WKE MAR 2015

PROJECT ID: 1100-37-70, 2720-10-70, 2782-11-70/71, 2782-12-70
WITH: N/A

COUNTY: WAUKESHA

ORDER OF SHEETS

Section No.	1	Title
Section No.	2	Typical Sections and Details (includes Erosion Control plans)
Section No.	3	Estimate of Quantities
Section No.	3	Miscellaneous Quantities
Section No.	4	Right of Way Plat
Section No.	5	Plan and Profile
Section No.	6	Standard Detail Drawings
Section No.	7	Sign Plates
Section No.	8	Structure Plans
Section No.	9	Computer Earthwork Data
Section No.	9	Cross Sections

TOTAL SHEETS = 1044

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
1100-37-70	WISC 2015124	1
2720-10-70		
2782-11-70	WISC 2015125	1
2782-11-71		
2782-12-70	WISC 2015126	1

MILWAUKEE - FOND DU LAC
PILGRIM ROAD BRIDGES
USH 41/45
WAUKESHA COUNTY
STATE PROJECT NUMBER 1100-37-70

WACKER NEUSON/MEGAL COURT VILLAGE OF MENOMONEE FALLS
PILGRIM ROAD TO CUL-DE-SAC
LOCAL STREET
WAUKESHA COUNTY
STATE PROJECT NUMBER 2720-10-70

PILGRIM ROAD
PARK BOULEVARD TO MEGAL DRIVE
LOCAL STREET
WAUKESHA COUNTY
STATE PROJECT NUMBER 2782-11-70

PILGRIM ROAD
USH 41/45 TO MAIN - WATER MAIN WORK
NON-HWY
WAUKESHA COUNTY
STATE PROJECT NUMBER 2782-11-71

MAIN & PILGRIM INTERSECTION AND PILGRIM
CLEVELAND AVENUE TO MEGAL DRIVE
STH 74
WAUKESHA COUNTY
STATE PROJECT NUMBER 2782-12-70



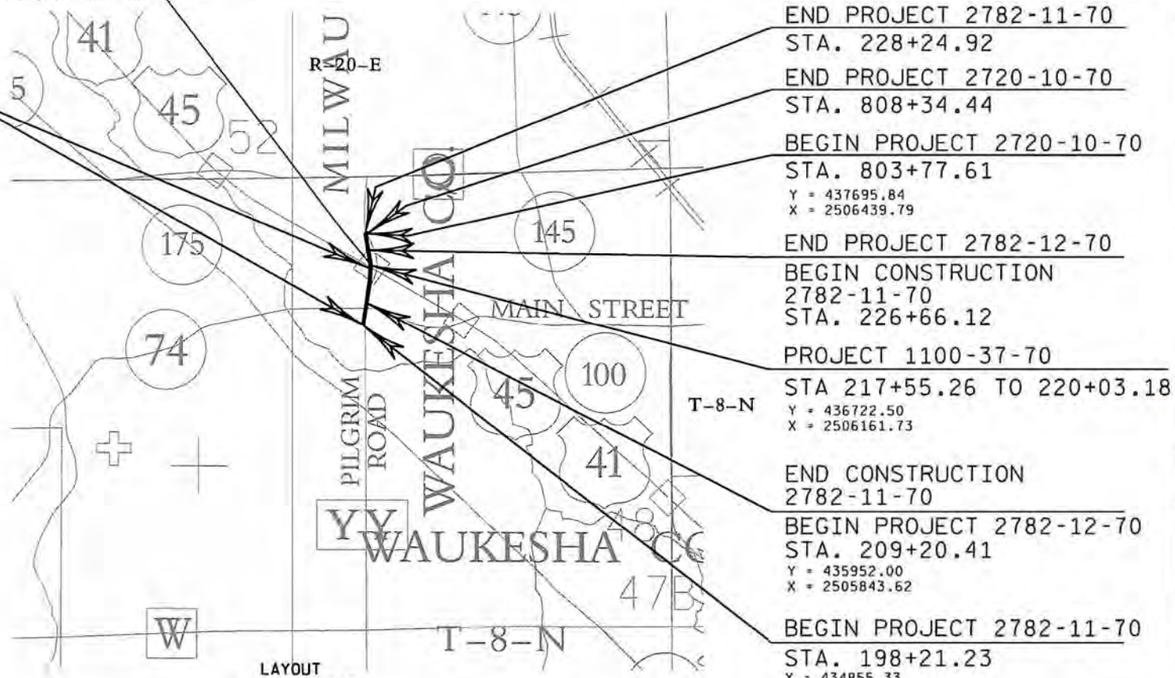
15

N

STRUCTURE B-67-337/338
(PROJECT 1100-37-70)

BEGIN PROJECT 2782-11-71
STA. 198+48.27
Y = 434882.09
X = 2505813.85

END PROJECT STA. 210+24.76



END PROJECT 2782-11-70
STA. 228+24.92

END PROJECT 2720-10-70
STA. 808+34.44

BEGIN PROJECT 2720-10-70
STA. 803+77.61
Y = 437695.84
X = 2506439.79

END PROJECT 2782-12-70

BEGIN CONSTRUCTION
2782-11-70
STA. 226+66.12

PROJECT 1100-37-70
STA 217+55.26 TO 220+03.18
Y = 436722.50
X = 2506161.73

END CONSTRUCTION
2782-11-70

BEGIN PROJECT 2782-12-70
STA. 209+20.41
Y = 435952.00
X = 2505843.62

BEGIN PROJECT 2782-11-70
STA. 198+21.23
Y = 434855.33
X = 2505823.10

LAYOUT
SCALE 0 1/2 MI.

TOTAL NET LENGTH OF CENTERLINE = 0.569 MI.
PROJECT 1100-37-70 = 0.047 MI.
PROJECT 2720-10-70 = 0.000 MI.
PROJECT 2782-11-70 = 0.238 MI.
PROJECT 2782-11-71 = 0.000 MI.
PROJECT 2782-12-70 = 0.284 MI.

COORDINATES ON THIS PLAN ARE REFERENCED TO THE WISCONSIN STATE PLANE COORDINATE SYSTEM (WSPCS), SOUTH ZONE. GROUND COORDINATES ARE LABELED "N" AND "E". GRID COORDINATES ARE LABELED "Y" AND "X". TO CONVERT GROUND TO GRID, MULTIPLY GROUND BY FACTOR 0.99990319.

ELEVATIONS ON THIS PLAN ARE REFERENCED TO THE NATIONAL GEODETIC VERTICAL DATUM OF 1929

DESIGN DESIGNATION

		PILGRIM ROAD	MAIN STREET	MEGAL DRIVE
A.A.D.T.	(2015)	= 21,900	14,300	3,400
A.A.D.T.	(2035)	= 39,600	20,900	6,100
D.H.V.	(2031)	= 3,920	3,920	3,920
D.D.	(2031)	= 58/42	58/42	58/42
T (DHV)	(2031)	= 5.4	5.4	5.4
DESIGN SPEED		= 40 MPH (N. OF MAIN ST.)	35 MPH	30 MPH
DESIGN SPEED		= 35 MPH (S. OF MAIN ST.)	-	-
ESALS		= 5,197,600	2,971,100	-

CONVENTIONAL SYMBOLS

PLAN
- CORPORATE LIMITS
- PROPERTY LINE (PL + 58.1)
- LOT LINE
- LIMITED HIGHWAY EASEMENT
- EXISTING RIGHT OF WAY
- PROPOSED OR NEW R/W LINE
- SLOPE INTERCEPT
- REFERENCE LINE
- EXISTING CULVERT
- PROPOSED CULVERT (Box or Pipe)
- COMBUSTIBLE FLUIDS (CAUTION)
- MARSH AREA
- WOODED OR SHRUB AREA

PROFILE
- GRADE LINE
- ORIGINAL GROUND
- MARSH OR ROCK PROFILE (To be noted as such) (ROCK)
- SPECIAL DITCH (LABEL)
- GRADE ELEVATION (95.36)
- CULVERT (Profile View)

UTILITIES
- ELECTRIC (E)
- FIBER OPTIC (FO)
- GAS (G)
- SANITARY SEWER (SAN)
- STORM SEWER (SS)
- TELEPHONE (T)
- WATER (W)
- UTILITY PEDESTAL
- POWER POLE
- TELEPHONE POLE

ACCEPTED FOR
VILLAGE of MENOMONEE FALLS
10/20/14 (Date)
DIRECTOR OF ENGINEERING (Signature & Title of Official)

ORIGINAL PLANS PREPARED BY
EMCS
1300 W. Canal Street, Suite 200
Milwaukee, WI 53233
414.347.1607 FAX: 414.347.1347

WISCONSIN
MICHAEL C. McCARTHY
E-29197
MENOMONEE FALLS, WI
PROFESSIONAL ENGINEER
10/17/2014 (Date)
(Signature)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	EMCS, INC.
Designer	EMCS, INC.
Project Manager	CHRISTINE HANNA, DAAR ENGINEERING
Regional Examiner	STEVE CHOJNACKI
Regional Supervisor	REEM SHAHIN
Management Consultant	DAAR ENGINEERING

APPROVED FOR THE DEPARTMENT
DATE: 10/24/14 Christine Hanna (Signature)
DATE: 10/23/14 (Management Consultant Signature)

E

FILE NAME : $$....designfile....$$ PLOT DATE : $$...plottingdate...$$ PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 15

GENERAL NOTES

VIBRATE CONCRETE PLACED AROUND MANHOLE & INLET CASTINGS.

ALL CURB & GUTTER RADII ARE MEASURED TO THE FLANGE LINE OF THE CURB.

NO TREES OR SHRUBS ARE TO BE REMOVED WITHOUT THE APPROVAL OF THE ENGINEER.

THE LOCATIONS OF EXISTING AND PROPOSED UTILITIES AS SHOWN ON THE PLAN ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN.

THE CONTRACTOR SHALL NOTIFY DIGGERS HOTLINE AND AFFECTED UTILITIES PRIOR TO START OF WORK. ANY UTILITY WHICH IS NOT A MEMBER OF THE DIGGERS HOTLINE MUST BE CONTACTED SEPARATELY.

FILL EXPANSION FACTOR IS SHOWN IN THE EARTHWORK SUMMARY.

ALL HOLES OR OPENINGS RESULTING FROM THE REMOVAL OF EXISTING STRUCTURES SHALL BE FILLED WITH GRANULAR BACKFILL, WHICH SHALL BE CONSIDERED INCIDENTAL TO THE RESPECTIVE REMOVAL ITEM.

EXCAVATION BELOW SUBGRADE (EBS) IS NOT USED TO BALANCE YARDAGE AND IS NOT SHOWN ON THE CROSS-SECTIONS BUT IS MEASURED AND PAID FOR AS EXCAVATION COMMON. THE EXACT LIMITS AND LOCATIONS OF EBS ARE TO BE DETERMINED BY THE ENGINEER IN THE FIELD.

CURB RAMPS ARE TO BE LOCATED IN THE FIELD BY THE ENGINEER.

PIPE ELEVATIONS AS SHOWN ON THE PLANS MAY BE ADJUSTED BY THE ENGINEER TO FIT EXISTING FIELD CONDITIONS.

STOCKPILE EXCESS MATERIAL OR SPOILS ON UPLAND AREAS AWAY FROM WETLANDS, FLOODPLAINS AND WATERWAYS. STOCKPILED SOIL SHALL BE PROTECTED AGAINST EROSION. IF STOCKPILED MATERIAL IS LEFT FOR MORE THAN FOURTEEN (14) CALENDAR DAYS, SEED THE STOCKPILE WITH TEMPORARY SEED.

PLACE INLET PROTECTION AT ALL INLET LOCATIONS ACCEPTING STORM WATER FROM THE PROJECT AREA OR AS DIRECTED BY THE ENGINEER.

RE-TOPSOIL GRADED AREAS, AS DESIGNATED BY THE ENGINEER, IMMEDIATELY AFTER GRADING IS COMPLETED WITHIN THOSE AREAS. PLACE SOD, OR SEED, FERTILIZE, AND MULCH/EROSION MAT ON TOP-SOILED AREAS, AS DESIGNATED BY THE ENGINEER AND AS SHOWN IN THE PLANS, WITHIN FIVE (5) CALENDAR DAYS AFTER PLACEMENT OF TOPSOIL.IF GRADED AREAS ARE LEFT EXPOSED FOR MORE THAN FOURTEEN ((14) CALENDAR DAYS, SEED THOSE AREAS WITH TEMPORARY SEED. AREAS DISTURBED BY CONSTRUCTION OPERATIONS OUTSIDE OF THE NORMAL CONSTRUCTION LIMITS SHALL BE TOPSOILED, SEEDED, FERTILIZED, AND COVERED WITH EROSION MAT OR MULCH, AT THE CONTRACTOR'S EXPENSE, UNLESS OTHERWISE AGREED UPON BY THE ENGINEER.

EROSION CONTROL BMP'S ARE AT SUGGESTED LOCATIONS. THE ACTUAL LOCATIONS WILL BE DETERMINED BY THE CONTRACTOR'S ECIP AND BY THE ENGINEER. EROSION CONTROL BMP'S SHALL BE MAINTAINED UNTIL PERMANENT VEGETATION IS ESTABLISHED OR UNTIL THE ENGINEER DETERMINES THAT THE BMP IS NO LONGER REQUIRED.

RESTORE EXISTING DRIVEWAYS AND FIELD ENTRANCES IN KIND AS DIRECTED BY THE ENGINEER AND AT THE LOCATION AS DETERMINED BY THE ENGINEER.

HMA PAVEMENT SHALL BE PLACED WITH THE FOLLOWING LAYER THICKNESSES AND NOMINAL SIZES:

- 4-INCH TYPE E-3
  - UPPER LAYER THICKNESS=1 3/4-INCHES (12.5mm)
  - LOWER LAYER THICKNESS=2 1/4-INCHES (19.0mm)
- 5-INCH TYPE E-3
  - UPPER LAYER THICKNESS=2-INCHES (12.5mm)
  - LOWER LAYER THICKNESS=3-INCHES (19.0mm)
- 6-INCH TYPE E-3
  - UPPER LAYER THICKNESS=2 1/2-INCHES (12.5mm)
  - LOWER LAYER THICKNESS=3 1/2-INCHES (19.0mm)
- 6.25-INCH TYPE E-3
  - UPPER LAYER THICKNESS=1 3/4-INCHES (12.5mm)
  - LOWER LAYER THICKNESS=2 1/4-INCHES (19.0mm)
  - LOWER LAYER THICKNESS=2 1/4-INCHES (19.0mm)
- 6.5-INCH TYPE E-10
  - UPPER LAYER THICKNESS=1 3/4-INCHES (12.5mm)
  - LOWER LAYER THICKNESS=2 1/4-INCHES (19.0mm)
  - LOWER LAYER THICKNESS=2 1/2-INCHES (19.0mm)

USE ASPHALTIC MATERIAL PG64-28 FOR LOWER LAYER AND PG64-28 FOR UPPER LAYER

GENERAL NOTES (CONT'D)

CONTRACTOR SHALL CONTACT THE PROJECT ENGINEER AND SEWRPC (JOHN WASHBURN) AT LEAST TWO WEEKS PRIOR TO WORK NEAR ANY PUBLIC SURVEY MONUMENT.

ORDER OF SECTION 2 SHEETS

PROJECT OVERVIEW
TYPICAL SECTIONS
CONSTRUCTION DETAILS
PLAN DETAILS
PAVING GRADES
RAMP CLOSURE GATES
FTMS PLANS
EROSION CONTROL
STORM SEWER
WATER MAIN
STREETSCAPE/LANDSCAPING PLANS
PERMANENT SIGNING
LIGHTING
TRAFFIC SIGNALS
PAVEMENT MARKING
TRAFFIC CONTROL/STAGING
DETOURS
ALIGNMENT

STANDARD ABBREVIATIONS

AEW/AEWS	APRON ENDWALL/APRON ENDWALLS
CB	CATCH BASIN
CPRC	CULVERT PIPE REINFORCED CONCRETE
SSPRC	STORM SEWER PIPE REINFORCED CONCRETE
SSPRCHE	STORM SEWER PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL
PE	PRIVATE ENTRANCE
CE	COMMERCIAL ENTRANCE
BMP'S	BEST MANAGEMENT PRACTICES

UTILITIES

WE ENERGIES (ELECTRIC)
LATROY BRUMFIELD, PROJECT MANAGER
333 W. EVERETT ST. - A299
MILWAUKEE, WI 53203
(414) 221-5617
latroy.brumfield@we-energies.com

TIME WARNER CABLE
TW CABLE ENGINEERING - STEVE CRAMER
1320 N. MARTIN LUTHER KING JR. DR.
MILWAUKEE, WI 53212
(414) 277-4045
wis.engineering@twcable.com

PAETEC BUSINESS SERVICES
JIM KOSTUCH, SUPERVISOR - OSP NETWORK
13935BISHOPS DRIVE
BROOKFIELD, WI 53005
(262)792-7938
james.kostuch@windstream.com

WISDOT SIGNALS
ELECTRICAL FIELD UNIT
(414)266-1170

WE ENERGIES (GAS)
LATROY BRUMFIELD, PROJECT MANAGER
333 W. EVERETT ST. - A299
MILWAUKEE, WI 53203
(414) 221-5617
latroy.brumfield@we-energies.com

TW TELECOM
BRAHIM GADDOUR
3235 INTERTECH DRIVE, SUITE 600
BROOKFIELD, WI 53045
(414) 908-1027
brahim.gaddour@twtelecom.com

WISDOT TRAFFIC LIGHTING
ERIC PEREA
141 NW BARSTOW ST
WAUKESHA, WI 53187
(262)574-5422
eric.perea.dot.wi.gov

AT&T WISCONSIN (TELEPHONE)
ALPER KOLCU
2005 PEWAUKEE ROAD
WAUKESHA, WI 53188
((262)970-8494
ak308x@att.com

VILLAGE OF MENOMONEE FALLS
BRIAN HORNICKEL
W156 N8480 PILGRIM ROAD
MENOMONEE FALLS, WI 53051
(262) 532-4412
bhornickel@menomonee-falls.org

WISDOT STOC
JEFF MADSON
433 W. ST PAUL AVE, SUITE 300
MILWAUKEE, WI 53203
(414)225-3723
jeffrey.madson@dot.wi.gov

DIGGERS HOTLINE
Dial 811 or (800) 242-8511
www.DiggersHotline.com

OTHER AGENCY

ATTN: JOHN WASHBURN
SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION
W239 N1812 ROCKWOOD DRIVE
P.O. BOX 1607
WAUKESHA, WI 53187-1607
PHONE (262) 953-4295
FAX (262) 547-1103
E-MAIL: jwashburn@sewrpc.org

DNR LIAISON

WISCONSIN DEPARTMENT OF NATURAL RESOURCES
CRAIG WEBSTER
141 NW BARSTOW ST.
ROOM 180
WAUKESHA, WI 53188
(262) 574-2141
craig.webster@wisconsin.gov

BEGIN CONSTRUCTION
2782-12-70
STA 402+88.13

SECTION CORNER
NE COR SEC 10-8-20

PARK BOULEVARD

2782-12-70
STA. 407+59.70

MAIN STREET

END CONSTRUCTION 2782-11-70
BEGIN PROJECT 2782-12-70
STA 209+20.41

BEGIN CONSTRUCTION
2782-12-70
STA 85+12.87

CLEVELAND AVENUE

EXISTING DETENTION POND

FALLS PARKWAY

BEGIN CONSTRUCTION
2782-11-70
STA 700+50.00

STRUCTURE R-67-121
PROJECT 1100-37-70

STRUCTURE R-67-122
PROJECT 1100-37-70

STRUCTURE B-67-337
PROJECT 1100-37-70

OVERHEAD SIGN
SUPPORT S-67-961
PROJECT 2782-12-70

US 41/45

US 41/45 NB ENTRANCE RAMP

END PROJECT 2782-11-70
STA 228+24.92

SECTION CORNER
E COR SEC 3-8-20

END PROJECT 2782-12-70
BEGIN CONSTRUCTION
2782-11-70
STA 226+66.12

US 41/45 NB EXIT RAMP TO PILGRIM SB

PARK & RIDE LOT

MEGAL DRIVE

2782-12-70
STA. 410+13.04

BEGIN PROJECT 2782-11-70
STA 198+21.23

OVERHEAD SIGN
SUPPORT S-67-960
PROJECT 2782-11-70

US 41/45 SB RAMPS

PILGRIM ROAD

STRUCTURE B-67-338
PROJECT 1100-37-70
STA 217+55.26 TO 220+03.18

DRIVEWAY TO BE REMOVED

PROPOSED DETENTION POND

MEGAL COURT

HARLEY DAVIDSON MAIN ENTRANCE

US 41/45 NB EXIT RAMP TO PILGRIM NB

END CONSTRUCTION
2782-12-70
STA 414+96.77

OVERHEAD SIGN
SUPPORT S-67-962
PROJECT 2782-12-70

BEGIN CONSTRUCTION
2782-12-70
STA 6+40.00

BEGIN CONSTRUCTION
2782-12-70
STA 17+07.41

END CONSTRUCTION
2720-10-70
STA. 901+25.00

END CONSTRUCTION 2782-11-70
BEGIN PROJECT 2720-10-70
STA. 803+77.61

HARLEY LOADING DOCK ENTRANCE

WACKER NEUSON ENTRANCE

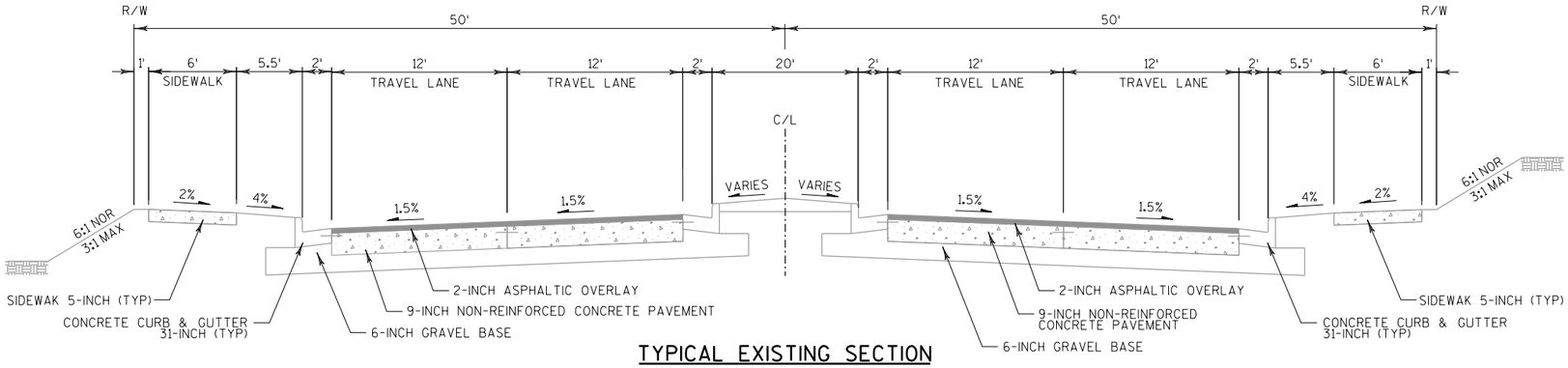
END CONSTRUCTION 2720-10-70
STA. 14+90.19

END PROJECT 2720-10-70
STA. 808+34.44

END CONST. 2720-10-70
STA. 907+51.70

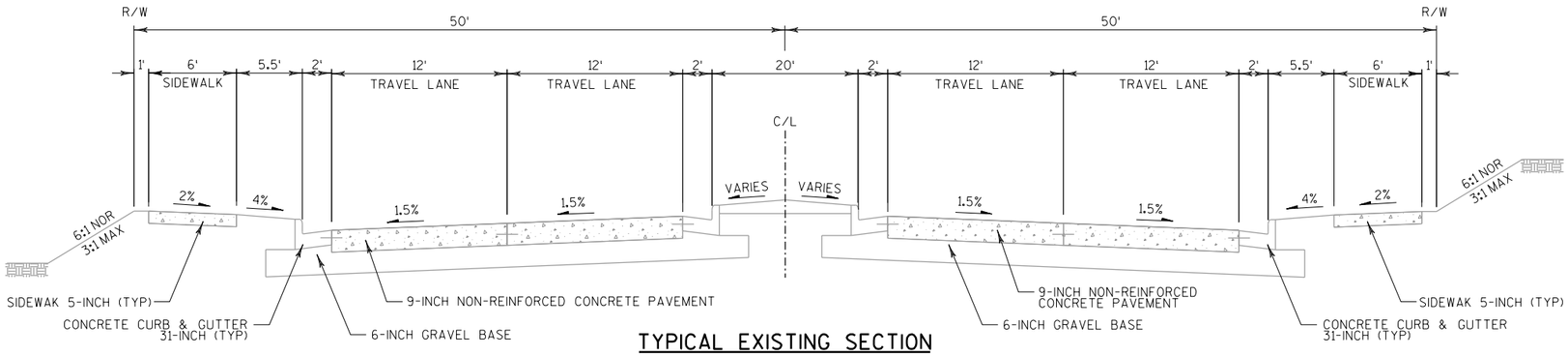
PROJECT NO: 2782-11-70 & 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	PROJECT OVERVIEW	SHEET 3	E

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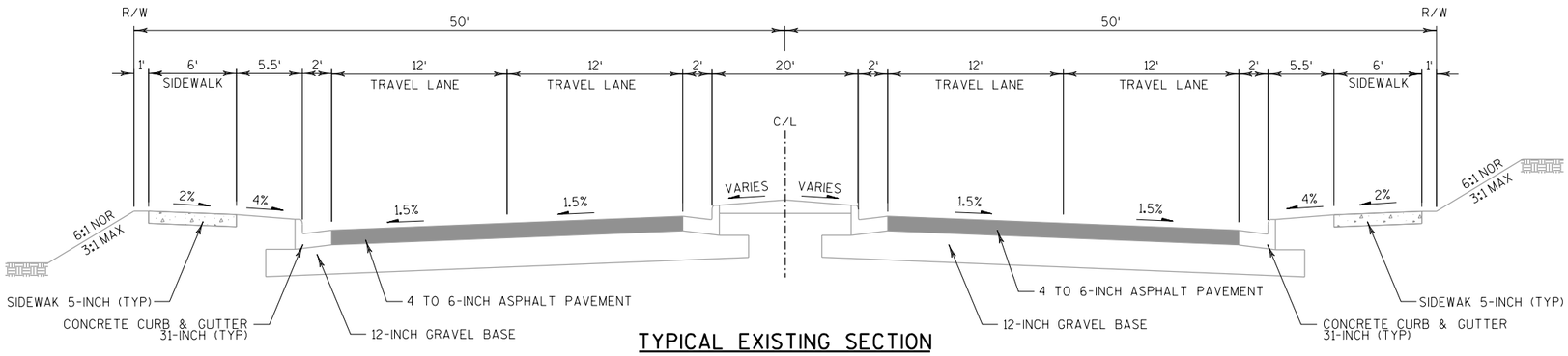
TYPICAL EXISTING SECTION

PILGRIM ROAD
STA 202+83 TO 211+00



TYPICAL EXISTING SECTION

PILGRIM ROAD
STA 200+60 TO 202+83

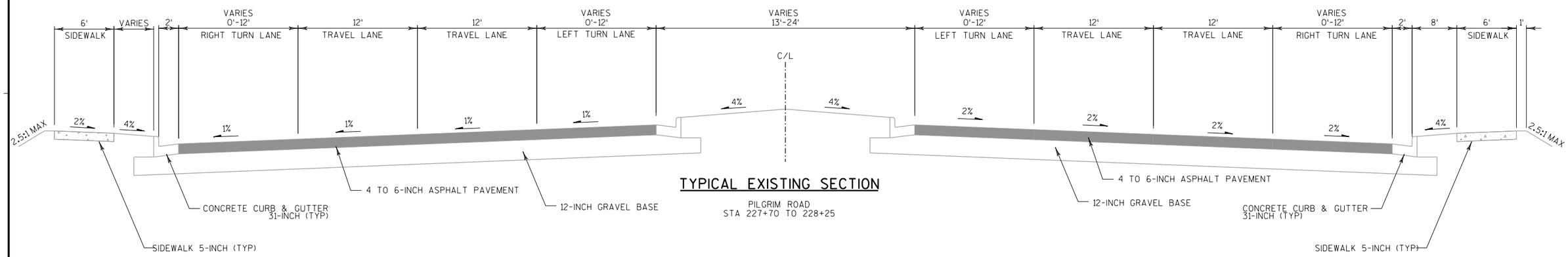


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PILGRIM ROAD
STA 198+21 TO 200+60

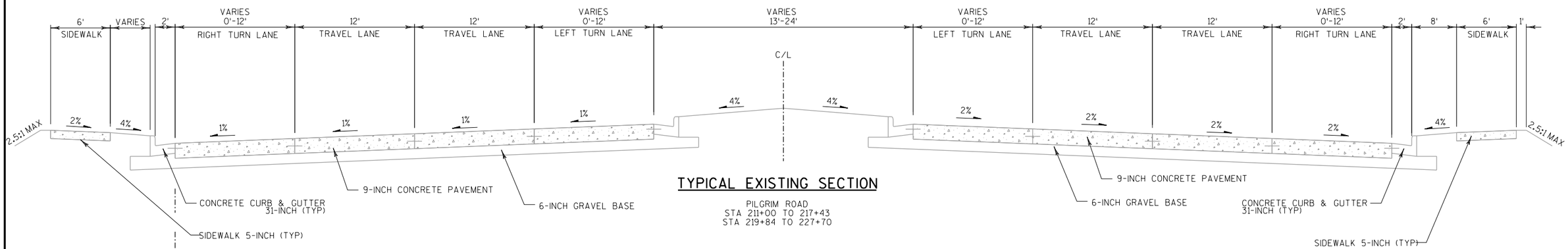
PROJECT NO: 2782-11-70 & 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TYPICAL SECTIONS	SHEET 4	E

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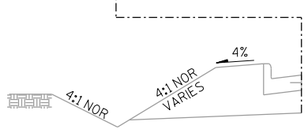
TYPICAL EXISTING SECTION

PILGRIM ROAD
STA 227+70 TO 228+25



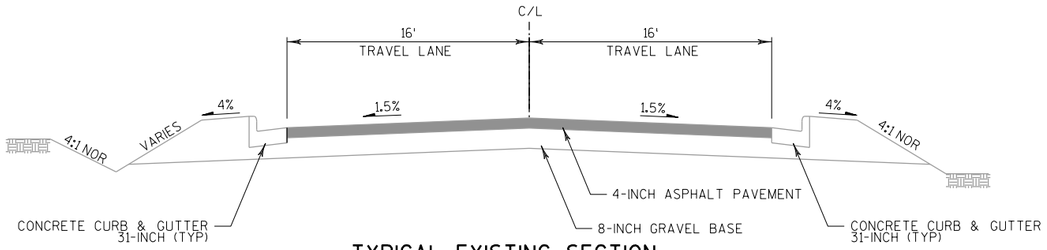
TYPICAL EXISTING SECTION

PILGRIM ROAD
STA 211+00 TO 217+43
STA 219+84 TO 227+70



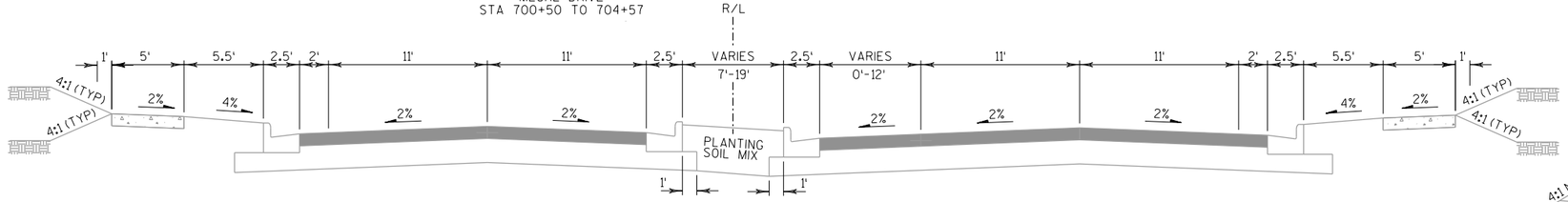
PILGRIM ROAD
STA 208+56 TO 217+43
STA 219+84 TO 227+70

PROJECT NO: 2782-11-70 & 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TYPICAL SECTIONS	SHEET 5	E



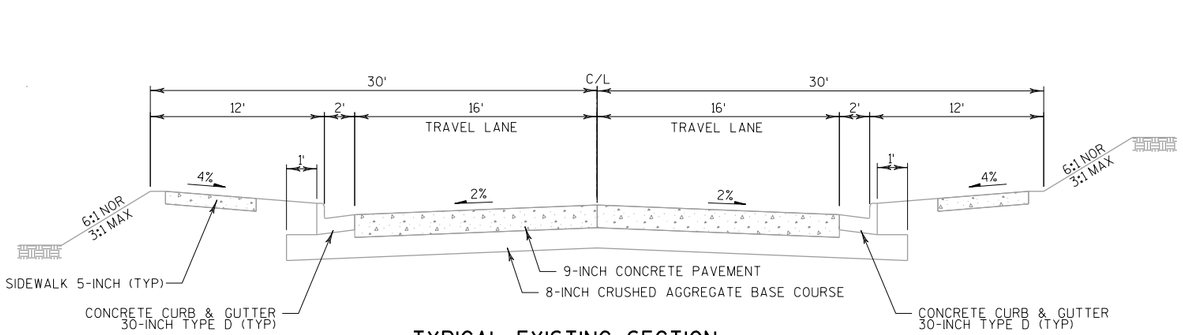
TYPICAL EXISTING SECTION

MEGAL DRIVE
STA 700+50 TO 704+57



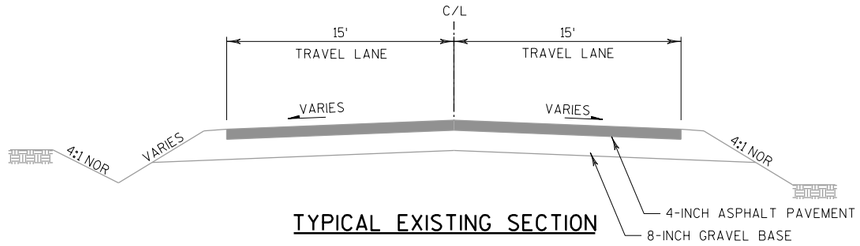
TYPICAL EXISTING SECTION

FALLS PARKWAY
STA 85+12 TO 88+05



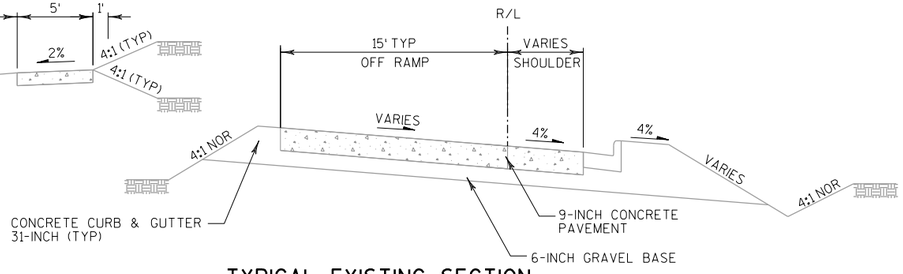
TYPICAL EXISTING SECTION

CLEVELAND AVENUE
STA 500+70 TO 501+05
STA 502+25 TO 502+65



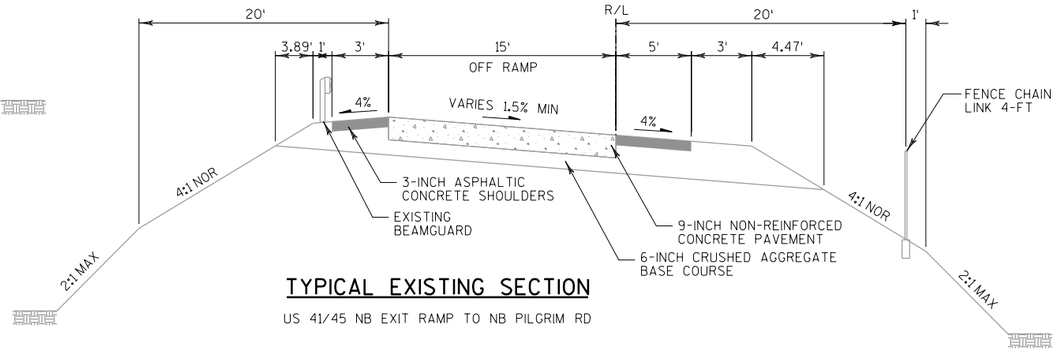
TYPICAL EXISTING SECTION

WACKER DRIVE
STA 704+25 TO 711+08



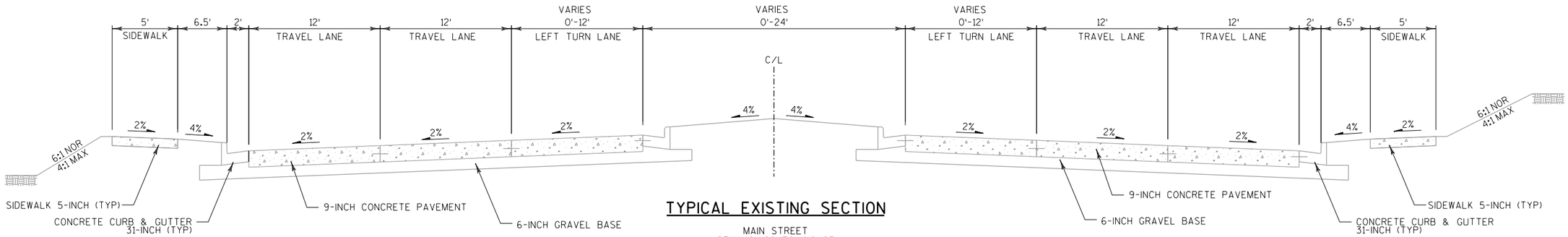
TYPICAL EXISTING SECTION

US 41/45 SB EXIT RAMP
STA 6+40 TO 12+85



TYPICAL EXISTING SECTION

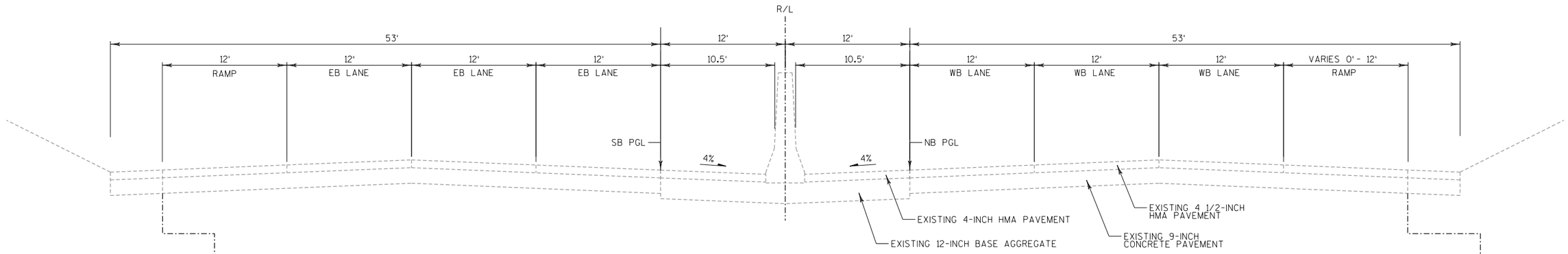
US 41/45 NB EXIT RAMP TO NB PILGRIM RD



TYPICAL EXISTING SECTION

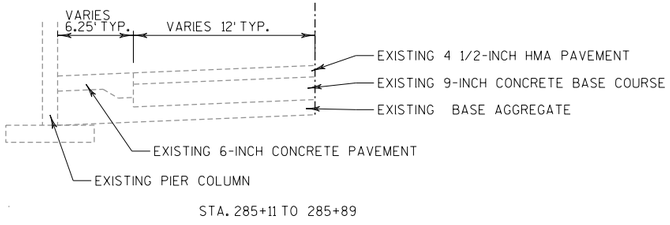
MAIN STREET
STA 401+98 TO 410+25

PROJECT NO: 2782-11-70 & 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TYPICAL SECTIONS	SHEET 6	E

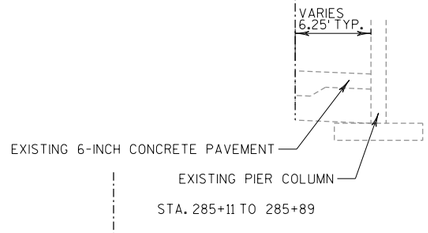


US 41 & 45

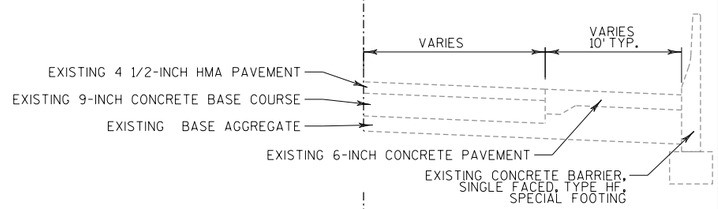
STA. 279+48 TO 286+41



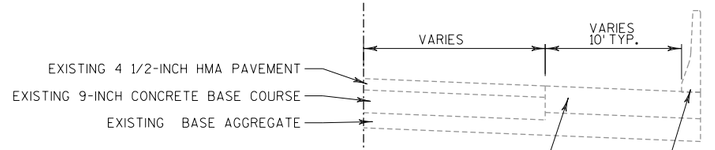
STA. 285+11 TO 285+89



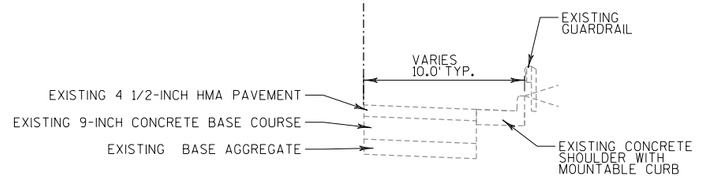
STA. 285+11 TO 285+89



STA. 281+50 TO 285+11

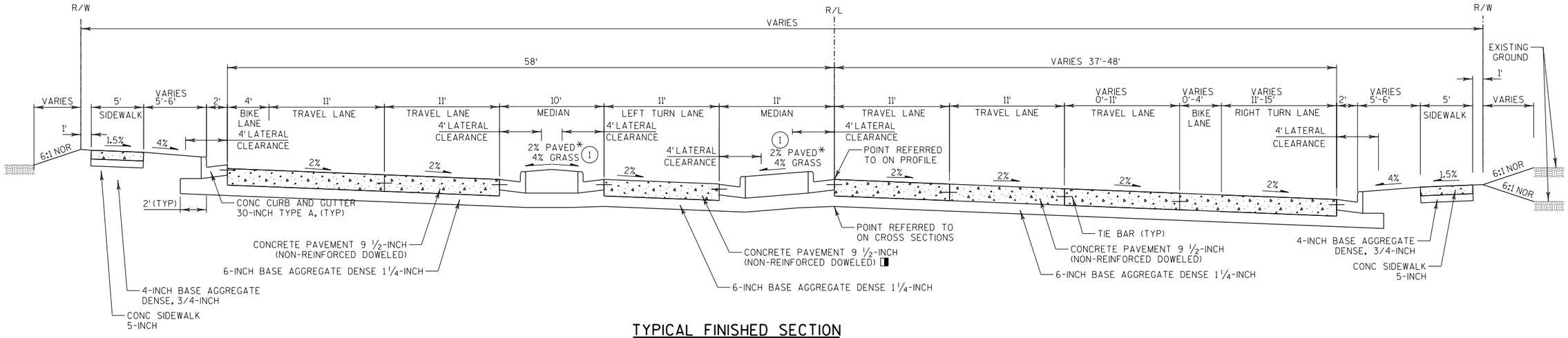


STA. 280+09 TO 281+50



STA. 279+48 TO 280+09

PROJECT NO: 2782-11-70 & 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TYPICAL SECTIONS	SHEET 7	E



TYPICAL FINISHED SECTION

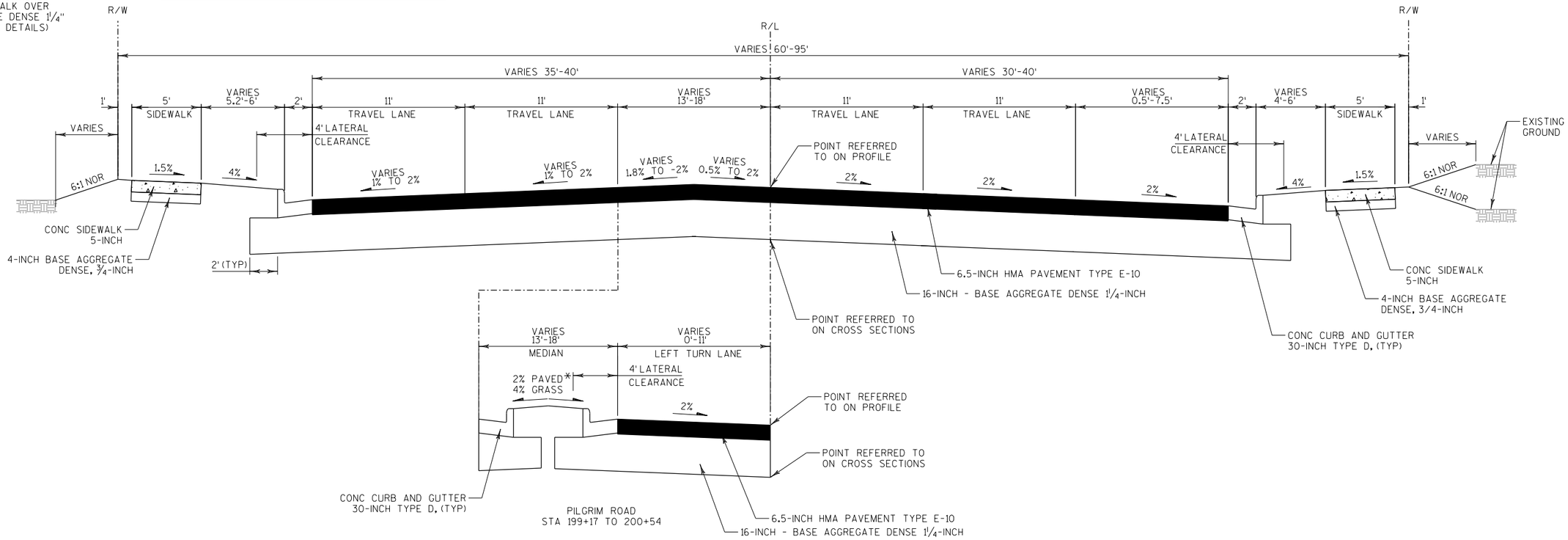
PILGRIM ROAD
STA 203+06 TO 204+29 (1)
STA 208+95 TO 211+55
STA 221+69 TO 226+75

(1) REVERSE SLOPE FROM THAT SHOWN

◨ TINED, NORTH OF MAIN STREET

* PAVED MEDIAN = 5-INCH CONCRETE SIDEWALK OVER BASE AGGREGATE DENSE 1 1/4" (SEE PLANS FOR DETAILS)

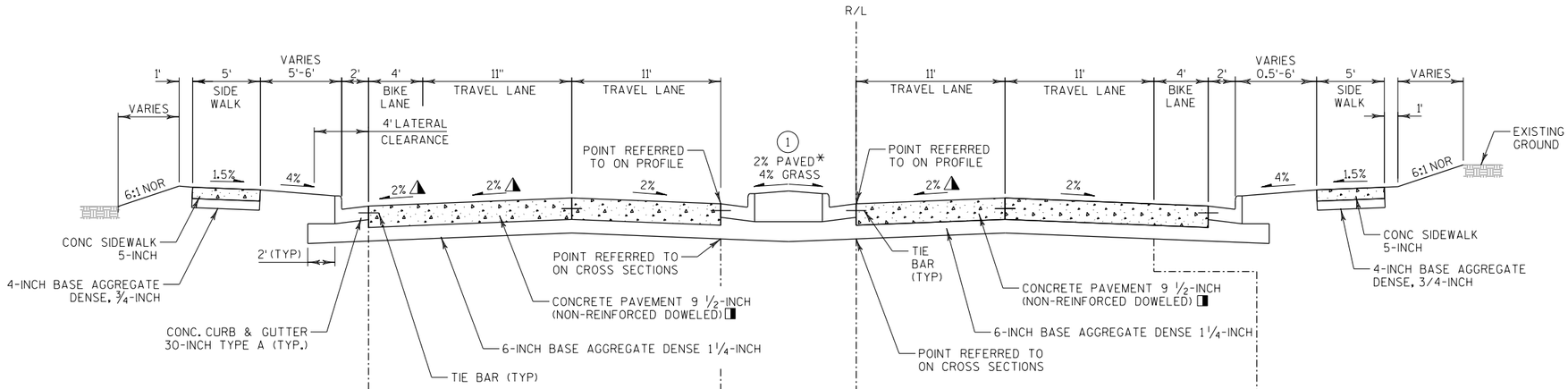
USE TOPSOIL STA. 198+21 - STA. 209+20 &
STA. 226+66 - STA. 228+24
AND SALVAGED TOPSOIL STA. 209+20 - STA. 226+66
SEE EROSION CONTROL PLANS FOR
SEEDING AND SOD.



TYPICAL FINISHED SECTION

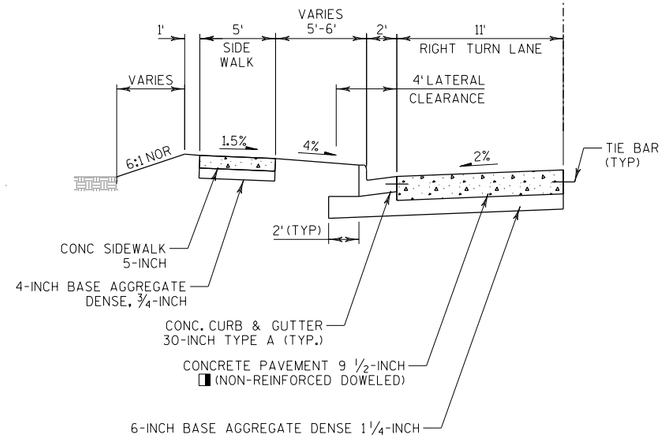
PILGRIM ROAD
STA 198+21 TO 200+60

PROJECT NO: 2782-11-70 & 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TYPICAL SECTIONS	SHEET 8	E

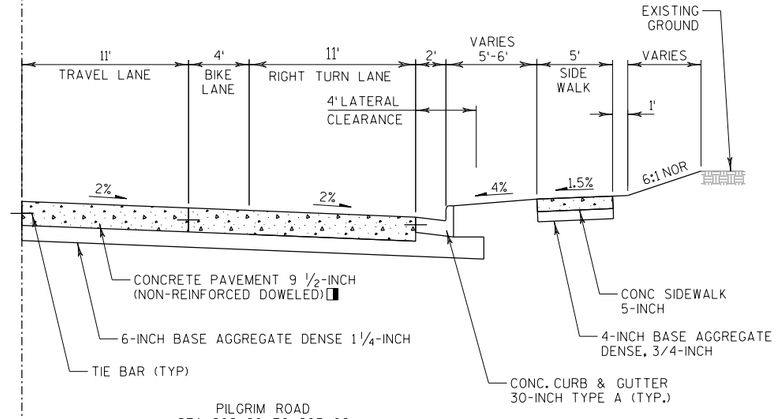


PILGRIM ROAD
STA 205+97 TO 207+15
STA 213+15 TO 214+81
STA 225+27 TO 226+93

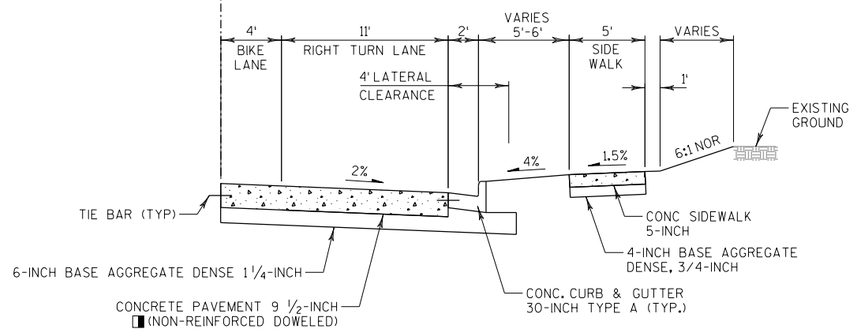
PILGRIM ROAD
STA 205+66 TO 207+39 (1)
STA 213+02 TO 216+26



PILGRIM ROAD
STA 205+97 TO 207+15
STA 213+15 TO 214+81
STA 225+27 TO 226+93



PILGRIM ROAD
STA 202+20 TO 203+06



PILGRIM ROAD
STA 206+10 TO 211+00
STA 221+66 TO 226+70

◨ TINED, NORTH OF MAIN STREET

* PAVED MEDIAN = 5-INCH CONCRETE SIDEWALK OVER BASE AGGREGATE DENSE 1¼" (SEE PLANS FOR DETAILS)

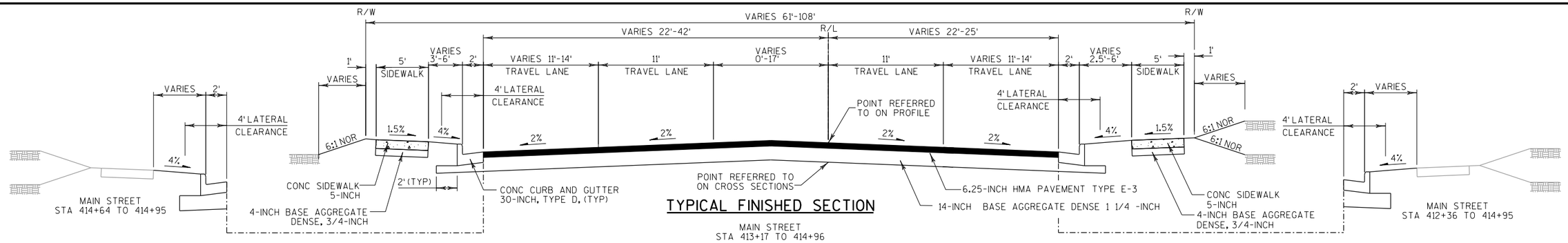
◭ -2% TO STA 206+00

(1) REVERSE SLOPE FROM THAT SHOWN

TYPICAL FINISHED SECTION

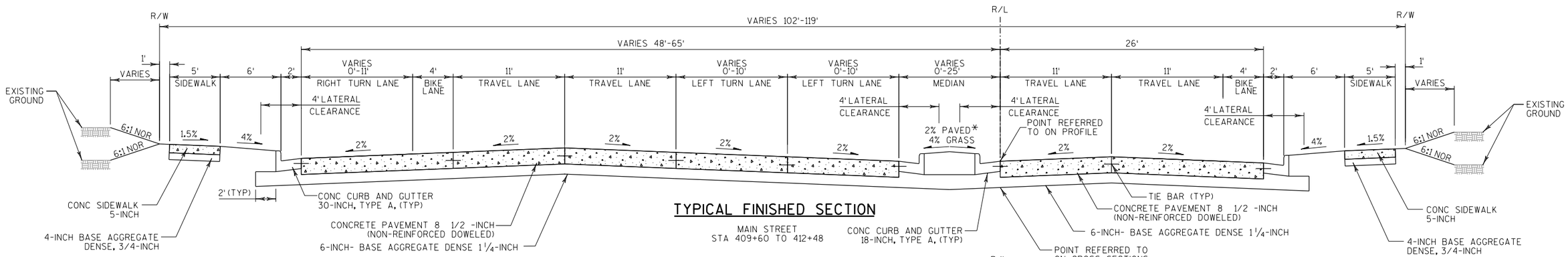
PILGRIM ROAD
STA 201+59 TO 203+06◭
STA 205+47 TO 208+95◭
STA 212+99 TO 217+71
STA. 219+88 TO 221+69

PROJECT NO: 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TYPICAL SECTIONS	SHEET 9	E



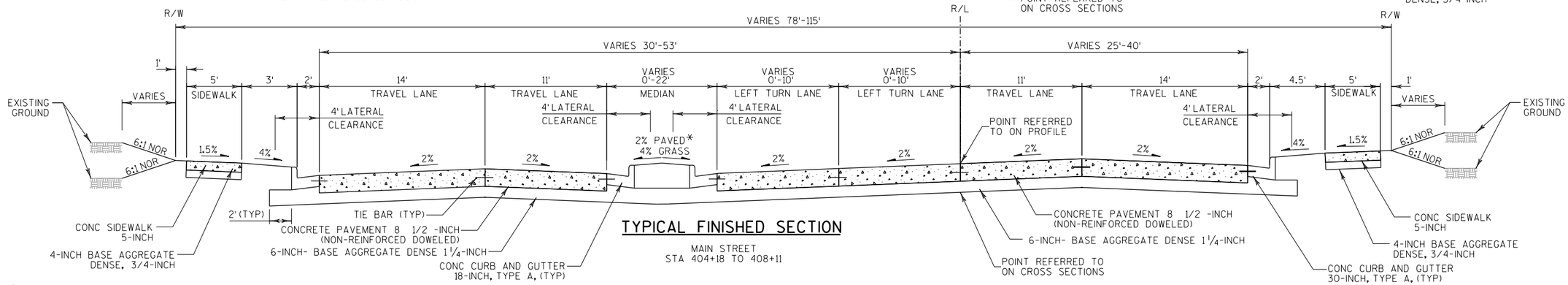
TYPICAL FINISHED SECTION

MAIN STREET
STA 413+17 TO 414+96



TYPICAL FINISHED SECTION

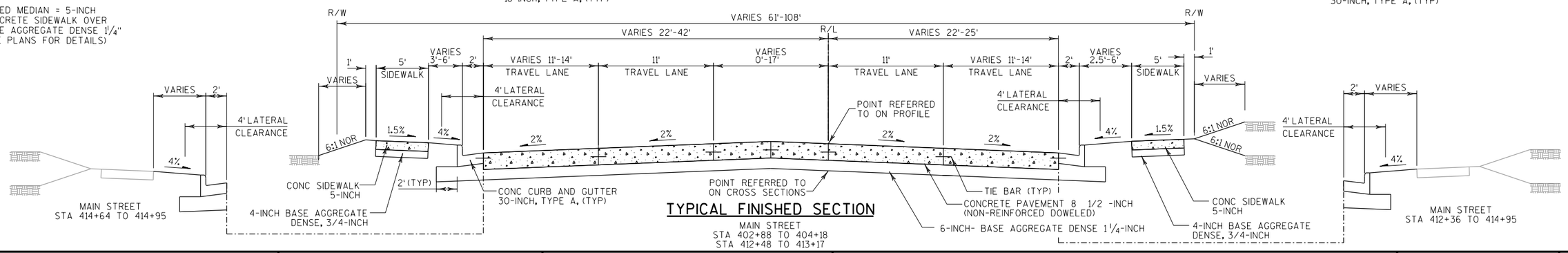
MAIN STREET
STA 409+60 TO 412+48



TYPICAL FINISHED SECTION

MAIN STREET
STA 404+18 TO 408+11

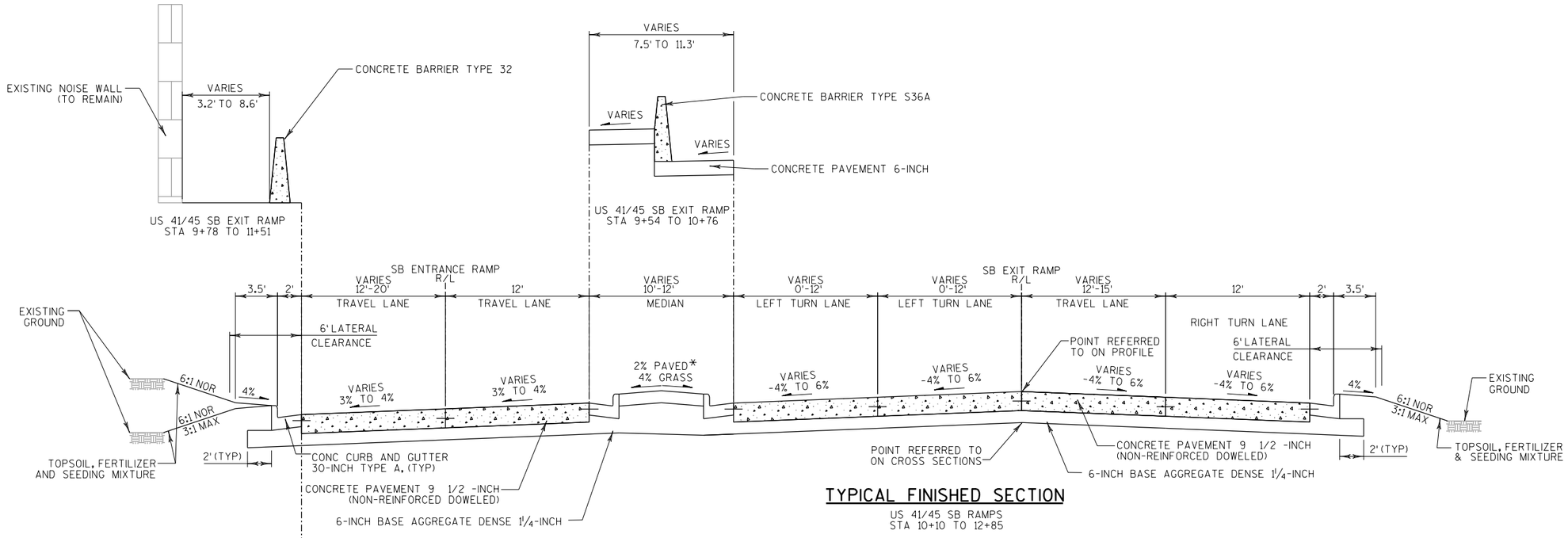
* PAVED MEDIAN = 5-INCH CONCRETE SIDEWALK OVER BASE AGGREGATE DENSE 1¼" (SEE PLANS FOR DETAILS)



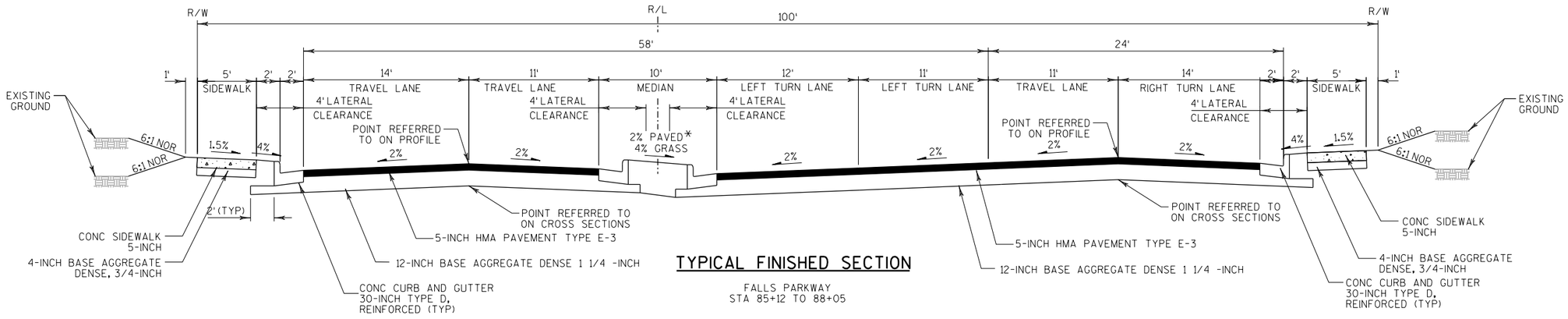
TYPICAL FINISHED SECTION

MAIN STREET
STA 402+88 TO 404+18
STA 412+48 TO 413+17

PROJECT NO: 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TYPICAL SECTIONS	SHEET 10	E

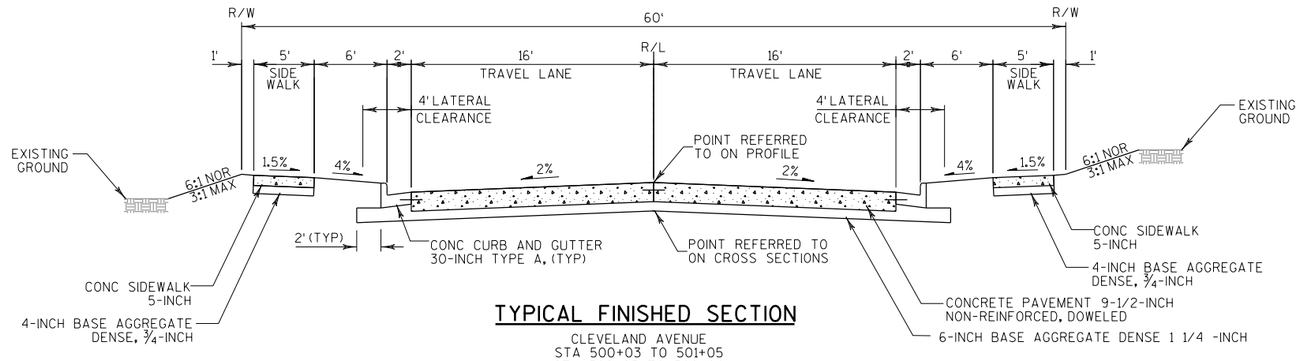


PROJECT NO: 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TYPICAL SECTIONS	SHEET 11	E



TYPICAL FINISHED SECTION

FALLS PARKWAY
STA 85+12 TO 88+05

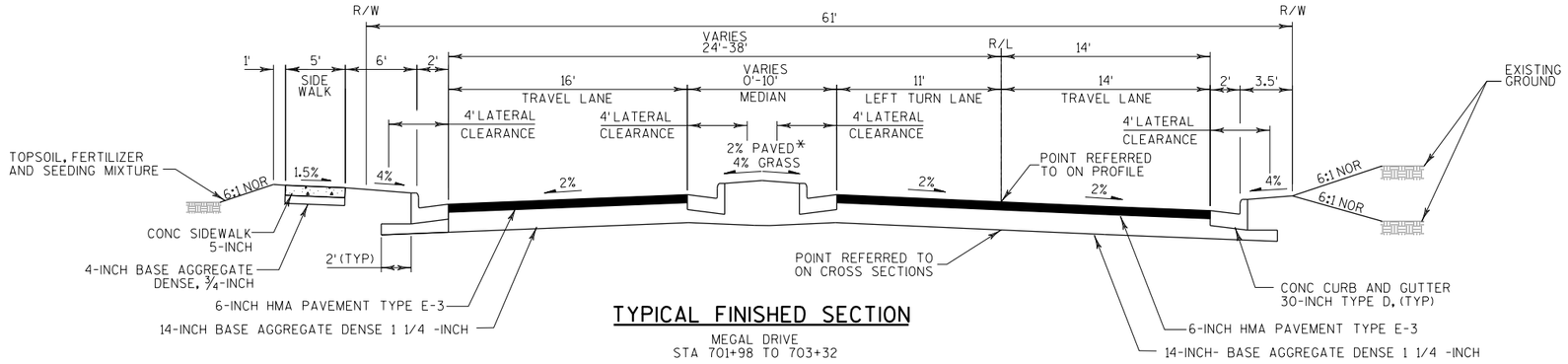


TYPICAL FINISHED SECTION

CLEVELAND AVENUE
STA 500+03 TO 501+05
STA 502+25 TO 502+90

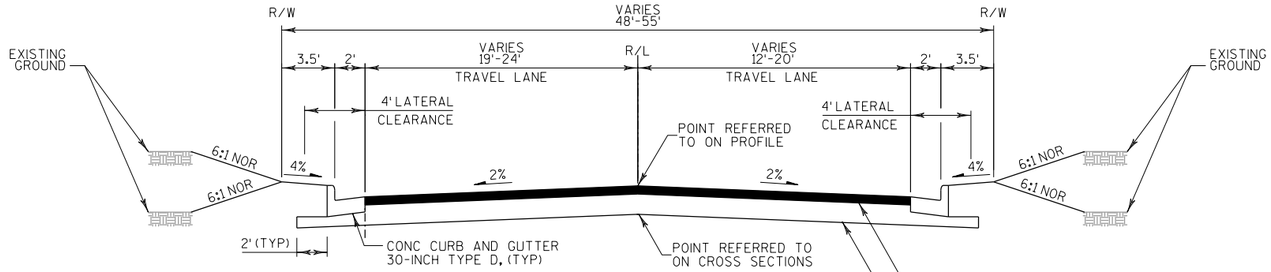
* PAVED MEDIAN = 5-INCH CONCRETE SIDEWALK OVER BASE AGGREGATE DENSE 1¼" (SEE PLANS FOR DETAILS)

PROJECT NO: 2782-11-70 & 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TYPICAL SECTIONS	SHEET 12	E



TYPICAL FINISHED SECTION

MEGAL DRIVE
STA 701+98 TO 703+32



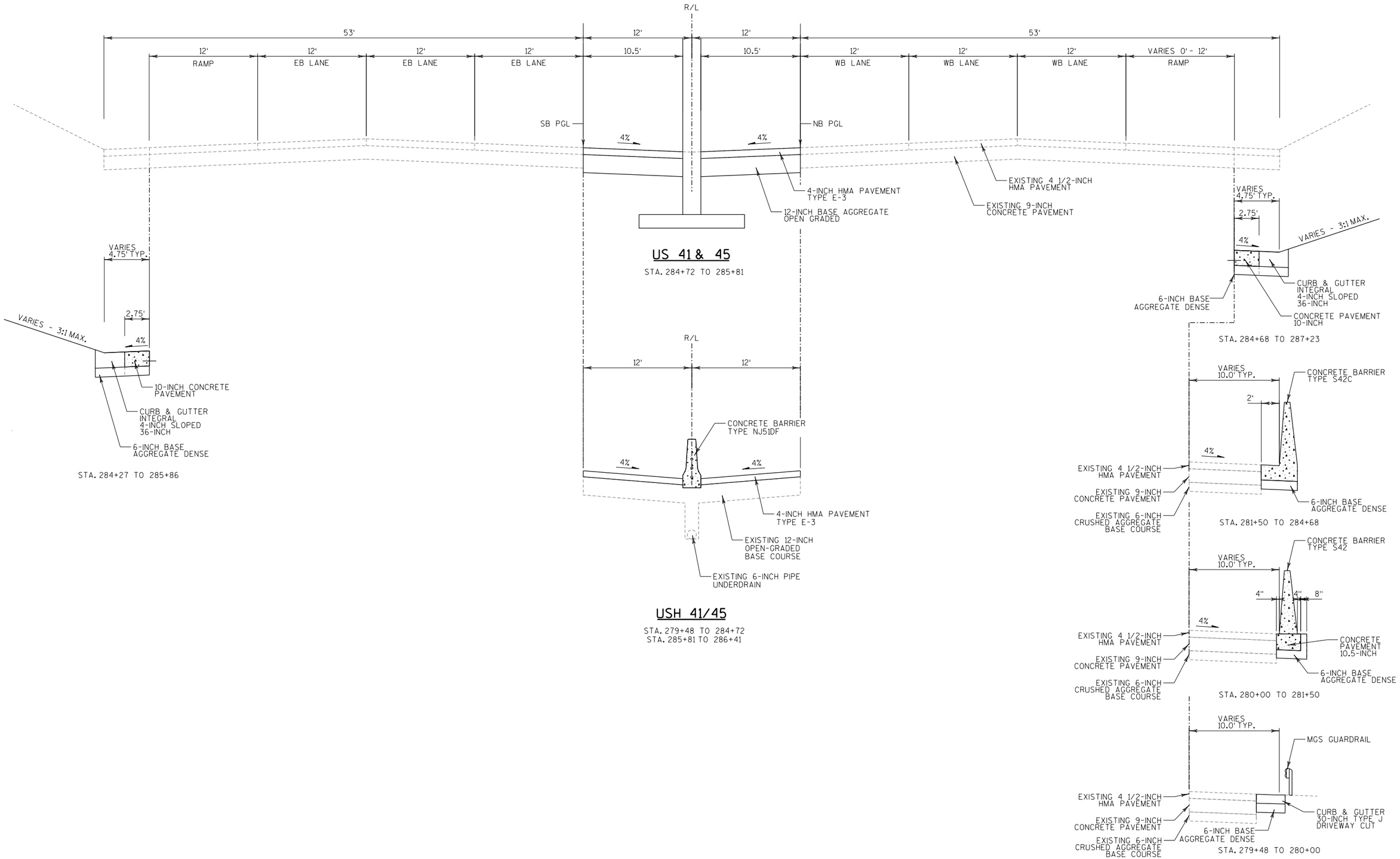
TYPICAL FINISHED SECTION

MEGAL DRIVE
STA 700+50 TO 701+98

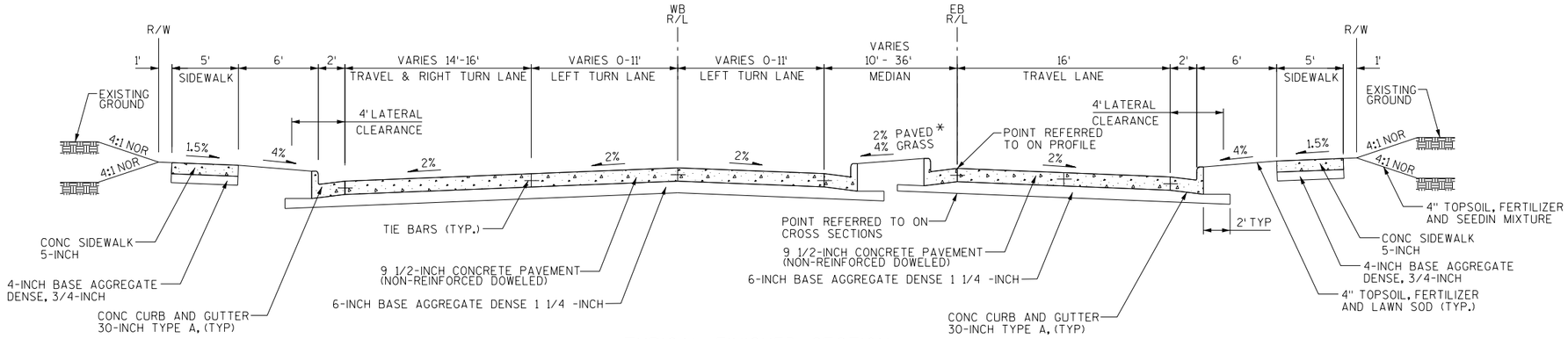
* PAVED MEDIAN = 5-INCH CONCRETE SIDEWALK OVER BASE AGGREGATE DENSE 1¼" (SEE PLANS FOR DETAILS)

PROJECT NO: 2782-11-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TYPICAL SECTIONS	SHEET 13	E

FILE NAME : P:\44xx\4442\Plan\020302_ts.dgn | PLOT DATE : 11/2/2014 | PLOT BY : ajp | PLOT NAME : | PLOT SCALE : 1:20



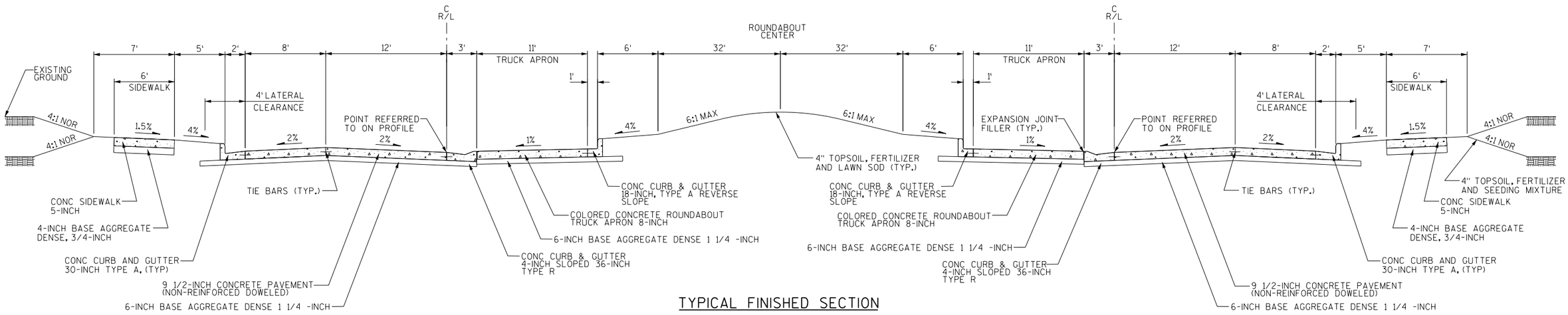
PROJECT NO: 2782-11-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TYPICAL SECTIONS	SHEET 14	E



TYPICAL FINISHED SECTION

MEGAL COURT
STA. 800+42.77 EB TO 804+30 EB

* PAVED MEDIAN = 5" CONCRETE SIDEWALK OVER 4" BASE AGGEREGATE DENSE 1 1/4"

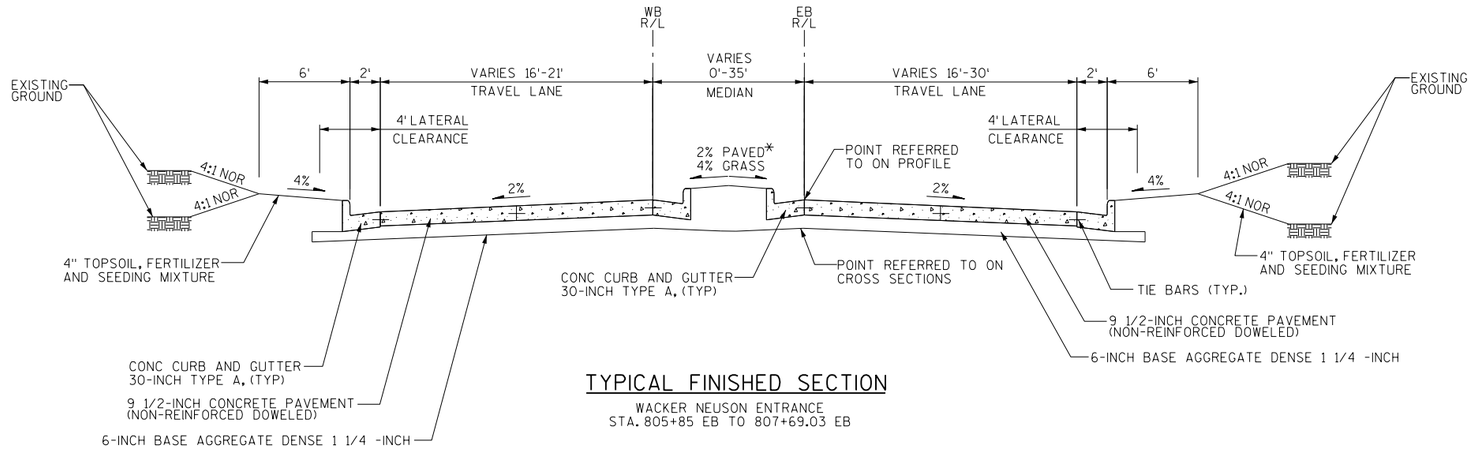


TYPICAL FINISHED SECTION

ROUNDABOUT - SECTION THROUGH CENTER

PROJECT NO: 2720-10-70 & 2782-11-70	HWY: MEGAL COURT	COUNTY: WAUKESHA	TYPICAL SECTIONS	SHEET 15	E

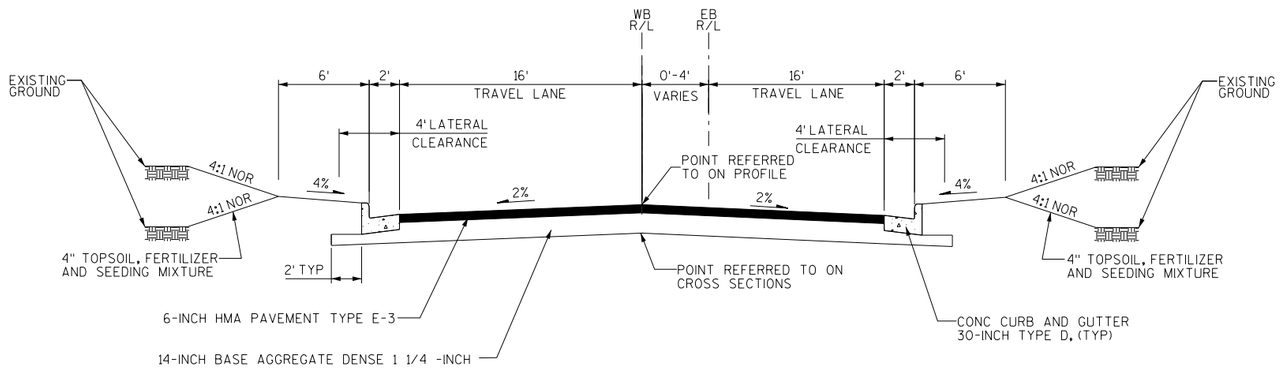
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TYPICAL FINISHED SECTION

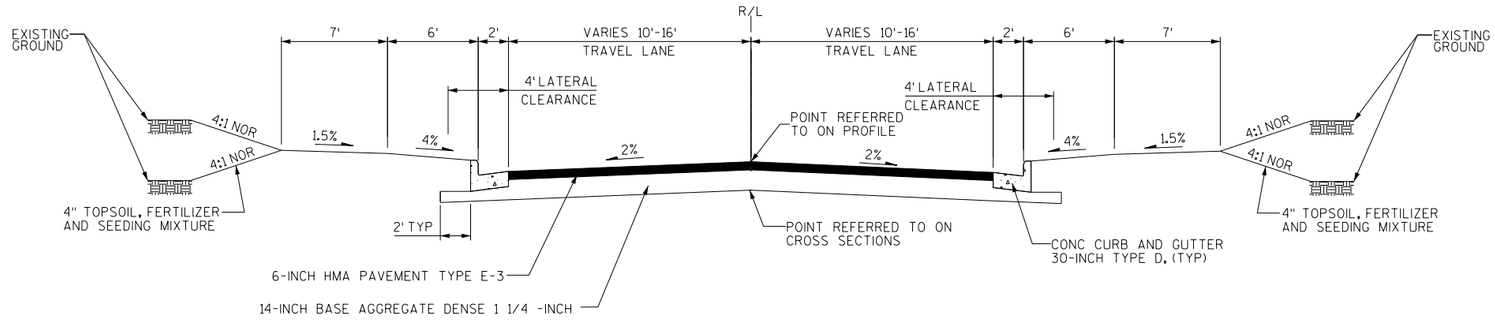
WACKER NEUSON ENTRANCE
STA. 805+85 EB TO 807+69.03 EB

* PAVED MEDIAN = 5" CONCRETE SIDEWALK
OVER 4" BASE AGGEREGATE DENSE 1 1/4"



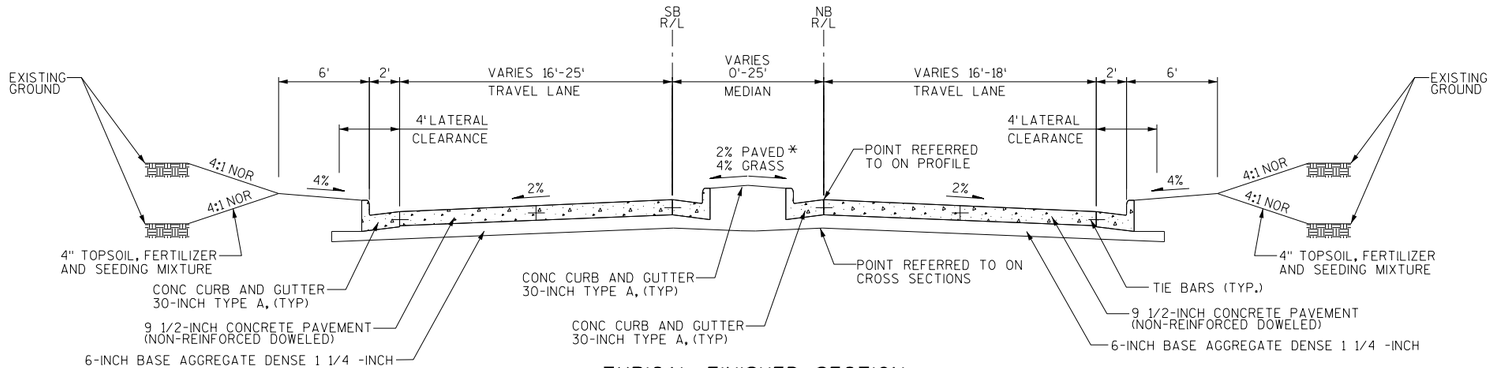
TYPICAL FINISHED SECTION

WACKER NEUSON ENTRANCE
STA. 807+69.03 EB TO 808+34.44 EB



TYPICAL FINISHED SECTION

HARLEY DAVIDSON MAIN ENTRANCE
STA. 901+25.00 NB TO 902+96.45 NB



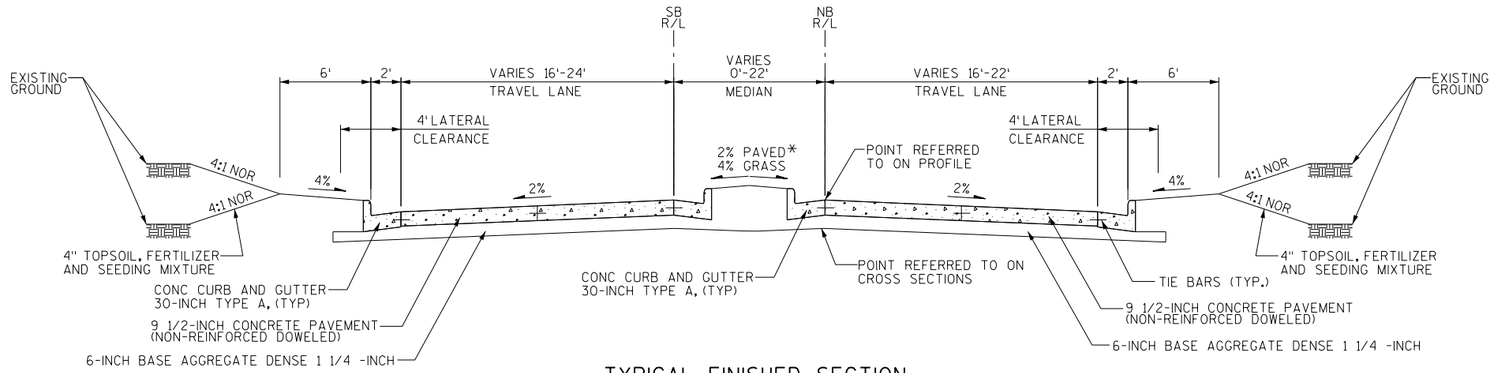
TYPICAL FINISHED SECTION

HARLEY DAVIDSON MAIN ENTRANCE
STA. 902+96.45 NB TO 905+00 NB

* PAVED MEDIAN = 5" CONCRETE SIDEWALK OVER 4" BASE AGGEREGATE DENSE 1 1/4"

PROJECT NO: 2720-10-70	HWY: MEGAL COURT	COUNTY: WAUKESHA	TYPICAL SECTIONS	SHEET 17	E

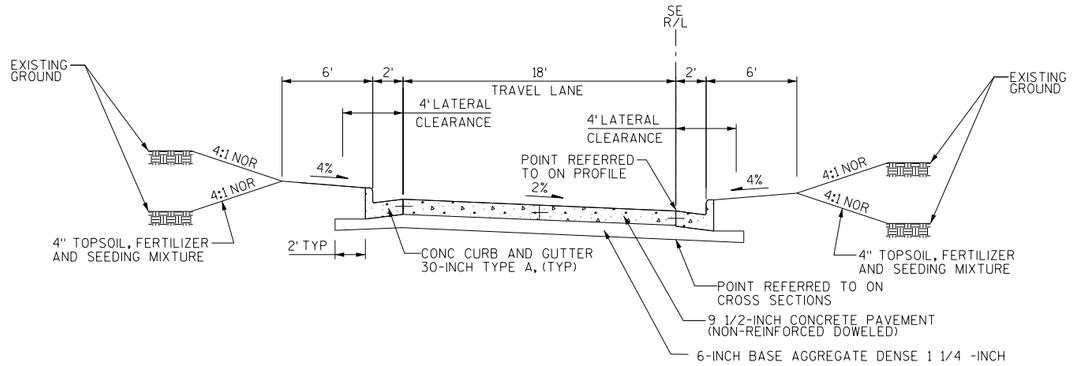
2



TYPICAL FINISHED SECTION

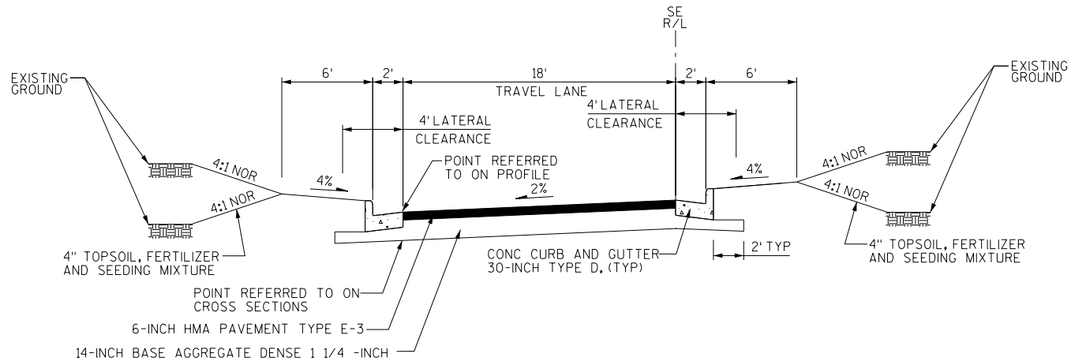
WACKER NEUSON NORTH LEG
STA. 906+50 NB TO 907+51.68 NB

* PAVED MEDIAN = 5" CONCRETE SIDEWALK
OVER 4" BASE AGGEREGATE DENSE 1 1/4"



TYPICAL FINISHED SECTION

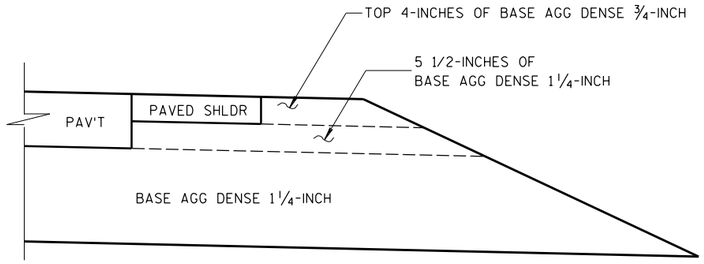
HARLEY LOADING DOCK ENTRANCE
STA. 12+50.00 SE TO 13+08.75 SE



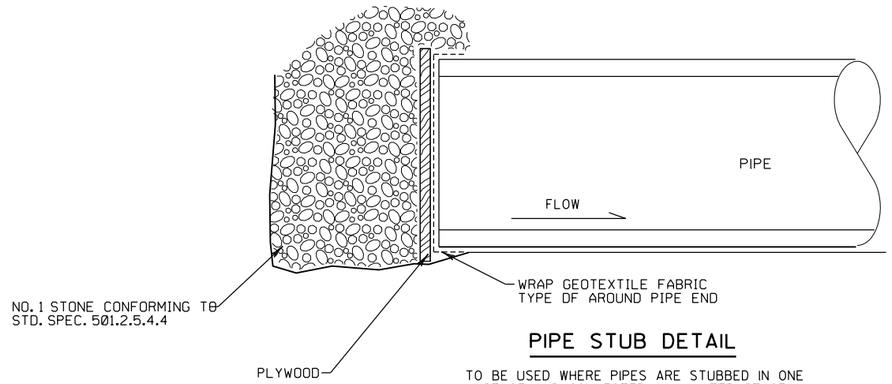
TYPICAL FINISHED SECTION

HARLEY LOADING DOCK ENTRANCE
STA. 13+08.75 SE TO 14+90.19 SE

PROJECT NO: 2720-10-70	HWY: MEGAL COURT	COUNTY: WAUKESHA	TYPICAL SECTIONS	SHEET 19	E



BASE AGG DENSE 1 1/4-INCH REQUIRED



PIPE STUB DETAIL

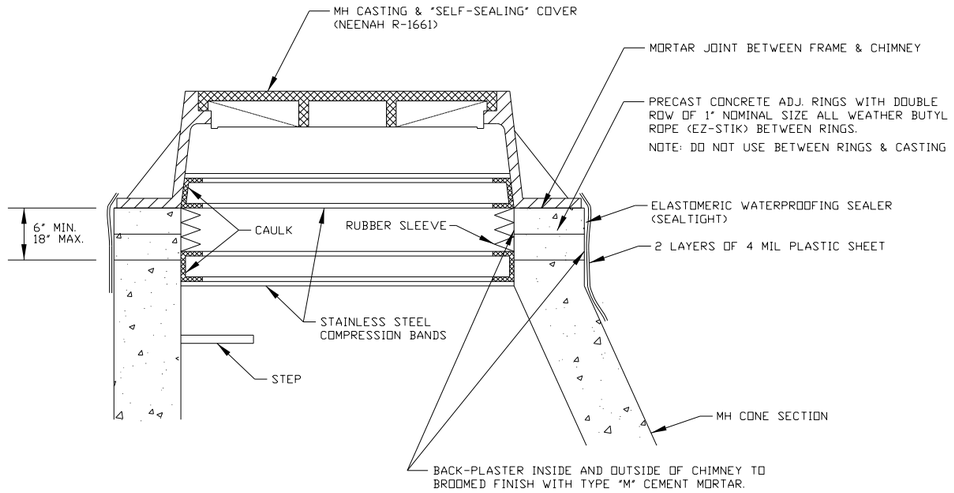
TO BE USED WHERE PIPES ARE STUBBED IN ONE STAGE AND CONNECTED IN A LATER STAGE

(ALL WORK & MATERIALS INVOLVED ARE INCIDENTAL TO THE APPLICABLE PIPE ITEM)

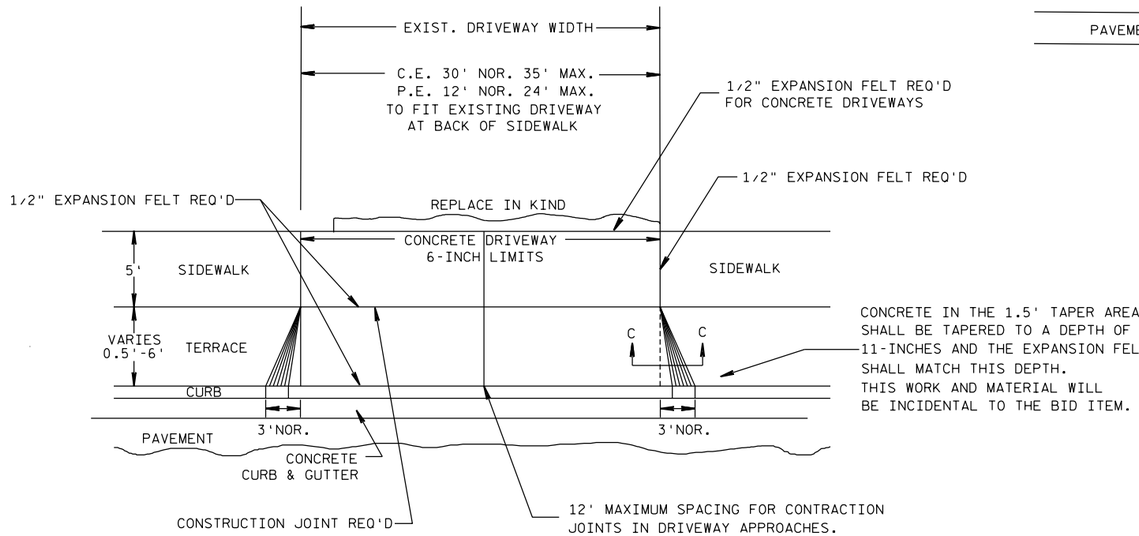
RUNOFF COEFFICIENT TABLE

	HYDROLOGIC SOIL GROUP											
	A			B			C			D		
	SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)		
LAND USE:	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER
ROW CROPS	.08 .22	.16 .30	.22 .38	.12 .26	.20 .34	.27 .44	.15 .30	.24 .37	.33 .50	.19 .34	.28 .41	.38 .56
MEDIAN STRIP-TURF	.19 .24	.20 .26	.24 .30	.19 .25	.22 .28	.26 .33	.20 .26	.23 .30	.30 .37	.20 .27	.25 .32	.30 .40
SIDE SLOPE-TURF			.25 .32			.27 .34			.28 .36			.30 .38
PAVEMENT:												
ASPHALT	.70 - .95											
CONCRETE	.80 - .95											
BRICK	.70 - .80											
DRIVES, WALKS	.75 - .85											
ROOFS	.75 - .95											
GRAVEL ROADS, SHOULDERS	.40 - .60											

TOTAL PROJECT AREA = 28 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 23 ACRES

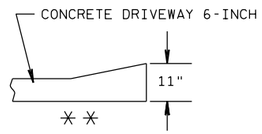


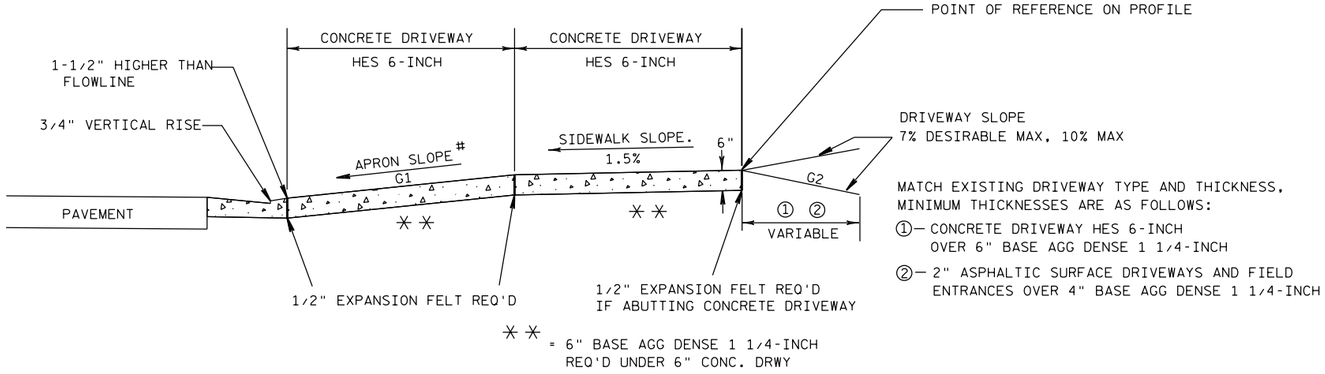
SANITARY MANHOLE CHIMNEY DETAIL FOR RIM ADJUSTMENT



CONCRETE IN THE 1.5' TAPER AREA SHALL BE TAPERED TO A DEPTH OF 11-INCHES AND THE EXPANSION FELT SHALL MATCH THIS DEPTH. THIS WORK AND MATERIAL WILL BE INCIDENTAL TO THE BID ITEM.

PLAN VIEW





MATCH EXISTING DRIVEWAY TYPE AND THICKNESS, MINIMUM THICKNESSES ARE AS FOLLOWS:

① — CONCRETE DRIVEWAY HES 6-INCH OVER 6" BASE AGG DENSE 1 1/4-INCH

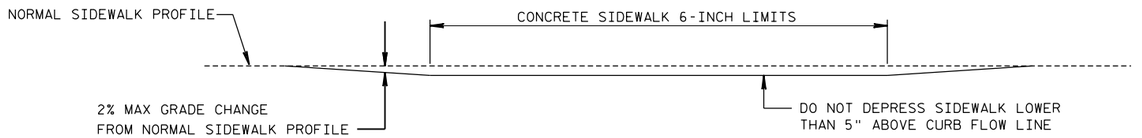
② — 2" ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES OVER 4" BASE AGG DENSE 1 1/4-INCH

TYPICAL DRIVEWAY/SIDEWALK SECTION

# TERRACE WIDTH	APRON SLOPE (G1) MIN %	DESIRABLE %	MAX %
3 FT	7.0	8.5	9.0
4 FT	5.0	7.0	9.0
5 FT	4.0	7.0	9.0
6 FT	4.0	7.0	9.0
7 FT	3.5	7.0	9.0
8 FT	3.0	7.0	9.0

NOTE: ALGEBRAIC DIFFERENCE BETWEEN TANGENT GRADES G1 & G2 IN FILL SHALL NOT EXCEED 14%

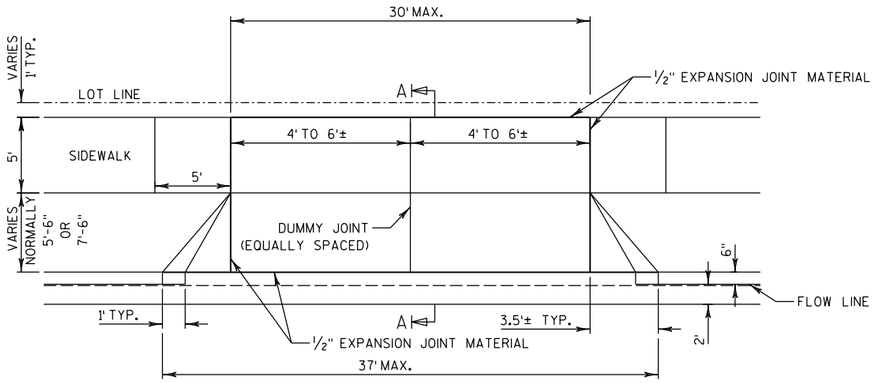
DEPRESS SIDEWALK PROFILE IF DRIVEWAY APRON EXCEEDS MAX SLOPE



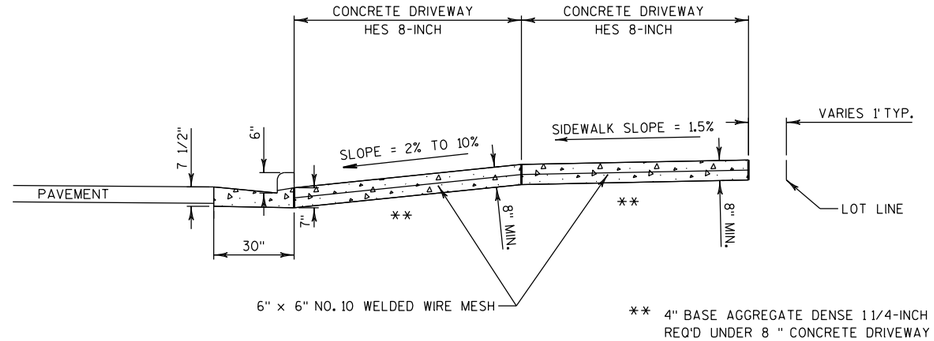
DEPRESSED SIDEWALK PROFILE DETAIL

RESIDENTIAL DRIVEWAY ENTRANCE DETAIL WITH SIDEWALK, CURB & GUTTER

2



PLAN VIEW



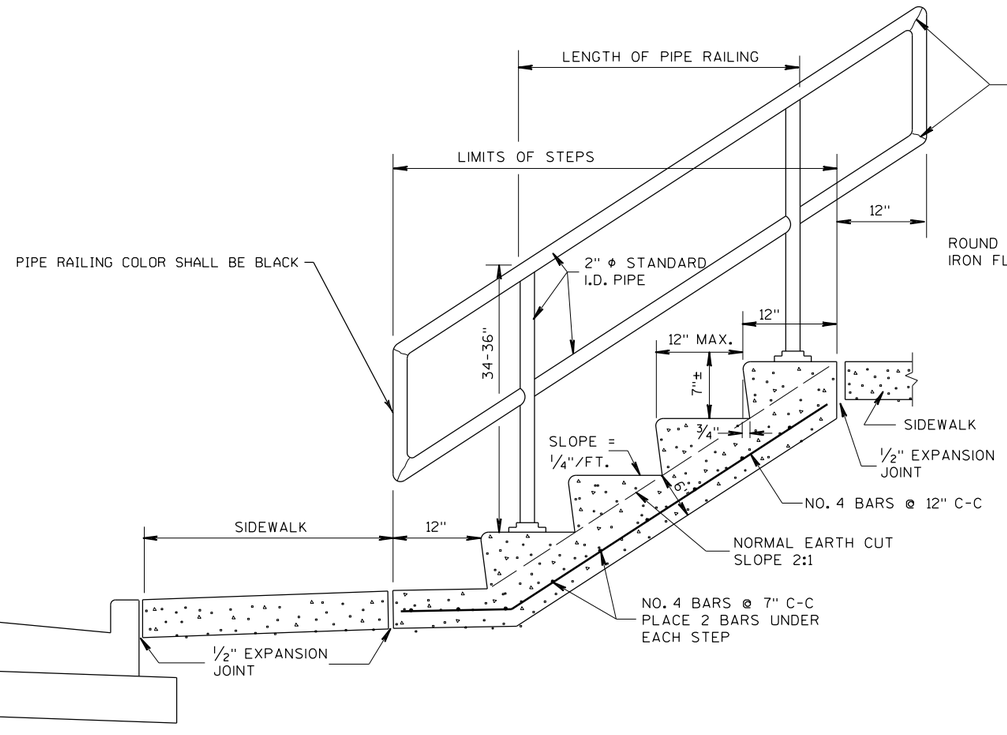
TYPICAL DRIVEWAY/SIDEWALK SECTION

NOTE:
4" MINIMUM THICKNESS OF WELL COMPACTED 3/4" BASE AGGREGATE DENSE REQUIRED UNDER DRIVEWAY APPROACH.

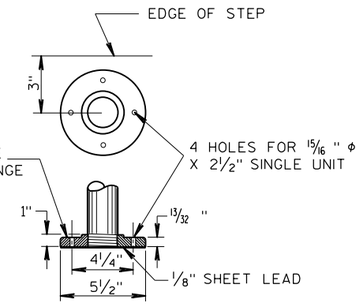
COMMERCIAL, INDUSTRIAL AND MULTI-FAMILY DRIVEWAY ENTRANCE DETAIL WITH SIDEWALK, CURB & GUTTER

PROJECT NO: 2782-11-70 & 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	CONSTRUCTION DETAIL	SHEET 22	E

2



CONCRETE STEPS DETAIL



FLANGE DETAIL

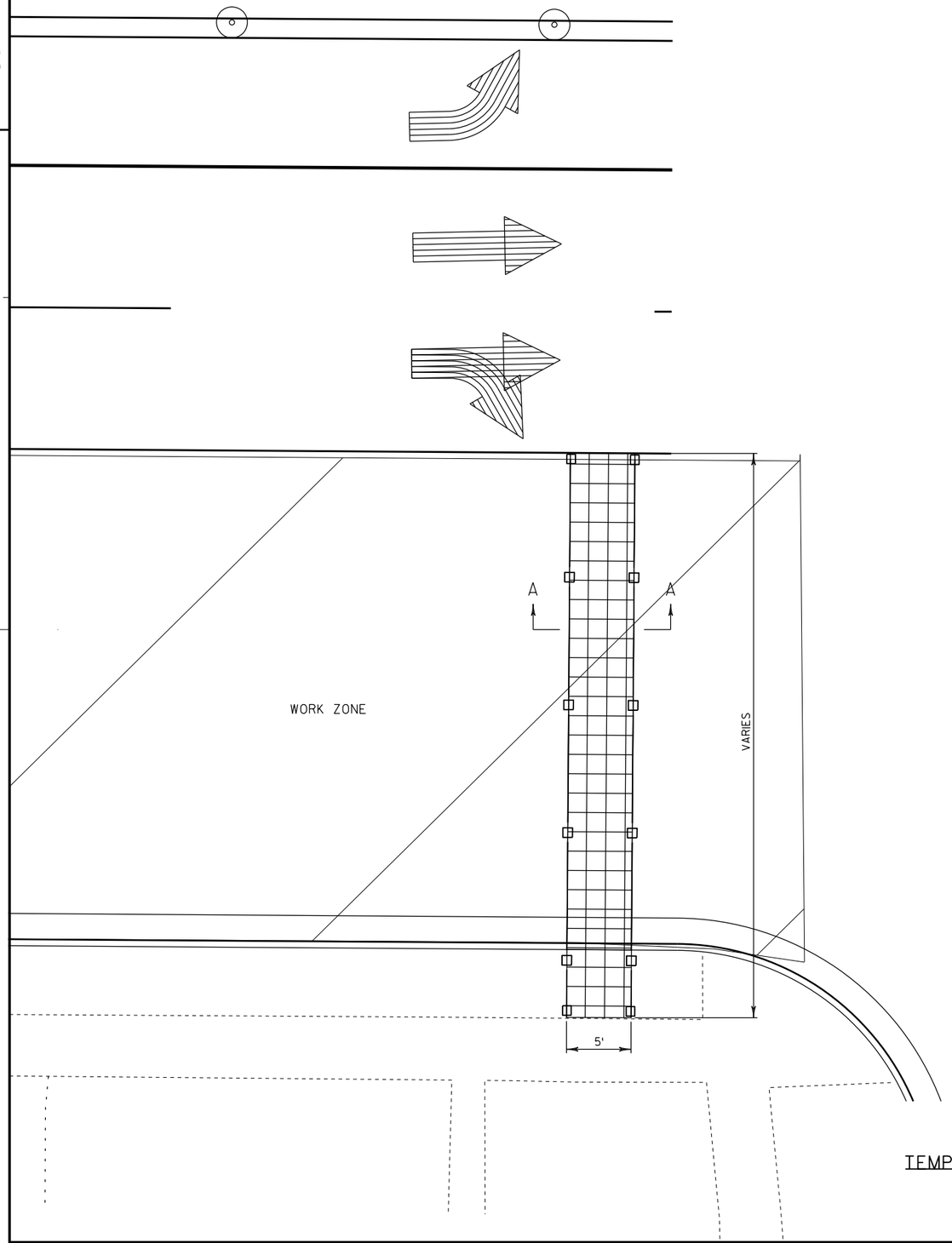
NOTE:

THE EXACT LOCATION, WIDTHS, & NUMBER OF STEPS TO BE DETERMINED BY THE ENGINEER IN THE FIELD.

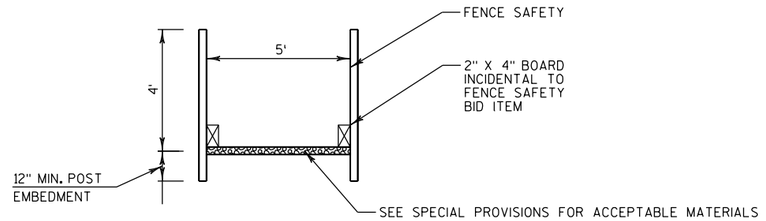
STEEL REINFORCEMENT AND PIPE RAILING NOT REQUIRED ON STEPS WITH 2 RISERS OR LESS.

MINIMUM WIDTH OF STEP EQUALS 4 FEET.

RAILING TO BE PLACED ON LEFT ASCENDING SIDE OF STEPS ONLY.



TEMPORARY CROSS WALK

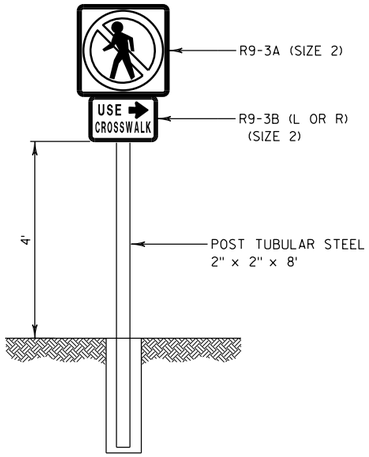


SECTION A - A

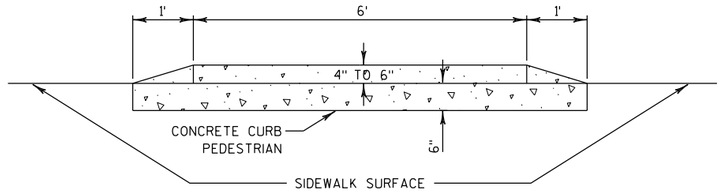
2

PROJECT NO: 2782-11-70 & 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	CONSTRUCTION DETAIL	SHEET 24	E

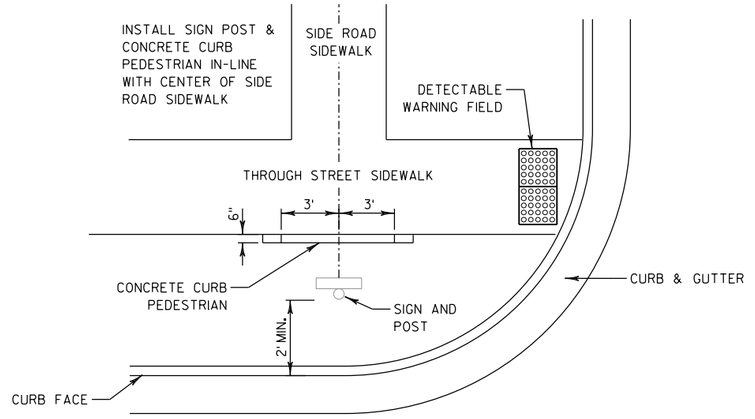
2



CROSSWALK CLOSURE SIGN

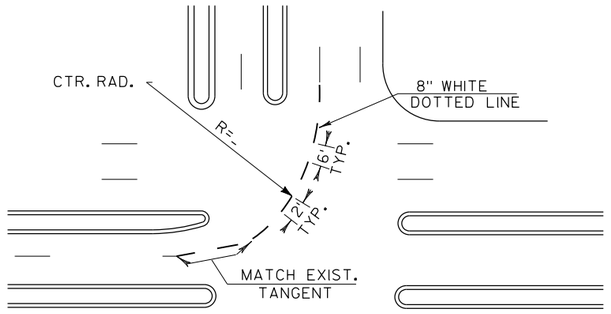


CONCRETE CURB PEDESTRIAN DETAIL
CURB ELEVATION VIEW



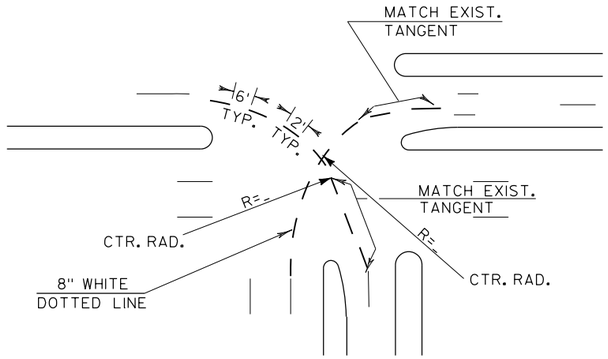
CURB AND SIGN LOCATION DETAIL

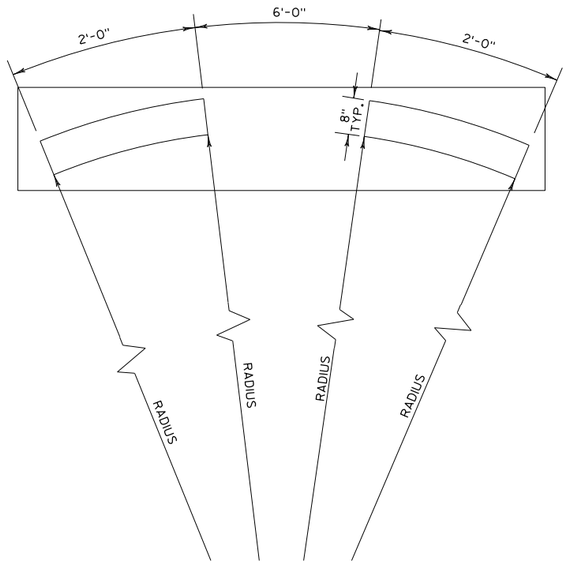
PROJECT NO: 2782-11-70 & 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	CONSTRUCTION DETAIL	SHEET 25	E



INTERSECTING HIGHWAYS
(DOTTED PATTERN)
DOUBLE LEFT-TURNING MOVEMENTS

2





DOTTED TEMPLATE

NOTE: CONTRACTOR TO BUILD TEMPLATE BASED ON RADIUS SHOWN. TEMPLATES ARE TO BE CONSTRUCTED OF PLYWOOD, PLASTIC, OR SUITABLE MATERIAL APPROVED BY THE ENGINEER IN THE FIELD.

GENERAL NOTES

1. DOTTED PAVEMENT MARKING PATTERNS SHALL BE INSTALLED WITH A 2-FOOT SEGMENT AND A 6-FOOT GAP.

2. EXISTING MARKINGS THRU INTERSECTIONS DO NOT ALWAYS HAVE THE 2-FOOT X 6-FOOT CYCLE. IF THE EXISTING MARKINGS ARE OF THE 5-FOOT CYCLE, THEY WILL BE BRUSH PLASTED AND PAVEMENT MARKED WITH A 380 WR TAPE GROOVED IN.

   IF THE EXISTING MARKINGS ARE NOT OF THE 2-FOOT CYCLE, THE CONTRACTOR WILL LAY OUT THE NEW MARKINGS, PREPARE THE EXISTING PAVMENT BY BRUSH PLASTING, AND A 380 WR TAPE PAVEMENT MARK THE NEW CYCLE.

3. IF THE DOTTED PAVEMENT MARKINGS ARE NON-EXISTING, THE CONTRACTOR SHALL LAY OUT THE RADIUS, AS BEING USED BY THE PRESENT TRAFFIC, WITH THE MINIMUM LANE WIDTHS AS SHOWN ON THE PLANS.

4. THE CONTRACTOR SHALL CONSTRUCT AND USE ONE OF THE TWO DOTTED TEMPLATES WHICH MOST CLOSELY MATCH THE FIELD CONDITIONS.

5. THE CONTRACTOR SHALL PROTECT THE TAPE LINES UNTIL DRY, BY THE USE OF TRAFFIC CONTROLS AND TRAFFIC CONES AS SHOWN ON THE TRAFFIC CONTROL PLANS.

2

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

BARRIER SHALL BE CAST-IN-PLACE UNLESS OTHERWISE SPECIFIED IN THE CONTRACT.

SAWED CONTRACTION JOINTS SHALL BE PROVIDED IN THE SIDES AND TOP OF THE CONCRETE MEDIAN BARRIER, SPACED AT 20 FOOT INTERVALS.

ALL HOLES SHALL BE FILLED WITH A COMMERCIAL NON-SHRINK GROUT AFTER INSTALLATION, AND SHALL BE CONSIDERED INCIDENTAL TO CONSTRUCTION OF BARRIER WALL.

(1) 3/4-INCH BEVEL OR 1-INCH RADIUS (TYPICAL).

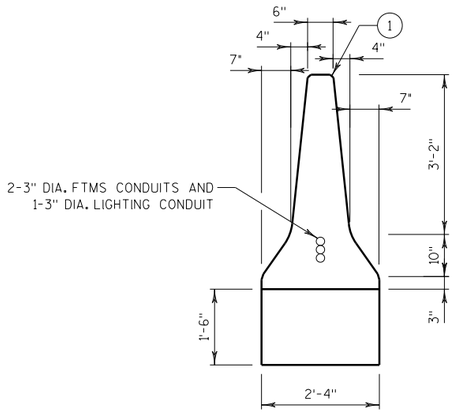
CONSTRUCTION NOTES

A. METHOD OF CONSTRUCTION OF CONCRETE BARRIER WALL SHALL BE CAST-IN-PLACE.

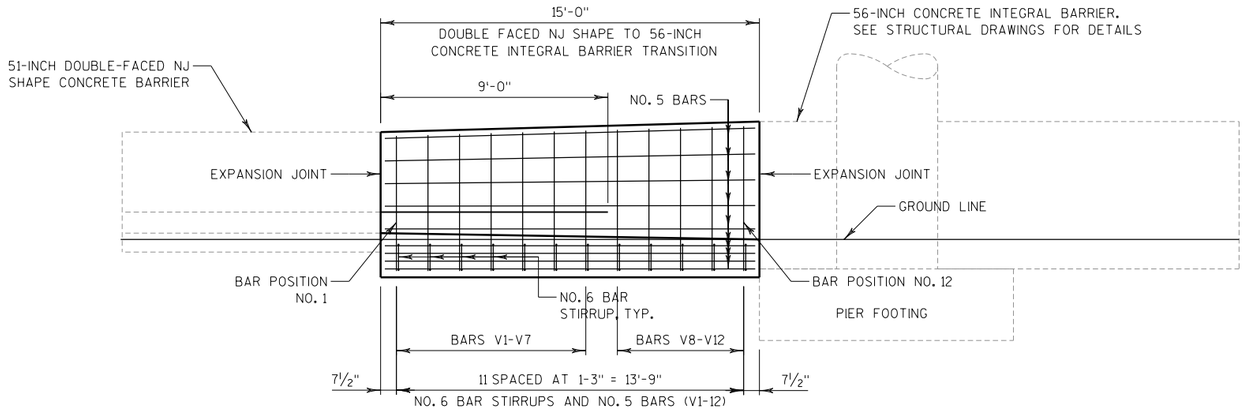
B. AT EXPANSION JOINTS, PLACE CONDUIT COUPLINGS WITHOUT GLUE FOR USE AS EXPANSION COUPLINGS.

C. SEE LIGHTING DETAIL FOR PLACEMENT OF T.M.S. AND LIGHTING CONDUIT. T.M.S. = FREEWAY TRAFFIC MANAGEMENT SYSTEM.

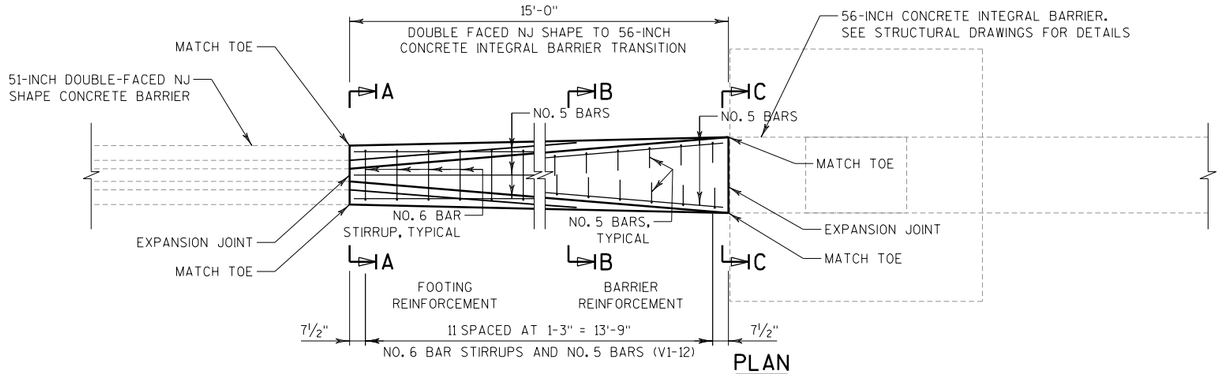
D. A GREY PIGMENTED ANTISPALLING COMPOUND SHALL BE USED TO COAT THE FACE OF THE BARRIER WALL.



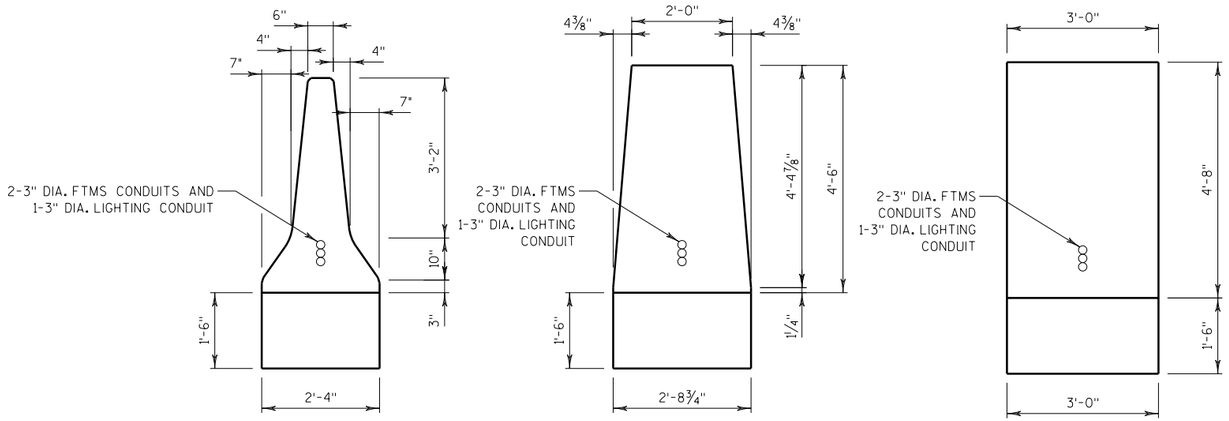
51-INCH DOUBLE-FACED NJ-SHAPE CONCRETE BARRIER



ELEVATION



PLAN



SECTION A-A

SECTION B-B

SECTION C-C

NOTES

CONSTRUCT PER STANDARD SPECIFICATION 603

SPLICES OF LONGITUDINAL BARS TO BE 2'LONG AND FIRMLY TIED AND FASTENED TOGETHER UNLESS NOTED OTHERWISE

4000 PSI CONCRETE AIR ENTRAINMENT PER STANDARD SPECIFICATION 501

USE ¾" BEVEL OR 1" RADIUS ON ALL EXPOSED SHARP EDGES UNLESS NOTED OTHERWISE

THE NUMBER IN BAR DESIGNATION REPRESENTS THE BARS LOCATION

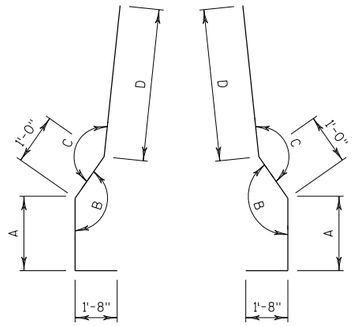
2" CLEAR COVER TYPCIAL

CONCRETE BARRIER TRANSITION TYPE NJ51DF TO V56

PROJECT NO: 1100-37-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	CONSTRUCTION DETAIL	SHEET 28	E

BAR CHART
BARS V1 - V8

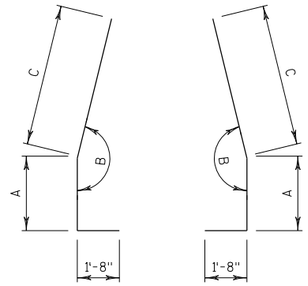
BAR MARK	A	B	C	D
V1	1'-5"	147°-05'	153°-00'	3'-1"
V2	1'-5"	151°-00'	157°-00'	3'-1"
V3	1'-5"	155°-05'	161°-05'	3'-1"
V4	1'-5"	159°-30'	165°-05'	3'-2"
V5	1'-4"	163°-45'	169°-10'	3'-2"
V6	1'-4"	167°-55'	173°-10'	3'-2"
V7	1'-4"	172°-20'	177°-15'	3'-3"



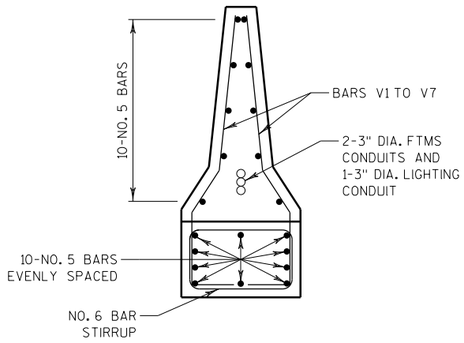
BAR CHART
BARS V1 - V7

BAR CHART
BARS V8 - V12

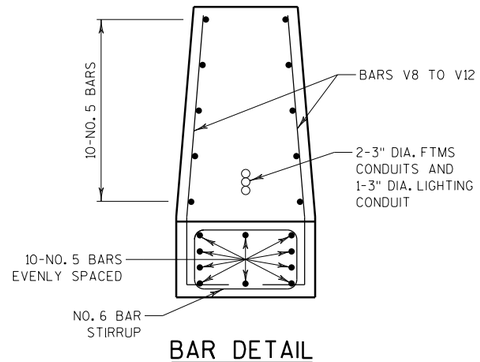
BAR MARK	A	B	C
V8	1'-4"	175°-35'	4'-3"
V9	1'-4"	176°-35'	4'-3"
V10	1'-4"	177°-30'	4'-4"
V11	1'-3"	178°-30'	4'-4"
V12	1'-3"	179°-30'	4'-5"



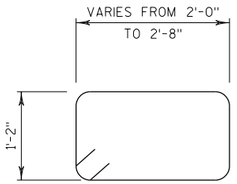
BAR CHART
BARS V8 - V12



BAR DETAIL
BARS V1 - V7



BAR DETAIL
BARS V8 - V12



STIRRUP BAR
BENDING DETAIL

CONCRETE BARRIER TRANSITION TYPE NJ51DF TO V56

PROJECT NO: 1100-37-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	CONSTRUCTION DETAIL	SHEET 29	E

2

2

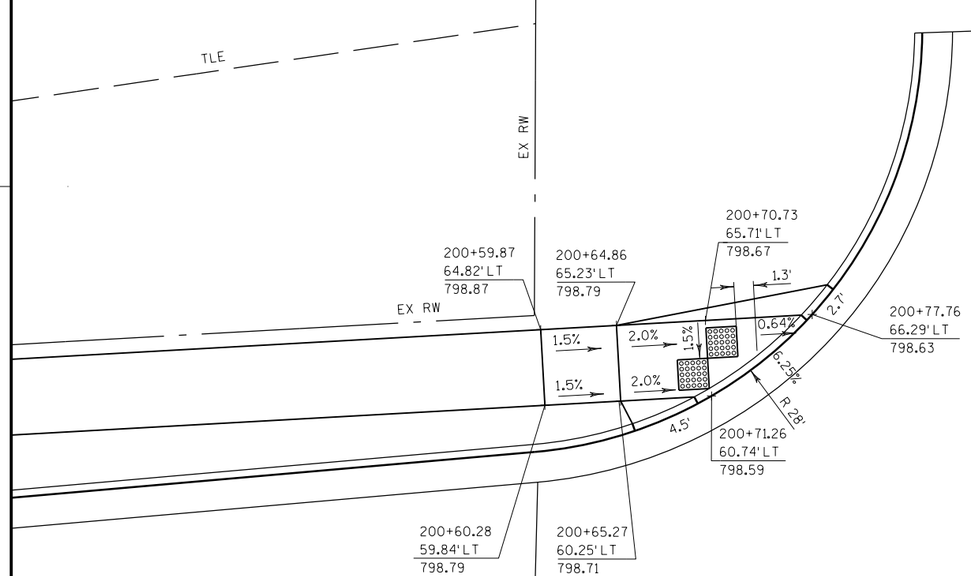
N

NOTES:

1. ALL STATION CALL-OFFS ARE BASED ON PILGRIM ROAD REFERENCE LINE ALIGNMENT.
2. LIMITS OF GUTTER PAN WARPING SHOULD BE FROM TAPER ENDS OF CONCRETE CURB.

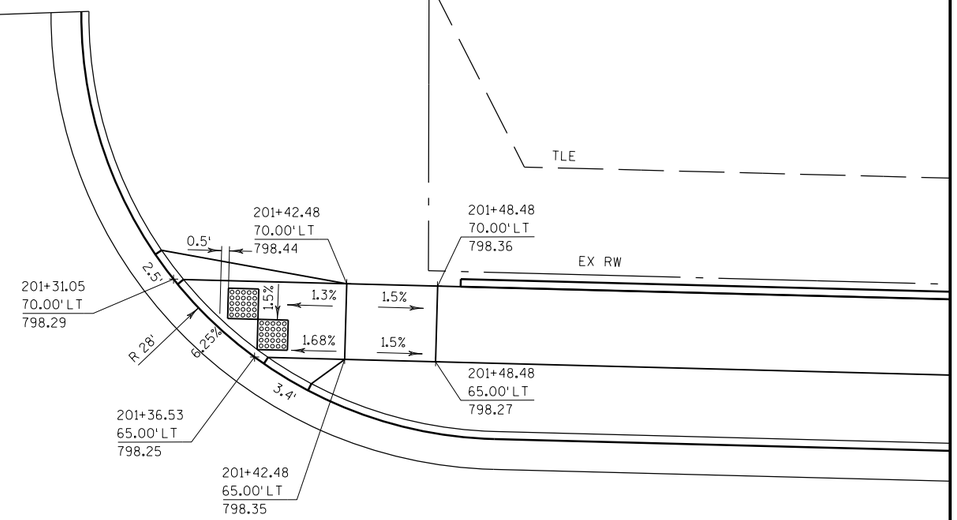
LEGEND

DETECTABLE WARNING FIELD



CURB RAMP TYPE 4B1 MODIFIED
PARK BOULEVARD SOUTHWEST

PARK BLVD.



CURB RAMP TYPE 4B1 MODIFIED
PARK BOULEVARD NORTHWEST

PILGRIM ROAD

PROJECT NO: 2782-11-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	CURB RAMP DETAIL: PARK BOULEVARD	SHEET 30	E

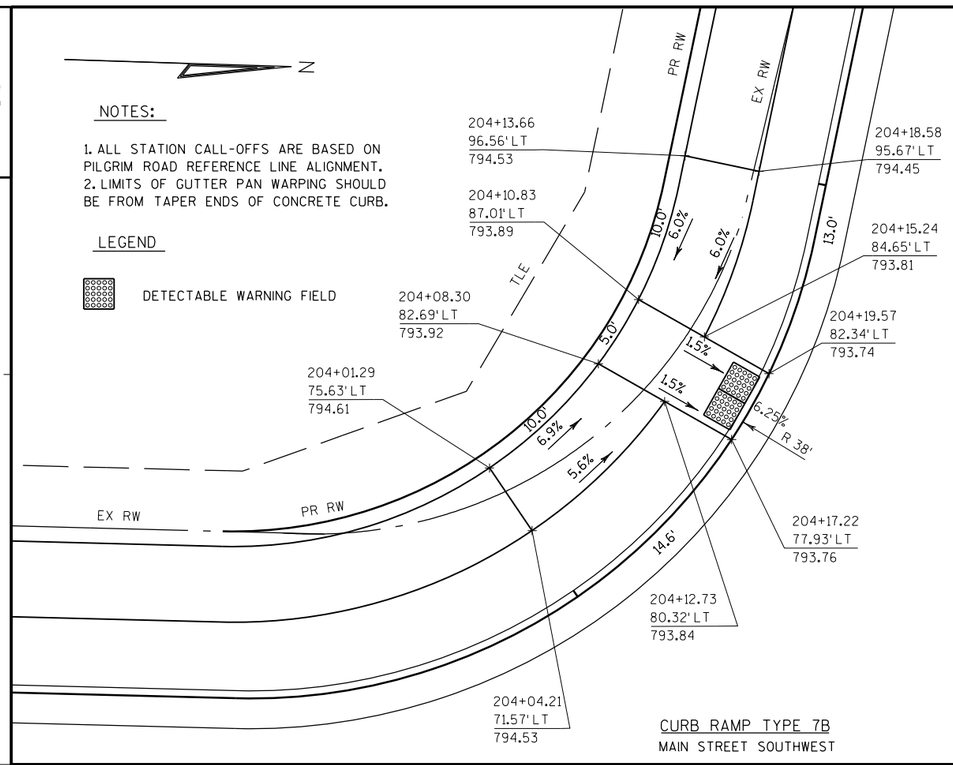
2

NOTES:

1. ALL STATION CALL-OFFS ARE BASED ON PILGRIM ROAD REFERENCE LINE ALIGNMENT.
2. LIMITS OF GUTTER PAN WARPING SHOULD BE FROM TAPER ENDS OF CONCRETE CURB.

LEGEND

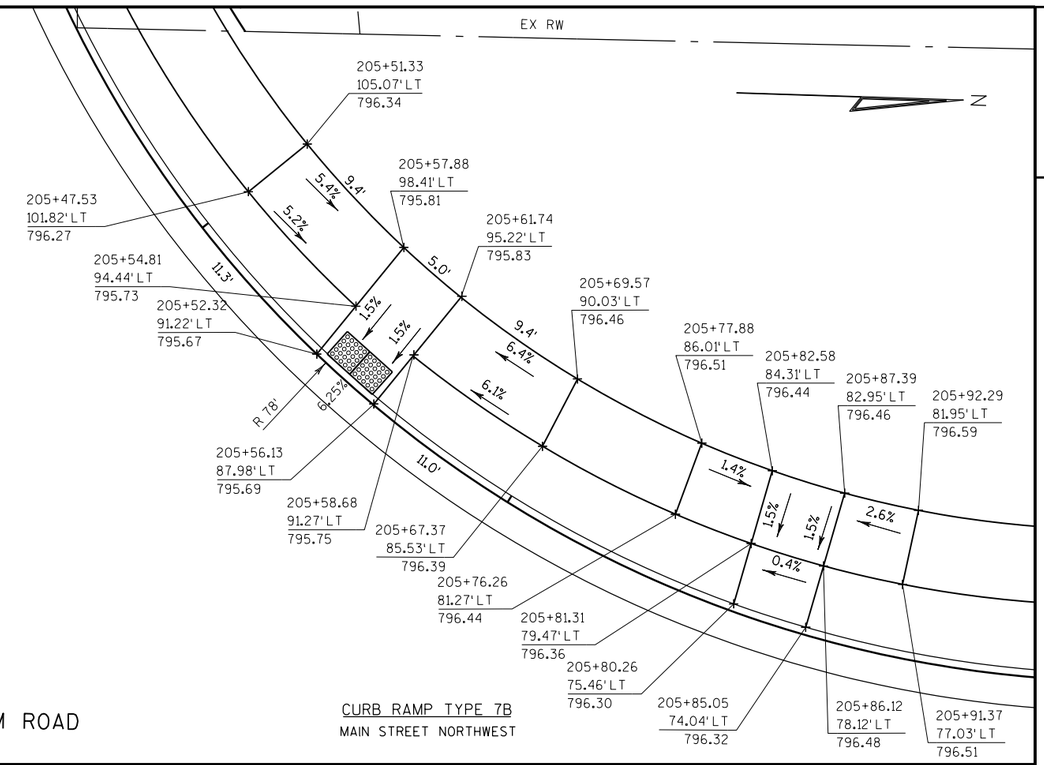
DETECTABLE WARNING FIELD



CURB RAMP TYPE 7B
MAIN STREET SOUTHWEST

MAIN STREET (STH 74)

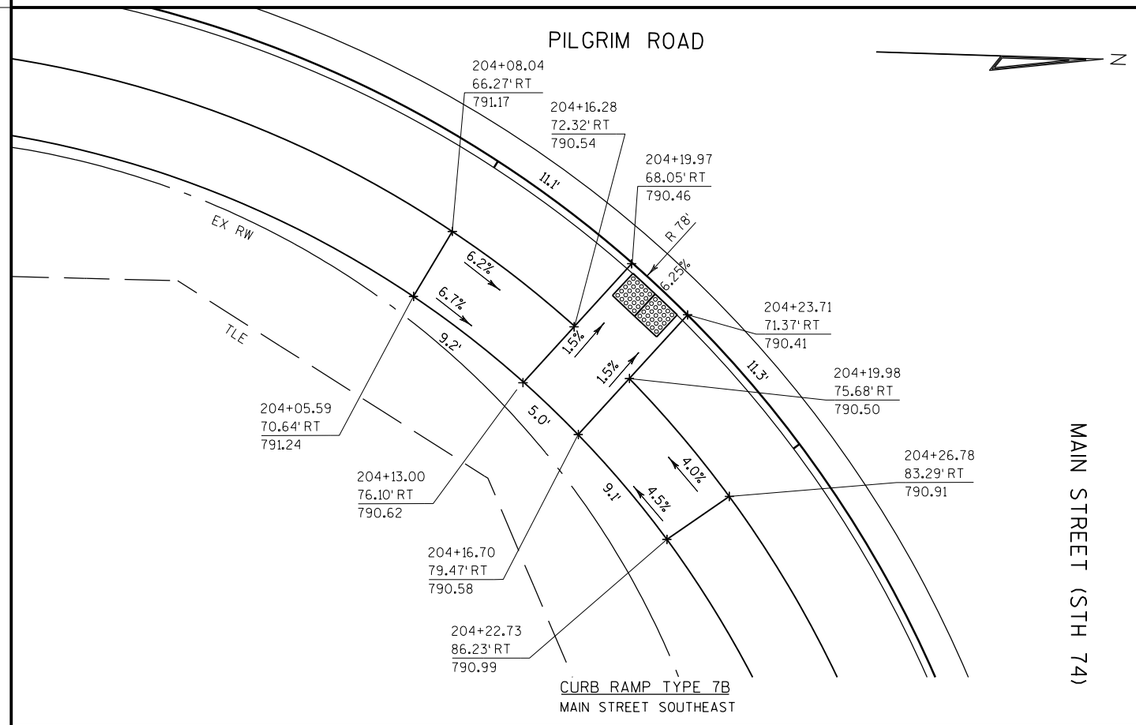
PILGRIM ROAD



CURB RAMP TYPE 7B
MAIN STREET NORTHWEST

MAIN STREET (STH 74)

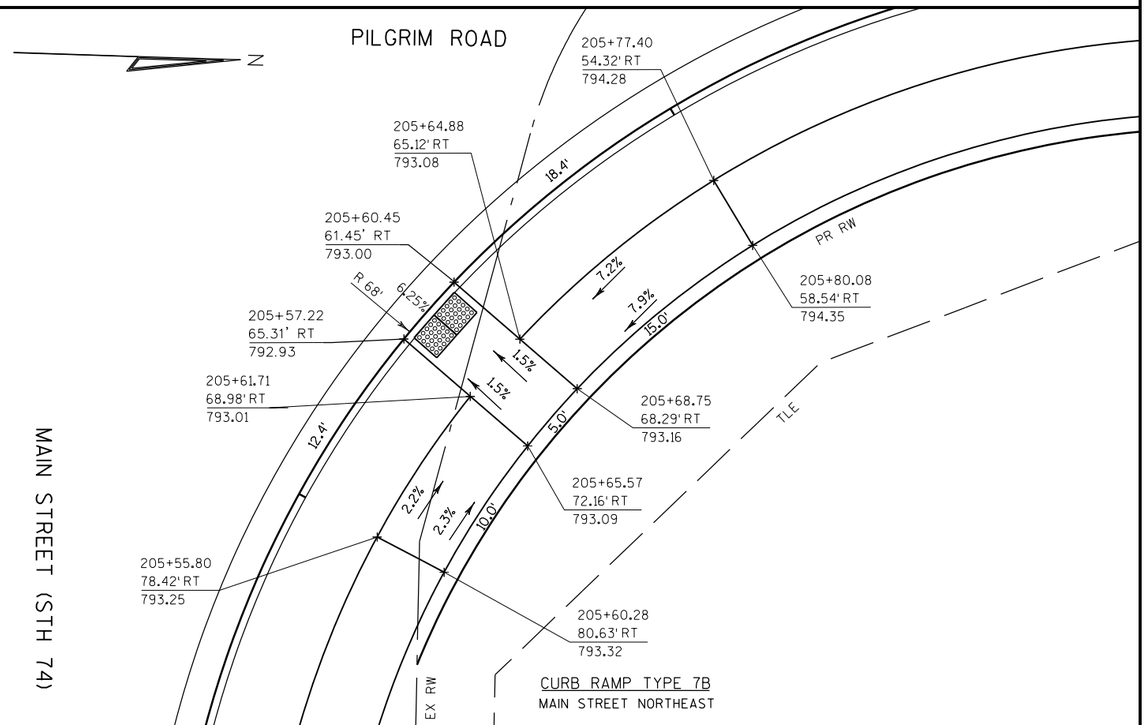
PILGRIM ROAD



CURB RAMP TYPE 7B
MAIN STREET SOUTHEAST

MAIN STREET (STH 74)

PILGRIM ROAD



CURB RAMP TYPE 7B
MAIN STREET NORTHEAST

PROJECT NO: 2782-11-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	CURB RAMP DETAIL: MAIN STREET	SHEET 31	E

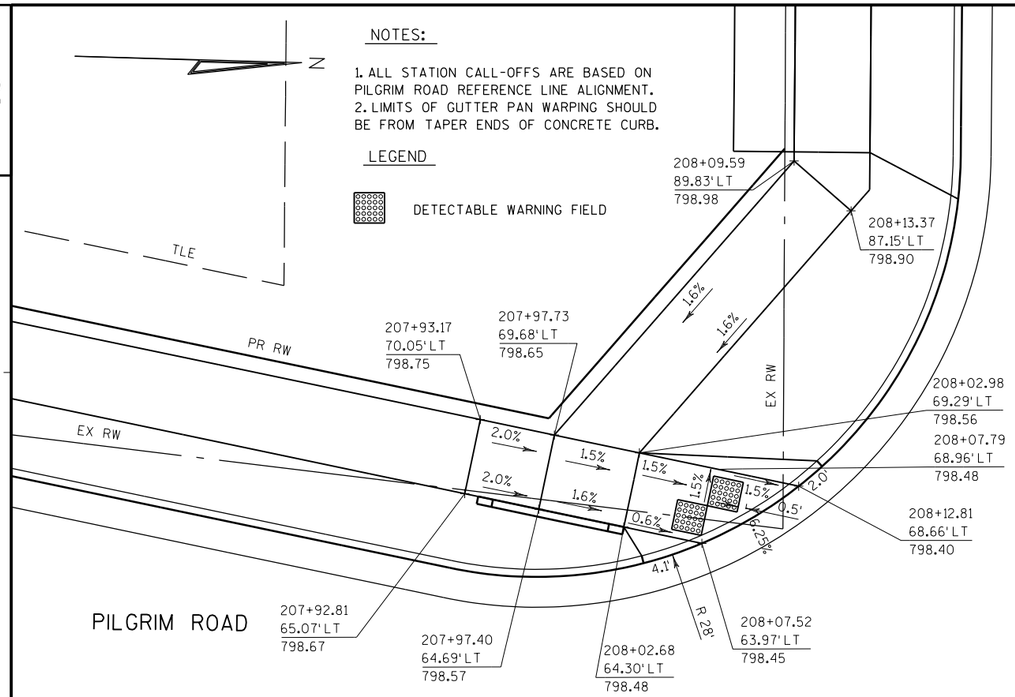
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NOTES:

1. ALL STATION CALL-OFFS ARE BASED ON PILGRIM ROAD REFERENCE LINE ALIGNMENT.
2. LIMITS OF GUTTER PAN WARPING SHOULD BE FROM TAPER ENDS OF CONCRETE CURB.

LEGEND

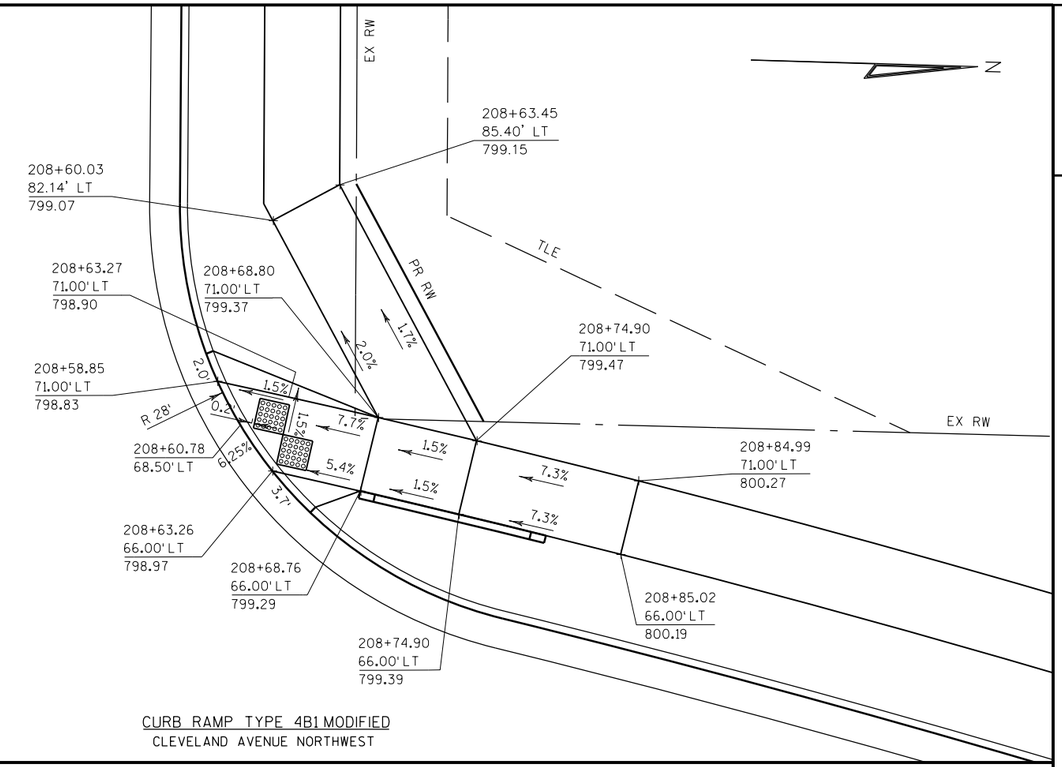
DETECTABLE WARNING FIELD



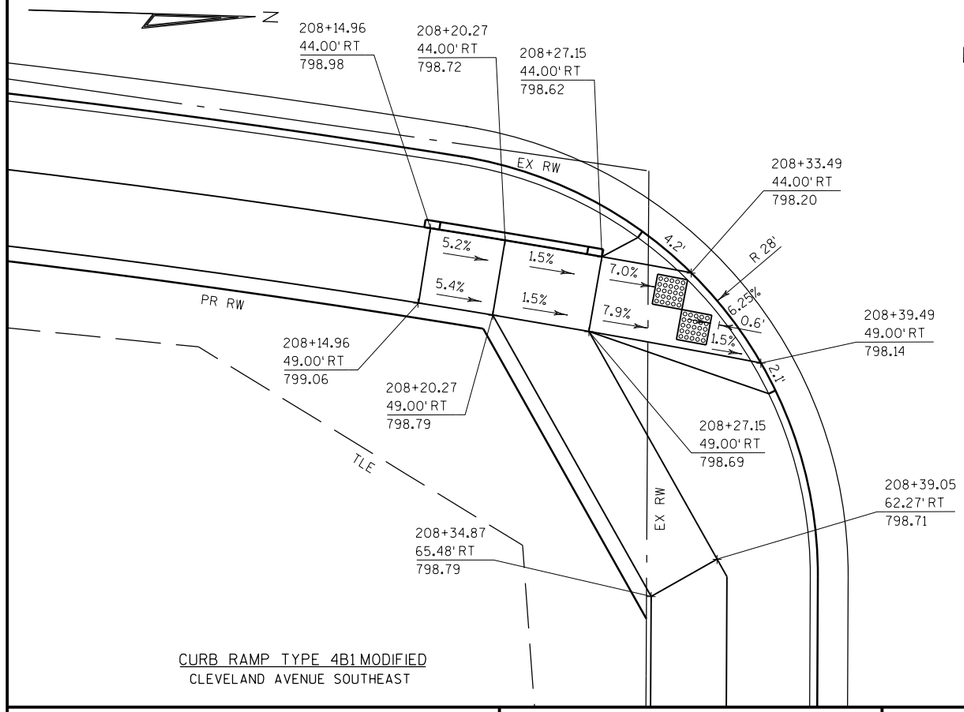
CURB RAMP TYPE 4B1 MODIFIED
CLEVELAND AVENUE SOUTHWEST

CLEVELAND AVENUE

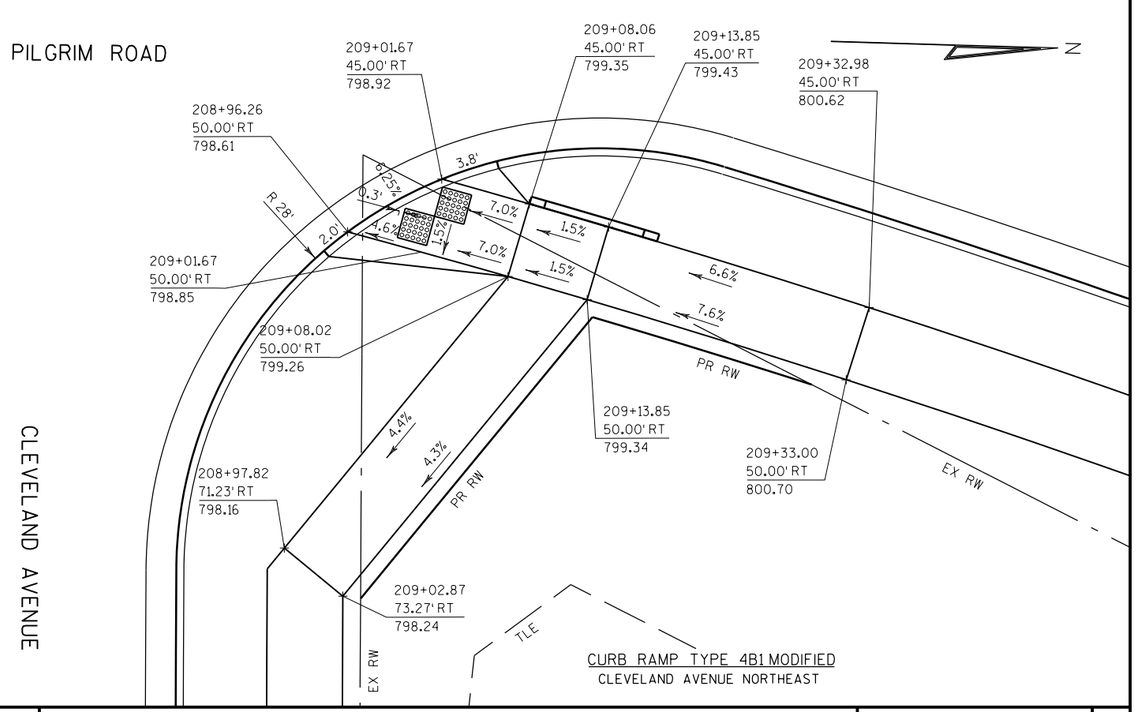
EX RW



CURB RAMP TYPE 4B1 MODIFIED
CLEVELAND AVENUE NORTHWEST



CURB RAMP TYPE 4B1 MODIFIED
CLEVELAND AVENUE SOUTHEAST



CURB RAMP TYPE 4B1 MODIFIED
CLEVELAND AVENUE NORTHEAST

PROJECT NO: 2782-11-70 & 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	CURB RAMP DETAIL: CLEVELAND AVENUE	SHEET 32	E

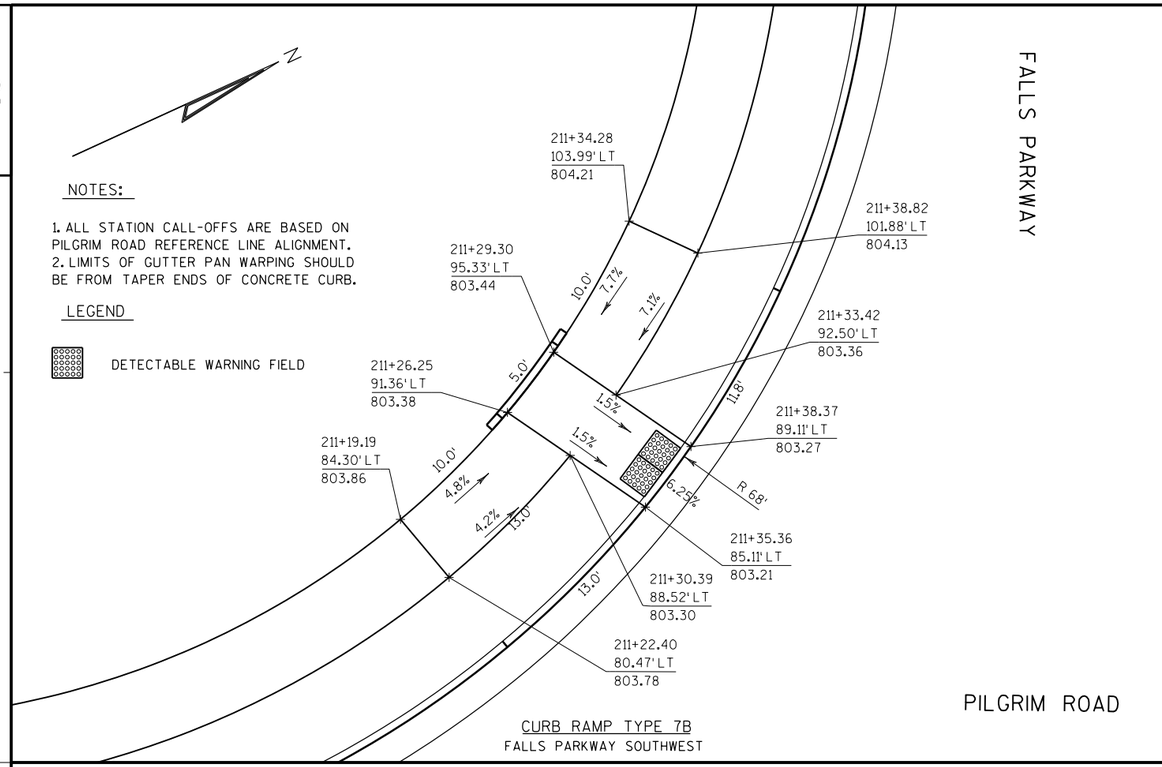
2

NOTES:

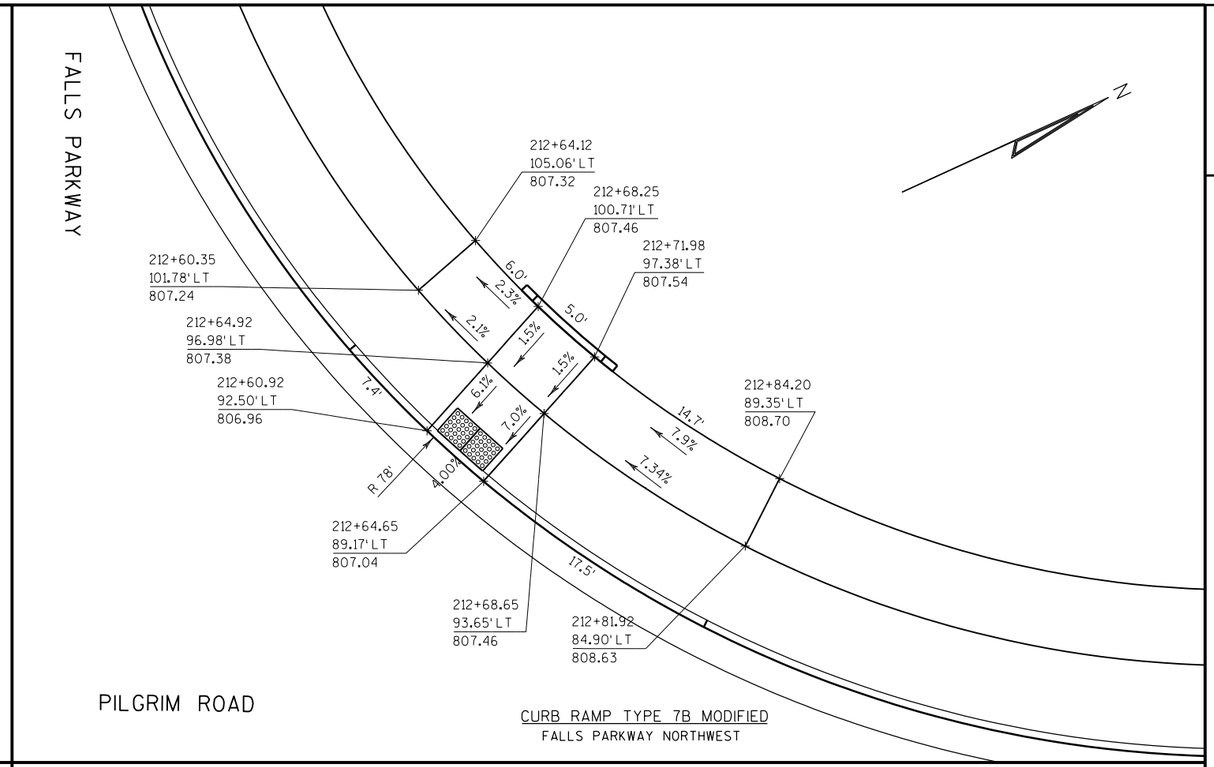
1. ALL STATION CALL-OFFS ARE BASED ON PILGRIM ROAD REFERENCE LINE ALIGNMENT.
2. LIMITS OF GUTTER PAN WARPING SHOULD BE FROM TAPER ENDS OF CONCRETE CURB.

LEGEND

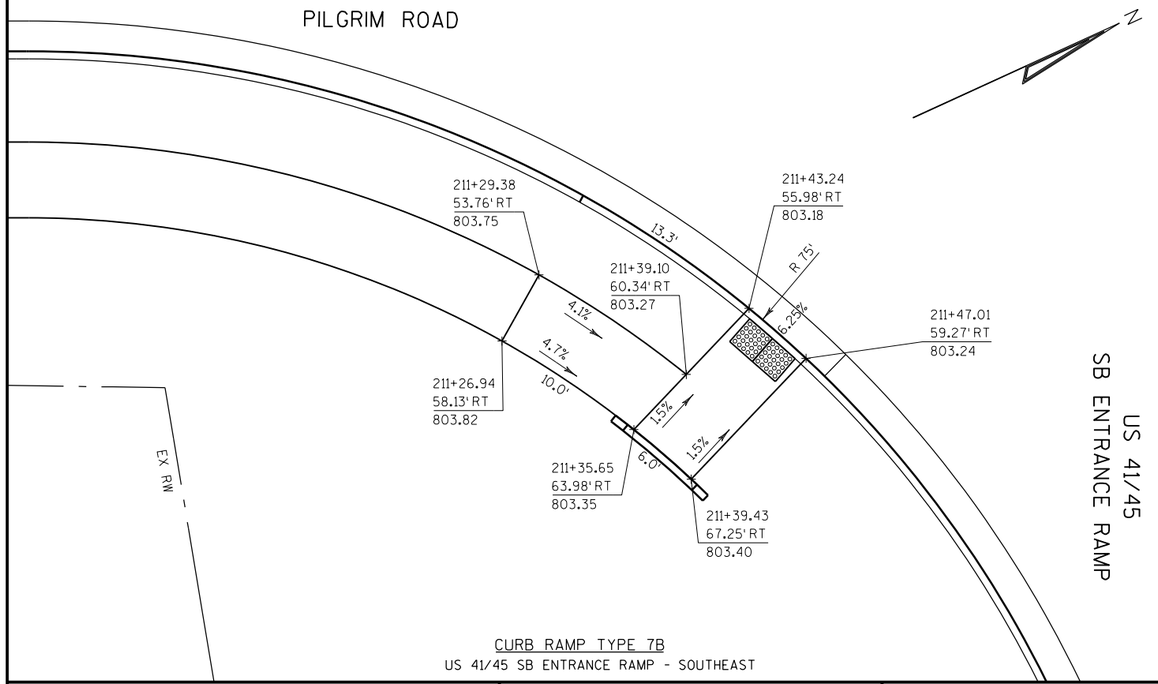
DETECTABLE WARNING FIELD



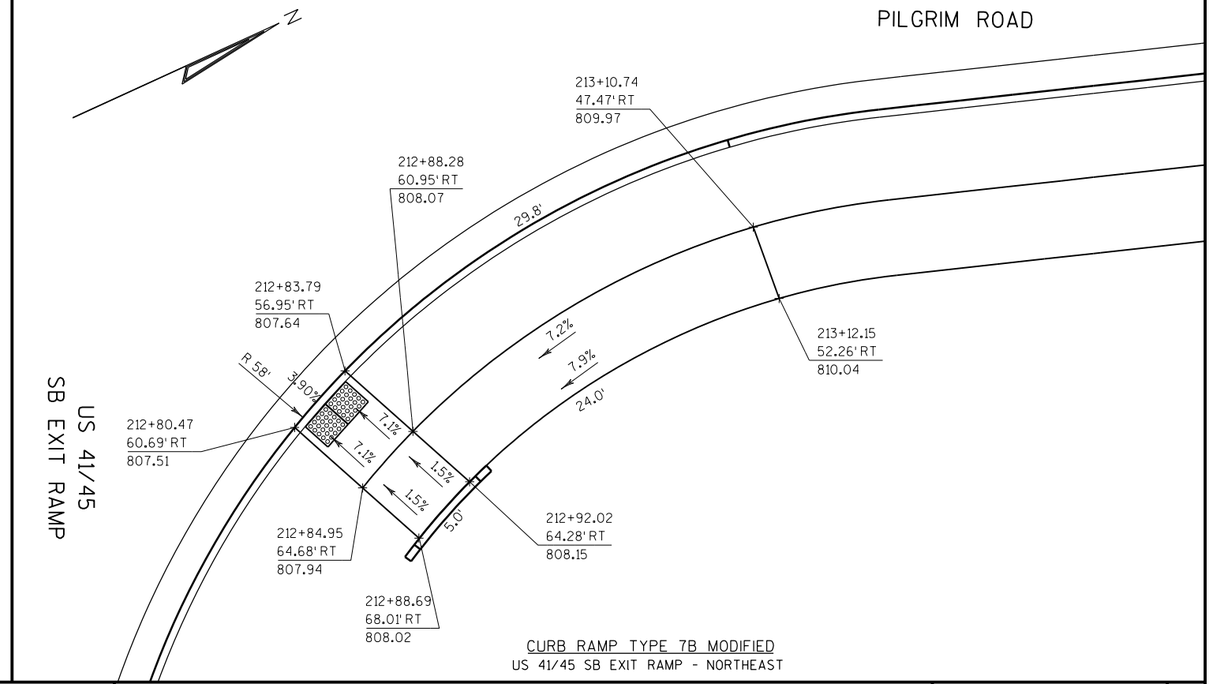
CURB RAMP TYPE 7B
FALLS PARKWAY SOUTHWEST



CURB RAMP TYPE 7B MODIFIED
FALLS PARKWAY NORTHWEST



CURB RAMP TYPE 7B
US 41/45 SB ENTRANCE RAMP - SOUTHEAST



CURB RAMP TYPE 7B MODIFIED
US 41/45 SB EXIT RAMP - NORTHEAST

PROJECT NO: 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	CURB RAMP DETAIL: FALLS PARKWAY	SHEET 33	E

2

PILGRIM ROAD

US 41/45 NB EXIT RAMP

EX RW

N

220+88.23
34.00' RT
829.45

220+93.03
34.00' RT
829.37

220+83.87
34.00' RT
829.75

220+83.37
39.00' RT
829.67

220+88.23
39.00' RT
829.50

220+93.09
39.00' RT
829.42

5.0'
6.0%
3.4%
5.0'
1.5%
1.5%
33.9'
7.0%
7.0%

221+26.14
34.00' RT
827.00

221+30.76
32.40' RT
826.94

221+32.39
37.41' RT
826.86

221+27.79
39.00' RT
826.92

1.5%
1.5%
7.1%
7.1%
1.8'
3.9%
1.8'
R 701.2'

221+29.85
45.31' RT
826.45

221+34.43
43.70' RT
826.39

221+41.05
64.60' RT
825.63

221+36.53
66.18' RT
825.68

R 679.2'
1.8'
4.0%
1.8'

221+42.83
70.30' RT
826.05

221+47.33
68.78' RT
826.30

221+38.32
71.87' RT
826.10

7.0%
7.0%
5.0%
1.5%
1.5%
5.1%

221+39.80
76.62' RT
826.18

5.0'

221+48.75
73.56' RT
826.38

221+44.29
75.06' RT
826.13

NOTES:

1. ALL STATION CALL-OFFS ARE BASED ON PILGRIM ROAD REFERENCE LINE ALIGNMENT.
2. LIMITS OF GUTTER PAN WARPING SHOULD BE FROM TAPER ENDS OF CONCRETE CURB.

LEGEND

DETECTABLE WARNING FIELD

CURB RAMP TYPE 7B MODIFIED

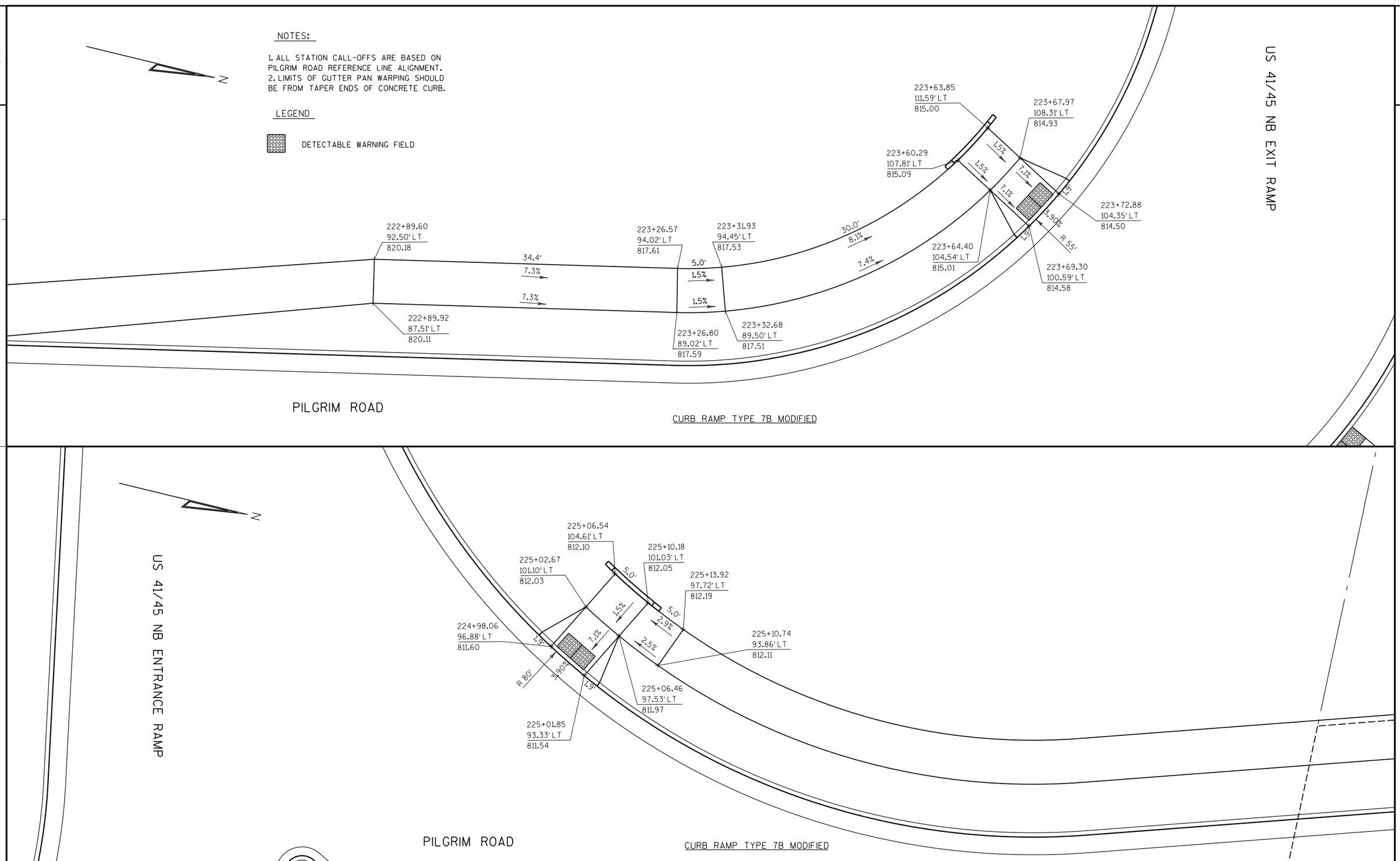
PROJECT NO: 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	CURB RAMP DETAIL: US 41/45 NB RAMPS	SHEET 34	E

NOTES:

1. ALL STATION CALL-OFFS ARE BASED ON PILGRIM ROAD REFERENCE LINE ALIGNMENT.
2. LIMITS OF GUTTER PAN WARPING SHOULD BE FROM TAPER ENDS OF CONCRETE CURB.

LEGEND

DETECTABLE WARNING FIELD



PROJECT NO: 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	CURB RAMP DETAIL: US 41/45 NB RAMPS	SHEET 35	E

FILE NAME : P:\44xx\4442\Plan\021007_cd.dgn PLOT DATE : 11/2/2014 PLOT BY : ajp PLOT NAME : PLOT SCALE : 1:10

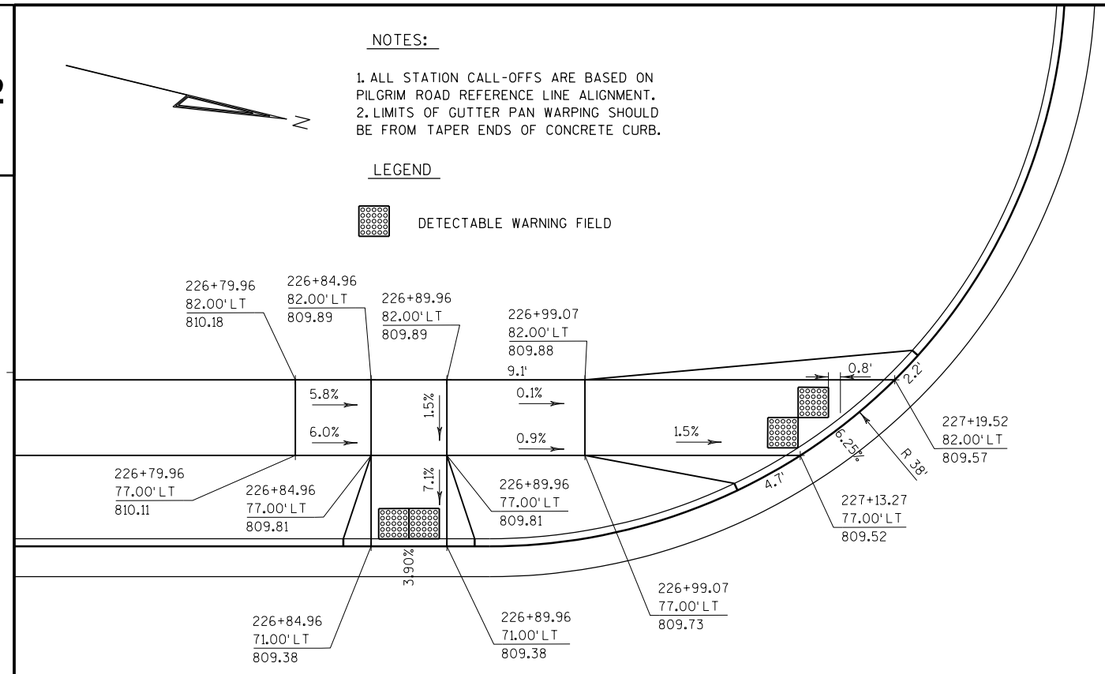
WISDOT/CADDS SHEET 42

NOTES:

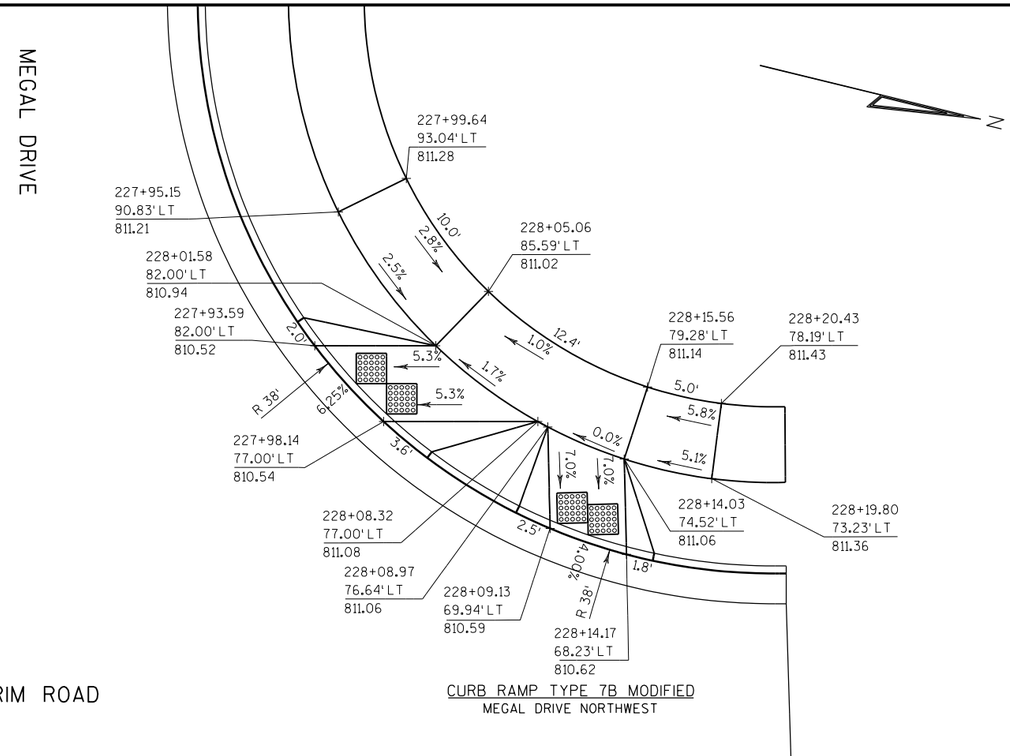
1. ALL STATION CALL-OFFS ARE BASED ON PILGRIM ROAD REFERENCE LINE ALIGNMENT.
2. LIMITS OF GUTTER PAN WARPING SHOULD BE FROM TAPER ENDS OF CONCRETE CURB.

LEGEND

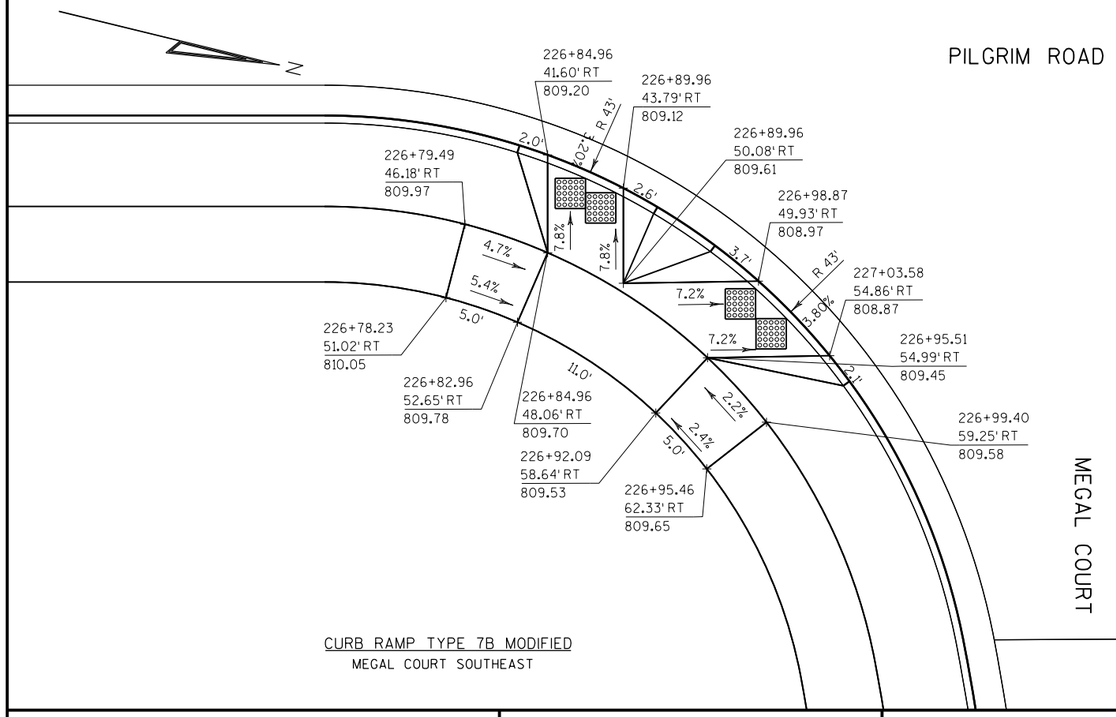
DETECTABLE WARNING FIELD



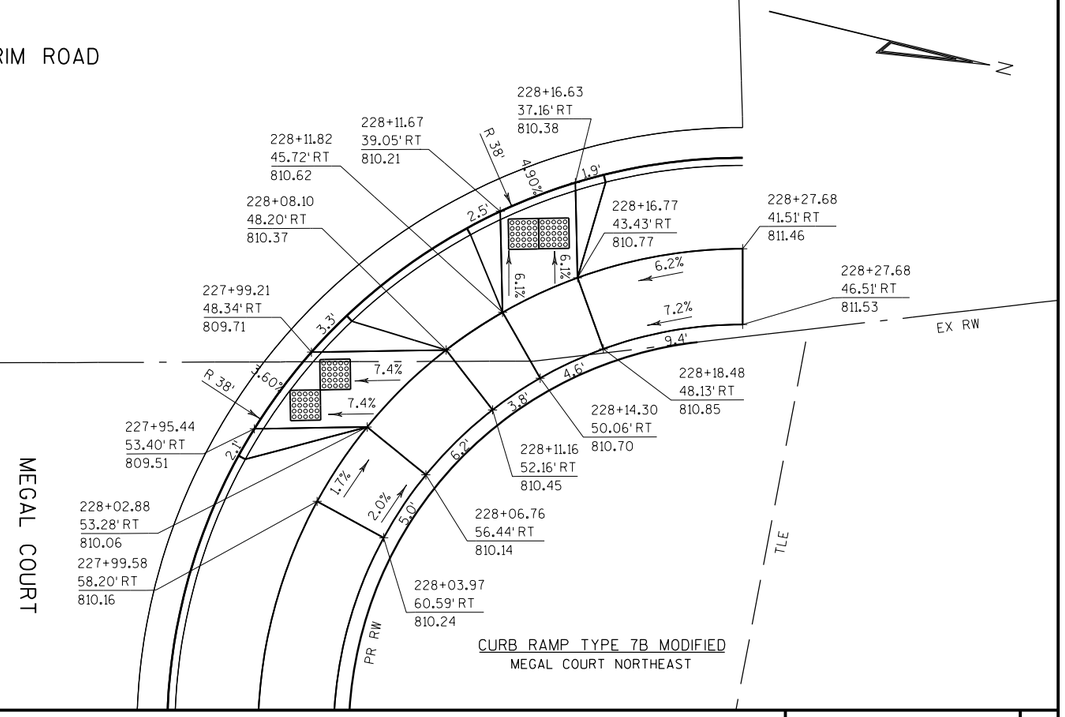
CURB RAMP TYPE 7B MODIFIED
MEGAL DRIVE SOUTHWEST



CURB RAMP TYPE 7B MODIFIED
MEGAL DRIVE NORTHWEST



CURB RAMP TYPE 7B MODIFIED
MEGAL COURT SOUTHEAST



CURB RAMP TYPE 7B MODIFIED
MEGAL COURT NORTHEAST

PROJECT NO: 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	CURB RAMP DETAIL: MEGAL DRIVE/MEGAL COURT	SHEET 36	E

NOTES:

1. ALL STATION CALL-OFFS ARE BASED ON MEGAL DRIVE REFERENCE LINE ALIGNMENT.
2. LIMITS OF GUTTER PAN WARPING SHOULD BE FROM TAPER ENDS OF CONCRETE CURB.

LEGEND

DETECTABLE WARNING FIELD

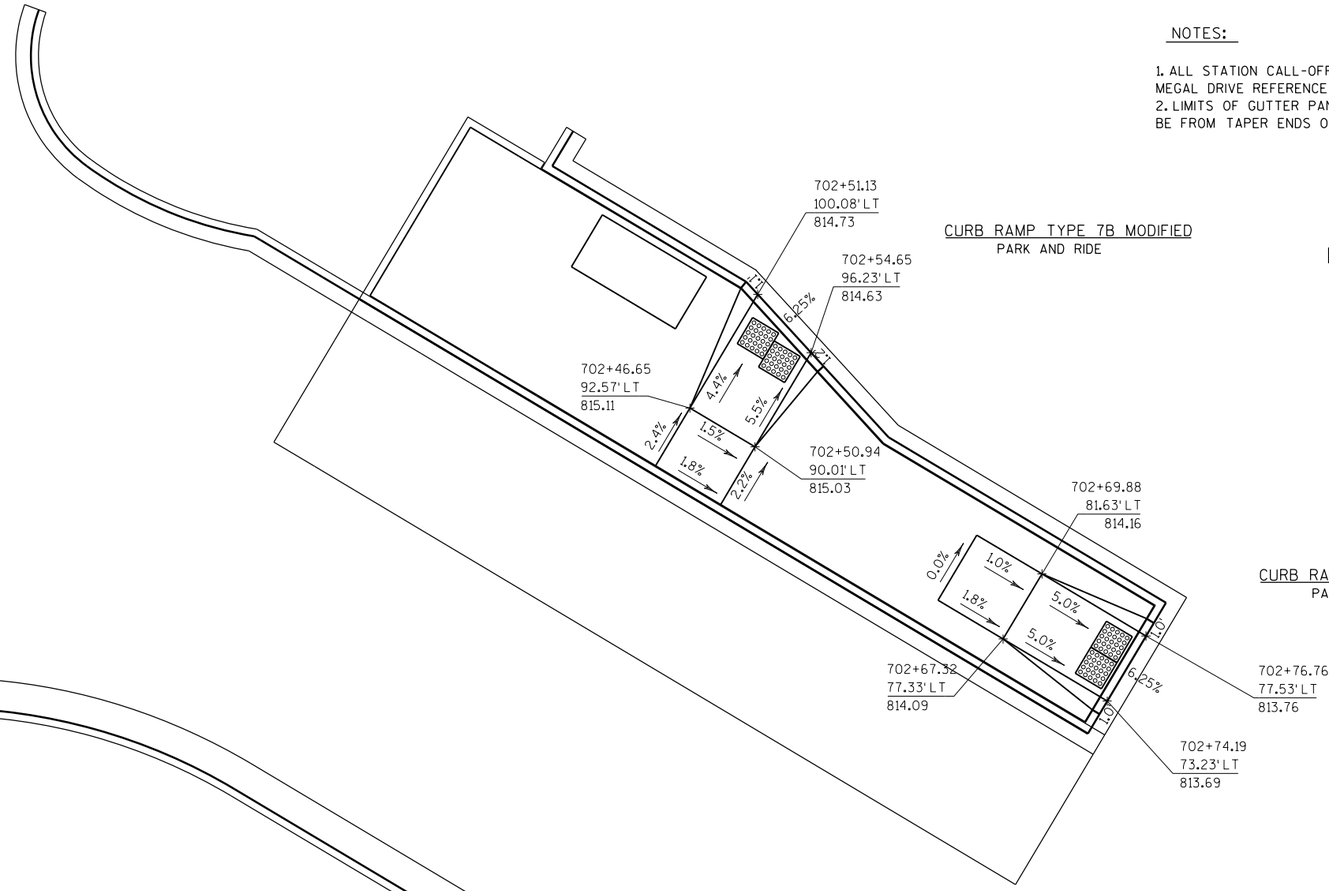
N

PARK AND ROAD

TIPP STREET

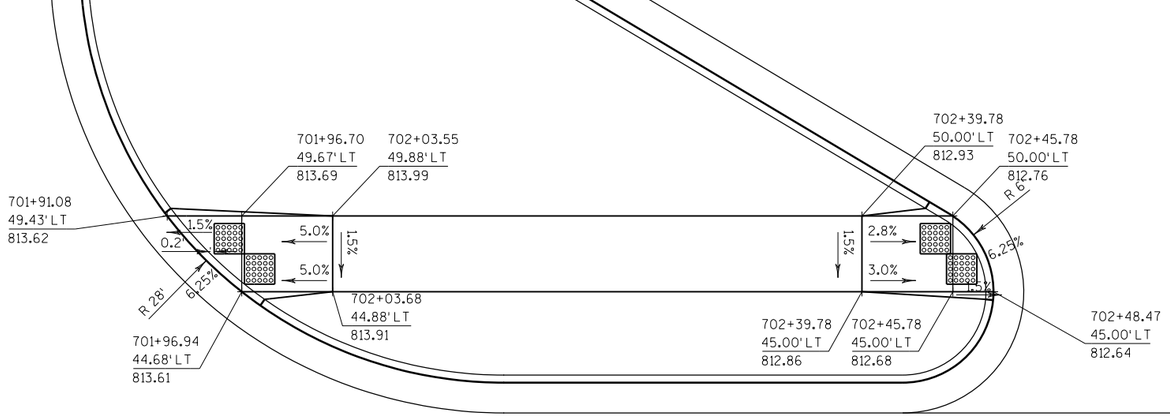
MEGAL DRIVE

CURB RAMP TYPE 7B MODIFIED
PARK AND RIDE



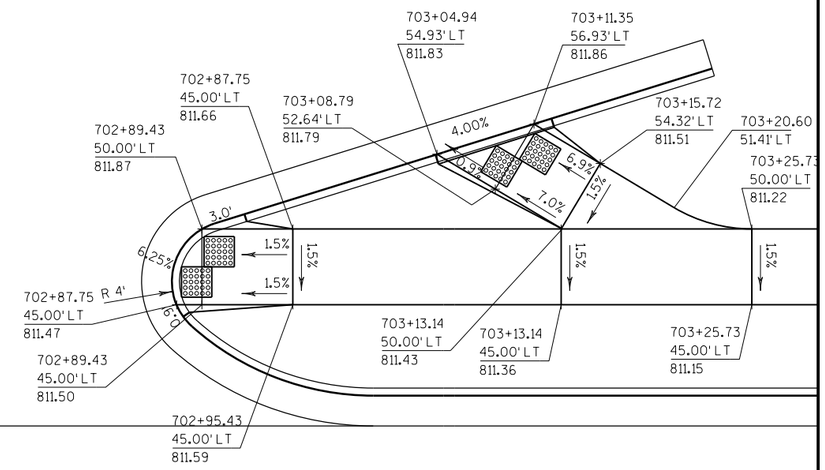
CURB RAMP TYPE 7B MODIFIED
PARK AND RIDE

CURB RAMP TYPE 7B MODIFIED
PARK AND RIDE



CURB RAMP TYPE 4B1 MODIFIED
PARK AND RIDE

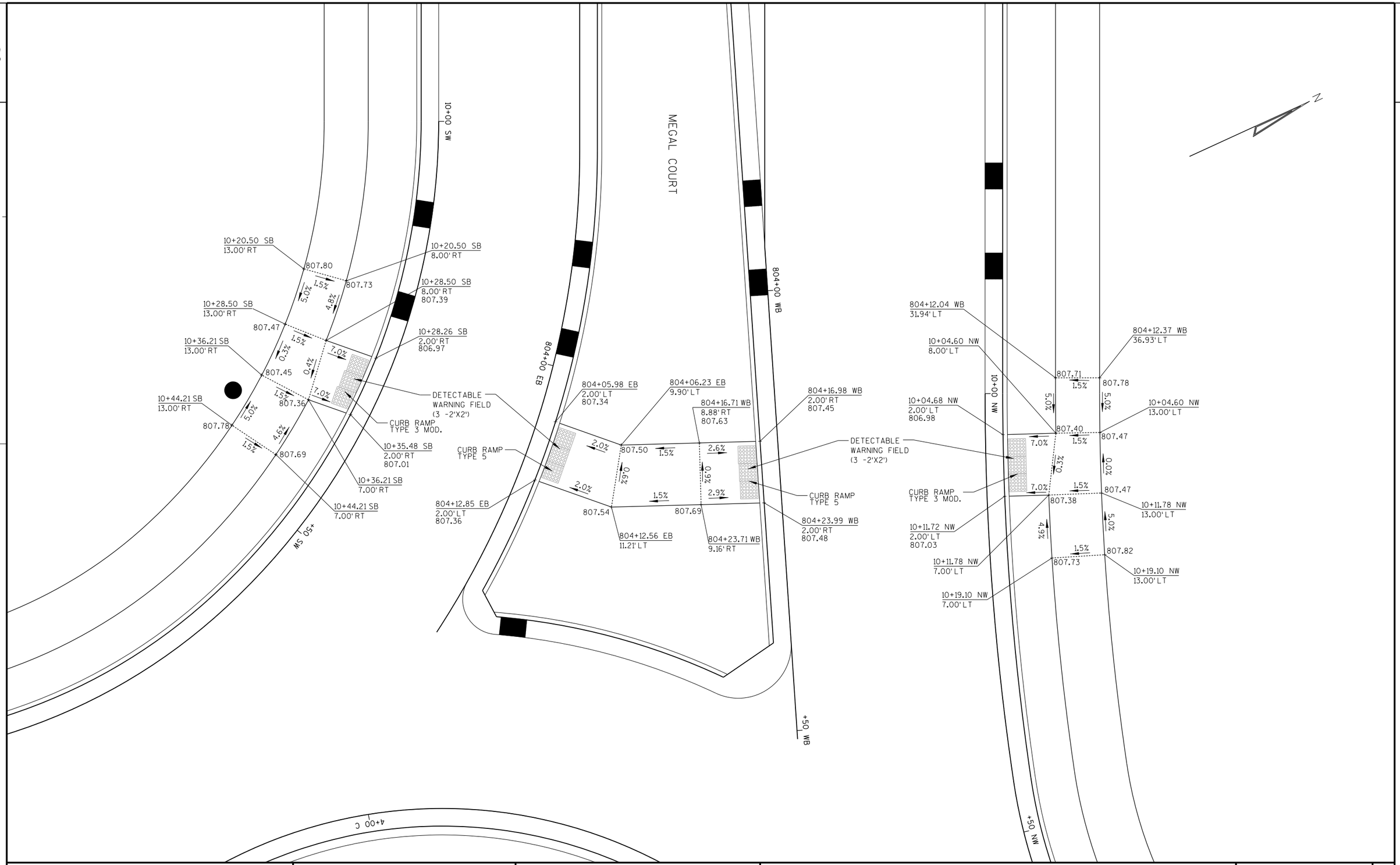
CURB RAMP TYPE 4B1 MODIFIED
PARK AND RIDE



CURB RAMP TYPE 4B1 MODIFIED
PARK AND RIDE

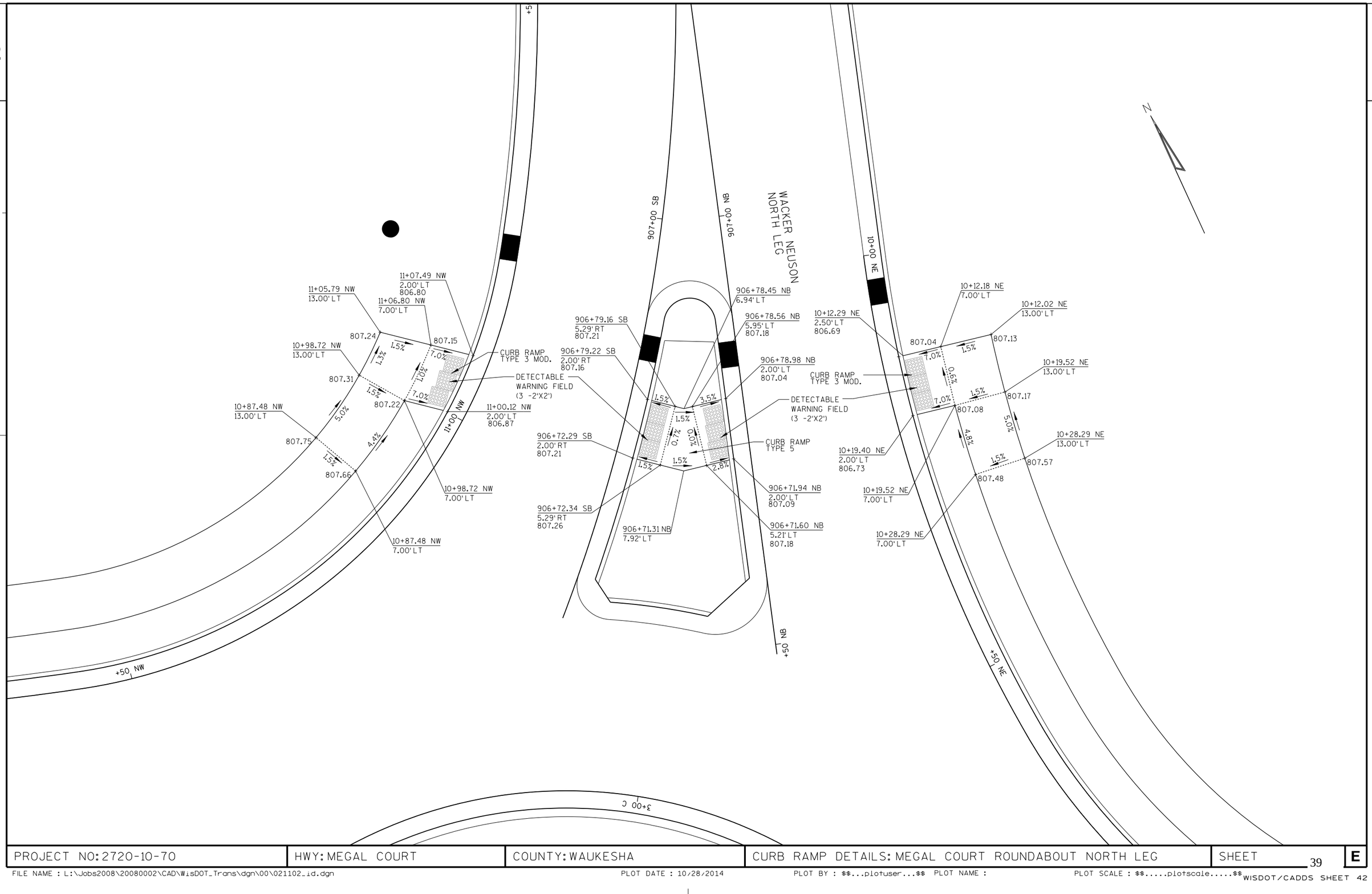
PROJECT NO: 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	CURB RAMP DETAIL: PARK AND RIDE	SHEET 37	E

2



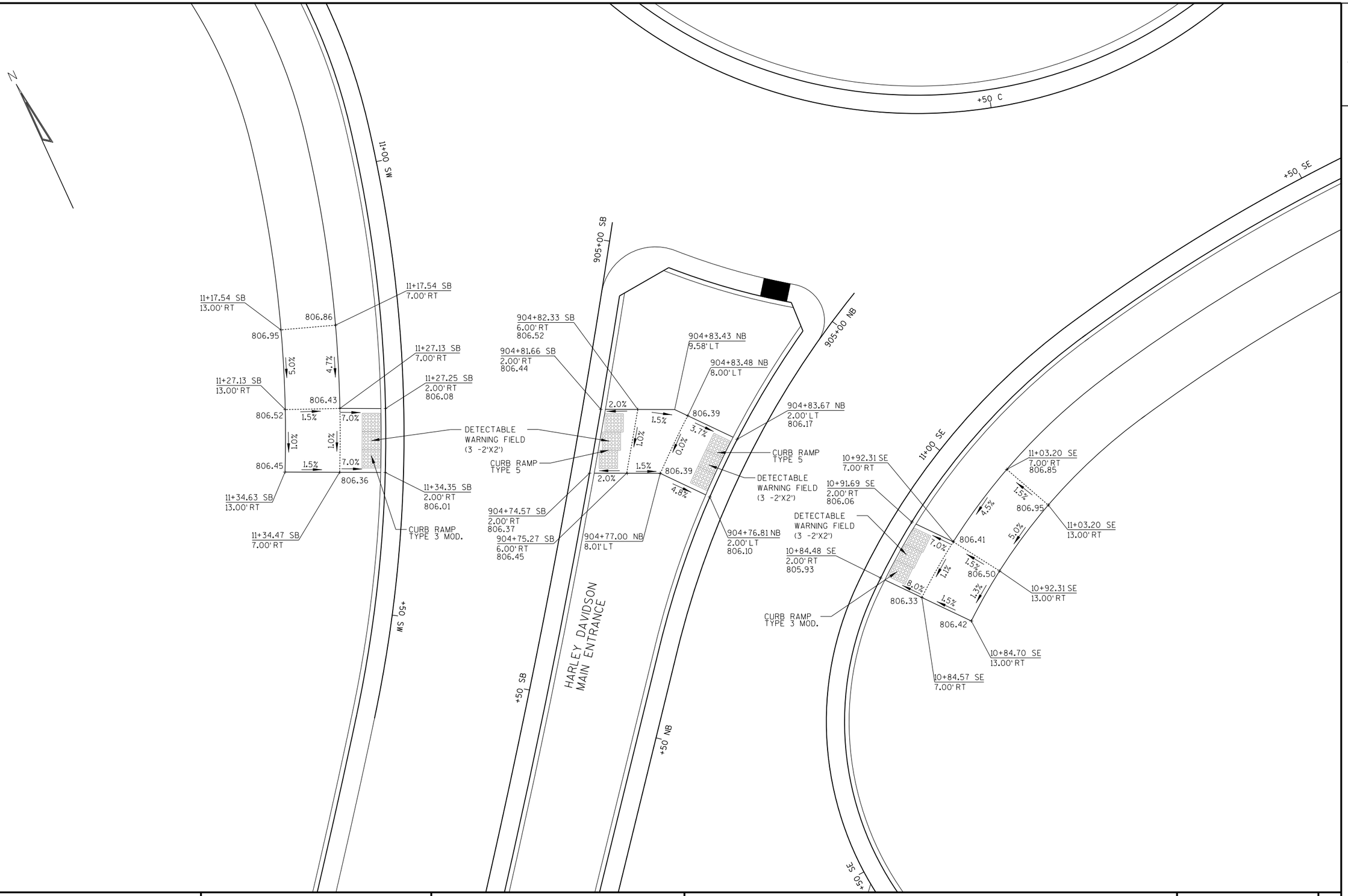
PROJECT NO: 2782-11-70 & 2720-10-70	HWY: MEGAL COURT	COUNTY: WAUKESHA	CURB RAMP DETAILS: MEGAL COURT ROUNDABOUT WEST LEG	SHEET 38	E

2

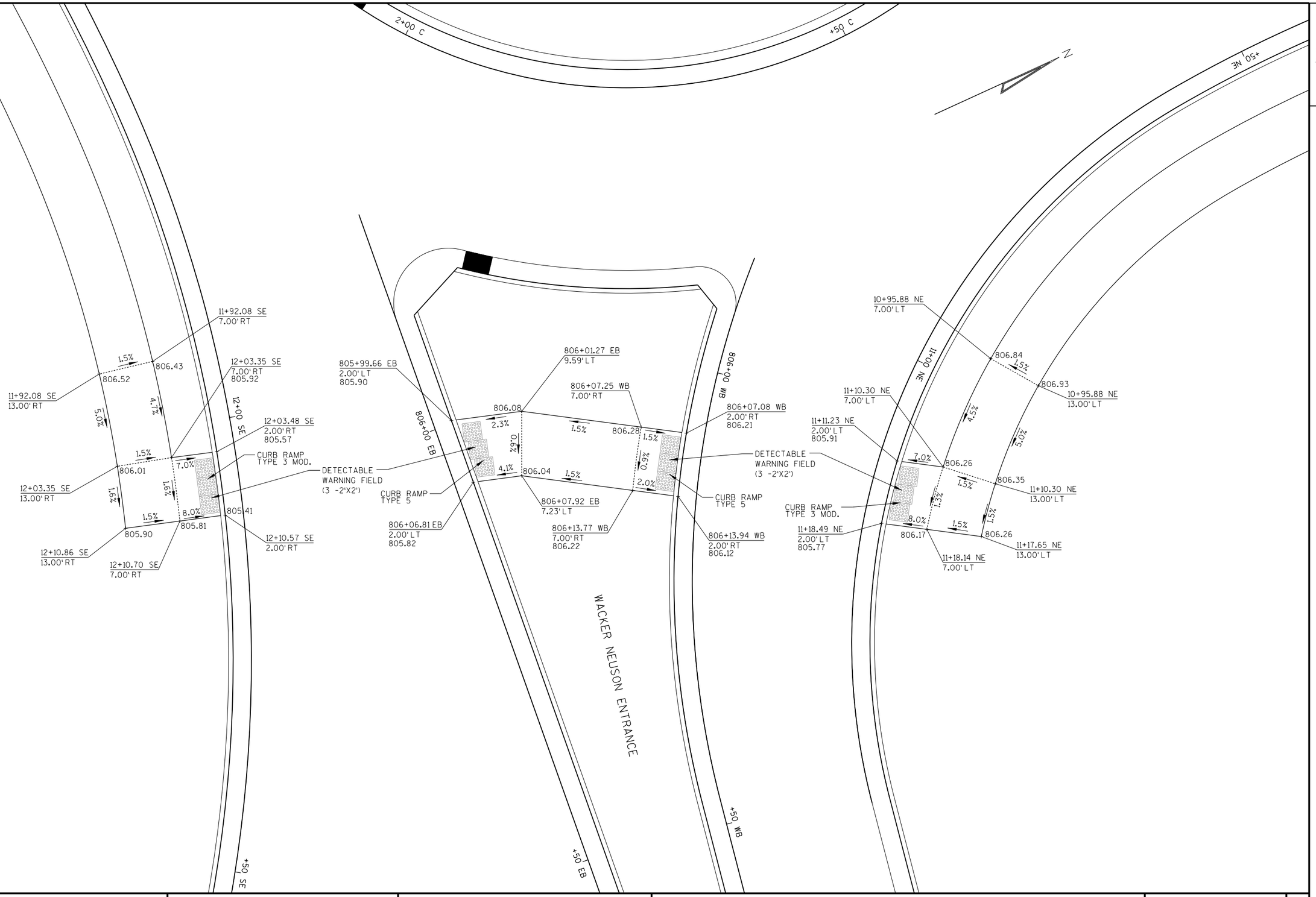


PROJECT NO: 2720-10-70	HWY: MEGAL COURT	COUNTY: WAUKESHA	CURB RAMP DETAILS: MEGAL COURT ROUNDABOUT NORTH LEG	SHEET 39	E

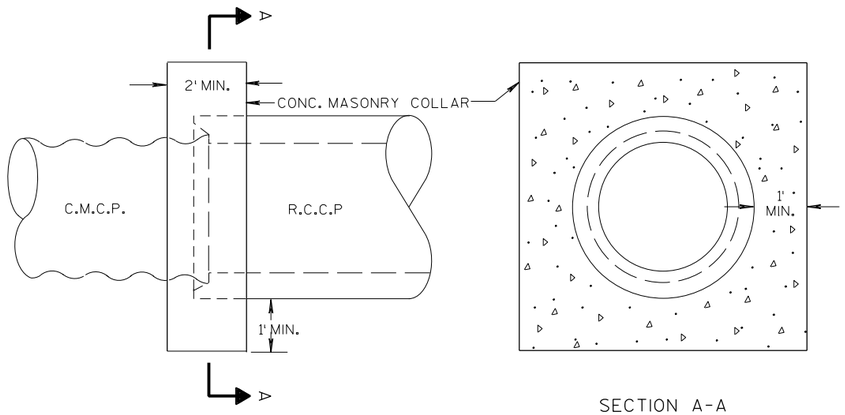
2



PROJECT NO: 2720-10-70	HWY: MEGAL COURT	COUNTY: WAUKESHA	CURB RAMP DETAILS: MEGAL COURT ROUNDABOUT SOUTH LEG	SHEET 40	E



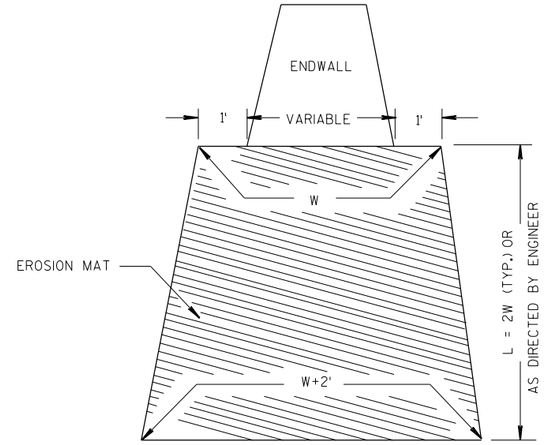
PROJECT NO: 2720-10-70	HWY: MEGAL COURT	COUNTY: WAUKESHA	CURB RAMP DETAILS: MEGAL COURT ROUNDABOUT EAST LEG	SHEET 41	E



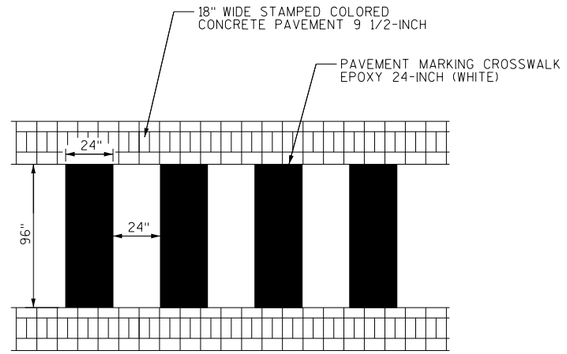
SECTION A-A

CONNECTION DETAIL R.C.C.P. TO C.M.C.P.

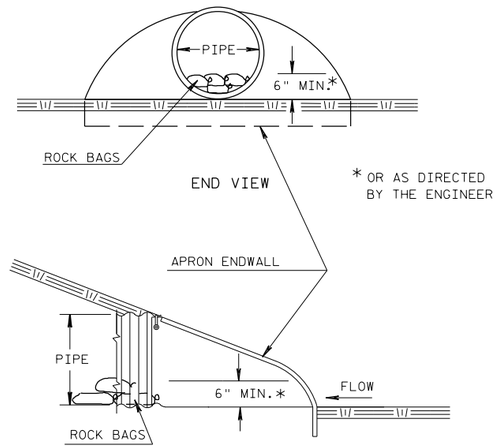
STA. 222+99.76 PILGRIM



EROSION MAT TREATMENT AT CULVERTS

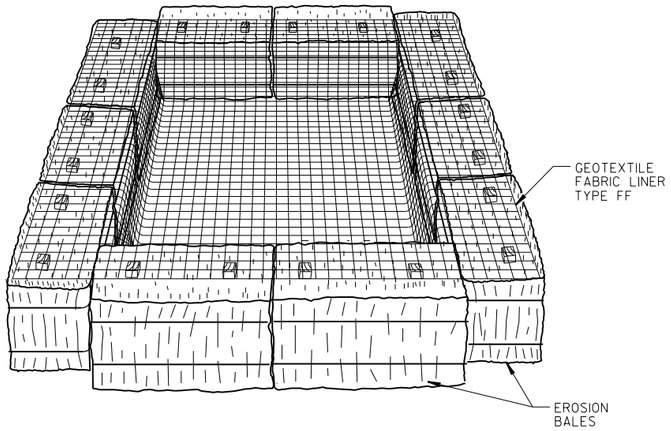


ROUNDABOUT CROSSWALK MARING DETAIL



SIDE VIEW

CULVERT PIPE CHECK



TEMPORARY SETTLING BASIN

(SIZE TO BE DETERMINED IN FIELD AS INDICATED BELOW:)

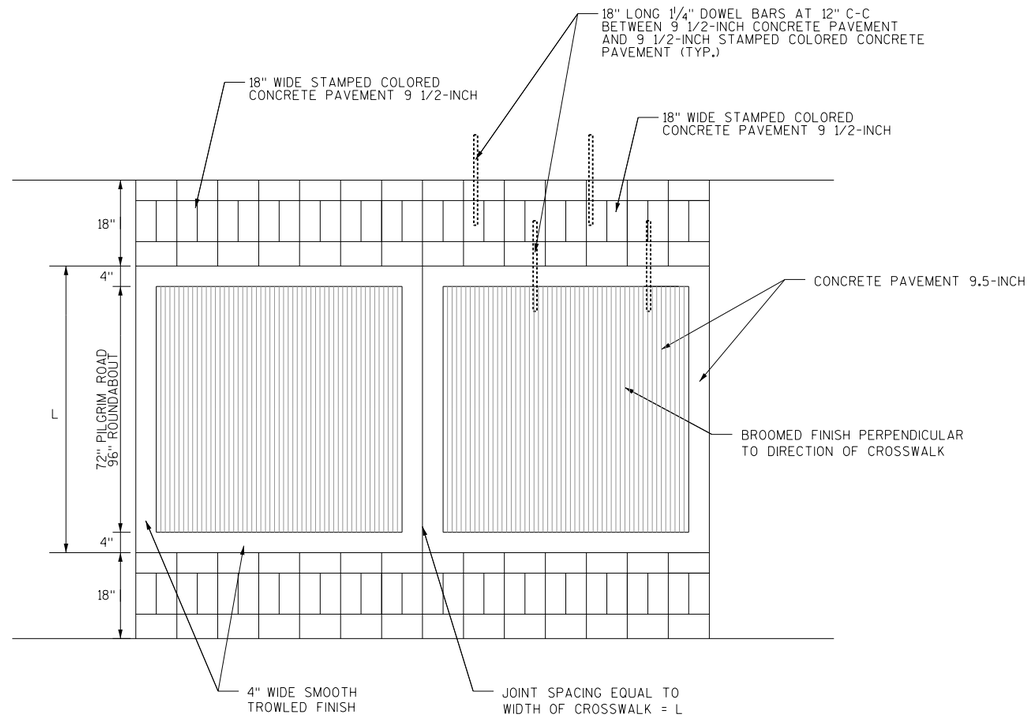
STORAGE VOLUME (C.F.) = 16 X GPM (PUMP RATE)

EXAMPLE:
CONTRACTOR INDICATES PUMP CAPABLE OF 50 GPM
HEIGHT OF BALES = 1.5 FT.

SOLUTION:
SV (C.F.) = 16 X 50
SV = 800 C.F.

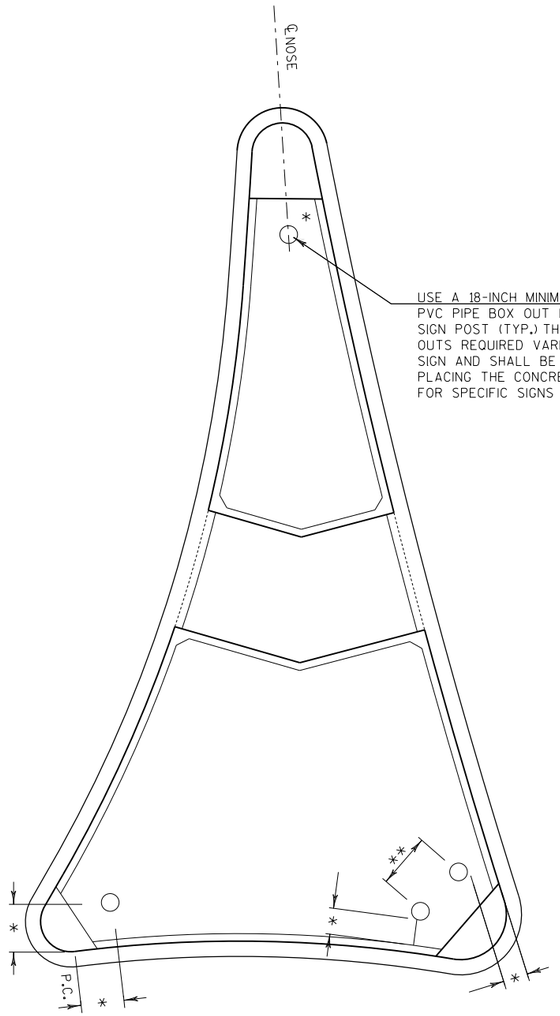
$\frac{800\ C.F.}{1.5\ FT.}$ = 533 S.F.

2



9.5-INCH STAMPED CONCRETE CROSSWALK

MAIN STREET, FALLS PARKWAY & MEGAL COURT CROSSWALKS



USE A 18-INCH MINIMUM INSIDE DIAMETER PVC PIPE BOX OUT IN CONCRETE FOR SIGN POST (TYP.) THE NUMBER OF BOX OUTS REQUIRED VARIES BY WIDTH OF THE SIGN AND SHALL BE VERIFIED BEFORE PLACING THE CONCRETE IN THE ISLAND FOR SPECIFIC SIGNS AT RAMP TERMINAL.

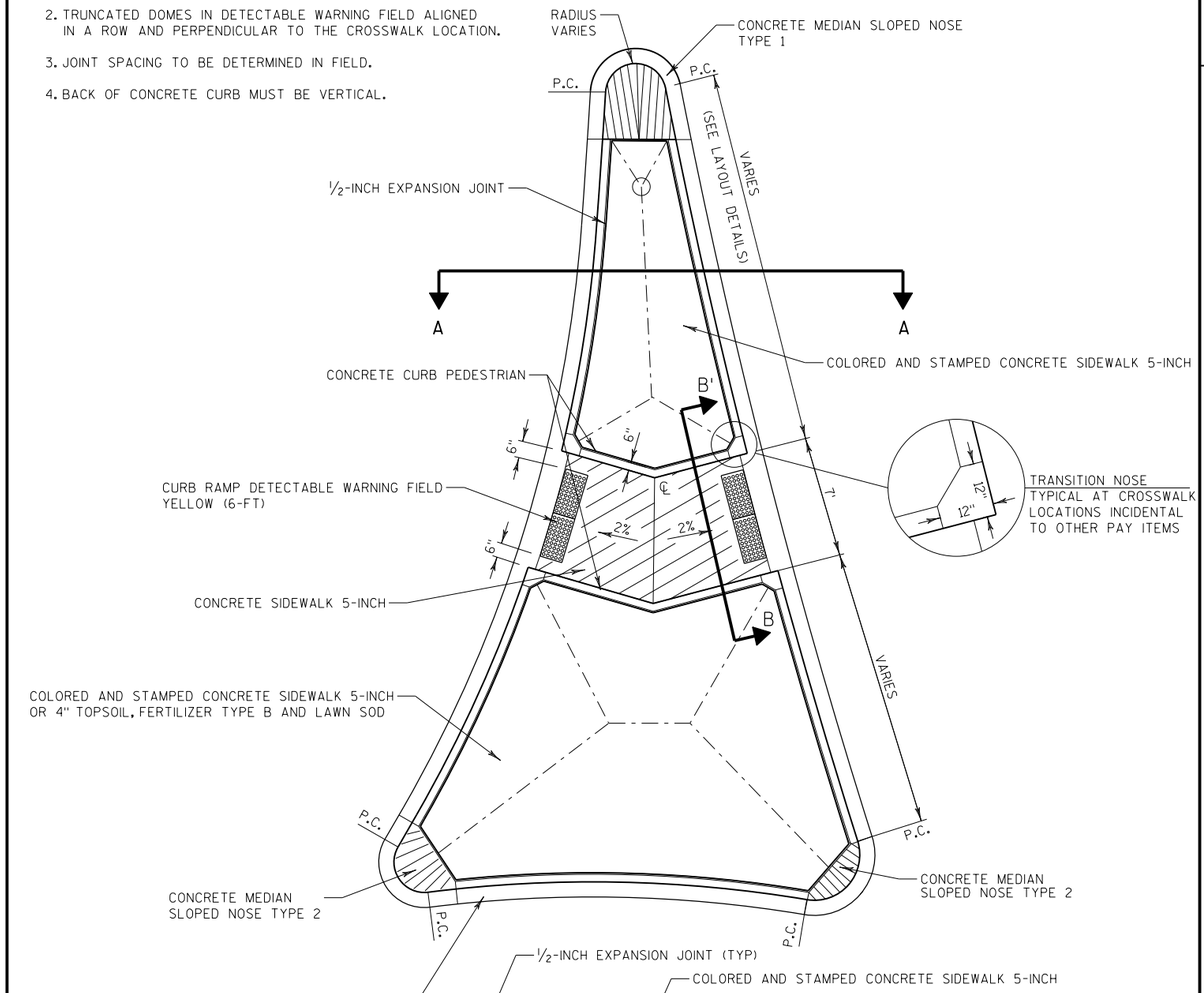
* DISTANCE TO BE LAID OUT IN THE FIELD BASED ON SIGN SIZE. TWO FOOT MINIMUM CLEARANCE BETWEEN THE EDGE OF SIGN AND THE FACE OF CURB.

**SEE SIGN DETAILS FOR POST SPACING.

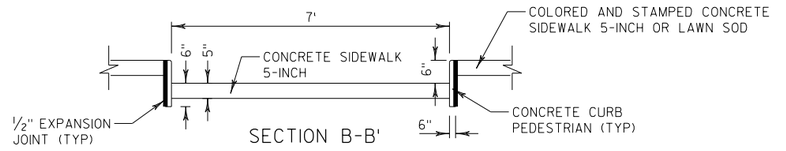
ROUNDABOUT ISLAND SIGN OPENINGS DETAIL

NOTES:

1. TROWEL ISLAND NOSE TO A SMOOTH FINISH.
2. TRUNCATED DOMES IN DETECTABLE WARNING FIELD ALIGNED IN A ROW AND PERPENDICULAR TO THE CROSSWALK LOCATION.
3. JOINT SPACING TO BE DETERMINED IN FIELD.
4. BACK OF CONCRETE CURB MUST BE VERTICAL.

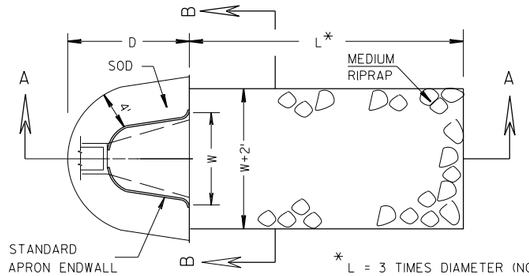


SECTION A-A



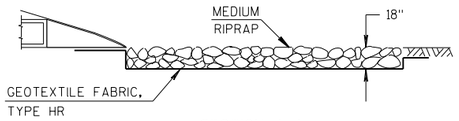
SECTION B-B'

ROUNDABOUT ISLAND DETAIL (TYP)

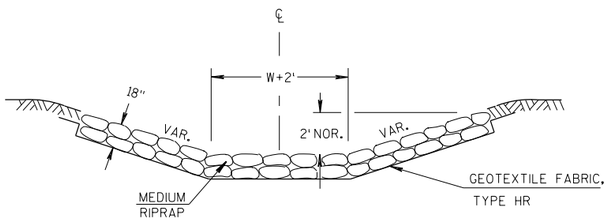


* L = 3 TIMES DIAMETER (NOR.) OR 10' MIN. OR AS DIRECTED BY THE ENGINEER

NOTE: PLACE GEOTEXTILE FABRIC 1/2D UNDER ENDWALL

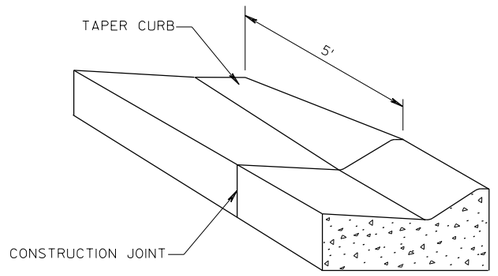


SECTION A-A

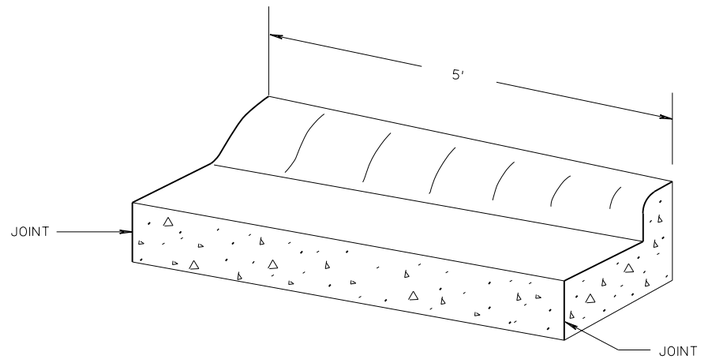


SECTION B-B

MEDIUM RIPRAP AND GEOTEXTILE FABRIC
DETAIL AT APRON ENDWALLS



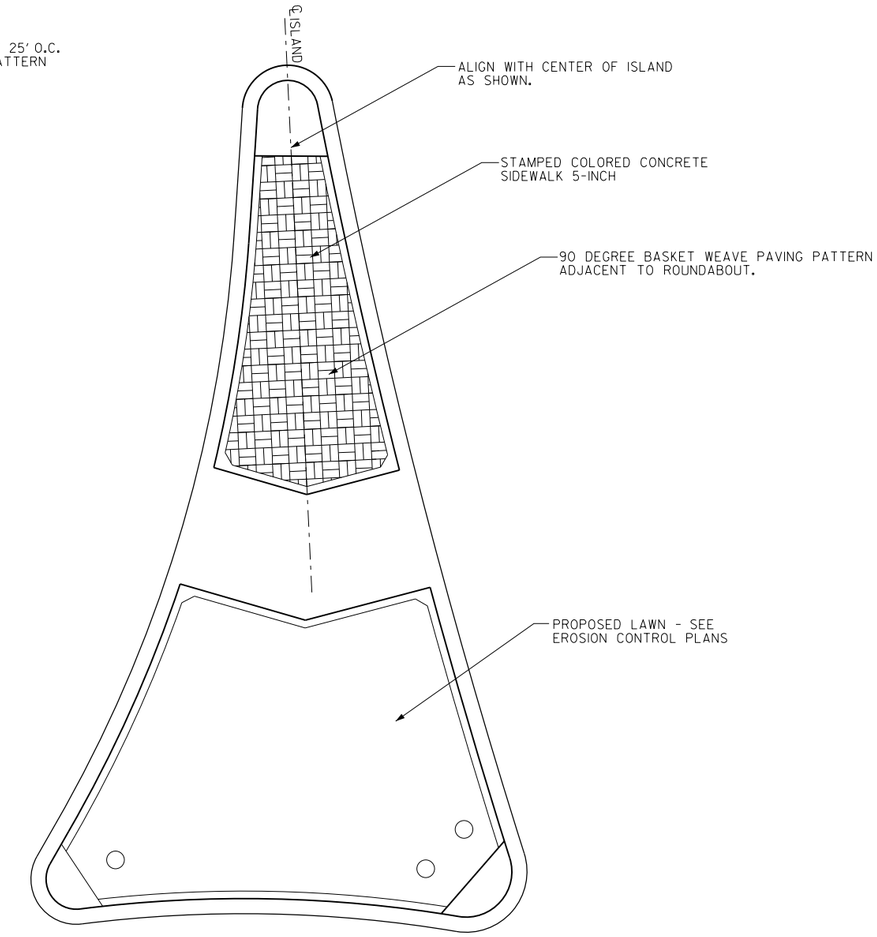
DETAIL OF CURB & GUTTER TERMINI



TRANSITION DETAIL

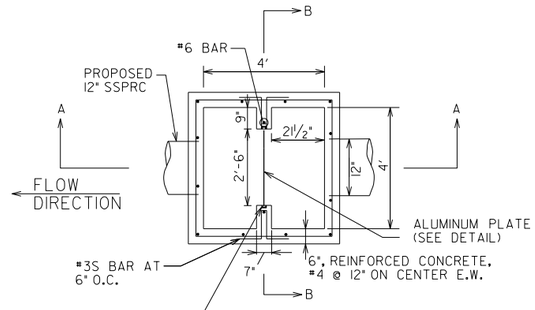
36" SLOPED TYPE CURB & GUTTER TO 30" TYPE A CURB & GUTTER
(TO BE MEASURED & PAID FOR AS CONCRETE CURB & GUTTER
4-INCH SLOPED 36" TYPE A)

NOTES:
1. LOCATE EXPANSION JOINTS AT 25' O.C.
2. ALIGN JOINTS WITH PAVING PATTERN

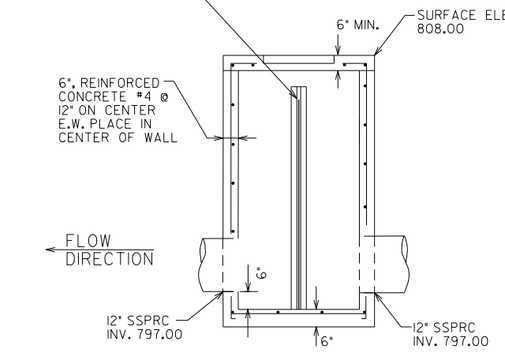


TYPICAL STAMPED, COLORED CONCRETE PAVING LAYOUT AT ROADWAY MEDIANS

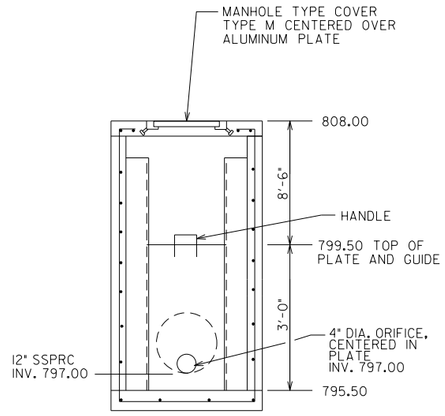
REFER TO STREETSCAPE PLANS FOR LOCATION



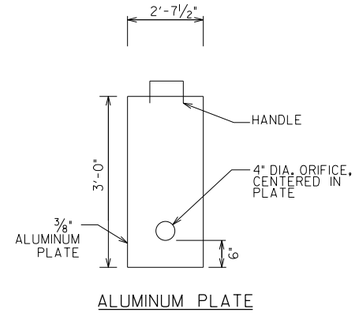
PLAN VIEW



SECTION A-A

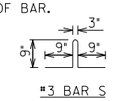


SECTION B-B



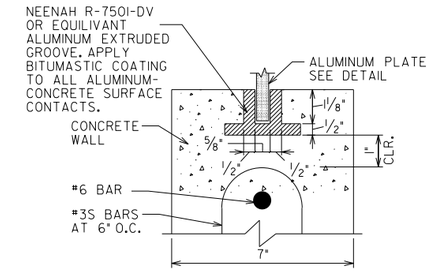
ALUMINUM PLATE

NOTE:
BAR MARKS REFER TO BAR BEND DIAGRAM SHOWN BELOW. A BILL OF MATERIAL FOR REINFORCING STEEL HAS NOT BEEN PROVIDED FOR THESE STRUCTURES. ALL DIMENSIONS ON BAR BEND ARE OUT TO OUT OF BAR.



#3 BAR S

BEND DIAGRAM

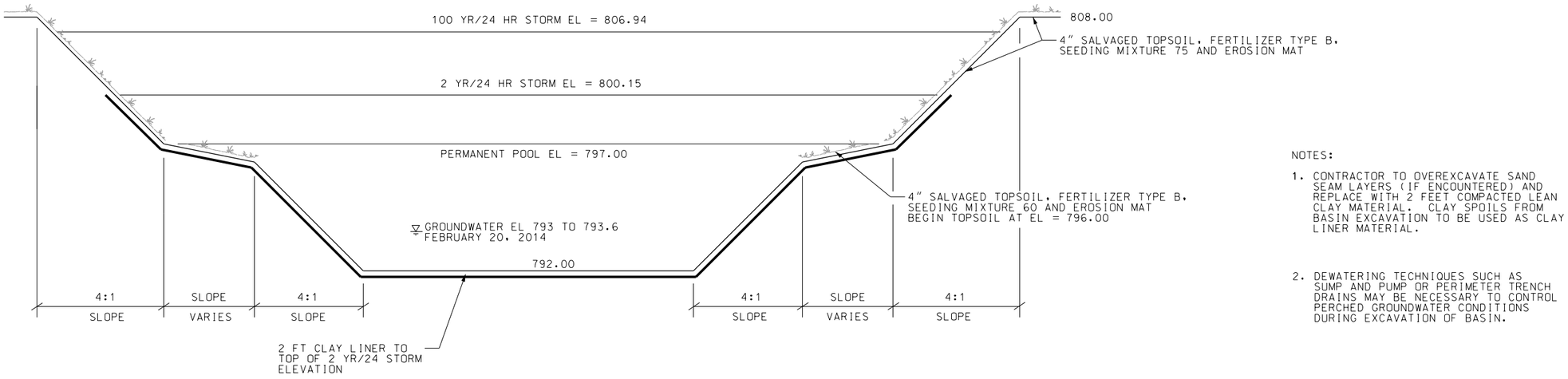


SECTION C-C

OUTLET STRUCTURE

N.T.S.

STA. 902+45.00 NB, 112.0' LT



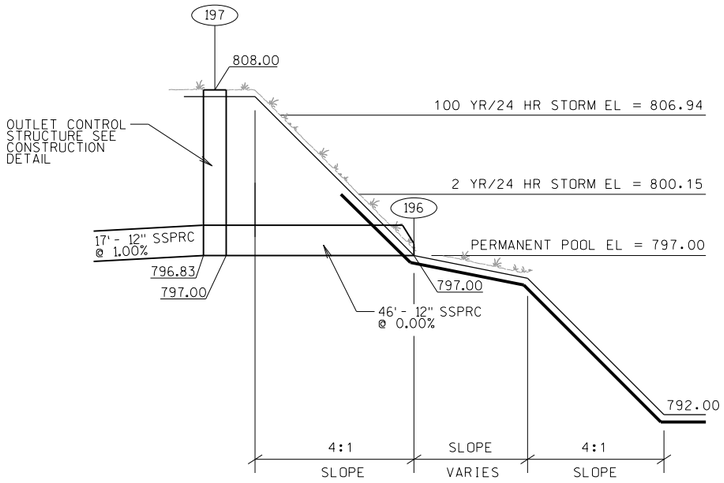
NOTES:

1. CONTRACTOR TO OVEREXCAVATE SAND SEAM LAYERS (IF ENCOUNTERED) AND REPLACE WITH 2 FEET COMPACTED LEAN CLAY MATERIAL. CLAY SPOILS FROM BASIN EXCAVATION TO BE USED AS CLAY LINER MATERIAL.

2. DEWATERING TECHNIQUES SUCH AS SUMP AND PUMP OR PERIMETER TRENCH DRAINS MAY BE NECESSARY TO CONTROL PERCHED GROUNDWATER CONDITIONS DURING EXCAVATION OF BASIN.

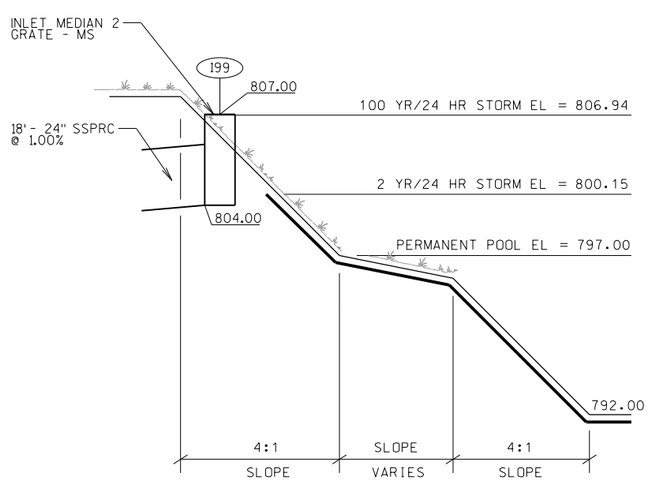
TYPICAL BASIN SECTION

N.T.S.



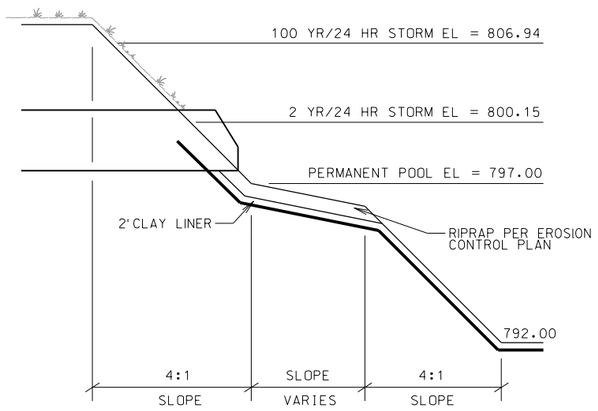
OUTLET CONTROL STRUCTURE SECTION

N.T.S.



OUTLET OVERFLOW STRUCTURE SECTION

N.T.S.

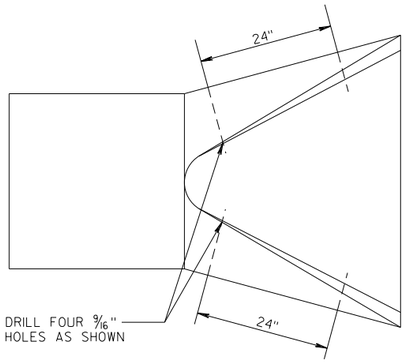


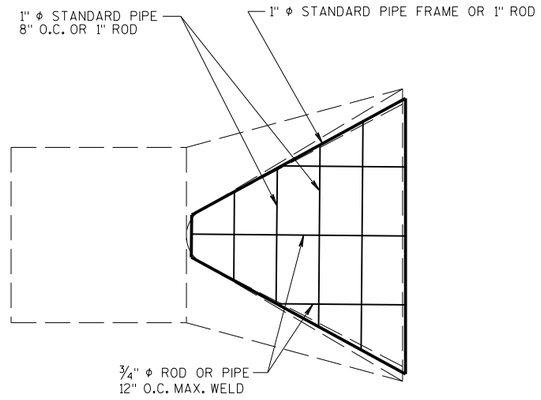
ENDWALL DETAIL

N.T.S.

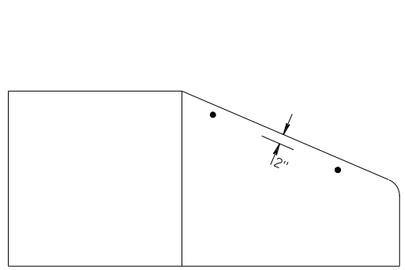
PROJECT NO: 2720-10-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	CONSTRUCTION DETAILS	SHEET 47	E

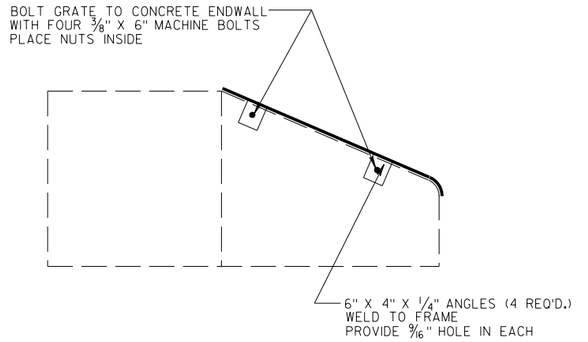
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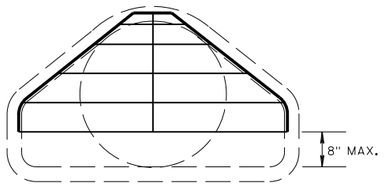




AT EACH PIPE







PIPE GRATE DETAIL

POND DATA TABLE

792.00 CONTOUR			797.00 CONTOUR		
POINT NO.	Y COORDINATE	X COORDINATE	POINT NO.	Y COORDINATE	X COORDINATE
1	437508.23	2506546.85	20	437482.73	2506541.41
2	437510.02	2506540.82	21	437488.92	2506521.22
3	437542.86	2506528.43	22	437534.17	2506503.92
4	437560.54	2506522.56	23	437551.63	2506498.12
5	437638.16	2506491.66	24	437665.95	2506453.48
6	437637.05	2506521.34	25	437663.01	2506523.03
7	437629.21	2506595.85	26	437655.18	2506597.54
8	437628.58	2506620.92	27	437654.55	2506622.61
9	437626.76	2506638.23	28	437650.33	2506665.39
10	437595.05	2506628.15	29	437606.02	2506660.09
11	437549.16	2506606.16	30	437583.81	2506651.59
12	437503.28	2506584.17	31	437530.07	2506625.84
			32	437475.43	2506599.24

POND DATA TABLE

808.00 CONTOUR			808.00 CONTOUR		
POINT NO.	Y COORDINATE	X COORDINATE	POINT NO.	Y COORDINATE	X COORDINATE
40	437439.66	2506532.24	52	437706.95	2506525.88
41	437446.84	2506507.62	53	437699.12	2506600.39
42	437456.35	2506490.95	54	437698.49	2506625.46
43	437472.28	2506480.24	55	437694.20	2506675.24
44	437519.47	2506462.44	56	437681.74	2506701.28
45	437536.55	2506456.77	57	437646.70	2506710.14
46	437666.52	2506405.02	58	437593.02	2506702.13
47	437686.58	2506405.05	59	437564.80	2506691.27
48	437701.08	2506418.91	60	437435.33	2506629.24
49	437707.93	2506434.74	61	437431.26	2506625.66
50	437711.05	2506456.53	62	437429.65	2506620.48
51	437707.58	2506500.81	63	437429.35	2506609.10

PROPOSED STORMWATER POND

10-FT SAFETY SHELF

SLOPE INTERCEPT (TYP.)

WETLAND BOUNDARY

HARLEY DAVIDSON MAIN ENTRANCE

MEGAL COURT

23+00 EB

24+00 EB

901+00 SB

901+00 NB

902+00 SB

902+00 NB

903+00 SB

903+00 NB

904+00 SB

904+00 NB

802+00 EB

803+00 EB

804+00 EB

10+00 SB

11+00 SB

PROJECT NO: 2720-10-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	STORMWATER POND LAYOUT	SHEET 49	E

FILE NAME : L:\Jobs2008\20080002\CAD\WisDOT_Trans\dgn\00\022517_ss.dgn PLOT DATE : 10/28/2014 PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

REMOVING STORM SEWER 48" ABANDONED AND FILLED

CONCRETE COLLAR REQUIRED

STA. 225+10.72 NB, 68.3'RT EXISTING MANHOLE 310

EXISTING 60" SSPRC

CULVERT PIPE TEMPORARY 48" MATCH INVERTS OF EXISTING PIPE

STA. 225+64.03NB, 68.3'RT EXISTING MANHOLE 311

CONCRETE COLLAR REQUIRED

STA. 226+59.0 NB, 30.3'RT EXISTING MANHOLE 312

CONCRETE COLLAR REQUIRED

STA. 226+75.6 NB, 28.6'RT 600 MANHOLES 8 FT-J MANHOLE TO BE REMOVED AFTER POND IS STABILIZED

TEMPORARY STORM SEWER 48" MATCH INVERTS OF EXISTING PIPES

CONCRETE COLLAR REQUIRED

EXISTING 48" STORM SEWER

EDGE OF EXISTING POND

PROPOSED STORMWATER POND

STA. 901+85.60SB, 36.7'LT EXISTING MANHOLE

STA. 901+90.00SB, 16.0'LT 195 CATCH BASINS 2X3-H TEMPORARY COVER PLATE REQUIRED

CONNECT TO EXISTING STORM SEWER CROSSING

RESTORE ENTRANCE DRIVE TO MAINTAIN TRAFFIC UNTIL PHASE 3

HARLEY DAVIDSON MAIN ENTRANCE

STA. 225+31.6, 272.5"RT 601 MANHOLES 4 FT-C INLET IE =797.00 E OUTLET IE = 800.00 W MANHOLE TO BE REMOVED AFTER POND IS STABILIZED

496

CULVERT PIPE TEMPORARY 24" @ 0%

STA. 803+70.00EB, 89.0'RT IE =797.00 FUTURE 24" APRON ENDWALL 174

166

MEGAL COURT

WETLAND BOUNDARY

SLOPE INTERCEPT (TYP.)

LEGEND

- XXX — DRAINAGE STRUCTURE NUMBER
- XXX — EXISTING DRAINAGE STRUCTURE TO BE RECONSTRUCTED
- XXX — EXISTING DRAINAGE STRUCTURE TO BE ADJUSTED
- XX — EXISTING DRAINAGE STRUCTURE TO BE REMOVED
- ///// — EXISTING STORM SEWER TO BE REMOVED

PROJECT NO: 2720-10-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	STORMWATER POND DETAILS - PHASE 1 CONSTRUCTION	SHEET 50	E

2

23+00

24+00

EXISTING 60" SSPRC

310

311

312

600

EDGE OF EXISTING POND

PROPOSED STORMWATER POND

STA. 901+85.60SB, 36.7'LT
EXISTING MANHOLE

195

+50 SB

+50 NB

902+00 SB

902+00 NB

CONNECT TO STORM SEWER CONSTRUCTED IN PHASE 1

194

HARLEY DAVIDSON MAIN ENTRANCE

903+00 SB

903+00 NB

193 STA. 903+55.00SB, 17.9'LT
CATCH BASINS 2X3-H

192 STA. 903+55.00SB, 2.0'RT
CATCH BASINS 2X3-H

191 STA. 903+55.00NB, 2.0'LT
CATCH BASINS 2X3-H

904+00 SB

904+00 NB

601

174

166

MEGAL COURT

WETLAND BOUNDARY

LEGEND

- (XXX) DRAINAGE STRUCTURE NUMBER
- [XXX] EXISTING DRAINAGE STRUCTURE TO BE RECONSTRUCTED
- ⟨XXX⟩ EXISTING DRAINAGE STRUCTURE TO BE ADJUSTED
- △XX EXISTING DRAINAGE STRUCTURE TO BE REMOVED
- ///// EXISTING STORM SEWER TO BE REMOVED

PROJECT NO: 2720-10-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	STORMWATER POND DETAILS - PHASE 2 CONSTRUCTION	SHEET 51	E

2

REMOVE CULVERT
PIPE TEMPORARY 48"

REMOVE CULVERT
PIPE TEMPORARY 48"

REMOVE STORM
SEWER 48"

STA. 225+10.72 NB, 68.3'RT
EXISTING MANHOLE

EXISTING 60" SSPRC

STA. 224+35.00, 99.0'RT
24" APRON ENDWALL

STA. 902+47.00NB, 120.0'LT
INLET MEDIAN 2 GRATE-MS

STA. 902+35.00NB, 120.2'LT
MANHOLES 8 FT-J
ADJUST LOCATION AS
NECESSARY TO MATCH
EXISTING PIPE CONNECTION

STA. 902+45.00NB, 112.0'LT
OUTLET CONTROL STRUCTURE

EXISTING 60" SSPRC

STA. 901+90.00SB, 16.0'LT
REMOVE TEMPORARY
COVER PLATE, INLET
COVER TYPE H REQUIRED

STA. 901+90.00NB, 14.3'RT
CATCH BASINS 2X3-H

10-FT SAFETY SHELF

STA. 226+40.00, 105.0'RT
48" APRON ENDWALL

EXISTING 60" STORM SEWER
TOP OF PIPE APPROXIMATELY
797.89

STA. 902+75.00NB, 104.0'LT
12" APRON ENDWALL

PROPOSED
STORMWATER POND

10-FT SAFETY SHELF

REMOVE CULVERT
PIPE TEMPORARY 24"

STA. 803+70.00EB, 89.0'RT
24" APRON ENDWALL

HARLEY DAVIDSON MAIN ENTRANCE

MEGAL COURT

WETLAND
BOUNDARY

SLOPE INTERCEPT
(TYP.)

LEGEND

- (XXX) DRAINAGE STRUCTURE NUMBER
- [XXX] EXISTING DRAINAGE STRUCTURE TO BE RECONSTRUCTED
- (XXX) EXISTING DRAINAGE STRUCTURE TO BE ADJUSTED
- ⟨XX⟩ EXISTING DRAINAGE STRUCTURE TO BE REMOVED
- ///// EXISTING STORM SEWER TO BE REMOVED

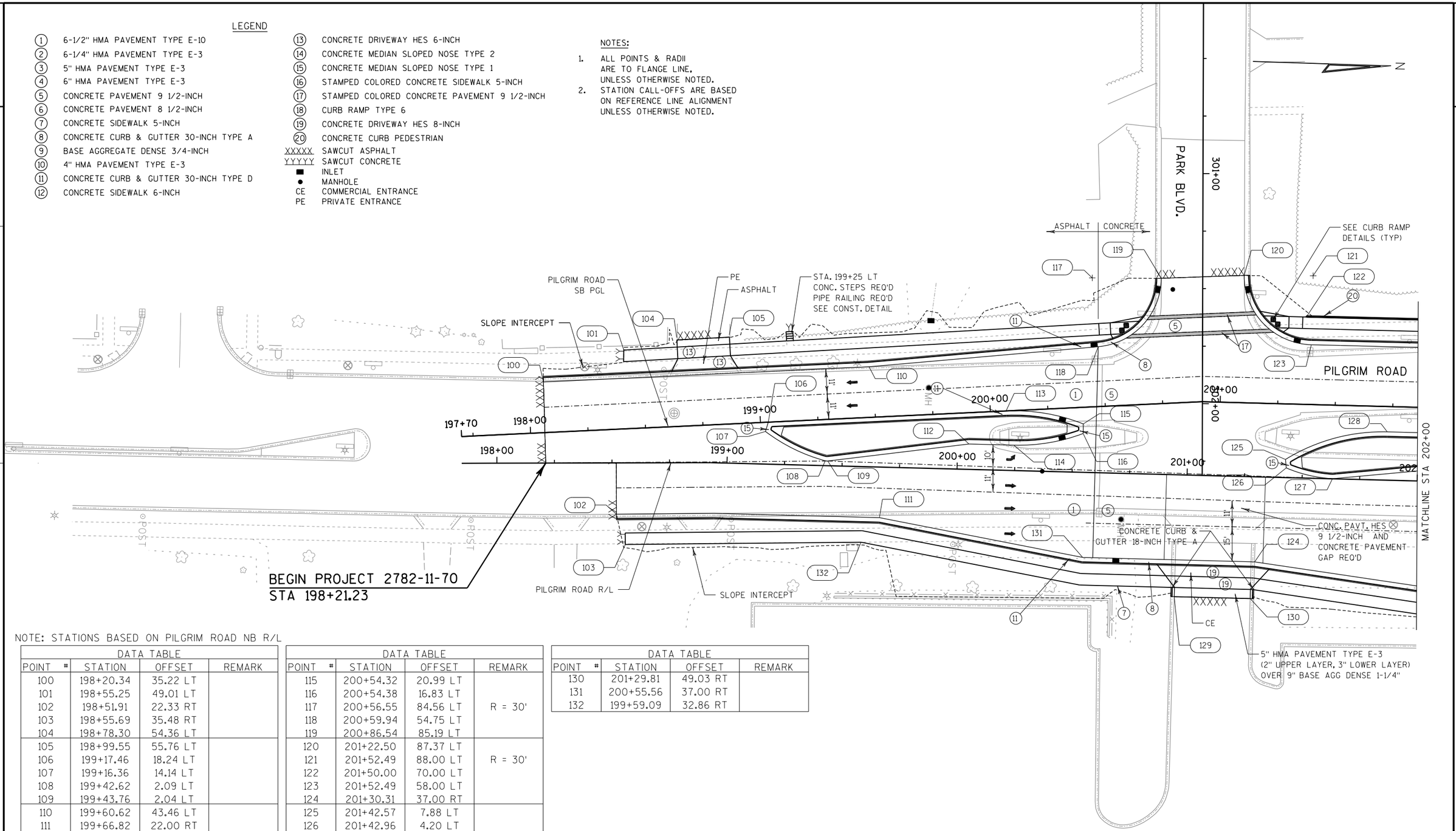
PROJECT NO: 2720-10-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	STORMWATER POND DETAILS - PHASE 3 CONSTRUCTION	SHEET 52	E

LEGEND

(1)	6-1/2" HMA PAVEMENT TYPE E-10	(13)	CONCRETE DRIVEWAY HES 6-INCH
(2)	6-1/4" HMA PAVEMENT TYPE E-3	(14)	CONCRETE MEDIAN SLOPED NOSE TYPE 2
(3)	5" HMA PAVEMENT TYPE E-3	(15)	CONCRETE MEDIAN SLOPED NOSE TYPE 1
(4)	6" HMA PAVEMENT TYPE E-3	(16)	STAMPED COLORED CONCRETE SIDEWALK 5-INCH
(5)	CONCRETE PAVEMENT 9 1/2-INCH	(17)	STAMPED COLORED CONCRETE PAVEMENT 9 1/2-INCH
(6)	CONCRETE PAVEMENT 8 1/2-INCH	(18)	CURB RAMP TYPE 6
(7)	CONCRETE SIDEWALK 5-INCH	(19)	CONCRETE DRIVEWAY HES 8-INCH
(8)	CONCRETE CURB & GUTTER 30-INCH TYPE A	(20)	CONCRETE CURB PEDESTRIAN
(9)	BASE AGGREGATE DENSE 3/4-INCH	XXXXX	SAWCUT ASPHALT
(10)	4" HMA PAVEMENT TYPE E-3	YYYYY	SAWCUT CONCRETE
(11)	CONCRETE CURB & GUTTER 30-INCH TYPE D	■	INLET
(12)	CONCRETE SIDEWALK 6-INCH	●	MANHOLE
		CE	COMMERCIAL ENTRANCE
		PE	PRIVATE ENTRANCE

NOTES:

1. ALL POINTS & RADII ARE TO FLANGE LINE, UNLESS OTHERWISE NOTED.
2. STATION CALL-OFFS ARE BASED ON REFERENCE LINE ALIGNMENT UNLESS OTHERWISE NOTED.



NOTE: STATIONS BASED ON PILGRIM ROAD NB R/L

DATA TABLE			
POINT #	STATION	OFFSET	REMARK
100	198+20.34	35.22 LT	
101	198+55.25	49.01 LT	
102	198+51.91	22.33 RT	
103	198+55.69	35.48 RT	
104	198+78.30	54.36 LT	
105	198+99.55	55.76 LT	
106	199+17.46	18.24 LT	
107	199+16.36	14.14 LT	
108	199+42.62	2.09 LT	
109	199+43.76	2.04 LT	
110	199+60.62	43.46 LT	
111	199+66.82	22.00 RT	
112	200+04.88	11.00 LT	
113	200+20.64	25.79 LT	
114	200+24.40	11.00 LT	

DATA TABLE			
POINT #	STATION	OFFSET	REMARK
115	200+54.32	20.99 LT	
116	200+54.38	16.83 LT	
117	200+56.55	84.56 LT	R = 30'
118	200+59.94	54.75 LT	
119	200+86.54	85.19 LT	
120	201+22.50	87.37 LT	
121	201+52.49	88.00 LT	R = 30'
122	201+50.00	70.00 LT	
123	201+52.49	58.00 LT	
124	201+30.31	37.00 RT	
125	201+42.57	7.88 LT	
126	201+42.96	4.20 LT	
127	201+63.34	0.02 LT	
128	201+86.47	21.00 LT	
129	200+94.80	49.00 RT	

DATA TABLE			
POINT #	STATION	OFFSET	REMARK
130	201+29.81	49.03 RT	
131	200+55.56	37.00 RT	
132	199+59.09	32.86 RT	

END CONSTRUCTION 2782-12-70
BEGIN PROJECT 2782-11-70
STA 407+60

MATCHLINE STA 407+60

CONCRETE CURB & GUTTER 18-INCH TYPE A

CONCRETE CURB PEDESTRIAN

SLOPE INTERCEPT

PILGRIM ROAD SB PGL

MAIN +82

SEE CURB RAMP DETAILS (TYP)

STA. 205+83 LT
ADA BUS STOP
5-FT WIDE, 1.5% CROSS SLOPE,
1.5% LONGITUDINAL SLOPE

SLOPE INTERCEPT

CONCRETE CURB & GUTTER 18-INCH TYPE A

202+00 203+00 204+00 205+00 206+00 207+00

408+00 409+00

MATCHLINE STA 202+00

MATCHLINE STA 207+75

PILGRIM ROAD

PILGRIM ROAD R/L

CONCRETE CURB & GUTTER 18-INCH TYPE A

CONC. PAVT. HES 9 1/2-INCH AND CONCRETE PAVEMENT GAP REQ'D

MAIN STREET (STH 74)

MAIN +81

SLOPE INTERCEPT

ASPHALT

XXXXX

CE

MATCHLINE STA 410+13

END CONSTRUCTION 2782-11-70
BEGIN PROJECT 2782-12-70
STA 410+13

NOTES:

1. ALL POINTS & RADII ARE TO FLANGE LINE, UNLESS OTHERWISE NOTED.
2. STATION CALL-OFFS ARE BASED ON REFERENCE LINE ALIGNMENT UNLESS OTHERWISE NOTED.

LEGEND

1	6-1/2" HMA PAVEMENT TYPE E-10	13	CONCRETE DRIVEWAY HES 6-INCH
2	6-1/4" HMA PAVEMENT TYPE E-3	14	CONCRETE MEDIAN SLOPED NOSE TYPE 2
3	5" HMA PAVEMENT TYPE E-3	15	CONCRETE MEDIAN SLOPED NOSE TYPE 1
4	6" HMA PAVEMENT TYPE E-3	16	STAMPED COLORED CONCRETE SIDEWALK 5-INCH
5	CONCRETE PAVEMENT 9 1/2-INCH	17	STAMPED COLORED CONCRETE PAVEMENT 9 1/2-INCH
6	CONCRETE PAVEMENT 8 1/2-INCH	18	CURB RAMP TYPE 6
7	CONCRETE SIDEWALK 5-INCH	19	CONCRETE DRIVEWAY HES 8-INCH
8	CONCRETE CURB & GUTTER 30-INCH TYPE A	20	CONCRETE CURB PEDESTRIAN
9	BASE AGGREGATE DENSE 3/4-INCH	XXXXX	SAWCUT ASPHALT
10	4" HMA PAVEMENT TYPE E-3	YYYYY	SAWCUT CONCRETE
11	CONCRETE CURB & GUTTER 30-INCH TYPE D	■	INLET
12	CONCRETE SIDEWALK 6-INCH	●	MANHOLE
		CE	COMMERCIAL ENTRANCE
		PE	PRIVATE ENTRANCE

NOTE: STATIONS BASED ON PILGRIM ROAD NB R/L

DATA TABLE			
POINT #	STATION	OFFSET	REMARK
200	202+20.34	48.00 RT	
201	202+60.00	70.00 LT	
202	202+56.20	21.00 LT	
203	203+08.34	5.98 LT	
204	203+08.69	0.00	
205	203+51.09	11.00 LT	
206	203+50.44	22.00 LT	
207	203+49.86	32.00 LT	
208	203+72.30	32.00 LT	
209	203+84.95	58.00 LT	
210	203+70.07	48.00 RT	
211	204+00.73	27.88 LT	
212	203+99.87	22.00 LT	
213	203+84.95	98.00 LT	R = 40'
214	204+24.31	90.84 LT	
215	204+42.39	88.00 LT	
216	204+48.23	87.12 LT	
217	204+33.66	61.95 LT	
218	204+36.51	58.00 LT	
219	204+45.89	58.00 LT	
220	204+48.89	61.08 LT	
221	204+33.24	11.00 LT	
222	204+36.24	8.05 LT	
223	204+36.32	3.05 LT	
224	204+33.32	0.00	

DATA TABLE			
POINT #	STATION	OFFSET	REMARK
225	204+26.74	37.16 RT	
226	204+25.26	42.76 RT	
227	204+46.51	37.16 RT	
228	204+49.51	40.14 RT	
229	204+45.10	54.05 RT	
230	204+49.58	51.42 RT	
231	204+77.74	65.90 RT	
232	204+83.68	66.48 RT	
233	204+75.80	85.61 RT	
234	204+93.23	87.85 LT	
235	204+97.15	87.35 LT	
236	205+00.56	114.27 LT	
237	205+26.63	72.46 LT	
238	205+31.06	75.17 LT	
239	205+26.92	60.92 LT	
240	205+29.92	58.00 LT	
241	205+52.26	63.64 LT	
242	205+50.83	58.00 LT	
243	205+29.51	40.02 RT	
244	205+32.51	37.00 RT	
245	205+41.95	37.00 RT	
246	205+44.56	41.49 RT	
247	205+29.62	56.43 RT	
248	205+35.22	57.89 RT	
249	205+40.94	107.45 RT	

DATA TABLE			
POINT #	STATION	OFFSET	REMARK
250	203+70.07	128.00 RT	R = 80'
251	205+57.94	9.66 LT	
252	205+57.34	3.80 LT	
253	205+83.20	0.00	
254	206+04.72	69.00 LT	
255	206+10.94	37.00 RT	
256	206+04.72	149.00 LT	R = 80'
257	206+10.94	107.00 RT	R = 70'
258	207+15.20	69.00 LT	
259	207+15.20	37.00 RT	
260	207+15.20	10.00 LT	
261	207+15.20	0.00	
262	207+39.15	10.00 LT	
263	207+39.57	0.00	
264	206+32.71	52.00 RT	
265	206+64.15	52.00 RT	

BEGIN CONSTRUCTION
2782-11-70
STA 500+03.64

LEGEND

1. 6-1/2" HMA PAVEMENT TYPE E-10
2. 6-1/4" HMA PAVEMENT TYPE E-3
3. 5" HMA PAVEMENT TYPE E-3
4. 6" HMA PAVEMENT TYPE E-3
5. CONCRETE PAVEMENT 9 1/2-INCH
6. CONCRETE PAVEMENT 8 1/2-INCH
7. CONCRETE SIDEWALK 5-INCH
8. CONCRETE CURB & GUTTER 30-INCH TYPE A
9. BASE AGGREGATE DENSE 3/4-INCH
10. 4" HMA PAVEMENT TYPE E-3
11. CONCRETE CURB & GUTTER 30-INCH TYPE D
12. CONCRETE SIDEWALK 6-INCH
13. CONCRETE DRIVEWAY HES 6-INCH
14. CONCRETE MEDIAN SLOPED NOSE TYPE 2
15. CONCRETE MEDIAN SLOPED NOSE TYPE 1
16. STAMPED COLORED CONCRETE SIDEWALK 5-INCH
17. STAMPED COLORED CONCRETE PAVEMENT 9 1/2-INCH
18. CURB RAMP TYPE 6
19. CONCRETE DRIVEWAY HES 8-INCH
20. CONCRETE CURB PEDESTRIAN

XXXXX SAWCUT ASPHALT
YYYYY SAWCUT CONCRETE
INLET
MANHOLE
CE COMMERCIAL ENTRANCE
PE PRIVATE ENTRANCE

CLEVELAND AVENUE
FALLS PARKWAY
PILGRIM ROAD
US 41/45 SB ENTRANCE RAMP
US 41/45 SB EXIT RAMP
MATCHLINE STA 87+00
MATCHLINE STA 207+75
MATCHLINE STA 213+50
MATCHLINE STA 12+00
CONCRETE CURB & GUTTER 18-INCH TYPE A
CONCRETE CURB & GUTTER 30-INCH TYPE A DRIVEWAY CUT
SLOPE INTERCEPT
SEE CURB RAMP DETAILS (TYP)
PILGRIM ROAD SB PGL
PILGRIM ROAD R/L
CONNECT TO EXISTING FENCE STA. 210+67, 58.37' RT
END CONSTRUCTION 2782-11-70
BEGIN PROJECT 2782-12-70
STA 209+20.41
END CONSTRUCTION 2782-11-70
STA 502+90.00
REMOVE FENCE
MGS ENERGY ABSORBING TERMINAL
MGS GUARDRAIL
FENCE CHAIN LINK 6-FT
REMOVE FENCE SEE PLAN DETAIL: US41/45 RAMPS

NOTES:

1. ALL POINTS & RADII ARE TO FLANGE LINE, UNLESS OTHERWISE NOTED.
2. STATION CALL-OFFS ARE BASED ON REFERENCE LINE ALIGNMENT UNLESS OTHERWISE NOTED.

PROJECT NO: 2782-11-70 & 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	PLAN DETAIL: PILGRIM ROAD	SHEET 56	E

NOTE: STATIONS BASED ON PILGRIM ROAD NB R/L

DATA TABLE			
POINT #	STATION	OFFSET	REMARK
300	207+92.33	58.09 LT	
301	207+97.73	69.68 LT	
302	208+09.51	90.42 LT	
303	208+05.97	89.87 LT	
304	208+03.86	107.32 LT	
305	208+12.01	92.17 LT	
306	208+16.27	37.00 RT	
307	208+20.27	49.00 RT	
308	208+34.87	65.48 RT	
309	208+48.54	61.75 RT	
310	208+16.27	67.00 RT	R = 30'
311	208+59.72	128.67 LT	
312	208+61.79	117.32 LT	
313	208+63.45	85.40 LT	
314	208+74.90	71.00 LT	
315	208+52.63	81.57 LT	
316	208+78.99	58.00 LT	
317	208+78.99	88.00 LT	R = 30'
318	208+88.48	75.02 RT	
319	209+02.87	73.27 RT	
320	209+13.85	50.00 RT	
321	209+20.41	37.00 RT	
322	209+20.37	67.00 RT	R = 30'
323	208+97.82	5.98 LT	
324	208+98.20	0.00	
325	209+33.63	32.00 LT	
326	209+34.29	22.00 LT	
327	209+35.02	11.00 LT	
328	210+44.19	58.00 LT	
329	210+44.19	32.00 LT	

DATA TABLE			
POINT #	STATION	OFFSET	REMARK
330	210+44.19	22.00 LT	
331	210+44.19	11.00 LT	
332	210+44.19	0.00	
333	210+44.19	37.00 RT	
334	210+82.59	58.00 LT	
335	210+72.54	32.00 LT	
336	211+06.36	27.91 LT	
337	211+05.65	22.00 LT	
338	210+95.72	37.00 RT	
339	211+43.94	11.00 LT	
340	211+46.94	8.00 LT	
341	211+46.94	3.00 LT	
342	211+43.94	0.00	
343	211+51.21	144.00 LT	
344	211+52.06	136.58 LT	
345	210+82.59	128.00 LT	R = 70'
346	211+51.43	62.58 LT	
347	211+53.98	58.00 LT	
348	211+71.43	58.00 LT	
349	211+74.42	61.30 LT	
350	211+66.43	86.74 LT	
351	211+71.97	85.46 LT	
352	211+50.50	26.00 RT	
353	211+49.31	31.75 RT	
354	211+72.65	48.20 RT	
355	211+77.72	47.01 RT	
356	211+79.99	26.00 RT	
357	211+82.86	29.86 RT	
358	211+49.63	59.02 RT	
359	211+68.19	87.97 RT	

DATA TABLE			
POINT #	STATION	OFFSET	REMARK
360	210+95.72	114.00 RT	R = 77'
361	211+86.35	138.53 RT	
362	211+98.91	149.44 LT	
363	211+99.75	142.01 LT	
364	212+02.33	119.41 LT	
365	212+08.27	119.29 LT	
366	212+08.90	150.02 LT	
367	212+09.84	103.36 RT	
368	212+15.77	102.90 RT	
369	212+33.68	153.40 LT	
370	212+35.21	139.94 LT	
371	213+14.70	149.00 LT	R = 80'
372	213+14.70	69.00 LT	
373	212+32.48	75.56 LT	
374	212+37.46	78.14 LT	
375	212+34.07	61.66 LT	
376	212+37.32	59.01 LT	
377	212+54.23	60.52 LT	
378	212+55.28	66.20 LT	
379	212+42.49	29.61 RT	
380	212+45.43	26.00 RT	
381	212+58.03	26.00 RT	
382	212+60.33	30.92 RT	
383	212+45.78	45.35 RT	
384	212+51.51	45.83 RT	
385	212+67.36	112.52 RT	
386	213+25.41	97.36 RT	R = 60'
387	213+18.81	37.72 RT	
388	213+15.75	10.00 LT	
389	213+15.06	4.08 LT	

DATA TABLE			
POINT #	STATION	OFFSET	REMARK
390	213+49.81	0.00	
391	207+94.45	88.00 LT	R = 30'

NOTE: STATIONS BASED ON PILGRIM ROAD NB R/L

DATA TABLE			
POINT #	STATION	OFFSET	REMARK
400	214+24.71	26.00 RT	
401	214+81.04	69.00 LT	
402	215+20.31	10.00 LT	
403	215+20.31	0.00	
404	215+20.31	26.00 RT	
405	215+14.80	39.00 RT	
406	215+63.52	34.00 RT	
407	215+83.75	58.00 LT	
408	216+25.62	10.00 LT	
409	217+04.23	71.00 LT	

DATA TABLE			
POINT #	STATION	OFFSET	REMARK
410	217+56.68	66.00 LT	
411	217+92.77	58.00 LT	
412	217+79.21	32.00 LT	
413	217+84.72	32.00 LT	
414	217+58.99	0.00	
415	217+67.92	26.00 RT	
416	217+70.04	2.00 LT	
417	217+75.84	2.00 LT	

CONNECT TO EXISTING FENCE
STA. 218+22.85, 138.33 LT

FENCE CHAIN LINK,
6-INCH

END FENCE
STA. 218+17.44, 114.21' LT

REMOVE FENCE

SLOPE INTERCEPT

GRADE DITCH TO DRAIN

10' TRANSITION
IN CURB HEIGHT
TO MATCH BRIDGE

CONCRETE PAVEMENT
APPROACH SLAB

POST

PILGRIM ROAD
SB PGL

PILGRIM ROAD

PILGRIM ROAD R/L

STRUCTURE
B-67-337

STRUCTURE
B-67-338

MATCHLINE STA 213+50

MATCHLINE STA 219+50

214+00
215+00
216+00
217+00
218+00
219+00
220+00
221+00
222+00
284+00
285+00
286+00
287+00
1+00
4+00

+26
+27

CONCRETE CURB & GUTTER
4-INCH SLOPED 30-INCH TYPE G

MGS GUARDRAIL
ENERGY ABSORBING TERMINAL

MGS THRIE BEAM

10' TRANSITION
IN CURB HEIGHT
TO MATCH BRIDGE

TRANSITION FROM CONCRETE
CURB & GUTTER 4-INCH SLOPED
30-INCH TYPE G TO CONCRETE
CURB & GUTTER 30-INCH TYPE A
MATCHING THE BRIDGE

SLOPE INTERCEPT

US 41/45 SB

US 41/45 NB

LEGEND

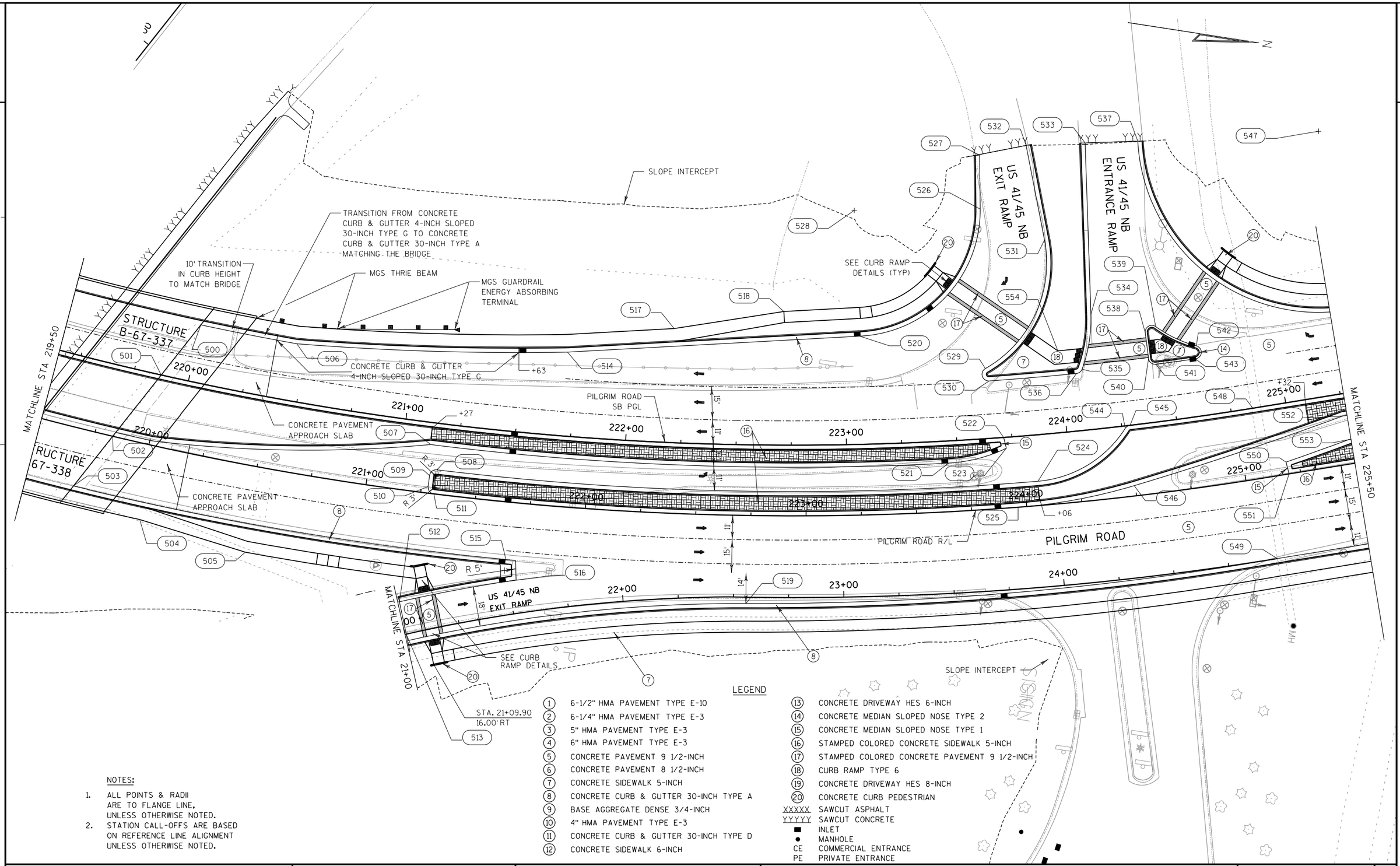
(1)	6-1/2" HMA PAVEMENT TYPE E-10
(2)	6-1/4" HMA PAVEMENT TYPE E-3
(3)	5" HMA PAVEMENT TYPE E-3
(4)	6" HMA PAVEMENT TYPE E-3
(5)	CONCRETE PAVEMENT 9 1/2-INCH
(6)	CONCRETE PAVEMENT 8 1/2-INCH
(7)	CONCRETE SIDEWALK 5-INCH
(8)	CONCRETE CURB & GUTTER 30-INCH TYPE A
(9)	BASE AGGREGATE DENSE 3/4-INCH
(10)	4" HMA PAVEMENT TYPE E-3
(11)	CONCRETE CURB & GUTTER 30-INCH TYPE D
(12)	CONCRETE SIDEWALK 6-INCH
(13)	CONCRETE DRIVEWAY HES 6-INCH
(14)	CONCRETE MEDIAN SLOPED NOSE TYPE 2
(15)	CONCRETE MEDIAN SLOPED NOSE TYPE 1
(16)	STAMPED COLORED CONCRETE SIDEWALK 5-INCH
(17)	STAMPED COLORED CONCRETE PAVEMENT 9 1/2-INCH
(18)	CURB RAMP TYPE 6
(19)	CONCRETE DRIVEWAY HES 8-INCH
(20)	CONCRETE CURB PEDESTRIAN
XXXXX	SAWCUT ASPHALT
YYYYY	SAWCUT CONCRETE
■	INLET
●	MANHOLE
CE	COMMERCIAL ENTRANCE
PE	PRIVATE ENTRANCE

NOTES:

1. ALL POINTS & RADII ARE TO FLANGE LINE, UNLESS OTHERWISE NOTED.
2. STATION CALL-OFFS ARE BASED ON REFERENCE LINE ALIGNMENT UNLESS OTHERWISE NOTED.

PROJECT NO: 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	PLAN DETAIL: PILGRIM ROAD	SHEET 58	E

2



NOTES:

1. ALL POINTS & RADII ARE TO FLANGE LINE, UNLESS OTHERWISE NOTED.
2. STATION CALL-OFFS ARE BASED ON REFERENCE LINE ALIGNMENT UNLESS OTHERWISE NOTED.

LEGEND

(1)	6-1/2" HMA PAVEMENT TYPE E-10
(2)	6-1/4" HMA PAVEMENT TYPE E-3
(3)	5" HMA PAVEMENT TYPE E-3
(4)	6" HMA PAVEMENT TYPE E-3
(5)	CONCRETE PAVEMENT 9 1/2-INCH
(6)	CONCRETE PAVEMENT 8 1/2-INCH
(7)	CONCRETE SIDEWALK 5-INCH
(8)	CONCRETE CURB & GUTTER 30-INCH TYPE A
(9)	BASE AGGREGATE DENSE 3/4-INCH
(10)	4" HMA PAVEMENT TYPE E-3
(11)	CONCRETE CURB & GUTTER 30-INCH TYPE D
(12)	CONCRETE SIDEWALK 6-INCH
(13)	CONCRETE DRIVEWAY HES 6-INCH
(14)	CONCRETE MEDIAN SLOPED NOSE TYPE 2
(15)	CONCRETE MEDIAN SLOPED NOSE TYPE 1
(16)	STAMPED COLORED CONCRETE SIDEWALK 5-INCH
(17)	STAMPED COLORED CONCRETE PAVEMENT 9 1/2-INCH
(18)	CURB RAMP TYPE 6
(19)	CONCRETE DRIVEWAY HES 8-INCH
(20)	CONCRETE CURB PEDESTRIAN
XXXXX	SAWCUT ASPHALT
YYYYY	SAWCUT CONCRETE
■	INLET
●	MANHOLE
CE	COMMERCIAL ENTRANCE
PE	PRIVATE ENTRANCE

PROJECT NO: 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	PLAN DETAIL: PILGRIM ROAD	SHEET 59	E

NOTE: STATIONS BASED ON PILGRIM ROAD NB R/L

DATA TABLE			
POINT #	STATION	OFFSET	REMARK
500	220+11.60	58.00 LT	
501	219+98.51	32.00 LT	
502	219+84.11	2.00 LT	
503	219+71.31	26.00 RT	
504	220+03.28	34.00 RT	
505	220+51.80	39.00 RT	
506	220+57.91	58.00 LT	
507	221+26.80	22.00 LT	
508	221+31.05	11.00 LT	
509	221+28.03	8.00 LT	
510	221+28.03	3.00 LT	
511	221+31.04	0.00	
512	221+21.84	50.38 RT	
513	221+26.56	64.55 RT	
514	221+86.18	70.00 LT	
515	221+66.33	26.00 RT	
516	221+67.52	35.85 RT	
517	222+36.65	83.63 LT	
518	222+89.60	92.50 LT	
519	222+65.50	37.00 RT	

DATA TABLE			
POINT #	STATION	OFFSET	REMARK
520	223+26.21	81.01 LT	
521	223+65.78	22.00 LT	
522	223+89.29	32.00 LT	
523	223+90.32	26.18 LT	
524	224+06.04	11.00 LT	
525	223+96.09	0.00	
526	223+80.50	135.89 LT	
527	223+90.18	160.22 LT	
528	223+25.02	138.00 LT	R = 57'
529	223+85.63	63.70 LT	
530	223+86.99	58.00 LT	
531	224+19.32	119.58 LT	
532	224+14.49	162.95 LT	
533	224+44.86	161.37 LT	
534	224+38.30	83.86 LT	
535	224+31.34	59.68 LT	
536	224+28.52	58.00 LT	
537	224+71.86	159.24 LT	
538	224+63.23	72.78 LT	
539	224+68.59	74.95 LT	

DATA TABLE			
POINT #	STATION	OFFSET	REMARK
540	224+63.23	61.00 LT	
541	224+66.37	58.00 LT	
542	224+86.55	63.76 LT	
543	224+85.32	58.00 LT	
544	224+48.44	30.89 LT	
545	224+50.82	32.00 LT	
546	224+49.47	4.66 LT	
547	225+57.76	151.00 LT	R = 82'
548	225+08.37	32.00 LT	
549	225+08.37	37.00 RT	
550	225+21.97	5.95 LT	
551	225+22.50	0.00	
552	225+48.03	22.00 LT	
553	225+49.59	11.08 LT	
554	224+20.76	69.00 LT	

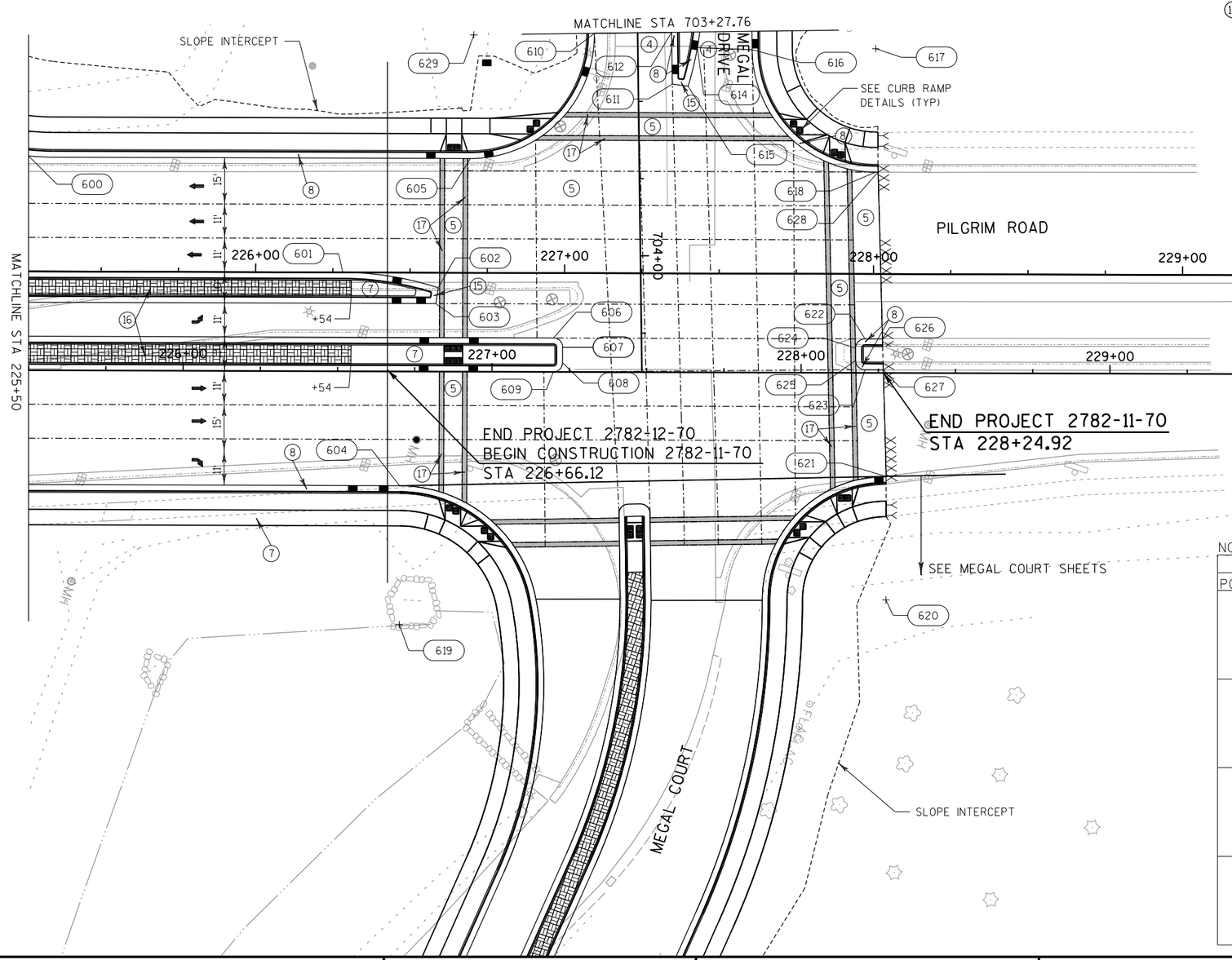
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LEGEND

(1)	6-1/2" HMA PAVEMENT TYPE E-10	(13)	CONCRETE DRIVEWAY HES 6-INCH
(2)	6-1/4" HMA PAVEMENT TYPE E-3	(14)	CONCRETE MEDIAN SLOPED NOSE TYPE 2
(3)	5" HMA PAVEMENT TYPE E-3	(15)	CONCRETE MEDIAN SLOPED NOSE TYPE 1
(4)	6" HMA PAVEMENT TYPE E-3	(16)	STAMPED COLORED CONCRETE SIDEWALK 5-INCH
(5)	CONCRETE PAVEMENT 9 1/2-INCH	(17)	STAMPED COLORED CONCRETE PAVEMENT 9 1/2-INCH
(6)	CONCRETE PAVEMENT 8 1/2-INCH	(18)	CURB RAMP TYPE 6
(7)	CONCRETE SIDEWALK 5-INCH	(19)	CONCRETE DRIVEWAY HES 8-INCH
(8)	CONCRETE CURB & GUTTER 30-INCH TYPE A	(20)	CONCRETE CURB PEDESTRIAN
(9)	BASE AGGREGATE DENSE 3/4-INCH	XXXXX	SAWCUT ASPHALT
(10)	4" HMA PAVEMENT TYPE E-3	YYYYY	SAWCUT CONCRETE
(11)	CONCRETE CURB & GUTTER 30-INCH TYPE D	■	INLET
(12)	CONCRETE SIDEWALK 6-INCH	●	MANHOLE
		CE	COMMERCIAL ENTRANCE
		PE	PRIVATE ENTRANCE

NOTES:

1. ALL POINTS & RADII ARE TO FLANGE LINE, UNLESS OTHERWISE NOTED.
2. STATION CALL-OFFS ARE BASED ON REFERENCE LINE ALIGNMENT UNLESS OTHERWISE NOTED.



NOTE: STATIONS BASED ON PILGRIM ROAD NB R/L

DATA TABLE			
POINT #	STATION	OFFSET	REMARK
600	225+49.79	69.39 LT	
601	226+51.59	32.00 LT	
602	226+80.01	27.88 LT	
603	226+79.15	22.00 LT	
604	226+70.22	37.00 RT	
605	226+92.78	69.00 LT	
606	227+19.83	11.00 LT	
607	227+22.83	8.00 LT	
608	227+22.83	3.00 LT	
609	227+19.83	0.00	
610	227+32.78	109.64 LT	
611	227+58.00	95.86 LT	
612	227+57.77	110.03 LT	
613	227+67.56	123.59 LT	
614	227+66.13	105.10 LT	
615	227+63.89	95.10 LT	
616	227+83.86	104.49 LT	
617	228+23.86	104.97 LT	R = 40'
618	228+23.98	64.97 LT	
619	226+70.22	82.00 RT	R = 45'

DATA TABLE			
POINT #	STATION	OFFSET	REMARK
620	228+27.68	73.51 RT	R = 40'
621	228+27.68	33.51 RT	
622	228+17.30	11.00 LT	
623	228+17.30	1.00 LT	
624	228+14.30	8.00 LT	
625	228+14.30	4.00 LT	
626	228+26.34	11.00 LT	
627	228+26.67	0.00	
628	228+24.72	64.97 LT	
629	226+93.78	109.00 LT	R = 40'

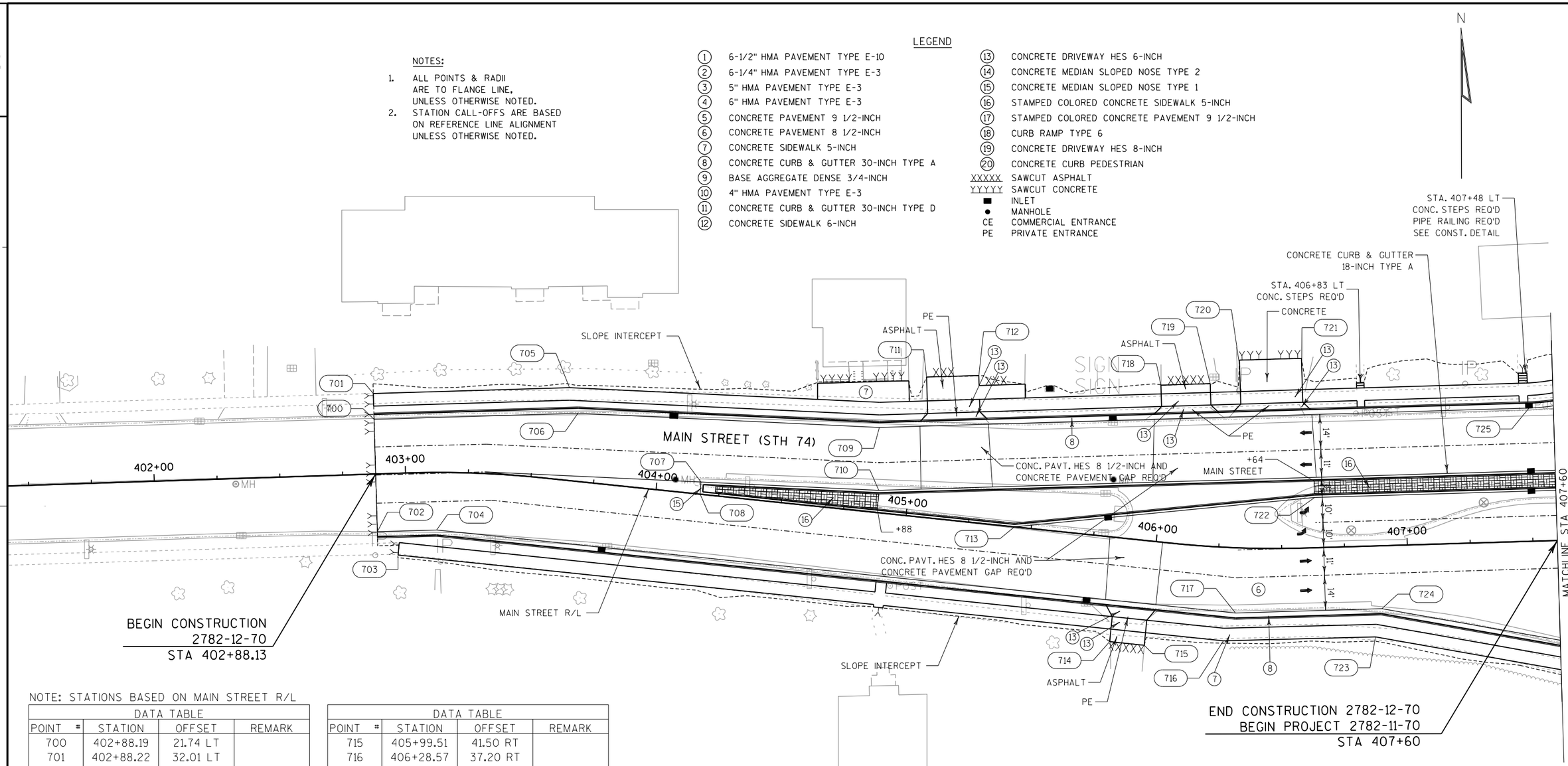
PROJECT NO: 2782-11-70 & 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	PLAN DETAIL: PILGRIM ROAD	SHEET 61	E

NOTES:

1. ALL POINTS & RADII ARE TO FLANGE LINE, UNLESS OTHERWISE NOTED.
2. STATION CALL-OFFS ARE BASED ON REFERENCE LINE ALIGNMENT UNLESS OTHERWISE NOTED.

LEGEND

(1)	6-1/2" HMA PAVEMENT TYPE E-10	(13)	CONCRETE DRIVEWAY HES 6-INCH
(2)	6-1/4" HMA PAVEMENT TYPE E-3	(14)	CONCRETE MEDIAN SLOPED NOSE TYPE 2
(3)	5" HMA PAVEMENT TYPE E-3	(15)	CONCRETE MEDIAN SLOPED NOSE TYPE 1
(4)	6" HMA PAVEMENT TYPE E-3	(16)	STAMPED COLORED CONCRETE SIDEWALK 5-INCH
(5)	CONCRETE PAVEMENT 9 1/2-INCH	(17)	STAMPED COLORED CONCRETE PAVEMENT 9 1/2-INCH
(6)	CONCRETE PAVEMENT 8 1/2-INCH	(18)	CURB RAMP TYPE 6
(7)	CONCRETE SIDEWALK 5-INCH	(19)	CONCRETE DRIVEWAY HES 8-INCH
(8)	CONCRETE CURB & GUTTER 30-INCH TYPE A	(20)	CONCRETE CURB PEDESTRIAN
(9)	BASE AGGREGATE DENSE 3/4-INCH	XXXXX	SAWCUT ASPHALT
(10)	4" HMA PAVEMENT TYPE E-3	YYYYY	SAWCUT CONCRETE
(11)	CONCRETE CURB & GUTTER 30-INCH TYPE D	■	INLET
(12)	CONCRETE SIDEWALK 6-INCH	●	MANHOLE
		CE	COMMERCIAL ENTRANCE
		PE	PRIVATE ENTRANCE



NOTE: STATIONS BASED ON MAIN STREET R/L

DATA TABLE			
POINT #	STATION	OFFSET	REMARK
700	402+88.19	21.74 LT	
701	402+88.22	32.01 LT	
702	402+88.06	22.97 RT	
703	402+95.98	32.50 RT	
704	403+12.29	22.87 RT	
705	403+61.54	36.75 LT	
706	403+65.98	26.98 LT	
707	404+19.86	5.00 LT	
708	404+20.00	0.00	
709	404+85.78	33.77 LT	
710	404+88.15	8.86 LT	
711	405+02.41	55.55 LT	
712	405+22.99	58.31 LT	
713	405+43.28	0.00	
714	405+85.68	41.50 RT	

DATA TABLE			
POINT #	STATION	OFFSET	REMARK
715	405+99.51	41.50 RT	
716	406+28.57	37.20 RT	
717	406+32.60	25.95 RT	
718	405+95.42	62.03 LT	
719	406+16.60	64.54 LT	
720	406+30.19	72.09 LT	
721	406+60.13	73.00 LT	
722	406+63.72	20.00 LT	
723	406+86.24	36.14 RT	
724	406+89.15	25.00 RT	
725	407+50.02	53.00 LT	

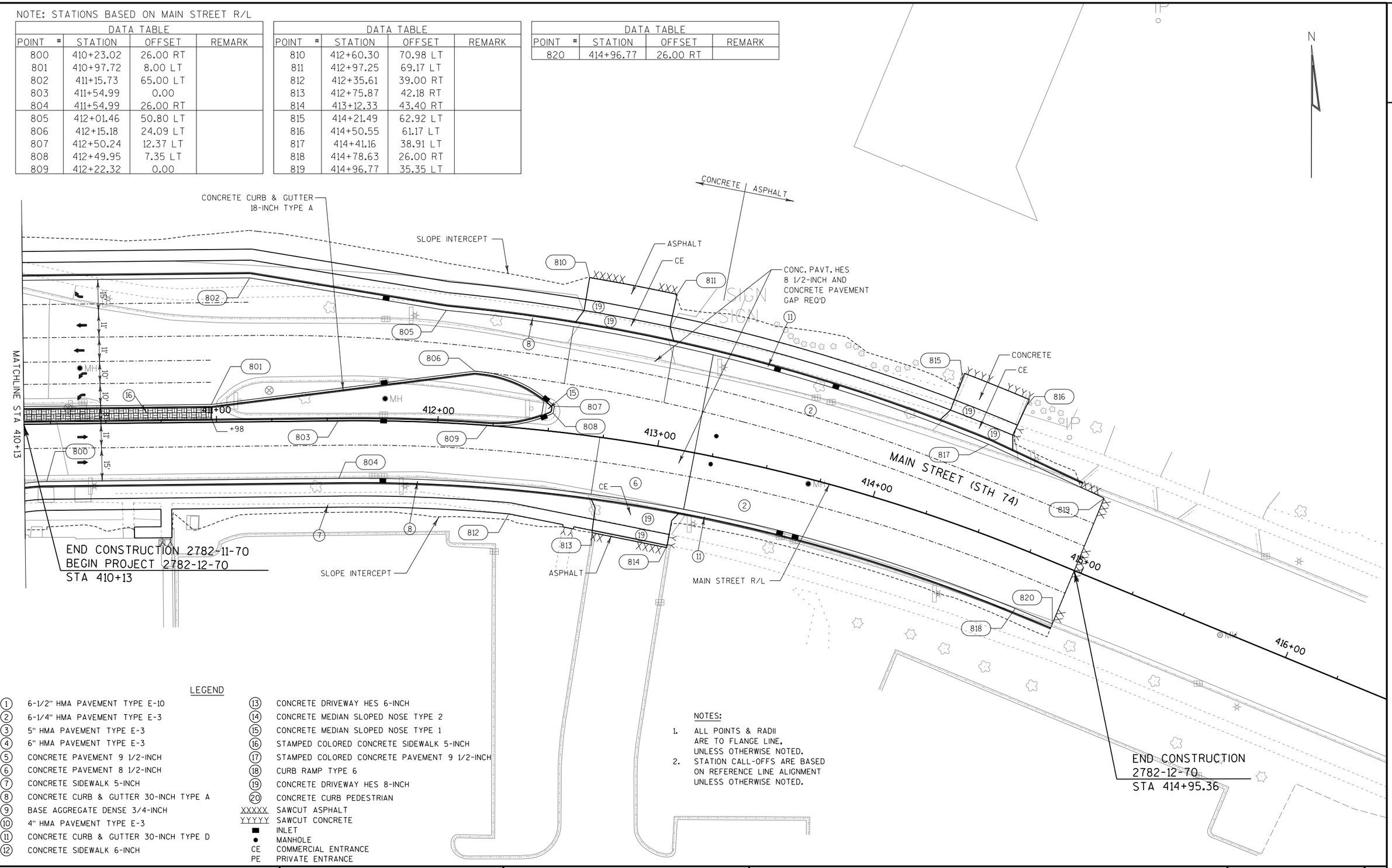
PROJECT NO: 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	PLAN DETAIL: MAIN STREET (STH 74)	SHEET 62	E

NOTE: STATIONS BASED ON MAIN STREET R/L

DATA TABLE			
POINT #	STATION	OFFSET	REMARK
800	410+23.02	26.00 RT	
801	410+97.72	8.00 LT	
802	411+15.73	65.00 LT	
803	411+54.99	0.00	
804	411+54.99	26.00 RT	
805	412+01.46	50.80 LT	
806	412+15.18	24.09 LT	
807	412+50.24	12.37 LT	
808	412+49.95	7.35 LT	
809	412+22.32	0.00	

DATA TABLE			
POINT #	STATION	OFFSET	REMARK
810	412+60.30	70.98 LT	
811	412+97.25	69.17 LT	
812	412+35.61	39.00 RT	
813	412+75.87	42.18 RT	
814	413+12.33	43.40 RT	
815	414+21.49	62.92 LT	
816	414+50.55	61.17 LT	
817	414+41.16	38.91 LT	
818	414+78.63	26.00 RT	
819	414+96.77	35.35 LT	

DATA TABLE			
POINT #	STATION	OFFSET	REMARK
820	414+96.77	26.00 RT	



LEGEND

(1)	6-1/2" HMA PAVEMENT TYPE E-10
(2)	6-1/4" HMA PAVEMENT TYPE E-3
(3)	5" HMA PAVEMENT TYPE E-3
(4)	6" HMA PAVEMENT TYPE E-3
(5)	CONCRETE PAVEMENT 9 1/2-INCH
(6)	CONCRETE PAVEMENT 8 1/2-INCH
(7)	CONCRETE SIDEWALK 5-INCH
(8)	CONCRETE CURB & GUTTER 30-INCH TYPE A
(9)	BASE AGGREGATE DENSE 3/4-INCH
(10)	4" HMA PAVEMENT TYPE E-3
(11)	CONCRETE CURB & GUTTER 30-INCH TYPE D
(12)	CONCRETE SIDEWALK 6-INCH
(13)	CONCRETE DRIVEWAY HES 6-INCH
(14)	CONCRETE MEDIAN SLOPED NOSE TYPE 2
(15)	CONCRETE MEDIAN SLOPED NOSE TYPE 1
(16)	STAMPED COLORED CONCRETE SIDEWALK 5-INCH
(17)	STAMPED COLORED CONCRETE PAVEMENT 9 1/2-INCH
(18)	CURB RAMP TYPE 6
(19)	CONCRETE DRIVEWAY HES 8-INCH
(20)	CONCRETE CURB PEDESTRIAN
XXXXX	SAWCUT ASPHALT
YYYYY	SAWCUT CONCRETE
■	INLET
●	MANHOLE
CE	COMMERCIAL ENTRANCE
PE	PRIVATE ENTRANCE

NOTES:

1. ALL POINTS & RADII ARE TO FLANGE LINE, UNLESS OTHERWISE NOTED.
2. STATION CALL-OFFS ARE BASED ON REFERENCE LINE ALIGNMENT UNLESS OTHERWISE NOTED.

PROJECT NO: 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	PLAN DETAIL: MAIN STREET (STH 74)	SHEET 63	E

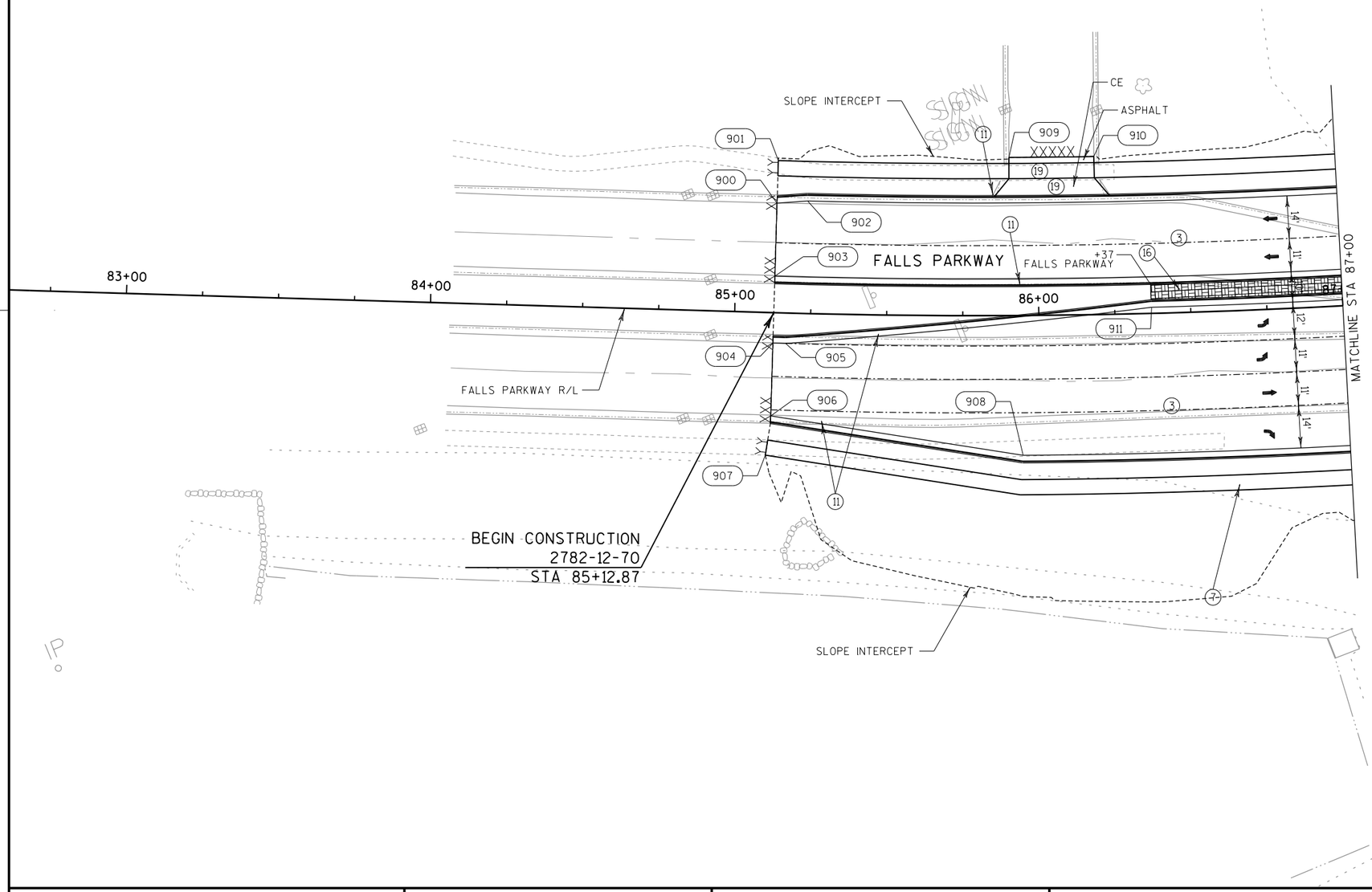
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LEGEND

(1)	6-1/2" HMA PAVEMENT TYPE E-10	(13)	CONCRETE DRIVEWAY HES 6-INCH
(2)	6-1/4" HMA PAVEMENT TYPE E-3	(14)	CONCRETE MEDIAN SLOPED NOSE TYPE 2
(3)	5" HMA PAVEMENT TYPE E-3	(15)	CONCRETE MEDIAN SLOPED NOSE TYPE 1
(4)	6" HMA PAVEMENT TYPE E-3	(16)	STAMPED COLORED CONCRETE SIDEWALK 5-INCH
(5)	CONCRETE PAVEMENT 9 1/2-INCH	(17)	STAMPED COLORED CONCRETE PAVEMENT 9 1/2-INCH
(6)	CONCRETE PAVEMENT 8 1/2-INCH	(18)	CURB RAMP TYPE 6
(7)	CONCRETE SIDEWALK 5-INCH	(19)	CONCRETE DRIVEWAY HES 8-INCH
(8)	CONCRETE CURB & GUTTER 30-INCH TYPE A	(20)	CONCRETE CURB PEDESTRIAN
(9)	BASE AGGREGATE DENSE 3/4-INCH	XXXXX	SAWCUT ASPHALT
(10)	4" HMA PAVEMENT TYPE E-3	YYYYY	SAWCUT CONCRETE
(11)	CONCRETE CURB & GUTTER 30-INCH TYPE D	■	INLET
(12)	CONCRETE SIDEWALK 6-INCH	●	MANHOLE
		CE	COMMERCIAL ENTRANCE
		PE	PRIVATE ENTRANCE

NOTES:

1. ALL POINTS & RADII ARE TO FLANGE LINE, UNLESS OTHERWISE NOTED.
2. STATION CALL-OFFS ARE BASED ON REFERENCE LINE ALIGNMENT UNLESS OTHERWISE NOTED.



NOTE: STATIONS BASED ON FALLS PARKWAY R/L

DATA TABLE

POINT #	STATION	OFFSET	REMARK
900	85+12.87	36.00 LT	
901	85+12.87	50.00 LT	
902	85+23.04	37.00 LT	
903	85+12.87	12.00 LT	
904	85+12.87	10.00 RT	
905	85+17.04	10.00 RT	
906	85+12..87	34.00 RT	
907	85+11.50	46.92 RT	
908	85+94.56	46.00 RT	
909	85+90.42	55.00 LT	
910	86+19.02	55.00 LT	
911	86+37.15	2.00 LT	

PROJECT NO: 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	PLAN DETAIL: FALLS PARKWAY	SHEET 64	E

2

LEGEND

(1)	6-1/2" HMA PAVEMENT TYPE E-10	(13)	CONCRETE DRIVEWAY HES 6-INCH
(2)	6-1/4" HMA PAVEMENT TYPE E-3	(14)	CONCRETE MEDIAN SLOPED NOSE TYPE 2
(3)	5" HMA PAVEMENT TYPE E-3	(15)	CONCRETE MEDIAN SLOPED NOSE TYPE 1
(4)	6" HMA PAVEMENT TYPE E-3	(16)	STAMPED COLORED CONCRETE SIDEWALK 5-INCH
(5)	CONCRETE PAVEMENT 9 1/2-INCH	(17)	STAMPED COLORED CONCRETE PAVEMENT 9 1/2-INCH
(6)	CONCRETE PAVEMENT 8 1/2-INCH	(18)	CURB RAMP TYPE 6
(7)	CONCRETE SIDEWALK 5-INCH	(19)	CONCRETE DRIVEWAY HES 8-INCH
(8)	CONCRETE CURB & GUTTER 30-INCH TYPE A	(20)	CONCRETE CURB PEDESTRIAN
(9)	BASE AGGREGATE DENSE 3/4-INCH	XXXXX	SAWCUT ASPHALT
(10)	4" HMA PAVEMENT TYPE E-3	YYYYY	SAWCUT CONCRETE
(11)	CONCRETE CURB & GUTTER 30-INCH TYPE D	■	INLET
(12)	CONCRETE SIDEWALK 6-INCH	●	MANHOLE
		CE	COMMERCIAL ENTRANCE
		PE	PRIVATE ENTRANCE

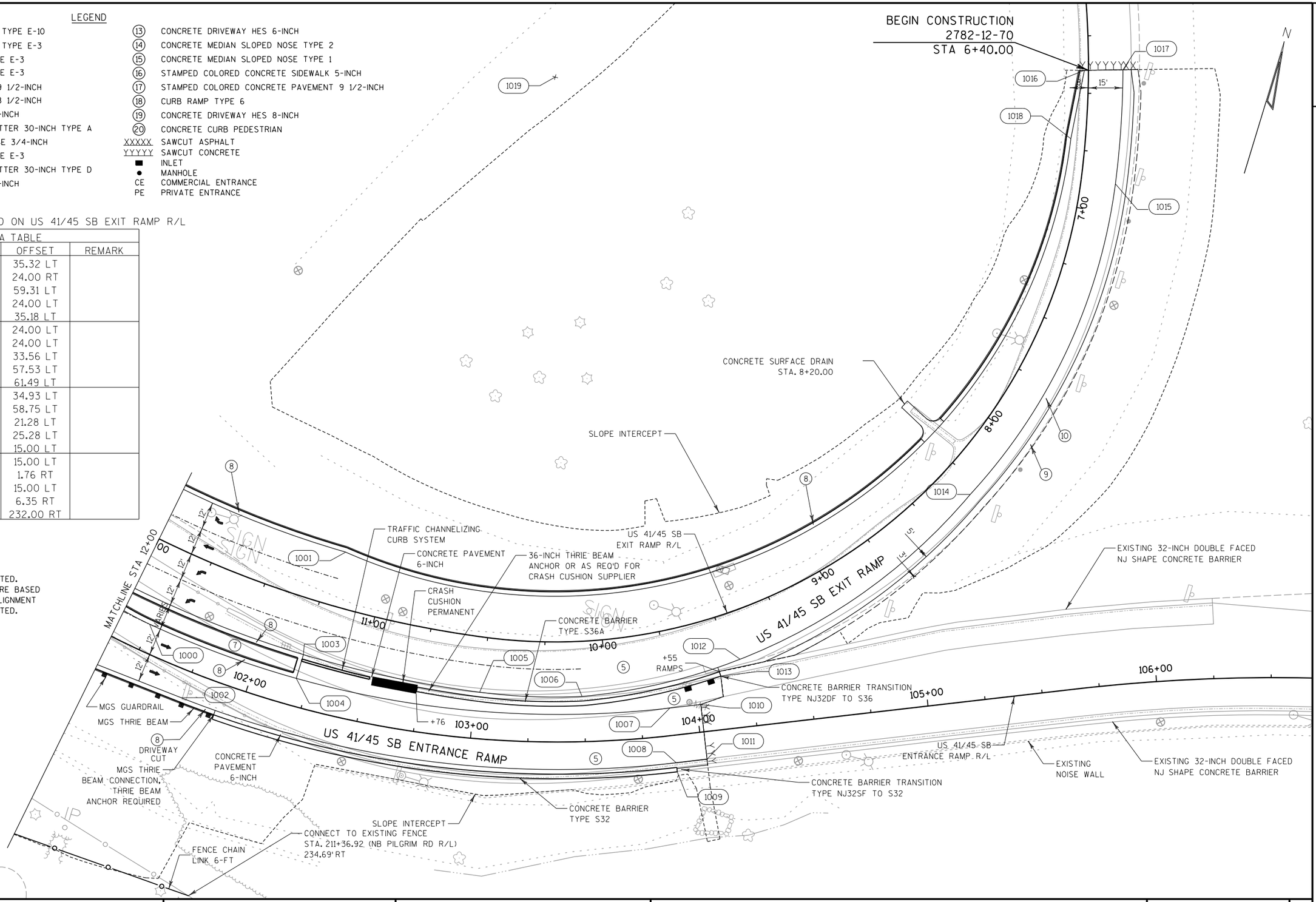
NOTE: STATIONS BASED ON US 41/45 SB EXIT RAMP R/L

DATA TABLE

POINT #	STATION	OFFSET	REMARK
1000	11+88.31	35.32 LT	
1001	11+20.00	24.00 RT	
1002	11+65.39	59.31 LT	
1003	11+48.99	24.00 LT	
1004	11+48.88	35.18 LT	
1005	10+50.44	24.00 LT	
1006	10+10.00	24.00 LT	
1007	9+76.71	33.56 LT	
1008	9+77.82	57.53 LT	
1009	9+78.38	61.49 LT	
1010	9+64.98	34.93 LT	
1011	9+67.41	58.75 LT	
1012	9+54.88	21.28 LT	
1013	9+54.71	25.28 LT	
1014	8+30.00	15.00 LT	
1015	6+87.63	15.00 LT	
1016	6+40.03	1.76 RT	
1017	6+39.73	15.00 LT	
1018	6+70.36	6.35 RT	
1019	6+50.24	232.00 RT	

NOTES:

1. ALL POINTS & RADII ARE TO FLANGE LINE, UNLESS OTHERWISE NOTED.
2. STATION CALL-OFFS ARE BASED ON REFERENCE LINE ALIGNMENT UNLESS OTHERWISE NOTED.



PROJECT NO: 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	PLAN DETAIL: US 41/45 SB RAMPS	SHEET 65	E

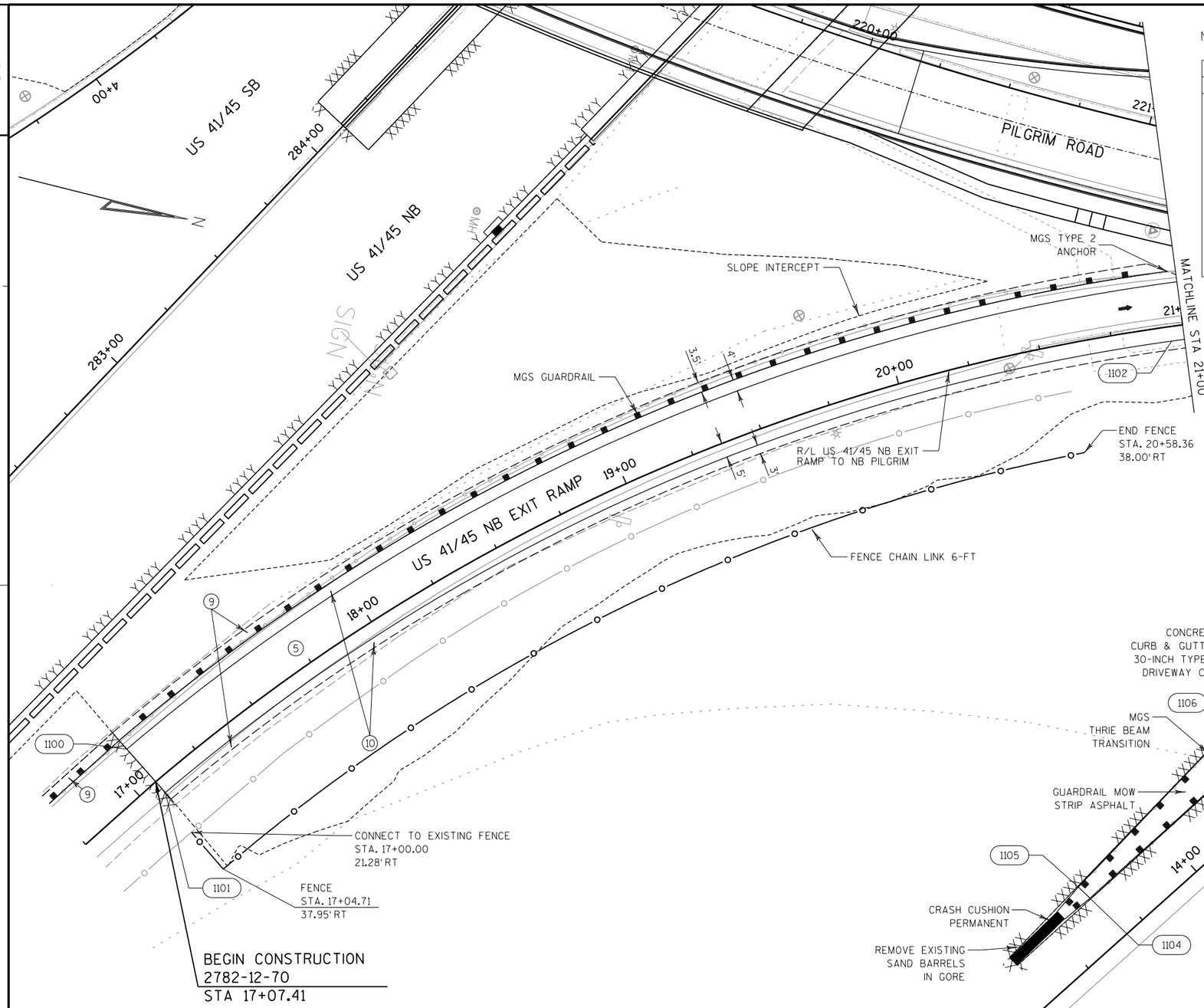
NOTE: STATIONS BASED ON US 41/45 NB EXIT RAMP TO NB PILGRIM R/L

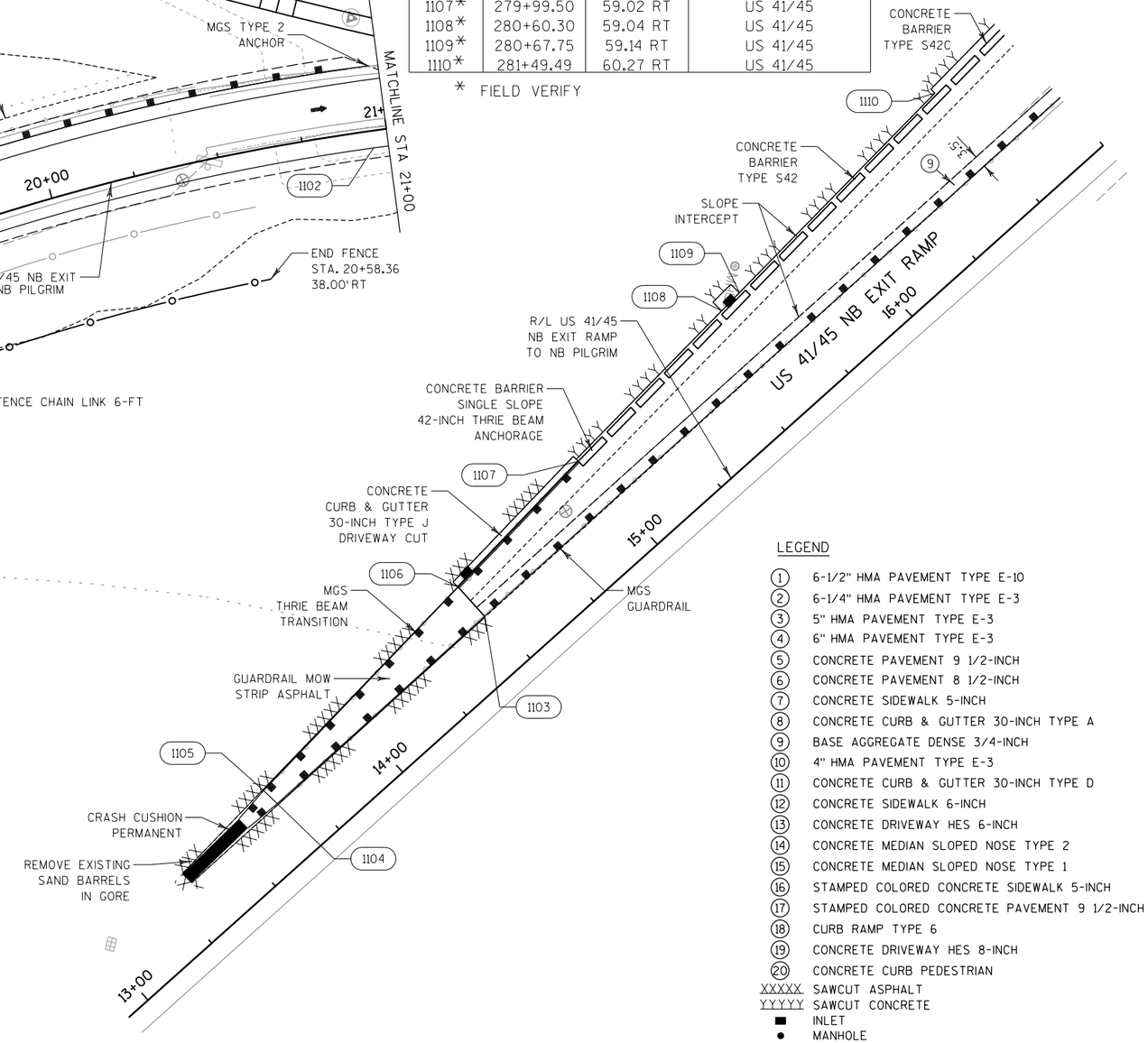
DATA TABLE			
POINT #	STATION	OFFSET	REMARK
1100	17+07.41	18.01 LT	US 41/45 NB EXIT RAMP
1101	17+07.53	5.00 RT	US 41/45 NB EXIT RAMP
1102	20+95.58	5.00 RT	US 41/45 NB EXIT RAMP
1103*	14+48.29	17.78 LT	US 41/45 NB EXIT RAMP
1104*	13+66.53	17.27 LT	US 41/45 NB EXIT RAMP
1105*	278+66.23	58.52 RT	US 41/45
1106*	279+48.61	58.92 RT	US 41/45
1107*	279+99.50	59.02 RT	US 41/45
1108*	280+60.30	59.04 RT	US 41/45
1109*	280+67.75	59.14 RT	US 41/45
1110*	281+49.49	60.27 RT	US 41/45

* FIELD VERIFY

NOTES:

1. ALL POINTS & RADII ARE TO FLANGE LINE, UNLESS OTHERWISE NOTED.
2. STATION CALL-OFFS ARE BASED ON REFERENCE LINE ALIGNMENT UNLESS OTHERWISE NOTED.

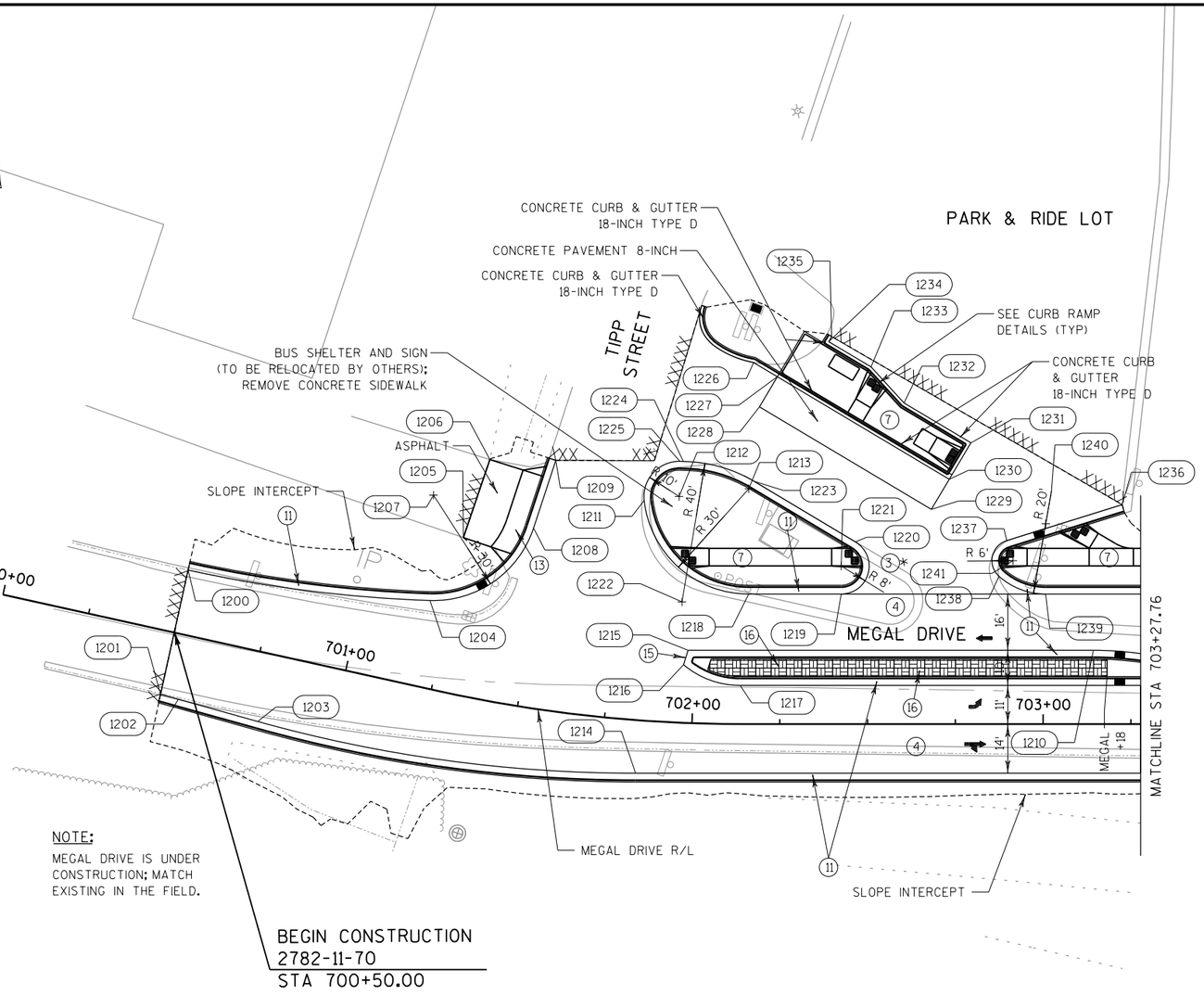




LEGEND

(1)	6-1/2" HMA PAVEMENT TYPE E-10
(2)	6-1/4" HMA PAVEMENT TYPE E-3
(3)	5" HMA PAVEMENT TYPE E-3
(4)	6" HMA PAVEMENT TYPE E-3
(5)	CONCRETE PAVEMENT 9 1/2-INCH
(6)	CONCRETE PAVEMENT 8 1/2-INCH
(7)	CONCRETE SIDEWALK 5-INCH
(8)	CONCRETE CURB & GUTTER 30-INCH TYPE A
(9)	BASE AGGREGATE DENSE 3/4-INCH
(10)	4" HMA PAVEMENT TYPE E-3
(11)	CONCRETE CURB & GUTTER 30-INCH TYPE D
(12)	CONCRETE SIDEWALK 6-INCH
(13)	CONCRETE DRIVEWAY HES 6-INCH
(14)	CONCRETE MEDIAN SLOPED NOSE TYPE 2
(15)	CONCRETE MEDIAN SLOPED NOSE TYPE 1
(16)	STAMPED COLORED CONCRETE SIDEWALK 5-INCH
(17)	STAMPED COLORED CONCRETE PAVEMENT 9 1/2-INCH
(18)	CURB RAMP TYPE 6
(19)	CONCRETE DRIVEWAY HES 8-INCH
(20)	CONCRETE CURB PEDESTRIAN
XXXXX	SAWCUT ASPHALT
YYYYY	SAWCUT CONCRETE
■	INLET
●	MANHOLE
CE	COMMERCIAL ENTRANCE
PE	PRIVATE ENTRANCE

PROJECT NO: 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	PLAN DETAIL: US 41/45 NB EXIT RAMP TO NB PILGRIM	SHEET 66	E



LEGEND

(1)	6-1/2" HMA PAVEMENT TYPE E-10	(13)	CONCRETE DRIVEWAY HES 6-INCH
(2)	6-1/4" HMA PAVEMENT TYPE E-3	(14)	CONCRETE MEDIAN SLOPED NOSE TYPE 2
(3)	5" HMA PAVEMENT TYPE E-3	(15)	CONCRETE MEDIAN SLOPED NOSE TYPE 1
(4)	6" HMA PAVEMENT TYPE E-3	(16)	STAMPED COLORED CONCRETE SIDEWALK 5-INCH
(5)	CONCRETE PAVEMENT 9 1/2-INCH	(17)	STAMPED COLORED CONCRETE PAVEMENT 9 1/2-INCH
(6)	CONCRETE PAVEMENT 8 1/2-INCH	(18)	CURB RAMP TYPE 6
(7)	CONCRETE SIDEWALK 5-INCH	(19)	CONCRETE DRIVEWAY HES 8-INCH
(8)	CONCRETE CURB & GUTTER 30-INCH TYPE A	(20)	CONCRETE CURB PEDESTRIAN
(9)	BASE AGGREGATE DENSE 3/4-INCH	XXXXX	SAWCUT ASPHALT
(10)	4" HMA PAVEMENT TYPE E-3	YYYYY	SAWCUT CONCRETE
(11)	CONCRETE CURB & GUTTER 30-INCH TYPE D	■	INLET
(12)	CONCRETE SIDEWALK 6-INCH	●	MANHOLE
		CE	COMMERCIAL ENTRANCE
		PE	PRIVATE ENTRANCE

NOTES:

1. ALL POINTS & RADII ARE TO FLANGE LINE, UNLESS OTHERWISE NOTED.
2. STATION CALL-OFFS ARE BASED ON REFERENCE LINE ALIGNMENT UNLESS OTHERWISE NOTED.

* 5" HMA PAVEMENT E-3 OVER 10" BASE AGGREGATE DENSE 1 1/4-INCH

NOTE: STATIONS BASED ON MEGAL DRIVE R/L

DATA TABLE

POINT #	STATION	OFFSET	REMARK
1200	700+50.00	18.24 LT	
1201	700+50.00	17.58 RT	
1202	700+54.70	18.27 RT	
1203	700+78.69	19.58 RT	
1204	701+19.15	24.66 LT	
1205	701+24.55	44.20 LT	
1206	701+27.16	67.49 LT	
1207	701+13.62	54.15 LT	
1208	701+45.90	50.75 LT	
1209	701+49.54	70.84 LT	
1210	703+14.37	21.00 LT	
1211	701+81.19	62.55 LT	
1212	701+92.89	64.32 LT	
1213	702+16.17	67.00 LT	
1214	701+84.96	15.09 RT	
1215	701+98.05	20.70 LT	
1216	701+96.87	16.56 LT	
1217	702+13.71	11.00 LT	
1218	702+16.12	37.00 LT	
1219	702+42.47	37.00 LT	
1220	702+46.56	51.87 LT	
1221	702+42.47	45.00 LT	
1222	701+95.54	34.39 LT	
1223	702+17.62	69.13 LT	
1224	701+93.77	74.36 LT	
1225	701+92.51	73.10 LT	
1226	702+17.53	102.96 LT	
1227	702+24.31	98.91 LT	
1228	702+19.18	90.32 LT	
1229	702+68.14	61.13 LT	
1230	702+73.26	69.72 LT	
1231	702+79.44	80.08 LT	
1232	702+60.40	91.43 LT	
1233	702+51.00	101.69 LT	
1234	702+38.93	108.89 LT	
1235	702+39.79	110.34 LT	
1236	703+22.51	62.50 LT	
1237	702+89.66	52.27 LT	
1238	702+87.45	42.06 LT	
1239	703+00.75	37.00 LT	
1240	703+00.75	57.00 LT	
1241	702+91.44	46.54 LT	

2

DATA TABLE		
POINT #	STATION	OFFSET
1300	284+27.74	63.35 LT
1301	284+43.47	62.76 LT
1302	285+53.16	60.21 LT
1303	285+86.72	59.60 LT
1304	284+12.79	12.00 LT
1305	285+39.84	12.00 LT
1306	286+41.87	12.00 LT
1307	286+41.87	12.00 RT
1308	285+39.84	12.00 RT
1309	284+12.79	12.00 RT
1310	284+68.40	60.26 RT
1311	286+97.74	60.93 RT
1312	287+22.69	62.63 RT
1313	285+53.27	64.96 LT

PILGRIM ROAD

US 41/45 SB EXIT RAMP

US 41/45 SB

US 41/45 NB

US 41/45 NB EXIT RAMP

US 41/45 R/L

STRUCTURE B-67-338

STRUCTURE B-67-337

STRUCTURE R-67-0122

STRUCTURE R-67-0121

GRADE DITCH TO DRAIN

REMOVE CONCRETE BARRIER

REMOVE GUARDRAIL

CURB & GUTTER INTEGRAL
4-INCH SLOPED 36-INCH
AND 10-INCH CONCRETE PAVEMENT

4-INCH HMA PAVEMENT
TYPE E-3

CONCRETE BARRIER
TYPE NJ51DF

CONCRETE BARRIER TRANSITION
TYPE NJ51DF TO V56

CONCRETE BARRIER
TYPE S42C

CONCRETE SURFACE DRAIN
STA. 287+15

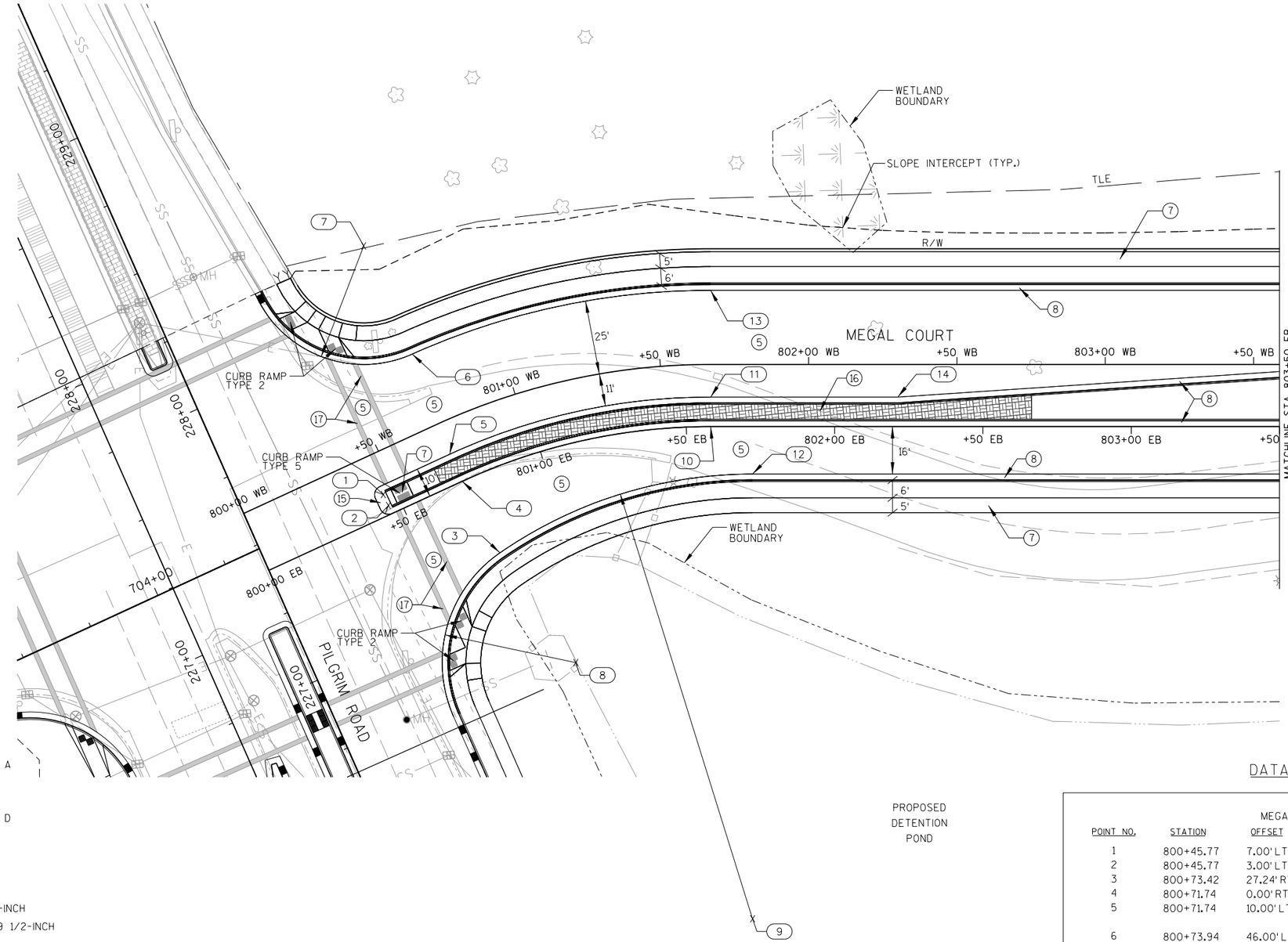
SLOPE INTERCEPT (TYP.)

LEGEND

XXXXX SAWCUT ASPHALT
YYYYY SAWCUT CONCRETE

PROJECT NO: 1100-37-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	PLAN DETAIL: US 41/45	SHEET 68	E

FILE NAME : P:\44xx\4442\Plan\021213_pd.dgn PLOT DATE : 11/2/2014 PLOT BY : ajp PLOT NAME : PLOT SCALE : 1:40



LEGEND

(1)	6-1/2" HMA PAVEMENT TYPE E-10
(2)	6-1/4" HMA PAVEMENT TYPE E-3
(3)	5" HMA PAVEMENT TYPE E-3
(4)	6" HMA PAVEMENT TYPE E-3
(5)	CONCRETE PAVEMENT 9 1/2-INCH
(6)	CONCRETE PAVEMENT 8 1/2-INCH
(7)	CONCRETE SIDEWALK 5-INCH
(8)	CONCRETE CURB & GUTTER 30-INCH TYPE A
(9)	BASE AGGREGATE DENSE 3/4-INCH
(10)	4" HMA PAVEMENT TYPE E-3
(11)	CONCRETE CURB & GUTTER 30-INCH TYPE D
(12)	CONCRETE SIDEWALK 6-INCH
(13)	CONCRETE DRIVEWAY HES 6-INCH
(14)	CONCRETE MEDIAN SLOPED NOSE TYPE 2
(15)	CONCRETE MEDIAN SLOPED NOSE TYPE 1
(16)	STAMPED COLORED CONCRETE SIDEWALK 5-INCH
(17)	STAMPED COLORED CONCRETE PAVEMENT 9 1/2-INCH
(18)	CURB RAMP TYPE 6
(19)	CONCRETE DRIVEWAY HES 8-INCH
(20)	CONCRETE CURB PEDESTRIAN

XXXXX	SAWCUT ASPHALT
YYYYY	SAWCUT CONCRETE
■	INLET
●	MANHOLE
CE	COMMERCIAL ENTRANCE
PE	PRIVATE ENTRANCE

NOTES:

1. ALL POINTS & RADII ARE TO FLANGE LINE, UNLESS OTHERWISE NOTED.
2. STATION CALL-OFFS ARE BASED ON REFERENCE LINE ALIGNMENT UNLESS OTHERWISE NOTED.
3. SEE STREETSCAPE PLANS FOR ISLAND CENTER PAVING DETAILS.

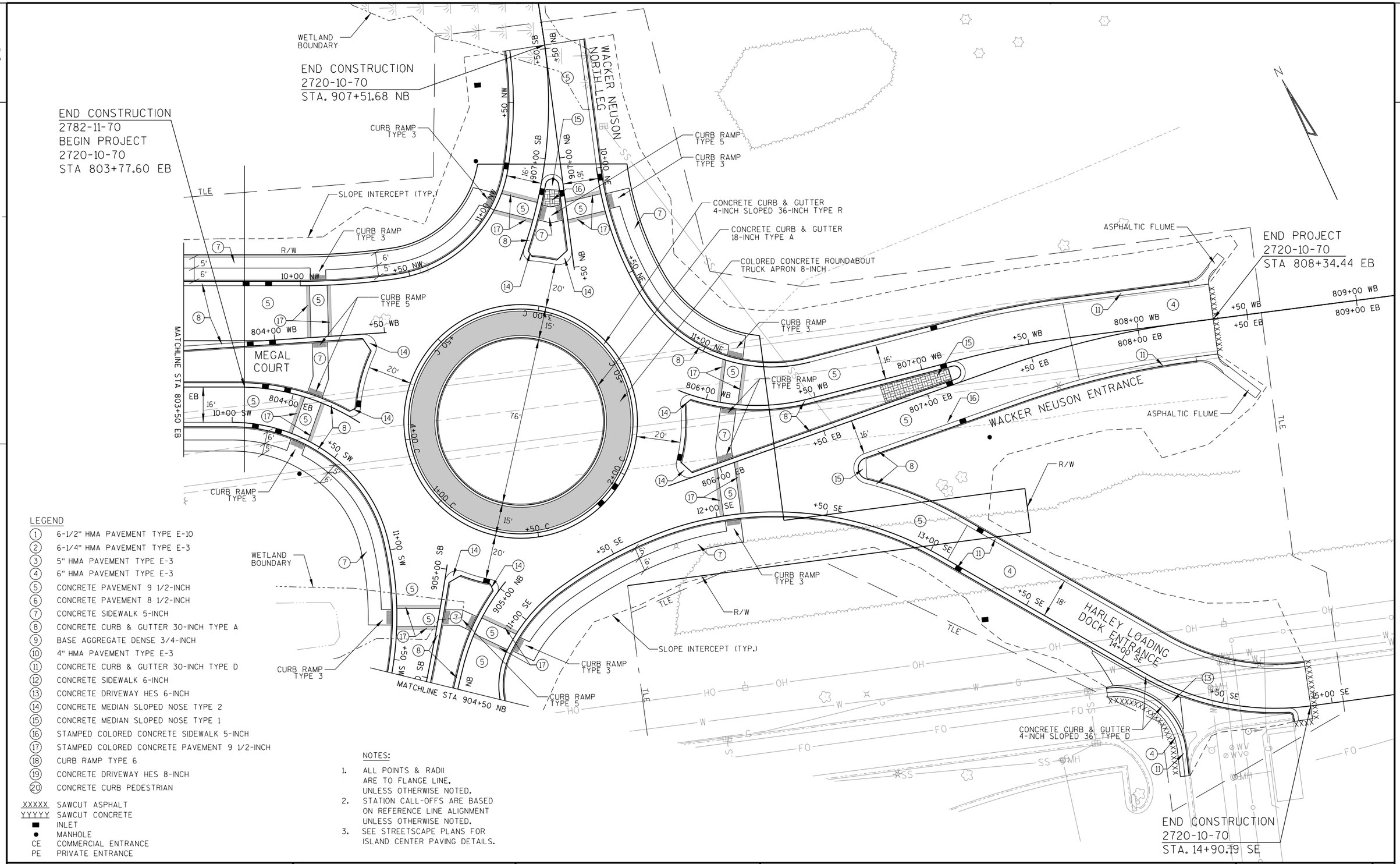
DATA TABLE

MEGAL COURT

POINT NO.	STATION	OFFSET	COMMENTS
1	800+45.77	7.00' LT	3' RADIUS
2	800+45.77	3.00' LT	3' RADIUS
3	800+73.42	27.24' RT	END 45' RADIUS BEGIN 150' RADIUS CURVE
4	800+71.74	0.00' RT	BEGIN 200' RADIUS CURVE
5	800+71.74	10.00' LT	BEGIN 210' RADIUS CURVE
6	800+73.94	46.00' LT	BEGIN 246' RADIUS CURVE
7	800+73.94	86.00' LT	40' RADIUS
8	800+85.94	71.26' RT	45' RADIUS
9	801+72.34	166.00' RT	150' RADIUS
10	801+58.23	0.00' RT	END 200' RADIUS CURVE
11	801+58.23	10.00' LT	END 210' RADIUS CURVE
12	801+72.34	16.00' RT	END 150' RADIUS CURVE
13	801+58.23	46.00' LT	END 246' RADIUS CURVE
14	802+21.29	10.00' LT	PI

RADIUS SHOWN IS TO CURB FLANGE

PROJECT NO: 2782-11-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	PLAN DETAIL: MEGAL COURT	SHEET 69	E



LEGEND

(1)	6-1/2" HMA PAVEMENT TYPE E-10
(2)	6-1/4" HMA PAVEMENT TYPE E-3
(3)	5" HMA PAVEMENT TYPE E-3
(4)	6" HMA PAVEMENT TYPE E-3
(5)	CONCRETE PAVEMENT 9 1/2-INCH
(6)	CONCRETE PAVEMENT 8 1/2-INCH
(7)	CONCRETE SIDEWALK 5-INCH
(8)	CONCRETE CURB & GUTTER 30-INCH TYPE A
(9)	BASE AGGREGATE DENSE 3/4-INCH
(10)	4" HMA PAVEMENT TYPE E-3
(11)	CONCRETE CURB & GUTTER 30-INCH TYPE D
(12)	CONCRETE SIDEWALK 6-INCH
(13)	CONCRETE DRIVEWAY HES 6-INCH
(14)	CONCRETE MEDIAN SLOPED NOSE TYPE 2
(15)	CONCRETE MEDIAN SLOPED NOSE TYPE 1
(16)	STAMPED COLORED CONCRETE SIDEWALK 5-INCH
(17)	STAMPED COLORED CONCRETE PAVEMENT 9 1/2-INCH
(18)	CURB RAMP TYPE 6
(19)	CONCRETE DRIVEWAY HES 8-INCH
(20)	CONCRETE CURB PEDESTRIAN

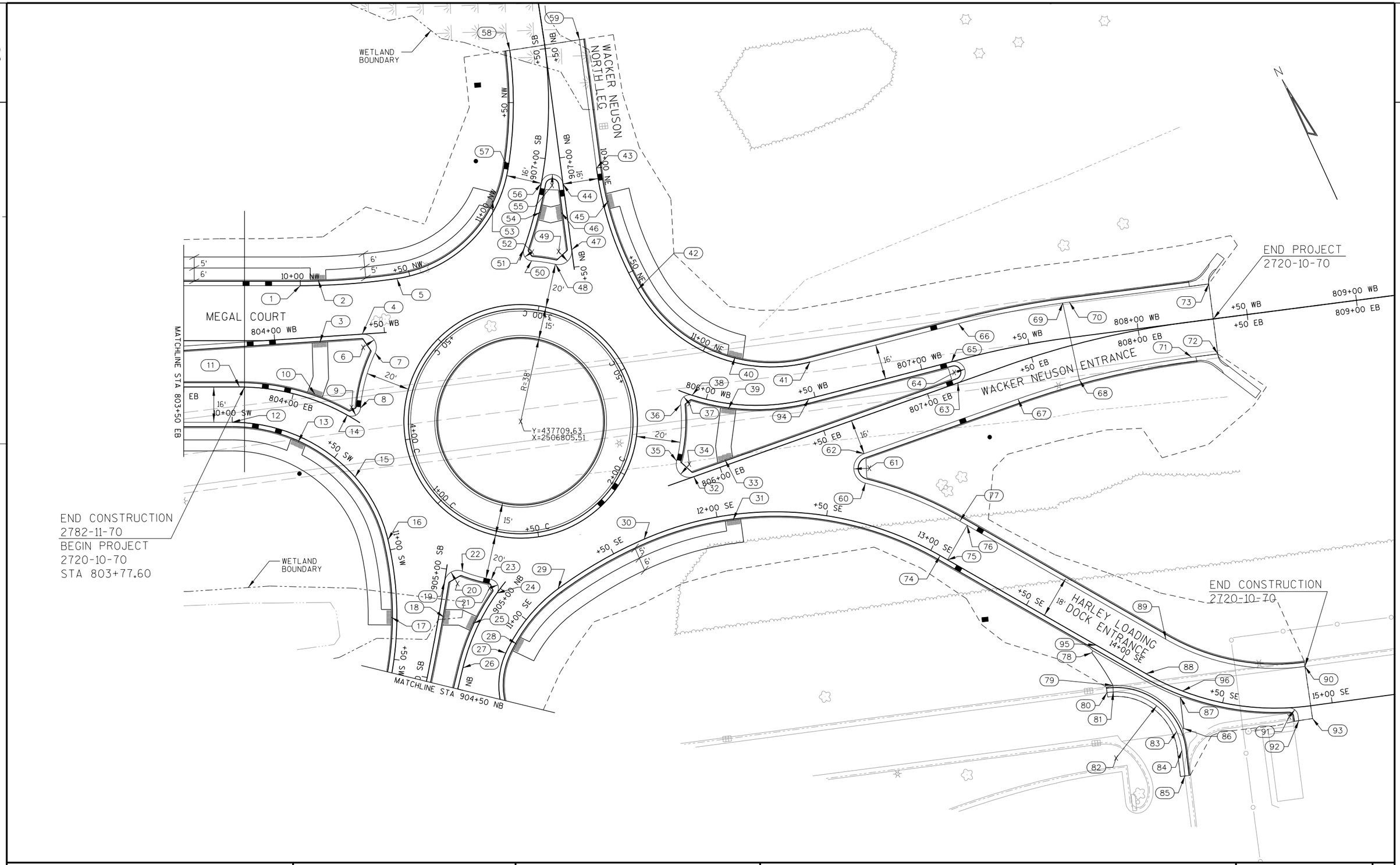
XXXXX	SAWCUT ASPHALT
YYYYY	SAWCUT CONCRETE
■	INLET
●	MANHOLE
CE	COMMERCIAL ENTRANCE
PE	PRIVATE ENTRANCE

NOTES:

1. ALL POINTS & RADII ARE TO FLANGE LINE, UNLESS OTHERWISE NOTED.
2. STATION CALL-OFFS ARE BASED ON REFERENCE LINE ALIGNMENT UNLESS OTHERWISE NOTED.
3. SEE STREETSCAPE PLANS FOR ISLAND CENTER PAVING DETAILS.

PROJECT NO: 2782-11-70 & 2720-10-70	HWY: MEGAL COURT	COUNTY: WAUKESHA	PLAN DETAIL: MEGAL COURT	SHEET 70	E

2



PROJECT NO: 2782-11-70 & 2720-10-70	HWY: MEGAL COURT	COUNTY: WAUKESHA	PLAN DETAIL: MEGAL COURT LAYOUT	SHEET 71	E

DATA TABLE

MEGAL COURT

POINT NO.	STATION	OFFSET	COMMENTS
1	803+94.02 EB	48.58' LT	BEGIN 300' RADIUS
2	803+98.93 EB	52.84' LT	CENTER OF CURB RAMP
3	804+04.82 EB	25.61' LT	CENTER OF CURB RAMP
4	804+17.59 EB	35.92' LT	BEGIN 6' RADIUS
5	804+20.00 EB	65.43' LT	END 300' RADIUS, BEGIN 60' RADIUS
6	804+19.75 EB	30.66' LT	6' RADIUS
7	804+24.34 EB	30.82' LT	END 6' RADIUS, BEGIN 73' RADIUS
8	804+29.91 EB	5.73' LT	END 73' RADIUS, BEGIN 4' RADIUS
9	804+26.47 EB	4.00' LT	4' RADIUS
10	804+09.42 EB	2.50' LT	CENTER OF CURB RAMP
11	803+75.37 EB	0.00' RT	BEGIN 100' RADIUS
12	803+72.03 EB	16.00' RT	BEGIN 75' RADIUS
13	804+09.42 EB	20.39' RT	CENTER OF CURB RAMP
14	804+26.47 EB	0.00' RT	END 100' RADIUS
15	804+33.14 EB	21.82' RT	END 75' RADIUS, BEGIN 65' RADIUS
16	904+91.72 NB	54.60' LT	END 65' RADIUS, BEGIN 150' RADIUS
17	904+70.52 NB	37.83' LT	CENTER OF CURB RAMP
18	904+77.51 NB	15.49' LT	CENTER OF CURB RAMP
19	904+89.70 NB	22.80' LT	BEGIN 6' RADIUS
20	904+91.60 NB	17.25' LT	6' RADIUS
21	904+97.29 NB	4.00' LT	4' RADIUS
22	904+96.58 NB	18.51' LT	END 6' RADIUS, BEGIN 73' RADIUS
23	905+00.74 NB	5.73' LT	END 73' RADIUS, BEGIN 4' RADIUS
24	904+97.29 NB	0.00' RT	END 100' RADIUS
25	904+80.24 NB	2.50' LT	CENTER OF CURB RAMP
26	904+59.90 NB	0.00' LT	BEGIN 100' RADIUS
27	904+73.28 NB	16.59' RT	END 35' RADIUS, BEGIN 75' RADIUS
28	904+80.24 NB	19.44' RT	CENTER OF CURB RAMP
29	11+20.14 SE	0.00' RT	END 75' RADIUS, BEGIN 200' RADIUS
30	11+65.35 SE	0.00' RT	END 200' RADIUS, BEING 150' RADIUS
31	805+97.60 EB	24.53' RT	CENTER OF CURB RAMP
32	805+87.41 EB	0.00' RT	END 6' RADIUS
33	806+03.34 EB	2.50' LT	CENTER OF CURB RAMP
34	805+87.41 EB	6.00' LT	6' RADIUS
35	805+82.42 EB	9.34' LT	END 6' RADIUS, BEGIN 73' RADIUS
36	805+92.73 EB	32.83' LT	END 73' RADIUS, BEGIN 4' RADIUS
37	805+96.61 EB	31.90' LT	4' RADIUS
38	805+99.05 EB	35.07' LT	BEGIN 95' RADIUS
39	806+12.41 EB	23.69' LT	CENTER OF CURB RAMP
40	806+23.27 EB	44.93' LT	CENTER OF CURB RAMP
41	10+58.65 NE	0.00' RT	END 70' RADIUS
42	906+93.28 NB	16.00' RT	END 150' RADIUS, BEGIN 70' RADIUS
43	906+93.28 NB	16.00' RT	BEGIN 150' RADIUS
44	906+88.08 NB	0.00' RT	END 5' RADIUS
45	906+77.72 NB	19.32' RT	CENTER OF CURB RAMP
46	906+75.40 NB	2.50' LT	CENTER OF CURB RAMP
47	906+58.00 NB	0.00' LT	BEGIN 6' RADIUS
48	906+52.37 NB	8.06' LT	END 6' RADIUS, BEGIN 73' RADIUS
49	906+58.00 NB	6.00' LT	6' RADIUS
50	906+55.38 NB	18.73' LT	END 73' RADIUS, BEGIN 4' RADIUS

RADII SHOWN ARE TO CURB FLANGE

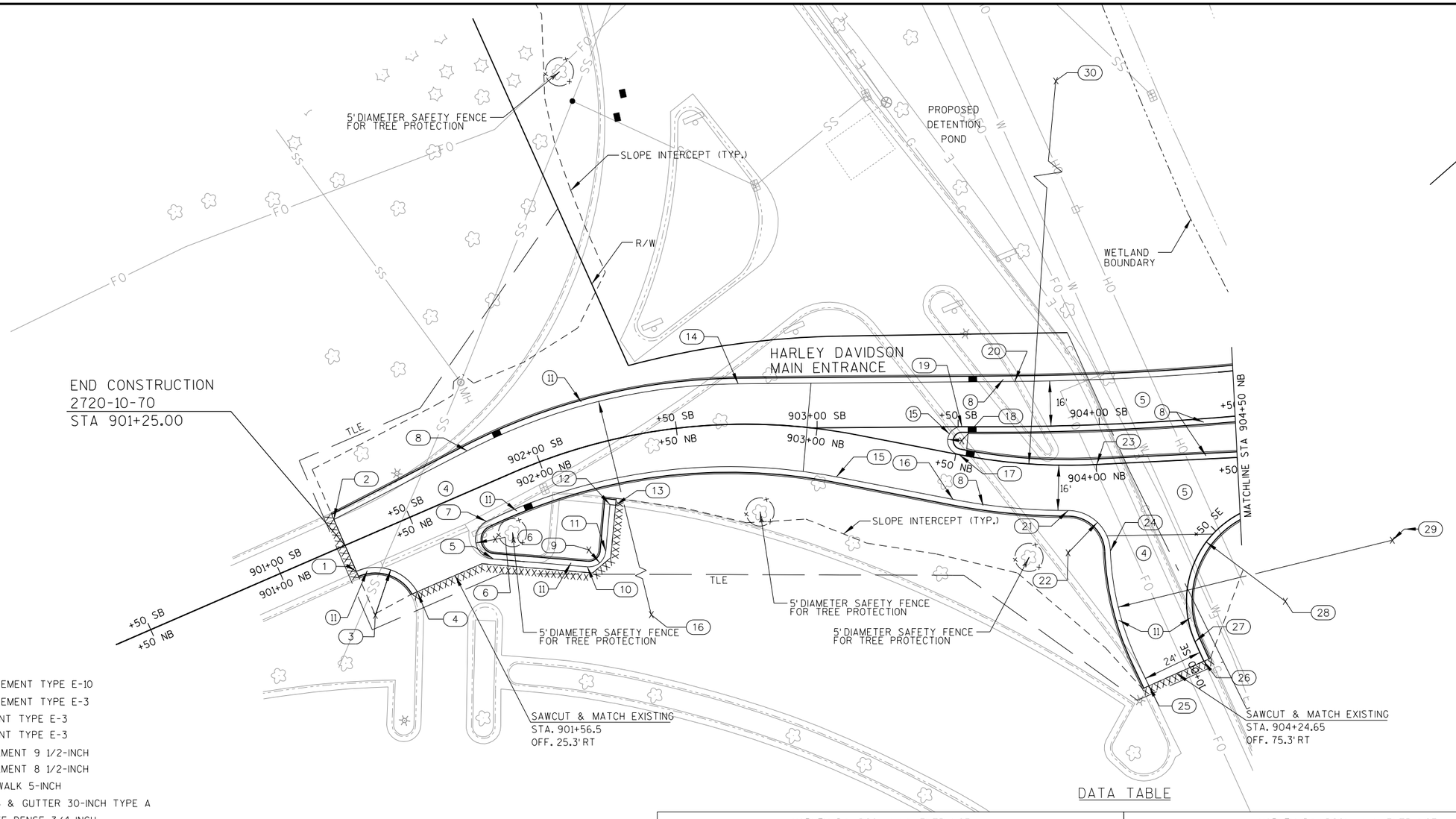
DATA TABLE

MEGAL COURT

POINT NO.	STATION	OFFSET	COMMENTS
51	906+61.10 NB	21.51' LT	BEGIN 200' RADIUS
52	906+59.30 NB	17.94' LT	4' RADIUS
53	906+84.87 NB	32.60' LT	CENTER OF CURB RAMP
54	906+76.61 NB	11.79' LT	CENTER OF CURB RAMP
55	906+88.08 NB	5.00' LT	5' RADIUS
56	906+89.63 NB	9.76' LT	END 200' RADIUS
57	906+98.06 NB	23.88' LT	END 60' RADIUS, BEGIN 184' RADIUS
58	907+51.33 NB	16.00' LT	END 184' RADIUS
59	907+51.72 NB	16.00' RT	END CURB & GUTTER
60	806+59.86 EB	28.83' RT	BEGIN 168' RADIUS
61	806+63.73 EB	23.00' RT	7' RADIUS
62	806+63.73 EB	16.00' RT	END 7' RADIUS
63	807+14.64 EB	0.00' LT	BEGIN 5' RADIUS
64	807+14.64 EB	5.00' LT	5' RADIUS
65	807+15.08 EB	9.98' LT	END 5' RADIUS
66	807+23.81 EB	25.27' LT	BEGIN 416' RADIUS
67	807+37.89 EB	16.00' RT	BEGIN 384' RADIUS
68	807+68.28 EB	16.00' RT	END CONCRETE, BEGIN ASPHALT PAVEMENT
69	807+70.07 EB	19.59' LT	END CONCRETE, BEGIN ASPHALT PAVEMENT
70	807+72.92 EB	19.22' LT	END 416' RADIUS
71	808+22.51 EB	16.00' RT	END 384' RADIUS
72	808+34.44 EB	16.00' RT	MATCH EXISTING PAVEMENT
73	808+34.44 EB	16.00' LT	MATCH EXISTING PAVEMENT
74	13+04.88 SE	0.00' LT	END 150' RADIUS
75	13+08.75 SE	0.00' LT	END CONCRETE, BEGIN ASPHALT PAVEMENT
76	13+08.75 SE	18.00' LT	END CONCRETE, BEGIN ASPHALT PAVEMENT
77	13+04.88 SE	18.00' LT	END 168' RADIUS
78	13+86.55 SE	4.00' RT	DRIVEWAY PI
79	14+02.23 SE	12.08' RT	DRIVEWAY PI
80	14+01.54 SE	16.23' RT	MATCH EXISTING CURB & GUTTER, BEGIN 30' RADIUS
81	14+03.84 SE	14.61' RT	END C&G TRANSITION
82	14+18.08 SE	40.10' RT	30' RADIUS
83	14+34.52 SE	18.13' RT	BEGIN C&G TRANSITION
84	14+38.68 SE	25.63' RT	END 30' RADIUS
85	14+42.26 SE	36.37' RT	MATCH EXISTING CURB & GUTTER
86	14+36.78 SE	15.77' RT	DRIVEWAY PI
87	14+31.00 SE	3.00' RT	DRIVEWAY PI
88	14+12.65 SE	0.00' RT	BEGIN 118' RADIUS
89	14+12.65 SE	18.00' LT	BEGIN 100' RADIUS
90	14+89.99 SE	18.00' LT	MATCH EXISTING CURB & GUTTER
91	14+80.19 SE	4.00' RT	4' RADIUS
92	14+84.23 SE	6.08' RT	MATCH EXISTING PAVEMENT
93	14+90.25 SE	5.86' RT	MATCH EXISTING PAVEMENT
94	806+48.44 EB	15.87' LT	END 95' RADIUS
95	13+86.55 SE	0.00' RT	END C&G TRANSITION
96	14+31.00 SE	0.00' RT	BEGIN C & G TRANSITION
97			

RADII SHOWN ARE TO CURB FLANGE

2



LEGEND

(1)	6-1/2" HMA PAVEMENT TYPE E-10
(2)	6-1/4" HMA PAVEMENT TYPE E-3
(3)	5" HMA PAVEMENT TYPE E-3
(4)	6" HMA PAVEMENT TYPE E-3
(5)	CONCRETE PAVEMENT 9 1/2-INCH
(6)	CONCRETE PAVEMENT 8 1/2-INCH
(7)	CONCRETE SIDEWALK 5-INCH
(8)	CONCRETE CURB & GUTTER 30-INCH TYPE A
(9)	BASE AGGREGATE DENSE 3/4-INCH
(10)	4" HMA PAVEMENT TYPE E-3
(11)	CONCRETE CURB & GUTTER 30-INCH TYPE D
(12)	CONCRETE SIDEWALK 6-INCH
(13)	CONCRETE DRIVEWAY HES 6-INCH
(14)	CONCRETE MEDIAN SLOPED NOSE TYPE 2
(15)	CONCRETE MEDIAN SLOPED NOSE TYPE 1
(16)	STAMPED COLORED CONCRETE SIDEWALK 5-INCH
(17)	STAMPED COLORED CONCRETE PAVEMENT 9 1/2-INCH
(18)	CURB RAMP TYPE 6
(19)	CONCRETE DRIVEWAY HES 8-INCH
(20)	CONCRETE CURB PEDESTRIAN
XXXXX	SAWCUT ASPHALT
YYYYY	SAWCUT CONCRETE
■	INLET
●	MANHOLE
CE	COMMERCIAL ENTRANCE
PE	PRIVATE ENTRANCE

NOTES:

1. ALL POINTS & RADII ARE TO FLANGE LINE, UNLESS OTHERWISE NOTED.
2. STATION CALL-OFFS ARE BASED ON REFERENCE LINE ALIGNMENT UNLESS OTHERWISE NOTED.
3. SEE STREETSCAPE PLANS FOR ISLAND CENTER PAVING DETAILS.

DATA TABLE

HARLEY DAVIDSON MAIN ENTRANCE

POINT NO.	STATION	OFFSET	COMMENTS
1	901+25.00 NB	10.00' RT	MATCH EXISTING CURB & GUTTER
2	901+25.00 NB	10.00' LT	MATCH EXISTING CURB & GUTTER
3	901+78.00 NB	13.53' LT	17' RADIUS
4	901+41.91 NB	25.27' RT	MATCH EXISTING CURB & GUTTER
5	901+71.37 NB	25.37' RT	END 7' RADIUS
6	901+74.67 NB	19.20' RT	7' RADIUS
7	901+74.42 NB	12.20' RT	BEGIN 200' RADIUS
8	901+78.00 NB	13.53' LT	BEGIN 214' RADIUS
9	902+06.42 NB	35.27' RT	6' RADIUS
10	902+03.43 NB	40.75' RT	BEGIN 6' RADIUS
11	902+13.11 NB	37.63' RT	END 6' RADIUS
12	902+20.17 NB	22.12' RT	CURB & GUTTER PI
13	902+22.28 NB	22.80' RT	MATCH EXISTING CURB & GUTTER
14	902+72.18 NB	14.29' LT	END 214' RADIUS
15	903+09.60 NB	15.95' RT	END 200' RADIUS

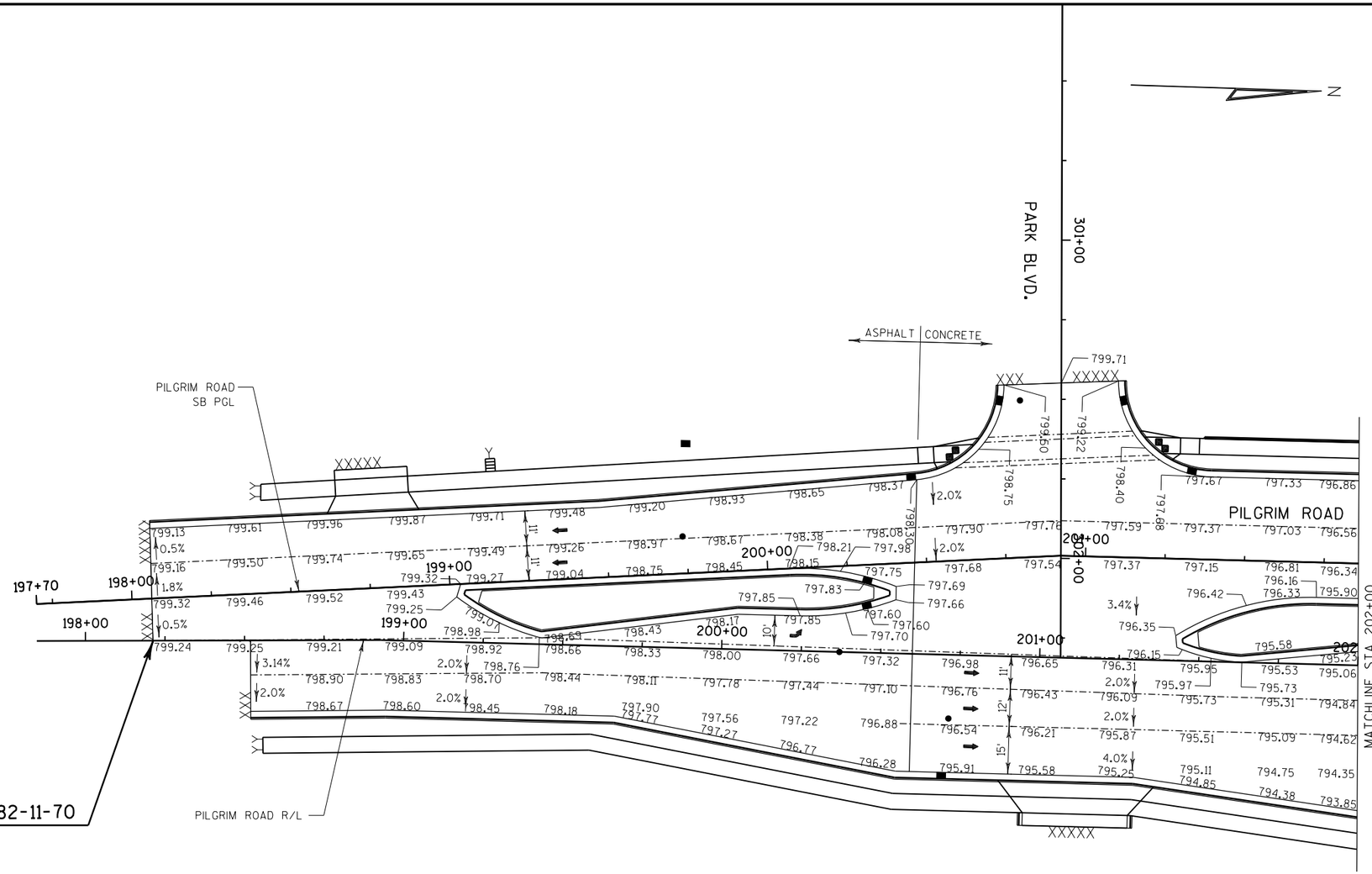
HARLEY DAVIDSON MAIN ENTRANCE

POINT NO.	STATION	OFFSET	COMMENTS
16	903+52.02 NB	16.00' RT	BEGIN 216' RADIUS
17	903+51.16 NB	0.00' RT	BEGIN 200' RADIUS
18	903+51.16 NB	5.00' LT	5' RADIUS
19	903+50.26 NB	9.92' LT	BEGIN 1000' RADIUS
20	903+67.92 NB	28.62' LT	BEGIN 984' RADIUS
21	903+90.04 NB	16.00' RT	END 216' RADIUS, BEGIN 15' RADIUS
22	903+90.04 NB	31.00' RT	15' RADIUS
23	904+00.23 NB	0.00' RT	END 200' RADIUS
24	904+03.46 NB	30.87' RT	END 15' RADIUS,BEGIN 100' RADIUS
25	904+14.72 NB	79.19' RT	MATCH EXISTING CURB & GUTTER
26	904+34.59 NB	71.46' RT	MATCH EXISTING CURB & GUTTER
27	904+31.84 NB	64.41' RT	END 35' RADIUS
28	904+69.31 NB	51.50' RT	35' RADIUS
29	905+03.96 NB	19.94' RT	100' RADIUS
30	904+00.23 NB	200.00' LT	200' RADIUS

RADIUS SHOWN IS TO CURB FLANGE

PROJECT NO: 2720-10-70	HWY: MEGAL COURT	COUNTY: WAUKESHA	PLAN DETAIL: HARLEY DAVIDSON ENTRANCE	SHEET 73	E

2



LEGEND

- ■ INLET
- ● MANHOLE
- XXXXX SAWCUT ASPHALT
- YYYYY SAWCUT CONCRETE

NOTES:

1. ALL PAVEMENT GRADES ARE SPACED EVERY 25' ALONG THE REFERENCE LINE UNLESS OTHERWISE NOTED.
2. PILGRIM RD SB GRADES ARE LOCATED AT EVEN 25' SPACING BASED ON THE NB ℄.

PROJECT NO: 2782-11-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	PAVING GRADES: PILGRIM ROAD	SHEET 74	E

2

END CONSTRUCTION 2782-12-70
BEGIN PROJECT 2782-11-70
STA 407+60

N

MATCHLINE STA 407+60

PILGRIM ROAD
SB PGL

MATCHLINE STA 202+00

MATCHLINE STA 207+75

PILGRIM ROAD

PILGRIM ROAD R/L

MAIN STREET (STH 74)

MAIN STREET (STH 74)

MATCHLINE STA 410+13

END CONSTRUCTION 2782-11-70
BEGIN PROJECT 2782-12-70
STA 410+13

LEGEND

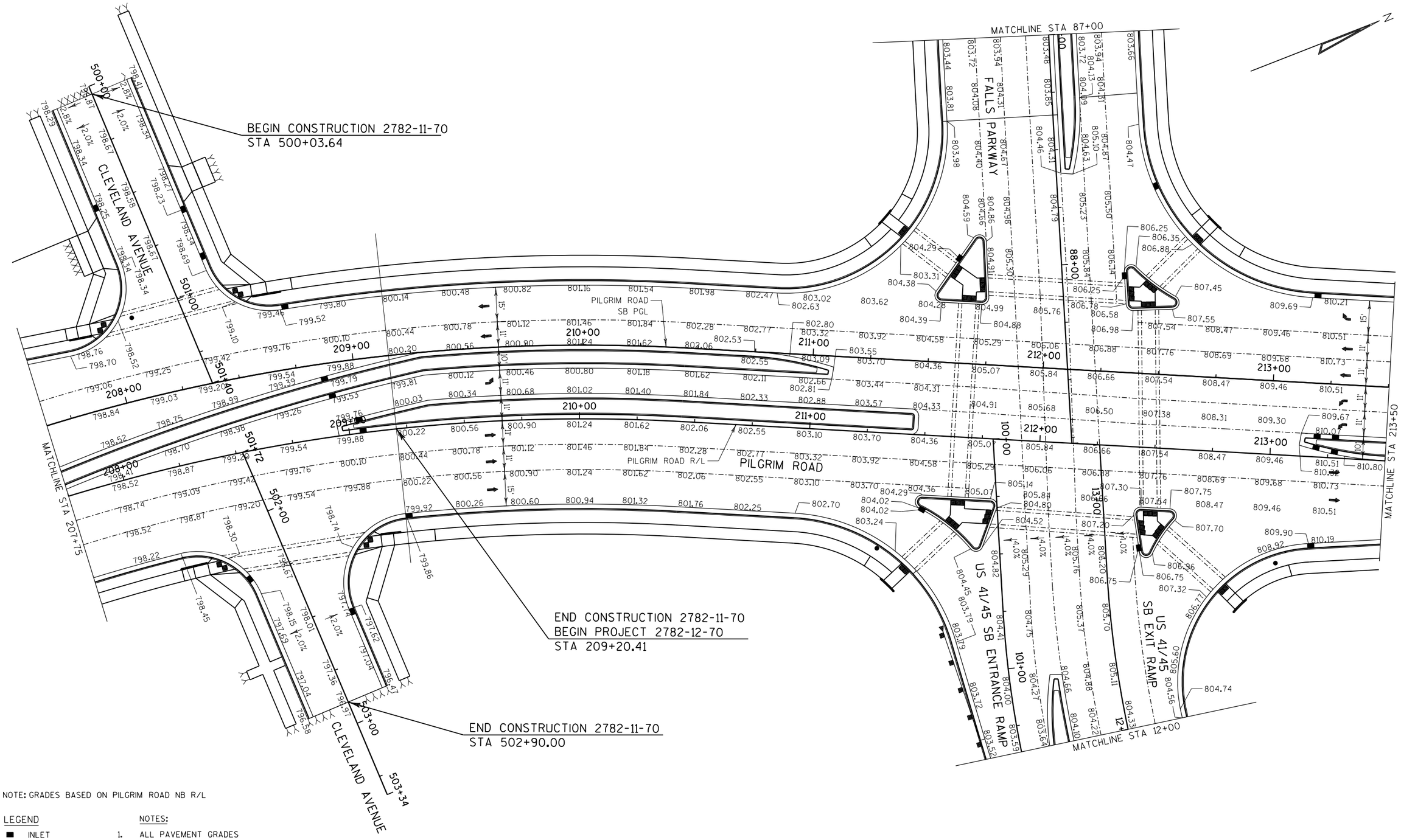
- ■ INLET
- ● MANHOLE
- XXXXX SAWCUT ASPHALT
- YYYYY SAWCUT CONCRETE

NOTES:

1. ALL PAVEMENT GRADES ARE SPACED EVERY 25' ALONG THE REFERENCE LINE UNLESS OTHERWISE NOTED.
2. PILGRIM RD SB GRADES ARE LOCATED AT EVEN 25' SPACING BASED ON THE NB ℄.

PROJECT NO: 2782-11-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	PAVING GRADES: PILGRIM ROAD	SHEET 75	E

2



NOTE: GRADES BASED ON PILGRIM ROAD NB R/L

LEGEND

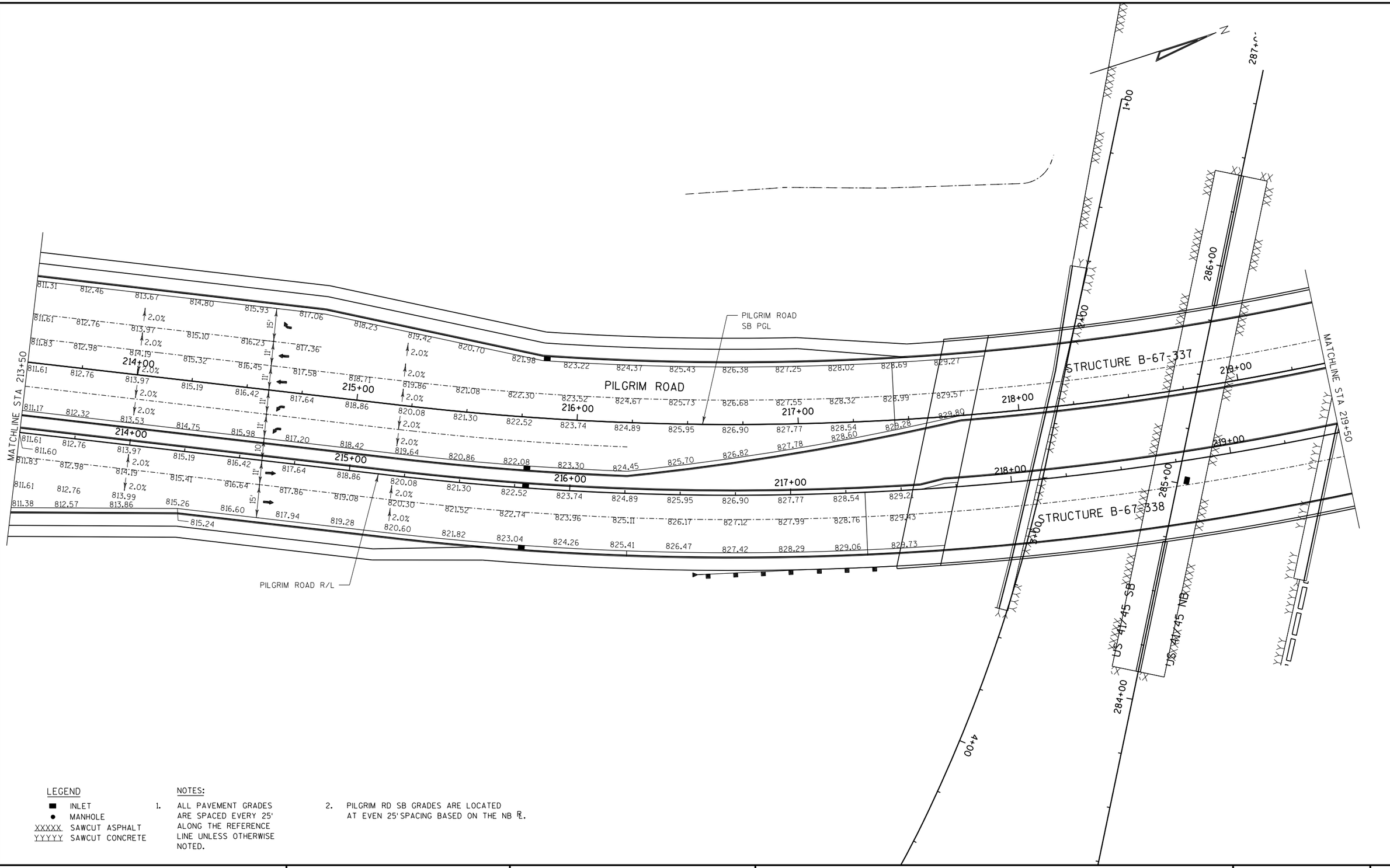
- ■ INLET
- ● MANHOLE
- XXXXX SAWCUT ASPHALT
- YYYYY SAWCUT CONCRETE

NOTES:

1. ALL PAVEMENT GRADES ARE SPACED EVERY 25' ALONG THE REFERENCE LINE UNLESS OTHERWISE NOTED.
2. PILGRIM RD SB GRADES ARE LOCATED AT EVEN 25' SPACING BASED ON THE NB R/L.

PROJECT NO: 2782-11-70 & 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	PAVING GRADES: PILGRIM ROAD	SHEET 76	E

2



LEGEND

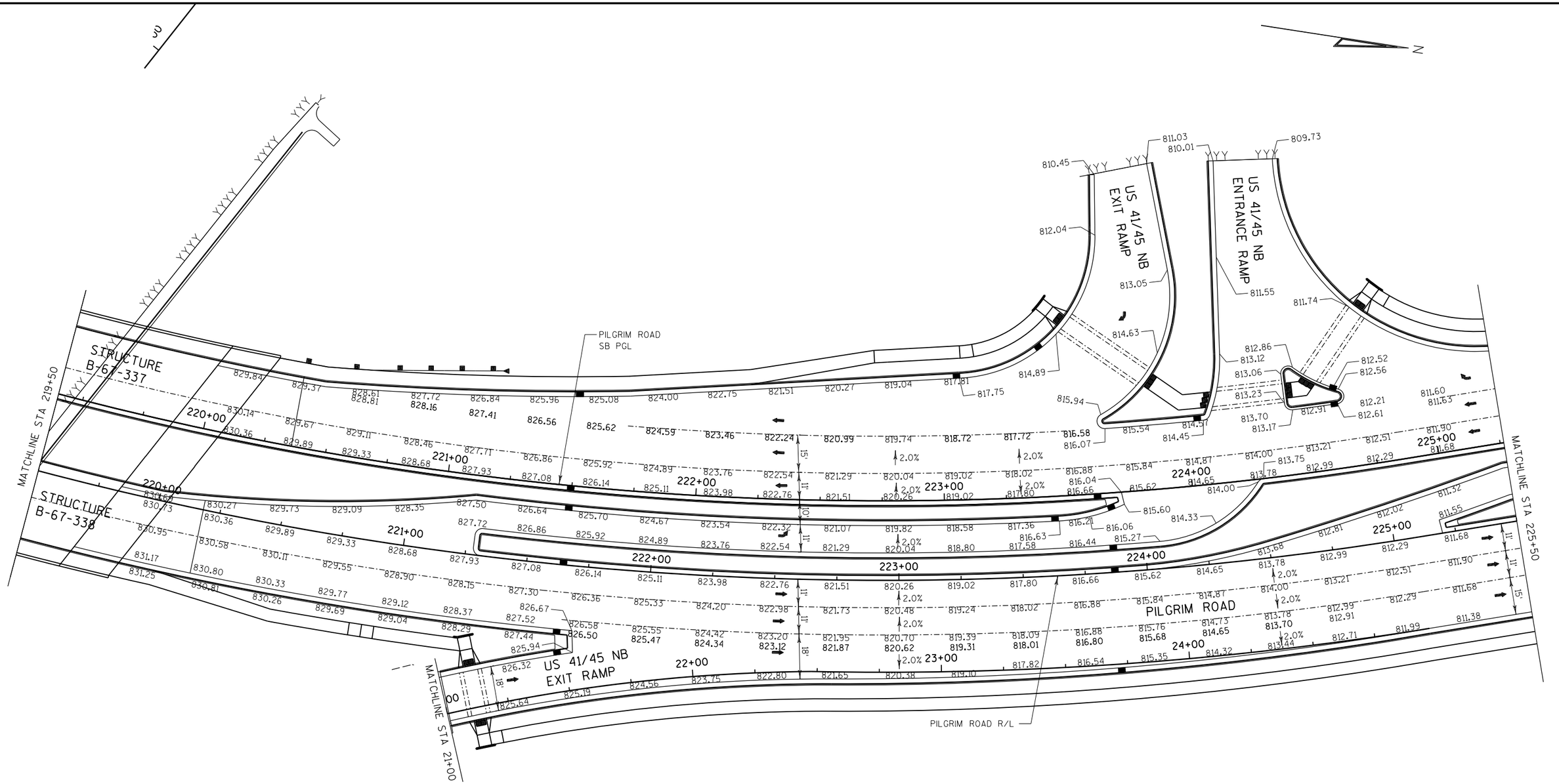
- ■ INLET
- ● MANHOLE
- XXXXX SAWCUT ASPHALT
- YYYYY SAWCUT CONCRETE

NOTES:

1. ALL PAVEMENT GRADES ARE SPACED EVERY 25' ALONG THE REFERENCE LINE UNLESS OTHERWISE NOTED.
2. PILGRIM RD SB GRADES ARE LOCATED AT EVEN 25' SPACING BASED ON THE NB ℄.

PROJECT NO: 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	PAVING GRADES: PILGRIM ROAD	SHEET 77	E

2



LEGEND

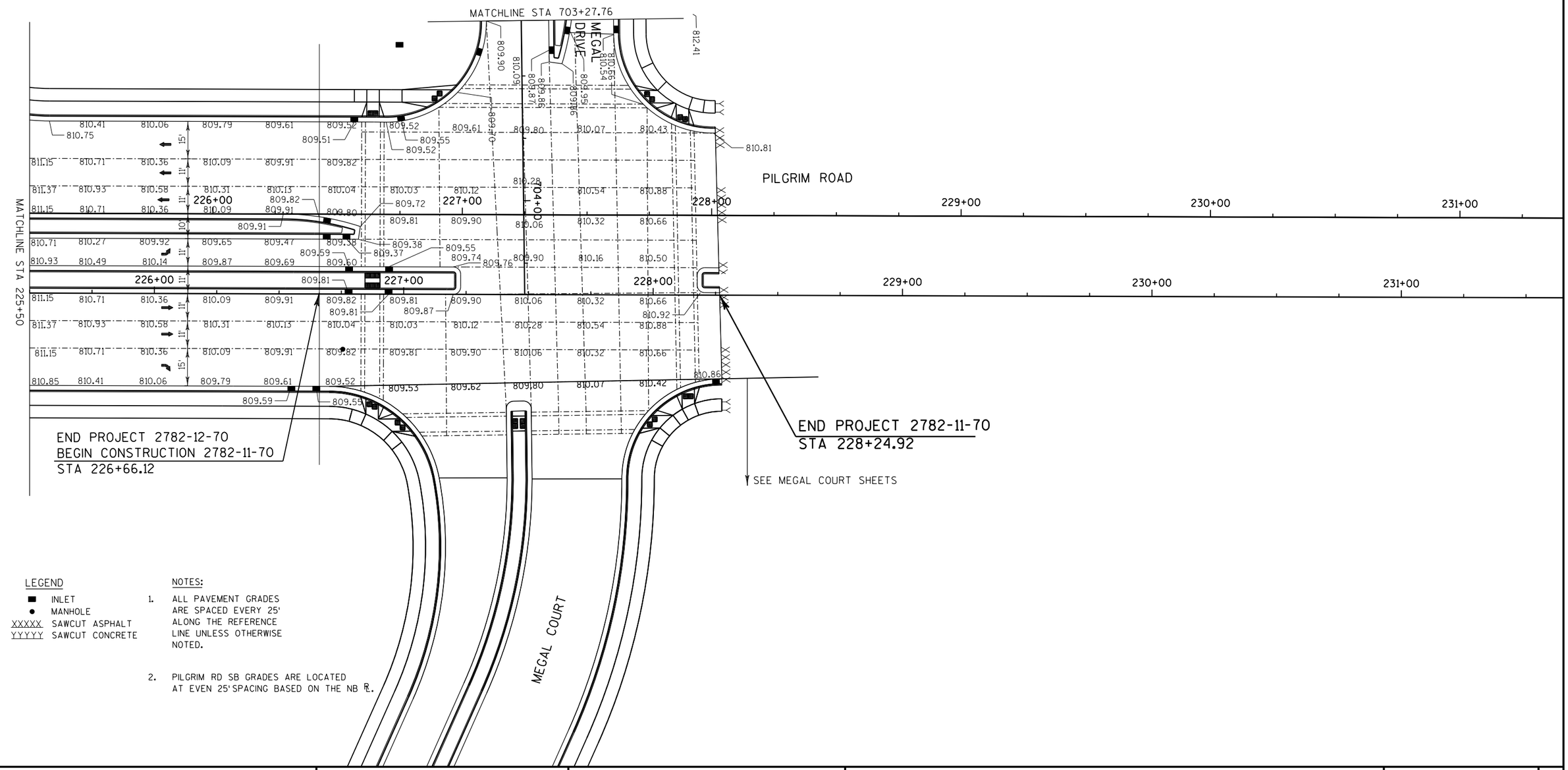
- ■ INLET
- ● MANHOLE
- XXXXX SAWCUT ASPHALT
- YYYYY SAWCUT CONCRETE

NOTES:

1. ALL PAVEMENT GRADES ARE SPACED EVERY 25' ALONG THE REFERENCE LINE UNLESS OTHERWISE NOTED.
2. PILGRIM RD SB GRADES ARE LOCATED AT EVEN 25'SPACING BASED ON THE NB ℄.

PROJECT NO: 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	PAVING GRADES: PILGRIM ROAD	SHEET 78	E

2



LEGEND

- ■ INLET
- ● MANHOLE
- XXXXX SAWCUT ASPHALT
- YYYYY SAWCUT CONCRETE

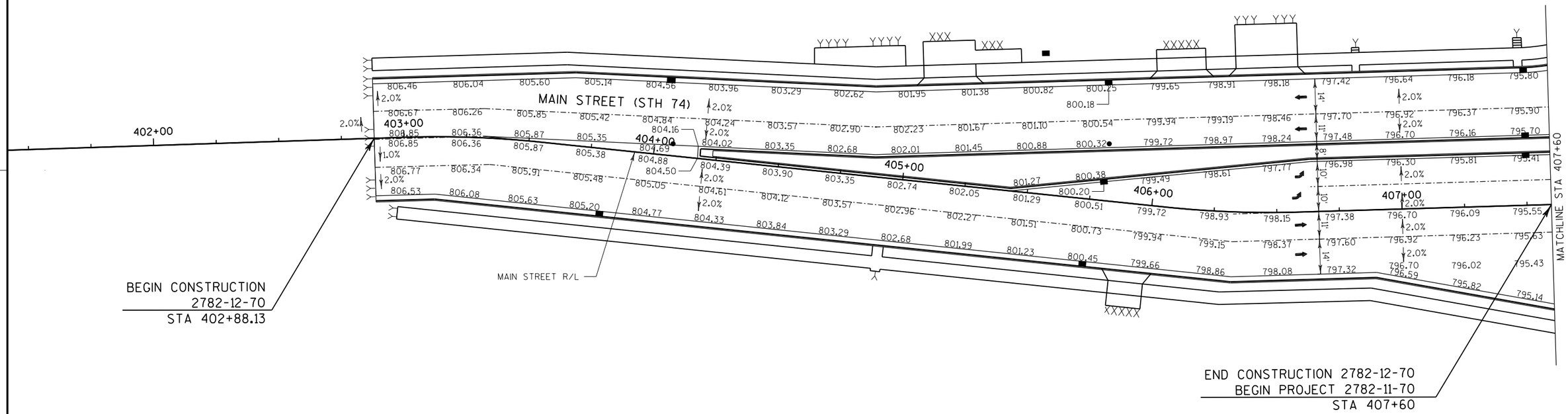
NOTES:

1. ALL PAVEMENT GRADES ARE SPACED EVERY 25' ALONG THE REFERENCE LINE UNLESS OTHERWISE NOTED.
2. PILGRIM RD SB GRADES ARE LOCATED AT EVEN 25'SPACING BASED ON THE NB ℄.

PROJECT NO: 2782-11-70 & 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	PAVING GRADES: PILGRIM ROAD	SHEET 79	E

2

N



LEGEND

- ■ INLET
- ● MANHOLE
- XXXXX SAWCUT ASPHALT
- YYYYY SAWCUT CONCRETE

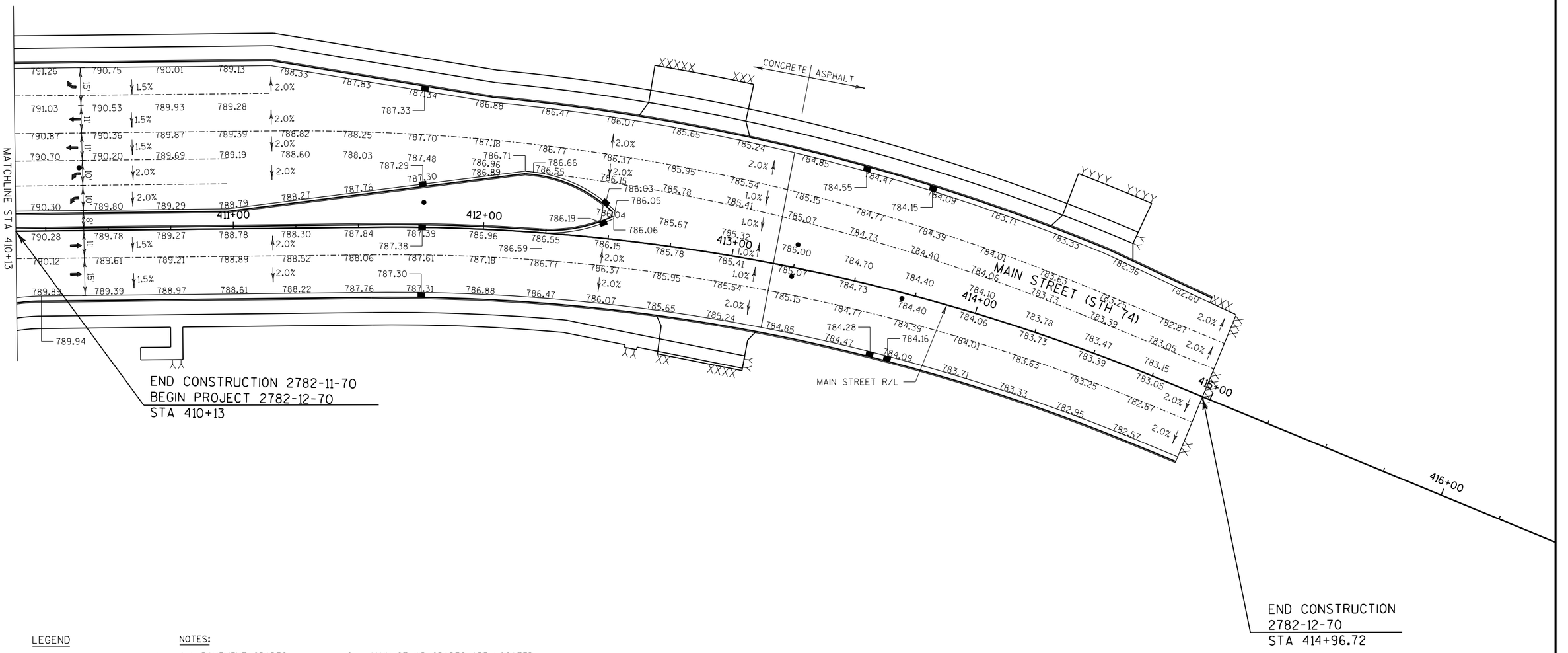
NOTES:

1. ALL PAVEMENT GRADES ARE SPACED EVERY 25' ALONG THE REFERENCE LINE UNLESS OTHERWISE NOTED.
2. MAIN ST WB GRADES ARE LOCATED AT EVEN 25' SPACING BASED ON THE EB ℄.

PROJECT NO: 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	PAVING GRADES: MAIN STREET (STH 74)	SHEET 80	E

2

N



LEGEND

- ■ INLET
- ● MANHOLE
- XXXXX SAWCUT ASPHALT
- YYYYY SAWCUT CONCRETE

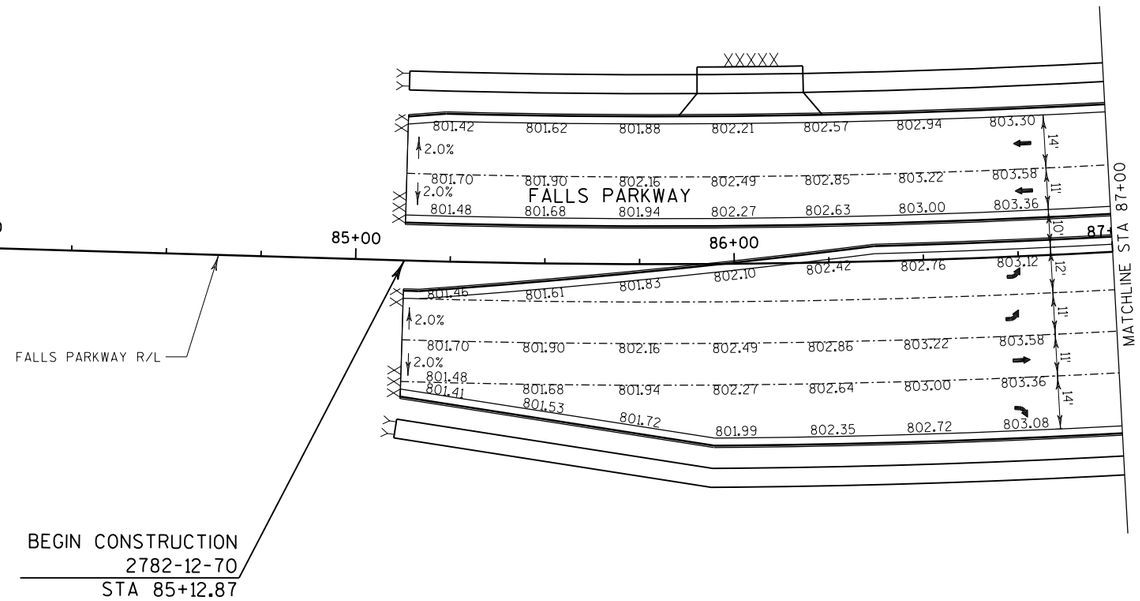
NOTES:

1. ALL PAVEMENT GRADES ARE SPACED EVERY 25' ALONG THE REFERENCE LINE UNLESS OTHERWISE NOTED.
2. MAIN ST WB GRADES ARE LOCATED AT EVEN 25' SPACING BASED ON THE EB ℄.

PROJECT NO: 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	PAVING GRADES: MAIN STREET (STH 74)	SHEET 81	E

2

N



LEGEND

- ■ INLET
- ● MANHOLE
- XXXXX SAWCUT ASPHALT
- YYYYY SAWCUT CONCRETE

NOTES:

1. ALL PAVEMENT GRADES ARE SPACED EVERY 25' ALONG THE REFERENCE LINE UNLESS OTHERWISE NOTED.

NOTE: GRADES BASED ON FALLS PARKWAY R/L

PROJECT NO: 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	PAVING GRADES: FALLS PARKWAY	SHEET 82	E

FILE NAME : P:\44xx\4442\Plan\021309_pg.dgn PLOT DATE : 11/2/2014 PLOT BY : ajp PLOT NAME : PLOT SCALE : 1:40

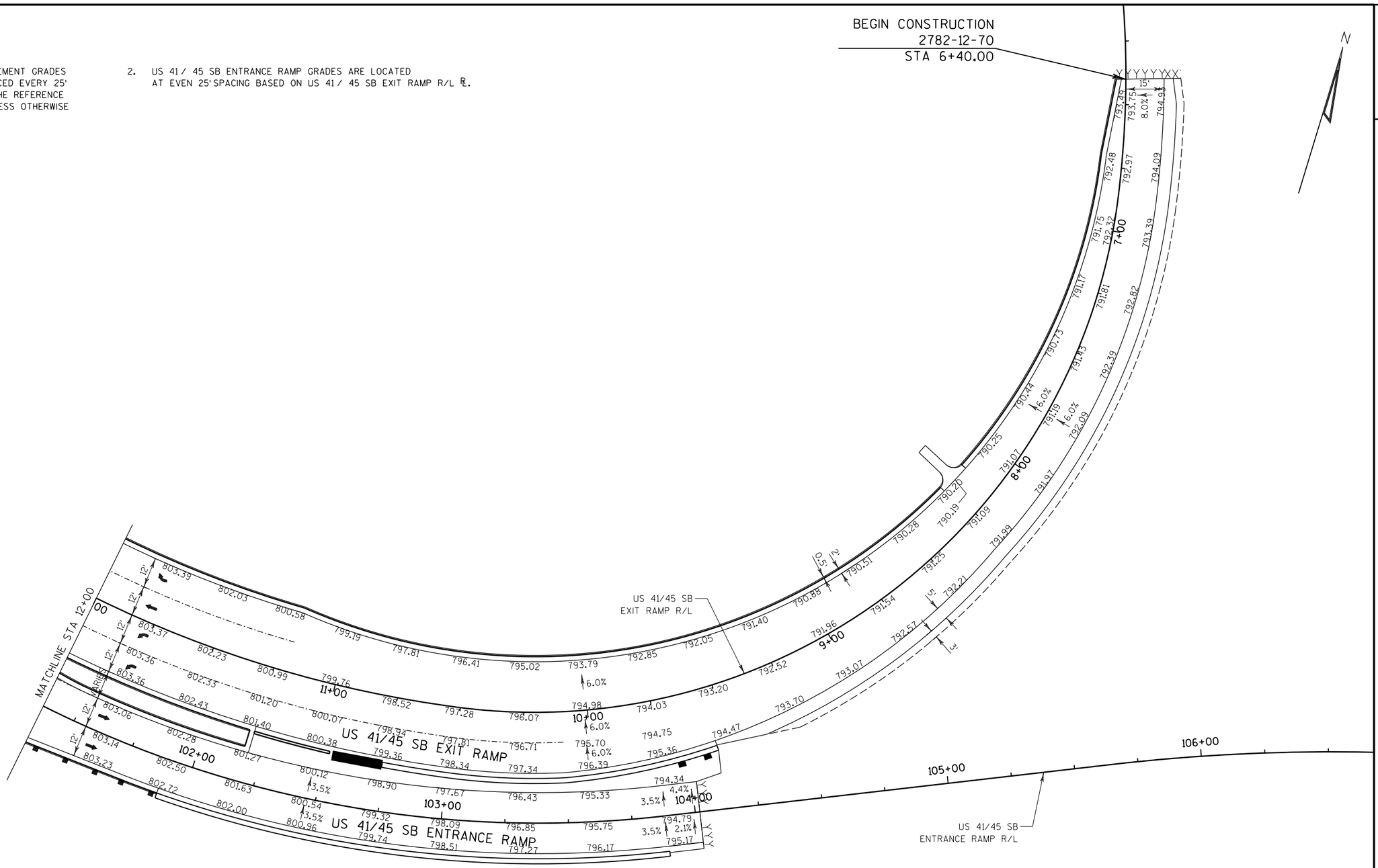
WISDOT/CADDS SHEET 42

LEGEND

- ■ INLET
- ● MANHOLE
- XXXXX SAWCUT ASPHALT
- YYYYY SAWCUT CONCRETE

NOTES:

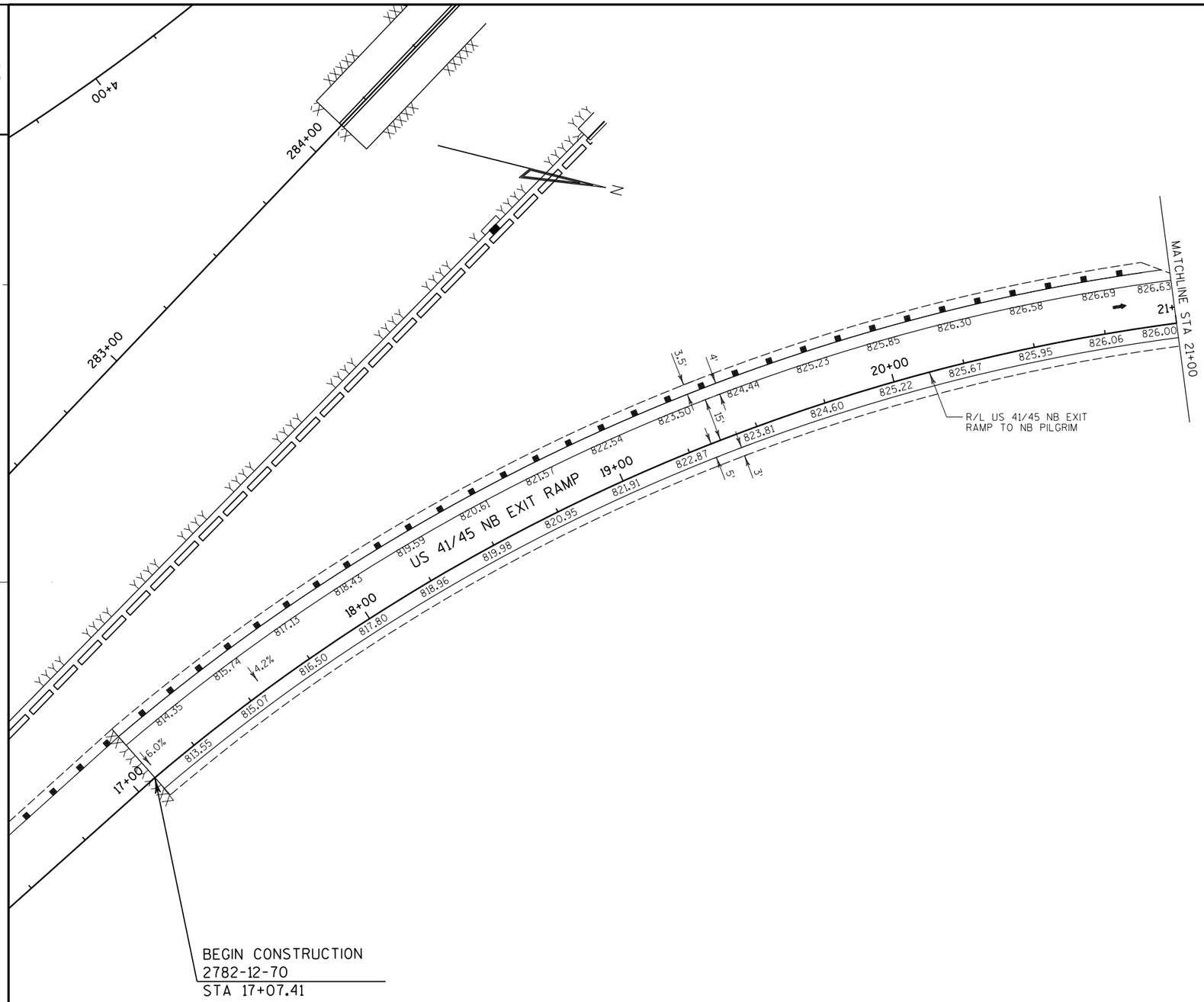
1. ALL PAVEMENT GRADES ARE SPACED EVERY 25' ALONG THE REFERENCE LINE UNLESS OTHERWISE NOTED.
2. US 41 / 45 SB ENTRANCE RAMP GRADES ARE LOCATED AT EVEN 25' SPACING BASED ON US 41 / 45 SB EXIT RAMP R/L ℄.



PROJECT NO: 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	PAVING GRADES: US 41/45 SB RAMPS	SHEET 83	E

FILE NAME : P:\44xx\4442\Plan\021310_pg.dgn PLOT DATE : 11/2/2014 PLOT BY : ajp PLOT NAME : PLOT SCALE : 1:40

WISDOT/CADDS SHEET 42



LEGEND

- ■ INLET
- ● MANHOLE
- XXXXX SAWCUT ASPHALT
- YYYYY SAWCUT CONCRETE

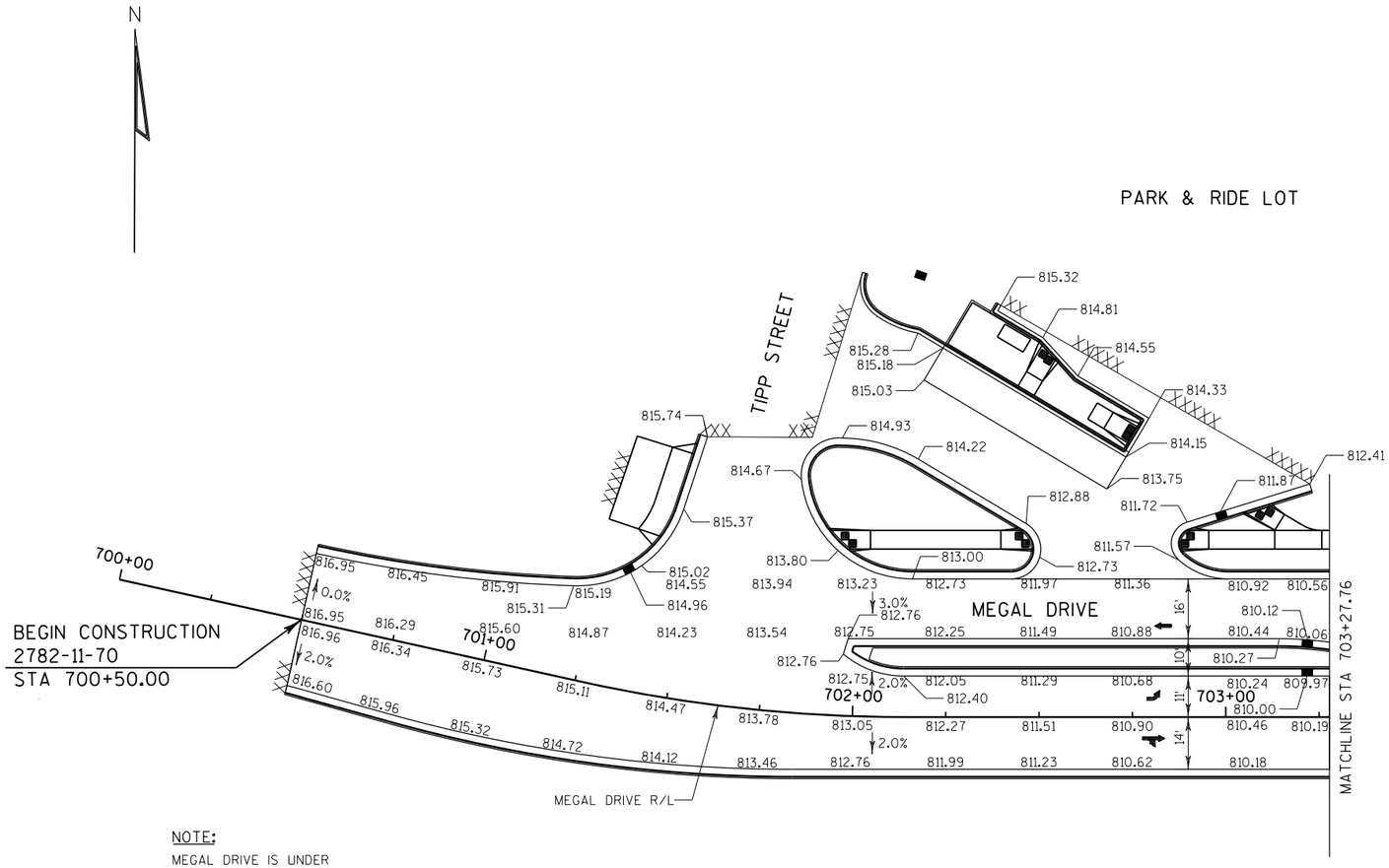
NOTES:

1. ALL PAVEMENT GRADES ARE SPACED EVERY 25' ALONG THE REFERENCE LINE UNLESS OTHERWISE NOTED.

NOTE: GRADES BASED ON US 41/45 NB EXIT RAMP R/L

PROJECT NO: 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	PAVING GRADES: US 41/45 NB EXIT RAMP TO NB PILGRIM	SHEET 84	E

2



NOTE:

MEGAL DRIVE IS UNDER CONSTRUCTION; MATCH EXISTING IN THE FIELD.

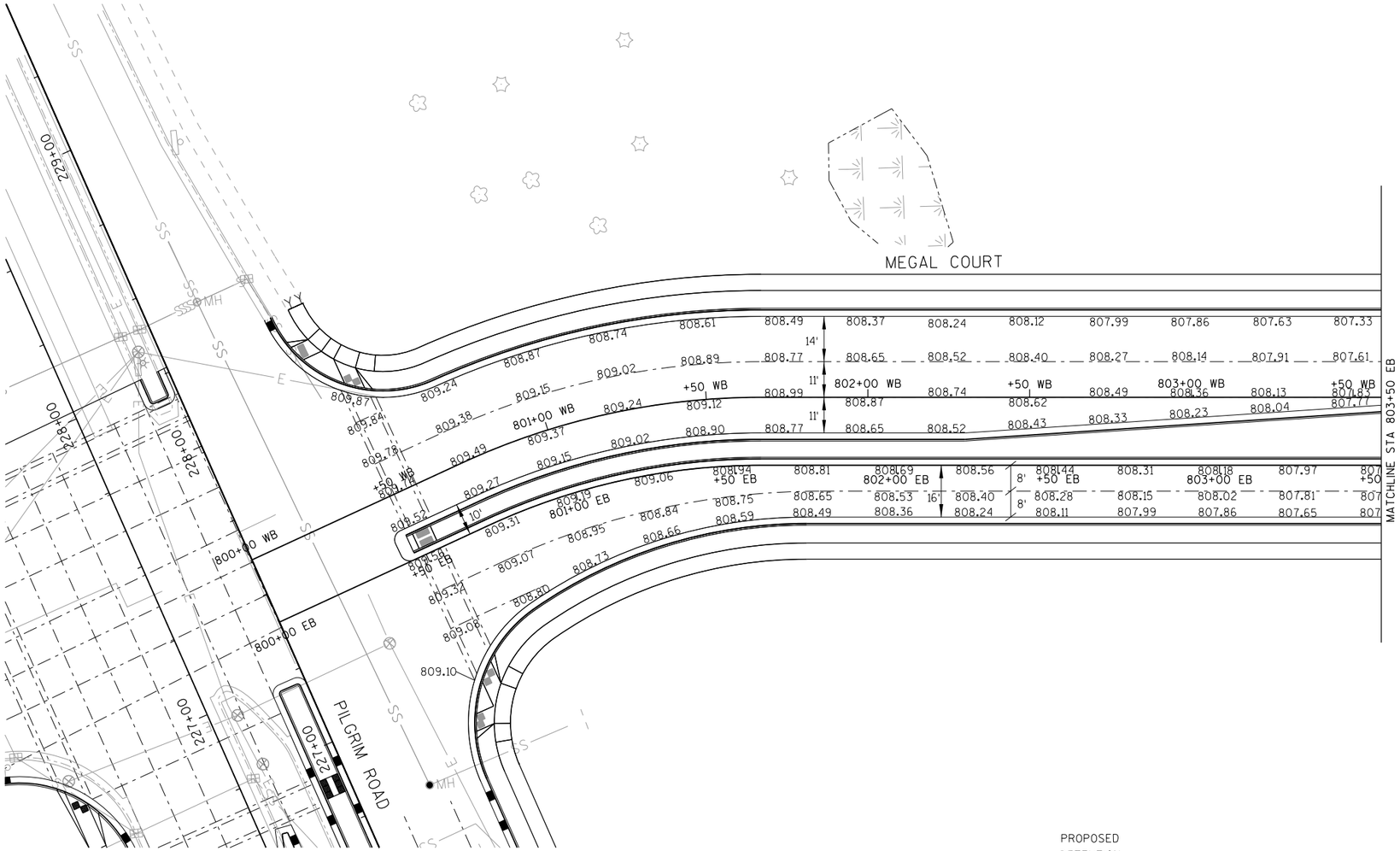
LEGEND

- ■ INLET
- ● MANHOLE
- XXXXX SAWCUT ASPHALT
- YYYYY SAWCUT CONCRETE

NOTES:

1. ALL PAVEMENT GRADES ARE SPACED EVERY 25' ALONG THE REFERENCE LINE UNLESS OTHERWISE NOTED.
2. MEGAL DRIVE WB GRADES ARE LOCATED AT EVEN 25' SPACING BASED ON THE EB ℄.

PROJECT NO: 2782-11-70 & 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	PAVING GRADES: MEGAL DRIVE	SHEET 85	E



PROJECT NO: 2782-11-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	JOINT DETAILS AND PAVEMENT GRADES: MEGAL COURT	SHEET 86	E

FILE NAME : L:\Jobs2008\20080002\CAD\WisDOT_Trans\dgn\00\021313_jd.dgn PLOT DATE : 12/10/2014 PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$

2

MEGAL COURT

WACKER NEUSON NORTH LEG

WACKER NEUSON ENTRANCE

HARLEY LOADING DOCK ENTRANCE

END PROJECT
2720-10-70
STA 808+34.44 EB

END CONSTRUCTION
2782-11-70
BEGIN PROJECT
2720-10-70
STA 803+77.60

PROPOSED
DETENTION
POND

MATCHLINE STA 803+50 EB

MATCHLINE STA 904+50 NB

END CONSTRUCTION
2720-10-70
STA. 14+90.19 SE

PROJECT NO: 2782-11-70 & 2720-10-70	HWY: MEGAL COURT	COUNTY: WAUKESHA	JOINT DETAILS AND PAVEMENT GRADES: MEGAL COURT	SHEET 87	E

2

2

PROPOSED
DETENTION
POND

END CONSTRUCTION
2720-10-70
STA 901+25.00

900+00 SB
900+00 NB
+50 SB
+50 NB
901+00 SB
901+00 NB
+50 SB
+50 NB
902+00 SB
902+00 NB
+50 SB
+50 NB
903+00 SB
903+00 NB
+50 SB
+50 NB
904+00 SB
904+00 NB
+50 SB
+50 NB
MATCHLINE STA 904+50 NB

801.13 801.31 801.58 802.04 802.55 803.08 803.56 804.05 804.52 804.95 805.33 805.66
801.00 801.08 801.45 801.86 802.33 803.37 803.72 804.21 804.68 805.11 805.49 805.82
801.20 801.61 802.06 802.55 803.06 803.72 804.18 804.02 804.59 804.96 805.28 805.47
804.43 804.80 805.12 805.23
804.84 804.88 804.87 804.36 804.84 805.27 805.65 805.98
804.75 805.12 805.44 805.71
804.98 803.90 803.28 802.94 801.97 (801.49) (801.48) (801.4)

8' 16' 8' 8' 16' 8' 8'

(802.06)
(801.47)
(801.39)
(801.22)
(800.57)
(800.54)

HIGHSIDE CURB
AND GUTTER

HARLEY DAVIDSON
MAIN ENTRANCE

SAWCUT & MATCH EXISTING
STA. 901+56.5
OFF. 25.3' RT

SAWCUT & MATCH EXISTING
STA. 904+24.65
OFF. 75.3' RT

PROJECT NO: 2720-10-70	HWY: MEGAL COURT	COUNTY: WAUKESHA	JOINT DETAILS AND PAVEMENT GRADES: HARLEY DAVIDSON	SHEET 88	E

2

N

BOP = 100+00.00

MAIN ST/STH 100

101+00

102+00

103+00

104+00

105+00

MAIN ST/STH 100

PT = 103+63.48

8'

FACE OF CURB

FACE OF CURB

10'

EXISTING SIGN

5'

6'

FACE OF CURB

G67-33

G67-32

USH 41/45 SB ON RAMP

LEGEND

- (A) RAMP GATES SOLAR-POWERED
- (B) CONCRETE BASE, TYPE 5
- (C) 3-2-INCH SCHEDULE 40 PVC CONDUIT
- (D) PULL BOX STEEL 24X36 INCH
- (E) SOLAR POWERED BATTERY AND CONTROLLER CABINET
- (F) CONCRETE MAINTENANCE PLATFORM

NOTE:

* EXACT LOCATIONS TO BE DETERMINED BY THE FIELD ENGINEER

PROJECT NO: 2782-12-70	HWY: STH 100 / MAIN ST.	COUNTY: WAUKESHA	FTMS - RAMP CLOSURE GATES	SHEET	E

2

LEGEND

(A) RAMP GATES SOLAR-POWERED
(B) CONCRETE BASE, TYPE 5
(C) 3-2-INCH SCHEDULE 40 PVC CONDUIT
(D) PULL BOX STEEL 24X36 INCH
(E) SOLAR POWERED BATTERY AND CONTROLLER CABINET
(F) CONCRETE MAINTENANCE PLATFORM

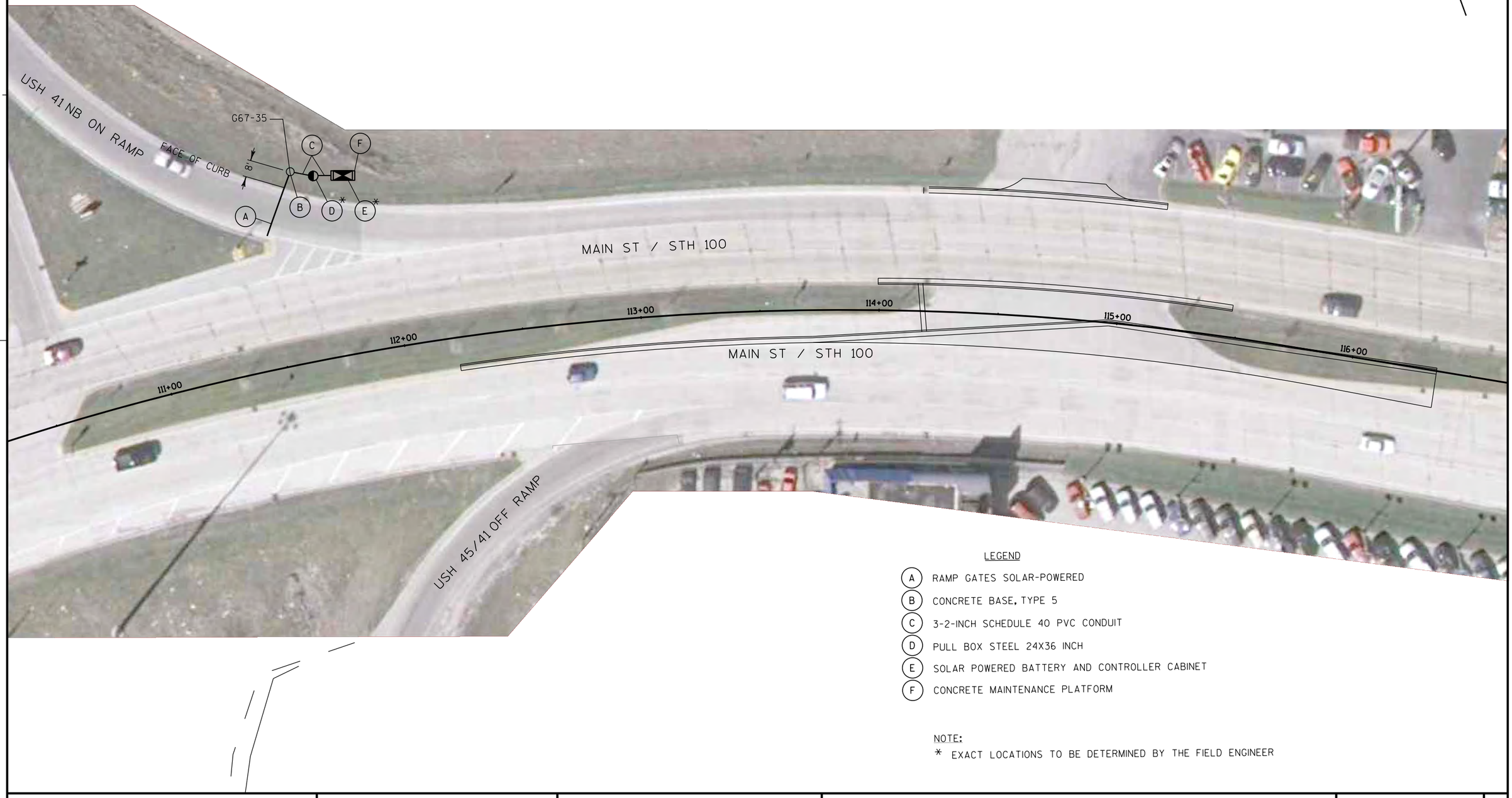
NOTE:
* EXACT LOCATIONS TO BE DETERMINED BY THE FIELD ENGINEER



PROJECT NO: 2782-12-70	HWY: STH 100 / MAIN ST.	COUNTY: WAUKESHA	FTMS - RAMP CLOSURE GATES	SHEET	E

FILE NAME : N:\PDS\Projects\27821200\Ramp Gates\023202_fm.dgn PLOT DATE : 09-DEC-2014 18:06 PLOT BY : ditj3s PLOT NAME : PLOT SCALE : 40:1

2



LEGEND

- (A) RAMP GATES SOLAR-POWERED
- (B) CONCRETE BASE, TYPE 5
- (C) 3-2-INCH SCHEDULE 40 PVC CONDUIT
- (D) PULL BOX STEEL 24X36 INCH
- (E) SOLAR POWERED BATTERY AND CONTROLLER CABINET
- (F) CONCRETE MAINTENANCE PLATFORM

NOTE:

* EXACT LOCATIONS TO BE DETERMINED BY THE FIELD ENGINEER

PROJECT NO: 2782-12-70	HWY: STH 100 / MAIN ST.	COUNTY: WAUKESHA	FTMS - RAMP CLOSURE GATES	SHEET	E

2

LEGEND

- (A) RAMP CLOSURE GATES SOLAR-POWERED
- (B) CONCRETE BASE, TYPE 5
- (C) 3-2-INCH SCHEDULE 40 PVC CONDUIT
- (D) PULL BOX STEEL 24X36 INCH
- (E) SOLAR POWERED BATTERY AND CONTROLLER CABINET
- (F) CONCRETE MAINTENANCE PLATFORM

NOTE:
*EXACT LOCATIONS TO BE DETERMINED BY THE FIELD ENGINEER

CLEVELAND AVENUE

FALLS PARKWAY

PILGRIM ROAD

MATCHLINE STA 208+00

MATCHLINE STA 214+00

208+00
209+00
210+00
211+00
212+00
213+00
214+00

ONLY

G67-36
STA 211+44.10
69.59' RT

US 41/45 SB ENTRANCE RAMP

US 41/45 SB EXIT RAMP

PROJECT NO: 2782-11-70 & 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	FTMS - RAMP CLOSURE GATES	SHEET	E

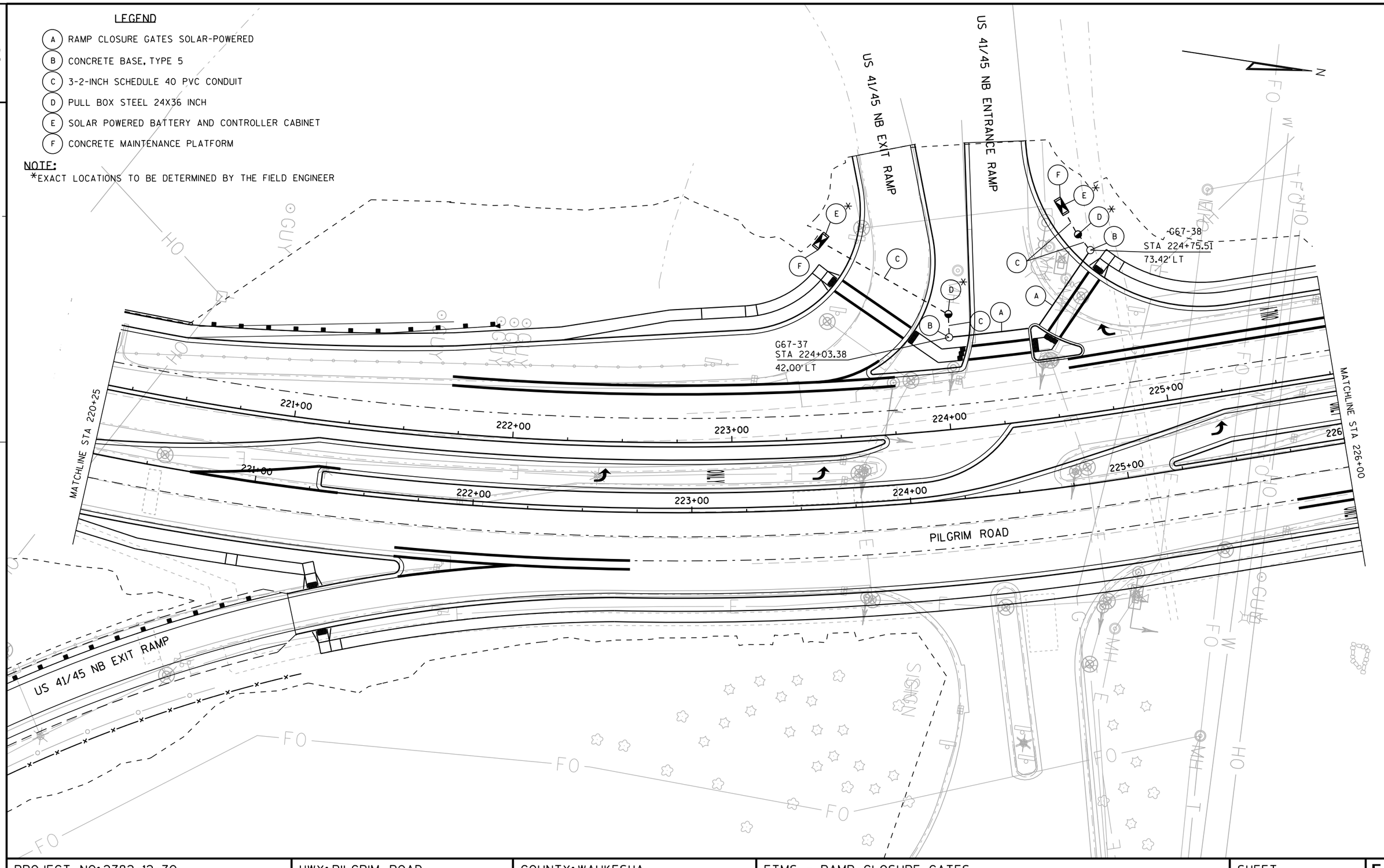
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WISDOT/CADDS SHEET 42

2

LEGEND

- (A) RAMP CLOSURE GATES SOLAR-POWERED
- (B) CONCRETE BASE, TYPE 5
- (C) 3-2-INCH SCHEDULE 40 PVC CONDUIT
- (D) PULL BOX STEEL 24X36 INCH
- (E) SOLAR POWERED BATTERY AND CONTROLLER CABINET
- (F) CONCRETE MAINTENANCE PLATFORM

NOTE:
*EXACT LOCATIONS TO BE DETERMINED BY THE FIELD ENGINEER



PROJECT NO: 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	FTMS - RAMP CLOSURE GATES	SHEET	E

FILE NAME : J:\projects\d2_27821241\FTMS\021402_fm.dgn PLOT DATE : 09-DEC-2014 14:14 PLOT BY : ditj3s PLOT NAME : PLOT SCALE : 40:1

WISDOT/CADDS SHEET 42

2

LEGEND

FTMS CONVENTIONAL SYMBOLS	EXISTING	PROPOSED
CCTV CAMERA AND POLE		
FTMS FIELD CABINET AND BASE		
POLE MOUNTED CABINET		
METER BREAKER PEDESTAL		
24X36-INCH STEEL PULL BOX		
MANHOLE		
ADVANCE FLASHER ASSEMBLY		
FTMS (ITS) CONDUIT		
BREAKER DISCONNECT BOX		
RAMP METER SIDEMOUNT SIGNAL		
RAMP METER OVERHEAD SIGNAL		
LOOP DETECTOR		
DETECTION ZONE		
TYPE 1 COMMUNICATIONS VAULT		

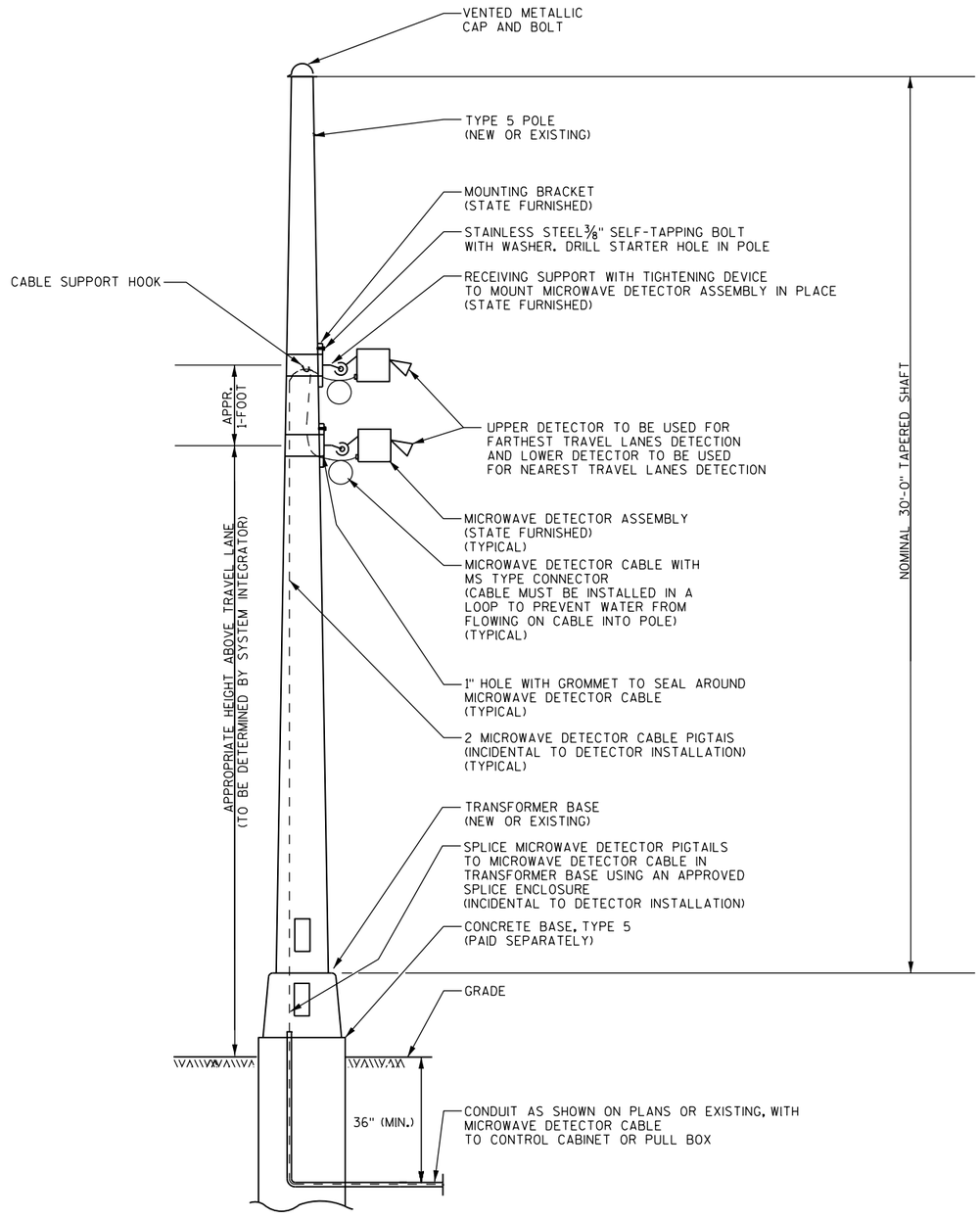
FTMS STANDARD ABBREVIATIONS

CB	CONTROLLER CABINET
CCTV	CLOSED CIRCUIT TELEVISION SITE
FY	ADVANCE FLASHER (ASSEMBLY)
PB	PULL BOX
MH	MANHOLE
RM	RAMP METER
SB	SIGNAL BASE
CV	TYPE 1 COMMUNICATIONS VAULT
EX	EXISTING

FTMS GENERAL NOTES

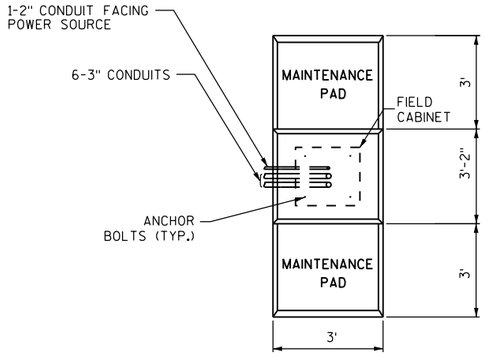
1. THESE PLANS AND THE ASSOCIATED SPECIAL PROVISIONS REFLECT CONDITIONS KNOWN DURING THE DEVELOPMENT OF THE PLANS AND TECHNICAL SPECIAL PROVISIONS. ALL SCALES, DIMENSIONS AND LOCATIONS SHOWN IN THESE PLANS ARE APPROXIMATE. ACTUAL PHYSICAL FIELD CONDITIONS SHALL PROVIDE THE BASIS FOR THE APPLICATION OF WORK SHOWN IN THE PLANS. THE CONTRACTOR IS FULLY RESPONSIBLE FOR THE APPLICATION OF ALL WORK SHOWN IN THE PLANS TO THE ACTUAL PHYSICAL FIELD CONDITIONS TO PROVIDE A COMPLETE AND ACCEPTED PROJECT. IN THE EVENT THAT ACTUAL PHYSICAL FIELD CONDITIONS AFFECT OR PREVENT THE APPLICATION OR PROGRESSION OF ANY WORK SHOWN IN THE PLANS OR TECHNICAL SPECIAL PROVISIONS, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY, AND PRIOR TO ANY FURTHER WORK ACTIVITY, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER OF ANY LOCATION CHANGES OTHER THAN MINOR ADJUSTMENTS.
2. BE AWARE THAT ALL EXISTING UNDERGROUND AND ABOVE GROUND STRUCTURES AND FACILITIES WITHIN THE SCOPE OF THIS PROJECT MAY NOT BE LOCATED IN THE PLANS. THE CONTRACTOR IS FULLY RESPONSIBLE FOR LOCATING AND AVOIDING ALL UNDERGROUND AND ABOVE GROUND STRUCTURES AND FACILITIES.
3. BE AWARE THAT NO TEST BORINGS WERE MADE WHERE CONDUITS, PULLBOXES, POLES, CABINET FOUNDATIONS, OR OTHER EQUIPMENT IS TO BE INSTALLED. THE CONTRACTOR IS FULLY RESPONSIBLE FOR EXAMINING THE JOB SITE CONDITIONS BEFORE SUBMITTING BID PROPOSALS.
4. NO TREES (AND/OR SHRUBS) SHALL BE REMOVED WITHOUT APPROVAL OF THE ENGINEER.
5. AREAS WITHIN THE RIGHT-OF-WAY DISTURBED SPECIFICALLY FOR FTMS CONSTRUCTION SHALL BE RESTORED TO THE ORIGINAL CONDITION WITH TOPSOIL, FERTILIZER, SEED, AND EROSION MAT, AND SHALL BE INCLUDED IN THE COST OF INSTALLING FTMS ITEMS. RESTORATION FOR AREAS DISTURBED FOR OTHER CONSTRUCTION OPERATIONS BUT ALSO CONTAINING FTMS CONSTRUCTION SHALL BE DONE ACCORDING TO REQUIREMENTS AND PAYMENT PROVISIONS FOR THE OTHER CONSTRUCTION OPERATIONS.
6. THE LOCATION OF EXISTING AND PROPOSED UTILITY INSTALLATIONS SHOWN ON THE PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN.
7. DUE TO RAMP, LANE, SHOULDER CLOSURE RESTRICTIONS, AND WORK UNDER OTHER CONTRACTS, SOME WORK MAY BE REQUIRED TO BE PERFORMED AT NIGHT.
8. THE CONTRACTOR IS FULLY RESPONSIBLE FOR COORDINATING RAMP, LANE, SHOULDER, AND ROADWAY CLOSURES WITH OTHER CONTRACTS IN THE AREA.
9. THE CONTRACTOR SHALL CONTACT THE WISDOT STATEWIDE TRAFFIC OPERATIONS CENTER AT (414) 227-2166 FIVE (5) WORKING DAYS PRIOR TO ENTERING ANY EXISTING WISDOT FTMS OR ITS CABINET.
10. ALL LOOP DETECTORS ARE STATIONED TO CENTER OF LEADING EDGE AS APPROACHED BY NORMAL VEHICLE PATH.
11. HAND DIG TRENCHES CROSSING EXISTING CONDUIT CONTAINING FIBER OPTIC CABLE.
12. VISUALLY VERIFY DEPTHS OF EXISTING CONDUITS CONTAINING FIBER OPTIC CABLE PRIOR TO CROSSING BY DIRECTIONAL BORE OR SPECIAL METHOD.

2

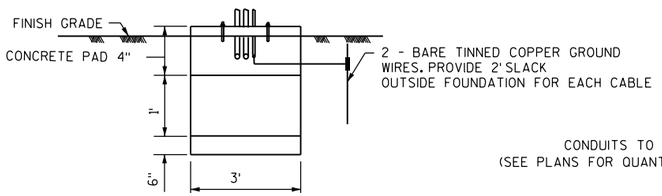


MICROWAVE DETECTOR INSTALLATION
ON TYPE 5 POLE

2



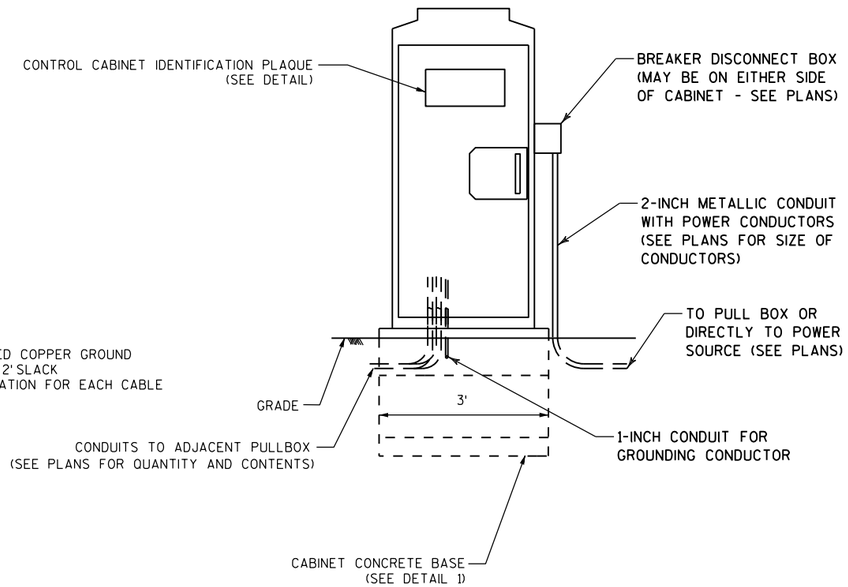
PLAN VIEW



FRONT VIEW

FTMS FIELD CABINET

STATE-FURNISHED FIELD CABINET

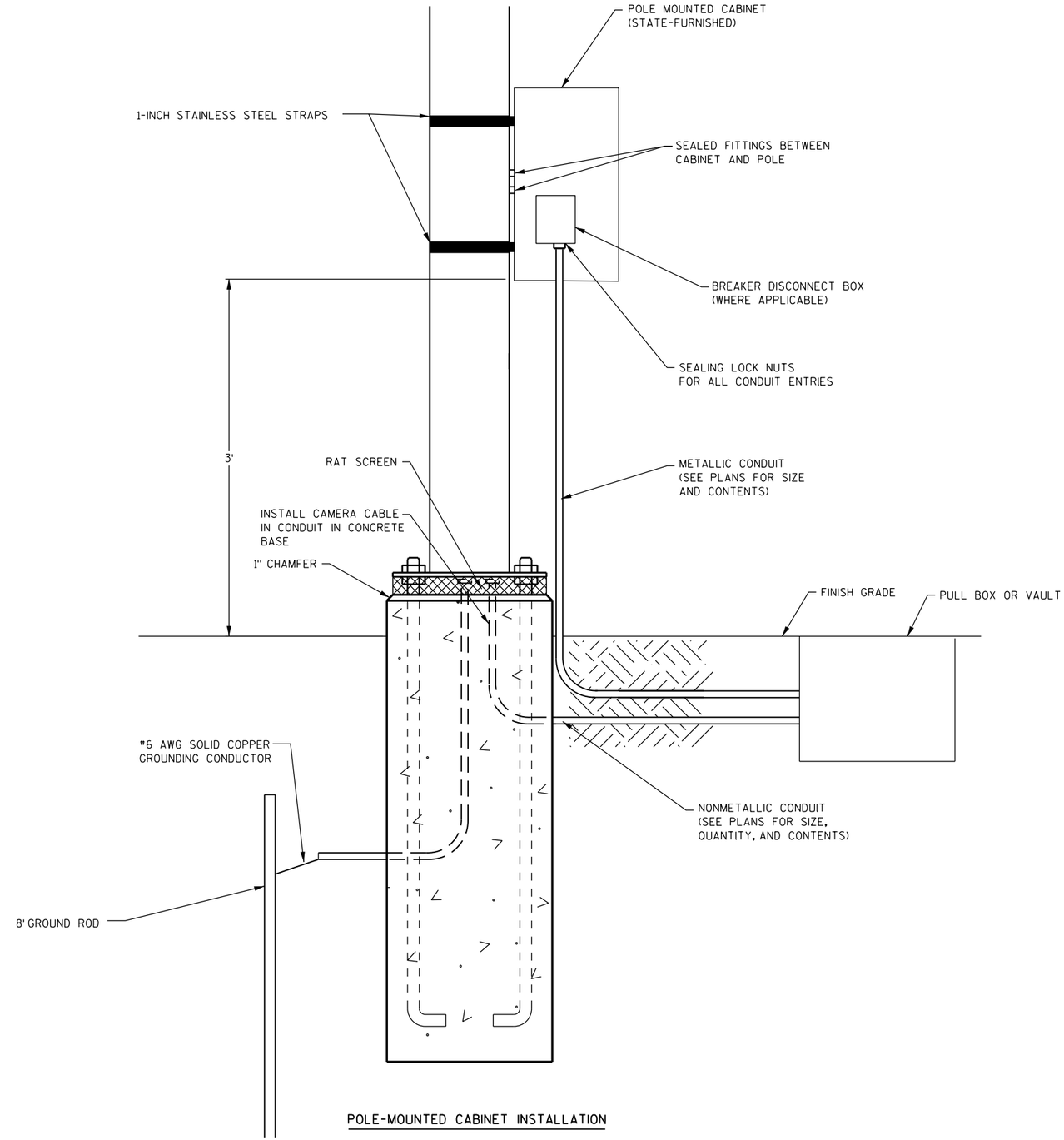


NOTES

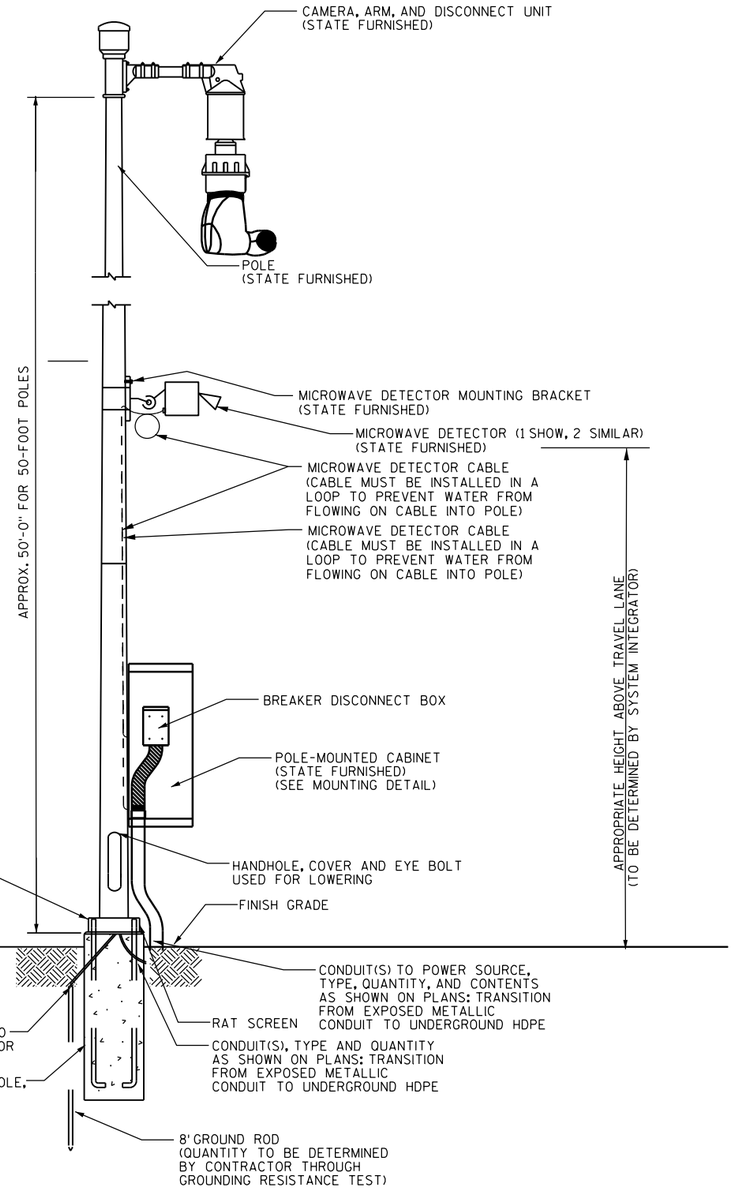
1) DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.
2) WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS, U.L. LISTED FOR ELECTRICAL USE, SHALL BE USED.
3) CONDUIT HEIGHT ABOVE THE CONCRETE BASE SHALL BE 3-INCHES.
4) DEPTH OF CONDUIT SHALL BE 24-INCHES MINIMUM AND 36-INCHES MAXIMUM.
5) ANY EXCEPTION TO THE MAXIMUM DEPTH SHALL BE ONLY WITH THE WRITTEN APPROVAL OF THE ENGINEER.
6) CONTROLLER CABINET BASE TOP SURFACES SHALL BE TROWEL FINISHED AND LEVEL PRIOR TO CABINET INSTALLATION. LEVELING OF TOP SURFACES AFTER CONCRETE BASE HAS CURED SHALL ONLY BE ACCOMPLISHED BY GRINDING.
7) MAINTENANCE PLATFORMS ARE NOT REQUIRED WHEN THE SURROUNDING AREA IS PAVED.
8) MINIMUM BENDING RADIUS OF CONDUIT SHALL BE SIX TIMES THE CONDUIT DIAMETER.
9) ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED.
10) CAP ALL BELOW GRADE METALLIC CONDUIT ENDS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED.
11) PLUG ALL BELOW GRADE NONMETALLIC CONDUIT ENDS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED.
12) ALL CONDUIT ENDS AT THE TOP OF CONCRETE BASES SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS PLACED. CONDUITS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED SHALL REMAIN CAPPED OR PLUGGED.
13) CONCRETE FORM DEPTH BELOW FINISHED GRADE SHALL BE 6-INCH MAXIMUM. CONCRETE FORMS SHALL BE REMOVED AFTER CONCRETE HAS SET.
14) ALL METALLIC CONDUIT ENDS AT TOP OF CONCRETE BASES SHALL HAVE BUSHINGS IF WIRE IS INSTALLED.
15) ALL NON METALLIC CONDUIT ENDS AT TOP OF CONCRETE BASES SHALL HAVE END BELLS IF WIRE IS INSTALLED.
16) ANCHOR BOLTS TO ANCHOR THE FIELD CABINETS TO THE CABINET BASE WILL BE STATE FURNISHED WITH THE FIELD CABINET.
17) CONTRACTOR SHALL CONFIRM BOLT PATTERN OF CABINET PRIOR TO CONSTRUCTION OF CONCRETE BASE.
18) THE CABINET SHALL BE SEALED WITH A SILICONE SEALANT AT THE INSIDE AND OUTSIDE JOINTS.
19) MAINTENANCE PADS SHALL BE INSTALLED ON BOTH SIDES OF THE CABINET.
20) STATE FURNISHED FIELD CABINETS WILL BE TYPE 334 CONTROLLER CABINETS.

ITS FIELD CABINET

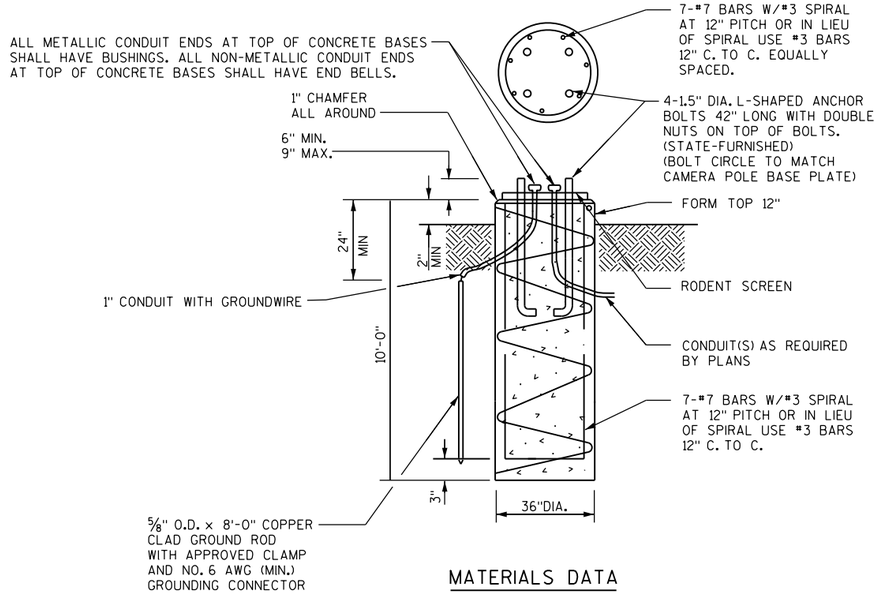
2



POLE-MOUNTED CABINET INSTALLATION



CAMERA POLE WITH CAMERA LOWERING HARDWARE

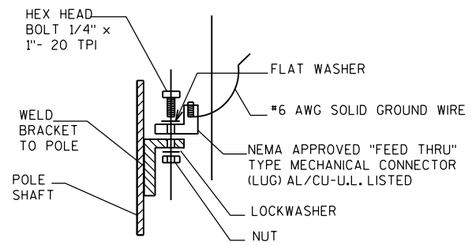


MATERIALS DATA

CONCRETE	f'c=3,500 psi
HIGH STRENGTH BAR STEEL REINFORCEMENT	fy = 60,000 psi

CONCRETE BASE, 50' CAMERA POLE

NOT TO SCALE



FIELD INSTALLED GROUNDING LUG

NOTES

1) ALL HARDWARE AND FASTENERS SHALL BE STAINLESS STEEL
2) POLE DRAWINGS SHOWN FOR BIDDING INFORMATION PURPOSES ONLY. POLES WILL BE STATE FURNISHED. BASE TO BE CONTRACTOR DESIGNED.
3) CONTRACTOR SHALL CONFIRM BOLT PATTERN OF CAMERA POLE PRIOR TO CONSTRUCTION OF CONCRETE BASE.
4) CONTRACTOR SHALL INSTALL GROUNDING LUG AS SHOWN

CAMERA POLES & FOUNDATIONS

2

2

N

EXMH0400
CHANGE EXISTING FO SPLICE FROM DROP SPLICES TO A MAINLINE SPLICE BY SPLICING DROPPED STRANDS THROUGH SO THAT EXCB-RM-67-0092 MAY BE REMOVED WITHOUT INTERRUPTING OTHER DEVICES ON THE FIBER OPTIC CABLE AT THE TIME OF REMOVAL. THEN RESPLICE BACK TO A DROP SPLICE TO RECONNECT EXCB-RM-67-0092 AND THE VILLAGE OF MENOMONEE FALLS WHEN IT HAS BEEN REINSTALLED
(6) FIBER OPTIC SPLICES AT TIME OF REMOVALS AND
(8) FIBER OPTIC SPLICES AT COMPLETION OF THE PROJECT

EXPB2180
(1) REMOVE PULL BOX

EXCCTV-67-0102
(1) REMOVE CAMERA POLE BASE
(1) REMOVE CAMERA POLE
(1) REMOVE CAMERA
(DISPOSE OF CAMERA AND CAMERA POLE APPROPRIATELY)

218+00

REMOVE CABLE AND ABANDON CONDUIT

EXPB2170
(1) REMOVE PULL BOX

REMOVE CABLE AND ABANDON CONDUIT

216+00

REMOVE CABLE AND ABANDON CONDUIT

U.S.H. 41/45

PILGRIM RD.

EXPB2185
(1) REMOVE PULL BOX

REMOVE CABLE AND ABANDON CONDUIT

EXPB1030
CUT EXISTING LOOP DETECTORS FROM LDLIC AND LEAVE SPLICE ENCLOSURES ON LOOP DETECTOR WIRES TO PROTECT THEM UNTIL RECONNECTION AT A LATER DATE (MAINTAIN ANY EXISTING LOOP LABELS)

EXPB1040
CUT EXISTING LOOP DETECTORS FROM LDLIC AND LEAVE SPLICE ENCLOSURES ON LOOP DETECTOR WIRES TO PROTECT THEM UNTIL RECONNECTION AT A LATER DATE (MAINTAIN ANY EXISTING LOOP LABELS)

EXPB0800
(1) REMOVE PULL BOX

REMOVE CABLE AND ABANDON CONDUIT

EXPB0805
(1) REMOVE PULL BOX

EXPB1200
(1) REMOVE PULL BOX

214+00

REMOVE CABLE AND ABANDON CONDUIT

EXPB1035

REMOVE CABLE
(CONDUIT IS TO BE REUSED)

EXCB-RM-67-0092
(1) REMOVE ITS CONTROL CABINET
(1) REMOVE CONCRETE BASE
(SALVAGE CABINET AND CONTENTS FOR REINSTALLATION)

REMOVE CABLE AND ABANDON CONDUIT

EXOHS1035

REMOVE CABLE AND ABANDON CONDUIT

EXPB1250
(1) REMOVE PULL BOX

EXPB1000
(1) REMOVE PULL BOX

REMOVE CABLE AND ABANDON CONDUIT

REMOVE CABLE AND ABANDON CONDUIT

EXPB0805
(1) REMOVE PULL BOX

EXPB0900
(1) REMOVE PULL BOX

212+00

EXMB1300
(1) REMOVE METER BREAKER PEDESTAL

EXPB1100
(1) REMOVE PULL BOX

REMOVE CABLE AND ABANDON CONDUIT

REMOVE CABLE AND ABANDON CONDUIT

REMOVE CABLE AND ABANDON CONDUIT

EXPB1005
(1) REMOVE PULL BOX

REMOVE CABLE
(CONDUIT IS TO BE REUSED)

EXPB2110
(1) REMOVE PULL BOX

EXFY1300
(1) REMOVE ADVANCE FLASHER ASSEMBLY TYPE 1

REMOVE CABLE AND ABANDON CONDUIT

EXPB1105
(1) REMOVE PULL BOX

REMOVE CABLE AND ABANDON CONDUIT

EXPB1300
(1) REMOVE PULL BOX

EXPB1045
CUT EXISTING LOOP DETECTORS FROM LDLIC AND LEAVE SPLICE ENCLOSURES ON LOOP DETECTOR WIRES TO PROTECT THEM UNTIL RECONNECTION AT A LATER DATE (MAINTAIN ANY EXISTING LOOP LABELS)

210+00

MATCHLINE 210+00

REMOVE CABLE AND ABANDON CONDUIT

PROJECT NO: 2782-12-70	HWY: US 41/45	COUNTY: WAUKESHA	FTMS REMOVAL SHEETS	SHEET 99	E

2

KENWOOD BLVD.

PARK BLVD.

KINGS HWY.

WIS 74 / MAIN ST.

CLEVELAND AVE.

WATCHLINE 210+00

EXISTING CONDUIT AND CABLE TO REMAIN IN PLACE

EXPB1900
REMOVE EXISTING PULL BOX
(COIL 100-FEET OF SLACK CABLE FOR LATER SPLICE AFTER NEW COMMUNICATIONS VAULT IS INSTALLED)

EXPB2000
(1) REMOVE PULL BOX

EXPB2060
(1) REMOVE PULL BOX

EXPB2090
(1) REMOVE PULL BOX

REMOVE CABLE AND ABANDON CONDUIT

REMOVE CABLE AND ABANDON CONDUIT

REMOVE CABLE AND ABANDON CONDUIT

REMOVE CABLE AND ABANDON CONDUIT

197+70 198+00 200+00 202+00 204+00 206+00 208+00 210+00

406+00 408+00 410+00 412+00 414+00

N

PROJECT NO: 2782-12-70	HWY: US 41/45	COUNTY: WAUKESHA	FTMS REMOVAL SHEETS	SHEET 100	E

NOTE:
MICROWAVE VEHICLE DETECTOR DETECTING SOUTHBOUND MAINLINE US 41 / 45 TRAFFIC IS TO BE CONNECTED TO SALVAGED CONTACT CLOSURE CARDS IN CB-RM-67-0092

N

CCTV-67-0102
(1) 50-FOOT CAMERA POLE BASE
(1) 50-FOOT CAMERA POLE (S-F)
(1) POLE MOUNT CABINET (S-F)
(1) BREAKER DISCONNECT BOX
(1) CCTV CAMERA (S-F)
(4) MICROWAVE VEHICLE DETECTORS (S-F)
(1) 12-COUNT FO TERMINATION PANEL (S-F)
(6) F.O. TERMINATIONS
(1) ETHERNET SWITCH (S-F)
(1) ETHERNET VIDEO ENCODER (S-F)

(3) 2-INCH NONMETALLIC CONDUITS
(1) WITH (2) 6-COUNT FOC (S-F) AND
(1) NO. 10 AWG LIGHTING WIRE
(1) WITH (1) MD CABLE

(2) 2-INCH NONMETALLIC CONDUITS
(1) WITH (1) 6-COUNT FOC (S-F)
(1) NO. 10 AWG LIGHTING WIRE

EXMH0400
REMOVE EXISTING FIBER OPTIC DROP SPLICES TO VILLAGE OF MENOMONEE FALLS AND TO EXCCTV-67-0102 AT BEGINNING OF PROJECT. ONCE NEW CONDUIT INTO MANHOLE IS CONSTRUCTED
(1) INSTALL PROPOSED CONDUIT INTO EXISTING MANHOLE
(9) FIBER OPTIC SPLICES AT TIME OF RECONNECTION

CB-RM-67-0092
(1) ITS FIELD CABINET CONCRETE BASE
(1) ITS FIELD CABINET (SALVAGED)
(1) BREAKER DISCONNECT BOX
(1) 12-COUNT F.O. TERMINATION PANEL (S-F)
(6) F.O. TERMINATIONS
(1) ETHERNET SWITCH (SALVAGED)
(1) 2070 RAMP METER CONTROLLER (SALVAGED)

(1) 2-INCH NONMETALLIC CONDUIT WITH
(3) NO. 4 AWG LIGHTING WIRES
(6) 3-INCH NONMETALLIC CONDUITS
(1) WITH (1) 6-COUNT FOC AND (3) MD CABLES
(1) WITH (1) 12/C NO. 14 TRAFFIC SIGNAL CABLE AND
(1) 5/C NO. 14 TRAFFIC SIGNAL CABLE
(1) WITH (7) LDLIC

(3) 2-INCH NONMETALLIC CONDUITS
(1) WITH (1) 12/C NO. 14 TRAFFIC SIGNAL CABLE AND (1) NO. 10 AWG LIGHTING WIRE
(1) WITH (7) LDLIC

EXPB1040
(1) INSTALL PROPOSED CONDUIT INTO EXISTING PULL BOX
IN EXISTING CONDUIT
(1) WITH (1) 7/C NO. 14 TRAFFIC SIGNAL CABLE AND
(1) NO. 10 AWG LIGHTING WIRE
(1) WITH (2) LDLIC

EXPB1020

EXPB1035
IN EXISTING CONDUIT
(1) WITH (1) LDLIC
(1) NO. 10 AWG LIGHTING WIRE

OHS1035

IN EXISTING CONDUIT
(1) WITH (1) 7/C NO. 14 TRAFFIC SIGNAL CABLE AND
(1) NO. 10 AWG LIGHTING WIRE

EXSB1045

IN EXISTING CONDUIT
(1) WITH (1) 12/C NO. 14 TRAFFIC SIGNAL CABLE,
(1) 7/C NO. 14 TRAFFIC SIGNAL CABLE, AND
(1) NO. 10 AWG LIGHTING WIRE
(1) WITH (2) LDLIC

EXPB1045

IN EXISTING CONDUIT
(1) WITH (1) 12/C NO. 14 TRAFFIC SIGNAL CABLE AND
(1) 7/C NO. 14 TRAFFIC SIGNAL CABLE

(1) 2-INCH METALLIC CONDUIT WITH
(3) NO. 4 AWG LIGHTING WIRES

PB2170

(3) 2-INCH NONMETALLIC CONDUITS
(1) WITH (3) NO. 4 AWG LIGHTING WIRES
(1) WITH (2) 6-COUNT FOCS (S-F),
(1) MD CABLE, AND (1) NO. 10 AWG LIGHTING WIRE

PB2160

(3) 2-INCH NONMETALLIC CONDUITS
(1) WITH (3) NO. 4 AWG LIGHTING WIRES
(1) WITH (1) 6-COUNT FOC (S-F) AND (1) MD CABLE
(1) WITH (1) 5/C NO. 14 TRAFFIC SIGNAL CABLE

(3) 2-INCH NONMETALLIC CONDUITS
(1) WITH (3) NO. 4 AWG LIGHTING WIRES
(1) WITH (1) 6-COUNT FOC (S-F), AND
(2) MD CABLES
(1) WITH (1) 5/C NO. 14 TRAFFIC SIGNAL CABLE

(2) 2-INCH NONMETALLIC CONDUITS
WITH (3) NO. 4 AWG LIGHTING WIRES
IN EACH

PB1050

PB1060

PB0900

MB1300
(1) ELECTRICAL SERVICE METER BREAKER PEDESTAL

PB1300

PB1100

(3) 2-INCH NONMETALLIC CONDUITS, SPECIAL
(1) WITH (1) 5/C NO. 14 TRAFFIC SIGNAL CABLE
(1) WITH (1) 6-COUNT FOC (S-F) AND
(1) NO. 10 AWG LIGHTING WIRE

(2) 2-INCH NONMETALLIC CONDUITS WITH
(1) 5/C NO. 14 TRAFFIC SIGNAL CABLE AND
(1) NO. 10 AWG LIGHTING WIRE

(2) 2-INCH NONMETALLIC CONDUITS
(1) WITH (1) 6-COUNT FOC (S-F) AND
(1) NO. 10 AWG LIGHTING WIRE

PB1200

PB2100

(2) 2-INCH NONMETALLIC CONUITS
(1) WITH (1) MD CABLE AND
(1) NO. 10 AWG LIGHTING WIRE

(2) 2-INCH NONMETALLIC CONUITS
(1) WITH (1) MD CABLE

MD1100
(1) TYPE 5 CONCRETE BASE
(1) 11-1/2-INCH TRANSFORMER BASE
(1) ALUMINUM TYPE 5 POLE
(1) MICROWAVE VEHICLE DETECTOR

MD1060
(1) TYPE 5 CONCRETE BASE
(1) 11-1/2-INCH TRANSFORMER BASE
(1) ALUMINUM TYPE 5 POLE
(1) MICROWAVE VEHICLE DETECTOR

(3) 2-INCH NONMETALLIC CONDUITS, SPECIAL
(1) WITH (3) NO. 4 AWG LIGHTING WIRES
(1) WITH (1) 6-COUNT FOC (S-F) AND (1) MD CABLE
(1) WITH (1) 5/C NO. 14 TRAFFIC SIGNAL CABLE

(2) 2-INCH NONMETALLIC CONDUITS
(1) WITH (1) 6-COUNT FOC (S-F) AND
(1) NO. 10 AWG LIGHTING WIRE

FY1200
(1) TYPE 1 CONCRETE BASE
(1) TYPE 1 ADVANCE FLASHER ASSEMBLY

U.S.H. 41/45

PILGRIM RD.

MATCHLINE 210+00

PROJECT NO: 2782-12-70	HWY: US 41/45	COUNTY: WAUKESHA	FTMS DESIGN SHEETS	SHEET 101	E

FILE NAME : \\mlww400\ingrproj\60816\27821100_PIL_RD\cds\FM_05_PILG.dgn PLOT DATE : 10/17/2014 PLOT BY : pkutz PLOT NAME : PLOT SCALE : 100:1

WISDOT/CADDS SHEET 42

KENWOOD BLVD.

PARK BLVD.

KINGS HWY.

WIS. 74 / MAIN ST.

CLEVELAND AVE.

CV1950
INSTALL PROPOSED COMMUNICATIONS VAULT CONNECTED TO EXISTING CONDUIT AND CABLE SYSTEM TO SOUTH WITHOUT DAMAGING SLACK IN 6-COUNT FIBER OPTIC CABLE. SPLICE PROPOSED 6-COUNT FIBER OPTIC CABLE TO NORTH TO EXISTING 6-COUNT FIBER OPTIC CABLE TO SOUTH.

(2) 2-INCH NONMETALLIC CONDUITS
(1) WITH (1) 6-COUNT FOC (S-F) AND
(1) NO. 10 AWG LIGHTING WIRE

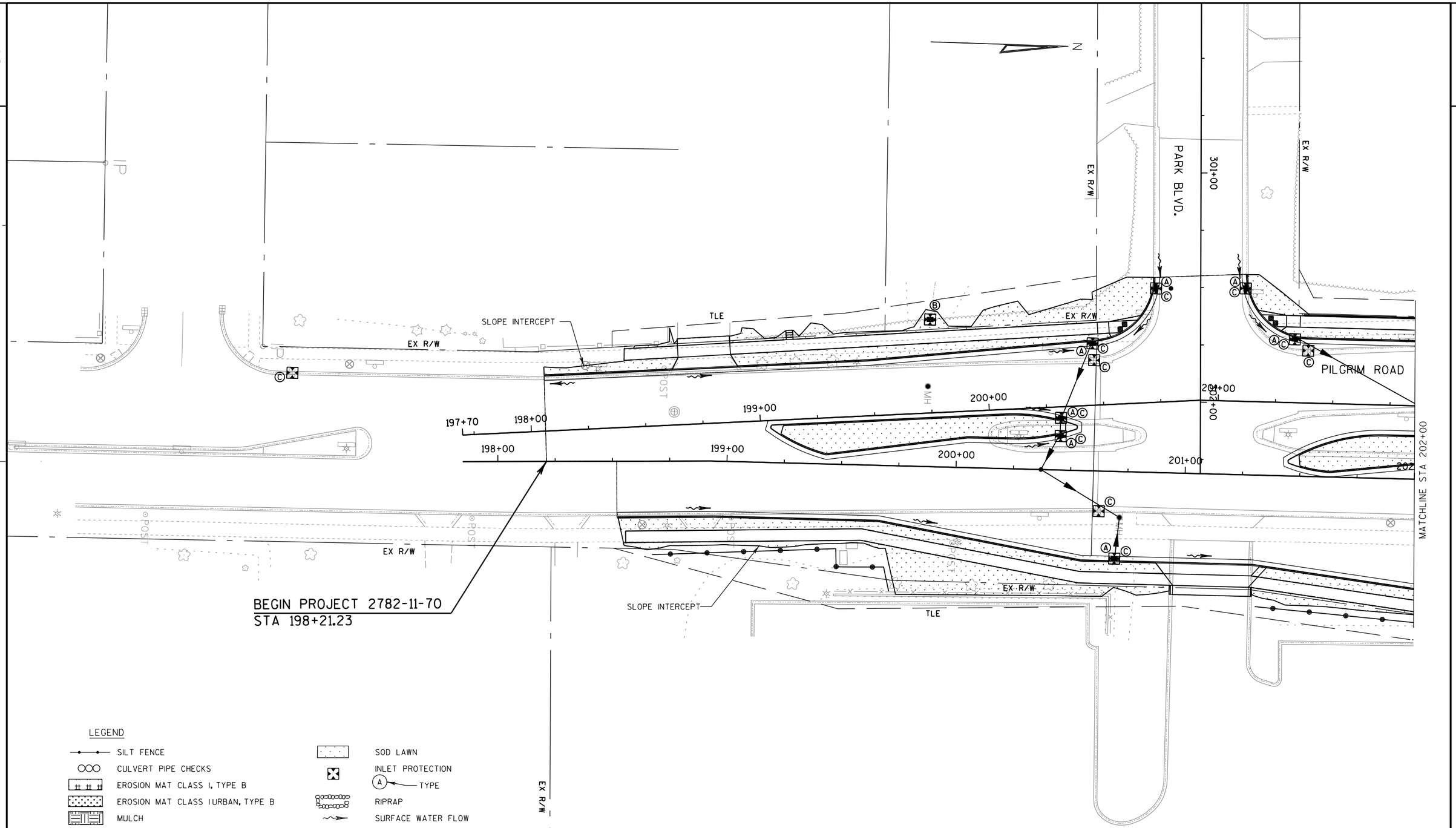
(2) 2-INCH NONMETALLIC CONDUITS
(1) WITH (1) 6-COUNT FOC (S-F) AND
(1) NO. 10 AWG LIGHTING WIRE

(2) 2-INCH NONMETALLIC CONDUITS
(1) WITH (1) 6-COUNT FOC (S-F) AND
(1) NO. 10 AWG LIGHTING WIRE

PB1980
PB2010
PB2040
PB2060
PB2080
PB2090

197+70
198+00
200+00
202+00
204+00
206+00
208+00
210+00
210
210
300+00
302+00
406+00
408+00
410+00
412+00
414+00
500+00
501+45
502+00
503+34
MATCHLINE 210+00

2



NOTES:

1.) INLET PROTECTION TYPE A IS FOR PRE-PAVING USE. TYPE C & D ARE FOR POST-PAVING USE.
2.) EROSION MAT & MULCH AREAS SHALL BE SEEDED WITH SEED NO. 40

PROJECT NO: 2782-11-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	EROSION CONTROL: PILGRIM ROAD	SHEET 103	E

END CONSTRUCTION 2782-12-70
BEGIN PROJECT 2782-11-70
STA 407+60

MATCHLINE STA 407+60

SLOPE INTERCEPT

TLE

EX R/W

PR R/W

MAIN STREET (STH 74)

202+00 203+00 204+00 205+00 206+00 207+00

408+00 409+00 410+00

PILGRIM ROAD

MATCHLINE STA 202+00

MATCHLINE STA 207+75

MATCHLINE STA 410+13

END CONSTRUCTION 2782-11-70
BEGIN PROJECT 2782-12-70
STA 410+13

LEGEND

- SILT FENCE
- CULVERT PIPE CHECKS
- EROSION MAT CLASS I, TYPE B
- EROSION MAT CLASS I URBAN, TYPE B
- MULCH
- SOD LAWN
- INLET PROTECTION (A) TYPE
- RIPRAP
- SURFACE WATER FLOW
- EROSION BALES

PROJECT NO: 2782-11-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	EROSION CONTROL: PILGRIM ROAD	SHEET 104	E

FILE NAME : P:\44xx\4442\Plan\022002_ec.dgn PLOT DATE : 11/2/2014 PLOT BY : ajp PLOT NAME : PLOT SCALE : 1:40

WISDOT/CADDS SHEET 42

2

N

MATCHLINE STA 87+00

212+86 142.14' LT
213+15 135.40' LT
213+22 137.00' LT
213+11 133.35' LT
213+24 141.94' LT
213+00 132.32' LT
213+30 141.67' LT
212+92 135.88' LT
213+33 138.20' LT

500+00
501+00
501+40
501+72
502+00
503+00
503+34

88+00
100+00
101+00
12+
13+00

208+00
209+00
210+00
211+00
212+00
213+00

EX R/W
TLE
SLOPE INTERCEPT
CLEVELAND AVENUE
FALLS PARKWAY
WETLAND BOUNDARY
PILGRIM ROAD
MATCHLINE STA 207+75
MATCHLINE STA 213+50
MATCHLINE STA 12+00
US 41/45 SB ENTRANCE RAMP
US 41/45 SB EXIT RAMP
PR R/W
PROP

END CONSTRUCTION 2782-11-70
BEGIN PROJECT 2782-12-70
STA 209+20.41

LEGEND

- SILT FENCE
- CULVERT PIPE CHECKS
- EROSION MAT CLASS I, TYPE B
- EROSION MAT CLASS I URBAN, TYPE B
- MULCH
- SOD LAWN
- INLET PROTECTION (A) TYPE
- RIPRAP
- SURFACE WATER FLOW
- EROSION BALES

PROJECT NO: 2782-11-70 & 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	EROSION CONTROL: PILGRIM ROAD	SHEET 105	E

2

LEGEND

- SILT FENCE
- CULVERT PIPE CHECKS
- EROSION MAT CLASS I, TYPE B
- EROSION MAT CLASS I URBAN, TYPE B
- MULCH
- SOD LAWN
- INLET PROTECTION
- (A) TYPE
- RIPRAP
- SURFACE WATER FLOW
- EROSION BALES

214+00 143.36' LT
214+27 143.82' LT
213+81 143.45' LT
214+20 143.91' LT
214+55 141.94' LT
EX R/W
WETLAND BOUNDARY
SLOPE INTERCEPT
MATCHLINE STA 213+50
214+00
215+00
216+00
PILGRIM ROAD
217+00
218+00
STRUCTURE B-67-337
219+00
MATCHLINE STA 219+50
R-67-0122
1+00
2+00
286+00
287+00
285+00
3+00
STRUCTURE B-67-338
US 41/45 SB
US 41/45 NB
284+00
4+00
HW
SIGN
SLOPE INTERCEPT

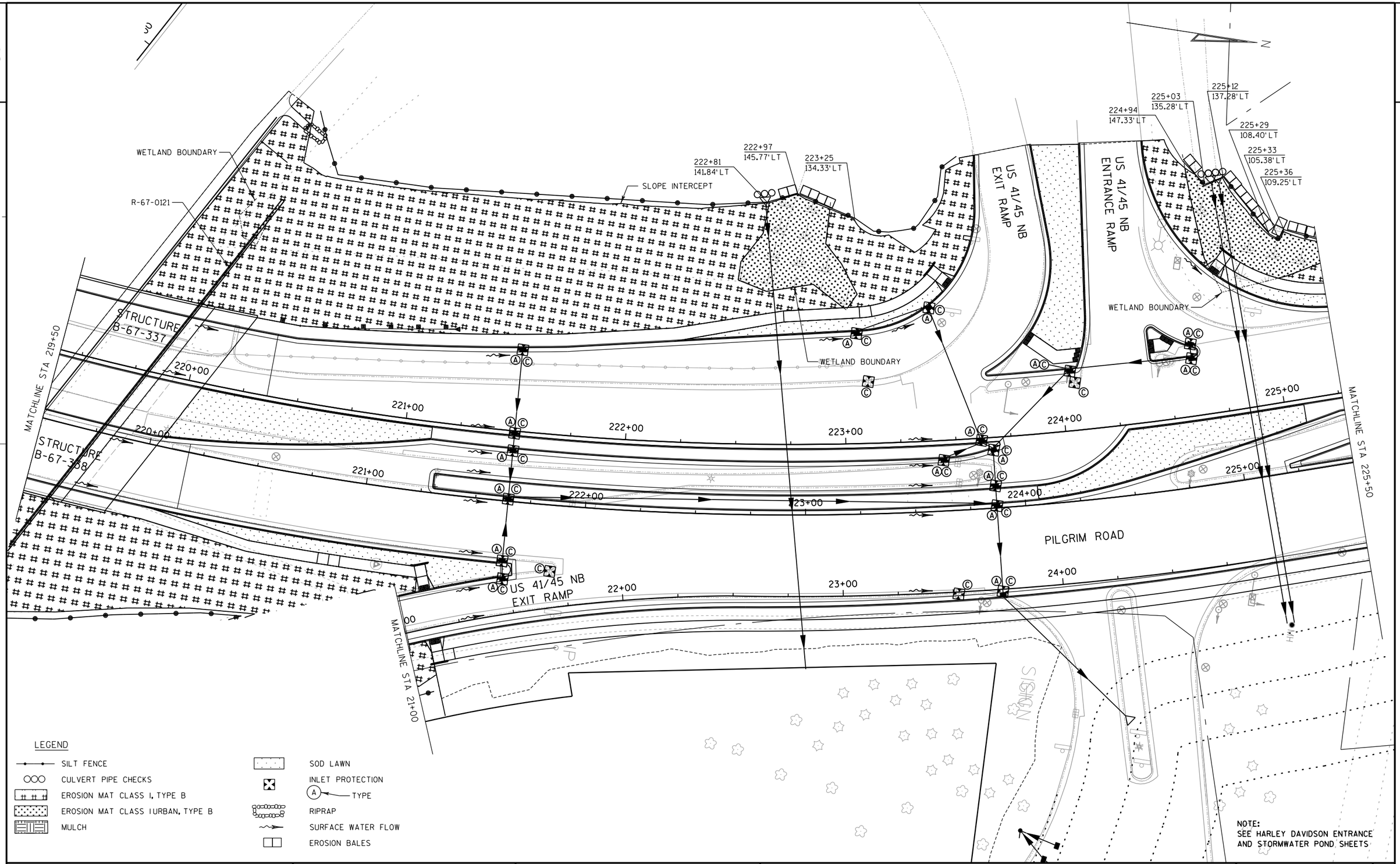
2

PROJECT NO: 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	EROSION CONTROL: PILGRIM ROAD	SHEET 106 E

FILE NAME : P:\44xx\4442\Plan\022004_ec.dgn PLOT DATE : 11/2/2014 PLOT BY : ajp PLOT NAME : PLOT SCALE : 1:40

WISDOT/CADDS SHEET 42

2



LEGEND

- SILT FENCE
- CULVERT PIPE CHECKS
- EROSION MAT CLASS I, TYPE B
- EROSION MAT CLASS I URBAN, TYPE B
- MULCH
- SOD LAWN
- INLET PROTECTION
- (A) TYPE
- RIPRAP
- SURFACE WATER FLOW
- EROSION BALES

PROJECT NO: 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	EROSION CONTROL: PILGRIM ROAD	SHEET 107	E

FILE NAME : P:\44xx\4442\Plan\022005_ec.dgn PLOT DATE : 11/2/2014 PLOT BY : ajp PLOT NAME : PLOT SCALE : 1:40

2

PARK & RIDE LOT

225+53
101.30' LT

225+71
99.31' LT

225+95
97.19' LT

SLOPE INTERCEPT

MATCHLINE STA 703+27.76

MEGAL DRIVE

704+00

WETLAND BOUNDARY

PILGRIM ROAD

226+00 227+00 228+00 229+00 230+00 231+00

MATCHLINE STA 225+50

226+00 227+00 228+00 229+00 230+00 231+00

END PROJECT 2782-12-70
BEGIN CONSTRUCTION 2782-11-70
STA 226+66.12

END PROJECT 2782-11-70
STA 228+24.92

HWY

SEE MEGAL COURT SHEETS

MEGAL COURT

LEGEND

- SILT FENCE
- CULVERT PIPE CHECKS
- EROSION MAT CLASS I, TYPE B
- EROSION MAT CLASS I URBAN, TYPE B
- MULCH
- SOD LAWN
- INLET PROTECTION (A) TYPE
- RIPRAP
- SURFACE WATER FLOW
- EROSION BALES

PROJECT NO: 2782-11-70 & 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	EROSION CONTROL: PILGRIM ROAD	SHEET 108	E

2

RESTORE WITH SOD 18" BEHIND SIDEWALK & REPLACE DISTURBED BERM WITH SHREDDED BARK MULCH. PAID FOR AS MULCHING.

SLOPE INTERCEPT

PR R/W

TLE

EX R/W

MAIN STREET (STH 74)

402+00

403+00

404+00

405+00

406+00

407+00

MH

MATCHLINE STA 407+60

BEGIN CONSTRUCTION
2782-12-70
STA 402+88.13

EX R/W

PR R/W

TLE

SLOPE INTERCEPT

END CONSTRUCTION 2782-12-70
BEGIN PROJECT 2782-11-70
STA 407+60

LEGEND

- SILT FENCE
- CULVERT PIPE CHECKS
- EROSION MAT CLASS I, TYPE B
- EROSION MAT CLASS I URBAN, TYPE B
- MULCH
- SOD LAWN
- INLET PROTECTION
- (A) TYPE
- RIPRAP
- SURFACE WATER FLOW
- EROSION BALES

PROJECT NO: 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	EROSION CONTROL: MAIN STREET (STH 74)	SHEET 109 E

2

LEGEND

- SILT FENCE
- CULVERT PIPE CHECKS
- EROSION MAT CLASS I, TYPE B
- EROSION MAT CLASS I URBAN, TYPE B
- MULCH
- SOD LAWN
- INLET PROTECTION
- (A) TYPE
- RIPRAP
- SURFACE WATER FLOW
- EROSION BALES

N

SLOPE INTERCEPT

TLE

EX R/W

PR R/W

MH

411+00

412+00

413+00

414+00

415+00

416+00

MAIN STREET (STH 74)

MATCHLINE STA 410+13

EX R/W

TLE

SLOPE INTERCEPT

END CONSTRUCTION 2782-11-70
BEGIN PROJECT 2782-12-70
STA 410+13

END CONSTRUCTION
2782-12-70
STA 414+95.36

PROJECT NO: 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	EROSION CONTROL: MAIN STREET (STH 74)	SHEET 110	E

FILE NAME : P:\44xx\4442\Plan\022008_ec.dgn PLOT DATE : 11/2/2014 PLOT BY : ajp PLOT NAME : PLOT SCALE : 1:40

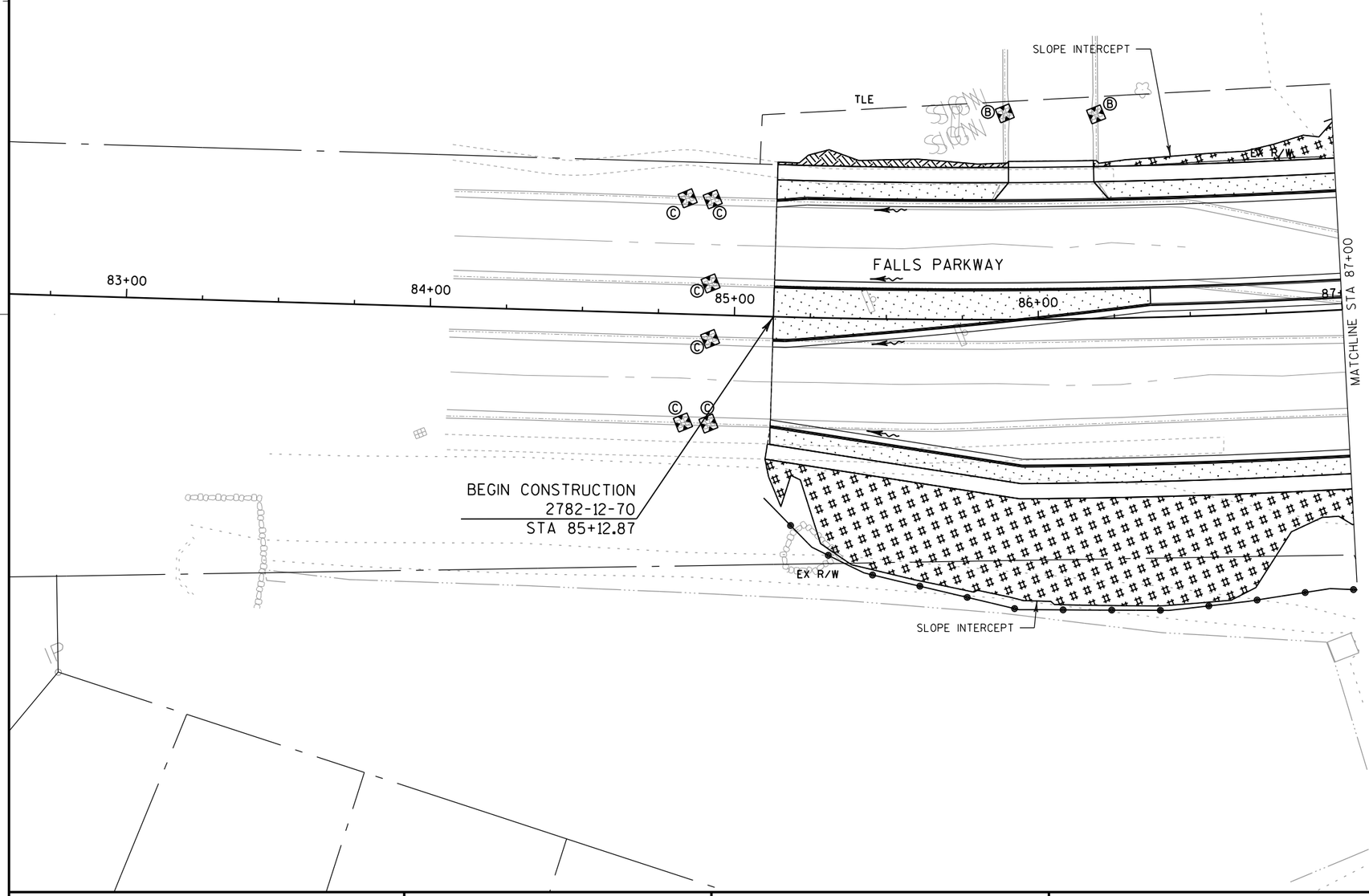
WISDOT/CADDS SHEET 42

2

N

LEGEND

- SILT FENCE
- CULVERT PIPE CHECKS
- EROSION MAT CLASS I, TYPE B
- EROSION MAT CLASS I URBAN, TYPE B
- MULCH
- SOD LAWN
- INLET PROTECTION (A) TYPE
- RIPRAP
- SURFACE WATER FLOW
- EROSION BALES



PROJECT NO: 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	EROSION CONTROL: FALLS PARKWAY	SHEET 111	E

2

LEGEND

- SILT FENCE
- CULVERT PIPE CHECKS
- EROSION MAT CLASS I, TYPE B
- EROSION MAT CLASS I URBAN, TYPE B
- MULCH
- SOD LAWN
- INLET PROTECTION
- (A) TYPE
- RIPRAP
- SURFACE WATER FLOW
- EROSION BALES

BEGIN CONSTRUCTION
2782-12-70
STA 6+40.00

WETLAND BOUNDARY
WETLAND BOUNDARY

6+40 13.21' RT
6+69 20.42' RT
6+90 20.24' RT
7+17 28.22' RT
7+27 28.76' RT
7+98 35.69' RT
8+19 36.33' RT
8+40 39.10' RT
8+72 41.87' RT
8+94 43.60' RT
9+02 46.90' RT
9+03 39.72' RT
9+32 42.58' RT
10+00 50.28' RT
10+19 50.65' RT
10+51 54.93' RT
10+82 59.51' RT
11+04 63.70' RT
11+20 67.64' RT
11+66 72.49' RT
11+80 77.61' RT
11+83 82.72' RT
11+32 162.88' RT

6+37 54.88' LT
6+49 57.96' LT
6+89 59.12' LT
7+10 60.23' LT
7+37 63.44' LT

SLOPE INTERCEPT
SLOPE INTERCEPT

7+00
8+00
9+00
10+00
11+00
102+00
103+00
104+00
105+00
106+00

MATCHLINE STA 12+00

US 41/45 SB EXIT RAMP
US 41/45 SB ENTRANCE RAMP

WETLAND BOUNDARY

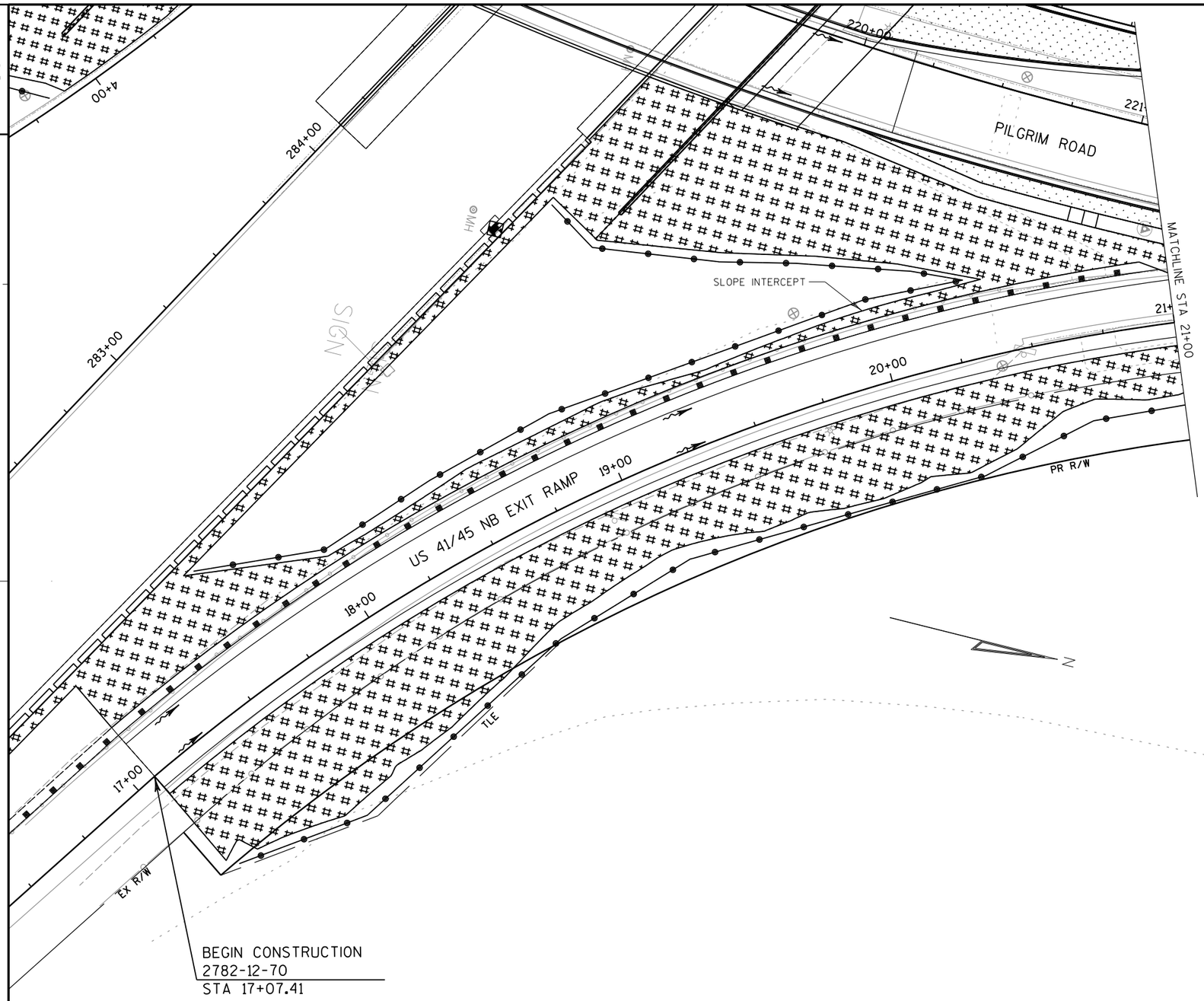
SIGN
SIGN

PR R/W

PROJECT NO: 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	EROSION CONTROL: US 41/45 SB RAMPS	SHEET 112	E

FILE NAME : P:\44xx\4442\Plan\022010_ec.dgn PLOT DATE : 11/2/2014 PLOT BY : ajp PLOT NAME : PLOT SCALE : 1:40

WISDOT/CADDS SHEET 42

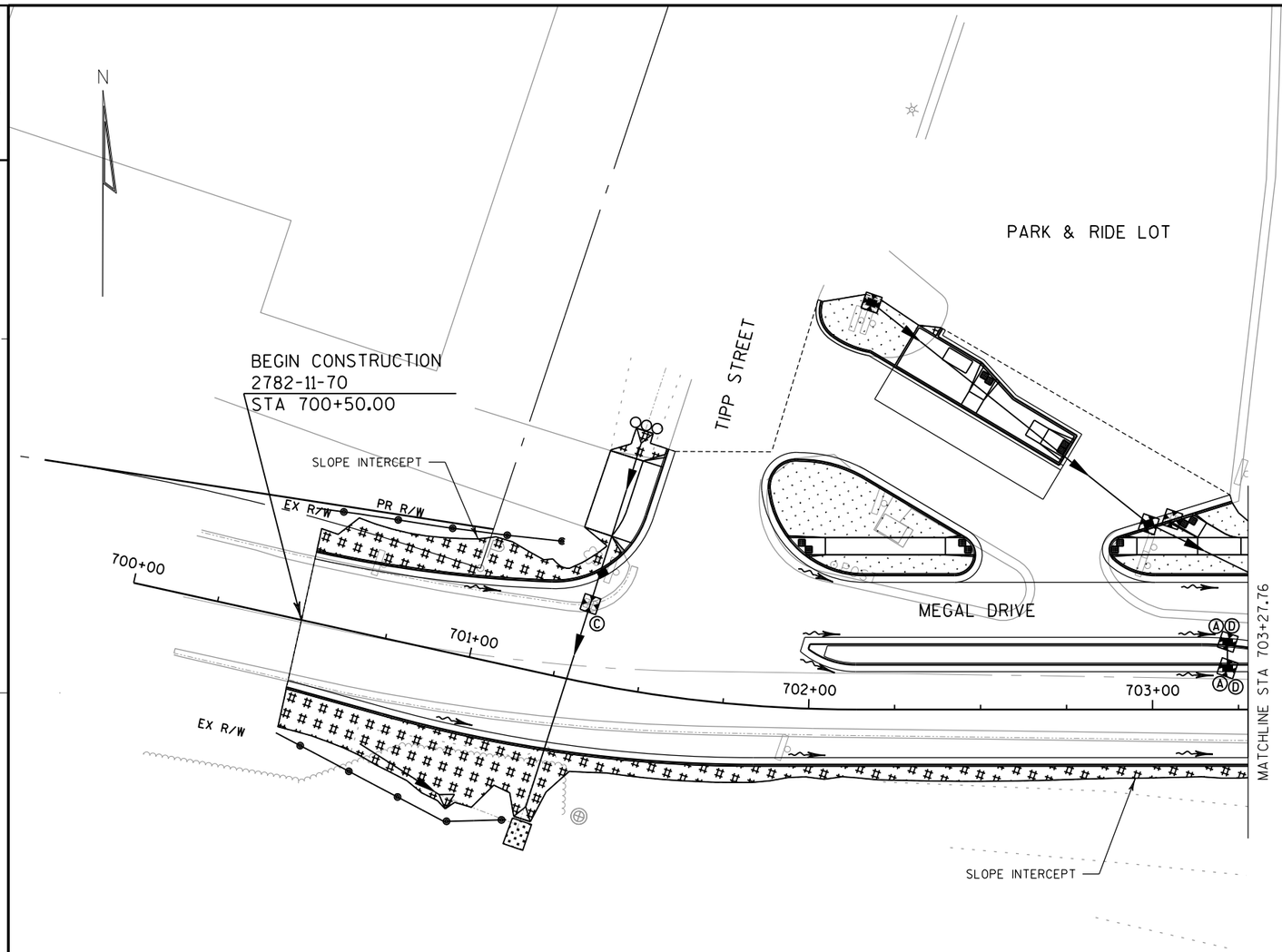


LEGEND

- SILT FENCE
- CULVERT PIPE CHECKS
- EROSION MAT CLASS I, TYPE B
- EROSION MAT CLASS I URBAN, TYPE B
- MULCH
- SOD LAWN
- INLET PROTECTION
- (A) TYPE
- RIPRAP
- SURFACE WATER FLOW
- EROSION BALES

2

PROJECT NO: 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	EROSION CONTROL: US 41/45 NB EXIT RAMP TO NB PILGRIM	SHEET 113	E



LEGEND

- SILT FENCE
- CULVERT PIPE CHECKS
- EROSION MAT CLASS I, TYPE B
- EROSION MAT CLASS I URBAN, TYPE B
- MULCH
- SOD LAWN
- INLET PROTECTION
- (A) TYPE
- RIPRAP
- SURFACE WATER FLOW
- EROSION BALES

2

PROJECT NO: 2782-11-70 & 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	EROSION CONTROL: MEGAL DRIVE	SHEET	E

FILE NAME : P:\44xx\4442\Plan\022012_ec.dgn PLOT DATE : 11/2/2014 PLOT BY : ajp PLOT NAME : PLOT SCALE : 1:40

2

US 41/45 SB ENTRANCE RAMP

LEGEND

- SILT FENCE
- CULVERT PIPE CHECKS
- EROSION MAT CLASS I, TYPE B
- EROSION MAT CLASS I URBAN, TYPE B
- MULCH
- SOD LAWN
- INLET PROTECTION
- (A) TYPE
- RIPRAP
- SURFACE WATER FLOW
- EROSION BALES

6+00

US 41/45 SB EXIT RAMP

N

US 41/45 SB

277+00 278+00 279+00 280+00 281+00 282+00

US 41/45 NB

12+00 13+00 14+00 15+00 16+00 17+00

SLOPE INTERCEPT

US 41/45 NB EXIT RAMP TO NB PILGRIM ROAD

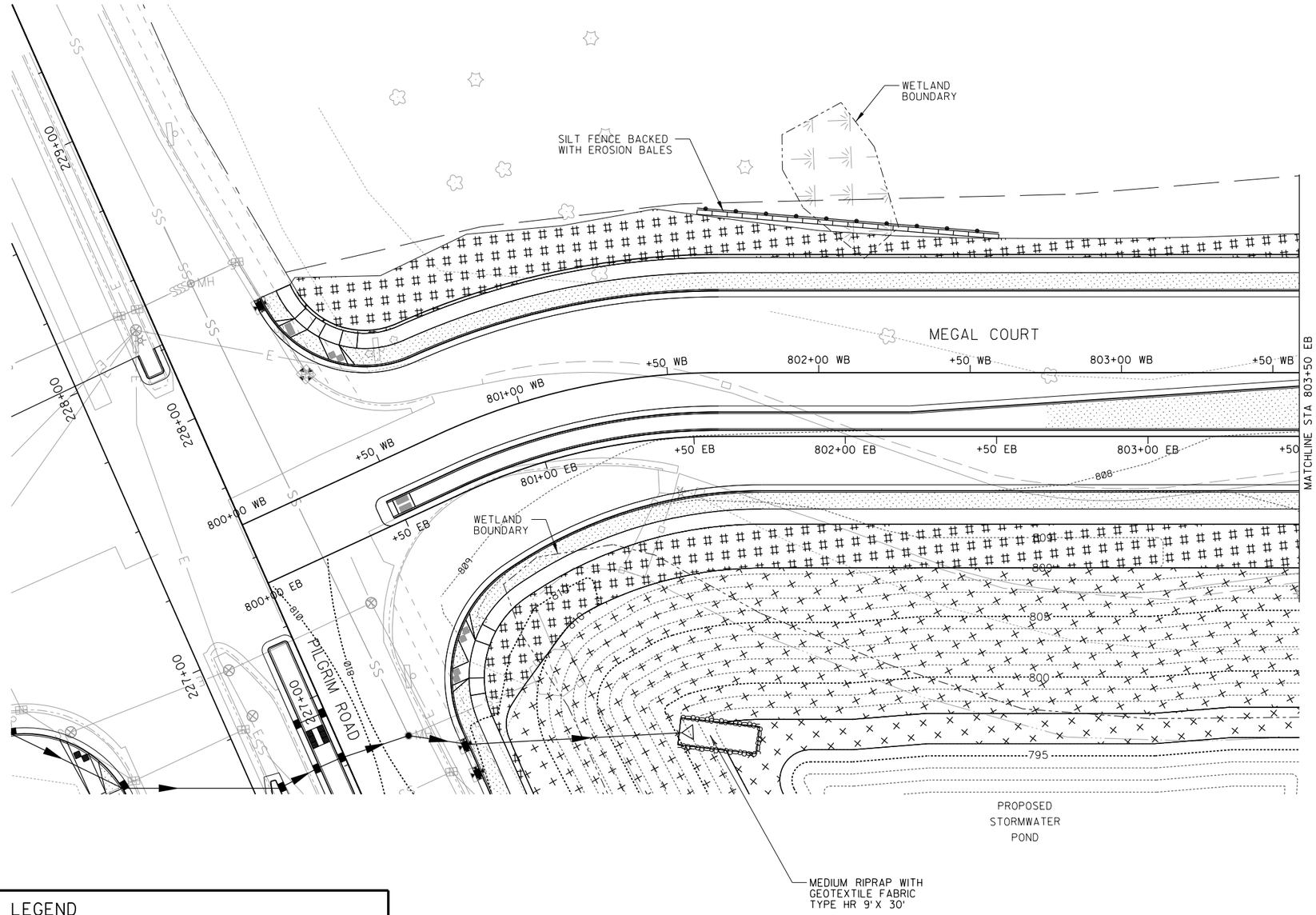
EX R/W

PR R/W

2

PROJECT NO: 1100-37-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	EROSION CONTROL: US 41/45	SHEET 115	E

2

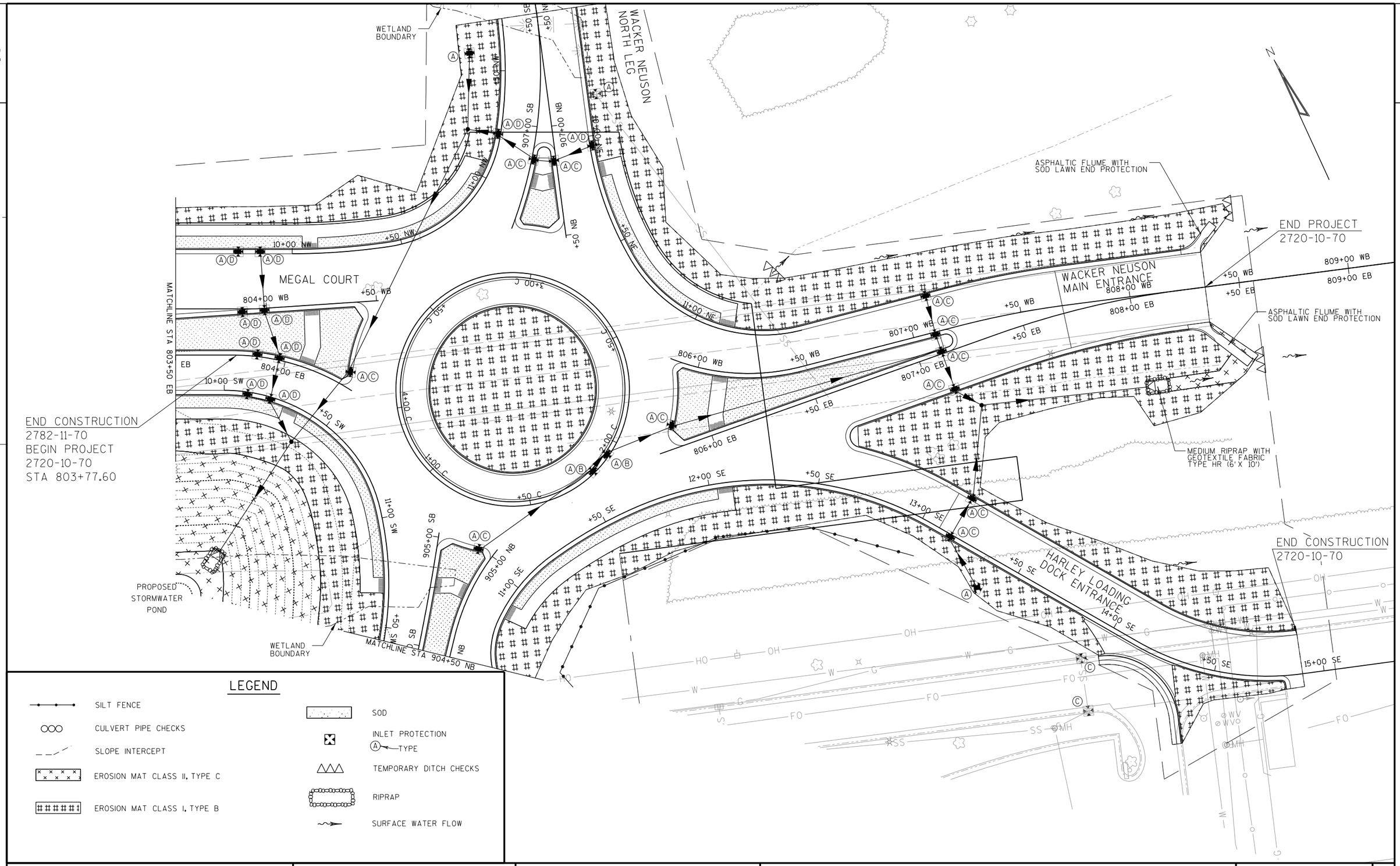


LEGEND

- SILT FENCE
- CULVERT PIPE CHECKS
- SLOPE INTERCEPT
- EROSION MAT CLASS II, TYPE C
- EROSION MAT CLASS I, TYPE B
- SOD
- INLET PROTECTION (A) TYPE
- TEMPORARY DITCH CHECKS
- RIPRAP
- SURFACE WATER FLOW

PROJECT NO: 2782-11-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	EROSION CONTROL: MEGAL COURT	SHEET 116	E

2

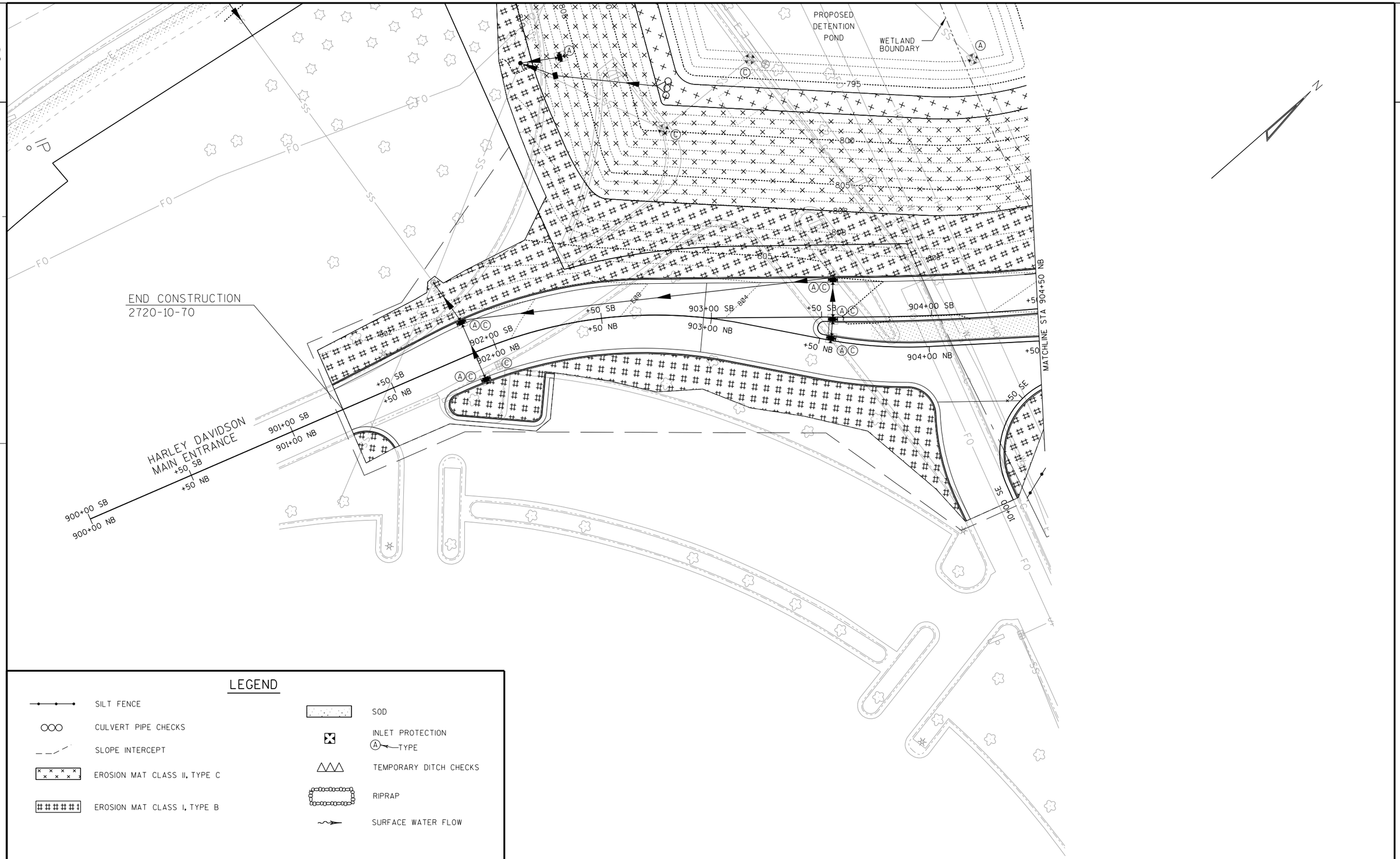


LEGEND

- SILT FENCE
- CULVERT PIPE CHECKS
- SLOPE INTERCEPT
- EROSION MAT CLASS II, TYPE C
- EROSION MAT CLASS I, TYPE B
- SOD
- INLET PROTECTION (A) ← TYPE
- TEMPORARY DITCH CHECKS
- RIPRAP
- SURFACE WATER FLOW

PROJECT NO: 2782-11-70 & 2720-10-70	HWY: MEGAL COURT	COUNTY: WAUKESHA	EROSION CONTROL: MEGAL COURT	SHEET 117	E

2



LEGEND

- SILT FENCE
- CULVERT PIPE CHECKS
- SLOPE INTERCEPT
- EROSION MAT CLASS II, TYPE C
- EROSION MAT CLASS I, TYPE B
- SOD
- INLET PROTECTION (A) TYPE
- TEMPORARY DITCH CHECKS
- RIPRAP
- SURFACE WATER FLOW

PROJECT NO: 2720-10-70	HWY: MEGAL COURT	COUNTY: WAUKESHA	EROSION CONTROL: HARLEY DAVIDSON ENTRANCE	SHEET 118	E

2

23+00

24+00

24" APRON ENDWALL

MEDIUM RIPRAP WITH GEOTEXTILE FABRIC TYPE HR 6' X 40'

SLOPE INTERCEPT (TYP.)

EXISTING 60" SSPRC

10-FT SAFETY SHELF

MEDIUM RIPRAP WITH GEOTEXTILE FABRIC TYPE HR 9' X 30'

WETLAND BOUNDARY

PROPOSED STORMWATER POND

MEDIUM RIPRAP WITH GEOTEXTILE FABRIC TYPE HR 6'X10'

HARLEY DAVIDSON MAIN ENTRANCE

MEGAL COURT

SLOPE INTERCEPT (TYP.)

902+00 SB

902+00 NB

903+00 SB

903+00 NB

904+00 SB

904+00 NB

MS 00+11

MS 10+00

802+00 EB

802+00 WB

803+00 EB

803+00 WB

804+00 EB

804+00 WB

801+00 EB

801+00 WB

+50 SB

+50 NB

+50 EB

+50 WB

+50 SW

LEGEND

- SILT FENCE
- CULVERT PIPE CHECKS
- SLOPE INTERCEPT
- EROSION MAT CLASS II, TYPE C
- EROSION MAT CLASS I, TYPE B
- SOD
- INLET PROTECTION (A) TYPE
- TEMPORARY DITCH CHECKS
- RIPRAP
- SURFACE WATER FLOW

PROJECT NO: 2720-10-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	EROSION CONTROL: STORMWATER POND	SHEET 119	E

2

N

KENWOOD BLVD.

PARK BLVD.

PILGRIM ROAD

PILGRIM ROAD
SB PGL

SLOPE INTERCEPT

STA. 199+87.00, 64.1'LT
INLETS 1G-MS (1)

STA. 200+58.00, 56.5'LT
CATCH BASINS 2X3-H-S (3)

STA. 200+84.72, 80.2'LT
WITH EXISTING COVER (201)

STA. 200+91.70, 80.5'LT
WITH EXISTING COVER (202)

STA. 201+24.72, 81.5'LT
WITH EXISTING COVER (203)

CONCRETE COLLAR
REQUIRED

STA. 201+46.50, 60.7'LT
CATCH BASINS 4 FT-H (8)

403

402

STA. 200+45.00, 21.8'LT
CATCH BASINS 2X3-H (4)

CONCRETE COLLAR
REQUIRED

STA. 199+86.79, 35.0'LT
199+00 WITH EXISTING COVER (200)

198+00

199+00

200+00

201+00

202

STA. 200+45.00, 15.8'LT
CATCH BASINS 2X3-H (5)

CONCRETE COLLAR
REQUIRED

401

300 STA. 200+71.80, 20.0'RT
WITH EXISTING COVER

CONCRETE COLLAR
REQUIRED

MATCHLINE STA 202+00

BEGIN PROJECT 2782-11-70
STA 198+21.23

PILGRIM ROAD R/L

SLOPE INTERCEPT
(TYP.)

STA. 200+35.00, 0'RT
MANHOLES 4 FT-J (2)

CONCRETE COLLAR
REQUIRED

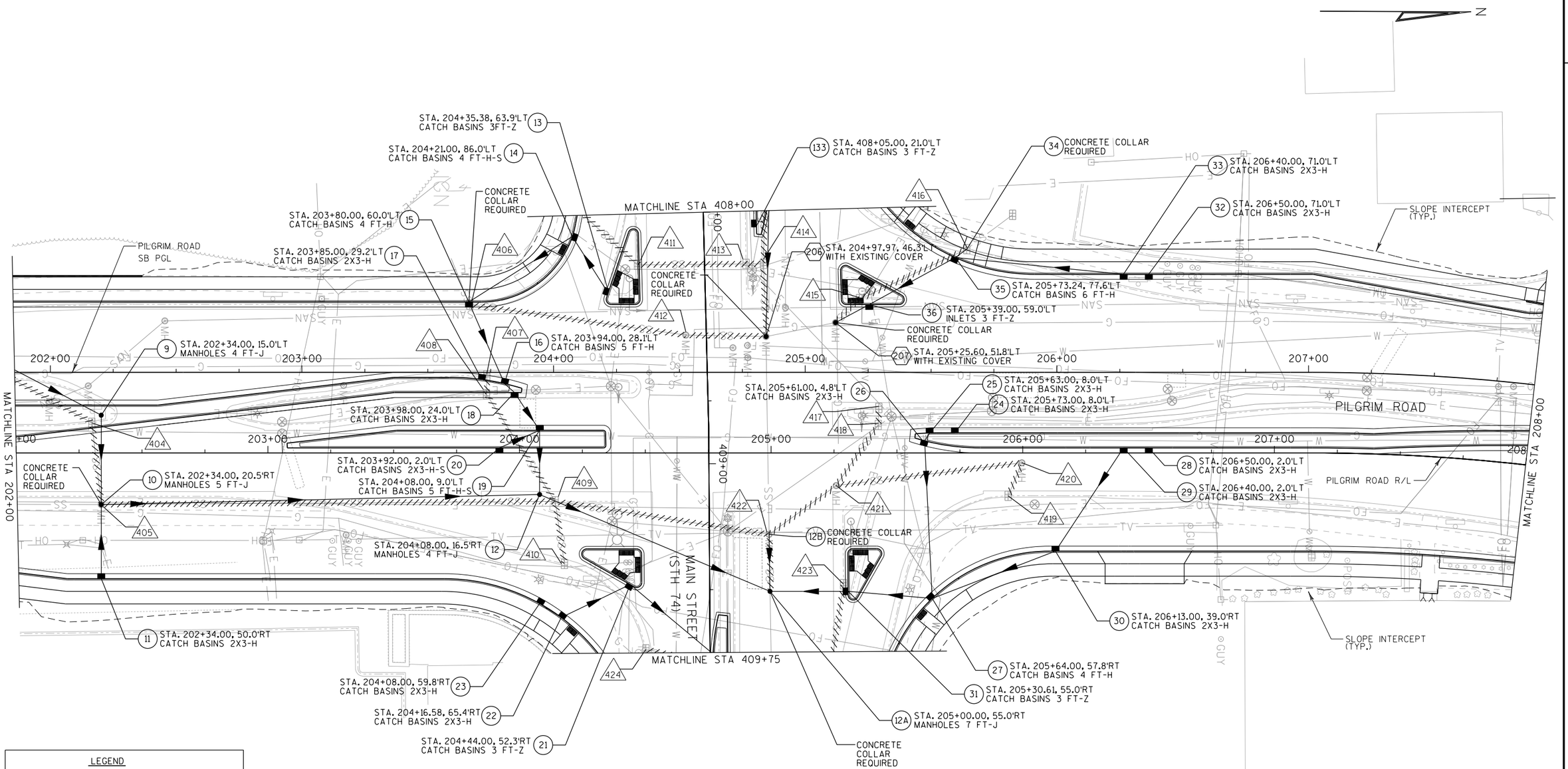
STA. 200+70.00, 39.0'RT
CATCH BASINS 2X3-H (7)

LEGEND

- (XXX) DRAINAGE STRUCTURE NUMBER
- [XXX] EXISTING DRAINAGE STRUCTURE TO BE RECONSTRUCTED
- ⟨XXX⟩ EXISTING DRAINAGE STRUCTURE TO BE ADJUSTED
- △XX EXISTING DRAINAGE STRUCTURE TO BE REMOVED
- ///// EXISTING STORM SEWER TO BE REMOVED

PROJECT NO: 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	STORM SEWER PLAN: PILGRIM ROAD	SHEET 120	E

2



PROJECT NO: 2782-11-70 & 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	STORM SEWER PLAN: PILGRIM ROAD	SHEET 121	E

2

EXISITNG DETENTION BASIN

37 STA. 208+15.83, 117.2'LT
CATCH BASINS 2X3-H-S

38 STA. 208+49.64, 108.7'LT
CATCH BASINS 2X3-H-S

CONCRETE COLLAR
REQUIRED

38A STA. 208+53.45, 87.1'LT
CATCH BASINS 2X3-H

39 STA. 208+81.00, 60.0'LT
CATCH BASINS 2X3-H

40 STA. 208+92.77, 24.5'LT
CATCH BASINS 2X3-H

SLOPE INTERCEPT

41 STA. 208+94.80, 18.7'LT
CATCH BASINS 2X3-H

42 STA. 209+05.00, 4.9'LT
CATCH BASINS 2X3-H

43 STA. 209+06.00, 2.0'LT
CATCH BASINS 2X3-H

303 STA. 208+19.98, 67.4'LT
WITH NEW TYPE J COVER

PILGRIM ROAD
SB PGL

PILGRIM ROAD R/L

MATCHLINE STA 208+00

MATCHLINE STA 214+00

48 STA. 210+97.60, 125.0'LT
12" APRON ENDWALL

47 STA. 211+61.56, 77.0'LT
INLETS 3 FT-Z

STA. 212+45.00, 114.0'LT
CATCH BASINS 2X3-H 53

52 STA. 212+33.67, 74.0'LT
CATCH BASINS 3 FT-Z

FALLS PARKWAY

57 STA. 213+27.15, 138.0'LT
30" APRON ENDWALL

54 STA. 212+64.65, 123.9'LT
12" APRON ENDWALL

56 STA. 213+17.00, 96.0'LT
12" APRON ENDWALL

55 STA. 213+17.00, 71.0'LT
CATCH BASINS 2X3-H

439

PILGRIM ROAD

61 STA. 213+20.00, 8.0'LT
CATCH BASINS 2X3-H

59 STA. 213+28.00, 8.0'LT
CATCH BASINS 2X3-H

60 STA. 213+28.00, 3.6'LT
CATCH BASINS 2X3-H

65 STA. 213+20.00, 39.6'RT
CATCH BASINS 2X3-H

62 STA. 213+20.00, 5.0'LT
CATCH BASINS 2X3-H

64 STA. 213+05.00, 47.0'RT
MANHOLES 6 FT-J

442

66 STA. 213+10.00 86.0'RT
15" APRON ENDWALL

58 STA. 213+21.51 114.0'RT
30" APRON ENDWALL

STA. 211+51.00, 31.4'RT
CATCH BASINS 3 FT-Z 49

BEGIN PROJECT 2782-12-70
STA 209+20.41

44 STA. 209+22.00, 39.0'RT
CATCH BASINS 4 FT-H

SLOPE INTERCEPT
(TYP.)

CONCRETE COLLAR
REQUIRED

STA. 211+31.98, 50.2'RT
WITH EXISTING COVER 304

CONCRETE COLLAR
REQUIRED 50

STA 211+35.00, 75.00'RT
12" APRON ENDWALL 49A

STA. 212+46.41, 43.5'RT
CATCH BASINS 3 FT-Z 63

US 41/45
SB RAMPS

MATCHLINE STA 101+50

45 STA. 208+43.78, 55.0'RT
CATCH BASINS 2X3-H

CONCRETE COLLAR
REQUIRED

46 STA. 208+91.05, 76.0'RT
CATCH BASINS 2X3-H

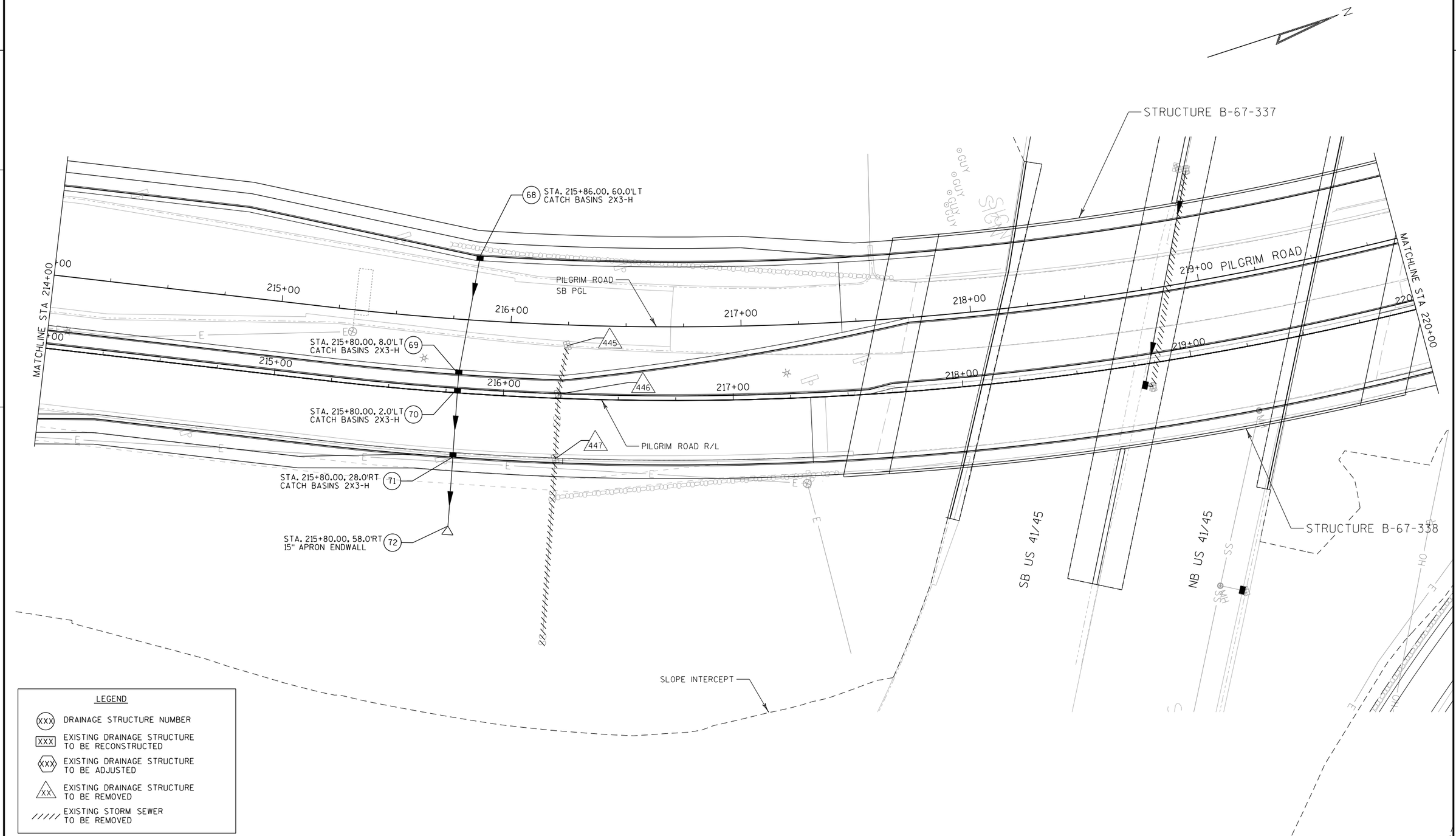
CLEVELAND
AVENUE

LEGEND

- XXX — DRAINAGE STRUCTURE NUMBER
- [XXX] — EXISTING DRAINAGE STRUCTURE TO BE RECONSTRUCTED
- ⟨XXX⟩ — EXISTING DRAINAGE STRUCTURE TO BE ADJUSTED
- △XX — EXISTING DRAINAGE STRUCTURE TO BE REMOVED
- ///// — EXISTING STORM SEWER TO BE REMOVED

PROJECT NO: 2782-11-70 & 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	STORM SEWER PLAN: PILGRIM ROAD	SHEET 122	E

2



PROJECT NO: 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	STORM SEWER PLAN: PILGRIM ROAD	SHEET 123	E

2

LEGEND

- (XXX) DRAINAGE STRUCTURE NUMBER
- [XXX] EXISTING DRAINAGE STRUCTURE TO BE RECONSTRUCTED
- (XXX) EXISTING DRAINAGE STRUCTURE TO BE ADJUSTED
- XX EXISTING DRAINAGE STRUCTURE TO BE REMOVED
- ///// EXISTING STORM SEWER TO BE REMOVED

N

US 41/45 NB RAMPS

PILGRIM ROAD

PILGRIM ROAD SB PGL

PILGRIM ROAD R/L

US 41/45 NB EXIT RAMP

MATCHLINE STA 220+00

MATCHLINE STA 226+00

220+00 221+00 222+00 223+00 224+00 225+00

STA. 223+60.00, 93.2'LT
INLETS 2X3-H (83)

STA. 223+25.00, 83.0'LT
INLETS 2X3-H (82)

STA. 222+80.57, 140.3'LT
30" APRON ENDWALL (91)

SLOPE INTERCEPT

WETLAND BOUNDARY

STA. 225+06.57, 134.7'LT
36" APRON ENDWALL (93)

STA. 225+14.57, 134.7'LT
36" APRON ENDWALL (94)

WETLAND BOUNDARY

STA. 224+84.00, 63.8'LT
INLETS 3 FT-Z (90)

STA. 221+64.76, 30.0'LT
INLETS 2X3-H (74)

STA. 221+64.76, 70.0'LT
INLETS 2X3-H (73)

STA. 221+64.76, 24.0'LT
INLETS 2X3-H (75)

STA. 223+82.00, 30.0'LT
INLETS 4 FT-H (84)

STA. 224+84.00, 59.0'LT
INLETS 3 FT-Z (88)

STA. 224+26.00, 60.0'LT
INLETS 2X3-H (89)

STA. 221+64.76, 2.0'LT
INLETS 4 FT-H (76)

STA. 223+87.00, 27.2'LT
INLETS 4 FT-H (85)

STA. 223+64.00, 24.0'LT
INLETS 2X3-H (87)

STA. 223+87.00, 9.0'LT
INLETS 2X3-H (86)

STA. 223+87.00, 2.0'LT
MANHOLES 5 FT-H (77)

CONCRETE COLLAR REQUIRED (306)

STA. 221+64.76, 28.0'RT
INLETS 2X3-H (96)

STA. 221+65.39, 34.3'RT
INLETS 2X3-H (95)

STA. 222+99.76, 69.9'RT
CONCRETE COLLAR REQUIRED (92)

SLOPE INTERCEPT

STA. 223+87.00, 40.5'RT
MANHOLES 4 FT-H (78)

(79)

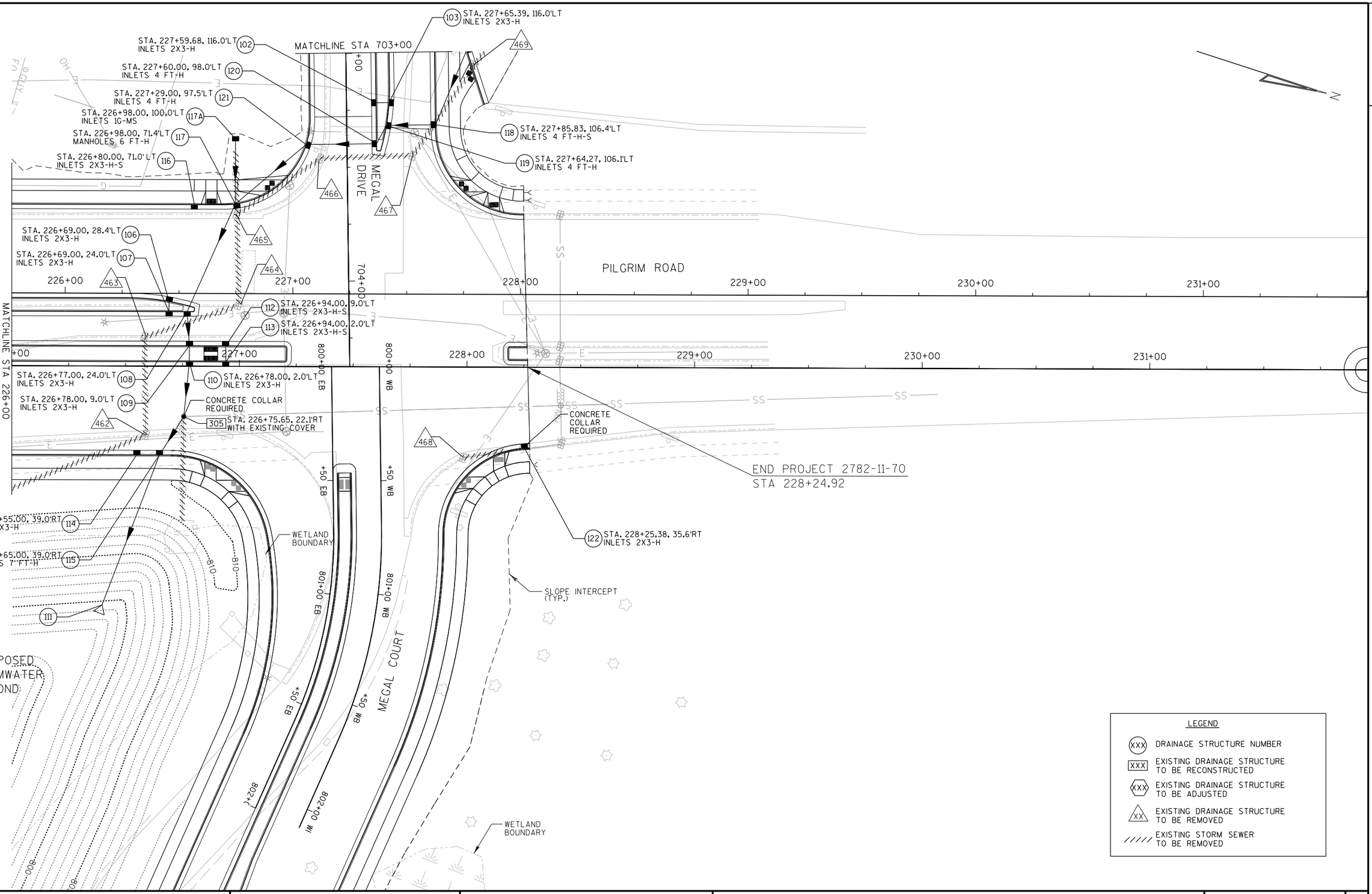
WETLAND BOUNDARY

PROPOSED STORMWATER POND

450 451 452 453 454 455 456 457 458 459 460 461

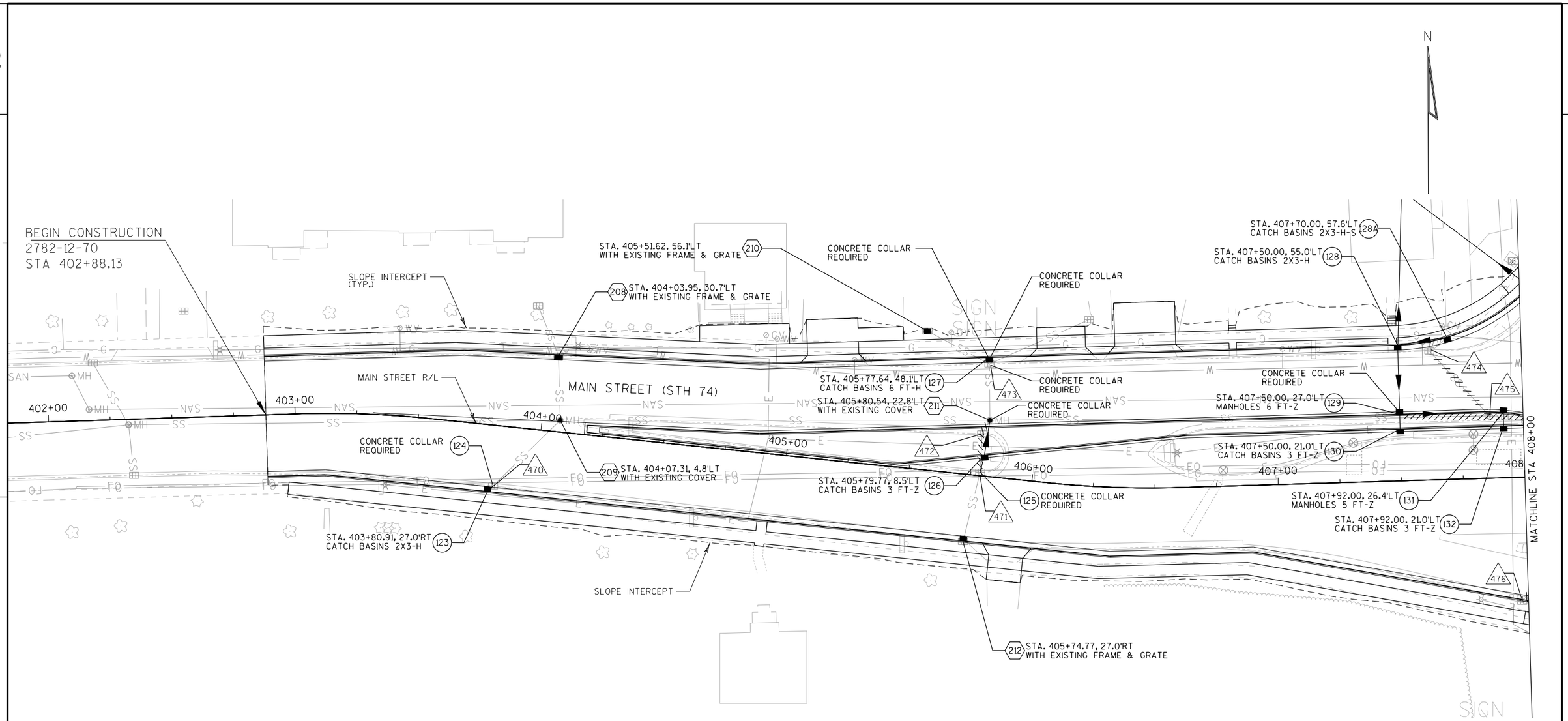
PROJECT NO: 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	STORM SEWER PLAN: PILGRIM ROAD	SHEET 124	E

2



PROJECT NO: 2782-11-70 & 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	STORM SEWER PLAN: PILGRIM ROAD	SHEET 125	E

2



LEGEND

- (XXX) DRAINAGE STRUCTURE NUMBER
- [XXX] EXISTING DRAINAGE STRUCTURE TO BE RECONSTRUCTED
- ⟨XXX⟩ EXISTING DRAINAGE STRUCTURE TO BE ADJUSTED
- △XX EXISTING DRAINAGE STRUCTURE TO BE REMOVED
- ////// EXISTING STORM SEWER TO BE REMOVED

PROJECT NO: 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	STORM SEWER PLAN: MAIN STREET	SHEET 126	E

2

N

MATCHLINE STA 409+75

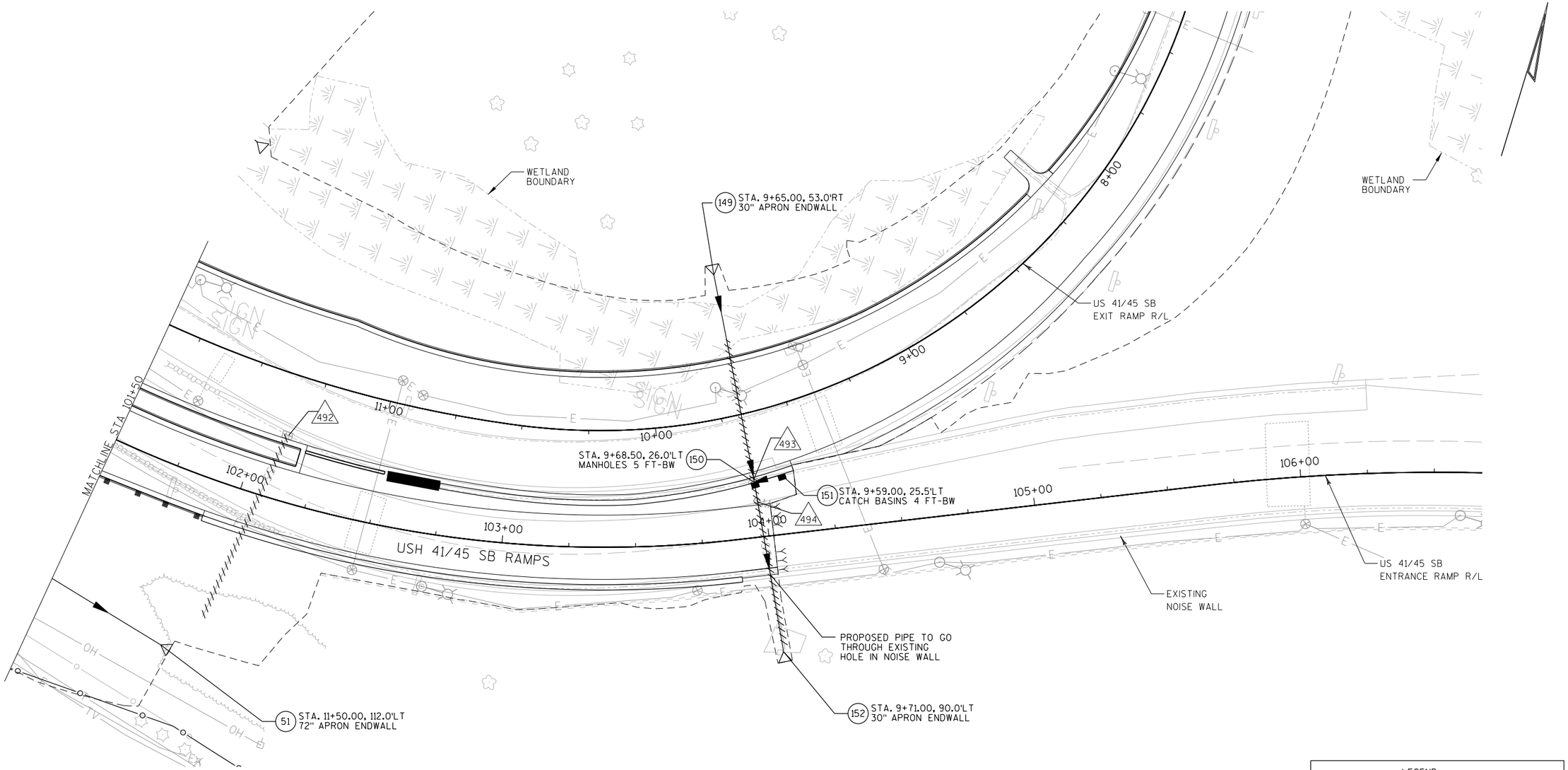
477
478
213 STA. 409+78.40, 24.2'LT WITH EXISTING COVER
CONCRETE COLLAR REQUIRED
480
214 STA. 410+38.56, 25.1'LT WITH EXISTING COVER
410+00
134 STA. 409+78.00, 4.0'LT MANHOLES 4 FT-J
481
479
411+00
STA. 411+75.50, 16.3'LT CATCH BASINS 3 FT-Z 137
STA. 411+76.03, 10.0'LT WITH EXISTING COVER 215
CONCRETE COLLAR REQUIRED
135 STA. 411+76.00, 56.4'LT CATCH BASINS 2X3-H
482
483
136 CONCRETE COLLAR REQUIRED
137A CONCRETE COLLAR REQUIRED
484
CONCRETE COLLAR REQUIRED
CONCRETE COLLAR REQUIRED
485
STAL 411+75.50, 1.0'LT CATCH BASINS 3 FT-Z 138
139 CONCRETE COLLAR REQUIRED
487
486
140 STA. 411+75.50, 28.0'RT CATCH BASINS 2X3-H
SLOPE INTERCEPT
412+00
141 STA. 412+47.00, 13.4'LT CATCH BASINS 3 FT-Z
142 STA. 412+47.00, 6.9'LT CATCH BASINS 3 FT-Z
413+00
SLOPE INTERCEPT
CONCRETE COLLAR REQUIRED
145 STA. 413+45.00, 45.7'LT CATCH BASINS 2X3-H ADJUST LOCATION TO INTERCEPT EXISITNG STORM SEWER FROM NW
145A STA. 413+71.00, 44.4'LT CATCH BASINS 2X3-H
146 CONCRETE COLLAR REQUIRED
488
143 STA. 413+25.00, 9.3'LT MANHOLES 4 FT-C
144 STA. 413+25.00, 3.6'RT MANHOLES 6 FT-J
489
CONCRETE COLLAR REQUIRED
CONCRETE COLLAR REQUIRED
216 STA. 413+70.11, 2.3'LT WITH EXISTING COVER
414+00
MAIN STREET (STH 74)
490
491
CONCRETE COLLAR REQUIRED
415+00
STA. 413+63+00, 28.0'RT CATCH BASINS 2X3-H 147
STA. 413+70.50, 28.0'RT CATCH BASINS 2X3-H 148
MAIN STREET R/L
416+00
END CONSTRUCTION
2782-12-70
STA 414+95.36

LEGEND

- XXX — DRAINAGE STRUCTURE NUMBER
- XXX — EXISTING DRAINAGE STRUCTURE TO BE RECONSTRUCTED
- XXX — EXISTING DRAINAGE STRUCTURE TO BE ADJUSTED
- XX — EXISTING DRAINAGE STRUCTURE TO BE REMOVED
- ///// — EXISTING STORM SEWER TO BE REMOVED

PROJECT NO: 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	STORM SEWER PLAN: MAIN STREET	SHEET 127	E

2

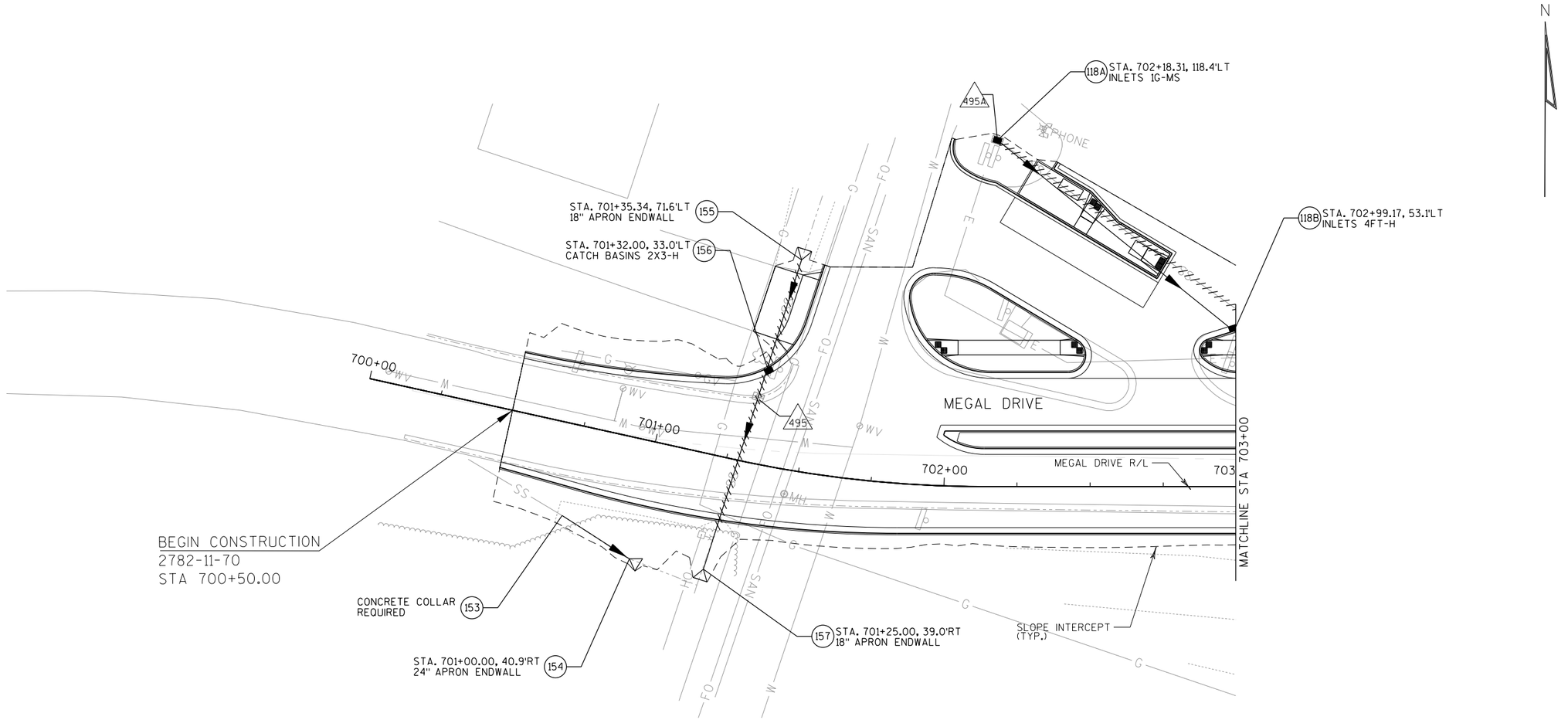


LEGEND

- (XXX) DRAINAGE STRUCTURE NUMBER
- [XXX] EXISTING DRAINAGE STRUCTURE TO BE RECONSTRUCTED
- ⟨XXX⟩ EXISTING DRAINAGE STRUCTURE TO BE ADJUSTED
- △XX EXISTING DRAINAGE STRUCTURE TO BE REMOVED
- ///// EXISTING STORM SEWER TO BE REMOVED

PROJECT NO: 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	STORM SEWER PLAN: SB USH 41/45 RAMPS	SHEET 128	E

2



LEGEND

- (XXX) DRAINAGE STRUCTURE NUMBER
- [XXX] EXISTING DRAINAGE STRUCTURE TO BE RECONSTRUCTED
- ⟨XXX⟩ EXISTING DRAINAGE STRUCTURE TO BE ADJUSTED
- △XX EXISTING DRAINAGE STRUCTURE TO BE REMOVED
- ///// EXISTING STORM SEWER TO BE REMOVED

PROJECT NO: 2782-11-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	STORM SEWER PLAN: MEGAL DRIVE	SHEET 129	E

2

STA. 907+35.00SB, 32.0'LT (172)
INLET MEDIAN 1 GRATE-MS

STA. 803+99.00WB, 26.8'LT (159)
INLETS 2X3-H-S

STA. 906+94.00SB, 31.0'LT (171)
MANHOLES 4 FT-J

STA. 803+87.00WB, 27.0'LT (158)
INLETS 2X3-H

STA. 906+85.00SB, 2.0'RT (169)
INLETS 2X3-H-S

STA. 803+89.00WB, 2.4'RT (161)
INLETS 2X3-H

STA. 803+99.00WB, 2.0'RT (160)
INLETS 2X3-H-S

STA. 906+94.00SB, 18.0'LT (170)
INLETS 2X3-H-S

497

STA. 906+89.00, 18.1'RT (167)
INLETS 2X3-H-S

STA. 906+84.00NB, 2.0'LT (168)
INLETS 2X3-H-S

SLOPE INTERCEPT
(TYP.)

END CONSTRUCTION 2782-11-70
BEGIN PROJECT 2720-10-70
STA 603+77.60

MEGAL COURT

STA. 807+10.00WB, 18.0'LT (180)
CATCH BASINS 2X3-H

STA. 807+10.00WB, 2.0'RT (181)
CATCH BASINS 2X3-H

STA. 807+11.00EB, 2.0'LT (182)
CATCH BASINS 2X3-H

STA. 805+85.20EB, 9.9'LT (179)
CATCH BASINS 2X3-H

ASPHALTIC
FLUME

WACKER NEUSON ENTRANCE

STA. 804+27.40EB, 6.7'LT (173)
INLETS 4 FT-H

STA. 803+87.00EB, 2.0'LT (163)
INLETS 2X3-H

STA. 803+84.00EB, 18.4'RT (165)
INLETS 2X3-H

STA. 803+97.00EB, 2.0'LT (162)
INLETS 2X3-H-S

STA. 803+97.00EB, 19.1'RT (164)
INLETS 4 FT-H-S

STA. 804+17.50EB, 33.5'RT (166)
MANHOLES 4FT-J

STA. 807+20.00EB, 28.0'RT (184)
MANHOLES 4FT-J

STA. 808+00.00EB, 41.0'RT (188)
15" APRON ENDWALL

STA. 807+11.00EB, 18.0'RT (183)
CATCH BASINS 2X3-H

STA. 1+93.00C, 2.0'LT (178)
CATCH BASINS 4FT-T

STA. 13+15.00, 20.0'LT (187)
CATCH BASINS 2X3-H

STA. 1+83.00C, 2.0'LT (177)
CATCH BASINS 4FT-T

STA. 13+15.00, 2.0'RT (186)
CATCH BASINS 2X3-H

STA. 904+98.24, 6.7'LT (176)
CATCH BASINS 2X3-H

STA. 13+37.00SE, 15.0'RT (185)
INLET MEDIAN 1 GRATE-MS

HARLEY LOADING DOCK ENTRANCE

HARLEY DAVIDSON
MAIN ENTRANCE

PROPOSED
STORMWATER
POND

WETLAND
BOUNDARY

SLOPE INTERCEPT
(TYP.)

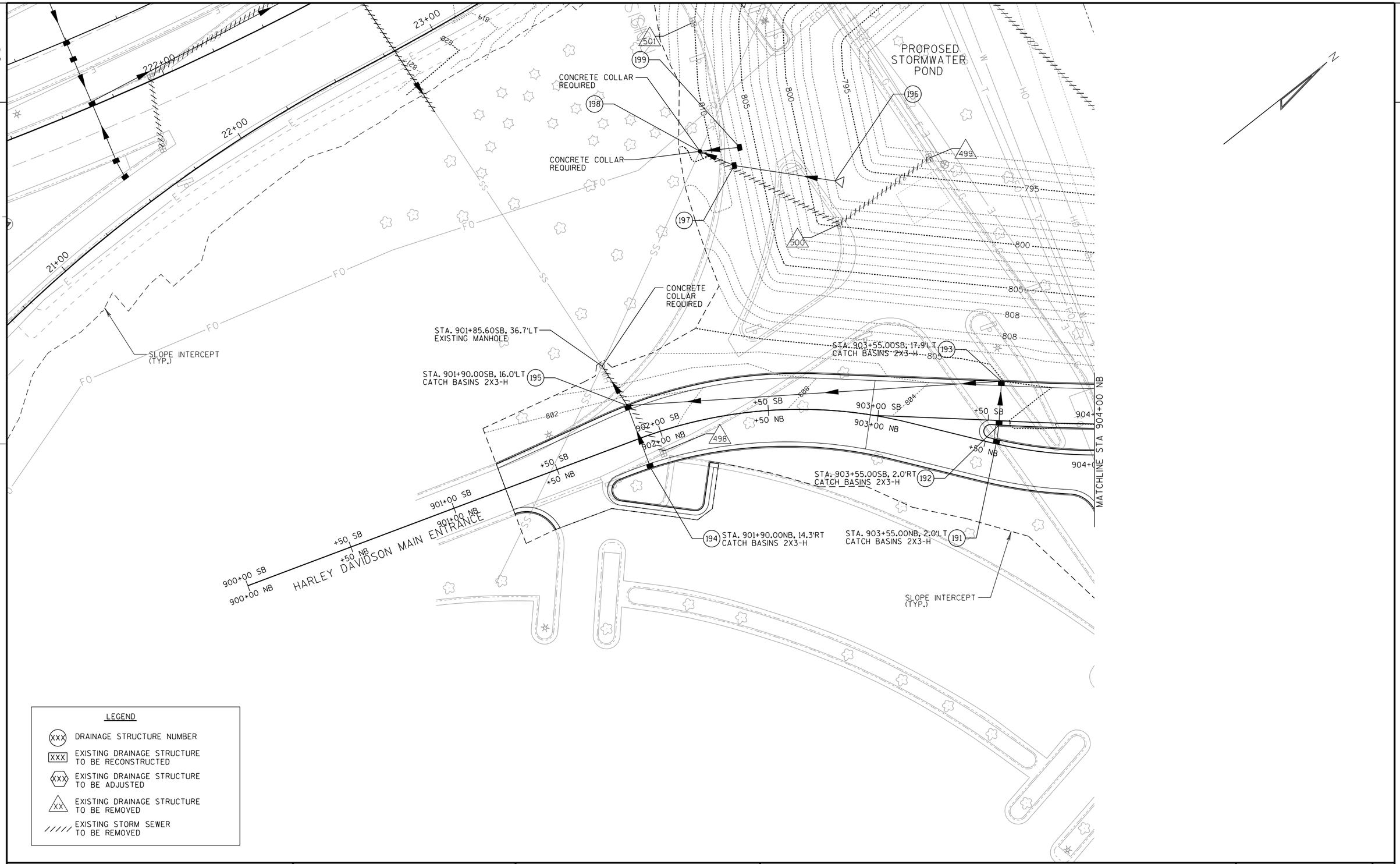
MATCHLINE STA 904+00 NB

LEGEND

- (XXX) DRAINAGE STRUCTURE NUMBER
- XXX EXISTING DRAINAGE STRUCTURE TO BE RECONSTRUCTED
- XXX EXISTING DRAINAGE STRUCTURE TO BE ADJUSTED
- XXX EXISTING DRAINAGE STRUCTURE TO BE REMOVED
- ///// EXISTING STORM SEWER TO BE REMOVED

PROJECT NO: 2782-11-70 & 2720-10-70	HWY: MEGAL COURT	COUNTY: WAUKESHA	STORM SEWER PLAN: MEGAL COURT	SHEET 130	E

2



LEGEND

- (XXX) DRAINAGE STRUCTURE NUMBER
- [XXX] EXISTING DRAINAGE STRUCTURE TO BE RECONSTRUCTED
- ⟨XXX⟩ EXISTING DRAINAGE STRUCTURE TO BE ADJUSTED
- ⟨XX⟩ EXISTING DRAINAGE STRUCTURE TO BE REMOVED
- ///// EXISTING STORM SEWER TO BE REMOVED

PROJECT NO: 2720-10-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	STORM SEWER PLAN: HARLEY DAVIDSON MAIN ENTRANCE	SHEET 131	E

2

STA. 224+35.00, 99.0'RT
24" APRON ENDWALL (79)

STA. 902+47.00NB, 120.0'LT
INLET MEDIAN 2 GRATE-MS (199)

CONCRETE COLLAR REQUIRED

STA. 902+35.00NB, 120.2'LT
MANHOLES 8 FT-J (198)

ADJUST LOCATION AS NECESSARY TO MATCH EXISTING PIPE CONNECTION

CONCRETE COLLAR REQUIRED

SLOPE INTERCEPT (TYP.)

EXISTING 60" SSPRC

STA. 902+45.00NB, 112.0'LT
OUTLET CONTROL STRUCTURE (197)

EXISTING 60" STORM SEWER
TOP OF PIPE APPROXIMATELY
797.89

STA. 902+75.00NB, 104.0'LT
12" APRON ENDWALL (196)

10-FT SAFETY SHELF

STA. 226+40.00, 105.0'RT
48" APRON ENDWALL
WITH PIPE GRATE (111)

WETLAND BOUNDARY

PROPOSED
STORMWATER POND

HARLEY DAVIDSON MAIN ENTRANCE

MEGAL COURT

STA. 803+70.00EB, 89.0'RT
24" APRON ENDWALL (174)

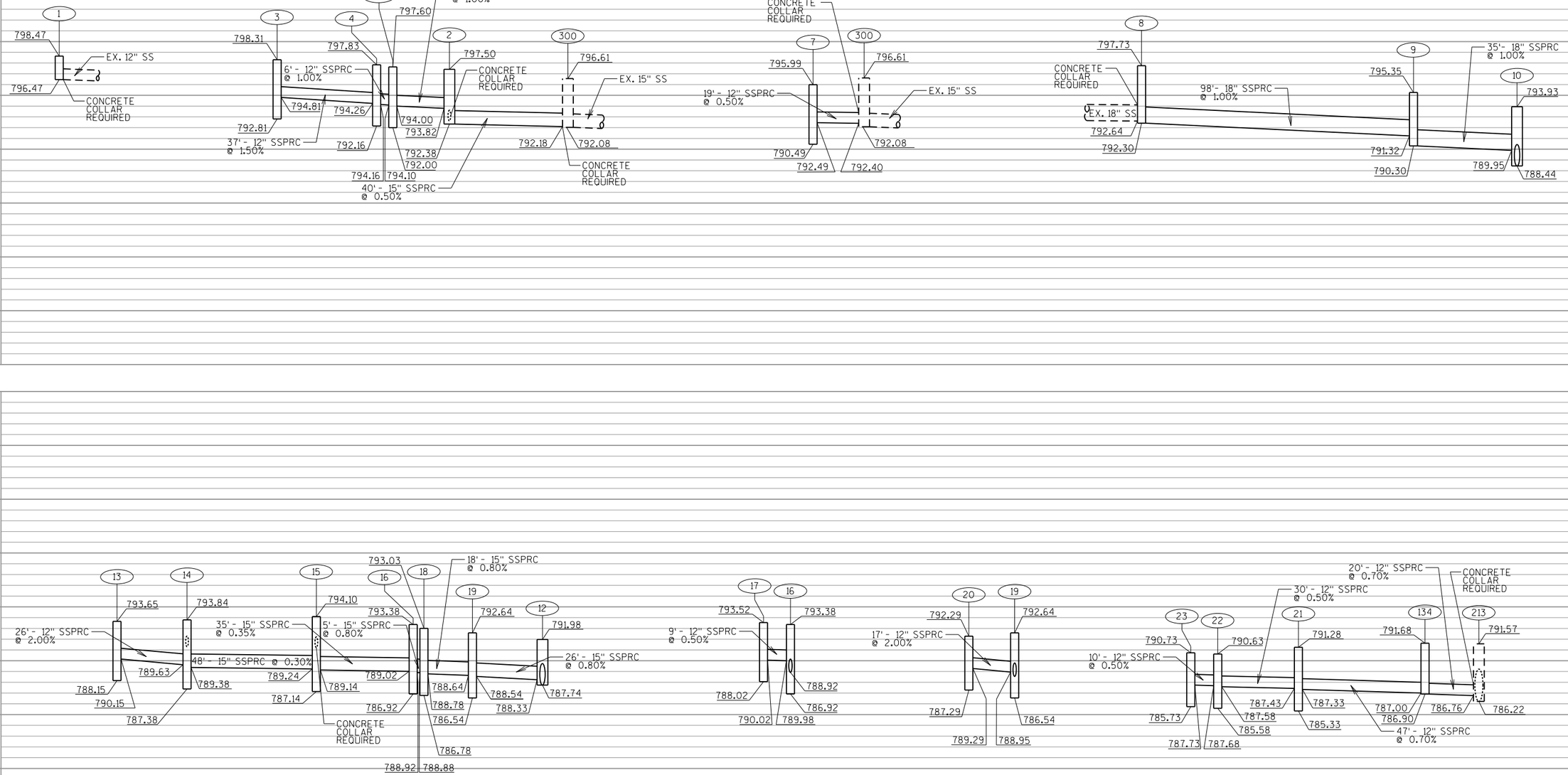
WETLAND BOUNDARY

SLOPE INTERCEPT (TYP.)

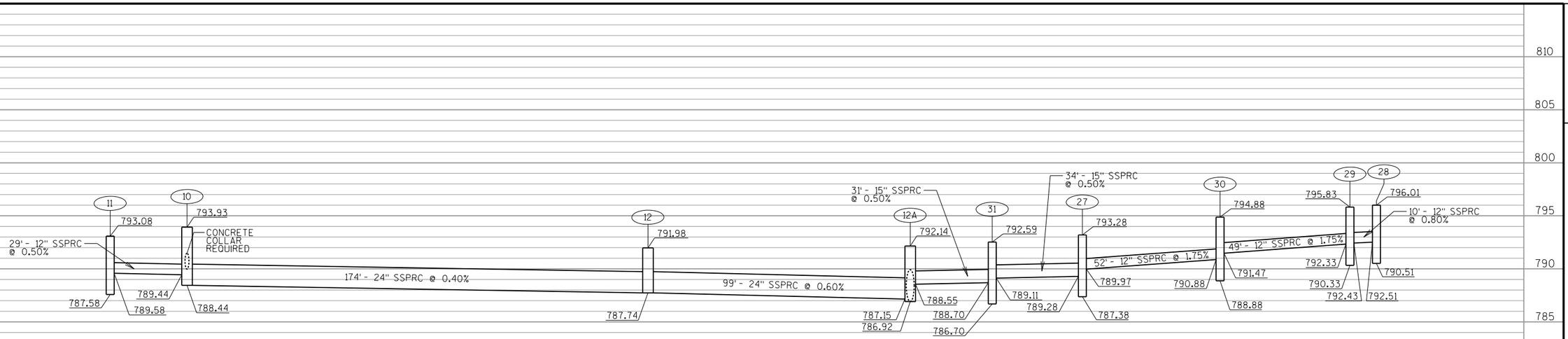
LEGEND

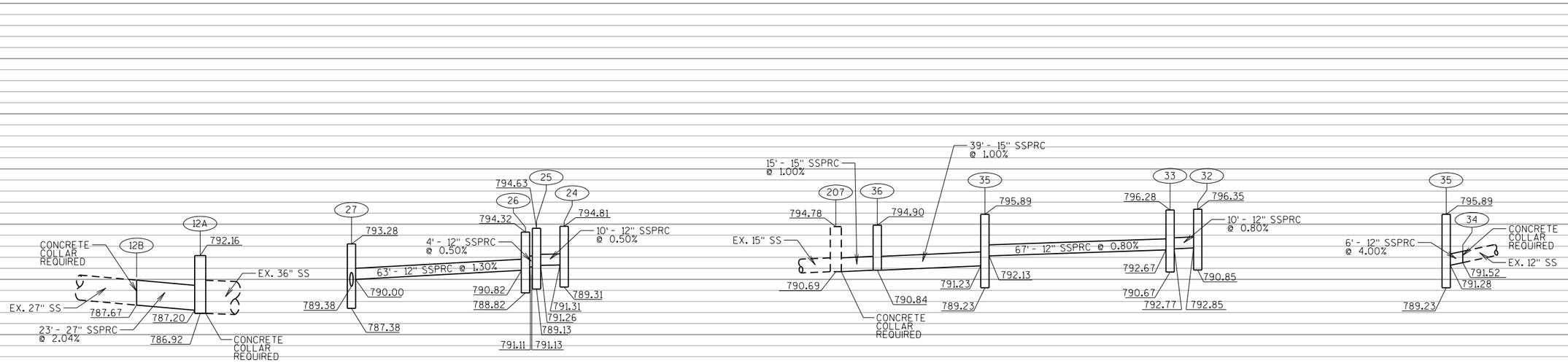
- (XXX) DRAINAGE STRUCTURE NUMBER
- [XXX] EXISTING DRAINAGE STRUCTURE TO BE RECONSTRUCTED
- (XXX) EXISTING DRAINAGE STRUCTURE TO BE ADJUSTED
- XX EXISTING DRAINAGE STRUCTURE TO BE REMOVED
- ////// EXISTING STORM SEWER TO BE REMOVED

PROJECT NO: 2720-10-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	STORMWATER POND DETAILS - FINAL CONDITION	SHEET 132	E

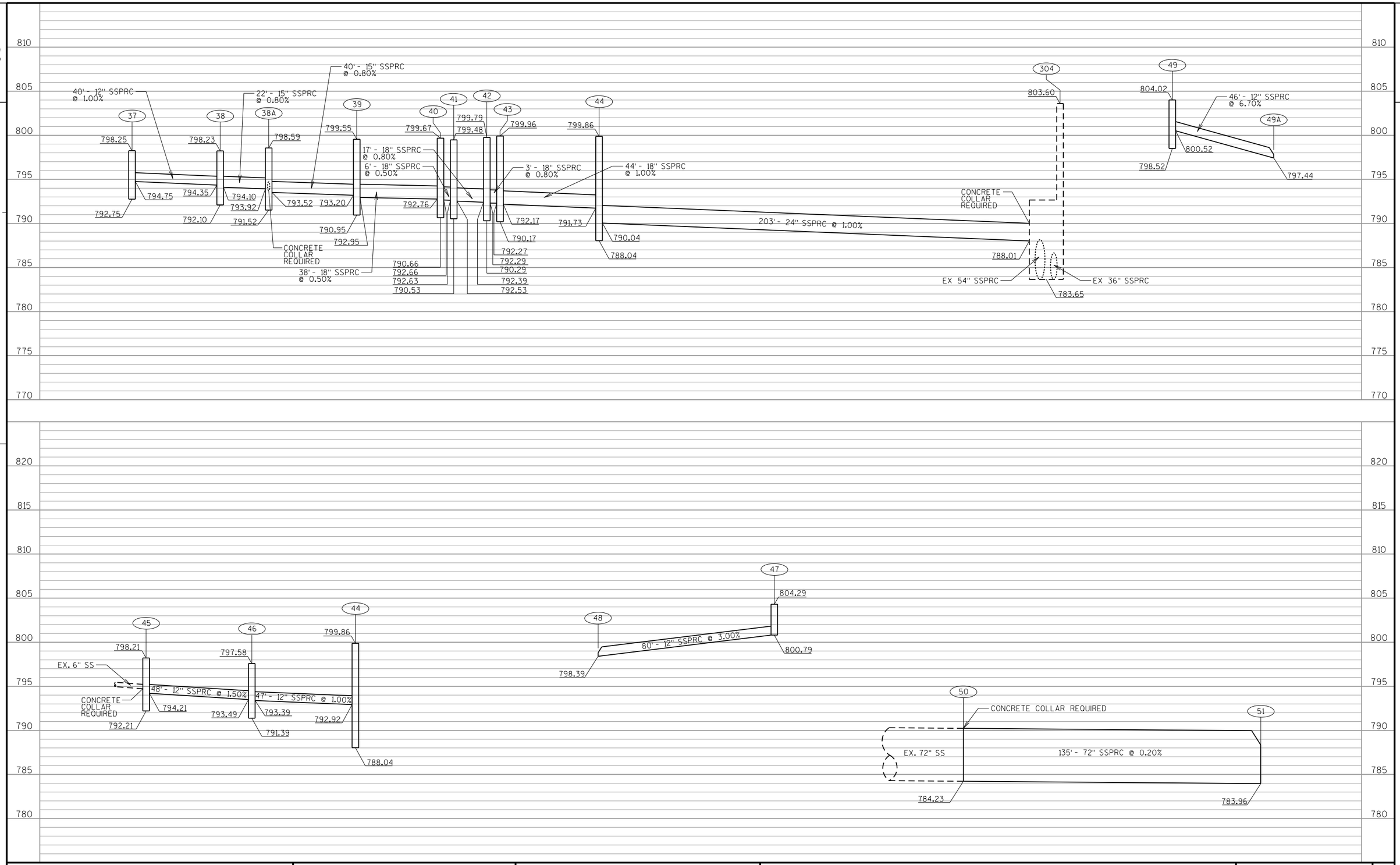


PROJECT NO: 2782-11-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	STORM SEWER PLAN	SHEET 133	E

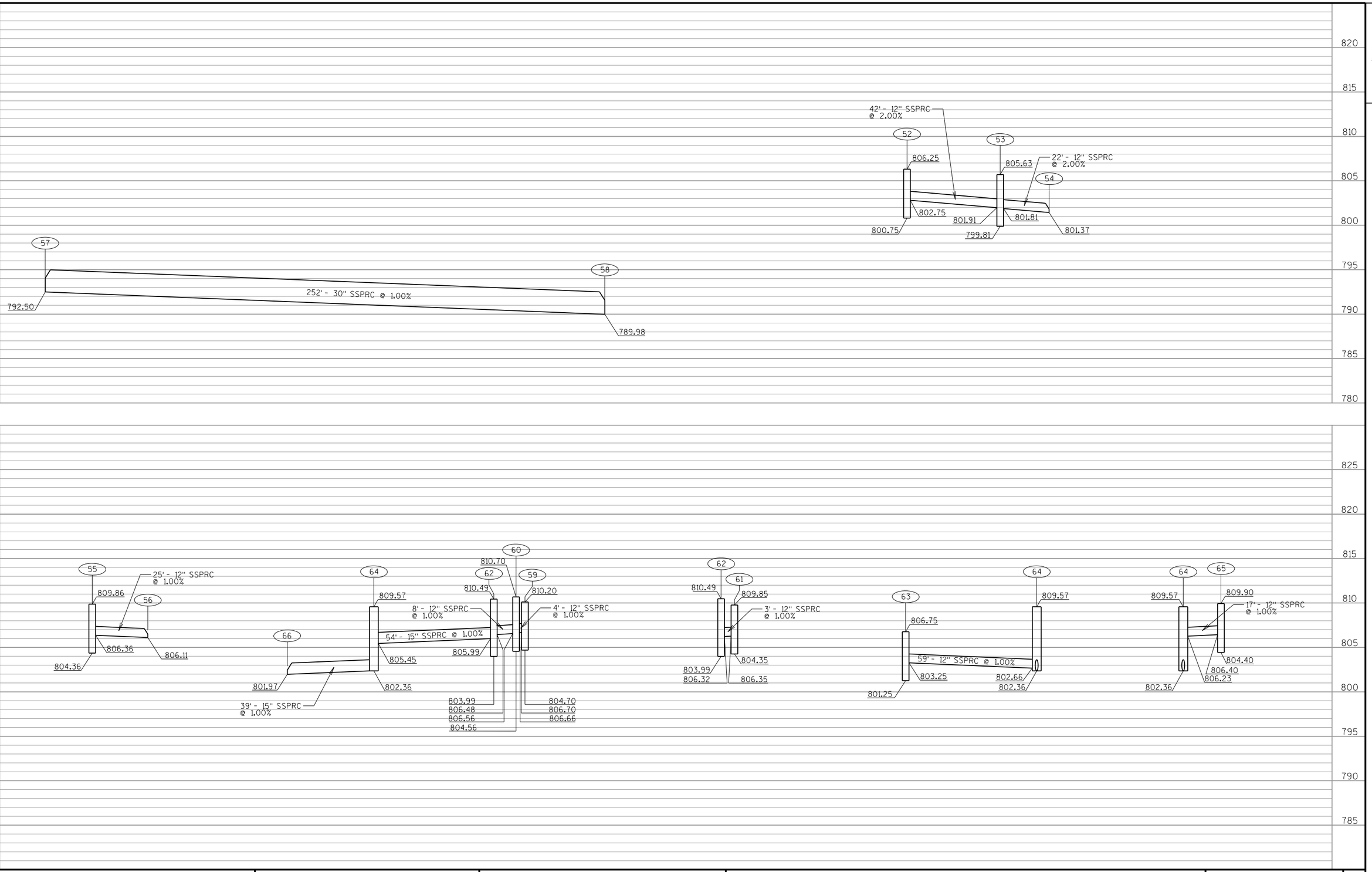




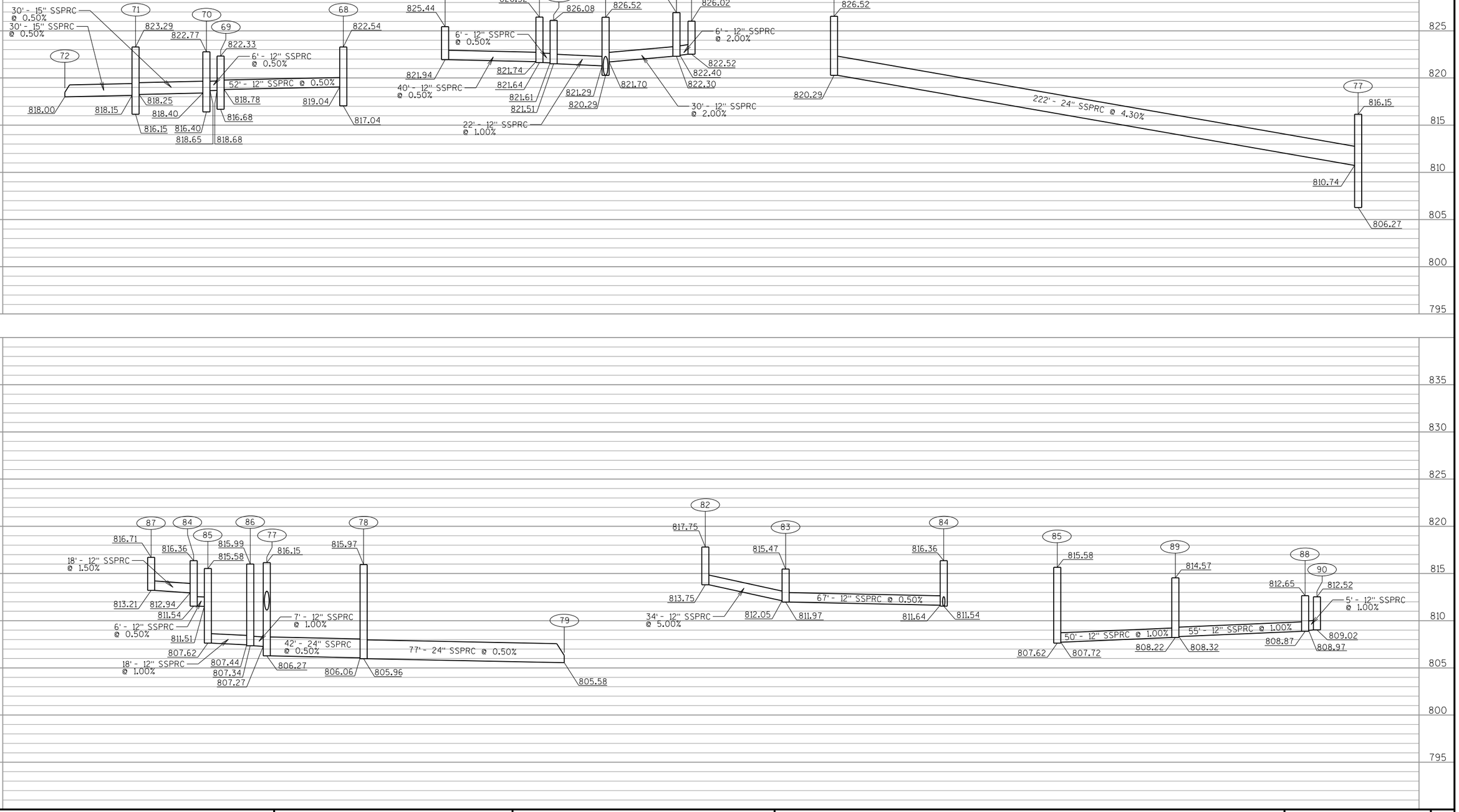
PROJECT NO: 2782-11-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	STORM SEWER PLAN	SHEET 134	E



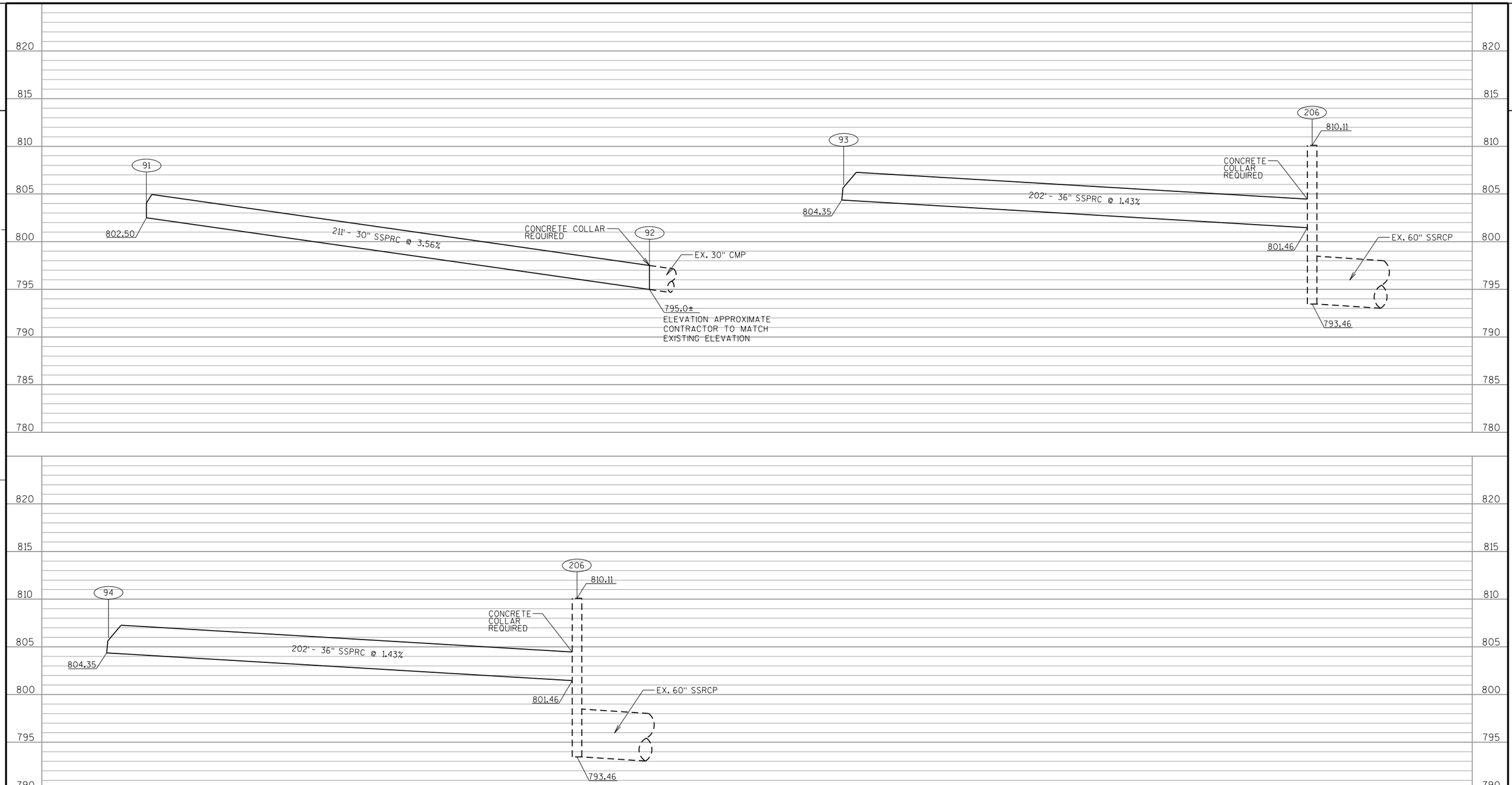
PROJECT NO: 2782-11-70 & 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	STORM SEWER PLAN	SHEET 135	E



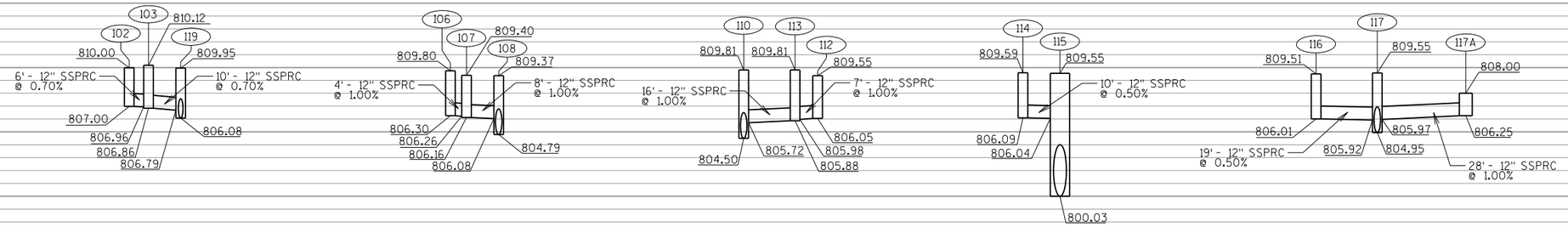
PROJECT NO: 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	STORM SEWER PLAN	SHEET 136	E

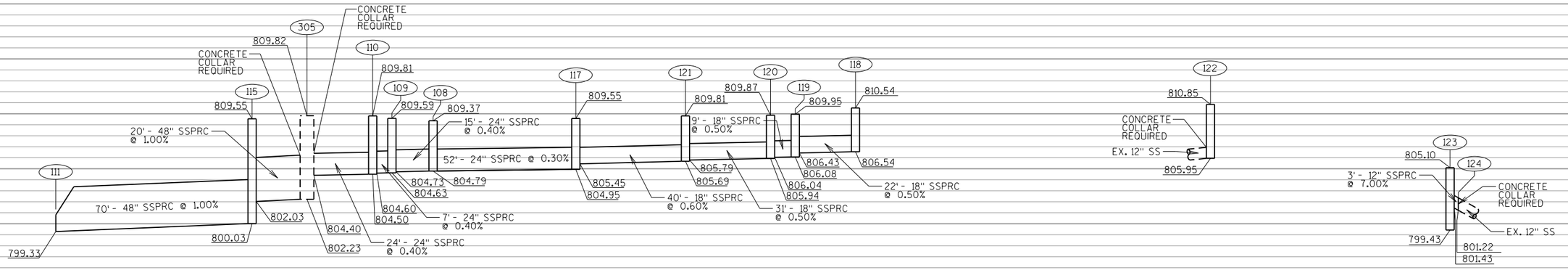


PROJECT NO: 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	STORM SEWER PLAN	SHEET 137	E

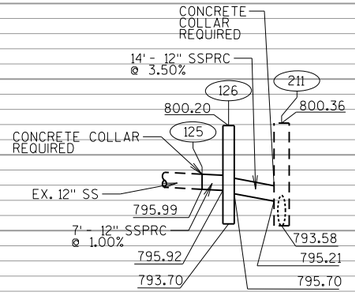


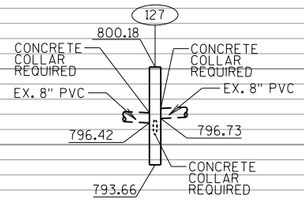
PROJECT NO: 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	STORM SEWER PLAN	SHEET 138	E

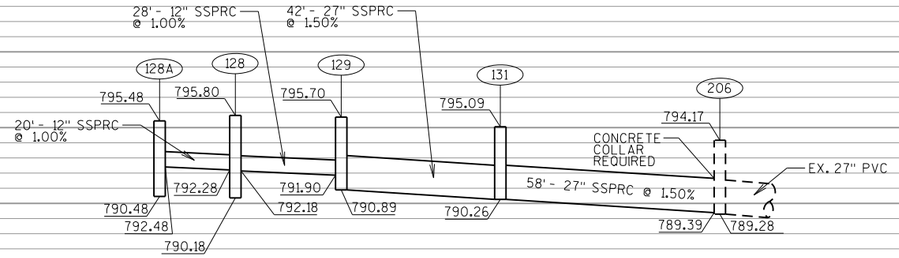


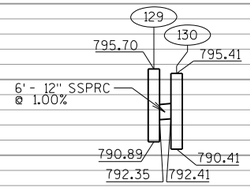


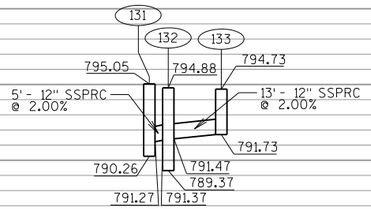
PROJECT NO: 2782-11-70 & 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	STORM SEWER PLAN	SHEET 139	E

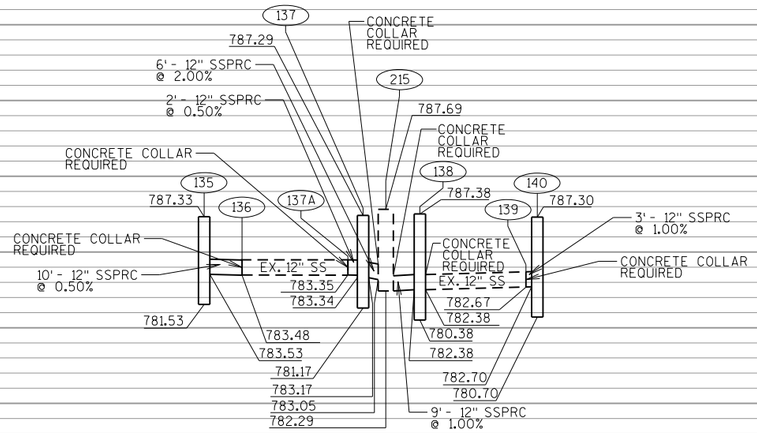




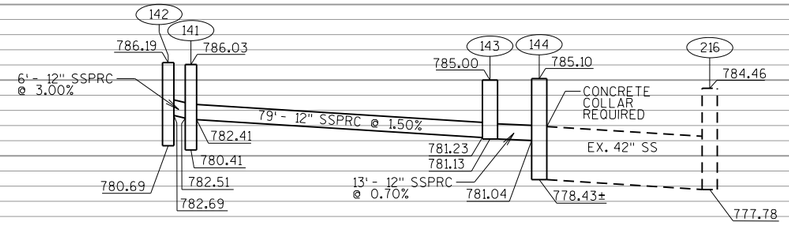


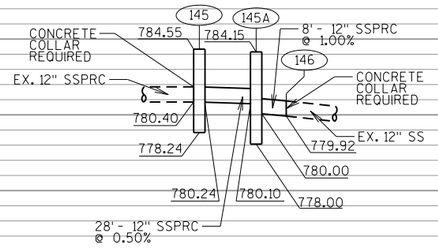


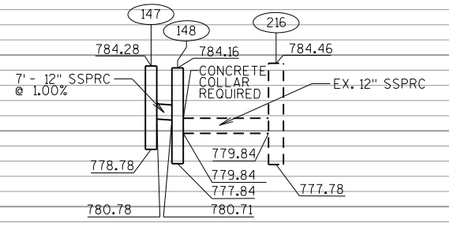


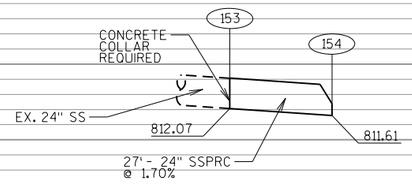


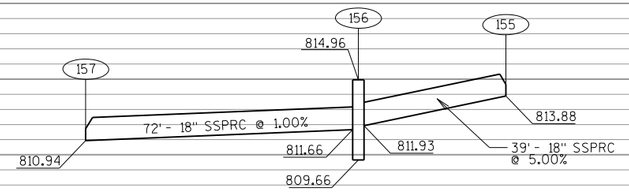
PROJECT NO: 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	STORM SEWER PLAN	SHEET 140	E

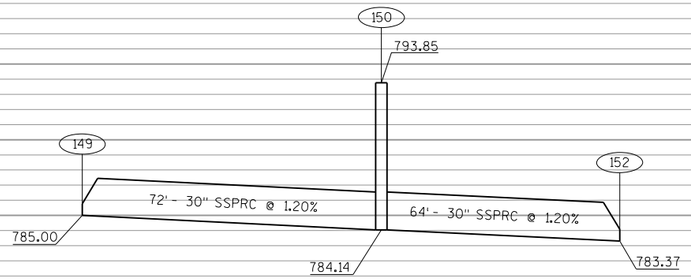


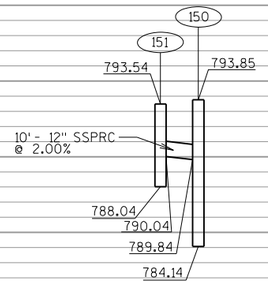




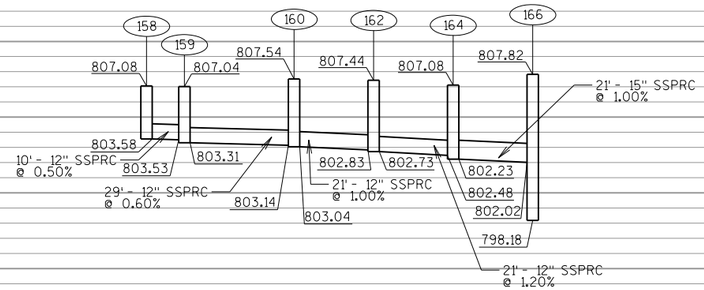


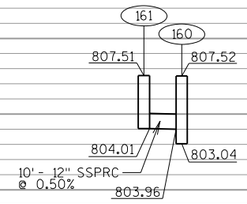


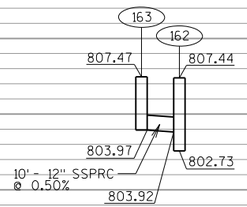


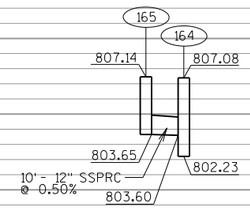


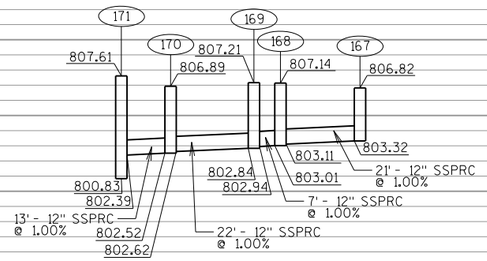
PROJECT NO: 2782-11-70 & 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	STORM SEWER PLAN	SHEET 141	E

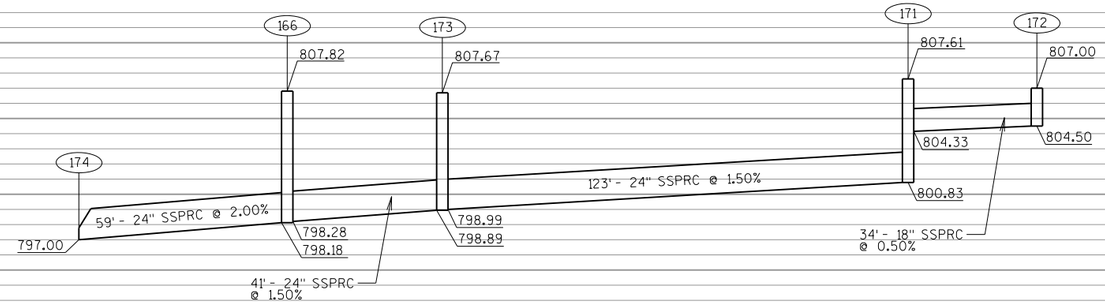




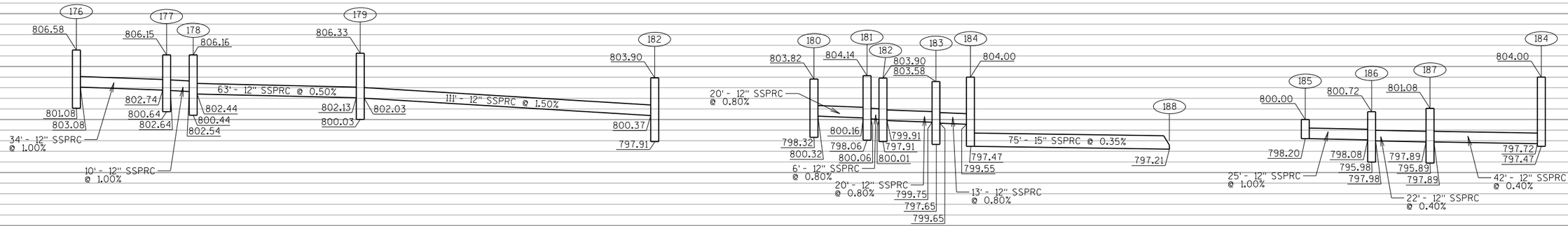


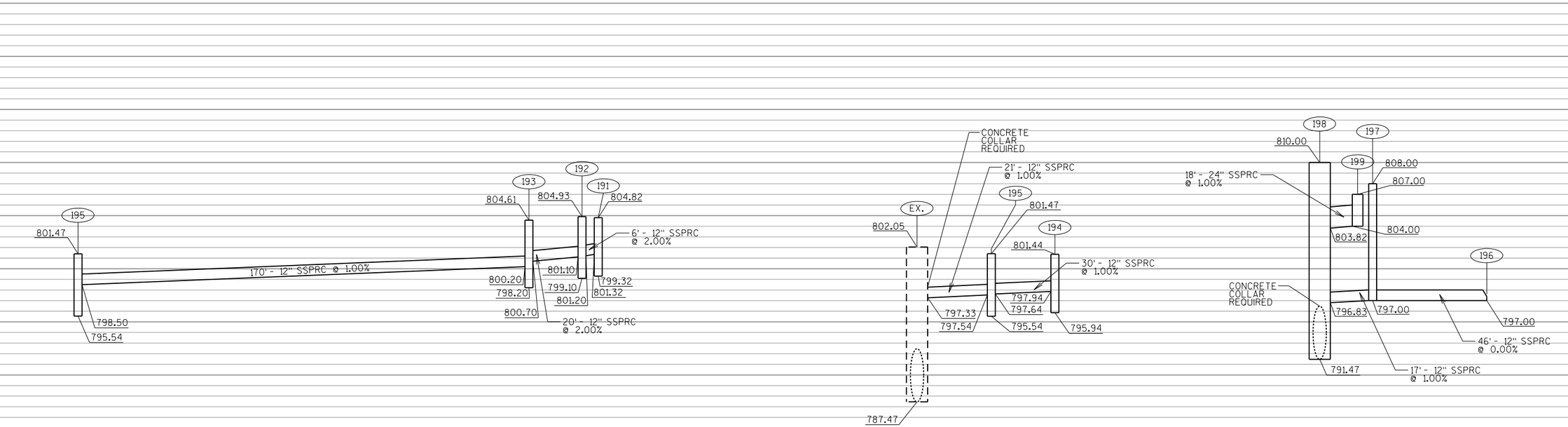






PROJECT NO: 2782-11-70 & 2720-10-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	STORM SEWER PLAN	SHEET 142	E





PROJECT NO: 2720-10-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	STORM SEWER PLAN	SHEET 143	E

STRUCT. NO.	STATION	OFFSET	C-C (FT)	TO STRUCT.	INLET/CB TYPE & COVER	MH TYPE & COVER	RIM/GRATE ELEV.	DEPTH (FT)	SIZE (IN)	DISCHARGE PIPE INLET ELEV.	DISCH. ELEV.	LENGTH (FT)	SLOPE (%)	PIPE CLASS	REMARKS	PIPE JOINT TIES
1	199+87.00	64.1' LT	--	200	INL 1G MS	-- --	798.47	2.00	12	796.47	--	--	--	--	CONNECT EXISTING STORM SEWER, 12" E I.E. 796.47+/- CONCRETE COLLAR REQUIRED	
2	200+35.00	0.0' RT	40	300	-- --	4FT J	797.50	5.12	15	792.38	792.18	40.00	0.50	III	CONNECT EXISTING STORM SEWER, 12" SW I.E. 792.72+/- CONCRETE COLLAR REQUIRED. CONNECT TO EXISTING STRUCTURE 300. CONCRETE COLLAR REQUIRED.	
3	200+58.00	56.5' LT	37	4	CB 2X3 H-S	-- --	798.31	3.50	12	794.81	794.26	37.00	1.50	III		
4	200+45.00	21.8' LT	6	5	CB 2X3 H	-- --	797.83	3.67	12	794.16	794.10	6.00	1.00	III		
5	200+45.00	15.8' LT	18	2	CB 2X3 H	-- --	797.60	3.60	12	794.00	793.82	18.00	1.00	III		
7	200+70.00	39.0' RT	19	300	CB 2X3 H	-- --	795.99	3.50	12	792.49	792.40	19.00	0.50	III	CORE INTO EXISTING STRUCTURE 300. CONCRETE COLLAR REQUIRED.	
8	201+46.50	60.7' LT	98	9	CB 4FT H	-- --	797.73	5.43	18	792.30	791.32	98.00	1.00	III	CONNECT EXISTING STORM SEWER, 18" SW I.E. 792.64+/- CONCRETE COLLAR REQUIRED	
9	202+34.00	15.0' LT	35	10	-- --	4FT J	795.35	5.05	18	790.30	789.95	35.00	1.00	III		
10	202+34.00	20.5' RT	174	12	-- --	5FT J	793.93	5.49	24	788.44	787.74	174.00	0.40	III	CONNECT EXISTING STORM SEWER, 15" S I.E. 790.22+/- CONCRETE COLLAR REQUIRED.	
11	202+34.00	50.0' RT	29	10	CB 2X3 H	-- --	793.08	3.50	12	789.58	789.44	29.00	0.50	III		
12	204+08.00	16.5' RT	99	12A	-- --	4FT J	791.98	4.24	24	787.74	787.15	99.00	0.60	III		
12A	205+00.00	55.0'RT	--	--	-- --	7FT J	792.14	5.22	36	786.92	--	--	--	--	CONNECT EXISTING STORM SEWER, 36" E I.E. 786.92+/- CONCRETE COLLAR REQUIRED.	
12B	--	--	23	12A	-- --	-- --	--	--	27	787.67	787.20	23.00	2.04	III	CONNECT EXISTING STORM SEWER, 27" W I.E. 787.67+/- CONCRETE COLLAR REQUIRED.	
13	204+35.38	63.9' LT	26	14	CB 3FT Z	-- --	793.65	3.50	12	790.15	789.63	26.00	2.00	III		
14	204+21.00	86.0' LT	48	15	CB 4FT H-S	-- --	793.84	4.46	15	789.38	789.24	48.00	0.30	III		
15	203+80.00	60.0' LT	35	16	CB 4FT H	-- --	794.10	4.96	15	789.14	789.02	35.00	0.35	III	CONNECT EXISTING STORM SEWER, 12" W I.E. 791.30+/- CONCRETE COLLAR REQUIRED.	
16	203+94.00	28.1' LT	5	18	CB 5FT H	-- --	793.38	4.46	15	788.92	788.88	5.00	0.80	III		
17	203+85.00	29.2' LT	9	16	CB 2X3 H	-- --	793.52	3.50	12	790.02	789.98	9.00	0.50	III		
18	203+98.00	24.0' LT	18	19	CB 2X3 H	-- --	793.03	4.25	15	788.78	788.64	18.00	0.80	III		
19	204+08.00	9.0' LT	26	12	CB 5FT H-S	-- --	792.64	4.10	15	788.54	788.33	26.00	0.80	III		
20	203+92.00	2.0' LT	17	19	CB 2X3 H-S	-- --	792.29	3.00	12	789.29	788.95	17.00	2.00	III		
21	204+44.00	52.3' RT	47	134	CB 3FT Z	-- --	791.28	3.95	12	787.33	787.00	47.00	0.70	III		
22	204+16.58	65.4' RT	30	21	CB 2X3 H	-- --	790.63	3.05	12	787.58	787.43	30.00	0.50	III		
23	204+08.00	59.8' RT	10	22	CB 2X3 H	-- --	790.73	3.00	12	787.73	787.68	10.00	0.50	III		
24	205+73.00	8.0' LT	10	25	CB 2X3 H	-- --	794.81	3.50	12	791.31	791.26	10.00	0.50	III		
25	205+63.00	8.0' LT	4	26	CB 2X3 H	-- --	794.63	3.50	12	791.13	791.11	4.00	0.50	III		
26	205+61.00	4.8' LT	63	27	CB 2X3 H	-- --	794.32	3.50	12	790.82	790.00	63.00	1.30	III		
27	205+64.00	57.8' RT	34	31	CB 4FT H	-- --	793.28	4.00	15	789.28	789.11	34.00	0.50	III		
28	206+50.00	2.0' LT	10	29	CB 2X3 H	-- --	796.01	3.50	12	792.51	792.43	10.00	0.80	III		
29	206+40.00	2.0' LT	49	30	CB 2X3 H	-- --	795.83	3.50	12	792.33	791.47	49.00	1.75	III		
30	206+13.00	39.0' RT	52	27	CB 2X3 H	-- --	794.88	4.00	12	790.88	789.97	52.00	1.75	III		
31	205+30.61	55.0' RT	31	12A	CB 3FT Z	-- --	792.59	3.89	15	788.70	788.55	31.00	0.50	III		
32	206+50.00	71.0' LT	10	33	CB 2X3 H	-- --	796.35	3.50	12	792.85	792.77	10.00	0.80	III		
33	206+40.00	71.0' LT	67	35	CB 2X3 H	-- --	796.28	3.61	12	792.67	792.13	67.00	0.80	III		
34	--	--	6	35	-- --	-- --	--	--	12	791.52	791.28	6.00	4.00	III	CONNECT EXISTING STORM SEWER, 12" NW I.E. 791.52+/- CONCRETE COLLAR REQUIRED	
35	205+73.24	77.6' LT	39	36	CB 6FT H	-- --	795.89	4.66	15	791.23	790.84	39.00	1.00	III		
36	205+39.00	59.0' LT	15	207	INL 3FT Z	-- --	794.90	4.06	15	790.84	790.69	15.00	1.00	III	CONNECT TO EXISTING STRUCTURE 206. CONCRETE COLLAR REQUIRED.	
37	208+15.83	117.2' LT	40	38	CB 2X3 H-S	-- --	798.25	3.50	12	794.75	794.35	40.00	1.00	III		
38	208+49.64	108.7' LT	22	38A	CB 2X3 H-S	-- --	798.23	4.13	15	794.10	793.92	22.00	0.80	III		
38A	208+53.45	87.1' LT	40	39	CB 2X3 H	-- --	798.59	5.07	15	793.52	793.20	40.00	0.80	III	CONNECT EXISTING STORM SEWER, 12" SE I.E. 793.73+/- CONCRETE COLLAR REQUIRED.	
303	208+19.98	67.4' LT	--	--	-- --	-- J	798.57	--	--	--	--	--	--	--	RECONSTRUCT INLET	
39	208+81.00	60.0' LT	38	40	CB 2X3 H	-- --	799.55	6.60	18	792.95	792.76	38.00	0.50	III		
40	208+92.77	24.5' LT	6	41	CB 2X3 H	-- --	799.67	7.01	18	792.66	792.63	6.00	0.50	III		
41	208+94.80	18.7' LT	17	42	CB 2X3 H	-- --	799.48	6.95	18	792.53	792.39	17.00	0.80	III		
42	209+05.00	4.9' LT	3	43	CB 2X3 H	-- --	799.79	7.50	18	792.29	792.27	3.00	0.80	III		
43	209+06.00	2.0' LT	44	44	CB 2X3 H	-- --	799.96	7.79	18	792.17	791.73	44.00	1.00	III		
44	209+22.00	39.0' RT	203	304	CB 4FT H	-- --	799.86	9.82	24	790.04	788.01	203.00	1.00	III	CORE INTO EXISITNG STRUCTURE 304. CONCRETE COLLAR REQUIRED.	
45	208+43.78	55.0' RT	48	46	CB 2X3 H	-- --	798.21	4.00	12	794.21	793.49	48.00	1.50	III	CONNECT EXISTING STORM SEWER, 6" S I.E. 794.70+/- CONCRETE COLLAR REQUIRED.	

NOTES:
1. STATIONS AND OFFSETS TO MANHOLES AND INLETS 1G ARE GIVEN TO THE CENTER OF STRUCTURE.
2. STATIONS AND OFFSETS TO CATCH BASINS AND INLETS ARE GIVEN TO THE FACE OF CURB.
3. STATIONS, OFFSETS AND ELEVATIONS OF ENDWALLS ARE GIVEN TO THE END OF THE ENDWALL.
4. MANHOLE RIM/GRATE ELEVATIONS ARE GIVEN TO THE CENTER OF STRUCTURE.
5. CATCH BASIN AND INLET RIM/GRATE ELEVATIONS ARE GIVEN TO THE FLANGE LINE.
6. DEPTH OF MANHOLES AND INLETS ARE MEASURED FROM THE LOWEST INVERT OF THE STRUCTURE TO THE RIM/GRATE ELEVATION.
7. DEPTH OF CATCH BASINS ARE MEASURED FROM THE LOWEST INVERT TO THE RIM/GRATE ELEVATION. (ADD TWO FEET FOR SUMP DEPTH.)
8. PIPE LENGTHS FOR STRUCTURES ARE SHOWN FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE.
9. CONTRACTOR SHALL VERIFY DEPTH AND ELEVATIONS OF ALL EXISTING STORM SEWER STRUCTURES BEFORE BEGINNING WORK AND SHALL REPORT ANY DISCREPANCIES TO ENGINEER PRIOR TO BEGINNING WORK.

STRUCT. NO.	STATION	OFFSET	C-C (FT)	TO STRUCT.	INLET/CB TYPE & COVER	MH TYPE & COVER	RIM/GRATE ELEV.	DEPTH (FT)	DISCHARGE PIPE SIZE (IN)	INLET ELEV.	DISCH. ELEV.	LENGTH (FT)	SLOPE (%)	PIPE CLASS	REMARKS	PIPE JOINT TIES
46	208+91.05	76.0' RT	47	44	CB 2X3 H	-- --	797.58	4.19	12	793.39	792.92	47.00	1.00	III		
47	211+61.56	77.0' LT	80	48	INL 3FT Z	-- --	804.29	3.50	12	800.79	798.39	80.00	3.00	III	APRON ENDWALL REQUIRED	X
49	211+51.00	31.4' RT	46	49A	CB 3FT Z	-- --	804.02	3.50	12	800.52	797.44	46.00	6.70	III	APRON ENDWALL REQUIRED	X
50	--	--	135	51	-- --	-- --	--	--	72	784.23	783.96	135.00	0.20	III	CONNECT EXISTING STORM SEWER, 72" W I.E. 784.23+/- CONCRETE COLLAR REQUIRED. APRON ENDWALL REQUIRED.	X
52	212+33.67	74.0' LT	42	53	CB 3FT Z	-- --	806.25	3.50	12	802.75	801.91	42.00	2.00	III		
53	212+45.00	114.0' LT	22	54	CB 2X3 H	-- --	805.63	3.82	12	801.81	801.37	22.00	2.00	III	APRON ENDWALL REQUIRED	X
55	213+17.00	71.0' LT	25	56	CB 2X3 H	-- --	809.86	3.50	12	806.36	806.11	25.00	1.00	III	APRON ENDWALL REQUIRED	X
57	213+27.15	138.0' LT	252	58	-- --	-- --	--	--	30	792.50	789.98	252.00	1.00	III	2 APRON ENDWALLS REQUIRED	X
59	213+28.00	8.0' LT	4	60	CB 2X3 H	-- --	810.20	3.50	12	806.70	806.66	4.00	1.00	III		
60	213+28.00	3.6' LT	8	62	CB 2X3 H	-- --	810.70	4.14	12	806.56	806.48	8.00	1.00	III		
61	213+20.00	8.0' LT	3	62	CB 2X3 H	-- --	809.85	3.50	12	806.35	806.32	3.00	1.00	III		
62	213+20.00	5.0' RT	54	64	CB 2X3 H	-- --	810.49	4.50	15	805.99	805.45	54.00	1.00	III		
63	212+46.41	43.5' RT	59	64	CB 3FT Z	-- --	806.75	3.50	12	803.25	802.66	59.00	1.00	III		
64	213+05.00	47.0' RT	39	66	-- --	6FT J	809.57	7.21	15	802.36	801.97	39.00	1.00	III	APRON ENDWALL REQUIRED	X
65	213+20.00	39.6' RT	17	64	CB 2X3 H	-- --	809.90	3.50	12	806.40	806.23	17.00	1.00	III		
68	215+86.00	60.0' LT	52	69	CB 2X3 H	-- --	822.54	3.50	12	819.04	818.78	52.00	0.50	III		
69	215+80.00	8.0' LT	6	70	CB 2X3 H	-- --	822.33	3.65	12	818.68	818.65	6.00	0.50	III		
70	215+80.00	2.0' LT	30	71	CB 2X3 H	-- --	822.77	4.37	15	818.40	818.25	30.00	0.50	III		
71	215+80.00	28.0' RT	30	72	CB 2X3 H	-- --	823.29	5.14	15	818.15	818.00	30.00	0.50	III	APRON ENDWALL REQUIRED	X
73	221+64.76	70.0' LT	40	74	INL 2X3 H	-- --	825.44	3.50	12	821.94	821.74	40.00	0.50	III		
74	221+64.76	30.0' LT	6	75	INL 2X3 H	-- --	826.52	4.88	12	821.64	821.61	6.00	0.50	III		
75	221+64.76	24.0' LT	22	76	INL 2X3 H	-- --	826.08	4.57	12	821.51	821.29	22.00	1.00	III		
76	221+64.76	2.0' LT	222	77	INL 4FT H	-- --	826.52	6.23	24	820.29	810.74	222.00	4.30	III		
77	223+87.00	2.0' LT	42	78	-- --	5FT H	816.15	9.88	24	806.27	806.06	42.00	0.50	III		
78	223+87.00	40.5' RT	77	79	-- --	4FT H	815.97	10.01	24	805.96	805.58	77.00	0.50	III	APRON ENDWALL REQUIRED	X
82	223+25.00	83.0' LT	34	83	INL 2X3 H	-- --	817.75	4.00	12	813.75	812.05	34.00	5.00	III		
83	223+60.00	93.2' LT	67	84	INL 2X3 H	-- --	815.47	3.50	12	811.97	811.64	67.00	0.50	III		
84	223+82.00	30.0' LT	6	85	INL 4FT H	-- --	816.36	4.82	12	811.54	811.51	6.00	0.50	III		
85	223+87.00	27.2' LT	18	86	INL 4FT H	-- --	815.58	7.96	12	807.62	807.44	18.00	1.00	III		
86	223+87.00	9.0' LT	7	77	INL 2X3 H	-- --	815.99	8.65	12	807.34	807.27	7.00	1.00	III		
87	223+64.00	24.0' LT	18	84	INL 2X3 H	-- --	816.71	3.50	12	813.21	812.94	18.00	1.50	III		
88	224+84.00	59.0' LT	55	89	INL 3FT Z	-- --	812.65	3.78	12	808.87	808.32	55.00	1.00	III		
89	224+26.00	60.0' LT	50	85	INL 2X3 H	-- --	814.57	6.35	12	808.22	807.72	50.00	1.00	III		
90	224+84.00	63.8' LT	5	88	INL 3FT Z	-- --	812.52	3.50	12	809.02	808.97	5.00	1.00	III		
91	222+80.57	140.3' LT	211	92	-- --	-- --	--	--	30	802.50	794.99	211.00	3.56	III	CONNECT EXISTING STORM SEWER, 30" E I.E. 795.0+/- CONCRETE COLLAR REQUIRED. APRON ENDWALL REQUIRED.	X
93	225+06.57	134.7' LT	202	206	-- --	-- --	--	--	36	804.35	801.46	202.00	1.43	III	CONNECT TO EXISTING STRUCUTURE 306. CONCRETE COLLAR REQUIRED. APRON ENDWALL REQUIRED.	X
94	225+14.57	134.7' LT	202	206	-- --	-- --	--	--	36	804.35	801.46	202.00	1.43	III	CONNECT TO EXISTING STRUCUTURE 306. CONCRETE COLLAR REQUIRED. APRON ENDWALL REQUIRED.	X
95	221+65.39	34.3' RT	6	96	INL 2X3 H	-- --	826.02	3.50	12	822.52	822.40	6.00	2.00	III		
96	221+64.76	28.0' RT	30	76	INL 2X3 H	-- --	826.90	4.60	12	822.30	821.70	30.00	2.00	III		
102	227+59.68	116.0' LT	6	103	INL 2X3 H	-- --	810.00	3.00	12	807.00	806.96	6.00	0.70	III		
103	227+65.39	116.0' LT	10	119	INL 2X3 H	-- --	810.12	3.26	12	806.86	806.79	10.00	0.70	III		
106	226+69.00	28.4' LT	4	107	INL 2X3 H	-- --	809.80	3.50	12	806.30	806.26	4.00	1.00	III		
107	226+69.00	24.0' LT	8	108	INL 2X3 H	-- --	809.40	3.24	12	806.16	806.08	8.00	1.00	III		
108	226+77.00	24.0' LT	15	109	INL 2X3 H	-- --	809.37	4.58	24	804.79	804.73	15.00	0.40	III		
109	226+78.00	9.0' LT	7	110	INL 2X3 H	-- --	809.59	4.96	24	804.63	804.60	7.00	0.40	III		
110	226+78.00	2.0' LT	24	305	INL 2X3 H	-- --	809.81	5.31	24	804.50	804.40	24.00	0.40	III	CONNECT TO EXISTING STRUCUTURE 305. CONCRETE COLLAR REQUIRED.	
112	226+94.00	9.0' LT	7	113	INL 2X3 H-S	-- --	809.55	3.50	12	806.05	805.98	7.00	1.00	III		
113	226+94.00	2.0' LT	16	110	INL 2X3 H-S	-- --	809.81	3.93	12	805.88	805.72	16.00	1.00	III		
114	226+55.00	39.0' RT	10	115	INL 2X3 H	-- --	809.59	3.50	12	806.09	806.04	10.00	0.50	III		
305	226+75.65	22.1' RT	20	115	-- --	-- --	809.82	--	48	802.23	802.03	20.00	1.00	III	RECONSTRUCT MANHOLE. CONCRETE COLLAR REQUIRED.	
115	226+65.00	39.0' RT	70	111	-- --	7FT H	809.55	9.52	48	800.03	799.33	70.00	1.00	III	APRON ENDWALL WITH PIPE GRATE REQUIRED	X

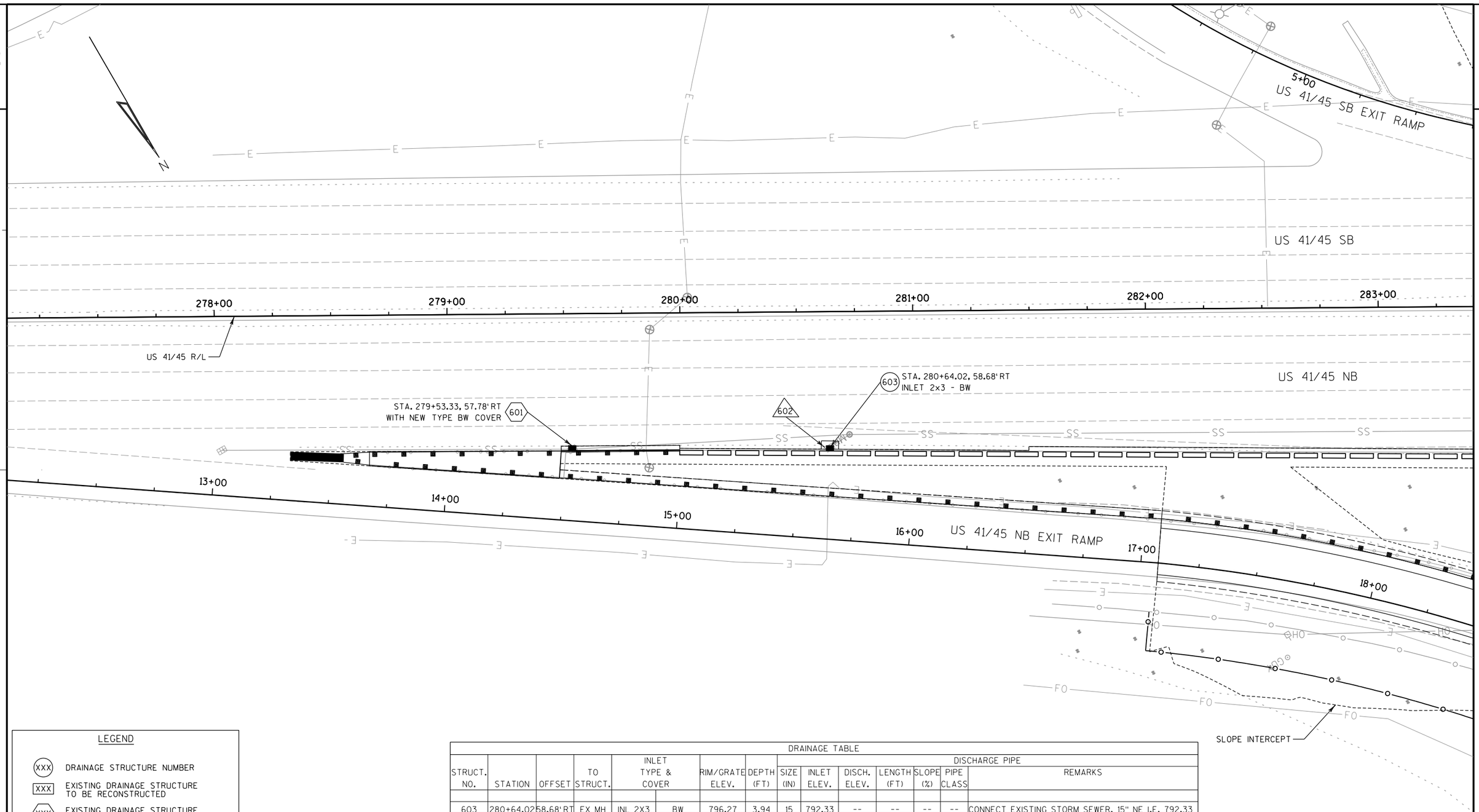
NOTES:
1. STATIONS AND OFFSETS TO MANHOLES AND INLETS 1G ARE GIVEN TO THE CENTER OF STRUCTURE.
2. STATIONS AND OFFSETS TO CATCH BASINS AND INLETS ARE GIVEN TO THE FACE OF CURB.
3. STATIONS, OFFSETS AND ELEVATIONS OF ENDWALLS ARE GIVEN TO THE END OF THE ENDWALL.
4. MANHOLE RIM/GRATE ELEVATIONS ARE GIVEN TO THE CENTER OF STRUCTURE.
5. CATCH BASIN AND INLET RIM/GRATE ELEVATIONS ARE GIVEN TO THE FLANGE LINE.
6. DEPTH OF MANHOLES AND INLETS ARE MEASURED FROM THE LOWEST INVERT OF THE STRUCTURE TO THE RIM/GRATE ELEVATION.
7. DEPTH OF CATCH BASINS ARE MEASURED FROM THE LOWEST INVERT TO THE RIM/GRATE ELEVATION. (ADD TWO FEET FOR SUMP DEPTH.)
8. PIPE LENGTHS FOR STRUCTURES ARE SHOWN FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE.
9. CONTRACTOR SHALL VERIFY DEPTH AND ELEVATIONS OF ALL EXISTING STORM SEWER STRUCTURES BEFORE BEGINNING WORK AND SHALL REPORT ANY DISCREPANCIES TO ENGINEER PRIOR TO BEGINNING WORK.

STRUCT. NO.	STATION	OFFSET	C-C (FT)	TO STRUCT.	INLET/CB TYPE & COVER	MH TYPE & COVER	RIM/GRATE ELEV.	DEPTH (FT)	DISCHARGE PIPE SIZE (IN)	DISCHARGE PIPE INLET ELEV.	DISCHARGE PIPE DISCH. ELEV.	DISCHARGE PIPE LENGTH (FT)	DISCHARGE PIPE SLOPE (%)	DISCHARGE PIPE CLASS	REMARKS	PIPE JOINT TIES
116	226+80.00	71.0' LT	19	117	INL 2X3 H-S	-- --	809.51	3.50	12	806.01	805.92	19.00	0.50	III		
117	226+98.00	71.4' LT	52	108	-- --	6FT H	809.55	4.60	24	804.95	804.79	52.00	0.30	III		
117A	226+98.00	100.0' LT	28	117	INL 1G MS	-- --	808.00	1.75	12	806.25	805.97	28.00	1.00	III		
118	227+85.83	106.4' LT	22	119	INL 4FT H-S	-- --	810.54	4.00	18	806.54	806.43	22.00	0.50	III		
118A	702+18.31	118.4' LT	104	118B	INL 1G MS	-- --	815.25	4.00	18	811.25	808.65	104.00	2.50	III		
118B	702+99.17	53.1' LT	36	118	INL 4FT H	-- --	811.87	3.72	18	808.15	807.25	36.00	2.50	III		
119	227+64.27	106.1' LT	9	120	INL 4FT H	-- --	809.95	3.87	18	806.08	806.04	9.00	0.50	III		
120	227+60.00	98.0' LT	31	121	INL 4FT H	-- --	809.87	3.93	18	805.94	805.79	31.00	0.50	III		
121	227+29.00	97.5' LT	40	117	INL 4FT H	-- --	809.81	4.12	18	805.69	805.45	40.00	0.60	III		
122	228+25.38	35.6' RT	--	--	INL 2X3 H	-- --	810.85	4.90	12	805.95	--	--	--	--	CONNECT EXISTING STORM SEWER, 12" N I.E. 805.95+/- CONCRETE COLLAR REQUIRED.	
123	403+80.91	27.0' RT	3	124	CB 2X3 H	-- --	805.10	3.67	12	801.43	801.22	3.00	7.00	III	CONNECT EXISTING STORM SEWER, 12" NE I.E. 801.22+/- CONCRETE COLLAR REQUIRED.	
125	--	--	7	126	-- --	-- --	--	--	12	795.99	795.92	7.00	1.00	III	CONNECT EXISTING STORM SEWER, 12" S I.E. 795.99+/- CONCRETE COLLAR REQUIRED.	
126	405+79.77	8.5' LT	14	211	CB 3FT Z	-- --	800.20	4.50	12	795.70	795.21	14.00	3.50	III	CONNECT TO EXISTING STRUCUTURE 211. CONCRETE COLLAR REQUIRED.	
127	405+77.64	48.1' LT	--	211	CB 6FT H	-- --	800.18	4.52	12	795.66	--	--	--	--	PLACE COVER OPENING AT NORTH SIDE OF STRUCTURE. CONNECT EXISTING STORM SEWER, 12" S I.E. 795.66+/-, 8" NW I.E. 796.42+/- & 8" NE I.E 796.73+/- 3 CONCRETE COLLARS REQUIRED.	
128	407+50.00	55.0' LT	28	129	CB 2X3 H	-- --	795.80	3.62	12	792.18	791.90	28.00	1.00	III		
128A	407+70.00	57.6' LT	20	128	CB 2X3 H-S	-- --	795.48	3.00	12	792.48	792.28	20.00	1.00	III		
129	407+50.00	27.0' LT	42	131	-- --	6FT Z	795.70	4.81	27	790.89	790.26	42.00	1.50	III	CONNECT EXISTING STORM SEWER, 24" W I.E. 790.89+/- CONCRETE COLLAR REQUIRED.	
130	407+50.00	21.0' LT	6	129	CB 3FT Z	-- --	795.41	3.00	12	792.41	792.35	6.00	1.00	III		
131	407+92.00	26.4' LT	58	206	-- --	5FT Z	795.09	4.83	27	790.26	789.39	58.00	1.50	III	CONNECT TO EXISTING STRUCTURE 206. CONCRETE COLLAR REQUIRED.	
132	407+92.00	21.0' LT	5	131	CB 3FT Z	-- --	794.88	3.51	12	791.37	791.27	5.00	2.00	III		
133	408+05.00	21.0' LT	13	132	CB 3FT Z	-- --	794.73	3.00	12	791.73	791.47	13.00	2.00	III		
134	409+78.00	4.0' LT	20	213	-- --	4FT J	791.68	4.78	12	786.90	786.76	20.00	0.70	III	CONNECT TO EXISTING STRUCTURE 213. CONCRETE COLLAR REQUIRED.	
135	411+76.00	56.4' LT	10	136	CB 2X3 H	-- --	787.33	3.80	12	783.53	783.48	10.00	0.50	III	CONNECT EXISTING STORM SEWER, 12" S I.E. 783.48+/- CONCRETE COLLAR REQUIRED.	
137	411+75.50	16.3' LT	6	215	CB 3FT Z	-- --	787.29	4.12	12	783.17	783.05	6.00	2.00	III	CONNECT TO EXISTING STRUCTURE 215. CONCRETE COLLAR REQUIRED.	
137A	--	--	2	137	-- --	-- --	--	--	12	783.35	783.34	2.00	0.50	III	CONNECT EXISTING STORM SEWER, 12" N I.E. 783.35+/- CONCRETE COLLAR REQUIRED.	
138	411+75.50	1.0' LT	9	215	CB 3FT Z	-- --	787.38	5.00	12	782.38	782.29	9.00	1.00	III	CONNECT EXISTING STORM SEWER, 12" S I.E. 782.38+/- CONCRETE COLLAR REQUIRED. CONNECT TO STRUCTURE 215. CONCRETE COLLAR REQUIRED.	
140	411+75.50	28.0' RT	3	139	CB 2X3 H	-- --	787.30	4.60	12	782.70	782.67	3.00	1.00	III	CONNECT EXISTING STORM SEWER, 12" S I.E. 782.67+/- CONCRETE COLLAR REQUIRED.	
141	412+47.00	13.4' LT	79	143	CB 3FT Z	-- --	786.03	3.62	12	782.41	781.23	79.00	1.50	III		
142	412+47.00	6.9' LT	6	141	CB 3FT Z	-- --	786.19	3.50	12	782.69	782.51	6.00	3.00	III		
143	413+25.00	9.3' LT	13	144	-- --	4FT C	785.00	3.87	12	781.13	781.04	13.00	0.70	III		
144	413+25.00	3.6' RT	--	--	-- --	6FT J	785.10	6.67	42	778.43	--	--	--	--	CONNECT EXISTING STORM SEWER, 42" E & W I.E. 778.43+/- 2 CONCRETE COLLARS REQUIRED.	
145	413+45.00	45.7' LT	28	145A	CB 2X3 H	-- --	784.55	4.31	12	780.24	780.10	28.00	0.50	III	CONNECT EXISTING STORM SEWER, 12" W I.E. 780.40+/- CONCRETE COLLAR REQUIRED.	
145A	413+71.00	44.4' LT	8	146	CB 2X3 H	-- --	784.15	4.15	12	780.00	779.92	8.00	1.00	III	CONNECT EXISTING STORM SEWER, 12" S I.E. 779.92+/- CONCRETE COLLAR REQUIRED.	
147	413+63.00	28.0' RT	7	148	CB 2X3 H	-- --	784.28	3.50	12	780.78	780.71	7.00	1.00	III		
148	413+70.50	28.0' RT	--	--	CB 2X3 H	-- --	784.16	4.32	12	779.84	--	--	--	--	CONNECT EXISTING STORM SEWER, 12" S I.E. 779.84+/- CONCRETE COLLAR REQUIRED.	
149	9+65.00	46.0' RT	72	150	-- --	-- --	--	--	30	785.00	784.14	72.00	1.20	III	APRON ENDWALL REQUIRED	X
150	9+68.50	26.0' LT	64	152	-- --	5FT BW	793.85	9.71	30	784.14	783.37	64.00	1.20	III	APRON ENDWALL REQUIRED	X
151	9+59.00	25.5' LT	10	150	CB 4FT BW	-- --	793.54	3.50	12	790.04	789.84	10.00	2.00	III		
153	--	--	27	154	-- --	-- --	--	--	24	812.07	811.61	27.00	1.70	III	CONNECT EXISTING STORM SEWER, 24" W I.E. 812.07+/- CONCRETE COLLAR REQUIRED. APRON ENDWALL REQUIRED.	X
155	701+35.34	71.6' LT	39	156	-- --	-- --	--	--	18	813.88	811.93	39.00	5.00	III	APRON ENDWALL REQUIRED	X
156	701+32.00	33.0' LT	72	157	CB 2X3 H	-- --	814.96	3.30	18	811.66	810.94	72.00	1.00	III	APRON ENDWALL REQUIRED	X
158	803+87.00	27.0' LT	10	159	INL 2X3 H	-- --	807.08	3.50	12	803.58	803.53	10.00	0.50	III		
159	803+99.00	26.8' LT	29	160	INL 2X3 H-S	-- --	807.04	3.73	12	803.31	803.14	29.00	0.60	III		
160	803+99.00	2.0' RT	21	162	INL 2X3 H-S	-- --	807.54	4.50	12	803.04	802.83	21.00	1.00	III		

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STRUCT. NO.	STATION	OFFSET	C-C (FT)	TO STRUCT.	INLET/CB TYPE & COVER	MH TYPE & COVER	RIM/GRATE ELEV.	DEPTH (FT)	DISCHARGE PIPE SIZE (IN)	DISCHARGE PIPE INLET ELEV.	DISCHARGE PIPE DISCH. ELEV.	DISCHARGE PIPE LENGTH (FT)	DISCHARGE PIPE SLOPE (%)	PIPE CLASS	REMARKS	PIPE JOINT TIES
161	803+89.00	2.4' RT	10	160	INL 2X3 H	-- --	807.51	3.50	12	804.01	803.96	10.00	0.50	III		
162	803+97.00	2.0' LT	21	164	INL 2X3 H-S	-- --	807.44	4.71	12	802.73	802.48	21.00	1.20	III		
163	803+87.00	2.0' LT	10	162	INL 2X3 H	-- --	807.47	3.50	12	803.97	803.92	10.00	0.50	III		
164	803+97.00	19.1' RT	21	166	INL 4FT H-S	-- --	807.08	4.85	15	802.23	802.02	21.00	1.00	III		
165	803+84.00	18.4' RT	10	164	INL 2X3 H	-- --	807.14	3.49	12	803.65	803.60	10.00	0.50	III		
166	804+17.50	33.5' RT	59	174	-- --	4FT J	807.82	9.64	24	798.18	797.00	59.00	2.00	III	APRON ENDWALL REQUIRED	X
167	906+89.00	18.1' RT	21	168	INL 2X3 H-S	-- --	806.82	3.50	12	803.32	803.11	21.00	1.00	III		
168	906+84.00	2.0' LT	7	169	INL 2X3 H-S	-- --	807.14	4.13	12	803.01	802.94	7.00	1.00	III		
169	906+85.00	2.0' RT	22	170	INL 2X3 H-S	-- --	807.21	4.37	12	802.84	802.62	22.00	1.00	III		
170	906+94.00	18.0' LT	13	171	INL 2X3 H-S	-- --	806.89	4.37	12	802.52	802.39	13.00	1.00	III		
171	906+94.00	31.0' LT	123	173	-- --	4FT J	807.61	6.78	24	800.83	798.99	123.00	1.50	III		
172	907+35.00	32.0' LT	34	171	INL 1G MS	-- --	807.00	2.50	18	804.50	804.33	34.00	0.50	III		
173	804+27.40	6.7' LT	41	166	INL 4FT H	-- --	807.67	8.78	24	798.89	798.28	41.00	1.50	III		
176	904+98.24	6.7' LT	34	177	CB 2X3 H	-- --	806.58	3.50	12	803.08	802.74	34.00	1.00	III		
177	01+83.00	2.0' LT	10	178	CB 4FT T	-- --	806.15	3.51	12	802.64	802.54	10.00	1.00	III		
178	01+93.00	2.0' LT	63	179	CB 4FT T	-- --	806.16	3.72	12	802.44	802.13	63.00	0.50	III		
179	805+85.20	9.9' LT	111	182	CB 2X3 H	-- --	806.33	4.30	12	802.03	800.37	111.00	1.50	III		
180	807+10.00	18.0' LT	20	181	CB 2X3 H	-- --	803.82	3.50	12	800.32	800.16	20.00	0.80	III		
181	807+10.00	2.0' RT	6	182	CB 2X3 H	-- --	804.14	4.08	12	800.06	800.01	6.00	0.80	III		
182	807+11.00	2.0' LT	20	183	CB 2X3 H	-- --	803.90	3.99	12	799.91	799.75	20.00	0.80	III		
183	807+11.00	18.0' RT	13	184	CB 2X3 H	-- --	803.58	3.93	12	799.65	799.55	13.00	0.80	III		
184	807+20.00	28.0' RT	75	188	-- --	4FT J	804.00	6.53	15	797.47	797.21	75.00	0.35	III	APRON ENDWALL REQUIRED	X
185	13+37.00	15.0' RT	25	186	INL 1G MS	-- --	800.00	1.80	12	798.20	798.08	25.00	0.50	III		
186	13+15.00	2.0' RT	22	187	CB 2X3 H	-- --	800.72	2.74	12	797.98	797.89	22.00	0.40	III		
187	13+15.00	20.0' LT	42	184	CB 2X3 H	-- --	801.08	3.19	12	797.89	797.72	42.00	0.40	III		
191	903+55.00	2.0' LT	6	192	CB 2X3 H	-- --	804.82	3.50	12	801.32	801.20	6.00	2.00	III		
192	903+55.00	2.0' RT	20	193	CB 2X3 H	-- --	804.93	3.83	12	801.10	800.70	20.00	2.00	III		
193	903+55.00	17.9' LT	170	195	CB 2X3 H	-- --	804.61	4.41	12	800.20	798.50	170.00	1.00	III		
194	901+90.00	14.3' RT	30	195	CB 2X3 H	-- --	801.44	3.50	12	797.94	797.64	30.00	1.00	III		
195	901+90.00	16.0' LT	21	EX. MH.	CB 2X3 H	-- --	801.47	3.93	12	797.54	797.33	21.00	1.00	III	CORE INTO EXISITNG STRUCTURE. CONCRETE COLLAR REQUIRED.	
196	902+75.00	104.0' LT	46	197	-- --	-- --	--	--	12	797.00	797.00	46.00	0.00	III	APRON ENDWALL REQUIRED	X
197	902+45.00	112.0' LT	17	198	-- --	-- M	808.00	11.00	12	797.00	796.83	17.00	1.00	III	OUTLET CONTROL STRUCTURE.	
198	902+35.00	120.2' LT	--	EX. MH.	-- --	8FT J	810.00	18.53	60	791.47	--	--	--	--	CONNECT EXISTING STORM SEWER, 60" NW & SE I.E. 791.47+/- 2 CONCRETE COLLARES REQUIRED.	
199	902+47.00	120.0' LT	18	198	INL 2G MS	-- --	807.00	3.00	24	804.00	803.82	18.00	1.00	III		

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2

LEGEND

- (XXX) DRAINAGE STRUCTURE NUMBER
- [XXX] EXISTING DRAINAGE STRUCTURE TO BE RECONSTRUCTED
- ⟨XXX⟩ EXISTING DRAINAGE STRUCTURE TO BE ADJUSTED
- △XX EXISTING DRAINAGE STRUCTURE TO BE REMOVED
- ////// EXISTING STORM SEWER TO BE REMOVED
- ■ INLET

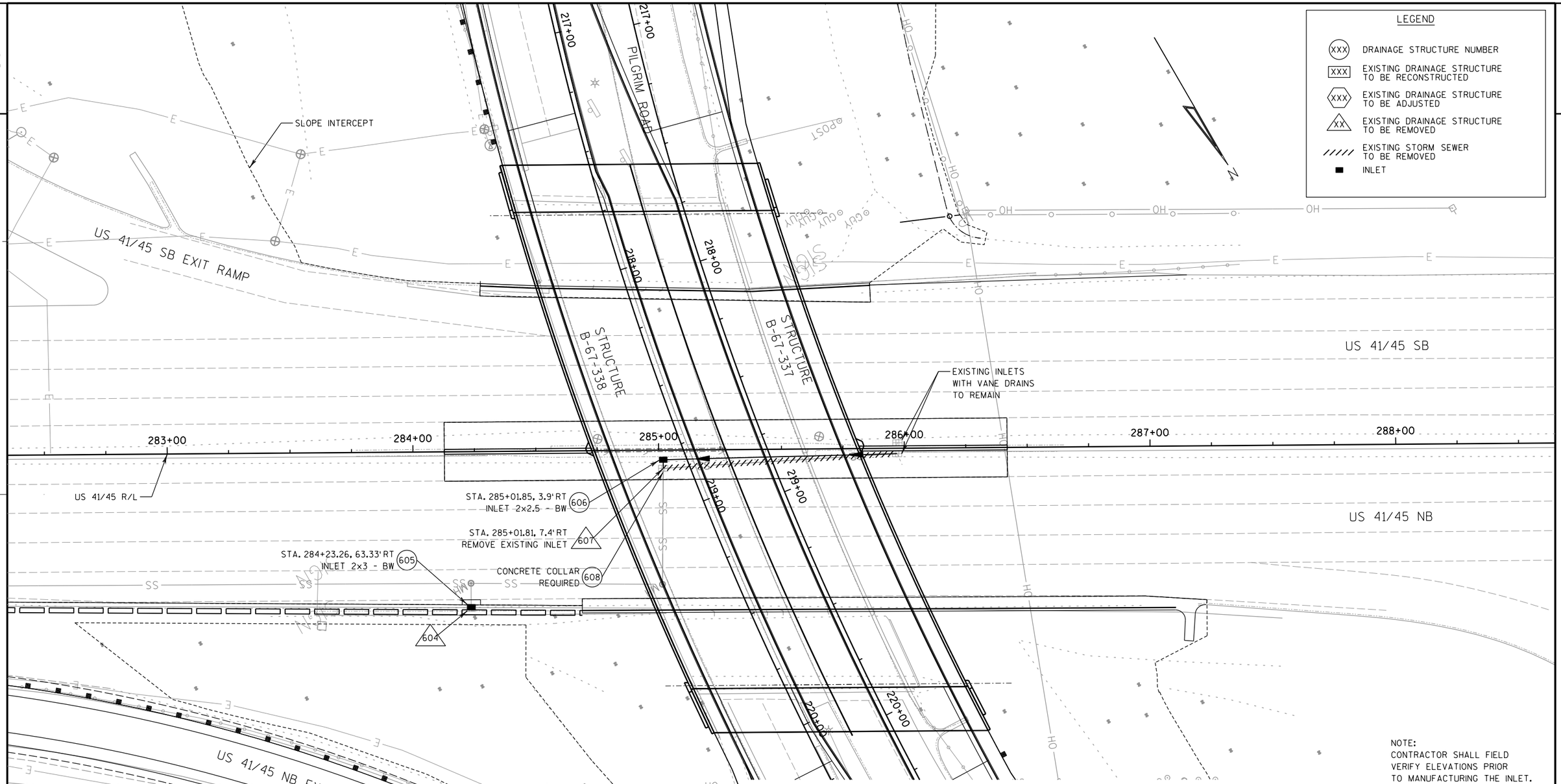
NOTE:
CONTRACTOR SHALL FIELD VERIFY ELEVATIONS PRIOR TO MANUFACTURING THE INLET.

DRAINAGE TABLE

STRUCT. NO.	STATION	OFFSET	TO STRUCT.	INLET TYPE & COVER		RIM/GRATE ELEV.	DEPTH (FT)	DISCHARGE PIPE SIZE (IN)	INLET ELEV.	DISCH. ELEV.	LENGTH (FT)	SLOPE (%)	PIPE CLASS	REMARKS
603	280+64.02	58.68' RT	EX MH	INL 2X3	BW	796.27	3.94	15	792.33	--	--	--	--	CONNECT EXISTING STORM SEWER, 15" NE I.E. 792.33
605	284+23.26	63.33' RT	EX MH	INL 2X3	BW	804.49	3.33	12	801.16	--	--	--	--	CONNECT EXISTING STORM SEWER, 12" N I.E. 801.16
EX INL	285+97.04	2.2' RT	606	--	--	807.03	3.53	12	803.50	802.50	95	1.10	III	
606	285+01.85	3.9' RT	608	INL 2X2.5	BW	805.66	3.16	12	802.50	--	6	5.00	III	CONNECT TO EXISTING STORM SEWER, 12" N I.E. 802.20 (ASSUMED)

NOTES: 1) STATIONS AND OFFSETS TO INLETS ARE GIVEN TO CENTER OF STRUCTURE (ALONG USH 41/45 R/L).
2) INLET RIM/GRATE ELEVATIONS ARE GIVEN TO THE RIGHT EDGE OF GRATE.

PROJECT NO: 1100-37-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	STORM SEWER PLAN: US 41/45	SHEET 148	E



NOTE:
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DRAINAGE TABLE

STRUCT. NO.	STATION	OFFSET	TO STRUCT.	INLET TYPE & COVER		RIM/GRATE ELEV.	DEPTH (FT)	DISCHARGE PIPE SIZE (IN)	INLET ELEV.	DISCH. ELEV.	LENGTH (FT)	SLOPE (%)	PIPE CLASS	REMARKS
603	280+64.02	58.68' RT	EX MH	INL 2X3	BW	796.27	3.94	15	792.33	--	--	--	--	CONNECT EXISTING STORM SEWER, 15" NE I.E. 792.33
605	284+23.26	63.33' RT	EX MH	INL 2X3	BW	804.49	3.33	12	801.16	--	--	--	--	CONNECT EXISTING STORM SEWER, 12" N I.E. 801.16
EX INL	285+97.04	2.2' RT	606	--	--	807.03	3.53	12	803.50	802.50	95	1.10	III	
606	285+01.85	3.9' RT	608	INL 2X2.5	BW	805.66	3.16	12	802.50	--	6	5.00	III	CONNECT TO EXISTING STORM SEWER, 12" N I.E. 802.20 (ASSUMED)

NOTES: 1) STATIONS AND OFFSETS TO INLETS ARE GIVEN TO CENTER OF STRUCTURE (ALONG USH 41/45 R/L).
2) INLET RIM/GRATE ELEVATIONS ARE GIVEN TO THE RIGHT EDGE OF GRATE.

PROJECT NO: 1100-37-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	STORM SEWER PLAN: US 41/45	SHEET 149	E

2

MATCHLINE STA 198+00

MATCHLINE STA 204+00

STA. 199+70.00, 5.00' RT
16"x6" ANCHOR TEE

EXIST. 8" PVC WATER MAIN

STA. 201+13.07, 60.72' LT
45° BEND
CONNECT TO EXIST. MAIN

STA. 201+18.99, 54.99' LT
45° BEND

8.20' - 8" PVC WATER MAIN

50.00' - 8" PVC WATER MAIN

10.00' - 8" PVC WATER MAIN

STA. 201+19.83, 5.00' LT
8" GATE VALVE

PILGRIM ROAD

STA. 201+82.00, 5.00' RT
16"x12" TEE

EXIST. 16" C.I. WATER MAIN

199+00

200+00

201+00

202+00

203+00

PROP. 16" PVC WATER MAIN

10.00' - 12" PVC WATER MAIN

10.00' - 12" PVC WATER MAIN

13.10' - 12" PVC WATER MAIN

STA. 201+82.00, 15.00' RT
12" BUTTERFLY VALVE

STA. 198+60.00, 4.06' RT
45° BEND

STA. 198+54.51, 1.75' LT
16" BUTTERFLY VALVE

STA. 198+48.27, 8.36' LT
45° BEND
CONNECT TO EXIST. MAIN

STA. 199+70.00, 27.10' RT
HYDRANT
22.10' - 6" PVC LEAD
NOZZLE EL.: 799.95

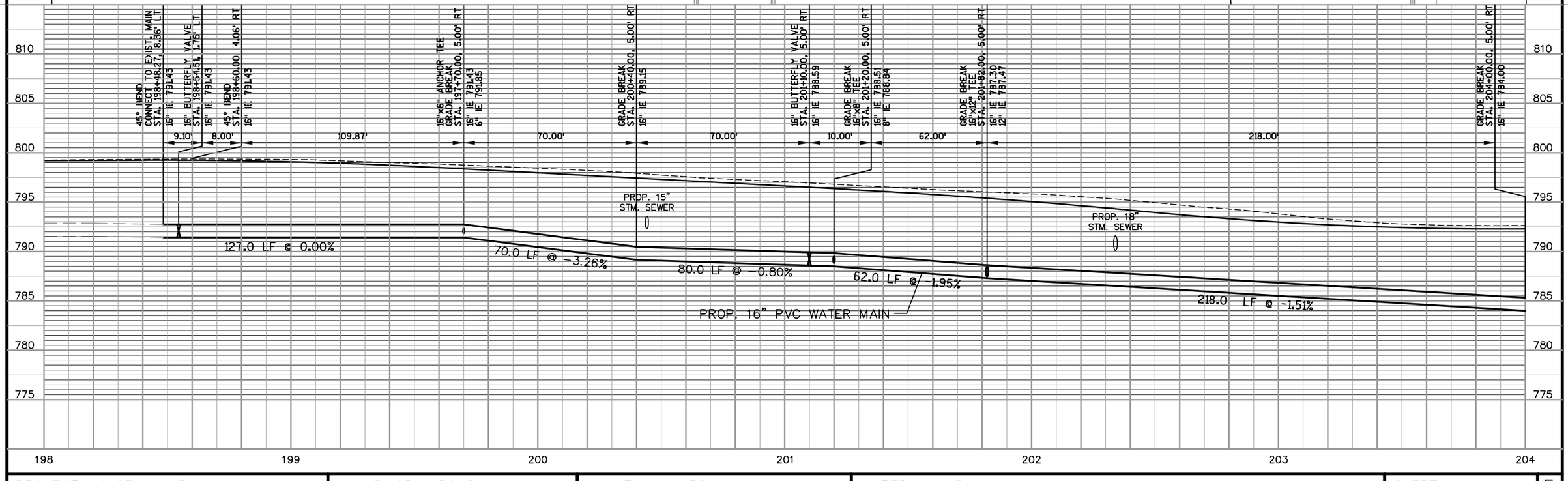
STA. 199+70.00, 6.50' RT
6" GATE VALVE

STA. 201+20.00, 5.00' RT
16"x8" TEE

STA. 201+10.00, 5.00' RT
16" BUTTERFLY VALVE

STA. 201+82.00, 25.00' RT
22 1/2° BEND

STA. 201+77.00, 37.07' RT
22 1/2° BEND
CONNECT TO EXIST. MAIN



PROJECT NO: 2782-11-71	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	WATER MAIN PLAN	SHEET 150	E

FILE NAME : U:\Engineering\Projects\VMFENG\PilgrimRd\Main to Megal\WATER MAIN PP1 PLOT DATE : 12/23/2014 PLOT BY : bch PLOT NAME : ---------- PLOT SCALE : 1:40

2

N

PILGRIM ROAD

PROP. 16" PVC WATER MAIN

MATCHLINE STA 204+00

MATCHLINE STA 210+00

STA. 204+58.00, 5.00' RT
16" BUTTERFLY VALVE

STA. 204+68.00, 5.00' RT
16"x8" TEE

STA. 205+47.00, 5.00' RT
16"x8" TEE

STA. 205+24.00, 5.00' RT
16" BUTTERFLY VALVE

STA. 205+14.00, 5.00' RT
16"x12" TEE

STA. 207+19.00, 4.99' RT
16"x6" ANCHOR TEE

STA. 208+00.00, 0.28' RT
11 1/4° BEND
GRADE BREAK

STA. 207+19.00, 7.49' RT
6" GATE VALVE

STA. 207+15.20, 28.89' RT
22 1/2° BEND

STA. 207+13.96, 41.00' RT
22 1/2° BEND

STA. 207+13.96, 49.00' RT
6" GATE VALVE
CONNECT TO EXIST. SERVICE

STA. 208+64.43, 7.86' RT
16" BUTTERFLY VALVE

STA. 208+54.37, 7.04' RT
16"x8" CROSS

STA. 209+61.05, 8.99' RT
45° BEND
GRADE BREAK

EXIST. 8" PVC WATER MAIN

EXIST. 8" PVC WATER MAIN

204+00 205+00 206+00 207+00 208+00 209+00 210+00

501+00 501+40 501+72 502+00

409+00

GRADE BREAK STA. 204+00.00, 5.00' RT 16" IE 784.00
20.00'
GRADE BREAK STA. 204+20.00, 5.00' RT 16" IE 784.00
33.00'
16" BUTTERFLY VALVE STA. 204+58.00, 5.00' RT 16" IE 784.75
10.00'
16"x8" TEE STA. 204+68.00, 5.00' RT 16" IE 784.94 8" IE 785.27
46.00'
16"x12" TEE STA. 205+14.00, 5.00' RT 16" IE 785.85 12" IE 786.02
10.00'
16" BUTTERFLY VALVE STA. 205+24.00, 5.00' RT 16" IE 786.05
23.00'
16"x8" TEE GRADE BREAK STA. 205+47.00, 5.00' RT 16" IE 786.50 8" IE 786.83
171.93'
16"x6" ANCHOR TEE STA. 207+19.00, 4.99' RT 16" IE 789.22 6" IE 789.64
80.82'
11 1/4° BEND GRADE BREAK STA. 208+00.00, 0.28' RT 16" IE 790.50
54.52'
16"x8" CROSS GRADE BREAK STA. 208+54.37, 7.04' RT 16" IE 791.18 8" IE 791.51
10.00'
16" BUTTERFLY VALVE STA. 208+64.43, 7.86' RT 16" IE 791.18
20.00'
GRADE BREAK W/ 11 1/4° BEND STA. 208+84.62, 9.10' RT 16" IE 791.18
15.00'
GRADE BREAK W/ 11 1/4° BEND STA. 208+84.62, 9.10' RT 16" IE 788.85
60.48'
45° BEND STA. 209+61.05, 8.99' RT 16" IE 788.92
103.95'

PROP. 15" STM. SEWER

EXIST. 27" STM. SEWER

PROP. 12" STM. SEWER

PROP. 12" STM. SEWER

PROP. 18" STM. SEWER

20.0 LF @ 0.00%

127.0 LF @ 1.9%

252.8 LF @ 1.58%

54.5 LF @ 1.25%

30.0 LF @ 0.00%

15.0 LF @ -15.53%

164.43 LF @ 0.12%

810 805 800 795 790 785 780 775

204 205 206 207 208 209 210

PROJECT NO: 2782-11-71	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	WATER MAIN PLAN	SHEET 151	E

FILE NAME : U:\Engineering\Projects\VMFENG\PilgrimRd\Main to Megal\WATER MAIN PP2 PLOT DATE : 10/27/2014 PLOT BY : bch PLOT NAME : ---------- PLOT SCALE : 1:40

2

EXIST. 16" PVC WATER MAIN

STA. 210+24.76, 71.13' LT
45° BEND
CONNECT TO EXIST MAIN

PROP. 16" PVC WATER MAIN

PILGRIM ROAD

MATCHLINE STA 210+00

MATCHLINE STA 216+00

211+00 212+00 213+00 214+00 215+00 216

N

45° BEND
CONNECT TO EXIST. MAIN
STA. 210+24.76, 71.13' LT
16" IE 789.05

103.95'

164.43 LF
@ 0.12%

820 815 810 805 800 795 790 785

210 211 212 213 214 215 216

PROJECT NO: 2782-11-71	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	WATER MAIN PLAN	SHEET 152	E

FILE NAME : U:\Engineering\Projects\VMFENG\PilgrimRd\Main to Megal\WATER MAIN PP3 PLOT DATE : 10/27/2014 PLOT BY : bch PLOT NAME : _____ PLOT SCALE : 1:40

STA. 405+10.41, 43.45' LT
45° BEND
CONNECT TO EXIST. MAIN

1 1/4" POLY. WATER SERVICE
W/ CURB STOP
CONNECT TO EXIST. SERVICE

STA. 407+92.18, 70.37' LT
HYDRANT
29.65' - 6" PVC LEAD
NOZZLE EL.: 797.70

1 1/4" POLY. WATER SERVICE
W/ CURB STOP
CONNECT TO EXIST. SERVICE

STA. 407+91.72, 42.18' LT
6" GATE VALVE

STA. 409+00.95, 38.71' LT
16"x12" TEE

STA. 408+90.95, 38.73' LT
12" BUTTERFLY VALVE

STA. 409+04.16, 71.71' LT
16"x8" TEE

STA. 409+14.16, 71.65' LT
8" GATE VALVE

STA. 409+19.16, 71.60' LT
22 1/2° BEND

EXIST. 8" PVC WATER MAIN

PROP. 12" PVC WATER MAIN

STA. 407+91.70, 40.68' LT
12"x6" ANCHOR TEE

STA. 409+31.97, 77.44' LT
11 1/4° BEND
CONNECT TO EXIST. MAIN

14.10' - 8" PVC WATER MAIN

8.00' - 8" PVC WATER MAIN

10.00' - 8" PVC WATER MAIN

STA. 409+00.65, 7.28' RT
16"x8" TEE

STA. 409+10.65, 7.39' RT
8" GATE VALVE

STA. 405+34.54, 33.26' LT
12" BUTTERFLY VALVE

STA. 409+30.65, 7.61' RT
22 1/2° BEND

EXIST. 8" PVC WATER MAIN

STA. 409+43.68, 13.18' RT
22 1/2° BEND
CONNECT TO EXIST. MAIN

STA. 405+24.60, 32.14' LT
45° BEND

MAIN STREET

STA. 409+74.76, 47.94' RT
HYDRANT
19.51' - 6" PVC LEAD
NOZZLE EL.: 792.55

MATCHLINE STA 405+00

MATCHLINE STA 411+00

406+00 407+00 408+00 409+00 410+00 411+00 205+00 204+00

45° BEND
CONNECT TO EXIST. MAIN
STA. 405+10.41, 43.45' LT
12" IE 793.79

45° BEND
STA. 405+24.60, 32.14' LT
12" IE 793.35

12" BUTTERFLY VALVE
STA. 405+34.54 33.26' LT
12" IE 793.10

12"x6" ANCHOR TEE
GRADE BREAK
STA. 408+01.70, 40.51' LT
12" IE 786.95
6" IE 787.20

12" BUTTERFLY VALVE
STA. 408+90.95 38.73' LT
12" IE 785.95

16"x12" TEE
STA. 409+00.95, 38.71' LT
16" IE 785.65
12" IE 786.02

18.15' 10.00' 252.00' 100.00' 10.00'

EXIST. 12"
STM. SEWER

PROP. 12"
STM. SEWER

EXIST. 15"
STM. SEWER

280.2 LF @ -2.44%

110.0 LF @ -1.00%

PROP. 12" PVC WATER MAIN

EXIST. 24"
SAN. SEWER

815 810 805 800 795 790 785 780

405 406 407 408 409 410 411

PROJECT NO: 2782-11-71	HWY: MAIN STREET	COUNTY: WAUKESHA	WATER MAIN PLAN	SHEET 153	E

FILE NAME : U:\Engineering\Projects\VMFENG\PilgrimRd\Main to Megal\WATER MAIN PP4 PLOT DATE : 10/27/2014 PLOT BY : bch PLOT NAME : PLOT SCALE : 1:40

STA. 500+92.57, 20.81' LT
HYDRANT
7.81' - 6" PVC LEAD
NOZZLE EL.: 800.75

STA. 500+92.57, 14.50' LT
6" GATE VALVE

1 1/4" POLY. WATER SERVICE
W/ CURB STOP
CONNECT TO EXIST. SERVICE

STA. 500+14.18, 13.00' LT
22 1/2° BEND

STA. 500+05.90 9.46' LT
22 1/2° BEND
CONNECT TO EXIST. MAIN

STA. 501+69.67 2.97' LT
8" GATE VALVE

PROP. 8" PVC WATER MAIN

CLEVELAND AVENUE

500+00 501+00 501+40 501+72 502+00 503+00 503+34

STA. 500+41.82, 13.00' LT
8"x4" ANCHOR TEE

STA. 500+92.57, 13.00' LT
8"x6" ANCHOR TEE

STA. 501+37.57, 13.00' LT
11 1/4° BEND

STA. 500+41.82, 11.50' LT
4" GATE VALVE

STA. 500+38.42, 30.22' RT
4" GATE VALVE
CONNECT TO EXIST. SERVICE

STA. 500+41.82, 22.20' RT
22 1/2° BEND

STA. 501+98.65 5.92' RT
11 1/4° BEND
CONNECT TO EXIST. MAIN

STA. 501+79.20 0.05' RT
16"x8" CROSS

22 1/2° BEND
CONNECT TO EXIST. MAIN
STA. 500+05.90, 9.46' LT
8" IE 791.27

22 1/2° BEND
STA. 500+14.18, 13.00' LT
8" IE 791.29

8"x6" ANCHOR TEE
STA. 500+92.57, 13.00' LT
8" IE 791.51
6" IE 791.59

11 1/4° BEND
STA. 501+37.57, 13.00' LT
8" IE 791.51

8" GATE VALVE
STA. 501+69.67, 2.97' LT
8" IE 791.51

16"x8" CROSS
STA. 501+79.20, 0.05' RT
16" IE 791.18
8" IE 791.51

GRADE BREAK
W/11 1/4° BEND
STA. 501+89.08, 3.03' RT
8" IE 791.00

22 1/2° BEND
CONNECT TO EXIST. MAIN
STA. 501+98.65, 5.92' RT
8" IE 788.94

9.00' 78.40' 45.00' 33.74' 10.00' 10.00' 10.00'

PROP. 12"
STM. SEWER

87.4 LF @ 0.27%
88.7 LF @ 0.00%
10.0 LF
@ -5.10%
10.0 LF
@ -20.60%

EXIST. 12"
SAN. SEWER

PROP. 8" PVC WATER MAIN

EXIST. 24"
SAN. SEWER

815 810 805 800 795 790 785 780

500 501 502 503

PROJECT NO: 2782-11-71	HWY: CLEVELAND AVENUE	COUNTY: WAUKESHA	WATER MAIN PLAN	SHEET 154	E

FILE NAME : U:\Engineering\Projects\VMFENG\PilgrimRd\Main to Megal\WATER MAIN PP5 PLOT DATE : 10/27/2014 PLOT BY : bch PLOT NAME : PLOT SCALE : 1:40

STA. 701+72.39, 36.65' LT
16"x12" STAINLESS STEEL
TAPPING SLEEVE W/ VALVE

STA. 701+93.86, 32.69' LT
11 1/4° BEND

EXIST. 16" C.I. WATER MAIN

PROP. 12" PVC WATER MAIN

MEGAL DRIVE

701+00

703+00

704+00

704+38

228+00

227+00

STA. 800+80.68, 18.90' LT
6" GATE VALVE

STA. 800+80.37, 29.50' LT
HYDRANT
12.10' - 6" PVC LEAD
NOZZLE EL.: 811.20

STA. 800+99.16, 18.90' LT
11 1/4° BEND

STA. 801+48.22, 19.87' LT
11 1/4° BEND

800+00 WB

+50 WB

STA. 800+71.45, 17.28' LT
12" BUTTERFLY VALVE

801+00 WB

MEGAL COURT

+50 WB

802+00

800+00 EB

+50 EB

801+00 EB

STA. 800+80.73, 17.40' LT
12"x6" ANCHOR TEE

+50 EB

MATCHLINE STA 802+00

STA. 701+47.76, 107.80' RT
CUT AND CAP EXIST. 12" MAIN AT EXIST. TEE

N

16"x12" TAPPING SLEEVE W/ VALVE STA. 701+72.39, 36.65' LT
16" IE 805.85
12" IE 807.02

11 1/4° BEND STA. 701+93.86, 32.69' LT
12" IE 806.32

GRADE BREAK STA. 702+95.51, 32.24' LT
12" IE 802.80

GRADE BREAK W/ 11 1/4° BEND STA. 800+04.00, 17.90' LT
12" IE 802.26

GRADE BREAK W/ 11 1/4° BEND STA. 800+14.00, 17.81' LT
12" IE 799.70

GRADE BREAK W/ 11 1/4° BEND STA. 800+24.00, 17.72' LT
12" IE 799.70

GRADE BREAK W/ 11 1/4° BEND STA. 800+34.00, 17.63' LT
12" IE 801.90

12" BUTTERFLY VALVE STA. 800+71.45, 17.28' LT
12" IE 801.99

12"X6" ANCHOR TEE GRADE BREAK STA. 800+80.73, 17.40' LT
12" IE 802.01
6" IE 802.26

11 1/4° BEND STA. 800+99.16, 18.90' LT
12" IE 801.90

11 1/4° BEND STA. 801+48.22, 19.87' LT
12" IE 801.59

20.00' | 100.00' | 146.34' | 10.00' | 10.00' | 10.00' | 37.46' | 10.00' | 20.00' | 53.26'

PROP. 18" STM. SEWER

EXIST. 48" STM. SEWER

120.0 LF @ -3.52%

146.3 LF @ -0.37%

47.5 LF @ 0.23%

377.3 LF @ -0.57%

PROP. 12" PVC WATER MAIN

10.0 LF @ -25.60%

10.0 LF @ 0.00%

10.0 LF @ 22.00%

825 820 815 810 805 800 795 790

800 801 802

PROJECT NO: 2782-11-71	HWY: MEGAL DRIVE/MEGAL COURT	COUNTY: WAUKESHA	WATER MAIN PLAN	SHEET 155	E

FILE NAME : U:\Engineering\Projects\VMFENG\PilgrimRd\Main to Megal\WATER MAIN PP6 PLOT DATE : 12/23/2014 PLOT BY : bch PLOT NAME : PLOT SCALE : 1:40

STA. 800+44.53, 27.89' LT
HYDRANT
12.12' - 6" PVC LEAD
NOZZLE EL.: 809.40

STA. 804+43.82, 17.29' LT
6" GATE VALVE

PROP. 12" PVC WATER MAIN

STA. 804+43.72, 15.80' LT
12"x6" ANCHOR TEE

MEGAL COURT

MATCHLINE STA 802+00

STA. 805+29.79, 31.28' LT
45° BEND

STA. 805+98.58, 6.83' RT
45° BEND

N

12"x6" ANCHOR TEE
STA. 804+43.72, 15.80' LT
12" IE 799.91
6" IE 780.16

GRADE BREAK
W/ 22 1/2 ° BEND
STA. 804+51.70, 15.26' LT
12" IE 799.86

GRADE BREAK
W/ 22 1/2 ° BEND
STA. 804+59.68, 14.73' LT
12" IE 796.90

45° BEND
STA. 805+29.79, 31.28' LT
12" IE 796.90

45° BEND
STA. 805+98.58, 6.83' RT
12" IE 796.90

296.00'
8.00'
8.00'
75.64'
78.26'

PROP. 12"
STM. SEWER

PROP. 24"
STM. SEWER

377.3 LF @ -0.57%

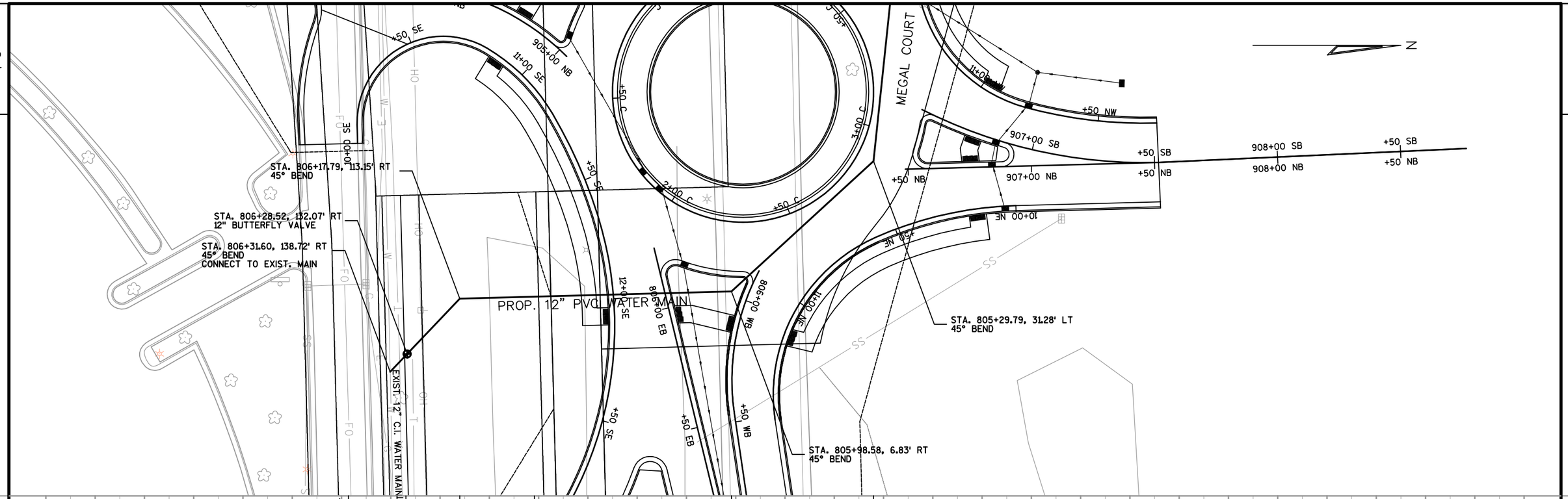
PROP. 12" PVC WATER MAIN

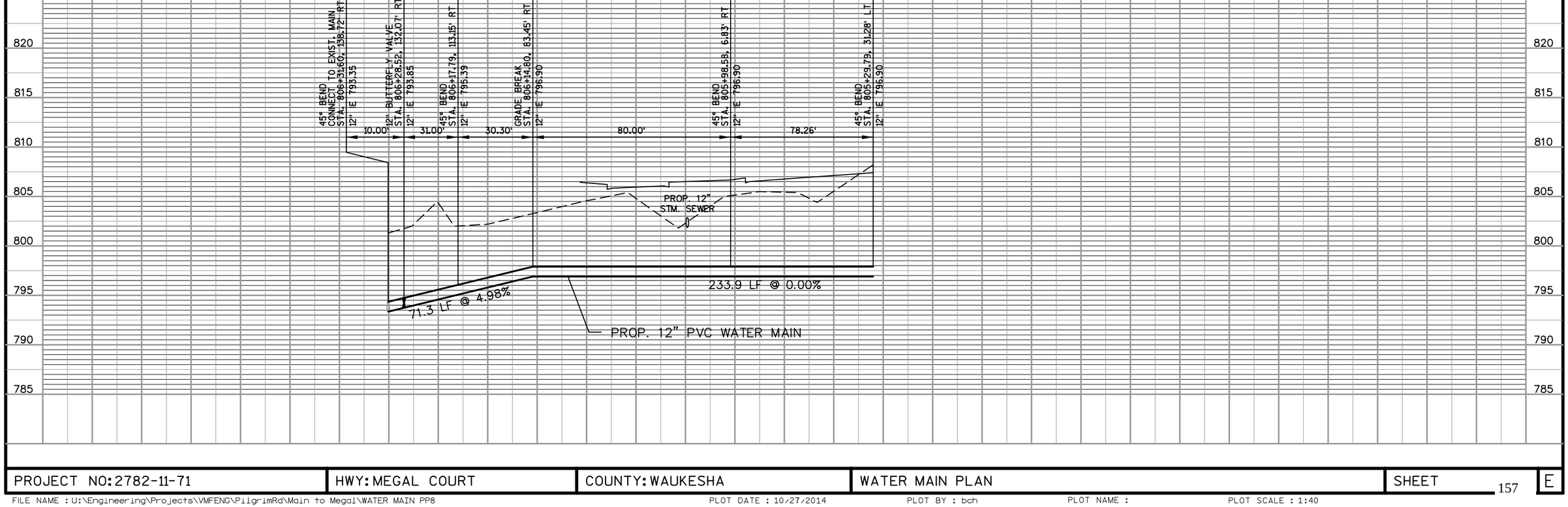
8.0 LF
@ -37.00%

233.9 LF @ 0.00%

PROJECT NO: 2782-11-71	HWY: MEGAL COURT	COUNTY: WAUKESHA	WATER MAIN PLAN	SHEET 156	E

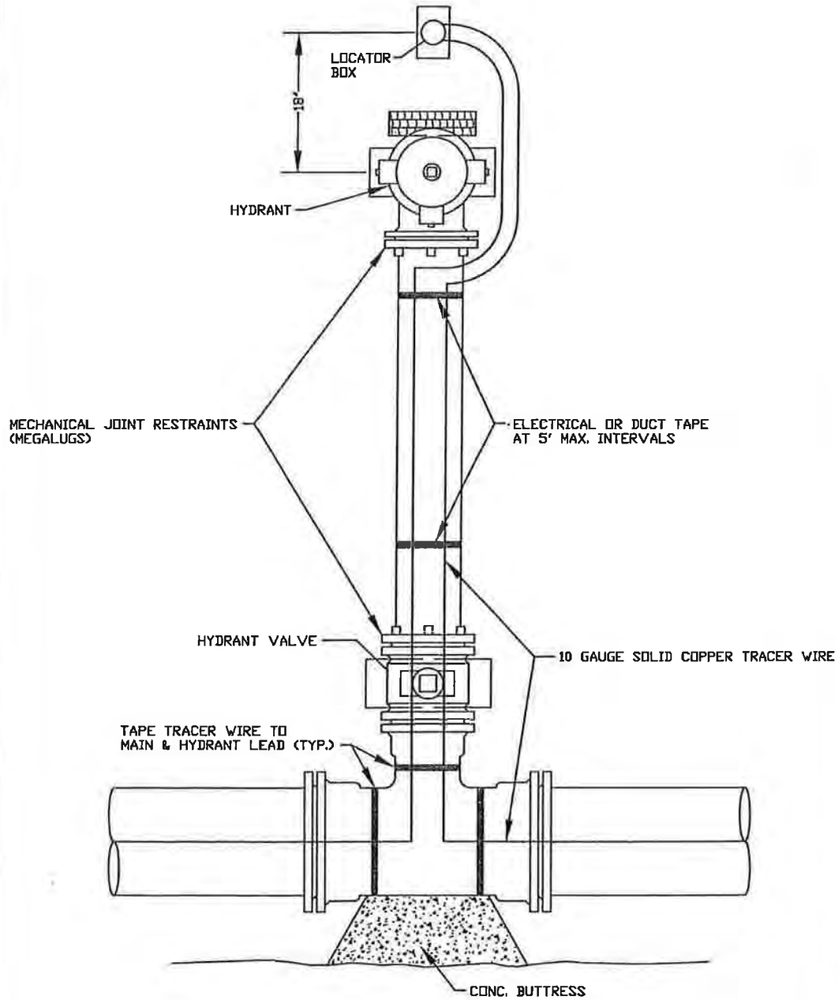
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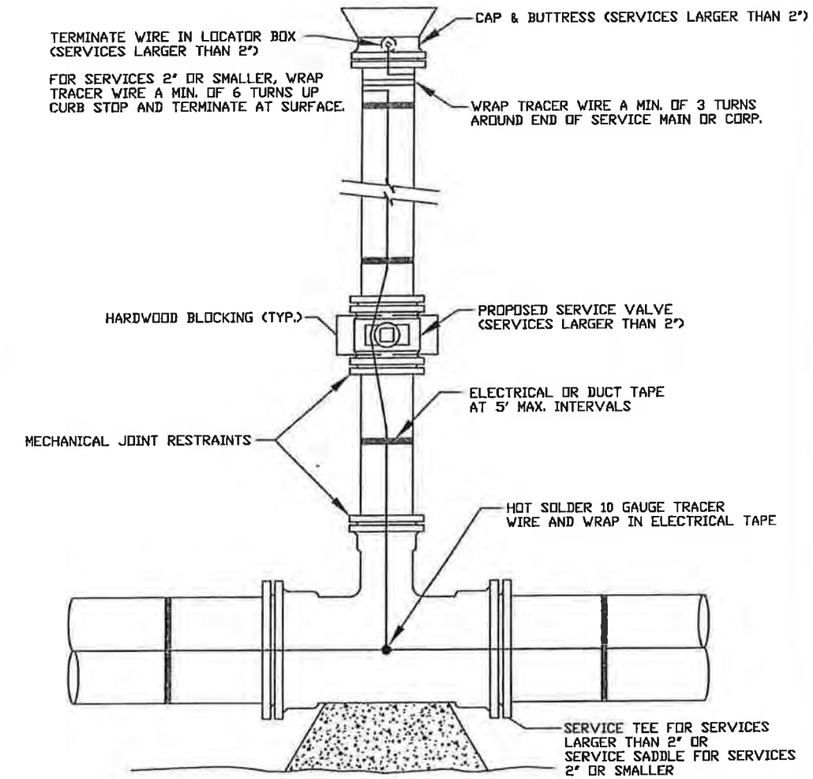
PROJECT NO: 2782-11-71	HWY: MEGAL COURT	COUNTY: WAUKESHA	WATER MAIN PLAN	SHEET 157	E

TRACER WIRE DETAIL FOR HYDRANT LEAD



REVISED 8/08

TRACER WIRE DETAIL FOR WATER SERVICES



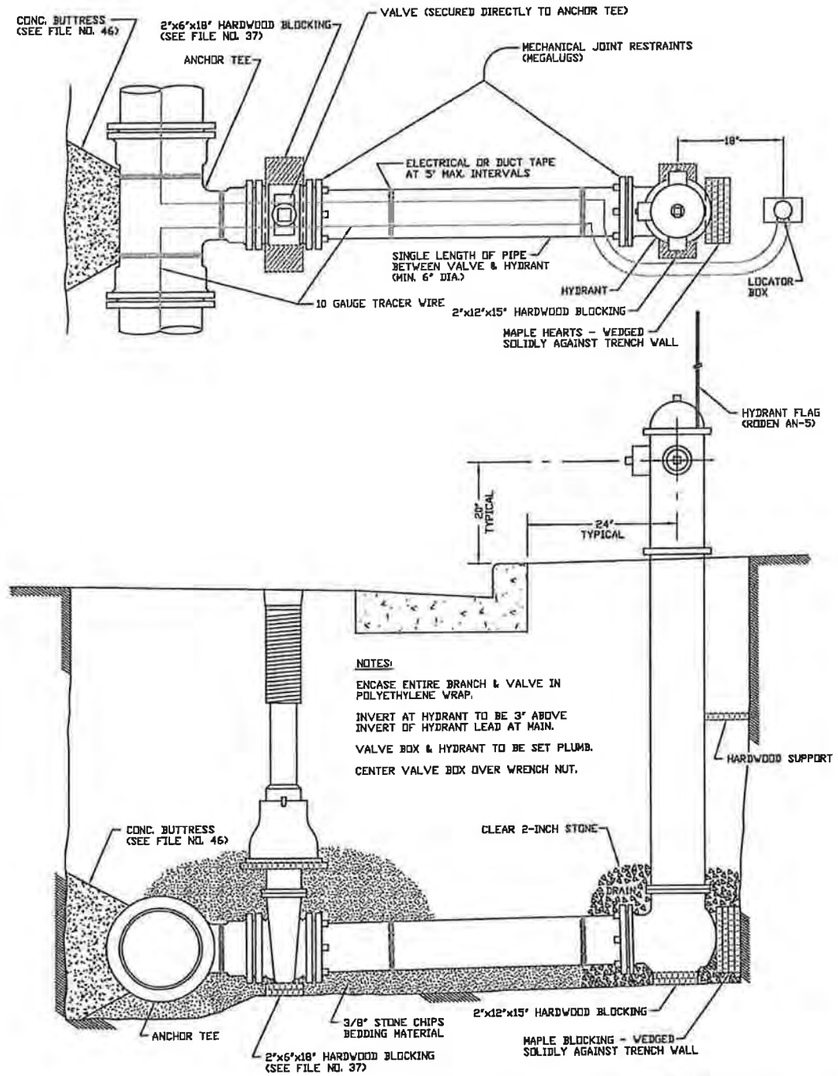
NOTE: SPLICING OF TRACER WIRE SHALL BE MADE BY STRIPPING ENDS OF EACH WIRE, TWISTING THE WIRES TOGETHER A MINIMUM OF 10 TURNS, HOT SOLDERING THE TWISTED WIRES TOGETHER, AND WRAPPING THE CONNECTION IN ELECTRICAL TAPE, OR BY USING A SPLICE KIT APPROVED BY THE VILLAGE WATER UTILITY.

REVISED 8/08

2

PROJECT NO: 2782-11-71	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	WATER MAIN DETAIL DRAWINGS		E

STANDARD HYDRANT DETAIL



REVISED 8/08

SECTION 550
WATER MAIN SPECIFICATIONS

PAGE 1

Material Specification List

Village Of Menomonee Falls Utilities

1. PIPE
* PVC-DR-18
* PVC-DR-14 for Firelines
* DUCTILE CLASS 55, POLY WRAPPED
* HDPE SDR11-PIPS
* TRACER WIRE (#10 SOLID)

2. FITTINGS (USA MADE ONLY)
* TYLER/UNION FOUNDRY or CLOW
* CORE BLUE NUTS & BOLTS ONLY
* ANCHOR TEES FOR HYDRANTS/WITH STAINLESS BOLT ON SWIVEL FLANGE

3. GATE VALVES 4" TO 8"
* WATEROUS # 2500 SERIES -DUCTILE OR CAST IRON, S.S. TRIM, OPEN LEFT
* MUELLER # 2360 SERIES-DUCTILE/CAST IRON, STAINLESS TRIM, RW, OPEN LEFT
* CLOW #C509DI-HEAVY DUCTILE, STAINLESS TRIM, RW, OPEN LEFT

BUTTERFLY VALVES 10" TO 24"
* CLOW - KENNEDY - M & H STYLE 4500 WITH ALL STAINLESS HARDWARE, OPEN LEFT

4. VALVE BOXES
* TYLER "DD" THREE PIECE, WITH ADAPTERS (VALVE BOX ADAPTER/BY ADAPTER INC).
* EAST JORDAN "DD" THREE PIECE, WITH ADAPTERS (VALVE BOX ADAPTER/BY ADAPTER INC.)

5. M.J. RESTRAINTS	BELL JOINT RESTRAINTS	FRICTION CLAMPS
* EBAA IRON MEGA LUGS	* FORD- 1390 HUB RESTRAINER	* MAX WEISS
* FORD UNI-FLANGE	* EBBA- 1600 SERIES HUB RESTRAINTS	* FRICTION CLAMPS

6. HYDRANTS
* WATEROUS PACER 250
* MUELLER CENTURION 250
* CLOW MEDALLION F2545
* HYDRANT EXTENSIONS MUST BE **OEM ONLY**

NOTE: ALL HYDRANTS MUST BE GREASE LUBRICATION
NOTE: ALL HYDRANTS MUST HAVE FACTORY INSTALLED VANDAL SHIELD
NOTE: MUELLER OR CLOW HYDRANTS MUST BE USED ON MAIN ROADS - DESIGNATED BY WATER SUPERINTENDENT

7. SERVICES - MINIMUM OF 1-1/4" REQUIRED FOR NEW CONSTRUCTION (FULL PORT ONLY)
* ALL Waterworks brass as of 2014 must be NSF/ANSI 61
* FORD FULL PORT CORP STOP # FB1000 SERIES
* FORD FULL PORT CURB STOP # B44 SERIES
* MUELLER CURB STOP #300 SERIES
* MUELLER CORPORATION STOP # B25 SERIES
* POLY TUBING 200 PSI RATED, SS INSERTS REQUIRED

*ALL BRASS MUST HAVE TRACER WIRE NUT (T.W.)
*AY McDonald FULL PORT CORP STOP #4 4701BQ SERIES
*AY McDonald FULL PORT CURB STOP #7 6104Q SERIES

8. STAINLESS STEEL TAPPING SADDLES FOR SERVICE (1" THROUGH 2") (NO REDUCING BUSHING ALLOWED)
* FORD FS202 - SINGLE STRAP
* SMITH BLAIR # 317 SERIES
* ROMAC # 202N SERIES

9. TAPPING SLEEVES (4" THROUGH 20")
* FORD # FTSSM.J. OUTLET
* ROMAC#RSST SS MJ OUTLET
* SMITH BLAIR - # 665 WITH M.J. OUTLET

NOTE: ALL STAINLESS HARDWARE REQUIRED

10. LOCKING BY PASS VALVES
* FORD # B11-666-W (1-1/2") # B11-777W (2")
* MUELLER # B200200 (1-1/2" THROUGH 2")

11. CURB STOP BOXES	Minneapolis Pattern
* FORD - EM2-70-56	*AY McDonald 5614
* MUELLER - H-10300	

12. TRACER WIRE ACCESS BOX
* VALVCO, INC.

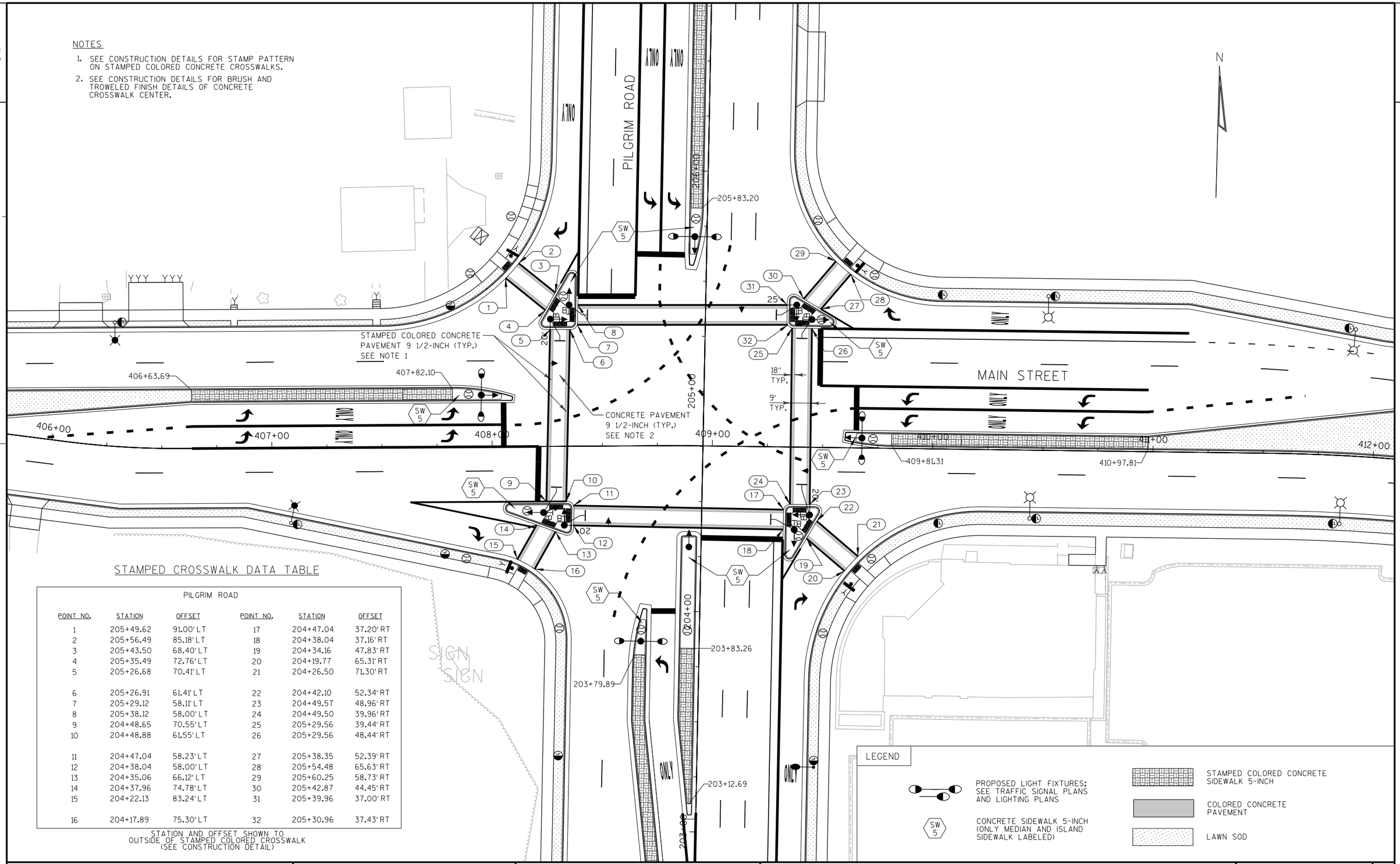
13. CASING SPACERS
* POWER SEAL-MODEL 4810
* CASCADE - TYPE CCS

14. METER PITS
* FORD # PMBHH-688-36-72 WITH MC-36-MD-TT COVER 6' BURY DEPTH

WU:Exce/DivCom/Procedure/MaterialSpecificationList
Revised 01/13/2013

NOTES

1. SEE CONSTRUCTION DETAILS FOR STAMP PATTERN ON STAMPED COLORED CONCRETE CROSSWALKS.
2. SEE CONSTRUCTION DETAILS FOR BRUSH AND TROWELED FINISH DETAILS OF CONCRETE CROSSWALK CENTER.



STAMPED CROSSWALK DATA TABLE

PILGRIM ROAD

POINT NO.	STATION	OFFSET	POINT NO.	STATION	OFFSET
1	205+49.62	91.00' LT	17	204+47.04	37.20' RT
2	205+56.49	85.18' LT	18	204+38.04	37.16' RT
3	205+43.50	68.40' LT	19	204+34.16	47.83' RT
4	205+35.49	72.76' LT	20	204+19.77	65.31' RT
5	205+26.68	70.41' LT	21	204+26.50	71.30' RT
6	205+26.91	61.41' LT	22	204+42.10	52.34' RT
7	205+29.12	58.11' LT	23	204+49.57	48.96' RT
8	205+38.12	58.00' LT	24	204+49.50	39.96' RT
9	204+48.65	70.55' LT	25	205+29.56	39.44' RT
10	204+48.88	61.55' LT	26	205+29.56	48.44' RT
11	204+47.04	58.23' LT	27	205+38.35	52.39' RT
12	204+38.04	58.00' LT	28	205+54.48	65.63' RT
13	204+35.06	66.12' LT	29	205+60.25	58.73' RT
14	204+37.96	74.78' LT	30	205+42.87	44.45' RT
15	204+22.13	83.24' LT	31	205+39.96	37.00' RT
16	204+17.89	75.30' LT	32	205+30.96	37.43' RT

STATION AND OFFSET SHOWN TO OUTSIDE OF STAMPED COLORED CROSSWALK (SEE CONSTRUCTION DETAIL)

LEGEND

- PROPOSED LIGHT FIXTURES; SEE TRAFFIC SIGNAL PLANS AND LIGHTING PLANS
- SW 5 — CONCRETE SIDEWALK 5-INCH (ONLY MEDIAN AND ISLAND SIDEWALK LABELED)
- STAMPED COLORED CONCRETE SIDEWALK 5-INCH
- COLORED CONCRETE PAVEMENT
- LAWN SOD

PROJECT NO: 2782-11-70 & 2782-12-70	HWY: MEGAL COURT	COUNTY: WAUKESHA	STREETSCAPE PLAN: MAIN STREET INTERSECTION	SHEET 160	E

STAMPED CROSSWALK DATA TABLE

PILGRIM ROAD

POINT NO.	STATION	OFFSET	POINT NO.	STATION	OFFSET
1	211+35.72	82.43' LT	17	212+42.63	30.29' RT
2	211+41.14	89.63' LT	18	212+44.52	39.32' RT
3	211+60.13	76.59' LT	19	212+53.37	41.62' RT
4	211+55.38	68.94' LT	20	212+77.65	61.01' RT
5	211+61.43	58.00' LT	21	212+83.63	54.27' RT
6	211+70.43	58.00' LT	22	212+58.05	33.85' RT
7	211+74.33	62.17' LT	23	212+53.93	26.00' RT
8	211+73.42	71.17' LT	24	212+44.91	26.04' RT
9	211+61.43	26.00' RT	25	212+39.35	59.19' LT
10	211+70.43	26.00' RT	26	212+48.32	59.99' LT
11	211+82.95	29.44' RT	27	212+49.58	69.28' LT
12	211+80.30	38.40' RT	28	212+64.87	86.41' LT
13	211+66.12	42.05' RT	29	212+58.16	92.41' LT
14	211+58.76	36.73' RT	30	212+42.05	74.36' LT
15	211+43.06	53.27' RT	31	212+33.04	70.73' LT
16	211+49.83	59.21' RT	32	212+34.06	61.72' LT

STATION AND OFFSET SHOWN TO OUTSIDE OF STAMPED COLORED CROSSWALK (SEE CONSTRUCTION DETAIL)

LEGEND

- PROPOSED LIGHT FIXTURES; SEE TRAFFIC SIGNAL PLANS AND LIGHTING PLANS
- SW 5 — CONCRETE SIDEWALK 5-INCH (ONLY MEDIAN AND ISLAND SIDEWALK LABELED)
- STAMPED COLORED CONCRETE SIDEWALK 5-INCH
- COLORED CONCRETE PAVEMENT
- LAWN SOD

STAMPED COLORED CONCRETE PAVEMENT 9 1/2-INCH (TYP.) SEE NOTE 1

CONCRETE PAVEMENT 9 1/2-INCH (TYP.) SEE NOTE 2

FALLS PARKWAY

PILGRIM ROAD

US 41/42 SB ON RAMP

US 41/42 SB OFF RAMP

ONLY

POST

211+01.68 211+03.40 209+02.19 503+00 503+34 210+00 211+00 212+00 213+00 213+42.79 214+00 215+00 90+88 100+00 101+00 124+00 50' 45° 18" TYP. 9' TYP.

NOTES

1. SEE CONSTRUCTION DETAILS FOR STAMP PATTERN ON STAMPED COLORED CONCRETE CROSSWALKS.
2. SEE CONSTRUCTION DETAILS FOR BRUSH AND TROWELED FINISH DETAILS OF CONCRETE CROSSWALK CENTER.

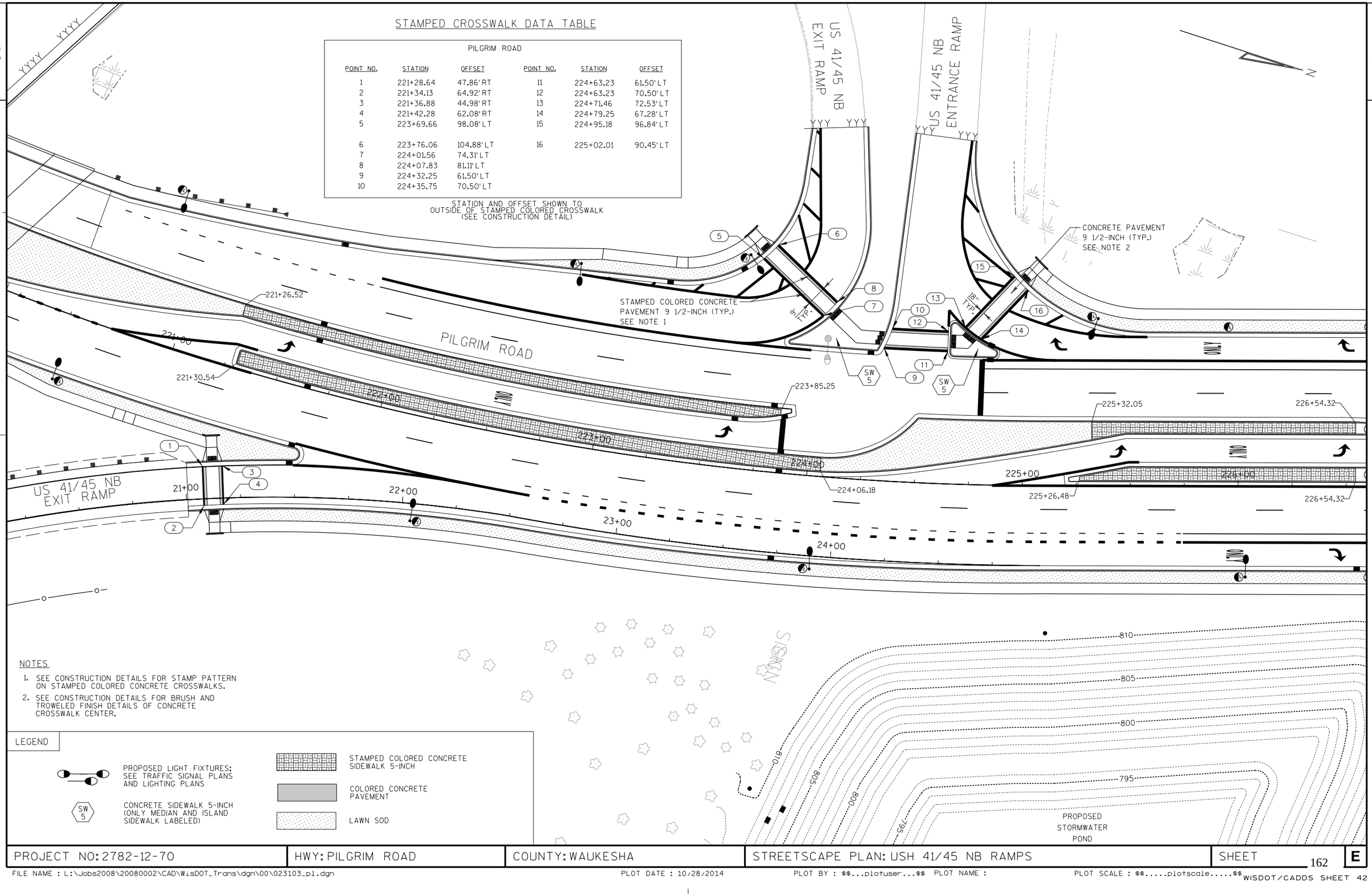
PROJECT NO: 2782-11-70 & 2782-12-70	HWY: MEGAL COURT	COUNTY: WAUKESHA	STREETSCAPE PLAN: FALLS PARKWAY INTERSECTION	SHEET 161	E

STAMPED CROSSWALK DATA TABLE

PILGRIM ROAD

POINT NO.	STATION	OFFSET	POINT NO.	STATION	OFFSET
1	221+28.64	47.86' RT	11	224+63.23	61.50' LT
2	221+34.13	64.92' RT	12	224+63.23	70.50' LT
3	221+36.88	44.98' RT	13	224+71.46	72.53' LT
4	221+42.28	62.08' RT	14	224+79.25	67.28' LT
5	223+69.66	98.08' LT	15	224+95.18	96.84' LT
6	223+76.06	104.88' LT	16	225+02.01	90.45' LT
7	224+01.56	74.31' LT			
8	224+07.83	81.11' LT			
9	224+32.25	61.50' LT			
10	224+35.75	70.50' LT			

STATION AND OFFSET SHOWN TO
OUTSIDE OF STAMPED COLORED CROSSWALK
(SEE CONSTRUCTION DETAIL)



NOTES

1. SEE CONSTRUCTION DETAILS FOR STAMP PATTERN ON STAMPED COLORED CONCRETE CROSSWALKS.
2. SEE CONSTRUCTION DETAILS FOR BRUSH AND TROWELED FINISH DETAILS OF CONCRETE CROSSWALK CENTER.

LEGEND

- PROPOSED LIGHT FIXTURES; SEE TRAFFIC SIGNAL PLANS AND LIGHTING PLANS
- SW 5 — CONCRETE SIDEWALK 5-INCH (ONLY MEDIAN AND ISLAND SIDEWALK LABELED)
- STAMPED COLORED CONCRETE SIDEWALK 5-INCH
- COLORED CONCRETE PAVEMENT
- LAWN SOD

PROJECT NO: 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	STREETSCAPE PLAN: USH 41/45 NB RAMPS	SHEET 162	E

NOTES

1. SEE CONSTRUCTION DETAILS FOR STAMP PATTERN ON STAMPED COLORED CONCRETE CROSSWALKS.
2. SEE CONSTRUCTION DETAILS FOR BRUSH AND TROWELED FINISH DETAILS OF CONCRETE CROSSWALK CENTER.

LEGEND

- PROPOSED LIGHT FIXTURES; SEE TRAFFIC SIGNAL PLANS AND LIGHTING PLANS
- SW 5 — CONCRETE SIDEWALK 5-INCH (ONLY MEDIAN AND ISLAND SIDEWALK LABELED)
- STAMPED COLORED CONCRETE SIDEWALK 5-INCH
- COLORED CONCRETE PAVEMENT
- LAWN SOD

PILGRIM ROAD

MEGAL DRIVE

MEGAL COURT

MATCHLINE STA 802+50 EB

702+04.98

703+18.45

702+00

703+00

704+00

229+00

228+00

227+00

226+00

18" TYP.

9' TYP.

CONCRETE PAVEMENT 9 1/2-INCH (TYP.) SEE NOTE 2

STAMPED COLORED CONCRETE PAVEMENT 9 1/2-INCH (TYP.) SEE NOTE 1

800+00 WB

+50 WB

800+00 EB

+50 EB

801+00 WB

801+00 EB

802+00 WB

802+00 EB

600+64.86

226+54.32

25'

20'

ONLY

ONLY

PROPOSED DETENTION POND

810

STAMPED CROSSWALK DATA TABLE

PILGRIM ROAD

POINT NO.	STATION	OFFSET	POINT NO.	STATION	OFFSET
1	228+16.23	65.70' LT	16	227+07.50	56.80' RT
2	228+07.16	68.62' LT	17	227+41.27	47.26' RT
3	227+97.37	75.00' LT	18	227+41.41	56.26' RT
4	227+89.80	84.00' LT	19	227+51.27	47.10' RT
5	227+24.01	84.00' LT	20	227+51.41	56.10' RT
6	227+13.85	75.00' LT	21	227+91.99	55.46' RT
7	226+91.96	69.00' LT	22	227+98.31	46.36' RT
8	226+82.96	69.00' LT	23	228+09.64	37.81' RT
9	226+82.96	11.00' LT	24	228+18.57	34.57' RT
10	226+91.96	11.00' LT			
11	226+91.96	0.00' RT			
12	226+82.96	0.00' RT			
13	226+82.96	38.84' RT			
14	226+91.96	42.60' RT			
15	226+99.61	47.92' RT			

STATION AND OFFSET SHOWN TO OUTSIDE OF STAMPED COLORED CROSSWALK

PROJECT NO: 2782-11-70 & 2782-12-70	HWY: MEGAL COURT	COUNTY: WAUKESHA	STREETSCAPE PLAN: MEGAL INTERSECTION	SHEET 163	E

LEGEND

PROPOSED LIGHT FIXTURES; SEE TRAFFIC SIGNAL PLANS AND LIGHTING PLANS

SW 5 — CONCRETE SIDEWALK 5-INCH (ONLY MEDIAN AND ISLAND SIDEWALK LABELED)

STAMPED COLORED CONCRETE SIDEWALK 5-INCH

COLORED CONCRETE PAVEMENT

LAWN SOD

STAMPED COLORED CONCRETE PAVEMENT 9 1/2-INCH (TYP.) SEE NOTE 1

CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE R

CONCRETE CURB & GUTTER 18-INCH TYPE A

COLORED CONCRETE ROUNDABOUT TRUCK APRON 8-INCH

CONCRETE PAVEMENT 9 1/2-INCH (TYP.) SEE NOTE 2

TOPSOIL, FERTILIZER, SEED AND EROSION MAT

MEGAL COURT

WACKER NEUSON NORTH LEG

WACKER NEUSON ENTRANCE

HARLEY DAVIDSON MAIN ENTRANCE

HARLEY LOADING DOCK ENTRANCE

MATCHLINE STA 803+50 EB

END CONSTRUCTION
2782-11-70
BEGIN PROJECT
2720-10-70
STA 603+77.60

PROPOSED STORMWATER POND

NOTES

1. SEE CONSTRUCTION DETAILS FOR STAMP PATTERN ON STAMPED COLORED CONCRETE CROSSWALKS.
2. SEE CONSTRUCTION DETAILS FOR BRUSH AND TROWELED FINISH DETAILS OF CONCRETE CROSSWALK CENTER.

STAMPED CROSSWALK DATA TABLE

MEGAL COURT

POINT NO.	STATION	OFFSET	POINT NO.	STATION	OFFSET
1	803+95.80 EB	49.11' LT	17	805+92.72 EB	21.04' RT
2	804+02.85 EB	52.02' LT	18	806+03.48 EB	23.32' RT
3	804+00.11 EB	26.17' LT	19	805+97.19 EB	0.00' RT
4	804+08.17 EB	30.00' LT	20	806+08.43 EB	0.00' RT
5	804+03.91 EB	0.00' RT	21	806+08.72 EB	28.56' LT
6	804+14.92 EB	0.00' RT	22	806+18.52 EB	23.55' LT
7	804+02.75 EB	17.45' RT	23	806+26.84 EB	39.83' LT
8	804+16.16 EB	18.36' RT	24	806+17.61 EB	45.93' LT
9	904+74.89 NB	37.50' LT	25	906+72.00 NB	17.52' RT
10	904+81.19 NB	19.25' LT	26	906+82.94 NB	16.36' RT
11	904+67.26 NB	33.75' LT	27	906+81.20 NB	0.00' RT
12	904+71.98 NB	16.67' LT	28	906+70.14 NB	0.00' LT
13	904+85.74 NB	0.00' RT	29	906+72.45 NB	16.21' LT
14	904+74.74 NB	0.00' LT	30	906+82.67 NB	12.15' LT
15	904+73.64 NB	16.61' RT	31	906+79.28 NB	33.42' LT
16	904+86.89 NB	17.30' RT	32	906+88.79 NB	27.55' LT

STATION AND OFFSET SHOWN TO OUTSIDE OF STAMPED COLORED CROSSWALK (SEE CONSTRUCTION DETAIL)

PROJECT NO: 2782-11-70 & 2720-10-70	HWY: MEGAL COURT	COUNTY: WAUKESHA	STREETSCAPE PLAN: MEGAL COURT	SHEET 164	E

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- ESTR EXISTING SIGN TO REMAIN

NOTE: STREET NAME SIGNS TO BE REMOVED OR RELOCATED BY VILLAGE.

ID 2782-11-70

STREET NAME SIGNS

STOP (2R) R1-1 REMOVE

R4-7 (8R) REMOVE

NO PARKING ANY TIME R7-1D (1R) REMOVE

CHURCH R7-1D ESTR

NO PARKING ANY TIME R7-1D ESTR

R4-7 ESTR

R3-4 ESTR

SPEED LIMIT 30 (3R) (4R) R2-1 REMOVE

PARK BLVD

301+00

302+00

198+00

199+00

200+00

201+00

202+00

PILGRIM ROAD

W3-3 (9R) REMOVE

NO PARKING ANY TIME R7-1D (7R) REMOVE

NO OVERNIGHT TRUCK PARKING — PRIVATE SIGN MOVE (SEE PERMANENT SIGNING PLAN)

STOP R1-1 — PRIVATE SIGN MOVE (SEE PERMANENT SIGNING PLAN)

R4-7 (5R) (6R) REMOVE

NOTES:

TYPE II ALUMINUM SIGNS REMOVED UNDER THE CONTRACT SHALL BE DELIVERED TO THE REGIONAL TRAFFIC SIGN SHOP ON 60TH STREET IN WEST ALLIS. SIGNS SHALL BE CAREFULLY REMOVED FROM SIGN SUPPORTS. THE SIGNS SHALL BE PALLETIZED FOR HANDLING WITH A FORKLIFT (SEE SPECIAL PROVISION 638.3.4). THE REGIONAL SIGN SHOP (414-266-1165) SHALL BE NOTIFIED THREE WORKING DAYS PRIOR TO DELIVERY OF THE SIGNS.

WHEN AN EXISTING SIGN SUPPORT IS TO BE REMOVED AND A NEW STOP SIGN AND SUPPORT ERECTED, THE WORK SHALL BE DONE CONCURRENTLY. FOR OTHER SIGNS AND SUPPORTS THAT ARE TO BE REMOVED AND NEW SIGNS AND SUPPORTS ERECTED, THE REMOVAL OF THE EXISTING SIGN AND SUPPORT AND ERECTION OF THE NEW SIGN AND SUPPORT SHOULD BE DONE AS CONCURRENTLY AS POSSIBLE. IN NO CASE SHALL A NEW SIGN AND SUPPORT BE DOWN FOR MORE THAN 24 HOURS AND THERE SHALL NOT BE MORE THAN ONE SIGN OF THE SAME LEGEND MISSING IN A ROW.

WOOD POST SIZES FOR TYPE II SIGNS ARE ESTIMATED LENGTHS, AND THE ACTUAL LENGTH WILL BE DETERMINED IN THE FIELD.

PROJECT NO: 2782-11-70, 2782-12-70, 2720-10-70	HWY: USH 41	COUNTY: WAUKESHA	SIGN REMOVAL PLAN	SHEET E

FILE NAME : J:\projects\d2_27821241\Sign\023101_ps.dgn PLOT DATE : 26-SEP-2014 10:01 PLOT BY : mscppl PLOT NAME : PLOT SCALE : 40:1 WISDOT/CADDS SHEET 42

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- ESTR EXISTING SIGN TO REMAIN

SEE SHEET 7 OF 16

MAIN STREET

PILGRIM ROAD

12R STOP R1-1F REMOVE

11R STOP R1-1 REMOVE

10R NO PARKING ANY TIME R7-1D REMOVE

14R STOP R1-1 REMOVE

13R STOP R1-1F REMOVE

15R STOP R1-1F REMOVE

R3-4

16R H D9-2 REMOVE

18R M1-85 REMOVE

HISTORIC VILLAGE CENTRE → MOVE (SEE PERMANENT SIGNING PLAN) PROPERTY OF VILLAGE

STREET NAME SIGNS

19R NO PARKING ANY TIME R7-1D REMOVE

20R R4-7 REMOVE

R4-7 REMOVE

17R R3-4

27R STOP R1-1F REMOVE

26R STOP R1-1F REMOVE

25R STOP R1-1 REMOVE

HISTORIC VILLAGE CENTRE ← MOVE (SEE PERMANENT SIGNING PLAN) PROPERTY OF VILLAGE

30R R3-4 STOP R1-1F REMOVE

29R STOP R1-1F REMOVE

28R STOP R1-1 REMOVE

SPEED LIMIT 35 R2-1 REMOVE

23R

24R

22R NO PARKING ANY TIME R7-1D REMOVE

21R W11-2 W16-7L REMOVE

200R NO PARKING ANY TIME R7-1D REMOVE

201R R4-7 REMOVE

202R M1-85 REMOVE

203+00 204+00 205+00 206+00 207+00 208+00

408+00 409+00 410+00

ID 2782-11-70
ID 2782-12-70

NOTE:
STREET NAME SIGNS TO BE REMOVED OR RELOCATED BY VILLAGE.

SEE SHEET 8 OF 16

PROJECT NO: 2782-11-70, 2782-12-70, 2720-10-70	HWY: USH 41	COUNTY: WAUKESHA	SIGN REMOVAL PLAN	SHEET 166	E

FILE NAME : J:\projects\d2_27821241\Sign\023102_ps.dgn PLOT DATE : 25-AUG-2014 06:59 PLOT BY : mscppl PLOT NAME : PLOT SCALE : 40:1 WISDOT/CADDS SHEET 42

NOTE:
STREET NAME SIGNS TO BE REMOVED OR RELOCATED BY VILLAGE.

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- ESTR EXISTING SIGN TO REMAIN

SEE SHEET 9 OF 16

N

CLEVELAND AVENUE

FALLS PARKWAY

PILGRIM ROAD

500+00
501+00
501+40
501+72
502+00
503+00
503+41
208+00
209+00
210+00
211+00
212+00
213+00
87+00
88+00
100+00
101+00
113+00
121+00

SPEED LIMIT 25
R2-1
MOVE
SEE PERMANENT SIGNING PLAN

ID 2782-11-70
ID 2782-12-70

31R STOP R1-1 REMOVE

32R W11-2 REMOVE
W16-7L REMOVE

33R R4-7 REMOVE

203R NO PARKING ANY TIME R7-1D REMOVE

204R STOP R1-1F REMOVE

205R STOP R1-1 REMOVE

206R STOP R1-1F REMOVE

Falls Parkway REMOVE

207R STOP R1-1F REMOVE

208R DO NOT ENTER R5-1 REMOVE

NO PARKING ANY TIME R7-1D REMOVE

209R SOUTH 41 45 M3-3 M1-4 M1-4 M6-1 JV3-1 REMOVE

R4-7 REMOVE

210R STOP R1-1F REMOVE

34R STOP R1-1 REMOVE

NO PARKING HERE TO CORNER R7-51L MOVE SEE PERMANENT SIGNING PLAN

216R STOP R1-1F REMOVE

215R SOUTH 41 45 JV3-1 NO PARKING ANY TIME R7-1D REMOVE

FREEWAY ENTRANCE MOVE SEE PERMANENT SIGNING PLAN

214R H D9-2 M6-1 REMOVE

Falls Parkway REMOVE

212R YIELD R1-2 REMOVE

DO NOT ENTER R5-1 REMOVE

NO PARKING ANY TIME R7-1D REMOVE

211R WRONG WAY R5-1A MOVE SEE PERMANENT SIGNING PLAN

213R STOP R1-1F REMOVE

SEE SHEET 10 OF 16

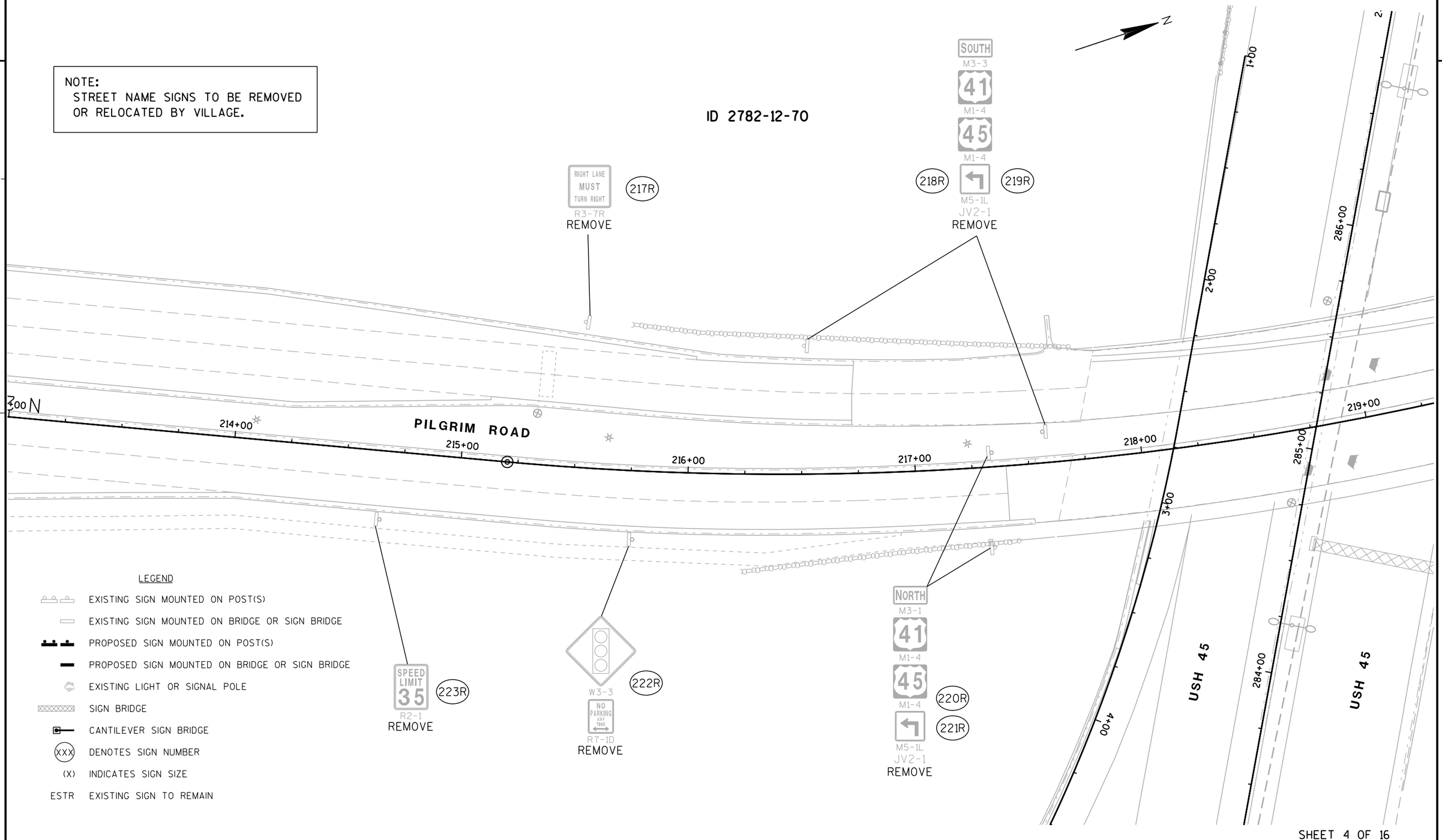
SHEET 3 OF 16

PROJECT NO: 2782-11-70, 2782-12-70, 2720-10-70	HWY: USH 41	COUNTY: WAUKESHA	SIGN REMOVAL PLAN	SHEET 167 E

FILE NAME : J:\projects\d2_27821241\Sign\023103_ps.dgn PLOT DATE : 25-AUG-2014 06:59 PLOT BY : mscppl PLOT NAME : PLOT SCALE : 40:1
WISDOT/CADDS SHEET 42

NOTE:
STREET NAME SIGNS TO BE REMOVED
OR RELOCATED BY VILLAGE.

ID 2782-12-70



LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- ESTR EXISTING SIGN TO REMAIN

SHEET 4 OF 16

PROJECT NO: 2782-11-70, 2782-12-70, 2720-10-70	HWY: USH 41	COUNTY: WAUKESHA	SIGN REMOVAL PLAN	SHEET 168 E

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- ESTR EXISTING SIGN TO REMAIN

N

NOTE:
STREET NAME SIGNS TO BE REMOVED OR RELOCATED BY VILLAGE.

ID 2782-12-70

USH 45 SB

USH 45 NB

USH 45 NB OFF RAMP

USH 45 NB ON RAMP

PILGRIM ROAD

1+00 2+00 285+00 286+00 287+00 219+00 220+00 221+00 222+00 223+00 224+00 24+00 23+00 22+00 21+00 20+00

227R — DO NOT ENTER (R5-1) — REMOVE

224R — W3-3 — REMOVE

225R — SPEED LIMIT 35 (R2-1) — REMOVE

226R — REMOVE

228R — YIELD (R1-2) — REMOVE

233R — W4-3 — REMOVE

234R — W5-52R — REMOVE

235R — W5-52L — REMOVE

232R — YIELD (R1-2) — REMOVE

231R — LEFT TURN LANE (R3-56L) — REMOVE

OLD FALLS VILLAGE — REMOVE BY VILLAGE

229R / 230R — STOP (R1-1F) — REMOVE

SHEET 5 OF 16

PROJECT NO: 2782-11-70, 2782-12-70, 2720-10-70	HWY: USH 41	COUNTY: WAUKESHA	SIGN REMOVAL PLAN	SHEET 169 E

SEE SHEET 11 OF 16

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- ESTR EXISTING SIGN TO REMAIN
- [X] INDICATES YEAR OF SIGN

USH 41/45 NB OFF RAMP

USH 41/45 NB ON RAMP

MEGAL DRIVE

PILGRIM ROAD

ID 2782-12-70
ID 2782-11-70

224+00 225+00 226+00 227+00 228+00 229+00

703+00 704+00

24+00

STREET NAME SIGNS

236R STOP R1-1F REMOVE

240R

NORTH M3-1
41 M1-4
45 M1-4
M6-1
JV3-1
238R REMOVE

35R STOP R1-1 REMOVE

BUS REMOVE BY BUS COMPANY

RIDESHARE INFO CALL 1-800-455-POOL D12-2A REMOVE

PARK & RIDE PARKING ONLY MOVE PROPERTY OF VILLAGE, SEE PERMANENT SIGNING PLAN

PARKING REGULATIONS MOVE PROPERTY OF VILLAGE, SEE PERMANENT SIGNING PLAN

36R PARK & RIDE D4-2R REMOVE

DO NOT ENTER R5-1 MOVE SEE PERMANENT SIGNING PLAN

237R W12-1D REMOVE

242R PARK & RIDE D4-2L REMOVE

241R STOP R1-1F REMOVE

* 246R NO TRUCKING / PRIVATE ROAD NO THRU TRAFFIC REMOVE

* 245R SPEED LIMIT 15 R2-1 REMOVE

* 243R R3-60R REMOVE

* 244R ONLY R3-50L REMOVE

PRIVATE DRIVE

37R
38R STOP R1-1 REMOVE

R4-7 MOVE SEE PERMANENT SIGNING PLAN

SPEED LIMIT 35 [09] ESTR

SEE SHEET 13 OF 16

SEE SHEET 12 OF 16

NOTES:
1. STREET NAME SIGNS TO BE REMOVED OR RELOCATED BY VILLAGE.
2. * = REMOVE SIGNS AND RETURN TO HARLEY DAVIDSON
3. # = REMOVE SIGNS AND RETURN TO WACKER NEUSON

PROJECT NO: 2782-11-70, 2782-12-70, 2720-10-70	HWY: USH 41	COUNTY: WAUKESHA	SIGN REMOVAL PLAN	SHEET 170	E

FILE NAME : J:\projects\d2_27821241\Sign\023106_ps.dgn PLOT DATE : 25-AUG-2014 06:59 PLOT BY : mscppl PLOT NAME : PLOT SCALE : 40:1
WISDOT/CADDS SHEET 42

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- ESTR EXISTING SIGN TO REMAIN

MEGAL DRIVE

703+00

704+00

ID 2782-11-70

SOUTH M3-3 / NORTH M3-1

INTERSTATE 41 — M1-1 / M1-1

45 — M1-4 / M1-4

39R

MB6-1 / MB5-1R

JV2-2

REMOVE

RIGHT TURN LANE

R3-55R

40R

REMOVE

PILGRIM ROAD

226+00

227+00

228+00

229+00

230+00

231+00

PILGRIM ROAD

WRONG WAY

R5-1A

MOVE

SEE PERMANENT SIGNING PLAN

MEGAL COURT

NOTES:

1. STREET NAME SIGNS TO BE REMOVED OR RELOCATED BY VILLAGE.
2. ✳ = REMOVE SIGNS AND RETURN TO HARLEY DAVIDSON
3. # = REMOVE SIGNS AND RETURN TO WACKER NEUSON

SHEET 6A OF 16

PROJECT NO: 2782-11-70, 2782-12-70, 2720-10-70	HWY: USH 41	COUNTY: WAUKESHA	SIGN REMOVAL PLAN	SHEET E

FILE NAME : J:\projects\d2_27821241\Sign\023106a_ps.dgn PLOT DATE : 30-SEP-2014 06:59 PLOT BY : mscppl PLOT NAME : PLOT SCALE : 40:1

WISDOT/CADDS SHEET 42

2

NOTE:
STREET NAME SIGNS TO BE REMOVED OR RELOCATED BY VILLAGE.

N

ID 2782-12-70

HISTORIC VILLAGE CENTRE
NO PARKING ANY TIME
ESTR

SPEED LIMIT 30
R2-1
247R
REMOVE

R3-4
REMOVE

248R
NO PARKING ANY TIME
REMOVE

MAIN STREET

402+00
403+00
404+00
405+00
406+00
407+00
408+00

253R
NO PARKING ANY TIME
REMOVE

R4-7
252R
W5-52L
REMOVE

W3-3
251R
REMOVE

250R
NO PARKING ANY TIME
REMOVE

TO
MB4-5
41
M1-4
45
M1-4
M6-1
JV3-1
REMOVE

H
HOSPITAL
249R
REMOVE

TRUCKS NO U-TURN
REMOVE

SIGN
SIGN

SEE SHEET 13 OF 16

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- XXX DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- ESTR EXISTING SIGN TO REMAIN

SHEET 7 OF 16

PROJECT NO: 2782-11-70, 2782-12-70, 2720-10-70	HWY: USH 41	COUNTY: WAUKESHA	SIGN REMOVAL PLAN	SHEET 172	E

2

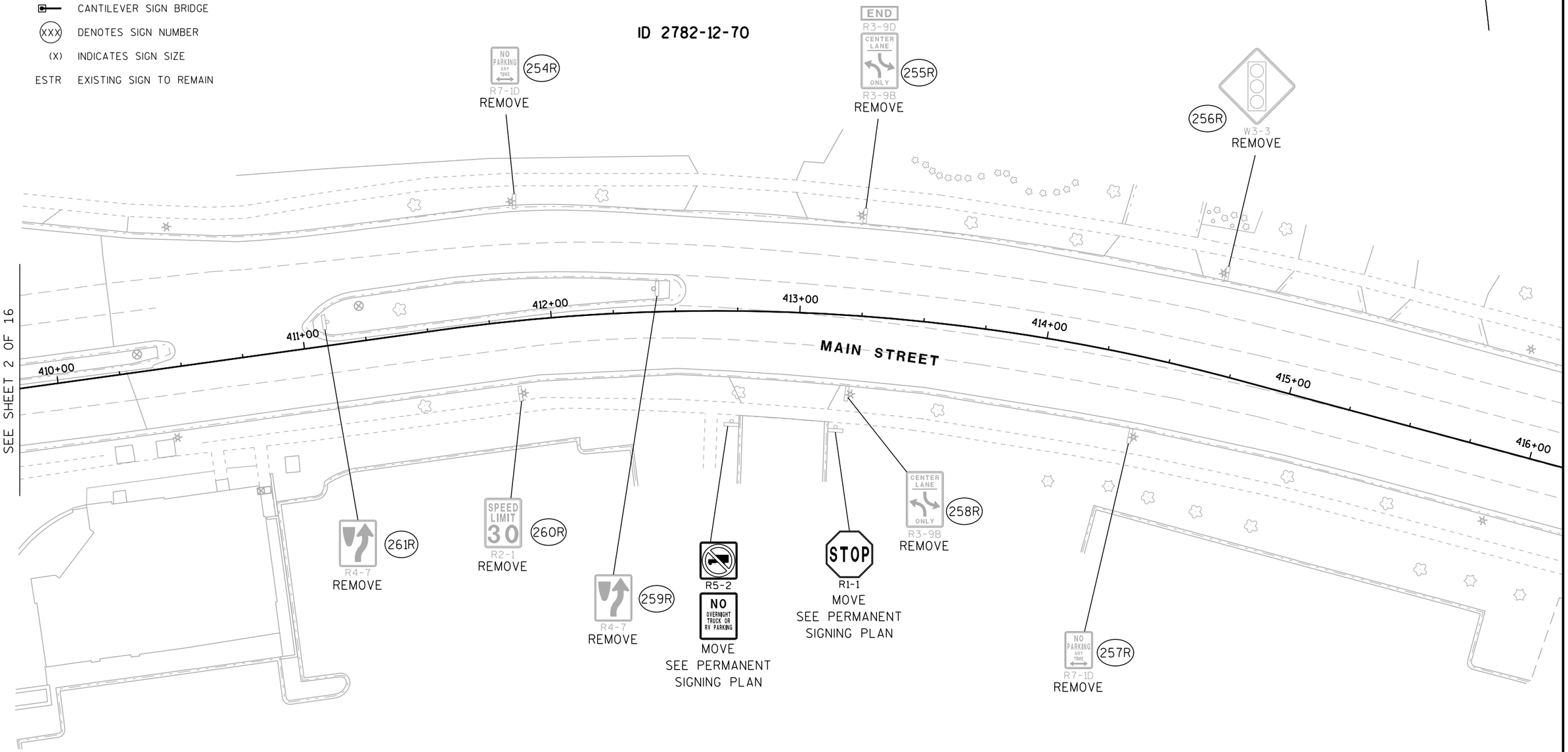
LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- ESTR EXISTING SIGN TO REMAIN

NOTE:
STREET NAME SIGNS TO BE REMOVED OR RELOCATED BY VILLAGE.

ID 2782-12-70

N



SHEET 8 OF 16

PROJECT NO: 2782-11-70, 2782-12-70, 2720-10-70	HWY: USH 41	COUNTY: WAUKESHA	SIGN REMOVAL PLAN	SHEET E

FILE NAME : J:\projects\d2_27821241\Sign\023108_ps.dgn PLOT DATE : 26-SEP-2014 09:58 PLOT BY : mscpp1 PLOT NAME : PLOT SCALE : 40:1

WISDOT/CADD[illegible] T 42

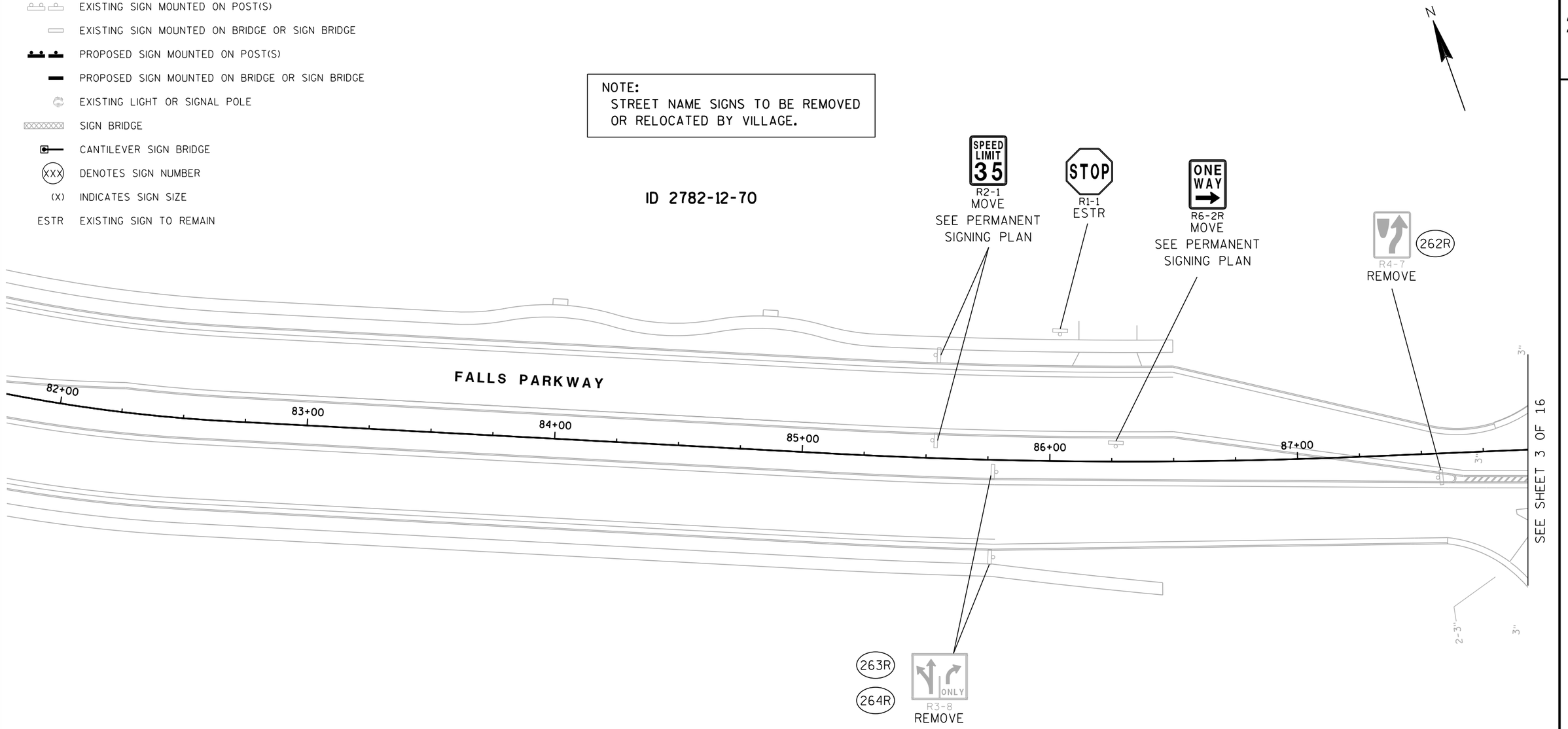
2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- ESTR EXISTING SIGN TO REMAIN

NOTE:
STREET NAME SIGNS TO BE REMOVED OR RELOCATED BY VILLAGE.

ID 2782-12-70



SHEET 9 OF 16

PROJECT NO: 2782-11-70, 2782-12-70, 2720-10-70	HWY: USH 41	COUNTY: WAUKESHA	SIGN REMOVAL PLAN	SHEET 174	E

FILE NAME : J:\projects\d2_27821241\Sign\023109_ps.dgn PLOT DATE : 25-AUG-2014 06:59 PLOT BY : mscppl PLOT NAME : PLOT SCALE : 40:1

NOTE:
STREET NAME SIGNS TO BE REMOVED
OR RELOCATED BY VILLAGE.

ID 2782-12-70

SIS

CONTACT ROGER ROSE OF
INTERSTATE LOGOS-WISCONSIN
TO MOVE: (844) 496-9163

N

SEE SHEET 3 OF 16

N 00°24'03"E
N 24°32'34" E

265R
WRONG WAY
R5-1A
REMOVE

WRONG WAY
R5-1A
REMOVE

Pilgrim Rd
SOUTH NORTH
D1-60
REMOVE
266R

267R 268R
W3-3
REMOVE

269R
W1-8
REMOVE

USE LEFT LANE WHEN METERED ONLY
270R
REMOVE

271R
W1-6
REMOVE

RAMP METERED WHEN FLASHING
275R
W3-8
REMOVE ON SIGNAL POLE

274R
RIGHT LANE
BUSES MOTORCYCLES AND 2 OR MORE OCCUPANT CAR POOLS ONLY
R3-51R
REMOVE

RAMP
35
M.P.H.
W13-3
REMOVE
273R

272R
RIGHT LANE
BUSES MOTORCYCLES AND 2 OR MORE OCCUPANT CAR POOLS ONLY
R3-51R
REMOVE

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- ESTR EXISTING SIGN TO REMAIN

SHEET 10 OF 16

PROJECT NO: 2782-11-70, 1100-37-70 2782-12-70, 2720-10-70	HWY: USH 41	COUNTY: WAUKESHA	SIGN REMOVAL PLAN	SHEET E

FILE NAME : J:\projects\d2_27821241\Sign\023110_ps.dgn PLOT DATE : 26-SEP-2014 10:08 PLOT BY : mscppl PLOT NAME : PLOT SCALE : 40:1

WISDOT/CADDS SHEET 42

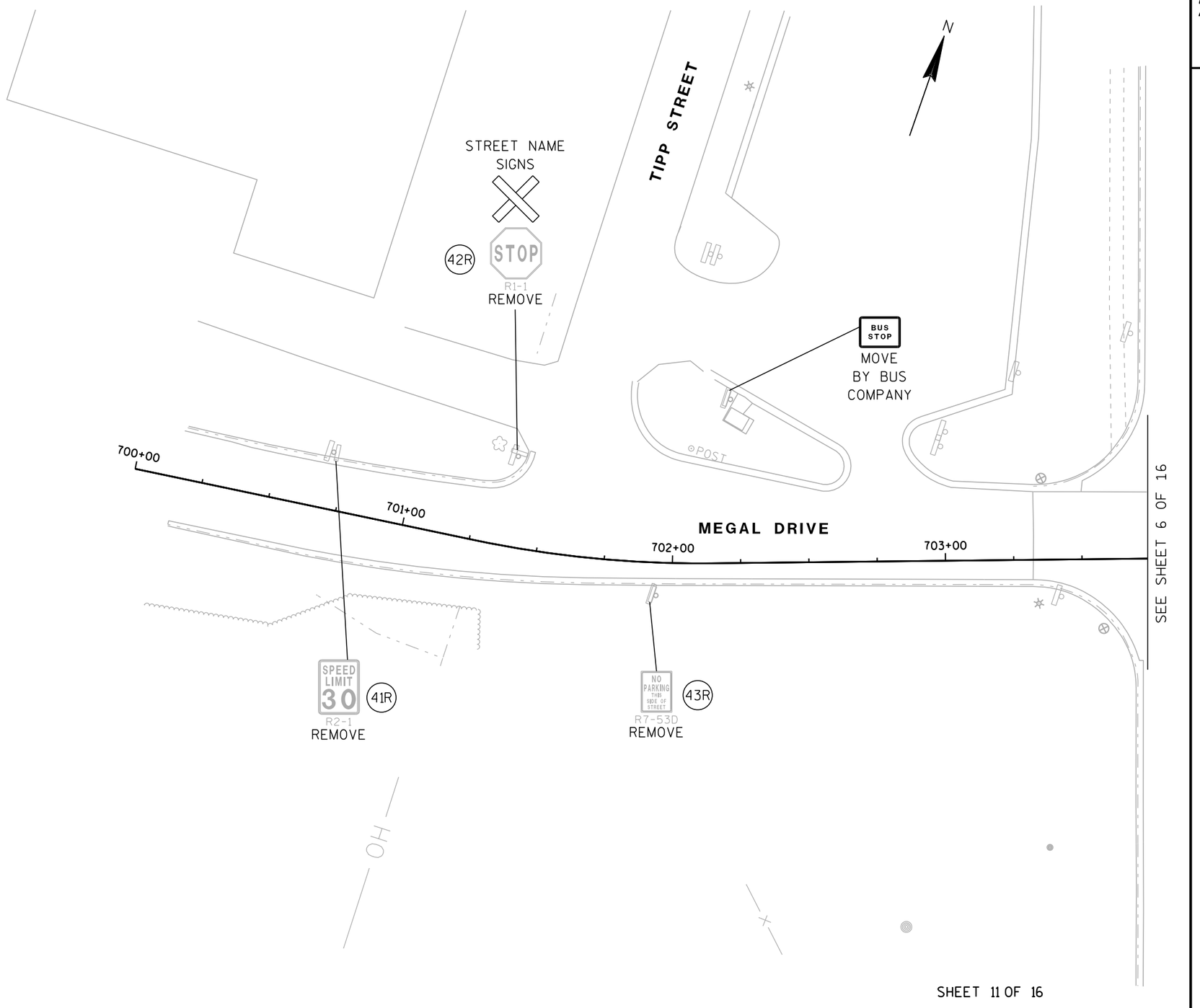
2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- ESTR EXISTING SIGN TO REMAIN

NOTE:
STREET NAME SIGNS TO BE REMOVED OR RELOCATED BY VILLAGE.

ID 2782-11-70



SHEET 11 OF 16

PROJECT NO: 2782-11-70, 2782-12-70, 2720-10-70	HWY: USH 41	COUNTY: WAUKESHA	SIGN REMOVAL PLAN	SHEET 176	E

FILE NAME : J:\projects\d2_27821241\Sign\023111_ps.dgn PLOT DATE : 20-OCT-2014 07:41 PLOT BY : mscppl PLOT NAME : PLOT SCALE : 40:1

WISDOT/CADDS SHEET 42

2

NO SIGNS ON THIS SHEET

ID 2782-11-70

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- ESTR EXISTING SIGN TO REMAIN

N

FLAG

FLAG

MEGAL DRIVE

SEE SHEET 6 OF 16

SEE SHEET 14 OF 16

PILGRIM ROAD

SHEET 12 OF 16

PROJECT NO: 2782-11-70, 2782-12-70, 2720-10-70	HWY: USH 41	COUNTY: WAUKESHA	SIGN REMOVAL PLAN	SHEET 177	E

NOTES:
1. STREET NAME SIGNS TO BE REMOVED OR RELOCATED BY VILLAGE.
2. * = REMOVE SIGNS AND RETURN TO HARLEY DAVIDSON

ID 2720-10-70

SEE SHEET 6 OF 16

SEE SHEET 12 OF 16

N

NO TRESPASSING
AUTHORIZED PERSONELL
HARLY DAVIDSON
REMOVE
* 503R

Tours
REMOVE
* 502R

STOP
R1-1
REMOVE
* 500R

* 501R
KEEP RIGHT
REMOVE

STOP
R1-1
REMOVE
* 504R

STOP
R1-1
REMOVE
* 505R
* 506R

STOP
R1-1
REMOVE
* 507R

MEGAL DRIVE

LEGEND

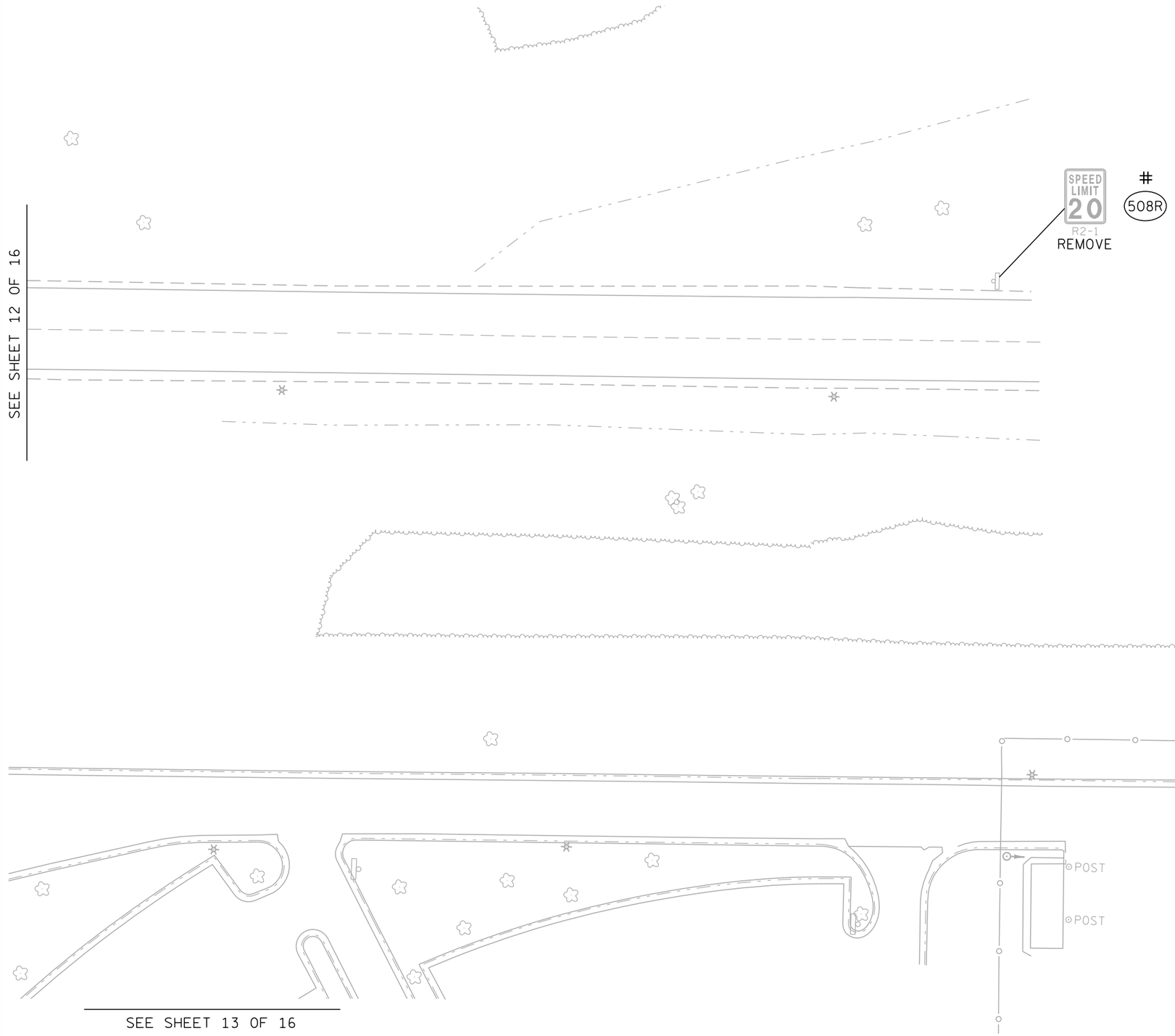
- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- ESTR EXISTING SIGN TO REMAIN

SEE SHEET 14 OF 16

PROJECT NO: 2782-11-70, 2782-12-70, 2720-10-70	HWY: USH 41	COUNTY: WAUKESHA	SIGN REMOVAL PLAN	SHEET 178	E

FILE NAME : J:\projects\d2_27821241\Sign\023113_ps.dgn PLOT DATE : 25-AUG-2014 06:59 PLOT BY : mscppl PLOT NAME : PLOT SCALE : 40:1
WISDOT/CADDS SHEET 42

2



N

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- ESTR EXISTING SIGN TO REMAIN

NOTES:
1. STREET NAME SIGNS TO BE REMOVED OR RELOCATED BY VILLAGE.
2. # = REMOVE SIGNS AND RETURN TO WACKER NEUSON

ID 2720-10-70

SHEET 14 OF 16

PROJECT NO: 2782-11-70, 2782-12-70, 2720-10-70	HWY: USH 41	COUNTY: WAUKESHA	SIGN REMOVAL PLAN	SHEET 179	E

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- ESTR EXISTING SIGN TO REMAIN

N

287R
W3-3
REMOVE

286R
W1-6
REMOVE

288R
SPEED LIMIT 30
W3-5
REMOVE

291R
EXIT 51A
E5-1A
REMOVE

USH 45 NB OFF RAMP

20+00 18+00 16+00 14+00 12+00 10+00

USH 45 NB

284+00 282+00 280+00 278+00 276+00 274+00 272+00 270+00

USH 45 SB

4+00 6+00 8+00

USH 45 SB OFF RAMP

290R
W11-2
PED X-ING
REMOVE

280R
STOP HERE ON RED
R10-6(MOD)
REMOVE

289R
W3-3
REMOVE

285R
EXIT
E5-1
REMOVE

W1-8
REMOVE

281R 282R 283R 284R

PILGRIM ROAD

USH 45 SB ON RAMP

106+00

279R
RIGHT LANE SIGNAL
R10-65R

STOP HERE ON RED
R10-6
REMOVE

278R
W4-2R
REMOVE

277R
CENTER LANE SIGNAL
R10-65C
REMOVE

LEFT LANE SIGNAL
R10-65L
REMOVE

276R
RIGHT LANE ENDS
W9-1R
REMOVE

NOTES:
STREET NAME SIGNS TO BE REMOVED OR RELOCATED BY VILLAGE.

ID 2782-12-70

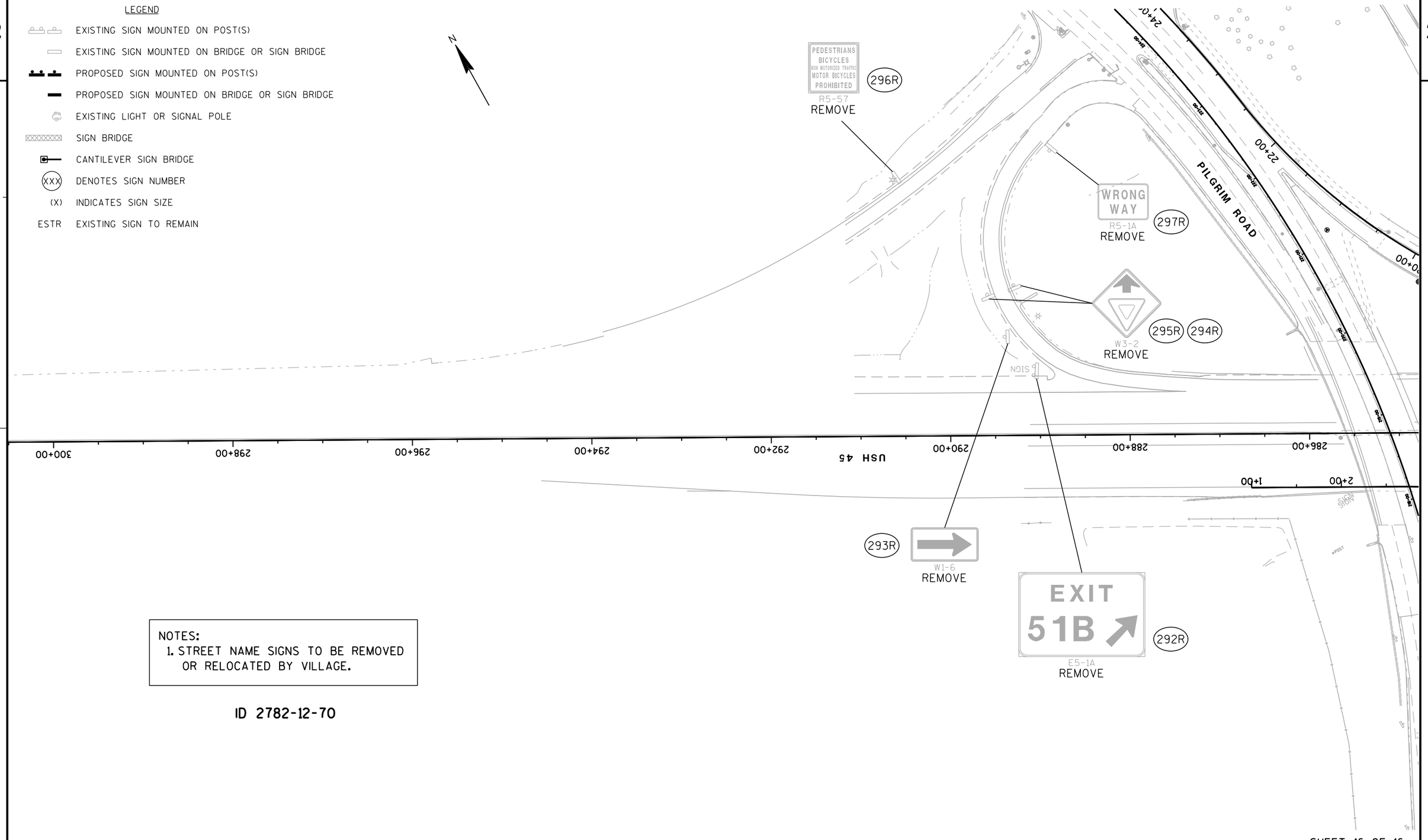
SHEET 15 OF 16

PROJECT NO: 2782-11-70, 2782-12-70, 2720-10-70	HWY: USH 41	COUNTY: WAUKESHA	SIGN REMOVAL PLAN	SHEET 180 E

FILE NAME : J:\projects\d2_27821241\Sign\023115_ps.dgn PLOT DATE : 25-AUG-2014 06:59 PLOT BY : mscppl PLOT NAME : PLOT SCALE : 100:1

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- ESTR EXISTING SIGN TO REMAIN



NOTES:
1. STREET NAME SIGNS TO BE REMOVED OR RELOCATED BY VILLAGE.

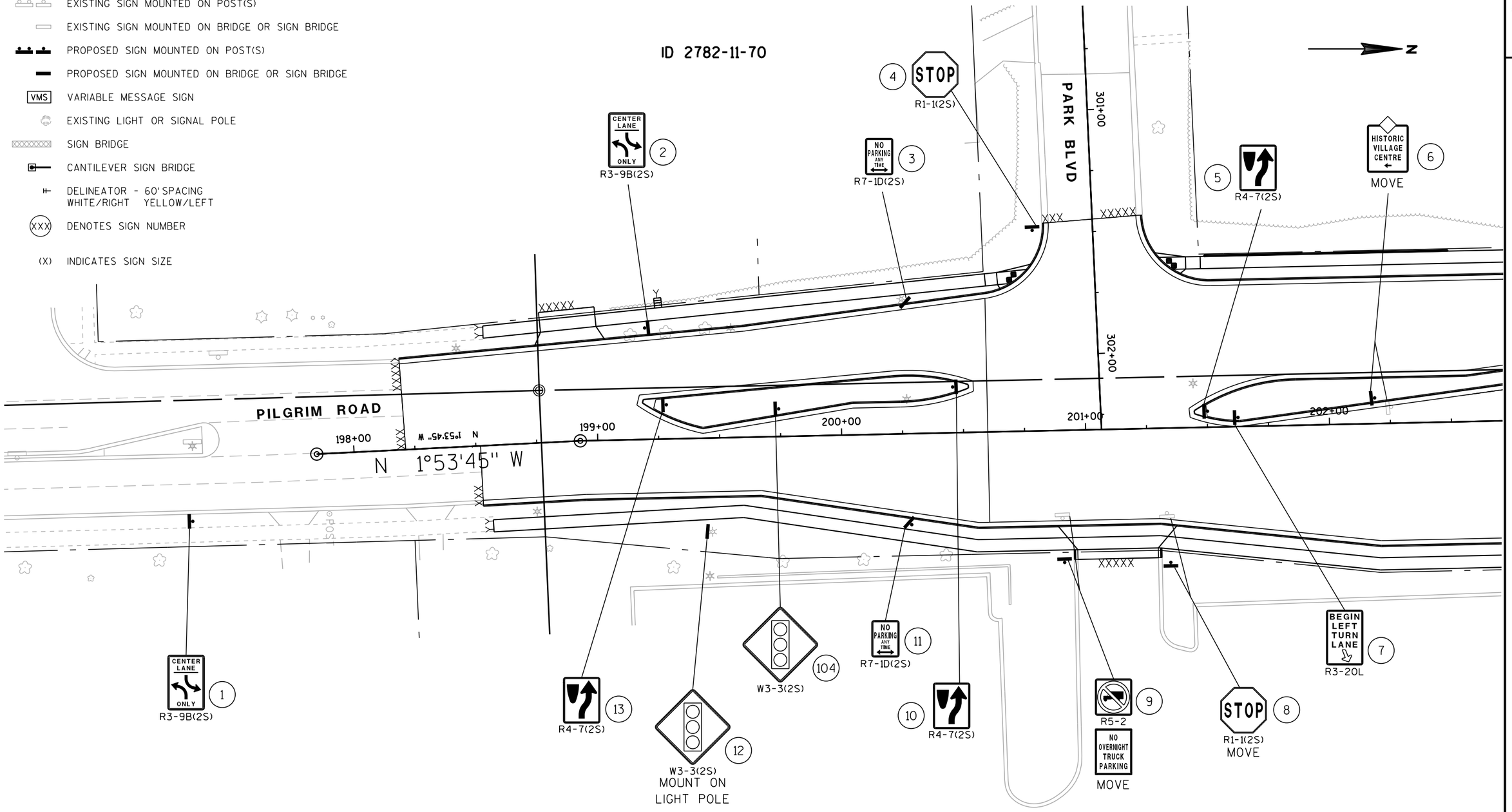
ID 2782-12-70

SHEET 16 OF 16

PROJECT NO: 2782-11-70, 2782-12-70, 2720-10-70	HWY: USH 41	COUNTY: WAUKESHA	SIGN REMOVAL PLAN	SHEET 181	E

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- DELINEATOR - 60' SPACING
  WHITE/RIGHT YELLOW/LEFT
- XXX — DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE



SHEET 1 OF 16

PROJECT NO: 2782-11-70, 2782-12-70, 2720-10-70	HWY: USH 41	COUNTY: WAUKESHA	PERMANENT SIGNING	SHEET 182	E

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- XXX DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- ESTR EXISTING SIGN TO REMAIN

SEE SHEET 7 OF 16

ID 2782-12-70
ID 2782-11-70

MAIN STREET

PILGRIM ROAD

21 STOP R1-1F(3) ON SIGNAL POLE
17 R3-4(2S)
18 STOP R1-1F(3) ON LIGHT POLE
20 R4-7(2S) ON LIGHT POLE
19 YIELD R1-2(2S)
22 W12-1D(2S) 2' MOUNT HEIGHT
47 Main St M1-94S ON MAST ARM
105 DO NOT ENTER R5-1(2S) ON SIGNAL POLE
51
49 Pilgrim Rd M1-94H ON MAST ARM
23 R3-4(2S)
24 STOP R1-1F(3) ON SIGNAL POLE
26 YIELD R1-2(2S)
108 DO NOT ENTER R5-1(2S)
28 STOP R1-1F(3) ON SIGNAL POLE
25 R4-7(2S) ON LIGHT POLE
27 W12-1D(2S) 2' MOUNT HEIGHT
40 R4-7(2S) ON LIGHT POLE
38 R3-4(2S)
39 STOP R1-1F(3) ON LIGHT POLE
30 H D9-2(2S)
MB6-1(2S) JH-1(2S) ON LIGHT POLE
35 SPEED LIMIT 35 R2-1(2S) ON OVERHEAD SIGN SUPPORT POLE
34 SPEED LIMIT 35 R2-1(2S)
29 HISTORIC VILLAGE CENTRE → MOVE ABOVE SIGN #30
15 SPEED LIMIT 30 R2-1(2S)
16
57 BEGIN LEFT TURN LANE R3-20LL(2S)
50 Pilgrim Rd M1-94H ON MAST ARM
122 LEFT TURN YIELD ON FLASHING YELLOW ARROW R10-50(2S) ABOVE SIGNAL HEAD
48 Main St M1-94S ON MAST ARM
56 YIELD R1-2(2S)
107 DO NOT ENTER R5-1(2S) ON SIGNAL POLE
44 R4-7(2S) ON LIGHT POLE
43 YIELD R1-2(2S)
41 STOP R1-1F(3) ON SIGNAL POLE
42 W12-1D(2S) 2' MOUNT HEIGHT
S-67-960 STA 206+70
33 NO PARKING ANY TIME R7-1D(2S) ON OVERHEAD SIGN SUPPORT POLE
32 BEGIN LEFT TURN LANE R3-20L(2S)
14 NO PARKING ANY TIME R7-1D(2S)
52 R3-4(2S)
53 STOP R1-1F(3) ON SIGNAL POLE
106 DO NOT ENTER R5-1(2S)
54 W12-1D(2S) 2' MOUNT HEIGHT
45 R3-4(2S)
46 STOP R1-1F(3) ON LIGHT POLE
55 STOP R1-1F(3) ON SIGNAL POLE
JCT M2-1
INTERSTATE 41 M1-1
COVER PLAQUE
36
45 M1-4 JV1-1(2S)
37
COVER PLAQUE
109
SOUTH
BUSINESS 41 45
Cleveland Ave
ONLY
D16-1L TYPE I
S-67-960 STA 206+70

SEE SHEET 8 OF 16

SHEET 2 OF 16

PROJECT NO: 2782-11-70, 2782-12-70, 2720-10-70	HWY: USH 41	COUNTY: WAUKESHA	PERMANENT SIGNING	SHEET E

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- ESTR EXISTING SIGN TO REMAIN

SEE SHEET 9 OF 16

110 SPEED LIMIT 25 R2-1 MOVE

CLEVELAND AVENUE

500+00

501+00

501+40

501+72

502+00

503+00

503+34

58 STOP R1-1(2S)

59 RIGHT TURN ONLY R3-53R(2S)

126 R9-3A(2S)

127 CROSS ONLY AT CROSS WALKS R9-2(2S)

128 R9-3A(2S)

129 CROSS ONLY AT CROSS WALKS R9-2(2S)

60 DO NOT ENTER R5-1(2S)

61 BEGIN LEFT TURN LANE R3-20LL(2S)

62 ONE WAY R6-2R(2S)

63

130 R9-3A(2S)

131 CROSS ONLY AT CROSS WALKS R9-2(2S)

PILGRIM ROAD

208+00

209+00

210+00

211+00

212+00

ID 2782-11-70
ID 2782-12-70

229

232 STOP R1-1F(3)

213 Falls Parkway M1-94H(MOD) ON MAST ARM

200 NO PARKING ANY TIME R7-1D(2S)

231 R4-7(2S)

204 STOP R1-1F(3) ON SIGNAL POLE

202 YIELD R1-2(2S)

201 ONE WAY R6-2L(2S) ON SIGNAL POLE

205 W12-1D(2S) 2' MOUNT HEIGHT

FALLS PARKWAY

87+00

88+00

203 DO NOT ENTER R5-1(2S)

206 STOP R1-1F(3)

383 DO NOT ENTER R5-1(2S)

209 STOP R1-1F(3) ON SIGNAL POLE

207 R4-7(2S)

210 W12-1D(2S)

228 DO NOT ENTER R5-1(2S)

211 Pilgrim Rd M1-94H ON MAST ARM

50'

LEFT TURN YIELD ON FLASHING YELLOW ARROW R10-50 ON MAST ARM

215

208 YIELD R1-2(2S)

PILGRIM ROAD

216 STOP R1-1F(3)

100'

N 24°32'34" E

N 00°24'32"34" E

227 YIELD R1-2(2S)

224 STOP R1-1F(3) ON SIGNAL POLE

Falls Parkway M1-94H(MOD) ON MAST ARM

214

220 ONE WAY R6-2L(2S)

217 R4-7(2S)

45

130'

USH 41/45 SB ON RAMP

USH 41/45 SB OFF RAMP

SOUTH M3-3 INTERSTATE 41 M1-1

382

Pilgrim Rd M1-94H ON MAST ARM

212

222 STOP R1-1F(3) ON SIGNAL POLE

67 DO NOT ENTER R5-1(2S)

132 R9-3A(2S)

133 CROSS ONLY AT CROSS WALKS R9-2(2S)

65 STOP R1-1(2S)

66 RIGHT TURN ONLY R3-53R(2S)

237 RIGHT LANE MUST TURN RIGHT R3-7R(3) ON LIGHT POLE

236 NO PARKING ANY TIME R7-1D(2S)

64 NO PARKING HERE TO CORNER R7-51L MOVE

234 RIGHT LANE MUST TURN RIGHT R3-7R(3)

235 DO NOT ENTER R5-1(2S)

233 RAMP CLOSED ~~USE~~ ALT ROUTE R11-54F(2S)

380

SOUTH M3-3 INTERSTATE 41 M1-1

SOUTH M3-3 45 M1-4

COVER PLAQUE

381 M5-1R M5-1R J2-2(2S)

226 Freeway Entrance D13-3 MOVE

225 W12-1D(2S) 2' MOUNT HEIGHT

45 M1-4

M6-1 JV3-1(2S) ON SIGNAL POLE

219 YIELD R1-2(2S)

218 DO NOT ENTER R5-1(3)

384 WRONG WAY R5-1A MOVE 3' MOUNT HEIGHT BELOW SIGN #218

223 W12-1D(2S) 2' MOUNT HEIGHT

SEE SHEET 10 OF 16

PROJECT NO: 2782-11-70, 2782-12-70, 2720-10-70	HWY: USH 41	COUNTY: WAUKESHA	PERMANENT SIGNING	SHEET 184 E

FILE NAME : J:\projects\d2_27821241\Sign\023203_ps.dgn PLOT DATE : 20-OCT-2014 07:46 PLOT BY : mscppl PLOT NAME : PLOT SCALE : 40:1
WISDOT/CADDS SHEET 42

2

N

DO NOT ENTER
239
R5-1(2S)

ID 2782-12-70

COVER PLAQUE

SOUTH
INTERSTATE 41 45
ONLY
240
241
TYPE I
S-67-961
STA 216+00

SOUTH
MB3-3
INTERSTATE 41
M1-1
COVER PLAQUE

244
45
M1-4
MB6-1
JV3-1(2S)

BEGIN LEFT TURN LANE
245
R3-20L(2S)
POST

PILGRIM ROAD

300 N

214+00
215+00
216+00
217+00
218+00
219+00

1+00
2+00
3+00
4+00
284+00
285+00
286+00

USH 45

242
243
W3-3(3)

NO PARKING ANY TIME
251
R7-1D(2S)

SPEED LIMIT 35
250
R2-1(2S)

NORTH
M3-1
INTERSTATE 41
M1-1
COVER PLAQUE

248
45
M1-4
249
MB5-1L
JV2-1(2S)

246
RAMP CLOSED
~~USE~~
ALT ROUTE
R11-54F(2S)

West Bend
Fond du Lac
D1-2
385

247
W5-52R(2S)
4' MOUNT HEIGHT

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- XXX DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- ESTR EXISTING SIGN TO REMAIN

SHEET 4 OF 16

PROJECT NO: 2782-11-70, 2782-12-70, 2720-10-70	HWY: USH 41	COUNTY: WAUKESHA	PERMANENT SIGNING	SHEET 185	E

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- ESTR EXISTING SIGN TO REMAIN

N

USH 45

ID 2782-12-70

1+00
286+00
287+00
PILGRIM ROAD
20+00
21+00
22+00
23+00
24+00
219+00
220+00
221+00
222+00
223+00
224+00
285+00

USH 41/45 NB OFF RAMP

USH 41/45 NB ON RAMP

SOUTH
MB3-3
INTERSTATE 41
M1-1
COVER PLAQUE

45
M1-4
254

MB5-1L
JV2-1(2S)
255

Menomonee Falls
Milwaukee
D1-2
393

W5-52R(2S)
4' MOUNT HEIGHT
253

DO NOT ENTER
R5-1(3)
389 259

WRONG WAY
R5-1A(2S)
390 388
3' MOUNT HEIGHT BELOW R5-1

YIELD
R1-2(2S)
260

W11-2(2S)
391

W16-7R(2S)
392

NO PARKING ANY TIME
R7-1D(2S)
258

SPEED LIMIT 35
R2-1(2S)
256
257

BEGIN LEFT TURN LANE
R3-20L(2S)
269

RAMP CLOSED
USE ALT ROUTE
R11-54F(2S)
252

W4-3(3)
268

W11-2(2S)
386

W16-7R(2S)
387

W11-2(2S)
266

W16-7L(2S)
267

BEGIN LEFT TURN LANE
R3-20LL(2S)
265

W3-3(3)
263
264

Megal Drive
Megal Court
NEXT SIGNAL
D1-65
261
262

ID 2782-12-70

SHEET 5 OF 16

PROJECT NO: 2782-11-70, 2782-12-70, 2720-10-70	HWY: USH 41	COUNTY: WAUKESHA	PERMANENT SIGNING	SHEET 186	E

SEE SHEET 11 OF 16

STOP 277 R1-1F(3) ON SIGNAL POLE

278 W12-1D(2S) 2' MOUNT HEIGHT

394 NORTH MB3-1 INTERSTATE 41 M1-1 — COVER PLAQUE; 45 M1-4; MB6-1 JV3-1(2S) ON SIGNAL POLE

280 RAMP CLOSED ~~USE~~ ALT ROUTE R11-54F(2S)

281 YIELD R1-2(2S)

NORTH MB3-1 INTERSTATE 41 M1-1 — COVER PLAQUE; 45 M1-4; 282 MB6-1 JV3-1(2S)

284 R4-7(2S) ON SIGNAL POLE

70 71 STOP R1-1F(3) ON SIGNAL POLE

ONE WAY 69 R6-2L ON SIGNAL POLE

68 RIGHT LANE MUST TURN RIGHT R3-7R(3) ON SIGNAL POLE

ID 2782-12-70 / ID 2782-11-70

703+00

MEGAL DRIVE

72 R4-7(2S)

RIDESHARE INFO CALL 1-800-455-POOL D12-2A(2S) 73

PARK & RIDE PARKING ONLY MOVE 74

PARKING REGULATIONS MOVE 125

PARK & RIDE 75 D4-2R(2S)

STOP 77 R1-1F(3) ON SIGNAL POLE

270 R4-7(2S)

283 RIGHT LANE MUST TURN RIGHT R3-7R(3)

285 STOP R1-1F(3) ON SIGNAL POLE

DO NOT ENTER 101 R5-1(2S) ON SIGNAL POLE

79 Pilgrim Rd M1-94H ON MAST ARM

704+00

DO NOT ENTER 76 R5-1(2S) MOVE TO SIGNAL POLE

RIGHT LANE MUST TURN RIGHT 78 R3-7R(3) ON SIGNAL POLE

STOP 89 R1-1F(3)

123 124 LEFT TURN YIELD ON FLASHING YELLOW ARROW R10-50(2S) ABOVE SIGNAL HEAD

N 17°51'48" W

224+00 225+00 226+00 227+00 228+00 229+00

271 R3-4(2S)

24+00

81 Megal Ct / Megal Dr M1-94H(MOD) CENTER ON UPRIGHT

PILGRIM ROAD

DO NOT ENTER 88 R5-1(2S)

Pilgrim Rd M1-94H ON MAST ARM 82

85 R4-7(2S) ON SIGNAL POLE

84 ONE WAY R6-2L(2S) ON SIGNAL POLE

83 R4-7 MOVE

272 BEGIN LEFT TURN LANE R3-20L(2S)

273 DO NOT ENTER R5-1(2S)

274 LEFT TURN YIELD ON FLASHING YELLOW ARROW R10-50(2S) ON SIGNAL POLE

275 R3-2(2S)

276 STOP R1-1F(3) ON SIGNAL POLE

279 BEGIN LEFT TURN LANE R3-20LL(2S)

91 STOP R1-1F(3) ON SIGNAL POLE

90 DO NOT ENTER R5-1(2S) ON SIGNAL POLE

STOP 86 87 R1-1F(3) ON SIGNAL POLE

DO NOT ENTER 102 R5-1(2S) ON SIGNAL POLE

Megal Dr / Megal Ct 80 M1-94H(MOD) CENTER ON UPRIGHT

MEGAL COURT

LEGEND

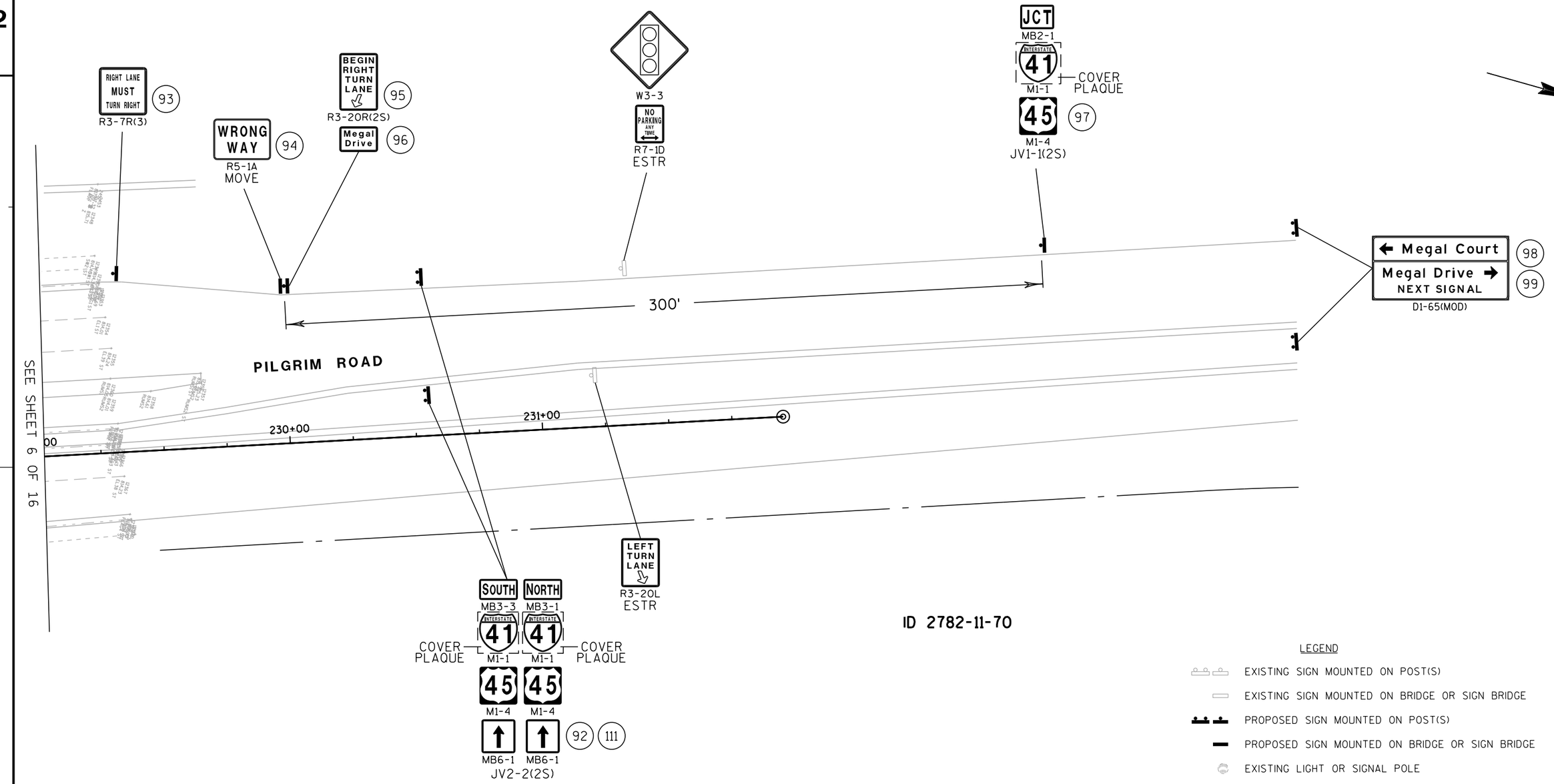
- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- ESTR EXISTING SIGN TO REMAIN

SEE SHEET 12 OF 16

PROJECT NO: 2782-11-70, 2782-12-70, 2720-10-70	HWY: USH 41	COUNTY: WAUKESHA	PERMANENT SIGNING	SHEET 187	E

FILE NAME : J:\projects\d2_27821241\Sign\023206_ps.dgn — 2' MOUNT — PLOT DATE : 09-DEC-2014 11:38 — PLOT BY : mscppl — PLOT NAME : — PLOT SCALE : 40:1

2



ID 2782-11-70

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- ESTR EXISTING SIGN TO REMAIN

SHEET 6A OF 16

PROJECT NO: 2782-11-70, 2782-12-70, 2720-10-70	HWY: USH 41	COUNTY: WAUKESHA	PERMANENT SIGNING	SHEET 188 E

2

N

HISTORIC VILLAGE CENTRE
NO PARKING ANY TIME
ESTR

SPEED LIMIT 30 (287)
R2-1(2S)
ON LIGHT POLE

(295)
R4-7(2S)
(296)
W5-54(2S)
SEE DETAIL

TO
MB4-5
INTERSTATE 41
M1-1
COVER PLAQUE

45
M1-4
(288)
MB6-1
JV3-1(2S)

H (289)
D9-2(2S)
(290)
MB6-1(2S)
JH-1(2S)

NO PARKING ANY TIME (291)
R7-1D(2S)

02+00
403+00
404+00
405+00
406+00
407+00
408+00
MAIN STREET

SEE SHEET 13 OF 14

NO PARKING ANY TIME (297)
R7-1D(2S)
ON LIGHT POLE

(294)
W3-3(2S)

(286)
R3-4(2S)

BEGIN LEFT TURN LANE (293)
R3-20L(2S)

NO PARKING ANY TIME (292)
R7-1D(2S)

ID 2782-12-70

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- ESTR EXISTING SIGN TO REMAIN

SHEET 7 OF 16

PROJECT NO: 2782-11-70, 2782-12-70, 2720-10-70	HWY: USH 41	COUNTY: WAUKESHA	PERMANENT SIGNING	SHEET 189	E

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- ESTR EXISTING SIGN TO REMAIN

ID 2782-12-70

N

MAIN STREET

410+00 411+00 412+00 413+00 414+00 415+00 416+00

SEE SHEET 2 OF 16

298 BEGIN LEFT TURN LANE — R3-20L(2S)

299 — R4-7(2S)

300 — W5-54(2S) — SEE DETAIL

301 END — R3-9D(2S)

302 CENTER LANE ONLY — R3-9B(2S) ON LIGHT POLE

303 — W3-3(3) ON LIGHT POLE

XXXXX XXX YYYY YYYY XXX

SIGN SIGN

309 SPEED LIMIT 30 — R2-1(2S)

308 — R5-2 — NO OVERNIGHT TRUCK OR RV PARKING — MOVE

307 STOP — R1-1 MOVE

305 BEGIN — R3-9C(2S)

306 CENTER LANE ONLY — R3-9B(2S) ON LIGHT POLE

304 NO PARKING ANY TIME — R7-1D(2S)

PROJECT NO: 2782-11-70, 2782-12-70, 2720-10-70	HWY: USH 41	COUNTY: WAUKESHA	PERMANENT SIGNING	SHEET 190 E

FILE NAME : J:\projects\d2_27821241\Sign\023208_ps.dgn PLOT DATE : 29-SEP-2014 10:25 PLOT BY : mscppl PLOT NAME : PLOT SCALE : 40:1 WISDOT/CADDS SHEET 42

2

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- ESTR EXISTING SIGN TO REMAIN

ID 2782-12-70

N

FALLS PARKWAY

82+00 83+00 84+00 85+00 86+00 87+00

SPEED LIMIT 35 (311) (312)
R2-1
MOVE

STOP
R1-1
ESTR

XXXXX

ONE WAY (314)
R6-2R
MOVE

STOP (315)
R1-1F(3)

(316)
R4-7(2S)

LEFT LANE MUST TURN LEFT (310)
R3-7L(2S)

ONLY ONLY ONLY ONLY (313) (403)
R3-8WW(2S)

SEE SHEET 3 OF 16

SHEET 9 OF 16

PROJECT NO: 2782-11-70, 2782-12-70, 2720-10-70	HWY: USH 41	COUNTY: WAUKESHA	PERMAMENT SIGNING	SHEET 191	E

ID 2782-12-70

SIS

CONTACT ROGER ROSE OF INTERSTATE LOGOS - WISCONSIN TO MOVE: (844) 496-9163

STOP
R1-1F(3)
ON SIGNAL POLE
333

DO NOT ENTER
R5-1(5)
ON SIGNAL POLE
398

DO NOT ENTER
R5-1(5)
397

Pilgrim Rd
SOUTH NORTH
D1-60
399

WRONG WAY
R5-1A
ON UPRIGHT
317
318

OVERHEAD SIGN SUPPORT
S-67-962
STA 11+25

323 324
W3-3(3)

401
402
W1-8(4)
4' MOUNT HEIGHT

405
406
WRONG WAY
R5-1A(3)

W1-6(2S)
325 326

404
R4-7(2S)
ON SIGNAL POLE

RAMP METERED WHEN FLASHING
W3-8(5)
334
ON SIGNAL POLE
SEE ELECTRICAL PLAN

LEFT LANE
BUSES MOTORCYCLES AND 2 OR MORE OCCUPANT CAR POOLS ONLY
R3-51R(2S)
332

331
RAMP
35
M.P.H.
W13-3(5)

H
D9-2(2S)
328
MB6-1(2S)
JH-1(2S)
ON UPRIGHT

ONLY
R3-5L(2S)
319

ONLY
R3-5L(2S)
320

ONLY
R3-5A(2S)
321

ONLY
R3-5R(2S)
322

USE LEFT LANE WHEN METERED ONLY
327

SEE SHEET 3 OF 16

213+00 13+00 212+00 100+00 12+00 11+00 10+00 9+00 8+00 101+00 102+00 103+00 104+00 105+00 106+00

50' 45' 50'

N

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- ESTR EXISTING SIGN TO REMAIN

SHEET 10 OF 16

PROJECT NO: 2782-11-70, 2782-12-70, 2720-10-70	HWY: USH 41	COUNTY: WAUKESHA	PERMANENT SIGNING	SHEET 192	E

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- ESTR EXISTING SIGN TO REMAIN

ID 2782-11-70

N

TIPP STREET

BUS STOP
MOVE BY BUS COMPANY

SPEED LIMIT 30 (119)
R2-1(2S)

STOP (120)
R1-1(2S)

700+00

701+00

702+00

703+00

MEGAL DRIVE

NO PARKING ANY TIME (121)
R7-1D(2S)

SEE SHEET 6 OF 16

SHEET 11 OF 16

2

PROJECT NO: 2782-11-70, 2782-12-70, 2720-10-70	HWY: USH 41	COUNTY: WAUKESHA	PERMANENT SIGNING	SHEET 193	E

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- ESTR EXISTING SIGN TO REMAIN

N

MEGAL COURT

PILGRIM ROAD

ID 2782-11-70

ID 2782-10-70

ID 2782-12-70

SEE SHEET 7 OF 16

SEE SHEET 14 OF 16

SEE SHEET 13 OF 16

SHEET 12 OF 16

112 113 R3-8Z(2S) ONLY ONLY

115 W3-3(3)

562 Megal Court / To Pilgrim Rd D1-2

545 546 W11-2(2S) W16-7L(2S)

506 507 W11-2(2S) W16-7L(2M)

559 560 561 W5-56(2S) 4' MOUNT HEIGHT

510 R1-2(2S)

511 ONE WAY R6-2R(2S)

558 PERMANENT BARRICADES TYPE III, SEE DETAIL ROAD CLOSED R11-2

508 509 R1-2(2S) TO TRAFFIC FROM LEFT R1-54(2S)

549 R4-7(2S)

550 551 W11-2(2S) W16-7L(2S)

512 513 R1-2(2S) TO TRAFFIC FROM LEFT R1-54(2S)

514 515 W11-2(2S) W16-7L(2S)

116 R7-1D(2S) NO PARKING ANY TIME

117 W2-6(2S)

118 15 M.P.H. W13-1(2S)

114 W3-2(2S)

500 501 W11-2(2S) W16-7L(2S)

502 R1-2(2S)

503 ONE WAY R6-2R(2S)

504 505 R1-2(2S) TO TRAFFIC FROM LEFT R1-54(2S)

563 Harley Davidson Entrance D1-1

518 519 520 521 522 523 524 525 ONE WAY R6-1R(2S) R6-4B(2S)

564 Wacker-Nueson Entrance / Harley-Davidson Loading Dock

547 548 W11-2(2S) W16-7L(2S)

516 R1-2(2S)

517 ONE WAY R6-2R(2S)

PROJECT NO: 2782-11-70, 2782-12-70, 2720-10-70	HWY: USH 41	COUNTY: WAUKESHA	PERMANENT SIGNING	SHEET 194	E

FILE NAME : J:\projects\d2_27821241\Sign\023212_ps.dgn PLOT DATE : 20-OCT-2014 07:47 PLOT BY : mscppl PLOT NAME : PLOT SCALE : 40:1 WISDOT/CADDS SHEET 42

SEE SHEET 12 OF 16

N

ID 2720-10-70

MEGAL COURT

W2-6(2S) 526

15 M.P.H. 527
W13-1(2S)

W3-2(2S) 553

DO NOT ENTER 530 552
R5-1(2S)

534 554
535 555
W11-2(2S)
W16-7L(2M)

YIELD 536
R1-2(2S)

ONE WAY 537
R6-2R(2S)

ONE WAY 531
R6-2R(2S)

R4-7(2S) 528

W5-54(2S) 529

RIGHT TURN ONLY 533
R3-53R(2S)

STOP 532
R1-1(2S)

YIELD 538
R1-2(2S)

TO TRAFFIC FROM LEFT 539
R1-54(2S)

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- ESTR EXISTING SIGN TO REMAIN

SEE SHEET 14 OF 16

PROJECT NO: 2782-11-70, 2782-12-70, 2720-10-70	HWY: USH 41	COUNTY: WAUKESHA	PERMANENT SIGNING	SHEET 195	E

FILE NAME : J:\projects\d2_27821241\Sign\023213_ps.dgn PLOT DATE : 29-SEP-2014 10:25 PLOT BY : mscppl PLOT NAME : PLOT SCALE : 40:1

WISDOT/CADDS SHEET 42

SEE SHEET 12 OF 16

ID 2720-10-70

MEGAL COURT

R4-7(2S) 540

W5-54(2S) 541

W3-2(2S) 556

W2-6(2S) 543

15 M.P.H. W13-1(2S) 544

DO NOT ENTER R5-1(2S) 557

WRONG WAY R5-1A(2S) 566 567

W12-1D 2' MOUNT HEIGHT 542

Harley-Davidson Loading Dock D1-1 565

DO NOT ENTER R5-1(2S) 568

POST

POST

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- XXX DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- ESTR EXISTING SIGN TO REMAIN

N

SEE SHEET 12 OF 16

SEE SHEET 13 OF 16

SEE SHEET 13 OF 16

PROJECT NO: 2782-11-70, 2782-12-70, 2720-10-70	HWY: USH 41	COUNTY: WAUKESHA	PERMANENT SIGNING	SHEET 196	E

FILE NAME : J:\projects\d2_27821241\Sign\023214_ps.dgn PLOT DATE : 20-OCT-2014 07:47 PLOT BY : mscppl PLOT NAME : PLOT SCALE : 40:1

WISDOT/CADDS SHEET 42

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- ESTR EXISTING SIGN TO REMAIN

N

ID 2782-12-70

EXIT 51A ↗ (350)
E5-1B(5)

W5-54(2S) (351) W5-54(2S) (352)
SEE DETAIL

W3-3(3) ON SIGNAL POLE (357)

W1-6(2S) (358)

W3-3(3) (355)

USH 41/45 NB OFF RAMP

USH 41/45 NB

USH 41/45 SB

W11-2(3) (353)
AHEAD (354)
W16-9P(3)

RIGHT LANE ENDS (335)
W9-1R(3)

STOP HERE ON RED (341)
R10-6(MOD)(2S)

USH 41/45 SB ON RAMP

LEFT LANE SIGNAL (337)
R10-65L(2S)

CENTER LANE SIGNAL (336)
R10-65C(2S)

RIGHT LANE SIGNAL (339)
R10-65R(2S)

STOP HERE ON RED (340)
R10-6(2S)

W4-2(3) (338)

SPEED LIMIT 30 (356)
W3-5(3)

EXIT 51 A-B ↗ (347)
E5-1B(5)

W5-54(2S) (348) W5-54(2S) (349)
SEE DETAIL

W1-8(4)
4' MOUNT HEIGHT
(342) (343) (344) (345) (346)

USH 41/45 SB OFF RAMP

PILGRIM ROAD

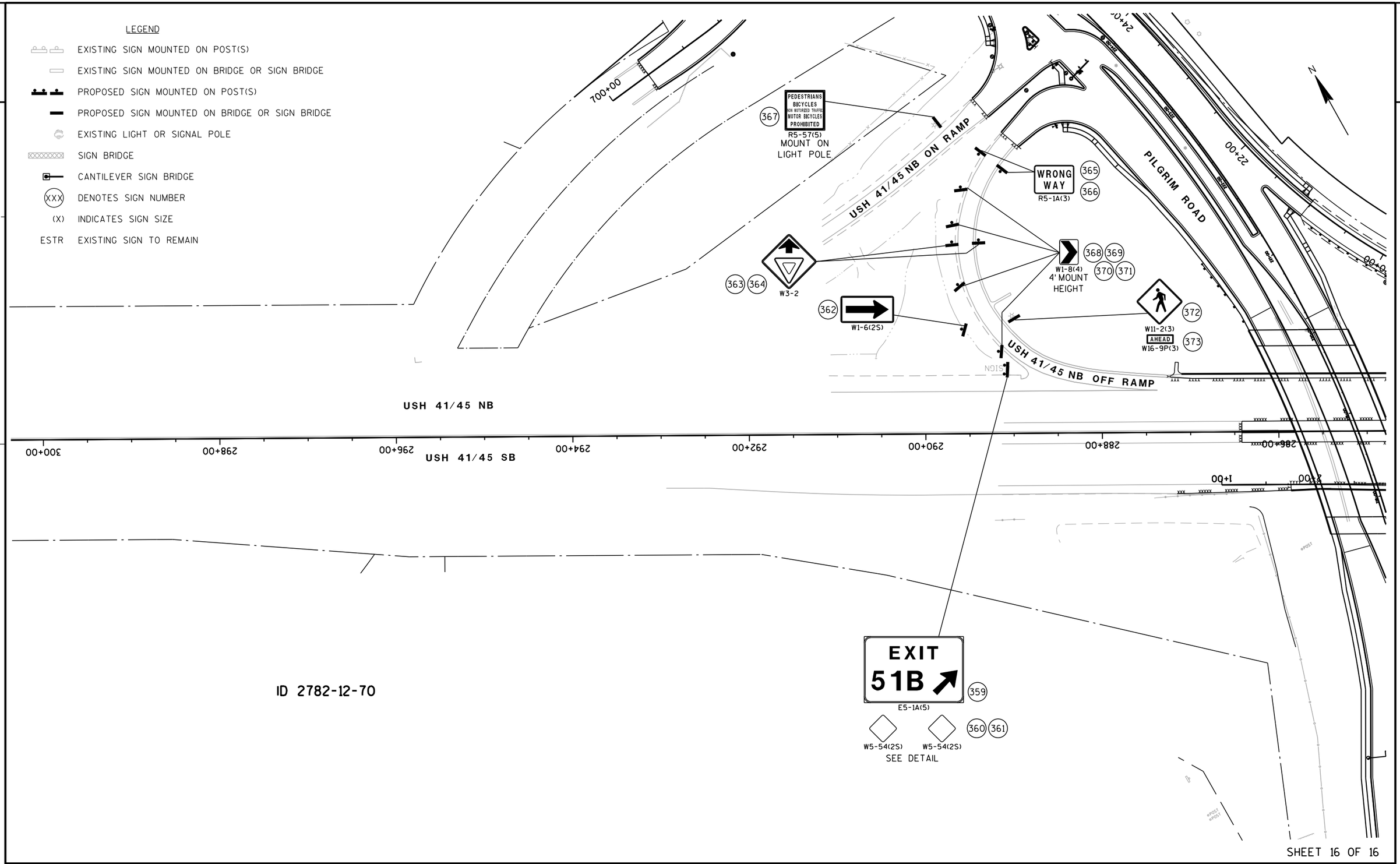
SHEET 15 OF 16

PROJECT NO: 2782-11-70, 2782-12-70, 2720-10-70	HWY: USH 41	COUNTY: WAUKESHA	PERMANENET SIGNING	SHEET 197 E

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- ESTR EXISTING SIGN TO REMAIN



SHEET 16 OF 16

PROJECT NO: 2782-11-70, 2782-12-70, 2720-10-70	HWY: USH 41	COUNTY: WAUKESHA	PERMANENT SIGNING	SHEET 198	E

FILE NAME : J:\projects\d2_27821241\Sign\023216_ps.dgn PLOT DATE : 29-SEP-2014 10:25 PLOT BY : mscppl PLOT NAME : PLOT SCALE : 100:1

WISDOT/CADDS SHEET 42

2

N

BOP = 100+00.00

101+00

102+00

103+00

104+00

105+00

PT = 103+63.48

MAIN ST/STH 100

MAIN ST/STH 100

USH 41/45 SB ON RAMP

RAMP CLOSED
~~USE~~
ALT ROUTE
R11-54F(2S)

374

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- RAMP GATE
- XXX — DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

SHEET 1 OF 3

PROJECT NO: 2782-12-70	HWY: STH 100 / MAIN ST.	COUNTY: WAUKESHA	PERMANENT SIGNING	SHEET 199	E

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- VMS VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- RAMP GATE
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

N

RAMP CLOSED
USE
ALT ROUTE
R11-54F(2S) 375

RAMP CLOSED
USE
ALT ROUTE
R11-54F(2S) 376

RAMP CLOSED
USE
ALT ROUTE
R11-54F(2S) 377



2

SHEET 2 OF 3

PROJECT NO: 2782-12-70	HWY: STH 100 / MAIN ST.	COUNTY: WAUKESHA	PERMANENT SIGNING	SHEET 200	E

FILE NAME : J:\projects\d2_27821241\023202_ps.dgn PLOT DATE : 09-DEC-2014 11:20 PLOT BY : mscppl PLOT NAME : PLOT SCALE : 40:1

WISDOT/CADDS SHEET 42

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- RAMP GATE
- (XXX) — DENOTES SIGN NUMBER
- (X) — INDICATES SIGN SIZE

N



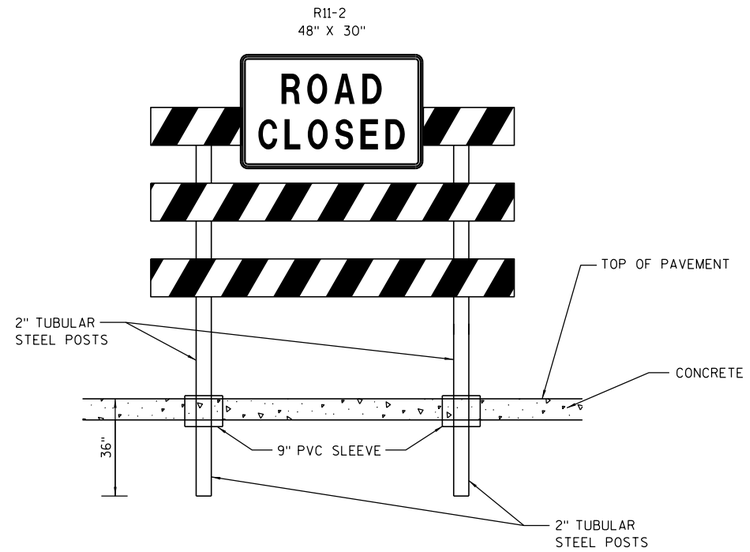
SHEET 3 OF 3

PROJECT NO: 2782-12-70	HWY: STH 100 / MAIN ST.	COUNTY: WAUKESHA	PERMANENT SIGNING	SHEET 201	E

FILE NAME : J:\projects\d2_27821241\023203_ps.dgn PLOT DATE : 09-DEC-2014 11:21 PLOT BY : mscppl PLOT NAME : PLOT SCALE : 40:1

WISDOT/CADDS SHEET 42

2



POSTS INCIDENTAL TO BARRICADE & SLEEVE

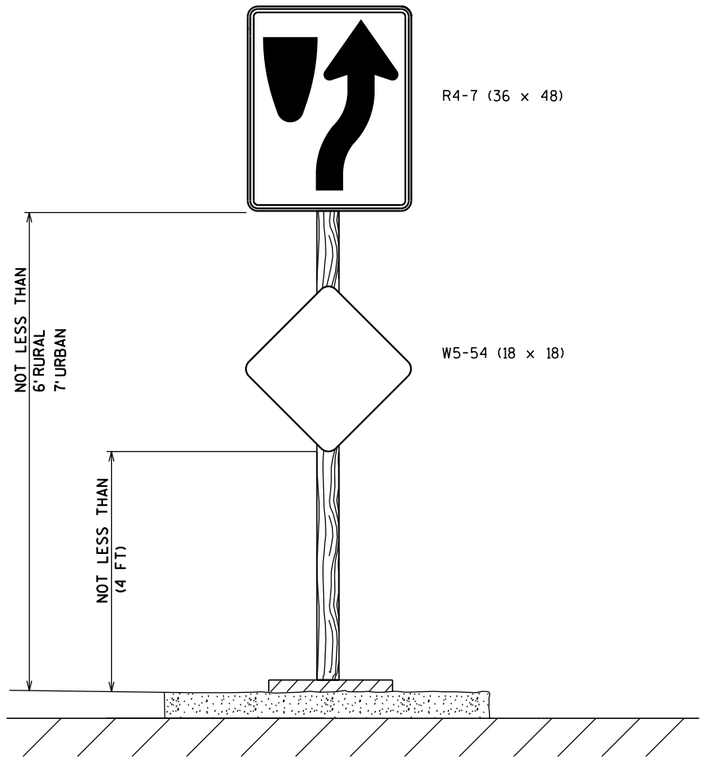
CORING CONCRETE INCIDENTAL TO BARRICADE

TRAFFIC CONTROL BARRICADE PERMANENT TYPE III ANCHORING DETAIL

QTY = 1

PROJECT NO: 2782-11-70	HWY: USH 41	COUNTY: WAUKESHA	TYPE III PERMANENT BARRICADE DETAIL	SHEET 202	E

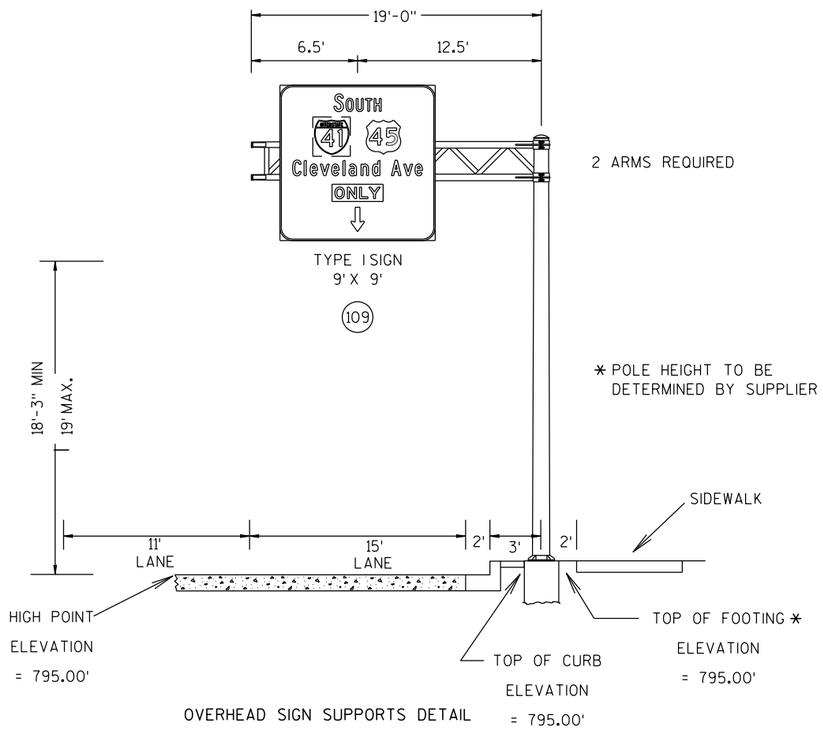
2



TYPICAL INSTALLATION FOR
TRANSITION TO DIVIDED HIGHWAY
OR OTHER SPECIAL NEEDS AREAS

PROJECT NO: 2720-10-70, 2782-11-70, 2782-12-70	HWY: USH 41	COUNTY: WAUKESHA	TYPICAL DETAIL - SIGN ON MEDIAN NOSE	SHEET 203	E

2



OVERHEAD SIGN SUPPORTS DETAIL

S-67-960
STA 206+70
PILGRIM ROAD NB @ MAIN STREET

NOTE, CONTRACTOR SHALL:
1.) SUBMIT SHOP DRAWINGS OF OVERHEAD SIGN SUPPORT. FOOTING IS INCIDENTAL TO OVERHEAD SIGN SUPPORT.
2.) PROVIDE DESIGN CALCULATIONS.
3.) SHOW SIGNS ON SHOP DRAWINGS.
4.) I.D. PLAQUE INCIDENTAL TO SIGN SUPPORT
5.) 6 ANCHOR RODS SHALL BE USED PER SDD

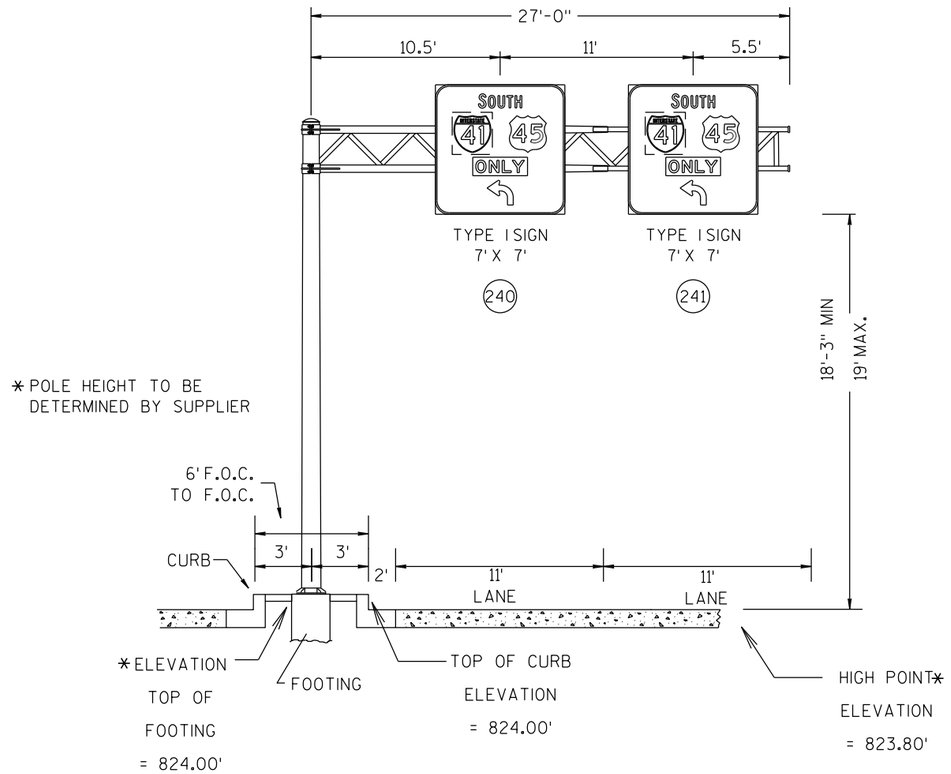
CONTRACTOR TO USE SDD, 42" DIAMETER CANTILEVER OVERHEAD SIGN SUPPORT BASE

MOUNTING BRACKETS FOR SIGNS TO BE APPROVED FROM PRODUCT LIST FOR TYPE II SIGNS

I BEAMS - W5X3.7 I BEAMS FOR MOUNTING SINGS ARE INCIDENTAL TO TYPE I SIGNS

MAXIMUM ANCHOR BOLT CIRCLE = 29"

2



OVERHEAD SIGN SUPPORTS DETAIL
S-67-961
STA 216+00
PILGRIM ROAD SB @ USH 45 SB ON RAMP

NOTE, CONTRACTOR SHALL:
1.) SUBMIT SHOP DRAWINGS OF OVERHEAD SIGN SUPPORT. FOOTING IS INCIDENTAL TO OVERHEAD SIGN SUPPORT.
2.) PROVIDE DESIGN CALCULATIONS.
3.) SHOW SIGNS ON SHOP DRAWINGS.
4.) I.D. PLAQUE INCIDENTAL TO SIGN SUPPORT
5.) 6 ANCHOR RODS SHALL BE USED PER SDD

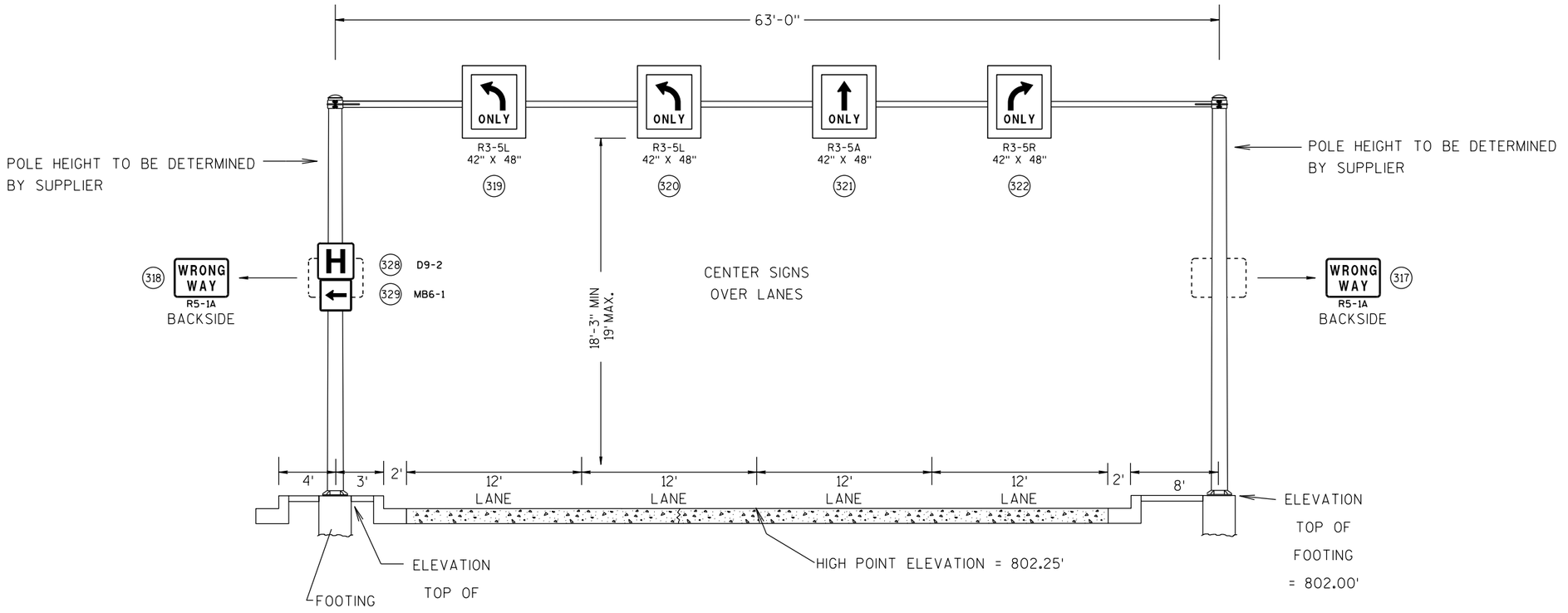
CONTRACTOR TO USE SDD, 42" DIAMETER CANTILEVER OVERHEAD SIGN SUPPORT BASE

MOUNTING BRACKETS FOR SIGNS TO BE APPROVED FROM PRODUCT LIST FOR TYPE II SIGNS

I BEAMS - W5X3.7 I BEAMS FOR MOUNTING SINGS ARE INCIDENTAL TO TYPE I SIGNS

MAXIMUM ANCHOR BOLT CIRCLE = 29"

2



OVERHEAD SIGN SUPPORTS DETAIL
S-67-962
STA 11+25
USH 41 SB OFF RAMP TO PILGRIM ROAD

NOTE, CONTRACTOR SHALL:
1.) SUBMIT SHOP DRAWINGS OF OVERHEAD SIGN SUPPORT. FOOTING IS INCIDENTAL TO OVERHEAD SIGN SUPPORT.
2.) PROVIDE DESIGN CALCULATIONS.
3.) SHOW SIGNS ON SHOP DRAWINGS.
4.) I.D. PLAQUE INCIDENTAL TO SIGN SUPPORT
5.) 6 ANCHOR RODS SHALL BE USED PER SDD

CONTRACTOR TO USE SDD, 36" DIAMETER FULL SPAN OVERHEAD SIGN SUPPORT BASE

MOUNTING BRACKETS FOR SIGNS TO BE APPROVED FROM PRODUCT LIST FOR TYPE II SIGNS

I BEAMS - W5X3.7 I BEAMS FOR MOUNTING SINGS ARE INCIDENTAL TO TYPE I SIGNS

MAXIMUM ANCHOR BOLT CIRCLE = 23"

GERNERAL NOTES

DRAWINGS NOT TO SCALE

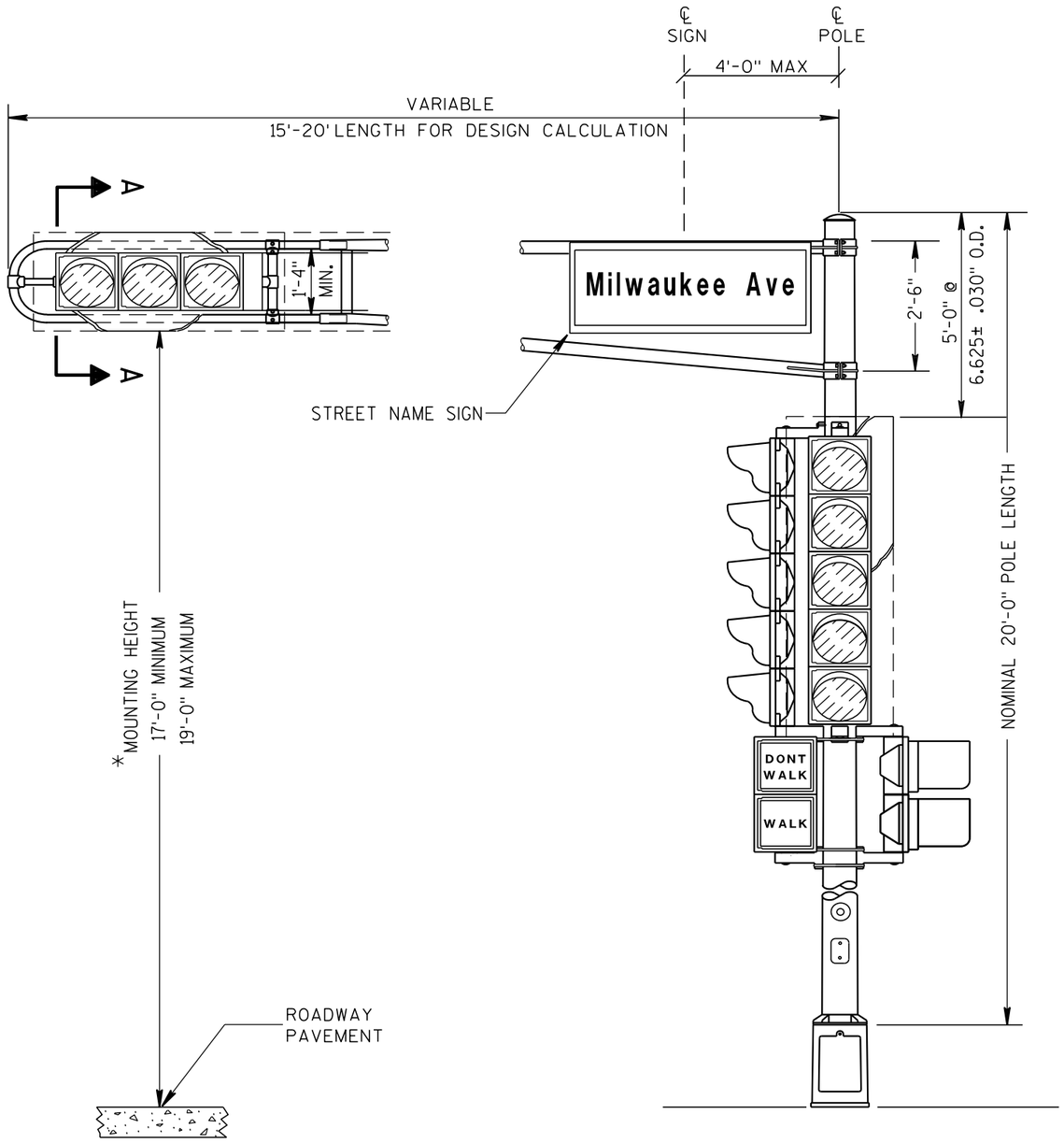
DESIGN ACCORDING TO AASHTO "STANDARD SPECIFICATIONS FOR STRUCTUAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS".

THE SIGN STRUCTURES SHALL BE DESIGNED TO SUPPORT THE SIGN SHOWN.

WIND VELOCITY PER WISDOT STD SPECIFATIONS

BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 3" CLEAR UNLESS DETAILED OTHERWISE.

NOTE: STREET NAME SIGN ALLOWED IF 3 SIGNAL HEADS, NOT IF 4 OR 5 SIGNAL HEADS.

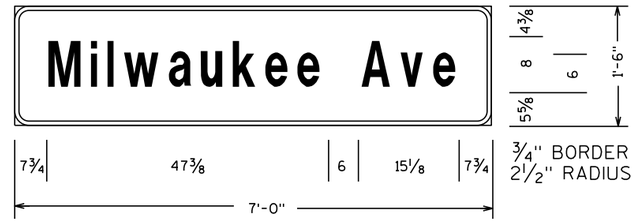


(MAXIMUM LOAD)

SIGN SPECS

MAXIMUM SIGN AREA 14'-0" SQ. FEET
8" UPPER CASE SERIES D LETTERS
6" LOWER CASE SERIES D LETTERS
GREEN BACKGROUND
WHITE LETTERS
HI SHEETING
TYPE II SIGN
WISCONSIN STANDARD SPECIFICATION 2008 TO BE FOLLOWED FOR ATTACHING SIGN TO TROMBONE ARM.

SIGN DETAIL
(TYPICAL)

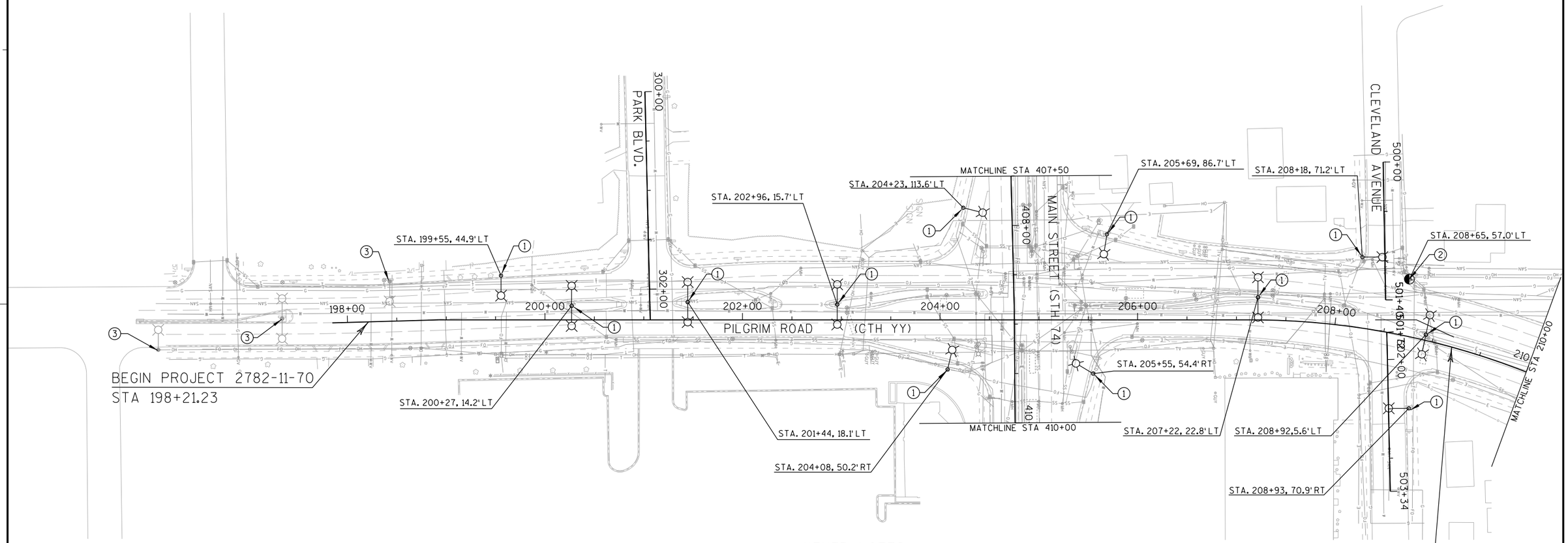


LETTERS
SERIES D

GREEN/WHITE
HI SHEETING
TYPE II
M1-94H

PROJECT NO: 2782-11-70	HWY: USH 41 (PILGRIM ROAD)	COUNTY: WAUKESHA	STREET NAME SIGN TYPICAL	SHEET 207	E

2



LEGEND

- LIGHTING CONTROL CABINET
- LOCAL MUNICIPAL POLE
- EXISTING LIGHT AND POLE TO REMAIN

STA. 82+00, 43.0'RT (STATION, OFFSET)

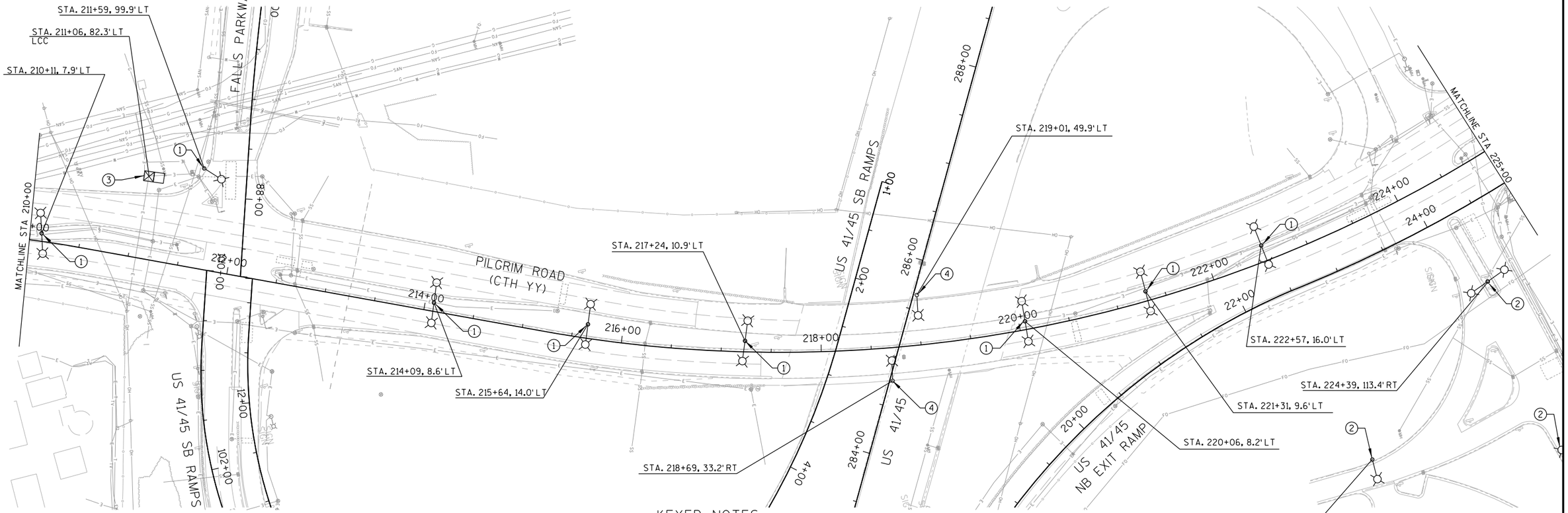
NOTE: GRAYSHADE REPRESENTS EXISTING TO REMAIN.
BOLD REPRESENTS EXISTING TO BE REMOVED

KEYED NOTES

1. REMOVE AND DISPOSE OF MUNICIPAL LIGHT POLE, LUMINAIRE, ARM, AND BASE.
2. REMOVE AND DISPOSE OF PULL BOX.
3. EXISTING LIGHT POLE TO REMAIN.

PROJECT NO: 2782-11-70 & 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	LIGHTING REMOVAL PLAN: PILGRIM ROAD	SHEET 208	E

2



LEGEND

- LIGHTING CONTROL CABINET
- LOCAL MUNICIPAL POLE
- EXISTING LIGHT AND POLE TO REMAIN

STATION / OFFSET
STA. 82+00, 43.0'RT

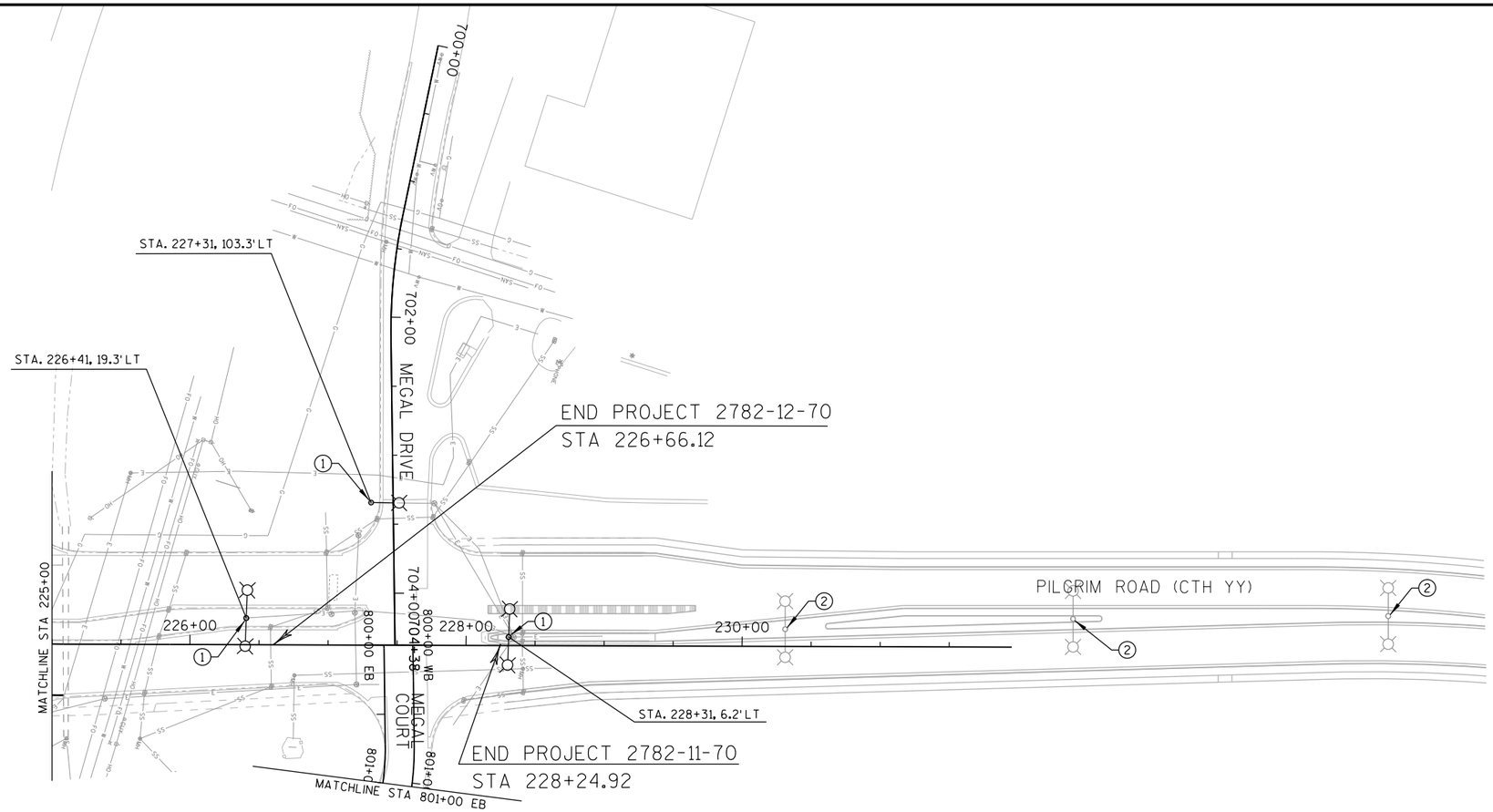
NOTE: GRAYSHADE REPRESENTS EXISTING TO REMAIN.
BOLD REPRESENTS EXISTING TO BE REMOVED

KEYED NOTES

1. REMOVE AND DISPOSE OF MUNICIPAL LIGHT POLE, LUMINAIRE, ARM, AND BASE.
2. REMOVE AND DISPOSE OF HARLEY DAVIDSON LIGHT POLE, LUMINAIRE, ARM, AND BASE.
3. REMOVE AND DISPOSE OF LIGHTING CONTROL CABINET AND BASE.
4. REMOVE AND DISPOSE OF MUNICIPAL LIGHT POLE, LUMINAIRE, AND ARM.

PROJECT NO: 2782-11-70 & 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	LIGHTING REMOVAL PLAN: PILGRIM ROAD	SHEET 209	E

2



LEGEND

- LIGHTING CONTROL CABINET
- LOCAL MUNICIPAL POLE
- EXISTING LIGHT AND POLE TO REMAIN

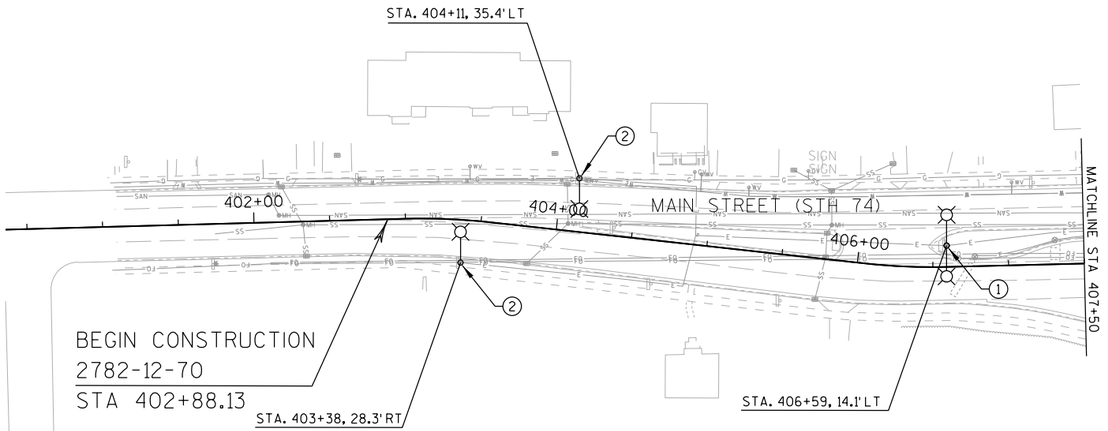
STA. 82+00, 43.0' RT
(STATION, OFFSET)

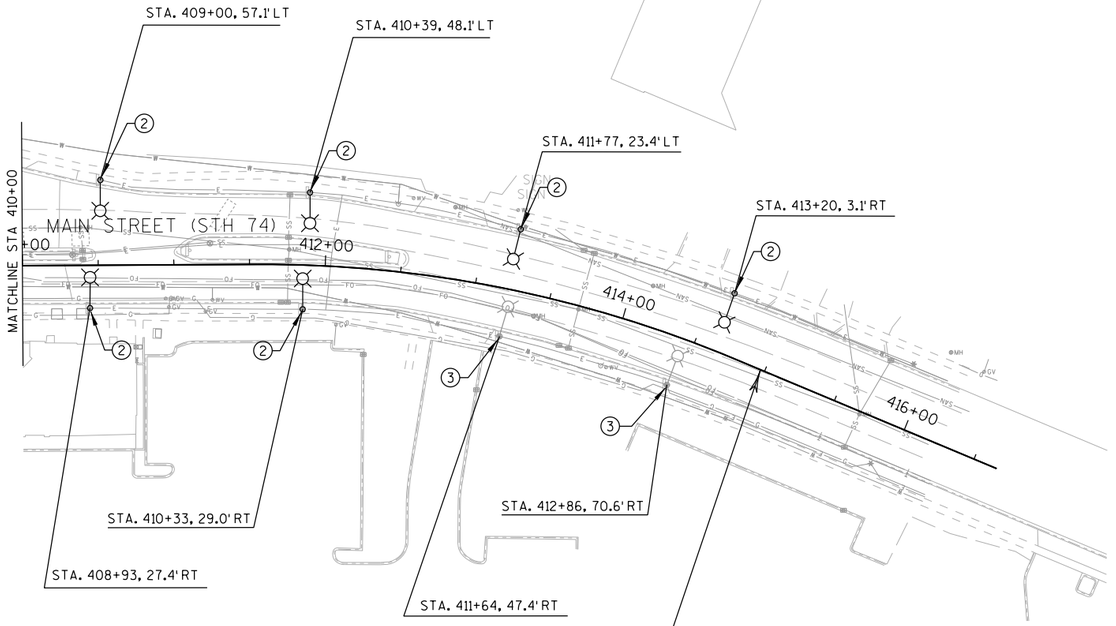
NOTE: GRAYSHADE REPRESENTS EXISTING TO REMAIN.
BOLD REPRESENTS EXISTING TO BE REMOVED

KEYED NOTES

① REMOVE AND DISPOSE OF MUNICIPAL LIGHT POLE, LUMINAIRE, ARM, AND BASE.

② EXISTING LIGHT POLE TO REMAIN.





END CONSTRUCTION 2782-12-70
STA 414+96.77

LEGEND

- LIGHTING CONTROL CABINET
- LOCAL MUNICIPAL POLE
- EXISTING LIGHT AND POLE TO REMAIN

STA. 82+00, 43.0' RT (STATION, OFFSET)

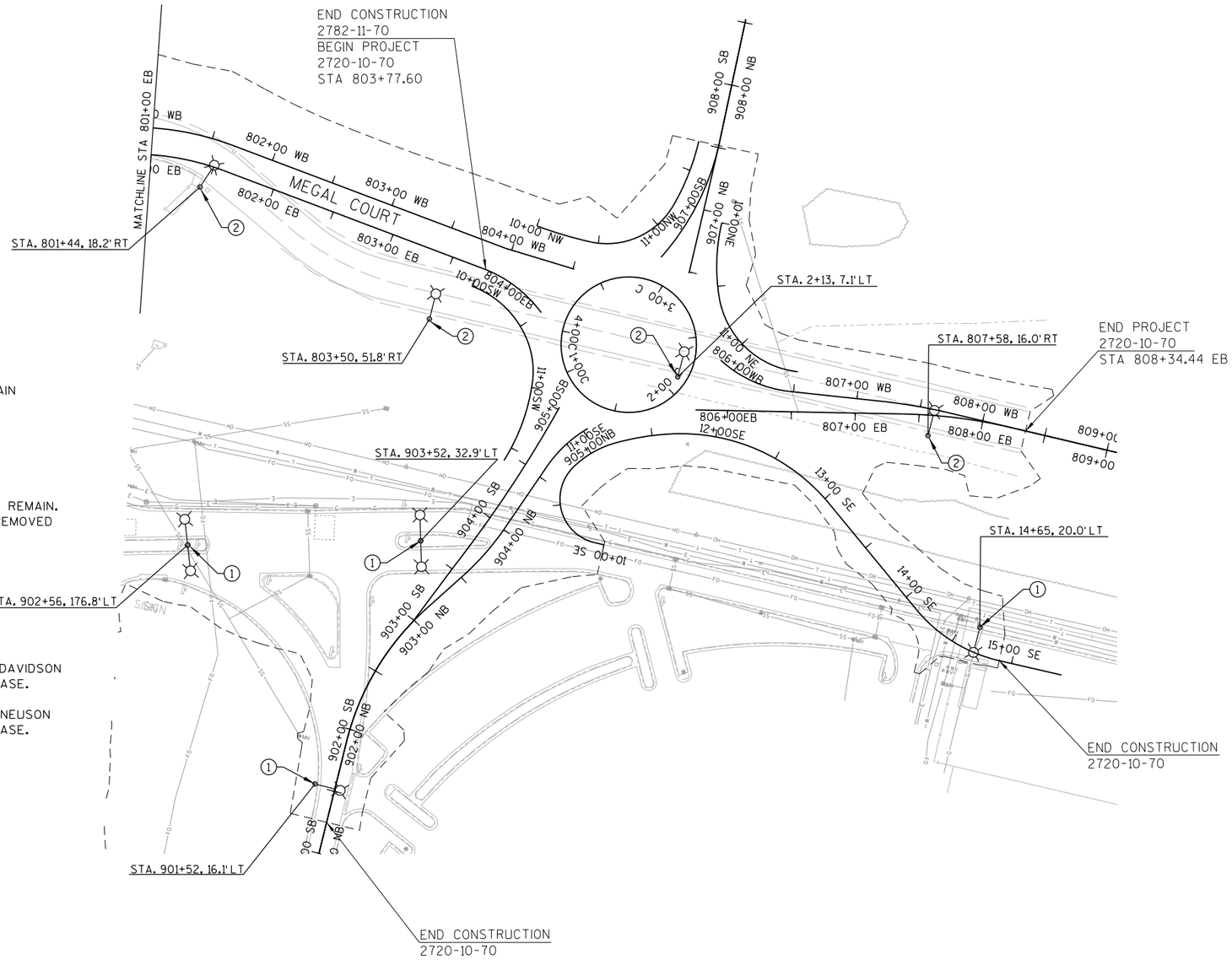
NOTE: GRAYSHADE REPRESENTS EXISTING TO REMAIN.
BOLD REPRESENTS EXISTING TO BE REMOVED

KEYED NOTES

1. REMOVE AND DISPOSE OF MUNICIPAL LIGHT POLE, LUMINAIRE, ARM, AND BASE.
2. REMOVE AND RE-LOCATE EXISTING POLE, ARM, AND LUMINAIRE TO LOCATION SHOWN ON LIGHTING PLAN. REMOVE CONCRETE POLE BASE.
3. EXISTING LIGHT POLE TO REMAIN. LIGHT POLES FED FROM LIGHTING CONTROL CABINET LOCATED EAST ON MAIN STREET. CIRCUIT SHALL REMAIN.

PROJECT NO: 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	LIGHTING REMOVAL PLAN: MAIN STREET	SHEET 211	E

2



LEGEND

- LIGHTING CONTROL CABINET
- LOCAL MUNICIPAL POLE
- EXISTING LIGHT AND POLE TO REMAIN

STATION / OFFSET
STA. 82+00, 43.0' RT

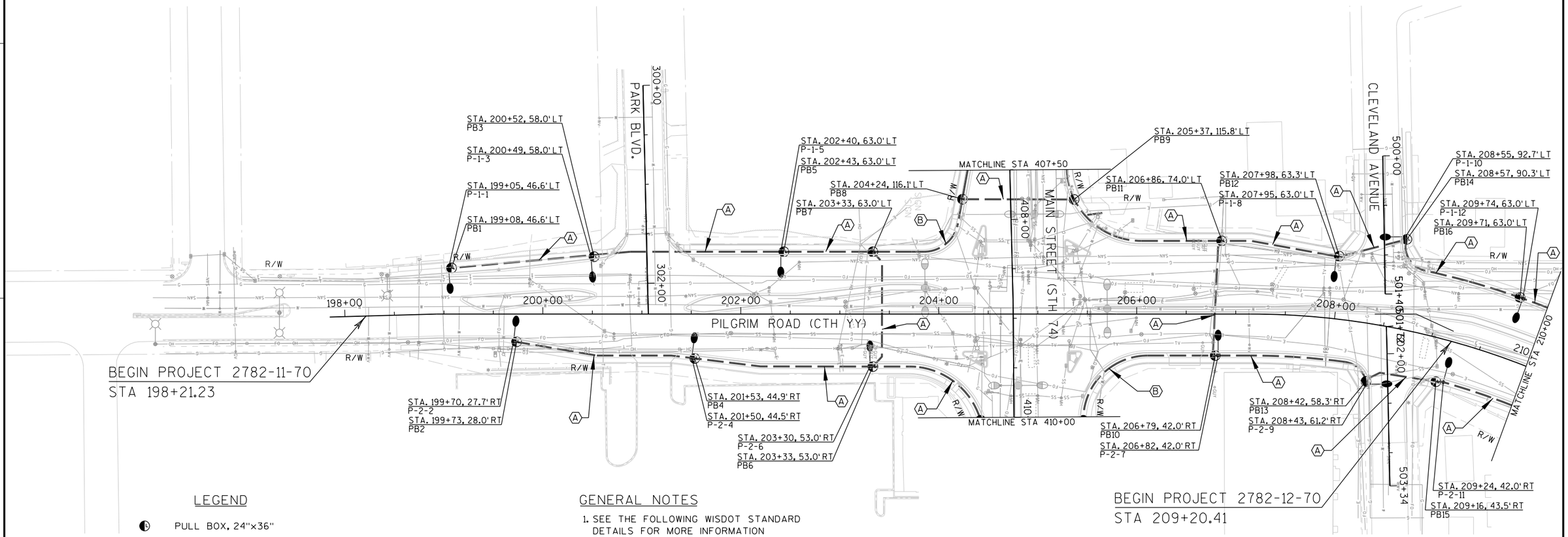
NOTE: GRAYSHADE REPRESENTS EXISTING TO REMAIN.
BOLD REPRESENTS EXISTING TO BE REMOVED

KEYED NOTES

(1) REMOVE AND DISPOSE OF HARLEY DAVIDSON LIGHT POLE, LUMINAIRE, ARM, AND BASE.

(2) REMOVE AND DISPOSE OF WACKER NEUSON LIGHT POLE, LUMINAIRE, ARM, AND BASE.

PROJECT NO: 2782-11-70 & 2720-10-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	LIGHTING REMOVAL PLAN: MEGAL COURT	SHEET 212	E



LEGEND

- PULL BOX, 24"x36"
- PROPOSED CONDUIT (SEE CABLE & CONDUIT LEGEND)
- UTILITY LED C BLACK LUMINAIRE ON TYPE 5 BLACK POLE WITH 6' SINGLE ARM
- LOCAL MUNICIPAL LUMINAIRE ON TYPE 5 POLE
- SALVAGED LIGHT FIXTURE, RELOCATED
- EXISTING LIGHT AND POLE TO REMAIN, FOR INFORMATION ONLY
- INTERSECTION LIGHT, BY TRAFFIC SIGNAL, FOR INFORMATION ONLY
- LIGHTING CONTROL CABINET

GENERAL NOTES

1. SEE THE FOLLOWING WISDOT STANDARD DETAILS FOR MORE INFORMATION

-9B2 - CONDUIT UNDER PAVED HIGHWAYS

-9B4 - PULL BOX

-9C2 - CONCRETE BASES TYPES 1, 2, 5, AND 6

-9C3 - TRANSFORMERS/ PEDESTAL BASES

-9E1 SHEET C - POLE MOUNTINGS FOR TRAFFIC SIGNALS AND LIGHTING UNITS TYPE 5 (30 FEET)

-9E1 SHEET G - HARDWARE DETAILS FOR POLE MOUNTING

-9E3 - NON-FREEWAY LIGHTING UNIT POLE WIRING

-9C5 - CONCRETE CONTROL CABINET BASE, TYPE 9

-9D1 - CABINET SERVICE INSTALLATION (METER BREAKER PEDESTAL)

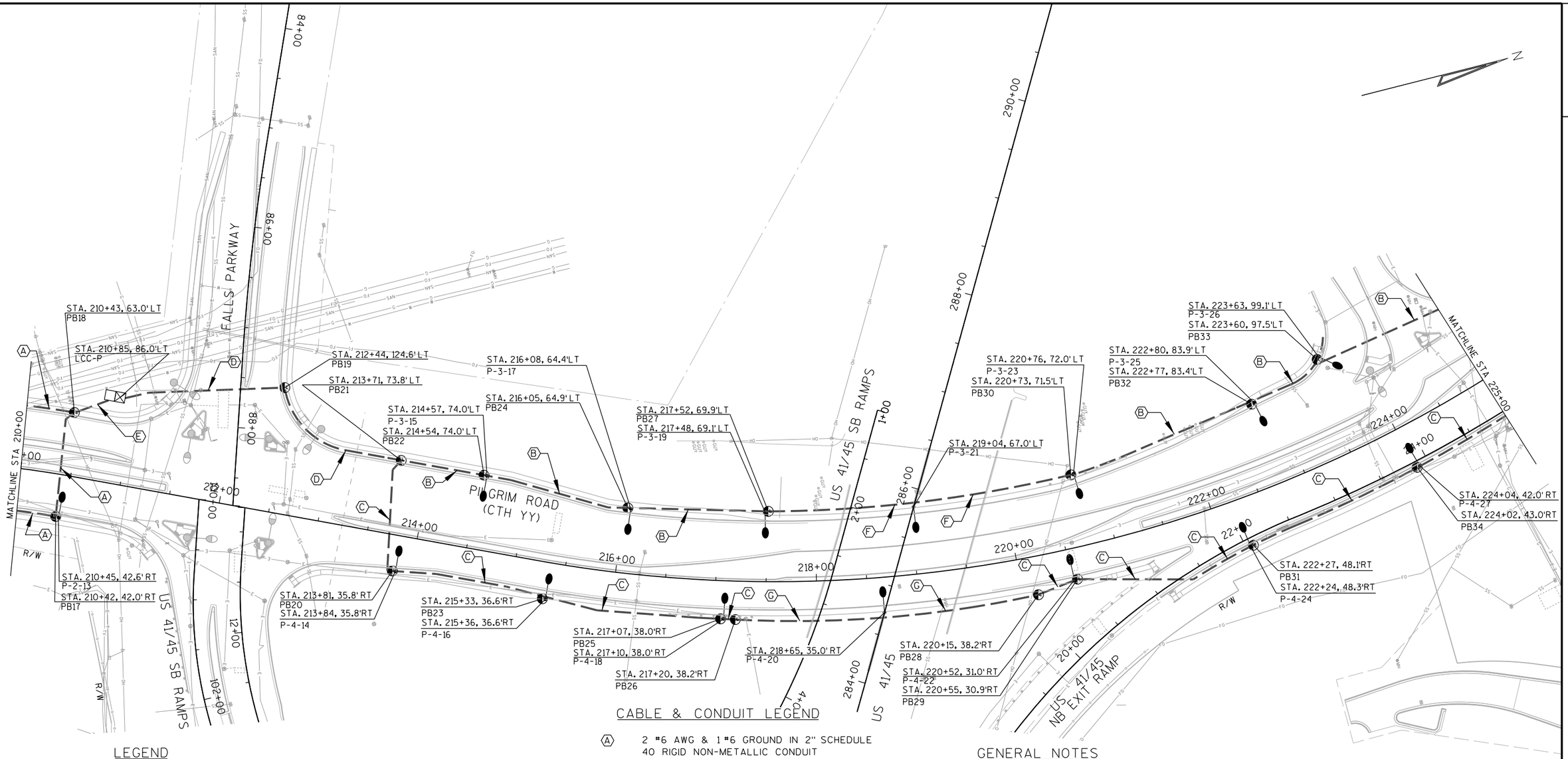
STA. 82+00, 43.0' RT
A-1,3-3
- STATION
- OFFSET
- POLE NUMBER
- LUMINAIRE CIRCUIT
- CONTROL CABINET

CABLE & CONDUIT LEGEND

- (A) 2 #6 AWG & 1 #6 GROUND IN 2" SCHEDULE 40 RIGID NON-METALLIC CONDUIT
- (B) 4 #6 AWG & 1 #6 GROUND IN 2" SCHEDULE 40 RIGID NON-METALLIC CONDUIT

PROJECT NO: 2782-11-70 & 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	LIGHTING PLAN: PILGRIM ROAD	SHEET 213	E

2



LEGEND

- PULL BOX, 24"x36"
- PROPOSED CONDUIT (SEE CABLE & CONDUIT LEGEND)
- UTILITY LED C BLACK LUMINAIRE ON TYPE 5 BLACK POLE WITH 6' SINGLE ARM
- LOCAL MUNICIPAL LUMINAIRE ON TYPE 5 POLE
- SALVAGED LIGHT FIXTURE, RELOCATED
- EXISTING LIGHT AND POLE TO REMAIN, FOR INFORMATION ONLY
- INTERSECTION LIGHT, BY TRAFFIC SIGNAL, FOR INFORMATION ONLY
- LIGHTING CONTROL CABINET

STA. 82+00, 43.0'RT
A-1.3-3
- STATION
- OFFSET
- POLE NUMBER
- LUMINAIRE CIRCUIT
- CONTROL CABINET

CABLE & CONDUIT LEGEND

- (A) 2 #6 AWG & 1 #6 GROUND IN 2" SCHEDULE 40 RIGID NON-METALLIC CONDUIT
- (B) 2 #4 AWG & 1 #4 GROUND IN 2" SCHEDULE 40 RIGID NON-METALLIC CONDUIT
- (C) 2 #2 AWG & 1 #2 GROUND IN 2" SCHEDULE 40 RIGID NON-METALLIC CONDUIT
- (D) 2 #4 AWG AND 2 #2 AWG & 1 #2 GROUND IN 2" SCHEDULE 40 RIGID NON-METALLIC CONDUIT
- (E) 4 #6 AWG & 1 #6 GROUND IN 2" SCHEDULE 40 RIGID NON-METALLIC CONDUIT
- (F) 2 #4 AWG & 1 #4 GROUND IN CONCRETE ENCASED CONDUIT PROVIDED BY OTHERS
- (G) 2 #2 AWG & 1 #2 GROUND IN CONCRETE ENCASED CONDUIT PROVIDED BY OTHERS

GENERAL NOTES

1. SEE THE FOLLOWING WISDOT STANDARD DETAILS FOR MORE INFORMATION

-9B2 - CONDUIT UNDER PAVED HIGHWAYS

-9B4 - PULL BOX

-9C2 - CONCRETE BASES TYPES 1, 2, 5, AND 6

-9C3 - TRANSFORMERS/ PEDESTAL BASES

-9E1 SHEET C - POLE MOUNTINGS FOR TRAFFIC SIGNALS AND LIGHTING UNITS TYPE 5 (30 FEET)

-9E1 SHEET G - HARDWARE DETAILS FOR POLE MOUNTING

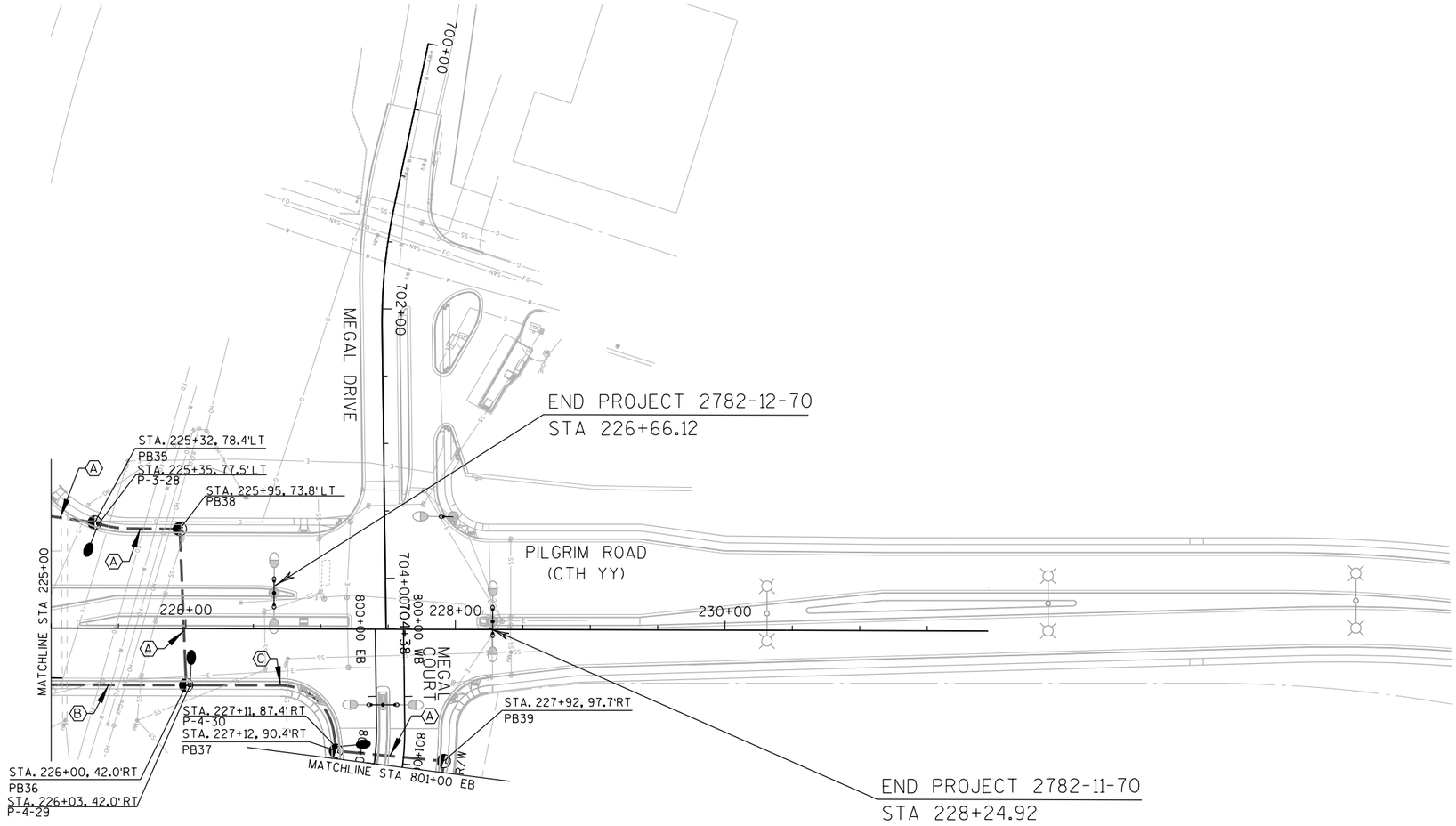
-9E3 - NON-FREEWAY LIGHTING UNIT POLE WIRING

-9C5 - CONCRETE CONTROL CABINET BASE, TYPE 9

-9D1 - CABINET SERVICE INSTALLATION (METER BREAKER PEDESTAL)

PROJECT NO: 2782-11-70 & 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	LIGHTING PLAN: PILGRIM ROAD	SHEET 214	E

2



LEGEND

- PULL BOX, 24"x36"
- PROPOSED CONDUIT (SEE CABLE & CONDUIT LEGEND)
- UTILITY LED C BLACK LUMINAIRE ON TYPE 5 BLACK POLE WITH 6' SINGLE ARM
- LOCAL MUNICIPAL LUMINAIRE ON TYPE 5 POLE
- SALVAGED LIGHT FIXTURE, RELOCATED
- EXISTING LIGHT AND POLE TO REMAIN, FOR INFORMATION ONLY
- INTERSECTION LIGHT, BY TRAFFIC SIGNAL, FOR INFORMATION ONLY
- LIGHTING CONTROL CABINET

STA. 82+00, 43.0'RT
A-1,3-3
STATION, OFFSET, POLE NUMBER, LUMINAIRE CIRCUIT, CONTROL CABINET

CABLE & CONDUIT LEGEND

(A) 2 #4 AWG & 1 #4 GROUND IN 2" SCHEDULE 40 RIGID NON-METALLIC CONDUIT

(B) 2 #2 AWG & 1 #2 GROUND IN 2" SCHEDULE 40 RIGID NON-METALLIC CONDUIT

(C) 2 #4 AWG AND 2 #2 AWG & 1 #2 GROUND IN 2" SCHEDULE 40 RIGID NON-METALLIC CONDUIT

GENERAL NOTES

1. SEE THE FOLLOWING WISDOT STANDARD DETAILS FOR MORE INFORMATION

-9B2 - CONDUIT UNDER PAVED HIGHWAYS

-9B4 - PULL BOX

-9C2 - CONCRETE BASES TYPES 1, 2, 5, AND 6

-9C3 - TRANSFORMERS/ PEDESTAL BASES

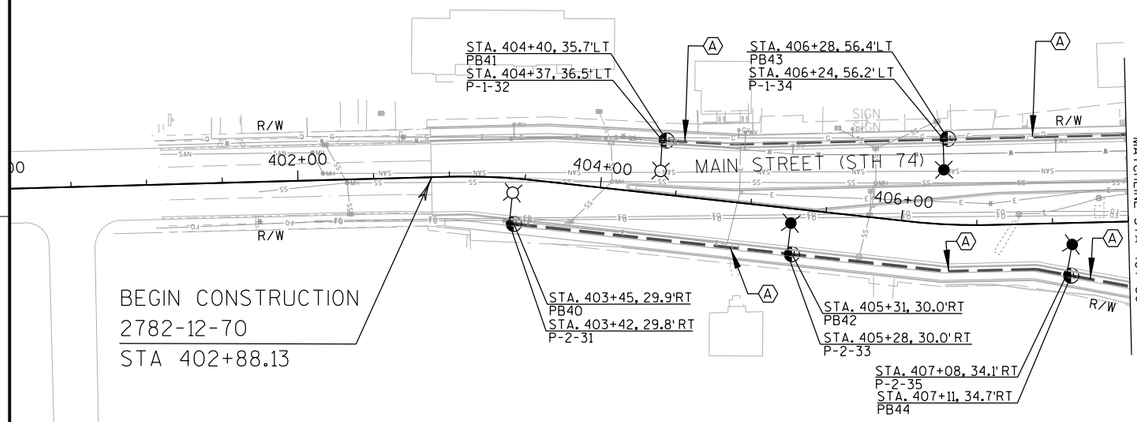
-9E1 SHEET C - POLE MOUNTINGS FOR TRAFFIC SIGNALS AND LIGHTING UNITS TYPE 5 (30 FEET)

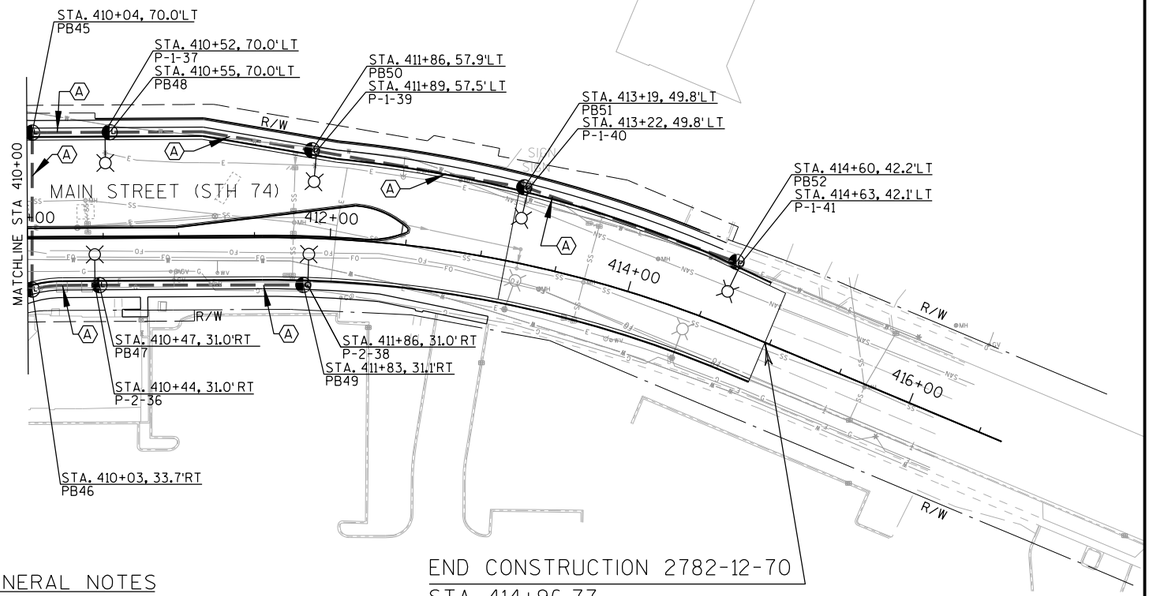
-9E1 SHEET G - HARDWARE DETAILS FOR POLE MOUNTING

-9E3 - NON-FREEWAY LIGHTING UNIT POLE WIRING

-9C5 - CONCRETE CONTROL CABINET BASE, TYPE 9

-9D1 - CABINET SERVICE INSTALLATION (METER BREAKER PEDESTAL)





LEGEND

- PULL BOX, 24"x36"
- PROPOSED CONDUIT (SEE CABLE & CONDUIT LEGEND)
- UTILITY LED C BLACK LUMINAIRE ON TYPE 5 BLACK POLE WITH 6' SINGLE ARM
- LOCAL MUNICIPAL LUMINAIRE ON TYPE 5 POLE
- SALVAGED LIGHT FIXTURE, RELOCATED
- EXISTING LIGHT AND POLE TO REMAIN, FOR INFORMATION ONLY
- INTERSECTION LIGHT, BY TRAFFIC SIGNAL, FOR INFORMATION ONLY
- LIGHTING CONTROL CABINET

CABLE & CONDUIT LEGEND

(A) 2 #6 AWG & 1 #6 GROUND IN 2" SCHEDULE 40 RIGID NON-METALLIC CONDUIT

STA. 82+00, 43.0' RT
A-1.3-3
- STATION
- OFFSET
- POLE NUMBER
- LUMINAIRE CIRCUIT
- CONTROL CABINET

GENERAL NOTES

1. SEE THE FOLLOWING WISDOT STANDARD DETAILS FOR MORE INFORMATION

-9B2 - CONDUIT UNDER PAVED HIGHWAYS

-9B4 - PULL BOX

-9C2 - CONCRETE BASES TYPES 1, 2, 5, AND 6

-9C3 - TRANSFORMERS/ PEDESTAL BASES

-9E1 SHEET C - POLE MOUNTINGS FOR TRAFFIC SIGNALS AND LIGHTING UNITS TYPE 5 (30 FEET)

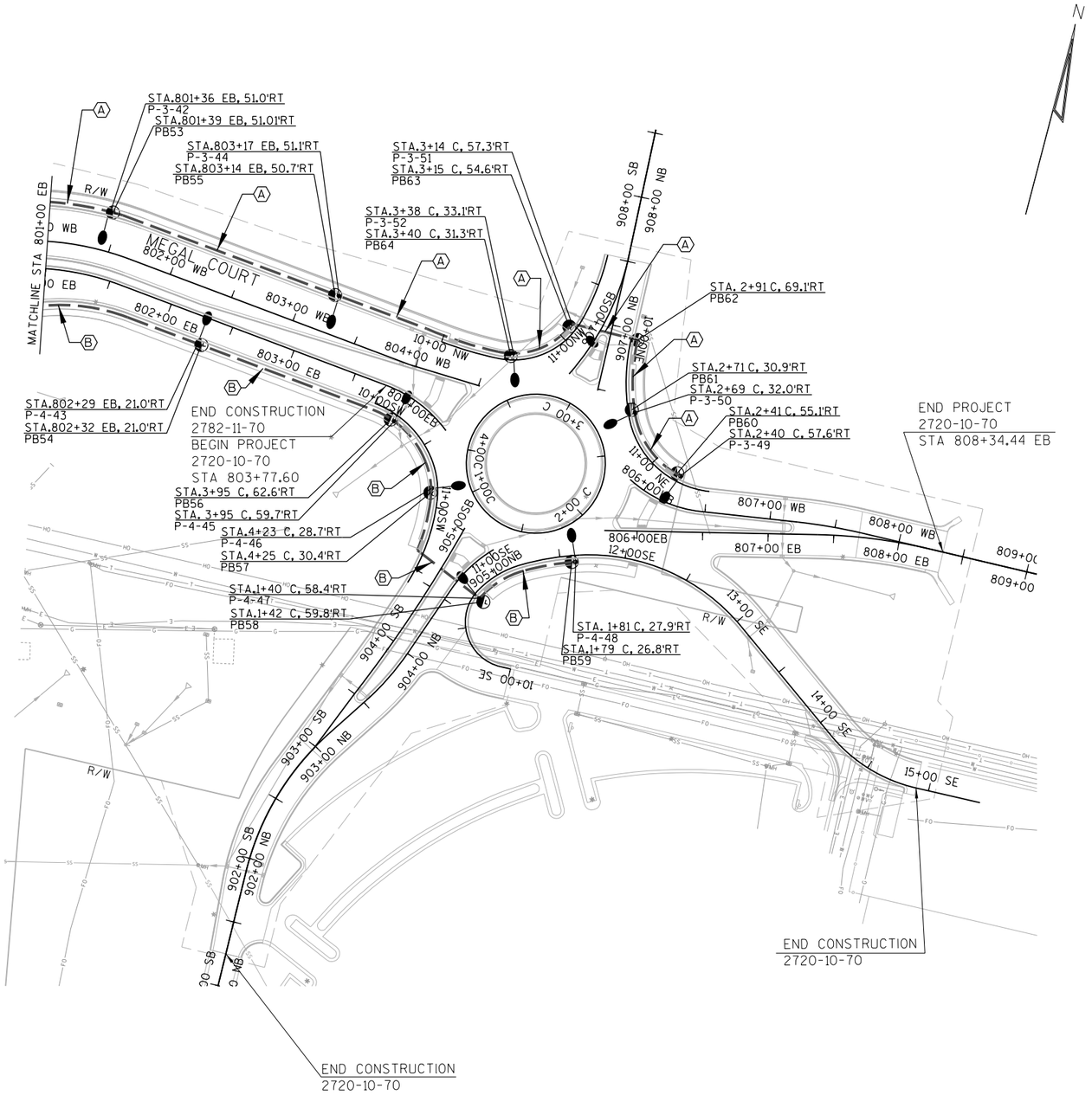
-9E1 SHEET G - HARDWARE DETAILS FOR POLE MOUNTING

-9E3 - NON-FREEWAY LIGHTING UNIT POLE WIRING

-9C5 - CONCRETE CONTROL CABINET BASE, TYPE 9

-9D1 - CABINET SERVICE INSTALLATION (METER BREAKER PEDESTAL)

PROJECT NO: 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	LIGHTING PLAN: MAIN STREET	SHEET 216	E



LEGEND

- PULL BOX, 24"x36"
- PROPOSED CONDUIT (SEE CABLE & CONDUIT LEGEND)
- UTILITY LED C BLACK LUMINAIRE ON TYPE 5 BLACK POLE WITH 6' SINGLE ARM
- LOCAL MUNICIPAL LUMINAIRE ON TYPE 5 POLE
- SALVAGED LIGHT FIXTURE, RELOCATED
- EXISTING LIGHT AND POLE TO REMAIN, FOR INFORMATION ONLY
- INTERSECTION LIGHT, BY TRAFFIC SIGNAL, FOR INFORMATION ONLY
- LIGHTING CONTROL CABINET

STATION
OFFSET
STA. 82+00, 43.0'RT
A-1,3-3
POLE NUMBER
LUMINAIRE CIRCUIT
CONTROL CABINET

CABLE & CONDUIT LEGEND

(A) 2 #4 AWG & 1 #4 GROUND IN 2" SCHEDULE 40 RIGID NON-METALLIC CONDUIT

(B) 2 #2 AWG & 1 #2 GROUND IN 2" SCHEDULE 40 RIGID NON-METALLIC CONDUIT

GENERAL NOTES

1. SEE THE FOLLOWING WISDOT STANDARD DETAILS FOR MORE INFORMATION

   -9B2 - CONDUIT UNDER PAVED HIGHWAYS

   -9B4 - PULL BOX

   -9C2 - CONCRETE BASES TYPES 1, 2, 5, AND 6

   -9C3 - TRANSFORMERS/ PEDESTAL BASES

   -9E1 SHEET C - POLE MOUNTINGS FOR TRAFFIC SIGNALS AND LIGHTING UNITS TYPE 5 (30 FEET)

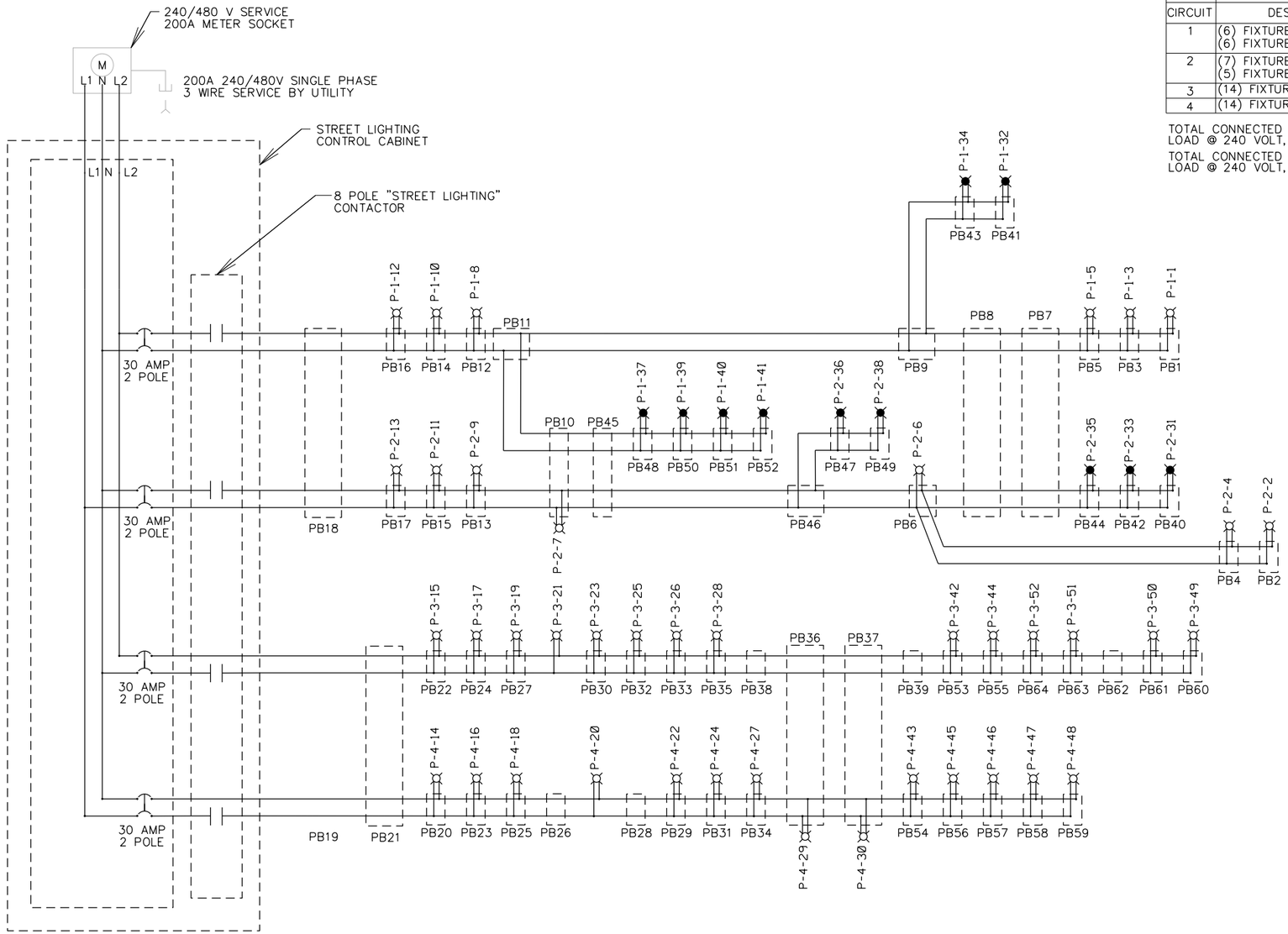
   -9E1 SHEET G - HARDWARE DETAILS FOR POLE MOUNTING

   -9E3 - NON-FREEWAY LIGHTING UNIT POLE WIRING

   -9C5 - CONCRETE CONTROL CABINET BASE, TYPE 9

   -9D1 - CABINET SERVICE INSTALLATION (METER BREAKER PEDESTAL)

	LOAD TABULATION FOR LIGHTING CONTROLLER "P"			
CIRCUIT	DESCRIPTION	L1	L2	BREAKER SIZE AMPS
1	(6) FIXTURES @ 0.67 AMPS (6) FIXTURES @ 1.04 AMPS	5.13	5.13	30 AMP, 2 POLE
2	(7) FIXTURES @ 0.67 AMPS (5) FIXTURES @ 1.04 AMPS	4.95	4.95	30 AMP, 2 POLE
3	(14) FIXTURES @ 0.67 AMPS	4.69	4.69	30 AMP, 2 POLE
4	(14) FIXTURES @ 0.67 AMPS	4.69	4.69	30 AMP, 2 POLE
TOTAL CONNECTED LOAD @ 240 VOLT, 1 PHASE		19.46 AMPS	19.46 AMPS	
TOTAL CONNECTED LOAD @ 240 VOLT, 1 PHASE		4.7 KILOVOLT AMPS	4.7 KILOVOLT AMPS	



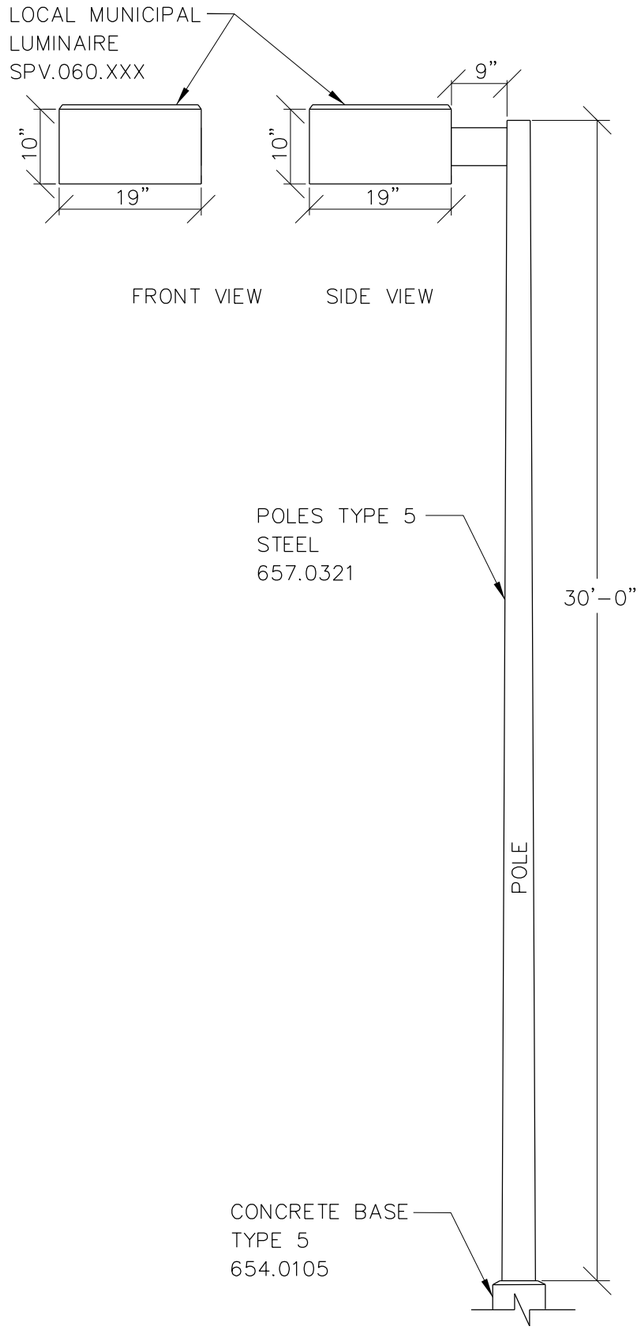
GENERAL NOTES

1. GROUND WIRE REQUIRED, NOT SHOWN.

LEGEND

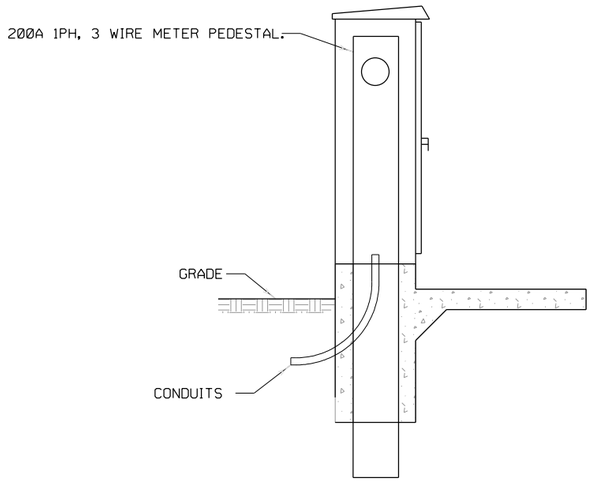
- PROPOSED 160 WATT LED TYPE C LUMINAIRE
- PROPOSED/RELOCATED 250 WATT HIGH PRESSURE SODIUM MUNICIPAL LUMINAIRE

"P" LIGHTING SYSTEM WIRING DIAGRAM

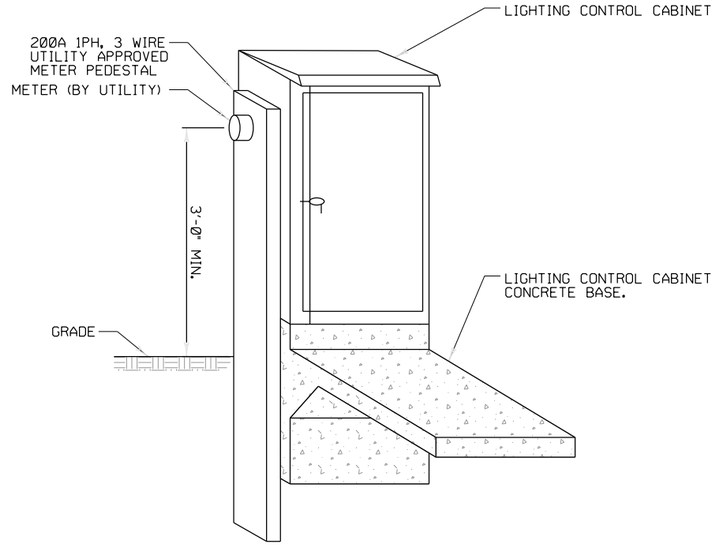


LOCAL MUNICIPAL LUMINAIRE ASSEMBLY

PROJECT NO: 2782-11-70 & 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	ELECTRICAL DETAILS	SHEET 219	E



SIDE VIEW



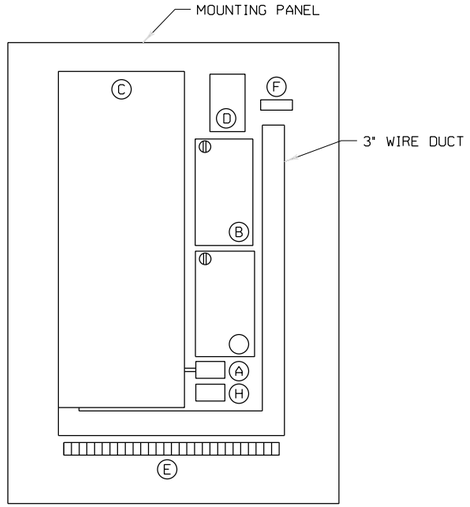
FRONT VIEW

GENERAL NOTES

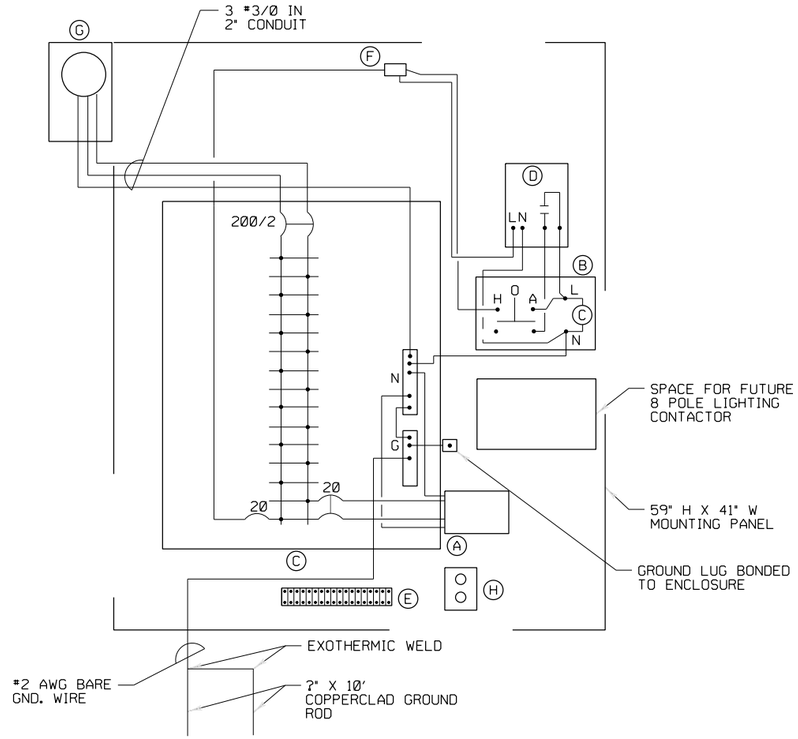
1. ALL CONTROL WIRING SHALL BE COLOR CODED #12 AWG, XLP UNLESS OTHERWISE NOTED.
2. ALL POWER AND CONTROL WIRING SHALL BE NEATLY ROUTED, LABELED AND SUPPORTED.
3. THE LIGHTING CONTROL CABINET SHALL BE COMPLETELY WIRED UP TO THE FIELD WIRING TERMINATION STRIP IN THE CONTRACTOR SHOP AND TESTED PRIOR TO INSTALLATION AT THE SITE.
4. A COPY OF THIS SHEET WITH AS-BUILT (RECORD) CONDITIONS SHALL BE PUT IN A PLASTIC PROTECTOR IN THE CABINET.
5. THE CONTRACTOR SHALL COMPLY WITH UTILITY INSTALLATION REQUIREMENTS.
6. USE #10 AWG XLP CONDUCTORS FROM THE 30A CB'S TO THE FIELD WIRING TERMINATION STRIP. PROVIDE A GROUND WIRE AND THE NEUTRAL WIRE TO FIELD WIRING TERMINATION STRIP FROM PANELBOARD FOR EACH UNDERGROUND CABLE RUN TO LIGHTING UNITS AS REQUIRED.
7. PROVIDE WISDOT STANDARD CONCRETE CONTROL CABINET BASE, TYPE 9.

EQUIPMENT

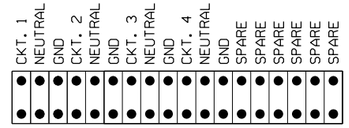
- (A) SURGE ARRESTOR
- (B) 8 POLE 30A 600V MAGNETICALLY HELD "STREET LIGHTING" CONTACTOR, 240V CONTROL COIL, H-O-A SWITCH, NEMA 1 ENCLOSURE
- (C) 200 AMP MAIN CIRCUIT BREAKER 240/480V, 1PH, 3 WIRE, 42CKT., PANELBOARD WITH BOLT-ON BRANCH BREAKERS, 65000 A RMS INTERUPTING CAPACITY.
- (D) TIMECLOCK, INTERMATIC ASTRONOMIC TIMESWITCH.
- (E) FIELD WIRING TERMINATION STRIP (18 BLOCKS)
- (F) CONTROL TERMINAL BLOCK
- (G) 200A, 240/480, 1PH, 3W METER PEDESTAL
- (H) GFCI RECEPTACLE



EQUIPMENT LAYOUT
NO SCALE



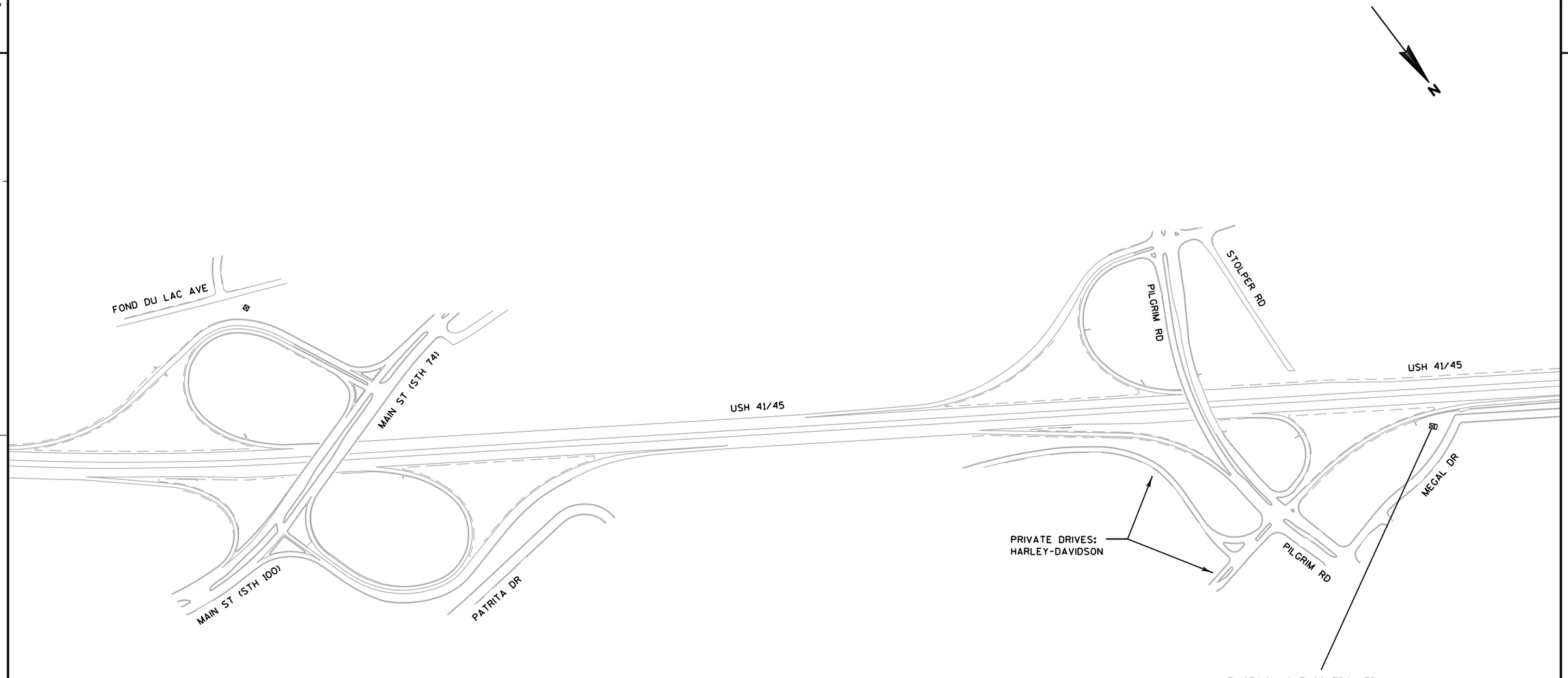
CONTROL DIAGRAM
NO SCALE



TERMINATION STRIP DETAIL
NO SCALE

PROJECT NO: 2782-11-70 & 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	ELECTRICAL DETAILS	SHEET 220	E

2



HL-67-PG	
A,C,E	RED
B,C,F	BLACK
N	WHITE
GND	GREEN OR BARE
A,B,C,D,E,F	30 A
240/480VAC 3 WIRE ISOLATED NEUTRAL	

NOTES:

1. WIRE IN THE PULL BOX IS INCIDENTAL TO THE PULL BOX BID ITEM.

2. THE LOCATION OF EXISTING AND PROPOSED UTILITIES AS SHOWN ON THE PLANS ARE APPROXIMATE. IN ADDITION, THERE MAY BE OTHER UTILITIES WITHIN THE PROJECT AREA WHICH ARE NOT SHOWN. THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL UTILITIES PRIOR TO CONSTRUCTION.

PROJECT NO: 2782-12-70	HWY: USH 41	COUNTY: WAUKESHA	LIGHTING PLAN - LIGHTING CONTROLLER OVERVIEW	SHEET 221	E

GENERAL NOTES

DETAILS OF CONSTRUCTION MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

LOCATIONS OF THE PVC CONDUITS ARE IDENTIFIED IN THE PLANS WHERE THEY ARE REQUIRED. APPROPRIATE ADJUSTMENT ON CONDUIT LOCATIONS MAY BE MADE IF THE FIELD CONDITIONS ARE SUCH THAT THE CONDUIT CANNOT BE INSTALLED AT THE SPECIFIED LOCATIONS. FIELD MARK EACH CONDUIT LOCATION IN RED.

THE TRENCH SHALL NOT BE BACK FILLED PRIOR TO INSPECTION OF THE CONDUIT.

ALL CONDUITS SHALL BE CAPPED OR PLUGGED WITH ENGINEER APPROVED FITTINGS IMMEDIATELY AFTER INSTALLATION.

BENDING OF PVC ELECTRICAL CONDUIT SHALL BE ACCOMPLISHED BY USING A BLANKET OR IMMERSION TYPE TANK DESIGNED FOR THE PURPOSE OF BENDING PVC ELECTRICAL CONDUIT.

ALL CUT ENDS SHALL BE TRIMMED INSIDE AND OUTSIDE TO REMOVE ALL ROUGH EDGES ON ALL CONDUITS.

PRIOR TO CONDUIT ACCEPTANCE, ALL CONDUIT ENDS SHALL BE THOROUGHLY CLEANED AND BE CAPPED WITH THE APPROPRIATE CAST PLASTIC CAP WHICH FITS SNUGGLY ON THE CONDUIT, BUT EASILY REMOVED IN THE FUTURE. DUCT TAPE OR ANY OTHER CAPPING METHOD IS NOT ACCEPTABLE.

CONDUIT RUNS SHALL BE THE SAME SIZE PIPE FROM ONE END TO THE OTHER (FROM PULL BOX TO PULL BOX-OR-JUNCTION BOX-OR-BASE TO BASE, ETC.) UNLESS OTHERWISE NOTED ON PLANS.

PULL ROPE (3/8-INCH NYLON) SHALL BE INSTALLED IN ALL NEW CONDUITS.

CONTRACTOR SHALL SUPPLY AS-BUILT DRAWING FOR ALL THE WORK BEING DONE.

INSTALLATION OF LATERAL UNDERGROUND CONDUIT UNDER PAVEMENT SHALL BE INSTALLED MINIMUM 30 INCHES BELOW PROPOSED GRADE. CONDUIT LATERALS SHALL BE TRENCHED UNDER PAVEMENT BEFORE PAVEMENT CONSTRUCTION. CONTRACTOR IS RESPONSIBLE TO COORDINATE WITH ROADWAY CONSTRUCTION FOR CONDUIT LATERALS INSTALLATION.

PITCH ALL CONDUITS TOWARD PULL BOXES. INSTALL A 2" DRAIN DUCT TO STORM SEWER OR DRAIN SUMP AS REQUIRED FOR DAMAGE. THE 2" DRAIN DUCT OR SUMP IS INCIDENTAL TO THE PULL BOX BID ITEM AND IS NOT SHOWN.

THE LOCATION OF EXISTING AND PROPOSED UTILITIES AS SHOWN ON THE PLANS ARE APPROXIMATE, IN ADDITION, THERE MAYBE OTHER UTILITIES WITHIN THE PROJECT AREA WHICH ARE NOT SHOWN. THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL UTILITIES PRIOR TO CONSTRUCTION.

HAND DIGGING MAYBE REQUIRED FOR LOCATIONS ADJACENT TO EXISTING GAS AND POWER LINES. HAND EXCAVATION SHOULD BE ANTICIPATED & WILL BE CONSIDERED INCIDENTAL TO THE CONCRETE BASE BID ITEM. COORDINATE ALL WORK NEAR GAS LINE WITH WE ENERGIES.

EXISTING CONDUIT AND CID NO LONGER BEING USED IS ABANDONED IN PLACE. THE CONTRACTOR MAY REMOVE ABANDONED WIRING AT THE CONTRACT'S EXPENSE. ABANDONED PULL BOX REMOVAL IS INCIDENTAL TO THE ROAD CONSTRUCTION.

ALL UNDERGROUND WIRING AND CONDUIT FOR POLES BEING REMOVED IS ABANDONED IN PLACE UNLESS NOTED OTHERWISE. CONTRACTOR MAY SALVAGE ABANDONED WIRING AT HIS OWN EXPENSE.

STAGING NOTES

MAINTAIN LIGHTING AT ALL TIMES DURING CONSTRUCTION USING EXISTING LIGHTING, PROPOSED LIGHTING OR BOTH.

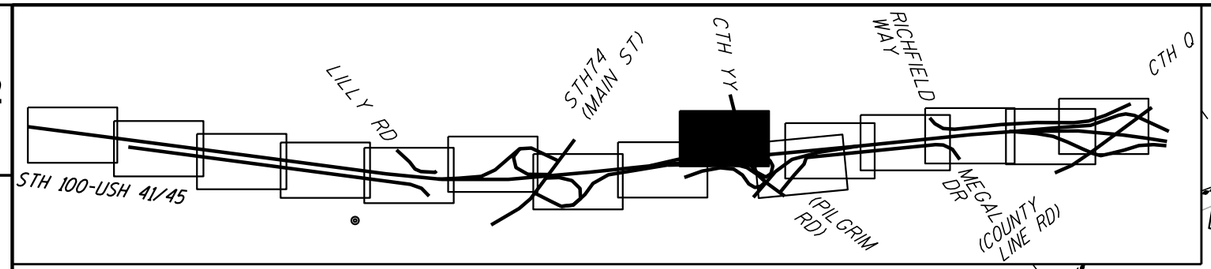
DO NOT REMOVE EXISTING LIGHTING UNTIL THE NEW OR TEMPORARY LIGHTING IS OPERATIONAL. REFER TO DRAWINGS FOR STAGING INFORMATION.

MAINTAINING SYSTEM CONTINUITY SHALL BE INCIDENTAL TO THE REMOVAL/SALVAGE BID ITEM.

DUE TO THE PHASING OF CONSTRUCTION SOME FINAL LIGHTING UNITS MAY BE ORPHANED UNTIL A LATER STAGE IS COMPLETE. IT IS AT THE DISCRETION OF THE CONTRACTOR TO SCHEDULE THESE ITEMS. THE CONTRACTOR IS RESPONSIBLE FOR THE COORDINATION OF THE PLACEMENT OF RACEWAY THAT SPANS TWO DIFFERENT PHASES OF CONSTRUCTION.

TEMPORARY LIGHTING MAY ILLUMINATE AN AREA BEFORE EXISTING LIGHTING UNITS IN THE AREA ARE SCHEDULED FOR REMOVAL. THE SCHEDULING OF REMOVAL IS AT THE DISCRETION OF THE CONTRACTOR WITH THE PROVISION THAT LIGHTING OF THE ROADWAY IS PROVIDED AT ALL TIMES.

2



LEGEND

- DISTRIBUTION CENTER
- CID (CABLE IN DUCT)
- CONDUIT - 2" UNLESS OTHERWISE SHOWN
- LIGHT POLE, ARM MOUNTED LUMINAIRE
- CONDUIT STUBOUT
- PULLBOX 24" x 42"
- PULLBOX 24" x 36"
- MUNICIPAL LIGHT POLE
- UDL (UNDER DECK LUMINAIRE)

BOLDED REPRESENTS ITEMS TO BE REMOVED

NOTES: 1. HL-67-PG CABINET IS LOCATED JUST NORTH OF PILGRIM ROAD ALONG USH 41.

APG7 100+50, 15'RT
#4 A,N
BPG6 102+50, 20'RT
#4 A,B,N
APG5 104+60, 30'RT
PB23
#4 B,N
BPG8 11+80, 20'RT
#4 A,B,N
APG9 9+70, 5'RT
#2 A,B,N
BPG10 7+70, 5'RT
APG11 5+50, 15'RT
BPG4 106+60, 25'RT
APG3 REMOVE LUMINAIRE ONLY
BPG2 REMOVE LUMINAIRE ONLY
284+20 SIGN BRIDGE AND UDL FEEDS FROM "F" BASE
PB22
PB21
USH 41/45SB ON RAMP
USH 41/45SB OFF RAMP
USH 41/45
PILGRIM ROAD
N 24°32'34" E
382+50
284+50 S-67-13 IMV-C/PG
#6 C,D,N
#8 R,S,T,N,GND
#8 S,T,N,G
#2 A,B,N #4 C,D,N
CPG2
CPG3
CPG4
CPG5
CPG6
CPG7
CPG8
DPG2
DPG3
DPG4
DPG5
DPG6
DPG7
DPG8
RPA10
SPA8
SPA11
PIA CPG RD.
SIGN
MH

LIGHTING PLAN DESIGNED BY
WISDOT SE REGION 8/14 DATE

SHEET 1 OF 2

PROJECT NO: 2782-12-70	HWY: USH 41	COUNTY: WAUKESHA	LIGHTING REMOVAL PLAN	SHEET 223 E

2

N

USH 41/45 SB

USH 41/45 NB

288+00 290+00 292+00 294+00 296+00 298+00 300+00 302+00

286+65 DPG3 | #2 A,B,N #4 C,D,N | CPG2 | 289+10 DPG2 | CPG3 | 291+60 DPG1 | #2 A,B,N #4 C,D,N | CPG1 | 293+90 | FPG1 | 294+14 EPG1 | #4 E,F,N | HO | 296+60 FPG2 | EPG2 | 299+10 EPG3 | FPG3 | #4 E,F,N | 301+50 EPG4 | EPG4

#8 A,B,N | #10 B,N

REMOVE LUMINAIRE ONLY APG17

BPG18 REMOVE LUMINAIRE ONLY

APG19 REMOVE LUMINAIRE ONLY

DISTRIBUTION CENTER HL-67-PG

HL-67-PG

A,C,E	RED
B,C,F	BLACK
N	WHITE
GND	GREEN OR BARE
A,B,C,D,E,F	600A
240/480VAC 3 WIRE ISOLATED NEUTRAL	

189K+20. 13'RT BPG12

#8 B,N

USH41/45 NB OFF RAMP

191K+75. 13'RT APG13

#8 A,B,N

PB8

PILGRIM ROAD

PRC STA22+47.64

224+00

24+00

225+00

98L+20. 21'RT BPG14

BPG16 REMOVE LUMINAIRE ONLY

APG15 REMOVE LUMINAIRE ONLY

USH 41/45 ON RAMP

100+00

102+00

PC STA10+

SIGN

MH

INL

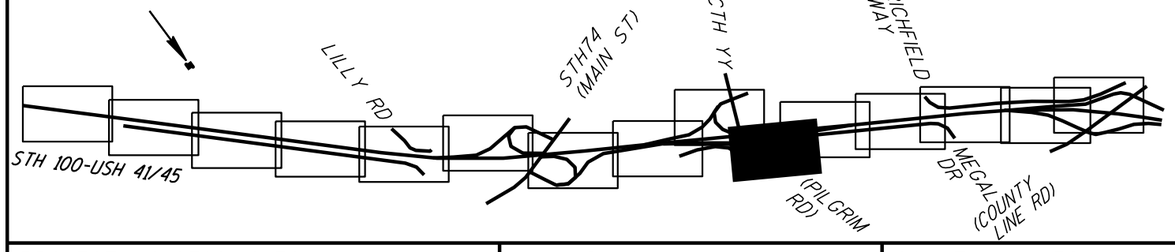
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LEGEND

- DISTRIBUTION CENTER
- CID (CABLE IN DUCT)
- CONDUIT - 2" UNLESS OTHERWISE SHOWN
- LIGHT POLE, ARM MOUNTED LUMINAIRE
- CONDUIT STUBOUT
- PULLBOX 24" x 42"
- PULLBOX 24" x 36"
- MUNICIPAL LIGHT POLE
- UDL (UNDER DECK LUMINAIRE)

BOLDED REPRESENTS ITEMS TO BE REMOVED

NOTES:
1. REMOVE AND SALVAGE LIGHTING UNIT.
2. LEAVE STUBOUT AT BASE.
3. HL-67-PG CABINET IS LOCATED JUST NORTH OF PILGRIM ROAD ALONG USH 41.

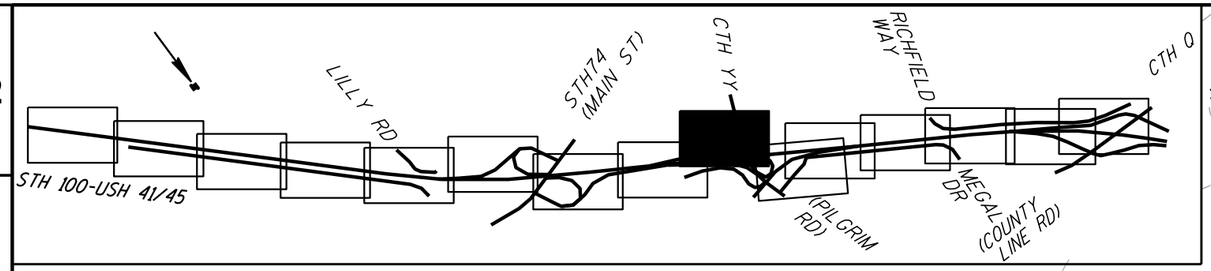


LIGHTING PLAN DESIGNED BY
WISDOT SE REGION 8/14 DATE

SHEET 2 OF 2

PROJECT NO: 2782-12-70	HWY: USH 41	COUNTY: WAUKESHA	LIGHTING REMOVAL PLAN	SHEET 224	E

FILE NAME : J:\projects\d2_27821241\Lighting\023502_lp.dgn PLOT DATE : 25-AUG-2014 12:39 PLOT BY : mscppl PLOT NAME : PLOT SCALE : 100:1



LEGEND

- DISTRIBUTION CENTER
- CID (CABLE IN DUCT, 4-#4AWG UNLESS OTHERWISE SHOWN)
- CONDUIT - 2" UNLESS OTHERWISE SHOWN
- LIGHT POLE, ARM MOUNTED LUMINAIRE
- CONDUIT STUBOUT
- PULLBOX 24" x 42"
- PULLBOX 24" x 36"
- C.I.M. — CENTER IN MEDIAN
- MUNICIPAL LIGHT POLE
- UDL (UNDER DECK LUMINAIRE)
- JUNCTION BOX

STATION — OFFSET
100+00.00, (100.00RT)
LED C A(T) 4 ANSI
- CIRCUIT, SOURCE, POLE #
- ARM LENGTH
- POLE TYPE ON T-BASE
- LUMINAIRE CATEGORY
- LUMINAIRE SOURCE

APG7 100+50, 30'RT
#4 A,N
BPG6 102+50, 20'RT
#4 A,B,N
APG5 104+60, 30'RT
BPG8 11+80, 45'RT
PB23
#4 A,B,N
APG9 9+70, 15'RT
#2 A,B,N
BPG10 7+70, 10'RT
#2 A,B,N
APG11 5+50, 15'RT
BPG4 106+60, 25'RT
APG3 INSTALL LUMINAIRE ONLY
BPG2 INSTALL LUMINAIRE ONLY
USH 41/45 SB ON RAMP
USH 41/45 SB OFF RAMP
PILGRIM ROAD
USH 41/45
284+20 SIGN BRIDGE AND UDL FEEDS FROM "F" BASE
#2 A,B,N #4 C,D,N
#6 C,D,N
#8 R,S,T,N,GND
#8 S,T,N,G
DPG2 DPG3 DPG4 DPG5 DPG6 DPG7 DPG8
CPG2 CPG3 CPG4 CPG5 CPG6 CPG7 CPG8
RPA10
SPA11
SPA8
PB21 PB22
382+50
284+50 S-67-13 1MV-C/PG
286+65
286+14
289+10
N

SHEET 1 OF 2

LIGHTING PLAN DESIGNED BY
WISDOT SE REGION 8/14 DATE

PROJECT NO: 2782-12-70	HWY: USH 41	COUNTY: WAUKESHA	LIGHTING PLAN	SHEET 225	E

FILE NAME : J:\projects\d2_27821241\Lighting\023601_lp.dgn PLOT DATE : 25-AUG-2014 11:25 PLOT BY : mscppl PLOT NAME : PLOT SCALE : 100:1

WISDOT/CADDS SHEET 42

2

USH 41/45

USH 41/45

288+00 290+00 292+00 294+00 296+00 298+00 300+00 302+00

286+65 DPG3 | #2 A,B,N #4 C,D,N | CPG2 | 289+10 DPG2 | CPG3 | 291+60 DPG1 | #2 A,B,N #4 C,D,N | CPG1 | 293+90 | 294+14 EPG1 | #4 E,F,N | FPG1 | 296+60 FPG2 | EPG2 | 299+10 EPG3 | #4 E,F,N | FPG3 | 301+50 EPG4 | EPG4

INSTALL LUMINAIRE ONLY APG17

#8 A,B,N

#8 A,B,N

BPG18 INSTALL LUMINAIRE ONLY

#10 B,N

APG19 INSTALL LUMINAIRE ONLY

DISTRIBUTION CENTER HL-67-PG

302+00 S-67-021 IMV-A/PG

INSTALL LUMINAIRE ONLY BPG12

#8 B,N

#8 A,B,N

APG13

BPG16 INSTALL LUMINAIRE ONLY

PILGRIM ROAD

PB8

APG15 INSTALL LUMINAIRE ONLY

PB9

BPG14

100+00

144+00

1+00

225+00

100+50

SIGN

MH

OH

SAN

C

W

HL-67-PG

A,C,E	RED
B,C,F	BLACK
N	WHITE
GND	GREEN OR BARE
A,B,C,D,E,F	3082

240/480VAC 3 WIRE ISOLATED NEUTRAL

LEGEND

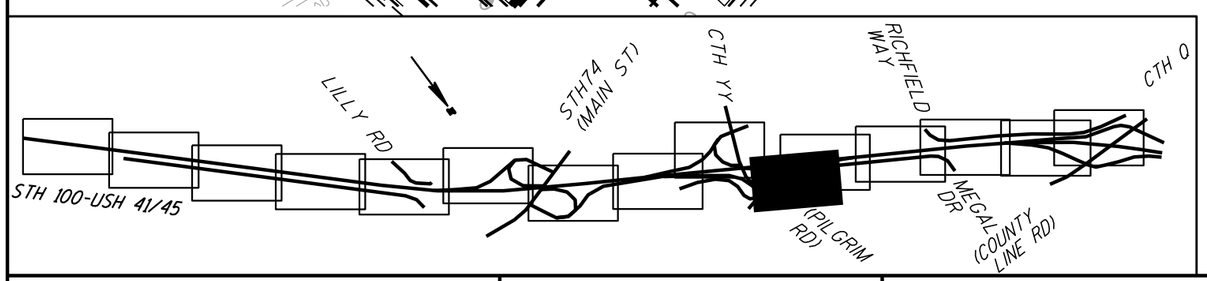
- DISTRIBUTION CENTER
- CID (CABLE IN DUCT, 4-#4AWG UNLESS OTHERWISE SHOWN)
- CONDUIT - 2" UNLESS OTHERWISE SHOWN
- LIGHT POLE, ARM MOUNTED LUMINAIRE
- CONDUIT STUBOUT
- PULLBOX 24" x 42"
- PULLBOX 24" x 36"
- C.I.M. CENTER IN MEDIAN
- MUNICIPAL LIGHT POLE
- UDL (UNDER DECK LUMINAIRE)
- JUNCTION BOX

STATION — OFFSET

100+00.00, (100.00RT)

LED C A(T) 4 ANS1

- ANS1 — CIRCUIT, SOURCE, POLE #
- 4 — ARM LENGTH
- A(T) — POLE TYPE ON T-BASE
- C — LUMINAIRE CATEGORY
- LED — LUMINAIRE SOURCE



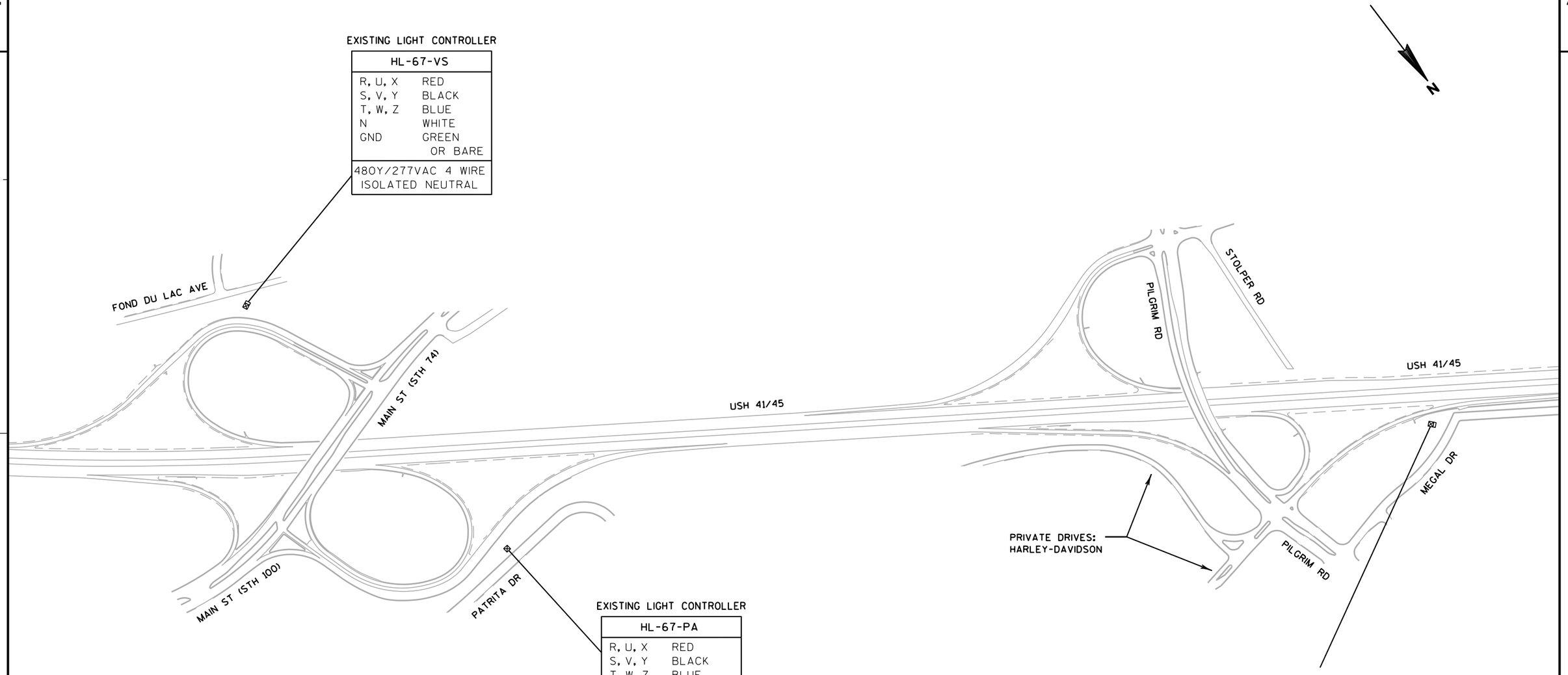
LIGHTING PLAN DESIGNED BY WISDOT SE REGION 8/14 DATE

SHEET 2 OF 2

PROJECT NO: 2782-11-70	HWY: USH 41	COUNTY: WAUKESHA	LIGHTING PLAN	SHEET 226	E

FILE NAME : J:\projects\d2_27821241\Lighting\023602_lp.dgn PLOT DATE : 20-AUG-2014 11:06 PLOT BY : mscppl PLOT NAME : PLOT SCALE : 100:1

2



NOTES:

1. WIRE IN THE PULL BOX IS INCIDENTAL TO THE PULL BOX BID ITEM.

2. THE LOCATION OF EXISTING AND PROPOSED UTILITIES AS SHOWN ON THE PLANS ARE APPROXIMATE. IN ADDITION, THERE MAY BE OTHER UTILITIES WITHIN THE PROJECT AREA WHICH ARE NOT SHOWN. THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL UTILITIES PRIOR TO CONSTRUCTION.

GENERAL NOTES

DETAILS OF CONSTRUCTION MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

LOCATIONS OF THE PVC CONDUITS ARE IDENTIFIED IN THE PLANS WHERE THEY ARE REQUIRED. APPROPRIATE ADJUSTMENT ON CONDUIT LOCATIONS MAY BE MADE IF THE FIELD CONDITIONS ARE SUCH THAT THE CONDUIT CANNOT BE INSTALLED AT THE SPECIFIED LOCATIONS. FIELD MARK EACH CONDUIT LOCATION IN RED.

THE TRENCH SHALL NOT BE BACK FILLED PRIOR TO INSPECTION OF THE CONDUIT.

ALL CONDUITS SHALL BE CAPPED OR PLUGGED WITH ENGINEER APPROVED FITTINGS IMMEDIATELY AFTER INSTALLATION.

BENDING OF PVC ELECTRICAL CONDUIT SHALL BE ACCOMPLISHED BY USING A BLANKET OR IMMERSION TYPE TANK DESIGNED FOR THE PURPOSE OF BENDING PVC ELECTRICAL CONDUIT.

ALL CUT ENDS SHALL BE TRIMMED INSIDE AND OUTSIDE TO REMOVE ALL ROUGH EDGES ON ALL CONDUITS.

PRIOR TO CONDUIT ACCEPTANCE, ALL CONDUIT ENDS SHALL BE THOROUGHLY CLEANED AND BE CAPPED WITH THE APPROPRIATE CAST PLASTIC CAP WHICH FITS SNUGGLY ON THE CONDUIT, BUT EASILY REMOVED IN THE FUTURE. DUCT TAPE OR ANY OTHER CAPPING METHOD IS NOT ACCEPTABLE.

CONDUIT RUNS SHALL BE THE SAME SIZE PIPE FROM ONE END TO THE OTHER (FROM PULL BOX TO PULL BOX-OR-JUNCTION BOX-OR-BASE TO BASE, ETC.) UNLESS OTHERWISE NOTED ON PLANS.

PULL ROPE (3/8-INCH NYLON) SHALL BE INSTALLED IN ALL NEW CONDUITS.

CONTRACTOR SHALL SUPPLY AS-BUILT DRAWING FOR ALL THE WORK BEING DONE.

INSTALLATION OF LATERAL UNDERGROUND CONDUIT UNDER PAVEMENT SHALL BE INSTALLED MINIMUM 30 INCHES BELOW PROPOSED GRADE. CONDUIT LATERALS SHALL BE TRENCHED UNDER PAVEMENT BEFORE PAVEMENT CONSTRUCTION. CONTRACTOR IS RESPONSIBLE TO COORDINATE WITH ROADWAY CONSTRUCTION FOR CONDUIT LATERALS INSTALLATION.

PITCH ALL CONDUITS TOWARD PULL BOXES. INSTALL A 2" DRAIN DUCT TO STORM SEWER OR DRAIN SUMP AS REQUIRED FOR DAMAGE. THE 2" DRAIN DUCT OR SUMP IS INCIDENTAL TO THE PULL BOX BID ITEM AND IS NOT SHOWN.

THE LOCATION OF EXISTING AND PROPOSED UTILITIES AS SHOWN ON THE PLANS ARE APPROXIMATE, IN ADDITION, THERE MAYBE OTHER UTILITIES WITHIN THE PROJECT AREA WHICH ARE NOT SHOWN. THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL UTILITIES PRIOR TO CONSTRUCTION.

HAND DIGGING MAYBE REQUIRED FOR LOCATIONS ADJACENT TO EXISTING GAS AND POWER LINES. HAND EXCAVATION SHOULD BE ANTICIPATED & WILL BE CONSIDERED INCIDENTAL TO THE CONCRETE BASE BID ITEM. COORDINATE ALL WORK NEAR GAS LINE WITH WE ENERGIES.

EXISTING CONDUIT AND CID NO LONGER BEING USED IS ABANDONED IN PLACE. THE CONTRACTOR MAY REMOVE ABANDONED WIRING AT THE CONTRACT'S EXPENSE. ABANDONED PULL BOX REMOVAL IS INCIDENTAL TO THE ROAD CONSTRUCTION.

ALL UNDERGROUND WIRING AND CONDUIT FOR POLES BEING REMOVED IS ABANDONED IN PLACE UNLESS NOTED OTHERWISE. CONTRACTOR MAY SALVAGE ABANDONED WIRING AT HIS OWN EXPENSE.

STAGING NOTES

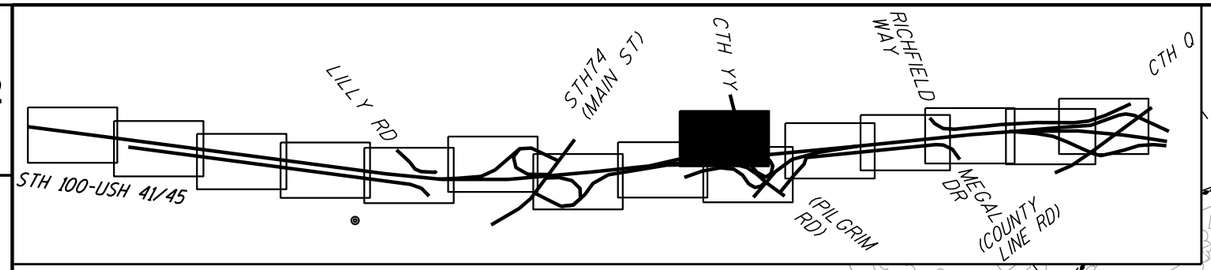
MAINTAIN LIGHTING AT ALL TIMES DURING CONSTRUCTION USING EXISTING LIGHTING, PROPOSED LIGHTING OR BOTH.

DO NOT REMOVE EXISTING LIGHTING UNTIL THE NEW OR TEMPORARY LIGHTING IS OPERATIONAL. REFER TO DRAWINGS FOR STAGING INFORMATION.

MAINTAINING SYSTEM CONTINUITY SHALL BE INCIDENTAL TO THE REMOVAL/SALVAGE BID ITEM.

DUE TO THE PHASING OF CONSTRUCTION SOME FINAL LIGHTING UNITS MAY BE ORPHANED UNTIL A LATER STAGE IS COMPLETE. IT IS AT THE DISCRETION OF THE CONTRACTOR TO SCHEDULE THESE ITEMS. THE CONTRACTOR IS RESPONSIBLE FOR THE COORDINATION OF THE PLACEMENT OF RACEWAY THAT SPANS TWO DIFFERENT PHASES OF CONSTRUCTION.

TEMPORARY LIGHTING MAY ILLUMINATE AN AREA BEFORE EXISTING LIGHTING UNITS IN THE AREA ARE SCHEDULED FOR REMOVAL. THE SCHEDULING OF REMOVAL IS AT THE DISCRETION OF THE CONTRACTOR WITH THE PROVISION THAT LIGHTING OF THE ROADWAY IS PROVIDED AT ALL TIMES.



LEGEND

- DISTRIBUTION CENTER
- CID (CABLE IN DUCT)
- CONDUIT - 2" UNLESS OTHERWISE SHOWN
- LIGHT POLE, ARM MOUNTED LUMINAIRE
- CONDUIT STUBOUT
- PULLBOX 24" x 42"
- PULLBOX 24" x 36"
- MUNICIPAL LIGHT POLE
- UDL (UNDER DECK LUMINAIRE)

BOLDED REPRESENTS ITEMS TO BE INSTALLED

USH 41/45SB ON RAMP

USH 41/45 SB OFF RAMP

PILGRIM ROAD

USH 41/45

SEE TEMPORARY LIGHTING CIRCUIT CONTINUITY DETAIL

RIGID METAL CONDUIT

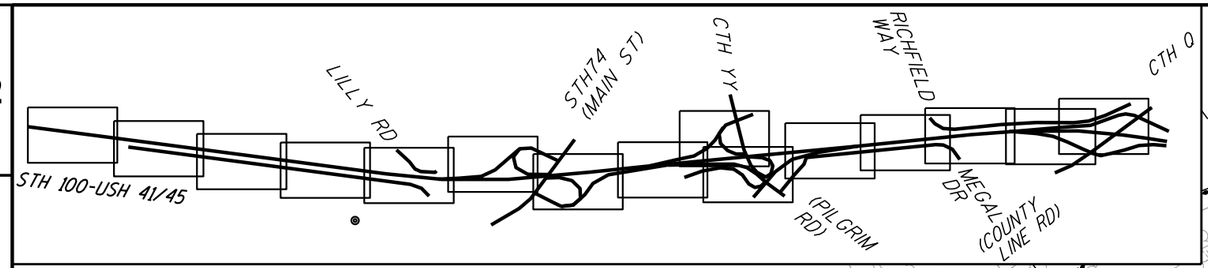
LIGHTING PLAN DESIGNED BY
WISDOT SE REGION 08/14 DATE

SHEET 1 OF 1

PROJECT NO: 1100-37-70	HWY: USH 41	COUNTY: WAUKESHA	LIGHTING PLAN - TEMPORARY	SHEET 229 E

FILE NAME : J:\projects\d2_27821241\Lighting\11003770\Temporary\023501_lp_TEMP.dgn PLOT DATE : 30-OCT-2014 13:54 PLOT BY : mscppl PLOT NAME : PLOT SCALE : 100:1

WISDOT/CADDS SHEET 42



LEGEND

- DISTRIBUTION CENTER
- CID (CABLE IN DUCT)
- CONDUIT - 2" UNLESS OTHERWISE SHOWN
- LIGHT POLE, ARM MOUNTED LUMINAIRE
- CONDUIT STUBOUT
- PULLBOX 24" x 42"
- PULLBOX 24" x 36"
- MUNICIPAL LIGHT POLE
- UDL (UNDER DECK LUMINAIRE)

BOLDED REPRESENTS ITEMS TO BE REMOVED

USH 41/45SB ON RAMP

USH41/45 SB OFF RAMP

PILGRIM ROAD

USH 41/45

284+20 SIGN BRIDGE AND UDL FEEDS FROM "F" BASE

LIGHTING PLAN DESIGNED BY WISDOT SE REGION 08/14 DATE

SHEET 1 OF 1

PROJECT NO: 1100-37-70	HWY: USH 41	COUNTY: WAUKESHA	LIGHTING REMOVAL PLAN	SHEET 230 E

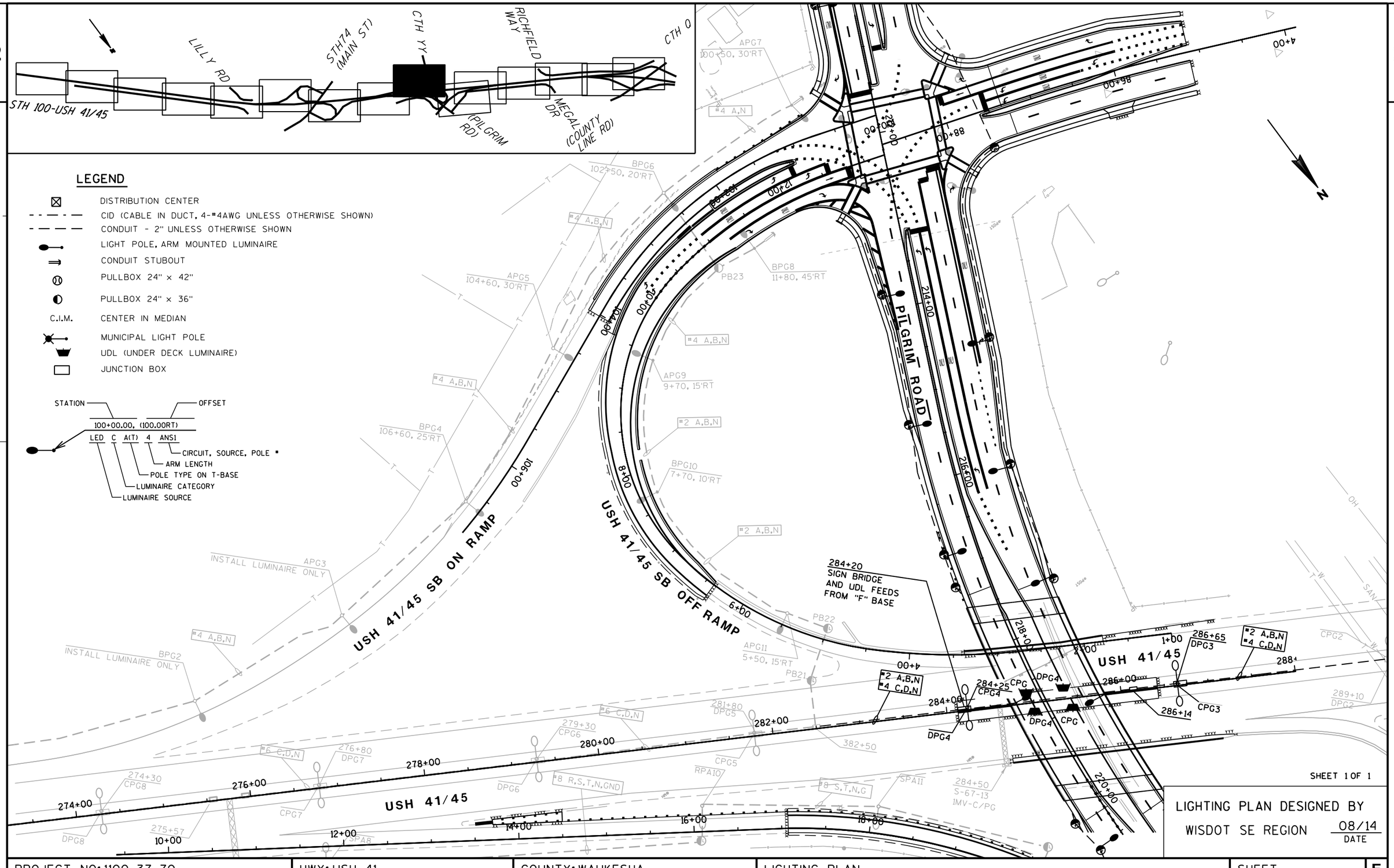
FILE NAME : J:\projects\d2_27821241\Lighting\11003770\Removal\023501_lp.dgn PLOT DATE : 29-OCT-2014 15:29 PLOT BY : mscppl PLOT NAME : PLOT SCALE : 100:1

WISDOT/CADDS SHEET 42

LEGEND

- ⊠ DISTRIBUTION CENTER
- CID (CABLE IN DUCT, 4-#4AWG UNLESS OTHERWISE SHOWN)
- CONDUIT - 2" UNLESS OTHERWISE SHOWN
- LIGHT POLE, ARM MOUNTED LUMINAIRE
- CONDUIT STUBOUT
- PULLBOX 24" x 42"
- PULLBOX 24" x 36"
- C.I.M. CENTER IN MEDIAN
- MUNICIPAL LIGHT POLE
- UDL (UNDER DECK LUMINAIRE)
- JUNCTION BOX

STATION — OFFSET
100+00.00, (100.00RT)
LED C A(T) 4 ANS1
- CIRCUIT, SOURCE, POLE #
- ARM LENGTH
- POLE TYPE ON T-BASE
- LUMINAIRE CATEGORY
- LUMINAIRE SOURCE



SHEET 1 OF 1

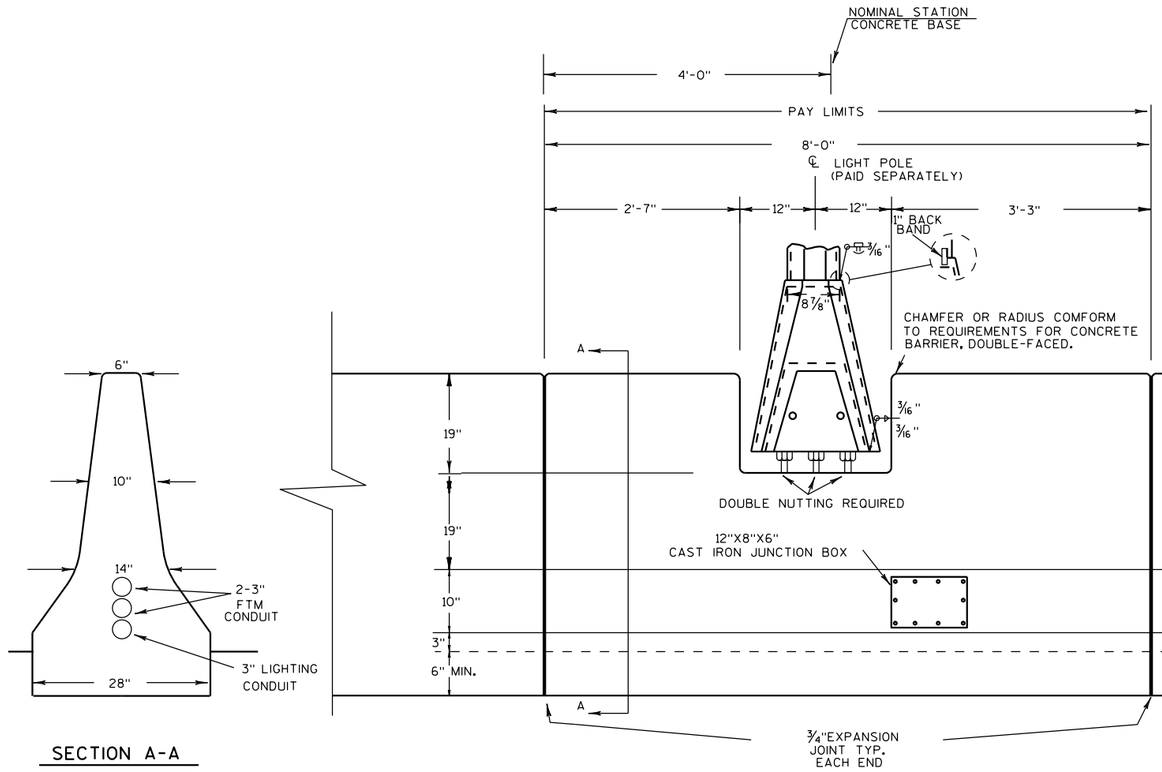
LIGHTING PLAN DESIGNED BY
WISDOT SE REGION 08/14 DATE

PROJECT NO: 1100-37-70	HWY: USH 41	COUNTY: WAUKESHA	LIGHTING PLAN	SHEET 231	E

FILE NAME : J:\projects\d2_27821241\Lighting\11003770\Permanent\023601_lp.dgn PLOT DATE : 30-OCT-2014 13:35 PLOT BY : mscppl PLOT NAME : PLOT SCALE : 100:1

WISDOT/CADDS SHEET 42

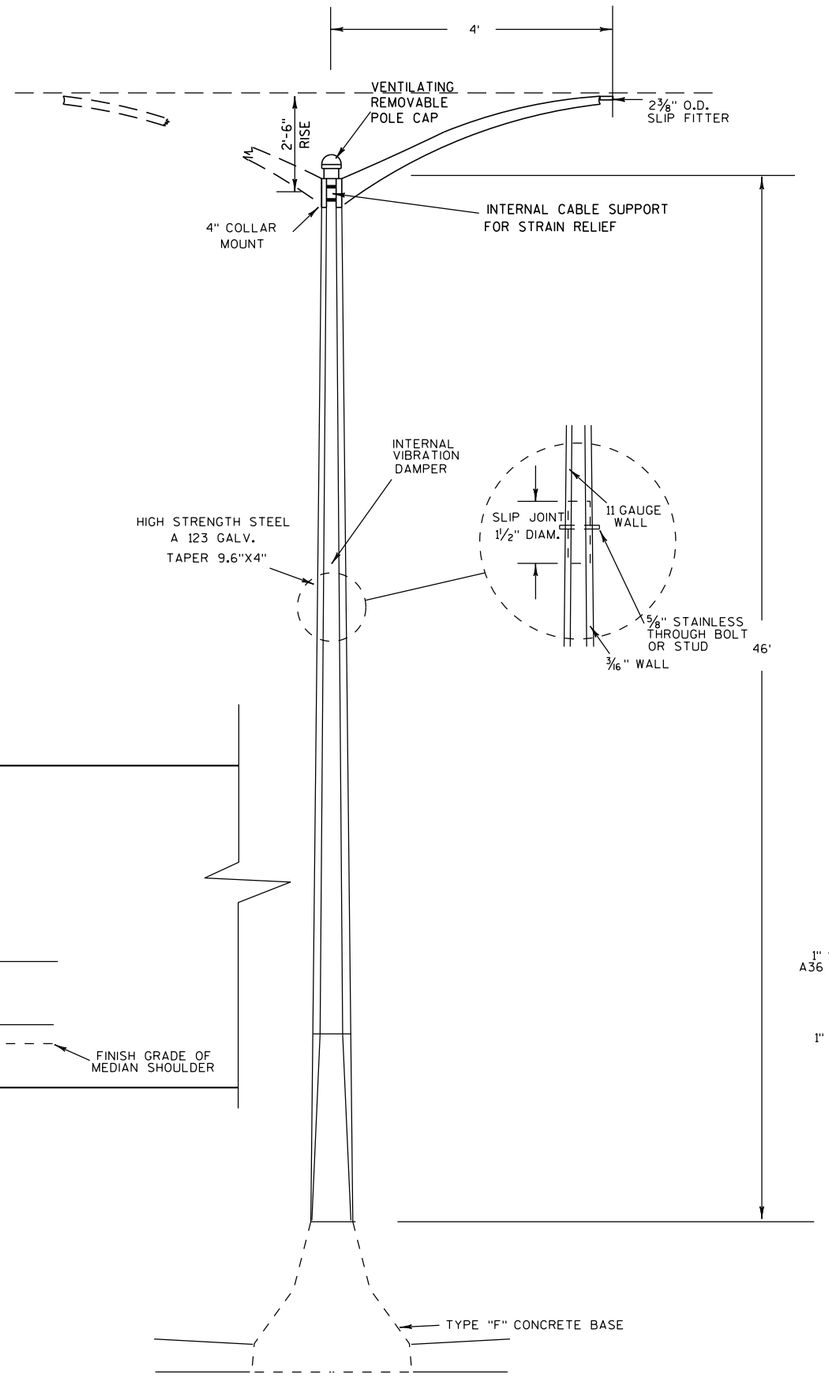
2



SECTION A-A

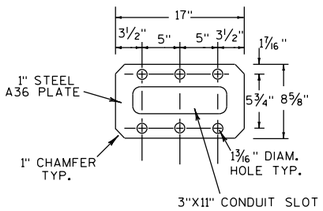
FTM= FREEWAY TRAFFIC MANAGEMENT SYSTEM

ELEVATION FACING WEST OR NORTH



TYPE "F" LIGHT POLE

WISDOT PART NO. A941(POLE)
WISDOT PART NO. A858 (ARM)



BASE PLATE DETAIL

CONCRETE BASE, TYPE "F"

REINFORCED SUPERSTRUCTURE ON 24"X10'-0"
REINFORCED CONCRETE CAISSON

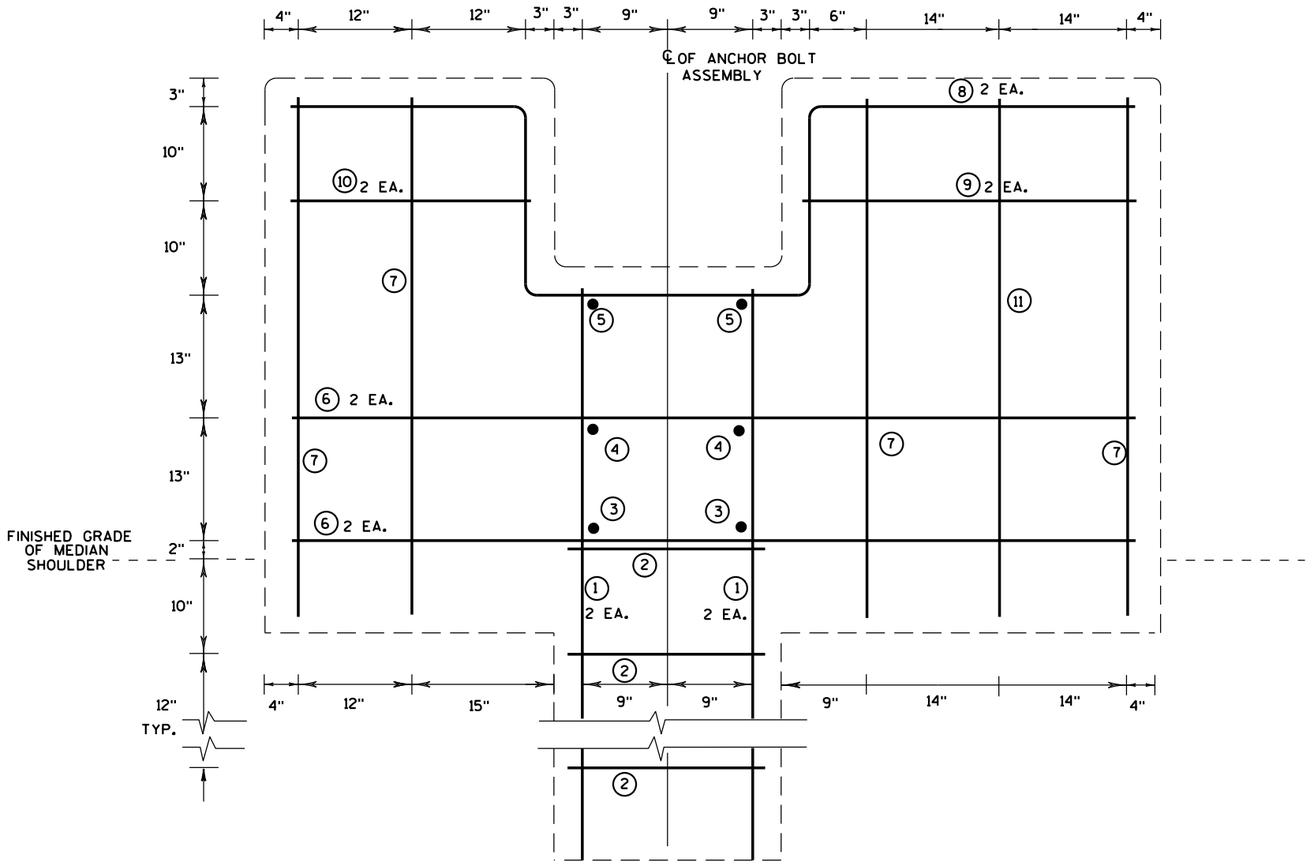
PAGE 1 OF 3

SHEET 1 OF 5

PROJECT NO: 1100-37-70	HWY: USH 41	COUNTY: WAUKESHA	LIGHTING DETAIL - CONCRETE BASE, TYPE F	SHEET 232	E

FILE NAME : J:\projects\d2_27821241\Lighting\11003770\Details\Barrier_Detail_F.DGN PLOT DATE : 30-OCT-2014 15:55 PLOT BY : dotcmv PLOT NAME : PLOT SCALE : 200:1

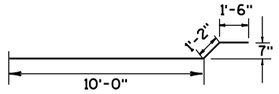
WISDOT/CADDS SHEET 42



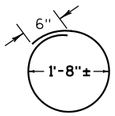
TYPE "F" CONCRETE BASE
BAR STEEL REINFORCEMENT

SCHEDULE OF BARS

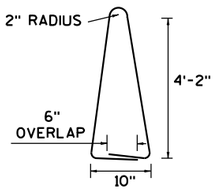
① #5 BAR - 4 REQUIRED



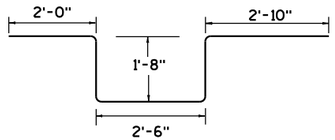
② #3 HOOP - 9 REQUIRED



③ #3 BAR X 1'-10" - 2 REQUIRED
④ #3 BAR X 10" - 2 REQUIRED
⑤ #3 BAR X 6" - 2 REQUIRED
⑥ #4 BAR X 7'-6" - 4 REQUIRED
⑦ #4 HOOP - 4 REQUIRED



⑧ #4 BAR - 2 REQUIRED



⑨ #4 BAR X 3'-0" - 2 REQUIRED
⑩ #4 BAR X 2'-2" - 2 REQUIRED
⑪ #4 BAR X 4'-2" - 1 REQUIRED BEHIND JUNCTION BOX

GENERAL NOTES - REINFORCED CONCRETE MASONRY

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

ALL BAR STEEL REINFORCEMENT SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.4 OF THE STANDARD SPECIFICATIONS.

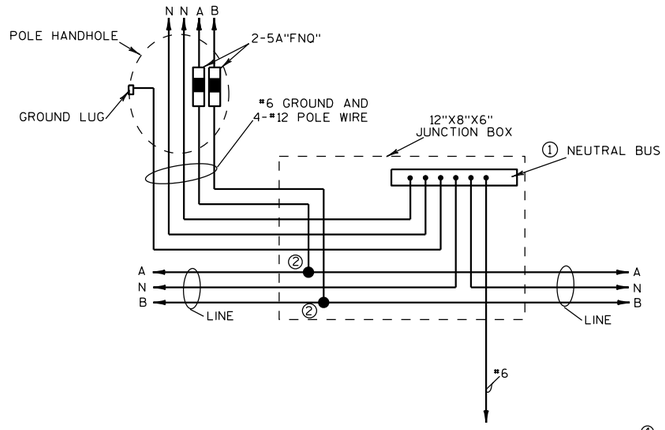
ALL BAR STEEL REINFORCEMENT SHALL BE EMBEDDED AT LEAST 2 INCHES.

ESTIMATED QUANTITIES

164 LBS. EPOXY-COATED BAR STEEL REINFORCEMENT
3 C.Y. CONCRETE MASONRY

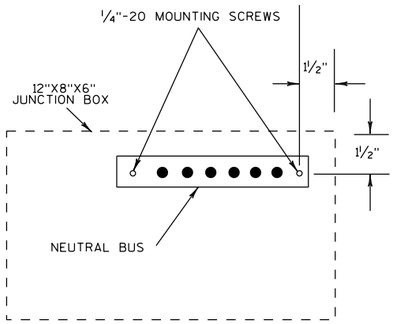
SHEET 2 OF 5

PROJECT NO: 1100-37-70	HWY: USH 41	COUNTY: WAUKESHA	LIGHTING DETAIL - CONCRETE BASE, TYPE F	SHEET 233	E

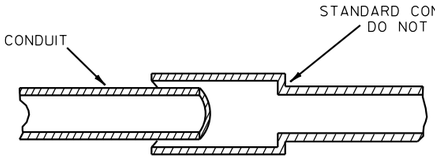


TYP. WIRING DIAGRAM FOR TYPE "F" BASE ④

(TWIN POLE SHOWN)



NEUTRAL BUS MOUNTING LOCATION



TYP. EXPANSION FITTING

6 REQUIRED, MOST LOCATIONS

NOTES:

① THE NEUTRAL BUS SHALL CONSIST OF A HARD-DRAWN COPPER BAR WITH 6 POSITIONS, #2 (SOLID) TO #12 CU. STRANDED # 2 OR #1 SHALL BE LUGGED TO THE BUS. MOUNT THE BUS OFFSET FROM THE REAR WALL OF THE BOX. FURNISH 6 BRASS SET SCREWS. COAT THE BUS WITH AN APPROVED SILICONE CAULK AT THE TIME OF INSTALLATION AND AFTER EACH CONNECTION IS MADE.

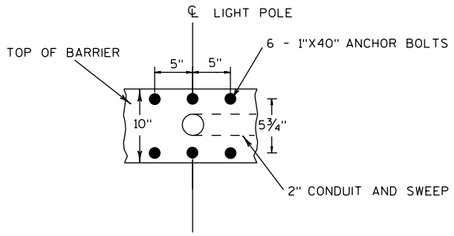
② SPLICES CONFORM TO SPLICES FOR DAMP LOCATIONS.

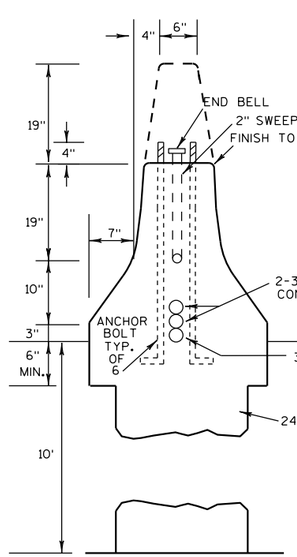
③ END BELLS REQUIRED EXCEPT DRAIN/GROUND CONDUIT

④ THIS DETAIL MODIFIES THE POLE WIRING DETAIL BUT APPLICALBLE PORTIONS OF THAT SHEET REMAIN IN FORCE.

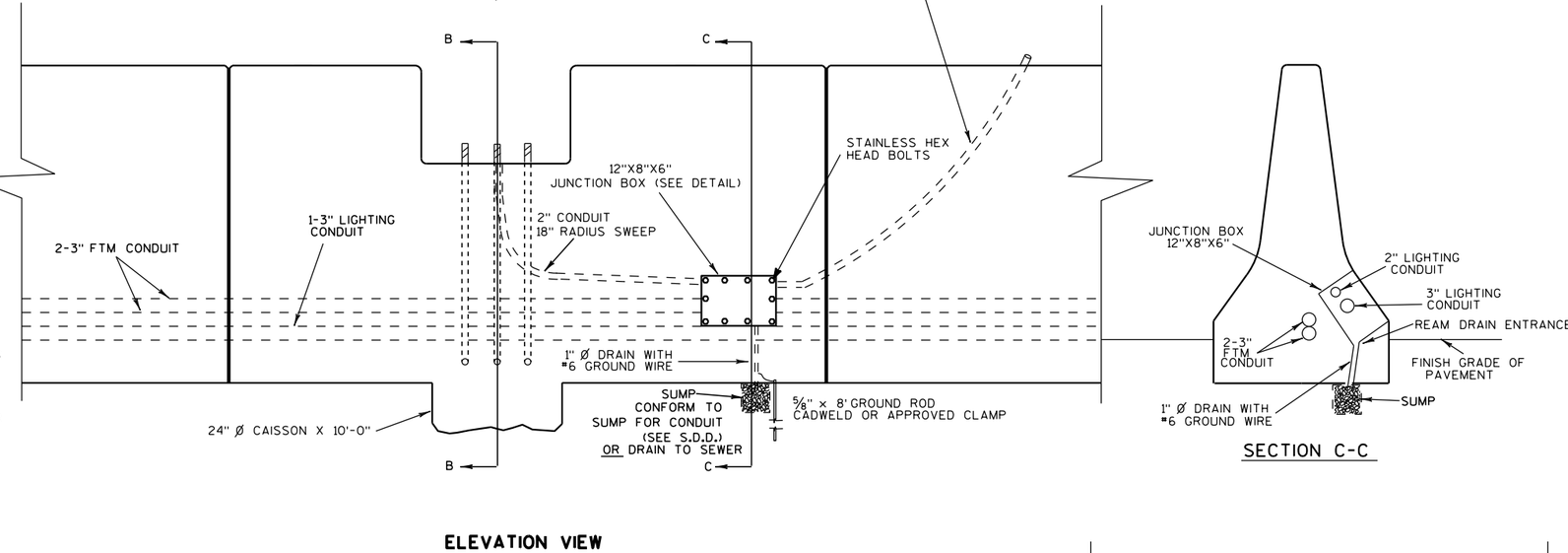
⑤ CONDUIT SHALL CONFORM TO SECTION 613.2.3 OF THE STANDARD SPECIFICATIONS.

⑥ ANCHOR BOLTS SHALL CONFORM TO AASHTO M314-90, GRADE 55. THE TOP THREADED PORTION SHALL BE ROLL THREADED, THEN PAINTED WITH A ZINC PRIMER COAT WITH AN EPOXY MASTIC IN THE FIELD. ANCHOR BOLTS SHALL MEET AN ADDITIONAL REQUIREMENT FOR A MIN. CHARPY V-NOTCH VALUE OF 15 FT.-LB. AT -20°F.





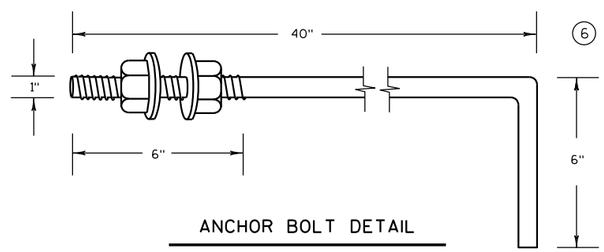
SECTION B-B



ELEVATION VIEW

SECTION C-C

ELECTRICAL DETAILS AND ANCHOR BOLTS



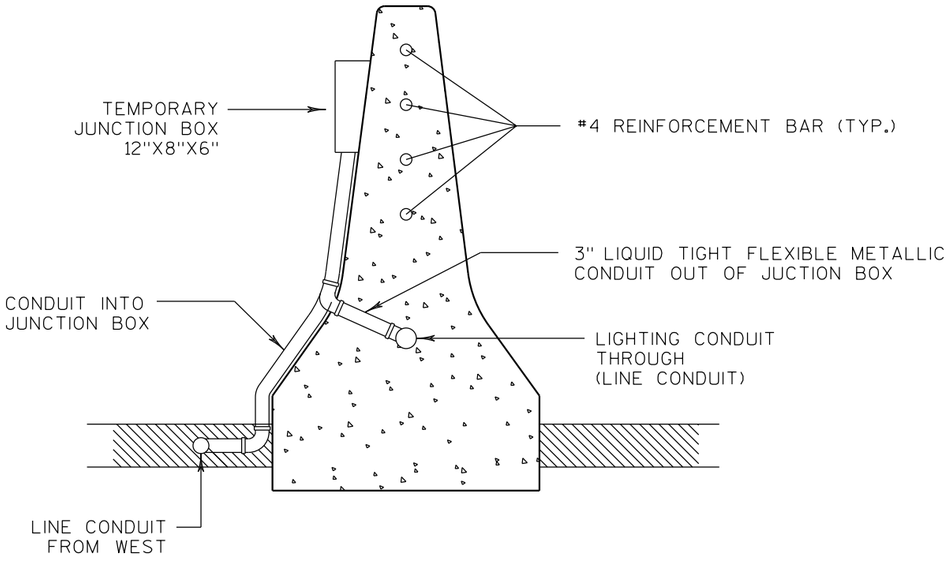
ANCHOR BOLT DETAIL

FTM=FREEWAY TRAFFIC MANAGEMENT SYSTEM

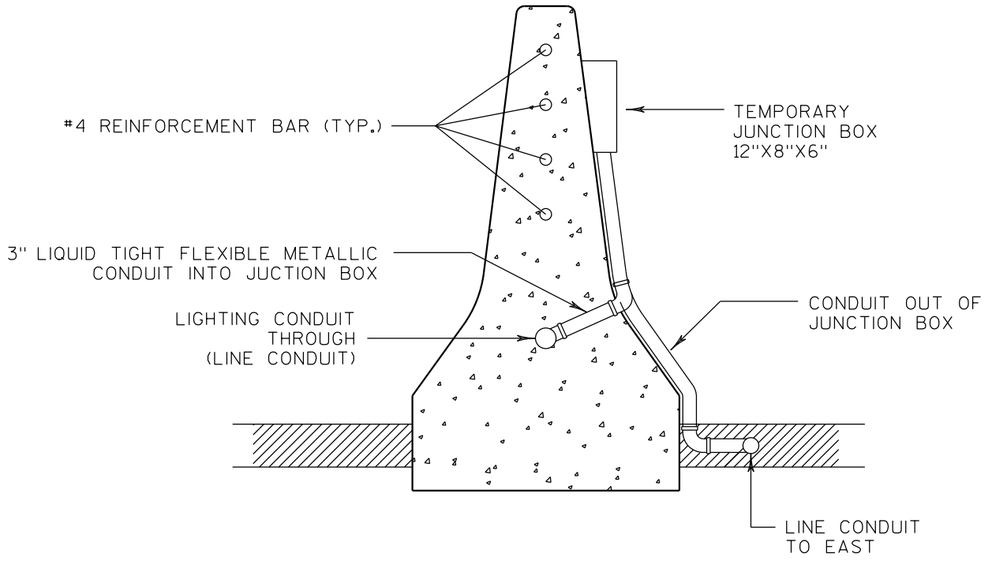
2

NOTES:

1. INSTALL 14" X 8" X 6" LIGHTING JUNCTION BOXES AT LOCATIONS WITH LATERALS. USE 12" X 8" X 6" AT OTHER LIGHTING LOCATIONS.
2. GROUNDING DETAILS IN LIGHTING BOXES SHALL CONFORM TO DETAILS IN CONCRETE VASE TYPE "F" IN FTM BOXES. INSTALL 1 EACH MOUNTING BUTTONS BLIND TAPED FOR 1/4"-20 SCREW.
3. DRAINED SYSTEM REQUIRED. BOX DRAINS SHOWN IN CONCRETE BASE TYPE "F" SHALL BE INSTALLED WHERE THE BOX IS NOT DRAINED BY OTHER CONDUITS.
4. END BELLS REQUIRED EXCEPT FOR 1" DRAIN/GROUND DETAIL (WHEN USED) WHICH SHALL BE REAMED.
5. BOXES SHALL BE STAGGERED MIN. 3'-0" O.C. LONGITUDINALLY.



CONCRETE BASE EAST OF PILGRIM ROAD BRIDGE
STA 284+13

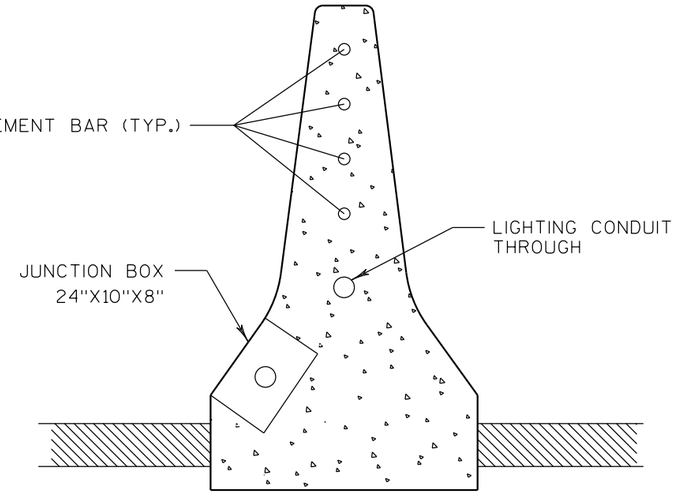


CONCRETE BASE WEST OF PILGRIM ROAD BRIDGE
STA 286+42

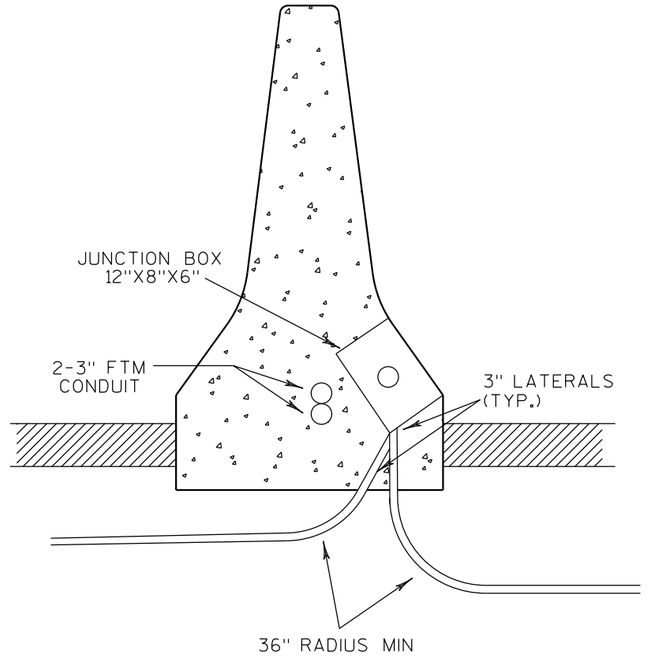
TEMPORARY LIGHTING CIRCUIT CONTINUITY

NOTES:

1. INSTALL 14" X 8" X 6" LIGHTING JUNCTION BOXES AT LOCATIONS WITH LATERALS. USE 12" X 8" X 6" AT OTHER LIGHTING LOCATIONS.
2. GROUNDING DETAILS IN LIGHTING BOXES SHALL CONFORM TO DETAILS IN CONCRETE VASE TYPE "F" IN FTM BOXES. INSTALL 1 EACH MOUNTING BUTTONS BLIND TAPED FOR 1/4"-20 SCREW.
3. DRAINED SYSTEM REQUIRED. BOX DRAINS SHOWN IN CONCRETE BASE TYPE "F" SHALL BE INSTALLED WHERE THE BOX IS NOT DRAINED BY OTHER CONDUITS.
4. END BELLS REQUIRED EXCEPT FOR 1" DRAIN/GROUND DETAIL (WHEN USED) WHICH SHALL BE REAMED.
5. BOXES SHALL BE STAGGERED MIN. 3'-0" O.C. LONGITUDINALLY.



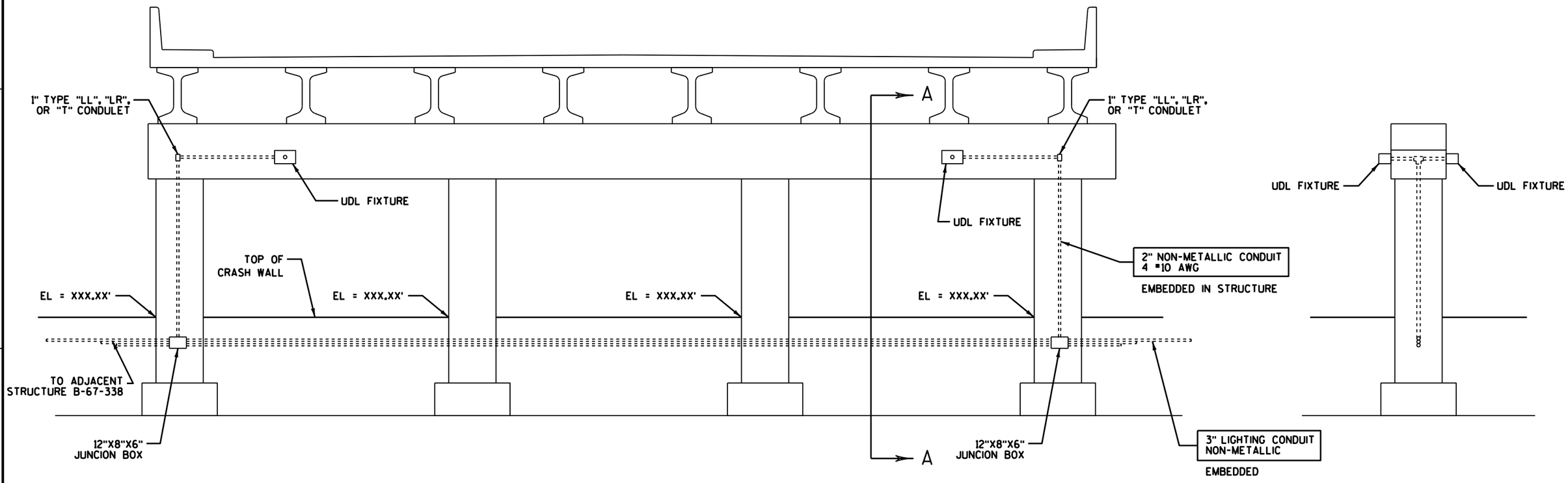
FTM JUNCTION BOX
24" X 10" X 8"



LIGHTING JUNCTION BOX, 12" X 8" X 6"
LIGHTING JUNCTION BOX, 14" X 8" X 6"

2

PILGRIM ROAD STRUCTURE (B-67-337)



TYPICAL CONDUIT TRANSITION DETAIL FOR UNDERDECK LIGHTING ON STRUCTURE B-67-337
N.T.S

SECTION A-A
N.T.S

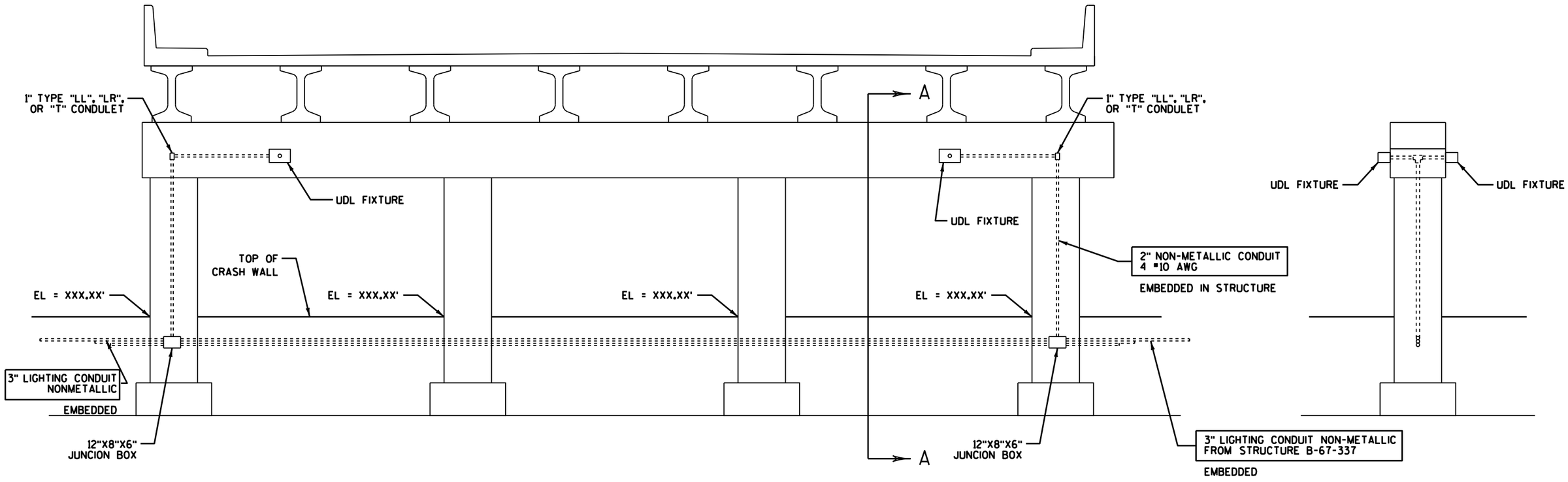
NOTES:

1. THE LED LUMINAIRES SHALL BE HORIZONTALLY MOUNTED ON THE PIER ACCORDING TO THE SPECIFICATIONS. LUMINAIRES SHALL BE LOCATED NO MORE THAN 1-FT FROM THE TOP OF THE PIER CAP. CENTER THE LUMINAIRES ON VERTICAL PER SUPPORT.
2. REVERSE SIDE OF BRIDGE IS IDENTICAL TO THE ABOVE DRAWING.

PROJECT NO: 1100-37-70	HWY: USH 41	COUNTY: WAUKESHA	LIGHTING DETAIL - UNDERDECK LIGHTING	SHEET E

FILE NAME : J:\d2_27821241\Lighting\11003770\Details\UDL_B-67-337.dgn PLOT DATE : 31-OCT-2014 13:55 PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : 40.000000:1.000000
WISDOT/CADDS SHEET 42

PILGRIM ROAD STRUCTURE (B-67-338)



TYPICAL CONDUIT TRANSITION DETAIL FOR UNDERDECK LIGHTING ON STRUCTURE B-67-338
N.T.S

SECTION A-A
N.T.S

NOTES:

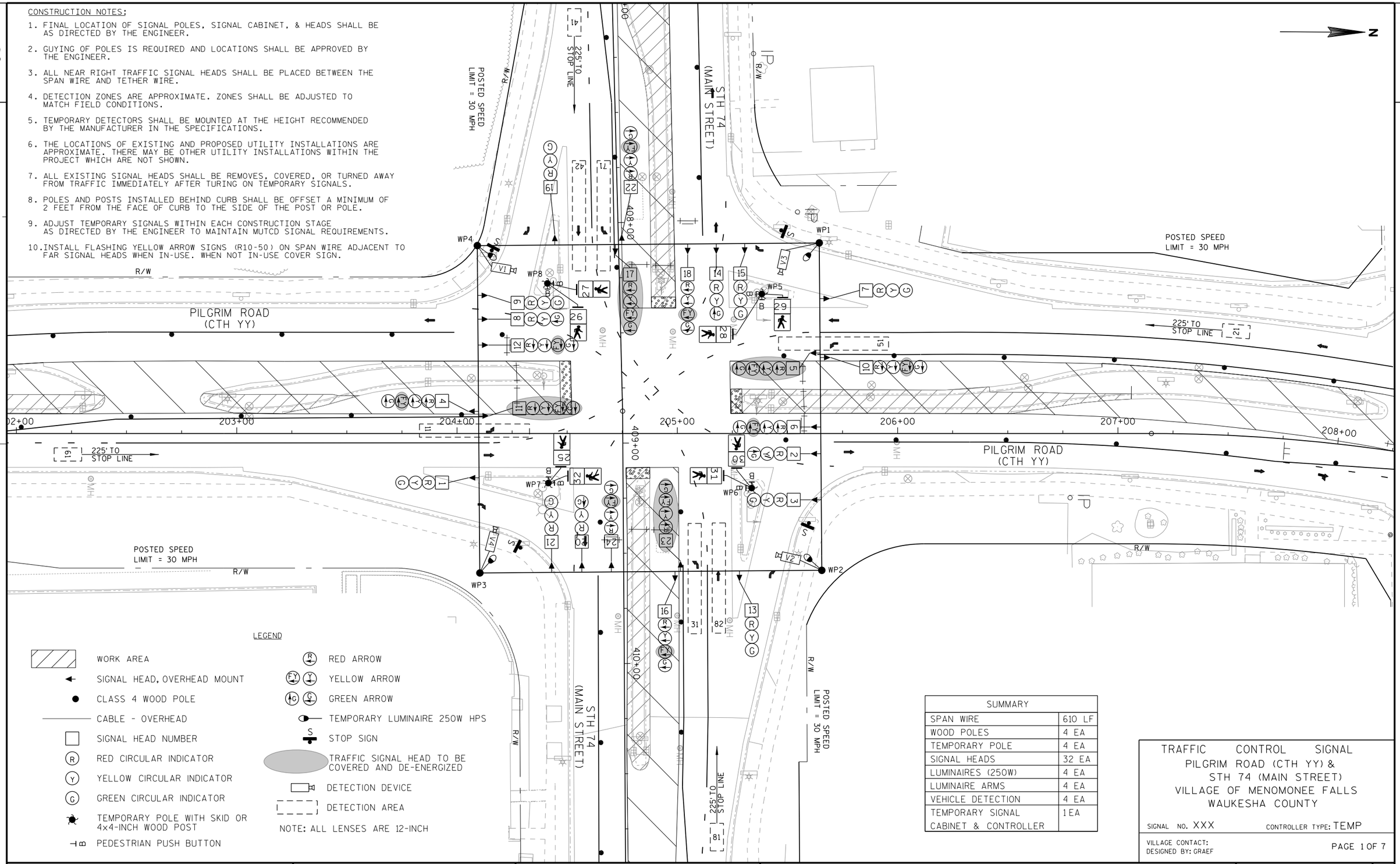
1. THE LED LUMINAIRES SHALL BE HORIZONTALLY MOUNTED ON THE PIER ACCORDING TO THE SPECIFICATIONS. LUMINAIRES SHALL BE LOCATED NO MORE THAN 1-FT FROM THE TOP OF THE PIER CAP. CENTER THE LUMINAIRES ON VERTICAL PER SUPPORT.
2. REVERSE SIDE OF BRIDGE IS IDENTICAL TO THE ABOVE DRAWING.

PROJECT NO: 1100-37-70	HWY: USH 41	COUNTY: WAUKESHA	LIGHTING DETAIL - UNDERDECK LIGHTING	SHEET E

FILE NAME : J:\d2_27821241\Lighting\11003770\Details\UDL_B-67-338.dgn PLOT DATE : 31-OCT-2014 13:54 PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : 40.000000:1.000000
WISDOT/CADDS SHEET 42

CONSTRUCTION NOTES:

1. FINAL LOCATION OF SIGNAL POLES, SIGNAL CABINET, & HEADS SHALL BE AS DIRECTED BY THE ENGINEER.
2. GUYING OF POLES IS REQUIRED AND LOCATIONS SHALL BE APPROVED BY THE ENGINEER.
3. ALL NEAR RIGHT TRAFFIC SIGNAL HEADS SHALL BE PLACED BETWEEN THE SPAN WIRE AND TETHER WIRE.
4. DETECTION ZONES ARE APPROXIMATE. ZONES SHALL BE ADJUSTED TO MATCH FIELD CONDITIONS.
5. TEMPORARY DETECTORS SHALL BE MOUNTED AT THE HEIGHT RECOMMENDED BY THE MANUFACTURER IN THE SPECIFICATIONS.
6. THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.
7. ALL EXISTING SIGNAL HEADS SHALL BE REMOVES, COVERED, OR TURNED AWAY FROM TRAFFIC IMMEDIATELY AFTER TURING ON TEMPORARY SIGNALS.
8. POLES AND POSTS INSTALLED BEHIND CURB SHALL BE OFFSET A MINIMUM OF 2 FEET FROM THE FACE OF CURB TO THE SIDE OF THE POST OR POLE.
9. ADJUST TEMPORARY SIGNALS WITHIN EACH CONSTRUCTION STAGE AS DIRECTED BY THE ENGINEER TO MAINTAIN MUTCD SIGNAL REQUIREMENTS.
10. INSTALL FLASHING YELLOW ARROW SIGNS (R10-50) ON SPAN WIRE ADJACENT TO FAR SIGNAL HEADS WHEN IN-USE. WHEN NOT IN-USE COVER SIGN.



LEGEND

- WORK AREA
- SIGNAL HEAD, OVERHEAD MOUNT
- CLASS 4 WOOD POLE
- CABLE - OVERHEAD
- SIGNAL HEAD NUMBER
- (R) RED CIRCULAR INDICATOR
- (Y) YELLOW CIRCULAR INDICATOR
- (G) GREEN CIRCULAR INDICATOR
- TEMPORARY POLE WITH SKID OR 4x4-INCH WOOD POST
- B PEDESTRIAN PUSH BUTTON
- (R) RED ARROW
- (FY) YELLOW ARROW
- (FG) GREEN ARROW
- TEMPORARY LUMINAIRE 250W HPS
- S STOP SIGN
- TRAFFIC SIGNAL HEAD TO BE COVERED AND DE-ENERGIZED
- DETECTION DEVICE
- DETECTION AREA

NOTE: ALL LENSES ARE 12-INCH

SUMMARY	
SPAN WIRE	610 LF
WOOD POLES	4 EA
TEMPORARY POLE	4 EA
SIGNAL HEADS	32 EA
LUMINAIRES (250W)	4 EA
LUMINAIRE ARMS	4 EA
VEHICLE DETECTION	4 EA
TEMPORARY SIGNAL CABINET & CONTROLLER	1 EA

TRAFFIC CONTROL SIGNAL
PILGRIM ROAD (CTH YY) &
STH 74 (MAIN STREET)
VILLAGE OF MENOMONEE FALLS
WAUKESHA COUNTY

SIGNAL NO. XXX CONTROLLER TYPE: TEMP

VILLAGE CONTACT:
DESIGNED BY: GRAEF

PAGE 1 OF 7

PROJECT NO: 2782-11-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TEMPORARY TRAFFIC SIGNAL PLAN - STAGE 1	SHEET 239	E

2

N

STH 74 (MAIN STREET)

PILGRIM ROAD (CTH YY)

POSTED SPEED LIMIT = 30 MPH

R/W

225' TO STOP LINE

WP1 WP2 WP3 WP4 WP5 WP6 WP7 WP8

V1 V2 V3 V4

200+00 201+00 202+00 203+00 204+00 205+00 206+00 207+00 208+00 409+00 410+00

LEGEND

- WORK AREA
- SIGNAL HEAD, OVERHEAD MOUNT
- CLASS 4 WOOD POLE
- CABLE - OVERHEAD
- SIGNAL HEAD NUMBER
- (R) RED CIRCULAR INDICATOR
- (Y) YELLOW CIRCULAR INDICATOR
- (G) GREEN CIRCULAR INDICATOR
- TEMPORARY POLE WITH SKID OR 4x4-INCH WOOD POST
- B PEDESTRIAN PUSH BUTTON
- (R) RED ARROW
- (FY) YELLOW ARROW
- (G) GREEN ARROW
- TEMPORARY LUMINAIRE 250W HPS
- S STOP SIGN
- TRAFFIC SIGNAL HEAD TO BE COVERED AND DE-ENERGIZED
- DETECTION DEVICE
- DETECTION AREA

NOTE: ALL LENSES ARE 12-INCH

TRAFFIC CONTROL SIGNAL
PILGRIM ROAD (CTH YY) &
STH 74 (MAIN STREET)
VILLAGE OF MENOMONEE FALLS
WAUKESHA COUNTY

SIGNAL NO. XXX CONTROLLER TYPE: TEMP

VILLAGE CONTACT:
DESIGNED BY: GRAEF

PAGE 2 OF 7

PROJECT NO: 2782-11-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TEMPORARY TRAFFIC SIGNAL PLAN - STAGE 2A	SHEET 240	E

2

N

PILGRIM ROAD
(CTH YY)

STH 74
(MAIN STREET)

POSTED SPEED
LIMIT = 30 MPH

R/W

WP1
WP2
WP3
WP4
WP6
WP7
WP8

202+00
203+00
204+00
205+00
206+00
207+00
208+00
408+00
409+00
410+00

225' TO
STOP LINE

LEGEND

- WORK AREA
- SIGNAL HEAD, OVERHEAD MOUNT
- CLASS 4 WOOD POLE
- CABLE - OVERHEAD
- SIGNAL HEAD NUMBER
- (R) RED CIRCULAR INDICATOR
- (Y) YELLOW CIRCULAR INDICATOR
- (G) GREEN CIRCULAR INDICATOR
- TEMPORARY POLE WITH SKID OR 4x4-INCH WOOD POST
- PEDESTRIAN PUSH BUTTON
- RED ARROW
- YELLOW ARROW
- GREEN ARROW
- TEMPORARY LUMINAIRE 250W HPS
- STOP SIGN
- TRAFFIC SIGNAL HEAD TO BE COVERED AND DE-ENERGIZED
- DETECTION DEVICE
- DETECTION AREA

NOTE: ALL LENSES ARE 12-INCH

TRAFFIC CONTROL SIGNAL
PILGRIM ROAD (CTH YY) &
STH 74 (MAIN STREET)
VILLAGE OF MENOMONEE FALLS
WAUKESHA COUNTY

SIGNAL NO. XXX
CONTROLLER TYPE: TEMP

VILLAGE CONTACT:
DESIGNED BY: GRAEF

PAGE 3 OF 7

PROJECT NO: 2782-11-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TEMPORARY TRAFFIC SIGNAL PLAN - STAGE 2B	SHEET 241	E

FILE NAME : L:\Jobs2008\20080002\CAD\WisDOT_Trans\dgn\00\01_Main Street\024002b_sp.dgn
PLOT DATE : 10/28/2014
PLOT BY : GRAEF
PLOT NAME :
PLOT SCALE : 40.0000 sf / in.
WISDOT/CADDS SHEET 42

2

N

PILGRIM ROAD
(CTH YY)

STH 74
(MAIN STREET)

POSTED SPEED
LIMIT = 30 MPH

R/W

225' TO
STOP LINE

WP1
WP2
WP3
WP4
WP5
WP6
WP7
WP8

202+00
203+00
204+00
205+00
206+00
207+00
208+00
408+00
410+00

LEGEND

- WORK AREA
- SIGNAL HEAD, OVERHEAD MOUNT
- CLASS 4 WOOD POLE
- CABLE - OVERHEAD
- SIGNAL HEAD NUMBER
- (R) RED CIRCULAR INDICATOR
- (Y) YELLOW CIRCULAR INDICATOR
- (G) GREEN CIRCULAR INDICATOR
- TEMPORARY POLE WITH SKID OR 4x4-INCH WOOD POST
- PEDESTRIAN PUSH BUTTON
- RED ARROW
- YELLOW ARROW
- GREEN ARROW
- TEMPORARY LUMINAIRE 250W HPS
- STOP SIGN
- TRAFFIC SIGNAL HEAD TO BE COVERED AND DE-ENERGIZED
- DETECTION DEVICE
- DETECTION AREA

NOTE: ALL LENSES ARE 12-INCH

TRAFFIC CONTROL SIGNAL
PILGRIM ROAD (CTH YY) &
STH 74 (MAIN STREET)
VILLAGE OF MENOMONEE FALLS
WAUKESHA COUNTY

SIGNAL NO. XXX
CONTROLLER TYPE: TEMP

VILLAGE CONTACT:
DESIGNED BY: GRAEF

PAGE 4 OF 7

PROJECT NO: 2782-11-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TEMPORARY TRAFFIC SIGNAL PLAN - STAGE 3A	SHEET 242	E

2

N

STH 74
(MAIN STREET)

POSTED SPEED
LIMIT = 30 MPH

R/W

225' TO
STOP LINE

PILGRIM ROAD
(CTH YY)

WP1 WP2 WP3 WP4 WP5 WP6 WP7 WP8

202+00 203+00 204+00 205+00 206+00 207+00 208+00

408+00 409+00 410+00

LEGEND

- WORK AREA
- SIGNAL HEAD, OVERHEAD MOUNT
- CLASS 4 WOOD POLE
- CABLE - OVERHEAD
- SIGNAL HEAD NUMBER
- R RED CIRCULAR INDICATOR
- Y YELLOW CIRCULAR INDICATOR
- G GREEN CIRCULAR INDICATOR
- TEMPORARY POLE WITH SKID OR 4x4-INCH WOOD POST
- PEDESTRIAN PUSH BUTTON
- RED ARROW
- YELLOW ARROW
- GREEN ARROW
- TEMPORARY LUMINAIRE 250W HPS
- STOP SIGN
- TRAFFIC SIGNAL HEAD TO BE COVERED AND DE-ENERGIZED
- DETECTION DEVICE
- DETECTION AREA

NOTE: ALL LENSES ARE 12-INCH

TRAFFIC CONTROL SIGNAL
PILGRIM ROAD (CTH YY) &
STH 74 (MAIN STREET)
VILLAGE OF MENOMONEE FALLS
WAUKESHA COUNTY

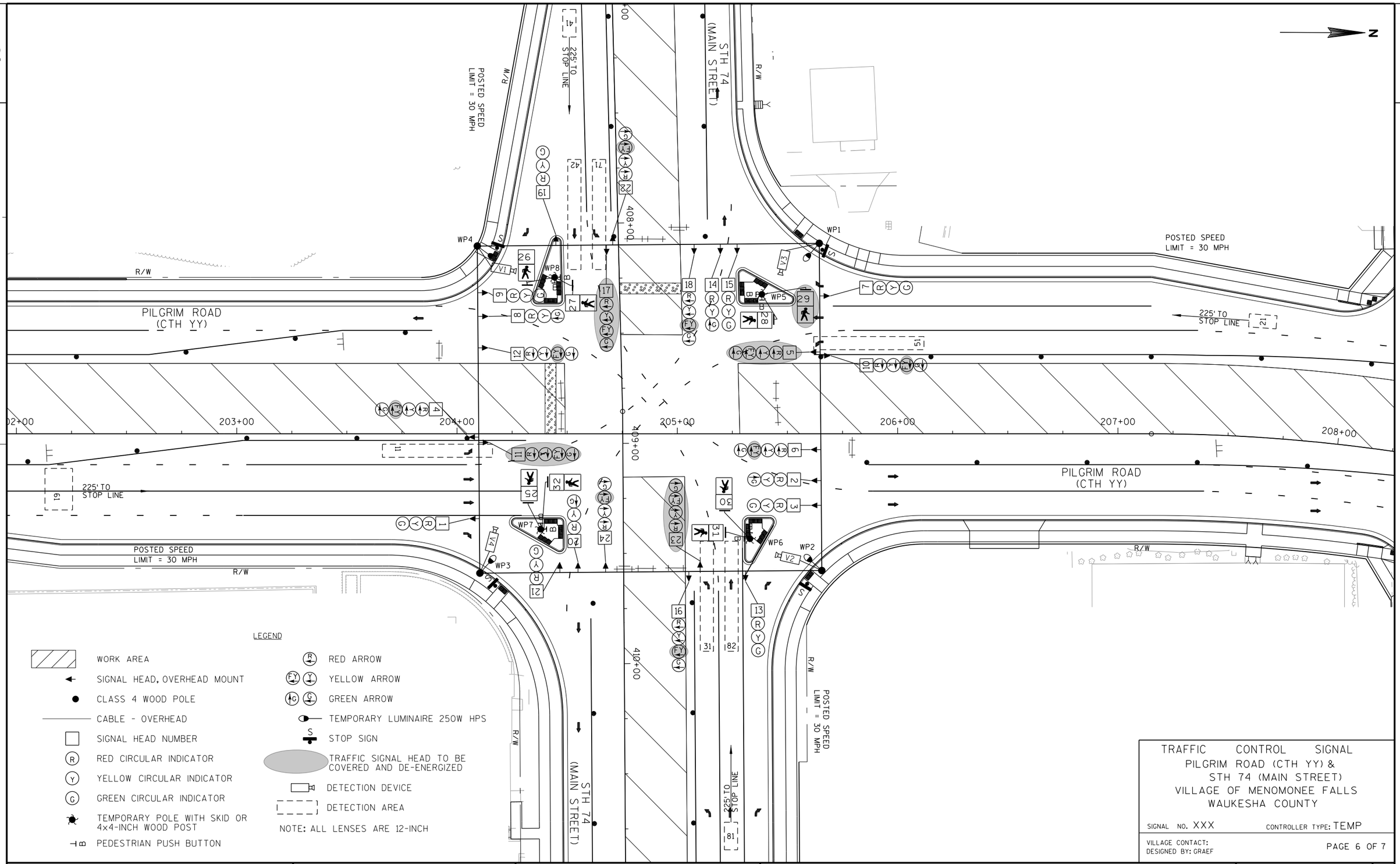
SIGNAL NO. XXX CONTROLLER TYPE: TEMP

VILLAGE CONTACT:
DESIGNED BY: GRAEF

PAGE 5 OF 7

PROJECT NO: 2782-11-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TEMPORARY TRAFFIC SIGNAL PLAN - STAGE 3B	SHEET 243	E

FILE NAME : L:\Jobs2008\20080002\CAD\WisDOT_Trans\dgn\00\01_Main Street\024003b_sp.dgn PLOT DATE : 10/28/2014 PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42



TRAFFIC CONTROL SIGNAL
PILGRIM ROAD (CTH YY) &
STH 74 (MAIN STREET)
VILLAGE OF MENOMONEE FALLS
WAUKESHA COUNTY

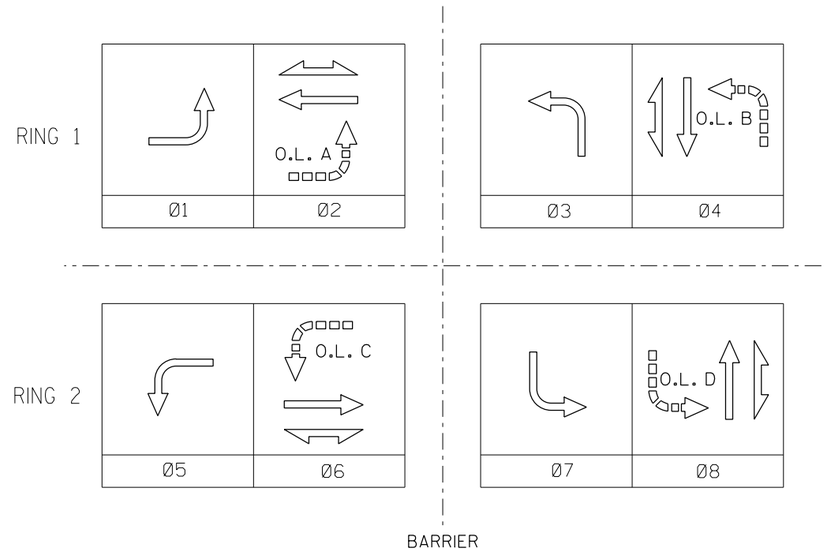
SIGNAL NO. XXX CONTROLLER TYPE: TEMP

VILLAGE CONTACT:
DESIGNED BY: GRAEF

PAGE 6 OF 7

PROJECT NO: 2782-11-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TEMPORARY TRAFFIC SIGNAL PLAN - STAGE 4	SHEET 244	E

	HEAD NUMBERS	FLASH
Ø1	4,5,6	R
Ø2	7,8,9	R
Ø3	16,17,18	R
Ø4	19,20,21	R
Ø5	10,11,12	R
Ø6	1,2,3	R
Ø7	22,23,24	R
Ø8	13,14,15	R
Ø2P	27,28	
Ø4P	25,26	
Ø6P	31,32	
Ø8P	29,30	
OLA	7,8,9	R
OLB	19,20,21	R
OLC	10,11,12	R
OLD	22,23,24	R



DETECTOR LOGIC

ZONE NUMBER	DETECTOR OPERATION: CALLS AND EXTENDS	CALLS ONLY	EXTENDS ONLY	PHASE CALLED	PHASE EXTENDED	DETECTOR DISCONNECT PHASE	CALLING DELAY	EXTENSION STRETCH
11	X			1	1		X	
21	X			2	2			
31	X			3	3		X	
41			X		4			X
42	X			4	4			
51	X			5	5		X	
61	X			6	6			
71	X				7		X	
81			X	8	8			X
82	X			8	8			

CONTROLLER LOGIC

PHASE NUMBER	PHASE LOCKING	DUAL ENTRY W / Ø	PHASE RECALL	PHASE ACTIVE
1		6		X
2	X	6	MAX.	X
3		8		X
4		8		X
5		2		X
6	X	2	MAX.	X
7		4		X
8		4		X

TYPE OF INTERCONNECT COMMUNICATION	
NONE	
TBC	X
CLOSED LOOP TWISTED PAIR*	
CLOSED LOOP FIBER OPTIC*	
RADIO	
*LOCATION OF MASTER CONTROLLER NO:	
SIGNAL SYSTEM #:	

TYPE OF PRE-EMPT	
NONE	X
RAILROAD	
EMERGENCY VEHICLE	
3M	
TOMAR	
HARDWIRE	
OTHER	
LIFT BRIDGE	
QUEUE DETECTOR	

TYPE OF LIGHTING	
BY OTHER AGENCY	
IN TRAFFIC SIGNAL CABINET	X
IN SEPARATE LIGHTING CABINET	

GENERAL NOTES:

1. ANY ACTUATED PHASE FOR WHICH THERE IS NO CALL SHALL BE SKIPPED.

2. WHEN ONE PHASE IS ON ALONE, ANY NONCONFLICTING PHASE MAY START TIMING CONCURRENTLY WITHOUT A CLEARANCE INTERVAL. (SEE CHART 1)

3. OPERATE LEFT TURNS (PHASES 1, 3, 5 & 7) AS PROTECTED ONLY DURING STAGES 1 & 4. COVER AND DE-ENERGIZE FLASHING YELLOW ARROWS WHEN NOT IN USE.

CHART 1

PHASE ON	NONCONFLICTING PHASE ALLOWED TO TIME CONCURRENTLY	PHASES IN CONFLICT WITH PHASE ON
1	5 OR 6	2,3,4,7,8
2	5 OR 6	1,3,4,7,8
3	7 OR 8	1,2,4,5,6
4	7 OR 8	1,2,3,5,6
5	1 OR 2	3,4,6,7,8
6	1 OR 2	3,4,5,7,8
7	3 OR 4	1,2,5,6,8
8	3 OR 4	1,2,5,6,7

PILGRIM ROAD (CTH YY) &
STH 74 (MAIN STREET)
VILLAGE OF MENOMONEE FALLS
WAUKESHA COUNTY

SIGNAL NO. XXXX

CONTROLLER TYPE: TEMP

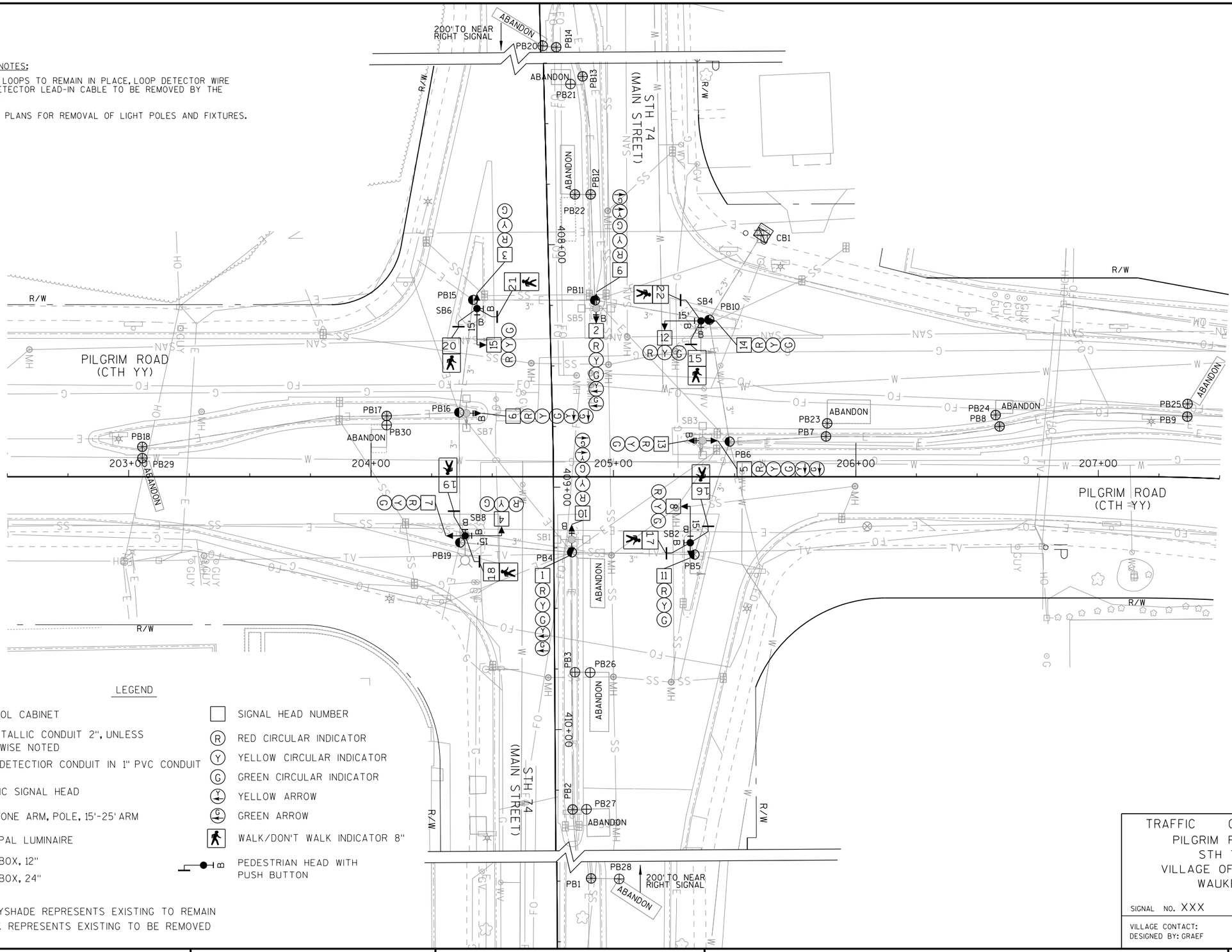
DATE 10/14

FILE NAME : L:\Jobs2008\20080002\CAD\WisDOT_Trans\dgn\00\01_Main Street\024101_ph.dgn PLOT DATE : 10/28/2014 PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

CONSTRUCTION NOTES:

1. ABANDONDED LOOPS TO REMAIN IN PLACE, LOOP DETECTOR WIRE AND LOOP DETECTOR LEAD-IN CABLE TO BE REMOVED BY THE CONTRACTOR.

2. SEE LIGHTING PLANS FOR REMOVAL OF LIGHT POLES AND FIXTURES.



LEGEND

- CONTROL CABINET
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- LOOP DETECTIOR CONDUIT IN 1" PVC CONDUIT
- TRAFFIC SIGNAL HEAD
- (XX) TROMBONE ARM, POLE, 15'-25' ARM
- MUNICIPAL LUMINAIRE
- PULL BOX, 12"
- PULL BOX, 24"
- SIGNAL HEAD NUMBER
- (R) RED CIRCULAR INDICATOR
- (Y) YELLOW CIRCULAR INDICATOR
- (G) GREEN CIRCULAR INDICATOR
- YELLOW ARROW
- GREEN ARROW
- WALK/DON'T WALK INDICATOR 8"
- B PEDESTRIAN HEAD WITH PUSH BUTTON

NOTE: GRAYSHADE REPRESENTS EXISTING TO REMAIN
DARK REPRESENTS EXISTING TO BE REMOVED

TRAFFIC CONTROL SIGNAL
PILGRIM ROAD (CTH YY) &
STH 74 (MAIN STREET)
VILLAGE OF MENOMONEE FALLS
WAUKESHA COUNTY

SIGNAL NO. XXX

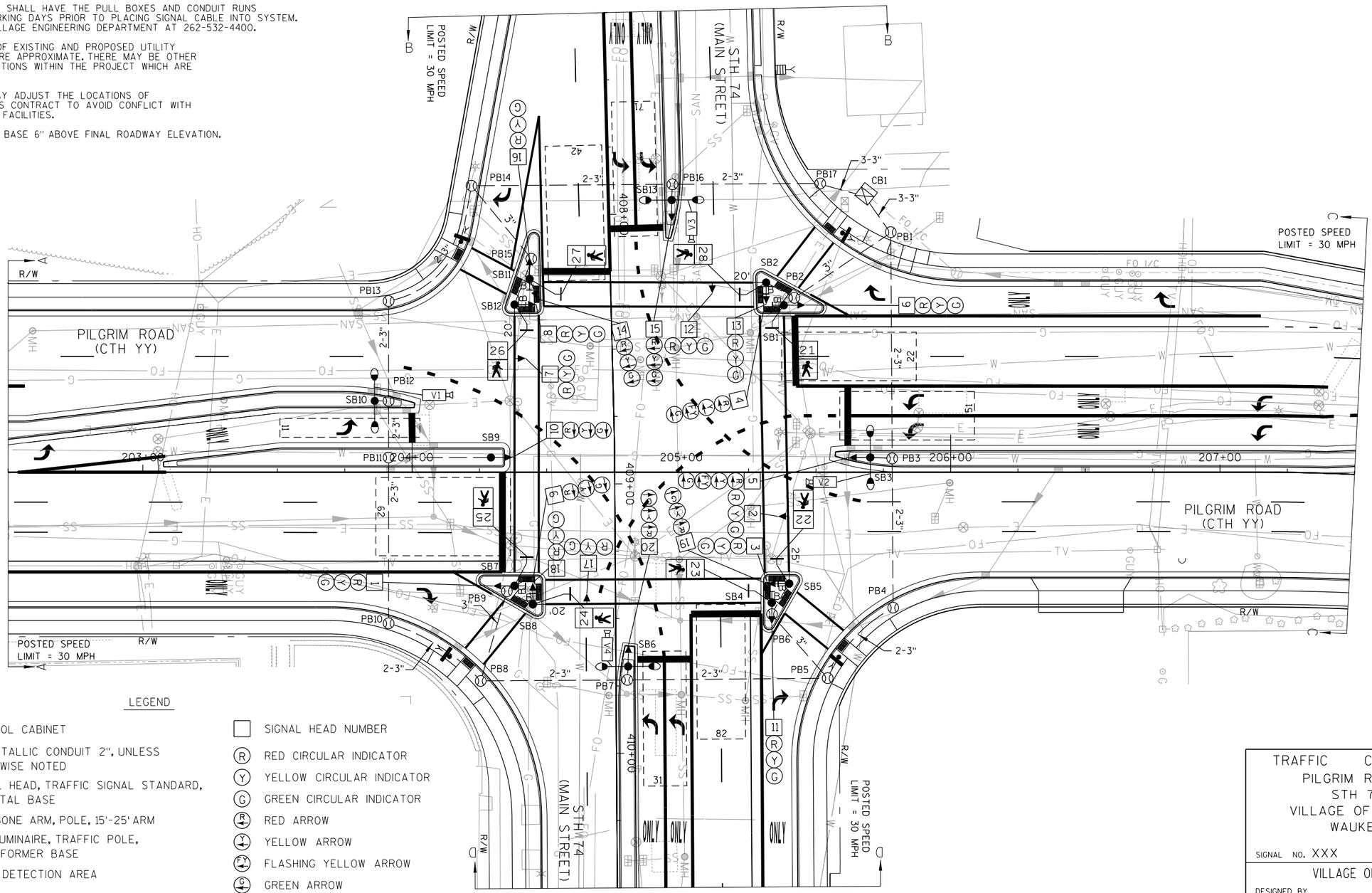
VILLAGE CONTACT:
DESIGNED BY: GRAEF

PAGE 1 OF 1

PROJECT NO: 2782-11-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TRAFFIC SIGNAL REMOVAL PLAN	SHEET 246	E

CONSTRUCTION NOTES:

1. THE CONTRACTOR SHALL HAVE THE PULL BOXES AND CONDUIT RUNS INSPECTED 5 WORKING DAYS PRIOR TO PLACING SIGNAL CABLE INTO SYSTEM. CONTACT THE VILLAGE ENGINEERING DEPARTMENT AT 262-532-4400.
2. THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.
3. THE ENGINEER MAY ADJUST THE LOCATIONS OF ITEMS UNDER THIS CONTRACT TO AVOID CONFLICT WITH EXISTING UTILITY FACILITIES.
4. INSTALL CABINET BASE 6" ABOVE FINAL ROADWAY ELEVATION.



LEGEND

- CONTROL CABINET
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
- (XX) TROMBONE ARM, POLE, 15'-25' ARM
- LED LUMINAIRE, TRAFFIC POLE, TRANSFORMER BASE
- VIDEO DETECTION AREA
- VX VIDEO DETECTION CAMERA
- PULL BOX, 24" X 42"
- WALK/DON'T WALK INDICATOR 16" (COUNTDOWN TIMER)
- SIGNAL HEAD NUMBER
- R RED CIRCULAR INDICATOR
- Y YELLOW CIRCULAR INDICATOR
- G GREEN CIRCULAR INDICATOR
- RA RED ARROW
- YA YELLOW ARROW
- FYA FLASHING YELLOW ARROW
- GA GREEN ARROW
- B PEDESTRIAN HEAD WITH PUSH BUTTON
- Y YIELD SIGN

NOTE: ALL LENSES ARE 12-INCH
GRAYSHADE REPRESENTS EXISTING

TRAFFIC CONTROL SIGNAL
PILGRIM ROAD (CTH YY) &
STH 74 (MAIN STREET)
VILLAGE OF MENOMONEE FALLS
WAUKESHA COUNTY

SIGNAL NO. XXX
CABINET TYPE: TS2
CONTROLLER TYPE: EPAC M52

VILLAGE OF MENOMONEE FALLS

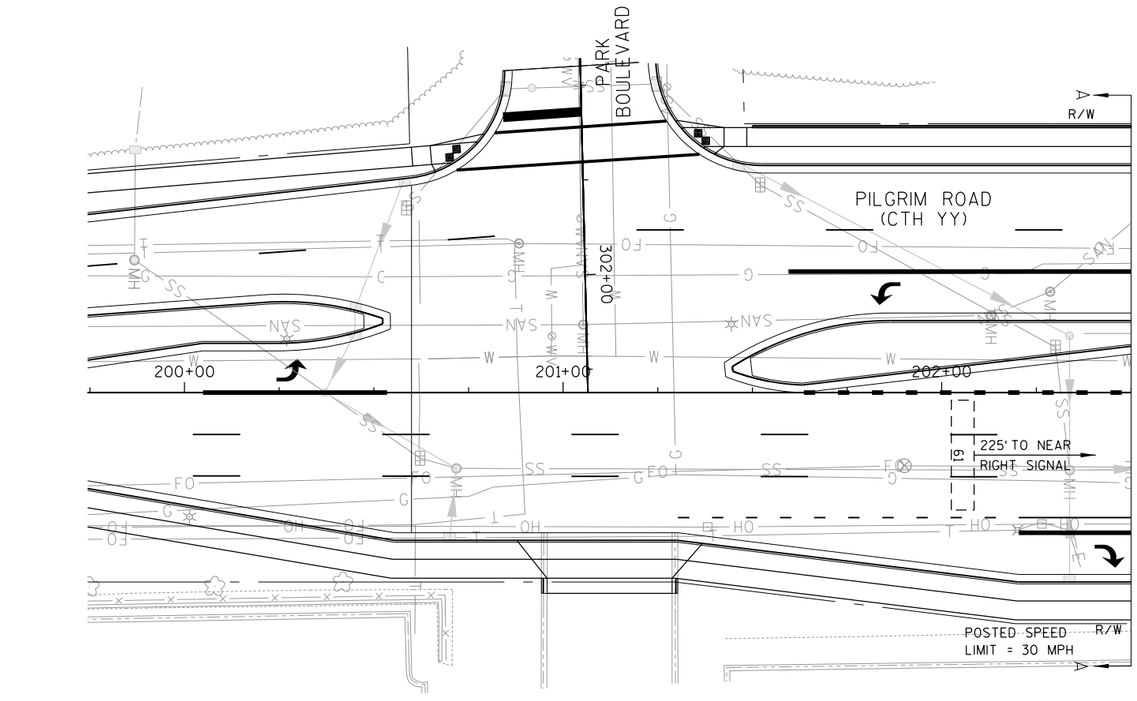
DESIGNED BY
Date _____ GRAEF DESIGNER

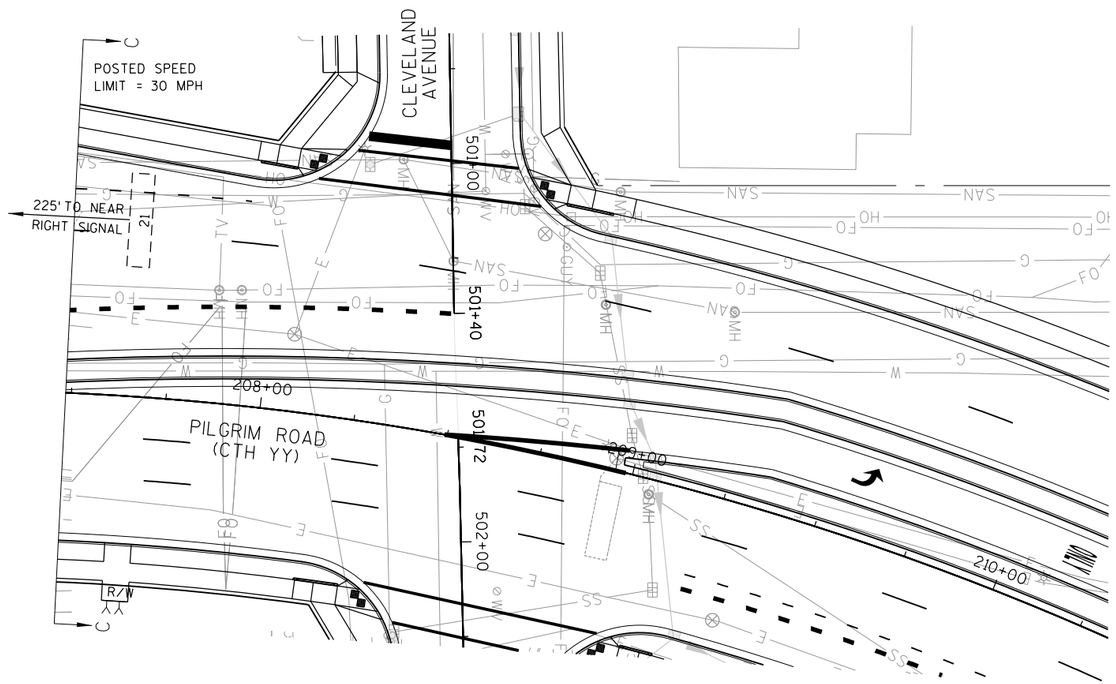
APPROVED
Date _____ VILLAGE ENGINEER

VILLAGE CONTACT:
DESIGNED BY: GRAEF

PAGE 1 OF 4

PROJECT NO: 2782-11-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TRAFFIC SIGNAL PLAN	SHEET 247 E



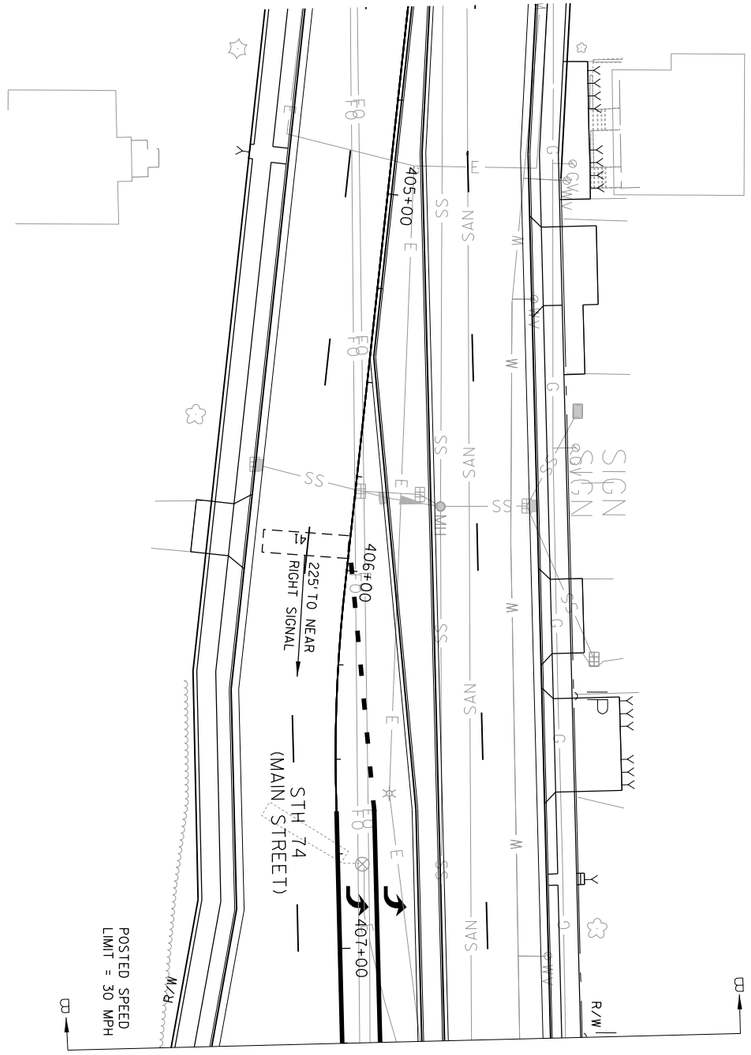


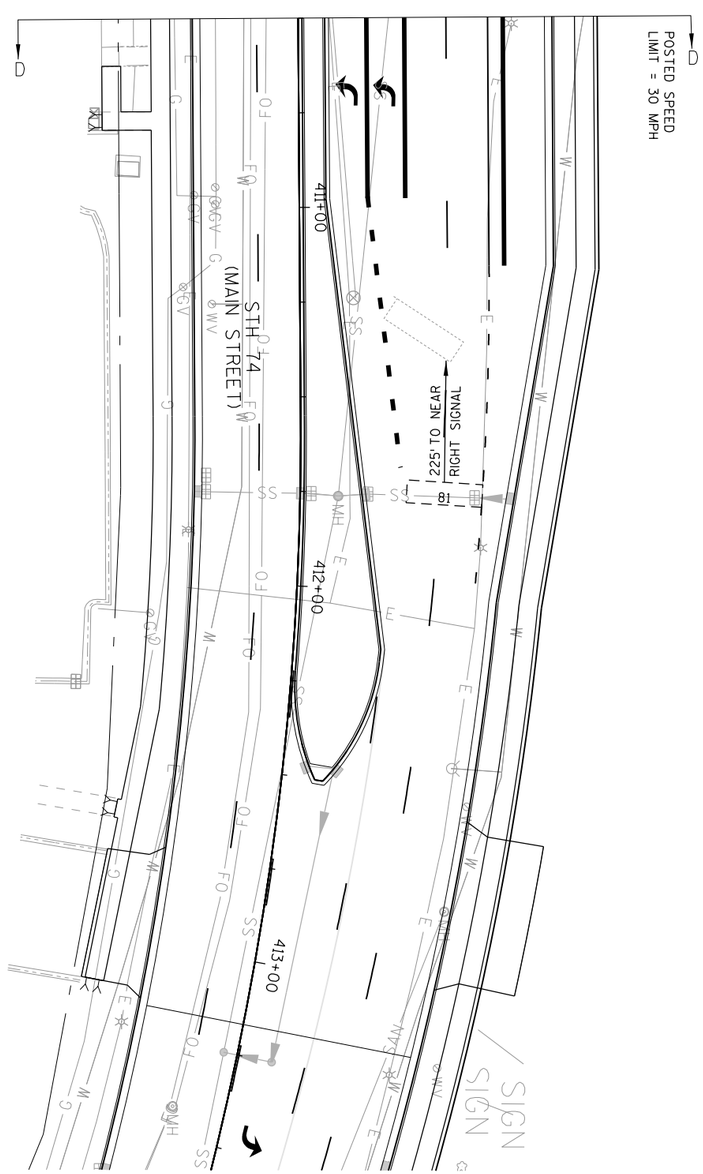
TRAFFIC CONTROL SIGNAL
PILGRIM ROAD (CTH YY) &
STH 74 (MAIN STREET)
VILLAGE OF MENOMONEE FALLS
WAUKESHA COUNTY

SIGNAL NO. XXX

PROJECT NO: 2782-11-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TRAFFIC SIGNAL PLAN	SHEET 248	E

FILE NAME : L:\Jobs2008\20080002\CAD\WisDOT_Trans\dgn\00\01_Main Street\024022_sp.dgn PLOT DATE : 12/19/2014 PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42





TRAFFIC CONTROL SIGNAL
PILGRIM ROAD (CTH YY) &
STH 74 (MAIN STREET)
VILLAGE OF MENOMONEE FALLS
WAUKESHA COUNTY

SIGNAL NO. XXX

PROJECT NO: 2782-11-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TRAFFIC SIGNAL PLAN	SHEET 249	E

FILE NAME : L:\Jobs2008\20080002\CAD\WisDOT_Trans\dgn\00\01_Main Street\024023_sp.dgn PLOT DATE : 10/28/2014 PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

RING 1

	HEAD NUMBERS	Ø1 R/W	Ø1 CLEAR TO **	Ø2 R/W	Ø2 CLEAR TO **	Ø3 R/W	Ø3 CLEAR TO **	Ø4 R/W	Ø4 CLEAR TO **	FLASH
Ø1	4,5	G	- -	-	- -	-	- -	-	- -	-
Ø2	6,7,8	R	R R	G	Y R	R	R R	R	R R	R
Ø3	14,15	R	R R	R	R R	G	Y R	R	R R	R
Ø4	16,17,18	R	R R	R	R R	R	R R	G	Y R	R
Ø5	9,10	R	R R	R	R R	R	R R	R	R R	R
Ø6	1,2,3	R	R R	R	R R	R	R R	R	R R	R
Ø7	19,20	R	R R	R	R R	R	R R	R	R R	R
Ø8	11,12,13	R	R R	R	R R	R	R R	R	R R	R
Ø2P	27,28	D	D D	*	D D	D	D D	D	D D	
Ø4P	25,26	D	D D	D	D D	D	D D	*	D D	
Ø6P	23,24	D	D D	D	D D	D	D D	D	D D	
Ø8P	21,22	D	D D	D	D D	D	D D	D	D D	
OLA	4,5	-	Y R	FY	Y R	R	R R	R	R R	R
OLB										
OLC										
OLD										

RING 2

	HEAD NUMBERS	Ø5 R/W	Ø5 CLEAR TO **	Ø6 R/W	Ø6 CLEAR TO **	Ø7 R/W	Ø7 CLEAR TO **	Ø8 R/W	Ø8 CLEAR TO **
Ø1	4,5	-	- -	-	- -	-	- -	-	- -
Ø2	6,7,8	R	R R	R	R R	R	R R	R	R R
Ø3	14,15	R	R R	R	R R	R	R R	R	R R
Ø4	16,17,18	R	R R	R	R R	R	R R	R	R R
Ø5	9,10	G	Y R	R	R R	R	R R	R	R R
Ø6	1,2,3	R	R R	G	Y R	R	R R	R	R R
Ø7	19,20	R	R R	R	R R	G	Y R	R	R R
Ø8	11,12,13	R	R R	R	R R	R	R R	G	Y R
Ø2P	27,28	D	D D	D	D D	D	D D	D	D D
Ø4P	25,26	D	D D	D	D D	D	D D	D	D D
Ø6P	23,24	D	D D	*	D D	D	D D	D	D D
Ø8P	21,22	D	D D	D	D D	D	D D	*	D D
OLA	4,5	R	R R	R	R R	R	R R	R	R R
OLB									
OLC									
OLD									

FY = FLASHING YELLOW ARROW

BARRIER

** CLEARANCE TO A PHASE IN CONFLICT WITH THIS PHASE ON (SEE CHART 1)

* WHEN CALLED, TIMED STEADY WALK, THEN FLASHING DON'T WALK, THEN GOES TO STEADY DON'T WALK

DETECTOR LOGIC

ZONE NUMBER	DETECTOR OPERATION: CALLS AND EXTENDS	CALLS ONLY	EXTENDS ONLY	PHASE CALLED	PHASE EXTENDED	DETECTOR DISCONNECT PHASE	CALLING DELAY	EXTENSION STRETCH	SIZE	NUMBER OF TURNS
11	X			1	1					VIDEO
21	X			2	2					VIDEO
22	X			2	2					VIDEO
31	X			3	3					VIDEO
41			X		4			X		VIDEO
42	X			4	4					VIDEO
51	X			5	5					VIDEO
61	X			6	6					VIDEO
62	X			6	6					VIDEO
71	X			7	7					VIDEO
81			X		8			X		VIDEO
82	X			8	8					VIDEO

CONTROLLER LOGIC

PHASE NUMBER	PHASE LOCKING	DUAL ENTRY W / Ø	PHASE RECALL	PHASE ACTIVE
1		6		X
2	X	6	MIN.	X
3		8		X
4		8		X
5		2		X
6	X	2	MIN.	X
7		4		X
8		4		X

N

TYPE OF INTERCONNECT COMMUNICATION	
NONE	
TBC	
CLOSED LOOP TWISTED PAIR*	
CLOSED LOOP FIBER OPTIC*	X
RADIO	
*LOCATION OF MASTER: IH-45/41 SB RAMPS & PILGRIM ROAD CONTROLLER NO: S67-0270	
SIGNAL SYSTEM #: SS-0718	

TYPE OF PRE-EMPT	
NONE	X
RAILROAD	
EMERGENCY VEHICLE	
3M	
TOMAR	
HARDWIRE	
OTHER	
LIFT BRIDGE	
QUEUE DETECTOR	

TYPE OF LIGHTING	
BY OTHER AGENCY	
IN TRAFFIC SIGNAL CABINET	X
IN SEPARATE LIGHTING CABINET	

SPECIAL OVERLAPS

	PROTECTIVE	PERMISSIVE
O.L. "A" =	1	2
O.L. "B" =		
O.L. "C" =		
O.L. "D" =		

CHART 1

PHASE ON	NONCONFLICTING PHASE ALLOWED TO TIME CONCURRENTLY	PHASES IN CONFLICT WITH PHASE ON
1	5 OR 6	2,3,4,7,8
2	5 OR 6	1,3,4,7,8
3	7 OR 8	1,2,4,5,6
4	7 OR 8	1,2,3,5,6
5	1 OR 2	3,4,6,7,8
6	1 OR 2	3,4,5,7,8
7	3 OR 4	1,2,5,6,8
8	3 OR 4	1,2,5,6,7

GENERAL NOTES:

1. ANY ACTUATED PHASE FOR WHICH THERE IS NO CALL SHALL BE SKIPPED.
2. WHEN ONE PHASE IS ON ALONE, ANY NONCONFLICTING PHASE MAY START TIMING CONCURRENTLY WITHOUT A CLEARANCE INTERVAL. (SEE CHART 1)

PILGRIM ROAD (CTH YY) &
STH 74 (MAIN STREET)
VILLAGE OF MENOMONEE FALLS
WAUKESHA COUNTY

SIGNAL NO. XXXX

CONTROLLER TYPE: EPAC M52

DATE 7/14

FILE NAME : L:\Jobs2008\20080002\CAD\WisDOT_Trans\dgn\00\01_Main Street\024121_ph.dgn PLOT DATE : 10/28/2014 PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

PROJECT ID:	2782-12-70
INTERSECTION:	PILGRIM RD (CTH YY) & STH 74 (MAIN STREET)

SIGNAL WIRE COLOR CODING	BLK-BLACK WHT-WHITE	RED-RED BLU-BLUE	GRN-GREEN ORG-ORANGE

CB1 TO	JUMPER	NO. OF CONDUCTORS	HEAD NO.	PHASE	RED	YELLOW	GREEN	<RED>	<YELLOW>	<GREEN>	FLASHING <YELLOW>	D/WALK	WALK	PED BUTTON	OTHER
SB1		12	4	1 & 2				RED/BLK	ORG/BLK	GRN/BLK	BLK/WHT				
			6	2	RED	ORG	GRN								
			21	8								BLK	BLU		
			B	8										WHT/BLK	
SB2		12	12	8	RED	ORG	GRN								
			13	8	RED	ORG	GRN								
			28	2								BLK	BLU		
			B	2										WHT/BLK	
SB3		12	5	1 & 2				RED/BLK	ORG/BLK	GRN/BLK	BLK/WHT				
SB4		12	11	8	RED	ORG	GRN								
			19	7				RED/BLK	ORG/BLK	GRN/BLK					
			23	6								BLK	BLU		
			B	6										WHT/BLK	
SB5		12	2	6	RED	ORG	GRN								
			3	6	RED	ORG	GRN								
			22	8								BLK	BLU		
			B	8										WHT/BLK	
SB6		12	20	7				RED	ORG	GRN					
SB7		12	1	4	RED	ORG	GRN								
			9	4				RED/BLK	ORG/BLK	GRN/BLK					
			25	6								BLK	BLU		
			B	6										WHT/BLK	
SB8		12	17	4	RED	ORG	GRN								
			18	4	RED	ORG	GRN								
			24	6								BLK	BLU		
			B	6										WHT/BLK	
SB9		12	10	4				RED	ORG	GRN					
SB11		12	14	3				RED/BLK	ORG/BLK	GRN/BLK					
			16	4	RED	ORG	GRN								
			27	2								BLK	BLU		
			B	2										WHT/BLK	
SB12		12	7	2	RED	ORG	GRN								
			8	2	RED	ORG	GRN								
			26	4								BLK	BLU		
			B	4										WHT/BLK	
SB13		12	15	3				RED	ORG	GRN					

EQUIPMENT GROUNDING CONDUCTOR 10 AWG GRN XLP	
FROM	TO
CB1	SB1
SB1	SB2
SB2	SB3
SB3	SB4
SB4	SB5
SB5	SB6
SB6	SB7
SB7	SB8
SB8	SB9
SB9	SB11
SB11	SB12
SB12	SB13
SB13	CB1

PULL BOX BONDING JUMPER 10 AWG GRN XLP	
FROM	TO
PB1	CB1
PB2	SB1
PB3	SB3
PB4	SB3
PB5	SB4
PB6	SB4
PB7	SB6
PB8	SB7
PB9	SB7
PB10	SB7
PB11	SB9
PB12	SB10
PB13	SB10
PB14	SB11
PB15	SB11
PB16	SB13
PB17	CB1

LIGHTING UF 10 AWG W/ GROUND	
CB1	SB3
SB3	SB6
CB1	SB13
SB13	SB10

VIDEO DETECTION CABLE	
CB1	SB10 (V1)
CB1	SB3 (V2)
CB1	SB13 (V3)
CB1	SB6 (V4)

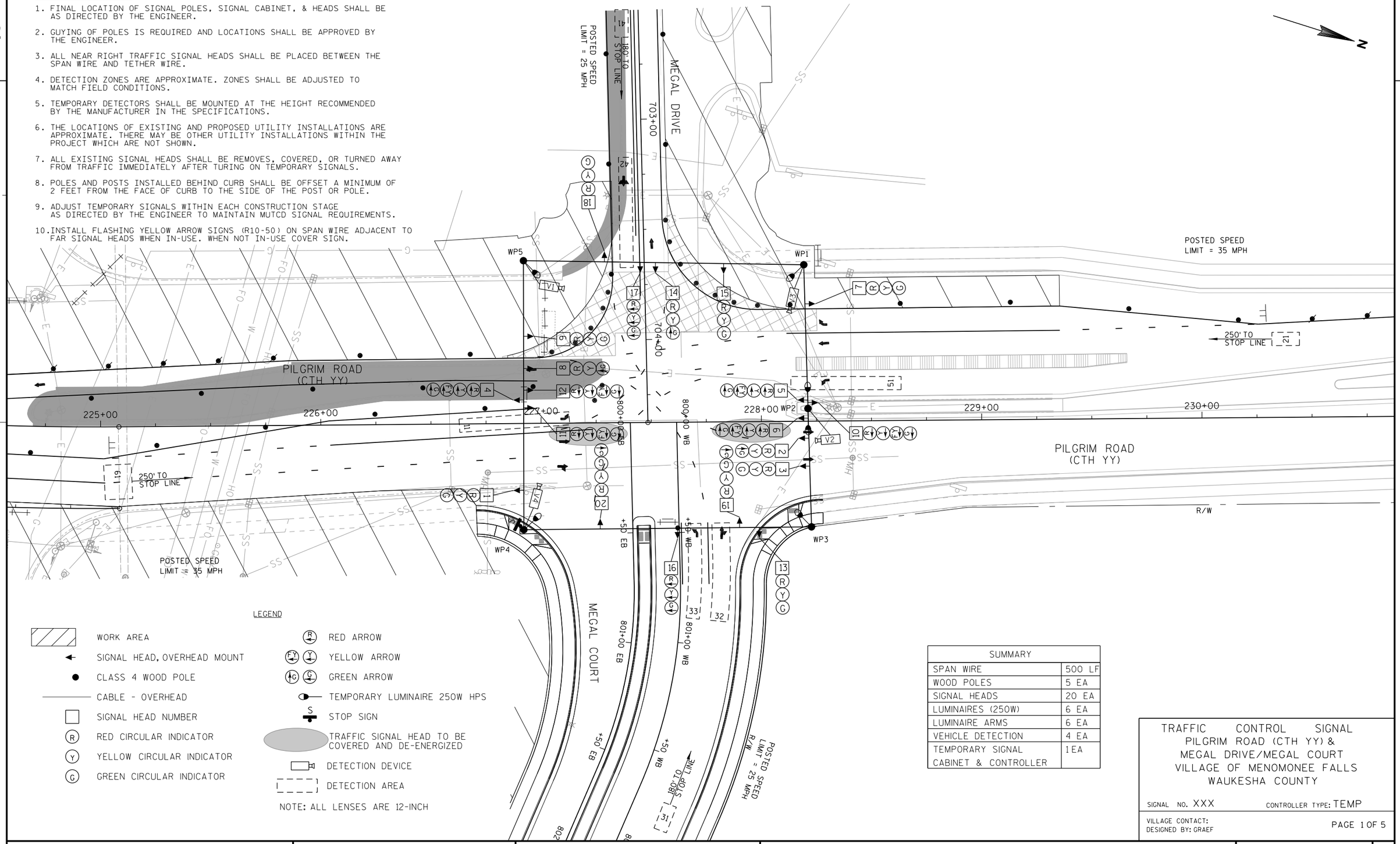
NOTES: USE WHITE CONDUCTOR IN THE SIGNAL CABLE AS THE GROUNDED CONDUCTOR FOR ALL TRAFFIC SIGNAL INDICATIONS.
ENSURE THE GROUNDED CONDUCTOR IN THE FEEDER CABLE AND THE POLE CABLES ARE BOTH 18" LONGER THAN THE UNGROUNDED CONDUCTORS.
AT THE SIGNAL BASES, CONNECT ON TERMINAL FROM THE PEDESTRIAN PUSH BUTTONS TO THE COLOR INDICATED IN THE CHART. CONNECT THE OTHER TERMINAL TO THE GROUNDED CONDUCTOR.

TRAFFIC CONTROL SIGNAL
PILGRIM ROAD (CTH YY) &
STH 74 (MAIN STREET)
VILLAGE OF MENOMONEE FALLS
WAUKESHA COUNTY

SIGNAL NO. XXX

CONSTRUCTION NOTES:

1. FINAL LOCATION OF SIGNAL POLES, SIGNAL CABINET, & HEADS SHALL BE AS DIRECTED BY THE ENGINEER.
2. GUYING OF POLES IS REQUIRED AND LOCATIONS SHALL BE APPROVED BY THE ENGINEER.
3. ALL NEAR RIGHT TRAFFIC SIGNAL HEADS SHALL BE PLACED BETWEEN THE SPAN WIRE AND TETHER WIRE.
4. DETECTION ZONES ARE APPROXIMATE. ZONES SHALL BE ADJUSTED TO MATCH FIELD CONDITIONS.
5. TEMPORARY DETECTORS SHALL BE MOUNTED AT THE HEIGHT RECOMMENDED BY THE MANUFACTURER IN THE SPECIFICATIONS.
6. THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.
7. ALL EXISTING SIGNAL HEADS SHALL BE REMOVES, COVERED, OR TURNED AWAY FROM TRAFFIC IMMEDIATELY AFTER TURING ON TEMPORARY SIGNALS.
8. POLES AND POSTS INSTALLED BEHIND CURB SHALL BE OFFSET A MINIMUM OF 2 FEET FROM THE FACE OF CURB TO THE SIDE OF THE POST OR POLE.
9. ADJUST TEMPORARY SIGNALS WITHIN EACH CONSTRUCTION STAGE AS DIRECTED BY THE ENGINEER TO MAINTAIN MUTCD SIGNAL REQUIREMENTS.
10. INSTALL FLASHING YELLOW ARROW SIGNS (R10-50) ON SPAN WIRE ADJACENT TO FAR SIGNAL HEADS WHEN IN-USE. WHEN NOT IN-USE COVER SIGN.



LEGEND

- WORK AREA
- SIGNAL HEAD, OVERHEAD MOUNT
- CLASS 4 WOOD POLE
- CABLE - OVERHEAD
- SIGNAL HEAD NUMBER
- RED CIRCULAR INDICATOR
- YELLOW CIRCULAR INDICATOR
- GREEN CIRCULAR INDICATOR
- RED ARROW
- YELLOW ARROW
- GREEN ARROW
- TEMPORARY LUMINAIRE 250W HPS
- STOP SIGN
- TRAFFIC SIGNAL HEAD TO BE COVERED AND DE-ENERGIZED
- DETECTION DEVICE
- DETECTION AREA

NOTE: ALL LENSES ARE 12-INCH

SUMMARY	
SPAN WIRE	500 LF
WOOD POLES	5 EA
SIGNAL HEADS	20 EA
LUMINAIRES (250W)	6 EA
LUMINAIRE ARMS	6 EA
VEHICLE DETECTION	4 EA
TEMPORARY SIGNAL CABINET & CONTROLLER	1 EA

TRAFFIC CONTROL SIGNAL
PILGRIM ROAD (CTH YY) &
MEGAL DRIVE/MEGAL COURT
VILLAGE OF MENOMONEE FALLS
WAUKESHA COUNTY

SIGNAL NO. XXX CONTROLLER TYPE: TEMP

VILLAGE CONTACT:
DESIGNED BY: GRAEF

PAGE 1 OF 5

PROJECT NO: 2782-11-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TEMPORARY TRAFFIC SIGNAL PLAN - STAGE 2B	SHEET 252	E

2

2

N

POSTED SPEED LIMIT = 25 MPH

180' TO STOP LINE

MEGAL DRIVE

703+00

704+00

POSTED SPEED LIMIT = 35 MPH

PILGRIM ROAD (CTH YY)

250' TO STOP LINE

225+00

226+00

227+00

228+00

229+00

230+00

800+00 EB

800+00 WB

WP1

WP2

WP3

WP4

WP5

PILGRIM ROAD (CTH YY)

R/W

MEGAL COURT

801+00 EB

801+00 WB

+50 EB

+50 WB

POSTED SPEED LIMIT = 25 MPH

LEGEND

- WORK AREA
- SIGNAL HEAD, OVERHEAD MOUNT
- CLASS 4 WOOD POLE
- CABLE - OVERHEAD
- SIGNAL HEAD NUMBER
- RED CIRCULAR INDICATOR
- YELLOW CIRCULAR INDICATOR
- GREEN CIRCULAR INDICATOR
- RED ARROW
- YELLOW ARROW
- GREEN ARROW
- TEMPORARY LUMINAIRE 250W HPS
- STOP SIGN
- TRAFFIC SIGNAL HEAD TO BE COVERED AND DE-ENERGIZED
- DETECTION DEVICE
- DETECTION AREA

NOTE: ALL LENSES ARE 12-INCH

TRAFFIC CONTROL SIGNAL
PILGRIM ROAD (CTH YY) &
MEGAL DRIVE/MEGAL COURT
VILLAGE OF MENOMONEE FALLS
WAUKESHA COUNTY

SIGNAL NO. XXX

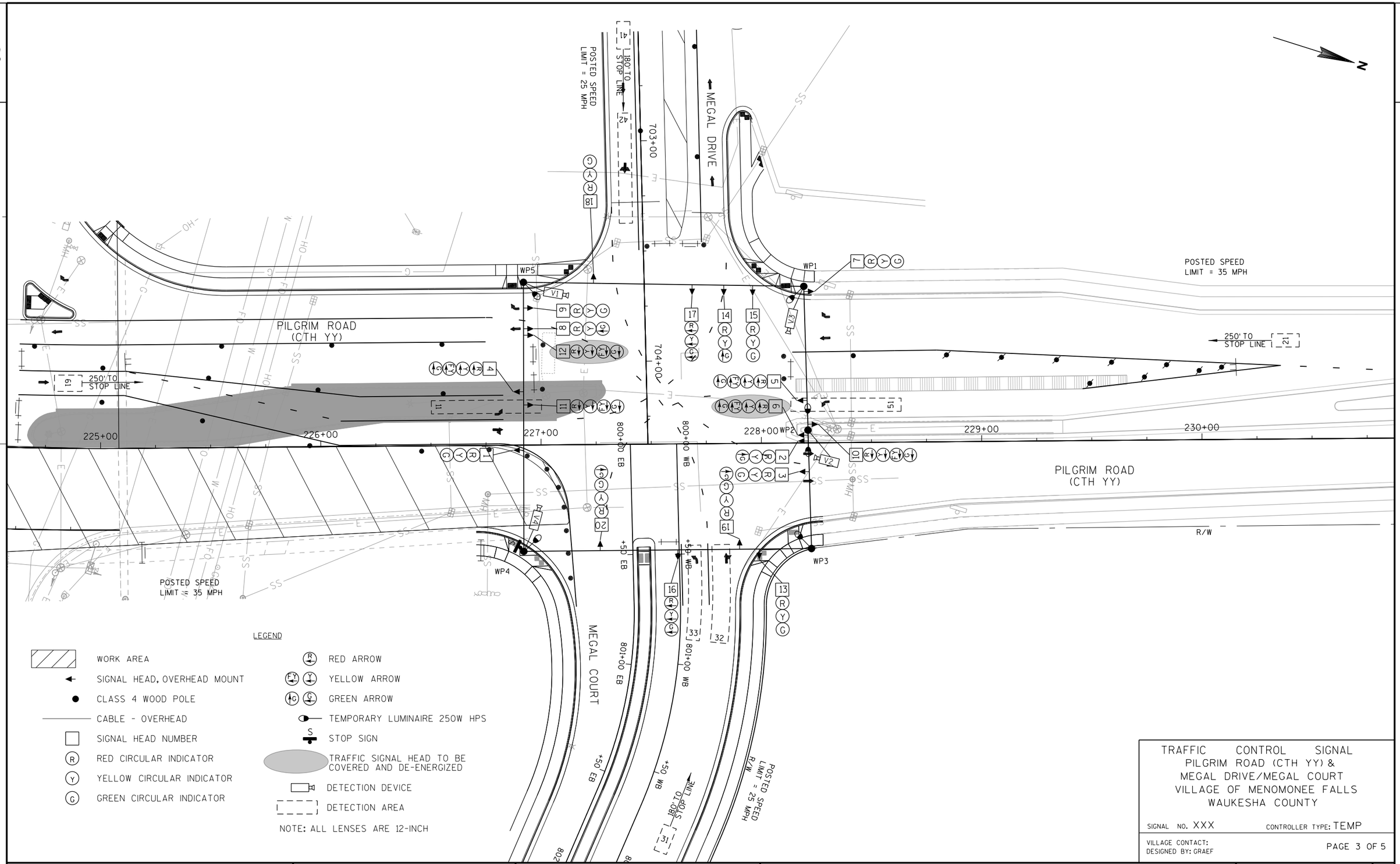
CONTROLLER TYPE: TEMP

VILLAGE CONTACT:
DESIGNED BY: GRAEF

PROJECT NO: 2782-11-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TEMPORARY TRAFFIC SIGNAL PLAN - STAGE 3A	SHEET 253	E

FILE NAME : L:\Jobs2008\20080002\CAD\WisDOT_Trans\dgn\00\02_Megal Drive\024003a_sp.dgn PLOT DATE : 10/28/2014 PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

2



TRAFFIC CONTROL SIGNAL
PILGRIM ROAD (CTH YY) &
MEGAL DRIVE/MEGAL COURT
VILLAGE OF MENOMONEE FALLS
WAUKESHA COUNTY

SIGNAL NO. XXX CONTROLLER TYPE: TEMP

VILLAGE CONTACT:
DESIGNED BY: GRAEF

PAGE 3 OF 5

PROJECT NO: 2782-11-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TEMPORARY TRAFFIC SIGNAL PLAN - STAGE 3B	SHEET 254	E

2

2

N

MEGAL DRIVE

POSTED SPEED
LIMIT = 25 MPH

180' TO
STOP LINE

703+00

704+00

PILGRIM ROAD
(CTH YY)

POSTED SPEED
LIMIT = 35 MPH

250' TO
STOP LINE

225+00

226+00

227+00

228+00

229+00

230+00

800+00 WB

801+00 WB

MEGAL COURT

801+00 EB

802+00 EB

WP1

WP2

WP3

WP4

WP5

V1

V2

V3

V4

LEGEND

- WORK AREA
- SIGNAL HEAD, OVERHEAD MOUNT
- CLASS 4 WOOD POLE
- CABLE - OVERHEAD
- SIGNAL HEAD NUMBER
- RED CIRCULAR INDICATOR
- YELLOW CIRCULAR INDICATOR
- GREEN CIRCULAR INDICATOR
- RED ARROW
- YELLOW ARROW
- GREEN ARROW
- TEMPORARY LUMINAIRE 250W HPS
- STOP SIGN
- TRAFFIC SIGNAL HEAD TO BE COVERED AND DE-ENERGIZED
- DETECTION DEVICE
- DETECTION AREA

NOTE: ALL LENSES ARE 12-INCH

TRAFFIC CONTROL SIGNAL
PILGRIM ROAD (CTH YY) &
MEGAL DRIVE/MEGAL COURT
VILLAGE OF MENOMONEE FALLS
WAUKESHA COUNTY

SIGNAL NO. XXX

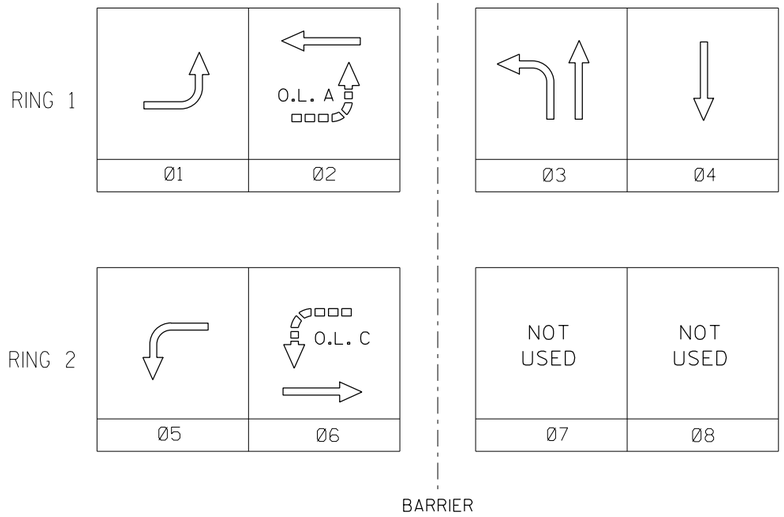
CONTROLLER TYPE: TEMP

VILLAGE CONTACT:
DESIGNED BY: GRAEF

PAGE 4 OF 5

PROJECT NO: 2782-11-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TEMPORARY TRAFFIC SIGNAL PLAN - STAGE 4	SHEET 255	E

	HEAD NUMBERS	FLASH
Ø1	4,5,6	R
Ø2	7,8,9	R
Ø3	13,14,15,16,17	R, R
Ø4	18,19,20	R
Ø5	10,11,12	R
Ø6	1,2,3	R
Ø7		
Ø8		
Ø2P		
Ø4P		
Ø6P		
Ø8P		
OLA	4,5,6	R
OLB		
OLC	10,11,12	R
OLD		



DETECTOR LOGIC

ZONE NUMBER	DETECTOR OPERATION: CALLS AND EXTENDS	CALLS ONLY	EXTENDS ONLY	PHASE CALLED	PHASE EXTENDED	DETECTOR DISCONNECT PHASE	CALLING DELAY	EXTENSION STRETCH
11	X			1	1		X	
21	X			2	2			
31			X		3			X
32	X			3	3		X	
33	X			3	3			
41			X		4			X
42	X			4	4			
51	X			5	5		X	
61	X			6	6			

CONTROLLER LOGIC

PHASE NUMBER	PHASE LOCKING	DUAL ENTRY W / Ø	PHASE RECALL	PHASE ACTIVE
1		6		X
2	X	6	MAX.	X
3				X
4				X
5		2		X
6	X	2	MAX.	X
7				
8				

TYPE OF INTERCONNECT COMMUNICATION	
NONE	
TBC	X
CLOSED LOOP TWISTED PAIR*	
CLOSED LOOP FIBER OPTIC*	
RADIO	
*LOCATION OF MASTER CONTROLLER NO:	
SIGNAL SYSTEM #:	

TYPE OF PRE-EMPT	
NONE	X
RAILROAD	
EMERGENCY VEHICLE	
3M	
TOMAR	
HARDWIRE	
OTHER	
LIFT BRIDGE	
QUEUE DETECTOR	

TYPE OF LIGHTING	
BY OTHER AGENCY	
IN TRAFFIC SIGNAL CABINET	X
IN SEPARATE LIGHTING CABINET	

CHART 1

PHASE ON	NONCONFLICTING PHASE ALLOWED TO TIME CONCURRENTLY	PHASES IN CONFLICT WITH PHASE ON
1	5 OR 6	2,3,4
2	5 OR 6	1,3,4
3		1,2,4,5,6
4		1,2,3,5,6
5	1 OR 2	3,4,6
6	1 OR 2	3,4,5
7		
8		

GENERAL NOTES:

1. ANY ACTUATED PHASE FOR WHICH THERE IS NO CALL SHALL BE SKIPPED.
2. WHEN ONE PHASE IS ON ALONE, ANY NONCONFLICTING PHASE MAY START TIMING CONCURRENTLY WITHOUT A CLEARANCE INTERVAL. (SEE CHART 1)

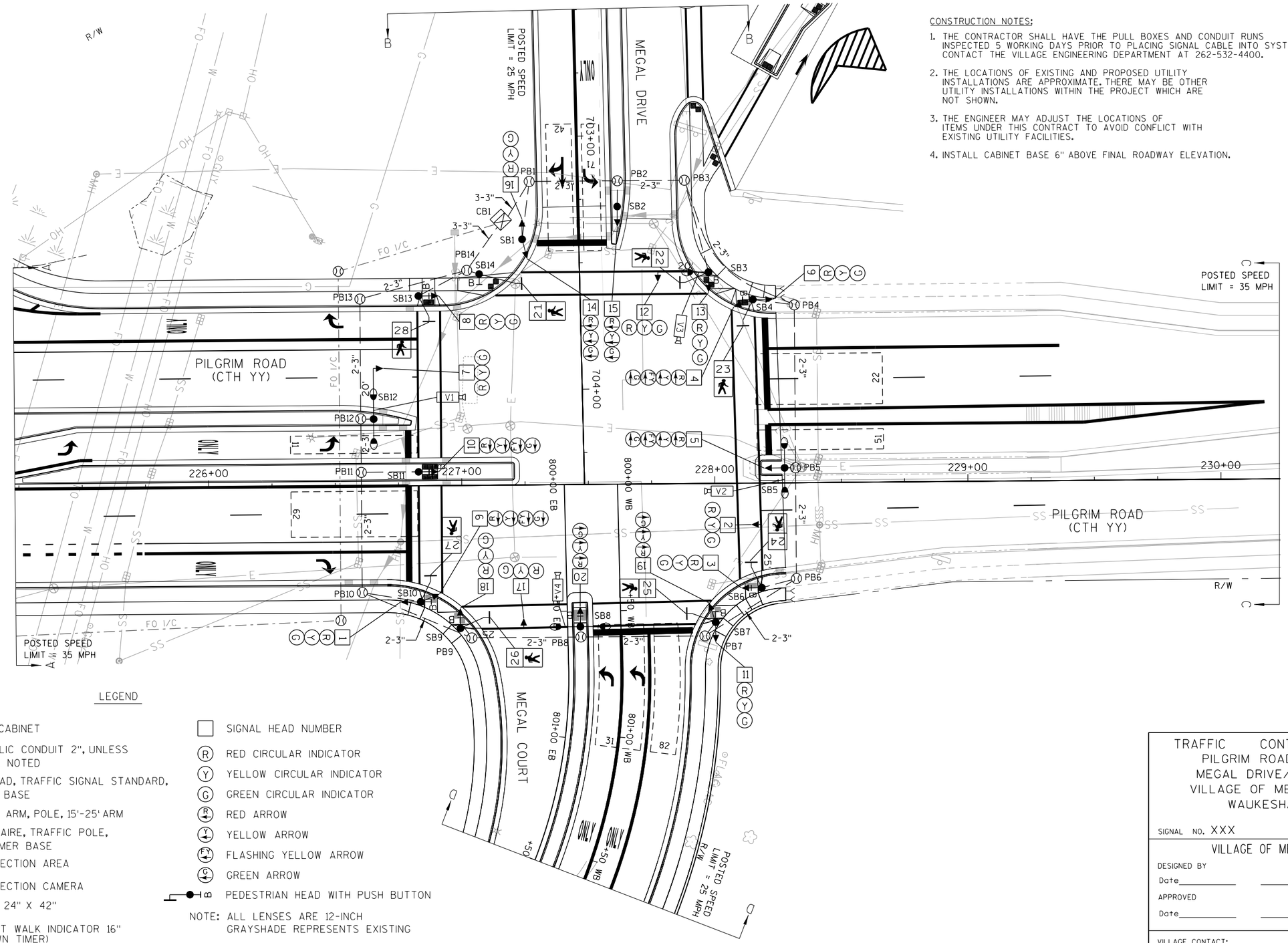
PILGRIM ROAD (CTH YY) &
MEGAL DRIVE/MEGAL COURT
VILLAGE OF MENOMONEE FALLS
WAUKESHA COUNTY

SIGNAL NO. XXXX

CONTROLLER TYPE: TEMP

DATE 10/14 PAGE NO. 5 OF 5

PROJECT NO: 2782-11-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TEMPORARY SEQUANCE OF OPERATIONS - STAGES 2B, 3A, 3B & 4	SHEET 256	E



CONSTRUCTION NOTES:

1. THE CONTRACTOR SHALL HAVE THE PULL BOXES AND CONDUIT RUNS INSPECTED 5 WORKING DAYS PRIOR TO PLACING SIGNAL CABLE INTO SYSTEM. CONTACT THE VILLAGE ENGINEERING DEPARTMENT AT 262-532-4400.
2. THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.
3. THE ENGINEER MAY ADJUST THE LOCATIONS OF ITEMS UNDER THIS CONTRACT TO AVOID CONFLICT WITH EXISTING UTILITY FACILITIES.
4. INSTALL CABINET BASE 6" ABOVE FINAL ROADWAY ELEVATION.

LEGEND

- CONTROL CABINET
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
- (XX) TROMBONE ARM, POLE, 15'-25' ARM
- LED LUMINAIRE, TRAFFIC POLE, TRANSFORMER BASE
- VIDEO DETECTION AREA
- VX VIDEO DETECTION CAMERA
- PULL BOX, 24" X 42"
- WALK/DON'T WALK INDICATOR 16" (COUNTDOWN TIMER)
- SIGNAL HEAD NUMBER
- (R) RED CIRCULAR INDICATOR
- (Y) YELLOW CIRCULAR INDICATOR
- (G) GREEN CIRCULAR INDICATOR
- RED ARROW
- YELLOW ARROW
- FLASHING YELLOW ARROW
- GREEN ARROW
- PEDESTRIAN HEAD WITH PUSH BUTTON

NOTE: ALL LENSES ARE 12-INCH GRAYSHADE REPRESENTS EXISTING

TRAFFIC CONTROL SIGNAL
PILGRIM ROAD (CTH YY) &
MEGAL DRIVE/MEGAL COURT
VILLAGE OF MENOMONEE FALLS
WAUKESHA COUNTY

SIGNAL NO. XXX
CABINET TYPE: TS2
CONTROLLER TYPE: EPAC M52

VILLAGE OF MENOMONEE FALLS

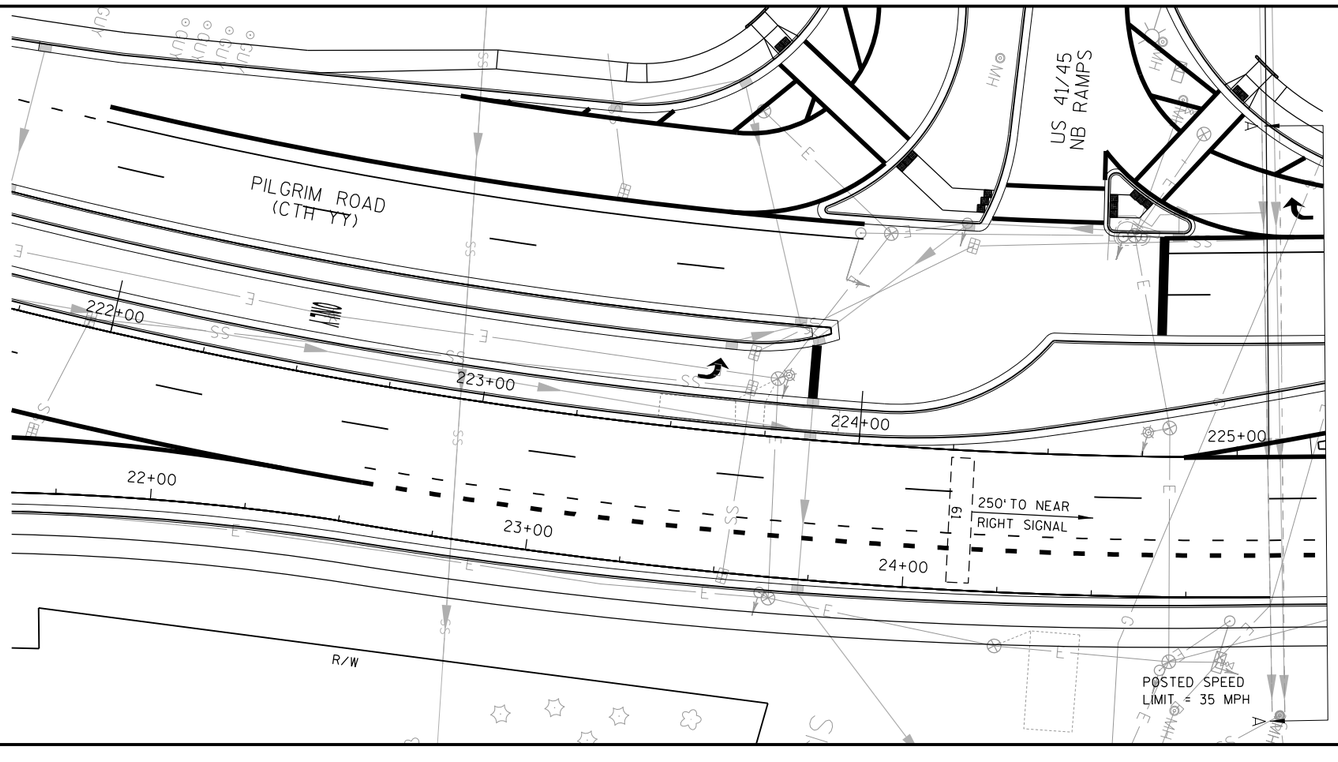
DESIGNED BY
Date_____ GRAEF
DESIGNER

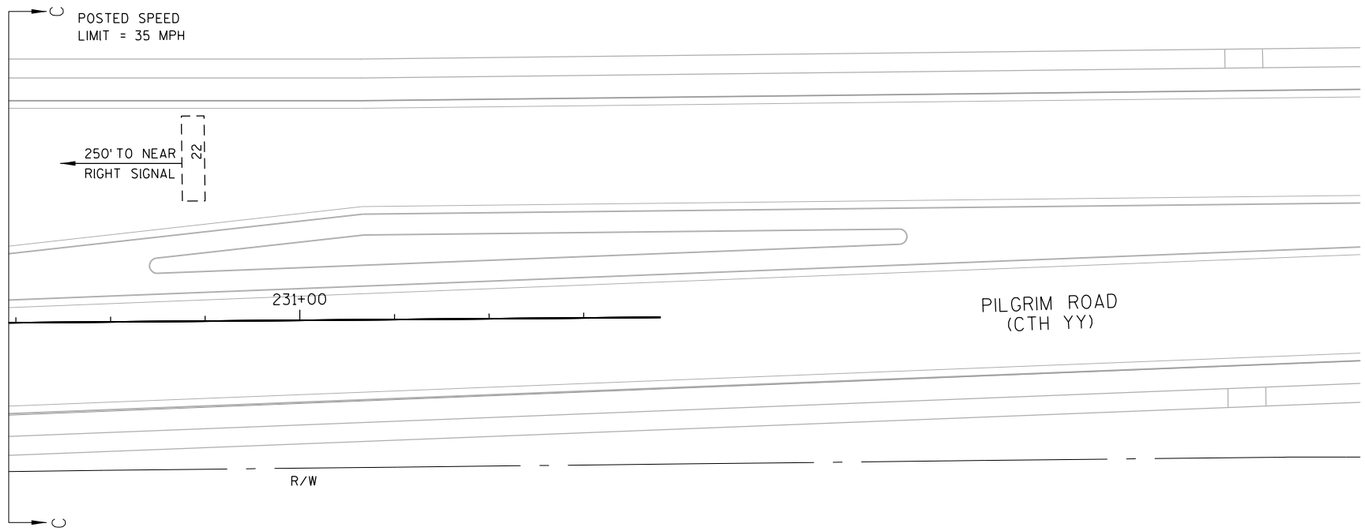
APPROVED
Date_____ VILLAGE ENGINEER

VILLAGE CONTACT:
DESIGNED BY: GRAEF

PAGE 1 OF 4

PROJECT NO: 2782-11-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TRAFFIC SIGNAL PLAN	SHEET 257	E



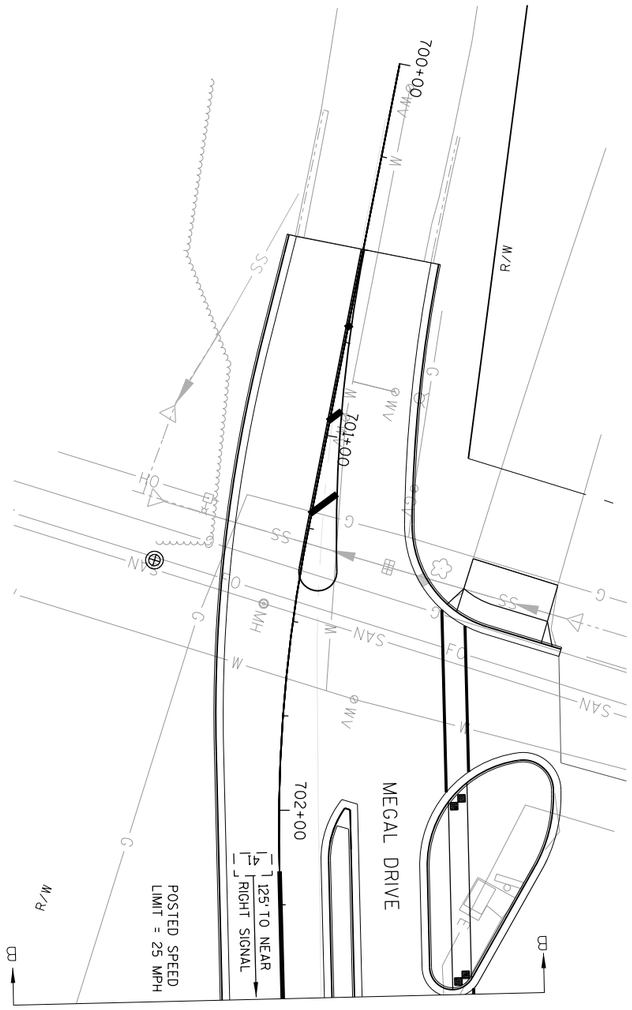


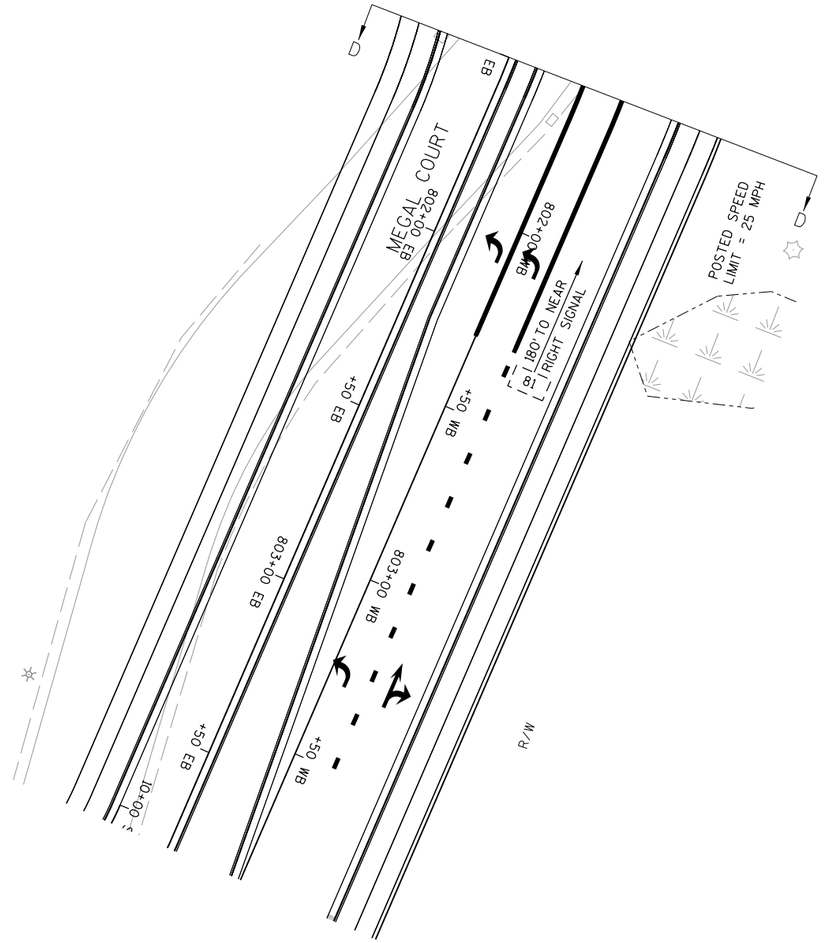
TRAFFIC CONTROL SIGNAL
PILGRIM ROAD (CTH YY) &
MEGAL DRIVE/MEGAL COURT
VILLAGE OF MENOMONEE FALLS
WAUKESHA COUNTY

SIGNAL NO. XXX

PROJECT NO: 2782-11-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TRAFFIC SIGNAL PLAN	SHEET 258	E

FILE NAME : L:\Jobs2008\20080002\CAD\WisDOT_Trans\dgn\00\02_Megal Drive\024022_sp.dgn PLOT DATE : 10/28/2014 PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42



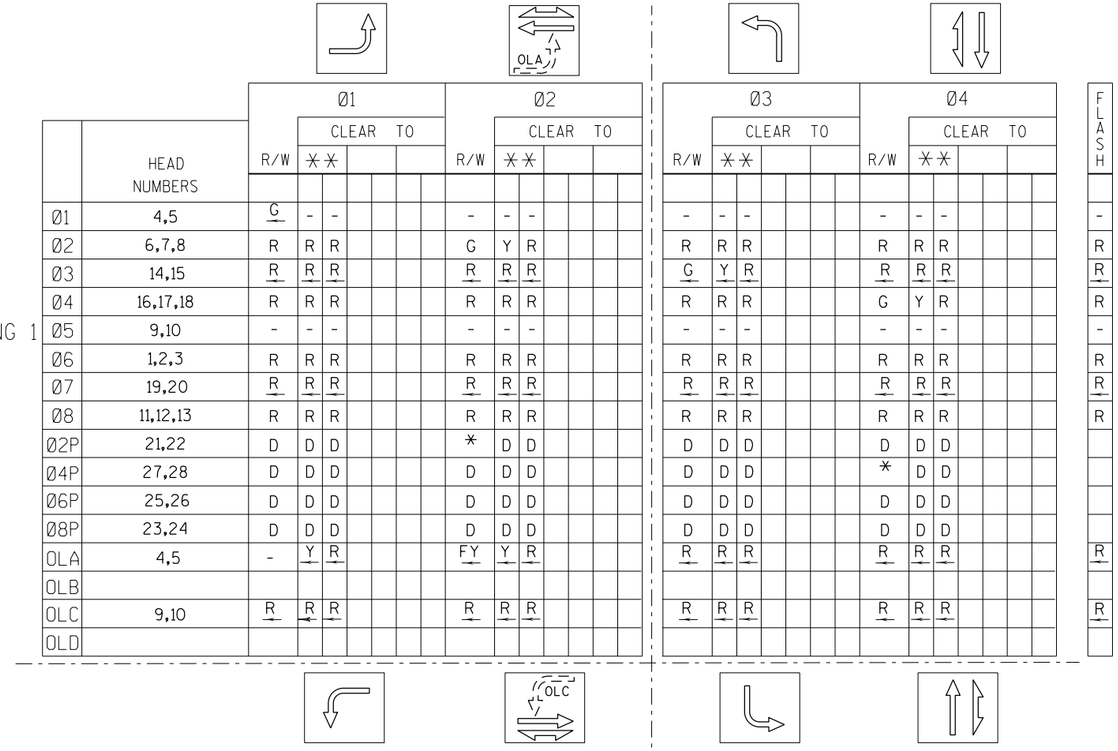


TRAFFIC CONTROL SIGNAL
PILGRIM ROAD (CTH YY) &
MEGAL DRIVE/MEGAL COURT
VILLAGE OF MENOMONEE FALLS
WAUKESHA COUNTY

SIGNAL NO. XXX

PROJECT NO: 2782-11-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TRAFFIC SIGNAL PLAN	SHEET 259	E

FILE NAME : L:\Jobs2008\20080002\CAD\WisDOT_Trans\dgn\00\02_Megal Drive\024023_sp.dgn PLOT DATE : 10/28/2014 PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42



RING 1

	HEAD NUMBERS	Ø1 R/W	Ø1 CLEAR TO **	Ø2 R/W	Ø2 CLEAR TO **	Ø3 R/W	Ø3 CLEAR TO **	Ø4 R/W	Ø4 CLEAR TO **	FLASH
Ø1	4,5	G	- -	-	- -	-	- -	-	- -	-
Ø2	6,7,8	R	R R	G	Y R	R	R R	R	R R	R
Ø3	14,15	R	R R	R	R R	G	Y R	R	R R	R
Ø4	16,17,18	R	R R	R	R R	R	R R	G	Y R	R
Ø5	9,10	-	- -	-	- -	-	- -	-	- -	-
Ø6	1,2,3	R	R R	R	R R	R	R R	R	R R	R
Ø7	19,20	R	R R	R	R R	R	R R	R	R R	R
Ø8	11,12,13	R	R R	R	R R	R	R R	R	R R	R
Ø2P	21,22	D	D D	*	D D	D	D D	D	D D	
Ø4P	27,28	D	D D	D	D D	D	D D	*	D D	
Ø6P	25,26	D	D D	D	D D	D	D D	D	D D	
Ø8P	23,24	D	D D	D	D D	D	D D	D	D D	
OLA	4,5	-	Y R	FY	Y R	R	R R	R	R R	R
OLB										
OLC	9,10	R	R R	R	R R	R	R R	R	R R	R
OLD										

RING 2

	HEAD NUMBERS	Ø5 R/W	Ø5 CLEAR TO **	Ø6 R/W	Ø6 CLEAR TO **	Ø7 R/W	Ø7 CLEAR TO **	Ø8 R/W	Ø8 CLEAR TO **
Ø1	4,5	-	- -	-	- -	-	- -	-	- -
Ø2	6,7,8	R	R R	R	R R	R	R R	R	R R
Ø3	14,15	R	R R	R	R R	R	R R	R	R R
Ø4	16,17,18	R	R R	R	R R	R	R R	R	R R
Ø5	9,10	G	- -	-	- -	-	- -	-	- -
Ø6	1,2,3	R	R R	G	Y R	R	R R	R	R R
Ø7	19,20	R	R R	R	R R	G	Y R	R	R R
Ø8	11,12,13	R	R R	R	R R	R	R R	G	Y R
Ø2P	21,22	D	D D	D	D D	D	D D	D	D D
Ø4P	27,28	D	D D	D	D D	D	D D	D	D D
Ø6P	25,26	D	D D	*	D D	D	D D	D	D D
Ø8P	23,24	D	D D	D	D D	D	D D	*	D D
OLA	4,5	R	R R	R	R R	R	R R	R	R R
OLB									
OLC	9,10	-	Y R	FY	Y R	R	R R	R	R R
OLD									

FY = FLASHING YELLOW ARROW

BARRIER

** CLEARANCE TO A PHASE IN CONFLICT WITH THIS PHASE ON (SEE CHART 1)

* WHEN CALLED, TIMED STEADY WALK, THEN FLASHING DON'T WALK, THEN GOES TO STEADY DON'T WALK

DETECTOR LOGIC

ZONE NUMBER	DETECTOR OPERATION: CALLS AND EXTENDS	CALLS ONLY	EXTENDS ONLY	PHASE CALLED	PHASE EXTENDED	DETECTOR DISCONNECT PHASE	CALLING DELAY	EXTENSION STRETCH	SIZE	NUMBER OF TURNS
11	X			1	1					VIDEO
21	X			2	2					VIDEO
22	X			2	2					VIDEO
31	X			3	3					VIDEO
41			X		4			X		VIDEO
42	X			4	4		X			VIDEO
51	X			5	5					VIDEO
61	X			6	6					VIDEO
62	X			6	6					VIDEO
81			X		8		X	X		VIDEO
82	X			8	8					VIDEO

CONTROLLER LOGIC

PHASE NUMBER	PHASE LOCKING	DUAL ENTRY W / Ø	PHASE RECALL	PHASE ACTIVE
1		6		X
2	X	6	MIN.	X
3		8		X
4		8		X
5		2		X
6	X	2	MIN.	X
7		4		X
8		4		X

N

TYPE OF INTERCONNECT COMMUNICATION	
NONE	
TBC	
CLOSED LOOP TWISTED PAIR*	
CLOSED LOOP FIBER OPTIC*	X
RADIO	
*LOCATION OF MASTER IH-45/41 SB RAMPS & PILGRIM ROAD CONTROLLER NO: S67-0270	
SIGNAL SYSTEM #: SS0178	

TYPE OF PRE-EMPT	
NONE	X
RAILROAD	
EMERGENCY VEHICLE	
3M	
TOMAR	
HARDWIRE	
OTHER	
LIFT BRIDGE	
QUEUE DETECTOR	

TYPE OF LIGHTING	
BY OTHER AGENCY	
IN TRAFFIC SIGNAL CABINET	X
IN SEPARATE LIGHTING CABINET	

SPECIAL OVERLAPS

	PROTECTIVE	PERMISSIVE
O.L. "A" =	1	2
O.L. "B" =		
O.L. "C" =	1	6
O.L. "D" =		

CHART 1

PHASE ON	NONCONFLICTING PHASE ALLOWED TO TIME CONCURRENTLY	PHASES IN CONFLICT WITH PHASE ON
1	5 OR 6	2,3,4,7,8
2	5 OR 6	1,3,4,7,8
3	7 OR 8	1,2,4,5,6
4	7 OR 8	1,2,3,5,6
5	1 OR 2	3,4,6,7,8
6	1 OR 2	3,4,5,7,8
7	3 OR 4	1,2,5,6,8
8	3 OR 4	1,2,5,6,7

GENERAL NOTES:

1. ANY ACTUATED PHASE FOR WHICH THERE IS NO CALL SHALL BE SKIPPED.
2. WHEN ONE PHASE IS ON ALONE, ANY NONCONFLICTING PHASE MAY START TIMING CONCURRENTLY WITHOUT A CLEARANCE INTERVAL. (SEE CHART 1)

PILGRIM ROAD (CTH YY) &
MEGAL DRIVE/MEGAL COURT
VILLAGE OF MENOMONEE FALLS
WAUKESHA COUNTY

SIGNAL NO. XXXX

CONTROLLER TYPE: EPAC M52

DATE 7/14

FILE NAME : L:\Jobs2008\20080002\CAD\WisDOT_Trans\dgn\00\02_Megal Drive\024121_ph.dgn PLOT DATE : 10/28/2014 PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

PROJECT ID:	2782-12-70
INTERSECTION:	PILGRIM RD (CTH YY) & MEGAL DR/ MEGAL CT

SIGNAL WIRE COLOR CODING	BLK-BLACK WHT-WHITE	RED-RED BLU-BLUE	GRN-GREEN ORG-ORANGE

CB1 TO	JUMPER	NO. OF CONDUCTORS	HEAD NO.	PHASE	RED	YELLOW	GREEN	<RED>	<YELLOW>	<GREEN>	FLASHING <YELLOW>	D/WALK	WALK	PED BUTTON	OTHER
SB1		12	14	3	RED	ORG	GRN								
			16	4				RED/BLK	ORG/BLK	GRN/BLK					
SB2		12	15	3				RED	ORG	GRN					
SB3		12	12	8	RED	ORG	GRN								
			13	8	RED	ORG	GRN								
			22	2								BLK	BLU		
			B	2										WHT/BLK	
SB4		12	4	1 & 2				RED/BLK	ORG/BLK	GRN/BLK	BLK/WHT				
			6	2	RED	ORG	GRN								
			23	8								BLK	BLU		
			B	8										WHT/BLK	
SB5		12	5	1 & 2				RED/BLK	ORG/BLK	GRN/BLK	BLK/WHT				
SB6		12	2	6	RED	ORG	GRN								
			3	6	RED	ORG	GRN								
			24	8								BLK	BLU		
			B	8										WHT/BLK	
SB7		12	11	8	RED	ORG	GRN								
			19	7				RED/BLK	ORG/BLK	GRN/BLK					
			25	6								BLK	BLU		
			B	6										WHT/BLK	
SB8		12	20	7				RED/BLK	ORG/BLK	GRN/BLK					
			B	6										WHT/BLK	
SB9		12	17	4	RED	ORG	GRN								
			18	4	RED	ORG	GRN								
			26	6								BLK	BLU		
			B	6										WHT/BLK	
SB10		12	1	6	RED	ORG	GRN								
			9	5 & 6				RED/BLK	ORG/BLK	GRN/BLK	BLK/WHT				
			27	4								BLK	BLU		
			B	4										WHT/BLK	
SB11		12	10	5 & 6				RED/BLK	ORG/BLK	GRN/BLK	BLK/WHT				
			B	6										WHT/BLK	
SB12		12	7	2	RED	ORG	GRN								
SB13		12	8	2	RED	ORG	GRN								
			28	4								BLK	BLU		
			B	4										WHT/BLK	
SB14		7	21	2								BLK	BLU		
			B	2										WHT/BLK	

EQUIPMENT GROUNDING CONDUCTOR 10 AWG GRN XLP	
FROM	TO
CB1	SB1
SB1	SB2
SB2	SB3
SB3	SB4
SB4	SB5
SB5	SB6
SB6	SB7
SB7	SB8
SB8	SB9
SB9	SB10
SB10	SB11
SB11	SB12
SB12	SB13
SB13	SB14
SB14	CB1

PULL BOX BONDING JUMPER 10 AWG GRN XLP	
FROM	TO
PB1	SB1
PB2	SB2
PB3	SB3
PB4	SB4
PB5	SB5
PB6	SB6
PB7	SB7
PB8	SB8
PB9	SB9
PB10	SB10
PB11	SB11
PB12	SB12
PB13	SB14
PB14	SB14

LIGHTING UF 10 AWG W/ GROUND	
CB1	SB3
SB3	SB5
CB1	SB12
SB12	SB8

VIDEO DETECTION CABLE	
CB1	SB12 (V1)
CB1	SB5 (V2)
CB1	SB3 (V3)
CB1	SB8 (V4)

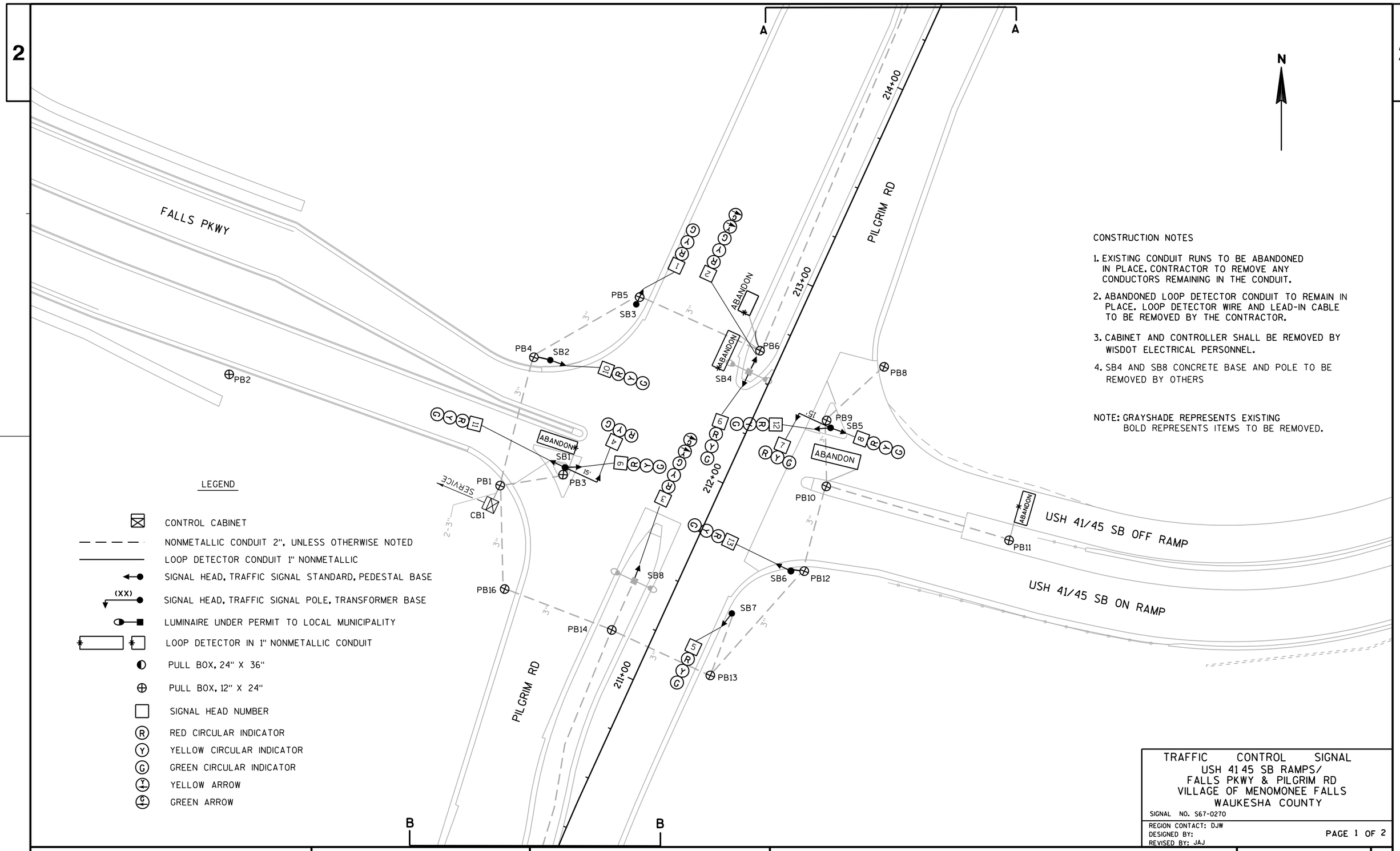
NOTES:

USE WHITE CONDUCTOR IN THE SIGNAL CABLE AS THE GROUNDED CONDUCTOR FOR ALL TRAFFIC SIGNAL INDICATIONS.
ENSURE THE GROUNDED CONDUCTOR IN THE FEEDER CABLE AND THE POLE CABLES ARE BOTH 18" LONGER THAN THE UNGROUNDED CONDUCTORS.
AT THE SIGNAL BASES, CONNECT ON TERMINAL FROM THE PEDESTRIAN PUSH BUTTONS TO THE COLOR INDICATED IN THE CHART. CONNECT THE OTHER TERMINAL TO THE GROUNDED CONDUCTOR.

TRAFFIC CONTROL SIGNAL
PILGRIM ROAD (CTH YY) &
MEGAL DRIVE/MEGAL COURT
VILLAGE OF MENOMONEE FALLS
WAUKESHA COUNTY

SIGNAL NO. XXX

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CONSTRUCTION NOTES

1. EXISTING CONDUIT RUNS TO BE ABANDONED IN PLACE. CONTRACTOR TO REMOVE ANY CONDUCTORS REMAINING IN THE CONDUIT.
2. ABANDONED LOOP DETECTOR CONDUIT TO REMAIN IN PLACE. LOOP DETECTOR WIRE AND LEAD-IN CABLE TO BE REMOVED BY THE CONTRACTOR.
3. CABINET AND CONTROLLER SHALL BE REMOVED BY WISDOT ELECTRICAL PERSONNEL.
4. SB4 AND SB8 CONCRETE BASE AND POLE TO BE REMOVED BY OTHERS

NOTE: GRAYSHADE REPRESENTS EXISTING
BOLD REPRESENTS ITEMS TO BE REMOVED.

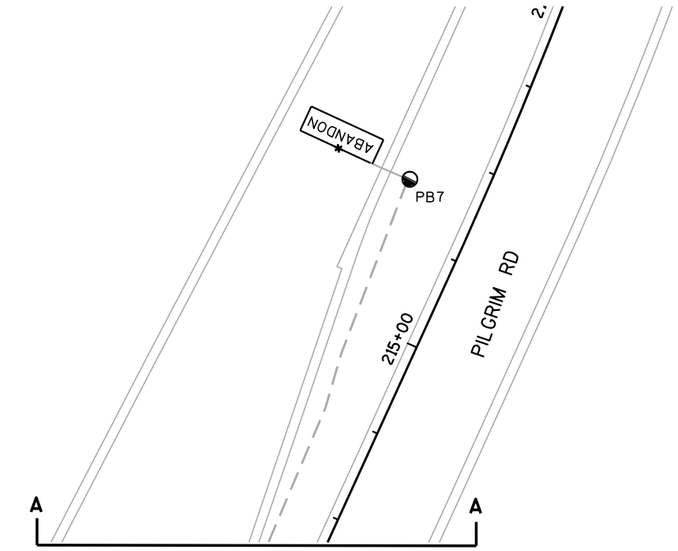
TRAFFIC CONTROL SIGNAL
USH 41 45 SB RAMPS/
FALLS PKWY & PILGRIM RD
VILLAGE OF MENOMONEE FALLS
WAUKESHA COUNTY

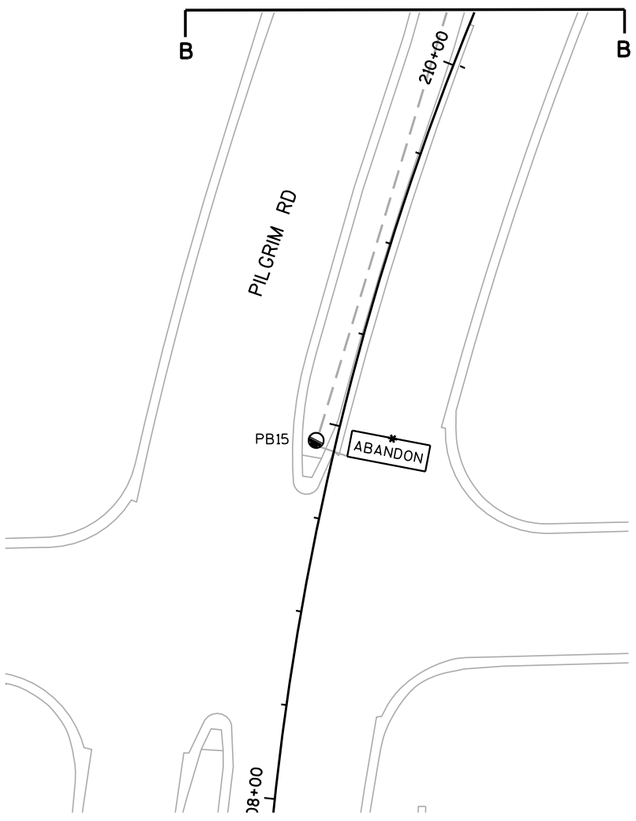
SIGNAL NO. S67-0270

REGION CONTACT: DJW
DESIGNED BY:
REVISED BY: JAJ

PAGE 1 OF 2

PROJECT NO: 2782-12-70	HWY: USH 41/45	COUNTY: WAUKESHA	TRAFFIC SIGNAL REMOVAL PLAN	SHEET 262 E





N

TRAFFIC CONTROL SIGNAL
USH 41 45 SB RAMPS/
FALLS PKWY & PILGRIM RD
VILLAGE OF MENOMONEE FALLS
WAUKESHA COUNTY

SIGNAL NO. S67-0270

REGION CONTACT: DJW
DESIGNED BY:
REVISED BY: JAJ

PAGE 2 OF 2

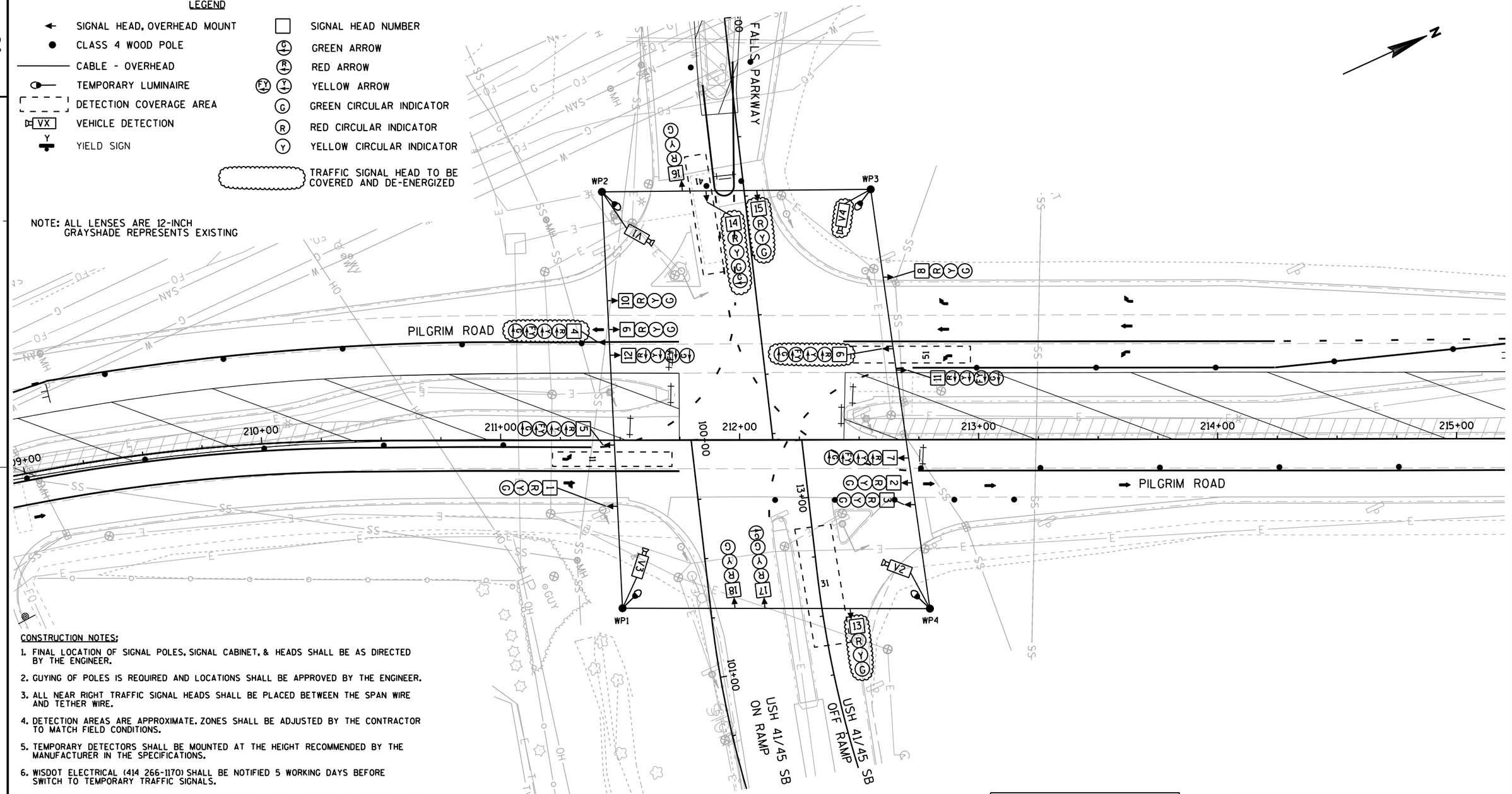
PROJECT NO: 2782-12-70	HWY: USH 41/45	COUNTY: WAUKESHA	TRAFFIC SIGNAL REMOVAL PLAN	SHEET 263	E

2

LEGEND

- SIGNAL HEAD, OVERHEAD MOUNT
- CLASS 4 WOOD POLE
- CABLE - OVERHEAD
- TEMPORARY LUMINAIRE
- DETECTION COVERAGE AREA
- VX VEHICLE DETECTION
- Y YIELD SIGN
- SIGNAL HEAD NUMBER
- G GREEN ARROW
- R RED ARROW
- FY Y YELLOW ARROW
- G GREEN CIRCULAR INDICATOR
- R RED CIRCULAR INDICATOR
- Y YELLOW CIRCULAR INDICATOR
- TRAFFIC SIGNAL HEAD TO BE COVERED AND DE-ENERGIZED

NOTE: ALL LENSES ARE 12-INCH
GRAYSHADE REPRESENTS EXISTING



CONSTRUCTION NOTES;

1. FINAL LOCATION OF SIGNAL POLES, SIGNAL CABINET, & HEADS SHALL BE AS DIRECTED BY THE ENGINEER.
2. GUYING OF POLES IS REQUIRED AND LOCATIONS SHALL BE APPROVED BY THE ENGINEER.
3. ALL NEAR RIGHT TRAFFIC SIGNAL HEADS SHALL BE PLACED BETWEEN THE SPAN WIRE AND TETHER WIRE.
4. DETECTION AREAS ARE APPROXIMATE. ZONES SHALL BE ADJUSTED BY THE CONTRACTOR TO MATCH FIELD CONDITIONS.
5. TEMPORARY DETECTORS SHALL BE MOUNTED AT THE HEIGHT RECOMMENDED BY THE MANUFACTURER IN THE SPECIFICATIONS.
6. WISDOT ELECTRICAL (414 266-1170) SHALL BE NOTIFIED 5 WORKING DAYS BEFORE SWITCH TO TEMPORARY TRAFFIC SIGNALS.
7. THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.
8. ALL EXISTING SIGNAL HEADS SHALL BE REMOVED, COVERED, OR TURNED AWAY FROM TRAFFIC IMMEDIATELY AFTER TURNING ON TEMPORARY SIGNALS.
9. POLES AND POSTS INSTALLED BEHIND CURBS SHALL BE OFFSET A MINIMUM OF 2 FEET FROM THE FACE OF CURB TO THE SIDE OF THE POLE OR POST.
10. ADJUST TEMPORARY SIGNALS WITHIN EACH CONSTRUCTION STAGE AS DIRECTED BY THE ENGINEER TO MAINTAIN MUTCD SIGNAL REQUIREMENTS.
11. WOOD POLES LONGER THAN 45-FEET MAY BE NECESSARY DUE TO ELEVATION DIFFERENCES.

SUMMARY	
SPAN WIRE	595 LF
WOOD POLES	4 EA
SIGNAL HEADS	26 EA
LUMINAIRES (250W)	4 EA
LUMINAIRE ARMS	4 EA
VEHICLE DETECTION	4 EA
TEMPORARY SIGNAL CABINET AND CONTROLLER	1 EA

TRAFFIC CONTROL SIGNAL

USH 41/45 SB RAMPS/FALLS PKWY
& PILGRIM RD
VILLAGE OF MENOMONEE FALLS
WAUKESHA COUNTY

SIGNAL NO. S67-0270

REGION CONTACT: D. WOLFORD
DESIGNED BY: C. VANDE LEEST
REVISED BY:

PAGE 1 OF 6

PROJECT NO: 2782-12-70	HWY: USH 41/45	COUNTY: WAUKESHA	TEMPORARY TRAFFIC SIGNAL PLAN - STAGE 1	SHEET 264	E

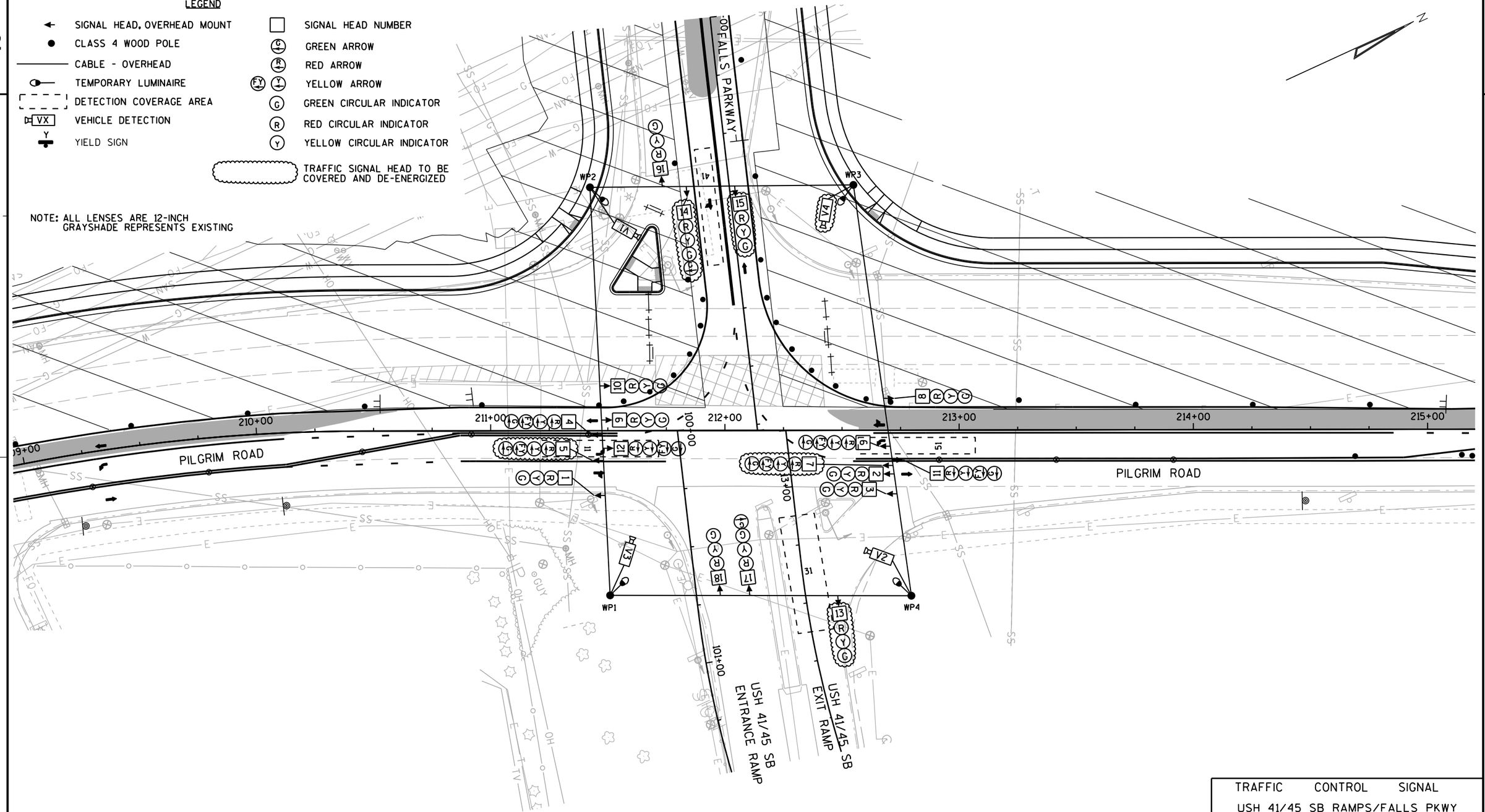
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2

LEGEND

- SIGNAL HEAD, OVERHEAD MOUNT
- CLASS 4 WOOD POLE
- CABLE - OVERHEAD
- TEMPORARY LUMINAIRE
- DETECTION COVERAGE AREA
- VX VEHICLE DETECTION
- Y YIELD SIGN
- SIGNAL HEAD NUMBER
- G GREEN ARROW
- R RED ARROW
- FY Y YELLOW ARROW
- G GREEN CIRCULAR INDICATOR
- R RED CIRCULAR INDICATOR
- Y YELLOW CIRCULAR INDICATOR
- TRAFFIC SIGNAL HEAD TO BE COVERED AND DE-ENERGIZED

NOTE: ALL LENSES ARE 12-INCH
GRAYSHADE REPRESENTS EXISTING



PROJECT NO: 2782-12-70	HWY: USH 41/45	COUNTY: WAUKESHA	TEMPORARY TRAFFIC SIGNAL PLAN - STAGE 2A	SHEET 265 E

TRAFFIC CONTROL SIGNAL

USH 41/45 SB RAMPS/FALLS PKWY
& PILGRIM RD
VILLAGE OF MENOMONEE FALLS
WAUKESHA COUNTY

SIGNAL NO. S67-0270

REGION CONTACT: D. WOLFORD
DESIGNED BY: C. VANDE LEEST
REVISED BY:

PAGE 2 OF 6

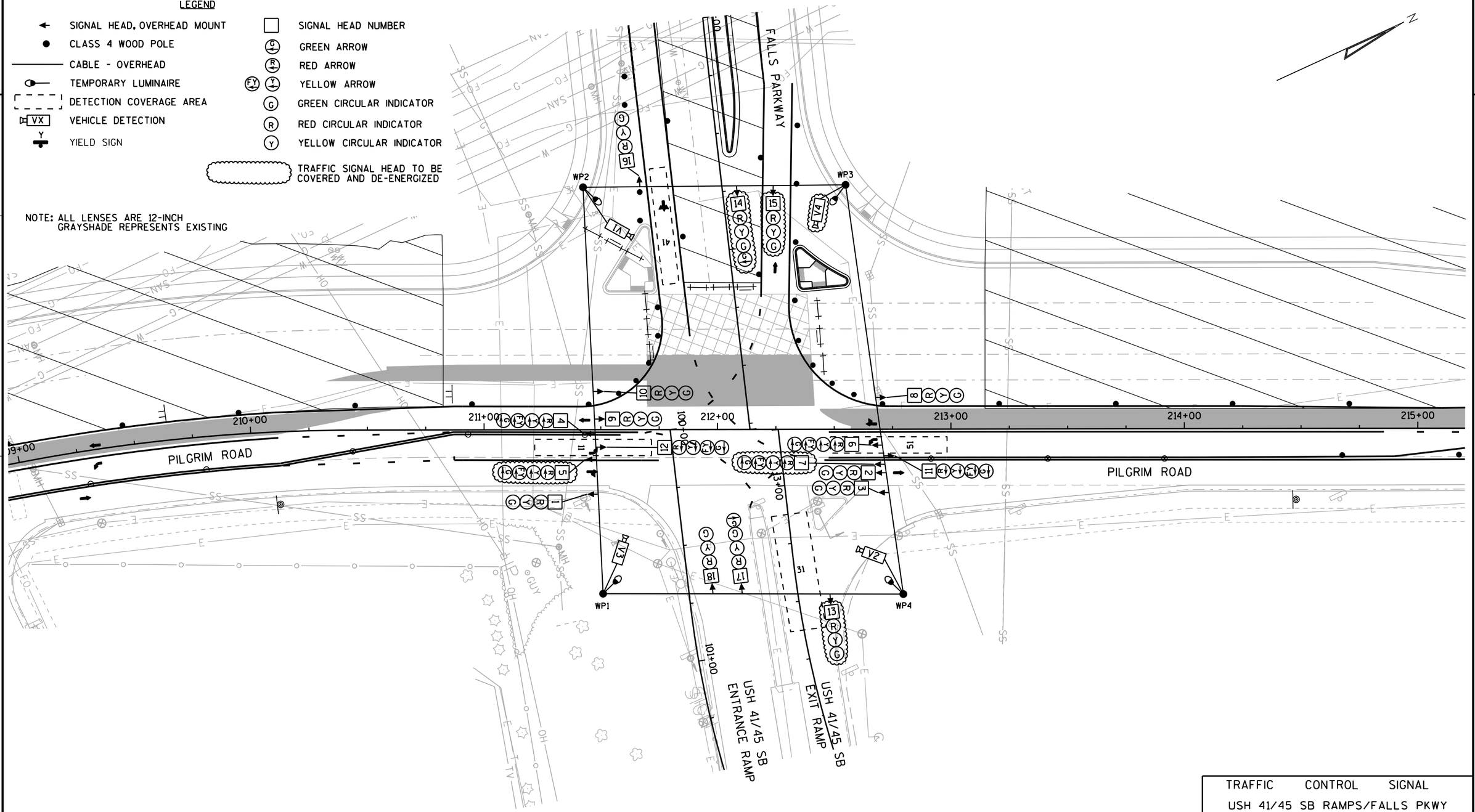
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WISDOT/CADDS SHEET 42

LEGEND

- SIGNAL HEAD, OVERHEAD MOUNT
- CLASS 4 WOOD POLE
- CABLE - OVERHEAD
- TEMPORARY LUMINAIRE
- DETECTION COVERAGE AREA
- VX — VEHICLE DETECTION
- Y — YIELD SIGN
- SIGNAL HEAD NUMBER
- G — GREEN ARROW
- R — RED ARROW
- FY / Y — YELLOW ARROW
- G — GREEN CIRCULAR INDICATOR
- R — RED CIRCULAR INDICATOR
- Y — YELLOW CIRCULAR INDICATOR
- TRAFFIC SIGNAL HEAD TO BE COVERED AND DE-ENERGIZED

NOTE: ALL LENSES ARE 12-INCH
GRAYSHADE REPRESENTS EXISTING



TRAFFIC CONTROL SIGNAL

USH 41/45 SB RAMPS/FALLS PKWY
& PILGRIM RD
VILLAGE OF MENOMONEE FALLS
WAUKESHA COUNTY

SIGNAL NO. S67-0270

REGION CONTACT: D. WOLFORD
DESIGNED BY: C. VANDE LEEST
REVISED BY:

PAGE 3 OF 6

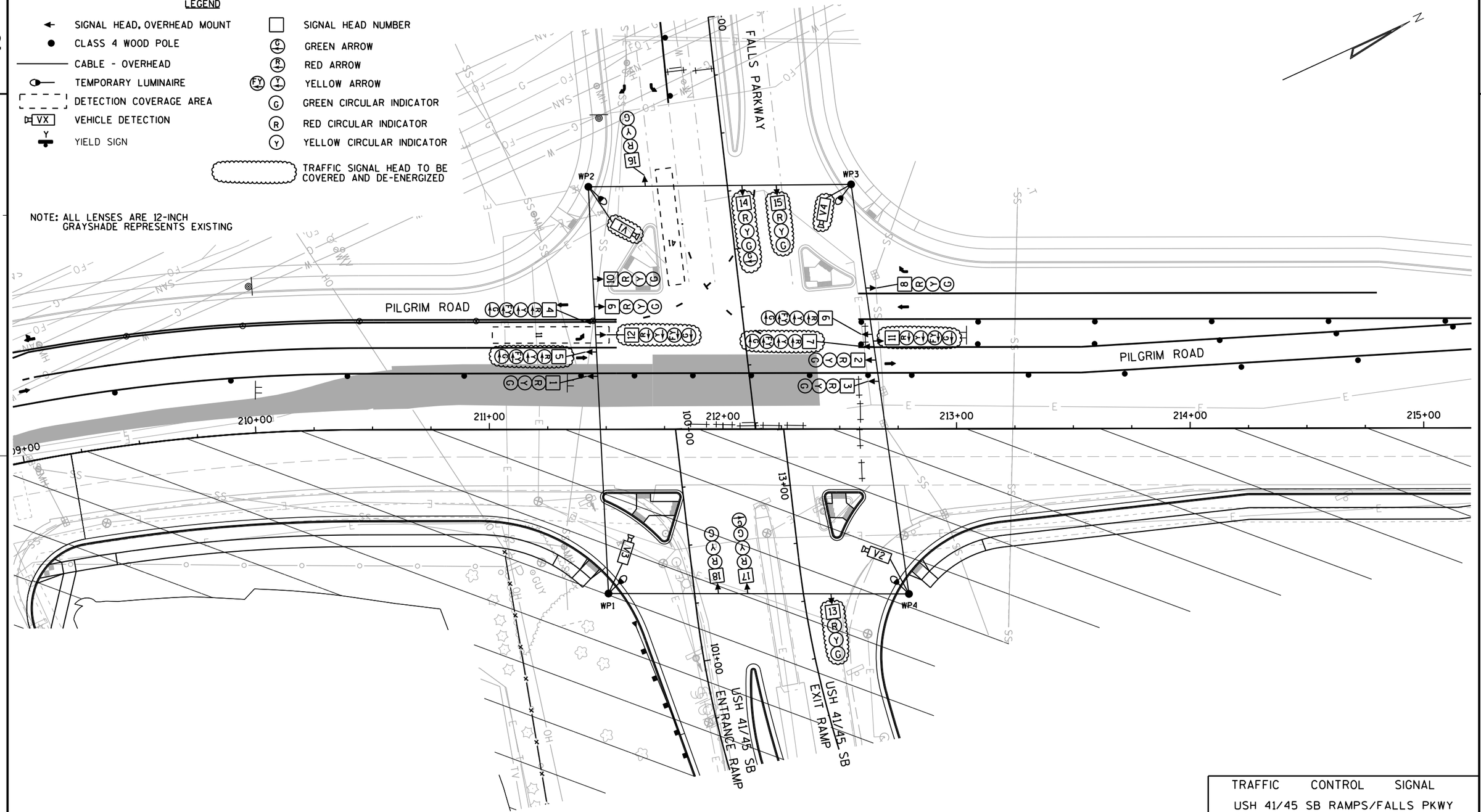
PROJECT NO: 2782-12-70	HWY: USH 41/45	COUNTY: WAUKESHA	TEMPORARY TRAFFIC SIGNAL PLAN - STAGE 2B	SHEET	E

FILE NAME : J:\projects\d2_27821241\SIG\Temps\S0270\024001_sp_s2b.dgn PLOT DATE : 29-OCT-2014 09:12 PLOT BY : dotcmv PLOT NAME : PLOT SCALE : 40:1

LEGEND

- SIGNAL HEAD, OVERHEAD MOUNT
- CLASS 4 WOOD POLE
- CABLE - OVERHEAD
- TEMPORARY LUMINAIRE
- DETECTION COVERAGE AREA
- VX — VEHICLE DETECTION
- Y — YIELD SIGN
- SIGNAL HEAD NUMBER
- G — GREEN ARROW
- R — RED ARROW
- FY / Y — YELLOW ARROW
- G — GREEN CIRCULAR INDICATOR
- R — RED CIRCULAR INDICATOR
- Y — YELLOW CIRCULAR INDICATOR
- TRAFFIC SIGNAL HEAD TO BE COVERED AND DE-ENERGIZED

NOTE: ALL LENSES ARE 12-INCH
GRAYSHADE REPRESENTS EXISTING



TRAFFIC CONTROL SIGNAL

USH 41/45 SB RAMPS/FALLS PKWY
& PILGRIM RD
VILLAGE OF MENOMONEE FALLS
WAUKESHA COUNTY

SIGNAL NO. S67-0270

REGION CONTACT: D. WOLFORD
DESIGNED BY: C. VANDE LEEST
REVISED BY:

PAGE 4 OF 6

PROJECT NO: 2782-12-70	HWY: USH 41/45	COUNTY: WAUKESHA	TEMPORARY TRAFFIC SIGNAL PLAN - STAGE 3A & 3B	SHEET 267 E

FILE NAME : J:\projects\d2_27821241\SIG\Temps\S0270\024001_sp_s3ab.dgn PLOT DATE : 29-OCT-2014 09:12 PLOT BY : dotcmv PLOT NAME : PLOT SCALE : 40:1

2

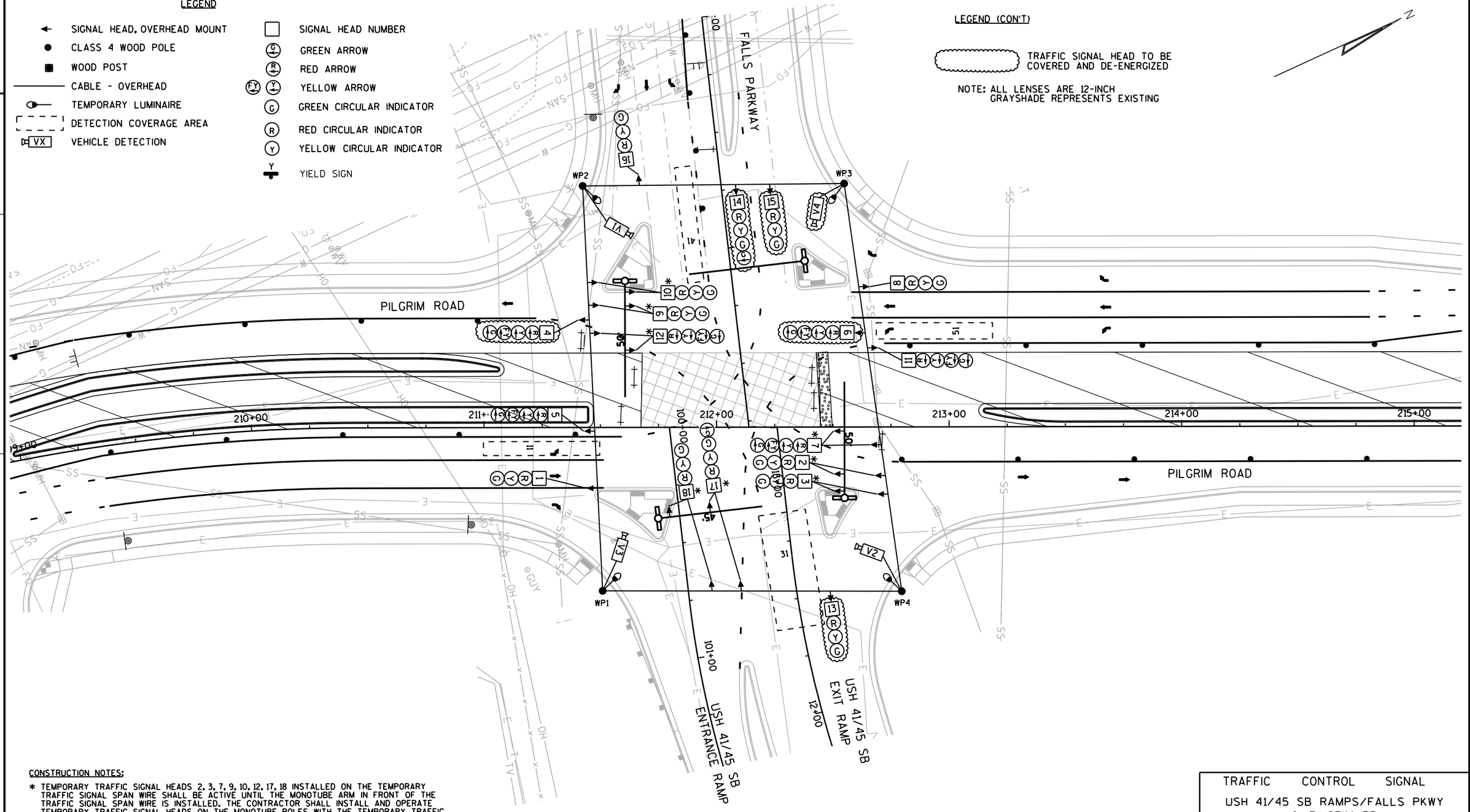
LEGEND

- SIGNAL HEAD, OVERHEAD MOUNT
- CLASS 4 WOOD POLE
- WOOD POST
- CABLE - OVERHEAD
- TEMPORARY LUMINAIRE
- DETECTION COVERAGE AREA
- VX VEHICLE DETECTION
- SIGNAL HEAD NUMBER
- GREEN ARROW
- RED ARROW
- YELLOW ARROW
- GREEN CIRCULAR INDICATOR
- RED CIRCULAR INDICATOR
- YELLOW CIRCULAR INDICATOR
- YIELD SIGN

LEGEND (CON'T)

- TRAFFIC SIGNAL HEAD TO BE COVERED AND DE-ENERGIZED

NOTE: ALL LENSES ARE 12-INCH GRAYSHADE REPRESENTS EXISTING



CONSTRUCTION NOTES:

* TEMPORARY TRAFFIC SIGNAL HEADS 2, 3, 7, 9, 10, 12, 17, 18 INSTALLED ON THE TEMPORARY TRAFFIC SIGNAL SPAN WIRE SHALL BE ACTIVE UNTIL THE MONOTUBE ARM IN FRONT OF THE TRAFFIC SIGNAL SPAN WIRE IS INSTALLED. THE CONTRACTOR SHALL INSTALL AND OPERATE TEMPORARY TRAFFIC SIGNAL HEADS ON THE MONOTUBE POLES WITH THE TEMPORARY TRAFFIC SIGNAL INSTALLATION ONCE THE MONOTUBE ARM IS INSTALLED IN FRONT OF THE TEMPORARY TRAFFIC SIGNAL SPAN WIRE. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE MOST APPROPRIATE METHOD TO FEED THE TEMPORARY TRAFFIC SIGNAL HEADS BEING USED WITH THE TEMPORARY TRAFFIC SIGNAL INSTALLATION. THE CONTRACTOR SHALL NOT DRILL ADDITIONAL HOLES INTO THE MONOTUBE ARMS TO FEED THE SIGNAL HEADS. THE CONTRACTOR SHALL HAVE THE TRAFFIC SIGNAL HEADS ON THE MONOTUBE TRAFFIC SIGNALS OPERATIONAL WITH THE TEMPORARY TRAFFIC SIGNAL WITHIN 2 HOURS OF THE MONOTUBE INSTALLATION.

TRAFFIC CONTROL SIGNAL

USH 41/45 SB RAMPS/FALLS PKWY
& PILGRIM RD
VILLAGE OF MENOMONEE FALLS
WAUKESHA COUNTY

SIGNAL NO. S67-0270

REGION CONTACT: D. WOLFORD
DESIGNED BY: C. VANDE LEEST
REVISED BY:

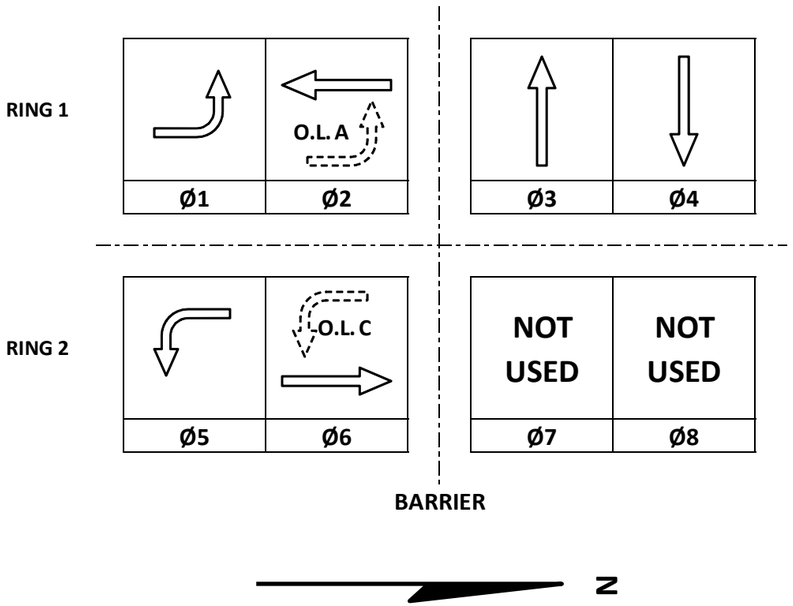
PAGE 5 OF 6

PROJECT NO: 2782-12-70	HWY: USH 41/45	COUNTY: WAUKESHA	TEMPORARY TRAFFIC SIGNAL PLAN - STAGE 4	SHEET 268 E

FILE NAME : J:\projects\d2_27821241\SIG\Temps\S0270\024001_sp_s4.dgn PLOT DATE : 30-OCT-2014 08:00 PLOT BY : dotcmv PLOT NAME : PLOT SCALE : 40:1

WISDOT/CADDS SHEET 42

	HEAD NUMBERS	FLASH
Ø1	4,5,6,7	-
Ø2	8,9,10	R
Ø3	13,14,15	R
Ø4	16,17,18	R
Ø5	11,12	-
Ø6	1,2,3	R
Ø7		
Ø8		
Ø2P		
Ø4P		
Ø6P		
Ø8P		
OLA	4,5,6,7	R ←
OLB		
OLC	11,12	R ←
OLD		



DETECTOR LOGIC

DETECTOR NUMBER	AMPLIFIER CHANNEL	DETECTOR OPERATION			PHASE CALLED	PHASE EXTENDED	DETECTOR DISCONNECT PHASE	CALLING DELAY	EXTENSION STRETCH	SIZE	NUMBER OF TURNS
		CALLS AND EXTENDS	CALLS ONLY	EXTENDS ONLY							
11		X			1	1					
31		X			3	3					
41		X			4	4					
51		X			5	5					

CONTROLLER LOGIC

PHASE NUMBER	PHASE LOCKING	DUAL ENTRY W / Ø	PHASE RECALL	PHASE ACTIVE
1		6		X
2	X	6	MAX	X
3				X
4				X
5		2		X
6	X	2	MAX	X
7				
8				

TYPE OF INTERCONNECT/COMMUNICATION	
NONE	X
CLOSED LOOP	
TWISTED PAIR	
FIBER OPTIC*	
FIBER OPTIC (ETHERNET)	
RADIO	
CELL MODEM	

TYPE OF COORDINATION	
NONE	
TBC	X
TRAFFIC RESPONSIVE	
ADAPTIVE	
*LOCATION OF MASTER CONTROLLER NO:	S-
SIGNAL SYSTEM NO:	SS- 01-78

TYPE OF LIGHTING	
BY OTHER AGENCY	
IN TRAFFIC CABINET	X
IN SEPARATE DOT LIGHTING CABINET	

TYPE OF PRE-EMPT	
NONE	X
RAILROAD	
EMERGENCY VEHICLE	
GTT	
TOMAR	
HARDWIRE	
OTHER	
LIFT BRIDGE	
QUEUE DETECTION	

USH 41/45 SB RAMPS/FALLS PKWY

VILLAGE OF MENOMONEE FALLS

WAUKESHA COUNTY

SIGNAL NO: S67-0270 CABINET TYPE:

CONTROLLER TYPE:

DATE: 10/14 PAGE NO. 6 OF 6

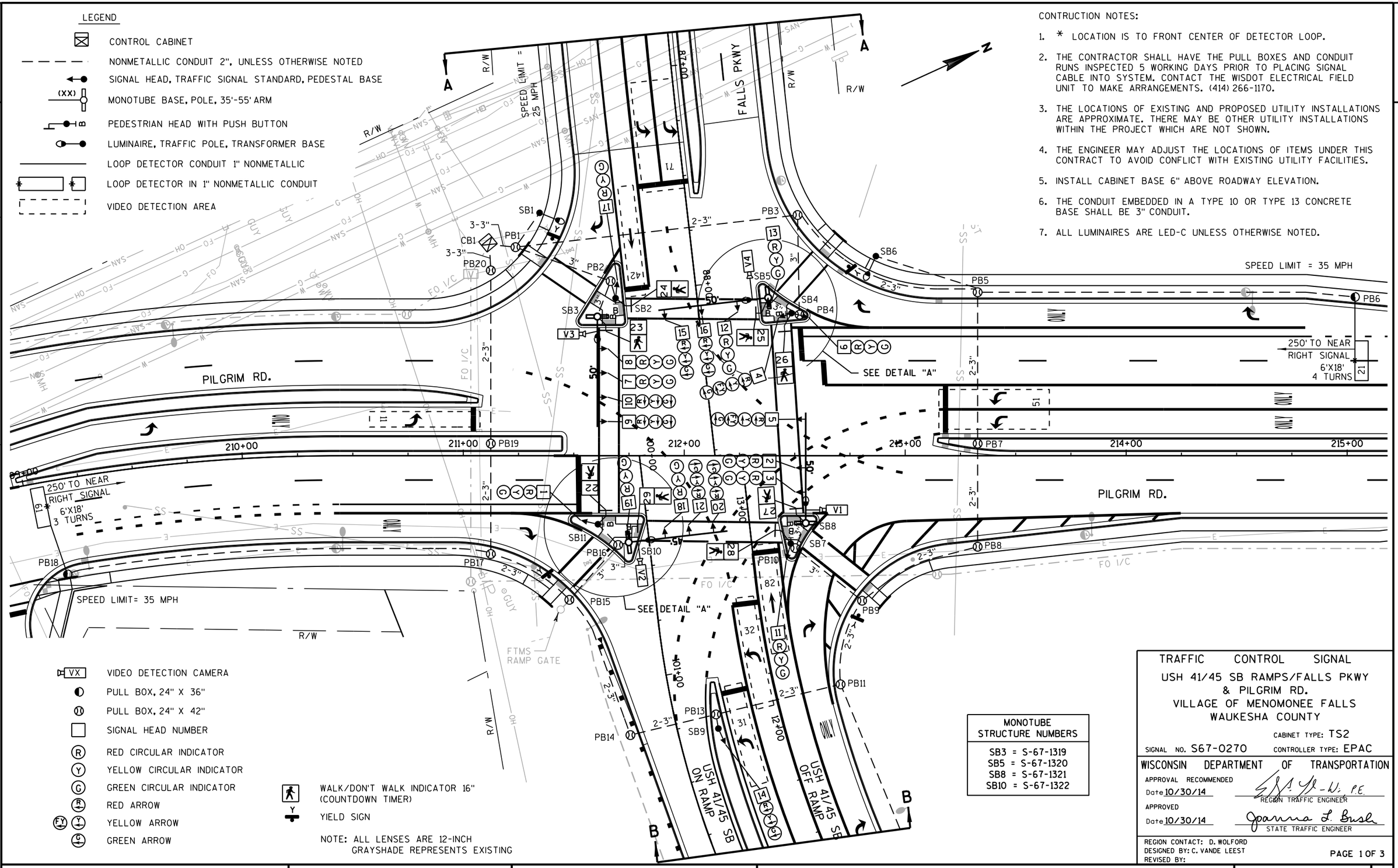
PROJECT NO: 2782-12-70	HWY: USH 41/45	COUNTY: WAUKESHA	TEMPORARY SEQUENCE OF OPERATIONS – ALL STAGES	SHEET NO: 269	E

LEGEND

- CONTROL CABINET
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
- (XX) MONOTUBE BASE, POLE, 35'-55' ARM
- PEDESTRIAN HEAD WITH PUSH BUTTON
- LUMINAIRE, TRAFFIC POLE, TRANSFORMER BASE
- LOOP DETECTOR CONDUIT 1" NONMETALLIC
- LOOP DETECTOR IN 1" NONMETALLIC CONDUIT
- VIDEO DETECTION AREA

CONTRUCTION NOTES:

1. * LOCATION IS TO FRONT CENTER OF DETECTOR LOOP.
2. THE CONTRACTOR SHALL HAVE THE PULL BOXES AND CONDUIT RUNS INSPECTED 5 WORKING DAYS PRIOR TO PLACING SIGNAL CABLE INTO SYSTEM. CONTACT THE WISDOT ELECTRICAL FIELD UNIT TO MAKE ARRANGEMENTS. (414) 266-1170.
3. THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.
4. THE ENGINEER MAY ADJUST THE LOCATIONS OF ITEMS UNDER THIS CONTRACT TO AVOID CONFLICT WITH EXISTING UTILITY FACILITIES.
5. INSTALL CABINET BASE 6" ABOVE ROADWAY ELEVATION.
6. THE CONDUIT EMBEDDED IN A TYPE 10 OR TYPE 13 CONCRETE BASE SHALL BE 3" CONDUIT.
7. ALL LUMINAIRES ARE LED-C UNLESS OTHERWISE NOTED.



- VX VIDEO DETECTION CAMERA
- PULL BOX, 24" X 36"
- PULL BOX, 24" X 42"
- SIGNAL HEAD NUMBER
- (R) RED CIRCULAR INDICATOR
- (Y) YELLOW CIRCULAR INDICATOR
- (G) GREEN CIRCULAR INDICATOR
- (R) RED ARROW
- (FY) (Y) YELLOW ARROW
- (G) GREEN ARROW

- WALK/DON'T WALK INDICATOR 16" (COUNTDOWN TIMER)
- Y YIELD SIGN

NOTE: ALL LENSES ARE 12-INCH
GRAYSHADE REPRESENTS EXISTING

MONOTUBE STRUCTURE NUMBERS
SB3 = S-67-1319
SB5 = S-67-1320
SB8 = S-67-1321
SB10 = S-67-1322

TRAFFIC CONTROL SIGNAL

USH 41/45 SB RAMPS/FALLS PKWY
& PILGRIM RD.
VILLAGE OF MENOMONEE FALLS
WAUKESHA COUNTY

CABINET TYPE: TS2
SIGNAL NO. S67-0270 CONTROLLER TYPE: EPAC

WISCONSIN DEPARTMENT OF TRANSPORTATION

APPROVAL RECOMMENDED
Date 10/30/14 REGION TRAFFIC ENGINEER

APPROVED
Date 10/30/14 STATE TRAFFIC ENGINEER

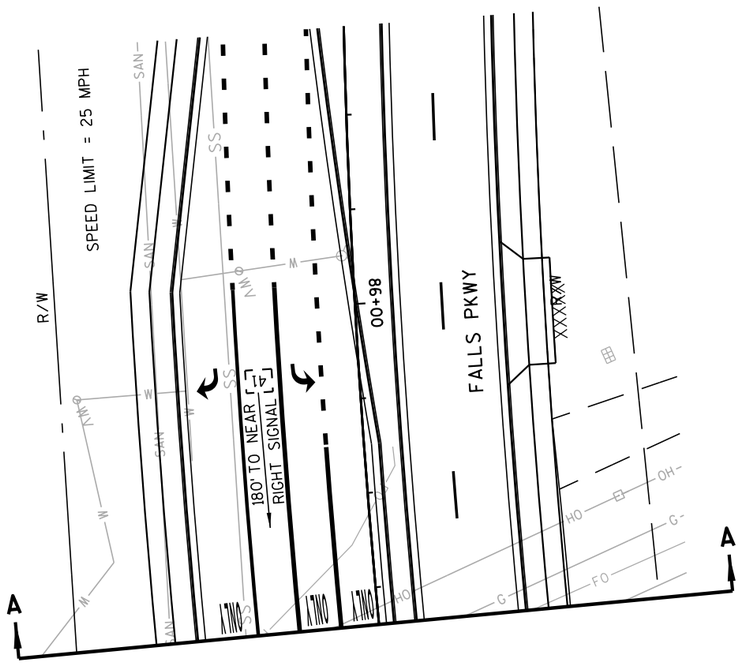
REGION CONTACT: D. WOLFORD
DESIGNED BY: C. VANDE LEEST
REVISED BY:

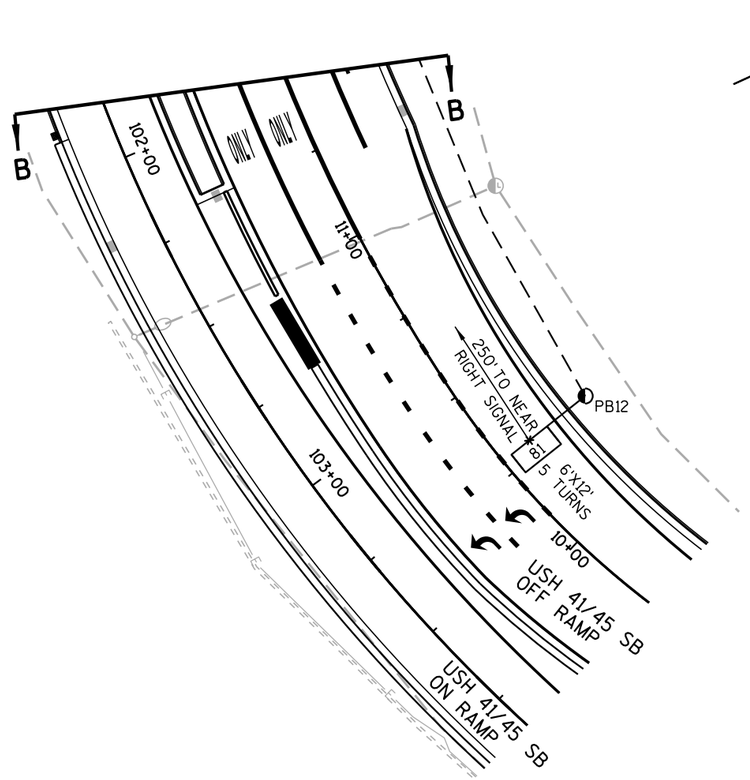
PAGE 1 OF 3

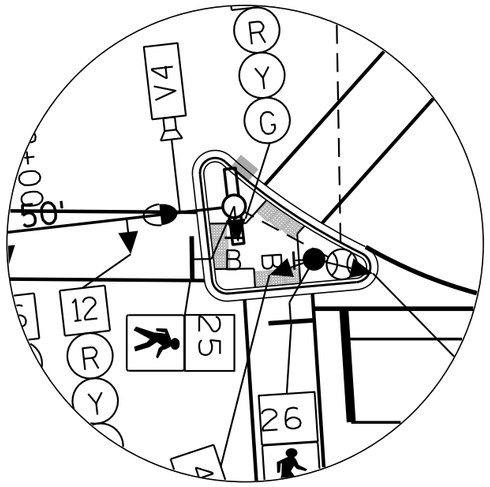
PROJECT NO: 2782-12-70	HWY: USH 41/45	COUNTY: WAUKESHA	TRAFFIC SIGNAL PLAN	SHEET 270 E

FILE NAME : J:\projects\d2_27821241\SIG\S0270.dgn PLOT DATE : 30-OCT-2014 07:19 PLOT BY : dotcmv PLOT NAME : PLOT SCALE : 40:1

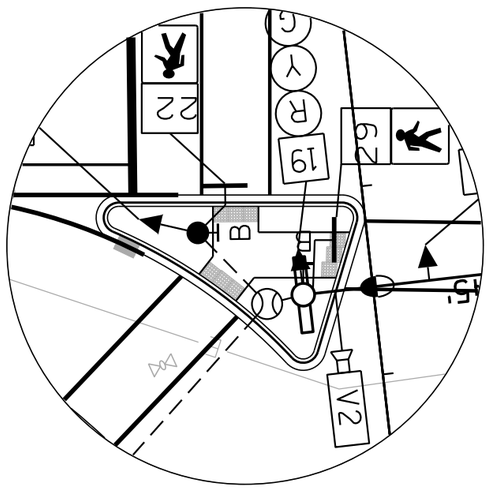
WISDOT/CADDS SHEET 42







DETAIL "A"



DETAIL "B"

TRAFFIC CONTROL SIGNAL

USH 41/45 SB RAMPS/FALLS PKWY
& PILGRIM RD.
VILLAGE OF MENOMONEE FALLS
WAUKESHA COUNTY

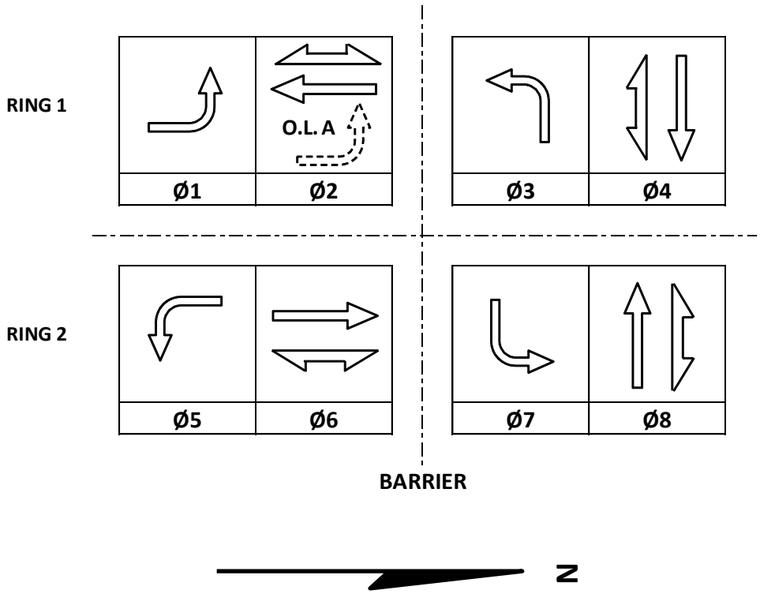
SIGNAL NO. S67-0270

REGION CONTACT: D. WOLFORD
DESIGNED BY: C. VANDE LEEST
REVISED BY:

PAGE 2 OF 3

PROJECT NO: 2782-12-70	HWY: USH 41/45	COUNTY: WAUKESHA	TRAFFIC SIGNAL PLAN	SHEET 271	E

	HEAD NUMBERS	FLASH
Ø1	4,5	-
Ø2	6,7,8	R
Ø3	14,15,16	R ←
Ø4	17,18,19	R
Ø5	9,10	R ←
Ø6	1,2,3	R
Ø7	20,21	R ←
Ø8	11,12,13	R
Ø2P	24,25	
Ø4P	22,23	
Ø6P	28,29	
Ø8P	26,27	
OLA	4,5	R ←
OLB		
OLC		
OLD		



CONTROLLER LOGIC

PHASE NUMBER	PHASE LOCKING	DUAL ENTRY W / Ø	PHASE RECALL	PHASE ACTIVE
1		6		X
2	X	6	MIN	X
3		8		X
4		8		X
5		2		X
6	X	2	MIN	X
7		4		X
8		4		X

TYPE OF INTERCONNECT/COMMUNICATION	
NONE	
CLOSED LOOP	
TWISTED PAIR	
FIBER OPTIC*	
FIBER OPTIC (ETHERNET)	X
RADIO	
CELL MODEM	

TYPE OF COORDINATION	
NONE	
TBC	X
TRAFFIC RESPONSIVE	
ADAPTIVE	
*LOCATION OF MASTER CONTROLLER NO:	S 67-0270
SIGNAL SYSTEM NO:	SS- 0178

TYPE OF LIGHTING	
BY OTHER AGENCY	
IN TRAFFIC CABINET	X
IN SEPARATE DOT LIGHTING CABINET	

TYPE OF PRE-EMPT	
NONE	X
RAILROAD	
EMERGENCY VEHICLE	
GTT	
TOMAR	
HARDWIRE	
OTHER	
LIFT BRIDGE	
QUEUE DETECTION	

DETECTOR LOGIC

DETECTOR INPUT	3	1	7	5	11	9	15	13	19	17	23	21	27	25	31	29	DETECTOR INPUT
PLAN LOOP DETECTOR*(S)	21	81							11	32	42	71					PLAN LOOP DETECTOR*(S)
ASSIGNED PHASE	2	8							1	3	4	7					ASSIGNED PHASE
OPERATION MODE	VEH	VEH							VEH	VEH	VEH	VEH					OPERATION MODE
SWITCH									2								SWITCH
EXTEND		X															EXTEND
DELAY		X															DELAY

DETECTOR INPUT	4	2	8	6	12	10	16	14	20	18	24	22	28	26	32	30	DETECTOR INPUT
PLAN LOOP DETECTOR*(S)	61								31	41	51	82					PLAN LOOP DETECTOR*(S)
ASSIGNED PHASE	6								3	4	5	8					ASSIGNED PHASE
OPERATION MODE	VEH								VEH	VEH	VEH	VEH					OPERATION MODE
SWITCH																	SWITCH
EXTEND										X							EXTEND
DELAY										X							DELAY

USH 41/45 SB RAMPS/FALLS PKWY & PILGRIM RD.
VILLAGE OF MENOMONEE FALLS
WAUKESHA COUNTY

SIGNAL NO: S67-0270 CABINET TYPE: TS2
CONTROLLER TYPE: EPAC
DATE: 10/14 PAGE NO. 3 OF 3

PROJECT NO: 2782-12-70	HWY: USH 41/45	COUNTY: WAUKESHA	SEQUENCE OF OPERATIONS	SHEET NO: 272	E

PROJECT ID:	2782-12-70
INTERSECTION:	USH 41/45 SB Ramps/Falls Pkwy & Pilgrim Rd

Signal Wire Color Coding	BLK - black	RED - red	GRN - green
	WHT - white	BLU - blue	ORG - orange

CB1 TO	AWG14 # OF CONDUCTORS	HEAD NO.	SIGNAL INDICATION WIRE COLOR									PED BUTTON
			RED	YELLOW	GREEN	<RED>	<YELLOW>	<GREEN>	<FLASHING YELLOW>	D/WALK	WALK	
SB2	12	17	RED	ORG	GRN							
		24								BLK	BLU	
		BUTTON										WHT/BLK
SB3	12	7	RED	ORG	GRN							
		8	RED	ORG	GRN							
		9				RED/BLK	ORG/BLK	GRN/BLK				
		10				RED/BLK	ORG/BLK	GRN/BLK				
		23								BLK	BLU	
		BUTTON										WHT/BLK
SB4	12	4				RED	ORG	GRN	BLK/WHT			
		6	RED/BLK	ORG/BLK	GRN/BLK							
		26								BLK	BLU	
		BUTTON										WHT/BLK
SB5	12	12	RED	ORG	GRN							
		13	RED	ORG	GRN							
		15				RED/BLK	ORG/BLK	GRN/BLK				
		16				RED/BLK	ORG/BLK	GRN/BLK				
		25								BLK	BLU	
		BUTTON										WHT/BLK
SB7	12	11	RED	ORG	GRN							
		28								BLK	BLU	
		BUTTON										WHT/BLK
SB8	12	2	RED	ORG	GRN							
		3	RED	ORG	GRN							
		5				RED/BLK	ORG/BLK	GRN/BLK	BLK/WHT			
		27								BLK	BLU	
		BUTTON										WHT/BLK
SB9	7	14				RED	ORG	GRN				
SB10	12	18	RED	ORG	GRN							
		19	RED	ORG	GRN							
		20				RED/BLK	ORG/BLK	GRN/BLK				
		21				RED/BLK	ORG/BLK	GRN/BLK				
		29								BLK	BLU	
		BUTTON										WHT/BLK
SB11	12	1	RED	ORG	GRN							
		22								BLK	BLU	
		BUTTON										WHT/BLK

Equipment grounding conductor 10 AWG Green XLP	
From	TO
CB1	SB2
SB2	SB3
SB3	SB4
SB4	SB5
SB5	SB7
SB7	SB8
SB8	SB9
SB9	SB10
SB10	SB11
SB11	CB1

Pull Box Bonding Jumper 10 AWG Green XLP	
From	To
PB1	CB1
PB2	SB3
PB3	SB5
PB4	SB5
PB5	SB6
PB7	SB6
PB8	SB8
PB9	SB8
PB10	SB8
PB11	SB9
PB13	SB9
PB14	SB9
PB15	SB10
PB16	SB10
PB17	SB10
PB19	CB1
PB20	CB1

VIDEO DETECTION CABLE	
From	To
CB1	V1 (SB8)
CB1	V2 (SB10)
CB1	V3 (SB3)
CB1	V4 (SB5)

Lighting UF #12 w/ground	
From	To
CB1	SB1
SB1	SB3
SB1	SB5
SB5	SB6
SB6	SB8
CB1	SB10

*Use the white conductor in the cable assembly as the grounded conductor for all traffic signal indications
*Ensure the grounded conductor in the feeder cable and the pole cables are both 18" longer than the ungrounded conductors.
*At the signal bases, connect one terminal from the pedestrian push buttons to the color indicated in the chart. Connect the other terminal to the grounded conductor.
*Reconnect the grounding conductors wherever the circuit has been interrupted to ensure the grounding circuit is complete.

2

2

LEGEND

- CONTROL CABINET
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- LOOP DETECTOR CONDUIT 1" NONMETALLIC
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
- (XX) SIGNAL HEAD, TRAFFIC SIGNAL POLE, TRANSFORMER BASE
- LUMINAIRE UNDER PERMIT TO LOCAL MUNICIPALITY
- LOOP DETECTOR IN 1" NONMETALLIC CONDUIT
- PULL BOX, 24" X 36"
- PULL BOX, 12" X 24"
- SIGNAL HEAD NUMBER
- (R) RED CIRCULAR INDICATOR
- (Y) YELLOW CIRCULAR INDICATOR
- (G) GREEN CIRCULAR INDICATOR
- (Y) YELLOW ARROW
- (G) GREEN ARROW

N

CONSTRUCTION NOTES

1. EXISTING CONDUIT RUNS TO BE ABANDONED IN PLACE. CONTRACTOR TO REMOVE ANY CONDUCTORS REMAINING IN THE CONDUIT.
2. ABANDONED LOOP DETECTOR CONDUIT TO REMAIN PLACE. LOOP DETECTOR WIRE AND LEAD-IN CABLE TO BE REMOVED BY THE CONTRACTOR.
3. CABINET AND CONTROLLER SHALL BE REMOVED BY WISDOT ELECTRICAL PERSONNEL.
4. SB3 AND SB7 CONCRETE BASE AND POLE TO BE REMOVED BY OTHERS

NOTE: GRAYSHADE REPRESENTS EXISTING
BOLD REPRESENTS ITEMS TO BE REMOVED.

PB19 PB20 PB21 PB18 PB17 PB16 PB15 PB14 PB13 PB12 PB11 PB10 PB9 PB8 PB7 PB6 PB5 PB4 PB3 PB2 PB1

ABANDON

227+00 226+00 225+00 224+00

PILGRIM RD

USH 41/45 NB ON RAMP

USH 41/45 NB OFF RAMP

HARLEY DAVIDSON DRWY

CB1

SB1 SB2 SB3 SB4 SB5 SB6 SB7 SB8

15' 3"

A A

TRAFFIC CONTROL SIGNAL
USH 41 45 NB RAMPS/
PILGRIM RD & HARLEY DAVIDSON
VILLAGE OF MENOMONEE FALLS
WAUKESHA COUNTY

SIGNAL NO. S67-0271

REGION CONTACT: DJW
DESIGNED BY:
REVISED BY: JAJ

PAGE 1 OF 2

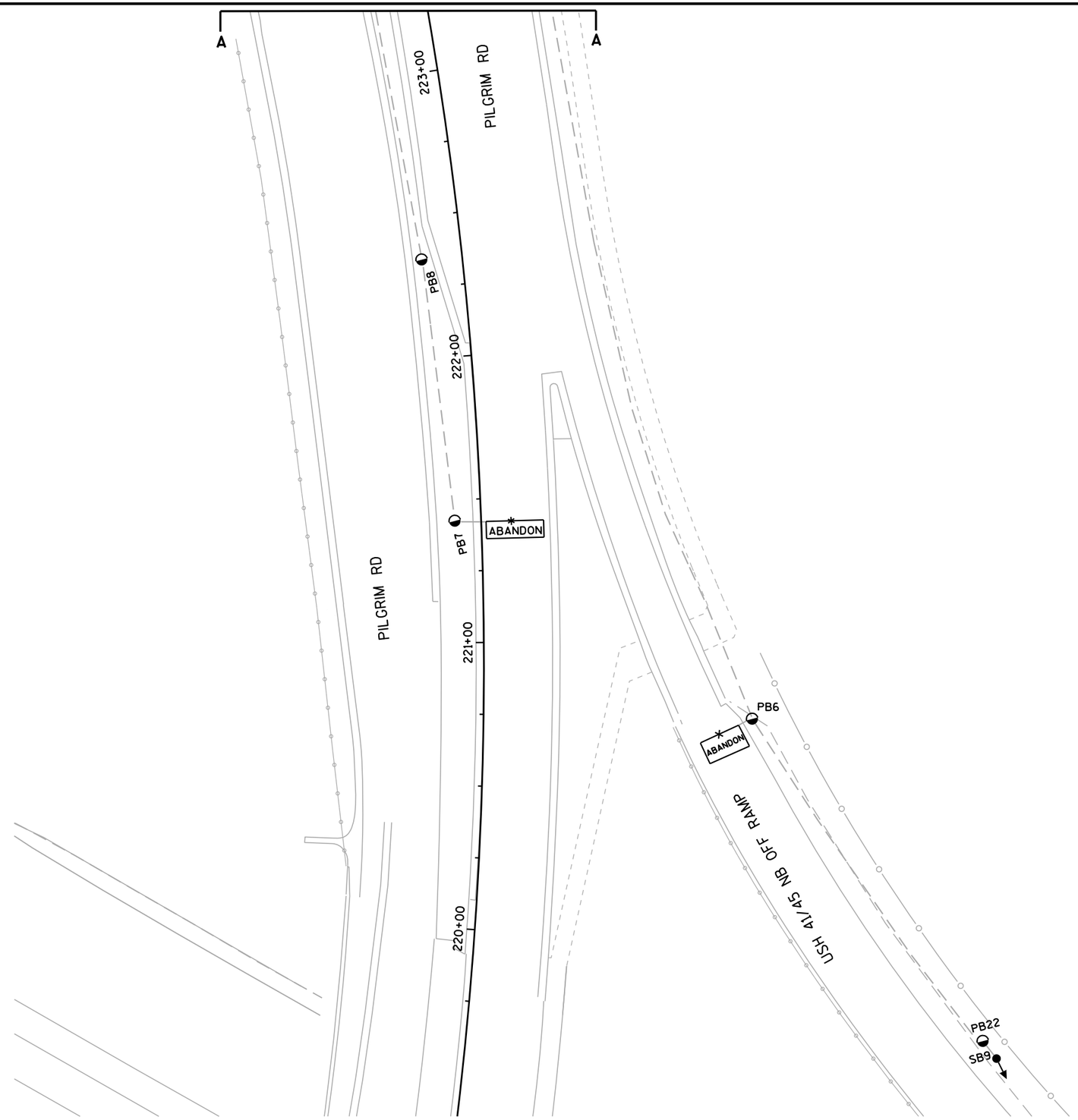
PROJECT NO: 2782-12-70	HWY: USH 41/45	COUNTY: WAUKESHA	TRAFFIC SIGNAL REMOVAL PLAN	SHEET 274 E

FILE NAME : J:\projects\d2_27821241\SIG\Removals\S67-0271_REM.DGN PLOT DATE : 28-OCT-2014 14:47 PLOT BY : dotcmv PLOT NAME : PLOT SCALE : 39.999767:1

WISDOT/CADDS SHEET 42

2

2



TRAFFIC CONTROL SIGNAL
USH 41 45 NB RAMPS/
PILGRIM RD & HARLEY DAVIDSON
VILLAGE OF MENOMONEE FALLS
WAUKESHA COUNTY

SIGNAL NO. S67-0271

REGION CONTACT: DJW
DESIGNED BY:
REVISED BY: JAJ

PAGE 2 OF 2

PROJECT NO: 2782-12-70	HWY: USH 41/45	COUNTY: WAUKESHA	TRAFFIC SIGNAL REMOVAL PLAN	SHEET 275	E

FILE NAME : J:\projects\d2_27821241\SIG\Removals\S67-0271_REM.DGN PLOT DATE : 28-OCT-2014 14:47 PLOT BY : dotcmv PLOT NAME : PLOT SCALE : 39.999767:1

WISDOT/CADDS SHEET 42

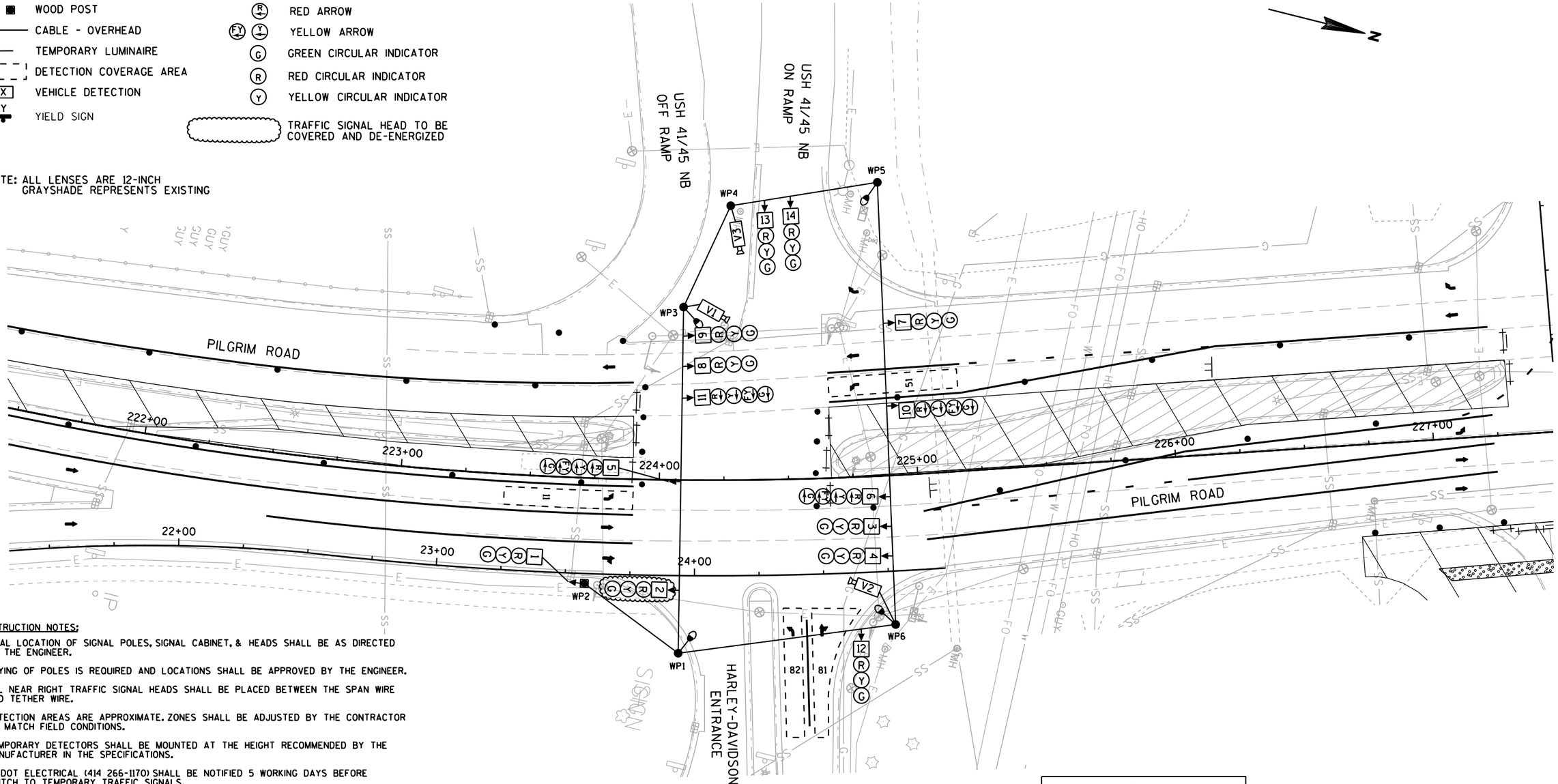
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2

LEGEND

- SIGNAL HEAD, OVERHEAD MOUNT
- CLASS 4 WOOD POLE
- WOOD POST
- CABLE - OVERHEAD
- TEMPORARY LUMINAIRE
- DETECTION COVERAGE AREA
- VX VEHICLE DETECTION
- Y YIELD SIGN
- SIGNAL HEAD NUMBER
- G GREEN ARROW
- R RED ARROW
- FY Y YELLOW ARROW
- G GREEN CIRCULAR INDICATOR
- R RED CIRCULAR INDICATOR
- Y YELLOW CIRCULAR INDICATOR
- TRAFFIC SIGNAL HEAD TO BE COVERED AND DE-ENERGIZED

NOTE: ALL LENSES ARE 12-INCH
GRAYSHADE REPRESENTS EXISTING



CONSTRUCTION NOTES;

1. FINAL LOCATION OF SIGNAL POLES, SIGNAL CABINET, & HEADS SHALL BE AS DIRECTED BY THE ENGINEER.
2. GUYING OF POLES IS REQUIRED AND LOCATIONS SHALL BE APPROVED BY THE ENGINEER.
3. ALL NEAR RIGHT TRAFFIC SIGNAL HEADS SHALL BE PLACED BETWEEN THE SPAN WIRE AND TETHER WIRE.
4. DETECTION AREAS ARE APPROXIMATE. ZONES SHALL BE ADJUSTED BY THE CONTRACTOR TO MATCH FIELD CONDITIONS.
5. TEMPORARY DETECTORS SHALL BE MOUNTED AT THE HEIGHT RECOMMENDED BY THE MANUFACTURER IN THE SPECIFICATIONS.
6. WISDOT ELECTRICAL (414 266-1170) SHALL BE NOTIFIED 5 WORKING DAYS BEFORE SWITCH TO TEMPORARY TRAFFIC SIGNALS.
7. THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.
8. ALL EXISTING SIGNAL HEADS SHALL BE REMOVED, COVERED, OR TURNED AWAY FROM TRAFFIC IMMEDIATELY AFTER TURNING ON TEMPORARY SIGNALS.
9. POLES AND POSTS INSTALLED BEHIND CURBS SHALL BE OFFSET A MINIMUM OF 2 FEET FROM THE FACE OF CURB TO THE SIDE OF THE POLE OR POST.
10. ADJUST TEMPORARY SIGNALS WITHIN EACH CONSTRUCTION STAGE AS DIRECTED BY THE ENGINEER TO MAINTAIN MUTCD SIGNAL REQUIREMENTS.
11. WOOD POLES LONGER THAN 45-FEET MAY BE NECESSARY DUE TO ELEVATION DIFFERENCES.

SUMMARY	
SPAN WIRE	539 LF
WOOD POLES	5 EA
WOOD POSTS	1 EA
SIGNAL HEADS	14 EA
LUMINAIRES (250W)	4 EA
LUMINAIRE ARMS	4 EA
VEHICLE DETECTION	3 EA
TEMPORARY SIGNAL CABINET AND CONTROLLER	1 EA

TRAFFIC CONTROL SIGNAL
USH 41/45 NB RAMPS & PILGRIM RD
VILLAGE OF MENOMONEE FALLS
WAUKESHA COUNTY

SIGNAL NO. S67-0271

REGION CONTACT: D. WOLFORD
DESIGNED BY: C. VANDE LEEST
REVISED BY:

PAGE 1 OF 6

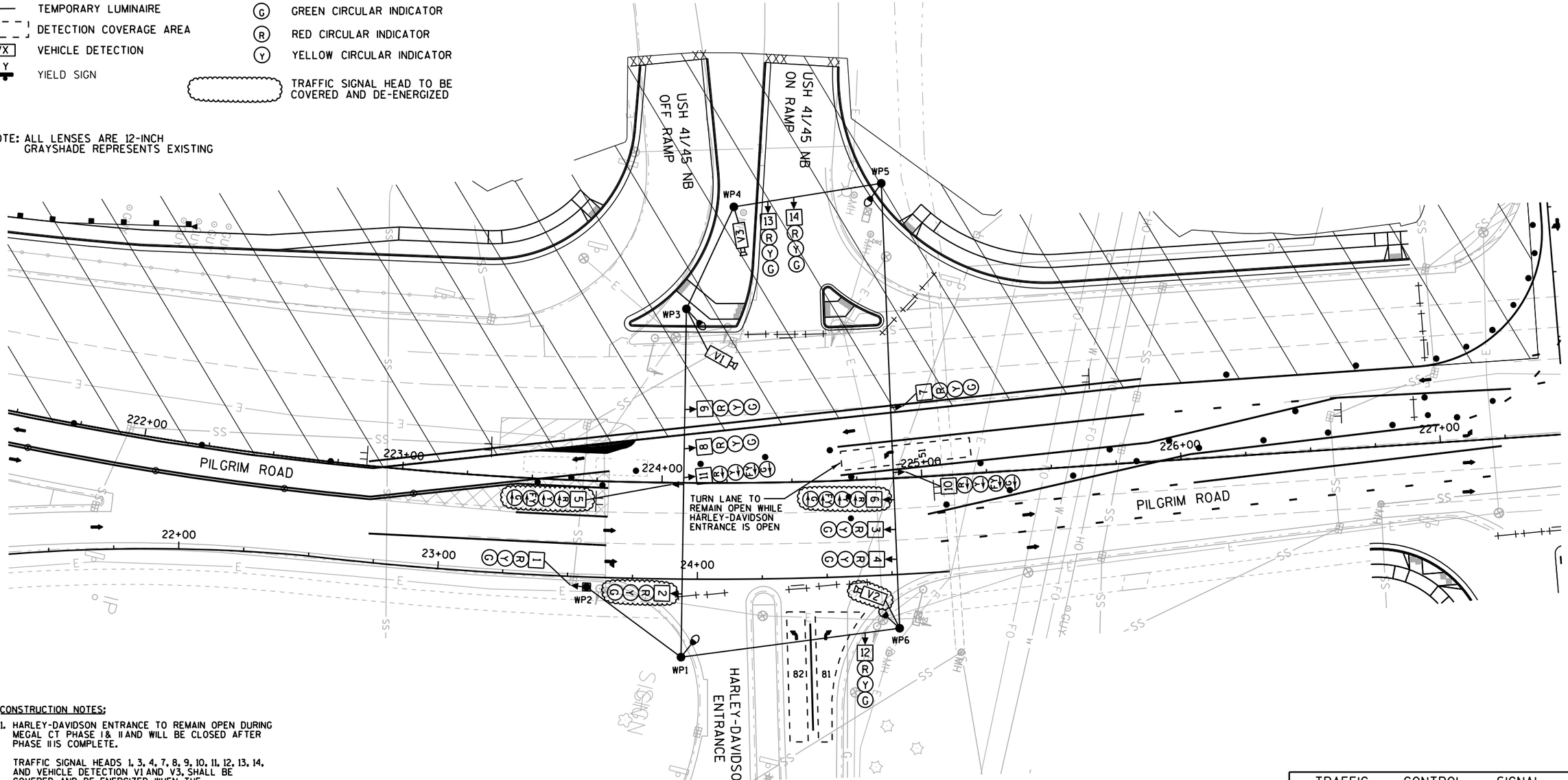
PROJECT NO: 2782-12-70	HWY: USH 41/45	COUNTY: WAUKESHA	TEMPORARY TRAFFIC SIGNAL PLAN - STAGE 1	SHEET 276	E

2

LEGEND

- SIGNAL HEAD, OVERHEAD MOUNT
- CLASS 4 WOOD POLE
- WOOD POST
- CABLE - OVERHEAD
- TEMPORARY LUMINAIRE
- DETECTION COVERAGE AREA
- VX — VEHICLE DETECTION
- Y — YIELD SIGN
- SIGNAL HEAD NUMBER
- G — GREEN ARROW
- R — RED ARROW
- FY / Y — YELLOW ARROW
- G — GREEN CIRCULAR INDICATOR
- R — RED CIRCULAR INDICATOR
- Y — YELLOW CIRCULAR INDICATOR
- TRAFFIC SIGNAL HEAD TO BE COVERED AND DE-ENERGIZED

NOTE: ALL LENSES ARE 12-INCH
GRAYSHADE REPRESENTS EXISTING



CONSTRUCTION NOTES:

1. HARLEY-DAVIDSON ENTRANCE TO REMAIN OPEN DURING MEGAL CT PHASE I & II AND WILL BE CLOSED AFTER PHASE III IS COMPLETE.

   TRAFFIC SIGNAL HEADS 1, 3, 4, 7, 8, 9, 10, 11, 12, 13, 14, AND VEHICLE DETECTION V1 AND V3, SHALL BE COVERED AND DE-ENERGIZED WHEN THE HARLEY-DAVIDSON ENTRANCE IS CLOSED AFTER MEGAL CT PHASE III IS COMPLETE.

TRAFFIC CONTROL SIGNAL
USH 41/45 NB RAMPS & PILGRIM RD
VILLAGE OF MENOMONEE FALLS
WAUKESHA COUNTY

SIGNAL NO. S67-0271

REGION CONTACT: D. WOLFORD
DESIGNED BY: C. VANDE LEEST
REVISED BY:

PROJECT NO: 2782-12-70	HWY: USH 41/45	COUNTY: WAUKESHA	TEMPORARY TRAFFIC SIGNAL PLAN - STAGE 2A	SHEET 277	E

FILE NAME : J:\projects\d2_27821241\SIG\Temps\S0271\024002_sp_s2a.dgn PLOT DATE : 29-OCT-2014 09:10 PLOT BY : dotcmv PLOT NAME : PLOT SCALE : 40:1
WISDOT/CADDS SHEET 42

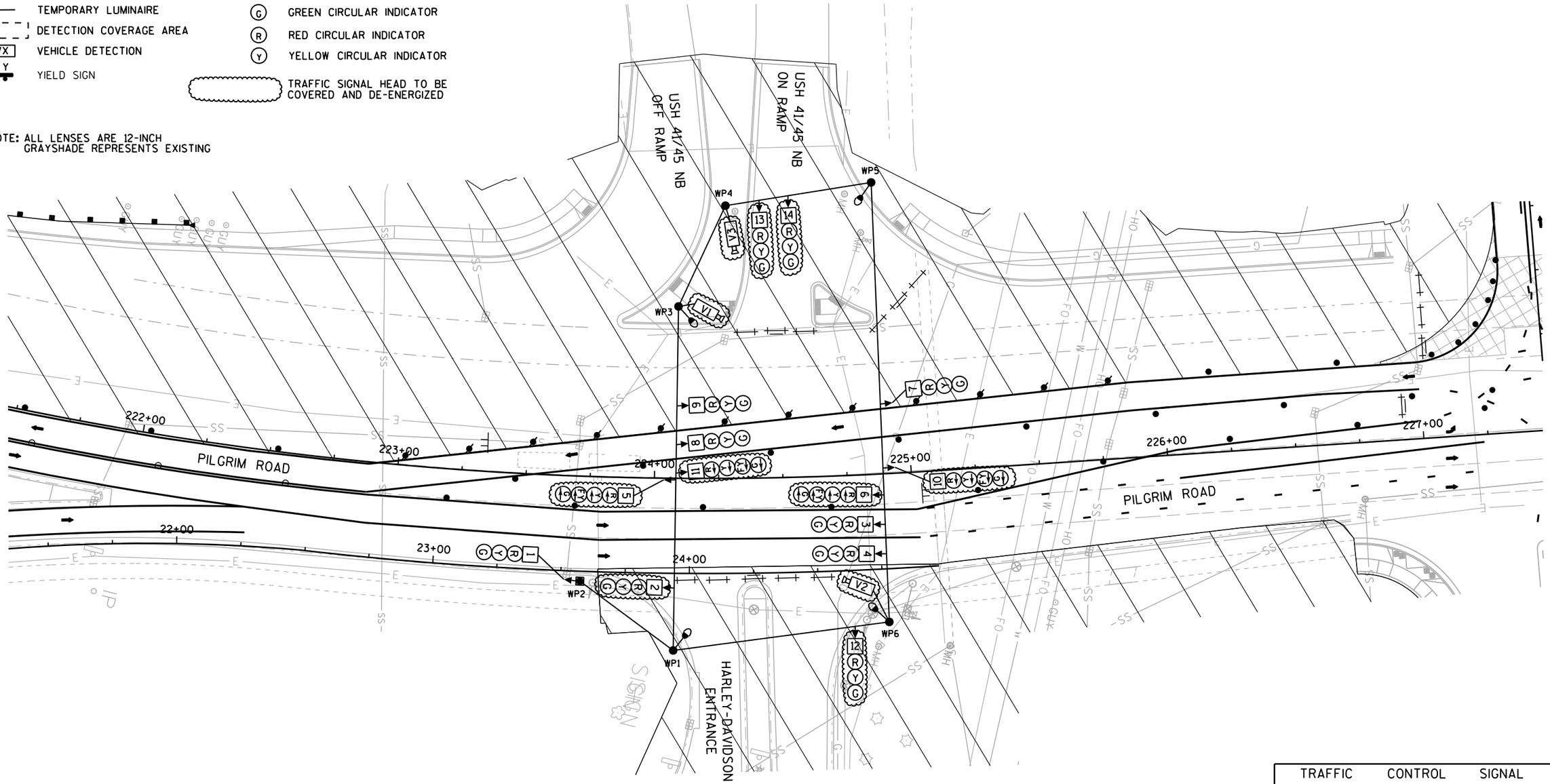
2

2

LEGEND

- SIGNAL HEAD, OVERHEAD MOUNT
- CLASS 4 WOOD POLE
- WOOD POST
- CABLE - OVERHEAD
- TEMPORARY LUMINAIRE
- DETECTION COVERAGE AREA
- VX VEHICLE DETECTION
- Y YIELD SIGN
- SIGNAL HEAD NUMBER
- G GREEN ARROW
- R RED ARROW
- FY Y YELLOW ARROW
- G GREEN CIRCULAR INDICATOR
- R RED CIRCULAR INDICATOR
- Y YELLOW CIRCULAR INDICATOR
- TRAFFIC SIGNAL HEAD TO BE COVERED AND DE-ENERGIZED

NOTE: ALL LENSES ARE 12-INCH
GRAYSHADE REPRESENTS EXISTING



TRAFFIC CONTROL SIGNAL
USH 41/45 NB RAMPS & PILGRIM RD
VILLAGE OF MENOMONEE FALLS
WAUKESHA COUNTY

SIGNAL NO. S67-0271

REGION CONTACT: D. WOLFORD
DESIGNED BY: C. VANDE LEEST
REVISED BY:

PAGE 3 OF 6

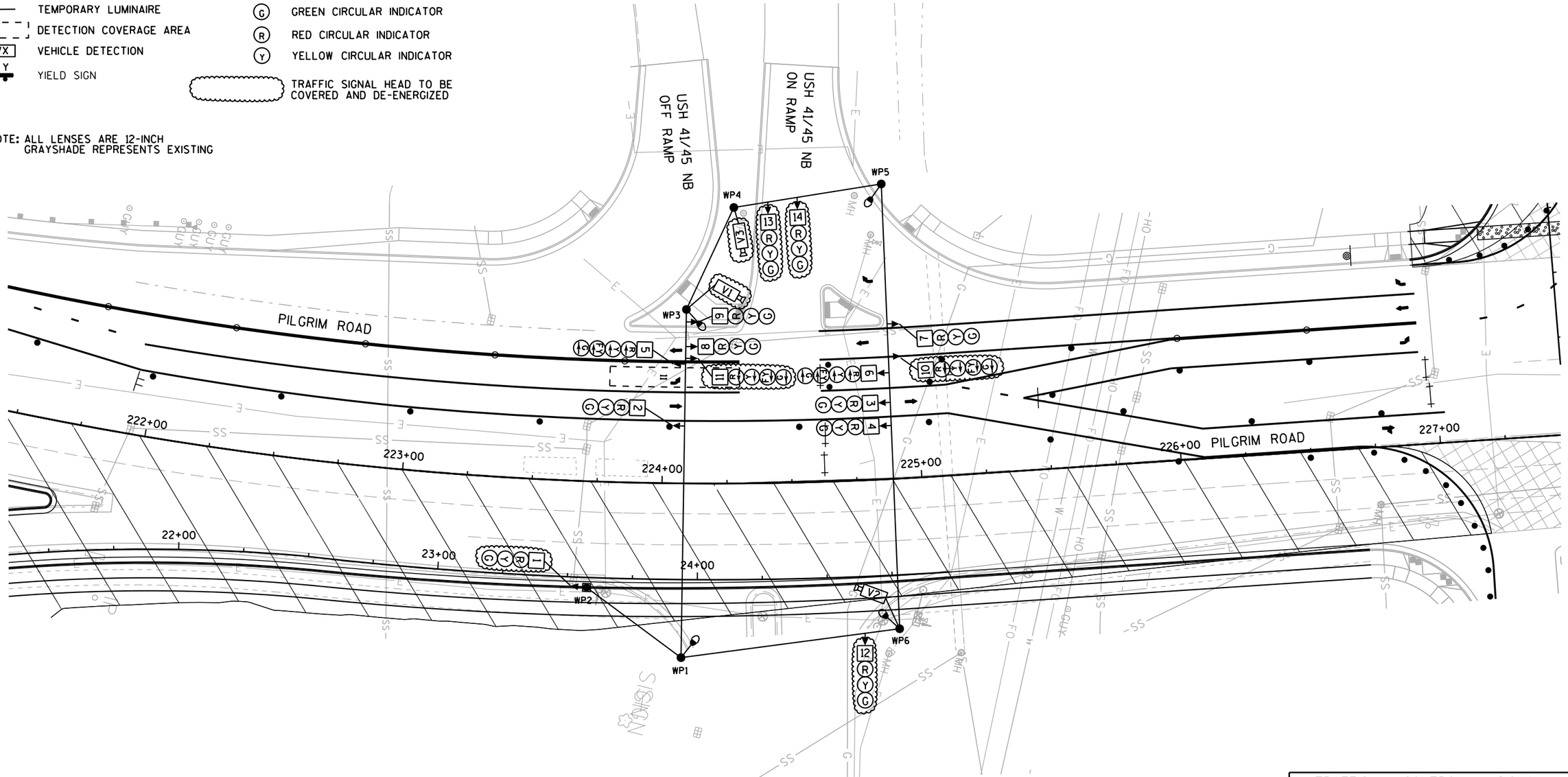
PROJECT NO: 2782-12-70	HWY: USH 41/45	COUNTY: WAUKESHA	TEMPORARY TRAFFIC SIGNAL PLAN - STAGE 2B	SHEET 278	E

2

LEGEND

- SIGNAL HEAD, OVERHEAD MOUNT
- CLASS 4 WOOD POLE
- WOOD POST
- CABLE - OVERHEAD
- TEMPORARY LUMINAIRE
- DETECTION COVERAGE AREA
- VX — VEHICLE DETECTION
- Y — YIELD SIGN
- SIGNAL HEAD NUMBER
- GREEN ARROW
- RED ARROW
- YELLOW ARROW
- GREEN CIRCULAR INDICATOR
- RED CIRCULAR INDICATOR
- YELLOW CIRCULAR INDICATOR
- TRAFFIC SIGNAL HEAD TO BE COVERED AND DE-ENERGIZED

NOTE: ALL LENSES ARE 12-INCH
GRAYSHADE REPRESENTS EXISTING



TRAFFIC CONTROL SIGNAL
USH 41/45 NB RAMPS & PILGRIM RD
VILLAGE OF MENOMONEE FALLS
WAUKESHA COUNTY

SIGNAL NO. S67-0271

REGION CONTACT: D. WOLFORD
DESIGNED BY: C. VANDE LEEST
REVISED BY:

PAGE 4 OF 6

PROJECT NO: 2782-12-70	HWY: USH 41/45	COUNTY: WAUKESHA	TEMPORARY TRAFFIC SIGNAL PLAN - STAGE 3A & 3B	SHEET 279	E

FILE NAME : J:\projects\d2_27821241\SIG\Temps\S0271\024002_sp_s3ab.dgn PLOT DATE : 29-OCT-2014 09:10 PLOT BY : dotcmv PLOT NAME : PLOT SCALE : 40:1

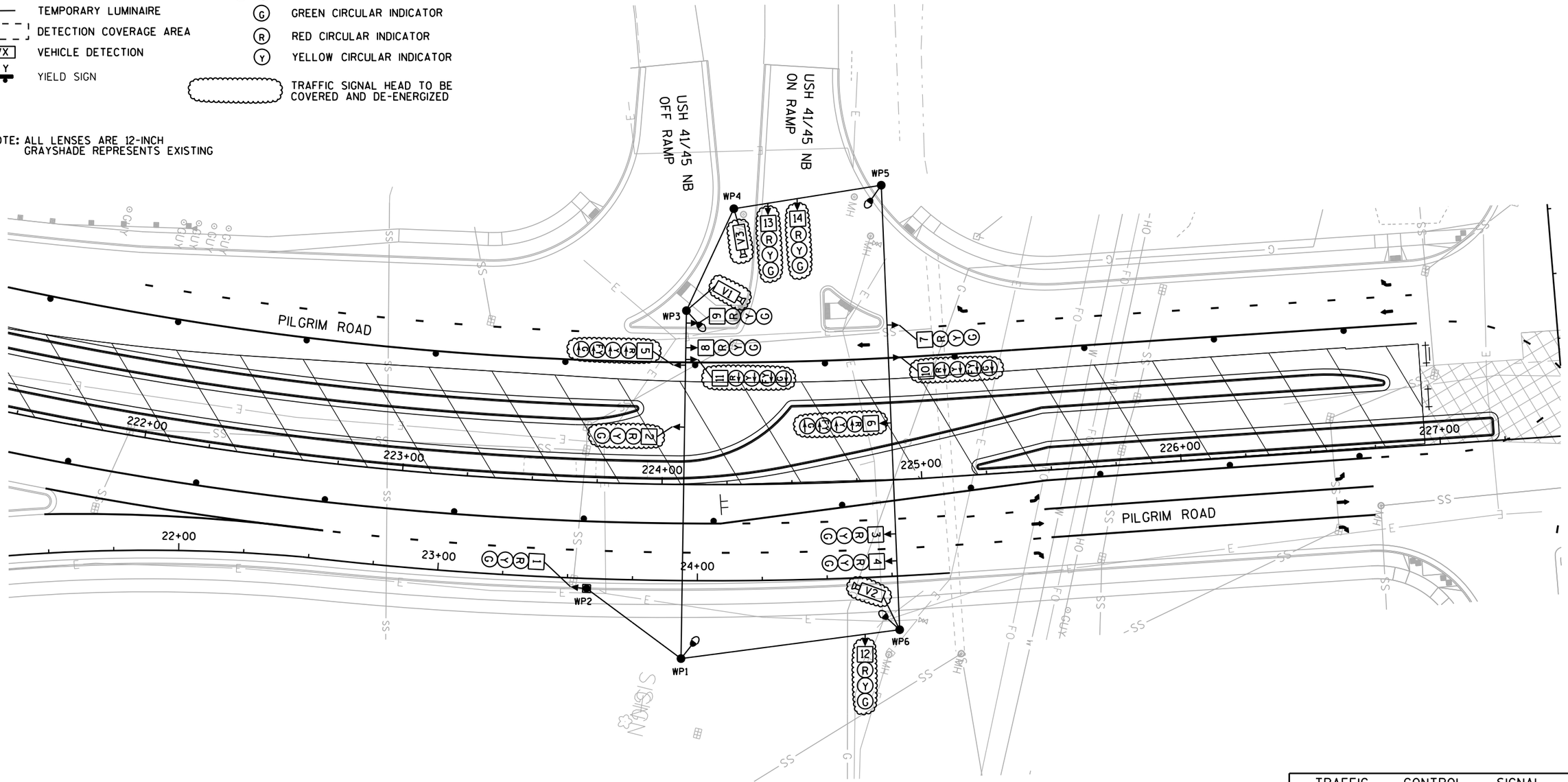
WISDOT/CADDS SHEET 42

2

LEGEND

- SIGNAL HEAD, OVERHEAD MOUNT
- CLASS 4 WOOD POLE
- WOOD POST
- CABLE - OVERHEAD
- TEMPORARY LUMINAIRE
- DETECTION COVERAGE AREA
- VX — VEHICLE DETECTION
- Y — YIELD SIGN
- SIGNAL HEAD NUMBER
- G — GREEN ARROW
- R — RED ARROW
- FY / Y — YELLOW ARROW
- G — GREEN CIRCULAR INDICATOR
- R — RED CIRCULAR INDICATOR
- Y — YELLOW CIRCULAR INDICATOR
- TRAFFIC SIGNAL HEAD TO BE COVERED AND DE-ENERGIZED

NOTE: ALL LENSES ARE 12-INCH
GRAYSHADE REPRESENTS EXISTING



TRAFFIC CONTROL SIGNAL
USH 41/45 NB RAMPS & PILGRIM RD
VILLAGE OF MENOMONEE FALLS
WAUKESHA COUNTY

SIGNAL NO. S67-0271

REGION CONTACT: D. WOLFORD
DESIGNED BY: C. VANDE LEEST
REVISED BY:

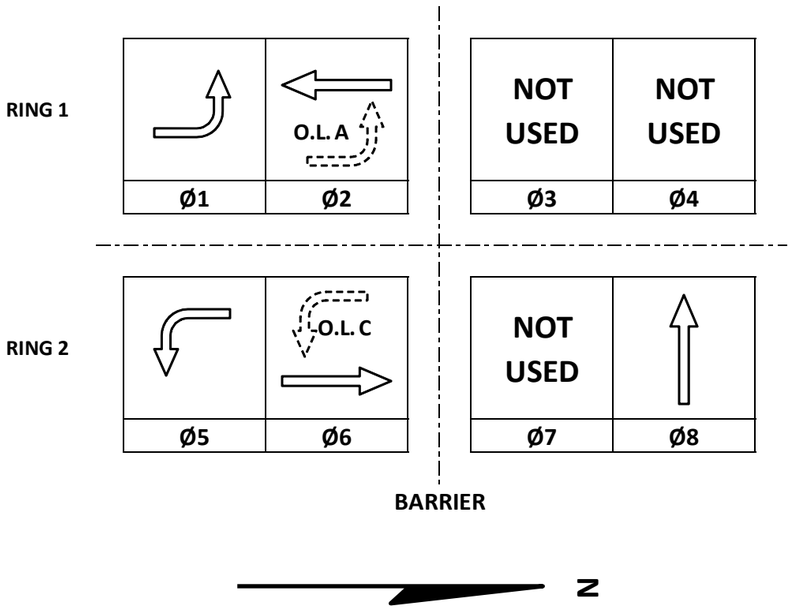
PAGE 5 OF 6

PROJECT NO: 2782-12-70	HWY: USH 41/45	COUNTY: WAUKESHA	TEMPORARY TRAFFIC SIGNAL PLAN - STAGE 4	SHEET 280 E

FILE NAME : J:\projects\d2_27821241\SIG\Temps\S0271\024002_sp_s4.dgn PLOT DATE : 29-OCT-2014 09:10 PLOT BY : dotcmv PLOT NAME : PLOT SCALE : 40:1

WISDOT/CADDS SHEET 42

	HEAD NUMBERS	FLASH
Ø1	5,6	-
Ø2	7,8,9	R
Ø3		
Ø4		
Ø5	10,11	-
Ø6	1,2,3,4	R
Ø7		
Ø8	12,13,14	R
Ø2P		
Ø4P		
Ø6P		
Ø8P		
OLA	5,6	R ←
OLB		
OLC	10,11	R ←
OLD		



DETECTOR LOGIC

DETECTOR NUMBER	AMPLIFIER CHANNEL	DETECTOR OPERATION			PHASE CALLED	PHASE EXTENDED	DETECTOR DISCONNECT PHASE	CALLING DELAY	EXTENSION STRETCH	SIZE	NUMBER OF TURNS
		CALLS AND EXTENDS	CALLS ONLY	EXTENDS ONLY							
11		X			1	1					
51		X			5	5					
81		X			8	8		X			
82		X			8	8					

CONTROLLER LOGIC

PHASE NUMBER	PHASE LOCKING	DUAL ENTRY W / Ø	PHASE RECALL	PHASE ACTIVE
1		6		X
2	X	6	MAX	X
3				
4				X
5		2		X
6	X	2	MAX	X
7				
8				X

TYPE OF INTERCONNECT/COMMUNICATION	
NONE	X
CLOSED LOOP	
TWISTED PAIR	
FIBER OPTIC*	
FIBER OPTIC (ETHERNET)	
RADIO	
CELL MODEM	

TYPE OF COORDINATION	
NONE	
TBC	X
TRAFFIC RESPONSIVE	
ADAPTIVE	
*LOCATION OF MASTER CONTROLLER NO:	S-
SIGNAL SYSTEM NO:	SS- 01-78

TYPE OF LIGHTING	
BY OTHER AGENCY	
IN TRAFFIC CABINET	X
IN SEPARATE DOT LIGHTING CABINET	

TYPE OF PRE-EMPT	
NONE	X
RAILROAD	
EMERGENCY VEHICLE	
GTT	
TOMAR	
HARDWIRE	
OTHER	
LIFT BRIDGE	
QUEUE DETECTION	

GENERAL NOTES:

1. SIGNAL TO FLASH Y-R DURING STAGE 2B AND STAGE 4.

USH 41/45 NB RAMPS & PILGRIM RD
VILLAGE OF MENOMONEE FALLS
WAUKESHA COUNTY
SIGNAL NO: S67-0271 CABINET TYPE:
CONTROLLER TYPE:
DATE: 10/14 PAGE NO. 6 OF 6

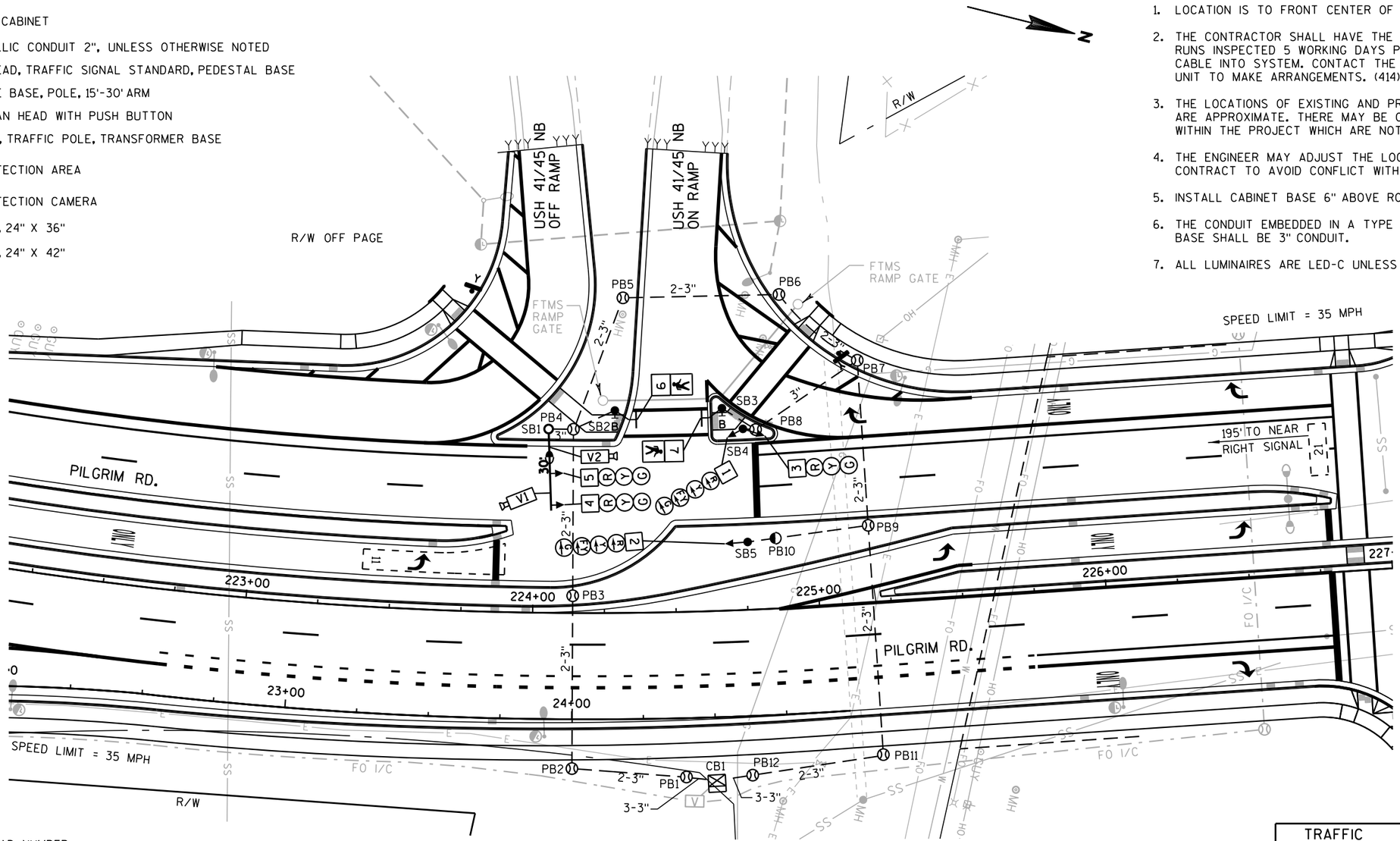
PROJECT NO: 2782-12-70	HWY: USH 41/45	COUNTY: WAUKESHA	TEMPORARY SEQUENCE OF OPERATIONS – ALL STAGES	SHEET NO: 281	E

LEGEND

- CONTROL CABINET
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
- (XX) MONOTUBE BASE, POLE, 15'-30' ARM
- PEDESTRIAN HEAD WITH PUSH BUTTON
- LUMINAIRE, TRAFFIC POLE, TRANSFORMER BASE
- VIDEO DETECTION AREA
- VX VIDEO DETECTION CAMERA
- PULL BOX, 24" X 36"
- PULL BOX, 24" X 42"

CONTRUCTION NOTES:

1. LOCATION IS TO FRONT CENTER OF DETECTOR LOOP.
2. THE CONTRACTOR SHALL HAVE THE PULL BOXES AND CONDUIT RUNS INSPECTED 5 WORKING DAYS PRIOR TO PLACING SIGNAL CABLE INTO SYSTEM. CONTACT THE WISDOT ELECTRICAL FIELD UNIT TO MAKE ARRANGEMENTS. (414) 266-1170.
3. THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.
4. THE ENGINEER MAY ADJUST THE LOCATIONS OF ITEMS UNDER THIS CONTRACT TO AVOID CONFLICT WITH EXISTING UTILITY FACILITIES.
5. INSTALL CABINET BASE 6" ABOVE ROADWAY ELEVATION.
6. THE CONDUIT EMBEDDED IN A TYPE 10 OR TYPE 13 CONCRETE BASE SHALL BE 3" CONDUIT.
7. ALL LUMINAIRES ARE LED-C UNLESS OTHERWISE NOTED.



- SIGNAL HEAD NUMBER
- (R) RED CIRCULAR INDICATOR
- (Y) YELLOW CIRCULAR INDICATOR
- (G) GREEN CIRCULAR INDICATOR
- (R) RED ARROW
- (FY) (Y) YELLOW ARROW
- (G) GREEN ARROW
- WALK/DON'T WALK INDICATOR 16" (COUNTDOWN TIMER)
- Y YIELD SIGN

NOTE: ALL LENSES ARE 12-INCH
GRAYSHADE REPRESENTS EXISTING

MONOTUBE STRUCTURE NUMBERS
SB1 = S-67-1323

TRAFFIC CONTROL SIGNAL

USH 41/45 NB RAMPS & PILGRIM RD.
VILLAGE OF MENOMONEE FALLS
WAUKESHA COUNTY

CABINET TYPE: TS2
SIGNAL NO. S67-0271 CONTROLLER TYPE: EPAC

WISCONSIN DEPARTMENT OF TRANSPORTATION

APPROVAL RECOMMENDED
Date 10/30/14 REGION TRAFFIC ENGINEER

APPROVED
Date 10/30/14 STATE TRAFFIC ENGINEER

REGION CONTACT: D. WOLFORD
DESIGNED BY: C. VANDE LEEST
REVISED BY:

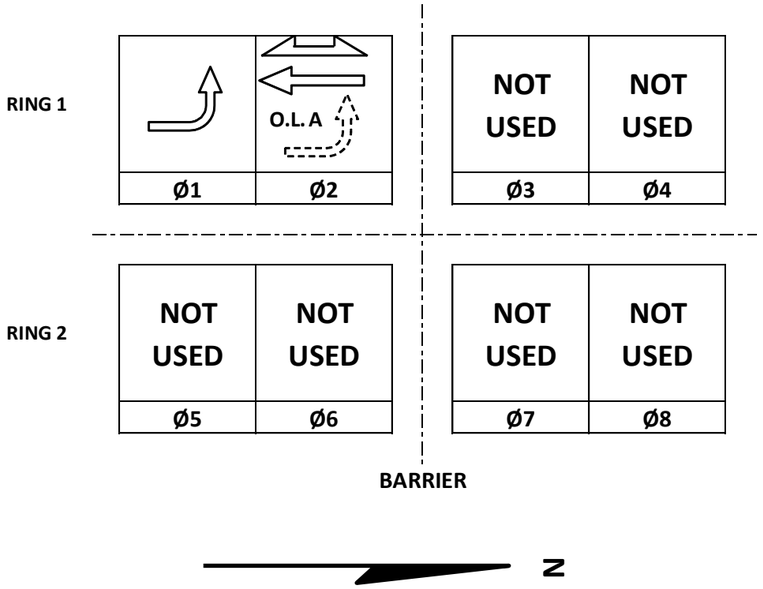
PAGE 1 OF 2

PROJECT NO: 2782-12-70	HWY: USH 41/45	COUNTY: WAUKESHA	TRAFFIC SIGNAL PLAN	SHEET 282 E

FILE NAME : J:\projects\d2_27821241\SIG\S0271.dgn PLOT DATE : 30-OCT-2014 07:18 PLOT BY : dotcmv PLOT NAME : PLOT SCALE : 40:1

WISDOT/CADDS SHEET 42

	HEAD NUMBERS	FLASH
Ø1	1,2	-
Ø2	3,4,5	R
Ø3		
Ø4		
Ø5		
Ø6		
Ø7		
Ø8		
Ø2P	6,7	
Ø4P		
Ø6P		
Ø8P		
OLA	1,2	R ←
OLB		
OLC		
OLD		



CONTROLLER LOGIC

PHASE NUMBER	PHASE LOCKING	DUAL ENTRY W / Ø	PHASE RECALL	PHASE ACTIVE
1				X
2	X		MIN	X
3				
4				X
5				
6				
7				
8				

TYPE OF INTERCONNECT/COMMUNICATION	
NONE	
CLOSED LOOP	
TWISTED PAIR	
FIBER OPTIC*	
FIBER OPTIC (ETHERNET)	X
RADIO	
CELL MODEM	

TYPE OF COORDINATION	
NONE	
TBC	X
TRAFFIC RESPONSIVE	
ADAPTIVE	
*LOCATION OF MASTER CONTROLLER NO:	S 67-0270
SIGNAL SYSTEM NO:	SS- 0178

TYPE OF LIGHTING	
BY OTHER AGENCY	
IN TRAFFIC CABINET	X
IN SEPARATE DOT LIGHTING CABINET	

TYPE OF PRE-EMPT	
NONE	X
RAILROAD	
EMERGENCY VEHICLE	
GTT	
TOMAR	
HARDWIRE	
OTHER	
LIFT BRIDGE	
QUEUE DETECTION	

DETECTOR LOGIC

DETECTOR INPUT	3	1	7	5	11	9	15	13
PLAN LOOP DETECTOR*(S)	11							
ASSIGNED PHASE	1							
OPERATION MODE	VEH							
SWITCH								
EXTEND								
DELAY								

19	17	23	21	27	25	31	29	DETECTOR INPUT
								PLAN LOOP DETECTOR*(S)
								ASSIGNED PHASE
								OPERATION MODE
								SWITCH
								EXTEND
								DELAY

DETECTOR INPUT	4	2	8	6	12	10	16	14
PLAN LOOP DETECTOR*(S)	21							
ASSIGNED PHASE	2							
OPERATION MODE	VEH							
SWITCH								
EXTEND								
DELAY								

20	18	24	22	28	26	32	30	DETECTOR INPUT
								PLAN LOOP DETECTOR*(S)
								ASSIGNED PHASE
								OPERATION MODE
								SWITCH
								EXTEND
								DELAY

USH 41/45 NB RAMPS & PILGRIM RD.
VILLAGE OF MENOMONEE FALLS
WAUKESHA COUNTY

SIGNAL NO: S67-0271 CABINET TYPE: TS2
CONTROLLER TYPE: EPAC
DATE: 10/14 PAGE NO. 2 OF 2

PROJECT NO: 2782-12-70	HWY: USH 41/45	COUNTY: WAUKESHA	SEQUENCE OF OPERATIONS	SHEET NO: 283	E

PROJECT ID:	2782-12-70
INTERSECTION:	USH 41/45 NB RAMPS & PILGRIM RD

Signal Wire Color Coding	BLK - black	RED - red	GRN - green
	WHT - white	BLU - blue	ORG - orange

CB1 TO	AWG14 # OF CONDUCTORS	HEAD NO.	SIGNAL INDICATION WIRE COLOR									PED BUTTON	OTHER
			RED	YELLOW	GREEN	<RED>	<YELLOW>	<GREEN>	<FLASHING YELLOW>	D/WALK	WALK		
SB1	7	4	RED	ORG	GRN								
		5	RED	ORG	GRN								
SB2	7	6								BLK	BLU		
		BUTTON										WHT/BLK	
SB3	7	7								BLK	BLU		
		BUTTON										WHT/BLK	
SB4	12	1				RED	ORG	GRN	BLK/WHT				
		3	RED/BLK	ORG/BLK	GRN/BLK								
SB5	7	2				RED	ORG	GRN	BLK				

*Use the white conductor in the cable assembly as the grounded conductor for all traffic signal indications
*Ensure the grounded conductor in the feeder cable and the pole cables are both 18" longer than the ungrounded conductors.
*At the signal bases, connect one terminal from the pedestrian push buttons to the color indicated in the chart. Connect the other terminal to the grounded conductor.
*Reconnect the grounding conductors wherever the circuit has been interrupted to ensure the grounding circuit is complete.

Equipment grounding conductor 10 AWG Green XLP	
From	TO
CB1	SB1
SB1	SB2
SB2	SB3
SB3	SB4
SB4	SB5
SB5	CB1

Pull Box Bonding Jumper 10 AWG Green XLP	
From	To
PB1	CB1
PB2	CB1
PB3	SB1
PB4	SB1
PB5	SB1
PB6	SB4
PB7	SB4
PB8	SB3
PB9	SB5
PB10	SB5
PB11	CB1
PB12	CB1

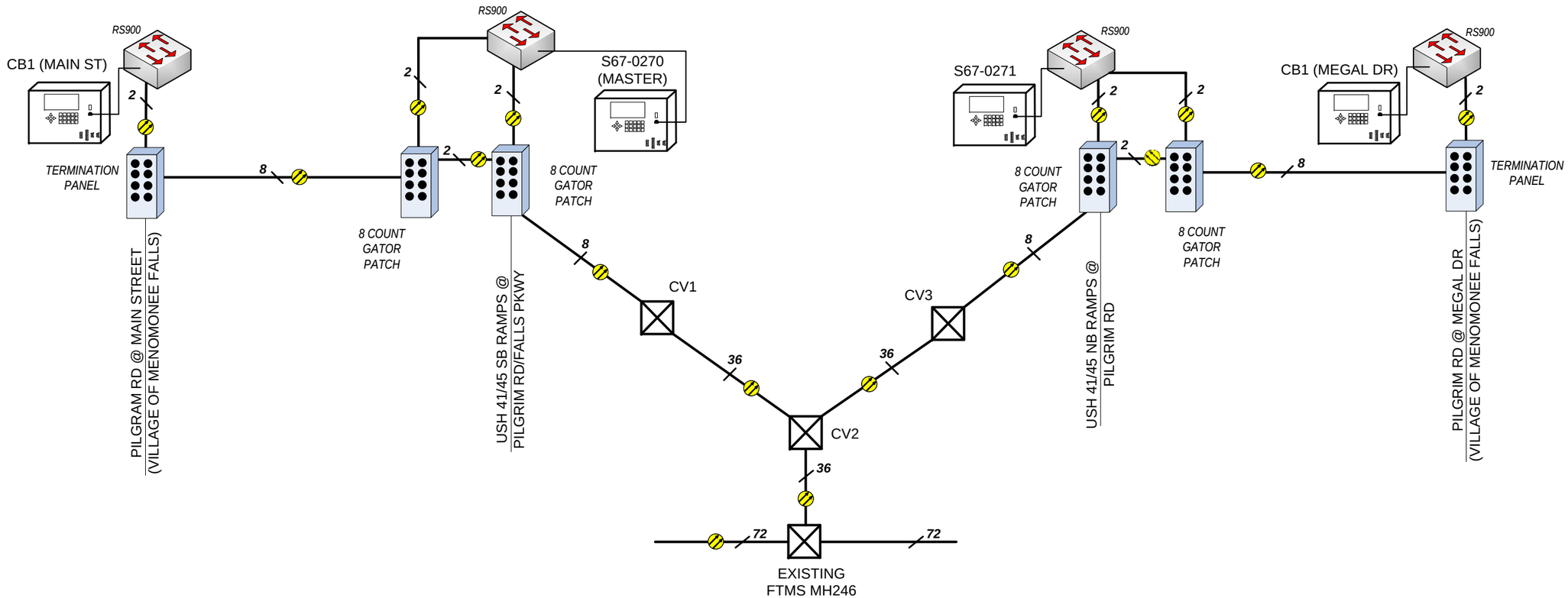
Lighting UF #12 w/ground	
From	To
CB1	SB1

VIDEO DETECTION CABLE	
From	To
CB1	V1 (SB1)
CB1	V2 (SB1)

2

LEGEND

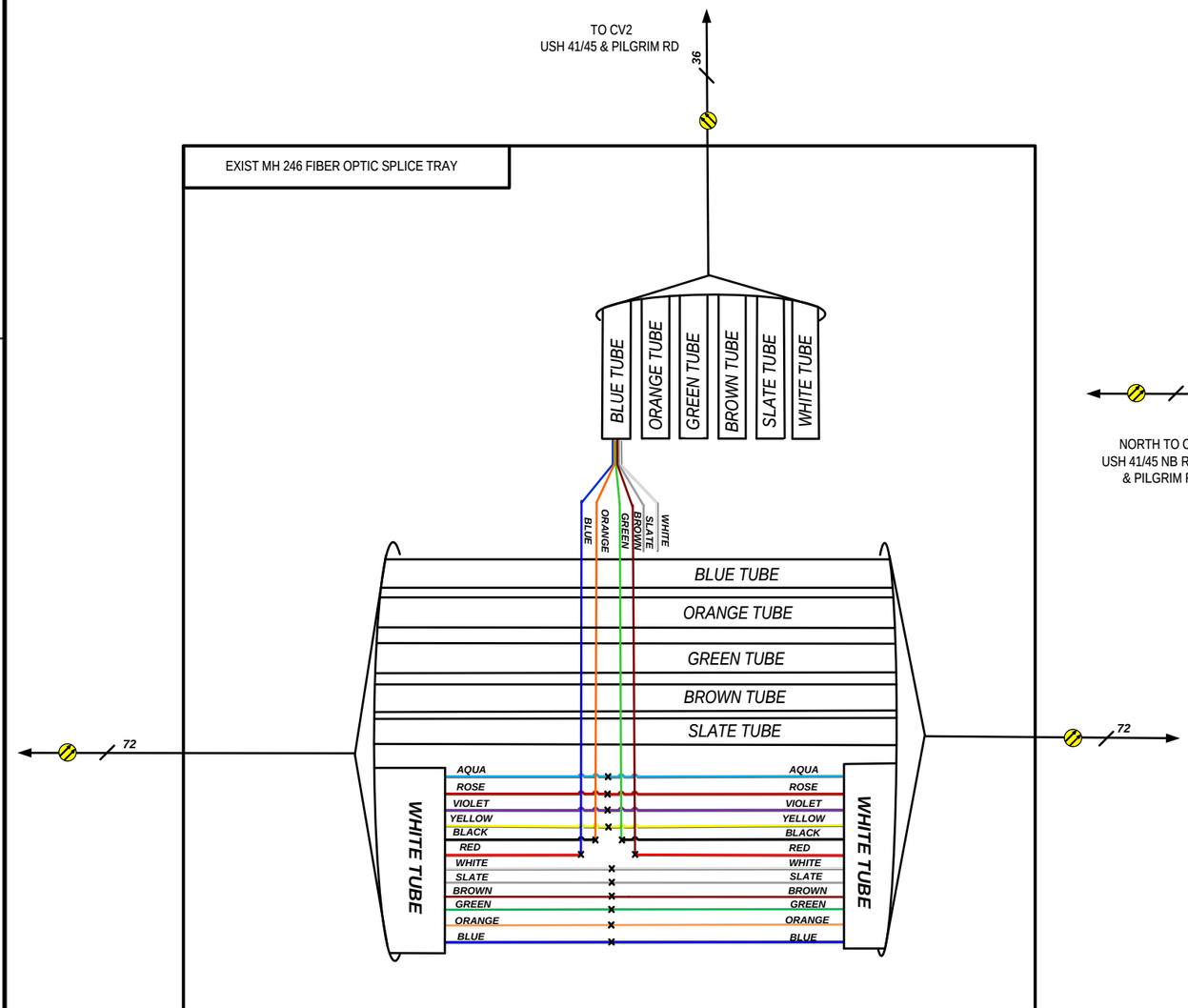
- 36 — SM FIBER OPTIC CABLE (# STRANDS)
- SPLICE ENCLOSURE
- HARDENED ETHERNET SWITCH
- TRAFFIC SIGNAL CONTROLLER
- 8 COUNT GATOR PATCH/ TERMINATION PANEL

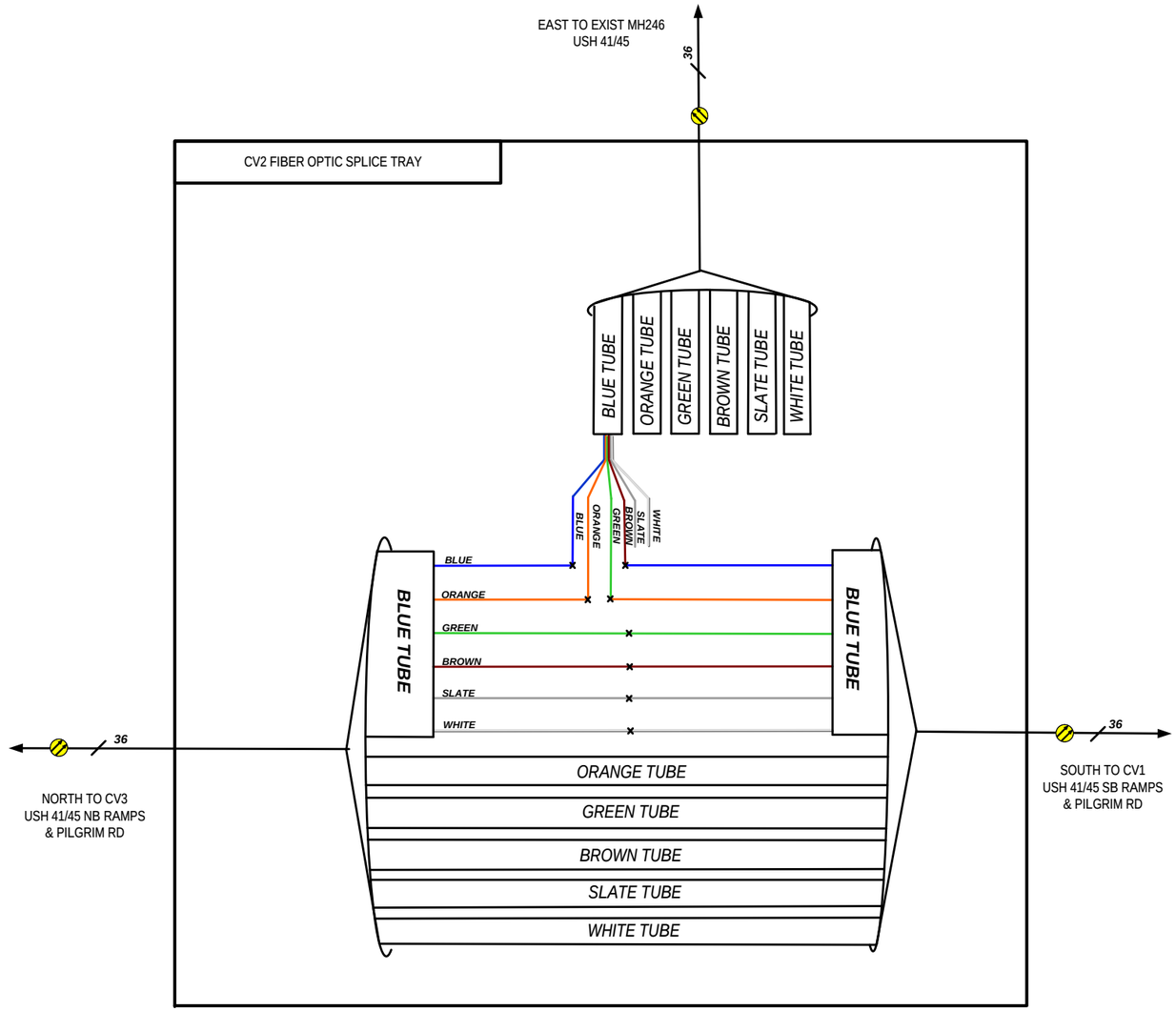


NOTES:
1. MAXIMUM SPLICE LOSS SHALL BE 0.1dB.
2. NO INTERMEDIATE SPLICES ALLOWED.
3. ALL SPLICES SHALL BE FUSION SPLICES.
4. COORDINATE FIBER ASSIGNMENTS WITH THE STOC AT (414) 225-3723 BEFORE SPLICING FIBER OPTIC CABLE.
5. THE ENTIRE MAINLINE FIBER OPTIC CABLE SHALL NOT BE CUT AND/OR SPLICED IN THE VAULTS NEAREST THE TRAFFIC SIGNAL CABINET WHILE MAKING THE PIGTAIL CONNECTION. ONLY THE REQUIRED BUFFER TUBE SHALL BE CUT AND SPLICED WITH THE PIGTAIL CONNECTION.

LEGEND

- CAT 5E PATCH CORD
- SM FIBER JUMPER
- 36 — SM FIBER OPTIC CABLE (# STRANDS)





PROJECT NO: 2782-12-70	HWY: USH 41/45	COUNTY: WAUKESHA	TRAFFIC SIGNAL INTERCONNECT	SHEET 286	E

TRAFFIC SIGNAL CABINET, CB1 (MAIN ST)

SIGNAL CONTROLLER

MMU

RS900 E-NET SWITCH

TX
RX
10/100
RX
TX
10/100

SDLC BUS

DETECTOR MVP/BIU

BIU

LOAD SWITCHES

INTERFACE PANEL

VIDEO DETECTION CAMERAS

TERMINATION PANEL

BLU ORG
GR BR
SL WH
RE BLA

TRAFFIC SIGNAL CABINET, CB1 (S67-0270)

SIGNAL CONTROLLER (MASTER)

MMU

RS900 E-NET SWITCH

TX
RX
10/100
RX
TX
10/100

SDLC BUS

DETECTOR MVP/BIU

BIU

LOAD SWITCHES

INTERFACE PANEL

VIDEO DETECTION CAMERAS

8 COUNT GATOR PATCH

BLU ORG
GR BR
SL WH
RE BLA

8 COUNT GATOR PATCH

BLU ORG
GR BR
SL WH
RE BLA

8

8

8

CV1 FIBER OPTIC SPLICE TRAY

BLUE
ORANGE
GREEN
BROWN
SLATE
WHITE
RED
BLACK

BLUE
ORANGE
GREEN
BROWN
SLATE
WHITE

BLUE TUBE
ORANGE TUBE
GREEN TUBE
BROWN TUBE
SLATE TUBE
WHITE TUBE

36

NORTH TO CV2
USH 41/45 & PILGRIM RD

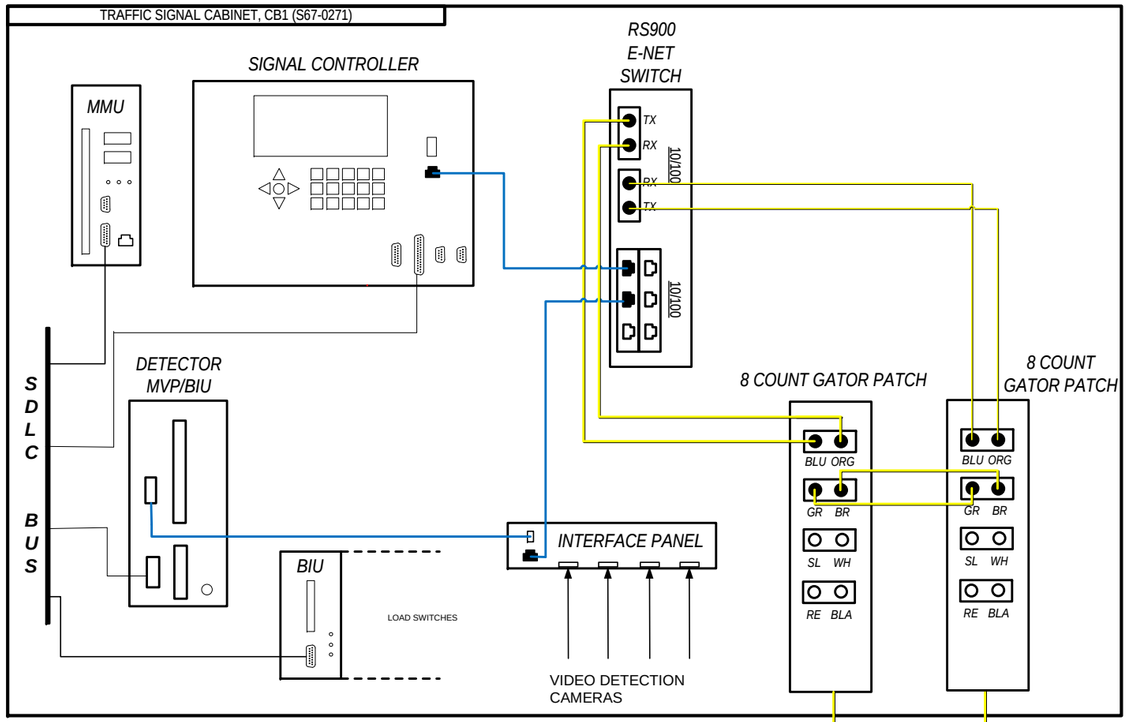
LEGEND

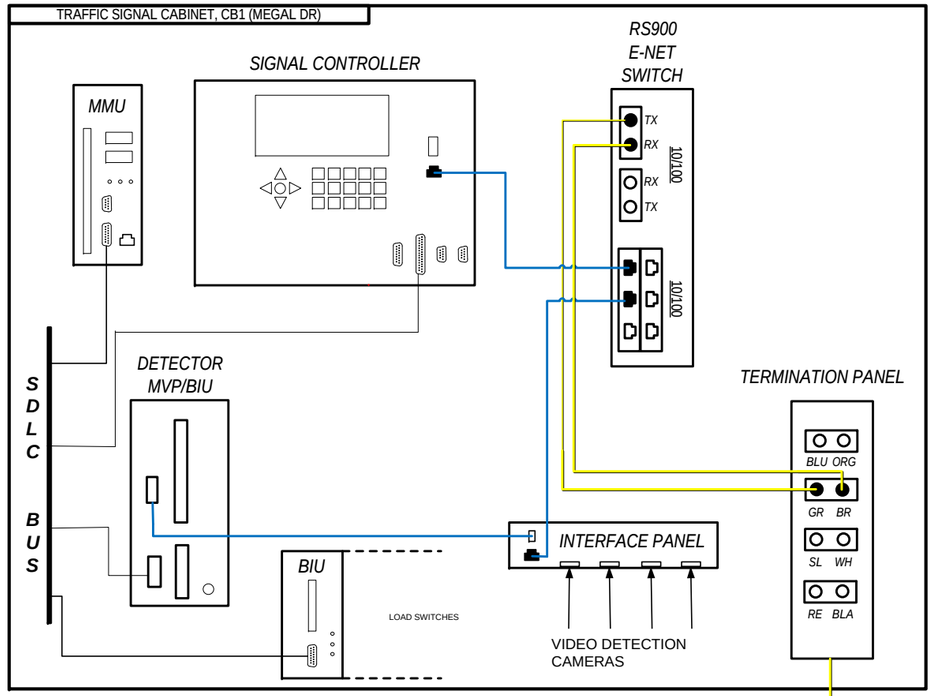
CAT 5E PATCH CORD

SM FIBER JUMPER

36 SM FIBER OPTIC CABLE (# STRANDS)

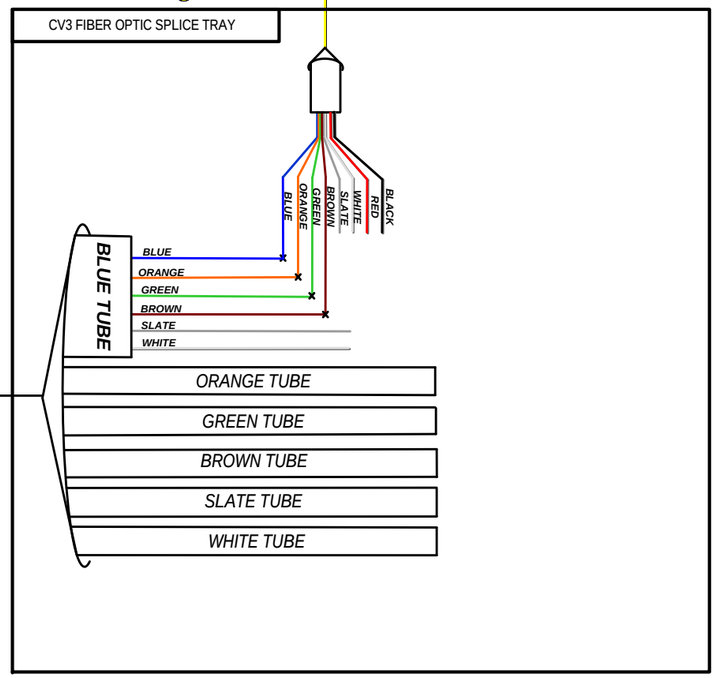
PROJECT NO: 2782-12-70	HWY: USH 41/45	COUNTY: WAUKESHA	TRAFFIC SIGNAL INTERCONNECT	SHEET 287	E





8

8



36

SOUTH TO CV2
USH 41/45 & PILGRIM RD

LEGEND

CAT 5E PATCH CORD

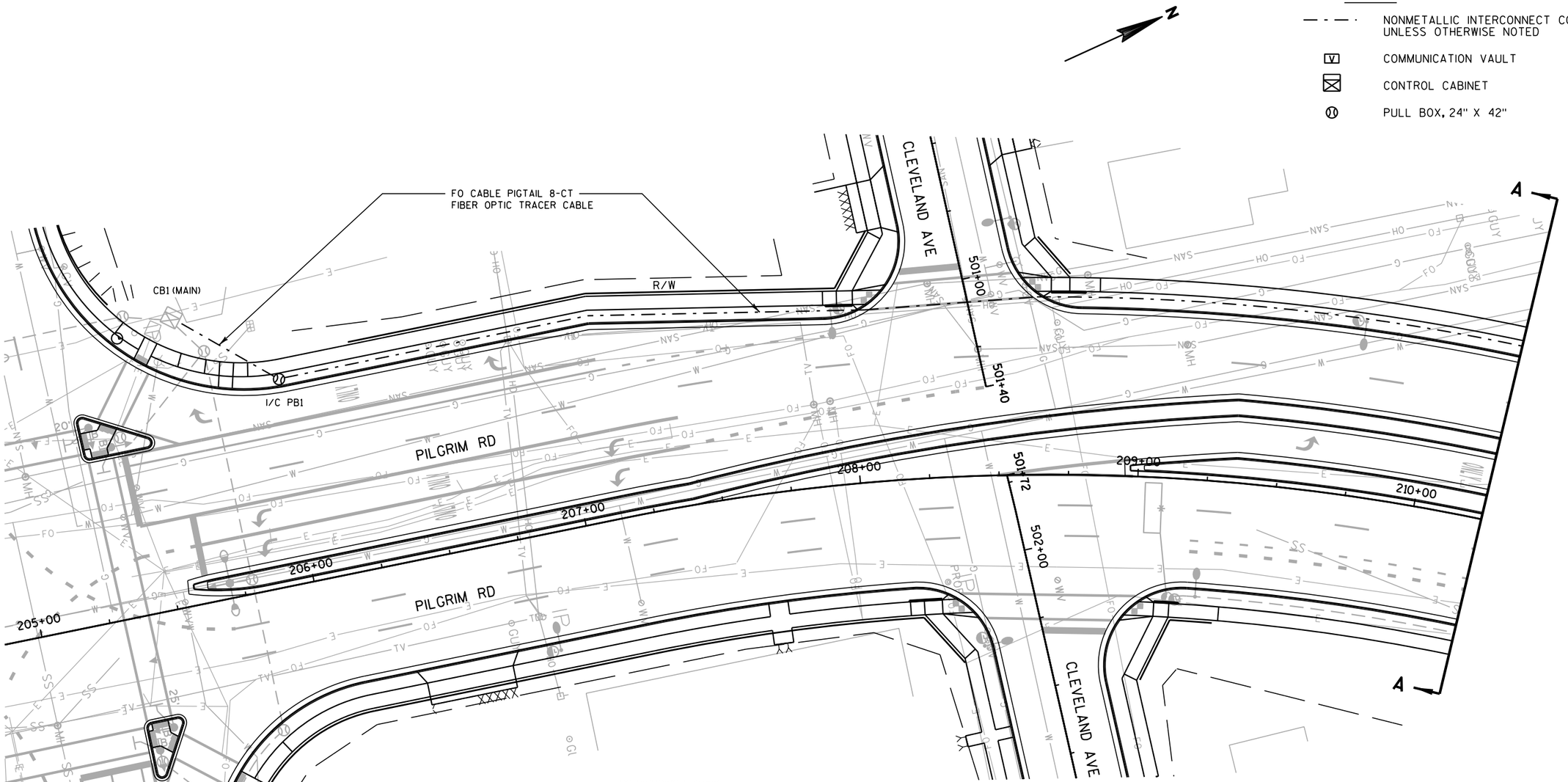
SM FIBER JUMPER

36 SM FIBER OPTIC CABLE (# STRANDS)

PROJECT NO: 2782-12-70	HWY: USH 41/45	COUNTY: WAUKESHA	TRAFFIC SIGNAL INTERCONNECT	SHEET 288	E

LEGEND

- NONMETALLIC INTERCONNECT CONDUIT 2", UNLESS OTHERWISE NOTED
- COMMUNICATION VAULT
- CONTROL CABINET
- PULL BOX, 24" X 42"



CONTRUCTION NOTES:

1. THE CONTRACTOR SHALL HAVE THE PULL BOXES AND CONDUIT RUNS INSPECTED 5 WORKING DAYS PRIOR TO PLACING INTERCONNECT CABLE INTO SYSTEM. CONTACT THE WISDOT ELECTRICAL UNIT AT (414) 266-1170 TO MAKE ARRANGEMENTS.
2. THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.
3. THE ENGINEER MAY ADJUST THE LOCATIONS OF ITEMS UNDER THIS CONTRACT TO AVOID CONFLICT WITH EXISTING UTILITY FACILITIES.
4. LEAVE 100-FEET OF FIBER OPTIC INTERCONNECT PIGTAIL COILED IN EACH COMMUNICATIONS VAULT AND 30-FEET IN EACH PULL BOX.
5. THE ENTIRE MAINLINE FIBER OPTIC CABLE SHALL NOT BE CUT AND/OR SPLICED IN THE VAULTS NEAREST THE TRAFFIC SIGNAL CABINET WHILE MAKING THE PIGTAIL CONNECTION. ONLY THE REQUIRED BUFFER TUBE SHALL BE CUT AND SPLICED WITH THE PIGTAIL CONNECTION.
6. INCIDENTAL 14 AWG PULL WIRE TO BE INSTALLED AS FIBER OPTIC TRACER WIRE IN INTERCONNECT CONDUIT.
7. PROPOSED STORM SEWER, LIGHTING, FTMS, DETECTABLE WARNING FIELDS, AND TRAFFIC SIGNALS ARE SHOWN GRAYSHADED FOR PLAN CLARITY.

TRAFFIC CONTROL INTERCONNECT
PILGRIM ROAD
VILLAGE OF MENOMONEE FALLS
WAUKESHA COUNTY

SIGNAL NO. MAIN ST, S67-0270, S67-0271, MEGAL DR

REGION CONTACT: D. WOLFORD
DESIGNED BY: C. VANDE LEEST
REVISED BY:

PAGE 1 OF 4

PROJECT NO: 2782-12-70	HWY: USH 41/45	COUNTY: WAUKESHA	TRAFFIC SIGNAL INTERCONNECT PLAN	SHEET 289	E

FILE NAME : J:\projects\d2_27821241\SIG\024050_IC.dgn PLOT DATE : 29-OCT-2014 10:12 PLOT BY : dotcmv PLOT NAME : PLOT SCALE : 40:1

WISDOT/CADDS SHEET 42

2

LEGEND

- NONMETALLIC INTERCONNECT CONDUIT 2", UNLESS OTHERWISE NOTED
- COMMUNICATION VAULT
- CONTROL CABINET
- PULL BOX, 24" X 42"

FALLS PKWY

PILGRIM RD

CB1 (S67-0270)

FO CABLE PIGTAIL 8-CT FIBER OPTIC TRACER CABLE

I/C CV1

I/C PB2

INSTALL FO CABLE OUTDOOR PLANT 36-CT FIBER OPTIC TRACER CABLE

3-2" HDPE FO I/C

I/C PB3

3-2" HDPE FO I/C

I/C PB4

INSTALL FO CABLE OUTDOOR PLANT 36-CT FIBER OPTIC TRACER CABLE

3-2" HDPE FO I/C

USH 41/45 ON RAMP

USH 41/45 SB OFF RAMP

R/W

A

B

TRAFFIC CONTROL INTERCONNECT
PILGRIM ROAD
VILLAGE OF MENOMONEE FALLS
WAUKESHA COUNTY

SIGNAL NO. MAIN ST, S67-0270, S67-0271, MEGAL DR

REGION CONTACT: D. WOLFORD
DESIGNED BY: C. VANDE LEEST
REVISED BY:

PAGE 2 OF 4

PROJECT NO: 2782-12-70	HWY: USH 41/45	COUNTY: WAUKESHA	TRAFFIC SIGNAL INTERCONNECT PLAN	SHEET 290	E

FILE NAME : J:\projects\d2_27821241\SIG\024051_IC.dgn PLOT DATE : 29-OCT-2014 10:12 PLOT BY : dotcmv PLOT NAME : PLOT SCALE : 40:1

LEGEND

NONMETALLIC INTERCONNECT CONDUIT 2", UNLESS OTHERWISE NOTED

COMMUNICATION VAULT

CONTROL CABINET

PULL BOX, 24" X 42"

PILGRIM RD

217+00

218+00

219+00

220+00

221+00

PILGRIM RD

3-2" HDPE FO I/C

I/C PB5

INSTALL FO CABLE OUTDOOR PLANT 36-CT FIBER OPTIC TRACER CABLE

3-2" HDPE FO I/C

I/C CV2

INSTALL FO CABLE OUTDOOR PLANT 36-CT FIBER OPTIC TRACER CABLE

2-2" FO I/C

MH246

4+00

USH 41/45 SB OFF RAMP

5+60

USH 41/45 SB

283+00

284+00

285+00

286+00

USH 41/45 NB

INSTALL FO CABLE OUTDOOR PLANT 36-CT FIBER OPTIC TRACER CABLE

3-2" HDPE FO I/C

I/C PB6

3-2" HDPE FO I/C

I/C PB7

3-2" HDPE FO I/C

I/C PB8

19+00

USH 41/45 NB OFF RAMP

20+00

21+00

INSTALL FO CABLE OUTDOOR PLANT 36-CT FIBER OPTIC TRACER CABLE

TRAFFIC CONTROL INTERCONNECT
PILGRIM ROAD
VILLAGE OF MENOMONEE FALLS
WAUKESHA COUNTY

SIGNAL NO. MAIN ST, S67-0270, S67-0271, MEGAL DR

REGION CONTACT: D. WOLFORD
DESIGNED BY: C. VANDE LEEST
REVISED BY:

PAGE 3 OF 4

PROJECT NO: 2782-12-70	HWY: USH 41/45	COUNTY: WAUKESHA	TRAFFIC SIGNAL INTERCONNECT PLAN	SHEET 291	E

FILE NAME : J:\projects\d2_27821241\SIG\024052_IC.dgn PLOT DATE : 29-OCT-2014 10:12 PLOT BY : dotcmv PLOT NAME : PLOT SCALE : 40:1

WISDOT/CADDS SHEET 42

2

N

C

USH 41/45 NB OFF RAMP

USH 41/45 NB ON RAMP

MEGAL DR

3+00

CB1 (MEGAL)

FO CABLE PIGTAIL 8-CT FIBER OPTIC TRACER CABLE

I/C PB10

FO CABLE PIGTAIL 8-CT FIBER OPTIC TRACER CABLE

PILGRIM RD

222+00

223+00

224+00

225+00

226+00

227+00

V1

V2

30'

25'

USH 41/45 NB OFF RAMP

22+00

23+00

24+00

PILGRIM RD

I/C PB9

3-2" HDPE FO I/C

CB1 (S67-0271)

I/C CV3

FO CABLE PIGTAIL 8-CT FIBER OPTIC TRACER CABLE

INSTALL FO CABLE OUTDOOR PLANT 36-CT FIBER OPTIC TRACER CABLE

C

LEGEND

- — - — · NONMETALLIC INTERCONNECT CONDUIT 2", UNLESS OTHERWISE NOTED
- COMMUNICATION VAULT
- CONTROL CABINET
- PULL BOX, 24" X 42"

TRAFFIC CONTROL INTERCONNECT
PILGRIM ROAD
VILLAGE OF MENOMONEE FALLS
WAUKESHA COUNTY

SIGNAL NO. MAIN ST, S67-0270, S67-0271, MEGAL DR

REGION CONTACT: D. WOLFORD
DESIGNED BY: C. VANDE LEEST
REVISED BY:

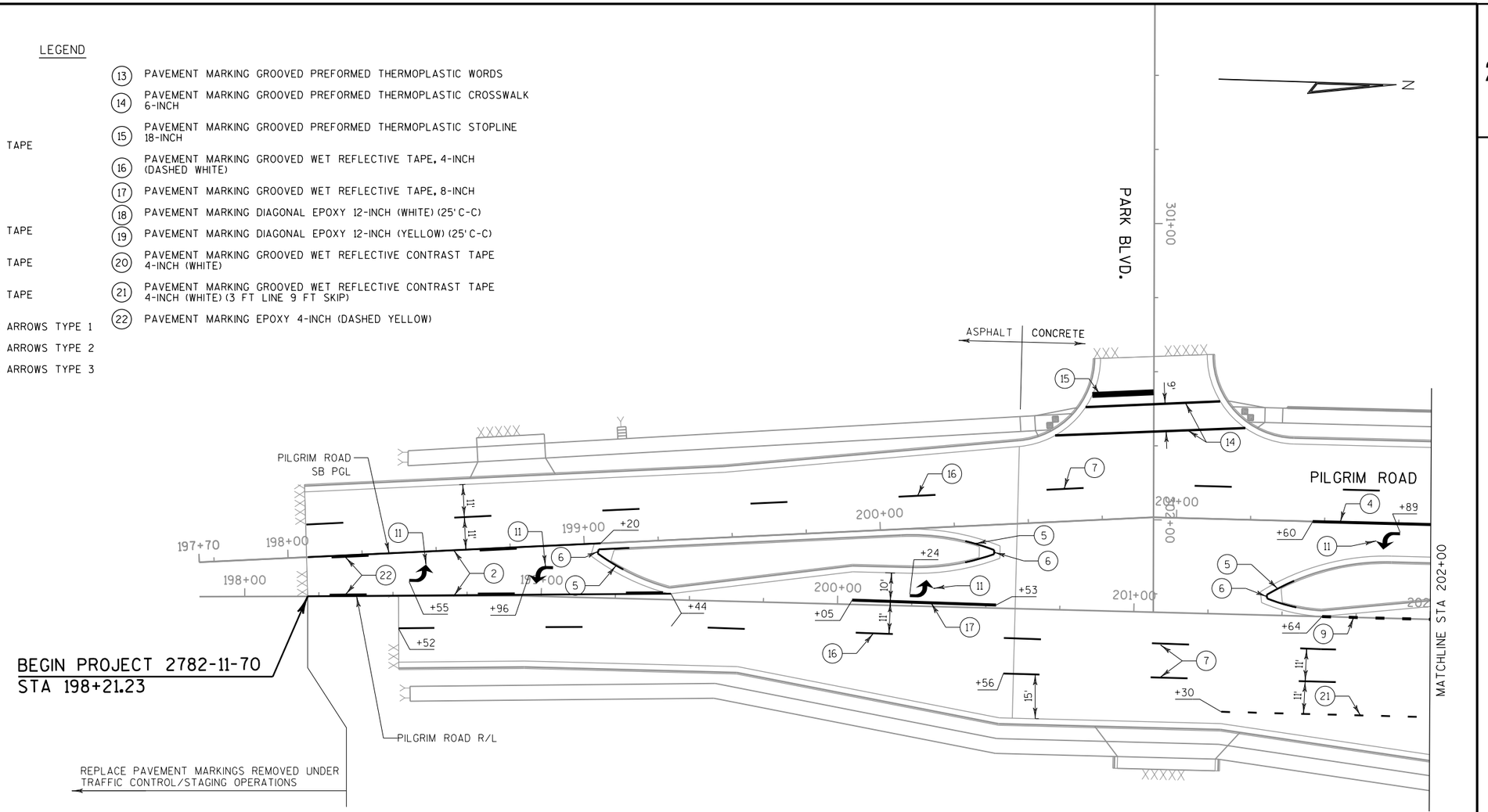
PAGE 4 OF 4

PROJECT NO: 2782-12-70	HWY: USH 41/45	COUNTY: WAUKESHA	TRAFFIC SIGNAL INTERCONNECT PLAN	SHEET 292 E

FILE NAME : J:\projects\d2_27821241\SIG\024053_IC.dgn PLOT DATE : 29-OCT-2014 10:13 PLOT BY : dotcmv PLOT NAME : PLOT SCALE : 40:1

LEGEND

1. PAVEMENT MARKING EPOXY 4-INCH (WHITE)
2. PAVEMENT MARKING EPOXY 4-INCH (YELLOW)
3. PAVEMENT MARKING GROOVED CONTRAST PREFORMED THERMOPLASTIC 18-INCH (WHITE) (2 FT LINE 2-FT SKIP)
4. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 8-INCH (WHITE)
5. PAVEMENT MARKING CURB EPOXY (YELLOW)
6. PAVEMENT MARKING ISLAND NOSE EPOXY
7. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH (DASHED WHITE)
8. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 8-INCH (WHITE) (2 FT LINE 6 FT SKIP)
9. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 8-INCH (WHITE) (3 FT LINE 9 FT SKIP)
10. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC ARROWS TYPE 1
11. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC ARROWS TYPE 2
12. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC ARROWS TYPE 3
13. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC WORDS
14. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC CROSSWALK 6-INCH
15. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC STOPLINE 18-INCH
16. PAVEMENT MARKING GROOVED WET REFLECTIVE TAPE, 4-INCH (DASHED WHITE)
17. PAVEMENT MARKING GROOVED WET REFLECTIVE TAPE, 8-INCH
18. PAVEMENT MARKING DIAGONAL EPOXY 12-INCH (WHITE) (25' C-C)
19. PAVEMENT MARKING DIAGONAL EPOXY 12-INCH (YELLOW) (25' C-C)
20. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH (WHITE)
21. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH (WHITE) (3 FT LINE 9 FT SKIP)
22. PAVEMENT MARKING EPOXY 4-INCH (DASHED YELLOW)



NOTES:

1. CALL-OFFS ARE BASED ON REFERENCE LINE ALIGNMENT UNLESS OTHERWISE NOTED.

PROJECT NO: 2782-11-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	PAVEMENT MARKING: PILGRIM ROAD	SHEET 293	E

2

END CONSTRUCTION 2782-12-70
BEGIN PROJECT 2782-11-70
STA 407+60

N

MATCHLINE STA 407+60

MAIN ST +63

MAIN ST +90

MAIN ST +77

MAIN ST +21

MAIN ST +05

PILGRIM ROAD SB PGL

PILGRIM RD +83 88.06' LT

R 100'

R 120'

R 92'

9' (TYP)

408+00

409+00

410+00

202+00

203+00

204+00

205+00

206+00

207+00

PILGRIM ROAD R/L

PILGRIM ROAD

MATCHLINE STA 202+00

MATCHLINE STA 207+75

MAIN STREET (STH 74)

MAIN ST +48

MAIN ST +65

MAIN ST +77

MAIN ST +85

PILGRIM RD +74 79.18' RT

PILGRIM RD +58 69.20' RT

MATCHLINE STA 410+13

END CONSTRUCTION 2782-11-70
BEGIN PROJECT 2782-12-70
STA 410+13

NOTES:

1. CALL-OFFS ARE BASED ON REFERENCE LINE ALIGNMENT UNLESS OTHERWISE NOTED.

LEGEND

1. PAVEMENT MARKING EPOXY 4-INCH (WHITE)
2. PAVEMENT MARKING EPOXY 4-INCH (YELLOW)
3. PAVEMENT MARKING GROOVED CONTRAST PREFORMED THERMOPLASTIC 18-INCH (WHITE) (2 FT LINE 2-FT SKIP)
4. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 8-INCH (WHITE)
5. PAVEMENT MARKING CURB EPOXY (YELLOW)
6. PAVEMENT MARKING ISLAND NOSE EPOXY
7. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH (DASHED WHITE)
8. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 8-INCH (WHITE) (2 FT LINE 6 FT SKIP)
9. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 8-INCH (WHITE) (3 FT LINE 9 FT SKIP)
10. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC ARROWS TYPE 1
11. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC ARROWS TYPE 2
12. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC ARROWS TYPE 3
13. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC WORDS
14. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC CROSSWALK 6-INCH
15. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC STOPLINE 18-INCH
16. PAVEMENT MARKING GROOVED WET REFLECTIVE TAPE, 4-INCH (DASHED WHITE)
17. PAVEMENT MARKING GROOVED WET REFLECTIVE TAPE, 8-INCH
18. PAVEMENT MARKING DIAGONAL EPOXY 12-INCH (WHITE) (25' C-C)
19. PAVEMENT MARKING DIAGONAL EPOXY 12-INCH (YELLOW) (25' C-C)
20. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH (WHITE)
21. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH (WHITE) (3 FT LINE 9 FT SKIP)
22. PAVEMENT MARKING EPOXY 4-INCH (DASHED YELLOW)

PROJECT NO: 2782-11-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	PAVEMENT MARKING: PILGRIM ROAD	SHEET 294	E

2

LEGEND

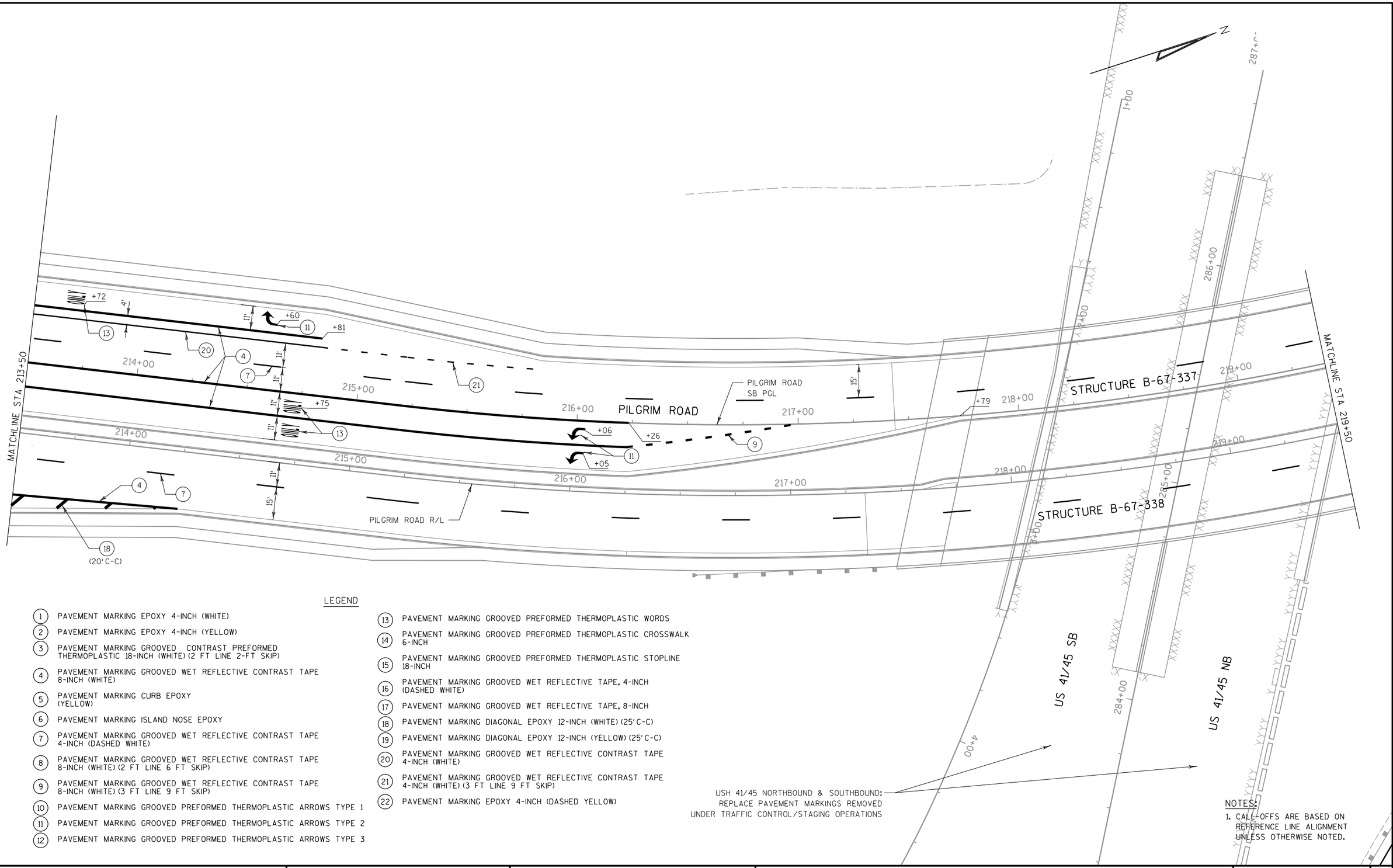
1. PAVEMENT MARKING EPOXY 4-INCH (WHITE)
2. PAVEMENT MARKING EPOXY 4-INCH (YELLOW)
3. PAVEMENT MARKING GROOVED CONTRAST PREFORMED THERMOPLASTIC 18-INCH (WHITE) (2 FT LINE 2-FT SKIP)
4. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 8-INCH (WHITE)
5. PAVEMENT MARKING CURB EPOXY (YELLOW)
6. PAVEMENT MARKING ISLAND NOSE EPOXY
7. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH (DASHED WHITE)
8. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 8-INCH (WHITE) (2 FT LINE 6 FT SKIP)
9. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 8-INCH (WHITE) (3 FT LINE 9 FT SKIP)
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11. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC ARROWS TYPE 2
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17. PAVEMENT MARKING GROOVED WET REFLECTIVE TAPE, 8-INCH
18. PAVEMENT MARKING DIAGONAL EPOXY 12-INCH (WHITE) (25' C-C)
19. PAVEMENT MARKING DIAGONAL EPOXY 12-INCH (YELLOW) (25' C-C)
20. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH (WHITE)
21. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH (WHITE) (3 FT LINE 9 FT SKIP)
22. PAVEMENT MARKING EPOXY 4-INCH (DASHED YELLOW)

NOTES:

1. CALL-OFFS ARE BASED ON REFERENCE LINE ALIGNMENT UNLESS OTHERWISE NOTED.

PROJECT NO: 2782-11-70 & 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	PAVEMENT MARKING: PILGRIM ROAD	SHEET 295	E

2



LEGEND

1. PAVEMENT MARKING EPOXY 4-INCH (WHITE)
2. PAVEMENT MARKING EPOXY 4-INCH (YELLOW)
3. PAVEMENT MARKING GROOVED CONTRAST PREFORMED THERMOPLASTIC 18-INCH (WHITE) (2 FT LINE 2-FT SKIP)
4. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 8-INCH (WHITE)
5. PAVEMENT MARKING CURB EPOXY (YELLOW)
6. PAVEMENT MARKING ISLAND NOSE EPOXY
7. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH (DASHED WHITE)
8. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 8-INCH (WHITE) (2 FT LINE 6 FT SKIP)
9. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 8-INCH (WHITE) (3 FT LINE 9 FT SKIP)
10. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC ARROWS TYPE 1
11. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC ARROWS TYPE 2
12. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC ARROWS TYPE 3
13. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC WORDS
14. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC CROSSWALK 6-INCH
15. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC STOPLINE 18-INCH
16. PAVEMENT MARKING GROOVED WET REFLECTIVE TAPE, 4-INCH (DASHED WHITE)
17. PAVEMENT MARKING GROOVED WET REFLECTIVE TAPE, 8-INCH
18. PAVEMENT MARKING DIAGONAL EPOXY 12-INCH (WHITE) (25' C-C)
19. PAVEMENT MARKING DIAGONAL EPOXY 12-INCH (YELLOW) (25' C-C)
20. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH (WHITE)
21. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH (WHITE) (3 FT LINE 9 FT SKIP)
22. PAVEMENT MARKING EPOXY 4-INCH (DASHED YELLOW)

USH 41/45 NORTHBOUND & SOUTHBOUND:
REPLACE PAVEMENT MARKINGS REMOVED
UNDER TRAFFIC CONTROL/STAGING OPERATIONS

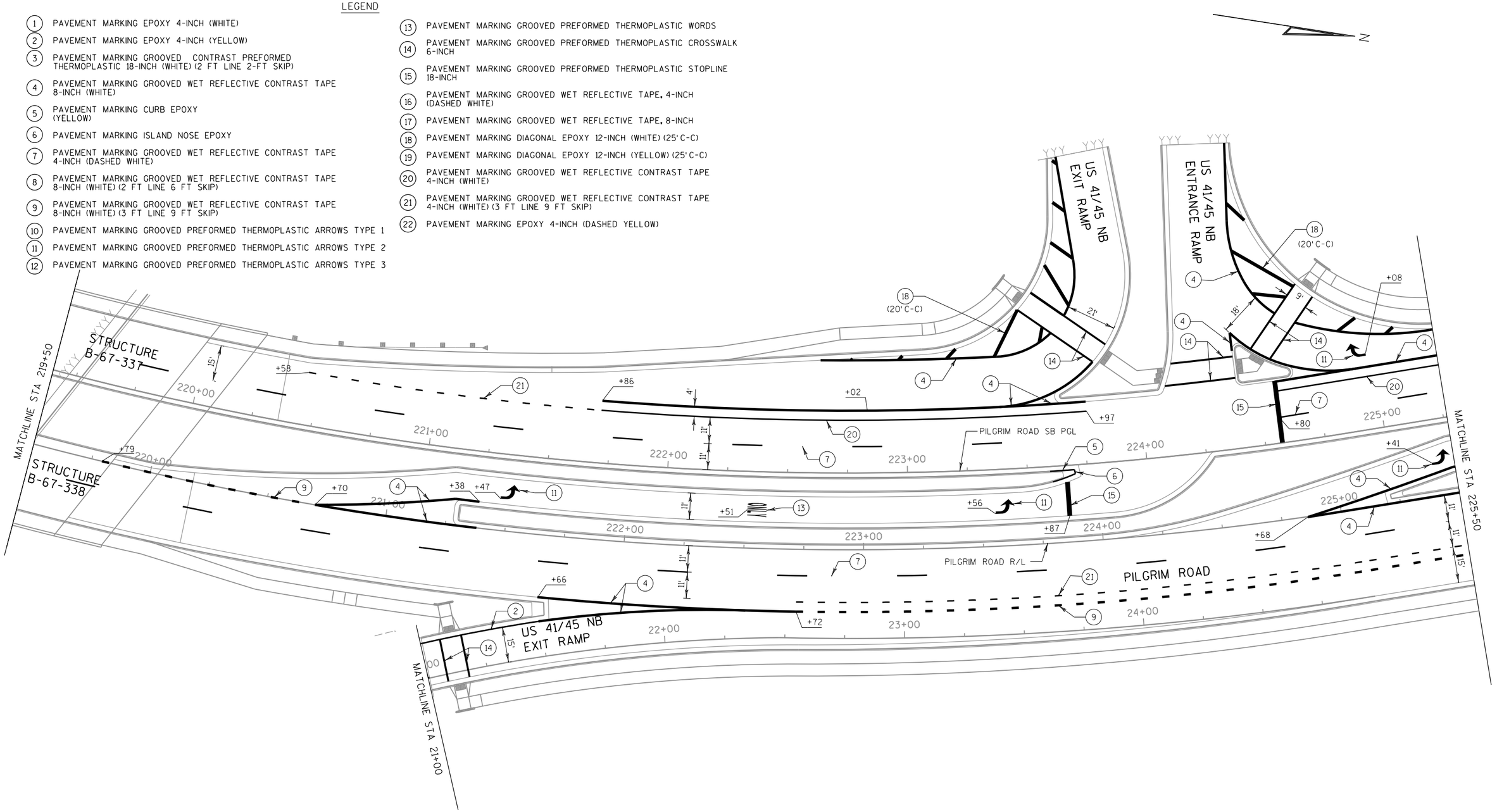
NOTES:
1. CALL-OFFS ARE BASED ON REFERENCE LINE ALIGNMENT UNLESS OTHERWISE NOTED.

PROJECT NO: 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	PAVEMENT MARKING: PILGRIM ROAD	SHEET 296	E

2

LEGEND

1. PAVEMENT MARKING EPOXY 4-INCH (WHITE)
2. PAVEMENT MARKING EPOXY 4-INCH (YELLOW)
3. PAVEMENT MARKING GROOVED CONTRAST PREFORMED THERMOPLASTIC 18-INCH (WHITE) (2 FT LINE 2-FT SKIP)
4. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 8-INCH (WHITE)
5. PAVEMENT MARKING CURB EPOXY (YELLOW)
6. PAVEMENT MARKING ISLAND NOSE EPOXY
7. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH (DASHED WHITE)
8. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 8-INCH (WHITE) (2 FT LINE 6 FT SKIP)
9. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 8-INCH (WHITE) (3 FT LINE 9 FT SKIP)
10. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC ARROWS TYPE 1
11. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC ARROWS TYPE 2
12. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC ARROWS TYPE 3
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14. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC CROSSWALK 6-INCH
15. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC STOPLINE 18-INCH
16. PAVEMENT MARKING GROOVED WET REFLECTIVE TAPE, 4-INCH (DASHED WHITE)
17. PAVEMENT MARKING GROOVED WET REFLECTIVE TAPE, 8-INCH
18. PAVEMENT MARKING DIAGONAL EPOXY 12-INCH (WHITE) (25' C-C)
19. PAVEMENT MARKING DIAGONAL EPOXY 12-INCH (YELLOW) (25' C-C)
20. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH (WHITE)
21. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH (WHITE) (3 FT LINE 9 FT SKIP)
22. PAVEMENT MARKING EPOXY 4-INCH (DASHED YELLOW)

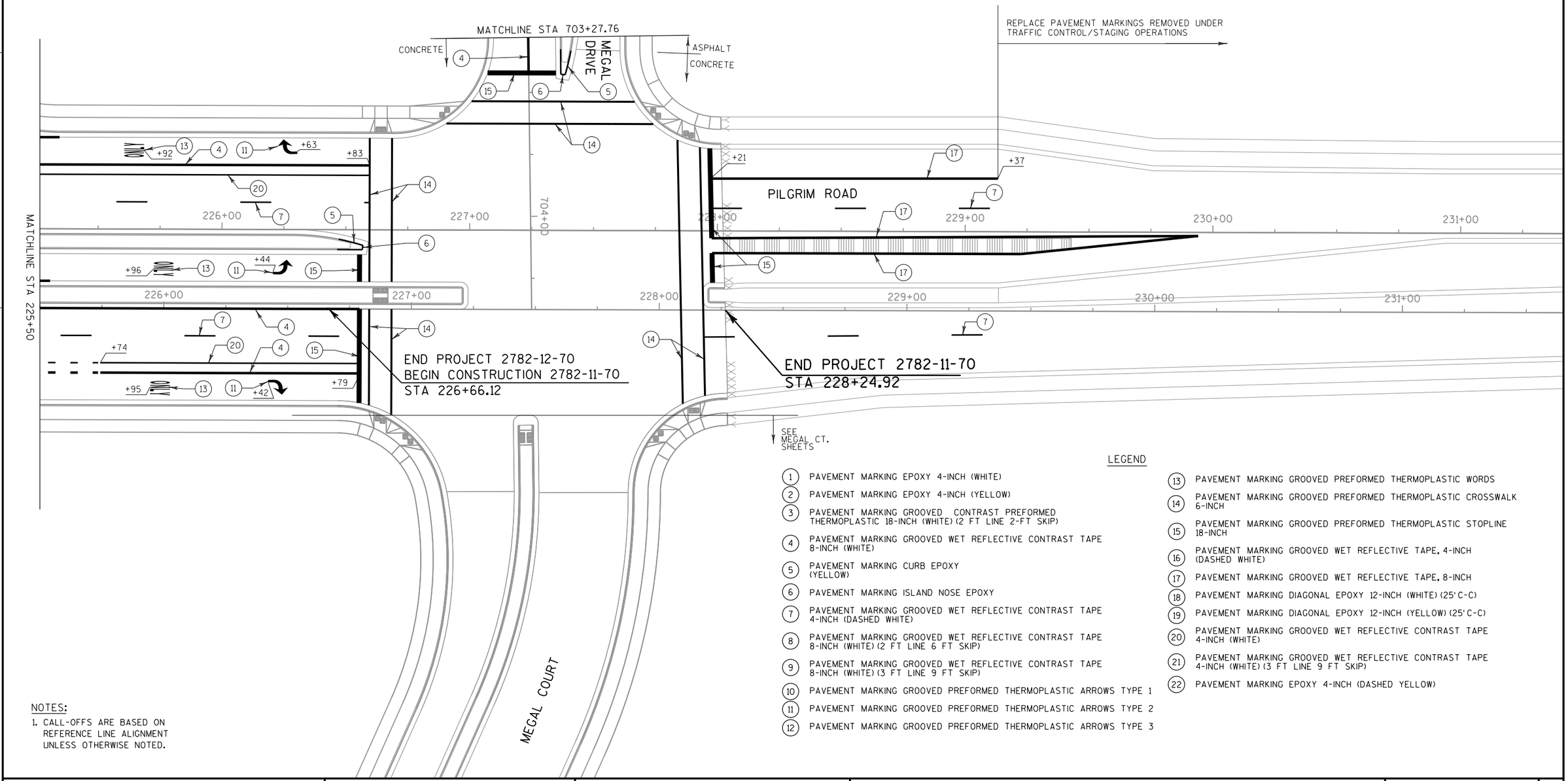


NOTES:

1. CALL-OFFS ARE BASED ON REFERENCE LINE ALIGNMENT UNLESS OTHERWISE NOTED.

PROJECT NO: 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	PAVEMENT MARKING: PILGRIM ROAD	SHEET 297	E

2



NOTES:

1. CALL-OFFS ARE BASED ON REFERENCE LINE ALIGNMENT UNLESS OTHERWISE NOTED.

LEGEND

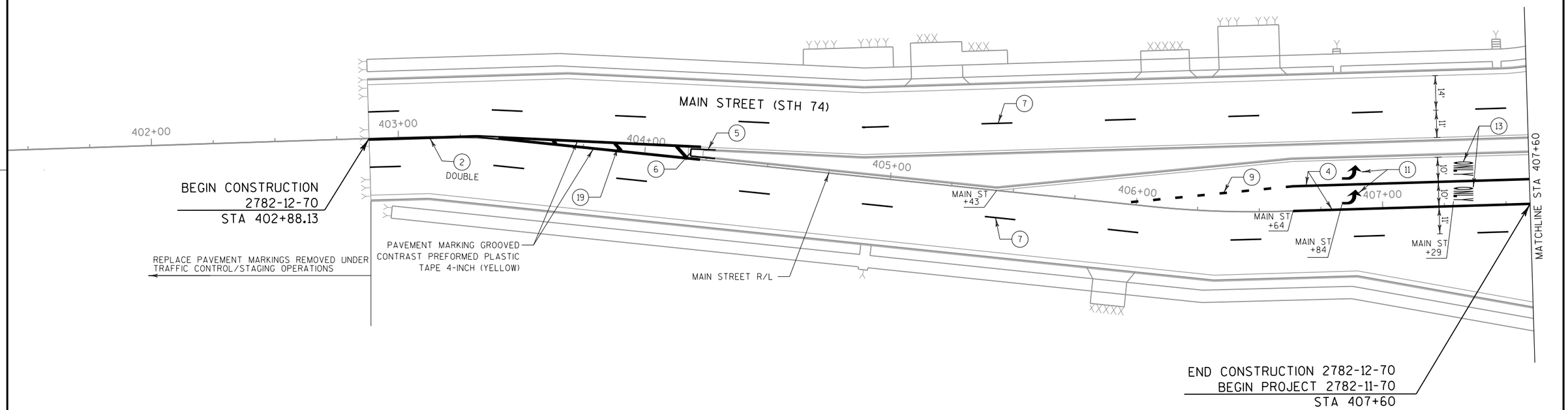
1. PAVEMENT MARKING EPOXY 4-INCH (WHITE)
2. PAVEMENT MARKING EPOXY 4-INCH (YELLOW)
3. PAVEMENT MARKING GROOVED CONTRAST PREFORMED THERMOPLASTIC 18-INCH (WHITE) (2 FT LINE 2-FT SKIP)
4. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 8-INCH (WHITE)
5. PAVEMENT MARKING CURB EPOXY (YELLOW)
6. PAVEMENT MARKING ISLAND NOSE EPOXY
7. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH (DASHED WHITE)
8. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 8-INCH (WHITE) (2 FT LINE 6 FT SKIP)
9. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 8-INCH (WHITE) (3 FT LINE 9 FT SKIP)
10. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC ARROWS TYPE 1
11. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC ARROWS TYPE 2
12. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC ARROWS TYPE 3
13. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC WORDS
14. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC CROSSWALK 6-INCH
15. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC STOPLINE 18-INCH
16. PAVEMENT MARKING GROOVED WET REFLECTIVE TAPE, 4-INCH (DASHED WHITE)
17. PAVEMENT MARKING GROOVED WET REFLECTIVE TAPE, 8-INCH
18. PAVEMENT MARKING DIAGONAL EPOXY 12-INCH (WHITE) (25'C-C)
19. PAVEMENT MARKING DIAGONAL EPOXY 12-INCH (YELLOW) (25'C-C)
20. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH (WHITE)
21. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH (WHITE) (3 FT LINE 9 FT SKIP)
22. PAVEMENT MARKING EPOXY 4-INCH (DASHED YELLOW)

PROJECT NO: 2782-11-70 & 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	PAVEMENT MARKING: PILGRIM ROAD	SHEET 298	E

2

LEGEND

1. PAVEMENT MARKING EPOXY 4-INCH (WHITE)
2. PAVEMENT MARKING EPOXY 4-INCH (YELLOW)
3. PAVEMENT MARKING GROOVED CONTRAST PREFORMED THERMOPLASTIC 18-INCH (WHITE) (2 FT LINE 2-FT SKIP)
4. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 8-INCH (WHITE)
5. PAVEMENT MARKING CURB EPOXY (YELLOW)
6. PAVEMENT MARKING ISLAND NOSE EPOXY
7. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH (DASHED WHITE)
8. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 8-INCH (WHITE) (2 FT LINE 6 FT SKIP)
9. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 8-INCH (WHITE) (3 FT LINE 9 FT SKIP)
10. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC ARROWS TYPE 1
11. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC ARROWS TYPE 2
12. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC ARROWS TYPE 3
13. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC WORDS
14. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC CROSSWALK 6-INCH
15. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC STOPLINE 18-INCH
16. PAVEMENT MARKING GROOVED WET REFLECTIVE TAPE, 4-INCH (DASHED WHITE)
17. PAVEMENT MARKING GROOVED WET REFLECTIVE TAPE, 8-INCH
18. PAVEMENT MARKING DIAGONAL EPOXY 12-INCH (WHITE) (25'C-C)
19. PAVEMENT MARKING DIAGONAL EPOXY 12-INCH (YELLOW) (25'C-C)
20. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH (WHITE)
21. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH (WHITE) (3 FT LINE 9 FT SKIP)
22. PAVEMENT MARKING EPOXY 4-INCH (DASHED YELLOW)

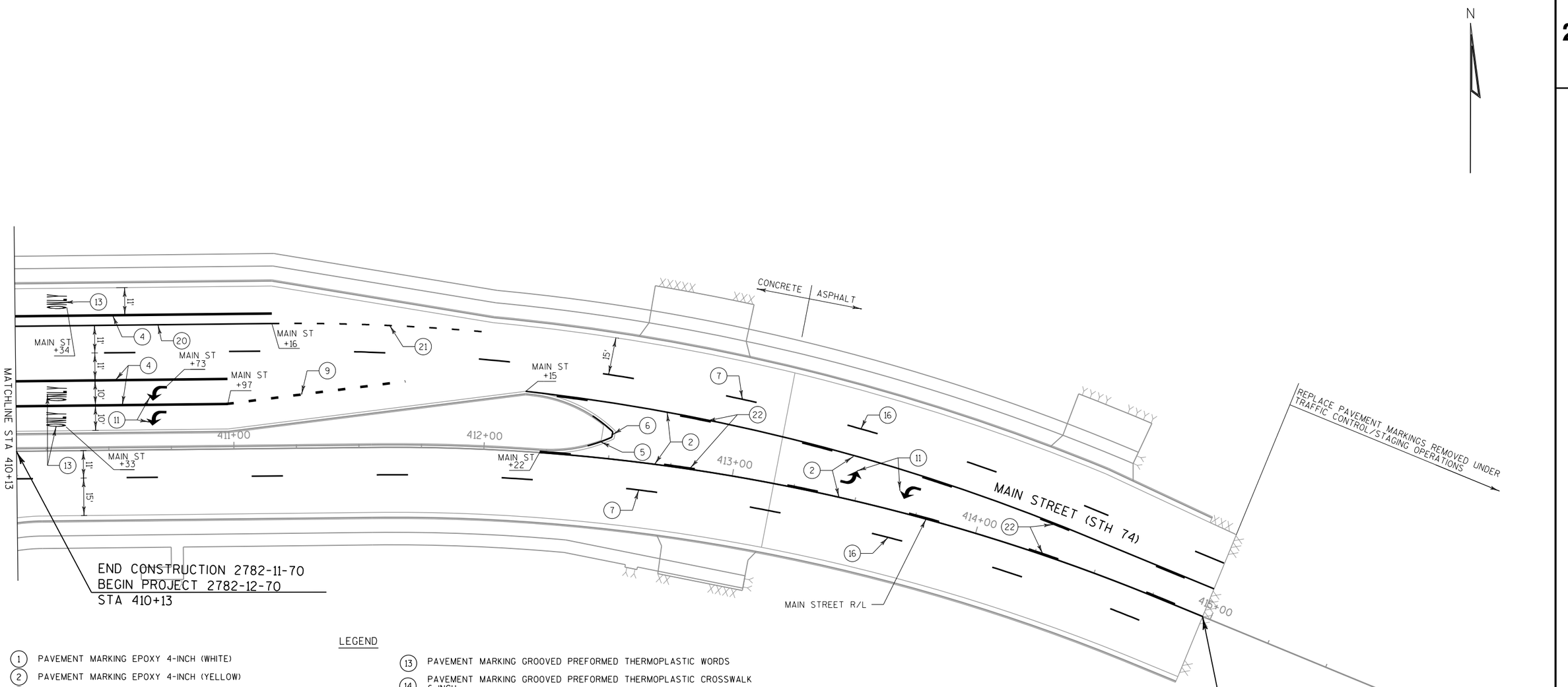


NOTES:

1. CALL-OFFS ARE BASED ON REFERENCE LINE ALIGNMENT UNLESS OTHERWISE NOTED.

PROJECT NO: 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	PAVEMENT MARKING: MAIN STREET (STH 74)	SHEET 299	E

2



LEGEND

1. PAVEMENT MARKING EPOXY 4-INCH (WHITE)
2. PAVEMENT MARKING EPOXY 4-INCH (YELLOW)
3. PAVEMENT MARKING GROOVED CONTRAST PREFORMED THERMOPLASTIC 18-INCH (WHITE) (2 FT LINE 2-FT SKIP)
4. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 8-INCH (WHITE)
5. PAVEMENT MARKING CURB EPOXY (YELLOW)
6. PAVEMENT MARKING ISLAND NOSE EPOXY
7. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH (DASHED WHITE)
8. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 8-INCH (WHITE) (2 FT LINE 6 FT SKIP)
9. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 8-INCH (WHITE) (3 FT LINE 9 FT SKIP)
10. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC ARROWS TYPE 1
11. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC ARROWS TYPE 2
12. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC ARROWS TYPE 3
13. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC WORDS
14. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC CROSSWALK 6-INCH
15. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC STOPLINE 18-INCH
16. PAVEMENT MARKING GROOVED WET REFLECTIVE TAPE, 4-INCH (DASHED WHITE)
17. PAVEMENT MARKING GROOVED WET REFLECTIVE TAPE, 8-INCH
18. PAVEMENT MARKING DIAGONAL EPOXY 12-INCH (WHITE) (25' C-C)
19. PAVEMENT MARKING DIAGONAL EPOXY 12-INCH (YELLOW) (25' C-C)
20. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH (WHITE)
21. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH (WHITE) (3 FT LINE 9 FT SKIP)
22. PAVEMENT MARKING EPOXY 4-INCH (DASHED YELLOW)

NOTES:

1. CALL-OFFS ARE BASED ON REFERENCE LINE ALIGNMENT UNLESS OTHERWISE NOTED.

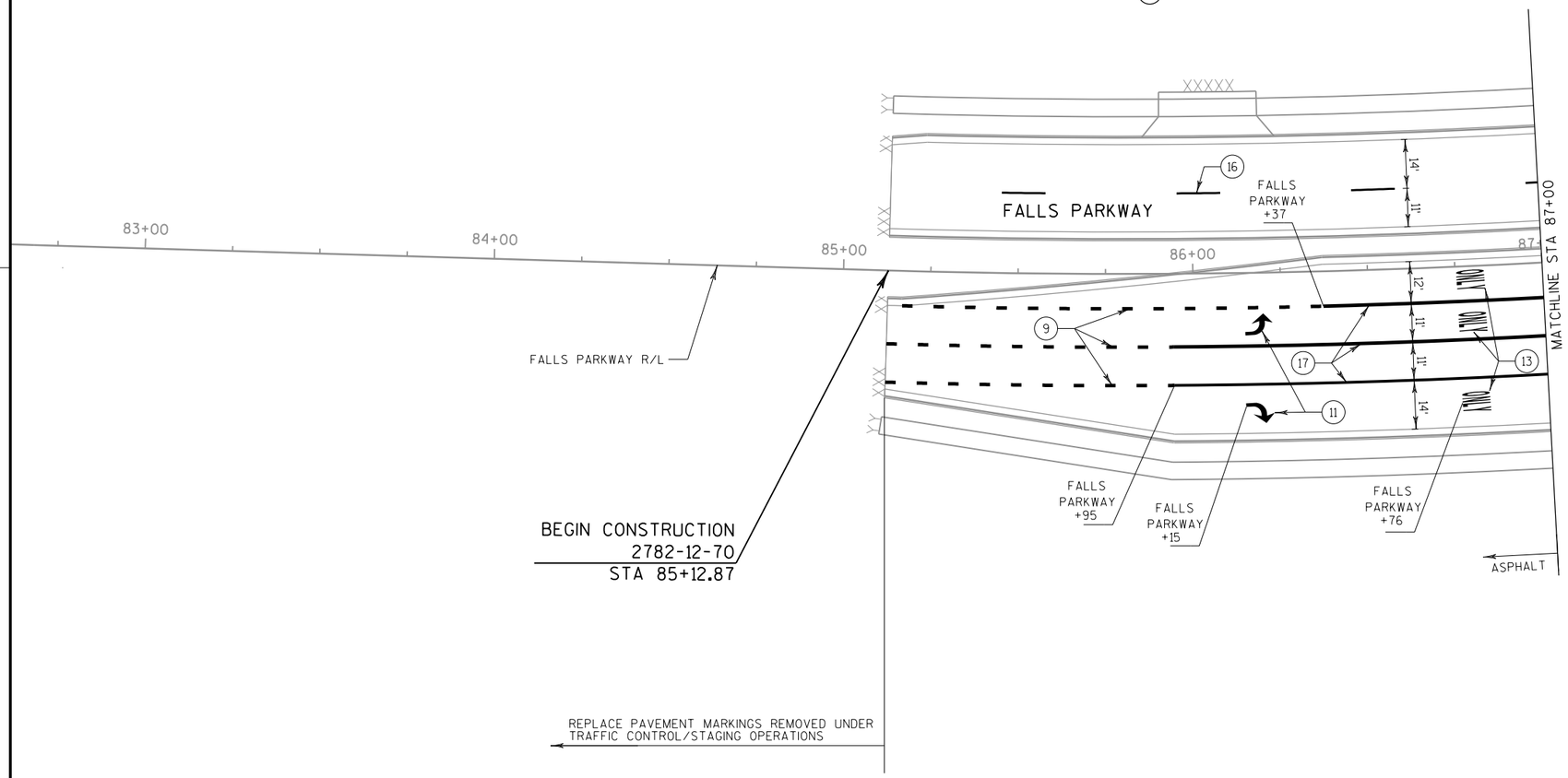
PROJECT NO: 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	PAVEMENT MARKING: MAIN STREET (STH 74)	SHEET 300	E

2

N

LEGEND

1. PAVEMENT MARKING EPOXY 4-INCH (WHITE)
2. PAVEMENT MARKING EPOXY 4-INCH (YELLOW)
3. PAVEMENT MARKING GROOVED CONTRAST PREFORMED THERMOPLASTIC 18-INCH (WHITE) (2 FT LINE 2-FT SKIP)
4. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 8-INCH (WHITE)
5. PAVEMENT MARKING CURB EPOXY (YELLOW)
6. PAVEMENT MARKING ISLAND NOSE EPOXY
7. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH (DASHED WHITE)
8. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 8-INCH (WHITE) (2 FT LINE 6 FT SKIP)
9. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 8-INCH (WHITE) (3 FT LINE 9 FT SKIP)
10. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC ARROWS TYPE 1
11. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC ARROWS TYPE 2
12. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC ARROWS TYPE 3
13. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC WORDS
14. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC CROSSWALK 6-INCH
15. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC STOPLINE 18-INCH
16. PAVEMENT MARKING GROOVED WET REFLECTIVE TAPE, 4-INCH (DASHED WHITE)
17. PAVEMENT MARKING GROOVED WET REFLECTIVE TAPE, 8-INCH
18. PAVEMENT MARKING DIAGONAL EPOXY 12-INCH (WHITE) (25' C-C)
19. PAVEMENT MARKING DIAGONAL EPOXY 12-INCH (YELLOW) (25' C-C)
20. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH (WHITE)
21. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH (WHITE) (3 FT LINE 9 FT SKIP)
22. PAVEMENT MARKING EPOXY 4-INCH (DASHED YELLOW)



NOTES:

1. CALL-OFFS ARE BASED ON REFERENCE LINE ALIGNMENT UNLESS OTHERWISE NOTED.

PROJECT NO: 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	PAVEMENT MARKING: FALLS PARKWAY	SHEET 301	E

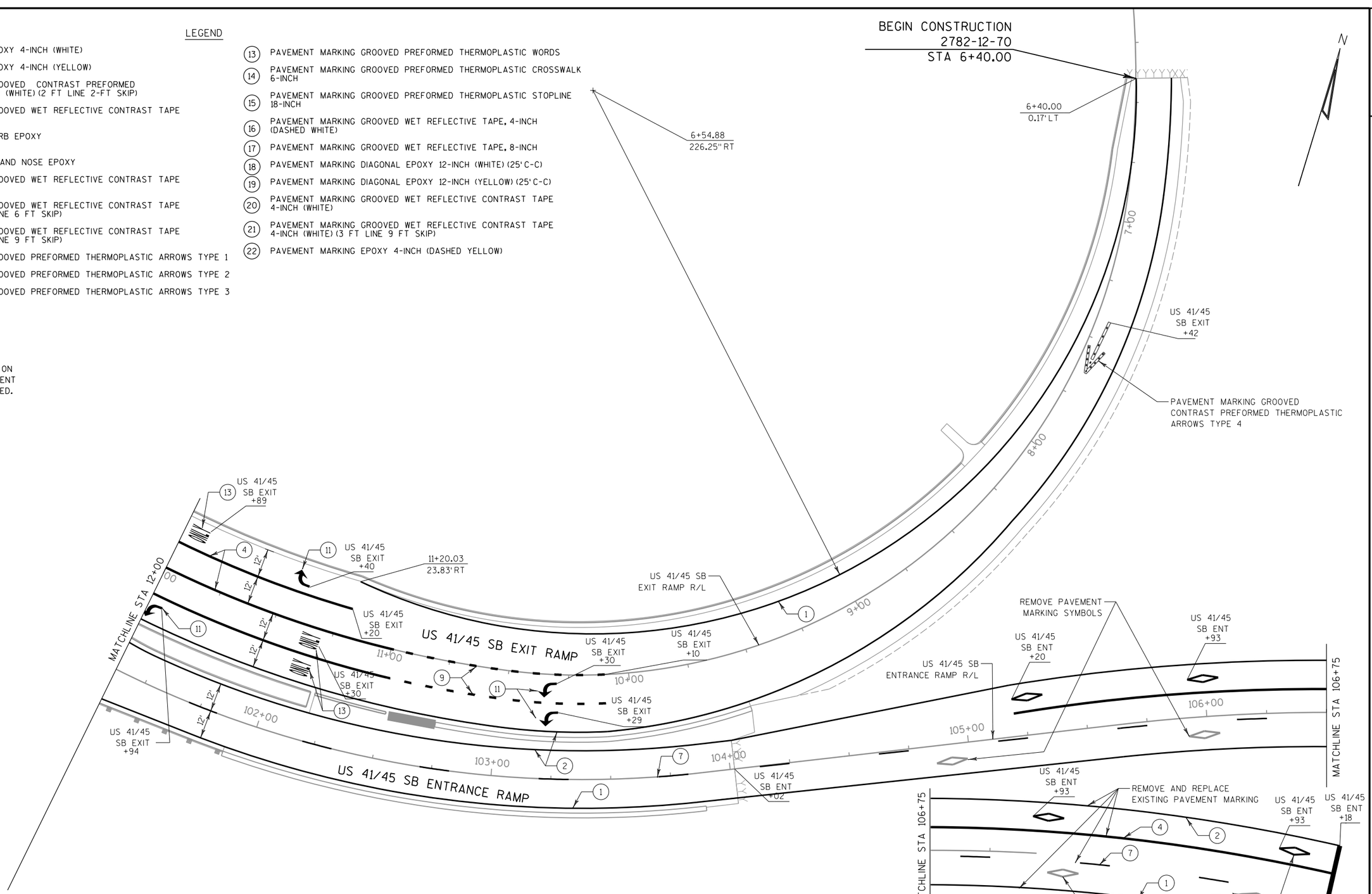
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LEGEND

1. PAVEMENT MARKING EPOXY 4-INCH (WHITE)
2. PAVEMENT MARKING EPOXY 4-INCH (YELLOW)
3. PAVEMENT MARKING GROOVED CONTRAST PREFORMED THERMOPLASTIC 18-INCH (WHITE) (2 FT LINE 2-FT SKIP)
4. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 8-INCH (WHITE)
5. PAVEMENT MARKING CURB EPOXY (YELLOW)
6. PAVEMENT MARKING ISLAND NOSE EPOXY
7. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH (DASHED WHITE)
8. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 8-INCH (WHITE) (2 FT LINE 6 FT SKIP)
9. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 8-INCH (WHITE) (3 FT LINE 9 FT SKIP)
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11. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC ARROWS TYPE 2
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14. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC CROSSWALK 6-INCH
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17. PAVEMENT MARKING GROOVED WET REFLECTIVE TAPE, 8-INCH
18. PAVEMENT MARKING DIAGONAL EPOXY 12-INCH (WHITE) (25'C-C)
19. PAVEMENT MARKING DIAGONAL EPOXY 12-INCH (YELLOW) (25'C-C)
20. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH (WHITE)
21. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH (WHITE) (3 FT LINE 9 FT SKIP)
22. PAVEMENT MARKING EPOXY 4-INCH (DASHED YELLOW)

NOTES:

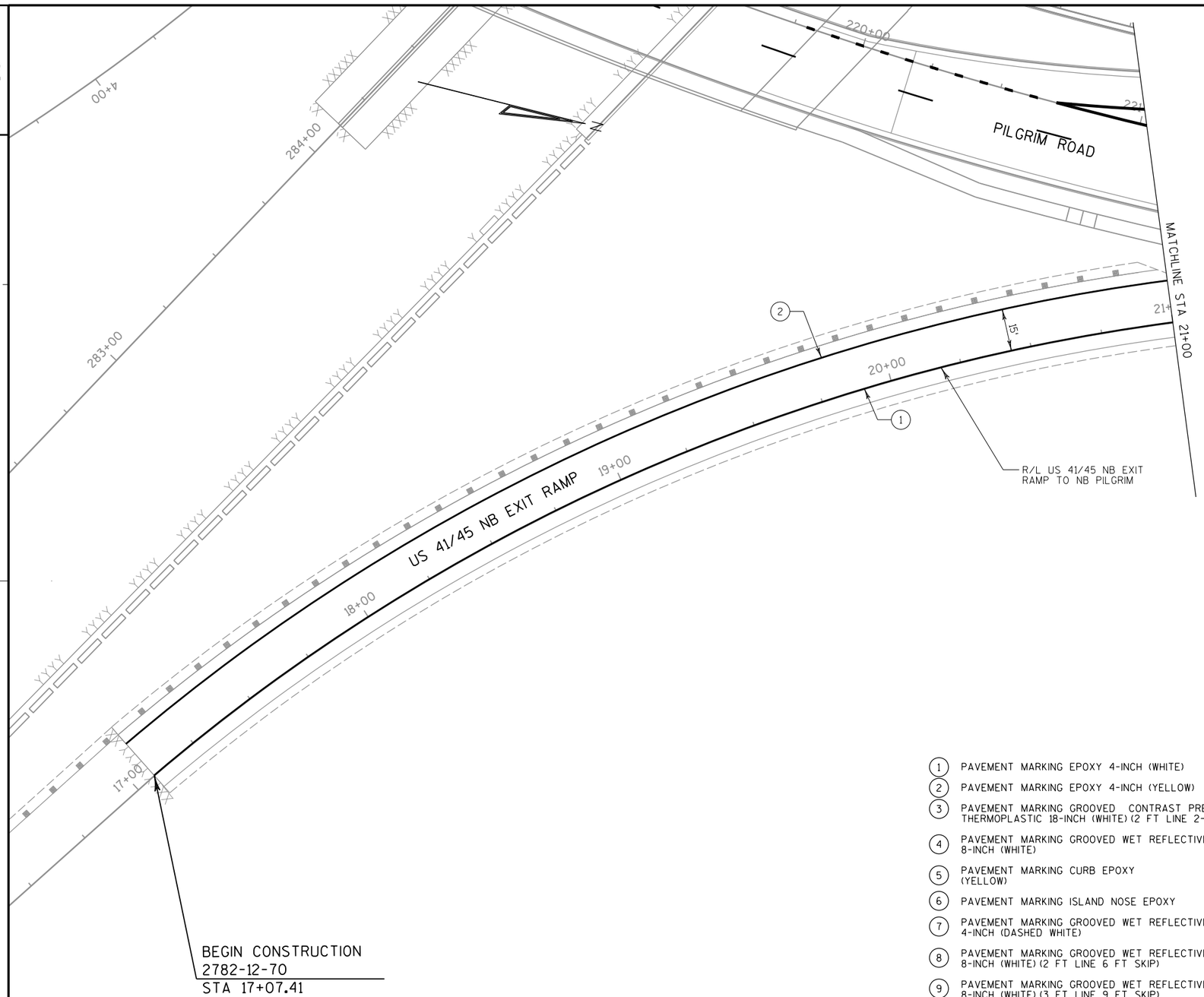
1. CALL-OFFS ARE BASED ON REFERENCE LINE ALIGNMENT UNLESS OTHERWISE NOTED.



PROJECT NO: 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	PAVEMENT MARKING: US 41/45 SB RAMPS	SHEET 302	E

FILE NAME : P:\44xx\4442\Plan\024510_pm.dgn PLOT DATE : 11/2/2014 PLOT BY : ajp PLOT NAME : PLOT SCALE : 1:40

WISDOT/CADDS SHEET 42



NOTES:

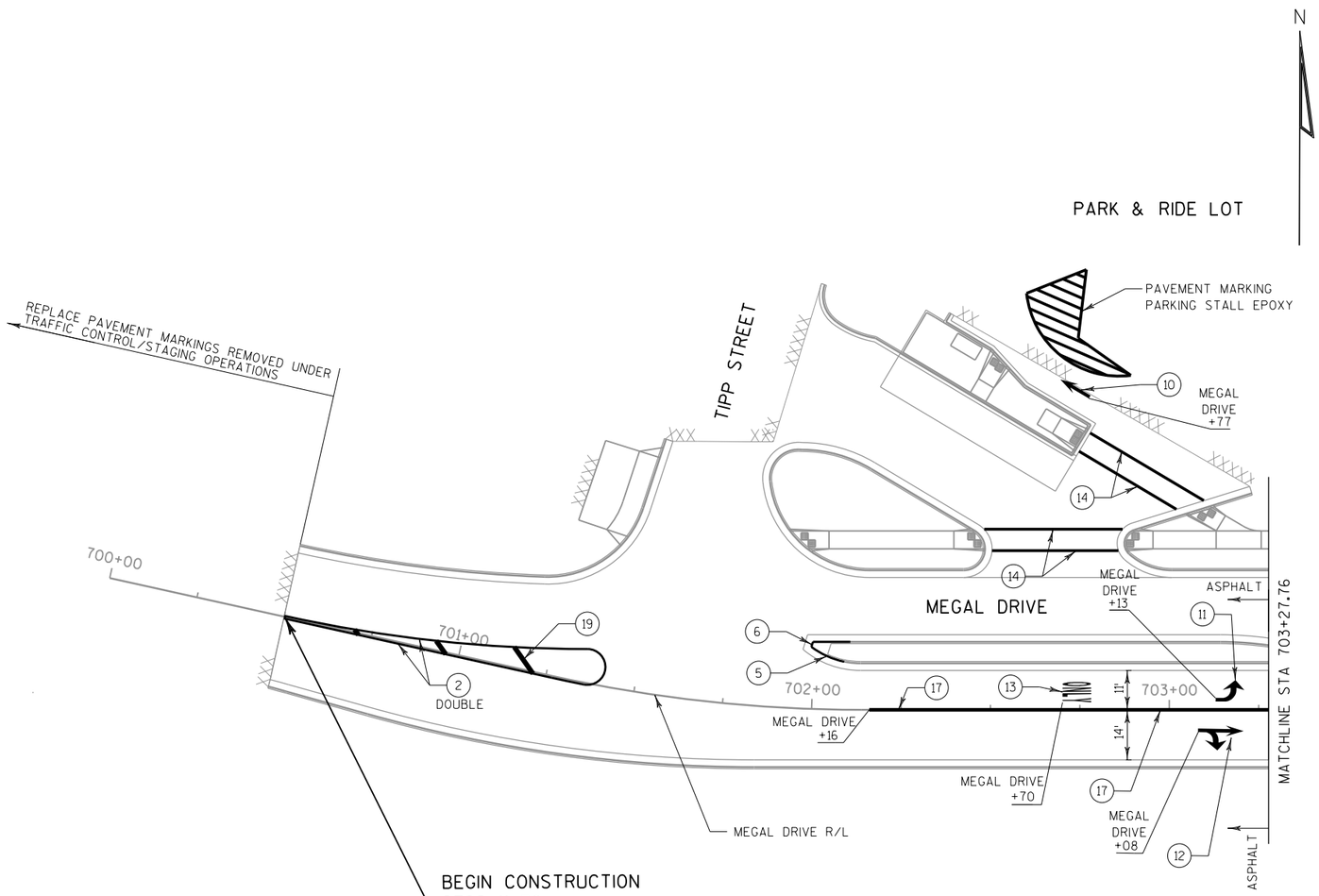
1. CALL-OFFS ARE BASED ON REFERENCE LINE ALIGNMENT UNLESS OTHERWISE NOTED.

LEGEND

1. PAVEMENT MARKING EPOXY 4-INCH (WHITE)
2. PAVEMENT MARKING EPOXY 4-INCH (YELLOW)
3. PAVEMENT MARKING GROOVED CONTRAST PREFORMED THERMOPLASTIC 18-INCH (WHITE) (2 FT LINE 2-FT SKIP)
4. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 8-INCH (WHITE)
5. PAVEMENT MARKING CURB EPOXY (YELLOW)
6. PAVEMENT MARKING ISLAND NOSE EPOXY
7. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH (DASHED WHITE)
8. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 8-INCH (WHITE) (2 FT LINE 6 FT SKIP)
9. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 8-INCH (WHITE) (3 FT LINE 9 FT SKIP)
10. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC ARROWS TYPE 1
11. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC ARROWS TYPE 2
12. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC ARROWS TYPE 3
13. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC WORDS
14. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC CROSSWALK 6-INCH
15. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC STOPLINE 18-INCH
16. PAVEMENT MARKING GROOVED WET REFLECTIVE TAPE, 4-INCH (DASHED WHITE)
17. PAVEMENT MARKING GROOVED WET REFLECTIVE TAPE, 8-INCH
18. PAVEMENT MARKING DIAGONAL EPOXY 12-INCH (WHITE) (25' C-C)
19. PAVEMENT MARKING DIAGONAL EPOXY 12-INCH (YELLOW) (25' C-C)
20. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH (WHITE)
21. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH (WHITE) (3 FT LINE 9 FT SKIP)
22. PAVEMENT MARKING EPOXY 4-INCH (DASHED YELLOW)

PROJECT NO: 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	PAVEMENT MARKING: US 41/45 NB EXIT RAMP TO NB PILGRIM	SHEET 303	E

2



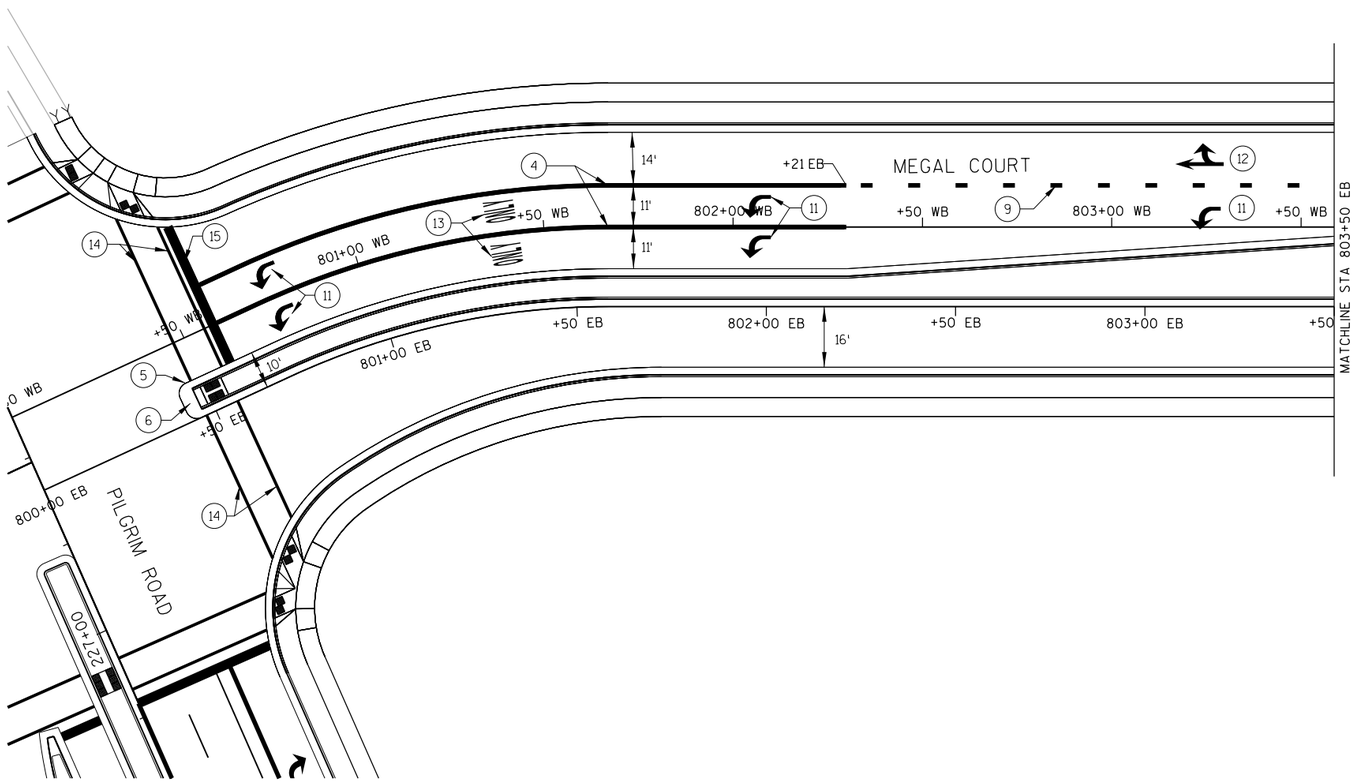
NOTES:

1. CALL-OFFS ARE BASED ON REFERENCE LINE ALIGNMENT UNLESS OTHERWISE NOTED.

LEGEND

1. PAVEMENT MARKING EPOXY 4-INCH (WHITE)
2. PAVEMENT MARKING EPOXY 4-INCH (YELLOW)
3. PAVEMENT MARKING GROOVED CONTRAST PREFORMED THERMOPLASTIC 18-INCH (WHITE) (2 FT LINE 2-FT SKIP)
4. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 8-INCH (WHITE)
5. PAVEMENT MARKING CURB EPOXY (YELLOW)
6. PAVEMENT MARKING ISLAND NOSE EPOXY
7. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH (DASHED WHITE)
8. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 8-INCH (WHITE) (2 FT LINE 6 FT SKIP)
9. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 8-INCH (WHITE) (3 FT LINE 9 FT SKIP)
10. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC ARROWS TYPE 1
11. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC ARROWS TYPE 2
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17. PAVEMENT MARKING GROOVED WET REFLECTIVE TAPE, 8-INCH
18. PAVEMENT MARKING DIAGONAL EPOXY 12-INCH (WHITE) (25'C-C)
19. PAVEMENT MARKING DIAGONAL EPOXY 12-INCH (YELLOW) (25'C-C)
20. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH (WHITE)
21. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH (WHITE) (3 FT LINE 9 FT SKIP)
22. PAVEMENT MARKING EPOXY 4-INCH (DASHED YELLOW)

PROJECT NO: 2782-11-70 & 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	PAVEMENT MARKING: MEGAL DRIVE	SHEET 304	E



LEGEND

1. PAVEMENT MARKING EPOXY 4-INCH (WHITE)
2. PAVEMENT MARKING EPOXY 4-INCH (YELLOW)
3. PAVEMENT MARKING GROOVED CONTRAST PREFORMED THERMOPLASTIC 18-INCH (WHITE) (2 FT LINE 2-FT SKIP)
4. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 8-INCH (WHITE)
5. PAVEMENT MARKING CURB EPOXY (YELLOW)
6. PAVEMENT MARKING ISLAND NOSE EPOXY
7. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH (DASHED WHITE)
8. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 8-INCH (WHITE) (2 FT LINE 6 FT SKIP)
9. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 8-INCH (WHITE) (3 FT LINE 9 FT SKIP)
10. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC ARROWS TYPE 1
11. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC ARROWS TYPE 2
12. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC ARROWS TYPE 3
13. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC WORDS
14. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC CROSSWALK 6-INCH
15. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC STOPLINE 18-INCH
16. PAVEMENT MARKING GROOVED WET REFLECTIVE TAPE, 4-INCH (DASHED WHITE)
17. PAVEMENT MARKING GROOVED WET REFLECTIVE TAPE, 8-INCH
18. PAVEMENT MARKING DIAGONAL EPOXY 12-INCH (WHITE) (25'C-C)
19. PAVEMENT MARKING DIAGONAL EPOXY 12-INCH (YELLOW) (25'C-C)
20. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH (WHITE)
21. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH (WHITE) (3 FT LINE 9 FT SKIP)
22. PAVEMENT MARKING EPOXY 4-INCH (DASHED YELLOW)

NOTES:

1. SEE SIGNAL PLANS FOR STOP BAR LOCATIONS.

PROJECT NO: 2782-11-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	PAVEMENT MARKING: MEGAL COURT	SHEET 305	E

2

LEGEND

1. PAVEMENT MARKING EPOXY 4-INCH (WHITE)
2. PAVEMENT MARKING EPOXY 4-INCH (YELLOW)
3. PAVEMENT MARKING GROOVED CONTRAST PREFORMED THERMOPLASTIC 18-INCH (WHITE) (2 FT LINE 2-FT SKIP)
4. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 8-INCH (WHITE)
5. PAVEMENT MARKING CURB EPOXY (YELLOW)
6. PAVEMENT MARKING ISLAND NOSE EPOXY
7. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH (DASHED WHITE)
8. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 8-INCH (WHITE) (2 FT LINE 6 FT SKIP)
9. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 8-INCH (WHITE) (3 FT LINE 9 FT SKIP)
10. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC ARROWS TYPE 1
11. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC ARROWS TYPE 2
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13. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC WORDS
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15. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC STOPLINE 18-INCH
16. PAVEMENT MARKING GROOVED WET REFLECTIVE TAPE, 4-INCH (DASHED WHITE)
17. PAVEMENT MARKING GROOVED WET REFLECTIVE TAPE, 8-INCH
18. PAVEMENT MARKING DIAGONAL EPOXY 12-INCH (WHITE) (25' C-C)
19. PAVEMENT MARKING DIAGONAL EPOXY 12-INCH (YELLOW) (25' C-C)
20. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH (WHITE)
21. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH (WHITE) (3 FT LINE 9 FT SKIP)
22. PAVEMENT MARKING EPOXY 4-INCH (DASHED YELLOW)
25. PAVEMENT MARKING CROSSWALK EPOXY 24-INCH (WHITE)

N

WACKER NEUSON NORTH LEG

MEGAL COURT

WACKER NEUSON ENTRANCE

HARLEY LOADING DOCK ENTRANCE

MATCHLINE STA 803+50 EB

MATCHLINE STA 904+50 NB

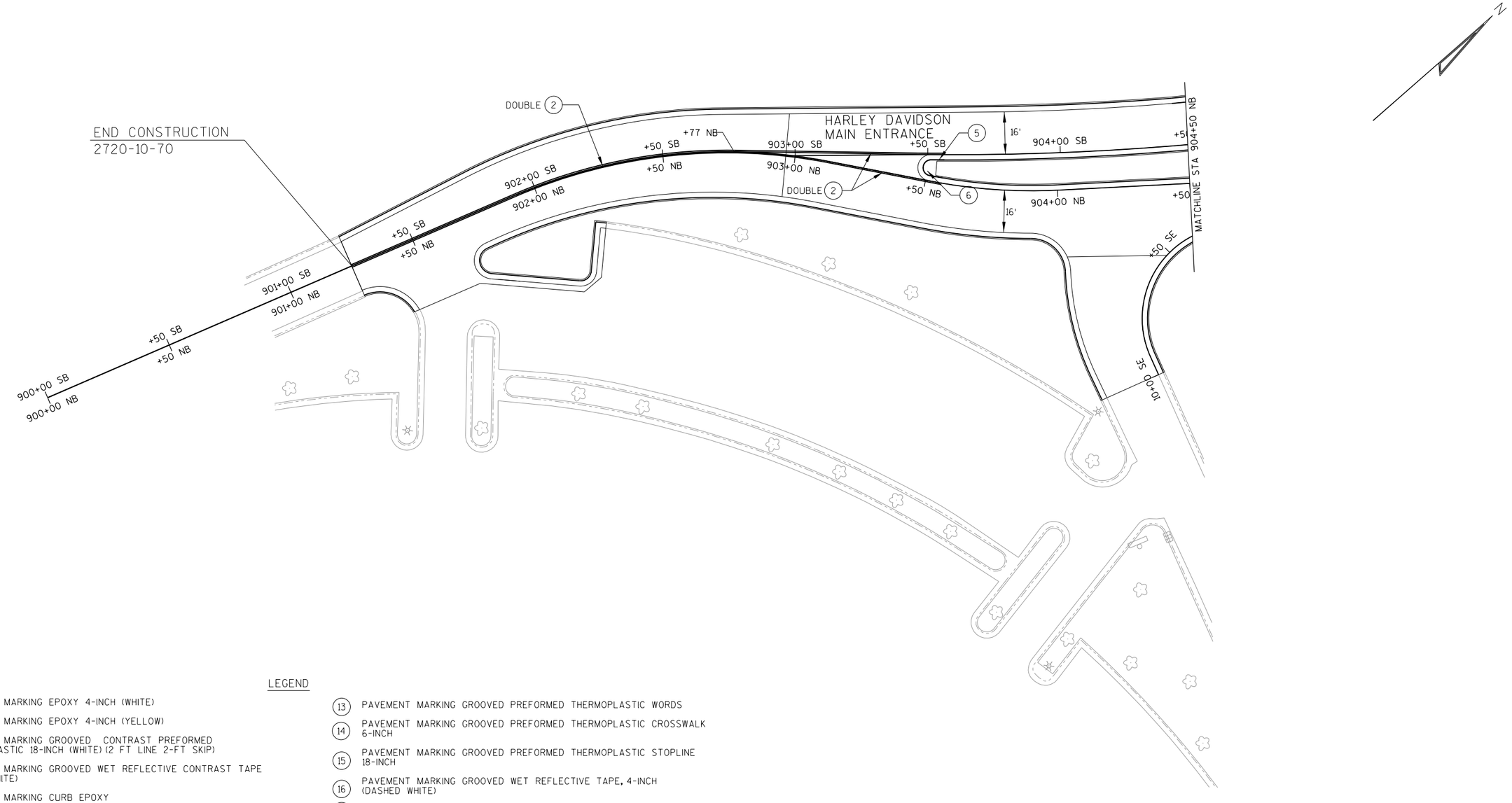
END CONSTRUCTION
2782-11-70
BEGIN PROJECT
2720-10-70
STA 803+77.60

END PROJECT
2720-10-70

END CONSTRUCTION
2720-10-70

PROJECT NO: 2782-11-70 & 2720-10-70	HWY: MEGAL COURT	COUNTY: WAUKESHA	PAVEMENT MARKING: MEGAL COURT	SHEET 306	E

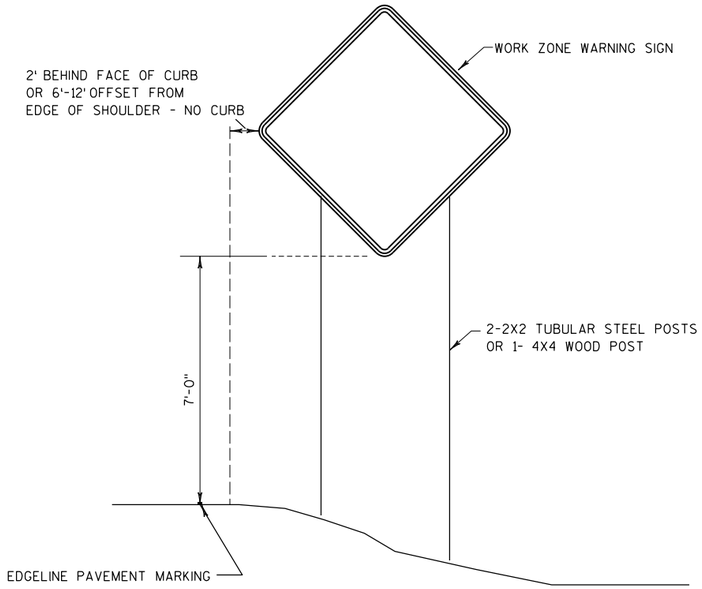
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LEGEND

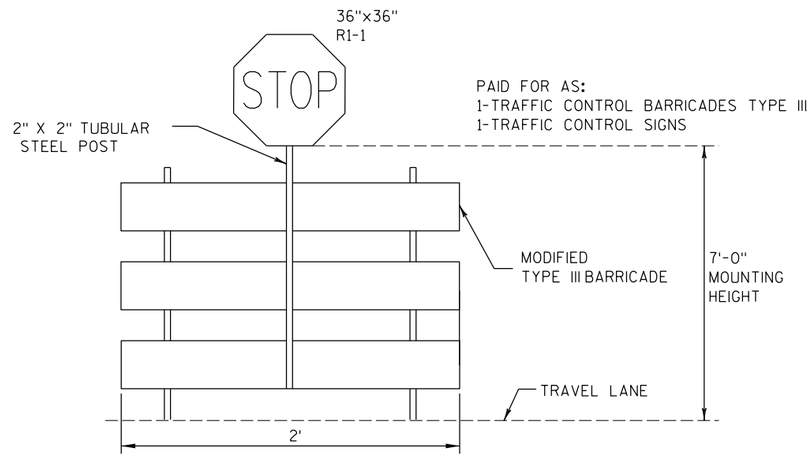
1. PAVEMENT MARKING EPOXY 4-INCH (WHITE)
2. PAVEMENT MARKING EPOXY 4-INCH (YELLOW)
3. PAVEMENT MARKING GROOVED CONTRAST PREFORMED THERMOPLASTIC 18-INCH (WHITE) (2 FT LINE 2-FT SKIP)
4. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 8-INCH (WHITE)
5. PAVEMENT MARKING CURB EPOXY (YELLOW)
6. PAVEMENT MARKING ISLAND NOSE EPOXY
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8. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 8-INCH (WHITE) (2 FT LINE 6 FT SKIP)
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10. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC ARROWS TYPE 1
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20. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH (WHITE)
21. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH (WHITE) (3 FT LINE 9 FT SKIP)
22. PAVEMENT MARKING EPOXY 4-INCH (DASHED YELLOW)

PROJECT NO: 2720-10-70	HWY: MEGAL COURT	COUNTY: WAUKESHA	PAVEMENT MARKING: HARLEY DAVIDSON ENTRANCE	SHEET 307	E



TYPICAL TEMPORARY TRAFFIC CONTROL DETAIL
MOUNTING ON FIXED SUPPORT

LONG TERM
7 DAYS OR MORE



TEMPORARY STOP SIGN

GENERAL NOTES FOR TRAFFIC CONTROL

NOTES APPLY TO ALL TRAFFIC CONTROL AND STAGING SHEETS.

PHASE CURB RAMP AND INTERSECTION WORK TO MAINTAIN PEDESTRIAN ACCESS.
SEE SDD "TRAFFIC CONTROL, SIDEWALK CLOSURE".

ALL SIGNS ARE 48-INCH X 48-INCH UNLESS OTHERWISE NOTED.

"WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS REFLECTIVE ORANGE.

THE EXACT LOCATION AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED
TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

ALL SIGNS INAPPROPRIATE TO THE STATUS OF THE CONTROL ZONE INCLUDING
EXISTING SIGNING IN THE VICINITY, SHALL BE COVERED OR REMOVED AS SPECIFIED
IN THE PLANS AND/OR THE SPECIAL PROVISIONS OR AS DIRECTED BY THE ENGINEER.
SEE SPECIAL PROVISIONS FOR ADDITIONAL TRAFFIC CONTROL/STAGING REQUIREMENTS.

BARRICADES OR DRUMS THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE
IMMEDIATELY RE-ESTABLISHED UPON COMPLETION OF THE OPERATION OR, FOR
CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

REMOVE ALL EXISTING PAVEMENT MARKINGS WHICH CONFLICT WITH THE TRAFFIC CONTROL.

CHANNELIZING DEVICES PLACED ADJACENT TO THE WORK AREA SHALL
BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN THE
PROGRESS.

RESIDENTIAL DRIVEWAYS WILL BE CLOSED WHEN UNDER CONSTRUCTION.
COMMERCIAL DRIVEWAYS WILL BE CONSTRUCTED IN HALVES. USE HES
CONCRETE TO MINIMIZE DRIVEWAY CLOSURES. TRAFFIC CONTROL DRUMS
SHALL BE PLACED AT DRIVEWAYS UNDER CONSTRUCTION, 10' SPACING.

TRAFFIC CONTROL DRUMS IN TAPERS SHALL BE EQUIPPED WITH
WARNING LIGHTS, TYPE "C", ONE WAY LIGHTS IN TAPERS ONLY,
UNLESS OTHERWISE SHOWN.

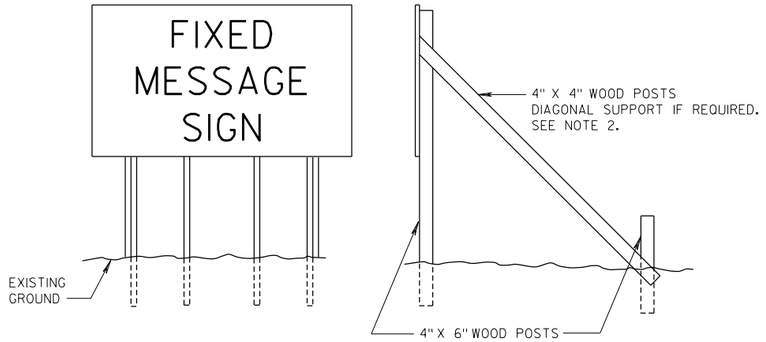
BARRICADE STRIPES ARE TO BE SLOPED DOWNWARD IN THE
DIRECTION OF TRAFFIC FLOW.

LOCAL STREET AND FREEWAY LANE CLOSURES SHALL BE INCIDENTAL TO
THE TRAFFIC CONTROL LIMP SUM ITEM, EXCEPT FOR EQUIPMENT BEING
USED IN THOSE CLOSURES.

REMOVE ALL CONFLICTING PAVEMENT MARKINGS.

2

PROJECT NO: 2782-11-70 & 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TEMPORARY TRAFFIC CONTROL DETAIL	SHEET 308	E



FRONT VIEW

SIDE VIEW

NOTES

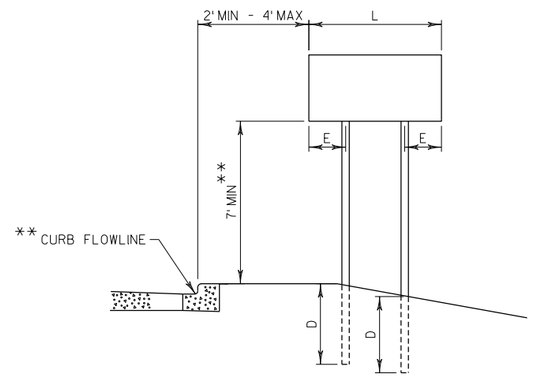
1. SEE TRAFFIC CONTROL SHEETS FOR SIGN LOCATIONS.

2. TWO DIAGONAL SUPPORTS TO BE INCLUDED FOR EACH SIGN OVER 12'LONG AND HIGHER THAN 8'. DIAGONAL SUPPORTS TO BE AFFIXED TO THE OUTSIDE SUPPORTS AND TO BE INCIDENTAL TO THE "TRAFFIC CONTROL FIXED MESSAGE SIGN" ITEM. IF DIAGONAL SUPPORTS ARE USED, SIGN TO BE SHIELDED BEHIND CONCRETE BARRIER OR PLACED OUTSIDE THE CLEAR ZONE.

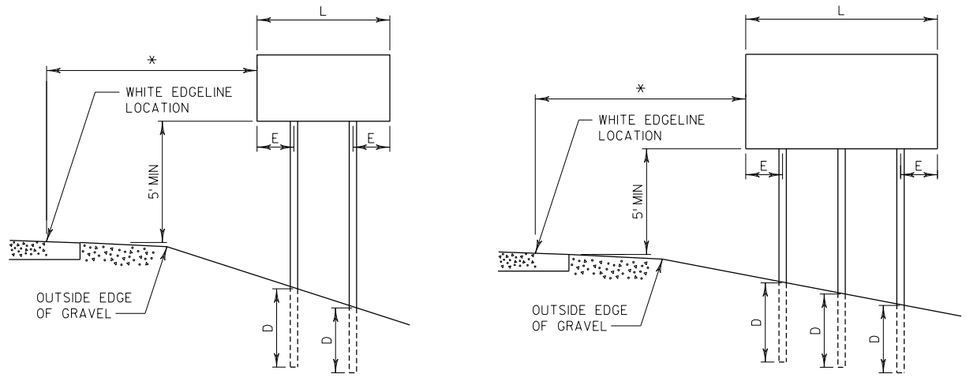
3. SEE TABLES BELOW FOR REQUIRED NUMBER OF POSTS.

* 6'FROM EDGE OF A PAVED SHOULDER OR 12'FROM THE EDGE OF PAVEMENT (EDGE LINE LOCATION) OR 2'FROM OUTSIDE EDGE OF GRAVEL, WHICHEVER IS GREATER UNLESS DIRECTED BY PROJECT ENGINEER. SEE NOTE 2 FOR OFFSET REQUIREMENTS WHERE DIAGONAL SUPPORTS ARE USED.

** THE EXISTENCE OF CURB AND GUTTER DOES NOT IN ITSELF MANDATE THE VERTICAL CLEARANCE ILLUSTRATED. THAT HEIGHT IS TYPICALLY MEASURED WHERE THERE IS SIDEWALK ADJACENT TO THE ROADWAY OR PARKING IS PERMITTED. IN THE ABSENCE OF SIDEWALK, VERTICAL CLEARANCE IS MEASURED FROM THE TOP OF THE CURB. IF NO SIDEWALK AND NO PARKING, VERTICAL CLEARANCE MAY BE REDUCED TO 5'MINIMUM. OFFSET OF SIGNS IS MEASURED FROM THE CURB FLOWLINE.



URBAN AREA



RURAL AREA

SIGN SHAPE OTHER THAN DIAMOND (TWO POSTS REQUIRED)	
L	E
GREATER THAN 48" LESS THAN 60"	12"
60" TO 120"	L/5

SIGN SHAPE OTHER THAN DIAMOND (THREE POSTS REQUIRED)	
L	E
GREATER THAN 120" LESS THAN 168"	12"

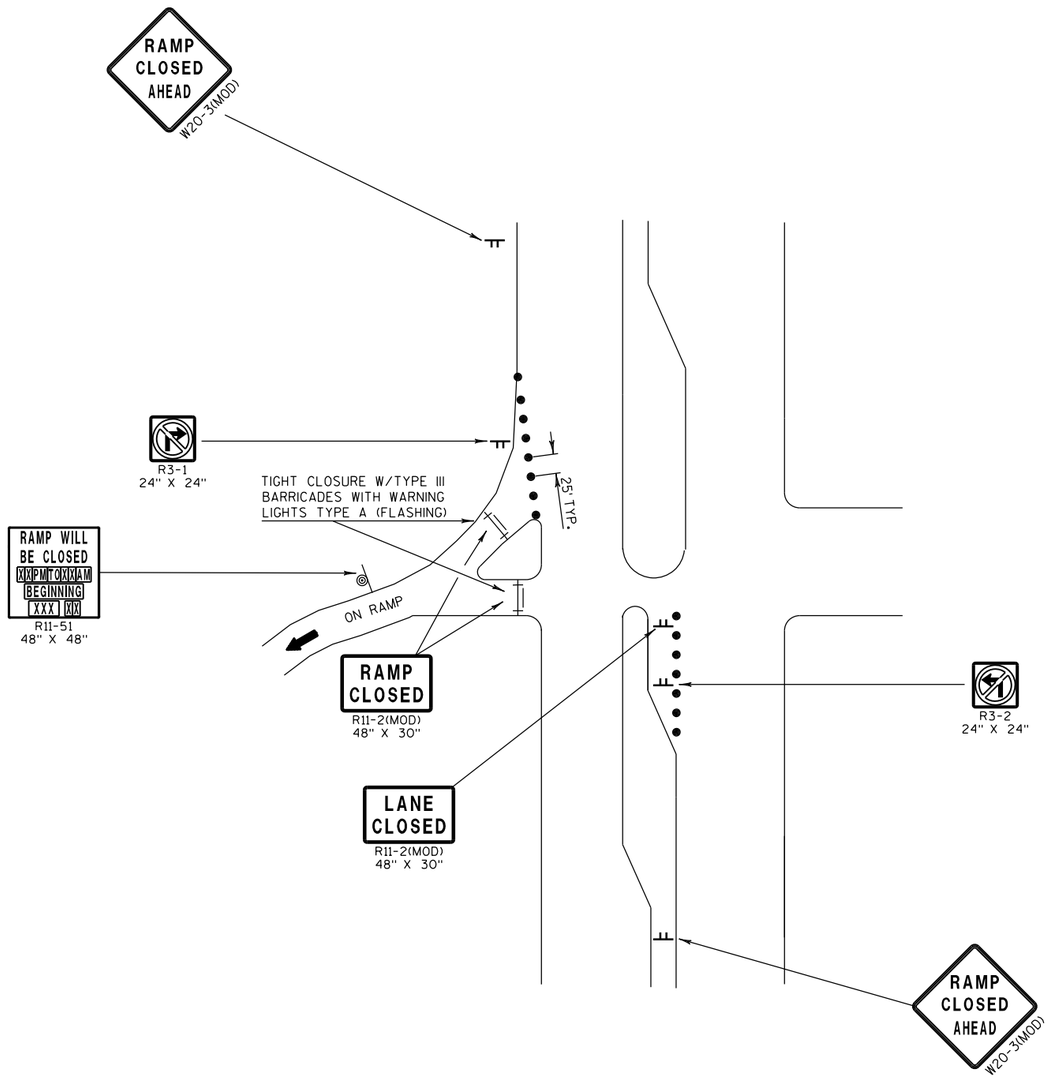
SIGN SHAPE OTHER THAN DIAMOND (FOUR POSTS REQUIRED)	
L	E
168" AND GREATER	12"

POST EMBEDMENT DEPTH

AREA OF SIGN INSTALLATION (SQ. FT.)	D (MIN)
20 OR LESS	4'
GREATER THAN 20	5'

POST MOUNTING DETAIL FOR TRAFFIC CONTROL FIXED MESSAGE SIGNS

2



LEGEND

- DRUM
- SIGN ON TEMPORARY SUPPORT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH SIGN

TRAFFIC CONTROL FOR ENTRANCE RAMP CLOSURE (SHORT TERM ONLY)

PROJECT NO: 2782-11-70 & 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TRAFFIC CONTROL AT ENTRANCE RAMP	SHEET 310	E

2

2

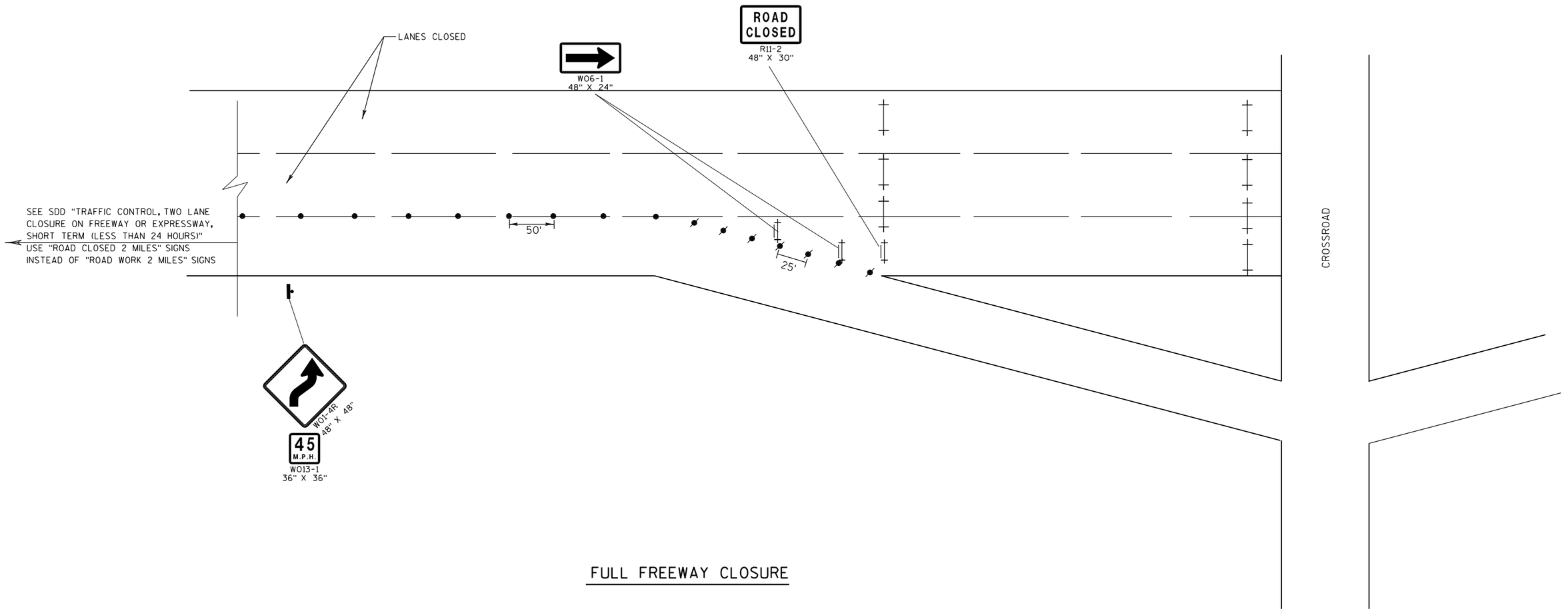
LEGEND

TYPE III BARRICADE WITH SIGN

TYPE III BARRICADE

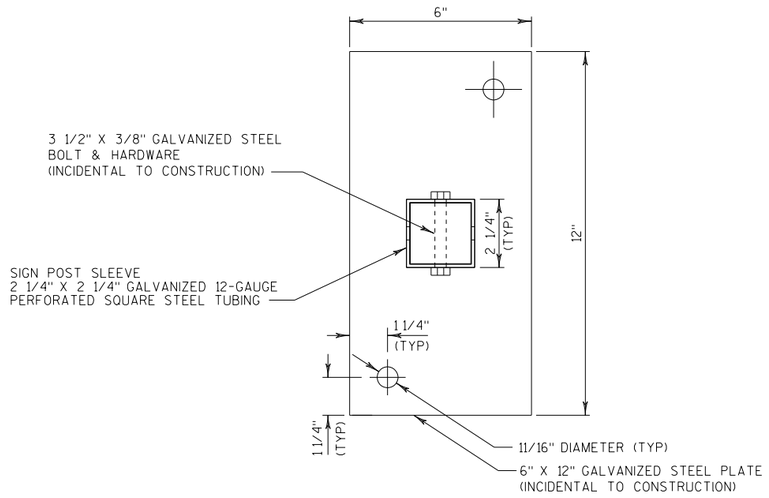
DRUMS WITH TYPE C LIGHT

DRUMS

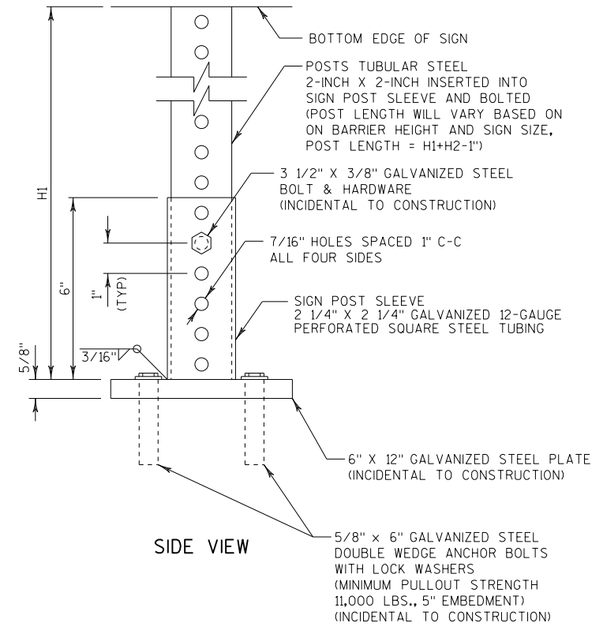


FULL FREEWAY CLOSURE

PROJECT NO: 2782-11-70 & 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TRAFFIC CONTROL - FULL FREEWAY CLOSURE	SHEET 311	E

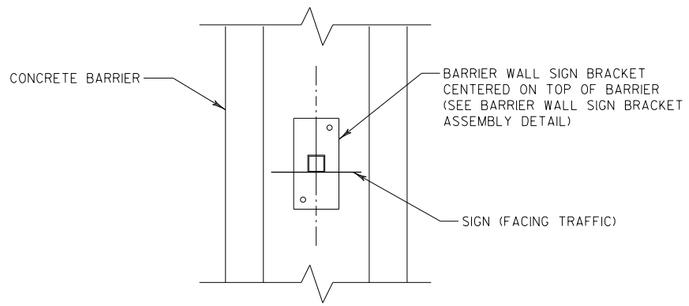


PLAN VIEW

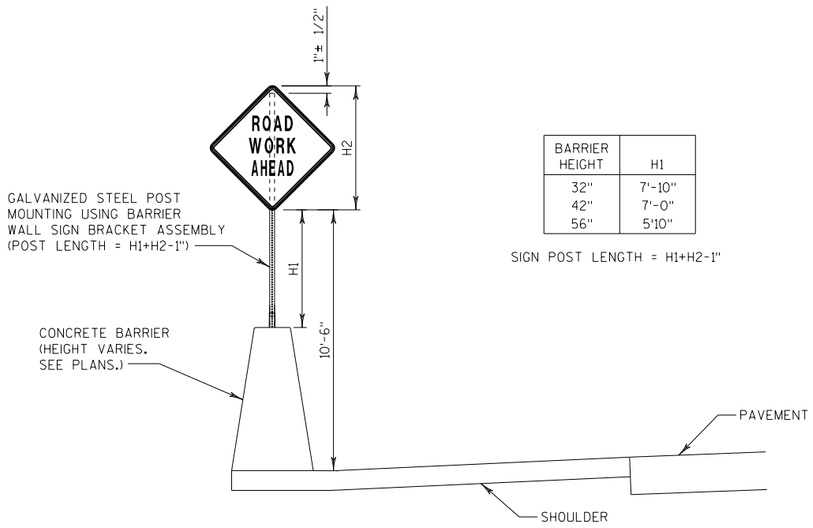


SIDE VIEW

BARRIER WALL SIGN BRACKET ASSEMBLY DETAIL



PLAN VIEW



BARRIER HEIGHT	H1
32"	7'-10"
42"	7'-0"
56"	5'10"

SIGN POST LENGTH = H1+H2-1"

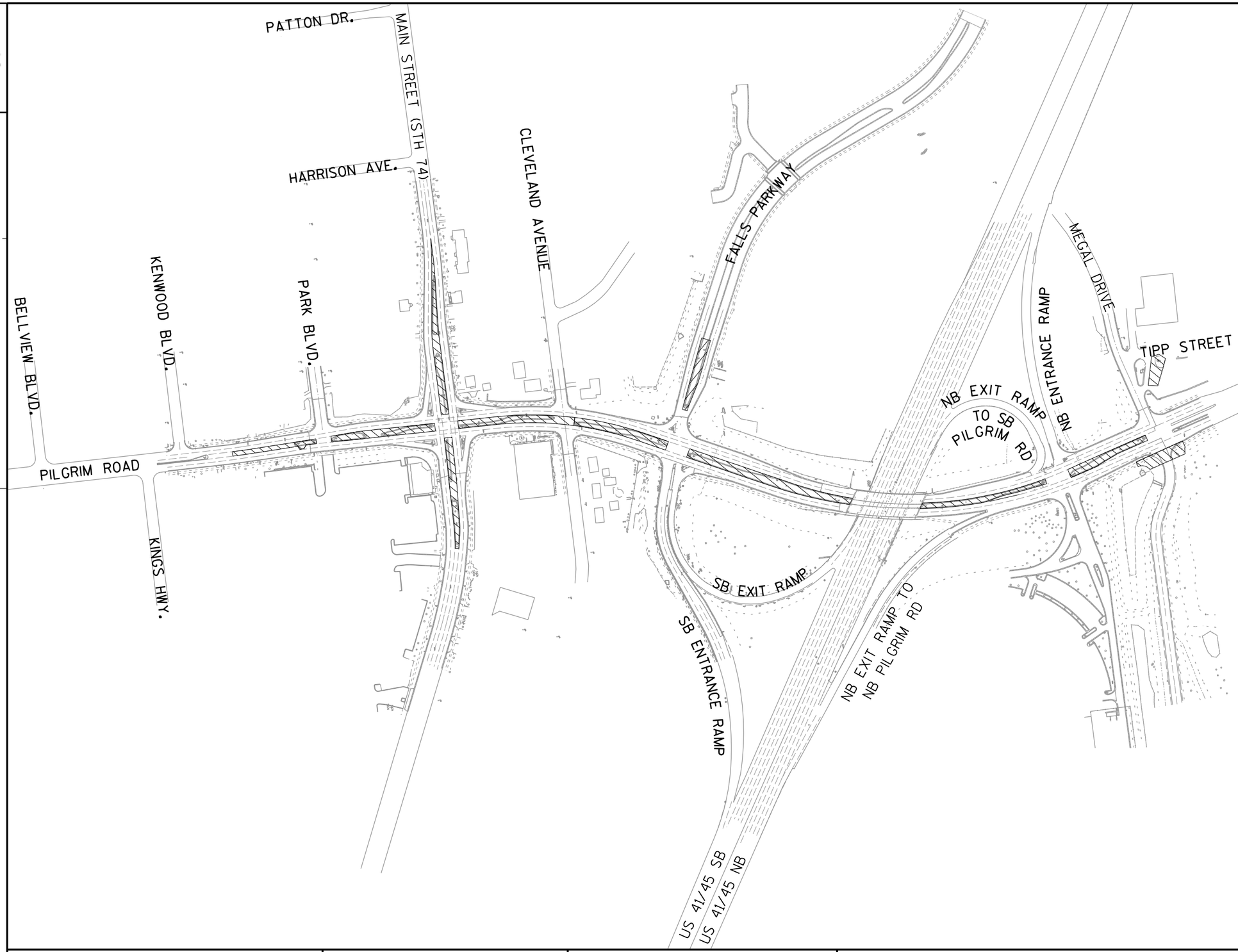
SIDE VIEW

MEDIAN BARRIER MOUNTING DETAIL

MOUNTING SIGNS TO MEDIAN BARRIER

NOT TO SCALE

2



N

CONSTRUCTION STAGING OVERVIEW - STAGE 1

PILGRIM ROAD
TRAFFIC WILL BE MAINTAINED ON EXISTING LANES AND ONE LANE OF TRAFFIC FOR EACH DIRECTION SHALL BE MAINTAINED AT ALL TIMES.

MAIN STREET
TRAFFIC WILL BE MAINTAINED ON EXISTING LANES AND ONE LANE OF TRAFFIC FOR EACH DIRECTION SHALL BE MAINTAINED AT ALL TIMES.

FALLS PARKWAY
TRAFFIC WILL BE MAINTAINED ON EXISTING LANES AND ONE LANE OF TRAFFIC FOR EACH DIRECTION SHALL BE MAINTAINED AT ALL TIMES.

US 41/45
TRAFFIC WILL BE MAINTAINED ON ALL EXISTING LANES OF US 41/45 DURING PEAK HOURS.

US 41/45 NB ENTRANCE RAMP
TRAFFIC WILL BE MAINTAINED ON THE EXISTING LANE OF THIS RAMP AT ALL TIMES.

US 41/45 NB EXIT RAMP TO PILGRIM RD SB
RAMP WILL BE CLOSED TO TRAFFIC.
RAMP WILL BE DETOURED VIA THE MAIN ST INTERCHANGE.

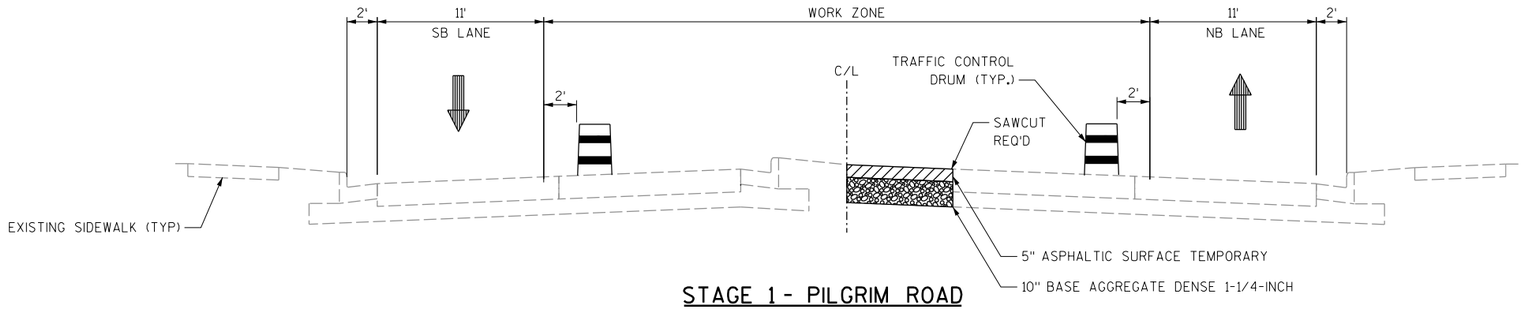
US 41/45 NB EXIT RAMP TO PILGRIM RD NB
TRAFFIC WILL BE MAINTAINED ON EXISTING LANE OF THIS RAMP AT ALL TIMES.

US 41/45 SB ENTRANCE RAMP
TRAFFIC WILL BE MAINTAINED ON EXISTING LANE OF THIS RAMP AT ALL TIMES.

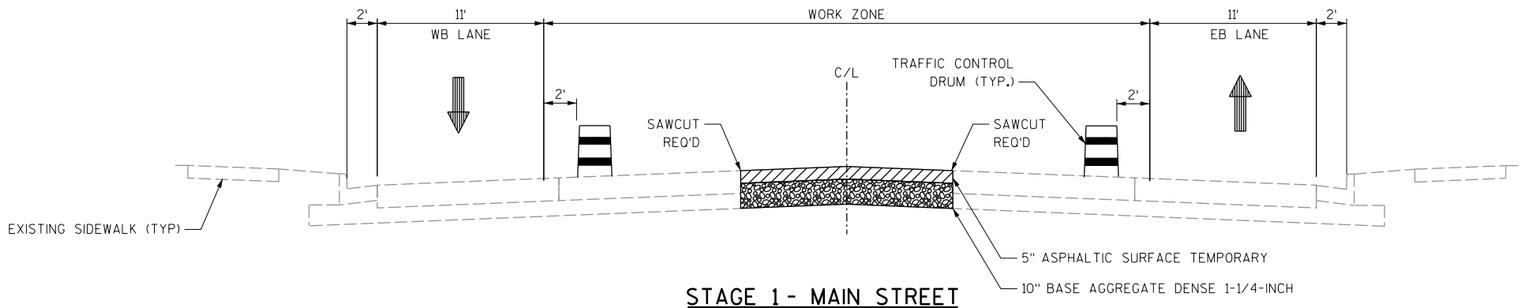
US 41/45 SB EXIT RAMP
RAMP WILL BE CLOSED TO TRAFFIC.
RAMP WILL BE DETOURED VIA THE MAIN ST INTERCHANGE.

SIDEWALKS
TO REMAIN OPEN.

PROJECT NO: 2782-11-70 & 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TRAFFIC CONTROL STAGE 1: OVERVIEW	SHEET 313	E



STAGE 1 - PILGRIM ROAD



STAGE 1 - MAIN STREET

PROJECT NO: 2782-11-70 & 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TRAFFIC CONTROL STAGE 1: TYPICAL SECTIONS	SHEET 314	E

2

N

BELLVIEW BLVD.

PILGRIM ROAD

KINGS HWY.

ROAD WORK AHEAD
W20-1

LEFT LANE CLOSED AHEAD
W20-5

W04-2L

END ROAD WORK
G20-2A
48" X 24"

W01-6
48" X 24"

R3-2
24" X 24"

4YR

400'

400'

200'

180'

200'

RIGHT TURN ONLY
R3-53R
24" X 30"

END ROAD WORK
G20-2A
48" X 24"

ROAD WORK AHEAD
W20-1

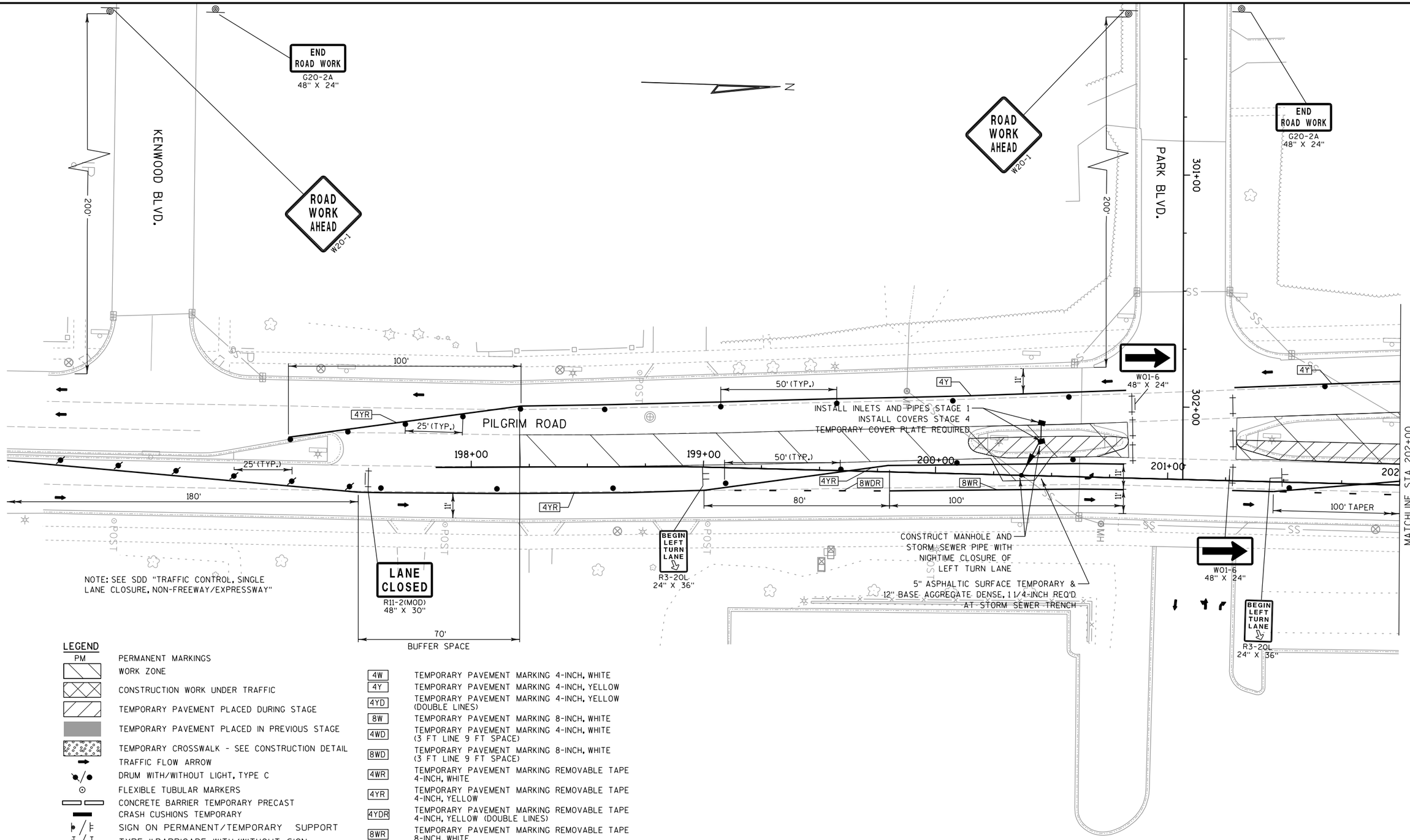
LEGEND

PM	PERMANENT MARKINGS
	WORK ZONE
	CONSTRUCTION WORK UNDER TRAFFIC
	TEMPORARY PAVEMENT PLACED DURING STAGE
	TEMPORARY PAVEMENT PLACED IN PREVIOUS STAGE
	TEMPORARY CROSSWALK - SEE CONSTRUCTION DETAIL
	TRAFFIC FLOW ARROW
	DRUM WITH/WITHOUT LIGHT, TYPE C
	FLEXIBLE TUBULAR MARKERS
	CONCRETE BARRIER TEMPORARY PRECAST
	CRASH CUSHIONS TEMPORARY
	SIGN ON PERMANENT/TEMPORARY SUPPORT
	TYPE II BARRICADE WITH/WITHOUT SIGN
	TYPE III BARRICADE WITH/WITHOUT SIGN

4W	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE
4Y	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW
4YD	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW (DOUBLE LINES)
8W	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE
4WD	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE (3 FT LINE 9 FT SPACE)
8WD	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE (3 FT LINE 9 FT SPACE)
4WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, WHITE
4YR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW
4YDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW (DOUBLE LINES)
8WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE
8WDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE (3 FT LINE 9 FT SPACE)

PROJECT NO: 2782-11-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TRAFFIC CONTROL STAGE 1: PILGRIM ROAD	SHEET 315	E

FILE NAME : P:\44xx\4442\Plan\026101_s1.dgn PLOT DATE : 11/2/2014 PLOT BY : ajp PLOT NAME : PLOT SCALE : 1:40



LEGEND

PM	PERMANENT MARKINGS
	WORK ZONE
	CONSTRUCTION WORK UNDER TRAFFIC
	TEMPORARY PAVEMENT PLACED DURING STAGE
	TEMPORARY PAVEMENT PLACED IN PREVIOUS STAGE
	TEMPORARY CROSSWALK - SEE CONSTRUCTION DETAIL
	TRAFFIC FLOW ARROW
	DRUM WITH/WITHOUT LIGHT, TYPE C
	FLEXIBLE TUBULAR MARKERS
	CONCRETE BARRIER TEMPORARY PRECAST
	CRASH CUSHIONS TEMPORARY
	SIGN ON PERMANENT/TEMPORARY SUPPORT
	TYPE II BARRICADE WITH/WITHOUT SIGN
	TYPE III BARRICADE WITH/WITHOUT SIGN

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8WDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE (3 FT LINE 9 FT SPACE)

PROJECT NO: 2782-11-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TRAFFIC CONTROL STAGE 1: PILGRIM ROAD	SHEET 316	E

2

N

MATCHLINE STA 407+60

CONSTRUCT ONE MEDIAN AT A TIME, MAINTAIN PEDESTRIAN ACCESS ACROSS PILGRIM ROAD AND MAIN STREET, SEE SDD "TRAFFIC CONTROL, SIDEWALK CLOSURE"

W01-6 48" X 24"

INSTALL INLETS AND PIPES STAGE 1
INSTALL COVERS STAGE 4

TEMPORARY COVER PLATE REQ'D

TEMPORARY INLET COVERS REQ'D

TEMPORARY CONNECTION TO EXISTING STORM SEWER REQUIRED IN STAGE 1, CONCRETE COLLAR REQUIRED

5" ASPHALTIC SURFACE TEMPORARY & 12" BASE AGGREGATE DENSE, 1 1/4-INCH REQ'D AT STORM SEWER TRENCH

MAIN STREET (STH 74)

PILGRIM ROAD

MATCHLINE STA 202+00

MATCHLINE STA 207+75

MATCHLINE STA 410+13

TEMPORARY CONNECTION TO EXISTING STORM SEWER PIPE REQUIRED, INCIDENTAL TO MANHOLE CONSTRUCTION CONCRETE COLLAR REQUIRED

LEGEND

PM	PERMANENT MARKINGS
	WORK ZONE
	CONSTRUCTION WORK UNDER TRAFFIC
	TEMPORARY PAVEMENT PLACED DURING STAGE
	TEMPORARY PAVEMENT PLACED IN PREVIOUS STAGE
	TEMPORARY CROSSWALK - SEE CONSTRUCTION DETAIL
	TRAFFIC FLOW ARROW
	DRUM WITH/WITHOUT LIGHT, TYPE C
	FLEXIBLE TUBULAR MARKERS
	CONCRETE BARRIER TEMPORARY PRECAST
	CRASH CUSHIONS TEMPORARY
	SIGN ON PERMANENT/TEMPORARY SUPPORT
	TYPE II BARRICADE WITH/WITHOUT SIGN
	TYPE III BARRICADE WITH/WITHOUT SIGN

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4YR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW
4YDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW (DOUBLE LINES)
8WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE
8WDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE (3 FT LINE 9 FT SPACE)

PROJECT NO: 2782-11-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TRAFFIC CONTROL STAGE 1: PILGRIM ROAD	SHEET 317	E

2

LEGEND

PM	PERMANENT MARKINGS
	WORK ZONE
	CONSTRUCTION WORK UNDER TRAFFIC
	TEMPORARY PAVEMENT PLACED DURING STAGE
	TEMPORARY PAVEMENT PLACED IN PREVIOUS STAGE
	TEMPORARY CROSSWALK - SEE CONSTRUCTION DETAIL
	TRAFFIC FLOW ARROW
	DRUM WITH/WITHOUT LIGHT, TYPE C
	FLEXIBLE TUBULAR MARKERS
	CONCRETE BARRIER TEMPORARY PRECAST
	CRASH CUSHIONS TEMPORARY
	SIGN ON PERMANENT/TEMPORARY SUPPORT
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8WDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE (3 FT LINE 9 FT SPACE)

MATCHLINE STA 500+00

CLEVELAND AVENUE

200'

501+00

R3-2
24" X 24"

ROAD CLOSED
R11-2
48" X 30"

REMOVE EXISTING SIGN

W11-2
W16-7L

BEGIN LEFT TURN LANE
R3-20L
24" X 36"

100' TAPER

260'

8WD

11'

4Y

50'(TYP.)

501+75

209+00

210+00

211+00

4YR

PILGRIM ROAD

10'

8WR

255'

208+00

MATCHLINE STA 207+75

8WDR

502+00

100' TAPER

BEGIN LEFT TURN LANE
R3-20L
24" X 36"

200'

W11-2
W16-7L
REMOVE EXISTING SIGN

503

MATCHLINE STA 503+00

R3-2
24" X 24"

W01-6
48" X 24"

MATCHLINE STA 87+00

FALLS PARKWAY

88+00

R4-7
24" X 30"

150'

12'

11'

8W

4Y

50'(TYP.)

213+00

4YR

MATCHLINE STA 213+50

100'

212+00

13+00

101+00

200'

US 41/45 SB ENTRANCE RAMP

US 41/45 SB EXIT RAMP

W01-6
48" X 24"

RAMP CLOSED

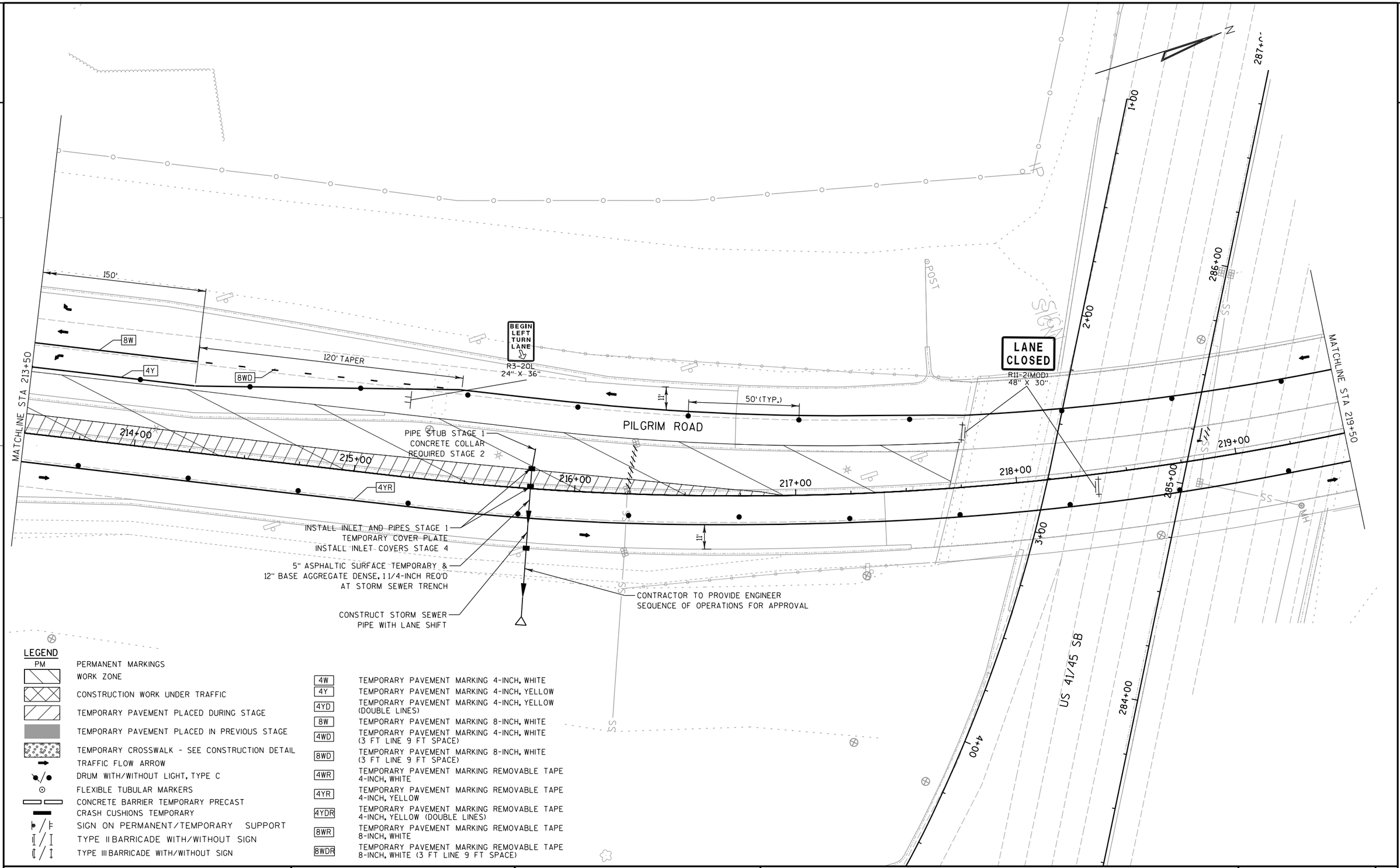
12+

MATCHLINE STA 12+00

PROJECT NO: 2782-11-70 & 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TRAFFIC CONTROL STAGE 1: PILGRIM ROAD	SHEET	E

FILE NAME : P:\44xx\4442\Plan\026104_s1.dgn PLOT DATE : 11/2/2014 PLOT BY : ajp PLOT NAME : PLOT SCALE : 1:40

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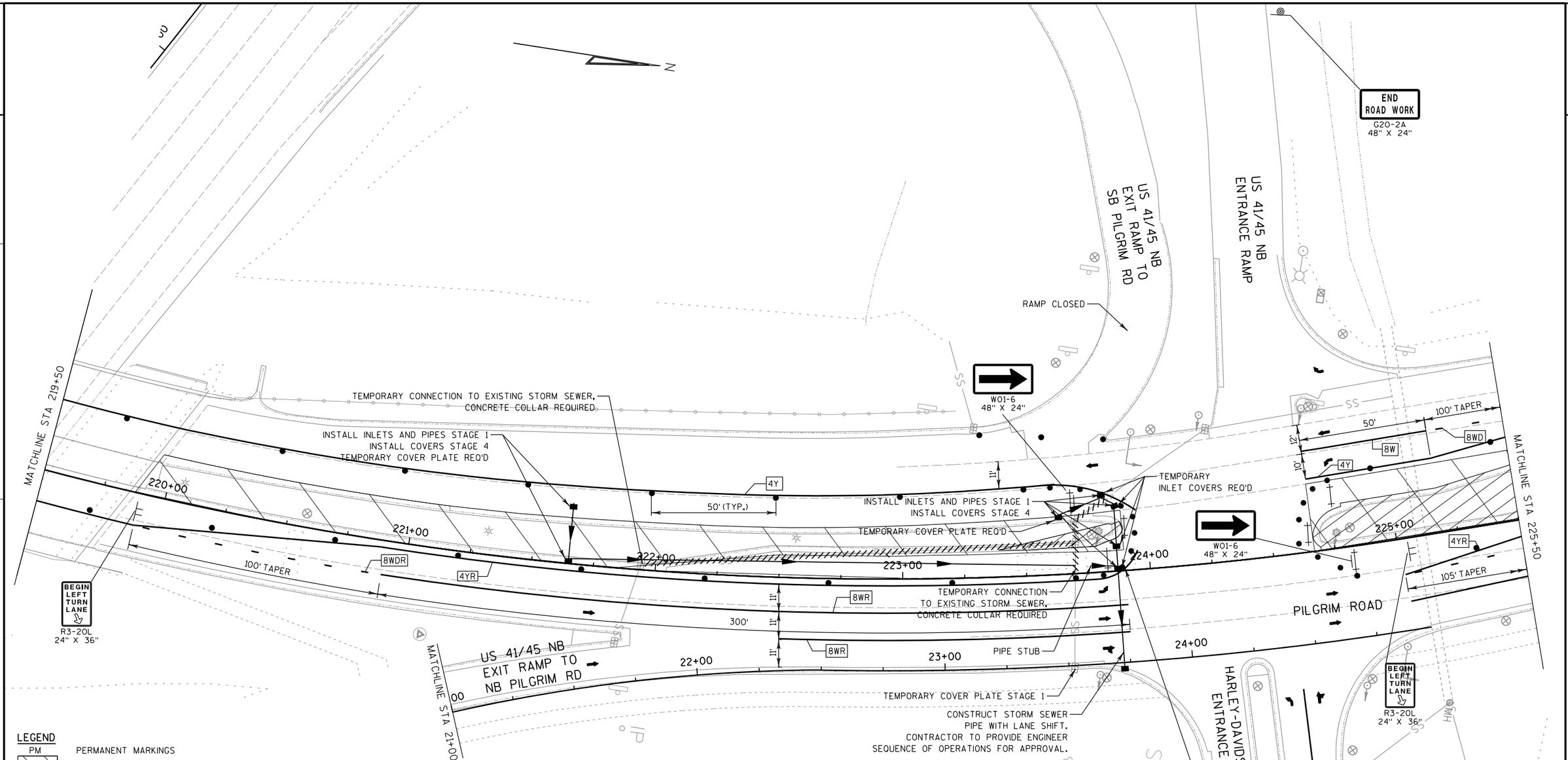
LEGEND

PM	PERMANENT MARKINGS
	WORK ZONE
	CONSTRUCTION WORK UNDER TRAFFIC
	TEMPORARY PAVEMENT PLACED DURING STAGE
	TEMPORARY PAVEMENT PLACED IN PREVIOUS STAGE
	TEMPORARY CROSSWALK - SEE CONSTRUCTION DETAIL
	TRAFFIC FLOW ARROW
	DRUM WITH/WITHOUT LIGHT, TYPE C
	FLEXIBLE TUBULAR MARKERS
	CONCRETE BARRIER TEMPORARY PRECAST
	CRASH CUSHIONS TEMPORARY
	SIGN ON PERMANENT/TEMPORARY SUPPORT
	TYPE II BARRICADE WITH/WITHOUT SIGN
	TYPE III BARRICADE WITH/WITHOUT SIGN

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4YD	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW (DOUBLE LINES)
8W	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE
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4YDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW (DOUBLE LINES)
8WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE
8WDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE (3 FT LINE 9 FT SPACE)

PROJECT NO: 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TRAFFIC CONTROL STAGE 1: PILGRIM ROAD	SHEET 319	E

2

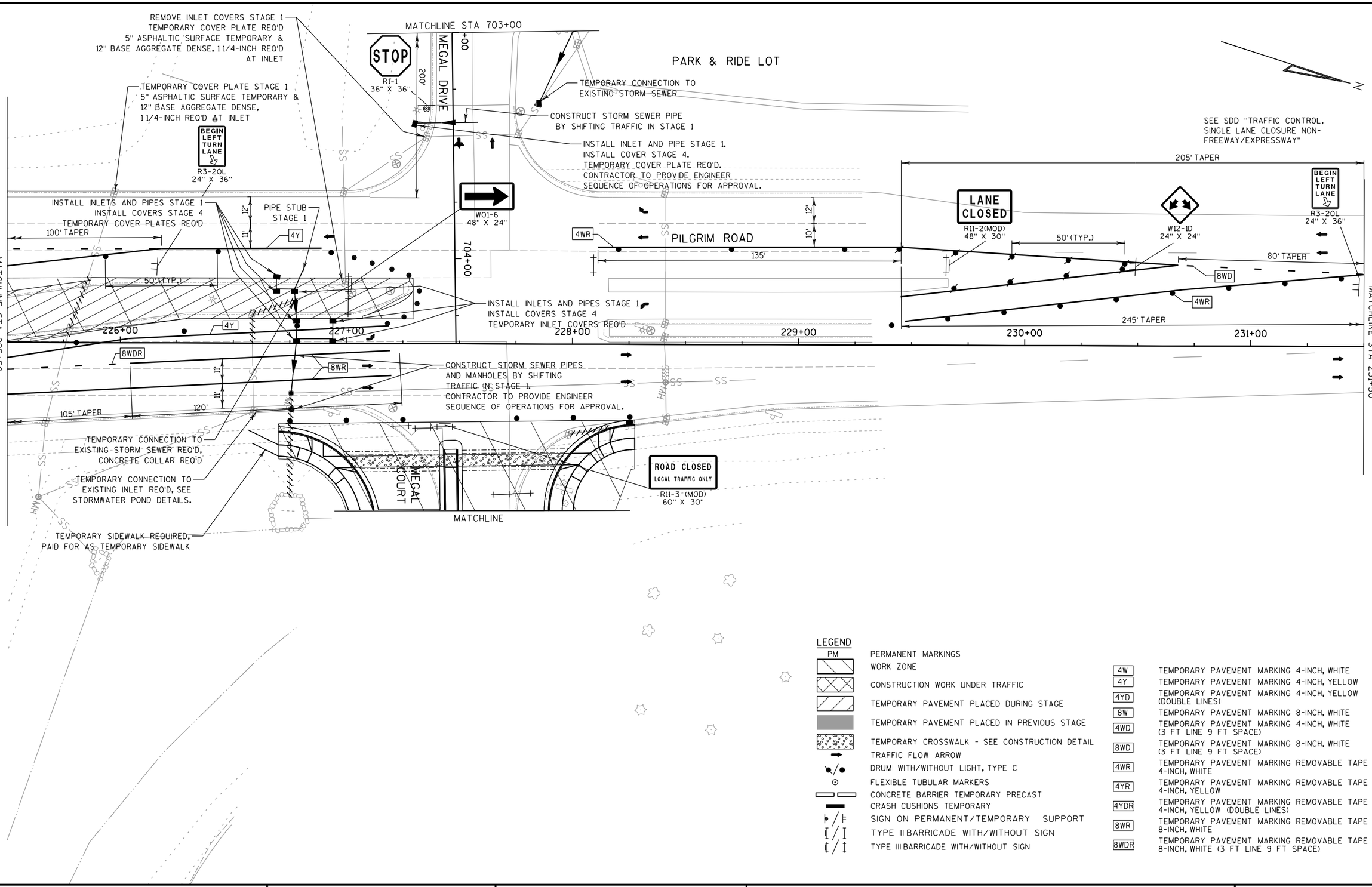


LEGEND

PM	PERMANENT MARKINGS
	WORK ZONE
	CONSTRUCTION WORK UNDER TRAFFIC
	TEMPORARY PAVEMENT PLACED DURING STAGE
	TEMPORARY PAVEMENT PLACED IN PREVIOUS STAGE
	TEMPORARY CROSSWALK - SEE CONSTRUCTION DETAIL
	TRAFFIC FLOW ARROW
	DRUM WITH/WITHOUT LIGHT, TYPE C
	FLEXIBLE TUBULAR MARKERS
	CONCRETE BARRIER TEMPORARY PRECAST
	CRASH CUSHIONS TEMPORARY
	SIGN ON PERMANENT/TEMPORARY SUPPORT
	TYPE II BARRICADE WITH/WITHOUT SIGN
	TYPE III BARRICADE WITH/WITHOUT SIGN

4W	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE
4Y	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW
4YD	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW (DOUBLE LINES)
8W	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE
4WD	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE (3 FT LINE 9 FT SPACE)
8WD	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE (3 FT LINE 9 FT SPACE)
4WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, WHITE
4YR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW
4YDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW (DOUBLE LINES)
8WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE
8WDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE (3 FT LINE 9 FT SPACE)

PROJECT NO: 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TRAFFIC CONTROL STAGE 1: PILGRIM ROAD	SHEET 320	E



LEGEND

PM	PERMANENT MARKINGS
	WORK ZONE
	CONSTRUCTION WORK UNDER TRAFFIC
	TEMPORARY PAVEMENT PLACED DURING STAGE
	TEMPORARY PAVEMENT PLACED IN PREVIOUS STAGE
	TEMPORARY CROSSWALK - SEE CONSTRUCTION DETAIL
	TRAFFIC FLOW ARROW
	DRUM WITH/WITHOUT LIGHT, TYPE C
	FLEXIBLE TUBULAR MARKERS
	CONCRETE BARRIER TEMPORARY PRECAST
	CRASH CUSHIONS TEMPORARY
	SIGN ON PERMANENT/TEMPORARY SUPPORT
	TYPE II BARRICADE WITH/WITHOUT SIGN
	TYPE III BARRICADE WITH/WITHOUT SIGN

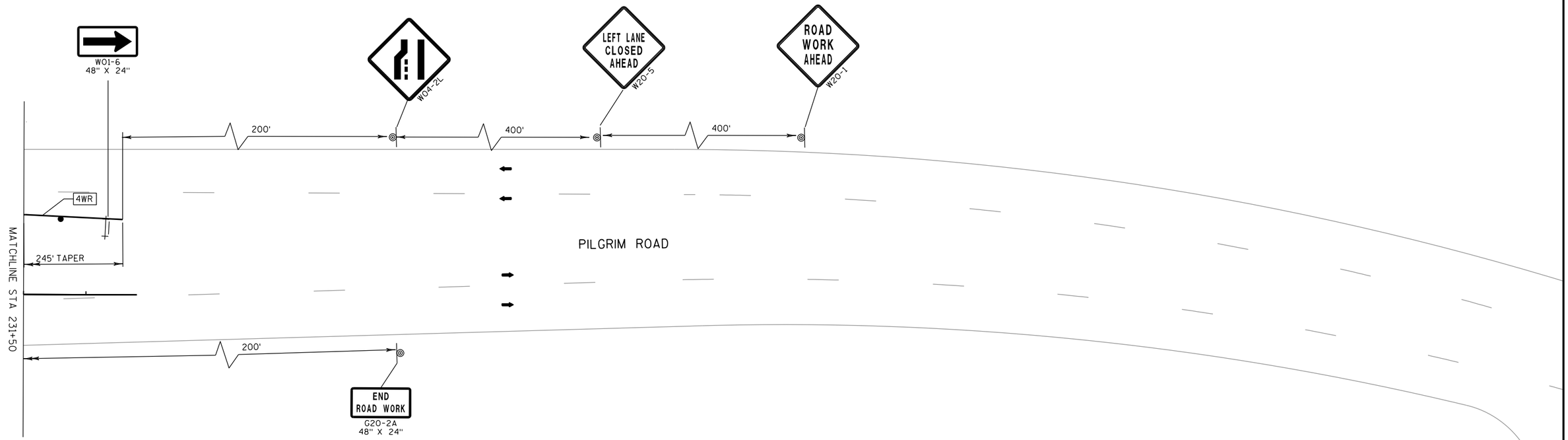
4W	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE
4Y	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW
4YD	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW (DOUBLE LINES)
8W	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE
4WD	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE (3 FT LINE 9 FT SPACE)
8WD	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE (3 FT LINE 9 FT SPACE)
4WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, WHITE
4YR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW
4YDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW (DOUBLE LINES)
8WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE
8WDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE (3 FT LINE 9 FT SPACE)

PROJECT NO: 2782-11-70 & 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TRAFFIC CONTROL STAGE 1: PILGRIM ROAD	SHEET 321	E

2

LEGEND

PM	PERMANENT MARKINGS	4W	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE
	WORK ZONE	4Y	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW
	CONSTRUCTION WORK UNDER TRAFFIC	4YD	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW (DOUBLE LINES)
	TEMPORARY PAVEMENT PLACED DURING STAGE	8W	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE
	TEMPORARY PAVEMENT PLACED IN PREVIOUS STAGE	4WD	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE (3 FT LINE 9 FT SPACE)
	TEMPORARY CROSSWALK - SEE CONSTRUCTION DETAIL	8WD	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE (3 FT LINE 9 FT SPACE)
	TRAFFIC FLOW ARROW	4WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, WHITE
	DRUM WITH/WITHOUT LIGHT, TYPE C	4YR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW
	FLEXIBLE TUBULAR MARKERS	4YDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW (DOUBLE LINES)
	CONCRETE BARRIER TEMPORARY PRECAST	8WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE
	CRASH CUSHIONS TEMPORARY	8WDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE (3 FT LINE 9 FT SPACE)
	SIGN ON PERMANENT/TEMPORARY SUPPORT		
	TYPE II BARRICADE WITH/WITHOUT SIGN		
	TYPE III BARRICADE WITH/WITHOUT SIGN		



PROJECT NO: 2782-11-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TRAFFIC CONTROL STAGE 1: PILGRIM ROAD	SHEET 322	E

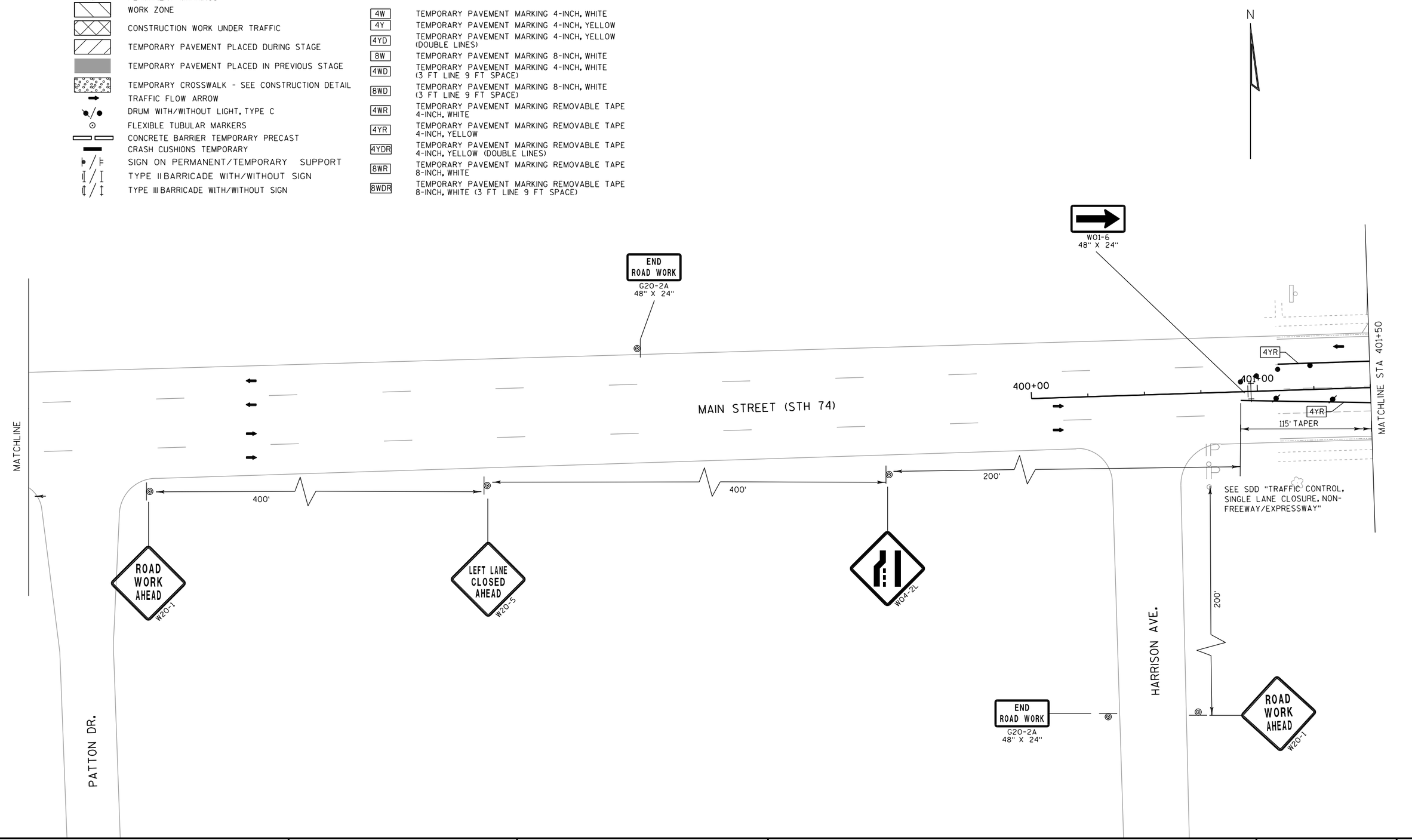
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LEGEND

PM	PERMANENT MARKINGS
	WORK ZONE
	CONSTRUCTION WORK UNDER TRAFFIC
	TEMPORARY PAVEMENT PLACED DURING STAGE
	TEMPORARY PAVEMENT PLACED IN PREVIOUS STAGE
	TEMPORARY CROSSWALK - SEE CONSTRUCTION DETAIL
	TRAFFIC FLOW ARROW
	DRUM WITH/WITHOUT LIGHT, TYPE C
	FLEXIBLE TUBULAR MARKERS
	CONCRETE BARRIER TEMPORARY PRECAST
	CRASH CUSHIONS TEMPORARY
	SIGN ON PERMANENT/TEMPORARY SUPPORT
	TYPE II BARRICADE WITH/WITHOUT SIGN
	TYPE III BARRICADE WITH/WITHOUT SIGN

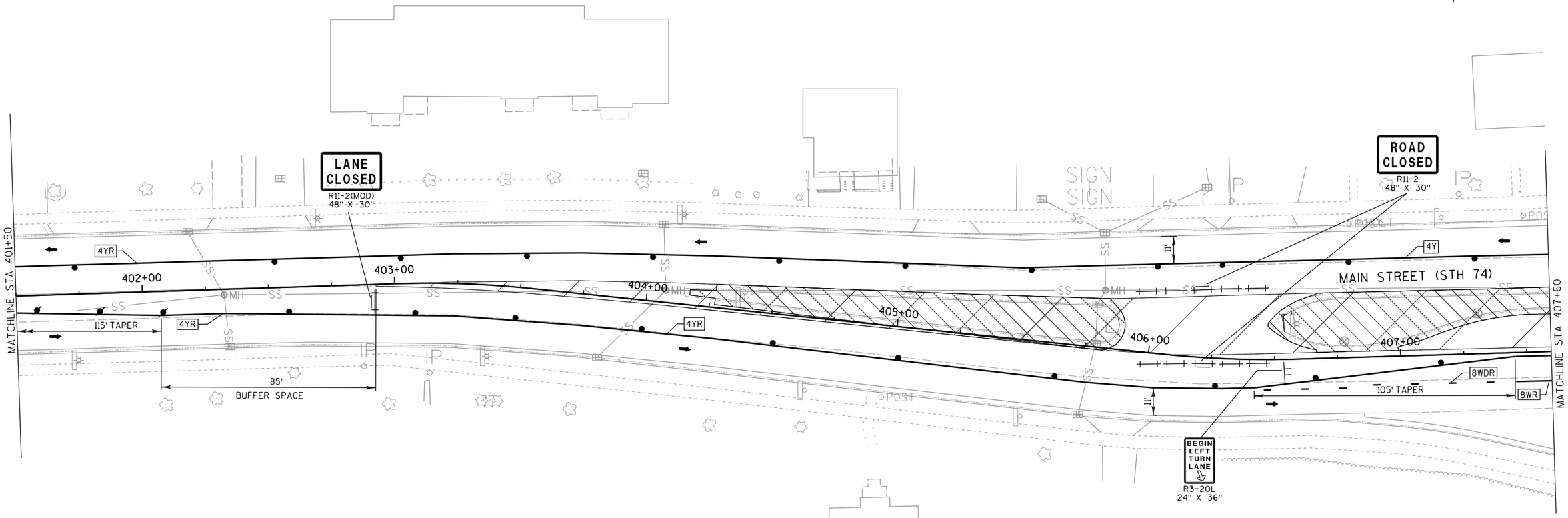
4W	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE
4Y	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW
4YD	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW (DOUBLE LINES)
8W	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE
4WD	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE (3 FT LINE 9 FT SPACE)
8WD	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE (3 FT LINE 9 FT SPACE)
4WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, WHITE
4YR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW
4YDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW (DOUBLE LINES)
8WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE
8WDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE (3 FT LINE 9 FT SPACE)



PROJECT NO: 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TRAFFIC CONTROL STAGE 1: MAIN STREET (STH 74)	SHEET 323	E

2

N



LEGEND

PM	PERMANENT MARKINGS
	WORK ZONE
	CONSTRUCTION WORK UNDER TRAFFIC
	TEMPORARY PAVEMENT PLACED DURING STAGE
	TEMPORARY PAVEMENT PLACED IN PREVIOUS STAGE
	TEMPORARY CROSSWALK - SEE CONSTRUCTION DETAIL
	TRAFFIC FLOW ARROW
	DRUM WITH/WITHOUT LIGHT, TYPE C
	FLEXIBLE TUBULAR MARKERS
	CONCRETE BARRIER TEMPORARY PRECAST
	CRASH CUSHIONS TEMPORARY
	SIGN ON PERMANENT/TEMPORARY SUPPORT
	TYPE II BARRICADE WITH/WITHOUT SIGN
	TYPE III BARRICADE WITH/WITHOUT SIGN

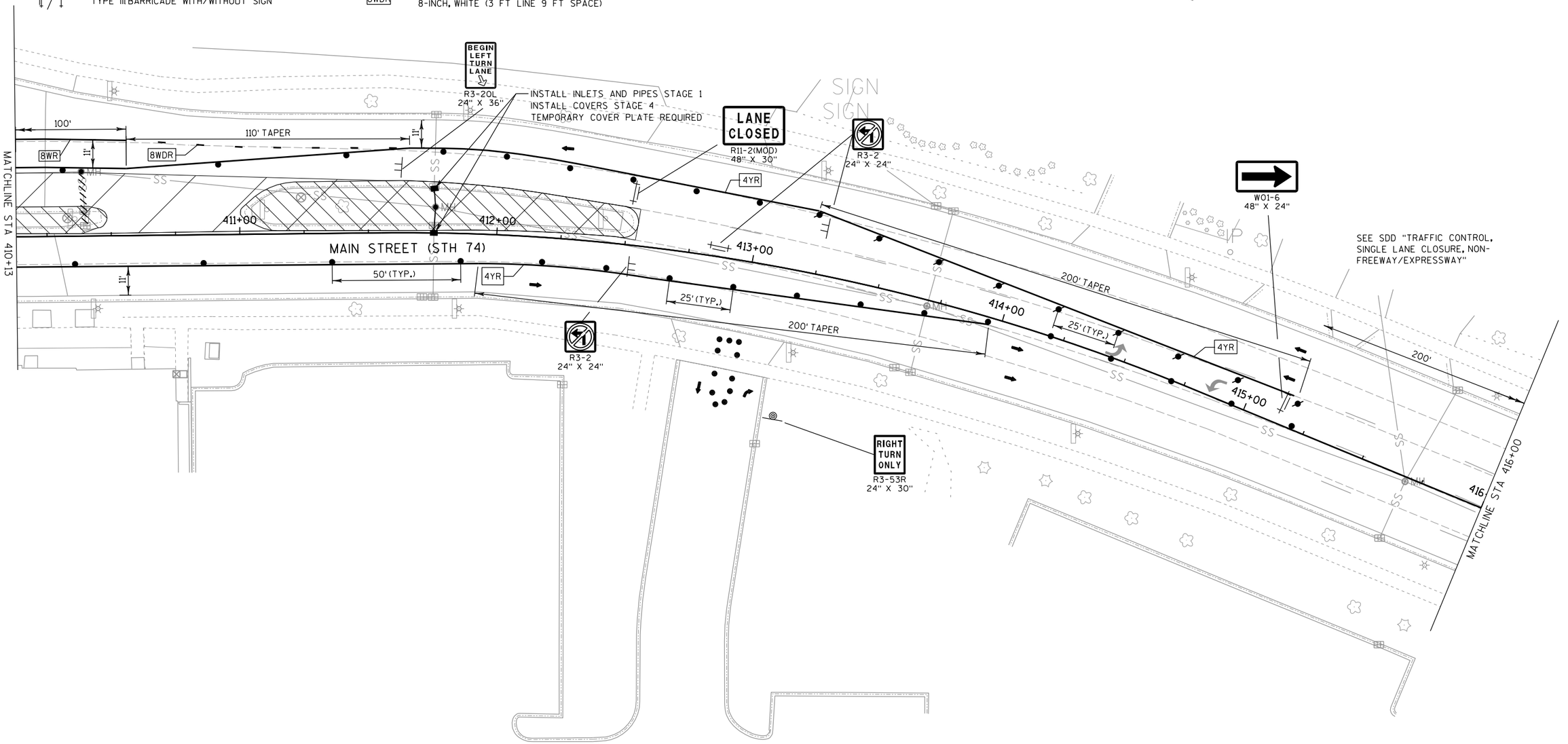
4W	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE
4Y	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW
4YD	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW (DOUBLE LINES)
8W	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE
4WD	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE (3 FT LINE 9 FT SPACE)
8WD	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE (3 FT LINE 9 FT SPACE)
4WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, WHITE
4YR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW
4YDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW (DOUBLE LINES)
8WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE
8WDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE (3 FT LINE 9 FT SPACE)

PROJECT NO: 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TRAFFIC CONTROL STAGE 1: MAIN STREET (STH 74)	SHEET 324	E

LEGEND

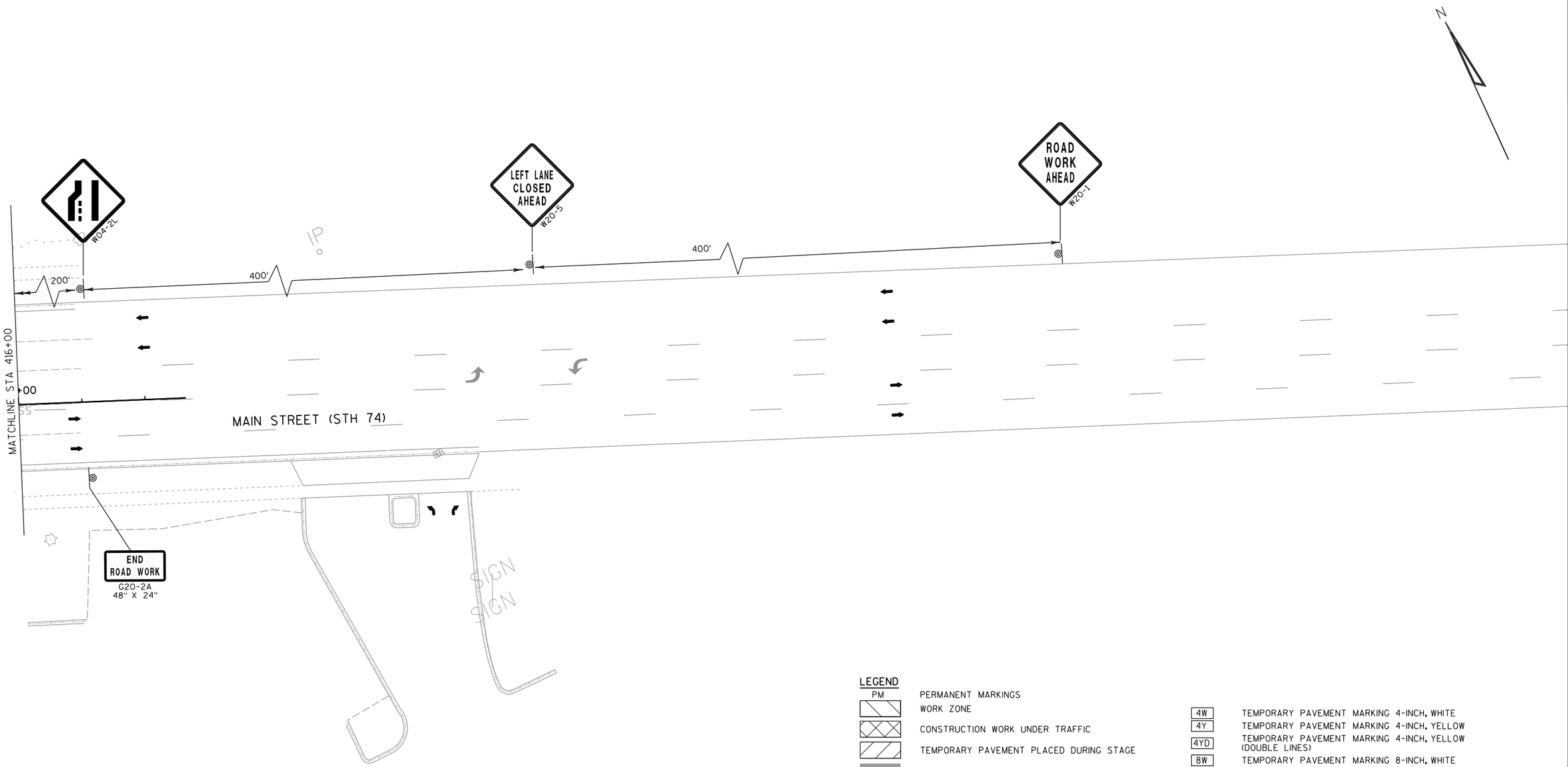
PM	PERMANENT MARKINGS
	WORK ZONE
	CONSTRUCTION WORK UNDER TRAFFIC
	TEMPORARY PAVEMENT PLACED DURING STAGE
	TEMPORARY PAVEMENT PLACED IN PREVIOUS STAGE
	TEMPORARY CROSSWALK - SEE CONSTRUCTION DETAIL
	TRAFFIC FLOW ARROW
	DRUM WITH/WITHOUT LIGHT, TYPE C
	FLEXIBLE TUBULAR MARKERS
	CONCRETE BARRIER TEMPORARY PRECAST
	CRASH CUSHIONS TEMPORARY
	SIGN ON PERMANENT/TEMPORARY SUPPORT
	TYPE II BARRICADE WITH/WITHOUT SIGN
	TYPE III BARRICADE WITH/WITHOUT SIGN

4W	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE
4Y	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW
4YD	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW (DOUBLE LINES)
8W	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE
4WD	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE (3 FT LINE 9 FT SPACE)
8WD	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE (3 FT LINE 9 FT SPACE)
4WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, WHITE
4YR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW
4YDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW (DOUBLE LINES)
8WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE
8WDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE (3 FT LINE 9 FT SPACE)



PROJECT NO: 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TRAFFIC CONTROL STAGE 1: MAIN STREET (STH 74)	SHEET 325	E

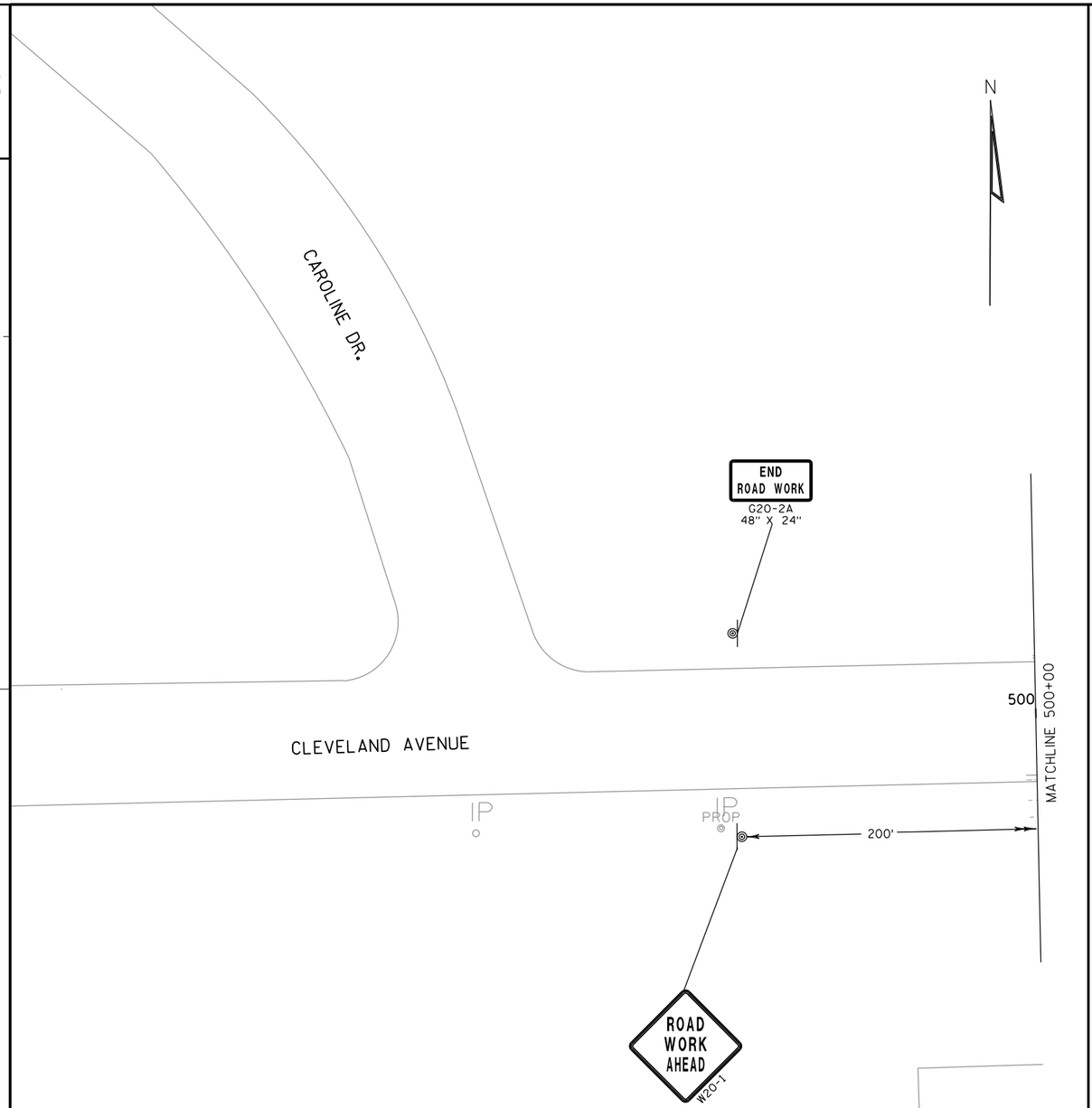
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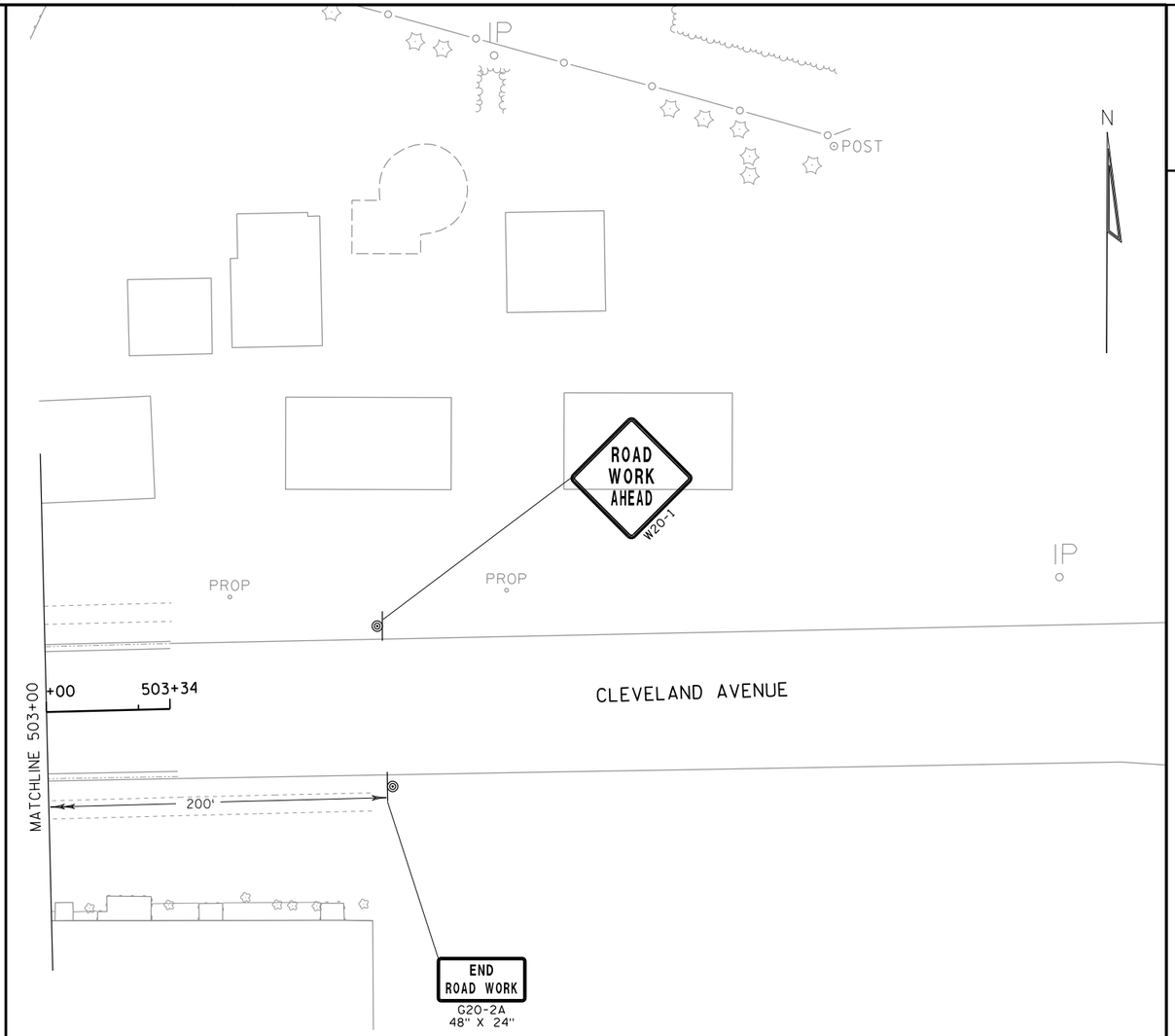


LEGEND

PM	PERMANENT MARKINGS	4W	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE
	WORK ZONE	4Y	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW
	CONSTRUCTION WORK UNDER TRAFFIC	4YD	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW (DOUBLE LINES)
	TEMPORARY PAVEMENT PLACED DURING STAGE	8W	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE
	TEMPORARY PAVEMENT PLACED IN PREVIOUS STAGE	4WD	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE (3 FT LINE 9 FT SPACE)
	TEMPORARY CROSSWALK - SEE CONSTRUCTION DETAIL	8WD	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE (3 FT LINE 9 FT SPACE)
	TRAFFIC FLOW ARROW	4WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, WHITE
	DRUM WITH/WITHOUT LIGHT, TYPE C	4YR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW
	FLEXIBLE TUBULAR MARKERS	4YDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW (DOUBLE LINES)
	CONCRETE BARRIER TEMPORARY PRECAST	8WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE
	CRASH CUSHIONS TEMPORARY	8WDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE (3 FT LINE 9 FT SPACE)
	SIGN ON PERMANENT/TEMPORARY SUPPORT		
	TYPE II BARRICADE WITH/WITHOUT SIGN		
	TYPE III BARRICADE WITH/WITHOUT SIGN		

PROJECT NO: 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TRAFFIC CONTROL STAGE 1: MAIN STREET (STH 74)	SHEET 326	E





LEGEND

PM	PERMANENT MARKINGS
	WORK ZONE
	CONSTRUCTION WORK UNDER TRAFFIC
	TEMPORARY PAVEMENT PLACED DURING STAGE
	TEMPORARY PAVEMENT PLACED IN PREVIOUS STAGE
	TEMPORARY CROSSWALK - SEE CONSTRUCTION DETAIL
	TRAFFIC FLOW ARROW
	DRUM WITH/WITHOUT LIGHT, TYPE C
	FLEXIBLE TUBULAR MARKERS
	CONCRETE BARRIER TEMPORARY PRECAST
	CRASH CUSHIONS TEMPORARY
	SIGN ON PERMANENT/TEMPORARY SUPPORT
	TYPE II BARRICADE WITH/WITHOUT SIGN
	TYPE III BARRICADE WITH/WITHOUT SIGN

4W	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE
4Y	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW
4YD	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW (DOUBLE LINES)
8W	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE
4WD	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE (3 FT LINE 9 FT SPACE)
8WD	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE (3 FT LINE 9 FT SPACE)
4WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, WHITE
4YR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW
4YDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW (DOUBLE LINES)
8WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE
8WDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE (3 FT LINE 9 FT SPACE)

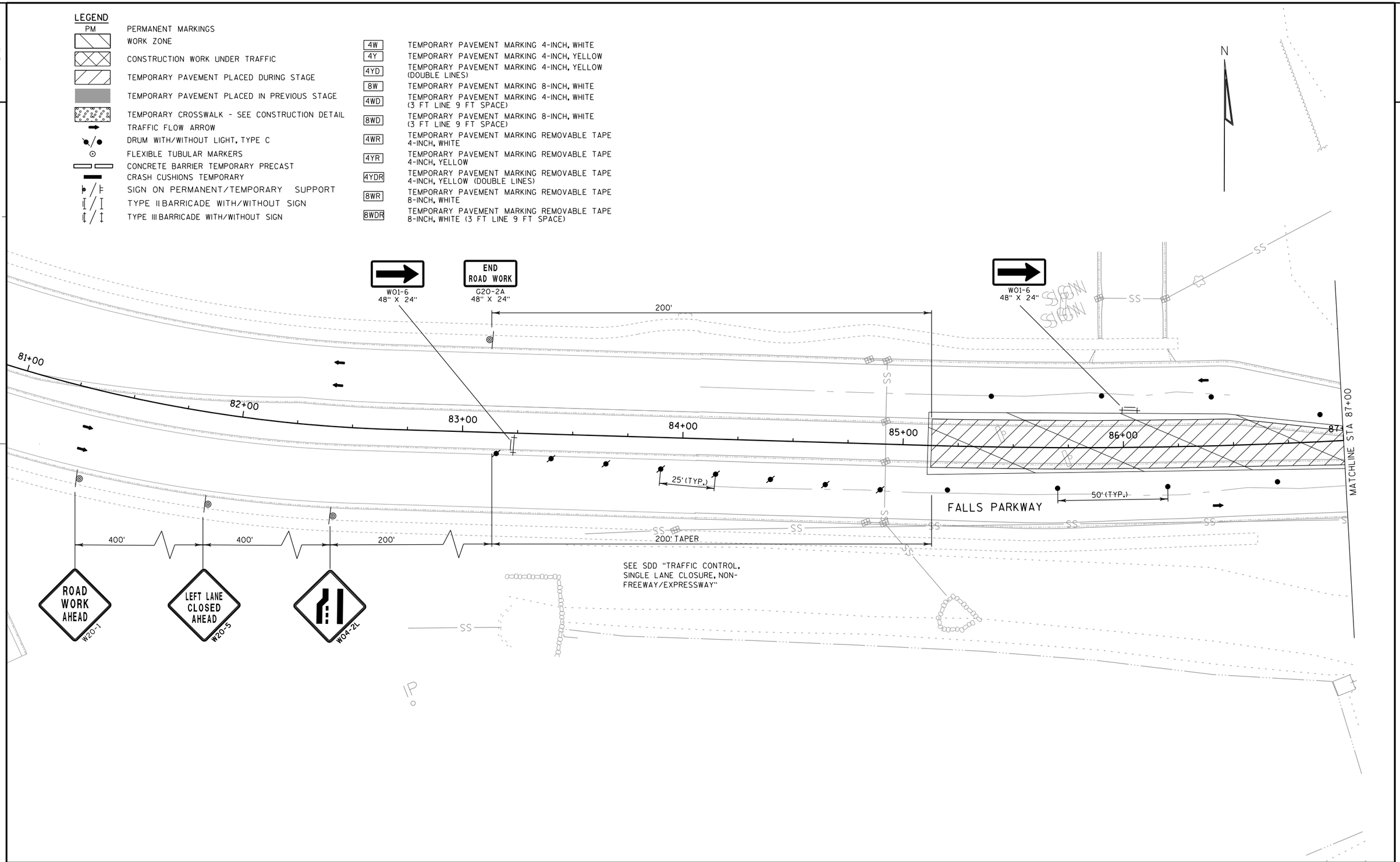
PROJECT NO: 2782-11-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TRAFFIC CONTROL STAGE 1: CLEVELAND AVENUE	SHEET 327	E

2

LEGEND

PM	
	PERMANENT MARKINGS
	WORK ZONE
	CONSTRUCTION WORK UNDER TRAFFIC
	TEMPORARY PAVEMENT PLACED DURING STAGE
	TEMPORARY PAVEMENT PLACED IN PREVIOUS STAGE
	TEMPORARY CROSSWALK - SEE CONSTRUCTION DETAIL
	TRAFFIC FLOW ARROW
	DRUM WITH/WITHOUT LIGHT, TYPE C
	FLEXIBLE TUBULAR MARKERS
	CONCRETE BARRIER TEMPORARY PRECAST
	CRASH CUSHIONS TEMPORARY
	SIGN ON PERMANENT/TEMPORARY SUPPORT
	TYPE II BARRICADE WITH/WITHOUT SIGN
	TYPE III BARRICADE WITH/WITHOUT SIGN

4W	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE
4Y	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW
4YD	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW (DOUBLE LINES)
8W	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE
4WD	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE (3 FT LINE 9 FT SPACE)
8WD	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE (3 FT LINE 9 FT SPACE)
4WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, WHITE
4YR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW
4YDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW (DOUBLE LINES)
8WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE
8WDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE (3 FT LINE 9 FT SPACE)



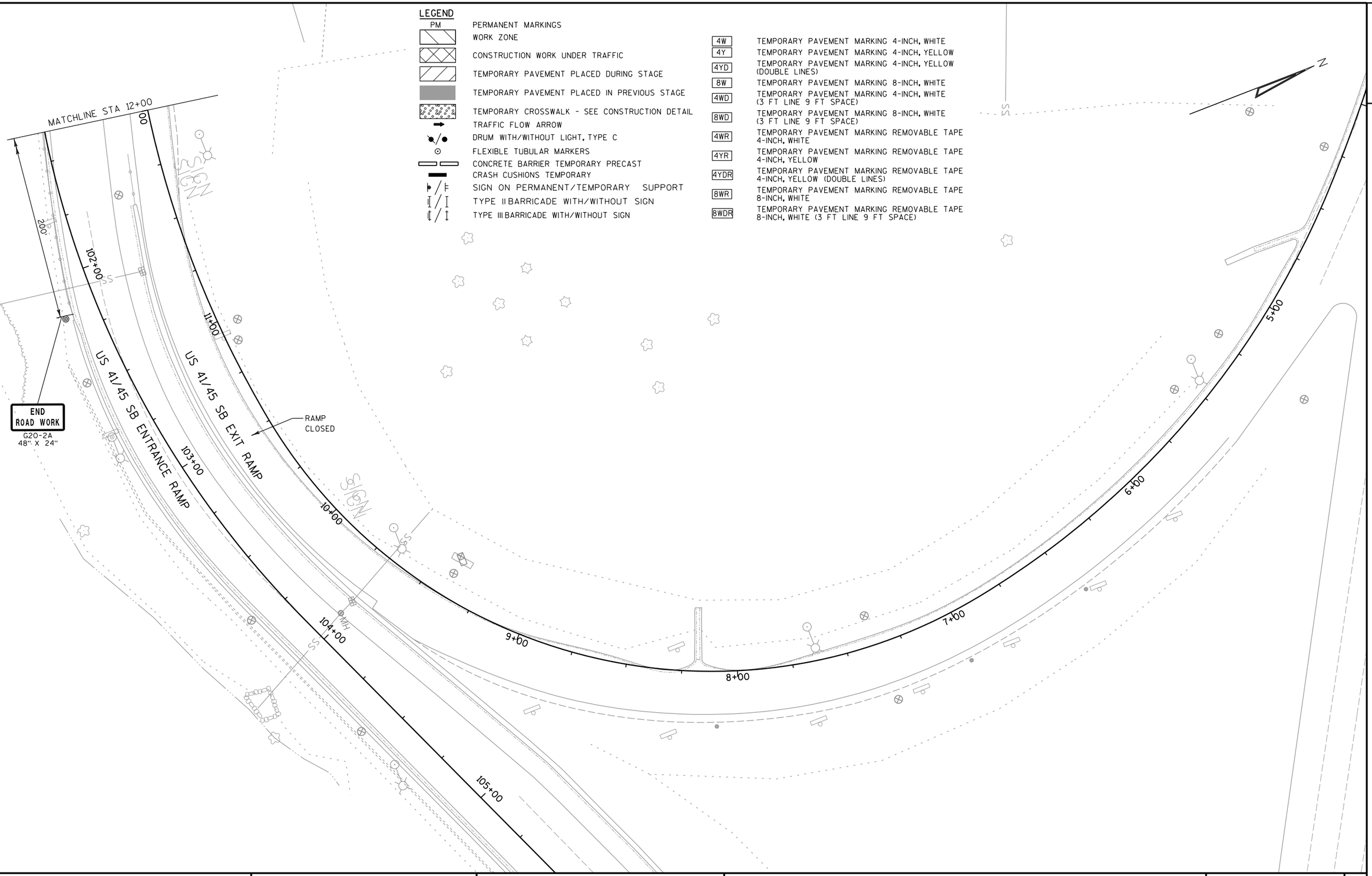
PROJECT NO: 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TRAFFIC CONTROL STAGE 1: FALLS PARKWAY	SHEET 328	E

2

LEGEND

PM	PERMANENT MARKINGS
	WORK ZONE
	CONSTRUCTION WORK UNDER TRAFFIC
	TEMPORARY PAVEMENT PLACED DURING STAGE
	TEMPORARY PAVEMENT PLACED IN PREVIOUS STAGE
	TEMPORARY CROSSWALK - SEE CONSTRUCTION DETAIL
	TRAFFIC FLOW ARROW
	DRUM WITH/WITHOUT LIGHT, TYPE C
	FLEXIBLE TUBULAR MARKERS
	CONCRETE BARRIER TEMPORARY PRECAST
	CRASH CUSHIONS TEMPORARY
	SIGN ON PERMANENT/TEMPORARY SUPPORT
	TYPE II BARRICADE WITH/WITHOUT SIGN
	TYPE III BARRICADE WITH/WITHOUT SIGN

4W	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE
4Y	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW
4YD	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW (DOUBLE LINES)
8W	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE
4WD	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE (3 FT LINE 9 FT SPACE)
8WD	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE (3 FT LINE 9 FT SPACE)
4WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, WHITE
4YR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW
4YDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW (DOUBLE LINES)
8WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE
8WDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE (3 FT LINE 9 FT SPACE)



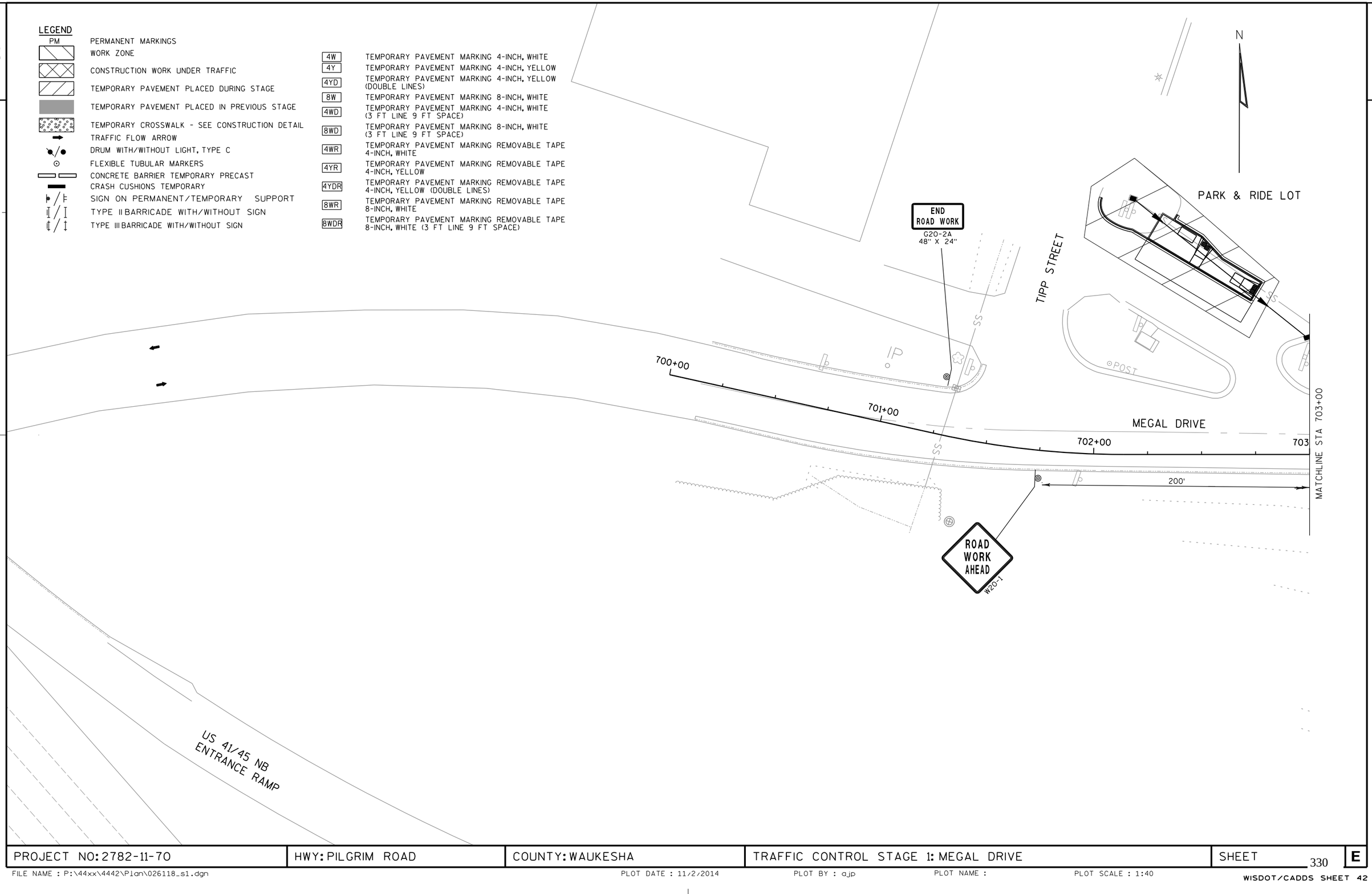
PROJECT NO: 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TRAFFIC CONTROL STAGE 1: US 41/45 SB RAMPS	SHEET 329 E

FILE NAME : P:\44xx\4442\Plan\026116_s1.dgn PLOT DATE : 11/2/2014 PLOT BY : ajp PLOT NAME : PLOT SCALE : 1:40

2

LEGEND

PM	PERMANENT MARKINGS		
	WORK ZONE	4W	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE
	CONSTRUCTION WORK UNDER TRAFFIC	4Y	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW
	TEMPORARY PAVEMENT PLACED DURING STAGE	4YD	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW (DOUBLE LINES)
	TEMPORARY PAVEMENT PLACED IN PREVIOUS STAGE	8W	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE
	TEMPORARY CROSSWALK - SEE CONSTRUCTION DETAIL	4WD	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE (3 FT LINE 9 FT SPACE)
	TRAFFIC FLOW ARROW	8WD	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE (3 FT LINE 9 FT SPACE)
	DRUM WITH/WITHOUT LIGHT, TYPE C	4WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, WHITE
	FLEXIBLE TUBULAR MARKERS	4YR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW
	CONCRETE BARRIER TEMPORARY PRECAST	4YDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW (DOUBLE LINES)
	CRASH CUSHIONS TEMPORARY	8WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE
	SIGN ON PERMANENT/TEMPORARY SUPPORT	8WDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE (3 FT LINE 9 FT SPACE)
	TYPE II BARRICADE WITH/WITHOUT SIGN		
	TYPE III BARRICADE WITH/WITHOUT SIGN		

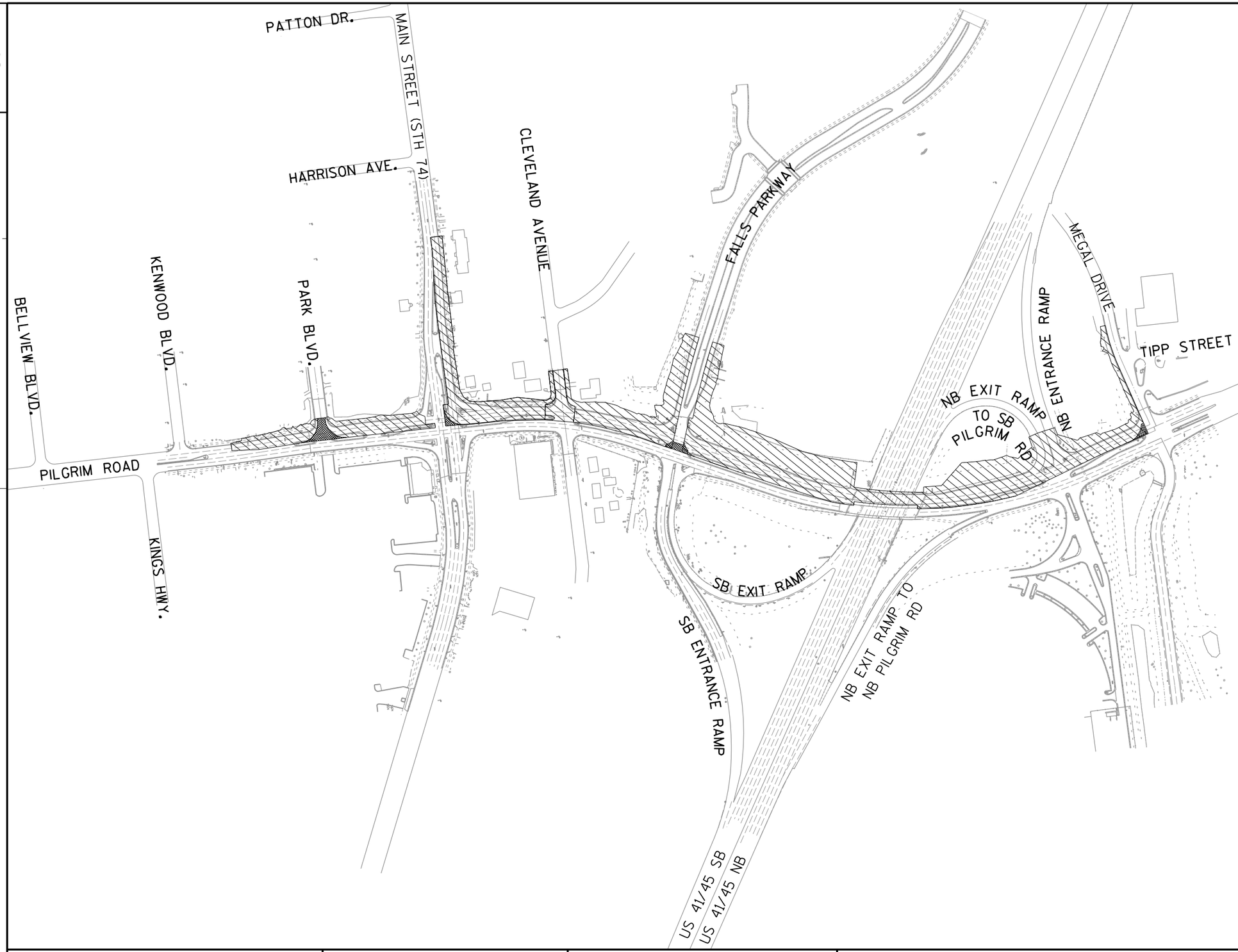


PROJECT NO: 2782-11-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TRAFFIC CONTROL STAGE 1: MEGAL DRIVE	SHEET 330	E

FILE NAME : P:\44xx\4442\Plan\026118_s1.dgn PLOT DATE : 11/2/2014 PLOT BY : ajp PLOT NAME : PLOT SCALE : 1:40

WISDOT/CADDS SHEET 42

2



CONSTRUCTION STAGING OVERVIEW - STAGE 2A

PILGRIM ROAD
TRAFFIC WILL BE MAINTAINED ON EXISTING NORTHBOUND LANES OF PILGRIM ROAD AND ONE LANE OF TRAFFIC FOR EACH DIRECTION SHALL BE MAINTAINED AT ALL TIMES.

MAIN STREET
TRAFFIC WILL BE MAINTAINED IN THE EASTBOUND LANES OF MAIN STREET AND ONE LANE OF TRAFFIC FOR EACH DIRECTION SHALL BE MAINTAINED AT ALL TIMES.

FALLS PARKWAY
TRAFFIC WILL BE MAINTAINED IN MEDIAN LANES AND ONE LANE OF TRAFFIC FOR EACH DIRECTION SHALL BE MAINTAINED AT ALL TIMES.

MEGAL DRIVE
TRAFFIC WILL BE MAINTAINED ON EXISTING LANES AND ONE LANE OF TRAFFIC FOR EACH DIRECTION SHALL BE MAINTAINED AT ALL TIMES.

US 41/45
TRAFFIC WILL BE MAINTAINED ON ALL EXISTING LANES OF US 41/45 DURING PEAK HOURS.

US 41/45 NB ENTRANCE RAMP
RAMP WILL BE CLOSED TO TRAFFIC.
RAMP WILL BE DETOURED VIA THE MAIN ST INTERCHANGE.

US 41/45 NB EXIT RAMP TO PILGRIM RD SB
RAMP WILL BE CLOSED TO TRAFFIC.
RAMP WILL BE DETOURED VIA THE MAIN ST INTERCHANGE.

US 41/45 NB EXIT RAMP TO PILGRIM RD NB
TRAFFIC WILL BE MAINTAINED ON EXISTING LANE OF THIS RAMP AT ALL TIMES.

US 41/45 SB ENTRANCE RAMP
TRAFFIC WILL BE MAINTAINED ON EXISTING LANE OF THIS RAMP AT ALL TIMES.

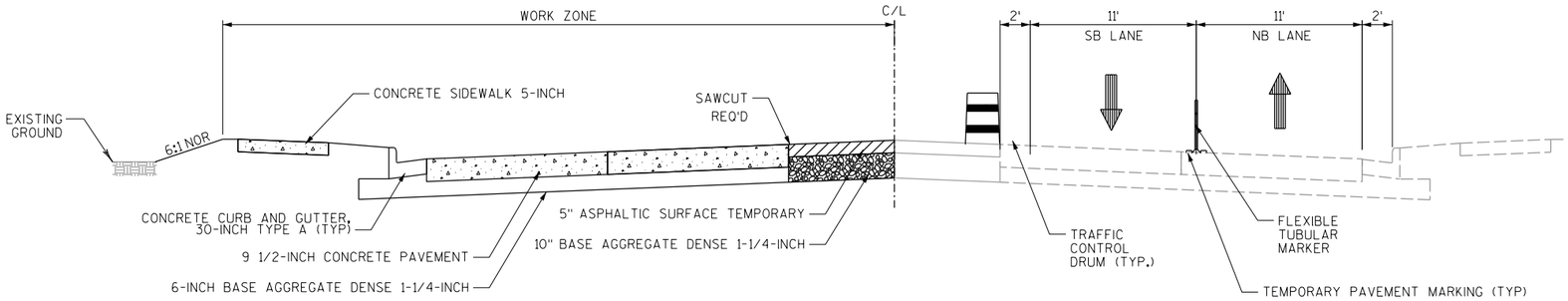
US 41/45 SB EXIT RAMP
RAMP WILL BE CLOSED TO TRAFFIC.
RAMP WILL BE DETOURED VIA THE MAIN ST INTERCHANGE.

SIDEWALKS
ACCESS TO BE MAINTAINED, CLOSURES AS SHOWN IN PLAN.

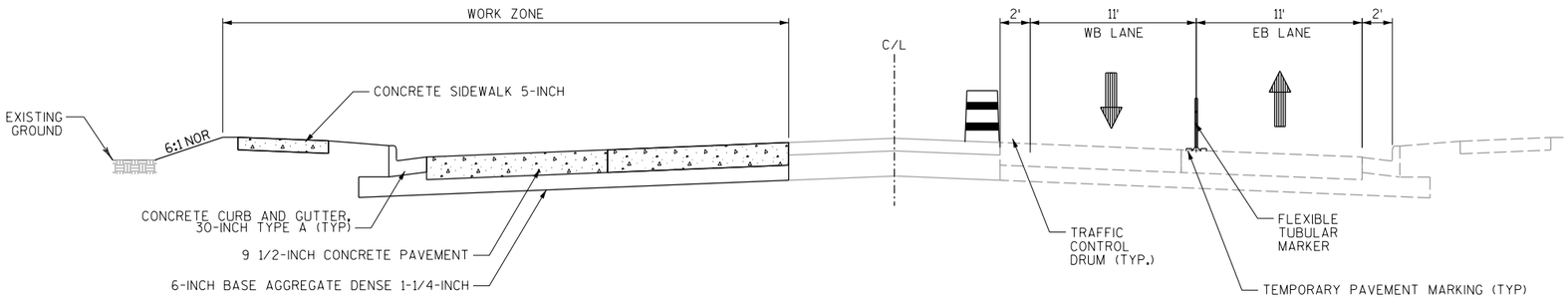
PROJECT NO: 2782-11-70 & 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TRAFFIC CONTROL STAGE 2A: OVERVIEW	SHEET 331	E

FILE NAME : P:\44xx\4442\Plan\026200_s2aov.dgn PLOT DATE : 11/2/2014 PLOT BY : ajp PLOT NAME : PLOT SCALE : 1:300
WISDOT/CADDS SHEET 42

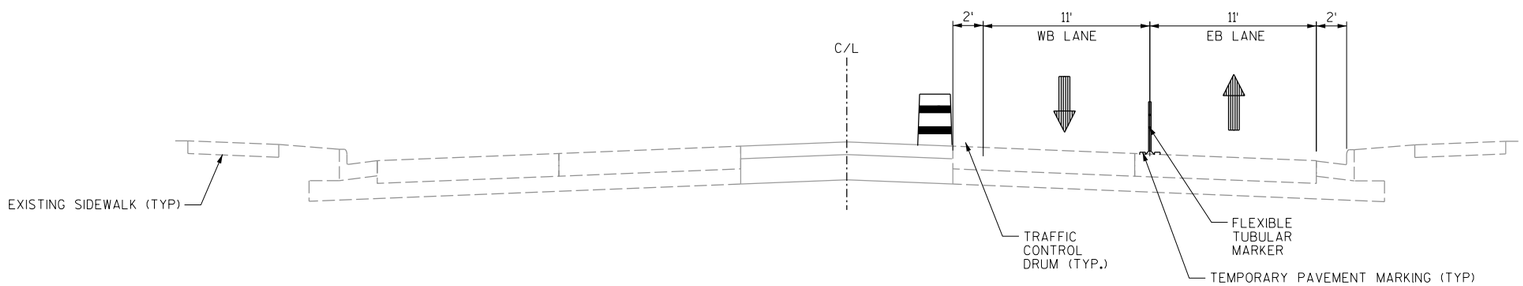
2



STAGE 2A - PILGRIM ROAD



STAGE 2A - MAIN STREET (WEST OF PILGRIM ROAD)



STAGE 2A - MAIN STREET (EAST OF PILGRIM ROAD)

PROJECT NO: 2782-11-70 & 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TRAFFIC CONTROL STAGE 2A: TYPICAL SECTIONS	SHEET 332	E

2

N

BELLVIEW BLVD.

PILGRIM ROAD

KINGS HWY.

ROAD WORK AHEAD
W20-1

400'

LEFT LANE CLOSED AHEAD
W20-5

400'

W04-2L

200'

END ROAD WORK
G20-2A
48" X 24"

200'

W01-6
48" X 24"

SIDEWALK CLOSED USE OTHER SIDE
R9-10
24" X 12"

4YR

180'
TAPER

RIGHT TURN ONLY
R3-53R
24" X 30"

200'

END ROAD WORK
G20-2A
48" X 24"

ROAD WORK AHEAD
W20-1

LEGEND

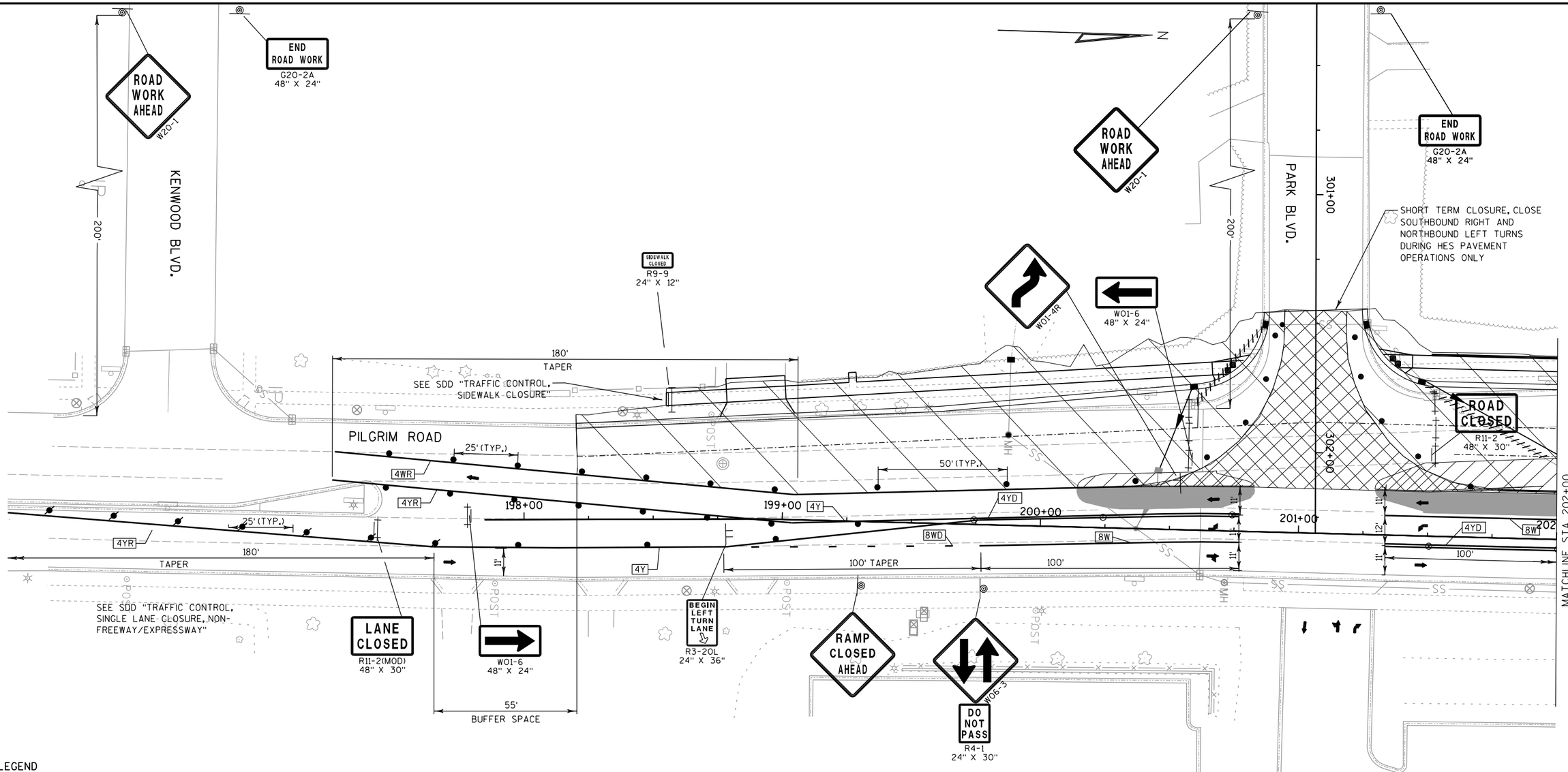
PM	PERMANENT MARKINGS
	WORK ZONE
	CONSTRUCTION WORK UNDER TRAFFIC
	TEMPORARY PAVEMENT PLACED DURING STAGE
	TEMPORARY PAVEMENT PLACED IN PREVIOUS STAGE
	TEMPORARY CROSSWALK - SEE CONSTRUCTION DETAIL
	TRAFFIC FLOW ARROW
	DRUM WITH/WITHOUT LIGHT, TYPE C
	FLEXIBLE TUBULAR MARKERS
	CONCRETE BARRIER TEMPORARY PRECAST
	CRASH CUSHIONS TEMPORARY
	SIGN ON PERMANENT/TEMPORARY SUPPORT
	TYPE II BARRICADE WITH/WITHOUT SIGN
	TYPE III BARRICADE WITH/WITHOUT SIGN

4W	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE
4Y	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW
4YD	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW (DOUBLE LINES)
8W	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE
4WD	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE (3 FT LINE 9 FT SPACE)
8WD	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE (3 FT LINE 9 FT SPACE)
4WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, WHITE
4YR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW
4YDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW (DOUBLE LINES)
8WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE
8WDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE (3 FT LINE 9 FT SPACE)

PROJECT NO: 2782-11-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TRAFFIC CONTROL STAGE 2A: PILGRIM ROAD	SHEET 333	E

FILE NAME : P:\44xx\4442\Plan\026201_s2a.dgn PLOT DATE : 11/2/2014 PLOT BY : ajp PLOT NAME : PLOT SCALE : 1:40

2



LEGEND

PM	PERMANENT MARKINGS
	WORK ZONE
	CONSTRUCTION WORK UNDER TRAFFIC
	TEMPORARY PAVEMENT PLACED DURING STAGE
	TEMPORARY PAVEMENT PLACED IN PREVIOUS STAGE
	TEMPORARY CROSSWALK - SEE CONSTRUCTION DETAIL
	TRAFFIC FLOW ARROW
	DRUM WITH/WITHOUT LIGHT, TYPE C
	FLEXIBLE TUBULAR MARKERS
	CONCRETE BARRIER TEMPORARY PRECAST
	CRASH CUSHIONS TEMPORARY
	SIGN ON PERMANENT/TEMPORARY SUPPORT
	TYPE II BARRICADE WITH/WITHOUT SIGN
	TYPE III BARRICADE WITH/WITHOUT SIGN

4W	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE
4Y	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW
4YD	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW (DOUBLE LINES)
8W	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE
4WD	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE (3 FT LINE 9 FT SPACE)
8WD	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE (3 FT LINE 9 FT SPACE)
4WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, WHITE
4YR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW
4YDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW (DOUBLE LINES)
8WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE
8WDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE (3 FT LINE 9 FT SPACE)

PROJECT NO: 2782-11-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TRAFFIC CONTROL STAGE 2A: PILGRIM ROAD	SHEET 334	E

CONSTRUCT ONE CORNER AT A TIME, MAINTAIN PEDESTRIAN ACCESS ACROSS PILGRIM ROAD AND MAIN STREET, SEE SDD "TRAFFIC CONTROL, SIDEWALK CLOSURE" TEMPORARY CROSSWALKS REQUIRED

MATCHLINE STA 407+60

TEMPORARY INLET COVER REQUIRED

INSTALL INLET STAGE 2A
INSTALL INLET COVER STAGE 4

TEMPORARY COVER PLATE REQUIRED

SHORT TERM CLOSURE, CLOSE SOUTHBOUND RIGHT TURN DURING HES PAVEMENT OPERATIONS ONLY.
CONTRACTOR TO PROVIDE ENGINEER SEQUENCE OF OPERATIONS FOR APPROVAL.

ROAD CLOSED
R11-2
48" X 30"

BEGIN LEFT TURN LANE
R3-20LL
24" X 36"

SIDEWALK CLOSED USE OTHER SIDE
R9-10
24" X 12"

PIPE STUB

LANE CLOSED
R11-2(MOD)
48" X 30"

W01-6
48" X 24"

ROAD CLOSED
R11-2
48" X 30"

MATCHLINE STA 202+00

MATCHLINE STA 207+75

PILGRIM ROAD

MAIN STREET (STH 74)

BEGIN LEFT TURN LANE
R3-20LL
24" X 36"

SIDEWALK CLOSED USE OTHER SIDE
R9-10
24" X 12"

W06-3

DO NOT PASS
R4-1
24" X 30"

ROAD CLOSED
R11-2
48" X 30"

MATCHLINE STA 410+13

LEGEND

PM	PERMANENT MARKINGS
	WORK ZONE
	CONSTRUCTION WORK UNDER TRAFFIC
	TEMPORARY PAVEMENT PLACED DURING STAGE
	TEMPORARY PAVEMENT PLACED IN PREVIOUS STAGE
	TEMPORARY CROSSWALK - SEE CONSTRUCTION DETAIL
	TRAFFIC FLOW ARROW
	DRUM WITH/WITHOUT LIGHT, TYPE C
	FLEXIBLE TUBULAR MARKERS
	CONCRETE BARRIER TEMPORARY PRECAST
	CRASH CUSHIONS TEMPORARY
	SIGN ON PERMANENT/TEMPORARY SUPPORT
	TYPE II BARRICADE WITH/WITHOUT SIGN
	TYPE III BARRICADE WITH/WITHOUT SIGN

4W	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE
4Y	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW
4YD	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW (DOUBLE LINES)
8W	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE
4WD	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE (3 FT LINE 9 FT SPACE)
8WD	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE (3 FT LINE 9 FT SPACE)
4WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, WHITE
4YR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW
4YDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW (DOUBLE LINES)
8WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE
8WDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE (3 FT LINE 9 FT SPACE)

PROJECT NO: 2782-11-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TRAFFIC CONTROL STAGE 2A: PILGRIM ROAD	SHEET 335 E

2

MATCHLINE 500+00

MATCHLINE STA 207+75

CLEVELAND AVENUE

SIDEWALK CLOSED
R9-9
24" X 12"

SIDEWALK CLOSED
R9-9
24" X 12"

MAINTAIN ACCESS AT ALL TIMES

ROAD CLOSED
R11-2
48" X 30"

ROAD CLOSED
R11-2
48" X 30"

501+00

501+40

502+00

503

MATCHLINE 503+00

90' TAPER

208+00

209+00

210+00

211+00

212+00

213+00

126'

15' (TYP.)

TEMPORARY CONNECTION TO EXISTING STORM SEWER REQ'D
CONCRETE COLLAR REQ'D

4W

4Y

8WD

PILGRIM ROAD

75' TAPER

70

11'

12'

BEGIN LEFT TURN LANE
R3-20L
24" X 36"

BEGIN LEFT TURN LANE
R3-20LL
24" X 36"

RIGHT TURN ONLY
R3-53R
24" X 30"

200'

R3-2
24" X 24"

W06-3

DO NOT PASS
R4-1
24" X 30"

SHORT TERM CLOSURE, CLOSE EASTBOUND RIGHT TURN DURING HES PAVEMENT OPERATIONS ONLY

LANE CLOSED
R11-2(MOD)
48" X 30"

MATCHLINE STA 87+00

FALLS PARKWAY

8W

4YD

88+00

15' (TYP.)

11'

2'

50' (TYP.)

BEGIN LEFT TURN LANE
R3-20LL
24" X 36"

TEMPORARY PAVEMENT TO BE CONSTRUCTED WITH A MAXIMUM 10:1 SLOPE TO MATCH EXISTING NORTHBOUND LANES

101+00

US 41/45 SB ENTRANCE RAMP

13+00

W01-4R

SHORT TERM CLOSURE, CLOSE SOUTHBOUND RIGHT TURN DURING HES PAVEMENT OPERATIONS ONLY

ROAD CLOSED
R11-2
48" X 30"

POST

230'

4YD

10:1 SLOPE TO MATCH EXISTING PAVEMENT

MATCHLINE STA 213+50

RAMP CLOSED

US 41/45 SB EXIT RAMP

200'

12+00

MATCHLINE STA 12+00

N

LEGEND

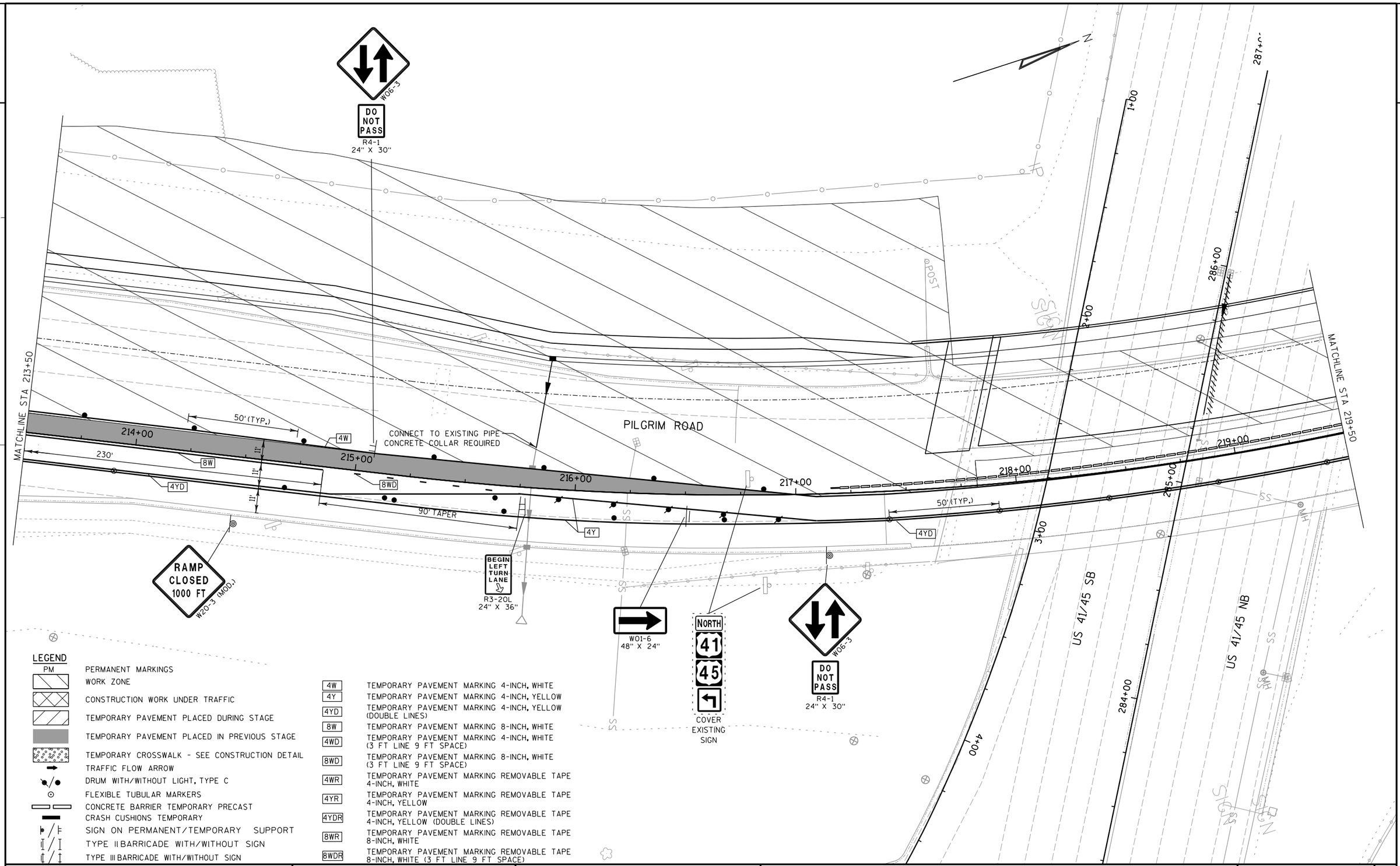
PM	PERMANENT MARKINGS
	WORK ZONE
	CONSTRUCTION WORK UNDER TRAFFIC
	TEMPORARY PAVEMENT PLACED DURING STAGE
	TEMPORARY PAVEMENT PLACED IN PREVIOUS STAGE
	TEMPORARY CROSSWALK - SEE CONSTRUCTION DETAIL
	TRAFFIC FLOW ARROW
	DRUM WITH/WITHOUT LIGHT, TYPE C
	FLEXIBLE TUBULAR MARKERS
	CONCRETE BARRIER TEMPORARY PRECAST
	CRASH CUSHIONS TEMPORARY
	SIGN ON PERMANENT/TEMPORARY SUPPORT
	TYPE II BARRICADE WITH/WITHOUT SIGN
	TYPE III BARRICADE WITH/WITHOUT SIGN

4W	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE
4Y	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW
4YD	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW (DOUBLE LINES)
8W	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE
4WD	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE (3 FT LINE 9 FT SPACE)
8WD	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE (3 FT LINE 9 FT SPACE)
4WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, WHITE
4YR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW
4YDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW (DOUBLE LINES)
8WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE
8WDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE (3 FT LINE 9 FT SPACE)

PROJECT NO: 2782-11-70 & 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TRAFFIC CONTROL STAGE 2A: PILGRIM ROAD	SHEET 336	E

FILE NAME : P:\44xx\4442\Plan\026204_s2a.dgn PLOT DATE : 11/2/2014 PLOT BY : ajp PLOT NAME : PLOT SCALE : 1:40

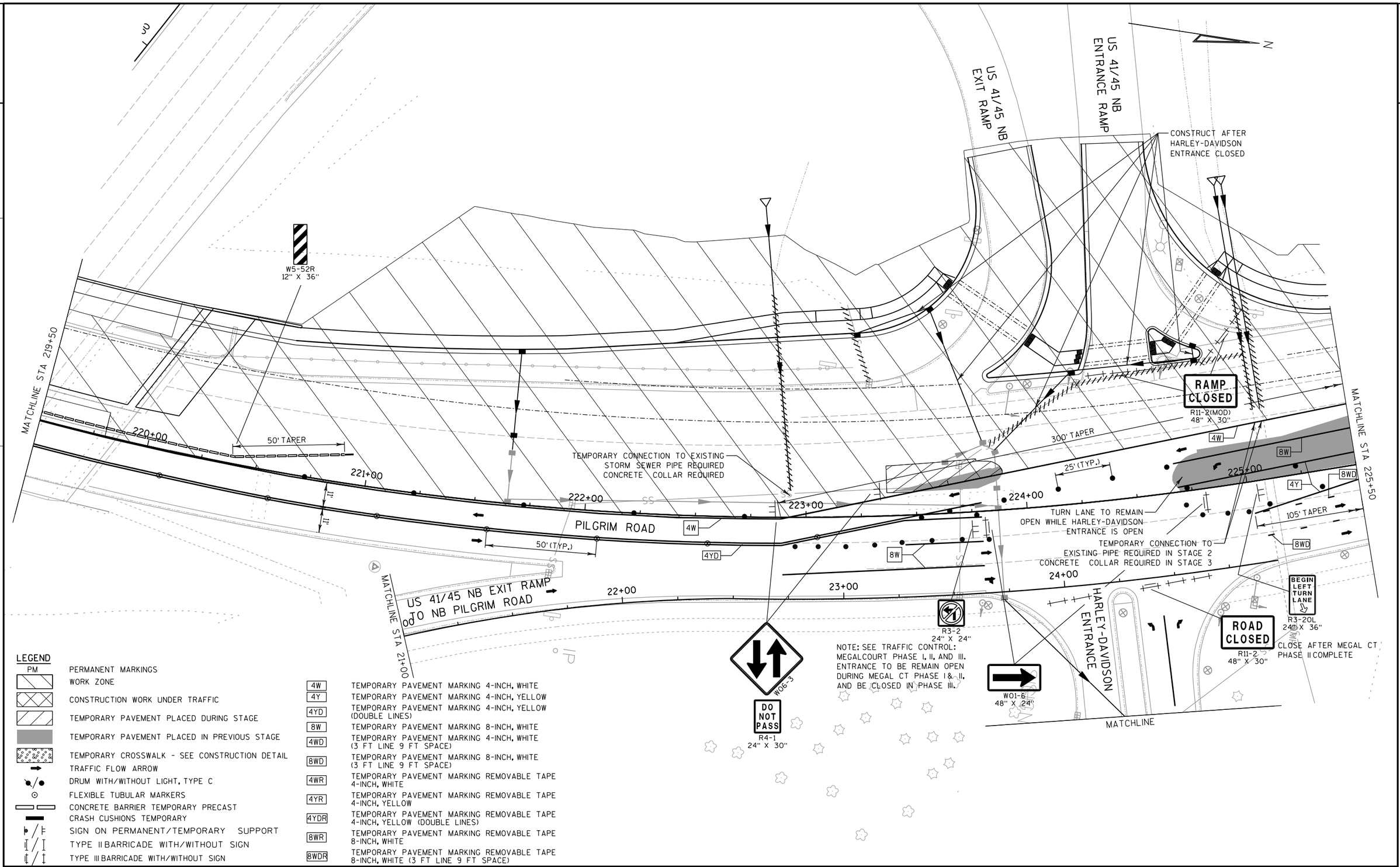
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LEGEND

PM	PERMANENT MARKINGS		
	WORK ZONE	4W	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE
	CONSTRUCTION WORK UNDER TRAFFIC	4Y	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW
	TEMPORARY PAVEMENT PLACED DURING STAGE	4YD	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW (DOUBLE LINES)
	TEMPORARY PAVEMENT PLACED IN PREVIOUS STAGE	8W	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE
	TEMPORARY CROSSWALK - SEE CONSTRUCTION DETAIL	4WD	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE (3 FT LINE 9 FT SPACE)
	TRAFFIC FLOW ARROW	8WD	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE (3 FT LINE 9 FT SPACE)
	DRUM WITH/WITHOUT LIGHT, TYPE C	4WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, WHITE
	FLEXIBLE TUBULAR MARKERS	4YR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW
	CONCRETE BARRIER TEMPORARY PRECAST	4YDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW (DOUBLE LINES)
	CRASH CUSHIONS TEMPORARY	8WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE
	SIGN ON PERMANENT/TEMPORARY SUPPORT	8WDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE (3 FT LINE 9 FT SPACE)
	TYPE II BARRICADE WITH/WITHOUT SIGN		
	TYPE III BARRICADE WITH/WITHOUT SIGN		

PROJECT NO: 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TRAFFIC CONTROL STAGE 2A: PILGRIM ROAD	SHEET 337 E

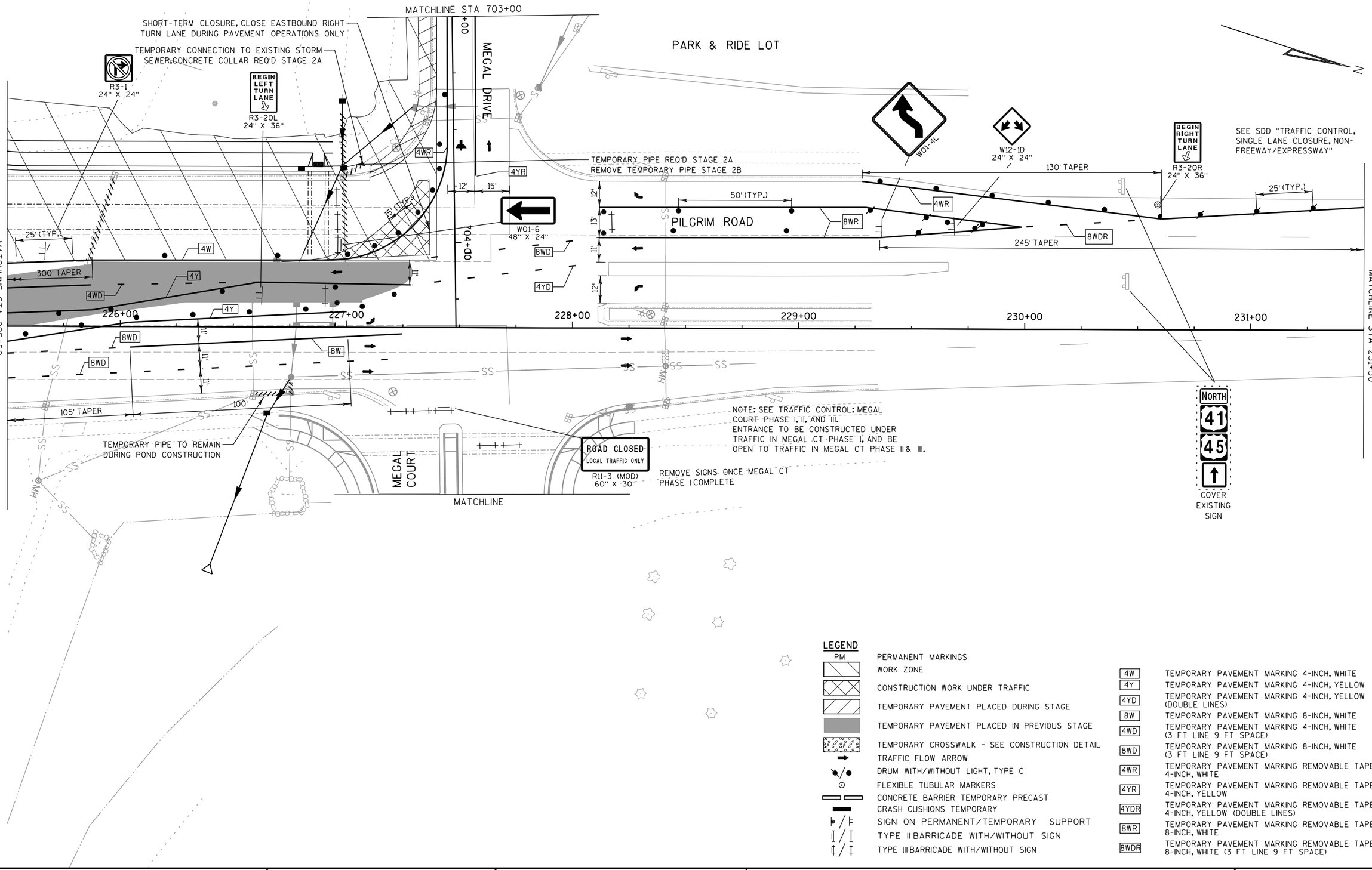


LEGEND

PM	PERMANENT MARKINGS		
	WORK ZONE	4W	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE
	CONSTRUCTION WORK UNDER TRAFFIC	4Y	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW
	TEMPORARY PAVEMENT PLACED DURING STAGE	4YD	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW (DOUBLE LINES)
	TEMPORARY PAVEMENT PLACED IN PREVIOUS STAGE	8W	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE
	TEMPORARY CROSSWALK - SEE CONSTRUCTION DETAIL	4WD	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE (3 FT LINE 9 FT SPACE)
	TRAFFIC FLOW ARROW	8WD	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE (3 FT LINE 9 FT SPACE)
	DRUM WITH/WITHOUT LIGHT, TYPE C	4WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, WHITE
	FLEXIBLE TUBULAR MARKERS	4YR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW
	CONCRETE BARRIER TEMPORARY PRECAST	4YDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW (DOUBLE LINES)
	CRASH CUSHIONS TEMPORARY	8WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE
	SIGN ON PERMANENT/TEMPORARY SUPPORT	8WDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE (3 FT LINE 9 FT SPACE)
	TYPE II BARRICADE WITH/WITHOUT SIGN		
	TYPE III BARRICADE WITH/WITHOUT SIGN		

PROJECT NO: 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TRAFFIC CONTROL STAGE 2A: PILGRIM ROAD	SHEET 338	E

2



LEGEND

PM	PERMANENT MARKINGS
	WORK ZONE
	CONSTRUCTION WORK UNDER TRAFFIC
	TEMPORARY PAVEMENT PLACED DURING STAGE
	TEMPORARY PAVEMENT PLACED IN PREVIOUS STAGE
	TEMPORARY CROSSWALK - SEE CONSTRUCTION DETAIL
	TRAFFIC FLOW ARROW
	DRUM WITH/WITHOUT LIGHT, TYPE C
	FLEXIBLE TUBULAR MARKERS
	CONCRETE BARRIER TEMPORARY PRECAST
	CRASH CUSHIONS TEMPORARY
	SIGN ON PERMANENT/TEMPORARY SUPPORT
	TYPE II BARRICADE WITH/WITHOUT SIGN
	TYPE III BARRICADE WITH/WITHOUT SIGN

4W	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE
4Y	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW
4YD	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW (DOUBLE LINES)
8W	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE
4WD	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE (3 FT LINE 9 FT SPACE)
8WD	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE (3 FT LINE 9 FT SPACE)
4WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, WHITE
4YR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW
4YDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW (DOUBLE LINES)
8WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE
8WDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE (3 FT LINE 9 FT SPACE)

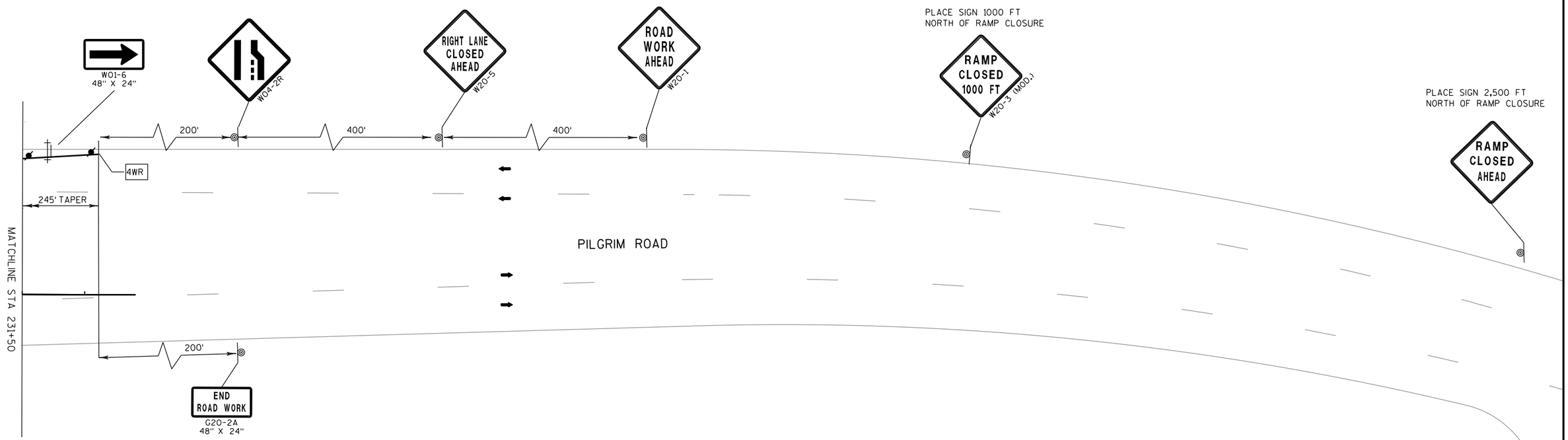
PROJECT NO: 2782-11-70 & 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TRAFFIC CONTROL STAGE 2A: PILGRIM ROAD	SHEET 339	E

2

LEGEND

PM	PERMANENT MARKINGS
	WORK ZONE
	CONSTRUCTION WORK UNDER TRAFFIC
	TEMPORARY PAVEMENT PLACED DURING STAGE
	TEMPORARY PAVEMENT PLACED IN PREVIOUS STAGE
	TEMPORARY CROSSWALK - SEE CONSTRUCTION DETAIL
	TRAFFIC FLOW ARROW
	DRUM WITH/WITHOUT LIGHT, TYPE C
	FLEXIBLE TUBULAR MARKERS
	CONCRETE BARRIER TEMPORARY PRECAST
	CRASH CUSHIONS TEMPORARY
	SIGN ON PERMANENT/TEMPORARY SUPPORT
	TYPE II BARRICADE WITH/WITHOUT SIGN
	TYPE III BARRICADE WITH/WITHOUT SIGN

4W	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE
4Y	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW
4YD	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW (DOUBLE LINES)
8W	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE
4WD	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE (3 FT LINE 9 FT SPACE)
8WD	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE (3 FT LINE 9 FT SPACE)
4WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, WHITE
4YR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW
4YDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW (DOUBLE LINES)
8WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE
8WDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE (3 FT LINE 9 FT SPACE)



PROJECT NO: 2782-11-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TRAFFIC CONTROL STAGE 2A: PILGRIM ROAD	SHEET 340 E

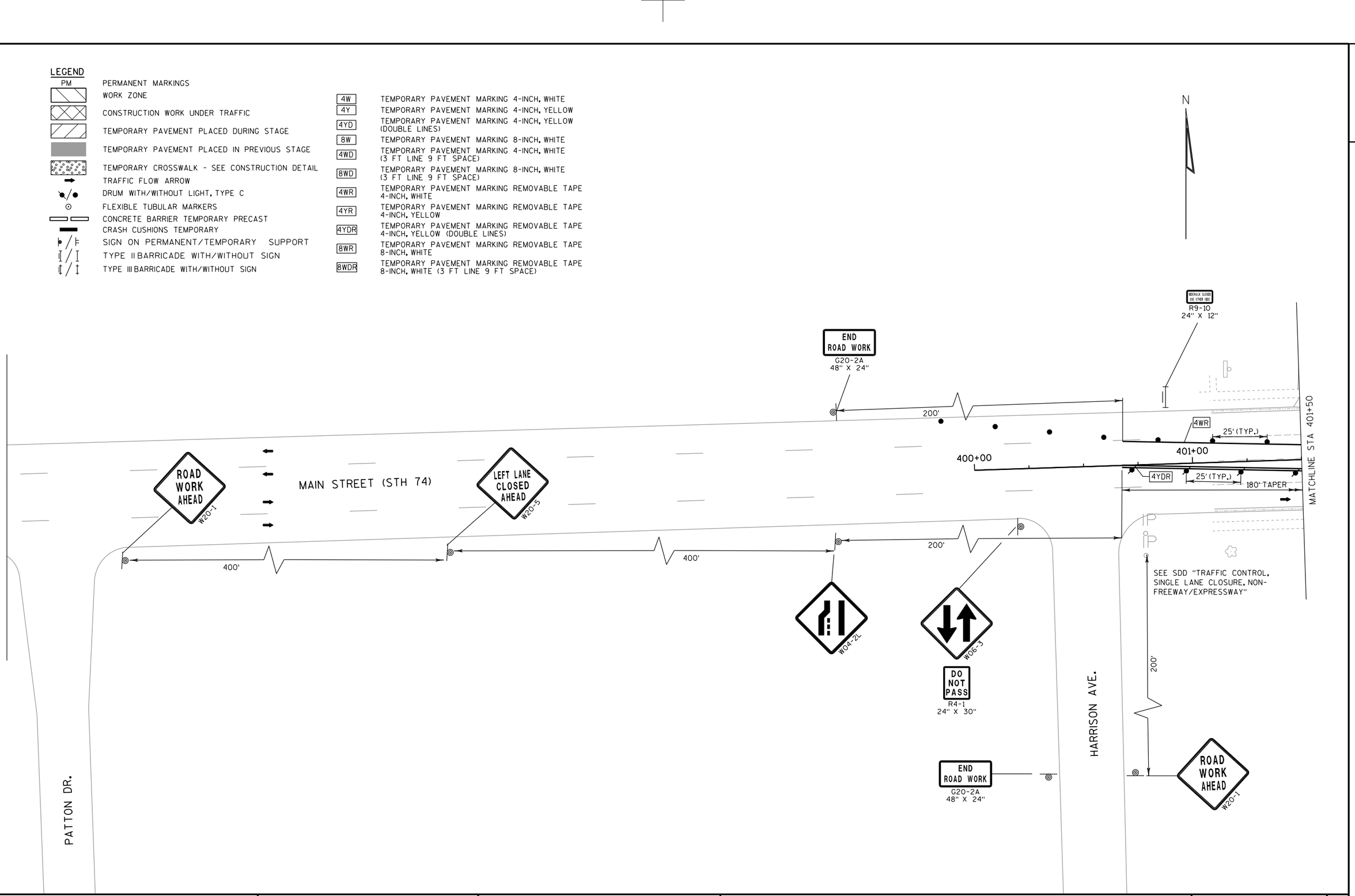
FILE NAME : P:\44xx\4442\Plan\026208_s2a.dgn PLOT DATE : 11/2/2014 PLOT BY : ajp PLOT NAME : PLOT SCALE : 1:40

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LEGEND

PM	PERMANENT MARKINGS
	WORK ZONE
	CONSTRUCTION WORK UNDER TRAFFIC
	TEMPORARY PAVEMENT PLACED DURING STAGE
	TEMPORARY PAVEMENT PLACED IN PREVIOUS STAGE
	TEMPORARY CROSSWALK - SEE CONSTRUCTION DETAIL
	TRAFFIC FLOW ARROW
	DRUM WITH/WITHOUT LIGHT, TYPE C
	FLEXIBLE TUBULAR MARKERS
	CONCRETE BARRIER TEMPORARY PRECAST
	CRASH CUSHIONS TEMPORARY
	SIGN ON PERMANENT/TEMPORARY SUPPORT
	TYPE II BARRICADE WITH/WITHOUT SIGN
	TYPE III BARRICADE WITH/WITHOUT SIGN

4W	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE
4Y	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW
4YD	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW (DOUBLE LINES)
8W	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE
4WD	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE (3 FT LINE 9 FT SPACE)
8WD	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE (3 FT LINE 9 FT SPACE)
4WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, WHITE
4YR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW
4YDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW (DOUBLE LINES)
8WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE
8WDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE (3 FT LINE 9 FT SPACE)



PROJECT NO: 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TRAFFIC CONTROL STAGE 2A: MAIN STREET (STH 74)	SHEET 341 E

FILE NAME : P:\44xx\4442\Plan\026210_s2a.dgn PLOT DATE : 11/2/2014 PLOT BY : ajp PLOT NAME : PLOT SCALE : 1:40

WISDOT/CADDS SHEET 42

2

N

SIDEWALK CLOSED
R9-9
24" X 12"

SEE SDD "TRAFFIC CONTROL, SIDEWALK CLOSURE"

W01-4R

SIGN

INSTALL INLET STAGE 2A
INSTALL INLET COVERS STAGE 4
TEMPORARY COVER PLATE PLATE REQUIRED

MATCHLINE STA 401+50

402+00

403+00

404+00

405+00

406+00

407+00

MATCHLINE STA 407+60

MAIN STREET (STH 74)

50'(TYP.)

180'
TAPER

4YDR

11'

45'
BUFFER SPACE

4YD

50'

105'TAPER

8WD

93'

8W

W06-3

DO NOT PASS
R4-1
24" X 30"

BEGIN LEFT TURN LANE
R3-20L
24" X 36"

INSTALL INLET STAGE 2A
INSTALL INLET COVERS STAGE 4
TEMPORARY COVER PLATE PLATE REQUIRED

LEGEND

PM	PERMANENT MARKINGS
	WORK ZONE
	CONSTRUCTION WORK UNDER TRAFFIC
	TEMPORARY PAVEMENT PLACED DURING STAGE
	TEMPORARY PAVEMENT PLACED IN PREVIOUS STAGE
	TEMPORARY CROSSWALK - SEE CONSTRUCTION DETAIL
	TRAFFIC FLOW ARROW
	DRUM WITH/WITHOUT LIGHT, TYPE C
	FLEXIBLE TUBULAR MARKERS
	CONCRETE BARRIER TEMPORARY PRECAST
	CRASH CUSHIONS TEMPORARY
	SIGN ON PERMANENT/TEMPORARY SUPPORT
	TYPE II BARRICADE WITH/WITHOUT SIGN
	TYPE III BARRICADE WITH/WITHOUT SIGN

4W	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE
4Y	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW
4YD	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW (DOUBLE LINES)
8W	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE
4WD	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE (3 FT LINE 9 FT SPACE)
8WD	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE (3 FT LINE 9 FT SPACE)
4WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, WHITE
4YR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW
4YDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW (DOUBLE LINES)
8WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE
8WDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE (3 FT LINE 9 FT SPACE)

PROJECT NO: 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TRAFFIC CONTROL STAGE 2A: MAIN STREET (STH 74)	SHEET 342	E

2

N

W06-3

DO NOT PASS
R4-1
24" X 30"

BEGIN LEFT TURN LANE
R3-20L
24" X 36"

ROAD CLOSED
R11-2
48" X 30"

MATCHLINE STA 410+13

MAIN STREET (STH 74)

411+00

412+00

413+00

414+00

415+00

416

MATCHLINE STA 416+00

50' (TYP.)

12'

11'

11'

140' TAPER

W01-6
48" X 24"

R3-2
24" X 24"

RIGHT TURN ONLY
R3-53R
24" X 30"

4W

8W

4YD

8WD

4Y

MH

SS

SIGN

IP

LEGEND

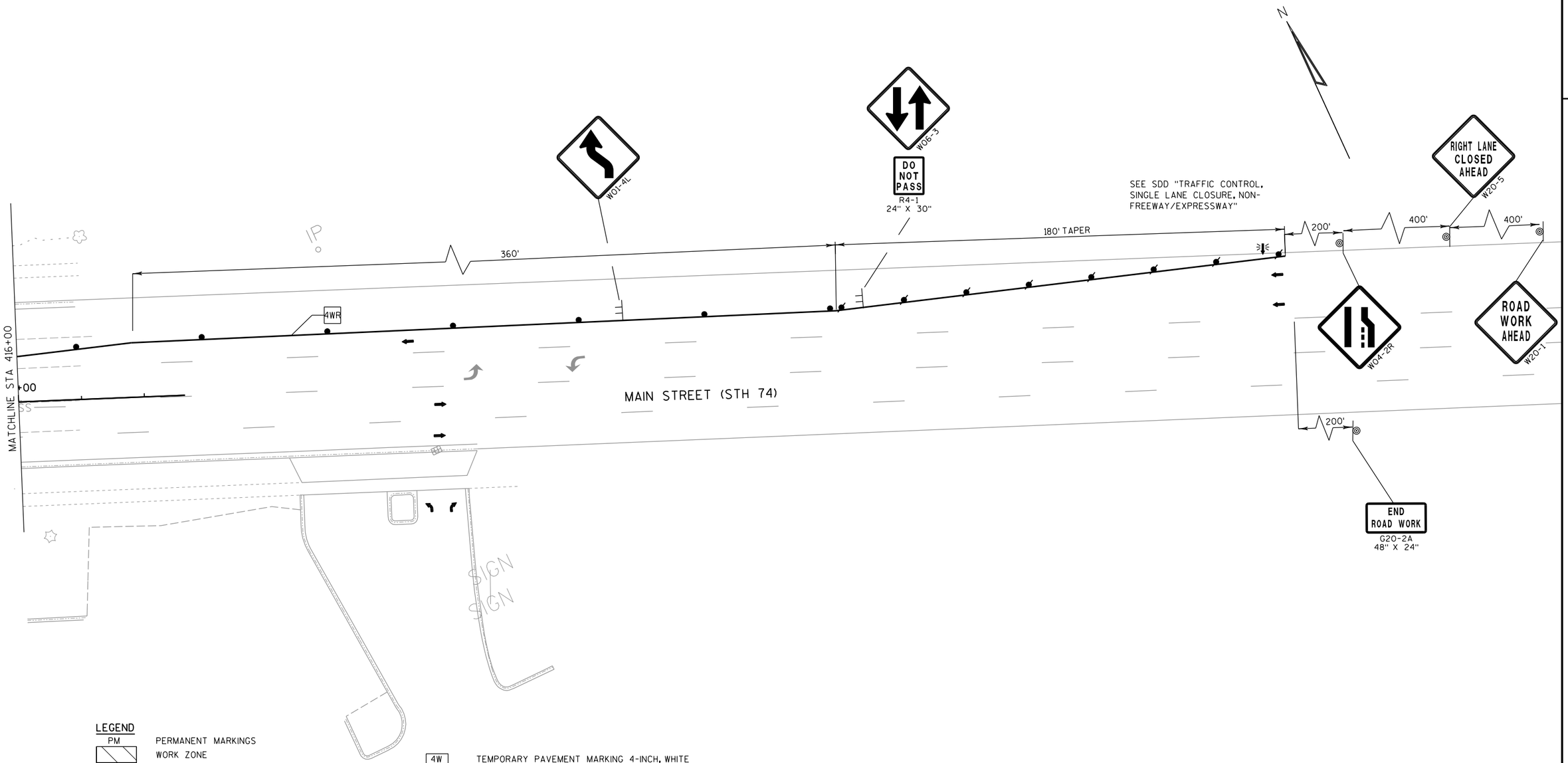
PM

- PERMANENT MARKINGS
- WORK ZONE
- CONSTRUCTION WORK UNDER TRAFFIC
- TEMPORARY PAVEMENT PLACED DURING STAGE
- TEMPORARY PAVEMENT PLACED IN PREVIOUS STAGE
- TEMPORARY CROSSWALK - SEE CONSTRUCTION DETAIL
- TRAFFIC FLOW ARROW
- DRUM WITH/WITHOUT LIGHT, TYPE C
- FLEXIBLE TUBULAR MARKERS
- CONCRETE BARRIER TEMPORARY PRECAST
- CRASH CUSHIONS TEMPORARY
- SIGN ON PERMANENT/TEMPORARY SUPPORT
- TYPE II BARRICADE WITH/WITHOUT SIGN
- TYPE III BARRICADE WITH/WITHOUT SIGN

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4Y	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW
4YD	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW (DOUBLE LINES)
8W	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE
4WD	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE (3 FT LINE 9 FT SPACE)
8WD	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE (3 FT LINE 9 FT SPACE)
4WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, WHITE
4YR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW
4YDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW (DOUBLE LINES)
8WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE
8WDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE (3 FT LINE 9 FT SPACE)

PROJECT NO: 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TRAFFIC CONTROL STAGE 2A: MAIN STREET (STH 74)	SHEET 343	E

2



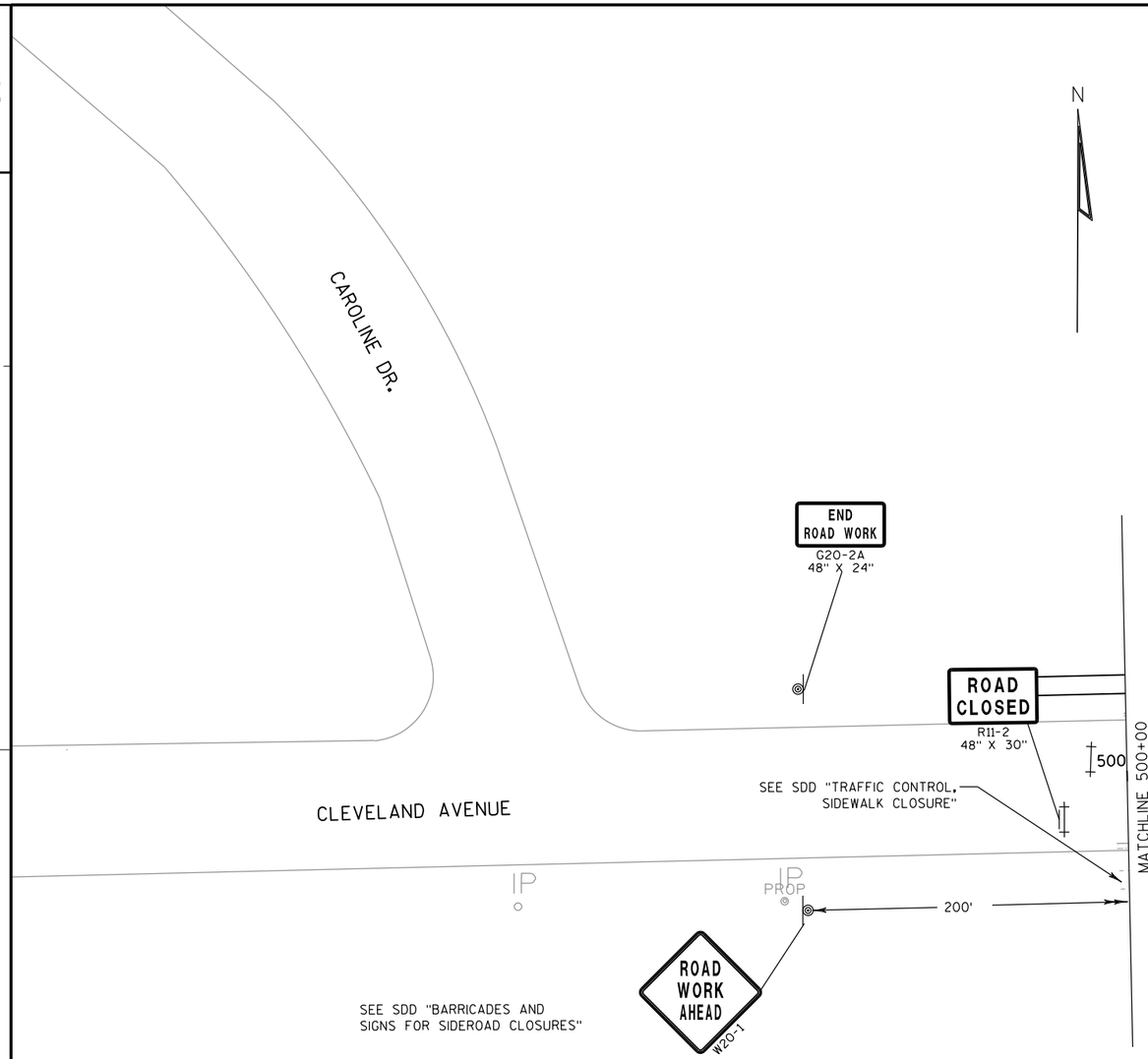
LEGEND

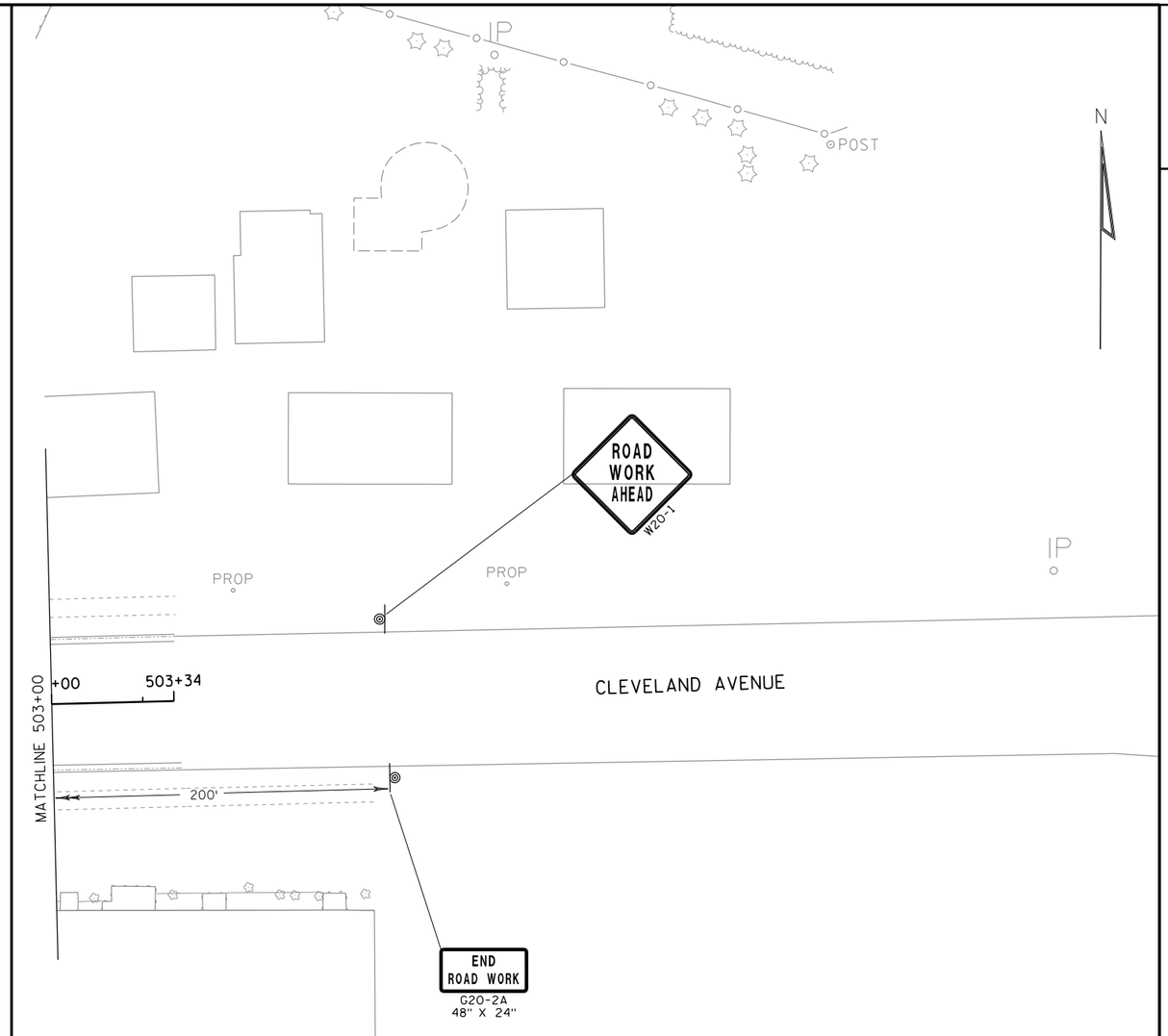
PM	PERMANENT MARKINGS
	WORK ZONE
	CONSTRUCTION WORK UNDER TRAFFIC
	TEMPORARY PAVEMENT PLACED DURING STAGE
	TEMPORARY PAVEMENT PLACED IN PREVIOUS STAGE
	TEMPORARY CROSSWALK - SEE CONSTRUCTION DETAIL
	TRAFFIC FLOW ARROW
	DRUM WITH/WITHOUT LIGHT, TYPE C
	FLEXIBLE TUBULAR MARKERS
	CONCRETE BARRIER TEMPORARY PRECAST
	CRASH CUSHIONS TEMPORARY
	SIGN ON PERMANENT/TEMPORARY SUPPORT
	TYPE II BARRICADE WITH/WITHOUT SIGN
	TYPE III BARRICADE WITH/WITHOUT SIGN

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4Y	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW
4YD	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW (DOUBLE LINES)
8W	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE
4WD	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE (3 FT LINE 9 FT SPACE)
8WD	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE (3 FT LINE 9 FT SPACE)
4WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, WHITE
4YR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW
4YDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW (DOUBLE LINES)
8WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE
8WDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE (3 FT LINE 9 FT SPACE)

PROJECT NO: 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TRAFFIC CONTROL STAGE 2A: MAIN STREET (STH 74)	SHEET 344	E

2





2

LEGEND

PM	PERMANENT MARKINGS	4W	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE
	WORK ZONE	4Y	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW
	CONSTRUCTION WORK UNDER TRAFFIC	4YD	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW (DOUBLE LINES)
	TEMPORARY PAVEMENT PLACED DURING STAGE	8W	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE
	TEMPORARY PAVEMENT PLACED IN PREVIOUS STAGE	4WD	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE (3 FT LINE 9 FT SPACE)
	TEMPORARY CROSSWALK - SEE CONSTRUCTION DETAIL	8WD	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE (3 FT LINE 9 FT SPACE)
	TRAFFIC FLOW ARROW	4WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, WHITE
	DRUM WITH/WITHOUT LIGHT, TYPE C	4YR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW
	FLEXIBLE TUBULAR MARKERS	4YDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW (DOUBLE LINES)
	CONCRETE BARRIER TEMPORARY PRECAST	8WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE
	CRASH CUSHIONS TEMPORARY	8WDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE (3 FT LINE 9 FT SPACE)
	SIGN ON PERMANENT/TEMPORARY SUPPORT		
	TYPE II BARRICADE WITH/WITHOUT SIGN		
	TYPE III BARRICADE WITH/WITHOUT SIGN		

PROJECT NO: 2782-11-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TRAFFIC CONTROL STAGE 2A: CLEVELAND AVENUE	SHEET 345	E

FILE NAME : P:\44xx\4442\Plan\026214_s2a.dgn PLOT DATE : 11/2/2014 PLOT BY : ajp PLOT NAME : PLOT SCALE : 1:40

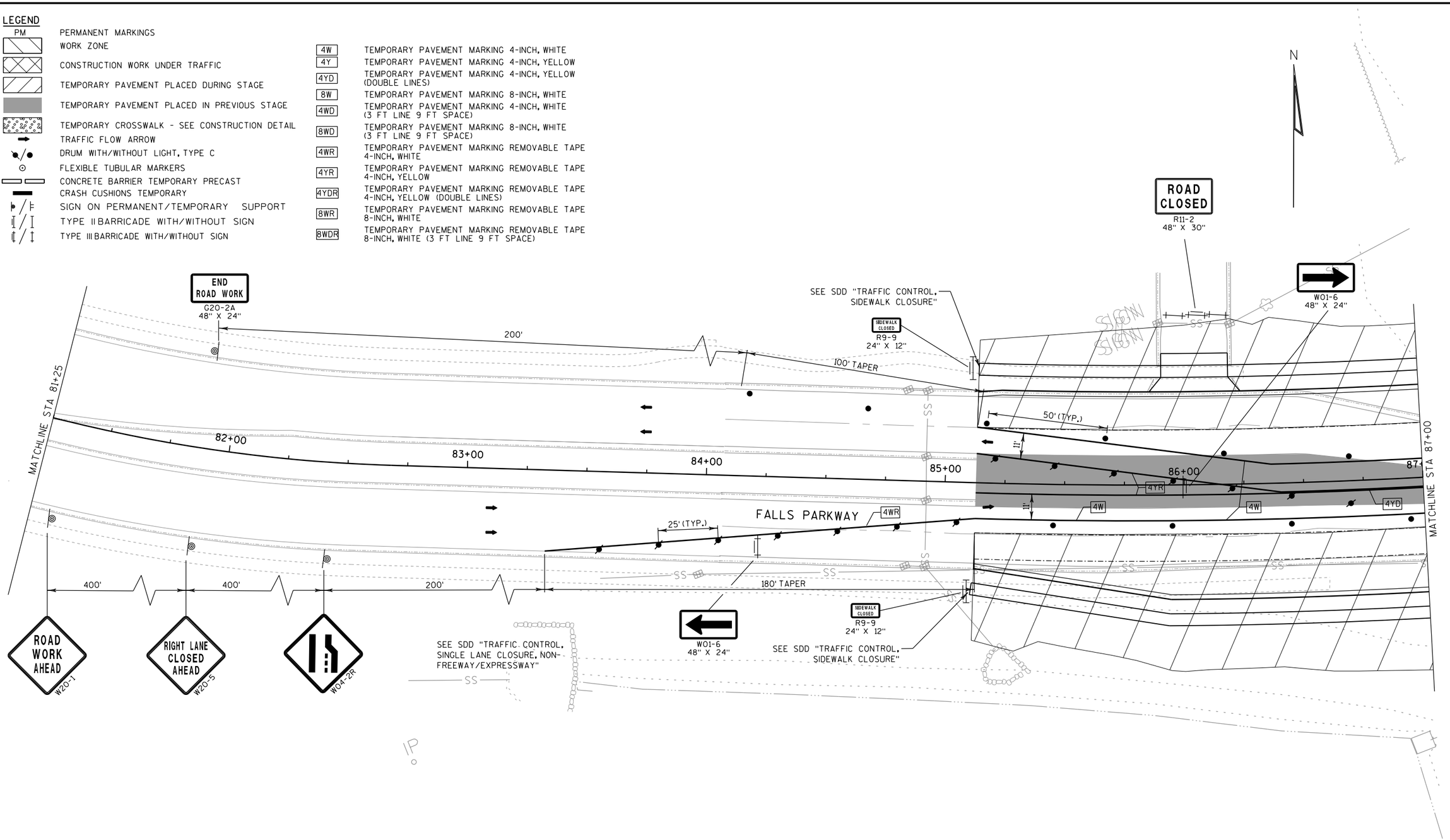
WISDOT/CADDS SHEET 42

2

LEGEND

PM	PERMANENT MARKINGS
	WORK ZONE
	CONSTRUCTION WORK UNDER TRAFFIC
	TEMPORARY PAVEMENT PLACED DURING STAGE
	TEMPORARY PAVEMENT PLACED IN PREVIOUS STAGE
	TEMPORARY CROSSWALK - SEE CONSTRUCTION DETAIL
	TRAFFIC FLOW ARROW
	DRUM WITH/WITHOUT LIGHT, TYPE C
	FLEXIBLE TUBULAR MARKERS
	CONCRETE BARRIER TEMPORARY PRECAST
	CRASH CUSHIONS TEMPORARY
	SIGN ON PERMANENT/TEMPORARY SUPPORT
	TYPE II BARRICADE WITH/WITHOUT SIGN
	TYPE III BARRICADE WITH/WITHOUT SIGN

4W	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE
4Y	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW
4YD	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW (DOUBLE LINES)
8W	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE
4WD	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE (3 FT LINE 9 FT SPACE)
8WD	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE (3 FT LINE 9 FT SPACE)
4WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, WHITE
4YR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW
4YDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW (DOUBLE LINES)
8WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE
8WDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE (3 FT LINE 9 FT SPACE)



PROJECT NO: 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TRAFFIC CONTROL STAGE 2A: FALLS PARKWAY	SHEET 346 E

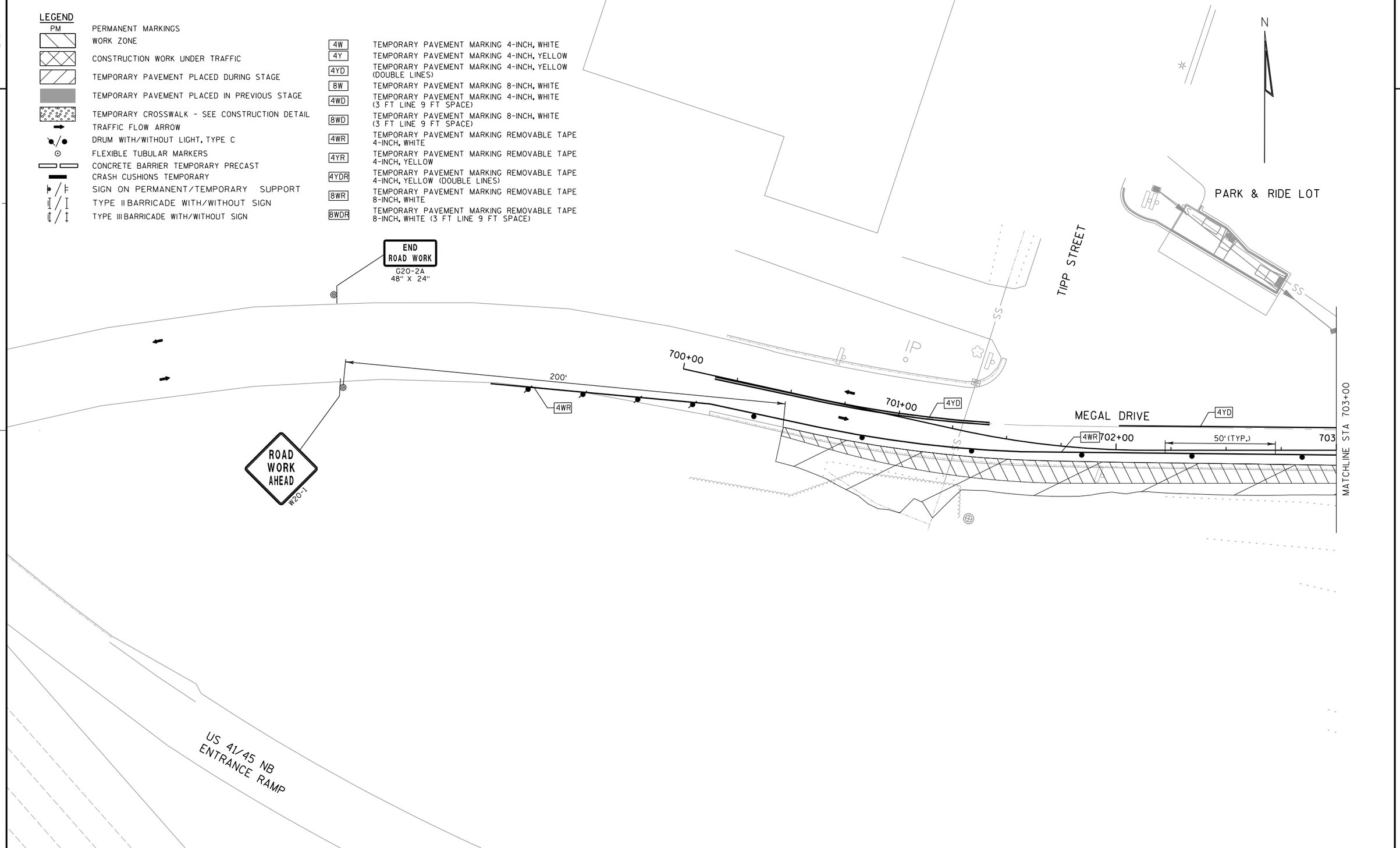
2

LEGEND

PM

- PERMANENT MARKINGS
- WORK ZONE
- CONSTRUCTION WORK UNDER TRAFFIC
- TEMPORARY PAVEMENT PLACED DURING STAGE
- TEMPORARY PAVEMENT PLACED IN PREVIOUS STAGE
- TEMPORARY CROSSWALK - SEE CONSTRUCTION DETAIL
- TRAFFIC FLOW ARROW
- DRUM WITH/WITHOUT LIGHT, TYPE C
- FLEXIBLE TUBULAR MARKERS
- CONCRETE BARRIER TEMPORARY PRECAST
- CRASH CUSHIONS TEMPORARY
- SIGN ON PERMANENT/TEMPORARY SUPPORT
- TYPE II BARRICADE WITH/WITHOUT SIGN
- TYPE III BARRICADE WITH/WITHOUT SIGN

4W	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE
4Y	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW
4YD	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW (DOUBLE LINES)
8W	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE
4WD	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE (3 FT LINE 9 FT SPACE)
8WD	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE (3 FT LINE 9 FT SPACE)
4WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, WHITE
4YR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW
4YDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW (DOUBLE LINES)
8WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE
8WDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE (3 FT LINE 9 FT SPACE)

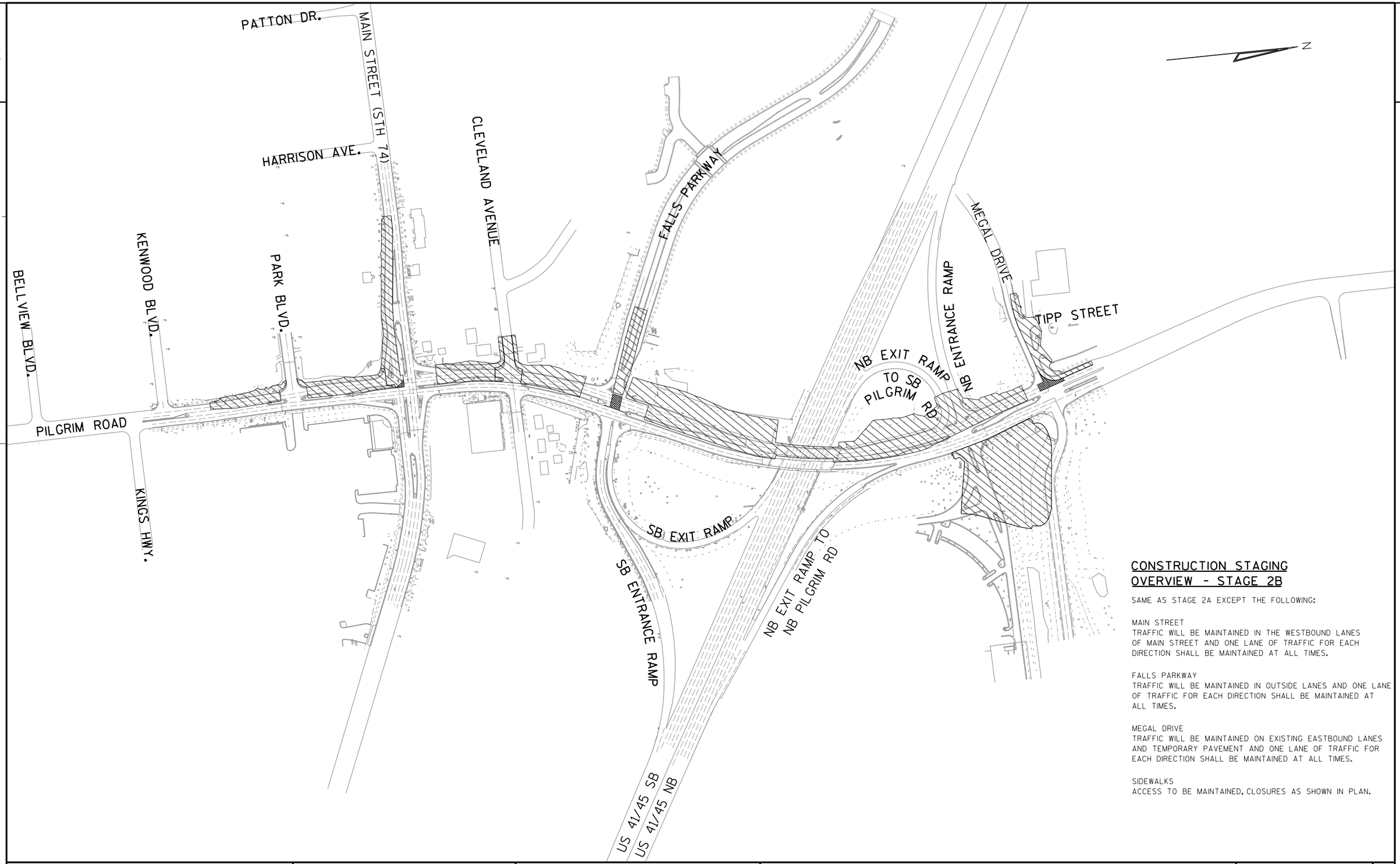


PROJECT NO: 2782-11-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TRAFFIC CONTROL STAGE 2A: MEGAL DRIVE	SHEET 347	E

FILE NAME : P:\44xx\4442\Plan\026219_s2a.dgn PLOT DATE : 11/2/2014 PLOT BY : ajp PLOT NAME : PLOT SCALE : 1:40

WISDOT/CADDS SHEET 42

2



CONSTRUCTION STAGING OVERVIEW - STAGE 2B

SAME AS STAGE 2A EXCEPT THE FOLLOWING:

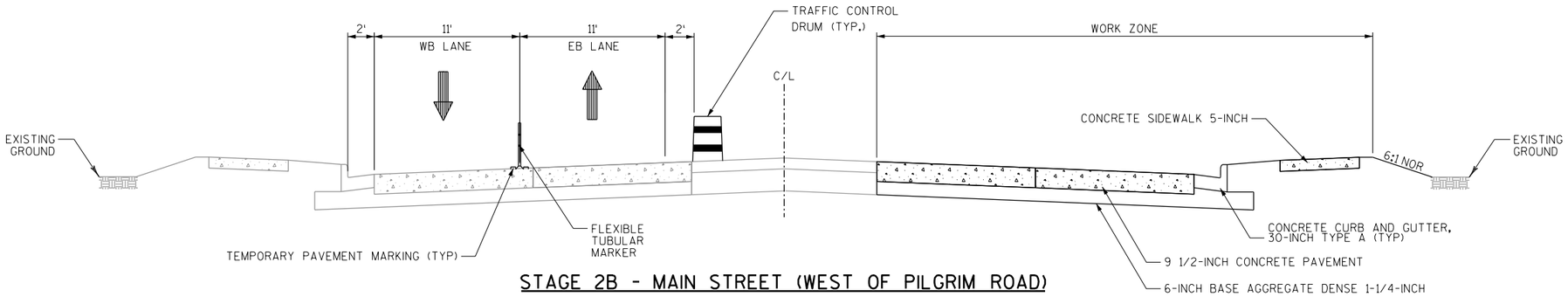
MAIN STREET
TRAFFIC WILL BE MAINTAINED IN THE WESTBOUND LANES OF MAIN STREET AND ONE LANE OF TRAFFIC FOR EACH DIRECTION SHALL BE MAINTAINED AT ALL TIMES.

FALLS PARKWAY
TRAFFIC WILL BE MAINTAINED IN OUTSIDE LANES AND ONE LANE OF TRAFFIC FOR EACH DIRECTION SHALL BE MAINTAINED AT ALL TIMES.

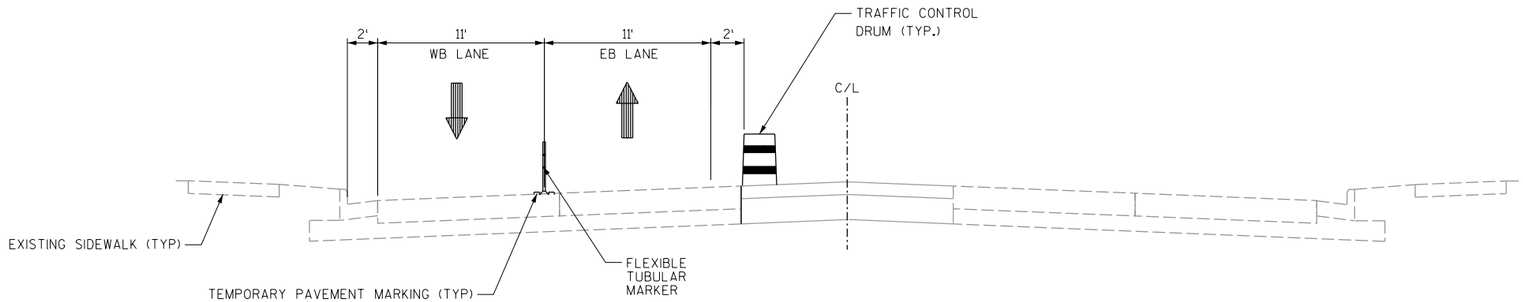
MEGAL DRIVE
TRAFFIC WILL BE MAINTAINED ON EXISTING EASTBOUND LANES AND TEMPORARY PAVEMENT AND ONE LANE OF TRAFFIC FOR EACH DIRECTION SHALL BE MAINTAINED AT ALL TIMES.

SIDEWALKS
ACCESS TO BE MAINTAINED, CLOSURES AS SHOWN IN PLAN.

PROJECT NO: 2782-11-70 & 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TRAFFIC CONTROL STAGE 2B: OVERVIEW	SHEET 348	E



STAGE 2B - MAIN STREET (WEST OF PILGRIM ROAD)



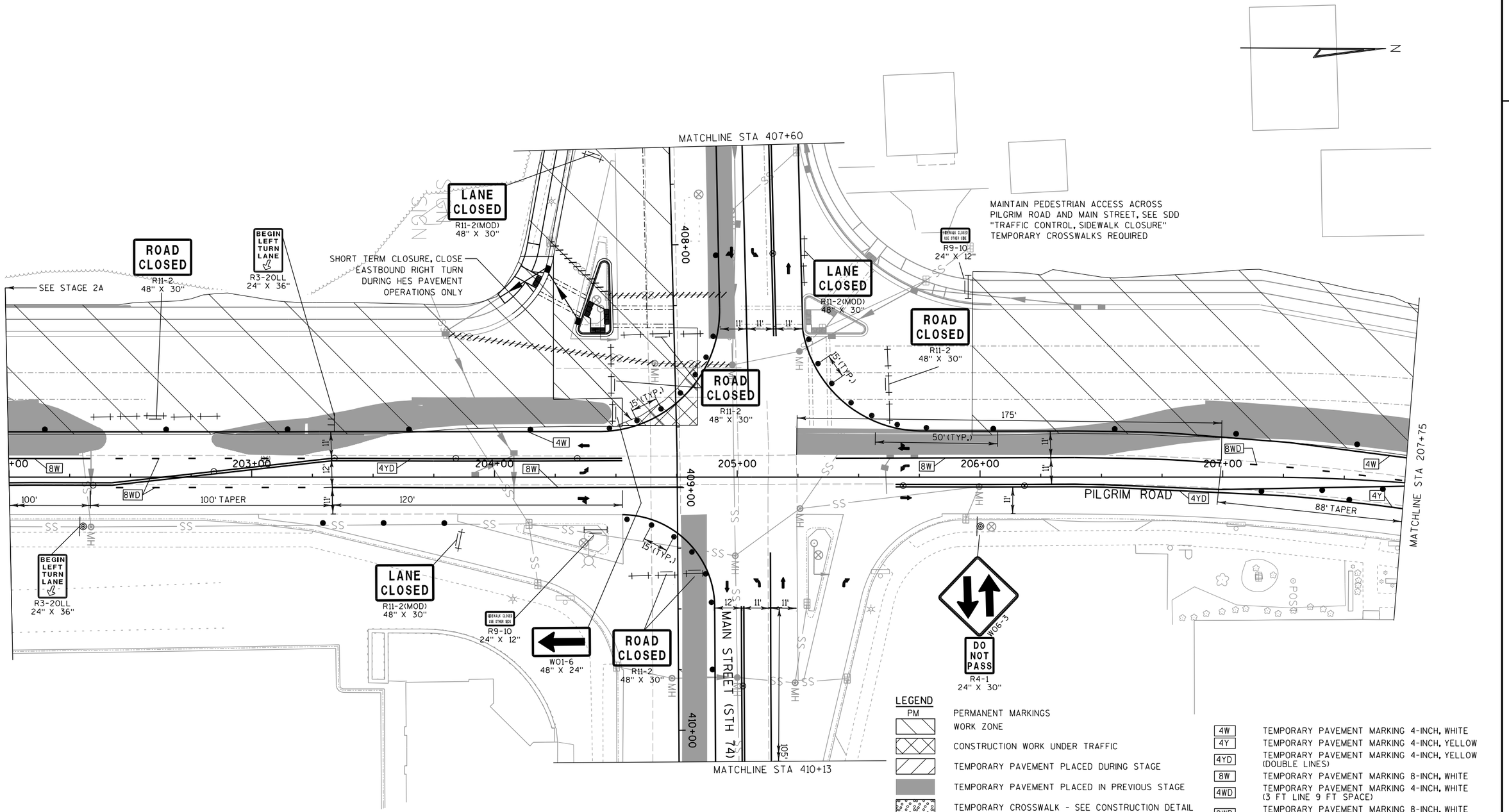
STAGE 2B - MAIN STREET (EAST OF PILGRIM ROAD)

PROJECT NO: 2782-11-70 & 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TRAFFIC CONTROL STAGE 2B TYPICAL SECTIONS	SHEET 349	E

FILE NAME : P:\44xx\4442\Plan\026300_s2bts.dgn PLOT DATE : 11/2/2014 PLOT BY : ajp PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 42

2



LEGEND

PM	PERMANENT MARKINGS
	WORK ZONE
	CONSTRUCTION WORK UNDER TRAFFIC
	TEMPORARY PAVEMENT PLACED DURING STAGE
	TEMPORARY PAVEMENT PLACED IN PREVIOUS STAGE
	TEMPORARY CROSSWALK - SEE CONSTRUCTION DETAIL
	TRAFFIC FLOW ARROW
	DRUM WITH/WITHOUT LIGHT, TYPE C
	FLEXIBLE TUBULAR MARKERS
	CONCRETE BARRIER TEMPORARY PRECAST
	CRASH CUSHIONS TEMPORARY
	SIGN ON PERMANENT/TEMPORARY SUPPORT
	TYPE II BARRICADE WITH/WITHOUT SIGN
	TYPE III BARRICADE WITH/WITHOUT SIGN

4W	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE
4Y	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW
4YD	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW (DOUBLE LINES)
8W	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE
4WD	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE (3 FT LINE 9 FT SPACE)
8WD	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE (3 FT LINE 9 FT SPACE)
4WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, WHITE
4YR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW
4YDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW (DOUBLE LINES)
8WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE
8WDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE (3 FT LINE 9 FT SPACE)

PROJECT NO: 2782-11-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TRAFFIC CONTROL STAGE 2B: PILGRIM ROAD	SHEET 350	E

2

MATCHLINE 500+00

SEE STAGE 2A

SIDEWALK CLOSED
R9-9
24" X 12"

CLEVELAND AVENUE

200'

MAINTAIN DRIVEWAY ACCESS

ROAD CLOSED
R11-2
48" X 30"

501+00

501+40

MATCHLINE STA 207+75

208+00

209+00

126'

210+00

211+00

212+00

100'

213+00

238'

4W

4YD

8W

8WD

PILGRIM ROAD

75'
TAPER

71'

11'

15' (TYP.)

502+00

502+12

200'

503

BEGIN LEFT TURN LANE
R3-20L
24" X 36"

R3-2
24" X 24"

RIGHT TURN ONLY
R3-53R
24" X 30"

R3-1
24" X 24"

BEGIN LEFT TURN LANE
R3-20LL
24" X 36"

SEE STAGE 2A

MATCHLINE STA 87+00

FALLS PARKWAY

SIDEWALK CLOSED
R9-9
24" X 12"

SIDEWALK CLOSED USE OTHER SIDE
R9-10
24" X 12"

LANE CLOSED
R11-2(MOD)
48" X 30"

W01-6
48" X 24"

4WR

88+00

SIDEWALK CLOSED
R9-9
24" X 12"

W01-6
48" X 24"

SEE STAGE 2A

ROAD CLOSED
R11-2
48" X 30"

15' (TYP.)

13+00

US 41/45 SB ENTRANCE RAMP

US 41/45 SB EXIT RAMP

101+00

200'

12+

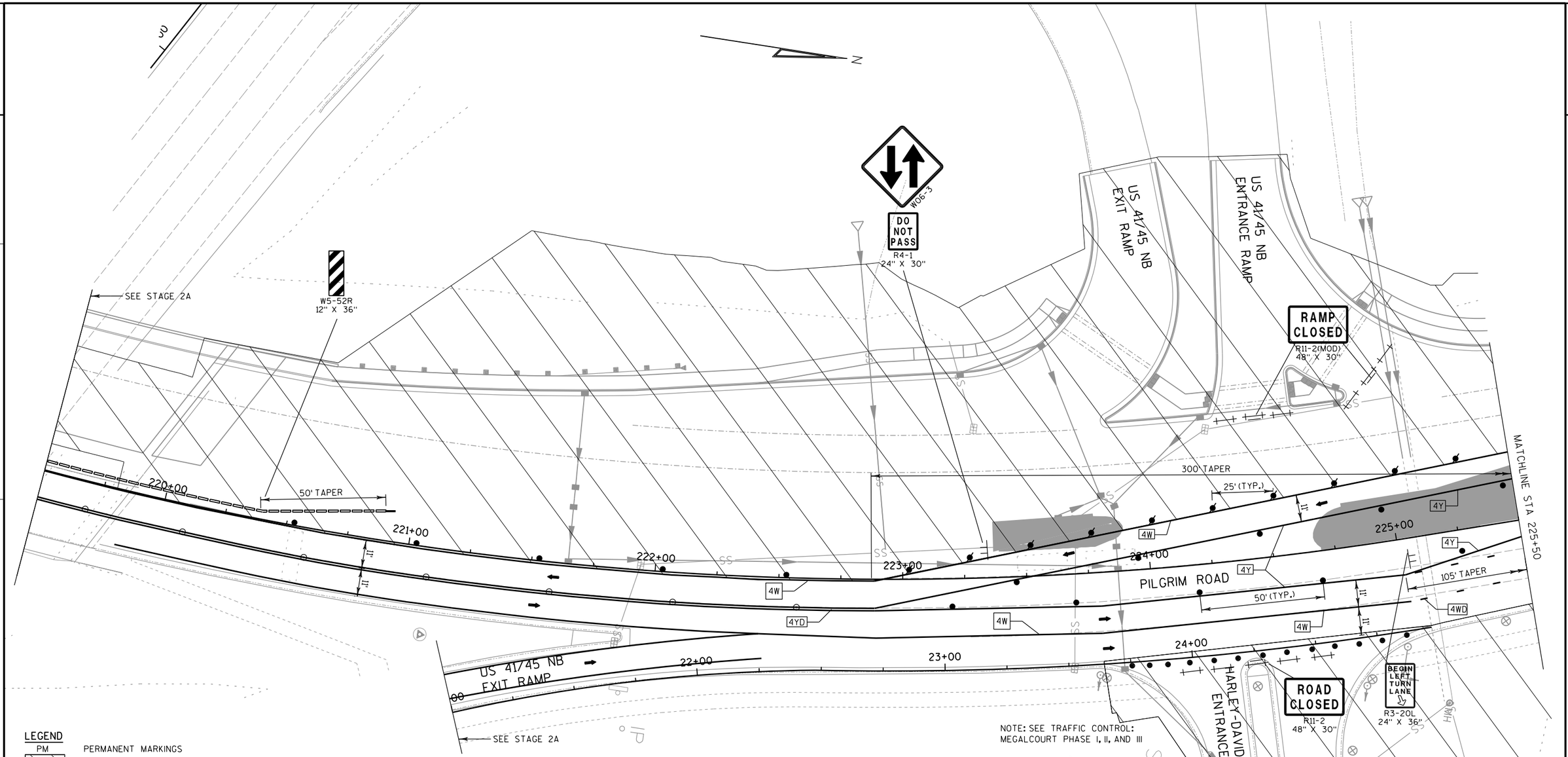
MATCHLINE STA 12+00

LEGEND

PM	PERMANENT MARKINGS
	WORK ZONE
	CONSTRUCTION WORK UNDER TRAFFIC
	TEMPORARY PAVEMENT PLACED DURING STAGE
	TEMPORARY PAVEMENT PLACED IN PREVIOUS STAGE
	TEMPORARY CROSSWALK - SEE CONSTRUCTION DETAIL
	TRAFFIC FLOW ARROW
	DRUM WITH/WITHOUT LIGHT, TYPE C
	FLEXIBLE TUBULAR MARKERS
	CONCRETE BARRIER TEMPORARY PRECAST
	CRASH CUSHIONS TEMPORARY
	SIGN ON PERMANENT/TEMPORARY SUPPORT
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4Y	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW
4YD	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW (DOUBLE LINES)
8W	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE
4WD	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE (3 FT LINE 9 FT SPACE)
8WD	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE (3 FT LINE 9 FT SPACE)
4WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, WHITE
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8WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE
8WDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE (3 FT LINE 9 FT SPACE)

PROJECT NO: 2782-11-70 & 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TRAFFIC CONTROL STAGE 2B: PILGRIM ROAD	SHEET 351	E



LEGEND

PM	PERMANENT MARKINGS
	WORK ZONE
	CONSTRUCTION WORK UNDER TRAFFIC
	TEMPORARY PAVEMENT PLACED DURING STAGE
	TEMPORARY PAVEMENT PLACED IN PREVIOUS STAGE
	TEMPORARY CROSSWALK - SEE CONSTRUCTION DETAIL
	TRAFFIC FLOW ARROW
	DRUM WITH/WITHOUT LIGHT, TYPE C
	FLEXIBLE TUBULAR MARKERS
	CONCRETE BARRIER TEMPORARY PRECAST
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8W	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE
4WD	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE (3 FT LINE 9 FT SPACE)
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4YR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW
4YDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW (DOUBLE LINES)
8WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE
8WDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE (3 FT LINE 9 FT SPACE)

PROJECT NO: 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TRAFFIC CONTROL STAGE 2B: PILGRIM ROAD	SHEET 352 E

2

PARK & RIDE LOT

MATCHLINE STA 703+00

REMOVE TEMPORARY PIPE

INSTALL INLETS AND PIPES STAGE 2B.
INSTALL COVERS STAGE 3B.
TEMPORARY COVER PLATES REQ'D.

SHORT-TERM CLOSURE, CLOSE SOUTHBOUND RIGHT TURN DURING PAVEMENT OPERATIONS ONLY

SEE SDD "TRAFFIC CONTROL, SINGLE LANE CLOSURE, NON-FREEWAY/EXPRESSWAY"

W01-6
48" X 24"

SIDEWALK CLOSED
R9-9
24" X 12"

BEGIN RIGHT TURN LANE
R3-20R
24" X 36"

MEGAL DRIVE

PILGRIM ROAD

90' TAPER

245' TAPER

300' TAPER

105' TAPER

120'

124'

15' (TYP.)

25' (TYP.)

704+00

226+00

227+00

228+00

229+00

230+00

231+00

MATCHLINE STA 225+50

MATCHLINE STA 231+50

4W 4Y 4YD 8W 8WD 8WR 8WDR 8YDR 4WR

NOTE: SEE TRAFFIC CONTROL:
MEGALCOURT PHASE I, II, AND III.
ENTRANCE TO BE OPEN IN PHASE III.

MEGAL COURT

12' 12'

MATCHLINE

LEGEND

PM	PERMANENT MARKINGS
	WORK ZONE
	CONSTRUCTION WORK UNDER TRAFFIC
	TEMPORARY PAVEMENT PLACED DURING STAGE
	TEMPORARY PAVEMENT PLACED IN PREVIOUS STAGE
	TEMPORARY CROSSWALK - SEE CONSTRUCTION DETAIL
	TRAFFIC FLOW ARROW
	DRUM WITH/WITHOUT LIGHT, TYPE C
	FLEXIBLE TUBULAR MARKERS
	CONCRETE BARRIER TEMPORARY PRECAST
	CRASH CUSHIONS TEMPORARY
	SIGN ON PERMANENT/TEMPORARY SUPPORT
	TYPE II BARRICADE WITH/WITHOUT SIGN
	TYPE III BARRICADE WITH/WITHOUT SIGN

4W	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE
4Y	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW
4YD	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW (DOUBLE LINES)
8W	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE
4WD	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE (3 FT LINE 9 FT SPACE)
8WD	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE (3 FT LINE 9 FT SPACE)
4WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, WHITE
4YR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW
4YDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW (DOUBLE LINES)
8WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE
8WDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE (3 FT LINE 9 FT SPACE)

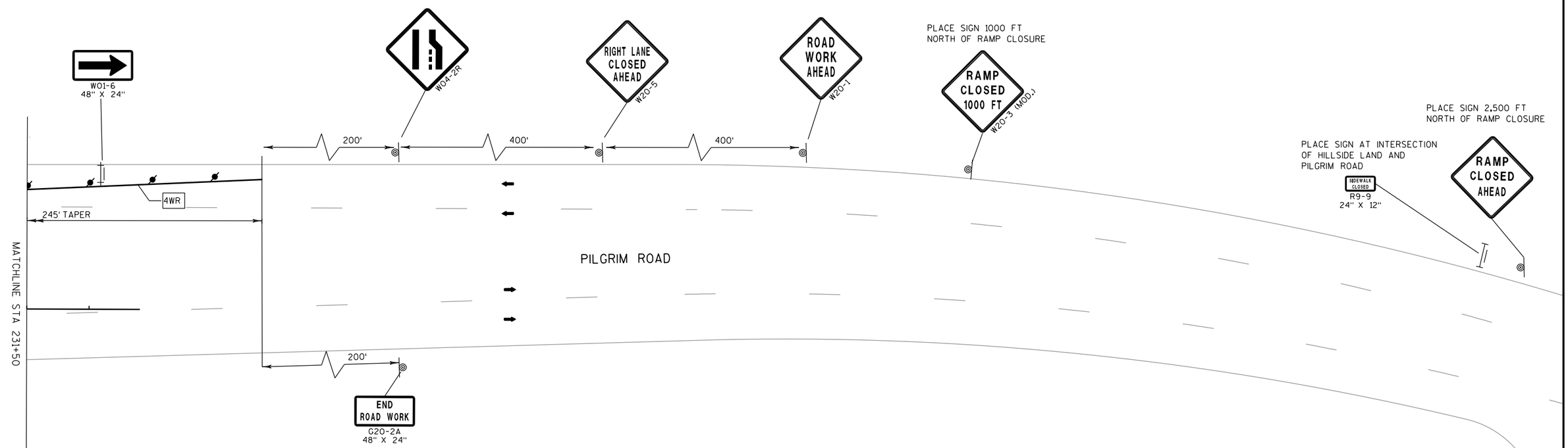
PROJECT NO: 2782-11-70 & 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TRAFFIC CONTROL STAGE 2B: PILGRIM ROAD	SHEET 353	E

FILE NAME : P:\44xx\4442\Plan\026307_s2b.dgn PLOT DATE : 11/2/2014 PLOT BY : ajp PLOT NAME : PLOT SCALE : 1:40

2

LEGEND

PM	PERMANENT MARKINGS	4W	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE
	WORK ZONE	4Y	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW
	CONSTRUCTION WORK UNDER TRAFFIC	4YD	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW (DOUBLE LINES)
	TEMPORARY PAVEMENT PLACED DURING STAGE	8W	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE
	TEMPORARY PAVEMENT PLACED IN PREVIOUS STAGE	4WD	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE (3 FT LINE 9 FT SPACE)
	TEMPORARY CROSSWALK - SEE CONSTRUCTION DETAIL	8WD	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE (3 FT LINE 9 FT SPACE)
	TRAFFIC FLOW ARROW	4WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, WHITE
	DRUM WITH/WITHOUT LIGHT, TYPE C	4YR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW
	FLEXIBLE TUBULAR MARKERS	4YDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW (DOUBLE LINES)
	CONCRETE BARRIER TEMPORARY PRECAST	8WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE
	CRASH CUSHIONS TEMPORARY	8WDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE (3 FT LINE 9 FT SPACE)
	SIGN ON PERMANENT/TEMPORARY SUPPORT		
	TYPE II BARRICADE WITH/WITHOUT SIGN		
	TYPE III BARRICADE WITH/WITHOUT SIGN		



PROJECT NO: 2782-11-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TRAFFIC CONTROL STAGE 2B: PILGRIM ROAD	SHEET 354	E

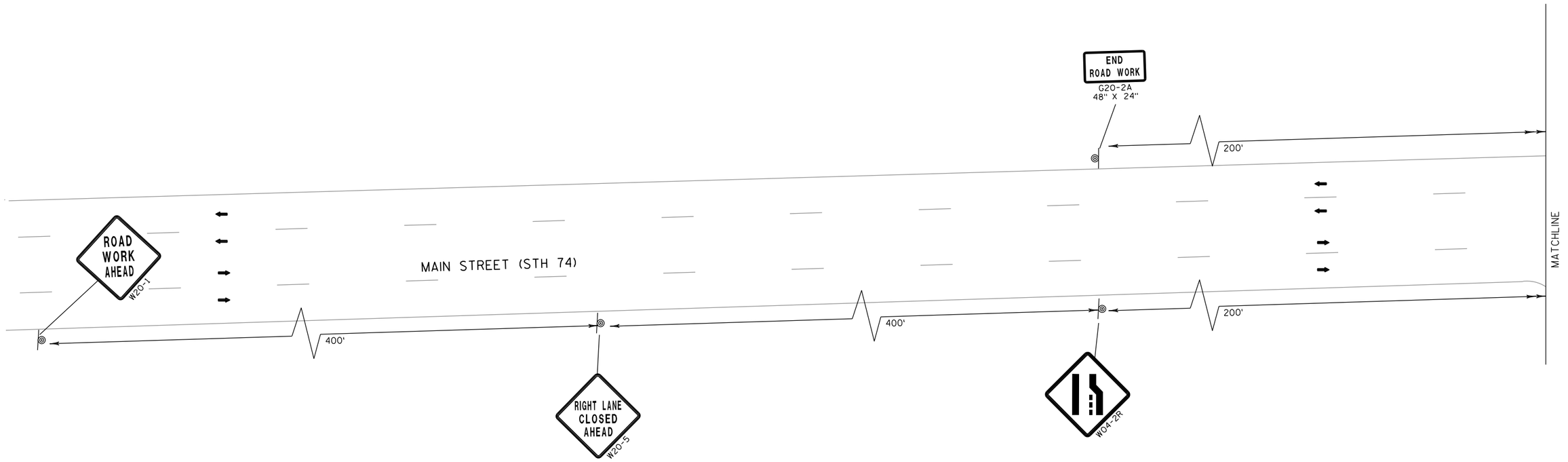
2

LEGEND

PM	PERMANENT MARKINGS
	WORK ZONE
	CONSTRUCTION WORK UNDER TRAFFIC
	TEMPORARY PAVEMENT PLACED DURING STAGE
	TEMPORARY PAVEMENT PLACED IN PREVIOUS STAGE
	TEMPORARY CROSSWALK - SEE CONSTRUCTION DETAIL
	TRAFFIC FLOW ARROW
	DRUM WITH/WITHOUT LIGHT, TYPE C
	FLEXIBLE TUBULAR MARKERS
	CONCRETE BARRIER TEMPORARY PRECAST
	CRASH CUSHIONS TEMPORARY
	SIGN ON PERMANENT/TEMPORARY SUPPORT
	TYPE II BARRICADE WITH/WITHOUT SIGN
	TYPE III BARRICADE WITH/WITHOUT SIGN

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4Y	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW
4YD	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW (DOUBLE LINES)
8W	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE
4WD	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE (3 FT LINE 9 FT SPACE)
8WD	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE (3 FT LINE 9 FT SPACE)
4WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, WHITE
4YR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW
4YDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW (DOUBLE LINES)
8WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE
8WDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE (3 FT LINE 9 FT SPACE)

N



PROJECT NO: 2782-11-70 & 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TRAFFIC CONTROL STAGE 2B: MAIN STREET (STH 74)	SHEET 355	E

FILE NAME : P:\44xx\4442\Plan\026309_s2b.dgn PLOT DATE : 11/2/2014 PLOT BY : ajp PLOT NAME : PLOT SCALE : 1:40

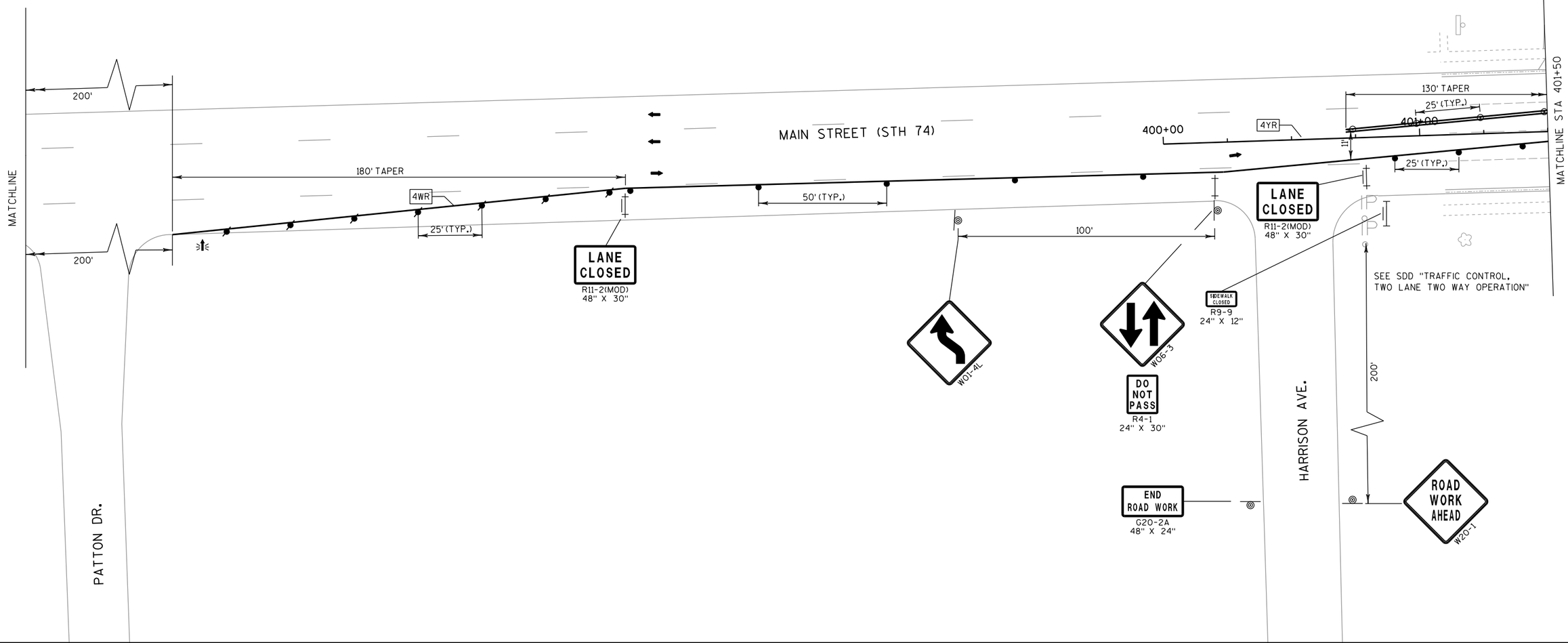
WISDOT/CADDS SHEET 42

LEGEND

PM	PERMANENT MARKINGS
	WORK ZONE
	CONSTRUCTION WORK UNDER TRAFFIC
	TEMPORARY PAVEMENT PLACED DURING STAGE
	TEMPORARY PAVEMENT PLACED IN PREVIOUS STAGE
	TEMPORARY CROSSWALK - SEE CONSTRUCTION DETAIL
	TRAFFIC FLOW ARROW
	DRUM WITH/WITHOUT LIGHT, TYPE C
	FLEXIBLE TUBULAR MARKERS
	CONCRETE BARRIER TEMPORARY PRECAST
	CRASH CUSHIONS TEMPORARY
	SIGN ON PERMANENT/TEMPORARY SUPPORT
	TYPE II BARRICADE WITH/WITHOUT SIGN
	TYPE III BARRICADE WITH/WITHOUT SIGN

4W	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE
4Y	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW
4YD	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW (DOUBLE LINES)
8W	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE
4WD	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE (3 FT LINE 9 FT SPACE)
8WD	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE (3 FT LINE 9 FT SPACE)
4WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, WHITE
4YR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW
4YDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW (DOUBLE LINES)
8WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE
8WDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE (3 FT LINE 9 FT SPACE)

N



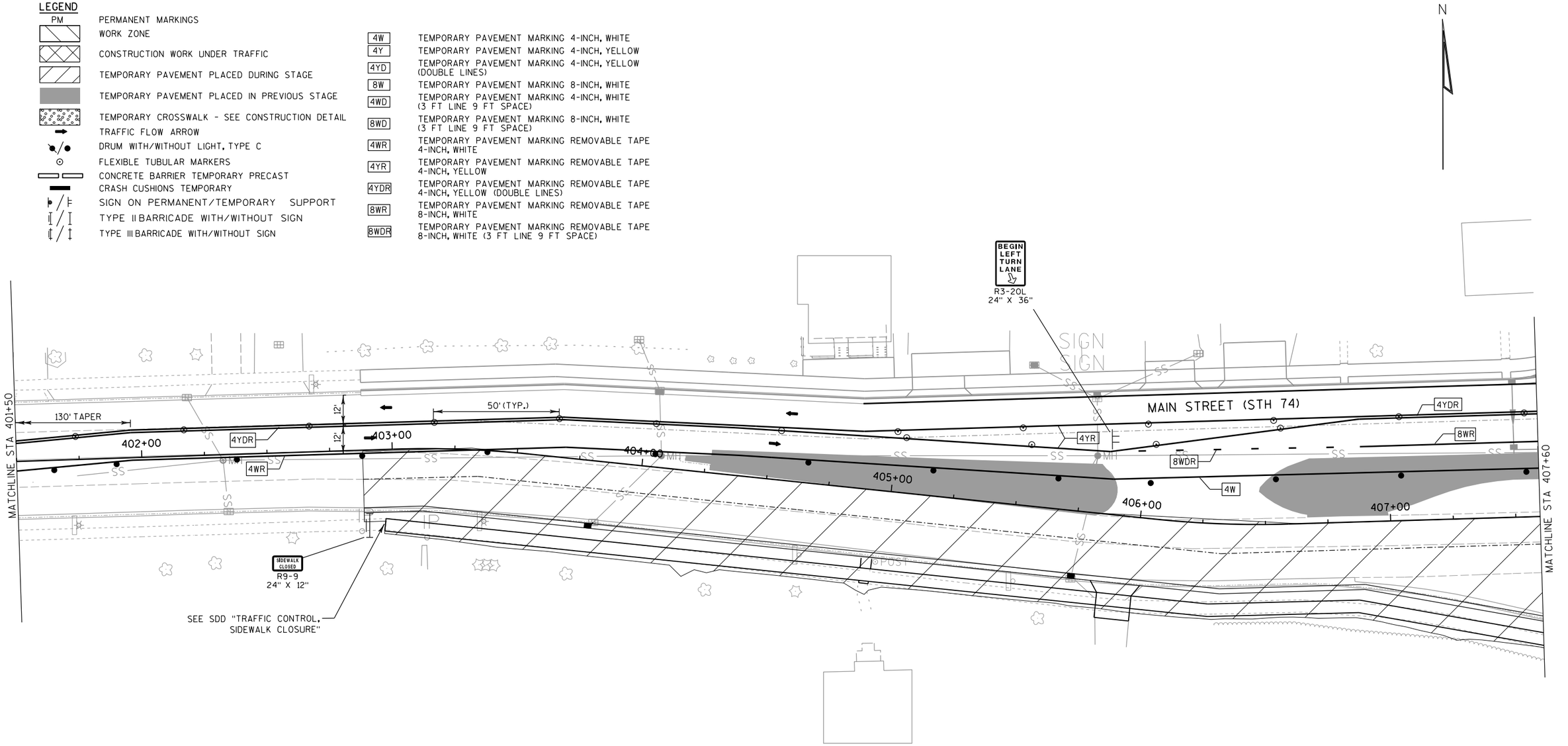
PROJECT NO: 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TRAFFIC CONTROL STAGE 2B: MAIN STREET (STH 74)	SHEET 356	E

2

LEGEND

PM	PERMANENT MARKINGS
	WORK ZONE
	CONSTRUCTION WORK UNDER TRAFFIC
	TEMPORARY PAVEMENT PLACED DURING STAGE
	TEMPORARY PAVEMENT PLACED IN PREVIOUS STAGE
	TEMPORARY CROSSWALK - SEE CONSTRUCTION DETAIL
	TRAFFIC FLOW ARROW
	DRUM WITH/WITHOUT LIGHT, TYPE C
	FLEXIBLE TUBULAR MARKERS
	CONCRETE BARRIER TEMPORARY PRECAST
	CRASH CUSHIONS TEMPORARY
	SIGN ON PERMANENT/TEMPORARY SUPPORT
	TYPE II BARRICADE WITH/WITHOUT SIGN
	TYPE III BARRICADE WITH/WITHOUT SIGN

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4Y	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW
4YD	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW (DOUBLE LINES)
8W	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE
4WD	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE (3 FT LINE 9 FT SPACE)
8WD	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE (3 FT LINE 9 FT SPACE)
4WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, WHITE
4YR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW
4YDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW (DOUBLE LINES)
8WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE
8WDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE (3 FT LINE 9 FT SPACE)



PROJECT NO: 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TRAFFIC CONTROL STAGE 2B: MAIN STREET (STH 74)	SHEET 357 E

2

N

MATCHLINE STA 410+13

MAIN STREET (STH 74)

411+00

412+00

413+00

414+00

415+00

416+00

MATCHLINE STA 416+00

BEGIN LEFT TURN LANE
R3-20L
24" X 36"

105'

110' TAPER

8WR

8WDR

4YDR

4WR

12'

12'

50' (TYP.)

25' (TYP.)

150' TAPER

180' TAPER

11'

W01-4R

W06-3

DO NOT PASS
R4-1
24" X 30"

SEE SDD "TRAFFIC CONTROL, SINGLE LANE CLOSURE, NON-FREEWAY/EXPRESSWAY"

W01-6
48" X 24"

ROAD CLOSED
R11-2
48" X 30"

RIGHT TURN ONLY
R3-53R
24" X 30"

SIGN
SIGN

MH

SS

IP

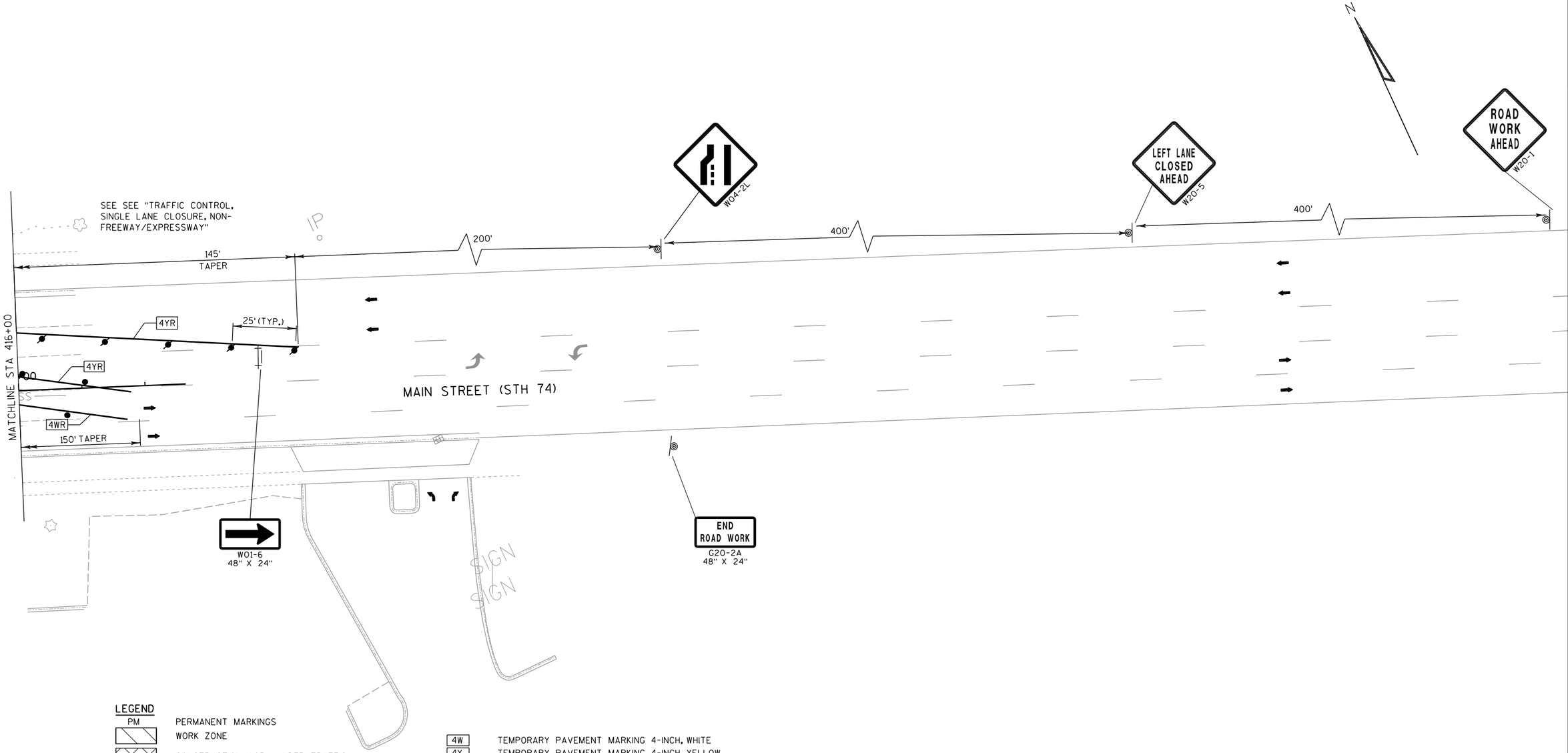
LEGEND

PM	PERMANENT MARKINGS
	WORK ZONE
	CONSTRUCTION WORK UNDER TRAFFIC
	TEMPORARY PAVEMENT PLACED DURING STAGE
	TEMPORARY PAVEMENT PLACED IN PREVIOUS STAGE
	TEMPORARY CROSSWALK - SEE CONSTRUCTION DETAIL
	TRAFFIC FLOW ARROW
	DRUM WITH/WITHOUT LIGHT, TYPE C
	FLEXIBLE TUBULAR MARKERS
	CONCRETE BARRIER TEMPORARY PRECAST
	CRASH CUSHIONS TEMPORARY
	SIGN ON PERMANENT/TEMPORARY SUPPORT
	TYPE II BARRICADE WITH/WITHOUT SIGN
	TYPE III BARRICADE WITH/WITHOUT SIGN

4W	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE
4Y	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW
4YD	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW (DOUBLE LINES)
8W	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE
4WD	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE (3 FT LINE 9 FT SPACE)
8WD	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE (3 FT LINE 9 FT SPACE)
4WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, WHITE
4YR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW
4YDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW (DOUBLE LINES)
8WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE
8WDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE (3 FT LINE 9 FT SPACE)

PROJECT NO: 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TRAFFIC CONTROL STAGE 2B: MAIN STREET (STH 74)	SHEET 358	E

2



LEGEND

PM	PERMANENT MARKINGS
	WORK ZONE
	CONSTRUCTION WORK UNDER TRAFFIC
	TEMPORARY PAVEMENT PLACED DURING STAGE
	TEMPORARY PAVEMENT PLACED IN PREVIOUS STAGE
	TEMPORARY CROSSWALK - SEE CONSTRUCTION DETAIL
	TRAFFIC FLOW ARROW
	DRUM WITH/WITHOUT LIGHT, TYPE C
	FLEXIBLE TUBULAR MARKERS
	CONCRETE BARRIER TEMPORARY PRECAST
	CRASH CUSHIONS TEMPORARY
	SIGN ON PERMANENT/TEMPORARY SUPPORT
	TYPE II BARRICADE WITH/WITHOUT SIGN
	TYPE III BARRICADE WITH/WITHOUT SIGN

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4Y	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW
4YD	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW (DOUBLE LINES)
8W	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE
4WD	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE (3 FT LINE 9 FT SPACE)
8WD	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE (3 FT LINE 9 FT SPACE)
4WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, WHITE
4YR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW
4YDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW (DOUBLE LINES)
8WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE
8WDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE (3 FT LINE 9 FT SPACE)

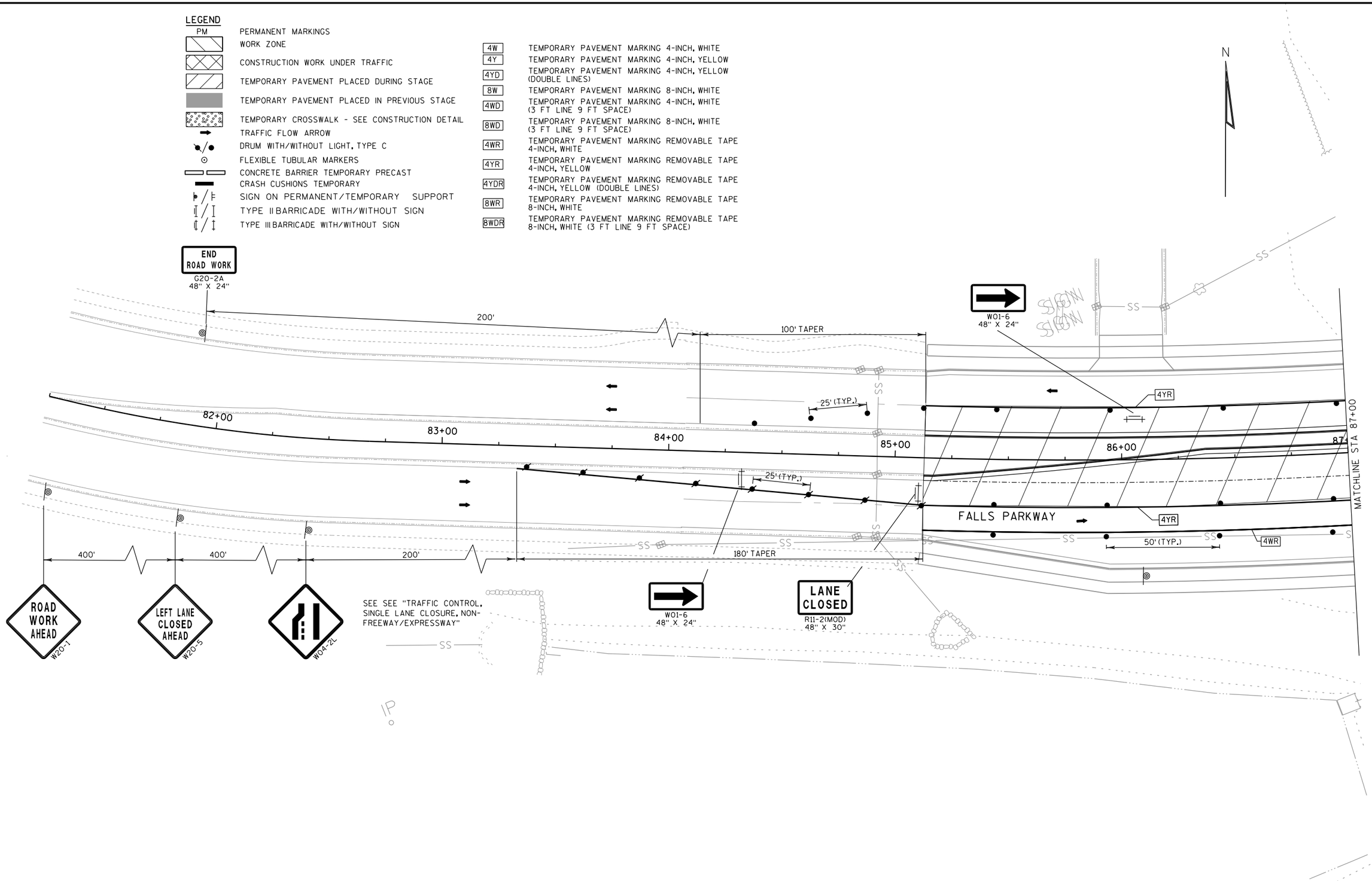
PROJECT NO: 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TRAFFIC CONTROL STAGE 2B: MAIN STREET (STH 74)	SHEET 359	E

2

LEGEND

PM	PERMANENT MARKINGS
	WORK ZONE
	CONSTRUCTION WORK UNDER TRAFFIC
	TEMPORARY PAVEMENT PLACED DURING STAGE
	TEMPORARY PAVEMENT PLACED IN PREVIOUS STAGE
	TEMPORARY CROSSWALK - SEE CONSTRUCTION DETAIL
	TRAFFIC FLOW ARROW
	DRUM WITH/WITHOUT LIGHT, TYPE C
	FLEXIBLE TUBULAR MARKERS
	CONCRETE BARRIER TEMPORARY PRECAST
	CRASH CUSHIONS TEMPORARY
	SIGN ON PERMANENT/TEMPORARY SUPPORT
	TYPE II BARRICADE WITH/WITHOUT SIGN
	TYPE III BARRICADE WITH/WITHOUT SIGN

4W	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE
4Y	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW
4YD	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW (DOUBLE LINES)
8W	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE
4WD	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE (3 FT LINE 9 FT SPACE)
8WD	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE (3 FT LINE 9 FT SPACE)
4WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, WHITE
4YR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW
4YDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW (DOUBLE LINES)
8WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE
8WDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE (3 FT LINE 9 FT SPACE)

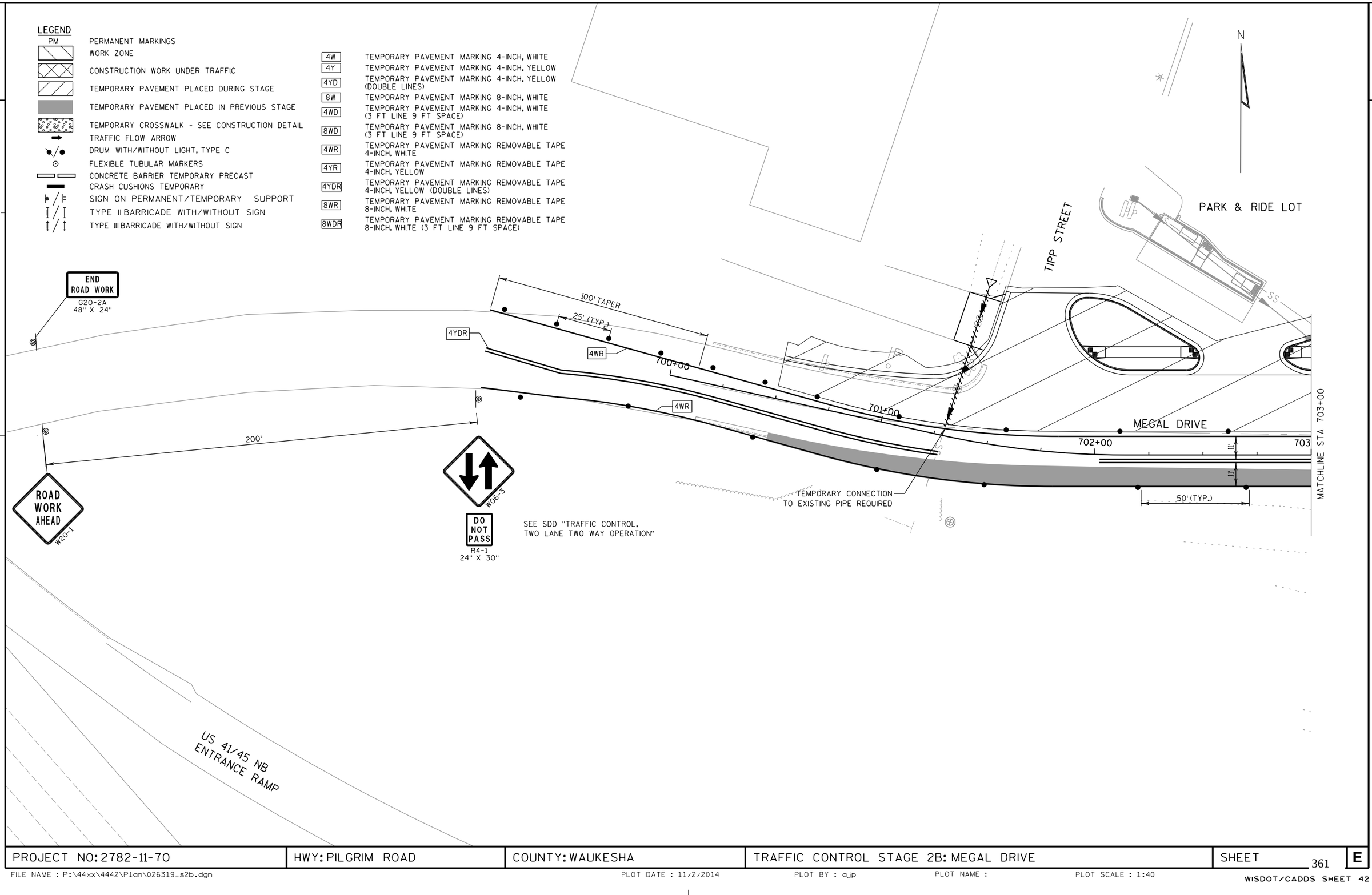


PROJECT NO: 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TRAFFIC CONTROL STAGE 2B: FALLS PARKWAY	SHEET 360	E

LEGEND

PM	PERMANENT MARKINGS
	WORK ZONE
	CONSTRUCTION WORK UNDER TRAFFIC
	TEMPORARY PAVEMENT PLACED DURING STAGE
	TEMPORARY PAVEMENT PLACED IN PREVIOUS STAGE
	TEMPORARY CROSSWALK - SEE CONSTRUCTION DETAIL
	TRAFFIC FLOW ARROW
	DRUM WITH/WITHOUT LIGHT, TYPE C
	FLEXIBLE TUBULAR MARKERS
	CONCRETE BARRIER TEMPORARY PRECAST
	CRASH CUSHIONS TEMPORARY
	SIGN ON PERMANENT/TEMPORARY SUPPORT
	TYPE II BARRICADE WITH/WITHOUT SIGN
	TYPE III BARRICADE WITH/WITHOUT SIGN

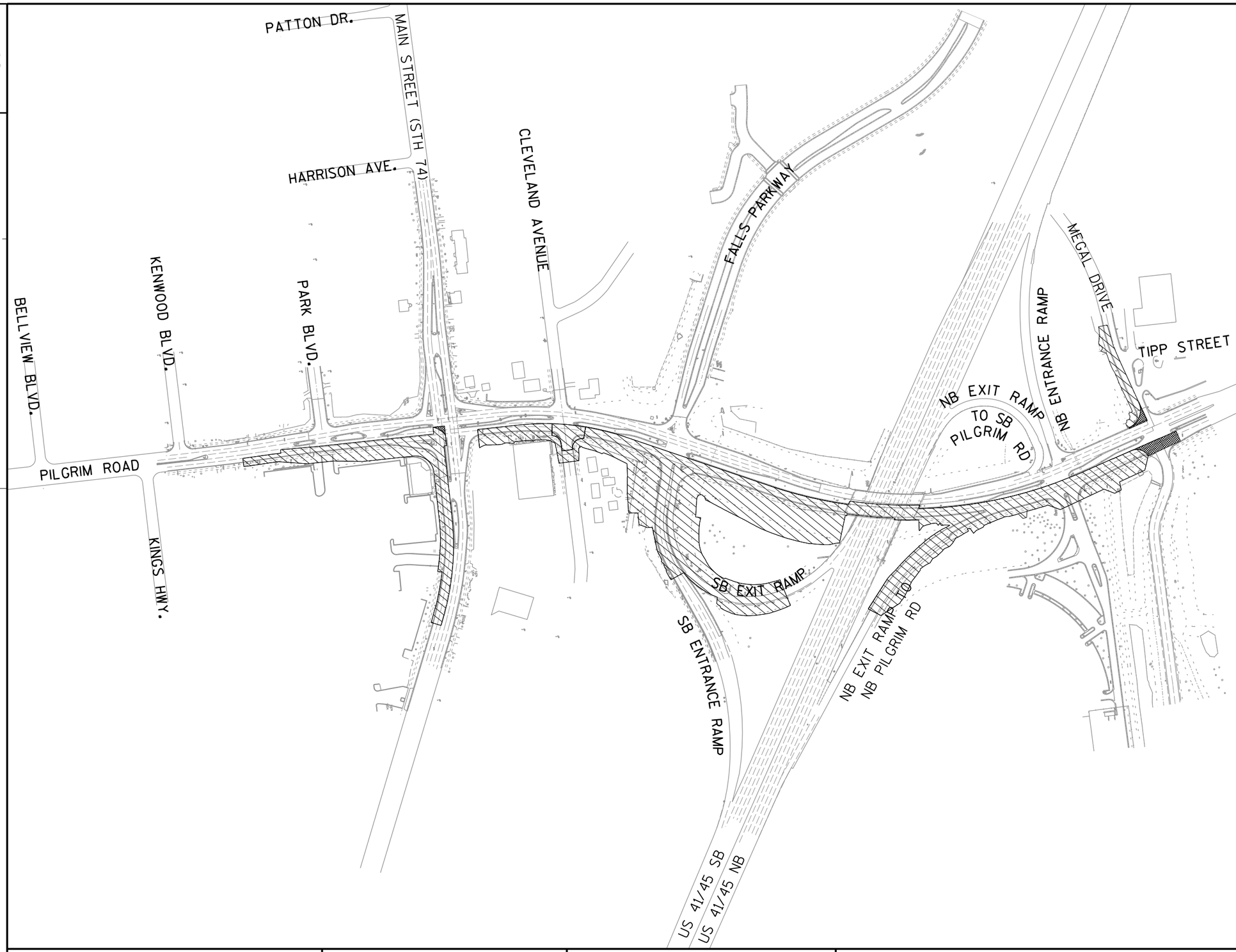
4W	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE
4Y	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW
4YD	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW (DOUBLE LINES)
8W	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE
4WD	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE (3 FT LINE 9 FT SPACE)
8WD	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE (3 FT LINE 9 FT SPACE)
4WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, WHITE
4YR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW
4YDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW (DOUBLE LINES)
8WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE
8WDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE (3 FT LINE 9 FT SPACE)



PROJECT NO: 2782-11-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TRAFFIC CONTROL STAGE 2B: MEGAL DRIVE	SHEET 361	E

FILE NAME : P:\44xx\4442\Plan\026319_s2b.dgn PLOT DATE : 11/2/2014 PLOT BY : ajp PLOT NAME : PLOT SCALE : 1:40

2



CONSTRUCTION STAGING OVERVIEW - STAGE 3A

PILGRIM ROAD
TRAFFIC WILL BE MAINTAINED ON THE NEW SOUTHBOUND LANES OF PILGRIM ROAD AND ONE LANE OF TRAFFIC FOR EACH DIRECTION SHALL BE MAINTAINED AT ALL TIMES.

MAIN STREET
TRAFFIC WILL BE MAINTAINED IN THE WESTBOUND LANES OF MAIN STREET AND ONE LANE OF TRAFFIC FOR EACH DIRECTION SHALL BE MAINTAINED AT ALL TIMES

FALLS PARKWAY
TRAFFIC WILL BE MAINTAINED IN MEDIAN LANES AND ONE LANE OF TRAFFIC FOR EACH DIRECTION SHALL BE MAINTAINED AT ALL TIMES.

MEGAL DRIVE
TRAFFIC WILL BE MAINTAINED ON WEST BOUND LANES AND ONE LANE OF TRAFFIC FOR EACH DIRECTION SHALL BE MAINTAINED AT ALL TIMES.

US 41/45
TRAFFIC WILL BE MAINTAINED ON ALL EXISTING LANES OF US 41/45 DURING PEAK HOURS.

US 41/45 NB ENTRANCE RAMP
TRAFFIC WILL BE MAINTAINED ON THE EXISTING LANE OF THIS RAMP AT ALL TIMES.

US 41/45 NB EXIT RAMP TO PILGRIM RD SB
RAMP WILL BE CLOSED TO TRAFFIC.
RAMP WILL BE DETOURED VIA THE MAIN ST INTERCHANGE.

US 41/45 NB EXIT RAMP TO PILGRIM RD NB
RAMP WILL BE CLOSED TO TRAFFIC.
RAMP WILL BE DETOURED VIA THE MAIN ST INTERCHANGE.

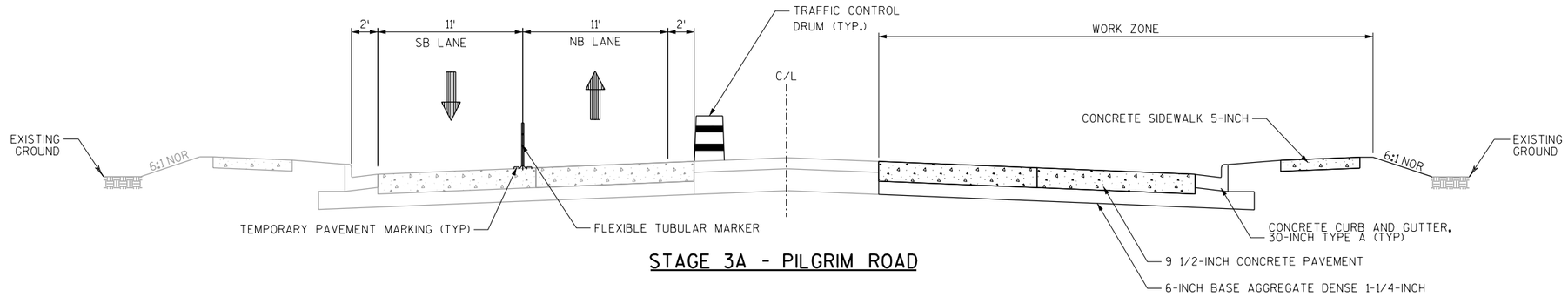
US 41/45 SB ENTRANCE RAMP
RAMP WILL BE CLOSED TO TRAFFIC.
RAMP WILL BE DETOURED VIA THE MAIN ST INTERCHANGE.

US 41/45 SB EXIT RAMP
RAMP WILL BE CLOSED TO TRAFFIC.
RAMP WILL BE DETOURED VIA THE MAIN ST INTERCHANGE.

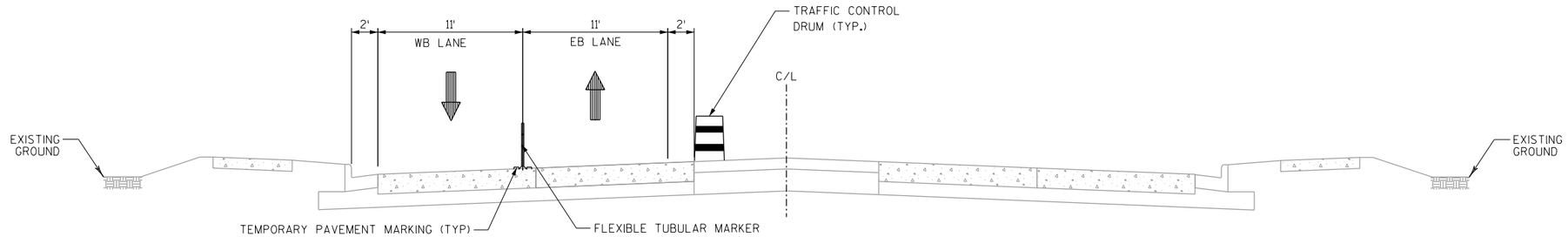
SIDEWALKS
ACCESS TO BE MAINTAINED, CLOSURES AS SHOWN IN PLAN.

NOTE:
USE PERMANENT PAVEMENT MARKINGS & SIGNS ON SOUTHBOUND PILGRIM ROAD AND SIDE ROADS WHERE APPLICABLE.

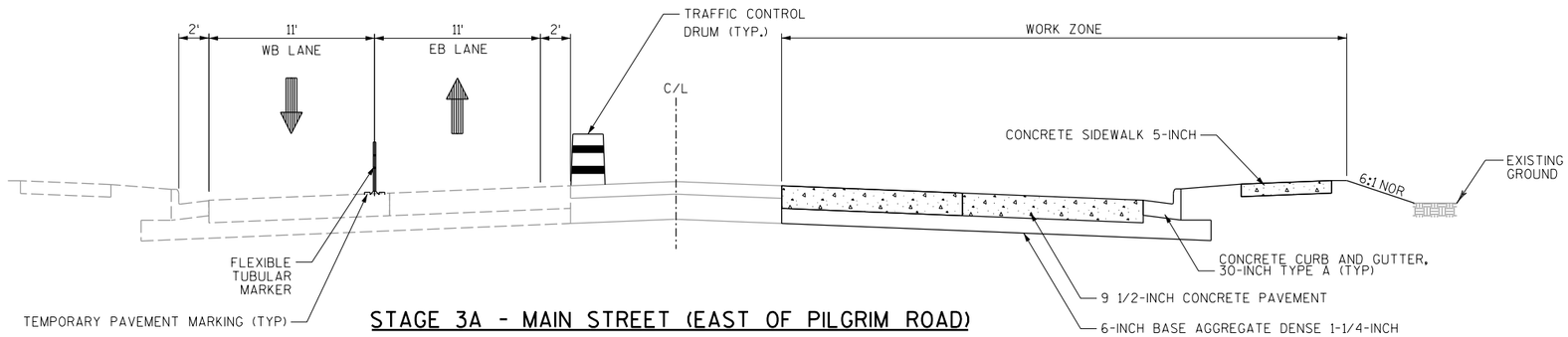
PROJECT NO: 2782-11-70 & 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TRAFFIC CONTROL STAGE 3A: OVERVIEW	SHEET 362	E



STAGE 3A - PILGRIM ROAD



STAGE 3A - MAIN STREET (WEST OF PILGRIM ROAD)



STAGE 3A - MAIN STREET (EAST OF PILGRIM ROAD)

PROJECT NO: 2782-11-70 & 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TRAFFIC CONTROL STAGE 3A: TYPICAL SECTIONS	SHEET 363	E

2

2

BELLVIEW BLVD.

N

PILGRIM ROAD

ROAD WORK AHEAD
W20-1

RIGHT LANE CLOSED AHEAD
W20-5

W04-2R

END ROAD WORK
G20-2A
48" X 24"

400'

400'

200'

4WR

25' (TYP.)

W01-6
48" X 24"

SIDEWALK CLOSED USE OTHER SIDE
R9-10
24" X 12"

180' TAPER

205'
BUFFER
SPACE

KINGS HWY.

200'

END ROAD WORK
G20-2A
48" X 24"

ROAD WORK AHEAD
W20-1

LEGEND

PM	PERMANENT MARKINGS
	WORK ZONE
	CONSTRUCTION WORK UNDER TRAFFIC
	TEMPORARY PAVEMENT PLACED DURING STAGE
	TEMPORARY PAVEMENT PLACED IN PREVIOUS STAGE
	TEMPORARY CROSSWALK - SEE CONSTRUCTION DETAIL
	TRAFFIC FLOW ARROW
	DRUM WITH/WITHOUT LIGHT, TYPE C
	FLEXIBLE TUBULAR MARKERS
	CONCRETE BARRIER TEMPORARY PRECAST
	CRASH CUSHIONS TEMPORARY
	SIGN ON PERMANENT/TEMPORARY SUPPORT
	TYPE II BARRICADE WITH/WITHOUT SIGN
	TYPE III BARRICADE WITH/WITHOUT SIGN

4W	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE
4Y	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW
4YD	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW (DOUBLE LINES)
8W	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE
4WD	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE (3 FT LINE 9 FT SPACE)
8WD	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE (3 FT LINE 9 FT SPACE)
4WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, WHITE
4YR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW
4YDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW (DOUBLE LINES)
8WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE
8WDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE (3 FT LINE 9 FT SPACE)

PROJECT NO: 2782-11-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TRAFFIC CONTROL STAGE 3A: PILGRIM ROAD	SHEET 364	E

2

ROAD WORK AHEAD
W20-1

END ROAD WORK
G20-2A
48" X 24"

KENWOOD BLVD.

N

ROAD WORK AHEAD
W20-1

PARK BLVD.

200'

301+00

302+00

END ROAD WORK
G20-2A
48" X 24"

BEGIN LEFT TURN LANE
R3-20L
24" X 36"

DO NOT PASS
R4-1
24" X 30"

W06-3

NOTE: SEE SDD "TRAFFIC CONTROL, TWO LANE TWO WAY OPERATION"

ROAD CLOSED
R11-2
48" X 30"

BEGIN LEFT TURN LANE
R3-20L
24" X 36"

PILGRIM ROAD

4YR
4YR
4YR
4YR
8WDR
8WR
4WR
4WR

50' (TYP.)
100'
105' TAPER
100' TAPER
25' (TYP.)

11'
11'
11'
11'

198+00
199+00
200+00
201+00
202

MATCHLINE STA 202+00

LANE CLOSED
R11-2(MOD)
48" X 30"

W01-4L

205'
BUFFER SPACE

W01-6
48" X 24"

RAMP CLOSED AHEAD

SIDEWALK CLOSED USE OTHER SIDE
R9-10
24" X 12"

SEE SDD "TRAFFIC CONTROL, SIDEWALK CLOSURE"

PLACE SIGN 2,500 FT SOUTH OF RAMP CLOSURE

NOTE: SEE SDD "TRAFFIC CONTROL, SINGLE LANE CLOSURE, NON-FREEWAY/EXPRESSWAY"

NOT TO BE CONSTRUCTED CONCURRENTLY WITH DRIVEWAY ON MAIN STREET AT 413+00 RT.

LEGEND

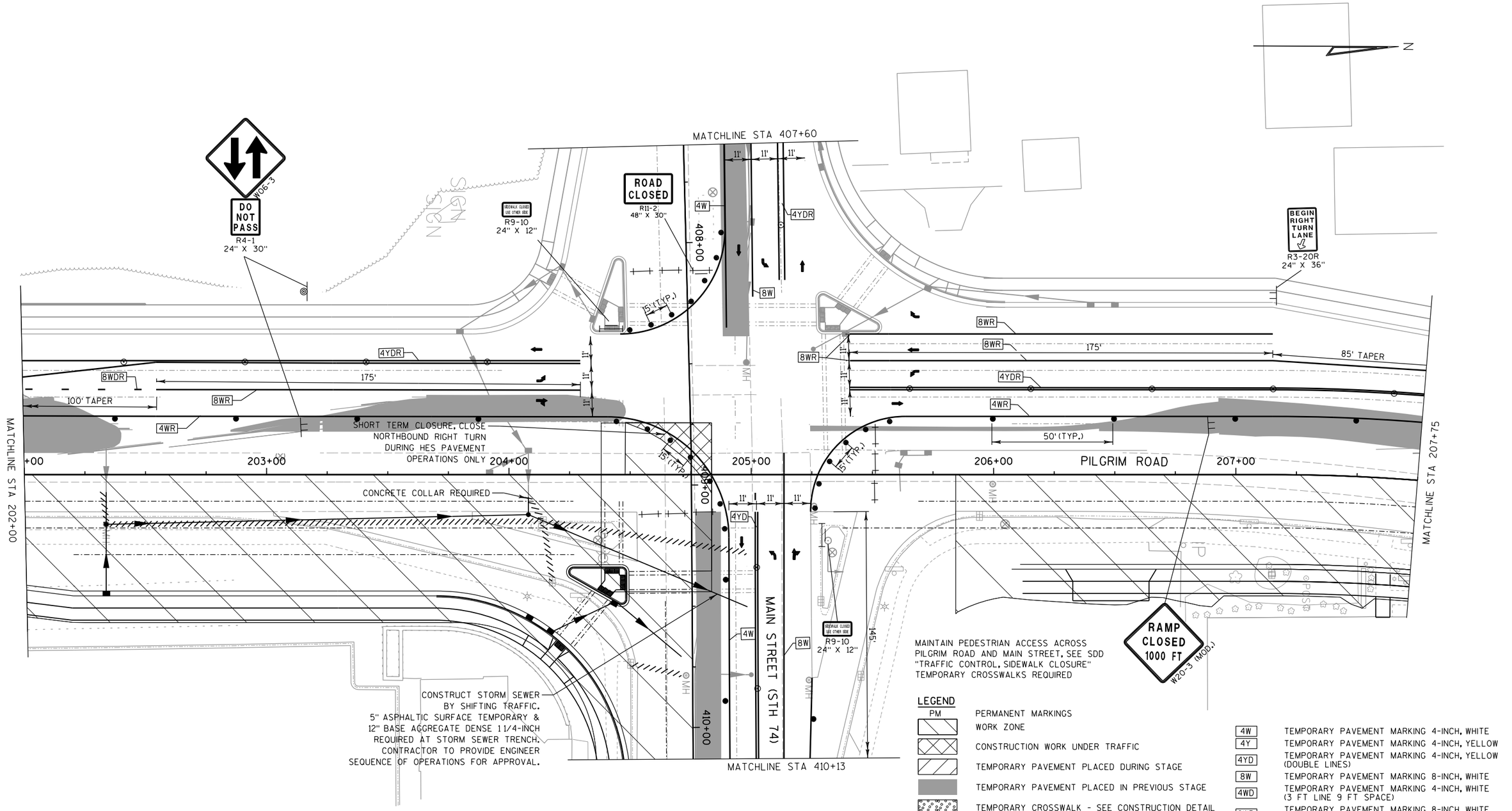
PM PERMANENT MARKINGS

- WORK ZONE
- CONSTRUCTION WORK UNDER TRAFFIC
- TEMPORARY PAVEMENT PLACED DURING STAGE
- TEMPORARY PAVEMENT PLACED IN PREVIOUS STAGE
- TEMPORARY CROSSWALK - SEE CONSTRUCTION DETAIL
- TRAFFIC FLOW ARROW
- DRUM WITH/WITHOUT LIGHT, TYPE C
- FLEXIBLE TUBULAR MARKERS
- CONCRETE BARRIER TEMPORARY PRECAST
- CRASH CUSHIONS TEMPORARY
- SIGN ON PERMANENT/TEMPORARY SUPPORT
- TYPE II BARRICADE WITH/WITHOUT SIGN
- TYPE III BARRICADE WITH/WITHOUT SIGN

4W	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE
4Y	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW
4YD	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW (DOUBLE LINES)
8W	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE
4WD	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE (3 FT LINE 9 FT SPACE)
8WD	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE (3 FT LINE 9 FT SPACE)
4WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, WHITE
4YR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW
4YDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW (DOUBLE LINES)
8WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE
8WDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE (3 FT LINE 9 FT SPACE)

PROJECT NO: 2782-11-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TRAFFIC CONTROL STAGE 3A: PILGRIM ROAD	SHEET 365	E

2



LEGEND

PM	PERMANENT MARKINGS
	WORK ZONE
	CONSTRUCTION WORK UNDER TRAFFIC
	TEMPORARY PAVEMENT PLACED DURING STAGE
	TEMPORARY PAVEMENT PLACED IN PREVIOUS STAGE
	TEMPORARY CROSSWALK - SEE CONSTRUCTION DETAIL
	TRAFFIC FLOW ARROW
	DRUM WITH/WITHOUT LIGHT, TYPE C
	FLEXIBLE TUBULAR MARKERS
	CONCRETE BARRIER TEMPORARY PRECAST
	CRASH CUSHIONS TEMPORARY
	SIGN ON PERMANENT/TEMPORARY SUPPORT
	TYPE II BARRICADE WITH/WITHOUT SIGN
	TYPE III BARRICADE WITH/WITHOUT SIGN

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4Y	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW
4YD	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW (DOUBLE LINES)
8W	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE
4WD	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE (3 FT LINE 9 FT SPACE)
8WD	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE (3 FT LINE 9 FT SPACE)
4WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, WHITE
4YR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW
4YDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW (DOUBLE LINES)
8WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE
8WDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE (3 FT LINE 9 FT SPACE)

PROJECT NO: 2782-11-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TRAFFIC CONTROL STAGE 3A: PILGRIM ROAD	SHEET 366	E

2

MATCHLINE 500+00

CLEVELAND AVENUE

200'

501+00

501+40

501+72

502+00

503+00

200'

MATCHLINE STA 207+75

208+00

209+00

210+00

211+00

212+00

213+00

MATCHLINE STA 213+50

MATCHLINE STA 87+00

100+00

88+00

101+00

MATCHLINE STA 12+00

PILGRIM ROAD

FALLS PARKWAY

SSS

SSS

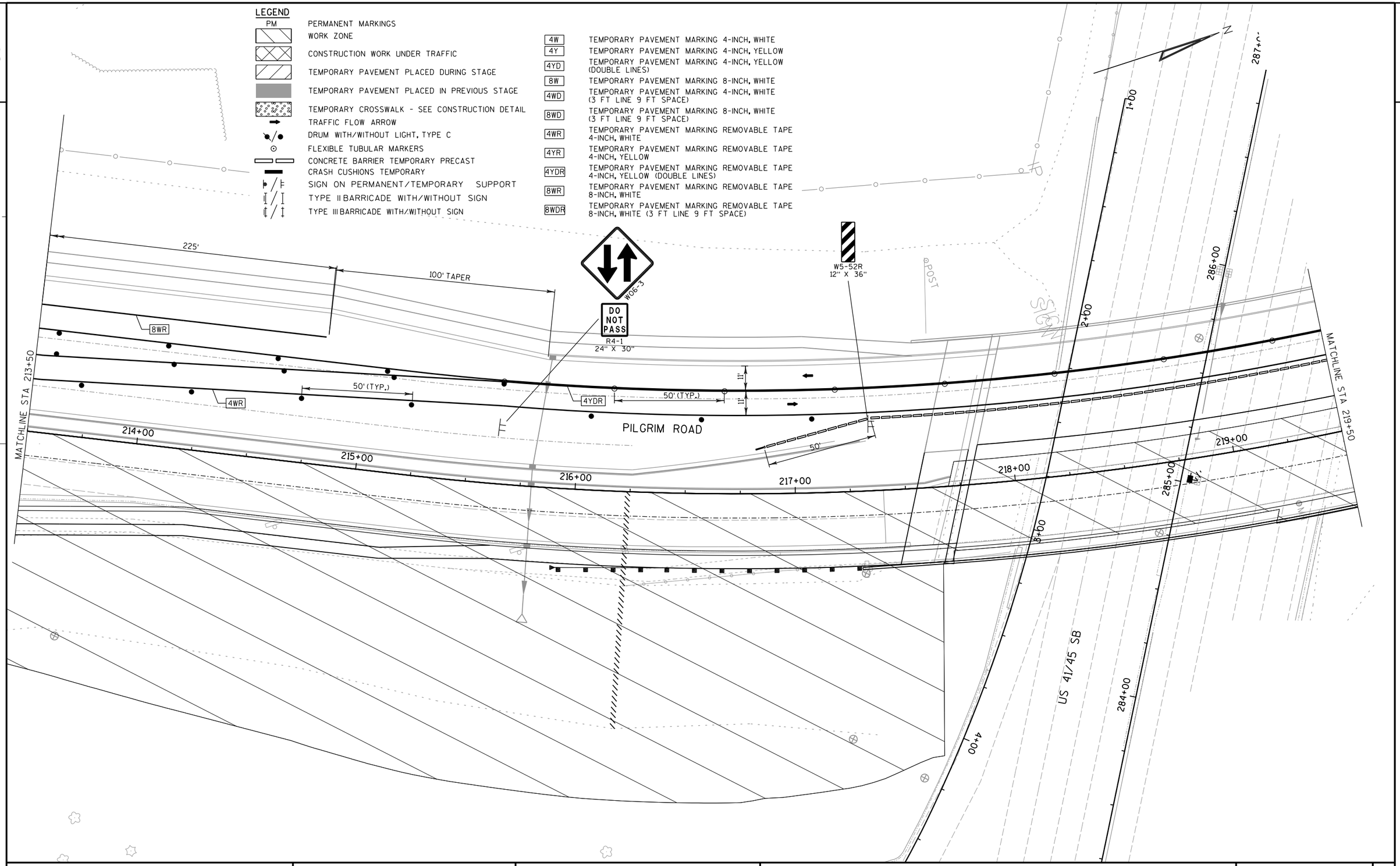
SSS

2

LEGEND

PM	PERMANENT MARKINGS
	WORK ZONE
	CONSTRUCTION WORK UNDER TRAFFIC
	TEMPORARY PAVEMENT PLACED DURING STAGE
	TEMPORARY PAVEMENT PLACED IN PREVIOUS STAGE
	TEMPORARY CROSSWALK - SEE CONSTRUCTION DETAIL
	TRAFFIC FLOW ARROW
	DRUM WITH/WITHOUT LIGHT, TYPE C
	FLEXIBLE TUBULAR MARKERS
	CONCRETE BARRIER TEMPORARY PRECAST
	CRASH CUSHIONS TEMPORARY
	SIGN ON PERMANENT/TEMPORARY SUPPORT
	TYPE II BARRICADE WITH/WITHOUT SIGN
	TYPE III BARRICADE WITH/WITHOUT SIGN

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4YD	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW (DOUBLE LINES)
8W	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE
4WD	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE (3 FT LINE 9 FT SPACE)
8WD	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE (3 FT LINE 9 FT SPACE)
4WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, WHITE
4YR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW
4YDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW (DOUBLE LINES)
8WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE
8WDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE (3 FT LINE 9 FT SPACE)



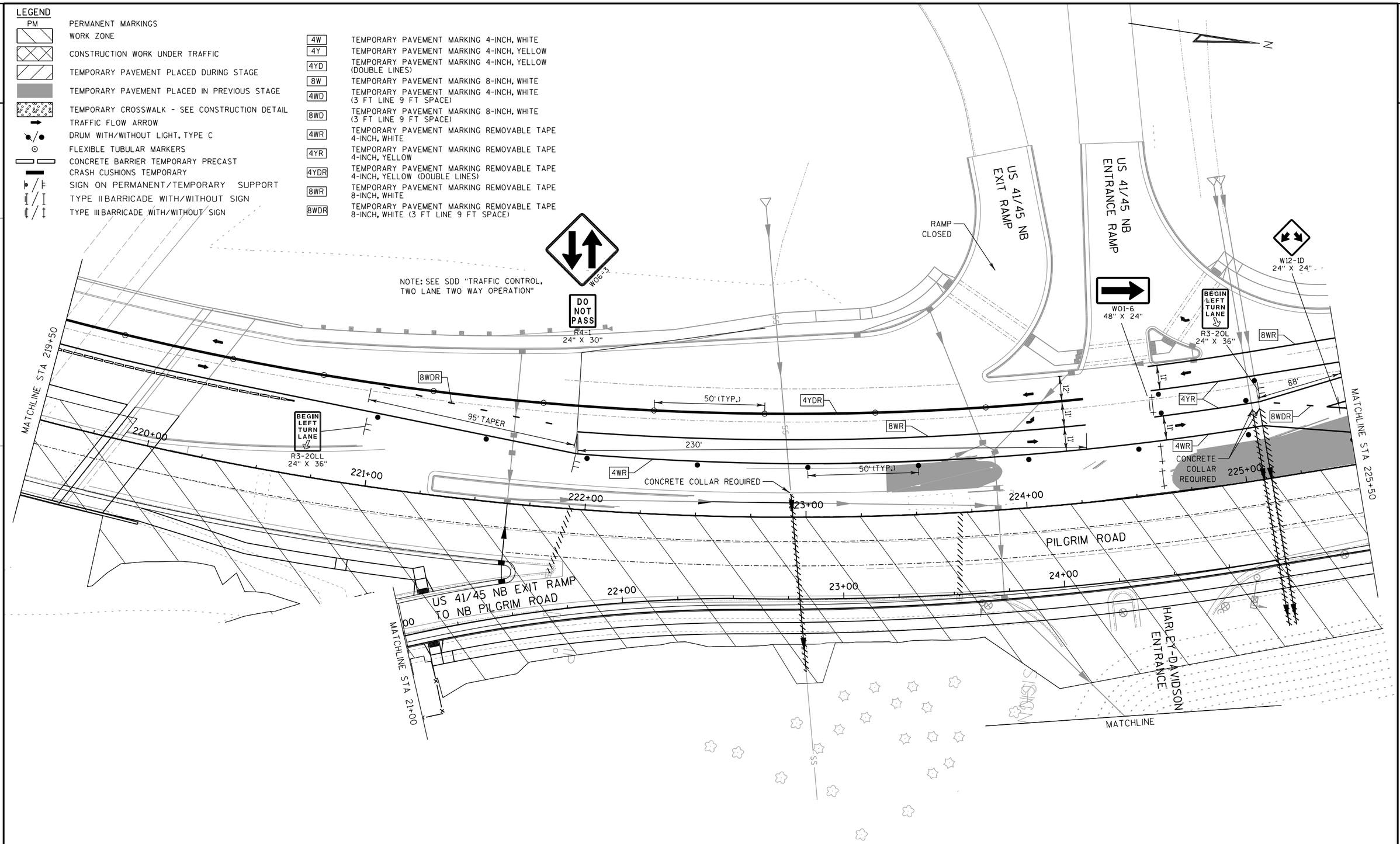
PROJECT NO: 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TRAFFIC CONTROL STAGE 3A: PILGRIM ROAD	SHEET 368 E

2

LEGEND

PM	PERMANENT MARKINGS
	WORK ZONE
	CONSTRUCTION WORK UNDER TRAFFIC
	TEMPORARY PAVEMENT PLACED DURING STAGE
	TEMPORARY PAVEMENT PLACED IN PREVIOUS STAGE
	TEMPORARY CROSSWALK - SEE CONSTRUCTION DETAIL
	TRAFFIC FLOW ARROW
	DRUM WITH/WITHOUT LIGHT, TYPE C
	FLEXIBLE TUBULAR MARKERS
	CONCRETE BARRIER TEMPORARY PRECAST
	CRASH CUSHIONS TEMPORARY
	SIGN ON PERMANENT/TEMPORARY SUPPORT
	TYPE II BARRICADE WITH/WITHOUT SIGN
	TYPE III BARRICADE WITH/WITHOUT SIGN

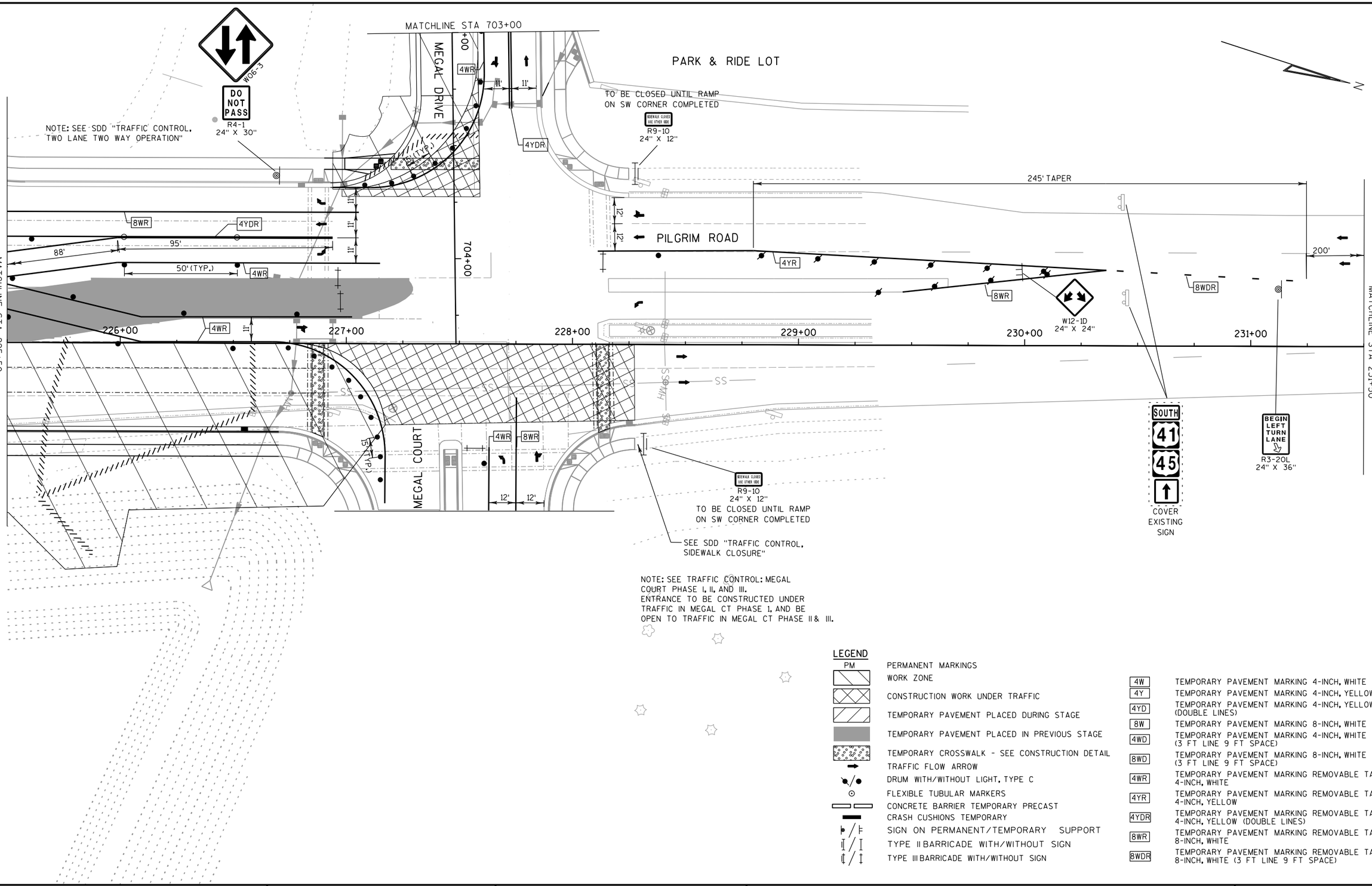
4W	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE
4Y	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW
4YD	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW (DOUBLE LINES)
8W	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE
4WD	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE (3 FT LINE 9 FT SPACE)
8WD	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE (3 FT LINE 9 FT SPACE)
4WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, WHITE
4YR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW
4YDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW (DOUBLE LINES)
8WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE
8WDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE (3 FT LINE 9 FT SPACE)



PROJECT NO: 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TRAFFIC CONTROL STAGE 3A: PILGRIM ROAD	SHEET 369	E

FILE NAME : P:\44xx\4442\Plan\026406_s3a.dgn PLOT DATE : 11/2/2014 PLOT BY : ajp PLOT NAME : PLOT SCALE : 1:40

WISDOT/CADDS SHEET 42



LEGEND

PM	PERMANENT MARKINGS
	WORK ZONE
	CONSTRUCTION WORK UNDER TRAFFIC
	TEMPORARY PAVEMENT PLACED DURING STAGE
	TEMPORARY PAVEMENT PLACED IN PREVIOUS STAGE
	TEMPORARY CROSSWALK - SEE CONSTRUCTION DETAIL
	TRAFFIC FLOW ARROW
	DRUM WITH/WITHOUT LIGHT, TYPE C
	FLEXIBLE TUBULAR MARKERS
	CONCRETE BARRIER TEMPORARY PRECAST
	CRASH CUSHIONS TEMPORARY
	SIGN ON PERMANENT/TEMPORARY SUPPORT
	TYPE II BARRICADE WITH/WITHOUT SIGN
	TYPE III BARRICADE WITH/WITHOUT SIGN

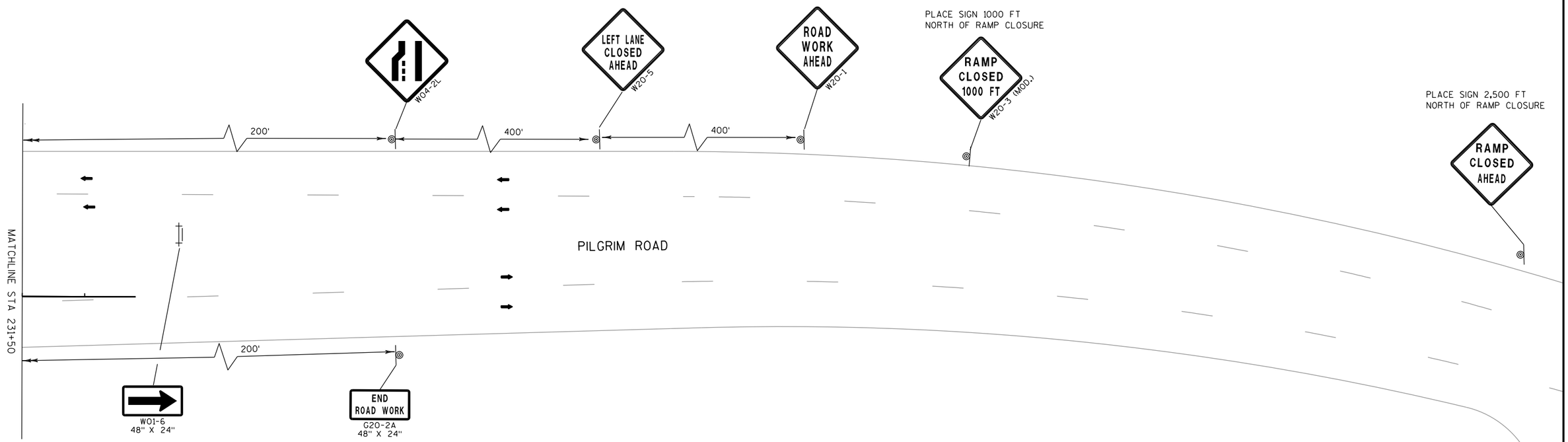
4W	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE
4Y	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW
4YD	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW (DOUBLE LINES)
8W	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE
4WD	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE (3 FT LINE 9 FT SPACE)
8WD	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE (3 FT LINE 9 FT SPACE)
4WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, WHITE
4YR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW
4YDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW (DOUBLE LINES)
8WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE
8WDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE (3 FT LINE 9 FT SPACE)

PROJECT NO: 2782-11-70 & 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TRAFFIC CONTROL STAGE 3A: PILGRIM ROAD	SHEET 370	E

2

LEGEND

PM	PERMANENT MARKINGS	4W	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE
	WORK ZONE	4Y	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW
	CONSTRUCTION WORK UNDER TRAFFIC	4YD	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW (DOUBLE LINES)
	TEMPORARY PAVEMENT PLACED DURING STAGE	8W	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE
	TEMPORARY PAVEMENT PLACED IN PREVIOUS STAGE	4WD	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE (3 FT LINE 9 FT SPACE)
	TEMPORARY CROSSWALK - SEE CONSTRUCTION DETAIL	8WD	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE (3 FT LINE 9 FT SPACE)
	TRAFFIC FLOW ARROW	4WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, WHITE
	DRUM WITH/WITHOUT LIGHT, TYPE C	4YR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW
	FLEXIBLE TUBULAR MARKERS	4YDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW (DOUBLE LINES)
	CONCRETE BARRIER TEMPORARY PRECAST	8WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE
	CRASH CUSHIONS TEMPORARY	8WDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE (3 FT LINE 9 FT SPACE)
	SIGN ON PERMANENT/TEMPORARY SUPPORT		
	TYPE II BARRICADE WITH/WITHOUT SIGN		
	TYPE III BARRICADE WITH/WITHOUT SIGN		



PROJECT NO: 2782-11-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TRAFFIC CONTROL STAGE 3A: PILGRIM ROAD	SHEET 371	E

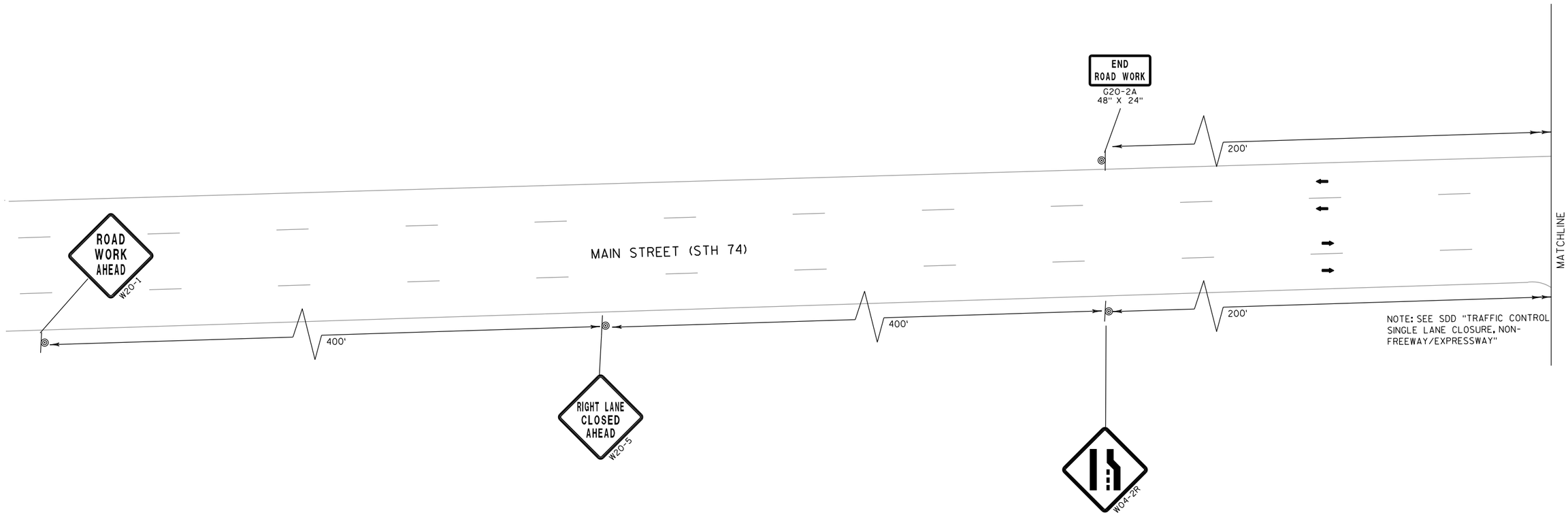
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LEGEND

PM	PERMANENT MARKINGS
	WORK ZONE
	CONSTRUCTION WORK UNDER TRAFFIC
	TEMPORARY PAVEMENT PLACED DURING STAGE
	TEMPORARY PAVEMENT PLACED IN PREVIOUS STAGE
	TEMPORARY CROSSWALK - SEE CONSTRUCTION DETAIL
	TRAFFIC FLOW ARROW
	DRUM WITH/WITHOUT LIGHT, TYPE C
	FLEXIBLE TUBULAR MARKERS
	CONCRETE BARRIER TEMPORARY PRECAST
	CRASH CUSHIONS TEMPORARY
	SIGN ON PERMANENT/TEMPORARY SUPPORT
	TYPE II BARRICADE WITH/WITHOUT SIGN
	TYPE III BARRICADE WITH/WITHOUT SIGN

4W	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE
4Y	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW
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8W	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE
4WD	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE (3 FT LINE 9 FT SPACE)
8WD	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE (3 FT LINE 9 FT SPACE)
4WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, WHITE
4YR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW
4YDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW (DOUBLE LINES)
8WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE
8WDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE (3 FT LINE 9 FT SPACE)

N



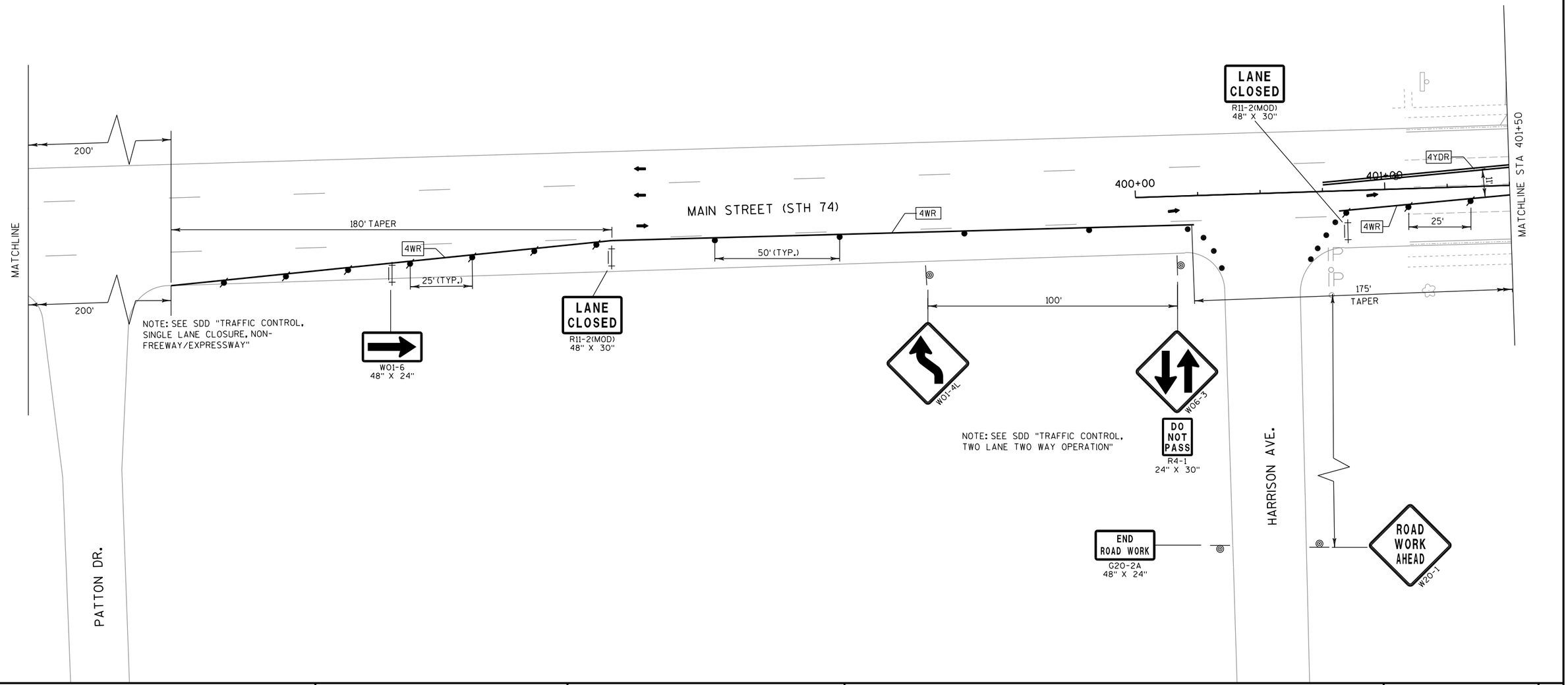
PROJECT NO: 2782-11-70 & 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TRAFFIC CONTROL STAGE 3A: MAIN STREET (STH 74)	SHEET 372	E

LEGEND

PM	PERMANENT MARKINGS
	WORK ZONE
	CONSTRUCTION WORK UNDER TRAFFIC
	TEMPORARY PAVEMENT PLACED DURING STAGE
	TEMPORARY PAVEMENT PLACED IN PREVIOUS STAGE
	TEMPORARY CROSSWALK - SEE CONSTRUCTION DETAIL
	TRAFFIC FLOW ARROW
	DRUM WITH/WITHOUT LIGHT, TYPE C
	FLEXIBLE TUBULAR MARKERS
	CONCRETE BARRIER TEMPORARY PRECAST
	CRASH CUSHIONS TEMPORARY
	SIGN ON PERMANENT/TEMPORARY SUPPORT
	TYPE II BARRICADE WITH/WITHOUT SIGN
	TYPE III BARRICADE WITH/WITHOUT SIGN

4W	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE
4Y	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW
4YD	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW (DOUBLE LINES)
8W	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE
4WD	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE (3 FT LINE 9 FT SPACE)
8WD	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE (3 FT LINE 9 FT SPACE)
4WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, WHITE
4YR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW
4YDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW (DOUBLE LINES)
8WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE
8WDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE (3 FT LINE 9 FT SPACE)

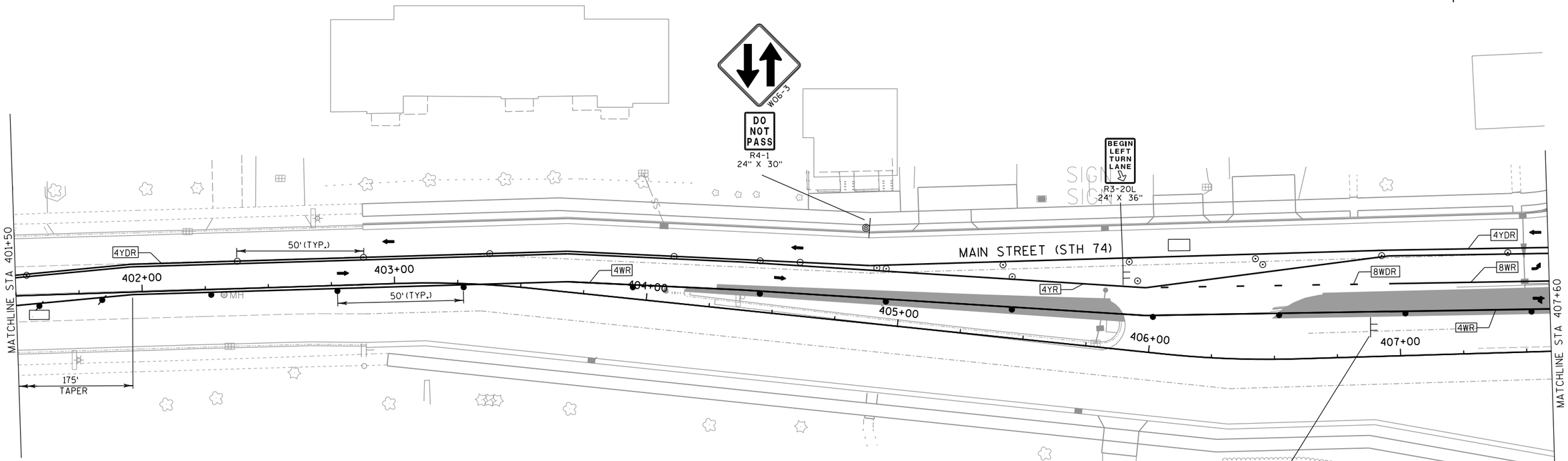
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PROJECT NO: 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TRAFFIC CONTROL STAGE 3A: MAIN STREET (STH 74)	SHEET 373 E

2

N



LEGEND

PM	PERMANENT MARKINGS
	WORK ZONE
	CONSTRUCTION WORK UNDER TRAFFIC
	TEMPORARY PAVEMENT PLACED DURING STAGE
	TEMPORARY PAVEMENT PLACED IN PREVIOUS STAGE
	TEMPORARY CROSSWALK - SEE CONSTRUCTION DETAIL
	TRAFFIC FLOW ARROW
	DRUM WITH/WITHOUT LIGHT, TYPE C
	FLEXIBLE TUBULAR MARKERS
	CONCRETE BARRIER TEMPORARY PRECAST
	CRASH CUSHIONS TEMPORARY
	SIGN ON PERMANENT/TEMPORARY SUPPORT
	TYPE II BARRICADE WITH/WITHOUT SIGN
	TYPE III BARRICADE WITH/WITHOUT SIGN

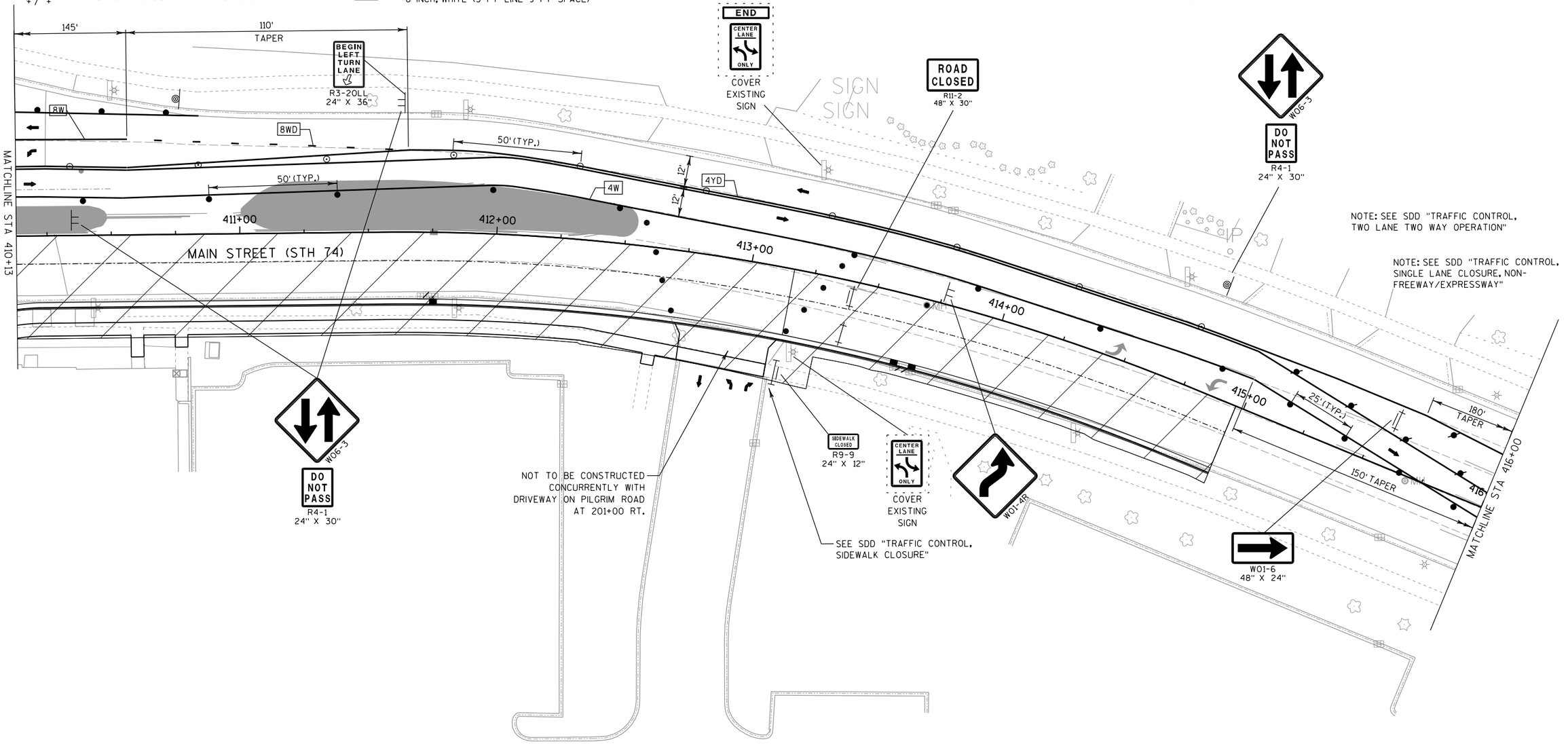
4W	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE
4Y	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW
4YD	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW (DOUBLE LINES)
8W	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE
4WD	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE (3 FT LINE 9 FT SPACE)
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4WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, WHITE
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8WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE
8WDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE (3 FT LINE 9 FT SPACE)

PROJECT NO: 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TRAFFIC CONTROL STAGE 3A: MAIN STREET (STH 74)	SHEET 374	E

2

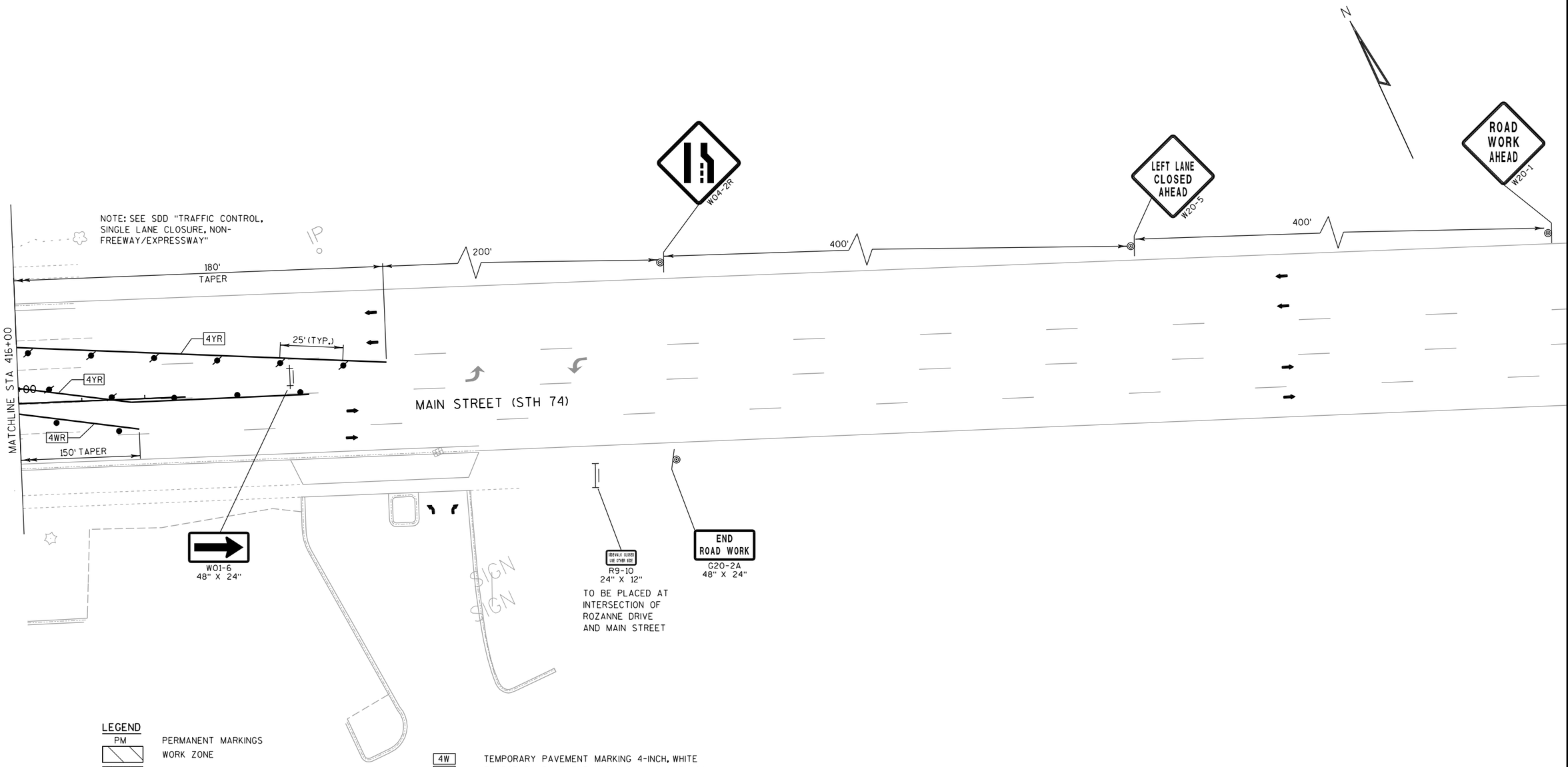
LEGEND

PM	PERMANENT MARKINGS	4W	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE
	WORK ZONE	4Y	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW
	CONSTRUCTION WORK UNDER TRAFFIC	4YD	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW (DOUBLE LINES)
	TEMPORARY PAVEMENT PLACED DURING STAGE	8W	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE
	TEMPORARY PAVEMENT PLACED IN PREVIOUS STAGE	4WD	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE (3 FT LINE 9 FT SPACE)
	TEMPORARY CROSSWALK - SEE CONSTRUCTION DETAIL	8WD	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE (3 FT LINE 9 FT SPACE)
	TRAFFIC FLOW ARROW	4WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, WHITE
	DRUM WITH/WITHOUT LIGHT, TYPE C	4YR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW
	FLEXIBLE TUBULAR MARKERS	4YDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW (DOUBLE LINES)
	CONCRETE BARRIER TEMPORARY PRECAST	8WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE
	CRASH CUSHIONS TEMPORARY	8WDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE (3 FT LINE 9 FT SPACE)
	SIGN ON PERMANENT/TEMPORARY SUPPORT		
	TYPE II BARRICADE WITH/WITHOUT SIGN		
	TYPE III BARRICADE WITH/WITHOUT SIGN		



PROJECT NO: 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TRAFFIC CONTROL STAGE 3A: MAIN STREET (STH 74)	SHEET 375	E

2



LEGEND

PM	PERMANENT MARKINGS
	WORK ZONE
	CONSTRUCTION WORK UNDER TRAFFIC
	TEMPORARY PAVEMENT PLACED DURING STAGE
	TEMPORARY PAVEMENT PLACED IN PREVIOUS STAGE
	TEMPORARY CROSSWALK - SEE CONSTRUCTION DETAIL
	TRAFFIC FLOW ARROW
	DRUM WITH/WITHOUT LIGHT, TYPE C
	FLEXIBLE TUBULAR MARKERS
	CONCRETE BARRIER TEMPORARY PRECAST
	CRASH CUSHIONS TEMPORARY
	SIGN ON PERMANENT/TEMPORARY SUPPORT
	TYPE II BARRICADE WITH/WITHOUT SIGN
	TYPE III BARRICADE WITH/WITHOUT SIGN

4W	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE
4Y	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW
4YD	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW (DOUBLE LINES)
8W	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE
4WD	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE (3 FT LINE 9 FT SPACE)
8WD	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE (3 FT LINE 9 FT SPACE)
4WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, WHITE
4YR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW
4YDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW (DOUBLE LINES)
8WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE
8WDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE (3 FT LINE 9 FT SPACE)

PROJECT NO: 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TRAFFIC CONTROL STAGE 3A: MAIN STREET (STH 74)	SHEET 376	E

2

N

CAROLINE DR.

END
ROAD WORK
G20-2A
48" X 24"

CLEVELAND AVENUE

500

500+00

MATCHLINE 500+00

IP

IP
PROP

200'

ROAD
WORK
AHEAD
W20-1

IP

POST

N

2

PLACE AT INTERSECTION
OF CLEVELAND AVENUE
AND JEFFERSON AVENUE

PROP

ROAD
WORK
AHEAD
W20-1

PROP

IP

503+00

503+34

CLEVELAND AVENUE

MATCHLINE 503+00

200'

END
ROAD WORK
G20-2A
48" X 24"

LEGEND

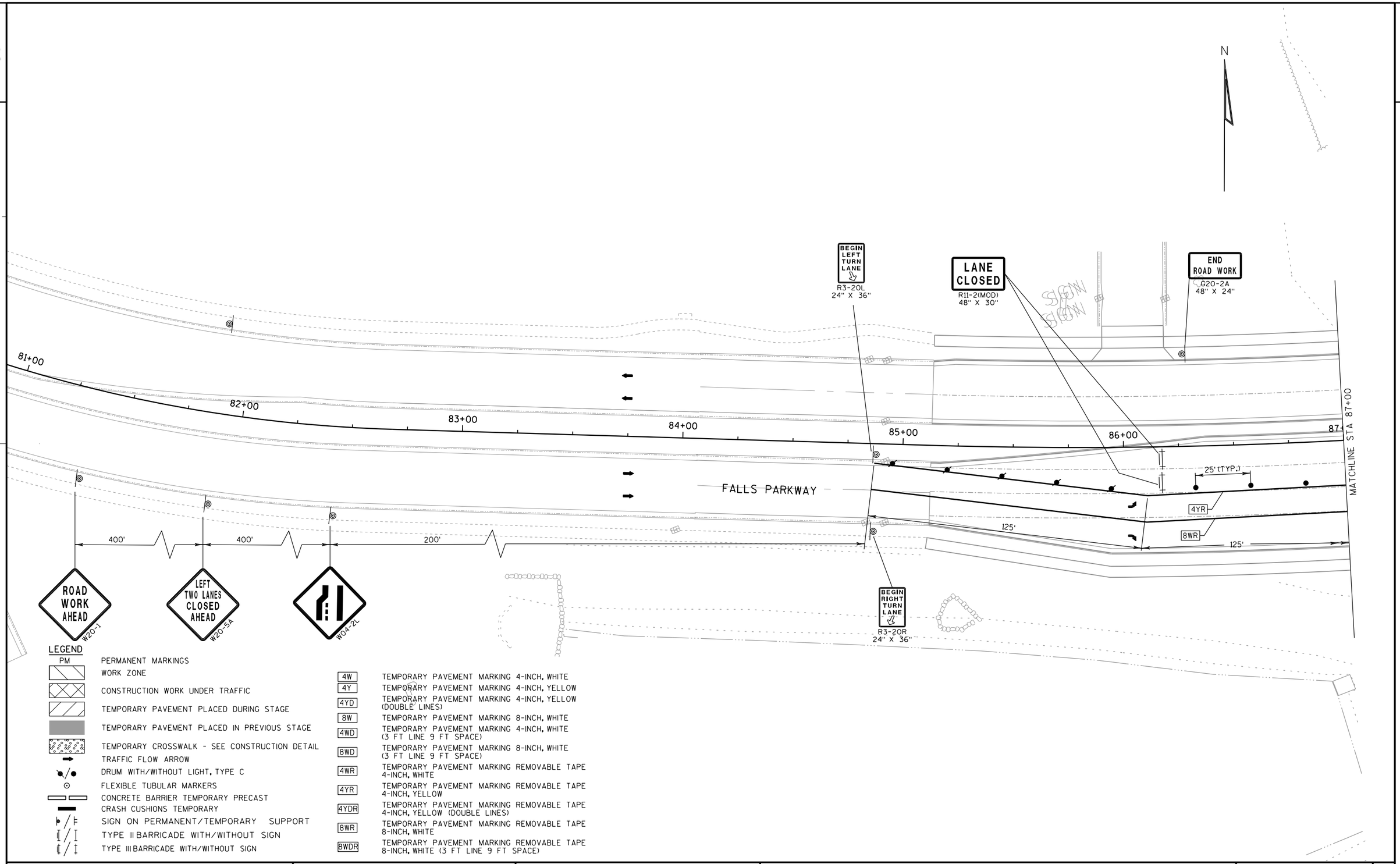
PM	PERMANENT MARKINGS	4W	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE
	WORK ZONE	4Y	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW
	CONSTRUCTION WORK UNDER TRAFFIC	4YD	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW (DOUBLE LINES)
	TEMPORARY PAVEMENT PLACED DURING STAGE	8W	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE
	TEMPORARY PAVEMENT PLACED IN PREVIOUS STAGE	4WD	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE (3 FT LINE 9 FT SPACE)
	TEMPORARY CROSSWALK - SEE CONSTRUCTION DETAIL	8WD	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE (3 FT LINE 9 FT SPACE)
	TRAFFIC FLOW ARROW	4WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, WHITE
	DRUM WITH/WITHOUT LIGHT, TYPE C	4YR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW
	FLEXIBLE TUBULAR MARKERS	4YDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW (DOUBLE LINES)
	CONCRETE BARRIER TEMPORARY PRECAST	8WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE
	CRASH CUSHIONS TEMPORARY	8WDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE (3 FT LINE 9 FT SPACE)
	SIGN ON PERMANENT/TEMPORARY SUPPORT		
	TYPE II BARRICADE WITH/WITHOUT SIGN		
	TYPE III BARRICADE WITH/WITHOUT SIGN		

PROJECT NO: 2782-11-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TRAFFIC CONTROL STAGE 3A: CLEVELAND AVENUE	SHEET 377	E

FILE NAME : P:\44xx\4442\Plan\026414_s3a.dgn PLOT DATE : 11/2/2014 PLOT BY : ajp PLOT NAME : PLOT SCALE : 1:40

WISDOT/CADDS SHEET 42

2



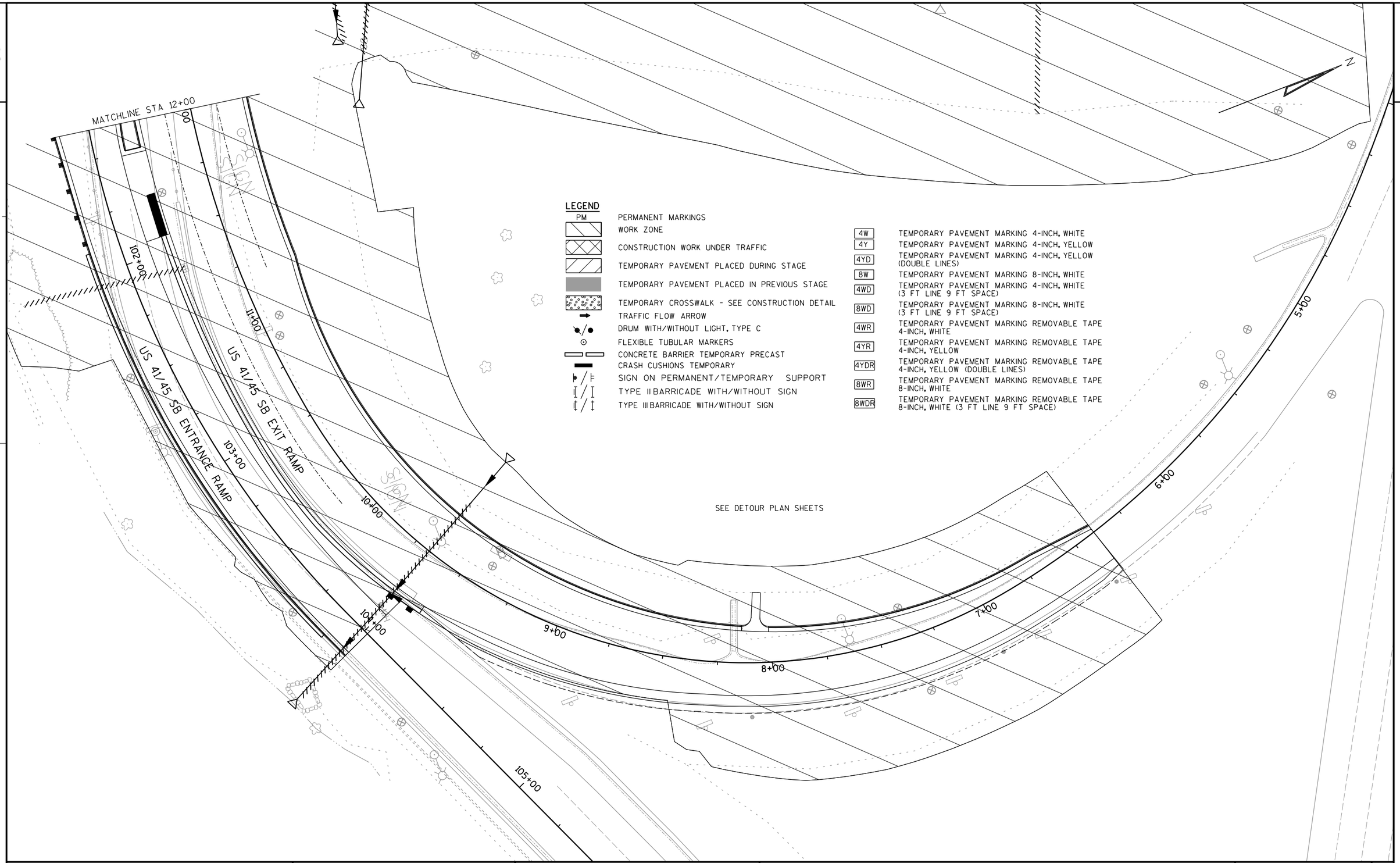
LEGEND

PM	PERMANENT MARKINGS
	WORK ZONE
	CONSTRUCTION WORK UNDER TRAFFIC
	TEMPORARY PAVEMENT PLACED DURING STAGE
	TEMPORARY PAVEMENT PLACED IN PREVIOUS STAGE
	TEMPORARY CROSSWALK - SEE CONSTRUCTION DETAIL
	TRAFFIC FLOW ARROW
	DRUM WITH/WITHOUT LIGHT, TYPE C
	FLEXIBLE TUBULAR MARKERS
	CONCRETE BARRIER TEMPORARY PRECAST
	CRASH CUSHIONS TEMPORARY
	SIGN ON PERMANENT/TEMPORARY SUPPORT
	TYPE II BARRICADE WITH/WITHOUT SIGN
	TYPE III BARRICADE WITH/WITHOUT SIGN

4W	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE
4Y	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW
4YD	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW (DOUBLE LINES)
8W	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE
4WD	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE (3 FT LINE 9 FT SPACE)
8WD	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE (3 FT LINE 9 FT SPACE)
4WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, WHITE
4YR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW
4YDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW (DOUBLE LINES)
8WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE
8WDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE (3 FT LINE 9 FT SPACE)

PROJECT NO: 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TRAFFIC CONTROL STAGE 3A: FALLS PARKWAY	SHEET 378	E

2

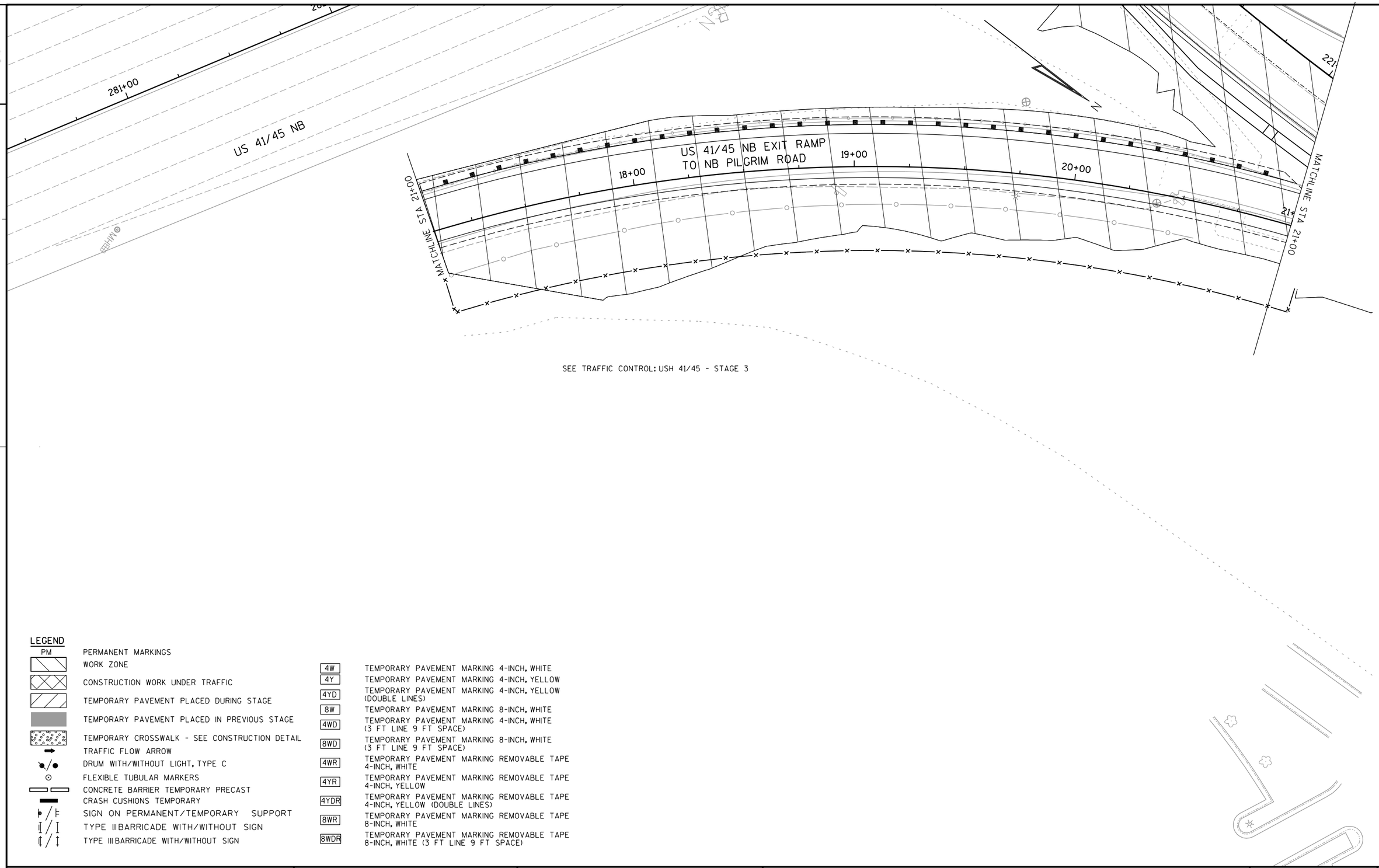


LEGEND

PM	PERMANENT MARKINGS
	WORK ZONE
	CONSTRUCTION WORK UNDER TRAFFIC
	TEMPORARY PAVEMENT PLACED DURING STAGE
	TEMPORARY PAVEMENT PLACED IN PREVIOUS STAGE
	TEMPORARY CROSSWALK - SEE CONSTRUCTION DETAIL
	TRAFFIC FLOW ARROW
	DRUM WITH/WITHOUT LIGHT, TYPE C
	FLEXIBLE TUBULAR MARKERS
	CONCRETE BARRIER TEMPORARY PRECAST
	CRASH CUSHIONS TEMPORARY
	SIGN ON PERMANENT/TEMPORARY SUPPORT
	TYPE II BARRICADE WITH/WITHOUT SIGN
	TYPE III BARRICADE WITH/WITHOUT SIGN

4W	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE
4Y	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW
4YD	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW (DOUBLE LINES)
8W	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE
4WD	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE (3 FT LINE 9 FT SPACE)
8WD	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE (3 FT LINE 9 FT SPACE)
4WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, WHITE
4YR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW
4YDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW (DOUBLE LINES)
8WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE
8WDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE (3 FT LINE 9 FT SPACE)

PROJECT NO: 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TRAFFIC CONTROL STAGE 3A: US 41/45 SB RAMPS	SHEET 379	E



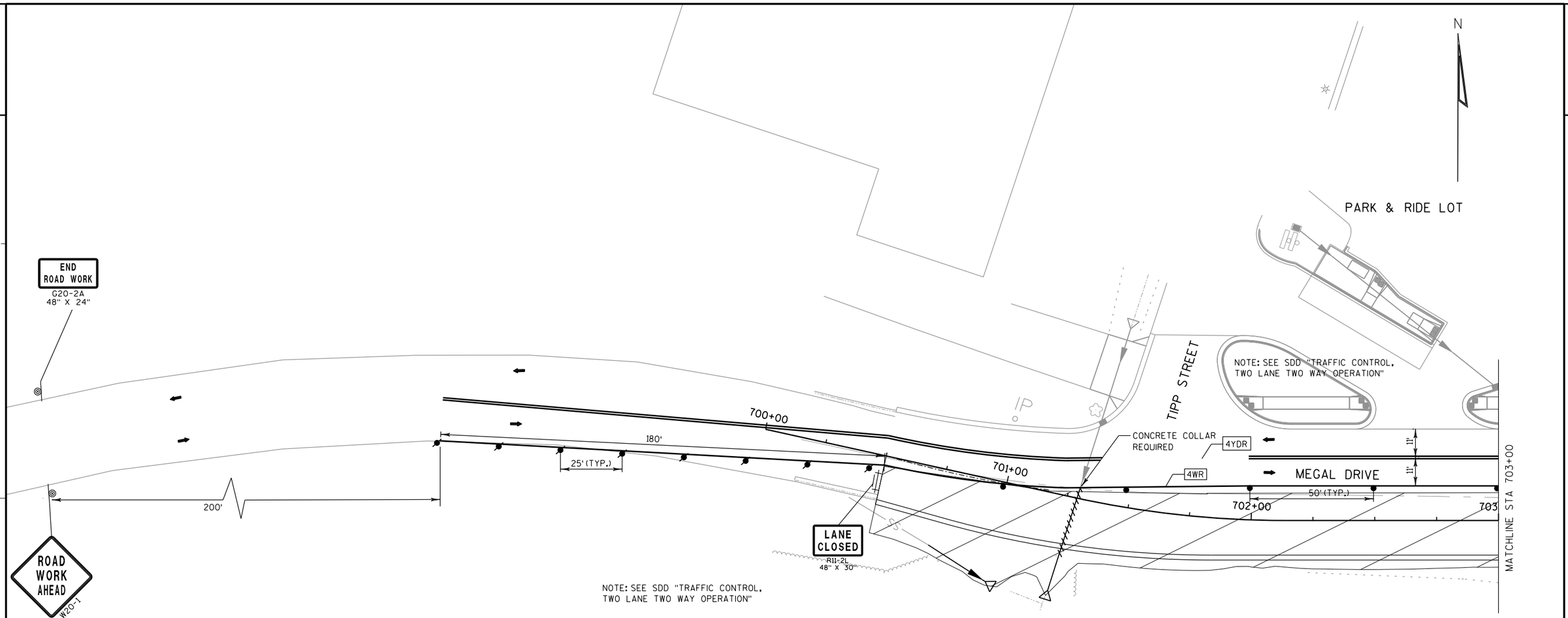
LEGEND

PM	PERMANENT MARKINGS
	WORK ZONE
	CONSTRUCTION WORK UNDER TRAFFIC
	TEMPORARY PAVEMENT PLACED DURING STAGE
	TEMPORARY PAVEMENT PLACED IN PREVIOUS STAGE
	TEMPORARY CROSSWALK - SEE CONSTRUCTION DETAIL
	TRAFFIC FLOW ARROW
	DRUM WITH/WITHOUT LIGHT, TYPE C
	FLEXIBLE TUBULAR MARKERS
	CONCRETE BARRIER TEMPORARY PRECAST
	CRASH CUSHIONS TEMPORARY
	SIGN ON PERMANENT/TEMPORARY SUPPORT
	TYPE II BARRICADE WITH/WITHOUT SIGN
	TYPE III BARRICADE WITH/WITHOUT SIGN

4W	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE
4Y	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW
4YD	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW (DOUBLE LINES)
8W	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE
4WD	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE (3 FT LINE 9 FT SPACE)
8WD	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE (3 FT LINE 9 FT SPACE)
4WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, WHITE
4YR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW
4YDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW (DOUBLE LINES)
8WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE
8WDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE (3 FT LINE 9 FT SPACE)

PROJECT NO: 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TRAFFIC CONTROL STAGE 3A: US 41/45 NB EXIT RAMP TO NB PILGRIM	SHEET 380	E

2



LEGEND

PM	PERMANENT MARKINGS
	WORK ZONE
	CONSTRUCTION WORK UNDER TRAFFIC
	TEMPORARY PAVEMENT PLACED DURING STAGE
	TEMPORARY PAVEMENT PLACED IN PREVIOUS STAGE
	TEMPORARY CROSSWALK - SEE CONSTRUCTION DETAIL
	TRAFFIC FLOW ARROW
	DRUM WITH/WITHOUT LIGHT, TYPE C
	FLEXIBLE TUBULAR MARKERS
	CONCRETE BARRIER TEMPORARY PRECAST
	CRASH CUSHIONS TEMPORARY
	SIGN ON PERMANENT/TEMPORARY SUPPORT
	TYPE II BARRICADE WITH/WITHOUT SIGN
	TYPE III BARRICADE WITH/WITHOUT SIGN

4W	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE
4Y	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW
4YD	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW (DOUBLE LINES)
8W	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE
4WD	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE (3 FT LINE 9 FT SPACE)
8WD	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE (3 FT LINE 9 FT SPACE)
4WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, WHITE
4YR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW
4YDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW (DOUBLE LINES)
8WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE
8WDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE (3 FT LINE 9 FT SPACE)

PROJECT NO: 2782-11-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TRAFFIC CONTROL STAGE 3A: MEGAL DRIVE	SHEET 381	E

CONSTRUCTION STAGING OVERVIEW - STAGE 3B

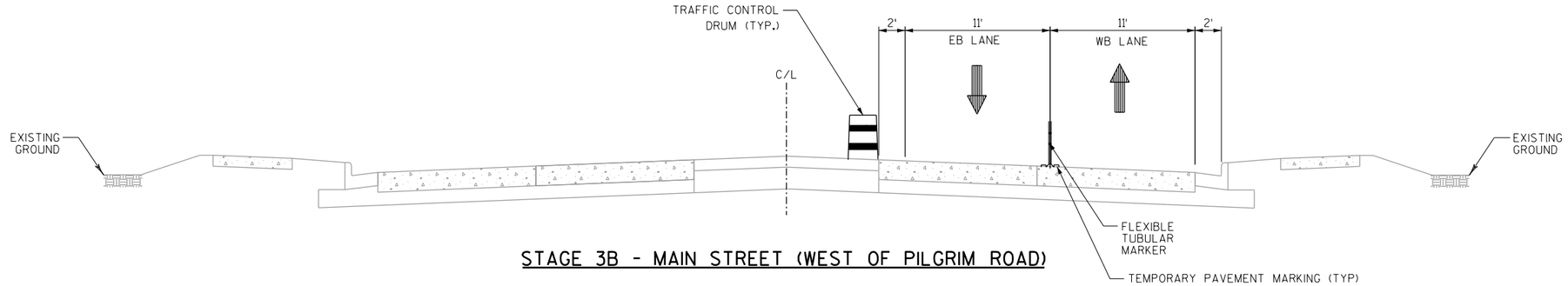
SAME AS STAGE 3A EXCEPT THE FOLLOWING:

MAIN STREET
TRAFFIC WILL BE MAINTAINED IN THE EASTBOUND LANES OF MAIN STREET AND ONE LANE OF TRAFFIC FOR EACH DIRECTION SHALL BE MAINTAINED AT ALL TIMES.

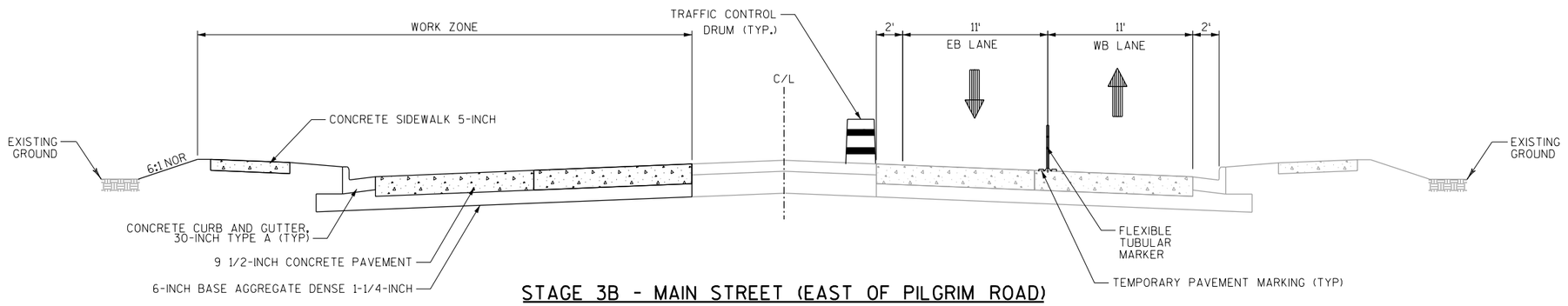
MEGAL DRIVE
TRAFFIC WILL BE MAINTAINED ON OUTSIDE LANES AND ONE LANE OF TRAFFIC FOR EACH DIRECTION SHALL BE MAINTAINED AT ALL TIMES.

SIDEWALKS
ACCESS TO BE MAINTAINED, CLOSURES AS SHOWN IN PLAN.

PROJECT NO: 2782-11-70 & 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TRAFFIC CONTROL STAGE 3B: OVERVIEW	SHEET 382	E



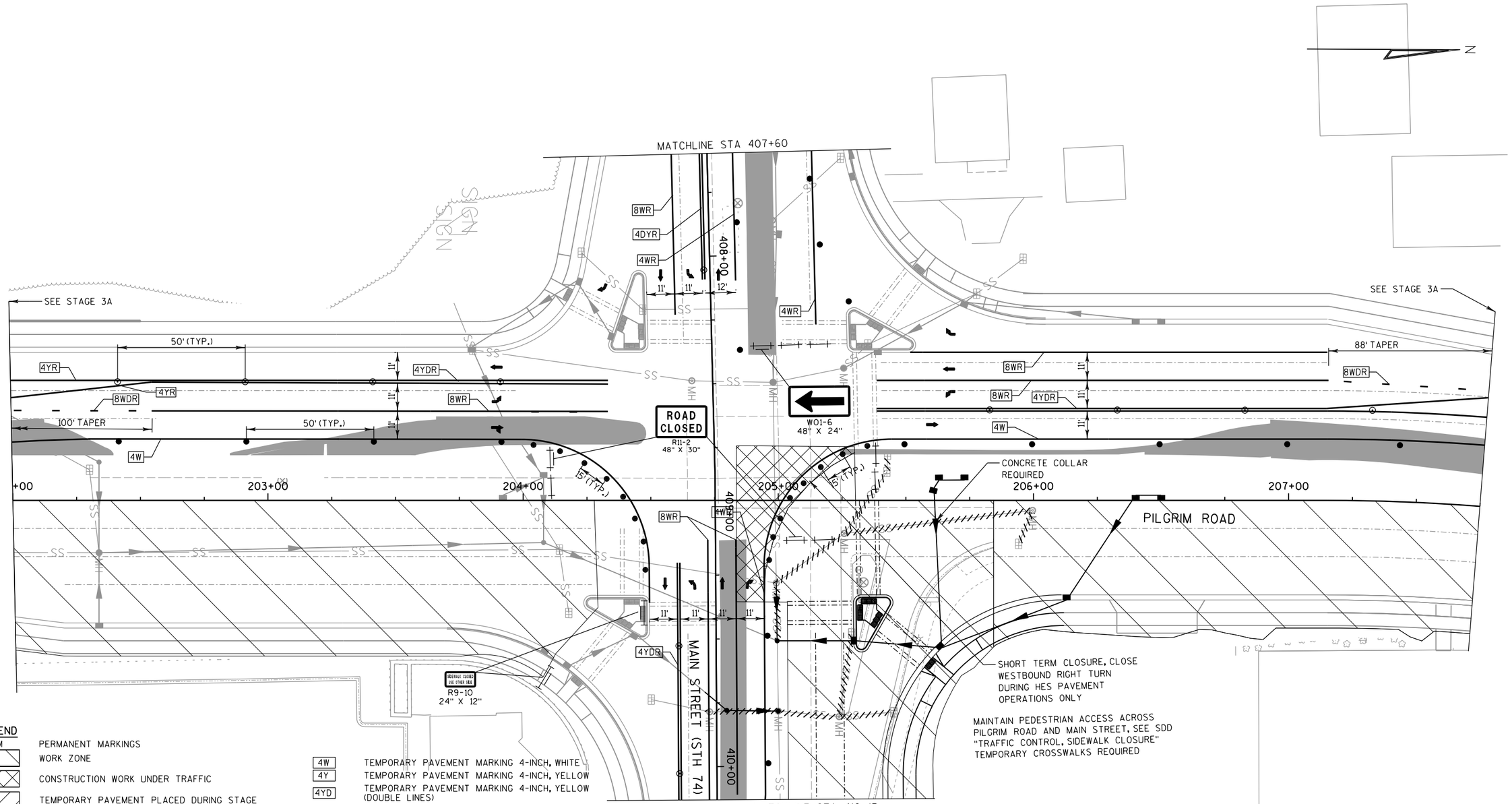
STAGE 3B - MAIN STREET (WEST OF PILGRIM ROAD)



STAGE 3B - MAIN STREET (EAST OF PILGRIM ROAD)

PROJECT NO: 2782-11-70 & 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TRAFFIC CONTROL STAGE 3B: TYPICAL SECTIONS	SHEET 383	E

2



LEGEND

PM	PERMANENT MARKINGS
	WORK ZONE
	CONSTRUCTION WORK UNDER TRAFFIC
	TEMPORARY PAVEMENT PLACED DURING STAGE
	TEMPORARY PAVEMENT PLACED IN PREVIOUS STAGE
	TEMPORARY CROSSWALK - SEE CONSTRUCTION DETAIL
	TRAFFIC FLOW ARROW
	DRUM WITH/WITHOUT LIGHT, TYPE C
	FLEXIBLE TUBULAR MARKERS
	CONCRETE BARRIER TEMPORARY PRECAST
	CRASH CUSHIONS TEMPORARY
	SIGN ON PERMANENT/TEMPORARY SUPPORT
	TYPE II BARRICADE WITH/WITHOUT SIGN
	TYPE III BARRICADE WITH/WITHOUT SIGN

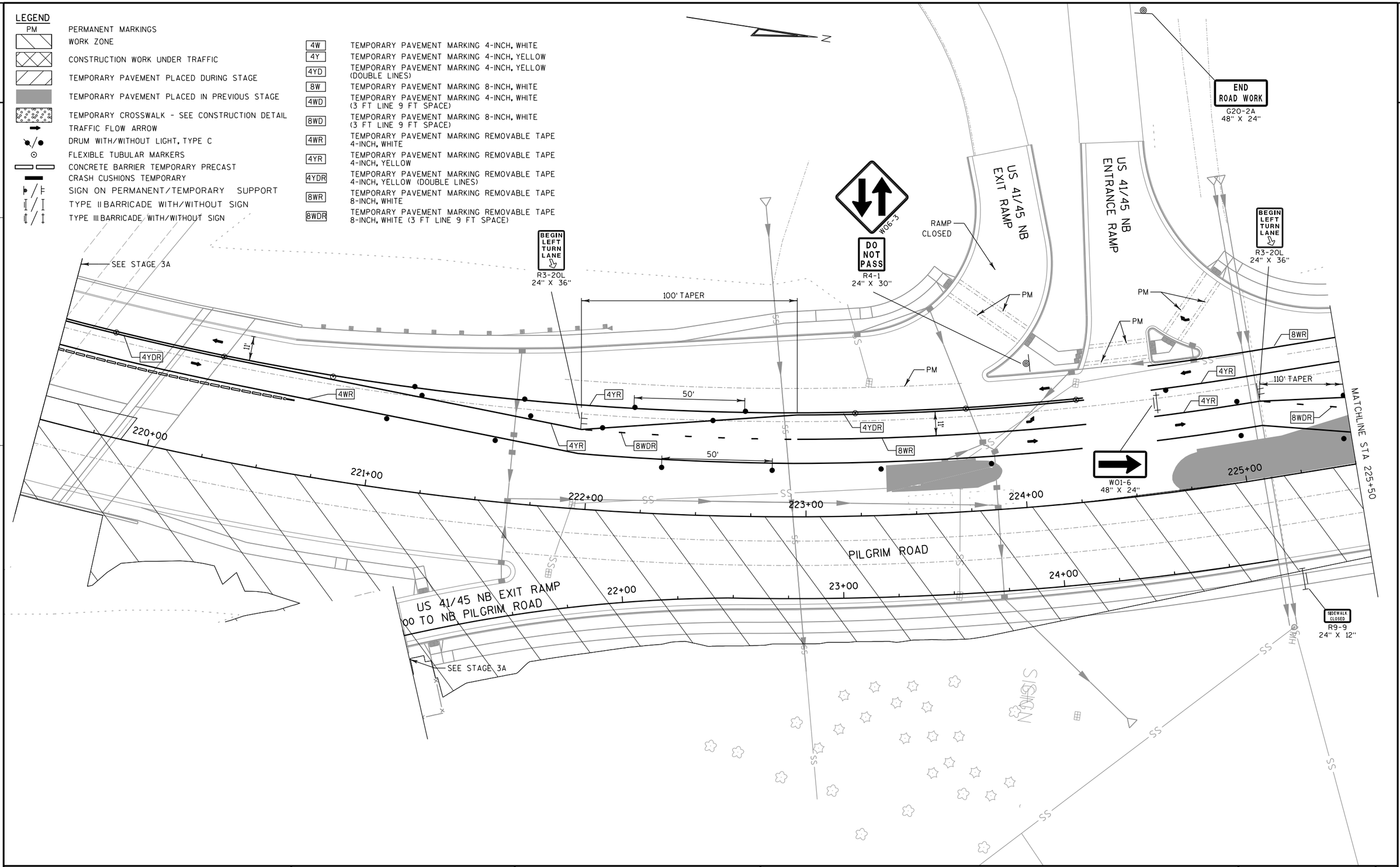
4W	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE
4Y	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW
4YD	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW (DOUBLE LINES)
8W	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE
4WD	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE (3 FT LINE 9 FT SPACE)
8WD	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE (3 FT LINE 9 FT SPACE)
4WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, WHITE
4YR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW
4YDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW (DOUBLE LINES)
8WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE
8WDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE (3 FT LINE 9 FT SPACE)

PROJECT NO: 2782-11-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TRAFFIC CONTROL STAGE 3B: PILGRIM ROAD	SHEET 384 E

LEGEND

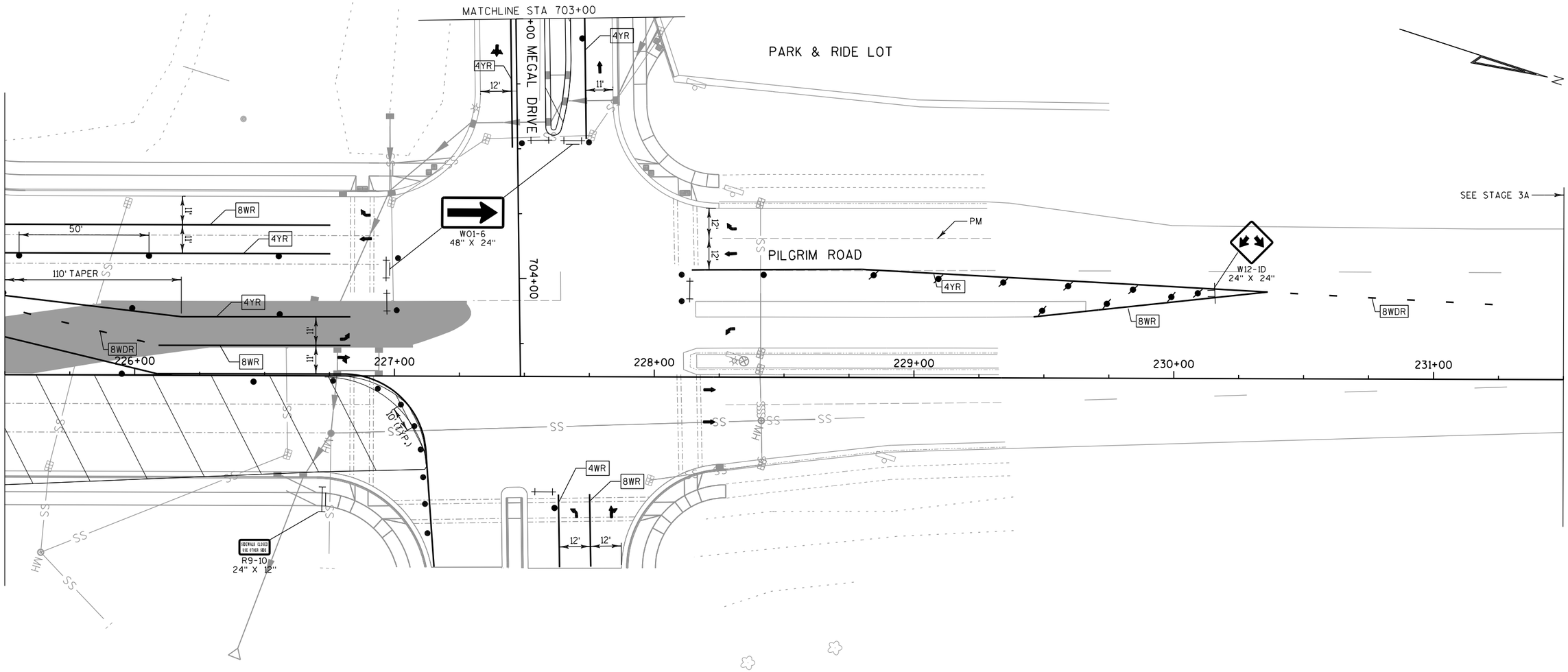
PM	PERMANENT MARKINGS
	WORK ZONE
	CONSTRUCTION WORK UNDER TRAFFIC
	TEMPORARY PAVEMENT PLACED DURING STAGE
	TEMPORARY PAVEMENT PLACED IN PREVIOUS STAGE
	TEMPORARY CROSSWALK - SEE CONSTRUCTION DETAIL
	TRAFFIC FLOW ARROW
	DRUM WITH/WITHOUT LIGHT, TYPE C
	FLEXIBLE TUBULAR MARKERS
	CONCRETE BARRIER TEMPORARY PRECAST
	CRASH CUSHIONS TEMPORARY
	SIGN ON PERMANENT/TEMPORARY SUPPORT
	TYPE II BARRICADE WITH/WITHOUT SIGN
	TYPE III BARRICADE WITH/WITHOUT SIGN

4W	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE
4Y	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW
4YD	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW (DOUBLE LINES)
8W	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE
4WD	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE (3 FT LINE 9 FT SPACE)
8WD	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE (3 FT LINE 9 FT SPACE)
4WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, WHITE
4YR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW
4YDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW (DOUBLE LINES)
8WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE
8WDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE (3 FT LINE 9 FT SPACE)



PROJECT NO: 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TRAFFIC CONTROL STAGE 3B: PILGRIM ROAD	SHEET 385 E

2



LEGEND

PM	PERMANENT MARKINGS
	WORK ZONE
	CONSTRUCTION WORK UNDER TRAFFIC
	TEMPORARY PAVEMENT PLACED DURING STAGE
	TEMPORARY PAVEMENT PLACED IN PREVIOUS STAGE
	TEMPORARY CROSSWALK - SEE CONSTRUCTION DETAIL
	TRAFFIC FLOW ARROW
	DRUM WITH/WITHOUT LIGHT, TYPE C
	FLEXIBLE TUBULAR MARKERS
	CONCRETE BARRIER TEMPORARY PRECAST
	CRASH CUSHIONS TEMPORARY
	SIGN ON PERMANENT/TEMPORARY SUPPORT
	TYPE II BARRICADE WITH/WITHOUT SIGN
	TYPE III BARRICADE WITH/WITHOUT SIGN

4W	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE
4Y	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW
4YD	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW (DOUBLE LINES)
8W	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE
4WD	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE (3 FT LINE 9 FT SPACE)
8WD	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE (3 FT LINE 9 FT SPACE)
4WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, WHITE
4YR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW
4YDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW (DOUBLE LINES)
8WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE
8WDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE (3 FT LINE 9 FT SPACE)

PROJECT NO: 2782-11-70 & 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TRAFFIC CONTROL STAGE 3B: PILGRIM ROAD	SHEET 386	E

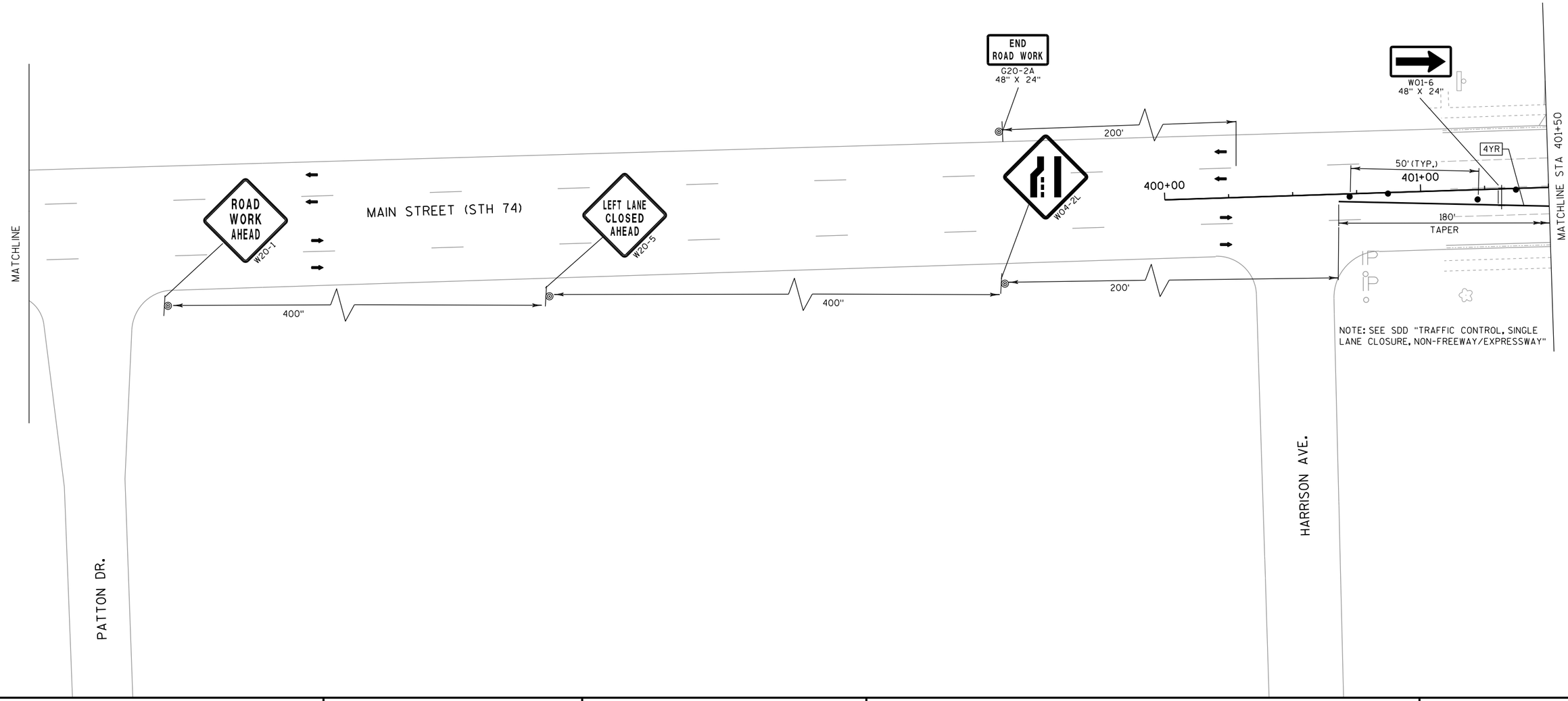
2

LEGEND

PM	PERMANENT MARKINGS
	WORK ZONE
	CONSTRUCTION WORK UNDER TRAFFIC
	TEMPORARY PAVEMENT PLACED DURING STAGE
	TEMPORARY PAVEMENT PLACED IN PREVIOUS STAGE
	TEMPORARY CROSSWALK - SEE CONSTRUCTION DETAIL
	TRAFFIC FLOW ARROW
	DRUM WITH/WITHOUT LIGHT, TYPE C
	FLEXIBLE TUBULAR MARKERS
	CONCRETE BARRIER TEMPORARY PRECAST
	CRASH CUSHIONS TEMPORARY
	SIGN ON PERMANENT/TEMPORARY SUPPORT
	TYPE II BARRICADE WITH/WITHOUT SIGN
	TYPE III BARRICADE WITH/WITHOUT SIGN

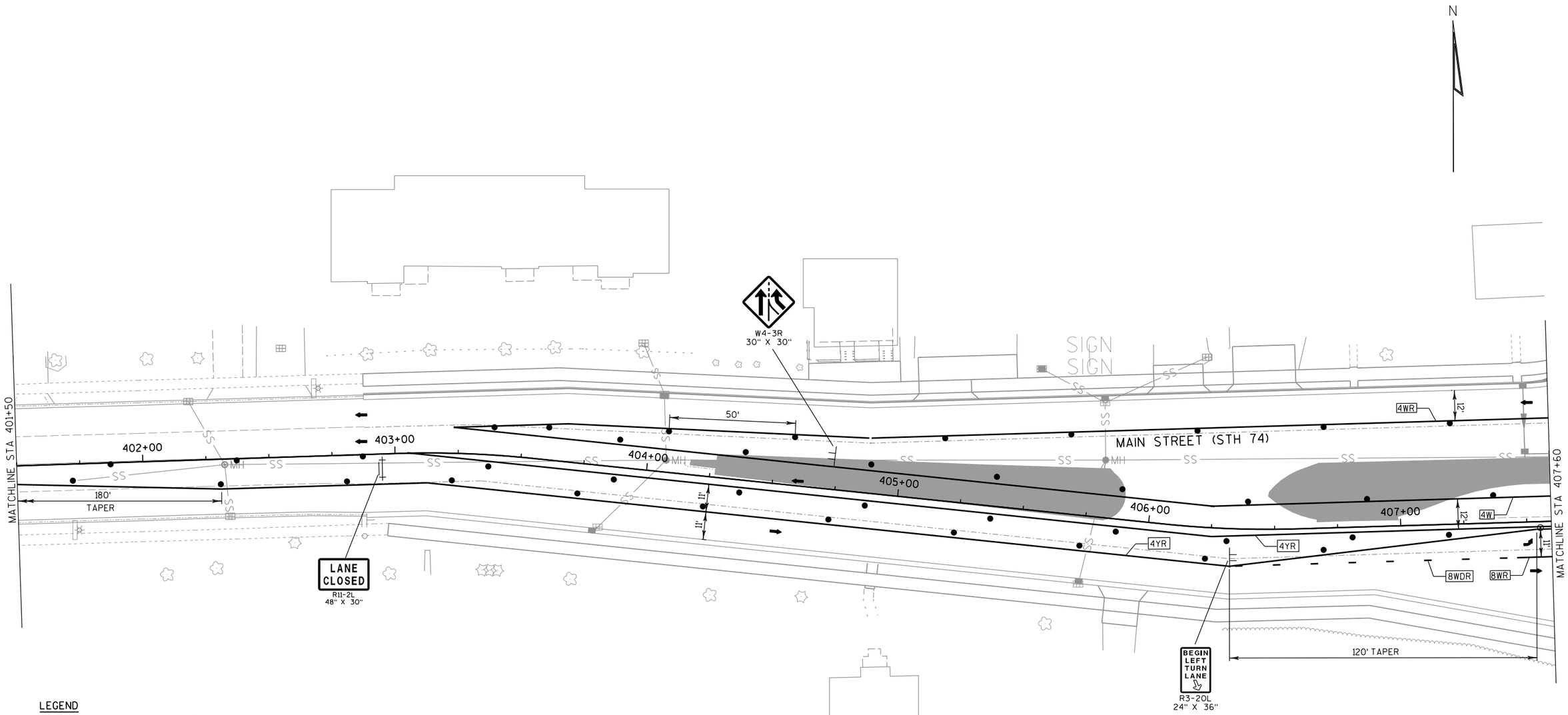
4W	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE
4Y	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW
4YD	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW (DOUBLE LINES)
8W	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE
4WD	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE (3 FT LINE 9 FT SPACE)
8WD	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE (3 FT LINE 9 FT SPACE)
4WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, WHITE
4YR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW
4YDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW (DOUBLE LINES)
8WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE
8WDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE (3 FT LINE 9 FT SPACE)





PROJECT NO: 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TRAFFIC CONTROL STAGE 3B: MAIN STREET (STH 74)	SHEET 387 E

2



LEGEND

PM	PERMANENT MARKINGS
	WORK ZONE
	CONSTRUCTION WORK UNDER TRAFFIC
	TEMPORARY PAVEMENT PLACED DURING STAGE
	TEMPORARY PAVEMENT PLACED IN PREVIOUS STAGE
	TEMPORARY CROSSWALK - SEE CONSTRUCTION DETAIL
	TRAFFIC FLOW ARROW
	DRUM WITH/WITHOUT LIGHT, TYPE C
	FLEXIBLE TUBULAR MARKERS
	CONCRETE BARRIER TEMPORARY PRECAST
	CRASH CUSHIONS TEMPORARY
	SIGN ON PERMANENT/TEMPORARY SUPPORT
	TYPE II BARRICADE WITH/WITHOUT SIGN
	TYPE III BARRICADE WITH/WITHOUT SIGN

4W	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE
4Y	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW
4YD	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW (DOUBLE LINES)
8W	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE
4WD	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE (3 FT LINE 9 FT SPACE)
8WD	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE (3 FT LINE 9 FT SPACE)
4WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, WHITE
4YR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW
4YDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW (DOUBLE LINES)
8WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE
8WDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE (3 FT LINE 9 FT SPACE)

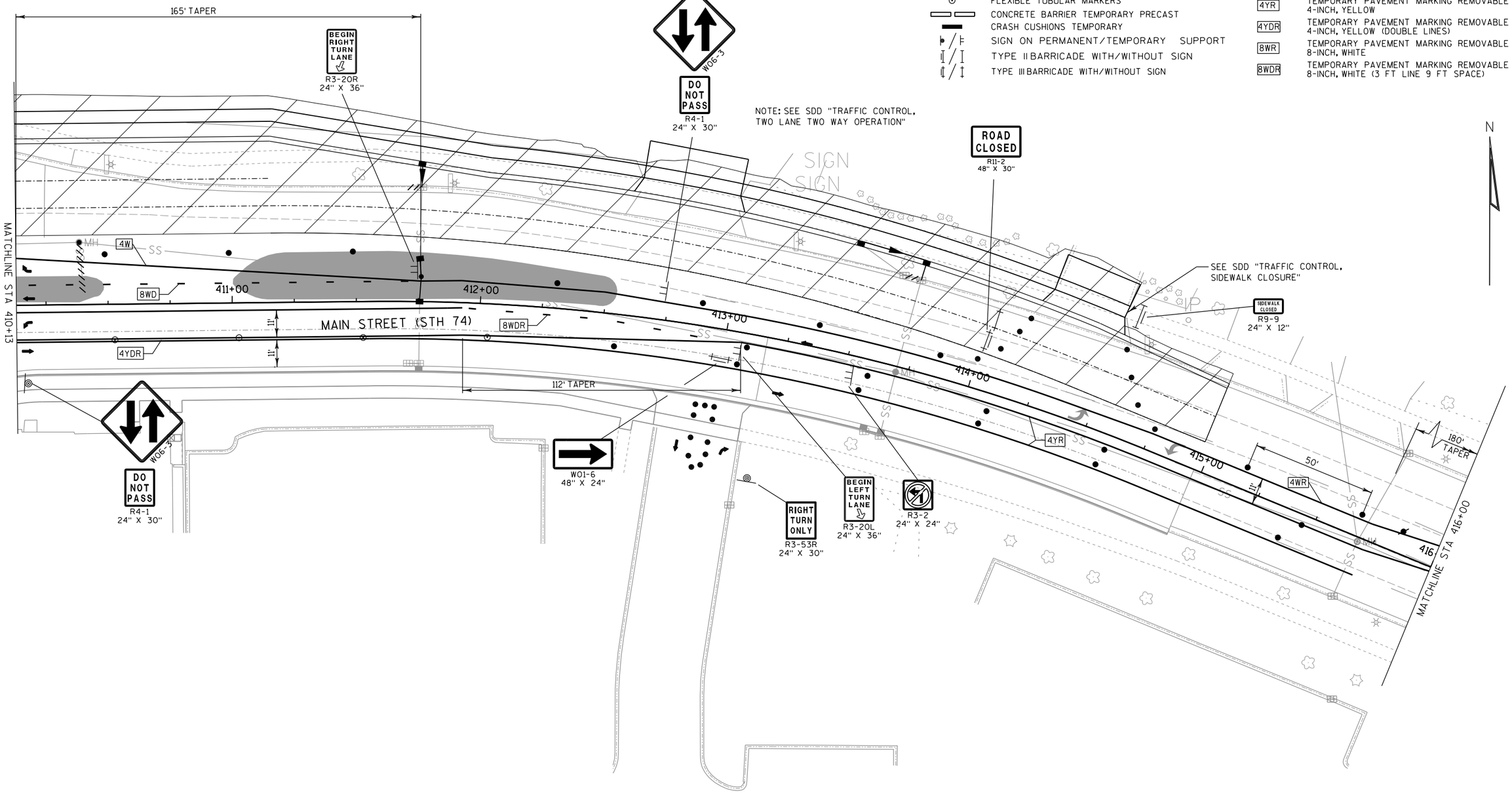
PROJECT NO: 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TRAFFIC CONTROL STAGE 3B: MAIN STREET (STH 74)	SHEET 388	E

2

LEGEND

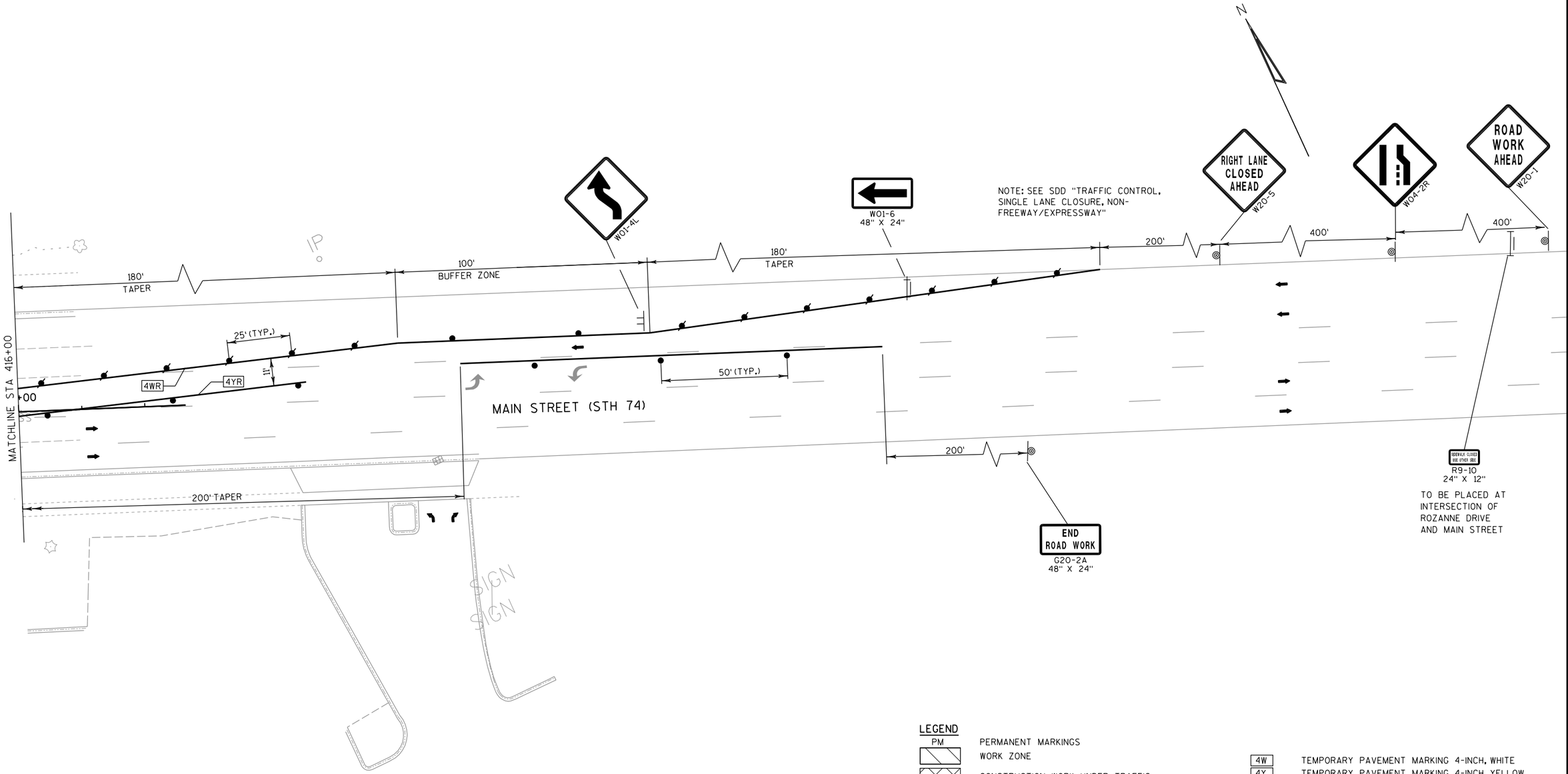
PM	PERMANENT MARKINGS
	WORK ZONE
	CONSTRUCTION WORK UNDER TRAFFIC
	TEMPORARY PAVEMENT PLACED DURING STAGE
	TEMPORARY PAVEMENT PLACED IN PREVIOUS STAGE
	TEMPORARY CROSSWALK - SEE CONSTRUCTION DETAIL
	TRAFFIC FLOW ARROW
	DRUM WITH/WITHOUT LIGHT, TYPE C
	FLEXIBLE TUBULAR MARKERS
	CONCRETE BARRIER TEMPORARY PRECAST
	CRASH CUSHIONS TEMPORARY
	SIGN ON PERMANENT/TEMPORARY SUPPORT
	TYPE II BARRICADE WITH/WITHOUT SIGN
	TYPE III BARRICADE WITH/WITHOUT SIGN

4W	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE
4Y	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW
4YD	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW (DOUBLE LINES)
8W	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE
4WD	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE (3 FT LINE 9 FT SPACE)
8WD	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE (3 FT LINE 9 FT SPACE)
4WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, WHITE
4YR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW
4YDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW (DOUBLE LINES)
8WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE
8WDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE (3 FT LINE 9 FT SPACE)



PROJECT NO: 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TRAFFIC CONTROL STAGE 3B: MAIN STREET (STH 74)	SHEET 389 E

2



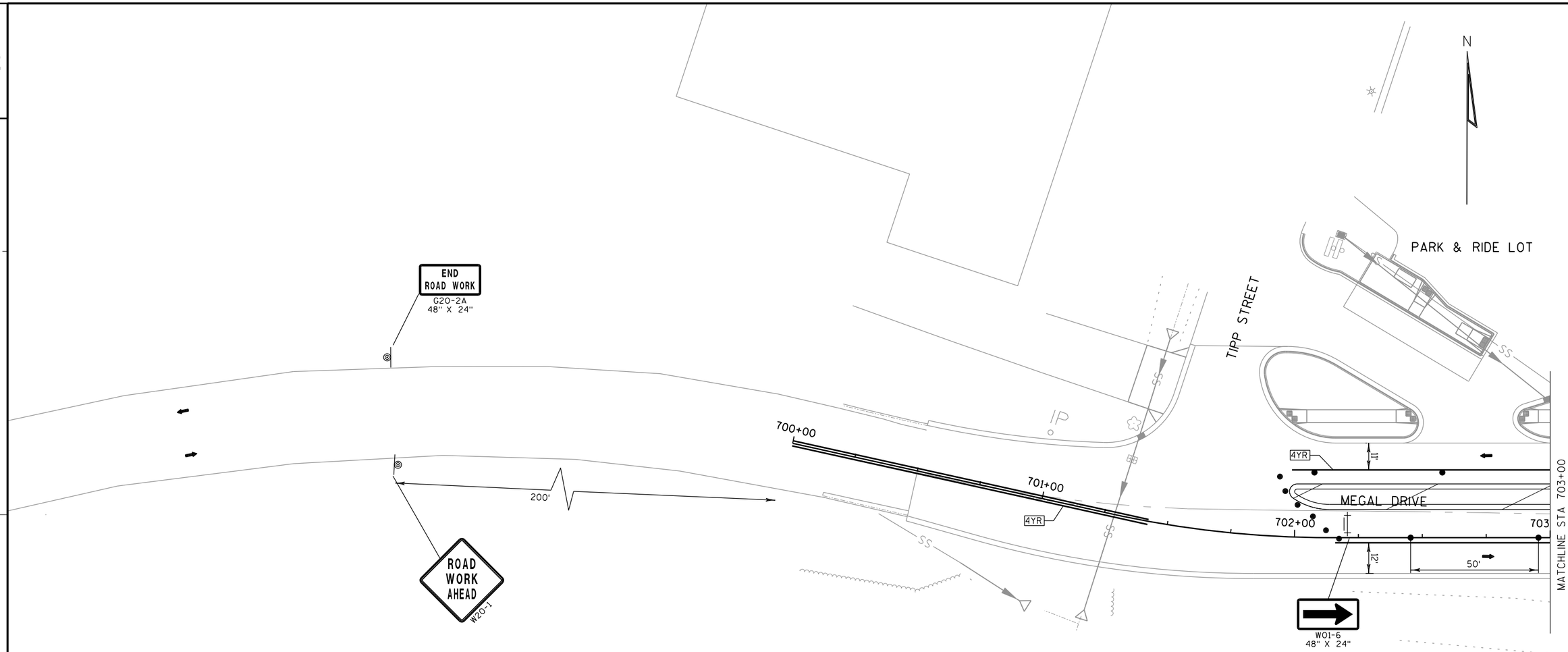
LEGEND

PM	PERMANENT MARKINGS
	WORK ZONE
	CONSTRUCTION WORK UNDER TRAFFIC
	TEMPORARY PAVEMENT PLACED DURING STAGE
	TEMPORARY PAVEMENT PLACED IN PREVIOUS STAGE
	TEMPORARY CROSSWALK - SEE CONSTRUCTION DETAIL
	TRAFFIC FLOW ARROW
	DRUM WITH/WITHOUT LIGHT, TYPE C
	FLEXIBLE TUBULAR MARKERS
	CONCRETE BARRIER TEMPORARY PRECAST
	CRASH CUSHIONS TEMPORARY
	SIGN ON PERMANENT/TEMPORARY SUPPORT
	TYPE II BARRICADE WITH/WITHOUT SIGN
	TYPE III BARRICADE WITH/WITHOUT SIGN

4W	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE
4Y	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW
4YD	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW (DOUBLE LINES)
8W	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE
4WD	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE (3 FT LINE 9 FT SPACE)
8WD	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE (3 FT LINE 9 FT SPACE)
4WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, WHITE
4YR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW
4YDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW (DOUBLE LINES)
8WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE
8WDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE (3 FT LINE 9 FT SPACE)

PROJECT NO: 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TRAFFIC CONTROL STAGE 3B: MAIN STREET (STH 74)	SHEET 390	E

2

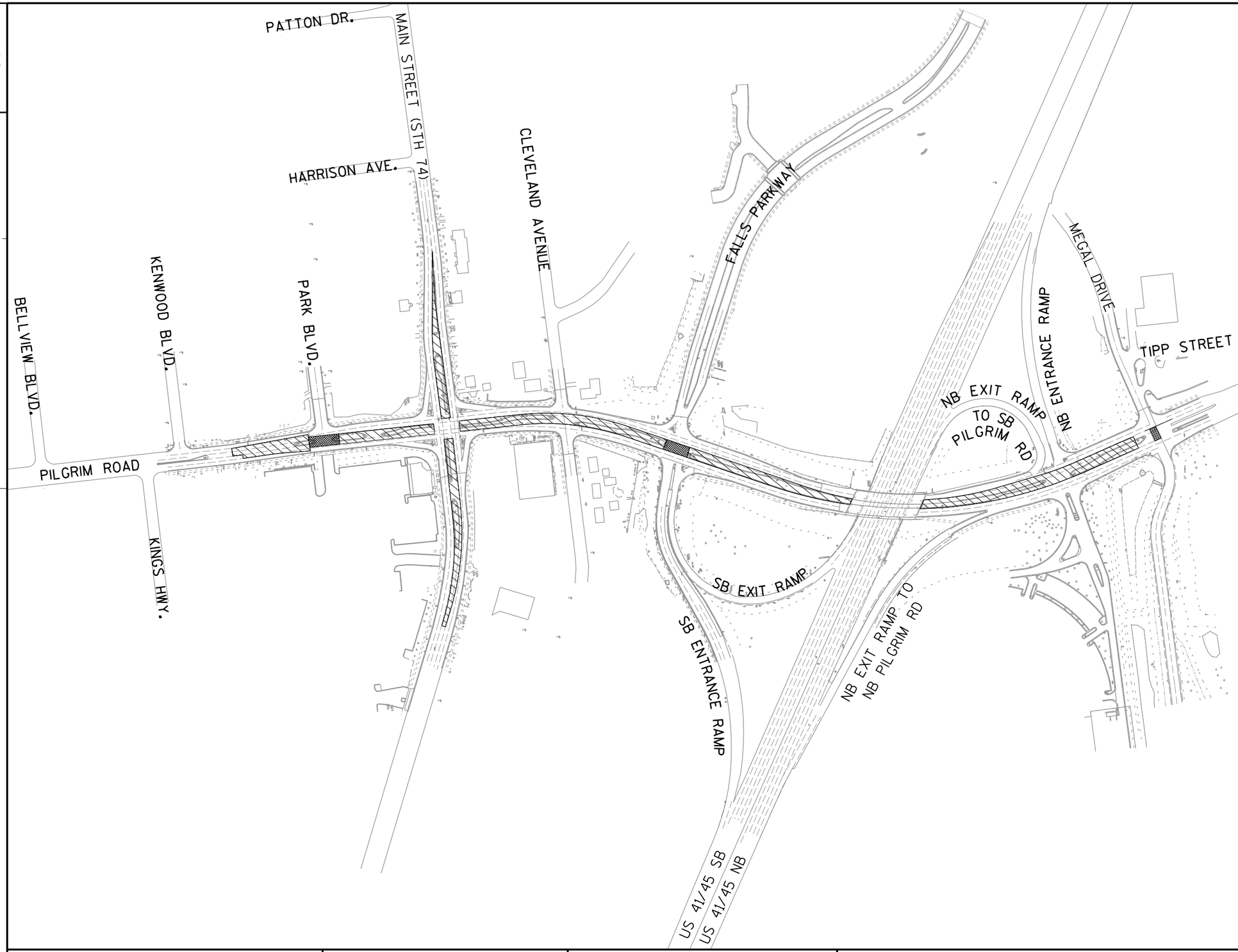


LEGEND

PM	PERMANENT MARKINGS	4W	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE
	WORK ZONE	4Y	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW
	CONSTRUCTION WORK UNDER TRAFFIC	4YD	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW (DOUBLE LINES)
	TEMPORARY PAVEMENT PLACED DURING STAGE	8W	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE
	TEMPORARY PAVEMENT PLACED IN PREVIOUS STAGE	4WD	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE (3 FT LINE 9 FT SPACE)
	TEMPORARY CROSSWALK - SEE CONSTRUCTION DETAIL	8WD	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE (3 FT LINE 9 FT SPACE)
	TRAFFIC FLOW ARROW	4WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, WHITE
	DRUM WITH/WITHOUT LIGHT, TYPE C	4YR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW
	FLEXIBLE TUBULAR MARKERS	4YDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW (DOUBLE LINES)
	CONCRETE BARRIER TEMPORARY PRECAST	8WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE
	CRASH CUSHIONS TEMPORARY	8WDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE (3 FT LINE 9 FT SPACE)
	SIGN ON PERMANENT/TEMPORARY SUPPORT		
	TYPE II BARRICADE WITH/WITHOUT SIGN		
	TYPE III BARRICADE WITH/WITHOUT SIGN		

PROJECT NO: 2782-11-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TRAFFIC CONTROL STAGE 3B: MEGAL DRIVE	SHEET 391	E

2



CONSTRUCTION STAGING OVERVIEW - STAGE 4

PILGRIM ROAD
TRAFFIC WILL BE MAINTAINED ON THE NEW NORTHBOUND AND SOUTHBOUND LANES AND ONE LANE OF TRAFFIC FOR EACH DIRECTION SHALL BE MAINTAINED AT ALL TIMES.

MAIN STREET
TRAFFIC WILL BE MAINTAINED ON THE NEW EASTBOUND AND WESTBOUND LANES AND ONE LANE OF TRAFFIC FOR EACH DIRECTION SHALL BE MAINTAINED AT ALL TIMES.

US 41/45
TRAFFIC WILL BE MAINTAINED ON ALL EXISTING LANES OF US 41/45 DURING PEAK HOURS.

US 41/45 NB ENTRANCE RAMP
TRAFFIC WILL BE MAINTAINED ON THE EXISTING LANE OF THIS RAMP AT ALL TIMES.

US 41/45 NB EXIT RAMP TO PILGRIM RD SB
RAMP WILL BE CLOSED TO TRAFFIC.
RAMP WILL BE DETOURED VIA THE MAIN ST INTERCHANGE.

US 41/45 NB EXIT RAMP TO PILGRIM RD NB
TRAFFIC WILL BE MAINTAINED ON EXISTING LANE OF THIS RAMP AT ALL TIMES.

US 41/45 SB ENTRANCE RAMP
TRAFFIC WILL BE MAINTAINED ON EXISTING LANE OF THIS RAMP AT ALL TIMES.

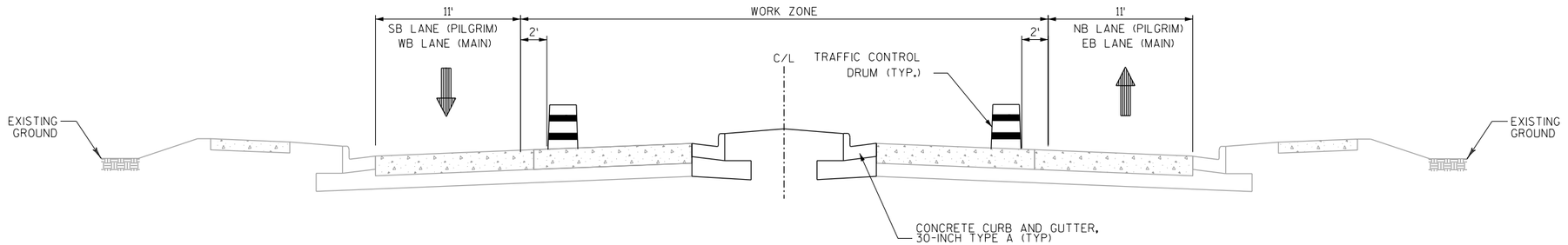
US 41/45 SB EXIT RAMP
RAMP WILL BE CLOSED TO TRAFFIC.
RAMP WILL BE DETOURED VIA THE MAIN ST INTERCHANGE.

SIDEWALKS
TO REMAIN OPEN.

NOTE:
USE PERMANENT PAVEMENT MARKINGS & SIGNS ON NORTHBOUND PILGRIM ROAD AND SIDE ROADS WHERE APPLICABLE.

PROJECT NO: 2782-11-70 & 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TRAFFIC CONTROL STAGE 4: OVERVIEW	SHEET 392	E

2



STAGE 4

PILGRIM ROAD

MAIN STREET

PROJECT NO: 2782-11-70 & 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TRAFFIC CONTROL STAGE 4: TYPICAL SECTIONS	SHEET 393	E

FILE NAME : P:\44xx\4442\Plan\026600_s4ts.dgn PLOT DATE : 11/2/2014 PLOT BY : ajp PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 42

2

N

BELLVIEW BLVD.

PILGRIM ROAD

KINGS HWY.

ROAD WORK AHEAD
W20-1

400'

LEFT LANE CLOSED AHEAD
W20-5

400'

W04-2L

200'

END ROAD WORK
G20-2A
48" X 24"

25' (TYP.)

4YR

180' TAPER

200'

ROAD WORK AHEAD
W20-1

END ROAD WORK
G20-2A
48" X 24"

LEGEND

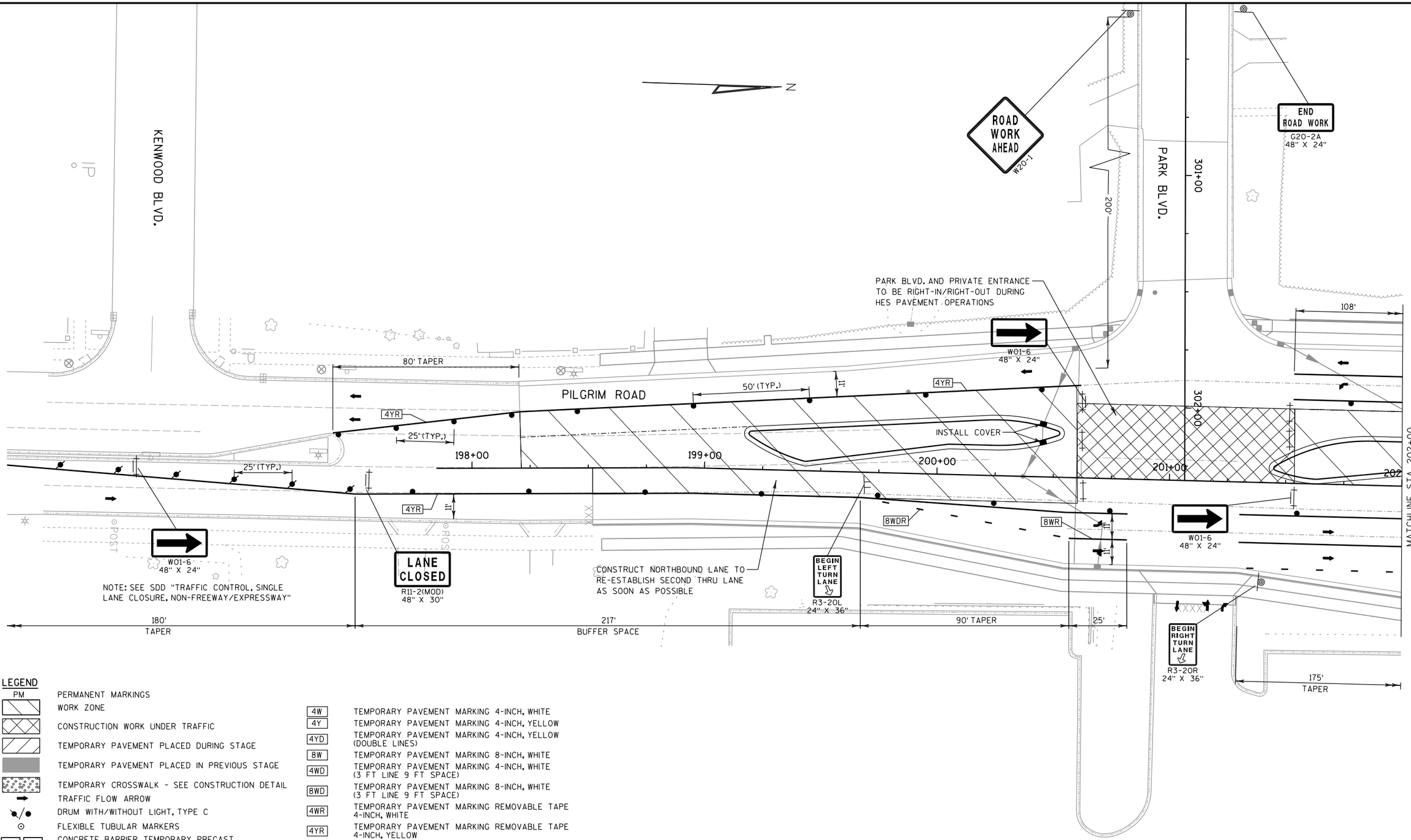
PM	PERMANENT MARKINGS
	WORK ZONE
	CONSTRUCTION WORK UNDER TRAFFIC
	TEMPORARY PAVEMENT PLACED DURING STAGE
	TEMPORARY PAVEMENT PLACED IN PREVIOUS STAGE
	TEMPORARY CROSSWALK - SEE CONSTRUCTION DETAIL
	TRAFFIC FLOW ARROW
	DRUM WITH/WITHOUT LIGHT, TYPE C
	FLEXIBLE TUBULAR MARKERS
	CONCRETE BARRIER TEMPORARY PRECAST
	CRASH CUSHIONS TEMPORARY
	SIGN ON PERMANENT/TEMPORARY SUPPORT
	TYPE II BARRICADE WITH/WITHOUT SIGN
	TYPE III BARRICADE WITH/WITHOUT SIGN

4W	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE
4Y	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW
4YD	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW (DOUBLE LINES)
8W	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE
4WD	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE (3 FT LINE 9 FT SPACE)
8WD	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE (3 FT LINE 9 FT SPACE)
4WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, WHITE
4YR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW
4YDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW (DOUBLE LINES)
8WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE
8WDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE (3 FT LINE 9 FT SPACE)

PROJECT NO: 2782-11-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TRAFFIC CONTROL STAGE 4: PILGRIM ROAD	SHEET 394	E

FILE NAME : P:\44xx\4442\Plan\026601_s4.dgn PLOT DATE : 11/2/2014 PLOT BY : ajp PLOT NAME : PLOT SCALE : 1:40

2



LEGEND

PM	PERMANENT MARKINGS
	WORK ZONE
	CONSTRUCTION WORK UNDER TRAFFIC
	TEMPORARY PAVEMENT PLACED DURING STAGE
	TEMPORARY PAVEMENT PLACED IN PREVIOUS STAGE
	TEMPORARY CROSSWALK - SEE CONSTRUCTION DETAIL
	TRAFFIC FLOW ARROW
	DRUM WITH/WITHOUT LIGHT, TYPE C
	FLEXIBLE TUBULAR MARKERS
	CONCRETE BARRIER TEMPORARY PRECAST
	CRASH CUSHIONS TEMPORARY
	SIGN ON PERMANENT/TEMPORARY SUPPORT
	TYPE II BARRICADE WITH/WITHOUT SIGN
	TYPE III BARRICADE WITH/WITHOUT SIGN

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4Y	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW
4YD	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW (DOUBLE LINES)
8W	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE
4WD	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE (3 FT LINE 9 FT SPACE)
8WD	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE (3 FT LINE 9 FT SPACE)
4WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, WHITE
4YR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW
4YDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW (DOUBLE LINES)
8WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE
8WDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE (3 FT LINE 9 FT SPACE)

PROJECT NO: 2782-11-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TRAFFIC CONTROL STAGE 4: PILGRIM ROAD	SHEET 395	E

2

N

MATCHLINE STA 407+60

CONSTRUCT ONE CROSSWALK AT A TIME ACROSS PILGRIM ROAD AND MAIN STREET, MAINTAIN PEDESTRIAN ACCESS ACROSS PILGRIM ROAD AND MAIN STREET, SEE SDD "TRAFFIC CONTROL, SIDEWALK CLOSURE"

BEGIN LEFT TURN LANE
R3-20L
24" X 36"

108'
90' TAPER
8WR
8WDR
4YR
50' (TYP.)
INSTALL COVERS
203+00
204+00
205+00
206+00
207+00
408+00
409+00
410+00
8WR
4YR
PM
INSTALL COVER
W01-6
48" X 24"
200'
203'
INSTALL COVERS
PILGRIM ROAD
178'
185' TAPER
90' TAPER
125'
12'
11'
126'
175'
TAPER
MAIN STREET (STH 74)
19'
11'
11'
11'
MATCHLINE STA 410+13
MATCHLINE STA 202+00
MATCHLINE STA 207+75

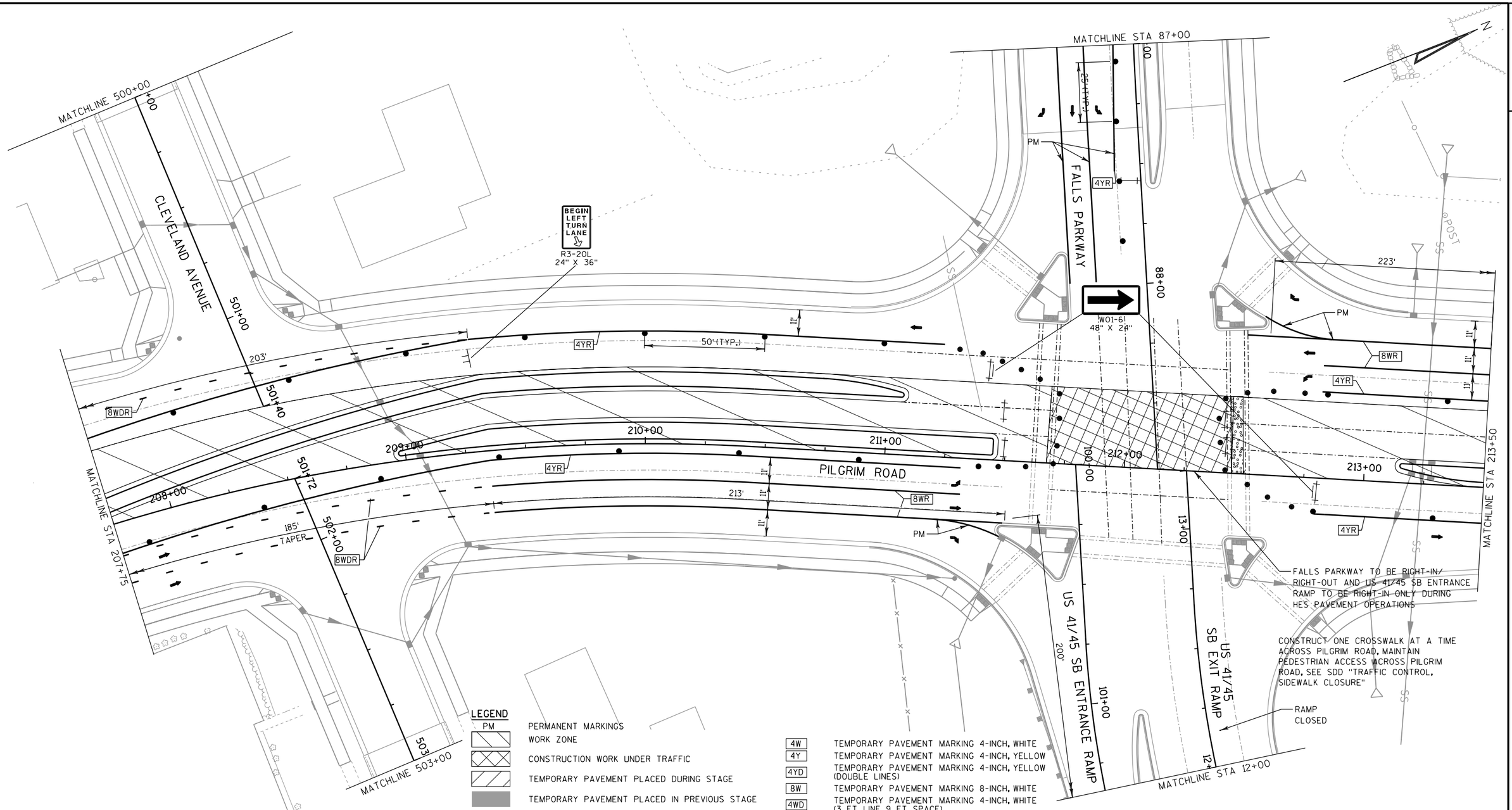
LEGEND

PM	PERMANENT MARKINGS
	WORK ZONE
	CONSTRUCTION WORK UNDER TRAFFIC
	TEMPORARY PAVEMENT PLACED DURING STAGE
	TEMPORARY PAVEMENT PLACED IN PREVIOUS STAGE
	TEMPORARY CROSSWALK - SEE CONSTRUCTION DETAIL
	TRAFFIC FLOW ARROW
	DRUM WITH/WITHOUT LIGHT, TYPE C
	FLEXIBLE TUBULAR MARKERS
	CONCRETE BARRIER TEMPORARY PRECAST
	CRASH CUSHIONS TEMPORARY
	SIGN ON PERMANENT/TEMPORARY SUPPORT
	TYPE II BARRICADE WITH/WITHOUT SIGN
	TYPE III BARRICADE WITH/WITHOUT SIGN

4W	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE
4Y	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW
4YD	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW (DOUBLE LINES)
8W	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE
4WD	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE (3 FT LINE 9 FT SPACE)
8WD	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE (3 FT LINE 9 FT SPACE)
4WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, WHITE
4YR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW
4YDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW (DOUBLE LINES)
8WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE
8WDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE (3 FT LINE 9 FT SPACE)

PROJECT NO: 2782-11-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TRAFFIC CONTROL STAGE 4: PILGRIM ROAD	SHEET 396	E

2



LEGEND

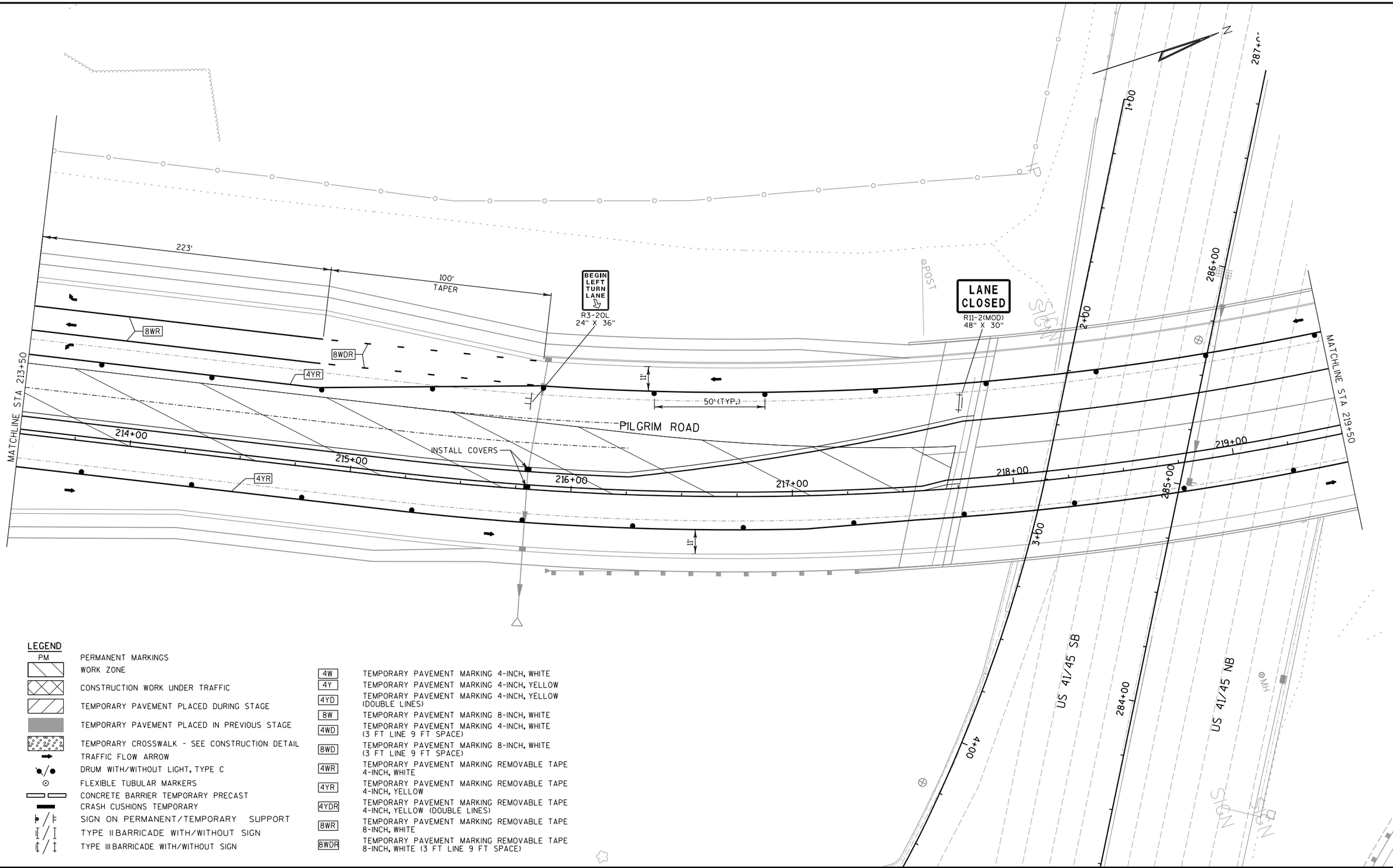
PM	PERMANENT MARKINGS
	WORK ZONE
	CONSTRUCTION WORK UNDER TRAFFIC
	TEMPORARY PAVEMENT PLACED DURING STAGE
	TEMPORARY PAVEMENT PLACED IN PREVIOUS STAGE
	TEMPORARY CROSSWALK - SEE CONSTRUCTION DETAIL
	TRAFFIC FLOW ARROW
	DRUM WITH/WITHOUT LIGHT, TYPE C
	FLEXIBLE TUBULAR MARKERS
	CONCRETE BARRIER TEMPORARY PRECAST
	CRASH CUSHIONS TEMPORARY
	SIGN ON PERMANENT/TEMPORARY SUPPORT
	TYPE II BARRICADE WITH/WITHOUT SIGN
	TYPE III BARRICADE WITH/WITHOUT SIGN

4W	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE
4Y	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW
4YD	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW (DOUBLE LINES)
8W	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE
4WD	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE (3 FT LINE 9 FT SPACE)
8WD	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE (3 FT LINE 9 FT SPACE)
4WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, WHITE
4YR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW
4YDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW (DOUBLE LINES)
8WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE
8WDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE (3 FT LINE 9 FT SPACE)

PROJECT NO: 2782-11-70 & 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TRAFFIC CONTROL STAGE 4: PILGRIM ROAD	SHEET 397	E

FILE NAME : P:\44xx\4442\Plan\026604_s4.dgn PLOT DATE : 11/2/2014 PLOT BY : ajp PLOT NAME : PLOT SCALE : 1:40

2



LEGEND

PM	PERMANENT MARKINGS
	WORK ZONE
	CONSTRUCTION WORK UNDER TRAFFIC
	TEMPORARY PAVEMENT PLACED DURING STAGE
	TEMPORARY PAVEMENT PLACED IN PREVIOUS STAGE
	TEMPORARY CROSSWALK - SEE CONSTRUCTION DETAIL
	TRAFFIC FLOW ARROW
	DRUM WITH/WITHOUT LIGHT, TYPE C
	FLEXIBLE TUBULAR MARKERS
	CONCRETE BARRIER TEMPORARY PRECAST
	CRASH CUSHIONS TEMPORARY
	SIGN ON PERMANENT/TEMPORARY SUPPORT
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8W	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE
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4YR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW
4YDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW (DOUBLE LINES)
8WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE
8WDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE (3 FT LINE 9 FT SPACE)

PROJECT NO: 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TRAFFIC CONTROL STAGE 4: PILGRIM ROAD	SHEET 398	E

LEGEND

PM — PERMANENT MARKINGS

- WORK ZONE
- CONSTRUCTION WORK UNDER TRAFFIC
- TEMPORARY PAVEMENT PLACED DURING STAGE
- TEMPORARY PAVEMENT PLACED IN PREVIOUS STAGE
- TEMPORARY CROSSWALK - SEE CONSTRUCTION DETAIL
- TRAFFIC FLOW ARROW
- DRUM WITH/WITHOUT LIGHT, TYPE C
- FLEXIBLE TUBULAR MARKERS
- CONCRETE BARRIER TEMPORARY PRECAST
- CRASH CUSHIONS TEMPORARY
- SIGN ON PERMANENT/TEMPORARY SUPPORT
- TYPE II BARRICADE WITH/WITHOUT SIGN
- TYPE III BARRICADE WITH/WITHOUT SIGN

4W	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE
4Y	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW
4YD	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW (DOUBLE LINES)
8W	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE
4WD	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE (3 FT LINE 9 FT SPACE)
8WD	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE (3 FT LINE 9 FT SPACE)
4WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, WHITE
4YR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW
4YDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW (DOUBLE LINES)
8WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE
8WDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE (3 FT LINE 9 FT SPACE)

N

END ROAD WORK
G20-2A
48" X 24"

US 41/45 NB EXIT RAMP

US 41/45 NB ENTRANCE RAMP

RAMP CLOSED

MATCHLINE STA 219+50

220+00

221+00

222+00

223+00

224+00

225+00

MATCHLINE STA 225+50

11'

11'

17'

8WDR

4YR

INSTALL COVERS

50' (TYP.)

186'

8WDR

4YR

122'

280' TAPER

8WDR

PILGRIM ROAD

108'

8WR

US 41/45 NB EXIT RAMP TO NB PILGRIM ROAD

22+00

23+00

24+00

MATCHLINE STA 21+00

200'

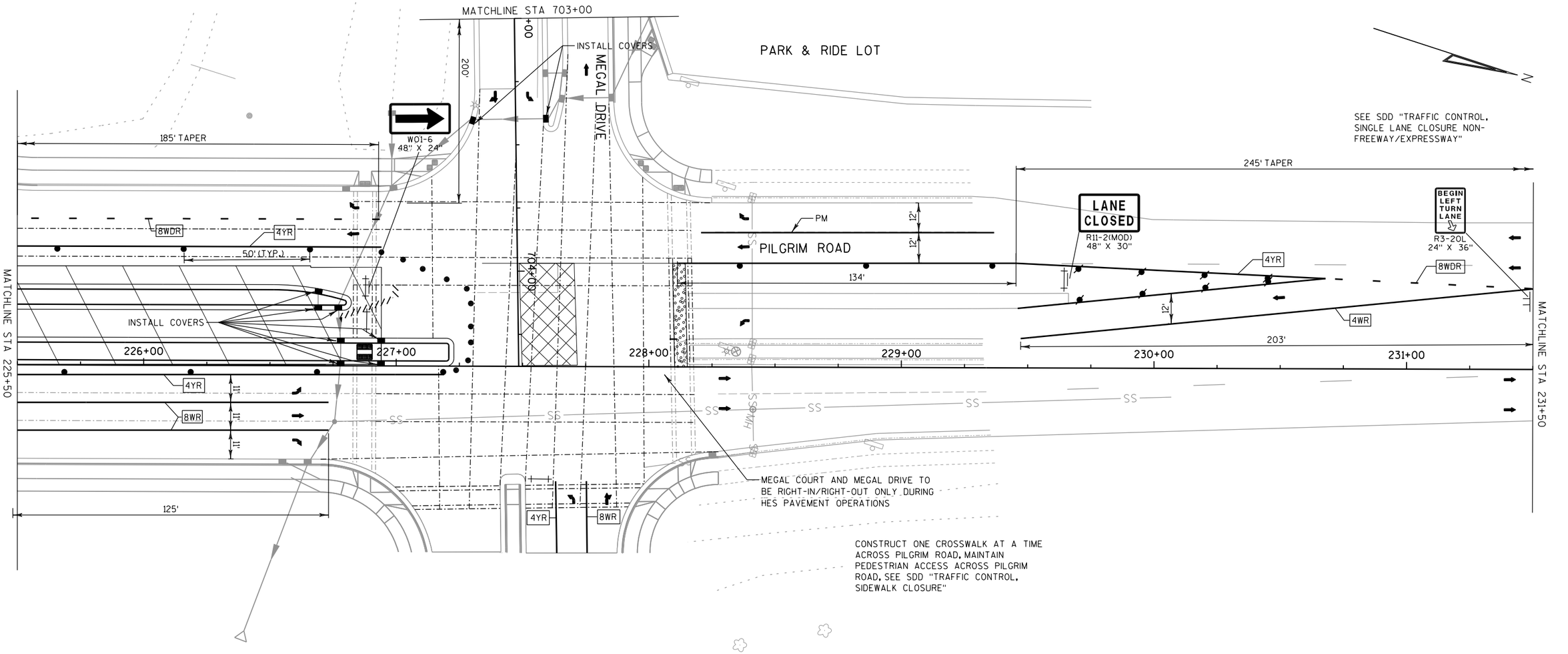
R3-2
24" X 24"

RAMP CLOSED
R11-2(MOD)
48" X 30"

BEGIN LEFT TURN LANE
R3-20L
24" X 36"

SIGNAL

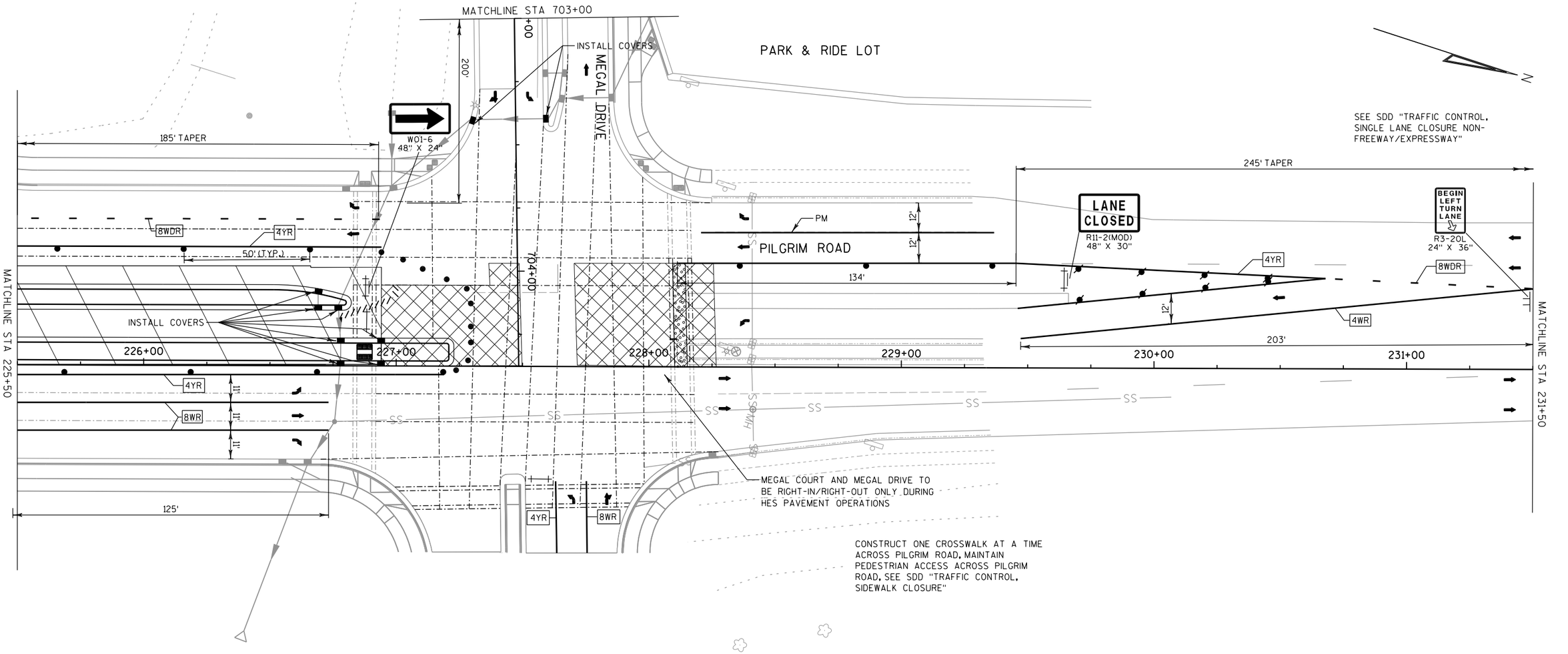
PROJECT NO: 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TRAFFIC CONTROL STAGE 4: PILGRIM ROAD	SHEET 399	E



LEGEND

PM	PERMANENT MARKINGS	4W	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE
	WORK ZONE	4Y	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW
	CONSTRUCTION WORK UNDER TRAFFIC	4YD	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW (DOUBLE LINES)
	TEMPORARY PAVEMENT PLACED DURING STAGE	8W	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE
	TEMPORARY PAVEMENT PLACED IN PREVIOUS STAGE	4WD	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE (3 FT LINE 9 FT SPACE)
	TEMPORARY CROSSWALK - SEE CONSTRUCTION DETAIL	8WD	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE (3 FT LINE 9 FT SPACE)
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	DRUM WITH/WITHOUT LIGHT, TYPE C	4YR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW
	FLEXIBLE TUBULAR MARKERS	4YDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW (DOUBLE LINES)
	CONCRETE BARRIER TEMPORARY PRECAST	8WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE
	CRASH CUSHIONS TEMPORARY	8WDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE (3 FT LINE 9 FT SPACE)
	SIGN ON PERMANENT/TEMPORARY SUPPORT		
	TYPE II BARRICADE WITH/WITHOUT SIGN		
	TYPE III BARRICADE WITH/WITHOUT SIGN		

PROJECT NO: 2782-11-70 & 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TRAFFIC CONTROL STAGE 4: PILGRIM ROAD	SHEET 400	E



LEGEND

PM	PERMANENT MARKINGS
	WORK ZONE
	CONSTRUCTION WORK UNDER TRAFFIC
	TEMPORARY PAVEMENT PLACED DURING STAGE
	TEMPORARY PAVEMENT PLACED IN PREVIOUS STAGE
	TEMPORARY CROSSWALK - SEE CONSTRUCTION DETAIL
	TRAFFIC FLOW ARROW
	DRUM WITH/WITHOUT LIGHT, TYPE C
	FLEXIBLE TUBULAR MARKERS
	CONCRETE BARRIER TEMPORARY PRECAST
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	SIGN ON PERMANENT/TEMPORARY SUPPORT
	TYPE II BARRICADE WITH/WITHOUT SIGN
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8W	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE
4WD	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE (3 FT LINE 9 FT SPACE)
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8WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE
8WDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE (3 FT LINE 9 FT SPACE)

PROJECT NO: 2782-11-70 & 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TRAFFIC CONTROL STAGE 4: PILGRIM ROAD	SHEET 401	E

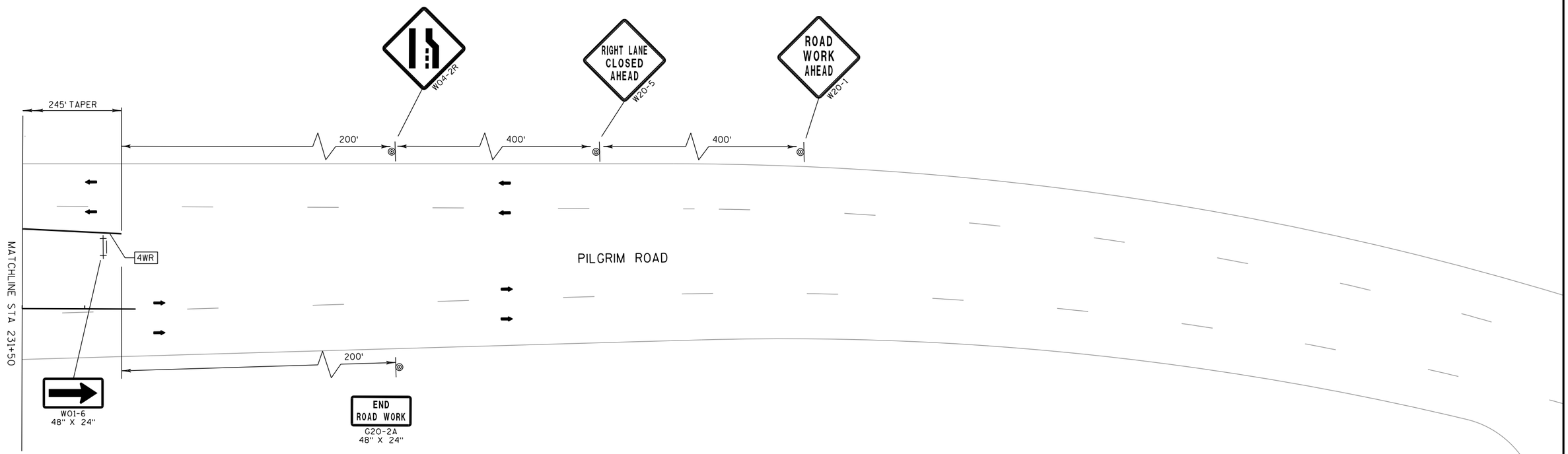
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LEGEND

PM	PERMANENT MARKINGS
	WORK ZONE
	CONSTRUCTION WORK UNDER TRAFFIC
	TEMPORARY PAVEMENT PLACED DURING STAGE
	TEMPORARY PAVEMENT PLACED IN PREVIOUS STAGE
	TEMPORARY CROSSWALK - SEE CONSTRUCTION DETAIL
	TRAFFIC FLOW ARROW
	DRUM WITH/WITHOUT LIGHT, TYPE C
	FLEXIBLE TUBULAR MARKERS
	CONCRETE BARRIER TEMPORARY PRECAST
	CRASH CUSHIONS TEMPORARY
	SIGN ON PERMANENT/TEMPORARY SUPPORT
	TYPE II BARRICADE WITH/WITHOUT SIGN
	TYPE III BARRICADE WITH/WITHOUT SIGN

4W	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE
4Y	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW
4YD	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW (DOUBLE LINES)
8W	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE
4WD	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE (3 FT LINE 9 FT SPACE)
8WD	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE (3 FT LINE 9 FT SPACE)
4WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, WHITE
4YR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW
4YDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW (DOUBLE LINES)
8WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE
8WDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE (3 FT LINE 9 FT SPACE)

N



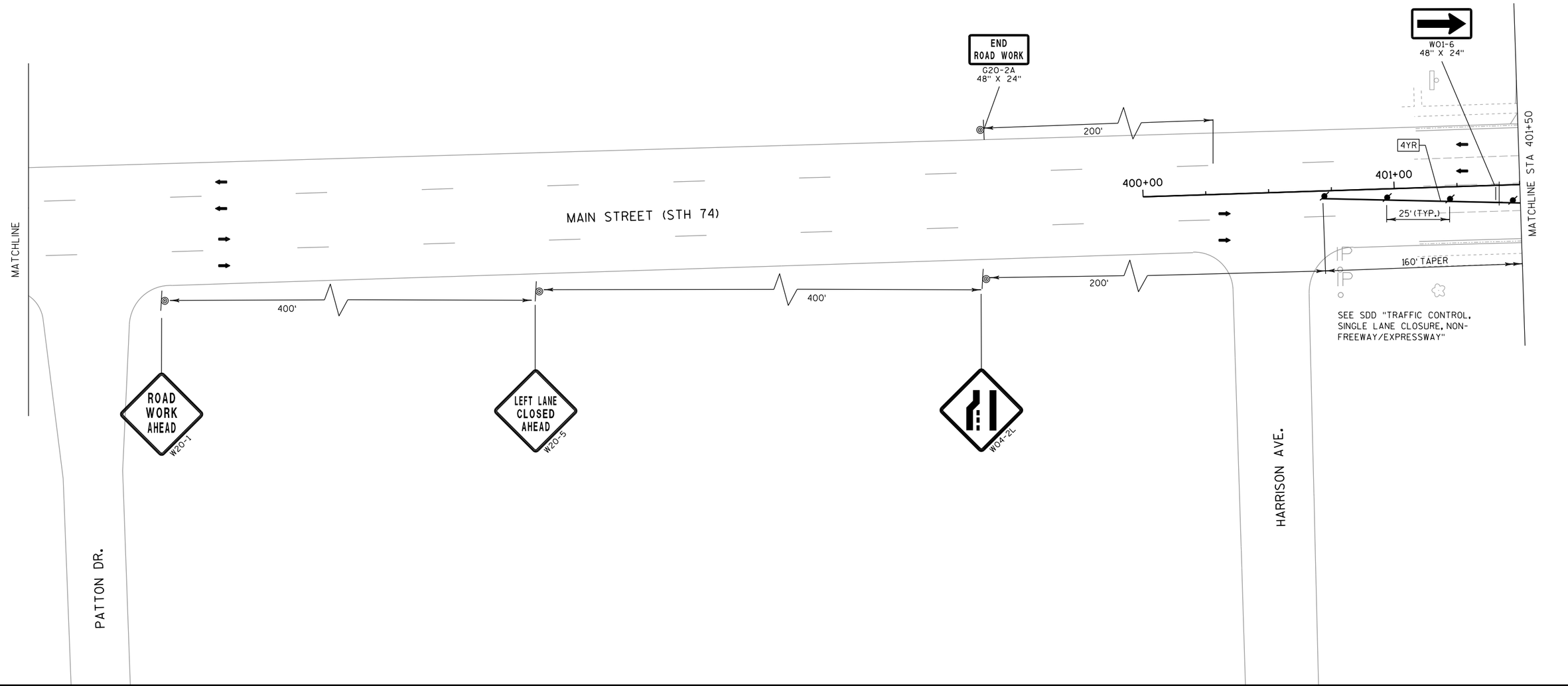
PROJECT NO: 2782-11-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TRAFFIC CONTROL STAGE 4: PILGRIM ROAD	SHEET 402	E

2

LEGEND

PM		
	PERMANENT MARKINGS	
	WORK ZONE	4W — TEMPORARY PAVEMENT MARKING 4-INCH, WHITE
	CONSTRUCTION WORK UNDER TRAFFIC	4Y — TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW
	TEMPORARY PAVEMENT PLACED DURING STAGE	4YD — TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW (DOUBLE LINES)
	TEMPORARY PAVEMENT PLACED IN PREVIOUS STAGE	8W — TEMPORARY PAVEMENT MARKING 8-INCH, WHITE
	TEMPORARY CROSSWALK - SEE CONSTRUCTION DETAIL	4WD — TEMPORARY PAVEMENT MARKING 4-INCH, WHITE (3 FT LINE 9 FT SPACE)
	TRAFFIC FLOW ARROW	8WD — TEMPORARY PAVEMENT MARKING 8-INCH, WHITE (3 FT LINE 9 FT SPACE)
	DRUM WITH/WITHOUT LIGHT, TYPE C	4WR — TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, WHITE
	FLEXIBLE TUBULAR MARKERS	4YR — TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW
	CONCRETE BARRIER TEMPORARY PRECAST	4YDR — TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW (DOUBLE LINES)
	CRASH CUSHIONS TEMPORARY	8WR — TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE
	SIGN ON PERMANENT/TEMPORARY SUPPORT	8WDR — TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE (3 FT LINE 9 FT SPACE)
	TYPE II BARRICADE WITH/WITHOUT SIGN	
	TYPE III BARRICADE WITH/WITHOUT SIGN	





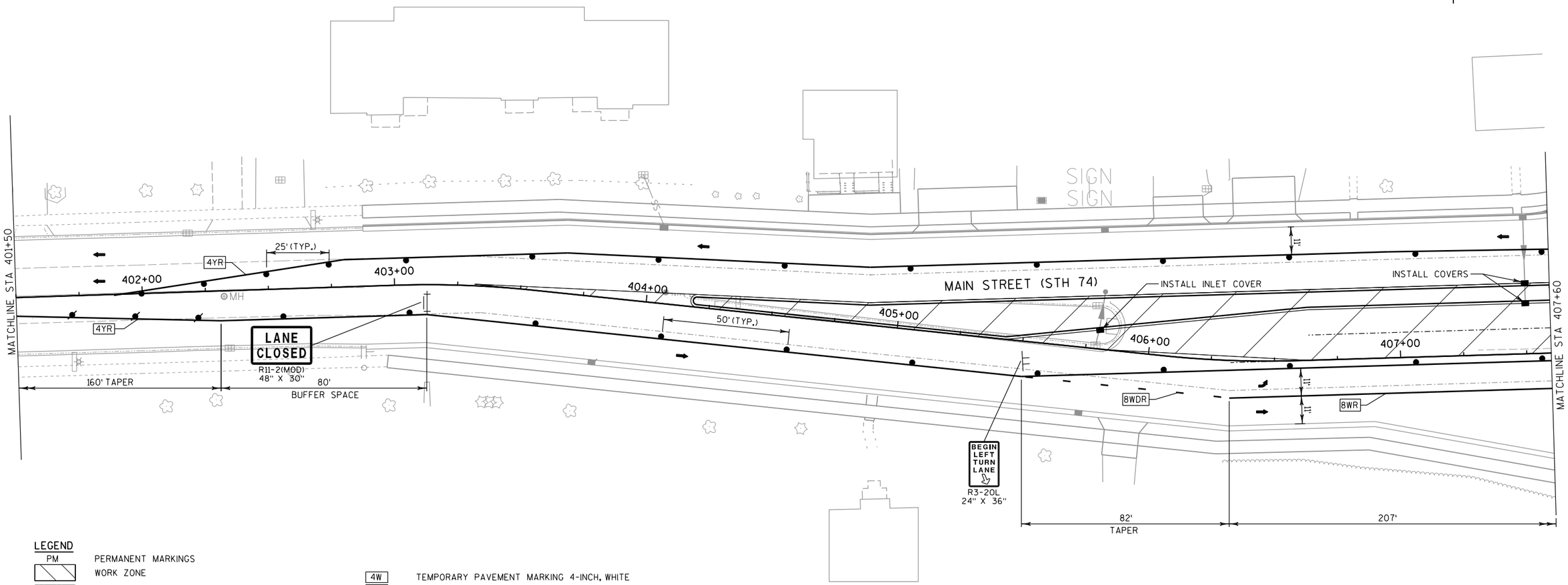
PROJECT NO: 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TRAFFIC CONTROL STAGE 4: MAIN STREET (STH 74)	SHEET 403	E

FILE NAME : P:\44xx\4442\Plan\026610_s4.dgn PLOT DATE : 11/2/2014 PLOT BY : ajp PLOT NAME : PLOT SCALE : 1:40

WISDOT/CADDS SHEET 42

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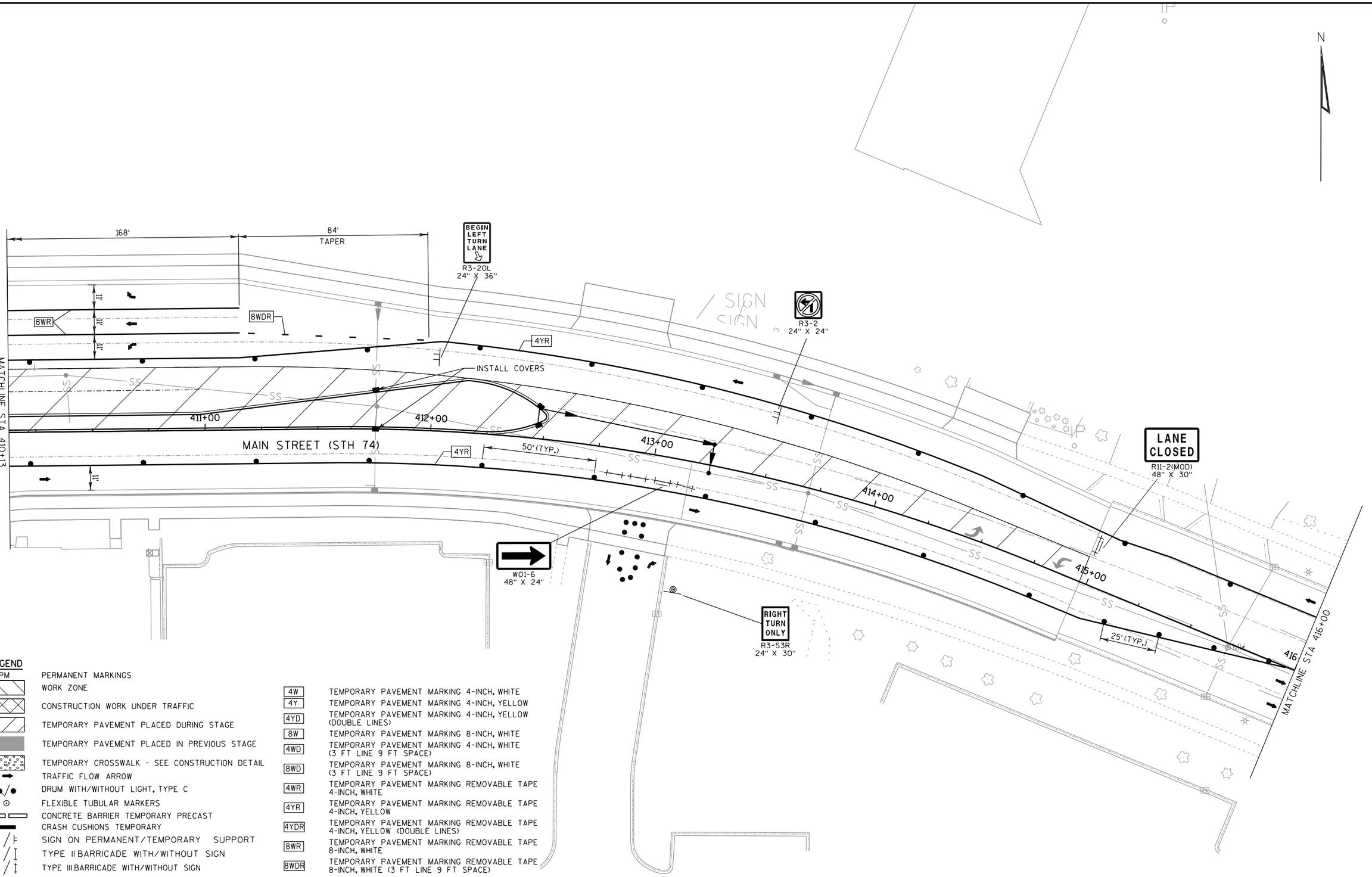
LEGEND

PM	PERMANENT MARKINGS
	WORK ZONE
	CONSTRUCTION WORK UNDER TRAFFIC
	TEMPORARY PAVEMENT PLACED DURING STAGE
	TEMPORARY PAVEMENT PLACED IN PREVIOUS STAGE
	TEMPORARY CROSSWALK - SEE CONSTRUCTION DETAIL
	TRAFFIC FLOW ARROW
	DRUM WITH/WITHOUT LIGHT, TYPE C
	FLEXIBLE TUBULAR MARKERS
	CONCRETE BARRIER TEMPORARY PRECAST
	CRASH CUSHIONS TEMPORARY
	SIGN ON PERMANENT/TEMPORARY SUPPORT
	TYPE II BARRICADE WITH/WITHOUT SIGN
	TYPE III BARRICADE WITH/WITHOUT SIGN

4W	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE
4Y	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW
4YD	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW (DOUBLE LINES)
8W	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE
4WD	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE (3 FT LINE 9 FT SPACE)
8WD	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE (3 FT LINE 9 FT SPACE)
4WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, WHITE
4YR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW
4YDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW (DOUBLE LINES)
8WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE
8WDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE (3 FT LINE 9 FT SPACE)

PROJECT NO: 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TRAFFIC CONTROL STAGE 4: MAIN STREET (STH 74)	SHEET 404	E

2



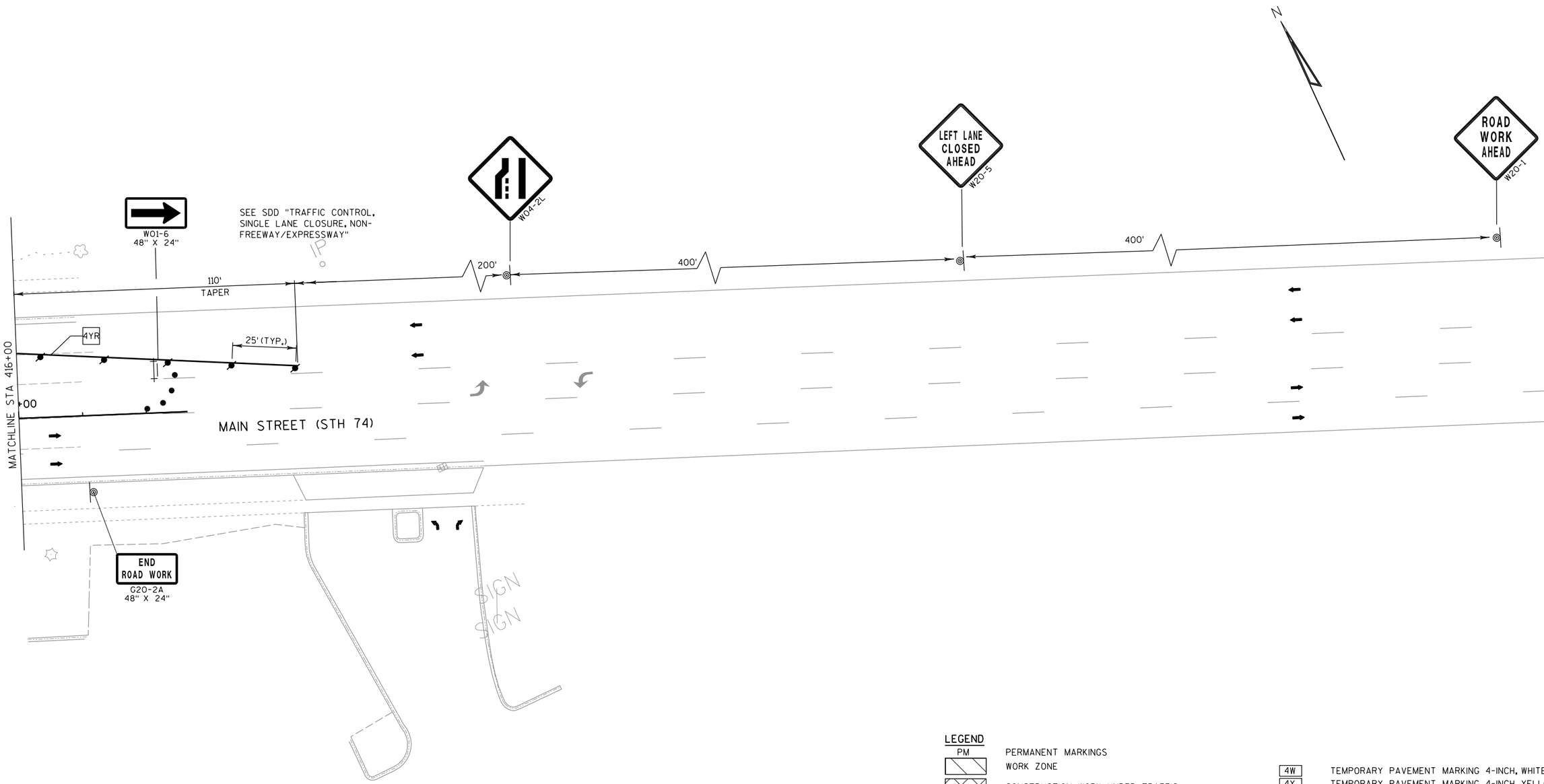
LEGEND

PM	PERMANENT MARKINGS
	WORK ZONE
	CONSTRUCTION WORK UNDER TRAFFIC
	TEMPORARY PAVEMENT PLACED DURING STAGE
	TEMPORARY PAVEMENT PLACED IN PREVIOUS STAGE
	TEMPORARY CROSSWALK - SEE CONSTRUCTION DETAIL
	TRAFFIC FLOW ARROW
	DRUM WITH/WITHOUT LIGHT, TYPE C
	FLEXIBLE TUBULAR MARKERS
	CONCRETE BARRIER TEMPORARY PRECAST
	CRASH CUSHIONS TEMPORARY
	SIGN ON PERMANENT/TEMPORARY SUPPORT
	TYPE II BARRICADE WITH/WITHOUT SIGN
	TYPE III BARRICADE WITH/WITHOUT SIGN

4W	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE
4Y	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW
4YD	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW (DOUBLE LINES)
8W	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE
4WD	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE (3 FT LINE 9 FT SPACE)
8WD	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE (3 FT LINE 9 FT SPACE)
4WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, WHITE
4YR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW
4YDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW (DOUBLE LINES)
8WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE
8WDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE (3 FT LINE 9 FT SPACE)

PROJECT NO: 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TRAFFIC CONTROL STAGE 4: MAIN STREET (STH 74)	SHEET 405	E

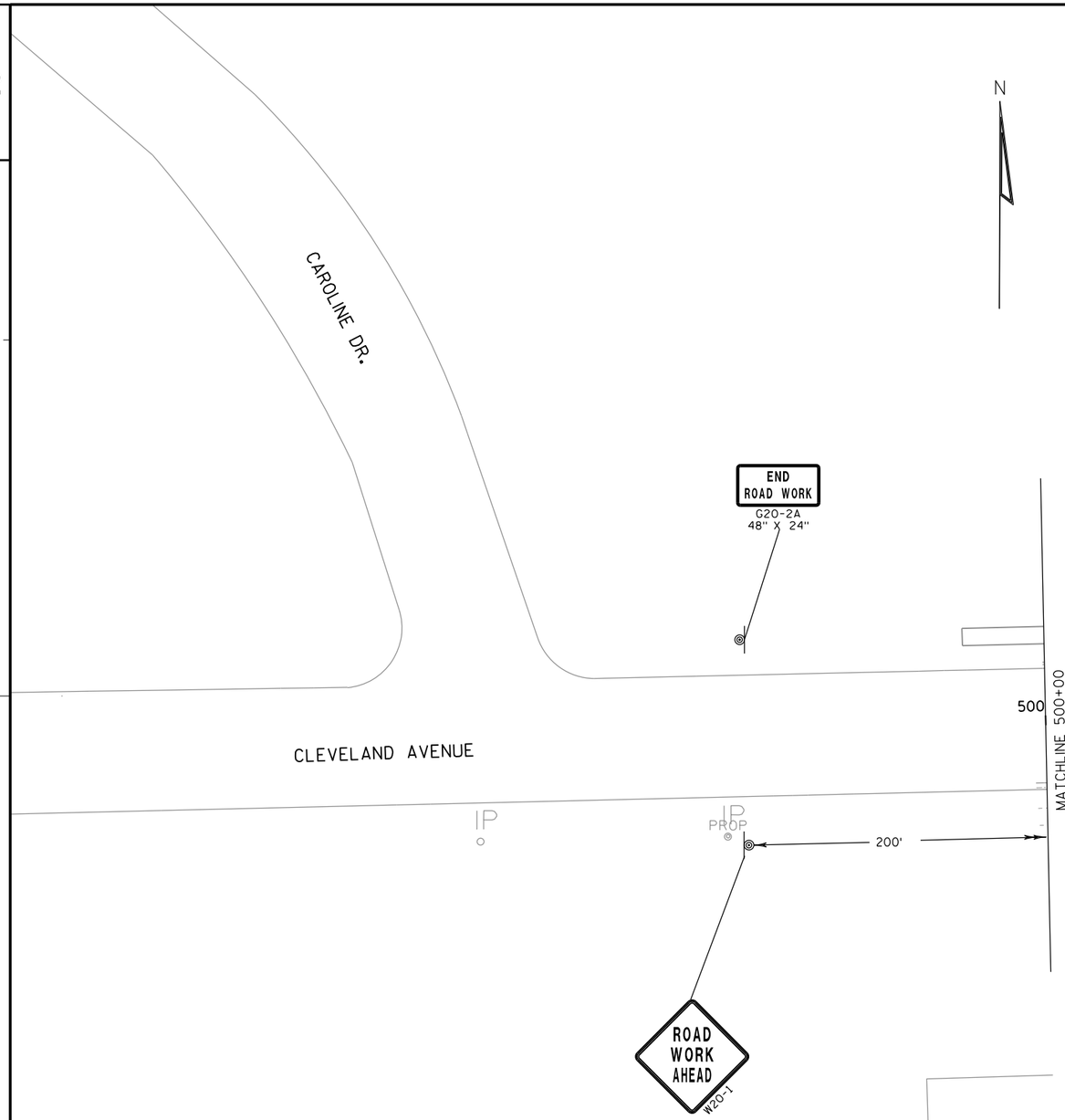
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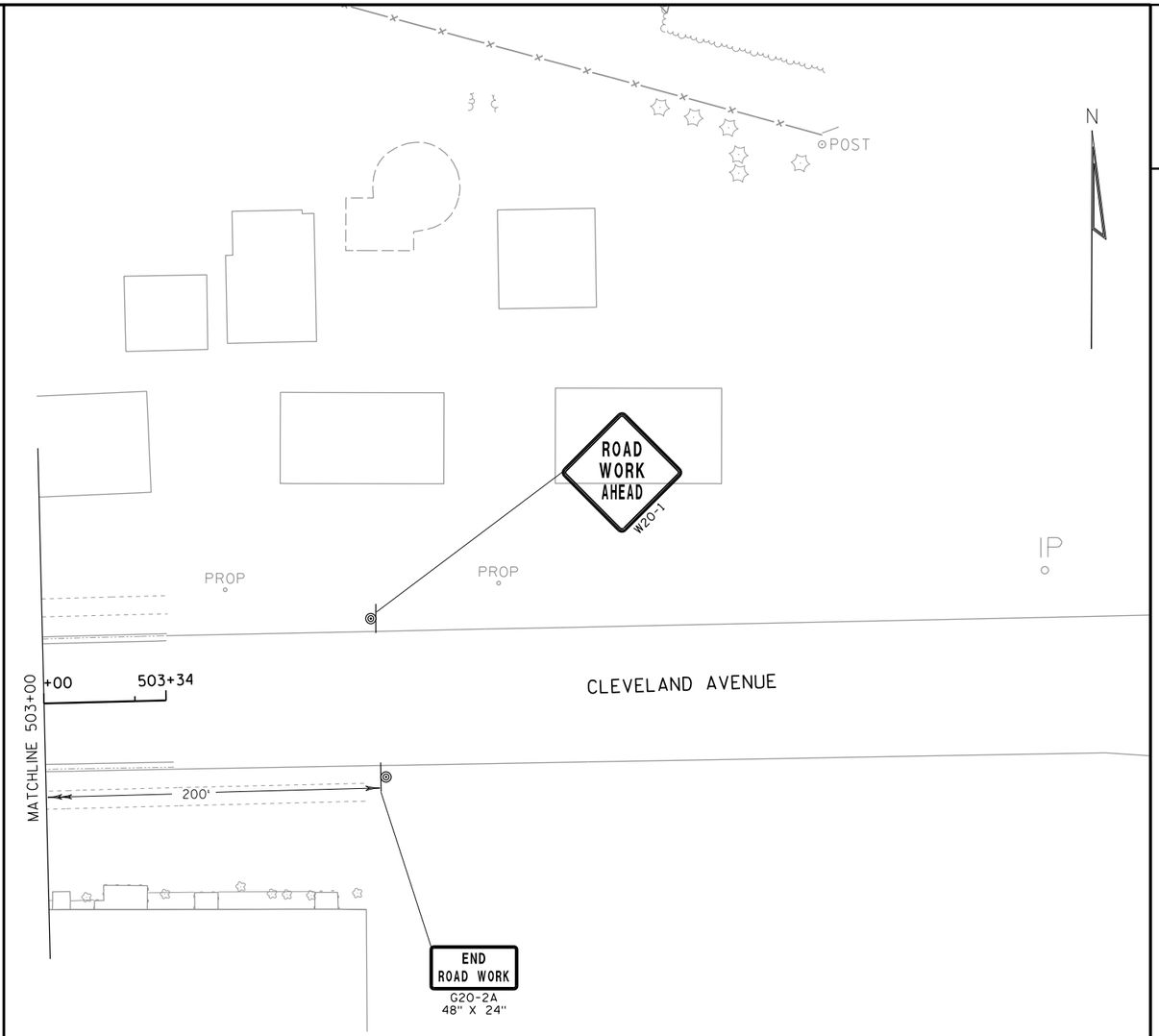


LEGEND

PM	PERMANENT MARKINGS	4W	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE
	WORK ZONE	4Y	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW
	CONSTRUCTION WORK UNDER TRAFFIC	4YD	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW (DOUBLE LINES)
	TEMPORARY PAVEMENT PLACED DURING STAGE	8W	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE
	TEMPORARY PAVEMENT PLACED IN PREVIOUS STAGE	4WD	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE (3 FT LINE 9 FT SPACE)
	TEMPORARY CROSSWALK - SEE CONSTRUCTION DETAIL	8WD	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE (3 FT LINE 9 FT SPACE)
	TRAFFIC FLOW ARROW	4WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, WHITE
	DRUM WITH/WITHOUT LIGHT, TYPE C	4YR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW
	FLEXIBLE TUBULAR MARKERS	4YDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW (DOUBLE LINES)
	CONCRETE BARRIER TEMPORARY PRECAST	8WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE
	CRASH CUSHIONS TEMPORARY	8WDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE (3 FT LINE 9 FT SPACE)
	SIGN ON PERMANENT/TEMPORARY SUPPORT		
	TYPE II BARRICADE WITH/WITHOUT SIGN		
	TYPE III BARRICADE WITH/WITHOUT SIGN		

PROJECT NO: 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TRAFFIC CONTROL STAGE 4: MAIN STREET (STH 74)	SHEET 406	E



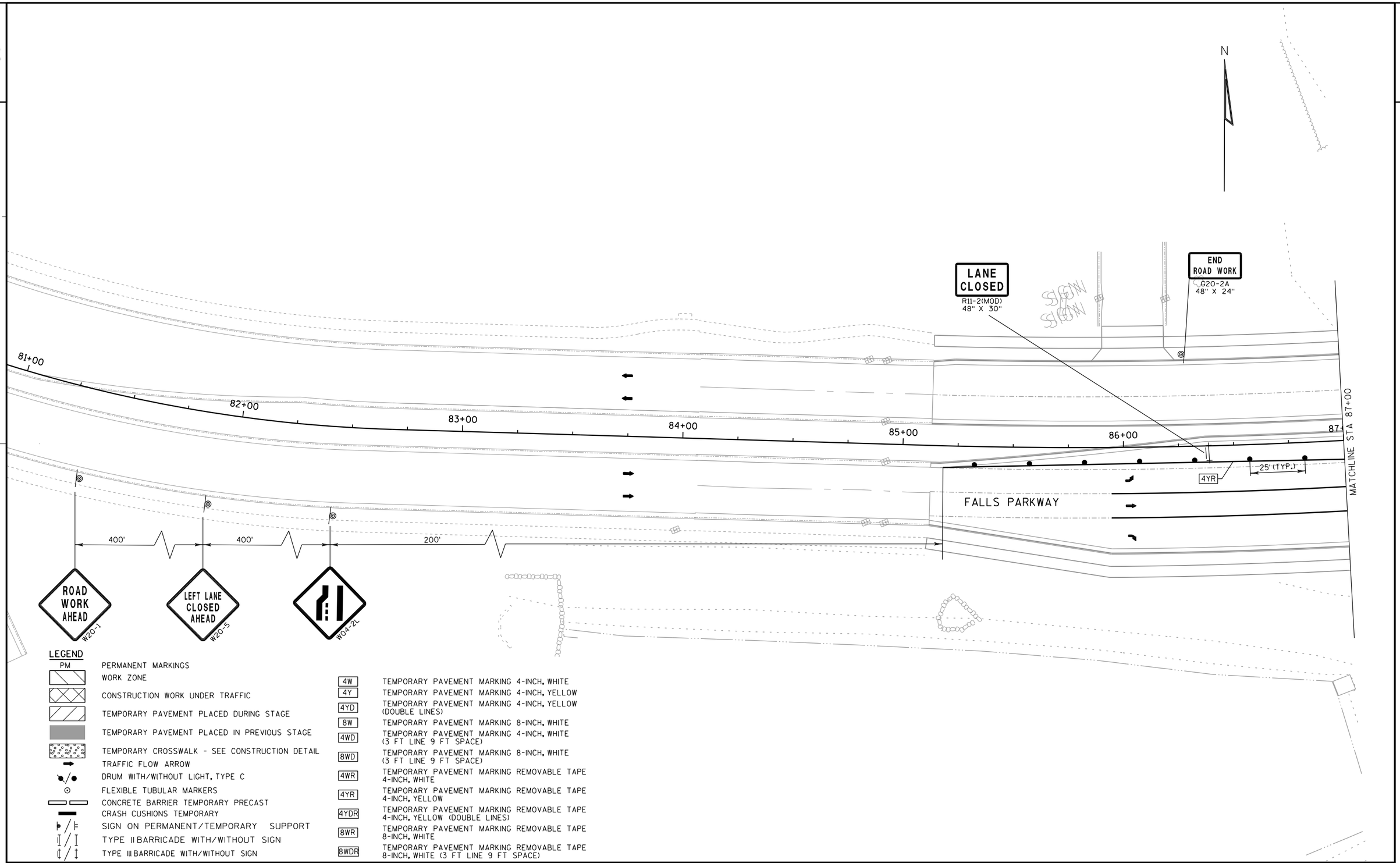


LEGEND

PM	PERMANENT MARKINGS	4W	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE
	WORK ZONE	4Y	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW
	CONSTRUCTION WORK UNDER TRAFFIC	4YD	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW (DOUBLE LINES)
	TEMPORARY PAVEMENT PLACED DURING STAGE	8W	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE
	TEMPORARY PAVEMENT PLACED IN PREVIOUS STAGE	4WD	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE (3 FT LINE 9 FT SPACE)
	TEMPORARY CROSSWALK - SEE CONSTRUCTION DETAIL	8WD	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE (3 FT LINE 9 FT SPACE)
	TRAFFIC FLOW ARROW	4WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, WHITE
	DRUM WITH/WITHOUT LIGHT, TYPE C	4YR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW
	FLEXIBLE TUBULAR MARKERS	4YDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW (DOUBLE LINES)
	CONCRETE BARRIER TEMPORARY PRECAST	8WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE
	CRASH CUSHIONS TEMPORARY	8WDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE (3 FT LINE 9 FT SPACE)
	SIGN ON PERMANENT/TEMPORARY SUPPORT		
	TYPE II BARRICADE WITH/WITHOUT SIGN		
	TYPE III BARRICADE WITH/WITHOUT SIGN		

PROJECT NO: 2782-11-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TRAFFIC CONTROL STAGE 4: CLEVELAND AVENUE	SHEET 407	E

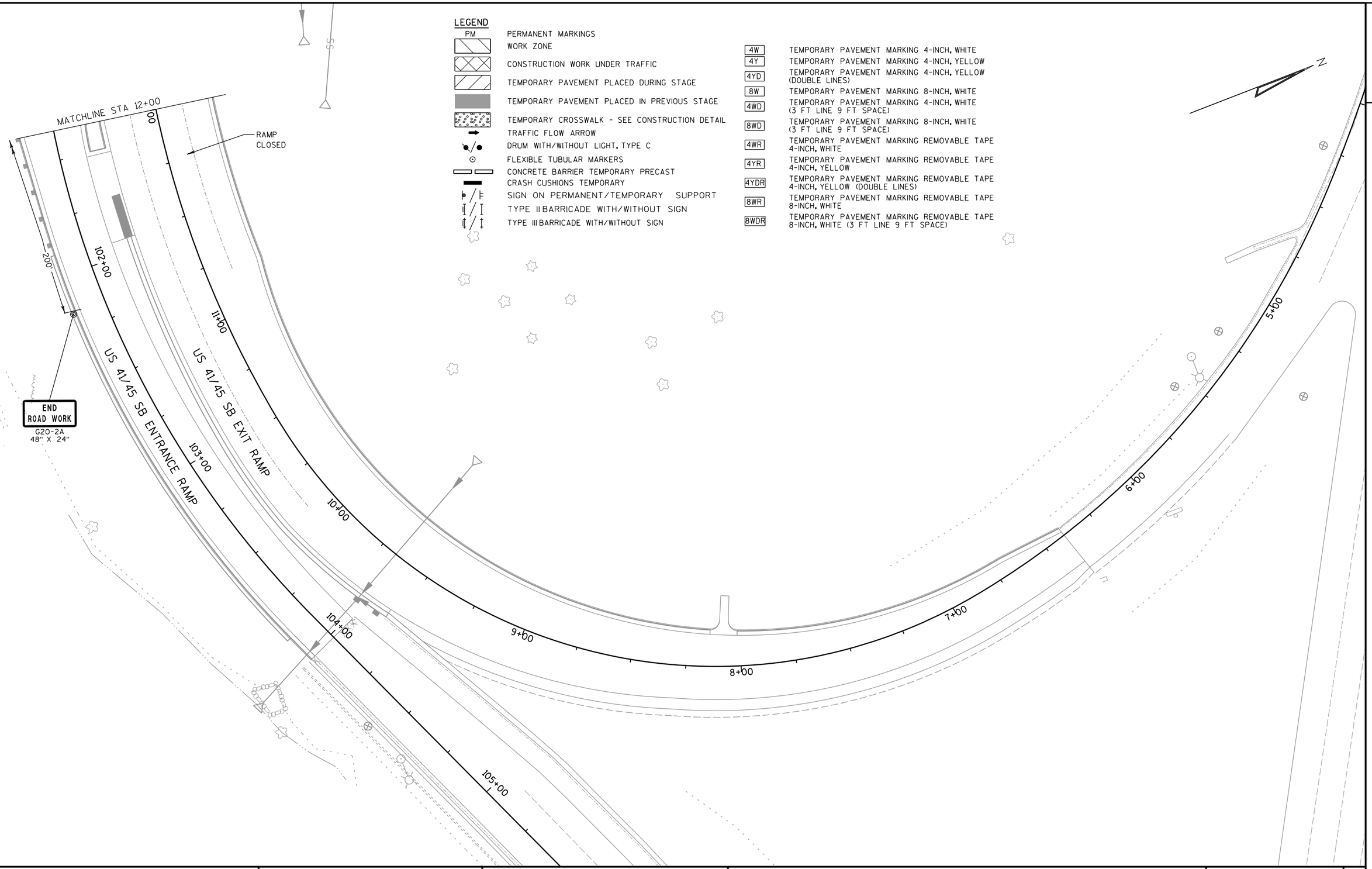
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LEGEND

PM	PERMANENT MARKINGS	4W	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE
	WORK ZONE	4Y	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW
	CONSTRUCTION WORK UNDER TRAFFIC	4YD	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW (DOUBLE LINES)
	TEMPORARY PAVEMENT PLACED DURING STAGE	8W	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE
	TEMPORARY PAVEMENT PLACED IN PREVIOUS STAGE	4WD	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE (3 FT LINE 9 FT SPACE)
	TEMPORARY CROSSWALK - SEE CONSTRUCTION DETAIL	8WD	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE (3 FT LINE 9 FT SPACE)
	TRAFFIC FLOW ARROW	4WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, WHITE
	DRUM WITH/WITHOUT LIGHT, TYPE C	4YR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW
	FLEXIBLE TUBULAR MARKERS	4YDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW (DOUBLE LINES)
	CONCRETE BARRIER TEMPORARY PRECAST	8WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE
	CRASH CUSHIONS TEMPORARY	8WDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE (3 FT LINE 9 FT SPACE)
	SIGN ON PERMANENT/TEMPORARY SUPPORT		
	TYPE II BARRICADE WITH/WITHOUT SIGN		
	TYPE III BARRICADE WITH/WITHOUT SIGN		

PROJECT NO: 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TRAFFIC CONTROL STAGE 4: FALLS PARKWAY	SHEET 408	E



LEGEND

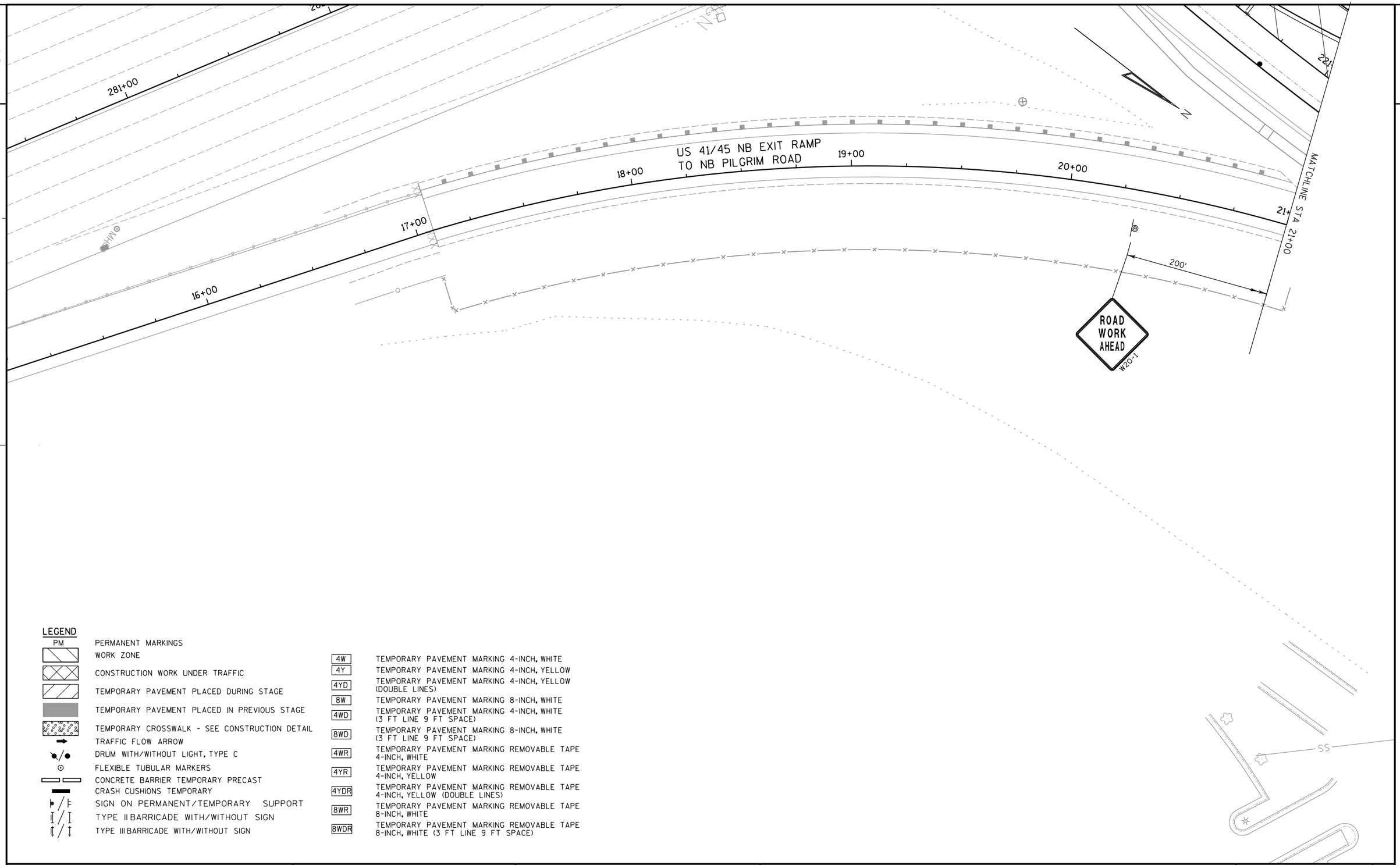
PM	PERMANENT MARKINGS
	WORK ZONE
	CONSTRUCTION WORK UNDER TRAFFIC
	TEMPORARY PAVEMENT PLACED DURING STAGE
	TEMPORARY PAVEMENT PLACED IN PREVIOUS STAGE
	TEMPORARY CROSSWALK - SEE CONSTRUCTION DETAIL
	TRAFFIC FLOW ARROW
	DRUM WITH/WITHOUT LIGHT, TYPE C
	FLEXIBLE TUBULAR MARKERS
	CONCRETE BARRIER TEMPORARY PRECAST
	CRASH CUSHIONS TEMPORARY
	SIGN ON PERMANENT/TEMPORARY SUPPORT
	TYPE II BARRICADE WITH/WITHOUT SIGN
	TYPE III BARRICADE WITH/WITHOUT SIGN

4W	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE
4Y	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW
4YD	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW (DOUBLE LINES)
8W	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE
4WD	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE (3 FT LINE 9 FT SPACE)
8WD	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE (3 FT LINE 9 FT SPACE)
4WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, WHITE
4YR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW
4YDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW (DOUBLE LINES)
8WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE
8WDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE (3 FT LINE 9 FT SPACE)

2

PROJECT NO: 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TRAFFIC CONTROL STAGE 4: US 41/45 SB RAMPS	SHEET 409	E

2



LEGEND

PM	PERMANENT MARKINGS
	WORK ZONE
	CONSTRUCTION WORK UNDER TRAFFIC
	TEMPORARY PAVEMENT PLACED DURING STAGE
	TEMPORARY PAVEMENT PLACED IN PREVIOUS STAGE
	TEMPORARY CROSSWALK - SEE CONSTRUCTION DETAIL
	TRAFFIC FLOW ARROW
	DRUM WITH/WITHOUT LIGHT, TYPE C
	FLEXIBLE TUBULAR MARKERS
	CONCRETE BARRIER TEMPORARY PRECAST
	CRASH CUSHIONS TEMPORARY
	SIGN ON PERMANENT/TEMPORARY SUPPORT
	TYPE II BARRICADE WITH/WITHOUT SIGN
	TYPE III BARRICADE WITH/WITHOUT SIGN

4W	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE
4Y	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW
4YD	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW (DOUBLE LINES)
8W	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE
4WD	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE (3 FT LINE 9 FT SPACE)
8WD	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE (3 FT LINE 9 FT SPACE)
4WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, WHITE
4YR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW
4YDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW (DOUBLE LINES)
8WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE
8WDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE (3 FT LINE 9 FT SPACE)

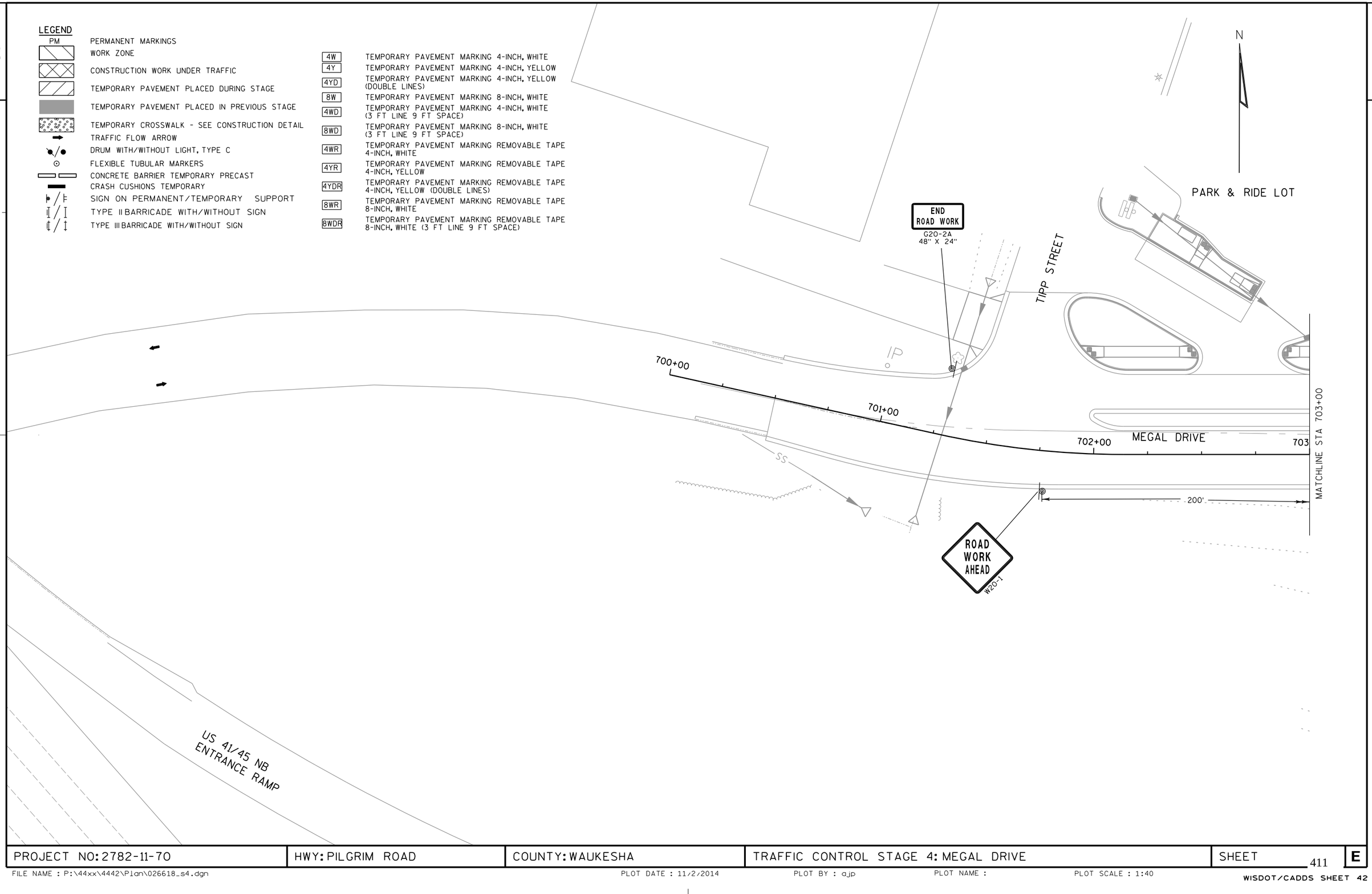
PROJECT NO: 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TRAFFIC CONTROL STAGE 4: US 41/45 NB EXIT RAMP TO NB PILGRIM	SHEET 410	E

FILE NAME : P:\44xx\4442\Plan\026617_s4.dgn PLOT DATE : 11/2/2014 PLOT BY : ajp PLOT NAME : PLOT SCALE : 1:40
WISDOT/CADDS SHEET 42

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LEGEND

PM	PERMANENT MARKINGS		
	WORK ZONE	4W	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE
	CONSTRUCTION WORK UNDER TRAFFIC	4Y	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW
	TEMPORARY PAVEMENT PLACED DURING STAGE	4YD	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW (DOUBLE LINES)
	TEMPORARY PAVEMENT PLACED IN PREVIOUS STAGE	8W	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE
	TEMPORARY CROSSWALK - SEE CONSTRUCTION DETAIL	4WD	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE (3 FT LINE 9 FT SPACE)
	TRAFFIC FLOW ARROW	8WD	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE (3 FT LINE 9 FT SPACE)
	DRUM WITH/WITHOUT LIGHT, TYPE C	4WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, WHITE
	FLEXIBLE TUBULAR MARKERS	4YR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW
	CONCRETE BARRIER TEMPORARY PRECAST	4YDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW (DOUBLE LINES)
	CRASH CUSHIONS TEMPORARY	8WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE
	SIGN ON PERMANENT/TEMPORARY SUPPORT	8WDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE (3 FT LINE 9 FT SPACE)
	TYPE II BARRICADE WITH/WITHOUT SIGN		
	TYPE III BARRICADE WITH/WITHOUT SIGN		

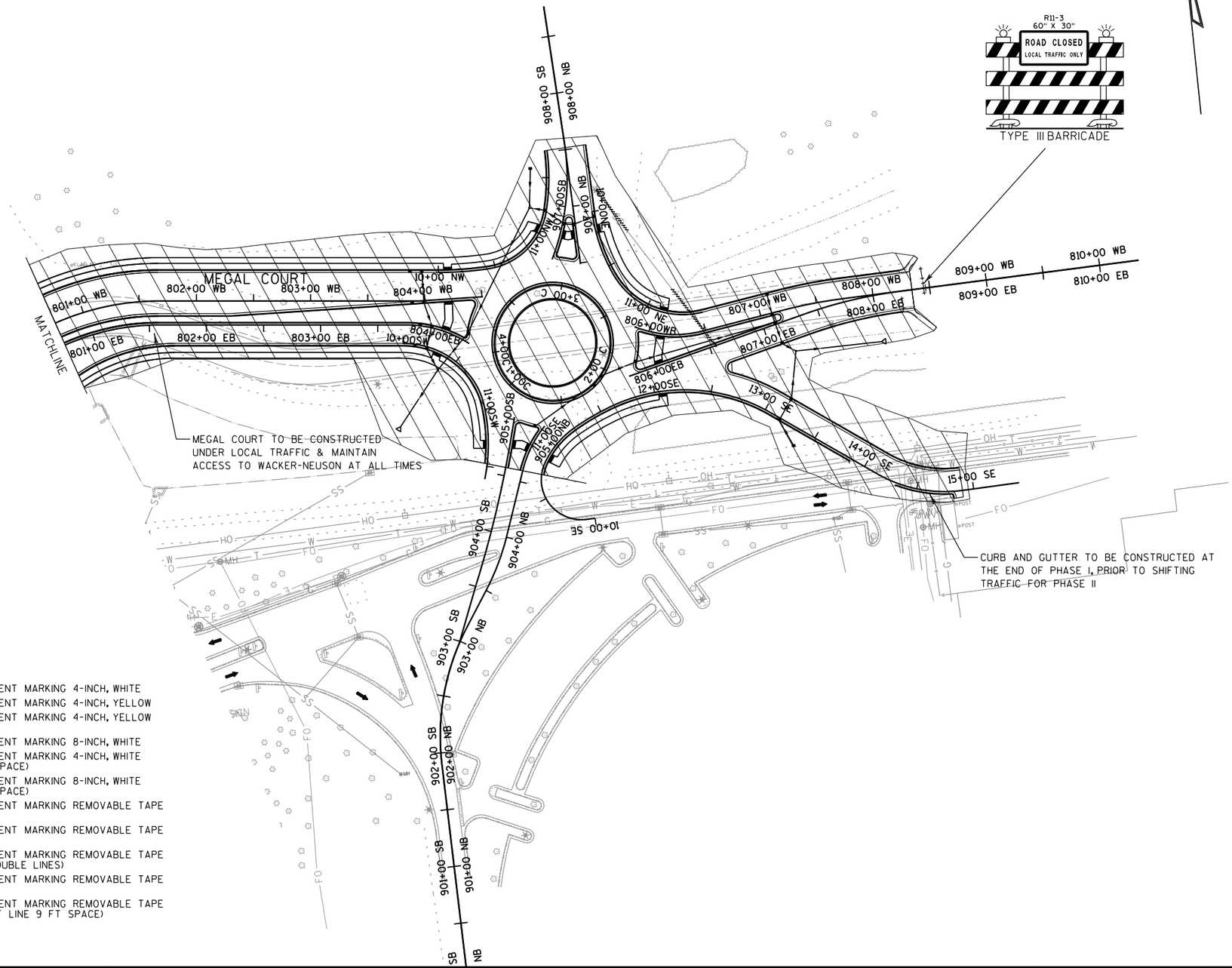


PROJECT NO: 2782-11-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TRAFFIC CONTROL STAGE 4: MEGAL DRIVE	SHEET 411	E

FILE NAME : P:\44xx\4442\Plan\026618_s4.dgn PLOT DATE : 11/2/2014 PLOT BY : ajp PLOT NAME : PLOT SCALE : 1:40

WISDOT/CADDS SHEET 42

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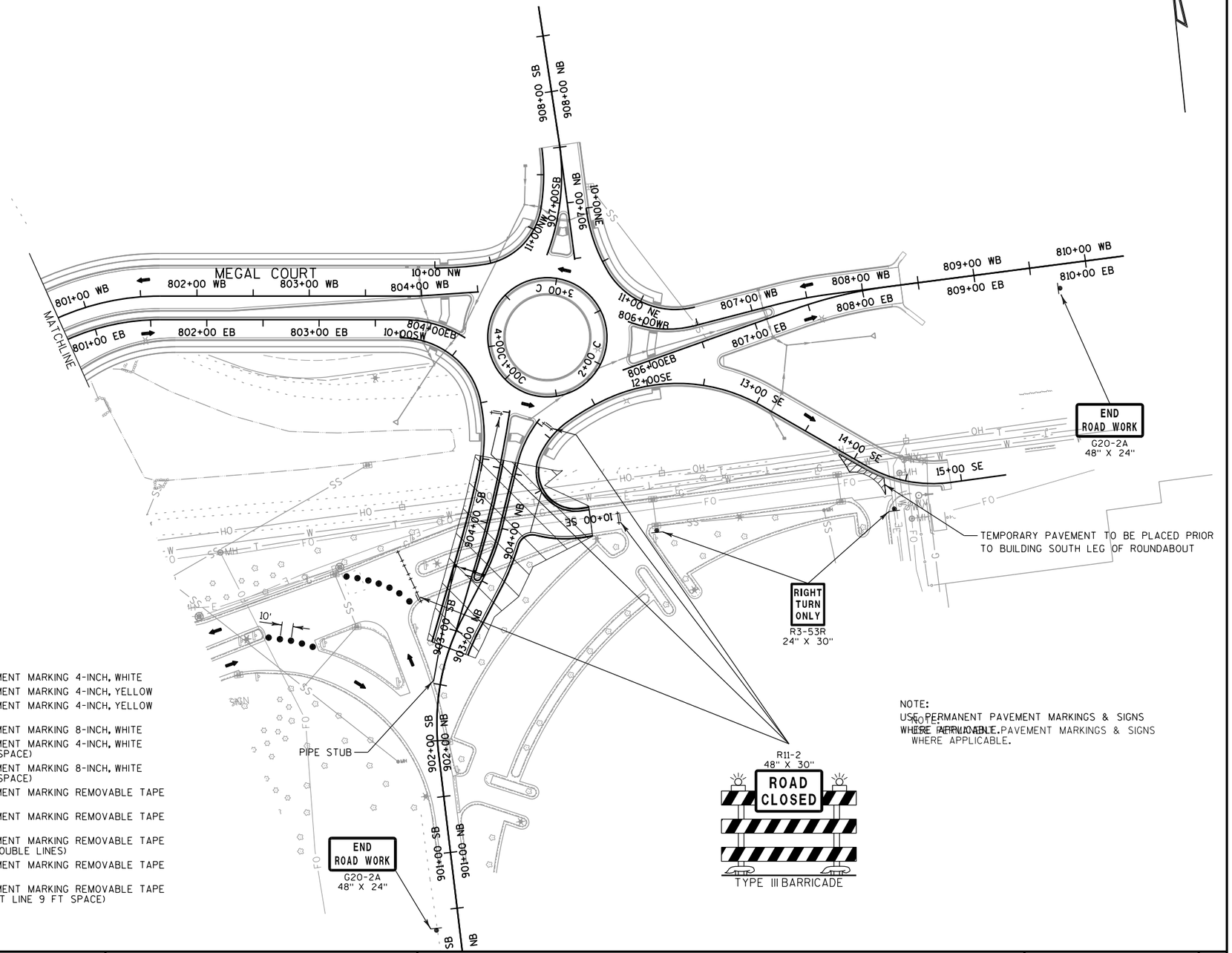
LEGEND

PM	PERMANENT MARKINGS
	WORK ZONE
	CONSTRUCTION WORK UNDER TRAFFIC
	TEMPORARY PAVEMENT PLACED DURING STAGE
	TEMPORARY PAVEMENT PLACED IN PREVIOUS STAGE
	TEMPORARY CROSSWALK - SEE CONSTRUCTION DETAIL
	TRAFFIC FLOW ARROW
	DRUM WITH/WITHOUT LIGHT, TYPE C
	FLEXIBLE TUBULAR MARKERS
	CONCRETE BARRIER TEMPORARY PRECAST
	CRASH CUSHIONS TEMPORARY
	SIGN ON PERMANENT/TEMPORARY SUPPORT
	TYPE II BARRICADE WITH/WITHOUT SIGN
	TYPE III BARRICADE WITH/WITHOUT SIGN

4W	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE
4Y	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW
4YD	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW (DOUBLE LINES)
8W	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE
4WD	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE (3 FT LINE 9 FT SPACE)
8WD	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE (3 FT LINE 9 FT SPACE)
4WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, WHITE
4YR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW
4YDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW (DOUBLE LINES)
8WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE
8WDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE (3 FT LINE 9 FT SPACE)

PROJECT NO: 2720-10-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TRAFFIC CONTROL: MEGAL COURT PHASE I	SHEET 412	E

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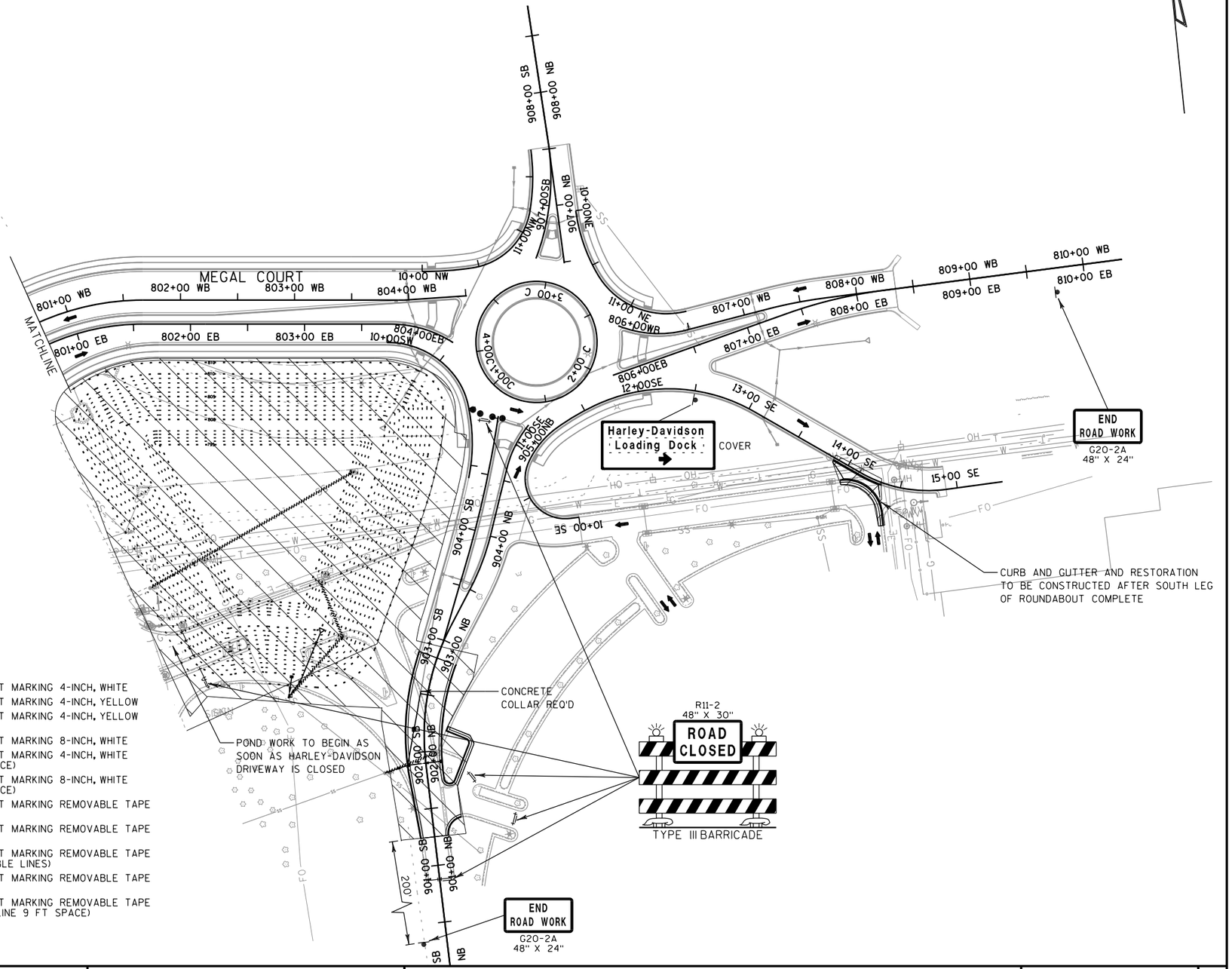


LEGEND

PM	PERMANENT MARKINGS	4W	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE
	WORK ZONE	4Y	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW
	CONSTRUCTION WORK UNDER TRAFFIC	4YD	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW (DOUBLE LINES)
	TEMPORARY PAVEMENT PLACED DURING STAGE	8W	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE
	TEMPORARY PAVEMENT PLACED IN PREVIOUS STAGE	4WD	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE (3 FT LINE 9 FT SPACE)
	TEMPORARY CROSSWALK - SEE CONSTRUCTION DETAIL	8WD	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE (3 FT LINE 9 FT SPACE)
	TRAFFIC FLOW ARROW	4WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, WHITE
	DRUM WITH/WITHOUT LIGHT, TYPE C	4YR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW
	FLEXIBLE TUBULAR MARKERS	4YDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW (DOUBLE LINES)
	CONCRETE BARRIER TEMPORARY PRECAST	8WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE
	CRASH CUSHIONS TEMPORARY	8WDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE (3 FT LINE 9 FT SPACE)
	SIGN ON PERMANENT/TEMPORARY SUPPORT		
	TYPE II BARRICADE WITH/WITHOUT SIGN		
	TYPE III BARRICADE WITH/WITHOUT SIGN		

PROJECT NO: 2720-10-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TRAFFIC CONTROL: MEGAL COURT PHASE II	SHEET 413	E

2

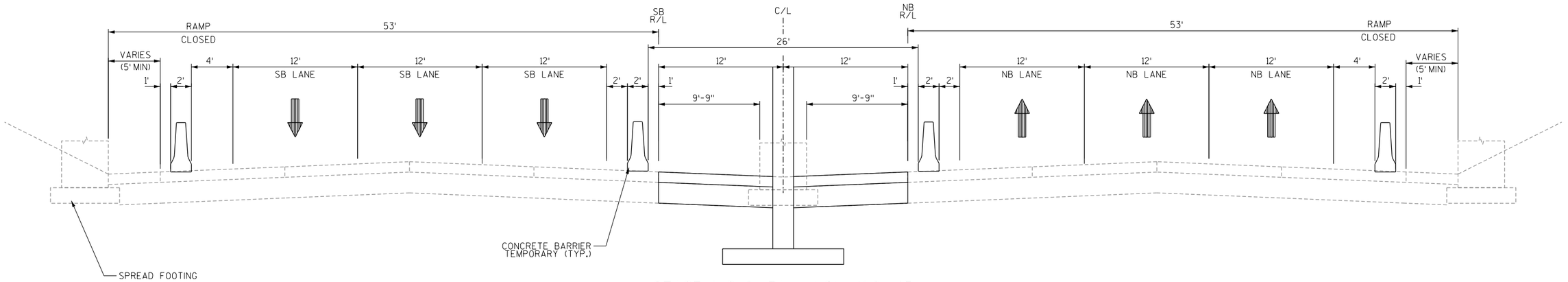


LEGEND

PM	PERMANENT MARKINGS
	WORK ZONE
	CONSTRUCTION WORK UNDER TRAFFIC
	TEMPORARY PAVEMENT PLACED DURING STAGE
	TEMPORARY PAVEMENT PLACED IN PREVIOUS STAGE
	TEMPORARY CROSSWALK - SEE CONSTRUCTION DETAIL
	TRAFFIC FLOW ARROW
	DRUM WITH/WITHOUT LIGHT, TYPE C
	FLEXIBLE TUBULAR MARKERS
	CONCRETE BARRIER TEMPORARY PRECAST
	CRASH CUSHIONS TEMPORARY
	SIGN ON PERMANENT/TEMPORARY SUPPORT
	TYPE II BARRICADE WITH/WITHOUT SIGN
	TYPE III BARRICADE WITH/WITHOUT SIGN

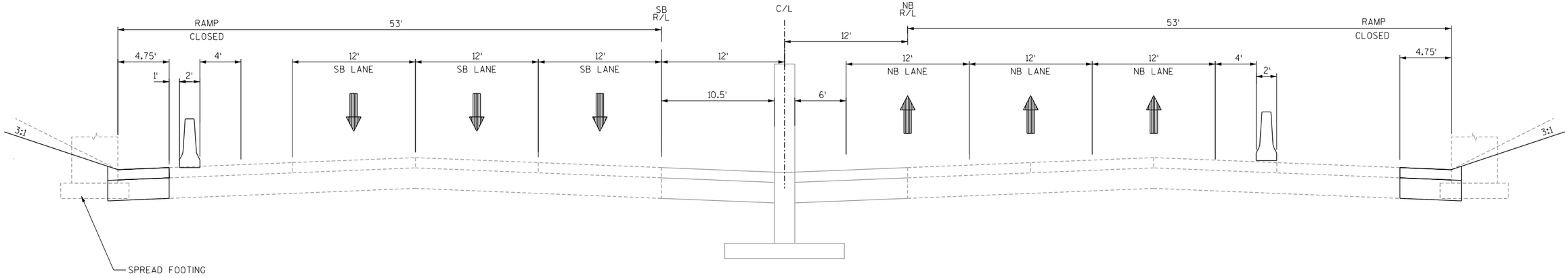
4W	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE
4Y	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW
4YD	TEMPORARY PAVEMENT MARKING 4-INCH, YELLOW (DOUBLE LINES)
8W	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE
4WD	TEMPORARY PAVEMENT MARKING 4-INCH, WHITE (3 FT LINE 9 FT SPACE)
8WD	TEMPORARY PAVEMENT MARKING 8-INCH, WHITE (3 FT LINE 9 FT SPACE)
4WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, WHITE
4YR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW
4YDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW (DOUBLE LINES)
8WR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE
8WDR	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH, WHITE (3 FT LINE 9 FT SPACE)

PROJECT NO: 2720-10-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TRAFFIC CONTROL: MEGAL COURT PHASE III	SHEET 414	E



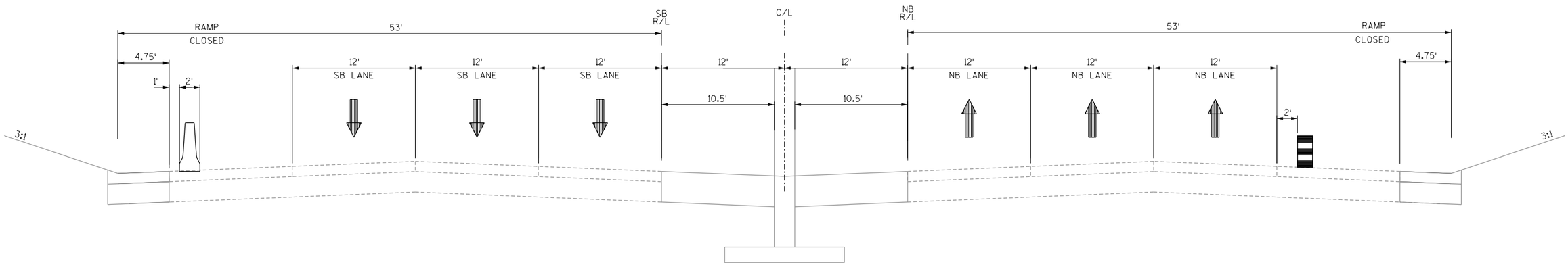
STAGE 1, 2 & 3A - USH 41 & 45

(THRU BRIDGES)



STAGE 3B - USH 41 & 45

(THRU BRIDGES)



STAGE 4 - USH 41 & 45

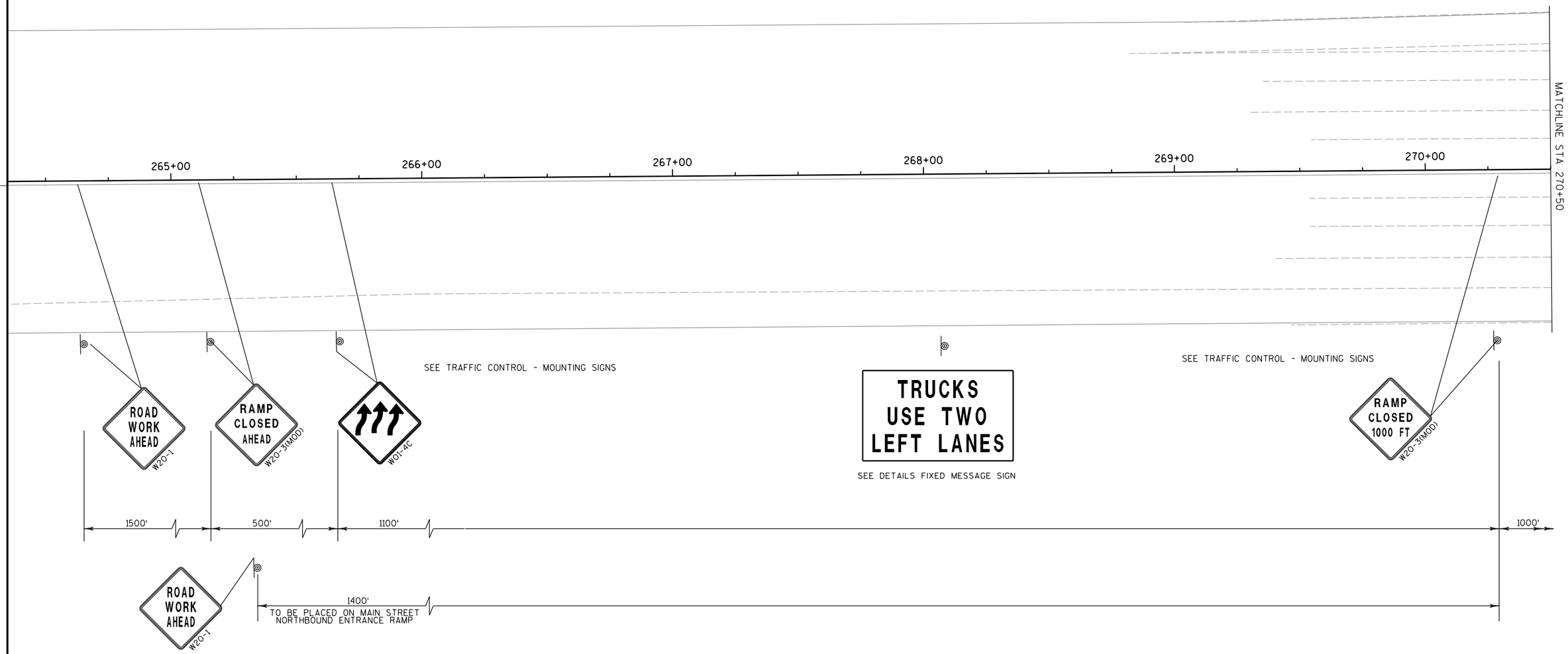
(THRU BRIDGES)

PROJECT NO: 1100-37-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TRAFFIC CONTROL: USH 41/45 - TYPICAL SECTIONS	SHEET 415	E

2

LEGEND

- WORK ZONE
- TRAFFIC FLOW ARROW
- DRUM WITH/WITHOUT LIGHT, TYPE C
- CONCRETE BARRIER TEMPORARY PRECAST
- CRASH CUSHIONS TEMPORARY
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TYPE III BARRICADE WITH/WITHOUT SIGN
- FLASHING ARROW BOARD
- 4WR — TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, WHITE
- 4YR — TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW
- FILL EXISTING RUMBLE STRIPS (STAGE 1)
  RESTORE EXISTING RUMBLE STRIPS (STAGE 4)



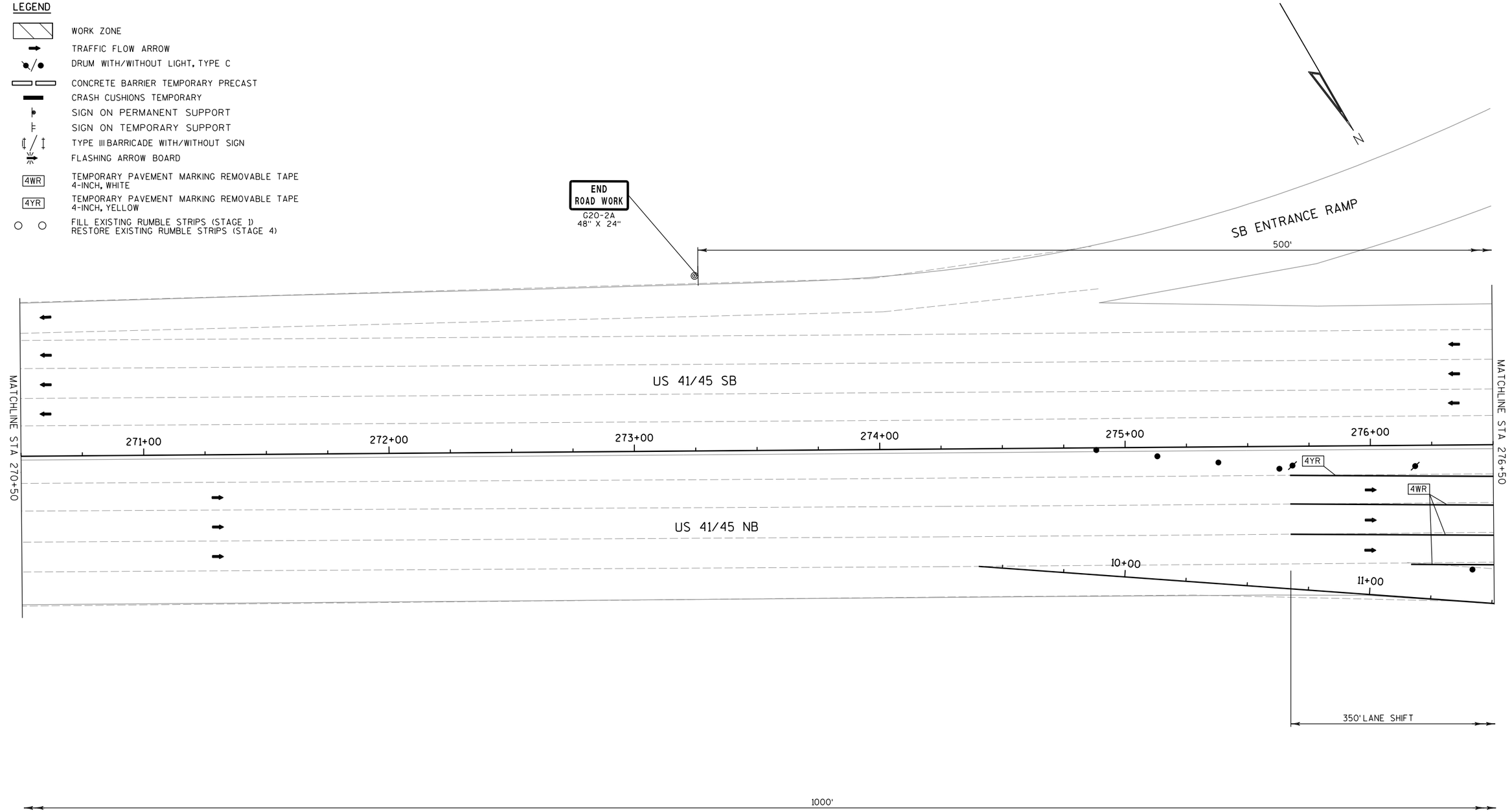
PROJECT NO: 1100-37-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TRAFFIC CONTROL: USH 41/45 - STAGE 1 & 2	SHEET 416	E

FILE NAME : P:\44xx\4442\Plan\026901_s1_41-45.dgn PLOT DATE : 11/2/2014 PLOT BY : ajp PLOT NAME : PLOT SCALE : 1:40

2

LEGEND

- WORK ZONE
- TRAFFIC FLOW ARROW
- DRUM WITH/WITHOUT LIGHT, TYPE C
- CONCRETE BARRIER TEMPORARY PRECAST
- CRASH CUSHIONS TEMPORARY
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TYPE III BARRICADE WITH/WITHOUT SIGN
- FLASHING ARROW BOARD
- 4WR — TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, WHITE
- 4YR — TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW
- FILL EXISTING RUMBLE STRIPS (STAGE 1)
  RESTORE EXISTING RUMBLE STRIPS (STAGE 4)



PROJECT NO: 1100-37-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TRAFFIC CONTROL: USH 41/45 - STAGE 1 & 2	SHEET 417	E

FILE NAME : P:\44xx\4442\Plan\026902_s1_41-45.dgn PLOT DATE : 11/2/2014 PLOT BY : ajp PLOT NAME : PLOT SCALE : 1:40

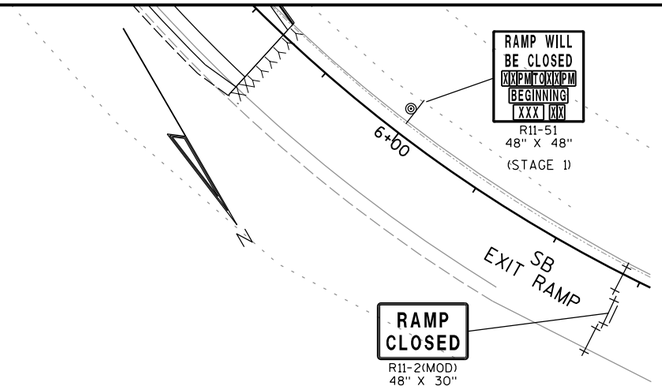
WISDOT/CADDS SHEET 42

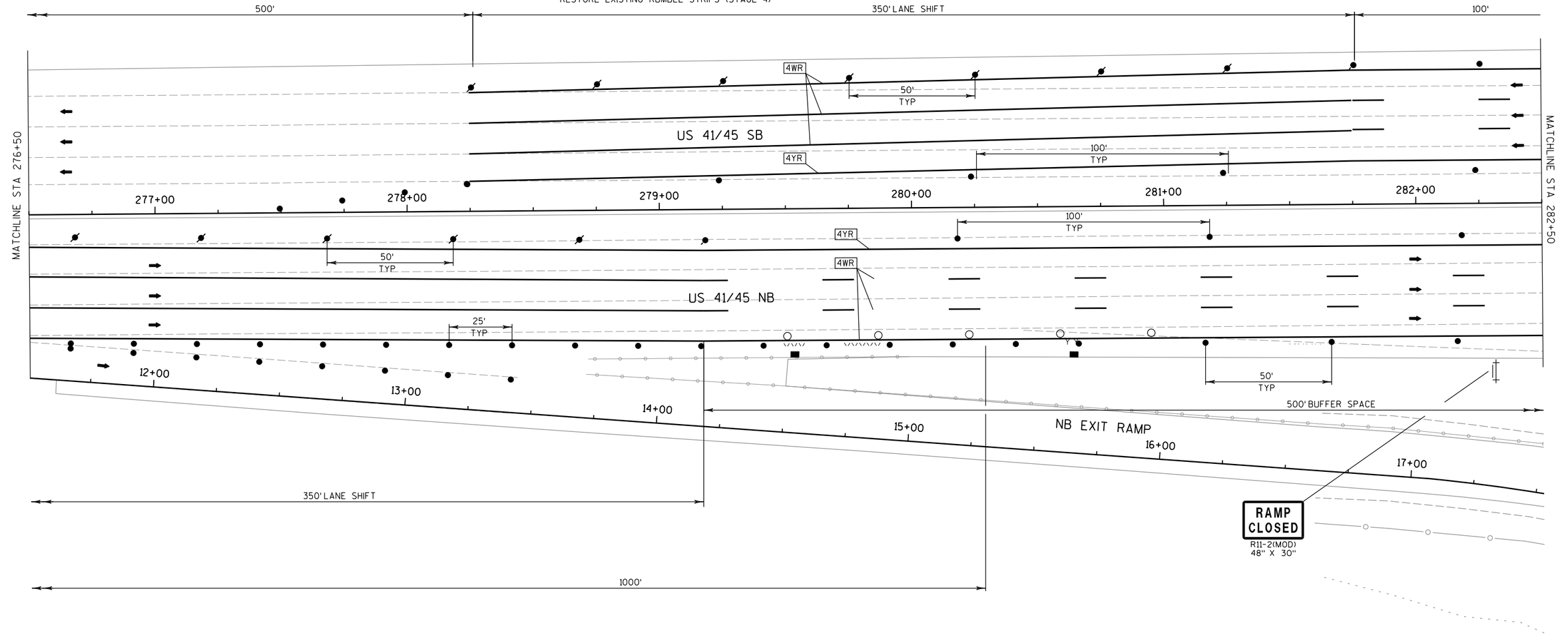
2

SB ENTRANCE RAMP

LEGEND

- WORK ZONE
- TRAFFIC FLOW ARROW
- DRUM WITH/WITHOUT LIGHT, TYPE C
- CONCRETE BARRIER TEMPORARY PRECAST
- CRASH CUSHIONS TEMPORARY
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TYPE III BARRICADE WITH/WITHOUT SIGN
- FLASHING ARROW BOARD
- 4WR — TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, WHITE
- 4YR — TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW
- FILL EXISTING RUMBLE STRIPS (STAGE 1) RESTORE EXISTING RUMBLE STRIPS (STAGE 4)





PROJECT NO: 1100-37-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TRAFFIC CONTROL: USH 41/45 - STAGE 1 & 2	SHEET 418	E

FILE NAME : P:\44xx\4442\Plan\026903_s1_41-45.dgn PLOT DATE : 11/2/2014 PLOT BY : ajp PLOT NAME : PLOT SCALE : 1:40

2

NOTE:
MEDIAN REMOVALS SOUTH OF STA. 285+90 ARE STAGE 1, NORTH OF STA. 285+90 ARE STAGE 3.

N

PILGRIM ROAD

217+00

218+00

5+00

4+00

SB EXIT RAMP

3+00

2+00

1+00

RAMP CLOSED
R11-2(MOD)
48" X 30"

SEE TRAFFIC CONTROL - MOUNTING SIGNS

W01-4C

500' BUFFER SPACE

50' TYP

US 41/45 SB

4WR

25' TYP

4YR

MATCHLINE STA 282+50

283+00

284+00

285+00

286+00

287+00

288+00

MATCHLINE STA 288+50

100' TYP

TEMPORARY MEDIAN STORM SEWER CONNECTION REQUIRED (STAGE 2)

US 41/45 NB

50' TYP

SS

500' BUFFER SPACE

SEE TRAFFIC CONTROL - MOUNTING SIGNS

W01-4C

RAMP CLOSED
R11-2(MOD)
48" X 30"

18+00

19+00

NB EXIT RAMP

20+00

220+00

221+00

LEGEND

- WORK ZONE
- TRAFFIC FLOW ARROW
- DRUM WITH/WITHOUT LIGHT, TYPE C
- CONCRETE BARRIER TEMPORARY PRECAST
- CRASH CUSHIONS TEMPORARY
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TYPE III BARRICADE WITH/WITHOUT SIGN
- FLASHING ARROW BOARD
- 4WR — TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, WHITE
- 4YR — TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW
- FILL EXISTING RUMBLE STRIPS (STAGE 1) RESTORE EXISTING RUMBLE STRIPS (STAGE 4)

PROJECT NO: 1100-37-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TRAFFIC CONTROL: USH 41/45 - STAGE 1 & 2	SHEET 419	E

2

2

LEGEND

- WORK ZONE
- TRAFFIC FLOW ARROW
- DRUM WITH/WITHOUT LIGHT, TYPE C
- CONCRETE BARRIER TEMPORARY PRECAST
- CRASH CUSHIONS TEMPORARY
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TYPE III BARRICADE WITH/WITHOUT SIGN
- FLASHING ARROW BOARD
- 4WR — TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, WHITE
- 4YR — TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW
- FILL EXISTING RUMBLE STRIPS (STAGE 1)
  RESTORE EXISTING RUMBLE STRIPS (STAGE 4)

N

RAMP CLOSED
R11-2(MOD)
48" X 30"

RAMP CLOSED
R11-2(MOD)
48" X 30"

500' BUFFER SPACE

350' LANE SHIFT TAPER

MATCHLINE STA 288+50

MATCHLINE STA 294+50

US 41/45 SB

US 41/45 NB

4WR

4YR

25' TYP

100' TYP

50' TYP

289+00

290+00

291+00

292+00

293+00

294+00

100'

350' LANE SHIFT

500'

NB EXIT RAMP

NB ENTRANCE RAMP

RAMP CLOSED
R11-2(MOD)
48" X 30"

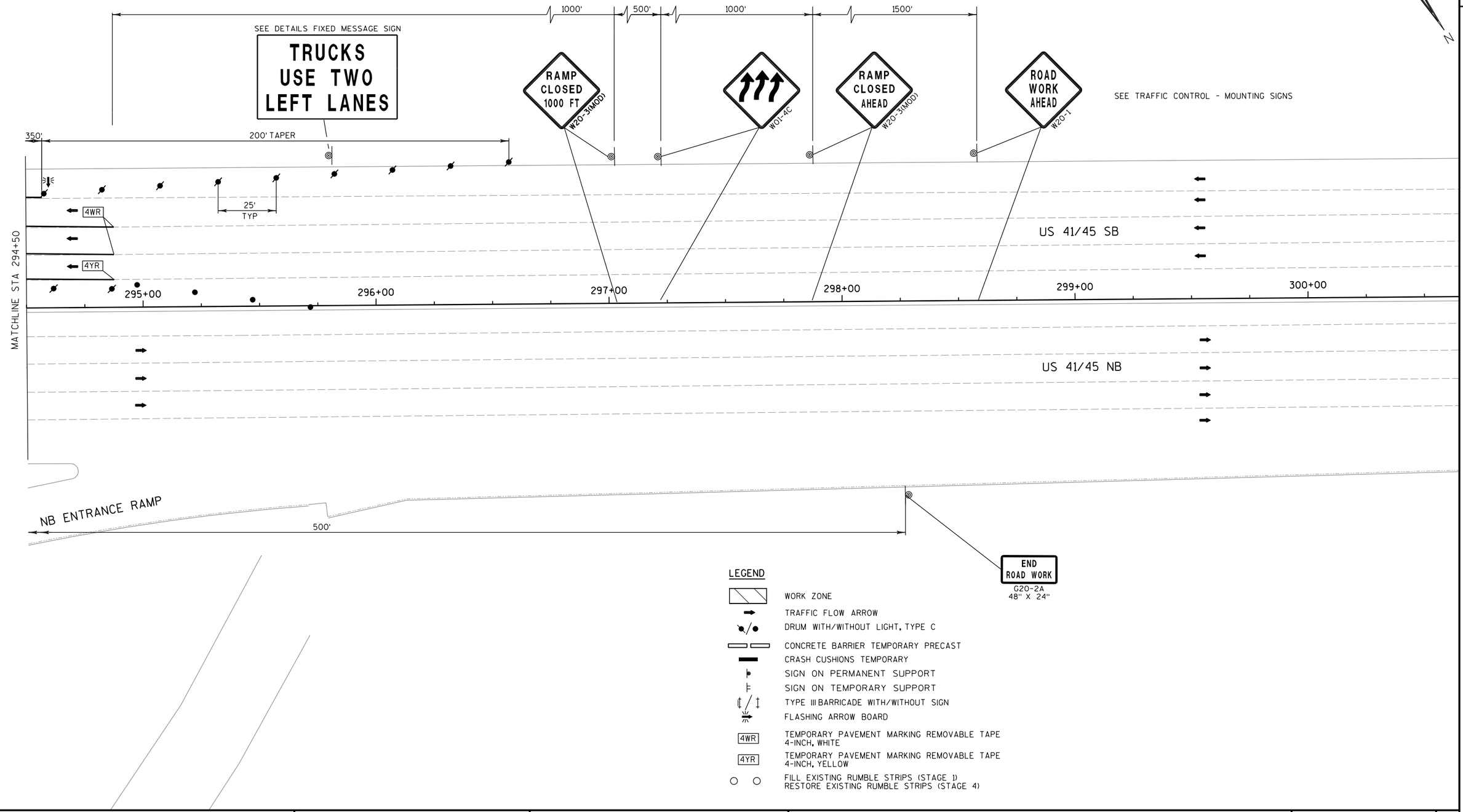
RAMP WILL BE CLOSED
XX PM TO XX PM
BEGINNING
XXX XX
R11-51
48" X 48"
(STAGE 1)

PROJECT NO: 1100-37-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TRAFFIC CONTROL: USH 41/45 - STAGE 1 & 2	SHEET 420	E

FILE NAME : P:\44xx\4442\Plan\026905_s1_41-45.dgn PLOT DATE : 11/2/2014 PLOT BY : ajp PLOT NAME : PLOT SCALE : 1:40

WISDOT/CADDS SHEET 42

2



LEGEND

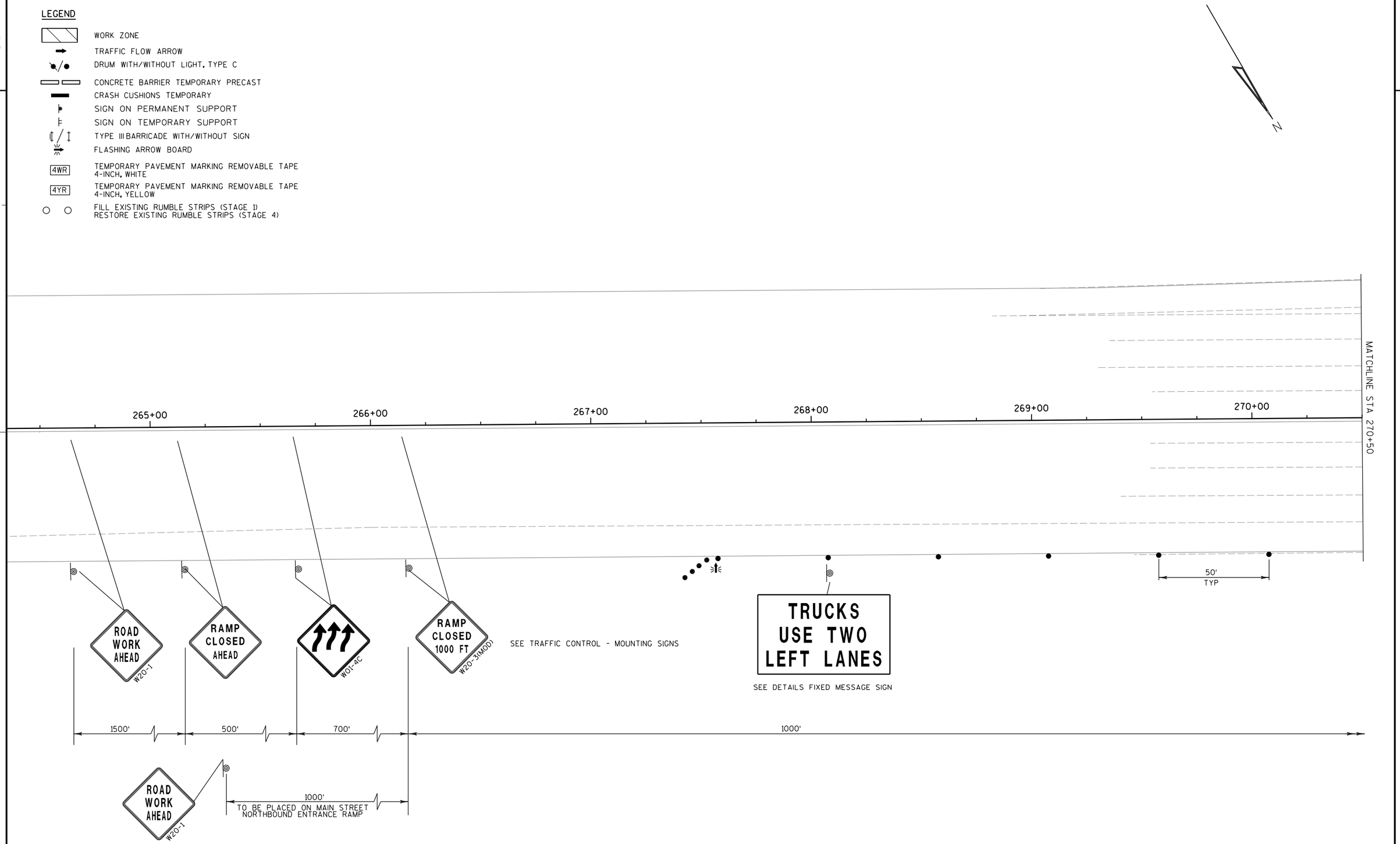
- WORK ZONE
- TRAFFIC FLOW ARROW
- DRUM WITH/WITHOUT LIGHT, TYPE C
- CONCRETE BARRIER TEMPORARY PRECAST
- CRASH CUSHIONS TEMPORARY
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TYPE III BARRICADE WITH/WITHOUT SIGN
- FLASHING ARROW BOARD
- 4WR — TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, WHITE
- 4YR — TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW
- FILL EXISTING RUMBLE STRIPS (STAGE 1)
  RESTORE EXISTING RUMBLE STRIPS (STAGE 4)

PROJECT NO: 1100-37-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TRAFFIC CONTROL: USH 41/45 - STAGE 1 & 2	SHEET 421	E

2

LEGEND

- WORK ZONE
- TRAFFIC FLOW ARROW
- DRUM WITH/WITHOUT LIGHT, TYPE C
- CONCRETE BARRIER TEMPORARY PRECAST
- CRASH CUSHIONS TEMPORARY
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TYPE III BARRICADE WITH/WITHOUT SIGN
- FLASHING ARROW BOARD
- 4WR — TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, WHITE
- 4YR — TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW
- FILL EXISTING RUMBLE STRIPS (STAGE 1)
  RESTORE EXISTING RUMBLE STRIPS (STAGE 4)



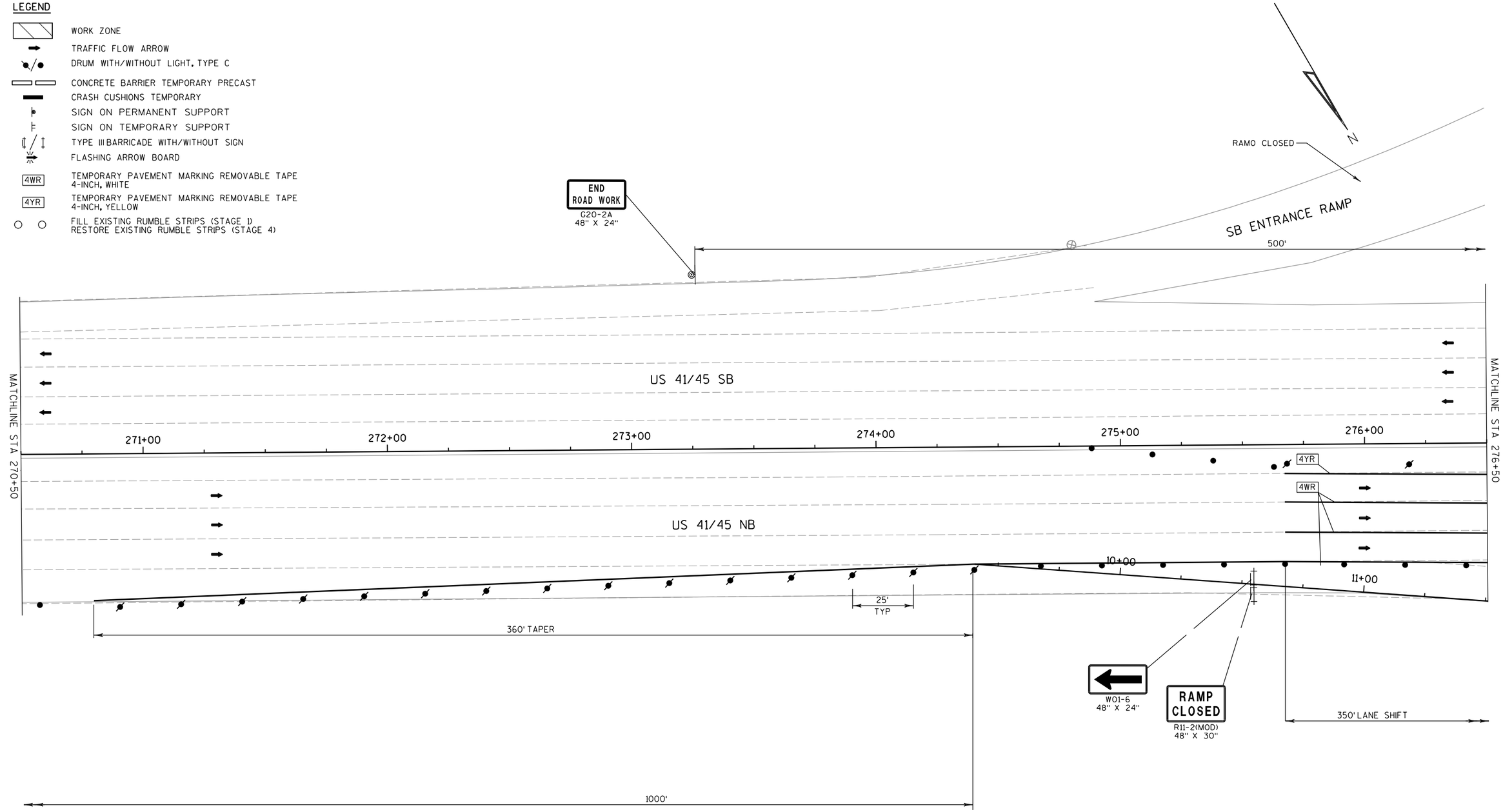
PROJECT NO: 1100-37-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TRAFFIC CONTROL: USH 41/45 - STAGE 3A	SHEET 422	E

FILE NAME : P:\44xx\4442\Plan\026907_s3a_41-45.dgn PLOT DATE : 11/2/2014 PLOT BY : ajp PLOT NAME : PLOT SCALE : 1:40

2

LEGEND

- WORK ZONE
- TRAFFIC FLOW ARROW
- DRUM WITH/WITHOUT LIGHT, TYPE C
- CONCRETE BARRIER TEMPORARY PRECAST
- CRASH CUSHIONS TEMPORARY
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TYPE III BARRICADE WITH/WITHOUT SIGN
- FLASHING ARROW BOARD
- 4WR — TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, WHITE
- 4YR — TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW
- FILL EXISTING RUMBLE STRIPS (STAGE 1) RESTORE EXISTING RUMBLE STRIPS (STAGE 4)



PROJECT NO: 1100-37-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TRAFFIC CONTROL: USH 41/45 - STAGE 3A	SHEET 423	E

FILE NAME : P:\44xx\4442\Plan\026908_s3a_41-45.dgn PLOT DATE : 11/2/2014 PLOT BY : ajp PLOT NAME : PLOT SCALE : 1:40

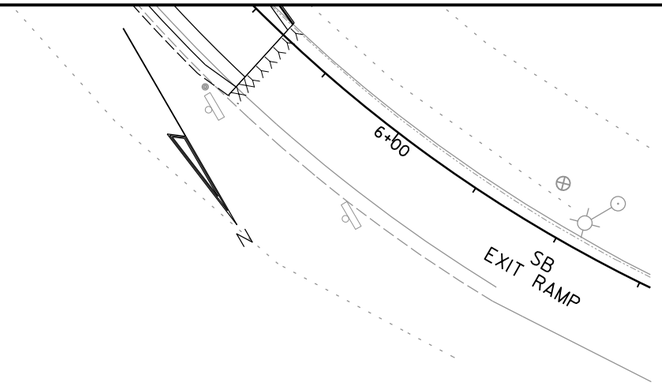
WISDOT/CADDS SHEET 42

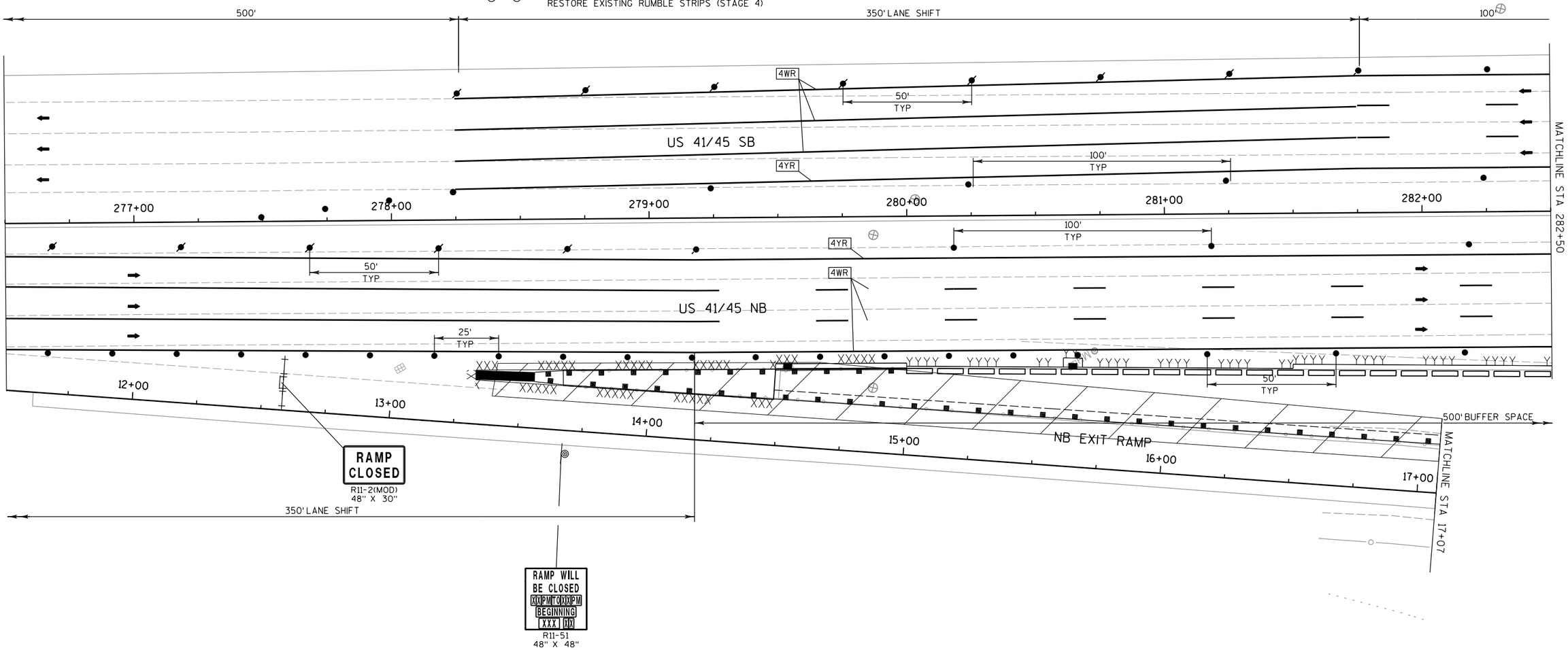
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SB ENTRANCE RAMP

LEGEND

- WORK ZONE
- TRAFFIC FLOW ARROW
- DRUM WITH/WITHOUT LIGHT, TYPE C
- CONCRETE BARRIER TEMPORARY PRECAST
- CRASH CUSHIONS TEMPORARY
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TYPE III BARRICADE WITH/WITHOUT SIGN
- FLASHING ARROW BOARD
- 4WR — TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, WHITE
- 4YR — TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW
- FILL EXISTING RUMBLE STRIPS (STAGE 1) RESTORE EXISTING RUMBLE STRIPS (STAGE 4)





PROJECT NO: 1100-37-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TRAFFIC CONTROL: USH 41/45 - STAGE 3A	SHEET 424	E

2

RAMP CLOSED
R11-2(MOD)
48" X 30"

SB EXIT RAMP

PILGRIM ROAD

217+00

218+00

220+00

221+00

5+00

4+00

3+00

2+00

1+00

SEE TRAFFIC CONTROL - MOUNTING SIGNS

W01-4C

500' BUFFER SPACE

50' TYP

25' TYP

100' TYP

4WR

4YR

US 41/45 SB

US 41/45 NB

MATCHLINE STA 282+50

MATCHLINE STA 288+50

283+00

284+00

285+00

286+00

287+00

288+00

TEMPORARY MEDIAN STORM SEWER CONNECTION REQUIRED

18+00

19+00

20+00

NB EXIT RAMP

LEGEND

- WORK ZONE
- TRAFFIC FLOW ARROW
- DRUM WITH/WITHOUT LIGHT, TYPE C
- CONCRETE BARRIER TEMPORARY PRECAST
- CRASH CUSHIONS TEMPORARY
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TYPE III BARRICADE WITH/WITHOUT SIGN
- FLASHING ARROW BOARD
- 4WR — TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, WHITE
- 4YR — TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW
- FILL EXISTING RUMBLE STRIPS (STAGE 1) RESTORE EXISTING RUMBLE STRIPS (STAGE 4)

PROJECT NO: 1100-37-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TRAFFIC CONTROL: USH 41/45 - STAGE 3A	SHEET 425	E

2

2

LEGEND

- WORK ZONE
- TRAFFIC FLOW ARROW
- DRUM WITH/WITHOUT LIGHT, TYPE C
- CONCRETE BARRIER TEMPORARY PRECAST
- CRASH CUSHIONS TEMPORARY
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TYPE III BARRICADE WITH/WITHOUT SIGN
- FLASHING ARROW BOARD
- 4WR — TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, WHITE
- 4YR — TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW
- FILL EXISTING RUMBLE STRIPS (STAGE 1) RESTORE EXISTING RUMBLE STRIPS (STAGE 4)

N

RAMP CLOSED
R11-2(MOD)
48" X 30"

RAMP CLOSED
R11-2(MOD)
48" X 30"

500' BUFFER SPACE

350' LANE SHIFT TAPER

MATCHLINE STA 288+50

MATCHLINE STA 294+50

US 41/45 SB

US 41/45 NB

289+00 290+00 291+00 292+00 293+00 294+00

25' TYP

100' TYP

50' TYP

100'

350' LANE SHIFT

500'

RAMP CLOSED
R11-2(MOD)
48" X 30"

NB EXIT RAMP

NB ENTRANCE RAMP

PROJECT NO: 1100-37-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TRAFFIC CONTROL: USH 41/45 - STAGE 3A	SHEET 426	E

FILE NAME : P:\44xx\4442\Plan\026911_s3a_41-45.dgn PLOT DATE : 11/2/2014 PLOT BY : ajp PLOT NAME : PLOT SCALE : 1:40

WISDOT/CADDS SHEET 42

2

SEE DETAILS FIXED MESSAGE SIGN

TRUCKS USE TWO LEFT LANES

1000' | 500' | 1000' | 1500'

RAMP CLOSED 1000 FT (W20-3(MOD))

(W01-4C)

RAMP CLOSED AHEAD

ROAD WORK AHEAD (W20-1)

SEE TRAFFIC CONTROL - MOUNTING SIGNS

350' | 200' TAPER | 25' TYP

4WR

4YR

MATCHLINE STA 294+50

295+00 | 296+00 | 297+00 | 298+00 | 299+00 | 300+00

US 41/45 SB

US 41/45 NB

NB ENTRANCE RAMP

500'

END ROAD WORK
G20-2A
48" X 24"

LEGEND

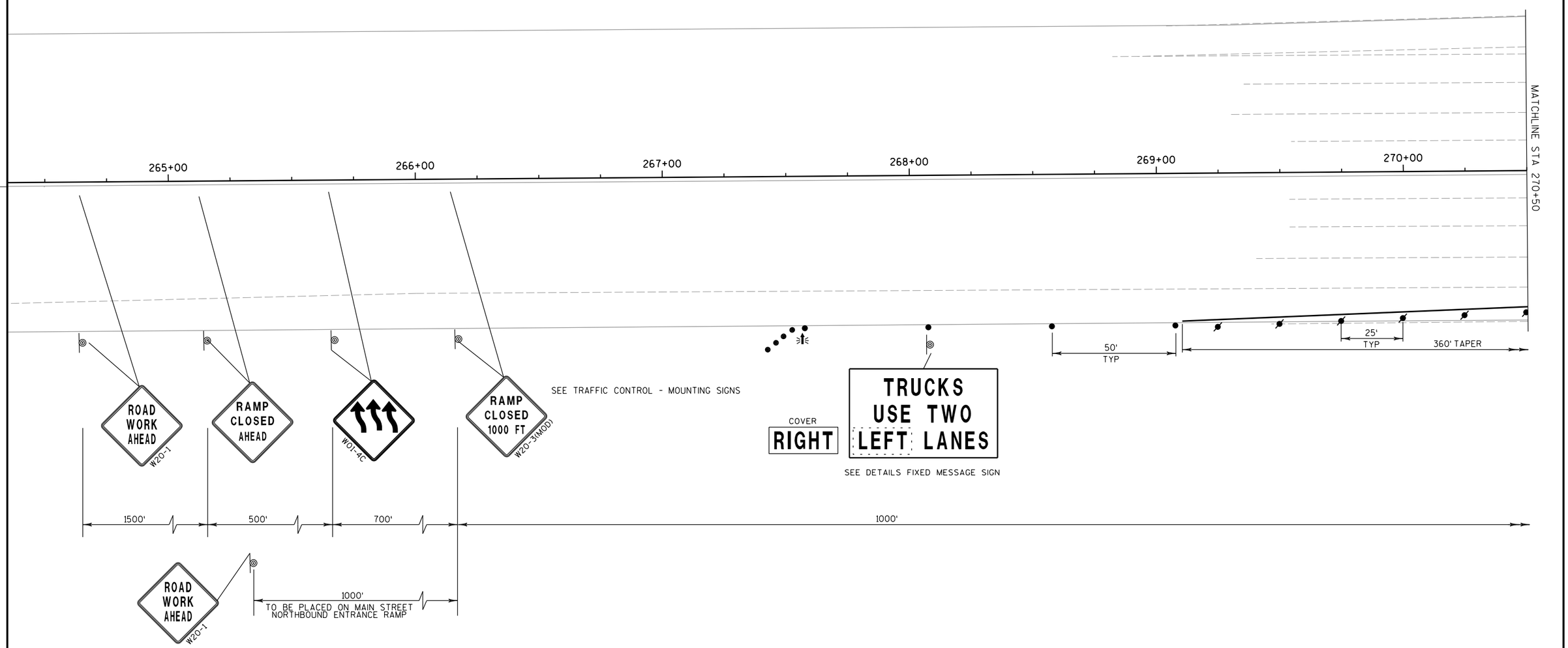
- WORK ZONE
- TRAFFIC FLOW ARROW
- DRUM WITH/WITHOUT LIGHT, TYPE C
- CONCRETE BARRIER TEMPORARY PRECAST
- CRASH CUSHIONS TEMPORARY
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TYPE III BARRICADE WITH/WITHOUT SIGN
- FLASHING ARROW BOARD
- 4WR — TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, WHITE
- 4YR — TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW
- FILL EXISTING RUMBLE STRIPS (STAGE 1)
  RESTORE EXISTING RUMBLE STRIPS (STAGE 4)

PROJECT NO: 1100-37-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TRAFFIC CONTROL: USH 41/45 - STAGE 3A	SHEET 427	E

2

LEGEND

- WORK ZONE
- TRAFFIC FLOW ARROW
- DRUM WITH/WITHOUT LIGHT, TYPE C
- CONCRETE BARRIER TEMPORARY PRECAST
- CRASH CUSHIONS TEMPORARY
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TYPE III BARRICADE WITH/WITHOUT SIGN
- FLASHING ARROW BOARD
- 4WR — TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, WHITE
- 4YR — TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW
- FILL EXISTING RUMBLE STRIPS (STAGE 1)
  RESTORE EXISTING RUMBLE STRIPS (STAGE 4)

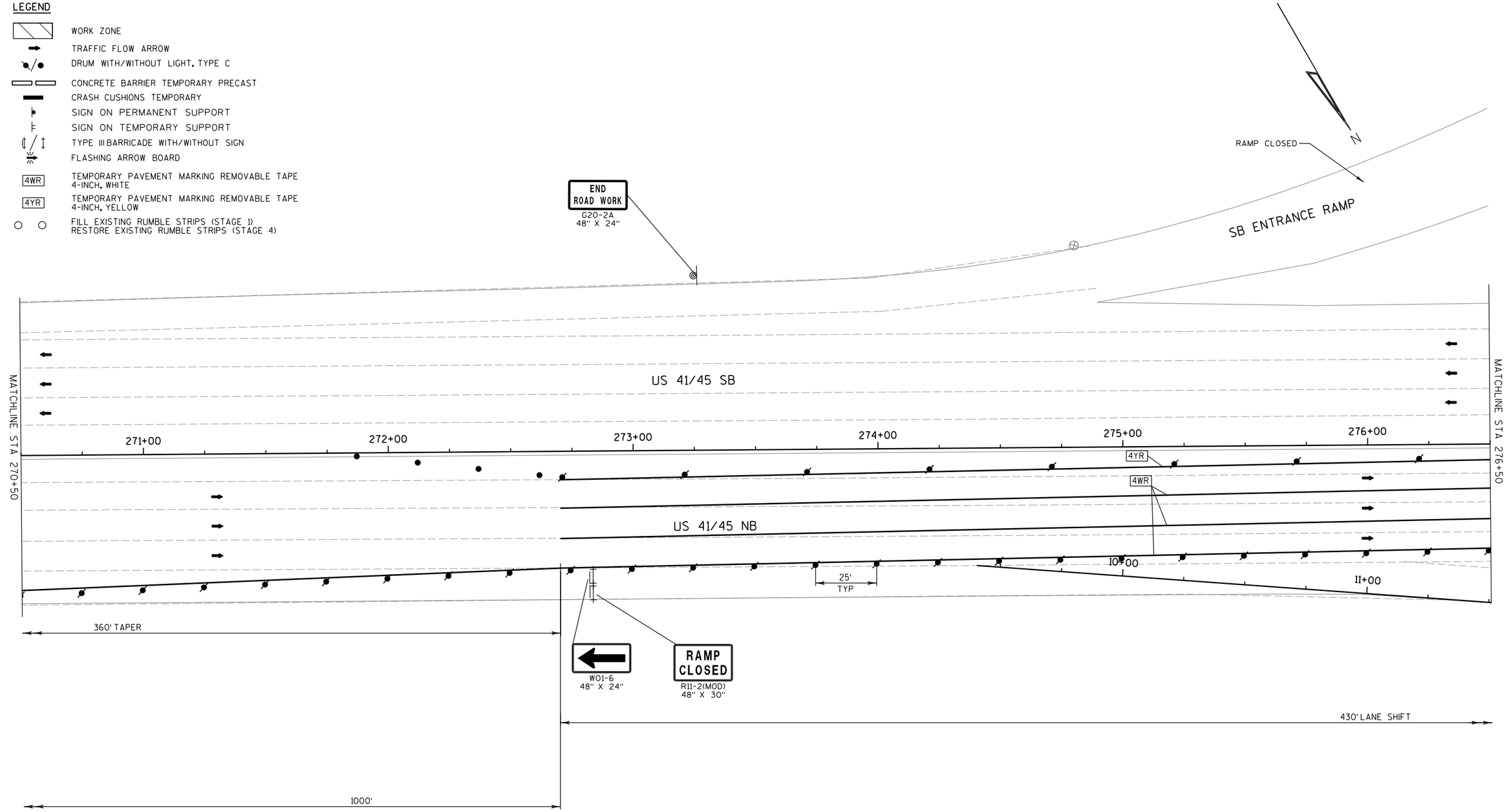


PROJECT NO: 1100-37-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TRAFFIC CONTROL: USH 41/45 - STAGE 3B	SHEET 428	E

2

LEGEND

- WORK ZONE
- TRAFFIC FLOW ARROW
- DRUM WITH/WITHOUT LIGHT, TYPE C
- CONCRETE BARRIER TEMPORARY PRECAST
- CRASH CUSHIONS TEMPORARY
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TYPE III BARRICADE WITH/WITHOUT SIGN
- FLASHING ARROW BOARD
- 4WR — TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, WHITE
- 4YR — TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW
- FILL EXISTING RUMBLE STRIPS (STAGE 1) RESTORE EXISTING RUMBLE STRIPS (STAGE 4)



PROJECT NO: 1100-37-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TRAFFIC CONTROL: USH 41/45 - STAGE 3B	SHEET 429	E

FILE NAME : P:\44xx\4442\Plan\026914_s3b_41-45.dgn PLOT DATE : 11/2/2014 PLOT BY : ajp PLOT NAME : PLOT SCALE : 1:40

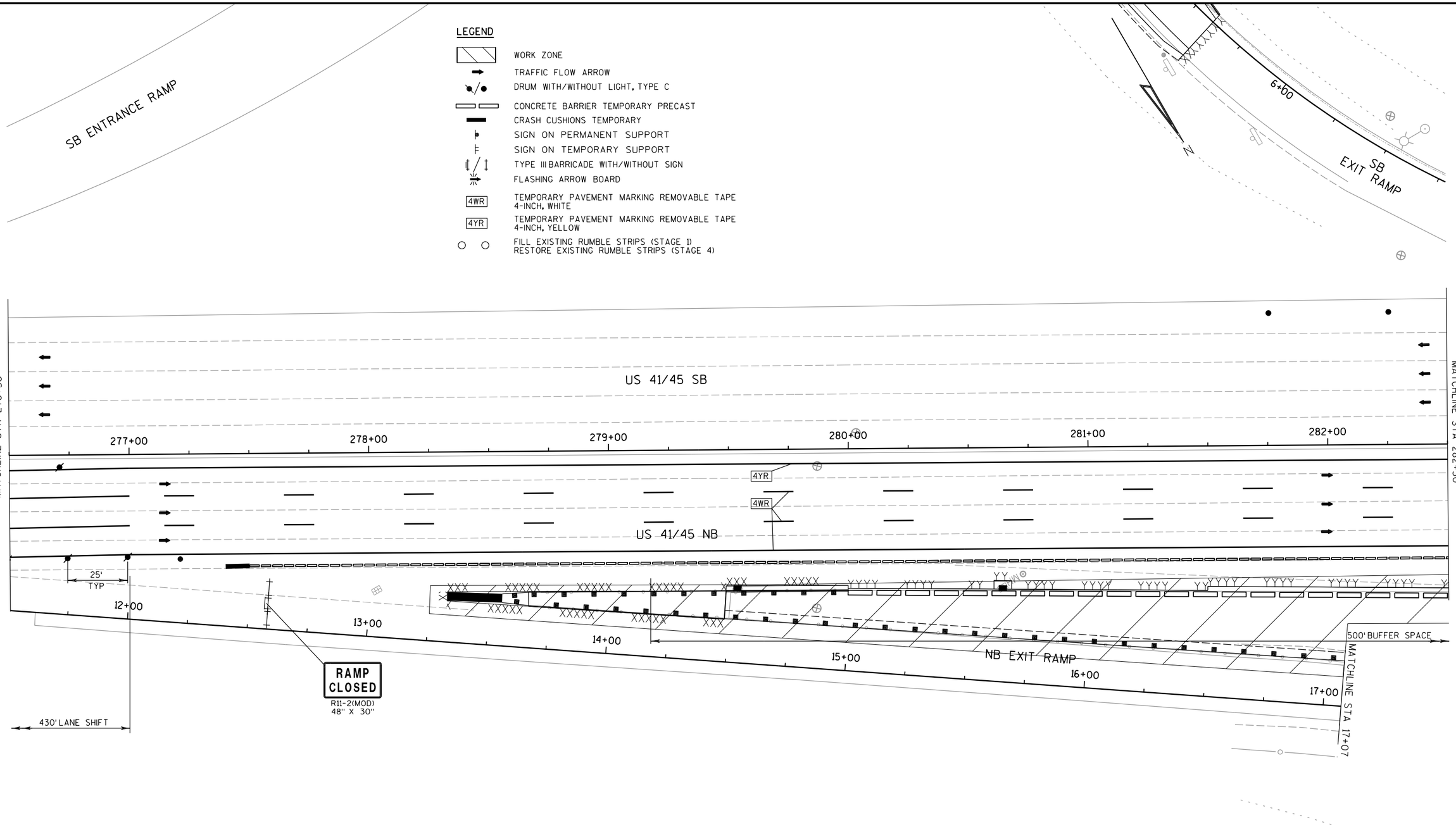
WISDOT/CADDS SHEET 42

2

2

LEGEND

- WORK ZONE
- TRAFFIC FLOW ARROW
- DRUM WITH/WITHOUT LIGHT, TYPE C
- CONCRETE BARRIER TEMPORARY PRECAST
- CRASH CUSHIONS TEMPORARY
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TYPE III BARRICADE WITH/WITHOUT SIGN
- FLASHING ARROW BOARD
- 4WR — TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, WHITE
- 4YR — TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW
- FILL EXISTING RUMBLE STRIPS (STAGE 1)
  RESTORE EXISTING RUMBLE STRIPS (STAGE 4)



PROJECT NO: 1100-37-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TRAFFIC CONTROL: USH 41/45 - STAGE 3B	SHEET 430	E

FILE NAME : P:\44xx\4442\Plan\026915_s3b_41-45.dgn PLOT DATE : 11/2/2014 PLOT BY : ajp PLOT NAME : PLOT SCALE : 1:40

WISDOT/CADDS SHEET 42

2

RAMP CLOSED
R11-2(MOD)
48" X 30"

SB EXIT RAMP

5+60

4+00

3+00

2+00

1+00

500' BUFFER SPACE

50' TYP

25' TYP

US 41/45 SB

MATCHLINE STA 282+50

283+00

284+00

285+00

286+00

287+00

288+00

MATCHLINE STA 288+50

4YR

4WR

US 41/45 NB

50' TYP

500' BUFFER SPACE

SEE TRAFFIC CONTROL - MOUNTING SIGNS

W01-4C

18+00

19+00

NB EXIT RAMP

20+00

217+00

PILGRIM ROAD

218+00

219+00

220+00

221+00

POST

LEGEND

- WORK ZONE
- TRAFFIC FLOW ARROW
- DRUM WITH/WITHOUT LIGHT, TYPE C
- CONCRETE BARRIER TEMPORARY PRECAST
- CRASH CUSHIONS TEMPORARY
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TYPE III BARRICADE WITH/WITHOUT SIGN
- FLASHING ARROW BOARD
- 4WR — TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, WHITE
- 4YR — TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW
- FILL EXISTING RUMBLE STRIPS (STAGE 1) RESTORE EXISTING RUMBLE STRIPS (STAGE 4)

PROJECT NO: 1100-37-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TRAFFIC CONTROL: USH 41/45 - STAGE 3B	SHEET 431	E

2

2

LEGEND

- WORK ZONE
- TRAFFIC FLOW ARROW
- DRUM WITH/WITHOUT LIGHT, TYPE C
- CONCRETE BARRIER TEMPORARY PRECAST
- CRASH CUSHIONS TEMPORARY
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TYPE III BARRICADE WITH/WITHOUT SIGN
- FLASHING ARROW BOARD
- 4WR — TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, WHITE
- 4YR — TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW
- FILL EXISTING RUMBLE STRIPS (STAGE 1) RESTORE EXISTING RUMBLE STRIPS (STAGE 4)

N

RAMP CLOSED
R11-2(MOD)
48" X 30"

RAMP CLOSED
R11-2(MOD)
48" X 30"

500' BUFFER SPACE

350' LANE SHIFT TAPER

MATCHLINE STA 288+50

US 41/45 SB

289+00 290+00 291+00 292+00 293+00 294+00

25' TYP

MATCHLINE STA 294+50

4YR

4WR

US 41/45 NB

25' TYP

50' TYP

100'

430' LANE SHIFT

500'

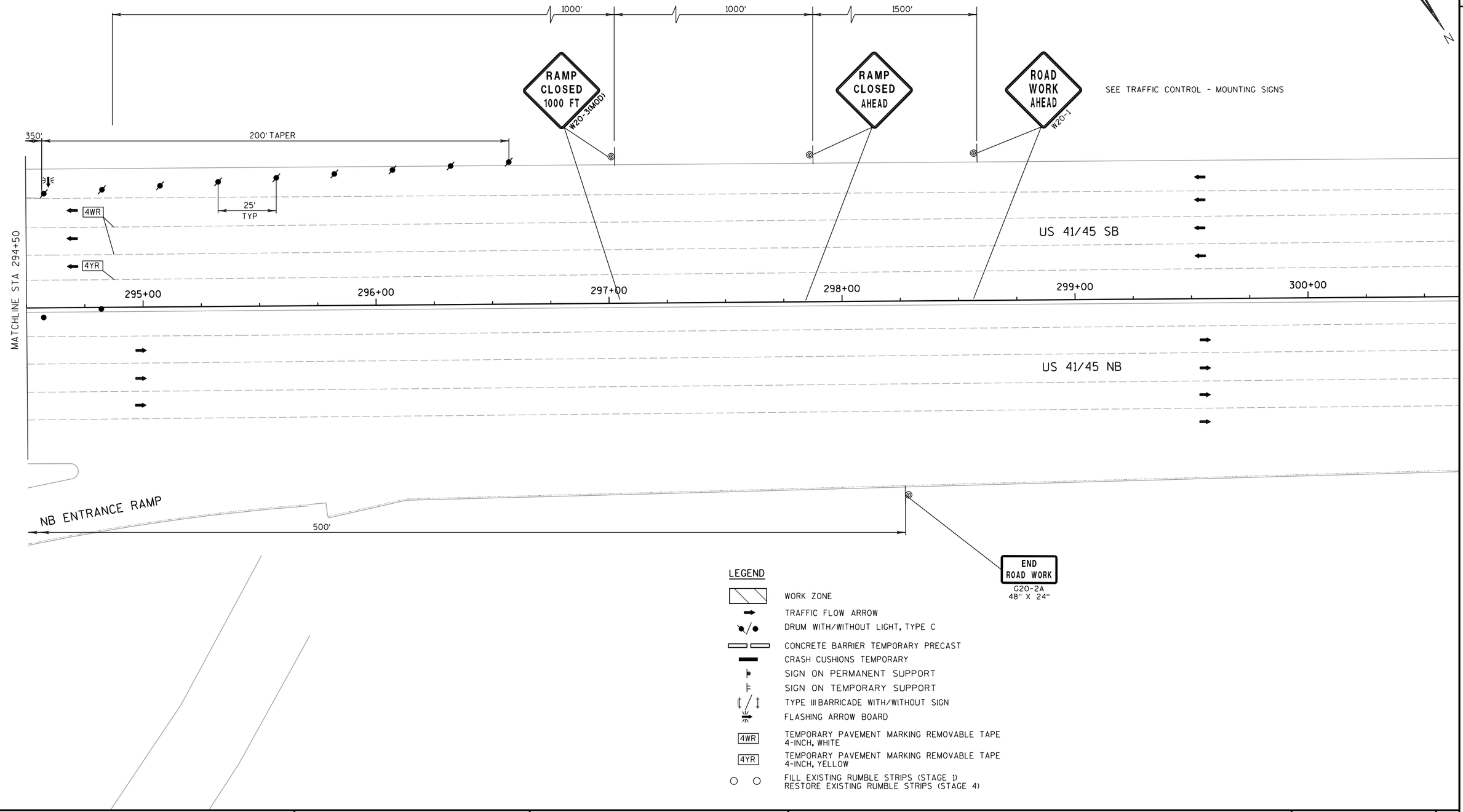
RAMP CLOSED
R11-2(MOD)
48" X 30"

NB EXIT RAMP

NB ENTRANCE RAMP

PROJECT NO: 1100-37-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TRAFFIC CONTROL: USH 41/45 - STAGE 3B	SHEET 432	E

2



LEGEND

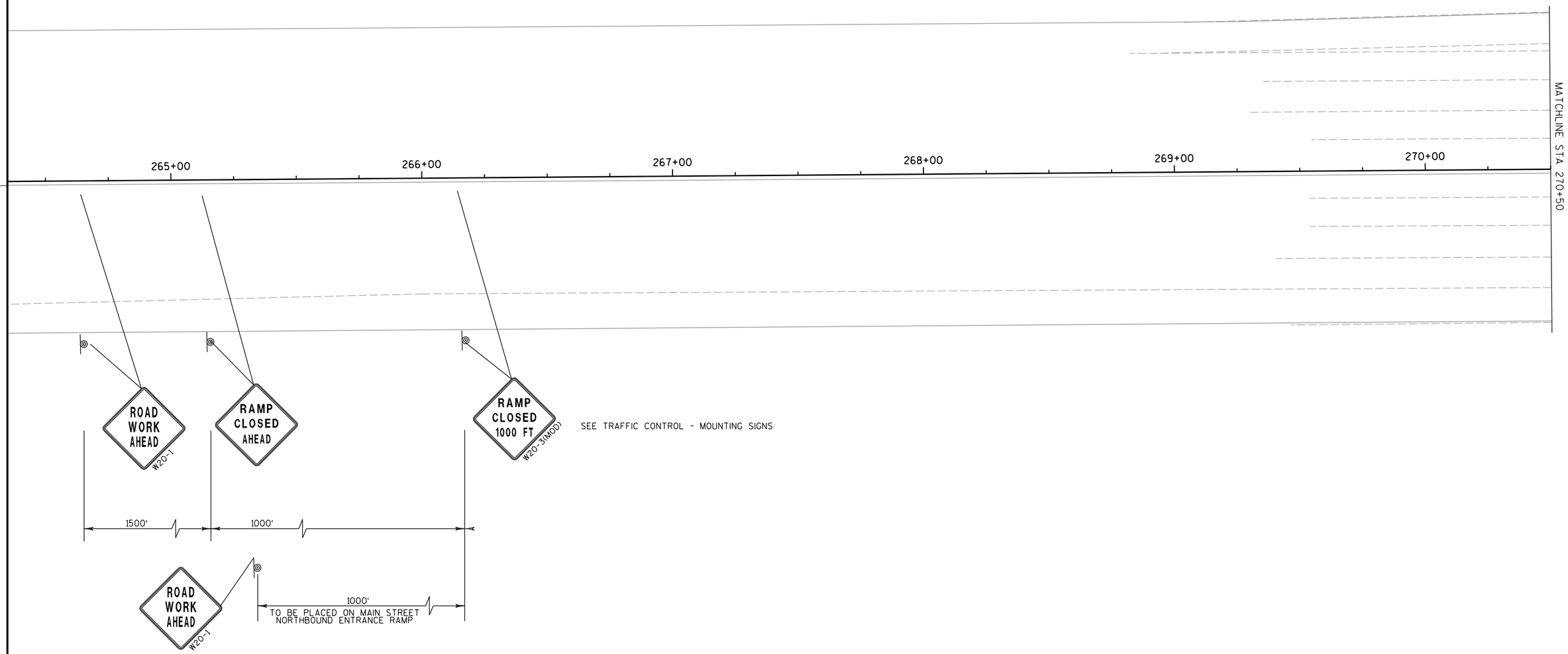
- WORK ZONE
- TRAFFIC FLOW ARROW
- DRUM WITH/WITHOUT LIGHT, TYPE C
- CONCRETE BARRIER TEMPORARY PRECAST
- CRASH CUSHIONS TEMPORARY
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TYPE III BARRICADE WITH/WITHOUT SIGN
- FLASHING ARROW BOARD
- 4WR — TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, WHITE
- 4YR — TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW
- FILL EXISTING RUMBLE STRIPS (STAGE 1)
  RESTORE EXISTING RUMBLE STRIPS (STAGE 4)

PROJECT NO: 1100-37-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TRAFFIC CONTROL: USH 41/45 - STAGE 3B	SHEET 433	E

2

LEGEND

- WORK ZONE
- TRAFFIC FLOW ARROW
- DRUM WITH/WITHOUT LIGHT, TYPE C
- CONCRETE BARRIER TEMPORARY PRECAST
- CRASH CUSHIONS TEMPORARY
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TYPE III BARRICADE WITH/WITHOUT SIGN
- FLASHING ARROW BOARD
- 4WR — TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, WHITE
- 4YR — TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW
- FILL EXISTING RUMBLE STRIPS (STAGE 1)
  RESTORE EXISTING RUMBLE STRIPS (STAGE 4)



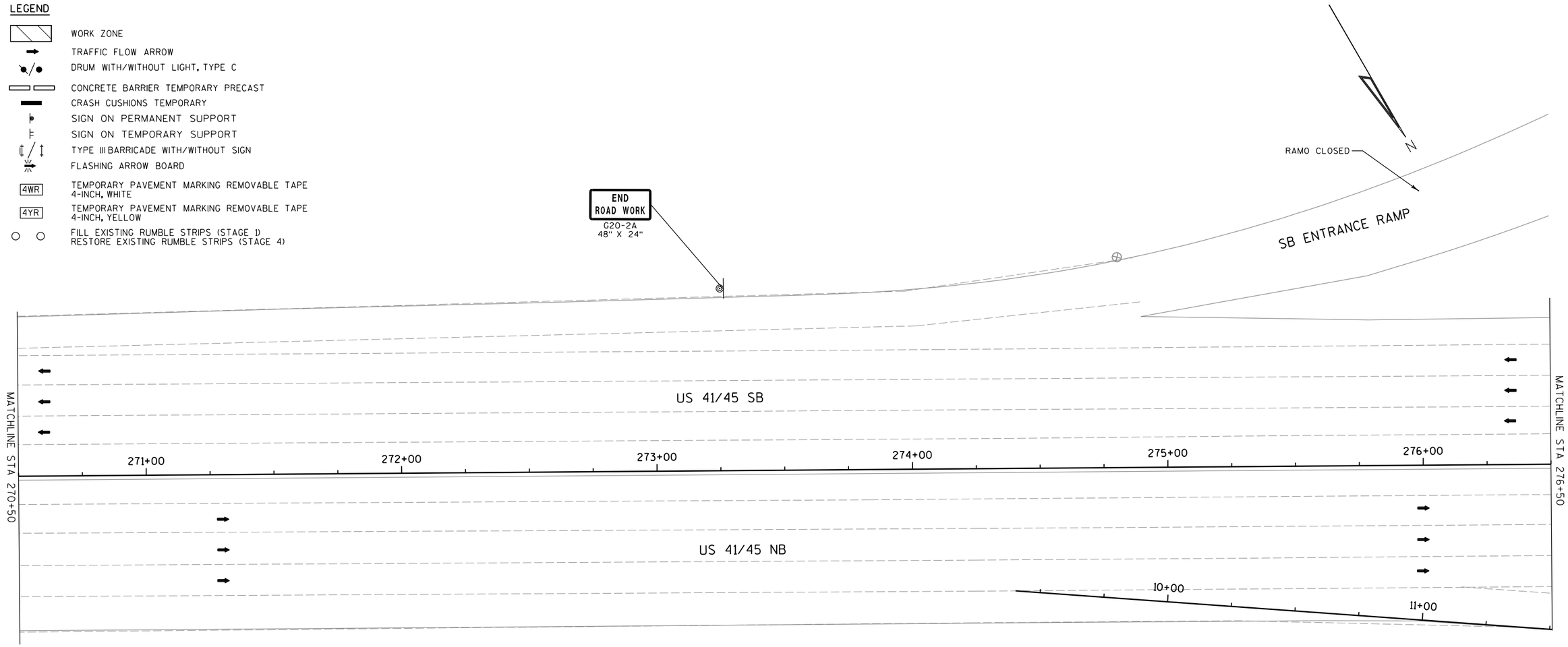
PROJECT NO: 1100-37-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TRAFFIC CONTROL: USH 41/45 - STAGE 4	SHEET 434	E

2

2

LEGEND

- WORK ZONE
- TRAFFIC FLOW ARROW
- DRUM WITH/WITHOUT LIGHT, TYPE C
- CONCRETE BARRIER TEMPORARY PRECAST
- CRASH CUSHIONS TEMPORARY
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TYPE III BARRICADE WITH/WITHOUT SIGN
- FLASHING ARROW BOARD
- 4WR — TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, WHITE
- 4YR — TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW
- FILL EXISTING RUMBLE STRIPS (STAGE 1) RESTORE EXISTING RUMBLE STRIPS (STAGE 4)



PROJECT NO: 1100-37-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TRAFFIC CONTROL: USH 41/45 - STAGE 4	SHEET 435	E

FILE NAME : P:\44xx\4442\Plan\026920_s4_41-45.dgn PLOT DATE : 11/2/2014 PLOT BY : ajp PLOT NAME : PLOT SCALE : 1:40

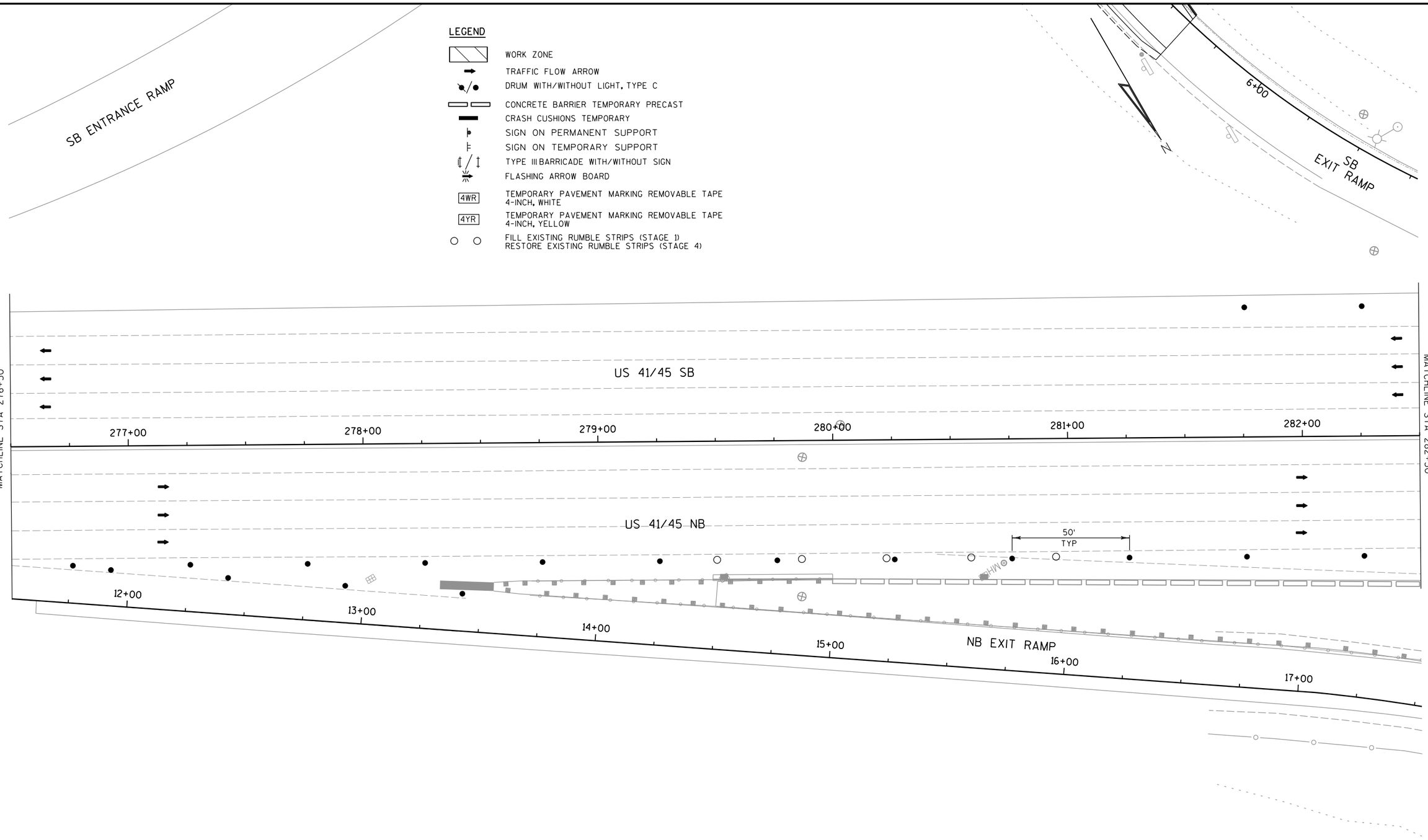
WISDOT/CADDS SHEET 42

2

2

LEGEND

- WORK ZONE
- TRAFFIC FLOW ARROW
- DRUM WITH/WITHOUT LIGHT, TYPE C
- CONCRETE BARRIER TEMPORARY PRECAST
- CRASH CUSHIONS TEMPORARY
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TYPE III BARRICADE WITH/WITHOUT SIGN
- FLASHING ARROW BOARD
- 4WR — TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, WHITE
- 4YR — TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW
- FILL EXISTING RUMBLE STRIPS (STAGE 1)
  RESTORE EXISTING RUMBLE STRIPS (STAGE 4)



PROJECT NO: 1100-37-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TRAFFIC CONTROL: USH 41/45 - STAGE 4	SHEET 436	E

FILE NAME : P:\44xx\4442\Plan\026921_s4_41-45.dgn PLOT DATE : 11/2/2014 PLOT BY : ajp PLOT NAME : PLOT SCALE : 1:40

WISDOT/CADDS SHEET 42

2

RAMP CLOSED
R11-2(MOD)
48" X 30"

NOTE:
MEDIAN REMOVALS SOUTH OF STA. 285+90 ARE STAGE 1, NORTH OF STA. 285+90 ARE STAGE 4.

PILGRIM ROAD

SB EXIT RAMP

NB EXIT RAMP

US 41/45 SB

US 41/45 NB

MATCHLINE STA 282+50

MATCHLINE STA 288+50

50' TYP

25' TYP

LEGEND

- WORK ZONE
- TRAFFIC FLOW ARROW
- DRUM WITH/WITHOUT LIGHT, TYPE C
- CONCRETE BARRIER TEMPORARY PRECAST
- CRASH CUSHIONS TEMPORARY
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TYPE III BARRICADE WITH/WITHOUT SIGN
- FLASHING ARROW BOARD
- 4WR — TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, WHITE
- 4YR — TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW
- FILL EXISTING RUMBLE STRIPS (STAGE 1) RESTORE EXISTING RUMBLE STRIPS (STAGE 4)

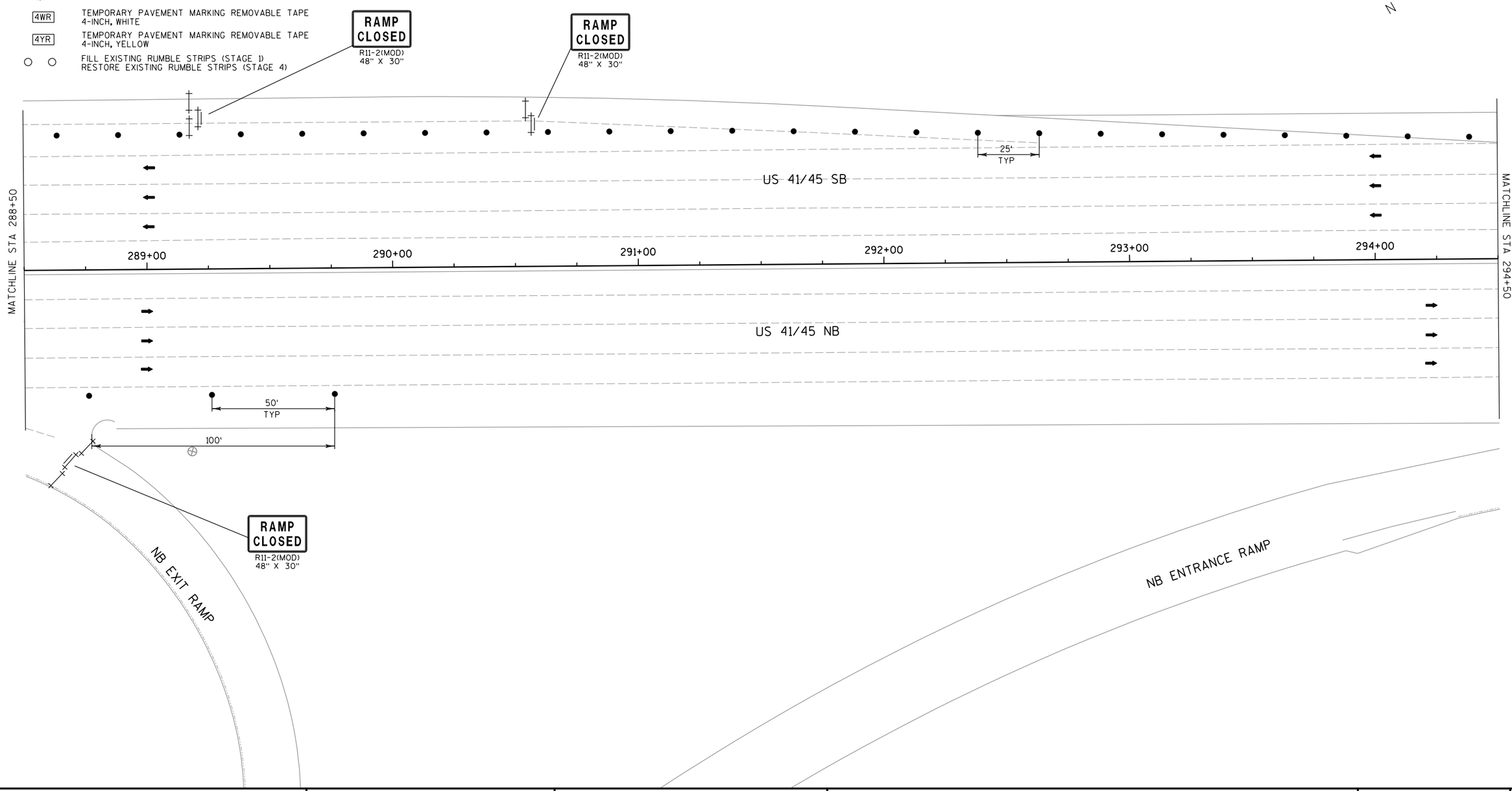
PROJECT NO: 1100-37-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TRAFFIC CONTROL: USH 41/45 - STAGE 4	SHEET 437	E

FILE NAME : P:\44xx\4442\Plan\026922_s4_41-45.dgn PLOT DATE : 11/2/2014 PLOT BY : ajp PLOT NAME : PLOT SCALE : 1:40

LEGEND

- WORK ZONE
- TRAFFIC FLOW ARROW
- DRUM WITH/WITHOUT LIGHT, TYPE C
- CONCRETE BARRIER TEMPORARY PRECAST
- CRASH CUSHIONS TEMPORARY
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TYPE III BARRICADE WITH/WITHOUT SIGN
- FLASHING ARROW BOARD
- 4WR — TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, WHITE
- 4YR — TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW
- FILL EXISTING RUMBLE STRIPS (STAGE 1) RESTORE EXISTING RUMBLE STRIPS (STAGE 4)



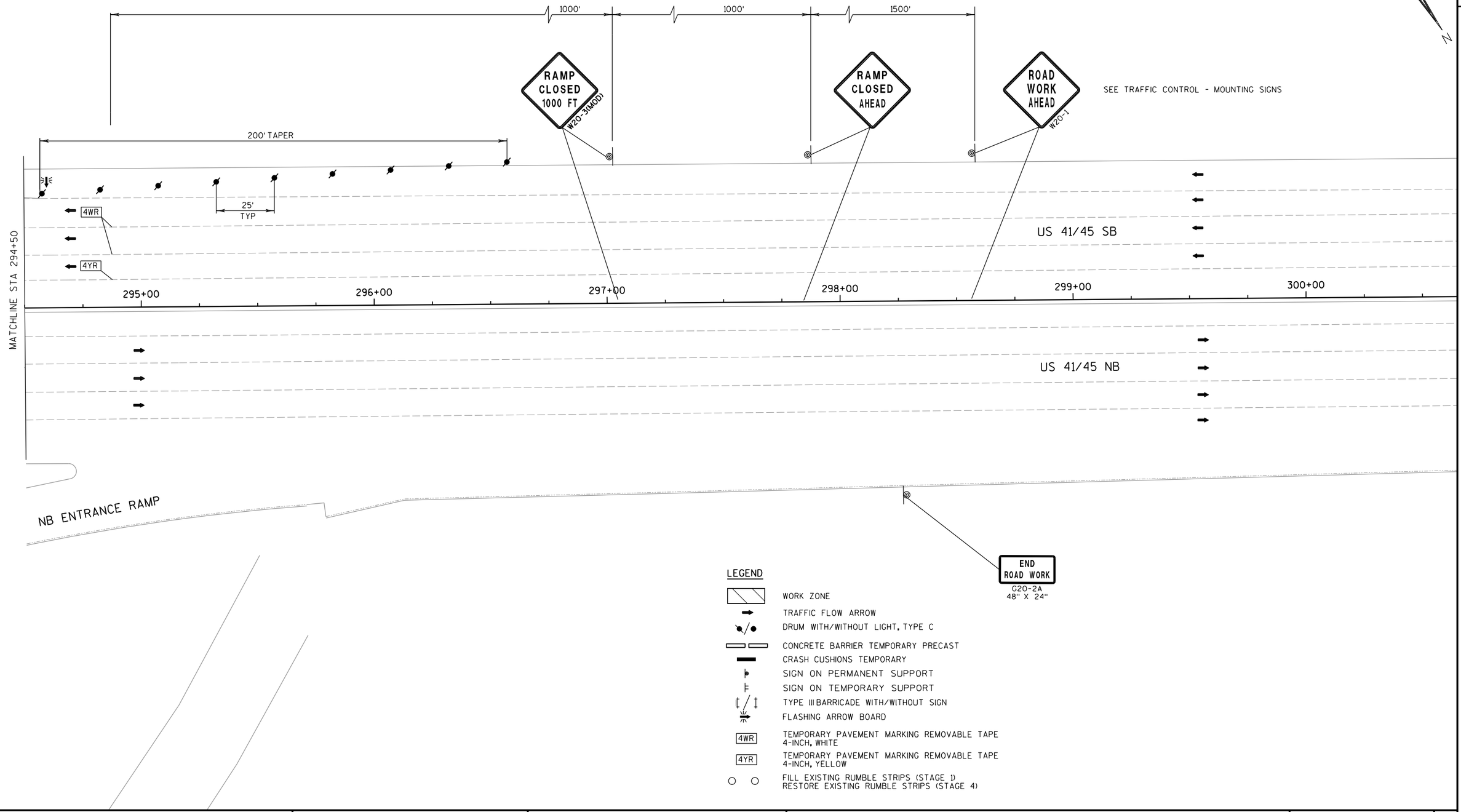


PROJECT NO: 1100-37-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TRAFFIC CONTROL: USH 41/45 - STAGE 4	SHEET 438	E

FILE NAME : P:\44xx\4442\Plan\026923_s4_41-45.dgn PLOT DATE : 11/2/2014 PLOT BY : ajp PLOT NAME : PLOT SCALE : 1:40

WISDOT/CADDS SHEET 42

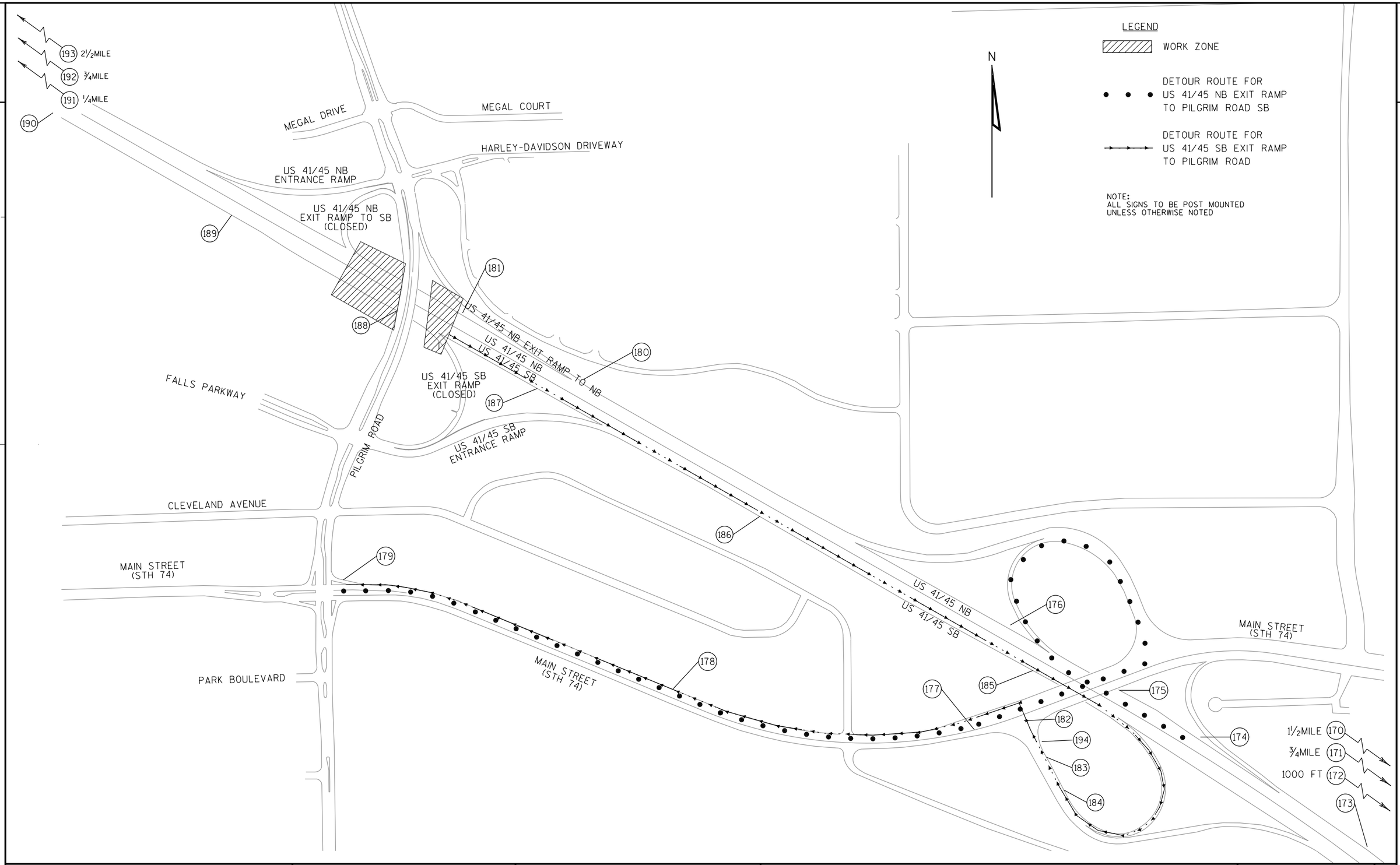
2



LEGEND

- WORK ZONE
- TRAFFIC FLOW ARROW
- DRUM WITH/WITHOUT LIGHT, TYPE C
- CONCRETE BARRIER TEMPORARY PRECAST
- CRASH CUSHIONS TEMPORARY
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TYPE III BARRICADE WITH/WITHOUT SIGN
- FLASHING ARROW BOARD
- 4WR — TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, WHITE
- 4YR — TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH, YELLOW
- FILL EXISTING RUMBLE STRIPS (STAGE 1)
  RESTORE EXISTING RUMBLE STRIPS (STAGE 4)

PROJECT NO: 1100-37-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	TRAFFIC CONTROL: USH 41/45 - STAGE 4	SHEET 439	E



2

PROJECT NO: 2782-11-70 & 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	RAMP DETOUR PLAN: STAGE 1 & 4	SHEET 440	E

** SEE FIXED MESSAGE SIGN DETAIL

(170)

** NORTH

74 100

Pilgrim Rd

Q

1 3/4

2 1/4

3 1/4

(171)

SOUTH
M3-3
36" X 18"

** Pilgrim Rd

DETOUR AHEAD
W20-2
48" X 48"

EXITS 50 A-B

74 100

Main St

1 MILE

(172)

DETOUR
M4-8
36" X 18"

SOUTH
M3-3
36" X 18"

** Pilgrim Rd

MO 6-1
30" X 30"

(173)

DETOUR
M4-8
36" X 18"

SOUTH
M3-3
36" X 18"

** Pilgrim Rd

MO 6-1
30" X 30"

EXIT 50 B

74 WEST

Main St

1/4 MILE

EXIT 50 A

100 EAST

Main St

(174)

DETOUR
M4-8
36" X 18"

SOUTH
M3-3
36" X 18"

** Pilgrim Rd

M05-2R
30" X 30"

(175)

EXIT 50 B

74 WEST

Main St

DETOUR
M4-8
36" X 18"

SOUTH
M3-3
36" X 18"

** Pilgrim Rd

M06-2
30" X 30"

(176)

COVER

EXITS 51 A-B

Pilgrim Rd

** NORTH ONLY

1/2 MILE

(177)

WEST
74

DETOUR
M4-8
24" X 12"

** Pilgrim Rd

(178)

DETOUR
M4-8
24" X 12"

** Pilgrim Rd

(179)

END DETOUR
M4-8A
24" X 18"

** Pilgrim Rd

(180)

EXIT 51 B

Pilgrim Rd

SOUTH

1/4 MILE

** RAMP CLOSED

EXIT 51 A

Pilgrim Rd

NORTH

EXIT ONLY

(181)

EXIT 51 B

Pilgrim Rd

SOUTH

** RAMP CLOSED

COVER

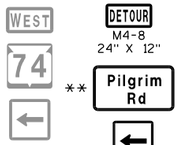
EXIT
20
MPH

COVER

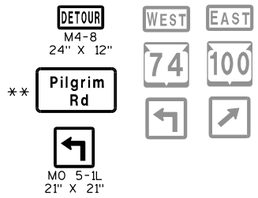
PROJECT NO: 2782-11-70 & 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	RAMP DETOUR PLAN: STAGE 1 & 4	SHEET 441	E

** SEE FIXED MESSAGE SIGN DETAIL

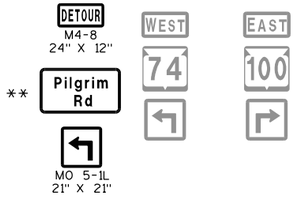
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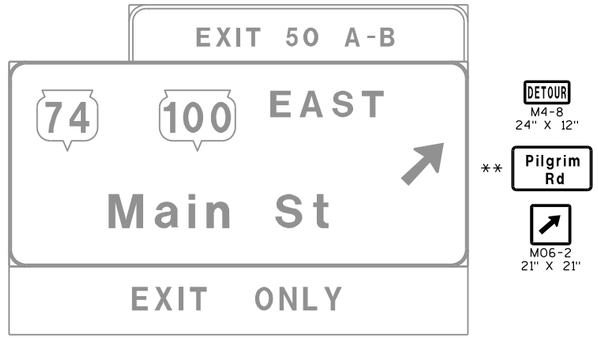
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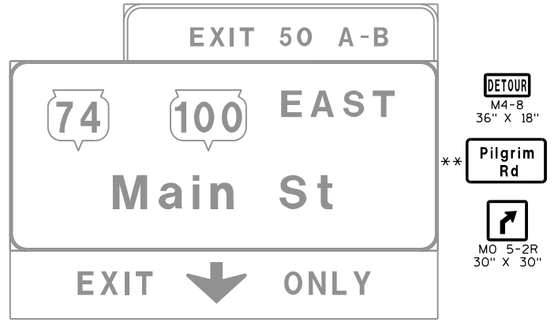
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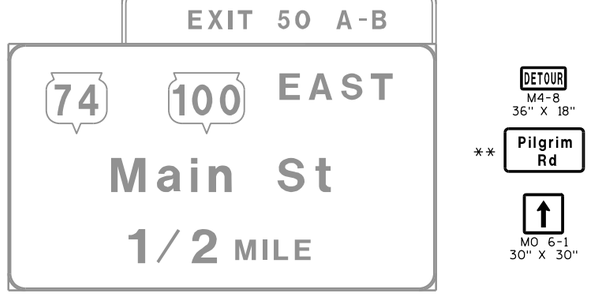
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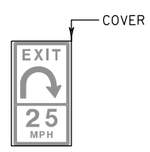
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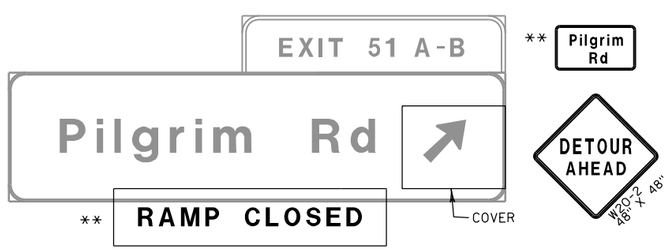
187



188



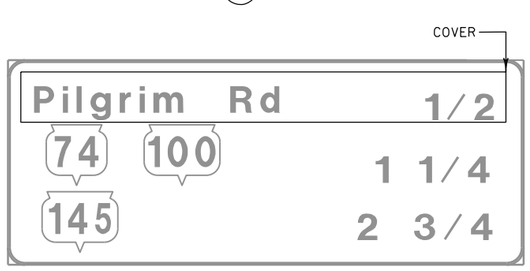
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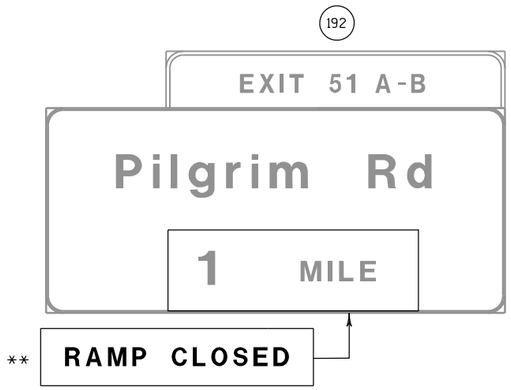
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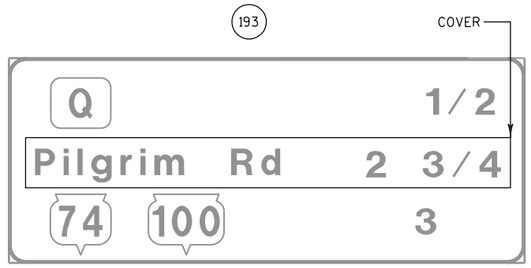
191



192



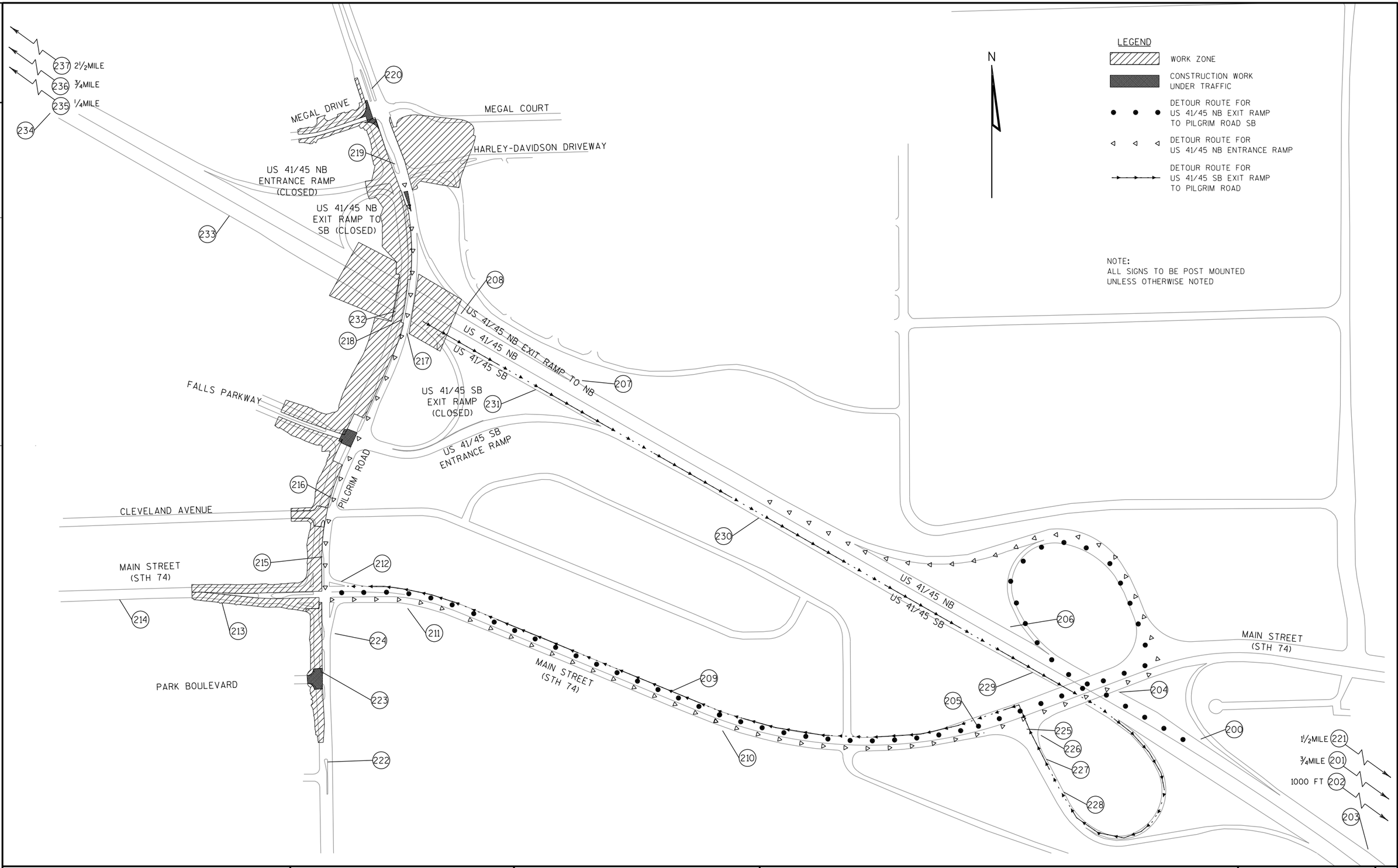
193



194



PROJECT NO: 2782-11-70 & 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	RAMP DETOUR PLAN: STAGE 1 & 4	SHEET 442	E

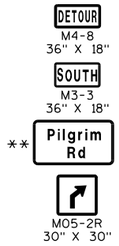


2

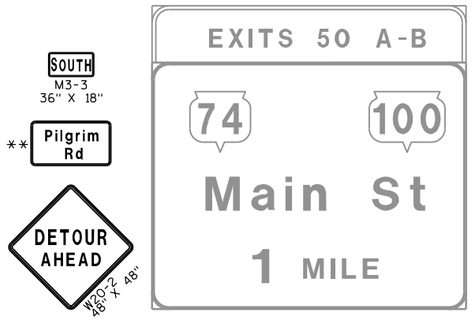
PROJECT NO: 2782-11-70 & 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	RAMP DETOUR PLAN: STAGE 2	SHEET 443	E

** SEE FIXED MESSAGE SIGN DETAIL

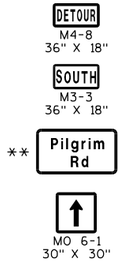
200



201



202



203



204

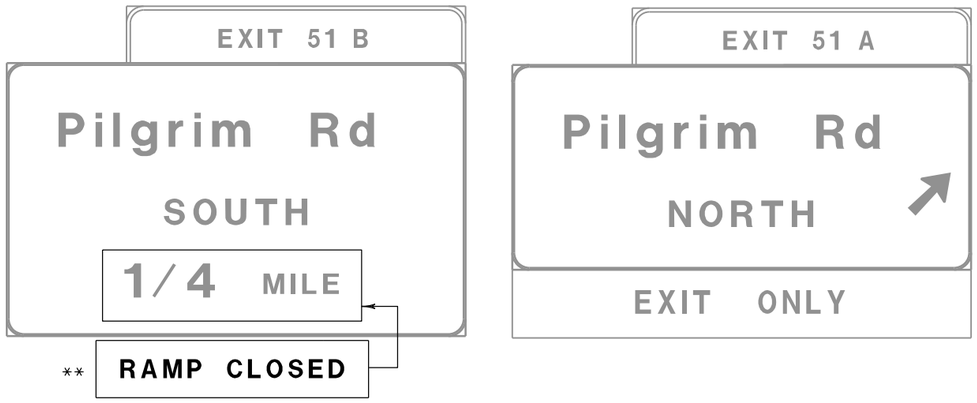


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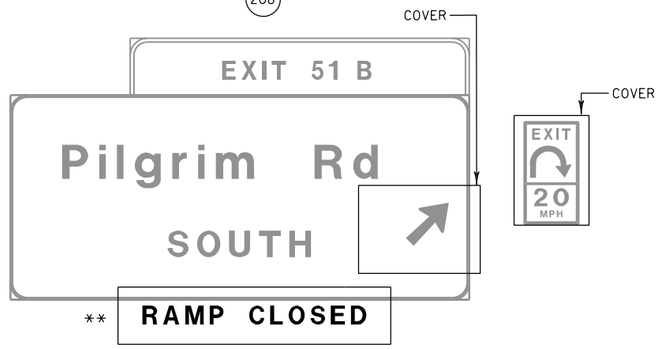
206



207



208



PROJECT NO: 2782-11-70 & 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	RAMP DETOUR PLAN: STAGE 2	SHEET 444	E

FILE NAME : P:\44xx\4442\Plan\027005_dt.dgn PLOT DATE : 11/2/2014 PLOT BY : ajp PLOT NAME : PLOT SCALE : N/A

** SEE FIXED MESSAGE SIGN DETAIL

209

DETOUR
M4-8
24" X 12"

SOUTH
M3-3
24" X 12"

** Pilgrim Rd

210

END 74 | JCT 41 | 45 | 100

DETOUR
M4-8
24" X 12"

NORTH
M3-1
24" X 12"

41
M1-4
24" X 24"

45
M1-4
24" X 24"

211

DETOUR
M4-8
24" X 12"

NORTH
M3-1
24" X 12"

41
M1-4
24" X 24"

45
M1-4
24" X 24"

212

END DETOUR
M4-8A
24" X 18"

SOUTH
M3-3
24" X 12"

** Pilgrim Rd

213

TO
M4-5
24" X 12"

SOUTH
M3-3
24" X 12"

TO
41
45

MOUNTED ON LIGHT POLE

DETOUR
M4-8
24" X 12"

NORTH
M3-1
24" X 12"

41
M1-4
24" X 24"

45
M1-4
24" X 24"

MO 6-1
21" X 21"

214

NORTH
M3-1
24" X 12"

41
M1-4
24" X 24"

45
M1-4
24" X 24"

DETOUR AHEAD
W20-2
48" X 48"

215

DETOUR
M4-8
24" X 12"

NORTH
M3-1
24" X 12"

41
M1-4
24" X 24"

45
M1-4
24" X 24"

MO 6-1
21" X 21"

216

DETOUR
M4-8
24" X 12"

NORTH
M3-1
24" X 12"

41
M1-4
24" X 24"

45
M1-4
24" X 24"

MO 5-1L
21" X 21"

217

COVER COVER

NORTH 41 45

NORTH 41 45

218

DETOUR
M4-8
24" X 12"

NORTH
M3-1
24" X 12"

41
M1-4
24" X 24"

45
M1-4
24" X 24"

MO 6-1
21" X 21"

219

DETOUR
M4-8
24" X 12"

NORTH
M3-1
24" X 12"

41
M1-4
24" X 24"

45
M1-4
24" X 24"

MO 6-1
21" X 21"

220

DETOUR
M4-8
24" X 12"

NORTH
M3-1
24" X 12"

41
M1-4
24" X 24"

45
M1-4
24" X 24"

MO 6-1
21" X 21"

221

** NORTH

74 100

Pilgrim Rd

Q

1 3/4
2 1/4
3 1/4

PROJECT NO: 2782-11-70 & 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	RAMP DETOUR PLAN: STAGE 2	SHEET 445	E

** SEE FIXED MESSAGE SIGN DETAIL

(222)

NORTH
M3-1
24" X 12"

41
M1-4
24" X 24"

45
M1-4
24" X 24"

DETOUR AHEAD
W20-2
48" X 48"

(223)

DETOUR
M4-8
24" X 12"

NORTH
M3-1
24" X 12"

41
M1-4
24" X 24"

45
M1-4
24" X 24"

M05-1R
21" X 21"

(224)

DETOUR
M4-8
24" X 12"

NORTH
M3-1
24" X 12"

41
M1-4
24" X 24"

45
M1-4
24" X 24"

MO 6-1
21" X 21"

(225)

WEST
74

** DETOUR
M4-8
24" X 12"

** Pilgrim Rd

MO 6-1
21" X 21"

(226)

H
D9-2
24" X 24"

MB6-1
21" X 21"

(227)

** DETOUR
M4-8
24" X 12"

** Pilgrim Rd

MO 5-1L
21" X 21"

WEST 74
EAST 100

(228)

** DETOUR
M4-8
24" X 12"

** Pilgrim Rd

MO 5-1L
21" X 21"

WEST 74
EAST 100

(229)

EXIT 50 A-B

74 100 EAST

Main St

EXIT ONLY

** DETOUR
M4-8
36" X 18"

** Pilgrim Rd

MO6-2
30" X30"

(230)

EXIT 50 A-B

74 100 EAST

Main St

EXIT ONLY

** DETOUR
M4-8
36" X 18"

** Pilgrim Rd

MO 5-2R
30" X 30"

(231)

EXIT 50 A-B

74 100 EAST

Main St

1/2 MILE

** DETOUR
M4-8
36" X 18"

** Pilgrim Rd

MO 6-1
30" X 30"

(232)

COVER

EXIT
25
MPH

(233)

COVER

EXIT 51 A-B

Pilgrim Rd

** RAMP CLOSED

** Pilgrim Rd

DETOUR AHEAD
W20-2
48" X 48"

(234)

HOSPITAL
NEXT RIGHT

EXIT 50 A-B **

(235)

COVER

Pilgrim Rd 1/2

74 100 1 1/4

145 2 3/4

(236)

EXIT 51 A-B

Pilgrim Rd

1 MILE

** RAMP CLOSED

(237)

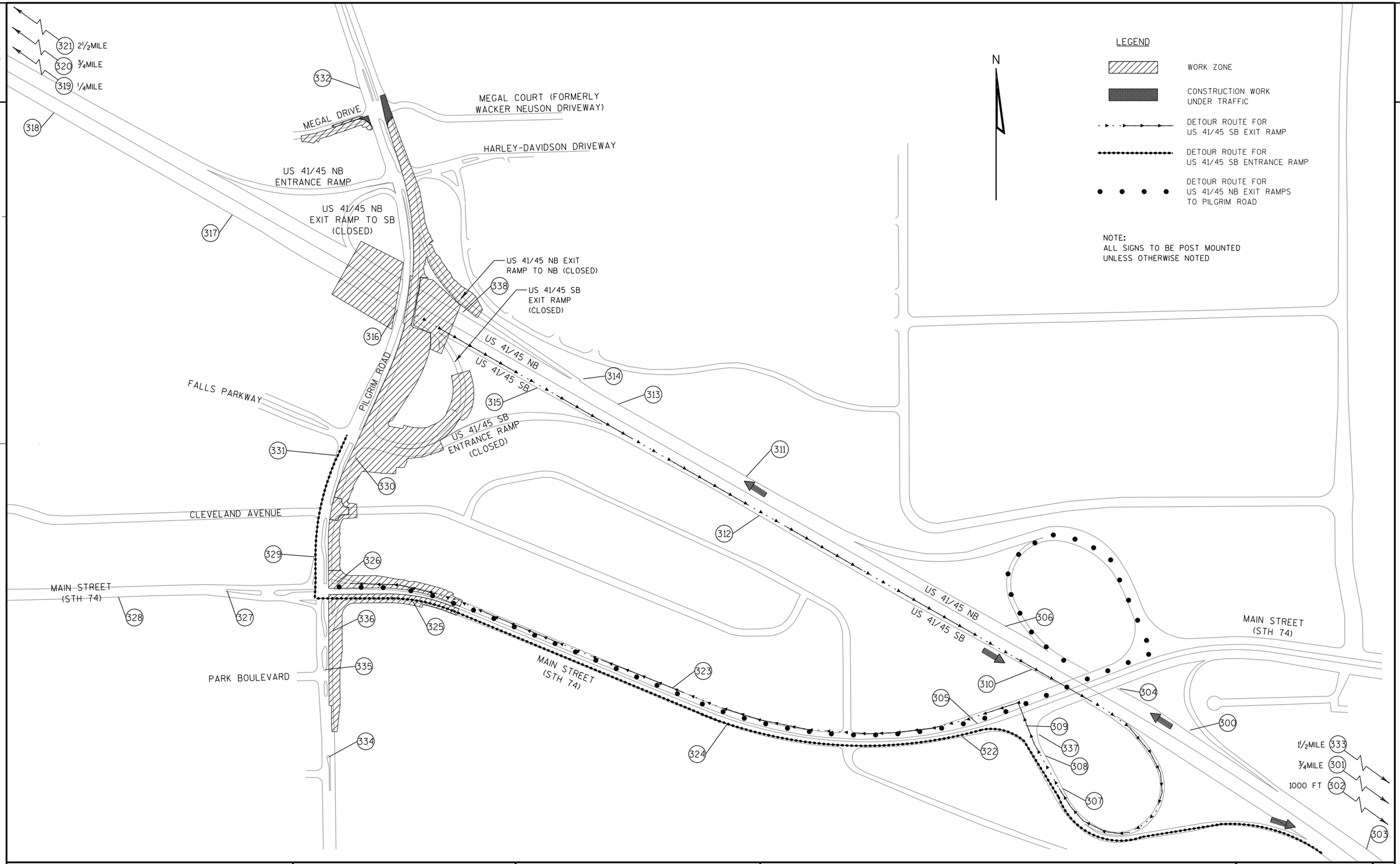
COVER

Q 1/2

Pilgrim Rd 2 3/4

74 100 3

PROJECT NO: 2782-11-70 & 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	RAMP DETOUR PLAN: STAGE 2	SHEET 446	E



PROJECT NO: 2782-11-70 & 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	RAMP DETOUR PLAN: STAGE 3	SHEET 447	E

FILE NAME : P:\44xx\4442\Plan\027008_dt.dgn PLOT DATE : 11/2/2014 PLOT BY : ajp PLOT NAME : PLOT SCALE : N/A

WISDOT/CADDS SHEET 42

** SEE FIXED MESSAGE SIGN DETAIL

(300)

DETOUR
M4-8
36" X 18"

** Pilgrim Rd

M05-2R
30" X 30"

(301)

** Pilgrim Rd

DETOUR AHEAD
W20-2
48" X 48"

EXITS 50 A-B

74 100

Main St

1 MILE

(302)

DETOUR
M4-8
36" X 18"

** Pilgrim Rd

M0 6-1
30" X 30"

(303)

DETOUR
M4-8
36" X 18"

** Pilgrim Rd

M0 6-1
30" X 30"

EXIT 50 B

74 WEST

Main St

1/4 MILE

EXIT 50 A

100 EAST

Main St

(304)

EXIT 50 B

74 WEST

Main St

DETOUR
M4-8
36" X 18"

** Pilgrim Rd

M06-2
30" X 30"

(305)

WEST
74

DETOUR
M4-8
24" X 12"

** Pilgrim Rd

(306)

EXITS 51 A-B

Pilgrim Rd

1/2 MILE

** RAMP CLOSED

(307)

DETOUR
M4-8
24" X 12"

** Pilgrim Rd

M0 5-1L
21" X 21"

WEST
74

EAST
100

(308)

DETOUR
M4-8
24" X 12"

** Pilgrim Rd

M0 5-1L
21" X 21"

WEST
74

EAST
100

(309)

WEST
74

DETOUR
M4-8
24" X 12"

** Pilgrim Rd

M0 6-1
21" X 21"

(310)

EXIT 50 A-B

74 100 EAST

Main St

EXIT ONLY

DETOUR
M4-8
24" X 12"

** Pilgrim Rd

M06-2
21" X 21"

(311)

EXIT 51 A

Pilgrim Rd

NORTH

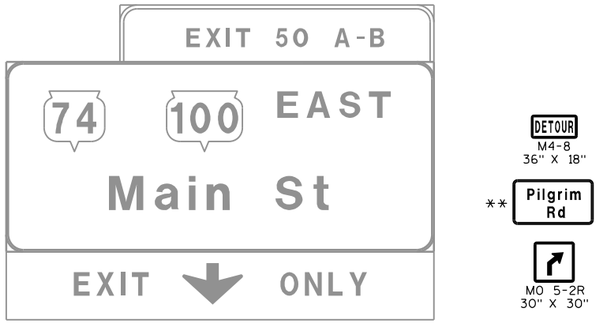
EXIT ONLY

** RAMP CLOSED

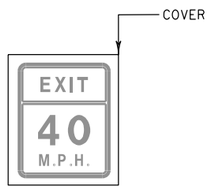
PROJECT NO: 2782-11-70 & 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	RAMP DETOUR PLAN: STAGE 3	SHEET 448	E

** SEE FIXED MESSAGE SIGN DETAIL

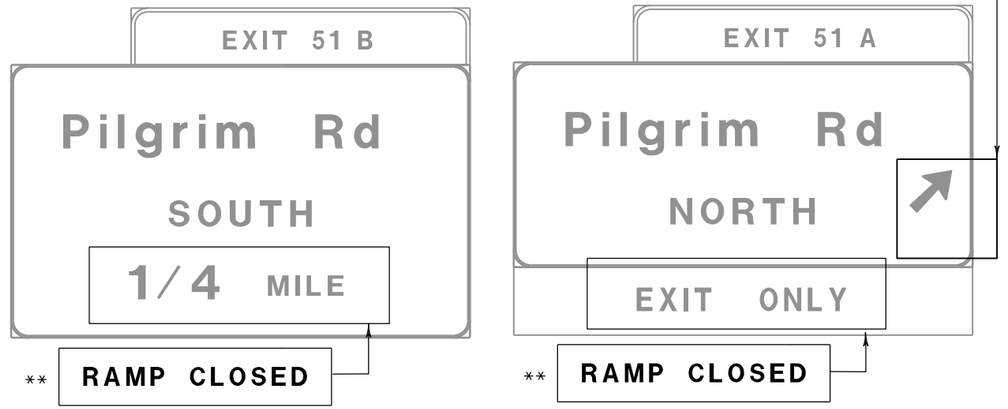
312



313



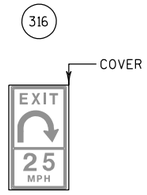
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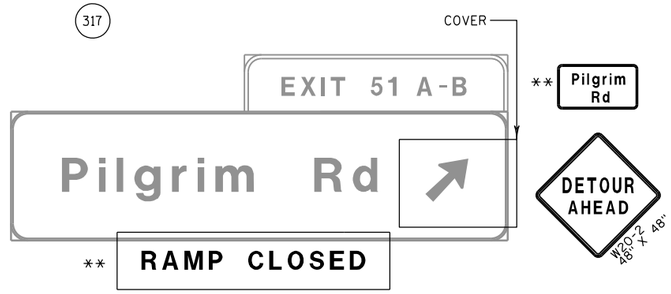
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316



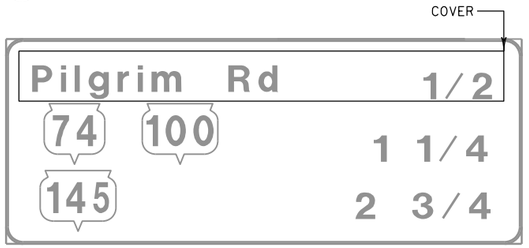
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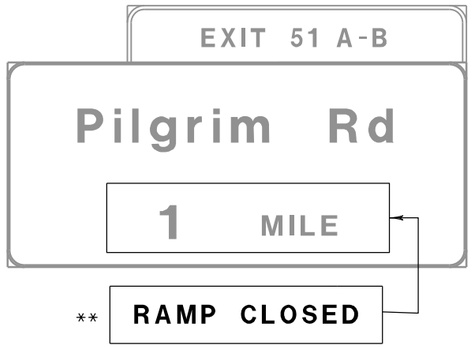
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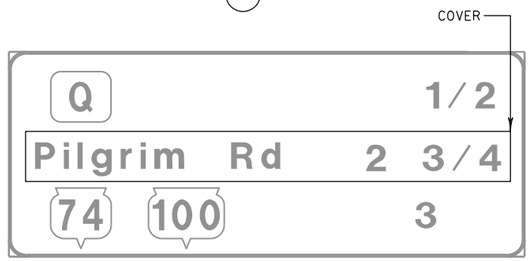
319



320



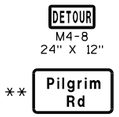
321



322



323



PROJECT NO: 2782-11-70 & 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	RAMP DETOUR PLAN: STAGE 3	SHEET 449	E

** SEE FIXED MESSAGE SIGN DETAIL

(324)

END
74

JCT
41
45
100

DETOUR
M4-8
24" X 12"

SOUTH
M3-3
24" X 12"

41
M1-4
24" X 24"

45
M1-4
24" X 24"

(325)

DETOUR
M4-8
24" X 12"

SOUTH
M3-3
24" X 12"

41
M1-4
24" X 24"

45
M1-4
24" X 24"

(326)

END DETOUR
M4-8A
24" X 18"

** Pilgrim Rd

(327)

TO
M4-5
24" X 12"

NORTH
M3-1
24" X 12"

TO

41

45

MOUNTED ON
LIGHT POLE

DETOUR
M4-8
24" X 12"

SOUTH
M3-3
24" X 12"

41
M1-4
24" X 24"

45
M1-4
24" X 24"

MO 6-1
21" X 21"

(328)

SOUTH
M3-3
24" X 12"

41
M1-4
24" X 24"

45
M1-4
24" X 24"

DETOUR AHEAD
W20-2
48" X 48"

(329)

DETOUR
M4-8
24" X 12"

SOUTH
M3-3
24" X 12"

41
M1-4
24" X 24"

45
M1-4
24" X 24"

MO 6-1
21" X 21"

(330)

COVER

SOUTH
41
45

(331)

DETOUR
M4-8
24" X 12"

SOUTH
M3-3
24" X 12"

41
M1-4
24" X 24"

45
M1-4
24" X 24"

MO 5-1L
21" X 21"

(332)

DETOUR
M4-8
24" X 12"

SOUTH
M3-3
24" X 12"

41
M1-4
24" X 24"

45
M1-4
24" X 24"

MO 6-1
21" X 21"

(333)

COVER

74 100 1 3/4
Pilgrim Rd 2 1/4
Q 3 1/4

(334)

SOUTH
M3-3
24" X 12"

41
M1-4
24" X 24"

45
M1-4
24" X 24"

DETOUR AHEAD
W20-2
48" X 48"

(335)

DETOUR
M4-8
24" X 12"

SOUTH
M3-3
24" X 12"

41
M1-4
24" X 24"

45
M1-4
24" X 24"

MO5-1R
21" X 21"

(336)

DETOUR
M4-8
24" X 12"

SOUTH
M3-3
24" X 12"

41
M1-4
24" X 24"

45
M1-4
24" X 24"

MO 6-1
21" X 21"

(337)

H
D9-2
24" X 24"

MB6-1
21" X 21"

(338)

EXIT 51 B
Pilgrim Rd
SOUTH

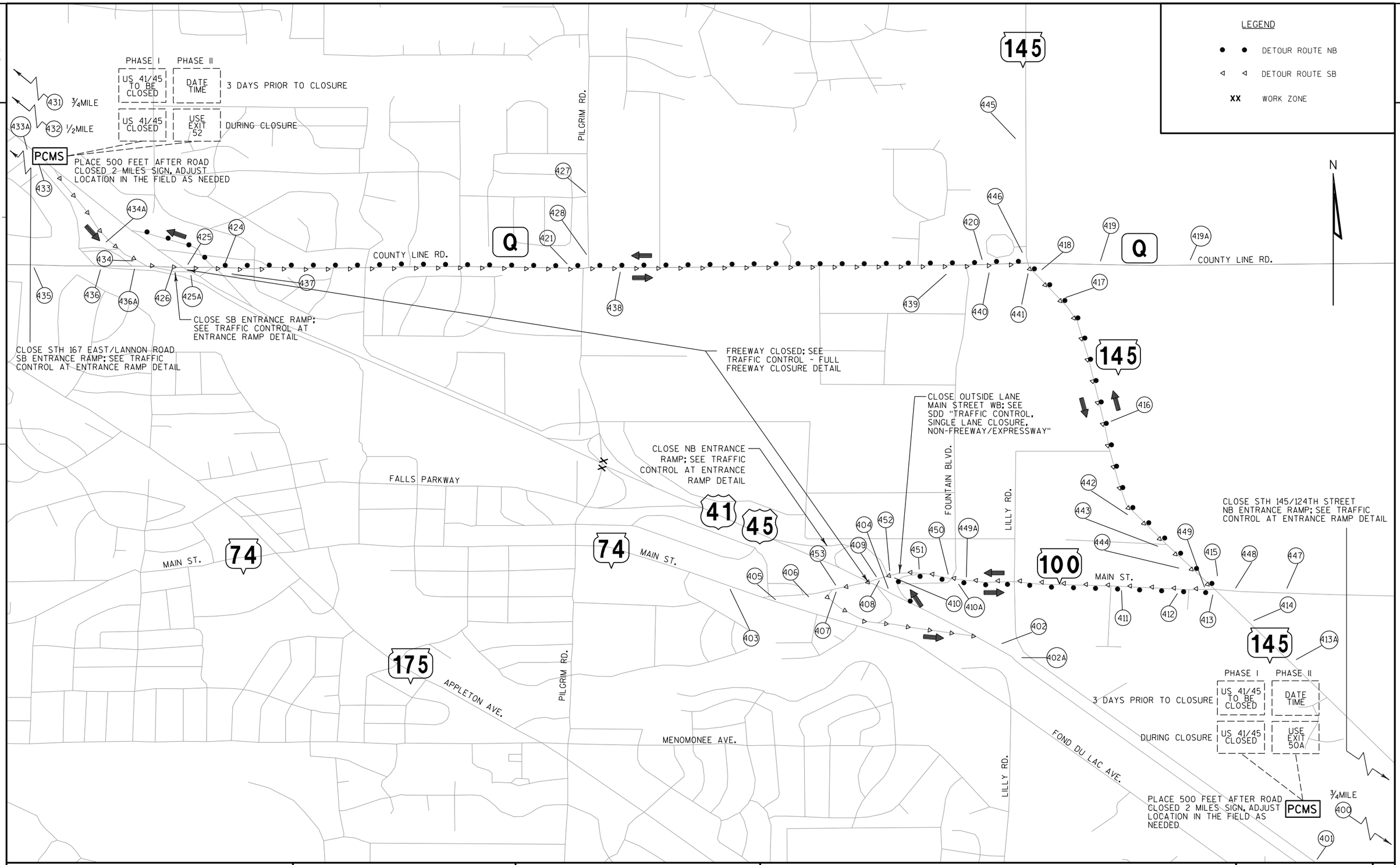
** RAMP CLOSED

COVER

EXIT
20
MPH

COVER

PROJECT NO: 2782-11-70 & 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	RAMP DETOUR PLAN: STAGE 3	SHEET 450	E

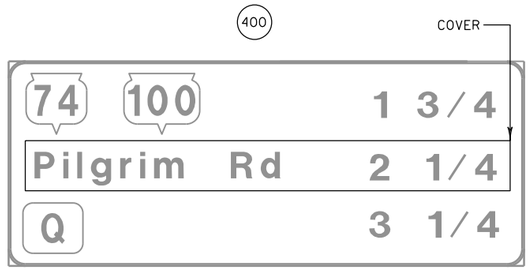


PROJECT NO: 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	DETOUR PLAN - FREEWAY CLOSURE	SHEET 451	E

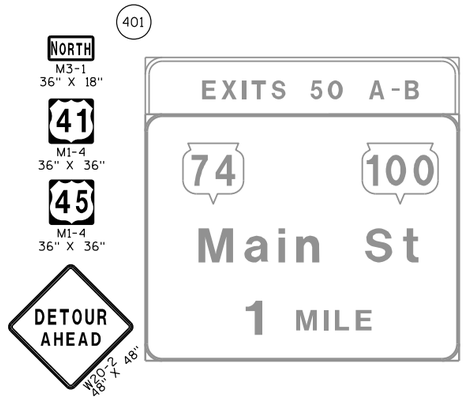
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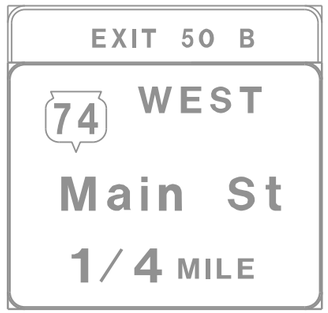
WISDOT/CADDS SHEET 42

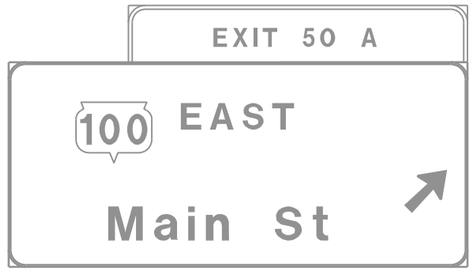
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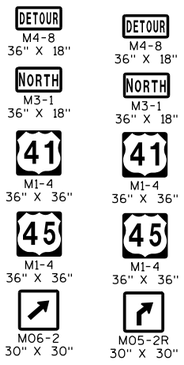
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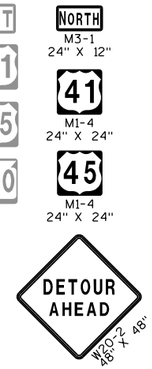
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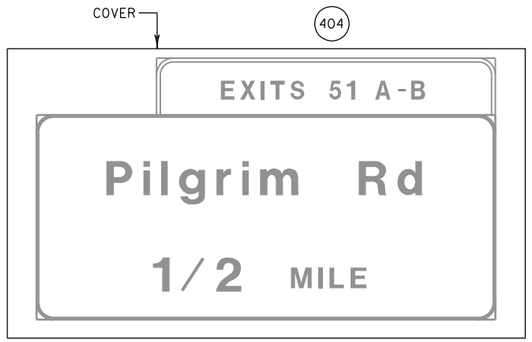
(402A)



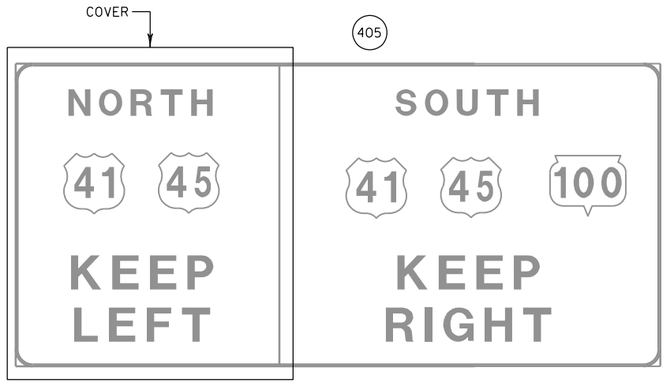
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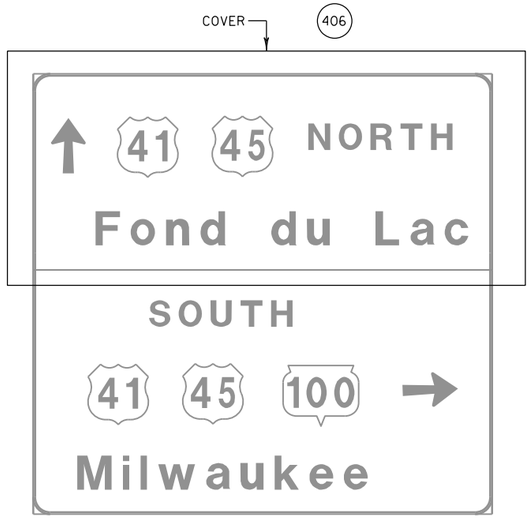
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(405)



(406)



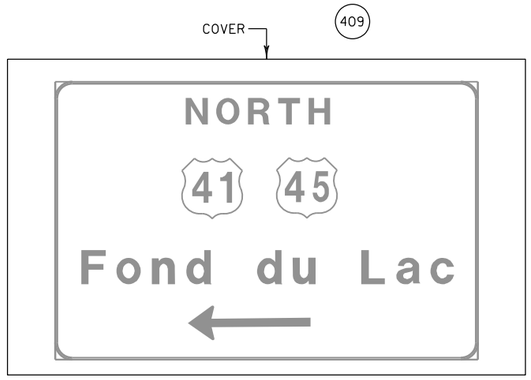
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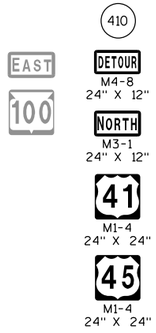
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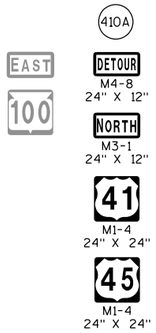
(409)



(410)



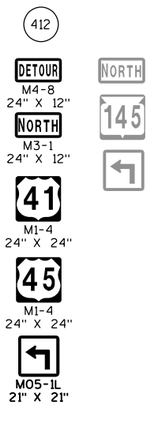
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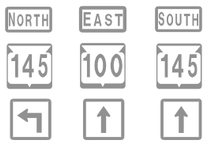


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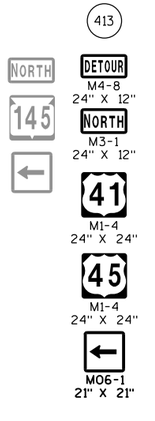


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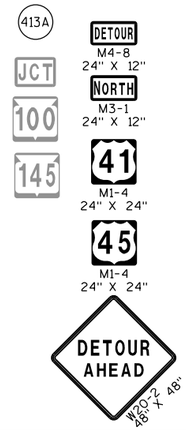




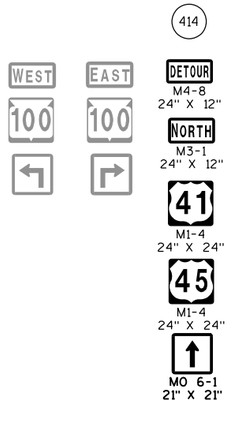
(413)



(413A)



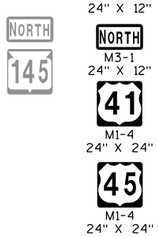
(414)



PROJECT NO: 2782-11-70 & 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	DETOUR PLAN: FREEWAY CLOSURE	SHEET 452	E

2

415



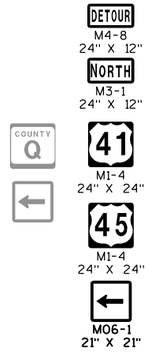
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417



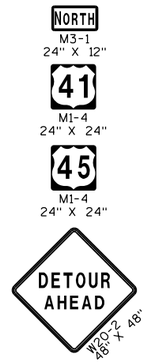
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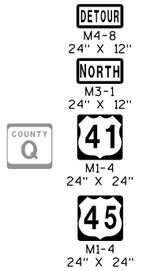
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420



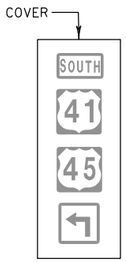
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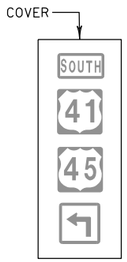
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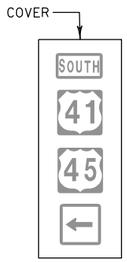
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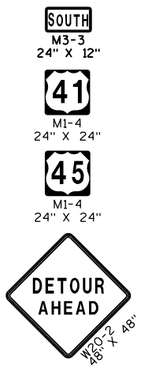
425A



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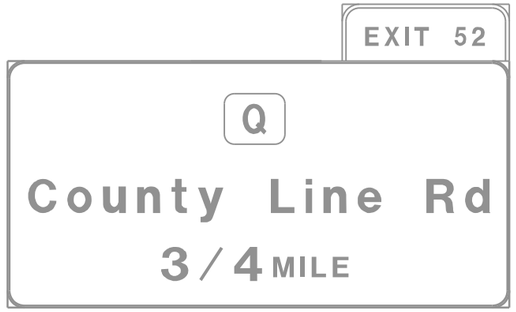


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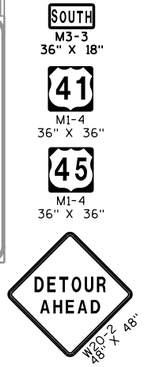


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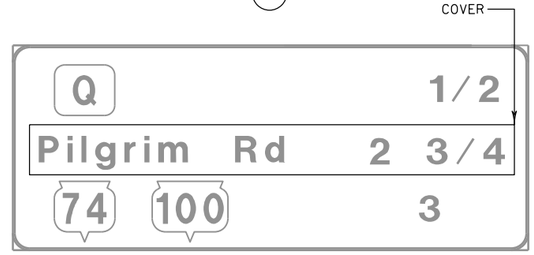




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432





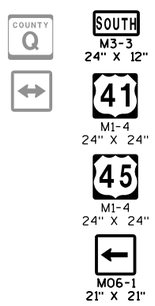
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433A



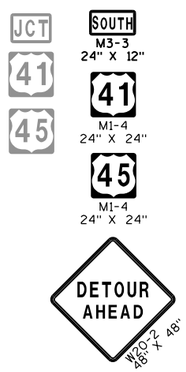
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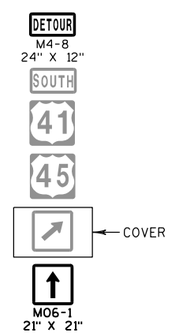
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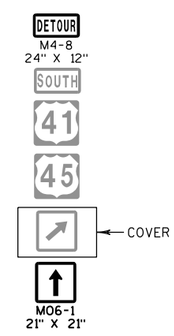
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436



436A

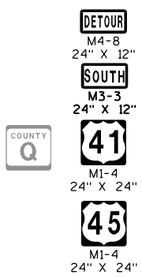


PROJECT NO: 2782-11-70 & 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	DETOUR PLAN: FREEWAY CLOSURE	SHEET 453	E

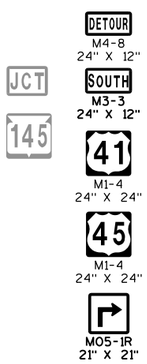
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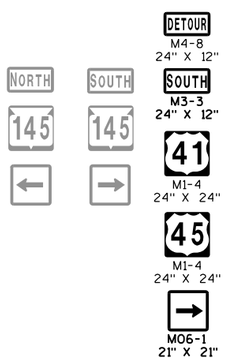
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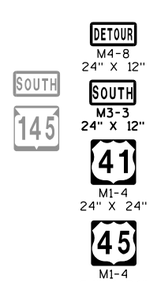
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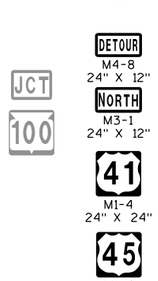
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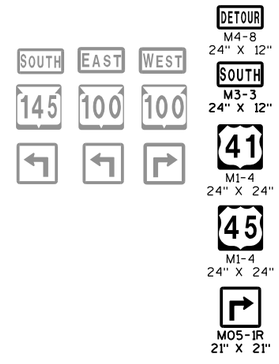
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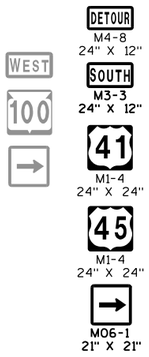
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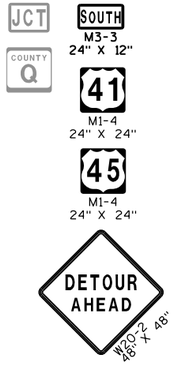
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444



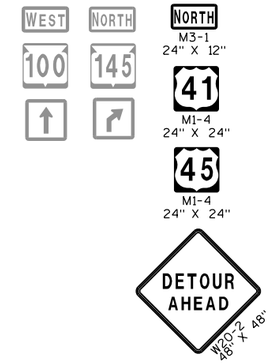
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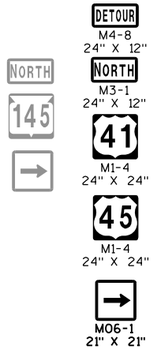
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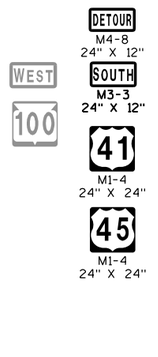
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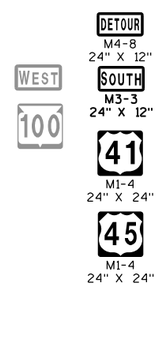
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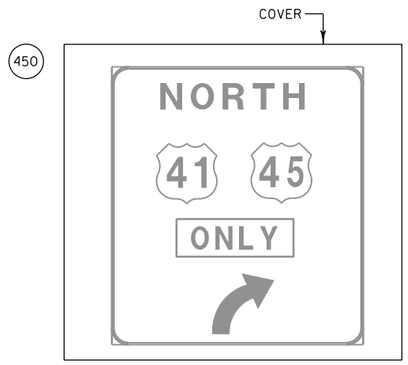
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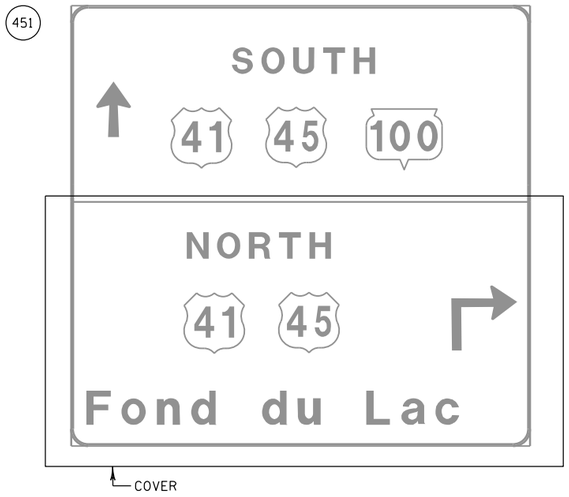
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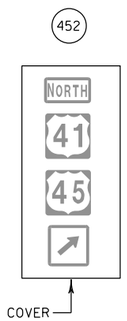
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451



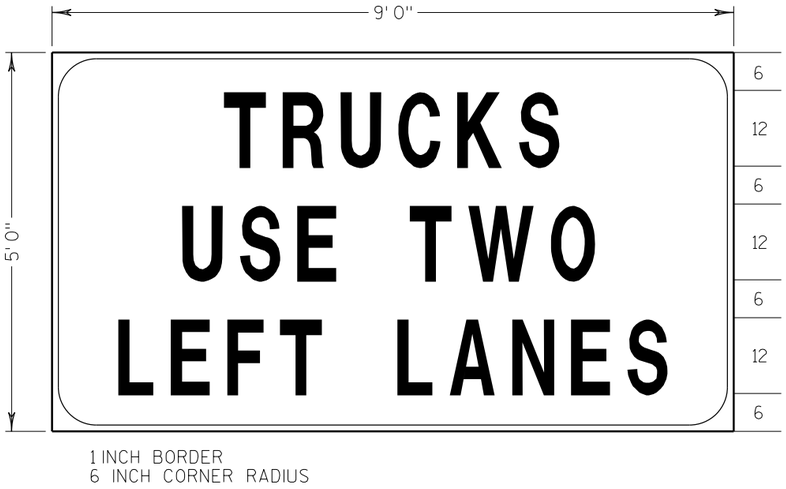
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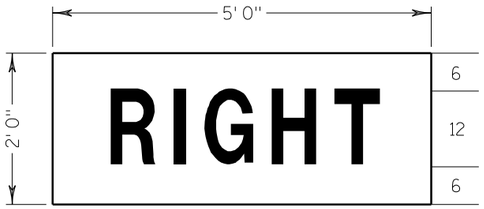
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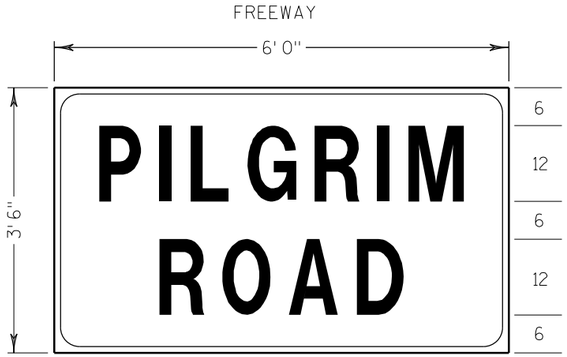


PROJECT NO: 2782-11-70 & 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	DETOUR PLAN: FREEWAY CLOSURE	SHEET 454	E

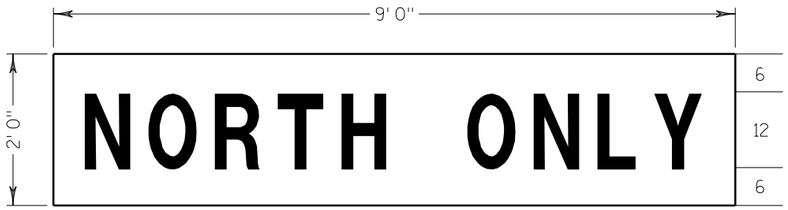


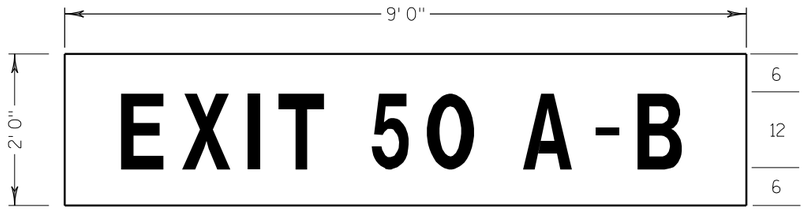
1 INCH BORDER
6 INCH CORNER RADIUS

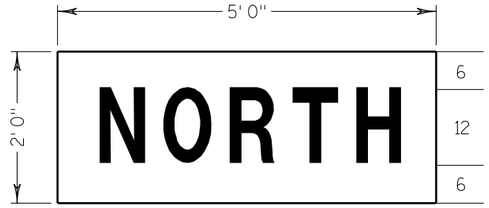




1 INCH BORDER
3 INCH CORNER RADIUS



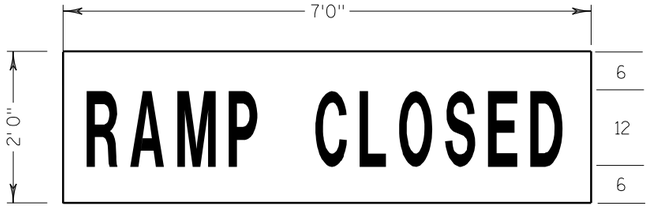




LOCAL STREETS
AND RAMPS



1 INCH BORDER
3 INCH CORNER RADIUS



GENERAL NOTES

ALL SIGNS TO HAVE FLUORESCENT REFLECTIVE SHEETING - REFERENCE: "WISDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION"

ENGINEER WILL FIELD VERIFY THE LOCATION AND SIZE OF SIGNS AFTER INITIAL LAYOUT, BUT BEFORE INSTALLATION

SIGNS ON THIS SHEET TO BE PAID FOR AS "TRAFFIC CONTROL FIXED MESSAGE SIGNS"

SIGNS SHALL BE BLACK NON-REFLECTIVE MESSAGE ON ORANGE FLUORESCENT REFLECTIVE BACKGROUND

ALL SIGNS SHALL HAVE CAPITAL LETTERS:
- 12" CAPS SHALL BE SERIES "D"
- 6" CAPS SHALL BE SERIES "C"

CONTRACTOR SHALL SUBMIT SHOP DRAWINGS TO ENGINEER FOR REVIEW PRIOR TO MANUFACTURING

SIGN BASE MATERIAL SHALL BE ACCORDING TO SECTION 643 & 637

SIGNS SHALL HAVE BLACK BORDERS & RADIUS OF BORDERS AS SHOWN.

CURVE PR1
PI STA: 208+82.32
N: 435,958.47
E: 2,506,058.86
DELTA: 24°48'08.84"
D: 7°32'20.11"
T: 167.11'
L: 328.99'
R: 760.00'
PC STA. 207+15.20
N: 435,791.36
E: 2,506,059.61
PT STA. 210+44.19
N: 436,110.49
E: 2,506,128.27
BK: N 0°15'35" W
AH: N 24°32'34" E
SE: NC

CURVE PR2
PI STA: 220+38.20
N: 437,014.69
E: 2,506,541.15
DELTA: 42°24'22.38"
D: 4°17'30.60"
T: 517.89'
L: 988.07'
R: 1335.00'
PC STA. 215+20.31
N: 436,543.59
E: 2,506,326.03
PT STA. 225+08.37
N: 437,507.61
E: 2,506,382.29
BK: N 24°32'34" E
AH: N 17°51'48" W
SE: 2.0% RC

CURVE MS1
PI STA. 403+27.62
N: 435,575.31
E: 2,505,494.21
DELTA: 7°48'20.46"
D: 14°19'26.20"
T: 27.29'
L: 54.49'
R: 400.00'
PC STA. 403+00.33
N: 435,574.42
E: 2,505,466.93
PT STA. 403+54.82
N: 435,572.49
E: 2,505,521.35
BK: N 88°07'44" E
AH: S 84°03'56" E
SE: NC

CURVE MS2
PI STA. 406+32.64
N: 435,543.77
E: 2,505,797.68
DELTA: 7°38'31.49"
D: 14°19'26.20"
T: 26.72'
L: 53.35'
R: 400.00'
PC STA. 406+05.93
N: 435,546.53
E: 2,505,771.10
PT STA. 406+59.28
N: 435,544.56
E: 2,505,824.38
BK: S 84°03'56" E
AH: N 88°17'33" E
SE: NC

CURVE MS3
PI STA. 413+19.03
N: 435,556.05
E: 2,506,484.00
DELTA: 23°02'04.23"
D: 7°07'02.96"
T: 164.03'
L: 323.63'
R: 805.00'
PC STA. 411+54.99
N: 435,554.25
E: 2,506,319.98
PT STA. 414+78.63
N: 435,493.52
E: 2,506,635.65
BK: N 89°22'21" E
AH: S 67°35'35" E
SE: NC

CURVE SB EN1
PI STA. 102+38.39
N: 436,159.92
E: 2,506,411.22
DELTA: 41°23'49.38"
D: 13°10'17.20"
T: 164.36'
L: 314.29
R: 435.00'
PC STA. 100+74.03
N: 436,210.83
E: 2,506,254.95
PT STA. 103+88.32
N: 436,225.07
E: 2,525,062.12
BK: S 71°57'26" E
AH: N 66°38'45" E
SE: 3.50%

CURVE SB EN2
PI STA. 106+29.77
N: 436,320.79
E: 2,506,783.78
DELTA: 9°52'32.36"
D: 7°36'48.16"
T: 65.02'
L: 129.71'
R: 752.57'
PC STA. 105+64.75
N: 436,295.01
E: 2,506,724.09
PT STA. 106+94.47
N: 436,335.94
E: 2,525,047.01
BK: N 66°38'45" E
AH: N 76°31'17" E
SE:

CURVE SB EX1
PI STA. 3+53.23
N: 436,783.77
E: 2,506,485.17
DELTA: 14°03'15.65"
D: 7°59'59.89"
T: 88.28'
L: 175.68'
R: 716.20'
PC STA. 2+64.95
N: 436,827.48
E: 2,506,408.47
PCC STA. 4+40.63
N: 436,722.74
E: 2,506,548.96
BK: N 71°57'26" W
AH: S 60°19'14" E
SE: 4.20%

CURVE SB EX2
PI STA. 5+68.58
N: 436,634.29
E: 2,506,641.41
DELTA: 36°52'07.39"
D: 14°55'35.78"
T: 127.95'
L: 247.00'
R: 383.85'
PCC STA. 4+40.63
N: 436,722.74
E: 2,506,548.96
PCC STA. 6+87.63
N: 436,508.06
E: 2,506,662.30
BK: N 71°57'26" W
AH: S 60°19'14" E
SE: 5.40%

CURVE SB EX3
PI STA. 9+18.58
N: 436,280.21
E: 2,506,700.01
DELTA: 89°59'18.28"
D: 24°48'12.12"
T: 230.95'
L: 362.81'
R: 231.00'
PCC STA. 6+87.63
N: 436,508.06
E: 2,506,662.30
PCC STA. 10+50.44
N: 436,242.45
E: 2,506,472.16
BK: N 71°57'26" W
AH: S 60°19'14" E
SE: 6.00%

CURVE SB EX4
PI STA. 11+61.82
N: 436,224.24
E: 2,506,362.28
DELTA: 27°27'06.85"
D: 12°33'53.51"
T: 111.38'
L: 218.48'
R: 456.00'
PCC STA. 10+50.44
N: 436,242.45
E: 2,506,472.16
PT STA. 12+68.92
N: 436,258.74
E: 2,506,256.38
BK: N 71°57'26" W
AH: S 60°19'14" E
SE: 5.00%

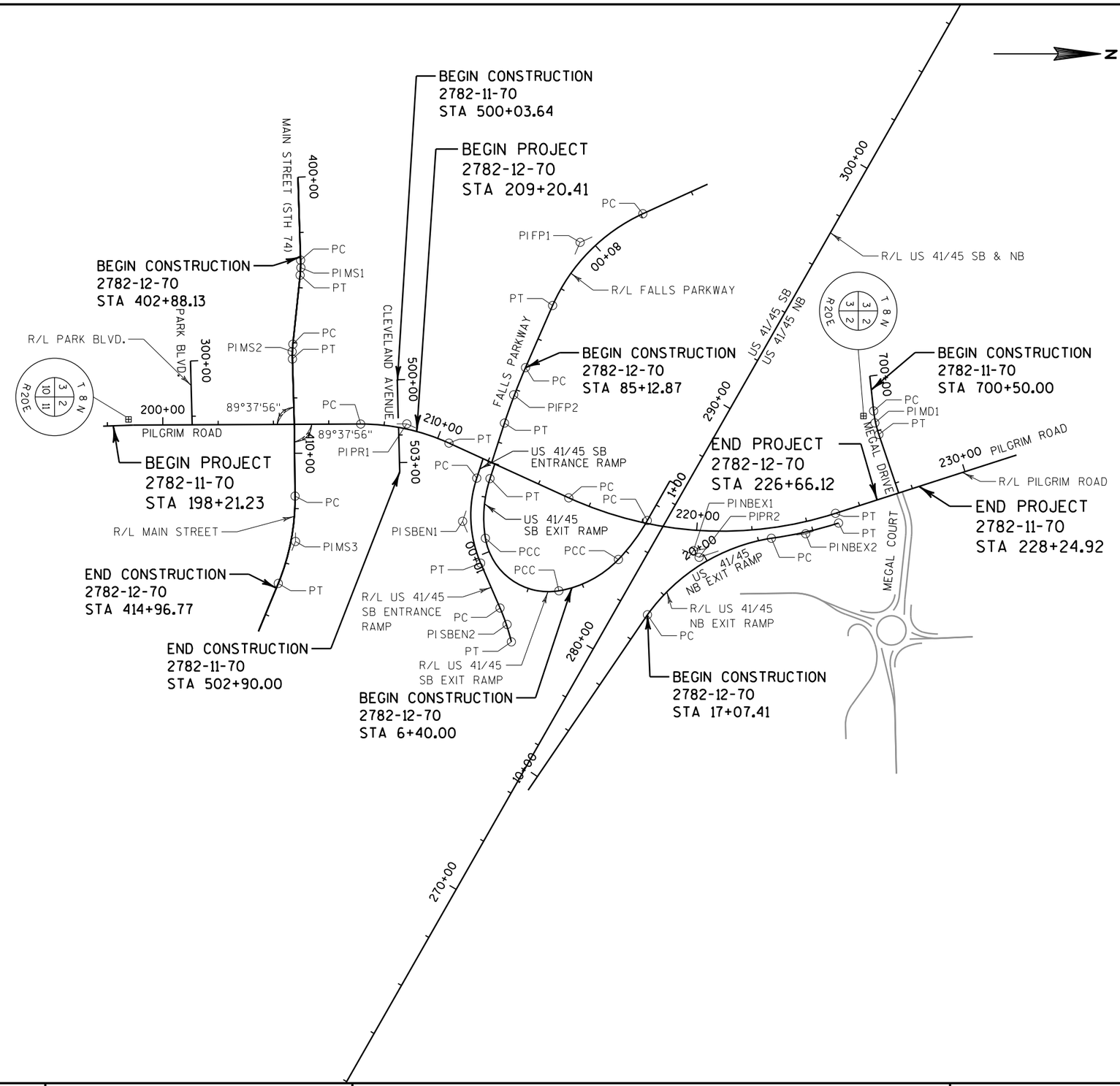
CURVE NB EX1
PI STA. 19+92.49
N: 436,994.27
E: 2,506,517.21
DELTA: 45°14'22.13
D: 8°22'26.86"
T: 285.08'
L: 540.23'
R: 684.20'
PC STA. 17+07.41
N: 436,828.10
E: 2,506,748.85
PRC STA. 22+47.64
N: 437,275.76
E: 2,506,472.10
BK: N 54°41'12" W
AH: N 09°06'19" W
SE: 4.40%

CURVE NB EX2
PI STA. 23+72.78
N: 437,399.85
E: 2,506,455.89
DELTA: 10°25'24.56"
D: 4°10'33.93"
T: 125.14'
L: 249.60'
R: 1372.00'
PRC STA. 22+47.64
N: 437,275.76
E: 2,506,472.10
PT STA. 24+97.24
N: 437,518.96
E: 2,506,417.51
BK: N 07°26'24" W
AH: N 17°51'48" W
SE:3.00%

CURVE FP1
PI STA. 80+41.46
N: 436,584.78
E: 2,505,402.74
DELTA: 41°55'26.77"
D: 8°48'53.05"
T: 249.02'
L: 475.61'
R:650.00'
PC STA. 77+92.44
N: 436,811.31
E: 2,505,299.34
PT STA. 82+68.06
N: 436,485.31
E: 2,505,631.04
BK: S 24°32'01" E
AH: S 66°27'28" E
SE: NC

CURVE FP2
PI STA. 86+20.23
N: 436,344.65
E: 2,505,953.90
DELTA: 5°29'58.00"
D: 2°33'47.48"
T: 107.36
L: 214.55
R:2235.33
PC STA. 85+12.87
N: 436,387.53
E: 2,505,855.47
PT STA. 87+27.43
N: 436,311.39
E: 2,506,055.98
BK: S 66°27'28" E
AH: S 71°57'26" E
SE: NC

CURVE MD1
PI STA. 701+70.57
N: 437,650.13
E: 2,506,055.44
DELTA: 12°29'10.25"
D: 14°19'26.20"
T: 43.76'
L: 87.17'
R: 400.00'
PC STA. 701+26.82
N: 437,645.33
E: 2,506,011.95
PT STA. 702+13.99
N: 437,664.21
E: 2,506,096.87
BK: N 83°42'47" E
AH: N 71°13'37" E
SE: NC



PROJECT NO: 2782-11-70 & 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	ALIGNMENT DETAILS	SHEET 456	E

2

CURVE SB1
PI STA. 902+45.32
N: 437,408.40
E: 2,506,669.85
DELTA: 29° 53' 52.1" (RT)
D: 27° 40' 44.8"
T: 55.27'
L: 108.02'
R: 207.00'
PC STA. 901+90.05
N: 437,353.14
E: 2,506,670.62
PT STA. 902+98.07
N: 437,456.70
E: 2,506,696.72
BK: 359° 12' 05.1"
AH: 29° 05' 57.2"
SE: N.C.

CURVE SB2
PI STA. 904+26.84
N: 437,575.44
E: 2,506,746.54
DELTA: 8° 38' 23.8" (LT)
D: 5° 43' 46.5"
T: 75.54'
L: 150.80'
R: 1,000.00'
PC STA. 903+51.30
N: 437,506.01
E: 2,506,716.77
PT STA. 905+02.09
N: 437,648.55
E: 2,506,765.53
BK: 23° 12' 19.1"
AH: 14° 33' 55.3"
SE: N.C.

CURVE SBA1
PI STA. 907+03.02
N: 437,827.57
E: 2,506,835.65
DELTA: 28° 29' 24.0" (LT)
D: 28° 38' 52.4"
T: 50.77'
L: 99.45'
R: 200.00'
PC STA. 906+52.25
N: 437,782.28
E: 2,506,812.71
PT STA. 907+51.70
N: 437,878.33
E: 2,506,834.20
BK: 26° 51' 34.6"
AH: 358° 22' 10.6"
SE: N.C.

CURVE NB1
PI STA. 902+54.02
N: 437,417.10
E: 2,506,669.72
DELTA: 34° 20' 39.8" (RT)
D: 27° 40' 44.8"
T: 63.97'
L: 124.08'
R: 207.00'
PC STA. 901+90.05
N: 437,353.14
E: 2,506,670.62
PT STA. 903+14.13
N: 437,470.42
E: 2,506,705.07
BK: 359° 12' 05.1"
AH: 33° 32' 44.9"
SE: N.C.

CURVE NB2
PI STA. 903+76.24
N: 437,522.18
E: 2,506,739.39
DELTA: 13° 48' 37.6" (LT)
D: 28° 38' 52.4"
T: 24.22'
L: 48.21'
R: 200.00'
PC STA. 903+52.02
N: 437,501.99
E: 2,506,726.01
PT STA. 904+00.23
N: 437,544.98
E: 2,506,747.57
BK: 33° 32' 44.9"
AH: 19° 44' 07.3"
SE: N.C.

CURVE NB3
PI STA. 904+82.30
N: 437,622.23
E: 2,506,775.29
DELTA: 25° 14' 31.8" (RT)
D: 57° 17' 44.8"
T: 22.39'
L: 44.06'
R: 100.00'
PC STA. 904+59.90
N: 437,601.15
E: 2,506,767.73
PT STA. 905+03.96
N: 437,638.07
E: 2,506,791.11
BK: 19° 44' 07.3"
AH: 44° 58' 39.1"
SE: N.C.

CURVE C1
PI STA. 1+53.00
N: 437,635.12
E: 2,506,797.40
DELTA: 90° 00' 00.0" (LT)
D: 108° 06' 18.9"
T: 53.00'
L: 83.25'
R: 53.00'
PC STA. 1+00.00
N: 437,676.43
E: 2,506,764.20
PT STA. 1+83.25
N: 437,668.32
E: 2,506,838.71
BK: 141° 12' 34.6"
AH: 51° 12' 34.6"
SE: N.C.

CURVE C2
PI STA. 2+36.25
N: 437,701.53
E: 2,506,880.02
DELTA: 90° 00' 00.0" (LT)
D: 108° 06' 18.9"
T: 53.00'
L: 83.25'
R: 53.00'
PC STA. 1+83.25
N: 437,668.32
E: 2,506,838.71
PT STA. 2+66.50
N: 437,742.84
E: 2,506,846.82
BK: 51° 12' 34.6"
AH: 321° 12' 34.6"
SE: N.C.

CURVE SW1
PI STA. 10+33.44
N: 437,719.42
E: 2,506,708.50
DELTA: 48° 03' 28.0" (RT)
D: 76° 23' 39.7"
T: 33.44'
L: 62.91'
R: 75.00'
PC STA. 10+00.00
N: 437,722.92
E: 2,506,675.25
PT STA. 10+62.91
N: 437,692.35
E: 2,506,728.12
BK: 96° 00' 16.4"
AH: 144° 03' 44.4"
SE: N.C.

CURVE SW2
PI STA. 10+79.48
N: 437,678.93
E: 2,506,737.85
DELTA: 28° 36' 29.6" (RT)
D: 88° 08' 50.5"
T: 16.57'
L: 32.46'
R: 65.00'
PC STA. 10+62.91 Y
: 437,692.35
E: 2,506,728.12
PT STA. 10+95.36
N: 437,662.49
E: 2,506,739.97
BK: 144° 03' 44.4"
AH: 172° 40' 14.0"
SE: N.C.

CURVE SW3
PI STA. 11+28.97
N: 437,629.16
E: 2,506,744.25
DELTA: 25° 15' 15.9" (RT)
D: 38° 11' 49.9"
T: 33.60'
L: 66.12'
R: 150.00'
PC STA. 10+95.36
N: 437,662.49
E: 2,506,739.97
PT STA. 11+61.48
N: 437,597.19
E: 2,506,733.91
BK: 172° 40' 14.0"
AH: 197° 55' 29.9"
SE: N.C.

CURVE NW1
PI STA. 10+22.05
N: 437,779.04
E: 2,506,734.38
DELTA: 8° 24' 21.3" (LT)
D: 19° 05' 54.9"
T: 22.05'
L: 44.01'
R: 300.00'
PC STA. 10+00.00
N: 437,781.35
E: 2,506,712.45
PT STA. 10+44.01
N: 437,779.96
E: 2,506,756.40
BK: 96° 00' 16.4"
AH: 87° 35' 55.0"
SE: N.C.

CURVE NW2
PI STA. 10+87.84
N: 437,781.80
E: 2,506,800.19
DELTA: 72° 17' 44.0" (LT)
D: 95° 29' 34.7"
T: 43.83'
L: 75.71'
R: 60.00'
PC STA. 10+44.01
N: 437,779.96
E: 2,506,756.40
PT STA. 11+19.72
N: 437,824.08
E: 2,506,811.76
BK: 87° 35' 55.0"
AH: 15° 18' 11.0"
SE: N.C.

CURVE NW3
PI STA. 11+46.94
N: 437,850.33
E: 2,506,818.94
DELTA: 16° 49' 42.7" (LT)
D: 31° 08' 20.4"
T: 27.22'
L: 54.04'
R: 184.00'
PC STA. 11+19.72
N: 437,824.08
E: 2,506,811.76
PT STA. 11+73.76
N: 437,877.54
E: 2,506,818.22
BK: 15° 18' 11.0"
AH: 358° 28' 28.3"
SE: N.C.

CURVE SE1
PI STA. 10+70.83
N: 437,551.30
E: 2,506,755.64
DELTA: 122° 05' 20.1" (RT)
D: 163° 42' 08.0"
T: 63.26'
L: 74.58'
R: 35.00'
PC STA. 10+07.57
N: 437,552.99
E: 2,506,818.87
PT STA. 10+82.15
N: 437,605.77
E: 2,506,787.80
BK: 268° 28' 11.0"
AH: 30° 33' 31.1"
SE: N.C.

CURVE SE2
PI STA. 11+01.56
N: 437,622.49
E: 2,506,797.67
DELTA: 29° 01' 21.0" (RT)
D: 76° 23' 39.7"
T: 19.41'
L: 37.99'
R: 75.00'
PC STA. 10+82.15
N: 437,605.77
E: 2,506,787.80
PT STA. 11+20.14
N: 437,632.31
E: 2,506,814.41
BK: 30° 33' 31.1"
AH: 59° 34' 52.1"
SE: N.C.

CURVE SE3
PI STA. 11+42.84
N: 437,643.81
E: 2,506,833.98
DELTA: 12° 57' 05.3" (RT)
D: 28° 38' 52.4"
T: 22.70'
L: 45.21'
R: 200.00'
PC STA. 11+20.14
N: 437,632.31
E: 2,506,814.41
PT STA. 11+65.35
N: 437,650.62
E: 2,506,855.64
BK: 59° 34' 52.6"
AH: 72° 31' 57.8"
SE: N.C.

CURVE SE4
PI STA. 12+40.62
N: 437,673.22
E: 2,506,927.44
DELTA: 53° 17' 52.6" (RT)
D: 38° 11' 49.9"
T: 75.27'
L: 139.53'
R: 150.00'
PC STA. 11+65.35
N: 437,650.62
E: 2,506,855.64
PT STA. 13+04.88
N: 437,629.15
E: 2,506,988.47
BK: 72° 31' 57.8"
AH: 125° 49' 50.5"
SE: N.C.

CURVE SE5
PI STA. 14+52.77
N: 437,542.58
E: 2,507,108.37
DELTA: 37° 33' 08.6" (LT)
D: 48° 33' 20.7"
T: 40.12'
L: 77.34'
R: 118.00'
PC STA. 14+12.65
N: 437,566.06
E: 2,507,075.85
PT STA. 14+89.99
N: 437,543.78
E: 2,507,148.47
BK: 125° 49' 50.5"
AH: 88° 16' 41.9"
SE: N.C.

CURVE NE1
PI STA. 10+29.70
N: 437,790.66
E: 2,506,852.54
DELTA: 22° 24' 07.6" (LT)
D: 38° 11' 49.9"
T: 29.70'
L: 58.65'
R: 150.00'
PC STA. 10+00.00
N: 437,820.36
E: 2,506,851.75
PT STA. 10+58.65
N: 437,763.51
E: 2,506,864.59
BK: 178° 28' 28.3"
AH: 156° 04' 20.7"
SE: N.C.

CURVE NE2
PI STA. 11+11.94
N: 437,714.80
E: 2,506,886.20
DELTA: 74° 33' 40.9" (LT)
D: 81° 51' 04.0"
T: 53.29'
L: 91.09'
R: 70.00'
PC STA. 10+58.65
N: 437,763.51
E: 2,506,864.59
PT STA. 11+49.74
N: 437,722.67
E: 2,506,938.91
BK: 156° 04' 20.7"
AH: 81° 30' 39.8"
SE: N.C.

CURVE EB1
PI STA. 801+15.67
N: 437,765.79
E: 2,506,420.59
DELTA: 24° 46' 39.5" (RT)
D: 28° 38' 52.4"
T: 43.93'
L: 86.49'
R: 200.00'
PC STA. 800+71.74
N: 437,751.65
E: 2,506,379.00
PT STA. 801+58.23
N: 437,761.20
E: 2,506,464.28
BK: 71° 13' 36.9"
AH: 96° 00' 16.4"
SE: N.C.

CURVE EB2
PI STA. 804+05.08
N: 437,735.37
E: 2,506,709.79
DELTA: 33° 05' 56.0" (RT)
D: 57° 17' 44.8"
T: 29.72'
L: 57.77'
R: 100.00'
PC STA. 803+75.37
N: 437,738.48
E: 2,506,680.24
PT STA. 804+33.14
N: 437,716.63
E: 2,506,732.85
BK: 96° 00' 16.4"
AH: 129° 06' 12.4"
SE: N.C.

CURVE EB3
PI STA. 807+80.36
N: 437,721.61
E: 2,507,068.62
DELTA: 12° 07' 14.2" (RT)
D: 14° 19' 26.2"
T: 42.47'
L: 84.62'
R: 400.00'
PC STA. 807+37.89
N: 437,711.67
E: 2,507,027.33
PT STA. 808+22.51
N: 437,722.66
E: 2,507,111.07
BK: 76° 27' 44.9"
AH: 88° 34' 59.1"
SE: N.C.

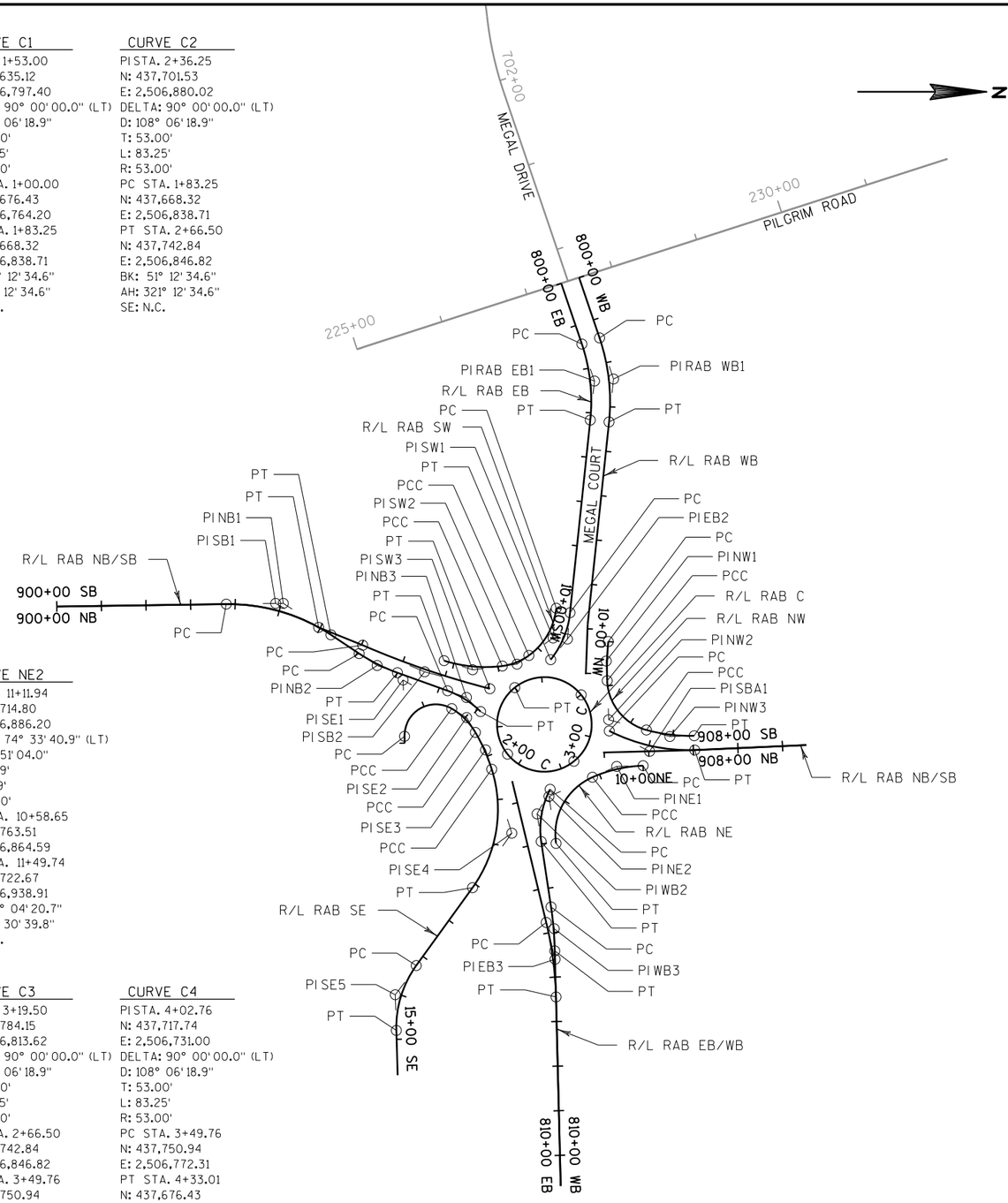
CURVE WB1
PI STA. 801+19.95
N: 437,787.16
E: 2,506,418.20
DELTA: 24° 46' 39.5" (RT)
D: 25° 55' 32.5"
T: 48.54'
L: 95.57'
R: 221.00'
PC STA. 800+71.40
N: 437,771.54
E: 2,506,372.24
PT STA. 801+66.97
N: 437,782.08
E: 2,506,466.48
BK: 71° 13' 36.9"
AH: 96° 00' 16.4"
SE: N.C.

CURVE WB2
PI STA. 806+17.96
N: 437,701.55
E: 2,506,905.80
DELTA: 36° 21' 29.3" (LT)
D: 60° 18' 40.8"
T: 31.20'
L: 60.28'
R: 95.00'
PC STA. 805+86.76
N: 437,716.13
E: 2,506,878.22
PT STA. 806+47.04
N: 437,706.16
E: 2,506,936.65
BK: 117° 52' 09.2"
AH: 81° 30' 39.8"
SE: N.C.

CURVE WB3
PI STA. 807+46.01
N: 437,720.77
E: 2,507,034.54
DELTA: 7° 04' 19.3" (RT)
D: 14° 19' 26.2"
T: 24.72'
L: 49.37'
R: 400.00'
PC STA. 807+21.29
N: 437,717.12
E: 2,507,010.09
PT STA. 807+70.67
N: 437,721.38
E: 2,507,059.25
BK: 81° 30' 39.8"
AH: 88° 34' 59.1"
SE: N.C.

CURVE C3
PI STA. 3+19.50
N: 437,784.15
E: 2,506,813.62
DELTA: 90° 00' 00.0" (LT)
D: 108° 06' 18.9"
T: 53.00'
L: 83.25'
R: 53.00'
PC STA. 2+66.50
N: 437,742.84
E: 2,506,846.82
PT STA. 3+49.76
N: 437,750.94
E: 2,506,772.31
BK: 321° 12' 34.6"
AH: 231° 12' 34.6"
SE: N.C.

CURVE C4
PI STA. 4+02.76
N: 437,717.74
E: 2,506,731.00
DELTA: 90° 00' 00.0" (LT)
D: 108° 06' 18.9"
T: 53.00'
L: 83.25'
R: 53.00'
PC STA. 3+49.76
N: 437,750.94
E: 2,506,772.31
PT STA. 4+33.01
N: 437,676.43
E: 2,506,764.20
BK: 231° 12' 34.6"
AH: 141° 12' 34.6"
SE: N.C.

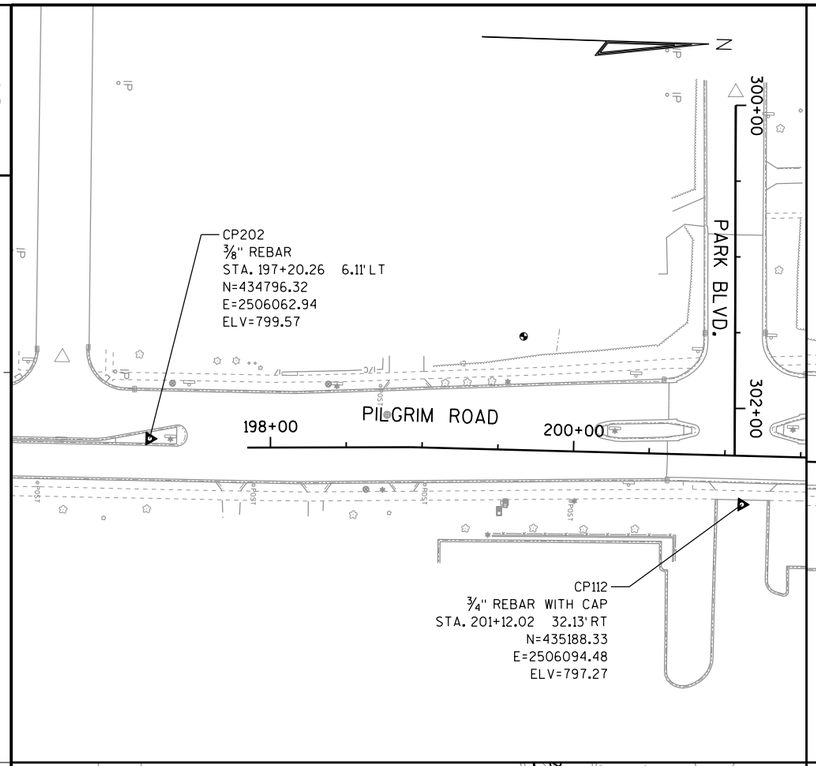


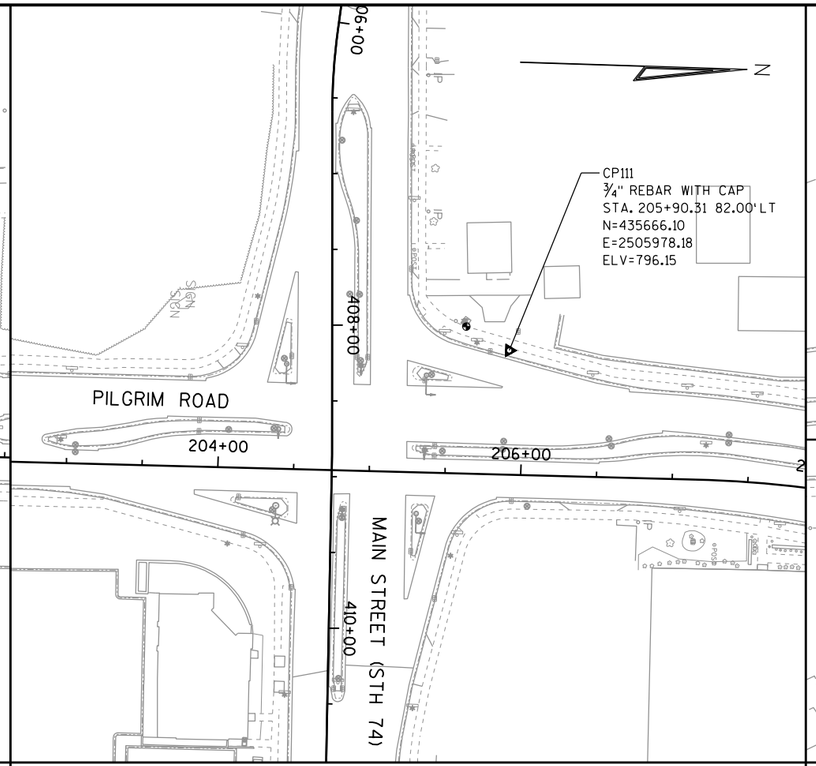
PROJECT NO: 2720-10-70 & 2782-11-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	ALIGNMENT DETAILS	SHEET 457	E

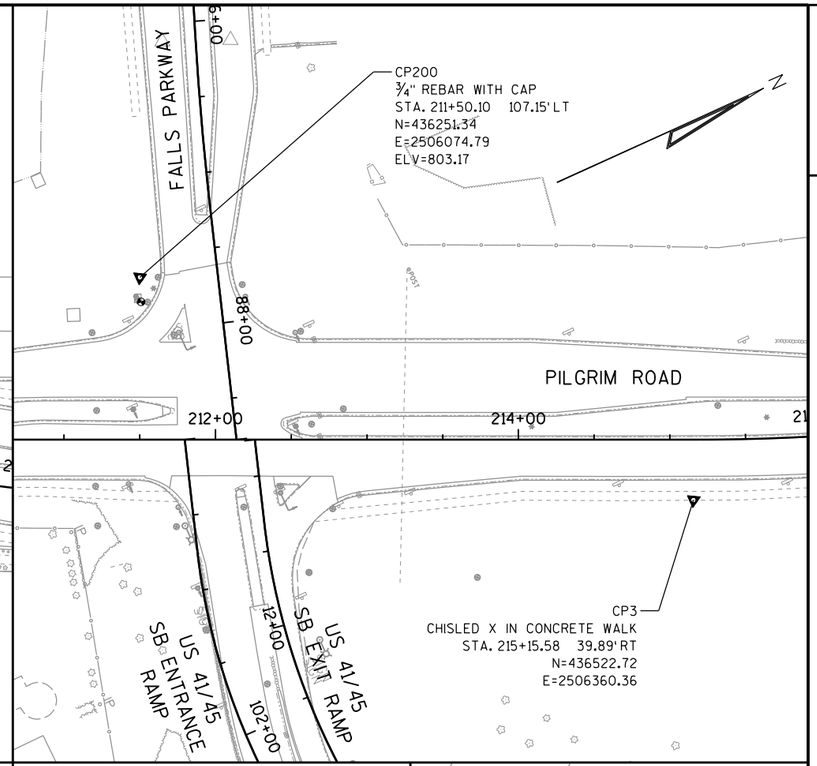
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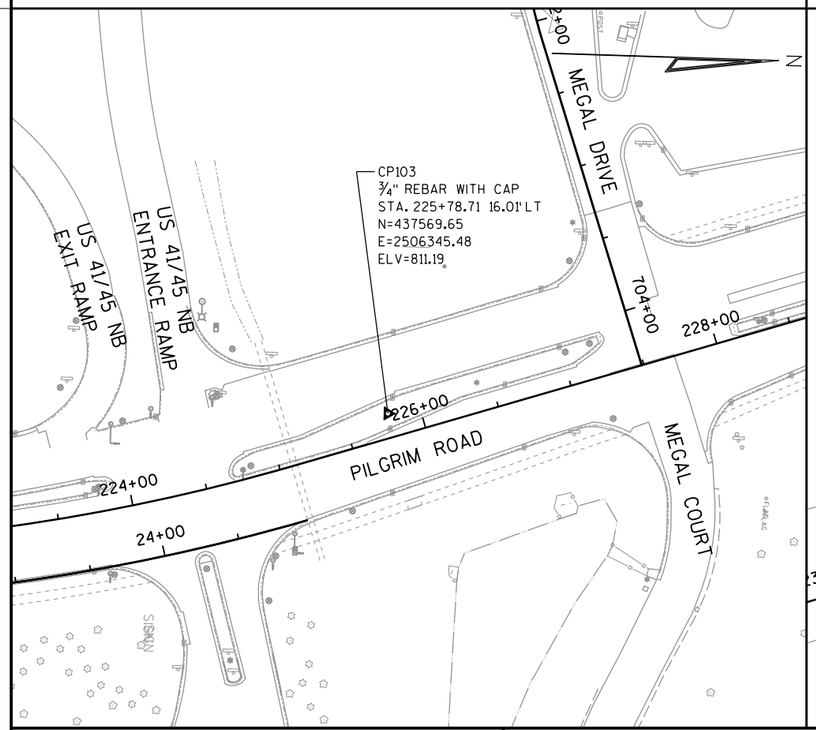
WISDOT/CADDS SHEET 42

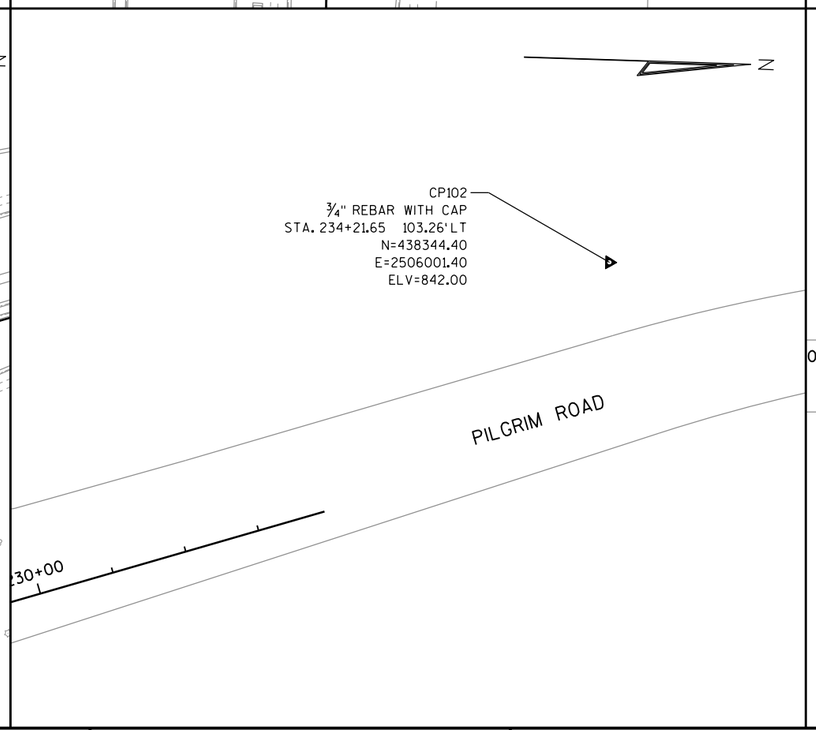
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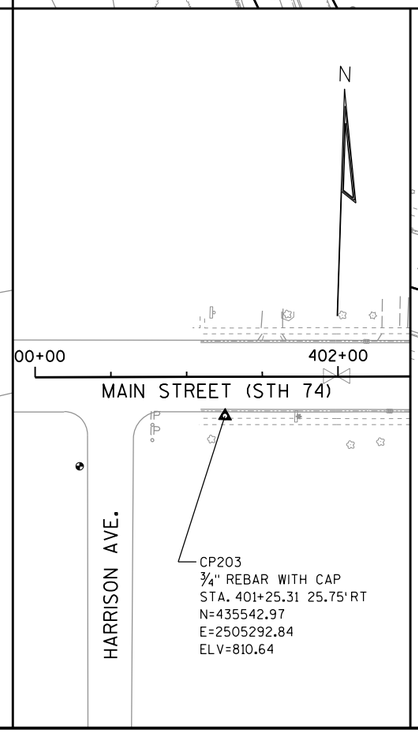


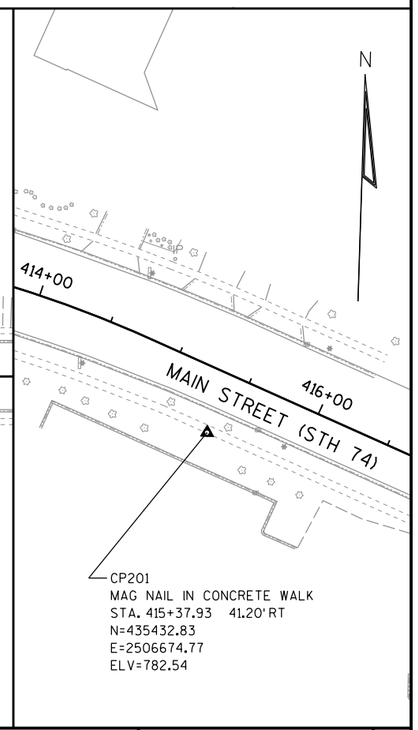












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PROJECT NO: 2782-11-70 & 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	ALIGNMENT LAYOUT - SURVEY CONTROL	SHEET 458	E

DATE 29JAN15 E S T I M A T E O F Q U A N T I T I E S

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	1100-37-70 QUANTITY	2720-10-70 QUANTITY	2782-11-70 QUANTITY	2782-11-71 QUANTITY	2782-12-70 QUANTITY
0010	201.0105	Clearing **P**	STA	3.000					3.000
0020	201.0110	Clearing **P**	SY	250.000		250.000			
0030	201.0120	Clearing **P**	ID	510.000		342.000	86.000		82.000
0040	201.0205	Grubbing **P**	STA	3.000					3.000
0050	201.0210	Grubbing **P**	SY	250.000		250.000			
0060	201.0220	Grubbing **P**	ID	510.000		342.000	86.000		82.000
0070	203.0200	Removing Old Structure (station) 0001. 218+81	LS	1.000	1.000				
0080	203.0200	Removing Old Structure (station) 0002. 218+77	LS	1.000	1.000				
0090	204.0100	Removing Pavement **P**	SY	32,431.000			11,750.000		20,681.000
0100	204.0150	Removing Curb & Gutter **P**	LF	10,097.000		1,929.000	3,640.000		4,528.000
0110	204.0155	Removing Concrete Sidewalk **P**	SY	3,517.000			1,554.000		1,963.000
0120	204.0157	Removing Concrete Barrier **P**	LF	1,089.000	679.000				410.000
0130	204.0165	Removing Guardrail **P**	LF	1,663.000	211.000				1,452.000
0140	204.0170	Removing Fence	LF	1,104.000					1,104.000
0150	204.0190	Removing Surface Drains	EACH	3.000					3.000
0160	204.0195	Removing Concrete Bases	EACH	27.000			5.000		22.000
0170	204.0210	Removing Manholes	EACH	15.000		2.000	11.000		2.000
0180	204.0220	Removing Inlets	EACH	83.000	3.000	6.000	36.000		38.000
0190	204.0245	Removing Storm Sewer (size) 0001. 12-Inch **P**	LF	2,934.000	96.000	375.000	1,408.000		1,055.000
0200	204.0245	Removing Storm Sewer (size) 0002. 15-Inch **P**	LF	338.000		110.000			228.000
0210	204.0245	Removing Storm Sewer (size) 0003. 18-Inch **P**	LF	337.000			337.000		
0220	204.0245	Removing Storm Sewer (size) 0004. 24-Inch **P**	LF	195.000			113.000		82.000
0230	204.0245	Removing Storm Sewer (size) 0005. 27-Inch **P**	LF	64.000			64.000		
0240	204.0245	Removing Storm Sewer (size) 0006. 30-Inch **P**	LF	496.000					496.000
0250	204.0245	Removing Storm Sewer (size) 0007. 36-Inch **P**	LF	331.000			23.000		308.000
0260	204.0245	Removing Storm Sewer (size) 0008. 48-Inch **P**	LF	201.000			201.000		
0270	204.0291.S	Abandoning Sewer	CY	20.000			10.000		10.000
0280	204.9105.S	Removing (item description) 0001. Sand Barrels	LS	1.000	1.000				
0290	205.0100	Excavation Common	CY	52,465.000	1,138.000	21,520.000	15,045.000		14,762.000
0300	205.0501.S	Excavation, Hauling, and Disposal of Petroleum Contaminated Soil	TON	85.000			85.000		
0310	206.1000	Excavation for Structures Bridges (structure) 0001. B-67-337	LS	1.000	1.000				
0320	206.1000	Excavation for Structures Bridges (structure) 0002. B-67-338	LS	1.000	1.000				
0330	208.0100	Borrow	CY	36,399.000		272.000			36,127.000
0340	210.0100	Backfill Structure **P**	CY	650.000	650.000				
0350	213.0100	Finishing Roadway (project) 0001. 1100-37-70	EACH	1.000	1.000				
0360	213.0100	Finishing Roadway (project) 0002. 2720-10-70	EACH	1.000		1.000			
0370	213.0100	Finishing Roadway (project) 0003. 2782-11-70	EACH	1.000			1.000		
0380	213.0100	Finishing Roadway (project) 0004. 2782-12-70	EACH	1.000					1.000
0390	305.0110	Base Aggregate Dense 3/4-Inch	TON	1,275.000		70.000	455.000		750.000

DATE 29JAN15 E S T I M A T E O F Q U A N T I T I E S

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	1100-37-70 QUANTITY	2720-10-70 QUANTITY	2782-11-70 QUANTITY	2782-11-71 QUANTITY	2782-12-70 QUANTITY
0400	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	32,150.000	950.000	3,280.000	11,020.000		16,900.000
0410	310.0110	Base Aggregate Open Graded	TON	370.000	370.000				
0420	311.0110	Breaker Run	TON	2,500.000			1,000.000		1,500.000
0430	405.0100	Coloring Concrete Red **P**	CY	979.000		629.000	160.000		190.000
0440	415.0060	Concrete Pavement 6-Inch **P**	SY	107.000					107.000
0450	415.0080	Concrete Pavement 8-Inch **P**	SY	63.000			63.000		
0460	415.0085	Concrete Pavement 8 1/2-Inch **P**	SY	4,916.000					4,916.000
0470	415.0095	Concrete Pavement 9 1/2-Inch **P**	SY	36,428.000		4,157.000	13,220.000		19,051.000
0480	415.0100	Concrete Pavement 10-Inch **P**	SY	162.000	162.000				
0490	415.0105	Concrete Pavement 10 1/2-Inch **P**	SY	49.000	49.000				
0500	415.0210	Concrete Pavement Gaps	EACH	33.000		16.000	11.000		6.000
0510	415.0410	Concrete Pavement Approach Slab **P**	SY	242.000					242.000
0520	415.1085	Concrete Pavement HES 8 1/2-Inch **P**	SY	568.000					568.000
0530	415.1095	Concrete Pavement HES 9 1/2-Inch **P**	SY	3,110.000			2,880.000		230.000
0540	416.0260	Concrete Driveway HES 6-Inch **P**	SY	224.000		30.000	88.000		106.000
0550	416.0280	Concrete Driveway HES 8-Inch **P**	SY	299.000			78.000		221.000
0560	416.0508	Concrete Roundabout Truck Apron 8-Inch **P**	SY	342.000		342.000			
0570	416.0610	Drilled Tie Bars	EACH	217.000	217.000				
0580	416.0620	Drilled Dowel Bars	EACH	255.000			74.000		181.000
0590	416.1010	Concrete Surface Drains **P**	CY	2.000	1.000				1.000
0600	440.4410.S	Incentive IRI Ride	DOL	4,554.000			1,906.000		2,648.000
0610	455.0120	Asphaltic Material PG64-28	TON	155.000	7.000	26.000	64.000		58.000
0620	455.0605	Tack Coat	GAL	660.000	39.000	132.000	240.000		249.000
0630	460.1103	HMA Pavement Type E-3	TON	2,143.000	126.000	456.000	503.000		1,058.000
0640	460.1110	HMA Pavement Type E-10	TON	617.000			617.000		
0650	460.2000	Incentive Density HMA Pavement	DOL	1,690.000		290.000	720.000		680.000
0660	460.4000	HMA Cold Weather Paving	TON	167.000		53.000	88.000		26.000
0670	465.0120	Asphaltic Surface Driveways and Field Entrances	TON	22.000			10.000		12.000
0680	465.0125	Asphaltic Surface Temporary	TON	1,255.000			475.000		780.000
0690	465.0315	Asphaltic Flumes	SY	23.000		23.000			
0700	502.0100	Concrete Masonry Bridges **P**	CY	1,759.000	1,759.000				
0710	502.3200	Protective Surface Treatment	SY	3,020.000	3,020.000				
0720	503.0146	Prestressed Girder Type I 45W-Inch **P**	LF	3,304.000	3,304.000				
0730	505.0405	Bar Steel Reinforcement HS Bridges **P**	LB	19,770.000	19,770.000				
0740	505.0605	Bar Steel Reinforcement HS Coated Bridges **P**	LB	273,700.000	273,700.000				
0750	506.2605	Bearing Pads Elastomeric Non-Laminated	EACH	64.000	64.000				
0760	506.4000	Steel Diaphragms (structure) 0001. B-67-337	EACH	28.000	28.000				
0770	506.4000	Steel Diaphragms (structure) 0002. B-67-338	EACH	28.000	28.000				
0780	511.1200	Temporary Shoring (structure) 0001. B-67-337	SF	2,890.000	2,890.000				
0790	511.1200	Temporary Shoring (structure) 0002. B-67-338	SF	1,100.000	1,100.000				
0800	513.2000	Railing Pipe (structure) 0001. R-67-121	LS	1.000	1.000				
0810	513.2000	Railing Pipe (structure) 0002. R-67-122	LS	1.000	1.000				
0820	513.2050.S	Railing Pipe	LF	4.000			2.000		2.000
0830	513.4090	Railing Tubular Screening (structure) 0001. B-67-337	LS	1.000	1.000				
0840	513.4090	Railing Tubular Screening (structure) 0002. B-67-338	LS	1.000	1.000				
0850	516.0500	Rubberized Membrane Waterproofing **P**	SY	68.000	68.000				

DATE 29JAN15 E S T I M A T E O F Q U A N T I T I E S

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	1100-37-70 QUANTITY	2720-10-70 QUANTITY	2782-11-70 QUANTITY	2782-11-71 QUANTITY	2782-12-70 QUANTITY
0860	517.1010.S	Concrete Staining (structure) 0001. B-67-337 **P**	SF	5,920.000	5,920.000				
0870	517.1010.S	Concrete Staining (structure) 0002. B-67-338 **P**	SF	4,940.000	4,940.000				
0880	517.1010.S	Concrete Staining (structure) 0003. R-67-121 **P**	SF	2,360.000	2,360.000				
0890	517.1010.S	Concrete Staining (structure) 0004. R-67-122 **P**	SF	2,530.000	2,530.000				
0900	520.4018	Culvert Pipe Temporary 18-Inch	LF	10.000			10.000		
0910	520.4024	Culvert Pipe Temporary 24-Inch	LF	48.000		48.000			
0920	520.4048	Culvert Pipe Temporary 48-Inch	LF	69.000		69.000			
0930	520.8000	Concrete Collars for Pipe	EACH	67.000	1.000	6.000	24.000		36.000
0940	522.1012	Apron Endwalls for Culvert Pipe Reinforced Concrete 12-Inch	EACH	5.000		1.000			4.000
0950	522.1015	Apron Endwalls for Culvert Pipe Reinforced Concrete 15-Inch	EACH	3.000		1.000			2.000
0960	522.1018	Apron Endwalls for Culvert Pipe Reinforced Concrete 18-Inch	EACH	2.000			2.000		
0970	522.1024	Apron Endwalls for Culvert Pipe Reinforced Concrete 24-Inch	EACH	2.000		1.000			1.000
0980	522.1030	Apron Endwalls for Culvert Pipe Reinforced Concrete 30-Inch	EACH	5.000					5.000
0990	522.1036	Apron Endwalls for Culvert Pipe Reinforced Concrete 36-Inch	EACH	2.000					2.000
1000	522.1048	Apron Endwalls for Culvert Pipe Reinforced Concrete 48-Inch	EACH	1.000					1.000
1010	522.1072	Apron Endwalls for Culvert Pipe Reinforced Concrete 72-Inch	EACH	1.000					1.000
1020	550.1100	Piling Steel HP 10-Inch X 42 Lb	LF	4,840.000	4,840.000				
1030	601.0405	Concrete Curb & Gutter 18-Inch Type A **P**	LF	2,195.000		245.000	486.000		1,464.000
1040	601.0407	Concrete Curb & Gutter 18-Inch Type D **P**	LF	151.000			151.000		
1050	601.0409	Concrete Curb & Gutter 30-Inch Type A **P**	LF	17,023.000		2,159.000	5,353.000		9,511.000
1060	601.0411	Concrete Curb & Gutter 30-Inch Type D **P**	LF	3,904.000		1,044.000	1,634.000		1,226.000
1070	601.0501	Concrete Curb & Gutter Integral 4-Inch Sloped 36-Inch **P**	LF	400.000	400.000				
1080	601.0553	Concrete Curb & Gutter 4-Inch Sloped 36-Inch Type D **P**	LF	89.000		89.000			
1090	601.0574	Concrete Curb & Gutter 4-Inch Sloped 30-Inch Type G	LF	220.000					220.000
1100	601.0576	Concrete Curb & Gutter 4-Inch Sloped 30-Inch Type J	LF	52.000	52.000				
1110	601.0580	Concrete Curb & Gutter 4-Inch Sloped 36-Inch Type R **P**	LF	244.000		244.000			
1120	601.0600	Concrete Curb Pedestrian **P**	LF	360.000		142.000	154.000		64.000
1130	602.0410	Concrete Sidewalk 5-Inch **P**	SF	61,237.000		3,749.000	23,210.000		34,278.000
1140	602.0505	Curb Ramp Detectable Warning Field Yellow **P**	SF	824.000		192.000	376.000		256.000
1150	602.1500	Concrete Steps	SF	32.000			12.000		20.000
1160	603.1132	Concrete Barrier Type S32 **P**	LF	191.000					191.000
1170	603.1142	Concrete Barrier Type S42	LF	150.000	150.000				
1180	603.1236	Concrete Barrier Type S36A	LF	130.000					130.000
1190	603.1442	Concrete Barrier Type S42C	LF	318.000	318.000				

DATE 29JAN15 E S T I M A T E O F Q U A N T I T I E S

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	1100-37-70 QUANTITY	2720-10-70 QUANTITY	2782-11-70 QUANTITY	2782-11-71 QUANTITY	2782-12-70 QUANTITY
1200	603.3111	Concrete Barrier Transition Type NJ32SF to S32	EACH	1.000					1.000
1210	603.3313	Concrete Barrier Transition Type NJ32DF to S36	EACH	1.000					1.000
1220	603.8000	Concrete Barrier Temporary Precast Delivered	LF	2,900.000	2,160.000				740.000
1230	603.8125	Concrete Barrier Temporary Precast Installed	LF	3,370.000	2,630.000				740.000
1240	604.0400	Slope Paving Concrete **P**	SY	72.000	72.000				
1250	606.0100	Riprap Light	CY	4.000	2.000				2.000
1260	606.0200	Riprap Medium	CY	144.000		26.000	19.000		99.000
1270	608.0312	Storm Sewer Pipe Reinforced Concrete Class III 12-Inch	LF	2,741.000	101.000	850.000	803.000		987.000
1280	608.0315	Storm Sewer Pipe Reinforced Concrete Class III 15-Inch	LF	732.000		96.000	483.000		153.000
1290	608.0318	Storm Sewer Pipe Reinforced Concrete Class III 18-Inch	LF	488.000		34.000	454.000		
1300	608.0324	Storm Sewer Pipe Reinforced Concrete Class III 24-Inch	LF	1,183.000		241.000	398.000		544.000
1310	608.0327	Storm Sewer Pipe Reinforced Concrete Class III 27-Inch	LF	123.000			113.000		10.000
1320	608.0330	Storm Sewer Pipe Reinforced Concrete Class III 30-Inch	LF	599.000					599.000
1330	608.0336	Storm Sewer Pipe Reinforced Concrete Class III 36-Inch	LF	404.000					404.000
1340	608.0348	Storm Sewer Pipe Reinforced Concrete Class III 48-Inch	LF	82.000			20.000		62.000
1350	608.0372	Storm Sewer Pipe Reinforced Concrete Class III 72-Inch	LF	135.000					135.000
1360	611.0420	Reconstructing Manholes	EACH	4.000			3.000		1.000
1370	611.0430	Reconstructing Inlets	EACH	1.000			1.000		
1380	611.0530	Manhole Covers Type J	EACH	14.000		4.000	8.000		2.000
1390	611.0550	Manhole Covers Type M	EACH	1.000		1.000			
1400	611.0610	Inlet Covers Type BW	EACH	6.000	4.000				2.000
1410	611.0612	Inlet Covers Type C	EACH	1.000					1.000
1420	611.0624	Inlet Covers Type H	EACH	98.000		18.000	42.000		38.000
1430	611.0639	Inlet Covers Type H-S	EACH	20.000		8.000	11.000		1.000
1440	611.0642	Inlet Covers Type MS	EACH	7.000		4.000	3.000		
1450	611.0652	Inlet Covers Type T	EACH	2.000		2.000			
1460	611.0666	Inlet Covers Type Z	EACH	21.000			8.000		13.000
1470	611.1003	Catch Basins 3-FT Diameter	EACH	14.000			5.000		9.000
1480	611.1004	Catch Basins 4-FT Diameter	EACH	8.000		2.000	4.000		2.000
1490	611.1005	Catch Basins 5-FT Diameter	EACH	2.000			2.000		
1500	611.1006	Catch Basins 6-FT Diameter	EACH	2.000			1.000		1.000
1510	611.1230	Catch Basins 2x3-FT	EACH	63.000		13.000	30.000		20.000
1520	611.2004	Manholes 4-FT Diameter	EACH	9.000		3.000	4.000		2.000
1530	611.2005	Manholes 5-FT Diameter	EACH	4.000			2.000		2.000
1540	611.2006	Manholes 6-FT Diameter	EACH	5.000			2.000		3.000
1550	611.2007	Manholes 7-FT Diameter	EACH	2.000			1.000		1.000
1560	611.2008	Manholes 8-FT Diameter	EACH	1.000		1.000			
1570	611.3003	Inlets 3-FT Diameter	EACH	4.000			1.000		3.000
1580	611.3004	Inlets 4-FT Diameter	EACH	10.000		2.000	5.000		3.000
1590	611.3225	Inlets 2x2.5-FT	EACH	1.000	1.000				
1600	611.3230	Inlets 2x3-FT	EACH	35.000	2.000	11.000	11.000		11.000
1610	611.3901	Inlets Median 1 Grate	EACH	5.000		2.000	3.000		

DATE 29JAN15 E S T I M A T E O F Q U A N T I T I E S

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	1100-37-70 QUANTITY	2720-10-70 QUANTITY	2782-11-70 QUANTITY	2782-11-71 QUANTITY	2782-12-70 QUANTITY
1620	611.3902	Inlets Median 2 Grate	EACH	1.000		1.000			
1630	611.8110	Adjusting Manhole Covers	EACH	10.000			5.000		5.000
1640	611.8115	Adjusting Inlet Covers	EACH	6.000			3.000		3.000
1650	611.8120.S	Cover Plates Temporary	EACH	29.000		3.000	15.000		11.000
1660	611.9800.S	Pipe Grates	EACH	1.000					1.000
1670	612.0206	Pipe Underdrain Unperforated 6-Inch	LF	38.000	38.000				
1680	612.0406	Pipe Underdrain Wrapped 6-Inch	LF	808.000	808.000				
1690	614.0150	Anchor Assemblies for Steel Plate Beam Guard	EACH	2.000	2.000				
1700	614.0396	Guardrail Mow Strip Asphalt	SY	76.000	76.000				
1710	614.0800	Crash Cushions Permanent	EACH	2.000	1.000				1.000
1720	614.0905	Crash Cushions Temporary	EACH	9.000	5.000				4.000
1730	614.2300	MGS Guardrail 3 **P**	LF	854.000	94.000				760.000
1740	614.2500	MGS Thrie Beam Transition **P**	LF	150.000	39.000				111.000
1750	614.2610	MGS Guardrail Terminal EAT	EACH	3.000					3.000
1760	616.0206	Fence Chain Link 6-FT **P**	LF	1,118.000	38.000				1,080.000
1770	616.0700.S	Fence Safety	LF	200.000					200.000
1780	619.1000	Mobilization	EACH	1.000	0.300	0.050	0.250	0.050	0.350
1790	620.0300	Concrete Median Sloped Nose **P**	SF	1,567.000		429.000	670.000		468.000
1800	624.0100	Water	MGAL	876.000	6.000	699.000	15.000		156.000
1810	625.0100	Topsoil	SY	3,526.000			3,526.000		
1820	625.0500	Salvaged Topsoil	SY	40,782.000		10,364.000	1,105.000		29,313.000
1830	627.0200	Mulching	SY	8.000					8.000
1840	628.1104	Erosion Bales	EACH	543.000		190.000	41.000		312.000
1850	628.1504	Silt Fence	LF	5,937.000		268.000	576.000		5,093.000
1860	628.1520	Silt Fence Maintenance	LF	5,937.000		268.000	576.000		5,093.000
1870	628.1905	Mobilizations Erosion Control	EACH	34.000	5.000	3.000	14.000		12.000
1880	628.1910	Mobilizations Emergency Erosion Control	EACH	26.000	2.000	6.000	11.000		7.000
1890	628.1920	Cleaning Sediment Basins	CY	90.000		50.000			40.000
1900	628.2004	Erosion Mat Class I Type B	SY	29,644.000	487.000	6,396.000	1,043.000		21,718.000
1910	628.2008	Erosion Mat Urban Class I Type B	SY	2,229.000			7.000		2,222.000
1920	628.2027	Erosion Mat Class II Type C	SY	6,785.000		6,785.000			
1930	628.6510	Soil Stabilizer Type B	ACRE	6.100		1.600			4.500
1940	628.7005	Inlet Protection Type A	EACH	191.000		40.000	83.000		68.000
1950	628.7010	Inlet Protection Type B	EACH	19.000	3.000	3.000	4.000		9.000
1960	628.7015	Inlet Protection Type C	EACH	222.000		24.000	89.000		109.000
1970	628.7020	Inlet Protection Type D	EACH	57.000	4.000	13.000	40.000		
1980	628.7504	Temporary Ditch Checks	LF	75.000		75.000			
1990	628.7555	Culvert Pipe Checks	EACH	73.000		10.000	13.000		50.000
2000	628.7560	Tracking Pads	EACH	5.000	1.000	2.000	1.000		1.000
2010	628.7570	Rock Bags	EACH	20.000		20.000			
2020	629.0210	Fertilizer Type B	CWT	26.600		6.300	3.200		17.100
2030	630.0140	Seeding Mixture No. 40	LB	541.200		138.800	61.500		340.900
2040	630.0160	Seeding Mixture No. 60	LB	1.000		1.000			
2050	630.0175	Seeding Mixture No. 75	LB	8.800		8.800			
2060	630.0200	Seeding Temporary	LB	440.700		187.500	82.800		170.400
2070	631.0300	Sod Water	MGAL	55.900		5.000	19.200		31.700
2080	631.1000	Sod Lawn **P**	SY	9,708.000		618.000	3,448.000		5,642.000
2090	633.5200	Markers Culvert End	EACH	20.000		2.000	2.000		16.000
2100	634.0618	Posts Wood 4x6-Inch X 18-FT	EACH	88.000			9.000		79.000
2110	634.0622	Posts Wood 4x6-Inch X 22-FT	EACH	6.000					6.000
2120	634.0814	Posts Tubular Steel 2x2-Inch X 14-FT	EACH	172.000		52.000	63.000		57.000
2130	637.1220	Signs Type I Reflective SH	SF	179.000			81.000		98.000
2140	637.2210	Signs Type II Reflective H	SF	1,929.240		260.970	655.490		1,012.780

DATE 29JAN15 E S T I M A T E O F Q U A N T I T I E S

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	1100-37-70 QUANTITY	2720-10-70 QUANTITY	2782-11-70 QUANTITY	2782-11-71 QUANTITY	2782-12-70 QUANTITY
2150	637.2215	Signs Type II Reflective H Folding	SF	316.340			119.360		196.980
2160	637.2220	Signs Type II Reflective SH	SF	6.750		6.750			
2170	637.2230	Signs Type II Reflective F	SF	558.750		109.500	60.500		388.750
2180	638.2102	Moving Signs Type II	EACH	16.000			11.000		5.000
2190	638.2602	Removing Signs Type II	EACH	148.000		9.000	42.000		97.000
2200	638.3000	Removing Small Sign Supports	EACH	127.000		9.000	37.000		81.000
2210	640.1303.S	Pond Liner Clay **P**	CY	2,068.000		2,068.000			
2220	641.8100	Overhead Sign Support (structure) 0001. S-67-960	LS	1.000			1.000		
2230	641.8100	Overhead Sign Support (structure) 0002. S-67-961	LS	1.000					1.000
2240	641.8100	Overhead Sign Support (structure) 0003. S-67-962	LS	1.000					1.000
2250	642.5401	Field Office Type D	EACH	1.000					1.000
2260	643.0100	Traffic Control (project) 0001. 1100-37-70	EACH	1.000	1.000				
2270	643.0100	Traffic Control (project) 0002. 2720-10-70	EACH	1.000		1.000			
2280	643.0100	Traffic Control (project) 0003. 2782-11-70	EACH	1.000			1.000		
2290	643.0100	Traffic Control (project) 0004. 2782-12-70	EACH	1.000					1.000
2300	643.0300	Traffic Control Drums	DAY	100,085.000	31,300.000	540.000	26,215.000		42,030.000
2310	643.0410	Traffic Control Barricades Type II	DAY	1,500.000			1,050.000		450.000
2320	643.0420	Traffic Control Barricades Type III	DAY	16,689.000	3,475.000	630.000	7,375.000		5,209.000
2330	643.0500	Traffic Control Flexible Tubular Marker Posts	EACH	218.000			52.000		166.000
2340	643.0600	Traffic Control Flexible Tubular Marker Bases	EACH	218.000			52.000		166.000
2350	643.0705	Traffic Control Warning Lights Type A	DAY	11,178.000	3,010.000	900.000	4,010.000		3,258.000
2360	643.0715	Traffic Control Warning Lights Type C	DAY	24,061.000	10,300.000		5,300.000		8,461.000
2370	643.0800	Traffic Control Arrow Boards	DAY	309.000	295.000				14.000
2380	643.0900	Traffic Control Signs	DAY	35,160.000	6,535.000	720.000	11,935.000		15,970.000
2390	643.0910	Traffic Control Covering Signs Type I	EACH	39.000	8.000		1.000		30.000
2400	643.0920	Traffic Control Covering Signs Type II	EACH	62.000	20.000		11.000		31.000
2410	643.1000	Traffic Control Signs Fixed Message	SF	1,345.000	55.000				1,290.000
2420	643.1050	Traffic Control Signs PCMS	DAY	48.000	48.000				
2430	643.2000	Traffic Control Detour (project) 0001. 1100-37-70	EACH	1.000	1.000				
2440	643.2000	Traffic Control Detour (project) 0002. 2782-12-70	EACH	1.000					1.000
2450	643.3000	Traffic Control Detour Signs	DAY	17,219.000	2,304.000				14,915.000
2460	645.0120	Geotextile Fabric Type HR	SY	332.000		83.000	54.000		195.000
2470	645.0130	Geotextile Fabric Type R	SY	32.000	16.000				16.000
2480	646.0106	Pavement Marking Epoxy 4-Inch **P**	LF	9,514.000		1,487.000	971.000		7,056.000
2490	646.0600	Removing Pavement Markings	LF	17,138.000	7,908.000		3,261.000		5,969.000
2500	646.0841.S	Pavement Marking Grooved Wet Reflective Contrast Tape 4-Inch **P**	LF	12,927.000	8,762.000		1,164.000		3,001.000
2510	646.0843.S	Pavement Marking Grooved Wet Reflective Contrast Tape 8-Inch **P**	LF	7,945.000	836.000	311.000	2,108.000		4,690.000
2520	646.0881.S	Pavement Marking Grooved Wet Reflective Tape 4-Inch **P**	LF	498.000			268.000		230.000
2530	646.0883.S	Pavement Marking Grooved Wet Reflective Tape 8-Inch **P**	LF	1,175.000			793.000		382.000
2540	647.0456	Pavement Marking Curb Epoxy **P**	LF	243.000		57.000	116.000		70.000
2550	647.0606	Pavement Marking Island Nose Epoxy	EACH	21.000		3.000	11.000		7.000

3

DATE 29JAN15 E S T I M A T E O F Q U A N T I T I E S

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	1100-37-70 QUANTITY	2720-10-70 QUANTITY	2782-11-70 QUANTITY	2782-11-71 QUANTITY	2782-12-70 QUANTITY
2560	647.0656	Pavement Marking Parking Stall Epoxy **P**	LF	220.000			220.000		
2570	647.0726	Pavement Marking Diagonal Epoxy 12-Inch **P**	LF	536.000	245.000		15.000		276.000
2580	647.0796	Pavement Marking Crosswalk Epoxy 24-Inch **P**	LF	280.000		280.000			
2590	647.0955	Removing Pavement Markings Arrows	EACH	6.000			1.000		5.000
2600	647.0960	Removing Pavement Markings Symbols	EACH	4.000					4.000
2610	649.0100	Temporary Pavement Marking 4-Inch	LF	26,922.000			9,765.000		17,157.000
2620	649.0400	Temporary Pavement Marking Removable Tape 4-Inch	LF	77,424.000	27,995.000		14,810.000		34,619.000
2630	649.0701	Temporary Pavement Marking 8-Inch	LF	3,628.000			1,951.000		1,677.000
2640	649.0801	Temporary Pavement Marking Removable Tape 8-Inch	LF	8,870.000			4,303.000		4,567.000
2650	652.0125	Conduit Rigid Metallic 2-Inch **P**	LF	30.000	20.000				10.000
2660	652.0135	Conduit Rigid Metallic 3-Inch **P**	LF	229.000	229.000				
2670	652.0225	Conduit Rigid Nonmetallic Schedule 40 2-Inch **P**	LF	18,430.000	500.000	900.000	3,751.000		13,279.000
2680	652.0235	Conduit Rigid Nonmetallic Schedule 40 3-Inch **P**	LF	5,914.000	433.000		2,504.000		2,977.000
2690	652.0605	Conduit Special 2-Inch **P**	LF	790.000					790.000
2700	652.0615	Conduit Special 3-Inch **P**	LF	216.000			216.000		
2710	652.0700.S	Install Conduit into Existing Item	EACH	3.000					3.000
2720	652.0800	Conduit Loop Detector **P**	LF	244.000					244.000
2730	653.0135	Pull Boxes Steel 24x36-Inch	EACH	75.000		9.000	20.000		46.000
2740	653.0140	Pull Boxes Steel 24x42-Inch	EACH	88.000			31.000		57.000
2750	653.0222	Junction Boxes 18x12x6-Inch	EACH	2.000	2.000				
2760	653.0905	Removing Pull Boxes	EACH	89.000			31.000		58.000
2770	654.0101	Concrete Bases Type 1	EACH	21.000			12.000		9.000
2780	654.0102	Concrete Bases Type 2	EACH	16.000			15.000		1.000
2790	654.0105	Concrete Bases Type 5	EACH	63.000		8.000	14.000		41.000
2800	654.0107	Concrete Bases Type 7	EACH	5.000					5.000
2810	654.0110	Concrete Bases Type 10	EACH	1.000					1.000
2820	654.0113	Concrete Bases Type 13	EACH	4.000					4.000
2830	654.0215	Concrete Control Cabinet Bases Type 9	EACH	1.000					1.000
2840	654.0217	Concrete Control Cabinet Bases Type 9 Special	EACH	3.000			1.000		2.000
2850	654.0220	Concrete Control Cabinet Bases Type 10	EACH	7.000					7.000
2860	655.0230	Cable Traffic Signal 5-14 AWG **P**	LF	2,765.000			1,159.000		1,606.000
2870	655.0240	Cable Traffic Signal 7-14 AWG **P**	LF	1,940.000			132.000		1,808.000
2880	655.0260	Cable Traffic Signal 12-14 AWG **P**	LF	8,784.000			5,595.000		3,189.000
2890	655.0305	Cable Type UF 2-12 AWG Grounded **P**	LF	1,631.000					1,631.000
2900	655.0315	Cable Type UF 2-10 AWG **P**	LF	1,338.000			1,338.000		
2910	655.0515	Electrical Wire Traffic Signals 10 AWG **P**	LF	8,984.000			3,844.000		5,140.000
2920	655.0610	Electrical Wire Lighting 12 AWG **P**	LF	14,757.000	492.000	1,728.000	5,265.000		7,272.000
2930	655.0615	Electrical Wire Lighting 10 AWG **P**	LF	2,155.000					2,155.000
2940	655.0620	Electrical Wire Lighting 8 AWG **P**	LF	1,440.000					1,440.000
2950	655.0625	Electrical Wire Lighting 6 AWG **P**	LF	15,045.000			8,826.000		6,219.000
2960	655.0630	Electrical Wire Lighting 4 AWG **P**	LF	18,287.000	5,400.000	1,299.000	1,494.000		10,094.000
2970	655.0635	Electrical Wire Lighting 2 AWG **P**	LF	17,287.000	7,780.000	1,401.000	945.000		7,161.000
2980	655.0700	Loop Detector Lead In Cable **P**	LF	3,458.000					3,458.000
2990	655.0800	Loop Detector Wire **P**	LF	944.000					944.000

3

DATE 29JAN15 E S T I M A T E O F Q U A N T I T I E S

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	1100-37-70 QUANTITY	2720-10-70 QUANTITY	2782-11-70 QUANTITY	2782-11-71 QUANTITY	2782-12-70 QUANTITY
3000	656.0200	Electrical Service Meter Breaker Pedestal (location) 0001. Intersection Of Pilgrim Road & Sth 74	LS	1.000			1.000		
3010	656.0200	Electrical Service Meter Breaker Pedestal (location) 0002. Intersection Of Pilgrim Road & Megal Drive	LS	1.000			1.000		
3020	656.0200	Electrical Service Meter Breaker Pedestal (location) 0003. Lighting Control Cabinet	LS	1.000					1.000
3030	656.0200	Electrical Service Meter Breaker Pedestal (location) 0004. Rm-67-0092	LS	1.000					1.000
3040	656.0200	Electrical Service Meter Breaker Pedestal (location) 0201. 41/45 Sb Ramps And Pilgrim Rd	LS	1.000					1.000
3050	656.0200	Electrical Service Meter Breaker Pedestal (location) 0202. 41/45 Nb Ramps & Pilgrim Rd	LS	1.000					1.000
3060	656.0500	Electrical Service Breaker Disconnect Box (location) 0001. Rm-67-0092	LS	1.000					1.000
3070	656.0500	Electrical Service Breaker Disconnect Box (location) 0002. Cctv-67-0102	LS	1.000					1.000
3080	657.0100	Pedestal Bases	EACH	15.000					15.000
3090	657.0255	Transformer Bases Breakaway 11 1/2-Inch Bolt Circle	EACH	12.000					12.000
3100	657.0305	Poles Type 2	EACH	1.000					1.000
3110	657.0321	Poles Type 5-Steel	EACH	3.000					3.000
3120	657.0322	Poles Type 5-Aluminum	EACH	4.000					4.000
3130	657.0420	Traffic Signal Standards Aluminum 13-FT	EACH	4.000					4.000
3140	657.0425	Traffic Signal Standards Aluminum 15-FT	EACH	9.000					9.000
3150	657.0430	Traffic Signal Standards Aluminum 10-FT	EACH	2.000					2.000
3160	657.0610	Luminaire Arms Single Member 4 1/2-Inch Clamp 6-FT	EACH	2.000					2.000
3170	657.1350	Install Poles Type 10	EACH	1.000					1.000
3180	657.1360	Install Poles Type 13	EACH	4.000					4.000
3190	657.1530	Install Monotube Arms 30-FT	EACH	1.000					1.000
3200	657.1545	Install Monotube Arms 45-FT	EACH	1.000					1.000
3210	657.1550	Install Monotube Arms 50-FT	EACH	3.000					3.000
3220	657.1815	Install Luminaire Arms Steel 15-FT	EACH	5.000					5.000
3230	657.6005.S	Anchor Assemblies Light Poles on Structures	EACH	2.000		2.000			
3240	658.0110	Traffic Signal Face 3-12 Inch Vertical	EACH	48.000			26.000		22.000
3250	658.0115	Traffic Signal Face 4-12 Inch Vertical	EACH	10.000			6.000		4.000
3260	658.0155	Traffic Signal Face 3-12 Inch Horizontal	EACH	8.000			8.000		
3270	658.0215	Backplates Signal Face 3 Section 12-Inch	EACH	56.000			34.000		22.000
3280	658.0220	Backplates Signal Face 4 Section 12-Inch	EACH	10.000			6.000		4.000
3290	658.0416	Pedestrian Signal Face 16-Inch	EACH	26.000			16.000		10.000
3300	658.0500	Pedestrian Push Buttons	EACH	28.000			18.000		10.000
3310	658.0600	Led Modules 12-Inch Red Ball	EACH	39.000			24.000		15.000
3320	658.0605	Led Modules 12-Inch Yellow Ball	EACH	39.000			24.000		15.000
3330	658.0610	Led Modules 12-Inch Green Ball	EACH	39.000			24.000		15.000
3340	658.0615	Led Modules 12-Inch Red Arrow	EACH	27.000			16.000		11.000
3350	658.0620	Led Modules 12-Inch Yellow Arrow	EACH	37.000			22.000		15.000
3360	658.0625	Led Modules 12-Inch Green Arrow	EACH	27.000			16.000		11.000
3370	658.0635	Led Modules Pedestrian Countdown Timer 16-Inch	EACH	26.000			16.000		10.000

DATE 29JAN15 E S T I M A T E O F Q U A N T I T I E S

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	1100-37-70 QUANTITY	2720-10-70 QUANTITY	2782-11-70 QUANTITY	2782-11-71 QUANTITY	2782-12-70 QUANTITY
3380	658.5069	Signal Mounting Hardware (location) 0001. Pilgrim Road & Sth 74	LS	1.000			1.000		
3390	658.5069	Signal Mounting Hardware (location) 0002. Pilgrim Road & Megal Drive	LS	1.000			1.000		
3400	658.5069	Signal Mounting Hardware (location) 0201. 41/45 Sb Ramps & Pilgrim Rd	LS	1.000					1.000
3410	658.5069	Signal Mounting Hardware (location) 0202. 41/45 Nb Ramps & Pilgrim Rd	LS	1.000					1.000
3420	659.0600	Underdeck Lighting (location) 0001. Pilgrim Road Structure B-67-337	LS	1.000	1.000				
3430	659.0600	Underdeck Lighting (location) 0002. Pilgrim Road Structure B-67-338	LS	1.000	1.000				
3440	659.0802	Plaques Sequence Identification	EACH	2.000					2.000
3450	659.1125	Luminaires Utility LED C	EACH	25.000					25.000
3460	659.1130	Luminaires Utility LED D	EACH	4.000	4.000				
3470	659.1205	Luminaires Underdeck LED A	EACH	8.000	8.000				
3480	661.0200	Temporary Traffic Signals for Intersections (location) 0001. Pilgrim Road & Sth 74	LS	1.000			1.000		
3490	661.0200	Temporary Traffic Signals for Intersections (location) 0002. Pilgrim Road & Megal Drive	LS	1.000			1.000		
3500	661.0200	Temporary Traffic Signals for Intersections (location) 0201. 41/45 Sb Ramps & Pilgrim Rd	LS	1.000					1.000
3510	661.0200	Temporary Traffic Signals for Intersections (location) 0202. 41/45 Nb Ramps & Pilgrim Rd	LS	1.000					1.000
3520	661.0300	Generators	DAY	4.000			4.000		
3530	662.2028.S	Ramp Closure Gates Solar 28-FT	EACH	3.000					3.000
3540	662.2032.S	Ramp Closure Gates Solar 32-FT	EACH	3.000					3.000
3550	662.2037.S	Ramp Closure Gates Solar 37-FT	EACH	1.000					1.000
3560	670.0100	Field System Integrator 0001. 2782-12-70 Ftms	LS	1.000					1.000
3570	670.0100	Field System Integrator 0002. Id 2782-12-70 Signals	LS	1.000					1.000
3580	670.0200	ITS Documentation 0001. 2782-12-70 Ftms	LS	1.000					1.000
3590	670.0200	ITS Documentation 0002. Id 2782-12-70 Signals	LS	1.000					1.000
3600	671.0132	Conduit HDPE 3-Duct 2-Inch **P**	LF	1,500.000					1,500.000
3610	671.0232	Conduit HDPE Directional Bore 3-Duct 2-Inch **P**	LF	150.000					150.000
3620	672.0100	Base ITS Controller Cabinet	EACH	1.000					1.000
3630	672.0250	Base Camera Pole 50-FT	EACH	1.000					1.000
3640	673.0105	Communication Vault Type 1	EACH	4.000					4.000
3650	673.0200.S	Install ITS Field Cabinet	EACH	1.000					1.000
3660	673.0225.S	Install Pole Mounted Cabinet	EACH	1.000					1.000
3670	674.0200	Cable Microwave Detector **P**	LF	795.000					795.000
3680	674.0300	Remove Cable **P**	LF	3,890.000					3,890.000
3690	675.0100	Install Controller Ramp Meter Processor Assembly	EACH	1.000					1.000
3700	675.0300	Install Mounted Controller Microwave Detector Assembly	EACH	6.000					6.000
3710	675.0400.S	Install Ethernet Switch	EACH	2.000					2.000
3720	676.0300	Signal Assembly Advance Flasher Type 1	EACH	1.000					1.000
3730	676.9001.S	Removing Advance Flasher Assemblies Type 1	EACH	1.000					1.000

3

DATE 29JAN15 E S T I M A T E O F Q U A N T I T I E S

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	1100-37-70 QUANTITY	2720-10-70 QUANTITY	2782-11-70 QUANTITY	2782-11-71 QUANTITY	2782-12-70 QUANTITY
3740	677.0100	Install Camera Pole	EACH	1.000					1.000
3750	677.0200	Install Camera Assembly	EACH	1.000					1.000
3760	677.0300.S	Install Video Encoder	EACH	1.000					1.000
3770	677.9051.S	Removing 50-FT Camera Pole	EACH	1.000					1.000
3780	677.9200.S	Removing CCTV Camera	EACH	1.000					1.000
3790	678.0006	Install Fiber Optic Cable Outdoor Plant 6-CT **P**	LF	3,430.000					3,430.000
3800	678.0036	Install Fiber Optic Cable Outdoor Plant 36-CT **P**	LF	2,402.000					2,402.000
3810	678.0200	Fiber Optic Splice Enclosure	EACH	3.000					3.000
3820	678.0300	Fiber Optic Splice	EACH	58.000					58.000
3830	678.0400	Fiber Optic Termination	EACH	12.000					12.000
3840	678.0500	Communication System Testing 0001. 2782-12-70 Ftms	LS	1.000					1.000
3850	678.0500	Communication System Testing 0002. 2782-12-70 Signals	LS	1.000					1.000
3860	690.0150	Sawing Asphalt	LF	2,108.000	924.000	346.000	508.000		330.000
3870	690.0250	Sawing Concrete	LF	8,600.000	915.000		3,377.000		4,308.000
3880	715.0415	Incentive Strength Concrete Pavement	DOL	3,929.000	18.000	229.000	1,841.000		1,841.000
3890	715.0502	Incentive Strength Concrete Structures	DOL	10,554.000	10,554.000				
3900	ASP.1T0A	On-the-Job Training Apprentice at $5. 00/HR	HRS	1,200.000	396.000		336.000		468.000
3910	ASP.1T0G	On-the-Job Training Graduate at $5.00/HR	HRS	1,600.000	528.000		448.000		624.000
3920	SPV.0060	Special 0001. Pavement Marking Grooved Preformed Thermoplastic Arrows Type 1 **P**	EACH	3.000			1.000		2.000
3930	SPV.0060	Special 0002. Pavement Marking Grooved Preformed Thermoplastic Arrows Type 2 **P**	EACH	61.000			26.000		35.000
3940	SPV.0060	Special 0003. Pavement Marking Grooved Preformed Thermoplastic Arrows Type 3 **P**	EACH	2.000			2.000		
3950	SPV.0060	Special 0004. Pavement Marking Grooved Preformed Thermoplastic Words **P**	EACH	28.000			8.000		20.000
3960	SPV.0060	Special 0005. Landmark Reference Monuments Special	EACH	1.000			1.000		
3970	SPV.0060	Special 0006. Permanent Barricades Type Iii	EACH	1.000		1.000			
3980	SPV.0060	Special 0007. Temporary Inlet Covers	EACH	12.000			8.000		4.000
3990	SPV.0060	Special 0009. Concrete Barrier Transition Type Nj51df To V56	EACH	2.000	2.000				
4000	SPV.0060	Special 0010. Pile Dynamic Analyzer (Pda) Testing	EACH	12.000	12.000				
4010	SPV.0060	Special 0011. Pile Dynamic Analyzer (Pda) Restrikes	EACH	12.000	12.000				
4020	SPV.0060	Special 0012. Pavement Marking Grooved Contrast Preformed Thermplastic Arrows Type 5 **P	EACH	1.000					1.000
4030	SPV.0060	Special 0013. Adjusting Sanitary Sewer Manhole	EACH	14.000				14.000	
4040	SPV.0060	Special 0014. Pavement Marking Grooved Preformed Thermoplastic Symbols **P**	EACH	4.000					4.000
4050	SPV.0060	Special 0100. Concrete Control Cabinet Base Type 9 Special Modified	EACH	1.000			1.000		
4060	SPV.0060	Special 0101. Pedestal Bases Black	EACH	12.000			12.000		
4070	SPV.0060	Special 0102. Poles Type 2 Black	EACH	7.000			7.000		
4080	SPV.0060	Special 0103. Poles Type 3 Black	EACH	1.000			1.000		

DATE 29JAN15 E S T I M A T E O F Q U A N T I T I E S

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	1100-37-70 QUANTITY	2720-10-70 QUANTITY	2782-11-70 QUANTITY	2782-11-71 QUANTITY	2782-12-70 QUANTITY
4090	SPV.0060	Special 0104. Poles Type 4 Black	EACH	6.000			6.000		
4100	SPV.0060	Special 0105. Poles Type 5 Aluminum Black	EACH	42.000		8.000	15.000		19.000
4110	SPV.0060	Special 0106. Traffic Signal Standards Aluminum 9-Ft Black	EACH	1.000			1.000		
4120	SPV.0060	Special 0107. Traffic Signal Standards Aluminum 13-Ft Black	EACH	8.000			8.000		
4130	SPV.0060	Special 0108. Traffic Signal Standards Aluminum 15-Ft Black	EACH	3.000			3.000		
4140	SPV.0060	Special 0109. Trombone Arms 20-Ft Black	EACH	5.000			5.000		
4150	SPV.0060	Special 0110. Trombone Arms 25-Ft Black	EACH	3.000			3.000		
4160	SPV.0060	Special 0111. Luminaire Arms Single Member 4 1/2 Inch Clamp 6-Ft Black	EACH	47.000		8.000	20.000		19.000
4170	SPV.0060	Special 0112. Transformer Bases Tb6-9 Special	EACH	56.000		8.000	29.000		19.000
4180	SPV.0060	Special 0113. Traffic Signal Cabinet	EACH	2.000			2.000		
4190	SPV.0060	Special 0114. Battery Backup System	EACH	2.000			2.000		
4200	SPV.0060	Special 0115. Video Detection Monitor	EACH	2.000			2.000		
4210	SPV.0060	Special 0116. Outlet Control Structure	EACH	1.000		1.000			
4220	SPV.0060	Special 0117. Removing Existing Lighting Assembly	EACH	44.000		6.000	16.000		22.000
4230	SPV.0060	Special 0118. Relocating Existing Single Arm Lighting Assembly	EACH	8.000					8.000
4240	SPV.0060	Special 0119. Luminaires Utility Led C Black	EACH	56.000		8.000	29.000		19.000
4250	SPV.0060	Special 0120. Lighting Control Cabinet 240/480 Special	EACH	1.000					1.000
4260	SPV.0060	Special 0121. Removing Existing Lighting Control Cabinet	EACH	1.000					1.000
4270	SPV.0060	Special 0122. Local Municipal Luminaire	EACH	3.000					3.000
4280	SPV.0060	Special 0123. Luminaire Arms Single Member 4-Inch Clamp 6-Ft Black	EACH	9.000			9.000		
4290	SPV.0060	Special 0301. Removing Luminaires	EACH	22.000	4.000				18.000
4300	SPV.0060	Special 0302. Lamp Disposal H.I.D.	EACH	26.000	8.000				18.000
4310	SPV.0060	Special 0303. Removing And Salvaging Lighting Units	EACH	7.000	2.000				5.000
4320	SPV.0060	Special 0304. Installing Salvaged Lighting Units	EACH	7.000	2.000				5.000
4330	SPV.0060	Special 0305. Junction Boxes 12"X8"X6'	EACH	3.000	3.000				
4340	SPV.0060	Special 0401. 4-Inch Water Service Gate Valve With Valve Box	EACH	2.000				2.000	
4350	SPV.0060	Special 0402. 6-Inch Water Service Gate Valve With Valve Box	EACH	2.000				2.000	
4360	SPV.0060	Special 0403. 6-Inch Hydrant Gate Valve With Valve Box	EACH	5.000				5.000	
4370	SPV.0060	Special 0404. 8-Inch Gate Valve With Valve Box	EACH	5.000				5.000	
4380	SPV.0060	Special 0405. 12-Inch Butterfly Valve With Valve Box	EACH	5.000				5.000	
4390	SPV.0060	Special 0406. 16-Inch Butterfly Valve With Valve Box	EACH	5.000				5.000	
4400	SPV.0060	Special 0407. 16-Inch X 12-Inch Stainless Steel Tapping Sleeve With Valve Box	EACH	1.000				1.000	
4410	SPV.0060	Special 0408. Hydrant	EACH	6.000				6.000	
4420	SPV.0060	Special 0409. Curb Stop 1-1/4 Inch And Box Incl. Reconnection Of Exist. Service	EACH	5.000				5.000	

DATE 29JAN15 E S T I M A T E O F Q U A N T I T I E S

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	1100-37-70 QUANTITY	2720-10-70 QUANTITY	2782-11-70 QUANTITY	2782-11-71 QUANTITY	2782-12-70 QUANTITY
4430	SPV.0060	Special 0410. Reconnection Of Existing 6-Inch Service	EACH	1.000				1.000	
4440	SPV.0060	Special 0411. Reconnection Of Existing 4-Inch Service	EACH	1.000				1.000	
4450	SPV.0060	Special 0412. Removing Existing Hydrant	EACH	4.000				4.000	
4460	SPV.0060	Special 0500. Removing Controller Cabinet Base	EACH	1.000					1.000
4470	SPV.0060	Special 0501. Removing Controller Cabinet	EACH	1.000					1.000
4480	SPV.0060	Special 0502. Removing Electrical Service Meter Breaker	EACH	1.000					1.000
4490	SPV.0060	Special 0503. Ground Rod	EACH	5.000					5.000
4500	SPV.0085	Special 0001. Bar Steel Reinforcement Hs Stainless Bridges **P**	LB	3,760.000	3,760.000				
4510	SPV.0090	Special 0001. Pavement Marking Grooved Preformed Thermoplastic Stop Line 18-Inch **P**	LF	694.000			464.000		230.000
4520	SPV.0090	Special 0002. Pvmt Marking Grooved Preformed Thermoplastic Crosswalk 6-Inch **P**	LF	3,067.000			2,047.000		1,020.000
4530	SPV.0090	Special 0003. Pavement Marking Grooved Preformed Thermolastic 18-Inch **P**	LF	87.000		87.000			
4540	SPV.0090	Special 0004. Concrete Barrier Nj51df	LF	90.000	90.000				
4550	SPV.0090	Special 0005. Traffic Channelizing Curb System	LF	31.000					31.000
4560	SPV.0090	Special 0006. Fill Existing Rumble Strips	LF	25.000	25.000				
4570	SPV.0090	Special 0007. Restore Existing Rumble Strips	LF	25.000	25.000				
4580	SPV.0090	Special 0008. Temporary Crosswalk	LF	439.000			407.000		32.000
4590	SPV.0090	Special 0301. Removing Electrical Wire From Conduit	LF	1,290.000	1,290.000				
4600	SPV.0090	Special 0302. Conduit Flexible Metallic 3-Inch	LF	20.000	20.000				
4610	SPV.0090	Special 0401. 4-Inch Pvc Water Service With Granular Backfill	LF	44.000				44.000	
4620	SPV.0090	Special 0402. 6-Inch Pvc Water Service With Granular Backfill	LF	45.000				45.000	
4630	SPV.0090	Special 0403. 6-Inch Pvc Hydrant Lead With Granular Backfill	LF	104.000				104.000	
4640	SPV.0090	Special 0404. 8-Inch Pvc Water Main With Granular Backfill	LF	341.000				341.000	
4650	SPV.0090	Special 0405. 12-Inch Pvc Water Main With Granular Backfill	LF	1,373.000				1,373.000	
4660	SPV.0090	Special 0406. 12-Inch Pvc Water Main With Spoil Backfill	LF	85.000				85.000	
4670	SPV.0090	Special 0407. 16-Inch Pvc Water Main With Granular Backfill	LF	1,221.000				1,221.000	
4680	SPV.0090	Special 0408. 1-1/4 Inch Polyethylene Water Service Lateral With Granular Backfill	LF	90.000				90.000	
4690	SPV.0105	Special 0001. Temporary Storm Sewer Connection Stage 2 1100-37-70	LS	1.000	1.000				
4700	SPV.0105	Special 0002. Temporary Storm Sewer Connection Stage 3 1100-37-70	LS	1.000	1.000				
4710	SPV.0105	Special 0003. Survey Project 1100-37-70	LS	1.000	1.000				
4720	SPV.0105	Special 0004. Survey Project 2720-10-70	LS	1.000		1.000			
4730	SPV.0105	Special 0005. Survey Project 2782-11-70	LS	1.000			1.000		

DATE 29JAN15 E S T I M A T E O F Q U A N T I T I E S

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	1100-37-70 QUANTITY	2720-10-70 QUANTITY	2782-11-70 QUANTITY	2782-11-71 QUANTITY	2782-12-70 QUANTITY
4740	SPV.0105	Special 0006. Survey Project 2782-11-71	LS	1.000				1.000	
4750	SPV.0105	Special 0007. Survey Project 2782-12-70	LS	1.000					1.000
4760	SPV.0105	Special 0008. Concrete Pavement Joint Layout Project 2782-11-70	LS	1.000			1.000		
4770	SPV.0105	Special 0009. Concrete Pavement Joint Layout Project 2782-12-70	LS	1.000					1.000
4780	SPV.0105	Special 0010. Concrete Pavement Joint Layout Project 2720-10-70	LS	1.000		1.000			
4790	SPV.0105	Special 0100. Remove Traffic Signal Intersection Pilgrim Road & Sth 74	LS	1.000			1.000		
4800	SPV.0105	Special 0101. Temporary Vehicle Detection System Pilgrim Road & Sth 74	LS	1.000			1.000		
4810	SPV.0105	Special 0102. Temporary Vehicle Detection System Pilgrim Road & Megal Drive	LS	1.000			1.000		
4820	SPV.0105	Special 0103. Vehicular Video Detection System Pilgrim Road & Sth 74	LS	1.000			1.000		
4830	SPV.0105	Special 0104. Vehicular Video Detection System Pilgrim Road & Megal Drive	LS	1.000			1.000		
4840	SPV.0105	Special 0106. Install Fiber Optic Communication In Cabinet, Pilgrim Rd & Sth 74	LS	1.000			1.000		
4850	SPV.0105	Special 0107. Install Fiber Optic Communication In Cabinet, Pilgrim Rd & Megal Drive	LS	1.000			1.000		
4860	SPV.0105	Special 0108. Dewatering For Detention Basin Construction	LS	1.000		1.000			
4870	SPV.0105	Special 0201. Install Fiber Optic Communications In Cabinet 41/45 Sb Ramps & Pilgrim Rd	LS	1.000					1.000
4880	SPV.0105	Special 0202. Install Fiber Optic Communications In Cabinet 41/45 Nb Ramps & Pilgrim Rd	LS	1.000					1.000
4890	SPV.0105	Special 0203. Install Fiber Optic Communications In Cabinet Sth 74(Main St) & Pilgrim R	LS	1.000					1.000
4900	SPV.0105	Special 0204. Install Fiber Optic Communications In Cabinet Pilgrim Rd & Megal Dr	LS	1.000					1.000
4910	SPV.0105	Special 0205. Transporting Signal & Lighting Materials 41/45 Sb Ramps & Pilgrim Rd	LS	1.000					1.000
4920	SPV.0105	Special 0206. Transporting Signal Lighting Materials 41/45 Nb Ramps & Pilgrim Rd	LS	1.000					1.000
4930	SPV.0105	Special 0207. Remove Traffic Signals 41/45 Sb Ramps & Pilgrim Rd	LS	1.000					1.000
4940	SPV.0105	Special 0208. Remove Traffic Signals 41/45 Nb Ramps & Pilgrim Rd	LS	1.000					1.000
4950	SPV.0105	Special 0209. Remove Loop Detector Wire & Lead- In Cable 41/45 Sb Ramps & Pilgrim Rd	LS	1.000					1.000
4960	SPV.0105	Special 0210. Remove Loop Detector Wire & Lead- In Cable 41/45 Nb Ramps & Pilgrim Rd	LS	1.000					1.000
4970	SPV.0105	Special 0211. Transport & Install State Furn Video Detect. 41/45 Sb Ramps & Pilgrim	LS	1.000					1.000

DATE 29JAN15 E S T I M A T E O F Q U A N T I T I E S

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	1100-37-70 QUANTITY	2720-10-70 QUANTITY	2782-11-70 QUANTITY	2782-11-71 QUANTITY	2782-12-70 QUANTITY
4980	SPV.0105	Special 0212. Transport & Install State Furn Video Detect. 41/45 Nb Ramps & Pilgrim	LS	1.000					1.000
4990	SPV.0105	Special 0213. Transport & Inst State Furn Traf Signal Cabinet 41/45 Sb Ramps & Pilgrim	LS	1.000					1.000
5000	SPV.0105	Special 0214. Transport & Inst State Furn Traf Signal Cabinet 41/45 Nb Ramps & Pilgrim	LS	1.000					1.000
5010	SPV.0105	Special 0215. Temp Non-Intrusive Vehic Det Sys For Intersect 41/45 Sb Ramps & Pilgrim	LS	1.000					1.000
5020	SPV.0105	Special 0216. Temp Non-Intrusive Vehic Det Sys For Intersect 41/45 Nb Ramps & Pilgrim	LS	1.000					1.000
5030	SPV.0105	Special 0301. Maintenance Of Lighting System	LS	1.000	1.000				
5040	SPV.0105	Special 0401. Cut And Cap Existing 12-Inch Main At Existing Tee	LS	1.000				1.000	
5050	SPV.0120	Special 0001. Water For Seeded Areas	MGAL	136.500			3.600		132.900
5060	SPV.0165	Special 0100. Stamping Colored Concrete **P**	SF	25,054.000		6,439.000	7,682.000		10,933.000
5070	SPV.0165	Special 4710. Wall Concrete Panel Mechanically Stabilized Earth Lrfd/Qmp **P**	SF	5,160.000	5,160.000				
5080	SPV.0165	Special 4740. Temp Wall Wire Face Mechanically Stabilized Earth Lrfd/Qmp Pilot	SF	1,250.000	1,250.000				
5090	SPV.0180	Special 0100. Geotextile Fabric Type Ff	SY	450.000		250.000			200.000

CLEARING AND GRUBBING

CATEGORY	PROJECT NUMBER	STAGE	LOCATION	STATION	TO STATION	OFFSET		201.0105 CLEARING STA	201.0110 CLEARING SY	201.0120 CLEARING I.D.	201.0205 GRUBBING STA	201.010 GRUBBING SY	201.0220 GRUBBING I.D.
0010	2782-11-70	1	PILGRIM ROAD										
				226+98		264	RT	--	--	5	--	--	5
				227+32		220	RT	--	--	10	--	--	10
				227+89		142	RT	--	--	12	--	--	12
			SUBTOTAL					--	--	27	--	--	27
		2	PILGRIM ROAD										
				199+14		43	LT	--	--	6	--	--	6
				199+29		44	LT	--	--	6	--	--	6
				199+45		45	LT	--	--	8	--	--	8
			SUBTOTAL					--	--	20	--	--	20
		3	PILGRIM ROAD										
				199+75		51	RT	--	--	3	--	--	3
				200+08		51	RT	--	--	3	--	--	3
				200+41		50	RT	--	--	3	--	--	3
				207+00		42	RT	--	--	30	--	--	30
			SUBTOTAL					--	--	39	--	--	39
			TOTAL I.D. 2782-11-70					--	--	86	--	--	86
0010	2782-12-70	2	MAIN STREET										
				406+97		68	RT	--	--	24	--	--	24
				407+32		67	RT	--	--	30	--	--	30
			SUBTOTAL					--	--	54	--	--	54
		3	MAIN STREET										
				411+40		10	RT	--	--	4	--	--	4
				411+45		29	LT	--	--	5	--	--	5
				411+53		51	RT	--	--	3	--	--	3
				412+25		48	RT	--	--	4	--	--	4
				413+64		42	RT	--	--	6	--	--	6
				414+05		41	RT	--	--	6	--	--	6
			US 41/45 SB RAMPS										
				100+50	- 102+50 -		RT	3	--	--	3	--	--
			SUBTOTAL					3	--	28	3	--	28
			TOTAL I.D. 2782-12-70					3	--	82	3	--	82
0010	2720-10-70	1	HARLEY LOADING DOCK ENT										
				11+50 SE	13+40 SE		RT	--	198	--	--	198	--
			HARLEY LOADING DOCK ENT										
				13+00 SE	13+75 SE		LT	--	52	--	--	52	--
			SUBTOTAL					--	250	--	--	250	--

CONTINUED ON NEXT SHEET

CONTINUED FROM PREVIOUS SHEET

CLEARING AND GRUBBING

CATEGORY	PROJECT NUMBER	STAGE	LOCATION	STATION	TO	STATION	OFFSET		201.0105 CLEARING STA	201.0110 CLEARING SY	201.0120 CLEARING I.D.	201.0205 GRUBBING STA	201.010 GRUBBING SY	201.0220 GRUBBING I.D.
		2	PILGRIM ROAD											
				223+47		269.3	RT		--	--	12	--	--	12
				223+68		269.6	RT		--	--	12	--	--	12
				223+81		307.6	RT		--	--	15	--	--	15
				223+88		266.4	RT		--	--	15	--	--	15
				224+11		333.3	RT		--	--	15	--	--	15
				224+65		339.2	RT		--	--	12	--	--	12
				224+66		253.9	RT		--	--	12	--	--	12
				224+67		219.4	RT		--	--	12	--	--	12
				224+68		182.0	RT		--	--	12	--	--	12
				224+68		311.6	RT		--	--	12	--	--	12
				224+69		285.2	RT		--	--	12	--	--	12
				224+77		110.6	RT		--	--	12	--	--	12
				224+77		629.7	RT		--	--	24	--	--	24
				224+78		139.7	RT		--	--	12	--	--	12
				224+79		156.3	RT		--	--	12	--	--	12
				224+80		638.1	RT		--	--	10	--	--	10
				224+80		628.6	RT		--	--	18	--	--	18
				224+82		95.0	RT		--	--	12	--	--	12
				224+82		235.6	RT		--	--	12	--	--	12
				224+83		201.5	RT		--	--	12	--	--	12
				224+85		166.8	RT		--	--	12	--	--	12
				224+85		128.8	RT		--	--	12	--	--	12
				224+90		143.9	RT		--	--	12	--	--	12
				224+92		104.2	RT		--	--	12	--	--	12
				226+15		469.8	RT		--	--	8	--	--	8
				226+38		427.3	RT		--	--	8	--	--	8
				226+38		423.6	RT		--	--	5	--	--	5
				226+52		452.7	RT		--	--	8	--	--	8
SUBTOTAL									--	--	342	--	--	342
TOTAL I.D. 2720-10-70									--	250	342	--	250	342
TOTALS									3	250	510	3	250	510

REMOVING PAVEMENT

CATEGORY	PROJECT NUMBER	STAGE	LOCATION	STATION	TO	STATION	204.0100 REMOVING PAVEMENT SY
0010	2782-11-70	2	PILGRIM ROAD				
				198+21	-	200+60	28
				200+60	-	209+20	3,741
				226+66	-	228+24	316
			MEGAL DRIVE				
				700+50	-	703+33	47
			SUBTOTAL				4,131
		3	PILGRIM ROAD				
				200+60	-	209+20	3,401
				226+66	-	228+24	788
			SUBTOTAL				4,189
		4	PILGRIM ROAD				
				200+60	-	209+20	3,078
				226+66	-	228+24	352
			SUBTOTAL				3,430
			TOTAL I.D. 2782-11-70				11,750
0010	2782-12-70	2	PILGRIM ROAD				
				209+20	-	226+66	4,580
			MAIN STREET				
				402+88	-	407+60	2,873
			FALLS PARKWAY				
				85+13	-	87+37	31
			SUBTOTAL				7,484
		3	PILGRIM ROAD				
				209+20	-	226+66	5,393
			MAIN STREET				
				410+13	-	414+97	344
			US 41/45 SB RAMPS				
				6+40	-	12+00	2,812
			US 41/45 NB OFF RAMP TO NB				
				17+07	-	21+00	992
			SUBTOTAL				9,541
		4	PILGRIM ROAD				
				209+20	-	226+66	3,161
			MAIN STREET				
				402+88	-	407+60	464
				410+13	-	414+97	30
			SUBTOTAL				3,656
			TOTAL I.D. 2782-12-70				20,681
			TOTALS				32,431

REMOVING CURB & GUTTER

CATEGORY	PROJECT NUMBER	STAGE	LOCATION	STATION	TO	STATION	204.0150 REMOVING CURB & GUTTER LF
0010	2782-11-70	1	MEGAL COURT				
				800+25	-	801+50	204
			PILGRIM ROAD				
				198+21	-	200+83	151
				201+29	-	209+20	950
				226+66	-	227+29	137
			SUBTOTAL				1,442
		2	PILGRIM ROAD				
				198+21	-	200+60	242
				200+60	-	209+20	787
			MEGAL DRIVE				
				700+50	-	703+74	806
			SUBTOTAL				1,835
		3	PILGRIM ROAD				
				198+54	-	200+60	207
				200+60	-	209+20	50
				226+66	-	228+28	69
			SUBTOTAL				325
		4	PILGRIM ROAD				
				228+11	-	228+27	38
			SUBTOTAL				38
			TOTAL I.D. 2782-11-70				3,640
0010	2782-12-70	1	PILGRIM ROAD				
				209+20	-	226+66	1,069
			MAIN STREET				
				404+17	-	407+60	605
				410+13	-	412+54	400
			FALLS PARKWAY				
				85+12	-	87+33	451
			SUBTOTAL				2,525
		2	PILGRIM ROAD				
				209+20	-	226+66	565
			FALLS PARKWAY				
				85+13	-	87+62	506
			SUBTOTAL				1,071

REMOVING CURB & GUTTER

CATEGORY	PROJECT NUMBER	STAGE	LOCATION	STATION	TO	STATION	204.0150 REMOVING CURB & GUTTER LF
		3	MAIN STREET				
				410+25	-	414+97	932
			SUBTOTAL				932
			TOTAL I.D. 2782-12-70				4,528
0010	2720-10-70	1	HARLEY LOADING DOCK ENT				
				901+25.00	-	904+50.00	1,751
			HARLEY LOADING DOCK ENT				
				13+87.20 SE	-	14+90.19 SE	178
			TOTAL I.D. 2720-10-70				1,929
			TOTALS				10,097

3

REMOVING CONCRETE SIDEWALK

CATEGORY	PROJECT NUMBER	STAGE	LOCATION	STATION TO STATION	204.0155 REMOVING CONCRETE SIDEWALK SY
0010	2782-11-70	2	PILGRIM ROAD		
				198+21 - 200+60	132
				200+60 - 209+20	493
				226+66 - 228+24	20
				SUBTOTAL	645
		3	PILGRIM ROAD		
				198+21 - 200+60	137
				200+60 - 209+20	707
				226+66 - 228+24	64
				SUBTOTAL	909
				TOTAL I.D. 2782-11-70	1,554
0010	2782-12-70	2	MAIN STREET		
				402+88 - 407+60	499
			FALLS PARKWAY		
				85+13 - 87+37	145
				SUBTOTAL	644
		3	PILGRIM ROAD		
				209+20 - 226+66	896
			MAIN STREET		
				410+13 - 414+97	422
				SUBTOTAL	1,319
				TOTAL I.D. 2782-12-70	1,963
				TOTALS	3,516

REMOVING CONCRETE BARRIER

CATEGORY	PROJECT NUMBER	STAGE	LOCATION	STATION TO STATION	204.0157 REMOVING CONCRETE BARRIER LF
0010	2782-12-70	3	US 41/45 SB RAMPS		
				9+55 - 11+61	410
				TOTAL I.D. 2782-12-70	410
0010	1100-37-70	1	US 41/45		
				280+00 - 286+50	210
		3	US 41/45		
				280+00 - 286+50	469
				TOTAL I.D. 1100-37-70	679
				TOTALS	1,089

REMOVING GUARDRAIL

CATEGORY	PROJECT NUMBER	STAGE	LOCATION	STATION TO STATION	204.0165 REMOVING GUARDRAIL LF
0010	2782-12-70	2	PILGRIM ROAD		
				209+20 - 226+66	484
				SUBTOTAL	484
		3	PILGRIM ROAD		
				209+20 - 226+66	124
			US 41/45 SB RAMPS		
				11+24 - 12+43	156
			US 41/45 NB OFF RAMP TO NB		
				13+71 - 20+48	688
				SUBTOTAL	968
				TOTAL I.D. 2782-12-70	1,452
0010	1100-37-70	1	US 41/45		
				278+71 - 287+37	211
				TOTAL I.D. 1100-37-70	211
				TOTALS	1,663

3

REMOVING FENCE

CATEGORY	PROJECT NUMBER	STAGE	LOCATION	STATION TO STATION	204.0170 REMOVING FENCE LF
0010	2782-12-70	2	PILGRIM ROAD		
				209+20 - 226+66	504
				SUBTOTAL	504
		3	PILGRIM ROAD		
				209+20 - 226+66	40
			US 41/45 SB RAMPS		
				6+40 - 12+00	217
			US 41/45 NB OFF RAMP TO NB		
				17+07 - 21+00	343
			SUBTOTAL		600
			TOTAL I.D. 2782-12-70		1,104

REMOVING STORM SEWER

CATEGORY	PROJECT NUMBER	STAGE	LOCATION	STATION TO STATION	OFFSET	* 204.0220 REMOVING INLETS EACH	* 204.0245.0001 REMOVING STORM SEWER (12-INCH) LF
0010	1100-37-70	2	US 41/45	285+01.81 - 285+49.31	RT	1	48
0010	1100-37-70	3	US 41/45	285+49.31 - 285+97.04	RT	--	48
0010	1100-37-70	3	US 41/45	280+64.02	RT	1	--
0010	1100-37-70	3	US 41/45	284+23.26	RT	1	--
				TOTAL I.D. 1100-37-70		3	96

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE

REMOVING SURFACE DRAINS

CATEGORY	PROJECT NUMBER	STAGE	LOCATION	STATION	OFFSET	204.0190 REMOVING SURFACE DRAINS EACH
0010	2782-12-70	2	PILGRIM ROAD			
				217+64	LT	1
				230+00	LT	1
		3	US 41/45 SB RAMPS			
				8+18	RT	1
			TOTAL I.D. 2782-12-70			3

REMOVING SAND BARRELS

CATEGORY	PROJECT NUMBER	STAGE	LOCATION	STATION TO STATION	204.9105.S REMOVING SAND BARRELS LS
0010	1100-37-70	3	US 41/45		
				278+25 - 278+75	1
			TOTAL I.D. 1100-37-70		1
			TOTALS		1

EXCAVATION, HAULING, AND DISPOSAL AND PETROLEUM CONTAMINATED SOIL

CATEGORY	PROJECT NUMBER	STAGE	LOCATION	205.0501.S CY
	2782-11-70	3	PILGRIM ROAD	85
			TOTAL	85

REMOVING INLETS

STRUCTURE NO.	STREET	STATION	OFFSET	CAT 0010 204.0220 PROJECT ID 2782-11-70 EACH	PROJECT ID 2782-12-70 EACH	PROJECT ID 2720-10-70 EACH
401	PILGRIM ROAD	200+62	17' RT	1	-	-
402	PILGRIM ROAD	200+59	49' LT	1	-	-
403	PILGRIM ROAD	201+52	55' LT	1	-	-
406	PILGRIM ROAD	203+80	59' LT	1	-	-
407	PILGRIM ROAD	203+87	31' LT	1	-	-
408	PILGRIM ROAD	203+87	23' LT	1	-	-
409	PILGRIM ROAD	204+14	19' RT	1	-	-
410	PILGRIM ROAD	204+18	44' RT	1	-	-
411	PILGRIM ROAD	204+47	75' LT	1	-	-
413	PILGRIM ROAD	204+90	75' LT	1	-	-
414	PILGRIM ROAD	204+97	75' LT	1	-	-
415	PILGRIM ROAD	205+35	61' LT	1	-	-
416	PILGRIM ROAD	205+78	81' LT	1	-	-
417	PILGRIM ROAD	205+43	18' LT	1	-	-
418	PILGRIM ROAD	205+43	11' LT	1	-	-
419	PILGRIM ROAD	205+94	17' RT	1	-	-
423	PILGRIM ROAD	205+29	52' RT	1	-	-
424	PILGRIM ROAD	204+50	78' RT	1	-	-
430	PILGRIM ROAD	208+53	87' LT	1	-	-
431	PILGRIM ROAD	208+59	63' LT	1	-	-
432	PILGRIM ROAD	208+80	50' LT	1	-	-
434	PILGRIM ROAD	208+97	10' LT	1	-	-
435	PILGRIM ROAD	209+03	0' LT	1	-	-
437	PILGRIM ROAD	209+13	28' RT	1	-	-
438	PILGRIM ROAD	208+45	54' RT	1	-	-
439	PILGRIM ROAD	212+65	66' LT	-	1	-
440	PILGRIM ROAD	212+69	16' LT	-	1	-
441	PILGRIM ROAD	212+69	2' LT	-	1	-
442	PILGRIM ROAD	212+95	36' RT	-	1	-
445	PILGRIM ROAD	216+27	23' LT	-	1	-
446	PILGRIM ROAD	216+24	2' LT	-	1	-
447	PILGRIM ROAD	216+24	26' RT	-	1	-
450	PILGRIM ROAD	221+86	30' RT	-	1	-
451	PILGRIM ROAD	221+94	2' LT	-	1	-
452	PILGRIM ROAD	223+30	60' LT	-	1	-
453	PILGRIM ROAD	223+70	22' LT	-	1	-
454	PILGRIM ROAD	223+70	12' LT	-	1	-
455	PILGRIM ROAD	223+67	38' RT	-	1	-
456	PILGRIM ROAD	224+28	54' LT	-	1	-
457	PILGRIM ROAD	225+97	66' LT	-	1	-
458	PILGRIM ROAD	225+85	25' LT	-	1	-
459	PILGRIM ROAD	225+78	6' LT	-	1	-
460	PILGRIM ROAD	225+67	35' RT	-	1	-
462	PILGRIM ROAD	226+59	30' RT	-	1	-
463	PILGRIM ROAD	226+58	13' LT	-	1	-
464	PILGRIM ROAD	227+00	27' LT	1	-	-
465	PILGRIM ROAD	226+99	67' LT	1	-	-
466	PILGRIM ROAD	227+35	91' LT	1	-	-
467	PILGRIM ROAD	227+76	93' LT	1	-	-
468	PILGRIM ROAD	227+98	40' RT	1	-	-
469	MEGAL DRIVE	703+06	55' LT	1	-	-
470	MAIN STREET	403+83	24' RT	-	1	-
471	MAIN STREET	405+79	1' LT	-	1	-
472	MAIN STREET	405+78	17' LT	-	1	-
473	MAIN STREET	405+78	45' LT	-	1	-
474	MAIN STREET	407+63	52' LT	1	-	-
476	MAIN STREET	407+97	50' RT	1	-	-
477	MAIN STREET	409+79	70' LT	1	-	-
480	MAIN STREET	410+40	10' LT	-	1	-
481	MAIN STREET	410+40	4' LT	-	1	-
482	MAIN STREET	411+72	46' LT	-	1	-

REMOVING INLETS

STRUCTURE NO.	STREET	STATION	OFFSET	CAT 0010 204.0220 PROJECT ID 2782-11-70 EACH	PROJECT ID 2782-12-70 EACH	PROJECT ID 2720-10-70 EACH
483	MAIN STREET	411+76	46' LT	-	1	-
484	MAIN STREET	411+75	18' LT	-	1	-
485	MAIN STREET	411+76	3' LT	-	1	-
486	MAIN STREET	411+71	25' RT	-	1	-
487	MAIN STREET	411+76	25' RT	-	1	-
488	MAIN STREET	413+64	36' LT	-	1	-
489	MAIN STREET	413+71	36' LT	-	1	-
490	MAIN STREET	413+64	29' RT	-	1	-
491	MAIN STREET	413+70	29' RT	-	1	-
492	USH 41/45 SB ON RAMP	102+11	24' LT	-	1	-
493	USH 41/45 SB ON RAMP	103+97	21' LT	-	1	-
495	MEGAL DRIVE	701+31	23' LT	1	-	-
495A	MEGAL DRIVE	702+18	118' LT	1	-	-
496	MEGAL COURT	803+43	129' RT	-	-	1
497	WACKER NEUSON NORTH LEG	907+12	22' RT	-	-	1
498	HARLEY DAVIDSON MAIN ENTRANCE	901+98	9' RT	-	-	1
499	HARLEY DAVIDSON MAIN ENTRANCE	903+02	119' LT	-	-	1
500	HARLEY DAVIDSON MAIN ENTRANCE	902+77	84' LT	-	-	1
501	HARLEY DAVIDSON MAIN ENTRANCE	902+38	179' LT	-	-	1
SUBOTALS	SUBOTALS		SUBTOTALS	36	38	6
PROJECT TOTAL	PROJECT TOTAL				80	

REMOVING MANHOLES

STRUCTURE NO.	STREET	STATION	OFFSET	CAT 0010 204.0210 PROJECT ID 2782-11-70 EACH	PROJECT ID 2782-12-70 EACH	PROJECT ID 2720-10-70 EACH
404	PILGRIM ROAD	202+30	12' LT	1	-	-
405	PILGRIM ROAD	202+34	21' RT	1	-	-
412	PILGRIM ROAD	204+66	47' LT	1	-	-
420	PILGRIM ROAD	206+00	4' RT	1	-	-
421	PILGRIM ROAD	205+26	13' RT	1	-	-
422	PILGRIM ROAD	204+99	32' RT	1	-	-
433	PILGRIM ROAD	208+83	42' LT	1	-	-
436	PILGRIM ROAD	209+05	4' RT	1	-	-
461	PILGRIM ROAD	225+64	68' RT	-	1	-
475	MAIN STREET	407+87	25' LT	1	-	-
478	MAIN STREET	409+81	48' LT	1	-	-
479	MAIN STREET	409+79	3' RT	1	-	-
494	USH 41/45 SB ON RAMP	103+97	14' LT	-	1	-
510	PILGRIM ROAD	226+76	29' RT	-	-	1
511	PILGRIM ROAD	225+32	273' RT	-	-	1
SUBOTALS				11	2	2
PROJECT TOTAL					15	

REMOVING STORM SEWER (12-INCH)

STREET	STATION	-	STATION	LOCATION	CAT 0010 204.0245.0001 PROJECT ID 2782-11-70 LF	PROJECT ID 2782-12-70 LF	PROJECT ID 2720-10-70 LF
PILGRIM ROAD	200+37	-	200+72	RT	41	-	-
PILGRIM ROAD	200+59	-	200+85	LT	41	-	-
PILGRIM ROAD	201+47	-	202+30	LT	97	-	-
PILGRIM ROAD	202+30	-	202+34	RT	33	-	-
PILGRIM ROAD	202+34	-	204+99	RT	266	-	-
PILGRIM ROAD	203+80	-	204+98	LT	119	-	-
PILGRIM ROAD	203+87	-	204+18	LT & RT	83	-	-
PILGRIM ROAD	204+23	-	204+97	LT	83	-	-
PILGRIM ROAD	204+99	-	206+00	RT	122	-	-
PILGRIM ROAD	205+26	-	205+43	LT & RT	36	-	-
PILGRIM ROAD	205+26	-	205+78	LT	60	-	-
PILGRIM ROAD	208+45	-	209+13	RT	69	-	-
PILGRIM ROAD	208+53	-	209+13	LT & RT	136	-	-
PILGRIM ROAD	212+65	-	212+83	LT	-	52	-
PILGRIM ROAD	212+69	-	213+14	LT & RT	-	116	-
PILGRIM ROAD	216+21	-	216+27	LT & RT	-	131	-
PILGRIM ROAD	221+86	-	223+70	LT & RT	-	209	-
PILGRIM ROAD	223+21	-	223+30	LT	-	37	-
PILGRIM ROAD	223+67	-	225+07	LT & RT	-	200	-
PILGRIM ROAD	225+64	-	225+97	LT & RT	-	139	-
PILGRIM ROAD	226+98	-	226+98	LT	29	-	-
PILGRIM ROAD	227+98	-	228+26	RT	28	-	-
MAIN STREET	405+79	-	405+81	LT	-	22	-
MAIN STREET	407+63	-	407+87	LT	36	-	-
MAIN STREET	409+48	-	409+81	LT	33	-	-
MAIN STREET	409+74	-	409+81	LT & RT	96	-	-
MAIN STREET	410+39	-	410+40	LT & RT	-	21	-
MAIN STREET	411+71	-	411+76	RT	-	5	-
MAIN STREET	411+71	-	411+76	LT	-	5	-
MAIN STREET	413+45	-	413+71	LT	-	28	-
MAIN STREET	413+64	-	413+71	RT	-	7	-
USH 41/45 SB ON RAMP	102+01	-	102+11	LT & RT	-	76	-
USH 41/45 SB ON RAMP	103+97	-	103+97	LT	-	7	-
HARLEY DAVIDSON MAIN ENTRANCE	901+86	-	901+98	LT & RT	-	-	48
HARLEY DAVIDSON MAIN ENTRANCE	902+36	-	903+02	LT	-	-	122
HARLEY DAVIDSON MAIN ENTRANCE	902+73	-	904+26	LT	-	-	205
SUBOTALS					1408	1055	375
PROJECT TOTAL						2838	

REMOVING STORM SEWER (15-INCH)

STREET	STATION	-	STATION	LOCATION	CAT 0010 204.0245.0002 PROJECT ID 2782-12-70 LF	PROJECT ID 2720-10-70 LF
PILGRIM ROAD	209+05	-	211+32	RT	228	-
WACKER NEUSON NORTH LEG	906+70	-	907+12	RT	-	46
WACKER NEUSON ENTRANCE	806+63	-	806+56	RT	-	64
SUBOTALS					228	110
PROJECT TOTAL						338

REMOVING STORM SEWER (24-INCH)

STREET	STATION	-	STATION	LOCATION	CAT 0010 204.0245.0004 PROJECT ID 2782-11-70 LF	PROJECT ID 2782-12-70 LF
PILGRIM ROAD	225+64	-	225+88	LT	-	35
PILGRIM ROAD	226+59	-	226+66	LT & RT	-	47
PILGRIM ROAD	226+66	-	226+99	LT	76	-
MAIN STREET	407+50	-	407+87	LT	37	-
SUBOTALS					113	82
PROJECT TOTAL						195

REMOVING STORM SEWER (18-INCH)

STREET	STATION	-	STATION	LOCATION	CAT 0010 204.0245.0003 PROJECT ID 2782-11-70 LF
PILGRIM ROAD	226+99	-	228+63	LT	240
MEGAL DRIVE	701+27	-	701+35	LT	97
PROJECT TOTAL					337

REMOVING STORM SEWER (27-INCH)

STREET	STATION	-	STATION	LOCATION	CAT 0010 204.0245.0005 PROJECT ID 2782-11-70 LF
MAIN STREET	407+87	-	408+50	LT	64
PROJECT TOTAL					64

REMOVING STORM SEWER (30-INCH)

STREET	STATION	-	STATION	LOCATION	CAT 0010 204.0245.0006 PROJECT ID 2782-12-70 LF
PILGRIM ROAD	213+22	-	213+26	LT & RT	208
PILGRIM ROAD	222+85	-	223+00	LT & RT	172
USH 41/45 SB ON RAMP	103+93	-	104+01	LT & RT	116
PROJECT TOTAL					496

REMOVING STORM SEWER (36-INCH)

STREET	STATION	-	STATION	LOCATION	CAT 0010 204.0245.0007 PROJECT ID 2782-11-70 LF	PROJECT ID 2782-12-70 LF
PILGRIM ROAD	225+08	-	225+08	LT & RT	-	308
MAIN STREET	409+28	-	409+51	LT	23	-
SUBOTALS				SUBTOTALS	23	308
PROJECT TOTAL						331

REMOVING STORM SEWER (48-INCH)

STREET	STATION	-	STATION	LOCATION	CAT 0010 204.0245.0008 PROJECT ID 2782-11-70 LF
PILGRIM ROAD	225+11	-	226+59	RT	155
PILGRIM ROAD	226+75	-	226+75	RT	46
PROJECT TOTAL					201

ABANDONING SEWER

STREET	STATION	-	STATION	LOCATION	CAT 0010 204.0291.S PROJECT ID 2782-11-70 CY	PROJECT ID 2782-12-70 CY
UNDISTRUBUTED		-			10	10
SUBOTALS					10	10
PROJECT TOTAL						20

EARTHWORK SUMMARY

DIVISION	ROADWAY	FROM / TO STATION	205.0100 COMMON EXCAVATION (3) CUT (1)	205.0100 COMMON EXCAVATION (3) EBS (2)	SALVAGED / UNUSABLE PAVEMENT MATERIAL (4)	AVAILABLE MATERIAL (5)	UNEXPANDED FILL (6)	EXPANDED FILL FACTOR 1.10	MASS ORDINATE +/- (7)	WASTE (8)	208.0100 BORROW (9)
STAGE 1 / 2782-11-70	PILGRIM RD	198+21 - 209+20, 226+66 - 228+24	157	0	157	0	0	0	0		
	MEGAL DRIVE	701+72 - 702+83	57	0	57	0	0	0	0		
	SUBTOTAL		213	0	213	0	0	0	0	213	0
			213								
STAGE 1 / 2782-12-70	PILGRIM RD	209+20 - 217+55, 220+03 - 226+66	300	0	300	0	0	0	0		
	MAIN ST	402+89 - 414+97	67	0	67	0	0	0	0		
	SUBTOTAL		367	0	367	0	0	0	0	367	0
			367								
STAGE 2 / 2782-11-70	PILGRIM RD	198+21 - 209+20, 226+66 - 228+24	2,377	0	1,051	1,326	161	178	1,148		
	CLEVELAND AVE	500+04 - 501+00	166	0	109	57	35	39	18		
	MEGAL DR	700+50 - 703+67	623	0	87	536	1	1	535		
	SUBTOTAL		3,166	200	1,247	1,919	198	217	1,701	3,148	0
			3,366								
STAGE 2 / 2782-12-70	PILGRIM RD	209+20 - 217+55, 220+03 - 226+66	1,757	0	1,394	364	17,088	18,797	-18,433		
	MAIN ST	402+89 - 414+97	1,830	0	907	923	13	14	909		
	FALLS PKWY	85+13 - 88+05	965	0	338	627	955	1,050	-423		
	SUBTOTAL		4,552	300	2,639	1,913	18,056	19,861	-17,948	2,939	17,948
			4,852								
STAGE 3 / 2782-11-70	PILGRIM RD	198+21 - 209+20, 226+66 - 228+24	4,328	0	1,118	3,210	77	85	3,125		
	CLEVELAND AVE	502+25 - 502+90	109	0	78	31	23	25	6		
	MEGAL DR	700+50 - 703+67	1,006	0	132	873	22	24	849		
	SUBTOTAL		5,442	200	1,328	4,114	122	134	3,980	5,508	0
			5,642								
STAGE 3 / 2782-12-70	PILGRIM RD	209+20 - 217+55, 220+03 - 226+66	1,560	0	1,423	137	11,928	13,121	-12,984		
	MAIN ST	402+89 - 414+97	2,836	0	909	1,927	0	1	1,926		
	US 41/45 SB RAMPS	6+40 - 12+76	1,303	0	748	555	4,527	4,980	-4,425		
	US 41/45 NB RAMP TO PILGRIM ROAD	17+07 - 24+97	678	0	501	178	1,178	1,296	-1,118		
	SUBTOTAL		6,377	400	3,581	2,796	17,634	19,397	-16,601	3,981	16,601
			6,777								

1) CUT VOLUME INCLUDES CUT AREAS SHOWN ON CROSS SECTIONS PLUS ADDITIONAL CUT BELOW SUBGRADE FOR EXISTING PAVEMENT REMOVAL. SALVAGED/UNUSABLE PAVEMENT MATERIAL VOLUME IS INCLUDED IN CUT VOLUME.

2) EBS IS UNDISTRIBUTED AND IS TO BE BACKFILLED WITH BREAKER RUN. EBS MATERIAL IS ASSUMED TO BE WASTED; HOWEVER, CONTRACTOR MAY USE EBS MATERIAL OUTSIDE 1:1 SLOPE ALONG PILGRIM RD BETWEEN STA 213+00 AND 223+00 WITH THE PERMISSION OF THE ENGINEER.

3) COMMON EXCAVATION, ITEM 205.0100 = CUT + EBS

4) SALVAGED/UNUSABLE PAVEMENT MATERIAL IS THE EXISTING CONCRETE AND ASPHALT PAVEMENT VOLUME, NOT AVAILABLE FOR FILL (MATERIAL TO BE WASTED)

5) AVAILABLE MATERIAL = CUT VOLUME - SALVAGED/UNUSABLE PAVEMENT MATERIAL (0 IF NEGATIVE)

6) FILL VOLUME INCLUDES FILL AREAS SHOWN ON CROSS SECTIONS PLUS ADDITIONAL FILL BELOW SUBGRADE FOR PAVEMENT REMOVAL (AREAS OF PAVEMENT REMOVAL BELOW SUBGRADE ARE TO BE BACKFILLED WITH CUT MATERIAL OR BORROW)

7) MASS ORDINATE = AVAILABLE MATERIAL - EXPANDED FILL (PLUS QUANTITY INDICATES EXCESS MATERIAL WITHIN DIVISION; NEGATIVE QUANTITY INDICATES SHORTAGE OF MATERIAL WITHIN DIVISION)

8) WASTE = EBS + SALVAGED/UNUSABLE PAVEMENT MATERIAL (+ MASS ORDINATE, IF POSITIVE WITHIN DIVISION)

9) BORROW, ITEM 208.0100 = MASS ORDINATE, IF NEGATIVE WITHIN DIVISION

CONTINUED ON NEXT SHEET

CONTINUED FROM PREVIOUS SHEET

EARTHWORK SUMMARY

DIVISION	ROADWAY	FROM / TO STATION	205.0100 COMMON EXCAVATION (3) CUT (1)	205.0100 COMMON EXCAVATION (3) EBS (2)	SALVAGED / UNUSABLE PAVEMENT MATERIAL (4)	AVAILABLE MATERIAL (5)	UNEXPANDED FILL (6)	EXPANDED FILL FACTOR 1.10	MASS ORDINATE +/- (7)	WASTE (8)	208.0100 BORROW (9)
STAGE 4 / 2782-11-70	PILGRIM RD	198+21 - 209+20, 226+66 - 228+24	2,274	0	1,043	1,231	53	58	1,173		
	SUBTOTAL		2,274	100	1,043	1,231	53	58	1,173	2,315	0
			2,374								
STAGE 4 / 2782-12-70	PILGRIM RD	209+20 - 217+55, 220+03 - 226+66	1,413	0	1,283	130	2,091	2,300	-2,170		
	MAIN ST	402+89 - 414+97	1,252	0	620	632	37	41	591		
	SUBTOTAL		2,665	100	1,903	762	2,128	2,341	-1,579	2,003	1,579
			2,765								
PHASE 1 / 2782-11-70	MEGAL COURT (EASTBOUND)	800+50 - 803+77	1,191	0	0	1,191	405	446	746		
	MEGAL COURT (WESTBOUND)	800+50 - 803+77	2,159	0	0	2,159	0	0	2,159		
	SUBTOTAL		3,350	100	0	3,350	405	446	2,905	3,005	0
			3,450								
1100-37-70	US 41/45		1,138	0	0	1,138	631	694	444		
	SUBTOTAL		1,138	0	0	1,138	631	694	444	444	0
			1,138								

NOTE: ALL QUANTITIES ARE CATEGORY 0010

TOTAL I.D. 2782-11-70	15,045	0
TOTAL I.D. 2782-12-70	14,762	36,127
TOTAL I.D. 1100-37-70	1,138	0

1) CUT VOLUME INCLUDES CUT AREAS SHOWN ON CROSS SECTIONS PLUS ADDITIONAL CUT BELOW SUBGRADE FOR EXISTING PAVEMENT REMOVAL. SALVAGED/UNUSABLE PAVEMENT MATERIAL VOLUME IS INCLUDED IN CUT VOLUME.

2) EBS IS UNDISTRIBUTED AND IS TO BE BACKFILLED WITH BREAKER RUN. EBS MATERIAL IS ASSUMED TO BE WASTED; HOWEVER, CONTRACTOR MAY USE EBS MATERIAL OUTSIDE 1:1 SLOPE ALONG PILGRIM RD BETWEEN STA 213+00 AND 223+00 WITH THE PERMISSION OF THE ENGINEER.

3) COMMON EXCAVATION, ITEM 205.0100 = CUT + EBS

4) SALVAGED/UNUSABLE PAVEMENT MATERIAL IS THE EXISTING CONCRETE AND ASPHALT PAVEMENT VOLUME, NOT AVAILABLE FOR FILL (MATERIAL TO BE WASTED)

5) AVAILABLE MATERIAL = CUT VOLUME - SALVAGED/UNUSABLE PAVEMENT MATERIAL (0 IF NEGATIVE)

6) FILL VOLUME INCLUDES FILL AREAS SHOWN ON CROSS SECTIONS PLUS ADDITIONAL FILL BELOW SUBGRADE FOR PAVEMENT REMOVAL (AREAS OF PAVEMENT REMOVAL BELOW SUBGRADE ARE TO BE BACKFILLED WITH CUT MATERIAL OR BORROW)

7) MASS ORDINATE = AVAILABLE MATERIAL - EXPANDED FILL (PLUS QUANTITY INDICATES EXCESS MATERIAL WITHIN DIVISION; NEGATIVE QUANTITY INDICATES SHORTAGE OF MATERIAL WITHIN DIVISION)

8) WASTE = EBS + SALVAGED/UNUSABLE PAVEMENT MATERIAL (+ MASS ORDINATE, IF POSITIVE WITHIN DIVISION)

9) BORROW, ITEM 208.0100 = MASS ORDINATE, IF NEGATIVE WITHIN DIVISION

EARTHWORK SUMMARY (PROJECT I.D. 2720-10-70)

Division	From/To Station	Location	Common Excavation (1)	Cat 0010 (item # 205.0100)	Salvaged/ Unusable Pavement Material (4)	Available Material (5)	Unexpanded Fill	Expanded Fill (13)	Mass Ordinate +/- (14)	Waste (16)	Borrow (15)	Comment:
			Cut (2)	EBS Excavation (3)				Factor 1.10			(item #208.0100)	
PHASE I												
MEGAL COURT (EASTBOUND)	803+77 to 804+25	Mainline	65	0	0	65	38	42	23	23	-	
MEGAL COURT (WESTBOUND)	803+77 to 804+25	Mainline	333	0	0	333	0	0	333	333	-	
WACKER NEUSON ENTRANCE (EASTBOUND)	806+00 to 808+34	Mainline	218	0	0	218	661	727	-509	-	509	
WACKER NEUSON ENTRANCE (WESTBOUND)	806+00 to 808+00	Mainline	98	0	0	98	204	225	-126	-	126	
WACKER NEUSON NORTH LEG (NORTHBOUND)	906+00 to 907+51	Mainline	346	0	0	346	12	13	333	333	-	
WACKER NEUSON NORTH LEG (SOUTHBOUND)	905+52 to 907+25	Mainline	206	0	0	206	2	3	204	204	-	
HARLEY DAVIDSON MAIN ENTRANCE (NORTHBOUND)	904+75 to 905+00	Mainline	7	0	0	7	73	80	-74	-	74	
HARLEY DAVIDSON MAIN ENTRANCE (SOUTHBOUND)	904+75 to 905+00	Mainline	3	0	0	3	87	95	-92	-	92	
HARLEY LOADING DOCK ENTRANCE	12+75 to 14+90	Mainline	903	0	0	903	3	3	899	899	-	
ROUNDABOUT	1+00 to 4+33	Mainline	649	0	0	649	1738	1912	-1263	-	1263	
			2828	0								
PHASE I SUBTOTAL			Total Common Exc	2828	0	2828	2818	3100	-272		272	
PHASE II												
HARLEY DAVIDSON MAIN ENTRANCE (NORTHBOUND)	902+75 to 904+75	Mainline	618	0	0	618	201	221	397	397	-	
HARLEY DAVIDSON MAIN ENTRANCE (SOUTHBOUND)	903+00 to 904+75	Mainline	363	0	0	363	175	192	171	171	-	
			981	0								
PHASE II SUBTOTAL			Total Common Exc	981	0	981	375	413	568	568	0	
PHASE III												
HARLEY DAVIDSON MAIN ENTRANCE (NORTHBOUND)	901+25 to 902+75	Mainline	656	0	0	656	22	24	632	632	-	
POND	--	Pond	17055	0	0	17055	1762	1938	15117	15117	-	
			17711	0								
PHASE III SUBTOTAL			Total Common Exc	17711	0	17711	1784	1962	15749	15749	0	
			21520	0								
PROJECT TOTALS			Total Common Exc	21520	0	21520	4977	5475	16045	16317	272	

1) Common Excavation is the sum of the Cut and EBS Excavation columns. Item number 205.0100
2) Salvaged/Unsuable Pavement Material is included in Cut.
3) EBS Excavation to be backfilled with Breaker Run. See quantities elsewhere for Item number 311.0110
4) Salvaged/Unusable Pavement Material
5) Available Material = Cut - Salvaged/Unusuable Pavement Material
13) Expanded Fill. Factor = 1.11
Depending on selections:
Expanded Fill = (Unexpanded Fill - Rock* Rock Factor - Reduced Marsh - Reduced EBS) * Fill Factor
Or Expanded Fill = (Unexpanded Fill - Rock* Rock Factor - Reduced EBS) * Fill Factor
Or Expanded Fill = (Unexpanded Fill - Rock* Rock Factor - Reduced Marsh) * Fill Factor
Expanded Fill = Unexpanded Fill * Fill Factor
14) The Mass Ordinate + or - Qty calculated for the Division. Plus quantity indicates an excess of material within the Division. Minus indicates a shortage of material within the Division.
15) Borrow Excavation
16) Waste on the project should be used on Project ID 2782-12-70.

BASE AGGREGATE ITEMS

CATEGORY	PROJECT NUMBER	STAGE	LOCATION	STATION	TO	STATION	305.0110 BASE AGGREGATE DENSE 3/4-INCH * TON	305.0120 BASE AGGREGATE DENSE 1 1/4-INCH * TON	310.0110 BASE AGGREGATE OPEN GRADED TON	311.0110 BREAKER RUN TON
0010	2782-11-70	1	MEGAL COURT							
				800+45.77 E	-	803+77.60 EB	85	920	--	--
			MEGAL DRIVE				--			
			P&R LOT	701+83	-	703+22	20	300	--	--
						UNDISTRIBUTED	--	--	--	100
				SUBTOTAL			105	1,220	--	100
		2	PILGRIM ROAD							
				198+21	-	200+60	30	640	--	--
				200+60	-	209+20	130	1,540	--	--
				226+66	-	228+24	--	200	--	--
			MEGAL DRIVE				--			
				700+50	-	703+33	20	550	--	--
						UNDISTRIBUTED	--	--	--	300
				SUBTOTAL			180	2,930	--	300
		3	PILGRIM ROAD							
				198+21	-	200+60	40	330	--	--
				200+60	-	209+20	110	1,790	--	--
				226+66	-	228+24	20	440	--	--
			MEGAL DRIVE							
				700+50	-	703+33	--	950	--	--
						UNDISTRIBUTED	--	--	--	400
				SUBTOTAL			170	3,510	--	400
		4	PILGRIM ROAD							
				198+21	-	200+60	--	700	--	--
				200+60	-	209+20	--	1,230	--	--
				226+66	-	228+24	--	240	--	--
						UNDISTRIBUTED	--	--	--	200
				SUBTOTAL			--	2,170	--	200
				TOTAL I.D. 2782-11-70			455	9,830	--	1,000
0010	2782-12-70	2	PILGRIM ROAD							
				209+20	-	226+66	170	2,660	--	--
			MAIN STREET				--			
				402+88	-	407+60	130	1,040	--	--
			FALLS PARKWAY				--			
				85+13	-	87+37	70	1,460	--	--
						UNDISTRIBUTED	--	--	--	500
				SUBTOTAL			370	5,160	--	500

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE

CONTINUED ON NEXT SHEET

CONTINUED FROM PREVIOUS SHEET

BASE AGGREGATE ITEMS

CATEGORY	PROJECT NUMBER	STAGE	LOCATION	STATION	TO	STATION	305.0110 BASE AGGREGATE DENSE 3/4-INCH * TON	305.0120 BASE AGGREGATE DENSE 1 1/4-INCH * TON	310.0110 BASE AGGREGATE OPEN GRADED TON	311.0110 BREAKER RUN TON
		3	PILGRIM ROAD							
				209+20	-	226+66	190	2,530	--	--
			MAIN STREET				--			
				410+13	-	414+97	100	1,160	--	--
			US 41/45 SB RAMPS				--			
				6+40	-	12+00	20	2,730	--	--
			US 41/45 NB OFF RAMP TO NB				--			
				14+48	-	17+07	20	--	--	--
				17+07	-	21+00	50	1,150	--	--
						UNDISTRIBUTED	--	--	--	800
			SUBTOTAL				380	7,570	--	800
		4	PILGRIM ROAD							
				209+20	-	226+66	--	1,620	--	--
			MAIN STREET				--			
				402+88	-	407+60	--	220	--	--
				410+13	-	414+97	--	340	--	--
						UNDISTRIBUTED	--	--	--	200
			SUBTOTAL				--	2,180	--	200
			TOTAL I.D. 2782-12-70				750	14,910	--	1,500
0010	1100-37-70	4	US 41/45							
				279+48	-	287+23	--	230	370	--
						UNDISTRIBUTED	--	--	--	--
			TOTAL I.D. 1100-37-70				--	230	370	--
0010	2720-10-70	1	MEGAL COURT							
				803+77.60 E	-	808+34.44 EB	70	2,230	--	--
		2	HD MAIN ENTRANCE							
				902+96.45 N	-	904+50.00 NB	--	450	--	--
		3	HD MAIN ENTRANCE							
				901+25.00 N	-	902+96.45 NB	--	600	--	--
			TOTAL I.D. 2720-10-70				70	3,280	--	--
			TOTALS				1,275	28,250	370	2,500

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE

3

COLORING CONCRETE RED

CATEGORY	PROJECT NUMBER	STAGE	LOCATION	STATION	TO	STATION	405.0100 COLORING CONCRETE RED CY
0010	2782-11-70	1	MEGAL COURT				
				800+45.77 EB	-	803+77.60 EB	24
			SUBTOTAL				24
		2	PILGRIM ROAD				
				200+60	-	209+20	27
				226+66	-	228+24	5
			SUBTOTAL				31
		3	PILGRIM ROAD				
				200+60	-	209+20	20
				226+66	-	228+24	23
			SUBTOTAL				42
		4	PILGRIM ROAD				
				200+60	-	209+20	57
				226+66	-	228+24	6
			SUBTOTAL				63
			TOTAL I.D. 2782-11-70				160
0020	2782-12-70	2	PILGRIM ROAD				
				209+20	-	226+66	31
			SUBTOTAL				31
		3	PILGRIM ROAD				
				209+20	-	226+66	16
			SUBTOTAL				16
		4	PILGRIM ROAD				
				209+20	-	226+66	124
			MAIN STREET				
				402+88	-	407+60	12
				410+13	-	414+97	7
			SUBTOTAL				142
			TOTAL I.D. 2782-12-70				190
0010	2720-10-70	1	MEGAL COURT				
				803+77.60 E	-	808+34.44 EB	13
		2	HD MAIN ENTRANCE				
				902+96.45 NB	-	904+50.00 NB	616
			TOTAL I.D. 2720-10-70				629
			TOTALS				979

CONCRETE PAVEMENT GAPS

CATEGORY	PROJECT NUMBER	STAGE	LOCATION	STATION	TO	STATION	415.0210 EACH
0010	2782-11-70	1	MEGAL COURT				
				800+45.77 EB	-	803+77.60 EB	4
			SUBTOTAL				4
		2	PILGRIM ROAD				
				200+60	-	209+20	2
				226+66	-	228+24	1
			SUBTOTAL				3
		3	PILGRIM ROAD				
				200+60	-	209+20	2
				226+66	-	228+24	1
			SUBTOTAL				3
		4	PILGRIM ROAD				
				200+60	-	209+20	--
				226+66	-	228+24	1
			SUBTOTAL				1
			TOTAL I.D. 2782-11-70				11
0010	2782-12-70	2	PILGRIM ROAD				
				209+20	-	226+66	1
			SUBTOTAL				1
		3	PILGRIM ROAD				
				209+20	-	226+66	--
			SUBTOTAL				--
		4	PILGRIM ROAD				
				209+20	-	226+66	--
			MAIN STREET				
				402+88	-	407+60	3
				410+13	-	414+97	2
			SUBTOTAL				5
			TOTAL I.D. 2782-12-70				6
0010	2720-10-70	1	MEGAL COURT				
				803+77.60 E	-	808+34.44 EB	16
			TOTAL I.D. 2720-10-70				16
			TOTALS				33

CONCRETE PAVEMENT

CATEGORY	PROJECT NUMBER	STAGE	LOCATION	STATION	TO	STATION	415.0060 CONCRETE PAVEMENT 6-INCH SY	415.0080 CONCRETE PAVEMENT 8-INCH SY	415.0085 CONCRETE PAVEMENT 8 1/2-INCH SY	415.0095 CONCRETE PAVEMENT 9 1/2-INCH SY	415.0100 CONCRETE PAVEMENT 10-INCH SY	415.0105 CONCRETE PAVEMENT 10 1/2-INCH SY	415.1085 CONCRETE PAVEMENT HES 8 1/2-INCH SY	415.1095 CONCRETE PAVEMENT HES 9 1/2-INCH SY	416.0508 CONCRETE ROUNDABOUT TRUCK APRON 8-INCH SY
0010	2782-11-70	1	MEGAL COURT												
				800+45.77 EB	-	803+77.60 EB	--	--	--	1965	--	--	--	--	--
			SUBTOTAL				--	--	--	1,965	--	--	--	--	--
		2	PILGRIM ROAD												
				200+60	-	209+20	--	--	--	3,361	--	--	--	695	--
				226+66	-	228+24	--	--	--	148	--	--	--	657	--
			MEGAL DRIVE												
				702+16	-	702+66	--	63							
			SUBTOTAL				--	63	--	3,509	--	--	--	1,352	--
		3	PILGRIM ROAD												
				200+60	-	209+20	--	--	--	4,510	--	--	--	333	--
				226+66	-	228+24	--	--	--	334	--	--	--	718	--
			SUBTOTAL				--	--	--	4,843	--	--	--	1,051	--
		4	PILGRIM ROAD												
				200+60	-	209+20	--	--	--	2,756	--	--	--	--	--
				226+66	-	228+24	--	--	--	146	--	--	--	477	--
			SUBTOTAL				--	--	--	2,903	--	--	--	477	--
			TOTAL I.D. 2782-11-70				--	63	--	13,220	--	--	--	2,880	--
0010	2782-12-70	2	PILGRIM ROAD												
				209+20	-	226+66	--	--	--	6,754	--	--	--	230	--
			MAIN STREET				--	--	--	--	--	--	--	--	--
				402+88	-	407+60	--	--	2,329	--	--	--	312	--	--
			SUBTOTAL				--	--	2,329	6,754	--	--	312	230	--
		3	PILGRIM ROAD												
				209+20	-	226+66	--	--	--	5,733	--	--	--	--	--
			MAIN STREET												
				410+13	-	414+97	--	--	1,687	--	--	--	257	--	--
			US 41/45 SB RAMPS												
				6+40	-	12+00	107	--	--	3,915	--	--	--	--	--
			US 41/45 NB OFF RAMP TO NB												
				17+07	-	21+00	--	--	--	663	--	--	--	--	--
			SUBTOTAL				107	--	1,687	10,311	--	--	257	--	--
		4	PILGRIM ROAD												
				209+20	-	226+66	--	--	--	2,436	--	--	--	--	--
			MAIN STREET												
				402+88	-	407+60	--	--	390	--	--	--	--	--	--
				410+13	-	414+97	--	--	509	--	--	--	--	--	--
			SUBTOTAL				--	--	899	2,436	--	--	--	--	--
			TOTAL I.D. 2782-12-70				107	--	4,916	19,501	--	--	568	230	--

CONTINUED ON NEXT SHEET

CONTINUED FROM PREVIOUS SHEET

CATEGORY	PROJECT NUMBER	STAGE	LOCATION	STATION	TO	STATION	415.0060 CONCRETE PAVEMENT 6-INCH SY	415.0080 CONCRETE PAVEMENT 8-INCH SY	415.0085 CONCRETE PAVEMENT 8 1/2-INCH SY	415.0095 CONCRETE PAVEMENT 9 1/2-INCH SY	415.0100 CONCRETE PAVEMENT 10-INCH SY	415.0105 CONCRETE PAVEMENT 10 1/2-INCH SY	415.1085 CONCRETE PAVEMENT HES 8 1/2-INCH SY	415.1095 CONCRETE PAVEMENT HES 9 1/2-INCH SY	416.0508 CONCRETE ROUNDABOUT TRUCK APRON 8-INCH SY
							CONCRETE PAVEMENT								
0010	1100-37-70	4	US 41/45												
				279+48	-	287+23	--	--	--	--	162	49	--	--	--
			TOTAL I.D.1100-37-70				--	--	--	--	162	49	--	--	--
0010	2720-10-70	1	MEGAL COURT												
				803+77.60 EB	-	808+34.44 EB	--	--	--	2,915	--	--	--	--	342
		2	HD MAIN ENTRANCE												
				902+96.45 NB	-	904+50.00 NB	--	--	--	1,242	--	--	--	--	--
		3	HD MAIN ENTRANCE												
				901+25.00 N	-	902+96.45 NB	--	--	--	--	--	--	--	--	--
			TOTAL I.D. 2720-10-70				--	--	--	4,157	--	--	--	--	342
			TOTALS				107	63	4,916	36,878	162	49	568	3,109	342

CONCRETE SIDEWALK ITEMS

CATEGORY	PROJECT NUMBER	STAGE	LOCATION	STATION	TO	STATION	602.0410 CONCRETE SIDEWALK 5-INCH SF
0010	2782-11-70	1	MEGAL COURT				
				800+45.77 EB	-	803+77.60 EB	4,490
			MEGAL DRIVE				
			P&R LOT	701+83	-	703+22	603
				SUBTOTAL			5,093
		2	PILGRIM ROAD				
				198+21	-	200+60	1,006
				200+60	-	209+20	4,953
			MEGAL DRIVE				
				700+50	-	703+33	893
				SUBTOTAL			6,852
		3	PILGRIM ROAD				
				198+21	-	200+60	1,251
				200+60	-	209+20	4,294
				226+66	-	228+24	1,755
				SUBTOTAL			7,300
		4	PILGRIM ROAD				
				200+60	-	209+20	3,641
				226+66	-	228+24	324
				SUBTOTAL			3,965
				TOTAL I.D. 2782-11-70			23,210
0010	2782-12-70	2	PILGRIM ROAD				
				209+20	-	226+66	7,119
			MAIN STREET				
				402+88	-	407+60	4,592
			FALLS PARKWAY				
				85+13	-	87+37	3,067
				SUBTOTAL			14,778
		3	PILGRIM ROAD				
				209+20	-	226+66	7,429
			MAIN STREET				
				410+13	-	414+97	3,358
			US 41/45 SB RAMPS				
				6+40	-	12+00	585
				SUBTOTAL			11,372
		4	PILGRIM ROAD				
				209+20	-	226+66	8,128
				SUBTOTAL			8,128
				TOTAL I.D. 2782-12-70			34,278

CONCRETE SIDEWALK ITEMS

CATEGORY	PROJECT NUMBER	STAGE	LOCATION	STATION	TO	STATION	602.0410 CONCRETE SIDEWALK 5-INCH SF
0010	2720-10-70	1	MEGAL COURT				
				803+77.60 EB	-	808+34.44 EB	3,618
		2	HD MAIN ENTRANCE				
				902+96.45 NB	-	904+50.00 NB	131
				TOTAL I.D. 2720-10-70			3,749
				TOTALS			61,237

3

CONCRETE SURFACE DRAINS

CATEGORY	PROJECT NUMBER	STAGE	LOCATION	STATION	OFFSET	416.1010 CONCRETE SURFACE DRAINS CY	606.0100 RIPRAP LIGHT CY	645.0130 GEOTEXTILE FABRIC TYPE R SY
0010	2782-12-70	3	US 41/45 SB RAMPS					
				8+20	14.7 RT	1	2	16
			TOTAL I.D. 2782-12-70			1	2	16
0010	1100-37-70	4	US 41/45					
				287+15	66.9 RT	1	2	16
			TOTAL I.D. 1100-37-70			1	2	16
			TOTAL			2	4	32

ASPHALTIC FLUMES

CATEGORY	PROJECT NUMBER	STAGE	LOCATION	STATION	TO	STATION	465.0315 SY
0010	2720-10-70	1	MEGAL COURT				
				803+77.60 EB	-	808+34.44 EB	23
			TOTAL I.D. 2720-10-70				23

CURB RAMP DETECTABLE WARNING FIELD

CATEGORY	PROJECT NUMBER	STAGE	LOCATION	STATION	TO	STATION	602.0505 CURB RAMP DETECTABLE WARNING FIELD YELLOW SF
0010	2782-11-70	1	MEGAL DRIVE P&R LOT	701+83	-	703+22	16
			SUBTOTAL				16
		2	PILGRIM ROAD	200+60	-	209+20	120
			MEGAL DRIVE	700+50	-	703+33	48
			SUBTOTAL				168
		3	PILGRIM ROAD	200+60	-	209+20	104
				226+66	-	228+24	64
			SUBTOTAL				168
		4	PILGRIM ROAD	226+66	-	228+24	24
			SUBTOTAL				24
			TOTAL I.D. 2782-11-70				376
0010	2782-12-70	2	PILGRIM ROAD	209+20	-	226+66	152
			SUBTOTAL				152
		3	PILGRIM ROAD	209+20	-	226+66	104
			SUBTOTAL				104
			TOTAL I.D. 2782-12-70				256
0010	2720-10-70	1	MEGAL COURT	803+77.60 E	-	808+34.44 EB	192
			TOTAL I.D. 2720-10-70				192
			TOTALS				824

DRIVEWAYS

CATEGORY	PROJECT NUMBER	STAGE	LOCATION	STATION	OFFSET		* 305.0120 BASE AGGREGATE DENSE 1 1/4-INCH TON	416.0260 CONCRETE DRIVEWAY HES 6-INCH SY	416.0280 CONCRETE DRIVEWAY HES 8-INCH SY	465.0120 ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES TON
0010	2782-11-70	2	PILGRIM ROAD							
				198+90	40.5'	LT	10	27	--	1
							--			
			MEGAL DRIVE				--			
				701+44	55.1'	LT	10	17	--	3
							--			
			CLEVELAND AVENUE				--			
				500+54	18.8'	LT	10	22	--	--
				500+67	18.8'	RT	10	23	--	1
				SUBTOTAL			40	88	--	5
		3	PILGRIM ROAD							
				201+12	39.5'	RT	20	--	43	4
				206+49	39.4'	RT	10	--	35	1
				SUBTOTAL			30	--	78	6
				TOTAL I.D. 2782-11-70			70	88	78	10
0010	2782-12-70	2	MAIN STREET							
				405+15	40.2'	LT	10	18	--	4
				405+93	27.3'	RT	10	15	--	1
				406+08	52.5'	LT	10	17	--	1
				406+46	55.1'	LT	20	56	--	--
							--			
			FALLS PARKWAY				--			
				86+04	39.2'	LT	10	--	35	1
				SUBTOTAL			60	106	35	6
		3	MAIN STREET							
				412+79	49.3'	LT	30	--	48	5
				412+95	28.1'	RT	20	--	57	
				414+36	41.4'	LT	30	--	81	--
				SUBTOTAL			80	--	186	5
				TOTAL I.D. 2782-12-70			140	106	221	12
0010	2720-10-70	1	MEGAL COURT							
				803+77.60 EB 808+34.44 EB			--	30	--	--
				TOTAL I.D. 2720-10-70			--	30	--	--
				TOTALS			210	224	299	22

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

ASPHALTIC ITEMS

CATEGORY	PROJECT NUMBER	STAGE	LOCATION	STATION	TO	STATION	455.0605 TACK COAT GAL	455.0120 ASPHALTIC MATERIAL PG 64-28 TON	460.1103 HMA PAVEMENT TYPE E-3 TON	460.1110 HMA PAVEMENT TYPE E-10 TON	460.4000 HMA COLD WEATHER PAVING TON
0010	2782-11-70	1	MEGAL DRIVE P&R LOT	701+83	-	703+22	28	6	113	--	28
			SUBTOTAL				28	6	113	--	28
0010	2782-11-70	2	PILGRIM ROAD	198+21	-	200+60	42	12	--	220	--
			MEGAL DRIVE	700+50	-	703+33	39	10	189	--	--
			SUBTOTAL				82	22	189	220	--
		3	PILGRIM ROAD	198+21	-	200+60	18	5	--	96	--
			MEGAL DRIVE	700+50	-	703+33	65	17	314	--	--
			SUBTOTAL				84	23	314	96	--
		4	PILGRIM ROAD	198+21	-	200+60	46	13	--	239	60
			SUBTOTAL				46	13	--	239	60
			TOTAL I.D. 2782-11-70				240	64	617	555	88
0010	2782-12-70	2	FALLS PARKWAY	85+13	-	87+37	115	25	460	--	--
			SUBTOTAL				115	25	460	--	--
		3	MAIN STREET	413+17	-	414+97	73	20	364	--	--
			US 41/45 SB RAMPS	6+40	-	12+00	13	2	41	--	--
			US 41/45 NB OFF RAMP TO NB	17+07	-	21+00	28	5	89	--	--
			SUBTOTAL				113	27	494	--	--
		4	MAIN STREET	413+17	-	414+97	21	6	105	--	26
			SUBTOTAL				21	6	105	--	26
			TOTAL I.D. 2782-12-70				249	58	1,058	--	26
0010	1100-37-70	3	US 41/45	284+75	-	285+50	39	7	126	--	--
			TOTAL I.D.1100-37-70				39	7	126	--	--

ASPHALTIC ITEMS

CATEGORY	PROJECT NUMBER	STAGE	LOCATION	STATION	TO	STATION	455.0605 TACK COAT GAL	455.0120 ASPHALTIC MATERIAL PG 64-28 TON	460.1103 HMA PAVEMENT TYPE E-3 TON	460.1110 HMA PAVEMENT TYPE E-10 TON	460.4000 HMA COLD WEATHER PAVING TON
0010	2720-10-70	1	MEGAL COURT	803+77.60 E	-	808+34.44 EB	61	12	210	--	53
		2	HD MAIN ENTRANCE	902+96.45 N	-	904+50.00 NB	14	3	50	--	--
		3	HD MAIN ENTRANCE	901+25.00 N	-	902+96.45 NB	57	11	196	--	--
			TOTAL I.D. 2720-10-70				132	26	456	--	53
			TOTALS				660	156	2,256	555	167

CURB & GUTTER ITEMS

CATEGORY	PROJECT NUMBER	STAGE	LOCATION	STATION TO STATION	601.0405 CONCRETE CURB & GUTTER 18-INCH TYPE A LF	601.0407 CONCRETE CURB & GUTTER 18-INCH TYPE D LF	601.0409 CONCRETE CURB & GUTTER 30-INCH TYPE A LF	601.0411 CONCRETE CURB & GUTTER 30-INCH TYPE D LF	601.0501 CONCRETE CURB & GUTTER INTEGRAL 4-INCH SLOPED 36-INCH LF	601.0553 CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE D LF	601.0574 CONCRETE CURB & GUTTER 4-INCH SLOPED 30-INCH TYPE G	601.0576 CONCRETE CURB & GUTTER 4-INCH SLOPED 30-INCH TYPE J	601.0580 CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE R LF	601.0600 CONCRETE CURB PEDESTRIAN LF	SPV.0090.0005 TRAFFIC CHANNELI ING CURB SYSTEM LF
0010	2782-11-70	1	MEGAL COURT												
				800+45. - 803+77.60 EB	--	--	1,348	--	--	--	--	--	--	10	--
			MEGAL DRIVE												
			P&R LOT	701+83 - 703+22	--	151	--	--	--	--	--	--	--	--	--
				SUBTOTAL	--	151	1,348	--	--	--	--	--	--	10	--
		2	PILGRIM ROAD												
				198+21 - 200+60	--	--	--	242	--	--	--	--	--	101	--
				200+60 - 209+20	145	--	1,013	--	--	--	--	--	--	22	--
				226+66 - 228+24	--	--	28	--	--	--	--	--	--	--	--
			MEGAL DRIVE												
				700+50 - 703+33	--	--	60	365	--	--	--	--	--	--	--
				SUBTOTAL	145	--	1,101	607	--	--	--	--	--	123	--
		3	PILGRIM ROAD												
				198+21 - 200+60	--	--	--	208	--	--	--	--	--	--	--
				200+60 - 209+20	132	--	927	--	--	--	--	--	--	21	--
				226+66 - 228+24	--	--	183	--	--	--	--	--	--	--	--
			MEGAL DRIVE												
				700+50 - 703+33	--	--	86	545	--	--	--	--	--	--	--
				SUBTOTAL	132	--	1,196	753	--	--	--	--	--	21	--
		4	PILGRIM ROAD												
				198+21 - 200+60	--	--	--	274	--	--	--	--	--	--	--
				200+60 - 209+20	209	--	1,541	--	--	--	--	--	--	--	--
				226+66 - 228+24	--	--	167	--	--	--	--	--	--	--	--
				SUBTOTAL	209	--	1,708	274	--	--	--	--	--	--	--
				TOTAL I.D. 2782-11-70	486	151	5,353	1,634	--	--	--	--	--	154	--
0010	2782-12-70	2	PILGRIM ROAD												
				209+20 - 226+66	149	--	1,761	--	--	--	110	--	--	32	--
			MAIN STREET												
				402+88 - 407+60	--	--	943	--	--	--	--	--	--	--	--
			FALLS PARKWAY												
				85+13 - 87+37	--	--	--	874	--	--	--	--	--	--	--
				SUBTOTAL	149	--	2,704	874	--	--	110	--	--	32	--
		3	PILGRIM ROAD												
				209+20 - 226+66	150	--	1,477	--	--	--	110	--	--	32	--
			MAIN STREET												
				410+13 - 414+97	--	--	614	352	--	--	--	--	--	--	--
			US 41/45 SB RAMPS												
				6+40 - 12+00	--	--	860	--	--	--	--	--	--	--	31
				SUBTOTAL	150	--	2,951	352	--	--	110	--	--	32	31

CONTINUED ON NEXT SHEET

CONTINUED FROM PREVIOUS SHEET

CURB & GUTTER ITEMS

CATEGORY	PROJECT NUMBER	STAGE	LOCATION	STATION TO STATION	601.0405 CONCRETE CURB & GUTTER 18-INCH TYPE A LF	601.0407 CONCRETE CURB & GUTTER 18-INCH TYPE D LF	601.0409 CONCRETE CURB & GUTTER 30-INCH TYPE A LF	601.0411 CONCRETE CURB & GUTTER 30-INCH TYPE D LF	601.0501 CONCRETE CURB & GUTTER INTEGRAL 4-INCH SLOPED 36-INCH LF	601.0553 CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE D LF	601.0574 CONCRETE CURB & GUTTER 4-INCH SLOPED 30-INCH TYPE G	601.0576 CONCRETE CURB & GUTTER 4-INCH SLOPED 30-INCH TYPE J	601.0580 CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE R LF	601.0600 CONCRETE CURB PEDESTRIAN LF	SPV.0090.0005 TRAFFIC CHANNELI ING CURB SYSTEM LF
		4	PILGRIM ROAD												
				209+20 - 226+66	--	--	3,856	--	--	--	--	--	--	--	--
				SUBTOTAL	1,165	--	3,856	--	--	--	--	--	--	--	--
				TOTAL I.D. 2782-12-70	1,464	--	9,511	1,226	--	--	220	--	--	64	31
0010	1100-37-70	4	US 41/45												
				284+75 - 285+50	--	--	--	--	400	--	--	52	--	--	--
				TOTAL I.D.1100-37-70	--	--	--	--	400	--	--	52	--	--	--
0010	2720-10-70	1	MEGAL COURT												
				803+77. - 808+34.44 EB	245	--	1,687	540	--	89	--	--	244	142	--
		2	HD MAIN ENTRANCE												
				902+96. - 904+50.00 NB	--	--	472	105	--	--	--	--	--	--	--
		3	HD MAIN ENTRANCE												
				901+25.0 - 902+96.45 NB	--	--	--	399	--	--	--	--	--	--	--
				TOTAL I.D. 2720-10-70	245	--	2,159	1,044	--	89	--	--	244	142	--
				TOTALS	2,195	151	17,023	3,904	400	89	220	52	244	360	31

CONCRETE BARRIER ITEMS

CATEGORY	PROJECT NUMBER	LOCATION	STATION		TO STATION		OFFSET	603.1132 CONCRETE BARRIER TYPE S32 LF	603.1142 CONCRETE BARRIER TYPE S42 LF	603.1236 CONCRETE BARRIER TYPE S36A LF	603.1442 CONCRETE BARRIER TYPE S42C LF	603.3111 CONCRETE BARRIER TRANSITION TYPE NJ32SF TO S32 EACH	603.3313 CONCRETE BARRIER TRANSITION TYPE NJ32DF TO S36 EACH	SPV.0060.0009 CONCRETE BARRIER TRANSITION TYPE NJ51DF TO V56 EACH	SPV.0090.0004 CONCRETE BARRIER NJ51DF LF
0010	2782-12-70	US 41/45 SB RAMPS													
			9+52	-	10+75		27.0 LT	--	--	130	--	--	1	--	--
			101+90	-	104+88		15.0 RT	191	--	--	--	1	--	--	--
		TOTAL I.D. 2782-12-70						191	--	130	--	1	1	--	--
0010	1100-37-70	US 41/45													
			280+00	-	281+50		60.0 RT	--	150	--	--	--	--	--	--
			281+50	-	284+68		60.0 RT	--	--	--	318				
			284+13	-	286+23		MEDIAN	--	--	--	--	--	--	1	45
			285+07	-	287+17		MEDIAN	--	--	--	--	--	--	1	45
		TOTAL I.D. 1100-37-70						--	150	--	318	--	--	2	90
		TOTAL						191	150	130	318	1	1	2	90

CONCRETE PAVEMENT APPROACH SLAB

CATEGORY	PROJECT NUMBER	STAGE	LOCATION	STATION		TO STATION	415.0410 SY
0010	2782-12-70	2	PILGRIM ROAD				
				217+49	-	217+68	59
				220+26	-	220+48	63
			SUBTOTAL				122
		3	PILGRIM ROAD				
				217+34	-	217+52	53
				219+98	-	220+18	67
			SUBTOTAL				120
			TOTAL I.D. 2782-12-70				242

CONCRETE MEDIAN SLOPED NOSE

CATEGORY	PROJECT NUMBER	STAGE	LOCATION	STATION		TO STATION	620.0300 CONCRETE MEDIAN SLOPED NOSE TYPE 1 SF	TYPE 2 SF
0010	2782-11-70	1	MEGAL COURT					
				800+45.77 EB	-	803+77.60 EB	36	--
			SUBTOTAL				36	
0010	2782-11-70	2	PILGRIM ROAD					
				200+60	-	209+20	--	70
			SUBTOTAL				70	
		3	PILGRIM ROAD					
				200+60	-	209+20	--	70
			MEGAL DRIVE					
				700+50	-	703+33	84	--
			SUBTOTAL				154	
		4	PILGRIM ROAD					
				198+21	-	200+60	90	--
				200+60	-	209+20	279	--
				226+66	-	228+24	41	--
			SUBTOTAL				410	
			TOTAL I.D. 2782-11-70				670	
0010	2782-12-70	2	PILGRIM ROAD					
				209+20	-	226+66	--	72
			FALLS PARKWAY					
				85+13	-	87+37	40	--
			SUBTOTAL				112	
		3	PILGRIM ROAD					
				209+20	-	226+66	--	70
			US 41/45 SB RAMPS					
				6+40	-	12+00	40	--
			SUBTOTAL				110	
		4	PILGRIM ROAD					
				209+20	-	226+66	171	--
			MAIN STREET					
				402+88	-	407+60	28	--
				410+13	-	414+97	47	--
			SUBTOTAL				246	
			TOTAL I.D. 2782-12-70				468	
0010	2720-10-70	1	MEGAL COURT					
				803+77.60 EB	-	808+34.44 EB	369	
		2	MEGAL COURT					
				902+96.45 NB	-	904+50.00 NB	60	
			TOTAL I.D. 2720-10-70				429	
			TOTALS				1,567	

3

DRILLED DOWEL BARS

CATEGORY	PROJECT NUMBER	STAGE	LOCATION	STATION	OFFSET	TO STATION	OFFSET	DRILLED DOWEL BAR 416.0620 EACH
0010	2782-11-70	2	PILGRIM ROAD					
				208+10	162.9' LT	- 208+40	169.2' LT	37
			SUBTOTAL					37
		3	PILGRIM ROAD					
				208+59	119.1' RT	- 209+02	110.2' RT	37
			SUBTOTAL					37
			TOTAL I.D. 2782-11-70					74
0010	2782-12-70	2	MAIN STREET					
				402+88	25.5' RT	402+88	24.2' LT	49
		2	PILGRIM ROAD					
				223+83	159.9' LT	- 224+17	163.2' LT	29
				224+42	161.6' LT	- 224+75	159.0' LT	28
			SUBTOTAL					106
		3	PILGRIM ROAD					
				213+29	366.9' RT	- 213+47	347.2' RT	26
				216+38	296.7' RT	- 216+48	313.0' RT	19
				218+58	314.8' RT	- 218+80	327.7' RT	30
			SUBTOTAL					75
			TOTAL I.D. 2782-12-70					181
			TOTALS					255

CONCRETE STEPS

CATEGORY	PROJECT NUMBER	STAGE	LOCATION	STATION	OFFSET	602.1500 CONCRETE STEPS SF	513.2050.S RAILING PIPE LF
0010	2782-11-70	2	PILGRIM ROAD				
				199+25	53.8' LT	12	2
			TOTAL I.D. 2782-11-70			12	2
0010	2782-12-70	2	MAIN STREET				
				406+83	63.0' LT	6	--
				407+48	63.0' LT	14	2
			TOTAL I.D. 2782-12-70			20	2
			TOTALS			32	4

CONCRETE PAVEMENT JOINT LAYOUT

CATEGORY	PROJECT NUMBER	STAGE	LOCATION	SPV.0105.0008 LS	SPV.0105.0009 LS	SPV.0105.0010 LS
0010	2782-11-70	ALL	PROJECT	1	--	--
0010	2782-12-70	ALL	PROJECT	--	1	--
0010	2720-10-70	ALL	PROJECT	--	--	1
			TOTAL	1	1	1

DRILLED TIE BARS

CATEGORY	PROJECT NUMBER	STAGE	LOCATION	STATION	TO	STATION	416.0610 EACH
0010	1100-37-70	4	US/41/45				
				284+75	-	285+50	217
			TOTAL I.D.1100-37-70				217

INCENTIVES

CATEGORY	PROJECT NUMBER	LOCATION	440.4410.S INCENTIVE IRI RIDE DOL	460.2000 INCENTIVE DENSITY HMA PAVEMENT DOL
0010	1100-37-70	PROJECT	--	--
0010	2782-11-70	PROJECT	1,906	790
0010	2782-12-70	PROJECT	2,648	680
0010	2720-10-70	PROJECT	--	290
		TOTAL	4,555	1,760

STAMPING COLORED CONCRETE

CATEGORY	PROJECT NUMBER	STAGE	LOCATION	STATION	TO	STATION	SPV.0165.0100 STAMPING COLORED CONCRETE SF
0010	2782-11-70	1	MEGAL COURT				
				800+45.77 E	-	803+77.60 EB	1,330
				SUBTOTAL			1,330
		2	PILGRIM ROAD				
				198+21	-	209+20	906
				226+66	-	228+24	154
				SUBTOTAL			1,060
		3	PILGRIM ROAD				
				198+21	-	209+20	674
				226+66	-	228+24	1,061
				SUBTOTAL			1,735
		4	PILGRIM ROAD				
				198+21	-	209+20	3,355
				226+66	-	228+24	202
				SUBTOTAL			3,557
				TOTAL I.D. 2782-11-70			7,682
0020	2782-12-70	2	PILGRIM ROAD				
				209+20	-	226+66	1,338
				SUBTOTAL			1,338
		3	PILGRIM ROAD				
				209+20	-	226+66	561
				SUBTOTAL			561
		4	PILGRIM ROAD				
				209+20	-	226+66	7,860
			MAIN STREET				
				402+88	-	407+60	750
				410+13	-	414+97	424
				SUBTOTAL			9,034
				TOTAL I.D. 2782-12-70			10,933
0010	2720-10-70	1	MEGAL COURT				
				803+77.60 E	-	808+34.44 EB	721
		2	HD MAIN ENTRANCE				
				902+96.45 N	-	904+50.00 NB	5,718
		3	HD MAIN ENTRANCE				
				901+25.00 N	-	902+96.45 NB	--
				TOTAL I.D. 2720-10-70			6,439
				TOTALS			25,054

TEMPORARY PAVEMENT ITEMS

CATEGORY	PROJECT NUMBER	STAGE	LOCATION	STATION	TO	STATION	* 305.0120 BASE AGGREGATE DENSE 1 1/4-INCH TON	465.0125 ASPHALTIC SURFACE TEMPORARY TON
0010	2782-11-70	1	PILGRIM ROAD					
				198+21	-	209+20	450	190
				226+66	-	228+24	90	40
				SUBTOTAL			540	230
		2	PILGRIM ROAD					
				198+21	-	209+20	380	160
			MEGAL DRIVE					
				700+50	-	703+33	200	85
				SUBTOTAL			580	245
				TOTAL I.D. 2782-11-70			1,120	475
0010	2782-12-70	1	PILGRIM ROAD					
				209+20	-	226+66	1,000	420
			MAIN STREET					
				402+88	-	407+60	310	130
				410+13	-	414+97	210	90
				SUBTOTAL			1,520	640
		2	PILGRIM ROAD					
				209+20	-	226+66	210	90
		3	PILGRIM ROAD					
				209+20	-	226+66	120	50
				SUBTOTAL			120	50
				TOTAL I.D. 2782-12-70			1,850	780
				TOTALS			2,970	1,255

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE

3

STORM SEWER SUMMARY

ITEM NUMBER	ITEM	CAT 0010 PROJECT ID 2782-11-70 TOTAL	CAT 0010 PROJECT ID 2782-12-70 TOTAL	CAT 0010 PROJECT ID 2720-10-70 TOTAL	
520.8000	Concrete Collars for Pipe	17	25	3	EACH
522.1012	Apron Endwalls for Culvert Pipe Reinforced Concrete 12-Inch	-	4	1	EACH
522.1015	Apron Endwalls for Culvert Pipe Reinforced Concrete 15-Inch	-	2	1	EACH
522.1018	Apron Endwalls for Culvert Pipe Reinforced Concrete 18-Inch	2	-	-	EACH
522.1024	Apron Endwalls for Culvert Pipe Reinforced Concrete 24-Inch	-	1	1	EACH
522.1030	Apron Endwalls for Culvert Pipe Reinforced Concrete 30-Inch	-	5	-	EACH
522.1036	Apron Endwalls for Culvert Pipe Reinforced Concrete 36-Inch	-	2	-	EACH
522.1048	Apron Endwalls for Culvert Pipe Reinforced Concrete 48-Inch	-	1	-	EACH
522.1072	Apron Endwalls for Culvert Pipe Reinforced Concrete 72-Inch	-	1	-	EACH
608.0312	Storm Sewer Pipe Reinforced Concrete Class III 12-Inch	803	987	850	LF
608.0315	Storm Sewer Pipe Reinforced Concrete Class III 15-Inch	483	153	96	LF
608.0318	Storm Sewer Pipe Reinforced Concrete Class III 18-Inch	454	-	34	LF
608.0324	Storm Sewer Pipe Reinforced Concrete Class III 24-Inch	398	544	241	LF
608.0327	Storm Sewer Pipe Reinforced Concrete Class III 27-Inch	113	10	-	LF
608.0330	Storm Sewer Pipe Reinforced Concrete Class III 30-Inch	-	599	-	LF
608.0336	Storm Sewer Pipe Reinforced Concrete Class III 36-Inch	-	404	-	LF
608.0348	Storm Sewer Pipe Reinforced Concrete Class III 48-Inch	20	62	-	LF
608.0372	Storm Sewer Pipe Reinforced Concrete Class III 72-Inch	-	135	-	LF
611.0530	Manhole Covers Type J	8	2	4	EACH
611.0550	Manhole Covers Type M	-	-	1	EACH
611.0610	Inlet Covers Type BW	-	2	-	EACH
611.0612	Inlet Covers Type C	-	1	-	EACH
611.0624	Inlet Covers Type H	42	38	18	EACH
611.0639	Inlet Covers Type H-S	11	1	8	EACH
611.0642	Inlet Covers Type MS	3	-	4	EACH
611.0652	Inlet Covers Type T	-	-	2	EACH
611.0666	Inlet Covers Type Z	8	13	-	EACH
611.1003	Catch Basins 3-FT Diameter	5	9	-	EACH
611.1004	Catch Basins 4-FT Diameter	4	2	2	EACH
611.1005	Catch Basins 5-FT Diameter	2	-	-	EACH
611.1006	Catch Basins 6-FT Diameter	1	1	-	EACH
611.1230	Catch Basins 2x3-FT	30	20	13	EACH
611.2004	Manholes 4-FT Diameter	4	2	3	EACH
611.2005	Manholes 5-FT Diameter	2	2	-	EACH
611.2006	Manholes 6-FT Diameter	2	3	-	EACH
611.2007	Manholes 7-FT Diameter	1	1	-	EACH
611.2008	Manholes 8-FT Diameter	-	-	1	EACH
611.3003	Inlets 3-FT Diameter	1	3	-	EACH
611.3004	Inlets 4-FT Diameter	5	3	2	EACH
611.3230	Inlets 2x3-FT	11	11	11	EACH
611.3901	Inlets Median 1 Grate	3	-	2	EACH
611.3902	Inlets Median 2 Grate	-	-	1	EACH
611.9800.S	Pipe Grates	-	1	-	EACH
SPV.0060.0116	Outlet Control Structure	-	-	1	EACH

RECONSTRUCTING MANHOLES

STRUCTURE NO.	STREET	STATION	OFFSET	CAT 0010 611.0420 PROJECT ID 2782-11-70 EACH	CAT 0010 611.0420 PROJECT ID 2782-12-70 EACH
300	PILGRIM ROAD	200+72	20' RT	1	-
304	PILGRIM ROAD	211+32	50' RT	-	1
305	PILGRIM ROAD	226+76	22' RT	1	-
306	PILGRIM ROAD	225+10	68' RT	1	-
SUBTOTAL				3	1
PROJECT TOTAL				4	

RECONSTRUCTING INLETS

STRUCTURE NO.	STREET	STATION	OFFSET	CAT 0010 611.0430 PROJECT ID 2782-11-70 EACH
303	PILGRIM ROAD	208+20	67' LT	1
PROJECT TOTAL				1

ADJUSTING MANHOLE COVERS

STRUCTURE NO.	STREET	STATION	OFFSET	CAT 0010 611.8110 PROJECT ID 2782-11-70 EACH	CAT 0010 611.8110 PROJECT ID 2782-12-70 EACH
200	PILGRIM ROAD	199+87	35' LT	1	-
202	PILGRIM ROAD	200+92	80' LT	1	-
206	PILGRIM ROAD	204+98	43' LT	1	-
207	PILGRIM ROAD	205+26	52' LT	1	-
209	MAIN STREET	404+07	5' LT	-	1
211	MAIN STREET	405+81	23' LT	-	1
213	MAIN STREET	409+78	24' LT	1	-
214	MAIN STREET	410+39	25' LT	-	1
215	MAIN STREET	411+76	10' LT	-	1
216	MAIN STREET	413+70	2' LT	-	1
SUBTOTAL			SUBTOTALS	5	5
PROJECT TOTAL				10	

3

ADJUSTING INLET COVERS

STRUCTURE NO.	STREET	STATION	OFFSET	CAT 0010 611.8115 PROJECT ID 2782-11-70 EACH	CAT 0010 611.8115 PROJECT ID 2782-12-70 EACH
201	PILGRIM ROAD	200+85	80' LT	1	-
203	PILGRIM ROAD	201+25	82' LT	1	-
204	PILGRIM ROAD	202+30	12' LT	1	-
208	MAIN STREET	404+04	31' LT	-	1
210	MAIN STREET	405+52	56' LT	-	1
212	MAIN STREET	405+75	27' RT	-	1
SUBTOTAL			SUBTOTALS	3	3
PROJECT TOTAL				6	

MARKERS CULVERT END

STREET	STATION	LOCATION	CAT 0010 633.5200 PROJECT ID 2782-11-70 EACH	CAT 0010 633.5200 PROJECT ID 2782-12-70 EACH	CAT 0010 633.5200 PROJECT ID 2720-10-70 EACH
PILGRIM ROAD	210+98	LT	-	1	-
PILGRIM ROAD	211+35	RT	-	1	-
PILGRIM ROAD	212+65	LT	-	1	-
PILGRIM ROAD	213+10	RT	-	1	-
PILGRIM ROAD	213+17	LT	-	1	-
PILGRIM ROAD	213+22	RT	-	1	-
PILGRIM ROAD	213+27	LT	-	1	-
PILGRIM ROAD	215+80	RT	-	1	-
PILGRIM ROAD	222+81	LT	-	1	-
PILGRIM ROAD	224+35	RT	-	1	-
PILGRIM ROAD	224+07	LT	-	1	-
PILGRIM ROAD	224+15	LT	-	1	-
PILGRIM ROAD	226+45	RT	-	1	-
USH 41/45 SB OFF RAMP	9+65	RT	-	1	-
USH 41/45 SB OFF RAMP	9+71	LT	-	1	-
USH 41/45 SB OFF RAMP	11+50	LT	-	1	-
MEGAL DRIVE	701+00	RT	1	-	-
MEGAL DRIVE	701+25	RT	1	-	-
MEGAL COURT	803+70	RT	-	-	1
HARLEY DAVIDSON MAIN ENTRANCE	902+75	LT	-	-	1
SUBTOTAL			2	16	2
PROJECT TOTAL				20	

TEMPORARY CULVERT PIPES

STAGE	PROJECT	STAGE	STREET	STA	TO	STA	520.4024 CULVERT PIPE TEMPORARY 24-INCH LF	520.4048 CULVERT PIPE TEMPORARY 48-INCH LF
0010	ID 2720-10-70	1	PILGRIM ROAD	225+32	-	803+70 EB	48	-
		1	PILGRIM ROAD	225+11	-	225+64	-	53
		1	PILGRIM ROAD	226+59	-	226+75	-	16
	TOTAL 2720-10-70						48	69

POND CLAY LINER

	STREET	FROM		TO	640.1303.S CY
ID 2720-10-70 CAT 0010					
STAGE 1					
	MEGAL COURT	803+77.60 EB	-	808+34.44 EB	-
	STAGE 1 TOTAL				0
STAGE 2					
	HD MAIN ENTRANCE	902+96.45 NB	-	904+50.00 NB	-
	STAGE 2 TOTAL				0
STAGE 3					
	HD MAIN ENTRANCE	901+25.00 NB	-	902+95.45 NB	2,068
	STAGE 3 TOTAL				2,068
PROJECT TOTAL					2,068

DEWATERING FOR DETENTION BASIN CONSTRUCTION

LOCATION	CAT 0010 SPV.0105.0108 PROJECT ID 2720-10-70 LS
MEGAL COUT DETENTION BASIN	1
PROJECT TOTAL	1

TEMPORARY STORM SEWER ITEMS

CATEGORY	PROJECT NUMBER	STAGE	LOCATION	STATION	TO STATION	520.4018 CULVERT PIPE TEMPORARY 18-INCH LF	* 520.8000 CONCRETE COLLARS FOR PIPE EACH	611.8120.S COVER PLATES TEMPORARY EACH	SPV.0060.0007 TEMPORARY INLET COVERS EACH
0010	2720-10-70	PHASE I, II, III	MEGAL COURT						
				800+75 WB	- 808+35 WB	--	3	3	--
			TOTAL I.D. 2720-10-70			0	3	3	0
0010	2782-11-70	1	PILGRIM ROAD						
				198+21	- 209+20	--	2	5	5
				226+66	- 228+24	--	1	5	3
			MEGAL DRIVE						
				700+50	- 703+33	--	--	2	--
			SUBTOTAL			0	3	12	8
		2	PILGRIM ROAD						
				198+21	- 209+20	--	1	3	--
				226+66	- 228+24	--	1	--	--
			SUBTOTAL			0	2	3	0
		3	PILGRIM ROAD						
				198+21	- 209+20	--	1	--	--
				226+66	- 228+24	10	--	--	--
			MEGAL DRIVE						
				700+50	- 703+33	--	1	--	--
			SUBTOTAL			10	2	0	0
			TOTAL I.D. 2782-11-70			10	7	15	8
0010	2782-12-70	1	PILGRIM ROAD						
				209+20	- 226+66	--	2	6	4
			MAIN STREET						
				410+13	- 414+97	--	--	2	--
			SUBTOTAL			0	2	8	4
		2	PILGRIM ROAD						
				209+20	- 226+66	--	3	--	--
			MAIN STREET						
				402+88	- 407+60	--	--	3	--
			SUBTOTAL			0	3	3	0
		3	PILGRIM ROAD / RAMPS						
				209+20	- 226+66	--	6	--	--
			SUBTOTAL			0	6	0	0
			TOTAL I.D. 2782-12-70			0	11	11	4
			TOTALS			10	21	29	12

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

STORM SEWER

CATEGORY	PROJECT NUMBER	STAGE	STRUCTURE NO.	LOCATION	STATION	TO STATION	OFFSET	* 520.8000 CONCRETE COLLARS FOR PIPE EACH	* 608.0312 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 12-INCH LF	* 611.0610 INLET COVERS TYPE BW EACH	611.3225 INLETS 2x2.5-FT EACH	* 611.3230 INLETS 2x3-FT EACH
0010	1100-37-70	4		US 41/45								
			601		279+53.33		RT	--	--	1	--	--
			603		280+64.02		RT	--	--	1	--	1
			605		284+23.26		RT	--	--	1	--	1
			606		285+01.81	- 285+97.04	RT	--	95	1	1	--
			608		285+01.85		RT	1	6	--	--	--
			TOTAL I.D. 1100-37-70					1	101	4	1	2

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

TEMPORARY MEDIAN STORM SEWER CONNECTION

CATEGORY	PROJECT NUMBER	STAGE	STRUCTURE NO.	LOCATION	STATION	TO STATION	OFFSET	SPV.0105.0001 LS	SPV.0105.0002 LS
0010	1100-37-70	2		US 41/45	285+01.81	- 285+49.31	RT	1	--
0010	1100-37-70	3		US 41/45	285+49.31	- 285+97.04	RT	--	1
					TOTAL I.D. 1100-37-70			1	1

EROSION CONTROL ITEMS

CATEGORY	PROJECT NUMBER	STAGE	LOCATION	STATION	TO	STATION	606.0200 RIPRAP MEDIUM CY	627.0200 MULCHING SY	628.7570 ROCK BAGS EACH	628.1104 * EROSION BALES EACH	628.1504 SILT FENCE LF	628.1520 SILT FENCE MAINTENANCE LF	628.2004 EROSION MAT CLASS I TYPE B SY	628.2008 EROSION MAT URBAN CLASS I TYPE B SY	628.2027 EROSION MAT CLASS II TYPE C SY	628.7504 TEMPORARY DITCH CHECKS LF	628.7555 CULVERT PIPE CHECKS EACH	645.0120 GEOTEXTILE FABRIC TYPE HR SY
0010	1100-37-70	4	US 41/45	279+48	-	287+23	--	--	--	--	--	--	390	--	--	--	--	--
			SUBTOTAL				--	--	--	--	--	--	390	--	--	--	--	--
			UNDISTRIBUTED				--	--	--	--	--	--	97	--	--	--	--	--
			TOTAL I.D. 1100-37-70				--	--	--	--	--	--	487	--	--	--	--	--
0010	2782-11-70	1	MEGAL COURT	800+45.77 EB	-	803+77.60 EB	15	--	--	33	100	100	434	--	--	--	--	43
			SUBTOTAL															
		2	PILGRIM ROAD	198+21	-	209+20	--	--	--	--	25	25	--	--	--	--	--	--
			MEGAL DRIVE	700+50	-	703+33	--	--	--	--	73	73	99	--	--	--	10	--
			SUBTOTAL				--	--	--	--	98	98	99	--	--	--	10	--
		3	PILGRIM ROAD	198+21	-	209+20	--	--	--	--	190	190	--	--	--	--	--	--
			MEGAL DRIVE	700+50	-	703+33	--	--	--	--	73	73	301	5	--	--	--	--
			SUBTOTAL				--	--	--	--	263	263	301	5	--	--	--	--
			UNDISTRIBUTED				4	--	--	8	115	115	209	1	--	--	3	11
			TOTAL I.D. 2782-11-70				19	--	--	41	576	576	1,043	7	--	--	13	54
0010	2782-12-70	2	PILGRIM ROAD	209+20	-	226+66	13	--	--	98	1179	1,179	6,792	824	--	--	30	27
			MAIN STREET	402+88	-	407+60	--	6	--	--	--	--	--	--	--	--	--	--
			FALLS PARKWAY	85+13	-	87+37	2	--	--	--	325	325	--	--	--	--	--	4
			SUBTOTAL				15	6	--	98	1,504	1,504	6,792	824	--	--	30	30
		3	PILGRIM ROAD	209+20	-	226+66	38	--	--	--	682	682	6,335	--	--	--	--	75
			US 41/45 SB RAMPS	6+40	-	12+00	26	--	--	119	1160	1,160	2,863	954	--	--	10	51

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE

CONTINUED ON NEXT SHEET

CONTINUED FROM PREVIOUS SHEET

EROSION CONTROL ITEMS

CATEGORY	PROJECT NUMBER	STAGE	LOCATION	STATION TO STATION	606.0200 RIPRAP MEDIUM CY	627.0200 MULCHING SY	628.7570 ROCK BAGS EACH	628.1104 * EROSION BALES EACH	628.1504 SILT FENCE LF	628.1520 SILT FENCE MAINTENANCE LF	628.2004 EROSION MAT CLASS I TYPE B SY	628.2008 EROSION MAT URBAN CLASS I TYPE B SY	628.2027 EROSION MAT CLASS II TYPE C SY	628.7504 TEMPORARY DITCH CHECKS LF	628.7555 CULVERT PIPE CHECKS EACH	645.0120 GEOTEXTILE FABRIC TYPE HR SY
			US 41/45 NB OFF RAMP TO NB													
				17+07 - 21+00	--	--	--	--	728	728	1,384	--	--	--	--	--
			SUBTOTAL		64	--	--	119	2,570	2,570	10,582	954	--	--	10	126
			UNDISTRIBUTED		20	2	--	54	1,019	1,019	4,344	444	--	--	10	39
			TOTAL I.D. 2782-12-70		99	8	--	272	5,093	5,093	21,718	2,222	--	--	50	195
0010	2720-10-70	1	MEGAL COURT													
				803+77.60 EB - 808+34.44 EB	4	--	--	--	214	214	2,205	--	--	60	10	12
		2	HD MAIN ENTRANCE													
				902+96.45 NB - 904+50.00 NB	--	--	--	--	--	--	315	--	--	--	--	--
		3	HD MAIN ENTRANCE													
				901+25.00 NB - 902+96.45 NB	17	--	--	--	--	--	2,597	--	5,428	--	--	54
			UNDISTRIBUTED		5	--	20	--	54	54	1,279	--	1,357	15	--	17
			TOTAL I.D. 2720-10-70		26	--	20	--	268	268	6,396	--	6,785	75	10	83
			TOTALS		144	8	20	313	5,936	5,936	29,157	2,229	6,785	75	73	332

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE

INLET PROTECTION

CATEGORY	PROJECT NUMBER	STAGE	LOCATION	STATION	TO	STATION	628.7005 INLET PROTECTION TYPE A EACH	628.7010 INLET PROTECTION TYPE B EACH	628.7015 INLET PROTECTION TYPE C EACH	628.7020 INLET PROTECTION TYPE D EACH
0010	2782-11-70	1	PILGRIM ROAD							
				198+21	-	209+20	7	--	27	--
				226+66	-	228+24	7	--	6	3
			SUBTOTAL				14	--	33	3
		2	PILGRIM ROAD							
				198+21	-	209+20	22	2	17	1
			MEGAL DRIVE							
				700+50	-	703+33	4	1	1	4
			SUBTOTAL				26	3	18	5
		3	PILGRIM ROAD							
				198+21	-	209+20	14	--	12	2
			MEGAL DRIVE							
				700+50	-	703+33	5	--	--	5
			SUBTOTAL				19	--	12	7
		4	PILGRIM ROAD							
				198+21	-	209+20	5	--	8	5
				226+66	-	228+24	--	--	--	7
			MEGAL DRIVE							
				700+50	-	703+33	2	--	--	5
			SUBTOTAL				7	--	8	17
			UNDISTRIBUTED				17	1	18	8
			TOTAL I.D. 2782-11-70				83	4	89	40
0010	2782-12-70	1	PILGRIM ROAD							
				209+20	-	226+66	5	2	14	--
			MAIN STREET							
				402+88	-	407+60	--	--	4	--
				410+13	-	414+97	--	--	15	--
			FALLS PARKWAY							
				85+13	-	87+37	--	2	6	--
			SUBTOTAL				5	4	39	--
		2	PILGRIM ROAD							
				209+20	-	226+66	12	--	12	--
			MAIN STREET							
				402+88	-	407+60	7	3	5	--
			SUBTOTAL				19	3	17	--

INLET PROTECTION

CATEGORY	PROJECT NUMBER	STAGE	LOCATION	STATION	TO	STATION	628.7005 INLET PROTECTION TYPE A EACH	628.7010 INLET PROTECTION TYPE B EACH	628.7015 INLET PROTECTION TYPE C EACH	628.7020 INLET PROTECTION TYPE D EACH
		3	PILGRIM ROAD							
				209+20	-	226+66	10	--	10	--
			MAIN STREET							
				410+13	-	414+97	6	--	6	--
			US 41/45 SB RAMPS							
				6+40	-	12+00	3	--	3	--
			SUBTOTAL				19	--	19	--
		4	PILGRIM ROAD							
				209+20	-	226+66	7	--	8	--
			MAIN STREET							
				402+88	-	407+60	--	--	2	--
				410+13	-	414+97	4	--	2	--
			SUBTOTAL				11	--	12	--
			UNDISTRIBUTED				14	2	22	--
			TOTAL I.D. 2782-12-70				68	9	109	--
0010	1100-37-70	4	US 41/45							
				279+48	-	287+23	--	3	--	4
			TOTAL I.D. 1100-37-70				--	3	--	4
0010	2720-10-70	1	MEGAL COURT							
				803+77.60 EB	-	808+34.44 EB	25	2	11	10
		2	HD MAIN ENTRANCE							
				902+96.45 NB	-	904+50.00 NB	4	--	4	--
		3	HD MAIN ENTRANCE							
				901+25.00 NB	-	902+96.45 NB	3	--	4	--
			UNDISTRIBUTED				8	1	5	3
			TOTAL I.D. 2720-10-70				40	3	24	13
			TOTALS				190	18	221	57

RESTORATION ITEMS

CATEGORY	PROJECT NUMBER	STAGE	LOCATION	STATION	TO	STATION	625.0100 TOPSOIL SY	625.0500 SALVAGED TOPSOIL SY	629.0210 FERTILI ER TYPE B CWT	630.0140 SEEDING MIXTURE NO. 40 LB	630.0160 SEEDING MIXTURE NO. 60 LB	630.0175 SEEDING MIXTURE NO. 75 LB	630.0200 SEEDING TEMPORARY LB	631.0300 SOD WATER MGAL	631.1000 SOD LAWN SY	SPV.0120.0001 WATER FOR SEEDED AREAS MGAL
0010	2782-11-70	1	MEGAL COURT													
				800+45.77 E	-	803+77.60 EB	--	1,105	1.0	50.0	--	--	77.0	3.0	563	--
			SUBTOTAL				--	1,105	1.0	50.0	--	--	77.0	3.0	563	--
		2	PILGRIM ROAD													
				198+21	-	209+20	837	--	0.5	--	--	--	--	4.7	837	--
				226+66	-	228+24	--	--	--	--	--	--	--	--	--	--
														--		
			MEGAL DRIVE											--		
				700+50	-	703+33	359	--	0.2	3.0	--	--	1.5	1.1	191	0.9
			SUBTOTAL				1,196	--	0.8	3.0	--	--	1.5	5.8	1,028	0.9
		3	PILGRIM ROAD													
				198+21	-	209+20	1,043	--	0.7	.7	--	--	.3	5.6	1,005	0.2
				226+66	-	228+24	18	--	0.0	--	--	--	--	0.1	18	--
			MEGAL DRIVE													
				700+50	-	703+33	306	--	0.2	5.5	--	--	2.8	--	--	1.7
			SUBTOTAL				1,368	--	0.9	6.2	--	--	3.1	5.7	1,023	1.9
		4	PILGRIM ROAD													
				198+21	-	209+20	257	--	0.2	--	--	--	--	1.4	257	--
				226+66	-	228+24	--	--	0.0	--	--	--	--	--	--	--
			SUBTOTAL				257	--	0.2	--	--	--	--	1.4	257	--
			UNDISTRIBUTED				705		0.4	2.3	--	--	1.2	3.2	577	0.7
			TOTAL I.D. 2782-11-70				3,526	1,105	3.2	61.5	--	--	82.8	19.2	3,448	3.6
0010	2782-12-70	2	PILGRIM ROAD													
				209+20	-	226+66	--	8,538	4.9	137.1	--	--	68.5	5.2	921	42.8
			MAIN STREET													
				402+88	-	407+60	--	533	0.3	--	--	--	--	3.0	533	--
			FALLS PARKWAY													
				85+13	-	87+37	--	470	0.3	--	--	--	--	2.6	470	--
			SUBTOTAL				--	9,541	5.5	137.1	--	--	68.5	10.8	1,924	42.8
		3	PILGRIM ROAD													
				209+20	-	226+66	--	6,814	4.3	110.2	--	--	55.1	3.9	694	34.4
			MAIN STREET													
				410+13	-	414+97	--	908	0.6	--	--	--		5.1	908	--
			US 41/45 SB RAMPS													
				6+40	-	12+00	--	3,816	1.8	68.7	--	--	34.3	--	--	21.4
			US 41/45 NB OFF RAMP TO NB													
				17+07	-	21+00	--	1,384	0.9	24.9	--	--	12.5	--	--	7.8
			SUBTOTAL				--	12,922	7.6	203.8	--	--	101.9	9.0	1,601	63.6

CONTINUED ON NEXT SHEET

CONTINUED FROM PREVIOUS SHEET

RESTORATION ITEMS

CATEGORY	PROJECT NUMBER	STAGE	LOCATION	STATION	TO	STATION	625.0100 TOPSOIL SY	625.0500 SALVAGED TOPSOIL SY	629.0210 FERTILI ER TYPE B CWT	630.0140 SEEDING MIXTURE NO. 40 LB	630.0160 SEEDING MIXTURE NO. 60 LB	630.0175 SEEDING MIXTURE NO. 75 LB	630.0200 SEEDING TEMPORARY LB	631.0300 SOD WATER MGAL	631.1000 SOD LAWN SY	SPV.0120.0001 WATER FOR SEEDED AREAS MGAL
		4	PILGRIM ROAD													
				209+20	-	226+66	--	592	0.4	--	--	--	--	3.3	592	--
			MAIN STREET													
				402+88	-	407+60	--	177	0.1	--	--	--	--	1.0	177	--
				410+13	-	414+97	--	219	0.1	--	--	--	--	1.2	219	--
			SUBTOTAL				--	988	0.6	--	--	--	--	5.5	988	--
			UNDISTRIBUTED					5,863	3.4					6.3	1,128	26.6
			TOTAL I.D. 2782-12-70				--	29,313	17.1	340.9	--	--	170.4	31.7	5,642	132.9
0010	2720-10-70	1	MEGAL COURT													
				803+77.60 E	-	808+34.44 EB	--	3,218	2.0	50.0	--	--	--	3.0	418	--
		2	HD MAIN ENTRANCE													
				902+96.45 N	-	904+50.00 NB	--	470	--	7.0	--	--	--	1.0	76	--
		3	HD MAIN ENTRANCE													
				901+25.00 NB	-	902+96.45 NB	--	4,603	3.0	54.0	1.0	7.0	150.0	--	--	--
			UNDISTRIBUTED				--	2,073	1.3	27.8	--	1.8	37.5	1.0	124	--
			TOTAL I.D. 2720-10-70				--	10,364	6.3	138.8	1.0	8.8	187.5	5.0	618	--
			TOTALS				3,526	40,782	26.6	541.2	1.0	8.8	440.7	55.9	9,707	136.5

3

SOIL STABILI ER

CATEGORY	PROJECT NUMBER	STAGE	628.6510 SOIL STABILI ER TYPE B ACRE
0010	2782-12-70	ALL	4.5
0010	2720-10-70	1	1.6
			6.1

MOBILI ATIONS EROSION CONTROL

CATEGORY	PROJECT NUMBER	STAGE	628.1905 MOBILI ATIONS EROSION CONTROL EACH	628.1910 MOBILI ATIONS EMERGENCY EROSION CONTROL EACH
0010	1100-37-70	ALL	5	2
0010	2782-11-70	ALL	14	11
0010	2782-12-70	ALL	12	7
0010	2720-10-70	ALL	3	6
		TOTALS	34	26

3

TEMPORARY SETTLING BASIN

CATEGORY	PROJECT NUMBER	STAGE	628.1104 EROSION BALES EACH	SPV.0180.0100 GEOTEXTILE FABRIC TYPE FF SY
0010	2782-12-70	ALL	40	200
0010	2720-10-70	ALL	190	250
			230	450

ADDITIONAL QUANTITIES SHOWN ELSEWHERE

WATER

CATEGORY	PROJECT NUMBER	STAGE	624.0100 MGAL
0010	1100-37-70	ALL	6
0010	2782-11-70	ALL	15
0010	2782-12-70	ALL	156
0010	2720-10-70	ALL	34
0010	2720-10-70	POND FILLING	665
		TOTALS	876

TRACKING PADS

CATEGORY	PROJECT NUMBER	STAGE	628.7560 EACH
0010	2782-11-70	ALL	1
0010	2782-12-70	ALL	1
0010	1100-37-70	ALL	1
0010	2720-10-70	ALL	2
			5

CLEANING SEDIMENT BASINS

CATEGORY	PROJECT NUMBER	STAGE	628.1920 CY
0010	2782-12-70	ALL	40
	2720-10-70	ALL	50
			90

PAVEMENT MARKING ITEMS

CATEGORY	PROJECT NUMBER	STAGE	LOCATION	STATION	TO	STATION	646.0106 PAVEMENT MARKING EPOXY 4-INCH WHITE LF	646.0106 PAVEMENT MARKING EPOXY 4-INCH YELLOW LF	646.0106 PAVEMENT MARKING EPOXY 4-INCH YELLOW DASHED LF	646.0841.S PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH WHITE LF	646.0841.S PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH WHITE DASHED LF	646.0841.S PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH WHITE DOT 3 FT LINE 9 FT SKIP LF	646.0843.S PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 8-INCH WHITE LF	646.0843.S PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 8-INCH WHITE DOT 3 FT LINE 9 FT SKIP LF	646.0843.S PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 8-INCH WHITE DOT 2 FT LINE 6 FT SKIP LF	646.0843.S PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 8-INCH YELLOW DOT 2 FT LINE 6 FT SKIP LF	647.0456 PAVEMENT MARKING CURB EPOXY YELLOW LF	647.0606 PAVEMENT MARKING ISLAND NOSE EPOXY YELLOW EACH	647.0656 PAVEMENT MARKING PARKING STALL EPOXY WHITE LF	647.0726 PAVEMENT MARKING DIAGONAL EPOXY 12-INCH WHITE LF
0010	2782-11-70	1	MEGAL COURT																	
				800+45.77 EB	-	803+77.60 EB	--	--	--	--	--	--	377	--	--	--	16	1	--	--
			SUBTOTAL STAGE 1				--	--	--	--	--	--	377	--	--	--	16	1	--	--
		4	PILGRIM ROAD																	
				198+21	-	200+60	--	219	63	--	--	--	--	--	--	--	20	2	--	--
				200+60	-	209+20	--	--	--	451	603	43	1,528	51	108	--	50	5	--	--
				226+66	-	231+02	--	--	--	--	67	--	44	--	--	--	20	2	--	--
				BEYOND PROJECT LIMITS (SOUTH)			--	165	--	--	--	--	--	--	--	--	--	--	--	--
				BEYOND PROJECT LIMITS (NORTH)			--	--	--	--	--	--	--	--	--	--	--	--	--	--
			MEGAL DRIVE																	
				700+50	-	703+33	--	424	--	--	--	--	--	--	--	--	10	1	220	--
				BEYOND PROJECT LIMITS			--	100	--	--	--	--	--	--	--	--	--	--	--	--
			SUBTOTAL				--	908	63	451	670	43	1,572	51	108	--	100	10	220	--
			SUBTOTAL STAGE 4					971			1,164			1,731						15
			TOTAL I.D. 2782-11-70					971			1,164			2,108			116	11	220	15
0010	2782-12-70	3	EALLS PARKWAY																	
				85+13	-	87+37	--	--	--	--	--	--	--	72	--	--	--	--	--	--
				BEYOND PROJECT LIMITS			--	--	--	--	90	--	--	--	--	--	--	--	--	--
			SUBTOTAL STAGE 3					--			90			72			--	--	--	--
		4	MAIN STREET																	
				402+88	-	407+60	--	528		--	228	--	192	18	--	--	10	1	--	12
				410+13	-	414+97	--	562	50	103	153	22	272	18	--	--	10	1	--	--
				BEYOND PROJECT LIMITS (WEST)			--	576		--	144	--	--	--	--	--	--	--	--	--
				BEYOND PROJECT LIMITS (EAST)			--	1,577	394	--	394	--	--	--	--	--	--	--	--	--
			PILGRIM ROAD																	
				209+20	-	226+66	393	452	--	816	669	162	2,713	147	132	49	40	4	--	164
			US 41/45 SB RAMPS																	
				6+40	-	13+00	1,198	1,326	--	--	175	45	1,078	--	--	--	10	1	--	100
			SUBTOTAL				1,591	5,021	444	919	1,763	229	4,255	183	132	49	70	7	--	276
			SUBTOTAL STAGE 4					7,056			2,911			4,618						276
			TOTAL I.D. 2782-12-70					7,056			3,001			4,690			70	7	--	276
0010	1100-37-70	4	PILGRIM ROAD																	
				217+75	-	219+83	--	--	--	--	104	--	--	1	--	--	--	--	--	--
			US 41/45																	
				272+00	-	295+00	--	--	--	6,469	1,712	477	835	--	--	--	--	--	--	245
			TOTAL I.D. 1100-37-70					--			8,762			836			--	--	--	245
0010	2720-10-70	1	MEGAL COURT																	
				803+77.60 EB	-	808+34.44 EB	--	781	--	--	--	--	311	--	--	--	38	2	--	--
		2	HD MAIN ENTRANCE																	
				902+96.45 NB	-	904+50.00 NB	--	239	--	--	--	--	--	--	--	--	19	1	--	--
		3	HD MAIN ENTRANCE																	
				901+25.00 NB	-	902+96.45 NB	--	467	--	--	--	--	--	--	--	--	--	--	--	--
			TOTAL I.D. 2720-10-70					1,487			--			311			57	3	--	--
			TOTALS					9,514			12,927			7,945			243	21	220	536

CONTINUED ON NEXT SHEET

CONTINUED FROM PREVIOUS SHEET

PAVEMENT MARKING ITEMS

CATEGORY	PROJECT NUMBER	STAGE	LOCATION	STATION TO STATION	646.0881.S PAVEMENT MARKING GROOVED WET REFLECTIVE TAPE 4-INCH WHITE DASHED LF	646.0881.S PAVEMENT MARKING GROOVED WET REFLECTIVE TAPE 4-INCH YELLOW DASHED LF	646.0883.S PAVEMENT MARKING GROOVED WET REFLECTIVE TAPE 8-INCH WHITE LF	SPV.0060.0001 PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC ARROWS TYPE 1 WHITE EACH	SPV.0060.0002 PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC ARROWS TYPE 2 WHITE EACH	SPV.0060.0003 PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC ARROWS TYPE 3 WHITE EACH	SPV.0060.0004 PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC WORDS WHITE EACH	SPV.0060.0012 PAVEMENT MARKING GROOVED CONTRAST PREFORMED THERMOPLASTIC ARROWS TYPE 4 WHITE EACH	SPV.0060.0014 PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC SYMBOLS WHITE EACH	SPV.0090.0001 PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC STOP LINE 18-INCH WHITE LF
0010	2782-11-70	1	MEGAL COURT											
				800+45.77 EB - 803+77.60 EB	--	--	--	--	5	1	2	--	--	87
				SUBTOTAL STAGE 1	--	--	--	--	5	1	2	--	--	87
		4	PILGRIM ROAD											
				198+21 - 200+60	112	--	49	--	3	--	--	--	--	--
				200+60 - 209+20	--	--	--	--	17	--	5	--	--	252
				226+66 - 231+02	--	--	508	--	--	--	--	--	--	125
				BEYOND PROJECT LIMITS (SOUTH)	91	--	--	--	--	--	--	--	--	--
				BEYOND PROJECT LIMITS (NORTH)	65	--	124	--	--	--	--	--	--	--
			MEGAL DRIVE											
				700+50 - 703+33	--	--	112	1	1	1	1	--	--	--
				BEYOND PROJECT LIMITS	--	--	--	--	--	--	--	--	--	--
				SUBTOTAL	268	--	793	1	21	1	6	--	--	377
				SUBTOTAL STAGE 4	268									
				TOTAL I.D. 2782-11-70	268		793	1	26	2	8	--	--	464
0010	2782-12-70	3	FALLS PARKWAY											
				85+13 - 87+37	53	--	382	--	4	--	3	--	--	--
				BEYOND PROJECT LIMITS	--	--	--	--	--	--	--	--	--	--
				SUBTOTAL STAGE 3	53		382	--	4	--	3	--	--	--
		4	MAIN STREET											
				402+88 - 407+60	--	--	--	--	2	--	2	--	--	--
				410+13 - 414+97	86	91	--	--	4	--	3	--	--	--
				BEYOND PROJECT LIMITS (WEST)	--	--	--	--	--	--	--	--	--	--
				BEYOND PROJECT LIMITS (EAST)	--	--	--	--	2	--	--	--	--	--
			PILGRIM ROAD											
				209+20 - 226+66	--	--	--	1	17	--	9	--	--	159
			US 41/45 SB RAMPS											
				6+40 - 13+00	--	--	--	1	6	--	3	1	4	71
				SUBTOTAL	86	91	--	2	31	--	17	1	4	230
				SUBTOTAL STAGE 4	177									
				TOTAL I.D. 2782-12-70	230		382	2	35	--	20	1	4	230
0010	1100-37-70	4	PILGRIM ROAD											
				217+75 - 219+83	--	--	--	--	--	--	--	--	--	--
			US 41/45											
				272+00 - 295+00	--	--	--	--	--	--	--	--	--	--
				TOTAL I.D. 1100-37-70	--		--	--	--	--	--	--	--	--
0010	2720-10-70	1	MEGAL COURT											
				803+77.60 EB - 808+34.44 EB	--	--	--	--	--	--	--	--	--	--
		2	HD MAIN ENTRANCE											
				902+96.45 NB - 904+50.00 NB	--	--	--	--	--	--	--	--	--	--
		3	HD MAIN ENTRANCE											
				901+25.00 NB - 902+96.45 NB	--	--	--	--	--	--	--	--	--	--
				TOTAL I.D. 2720-10-70	--		--	--	--	--	--	--	--	--
				TOTALS	498		1,175	3	61	2	28	1	4	694

PROJECT NO: 2782-11-70, 2782-12-70, 2720-10-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	MISCELLANEOUS QUANTITIES	SHEET 507	E

CONTINUED FROM PREVIOUS SHEET

CATEGORY	PROJECT NUMBER	STAGE	LOCATION	STATION	TO	STATION	PAVEMENT MARKING ITEMS SPV.0090.0002 PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC CROSSWALK 6-INCH WHITE LF	SPV.0090.0003 GROOVED CONTRAST PREFORMED THERMOPLASTIC 18-INCH WHITE LF	647.0796 PAVEMENT MARKING CROSSWALK EPOXY 24-INCH WHITE LF
0010	2782-11-70	1	MEGAL COURT	800+45.77 EB	-	803+77.60 EB	162	--	--
			SUBTOTAL STAGE 1				162	--	--
		4	PILGRIM ROAD	198+21	-	200+60	--	--	--
				200+60	-	209+20	1,189	--	--
				226+66	-	231+02	554	--	--
				BEYOND PROJECT LIMITS (SOUTH)			--	--	--
				BEYOND PROJECT LIMITS (NORTH)			--	--	--
			MEGAL DRIVE	700+50	-	703+33	142	--	--
				BEYOND PROJECT LIMITS			--	--	--
			SUBTOTAL				1,885	--	--
			SUBTOTAL STAGE 4						
			TOTAL I.D. 2782-11-70				2,047	--	--
0010	2782-12-70	3	FALLS PARKWAY	85+13	-	87+37	--	--	--
				BEYOND PROJECT LIMITS			--	--	--
			SUBTOTAL STAGE 3				--	--	--
		4	MAIN STREET	402+88	-	407+60	--	--	--
				410+13	-	414+97	--	--	--
				BEYOND PROJECT LIMITS (WEST)			--	--	--
				BEYOND PROJECT LIMITS (EAST)			--	--	--
			PILGRIM ROAD	209+20	-	226+66	832	--	--
			US 41/45 SB RAMPS	6+40	-	13+00	188	--	--
			SUBTOTAL				1,020	--	--
			SUBTOTAL STAGE 4						
			TOTAL I.D. 2782-12-70				1,020	--	--
0010	1100-37-70	4	PILGRIM ROAD	217+75	-	219+83	--	--	--
			US 41/45	272+00	-	295+00	--	--	--
			TOTAL I.D. 1100-37-70				--	--	--
0010	2720-10-70	1	MEGAL COURT	803+77.60 EB	-	808+34.44 EB	--	87	280
		2	HD MAIN ENTRANCE	902+96.45 NB	-	904+50.00 NB	--	--	--
		3	HD MAIN ENTRANCE	901+25.00 NB	-	902+96.45 NB	--	--	--
			TOTAL I.D. 2720-10-70				--	87	280
			TOTALS				3,067	87	280

TEMPORARY CONCRETE BARRIER ITEMS

CATEGORY	PROJECT NUMBER	STAGE	LOCATION	STATION	TO	STATION	603.8000 CONCRETE BARRIER TEMPORARY PRECAST DELIVERED LF	603.8125 CONCRETE BARRIER TEMPORARY PRECAST INSTALLED LF
0010	1100-37-70	1	US 41/45					
				264+00	-	299+00	1,500	1,500
				SUBTOTAL			1,500	1,500
		3	US 41/45					
				264+00	-	299+00	660	1,130
				SUBTOTAL			660	1,130
				TOTAL I.D. 1100-37-70			2,160	2,630
0010	2782-12-70	2	PILGRIM ROAD					
				209+20	-	226+66	370	370
				SUBTOTAL			370	370
		3	PILGRIM ROAD / RAMPS					
				209+20	-	226+66	370	370
				SUBTOTAL			370	370
				TOTAL I.D. 2782-12-70			740	740
				TOTALS			2,900	3,370

TRAFFIC CONTROL DETOUR (PROJECT)

CATEGORY	PROJECT NUMBER	643.2000.0001 EACH	643.2000.0002 EACH
0010	1100-37-70	1	--
	2782-12-70	--	1
	TOTALS	1	1

TRAFFIC CONTROL (PROJECT)

CATEGORY	LOCATION	643.0100.0001 EACH	643.0100.0002 EACH	643.0100.0003 EACH	643.0100.0004 EACH
0010	1100-37-70	1	--	--	--
	2720-10-70	--	1	--	--
	2782-11-70	--	--	1	--
	2782-12-70	--	--	--	1
	TOTAL	1	1	1	1

TRAFFIC CONTROL ITEMS-DETOUR

CATEGORY	PROJECT NUMBER	STAGE	* 643.0910 TRAFFIC CONTROL COVERING SIGNS TYPE I NO. OF CYCLES	NO. OF SIGNS	EACH	* 643.0920 TRAFFIC CONTROL COVERING SIGNS TYPE II NO. OF CYCLES	NO. OF SIGNS	EACH	643.1050 TRAFFIC CONTROL SIGNS PCMS DAY	643.3000 TRAFFIC CONTROL DETOUR SIGNS DAY
0010	2782-12-70	1	1	6	6	--	--	--	--	960
		2	1	7	7	1	8	8	--	6,975
		3	1	9	9	1	4	4	--	5,700
		4	1	6	6	--	--	--	--	1,280
		TOTAL I.D. 2782-12-70			28			12	--	14,915
0010	1100-37-70	FULL FREEWAY CLOSURE	1	8	8	1	20	20	48	2,304
		TOTAL I.D. 1100-37-70			8			20	48	2,304
		TOTALS			36			32	48	17,219

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

PROJECT NO: 2782-11-70, 2782-12-70, 2720-10-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	MISCELLANEOUS QUANTITIES	SHEET 509	E

TRAFFIC CONTROL ITEMS

CATEGORY	PROJECT NUMBER	STAGE	LOCATION	STATION	TO	STATION	643.0300 TRAFFIC CONTROL DRUMS DAY	643.0410 TRAFFIC CONTROL BARRICADES TYPE II DAY	643.0420 TRAFFIC CONTROL BARRICADES TYPE III DAY	643.0500 TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER POSTS EACH	643.0600 TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER BASES EACH	643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A DAY	643.0715 TRAFFIC CONTROL WARNING LIGHTS TYPE C DAY	643.0800 TRAFFIC CONTROL ARROW BOARDS DAY	643.0900 TRAFFIC CONTROL SIGNS DAY	NO. OF CYCLES	* 643.0920 TRAFFIC CONTROL COVERING SIGNS TYPE II NO. OF SIGNS	EACH
0010	1100-37-70	1, 2	US 41/45	264+00	-	299+00	16,275	--	1,680	--	--	1,470	5,040	105	3,465	--	--	--
		3A	US 41/45	264+00	-	299+00	7,200	--	720	--	--	480	2,520	80	1,240	--	--	--
		3B	US 41/45	264+00	-	299+00	4,865	--	595	--	--	420	2,380	70	910	--	--	--
		4	US 41/45	264+00	-	299+00	2,960	--	480	--	--	640	360	40	920	--	--	--
				TOTAL I.D. 1100-37-70			31,300	--	3,475	--	--	3,010	10,300	295	6,535			--
0010	2720-10-70	PHASE I, II, III	MEGAL COURT	800+75 WB	-	808+35 WB	540	--	630	--	--	900	--	--	720	--	--	--
				TOTAL I.D. 2720-10-70			540	--	630	--	--	900	--	--	720			--
0010	2782-11-70	1	PILGRIM ROAD / SIDEROADS	198+21	-	209+20	1,800	--	900	--	--	180	240	--	990	1	2	2
				226+66		228+25	900	--	300	--	--	120	270	--	390	--	--	--
				SUBTOTAL			2,700	--	1,200	--	--	300	510	--	1,380			2
		2	PILGRIM ROAD / SIDEROADS	198+21	-	209+20	6,500	450	3,050	24	24	2,150	600	--	3,725	--	--	--
				226+66		228+25	5,400	50	225	--	--	200	1,000	--	875	1	2	2
				SUBTOTAL			11,900	500	3,275	24	24	2,350	1,600	--	4,600			2
		3	PILGRIM ROAD / SIDEROADS	198+21	-	209+20	5,300	425	1,600	28	28	1,075	975	--	3,075	--	--	--
				226+66		228+25	3,675	125	300	--	--	125	1,575	--	1,400	1	2	2
				SUBTOTAL			8,975	550	1,900	28	28	1,200	2,550	--	4,475			2
		4	PILGRIM ROAD / SIDEROADS	198+21	-	209+20	2,120	--	800	--	--	80	320	--	1,080	--	--	--
				226+66		228+25	520	--	200	--	--	80	320	--	400	--	--	--
				SUBTOTAL			2,640	--	1,000	--	--	160	640	--	1,480			--
				TOTAL I.D. 2782-11-70			26,215	1,050	7,375	52	52	4,010	5,300	--	11,935			6

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

CONTINUED ON NEXT SHEET

CONTINUED FROM PREVIOUS SHEET

TRAFFIC CONTROL ITEMS

CATEGORY	PROJECT NUMBER	STAGE	LOCATION	STATION TO STATION	643.0300 TRAFFIC CONTROL DRUMS DAY	643.0410 TRAFFIC CONTROL BARRICADES TYPE II DAY	643.0420 TRAFFIC CONTROL BARRICADES TYPE III DAY	643.0500 TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER POSTS EACH	643.0600 TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER BASES EACH	643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A DAY	643.0715 TRAFFIC CONTROL WARNING LIGHTS TYPE C DAY	643.0800 TRAFFIC CONTROL ARROW BOARDS DAY	643.0900 TRAFFIC CONTROL SIGNS DAY	* 643.0920 TRAFFIC CONTROL COVERING SIGNS TYPE II NO. OF CYCLES	643.0920 TRAFFIC CONTROL COVERING SIGNS TYPE II NO. OF SIGNS	643.0920 TRAFFIC CONTROL COVERING SIGNS TYPE II EACH
0010	2782-12-70	1	PILGRIM ROAD / SIDE ROADS / RAMPS													
				209+20 - 226+66	3,090	--	450	--	--	120	510	--	510	--	--	--
			MAIN STREET													
				402+88 - 407+60	1,080	--	360	--	--	180	240	--	390	--	--	--
				410+13 - 414+97	1,080	--	90	--	--	60	270	--	300	--	--	--
			SUBTOTAL		5,250	--	900	--	--	360	1,020	--	1,200			
		2	PILGRIM ROAD / SIDE ROADS / RAMPS													
				209+20 - 226+66	8,000	25	2,025	30	30	825	1,475	--	2,900	--	--	3
			MAIN STREET		2,550	50	150	29	29	150	525	--	1,600	--	--	--
				402+88 - 407+60	2,575	--	25	45	45	--	625	--	925	1	2	2
				410+13 - 414+97												
			SUBTOTAL		13,125	75	2,200	104	104	975	2,625	--	5,425			5
		3	PILGRIM ROAD / SIDE ROADS / RAMPS													
				209+20 - 226+66	6,750	225	1,200	29	29	975	375	--	3,525	--	--	2
			MAIN STREET		5,400	--	300	19	19	450	1,650	--	2,175	--	--	--
				402+88 - 407+60	5,475	150	75	14	14	150	2,025	--	2,025	1	2	2
				410+13 - 414+97												
			SUBTOTAL		17,625	375	1,575	62	62	1,575	4,050	--	7,725			4
		4	PILGRIM ROAD / SIDE ROADS / RAMPS													
				209+20 - 226+66	3,000	--	320	--	--	160	--	--	840	--	--	--
			MAIN STREET													
				402+88 - 407+60	1,360	--	80	--	--	80	360	--	280	--	--	--
				410+13 - 414+97	1,320	--	120	--	--	80	280	--	360	--	--	--
			SUBTOTAL		5,680	--	520	--	--	320	640	--	1,480			--
			TOTAL I.D. 2782-12-70		41,680	450	5,195	166	166	3,230	8,335	--	15,830			9
			TOTALS		99,735	1,500	16,675	218	218	11,150	23,935	295	35,020			15

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

REMOVING PAVEMENT MARKING

CATEGORY	PROJECT NUMBER	STAGE	LOCATION	STATION	TO	STATION	646.0600 REMOVING PAVEMENT MARKINGS LF	647.0955 REMOVING PAVEMENT MARKINGS ARROWS EACH	647.0960 REMOVING PAVEMENT MARKING SYMBOLS EACH
0010	1100-37-70	1	US 41/45						
				264+00	-	299+00	7,806	--	--
		3	US 41/45						
				264+00	-	299+00	102	--	--
			TOTAL I.D. 1100-37-70				7,908	--	--
0010	2720-10-70	PHASE I, II, III	MEGAL COURT						
				800+75 WB	-	808+35 WB	--	--	--
			TOTAL I.D. 2720-10-70				--	--	--
0010	2782-11-70	1	PILGRIM ROAD						
				198+21	-	209+20	2,106	1	--
				226+66	-	228+24	744	--	--
			MEGAL DRIVE						
				700+50	-	703+33	--	--	--
			SUBTOTAL				2,850	1	--
		2	PILGRIM ROAD						
				198+21	-	209+20	--	--	--
				226+66	-	228+24	--	--	--
			MEGAL DRIVE						
				700+50	-	703+33	90	--	--
			SUBTOTAL				90	--	--
		3	PILGRIM ROAD						
				198+21	-	209+20	83	--	--
				226+66	-	228+24	--	--	--
			MEGAL DRIVE						
				700+50	-	703+33	--	--	--
			SUBTOTAL				83	--	--
		4	PILGRIM ROAD						
				198+21	-	209+20	--	--	--
				226+66	-	228+24	238	--	--
			MEGAL DRIVE						
				700+50	-	703+33	--	--	--
			SUBTOTAL				238	--	--
			TOTAL I.D. 2782-11-70				3,261	1	--

REMOVING PAVEMENT MARKING

CATEGORY	PROJECT NUMBER	STAGE	LOCATION	STATION	TO	STATION	646.0600 REMOVING PAVEMENT MARKINGS LF	647.0955 REMOVING PAVEMENT MARKINGS ARROWS EACH	647.0960 REMOVING PAVEMENT MARKING SYMBOLS EACH
0010	2782-12-70	1	PILGRIM ROAD						
				209+20	-	226+66	1,423	1	--
			MAIN STREET						
				402+88	-	407+60	562	--	--
				410+13	-	414+97	777	2	--
			SUBTOTAL				2,762	3	--
		2	PILGRIM ROAD						
				209+20	-	226+66	--	--	--
			MAIN STREET						
				402+88	-	407+60	1,842	2	--
			FALLS PARKWAY						
				85+13	-	87+37	90	--	--
			SUBTOTAL				1,932	2	--
		3	PILGRIM ROAD / RAMPS						
				209+20	-	226+66	--	--	--
			MAIN STREET						
				410+13	-	414+97	--	--	--
			US 41/45 SB RAMPS						
				6+40	-	13+00	1,275	--	4
			SUBTOTAL				1,275	--	4
		4	PILGRIM ROAD						
				209+20	-	226+66	--	--	--
			MAIN STREET						
				402+88	-	407+60	--	--	--
				410+13	-	414+97	--	--	--
			SUBTOTAL				--	--	--
			TOTAL I.D. 2782-12-70				5,969	5	4
			TOTALS				17,138	6	4

TEMPORARY PAVEMENT MARKING

CATEGORY	PROJECT NUMBER	STAGE	LOCATION	STATION		TO STATION	649.0100 TEMPORARY PAVEMENT MARKING 4-INCH WHITE LF	649.0100 TEMPORARY PAVEMENT MARKING 4-INCH YELLOW LF	649.0400 TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH WHITE LF	649.0400 TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH YELLOW LF	649.0701 TEMPORARY PAVEMENT MARKING 8-INCH WHITE LF	649.0701 TEMPORARY PAVEMENT MARKING 8-INCH DOT WHITE LF	649.0801 TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH WHITE LF	649.0801 TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH DOT WHITE LF
0010	1100-37-70	1, 2	US 41/45	264+00	-	299+00	--	--	6,400	3,425	--	--	--	--
		3A	US 41/45	264+00	-	299+00	--	--	7,735	3,430	--	--	--	--
		3B	US 41/45	264+00	-	299+00	--	--	4,865	2,140	--	--	--	--
			SUBTOTAL I.D. 1100-37-70				--	--	19,000	8,995	--	--	--	--
			TOTAL I.D. 1100-37-70				--		27,995		--		--	
0010	2782-11-70	1	PILGRIM ROAD	198+21	-	209+20	--	944	--	1,400	265	21	312	54
				226+66	-	228+24	--	30	620	55	--	--	120	18
			MEGAL DRIVE	700+50	-	703+33	--	--	--	--	--	--	--	--
			SUBTOTAL				--	974	620	1,455	265	21	432	72
		2	PILGRIM ROAD	198+21	-	209+20	2,107	3,504	95	345	1,169	120	--	--
				226+66	-	228+24	195	100	670	--	80	21	505	30
			MEGAL DRIVE	700+50	-	703+33	930	1,060	405	280	--	--	--	--
			SUBTOTAL				3,232	4,664	1,170	625	1,249	141	505	30
		3	PILGRIM ROAD	198+21	-	209+20	575	320	1,850	3,295	275	--	1,242	96
				226+66	-	228+24	--	--	415	535	--	--	310	36
			MEGAL DRIVE	700+50	-	703+33	--	--	450	1,540	--	--	--	--
			SUBTOTAL				575	320	2,715	5,370	275	--	1,552	132
		4	PILGRIM ROAD	198+21	-	209+20	--	--	--	2,205	--	--	1,279	207
				226+66	-	228+24	--	--	330	320	--	--	30	24
			MEGAL DRIVE	700+50	-	703+33	--	--	--	--	--	--	40	--
			SUBTOTAL				--	--	330	2,525	--	--	1,349	231
			SUBTOTAL I.D. 2782-11-70				3,807	5,958	4,835	9,975	1,789	162	3,838	465
			TOTAL I.D. 2782-11-70				9,765		14,810		1,951		4,303	

CONTINUED ON NEXT SHEET

CONTINUED FROM PREVIOUS SHEET

TEMPORARY PAVEMENT MARKING

CATEGORY	PROJECT NUMBER	STAGE	LOCATION	STATION	TO	STATION	649.0100 TEMPORARY PAVEMENT MARKING 4-INCH WHITE LF	649.0100 TEMPORARY PAVEMENT MARKING 4-INCH YELLOW LF	649.0400 TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH WHITE LF	649.0400 TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH YELLOW LF	649.0701 TEMPORARY PAVEMENT MARKING 8-INCH WHITE LF	649.0701 TEMPORARY PAVEMENT MARKING 8-INCH DOT WHITE LF	649.0801 TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH WHITE LF	649.0801 TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH DOT WHITE LF
0010	2782-12-70	1	PILGRIM ROAD											
				209+20	-	226+66	--	1,665	--	1,500	205	45	870	42
			MAIN STREET											
				402+88	-	407+60	--	435	--	950	--	--	15	21
				410+13	-	414+97	--	--	--	895	--	--	45	21
			SUBTOTAL				--	2,100	--	3,345	205	45	930	84
		2	PILGRIM ROAD											
				209+20	-	226+66	3,455	4,720	--	--	980	183	--	--
			MAIN STREET											
				402+88	-	407+60	940	940	899	1,884	15	21	70	21
				410+13	-	414+97	1,110	2,220	1,980	3,982	180	15	45	21
			FALLS PARKWAY											
				85+13	-	87+37	380	370	370	560	--	--	--	--
			SUBTOTAL				5,885	8,250	3,249	6,426	1,175	219	115	42
		3	PILGRIM ROAD / RAMPS											
				209+20	-	226+66	--	--	2,650	4,485	--	--	1,260	69
			MAIN STREET											
				402+88	-	407+60	435	--	1,570	2,654	--	--	80	42
				410+13	-	414+97	487	--	1,177	2,850	--	33	225	78
			FALLS PARKWAY											
				85+13	-	87+37	--	--	--	215	--	--	--	--
			SUBTOTAL				922	--	5,397	10,204	--	33	1,565	189
		4	PILGRIM ROAD											
				209+20	-	226+66	--	--	--	3,175	--	--	1,080	186
			MAIN STREET											
				402+88	-	407+60	--	--	--	1,300	--	--	130	18
				410+13	-	414+97	--	--	--	1,340	--	--	210	18
			FALLS PARKWAY											
				85+13	-	87+37	--	--	--	183	--	--	--	--
			SUBTOTAL				--	--	--	5,998	--	--	1,420	222
			SUBTOTAL I.D. 2782-12-70				6,807	10,350	8,646	25,973	1,380	297	4,030	537
			TOTAL I.D. 2782-12-70				17,157		34,619		1,677		4,567	
			TOTALS				10,614	16,308	32,481	44,943	3,169	459	7,868	1,002

TRAFFIC CONTROL FIXED MESSAGE SIGNS

CATEGORY	PROJECT NUMBER	STAGE	643.1000 SF
0010	2782-12-70	1	312
		2	326
		3	340
		4	312
		TOTAL I.D. 2782-12-70	1,290
	1100-37-70	1	45
		3	10
		TOTAL I.D. 1100-37-70	55
		TOTALS	1,345

RUMBLE STRIP ITEMS

CATEGORY	PROJECT NUMBER	STAGE	LOCATION	STATION	TO	STATION	SPV.0090.0006 FILL EXISTING RUMBLE STRIPS LF	SPV.0090.0007 RESTORE EXISTING RUMBLE STRIPS LF
0010	1100-37-70	1	US 41/45	279+50	-	281+00	25	--
		4	US 41/45	279+50	-	281+00	--	25
		TOTAL I.D. 1100-37-70					25	25

TEMPORARY CROSSWALK

CATEGORY	PROJECT NUMBER	STAGE	LOCATION	STATION	SPV.0090.0008 TEMPORARY CROSSWALK LF
0010	2782-11-70	1	PILGRIM ROAD		
				204+50	24
				205+25	11
				226+70	15
			MEGAL CT		
				800+50 WB	100
			MAIN STREET		
				408+35	11
				409+12	11
			SUBTOTAL		172
		2	PILGRIM ROAD		
				204+50	14
			SUBTOTAL		14
		3	PILGRIM ROAD		
				226+87	42
				228+12	25
			MEGAL DRIVE		
				703+60	42
			SUBTOTAL		109
		4	PILGRIM ROAD		
				204+50	32
				228+13	52
			MAIN STREET		
				408+30	28
			SUBTOTAL		112
			TOTAL I.D. 2782-11-70		407
0010	2782-12-70	4	PILGRIM ROAD		
				212+50	32
			TOTAL I.D. 2782-12-70		32
			TOTALS		439

BEAM GUARD ITEMS

CATEGORY	PROJECT NUMBER	STAGE	LOCATION	STATION TO STATION	OFFSET	614.0396 GUARDRAIL MOWSTRIP ASPHALT SY	614.2300 MGS GUARDRAIL 3 LF	614.2500 MGS THRIE BEAM TRANSITION LF	614.2610 MGS GUARDRAIL TERMINAL EAT EACH
0010	1100-37-70	4	US 41/45						
				278+70 - 279+51	60 RT	76	94	39	--
				TOTAL ID 1100-37-70		76	94	39	--
0010	2782-12-70	3	PILGRIM ROAD						
				216+58 - 217-50	34 RT	--	--	37	1
				220+35 - 221+26	68 LT	--	--	37	1
			US 41/45 SB RAMPS						
				100+82 - 101+93	16 RT	--	25	37	1
			US 41/45 NB EXIT RAMP						
				13+71 - 20+94	19 LT	--	735	--	--
				TOTAL ID 2782-12-70		--	760	111	3
				TOTAL		76	854	150	3

CRASH CUSHION ITEMS

CATEGORY	PROJECT NUMBER	STAGE	LOCATION	STATION	OFFSET	614.0800 CRASH CUSHIONS PERMANENT EACH	614.0905 CRASH CUSHIONS TEMPORARY	BACK WIDTH FT	OBJECT MARKING PATTERN	CRASH TEST LEVEL	TRAFFIC DIRECTION	TRAFFIC LOCATION	CRASH CUSHION SHIELDS
0010	1100-37-70	1	US 41/45										
				278+44	61.0 RT	1	--	6.0	OM-3C	TL-3	UNIDIRECTIONAL	R/L	MGS GUARDRAIL
				287+06	57.6 LT	--	1	2.0	OM-3L	TL-3	UNIDIRECTIONAL	L	TEMPORARY CONCRETE BARRIER
				287+47	13.3 LT	--	1	2.0	OM-3R	TL-3	UNIDIRECTIONAL	R	TEMPORARY CONCRETE BARRIER
				283+06	13.7 RT	--	1	2.0	OM-3R	TL-3	UNIDIRECTIONAL	R	TEMPORARY CONCRETE BARRIER
				283+68	57.8 RT	--	1	2.0	OM-3L	TL-3	UNIDIRECTIONAL	L	TEMPORARY CONCRETE BARRIER
				SUBTOTAL		1	4						
		3	US 41/45										
				277+45	47.0 LT	--	1	2.0	OM-3L	TL-3	UNIDIRECTIONAL	L	TEMPORARY CONCRETE BARRIER
				SUBTOTAL		--	1						
				TOTAL ID 1100-37-70		1	5						
0010	2782-12-70	2	PILGRIM ROAD										
				217+16	3.0 LT	--	1	2.0	OM-3L	TL-2	UNIDIRECTIONAL	L	TEMPORARY CONCRETE BARRIER
				220+94	13.8 LT	--	1	2.0	OM-3R	TL-2	UNIDIRECTIONAL	R	TEMPORARY CONCRETE BARRIER
				SUBTOTAL		--	2						
0010	2782-12-70	3	PILGRIM ROAD										
				216+92	20.0 LT	--	1	2.0	OM-3R	TL-2	UNIDIRECTIONAL	R	TEMPORARY CONCRETE BARRIER
				220+60	33.0 LT	--	1	2.0	OM-3L	TL-2	UNIDIRECTIONAL	L	TEMPORARY CONCRETE BARRIER
			US 41/45 SB RAMPS										
				10+88	27.0 LT	1	--	2.0	OM-3L	TL-2	UNIDIRECTIONAL	R	CONCRETE BARRIER
				SUBTOTAL		1	2						
				TOTAL ID 2782-12-70		1	4						
				TOTAL		2	9						

FENCE ITEMS

CATEGORY	PROJECT NUMBER	STAGE	LOCATION	STATION		TO STATION	OFFSET		616.0206 FENCE CHAIN LINK 6-FT LF	616.0700.S FENCE SAFETY LF
0010	2782-12-70	3	US 41/45 SB RAMPS	100+58	-	102+37	95	RT	190	--
			US 41/45 NB EXIT RAMP	17+05	-	20+55	38	RT	350	--
			SUBTOTAL						540	--
		ALL	UNDISTRIBUTED						--	200
			TOTAL I.D. 2782-12-70						1,080	200
0010	1100-37-70	4	US 41/45 SB RAMPS	1+42	-	1+80	33	RT	38	--
			TOTAL I.D.1100-37-70						38	--
			TOTALS						1,118	200

MOBILI ATION

CATEGORY	PROJECT NUMBER	STAGE	LOCATION	619.1000 LS
0010	1100-37-70	ALL	PROJECT	0.30
	2720-10-70	ALL	PROJECT	0.05
	2782-11-70	ALL	PROJECT	0.25
	2782-11-71	ALL	PROJECT	0.05
	2782-12-70	ALL	PROJECT	0.35
			TOTAL	1

FINISHING ROADWAY

CATEGORY	PROJECT NUMBER	STAGE	LOCATION	213.0100.0001 EACH	213.0100.0002 EACH	213.0100.0003 EACH	213.0100.0004 EACH
0010	1100-37-70	ALL	PROJECT	1	--	--	--
	2720-10-70	ALL	PROJECT	--	1	--	--
	2782-11-70	ALL	PROJECT	--	--	1	--
	2782-12-70	ALL	PROJECT	--	--	--	1
			TOTAL	1	1	1	1

FIELD OFFICE

CATEGORY	PROJECT NUMBER	STAGE	LOCATION	642.5401 FIELD OFFICE TYPE D EACH
0010	2782-12-70	ALL	PROJECT	1
			TOTAL	1

CONSTRUCTION STAKING

CATEGORY	PROJECT NUMBER	STAGE	LOCATION	SPV.0105.0003 SURVEY PROJECT 1100-37-70 LS	SPV.0105.0004 SURVEY PROJECT 2720-10-70 LS	SPV.0105.0005 SURVEY PROJECT 2782-11-70 LS	SPV.0105.0006 SURVEY PROJECT 2782-11-71 LS	SPV.0105.0007 SURVEY PROJECT 2782-12-70 LS
0010	1100-37-70	ALL	PROJECT	1	--	--	--	--
	2720-10-70	ALL	PROJECT	--	1	--	--	--
	2782-11-70	ALL	PROJECT	--	--	1	--	--
	2782-11-71	ALL	PROJECT	--	--	--	1	--
	2782-12-70	ALL	PROJECT	--	--	--	--	1
		TOTAL		1	1	1	1	1

LANDMARK REFERENCE MONUMENTS SPECIAL

CATEGORY	PROJECT NUMBER	STAGE	LOCATION	STATION	OFFSET	SPV.0060.0005 EACH	DESCRIPTION
0010	2782-11-70	2	PILGRIM ROAD				
				198+77	LT	1	SW CORNER SECTION 2, T8N, R20E
			TOTAL I.D. 2782-11-70			1	

SAWCUT ITEMS

CATEGORY	PROJECT NUMBER	STAGE	LOCATION	STATION TO STATION	690.0150 SAWING ASPHALT LF	690.0250 SAWING CONCRETE LF
0010	2782-11-70	1	PILGRIM ROAD			
				198+21 - 200+60	--	143
				200+60 - 209+20	--	1,206
				226+66 - 228+24	--	136
				SUBTOTAL	--	1,485
		2	PILGRIM ROAD			
				198+21 - 200+60	43	149
				200+60 - 209+20	70	989
				226+66 - 228+24	27	5
			MEGAL DRIVE			
				700+50 - 703+33	223	679
				SUBTOTAL	363	1,823
		3	PILGRIM ROAD			
				198+21 - 200+60	13	6
				200+60 - 209+20	66	59
				226+66 - 228+24	66	5
				SUBTOTAL	145	70
				TOTAL I.D. 2782-11-70	508	3,377
0010	2782-12-70	1	PILGRIM ROAD			
				209+20 - 226+66	--	1,693
			MAIN STREET			
				402+88 - 407+60	--	545
				410+13 - 414+97	--	400
			FALLS PARKWAY			
				85+13 - 87+37	--	471
				SUBTOTAL	--	3,109
		2	PILGRIM ROAD			
				209+20 - 226+66	--	759
			MAIN STREET			
				402+88 - 407+60	73	131
			FALLS PARKWAY			
				85+13 - 87+37	86	10
				SUBTOTAL	159	900
		3	PILGRIM ROAD			
				209+20 - 226+66	--	186
			MAIN STREET			
				410+13 - 414+97	138	51
			US 41/45 SB RAMPS			
				6+40 - 12+00	7	43

SAWCUT ITEMS

CATEGORY	PROJECT NUMBER	STAGE	LOCATION	STATION TO STATION	690.0150 SAWING ASPHALT LF	690.0250 SAWING CONCRETE LF
			US 41/45 NB OFF RAMP TO NB			
				17+07 - 21+00	15	19
			SUBTOTAL		159	300
			MAIN STREET			
				402+88 - 407+60	--	--
				410+13 - 414+97	12	--
			SUBTOTAL		12	--
			TOTAL I.D. 2782-12-70		330	4,308
0010	1100-37-70	1	US 41/45			
				284+00 - 287+25	635	434
		3	US 41/45			
				278+32 - 284+68	289	481
			TOTAL I.D. 1100-37-70		924	915
0010	2720-10-70	1	WACKER NEUSON ENTRANCE			
				808+34	32	--
			HARLEY DAVIDSON MAIN ENTRANCE			
				901+25	20	--
			HARLEY DAVIDSON MAIN ENTRANCE			
				901+56	92	--
			HARLEY DAVIDSON MAIN ENTRANCE			
				904+24	24	--
			HARLEY LOADING DOCK ENTRANCE			
				14+90 SE	178	--
			TOTAL I.D. 2720-10-70		346	0
			TOTALS		2,108	8,599

TYPE II SIGN REMOVAL **CATEGORY 0010** **2782-11-70 USH 41/45**

SIGN NO.	SIGN CODE	SIGN MESSAGE	638.2602 REM SIGNS TYPE II [EA]	638.3000 REM SMALL SIGN SUP [EA]	REMARKS / SIGN LOCATION
1R	R7-1D	--	1	1	--
2R	R1-1	--	1	1	--
3R	R2-1	--	1	1	--
4R	R2-1	--	1	1	--
5R	R4-7	--	1	1	--
6R	R4-7	--	1	--	REMOVE FROM LIGHT POLE
7R	R7-1D	--	1	1	--
8R	R4-7	--	1	--	REMOVE FROM LIGHT POLE
9R	W3-3	--	1	--	REMOVE FROM LIGHT POLE
10R	R7-1D	--	1	1	--
11R	R1-1	--	1	1	--
12R	R1-1F	--	1	--	REMOVE FROM SIGNAL POLE
13R	R3-4 R1-1F R4-7	--	1	--	REMOVE FROM SIGNAL POLE
14R	R1-1	--	1	1	--
15R	R1-1F	--	1	--	REMOVE FROM SIGNAL POLE
16R	D9-2 MB6-1	--	--	--	REMOVE FROM LIGHT POLE
17R	R3-4 R1-1F R4-7	--	1	--	REMOVE FROM SIGNAL POLE
18R	M1-85 M1-85D	--	1	1	--
19R	R7-1D	--	1	1	--
20R	R4-7	--	1	1	--
21R	W11-2 W16-7L	--	1	1	--
22R	R7-1D	--	1	1	--
23R	R2-1	--	1	--	REMOVE FROM LIGHT POLE
24R	R2-1	--	1	1	--

PROJECT NO:2782-11-70	HWY:USH 41/45	COUNTY:WAUKESHA	SIGNING REMOVAL QUANTITIES	SHEET:	E

TYPE II SIGN REMOVAL **CATEGORY 0010** **2782-11-70 USH 41/45**

SIGN NO.	SIGN CODE	SIGN MESSAGE	638.2602 REM SIGNS TYPE II [EA]	638.3000 REM SMALL SIGN SUP [EA]	REMARKS / SIGN LOCATION
25R	R1-1	--	1	--	REMOVE FROM LIGHT POLE
26R	R1-1F	--	1	--	REMOVE FROM SIGNAL POLE
27R	R3-4	--	1	--	REMOVE FROM SIGNAL POLE
	R1-1F				
	R4-7				
28R	R1-1	--	1	1	--
29R	R1-1F	--	1	--	REMOVE FROM SIGNAL POLE
30R	R3-4	--	1	--	REMOVE FROM SIGNAL POLE
	R1-1F				
	R4-7				
31R	R1-1	--	1	--	REMOVE FROM LIGHT POLE
32R	W11-2	--	1	1	--
	W16-7L				
33R	R4-7	--	1	--	REMOVE FROM LIGHT POLE
34R	R1-1	--	1	--	REMOVE FROM LIGHT POLE
35R	R1-1	--	1	1	--
36R	D4-2	--	1	2	--
	D12-2A				
37R	R1-1	--	1	1	RETURN SIGNS TO WACKER NEUSON
	--	PRIVATE DRIVE			
38R	R1-1	--	1	1	RETURN SIGNS TO WACKER NEUSON
	--	PRIVATE DRIVE			
39R	JV2-2	--	1	2	--
40R	R3-55R	--	1	1	--
41R	R2-1	--	1	1	--
42R	R1-1	--	1	1	--
43R	R7-53D	--	1	1	--
--	--	--	--	--	--
	TOTALS		42	28	

TYPE II SIGN REMOVAL **CATEGORY 0010** **2782-12-70 USH 41/45**

SIGN NO.	SIGN CODE	SIGN MESSAGE	638.2602 REM SIGNS TYPE II [EA]	638.3000 REM SMALL SIGN SUP [EA]	REMARKS / SIGN LOCATION
200R	R7-1D	--	1	--	REMOVE FROM LIGHT POLE
201R	R4-7	--	1	1	--
202R	M1-85	--	1	--	REMOVE FROM LIGHT POLE
	M1-85D				
203R	R7-1D	--	1	1	--
204R	R1-1F	--	1	--	REMOVE FROM SIGNAL POLE
	R4-7				
205R	R1-1	--	1	1	--
206R	R1-1F	--	1	--	REMOVE FROM SIGNAL POLE
207R	R1-1F	--	1	--	REMOVE FROM SIGNAL POLE
208R	R5-1	--	1	1	--
	R7-1D				
209R	JV3-1	--	1	1	--
	R4-7				
210R	R1-1F	--	1	--	REMOVE FROM SIGNAL POLE
211R	R7-1D	--	1	1	--
212R	R1-2	--	1	1	--
213R	R1-1F	--	1	--	REMOVE FROM SIGNAL POLE
	R5-1				
214R	D9-2	--	1	1	--
	MB6-1				
	R4-7				
215R	JV3-1	--	1	1	--
216R	R1-1F	--	1	--	REMOVE FROM SIGNAL POLE
217R	R3-7R	--	1	1	--
218R	JV2-1	--	1	1	--
219R	JV2-1	--	1	1	--
220R	JV2-1	--	1	1	--
221R	JV2-1	--	1	1	--
222R	W3-3	--	1	1	--

TYPE II SIGN REMOVAL **CATEGORY 0010** **2782-12-70 USH 41/45**

SIGN NO.	SIGN CODE	SIGN MESSAGE	638.2602 REM SIGNS TYPE II [EA]	638.3000 REM SMALL SIGN SUP [EA]	REMARKS / SIGN LOCATION
	R7-1				
223R	R2-1	--	1	1	--
224R	W3-3	--	1	1	--
225R	R2-1	--	1	1	--
226R	R7-1D	--	1	1	--
227R	R5-1	--	1	1	--
228R	R1-2	--	1	1	--
229R	R1-1F	--	1	--	REMOVE FROM SIGNAL POLE
230R	R1-1F	--	1	--	REMOVE FROM SIGNAL POLE
231R	R3-55L	--	1	1	--
232R	R1-2	--	1	1	--
233R	W4-3R	--	1	1	--
234R	W5-52R	--	1	1	--
235R	W5-52L	--	1	1	--
236R	R1-1F	--	1	--	REMOVE FROM SIGNAL POLE
237R	W12-1D	--	1	1	--
238R	JV3-1	--	1	1	--
239R	*NOT USED*	--	--	--	--
240R	R1-1F	--	1	--	REMOVE FROM SIGNAL POLE
241R	R1-1F	--	1	--	REMOVE FROM SIGNAL POLE
242R	D4-2L	--	1	1	--
243R	R3-60	--	1	1	RETURN TO HARLEY DAVIDSON
244R	R3-50L	--	1	1	RETURN TO HARLEY DAVIDSON
245R	R2-1	--	1	1	RETURN TO HARLEY DAVIDSON
246R	--	NO TRUCKING	1	1	RETURN TO HARLEY DAVIDSON
		PRIVATE ROAD			
247R	R2-1	--	1	--	REMOVE FROM LIGHT POLE
248R	R7-1	--	1	1	--
249R	D9-2	--	1	--	REMOVE FROM LIGHT POLE
	JV3-1				

3

TYPE II SIGN REMOVAL **CATEGORY 0010** **2782-12-70 USH 41/45**

SIGN NO.	SIGN CODE	SIGN MESSAGE	638.2602 REM SIGNS TYPE II [EA]	638.3000 REM SMALL SIGN SUP [EA]	REMARKS / SIGN LOCATION
250R	R7-1	--	1	1	--
251R	W3-3	--	1	1	--
252R	R4-7	--	1	1	--
	W5-52				
	R3-4				
253R	R7-1	--	1	--	REMOVE FROM LIGHT POLE
254R	R7-1D	--	1	--	REMOVE FROM LIGHT POLE
255R	R3-9D	--	1	--	REMOVE FROM LIGHT POLE
	R3-9B				
256R	W3-3	--	1	--	REMOVE FROM LIGHT POLE
257R	R7-1D	--	1	--	REMOVE FROM LIGHT POLE
258R	R3-9B	--	1	--	REMOVE FROM LIGHT POLE
259R	R4-7	--	1	1	--
260R	R2-1	--	1	--	REMOVE FROM LIGHT POLE
261R	R4-7	--	1	1	--
262R	R4-7	--	1	1	--
263R	R3-8	--	1	1	--
264R	R3-8	--	1	1	--
265R	R5-1A	--	1	1	--
266R	D1-60	--	1	2	--
	R5-1A				
267R	W3-3	--	1	1	--
268R	W3-3	--	1	1	--
269R	W1-8	--	1	1	--
270R	--	USE LEFT LANE …	1	1	--
271R	W1-6	--	1	1	--
	W1-6				
272R	R3-51R	--	1	--	REMOVE FROM LIGHT POLE
273R	W13-3	--	1	1	--
274R	R3-51R	--	1	2	--

TYPE II SIGN REMOVAL **CATEGORY 0010** **2782-12-70 USH 41/45**

SIGN NO.	SIGN CODE	SIGN MESSAGE	638.2602 REM SIGNS TYPE II [EA]	638.3000 REM SMALL SIGN SUP [EA]	REMARKS / SIGN LOCATION
275R	W3-8	--	1	--	REMOVE FROM SIGNAL POLE
276R	W9-1R	--	1	1	--
277R	R10-65C	--	1	--	REMOVE FROM MAST ARM
	R10-65L				
278R	W4-2R	--	1	--	REMOVE FROM LIGHT POLE
279R	R10-65R	--	1	--	REMOVE FROM SIGNAL POLE
	R10-6				
280R	R10-6(MOD)	--	1	1	--
281R	W1-8	--	1	1	--
282R	W1-8	--	1	1	--
283R	W1-8	--	1	1	--
284R	W1-8	--	1	1	--
285R	E5-1	--	1	2	--
286R	W1-6	--	1	2	--
287R	W3-3	--	1	--	REMOVE FROM SIGNAL POLE
288R	W3-5	--	1	1	--
289R	W3-3	--	1	1	--
290R	W11-2	--	1	1	--
		PED XING			
291R	E5-1A	--	1	2	--
292R	E5-1B	--	1	2	--
293R	W1-6	--	1	1	--
294R	W3-2	--	1	1	--
295R	W3-2	--	1	1	--
296R	R5-57	--	1	--	REMOVE FROM LIGHT POLE
297R	W5-1A	--	1	1	--
--	--	--	--	--	--
TOTALS			97	74	

TYPE II SIGN REMOVAL **2720-10-70 USH 41/45**

SIGN NO.	SIGN CODE	SIGN MESSAGE	638.2602 REM SIGNS TYPE II [EA]	638.3000 REM SMALL SIGN SUP [EA]	REMARKS / SIGN LOCATION
500R	R1-1	--	1	1	RETURN SIGN TO HARLEY DAVIDSON
501R	R4-7	--	1	1	RETURN SIGN TO HARLEY DAVIDSON
502R	--	TOURS / ARROW	1	1	RETURN SIGN TO HARLEY DAVIDSON
503R	--	NO TRESPASSING…	1	1	RETURN SIGN TO HARLEY DAVIDSON
504R	R1-1	--	1	1	RETURN SIGN TO HARLEY DAVIDSON
505R	R1-1	--	1	1	RETURN SIGN TO HARLEY DAVIDSON
506R	R1-1	--	1	1	RETURN SIGN TO HARLEY DAVIDSON
507R	R1-1	--	1	1	RETURN SIGN TO HARLEY DAVIDSON
508R	R2-1	--	1	1	RETURN SIGN TO WACKER NEUSON
--	--	--	--	--	--
	TOTALS		9	9	

3

SHEET 1 OF 1

PROJECT NO:2720-10-70	HWY:USH 41/45	COUNTY:WAUKESHA	SIGNING REMOVAL QUANTITIES	SHEET:	E

SIGN NO.	SIGN CODE & SIZE	SIGN TYPE	SIGN MESSAGE	TYPE II SIGN SIZE W [IN.]	x	H [IN.]	**637.2210** SIGNS TYPE II REFLC H [SF]	**637.2230** SIGNS TYPE II REFLC F [SF]	**637.2215** SIGNS TYPE II REFLC H FOLDING [SF]	**638.3000** REM SMALL SIGN SUP [EA]	**634.0618** WOOD POSTS 4"X 6"X18' [EA]	**634.0814** TUBULAR STEEL POSTS 2"X2"X14' [EA]	**638.2102** MOVE SIGNS TYPE II [EA]	**643.0910** TRAFFIC CONTROL COVERING SIGNS TYPE I [EA]	**643.0920** TRAFFIC CONTROL COVERING SIGNS TYPE II [EA]	MOUNT ON SAME POST AS SIGN #	REMARKS / NEW SIGN LOCATION	TYPE I SIGN SIZE W [FT.]	x	H [FT.]	**637.1220** SIGNS TYPE I REFLC SH [SF]
1	R3-9B(2S)	II	--	24	x	36	6.000	--	--	--	--	1	--	--	--	--	--	--	x	--	--
2	R3-9B(2S)	II	--	24	x	36	6.000	--	--	--	--	1	--	--	--	--	--	--	x	--	--
3	R7-1D(2S)	II	--	18	x	24	3.000	--	--	--	--	--	--	--	--	--	MOUNT ON LIGHT POLE	--	x	--	--
4	R1-1(2S)	II	--	30	x	30	5.180	--	--	--	--	1	--	--	--	--	--	--	x	--	--
5	R4-7(2S)	II	--	24	x	30	5.000	--	--	--	--	1	--	--	--	--	--	--	x	--	--
6	--	--	HISTORIC VILLAGE CENTRE	--	x	--	--	--	--	1	--	1	1	--	--	--	MOVE FROM LIGHT POLE TO POST	--	x	--	--
7	R3-20L(2S)	II	--	24	x	36	6.000	--	--	--	--	1	--	--	--	--	--	--	x	--	--
8	R1-1	--	--	--	x	--	--	--	--	1	--	1	1	--	--	--	--	--	x	--	--
9	R5-2	--	--	--	x	--	--	--	--	1	--	1	1	--	--	--	--	--	x	--	--
			NO OVERNIGHT…PARKING	--	x	--	--	--	--	--	--	--	--	--	--	--	--	--	x	--	--
10	R4-7(2S)	II	--	24	x	30	5.000	--	--	--	--	1	--	--	--	--	--	--	x	--	--
11	R7-1D(2S)	II	--	18	x	24	3.000	--	--	--	--	1	--	--	--	--	--	--	x	--	--
12	W3-3(2S)	II	--	36	x	36	--	9.000	--	--	--	--	--	--	--	--	MOUNT ON LIGHT POLE	--	x	--	--
13	R4-7(2S)	II	--	24	x	30	5.000	--	--	--	--	1	--	--	--	--	--	--	x	--	--
14	R7-1D(2S)	II	--	24	x	30	5.000	--	--	--	--	1	--	--	--	--	--	--	x	--	--
15	R2-1(2S)	II	30 MPH	24	x	30	5.000	--	--	--	--	1	--	--	--	--	--	--	x	--	--
16	R2-1(2S)	II	30 MPH	24	x	30	5.000	--	--	--	--	1	--	--	--	--	--	--	x	--	--
17	R3-4(2S)	II	--	24	x	24	4.000	--	--	--	--	--	--	--	--	--	MOUNT ON LIGHT POLE	--	x	--	--
18	R1-1F(3)	II	--	36	x	36	--	--	7.460	--	--	--	--	--	--	--	MOUNT ON LIGHT POLE	--	x	--	--
19	R1-2(2S)	II	--	36	x	31	3.880	--	--	--	--	1	--	--	--	--	--	--	x	--	--
20	R4-7(2S)	II	--	24	x	30	5.000	--	--	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE	--	x	--	--
21	R1-1F(3)	II	--	36	x	36	--	--	7.460	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE	--	x	--	--
22	W12-1D(2S)	II	--	24	x	24	--	4.000	--	--	--	1	--	--	--	--	2' MOUNTING HEIGHT	--	x	--	--
23	R3-4(2S)	II	--	24	x	24	4.000	--	--	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE	--	x	--	--
24	R1-1F(3)	II	--	36	x	36	--	--	7.460	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE	--	x	--	--
25	R4-7(2S)	II	--	24	x	30	5.000	--	--	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE	--	x	--	--
26	R1-2(2S)	II	--	36	x	31	3.880	--	--	--	--	1	--	--	--	--	--	--	x	--	--
27	W12-1D(2S)	II	--	24	x	24	--	4.000	--	--	--	1	--	--	--	--	2' MOUNTING HEIGHT	--	x	--	--
28	R1-1F(3)	II	--	36	x	36	--	--	7.460	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE	--	x	--	--
29	--	--	HISTORIC VILLAGE CENTRE	--	x	--	--	--	--	--	--	--	1	--	--	--	MOVE TO LIGHT POLE	--	x	--	--
30	JH-1(2S)	II	--	24	x	45	7.500	--	--	--	--	--	--	--	--	--	MOUNT ON LIGHT POLE	--	x	--	--
	D9-2		--	24	x	24															
	MB6-1		--	21	x	21															
31	*NOT USED*	--	--	--	x	--	--	--	--	--	--	--	--	--	--	--	--	--	x	--	--
32	R3-20L(2S)	II	--	24	x	36	6.000	--	--	--	--	1	--	--	--	--	--	--	x	--	--
33	R7-1D(2S)	II	--	18	x	24	3.000	--	--	--	--	--	--	--	--	--	MOUNT ON LIGHT POLE	--	x	--	--
34	R2-1(2S)	II	35 MPH	24	x	30	5.000	--	--	--	--	1	--	--	--	--	--	--	x	--	--
35	R2-1(2S)	II	35 MPH	24	x	30	5.000	--	--	--	--	--	--	--	--	--	MOUNT ON LIGHT POLE	--	x	--	--
36	JV1-1(2S)	II	--	24	x	63	10.500	--	--	--	1	--	--	--	1	--	--	--	x	--	--
	MB2-1		--	21	x	15															
	M1-1		IH 41	24	x	24											COVER IH 41 SHIELD				
	M1-4		USH 45	24	x	24															

PROJECT NO:2782-11-70	HWY:USH 41/45	COUNTY:WAUKESHA	PERMANENT SIGNING QUANTITIES	SHEET:	E

SIGN NO.	SIGN CODE & SIZE	SIGN TYPE	SIGN MESSAGE	TYPE II SIGN SIZE W [IN.]	x	H [IN.]	637.2210 SIGNS TYPE II REFLC H [SF]	637.2230 SIGNS TYPE II REFLC F [SF]	637.2215 SIGNS TYPE II REFLC H FOLDING [SF]	638.3000 REM SMALL SIGN SUP [EA]	634.0618 WOOD POSTS 4"X 6"X18' [EA]	634.0814 TUBULAR STEEL POSTS 2"X2"X14' [EA]	638.2102 MOVE SIGNS TYPE II [EA]	643.0910 TRAFFIC CONTROL COVERING SIGNS TYPE I [EA]	643.0920 TRAFFIC CONTROL COVERING SIGNS TYPE II [EA]	MOUNT ON SAME POST AS SIGN #	REMARKS / NEW SIGN LOCATION	TYPE I SIGN SIZE W [FT.]	x	H [FT.]	637.1220 SIGNS TYPE I REFLC SH [SF]
37	JV1-1(2S)	II	--	24	x	63	10.500	--	--	--	1	--	--	--	1	--	--	--	x	--	--
	MB2-1		--	21	x	15															
	M1-1		IH 41	24	x	24															
	M1-4		USH 45	24	x	24											COVER IH 41 SHIELD				
38	R3-4(2S)	II	--	24	x	24	4.000	--	--	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE	--	x	--	--
39	R1-1F(3)	II	--	36	x	36	--	--	7.460	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE	--	x	--	--
40	R4-7(2S)	II	--	24	x	30	5.000	--	--	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE	--	x	--	--
41	R1-1F(3)	II	--	36	x	36	--	--	7.460	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE	--	x	--	--
42	W12-1D(2S)	II	--	24	x	24	--	4.000	--	--	--	--	--	--	--	--	2' MOUNT HEIGHT ON SIGNAL POLE	--	x	--	--
43	R1-2(2S)	II	--	36	x	31	3.880	--	--	--	--	1	--	--	--	--	--	--	x	--	--
44	R4-7(2S)	II	--	24	x	30	5.000	--	--	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE	--	x	--	--
45	R3-4(2S)	II	--	24	x	24	4.000	--	--	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE	--	x	--	--
46	R1-1F(3)	II	--	36	x	36	--	--	7.460	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE	--	x	--	--
47	M1-94S	II	[74] MAIN ST	78	x	18	9.750	--	--	--	--	--	--	--	--	--	ON MAST ARM	--	x	--	--
48	M1-94S	II	[74] MAIN ST	78	x	18	9.750	--	--	--	--	--	--	--	--	--	ON MAST ARM	--	x	--	--
49	M1-94H	II	PILGRIM RD	84	x	18	10.500	--	--	--	--	--	--	--	--	--	ON MAST ARM	--	x	--	--
50	M1-94H	II	PILGRIM RD	84	x	18	10.500	--	--	--	--	--	--	--	--	--	ON MAST ARM	--	x	--	--
51	R5-1(2S)	II	--	30	x	30	6.250	--	--	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE	--	x	--	--
52	R3-4(2S)	II	--	24	x	24	4.000	--	--	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE	--	x	--	--
53	R1-1F(3)	II	--	36	x	36	--	--	7.460	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE	--	x	--	--
54	W12-1D(2S)	II	--	24	x	24	--	4.000	--	--	--	1	--	--	--	--	2' MOUNTING HEIGHT	--	x	--	--
55	R1-1F(3)	II	--	36	x	36	--	--	7.460	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE	--	x	--	--
56	R1-2(2S)	II	--	31	x	36	3.880	--	--	--	--	1	--	--	--	--	--	--	x	--	--
57	R3-20LL(2S)	II	--	24	x	36	6.000	--	--	--	--	1	--	--	--	--	--	--	x	--	--
58	R1-1(2S)	II	--	30	x	30	5.180	--	--	--	--	1	--	--	--	--	--	--	x	--	--
59	R3-53R(2S)	II	--	24	x	30	5.000	--	--	--	--	1	--	--	--	--	--	--	x	--	--
60	R5-1(2S)	II	--	30	x	30	6.250	--	--	--	--	1	--	--	--	--	--	--	x	--	--
61	R3-20LL(2S)	II	--	24	x	36	6.000	--	--	--	--	1	--	--	--	--	--	--	x	--	--
62	R6-2R(2S)	II	--	24	x	30	5.000	--	--	--	--	1	--	--	--	--	--	--	x	--	--
63	R6-2R(2S)	II	--	24	x	30	5.000	--	--	--	--	1	--	--	--	--	--	--	x	--	--
64	R7-51	--	--	--	x	--	--	--	--	1	--	1	1	--	--	--	MOVE TO NEW POST	--	x	--	--
65	R1-1(2S)	II	--	30	x	30	5.180	--	--	--	--	1	--	--	--	--	--	--	x	--	--
66	R3-53R(2S)	II	--	24	x	30	5.000	--	--	--	--	1	--	--	--	--	--	--	x	--	--
67	R5-1(2S)	II	--	30	x	30	6.250	--	--	--	--	1	--	--	--	--	--	--	x	--	--
68	R3-7R(3)	II	--	36	x	36	9.000	--	--	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE - SHEET 6	--	x	--	--
69	R6-2L(2S)	II	--	24	x	30	5.000	--	--	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE - SHEET 6	--	x	--	--
70	R1-1F(3)	II	--	36	x	36	--	--	7.460	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE - SHEET 6	--	x	--	--
71	R1-1F(3)	II	--	36	x	36	--	--	7.460	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE - SHEET 6	--	x	--	--
72	R4-7(2S)	II	--	24	x	30	5.000	--	--	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE - SHEET 6	--	x	--	--

SIGN NO.	SIGN CODE & SIZE	SIGN TYPE	SIGN MESSAGE	TYPE II SIGN SIZE W [IN.] x H [IN.]	637.2210 SIGNS TYPE II REFLC H [SF]	637.2230 SIGNS TYPE II REFLC F [SF]	637.2215 SIGNS TYPE II REFLC H FOLDING [SF]	638.3000 REM SMALL SIGN SUP [EA]	634.0618 WOOD POSTS 4"X 6"X18' [EA]	634.0814 TUBULAR STEEL POSTS 2"X2"X14' [EA]	638.2102 MOVE SIGNS TYPE II [EA]	643.0910 TRAFFIC CONTROL COVERING SIGNS TYPE I [EA]	643.0920 TRAFFIC CONTROL COVERING SIGNS TYPE II [EA]	MOUNT ON SAME POST AS SIGN #	REMARKS / NEW SIGN LOCATION	TYPE I SIGN SIZE W [FT.] x H [FT.]	637.1220 SIGNS TYPE I REFLC SH [SF]
73	D12-2A(2S)	II	--	60 x 42	17.500	--	--	--	2	--	--	--	--	--	SHEET 6 OF 16	-- x --	--
74	--	--	PARK & RIDE PARKING ONLY...	-- x --	--	--	--	1	--	1	1	--	--	--	SHEET 6 OF 16	-- x --	--
75	D4-2(2S)	II	--	30 x 36	7.500	--	--	--	--	--	--	--	--	73	BACK OF SIGN #73 - SHEET 6 OF 16	-- x --	--
76	R5-1	--	--	-- x --	--	--	--	1	--	--	1	--	--	--	MOVE TO SIGNAL POLE - SHEET 6 OF 16	-- x --	--
77	R1-1F(3)	II	--	36 x 36	--	--	7.460	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE - SHEET 6	-- x --	--
78	R3-7R(3)	II	--	36 x 36	9.000	--	--	--	--	1	--	--	--	--	SHEET 6 OF 16	-- x --	--
79	M1-94H	II	PILGRIM RD	84 x 18	10.500	--	--	--	--	--	--	--	--	--	ON MAST ARM - SHEET 6 OF 16	-- x --	--
80	M1-94H(MOD)	II	[A] MEGAL CT MEGAL DR [A]	84 x 42	24.500	--	--	--	--	--	--	--	--	--	CENTER ON UPRIGHT ABOVE SIGNAL SHEET 6 OF 16	-- x --	--
81	M1-94H(MOD)	II	[A] MEGAL DR MEGAL CT [A]	84 x 42	24.500	--	--	--	--	--	--	--	--	--	CENTER ON UPRIGHT ABOVE SIGNAL SHEET 6 OF 16	-- x --	--
82	M1-94H	II	PILGRIM RD	84 x 18	10.500	--	--	--	--	--	--	--	--	--	ON MAST ARM - SHEET 6 OF 16	-- x --	--
83	R4-7	--	--	-- x --	--	--	--	1	--	--	1	--	--	--	MOVE TO SIGNAL POLE - SHEET 6 OF 16	-- x --	--
84	R6-2L(2S)	II	--	24 x 30	5.000	--	--	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE - SHEET 6	-- x --	--
85	R4-7(2S)	II	--	24 x 30	5.000	--	--	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE - SHEET 6	-- x --	--
86	R1-1F(3)	II	--	36 x 36	--	--	7.460	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE - SHEET 6	-- x --	--
87	R1-1F(3)	II	--	36 x 36	--	--	7.460	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE - SHEET 6	-- x --	--
88	R5-1(2S)	II	--	30 x 30	6.250	--	--	--	--	1	--	--	--	--	SHEET 6 OF 16	-- x --	--
89	R1-1F(3)	II	--	36 x 36	--	--	7.460	--	--	--	--	--	--	88	SHEET 6 OF 16	-- x --	--
90	R5-1(2S)	II	--	30 x 30	6.250	--	--	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE - SHEET 6	-- x --	--
91	R1-1F(3)	II	--	36 x 36	--	--	7.460	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE - SHEET 6	-- x --	--
92	JV2-2(2S)	II	--	48 x 81	27.000	--	--	--	2	--	--	--	1	--	SHEET 6A OF 16	-- x --	--
	MB3-3		--	24 x 12													
	M1-1		IH 41	24 x 24											COVER IH 41 SHIELD		
	M1-4		USH 45	24 x 24													
	MB6-1		--	21 x 21													
	MB3-1		--	24 x 12													
	M1-1		IH 41	24 x 24											COVER IH 41 SHIELD		
	M1-4		USH 45	24 x 24													
	MB6-1		--	21 x 21													
93	R3-7R(3)	II	--	36 x 36	9.000	--	--	--	--	1	--	--	--	--	SHEET 6A OF 16	-- x --	--
94	R5-1A	--	--	-- x --	--	--	--	1	--	1	1	--	--	--	MOVE TO NEW POST - SHEET 6A OF 16	-- x --	--
95	R3-20R(2S)	II	--	24 x 36	6.000	--	--	--	--	--	--	--	--	94	SHEET 6A OF 16	-- x --	--
96	D1-65(MOD)	II	MEGAL DRIVE	24 x 24	4.000	--	--	--	--	--	--	--	--	94	SHEET 6A OF 16	-- x --	--
97	JV1-1(2S)	II	--	24 x 63	10.500	--	--	--	1	--	--	--	1	--	SHEET 6A OF 16	-- x --	--
	MB2-1		--	21 x 15													
	M1-1		IH 41	24 x 24											COVER IH 41 SHIELD		
	M1-4		USH 45	24 x 24													
98	D1-65(MOD)	II	[A] MEGAL COURT MEGAL DRIVE [A] NEXT SIGNAL	84 x 42	24.500	--	--	--	--	2	--	--	--	--	SHEET 6A OF 16	-- x --	--

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SIGN NO.	SIGN CODE & SIZE	SIGN TYPE	SIGN MESSAGE	TYPE II SIGN SIZE W [IN.] x H [IN.]	**637.2210** SIGNS TYPE II REFLC H [SF]	**637.2230** SIGNS TYPE II REFLC F [SF]	**637.2215** SIGNS TYPE II REFLC H FOLDING [SF]	**638.3000** REM SMALL SIGN SUP [EA]	**634.0618** WOOD POSTS 4"X 6"X18' [EA]	**634.0814** TUBULAR STEEL POSTS 2"X2"X14' [EA]	**638.2102** MOVE SIGNS TYPE II [EA]	**643.0910** TRAFFIC CONTROL COVERING SIGNS TYPE I [EA]	**643.0920** TRAFFIC CONTROL COVERING SIGNS TYPE II [EA]	MOUNT ON SAME POST AS SIGN #	REMARKS / NEW SIGN LOCATION	TYPE I SIGN SIZE W [FT.] x H [FT.]	**637.1220** SIGNS TYPE I REFLC SH [SF]
99	D1-65(MOD)	II	[A] MEGAL COURT MEGAL DRIVE [A] NEXT SIGNAL	84 x 42	24.500	--	--	--	--	2	--	--	--	--	SHEET 6A OF 16	-- x --	--
100	*NOT USED*	--	--	-- x --	--	--	--	--	--	--	--	--	--	--	--	-- x --	--
101	R5-1(2S)	II	--	30 x 30	6.250	--	--	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE - SHEET 6	-- x --	--
102	R5-1(2S)	II	--	30 x 30	6.250	--	--	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE - SHEET 6	-- x --	--
103	*NOT USED*	--	--	-- x --	--	--	--	--	--	--	--	--	--	--	--	-- x --	--
104	W3-3(2S)	II	--	36 x 36	--	9.000	--	--	--	1	--	--	--	--	SHEET 1 OF 16	-- x --	--
105	R5-1(2S)	II	--	30 x 30	6.250	--	--	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE - SHEET 2 OF 16	-- x --	--
106	R5-1(2S)	II	--	30 x 30	6.250	--	--	--	--	1	--	--	--	--	SHEET 2 OF 16	-- x --	--
107	R5-1(2S)	II	--	30 x 30	6.250	--	--	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE - SHEET 2 OF 16	-- x --	--
108	R5-1(2S)	II	--	30 x 30	6.250	--	--	--	--	1	--	--	--	--	SHEET 2 OF 16	-- x --	--
109	D16-1L(MOD)	I	SOUTH [41] [45] CLEVELAND AVE ONLY [A]	-- x --	--	--	--	--	--	--	--	1	--	--	INSTALL ON S-67-960 I-BEAMS INCIDENTAL COVER IH 41 SHIELD SHEET 2 OF 16	9 x 9	81.00
110	R2-1	--	25 MPH	-- x --	--	--	--	1	--	1	1	--	--	--	MOVE TO NEW POST - SHEET 3 OF 16	-- x --	--
111	JV2-2(2S)	II	--	48 x 81	27.000	--	--	--	2	--	--	--	1	--	SHEET 6A OF 16	-- x --	--
	MB3-3		--	24 x 12													
	M1-1		IH 41	24 x 24											COVER IH 41 SHIELD		
	M1-4		USH 45	24 x 24													
	MB6-1		--	21 x 21													
	MB3-1		--	24 x 12													
	M1-1		IH 41	24 x 24											COVER IH 41 SHIELD		
	M1-4		USH 45	24 x 24													
	MB6-1		--	21 x 21													
112	R3-8Z(2S)	II	--	30 x 54	11.250	--	--	--	--	2	--	--	--	--	SHEET 12 OF 16	-- x --	--
113	R3-8Z(2S)	II	--	30 x 54	11.250	--	--	--	--	2	--	--	--	--	SHEET 12 OF 16	-- x --	--
114	W3-2(2S)	II	--	36 x 36	--	9.000	--	--	--	1	--	--	--	--	SHEET 12 OF 16	-- x --	--
115	W3-3(2S)	II	--	36 x 36	--	9.000	--	--	--	1	--	--	--	--	SHEET 12 OF 16	-- x --	--
116	R7-1D(2S)	II	--	18 x 24	3.000	--	--	--	--	1	--	--	--	--	SHEET 12 OF 16	-- x --	--
117	W2-6(2S)	II	--	30 x 30	--	6.250	--	--	--	1	--	--	--	--	SHEET 12 OF 16	-- x --	--
118	W13-1(2S)	II	--	18 x 18	--	2.250	--	--	--	--	--	--	--	117	SHEET 12 OF 16	-- x --	--
119	R2-1(2S)	II	30 MPH	24 x 30	5.000	--	--	--	--	1	--	--	--	--	SHEET 11 OF 16	-- x --	--
120	R1-1(2S)	II	--	30 x 30	5.180	--	--	--	--	1	--	--	--	--	SHEET 11 OF 16	-- x --	--
121	R7-53D(2S)	II	--	18 x 24	3.000	--	--	--	--	1	--	--	--	--	SHEET 11 OF 16	-- x --	--
122	R10-50(2S)	II	--	30 x 36	7.500	--	--	--	--	--	--	--	--	--	ABOVE SIGNAL HEAD - SHEET 2 OF 16	-- x --	--
123	R10-50(2S)	II	--	30 x 36	7.500	--	--	--	--	--	--	--	--	--	ABOVE SIGNAL HEAD - SHEET 6 OF 16	-- x --	--
124	R10-50(2S)	II	--	30 x 36	7.500	--	--	--	--	--	--	--	--	--	ABOVE SIGNAL HEAD - SHEET 6 OF 16	-- x --	--
125	--	--	PARKING REGULATIONS...	-- x --	--	--	--	--	--	1	1	--	--	--	SHEET 6 OF 16	-- x --	--
126	R9-3A(2S)	II	--	18 x 18	2.250	--	--	--	--	1	--	--	--	--	5' MOUNT HEIGHT - SHEET 3 OF 16	-- x --	--

SIGN NO.	SIGN CODE & SIZE	SIGN TYPE	SIGN MESSAGE	TYPE II SIGN SIZE W [IN.]	x	H [IN.]	**637.2210** SIGNS TYPE II REFLC H [SF]	**637.2230** SIGNS TYPE II REFLC F [SF]	**637.2215** SIGNS TYPE II REFLC H FOLDING [SF]	**638.3000** REM SMALL SIGN SUP [EA]	**634.0618** WOOD POSTS 4"X 6"X18' [EA]	**634.0814** TUBULAR STEEL POSTS 2"X2"X14' [EA]	**638.2102** MOVE SIGNS TYPE II [EA]	**643.0910** TRAFFIC CONTROL COVERING SIGNS TYPE I [EA]	**643.0920** TRAFFIC CONTROL COVERING SIGNS TYPE II [EA]	MOUNT ON SAME POST AS SIGN #	REMARKS / NEW SIGN LOCATION	TYPE I SIGN SIZE W [FT.]	x	H [FT.]	**637.1220** SIGNS TYPE I REFLC SH [SF]
127	R9-2(2S)	II	--	12	x	18	1.500	--	--	--	--	--	--	--	--	126	SHEET 3 OF 16	--	x	--	--
128	R9-3A(2S)	II	--	18	x	18	2.250	--	--	--	--	1	--	--	--	--	5' MOUNT HEIGHT - SHEET 3 OF 16	--	x	--	--
129	R9-2(2S)	II	--	12	x	18	1.500	--	--	--	--	--	--	--	--	128	SHEET 3 OF 16	--	x	--	--
130	R9-3A(2S)	II	--	18	x	18	2.250	--	--	--	--	1	--	--	--	--	5' MOUNT HEIGHT - SHEET 3 OF 16	--	x	--	--
131	R9-2(2S)	II	--	12	x	18	1.500	--	--	--	--	--	--	--	--	130	SHEET 3 OF 16	--	x	--	--
132	R9-3A(2S)	II	--	18	x	18	2.250	--	--	--	--	1	--	--	--	--	5' MOUNT HEIGHT - SHEET 3 OF 16	--	x	--	--
133	R9-2(2S)	II	--	12	x	18	1.500	--	--	--	--	--	--	--	--	132	SHEET 3 OF 16	--	x	--	--
--	--	--	--	--	x	--	--	--	--	--	--	--	--	--	--	--	--	--	x	--	--
TOTALS							655.490	60.500	119.360	9	9	63	11	1	5						81.000

3

SHEET 5 OF 5

PROJECT NO:2782-11-70	HWY:USH 41/45	COUNTY:WAUKESHA	PERMANENT SIGNING QUANTITIES	SHEET:	**E**

SIGN NO.	SIGN CODE & SIZE	SIGN TYPE	SIGN MESSAGE	TYPE II SIGN SIZE W [IN.] x H [IN.]	637.2210 SIGNS TYPE II REFLC H [SF]	637.2230 SIGNS TYPE II REFLC F [SF]	637.2215 SIGNS TYPE II REFLC H FOLDING [SF]	638.3000 REM SMALL SIGN SUP [EA]	634.0618 WOOD POSTS 4"X 6"X18' [EA]	634.0622 WOOD POSTS 4"X6"X22' [EA]	634.0814 TUBULAR STEEL POSTS 2"X2"X14' [EA]	638.2102 MOVE SIGNS TYPE II [EA]	643.0910 TRAFFIC CONTROL COVERING SIGNS TYPE I [EA]	643.0920 TRAFFIC CONTROL COVERING SIGNS TYPE II [EA]	MOUNT ON SAME POST AS SIGN #	REMARKS / NEW SIGN LOCATION	TYPE I SIGN SIZE W [FT.] x H [FT.]	637.1220 SIGNS TYPE I REFLC SH [SF]
200	R7-1D(2S)	II	--	18 x 24	3.000	--	--	--	--	--	1	--	--	--	--	--	-- x --	--
201	R6-2L(2S)	II	--	24 x 30	5.000	--	--	--	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE	-- x --	--
202	R1-2(2S)	II	--	31 x 36	3.880	--	--	--	--	--	1	--	--	--	--	--	-- x --	--
203	R5-1(2S)	II	--	30 x 30	6.250	--	--	--	--	--	1	--	--	--	--	--	-- x --	--
204	R1-1F(3)	II	--	36 x 36	--	--	7.460	--	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE	-- x --	--
205	W12-1D(2S)	II	--	24 x 24	--	4.000	--	--	--	--	1	--	--	--	--	2' MOUNTING HEIGHT	-- x --	--
206	R1-1F(3)	II	--	36 x 36	--	--	7.460	--	--	--	1	--	--	--	--	--	-- x --	--
207	R4-7(2S)	II	--	24 x 30	5.000	--	--	--	--	--	--	--	--	--	206	--	-- x --	--
208	R1-2(2S)	II	--	31 x 36	3.880	--	--	--	--	--	1	--	--	--	--	--	-- x --	--
209	R1-1F(3)	II	--	36 x 36	--	--	7.460	--	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE	-- x --	--
210	W12-1D(2S)	II	--	24 x 24	--	4.000	--	--	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE BELOW R1-1F	-- x --	--
211	M1-94H	II	PILGRIM RD	84 x 18	10.500	--	--	--	--	--	--	--	--	--	--	ON MAST ARM	-- x --	--
212	M1-94H	II	PILGRIM RD	84 x 18	10.500	--	--	--	--	--	--	--	--	--	--	ON MAST ARM	-- x --	--
213	M1-94H(MOD)	II	FALLS PARKWAY [A]	132 x 18	16.500	--	--	--	--	--	--	--	--	--	--	ON MAST ARM	-- x --	--
214	M1-94H(MOD)	II	[A] FALLS PARKWAY	132 x 18	16.500	--	--	--	--	--	--	--	--	--	--	ON MAST ARM	-- x --	--
215	R10-50(2S)	II	--	30 x 36	7.500	--	--	--	--	--	--	--	--	--	--	ON MAST ARM	-- x --	--
216	R1-1F(3)	II	--	36 x 36	--	--	7.460	--	--	--	1	--	--	--	--	--	-- x --	--
217	R4-7(2S)	II	--	24 x 30	5.000	--	--	--	--	--	--	--	--	--	216	--	-- x --	--
218	R5-1(3)	II	--	36 x 36	9.000	--	--	--	1	--	--	--	--	--	--	--	-- x --	--
219	R1-2(2S)	II	--	31 x 36	3.880	--	--	--	--	--	1	--	--	--	--	--	-- x --	--
220	R6-2L(2S)	II	--	24 x 30	5.000	--	--	--	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE	-- x --	--
221	*NOT USED*	--	--	-- x --	--	--	--	--	--	--	--	--	--	--	--	--	-- x --	--
222	R1-1F(3)	II	--	36 x 36	--	--	7.460	--	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE	-- x --	--
223	W12-1D(2S)	II	--	24 x 24	--	4.000	--	--	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE BELOW R1-1F	-- x --	--
224	R1-1F(3)	II	--	36 x 36	--	--	7.460	--	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE	-- x --	--
225	W12-1D(2S)	II	--	24 x 24	--	4.000	--	--	--	--	1	--	--	--	--	2' MOUNTING HEIGHT	-- x --	--
226	D13-3	--	--	-- x --	--	--	--	2	2	--	--	1	--	--	--	--	-- x --	--
227	R1-2(2S)	II	--	31 x 36	3.880	--	--	--	--	--	1	--	--	--	--	--	-- x --	--
228	R5-1(2S)	II	--	30 x 30	6.250	--	--	--	--	--	1	--	--	--	--	--	-- x --	--
229	R1-1F(3)	II	--	36 x 36	--	--	7.460	--	--	--	--	--	--	--	228	--	-- x --	--
230	*NOT USED*	--	--	-- x --	--	--	--	--	--	--	--	--	--	--	--	--	-- x --	--
231	R4-7(2S)	II	--	24 x 30	5.000	--	--	--	--	--	1	--	--	--	--	--	-- x --	--
232	R1-1F(3)	II	--	36 x 36	--	--	7.460	--	--	--	--	--	--	--	231	--	-- x --	--
233	R11-54F(2S)	II	--	48 x 30	--	--	10.000	--	2	--	--	--	--	--	--	--	-- x --	--
234	R3-7R(3)	II	--	36 x 36	9.000	--	--	--	--	--	1	--	--	--	--	--	-- x --	--
235	R5-1(2S)	II	--	30 x 30	6.250	--	--	--	--	--	--	--	--	--	234	--	-- x --	--
236	R7-1D(2S)	II	--	18 x 24	3.000	--	--	--	1	--	--	--	--	--	--	--	-- x --	--
237	R3-7R(3)	II	--	36 x 36	9.000	--	--	--	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE	-- x --	--
238	*NOT USED*	--	--	-- x --	--	--	--	--	--	--	--	--	--	--	--	--	-- x --	--
239	R5-1(2S)	II	--	30 x 30	6.250	--	--	--	--	--	1	--	--	--	--	--	-- x --	--
240	D16-1L(MOD)	I	SOUTH [41] [45] ONLY [A]	-- x --	--	--	--	--	--	--	--	--	1	--	--	INSTALL ON S-67-961 I-BEAMS INCIDENTAL COVER IH 41 SHIELD	7 x 7	49.00

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SIGN NO.	SIGN CODE & SIZE	SIGN TYPE	SIGN MESSAGE	TYPE II SIGN SIZE W [IN.] x H [IN.]	637.2210 SIGNS TYPE II REFLC H [SF]	637.2230 SIGNS TYPE II REFLC F [SF]	637.2215 SIGNS TYPE II REFLC H FOLDING [SF]	638.3000 REM SMALL SIGN SUP [EA]	634.0618 WOOD POSTS 4"X 6"X18' [EA]	634.0622 WOOD POSTS 4"X6"X22' [EA]	634.0814 TUBULAR STEEL POSTS 2"X2"X14' [EA]	638.2102 MOVE SIGNS TYPE II [EA]	643.0910 TRAFFIC CONTROL COVERING SIGNS TYPE I [EA]	643.0920 TRAFFIC CONTROL COVERING SIGNS TYPE II [EA]	MOUNT ON SAME POST AS SIGN #	REMARKS / NEW SIGN LOCATION	TYPE I SIGN SIZE W [FT.] x H [FT.]	637.1220 SIGNS TYPE I REFLC SH [SF]
241	D16-1L(MOD)	I	SOUTH [41] [45] ONLY [A]	-- x --	--	--	--	--	--	--	--	--	1	--	--	INSTALL ON S-67-961 I-BEAMS INCIDENTAL COVER IH 41 SHIELD	7 x 7	49.00
242	W3-3(3)	II	--	36 x 36	--	9.000	--	--	--	--	1	--	--	--	--	--	-- x --	--
243	W3-3(3)	II	--	36 x 36	--	9.000	--	--	--	--	1	--	--	--	--	--	-- x --	--
244	JV3-1(2S)	II	--	24 x 81	13.500	--	--	--	1	--	--	--	--	1	--	--	-- x --	--
	MB3-3		--	24 x 12														
	M1-1		IH 41	24 x 24												COVER IH 41 SHIELD		
	M1-4		USH 45	24 x 24														
	MB6-1		--	21 x 21														
245	R3-20L(2S)	II	--	24 x 36	6.000	--	--	--	--	--	1	--	--	--	--	--	-- x --	--
246	R11-54F(2S)	II	--	48 x 30	--	--	10.000	--	2	--	--	--	--	--	--	--	-- x --	--
247	W5-52R(2S)	II	--	12 x 36	--	3.000	--	--	1	--	--	--	--	--	--	4' MOUNTING HEIGHT	-- x --	--
248	JV2-1(2S)	II	--	24 x 81	13.500	--	--	--	1	--	--	--	--	1	--	--	-- x --	--
	MB3-1		--	24 x 12														
	M1-1		IH 41	24 x 24												COVER IH 41 SHIELD		
	M1-4		USH 45	24 x 24														
	MB5-1L		--	21 x 21														
249	JV2-1(2S)	II	--	24 x 81	13.500	--	--	--	1	--	--	--	--	1	--	--	-- x --	--
	MB3-1		--	24 x 12														
	M1-1		IH 41	24 x 24												COVER IH 41 SHIELD		
	M1-4		USH 45	24 x 24														
	MB5-1L		--	21 x 21														
250	R2-1(2S)	II	35 MPH	24 x 30	5.000	--	--	--	--	--	1	--	--	--	--	--	-- x --	--
251	R7-1D(2S)	II	--	18 x 24	3.000	--	--	--	--	--	1	--	--	--	--	--	-- x --	--
252	R11-54F(2S)	II	--	48 x 30	--	--	10.000	--	2	--	--	--	--	--	--	--	-- x --	--
253	W5-52R(2S)	II	--	12 x 36	--	3.000	--	--	1	--	--	--	--	--	--	4' MOUNTING HEIGHT	-- x --	--
254	JV2-1(2S)	II	--	24 x 81	13.500	--	--	--	1	--	--	--	--	1	--	--	-- x --	--
	MB3-3		--	24 x 12														
	M1-1		IH 41	24 x 24												COVER IH 41 SHIELD		
	M1-4		USH 45	24 x 24														
	MB5-1L		--	21 x 21														
255	JV2-1(2S)	II	--	24 x 81	13.500	--	--	--	1	--	--	--	--	1	--	--	-- x --	--
	MB3-3		--	24 x 12														
	M1-1		IH 41	24 x 24												COVER IH 41 SHIELD		
	M1-4		USH 45	24 x 24														
	MB5-1L		--	21 x 21														
256	R2-1(2S)	II	35 MPH	24 x 30	5.000	--	--	--	--	--	1	--	--	--	--	--	-- x --	--
257	R2-1(2S)	II	35 MPH	24 x 30	5.000	--	--	--	--	--	1	--	--	--	--	--	-- x --	--
258	R7-1D(2S)	II	--	18 x 24	3.000	--	--	--	--	--	1	--	--	--	--	--	-- x --	--
259	R5-1(3)	II	--	36 x 36	9.000	--	--	--	1	--	--	--	--	--	--	--	-- x --	--
260	R1-2(2S)	II	--	31 x 36	3.880	--	--	--	1	--	--	--	--	--	--	--	-- x --	--

FILE NAME : N:\SPO\Operations\Traffic_Ops\Signing\Miscellaneous Quantities\2782-12-70\030505.pptx PLOT DATE : 24-SEP-2014 PLOT BY : DOTKLM PLOT NAME : 030505_mq.pdf PLOT SCALE : 1:1

SIGN NO.	SIGN CODE & SIZE	SIGN TYPE	SIGN MESSAGE	TYPE II SIGN SIZE W [IN.] x H [IN.]	637.2210 SIGNS TYPE II REFLC H [SF]	637.2230 SIGNS TYPE II REFLC F [SF]	637.2215 SIGNS TYPE II REFLC H FOLDING [SF]	638.3000 REM SMALL SIGN SUP [EA]	634.0618 WOOD POSTS 4"X 6"X18' [EA]	634.0622 WOOD POSTS 4"X6"X22' [EA]	634.0814 TUBULAR STEEL POSTS 2"X2"X14' [EA]	638.2102 MOVE SIGNS TYPE II [EA]	643.0910 TRAFFIC CONTROL COVERING SIGNS TYPE I [EA]	643.0920 TRAFFIC CONTROL COVERING SIGNS TYPE II [EA]	MOUNT ON SAME POST AS SIGN #	REMARKS / NEW SIGN LOCATION	TYPE I SIGN SIZE W [FT.] x H [FT.]	637.1220 SIGNS TYPE I REFLC SH [SF]
261	D1-65(MOD)	II	[A] MEGAL DRIVE MEGAL COURT [A] NEXT SIGNAL	66 x 42	19.250	--	--	--	--	--	2	--	--	--	--	--	-- x --	--
262	D1-65(MOD)	II	[A] MEGAL DRIVE MEGAL COURT [A] NEXT SIGNAL	66 x 42	19.250	--	--	--	--	--	2	--	--	--	--	--	-- x --	--
263	W3-3(3)	II	--	36 x 36	--	9.000	--	--	--	--	1	--	--	--	--	--	-- x --	--
264	W3-3(3)	II	--	36 x 36	--	9.000	--	--	--	--	1	--	--	--	--	--	-- x --	--
265	R3-20LL(2S)	II	--	24 x 36	6.000	--	--	--	--	--	1	--	--	--	--	--	-- x --	--
266	W11-2(2S)	II	--	30 x 30	--	6.250	--	--	1	--	--	--	--	--	--	--	-- x --	--
267	W16-7L(2S)	II	--	24 x 12	--	2.000	--	--	--	--	--	--	--	--	266	--	-- x --	--
268	W4-3R(3)	II	--	36 x 36	--	9.000	--	--	--	--	1	--	--	--	--	--	-- x --	--
269	R3-20L(2S)	II	--	24 x 36	6.000	--	--	--	--	--	1	--	--	--	--	--	-- x --	--
270	R4-7(2S)	II	--	24 x 30	5.000	--	--	--	--	--	1	--	--	--	--	--	-- x --	--
271	R3-4(2S)	II	--	24 x 24	4.000	--	--	--	--	--	--	--	--	--	270	--	-- x --	--
272	R3-20L(2S)	II	--	24 x 36	6.000	--	--	--	--	--	1	--	--	--	--	--	-- x --	--
273	R5-1(2S)	II	--	30 x 30	6.250	--	--	--	--	--	1	--	--	--	--	--	-- x --	--
274	R10-50(2S)	II	--	30 x 36	7.500	--	--	--	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE	-- x --	--
275	R3-2(2S)	II	--	24 x 24	4.000	--	--	--	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE	-- x --	--
276	R1-1F(3)	II	--	36 x 36	--	--	7.460	--	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE	-- x --	--
277	R1-1F(3)	II	--	36 x 36	--	--	7.460	--	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE	-- x --	--
278	W12-1D(2S)	II	--	24 x 24	--	4.000	--	--	--	--	--	--	--	--	--	2' MOUNTING HEIGHT ON SIGNAL POLE	-- x --	--
279	R3-20LL(2S)	II	--	24 x 36	6.000	--	--	--	--	--	1	--	--	--	--	--	-- x --	--
280	R11-54F(2S)	II	--	48 x 30	--	--	10.000	--	2	--	--	--	--	--	--	--	-- x --	--
281	R1-2(2S)	II	--	31 x 36	3.880	--	--	--	1	--	--	--	--	--	--	--	-- x --	--
282	JV3-1(2S)	II	--	24 x 81	13.500	--	--	--	1	--	--	--	--	1	--	--	-- x --	--
	MB3-1		--	24 x 12														
	M1-1		IH 41	24 x 24												COVER IH 41 SHIELD		
	M1-4		USH 45	24 x 24														
	MB6-1		--	21 x 21														
283	R3-7R(3)	II	--	36 x 36	9.000	--	--	--	--	--	1	--	--	--	--	--	-- x --	--
284	R4-7(2S)	II	--	24 x 30	5.000	--	--	--	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE	-- x --	--
285	R1-1F(3)	II	--	36 x 36	--	--	7.460	--	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE	-- x --	--
286	R3-4(2S)	II	--	24 x 24	4.000	--	--	--	--	--	1	--	--	--	--	--	-- x --	--
287	R2-1(2S)	II	30 MPH	24 x 30	5.000	--	--	--	--	--	--	--	--	--	--	MOUNT ON LIGHT POLE	-- x --	--
288	JV33-1	II	--	24 x 81	13.500	--	--	--	1	--	--	--	--	1	--	--	-- x --	--
	MB4-5		--	24 x 12														
	M1-1		IH 41	24 x 24												COVER IH 41 SHIELD		
	M1-4		USH 45	24 x 24														
	MB6-1		--	21 x 21														
289	JH-1(2S)	II	--	24 x 45	7.500	--	--	--	--	--	1	--	--	--	--	--	-- x --	--
	D9-2		--	24 x 24												--	-- x --	--
	MB6-1		--	21 x 21												--	-- x --	--

SIGN NO.	SIGN CODE & SIZE	SIGN TYPE	SIGN MESSAGE	TYPE II SIGN SIZE W [IN.] x H [IN.]	637.2210 SIGNS TYPE II REFLC H [SF]	637.2230 SIGNS TYPE II REFLC F [SF]	637.2215 SIGNS TYPE II REFLC H FOLDING [SF]	638.3000 REM SMALL SIGN SUP [EA]	634.0618 WOOD POSTS 4"X 6"X18' [EA]	634.0622 WOOD POSTS 4"X6"X22' [EA]	634.0814 TUBULAR STEEL POSTS 2"X2"X14' [EA]	638.2102 MOVE SIGNS TYPE II [EA]	643.0910 TRAFFIC CONTROL COVERING SIGNS TYPE I [EA]	643.0920 TRAFFIC CONTROL COVERING SIGNS TYPE II [EA]	MOUNT ON SAME POST AS SIGN #	REMARKS / NEW SIGN LOCATION	TYPE I SIGN SIZE W [FT.] x H [FT.]	637.1220 SIGNS TYPE I REFLC SH [SF]
290	*NOT USED*	--	--	-- x --	--	--	--	--	--	--	--	--	--	--	--	--	-- x --	--
291	R7-1D(2S)	II	--	18 x 24	3.000	--	--	--	--	--	1	--	--	--	--	--	-- x --	--
292	R7-1D(2S)	II	--	18 x 24	3.000	--	--	--	--	--	1	--	--	--	--	--	-- x --	--
293	R3-20L(2S)	II	--	24 x 36	6.000	--	--	--	--	--	1	--	--	--	--	--	-- x --	--
294	W3-3(2S)	II	--	36 x 36	--	9.000	--	--	--	--	1	--	--	--	--	--	-- x --	--
295	R4-7(2S)	II	--	24 x 30	5.000	--	--	--	--	--	--	--	--	--	286	--	-- x --	--
296	W5-54(2S)	II	--	18 x 18	--	2.250	--	--	--	--	--	--	--	--	286	--	-- x --	--
297	R7-1D(2S)	II	--	18 x 24	3.000	--	--	--	--	--	--	--	--	--	--	MOUNT ON LIGHT POLE	-- x --	--
298	R3-20L(2S)	II	--	24 x 36	6.000	--	--	--	--	--	1	--	--	--	--	--	-- x --	--
299	R4-7(2S)	II	--	24 x 30	5.000	--	--	--	--	--	1	--	--	--	--	--	-- x --	--
300	W5-54(2S)	II	--	18 x 18	--	2.250	--	--	--	--	--	--	--	--	299	--	-- x --	--
301	R3-9D(2S)	II	--	24 x 6	1.000	--	--	--	--	--	--	--	--	--	--	MOUNT ON LIGHT POLE	-- x --	--
302	R3-9B(2S)	II	--	24 x 36	6.000	--	--	--	--	--	--	--	--	--	301	--	-- x --	--
303	W3-3(3)	II	--	36 x 36	--	9.000	--	--	--	--	--	--	--	--	--	MOUNT ON LIGHT POLE	-- x --	--
304	R7-1D(2S)	II	--	18 x 24	3.000	--	--	--	--	--	--	--	--	--	--	MOUNT ON LIGHT POLE	-- x --	--
305	R3-9C(2S)	II	--	24 x 6	1.000	--	--	--	--	--	--	--	--	--	--	MOUNT ON LIGHT POLE	-- x --	--
306	R3-9B(2S)	II	--	24 x 36	6.000	--	--	--	--	--	--	--	--	--	--	MOUNT ON LIGHT POLE	-- x --	--
307	R1-1	--	--	-- x --	--	--	--	1	--	--	1	1	--	--	--	MOVE TO NEW POST	-- x --	--
308	R5-2	--	--	-- x --	--	--	--	1	--	--	1	1	--	--	--	MOVE TO NEW POST	-- x --	--
		--	NO OVERNIGHT ... PARKING										--	--				
309	R2-1(2S)	II	30 MPH	24 x 30	5.000	--	--	--	--	--	1	--	--	--	--	--	-- x --	--
310	R3-7L(2S)	II	--	30 x 30	6.250	--	--	--	--	--	1	--	--	--	--	--	-- x --	--
311	R2-1(2S)	II	35 MPH	24 x 30	5.000	--	--	1	--	--	1	--	--	--	--	MOVE TO NEW POST	-- x --	--
312	R2-1(2S)	II	35 MPH	24 x 30	5.000	--	--	1	--	--	1	--	--	--	--	MOVE TO NEW POST	-- x --	--
313	R3-8WW(2S)	II	--	72 x 30	15.000	--	--	--	--	--	2	--	--	--	--	--	-- x --	--
314	R6-2R	--	--	-- x --	--	--	--	1	--	--	1	1	--	--	--	MOVE TO NEW POST	-- x --	--
315	R1-1F(3)	II	--	36 x 36	--	--	7.460	--	--	--	1	--	--	--	--	--	-- x --	--
316	R4-7(2S)	II	--	24 x 30	5.000	--	--	--	--	--	--	--	--	--	315	--	-- x --	--
317	R5-1A(3)	II	--	42 x 30	8.750	--	--	--	--	--	--	--	--	--	--	MOUNT ON UPRIGHT	-- x --	--
318	R5-1A(3)	II	--	42 x 30	8.750	--	--	--	--	--	--	--	--	--	--	MOUNT ON UPRIGHT	-- x --	--
319	R3-5L(2S)	II	--	42 x 48	14.000	--	--	--	--	--	--	--	--	--	--	INSTALL ON S-67-962	-- x --	--
													--	--		BRACKETS INCIDENTAL		
320	R3-5L(2S)	II	--	42 x 48	14.000	--	--	--	--	--	--	--	--	--	--	INSTALL ON S-67-962	-- x --	--
													--	--		BRACKETS INCIDENTAL		
321	R3-5A(2S)	II	--	42 x 48	14.000	--	--	--	--	--	--	--	--	--	--	INSTALL ON S-67-962	-- x --	--
													--	--		BRACKETS INCIDENTAL		
322	R3-5R(2S)	II	--	42 x 48	14.000	--	--	--	--	--	--	--	--	--	--	INSTALL ON S-67-962	-- x --	--
													--	--		BRACKETS INCIDENTAL		
323	W3-3(3)	II	--	36 x 36	--	9.000	--	--	1	--	--	--	--	--	--	--	-- x --	--
324	W3-3(3)	II	--	36 x 36	--	9.000	--	--	1	--	--	--	--	--	--	--	-- x --	--
325	W1-6(2S)	II	--	48 x 24	--	8.000	--	--	1	--	--	--	--	--	--	--	-- x --	--
326	W1-6(2S)	II	--	48 x 24	--	8.000	--	--	--	--	--	--	--	--	325	--	-- x --	--
327	--	II	USE LEFT LANE WHEN METERED	54 x 60	22.500	--	--	--	1	--	--	--	--	--	--	--	-- x --	--

FILE NAME : N:\SPO\Operations\Traffic_Ops\Signing\Miscellaneous Quantities\2782-12-70\030505.pptx PLOT DATE : 24-SEP-2014 PLOT BY : DOTKLM PLOT NAME : 030505_mq.pdf PLOT SCALE : 1:1

SIGN NO.	SIGN CODE & SIZE	SIGN TYPE	SIGN MESSAGE	TYPE II SIGN SIZE W [IN.] x H [IN.]	637.2210 SIGNS TYPE II REFLC H [SF]	637.2230 SIGNS TYPE II REFLC F [SF]	637.2215 SIGNS TYPE II REFLC H FOLDING [SF]	638.3000 REM SMALL SIGN SUP [EA]	634.0618 WOOD POSTS 4"X 6"X18' [EA]	634.0622 WOOD POSTS 4"X6"X22' [EA]	634.0814 TUBULAR STEEL POSTS 2"X2"X14' [EA]	638.2102 MOVE SIGNS TYPE II [EA]	643.0910 TRAFFIC CONTROL COVERING SIGNS TYPE I [EA]	643.0920 TRAFFIC CONTROL COVERING SIGNS TYPE II [EA]	MOUNT ON SAME POST AS SIGN #	REMARKS / NEW SIGN LOCATION	TYPE I SIGN SIZE W [FT.] x H [FT.]	637.1220 SIGNS TYPE I REFLC SH [SF]
328	JH-1(2S)	II	--	24 x 45	7.500	--	--	--	--	--	--	--	--	--	--	MOUNT ON UPRIGHT	-- x --	--
	D9-2		--	24 x 24													-- x --	--
	MB6-1		--	21 x 21													-- x --	--
329	--	--	--	-- x --	--	--	--	--	--	--	--	--	--	--	--	--	-- x --	--
330	*NOT USED*	II	--	-- x --	--	--	--	--	--	--	--	--	--	--	--	--	-- x --	--
331	W13-3(5)	II	--	48 x 60	--	20.000	--	--	2	--	--	--	--	--	--	--	-- x --	--
332	R3-51L(2S)	II	--	48 x 78	26.000	--	--	--	2	--	--	--	--	--	--	--	-- x --	--
333	R1-1F(3)	II	--	36 x 36	--	--	7.460	--	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE	-- x --	--
334	W3-8(5)	II	--	48 x 48	--	16.000	--	--	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE	-- x --	--
335	W9-1R(3)	II	--	36 x 36	--	9.000	--	--	1	--	--	--	--	--	--	--	-- x --	--
336	R10-65C(2S)	II	--	24 x 30	5.000	--	--	--	--	--	--	--	--	--	--	ON MAST ARM	-- x --	--
337	R10-65L(2S)	II	--	24 x 30	5.000	--	--	--	--	--	--	--	--	--	--	ON MAST ARM	-- x --	--
338	W4-2R(3)	II	--	36 x 36	--	9.000	--	--	--	--	--	--	--	--	--	MOUNT ON LIGHT POLE	-- x --	--
339	R10-65R(2S)	II	--	24 x 30	5.000	--	--	--	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE	-- x --	--
340	R10-6(2S)	II	--	24 x 36	6.000	--	--	--	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE	-- x --	--
341	R10-6(MOD)(2S)	II	--	24 x 36	6.000	--	--	--	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE	-- x --	--
342	W1-8(4)	II	--	30 x 36	--	7.500	--	--	1	--	--	--	--	--	--	4' MOUNTING HEIGHT	-- x --	--
343	W1-8(4)	II	--	30 x 36	--	7.500	--	--	1	--	--	--	--	--	--	4' MOUNTING HEIGHT	-- x --	--
344	W1-8(4)	II	--	30 x 36	--	7.500	--	--	1	--	--	--	--	--	--	4' MOUNTING HEIGHT	-- x --	--
345	W1-8(4)	II	--	30 x 36	--	7.500	--	--	1	--	--	--	--	--	--	4' MOUNTING HEIGHT	-- x --	--
346	W1-8(4)	II	--	30 x 36	--	7.500	--	--	1	--	--	--	--	--	--	4' MOUNTING HEIGHT	-- x --	--
347	E5-1B(5)	II	EXIT 51 A-B	96 x 84	56.000	--	--	--	--	2	--	--	--	--	--	--	-- x --	--
348	W5-54(2S)	II	--	18 x 18	--	2.250	--	--	--	--	--	--	--	--	347	--	-- x --	--
349	W5-54(2S)	II	--	18 x 18	--	2.250	--	--	--	--	--	--	--	--	347	--	-- x --	--
350	E5-1B(5)	II	EXIT 51 A	96 x 60	40.000	--	--	--	--	2	--	--	--	--	--	--	-- x --	--
351	W5-54(2S)	II	--	18 x 18	--	2.250	--	--	--	--	--	--	--	--	350	--	-- x --	--
352	W5-54(2S)	II	--	18 x 18	--	2.250	--	--	--	--	--	--	--	--	350	--	-- x --	--
353	W11-2(3)	II	--	36 x 36	--	9.000	--	--	1	--	--	--	--	--	--	--	-- x --	--
354	W16-9P(3)	II	--	30 x 18	--	3.750	--	--	--	--	--	--	--	--	353	--	-- x --	--
355	W3-3(3)	II	--	36 x 36	--	9.000	--	--	1	--	--	--	--	--	--	--	-- x --	--
356	W3-5(3)	II	--	36 x 36	--	9.000	--	--	1	--	--	--	--	--	--	--	-- x --	--
357	W3-3(3)	II	--	36 x 36	--	9.000	--	--	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE	-- x --	--
358	W1-6(2S)	II	--	48 x 24	--	8.000	--	--	2	--	--	--	--	--	--	--	-- x --	--
359	E5-1B(5)	II	EXIT 51 B	96 x 60	40.000	--	--	--	--	2	--	--	--	--	--	--	-- x --	--
360	W5-54(2S)	II	--	18 x 18	--	2.250	--	--	--	--	--	--	--	--	359	--	-- x --	--
361	W5-54(2S)	II	--	18 x 18	--	2.250	--	--	--	--	--	--	--	--	359	--	-- x --	--
362	W1-6(2S)	II	--	48 x 24	--	8.000	--	--	1	--	--	--	--	--	--	--	-- x --	--
363	W3-2(3)	II	--	36 x 36	--	9.000	--	--	1	--	--	--	--	--	--	--	-- x --	--
364	W3-2(3)	II	--	36 x 36	--	9.000	--	--	1	--	--	--	--	--	--	--	-- x --	--
365	R5-1A(3)	II	--	42 x 30	8.750	--	--	--	1	--	--	--	--	--	--	--	-- x --	--
366	R5-1A(3)	II	--	42 x 30	8.750	--	--	--	1	--	--	--	--	--	--	--	-- x --	--
367	R5-57(5)	II	--	36 x 36	9.000	--	--	--	--	--	--	--	--	--	--	MOUNT ON LIGHT POLE	-- x --	--

TYPE I & II PERMANENT SIGNING **CATEGORY 0010** **2782-12-70 USH 41/45**

SIGN NO.	SIGN CODE & SIZE	SIGN TYPE	SIGN MESSAGE	TYPE II SIGN SIZE W [IN.] x H [IN.]	637.2210 SIGNS TYPE II REFLC H [SF]	637.2230 SIGNS TYPE II REFLC F [SF]	637.2215 SIGNS TYPE II REFLC H FOLDING [SF]	638.3000 REM SMALL SIGN SUP [EA]	634.0618 WOOD POSTS 4"X 6"X18' [EA]	634.0622 WOOD POSTS 4"X6"X22' [EA]	634.0814 TUBULAR STEEL POSTS 2"X2"X14' [EA]	638.2102 MOVE SIGNS TYPE II [EA]	643.0910 TRAFFIC CONTROL COVERING SIGNS TYPE I [EA]	643.0920 TRAFFIC CONTROL COVERING SIGNS TYPE II [EA]	MOUNT ON SAME POST AS SIGN #	REMARKS / NEW SIGN LOCATION	TYPE I SIGN SIZE W [FT.] x H [FT.]	637.1220 SIGNS TYPE I REFLC SH [SF]
368	W1-8(4)	II	--	30 x 36	--	7.500	--	--	1	--	--	--	--	--	--	4' MOUNTING HEIGHT	-- x --	--
369	W1-8(4)	II	--	30 x 36	--	7.500	--	--	1	--	--	--	--	--	--	4' MOUNTING HEIGHT	-- x --	--
370	W1-8(4)	II	--	30 x 36	--	7.500	--	--	1	--	--	--	--	--	--	4' MOUNTING HEIGHT	-- x --	--
371	W1-8(4)	II	--	30 x 36	--	7.500	--	--	1	--	--	--	--	--	--	4' MOUNTING HEIGHT	-- x --	--
372	W11-2(3)	II	--	36 x 36	--	9.000	--	--	--	--	--	--	--	--	--	--	-- x --	--
373	W16-9P(3)	II	--	30 x 18	--	3.750	--	--	--	--	--	--	--	--	372	MOUNT ON LIGHT POLE	-- x --	--
374	R11-54F(2S)	II	--	48 x 30	--	--	10.000	--	2	--	--	--	--	--	--	MAIN ST/STH 100 - SHEET 1 OF 3	-- x --	--
375	R11-54F(2S)	II	--	48 x 30	--	--	10.000	--	2	--	--	--	--	--	--	MAIN ST/STH 100 - SHEET 2 OF 3	-- x --	--
376	R11-54F(2S)	II	--	48 x 30	--	--	10.000	--	2	--	--	--	--	--	--	MAIN ST/STH 100 - SHEET 2 OF 3	-- x --	--
377	R11-54F(2S)	II	--	48 x 30	--	--	10.000	--	2	--	--	--	--	--	--	MAIN ST/STH 100 - SHEET 2 OF 3	-- x --	--
378	R11-54F(2S)	II	--	48 x 30	--	--	10.000	--	2	--	--	--	--	--	--	MAIN ST/STH 100 - SHEET 3 OF 3	-- x --	--
379	*NOT USED*	--	--	-- x --	--	--	--	--	--	--	--	--	--	--	--	--	-- x --	--
380	R11-54F(2S)	II	--	48 x 30	--	--	10.000	--	2	--	--	--	--	--	--	SHEET 3 OF 16	-- x --	--
381	J2-2(2S)	II	--	48 x 57	19.000	--	--	--	2	--	--	--	--	1	--	SHEET 3 OF 16	-- x --	--
	MB3-3		--	24 x 12												COVER		
	M1-1		IH 41	24 x 24												COVER		
	MB5-1R		--	21 x 21												COVER		
	M3-3		--	24 x 12														
	M1-4		USH 45	24 x 24														
	M5-1R		--	21 x 21														
382	JV3-1(2S)	II	--	24 x 81	13.500	--	--	--	--	--	--	--	--	1	--	MOUNT ON SIGNAL POLE - SHEET 3 OF 16	-- x --	--
	MB3-3		--	24 x 12														
	M1-1		IH 41	24 x 24												COVER IH 41 SHIELD		
	M1-4		USH 45	24 x 24														
	MB6-1		--	21 x 21														
383	R5-1(2S)	II	--	30 x 30	6.250	--	--	--	--	--	1	--	--	--	--	SHEET 3 OF 16	-- x --	--
384	R5-1A	--	--	-- x --	--	--	--	--	--	--	--	1	--	--	218	3' MOUNTING HEIGHT - SHEET 3 OF 16	-- x --	--
385	D1-2	II	[A] WEST BEND	84 x 24	14.000	--	--	--	2	--	--	--	--	--	--	SHEET 4 OF 16	-- x --	--
			FOND DU LAC										--	--				
386	W11-2(2S)	II	--	30 x 30	--	6.250	--	--	1	--	--	--	--	--	--	SHEET 5 OF 16	-- x --	--
387	W16-7R(2S)	II	--	24 x 12	--	2.000	--	--	--	--	--	--	--	--	386	SHEET 5 OF 16	-- x --	--
388	R5-1A(2S)	II	--	36 x 24	6.000	--	--	--	--	--	--	--	--	--	259	3' MOUNT HEIGHT - SHEET 5 OF 16	-- x --	--
389	R5-1(3)	II	--	36 x 36	9.000	--	--	--	1	--	--	--	--	--	--	SHEET 5 OF 16	-- x --	--
390	R5-1A(2S)	II	--	36 x 24	6.000	--	--	--	--	--	--	--	--	--	389	3' MOUNT HEIGHT - SHEET 5 OF 16	-- x --	--
391	W11-2(2S)	II	--	30 x 30	--	6.250	--	--	1	--	--	--	--	--	--	SHEET 5 OF 16	-- x --	--
392	W16-7R(2S)	II	--	24 x 12	--	2.000	--	--	--	--	--	--	--	--	391	SHEET 5 OF 16	-- x --	--
393	D1-2	II	[A] MENOMONEE FALLS	78 x 42	22.750	--	--	--	2	--	--	--	--	--	--	SHEET 5 OF 16	-- x --	--
			[A] MILWAUKEE															
394	JV3-1(2S)	II	--	24 x 81	13.500	--	--	--	--	--	--	--	--	1	--	MOUNT ON SIGNAL POLE - SHEET 6 OF 16	-- x --	--
	MB3-1		--	24 x 12														
	M1-1		IH 41	24 x 24												COVER IH 41 SHIELD		
	M1-4		USH 45	24 x 24														
	MB6-1		--	21 x 21														

SHEET 6 OF 7

PROJECT NO:2782-12-70	HWY:USH 41/45	COUNTY:WAUKESHA	PERMANENT SIGNING QUANTITIES	SHEET:	E

TYPE I & II PERMANENT SIGNING **CATEGORY 0010** **2782-12-70 USH 41/45**

SIGN NO.	SIGN CODE & SIZE	SIGN TYPE	SIGN MESSAGE	TYPE II SIGN SIZE W [IN.] x H [IN.]	637.2210 SIGNS TYPE II REFLC H [SF]	637.2230 SIGNS TYPE II REFLC F [SF]	637.2215 SIGNS TYPE II REFLC H FOLDING [SF]	638.3000 REM SMALL SIGN SUP [EA]	634.0618 WOOD POSTS 4"X 6"X18' [EA]	634.0622 WOOD POSTS 4"X6"X22' [EA]	634.0814 TUBULAR STEEL POSTS 2"X2"X14' [EA]	638.2102 MOVE SIGNS TYPE II [EA]	643.0910 TRAFFIC CONTROL COVERING SIGNS TYPE I [EA]	643.0920 TRAFFIC CONTROL COVERING SIGNS TYPE II [EA]	MOUNT ON SAME POST AS SIGN #	REMARKS / NEW SIGN LOCATION	TYPE I SIGN SIZE W [FT.] x H [FT.]	637.1220 SIGNS TYPE I REFLC SH [SF]
395	*NOT USED*	--	--	-- x --	--	--	--	--	--	--	--	--	--	--	--	--	-- x --	--
396	*NOT USED*	--	--	-- x --	--	--	--	--	--	--	--	--	--	--	--	--	-- x --	--
397	R5-1(5)	II	--	48 x 48	16.000	--	--	--	1	--	--	--	--	--	--	SHEET 10 OF 19	-- x --	--
398	R5-1(3)	II	--	36 x 36	9.000	--	--	--	--	--	--	--	--	--	--	MOUNT ON UPRIGHT ABOVE R5-1A ANGLE SIGN TO NW - SHEET 10 OF 19	-- x --	--
399	D1-60	II	PILGRIM RD [A] SOUTH NORTH [A]	84 x 24	14.000	--	--	--	2	--	--	--	--	--	--	SHEET 10 OF 19	-- x --	--
400	*NOT USED*	--	--	-- x --	--	--	--	--	--	--	--	--	--	--	--	--	-- x --	--
401	W1-8(4)	II	--	30 x 36	--	7.500	--	--	1	--	--	--	--	--	--	4' MOUNT HEIGHT - SHEET 10	-- x --	--
402	W1-8(4)	II	--	30 x 36	--	7.500	--	--	1	--	--	--	--	--	--	4' MOUNT HEIGHT - SHEET 10	-- x --	--
403	R3-8WW(2S)	II	--	72 x 30	15.000	--	--	--	--	--	2	--	--	--	--	SHEET 9 OF 16	-- x --	--
404	R4-7(2S)	II	--	24 x 30	5.000	--	--	--	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE - SHEET 10 OF 1	-- x --	--
405	R5-1A(3)	II	--	42 x 30	8.750	--	--	--	--	--	--	--	--	--	323	BACK OF SIGN #323 - SHEET 10 OF 16	-- x --	--
406	R5-1A(3)	II	--	42 x 30	8.750	--	--	--	--	--	--	--	--	--	324	BACK OF SIGN #324 - SHEET 10 OF 16	-- x --	--
--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--	--	--	--	-- x --	--
TOTALS					1012.780	388.750	196.980	7	79	6	57	5	2	10				98.000

3

SHEET 7 OF 7

PROJECT NO:2782-12-70	HWY:USH 41/45	COUNTY:WAUKESHA	PERMANENT SIGNING QUANTITIES	SHEET:	E

SIGN NO.	SIGN CODE & SIZE	SIGN TYPE	SIGN MESSAGE	TYPE II SIGN SIZE W [IN.]	x	H [IN.]	637.2210 SIGNS TYPE II REFLC H [SF]	637.2220 SIGNS TYPE II REFLC SH [SF]	637.2230 SIGNS TYPE II REFLC F [SF]	637.2215 SIGNS TYPE II REFLC H FOLDING [SF]	638.3000 REM SMALL SIGN SUP [EA]	634.0618 WOOD POSTS 4"X 6"X18' [EA]	634.0814 TUBULAR STEEL POSTS 2"X2"X14' [EA]	638.2102 MOVE SIGNS TYPE II [EA]	MOUNT ON SAME POST AS SIGN #	REMARKS / NEW SIGN LOCATION
500	W11-2(2S)	II	--	30	x	30	--	--	6.250	--	--	--	1	--	--	--
501	W16-7L(2S)	II	--	24	x	12	--	--	2.000	--	--	--	--	--	500	--
502	R1-2(2S)	II	--	31	x	36	3.880	--	--	--	--	--	1	--	--	TEMPORARY FLAGS INCIDENTAL
503	R6-2R(2S)	II	--	24	x	30	5.000	--	--	--	--	--	--	--	502	--
504	R1-2(2S)	II	--	31	x	36	3.880	--	--	--	--	--	1	--	--	TEMPORARY FLAGS INCIDENTAL
505	R1-54(2S)	II	--	24	x	15	2.500	--	--	--	--	--	--	--	504	--
506	W11-2(2S)	II	--	30	x	30	--	--	6.250	--	--	--	1	--	--	--
507	W16-7L(2S)	II	--	24	x	12	--	--	2.000	--	--	--	--	--	506	--
508	R1-2(2S)	II	--	31	x	36	3.880	--	--	--	--	--	1	--	--	TEMPORARY FLAGS INCIDENTAL
509	R1-54(2S)	II	--	24	x	15	2.500	--	--	--	--	--	--	--	508	--
510	R1-2(2S)	II	--	31	x	36	3.880	--	--	--	--	--	1	--	--	TEMPORARY FLAGS INCIDENTAL
511	R6-2R(2S)	II	--	24	x	30	5.000	--	--	--	--	--	--	--	510	--
512	R1-2(2S)	II	--	31	x	36	3.880	--	--	--	--	--	1	--	--	TEMPORARY FLAGS INCIDENTAL
513	R1-54(2S)	II	--	24	x	15	2.500	--	--	--	--	--	--	--	512	--
514	W11-2(2S)	II	--	30	x	30	--	--	6.250	--	--	--	1	--	--	--
515	W16-7L(2S)	II	--	24	x	12	--	--	2.000	--	--	--	--	--	514	--
516	R1-2(2S)	II	--	31	x	36	3.880	--	--	--	--	--	1	--	--	TEMPORARY FLAGS INCIDENTAL
517	R6-2R(2S)	II	--	24	x	30	5.000	--	--	--	--	--	--	--	516	--
518	R6-1R(2S)	II	--	36	x	12	3.000	--	--	--	--	--	2	--	--	--
519	R6-1R(2S)	II	--	36	x	12	3.000	--	--	--	--	--	2	--	--	--
520	R6-1R(2S)	II	--	36	x	12	3.000	--	--	--	--	--	2	--	--	--
521	R6-1R(2S)	II	--	36	x	12	3.000	--	--	--	--	--	2	--	--	--
522	R6-4B(2S)	II	--	60	x	24	10.000	--	--	--	--	--	--	--	518	--
523	R6-4B(2S)	II	--	60	x	24	10.000	--	--	--	--	--	--	--	519	--
524	R6-4B(2S)	II	--	60	x	24	10.000	--	--	--	--	--	--	--	520	--
525	R6-4B(2S)	II	--	60	x	24	10.000	--	--	--	--	--	--	--	521	--
526	W2-6(2S)	II	--	30	x	30	--	--	6.250	--	--	--	1	--	--	--
527	W13-1(2S)	II	15 MPH	18	x	18	--	--	2.250	--	--	--	--	--	526	--
528	R4-7(2S)	II	--	24	x	30	5.000	--	--	--	--	--	1	--	--	--
529	W5-54(2S)	II	--	18	x	18	--	--	2.250	--	--	--	--	--	528	--
530	R5-1(2S)	II	--	30	x	30	6.250	--	--	--	--	--	1	--	--	--
531	R6-2R(2S)	II	--	24	x	30	5.000	--	--	--	--	--	1	--	--	--
532	R1-1(2S)	II	--	30	x	30	5.180	--	--	--	--	--	1	--	--	--
533	R3-53(2S)	II	--	24	x	30	5.000	--	--	--	--	--	1	--	--	--
534	W11-2(2S)	II	--	30	x	30	--	--	6.250	--	--	--	1	--	--	--

FILE NAME : N:\SPO\Operations\Traffic_Ops\Signing\Miscellaneous Quantities\2782-12-70\030506.pptx PLOT DATE : 24-SEP-2014 PLOT BY : DOTKLM PLOT NAME : 030506_mq.pdf PLOT SCALE : 1:1

SIGN NO.	SIGN CODE & SIZE	SIGN TYPE	SIGN MESSAGE	TYPE II SIGN SIZE W [IN.]	x	H [IN.]	637.2210 SIGNS TYPE II REFLC H [SF]	637.2220 SIGNS TYPE II REFLC SH [SF]	637.2230 SIGNS TYPE II REFLC F [SF]	637.2215 SIGNS TYPE II REFLC H FOLDING [SF]	638.3000 REM SMALL SIGN SUP [EA]	634.0618 WOOD POSTS 4"X 6"X18' [EA]	634.0814 TUBULAR STEEL POSTS 2"X2"X14' [EA]	638.2102 MOVE SIGNS TYPE II [EA]	MOUNT ON SAME POST AS SIGN #	REMARKS / NEW SIGN LOCATION
535	W16-7L(2S)	II	--	24	x	12	--	--	2.000	--	--	--	--	--	534	--
536	R1-2(2S)	II	--	31	x	36	3.880	--	--	--	--	--	1	--	--	TEMPORARY FLAGS INCIDENTAL
537	R6-2R(2S)	II	--	24	x	30	5.000	--	--	--	--	--	--	--	536	--
538	R1-2(2S)	II	--	31	x	36	3.880	--	--	--	--	--	1	--	--	--
539	R6-2R(2S)	II	--	24	x	30	5.000	--	--	--	--	--	--	--	538	TEMPORARY FLAGS INCIDENTAL
540	R4-7(2S)	II	--	24	x	30	5.000	--	--	--	--	--	1	--	--	--
541	W5-54(2S)	II	--	18	x	18	--	--	2.250	--	--	--	--	--	540	--
542	W12-1D(2S)	II	--	24	x	24	--	--	4.000	--	--	--	1	--	--	2' MOUNTING HEIGHT
543	W2-6(2S)	II	--	30	x	30	--	--	6.250	--	--	--	1	--	--	--
544	W13-1(2S)	II	15 MPH	18	x	18	--	--	2.250	--	--	--	--	--	543	
545	W11-2(2S)	II	--	30	x	30	--	--	6.250	--	--	--	1	--	--	SHEET 12 OF 16
546	W16-7L(2S)	II	--	24	x	12	--	--	2.000	--	--	--	--	--	545	SHEET 12 OF 16
547	W11-2(2S)	II	--	30	x	30	--	--	6.250	--	--	--	1	--	--	SHEET 12 OF 16
548	W16-7L(2S)	II	--	24	x	12	--	--	2.000	--	--	--	--	--	547	SHEET 12 OF 16
549	R4-7(2S)	II	--	24	x	30	5.000	--	--	--	--	--	1	--	--	SHEET 12 OF 16
550	W11-2(2S)	II	--	30	x	30	--	--	6.250	--	--	--	1	--	--	SHEET 12 OF 16
551	W16-7L(2S)	II	--	24	x	12	--	--	2.000	--	--	--	--	--	550	SHEET 12 OF 16
552	R5-1(2S)	II	--	30	x	30	6.250	--	--	--	--	--	1	--	--	SHEET 13 OF 16
553	W3-2(2S)	II	--	36	x	36	--	--	9.000	--	--	--	1	--	--	SHEET 13 OF 16
554	W11-2(2S)	II	--	30	x	30	--	--	6.250	--	--	--	1	--	--	SHEET 13 OF 16
555	W16-7L(2S)	II	--	24	x	12	--	--	2.000	--	--	--	--	--	554	SHEET 13 OF 16
556	W3-2(2S)	II	--	36	x	36	--	--	9.000	--	--	--	1	--	--	SHEET 14 OF 16
557	R5-1(2S)	II	--	30	x	30	6.250	--	--	--	--	--	1	--	--	SHEET 14 OF 16
558	R11-2(2S)	II	--	48	x	30	10.000	--	--	--	--	--	--	--	--	SHEET 12 OF 16
559	W5-56(2S)	II	--	18	x	18	--	2.250	--	--	--	--	1	--	--	4' MOUNTING HEIGHT - SHEET 12 OF 16
560	W5-56(2S)	II	--	18	x	18	--	2.250	--	--	--	--	1	--	--	4' MOUNTING HEIGHT - SHEET 12 OF 16
561	W5-56(2S)	II	--	18	x	18	--	2.250	--	--	--	--	1	--	--	4' MOUNTING HEIGHT - SHEET 12 OF 16
562	D1-2	II	MEGAL COURT [A] TO PILGRIM RD [A]	78	x	30	16.250	--	--	--	--	--	2	--	--	SHEET 12 OF 16

3

SIGN NO.	SIGN CODE & SIZE	SIGN TYPE	SIGN MESSAGE	TYPE II SIGN SIZE W [IN.]	x	H [IN.]	637.2210 SIGNS TYPE II REFLC H [SF]	637.2220 SIGNS TYPE II REFLC SH [SF]	637.2230 SIGNS TYPE II REFLC F [SF]	637.2215 SIGNS TYPE II REFLC H FOLDING [SF]	638.3000 REM SMALL SIGN SUP [EA]	634.0618 WOOD POSTS 4"X 6"X18' [EA]	634.0814 TUBULAR STEEL POSTS 2"X2"X14' [EA]	638.2102 MOVE SIGNS TYPE II [EA]	MOUNT ON SAME POST AS SIGN #	REMARKS / NEW SIGN LOCATION
563	D1-1	II	HARLEY DAVIDSON [A] ENTRANCE	54	x	36	13.500	--	--	--	--	--	2	--	--	SHEET 12 OF 16
564	D1-2	II	WACKER-NEUSON [A] ENTRANCE HARLEY-DAVIDSON LOADING DOCK [A]	78	x	48	26.000	--	--	--	--	--	2	--	--	SHEET 12 OF 16
565	D1-1	II	HARLEY-DAVIDSON LOADING DOCK [A]	60	x	30	12.500	--	--	--	--	--	2	--	--	SHEET 14 OF 16
566	R5-1A(2S)	II	--	36	x	24	6.000	--	--	--	--	--	1	--	--	SHEET 14 OF 16
567	R5-1A(2S)	II	--	36	x	24	6.000	--	--	--	--	--	1	--	--	SHEET 14 OF 16
568	R5-1(2S)	II	--	30	x	30	6.250	--	--	--	--	--	1	--	--	SHEET 14 OF 16
--	--	--	--	--	x	--	--	--	--	--	--	--	--	--	--	--
TOTALS							260.970	6.750	109.500	0.000	0	0	52	0		

3

SHEET 3 OF 3

PROJECT NO:2720-10-70	HWY:USH 41/45	COUNTY:WAUKESHA	PERMANENT SIGNING QUANTITIES	SHEET:	E

3

PERMANENT BARRICADES 2720-10-70 USH 41/45

LOCATION	PERMANENT BARRICADES TYPE III EA SPV.0060.0006
MEGAL COURT - ROUNDABOUT	1
TOTAL	1

3

SHEET 1 OF 1

PROJECT NO:2720-10-70	HWY:USH 41/45	COUNTY:WAUKESHA	MISCELLANEOUS QUANTITIES	SHEET:	E

OVERHEAD SIGN SUPPORTS - MISC QUANTITIES		
LOCATION		OVERHEAD SIGN
		SUPPORT STRUCTURE
		S-67-960
		L.S.
		641.8100.0001
Pilgrim Road NB at Main street		1
TOTAL		1

SHEET: 1 OF 1

PROJECT NO:2782-11-70	HWYUSH 41:	COUNTY: WAUKESHA	MISCELLANEOUS QUANTITIES – OVERHEAD SIGN SUPPORTS	SHEET:	E

OVERHEAD SIGN SUPPORTS - MISC QUANTITIES

LOCATION	OVERHEAD SIGN SUPPORT STRUCTURE S-67-961 L.S. 641.8100.0002	OVERHEAD SIGN SUPPORT STRUCTURE S-67-962 L.S. 641.8100.0003
PILGRIM ROAD SB AT USH 45 SB DUAL LEFT	1	
USH 41 SB EXIT RAMP AT PILGRIM ROAD		1
TOTAL	1	1

SHEET 1 OF 1

PROJECT NO:2720-12-70	HWY:USH 41/45	COUNTY:WAUKESHA	MISCELLANEOUS QUANTITIES – OVERHEAD SIGN SUPPORTS	SHEET:	E

RAMP CLOSURE GATES

LOCATION	CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH 652.0225 LF	PULL BOX STEEL 24X36-INCH 653.0135 EACH	CONCRETE BASE TYPE 5 654.0105 EACH	CONCRETE CONTROL CABINET BASE TYPE 10 654.0220 EACH	PEDESTAL BASES 657.0100 EACH	TRANSFORMER BASE BREAKAWAY 11 1/2-INCH BOLT CIRCLE 657.0255 EACH	TRAFFIC SIGNAL STANDARDS ALIUMINUM 15-FT 657.0425 EACH	RAMP CLOSURE GATE SOLAR 28-FT 662.2028.S EACH	RAMP CLOSURE GATE SOLAR 32-FT 662.2032.S EACH	RAMP CLOSURE GATE SOLAR 37-FT 662.2037.S EACH
PILGRIM ROAD										
PILGRIM RD NB TO USH 41 SB	30	1	1	1	1	1	1	--	1	--
PILGRIM RD NB TO USH 41 NB	30	1	1	1	1	1	1	--	1	--
PILGRIM RD SB TO USH 41 NB	30	1	1	1	1	1	1	--	--	1
MAIN STREET										
MAIN ST EB TO USH 41 SB	30	1	1	1	1	1	1	1	--	--
MAIN ST WB TO USH 41 SB	30	1	1	1	1	1	1	1	--	--
MAIN ST EB TO USH 41 NB	30	1	1	1	1	1	1	--	1	--
MAIN ST WB TO USH 41 NB	30	1	1	1	1	1	1	1	--	--
TOTALS	210	7	7	7	7	7	7	3	3	1

NOTE:
* QUANTITIES WERE INCLUDED IN SIGNAL PLANS.

TRAFFIC CONTROL ITEMS TO BE USED AT MAIN STREET FOR RAMP CLOSURE GATE CONSTRUCTION

	TRAFFIC CONTROL *						
		BARRICADES	WARNING LIGHTS			ARROWS	
LOCATION	DRUMS 643.0300 DAYS	TYPE III 643.0420 DAYS	TYPE A 643.0705 DAYS	TYPE C 643.0715 DAYS	SIGNS 643.0900 DAYS	BOARD 643.0800 DAYS	REMARKS
MAIN ST							
EB	175	7	14	63	70	7	RIGHT LANE CLOSURE
WB	175	7	14	63	70	7	RIGHT LANE CLOSURE
TOTALS	350	14	28	126	140	14	

NOTE:
TEMPORARY OUTSIDE SINGLE LANE CLOSURE DURING OFF PEAK HOURS IS REQUIRED (SEE SDD).
* ADDITIONAL QUANTITIES SHOWN ELSEWHERE IN PLANS.

3

REMOVING CONCRETE BASES

EXISTING BASE NO.	STATION	LOCATION	204.0195 REMOVING CONCRETE BASES EACH
CB1	205+61.3	99.7' LT	1
SB2	205+31.7	27.2' RT	1
SB4	205+36.1	64.3' LT	1
SB6	204+43.7	69.4' LT	1
SB8	204+38.9	24.4' RT	1
		*** TOTAL	5

*** QUANTITIES LISTED ELSEWHERE ON PLAN

PULL BOXES STEEL 24X42-INCH

PULL BOX NO.	STATION	LOCATION	653.0140 PULL BOXES STEEL 24X42-INCH EACH
PB1	205+77.8	89.1' LT	1
PB2	204+41.9	64.8' LT	1
PB3	205+78.3	5.2' LT	1
PB4	205+78.7	50.3' RT	1
PB5	205+54.3	76.4' RT	1
PB6	205+33.6	52.6' RT	1
PB7	204+49.9	77.1' RT	1
PB8	204+25.5	77.4' RT	1
PB9	204+35.2	44.2' RT	1
PB10	203+91.3	56.1' RT	1
PB11	203+91.3	5.5' LT	1
PB12	203+91.3	26.5' LT	1
PB13	203+91.3	63.6' LT	1
PB14	204+22.1	106.4' LT	1
PB15	204+44.3	79.2' LT	1
PB16	204+96.7	106.9' LT	1
PB17	205+51.5	107.2' LT	1
		*** TOTALS	17

* FINAL LOCATION TO BE DETERMINED BY THE ENGINEER IN THE FIELD
*** ADDITIONAL QUANTITIES SHOWN ELSEWHERE

CONCRETE BASES TYPE 1
CONCRETE BASES TYPE 2
CONCRETE CONTROL CABINET BASE TYPE 9 SPECIAL MODIFIED

BASE NO.	STATION	LOCATION	654.0101 CONCRETE BASES TYPE 1 EACH	654.0102 CONCRETE BASES TYPE 2 EACH	SPV.0060.0100 CONCRETE CONTROL CABINET BASE TYPE 9 SPECIAL MODIFIED EACH
CB1	205+68.0	105.5' LT			1
SB1	205+38.0	62.0' LT	1		
SB2	205+31.5	70.4' LT		1	
SB3	205+70.2	5.5' LT		1	
SB4	205+33.6	48.2' RT	1		
SB5	205+40.0	41.3' RT		1	
SB6	204+80.2	70.1' RT		1	
SB7	204+38.0	42.1' RT	1		
SB8	204+44.9	49.0' RT		1	
SB9	204+29.3	5.5' LT	1		
SB10	203+86.1	26.5' LT		1	
SB11	204+43.6	71.8' LT	1		
SB12	204+38.0	62.2' LT		1	
SB13	204+96.4	101.1' LT		1	
		*** TOTALS	5	8	1

* FINAL LOCATION TO BE DETERMINED BY THE ENGINEER IN THE FIELD
*** ADDITIONAL QUANTITIES SHOWN ELSEWHERE

CABLE TRAFFIC SIGNAL 5-14 AWG
CABLE TRAFFIC SIGNAL 7-14 AWG
CABLE TRAFFIC SIGNAL 12-14 AWG

FROM	TO	655.0230 CABLE TRAFFIC SIGNAL 5-14 AWG L.F.	655.0240 CABLE TRAFFIC SIGNAL 7-14 AWG L.F.	655.0260 CABLE TRAFFIC SIGNAL 12-14 AWG L.F.
CB1	SB1			88
SB1	HEAD 4		22	
SB1	HEAD 6	21		
SB1	HEAD 21			
CB1	SB2			95
SB2	HEAD 12	45		
SB2	HEAD 13	19		
SB2	HEAD 28	18		
CB1	SB3			129
SB3	HEAD 5		22	
CB1	SB4			263
SB4	HEAD 11	19		
SB4	HEAD 19	19		
SB4	HEAD 23	18		
CB1	SB5			272
SB5	HEAD 2	50		
SB5	HEAD 3	19		
SB5	HEAD 22	18		
CB1	SB6			318
SB6	HEAD 20	19		
CB1	SB7			419
SB7	HEAD 1	19		
SB7	HEAD 9	19		
SB7	HEAD 25	18		
CB1	SB8			426
SB8	HEAD 17	45		
SB8	HEAD 18	19		
SB8	HEAD 24	18		
CB1	SB9			347
SB9	HEAD 10	19		
CB1	SB11			225
SB11	HEAD 14	19		
SB11	HEAD 16	19		
SB11	HEAD 27	18		
CB1	SB12			235
SB12	HEAD 7	45		
SB12	HEAD 8	19		
SB12	HEAD 26	18		
CB1	SB13			101
SB13	HEAD 15	19		
	*** TOTALS	579	44	2918

*** ADDITIONAL QUANTITIES SHOWN ELSEWHERE

CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH
CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH

FROM	TO	652.0225 CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH L.F.	652.0235 CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH L.F.
CB1	PB1		51
PB1	PB2		43
PB1	PB3		86
PB3	PB4		110
PB4	PB5		72
PB5	PB6		32
PB5	PB7		160
PB7	PB8		110
PB8	PB9		35
PB8	PB10		82
PB10	PB11		124
PB11	PB12		42
PB12	PB13		74
PB13	PB14		114
PB14	PB15		35
PB14	PB16		150
PB16	PB17		110
PB17	CB1		51
PB2	SB1	5	
PB2	SB2	12	
PB3	SB3	5	
PB6	SB4	4	
PB6	SB5	13	
PB7	SB6	5	
PB9	SB7	4	
PB9	SB8	11	
PB11	SB9	38	
PB12	SB10	5	
PB15	SB11	8	
PB15	SB12	18	
PB16	SB13	6	
	*** TOTALS	134	1481

*** ADDITIONAL QUANTITIES SHOWN ELSEWHERE

REMOVING PULL BOXES

PULL BOX NO.	STATION	LOCATION	653.0905 REMOVING PULL BOXES EACH
PB1	411+24.0	14.1' LT	1
PB2	410+33.0	7.0' LT	1
PB3	409+76.4	8.3' LT	1
PB4	409+26.9	7.3' LT	1
PB5	409+28.2	58.0' LT	1
PB6	205+49.9	14.5' LT	1
PB7	205+87.7	16.6' LT	1
PB8	206+59.3	20.7' LT	1
PB9	207+36.0	25.1' LT	1
PB10	208+39.5	64.8' LT	1
PB11	408+23.3	18.7' LT	1
PB12	407+79.6	18.1' LT	1
PB13	407+30.9	16.0' LT	1
PB14	406+77.9	6.5' LT	1
PB15	408+21.9	31.6' RT	1
PB16	204+36.3	26.6' LT	1
PB17	204+06.5	25.1' LT	1
PB18	203+05.7	12.4' LT	1
PB19	204+36.7	27.1' RT	1
PB20	406+77.2	0.9' LT	1
PB21	407+33.9	10.9' LT	1
PB22	407+79.5	11.6' LT	1
PB23	205+88.2	22.0' LT	1
PB24	206+57.7	25.5' LT	1
PB25	207+36.0	30.3' LT	1
PB26	409+76.6	14.6' LT	1
PB27	410+32.9	12.8' LT	1
PB28	411+24.3	25.6' LT	1
PB29	203+05.7	7.7' LT	1
PB30	204+06.5	21.3' LT	1
		*** TOTAL	30

*** ADDITIONAL QUANTITIES SHOWN ELSEWHERE

TRAFFIC SIGNAL QUANTITIES
PILGRIM ROAD (CTH YY) &
STH 74 (MAIN STREET)
ALL ITEMS CATEGORY 0020
PAGE 1 OF 3

CABLE TYPE UF 2-10 AWG
ELECTRICAL WIRE LIGHTING 12 AWG

		655.0315 CABLE TYPE UF 2-10 AWG (W/ GROUND) L.F.	655.0610 ELECTRICAL WIRE LIGHTING 12 AWG L.F.
CB1	SB3	129	
SB3	LUMIN		288
SB3	SB6	213	
SB6	LUMIN		288
CB1	SB13	101	
SB13	LUMIN		288
SB13	SB10	212	
SB10	LUMIN		288
*** TOTALS		655	1152

*** ADDITIONAL QUANTITIES SHOWN ELSEWHERE

ELECTRICAL WIRE TRAFFIC SIGNALS 10 AWG

FROM	TO	655.0515 L.F.
CB1	SB1	88
SB1	SB2	31
SB2	SB3	170
SB3	SB4	164
SB4	SB5	31
SB5	SB6	156
SB6	SB7	125
SB7	SB8	29
SB8	SB9	219
SB9	SB10	84
SB10	SB11	174
SB11	SB12	40
SB12	SB13	160
SB13	CB1	101
PB1	CB1	30
PB2	SB1	15
PB3	SB3	15
PB4	SB3	76
PB5	SB4	53
PB6	SB4	15
PB7	SB6	15
PB8	SB7	55
PB9	SB7	14
PB10	SB7	102
PB11	SB9	48
PB12	SB10	15
PB13	SB10	58
PB14	SB11	59
PB15	SB11	18
PB16	SB13	16
PB17	CB1	30
*** TOTAL		2206

*** ADDITIONAL QUANTITIES SHOWN ELSEWHERE

ELECTRICAL SERVICE METER BREAKER PEDESTAL
INTERSECTION OF PILGRIM ROAD & STH 74

BASE NO.	656.0200.0001 L.S.
CB1	1
TOTAL	1

* FINAL LOCATION TO BE DETERMINED BY THE ENGINEER IN THE FIELD

LOCATION	658.5069.0001 SIGNAL MOUNTING HARDWARE L.S.
PILGRIM ROAD & STH 74	1
TOTAL	1

LOCATION	SPV.0105.0100 REMOVE TRAFFIC SIGNALS INTERSECTION OF PILGRIM ROAD & STH 74 L.S.
PILGRIM ROAD & STH 74	1
TOTAL	1

TRAFFIC SIGNAL FACE 3-12 INCH VERTICAL
TRAFFIC SIGNAL FACE 4-12 INCH VERTICAL
TRAFFIC SIGNAL FACE 3-12 INCH HORIZONTAL
BACKPLATES SIGNAL FACE 3 SECTION 12-INCH
BACKPLATES SIGNAL FACE 4 SECTION 12-INCH
PEDESTRIAN SIGNAL FACE 16-INCH
LED MODULES 12-INCH RED BALL
LED MODULES 12-INCH YELLOW BALL
LED MODULES 12-INCH GREEN BALL
LED MODULES 12-INCH RED ARROW
LED MODULES 12-INCH YELLOW ARROW
LED MODULES 12-INCH GREEN ARROW
LED MODULES PEDESTRIAN COUNTDOWN TIMER 16-INCH

SIGNAL HEAD NO.	SIGNAL BASE NO.	658.0110 TRAFFIC SIGNAL FACE 3-12 INCH VERTICAL EACH	658.0115 TRAFFIC SIGNAL FACE 4-12 INCH VERTICAL EACH	658.0155 TRAFFIC SIGNAL FACE 3-12 INCH HORIZONTAL EACH	658.0215 BACKPLATES SIGNAL FACE 3 SECTION 12-INCH EACH	658.0220 BACKPLATES SIGNAL FACE 4 SECTION 12-INCH EACH	658.0416 PEDESTRIAN SIGNAL FACE 16-INCH EACH	658.0600 LED MODULES 12-INCH RED BALL EACH	658.0605 LED MODULES 12-INCH YELLOW BALL EACH	658.0610 LED MODULES 12-INCH GREEN BALL EACH	658.0615 LED MODULES 12-INCH RED ARROW EACH	658.0620 LED MODULES 12-INCH YELLOW ARROW EACH	658.0625 LED MODULES 12-INCH GREEN ARROW EACH	658.0635 LED MODULES PEDESTRIAN COUNTDOWN TIMER 16-INCH EACH
1	SB7	1			1			1	1	1				
2	SB5			1	1			1	1	1				
3	SB5	1			1			1	1	1				
4	SB1		1			1					1	2	1	
5	SB3		1			1					1	2	1	
6	SB1	1			1			1	1	1				
7	SB12			1	1			1	1	1				
8	SB12	1			1			1	1	1				
9	SB7	1			1						1	1	1	
10	SB9	1			1						1	1	1	
11	SB4	1			1			1	1	1				
12	SB2			1	1			1	1	1				
13	SB2	1			1			1	1	1				
14	SB11	1			1						1	1	1	
15	SB13	1			1						1	1	1	
16	SB11	1			1			1	1	1				
17	SB8			1	1			1	1	1				
18	SB8	1			1			1	1	1				
19	SB4	1			1						1	1	1	
20	SB6	1			1						1	1	1	
21	SB1						1							1
22	SB5						1							1
23	SB4						1							1
24	SB8						1							1
25	SB7						1							1
26	SB12						1							1
27	SB11						1							1
28	SB2						1							1
*** TOTALS		14	2	4	18	2	8	12	12	12	8	10	8	8

*** ADDITIONAL QUANTITIES SHOWN ELSEWHERE

TRAFFIC SIGNAL QUANTITIES
PILGRIM ROAD (CTH YY) &
STH 74 (MAIN STREET)
ALL ITEMS CATEGORY 0020
PAGE 2 OF 3

PEDESTAL BASES BLACK
TRANSFORMER BASES TB6-9 SPECIAL
POLES TYPE 2 BLACK
POLES TYPE 4 BLACK
POLES TYPE 5 ALUMINUM BLACK
TRAFFIC SIGNAL STANDARDS ALUMINUM 13-FT BLACK
TRAFFIC SIGNAL STANDARDS ALUMINUM 15-FT BLACK
TROMBONE ARMS 20-FT BLACK
TROMBONE ARMS 25-FT BLACK
LUMINAIRE ARMS SINGLE MEMBER 4 1/2-INCH CLAMP 6-FT BLACK
LUMINAIRE ARMS SINGLE MEMBER 4-INCH CLAMP 6-FT BLACK
PEDESTRIAN PUSH BUTTONS
LUMINAIRES UTILITY LED C BLACK

SIGNAL BASE NO.	SVP.0060.0101 PEDESTAL BASES BLACK EACH	SVP.0060.0112 TRANSFORMER BASES TB6-9 SPECIAL EACH	SVP.0060.0102 POLES TYPE 2 BLACK EACH	SVP.0060.0104 POLES TYPE 4 BLACK EACH	SVP.0060.0105 POLES TYPE 5 ALUMINUM BLACK EACH	SVP.0060.0107 TRAFFIC SIGNAL STANDARDS ALUMINUM 13-FT BLACK EACH	SVP.0060.0108 TRAFFIC SIGNAL STANDARDS ALUMINUM 15-FT BLACK EACH	SVP.0060.0109 TROMBONE ARMS 20-FT BLACK EACH	SVP.0060.0110 TROMBONE ARMS 25-FT BLACK EACH	SVP.0060.0111 LUMINAIRE ARMS SINGLE MEMBER 4 1/2 INCH CLAMP 6-FT BLACK EACH	SVP.0060.0123 LUMINAIRE ARMS SINGLE MEMBER 4 INCH CLAMP 6-FT BLACK EACH	658.0500 PEDESTRIAN PUSH BUTTONS EACH	SPV.0060.0119 LUMINAIRES UTILITY LED C BLACK EACH
SB1	1						1					1	
SB2		1	1					1				1	
SB3		1		1						2			2
SB4	1					1						1	
SB5		1	1						1			1	
SB6		1		1						2			2
SB7	1					1						1	
SB8		1	1					1				1	
SB9	1					1							
SB10		1			1						2		2
SB11	1					1						1	
SB12		1	1					1				1	
SB13		1		1						2			2
*** TOTALS	5	8	4	3	1	4	1	3	1	6	2	8	8

*** ADDITIONAL QUANTITIES SHOWN ELSEWHERE

LOCATION	661.0200.0001 TEMPORARY TRAFFIC SIGNALS FOR INTERSECTIONS L.S.	661.0300 GENERATORS DAYS	SPV.0105.0101 TEMPORARY VEHICLE DETECTION SYSTEM L.S.
PILGRIM ROAD & STH 74	1	2	1
*** TOTALS	1	2	1

*** ADDITIONAL QUANTITIES SHOWN ELSEWHERE

LOCATION	SPV.0060.0113 TRAFFIC SIGNAL CABINET EACH	SPV.0060.0114 BATTERY BACKUP SYSTEM EACH	SPV.0060.0115 VIDEO DETECTION MONITOR EACH	SPV.0105.0103 VEHICULAR VIDEO DETECTION SYSTEM L.S.	SPV.0105.0106 INSTALL FIBER OPTIC COMMUNICATIONS IN CABINET L.S.
PILGRIM ROAD & STH 74	1	1	1	1	1
TOTAL	1	1	1	1	1

TRAFFIC SIGNAL QUANTITIES
PILGRIM ROAD (CTH YY) &
STH 74 (MAIN STREET)
ALL ITEMS CATEGORY 0020
PAGE 3 OF 3

3

CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH
CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH
CONDUIT SPECIAL 3-INCH

FROM	TO	652.0225 CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH L.F.	652.0235 CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH L.F.	652.0615 CONDUIT SPECIAL 3-INCH L.F.
CB1	PB1		45	
PB1	PB2		64	
PB2	PB3		54	
PB3	PB4		128	
PB4	PB5			128
PB5	PB6			88
PB6	PB7		86	
PB7	PB8		98	
PB8	PB9		86	
PB9	PB10		94	
PB10	PB11		96	
PB11	PB12		42	
PB12	PB13		94	
PB13	PB14		88	
PB14	CB1		48	
PB1	SB1	17		
PB2	SB2	4		
PB3	SB3	32		
PB4	SB4	17		
PB5	SB5	4		
PB6	SB6	14		
PB7	SB7	7		
PB8	SB8	4		
PB9	SB9	6		
PB10	SB10	23		
PB11	SB11	23		
PB12	SB12	5		
PB14	SB13	15		
PB14	SB14	5		
	*** TOTALS	176	1023	216

*** ADDITIONAL QUANTITIES SHOWN ELSEWHERE

PULL BOXES STEEL 24X42-INCH

PULL BOX NO.	STATION	LOCATION	653.0140 PULL BOXES STEEL 24X42-INCH EACH
PB1	703+27.0	19.0' RT	1
PB2	703+27.0	15.8' LT	1
PB3	703+27.0	42.3' LT	1
PB4	228+32.0	70.3' LT	1
PB5	228+32.0	5.9' LT	1
PB6	228+32.0	37.9' RT	1
PB7	227+95.6	60.3' RT	1
PB8	227+46.6	60.3' RT	1
PB9	227+03.5	60.3' RT	1
PB10	226+60.3	42.0' RT	1
PB11	226+60.3	5.5' LT	1
PB12	226+60.3	26.7' LT	1
PB13	226+60.3	74.0' LT	1
PB14	227+02.6	85.0' LT	1
	*** TOTALS		14

* FINAL LOCATION TO BE DETERMINED BY THE ENGINEER IN THE FIELD
*** ADDITIONAL QUANTITIES SHOWN ELSEWHERE

CONCRETE BASES TYPE 1
CONCRETE BASES TYPE 2
CONCRETE CONTROL CABINET BASE TYPE 9 SPECIAL

BASE NO.	STATION	LOCATION	654.0101 CONCRETE BASES TYPE 1 EACH	654.0102 CONCRETE BASES TYPE 2 EACH	654.0217 CONCRETE CONTROL CABINET BASE TYPE 9 SPECIAL EACH
CB1	227+17.0	104.1' LT			1
SB1	227+24.6	97.1' LT	1		
SB2	227+62.3	109.7' LT	1		
SB3	227+98.2	83.5' LT		1	
SB4	228+15.6	72.5' LT	1		
SB5	228+27.6	5.9' LT		1	
SB6	228+18.2	41.4' RT		1	
SB7	227+99.9	54.8' RT	1		
SB8	227+46.4	56.2' RT		1	
SB9	226+99.0	56.4' RT		1	
SB10	226+86.4	45.9' RT	1		
SB11	226+86.0	5.5' LT		1	
SB12	226+65.4	26.5' LT		1	
SB13	226+83.5	75.0' LT	1		
SB14	227+07.5	83.5' LT	1		
		*** TOTALS	7	7	1

* FINAL LOCATION TO BE DETERMINED BY THE ENGINEER IN THE FIELD
*** ADDITIONAL QUANTITIES SHOWN ELSEWHERE

CABLE TRAFFIC SIGNAL 5-14 AWG
CABLE TRAFFIC SIGNAL 7-14 AWG
CABLE TRAFFIC SIGNAL 12-14 AWG

FROM	TO	655.0230 CABLE TRAFFIC SIGNAL 5-14 AWG L.F.	655.0240 CABLE TRAFFIC SIGNAL 7-14 AWG L.F.	655.0260 CABLE TRAFFIC SIGNAL 12-14 AWG L.F.
CB1	SB1			49
SB1	HEAD 14	21		
SB1	HEAD 16	21		
CB1	SB2			77
SB2	HEAD 15	21		
CB1	SB3			138
SB3	HEAD 12	45		
SB3	HEAD 13	19		
SB3	HEAD 22	18		
CB1	SB4			193
SB4	HEAD 4		22	
SB4	HEAD 6	21		
SB4	HEAD 23	18		
CB1	SB5			250
SB5	HEAD 5		22	
CB1	SB6			310
SB6	HEAD 2	50		
SB6	HEAD 3	19		
SB6	HEAD 24	18		
CB1	SB7			352
SB7	HEAD 11	21		
SB7	HEAD 19	21		
SB7	HEAD 25	18		
CB1	SB8			331
SB8	HEAD 20	21		
CB1	SB9			284
SB9	HEAD 17	50		
SB9	HEAD 18	19		
SB9	HEAD 26	18		
CB1	SB10			248
SB10	HEAD 1	21		
SB10	HEAD 9		22	
SB10	HEAD 27	18		
CB1	SB11			194
SB11	HEAD 10		22	
CB1	SB12			149
SB12	HEAD 7	45		
CB1	SB13			56
SB13	HEAD 8	21		
SB13	HEAD 28	18		
CB1	SB14			46
SB14	HEAD 21	18		
	*** TOTALS	580	88	2677

*** ADDITIONAL QUANTITIES SHOWN ELSEWHERE

TRAFFIC SIGNAL QUANTITIES
PILGRIM ROAD (CTH YY) &
MEGAL DRIVE/ MEGAL COURT
ALL ITEMS CATEGORY 0020
PAGE 1 OF 3

CABLE TYPE UF 2-10 AWG
ELECTRICAL WIRE LIGHTING 12 AWG

		655.0315 CABLE TYPE UF 2-10 AWG (W/ GROUND) L.F.	655.0610 ELECTRICAL WIRE LIGHTING 12 AWG L.F.
CB1	SB3	138	
SB3	LUMIN		117
SB3	SB5	190	
SB5	LUMIN		288
CB1	SB12	149	
SB12	LUMIN		288
SB12	SB8	206	
SB8	LUMIN		288
	*** TOTALS	683	981

*** ADDITIONAL QUANTITIES SHOWN ELSEWHERE

ELECTRICAL WIRE TRAFFIC SIGNALS 10 AWG

FROM	TO	655.0515 L.F.
CB1	SB1	49
SB1	SB2	76
SB2	SB3	83
SB3	SB4	133
SB4	SB5	105
SB5	SB6	82
SB6	SB7	84
SB7	SB8	80
SB8	SB9	79
SB9	SB10	96
SB10	SB11	112
SB11	SB12	69
SB12	SB13	134
SB13	SB14	34
SB14	CB1	46
PB1	SB1	27
PB2	SB2	14
PB3	SB3	42
PB4	SB4	27
PB5	SB5	14
PB6	SB6	24
PB7	SB7	17
PB8	SB8	14
PB9	SB9	16
PB10	SB10	33
PB11	SB11	33
PB12	SB12	15
PB13	SB14	75
PB14	SB14	25
	*** TOTAL	1638

*** ADDITIONAL QUANTITIES SHOWN ELSEWHERE

ELECTRICAL SERVICE METER BREAKER PEDESTAL
INTERSECTION OF PILGRIM ROAD & MEGAL DRIVE

BASE NO.	656.0200.0002 L.S.
CB1	1
TOTAL	1

* FINAL LOCATION TO BE DETERMINED BY THE ENGINEER IN THE FIELD

LOCATION	658.5069.0002 SIGNAL MOUNTING HARDWARE L.S.
PILGRIM ROAD & MEGAL DRIVE	1
TOTAL	1

TRAFFIC SIGNAL FACE 3-12 INCH VERTICAL
TRAFFIC SIGNAL FACE 4-12 INCH VERTICAL
TRAFFIC SIGNAL FACE 3-12 INCH HORIZONTAL
BACKPLATES SIGNAL FACE 3 SECTION 12-INCH
BACKPLATES SIGNAL FACE 4 SECTION 12-INCH
PEDESTRIAN SIGNAL FACE 16-INCH
LED MODULES 12-INCH RED BALL
LED MODULES 12-INCH YELLOW BALL
LED MODULES 12-INCH GREEN BALL
LED MODULES 12-INCH RED ARROW
LED MODULES 12-INCH YELLOW ARROW
LED MODULES 12-INCH GREEN ARROW
LED MODULES PEDESTRIAN COUNTDOWN TIMER 16-INCH

SIGNAL HEAD NO.	SIGNAL BASE NO.	658.0110 TRAFFIC SIGNAL FACE 3-12 INCH VERTICAL EACH	658.0115 TRAFFIC SIGNAL FACE 4-12 INCH VERTICAL EACH	658.0155 TRAFFIC SIGNAL FACE 3-12 INCH HORIZONTAL EACH	658.0215 BACKPLATES SIGNAL FACE 3 SECTION 12-INCH EACH	658.0220 BACKPLATES SIGNAL FACE 4 SECTION 12-INCH EACH	658.0416 PEDESTRIAN SIGNAL FACE 16-INCH EACH	658.0600 LED MODULES 12-INCH RED BALL EACH	658.0605 LED MODULES 12-INCH YELLOW BALL EACH	658.0610 LED MODULES 12-INCH GREEN BALL EACH	658.0615 LED MODULES 12-INCH RED ARROW EACH	658.0620 LED MODULES 12-INCH YELLOW ARROW EACH	658.0625 LED MODULES 12-INCH GREEN ARROW EACH	658.0635 LED MODULES PEDESTRIAN COUNTDOWN TIMER 16-INCH EACH
1	SB10	1			1			1	1	1				
2	SB6			1	1			1	1	1				
3	SB6	1			1			1	1	1				
4	SB4		1			1					1	2	1	
5	SB5		1			1					1	2	1	
6	SB4	1			1			1	1	1				
7	SB12			1	1			1	1	1				
8	SB13	1			1			1	1	1				
9	SB10		1			1					1	2	1	
10	SB11		1			1					1	2	1	
11	SB7	1			1			1	1	1				
12	SB3			1	1			1	1	1				
13	SB3	1			1			1	1	1				
14	SB1	1			1						1	1	1	
15	SB2	1			1						1	1	1	
16	SB1	1			1			1	1	1				
17	SB9			1	1			1	1	1				
18	SB9	1			1			1	1	1				
19	SB7	1			1						1	1	1	
20	SB8	1			1						1	1	1	
21	SB14						1							1
22	SB3						1							1
23	SB4						1							1
24	SB6						1							1
25	SB7						1							1
26	SB9						1							1
27	SB10						1							1
28	SB13						1							1
	*** TOTALS	12	4	4	16	4	8	12	12	12	8	12	8	8

*** ADDITIONAL QUANTITIES SHOWN ELSEWHERE

TRAFFIC SIGNAL QUANTITIES
PILGRIM ROAD (CTH YY) &
MEGAL DRIVE/ MEGAL COURT
ALL ITEMS CATEGORY 0020
PAGE 2 OF 3

PROJECT NO: 2782-11-70 | HWY: PILGRIM ROAD | COUNTY: WAUKESHA | MISCELLANEOUS QUANTITIES | SHEET 550 | E

PEDESTAL BASES BLACK
TRANSFORMER BASES TB6-9 SPECIAL
POLES TYPE 2 BALCK
POLES TYPE 3 BLACK
POLES TYPE 4 BLACK
TRAFFIC SIGNAL STANDARDS ALUMINUM 9-FT BLACK
TRAFFIC SIGNAL STANDARDS ALUMINUM 13-FT BLACK
TRAFFIC SIGNAL STANDARDS ALUMINUM 15-FT BLACK
TROMBONE ARMS 20-FT BLACK
TROMBONE ARMS 25-FT BLACK
LUMINAIRE ARMS 4-INCH CLAMP 6-FT BLACK
PEDESTRIAN PUSH BUTTONS
LUMINAIRESUTILITY LED C BLACK

SIGNAL BASE NO.	SVP.0060.0101 PEDESTAL BASES BLACK EACH	SVP.0060.0112 TRANSFORMER BASES TB6-9 SPECIAL EACH	SVP.0060.0102 POLES TYPE 2 BLACK EACH	SVP.0060.0103 POLES TYPE 3 BLACK EACH	SVP.0060.0104 POLES TYPE 4 BLACK EACH	SVP.0060.0106 TRAFFIC SIGNAL STANDARDS ALUMINUM 9-FT BLACK EACH	SVP.0060.0107 TRAFFIC SIGNAL STANDARDS ALUMINUM 13-FT BLACK EACH	SVP.0060.0108 TRAFFIC SIGNAL STANDARDS ALUMINUM 15-FT BLACK EACH	SVP.0060.0109 TROMBONE ARMS 20-FT BLACK EACH	SVP.0060.0110 TROMBONE ARMS 25-FT BLACK EACH	SVP.0060.0123 LUMINAIRE ARMS SINGLE MEMBER 4-INCH CLAMP 6-FT BLACK EACH	658.0500 PEDESTRIAN PUSH BUTTONS EACH	SPV.0060.0119 LUMINAIRES UTILITY LED C BLACK EACH
SB1	1						1						
SB2	1						1						
SB3		1		1					1		1	1	1
SB4	1							1				1	
SB5		1			1						2		2
SB6		1	1							1		1	
SB7	1						1					1	
SB8		1			1						2	1	2
SB9		1	1							1		1	
SB10	1							1				1	
SB11		1	1									1	
SB12		1			1				1		2		2
SB13	1						1					1	
SB14	1					1						1	
*** TOTALS	7	7	3	1	3	1	4	2	2	2	7	10	7

*** ADDITIONAL QUANTITIES SHOWN ELSEWHERE

LOCATION	661.0200.0002 TEMPORARY TRAFFIC SIGNALS FOR INTERSECTIONS L.S.	661.0300 GENERATORS DAYS	SPV.0105.0102 TEMPORARY VEHICLE DETECTION SYSTEM L.S.
PILGRIM ROAD & MEGAL DRIVE	1	2	1
*** TOTALS	1	2	1

*** ADDITIONAL QUANTITIES SHOWN ELSEWHERE

LOCATION	SPV.0060.0113 TRAFFIC SIGNAL CABINET EACH	SPV.0060.0114 BATTERY BACKUP SYSTEM EACH	SPV.0060.0115 VIDEO DETECTION MONITOR EACH	SPV.0105.0104 VEHICULAR VIDEO DETECTION SYSTEM L.S.	SPV.0105.0107 INSTALL FIBER OPTIC COMMUNICATIONS IN CABINET L.S.
PILGRIM ROAD & MEGAL DRIVE	1	1	1	1	1
TOTAL	1	1	1	1	1

TRAFFIC SIGNAL QUANTITIES
PILGRIM ROAD (CTH YY) &
MEGAL DRIVE/ MEGAL COURT
ALL ITEMS CATEGORY 0020
PAGE 3 OF 3

3

USH 41/45 SB RAMPS/FALLS PKWY & PILGRIM RD
WAUKESHA COUNTY
CATEGORY 0030
S67-0270

STATE FURNISHED MATERIALS SUMMARY

EACH	DESCRIPTION
1	TRAFFIC SIGNAL CONTROLLER, FULLY ACTUATED, 8 PHASE
1	TRAFFIC SIGNAL CABINET
4	POLES, TYPE 13
4	LUMINAIRE ARMS, STEEL, 15-FT
1	45-FT MONOTUBE ARM
3	50-FT MONOTUBE ARM
4	VIDEO CAMERA

STATE FURNISHED FOR INFORMATION ONLY

SIGNAL BASE NO.	POLE TYPE 13 EACH	MONO 45' ARM EACH	MONO 50' ARM EACH	VIDEO CAMERA EACH	LUMINAIRE ARMS, STEEL, 15-FT EACH
SB3	1		1	1	1
SB5	1		1	1	1
SB8	1		1	1	1
SB10	1	1		1	1
***TOTAL	4	1	3	4	4

REMOVING CONCRETE BASES

SIGNAL BASE NO.	204.0195 REMOVING CONCRETE BASES EACH
CB1	1
SB1	1
SB2	1
SB3	1
SB5	1
SB6	1
SB7	1
***TOTAL	7

CONDUIT

FROM	TO	652.0225 CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH L.F.	652.0235 CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH L.F.
CB1	PB1		36
PB1	SB1	19	
PB1	PB2		46
PB2	SB2	8	
PB2	SB3		17
PB1	PB3		258
PB3	PB4		45
PB4	SB4	4	
PB4	SB5		16
PB3	PB5		186
PB5	SB6	49	
PB5	PB6	171	
PB5	PB7		138
PB7	PB8		94
PB8	PB9		118
PB9	PB10		39
PB10	SB7	3	
PB10	SB8		12
PB9	PB11		80
PB11	PB12	170	
PB11	PB13		116
PB13	SB9	7	
PB13	PB14		80
PB14	PB15		136
PB15	SB16		33
PB16	SB10		5
PB16	SB11	13	
PB15	PB17		84
PB17	PB18	193	
PB17	PB19		100
PB19	PB20		156
PB20	CB1		36
	***TOTAL	637	1831

***QUANTITIES SHOWN ELSEWHERE ON PLAN

PROJECT NO: 2782-12-70	HWY: USH 41/45	COUNTY: WAUKESHA	MISCELLANEOUS QUANTITIES	SHEET:	E

FILE NAME : J:\PROJECTS\D2_27821241\SIG\030501_MQ.PPTX PLOT DATE : 10/16/2014 11:30AM PLOT BY : MSCCXV PLOT NAME : 030501_MQ.PDF PLOT SCALE : 1:1

3

USH 41/45 SB RAMPS/FALLS PKWY & PILGRIM RD
WAUKESHA COUNTY
CATEGORY 0030
S67-0270

TRAFFIC DETECTOR LOOPS

LOOP NO.	HOME RUN PB	LOCATION*	SIZE (FT)x(FT)	NO. OF TURNS	SDD INSTALLATION REFERENCE	652.0800 CONDUIT LOOP DETECTOR L.F.	655.0700 LOOP DETECTOR LEAD IN CABLE L.F.	655.0800 LOOP DETECTOR WIRE L.F.
21	PB6	215+03.5, 43.1'LT	6'x18'	4	9F15-3B - LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	88	419	352
61	PB18	209+09.0, 11.1'RT	6'x18'	3	9F15-3B - LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	94	347	282
81	PB12	10+28.8, 8.8'RT	6'x12'	5	9F15-3A - LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 1)	62	532	310
					***TOTAL	244	1298	944

* LOCATION IS TO FRONT CENTER OF DETECTOR LOOP
* * FINAL LOCATION TO BE DETERMINED BY THE ENGINEER IN THE FIELD.

PULL BOXES

PULL BOX NO.	LOCATION*	653.0135 PULL BOXES STEEL 24x36-INCH EACH	653.0140 PULL BOXES STEEL 24x42-INCH EACH
PB1	211+23.6, 94.4'LT		1
PB2	211+66.7, 79.0'LT		1
PB3	212+51.3, 108.9'LT		1
PB4	212+52.2, 63.9'LT		1
PB5	213+32.8, 74.0'LT		1
PB6	215+03.5, 71.9'LT	1	
PB7	213+32.8, 5.5'LT		1
PB8	213+32.8, 41.2'RT		1
PB9	212+80.5, 65.6'RT		1
PB10	212+50.2, 41.8'RT		1
PB11	12+12.6, 29.5'RT		1
PB12	10+28.5, 27.7'RT	1	
PB13	12+12.6, 28.5'LT		1
PB14	12+12.6, 68.4'LT		1
PB15	211+48.0, 65.2'RT		1
PB16	211+70.1, 40.4'RT		1
PB17	211+12.5, 44.5'RT		1
PB18	209+12.8, 43.0'RT	1	
PB19	211+12.5, 5.5'LT		1
PB20	211+12.5, 83.9'LT		1
	***TOTAL	3	17

* FINAL LOCATION TO BE DETERMINED BY THE ENGINEER IN THE FIELD.

REMOVE PULL BOXES

PULL BOX NO.	653.0905 REMOVING PULL BOXES EACH
PB1	1
PB2	1
PB3	1
PB4	1
PB5	1
PB6	1
PB7	1
PB8	1
PB9	1
PB10	1
PB11	1
PB12	1
PB13	1
PB14	1
PB15	1
PB16	1
***TOTAL	16

***QUANTITIES SHOWN ELSEWHERE ON PLAN

USH 41/45 SB RAMPS/FALLS PKWY & PILGRIM RD
WAUKESHA COUNTY
CATEGORY 0030
S67-0270

TRAFFIC SIGNAL CABLE AND WIRE

FROM	TO		655.0240 CABLE TRAFFIC SIGNAL 7-14 AWG L.F.	655.0260 CABLE TRAFFIC SIGNAL 12-14 AWG L.F.	655.0305 CABLE TYPE UF 2-12 AWG GROUNDED L.F.
CB1	SB2			109	
CB1	SB3			118	
CB1	SB4			249	
CB1	SB5			261	
CB1	SB7			574	
CB1	SB8			583	
CB1	SB9		404		
CB1	SB10			311	
CB1	SB11			319	
CB1	SB1				58
SB1	SB3				122
SB1	SB5				265
SB5	SB6				259
SB6	SB8				363
CB1	SB10				311
		***TOTAL	404	2524	1378

TRAFFIC SIGNAL CABLE AND WIRE

FROM	TO	655.0515 ELECTRICAL WIRE TRAFFIC SIGNALS 10 AWG L.F.
CB1	SB2	109
SB2	SB3	49
SB3	SB4	313
SB4	SB5	44
SB5	SB7	491
SB7	SB8	39
SB8	SB9	228
SB9	SB10	225
SB10	SB11	42
SB11	CB1	319
PB1	CB1	35
PB2	SB3	37
PB3	SB5	97
PB4	SB5	36
PB5	SB6	69
PB7	SB6	154
PB8	SB8	162
PB9	SB8	87
PB10	SB8	32
PB11	SB9	101
PB13	SB9	27
PB14	SB9	83
PB15	SB10	74
PB16	SB10	25
PB17	SB10	132
PB19	CB1	129
PB20	CB1	35
	***TOTAL	3174

CONCRETE BASES

SIGNAL BASE NO.	LOCATION*		654.0101 CONCRETE BASES TYPE 1 EACH	654.0105 CONCRETE BASES TYPE 5 EACH	654.0113 CONCRETE BASES TYPE 13 EACH	654.0217 CONCRETE CONTROL CABINET BASES TYPE 9 SPECIAL EACH
CB1	211+11.8, 95.6'LT					1
SB1	211+34.5, 110.0'LT			1		
SB2	211+68.9, 71.3'LT		1			
SB3	211+60.7, 63.0'LT				1	
SB4	212+48.5, 64.5'LT		1			
SB5	212+38.0, 71.5'LT				1	
SB6	212+86.7, 90.3'LT			1		
SB7	212+48.2, 39.7'RT		1			
SB8	212+55.0, 30.5'RT				1	
SB9	12+06.5, 29.0'LT		1			
SB10	211+74.8, 39.2'RT				1	
SB11	211+60.9, 31.0'RT		1			
		***TOTAL	5	2	4	1

* FINAL LOCATION TO BE DETERMINED BY THE ENGINEER IN THE FIELD.

***QUANTITIES SHOWN ELSEWHERE ON PLAN

PROJECT NO: 2782-12-70	HWY: USH 41/45	COUNTY: WAUKESHA	MISCELLANEOUS QUANTITIES	SHEET:	E

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3

USH 41/45 SB RAMPS/FALLS PKWY & PILGRIM RD
WAUKESHA COUNTY
CATEGORY 0030
S67-0270

TRAFFIC SIGNAL CABLE AND WIRE

FROM	TO	655.0230 CABLE TRAFFIC SIGNAL 5-14 AWG L.F.	655.0240 CABLE TRAFFIC SIGNAL 7-14 AWG L.F.
SB2	HEAD 17	19	
SB2	HEAD 24	15	
SB3	HEAD 7	51	
SB3	HEAD 8	40	
SB3	HEAD 9	73	
SB3	HEAD 10	62	
SB3	HEAD 23	15	
SB4	HEAD 4		22
SB4	HEAD 6	19	
SB4	HEAD 26	15	
SB5	HEAD 12	39	
SB5	HEAD 13	19	
SB5	HEAD 15	72	
SB5	HEAD 16	56	
SB5	HEAD 25	15	
SB7	HEAD 11	19	
SB7	HEAD 28	15	
SB8	HEAD 2	50	
SB8	HEAD 3	39	
SB8	HEAD 5		73
SB8	HEAD 27	15	
SB9	HEAD 14	19	
SB10	HEAD 18	42	
SB10	HEAD 19	19	
SB10	HEAD 20	64	
SB10	HEAD 21	53	
SB10	HEAD 29	15	
SB11	HEAD 1	19	
SB11	HEAD 22	15	
	***TOTAL	894	95

TRAFFIC SIGNAL CABLE AND WIRE

FROM	TO	655.0610 ELECTRICAL WIRE LIGHTING 12 AWG L.F.
SB1	LUMIN.	117
SB3	LUMIN.	144
SB5	LUMIN.	144
SB6	LUMIN.	117
SB8	LUMIN.	144
SB10	LUMIN.	144
	***TOTAL	810

METER BREAKER PEDESTAL SERVICE

LOCATION*	656.0200.0201 METER BREAKER PEDESTAL SERVICE L.S.
41/45 SB RAMPS & PILGRIM RD	1
***TOTAL	1

* FINAL LOCATION TO BE DETERMINED BY THE ENGINEER IN THE FIELD

POLES

SIGNAL BASE NO.	657.0100 PEDESTAL BASES EACH	657.0255 TRANSFORMER BASES BREAKAWAY 11 1/2-INCH BOLT CIRCLE EACH	657.0322 POLES TYPE 5 ALUMINUM EACH	657.0420 TRAFFIC SIGNAL STANDARDS ALUMINUM 13-FT EACH	657.0425 TRAFFIC SIGNAL STANDARDS ALUMINUM 15-FT EACH	657.0610 LUMINAIRE ARMS SINGLE MEMBER 4 1/2-INCH CLAMP 6-FT EACH	657.1360 INSTALL POLES TYPE 13 EACH	657.1545 INSTALL MONOTUBE ARMS 45-FT EACH	657.1550 INSTALL MONOTUBE ARMS 50-FT EACH	657.1815 INSTALL LUMINAIRE ARMS STEEL 15-FT EACH	658.0500 PEDESTRIAN PUSH BUTTONS EACH	659.1125 LUMINAIRES UTILITY LED C EACH
SB1		1	1			1						1
SB2	1			1							1	
SB3							1		1	1	1	1
SB4	1				1						1	
SB5							1		1	1	1	1
SB6		1	1			1						1
SB7	1			1							1	
SB8							1		1	1	1	1
SB9	1			1								
SB10							1	1		1	1	1
SB11	1			1							1	
***TOTAL	5	2	2	4	1	2	4	1	3	4	8	6

***QUANTITIES SHOWN ELSEWHERE ON PLAN

PROJECT NO: 2782-12-70	HWY: USH 41/45	COUNTY: WAUKESHA	MISCELLANEOUS QUANTITIES	SHEET:	E

FILE NAME : J:\PROJECTS\D2_27821241\SIG\030501_MQ.PPTX PLOT DATE : 10/16/2014 11:30AM PLOT BY : MSCCXV PLOT NAME : 030501_MQ.PDF PLOT SCALE : 1:1

USH 41/45 SB RAMPS/FALLS PKWY & PILGRIM RD
WAUKESHA COUNTY
CATEGORY 0030
S67-0270

3

		FACES											
SIGNAL HEAD NO.	SIGNAL BASE NO.	658.0110 TRAFFIC SIGNAL FACE 3-12 INCH VERTICAL EACH	658.0115 TRAFFIC SIGNAL FACE 4-12 INCH VERTICAL EACH	658.0215 BACKPLATES SIGNAL FACE 3 SECTION 12-INCH EACH	658.0220 BACKPLATES SIGNAL FACE 4 SECTION 12-INCH EACH	658.0416 PEDESTRIAN SIGNAL FACE 16-INCH EACH	658.0600 LED MODULES 12-INCH RED BALL EACH	658.0605 LED MODULES 12-INCH YELLOW BALL EACH	658.0610 LED MODULES 12-INCH GREEN BALL EACH	658.0615 LED MODULES 12-INCH RED ARROW EACH	658.0620 LED MODULES 12-INCH YELLOW ARROW EACH	658.0625 LED MODULES 12-INCH GREEN ARROW EACH	658.0635 LED MODULES PEDESTRIAN COUNTDOWN TIMER 16-INCH EACH
1	SB11	1		1			1	1	1				
2	SB8	1		1			1	1	1				
3	SB8	1		1			1	1	1				
4	SB4		1		1					1	2	1	
5	SB8		1		1					1	2	1	
6	SB4	1		1			1	1	1				
7	SB3	1		1			1	1	1				
8	SB3	1		1			1	1	1				
9	SB3	1		1						1	1	1	
10	SB3	1		1						1	1	1	
11	SB7	1		1			1	1	1				
12	SB5	1		1			1	1	1				
13	SB5	1		1			1	1	1				
14	SB9	1		1						1	1	1	
15	SB5	1		1						1	1	1	
16	SB5	1		1						1	1	1	
17	SB2	1		1			1	1	1				
18	SB10	1		1			1	1	1				
19	SB10	1		1			1	1	1				
20	SB10	1		1						1	1	1	
21	SB10	1		1						1	1	1	
22	SB11					1							1
23	SB3					1							1
24	SB2					1							1
25	SB5					1							1
26	SB4					1							1
27	SB8					1							1
28	SB7					1							1
29	SB10					1							1
	***TOTAL	19	2	19	2	8	12	12	12	9	11	9	8

TRAFFIC SIGNAL MOUNTING HARDWARE

LOCATION	658.5069.0201 SIGNAL MOUNTING HARDWARE L.S.
41/45 SB RAMPS & PILGRIM RD	1
***TOTAL	1

TEMPORARY TRAFFIC SIGNALS FOR INTERSECTIONS

LOCATION	661.0200.0201 TEMPORARY TRAFFIC SIGNALS FOR INTERSECTIONS L.S.
41/45 SB RAMPS & PILGRIM RD	1
***TOTAL	1

***QUANTITIES SHOWN ELSEWHERE ON PLAN

USH 41/45 SB RAMPS/FALLS PKWY & PILGRIM RD
WAUKESHA COUNTY
CATEGORY 0030
S67-0270

TRANSPORTING TRAFFIC SIGNAL AND INTERSECTION LIGHTING MATERIALS

LOCATION	SPV.0105.0205 TRANSPORTING SIGNAL & LIGHTING MATERIALS L.S.
41/45 SB RAMPS & PILGRIM RD	1
***TOTAL	1

TRANSPORTING AND INSTALLING STATE FURNISHED VIDEO DETECTION

LOCATION	SPV.0105.0211 TRANSPORT & INSTALL STATE FURN VIDEO DETECTION L.S.
41/45 SB RAMPS & PILGRIM RD	1
***TOTAL	1

REMOVE TRAFFIC SIGNALS

LOCATION	SPV.0105.0207 REMOVE TRAFFIC SIGNALS L.S.
41/45 SB RAMPS & PILGRIM RD	1
***TOTAL	1

TRANSPORT AND INSTALL STATE FURNISHED TRAFFIC SIGNAL CABINET

LOCATION	SPV.0105.0213 TRANSPORT & INSTALL STATE FURN SIGNAL CABINET L.S.
41/45 SB RAMPS & PILGRIM RD	1
***TOTAL	1

REMOVE LOOP DETECTOR WIRE AND LEAD-IN CABLE

LOCATION	SPV.0105.0209 REMOVE LOOP DETECTOR WIRE & LEAD-IN CABLE L.S.
41/45 SB RAMPS & PILGRIM RD	1
***TOTAL	1

TEMPORARY NON-INTRUSIVE VEHICLE DETECTION SYSTEM FOR INTERSECTIONS

LOCATION	SPV.0105.0215 TEMP NON-INTRUSIVE VEHIC DET SYS FOR INTERSECT L.S.
41/45 SB RAMPS & PILGRIM RD	1
***TOTAL	1

***QUANTITIES SHOWN ELSEWHERE ON PLAN

PROJECT NO: 2782-12-70	HWY: USH 41/45	COUNTY: WAUKESHA	MISCELLANEOUS QUANTITIES	SHEET:	E

FILE NAME : J:\PROJECTS\D2_27821241\SIG\030501_MQ.PPTX PLOT DATE : 10/16/2014 11:30AM PLOT BY : MSCCXV PLOT NAME : 030501_MQ.PDF PLOT SCALE : 1:1

USH 41/45 NB RAMPS & PILGRIM RD
WAUKESHA COUNTY
CATEGORY 0030
S67-0271

3

STATE FURNISHED MATERIALS SUMMARY

EACH	DESCRIPTION
1	TRAFFIC SIGNAL CONTROLLER, FULLY ACTUATED, 8 PHASE
1	TRAFFIC SIGNAL CABINET
1	POLES, TYPE 10
1	LUMINAIRE ARMS, STEEL, 15-FT
1	30-FT MONOTUBE ARM
2	VIDEO CAMERA

STATE FURNISHED FOR INFORMATION ONLY

SIGNAL BASE NO.	POLE TYPE 10 EACH	MONO 30' ARM EACH	VIDEO CAMERA EACH	LUMINAIRE ARMS, STEEL, 15-FT EACH
SB1	1	1	2	1
***TOTAL	1	1	2	1

PULL BOXES

PULL BOX NO.	LOCATION*	653.0135 PULL BOXES STEEL 24x36-INCH EACH	653.0140 PULL BOXES STEEL 24x42-INCH EACH
PB1	224+52.2, 57.5'RT		1
PB2	224+13.9, 54.2'RT		1
PB3	224+13.9, 6.0'LT		1
PB4	224+13.9, 64.0'LT		1
PB5	224+32.5, 109.7'LT		1
PB6	224+91.7, 109.2'LT		1
PB7	225+18.8, 84.6'LT		1
PB8	224+80.5, 62.6'LT		1
PB9	225+18.8, 27.0'LT		1
PB10	224+85.8, 24.5'LT	1	
PB11	225+18.8, 53.0'RT		1
PB12	224+74.3, 57.6'RT		1
	***TOTAL	1	11

* FINAL LOCATION TO BE DETERMINED BY THE ENGINEER IN THE FIELD.

REMOVING CONCRETE BASES

SIGNAL BASE NO.	204.0195 REMOVING CONCRETE BASES EACH
CB1	1
SB1	1
SB2	1
SB4	1
SB5	1
SB6	1
SB8	1
SB9	1
***TOTAL	8

REMOVE PULL BOXES

PULL BOX NO.	653.0905 REMOVING PULL BOXES EACH
PB1	1
PB2	1
PB3	1
PB4	1
PB5	1
PB6	1
PB7	1
PB8	1
PB9	1
PB10	1
PB11	1
PB12	1
PB13	1
PB14	1
PB15	1
PB16	1
PB17	1
PB18	1
PB19	1
PB20	1
PB21	1
PB22	1
TOTAL	22

CONDUIT

FROM	TO	652.0225 CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH L.F.	652.0235 CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH L.F.
CB1	PB1		33
PB1	PB2		80
PB2	PB3		120
PB3	PB4		116
PB4	SB1		9
PB4	SB2	16	
PB4	PB5		98
PB5	PB6		108
PB6	PB7		72
PB7	PB8		43
PB8	SB3	14	
PB8	SB4	4	
PB7	PB9		116
PB9	PB10	33	
PB10	SB5	10	
PB9	PB11		160
PB11	PB12		92
PB12	CB1		39
	***TOTAL	77	1086

***QUANTITIES SHOWN ELSEWHERE ON PLAN

PROJECT NO: 2782-12-70	HWY: USH 41/45	COUNTY: WAUKESHA	MISCELLANEOUS QUANTITIES	SHEET:	E

3

USH 41/45 NB RAMPS & PILGRIM RD
WAUKESHA COUNTY
CATEGORY 0030
S67-0271

CONCRETE BASES

SIGNAL BASE NO.	LOCATION*	654.0101 CONCRETE BASES TYPE 1 EACH	654.0102 CONCRETE BASES TYPE 2 EACH	654.0110 CONCRETE BASES TYPE 10 EACH	654.0217 CONCRETE CONTROL CABINET BASES TYPE 9 SPECIAL EACH
CB1	224+63.4, 59.0'RT				1
SB1	224+04.8, 64.0'LT			1	
SB2	224+29.1, 70.5'LT	1			
SB3	224+68.5, 70.5'LT	1			
SB4	224+75.9, 63.0'LT	1			
SB5	224+75.9, 23.6'LT		1		
	***TOTAL	3	1	1	1

* FINAL LOCATION TO BE DETERMINED BY THE ENGINEER IN THE FIELD.

TRAFFIC SIGNAL CABLE AND WIRE

FROM	TO	655.0240 CABLE TRAFFIC SIGNAL 7-14 AWG L.F.	655.0260 CABLE TRAFFIC SIGNAL 12-14 AWG L.F.	655.0305 CABLE TYPE UF 2-12 AWG GROUNDED L.F.
CB1	SB1	253		
CB1	SB2	260		
CB1	SB3	345		
CB1	SB4		335	
CB1	SB5	257		
CB1	SB1			253
	***TOTAL	1115	335	253

TRAFFIC SIGNAL CABLE AND WIRE

FROM	TO	655.0230 CABLE TRAFFIC SIGNAL 5-14 AWG L.F.	655.0240 CABLE TRAFFIC SIGNAL 7-14 AWG L.F.
SB1	HEAD 4	52	
SB1	HEAD 5	41	
SB2	HEAD 6	15	
SB3	HEAD 7	15	
SB4	HEAD 1		22
SB4	HEAD 3	19	
SB5	HEAD 2		22
	***TOTAL	142	44

TRAFFIC SIGNAL CABLE AND WIRE

FROM	TO	655.0610 ELECTRICAL WIRE LIGHTING 12 AWG L.F.
SB1	LUMIN.	144
	***TOTAL	144

TRAFFIC SIGNAL CABLE AND WIRE

FROM	TO	655.0515 ELECTRICAL WIRE TRAFFIC SIGNALS 10 AWG L.F.
CB1	SB1	253
SB1	SB2	49
SB2	SB3	300
SB3	SB4	42
SB4	SB5	220
SB5	CB1	257
PB1	CB1	34
PB2	CB1	90
PB3	SB1	103
PB4	SB1	29
PB5	SB1	94
PB6	SB4	135
PB7	SB4	83
PB8	SB3	34
PB9	SB5	79
PB10	SB5	30
PB11	CB1	98
PB12	CB1	36
	***TOTAL	1966

***QUANTITIES SHOWN ELSEWHERE ON PLAN

3

USH 41/45 NB RAMPS & PILGRIM RD
WAUKESHA COUNTY
CATEGORY 0030
S67-0271

POLES

SIGNAL BASE NO.	657.0100 PEDESTAL BASES EACH	657.0255 TRANSFORMER BASES BREAKAWAY 11 1/2-INCH BOLT CIRCLE EACH	657.0305 POLES TYPE 2 EACH	657.0425 TRAFFIC SIGNAL STANDARDS ALUMINUM 15-FT EACH	657.0430 TRAFFIC SIGNAL STANDARDS ALUMINUM 10-FT EACH	657.1350 INSTALL POLES TYPE 10 EACH	657.1530 INSTALL MONOTUBE ARMS 30-FT EACH	657.1815 INSTALL LUMINAIRE ARMS STEEL 15-FT EACH	658.0500 PEDESTRIAN PUSH BUTTONS EACH	659.1125 LUMINAIRES UTILITY LED C EACH
SB1						1	1	1		1
SB2	1				1				1	
SB3	1				1				1	
SB4	1			1						
SB5		1	1							
***TOTAL	3	1	1	1	2	1	1	1	2	1

FACES

SIGNAL HEAD NO.	SIGNAL BASE NO.	658.0110 TRAFFIC SIGNAL FACE 3-12 INCH VERTICAL EACH	658.0115 TRAFFIC SIGNAL FACE 4-12 INCH VERTICAL EACH	658.0215 BACKPLATES SIGNAL FACE 3 SECTION 12-INCH EACH	658.0220 BACKPLATES SIGNAL FACE 4 SECTION 12-INCH EACH	658.0416 PEDESTRIAN SIGNAL FACE 16-INCH EACH	658.0600 LED MODULES 12-INCH RED BALL EACH	658.0605 LED MODULES 12-INCH YELLOW BALL EACH	658.0610 LED MODULES 12-INCH GREEN BALL EACH	658.0615 LED MODULES 12-INCH RED ARROW EACH	658.0620 LED MODULES 12-INCH YELLOW ARROW EACH	658.0625 LED MODULES 12-INCH GREEN ARROW EACH	658.0635 LED MODULES PEDESTRIAN COUNTDOWN TIMER 16-INCH EACH
1	SB4		1		1					1	2	1	
2	SB5		1		1					1	2	1	
3	SB4	1		1			1	1	1				
4	SB1	1		1			1	1	1				
5	SB1	1		1			1	1	1				
6	SB2					1							1
7	SB3					1							1
***TOTAL		3	2	3	2	2	3	3	3	2	4	2	2

METER BREAKER PEDESTAL SERVICE

LOCATION*	656.0200.0202 METER BREAKER PEDESTAL SERVICE L.S.
41/45 NB RAMPS & PILGRIM RD	1
***TOTAL	1

* FINAL LOCATION TO BE DETERMINED BY THE ENGINEER IN THE FIELD

TRAFFIC SIGNAL MOUNTING HARDWARE

LOCATION	658.5069.0202 SIGNAL MOUNTING HARDWARE L.S.
41/45 NB RAMPS & PILGRIM RD	1
***TOTAL	1

TEMPORARY TRAFFIC SIGNALS FOR INTERSECTIONS

LOCATION	661.0200.0202 TEMPORARY TRAFFIC SIGNALS FOR INTERSECTIONS L.S.
41/45 NB RAMPS & PILGRIM RD	1
***TOTAL	1

***QUANTITIES SHOWN ELSEWHERE ON PLAN

PROJECT NO: 2782-12-70	HWY: USH 41/45	COUNTY: WAUKESHA	MISCELLANEOUS QUANTITIES	SHEET:	E

FILE NAME : J:\PROJECTS\D2_27821241\SIG\030502_MQ.PPTX PLOT DATE : 10/16/2014 11:30AM PLOT BY : MSCCXV PLOT NAME : 030502_MQ.PDF PLOT SCALE : 1:1

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TRANSPORTING TRAFFIC SIGNAL AND INTERSECTION LIGHTING MATERIALS

LOCATION		SPV.0105.0206 TRANSPORTING SIGNAL & LIGHTING MATERIALS L.S.
41/45 NB RAMPS & PILGRIM RD		1
	***TOTAL	1

TRANSPORTING AND INSTALLING STATE FURNISHED VIDEO DETECTION

LOCATION		SPV.0105.0212 TRANSPORT & INSTALL STATE FURN VIDEO DETECTION L.S.
41/45 NB RAMPS & PILGRIM RD		1
	***TOTAL	1

REMOVE TRAFFIC SIGNALS

LOCATION		SPV.0105.0208 REMOVE TRAFFIC SIGNALS L.S.
41/45 NB RAMPS & PILGRIM RD		1
	***TOTAL	1

TRANSPORT AND INSTALL STATE FURNISHED TRAFFIC SIGNAL CABINET

LOCATION		SPV.0105.0214 TRANSPORT & INSTALL STATE FURN SIGNAL CABINET L.S.
41/45 NB RAMPS & PILGRIM RD		1
	***TOTAL	1

REMOVE LOOP DETECTOR WIRE AND LEAD-IN CABLE

LOCATION		SPV.0105.0210 REMOVE LOOP DETECTOR WIRE & LEAD-IN CABLE L.S.
41/45 NB RAMPS & PILGRIM RD		1
	***TOTAL	1

TEMPORARY NON-INTRUSIVE VEHICLE DETECTION SYSTEM FOR INTERSECTIONS

LOCATION		SPV.0105.0216 TEMP NON-INTRUSIVE VEHIC DET SYS FOR INTERSECT L.S.
41/45 NB RAMPS & PILGRIM RD		1
	***TOTAL	1

***QUANTITIES SHOWN ELSEWHERE ON PLAN

***QUANTITIES SHOWN ELSEWHERE ON PLAN

USH 41/45 NB &SB RAMPS & PILGRIM RD
(STH 74/MAIN ST TO MEGAL DR)
WAUKESHA COUNTY
CATEGORY 0030
COMMUNICATIONS

3

3

CONDUIT

FROM	TO	652.0225 CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH L.F.	671.0132 CONDUIT HDPE 3-DUCT 2-INCH L.F.	671.0232 CONDUIT HDPE DIRECTIONAL BORE 3-DUCT 2-INCH L.F.
CB1 (MAIN)	I/C PB1	45		
I/C PB1	I/C PB2	501		
I/C PB2	I/C CV1	35		
I/C CV1	CB1 (S67-0270)	16		
I/C CV1	I/C PB3		139	
I/C PB3	I/C PB4		211	
I/C PB4	I/C PB5		412	
I/C PB5	I/C CV2		81	
I/C CV2	EX MH246	33		
I/C CV2	I/C PB6			150
I/C PB6	I/C PB7		52	
I/C PB7	I/C PB8		41	
I/C PB8	I/C CV3		564	
I/C CV3	CB1 (S67-0271)	12		
I/C CV3	I/C PB9	202		
I/C PB9	I/C PB10	139		
I/C PB10	CB1 (MEGAL)	68		
	***TOTAL	1051	1500	150

INSTALL CONDUIT INTO EXISTING ITEM

STRUCTURE NO.	652.0700.S INSTALL CONDUIT INTO EXISTING ITEM EACH
EX MH246	1
TOTAL	1

PULL BOXES

PULL BOX NO.	LOCATION*	653.0140 PULL BOXES STEEL 24x42-INCH EACH
I/C PB1	206+02.2, 73.9'LT	1
I/C PB2	210+74.4, 64.0'LT	1
I/C PB3	211+03.4, 57.0'RT	1
I/C PB4	213+14.4, 53.7'RT	1
I/C PB5	217+19.6, 39.1'RT	1
I/C PB6	283+73.9, 69.8'RT	1
I/C PB7	18+73.0, 25.3'LT	1
I/C PB8	18+73.0, 15.6'RT	1
I/C PB9	226+51.8, 53.0'RT	1
I/C PB10	226+51.8, 85.0'LT	1
	***TOTAL	10

* FINAL LOCATION TO BE DETERMINED BY THE ENGINEER IN THE FIELD.

COMMUNICATION VAULTS

VAULT NO.	LOCATION*	673.0105 COMMUNICATION VAULT TYPE 1 EACH
I/C CV1	211+03.4, 82.1'LT	1
I/C CV2	283+73.1, 80.5'LT	1
I/C CV3	224+54.7, 66.2'RT	1
	TOTAL	3

* FINAL LOCATION TO BE DETERMINED BY THE ENGINEER IN THE FIELD.

FIELD SYSTEM INTEGRATOR

LOCATION	670.0100.0002 FIELD SYSTEM INTEGRATOR L.S.	670.0200.0002 ITS DOCUMENTATION L.S.	678.0500.0002 COMMUNICATION SYSTEM TESTING L.S.
2782-12-70	1	1	1
TOTAL	1	1	1

INTERCONNECT CABLE

FROM	TO	678.0036 INSTALL FIBER OPTIC CABLE OUTDOOR PLANT 36-CT L.F.
EX MH246	I/C CV2	183
I/C CV1	I/C CV2	1133
I/C CV2	I/C CV3	1086
	TOTAL	2402

FIBER OPTIC SPLICE

LOCATION	678.0200 FIBER OPTIC SPLICE ENCLOSURE EACH	678.0300 FIBER OPTIC SPLICE EACH
EX MH246		14
I/C CV1	1	4
I/C CV2	1	8
I/C CV3	1	8
TOTAL	3	34

PROJECT NO: 2782-12-70	HWY: USH 41/45	COUNTY: WAUKESHA	MISCELLANEOUS QUANTITIES	SHEET:	E

FILE NAME : J:\PROJECTS\D2_27821241\SIG\030503_MQ.PPTX PLOT DATE : 10/16/2014 12:30PM PLOT BY : DOTCMV PLOT NAME : 030503_MQ.PDF PLOT SCALE : 1:1

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USH 41/45 NB &SB RAMPS & PILGRIM RD
(STH 74/MAIN ST TO MEGAL DR)
WAUKESHA COUNTY
CATEGORY 0030
COMMUNICATIONS

FIBER OPTIC COMMUNICATIONS EQUIPMENT

LOCATION	**SPV.0105.0201 INSTALL FIBER OPTIC COMMUNICATIONS IN CABINET L.S.	ST-ST SINGLE MODE FIBER JUMPER 2-CT CONTRACTOR FURNISHED L.F.	CAT-5E CABLE 1-METER CONTRACTOR FURNISHED EACH	PATCH PANEL WITH FIBER OPTIC CABLE PIGTAIL 8-CT STATE FURNISHED L.F.	ETHERNET SWITCH 2-PORT STATE FURNISHED EACH
CB1 (S67-0270)	1	2	2	116	1
TOTAL	1	2	2	116	1

**PAY ITEM INCLUDES INSTALLATION OF BOTH CONTRACTOR FURNISHED AND STATE FURNISHED MATERIALS

STATE FURNISHED MATERIALS SUMMARY

QUANTITY	UNIT	DESCRIPTION
1	EACH	ETHERNET SWITCH 2-PORT
116	L.F.	PATCH PANEL WITH FIBER OPTIC CABLE PIGTAIL 8-CT

CONTRACTOR FURNISHED MATERIALS SUMMARY

QUANTITY	UNIT	DESCRIPTION
2	EACH	CAT-5E CABLE 1-METER
2	L.F.	ST-ST SINGLE MODE FIBER OPTIC JUMBER 2-CT

FIBER OPTIC COMMUNICATIONS EQUIPMENT

LOCATION	**SPV.0105.0202 INSTALL FIBER OPTIC COMMUNICATIONS IN CABINET L.S.	ST-ST SINGLE MODE FIBER JUMPER 2-CT CONTRACTOR FURNISHED L.F.	CAT-5E CABLE 1-METER CONTRACTOR FURNISHED EACH	PATCH PANEL WITH FIBER OPTIC CABLE PIGTAIL 8-CT STATE FURNISHED L.F.	ETHERNET SWITCH 2-PORT STATE FURNISHED EACH
CB1 (S67-0271)	1	2	2	112	1
TOTAL	1	2	2	112	1

**PAY ITEM INCLUDES INSTALLATION OF BOTH CONTRACTOR FURNISHED AND STATE FURNISHED MATERIALS

STATE FURNISHED MATERIALS SUMMARY

QUANTITY	UNIT	DESCRIPTION
1	EACH	ETHERNET SWITCH 2-PORT
112	L.F.	PATCH PANEL WITH FIBER OPTIC CABLE PIGTAIL 8-CT

CONTRACTOR FURNISHED MATERIALS SUMMARY

QUANTITY	UNIT	DESCRIPTION
2	EACH	CAT-5E CABLE 1-METER
2	L.F.	ST-ST SINGLE MODE FIBER OPTIC JUMBER 2-CT

USH 41/45 NB &SB RAMPS & PILGRIM RD
(STH 74/MAIN ST TO MEGAL DR)
WAUKESHA COUNTY
CATEGORY 0030
COMMUNICATIONS

3

FIBER OPTIC COMMUNICATIONS EQUIPMENT

LOCATION	**SPV.0105.0203 INSTALL FIBER OPTIC COMMUNICATIONS IN CABINET L.S.	ST-ST SINGLE MODE FIBER JUMPER 2-CT CONTRACTOR FURNISHED L.F.	CAT-5E CABLE 1-METER CONTRACTOR FURNISHED EACH	PATCH PANEL WITH FIBER OPTIC CABLE PIGTAIL 8-CT STATE FURNISHED L.F.	ETHERNET SWITCH 2-PORT STATE FURNISHED EACH	TERMINATION PANEL LOCAL FURNISHED EACH
CB1 (MAIN)	1	2	2	745	1	1
TOTAL	1	2	2	745	1	1

**PAY ITEM INCLUDES INSTALLATION OF BOTH CONTRACTOR FURNISHED AND STATE FURNISHED MATERIALS

LOCAL FURNISHED MATERIALS SUMMARY

QUANTITY	UNIT	DESCRIPTION
1	EACH	TERMINATION PANEL

STATE FURNISHED MATERIALS SUMMARY

QUANTITY	UNIT	DESCRIPTION
1	EACH	ETHERNET SWITCH 2-PORT
745	L.F.	PATCH PANEL WITH FIBER OPTIC CABLE PIGTAIL 8-CT

CONTRACTOR FURNISHED MATERIALS SUMMARY

QUANTITY	UNIT	DESCRIPTION
2	EACH	CAT-5E CABLE 1-METER
2	L.F.	ST-ST SINGLE MODE FIBER OPTIC JUMBER 2-CT

FIBER OPTIC COMMUNICATIONS EQUIPMENT

LOCATION	**SPV.0105.0204 INSTALL FIBER OPTIC COMMUNICATIONS IN CABINET L.S.	ST-ST SINGLE MODE FIBER JUMPER 2-CT CONTRACTOR FURNISHED L.F.	CAT-5E CABLE 1-METER CONTRACTOR FURNISHED EACH	PATCH PANEL WITH FIBER OPTIC CABLE PIGTAIL 8-CT STATE FURNISHED L.F.	ETHERNET SWITCH 2-PORT STATE FURNISHED EACH	TERMINATION PANEL LOCAL FURNISHED EACH
CB1 (MEGAL)	1	2	2	568	1	1
TOTAL	1	2	2	568	1	1

**PAY ITEM INCLUDES INSTALLATION OF BOTH CONTRACTOR FURNISHED AND STATE FURNISHED MATERIALS

LOCAL FURNISHED MATERIALS SUMMARY

QUANTITY	UNIT	DESCRIPTION
1	EACH	TERMINATION PANEL

STATE FURNISHED MATERIALS SUMMARY

QUANTITY	UNIT	DESCRIPTION
1	EACH	ETHERNET SWITCH 2-PORT
568	L.F.	PATCH PANEL WITH FIBER OPTIC CABLE PIGTAIL 8-CT

CONTRACTOR FURNISHED MATERIALS SUMMARY

QUANTITY	UNIT	DESCRIPTION
2	EACH	CAT-5E CABLE 1-METER
2	L.F.	ST-ST SINGLE MODE FIBER OPTIC JUMBER 2-CT

3

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STREET LIGHTING WIRING AND CONDUIT

PROJECT	CATEGORY	DESCRIPTION FROM	STATION	DIRECTION	OFFSET	DESCRIPTION TO	STATION	DIRECTION	OFFSET	652.0225 CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH L.F.	655.0625 ELECTRICAL WIRE LIGHTING 6 AWG L.F.	655.0630 ELECTRICAL WIRE LIGHTING 4 AWG L.F.	655.0635 ELECTRICAL WIRE LIGHTING 2 AWG L.F.	655.0610 ELECTRICAL WIRE LIGHTING 12 AWG L.F.
2782-11-70	0030	P-1-1	199+05	LT	46.6'	P-1-3	200+49	LT	57.5'	158	474	-	-	216
2782-11-70	0030	P-1-3	200+49	LT	57.5'	P-1-5	202+40	LT	63.0'	205	615	-	-	216
2782-11-70	0030	P-1-5	202+40	LT	63.0'	PB7	203+33	LT	63.0'	99	297	-	-	108
2782-11-70	0030	PB7	203+33	LT	63.0'	PB8	204+24	LT	116.1'	150	450	-	-	-
2782-11-70	0030	PB8	204+24	LT	116.1'	PB9	205+37	LT	115.8'	116	348	-	-	-
2782-11-70	0030	PB9	205+37	LT	115.8'	P-1-34	406+24	LT	56.2'	164	492	-	-	108
2782-12-70	0050	P-1-34	406+24	LT	56.2'	P-1-32	404+37	LT	36.5'	199	597	-	-	216
2782-11-70	0030	PB9	205+37	LT	115.8'	PB11	206+86	LT	74.0'	202	606	-	-	-
2782-11-70	0030	PB11	206+86	LT	74.0'	PB10	206+79	RT	42.0'	119	357	-	-	-
2782-11-70	0030	PB10	206+79	RT	42.0'	PB45	410+04	LT	70.0'	204	612	-	-	-
2782-12-70	0050	PB45	410+04	LT	70.0'	P-1-37	410+52	LT	70.0'	57	171	-	-	108
2782-12-70	0050	P-1-37	410+52	LT	70.0'	P-1-39	411+89	LT	57.5'	152	456	-	-	216
2782-12-70	0050	P-1-39	411+89	LT	57.5'	P-1-40	413+22	LT	49.8'	153	459	-	-	216
2782-12-70	0050	P-1-40	413+22	LT	49.8'	P-1-41	414+63	LT	42.1'	159	477	-	-	216
2782-11-70	0030	PB11	206+86	LT	74.0'	P-1-8	207+95	LT	63.0'	125	375	-	-	108
2782-11-70	0030	P-1-8	207+95	LT	63.0'	P-1-10	208+55	LT	92.7'	88	264	-	-	216
2782-11-70	0030	P-1-10	208+55	LT	92.7'	P-1-12	209+74	LT	63.0'	169	507	-	-	216
2782-12-70	0050	P-1-12	209+74	LT	63.0'	PB18	210+43	LT	63.0'	83	249	-	-	108
2782-12-70	0050	PB18	210+43	LT	63.0'	LCC-P	211+06	LT	82.3'	60	180	-	-	-
2782-11-70	0030	P-2-2	199+70	RT	41.5'	P-2-4	201+50	RT	44.5'	194	582	-	-	216
2782-11-70	0030	P-2-4	201+50	RT	44.5'	P-2-6	203+30	RT	53.0'	193	579	-	-	216
2782-11-70	0030	P-2-6	203+30	RT	53.0'	PB7	203+33	LT	63.0'	125	375	-	-	108
2782-11-70	0030	PB7	203+33	LT	63.0'	PB8	204+24	LT	116.1'	-	450	-	-	-
2782-11-70	0030	PB8	204+24	LT	116.1'	P-2-35	407+08	RT	34.1'	71	213	-	-	108
2782-12-70	0050	P-2-35	407+08	RT	34.1'	P-2-33	405+28	RT	30.0'	198	594	-	-	216
2782-12-70	0050	P-2-33	405+28	RT	30.0'	P-2-31	403+42	RT	29.8'	198	594	-	-	216
2782-11-70	0030	P-2-6	203+30	RT	53.0'	PB46	410+03	RT	33.7'	132	396	-	-	108
2782-12-70	0050	PB46	410+03	RT	33.7'	P-2-36	410+44	RT	31.0'	50	150	-	-	108
2782-12-70	0050	P-2-36	410+44	RT	31.0'	P-2-38	411+86	RT	31.0'	155	465	-	-	216
2782-12-70	0050	PB46	410+03	RT	33.7'	PB45	410+04	LT	70.0'	104	312	-	-	-
2782-12-70	0050	PB45	410+04	LT	70.0'	P-2-7	206+82	RT	42.0'	-	612	-	-	108
2782-11-70	0030	P-2-7	206+82	RT	42.0'	P-2-9	208+43	RT	61.2'	186	558	-	-	216
2782-11-70	0030	P-2-9	208+43	RT	61.2'	P-2-11	209+24	RT	42.0'	92	276	-	-	216
2782-12-70	0050	P-2-11	209+24	RT	42.0'	P-2-13	210+45	RT	42.6'	127	381	-	-	216
2782-12-70	0050	P-2-13	210+45	RT	42.6'	PB18	210+43	LT	63.0'	114	342	-	-	108
2782-12-70	0050	PB18	210+43	LT	63.0'	LCC-P	211+06	LT	82.3'	-	180	-	-	-
2720-10-70	0010	P-3-49	2+40C	RT	57.6'	P-3-50	2+69C	RT	32.0'	74	-	222	-	216
2720-10-70	0010	P-3-50	2+69C	RT	32.0'	PB62	2+91C	RT	69.1'	69	-	207	-	108
2720-10-70	0010	PB62	2+91C	RT	69.1'	P-3-51	3+14C	RT	57.3'	61	-	183	-	108
2720-10-70	0010	P-3-51	3+14C	RT	57.3'	P-3-52	3+38C	RT	33.1'	70	-	210	-	216
2720-10-70	0010	P-3-52	3+38C	RT	33.1'	P-3-44	803+17EB	RT	51.1'	159	-	477	-	216
2782-11-70	0030	P-3-44	803+17EB	RT	51.1'	P-3-42	801+36EB	RT	51.0'	199	-	597	-	216
2782-11-70	0030	P-3-42	801+36EB	RT	51.0'	PB39	227+92	RT	97.7'	61	-	183	-	108
2782-11-70	0030	PB39	227+92	RT	97.7'	PB37	227+12	RT	90.4'	84	-	252	-	-
2782-11-70	0030	PB37	227+12	RT	90.4'	PB36	226+00	RT	42.0'	154	-	462	-	-

CONTINUED ON NEXT SHEET 1 OF 2

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STREET LIGHTING WIRING AND CONDUIT

PROJECT	CATEGORY	DESCRIPTION FROM	STATION	DIRECTION	OFFSET	DESCRIPTION TO	STATION	DIRECTION	OFFSET	652.0225 CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH L.F.	655.0625 ELECTRICAL WIRE LIGHTING 6 AWG L.F.	655.0630 ELECTRICAL WIRE LIGHTING 4 AWG L.F.	655.0635 ELECTRICAL WIRE LIGHTING 2 AWG L.F.	655.0610 ELECTRICAL WIRE LIGHTING 12 AWG L.F.
2782-12-70	0050	PB36	226+00	RT	42.0'	PB38	225+95	LT	73.8'	120	-	360	-	-
2782-12-70	0050	PB38	225+95	LT	73.8'	P-3-28	225+35	LT	77.5'	68	-	204	-	108
2782-12-70	0050	P-3-28	225+35	LT	77.5'	P-3-26	223+63	LT	99.1'	174	-	522	-	216
2782-12-70	0050	P-3-26	223+63	LT	99.1'	P-3-25	222+80	LT	83.9'	96	-	288	-	216
2782-12-70	0050	P-3-25	222+80	LT	83.9'	P-3-23	220+84	LT	72.0'	200	-	600	-	216
2782-12-70	0050	P-3-23	220+84	LT	72.0'	P-3-21	219+04	LT	67.0'	195	-	585	-	216
2782-12-70	0050	P-3-21	219+04	LT	67.0'	P-3-19	217+48	LT	69.1'	172	-	516	-	216
2782-12-70	0050	P-3-19	217+48	LT	69.1'	P-3-17	216+08	LT	64.4'	149	-	447	-	216
2782-12-70	0050	P-3-17	216+08	LT	64.4'	P-3-15	215-54	LT	74.0'	161	-	483	-	216
2782-12-70	0050	P-3-15	215-54	LT	74.0'	PB21	213+71	LT	73.8'	88	-	264	-	108
2782-12-70	0050	PB21	213+71	LT	73.8'	PB19	212+44	LT	124.6'	163	-	489	-	-
2782-12-70	0050	PB19	212+44	LT	124.6'	LCC-P	211+06	LT	82.3'	162	-	486	-	-
2720-10-70	0010	P-4-48	1+81C	RT	27.9'	P-4-47	1+40C	RT	58.4'	94	-	-	282	216
2720-10-70	0010	P-4-47	1+40C	RT	58.4'	P-4-46	4+23C	RT	28.7'	113	-	-	339	216
2720-10-70	0010	P-4-46	4+23C	RT	28.7'	P-4-45	3+95C	RT	59.7'	84	-	-	252	216
2720-10-70	0010	P-4-45	3+95C	RT	59.7'	P-4-43	802+29EB	RT	21.0'	176	-	-	528	216
2782-11-70	0030	P-4-43	802+29EB	RT	21.0'	P-4-30	227+11	RT	87.4'	151	-	-	453	216
2782-11-70	0030	P-4-30	227+11	RT	87.4'	P-4-29	226+03	RT	42.0'	-	-	-	492	216
2782-12-70	0050	P-4-29	226+03	RT	42.0'	P-4-27	224+04	RT	42.0'	217	-	-	651	216
2782-12-70	0050	P-4-27	224+04	RT	42.0'	P-4-24	222+24	RT	48.3'	199	-	-	597	216
2782-12-70	0050	P-4-24	222+24	RT	48.3'	P-4-22	220+52	RT	31.0'	198	-	-	594	216
2782-12-70	0050	P-4-22	220+52	RT	31.0'	PB28	220+15	RT	38.2'	49	-	-	147	108
2782-12-70	0050	PB28	220+15	RT	38.2'	P-4-20	218+65	RT	35'	168	-	-	504	108
2782-12-70	0050	P-4-20	218+65	RT	35'	PB26	217+20	RT	38.2'	168	-	-	504	108
2782-12-70	0050	PB26	217+20	RT	38.2'	P-4-18	216+85	RT	38.0'	49	-	-	147	108
2782-12-70	0050	P-4-18	216+85	RT	38.0'	P-4-16	215+36	RT	36.6'	167	-	-	501	216
2782-12-70	0050	P-4-16	215+36	RT	36.6'	P-4-14	213+84	RT	35.8'	166	-	-	498	216
2782-12-70	0050	P-4-14	213+84	RT	35.8'	PB21	213+71	LT	73.8'	121	-	-	363	108
2782-12-70	0050	PB21	213+71	LT	73.8'	PB19	212+44	LT	124.6'	-	-	-	489	-
2782-12-70	0050	PB19	212+44	LT	124.6'	LCC-P	211+06	LT	82.3'	-	-	-	486	-
						ID 2782-11-70 CATEGORY 0030 TOTAL				3441**	8826	1494	945	3132
						ID 2782-12-70 CATEGORY 0050 TOTAL				5059**	6219	5244	5481	5616
						ID 2720-10-70 CATEGORY 0010 TOTAL				900	0	1299	1401	1728
									TOTAL	9400	15045	8037	7827	10476

** ADDITIONAL QUANTITIES SHOWN ELSEWHERE

SHEET 2 OF 2

PULL BOXES

PROJECT	CATEGORY	DESCRIPTION	STATION	DIRECTION	OFFSET	653.0135 PULL BOXES STEEL 24X36-INCH EACH
2782-11-70	0030	PB1	199+08	LT	46.6'	1
2782-11-70	0030	PB2	199+73	RT	28.0'	1
2782-11-70	0030	PB3	200+52	LT	58.0'	1
2782-11-70	0030	PB4	201+53	RT	44.9'	1
2782-11-70	0030	PB5	202+43	LT	63.0'	1
2782-11-70	0030	PB6	203+33	RT	53.0'	1
2782-11-70	0030	PB7	203+33	LT	63.0'	1
2782-11-70	0030	PB8	204+24	LT	116.1'	1
2782-11-70	0030	PB9	205+37	LT	115.8'	1
2782-11-70	0030	PB10	206+79	RT	42.0'	1
2782-11-70	0030	PB11	206+86	LT	74.0'	1
2782-11-70	0030	PB12	207+98	LT	63.3'	1
2782-11-70	0030	PB13	208+42	RT	58.3'	1
2782-11-70	0030	PB14	208+57	LT	90.3'	1
2782-11-70	0030	PB15	209+16	RT	43.5'	1
2782-12-70	0050	PB16	209+71	LT	63.0'	1
2782-12-70	0050	PB17	210+42	RT	42.0'	1
2782-12-70	0050	PB18	210+43	LT	63.0'	1
2782-12-70	0050	PB19	212+44	LT	124.6'	1
2782-12-70	0050	PB20	213+81	RT	35.8'	1
2782-12-70	0050	PB21	213+71	LT	73.8'	1
2782-12-70	0050	PB22	214+54	LT	74.0'	1
2782-12-70	0050	PB23	215+33	RT	36.6'	1
2782-12-70	0050	PB24	216+05	LT	64.9'	1
2782-12-70	0050	PB25	217+07	RT	38.0'	1
2782-12-70	0050	PB26	217+20	RT	38.2'	1
2782-12-70	0050	PB27	217+52	LT	69.9'	1
2782-12-70	0050	PB28	220+15	RT	38.2'	1
2782-12-70	0050	PB29	220+55	RT	30.9'	1
2782-12-70	0050	PB30	220+73	LT	71.5'	1
2782-12-70	0050	PB31	222+27	RT	48.1'	1
2782-12-70	0050	PB32	222+77	LT	83.4'	1
2782-12-70	0050	PB33	223+60	LT	97.5'	1
2782-12-70	0050	PB34	224+02	RT	43.0'	1
2782-12-70	0050	PB35	225+32	LT	78.4'	1

PULL BOXES

PROJECT	CATEGORY	DESCRIPTION	STATION	DIRECTION	OFFSET	653.0135 PULL BOXES STEEL 24X36-INCH EACH
2782-12-70	0050	PB36	226+00	RT	42.0'	1
2782-11-70	0030	PB37	227+12	RT	90.4'	1
2782-12-70	0050	PB38	225+95	LT	73.8'	1
2782-11-70	0030	PB39	227+92	RT	97.7'	1
2782-12-70	0050	PB40	403+45	RT	29.9'	1
2782-12-70	0050	PB41	404+40	LT	35.7'	1
2782-12-70	0050	PB42	405+31	RT	30.0'	1
2782-12-70	0050	PB43	406+28	LT	56.4'	1
2782-12-70	0050	PB44	407+11	RT	34.7'	1
2782-12-70	0050	PB45	410+04	LT	70.0'	1
2782-12-70	0050	PB46	410+03	RT	33.7'	1
2782-12-70	0050	PB47	410+47	RT	31.0'	1
2782-12-70	0050	PB48	410+55	LT	70.0'	1
2782-12-70	0050	PB49	411+83	RT	31.1'	1
2782-12-70	0050	PB50	411+86	LT	57.9'	1
2782-12-70	0050	PB51	413+19	LT	49.8'	1
2782-12-70	0050	PB52	414+60	LT	42.2'	1
2782-11-70	0030	PB53	801+39 EB	RT	51.01'	1
2782-11-70	0030	PB54	802+32 EB	RT	21.0'	1
2782-11-70	0030	PB55	803+14 EB	RT	50.7'	1
2720-10-70	0010	PB56	3+95 C	RT	62.6'	1
2720-10-70	0010	PB57	4+25 C	RT	30.4'	1
2720-10-70	0010	PB58	1+42 C	RT	59.8'	1
2720-10-70	0010	PB59	1+79 C	RT	26.8'	1
2720-10-70	0010	PB60	2+41 C	RT	55.1'	1
2720-10-70	0010	PB61	2+71 C	RT	30.9'	1
2720-10-70	0010	PB62	2+91 C	RT	69.1'	1
2720-10-70	0010	PB63	3+15 C	RT	54.6'	1
2720-10-70	0010	PB64	3+40 C	RT	31.3'	1
					ID 2782-11-70 CATEGORY 0030 TOTAL	20
					ID 2782-12-70 CATEGORY 0050 TOTAL	35
					ID 2720-10-70 CATEGORY 0010 TOTAL	9
					PROJECT TOTAL	64

LIGHTING CONTROL CABINET

PROJECT	CATEGORY	DESCRIPTION	STATION	DIRECTION	OFFSET	SPV.0060.0120 LIGHTING CONTROL CABINET 240/480V SPECIAL EACH	656.0200.0003 ELECTRICAL SERVICE METER BREAKER PEDESTAL LIGHTING CONTROL CABINET EACH	654.0215 CONCRETE CONTROL CABINET BASES TYPE 9 EACH
2782-12-70	0050	LCC-P	210+85	LT	86.0'	1	1	1
					PROJECT TOTAL	1	1	1

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3

LIGHTING REMOVAL QUANTITIES

PROJECT	CATEGORY	STATION	DIRECTION	OFFSET	653.0905 REMOVING PULL BOX EACH	SPV.0060.0117 REMOVING EXISTING LIGHTING ASSEMBLY EACH	SPV.0060.0121 REMOVING EXISTING LIGHTING CONTROL CABINET EACH
2782-11-70	0030	199+55	LT	44.9'	-	1	-
2782-11-70	0030	200+27	LT	14.2'	-	1	-
2782-11-70	0030	201+44	LT	18.1'	-	1	-
2782-11-70	0030	202+96	LT	15.7'	-	1	-
2782-11-70	0030	204+08	RT	50.2'	-	1	-
2782-11-70	0030	204+23	LT	113.6'	-	1	-
2782-11-70	0030	205+69	LT	86.7'	-	1	-
2782-11-70	0030	205+55	RT	54.4'	-	1	-
2782-11-70	0030	207+22	LT	22.8'	-	1	-
2782-11-70	0030	208+18	LT	71.2'	-	1	-
2782-11-70	0030	208+92	LT	5.6'	-	1	-
2782-11-70	0030	208+93	RT	70.9'	-	1	-
2782-12-70	0050	210+11	LT	7.9'	-	1	-
2782-12-70	0050	211+59	LT	99.9'	-	1	-
2782-12-70	0050	214+09	LT	8.6'	-	1	-
2782-12-70	0050	215+64	LT	14.0'	-	1	-
2782-12-70	0050	217+24	LT	10.9'	-	1	-
2782-12-70	0050	218+69	RT	33.2'	-	1	-
2782-12-70	0050	219+01	LT	49.9'	-	1	-
2782-12-70	0050	220+06	LT	8.2'	-	1	-
2782-12-70	0050	221+31	LT	9.6'	-	1	-
2782-12-70	0050	222+57	LT	16.0'	-	1	-
2782-12-70	0050	224+39	RT	113.4'	-	1	-
2782-12-70	0050	222+78	RT	223.6'	-	1	-
2782-12-70	0050	226+41	LT	19.3'	-	1	-
2782-11-70	0030	227+31	LT	103.3'	-	1	-
2782-11-70	0030	228+31	LT	6.2'	-	1	-
2782-12-70	0050	403+38	RT	28.3'	-	1	-
2782-12-70	0050	404+11	LT	35.4'	-	1	-
2782-12-70	0050	406+59	LT	14.1'	-	1	-
2782-12-70	0050	408+93	RT	27.4'	-	1	-
2782-12-70	0050	409+00	LT	57.1'	-	1	-
2782-12-70	0050	410+39	LT	48.1'	-	1	-
2782-12-70	0050	410+33	RT	29.0'	-	1	-
2782-12-70	0050	411+77	LT	23.4'	-	1	-
2782-12-70	0050	413+20	RT	3.1'	-	1	-
2782-11-70	0030	801+44	RT	18.2'	-	1	-
2782-11-70	0030	803+50	RT	51.8'	-	1	-
2720-10-70	0010	2+13	LT	7.1'	-	1	-
2720-10-70	0010	807+58	RT	16.0'	-	1	-
2720-10-70	0010	902+56	LT	176.8'	-	1	-
2720-10-70	0010	901+52	LT	16.1'	-	1	-
2720-10-70	0010	903+52	LT	32.9'	-	1	-
2720-10-70	0010	14+65	LT	20.0'	-	1	-
2782-11-70	0030	208+65	LT	57.0'	1	-	-
2782-12-70	0030	211+06	LT	82.3'	-	-	1
		ID 2782-11-70 CATEGORY 0030 TOTAL			1**	16	0
		ID 2782-12-70 CATEGORY 0050 TOTAL			0	22	1
		ID 2720-10-70 CATEGORY 0010 TOTAL			0	6	0
				TOTAL	1	44	1

** ADDITIONAL QUANTITIES SHOWN ELSEWHERE

LUMINAIRE AND POLE MOUNTINGS

PROJECT	CATEGORY	DESCRIPTION	STATION	DIRECTION	OFFSET	SPV.0060.0119 LUMINAIRES UTILITY LED C BLACK EACH	SPV.0060.0111 LUMINAIRE ARMS SINGLE MEMBER 4 1/2-INCH CLAMP 6-FT BLACK EACH	SPV.0060.0112 TRANSFORMER BASES TB6-9 SPECIAL EACH	SPV.0060.0105 POLES TYPE 5 ALUMINUM BLACK EACH	654.0105 CONCRETE BASES TYPE 5 EACH	SPV.0060.0118 RELOCATING EXISTING SINGLE ARM LIGHTING ASSEMBLY EACH	SPV.060.0122 LOCAL MUNICIPAL LUMINAIRE EACH	657.0321 POLES TYPE 5 STEEL EACH
2782-11-70	0030	P-1-1	199+05	LT	46.6'	1	1	1	1	1	-	-	-
2782-11-70	0030	P-2-2	199+70	RT	27.7'	1	1	1	1	1	-	-	-
2782-11-70	0030	P-1-3	200+49	LT	58.0'	1	1	1	1	1	-	-	-
2782-11-70	0030	P-2-4	201+50	RT	44.5'	1	1	1	1	1	-	-	-
2782-11-70	0030	P-1-5	202+40	LT	63.0'	1	1	1	1	1	-	-	-
2782-11-70	0030	P-2-6	203+30	RT	53.0'	1	1	1	1	1	-	-	-
2782-11-70	0030	P-2-7	206+82	RT	42.0'	1	1	1	1	1	-	-	-
2782-11-70	0030	P-1-8	207+95	LT	63.0'	1	1	1	1	1	-	-	-
2782-11-70	0030	P-2-9	208+43	RT	61.2'	1	1	1	1	1	-	-	-
2782-11-70	0030	P-1-10	208+55	LT	92.7'	1	1	1	1	1	-	-	-
2782-12-70	0050	P-2-11	209+24	RT	42.0'	1	1	1	1	1	-	-	-
2782-12-70	0050	P-1-12	209+74	LT	63.0'	1	1	1	1	1	-	-	-
2782-12-70	0050	P-2-13	210+45	RT	42.6'	1	1	1	1	1	-	-	-
2782-12-70	0050	P-4-14	213+84	RT	35.8'	1	1	1	1	1	-	-	-
2782-12-70	0050	P-3-15	214+57	LT	74.0'	1	1	1	1	1	-	-	-
2782-12-70	0050	P-4-16	215+36	RT	36.6'	1	1	1	1	1	-	-	-
2782-12-70	0050	P-3-17	216+08	LT	64.4'	1	1	1	1	1	-	-	-
2782-12-70	0050	P-4-18	217+10	RT	38.0'	1	1	1	1	1	-	-	-
2782-12-70	0050	P-3-19	217+48	LT	69.1'	1	1	1	1	1	-	-	-
2782-12-70	0050	P-4-20	218+65	RT	35.0'	1	1	1	1	1	-	-	-
2782-12-70	0050	P-3-21	219+04	LT	67.0'	1	1	1	1	1	-	-	-
2782-12-70	0050	P-4-22	220+52	RT	31.0'	1	1	1	1	1	-	-	-
2782-12-70	0050	P-3-23	220+76	LT	72.0'	1	1	1	1	1	-	-	-
2782-12-70	0050	P-4-24	222+24	RT	48.3'	1	1	1	1	1	-	-	-
2782-12-70	0050	P-3-25	222+80	LT	83.9'	1	1	1	1	1	-	-	-
2782-12-70	0050	P-3-26	223+63	LT	99.1'	1	1	1	1	1	-	-	-
2782-12-70	0050	P-4-27	224+04	RT	42.0'	1	1	1	1	1	-	-	-
2782-12-70	0050	P-3-28	225+35	LT	77.5'	1	1	1	1	1	-	-	-
2782-12-70	0050	P-4-29	226+03	RT	42.0'	1	1	1	1	1	-	-	-
2782-11-70	0030	P-4-30	227+11	RT	87.4'	1	1	1	1	1	-	-	-
2782-12-70	0050	P-2-31	403+42	RT	29.8'	-	-	-	-	1	1	-	-
2782-12-70	0050	P-1-32	404+37	LT	36.5'	-	-	-	-	1	1	-	-
2782-12-70	0050	P-2-33	405+28	RT	30.0'	-	-	-	-	1	-	1	1
2782-12-70	0050	P-1-34	406+24	LT	56.2'	-	-	-	-	1	-	1	1
2782-12-70	0050	P-2-35	407+08	RT	34.1'	-	-	-	-	1	-	1	1
2782-12-70	0050	P-2-36	410+44	RT	31.0'	-	-	-	-	1	1	-	-
2782-12-70	0050	P-1-37	410+52	LT	70.0'	-	-	-	-	1	1	-	-
2782-12-70	0050	P-2-38	411+86	RT	31.0'	-	-	-	-	1	1	-	-
2782-12-70	0050	P-1-39	411+89	LT	57.5'	-	-	-	-	1	1	-	-
2782-12-70	0050	P-1-40	413+22	LT	49.8'	-	-	-	-	1	1	-	-
2782-12-70	0050	P-1-41	414+63	LT	42.1'	-	-	-	-	1	1	-	-
2782-11-70	0030	P-3-42	801+36 EB	RT	51.0'	1	1	1	1	1	-	-	-
2782-11-70	0030	P-4-43	802+29 EB	RT	21.0'	1	1	1	1	1	-	-	-
2782-11-70	0030	P-3-44	803+17 EB	RT	51.1'	1	1	1	1	1	-	-	-
2720-10-70	0010	P-4-45	3+95 C	RT	59.7'	1	1	1	1	1	-	-	-
2720-10-70	0010	P-4-46	4+23 C	RT	28.7'	1	1	1	1	1	-	-	-
2720-10-70	0010	P-4-47	1+40 C	RT	58.4'	1	1	1	1	1	-	-	-
2720-10-70	0010	P-4-48	1+81 C	RT	27.9'	1	1	1	1	1	-	-	-
2720-10-70	0010	P-3-49	2+40 C	RT	57.6'	1	1	1	1	1	-	-	-
2720-10-70	0010	P-3-50	2+69 C	RT	32.0'	1	1	1	1	1	-	-	-
2720-10-70	0010	P-3-51	3+14 C	RT	57.3'	1	1	1	1	1	-	-	-
2720-10-70	0010	P-3-52	3+38 C	RT	33.1'	1	1	1	1	1	-	-	-
		ID 2782-11-70 CATEGORY 0030 TOTAL				14**	14**	14**	14**	14**	0	0	0
		ID 2782-12-70 CATEGORY 0050 TOTAL				19	19	19	19	30	8	3	3
		ID 2720-10-70 CATEGORY 0010 TOTAL				8	8	8	8	8	0	0	0
					TOTAL	41	41	41	41	52	8	3	3

** ADDITIONAL QUANTITIES SHOWN ELSEWHERE

3

CATEGORY 0040
LIGHTING REMOVAL ITEMS

204.0195	REMOVING CONCRETE BASES
653.0905	REMOVING PULL BOXES
SPV.0060.0301	REMOVING LUMINAIRES
SPV.0060.0302	LAMP DISPOSAL HIGH INTENSITY DISCHARGE
SPV.0060.0303	REMOVING AND SALVAGING LIGHTING UNITS

SYSTEM	LOCATION	OFFSET	ITEM	204.0195 REMOVING CONCRETE BASES EACH	653.0905 REMOVING PULL BOXES EACH	SPV.0060.0301 REMOVING LUMINAIRES EACH	SPV.0060.0302 LAMP DISPOSAL H.I.D. EACH	SPV.0060.0303 REMOVING AND SALVAGING LIGHTING UNITS EACH	COMMENTS
HL-67-PG	110+50	25' RIGHT	BPG2	--	--	1	1	--	REMOVE LUMINAIRE ONLY
HL-67-PG	108+50	25' RIGHT	APG3	--	--	1	1	--	"
HL-67-PG	106+60	25' RIGHT	BPG4	--	--	1	1	--	"
HL-67-PG	104+60	30' RIGHT	APG5	--	--	1	1	--	"
HL-67-PG	102+50	20' RIGHT	BPG6	--	--	1	1	--	REMOVE LUMINAIRE ONLY
HL-67-PG	100+50	15' RIGHT	APG7	1	--	1	1	1	--
HL-67-PG	11+80	20' RIGHT	BPG8	1	--	1	1	1	--
HL-67-PG	10+90	05' RIGHT	PB23	--	1	--	--	--	--
HL-67-PG	09+70	05' RIGHT	APG9	1	--	1	1	1	--
HL-67-PG	07+70	05' RIGHT	BPG10	1	--	1	1	1	--
HL-67-PG	05+50	15' RIGHT	APG11	--	--	1	1	--	REMOVE LUMINAIRE ONLY
HL-67-PG	189K+20	13' RIGHT	BPG12	--	--	1	1	--	"
HL-67-PG	191K+35	13' RIGHT	APG13	--	--	1	1	--	REMOVE LUMINAIRE ONLY
HL-67-PG	191K+75	13' RIGHT	PB8	--	1	--	--	--	--
HL-67-PG	98L+20	21' RIGHT	BPG14	1	--	1	1	1	--
HL-67-PG	--	--	APG15	--	--	1	1	--	REMOVE LUMINAIRE ONLY
HL-67-PG	--	--	BPG16	--	--	1	1	--	"
HL-67-PG	--	--	APG17	--	--	1	1	--	"
HL-67-PG	--	--	BPG18	--	--	1	1	--	"
HL-67-PG	--	--	APG19	--	--	1	1	--	REMOVE LUMINAIRE ONLY
TOTAL (0040)				**5**	**2**	**18**	**18**	**5**	

CATEGORY 0040
LIGHTING BRANCH CIRCUIT CONDUIT

652.0225 CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH

SYSTEM	LOCATION TO LOCATION	652.0225 CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH LF	COMMENTS
HL-67-PG	EXISTING POLE APG11 TO SALVAGED POLE BPG10	220	INTERCEPT EXISTING CONDUIT
HL-67-PG	SALVAGED POLE BPG10 TO SALVAGED POLE APG9	180	--
HL-67-PG	SALVAGED POLE APG9 TO LIGHTING PULL BOX PB23	130	--
HL-67-PG	PULL BOX PB23 TO SALVAGED POLE BPG8	50	--
HL-67-PG	SALVAGED POLE BPG8 TO STUBOUT WEST	15	--
HL-67-PG	PULL BOX PB23 TO EXISTING POLE BPG6	100	INTERCEPT EXISTING CONDUIT
HL-67-PG	EXISTING POLE BPG6 TO SALVAGED POLE APG7	180	INTERCEPT EXISTING CONDUIT
HL-67-PG	SALVAGED POLE APG7 TO STUBOUT WEST	15	--
HL-67-PG	LIGHTING PULL BOX PB9 TO SALVAGED POLE BPG14	20	INTERCEPT EXISTING CONDUIT
HL-67-PG	SALVAGED POLE BPG14 TO STUBOUT EAST	15	--
HL-67-PG	LIGHTING PULL BOX PB9 TO LIGHTING PULL BOX PB8	120	--
HL-67-PG	LIGHTING PULL BOX PB8 TO EXISTING POLE APG13	20	INTERCEPT EXISTING CONDUIT
	TOTAL (0040)	**1,065**	

CATEGORY 0040
LIGHTING PULL BOX AND JUNCTION BOXES QUANTITIES

653.0140 PULL BOXES STEEL 24x42-INCH

SYSTEM	STATION	OFFSET	LABEL	653.0140 PULL BOXES STEEL 24x42-INCH EACH
HL-67-PG	--	--	PB8	1
HL-67-PG	--	--	PB9	1
HL-67-PG	10+90	40' RIGHT	PB23	1
	TOTAL (0040)			**3**

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CATEGORY 0040
LIGHTING WIRE QUANTITIES
240/480 VAC 3-WIRE ISOLATED NEUTRAL SYSTEM

655.0620 ELECTRICAL WIRE LIGHTING 8 AWG
655.0630 ELECTRICAL WIRE LIGHTING 4 AWG
655.0635 ELECTRICAL WIRE LIGHTING 2 AWG

SYSTEM	NETWORK	LOCATION TO LOCATION	DISTANCE	655.0620 ELECTRICAL WIRE LIGHTING 8 AWG LF	655.0630 ELECTRICAL WIRE LIGHTING 4 AWG LF	655.0635 ELECTRICAL WIRE LIGHTING 2 AWG LF
HL-67-PG	A/B/N/G	EXISTING POLE APG11 TO SALVAGED POLE BPG10	220	--	--	920
HL-67-PG	A/B/N/G	SALVAGED POLE BPG10 TO SALVAGED POLE APG9	180	--	--	760
HL-67-PG	A/B/N/G	SALVAGED POLE APG9 TO PB23 TO SALVAGED POLE BPG8	180	--	800	--
HL-67-PG	A/B/N/G	SALVAGED POLE BPG8 TO PB23 TO EXISTING POLE BPG6	150	--	680	--
HL-67-PG	A/B/N/G	EXISTING POLE BPG6 TO SALVAGED POLE APG7	180	--	760	--
HL-67-PG	A/B/N/G	EXISTING POLE APG15 TO PB9 TO SALVAGED POLE BPG14	150	680	--	--
HL-67-PG	A/B/N/G	SALVAGED POLE BPG14 TO PB9 TO PB8 TO APG13	160	760	--	--
		TOTAL (0040)		**1,440**	**2,240**	**1,680**

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CATEGORY 0040
LIGHT POLE QUANTITIES
240/480 VAC

654.0107	CONCRETE BASES TYPE 7
655.0610	ELECTRICAL WIRE LIGHTING 12 AWG
659.1125	LUMINAIRES UTILITY LED C
657.0322	POLES TYPE 5-ALUMINUM
SPV.0060.0304	INSTALLING SALVAGED LIGHTING UNITS

SYSTEM	STATION	OFFSET	ITEM	BOLT PROJECTION	654.0107 CONCRETE BASES TYPE 7 EACH	655.0610 ELECTRICAL WIRE LIGHTING 12 AWG L.F.	659.1125 LUMINAIRES UTILITY LED C EACH	SPV.0060.0304 INSTALLING SALVAGED LIGHTING UNITS EACH	COMMENTS
HL-67-PG	110+50	25' RIGHT	BPG2	3-INCH	--	--	1	--	LUMINAIRE ONLY
HL-67-PG	108+50	25' RIGHT	APG3	3-INCH	--	--	1	--	"
HL-67-PG	106+60	25' RIGHT	BPG4	3-INCH	--	--	1	--	"
HL-67-PG	104+60	30' RIGHT	APG5	3-INCH	--	--	1	--	"
HL-67-PG	102+50	20' RIGHT	BPG6	3-INCH	--	--	1	--	LUMINAIRE ONLY
HL-67-PG	100+50	30' RIGHT	APG7	3-INCH	1	126	1	1	--
HL-67-PG	11+80	45' RIGHT	BPG8	3-INCH	1	144	1	1	--
HL-67-PG	09+70	15' RIGHT	APG9	3-INCH	1	144	1	1	--
HL-67-PG	07+70	15' RIGHT	BPG10	3-INCH	1	144	1	1	--
HL-67-PG	05+50	15' RIGHT	APG11	3-INCH	--	--	1	--	LUMINAIRE ONLY
HL-67-PG	189K+20	13' RIGHT	BPG12	3-INCH	--	--	1	--	"
HL-67-PG	191K+35	13' RIGHT	APG13	3-INCH	--	--	1	--	LUMINAIRE ONLY
HL-67-PG	98L+20	21' RIGHT	BPG14	3-INCH	1	144	1	1	--
HL-67-PG	--	--	APG15	3-INCH	--	--	1	--	LUMINAIRE ONLY
HL-67-PG	--	--	BPG16	3-INCH	--	--	1	--	"
HL-67-PG	--	--	APG17	3-INCH	--	--	1	--	"
HL-67-PG	--	--	BPG18	3-INCH	--	--	1	--	"
HL-67-PG	--	--	APG19	3-INCH	--	--	1	--	LUMINAIRE ONLY
TOTAL (0040)					**5**	**702**	**18**	**5**	

PROJECT NO: 2782-12-70	HWY: USH 41/45	COUNTY: WAUKESHA	MISCELLANEOUS QUANTITIES	SHEET:	E

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ITS EACH REMOVALS

CATEGORY 0060	ITEM ID	204.0195 REMOVING CONCRETE BASES EA	653.0905 REMOVING PULL BOXES EA	676.9001.S REMOVING ADVANCE FLASHER ASSEMBLIES TYPE 1 EA	677.9051.S REMOVING 50-FOOT CAMERA POLE EA	677.9200.S REMOVING CCTV CAMERA EA	SPV.0060.0500 REMOVING CONTROLLER CABINET BASE EA	SPV.0060.0501 REMOVING CONTROLLER CABINET EA	SPV.0060.0502 REMOVING ELECTRICAL SERVICE METER BREAKER PEDESTAL EA
	EXPB2170	-	1	-	-	-	-	-	-
	EXPB2180	-	1	-	-	-	-	-	-
	EXPB2185	-	1	-	-	-	-	-	-
	EXPB0800	-	1	-	-	-	-	-	-
	EXPB0805	-	1	-	-	-	-	-	-
	EXPB1000	-	1	-	-	-	-	-	-
	EXPB1100	-	1	-	-	-	-	-	-
	EXPB1250	-	1	-	-	-	-	-	-
	EXPB1200	-	1	-	-	-	-	-	-
	EXPB1300	-	1	-	-	-	-	-	-
	EXPB2110	-	1	-	-	-	-	-	-
	EXPB1105	-	1	-	-	-	-	-	-
	EXPB1005	-	1	-	-	-	-	-	-
	EXPB0900	-	1	-	-	-	-	-	-
	EXPB0805	-	1	-	-	-	-	-	-
	EXPB2090	-	1	-	-	-	-	-	-
	EXPB2060	-	1	-	-	-	-	-	-
	EXPB2000	-	1	-	-	-	-	-	-
	EXMB1300	-	-	-	-	-	-	-	1
	EXCCTV-67-0102	1	-	-	1	1	-	-	-
	EXCB-RM-0092	-	-	-	-	-	1	1	-
	EXFY1300	1	-	1	-	-	-	-	-
	TOTAL	2	18	1	1	1	1	1	1

ITS CABLE REMOVAL

CATEGOR\0060	FROM	TO	674.0300 REMOVE CABLE LF
	EXMB1300	EXPB1300	20
	EXPB1300	EXPB1250	95
	EXPB1300	EXFY1300	40
	EXPB1250	EXPB1100	125
	EXPB1100	EXPB1000	140
	EXPB1000	EXCB-RM-67-0092	20
	EXPB1000	EXPB1005	85
	EXPB1005	EXPB1105	190
	EXPB1105	EXPB0900	175
	EXPB0900	EXPB0805	70
	EXPB0805	EXPB1045	150
	EXPB1045	EXPB1040	70
	EXPB1040	EXPB1035	70
	EXPB1035	EXOHS1035	15
	EXPB1035	EXPB1030	215
	EXCCTV-67-0102	EXPB2170	35
	EXPB2170	EXPB2180	50
	EXPB2180	EXMH0400	25
	EXMH0400	EXPB2185	120
	EXPB2185	EXPB0800	185
	EXPB0800	EXPB1000	180
	EXMH0400	EXPB1200	455
	EXPB1200	EXPB2110	195
	EXPB2110	EXPB2090	210
	EXPB2090	EXPB2060	300
	EXPB2060	EXPB2000	255
	EXPB2000	EXPB1900	400
			3890

ITS CABINETS, CONTENTS, AND DEVICES

CATEGORY 0060	ITEM I.D.	659.0802 PLAQUES SEQUENCE IDENTIFICATION EACH	672.0100 BASE ITS CONTROLLER CABINET EA	673.0200.S INSTALL ITS FIELD CABINET EA	675.0100 INSTALL CONTROLLER RAMP METER PROCESSOR ASSEMBLY EA	675.0400.S INSTALL EHTERNET SWITCH EA	677.0300.S INSTALL VIDEO ENCODER EA	678.0400 FIBER OPTIC TERMINATION EACH	SPV.0060.0503 GROUND ROD EACH
	CCTV-67-0102	1	-	-	-	1	1	6	1
	CB-RM-67-0092	1	1	1	1	1	-	6	1
	MD1100	-	-	-	-	-	-	-	1
	MD1060	-	-	-	-	-	-	-	1
	FY1200	-	-	-	-	-	-	-	1
		2	1	1	1	2	1	12	5

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ITS CONDUIT AND CABLE ITEMS

CATEGORY 0060	FROM	TO	LINEAR DISTANCE	652.0125 CONDUIT RIGID METALLIC 2-INCH LF	652.0225 CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH LF	652.0235 CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH LF	652.0605 CONDUIT SPECIAL 2-INCH LF	655.0230 CABLE TRAFFIC SIGNAL 5-14 AWG LF	655.0240 CABLE TRAFFIC SIGNAL 7-14 AWG LF	655.0260 CABLE TRAFFIC SIGNAL 12-14 AWG LF	655.0615 ELECTRICAL WIRE LIGHTING 10 AWG LF	655.0630 ELECTRICAL WIRE LIGHTING 4 AWG LF	655.0700 LOOP DETECTOR LEAD IN CABLE LF	674.0200 CABLE MICROWAVE DETECTOR LF	678.0006 INSTALL FIBER OPTIC CABLE OUTDOOR PLANT 6-CT LF
	MB1300	PB1300	30	-	60	-	-	-	-	-	-	180	-	-	-
	PB1300	PB1100	100	-	300	-	-	100	-	-	-	300	-	-	150
	PB1100	MD1100	10	-	20	-	-	-	-	-	10	-	-	10	-
	PB1100	PB0900	150	-	450	-	-	150	-	-	-	450	-	150	200
	PB0900	PB1050	190	-	-	-	570	190	-	-	-	570	-	190	240
	PB1050	CB-RM-67-0092	10	-	10	60	-	10	-	10	-	30	70	30	120
	PB1050	PB1060	35	-	70	-	-	-	-	-	35	-	-	35	-
	PB1060	MD1060	10	-	20	-	-	-	-	-	10	-	-	20	-
	PB1050	EXPB1040	240	-	720	-	-	-	-	240	240	-	1680	-	-
	EXPB1040	EXPB1045	70	-	-	-	-	-	70	70	70	-	140	-	-
	EXPB1045	EXSB1045	10	-	-	-	-	-	10	10	10	-	-	-	-
	EXPB1040	EXPB1035	60	-	-	-	-	-	60	-	60	-	60	-	-
	EXPB1035	OHS1035	10	-	-	-	-	-	10	-	10	-	-	-	-
	EXPB1035	EXPB1020	210	-	-	-	-	-	-	-	210	-	210	-	-
	PB1300	PB2160	190	-	570	-	-	-	-	-	-	570	-	190	240
	PB2160	PB2170	160	-	480	-	-	-	-	-	-	480	-	160	210
	PB2170	CCTV-67-0102	10	10	20	-	-	-	-	-	10	30	-	10	120
	PB2170	EXMH0400	90	-	180	-	-	-	-	-	90	-	-	-	140
	PB1300	PB1200	110	-	-	-	220	110	-	-	-	-	-	-	160
	PB1200	FY1200	10	-	20	-	-	10	-	-	-	-	-	-	-
	PB1200	PB2100	125	-	250	-	-	-	-	-	125	-	-	-	175
	PB2100	PB2090	175	-	350	-	-	-	-	-	175	-	-	-	225
	PB2090	PB2080	90	-	180	-	-	-	-	-	90	-	-	-	140
	PB2080	PB2060	225	-	450	-	-	-	-	-	225	-	-	-	275
	PB2060	PB2040	150	-	300	-	-	-	-	-	150	-	-	-	200
	PB2040	PB2010	85	-	170	-	-	-	-	-	85	-	-	-	135
	PB2010	PB1980	280	-	560	-	-	-	-	-	280	-	-	-	330
	PB1980	CV1950	270	-	-	-	-	-	-	-	270	-	-	-	370
				10	5180	60	790	570	150	330	2155	2610	2160	795	3430

ITS MANHOLES AND PULLBOXES

CATEGORY 0060	ITEM ID	652.0700.S INSTALL CONDUIT INTO EXISTING ITEM EACH	653.0140 PULL BOXES STEEL 24 x 42-INCH EACH	678.0300 FIBER OPTIC SPLICE EACH	673.0105 COMMUNICATION VAULT TYPE 1 EACH
	EXMH0400	1	-	18	-
	EXPB1040	1	-	-	-
	PB1200	-	1	-	-
	PB1300	-	1	-	-
	PB1100	-	1	-	-
	PB2160	-	1	-	-
	PB2170	-	1	-	-
	PB1100	-	1	-	-
	PB0900	-	1	-	-
	PB1050	-	1	-	-
	PB1060	-	1	-	-
	PB2100	-	1	-	-
	PB2090	-	1	-	-
	PB2080	-	1	-	-
	PB2060	-	1	-	-
	PB2040	-	1	-	-
	PB2010	-	1	-	-
	PB1980	-	1	-	-
	CV1950	-	-	6	1
	TOTAL	2	16	24	1

ITS POWER

CATEGORY 0060	ITEM I.D.	656.0200.0004 ELECTRICAL SERVICE METER BREAKER PEDESTAL (RM-67-0092) LS	656.0500.0001 ELECTRICAL SERIVCE BREAKER DISCONNECT BOX (RM-67-0092) LS	656.0500.0002 ELECTRICAL SERIVCE BREAKER DISCONNECT BOX (CCTV-67-0102) LS
	MB1300	1	-	-
	CB-RM-67-0092	-	1	-
	CCTV-67-0102	-	-	1
		1	1	1

ITS LUMP SUM ITEMS

CATEGORY 0060	ITEM ID	670.0100.0001 FIELD SYSTEM INTEGRATOR LS	670.0200.0001 ITS DOCUMENTATION LS	678.0500.0001 COMMUNICATION SYSTEM TESTING LS
	PROJECT	1	1	1
	TOTAL	1	1	1

ITS POLES AND BASES

CATEGORY 0060	ITEM I.D.	654.0101 CONCRETE BASES TYPE1 EA	654.0105 CONCRETE BASES TYPE 5 EACH	657.0255 TRANSFORMER BASES BREAKAWAY 11 1/2-INCH BOLT CIRCLE EACH	657.0322 POLES TYPE 5-ALUMINUM EACH	672.0250 BASE CAMERA POLE 50-FT EACH	673.0225.S INSTALL POLE MOUNTED CABINET EACH	675.0300 INSTALL MOUNTED CONTROLLER MICROWAVE DETECTOR ASSEMBLY EACH	676.0300 SIGNAL ASSEMBLY ADVANCE FLASHER TYPE 1 EA	677.0100 INSTALL CAMERA POLE EACH	677.0200 INSTALL CAMERA ASSEMBLY EA
	FY1200	1	-	-	-	-	-	-	1	1	-
	CCTV-67-0102	-	-	-	-	1	1	4	-	-	1
	MD1100	-	1	1	1	-	-	1	-	-	-
	MD1060	-	1	1	1	-	-	1	-	-	-
	TOTAL	1	2	2	2	1	1	6	1	1	1

CATEGORY 0070
TEMPORARY LIGHTING ITEMS

652.0135 CONDUIT RIGID METALLIC 3-INCH
652.0235 RIGID NONMETALLIC SCHEDULE 40 3-INCH
655.0630 ELECTRICAL WIRE LIGHTING 4 AWG
655.0635 ELECTRICAL WIRE LIGHTING 2 AWG
SPV.0060.0305 JUNCTION BOXES 12"X8"X6" *
SPV.0090.0302 CONDUIT FLEXIBLE METALLIC 3-INCH

* ADDITIONAL QUANTITIES FOUND ELSEWHERE

SYSTEM	LOCATION	OFFSET	652.0135 CONDUIT RIGID METALLIC 3-INCH LF	652.0235 CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH LF	655.0630 ELECTRICAL WIRE LIGHTING 4 AWG LF	655.0635 ELECTRICAL WIRE LIGHTING 2 AWG LF	SPV.0060.0305 JUNCTION BOXES 12"X8"X6" EACH	SPV.0090.0302 CONDUIT FLEXIBLE METALLIC 3-INCH LF
HL-67-PG	284+13	C/L	--	50	--	--	1	10
HL-67-PG	284+13 - 286+42	C/L	229	--	--	--	--	--
HL-67-PG	286+42	C/L	--	50	--	--	1	10
HL-67-PG	281+80 - 286+65	C/L	--	--	2140	2140	--	--
	TOTAL (0070)		**229**	**100**	**2,140**	**2,140**	**2**	**20**

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CATEGORY 0070
LIGHTING REMOVAL ITEMS

SPV.0060.0301 REMOVING LUMINAIRES
SPV.0060.0302 LAMP DISPOSAL HIGH INTENSITY DISCHARGE
SPV.0060.0303 REMOVING AND SALVAGE LIGHTING UNITS
SPV.0090.0301 REMOVING ELECTRICAL WIRE FROM CONDUIT

SYSTEM	LOCATION	OFFSET	ITEM	SPV.0060.0301 REMOVING LUMINAIRES	SPV.0060.0302 LAMP DISPOSAL HIGH INTENSITY DISCHARGE	SPV.0060.0303 REMOVING AND SALVAGE LIGHTING UNITS	SPV.0090.0301 REMOVING ELECTRICAL WIRE FROM CONDUIT	COMMENTS
				EACH	EACH	EACH	LF	
HL-67-PG	APG11 TO CPG4/DPG4	--	ELECTRICAL WIRE	--	--	--	370	--
HL-67-PG	CPG5/DPG5 TO CPG4/DPG4	--	ELECTRICAL WIRE	--	--	--	260	--
HL-67-PG	CPG4/DPG4 TO CPG3/DPG3	--	ELECTRICAL WIRE	--	--	--	260	--
HL-67-PG	284+25	C/L	CPG4/DPG4	2	2	1	--	--
HL-67-PG	285+00 - 285+50	C/L	UDL CPG/DPG	--	2	--	200	SB UDL
HL-67-PG	285+00 - 285+50	C/L	UDL DPG/CPG	--	2	--	200	NB UDL
HL-67-PG	286+65	C/L	CPG3/DPG3	2	2	1	--	FIELD VERIFY REMOVAL
	TOTAL (0070)			**4**	**8**	**2**	**1,290**	

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CATEGORY 0070
LIGHTING WIRE QUANTITIES
240/480 VAC 3-WIRE ISOLATED NEUTRAL SYSTEM

655.0630 ELECTRICAL WIRE LIGHTING 4 AWG *
655.0635 ELECTRICAL WIRE LIGHTING 2 AWG*

* ADDITIONAL QUANTITIES FOUND ELSEWHERE

SYSTEM	NETWORK	LOCATION TO LOCATION	DISTANCE	655.0630 ELECTRICAL WIRE LIGHTING 4 AWG LF	655.0635 ELECTRICAL WIRE LIGHTING 2 AWG LF	COMMENTS
HL-67-PG	C/D/N/G	SALVAGED POLE CPG3/DPG3 TO UDL SB (PILGRIM ROAD) CPG/DPG	150	680	680	FIELD VERIFY POLE CPG3/DPG3 REMOVAL
HL-67-PG	C/D/N/G	SALVAGED POLE CPG3/DPG3 TO SALVAGED POLE CPG4/DPG4	240	1,040	1,040	FIELD VERIFY POLE CPG3/DPG3 REMOVAL
HL-67-PG	C/D/N/G	SALVAGED POLE CPG4/DPG4 TO UDL NB (PILGRIM ROAD) CPG/DPG	100	480	480	--
HL-67-PG	C/D/N/G	SALVAGED POLE CPG4/DPG4 TO EXISTING POLE CPG5/DPG5	245	1,060	1,060	--
HL-67-PG	A/B/N/G	SALVAGED POLE CPG3/DPG3 TO JUNCTION BOX 282+50 TO POLE APG11	575	--	2,380	--
		TOTAL (0070)		**3,260**	**5,640**	

CATEGORY 0070
LIGHT POLE QUANTITIES
240/480 VAC

655.0610 ELECTRICAL WIRE LIGHTING 12 AWG
659.1130 LUMINAIRES UTILITY LED D
657.0322 POLES TYPE 5-ALUMINUM
SPV.0060.0304 INSTALLING SALVAGED LIGHTING UNITS
SPV.0060.0305 JUNCTION BOXES 12"X8"X6" *

* ADDITIONAL QUANTITIES FOUND ELSEWHERE

SYSTEM	STATION	OFFSET	ITEM	BOLT PROJECTION	655.0610 ELECTRICAL WIRE LIGHTING 12 AWG L.F.	659.1130 LUMINAIRES UTILITY LED D EACH	SPV.0060.0304 INSTALLING SALVAGED LIGHTING UNITS EACH	SPV.0060.0305 JUNCTION BOXES 12"X8"X6" EACH
HL-67-PG	284+25	C/L	CPG4/DPG4	3-INCH	246	2	1	1
HL-67-PG	286+65	C/L	CPG3/DPG3	3-INCH	246	2	1	--
		TOTAL (0070)			**492**	**4**	**2**	**1**

3

3

CATEGORY 0070
UNDERDECK LIGHTING ITEMS
240 / 480 VAC 3-WIRE ISOLATED NEUTRAL SYSTEM

659.0600.0001 UNDERDECK LIGHTING (B-67-337) PILGRIM ROAD STRUCTURE
659.0600.0002 UNDERDECK LIGHTING (B-67-338) PILGRIM ROAD STRUCTURE
659.1205 LUMINAIRES UNDERDECK LED A

SYSTEM	LOCATION	659.0600.0001 UNDERDECK LIGHTING (B-67-337) PILGRIM ROAD STRUCTURE LS	659.0600.0002 UNDERDECK LIGHTING (B-67-338) PILGRIM ROAD STRUCTURE LS	659.1205 LUMINAIRES UNDERDECK LED A EACH
HL-67-PG	USH 41/45 - PILGRIM ROAD BRIDGE (B-67-337)	1	--	4
HL-67-PG	USH 41/45 - PILGRIM ROAD BRIDGE (B-67-338)	--	1	4
	TOTAL (0070)	1	1	8

CATEGORY 0070
LIGHTING SYSTEM ITEMS

SPV.0105.0301 MAINTENANCE OF LIGHTING SYSTEMS

SYSTEM	LOCATION	SPV.0105.0301 MAINTENANCE OF LIGHTING SYSTEMS LS
HL-67-PG	USH 41/45 - PILGRIM ROAD BRIDGES	1
	TOTAL (0070)	1

PILGRIM ROAD WATER MAIN - PROJECT 2782-11-71

CATEGORY 0010

BID ITEM NO.	ITEM DESCRIPTION	UNIT	QUANTITY
SPV.0060.0401	4-INCH WATER SERVICE GATE VALVE WITH VALVE BOX	EA	2
SPV.0060.0402	6-INCH WATER SERVICE GATE VALVE WITH VALVE BOX	EA	2
SPV.0060.0403	6-INCH HYDRANT GATE VALVE WITH VALVE BOX	EA	5
SPV.0060.0404	8-INCH GATE VALVE WITH VALVE BOX	EA	5
SPV.0060.0405	12-INCH BUTTERFLY VALVE WITH VALVE BOX	EA	5
SPV.0060.0406	16-INCH BUTTERFLY VALVE WITH VALVE BOX	EA	5
SPV.0060.0407	16-INCH X 12-INCH STAINLESS STEEL TAPPING SLEEVE WITH VALVE BOX	EA	1
SPV.0060.0408	HYDRANT	EA	6
SPV.0060.0409	CURB STOP 1-1/4 INCH AND BOX INCL. RECONNECTION OF EXIST. SERVICE	EA	5
SPV.0060.0410	RECONNECTION OF EXISTING 6-INCH SERVICE	EA	1
SPV.0060.0411	RECONNECTION OF EXISTING 4-INCH SERVICE	EA	1
SPV.0060.0412	REMOVE EXISTING HYDRANT	EA	4
SPV.0090.0401	4-INCH PVC WATER SERVICE WITH GRANULAR BACKFILL	LF	44
SPV.0090.0402	6-INCH PVC WATER SERVICE WITH GRANULAR BACKFILL	LF	45
SPV.0090.0403	6-INCH PVC HYDRANT LEAD WITH GRANULAR BACKFILL	LF	104
SPV.0090.0404	8-INCH PVC WATER MAIN WITH GRANULAR BACKFILL	LF	341
SPV.0090.0405	12-INCH PVC WATER MAIN WITH GRANULAR BACKFILL	LF	1,373
SPV.0090.0406	12-INCH PVC WATER MAIN WITH SPOIL BACKFILL	LF	85
SPV.0090.0407	16-INCH PVC WATER MAIN WITH GRANULAR BACKFILL	LF	1,221
SPV.0090.0408	1-1/4 INCH POLYETHYLENE WATER SERVICE LATERAL WITH GRANULAR BACKFILL	LF	90
SPV.0105.0401	CUT AND CAP EXISTING 12-INCH MAIN AT EXISTING TEE	LS	1

ADJUST SANITARY SEWER MANHOLE

CATEGORY	PROJECT NUMBER	STAGE	LOCATION	STATION TO STATION	SPV.0060.0013 EACH
0010	2782-11-71	3	PILGRIM ROAD		
				198+21 - 209+20	6
				226+66 - 228+24	--
			MEGAL DRIVE		
				700+50 - 703+33	1
			FALLS PARKWAY		
				85+13 - 87+37	2
			MAIN STREET		
				410+13 - 414+97	2
		4	PILGRIM ROAD		
				198+21 - 209+20	3
				226+66 - 228+24	--
			TOTAL I.D. 2782-11-71		14

COMPOSITE: ORIGINAL DOCUMENT LOCATED AT THE REGISTER OF DEEDS

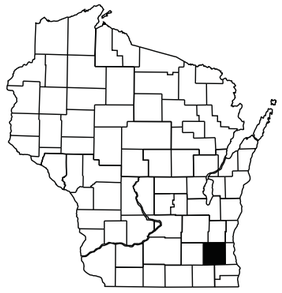
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

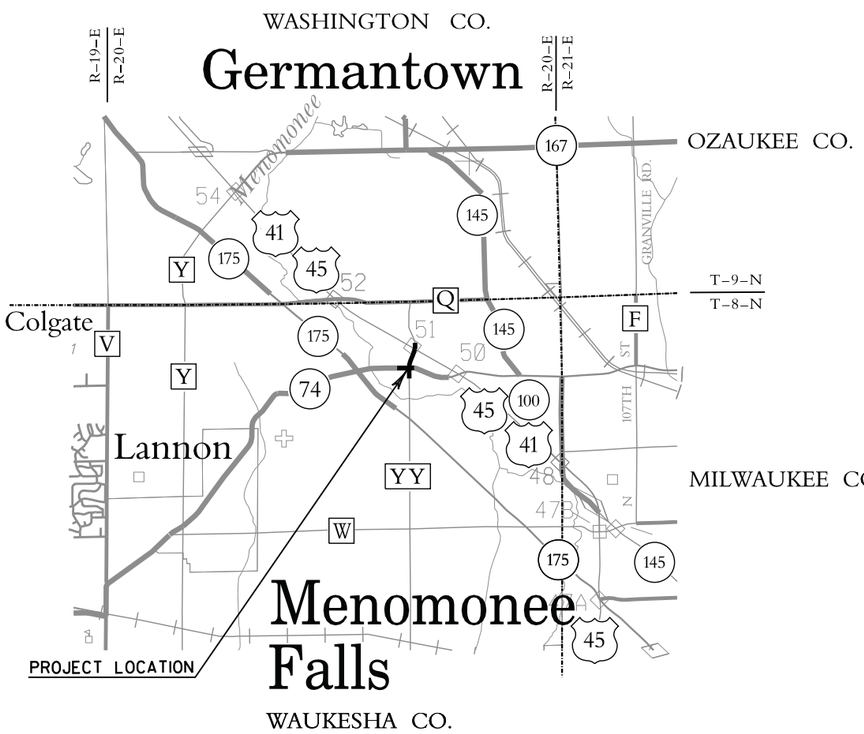
TRANSPORTATION PROJECT PLAT TITLE SHEET

PROJECT NO. 2782-11-20

PARK BLVD TO MEGAL DRIVE

LOCAL STREET
WAUKESHA COUNTY







LAYOUT
SCALE 0 1 MI.

CONVENTIONAL ABBREVIATIONS

ACCESS POINT/ DRIVEWAY CONNECTION	AP	REFERENCE LINE	R/L
ACCESS RIGHTS	AR	RELEASE OF RIGHTS	ROR
ACRES	AC.	REMAINING	REM.
AND OTHERS	ET.AL.	RIGHT-OF-WAY	R/W
CENTERLINE	C/L	SECTION	SEC.
CERTIFIED SURVEY MAP	CSM	STATION	STA.
CORNER	COR.	TEMPORARY LIMITED EASEMENT	TLE
DOCUMENT	DOC.	VOLUME	V.
EASEMENT	EASE.	**CURVE DATA**	
HIGHWAY EASEMENT	H.E.	LONG CHORD	LCH
LAND CONTRACT	LC	LONG CHORD BEARING	LCB
MONUMENT	MON.	RADIUS	R
PAGE	P.	DEGREE OF CURVE	D
PERMANENT LIMITED EASEMENT	PLE	CENTRAL ANGLE OR DELTA	DELTA
PROPERTY LINE	PL	LENGTH OF CURVE	L
RECORDED AS	(100')	TANGENT	TAN

CONVENTIONAL SYMBOLS

FOUND IRON PIPE/PIN	LP (1" UNLESS NOTED)	PROPOSED R/W LINE	
		EXISTING H.E. LINE	
R/W MONUMENT	•(SET)	PROPERTY LINE	
R/W STANDARD	▲(SET)	LOT & TIE LINES	
SIGN	ISIGN	SLOPE INTERCEPTS	
SECTION CORNER MONUMENT		CORPORATE LIMITS	
SECTION CORNER SYMBOL		ACCESS RESTRICTED (BY PREVIOUS ACQUISITION/CONTROL)	
FEE (HATCH VARIES)		ACCESS RESTRICTED (BY ACQUISITION)	
TEMPORARY LIMITED EASEMENT		NO ACCESS (BY STATUTORY AUTHORITY)	
PERMANENT LIMITED EASEMENT		SECTION LINE	
R/W BOUNDARY POINT	RWB20	QUARTER LINE	
PARCEL NUMBER	102	SIXTEENTH LINE	
UTILITY PARCEL NUMBER	92	EXISTING CENTERLINE	
SIGN NUMBER (OFF PREMISE)	21-1	PROPOSED REFERENCE LINE	
BUILDING		PARALLEL OFFSET	

CONVENTIONAL UTILITY SYMBOLS

	NON COMPENSABLE	COMPENSABLE
WATER	W	
GAS	G	
TELEPHONE	T	
OVERHEAD	OH	
TRANSMISSION LINES ELECTRIC	E	
CABLE TELEVISION	TV	
FIBER OPTIC	FO	
SANITARY SEWER	SAN	
STORM SEWER	SS	
POWER POLE		
TELEPHONE POLE		
TELEPHONE PEDESTAL		
ELECTRIC TOWER		

NOTES:

POSITIONS SHOWN ON THIS PLAT ARE STATE PLANE COORDINATES, WISCONSIN, SOUTH ZONE, NAD 27 IN U.S. SURVEY FEET. VALUES SHOWN ARE GROUND COORDINATES, GROUND BEARINGS, AND GROUND DISTANCES. TO CONVERT GRID AND GROUND DISTANCES EITHER DIVIDE OR MULTIPLY BY THE SCALE FACTOR OF 0.99990319.

RIGHT-OF-WAY MONUMENTS ARE TYPE 2 AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

RIGHT-OF-WAY BOUNDARIES ARE DEFINED WITH COURSES OF THE PERIMETER OF THE HIGHWAY LANDS REFERENCED TO THE U.S. PUBLIC LAND SURVEY SYSTEM OR OTHER "SURVEYS OF PUBLIC RECORD".

PROPERTY LINES SHOWN ON THIS PLAT ARE DRAWN FROM DATA DERIVED FROM MAPS AND DOCUMENTS OF PUBLIC RECORD AND/OR EXISTING OCCUPATIONAL LINES. THIS PLAT MAY NOT BE A TRUE REPRESENTATION OF EXISTING PROPERTY LINES, EXCLUDING RIGHT-OF-WAY LINES, AND SHOULD NOT BE USED AS A SUBSTITUTE FOR AN ACCURATE FIELD SURVEY.

EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE:
EXISTING HIGHWAY RIGHT-OF-WAY FOR PILGRIM ROAD ESTABLISHED FROM PREVIOUS PROJECTS 2782-02-20, 2782-04-20, EDGEBROOK PARK, MENOMONEE MEADOWS, ROYAL MANOR ADDITION NO. 2, EDGEBROOK PARK, CSM 3972, CSM 10923, CSM 11020 CSM 11026, CSM 4629.
EXISTING HIGHWAY RIGHT-OF-WAY FOR STH 74 ESTABLISHED FROM PREVIOUS PROJECTS 2782-02-20, J.A. PRATT & ED. STARK'S 2ND ADD. TO MENOMONEE FALLS, CSM 10923.
EXISTING HIGHWAY RIGHT-OF-WAY FOR CLEAVELAND AVE ESTABLISHED FROM PREVIOUS PROJECTS MENOMONEE MEADOWS, ROYAL MANOR ADDITION NO. 1, ROYAL MANOR ADDITION NO. 2,
EXISTING HIGHWAY RIGHT-OF-WAY FOR PARK BLVD ESTABLISHED FROM PREVIOUS PROJECTS CSM 3972.
EXISTING HIGHWAY RIGHT-OF-WAY FOR RICHFIELD WAY ESTABLISHED FROM PREVIOUS PROJECTS MENOMONEE MEADOWS, CSM 11026.
EXISTING HIGHWAY RIGHT-OF-WAY FOR US 41 ESTABLISHED FROM PREVIOUS PROJECTS F03-1(69), 2782-09-20.
EXISTING ACCESS CONTROL ESTABLISHED FROM PREVIOUS PROJECTS 2782-02-20, 1178-08-86, F03-1(69), MENOMONEE MEADOWS, ROYAL MANOR ADDITION NO. 1 & 2, AND CSM 10923.

A **TEMPORARY LIMITED EASEMENT** (TLE) IS A RIGHT FOR CONSTRUCTION PURPOSES, AS DEFINED HEREIN, INCLUDING THE RIGHT TO OPERATE NECESSARY EQUIPMENT THEREON AND THE RIGHT OF INGRESS AND EGRESS, AS LONG AS REQUIRED FOR SUCH PUBLIC PURPOSE, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE, OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM NECESSARY OR DESIRABLE. ALL TLES EXPIRE AT THE COMPLETION OF THE CONSTRUCTION PROJECT FOR WHICH THIS INSTRUMENT IS GIVEN.

DIMENSIONING FOR THE NEW RIGHT-OF-WAY IS MEASURED ALONG AND PERPENDICULAR TO NEW REFERENCE LINES.

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 2782-11-20 - 4.01
SHEET 2 OF 2
AMENDMENT NO:

COMPOSITE: ORIGINAL DOCUMENT LOCATED IN REGISTER OF DEEDS

TRANSPORTATION PROJECT PLAT NO: 2782-11-20 - 4.01 AMENDMENT NO: 1

AMENDMENT MODIFIES OWNER NAMES FOR PARCELS 4 AND 8, ADDS UTILITY EASEMENT RELEASE FOR UTILITY PARCEL 203 AFFECTING PARCEL 9 OF TPP 2782-11-20-4.01, RECORDED IN BOOK 1, PAGE 160 AS DOCUMENT 4056273.

THAT PART OF LOT 3 & 4 CSM 10923, LOT 1 CSM 11020, BLOCK 7, ROYAL MANOR ADDITION NO. 1, LOCATED IN AND PART OF THE SW¼ OF THE SW¼ OF SECTION 2; PART OF LOTS 1 & 2 CSM 3972, LOT 19, J.A. PRATT AND ED. STARK'S 2ND ADDITION TO MENOMONEE FALLS, LOCATED IN AND PART OF THE SE¼ OF THE SE¼ OF SECTION 3; PART OF LOT 12, BLOCK 1, EDGEBROOK PARK LOCATED IN THE NE¼ OF THE NE¼ OF SECTION 10; PART OF THE NW¼ OF THE NW¼ OF SECTION 11; ALL BEING LOCATED IN TOWNSHIP 8 NORTH, RANGE 20 EAST, VILLAGE OF MENOMONEE FALLS, WAUKESHA COUNTY, WISCONSIN.

RELOCATION ORDER PILGRIM RD WAUKESHA COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE VILLAGE OF MENOMONEE FALLS DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 61.34(3), (3m) & 61.36, WISCONSIN STATUTES, THE VILLAGE OF MENOMONEE FALLS HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE VILLAGE FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE VILLAGE OF MENOMONEE FALLS, PURSUANT TO THE PROVISIONS OF SECTION 61.34(3), (3m) & 61.36, WISCONSIN STATUTES.

POSITIONS SHOWN ON THIS PLAT ARE STATE PLANE COORDINATES, WISCONSIN, SOUTH ZONE, NAD 27 IN U.S. SURVEY FEET. VALUES SHOWN ARE GROUND COORDINATES. GROUND BEARINGS, AND GROUND DISTANCES. TO CONVERT BETWEEN GRID AND GROUND DISTANCES EITHER DIVIDE OR MULTIPLY BY THE SCALE FACTOR OF 0.99990319.

TLE STATION AND OFFSET TABLE		
POINT NO.	STATION	OFFSET
TLE157	198+50.00	-49.74
TLE158	198+50.00	-56.74
TLE159	199+50.00	-66.00
TLE160	200+59.02	-85.00
TLE161	201+47.40	-90.15
TLE162	201+54.00	-78.00
TLE163	202+97.72	-78.00
TLE164	202+97.88	-71.00
TLE167	206+10.20	-90.00
TLE168	206+50.00	-87.00
TLE169	207+16.66	-87.00
TLE170	207+80.47	-77.28
TLE171	207+77.77	-106.88
TLE172	205+84.75	66.15
TLE173	208+00.38	-109.86
TLE174	207+94.55	-164.21
TLE175	208+00.07	-165.06
TLE176	208+47.38	125.16
TLE177	208+43.69	125.76
TLE178	208+25.09	63.66
TLE179	208+00.00	54.00
TLE180	207+50.00	54.26
TLE181	206+11.94	55.00
TLE182	205+63.81	87.31
TLE183	205+64.21	148.90
TLE184	205+58.95	148.90
TLE185	204+21.63	214.65
TLE186	204+20.92	104.65
TLE187	204+10.81	82.49
TLE188	203+90.00	70.00
TLE189	202+00.00	70.00
TLE190	201+00.00	58.00
TLE191	199+50.00	63.00
TLE192	198+50.49	37.96

RIGHT OF WAY STATION AND OFFSET TABLE		
POINT NO.	STATION	OFFSET
101	200+59.43	-65.74
102	201+47.85	-70.99
103	203+87.73	-71.00
104	204+17.54	-92.58
105	204+21.67	-111.93
106	204+72.61	-112.11
107	205+35.96	-112.35
108	206+14.08	-112.64
109	206+09.67	-86.93
110	206+72.69	-70.99
111	206+94.90	-70.99
112	208+12.26	-65.72
113	208+17.91	-28.18
114	208+22.53	0.00
115	208+29.32	37.88
116	206+78.39	29.00
117	205+94.04	29.00
118	205+65.23	51.51
119	205+58.61	78.63
120	205+48.40	148.90
121	205+46.09	213.85
122	204+76.62	214.29
123	204+29.01	214.6
124	204+28.46	117.63
125	203+71.46	60.99
126	202+19.51	60.99
127	201+29.49	50.00
128	199+73.32	50.00
129	198+76.63	38.55
130	198+50.28	0.00
131	198+50.15	-22.06
PRW140	206+29.17	-82.00
PRW141	207+16.26	-82.00
PRW142	207+97.26	-70.72
PRW143	208+08.94	-90.56
PRW144	208+19.75	50.00
PRW145	207+15.20	50.00
PRW146	206+11.94	50.00
PRW147	205+58.65	86.78
PRW148	208+34.83	66.99

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE VILLAGE.

PARCEL NUMBER	OWNERS	INTEREST REQUIRED	R/W SQ FT REQUIRED NEW	EXISTING	TOTAL	TLE SQ FT
1	DEBRA L. SOPHER	TLE	---	---	---	201.895
2	ROBERT J. ZARTLER & KATHLEEN A. ZARTLER, TRUSTEES OF THE ZARTLER REVOCABLE TRUST	TLE	---	---	---	795.149
3	NANCY J. SEHR	TLE	---	---	---	1384.224
4	RICHARD A. SCHULTZ & DONNA L. SCHULTZ, TRUSTEES OF THE RICHARD A.SCHULTZ & DONNA L. SCHULTZ JOINT REVOCABLE TRUST AGREEMENT, DATED MARCH 27, 2002	TLE	---	---	---	1089.526
6	EDWARD J. SABLJAK & ROSEMARY H. SABLJAK	FEE/TLE	1794.535	---	1794.535	2376.700
7	CHRISTOPHER J. MACKAY	TLE	---	---	---	85.321
8	INLAND PILGRIM VILLAGE, LLC	TLE	---	---	---	6333.844
9	ERNIE VON SCHLEDORN PONTIAC-BUICK, INC.	FEE/TLE	2648.534	---	2648.534	1157.400
11	WISCONSIN BELL, INC., F/K/A AMERITECH-WISCONSIN, F/K/A WISCONSIN TELEPHONE COMPANY	FEE/TLE	2198.506	---	2198.506	1110.457

UTILITY INTERESTS REQUIRED

UTILITY NUMBER	OWNER(S)	INTEREST REQUIRED
200	WE ENERGIES (ELECTRIC)	RELEASE OF RIGHTS
201	WE ENERGIES (GAS)	RELEASE OF RIGHTS
202	AT&T	RELEASE OF RIGHTS
203	MENOMONEE FALLS SEWER & WATER UTILITY	RELEASE OF RIGHTS
205	TW TELECOM	RELEASE OF RIGHTS

HIGHWAY	BASIS OF EXISTING R/W	R/W WIDTH	YEAR
STH 74	RW PLAT 2782-02-20	VARIES	1980
PILGRIM RD	RW PLAT 2782-02-20	VARIES	1980
STH 74	J.A. PRATT & ED. STARK'S 2ND ADD. TO MENOMONEE FALLS	50'	1909
PILGRIM RD	EDGEBROOK PARK	50'	1931
PILGRIM RD	MENOMONEE MEADOWS	66'	1950
CLEAVELAND AVE	MENOMONEE MEADOWS	60'	1950
CLEVELAND AVE	ROYAL MANOR ADDITION NO. 1	60'	1958
PILGRIM RD	ROYAL MANOR ADDITION NO. 2	VARIES	1982
CLEVELAND AVE	ROYAL MANOR ADDITION NO. 2	60'	1982
PILGRIM RD	CSM 3972	49.50'	1979
PARK BLVD	CSM 3972	VARIES	1979
PILGRIM RD	CSM 10923	VARIES	2011
STH 74	CSM 10923	VARIES	2011
STH 74	CSM 11020	VARIES	2012

LINE TABLE		
LINE NUMBER	BEARING	LENGTH
L1	N50°34'02"W	23.67'
L2	S58°52'45"W	21.97'

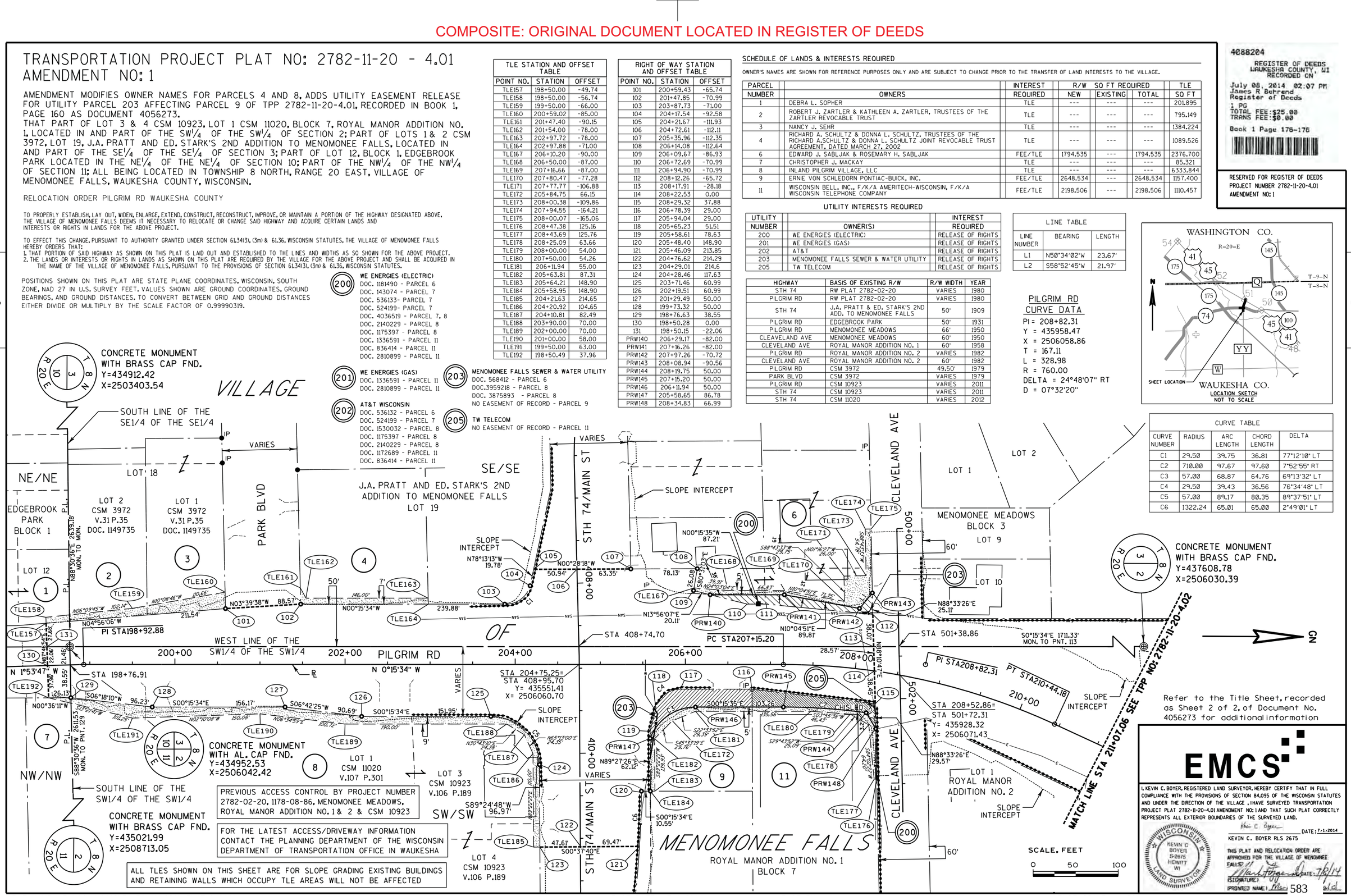
PILGRIM RD CURVE DATA
PI = 208+82.31
Y = 435958.47
X = 2506058.86
T = 167.11
L = 328.98
R = 760.00
DELTA = 24°48'07" RT
D = 07°32'20"

CURVE TABLE				
CURVE NUMBER	RADIUS	ARC LENGTH	CHORD LENGTH	DELTA
C1	29.50	39.75	36.81	77°12'10" LT
C2	710.00	97.67	97.60	7°52'55" RT
C3	57.00	68.87	64.76	69°13'32" LT
C4	29.50	39.43	36.56	76°34'48" LT
C5	57.00	89.17	80.35	89°37'51" LT
C6	1322.24	65.01	65.00	2°49'01" LT

LOCATION SKETCH
NOT TO SCALE

4088204
REGISTER OF DEEDS
WAUKESHA COUNTY, WI
RECORDED ON
July 08, 2014 02:07 PM
James R Behrend
Register of Deeds
1 PG
TOTAL FEE:$25.00
TRANS FEE:$0.00
Book 1 Page 176-176

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 2782-11-20-4.01
AMENDMENT NO: 1



EMCS

I, KEVIN C. BOYER, REGISTERED LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE VILLAGE, I HAVE SURVEYED TRANSPORTATION PROJECT PLAT 2782-11-20-4.01 AMENDMENT NO: 1 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

Kevin C. Boyer DATE: 7/1/2014
KEVIN C. BOYER RLS 2675

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE VILLAGE OF MENOMONEE FALLS

(SIGNATURE) DATE: 7/8/14
(PRINTED NAME) Mac

583

FILE NAME : P:\44xx\4442\RW Plat\LOCAL PLAT\040101_rp_A1.dgn
APPRAISAL PLAT DATE :
PLOT DATE : 7/1/2014
PLOT BY : tgr
PLOT NAME :
PLOT SCALE : 1:50

2782-11-70, PILGRIM ROAD, 2782-11-20 4.01 AMENDMENT NO: 1

COMPOSITE: ORIGINAL DOCUMENT LOCATED AT THE REGISTER OF DEEDS

160

TRANSPORTATION PROJECT PLAT NO: 2782-11-20 - 4.01

THAT PART OF LOT 3 & 4 CSM 10923, LOT 1 CSM 11020, BLOCK 7, ROYAL MANOR ADDITION NO. 1, LOCATED IN AND PART OF THE SW1/4 OF THE SW1/4 OF SECTION 2; PART OF LOTS 1 & 2 CSM 3972, LOT 19, J.A. PRATT AND ED. STARK'S 2ND ADDITION TO MENOMONEE FALLS, LOCATED IN AND PART OF THE SE1/4 OF THE SE1/4 OF SECTION 3; PART OF LOT 12, BLOCK 1, EDGEBROOK PARK LOCATED IN THE NE1/4 OF THE NE1/4 OF SECTION 10; PART OF THE NW1/4 OF THE NW1/4 OF SECTION 11; ALL BEING LOCATED IN TOWNSHIP 8 NORTH, RANGE 20 EAST, VILLAGE OF MENOMONEE FALLS, WAUKESHA COUNTY, WISCONSIN.

RELOCATION ORDER PILGRIM RD WAUKESHA COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE VILLAGE OF MENOMONEE FALLS DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 61.34(3), (3m) & 61.36, WISCONSIN STATUTES, THE VILLAGE OF MENOMONEE FALLS HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE VILLAGE FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE VILLAGE OF MENOMONEE FALLS, PURSUANT TO THE PROVISIONS OF SECTION 61.34(3), (3m) & 61.36, WISCONSIN STATUTES.

POSITIONS SHOWN ON THIS PLAT ARE STATE PLANE COORDINATES, WISCONSIN, SOUTH ZONE, NAD 27 IN U.S. SURVEY FEET. VALUES SHOWN ARE GROUND COORDINATES, GROUND BEARINGS, AND GROUND DISTANCES. TO CONVERT BETWEEN GRID AND GROUND DISTANCES EITHER DIVIDE OR MULTIPLY BY THE SCALE FACTOR OF 0.99990319.

PREVIOUS ACCESS CONTROL BY PROJECT NUMBER 2782-02-20, 1178-08-86, MENOMONEE MEADOWS, ROYAL MANOR ADDITION NO. 1 & 2 & CSM 10923

FOR THE LATEST ACCESS/DRIVEWAY INFORMATION CONTACT THE PLANNING DEPARTMENT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN WAUKESHA

CONCRETE MONUMENT WITH BRASS CAP FND.
Y=434912.42
X=2503403.54
VILLAGE

TLE STATION AND OFFSET TABLE

POINT NO.	STATION	OFFSET
TLE157	198+50.00	-49.74
TLE158	198+50.00	-56.74
TLE159	199+50.00	-66.00
TLE160	200+59.02	-85.00
TLE161	201+47.40	-90.15
TLE162	201+54.00	-78.00
TLE163	202+97.72	-78.00
TLE164	202+97.88	-71.00
TLE167	206+10.20	-90.00
TLE168	206+50.00	-87.00
TLE169	207+16.66	-87.00
TLE170	207+80.47	-77.28
TLE171	207+77.77	-106.88
TLE172	205+84.75	66.15
TLE173	208+00.38	-109.86
TLE174	207+94.55	-164.21
TLE175	208+00.07	-165.06
TLE176	208+47.38	125.16
TLE177	208+43.69	125.76
TLE178	208+25.09	63.66
TLE179	208+00.00	54.00
TLE180	207+50.00	54.26
TLE181	206+11.94	55.00
TLE182	205+63.81	87.31
TLE183	205+64.21	148.90
TLE184	205+58.95	148.90
TLE185	204+21.63	214.65
TLE186	204+20.92	104.65
TLE187	204+10.81	82.49
TLE188	203+90.00	70.00
TLE189	202+00.00	70.00
TLE190	201+00.00	58.00
TLE191	199+50.00	63.00
TLE192	198+50.49	37.96

RIGHT OF WAY STATION AND OFFSET TABLE

POINT NO.	STATION	OFFSET
101	200+59.43	-65.74
102	201+47.85	-70.99
103	203+87.73	-71.00
104	204+17.54	-92.58
105	204+21.67	-111.93
106	204+72.61	-112.11
107	205+35.96	-112.35
108	206+14.08	-112.64
109	206+09.67	-86.93
110	206+72.69	-70.99
111	206+94.90	-70.99
112	208+12.26	-65.72
113	208+17.91	-28.18
114	208+22.53	0.00
115	208+29.32	37.88
116	206+78.39	29.00
117	205+94.04	29.00
118	205+65.23	51.51
119	205+58.61	78.63
120	205+48.40	148.90
121	205+46.09	213.85
122	204+76.62	214.29
123	204+29.01	214.6
124	204+28.46	117.63
125	203+71.46	60.99
126	202+19.51	60.99
127	201+29.49	50.00
128	199+73.32	50.00
129	198+76.63	38.55
130	198+50.28	0.00
131	198+50.15	-22.06
PRW140	206+29.17	-82.00
PRW141	207+16.26	-82.00
PRW142	207+97.26	-70.72
PRW143	208+08.94	-90.56
PRW144	208+19.75	50.00
PRW145	207+15.20	50.00
PRW146	206+11.94	50.00
PRW147	205+58.65	86.78
PRW148	208+34.83	66.99

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE VILLAGE.

PARCEL NUMBER	OWNERS	INTEREST REQUIRED	R/W SO FT REQUIRED NEW	EXISTING	TOTAL	TLE SO FT
1	DEBRA L. SOPHER	TLE	---	---	---	201.895
2	ROBERT J. ZARTLER & KATHLEEN A. ZARTLER, TRUSTEES OF THE ZARTLER REVOCABLE TRUST	TLE	---	---	---	795.149
3	NANCY J. SEHR	TLE	---	---	---	1384.224
4	RICHARD & DONNA SCHULTZ TRUST	TLE	---	---	---	1089.526
6	EDWARD J. SABLJAK & ROSEMARY H. SABLJAK	FEE/TLE	1794.535	---	1794.535	2376.700
7	CHRISTOPHER J. MACKAY	TLE	---	---	---	85.321
8	PILGRIM PARTNERS, LLC	TLE	---	---	---	6333.844
9	ERNIE VON SCHLEDORN PONTIAC-BUICK, INC.	FEE/TLE	2648.534	---	2648.534	1157.400
11	WISCONSIN BELL, INC., F/K/A AMERITECH-WISCONSIN, F/K/A WISCONSIN TELEPHONE COMPANY	FEE/TLE	2198.506	---	2198.506	1110.457

UTILITY INTERESTS REQUIRED

UTILITY NUMBER	OWNER(S)	INTEREST REQUIRED
200	WE ENERGIES (ELECTRIC)	RELEASE OF RIGHTS
201	WE ENERGIES (GAS)	RELEASE OF RIGHTS
202	AT&T	RELEASE OF RIGHTS
203	MENOMONEE FALLS SEWER & WATER UTILITY	RELEASE OF RIGHTS
205	TW TELECOM	RELEASE OF RIGHTS

LINE TABLE

LINE NUMBER	BEARING	LENGTH
L1	N50°34'02"W	23.67'
L2	S58°52'45"W	21.97'

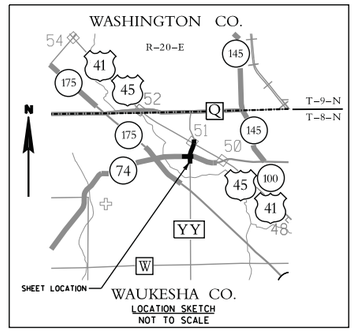
HIGHWAY	BASIS OF EXISTING R/W	R/W WIDTH	YEAR
STH 74	RW PLAT 2782-02-20	VARIES	1980
PILGRIM RD	RW PLAT 2782-02-20	VARIES	1980
STH 74	J.A. PRATT & ED. STARK'S 2ND ADD. TO MENOMONEE FALLS	50'	1909
PILGRIM RD	EDGEBROOK PARK	50'	1931
PILGRIM RD	MENOMONEE MEADOWS	66'	1950
CLEAVELAND AVE	MENOMONEE MEADOWS	60'	1950
CLEVELAND AVE	ROYAL MANOR ADDITION NO. 1	60'	1958
PILGRIM RD	ROYAL MANOR ADDITION NO. 2	VARIES	1982
CLEVELAND AVE	ROYAL MANOR ADDITION NO. 2	60'	1982
PILGRIM RD	CSM 3972	49.50'	1979
PARK BLVD	CSM 3972	VARIES	1979
PILGRIM RD	CSM 10923	VARIES	2011
STH 74	CSM 10923	VARIES	2011
STH 74	CSM 11020	VARIES	2012

PILGRIM RD CURVE DATA

PI = 208+82.31
Y = 435958.47
X = 2506058.86
T = 167.11
L = 328.98
R = 760.00
DELTA = 24°48'07" RT
D = 07°32'20"

CURVE TABLE

CURVE NUMBER	RADIUS	ARC LENGTH	CHORD LENGTH	DELTA
C1	29.50	39.75	36.81	77°12'10" LT
C2	710.00	97.67	97.60	7°52'55" RT
C3	57.00	68.87	64.76	69°13'32" LT
C4	29.50	39.43	36.56	76°34'48" LT
C5	57.00	89.17	80.35	89°37'51" LT
C6	1322.24	65.01	65.00	2°49'01" LT



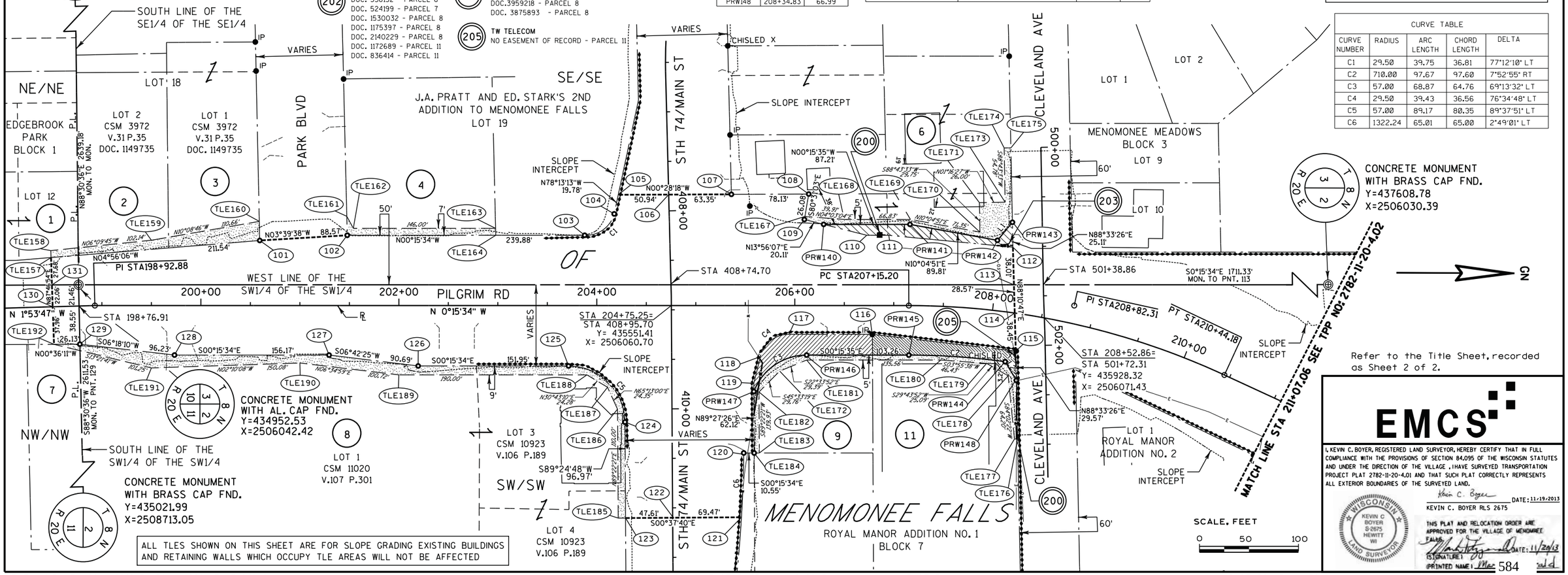
(200) **WE ENERGIES (ELECTRIC)**
DOC. 1181490 - PARCEL 6
DOC. 143074 - PARCEL 7
DOC. 536133- PARCEL 7
DOC. 524199 - PARCEL 7
DOC. 2140229 - PARCEL 8
DOC. 1175397 - PARCEL 8
DOC. 3922843 - PARCEL 8
DOC. 1336591 - PARCEL 11
DOC. 836414 - PARCEL 11
DOC. 2810899 - PARCEL 11

(201) **WE ENERGIES (GAS)**
DOC. 1336591 - PARCEL 11
DOC. 2810899 - PARCEL 11

(202) **AT&T WISCONSIN**
DOC. 536132 - PARCEL 6
DOC. 524199 - PARCEL 7
DOC. 1530032 - PARCEL 8
DOC. 1175397 - PARCEL 8
DOC. 2140229 - PARCEL 8
DOC. 1172689 - PARCEL 11
DOC. 836414 - PARCEL 11

(203) **MENOMONEE FALLS SEWER & WATER UTILITY**
DOC. 568412 - PARCEL 6
DOC.3959218 - PARCEL 8
DOC. 3875893 - PARCEL 8

(205) **TW TELECOM**
NO EASEMENT OF RECORD - PARCEL 11



ALL TLES SHOWN ON THIS SHEET ARE FOR SLOPE GRADING EXISTING BUILDINGS AND RETAINING WALLS WHICH OCCUPY TLE AREAS WILL NOT BE AFFECTED

Refer to the Title Sheet, recorded as Sheet 2 of 2.

EMCS

I, KEVIN C. BOYER, REGISTERED LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE VILLAGE, I HAVE SURVEYED TRANSPORTATION PROJECT PLAT 2782-11-20-4.01 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

Kevin C. Boyer DATE: 11/19/2013
KEVIN C. BOYER RLS 2675

WISCONSIN KEVIN C BOYER S-2675 HEWITT WI LAND SURVEYOR

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE VILLAGE OF MENOMONEE FALLS.
(SIGNATURE) DATE: 11/20/13
(PRINTED NAME) Mac Ladd

4056273
REGISTER OF DEEDS
WAUKESHA COUNTY, WI
RECORDED ON
December 03, 2013 02:18 PM
James R Behrend
Register of Deeds
2 PGS
TOTAL FEE: $25.00
TRANS FEE: $0.00
Book 1 Page 159-160

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 2782-11-20-4.01
AMENDMENT NO:
SHEET 1 OF 2

FILE NAME : P:\44xx\4442\RW Plat\LOCAL PLAT\040101_rp.dgn
APPRAISAL PLAT DATE :
PLOT DATE : 11/19/2013
PLOT BY : kcb
PLOT NAME :
PLOT SCALE : 1:50

2782-11-70, PILGRIM ROAD, 2782-11-20 4.01

COMPOSITE: ORIGINAL DOCUMENT LOCATED IN REGISTER OF DEEDS

TRANSPORTATION PROJECT PLAT NO: 2782-11-20 - 4.02
AMENDMENT NO: 1

AMENDMENT MODIFIES OWNER NAME FOR PARCEL 12, ADDS COMPENSABLE UTILITIES AND UTILITY EASEMENT RELEASE FOR UTILITY PARCEL 205 AND COMPENSABLE UTILITIES FOR UTILITY PARCEL 200 AFFECTING PARCEL 12 OF TPP 2782-11-20-4.02, RECORDED IN BOOK 1, PAGE 163 AS DOCUMENT 4056845.

THAT PART OF THE LOT 1 OF CSM 11026, BEING PART OF THE NE1/4 OF THE SE1/4 OF SECTION 3; PART OF THE NW1/4 OF THE SW1/4 OF SECTION 2, ALL BEING LOCATED IN TOWNSHIP 8 NORTH, RANGE 20 EAST, VILLAGE OF MENOMONEE FALLS, WAUKESHA COUNTY, WISCONSIN.

RELOCATION ORDER PILGRIM RD WAUKESHA COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE VILLAGE OF MENOMONEE FALLS DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 61.34(3), (3m) & 61.36, WISCONSIN STATUTES, THE VILLAGE OF MENOMONEE FALLS HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE VILLAGE FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE VILLAGE OF MENOMONEE FALLS, PURSUANT TO THE PROVISIONS OF SECTION 61.34(3), (3m) & 61.36, WISCONSIN STATUTES.

TLE STATION AND OFFSET TABLE		
POINT NO.	STATION	OFFSET
TLE220	212+32.78	-370.00
TLE221	212+49.02	-370.00
TLE225	212+70.00	-163.74
TLE227	219+68.76	229.67
TLE228	219+36.21	308.00

RIGHT OF WAY STATION AND OFFSET TABLE		
POINT NO.	STATION	OFFSET
200	212+38.17	-245.78
201	212+45.70	-162.96
202	216+36.80	-170.63
203	219+81.86	0.00
204	221+00.00	94.43
205	218+90.22	331.11
206	211+04.69	61.20
207	211+07.06	0.00
208	211+12.19	-131.78
209	211+13.63	-168.79
210	211+01.35	-361.64
211	212+32.78	-370.00
212	221+00.00	120.74
PRW250	219+01.46	347.1
PRW251	218+87.49	338.24

VILLAGE OF MENOMONEE FALLS

MENOMONEE MEADOWS
BLOCK 4

LOT 1
CSM 11026
BOOK 107 P.333-341
DOC. 3968530

NE/SE

NW/SW

SE/SE

SW/SW

MATCH LINE STA 221+00.00
SEE TPP NO: 2782-11-20-4.03

MATCH LINE STA 211+07.06
SEE TPP NO: 2782-11-20-4.01

CONCRETE MONUMENT
WITH BRASS CAP FND.
Y=437608.78
X=2506030.39

CONCRETE MONUMENT
WITH ALUMINUM CAP FND.
Y=434952.53
X=2506042.42

T 8 N R 20 E — 3 2 10 11

WEST LINE OF THE NW1/4 OF THE SW1/4

NO°15'34"W 1274.56' MON. TO PNT. 208

N89°39'48"E 26.30'

154.44'

363.85'

N39°51'02"E

316.28'

PC STA215+20.31

SLOPE INTERCEPT

SLOPE INTERCEPT

SLOPE INTERCEPT

PI STA220+38.20

212-PRW250
L = 328.03
LCH = 324.49
R = 643.20
DELTA = 29°13'15"RT

204-205
L = 342.98
LCH = 338.68
R = 623.92
DELTA = 31°29'47"LT

S55°44'37"E 7.91'

S35°13'58"W 19.67'

836.02'

US 41/45

220+00
218+00
216+00
214+00
212+00

PILGRIM RD
N 24°32'32" E

S38°22'11"W

PILGRIM RD
CURVE DATA
PI = 220+38.20
Y = 437014.69
X = 2506541.15
T = 517.89
L = 988.06
R = 1335.00
DELTA = 42°24'21" LT
D = 04°17'31"

STA 212+36.22

NORTH LINE OF THE SW1/4 OF THE SW1/4

FALLS PARKWAY

VARIES

131.70'

S71°19'54"E 207.33'

S66°27'28"E 5.80'

211-200
L = 118.55
LCH = 118.54
R = 2187.33
DELTA = 03°06'20" LT

200-201
L = 83.17
LCH = 83.16
R = 2187.33
DELTA = 02°10'43" LT

N20°25'59"E

N69°06'01"W

193.23'

31.05'

N63°13'53"W 131.87'

61.25'

US 41/45 SB ON RAMP

SCALE, FEET
0 50 100

GN

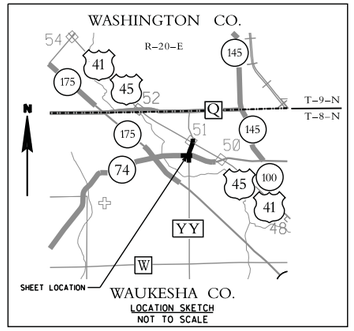
Refer to the Title Sheet, recorded as Sheet 2 of 2, of Document No. 4056273 for additional information

POSITIONS SHOWN ON THIS PLAT ARE STATE PLANE COORDINATES, WISCONSIN, SOUTH ZONE, NAD 27 IN U.S. SURVEY FEET. VALUES SHOWN ARE GROUND COORDINATES, GROUND BEARINGS, AND GROUND DISTANCES. TO CONVERT BETWEEN GRID AND GROUND DISTANCES EITHER DIVIDE OR MULTIPLY BY THE SCALE FACTOR OF 0.99990319.

PREVIOUS ACCESS CONTROL BY PROJECT NUMBER FO3-1(69), TO3-1(64) & MENOMONEE MEADOWS

4088205
REGISTER OF DEEDS
WAUKESHA COUNTY, WI
RECORDED ON
July 08, 2014 02:07 PM
James R Behrend
Register of Deeds
1 PG
TOTAL FEE:$25.00
TRANS FEE:$0.00
Book 1 Page 177-177

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 2782-11-20-4.02
AMENDMENT NO: 1



ALL TLES SHOWN ON THIS SHEET ARE FOR SLOPE GRADING

FOR THE LATEST ACCESS/DRIVEWAY INFORMATION CONTACT THE PLANNING DEPARTMENT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN WAUKESHA

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE VILLAGE.

PARCEL NUMBER	OWNERS	INTEREST REQUIRED	R/W SQ FT REQUIRED NEW	EXISTING	TOTAL	TLE SQ FT
12	FITNESS DEVELOPMENT ASSOCIATES MENOMONEE FALLS, LLC	TLE	---	---	---	4491.042
13	H-D PILGRIM ROAD, LLC, A WISCONSIN LIMITED LIABILITY COMPANY	FEE/TLE	7732.847	---	7732.847	1370.464

(200) WE ENERGIES (ELECTRIC)
DOC. 3970325 - PARCEL 12
DOC. 3975666 - PARCEL 12
NO EASEMENT OF RECORD - PARCEL 13

(201) WE ENERGIES (GAS)
DOC. 3971197 - PARCEL 12
DOC. 3975664 - PARCEL 12

(202) AT&T WISCONSIN
DOC. 3971197 - PARCEL 12
DOC. 3975664 - PARCEL 12
NO EASEMENT OF RECORD - PARCEL 13

(203) MENOMONEE FALLS SEWER & WATER UTILITY
DOC. 3971196 - PARCEL 12

(204) WINDSTREAM
DOC. 3971197 - PARCEL 12
DOC. 3975664 - PARCEL 12

(205) TW TELECOM
DOC. 3970324 - PARCEL 12
DOC. 3975665- PARCEL 12

HIGHWAY	BASIS OF EXISTING R/W	R/W WIDTH	YEAR
US 41	RW PLAT F03-1(69)	VARIES	1961
PILGRIM RD	RW PLAT 2782-04-20	VARIES	1979
PILGRIM RD	MENOMONEE MEADOWS	66'	1950
RICHFIELD WAY	MENOMONEE MEADOWS	60'	1950
PILGRIM RD	CSM 11026	VARIES	2013
RICHFIELD WAY	CSM 11026	VARIES	2013

UTILITY INTERESTS REQUIRED

UTILITY NUMBER	OWNER(S)	INTEREST REQUIRED
200	WE ENERGIES (ELECTRIC)	RELEASE OF RIGHTS
201	WE ENERGIES (GAS)	RELEASE OF RIGHTS
202	AT&T	RELEASE OF RIGHTS
203	MENOMONEE FALLS SEWER & WATER UTILITY	RELEASE OF RIGHTS
204	WINDSTREAM	RELEASE OF RIGHTS
205	TW TELECOM	RELEASE OF RIGHTS

EMCS

I, KEVIN C. BOYER, REGISTERED LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF VILLAGE, I HAVE SURVEYED TRANSPORTATION PROJECT PLAT 2782-11-20-4.02 AMENDMENT NO: 1 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN KEVIN C BOYER S-2675 MEWITT WI LAND SURVEYOR

Kevin C. Boyer DATE: 7/7/2014
KEVIN C. BOYER RLS 2675

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE VILLAGE OF MENOMONEE FALLS.
(SIGNATURE) DATE: 7/8/14
(PRINTED NAME) Mar 585 gald

FILE NAME : P:\44xx\4442\RW Plat\LOCAL PLAT\040102_rp_A1.dgn
APPRAISAL PLAT DATE :
PLOT DATE : 7/7/2014
PLOT BY : tgr
PLOT NAME :
PLOT SCALE : 1:50
2782-11-70, PILGRIM ROAD, 2782-11-20 4.02 AMENDMENT NO: 1

COMPOSITE: ORIGINAL DOCUMENT LOCATED AT THE REGISTER OF DEEDS

TRANSPORTATION PROJECT PLAT NO: 2782-11-20 - 4.02

THAT PART OF THE LOT 1 OF CSM 11026, BEING PART OF THE NE1/4 OF THE SE1/4 OF SECTION 3; PART OF THE NW1/4 OF THE SW1/4 OF SECTION 2, ALL BEING LOCATED IN TOWNSHIP 8 NORTH, RANGE 20 EAST, VILLAGE OF MENOMONEE FALLS, WAUKESHA COUNTY, WISCONSIN.

RELOCATION ORDER PILGRIM RD WAUKESHA COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE VILLAGE OF MENOMONEE FALLS DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 61.34(3), (3m) & 61.36, WISCONSIN STATUTES, THE VILLAGE OF MENOMONEE FALLS HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE VILLAGE FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE VILLAGE OF MENOMONEE FALLS, PURSUANT TO THE PROVISIONS OF SECTION 61.34(3), (3m) & 61.36, WISCONSIN STATUTES.

POSITIONS SHOWN ON THIS PLAT ARE STATE PLANE COORDINATES, WISCONSIN, SOUTH ZONE, NAD 27 IN U.S. SURVEY FEET. VALUES SHOWN ARE GROUND COORDINATES, GROUND BEARINGS, AND GROUND DISTANCES. TO CONVERT BETWEEN GRID AND GROUND DISTANCES EITHER DIVIDE OR MULTIPLY BY THE SCALE FACTOR OF 0.99990319.

TLE STATION AND OFFSET TABLE		
POINT NO.	STATION	OFFSET
TLE220	212+32.78	-370.00
TLE221	212+49.02	-370.00
TLE225	212+70.00	-163.74
TLE227	219+68.76	229.67
TLE228	219+36.21	308.00

RIGHT OF WAY STATION AND OFFSET TABLE		
POINT NO.	STATION	OFFSET
200	212+38.17	-245.78
201	212+45.70	-162.96
202	216+36.80	-170.63
203	219+81.86	0.00
204	221+00.00	94.43
205	218+90.22	331.11
206	211+04.69	61.20
207	211+07.06	0.00
208	211+12.19	-131.78
209	211+13.63	-168.79
210	211+01.35	-361.64
211	212+32.78	-370.00
212	221+00.00	120.74
PRW250	219+01.46	347.1
PRW251	218+87.49	338.24

MATCH LINE STA 221+00.00
SEE TPP NO: 2782-11-20-4.03

N89°39'48"E 26.30'

Refer to the Title Sheet, recorded as Sheet 2 of 2, of Document No. 4056273 for additional information

4056845
REGISTER OF DEEDS
WAUKESHA COUNTY, WI
RECORDED ON
December 06, 2013 02:05 PM
James R Behrend
Register of Deeds
1 PG
TOTAL FEE: $25.00
TRANS FEE: $0.00
Book 1 Page 163-163

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 2782-11-20-4.02
AMENDMENT NO:

CONCRETE MONUMENT WITH BRASS CAP FND.
Y=437608.78
X=2506030.39

T 8 N, R 20 E, Sec 3 / 2

VILLAGE OF MENOMONEE FALLS

MENOMONEE MEADOWS
BLOCK 4

LOT 1
CSM 11026
BOOK 107 P.333-341
DOC. 3968530

NE/SE

WEST LINE OF THE NW1/4 OF THE SW1/4

220+00
218+00
216+00
214+00
212+00

363.85'
154.44'
N39°51'02"E
316.28'
PC STA215+20.31
PI STA220+38.20
SLOPE INTERCEPT
212-PRW250
L = 328.03
LCH = 324.49
R = 643.20
DELTA = 29°13'15"RT
204-205
L = 342.98
LCH = 338.68
R = 623.92
DELTA = 31°29'47"LT
S35°13'58"W 19.67'
S55°44'37"E 7.91'
896.02'
US 41/45
MENOMONEE FALLS
NW/SW
SW/SW
US 41/45 SB ON RAMP
S38°22'11"W
N24°32'32"E
PILGRIM RD
FALLS PARKWAY
VARIES
131.70'
S79°18'44"E 201.33'
S66°27'28"E 5.80'
N22°41'56"E
N20°53'39"E
211-200
L = 118.55
LCH = 118.54
R = 2187.33
DELTA = 03°06'20" LT
200-201
L = 83.17
LCH = 83.16
R = 2187.33
DELTA = 02°10'43" LT
N69°06'01"W 193.23'
SLOPE INTERCEPT
31.05'
STA 212+36.22
NORTH LINE OF THE SW1/4 OF THE SW1/4
SE/SE
LOT 4
LOT 3
NO°15'34"W 1274.56' MON. TO PNT. 208
N63°13'53"W 131.87'
61.25'
2" IP
CONCRETE MONUMENT WITH ALUMINUM CAP FND.
Y=434952.53
X=2506042.42
MATCH LINE STA 211+07.06
SEE TPP NO: 2782-11-20-4.01

PILGRIM RD CURVE DATA
PI = 220+38.20
Y = 437014.69
X = 2506541.15
T = 517.89
L = 988.06
R = 1335.00
DELTA = 42°24'21" LT
D = 04°17'31"

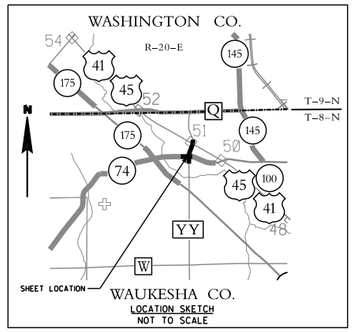
200 WE ENERGIES (ELECTRIC)
DOC. 3970325 - PARCEL 12
DOC. 3975666 - PARCEL 12
NO EASEMENT OF RECORD - PARCEL 13

201 WE ENERGIES (GAS)
DOC. 3971197 - PARCEL 12
DOC. 3975664 - PARCEL 12

202 AT&T WISCONSIN
DOC. 3971197 - PARCEL 12
DOC. 3975664 - PARCEL 12
NO EASEMENT OF RECORD - PARCEL 13

203 MENOMONEE FALLS SEWER & WATER UTILITY
DOC. 3971196 - PARCEL 12

204 WINDSTREAM
DOC. 3971197 - PARCEL 12
DOC. 3975664 - PARCEL 12



HIGHWAY	BASIS OF EXISTING R/W	R/W WIDTH	YEAR
US 41	RW PLAT F03-1(69)	VARIES	1961
PILGRIM RD	RW PLAT 2782-04-20	VARIES	1979
PILGRIM RD	MENOMONEE MEADOWS	66'	1950
RICHFIELD WAY	MENOMONEE MEADOWS	60'	1950
PILGRIM RD	CSM 11026	VARIES	2013
RICHFIELD WAY	CSM 11026	VARIES	2013

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE VILLAGE.

PARCEL NUMBER	OWNERS	INTEREST REQUIRED	R/W SQ FT REQUIRED NEW	EXISTING	TOTAL	TLE SQ FT
12	MNFV 0007.998.003 RYAN RICHFIELD WAY,	TLE	---	---	---	4491.042
13	H-D PILGRIM ROAD, LLC, A WISCONSIN LIMITED	FEE/TLE	7732.847	---	7732.847	1370.464

UTILITY INTERESTS REQUIRED

UTILITY NUMBER	OWNER(S)	INTEREST REQUIRED
200	WE ENERGIES (ELECTRIC)	RELEASE OF RIGHTS
201	WE ENERGIES (GAS)	RELEASE OF RIGHTS
202	AT&T	RELEASE OF RIGHTS
203	MENOMONEE FALLS SEWER & WATER UTILITY	RELEASE OF RIGHTS
204	WINDSTREAM	RELEASE OF RIGHTS

PREVIOUS ACCESS CONTROL BY PROJECT NUMBER F03-1(69), T03-1(64) & MENOMONEE MEADOWS

ALL TLES SHOWN ON THIS SHEET ARE FOR SLOPE GRADING

FOR THE LATEST ACCESS/DRIVEWAY INFORMATION CONTACT THE PLANNING DEPARTMENT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN WAUKESHA

GN

SCALE, FEET
0 50 100

EMCS

I, KEVIN C. BOYER, REGISTERED LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF VILLAGE, I HAVE SURVEYED TRANSPORTATION PROJECT PLAT 2782-11-20-4.02 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

Kevin C. Boyer DATE: 12/5/2013
KEVIN C. BOYER RLS 2675

WISCONSIN KEVIN C BOYER S-2675 HEWITT WI LAND SURVEYOR

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE VILLAGE OF MENOMONEE FALLS
(SIGNATURE) DATE: 12/5/13
(PRINTED NAME)

FILE NAME : P:\44xx\4442\RW Plat\LOCAL PLAT\040102_rp.dgn
APPRAISAL PLAT DATE :
PLOT DATE : 12/4/2013
PLOT BY : kcb
PLOT NAME :
PLOT SCALE : 1:50

2782-11-70, PILGRIM ROAD, 2782-11-20 4.02

COMPOSITE: ORIGINAL DOCUMENT LOCATED IN REGISTER OF DEEDS

TRANSPORTATION PROJECT PLAT NO: 2782-11-20 - 4.03
AMENDMENT NO: 1

AMENDS THE FEE AND TLE AREAS OF PARCEL 17 AND MODIFIES THE OWNER NAME FOR PARCEL 18 OF TPP 2782-11-20-4.03, RECORDED IN BOOK 1, PAGE 164 AS DOCUMENT 4056846. THAT PART OF LOT 1 OF CSM 10941 AND PART OF LOT 2 OF CSM 4629 , LOCATED IN AND PART OF THE SW1/4 OF THE NW1/4 AND PART OF THE NW1/4 OF THE SW1/4 OF SECTION 2; PART OF THE SE1/4 OF THE NE1/4 OF SECTION 3, ALL BEING LOCATED IN TOWNSHIP 8 NORTH, RANGE 20 EAST, VILLAGE OF MENOMONEE FALLS, WAUKESHA COUNTY, WISCONSIN.

RELOCATION ORDER PILGRIM RD WAUKESHA COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE VILLAGE OF MENOMONEE FALLS DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 61.34(3), (3m) & 61.36, WISCONSIN STATUTES, THE VILLAGE OF MENOMONEE FALLS HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE VILLAGE FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE VILLAGE OF MENOMONEE FALLS, PURSUANT TO THE PROVISIONS OF SECTION 61.34(3), (3m) & 61.36, WISCONSIN STATUTES.

SCHEDULE OF LANDS & INTERESTS REQUIRED

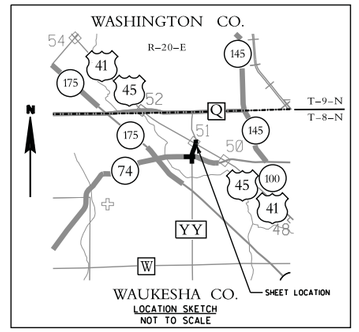
OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE VILLAGE.

PARCEL NUMBER	OWNERS	INTEREST REQUIRED	R/W SQ FT REQUIRED NEW	R/W SQ FT REQUIRED EXISTING	R/W SQ FT REQUIRED TOTAL	TLE SQ FT
13	H-D PILGRIM ROAD, LLC, A WISCONSIN LIMITED LIABILITY COMPANY	FEE/TLE	31909.536	---	31909.536	42589.868
14	WASTE MANAGEMENT OF WISCONSIN	FEE/TLE	4829.775	---	4829.775	2270.137
16	HEILERT PROPERTIES, LLC, A WISCONSIN LIMITED LIABILITY COMPANY	FEE	534.1714	---	534.171	---
17	WACKER NEUSON PRODUCTION AMERICAS LLC, A WISCONSIN LIMITED LIABILITY COMPANY	FEE/TLE	56408.198	---	56408.198	42785.647
18	WISCONSIN ELECTRIC POWER COMPANY	FEE/TLE	3692.133	---	3692.133	2334.307

POSITIONS SHOWN ON THIS PLAT ARE STATE PLANE COORDINATES, WISCONSIN, SOUTH ZONE, NAD 27 IN U.S. SURVEY FEET. VALUES SHOWN ARE GROUND COORDINATES, GROUND BEARINGS, AND GROUND DISTANCES. TO CONVERT BETWEEN GRID AND GROUND DISTANCES EITHER DIVIDE OR MULTIPLY BY THE SCALE FACTOR OF 0.99990319.

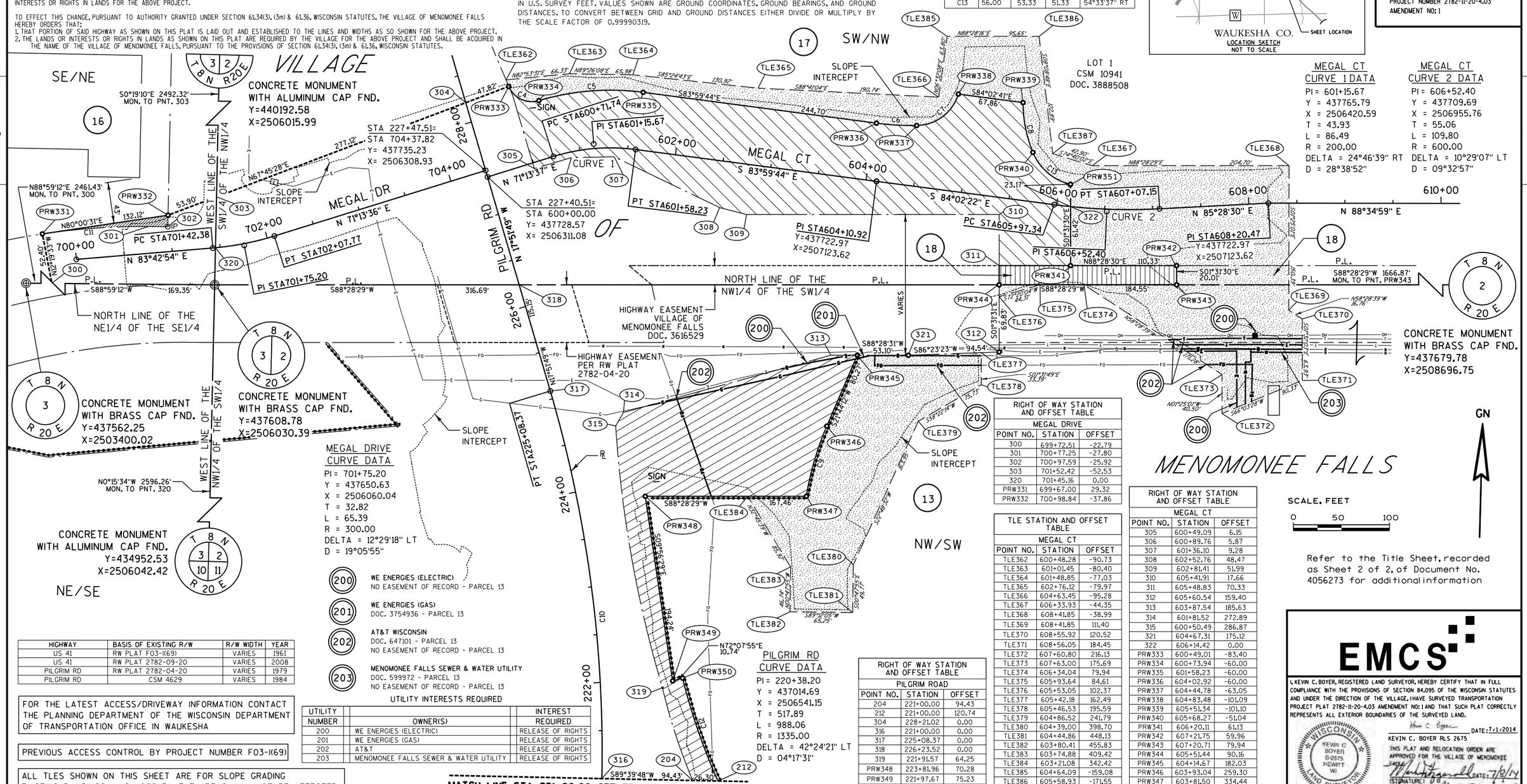
CURVE TABLE

CURVE NUMBER	RADIUS	ARC LENGTH	CHORD LENGTH	DELTA
C4	26.00	37.97	34.68	83°40'17" LT
C5	260.00	109.57	108.76	24°08'46" RT
C6	286.00	41.96	41.92	08°24'21" LT
C7	46.00	58.04	54.27	72°17'44" LT
C8	136.00	53.17	52.84	22°24'08" LT
C9	312.00	76.21	76.02	13°59'44" RT
C10	1335.00	408.37	406.78	17°31'36" LT
C11	703.73	110.38	110.26	8°59'12" LT
C12	643.20	113.40	113.26	10°06'07" RT
C13	56.00	53.33	51.33	54°33'37" RT



4088206
REGISTER OF DEEDS
WAUKESHA COUNTY, WI
RECORDED ON
July 08, 2014 02:07 PM
James R Behrend
Register of Deeds
1 PG
TOTAL FEE:$25.00
TRANS FEE:$0.00
Book 1 Page 178-178

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 2782-11-20-4.03
AMENDMENT NO: 1


SE/NE
VILLAGE
CONCRETE MONUMENT WITH ALUMINUM CAP FND. Y=440192.58 X=2506015.99
S0°19'10"E 2492.32' MON. TO PNT. 303
N88°59'12"E 2461.43' MON. TO PNT. 300
N80°00'31"E
132.12'
53.90'
277.12'
N67°45'28"E
SLOPE INTERCEPT
WEST LINE OF THE SW1/4 OF THE NW1/4
MEGAL DR
STA 227+47.51= STA 704+37.82 Y= 437735.23 X= 2506308.93
STA 227+40.51= STA 600+00.00 Y= 437728.57 X= 2506311.08
PC STA701+42.38
PT STA702+07.77
PI STA701+75.20
N 83°42'54" E
N 71°13'36" E
N 71°13'37" E
S 83°59'44" E
S 84°02'22" E
N 88°34'59" E
N 85°28'30" E
N 88°28'30" E
S88°59'12"W
169.35'
S88°28'29"W
316.69'
NORTH LINE OF THE NE1/4 OF THE SE1/4
NORTH LINE OF THE NW1/4 OF THE SW1/4
HIGHWAY EASEMENT VILLAGE OF MENOMONEE FALLS DOC. 3616529
HIGHWAY EASEMENT PER RW PLAT 2782-04-20
PILGRIM RD
N 17°15'49" W
N 17°15'49" E
PI STA601+15.67
PC STA600+71.74
PT STA601+58.23
PI STA604+10.92 Y=437722.97 X=2507123.62
PI STA606+52.40
PC STA605+97.34
PT STA607+07.15
PI STA608+20.47 Y=437722.97 X=2507123.62
CURVE 1
CURVE 2
SLOPE INTERCEPT
SLOPE INTERCEPT
SIGN
SIGN
LOT 1 CSM 10941 DOC. 3888508
MEGAL CT CURVE 1 DATA
PI= 601+15.67
Y = 437765.79
X = 2506420.59
T = 43.93
L = 86.49
R = 200.00
DELTA = 24°46'39" RT
D = 28°38'52"
MEGAL CT CURVE 2 DATA
PI= 606+52.40
Y = 437709.69
X = 2506955.76
T = 55.06
L = 109.80
R = 600.00
DELTA = 10°29'07" LT
D = 09°32'57"
S88°28'29"W 1666.87' MON. TO PNT. PRW343
CONCRETE MONUMENT WITH BRASS CAP FND. Y=437679.78 X=2508696.75
CONCRETE MONUMENT WITH BRASS CAP FND. Y=437608.78 X=2506030.39
CONCRETE MONUMENT WITH BRASS CAP FND. Y=437562.25 X=2503400.02
CONCRETE MONUMENT WITH ALUMINUM CAP FND. Y=434952.53 X=2506042.42
N0°15'34"W 2596.26' MON. TO PNT. 320
WEST LINE OF THE NW1/4 OF THE SW1/4
MEGAL DRIVE CURVE DATA
PI= 701+75.20
Y = 437650.63
X = 2506060.04
T = 32.82
L = 65.39
R = 300.00
DELTA = 12°29'18" LT
D = 19°05'55"
PT STA225+08.37
PILGRIM RD CURVE DATA
PI= 220+38.20
Y = 437014.69
X = 2506541.15
T = 517.89
L = 988.06
R = 1335.00
DELTA = 42°24'21" LT
D = 04°17'31"
MATCH LINE STA 221+00.00 SEE TPP NO: 2782-11-20-4.02
S89°39'48"W 94.43'
26.30'
N72°07'55"E 10.74'
S88°28'29"W 167.46'
S09°56'28"E 194.23'
S89°28'29"W 184.55'
S01°31'30"E 20.01'
S01°31'30"E 69.83'
S86°23'23"W 94.54'
S88°28'31"W 53.10'
S58°22'14"W 16.13'
S00°17'49"E 44.39'
S00°17'49"E 44.31'
S12°20'04"W 44.31'
S66°03'28"W 90.33'
N01°25'01"W 40.50'
N58°28'39"W 16.76'
N66°28'39"W 16.76'
N88°28'16"E 95.65'
S84°02'41"E 67.86'
S74°40'06"E 42.90'
N88°28'29"E 204.70'
S01°31'30"E 61.42'
S01°31'30"E 61.42'
S01°31'30"E 61.42

COMPOSITE: ORIGINAL DOCUMENT LOCATED AT THE REGISTER OF DEEDS

TRANSPORTATION PROJECT PLAT NO: 2782-11-20 - 4.03

THAT PART OF LOT 2 OF CSM 4629, LOCATED IN AND PART OF THE SW1/4 OF THE NW1/4 AND PART OF THE NW1/4 OF THE SW1/4 OF SECTION 2; PART OF THE SE1/4 OF THE NE1/4 OF SECTION 3, ALL BEING LOCATED IN TOWNSHIP 8 NORTH, RANGE 20 EAST, VILLAGE OF MENOMONEE FALLS, WAUKESHA COUNTY, WISCONSIN.

RELOCATION ORDER PILGRIM RD WAUKESHA COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE VILLAGE OF MENOMONEE FALLS DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 61.34(3), (3m) & 61.36, WISCONSIN STATUTES, THE VILLAGE OF MENOMONEE FALLS HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE VILLAGE FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE VILLAGE OF MENOMONEE FALLS, PURSUANT TO THE PROVISIONS OF SECTION 61.34(3), (3m) & 61.36, WISCONSIN STATUTES.

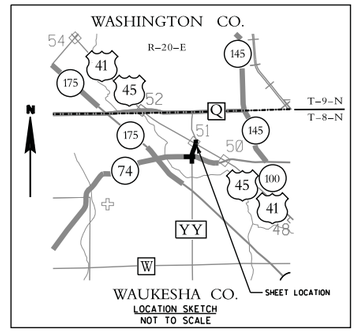
SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE VILLAGE.

PARCEL NUMBER	OWNERS	INTEREST REQUIRED	R/W SQ FT REQUIRED NEW	EXISTING	TOTAL	TLE SQ FT
13	H-D PILGRIM ROAD, LLC, A	FEE/TLE	31909.536	---	31909.536	42589.868
16	HEILERT PROPERTIES, LLC, A WISCONSIN LIMITED LIABILITY	FEE	534.1714	---	534.171	---
17	WACKER NEUSON PRODUCTION AMERICAS LLC, A WISCONSIN LIMITED	FEE/TLE	53837.258	---	53837.258	33109.356
18	WISCONSIN ELECTRIC COMPANY	FEE/TLE	3692.133	---	3692.133	2334.307

POSITIONS SHOWN ON THIS PLAT ARE STATE PLANE COORDINATES, WISCONSIN, SOUTH ZONE, NAD 27 IN U.S. SURVEY FEET. VALUES SHOWN ARE GROUND COORDINATES. GROUND BEARINGS, AND GROUND DISTANCES. TO CONVERT BETWEEN GRID AND GROUND DISTANCES EITHER DIVIDE OR MULTIPLY BY THE SCALE FACTOR OF 0.99990319.

CURVE TABLE				
CURVE NUMBER	RADIUS	ARC LENGTH	CHORD LENGTH	DELTA
C4	26.00	37.97	34.68	83°40'17.31" RT
C5	260.00	92.22	91.74	20°19'18.94" LT
C6	514.00	117.99	117.73	13°09'08.08" LT
C7	79.00	33.38	33.13	24°12'32.48" LT
C8	106.00	53.65	53.08	28°59'58" RT
C9	312.00	76.21	76.02	13°59'43.59" RT
C10	1335.00	408.37	406.78	17°31'36" LT
C11	703.73	110.38	110.26	8°59'11.53" LT
C12	643.20	113.40	113.26	10°06'07" RT



4056846
REGISTER OF DEEDS
WAUKESHA COUNTY, WI
RECORDED ON
December 06, 2013 02:05 PM
James R Behrend
Register of Deeds
1 PG
TOTAL FEE: $25.00
TRANS FEE: $0.00
Book 1 Page 164-164

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 2782-11-20-4.03
AMENDMENT NO:

VILLAGE OF MENOMONEE FALLS

CONCRETE MONUMENT WITH ALUMINUM CAP FND.
Y=440192.58
X=2506015.99

SE/NE

S0°19'10"E 2492.32' MON. TO PNT. 303

N88°59'12"E 2461.43' MON. TO PNT. 300

NORTH LINE OF THE NE1/4 OF THE SE1/4

WEST LINE OF THE SW1/4 OF THE NW1/4

CONCRETE MONUMENT WITH BRASS CAP FND.
Y=437562.25
X=2503400.02

CONCRETE MONUMENT WITH BRASS CAP FND.
Y=437608.78
X=2506030.39

N0°15'34"W 2596.26' MON. TO PNT. 320

WEST LINE OF THE NW1/4 OF THE SW1/4

CONCRETE MONUMENT WITH ALUMINUM CAP FND.
Y=434952.53
X=2506042.42

NE/SW

SLOPE INTERCEPT

SLOPE INTERCEPT

SLOPE INTERCEPT

COMPOSITE: ORIGINAL DOCUMENT LOCATED AT THE REGISTER OF DEEDS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

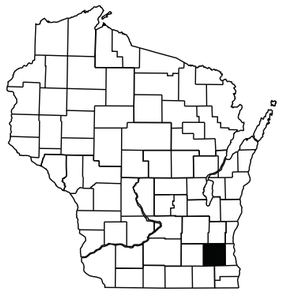
TRANSPORTATION PROJECT PLAT TITLE SHEET

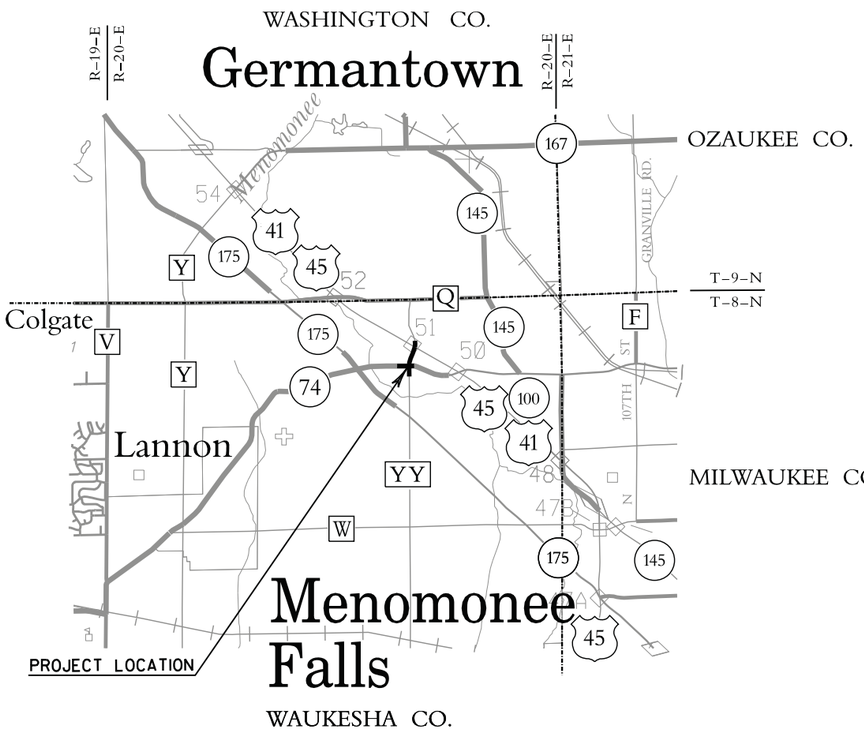
PROJECT NO. 2782-12-20

CLEVELAND AVE TO MEGAL DRIVE

STH 74

WAUKESHA COUNTY







LAYOUT
SCALE 0 1 MI.

CONVENTIONAL ABBREVIATIONS

ACCESS POINT/ DRIVEWAY CONNECTION	AP	REFERENCE LINE	R/L
ACCESS RIGHTS	AR	RELEASE OF RIGHTS	ROR
ACRES	AC.	REMAINING	REM.
AND OTHERS	ET.AL.	RIGHT-OF-WAY	R/W
CENTERLINE	C/L	SECTION	SEC.
CERTIFIED SURVEY MAP	CSM	STATION	STA.
CORNER	COR.	TEMPORARY LIMITED EASEMENT	TLE
DOCUMENT	DOC.	VOLUME	V.
EASEMENT	EASE.	**CURVE DATA**	
HIGHWAY EASEMENT	H.E.	LONG CHORD	LCH
LAND CONTRACT	LC	LONG CHORD BEARING	LCB
MONUMENT	MON.	RADIUS	R
PAGE	P.	DEGREE OF CURVE	D
PERMANENT LIMITED EASEMENT	PLE	CENTRAL ANGLE OR DELTA	DELTA
PROPERTY LINE	PL	LENGTH OF CURVE	L
RECORDED AS	(100')	TANGENT	TAN

CONVENTIONAL SYMBOLS

FOUND IRON PIPE/PIN	LP (1" UNLESS NOTED)	PROPOSED R/W LINE	
		EXISTING H.E. LINE	
R/W MONUMENT	•(SET)	PROPERTY LINE	
R/W STANDARD	▲(SET)	LOT & TIE LINES	
SIGN	SIGN	SLOPE INTERCEPTS	
SECTION CORNER MONUMENT		CORPORATE LIMITS	
SECTION CORNER SYMBOL		ACCESS RESTRICTED (BY PREVIOUS ACQUISITION/CONTROL)	
FEE (HATCH VARIES)		ACCESS RESTRICTED (BY ACQUISITION)	
TEMPORARY LIMITED EASEMENT		NO ACCESS (BY STATUTORY AUTHORITY)	
PERMANENT LIMITED EASEMENT		SECTION LINE	
R/W BOUNDARY POINT	RWB20	QUARTER LINE	
PARCEL NUMBER	102	SIXTEENTH LINE	
UTILITY PARCEL NUMBER	92	EXISTING CENTERLINE	
SIGN NUMBER (OFF PREMISE)	21-1	PROPOSED REFERENCE LINE	
BUILDING		PARALLEL OFFSET	

CONVENTIONAL UTILITY SYMBOLS

WATER	W	
GAS	G	
TELEPHONE	T	
OVERHEAD TRANSMISSION LINES ELECTRIC	OH / E	
CABLE TELEVISION	TV	
FIBER OPTIC	FO	
SANITARY SEWER	SAN	
STORM SEWER	SS	
	NON COMPENSABLE	COMPENSABLE
POWER POLE		
TELEPHONE POLE		
TELEPHONE PEDESTAL		
ELECTRIC TOWER		

NOTES:

POSITIONS SHOWN ON THIS PLAT ARE STATE PLANE COORDINATES, WISCONSIN, SOUTH ZONE, NAD 27 IN U.S. SURVEY FEET. VALUES SHOWN ARE GROUND COORDINATES, GROUND BEARINGS, AND GROUND DISTANCES. TO CONVERT BETWEEN GRID AND GROUND DISTANCES EITHER DIVIDE OR MULTIPLY BY THE SCALE FACTOR OF 0.99990319.

RIGHT-OF-WAY MONUMENTS ARE TYPE 2 AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

RIGHT-OF-WAY BOUNDARIES ARE DEFINED WITH COURSES OF THE PERIMETER OF THE HIGHWAY LANDS REFERENCED TO THE U.S. PUBLIC LAND SURVEY SYSTEM OR OTHER "SURVEYS OF PUBLIC RECORD".

PROPERTY LINES SHOWN ON THIS PLAT ARE DRAWN FROM DATA DERIVED FROM MAPS AND DOCUMENTS OF PUBLIC RECORD AND/OR EXISTING OCCUPATIONAL LINES. THIS PLAT MAY NOT BE A TRUE REPRESENTATION OF EXISTING PROPERTY LINES, EXCLUDING RIGHT-OF-WAY LINES, AND SHOULD NOT BE USED AS A SUBSTITUTE FOR AN ACCURATE FIELD SURVEY.

EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE:
EXISTING HIGHWAY RIGHT-OF-WAY FOR PILGRIM RD ESTABLISHED FROM PREVIOUS PROJECTS 2782-02-20, CSM 10923, ROYAL MANOR ADDITION NO. 2, MENOMONEE MEADOWS.
EXISTING HIGHWAY RIGHT-OF-WAY FOR STH 74 ESTABLISHED FROM PREVIOUS PROJECTS 2782-02-20, 2322-01-23, 2323-02-20, CSM 3301, CSM 5291, CSM 7808, CSM 10923.
EXISTING HIGHWAY RIGHT-OF-WAY FOR CLEVELAND AVE. ESTABLISHED FROM PREVIOUS PROJECTS ROYAL MANOR ADDITION NO. 2, ROYAL MANOR ADDITION NO. 1, MENOMONEE MEADOWS.
EXISTING HIGHWAY RIGHT-OF-WAY FOR US 41 ESTABLISHED FROM PREVIOUS PROJECT F03-1(69).
EXISTING ACCESS CONTROL ESTABLISHED FROM PREVIOUS PROJECTS 2782-02-20, 1178-08-86, F03-1(69), MENOMONEE MEADOWS, AND ROYAL MANOR ADDITION NO. 1 & 2.

A **TEMPORARY LIMITED EASEMENT** (TLE) IS A RIGHT FOR CONSTRUCTION PURPOSES, AS DEFINED HEREIN, INCLUDING THE RIGHT TO OPERATE NECESSARY EQUIPMENT THEREON AND THE RIGHT OF INGRESS AND EGRESS, AS LONG AS REQUIRED FOR SUCH PUBLIC PURPOSE, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE, OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM NECESSARY OR DESIRABLE. ALL TLES EXPIRE AT THE COMPLETION OF THE CONSTRUCTION PROJECT FOR WHICH THIS INSTRUMENT IS GIVEN.

DIMENSIONING FOR THE NEW RIGHT-OF-WAY IS MEASURED ALONG AND PERPENDICULAR TO NEW REFERENCE LINES.

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 2782-12-20 - 4.01
SHEET 2 OF 2
AMENDMENT NO:

FILE NAME : P:\44xx\4442\RW Plat\STATE PLAT\040100_Title.dgn
PLOT DATE : 11/19/2013
PLOT BY : kcb
PLOT NAME :
PLOT SCALE : 1:100

2782-12-70, PILGRIM ROAD, 2782-12-20 4.00

COMPOSITE: ORIGINAL DOCUMENT LOCATED AT THE REGISTER OF DEEDS

TRANSPORTATION PROJECT PLAT NO: 2782-12-20 - 4.01

THAT PART OF THE LOTS 17 & 19, J.A. PRATT AND ED. STARKE'S 2ND ADDITION TO MENOMONEE FALLS, PART OF PARCELS 2 & 3 OF CSM 3301, AND PART OF LOT 1 OF CSM 5291, LOCATED IN AND PART OF THE SE1/4 OF THE SE1/4 OF SECTION 3; PART OF LOT 1 OF CSM 7808, LOCATED IN AND PART OF THE SW1/4 OF THE SW1/4 OF SECTION 2, ALL BEING LOCATED IN TOWNSHIP 8 NORTH, RANGE 20 EAST, VILLAGE OF MENOMONEE FALLS, WAUKESHA COUNTY, WISCONSIN.

RELOCATION ORDER PILGRIM RD WAUKESHA COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE VILLAGE OF MENOMONEE FALLS DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

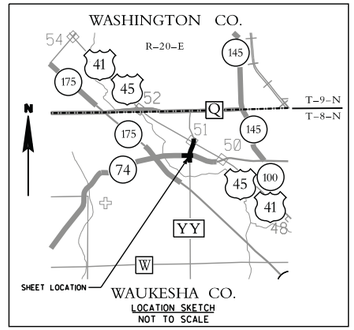
TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 61.34(3), (3m) & 61.36, WISCONSIN STATUTES, THE VILLAGE OF MENOMONEE FALLS HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE VILLAGE FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE VILLAGE OF MENOMONEE FALLS, PURSUANT TO THE PROVISIONS OF SECTION 61.34(3), (3m) & 61.36 WISCONSIN STATUTES.

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT.

PARCEL NUMBER	OWNERS	INTEREST REQUIRED	R/W SQ FT REQUIRED NEW	R/W SQ FT REQUIRED EXISTING	R/W SQ FT REQUIRED TOTAL	TLE SQ FT
50	PHILLIP A. GIUFFRE REVOCABLE LIVING TRUST DATED NOV. 11, 1998, PHILLIP A. GIUFFRE, TRUSTEE	FEE/TLE	175.183	---	175.183	684.393
51	ERIC J. STOCKING, THERESA STOCKING, COLIN J. STOCKING, MITCHEL S. STOCKING AND RYAN T. STOCKING	FEE/TLE	61.179	---	61.179	695.882
52	RONALD J. SCHMIDT	TLE	---	---	---	893.888
53	DANIEL L. MILLS	TLE	---	---	---	997.482
54	SCOTT A. FRIESS & TRACY R. FRIESS	FEE/AR/TLE	131.358	---	131.358	824.496
56	ERNIE VON SCHLEDORN, INC, A WISCONSIN CORPORATION	FEE/TLE	1718.815	---	1718.815	2725.736
57	AUTOZONE, INC.,, A NEVADA CORPORATION	FEE/TLE	388.518	---	388.518	1725.068
58	MANONE PROPERTIES, LLC	TLE	---	---	---	84.050
59	BRYAN HERMUS AND THERESA HERMUS	FEE/TLE	74.184	---	74.184	213.474
61	ROBERT L. JUNG AND THERESA L. JUNG	FEE/TLE	469.898	---	469.898	424.026
62	ELIZABETH I. JACOBSON & MILES LAUBENHEIMER, PERSONAL REPRESENTITIVE OF THE ESTATE OF ARTHUR T. JACOBSON, DECEASED AND ERNIE VON SCHLEDORN PONTIAC-BUICK, INC. A WISCONSIN CORPORATION AND ERNST VON SCHLEDORN, AS THEIR INTEREST MAY APPEAR	FEE/TLE	1753.868	---	1753.868	1460.689

GN

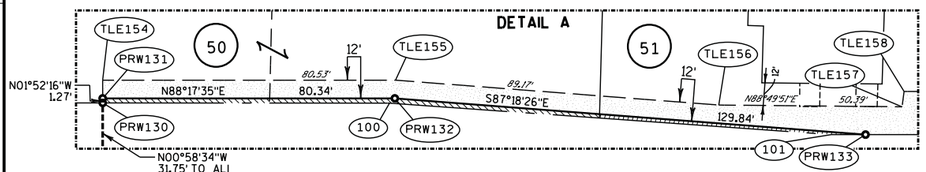


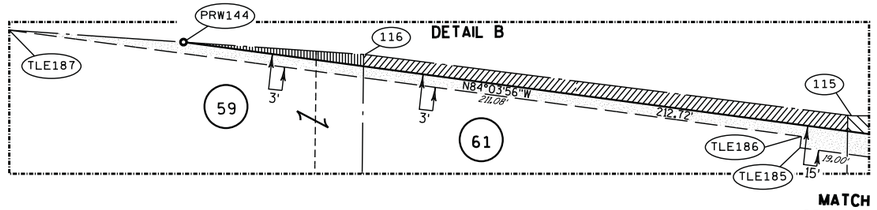
4056274
REGISTER OF DEEDS
WAUKESHA COUNTY, WI
RECORDED ON
December 03, 2013 02:18 PM
James R Behrend
Register of Deeds
2 PGS
TOTAL FEE: $25.00
TRANS FEE: $0.00
Book 1 Page 161-162

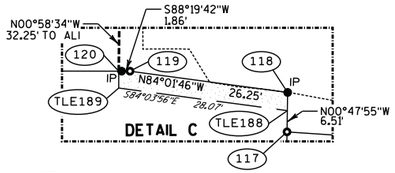
RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 2782-12-20-4.01
AMENDMENT NO:
SHEET 1 OF 2

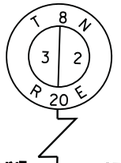
SCALE, FEET
0 50 100

POSITIONS SHOWN ON THIS PLAT ARE STATE PLANE COORDINATES, WISCONSIN, SOUTH ZONE, NAD 27 IN U.S. SURVEY FEET. VALUES SHOWN ARE GROUND COORDINATES, GROUND BEARINGS, AND GROUND DISTANCES. TO CONVERT BETWEEN GRID AND GROUND DISTANCES EITHER DIVIDE OR MULTIPLY BY THE SCALE FACTOR OF 0.99990319.









CONCRETE MONUMENT
WITH BRASS CAP
Y=437608.78
X=2506030.39

STH 74
CURVE 2 DATA
PI = 406+32.64
Y = 435543.77
X = 2505797.68
T = 26.71
L = 53.33
R = 400.00
DELTA = 07°38'22" LT
D = 14°19'26"

STH 74
CURVE 3 DATA
PI = 413+19.02
Y = 435556.05
X = 2506484.00
T = 164.03
L = 323.63
R = 805.00
DELTA = 23°02'04" RT
D = 07°07'03"

HIGHWAY	BASIS OF EXISTING R/W	R/W WIDTH	YEAR
STH 74	RW PLAT 2782-02-20	VARIES	1980
PILGRIM RD	RW PLAT 2782-02-20	VARIES	1980
STH 74	RW PLAT 2322-01-23	VARIES	1990
STH 74	RW PLAT 2323-02-20	VARIES	1999
STH 74	J.A. PRATT & ED. STARK'S 2ND ADD. TO MENOMONEE FALLS	50'	1909
STH 74	CSM 3301	33'	1977
STH 74	CSM 5291	33'	1987
STH 74	CSM 7808	VARIES	1995
STH 74	CSM 10923	VARIES	2011
PILGRIM RD	CSM 10923	VARIES	2011
STH 74	CSM 11020	VARIES	2012

UTILITY INTERESTS REQUIRED

UTILITY NUMBER	OWNER(S)	INTEREST REQUIRED
200	WE ENERGIES (ELECTRIC)	RELEASE OF RIGHTS
202	AT&T	RELEASE OF RIGHTS

CURVE TABLE

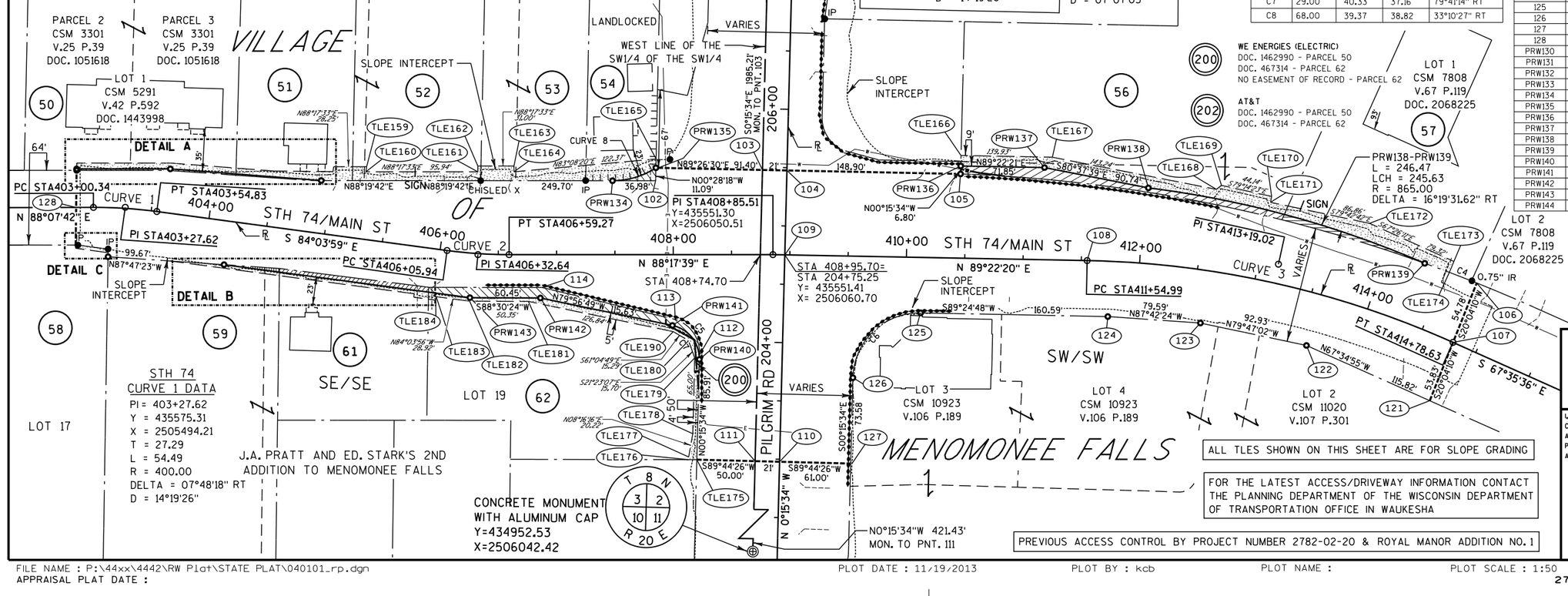
CURVE NUMBER	RADIUS	ARC LENGTH	CHORD LENGTH	DELTA
C4	1322.24	47.65	47.65	19°29'23.18" LT
C5	29.50	39.75	36.81	77°12'09.88" LT
C6	57.00	89.17	80.35	89°37'51" LT
C7	29.00	40.33	37.16	79°41'14" RT
C8	68.00	39.37	38.82	33°10'27" RT

RIGHT OF WAY STATION AND OFFSET TABLE

POINT NO.	STATION	OFFSET
100	403+60.16	-36.24
101	404+81.74	-43.84
102	407+84.92	-63.33
103	408+76.54	-72.59
104	408+96.17	-72.38
105	410+45.06	-72.20
106	414+76.53	-54.74
107	414+78.63	0.00
108	411+54.99	0.00
109	408+95.70	0.00
110	408+94.56	177.36
111	408+70.23	176.97
112	408+22.52	85.89
113	408+01.69	55.54
114	406+87.39	28.13
115	405+95.37	33.32
116	404+65.94	34.38
117	403+14.21	42.13
118	403+14.09	35.62
119	402+86.86	32.25
120	402+85.00	32.25
121	414+80.82	53.78
122	413+57.78	45.22
123	412+59.25	45.35
124	411+74.78	47.43
125	410+13.03	47.54
126	409+56.03	104.18
127	409+55.55	177.75
128	402+85.50	0
PRW130	402+86.00	-31.75
PRW131	402+86.00	-33.02
PRW132	403+61.45	-37.75
PRW133	404+91.07	-45.09
PRW134	407+47.94	-63.36
PRW135	407+85.16	-74.42
PRW136	410+45.11	-79.00
PRW137	411+16.96	-79.00
PRW138	412+02.52	-64.76
PRW139	414+31.90	-53.38
PRW140	408+22.41	89.83
PRW141	407+99.33	60.70
PRW142	406+86.13	37.14
PRW143	406+28.58	38.21
PRW144	404+18.01	37.50

TLE STATION AND OFFSET TABLE

POINT NO.	STATION	OFFSET
TLE154	402+86.02	-38.02
TLE155	403+60.97	-42.73
TLE156	404+50.00	-47.77
TLE157	405+00.00	-54.00
TLE158	405+00.00	-58.25
TLE159	405+28.00	-62.00
TLE160	405+28.00	-57.59
TLE161	406+26.73	-69.90
TLE162	406+26.23	-74.89
TLE163	406+63.45	-76.00
TLE164	406+63.45	-71.00
TLE165	407+85.32	-81.99
TLE166	410+45.17	-88.00
TLE167	411+23.50	-88.00
TLE168	412+56.07	-70.02
TLE169	412+59.57	-74.04
TLE170	413+00.00	-72.11
TLE171	413+00.00	-67.00
TLE172	413+80.00	-70.42
TLE173	414+53.00	-64.08
TLE174	414+53.00	-53.91
TLE175	408+20.25	175.71
TLE176	408+13.24	175.70
TLE177	408+13.30	173.42
TLE178	408+16.80	153.50
TLE179	408+18.44	88.52
TLE180	408+13.16	73.74
TLE181	406+75.83	40.10
TLE182	406+28.60	41.21
TLE183	406+02.00	40.50
TLE184	406+02.00	43.50
TLE185	405+83.00	43.50
TLE186	405+83.00	40.50
TLE187	403+71.92	40.50
TLE188	403+14.14	38.63
TLE189	402+85.00	35.03
TLE190	408+00.00	65.95



Refer to the Title Sheet, recorded as Sheet 2 of 2

ALL TLES SHOWN ON THIS SHEET ARE FOR SLOPE GRADING

FOR THE LATEST ACCESS/DRIVEWAY INFORMATION CONTACT THE PLANNING DEPARTMENT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN WAUKESHA

PREVIOUS ACCESS CONTROL BY PROJECT NUMBER 2782-02-20 & ROYAL MANOR ADDITION NO. 1

EMCS

I, KEVIN C. BOYER, REGISTERED LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE VILLAGE, I HAVE SURVEYED TRANSPORTATION PROJECT PLAT 2782-12-20-4.01 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

Kevin C. Boyer DATE: 11/19/2013
KEVIN C. BOYER RLS 2675

WISCONSIN KEVIN C BOYER S-2675 HEWITT WI LAND SURVEYOR

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE VILLAGE OF MENOMONEE FALLS
(SIGNATURE) DATE: 11/20/13
(PRINTED NAME) Mar

FILE NAME : P:\44xx\4442\RW Plat\STATE PLAT\040101_rp.dgn
APPRAISAL PLAT DATE :
PLOT DATE : 11/19/2013
PLOT BY : kcb
PLOT NAME :
PLOT SCALE : 1:50

2782-12-70, PILGRIM ROAD, 2782-12-20 4.01

COMPOSITE: ORIGINAL DOCUMENT LOCATED AT THE REGISTER OF DEEDS

TRANSPORTATION PROJECT PLAT NO: 2782-12-20 - 4.02 AMENDMENT NO: 1

AMENDMENT ADDS PARCEL 65, MODIFIES THE TLE AREA FOR PARCEL 63 AND ADDS UTILITY PARCEL 202 OF TPP 2782-12-20-4.02, RECORDED IN BOOK 1, PAGE 165 AS DOCUMENT 4056847. THAT PART OF THE LOTS 9 & 10, BLOCK 3, MENOMONEE MEADOWS, LOCATED IN AND PART OF THE SE1/4 OF THE SE1/4 OF SECTION 3, PART OF LOTS 1-3, BLOCK 8, ROYAL MANOR ADDITION NO. 2, LOCATED IN AND PART OF THE SW1/4 OF THE SW1/4 OF SECTION 2, ALL BEING LOCATED IN AND PART OF TOWNSHIP 8 NORTH, RANGE 20 EAST, VILLAGE OF MENOMONEE FALLS, WAUKESHA COUNTY, WISCONSIN.

RELOCATION ORDER PILGRIM RD WAUKESHA COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE VILLAGE OF MENOMONEE FALLS DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 61.34(3), (3m) & 61.36, WISCONSIN STATUTES, THE VILLAGE OF MENOMONEE FALLS HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE VILLAGE FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE VILLAGE OF MENOMONEE FALLS, PURSUANT TO THE PROVISIONS OF SECTION 61.34(3), (3m) & 61.36 WISCONSIN STATUTES.

POSITIONS SHOWN ON THIS PLAT ARE STATE PLANE COORDINATES, WISCONSIN, SOUTH ZONE, NAD 27 IN U.S. SURVEY FEET. VALUES SHOWN ARE GROUND COORDINATES, GROUND BEARINGS, AND GROUND DISTANCES. TO CONVERT BETWEEN GRID AND GROUND DISTANCES EITHER DIVIDE OR MULTIPLY BY THE SCALE FACTOR OF 0.99990319.

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT.

PARCEL NUMBER	OWNERS	INTEREST REQUIRED	R/W SQ FT REQUIRED NEW	EXISTING	TOTAL	TLE SQ FT
63	JESSE J. CERNICKA & JENNIFER L. CERNICKA	FEE/TLE	65.638	---	65.638	561.756
64	DAVID A RUTKE & SANDRA J. RUTKE	FEE/TLE	1787.452	---	1787.452	3039.747
65	JARED BEILKE	TLE	---	---	---	218.455
66	DALE J. GEORGENSON & LAURIE A.	FEE	1588.518	---	1588.518	---
67	NATHAN J. SCHUMACHER	FEE	373.581	---	373.581	---

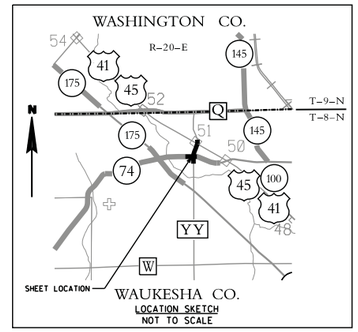
UTILITY INTERESTS REQUIRED

UTILITY NUMBER	OWNER(S)	INTEREST REQUIRED
200	WE ENERGIES (ELECTRIC)	RELEASE OF RIGHTS
202	AT&T	RELEASE OF RIGHTS
203	MENOMONEE FALLS SEWER & WATER	RELEASE OF RIGHTS

200 WE ENERGIES (ELECTRIC)
DOC. 1199995 - PARCEL 64 & 66
DOC. 1245804 - PARCEL 67

202 AT&T
DOC. 1199995 - PARCEL 64 & 66

203 MENOMONEE FALLS SEWER & WATER UTILITY
NO EASEMENT OF RECORD - PARCEL 63



173

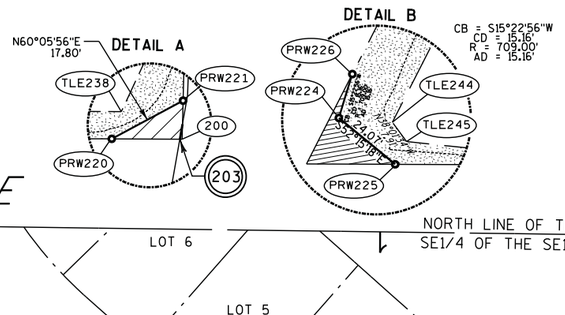
4073382
REGISTER OF DEEDS
WAUKESHA COUNTY, WI
RECORDED ON
April 08, 2014 02:20 PM
James R Behrens
Register of Deeds
Pgs: 1
TOTAL FEE: $25.00
TRANS FEE: $0.00
Book 1 Page 173-173

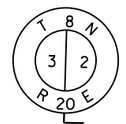
RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 2782-12-20-4.02
AMENDMENT NO: 1

HIGHWAY	BASIS OF EXISTING R/W	R/W WIDTH	YEAR
US 41	RW PLAT F03-1(69)	VARIES	1961
STH 74	RW PLAT 2782-02-20	VARIES	1980
PILGRIM RD	RW PLAT 2782-02-20	VARIES	1980
US 41	RW PLAT F03-1(69)	VARIES	1961
PILGRIM RD	ROYAL MANOR ADDITION NO. 2	VARIES	1982
CLEVELAND AVE	ROYAL MANOR ADDITION NO. 2	60'	1982
CLEVELAND AVE	ROYAL MANOR ADDITION NO. 1	60'	1958
PILGRIM RD	MENOMONEE MEADOWS	66'	1950
CLEAVELAND AVE	MENOMONEE MEADOWS	60'	1950

RIGHT OF WAY STATION AND OFFSET TABLE		
POINT NO.	STATION	OFFSET
200	208+67.45	-70.61
201	210+42.32	-135.69
202	210+55.83	-105.73
203	211+04.69	0.00
204	211+04.69	61.20
205	208+95.88	44.83
206	208+82.11	118.69
207	208+52.86	0.00
208	208+46.12	-32.73
209	208+24.68	-169.46
PRW 220	208+64.40	-85.71
PRW 221	208+75.04	-72.34
PRW 222	211+33.61	234.49
PRW223	210+64.39	60.65
PRW224	209+14.55	51.00
PRW225	209+04.16	73.09
PRW226	209+30.81	51.00

TLE STATION AND OFFSET TABLE		
POINT NO.	STATION	OFFSET
TLE234	208+55.79	-131.58
TLE235	208+60.96	-132.85
TLE236	208+48.48	-174.70
TLE237	208+53.27	-175.87
TLE238	208+70.07	-85.00
TLE239	209+00.00	-78.67
TLE244	209+18.56	68.33
TLE245	209+13.30	74.63
TLE246	209+20.86	109.69
TLE247	209+16.38	110.83
TLE248	210+72.00	79.74





CONCRETE MONUMENT
WITH BRASS CAP
Y=437608.78
X=2506030.39

VILLAGE OF MENOMONEE FALLS

NORTH LINE OF THE SE1/4 OF THE SE1/4
NORTH LINE OF THE SW1/4 OF THE SW1/4
LOT 6
LOT 5
LOT 4
LOT 3
LOT 2
LOT 1
CAROLINE DR
MENOMONEE MEADOWS BLOCK 2
SE/SE
MENOMONEE MEADOWS BLOCK 3
LOT 9
LOT 10
63
65
64
ROYAL MANOR ADDITION NO. 2 BLOCK 8
LOT 1
LOT 2
LOT 3
LOT 4
LOT 5
66
67
SW/SW
PILGRIM RD
CURVE DATA
PI = 208+82.31
Y = 435958.47
X = 2506058.86
T = 167.11
L = 328.98
R = 760.00
DELTA = 24°48'07" RT
D = 07°32'20"
US 41/45 SB ON RAMP
SLOPE INTERCEPT
SCALE, FEET
0 50 100
GN
Refer to the Title Sheet, recorded as Sheet 2 of 2, as Document No. 4056274 for additional information
CLEVELAND AVE
60'
PI STA501+47.60
Y=435927.34
X=2506046.74
PI STA501+85.50
Y=435928.85
X=2506084.61
STA 208+52.86=
STA 501+72.31
Y=435928.32
X=2506071.43
ROYAL MANOR ADDITION NO. 1 BLOCK 7
MENOMONEE FALLS
PC STA207+15.20
VARIES
SEE TPP 2782-12-20-4.01
MATCH LINE TPP STA 207+00.00
CONCRETE MONUMENT WITH ALUMINUM CAP
Y=434952.53
X=2506042.42
N0°15'34"W 974.63'
MON. TO PNT. 208
PI STA208+82.31
PI STA210+44.18
PILGRIM RD
WEST LINE OF THE SW1/4 OF THE SW1/4
S0°15'34"E 1443.81'
MON. TO PNT. 202
N89°44'26"E 116.47'
S65°27'28"E 61.20'
S74°56'00"E 175.68'
N87°10'04"W 166.56'
S88°46'46"E 35.63'
N88°33'26"E 90.91'
N23°21'55"E 33.15'
S 87°43'00" W 37.90'
S 88°43'36" W 138.86'
N88°33'26"E 108.50'
S 88°30'23" W 39.24'
S01°29'37"E 30.14'
N01°16'24"W 29.66'
212+00
210+00
208+00
500+00
502+00

PREVIOUS ACCESS CONTROL BY RW PLAT F03-1(69), MENOMONEE MEADOWS & ROYAL MANOR ADDITION NO. 1 & 2

ALL TLES SHOWN ON THIS SHEET ARE FOR SLOPE GRADING

FOR THE LATEST ACCESS/DRIVEWAY INFORMATION CONTACT THE PLANNING DEPARTMENT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN WAUKESHA

EMCS

I, KEVIN C. BOYER, REGISTERED LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE VILLAGE, I HAVE SURVEYED TRANSPORTATION PROJECT PLAT 2782-12-20-4.02 AMENDMENT NO: 1 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

Kevin C. Boyer DATE: 3/31/2014
KEVIN C. BOYER RLS 2675

WISCONSIN KEVIN C. BOYER S-2675 HEWITT WI LAND SURVEYOR

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE VILLAGE OF MENOMONEE FALLS
SIGNATURE: DATE: 4/8/14
PRINTED NAME: Mark Grandi

591

FILE NAME : P:\44xx\4442\RW Plat\STATE PLAT\040102_rp_A1.dgn
APPRAISAL PLAT DATE :
PLOT DATE : 3/31/2014
PLOT BY : kcb
PLOT NAME :
PLOT SCALE : 1:50
2782-12-70, PILGRIM ROAD, 2782-12-20 4.02 AMENDMENT NO: 1

COMPOSITE: ORIGINAL DOCUMENT LOCATED AT THE REGISTER OF DEEDS

TRANSPORTATION PROJECT PLAT NO: 2782-12-20 - 4.02

THAT PART OF THE LOTS 9 & 10, BLOCK 3, MENOMONEE MEADOWS, LOCATED IN AND PART OF THE SE1/4 OF THE SE1/4 OF SECTION 3, PART OF LOTS 1-3, BLOCK 8, ROYAL MANOR ADDITION NO. 2, LOCATED IN AND PART OF THE SW1/4 OF THE SW1/4 OF SECTION 2, ALL BEING LOCATED IN AND PART OF TOWNSHIP 8 NORTH, RANGE 20 EAST, VILLAGE OF MENOMONEE FALLS, WAUKESHA COUNTY, WISCONSIN.

RELOCATION ORDER PILGRIM RD WAUKESHA COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE VILLAGE OF MENOMONEE FALLS DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 61.34(3), (3m) & 61.36, WISCONSIN STATUTES, THE VILLAGE OF MENOMONEE FALLS HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE VILLAGE FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE VILLAGE OF MENOMONEE FALLS, PURSUANT TO THE PROVISIONS OF SECTION 61.34(3), (3m) & 61.36 WISCONSIN STATUTES.

POSITIONS SHOWN ON THIS PLAT ARE STATE PLANE COORDINATES, WISCONSIN, SOUTH ZONE, NAD 27 IN U.S. SURVEY FEET. VALUES SHOWN ARE GROUND COORDINATES. GROUND BEARINGS, AND GROUND DISTANCES. TO CONVERT BETWEEN GRID AND GROUND DISTANCES EITHER DIVIDE OR MULTIPLY BY THE SCALE FACTOR OF 0.99990319.

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT.

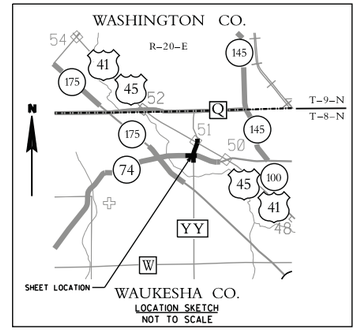
PARCEL NUMBER	OWNERS	INTEREST REQUIRED	R/W SQ FT REQUIRED NEW	R/W SQ FT REQUIRED EXISTING	R/W SQ FT REQUIRED TOTAL	TLE SQ FT
63	JESSE J. CERNICKA & JENNIFER L. CERNICKA	FEE/TLE	65.638	---	65.638	781.486
64	DAVID A RUTKE & SANDRA J. RUTKE	FEE/TLE	1787.452	---	1787.452	3039.747
66	DALE J. GEORGENSON & LAURIE A.	FEE	1588.518	---	1588.518	---
67	NATHAN J. SCHUMACHER	FEE	373.581	---	373.581	---

UTILITY INTERESTS REQUIRED

UTILITY NUMBER	OWNER(S)	INTEREST REQUIRED
200	WE ENERGIES (ELECTRIC)	RELEASE OF RIGHTS
203	MENOMONEE FALLS SEWER & WATER	RELEASE OF RIGHTS

200 WE ENERGIES (ELECTRIC)
DOC. 1199995 - PARCEL 64 & 66

203 MENOMONEE FALLS SEWER & WATER UTILITY
NO EASEMENT OF RECORD - PARCEL 63



4056847
REGISTER OF DEEDS
WAUKESHA COUNTY, WI
RECORDED ON
December 06, 2013 02:05 PM
James R Behrend
Register of Deeds
1 PG
TOTAL FEE: $25.00
TRANS FEE: $0.00
Book 1 Page 165-165

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 2782-12-20-4.02
AMENDMENT NO:

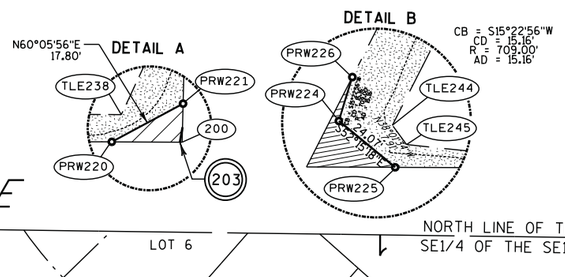
HIGHWAY	BASIS OF EXISTING R/W	R/W WIDTH	YEAR
US 41	RW PLAT F03-1(69)	VARIES	1961
STH 74	RW PLAT 2782-02-20	VARIES	1980
PILGRIM RD	RW PLAT 2782-02-20	VARIES	1980
US 41	RW PLAT F03-1(69)	VARIES	1961
PILGRIM RD	ROYAL MANOR ADDITION NO. 2	VARIES	1982
CLEVELAND AVE	ROYAL MANOR ADDITION NO. 2	60'	1982
CLEVELAND AVE	ROYAL MANOR ADDITION NO. 1	60'	1958
PILGRIM RD	MENOMONEE MEADOWS	66'	1950
CLEAVELAND AVE	MENOMONEE MEADOWS	60'	1950

RIGHT OF WAY STATION AND OFFSET TABLE

POINT NO.	STATION	OFFSET
200	208+67.45	-70.61
201	210+42.32	-135.69
202	210+55.83	-105.73
203	211+04.69	0.00
204	211+04.69	61.20
205	208+95.88	44.83
206	208+82.11	118.69
207	208+52.86	0.00
208	208+46.12	-32.73
209	208+24.68	-169.46
PRW 220	208+64.40	-85.71
PRW 221	208+75.04	-72.34
PRW 222	211+33.61	234.49
PRW223	210+64.39	60.65
PRW224	209+14.55	51.00
PRW225	209+04.16	73.09
PRW226	209+30.81	51.00

TLE STATION AND OFFSET TABLE

POINT NO.	STATION	OFFSET
TLE234	208+55.79	-131.58
TLE235	208+60.96	-132.85
TLE236	208+48.48	-174.70
TLE237	208+53.27	-175.87
TLE238	208+70.07	-85.00
TLE239	209+00.00	-78.67
TLE244	209+18.56	68.33
TLE245	209+13.30	74.63
TLE246	209+20.86	109.69
TLE247	209+16.38	110.83
TLE248	210+72.00	79.74



CONCRETE MONUMENT WITH BRASS CAP
Y=437608.78
X=2506030.39

VILLAGE

NORTH LINE OF THE SE1/4 OF THE SE1/4

NORTH LINE OF THE SW1/4 OF THE SW1/4

LOT 6 LOT 5 LOT 4 LOT 3 LOT 2 LOT 1

CAROLINE DR

MENOMONEE MEADOWS BLOCK 2

MENOMONEE MEADOWS BLOCK 3

LOT 10 LOT 9

SE/SE SW/SW

CLEVELAND AVE

WEST LINE OF THE SW1/4 OF THE SW1/4

PT STA210+44.18

PI STA208+82.31

PILGRIM RD

210+00 212+00 208+00 500+00 502+00

PILGRIM RD CURVE DATA
PI = 208+82.31
Y = 435958.47
X = 2506058.86
T = 167.11
L = 328.98
R = 760.00
DELTA = 24°48'07" RT
D = 07°32'20"

US 41/45 SB ON RAMP

SLOPE INTERCEPT

ROYAL MANOR ADDITION NO. 2 BLOCK 8

ROYAL MANOR ADDITION NO. 1 BLOCK 7

MENOMONEE FALLS

PI STA501+47.60
Y=435927.34
X=2506046.74

PI STA501+85.50
Y=435928.85
X=2506084.61

STA 208+52.86=
STA 501+72.31
Y=435928.32
X=2506071.43

PC STA207+15.20

VARIES

CHISLED X

CONCRETE MONUMENT WITH ALUMINUM CAP
Y=434952.53
X=2506042.42

SEE TPP 2782-12-20-4.01

MATCH LINE TPP STA 207+00.00

N0°15'34"W 974.63' MON. TO PNT. 208

S0°15'34"E 1443.81' MON. TO PNT. 202

N89°44'26"E 116.47'

S65°27'28"E 61.20'

S74°56'00"E

N87°10'04"W

S85°46'46"E 39.69'

S01°29'37"E 30.14'

N88°33'26"E 90.91'

N01°16'24"W 29.66'

S 87°43'00" W 37.90'

S 88°43'36" W 138.86'

N88°33'26"E 39.24'

S 88°30'23" W 108.50'

N23°23'25"E 103.15'

DETAIL A

DETAIL B

PRW223 PRW222 TLE244 TLE246 TLE247 TLE239 TLE237 TLE236

63 64 66 67

201 202 203 204 206 207 208 209

2" IP IP 175.68' 166.56'

199.96' 152.68' 119' 120.04' 93.18' 8.74'

GN

SCALE, FEET
0 50 100

Refer to the Title Sheet, recorded as Sheet 2 of 2, of Document No. 4056274 for additional information

EMCS

I, KEVIN C. BOYER, REGISTERED LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE VILLAGE, I HAVE SURVEYED TRANSPORTATION PROJECT PLAT 2782-12-20-4.02 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

Kevin C. Boyer DATE: 12/5/2013
KEVIN C. BOYER RLS 2675

WISCONSIN KEVIN C BOYER S-2675 HEWITT WI LAND SURVEYOR

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE VILLAGE OF MENOMONEE FALLS
(SIGNATURE) DATE: 12/5/13
(PRINTED NAME) Mar 592 ad

PREVIOUS ACCESS CONTROL BY RW PLAT F03-1(69), MENOMONEE MEADOWS & ROYAL MANOR ADDITION NO. 1 & 2

ALL TLES SHOWN ON THIS SHEET ARE FOR SLOPE GRADING

FOR THE LATEST ACCESS/DRIVEWAY INFORMATION CONTACT THE PLANNING DEPARTMENT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN WAUKESHA

FILE NAME : P:\44xx\4442\RW Plat\STATE PLAT\040102_rp.dgn
APPRAISAL PLAT DATE :
PLOT DATE : 12/4/2013 PLOT BY : kcb PLOT NAME : PLOT SCALE : 1:50
2782-12-70, PILGRIM ROAD, 2782-12-20 4.02

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
RBM2	199+65.17, 75.01'LT	NE SIDE OF LOWER FLANGE OF HYDRANT	800.79
BM10	205+61.58, 97.03'LT	NW CORNER OF CONTROL BOX BASE	796.78

CAUTION SECTION CORNER.
CONTACT PROJECT ENGINEER AND SEWRPC
AT LEAST TWO WEEKS PRIOR TO WORKING
NEAR OR DISTURBING THIS CORNER.

T 8 N
R 20 E
10 | 3 | 2 | 11

PARK BLVD.

MATCHLINE STA 406+50

END CONSTRUCTION
2782-12-70

MAIN STREET (STH 74)

CLEVELAND AVENUE

PILGRIM ROAD
SB PGL

SLOPE INTERCEPT

PILGRIM ROAD

TLE

PR R/W

EX R/W

CAUTION

BEGIN PROJECT 2782-11-70
STA 198+21.23

STA. 201+06.54 PILGRIM =
STA. 302+31.80 PARK

PILGRIM ROAD
R/L

STA. 204+75.25 PILGRIM =
STA. 408+95.70 MAIN

BEGIN CONSTRUCTION
2782-12-70

MATCHLINE STA 411+00

STA. 208+53.07 PILGRIM =
STA. 501+72.4 CLEVELAND

BEGIN PROJECT 2782-12-70
STA 209+20.41

END CONSTRUCTION
2782-11-70
BEGIN PROJECT
2782-12-70

MATCHLINE STA 210+00

NOTE:
PROFILE STATIONING REFERS
TO NB PILGRIM ROAD R/L

VPI STA 197+84.70
VPI EL 799.20

VPI STA 199+00.00
VPI EL 799.30

VPT STA 199+60.00
VPT EL 798.50

FINISHED PROFILE
GRADE LINE
PROJECT 2782-11-70

VPI STA 201+85.00
VPI EL 795.50

VPT STA 202+45.00
VPT EL 794.08

VPC STA 202+50.00
VPC EL 793.96

LP STA 203+91.25
LP EL 792.29

VPI STA 203+75.00
VPI EL 791.00

VPT STA 205+00.00
VPT EL 793.28

VPI STA 207+52.88
VPI EL 797.89

VPT STA 208+12.88
VPT EL 798.70

VPC STA 209+92.82
VPC EL 801.14

VPC STA 198+40.00
VPC EL 799.25

HP STA 198+47.16
HP EL 799.25

VPC STA 201+25.00
VPC EL 796.30

VPC STA 206+92.88
VPC EL 796.80

0.08%
-1.33%
1.82%
1.35%

VCL = 120'
K = 85

VCL = 120'
K = 116

VCL = 250'
K = 60

VCL = 120'
K = 255

EXISTING GROUND
AT R/L

EXISTING
GRADE

PROPOSED
GRADE

| | | |

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
BM20	211+50.93, 90.90'LT (NB PILGRIM R/L)	NE CORNER OF CONTROL BOX BASE	803.91
BM1	217+58.00, 32.00'RT (NB PILGRIM R/L)	ALUM. CAP IN CONC. WALK, SOUTH OF JOINT	827.32

FALLS PARKWAY
EX R/W
TLE
CAUTION
SLOPE INTERCEPT
STA. 212+13.92 PILGRIM =
STA. 88+77.60 FALLS PKWY.
WETLAND LIMITS
MATCHLINE STA 210+00
PILGRIM ROAD
SB PGL
PILGRIM ROAD R/L
PILGRIM ROAD
US 41/45 SB RAMPS
US 41/45 SB
US 41/45 NB
B-67-337
B-67-338
STRUCTURE R-67-0121
STRUCTURE R-67-0122
STA. 224+43.59 PILGRIM =
STA. 50+00.00 USH 41/45 NB ON
MATCHLINE STA 225+00
STA. 212+26.00 PILGRIM =
STA. 13+24.23 USH 41/45 SB OFF
STA. 211+79.70 PILGRIM =
STA. 100+00.00 USH 41/45 SB ON
US 41/45 SB ENTRANCE RAMP
US 41/45 SB EXIT RAMP
US 41/45 NB EXIT RAMP TO NB PILGRIM RD
PR R/W
P.I. 1100-37-70
STA. 217+55.26 TO
STA. 220+03.18
N

NOTE:
PROFILE STATIONING REFERS
TO NB PILGRIM ROAD R/L

FINISHED PROFILE
GRADE LINE
PROJECT 2782-12-70

VPI STA 219+18.20
VPI EL 839.30
HP STA 219+14.98
HP EL 831.28
VPT STA 222+43.20
VPT EL 823.10
VPC STA 223+30.49
VPC EL 818.75
VCL = 650'
K = 66
-4.99%
4.89%
VCL = 400'
K = 113
VPC STA 209+92.82
VPC EL 801.14
VPI STA 211+92.82
VPI EL 803.84
VPT STA 213+92.82
VPT EL 813.62
VPC STA 215+93.20
VPC EL 823.41
CRITICAL CLEARANCE 17'-6"
STRUCTURE B-67-337

STATION 217+81 (NB PILGRIM R/L)
STRUCTURE R-67-122 REQ'D
MECHANICALLY STABILIZED EARTH WALL
185'-7½" OVERALL LENGTH

STATION 219+80 (NB PILGRIM R/L)
STRUCTURE R-67-121 REQ'D
MECHANICALLY STABILIZED EARTH WALL
179'-11¼" OVERALL LENGTH

EXISTING GROUND
AT R/L

STATION 218+65 (NB PILGRIM R/L)
REMOVE STRUCTURE B-67-198
4 SPAN STEEL GIRDER STRUCTURE
222'-8¾" OVERALL LENGTH
38-6" OVERALL WIDTH

STATION 218+65 (NB PILGRIM R/L)
STRUCTURE B-67-338 REQUIRED
2 SPAN 45-INCH 'W' PRESTRESSED GIRDER
30' CLEAR ROADWAY
SKEW 20°30'41" LHF

STATION 218+90 (NB PILGRIM R/L)
REMOVE STRUCTURE B-67-35
4 SPAN STEEL GIRDER STRUCTURE
221'-7" OVERALL LENGTH
38-6" OVERALL WIDTH

STATION 218+90 (NB PILGRIM R/L)
STRUCTURE B-67-337 REQUIRED
2 SPAN 45-INCH 'W'
PRESTRESSED CONCRETE GIRDER
30' CLEAR ROADWAY
SKEW 21°00'07" LHF

EXISTING GRADE
PROPOSED GRADE

799.69	802.16	804.09	806.89	810.97	815.87	820.33	823.81	826.03	827.09	827.00	825.47	822.83	818.66	814.33	811.58
801.24	803.10	805.84	809.46	813.97	818.86	823.74	827.77	830.27	831.26	830.73	828.68	825.11	820.26	815.62	812.29

210 212 214 216 218 220 222 224

PROJECT NO: 1100-37-70 & 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	PLAN AND PROFILE: PILGRIM ROAD	SHEET 594 E

FILE NAME : P:\44xx\4442\Plan\050102_pp.dgn PLOT DATE : 11/2/2014 PLOT BY : ajp PLOT NAME : PLOT SCALE : 1:100

WISDOT/CADDS SHEET 40

EX R/W

CAUTION

SLOPE INTERCEPT

704+00 MEGAL DRIVE

CAUTION

PARK & RIDE LOT

SLOPE INTERCEPT

STA. 227+47.52 PILGRIM =
STA. 704+37.82 MEGAL

PILGRIM ROAD
SB PGL

MATCHLINE STA 225+00

226+00

228+00 PILGRIM ROAD

230+00

231+72

226+00

800+00 EB

704+00

800+00 WB

228+00

230+00

EX R/W

PILGRIM ROAD R/L

801+00 EB

801+00 WB

EX R/W

802+00 EB

802+00 WB

MEGAL COURT

PR R/W

TILE

EX R/W

END PROJECT 2782-12-70
STA 226+66.12

END PROJECT 2782-11-70
STA 228+24.92

N

5

5

NOTE:
PROFILE STATIONING REFERS
TO NB PILGRIM ROAD R/L

VPI STA 231+00.00
VPI EL 821.53

VCL = 760'
K = 72

LP STA 226+89.11
LP EL 809.81

EXISTING GROUND
AT R/L

FINISHED PROFILE
GRADE LINE
PROJECT 2782-12-70

VPT STA 230+90.49
VPT EL 821.00

FINISHED PROFILE
GRADE LINE
PROJECT 2782-11-70

EXISTING
GRADE

VPI STA 227+10.49
VPI EL 799.80

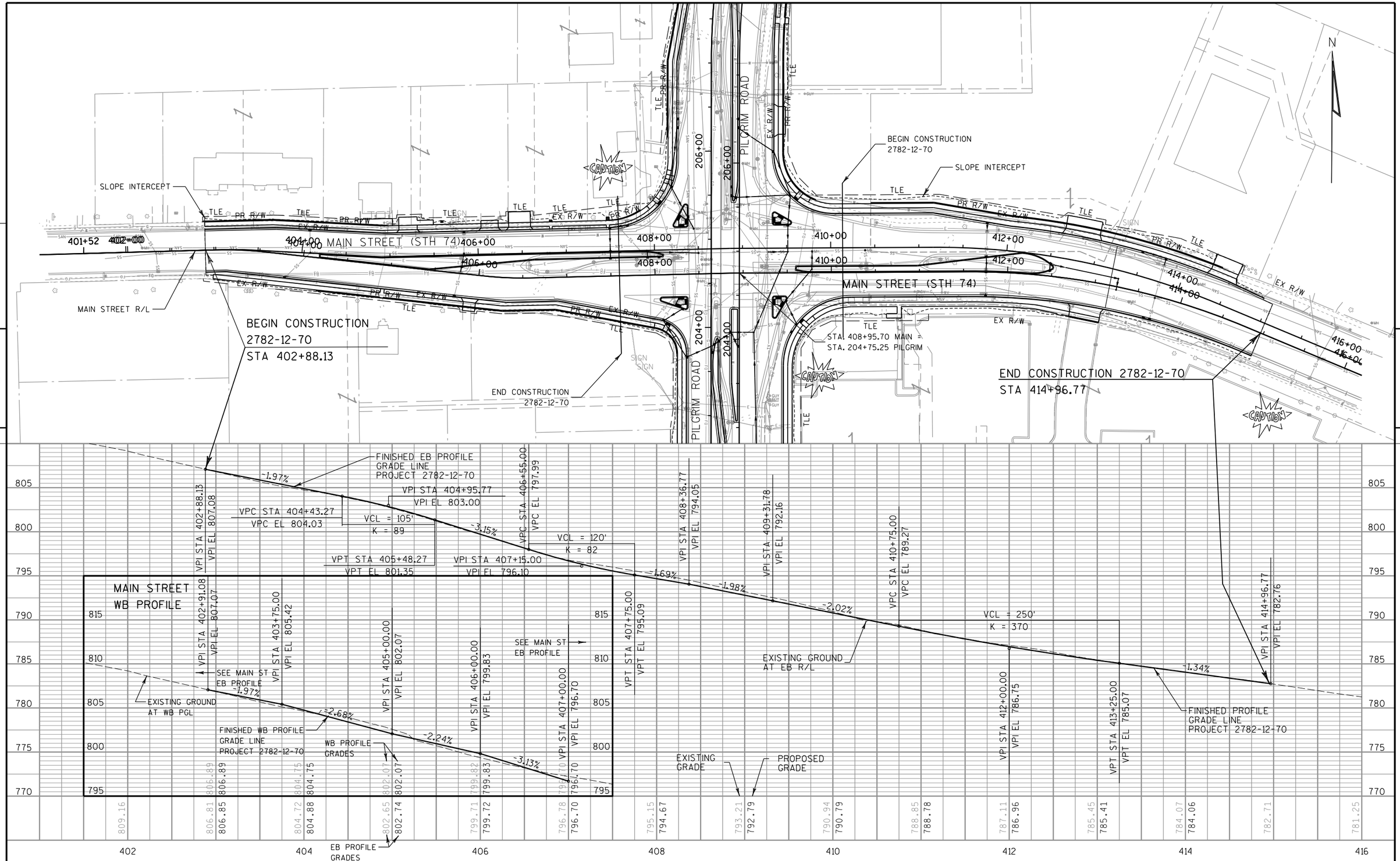
PROPOSED
GRADE

830	825	820	815	810	805	800	795

811.58	812.29	810.11	810.36	810.00	809.81	810.74	810.66	813.13	812.90	816.52	821.53

226	228	230	23

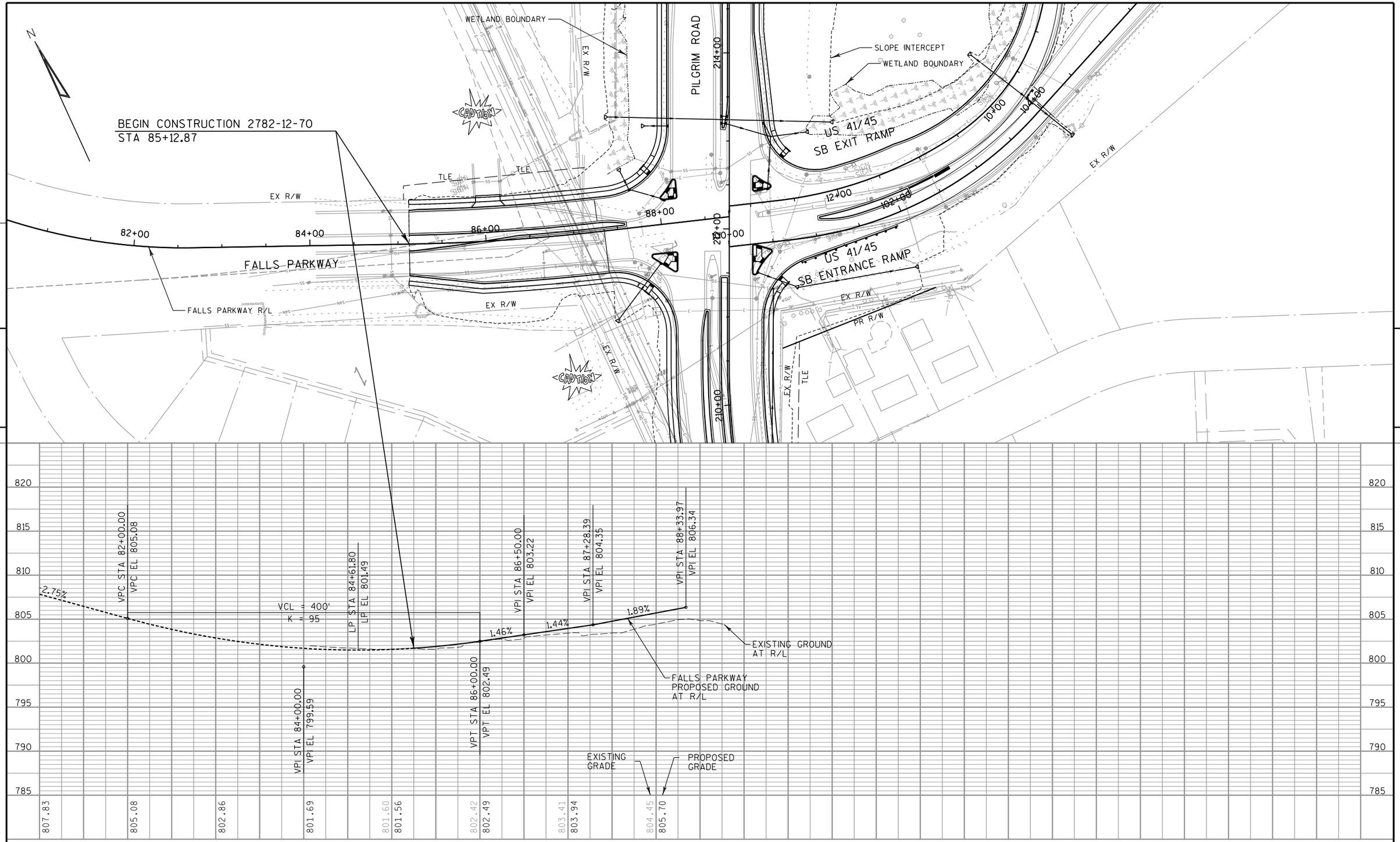
PROJECT NO: 2782-11-70 & 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	PLAN AND PROFILE: PILGRIM ROAD	SHEET 595	E



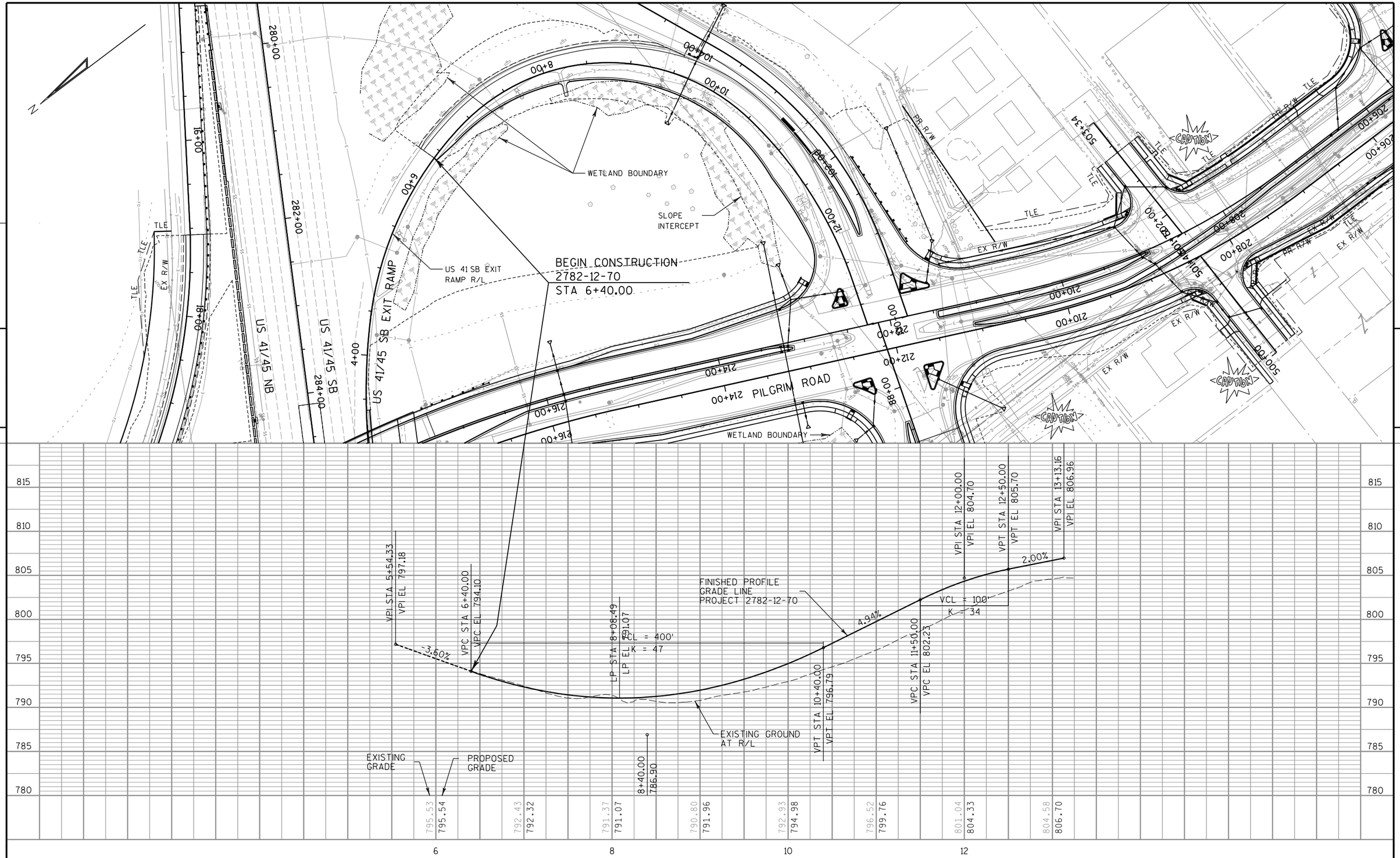
PROJECT NO: 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	PLAN AND PROFILE: MAIN STREET (STH 74)	SHEET 596	E

FILE NAME : P:\44xx\4442\Plan\050104_pp.dgn PLOT DATE : 11/2/2014 PLOT BY : ajp PLOT NAME : PLOT SCALE : 1:100

WISDOT/CADDS SHEET 40



PROJECT NO: 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	PLAN AND PROFILE: FALLS PARKWAY	SHEET 597	E



PROJECT NO: 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	PLAN AND PROFILE: US 41/45 SB EXIT RAMP	SHEET 598	E

END CONSTRUCTION
2782-12-70
STA 104+01.85

US 41/45 SB ENTRANCE RAMP

US 41 SB
ENTRANCE RAMP R/L

US 41/45 SB EXIT RAMP

US 41/45 NB

US 41/45 SB

SLOPE
INTERCEPT

WETLAND BOUNDARY

PILGRIM ROAD

EX R/W

PR R/W

TLE

CAUTION

FINISHED PROFILE
GRADE LINE
PROJECT 2782-12-70

EXISTING GROUND
AT R/L

VPC STA 101+50.00
VPC EL 803.38

VPI STA 102+00.00
VPI EL 802.63

VPT STA 102+50.00
VPT EL 800.41

VPC STA 103+00.18
VPC EL 798.17

VCL = 100'
K = 34

-4.46%

VCL = 90'
K = 61

-2.99%

VPI STA 103+45.18
VPI EL 796.16

VPT STA 103+90.18
VPT EL 794.82

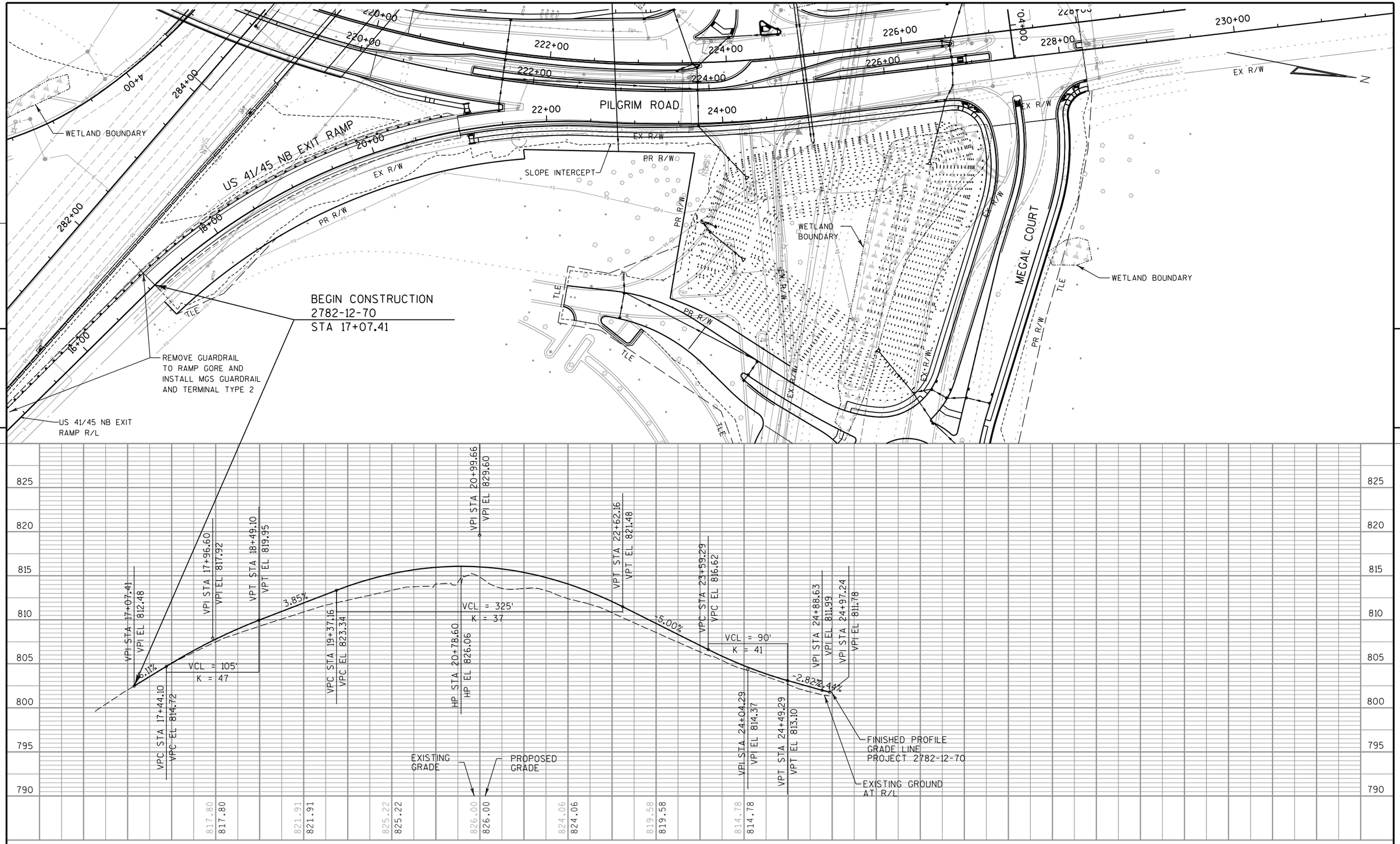
VPI STA 106+94.47
VPI EL 785.73

EXISTING
GRADE

PROPOSED
GRADE

	102	104	106	108
EXISTING GRADE	800.98	797.78	794.52	791.55	788.62
PROPOSED GRADE	802.26	798.18	794.53	791.54	788.55

PROJECT NO: 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	PLAN AND PROFILE: US 41/45 SB ENTRANCE RAMP	SHEET 599	E



PROJECT NO: 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	PLAN AND PROFILE: US 41/45 NB EXIT RAMP TO NB PILGRIM RD	SHEET 600	E

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
RBM1	MEGAL DR STA. 700+84.94, 21.41' LT	CHISELED "X" NE SIDE OF LOWER FLANGE OF HYDRANT	817.71

N

EX R/W

PARK & RIDE LOT

PILGRIM ROAD

230+00

228+00

226+00

TLE

PR R/W

WETLAND BOUNDARY

MEGAL COURT

MEGAL DRIVE

700+00

702+00

704+00

BEGIN CONSTRUCTION
2782-11-70
STA 700+50.00

MEGAL DRIVE R/L
SLOPE INTERCEPT

END PROJECT
2782-12-70
BEGIN CONSTRUCTION
2782-11-70

CAUTION SECTION CORNER.
CONTACT PROJECT ENGINEER AND SEWRPC
AT LEAST TWO WEEKS PRIOR TO WORKING
NEAR OR DISTURBING THIS CORNER.

T 8 N
3 2
3 2
R20E

NOTE:
MEGAL DRIVE IS UNDER
CONSTRUCTION; MATCH
EXISTING IN THE FIELD.

5

5

VPI STA 700+14.92
VPI EL 817.83

-2.47%

VPI STA 701+69.32
VPI EL 814.02

VPT STA 702+14.32
VPT EL 812.60

VPC STA 702+35.85
VPC EL 811.92

VCL = 90'
K = 132

3.75%

VCL = 135'
K = 37

LP STA 703+52.03
LP EL 810.10

VPI STA 703+94.63
VPI EL 810.27

VPI STA 704+05.63
VPI EL 810.05

0.51%

4.99%

FINISHED PROFILE
GRADE LINE
PROJECT 2782-11-70

VPC STA 701+24.32
VPC EL 815.13

VPI STA 703+03.35
VPI EL 809.80

VPT STA 703+70.85
VPT EL 810.14

EXISTING GROUND
AT R/L

EXISTING GRADE

PROPOSED GRADE

	815.72	815.73	813.18	813.05	810.77	810.46	810.14	810.16

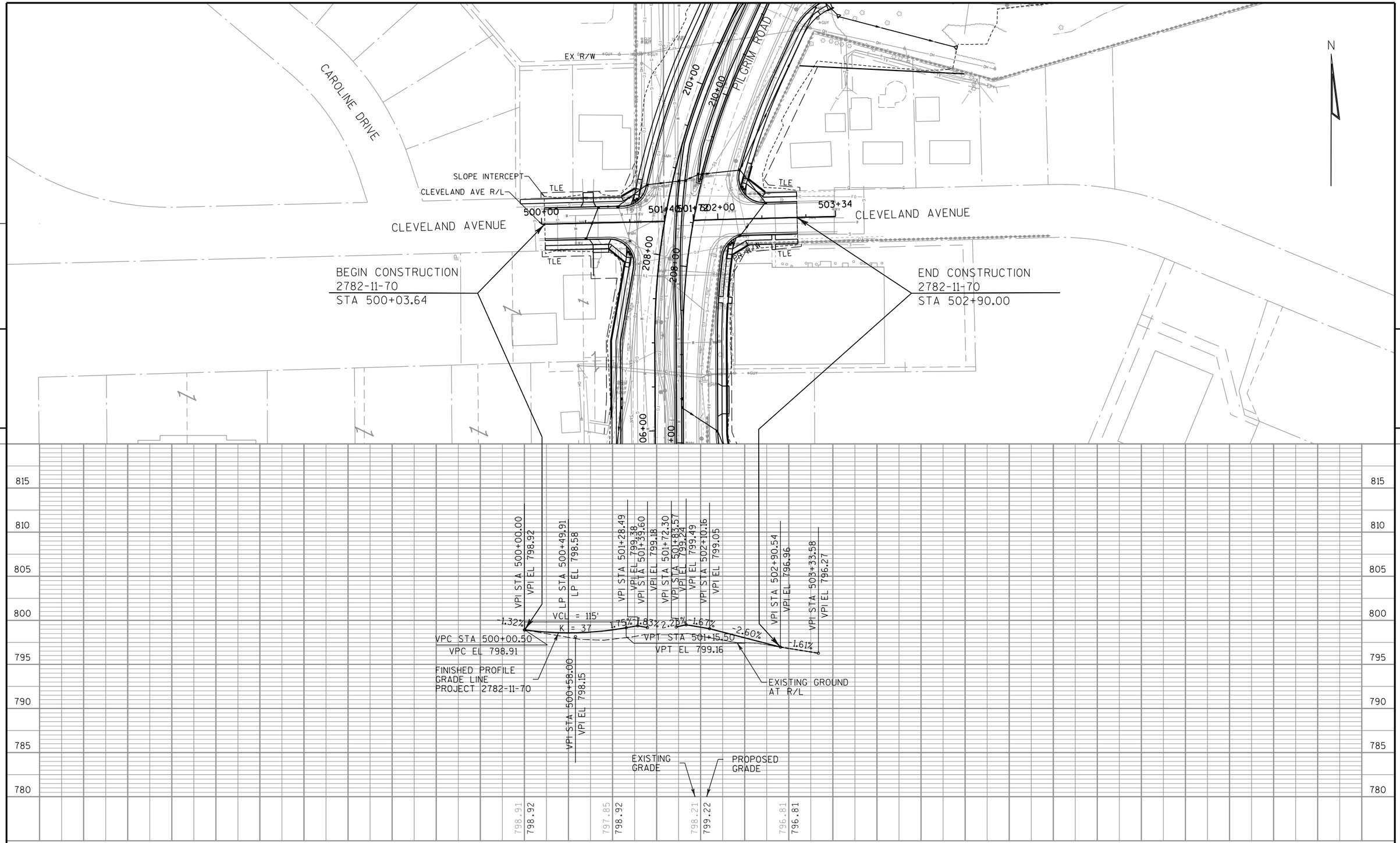
830 825 820 815 810 805 800 795

698 700 702 704 706

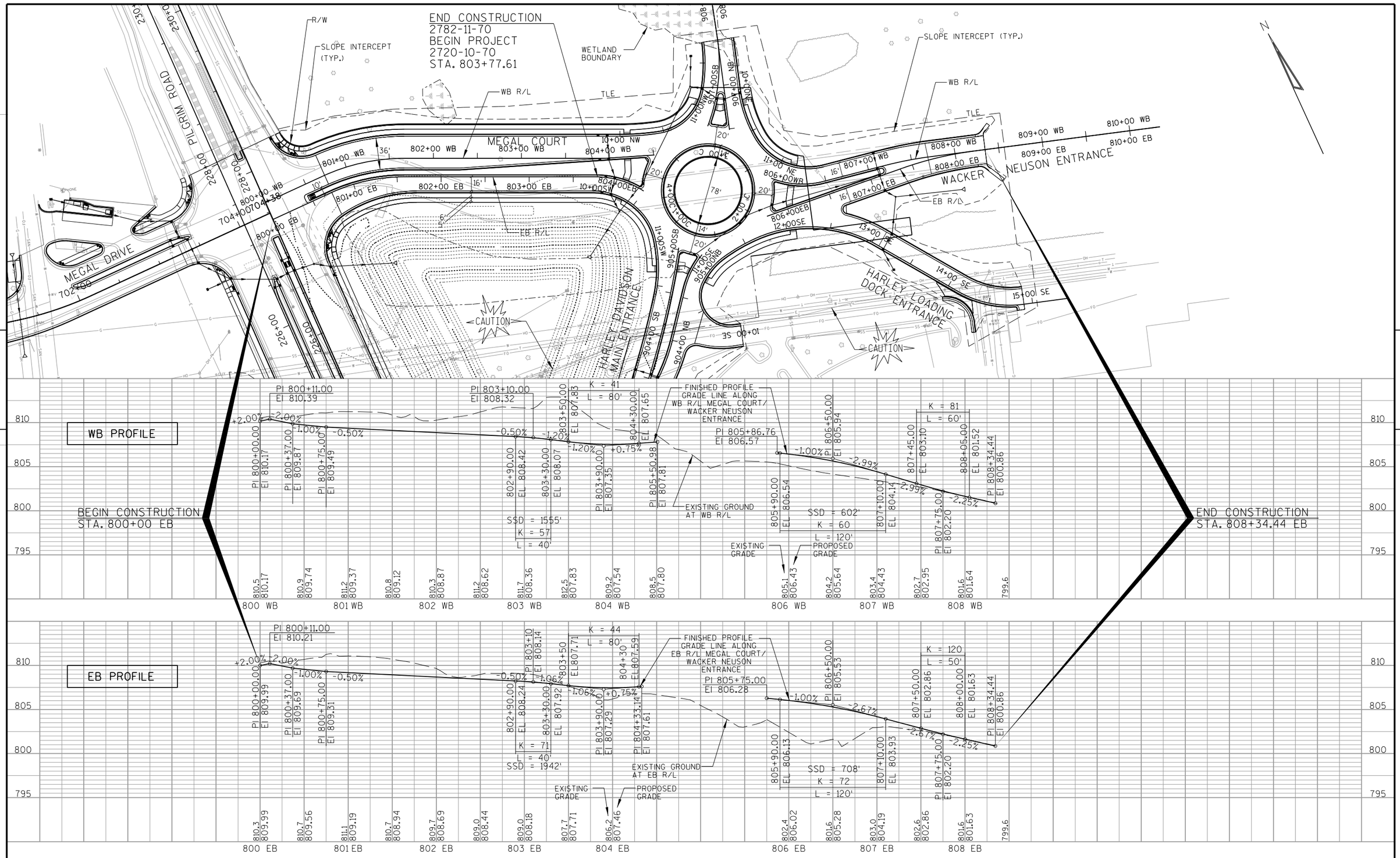
PROJECT NO: 2782-11-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	PLAN AND PROFILE: MEGAL DRIVE	SHEET 601	E

FILE NAME : P:\44xx\4442\Plan\050109_pp.dgn PLOT DATE : 11/2/2014 PLOT BY : ajp PLOT NAME : PLOT SCALE : 1:100

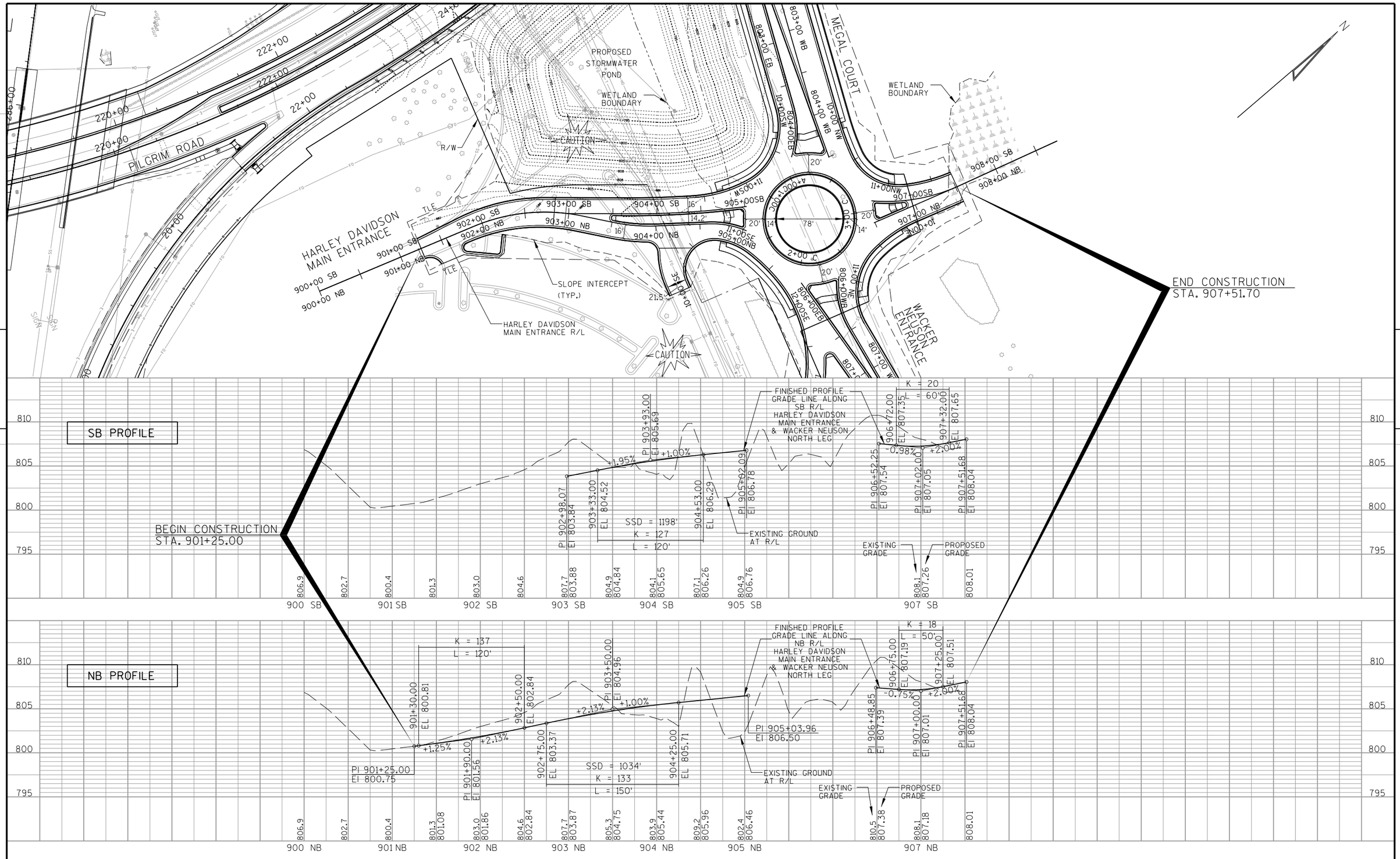
WISDOT/CADDS SHEET 40



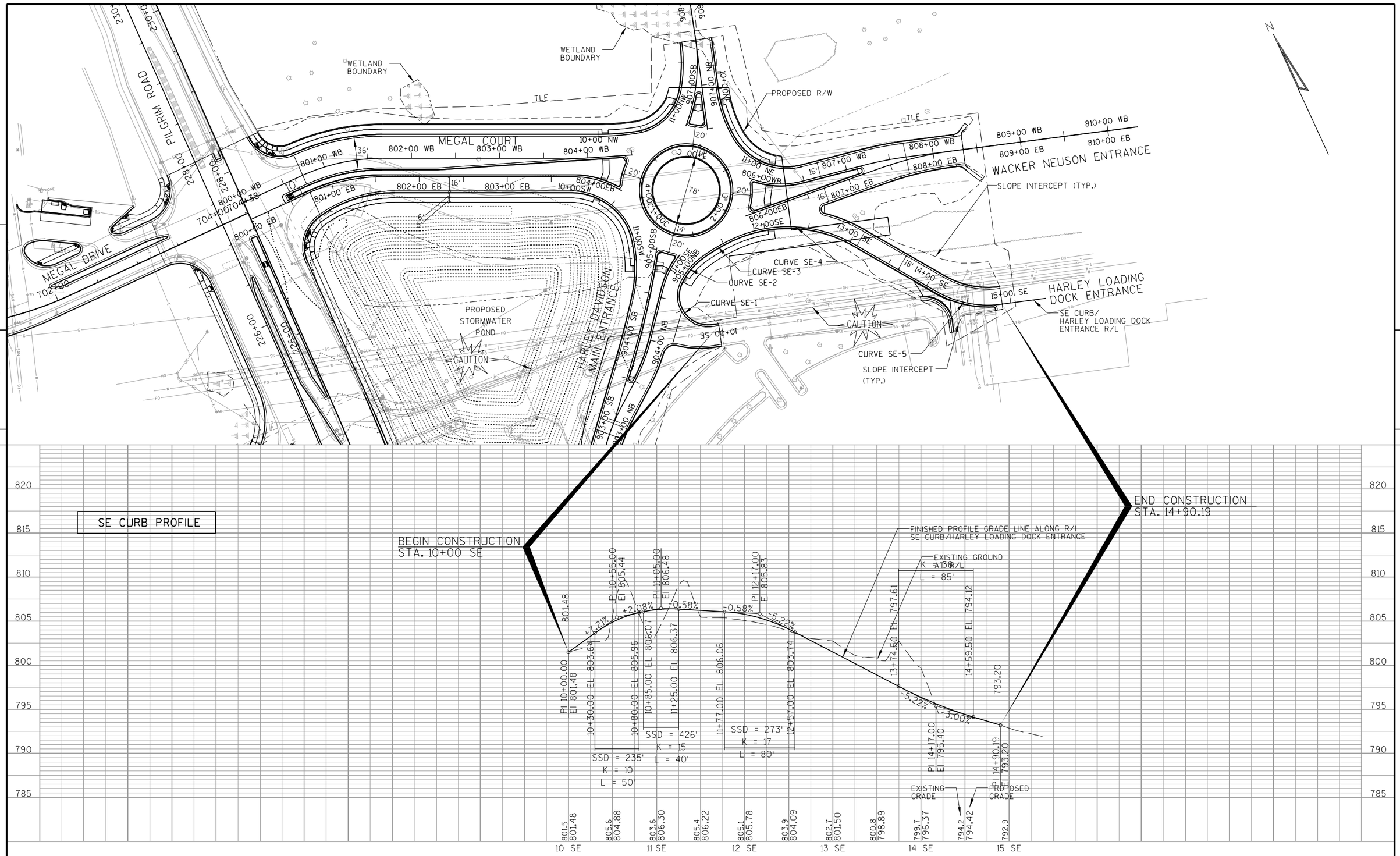
PROJECT NO: 2782-11-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	PLAN AND PROFILE: CLEVELAND AVENUE	SHEET 602	E



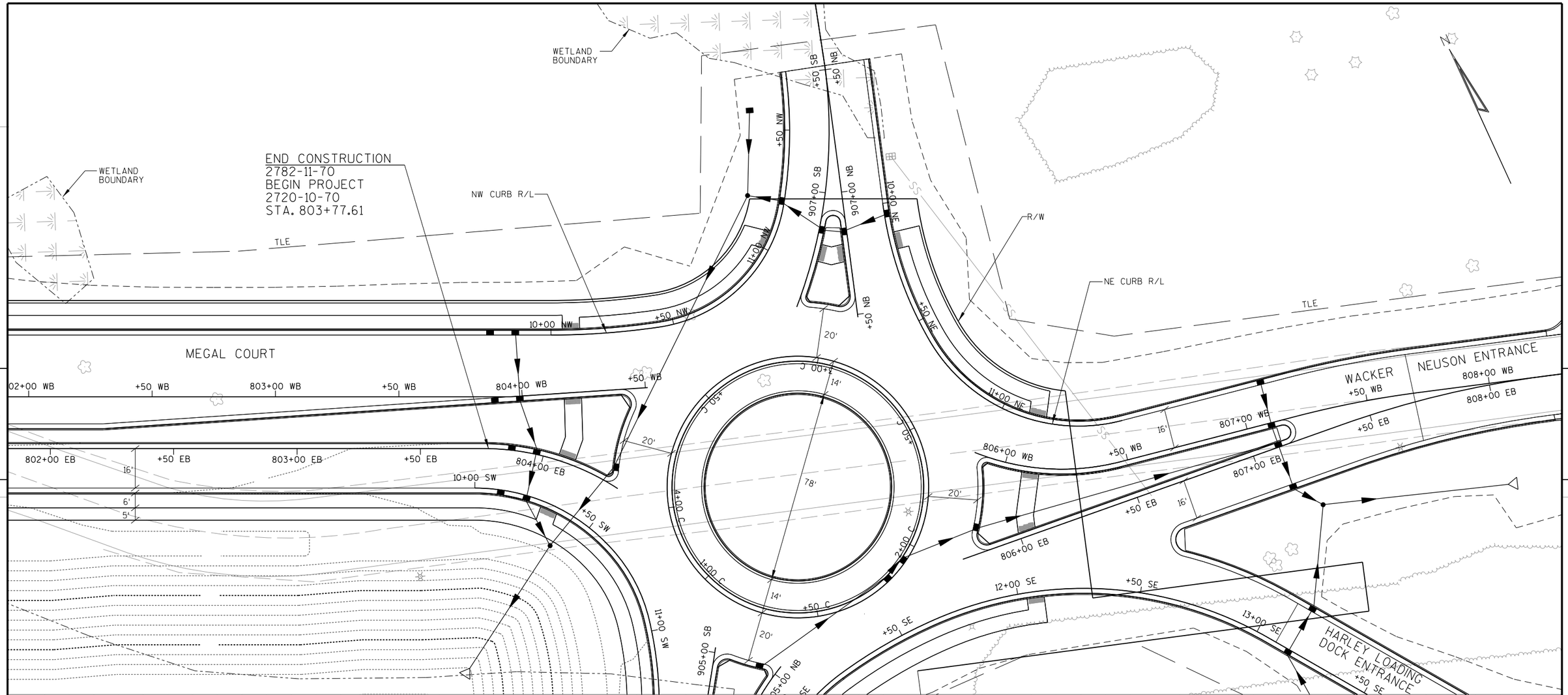
PROJECT NO: 2782-11-70 & 2720-10-70	HWY: MEGAL COURT	COUNTY: WAUKESHA	PLAN AND PROFILE: MEGAL COURT & WACKER NEUSON ENTRANCE	SHEET 603	E

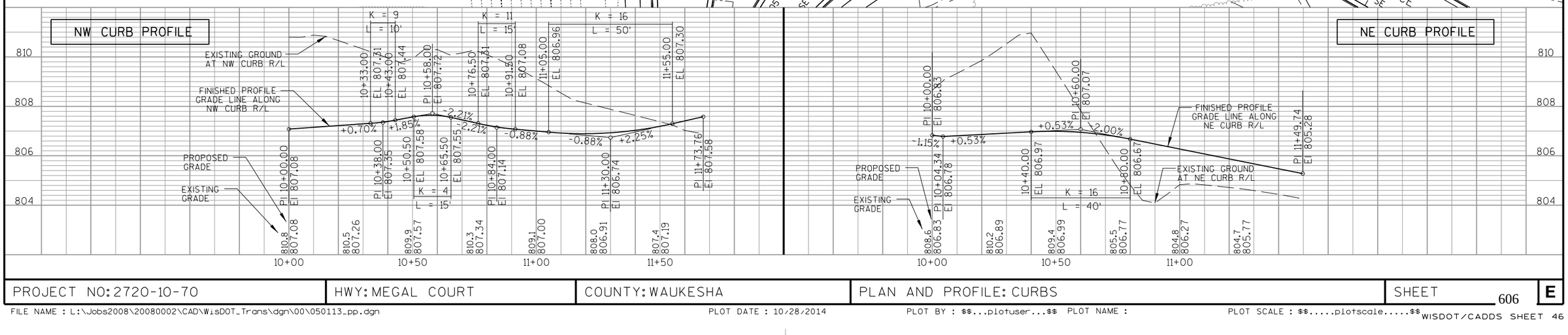


PROJECT NO: 2720-10-70	HWY: MEGAL COURT	COUNTY: WAUKESHA	PLAN AND PROFILE: HARLEY DAVIDSON MAIN ENTRANCE & NORTH LEG	SHEET 604	E



PROJECT NO: 2720-10-70	HWY: MEGAL COURT	COUNTY: WAUKESHA	PLAN AND PROFILE: SE CURB/HARLEY LOADING DOCK ENTRANCE	SHEET 605	E





PROJECT NO: 2720-10-70	HWY: MEGAL COURT	COUNTY: WAUKESHA	PLAN AND PROFILE: CURBS	SHEET 606	E

END CONSTRUCTION
2782-11-70
BEGIN PROJECT
2720-10-70
STA. 803+77.61

WETLAND BOUNDARY

TLE

MEGAL COURT

802+00 WB | +50 WB | 803+00 WB | +50 WB | 804+00 WB | +50 WB

802+00 EB | +50 EB | 803+00 EB | +50 EB | 804+00 EB

10+00 SW | +50 SW | SW CURB R/L

10+00 NW | +50 NW | 11+00 NW

907+00 SB | 907+00 NB | 10+00 NE | +50 NB | +50 NE | 11+00 NE

R/W

20' | 14' | 78' | 20' | 14' | 20'

J 00+ | J 05+ | J 05+ | 4+00 C | 1+00 C | 2+00 C | +50 C

WACKER | NEUSON ENTRANCE

806+00 WB | +50 WB | 807+00 WB | 808+00 WB

806+00 EB | +50 EB | 807+00 EB | 808+00 EB

16' | 6' | 5'

12+00 SE | +50 SE | 13+00 SE | 14+00 SE

HARLEY LOADING DOCK ENTRANCE

905+00 SB | 905+00 NB | 11+00 SE

HARLEY DAVIDSON MAIN ENTRANCE

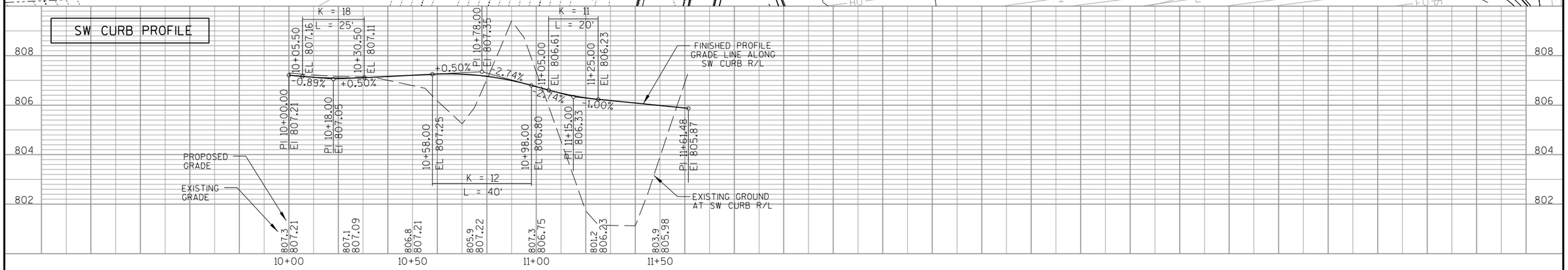
10+00 SW | +50 SW | 11+00 SW

OH | T | W | E | G | HO

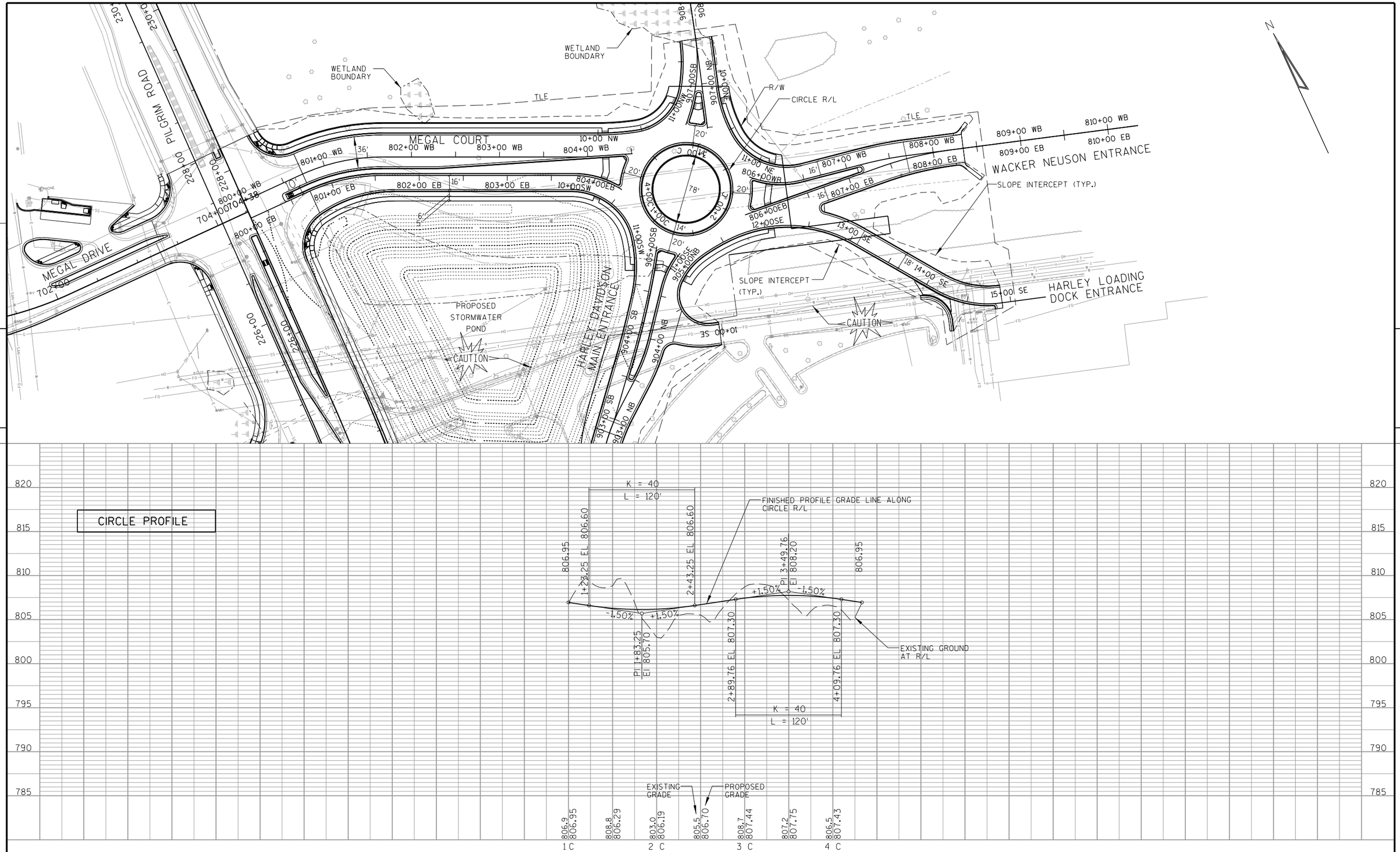
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5 | 5

SW CURB PROFILE



PROJECT NO: 2782-11-70 & 2720-10-70	HWY: MEGAL COURT	COUNTY: WAUKESHA	PLAN AND PROFILE: CURBS	SHEET 607	E



PROJECT NO: 2720-10-70	HWY: MEGAL COURT	COUNTY: WAUKESHA	PLAN AND PROFILE: CIRCLE	SHEET 608	E

Standard Detail Drawing List

08A05-19A	INLET COVERS TYPE A, H, A-S, H-S & Z
08A05-19B	INLET COVERS TYPE B, B-A, C, MS, MS-A, & WM
08A05-19C	INLET COVERS TYPE F, HM, HM-S, S, T, V, HM-GJ, & HM-GJ-S
08A05-19D	INLET COVER TYPE BW, MANHOLE COVERS, TYPE K, J, J-S, L & M
08A08-01	CATCH BASINS 3-FT, 4-FT, 5-FT AND 6-FT DIAMETER
08A09-01	CATCH BASINS 2X3-FT AND 2.5X3-FT
08B09-01	MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT AND 8-FT DIAMETER
08C06-01	INLETS 3-FT AND 4-FT DIAMETER
08C07-01	INLETS 2X2-FT, 2X2.5-FT, 2X3-FT AND 2.5X3-FT
08C08-01	INLETS MEDIAN 1 AND 2 GRATE
08D01-17	CONCRETE CURB, CONCRETE CURB AND GUTTER AND TIES
08D04-05	CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES
08D05-15A	CURB RAMPS TYPES 1 AND 1-A
08D05-15B	CURB RAMPS TYPES 2 AND 3
08D05-15C	CURB RAMPS TYPES 4A AND 4A1
08D05-15D	CURB RAMPS TYPE 4B AND 4B1
08D05-15E	CURB RAMPS TYPES 5, 6, 7A, 7B & 8
08E08-03	TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS
08E09-06	SILT FENCE
08E10-02	INLET PROTECTION TYPE A, B, C AND D
08E14-01	TRACKING PAD
08F01-11	APRON ENDWALLS FOR CULVERT PIPE
08F04-07	JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL
09B02-08	CONDUIT UNDER PAVED HIGHWAYS
09B04-11	PULL BOX
09C02-07	CONCRETE BASES, TYPES 1, 2, 5, & 6
09C03-04	TRANSFORMER/PEDESTAL BASES
09C05-09	CONCRETE CONTROL CABINET BASES
09C06-07	CONCRETE CONTROL CABINET BASE, TYPE 9, SPECIAL
09C08-05	CONCRETE BASE, TYPE 7
09C11-05	CONCRETE BASE TYPE 10
09C12-05A	CONCRETE BASE TYPE 13
09C12-05B	CONCRETE BASE TYPE 13
09C13-02	CONCRETE BASE TYPE 10 & TYPE 13 EXTENSION
09D01-05	CABINET SERVICE INSTALLATION (METER BREAKER PEDESTAL)
09D02-03	SIGNAL CONTROL CABINET
09D04-01	LIGHTING CONTROL CABINET
09E01-13A	POLE MOUNTINGS FOR TRAFFIC SIGNALS TYPE 2
09E01-13B	POLE MOUNTINGS FOR TRAFFIC SIGNALS AND LIGHTING UNITS, TYPE 3 (HEAVY DUTY)
09E01-13C	POLE MOUNTINGS FOR TRAFFIC SIGNALS AND LIGHTING UNITS, TYPE 4
09E01-13D	POLE MOUNTINGS FOR LIGHTING UNITS, TYPE 5 (30 FEET)
09E01-13G	HARDWARE DETAILS FOR POLE MOUNTINGS
09E02-04	FREEWAY LIGHTING UNIT POLE WIRING
09E03-05	NON-FREEWAY LIGHTING UNIT POLE WIRING
09E06-05	TRAFFIC SIGNAL STANDARD POLY BRACKET MOUNTINGS (TYPICAL) 13 FT. OR 15 FT.
09E07-05	TRAFFIC SIGNAL STANDARD PEDESTRIAN AND FLASHER TYPICAL MOUNTING DETAILS
09E08-06B	TYPE 10 POLE 15'-30' MONOTUBE ARM
09E08-06D	TYPE 13 POLE 35'-55' MONOTBE ARM
09E08-06E	GENERAL NOTES AND HARDWARE DETAILS FOR TYPE 9, 10, 12 & 13 POLES WITH MONOTUBE ARMS
09F15-04A	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 1)
09F15-04B	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 1)
09G01-03A	SPAN WIRE TEMPORARY TRAFFIC SIGNAL
09G01-03B	SPAN WIRE TEMPORARY TRAFFIC SIGNAL
09G01-03C	SPAN WIRE TEMPORARY TRAFFIC SIGNAL
09G01-03D	SPAN WIRE TEMPORARY TRAFFIC SIGNAL
09G01-03E	SPAN WIRE TEMPORARY TRAFFIC SIGNAL
09G01-03F	SPAN WIRE TEMPORARY TRAFFIC SIGNAL
09G01-03G	SPAN WIRE TEMPORARY TRAFFIC SIGNAL
09H08-01	COMMUNICATIONS MANHOLE DETAILS
09H09-01	COMMUNICATION VAULT
09H11-01	IDENTIFICATION PLAQUE REQUIREMENTS AND PLACEMENTS
10A01-03	ELECTRICAL HANDHOLE WIRING
10A04-02	IDENTIFICATION PLAQUES UNDERDECK AND HIGH MAST LIGHTING
10A05-02	ELECTRICAL DETAILS GROUND MOUNT LIGHT POLES ISOLATED NEUTRAL SYSTEMS
10A08-02	ELECTRICAL DETAILS STRUCTURE MOUNT LIGHT POLES ISOLATED NEUTRAL SYSTEMS
10A15-04A	ELECTRICAL DETAILS UNDERDECK LIGHTING
10A15-04B	ELECTRICAL DETAILS UNDERDECK LIGHTING
11B02-02	CONCRETE MEDIAN NOSE

6

Standard Detail Drawing List

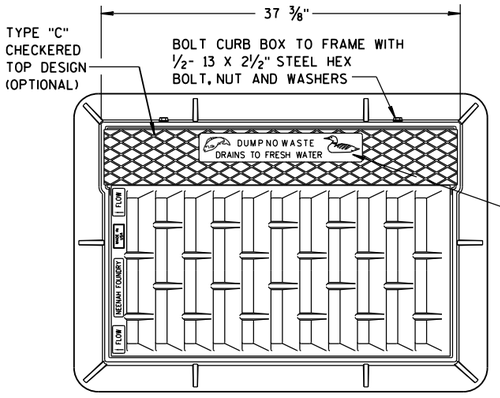
12A03-10	NAME PLATE (STRUCTURES)
12A04-03	STRUCTURE IDENTIFICATION PLAQUES, RAMP GATES, SIGN BRIDGES & OVERHEAD SIGN SUPPORTS & TRAFFIC SIGNALS
13A03-05	CONCRETE PAVEMENT SHOULDERS
13B02-07A	CONCRETE BRIDGE APPROACH
13B02-07B	STRUCTURAL APPROACH SLAB AND CONCRETE BRIDGE APPROACH
13C01-17	CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES
13C13-08	URBAN DOWELED CONCRETE PAVEMENT
13C18-02A	CONCRETE PAVEMENT JOINTING
13C18-02B	CONCRETE PAVEMENT STEEL REINFORCEMENT
13C18-02C	CONCRETE PAVEMENT JOINT TIES
13C18-02D	CONCRETE PAVEMENT JOINTING AT UTILITY FIXTURES
13C18-02E	CONCRETE PAVEMENT JOINTING AND STEEL REINFORCEMENT IN ROUNDABOUTS
14B07-14A	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-14B	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-14C	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-14D	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-14E	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-14F	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-14G	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-14H	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B08-01A	CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS
14B08-01B	CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS
14B08-01C	CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS
14B08-01D	CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS
14B08-01E	CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS
14B28-03	GUARDRAIL MOW STRIP
14B29-01	SAFETY EDGE
14B32-03A	CONCRETE BARRIER SINGLE SLOPE (CBSS)
14B32-03B	CONCRETE BARRIER SINGLE SLOPE (CBSS)
14B32-03C	CONCRETE BARRIER SINGLE SLOPE (CBSS)
14B32-03D	CONCRETE BARRIER SINGLE SLOPE (CBSS)
14B33-01A	CONCRETE BARRIER SINGLE SLOPE 32" THRIE BEAM ANCHOR
14B33-01B	CONCRETE BARRIER SINGLE SLOPE 32" THRIE BEAM ANCHOR
14B33-01C	CONCRETE BARRIER SINGLE SLOPE 32" THRIE BEAM ANCHOR
14B33-01D	CONCRETE BARRIER SINGLE SLOPE 36" THRIE BEAM ANCHOR
14B33-01E	CONCRETE BARRIER SINGLE SLOPE 36" THRIE BEAM ANCHOR
14B33-01F	CONCRETE BARRIER SINGLE SLOPE 36" THRIE BEAM ANCHOR
14B33-01G	CONCRETE BARRIER SINGLE SLOPE 42" THRIE BEAM ANCHOR
14B33-01H	CONCRETE BARRIER SINGLE SLOPE 42" THRIE BEAM ANCHOR
14B35-01A	32-INCH SINGLE-FACED NJ SHAPE CONCRETE BARRIER TO 32-INCH SSCB TRANSITION
14B35-01B	32-INCH SINGLE-FACED NJ SHAPE CONCRETE BARRIER TO 32-INCH SSCB TRANSITION
14B37-01C	32-INCH DOUBLE-FACED NJ SHAPE CONCRETE BARRIER TO 36-INCH SSCB TRANSITION
14B37-01D	32-INCH DOUBLE-FACED NJ SHAPE CONCRETE BARRIER TO 36-INCH SSCB TRANSITION
14B41-01A	SINGLE SLOPE ROADSIDE RETAINING WALL
14B41-01B	SINGLE SLOPE ROADSIDE RETAINING WALL
14B42-03A	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-03B	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-03C	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B44-02A	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-02B	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-02C	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B45-03A	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-03B	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-03C	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-03D	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-03E	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-03F	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-03G	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-03H	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-03I	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-03J	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
15A03-02A	FLEXIBLE MARKER POST FOR CULVERT END
15A03-02B	FLEXIBLE MARKER POST FOR CULVERT END
15C02-05A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-05B	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-05C	DETOUR SIGNING FOR MAINLINE CLOSURES
15C03-02	BARRICADES AND SIGNS FOR SIDEROAD CLOSURES
15C05-02	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS

6

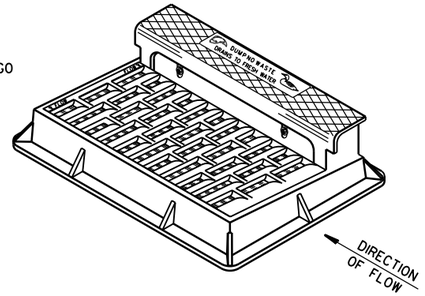
Standard Detail Drawing List

15C07-12A	PAVEMENT MARKING SYMBOLS
15C07-12B	PAVEMENT MARKING WORDS
15C07-12C	PAVEMENT MARKING ARROWS
15C08-16A	PAVEMENT MARKING (MAINLINE)
15C08-16B	PAVEMENT MARKING (INTERSECTIONS)
15C08-16E	PAVEMENT MARKING (LEFT TURN LANE)
15C08-16F	PAVEMENT MARKING (ISLANDS)
15C11-05	FLEXIBLE TUBULAR MARKER POST, ANCHOR & BASES
15C12-04	TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)
15C15-03	36" DIAMETER FULL SPAN OVERHEAD SIGN SUPPORT BASE
15C25-02	42" DIAMETER CANTILEVER OVERHEAD SIGN SUPPORT BASE
15C27-01	DOUBLE ARROW WARNING SIGN PLACEMENT
15C29-03A	BICYCLE LANE MARKING
15C29-03B	BICYCLE LANE MARKING
15C31-01A	PAVEMENT MARKING (RAMPS AND GORES)
15C33-01	STOP LINE AND CROSSWALK PAVEMENT MARKING
15D06-03	TRAFFIC CONTROL, TWO LANE TWO WAY OPERATION
15D14-02	TRAFFIC CONTROL, TWO LANE CLOSURE ON FREEWAY OR EXPRESSWAY, SHORT-TERM (LESS THAN 24 HOURS)
15D15-01	TRAFFIC CONTROL, EXIT AND ENTRANCE RAMP WITHIN LANE CLOSURE
15D16-02	TRAFFIC CONTROL, EXIT RAMP CLOSURE
15D20-02	TRAFFIC CONTROL, SINGLE LANE CLOSURE, NON-FREEWAY/EXPRESSWAY
15D21-03	TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE
15D30-01	TRAFFIC CONTROL, SIDEWALK CLOSURE
15D34-01A	RAMP GATE SOLAR POWER
15D34-01B	RAMP GATE SOLAR POWER
15D34-01C	RAMP GATE SOLAR POWER
15D34-01D	RAMP GATE SOLAR POWER
16A01-06	LANDMARK REFERENCE MONUMENTS AND COVERS

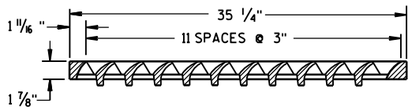
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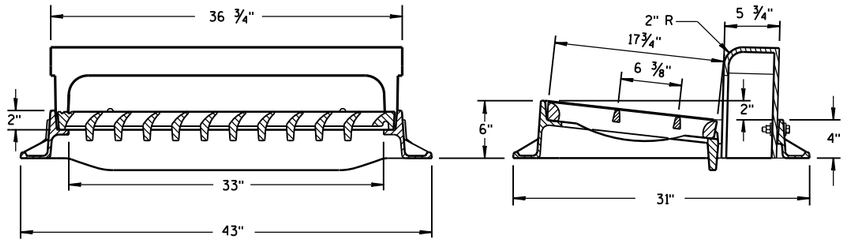


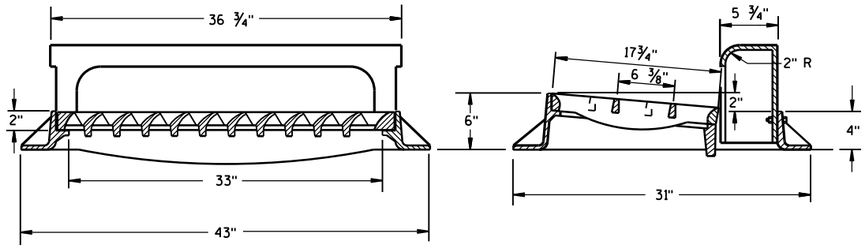
NOTE:
GRATE IS REVERSIBLE.



NOTE: CURB BOX HEIGHT ADJUSTABLE 6" TO 9"

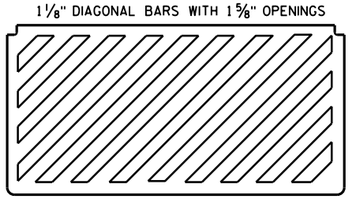






TYPE "H"

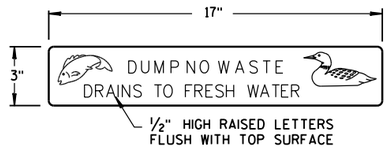
NOTE: EITHER CASTING IS ACCEPTABLE



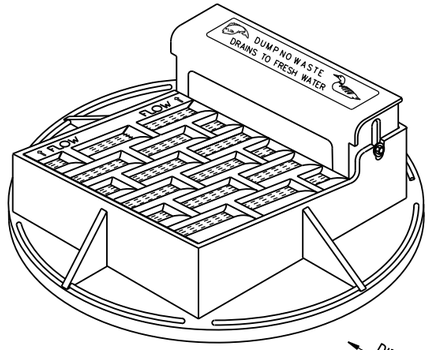
SPECIAL GRATE FOR TYPE "H" COVER

(MEASURES 35 1/4" X 17 3/4" X 2")

(NOTED AS TYPE H-S ON DRAINAGE TABLE)



LOGO DETAIL



NOTE: CURB BOX ADJUSTABLE 4" TO 9"

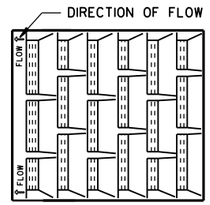
NOTE:
GRATE IS REVERSIBLE.

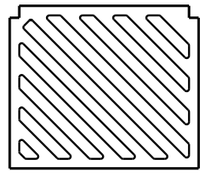
GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR CATCH BASIN, MANHOLE AND INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.

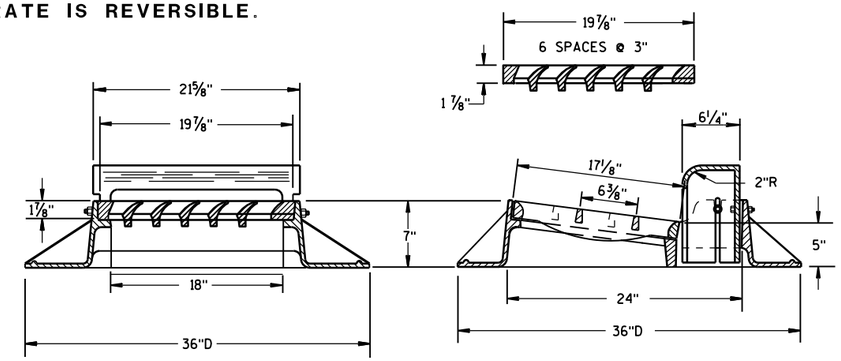




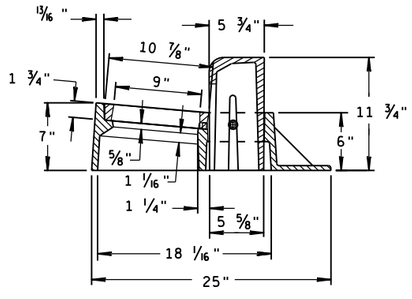
SPECIAL GRATE FOR TYPE "A" COVER

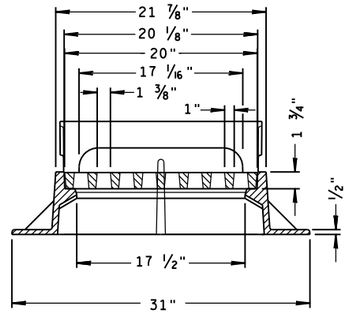
(MEASURES 19 3/4" X 17" X 1 7/8")

(NOTED AS TYPE A-S ON DRAINAGE TABLE)

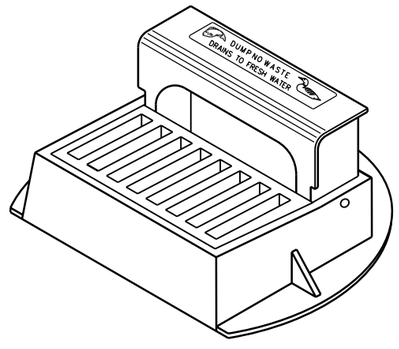


TYPE "A"





TYPE "Z"

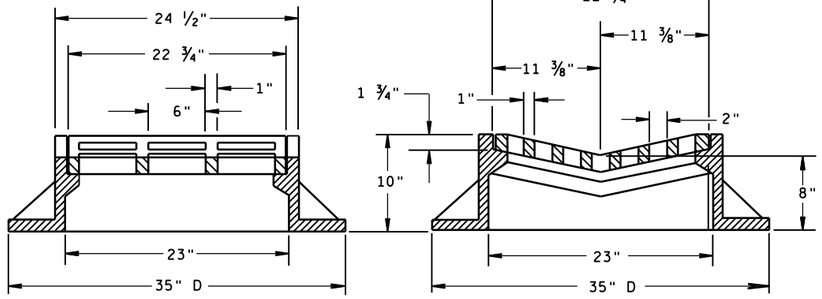


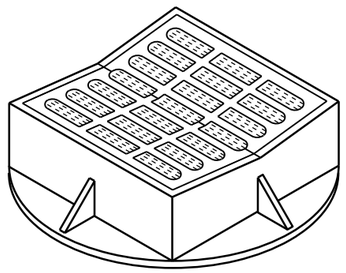
INLET COVERS
TYPE A, H, A-S, H-S & Z

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

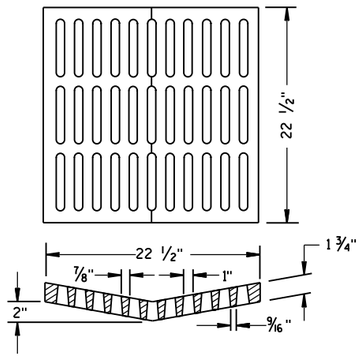
APPROVED
11-27-13 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER
FHWA

S.D.D. 8 A 5-19a



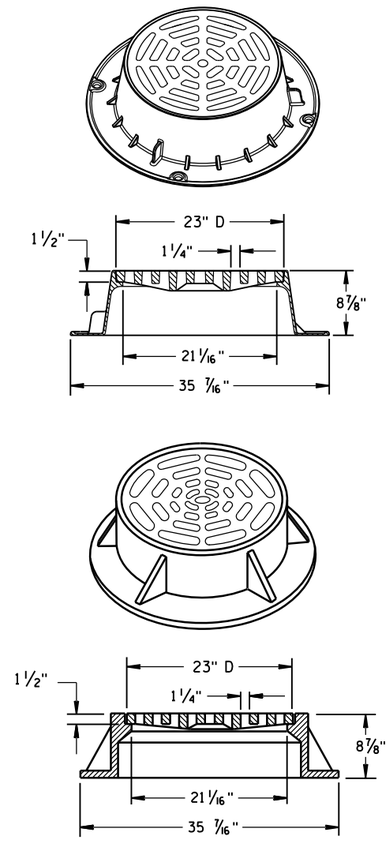


TYPE "B"



ALTERNATIVE GRATE FOR TYPE "B" COVER

USE WHERE PEDESTRIAN OR BICYCLE TRAFFIC IS POSSIBLE.
NOTED AS TYPE B-A ON THE DRAINAGE TABLE



TYPE "C"

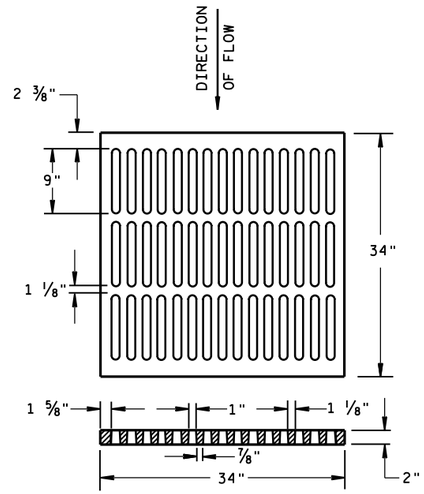
NOTE: EITHER CASTING IS ACCEPTABLE

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

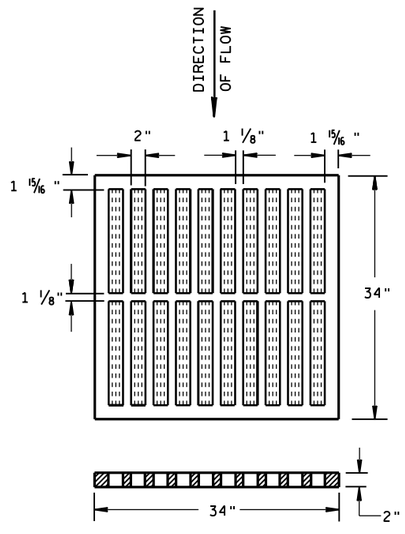
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR CATCH BASIN, MANHOLE AND INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.



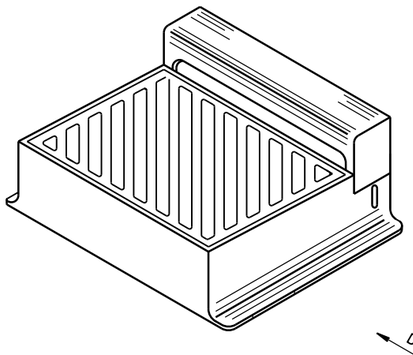
ALTERNATIVE TYPE "MS"

USE WHERE PEDESTRIAN OR BICYCLE TRAFFIC IS PERMITTED
NOTED AS TYPE MS-A ON THE DRAINAGE TABLE



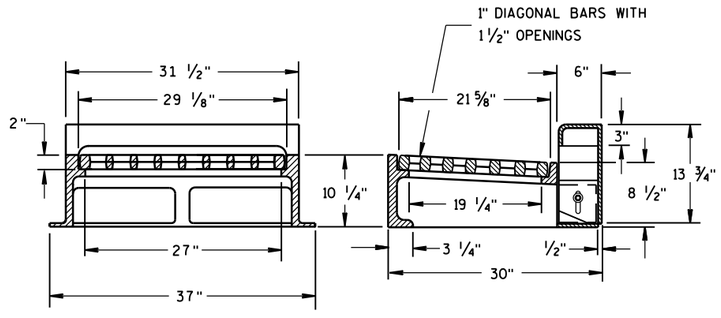
TYPE "MS"

USE ON FREEWAYS AND EXPRESSWAYS
NOTED AS TYPE MS ON DRAINAGE TABLE



DIRECTION OF FLOW

DIAGONAL SLOTS, SHALL BE ORIENTED TO THE DIRECTION OF FLOW AS ILLUSTRATED. GRATES ARE MANUFACTURED TO BE REVERSIBLE.



NOTE: CURB BOX HEIGHT ADJUSTABLE 6" TO 9"

TYPE "WM"

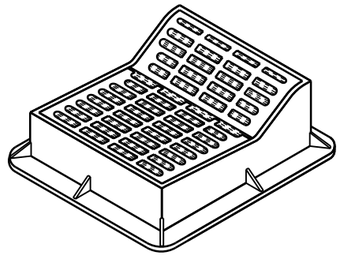
INLET COVERS
TYPE B, B-A, C,
MS, MS-A, & WM

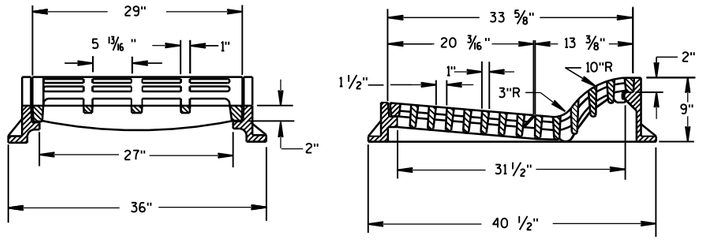
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11/27/2013
DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

6

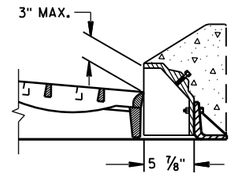
S.D.D. 8 A 5-19b





TYPE "F"

USE WITH TYPES A & D CONCRETE CURB & GUTTER, 36 INCH.



ALTERNATIVE CURB BOX FOR TYPE "HM" COVER

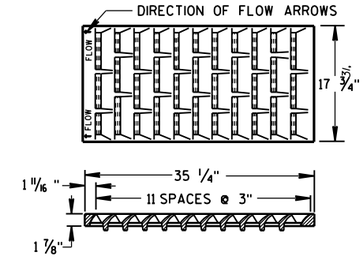
USE WITH TYPES G & J CONCRETE CURB & GUTTER, 30 INCH
NOTED AS TYPE HM-GJ ON DRAINAGE TABLE

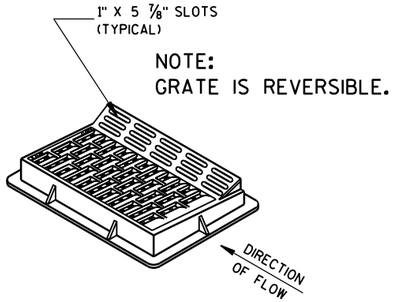
NOTE:
SPECIAL GRATE FOR THE
TYPE "H" COVER MAY ALSO BE
USED FOR THE TYPE "HM-GJ" COVER
NOTED AS TYPE HM-GJ-S ON DRAINAGE TABLE

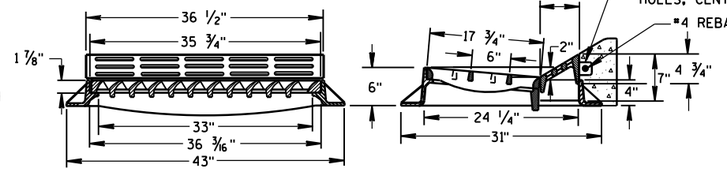
GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

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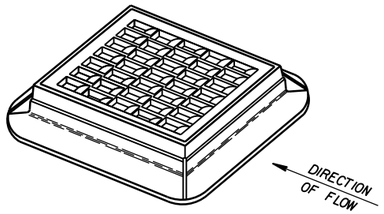


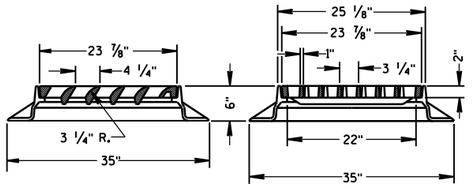


TYPE "HM"

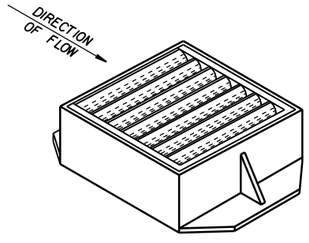
USE WITH TYPES A & D CONCRETE CURB & GUTTER, 36 INCH.

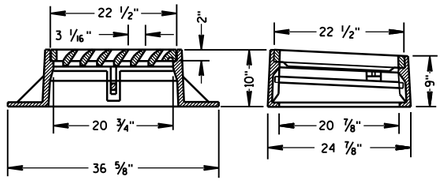
NOTE:
SPECIAL GRATE FOR THE
TYPE "H" COVER MAY ALSO BE
USED FOR THE TYPE "HM" COVER
NOTED AS TYPE HM-S ON DRAINAGE TABLE



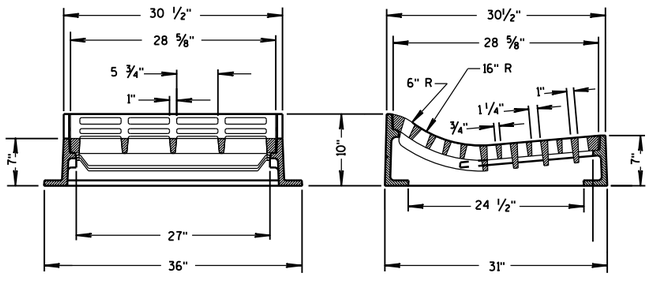


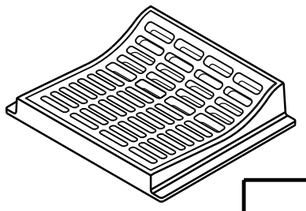
TYPE "S"





TYPE "V"





TYPE "T"

USE WITH TYPES R & T CONCRETE CURB & GUTTER, 36 INCH.

INLET COVERS
TYPE F, HM, HM-S, S, T, V, HM-GJ, & HM-GJ-S

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11/27/2013
DATE

/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER

614

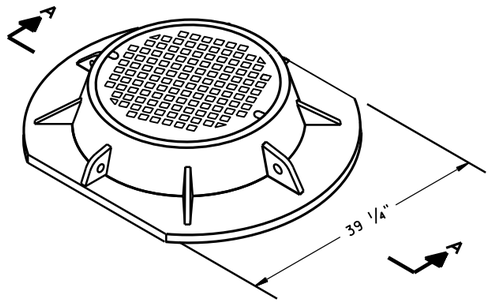
FHWA

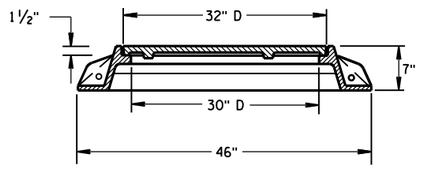
6

S.D.D. 8 A 5-19c

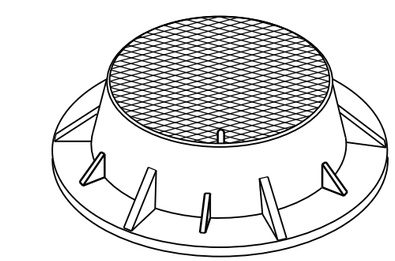
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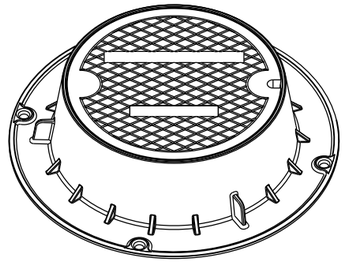
S.D.D. 8 A 5-19c

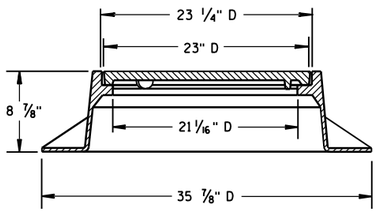


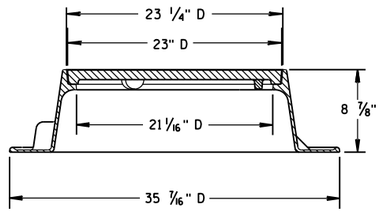


SECTION A-A
TYPE "K"









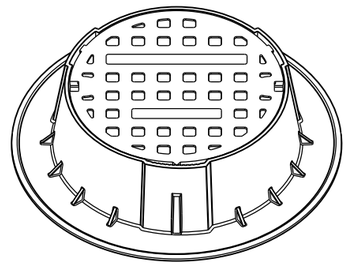
TYPE "J"
NOTE: EITHER CASTING IS ACCEPTABLE

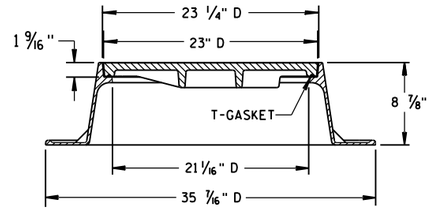
GENERAL NOTES

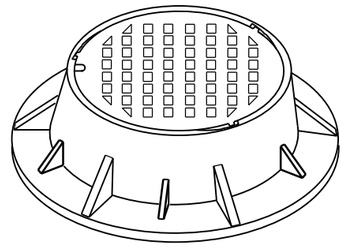
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

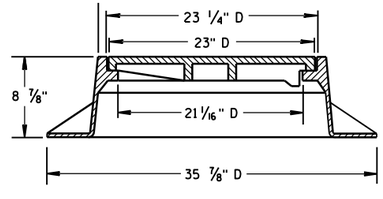
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR MANHOLE COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.

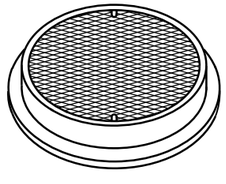


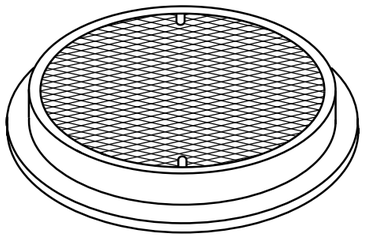


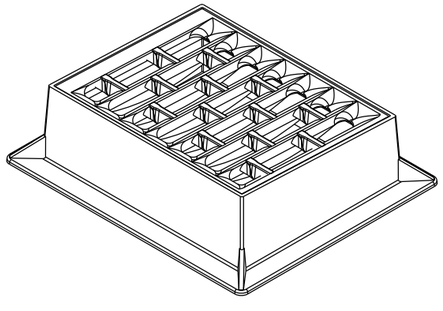


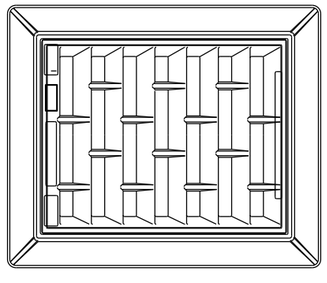


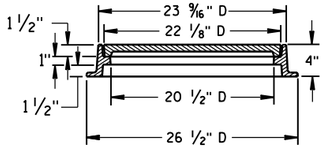
TYPE "J" SPECIAL
TYPE "B" NON-ROCKING SELF-SEAL LID
(NOTED AS TYPE J-S ON THE DRAINAGE TABLE)
NOTE: EITHER CASTING IS ACCEPTABLE



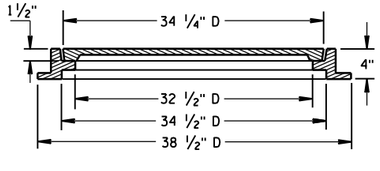




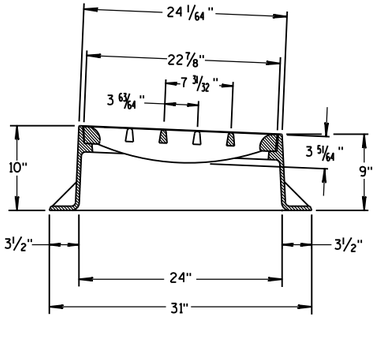


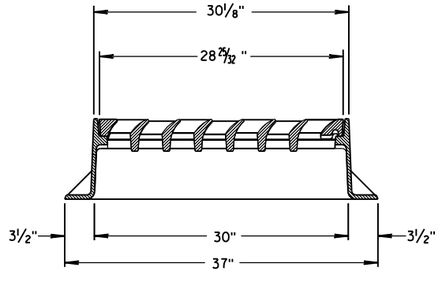


TYPE "L"



TYPE "M"





INLET COVER TYPE "BW"

INLET COVER TYPE BW
MANHOLE COVERS, TYPE K, J, J-S, L & M

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11/27/2013
DATE
FHWA

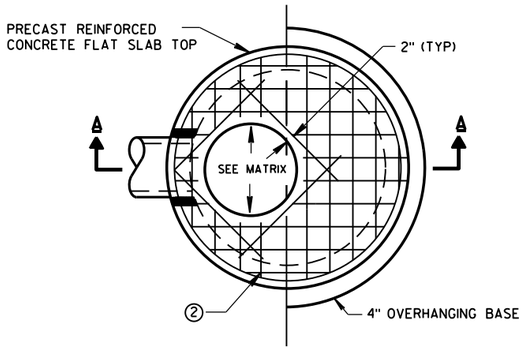
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER

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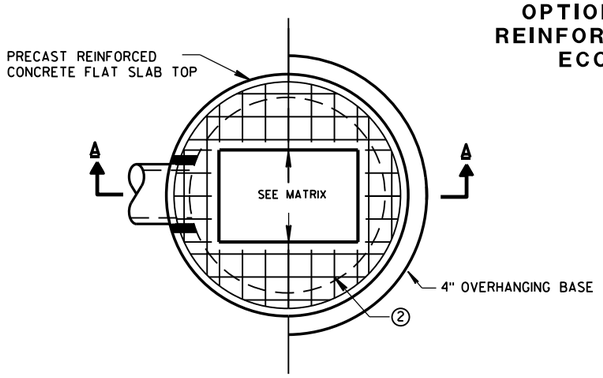
S.D.D. 8 A 5-19d

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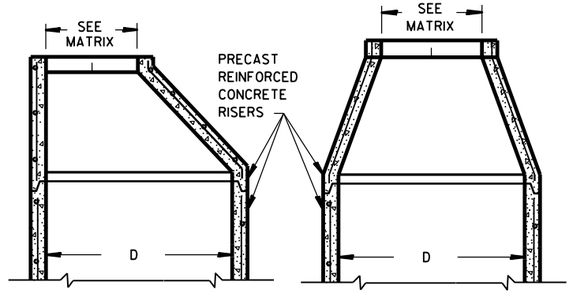
S.D.D. 8 A 5-19d



PLAN VIEW CIRCULAR OPENING

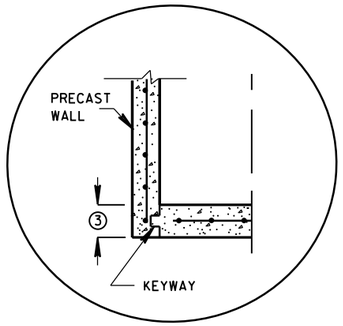


PLAN VIEW RECTANGULAR OPENING

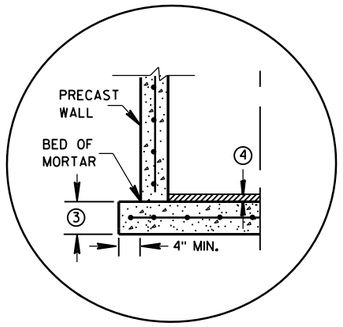


OPTIONAL PRECAST REINFORCED CONCRETE ECCENTRIC TOP

OPTIONAL PRECAST REINFORCED CONCRETE CONCENTRIC TOP

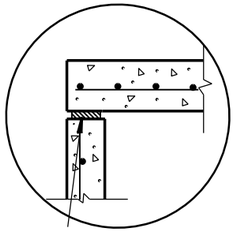


PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION



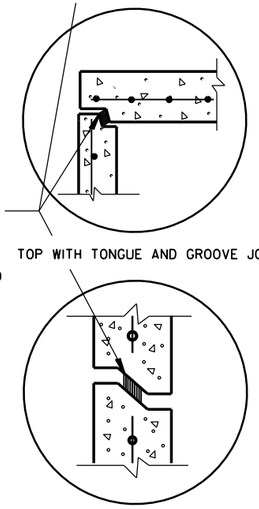
SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

DETAIL "A"



TOP WITH PLAIN END JOINT

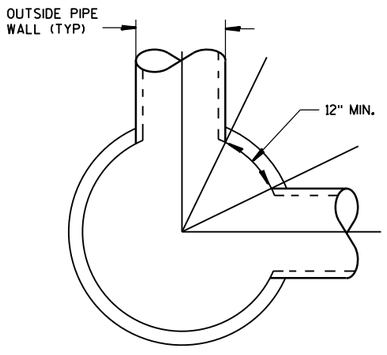
JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C 990 (TYP)



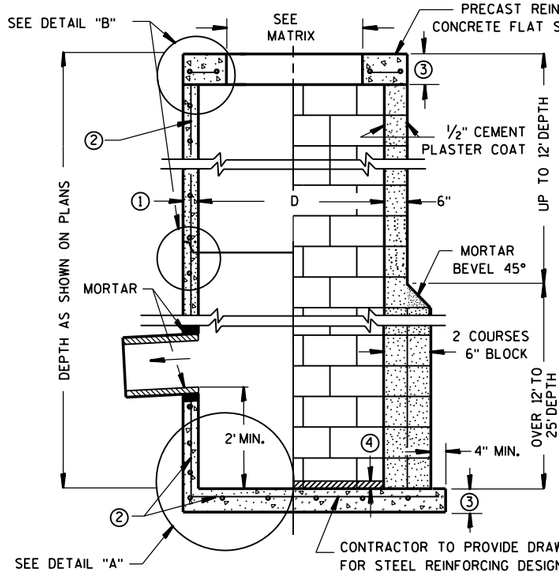
TOP WITH TONGUE AND GROOVE JOINT

RISER WITH TONGUE AND GROOVE JOINT

DETAIL "B"



DETAIL "C"



CONTRACTOR TO PROVIDE DRAWING(S) STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCING DESIGN FOR CAST-IN-PLACE STRUCTURES

SECTION A-A

PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

CONCRETE BLOCK WITH CAST-IN-PLACE OR PRECAST REINFORCED CONCRETE BASE ②

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

UNLESS OTHERWISE AUTHORIZED IN WRITING BY THE ENGINEER, THE CONTRACTOR SHALL NOT ORDER AND DELIVER PRECAST CATCH BASIN UNITS REQUIRED FOR THE PROJECT UNTIL A LIST OF SIZES IS FURNISHED BY THE ENGINEER.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR UNDERGROUND DRAINAGE STRUCTURES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ALL DRAINAGE STRUCTURES ARE DESIGNATED ON THE PLANS AS "MANHOLES 3X3-L", "CATCH BASINS 4-B", "INLETS 2X3-H", ETC. THE FIRST NUMBERS DESIGNATE THE SIZE OF THE STRUCTURE, AND THE FOLLOWING LETTER DESIGNATES THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6 INCHES IN DEPTH, WHICH MEETS THE REQUIREMENTS OF GRANULAR BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.

PRECAST REINFORCED CONCRETE CONE TOPS (ECCENTRIC OR CONCENTRIC) OR PRECAST REINFORCED CONCRETE FLAT SLAB TOPS MAY BE USED ON CONCRETE BLOCK STRUCTURES. THE TOPS SHALL BE INSTALLED ON A BED OF MORTAR.

ECCENTRIC CONE TOPS MAY BE USED ON ALL STRUCTURES, AND CONCENTRIC CONE TOPS SHALL BE USED ONLY ON STRUCTURES 5 FEET OR LESS IN DEPTH, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

STEPS MEETING AASHTO M199 AND THE FOLLOWING REQUIREMENTS SHALL BE INSTALLED IN ALL STRUCTURES OVER 5 FEET IN DEPTH: 16 INCH C-C MAXIMUM SPACING; PROJECT A MINIMUM CLEAR DISTANCE OF 4 INCHES FROM THE WALL AT THE POINT OF EMBEDMENT; MINIMUM LENGTH OF 10 INCHES; MINIMUM WALL EMBEDMENT OF 3 INCHES. FERROUS METAL STEPS NOT PAINTED OR TREATED TO RESIST CORROSION SHALL HAVE A MINIMUM CROSS SECTIONAL DIMENSION OF 1 INCH.

STEPS OF APPROVED POLYPROPYLENE PLASTIC COATED REINFORCEMENT BAR ARE ACCEPTABLE. REINFORCING BAR MUST BE A MINIMUM OF 1/2 INCH AND MEET THE REQUIREMENTS OF ASTM A615.

CERTIFICATION SHALL BE PROVIDED THAT INSTALLED STEPS WHEN TESTED IN ACCORDANCE WITH SECTION 10 OF AASHTO T280 CAN WITHSTAND A VERTICAL LOAD OF 800 LBS. AND A HORIZONTAL LOAD OF 400 LBS.

ALL BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

ALL PRECAST INLET UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M199.

PRECAST REINFORCED RISERS SHALL HAVE A TONGUE AND GROOVE JOINT WITH TONGUE UP OR DOWN.

CONCRETE BLOCK WILL NOT BE PERMITED FOR STRUCTURES GREATER THAN 4 FEET IN DIAMETER.

4" OVERHANGING BASES ARE REQUIRED FOR ALL CONCRETE BLOCK INSTALLATIONS. 4" OVERHANG IS REQUIRED WHEN SEPARATE PRECAST BASE IS PROVIDED. OVERHANG IS NOT REQUIRED ON PRECAST STRUCTURES WITH AN INTEGRAL OR MONOLITHIC BASE.

FOR ADDITIONAL CONFIGURATIONS, MAINTAIN A MINIMUM OF 12 INCHES AS MEASURED FROM THE INSIDE OF THE STRUCTURE WALL BETWEEN THE OUTSIDE PIPE WALLS OF ADJACENT PIPES. SEE DETAIL "C".

① MINIMUM WALL THICKNESS SHALL BE 4 INCHES FOR 3-FT, 5 INCHES FOR 4-FT, 6 INCHES FOR 5-FT AND 7 INCHES FOR 6-FT DIAMETER PRECAST CATCH BASINS.

② FOR PRECAST CATCH BASINS PROVIDE REINFORCING STEEL IN ACCORDANCE TO AASHTO M199.

③ PRECAST FLAT SLAB TOPS AND BASES WITH A DIAMETER OF 48" AND LESS SHALL HAVE A MINIMUM THICKNESS OF 6". PRECAST FLAT SLAB TOPS AND BASES WITH A DIAMETER LARGER THAN 48" SHALL HAVE A MINIMUM THICKNESS OF 8".

④ 1" CONCRETE KEY POURED AFTER INSTALLATION. 2' SUMP MEASURED FROM TOP OF KEY.

CATCH BASIN COVER OPENING MATRIX

CATCH BASIN SIZE	INLET COVER TYPE	ALL A'S	ALL B'S	BW	C	F	ALL H'S	S	T	V	WM	Z
	OPENING SIZE (FT)											
3-FT	2X2	X	X					X		X		
	2 DIA.				X							X
4-FT-6-FT	2X2	X	X					X		X		
	2X2.5			X				X	X	X	X	
	2 DIA.				X							X
	2X3						X					
	2.5X3					X						

PIPE MATRIX

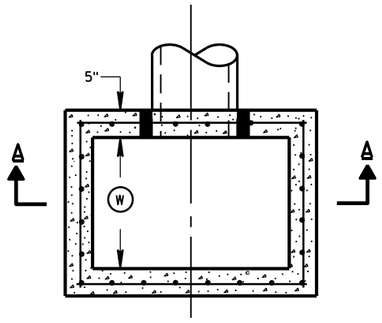
CATCH BASIN SIZE	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES	
	180° SEPARATION (IN)	90° SEPARATION (IN)
3-FT	15	12
4-FT	24	18
5-FT	36	24
6-FT	42	30

CATCH BASINS 3-FT, 4-FT, 5-FT AND 6-FT DIAMETER

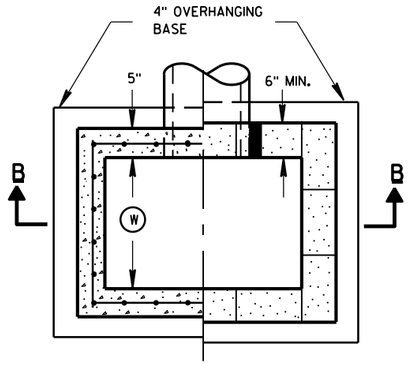
CATCH BASINS 3-FT, 4-FT, 5-FT AND 6-FT DIAMETER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

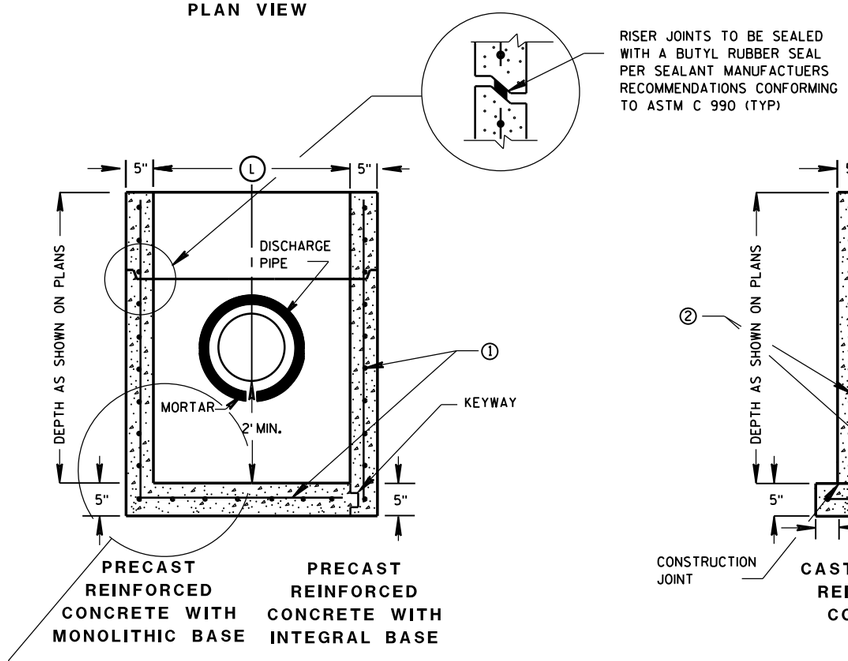
APPROVED
6/5/2012 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER
FHWA



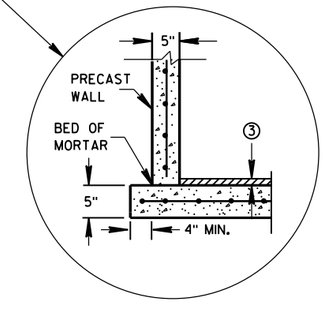
PLAN VIEW



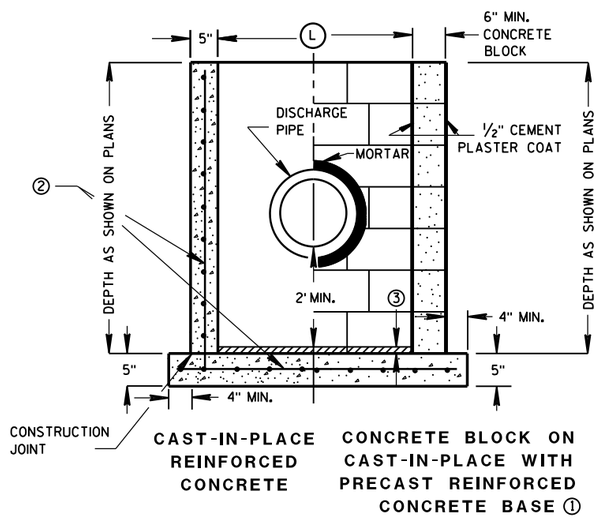
PLAN VIEW



SECTION A-A



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION



SECTION B-B

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

UNLESS OTHERWISE AUTHORIZED IN WRITING BY THE ENGINEER, THE CONTRACTOR SHALL NOT ORDER AND DELIVER PRECAST CATCH BASIN UNITS REQUIRED FOR THE PROJECT UNTIL A LIST OF SIZES IS FURNISHED BY THE ENGINEER.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR UNDERGROUND DRAINAGE STRUCTURES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ALL PRECAST CATCH BASIN UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF ASTM C 913.

ALL DRAINAGE STRUCTURES ARE DESIGNATED ON THE PLANS AS "MANHOLES 3X3-L", "CATCH BASINS 4-B", "INLETS 2X3-H", ETC. THE FIRST NUMBERS DESIGNATES THE SIZE OF THE STRUCTURE, AND THE FOLLOWING LETTER DESIGNATES THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6 INCHES IN DEPTH, WHICH MEETS THE REQUIREMENTS OF GRANULAR BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.

ALL BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

PRECAST REINFORCED RISERS SHALL HAVE A TONGUE AND GROOVE JOINT WITH TONGUE UP OR DOWN.

4" OVERHANGING BASES ARE REQUIRED FOR CAST-IN-PLACE REINFORCED CONCRETE AND CONCRETE BLOCK INSTALLATIONS.
4" OVERHANG IS REQUIRED WHEN SEPARATE PRECAST BASE IS PROVIDED.
OVERHANG IS NOT REQUIRED ON PRECAST STRUCTURES WITH AN INTEGRAL OR MONOLITHIC BASE.

MAXIMUM INSIDE PIPE DIAMETER DETERMINED BY 3" CLEARANCE ON EACH SIDE OF THE OUTSIDE WALL OF THE PIPE. SEE DETAIL "A". ASSUMES PIPE ENTERS PERPENDICULAR TO THE STRUCTURE.

① FOR PRECAST CATCH BASINS PROVIDE REINFORCING STEEL IN ACCORDANCE TO ASTM C 913.

② CONTRACTOR TO PROVIDE DRAWING(S) STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCING DESIGN FOR CAST-IN-PLACE STRUCTURES.

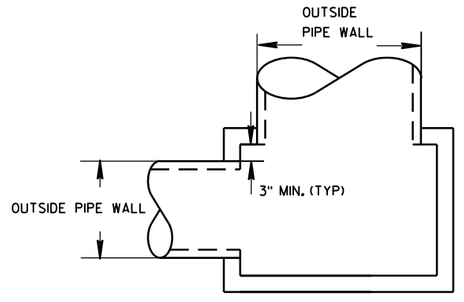
③ 1" CONCRETE KEY POURED AFTER INSTALLATION. 2' SUMP MEASURED FROM TOP OF KEY.

CATCH BASIN COVER MATRIX

CATCH BASIN SIZE		INLET COVER TYPE	F	ALL H'S
	WIDTH (W) (FT)	LENGTH (L) (FT)		
2X3-FT	2	3		X
2.5X3-FT	2.5	3	X	

PIPE MATRIX

CATCH BASIN SIZE	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES	
	WIDTH (IN)	LENGTH (IN)
2X3-FT	12	24
2.5X3-FT	18	24



DETAIL "A"

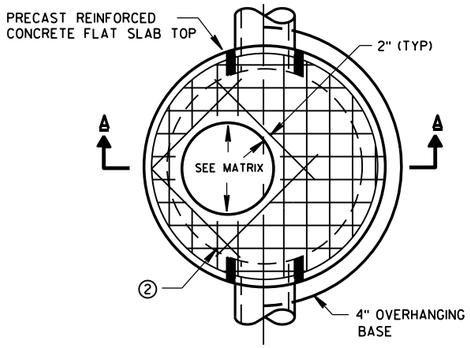
CATCH BASINS 2X3-FT AND 2.5X3-FT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

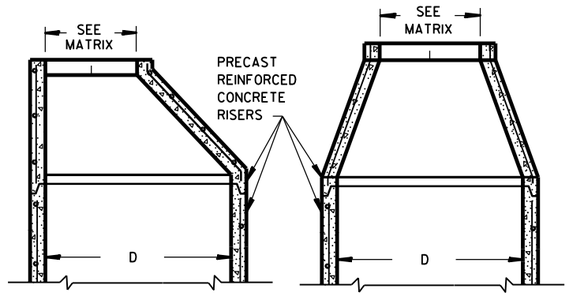
APPROVED
6/5/2012 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER
FHWA

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S.D.D. 8 A 9-1

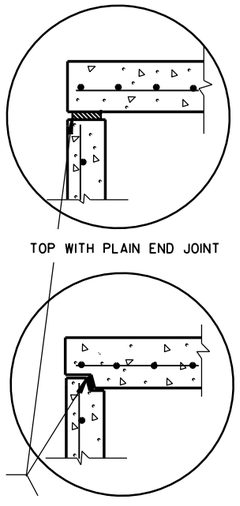


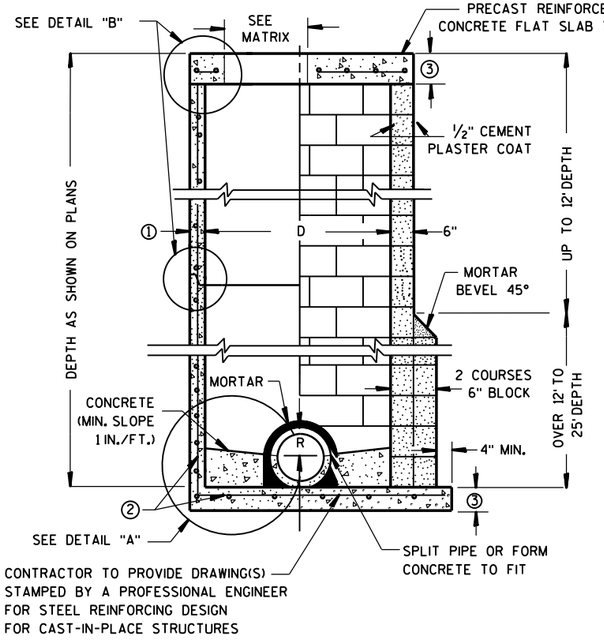
PLAN VIEW CIRCULAR OPENING



OPTIONAL PRECAST REINFORCED CONCRETE ECCENTRIC TOP

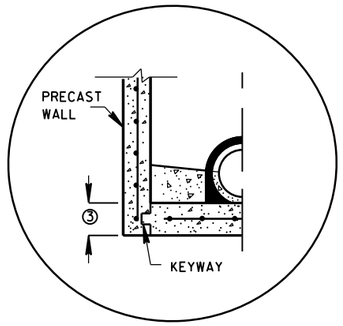
OPTIONAL PRECAST REINFORCED CONCRETE CONCENTRIC TOP



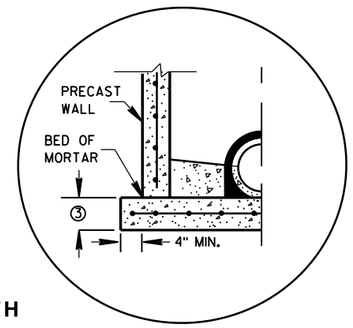


PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

CONCRETE BLOCK WITH CAST-IN-PLACE OR PRECAST REINFORCED CONCRETE BASE ②

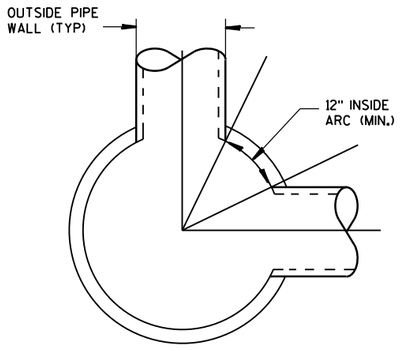


PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION

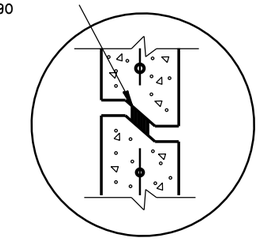


SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

DETAIL "A"



DETAIL "C"



DETAIL "B"

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

UNLESS OTHERWISE AUTHORIZED IN WRITING BY THE ENGINEER, THE CONTRACTOR SHALL NOT ORDER AND DELIVER PRECAST MANHOLE UNITS REQUIRED FOR THE PROJECT UNTIL A LIST OF SIZES IS FURNISHED BY THE ENGINEER.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR UNDERGROUND DRAINAGE STRUCTURES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ALL DRAINAGE STRUCTURES ARE DESIGNATED ON THE PLANS AS "MANHOLES 3X3-L", "CATCH BASINS 4-B", "INLETS 2X3-H", ETC. THE FIRST NUMBERS DESIGNATE THE SIZE OF THE STRUCTURE, AND THE FOLLOWING LETTER DESIGNATES THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6 INCHES IN DEPTH, WHICH MEETS THE REQUIREMENTS OF GRANULAR BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.

PRECAST REINFORCED CONE TOPS (ECCENTRIC OR CONCENTRIC) OR PRECAST REINFORCED FLAT SLAB TOPS MAY BE USED ON CONCRETE BLOCK STRUCTURES. THE CONE TOPS SHALL BE INSTALLED ON A BED OF MORTAR.

ECCENTRIC CONE TOPS MAY BE USED ON ALL STRUCTURES, AND CONCENTRIC CONE TOPS SHALL BE USED ONLY ON STRUCTURES 5 FEET OR LESS IN DEPTH, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

STEPS MEETING AASHTO M199 AND THE FOLLOWING REQUIREMENTS SHALL BE INSTALLED IN ALL STRUCTURES OVER 5 FEET IN DEPTH: 16 INCH C-C MAXIMUM SPACING; PROJECT A MINIMUM CLEAR DISTANCE OF 4 INCHES FROM THE WALL AT THE POINT OF EMBEDMENT; MINIMUM LENGTH OF 10 INCHES; MINIMUM WALL EMBEDMENT OF 3 INCHES. FERROUS METAL STEPS NOT PAINTED OR TREATED TO RESIST CORROSION SHALL HAVE A MINIMUM CROSS SECTIONAL DIMENSION OF 1 INCH.

STEPS OF APPROVED POLYPROPYLENE PLASTIC COATED REINFORCEMENT BAR ARE ACCEPTABLE. REINFORCING BAR MUST BE A MINIMUM OF ½" AND MEET THE REQUIREMENTS OF ASTM A615.

CERTIFICATION SHALL BE PROVIDED THAT INSTALLED STEPS WHEN TESTED IN ACCORDANCE WITH SECTION 10 OF AASHTO T280 CAN WITHSTAND A VERTICAL LOAD OF 800 LBS. AND A HORIZONTAL LOAD OF 400 LBS.

ALL BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

CONCRETE BLOCK WILL NOT BE PERMITED FOR STRUCTURES GREATER THAN 4 FEET IN DIAMETER.

PRECAST REINFORCED RISERS SHALL HAVE A TONGUE AND GROOVE JOINT WITH TONGUE UP OR DOWN.

ALL PRECAST MANHOLE UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M 199.

4" OVERHANGING BASES ARE REQUIRED FOR ALL CONCRETE BLOCK INSTALLATIONS. 4" OVERHANG IS REQUIRED WHEN SEPARATE PRECAST BASE IS PROVIDED. OVERHANG IS NOT REQUIRED ON PRECAST STRUCTURES WITH AN INTEGRAL OR MONOLITHIC BASE.

FOR ADDITIONAL CONFIGURATIONS, MAINTAIN A MINIMUM OF 12 INCHES AS MEASURED FROM THE INSIDE OF THE STRUCTURE WALL BETWEEN THE OUTSIDE PIPE WALLS OF ADJACENT PIPES. SEE DETAIL "C".

① MINIMUM WALL THICKNESS SHALL BE 4 INCHES FOR 3-FT, 5 INCHES FOR 4-FT, 6 INCHES FOR 5-FT, 7 INCHES FOR 6-FT, 8 INCHES FOR 7-FT AND 9 INCHES FOR 8-FT DIAMETER PRECAST MANHOLES.

② FOR PRECAST MANHOLES PROVIDE REINFORCING STEEL IN ACCORDANCE TO AASHTO M199.

③ PRECAST FLAT SLAB TOPS AND BASES WITH A DIAMETER OF 48" AND LESS SHALL HAVE A MINIMUM THICKNESS OF 6". PRECAST FLAT SLAB TOPS AND BASES WITH A DIAMETER LARGER THAN 48" SHALL HAVE A MINIMUM THICKNESS OF 8".

MANHOLE COVER OPENING MATRIX

MANHOLE COVER TYPE	C	ALL J'S	K	L	M
OPENING SIZE (FT)					
2 DIA.	X	X		X	
3 DIA.			X		X

PIPE MATRIX

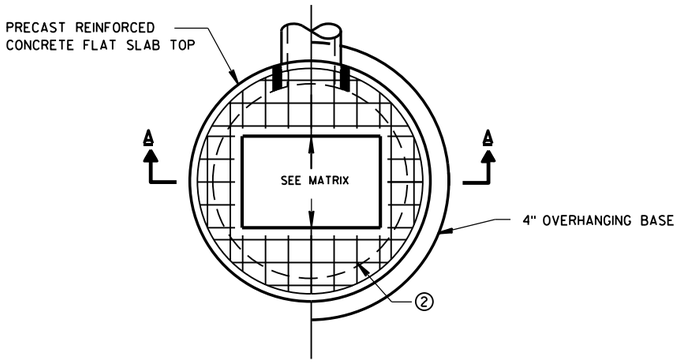
MANHOLE SIZE	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES	
	180° SEPARATION (IN)	90° SEPARATION (IN)
3-FT	15	12
4-FT	24	18
5-FT	36	24
6-FT	42	36
7-FT	48	36
8-FT	60	42

MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT AND 8-FT DIAMETER

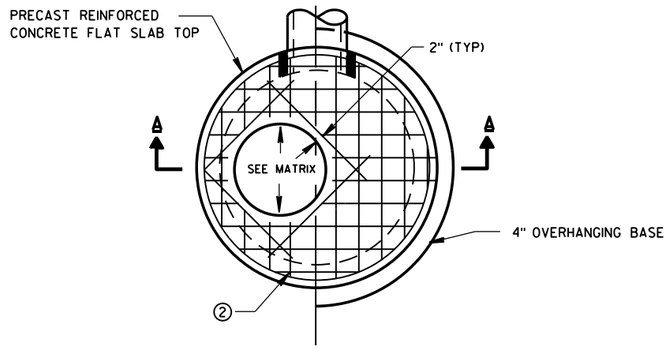
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
6/5/2012 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

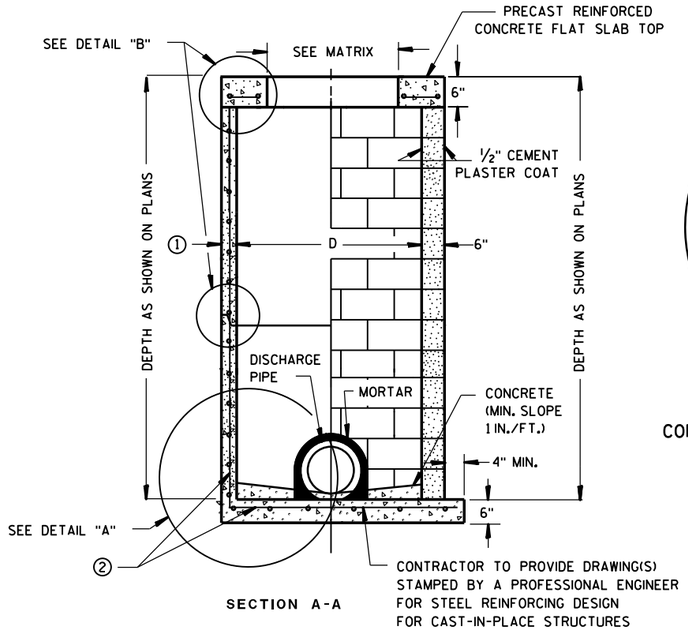
6
S.D.D. 8 B 9-1



PLAN VIEW RECTANGULAR OPENING



PLAN VIEW CIRCULAR OPENING

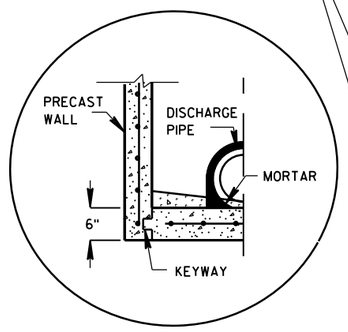


SECTION A-A

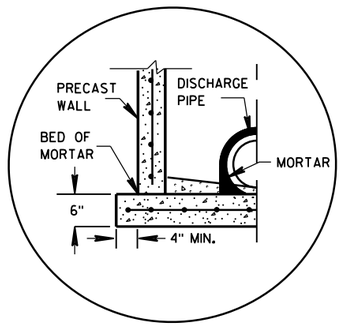
PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

CONCRETE BLOCK WITH CAST-IN-PLACE OR PRECAST REINFORCED CONCRETE BASE ②

CIRCULAR INLETS W/ FLAT TOP

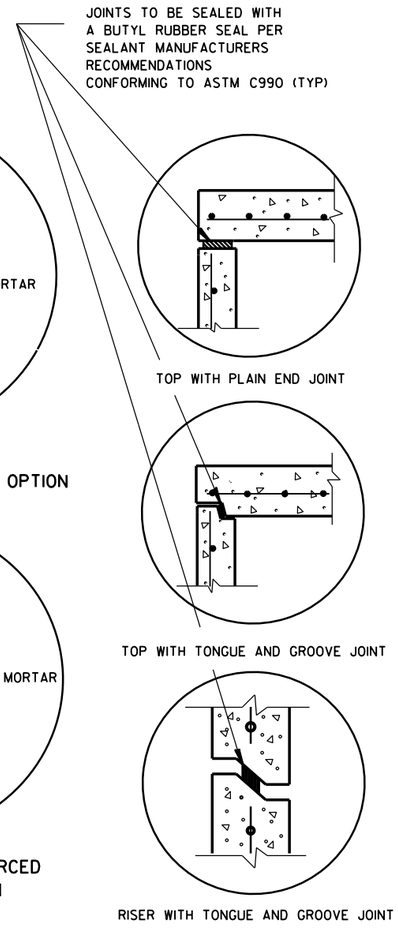


PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

DETAIL "A"



DETAIL "B"

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

UNLESS OTHERWISE AUTHORIZED IN WRITING BY THE ENGINEER, THE CONTRACTOR SHALL NOT ORDER AND DELIVER PRECAST INLET UNITS REQUIRED FOR THE PROJECT UNTIL A LIST OF SIZES IS FURNISHED BY THE ENGINEER.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR UNDERGROUND DRAINAGE STRUCTURES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ALL DRAINAGE STRUCTURES ARE DESIGNATED ON THE PLANS AS "MANHOLES 3X3-L", "CATCH BASINS 4-B", "INLETS 2X3-H", ETC. THE FIRST NUMBERS DESIGNATE THE SIZE OF THE STRUCTURE, AND THE FOLLOWING LETTER DESIGNATES THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6 INCHES IN DEPTH, WHICH MEETS THE REQUIREMENTS OF GRANULAR BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.

ALL BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

ALL PRECAST INLET UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M199.

PRECAST REINFORCED RISERS SHALL HAVE A TONGUE AND GROOVE JOINT WITH TONGUE UP OR DOWN.

4" OVERHANGING BASES ARE REQUIRED FOR ALL CONCRETE BLOCK INSTALLATIONS. 4" OVERHANG IS REQUIRED WHEN SEPARATE PRECAST BASE IS PROVIDED. OVERHANG IS NOT REQUIRED ON PRECAST STRUCTURES WITH AN INTEGRAL OR MONOLITHIC BASE.

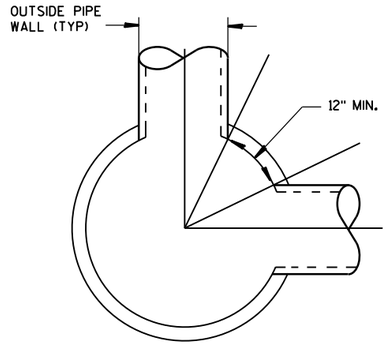
FOR ADDITIONAL CONFIGURATIONS, MAINTAIN A MINIMUM OF 12 INCHES AS MEASURED FROM THE INSIDE OF THE STRUCTURE WALL BETWEEN THE OUTSIDE PIPE WALLS OF ADJACENT PIPES. SEE DETAIL "C".

① MINIMUM WALL THICKNESS SHALL BE 4-IN FOR 3-FT DIAMETER AND 5-IN FOR 4-FT DIAMETER PRECAST INLETS.

② FOR PRECAST CATCH BASINS PROVIDE REINFORCING STEEL IN ACCORDANCE TO AASHTO M199.

INLET COVER OPENING MATRIX

INLET SIZE	INLET COVER TYPE / OPENING SIZE (FT)	ALL A'S	ALL B'S	BW	C	F	ALL H'S	S	T	V	WM	Z
3-FT	2 DIA.				X							X
	2X2	X	X					X		X		
4-FT	2 DIA.				X							X
	2X2	X	X					X		X		
	2X2.5			X				X	X	X	X	
	2X3						X					
	2.5X3					X						



DETAIL "C"

PIPE MATRIX

INLET SIZE	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES	
	180° SEPARATION (IN)	90° SEPARATION (IN)
3-FT	15	12
4-FT	24	18

INLETS 3-FT AND 4-FT DIAMETER

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DEPARTMENT OF TRANSPORTATION

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6/5/2012 — DATE
FHWA
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER

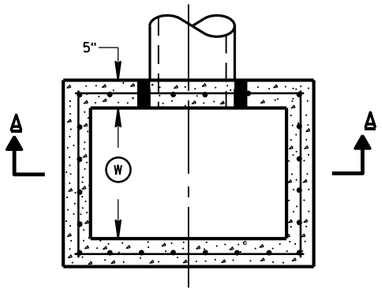
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S.D.D. 8 C 6-1

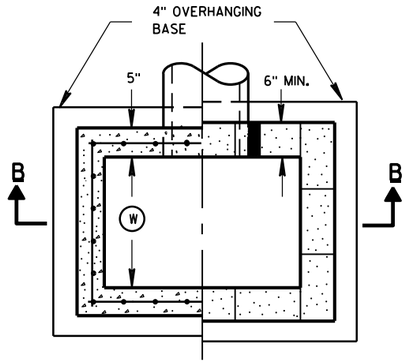
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S.D.D. 8 C 6-1

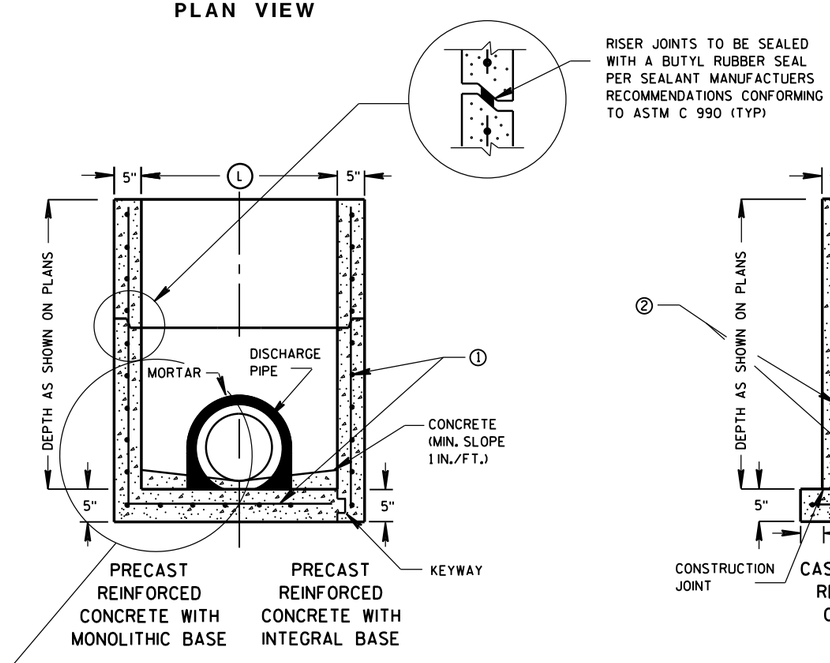
INLETS 3-FT AND 4-FT DIAMETER



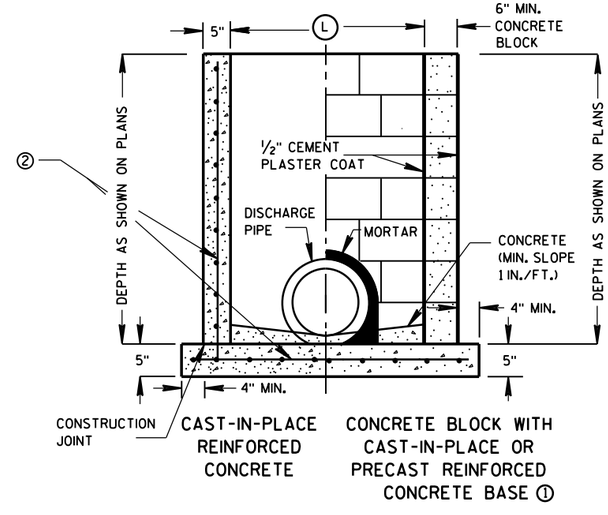
PLAN VIEW



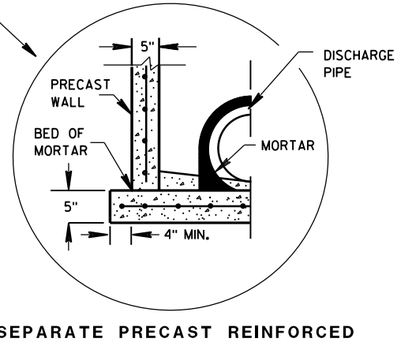
PLAN VIEW



SECTION A-A



SECTION B-B



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

UNLESS OTHERWISE AUTHORIZED IN WRITING BY THE ENGINEER, THE CONTRACTOR SHALL NOT ORDER AND DELIVER PRECAST INLET UNITS REQUIRED FOR THE PROJECT UNTIL A LIST OF SIZES IS FURNISHED BY THE ENGINEER.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR UNDERGROUND DRAINAGE STRUCTURES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ALL PRECAST INLET UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF ASTM C 913.

ALL DRAINAGE STRUCTURES ARE DESIGNATED ON THE PLANS AS "MANHOLES 3X3-L", "CATCH BASINS 4-B", "INLETS 2X3-H", ETC. THE FIRST NUMBERS DESIGNATES THE SIZE OF THE STRUCTURE, AND THE FOLLOWING LETTER DESIGNATES THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6 INCHES IN DEPTH, WHICH MEETS THE REQUIREMENTS OF GRANULAR BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.

ALL BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

PRECAST REINFORCED RISERS SHALL HAVE A TONGUE AND GROOVE JOINT WITH TONGUE UP OR DOWN.

4" OVERHANGING BASES ARE REQUIRED FOR CAST-IN-PLACE REINFORCED CONCRETE AND CONCRETE BLOCK INSTALLATIONS.
4" OVERHANG IS REQUIRED WHEN SEPARATE PRECAST BASE IS PROVIDED.
OVERHANG IS NOT REQUIRED ON PRECAST STRUCTURES WITH AN INTEGRAL OR MONOLITHIC BASE.

MAXIMUM INSIDE PIPE DIAMETER DETERMINED BY 3 INCH CLEARANCE ON EACH SIDE OF THE OUTSIDE WALL OF THE PIPE. SEE DETAIL "A". ASSUMES PIPE ENTERS PERPENDICULAR TO THE STRUCTURE.

① FOR PRECAST INLETS PROVIDE REINFORCING STEEL IN ACCORDANCE TO ASTM C 913.

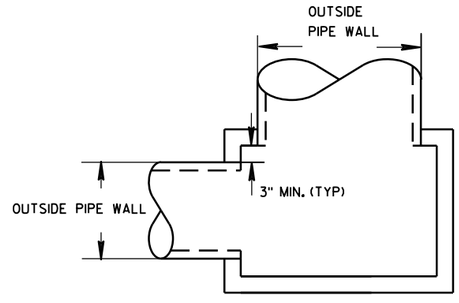
② CONTRACTOR TO PROVIDE DRAWING(S) STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCING DESIGN FOR CAST-IN-PLACE STRUCTURES.

INLET COVER MATRIX

INLET SIZE		INLET COVER TYPE	ALL A'S	ALL B'S	BW	F	ALL H'S	S	T	V	WM
	WIDTH (W) (FT)	LENGTH (L) (FT)									
2X2-FT	2	2	X	X				X		X	
2X2.5-FT	2	2.5			X			X	X	X	X
2X3-FT	2	3					X				
2.5X3-FT	2.5	3				X					

PIPE MATRIX

INLET SIZE	MAXIMUM INSIDE PIPE DIAMETER	
	WIDTH (IN)	LENGTH (IN)
2X2-FT	12	12
2X2.5-FT	12	18
2X3-FT	12	24
2.5X3-FT	18	24



DETAIL "A"

INLETS 2X2-FT, 2X2.5-FT, 2X3-FT AND 2.5X3-FT

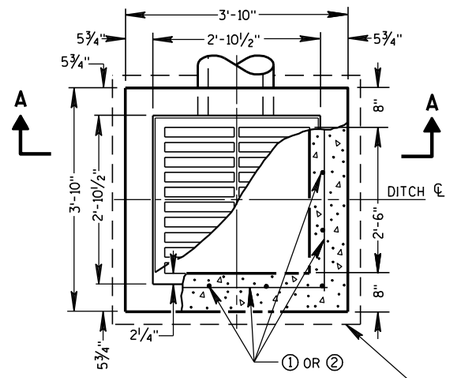
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
6/5/2012
DATE
FHWA

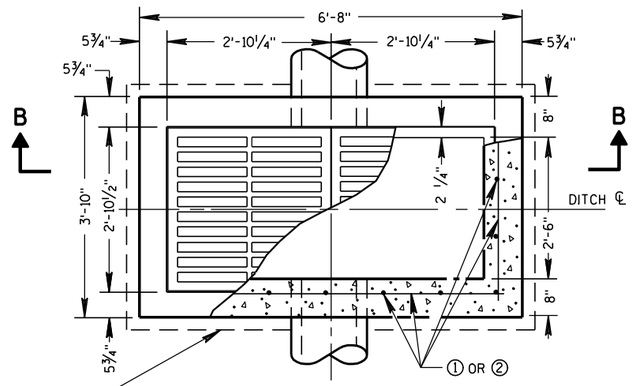
/S/ Jerry H. Zogg
ROADWAY STANDARDS DE
ENGINEER

6
S.D.D. 8 C 7-1

INLETS 2X2-FT, 2X2.5-FT, 2X3-FT AND 2.5X3-FT

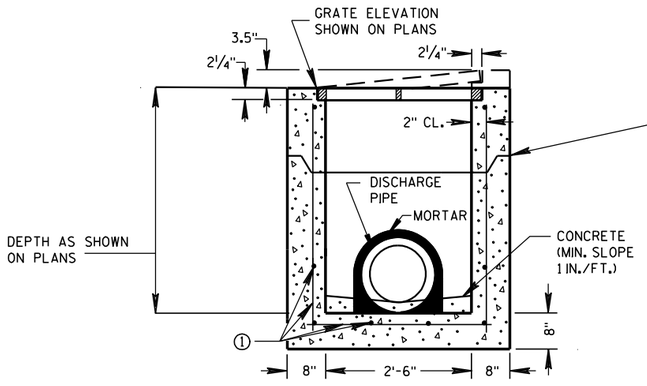


PLAN VIEW

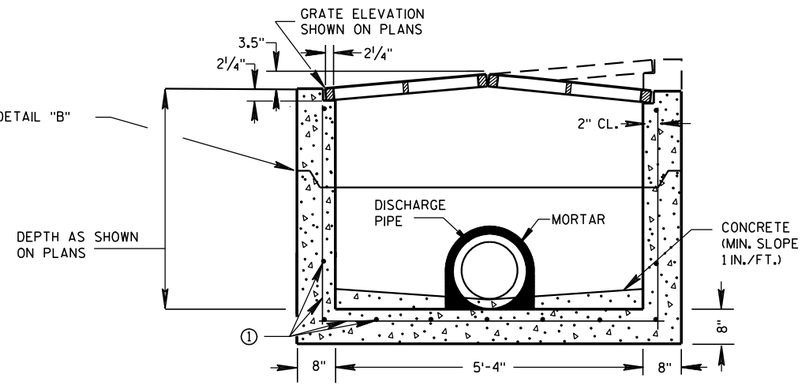


PLAN VIEW

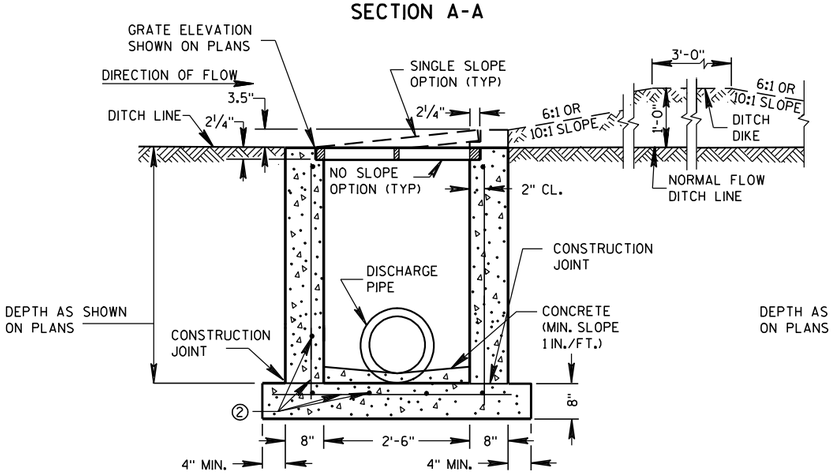
4" OVERHANGING BASE ON REINFORCED CAST-IN-PLACE CONCRETE INLETS



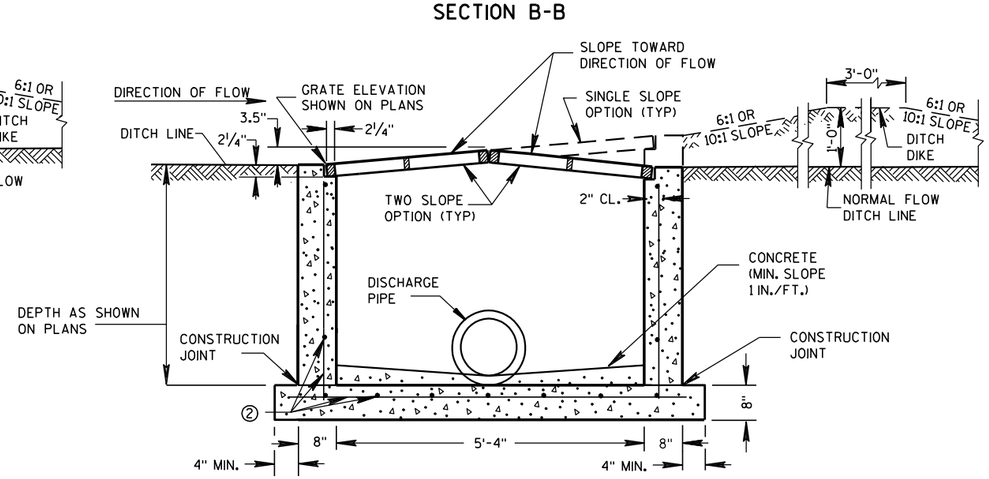
PRECAST REINFORCED CONCRETE SECTION A-A



PRECAST REINFORCED CONCRETE SECTION B-B



REINFORCED CAST-IN-PLACE CONCRETE SECTION A-A



REINFORCED CAST-IN-PLACE CONCRETE SECTION B-B

INLETS MEDIAN 1 GRATE

INLETS MEDIAN 2 GRATE

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

UNLESS OTHERWISE AUTHORIZED IN WRITING BY THE ENGINEER, THE CONTRACTOR SHALL NOT ORDER AND DELIVER PRECAST INLET UNITS REQUIRED FOR THE PROJECT UNTIL A LIST OF SIZES IS FURNISHED BY THE ENGINEER.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR INLETS WHICH MAY INCLUDE PRECAST REINFORCED CONCRETE INLETS, SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ALL MEDIAN INLETS ARE DESIGNATED ON THE PLANS AS "INLETS, 1G-MS", ETC. THE FIRST NUMBER AND LETTER DESIGNATE THE TYPE OF STRUCTURE, AND THE FOLLOWING LETTERS DESIGNATE THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

ALL BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

PRECAST REINFORCED RISERS SHALL HAVE A TONGUE AND GROOVE JOINT WITH TONGUE UP OR DOWN.

ALL PRECAST INLET UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF ASTM C 913.

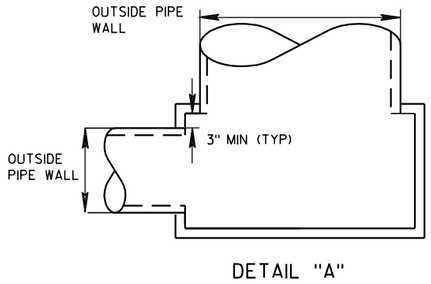
MAXIMUM INSIDE PIPE DIAMETER DETERMINED BY 3" CLEARANCE ON EACH SIDE OF THE OUTSIDE WALL OF THE PIPE. SEE DETAIL "A". ASSUMES PIPE ENTERS PERPENDICULAR TO THE STRUCTURE.

① FOR PRECAST INLETS PROVIDE REINFORCING STEEL IN ACCORDANCE TO ASTM C 913.

② CONTRACTOR TO PROVIDE DRAWING(S) STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCING DESIGN FOR CAST-IN-PLACE STRUCTURES.

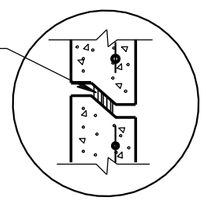
PIPE MATRIX

	MAXIMUM INSIDE PIPE DIAMETER	
INLET SIZE	WIDTH (IN)	LENGTH (IN)
1 GRATE	18	18
2 GRATE	18	42



DETAIL "A"

JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C 990 (TYP)



DETAIL "B"

INLETS MEDIAN 1 AND 2 GRATE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

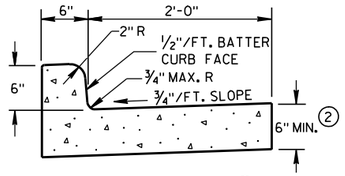
APPROVED
6/5/2012 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

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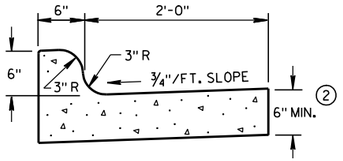
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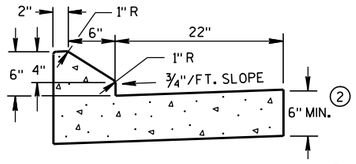
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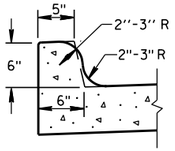
TYPES A & D (1)



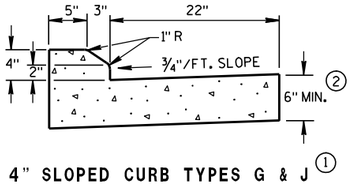
TYPES K & L (1)



6" SLOPED CURB TYPES G & J (1)

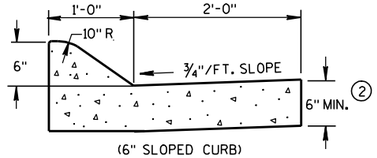


OPTIONAL CURB SHAPE FOR TYPES K & L (1)

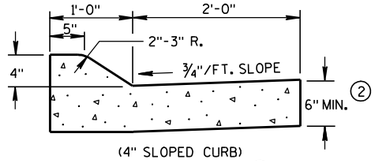


4" SLOPED CURB TYPES G & J (1)

CONCRETE CURB & GUTTER 30"

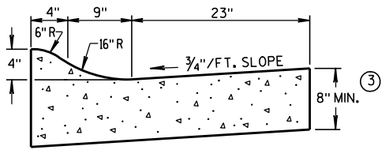


(6" SLOPED CURB)



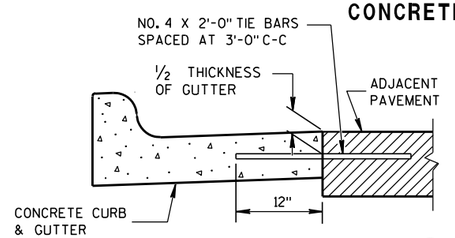
(4" SLOPED CURB)

TYPES A & D (1)

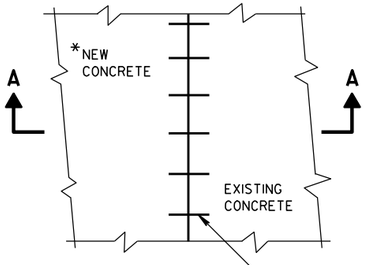


4" SLOPED CURB TYPES R & T (1) (4)

CONCRETE CURB & GUTTER 36"

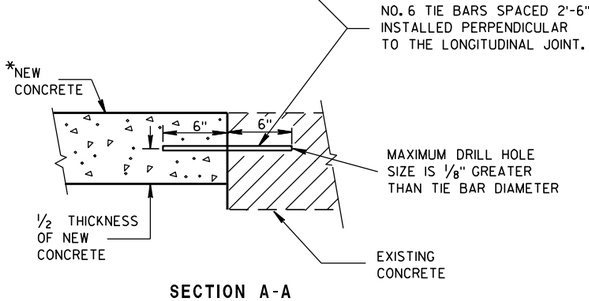


TYPICAL TIE BAR LOCATION (1)



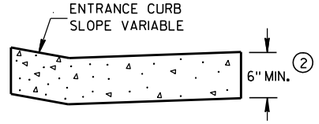
*NEW CURB & GUTTER, SURFACE DRAINS, CONCRETE PAVEMENT OR OTHER NEW CONCRETE.

PLAN VIEW

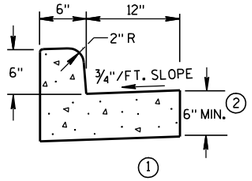


SECTION A-A

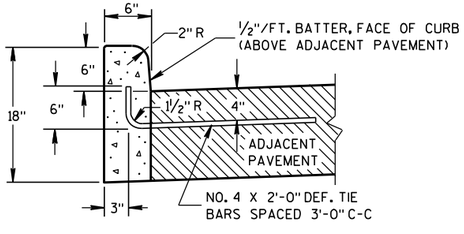
TIE BARS DRILLED INTO EXISTING PAVEMENT



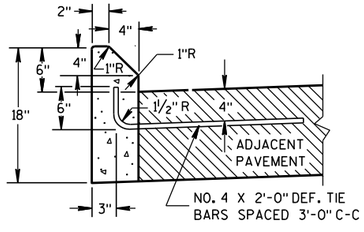
DRIVEWAY ENTRANCE CURB
(WHEN DIRECTED BY THE ENGINEER)



(1)
TYPES A & D
CONCRETE CURB & GUTTER 18"



(1)
TYPES A & D



(1)
TYPES G & J

CONCRETE CURB

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

INTEGRAL CURB & GUTTER SHALL CONFORM TO THE DETAILS SHOWN FOR CONCRETE CURB & GUTTER INCLUDING THE TRANSVERSE GUTTER SLOPE. A LONGITUDINAL CONSTRUCTION JOINT IS NOT REQUIRED WITH INTEGRAL CURB AND GUTTER.

WHERE THE TRANSVERSE JOINTS IN THE PAVEMENT ARE REQUIRED TO BE SEALED, THE JOINTS IN THE INTEGRAL CURB AND GUTTER SHALL BE SEALED TO THE FACE OF CURB WITH THE SAME TYPE OF SEALANT. THE COST OF FURNISHING AND INSTALLING THIS SEALANT SHALL BE INCIDENTAL TO THE ITEM CONCRETE CURB AND GUTTER.

UNLESS OTHERWISE SHOWN ON THE TYPICAL CROSS SECTIONS, THE BASE AGGREGATE AND COMMON EXCAVATION LIMITS ARE 2'-0" BEHIND THE BACK OF CURBS.

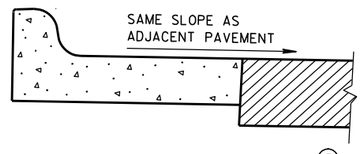
(1) TIE BARS ARE REQUIRED FOR CURB AND GUTTER TYPES A, G, K AND R.

(2) THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.

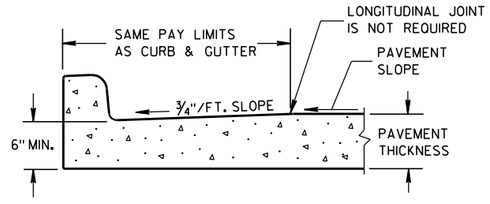
(3) THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 8" MINIMUM GUTTER THICKNESS IS MAINTAINED.

(4) THE FACE OF CURB IS 6" FROM THE BACK OF CURB.

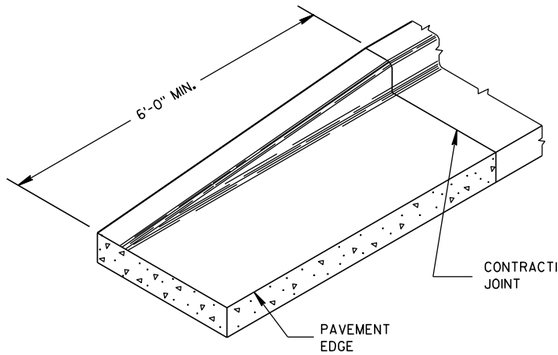
(5) WHEN REVERSE SLOPE GUTTER IS REQUIRED, THE LOCATION(S) WILL BE SHOWN ELSEWHERE IN THE PLAN.



REVERSE SLOPE GUTTER (5)
(TYPICAL FOR ALL CURB & GUTTER TYPES)



PARTIAL SECTION OF PAVEMENT WITH INTEGRAL CURB & GUTTER



END SECTION CURB & GUTTER

CONCRETE CURB, CONCRETE CURB & GUTTER AND TIES

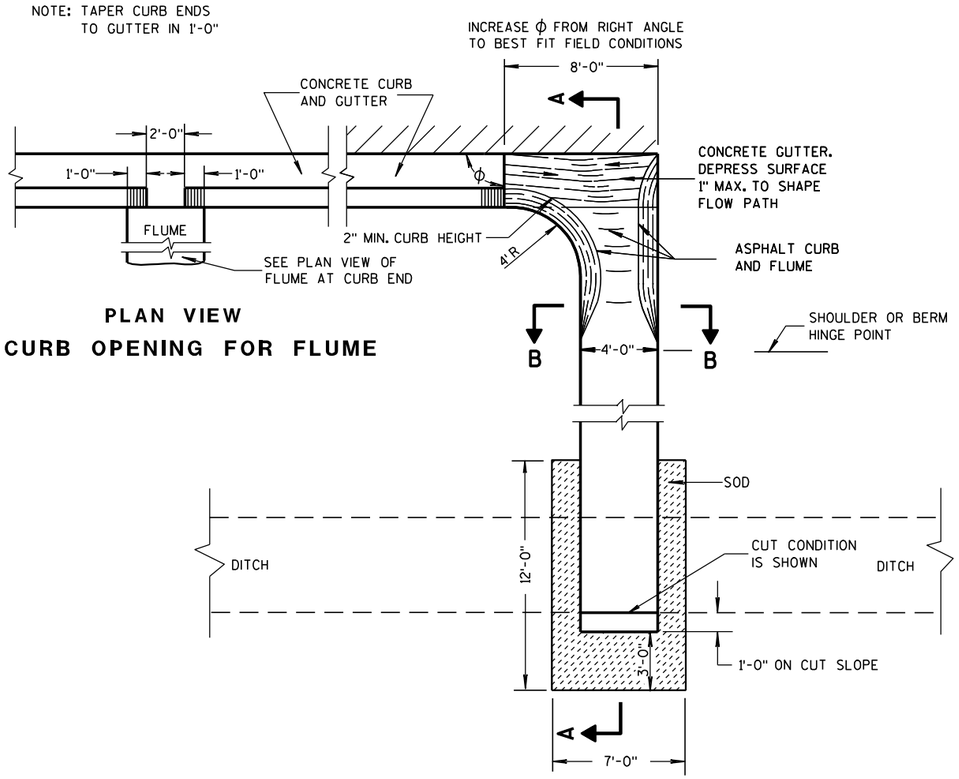
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
9/4/08 DATE
/S/ Jerry H. [illegible]
ROADWAY STANDARDS ENGINEER
622
FHWA
ENT

6

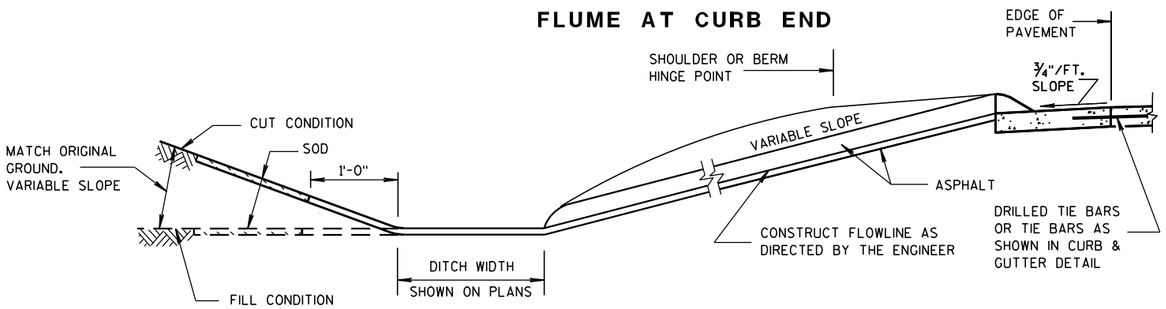
S.D.D. 8 D 1-17

ASPHALTIC FLUME

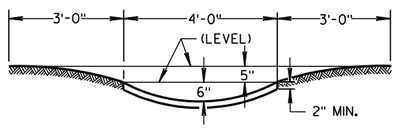


PLAN VIEW
CURB OPENING FOR FLUME

PLAN VIEW
FLUME AT CURB END



SECTION A-A



SECTION B-B

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

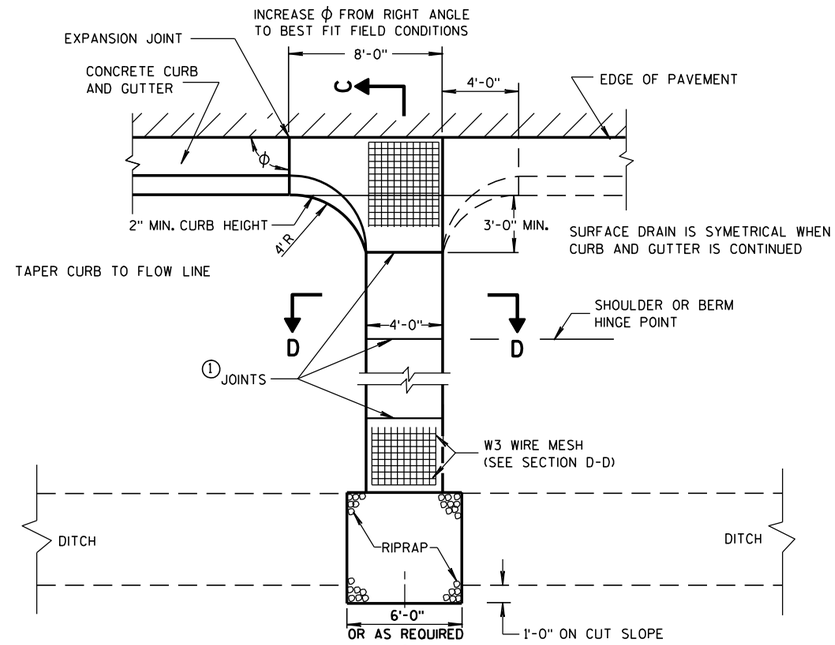
WELDED STEEL WIRE FABRIC SHALL BE IN ACCORDANCE WITH AASHTO SPECIFICATION M55.

① JOINTS SHALL BE ⅛ TO ¼ INCH WIDE BY 1½ INCHES DEEP AND SPACED AT UNIFORM INTERVALS OF APPROXIMATELY 4 FEET.

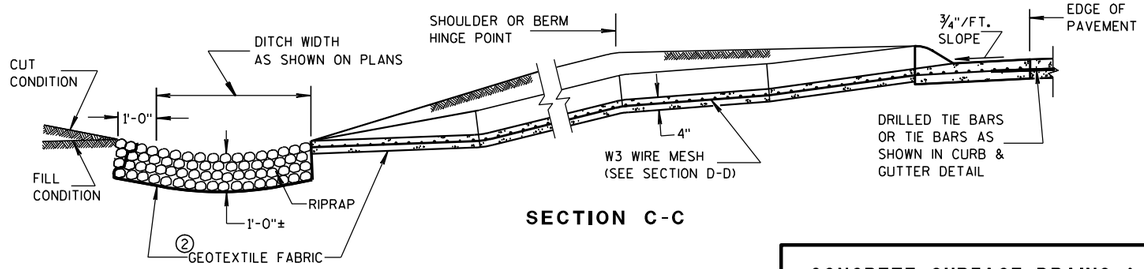
② GEOTEXTILE FABRIC TYPE "R" SHALL UNDERLAY THE FULL LENGTH AND WIDTH OF THE CONCRETE SURFACE DRAIN AND RIPRAP.

③ CONCRETE SURFACE DRAIN WITHOUT CURB AND GUTTER MAY BE USED ON BACKSLOPES WHEN SPECIFIED

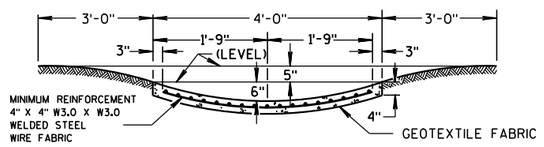
③ CONCRETE SURFACE DRAIN



PLAN VIEW



SECTION C-C



SECTION D-D

CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

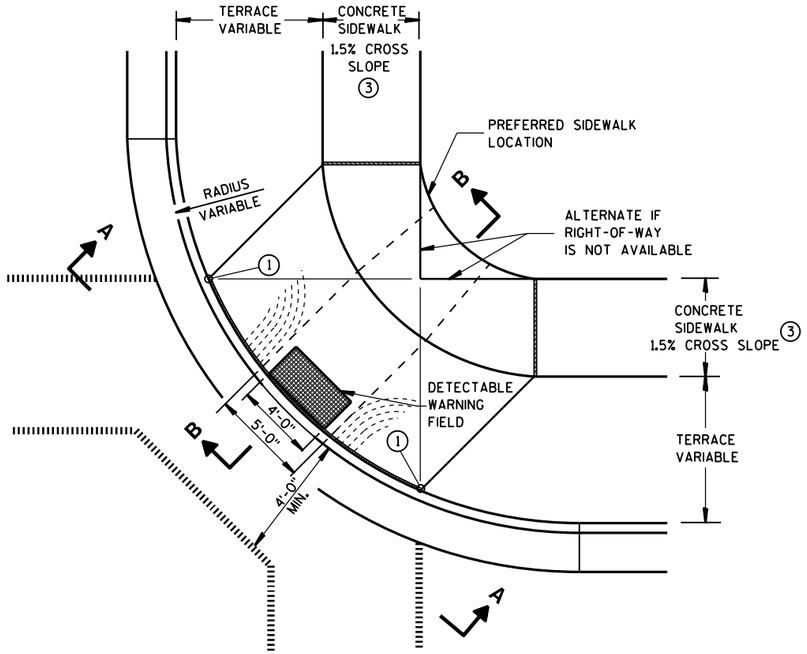
APPROVED
9-4-08 DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER
623 MENT
FHWA

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S.D.D. 8 D 4-5

6

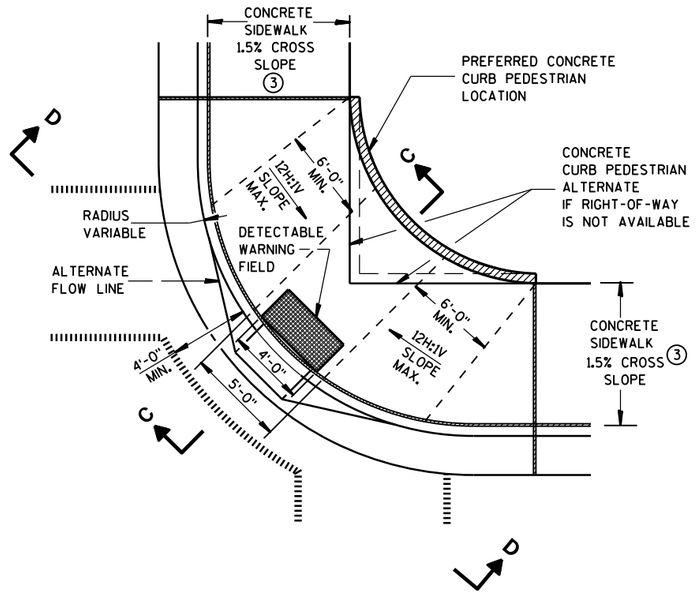
S.D.D. 8 D 4-5



PLAN VIEW

TYPE 1 RAMP

(CENTER OF CORNER RADIUS)



PLAN VIEW

TYPE 1-A RAMP

(NO TERRACE)

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

RAMPS SHALL BE BUILT AT 12H:1V OR FLATTER. WHEN NECESSARY, THE SIDEWALK ELEVATION MAY BE LOWERED TO MEET THE HIGH POINT ON THE RAMP.

TYPE 1 RAMPS SHALL HAVE A NORMAL SIDEWALK APRON AND CURB ON BOTH SIDES OF RAMP.

DETECTABLE WARNING FIELD SHALL BE MEASURED AND PAID BY THE SQUARE FOOT AS "CURB RAMP DETECTABLE WARNING FIELD". THE CONCRETE PEDESTRIAN CURB, IF NEEDED, SHALL BE MEASURED AND PAID BY THE LINEAL FOOT AS "CONCRETE CURB PEDESTRIAN". CONCRETE SIDEWALK IN THE CURB RAMP AREA SHALL BE MEASURED AND PAID BY THE SQUARE FOOT AS CONCRETE SIDEWALK, INCLUDING THE AREA UNDER THE DETECTABLE WARNING FIELD.

SELECT CURB RAMP DETECTABLE WARNING FIELD MATERIALS AND DEVICES FROM THE DEPARTMENT'S APPROVED MATERIALS LIST. THE COLOR OF THE DETECTABLE WARNING FIELD IS SPECIFIED ELSEWHERE AND IS INCIDENTAL TO THE BID ITEM OF "CURB RAMP DETECTABLE WARNING FIELD".

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

SURFACE TEXTURE OF THE RAMP SHALL BE OBTAINED BY COARSE BROOMING TRANSVERSE TO THE SLOPE OF THE RAMP.

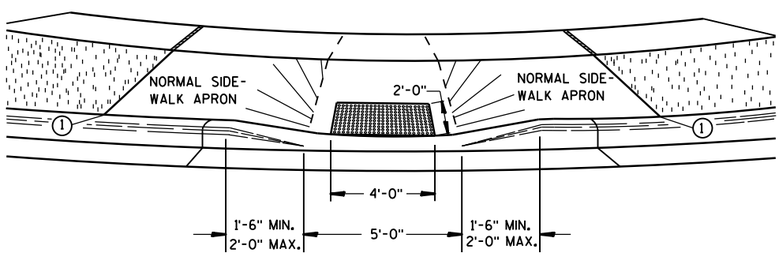
① THIS POINT IS AN EXTENSION OF OUTSIDE EDGE OF APPROACHING SIDEWALK WHERE IT MEETS THE BACK OF CONCRETE CURB.

② GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. PROVIDE DRAINAGE AWAY FROM CURB RAMP AT GUTTER FLAG INTERFACE.

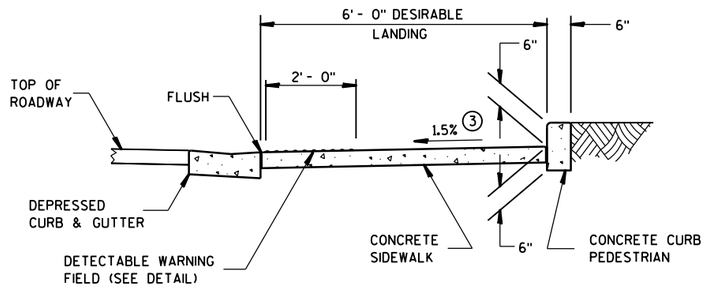
③ ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

LEGEND

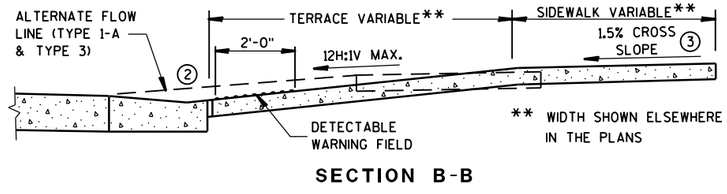
- ½" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)
- ALTERNATIVE LAYOUT



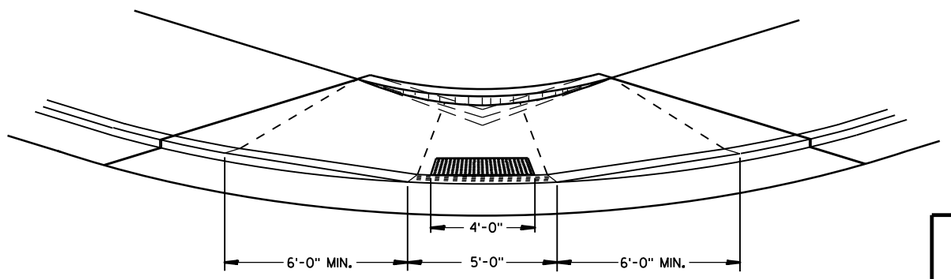
VIEW A-A



SECTION C-C



SECTION B-B



VIEW D-D

CURB RAMPS TYPES 1 AND 1-A

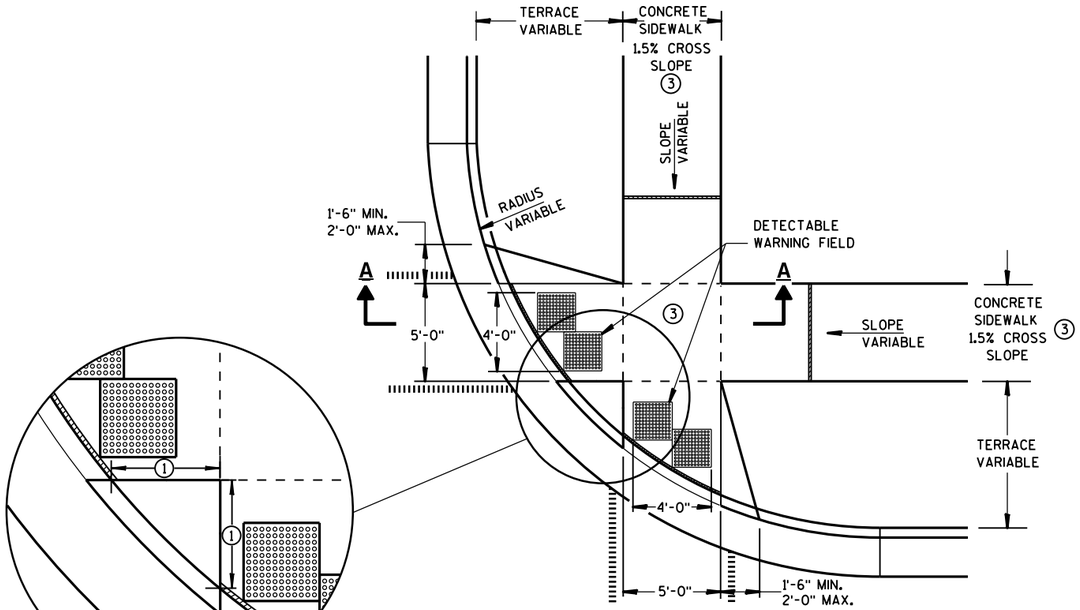
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR 624

6

S.D.D. 8 D 5-15a

6

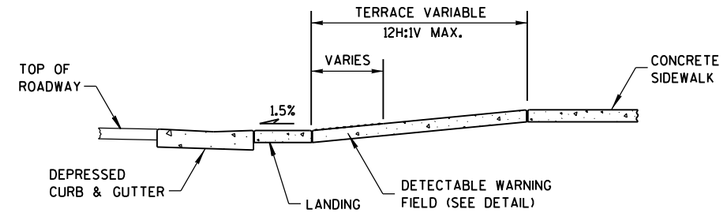
S.D.D. 8 D 5-15a



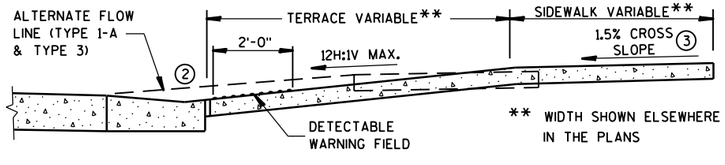
PLAN VIEW

TYPE 2 RAMP

(ON LINE WITH SIDEWALK)



SECTION A-A



SECTION B-B

GENERAL NOTES

USE THE TYPE 3 RAMP ONLY WHEN A TYPE 1 OR TYPE 2 CANNOT BE ACHIEVED BECAUSE OF FIELD CONDITIONS.

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

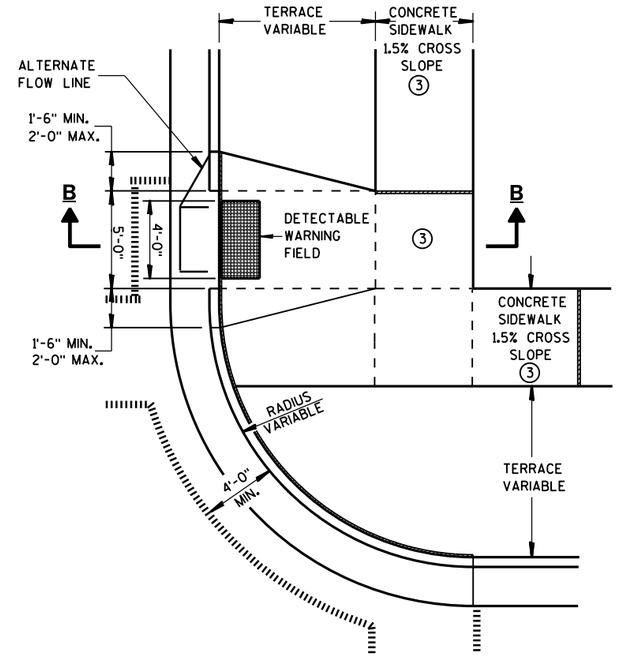
① WHEN THIS DISTANCE IS LESS THAN 6'-0" IT MAY BE DIFFICULT TO ACHIEVE A 12H:1V SLOPE, OR FLATTER, ON THE RAMP. REDUCE CURB HEIGHT IN TRIANGLE AREA TO ACHIEVE 12H:1V SLOPE, OR FLATTER, ON RAMP. 2" MINIMUM CURB HEIGHT.

② GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. PROVIDE DRAINAGE AWAY FROM CURB RAMP AT GUTTER FLAG INTERFACE.

③ ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

LEGEND

- ½" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)
- ALTERNATIVE LAYOUT



PLAN VIEW

TYPE 3 RAMP

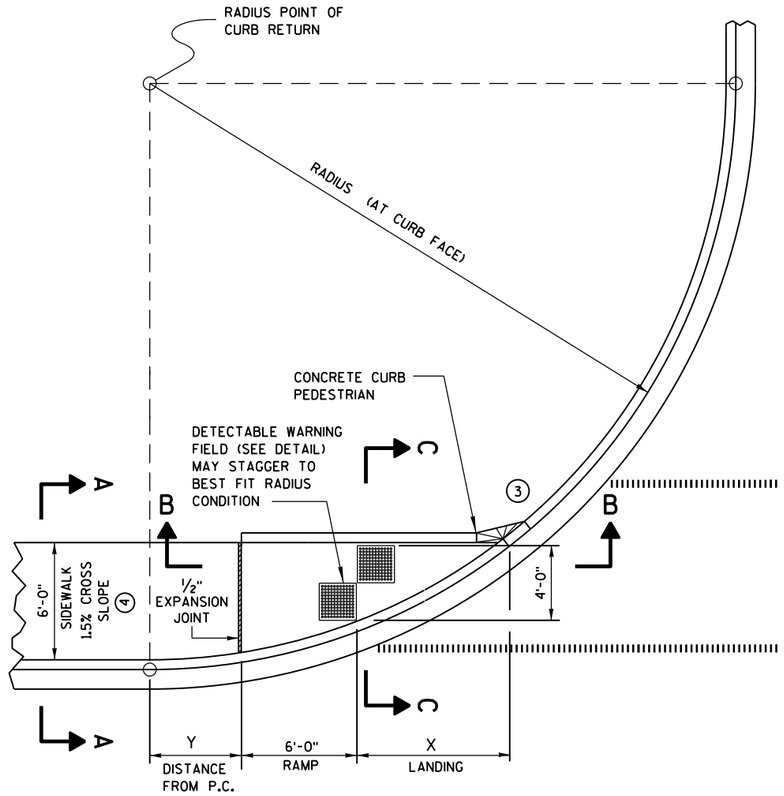
(OUTSIDE OF CROSSWALK AREA)

CURB RAMPS TYPES 2 AND 3

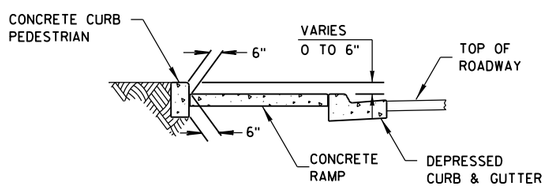
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

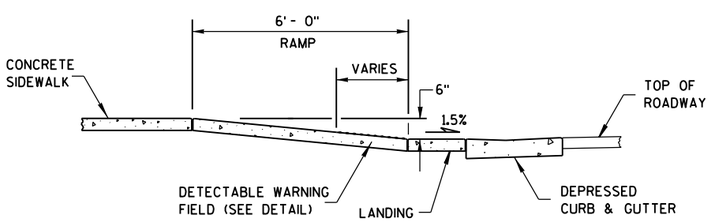
S.D.D. 8 D 5-15b



CURB RAMP TYPE 4A
PLAN VIEW



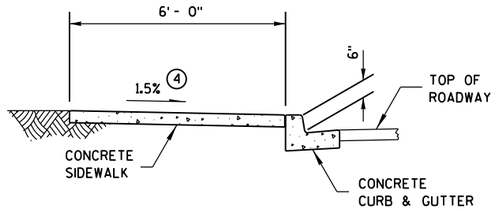
SECTION C-C FOR TYPE 4A



SECTION B-B FOR TYPE 4A

RADIUS (AT CURB FACE)	X	Y
20 FEET	6'-1¾"	2'-7¼"
30 FEET	7'-11¾"	4'-8¼"
40 FEET	9'-5¼"	6'-5"
50 FEET	10'-8¾"	7'-11¼"
60 FEET	11'-10¼"	9'-3½"

INTERMEDIATE RADII CAN BE INTERPOLATED



SECTION A-A FOR TYPE 4A

GENERAL NOTES

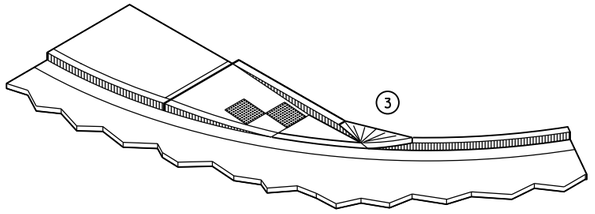
AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

RAMP SLOPES SHALL NOT BE STEEPER THAN 12:1.

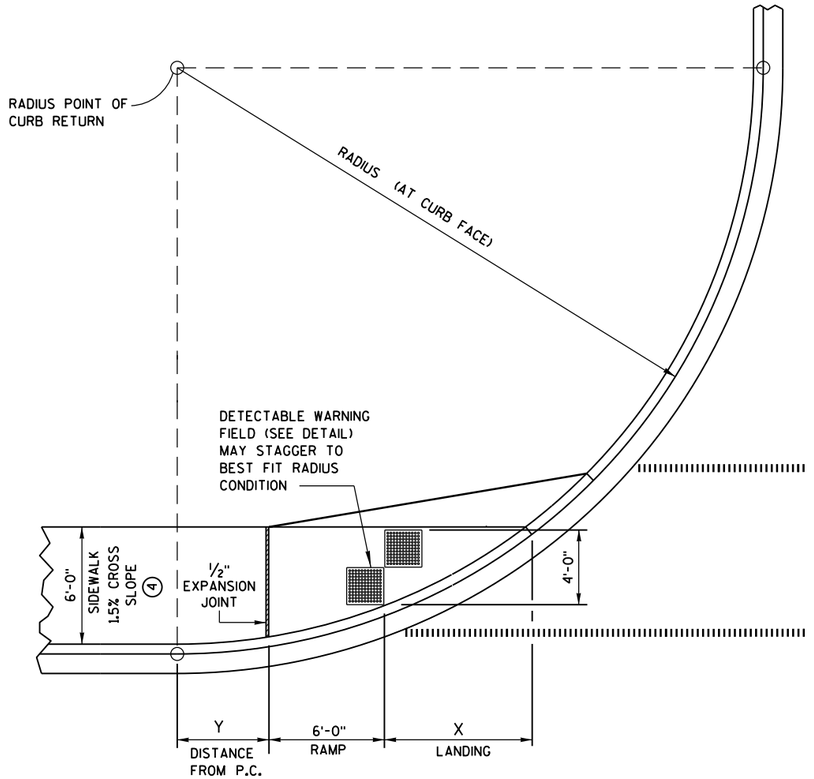
DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

(3) INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS.) DO NOT MARK TRANSITION NOSE.

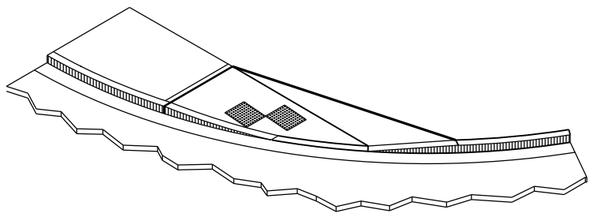
(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.



ISOMETRIC VIEW FOR TYPE 4A



CURB RAMP TYPE 4A1
PLAN VIEW



ISOMETRIC VIEW FOR TYPE 4A1

LEGEND

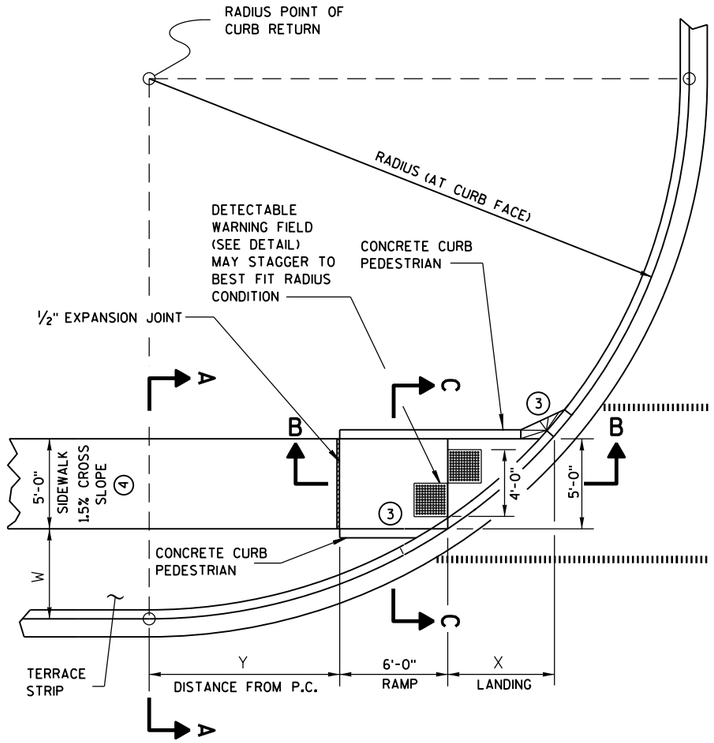
- ½" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)

CURB RAMPS TYPES 4A AND 4A1

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

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S.D.D. 8 D 5-15c



CURB RAMP TYPE 4B
PLAN VIEW

LEGEND

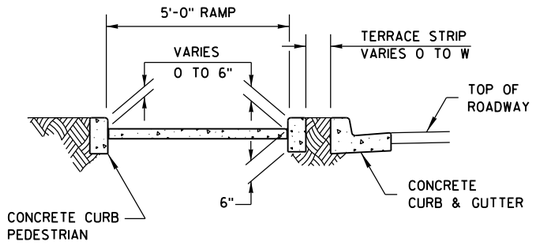
½" EXPANSION JOINT-SIDEWALK

CONTRACTION JOINT FIELD LOCATED

PAVEMENT MARKING CROSSWALK (WHITE)

RADIUS (AT CURB FACE)	W = 3'-0"		W = 4'-0"		W = 5'-0"		W = 6'-0"		W = 7'-0"	
	X	Y	X	Y	X	Y	X	Y	X	Y
20 FEET	5'-5½"	4'-6½"	4'-8½"	6'-0"	4'-1"	7'-2¾"	3'-7"	8'-3½"	3'-1½"	9'-2½"
30 FEET	7'-3¾"	7'-1"	6'-5½"	8'-11½"	5'-9¼"	10'-7"	5'-2½"	12'-0"	4'-8¾"	13'-3¼"
40 FEET	8'-9½"	9'-2½"	7'-10"	11'-5¼"	7'-1"	13'-4½"	6'-5¾"	15'-¾"	5'-11½"	16'-7¼"
50 FEET	10'-¾"	11'-¾"	9'-¼"	13'-7¼"	8'-2½"	15'-9½"	7'-6½"	17'-9"	6'-11¾"	19'-6¼"
60 FEET	11'-2½"	12'-8¾"	10'-¾"	15'-6½"	9'-2¼"	17'-11¾"	8'-5¾"	20'-1¾"	7'-10½"	22'-1½"

INTERMEDIATE RADII CAN BE INTERPOLATED



SECTION C-C FOR TYPE 4B

GENERAL NOTES

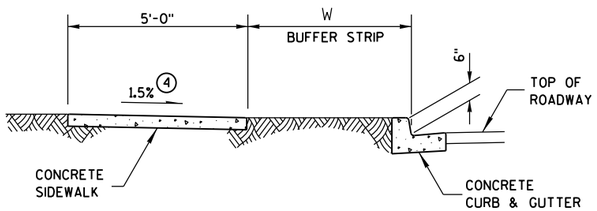
AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

RAMP SLOPES SHALL NOT BE STEEPER THAN 12:1.

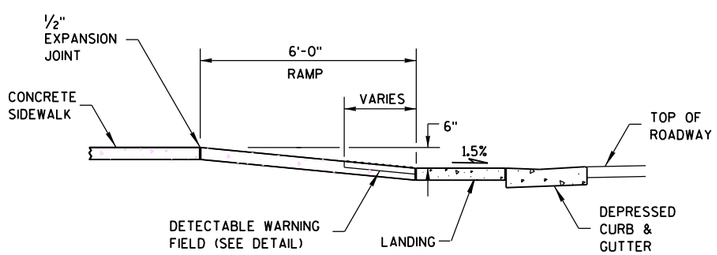
DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

(3) INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS.) DO NOT MARK TRANSITION NOSE.

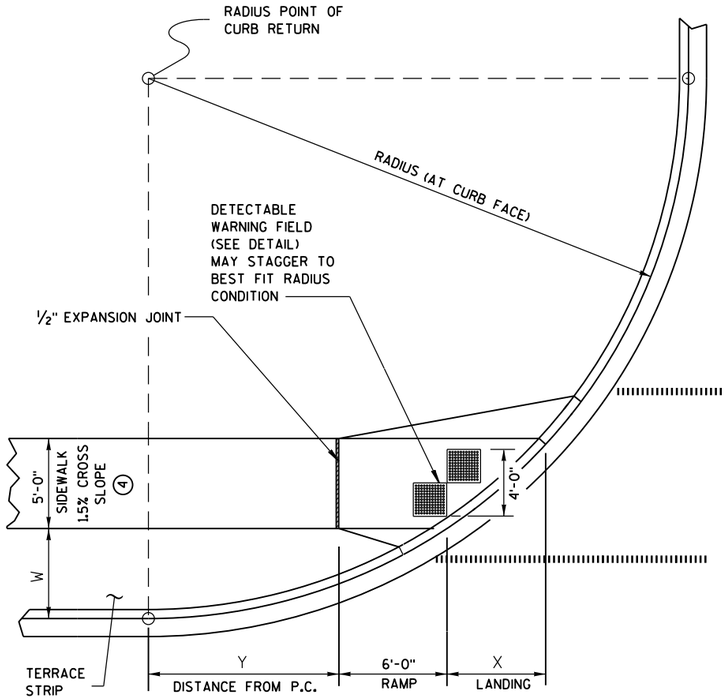
(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.



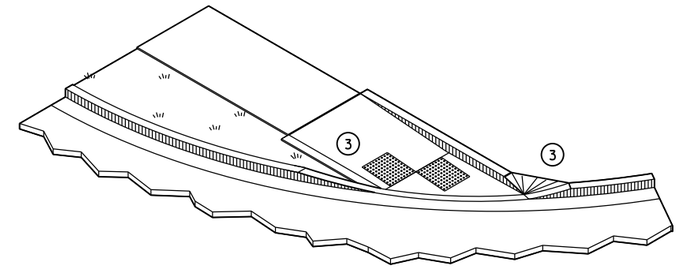
SECTION A-A FOR TYPE 4B



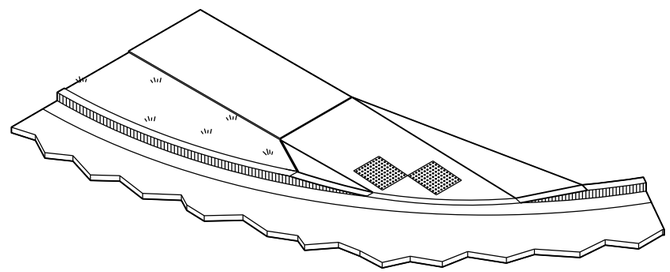
SECTION B-B FOR TYPE 4B



CURB RAMP TYPE 4B1
PLAN VIEW



ISOMETRIC VIEW FOR TYPE 4B

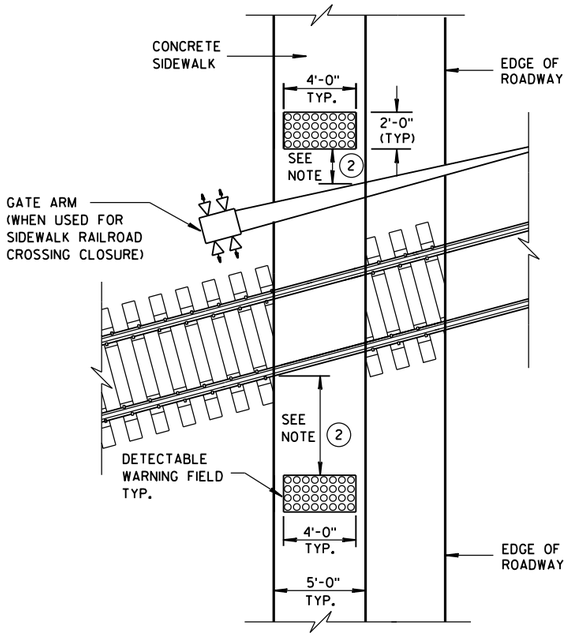


ISOMETRIC VIEW FOR TYPE 4B1

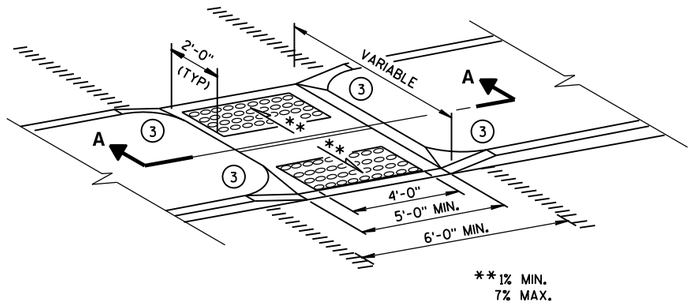
CURB RAMPS TYPE 4B AND 4B1

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6
S.D.D. 8 D 5-15d



TYPE 8
DETECTABLE WARNINGS AT RAILROAD CROSSING



MEDIAN ISLAND
NON-ELEVATED CROSSING
TYPE 5

GENERAL NOTES

SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.

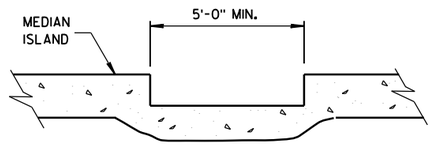
DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

(1) SLOPE SIDEWALK TOWARD LANDING AS SHOWN WHERE THERE IS NO TERRACE OR WHERE THE TERRACE WIDTH IS LESS THAN 6 FEET WIDE.

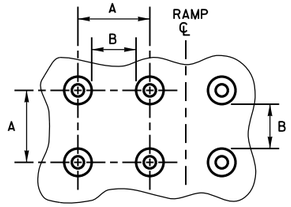
(2) THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO A RAILROAD CROSSING SHALL BE 1.5 FEET ± 0.1' FROM THE FACE OF THE GATE ARM IF THE GATE ARM EXTENDS ACROSS THE SIDEWALK. WHERE THERE IS NO PEDESTRIAN GATE, THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO THE RAILROAD CROSSING SHALL BE 15 FEET FROM THE NEAREST RAIL.

(3) INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS.) DO NOT MARK TRANSITION NOSE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.



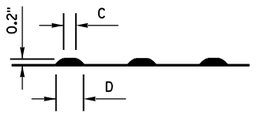
SECTION A-A



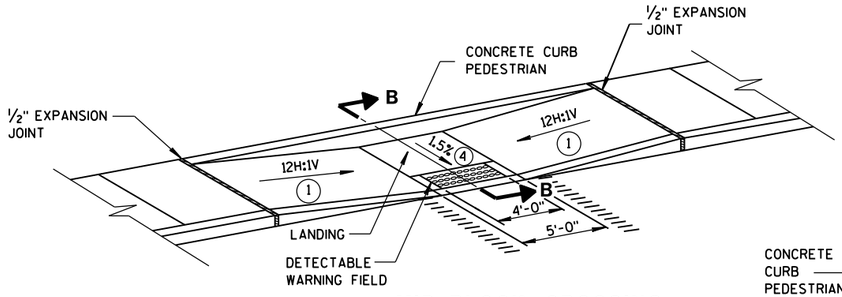
PLAN VIEW

	MIN.	MAX.
A	1.6"	2.4"
B	0.65"	1.5"
C	*	*
D	0.9"	1.4"

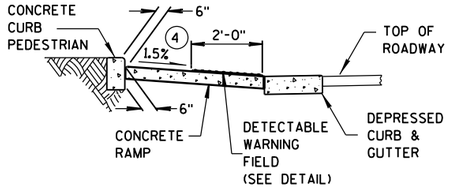
* THE C DIMENSION IS 50% TO 65% OF THE D DIMENSION.



ELEVATION VIEW

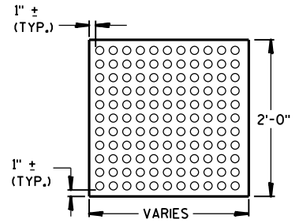


MID-BLOCK CROSSING
TYPE 7A



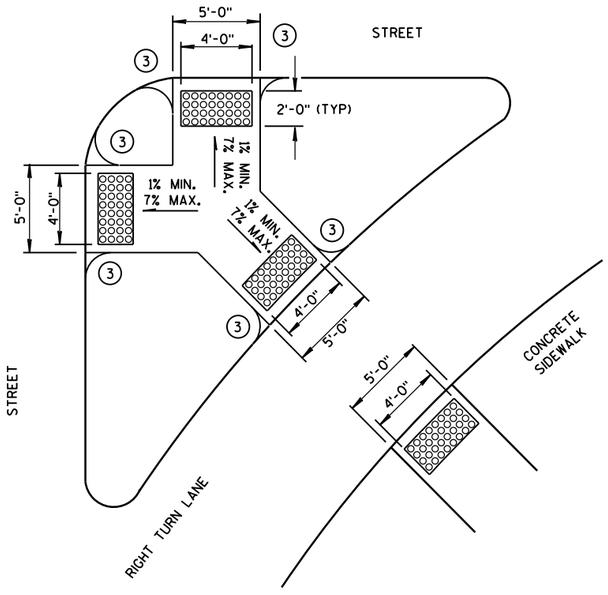
SECTION B-B

TRUNCATED DOMES
DETECTABLE WARNING PATTERN DETAIL

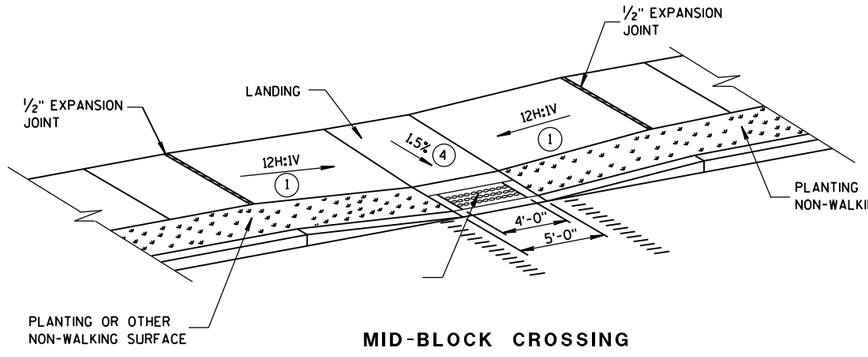


PLAN VIEW

DETECTABLE WARNING FIELD (TYPICAL)



TYPE 6
DETECTABLE WARNING AT ISLANDS



MID-BLOCK CROSSING
TYPE 7B

NOTE: THESE PARALLEL AND PARALLEL/PERPENDICULAR CURB RAMPS MAY BE USED AT INTERSECTIONS AND MID BLOCK LOCATIONS.

LEGEND

- ½" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)

CURB RAMPS
TYPES 5, 6, 7A, 7B & 8

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

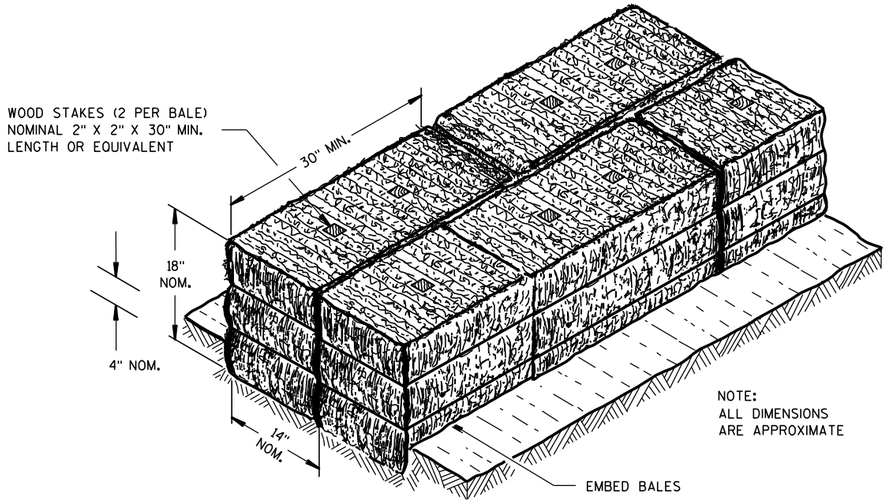
APPROVED
2-6-2013 DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS [illegible] ENGINEER
FHWA

6

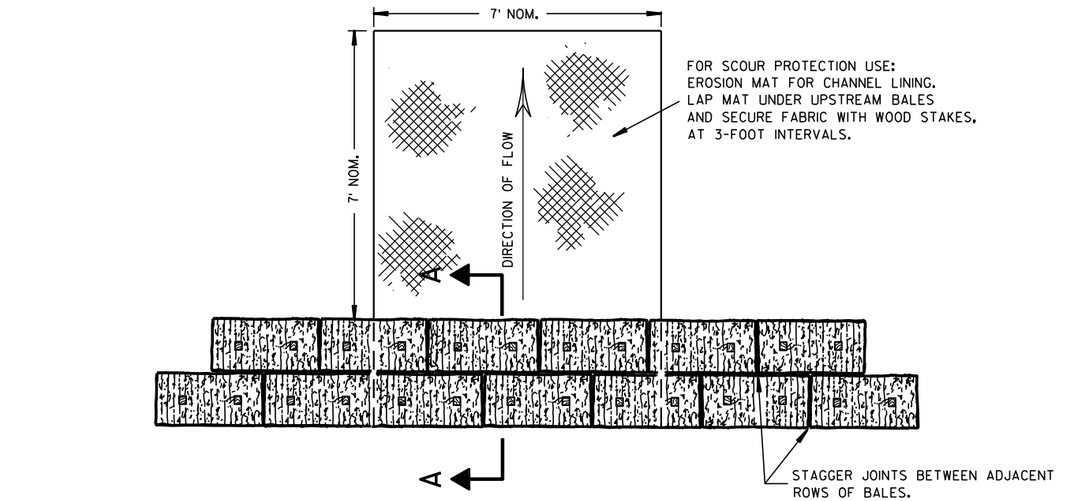
S.D.D. 8 D 5-15e

6

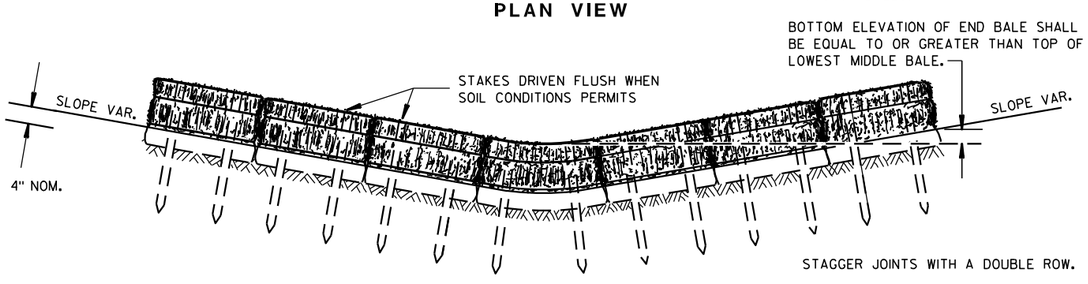
S.D.D. 8 D 5-15e



SECTION A-A



PLAN VIEW



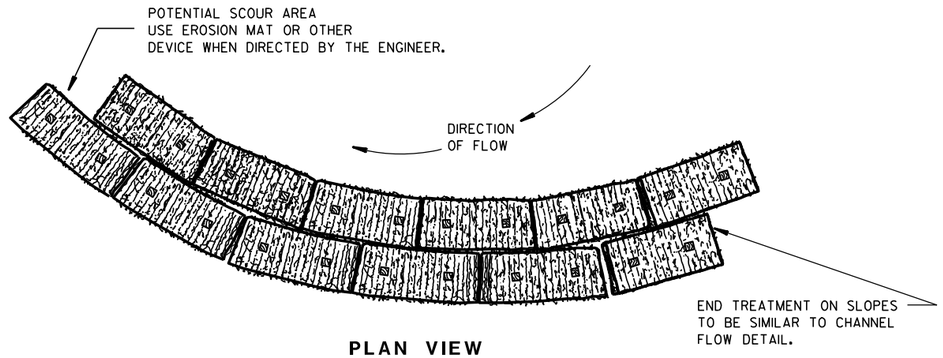
FRONT ELEVATION

TEMPORARY DITCH CHECK USING EROSION BALES (1)

GENERAL NOTES

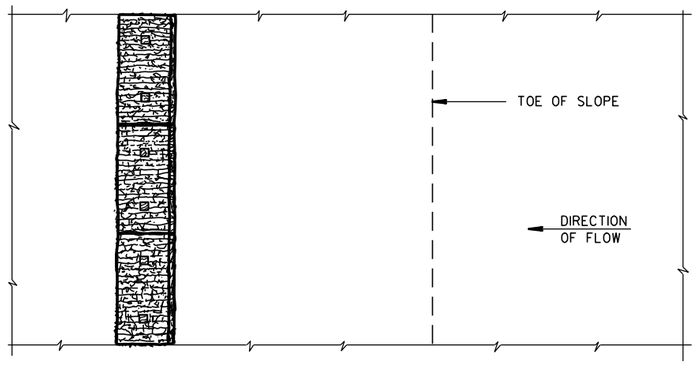
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

(1) TEMPORARY DITCH CHECKS EITHER EROSION BALES OR MANUFACTURED SHALL BE PAID FOR UNDER THE BID ITEM OF TEMPORARY DITCH CHECK. THE DEPARTMENT WILL NOT PAY FOR TEMPORARY DITCH CHECKS CONSTRUCTED OF A SINGLE ROW OF EROSION BALES.

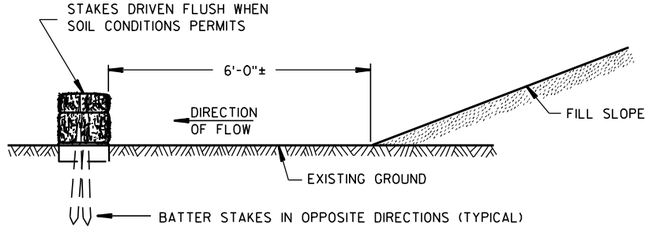


PLAN VIEW

WHEN ALTERING THE DIRECTION OF FLOW



PLAN VIEW



FRONT ELEVATION

WHEN EXISTING GROUND SLOPES AWAY FROM FILL SLOPE

EROSION BALES FOR SHEET FLOW

TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

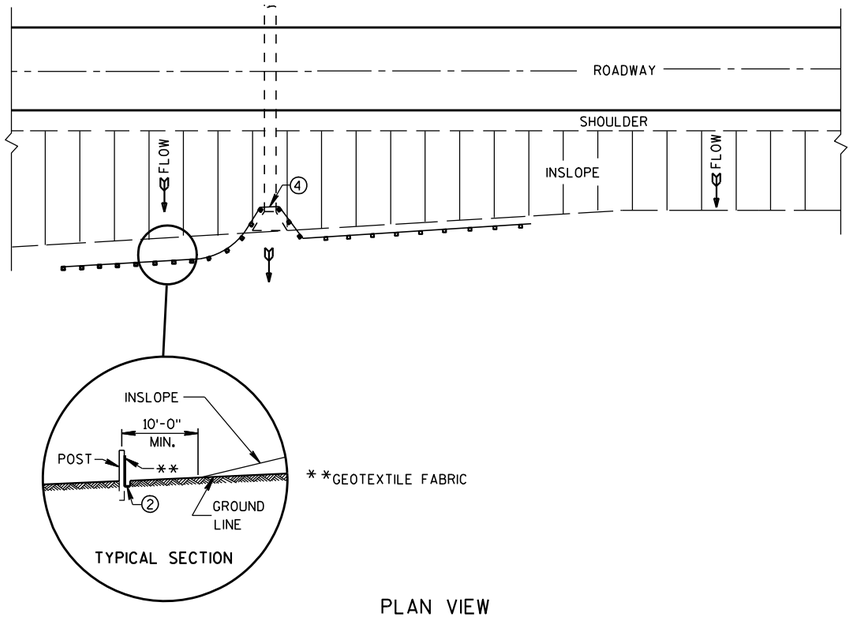
APPROVED
6/04/02 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

6

S.D.D. 8 E 8-3

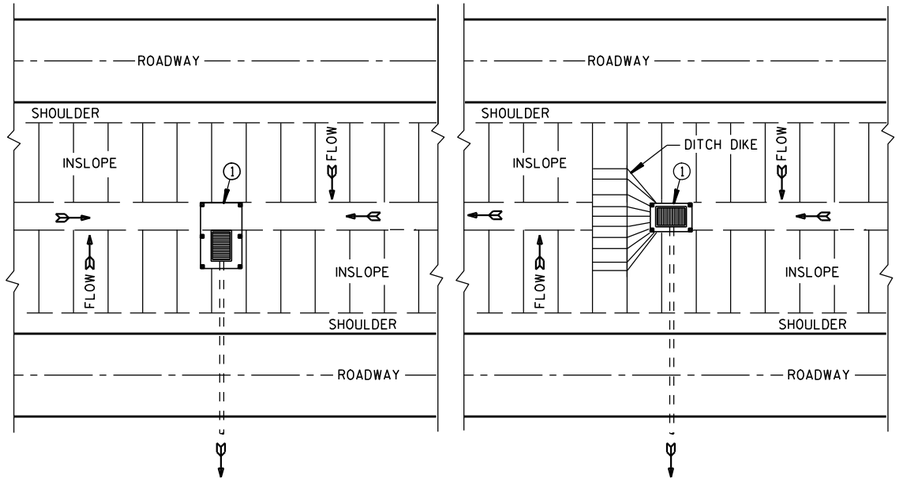
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S.D.D. 8 E 8-3



PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS

GENERAL NOTES

DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

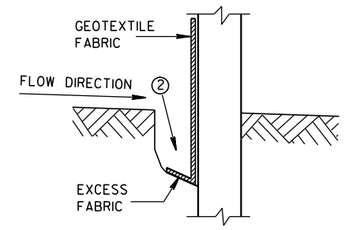
① HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.

② FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.

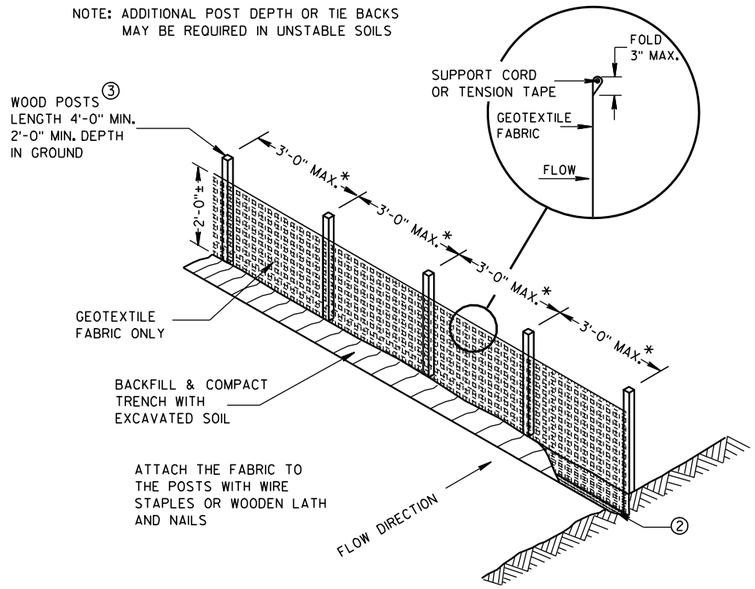
③ WOOD POSTS SHALL BE A MINIMUM SIZE OF 1⅛" X 1⅛" OF OAK OR HICKORY.

④ SILT FENCE TO EXTEND ACROSS THE TOP OF THE PIPE.

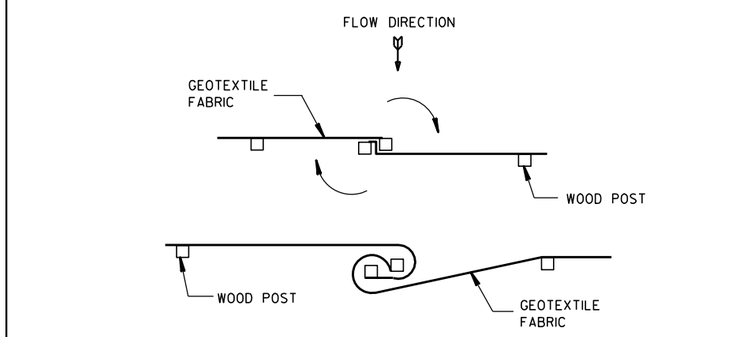
⑤ CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS; A) OVERLAP THE END POSTS AND TWIST, OR ROTATE, AT LEAST 180 DEGREES, B) HOOK THE END OF EACH SILT FENCE LENGTH.



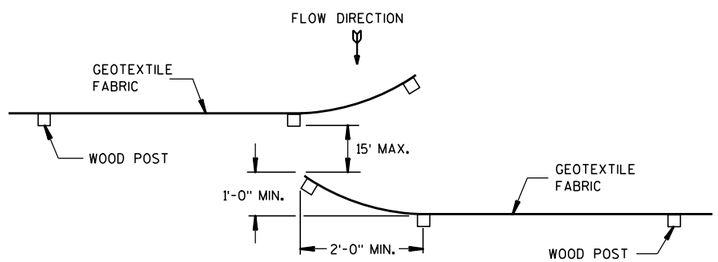
TRENCH DETAIL



SILT FENCE

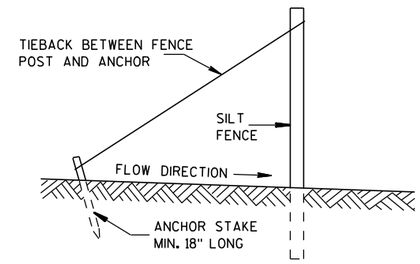


TWIST METHOD



HOOK METHOD

JOINING TWO LENGTHS OF SILT FENCE ⑤



SILT FENCE TIE BACK

(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
4-29-05 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

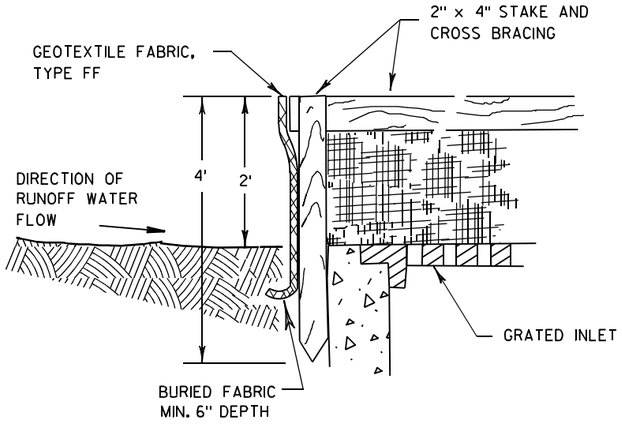
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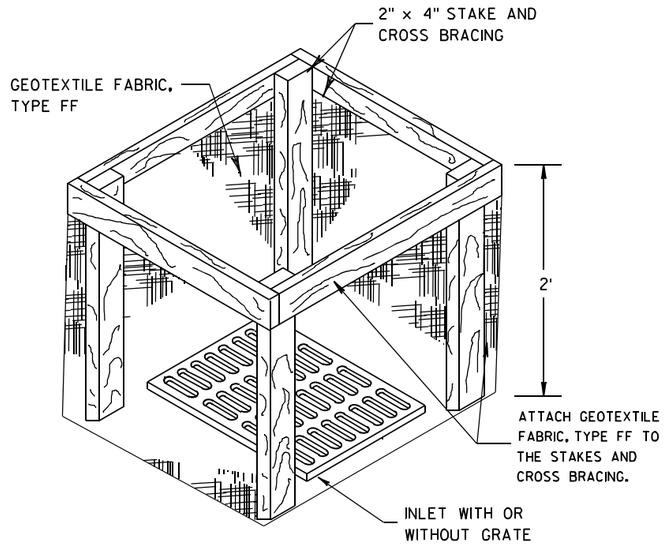
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S.D.D. 8 E 9-6

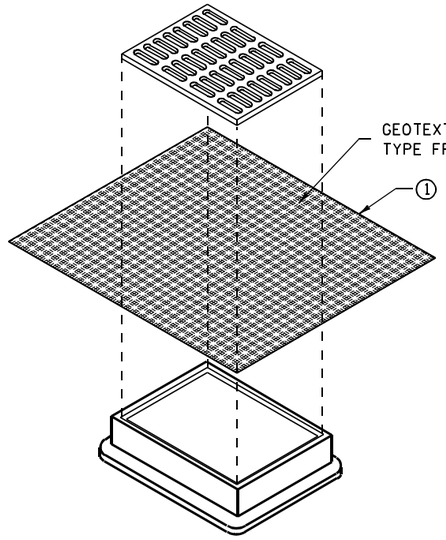
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S.D.D. 8 E 9-6



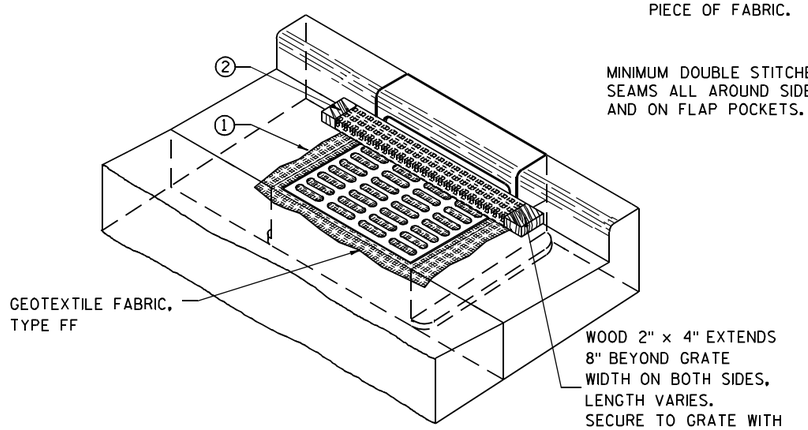


INLET PROTECTION, TYPE A

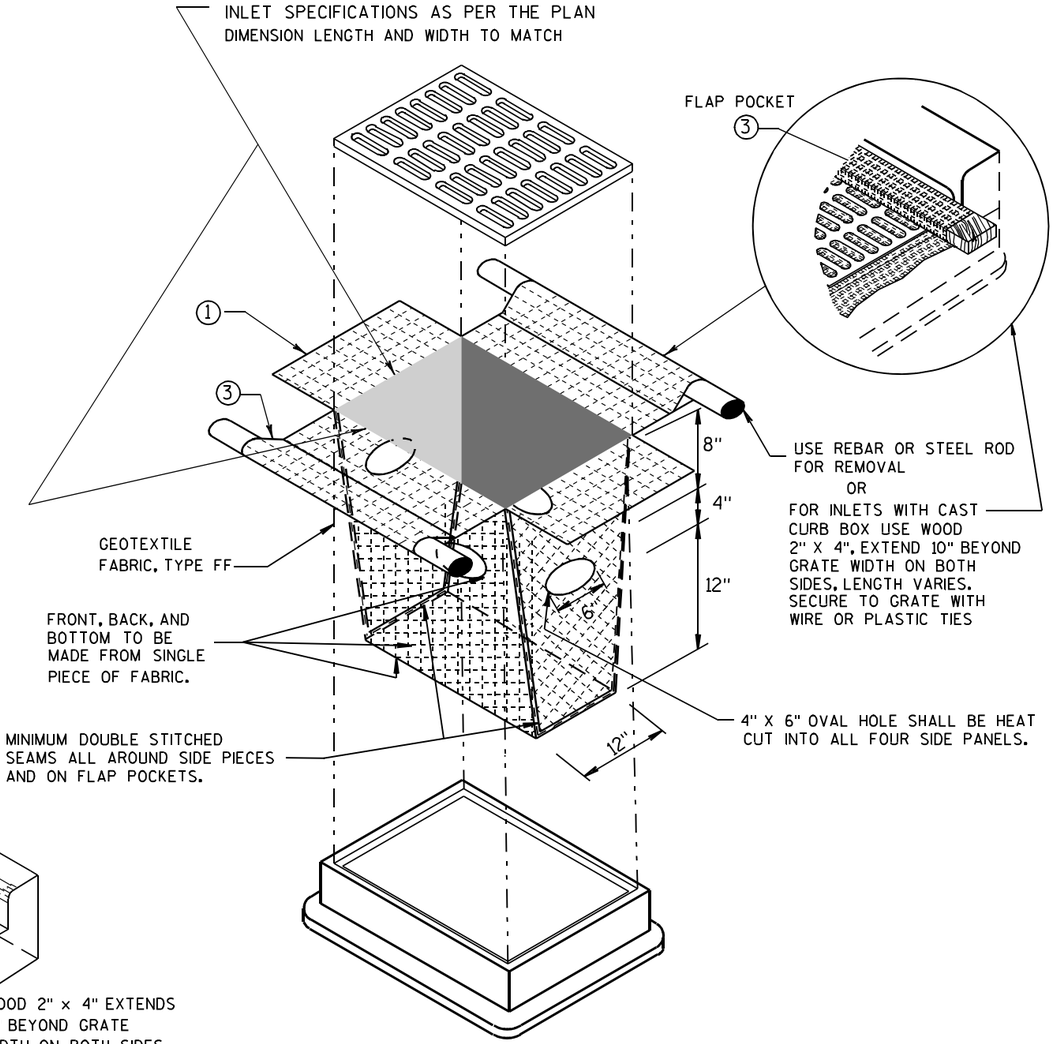


INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)

(CAN BE INSTALLED IN ANY INLET WITHOUT A CURB BOX)



INLET PROTECTION, TYPE C (WITH CURB BOX)



INLET PROTECTION, TYPE D

(CAN BE INSTALLED IN ANY INLET TYPE WITH
OR WITHOUT A CURB BOX AS PER NOTE ②)

GENERAL NOTES

INLET PROTECTION DEVICES SHALL BE MAINTAINED OR REPLACED AT THE DIRECTION OF THE ENGINEER.

MANUFACTURED ALTERNATIVES APPROVED AND LISTED ON THE DEPARTMENT'S EROSION CONTROL PRODUCT ACCEPTABILITY LIST MAY BE SUBSTITUTED.

WHEN REMOVING OR MAINTAINING INLET PROTECTION, CARE SHALL BE TAKEN SO THAT THE SEDIMENT TRAPPED ON THE GEOTEXTILE FABRIC DOES NOT FALL INTO THE INLET. ANY MATERIAL FALLING INTO THE INLET SHALL BE REMOVED IMMEDIATELY.

① FINISHED SIZE, INCLUDING FLAP POCKETS WHERE REQUIRED, SHALL EXTEND A MINIMUM OF 10" AROUND THE PERIMETER TO FACILITATE MAINTENANCE OR REMOVAL.

② FOR INLET PROTECTION, TYPE C (WITH CURB BOX), AN ADDITIONAL 18" OF FABRIC IS WRAPPED AROUND THE WOOD AND SECURED WITH STAPLES. THE WOOD SHALL NOT BLOCK THE ENTIRE HEIGHT OF THE CURB BOX OPENING.

③ FLAP POCKETS SHALL BE LARGE ENOUGH TO ACCEPT WOOD 2X4.

INSTALLATION NOTES

TYPE B & C

TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE.

THE CONTRACTOR SHALL DEMONSTRATE A METHOD OF MAINTENANCE, USING A SEWN FLAP, HAND HOLDS OR OTHER METHOD TO PREVENT ACCUMULATED SEDIMENT FROM ENTERING THE INLET.

TYPE D

DO NOT INSTALL INLET PROTECTION TYPE D IN INLETS SHALLOWER THAN 30", MEASURED FROM THE BOTTOM OF THE INLET TO THE TOP OF THE GRATE.

TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE.

THE INSTALLED BAG SHALL HAVE A MINIMUM SIDE CLEARANCE, BETWEEN THE INLET WALLS AND THE BAG, MEASURED AT THE BOTTOM OF THE OVERFLOW HOLES, OF 3". WHERE NECESSARY THE CONTRACTOR SHALL CINCH THE BAG, USING PLASTIC ZIP TIES, TO ACHIEVE THE 3" CLEARANCE. THE TIES SHALL BE PLACED AT A MAXIMUM OF 4" FROM THE BOTTOM OF THE BAG.

INLET PROTECTION
TYPE A, B, C, AND D

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

10/16/02
DATE

/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER

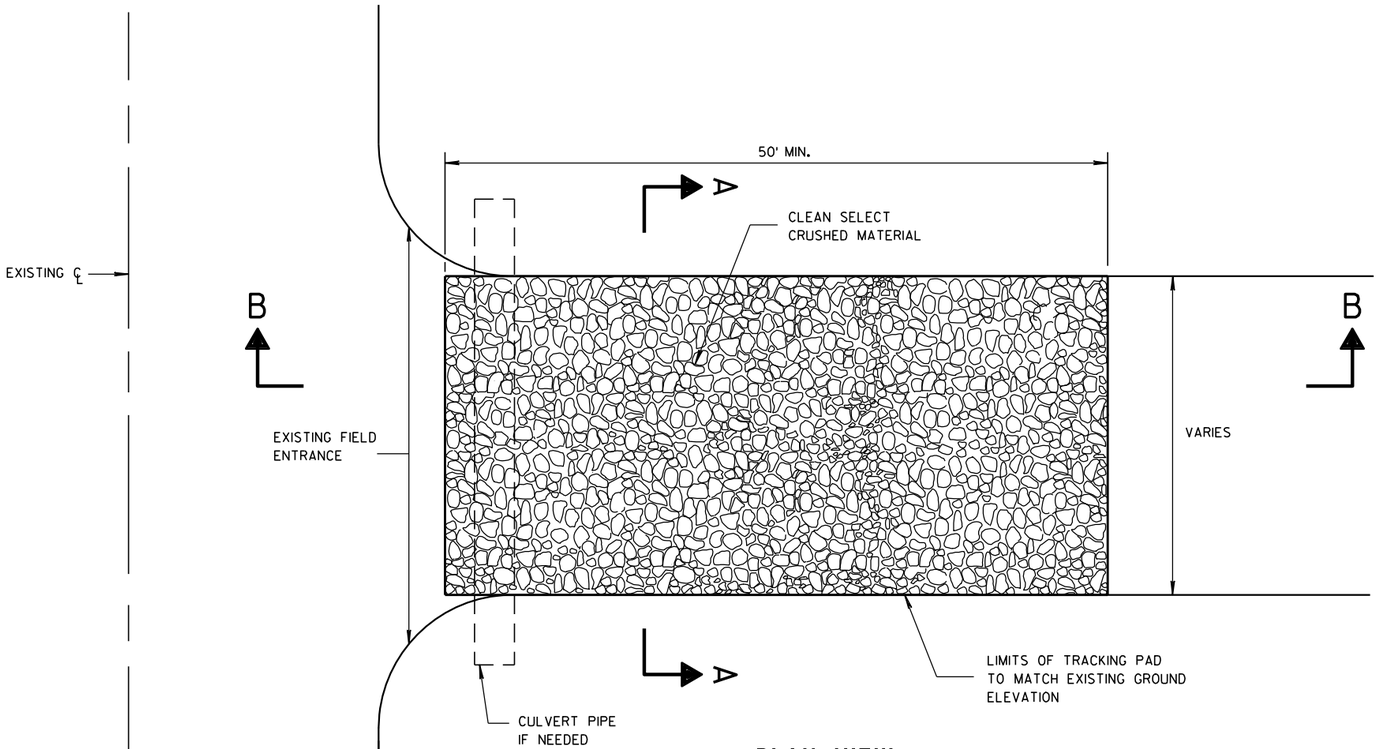
FHWA

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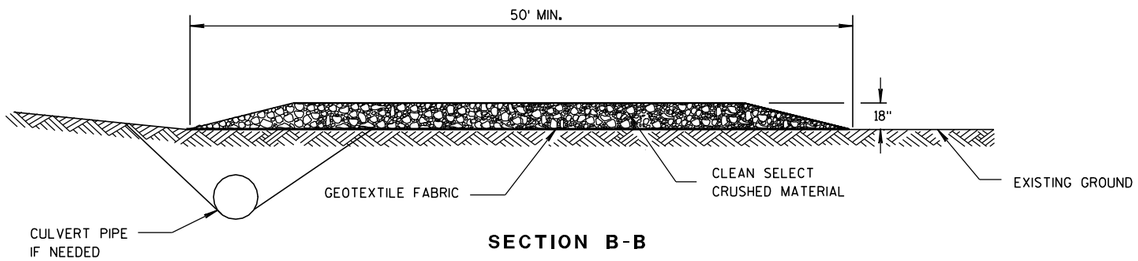
S.D.D. 8 E 10-2

6

S.D.D. 8 E 10-2



PLAN VIEW



SECTION B-B

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

TRACKING PAD SHALL BE INSPECTED DAILY. DEFICIENT AREAS SHALL BE REPAIRED OR REPLACED IMMEDIATELY.

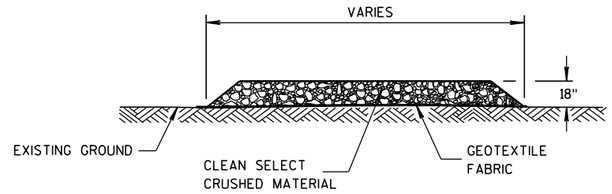
TRACKING PAD TO BE REMOVED AFTER CONSTRUCTION IS COMPLETED.

TRACKING PAD SHALL BE THE FULL WIDTH OF THE EGRESS POINT.

SURFACE WATER MUST BE PREVENTED FROM PASSING THROUGH THE TRACKING PAD. FLOWS SHALL BE DIVERTED AWAY, AROUND OR CONVEYED UNDER THE TRACKING PAD.

CULVERT PIPE OR OTHER BMP USED TO DIVERT WATER AWAY, AROUND OR UNDER THE TRACKING PAD SHALL BE DESIGNED TO CONVEY THE 2 YEAR - 24 HOUR EVENT.

THE COST OF ADDITIONAL BMP TO DIVERT WATER ARE INCIDENTAL TO THE TRACKING PAD BID ITEM.



SECTION A-A

TRACKING PAD

TRACKING PAD

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

3/24/2011	/S/ Jerry H. Zona	
DATE	ROADWAY STANDARDS ENGINEER 632	ENT

FHWA

6

S.D.D. 8 E 14-1

METAL APRON ENDWALLS

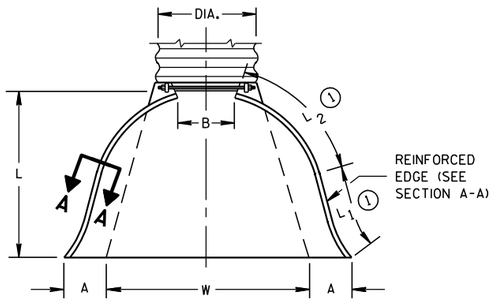
PIPE DIA. (IN.)	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
12	.064	.060	6	6	6	21	12	17 1/2	24	2 1/2 to 1	1 Pc.
15	.064	.060	7	8	6	26	14	21 3/4	30	2 1/2 to 1	1 Pc.
18	.064	.060	8	10	6	31	15	28 1/4	36	2 1/2 to 1	1 Pc.
21	.064	.060	9	12	6	36	18	29 5/8	42	2 1/2 to 1	1 Pc.
24	.064	.075	10	13	6	41	18	37 1/4	48	2 1/2 to 1	1 Pc.
30	.079	.075	12	16	8	51	18	52 1/4	60	2 1/2 to 1	1 Pc.
36	.079	.105	14	19	9	60	24	59 3/4	72	2 1/2 to 1	2 Pc.
42	.109	.105	16	22	11	69	24	75 5/8	84	2 1/2 to 1	2 Pc.
48	.109	.105	18	27	12	78	24	81	90	2 1/4 to 1	3 Pc.
54	.109	.105	18	30	12	84	30	85 1/2	102	2 1/4 to 1	3 Pc.
60	.109×	.105×	18	33	12	87	—	—	114	2 to 1	3 Pc.
66	.109×	.105×	18	36	12	87	—	—	120	2 to 1	3 Pc.
72	.109×	.105×	18	39	12	87	—	—	126	2 to 1	3 Pc.
78	.109×	.105×	18	42	12	87	—	—	132	1 1/2 to 1	3 Pc.
84	.109×	.105×	18	45	12	87	—	—	138	1 1/2 to 1	3 Pc.
90	.109×	.105×	18	37	12	87	—	—	144	1 1/2 to 1	3 Pc.
96	.109×	.105×	18	35	12	87	—	—	150	1 1/2 to 1	3 Pc.

× EXCEPT CENTER PANEL SEE GENERAL NOTES

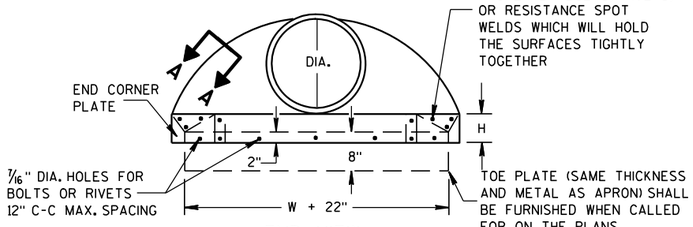
REINFORCED CONCRETE APRON ENDWALLS

PIPE DIA. (IN.)	DIMENSIONS (Inches) T	A	B	C	D	E	G	APPROX. SLOPE
12	2	4	24	48 7/8	72 1/8	24	2	3 to 1
15	2 1/4	6	27	46	73	30	2 1/4	3 to 1
18	2 1/2	9	27	46	73	36	2 1/2	3 to 1
21	2 3/4	9	36	37 1/2	73 1/2	42	2 3/4	3 to 1
24	3	9 1/2	43 1/2	30	73 1/2	48	3	3 to 1
27	3 1/4	10 1/2	49 1/2	24	73 1/2	54	3 1/4	3 to 1
30	3 1/2	12	54	19 3/4	73 1/2	60	3 1/2	3 to 1
36	4	15	63	34 3/4	97 3/4	72	4	3 to 1
42	4 1/2	21	63	35	98	78	4 1/2	3 to 1
48	5	24	72	26	98	84	5	3 to 1
54	5 1/2	27	65	* 33 1/4 - ** 35	* 98 1/4 - ** 100	90	5 1/2	2 2/5 to 1
60	6	* 30 - ** 35	60	39	99	96	5	2 to 1
66	6 1/2	* 24 - ** 30	* 72 - ** 78	* 21 - ** 27	99	102	5 1/2	2 to 1
72	7	* 24 - ** 36	78	21	99	108	6	2 to 1
78	7 1/2	* 24 - ** 36	78	21	99	114	6 1/2	2 to 1
84	8	36	90 1/2	21	111 1/2	120	6 1/2	1 1/2 to 1
90	8 1/2	41	87 1/2	24	111 1/2	132	6 1/2	1 1/2 to 1

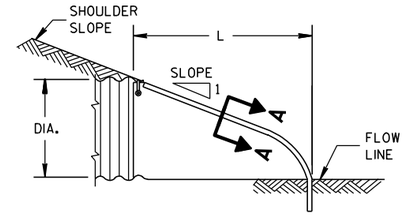
* MINIMUM
** MAXIMUM



PLAN VIEW

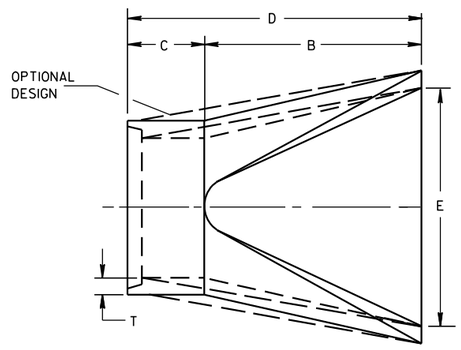


END VIEW

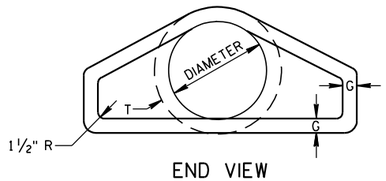


SIDE ELEVATION

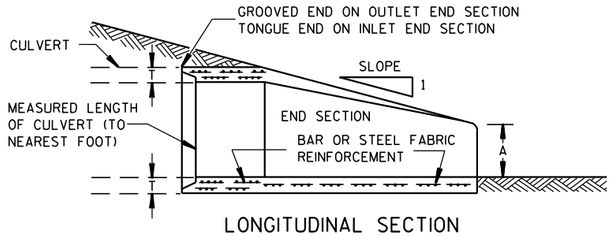
METAL ENDWALLS



PLAN

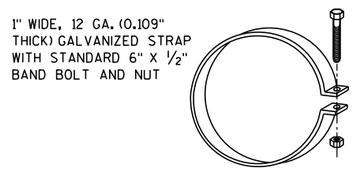


END VIEW



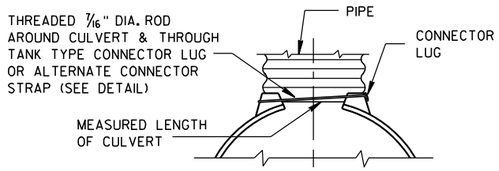
LONGITUDINAL SECTION

CONCRETE ENDWALLS

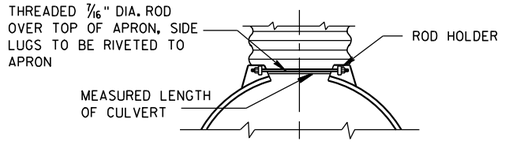


ALTERNATE FOR TYPE 1 CONNECTION

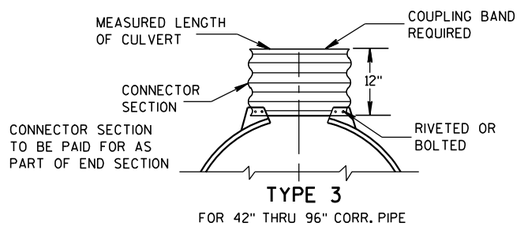
END SECTION CONNECTOR STRAP



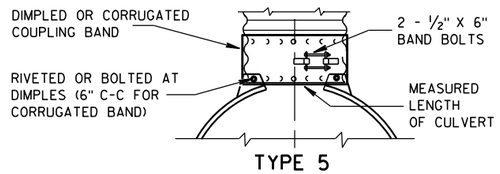
TYPE 1
FOR 12" THRU 24" CORR. PIPE



TYPE 2
FOR 30" THRU 96" CORR. PIPE



TYPE 3
FOR 42" THRU 96" CORR. PIPE



TYPE 5
ALTERNATE FOR:
ALL SIZES CORRUGATED CIRCULAR PIPE

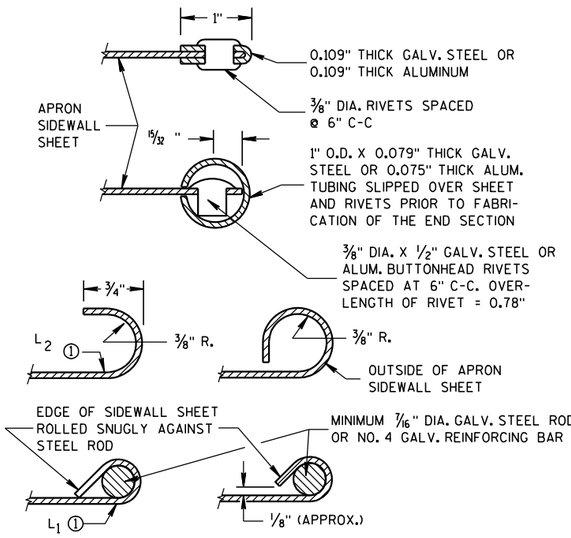
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL. AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

FOR CIRCUMFERENTIALLY CORRUGATED PIPE USE ENDWALL CONNECTION DETAILS 1, 2, 3 OR 5 AS APPLICABLE.

FOR HELICALLY CORRUGATED PIPE USE ENDWALL CONNECTION DETAILS 1, 2 OR 5.

FOR HELICALLY CORRUGATED PIPES WITH TWO CIRCUMFERENTIAL CORRUGATIONS AT EACH END USE ENDWALL CONNECTION DETAILS 1, 2 OR 3.

CONNECTION DETAILS



SECTION A-A

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

CONCRETE CULVERT ENDWALLS MAY NOT BE USED WITH GALVANIZED STEEL OR ALUMINUM CULVERT PIPE OR VISE VERSA. GALVANIZED STEEL OR ALUMINUM ENDWALLS SHALL NORMALLY BE INSTALLED ON CULVERT PIPE OF THE SAME METAL.

ALL THREE PIECE STEEL APRON ENDWALLS FOR 60" DIAMETER PIPE AND LARGER SHALL HAVE 0.109" SIDES AND 0.138" CENTER PANELS. ALL THREE PIECE ALUMINUM APRON ENDWALLS FOR 60" DIAMETER PIPE AND LARGER SHALL HAVE 0.105" SIDES AND 0.134" CENTER PANELS. THE WIDTH OF CENTER PANELS SHALL BE GREATER THAN 20 PERCENT OF THE PIPE PERIMETER.

LAP SEAMS SHALL BE TIGHTLY JOINED BY GALVANIZED RIVETS OR BOLTS FOR STEEL UNITS AND ALUMINUM RIVETS AND BOLTS FOR ALUMINUM UNITS. FOR THE 60" THROUGH 96" DIAMETER APRON ENDWALL SIZES, THE REINFORCED EDGES AND CENTER PANEL SEAMS SHALL BE FURTHER REINFORCED WITH GALVANIZED STEEL OR ALUMINUM STIFFENER ANGLES. THE ANGLES SHALL BE ATTACHED BY GALVANIZED NUTS AND BOLTS FOR STEEL UNITS AND ALUMINUM NUTS AND BOLTS FOR ALUMINUM UNITS.

WHERE TWO OR MORE PIPES WITH APRON ENDWALLS ARE LAID ADJACENT TO EACH OTHER, THEY SHALL BE SEPARATED BY A DISTANCE SUFFICIENT TO PROVIDE A MINIMUM CLEARANCE OF 6 INCHES BETWEEN APRON ENDWALLS.

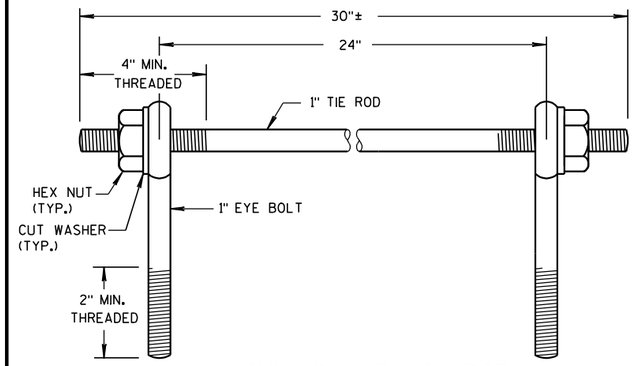
① FOR PIPE SIZES UP TO 60" DIAMETER, A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

APRON ENDWALLS FOR CULVERT PIPE

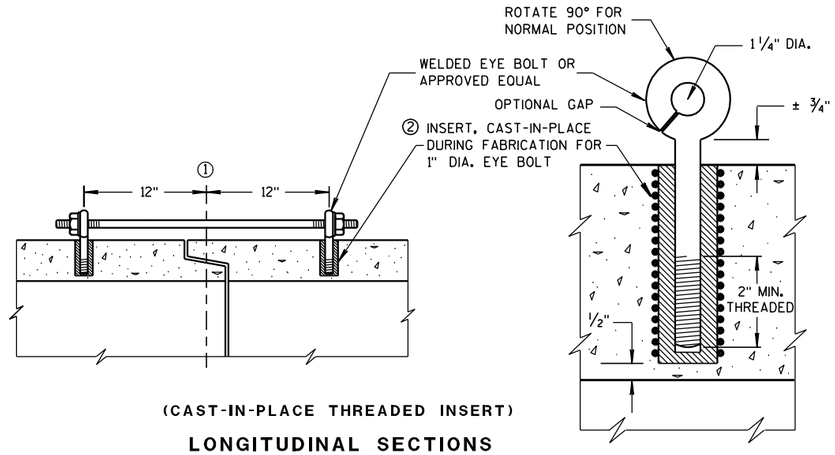
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11/30/94 DATE
/S/ Rory L. Rhinesmith
CHIEF ROADWAY DEVELOPMENT ENGINEER
633
FHWA

6
S.D.D. 8 F 1-11



EYE BOLTS AND TIE ROD



(CAST-IN-PLACE THREADED INSERT)

LONGITUDINAL SECTIONS

EYE BOLT AND TIE ROD ASSEMBLY (ALTERNATE NO. 1)

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS, AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

CONCRETE CULVERT AND STORM SEWER PIPE SHALL BE TIED TOGETHER IN THE MANNER ILLUSTRATED BY THIS DETAIL AT LOCATIONS DESIGNATED IN THE STANDARD SPECIFICATIONS AND THE PLAN. THE CONTRACTOR MAY USE EITHER ALTERNATE 1, 2 OR 3 FOR DRAINAGE STRUCTURES. ONLY ALTERNATE 1 AND 3 MAY BE USED FOR CATTLE PASSES, UNLESS OTHERWISE STATED IN THE CONTRACT. THE MATERIALS, FABRICATION AND WORK NECESSARY TO TIE THE PIPE BY THIS DETAIL WILL BE CONSIDERED INCIDENTAL TO THE PIPE AND APRON ENDWALLS IF REQUIRED.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR JOINT TIES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

JOINT TIES TO BE HOT-DIP GALVANIZED PER ASTM A 153.

① ℄ OF TONGUE AND GROOVE OR BELL AND SPIGOT JOINTS.

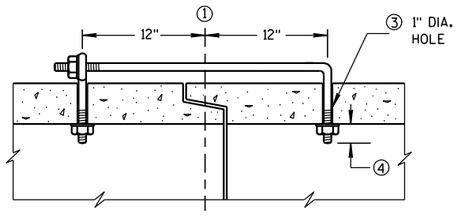
② THE INSIDE OF THE THREADED INSERTS SHALL BE CLEAN TO ALLOW THE INSERTION OF THREADED EYE BOLTS.

③ HOLES SHALL BE CAST-IN-PLACE OR DRILLED 12 INCHES FROM ℄ OF TONGUE AND GROOVE.

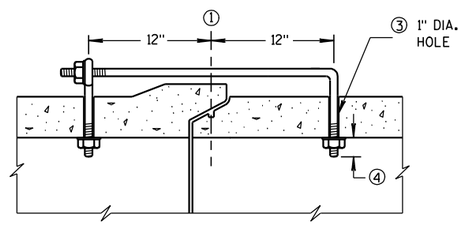
④ BOLT PROJECTION INSIDE OF PIPE SHALL NOT EXCEED 2 INCHES.

⑤ OPENING TO BE ROD DIAMETER PLUS 1 INCH.

⑥ LENGTH ADEQUATE TO EXTEND TO WITHIN 1/2 INCH OF THE INNER SURFACE OF THE PIPE.



(TONGUE & GROOVE PIPE)

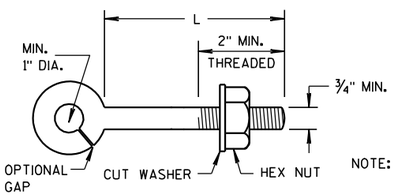


(MODIFIED BELL PIPE)

LONGITUDINAL SECTION

EYE BOLT DIMENSION TABLE

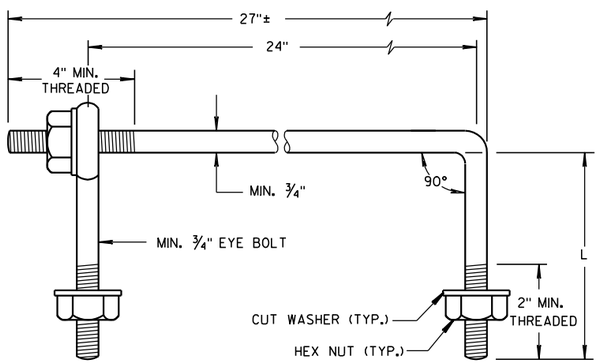
PIPE SIZE	L = LENGTH	
	TONGUE & GROOVE PIPE	MODIFIED BELL PIPE
18" TO 24"	4 1/2"	6 1/4"
30"	5"	7"
36"	5 1/2"	7"
42"	6"	
48"	6 1/2"	
60"	7 1/2"	
66"	8"	



NOTE:

EYE BOLT

NOTE: TWO EYE BOLTS MAY BE USED WITH A 30" LONG THREADED ROD IN LIEU OF THE 90° BENT TIE ROD.



EYE BOLT AND TIE ROD

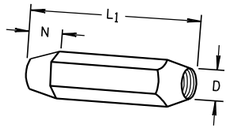
(JOINT TIES FOR 18" TO 66" DIA. CONCRETE PIPE)

EYE BOLT AND TIE ROD ASSEMBLY (ALTERNATE NO. 2)

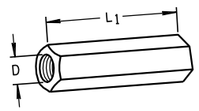
ADJUSTABLE TIE ROD TABLE

PIPE DIAMETER	TIE ROD DIAMETER	D	L_1	N
12-60	5/8	5/8	5	1/2
66-84	3/4	3/4	5	1/2
90-108	1	1	7	1 1/16

DIMENSIONS SHOWN ARE IN INCHES



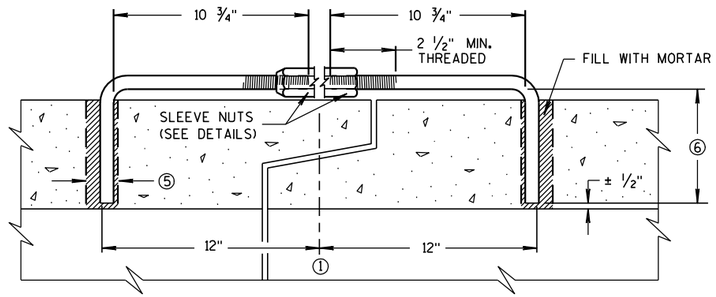
TAPERED



PLAIN

RIGHT AND LEFT THREADS

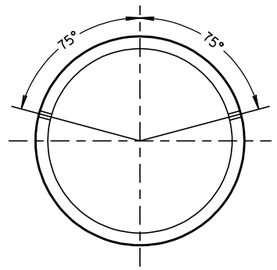
SLEEVE NUTS



LONGITUDINAL SECTION

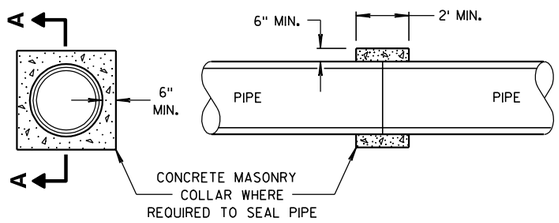
(JOINT TIES FOR 12" TO 108" DIA. CONCRETE PIPE)

ADJUSTABLE TIE ROD (ALTERNATE NO. 3)



PLACEMENT OF (2) CAST-IN-PLACE INSERTS OR HOLES DURING FABRICATION FOR PIPE SECTIONS REQUIRING TIE RODS

TRANSVERSE SECTION



SECTION A-A

CONCRETE COLLAR DETAIL

JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

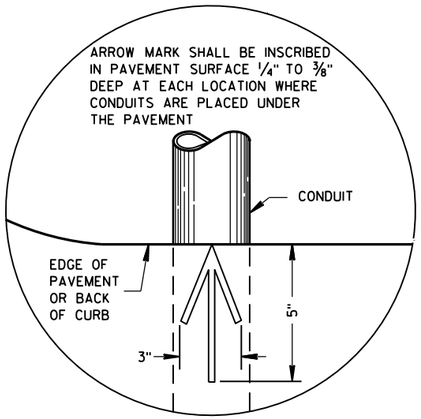
APPROVED
6/5/2012 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER
634
FHWA

6

S.D.D. 8 F 4-7

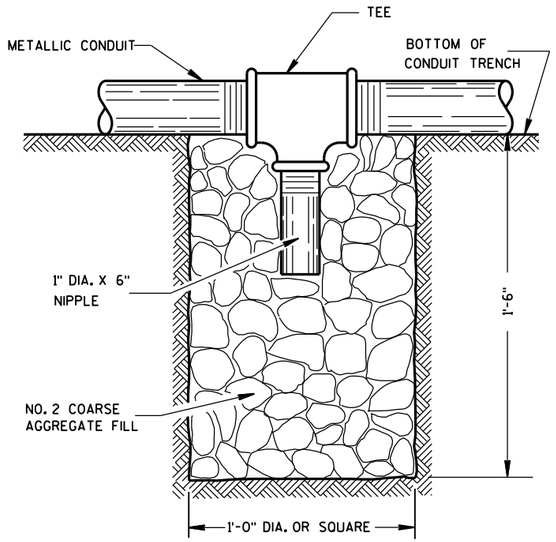
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S.D.D. 8 F 4-7



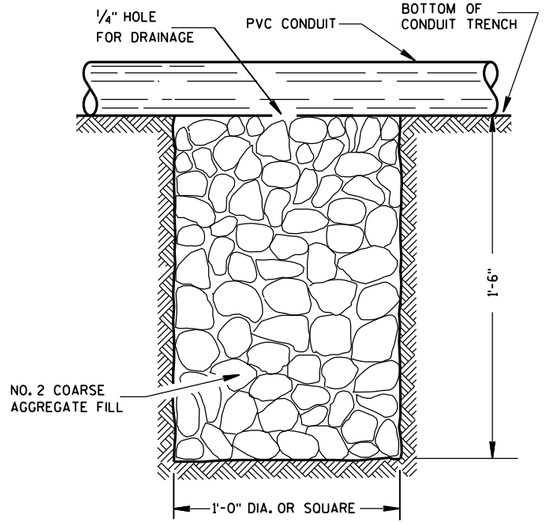
PLAN VIEW

ARROW MARK



NOTE: INSTALL AT LOCATIONS WHERE METALLIC CONDUITS CANNOT BE PITCHED TO DRAIN INTO A PULL BOX.

DRAIN SUMP FOR METALLIC CONDUIT



NOTE: INSTALL AT LOCATIONS WHERE PVC CONDUITS CANNOT BE PITCHED TO DRAIN INTO A PULL BOX.

DRAIN SUMP FOR PVC CONDUIT

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

METALLIC (STANDARD SPECIFICATION 652.2.2) OR NONMETALLIC (STANDARD SPECIFICATION 652.2.3) CONDUIT SHALL BE FURNISHED AND PLACED AS SHOWN.

DEPTH OF CONDUIT INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES MINIMUM AND 36 INCHES MAXIMUM.

DEPTH OF CONDUIT INSTALLED THAT IS NOT BELOW THE TRAVELED WAY SHALL BE 18 INCHES MINIMUM AND 36 INCHES MAXIMUM.

ANY EXCEPTION TO THE MAXIMUM DEPTH SHALL BE ONLY WITH THE WRITTEN APPROVAL OF THE ENGINEER.

THE TRENCH SHALL NOT BE BACKFILLED PRIOR TO INSPECTION OF THE CONDUIT.

ALL METALLIC CONDUIT RACEWAY ENDS SHALL BE REAMED AND THREADED.

ALL METALLIC CONDUIT IN WHICH WIRE OR CABLE IS TO BE INSTALLED SHALL BE BUSHED WITH APPROVED THREADED BUSHINGS BEFORE INSTALLATION OF THE WIRE OR CABLE.

ALL METALLIC CONDUITS IN WHICH WIRE OR CABLE IS NOT TO BE INSTALLED SHALL BE CAPPED WITH THREADED PROTECTIVE CAPS, AS APPROVED BY THE ENGINEER.

ALL NONMETALLIC CONDUIT SHALL BE CAPPED OR PLUGGED IMMEDIATELY AFTER INSTALLATION AND SHALL REMAIN CAPPED OR PLUGGED UNTIL WIRE/CABLES ARE INSTALLED.

NONMETALLIC CONDUITS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

BENDING OF PVC ELECTRICAL CONDUIT SHALL BE ACCOMPLISHED BY USING A BLANKET OR EMERSION TYPE TANK DESIGNED FOR THE PURPOSE OF BENDING PVC ELECTRICAL CONDUIT.

ALL CUT ENDS SHALL BE TRIMMED INSIDE AND OUTSIDE TO REMOVE ALL ROUGH EDGES ON NONMETALLIC CONDUIT. (SEE NEC 347.5)

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY U.L. LISTED ADAPTER FITTINGS SHALL BE USED.

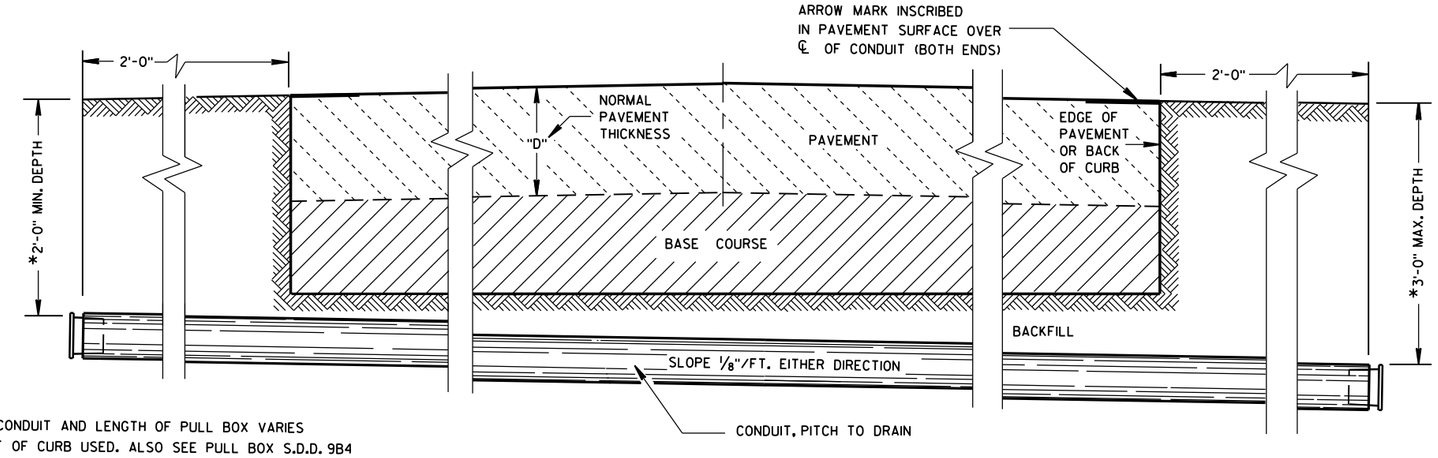
PRIOR TO CONDUIT ACCEPTANCE, CONDUIT CAPS OR PLUGS SHALL BE REMOVED, AND THE CAPS, PLUGS AND CONDUIT ENDS SHALL BE THOROUGHLY CLEANED AND THEN THE CAPS OR PLUGS REINSTALLED TO ENSURE THAT THE CAPS OR PLUGS CAN BE EASILY REMOVED IN THE FUTURE.

ALL CONDUIT BEING FURNISHED AND INSTALLED SHALL HAVE THE U.L. LABEL FIRMLY ATTACHED.

CONDUIT RUNS SHALL BE THE SAME SIZE OF CONDUIT FROM ONE END TO THE OTHER (FROM PULL BOX TO PULL BOX-OR-JUNCTION BOX TO JUNCTION BOX-OR-BASE TO BASE, ETC.).

POLY ROPE OR A PULL WIRE SHALL BE INSTALLED AS STATED IN THE STANDARD SPECIFICATION, ITEM 652.3.1.1.

ALL CONDUIT RUNS SHALL BE STRAIGHT (WITHOUT BENDS) FROM PULL BOX TO PULL BOX, PULL BOX TO BASE AND BASE TO BASE AS SHOWN ON THE PLANS.



*DEPTH OF CONDUIT AND LENGTH OF PULL BOX VARIES WITH HEIGHT OF CURB USED. ALSO SEE PULL BOX S.D.D. 9B4

SIDE ELEVATION

DETAIL FOR CONDUIT UNDER PAVED HIGHWAYS

CONDUIT UNDER PAVED HIGHWAYS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

Sept. 2014 — DATE

/S/ Ahmet Demirbilek — STATE ELECTRICAL 635

FHWA

6

S.D.D. 9 B 2-8

6

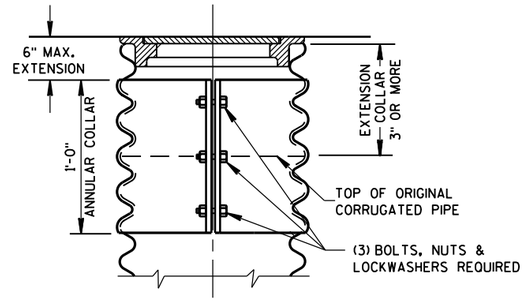
S.D.D. 9 B 2-8

TABLE OF NOMINAL DIMENSIONS AND WEIGHTS

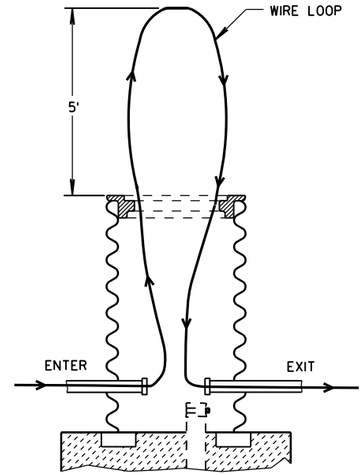
DIMENSION IN INCHES		CORRUGATED STEEL PIPE								
PIPE DIAMETER (INSIDE)	A	12	12	12	18	18	18	24	24	24
PIPE LENGTH **	B	24	30	36	24	30	36	36	42	48
WALL THICKNESS	C	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064
COVER	D	10 1/4	10 1/4	10 1/4	16 1/4	16 1/4	16 1/4	22 1/4	22 1/4	22 1/4
FRAME	E	14 1/2	14 1/2	14 1/2	20 1/2	20 1/2	20 1/2	26 1/2	26 1/2	26 1/2
FRAME	F	8 1/2	8 1/2	8 1/2	14 1/2	14 1/2	14 1/2	20 1/2	20 1/2	20 1/2
FRAME	G	11 1/2	11 1/2	11 1/2	17 1/2	17 1/2	17 1/2	23 1/2	23 1/2	23 1/2
WEIGHT IN POUNDS *										
FRAME AND COVER		60	60	60	110	110	110	155	155	155

* THE ACTUAL WEIGHT OF THE MANHOLE FRAME AND COVER MAY VARY WITHIN 5 PERCENT PLUS OR MINUS OF THE WEIGHTS SHOWN.

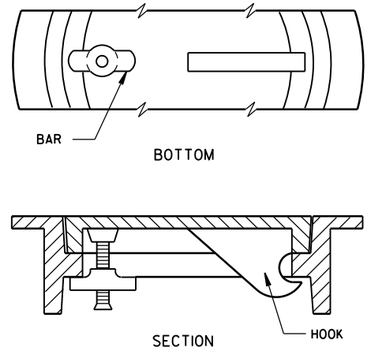
** NORMALLY USED LENGTHS. THE PROJECT ENGINEER SHALL DETERMINE IF PIPE LENGTHS, OTHER THAN THOSE SPECIFIED, SHALL BE USED, TO A MAXIMUM OF 48" (CONTINUOUS LENGTH, NON-SPLICED). THE ADDITIONAL LENGTH SHALL BE INCIDENTAL TO THE PULL BOX BID PRICE.



CORRUGATED PIPE EXTENDER

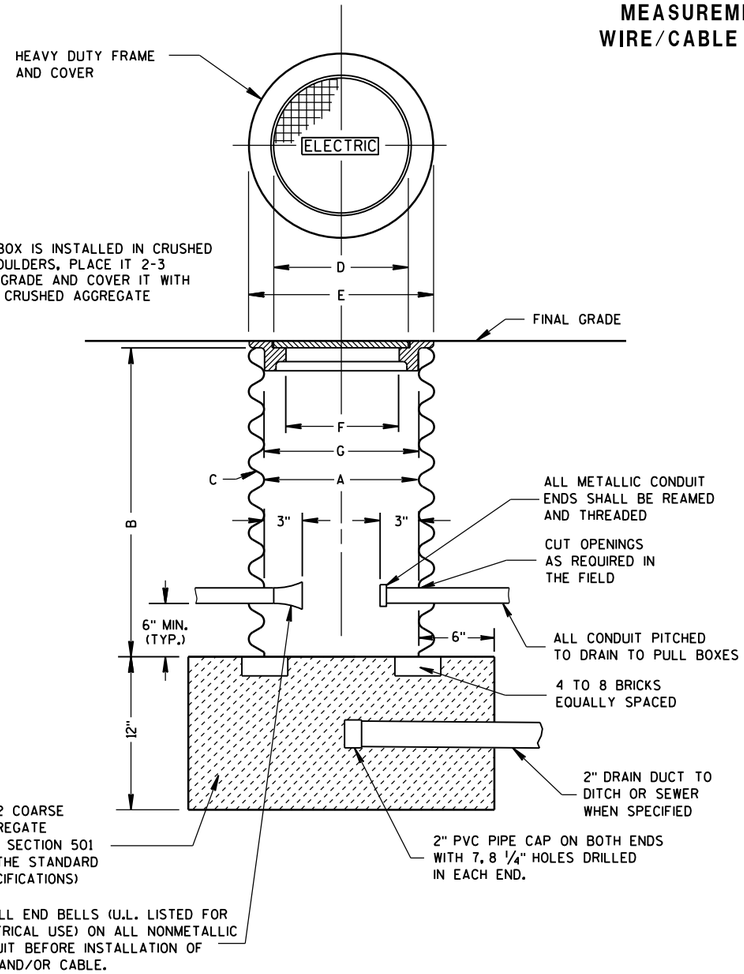


MEASUREMENT DETAIL FOR WIRE/CABLE IN THE PULL BOX



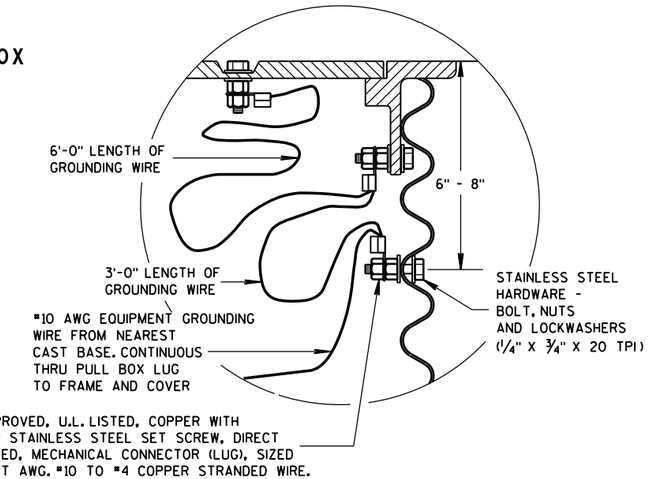
ALTERNATE COVER (LOCKING)

TIGHTENING BAR TYPE



WHEN A PULL BOX IS INSTALLED IN CRUSHED AGGREGATE SHOULDERS, PLACE IT 2-3 INCHES BELOW GRADE AND COVER IT WITH 2-3 INCHES OF CRUSHED AGGREGATE

PULL BOX



EQUIPMENT GROUNDING LUG AND LOCATION IN STEEL PULL BOXES

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

ALL FRAMES AND COVERS SHALL BE HEAVY DUTY TYPE, SUITABLE FOR VEHICULAR TRAFFIC LOADS.

PULL BOXES LOCATED IN THE ROADWAYS SHALL HAVE LOCKING COVERS.

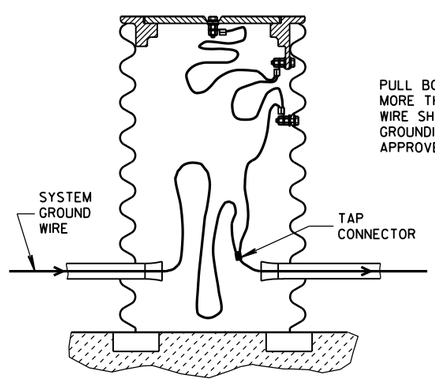
ENTRANCE HOLES INTO PULL BOXES SHALL BE CUT WITH A CIRCULAR HOLE SAW OR HYDRAULIC CONDUIT PUNCH. HOLE SIZE SHALL BE THE OUTSIDE DIAMETER OF THE CONDUIT THAT IS TO FIT IN THE OPENING PLUS NO MORE THAN 1/4".

THE CONTRACTOR SHALL NOT INSTALL WIRE IN ANY PULL BOX UNTIL ITS INSTALLATION HAS BEEN INSPECTED AND ACCEPTED BY THE ENGINEER.

GROUNDING LUGS (MECHANICAL CONNECTORS) SHALL BE U.L. LISTED AND APPROVED FOR USE WITH COPPER WIRE.

ALL METALLIC CONDUIT IN WHICH WIRE AND/OR CABLE IS TO BE INSTALLED, SHALL BE BUSHED BEFORE INSTALLATION OF THE WIRE AND/OR CABLE.

WHEN PULL BOXES ARE INSTALLED FOR FUTURE USE, DO NOT INSTALL THE EQUIPMENT GROUNDING LUG. THE EQUIPMENT GROUNDING LUG, THE EQUIPMENT GROUNDING ELECTRODE AND THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE REQUIRED AND INSTALLED UNDER A FUTURE WIRING CONTRACT.



PULL BOX TO NEAREST BASE DISTANCE MORE THAN 20 FEET. PULL BOX GROUND WIRE SHALL CONNECT AT SYSTEM GROUNDING WIRE. USE DEPARTMENT APPROVED TAP CONNECTOR.

EQUIPMENT GROUNDING LUG AND LOCATION IN STEEL PULL BOXES

PULL BOX

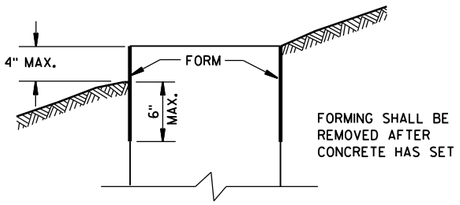
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014
DATE
/S/ Ahmet Demirbilek
STATE ELECTRICAL 636
FHWA

6

S.D.D. 9 B 4-11

FORM DEPTH SHALL BE NO MORE THAN 6" BELOW GRADE ON THE LOWER SIDE OF BASE



FORMING DETAIL

QUANTITY REQUIREMENTS	CONCRETE BASE TYPE		
	1	2	5 & 6
APPROX. CUBIC YARDS OF CONCRETE	0.40	0.57	0.40
LBS. OF HOOP BAR STEEL	NONE	23	16
LBS. OF VERTICAL BAR STEEL	NONE	60	18

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

BASES SHALL BE EXCAVATED BY USE OF A CIRCULAR AUGER.

TOP SURFACES OF CONCRETE BASES SHALL BE TROWEL FINISHED SMOOTH AND LEVEL.

CONDUIT SIZES AND LOCATIONS SHALL BE AS SHOWN ON THE PLANS.

THE FINAL OR TERMINATING CONCRETE BASE IN A CONDUIT RUN SHALL HAVE A 6" EXIT STUB INSTALLED FOR FUTURE CABLING USE. THE EXIT STUB SHALL BE SIZED AS USED THROUGHOUT THE CONDUIT RUN AS SHOWN AT THE ENTRANCE OF THE BASE.

MINIMUM BENDING RADIUS OF CONDUIT IS EQUAL TO 6 X THE DIAMETER.

CONDUIT HEIGHT ABOVE CONCRETE BASES SHALL BE 1 INCH. ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED.

ALL CONDUIT ENDS AT THE TOP OF CONCRETE BASES SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUITS IN WHICH WIRE OR CABLE IS NOT INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

GENERAL NOTES (CONTINUED)

BELL ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF CONCRETE BASES BEFORE INSTALLATION OF CABLE OR WIRE.

ENDS OF CONDUIT INSTALLED BELOW GRADE FOR FUTURE USE SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC.

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS, U.L. LISTED FOR ELECTRICAL USE, SHALL BE USED.

IF A BASE REQUIRES A DEEP FORM BECAUSE OF LOOSE DIRT OR FILL, THE FORM SHALL BE REMOVED BEFORE BACKFILLING AROUND THE BASE. BACKFILL SHALL BE TAMPED TIGHT AGAINST THE BARE CONCRETE BASE IN LAYERS OF 1 FOOT OR LESS.

A NO. 4 AWG, STRANDED COPPER EQUIPMENT GROUNDING CONDUCTOR SHALL BE EXOTHERMICALLY WELDED TO THE EQUIPMENT GROUNDING ELECTRODE (GROUND ROD) FOR TYPE 1, TYPE 2, TYPE 5, AND TYPE 6 BASES.

THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE FURNISHED AND INSTALLED TO ENTER THE BASE OF THE TYPE 2 AND TYPE 5 BASES THROUGH A 1 INCH CONDUIT INSTALLED FOR GROUNDING PURPOSES, LEAVING A 4 FOOT COIL OF WIRE ABOVE THE CONCRETE BASE. THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE NEATLY COILED AND THE COILS TIED TOGETHER.

ANCHOR RODS SHALL BE THREADED 12" IN LENGTH ON EACH END OF THE ROD. ANCHOR RODS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 654.2.1 OF THE STANDARD SPECIFICATIONS.

WASHERS AND LOCK WASHERS ARE REQUIRED ON ALL ANCHOR RODS.

WHEN ANCHOR RODS USING THE ALTERNATE "L" BEND ARE FURNISHED, THE 4" "L" BEND SHALL BE IN ADDITION TO THE SPECIFIED ANCHOR ROD BAR LENGTH. THE "L" BEND END SHALL NOT BE THREADED.

ANCHOR RODS SHALL BE INSTALLED WITH MISALIGNMENTS OF LESS THAN 1:40 FROM VERTICAL.

WELDING OF THE ANCHOR RODS TO THE CAGE IS UNACCEPTABLE. TIE WIRES SHALL BE USED.

BAR STEEL REINFORCEMENT SHALL BE COATED WITH POWDERED EPOXY RESIN IN ACCORDANCE WITH SECTION 505 OF THE STANDARD SPECIFICATIONS (LATEST EDITION).

(1) THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE AND INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES. THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE THAT IS NOT INSTALLED BELOW THE TRAVELED WAY SHALL BE 18 INCHES. THE MAXIMUM DEPTH OF ALL CONDUIT SHALL BE 36 INCHES EXCEPT WITH WRITTEN APPROVAL BY THE ENGINEER.

(2) (4) 1" DIA. X 3'-6" ANCHOR RODS.

(3) (4) 1" DIA. X 5'-0" ANCHOR RODS.

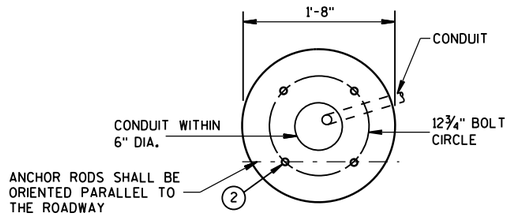
(4) (6) NO. 6 X 6'-8" BAR STEEL REINFORCEMENT.

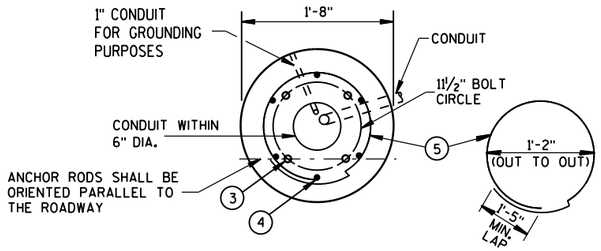
(5) (7) NO. 4 X 5'-1" BAR STEEL REINFORCEMENT @ 1'-0" C-C.

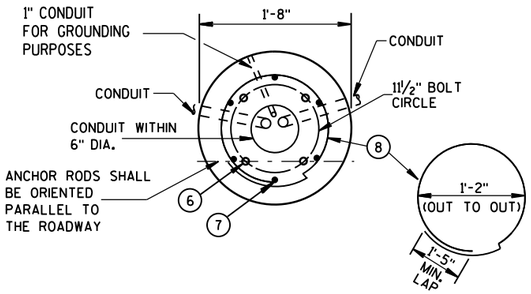
(6) (4) 1" DIA. X 3'-6" ANCHOR RODS.

(7) (6) NO.4 X 4'-8" BAR STEEL REINFORCEMENT.

(8) (5) NO. 4 X 5'-1" BAR STEEL REINFORCEMENT @ 1'-0" C-C.



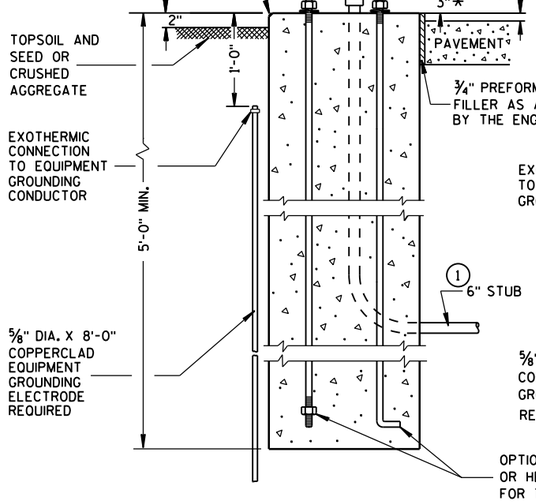




FORM ALL EXPOSED CONCRETE. PROVIDE 1" CHAMFER ALL AROUND

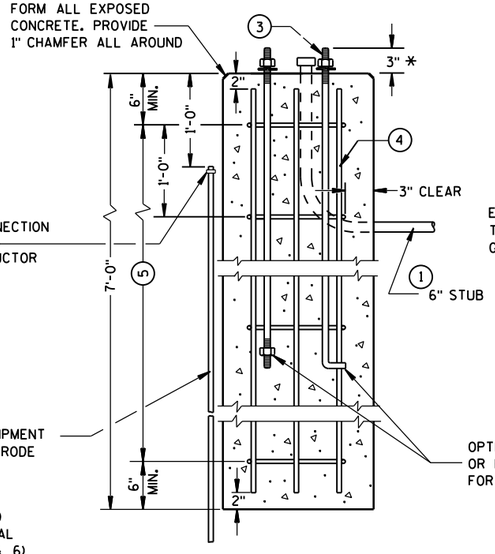
HALF SECTION IN UNPAVED AREA

(TYPICAL FOR TYPES 1, 2, 5, & 6)

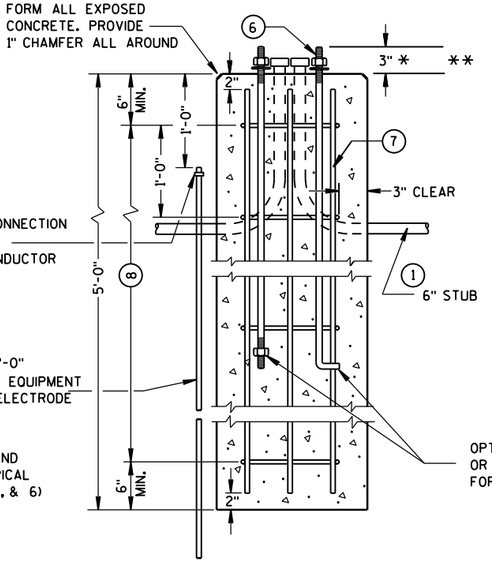


HALF SECTION IN PAVEMENT

(TYPICAL FOR TYPES 1, 2, 5, & 6)



TYPE 2



TYPE 5 & 6

CONCRETE BASES

* ANY ANCHOR ROD PROJECTION SHORTER THAN 2¾" OR LONGER THAN 3¼" SHALL REQUIRE THE BASE TO BE REMOVED AND REPLACED AT THE CONTRACTORS EXPENSE.

** FOR NONBREAKAWAY INSTALLATIONS, 4½" ± ANCHOR ROD PROJECTION WITH THE USE OF LEVELING NUTS. RODENT SCREEN REQUIRED.

CONCRETE BASES, TYPES 1, 2, 5, & 6

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

6
S.D.D. 9 C 2-7

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

FOUR (4) BOLTS SHALL BE FURNISHED WITH EACH TRANSFORMER BASE. BOLTS SHALL BE 1" DIAMETER, 4" IN LENGTH, WITH WASHERS, LOCK WASHERS AND NUTS. BOLTS, NUTS AND WASHERS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 641.2.2 OF THE STANDARD SPECIFICATIONS.

LEVELING SHIMS, IF NEEDED, SHALL BE DESIGNED FOR THE PURPOSE AND USED UNDER CAST BASES WHEN PLUMBING POLES OR STANDARDS DURING INSTALLATION. THE USE OF WASHERS IN LIEU OF PROPER LEVELING SHIMS IS NOT ACCEPTABLE.

SHIM LENGTH SHALL BE LONG ENOUGH TO COMPLETELY COVER THE AREA UNDER THE LENGTH AND WIDTH OF THE BASE MOUNTING FLANGE.

DOUBLE NUTTING IS NOT ACCEPTABLE FOR LEVELING OR MOUNTING PURPOSES.

A NEMA APPROVED, U.L. LISTED, COPPER WITH BRASS OR STAINLESS STEEL SET SCREW, DIRECT BURY RATED, MECHANICAL CONNECTOR (LUG), SIZED TO ACCEPT AWG. #10 TO #4 COPPER STRANDED WIRE SHALL BE FURNISHED AND INSTALLED IN THE PEDESTAL AND TRANSFORMER BASES.

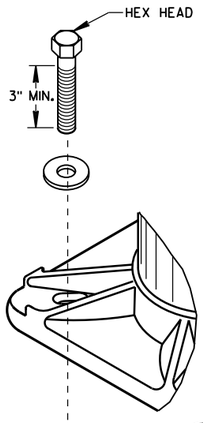
THE MECHANICAL CONNECTOR SHALL BE INSTALLED USING A 1/4" - 20 (TPI) STAINLESS STEEL HEX HEAD BOLT OF SUFFICIENT LENGTH TO FIRMLY ATTACH THE LUG TO THE BASE.

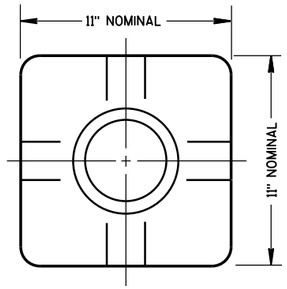
SHOULD THE MANNER OF ATTACHMENT OF THE LUG REQUIRE WASHERS, HEX NUTS, LOCK WASHER - THEY SHALL BE STAINLESS STEEL AS IS THE BOLT. THE MANNER OF ATTACHMENT SHALL NOT BLOCK ACCESSIBILITY TO WIRE PLACEMENT IN THE CONNECTOR.

PEDESTAL BASE COLLAR THREADING SHALL BE TAPERED AND IN ACCORDANCE WITH NATIONAL PIPE THREADING DIMENSIONS.

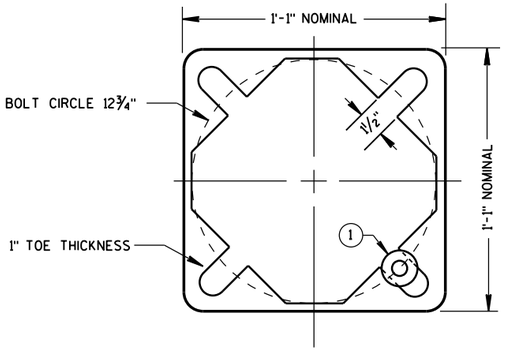
BASE COLLAR THREADING SHALL EXTEND INTO THE BASE COLLAR WITH SUFFICIENT DEPTH TO ACCEPT THE INSTALLATION OF TRAFFIC SIGNAL STANDARDS TO A DEPTH OF 1 1/2", THEN TIGHTENING TO A POINT OF BEING IMMOVABLE.

THE ACCESS DOOR SHALL BE OF THE SAME MATERIAL AS THE BASE.

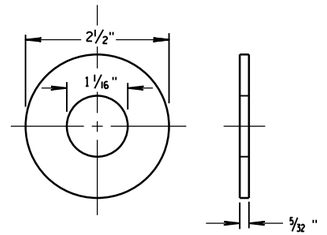




TOP VIEW
(PEDESTAL BASE)

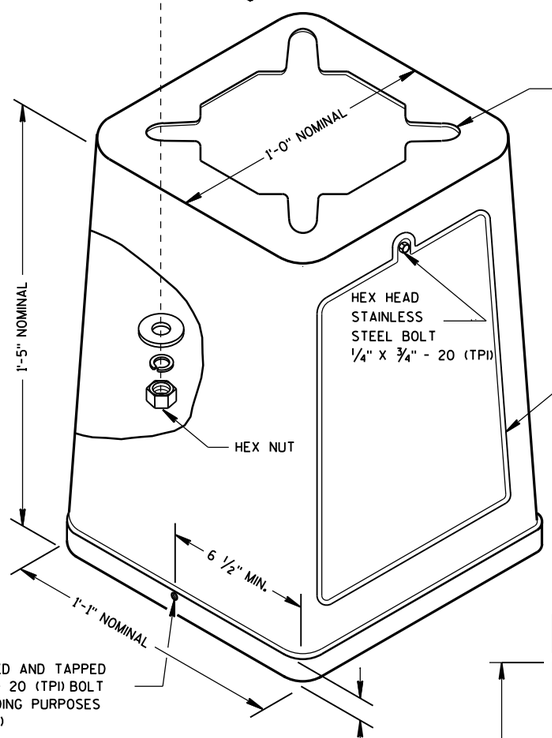


BOTTOM VIEW
(PEDESTAL BASE)

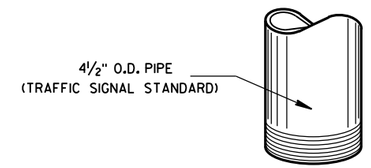


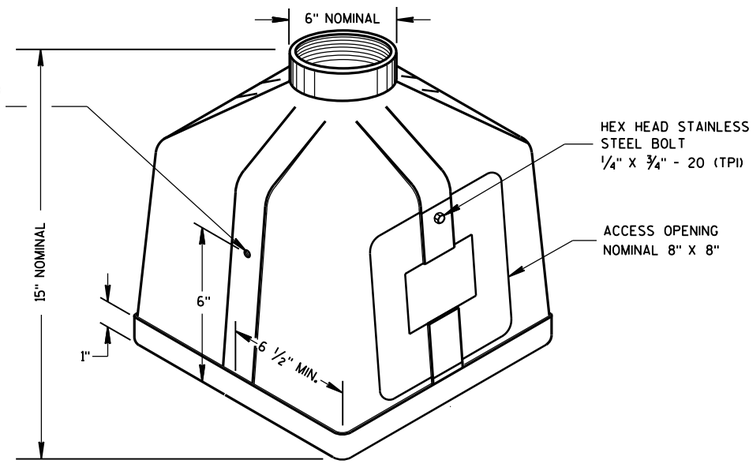
ZINC COATED STEEL WASHER
TO BE PROVIDED BY THE CONTRACTOR

PEDESTAL BASE WASHER (1)



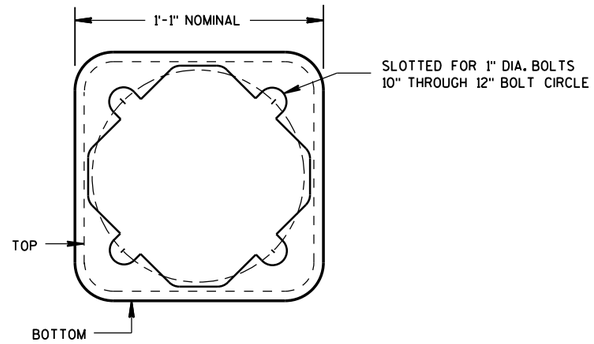
ISOMETRIC VIEW



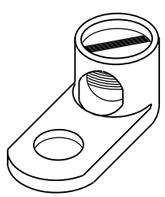


ISOMETRIC VIEW

PEDESTAL BASE



BOTTOM VIEW
(TRANSFORMER BASE)

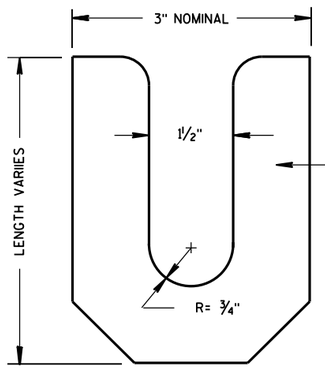


TYPICAL MECHANICAL CONNECTOR LUG

TO BE FURNISHED WITH EACH BASE

TRANSFORMER BASE

INTENDED FOR USE WITH TYPE 2, 3, 4, 5 & 6 POLES



LEVELING SHIM

TRANSFORMER/PEDESTAL BASES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL 638
FHWA

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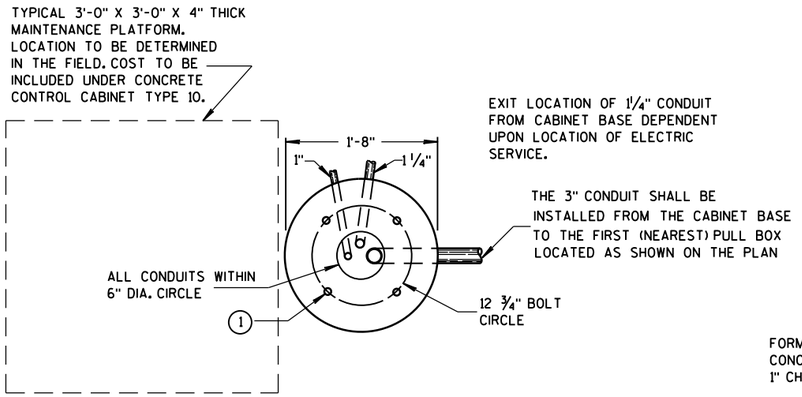
S.D.D. 9 C 3-4

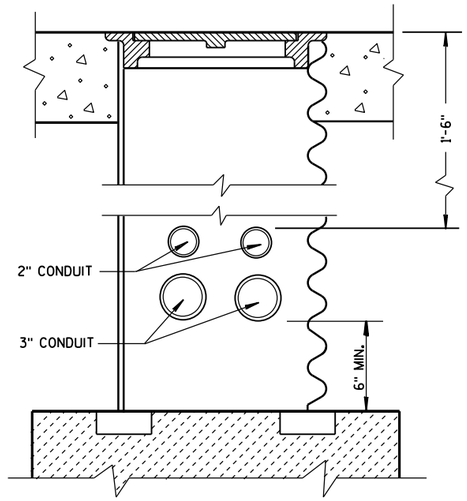
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S.D.D. 9 C 3-4

CONTROL CABINET BASE TYPE	DIMENSIONS				C.Y. CONCRETE (APPROX.)
	H	I	J	K	
TYPE 6 - 30" CABINET	34"	60"	10"	17"	.64
TYPE 7 - 38" CABINET	42"	60"	10"	21"	.93
TYPE 8 - 38" CABINET	42"	72"	12"	21"	1.29
TYPE 9 - VARIABLE	54"	72"	14"	27"	1.56
TYPE 10 - POST MOUNT	AS SHOWN				.65 *

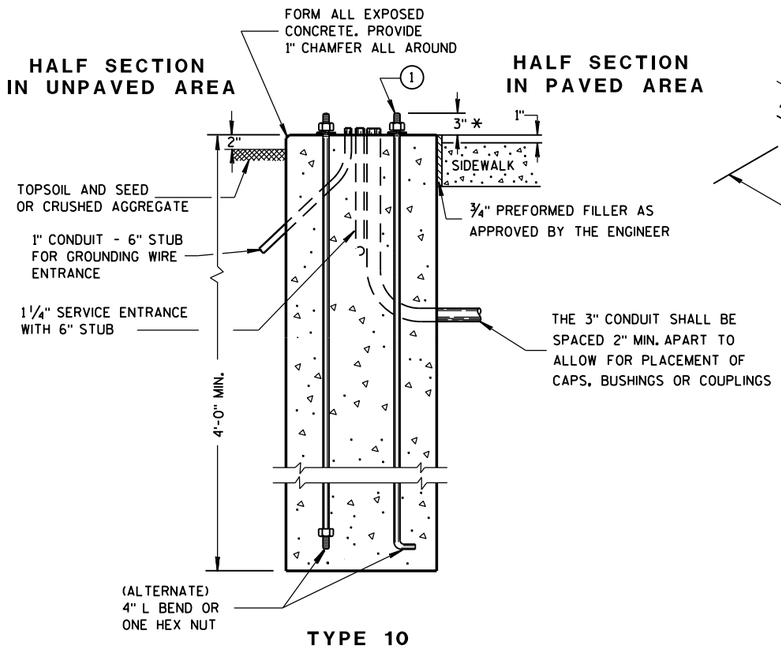
* INCLUDES MAINTENANCE PLATFORM.



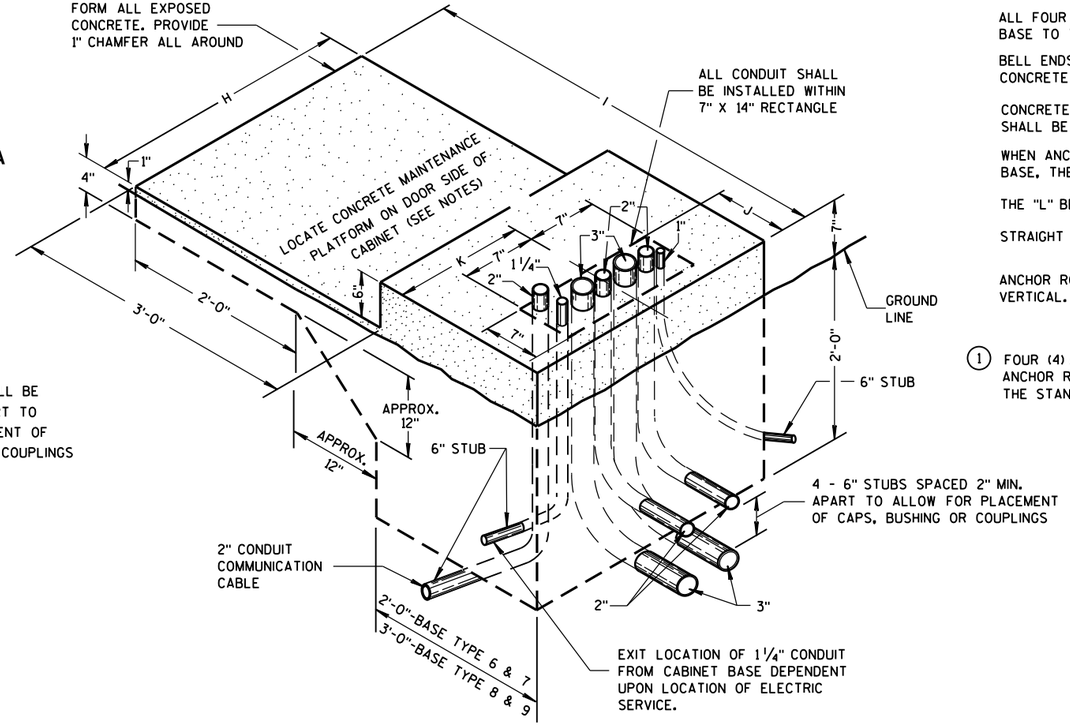


CONDUIT LOCATIONS IN 24" X 36" PULL BOX

(LEADING TO CONTROLLER CABINET BASE TYPE 6, 7, 8 AND 9)



TYPE 10



TYPE 6,7,8 AND 9
(ISOMETRIC VIEW)

* ANY ANCHOR ROD PROJECTION SHORTER THAN 2¾" OR LONGER THAN 3¼" SHALL REQUIRE THE BASE TO BE REMOVED AND REPLACED AT THE CONTRACTORS EXPENSE.

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

INSTALL FOUR ½ INCH MINIMUM DIAMETER X 4 INCH MINIMUM LENGTH APPROVED CONCRETE MASONRY ANCHORS WITH A PULLOUT STRENGTH OF 9,000 LBS. TO ANCHOR THE CABINET TO TYPE 6, 7, 8, AND 9 BASES. THE ANCHOR STUDS SHALL BE LOCATED AS DIRECTED BY THE ENGINEER TO PROPERLY ANCHOR THE CONTROL CABINET TO THE BASE.

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS, U.L. LISTED FOR ELECTRICAL USE, SHALL BE USED.

CONDUIT HEIGHT ABOVE THE CONCRETE BASE SHALL BE 1 INCH.

DEPTH OF CONDUIT INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES MINIMUM AND 36 INCHES MAXIMUM.

DEPTH OF CONDUIT INSTALLED THAT IS NOT BELOW THE TRAVELED WAY SHALL BE 18 INCHES MINIMUM AND 36 INCHES MAXIMUM.

ANY EXCEPTION TO THE MAXIMUM DEPTH SHALL BE ONLY WITH THE WRITTEN APPROVAL OF THE ENGINEER.

CONTROL CABINET BASE TOP SURFACES SHALL BE TROWEL FINISHED SMOOTH AND LEVEL.

WHEN A TYPE 10 CONTROL CABINET BASE IS USED TO POST MOUNT A CONTROL CABINET, A 36" SQUARE 4" THICK CONCRETE MAINTENANCE PLATFORM SHALL BE REQUIRED ON THE DOOR SIDE OF THE CABINET. THE TOP 1 INCH SHALL BE ABOVE FINISHED GRADE AND BE BROOM FINISHED AND LEVEL.

MAINTENANCE PLATFORMS ARE NOT REQUIRED WHEN THE SURROUNDING AREA IS PAVED.

MINIMUM BENDING RADIUS OF CONDUIT = 6 X THE DIAMETER.

ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED.

ALL CONDUIT ENDS AT THE TOP OF CONCRETE BASES SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUITS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

ALL FOUR (TWO INCH AND THREE INCH) CONDUIT SHALL BE INSTALLED FROM THE CABINET BASE TO THE FIRST (NEAREST PULL BOX LOCATED AS SHOWN ON THE PLANS.

BELL ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF THE CONCRETE BASE BEFORE INSTALLATION OF CABLE OR WIRE.

CONCRETE FORM DEPTH BELOW FINISHED GRADE SHALL BE 6" MAXIMUM. CONCRETE FORMS SHALL BE REMOVED AFTER CONCRETE HAS SET.

WHEN ANCHOR RODS USING THE ALTERNATE L BEND ARE FURNISHED FOR THE TYPE 10 BASE, THE 4" L BEND SHALL BE IN ADDITION TO THE SPECIFIED ANCHOR ROD BAR LENGTH.

THE "L" BEND SHALL NOT BE THREADED.

STRAIGHT ANCHOR RODS SHALL BE THREADED 12" IN LENGTH ON EACH END OF THE ROD.

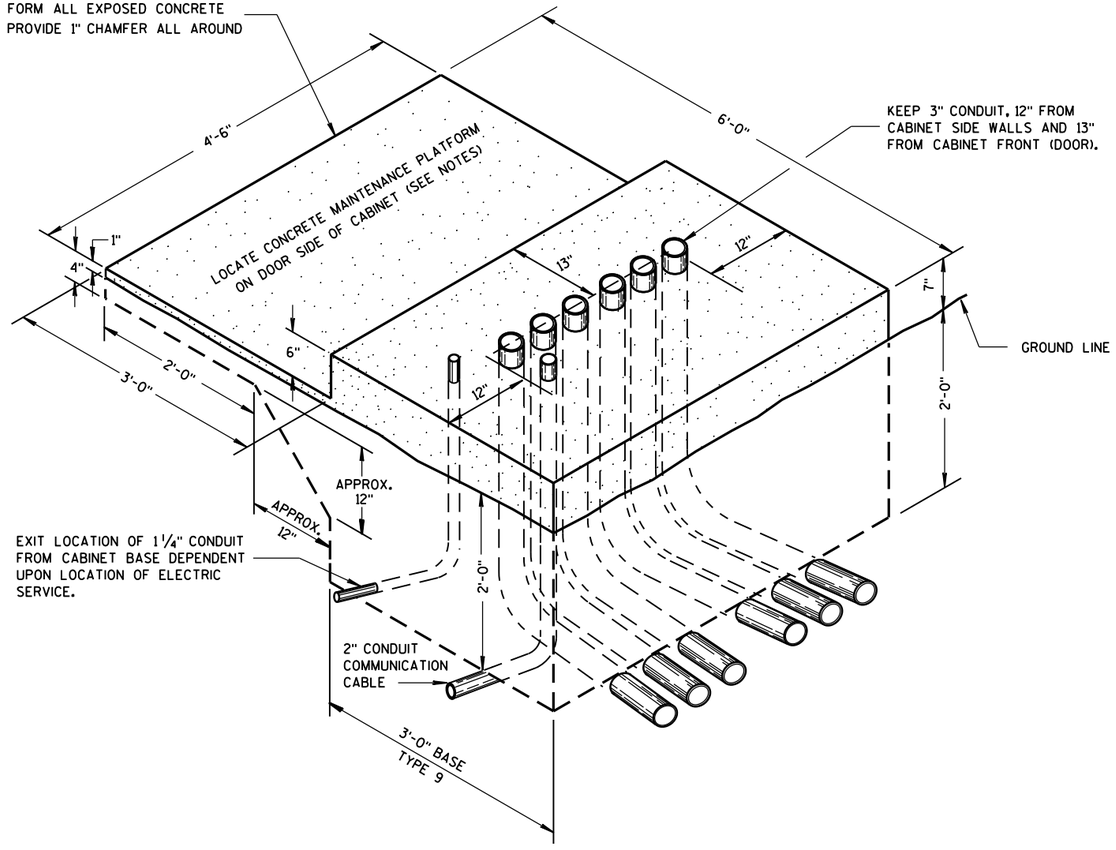
ANCHOR RODS SHALL BE INSTALLED WITH MISALIGNMENTS OF LESS THAN 1:40 FROM VERTICAL.

(1) FOUR (4) ANCHOR RODS, 1" DIA. X 3'-6". ANCHOR RODS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 654.2.1 OF THE STANDARD SPECIFICATIONS.

CONCRETE CONTROL CABINET BASES

CONCRETE CONTROL CABINET BASES	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED	
Sept. 2014 DATE	/S/ Ahmet Demirbilek STATE ELECTRICAL
FHWA	

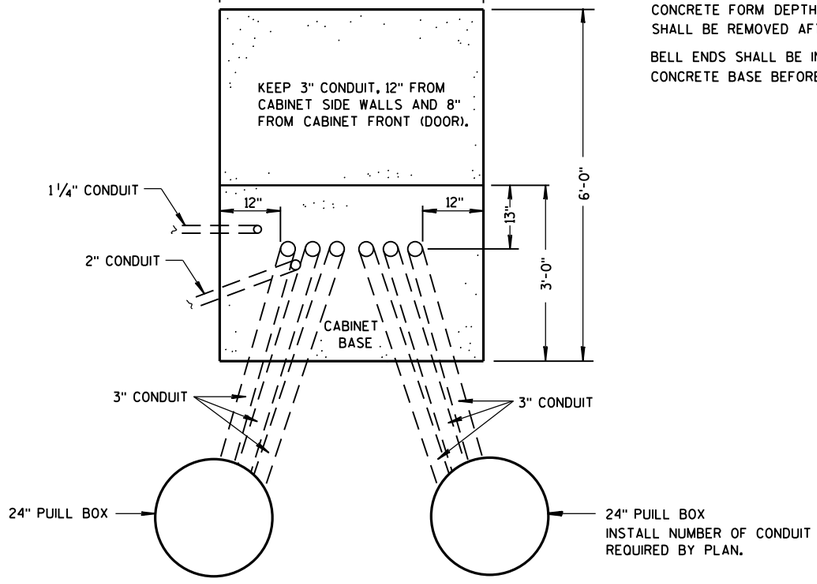
6 S.D.D. 9 C 5-9



ISOMETRIC VIEW

TYPE 9, SPECIAL

(C.Y. CONCRETE = APPROX. 1.56)



PLAN VIEW

CONCRETE CONTROL CABINET BASE, TYPE 9, SPECIAL

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

INSTALL FOUR ½ INCH MINIMUM DIAMETER X 4 INCH MINIMUM LENGTH STAINLESS STEEL APPROVED CONCRETE MASONRY ANCHORS WITH A PULLOUT STRENGTH OF 9,000 LBS. TO ANCHOR THE CABINET TO TYPE 6, 7, 8, AND 9 BASES. THE ANCHOR STUDS SHALL BE LOCATED AS DIRECTED BY THE ENGINEER TO PROPERLY ANCHOR THE CONTROL CABINET TO THE BASE.

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS, U.L. LISTED FOR ELECTRICAL USE, SHALL BE USED.

CONDUIT HEIGHT ABOVE THE CONCRETE BASE SHALL BE 1 INCH.

DEPTH OF CONDUIT INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES MINIMUM AND 36 INCHES MAXIMUM.

DEPTH OF CONDUIT INSTALLED THAT IS NOT BELOW THE TRAVELED WAY SHALL BE 18 INCHES MINIMUM AND 36 INCHES MAXIMUM.

ANY EXCEPTION TO THE MAXIMUM DEPTH SHALL BE ONLY WITH THE WRITTEN APPROVAL OF THE ENGINEER.

CONTROL CABINET BASE TOP SURFACE SHALL BE TROWEL FINISHED SMOOTH AND LEVEL.

MAINTENANCE PLATFORM SHALL BE FLOAT OR BROOM FINISHED AND BE LEVEL.

MAINTENANCE PLATFORMS ARE NOT REQUIRED WHEN THE SURROUNDING AREA IS PAVED.

MINIMUM BENDING RADIUS OF CONDUIT = 6 X THE DIAMETER.

ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED.

CAP ALL BELOW GRADE METALLIC CONDUIT ENDS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED.

PLUG ALL BELOW GRADE NONMETALLIC CONDUIT ENDS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED.

ALL CONDUIT ENDS AT THE TOP OF CONCRETE BASES SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUITS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

CONDUIT EXITING THE CONCRETE BASE (SIX THREE INCH) SHALL TERMINATE IN PULL BOXES AS SHOWN ON THE PLANS.

CONCRETE FORM DEPTH BELOW FINISHED GRADE SHALL BE 6" MAXIMUM. CONCRETE FORMS SHALL BE REMOVED AFTER CONCRETE HAS SET.

BELL ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF THE CONCRETE BASE BEFORE INSTALLATION OF CABLE OR WIRE.

CONCRETE CONTROL CABINET BASE, TYPE 9, SPECIAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL 640
FHWA

6
S.D.D. 9 C 6-7

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

BASES SHALL BE EXCAVATED BY USE OF A CIRCULAR AUGER.

TOP SURFACES OF CONCRETE BASES SHALL BE TROWEL FINISHED SMOOTH AND LEVEL.

CONDUIT SIZES AND LOCATIONS SHALL BE AS SHOWN ON THE PLANS.

THE FINAL OR TERMINATING CONCRETE BASE IN A CONDUIT RUN SHALL HAVE A 6" EXIT STUB INSTALLED FOR FUTURE CABLING USE. THE EXIT STUB SHALL BE SIZED AS USED THROUGHOUT THE CONDUIT RUN AS SHOWN AT THE ENTRANCE OF THE BASE.

MINIMUM BENDING RADIUS OF CONDUIT IS EQUAL TO 6 X THE DIAMETER.

CONDUIT HEIGHT ABOVE CONCRETE BASES SHALL BE 1 INCH. ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED.

ALL CONDUIT ENDS AT THE TOP OF CONCRETE BASES SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUITS IN WHICH WIRE OR CABLE IS NOT INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

BELL ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF CONCRETE BASES BEFORE INSTALLATION OF CABLE OR WIRE.

ENDS OF CONDUIT INSTALLED BELOW GRADE FOR FUTURE USE SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC.

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS, U.L. LISTED FOR ELECTRICAL USE, SHALL BE USED.

IF A BASE REQUIRES A DEEP FORM BECAUSE OF LOOSE DIRT OR FILL, THE FORM SHALL BE REMOVED BEFORE BACKFILLING AROUND THE BASE. BACKFILL SHALL BE TAMPED TIGHT AGAINST THE BARE CONCRETE BASE IN LAYERS OF 1 FOOT OR LESS.

A NO. 4 AWG, STRANDED COPPER EQUIPMENT GROUNDING CONDUCTOR SHALL BE EXOTHERMICALLY WELDED TO THE EQUIPMENT GROUNDING ELECTRODE (GROUND ROD).

THE EQUIPMENT GROUNDING CONDUCTOR SHALL ENTER THE BASE THROUGH A 1 INCH CONDUIT INSTALLED FOR GROUNDING PURPOSES, LEAVING A 4 FOOT COIL OF WIRE ABOVE THE CONCRETE BASE. THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE NEATLY COILED AND THE COILS TIED TOGETHER.

ANCHOR RODS SHALL BE 1" X 60".

ANCHOR RODS SHALL BE THREADED 12" IN LENGTH ON EACH END OF THE ROD. ANCHOR RODS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 654.2.1 OF THE STANDARD SPECIFICATIONS.

WHEN ANCHOR RODS USING THE ALTERNATE "L" BEND ARE FURNISHED, THE 4" "L" BEND SHALL BE IN ADDITION TO THE SPECIFIED ANCHOR ROD BAR LENGTH. THE "L" BEND END SHALL NOT BE THREADED.

WELDING OF THE ANCHOR RODS TO THE CAGE IS UNACCEPTABLE. TIE WIRES SHALL BE USED.

ANCHOR RODS SHALL BE INSTALLED WITH MISALIGNMENTS OF LESS THAN 1:40 FROM VERTICAL.

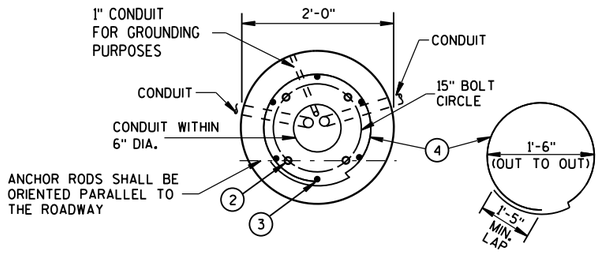
BAR STEEL REINFORCEMENT SHALL BE COATED WITH POWDERED EPOXY RESIN IN ACCORDANCE WITH SECTION 505 OF THE STANDARD SPECIFICATIONS (LATEST EDITION).

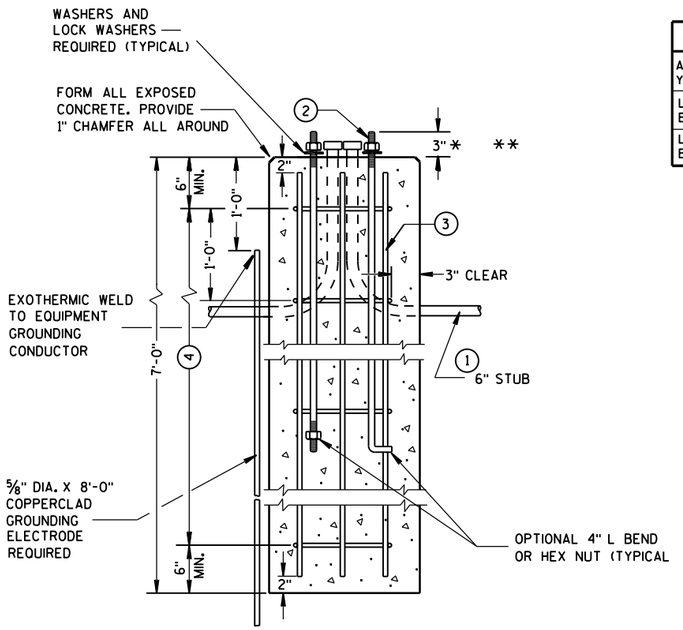
(1) THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE AND INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES. THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE THAT IS NOT INSTALLED BELOW THE TRAVELED WAY SHALL BE 18 INCHES. THE MAXIMUM DEPTH OF ALL CONDUIT SHALL BE 36 INCHES EXCEPT WITH WRITTEN APPROVAL BY THE ENGINEER.

(2) (4) 1" DIA. X 5'-0" ANCHOR RODS.

(3) (6) NO. 6 X 6'-8" BAR STEEL REINFORCEMENT.

(4) (7) NO. 4 X 6'-2" BAR STEEL REINFORCEMENT @ 1'-0" C-C.

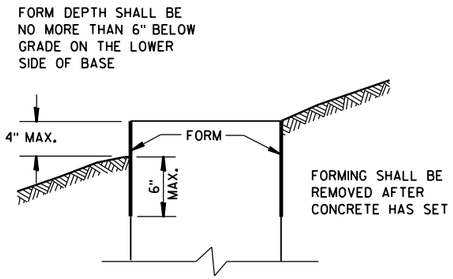




CONCRETE BASE, TYPE 7 (FOR 40' LIGHT POLES)

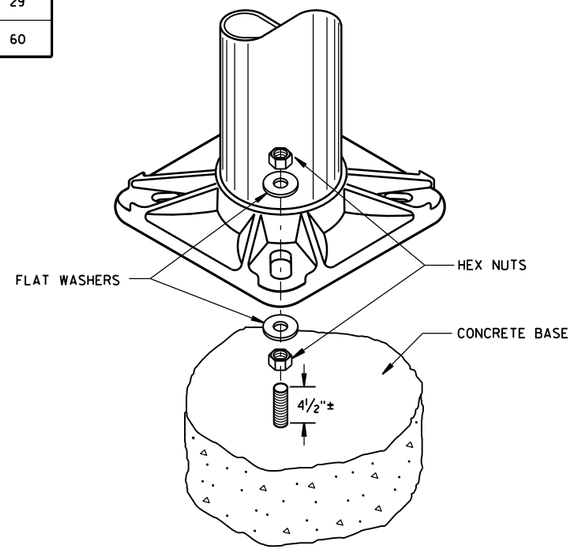
* ANY ANCHOR ROD PROJECTION SHORTER THAN 2¾" OR LONGER THAN 3¼" SHALL REQUIRE THE BASE TO BE REMOVED AND REPLACED AT THE CONTRACTORS EXPENSE.

** FOR NONBREAKAWAY INSTALLATIONS, 4½" ± ANCHOR ROD PROJECTION WITH THE USE OF LEVELING NUTS. RODENT SCREEN REQUIRED.



FORMING DETAIL

QUANTITY REQUIREMENTS	
APPROX. CUBIC YARDS OF CONCRETE	0.8
LBS. OF HOOP BAR STEEL	29
LBS. OF VERTICAL BAR STEEL	60



NON-BREAKAWAY INSTALLATION (LEVELING NUT)

CONCRETE BASE, TYPE 7

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

6
S.D.D. 9 C 8-5

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

BASES SHALL BE EXCAVATED BY USE OF A CIRCULAR AUGER.

TOP SURFACES OF CONCRETE BASES SHALL BE TROWEL FINISHED AND LEVEL.

CONDUIT SIZES AND LOCATIONS SHALL BE AS SHOWN ON THE PLANS.

THE FINAL OR TERMINATING CONCRETE BASE IN A CONDUIT RUN SHALL HAVE A 6" EXIT STUB INSTALLED FOR FUTURE CABLING USE. THE EXIT STUB SHALL BE SIZED AS USED THROUGHOUT THE CONDUIT RUN AS SHOWN AT THE ENTRANCE OF THE BASE.

MINIMUM BENDING RADIUS OF CONDUIT IS EQUAL TO 6 X THE DIAMETER.

CONDUIT HEIGHT ABOVE CONCRETE BASES SHALL BE 4 INCHES. ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED. NONMETALLIC CONDUIT SHALL HAVE BELL END INSTALLED. ALL CONDUIT SHALL BE SLOPED TO PULL BOX.

ALL CONDUIT ENDS AT THE TOP OF CONCRETE BASES SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUIT IN WHICH WIRE OR CABLE IS NOT INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

BELL ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF CONCRETE BASES BEFORE INSTALLATION OF CABLE OR WIRE.

ENDS OF CONDUIT INSTALLED BELOW GRADE FOR FUTURE USE SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC.

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS, U.L. LISTED FOR ELECTRICAL USE, SHALL BE USED.

IF A BASE REQUIRES A DEEP FORM BECAUSE OF LOOSE DIRT OR FILL, THE FORM SHALL BE REMOVED BEFORE BACKFILLING AROUND THE BASE. BACKFILL SHALL BE TAMPED TIGHT AGAINST THE BARE CONCRETE BASE IN LAYERS OF 1 FOOT OR LESS.

A NO. 4 AWG, STRANDED COPPER EQUIPMENT GROUNDING CONDUCTOR SHALL BE EXOTHERMICALLY WELDED TO THE EQUIPMENT GROUNDING ELECTRODE (GROUND ROD).

THE EQUIPMENT GROUNDING CONDUCTOR SHALL ENTER THE BASE THROUGH A 1 INCH CONDUIT INSTALLED FOR GROUNDING PURPOSES, LEAVING A 4 FOOT COIL OF WIRE ABOVE THE CONCRETE BASE. THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE NEATLY COILED AND THE COILS TIED TOGETHER.

WELDING OF THE ANCHOR RODS TO THE CAGE IS UNACCEPTABLE. TEMPLATES SHALL BE USED.

BAR STEEL REINFORCEMENT SHALL BE COATED WITH POWDERED EPOXY RESIN IN ACCORDANCE WITH SECTION 505 OF THE STANDARD SPECIFICATIONS (LATEST EDITION).

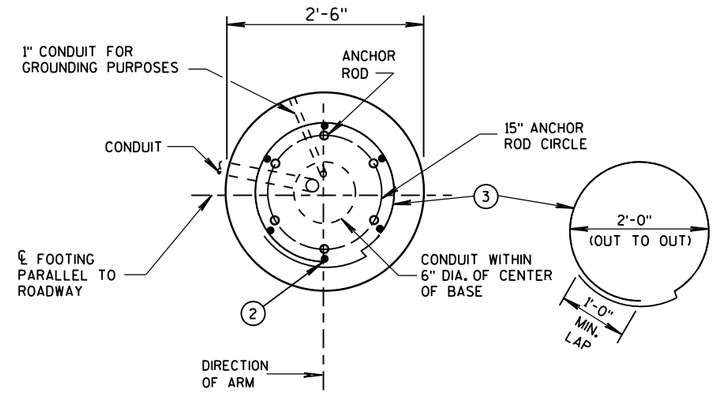
ANCHOR RODS SHALL BE INSTALLED WITH MISALIGNMENTS OF LESS THAN 1:40 FROM VERTICAL.

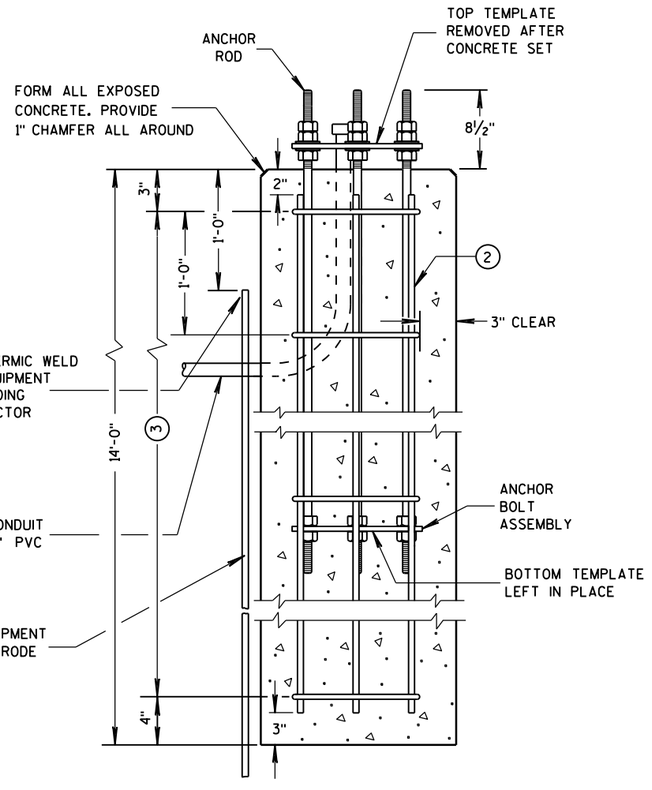
(1) THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE AND INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES. THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE THAT IS NOT INSTALLED BELOW THE TRAVELED WAY SHALL BE 18 INCHES. THE MAXIMUM DEPTH OF ALL CONDUIT SHALL BE 36 INCHES, (GREATER THAN 36 INCHES IF INSTALLED IN BREAKER-RUN), EXCEPT WITH WRITTEN APPROVAL BY THE ENGINEER.

(2) (6) NO. 6 X 13'-7" BAR STEEL REINFORCEMENT.

(3) (15) NO. 4 X 7'-4" BAR STEEL REINFORCEMENT @ 1'-0" C-C.

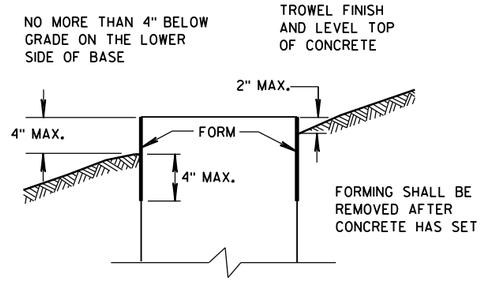
CONCRETE MASONRY	fc=3,500 p.s.i.
HIGH STRENGTH BAR STEEL REINFORCEMENT, GRADE 60	fy=60,000 p.s.i.
ANCHOR RODS, AASHTO M314 GRADE 55	fy=55,000 p.s.i.
TEMPLATES, ASTM, A709 GRADE 36	fy=36,000 p.s.i.



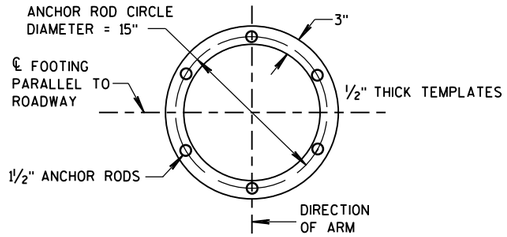


CONCRETE BASE TYPE 10
(FOR TYPE 9 & 10 POLES)

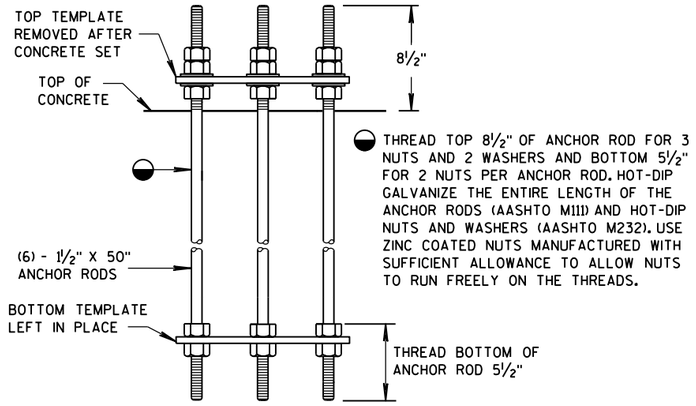
TO BE USED WHEN GROUND ELEVATION AT BASE EQUALS OR IS GREATER THAN HIGH POINT OF ROADWAY ELEVATION. SEE S.D.D. 9C13-2 WHEN GROUND ELEVATION AT BASE IS LOWER THAN HIGH POINT OF ROADWAY ELEVATION.



FORMING DETAIL



TOP AND BOTTOM TEMPLATES



ANCHOR BOLT ASSEMBLY DETAIL

CONCRETE BASE TYPE 10 ANCHOR ASSEMBLY

QUANTITY REQUIREMENTS	
APPROX. CUBIC YARDS OF CONCRETE	2.5
LBS. OF HOOP BAR STEEL	69
LBS. OF VERTICAL BAR STEEL	122

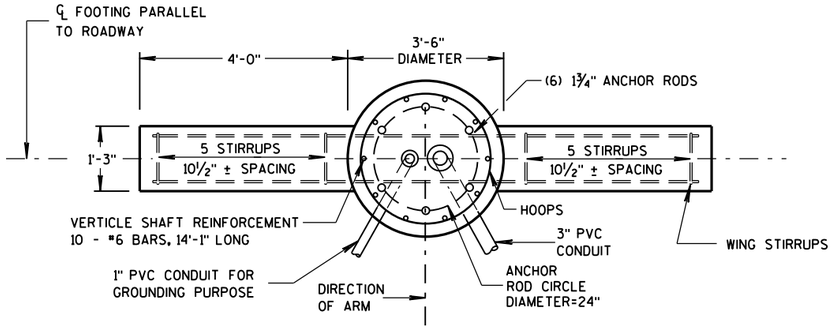
CONCRETE BASE TYPE 10

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

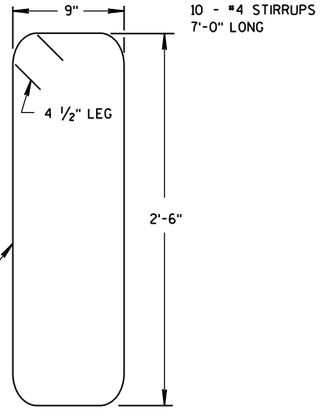
APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

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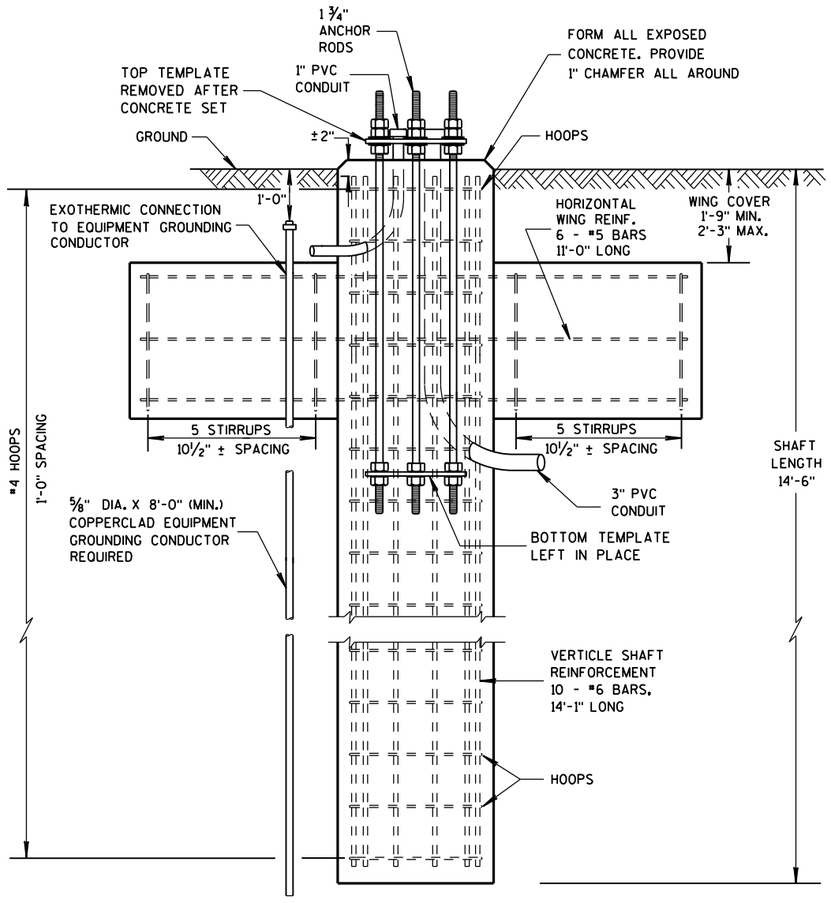
S.D.D. 9 C 11-5



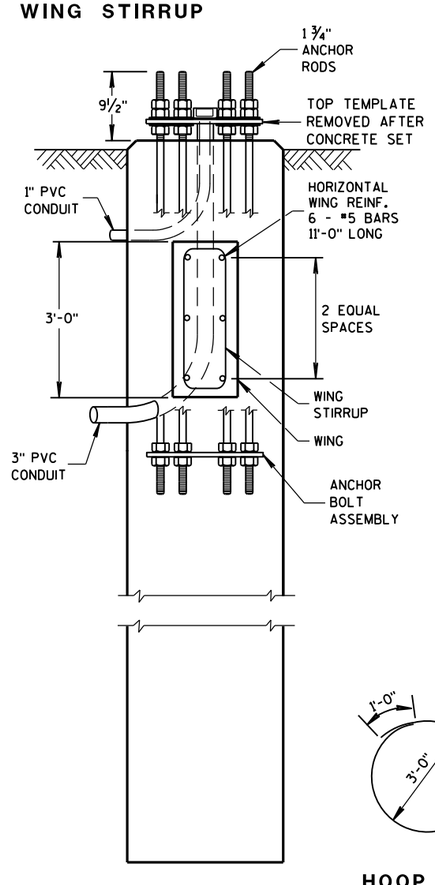
PLAN VIEW



WING STIRRUP

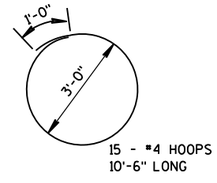


ELEVATION VIEW



SIDE VIEW

DOES NOT SHOW HOOPS OR VERTICAL SHAFT REINFORCEMENT



HOOP DETAIL

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

ORIENT ANCHOR RODS IN FOOTING AND PROVIDE ANCHOR ROD PROJECTION ABOVE TOP OF CONCRETE FOOTING BASE PER THIS SHEET.

BENDING DIMENSIONS FOR REINFORCING BARS ARE OUT TO OUT.

USE 3" CLEAR FOR ALL REINFORCEMENT UNLESS NOTED OTHERWISE.

THE CONTRACTOR IS RESPONSIBLE FOR MAKING HIS OWN DETERMINATION AS TO THE TYPE AND LOCATION OF THE UNDERGROUND UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE THERETO.

WELDING OF ANCHOR RODS TO THE CAGE IS UNACCEPTABLE. TEMPLATES SHALL BE USED.

BASES (SHAFT), BELOW THE WING, SHALL BE EXCAVATED BY THE USE OF A CIRCULAR AUGER. IF A BASE REQUIRES A DEEP FORM BECAUSE OF LOOSE SOIL, THE FORM SHALL BE REMOVED BEFORE BACKFILLING AROUNG THE BASE. BACKFILL SHALL BE TAMPED TIGHT AGAINST THE BARE CONCRETE BASE IN LAYERS OF 1 FOOT OR LESS.

TOP SURFACE OF THE CONCRETE BASE SHALL BE TROWEL FINISHED AND LEVEL.

CONDUIT SIZE AND LOCATIONS SHALL BE AS SHOWN ON THE PLANS.

MINIMUM BENDING RADIUS OF CONDUIT IS EQUAL TO 6 X THE DIAMETER.

CONDUIT HEIGHT ABOVE CONCRETE BASE SHALL BE 4½" INCHES. ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED. NONMETALLIC CONDUIT SHALL HAVE BELL ENDS INSTALLED. ALL CONDUIT SHALL SLOPE TO PULL BOX.

ALL CONDUIT ENDS AT THE TOP OF THE BASES SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUITS IN WHICH WIRE OR CABLE IS NOT INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

BELL ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF CONCRETE BASES BEFORE INSTALLATION OF CABLE OR WIRE.

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTOR FITTINGS, UL LISTED FOR ELECTRICAL USE, SHALL BE USED.

A NO. 4 AWG, STRANDED COPPER EQUIPMENT GROUNDING CONDUCTOR SHALL BE EXOTHERMICALLY WELDED TO THE EQUIPMENT GROUNDING ELECTRODE (GROUND ROD).

THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE FURNISHED AND INSTALLED TO ENTER THE BASE THROUGH A 1-INCH CONDUIT INSTALLED FOR GROUNDING PURPOSES, LEAVING A 4-FOOT COIL OF WIRE ABOVE THE CONCRETE BASE, THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE NEATLY COILED AND THE COILS TIED TOGETHER.

BAR STEEL REINFORCEMENT SHALL BE COATED WITH POWDERED EPOXY RESIN IN ACCORDANCE WITH SECTION 505 OF THE STANDARD SPECIFICATIONS.

THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE AND INSTALLED BELOW THE TRAVEL WAY SHALL BE 24-INCHES. THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE THAT IS NOT INSTALLED BELOW THE TRAVELED WAY SHALL BE 18-INCHES. THE MAXIMUM DEPTH OF ALL CONDUIT SHALL BE 36-INCHES, (GREATER THAN 36-INCHES IF INSTALLED IN BREAKER-RUN), EXCEPT WITH THE WRITTEN APPROVAL OF THE ENGINEER.

ANCHOR RODS SHALL BE INSTALLED WITH MISALIGNMENTS OF LESS THAN 1:40 FROM VERTICAL.

CONCRETE MASONRY	fc=3,500 p.s.i.
HIGH STRENGTH BAR STEEL REINFORCEMENT, GRADE 60	fy=60,000 p.s.i.
ANCHOR RODS, AASHTO M314 GRADE 55	fy=55,000 p.s.i.
TEMPLATES, ASTM A709 GRADE 36	fy=36,000 p.s.i.

(FOR TYPE 12 & 13 POLES)

CONCRETE = 6.3 C.Y.
H.S. REINFORCEMENT = 433 LBS.

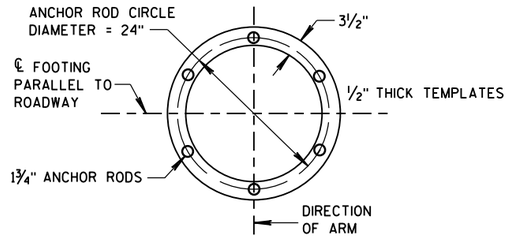
TO BE USED WHEN GROUND ELEVATION AT BASE EQUALS OR IS GREATER THAN HIGH POINT OF ROADWAY ELEVATION.
SEE S.D.D. 9C13-2 WHEN GROUND ELEVATION AT BASE IS LOWER THAN HIGH POINT OF ROADWAY ELEVATION.

CONCRETE BASE TYPE 13

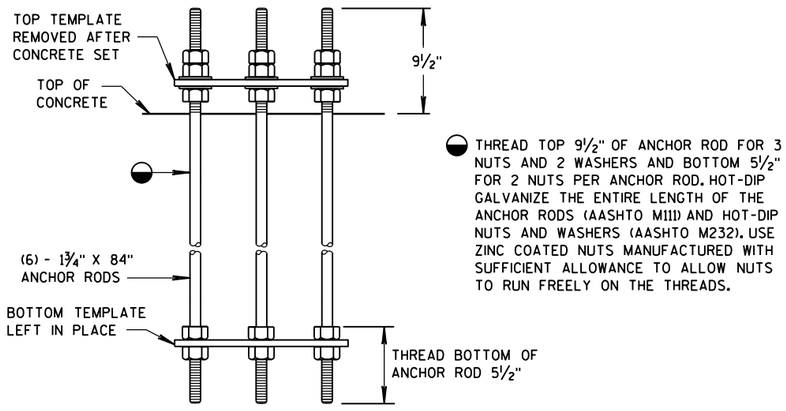
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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S.D.D. 9 C 12-5a

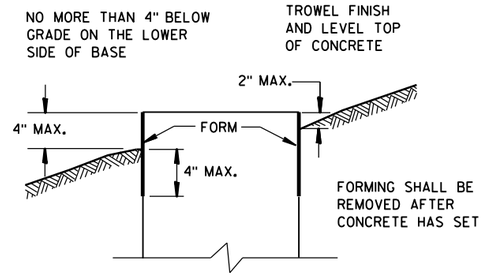


TOP AND BOTTOM TEMPLATES



ANCHOR BOLT ASSEMBLY DETAIL

CONCRETE BASE TYPE 13 ANCHOR ASSEMBLY



FORMING DETAIL

CONCRETE BASE TYPE 13	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED Sept. 2014 DATE FHWA	/S/ Ahmet Demirbilek STATE ELECTRICAL

6

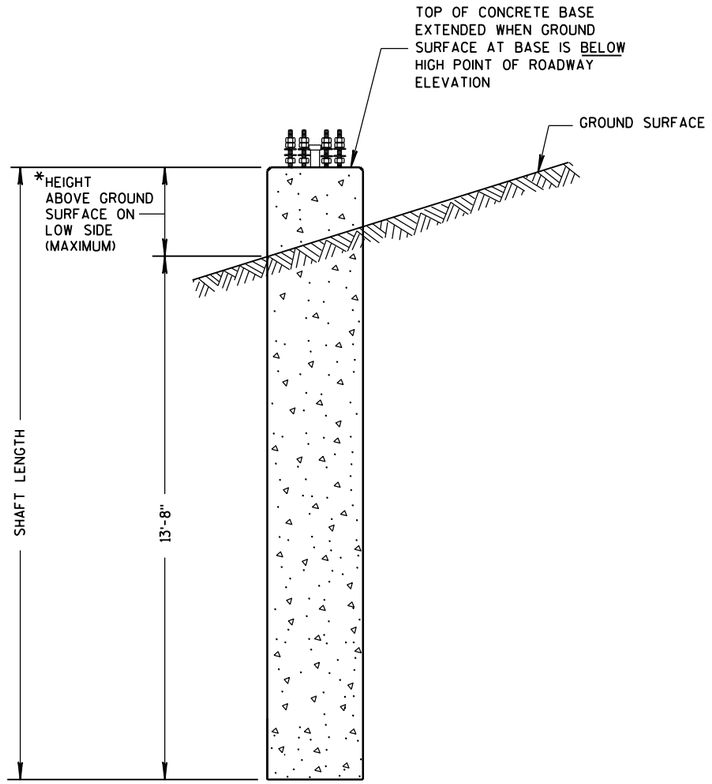
S.D.D. 9 C 12-5b

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S.D.D. 9 C 12-5b

REINFORCEMENT AND CONCRETE QUANTITIES
ADJUSTED FOR EXTENDED TYPE 10 CONCRETE BASE

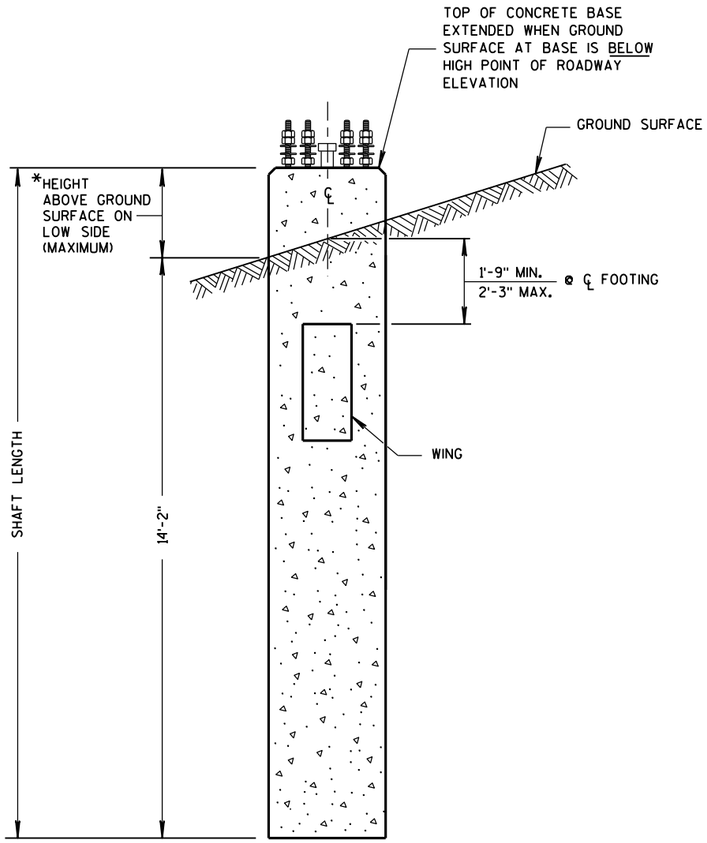
HEIGHT INCREASE REQUIRED	* HEIGHT ABOVE GROUND SURFACE ON LOW SIDE (MAXIMUM)	SHAFT LENGTH	LENGTH OF #6 VERTICAL REINF.	NO. OF #4 HOOPS	C.Y. OF CONCRETE	LBS. OF HOOP BAR STEEL	LBS. OF VERTICAL BAR STEEL
>0" TO 6"	10"	14'-6"	14'-1"	16	2.6	78	127
>6" TO 1'-0"	1'-4"	15'-0"	14'-7"	16	2.7	78	131
>1'-0" TO 1'-6"	1'-10"	15'-6"	15'-1"	17	2.8	83	136
>1'-6" TO 2'-0"	2'-4"	16'-0"	15'-7"	17	2.9	83	141



CONCRETE BASE TYPE 10 (EXTENDED)

REINFORCEMENT AND CONCRETE QUANTITIES
ADJUSTED FOR EXTENDED TYPE 13 CONCRETE BASE

HEIGHT INCREASE REQUIRED	* HEIGHT ABOVE GROUND SURFACE ON LOW SIDE (MAXIMUM)	SHAFT LENGTH	LENGTH OF #6 VERTICAL REINF.	NO. OF #4 HOOPS	C.Y. OF CONCRETE	LBS. OF H.S. BAR STEEL
>0" TO 6"	10"	15'-0"	14'-7"	16	6.5	447
>6" TO 1'-0"	1'-4"	15'-6"	15'-1"	16	6.6	454
>1'-0" TO 1'-6"	1'-10"	16'-0"	15'-7"	17	6.8	469
>1'-6" TO 2'-0"	2'-4"	16'-6"	16'-1"	17	7.0	476



CONCRETE BASE TYPE 13 (EXTENDED)

CONCRETE BASE
TYPE 10 & TYPE 13 EXTENSION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

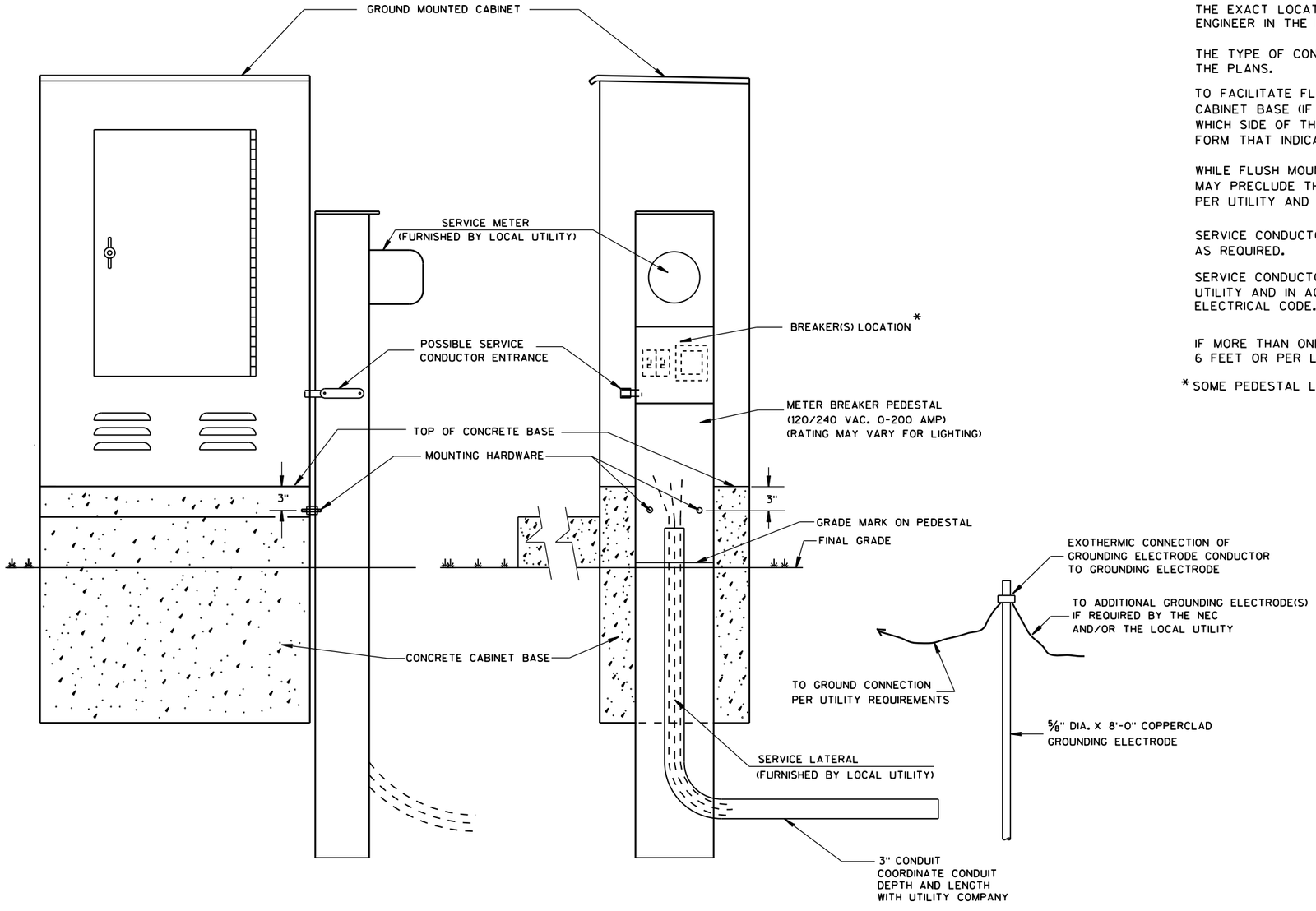
APPROVED
11-26-2013
DATE
/S/ Ahmet Demirbilek
STATE ELECTRICAL
FHWA

6

S.D.D. 9 C 13-2

6

S.D.D. 9 C 13-2



TYPICAL CABINET SERVICE INSTALLATION

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

THE EXACT LOCATION OF THE METER BREAKER PEDESTAL SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.

THE TYPE OF CONCRETE CABINET BASE TO BE INSTALLED SHALL BE AS CALLED FOR IN THE PLANS.

TO FACILITATE FLUSH MOUNTING OF THE METER BREAKER PEDESTAL AGAINST THE SIDE OF THE CABINET BASE (IF FLUSH MOUNTING POSSIBLE. CONFER WITH THE LOCAL UTILITY TO DETERMINE WHICH SIDE OF THE CONCRETE BASE THE ELECTRICAL SERVICE LATERAL WILL APPROACH. THEN FORM THAT INDICATED SIDE FOR FULL SIDE DEPTH.

WHILE FLUSH MOUNTING IS THE MOST DESIRABLE MOUNTING CONFIGURATION UTILITY REQUIREMENTS MAY PRECLUDE THIS OPTION. CONTRACTOR MUST PROVIDE UTILITY APPROVED PEDESTAL AND INSTALL PER UTILITY AND MANUFACTURERS REQUIREMENTS.

SERVICE CONDUCTOR ENTRANCES SHALL BE RIGID METALLIC CONDUIT, NIPPLES AND/OR CONDULETS AS REQUIRED.

SERVICE CONDUCTOR ENTRANCES SHALL BE SIZED AND LOCATED AS REQUIRED BY THE LOCAL UTILITY AND IN ACCORDANCE WITH APPROPRIATE ARTICLES OF THE LATEST ACCEPTED NATIONAL ELECTRICAL CODE.

IF MORE THAN ONE GROUNDING ELECTRODE IS REQUIRED, THE DISTANCE APART SHALL BE 6 FEET OR PER LOCAL UTILITY REGULATIONS.

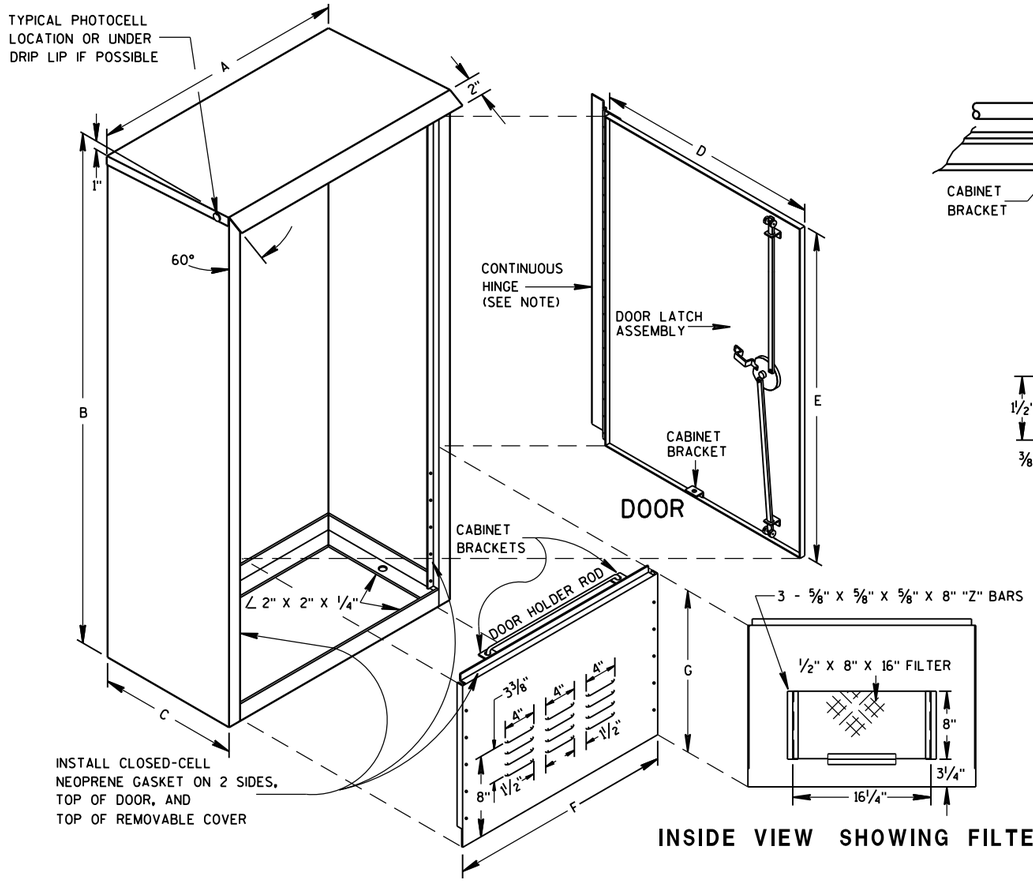
*SOME PEDESTAL LIGHTING PLANS SHOW MAIN LUGS ONLY.

CABINET SERVICE INSTALLATION (METER BREAKER PEDESTAL)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

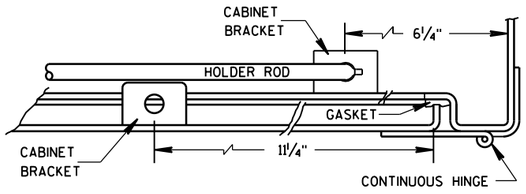
APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

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S.D.D. 9 D 1-5

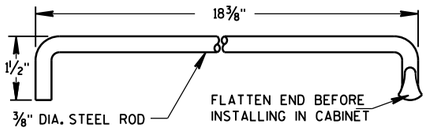


REMOVABLE COVER

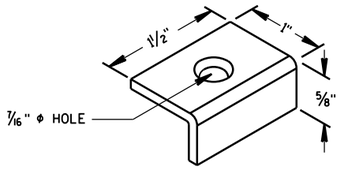
INSIDE VIEW SHOWING FILTER



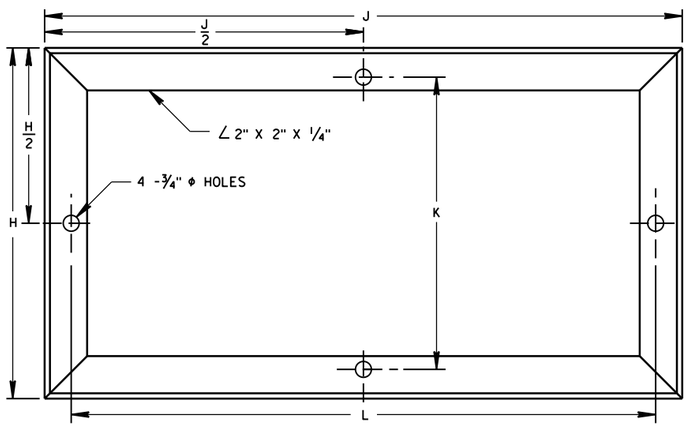
HINGE & DOOR HOLDER



HOLDER ROD



CABINET BRACKET



MOUNTING BASE

TABLE OF DIMENSIONS (INCHES)

MARK	CABINET TYPE		
	3060	3860	3866
A	30	38	38
B	60	60	66
C	16 1/2	16 1/2	24
D	26 1/2	34 3/4	33 3/4
E	38 3/4	38 3/4	38 3/4
F	26 1/2	34 3/4	33 3/4
G	19	19	25
H	16 1/2	16 1/2	24
H/2	8 1/4	8 1/4	12
J	30	38	38
J/2	15	19	19
K	13 3/4	13 3/4	21 1/4
L	27 1/2	35 1/2	35 1/2

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

PRIME WITH PHOSPHATE TREATMENT AND PRIMER.

FINISH EXTERIOR SURFACES WITH RUSTOLEUM #906 SILVER GRAY OR APPROVED EQUAL.

FINISH INTERIOR WITH RUSTOLEUM #2766 HIGH GLOSS WHITE ENAMEL OR APPROVED EQUAL.

ALL SHEET METAL PARTS SHALL BE .125 INCH THICK ALUMINUM.

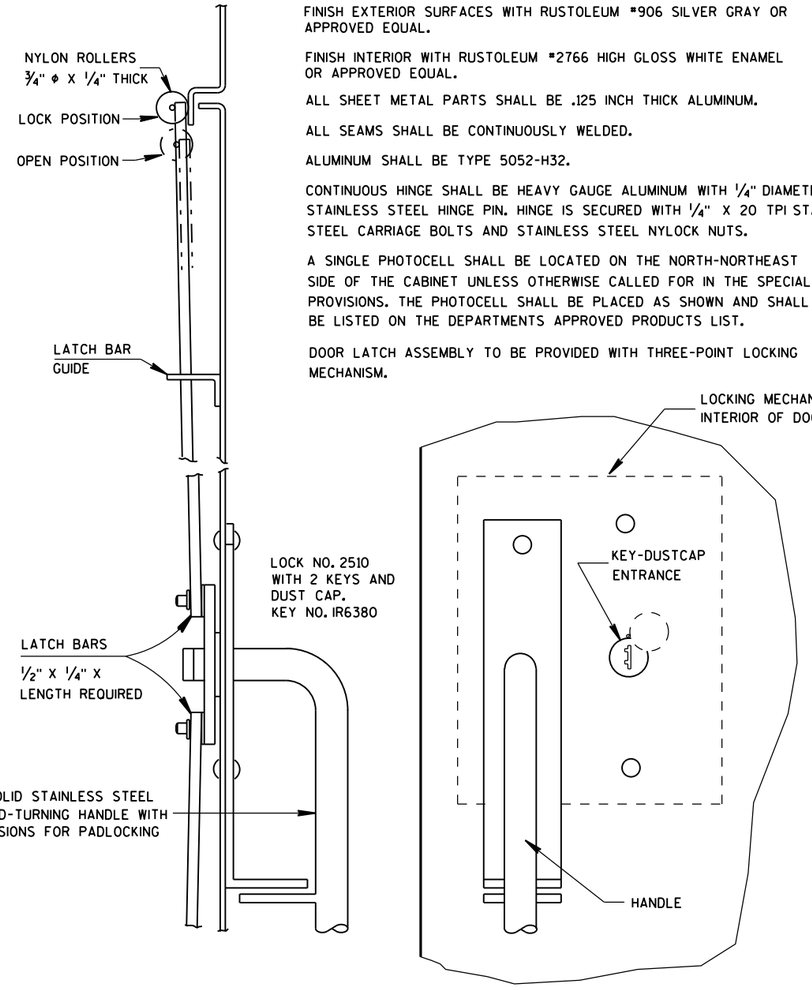
ALL SEAMS SHALL BE CONTINUOUSLY WELDED.

ALUMINUM SHALL BE TYPE 5052-H32.

CONTINUOUS HINGE SHALL BE HEAVY GAUGE ALUMINUM WITH 1/4" DIAMETER STAINLESS STEEL HINGE PIN. HINGE IS SECURED WITH 1/4" X 20 TPI STAINLESS STEEL CARRIAGE BOLTS AND STAINLESS STEEL NYLOCK NUTS.

A SINGLE PHOTOCELL SHALL BE LOCATED ON THE NORTH-NORTHEAST SIDE OF THE CABINET UNLESS OTHERWISE CALLED FOR IN THE SPECIAL PROVISIONS. THE PHOTOCELL SHALL BE PLACED AS SHOWN AND SHALL BE LISTED ON THE DEPARTMENTS APPROVED PRODUCTS LIST.

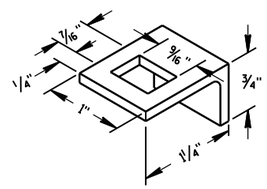
DOOR LATCH ASSEMBLY TO BE PROVIDED WITH THREE-POINT LOCKING MECHANISM.



SIDE VIEW

FRONT VIEW

LATCH ASSEMBLY



LATCH BAR GUIDE

SIGNAL CONTROL CABINET

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014
DATE

/S/ Ahmet Demirbilek
STATE ELECTRICAL

FHWA

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S.D.D. 9 D 2-3

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

ALL INTERNAL ELECTRICAL COMPONENTS WILL BE PRE-WIRED BY THE CABINET FABRICATOR.

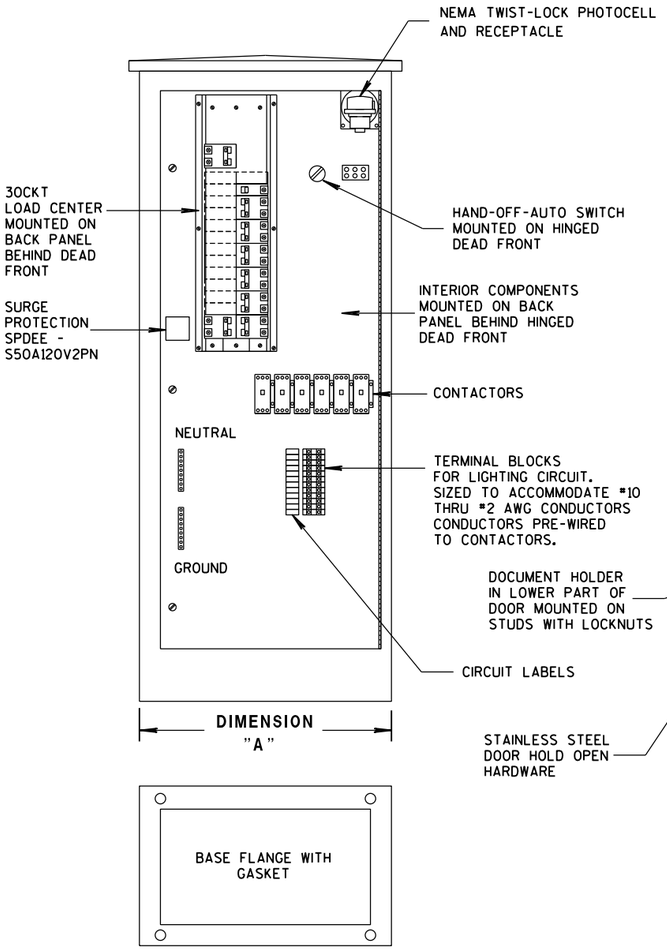
ALL CONDUIT ENTRIES SHALL BE SEALED WITH AN APPROPRIATE DUCT SEALING COMPOUND.

ORIENT PHOTOCELL AWAY FROM AMBIENT LIGHT SOURCES AND ONCOMING TRAFFIC HEADLIGHTS.

THE CONTRACTOR SHALL TOUCH UP ANY DAMAGE TO THE ANODIZED FINISH CAUSED BY THE INSTALLATION PROCESS. COLOR MATCH PAINT SHALL BE USED.

A COMPLETE LIGHTING OR ELECTRICAL PLAN SHALL BE SECURELY PLACED IN THE DOCUMENT HOLDER ATTACHED TO THE DOOR.

FRONT INTERIOR ELEVATION



SIDE VIEW

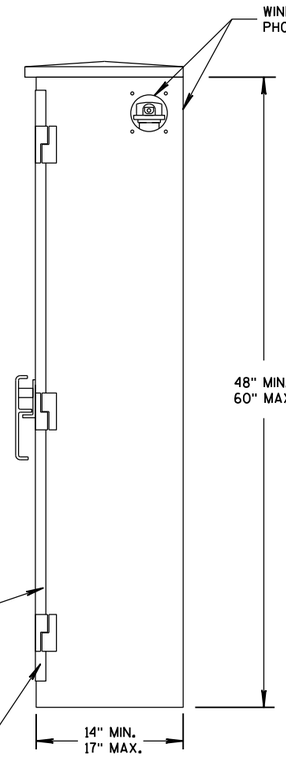
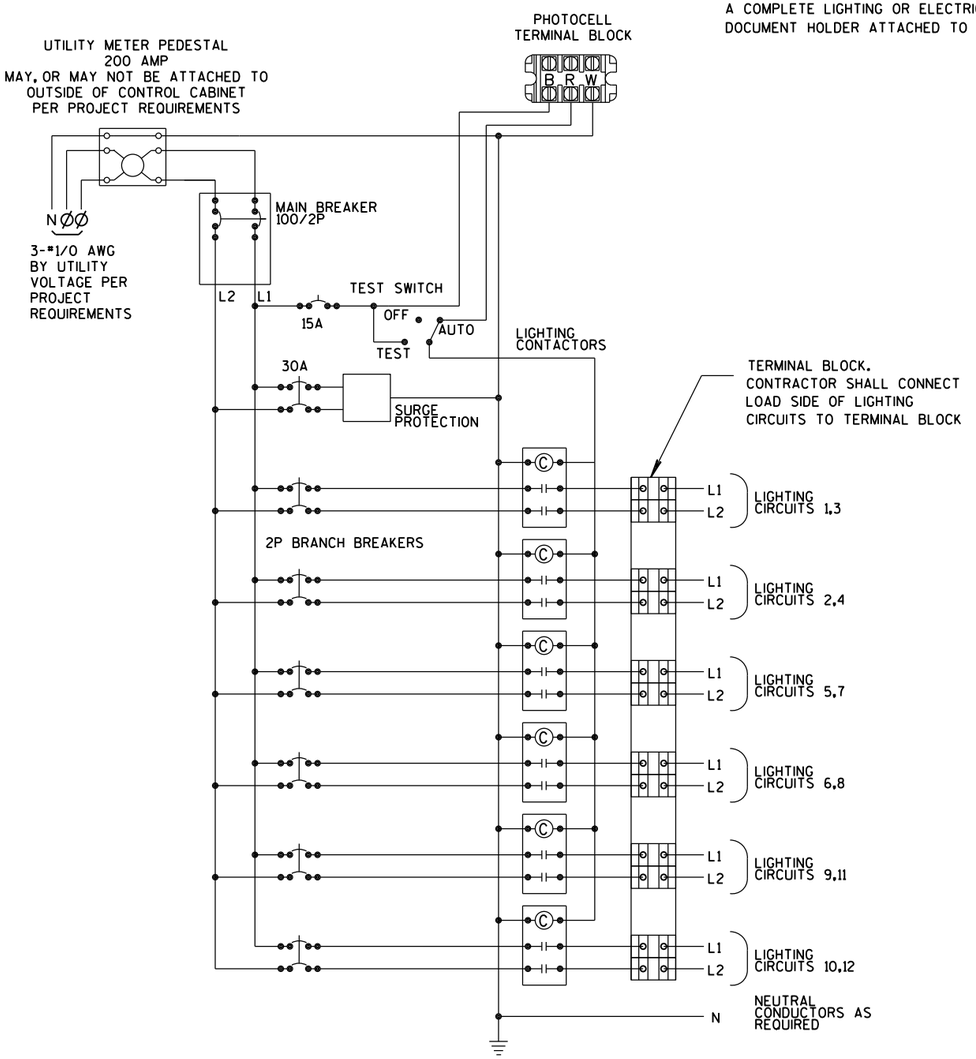


TABLE OF DIMENSIONS (INCHES)

CONCRETE BASE TYPE	CABINET WIDTH	DIMENSION "A"
L24	24"	24"
L30	30"	30"



CONTROL CABINET SCHEMATIC

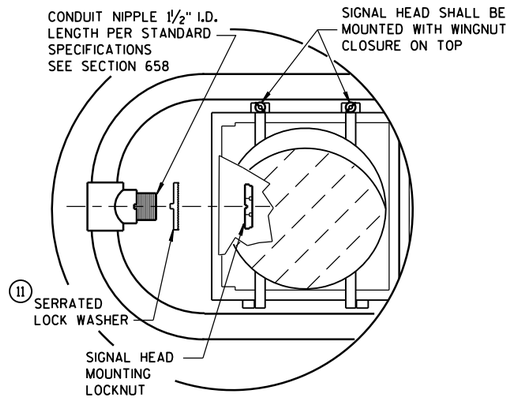
LIGHTING CONTROL CABINET

LIGHTING CONTROL CABINET

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

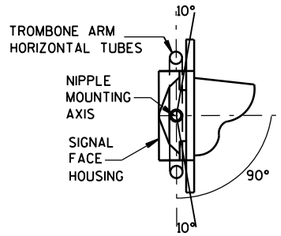
APPROVED
June 2014 — DATE
/S/ Thomas Gonring — STATE LIGHTING ENGINEER
FHWA

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S.D.D. 9 D 4-1



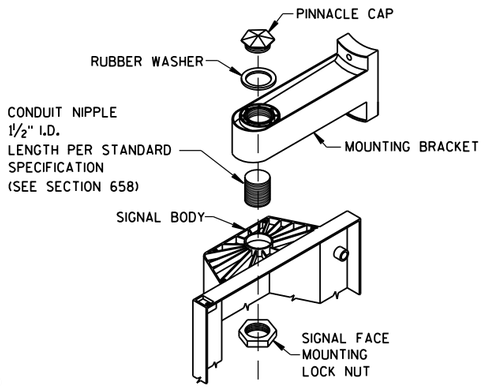
HORIZONTAL SIGNAL HEAD MOUNTING DETAIL *

* SIGNAL HEAD ATTACHMENT ALSO APPLYS TO MOUNTING AT CROSS BAR



SECTION A-A

(10 DEGREES TILT REQUIREMENT OF FACE(S) IN THE TROMBONE MOUNTING)



SIGNAL FACE MOUNTING DETAIL

(BANDED)

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

POLES SHALL BE EITHER ALUMINUM OR GALVANIZED STEEL AS CALLED FOR IN THE CONTRACT.

SECTION 657, POLES, OF THE STANDARD SPECIFICATIONS SHALL APPLY TO THIS DRAWING.

A PULL WIRE/ROPE IN ACCORDANCE WITH STANDARD SPECIFICATION 652 SHALL BE INSTALLED IN EACH TROMBONE ARM RACEWAY DURING THE MANUFACTURING PROCESS.

TYPE 2 ALUMINUM POLES SHALL BE CONSTRUCTED OF 6063-T6 ALUMINUM ALLOY. SLEEVING INSIDE THE POLE IS NOT ACCEPTABLE.

WHEN TRANSFORMER BASES ARE USED, WIRE CONNECTIONS SHALL BE MADE IN THE TRANSFORMER BASE.

(1) 4" X 6" REINFORCED HANDHOLE & COVER ASSEMBLY WITH 2 (TWO) ¼" X ¾" - 20 TPI HEX HEAD STAINLESS STEEL BOLTS.

(2) SIGNAL FACE MOUNTING BRACKETS. MOUNT WITH CAP SCREWS AND BANDING. (SEE STANDARD SPECIFICATIONS - SEC. 658)

(3) GROMMETS, 1" CHASE NIPPLES OR 1" CLOSE CONDUIT NIPPLES WITH BUSHINGS SHALL BE PROVIDED FOR 1⅜" HOLE IN POLE SHAFT FOR WIRING.

(4) SECURELY MOUNT DULL BLACK POLYCARBONATE BACKPLATES, PROJECTING 5" BEYOND ALL SIDES OF THE SIGNAL FACE HOUSING, PER MANUFACTURER'S RECOMMENDATIONS.

(5) POLE MOUNTED SIGNAL FACES SHALL REQUIRE 1 OR MORE MOUNTING SPACERS UNDER THE TOP MOUNTING BRACKET(S) AS REQUIRED, TO PLUMB THE SIGNAL FACES.

(6) CAST ALUMINUM TRANSFORMER BASE, WHEN REQUIRED.

(7) MOUNTING BRACKET NIPPLES FOR THE SIGNAL FACE(S) SHALL BE 2 INCHES IN LENGTH AND 1½ INCHES IN DIAMETER. (SEE STANDARD SPECIFICATION - SECTION 658).

(8) VERTICAL STRUT (ADJUSTABLE). ONE (1) SET SCREW (¼" X ¾" LONG - 20 TPI, STAINLESS STEEL, HEX HEAD) INTO EACH ARM MEMBER IF STRUT IS THE SLIDING TYPE.

(9) FURNISH AND INSTALL VENTILATED, CAST, METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) ¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.

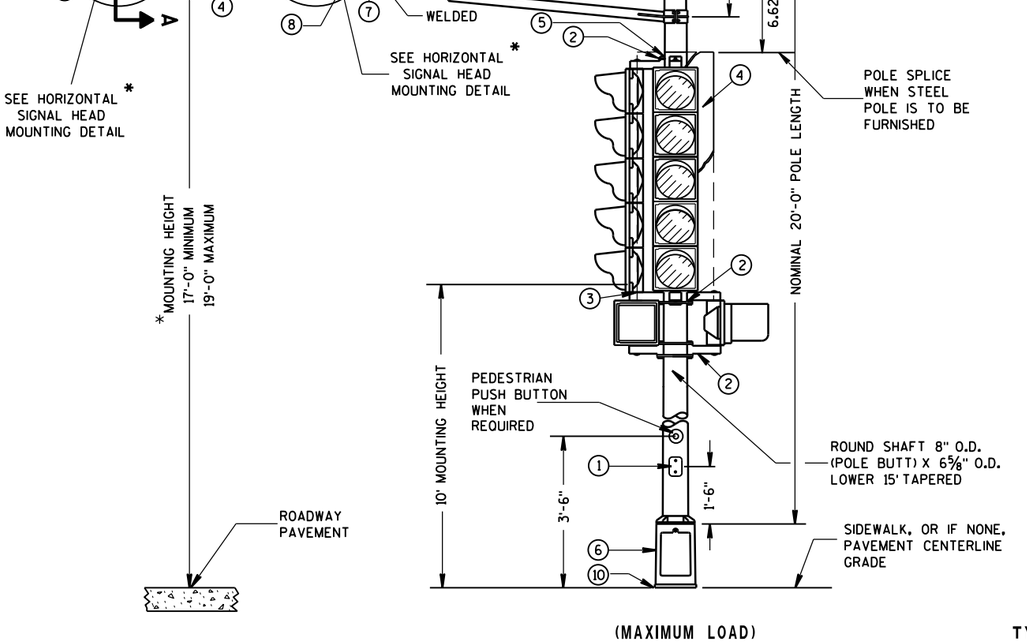
(10) SHIMMING, IF NEEDED, SHALL BE LOCATED BETWEEN THE CONCRETE FOUNDATION AND THE TRANSFORMER BASE.

(11) USE SERRATED LOCK WASHERS WITH NOTCHES BETWEEN END TEE AND SIGNAL HEAD.

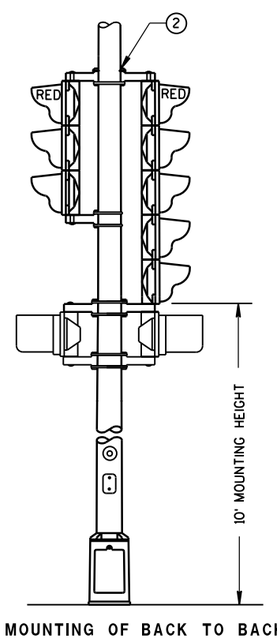
*MOUNTING HEIGHT LIMITATION DIMENSIONS OF THE TROMBONE MAST ARM WILL BE DEPENDENT UPON THE USE/NON-USE OF A TRANSFORMER BASE.

FOR MANUFACTURERS USE ONLY

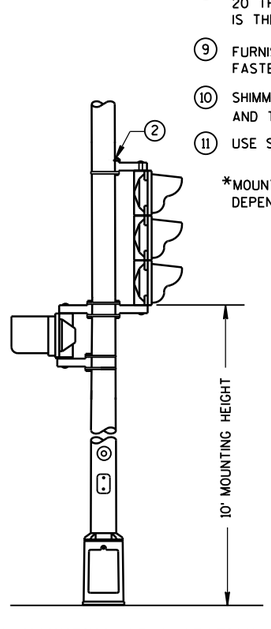
WELD TO BE 100% R.T. OR U.T. TESTED AS PER THE REQUIREMENTS OF AWS D 1.5-88. RECORDS OF COMPLIANCE OF SUCH TESTING SHALL BE FURNISHED TO THE OFFICE OF DESIGN/BRIDGE FOR VERIFICATION AND APPROVAL.



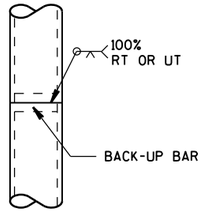
(MAXIMUM LOAD)



TYPICAL MOUNTING OF BACK TO BACK 3 AND 5 SECTION SIGNAL FACES



TYPICAL MOUNTING OF 3 SECTION SIGNAL FACE



POLE SPLICE DETAIL

TYPE 2 POLE MOUNTING CONFIGURATION

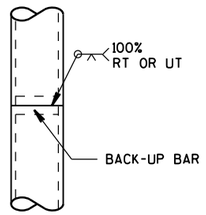
POLE MOUNTINGS FOR TRAFFIC SIGNALS TYPE 2

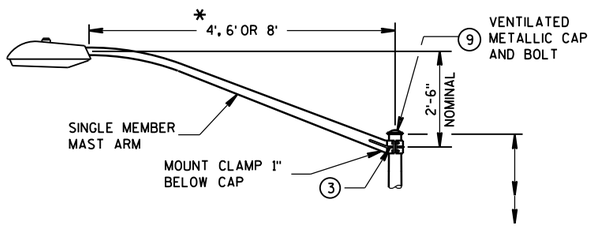
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

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S.D.D. 9 E 1-13a

FOR MANUFACTURERS USE ONLY

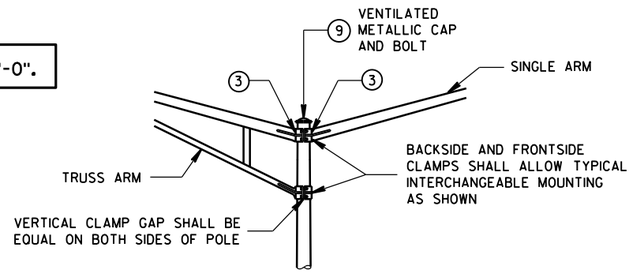
WELD TO BE 100% R.T. OR U.T. TESTED AS PER THE REQUIREMENTS OF AWS D 1.5-88. RECORDS OF COMPLIANCE OF SUCH TESTING SHALL BE FURNISHED TO THE OFFICE OF DESIGN/BRIDGE FOR VERIFICATION AND APPROVAL.





POLE SPLICE DETAIL

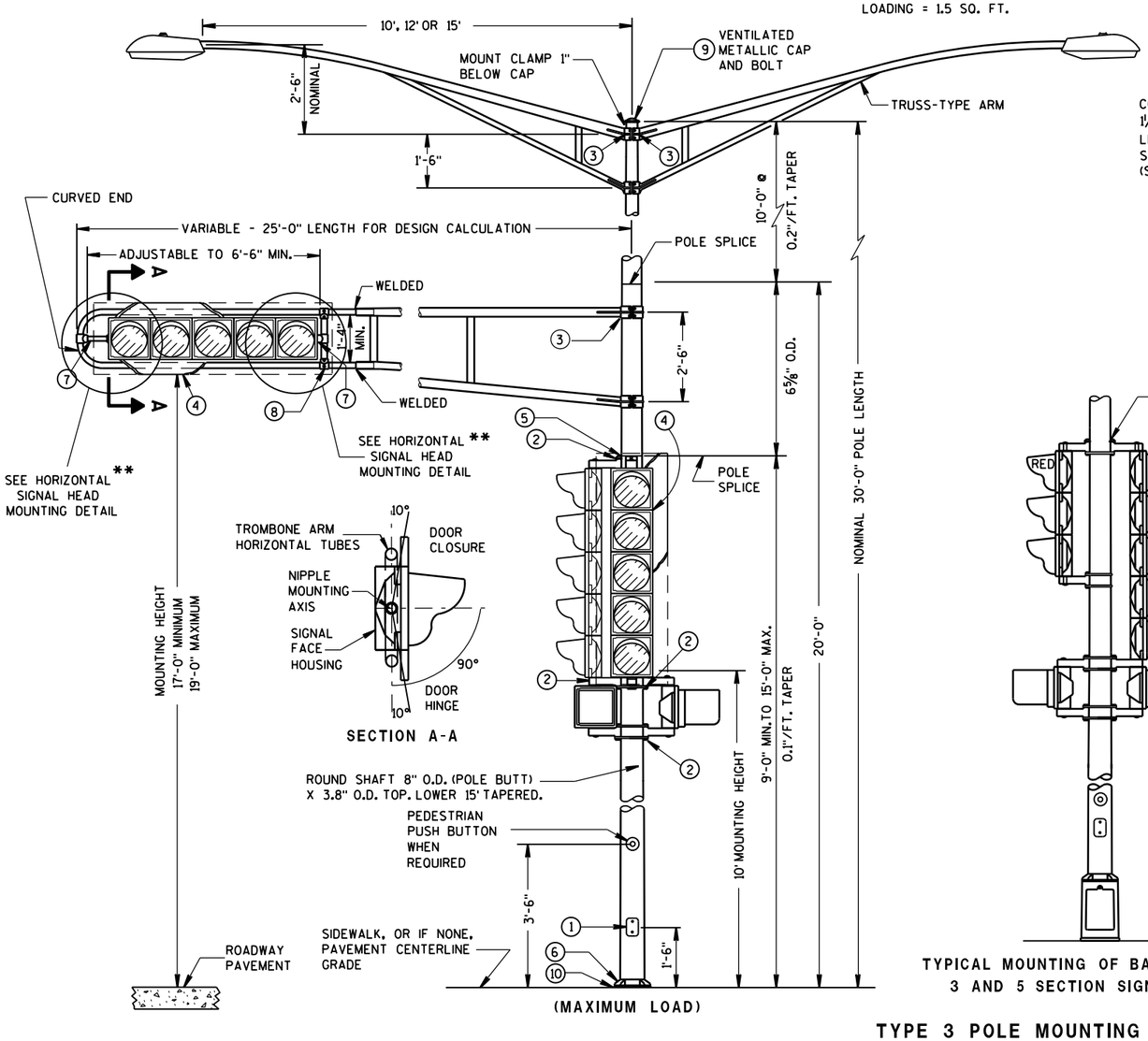
***RISE FOR 4' ARM SHALL BE 2'-0".**

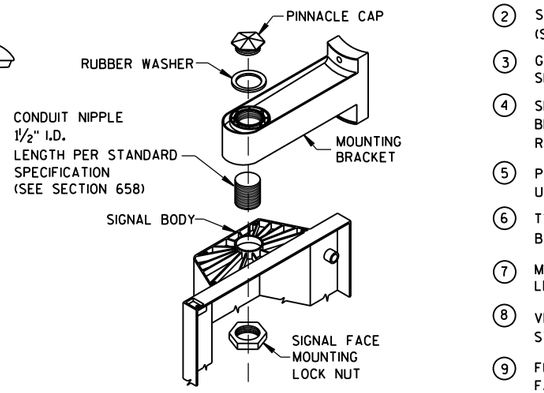


INTERCHANGEABLE MOUNTING DETAIL

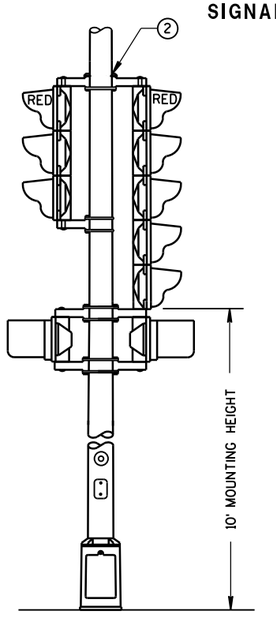
LUMINAIRE

WT. - 50 LBS.
EFFECTIVE PROJECTED
AREA FOR WIND
LOADING = 1.5 SQ. FT.

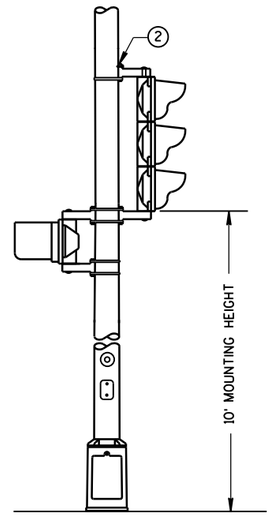




SIGNAL FACE MOUNTING DETAIL
(BANDED)



TYPICAL MOUNTING OF BACK TO BACK
3 AND 5 SECTION SIGNAL FACES



TYPICAL MOUNTING OF 3 SECTION
SIGNAL FACE

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

ALL TYPE 3 POLE MOUNTINGS SHALL BE DESIGNED TO INCLUDE TWIN 15' ARMS WITH LUMINAIRES.

POLES SHALL BE GALVANIZED STEEL.

SECTION 657, POLES, OF THE STANDARD SPECIFICATIONS SHALL APPLY TO THIS DRAWING.

A PULL WIRE/ROPE IN ACCORDANCE WITH STANDARD SPECIFICATION 652, SHALL BE INSTALLED IN EACH TROMBONE ARM RACEWAY DURING THE MANUFACTURING PROCESS.

THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 2⅜ INCHES IN OUTSIDE DIAMETER. THE STRAIGHT PORTION OF THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 12 INCHES IN LENGTH.

WHEN TRANSFORMER BASES ARE USED, WIRE CONNECTIONS SHALL BE MADE IN THE TRANSFORMER BASE.

(1) 4" X 6" REINFORCED HANDHOLE & COVER ASSEMBLY WITH 2 (TWO) ¼" X ¾" - 20 TPI HEX HEAD STAINLESS STEEL BOLTS.

(2) SIGNAL FACE MOUNTING BRACKETS, MOUNT WITH CAP SCREWS AND BANDING. (SEE STANDARD SPECIFICATIONS - SEC. 658)

(3) GROMMETS, 1" CHASE NIPPLES OR 1" CLOSE CONDUIT NIPPLES WITH BUSHINGS SHALL BE PROVIDED FOR 1⅜" HOLE IN POLE SHAFT FOR WIRING.

(4) SECURELY MOUNT DULL BLACK POLYCARBONATE BACKPLATES, PROJECTING 5" BEYOND ALL SIDES OF THE SIGNAL FACE HOUSING, PER MANUFACTURER'S RECOMMENDATIONS.

(5) POLE MOUNTED SIGNAL FACES SHALL REQUIRE 1 OR MORE MOUNTING SPACERS UNDER THE TOP MOUNTING BRACKET(S) AS REQUIRED, TO PLUMB THE SIGNAL FACE.

(6) TYPE 3 POLE CONFIGURATIONS SHALL BE MOUNTED DIRECTLY TO THEIR CONCRETE BASES.

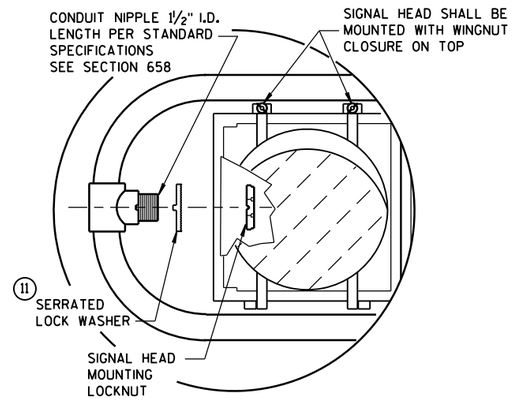
(7) MOUNTING BRACKET NIPPLES FOR THE SIGNAL FACE(S) SHALL BE 2 INCHES IN LENGTH AND 1½ INCHES IN DIAMETER. (SEE STANDARD SPECIFICATION - SECTION 658)

(8) VERTICAL STRUT (ADJUSTABLE). ONE (1) SET SCREW (1/4 " X ¾" -20 TPI, STAINLESS STEEL, HEX HEAD) INTO EACH ARM MEMBER IF STRUT IS THE SLIDING TYPE.

(9) FURNISH AND INSTALL VENTILATED, CAST, METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) ¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.

(10) SHIMMING, IF NEEDED, SHALL BE LOCATED BETWEEN THE CONCRETE FOUNDATION AND POLE.

(11) USE SERRATED LOCK WASHERS WITH NOTCHES BETWEEN END TEE AND SIGNAL HEAD.



HORIZONTAL SIGNAL HEAD MOUNTING DETAIL**

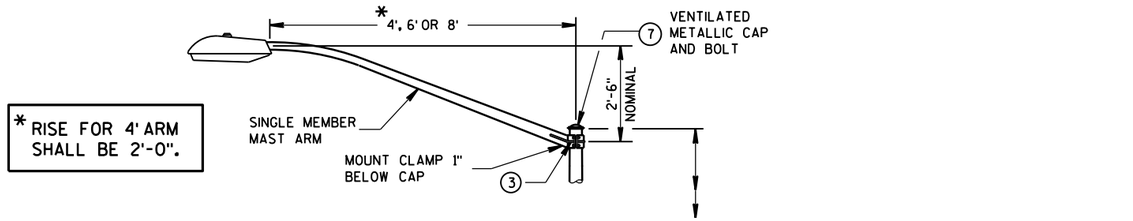
** SIGNAL HEAD ATTACHMENT ALSO APPLYS TO MOUNTING AT CROSS BAR

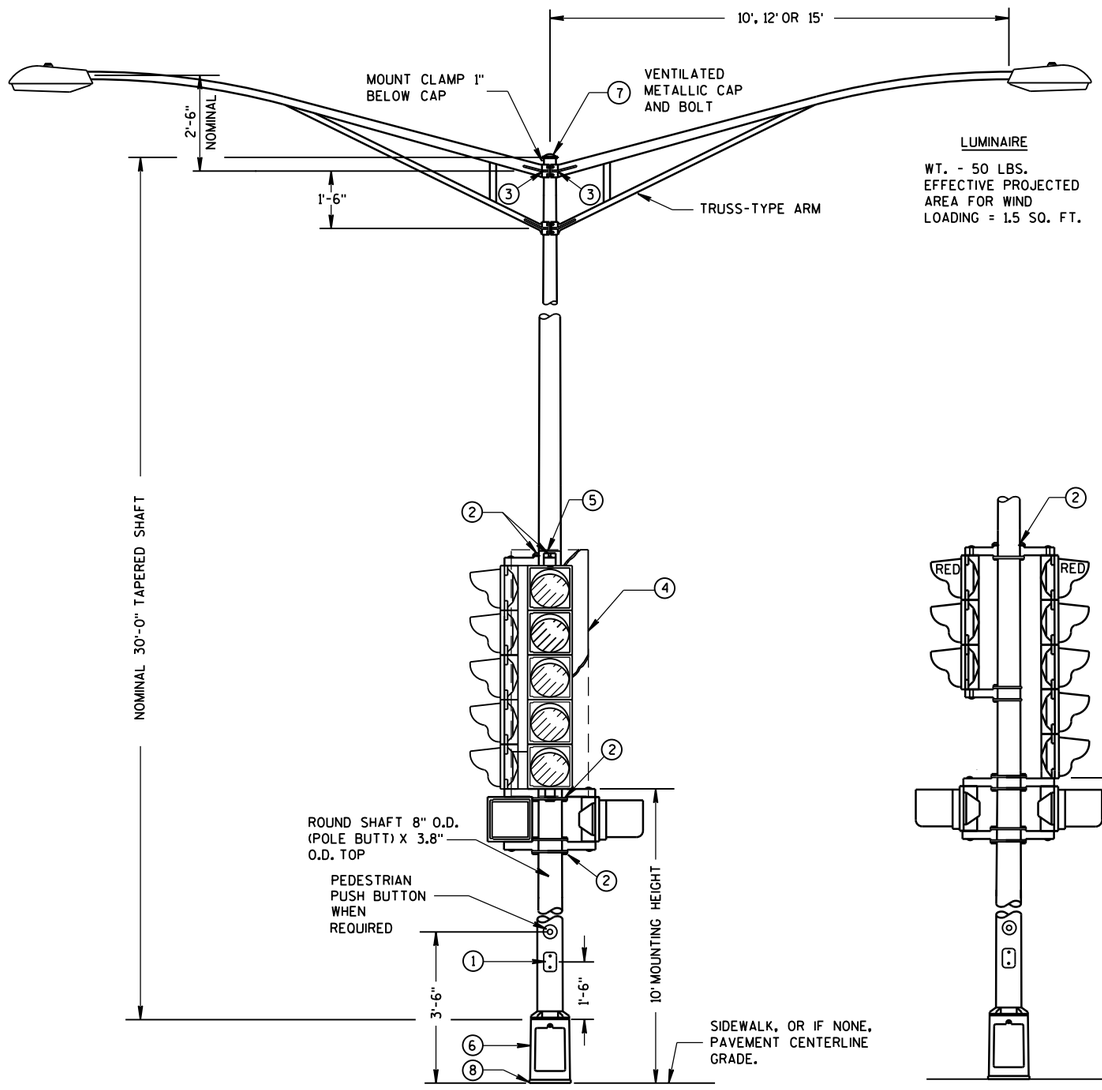
TYPE 3 POLE MOUNTING CONFIGURATION

POLE MOUNTINGS FOR TRAFFIC SIGNALS AND LIGHTING UNITS, TYPE 3 (HEAVY DUTY)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPO 650

6
S.D.D. 9 E 1-13b

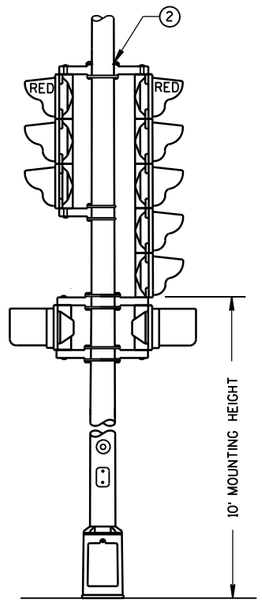




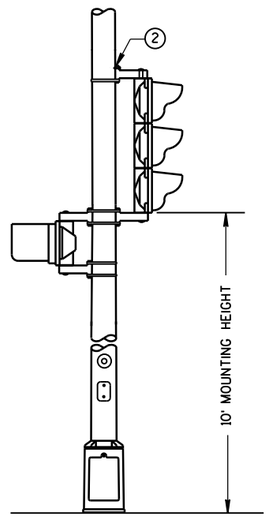
LUMINAIRE

WT. - 50 LBS.
EFFECTIVE PROJECTED AREA FOR WIND LOADING = 1.5 SQ. FT.

(MAXIMUM LOAD)

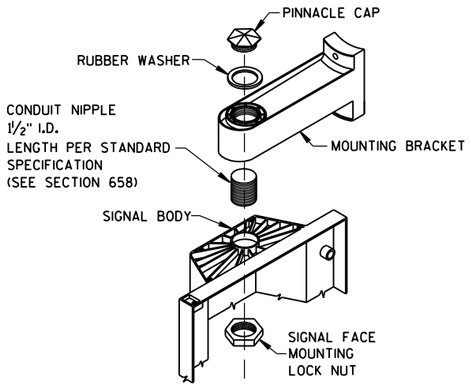


TYPICAL MOUNTING OF BACK TO BACK 3 AND 5 SECTION SIGNAL FACES



TYPICAL MOUNTING OF 3 SECTION SIGNAL FACE

TYPE 4 POLE MOUNTING CONFIGURATION



SIGNAL FACE MOUNTING DETAIL

(BANDED)

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

ALL TYPE 4 POLE MOUNTINGS SHALL BE DESIGNED TO INCLUDE TWIN 15' ARMS WITH LUMINAIRES.

POLES SHALL BE GALVANIZED STEEL WITH A MINIMUM WALL THICKNESS OF U.S. STANDARD 11 GAGE (.1196").

SECTION 657, POLES, OF THE STANDARD SPECIFICATIONS SHALL APPLY TO THIS DRAWING.

THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 2⅜ INCHES IN OUTSIDE DIAMETER. THE STRAIGHT PORTION OF THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 12 INCHES IN LENGTH.

WHEN TRANSFORMER BASES ARE USED, CONNECTIONS SHALL BE MADE IN THE TRANSFORMER BASE.

(1) 4" X 6" REINFORCED HANDHOLE & COVER ASSEMBLY WITH 2 (TWO) ¼" X ¾" - 20 TPI HEX HEAD STAINLESS STEEL BOLTS.

(2) SIGNAL FACE MOUNTING BRACKETS, MOUNT WITH CAP SCREWS AND BANDING. (SEE STANDARD SPECIFICATIONS - SEC. 658).

(3) GROMMETS, 1" CHASE NIPPLES OR 1" CLOSE CONDUIT NIPPLES WITH BUSHINGS SHALL BE PROVIDED FOR 1⅜" HOLE IN POLE SHAFT FOR WIRING.

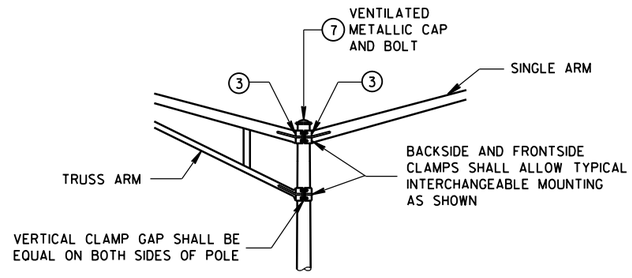
(4) SECURELY MOUNT DULL BLACK POLYCARBONATE BACKPLATES, PROJECTING 5" BEYOND ALL SIDES OF THE SIGNAL FACE HOUSING, PER MANUFACTURER'S RECOMMENDATIONS.

(5) POLE MOUNTED SIGNAL FACES SHALL REQUIRE 1 OR MORE MOUNTING SPACERS UNDER THE TOP MOUNTING BRACKET(S) AS REQUIRED, TO PLUMB THE SIGNAL FACE.

(6) CAST ALUMINUM TRANSFORMER BASE, WHEN REQUIRED.

(7) FURNISH AND INSTALL VENTILATED, CAST, METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) ¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.

(8) SHIMMING, IF NEEDED, SHALL BE LOCATED BETWEEN THE CONCRETE FOUNDATION AND THE TRANSFORMER BASE.



INTERCHANGEABLE MOUNTING DETAIL

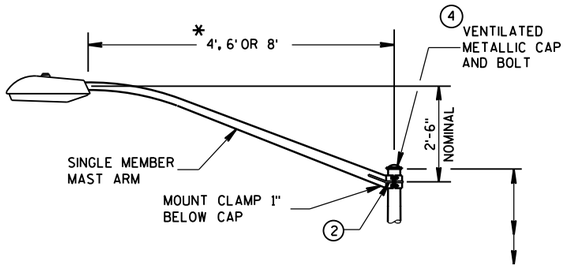
POLE MOUNTINGS FOR TRAFFIC SIGNALS AND LIGHTING UNITS, TYPE 4

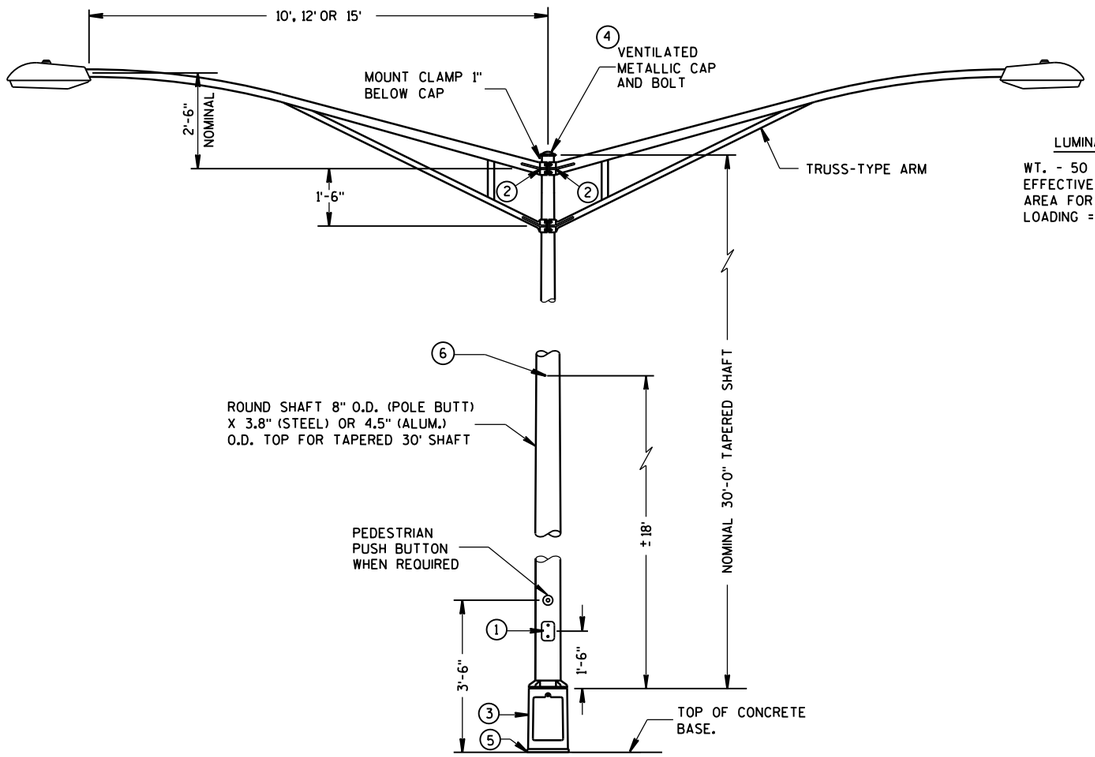
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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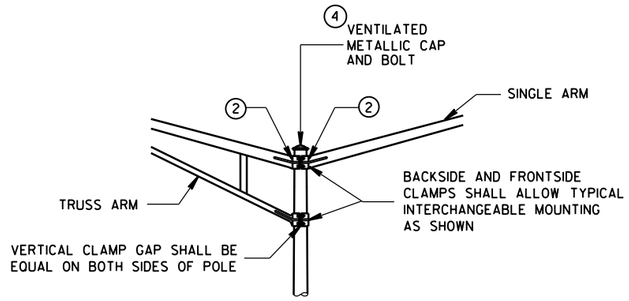
S.D.D. 9 E 1-13c

*RISE FOR 4' ARM SHALL BE 2'-0".





TYPE 5 POLE MOUNTING CONFIGURATION
(MAXIMUM LOAD)
LIGHTING ONLY



INTERCHANGEABLE MOUNTING DETAIL

LUMINAIRE

WT. - 50 LBS.
EFFECTIVE PROJECTED
AREA FOR WIND
LOADING = 1.5 SQ. FT.

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

ALL TYPE 5 POLE MOUNTINGS SHALL BE DESIGNED TO INCLUDE TWIN 15' ARMS WITH LUMINAIRES.

POLES SHALL BE GALVANIZED STEEL OR ALUMINUM, AS CALLED FOR IN THE CONTRACT.

TYPE 5 ALUMINUM POLES SHALL BE CONSTRUCTED OF 6063-T6 ALUMINUM ALLOY. SLEEVING INSIDE THE POLE IS NOT ACCEPTABLE.

THE TYPE 5 ALUMINUM POLES SHALL HAVE A MINIMUM WALL THICKNESS OF 0.188".

TYPE 5 STEEL POLES SHALL HAVE A MINIMUM WALL THICKNESS OF U.S. STANDARD 11 GAGE (.1196").

THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 2⅜ INCHES IN OUTSIDE DIAMETER. THE STRAIGHT PORTION OF THE SLIPFITTER END OF THE LUMINAIRE ARM SHALL BE A NOMINAL 12 INCHES IN LENGTH.

WHEN TRANSFORMER BASES ARE USED, WIRE CONEECTIONS SHALL BE MADE IN THE TRANSFORMER BASE.

(1) 4" x 6" REINFORCED HANDHOLE & COVER ASSEMBLY WITH 2 (TWO) ¼" X ¾" - 20 TPI HEX HEAD STAINLESS STEEL BOLTS.

(2) GROMMETS, 1" CHASE NIPPLES OR 1" CLOSE CONDUIT NIPPLES WITH BUSHINGS SHALL BE PROVIDED FOR 1⅜" HOLE IN POLE SHAFT FOR WIRING.

(3) CAST ALUMINUM TRANSFORMER BASE, WHEN REQUIRED.

(4) FURNISH AND INSTALL VENTILATED, CAST, METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) ¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.

(5) SHIMMING, IF NEEDED, SHALL BE LOCATED BETWEEN THE CONCRETE FOUNDATION AND THE TRANSFORMER BASE.

(6) INTERNAL DUMBBELL-TYPE VIBRATION DAMPER.

6

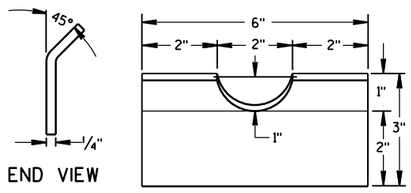
S.D.D. 9 E 1-13d

POLE MONTINGS FOR
LIGHTING UNITS, TYPE 5
(30 FEET)

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S.D.D. 9 E 1-13d

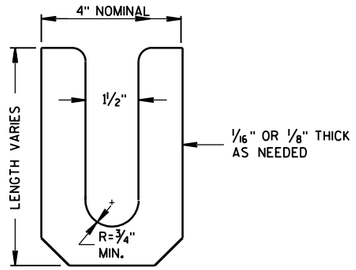


END VIEW

FRONT VIEW

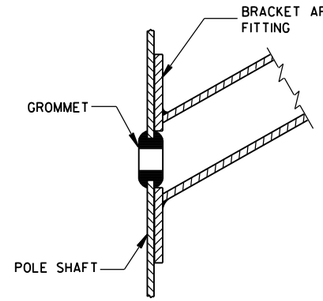
RECTANGULAR CLAMP SHIM

(4 TO A SET)

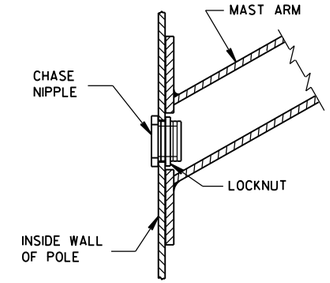


LEVELING SHIM (15)

SHALL BE ALUMINUM



TYPICAL APPLICATION OF GROMMET IN POLE SHAFT



TYPICAL APPLICATION OF CHASE NIPPLE IN POLE SHAFT

GENERAL NOTES

CLAMP BOLT-NUT TIGHTENING TORQUE SHALL BE INDICATED BY INDENT STAMPING (1/2 INCH NUMERALS AND LETTERS) OR WEATHERPROOF PRINTING ON THE INSIDE OF THE CLAMP THAT IS WELDED TO THE ARM MEMBER.

(10) 4.5" I.D. FOR LUMINAIRE MAST ARM CLAMP.
6.625" I.D. FOR TROMBONE MAST ARM CLAMP.

(11) INDIVIDUAL BASE PLATE ANCHOR ROD COVERS. (4 REQUIRED)

(12) BASE PLATE SLOTTED TO ACCEPT 11" THROUGH 12" BOLT CIRCLE USING 1" DIAMETER ANCHOR RODS.

(13) OUTSIDE SHIM DIAMETER - (4.5" O.D. FOR LUMINAIRE MAST ARM)
(6.625" O.D. FOR TROMBONE MAST ARM)

(14) VARIABLE SHIM THICKNESS - (0.10", 0.25", 0.35", 0.53" OR 0.70")

SHIM THICKNESS FOR TROMBONE MAST ARMS MAY BE TYPICALLY 0.25", 0.35", 0.53" OR 0.70".

SHIM THICKNESS FOR LUMINAIRE MAST ARMS MAY BE TYPICALLY 0.10", 0.25" OR 0.35".

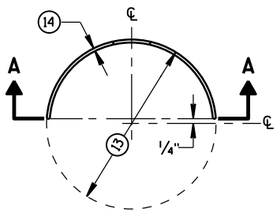
SHIM MATERIAL SHALL BE ALUMINUM ALLOY.

SHIM THICKNESS SHALL BE IMPRESSED INTO EACH SHIM. NUMERALS SHALL BE 1/4" HIGH AND LEGIBLE.

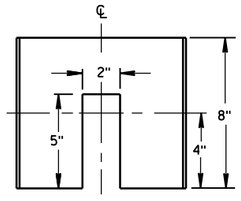
THE CONTRACTOR SHALL SUBMIT TWO COPIES OF ALL SHIM SHOP DRAWINGS TO THE ENGINEER FOR APPROVAL.

(15) LEVELING SHIMS, DESIGNED FOR THE PURPOSE, SHALL BE USED WHEN PLUMBING POLES. THE USE OF WASHERS IN LIEU OF PROPER LEVELING SHIMS IS NOT ACCEPTABLE. LEVELING SHIMS SHALL BE USED ONLY BETWEEN THE TOP OF THE CONCRETE BASE AND A METALLIC BASE PLATE.

SHIMS SHALL BE LONG ENOUGH AND WIDE ENOUGH TO COMPLETELY COVER THE AREA UNDER THE LENGTH AND WIDTH OF THE BASE MOUNTING FLANGE.



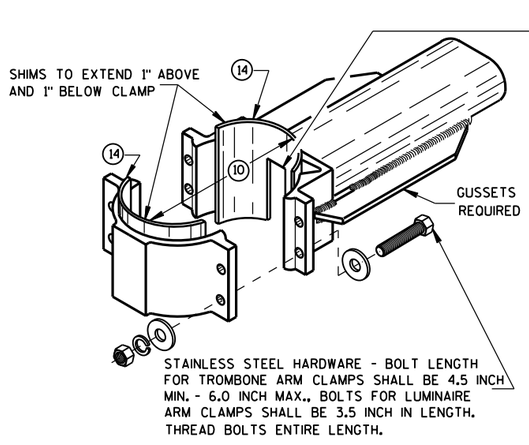
PLAN VIEW



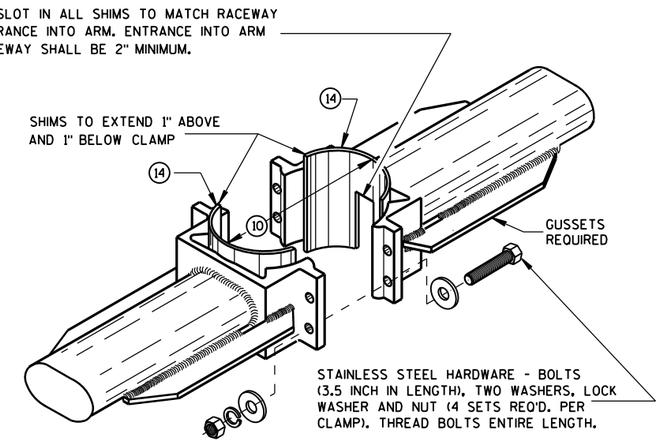
SECTION A-A

CIRCULAR CLAMP SHIM

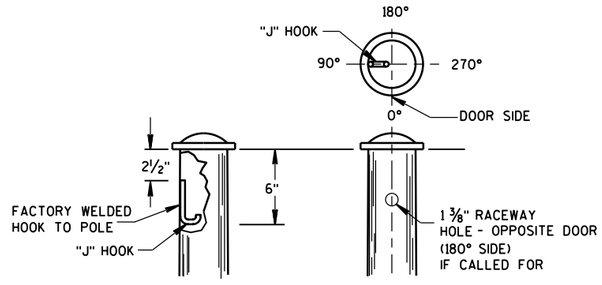
(2 TO A SET)



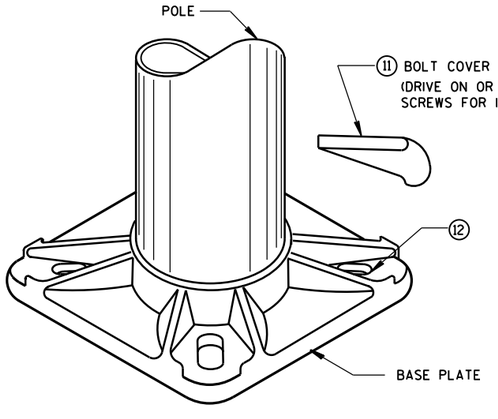
TYPICAL TROMBONE MAST ARM AND SINGLE LUMINAIRE MAST ARM MOUNTING CLAMP



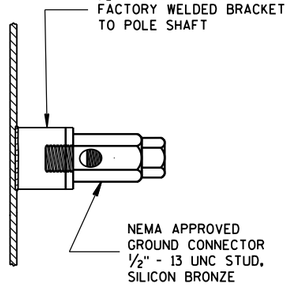
TYPICAL LUMINAIRE MAST ARM (DOUBLE) MOUNTING BRACKETS

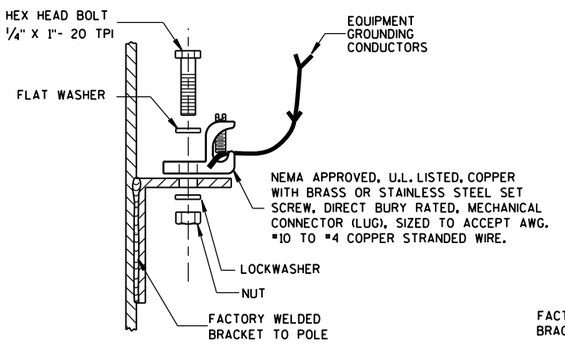


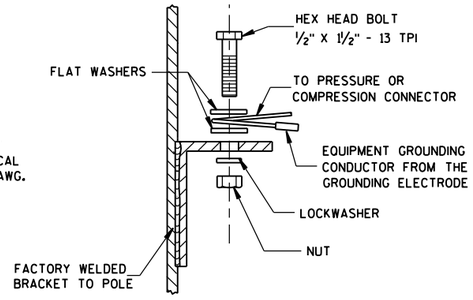
TYPICAL "J" HOOK LOCATION



BASE PLATE







TYPICAL GROUNDING CONNECTIONS

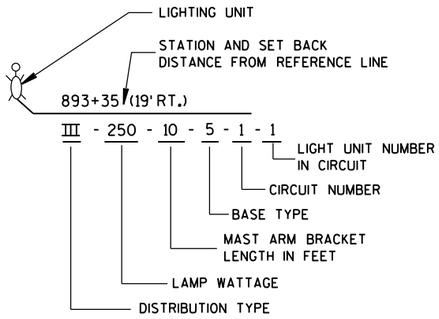
NUT, BOLT AND WASHERS SHALL BE STAINLESS STEEL

HARDWARE DETAILS FOR POLE MOUNTINGS

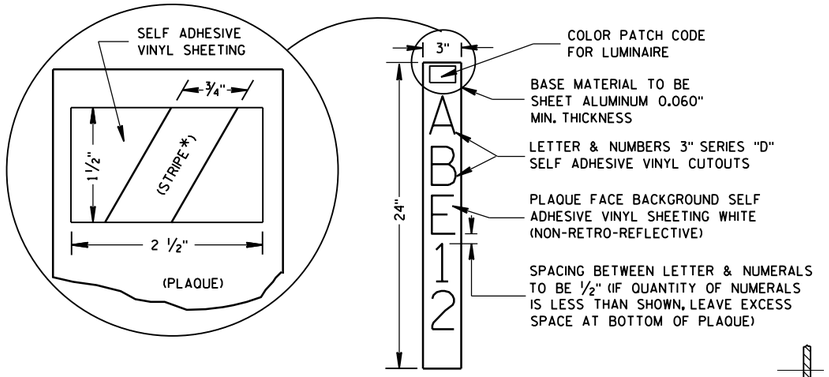
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL 653
FHWA

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S.D.D. 9 E 1-13g



LIGHTING UNIT CODE
(TYPICAL)



COLOR PATCH CODE FOR LUMINAIRES

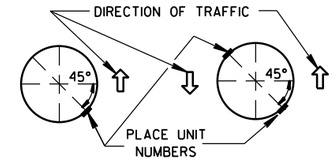
(HIGH PRESSURE SODIUM)

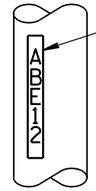
1000 WATT - NO PATCH
400 WATT - ORANGE
310 WATT - BLUE
250 WATT - ORANGE W/WHITE STRIPE*
200 WATT - RED
150 WATT - GREEN
100 WATT - BROWN

(MERCURY VAPOR)

400 WATT - (NO PATCH)
250 WATT - YELLOW

IDENTIFICATION PLAQUE





FASTEN TOP, CENTER AND BOTTOM OF PLAQUE WITH 3 ALUMINUM POP RIVETS (ALUM. POLES) OR STAINLESS STEEL POP RIVETS (STEEL POLES)

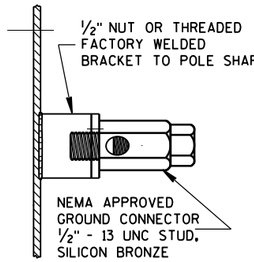
NOTES:

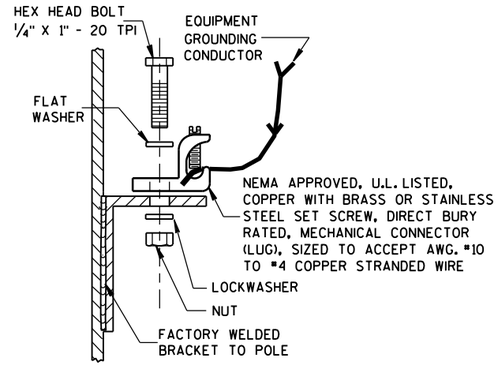
1) PLACE BOTTOM OF UNIT NUMBER PLAQUE 5'-0" ABOVE ELEVATION OF ADJACENT CURB OR SHOULDER.

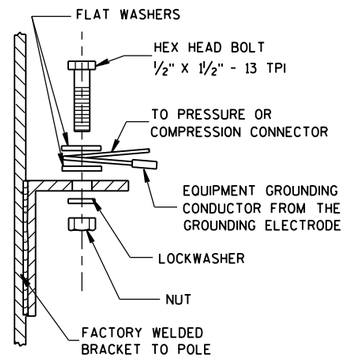
2) UNIT NUMBERS: ONE REQUIRED FOR SINGLE ARM POLES TWO REQUIRED FOR MEDIAN MOUNT POLES.

LIGHTING UNIT IDENTIFICATION PLAQUE REQUIREMENTS AND PLACEMENT
(TYPICAL ALL LIGHTING UNITS)

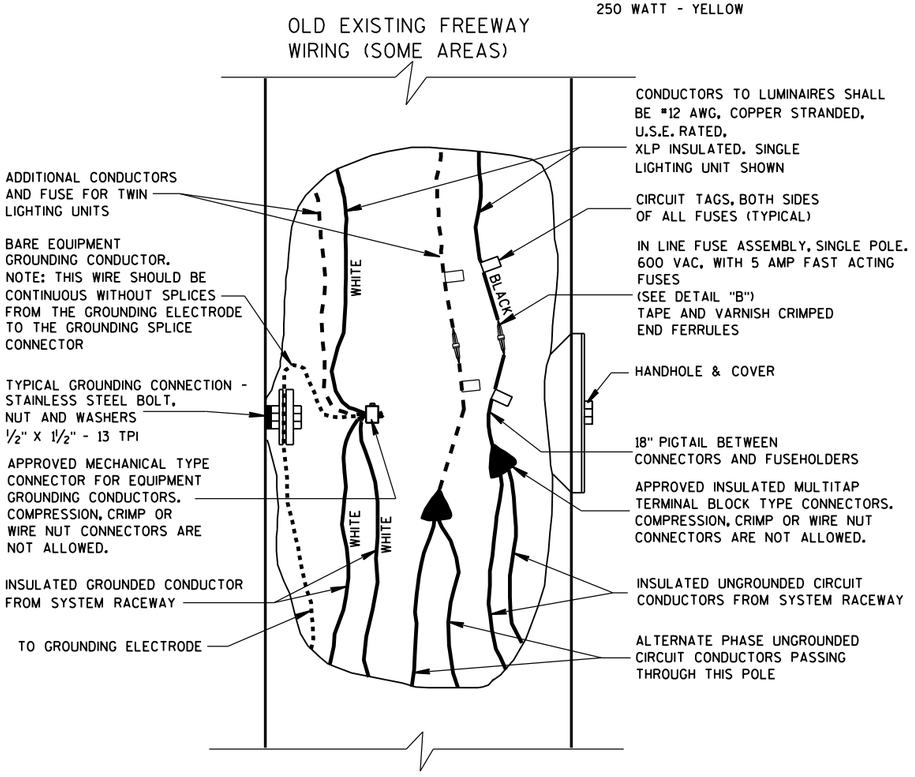
FURNISH PLAQUE WHEN CALLED FOR BY SPECIAL PROVISIONS



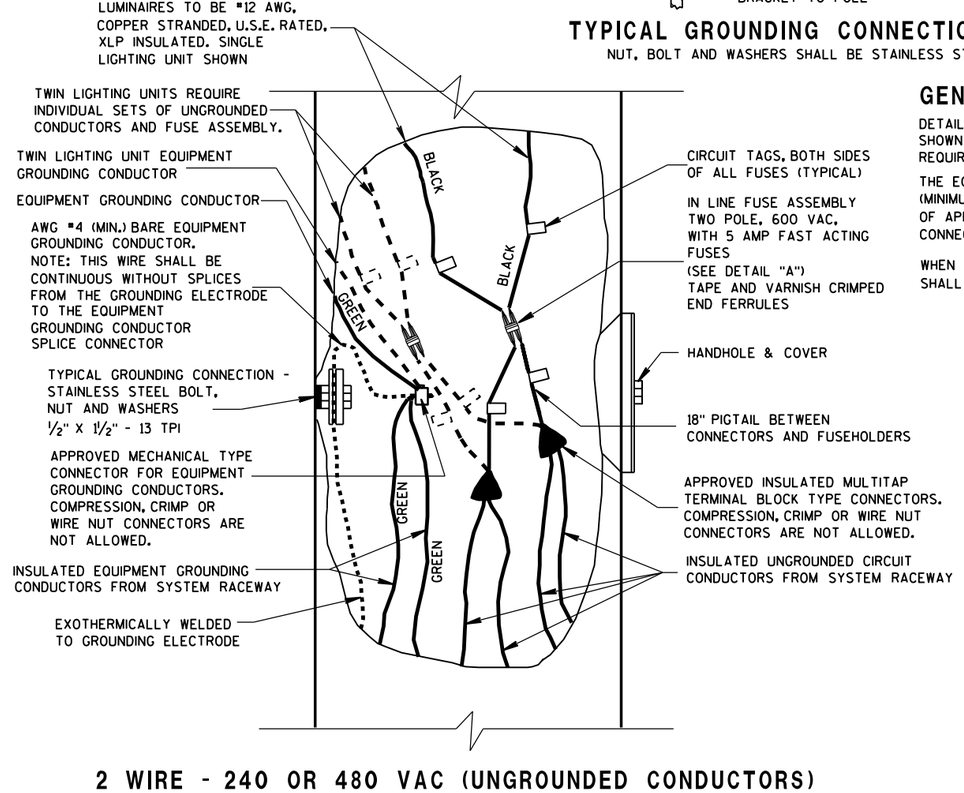




TYPICAL GROUNDING CONNECTIONS
NUT, BOLT AND WASHERS SHALL BE STAINLESS STEEL



2 WIRE - 120, 240 OR 480 VAC TO GROUND



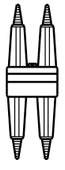
2 WIRE - 240 OR 480 VAC (UNGROUNDED CONDUCTORS) WITH EQUIPMENT GROUNDING CONDUCTOR

GENERAL NOTES

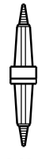
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

THE EQUIPMENT GROUND CONNECTOR SHALL BE TAPED WITH 3 WRAPS (MINIMUM) OF APPROVED RUBBER TAPE AND THEN 3 WRAPS (MINIMUM) OF APPROVED VINYL TAPE TO COVER SHARP WIRE ENDS AFTER THE CONNECTION IS COMPLETED.

WHEN TRANSFORMER BASES ARE USED, ALL WIRING CONNECTIONS SHALL OCCUR WITHIN THE TRANSFORMER BASES.



DETAIL "A"
BREAKAWAY DOUBLE POLE WITH WATERPROOF INSULATING BOOT

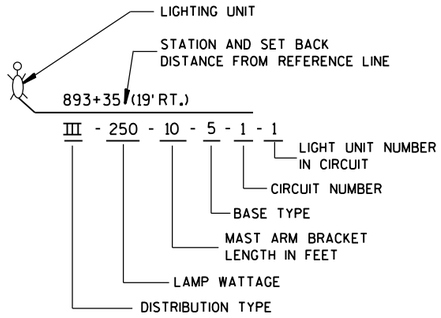


DETAIL "B"
BREAKAWAY SINGLE POLE WITH WATERPROOF INSULATING BOOT

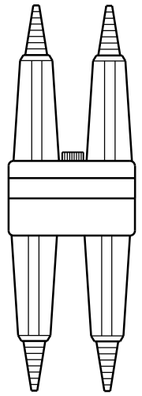
FREEWAY LIGHTING UNIT POLE WIRING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

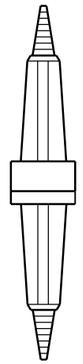
APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA



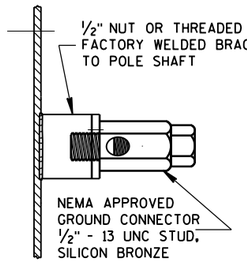
LIGHTING UNIT CODE
(TYPICAL)

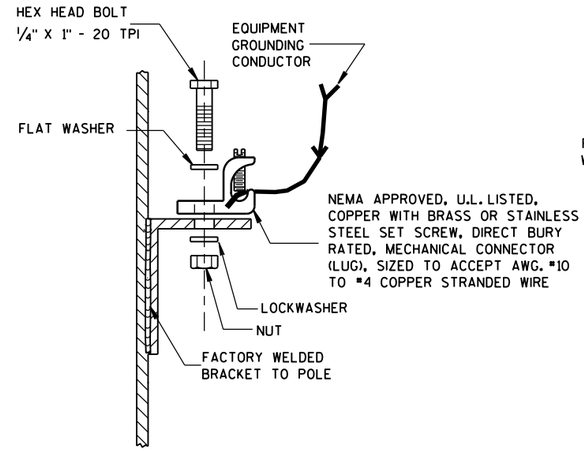


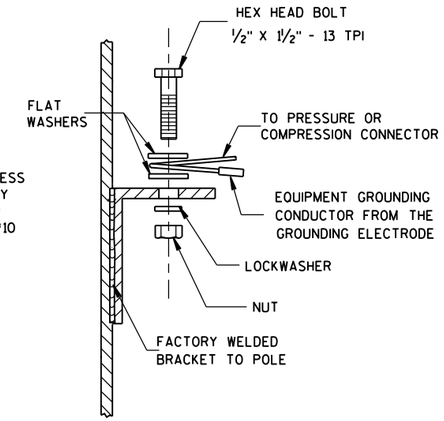
DETAIL "A"
BREAKAWY
DOUBLE POLE WITH
WATERPROOF
INSULATING BOOT



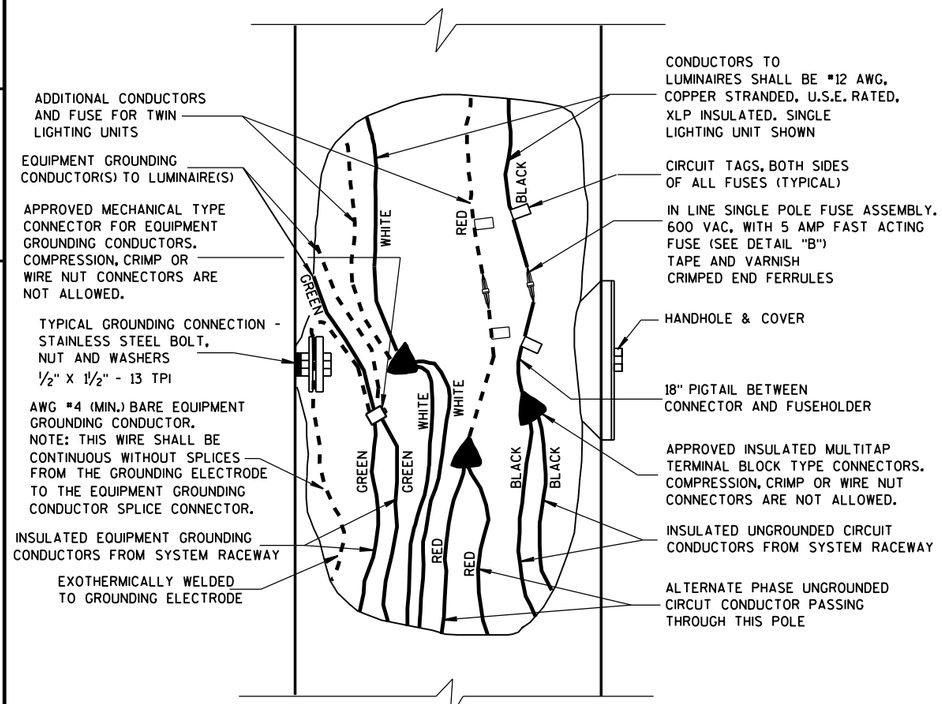
DETAIL "B"
BREAKAWY
SINGLE POLE WITH
WATERPROOF
INSULATING BOOT



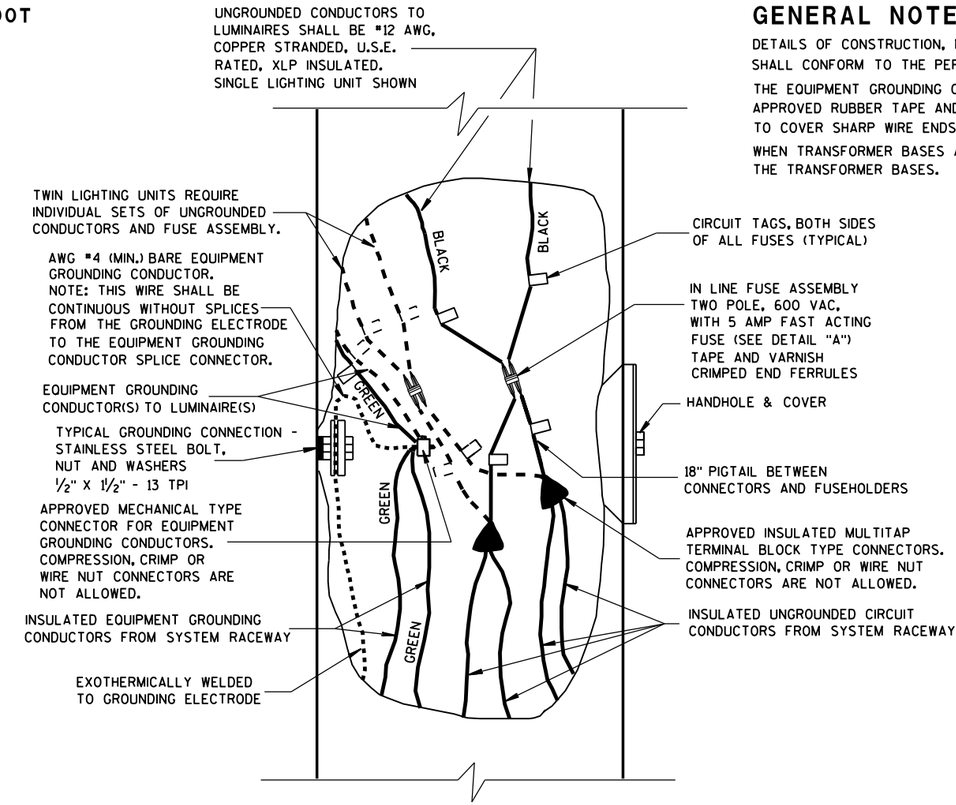




TYPICAL GROUNDING CONNECTIONS
NUT, BOLT, WASHERS AND LOCKWASHERS SHALL BE STAINLESS STEEL



3 WIRE - 120, 240 OR 480 VAC (UNGROUNDED CONDUCTOR) WITH GROUNDED CONDUCTOR AND WITH EQUIPMENT GROUNDING CONDUCTOR



2 WIRE - 240 OR 480 VAC (UNGROUNDED CONDUCTORS) WITH EQUIPMENT GROUNDING CONDUCTOR

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

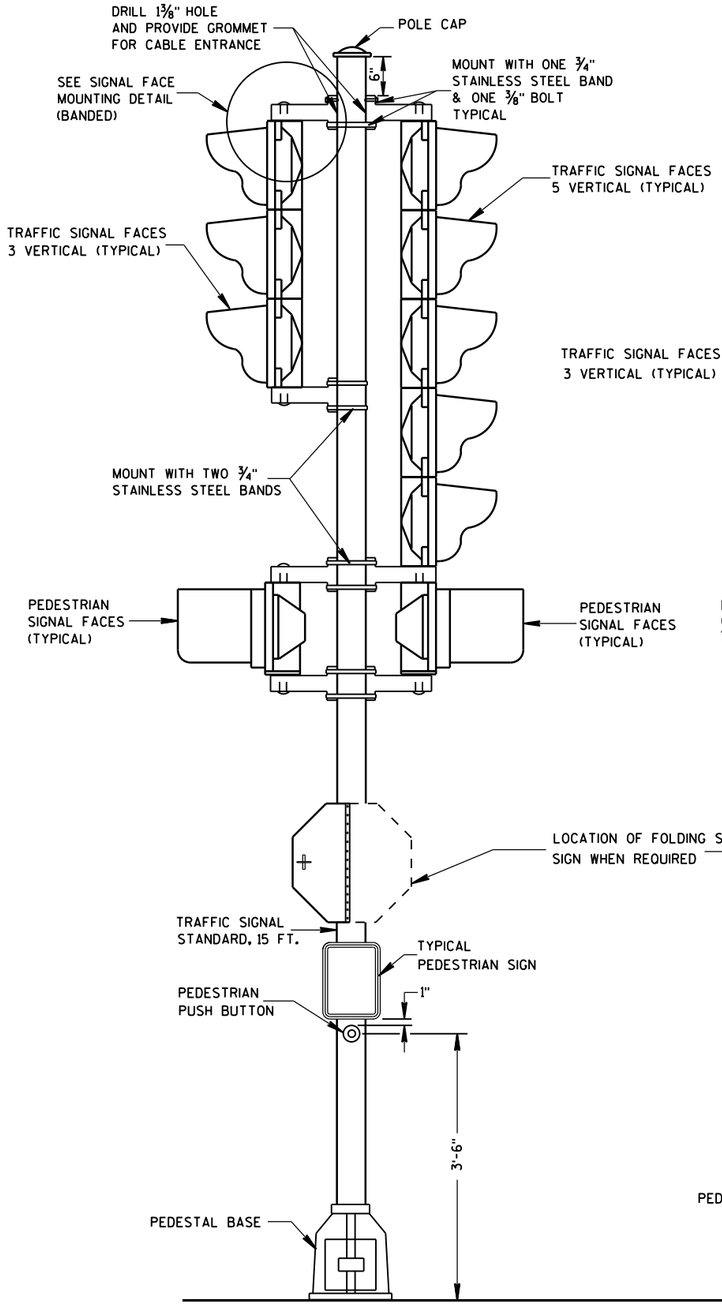
THE EQUIPMENT GROUNDING CONNECTOR SHALL BE TAPED WITH 3 WRAPS (MINIMUM) OF APPROVED RUBBER TAPE AND THEN 3 WRAPS (MINIMUM) OF APPROVED VINYL TAPE TO COVER SHARP WIRE ENDS AFTER THE CONNECTION IS COMPLETED.

WHEN TRANSFORMER BASES ARE USED, ALL WIRING CONNECTIONS SHALL OCCUR WITHIN THE TRANSFORMER BASES.

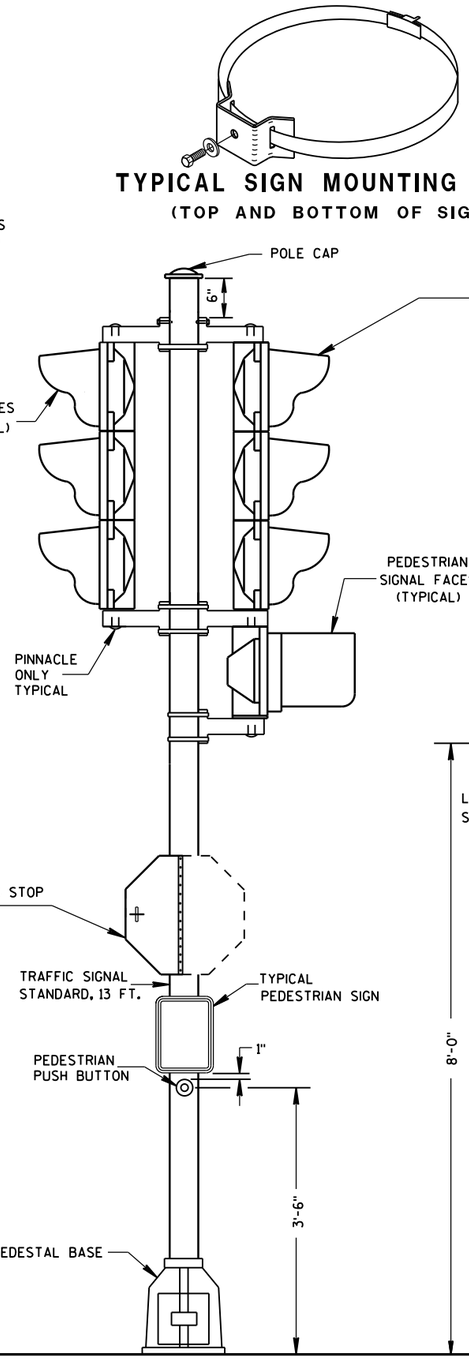
NON-FREEWAY LIGHTING UNIT POLE WIRING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL 655
FHWA

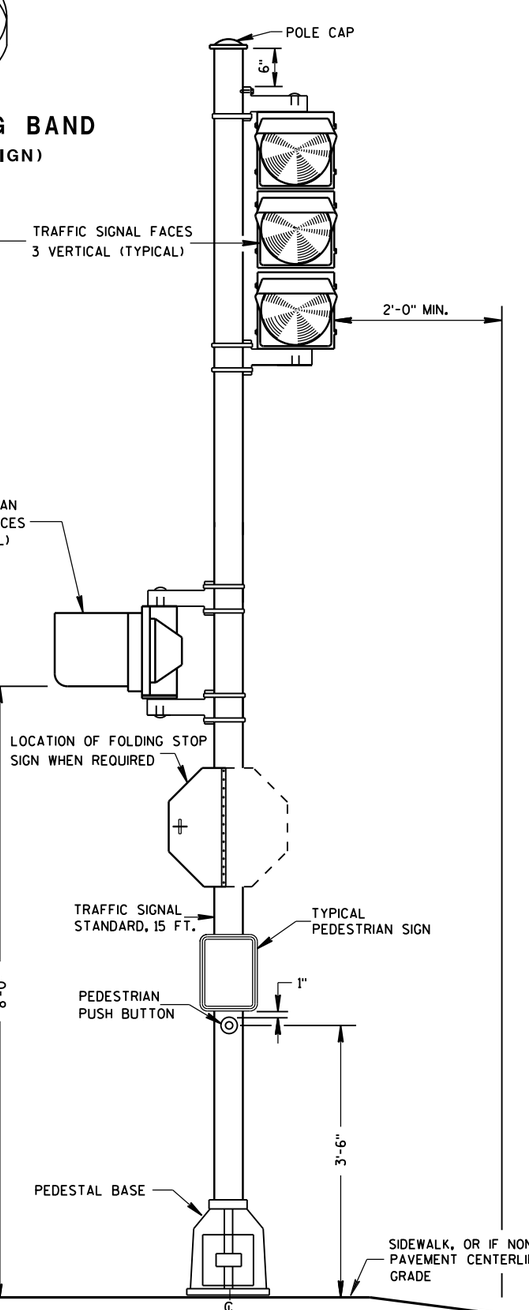


TRAFFIC SIGNAL STANDARD-15 FT.



TRAFFIC SIGNAL STANDARD-13 FT.

TYPICAL SIGN MOUNTING BAND
(TOP AND BOTTOM OF SIGN)



TRAFFIC SIGNAL STANDARD-15 FT.
3M MOUNTING (TYPICAL)

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

SEE THE SIGNAL PLAN FOR REQUIRED SIGNAL FACE SIZES.

ALL PEDESTAL BASES SHALL BE MOUNTED ON CONCRETE BASE - TYPE 1.

FOR APPROVED MOUNTING HARDWARE, SEE THE CONTRACT SPECIAL PROVISIONS.

POLYCARBONATE MOUNTING BRACKETS SHALL BE USED.

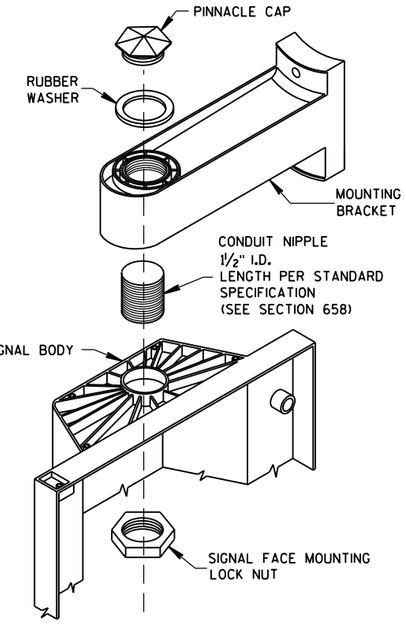
LENGTH AND LOCATION OF TRAFFIC SIGNAL STANDARDS SHALL BE AS SHOWN ON THE PLANS.

OPTICALLY PROGRAMMED SIGNAL FACES SHALL BE MASKED IN ACCORDANCE WITH MANUFACTURERS INSTRUCTIONS, AND UNDER THE DIRECTIONS OF THE REGION TRAFFIC ENGINEER.

FOLDING STOP SIGNS SHALL BE IN ACCORDANCE WITH THE MUTCD AND/OR THE LATEST WISCONSIN SUPPLEMENT. THE SIGNS SHALL BE SIZED AND LOCATED AS CALLED FOR IN IN THE PLANS.

PEDESTRIAN SIGNS SHALL BE AS DESIGNATED IN THE PLANS.

FURNISH AND INSTALL VENTILATED, CAST, METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) ¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.



SIGNAL FACE MOUNTING DETAIL
(BANDED)

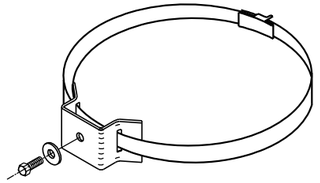
TRAFFIC SIGNAL STANDARD POLY BRACKET MOUNTINGS (TYPICAL) 13 FT. OR 15 FT.

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

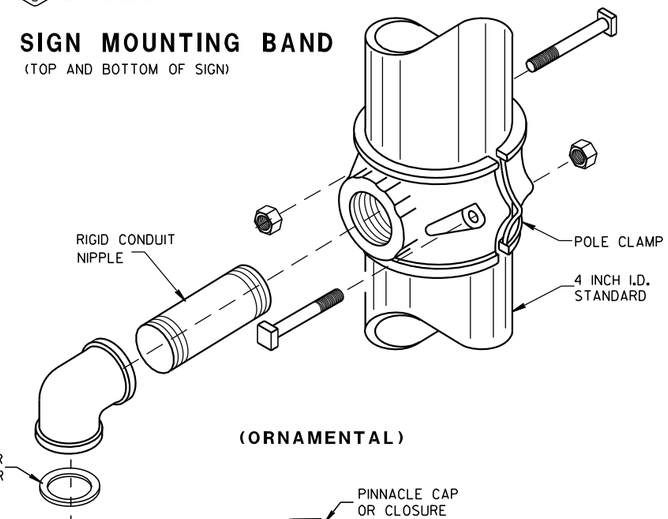
APPROVED
2/28/2013 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

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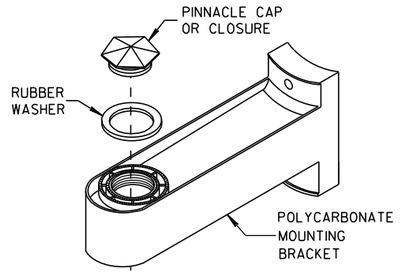
S.D.D. 9 E 6-5



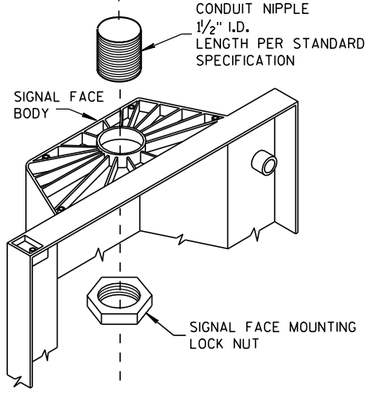
TYPICAL SIGN MOUNTING BAND
(TOP AND BOTTOM OF SIGN)



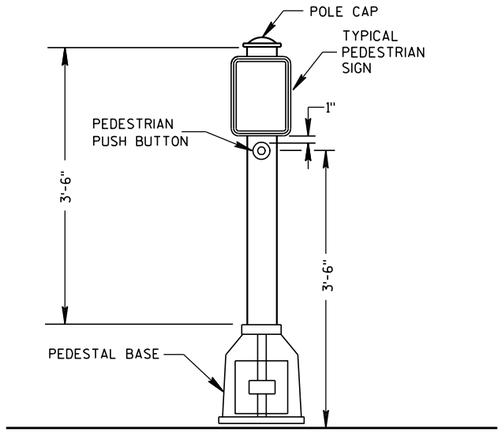
(ORNAMENTAL)



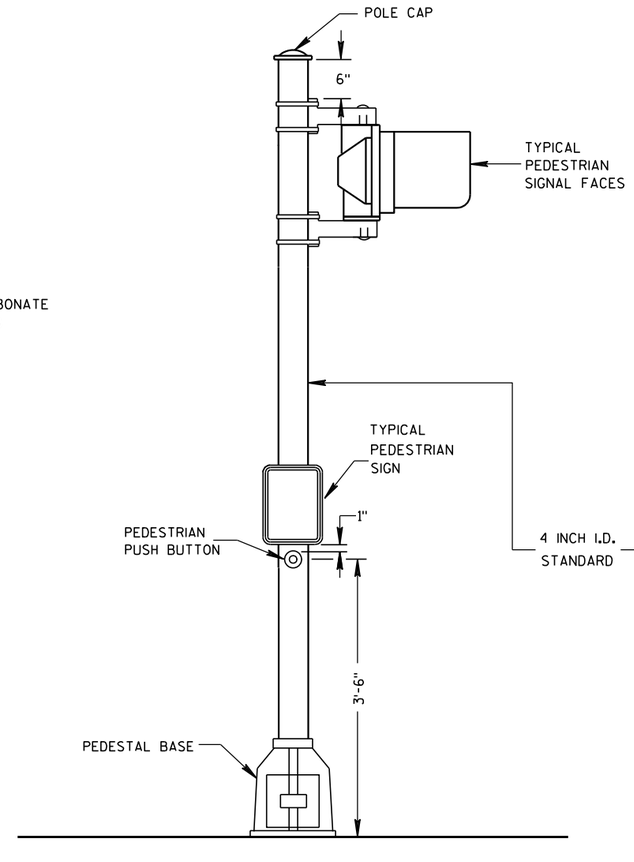
(BANDED)



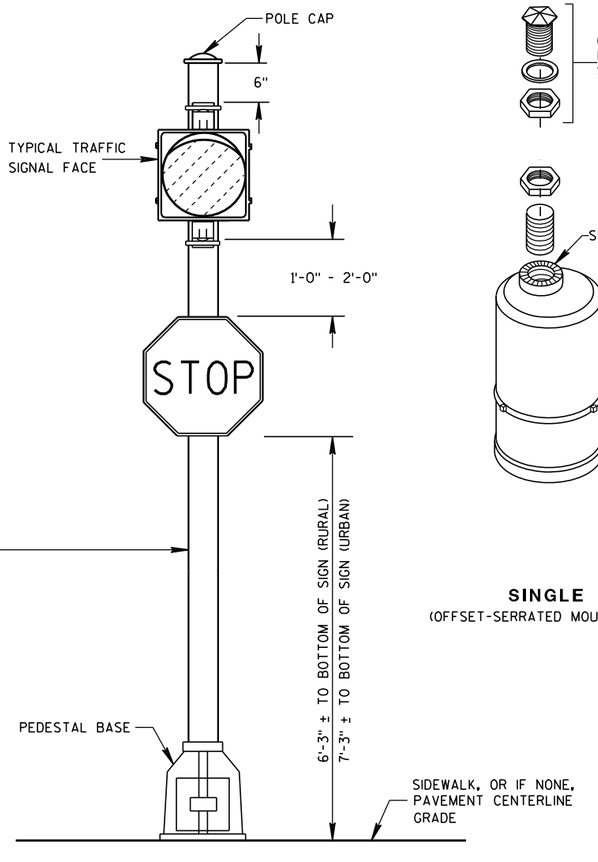
SIGNAL FACE MOUNTING DETAILS



PEDESTRIAN PUSH BUTTON TYPICAL MOUNTING



PEDESTRIAN FACE STANDARD-10 FT.
(WALK-DON'T WALK)



STANDARD FLASHER.
10 FOOT, 13 FOOT OR 15 FOOT AS REQUIRED

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

SEE THE SIGNAL PLAN FOR REQUIRED SIGNAL FACE SIZES.

LOCATIONS SHALL BE AS SHOWN ON THE PLANS.

ALL PEDESTAL BASES SHALL BE MOUNTED ON CONCRETE BASE - TYPE 1.

FOR APPROVED MOUNTING HARDWARE, SEE THE CONTRACT SPECIFICATIONS.

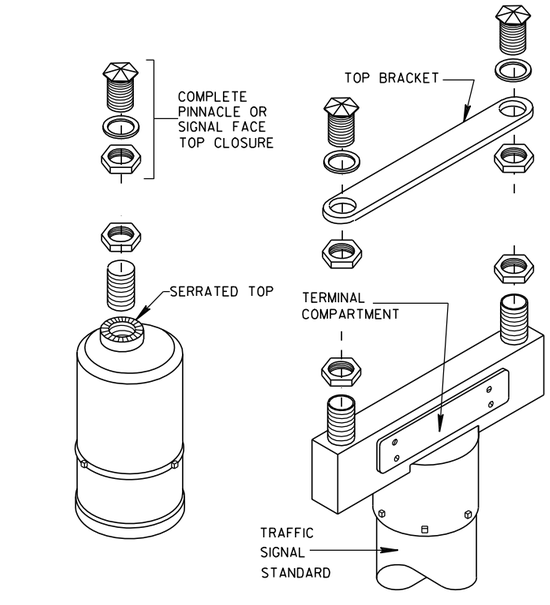
POLYCARBONATE SIGNAL FACE MOUNTING BRACKETS SHALL BE USED UNLESS ORNAMENTAL POLE CLAMPS ARE SPECIFIED.

LENGTH OF TRAFFIC STANDARDS SHALL BE AS SHOWN ON THE PLANS.

MOUNTINGS AND BRACKETS SHALL BE AS SHOWN ON THE PLANS OR DESCRIBED IN THE SPECIAL PROVISIONS (BY THE DISTRICT TRAFFIC ENGINEER).

PEDESTRIAN SIGNS SHALL BE AS DESIGNATED IN THE PLANS.

FURNISH AND INSTALL VENTILATED, CAST, METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) ¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.



SINGLE
(OFFSET-SERRATED MOUNTING)

DOUBLE
(SERRATED MOUNTING)

SLIPFITTERS

TRAFFIC SIGNAL STANDARD PEDESTRIAN AND FLASHER TYPICAL MOUNTING DETAILS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

5/11/10
DATE

/S/ John Corbin
STATE ELECTRICAL ENGI 657

HWYS

FHWA

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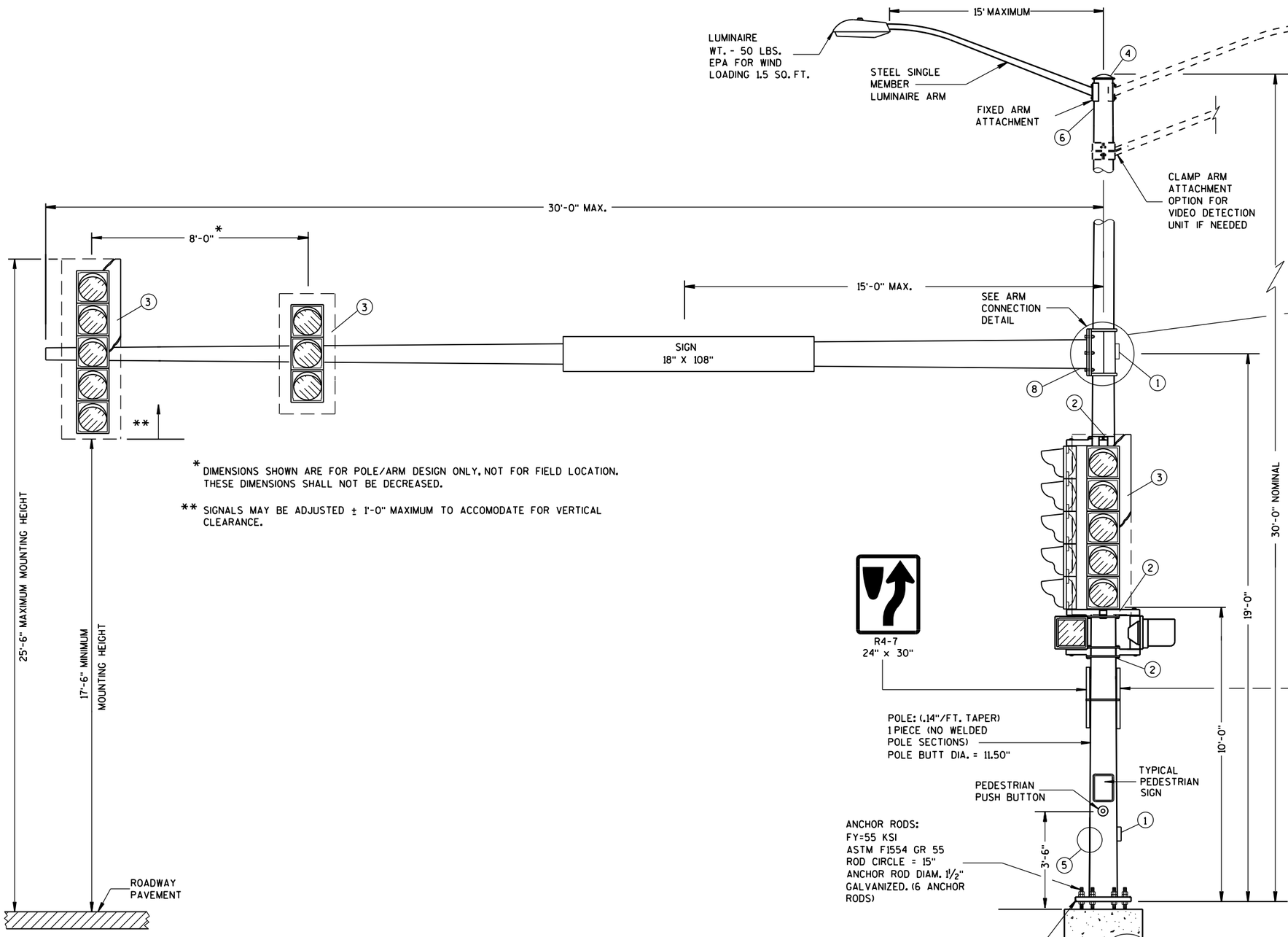
S.D.D. 9 E 7-5

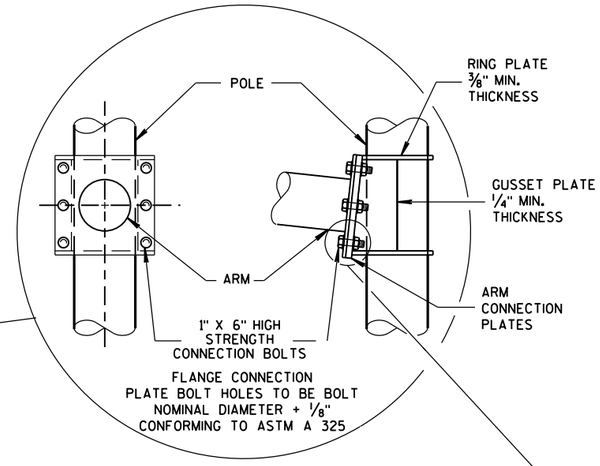
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S.D.D. 9 E 7-5

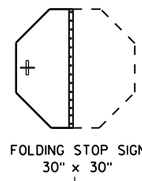
* DIMENSIONS SHOWN ARE FOR POLE/ARM DESIGN ONLY, NOT FOR FIELD LOCATION. THESE DIMENSIONS SHALL NOT BE DECREASED.

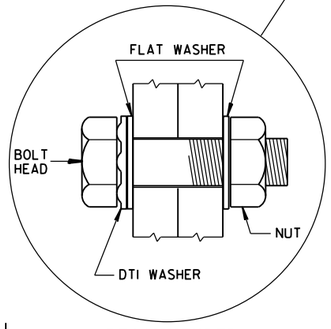
** SIGNALS MAY BE ADJUSTED ± 1'-0" MAXIMUM TO ACCOMODATE FOR VERTICAL CLEARANCE.



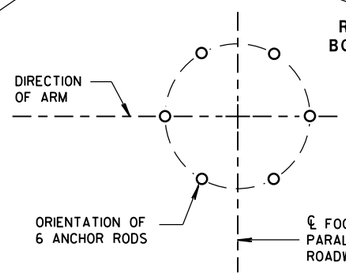


6 BOLT ARM CONNECTION DETAIL





RECOMMENDED BOLT ASSEMBLY DETAIL



ANCHOR ROD LOCATION

(MAXIMUM LOAD)

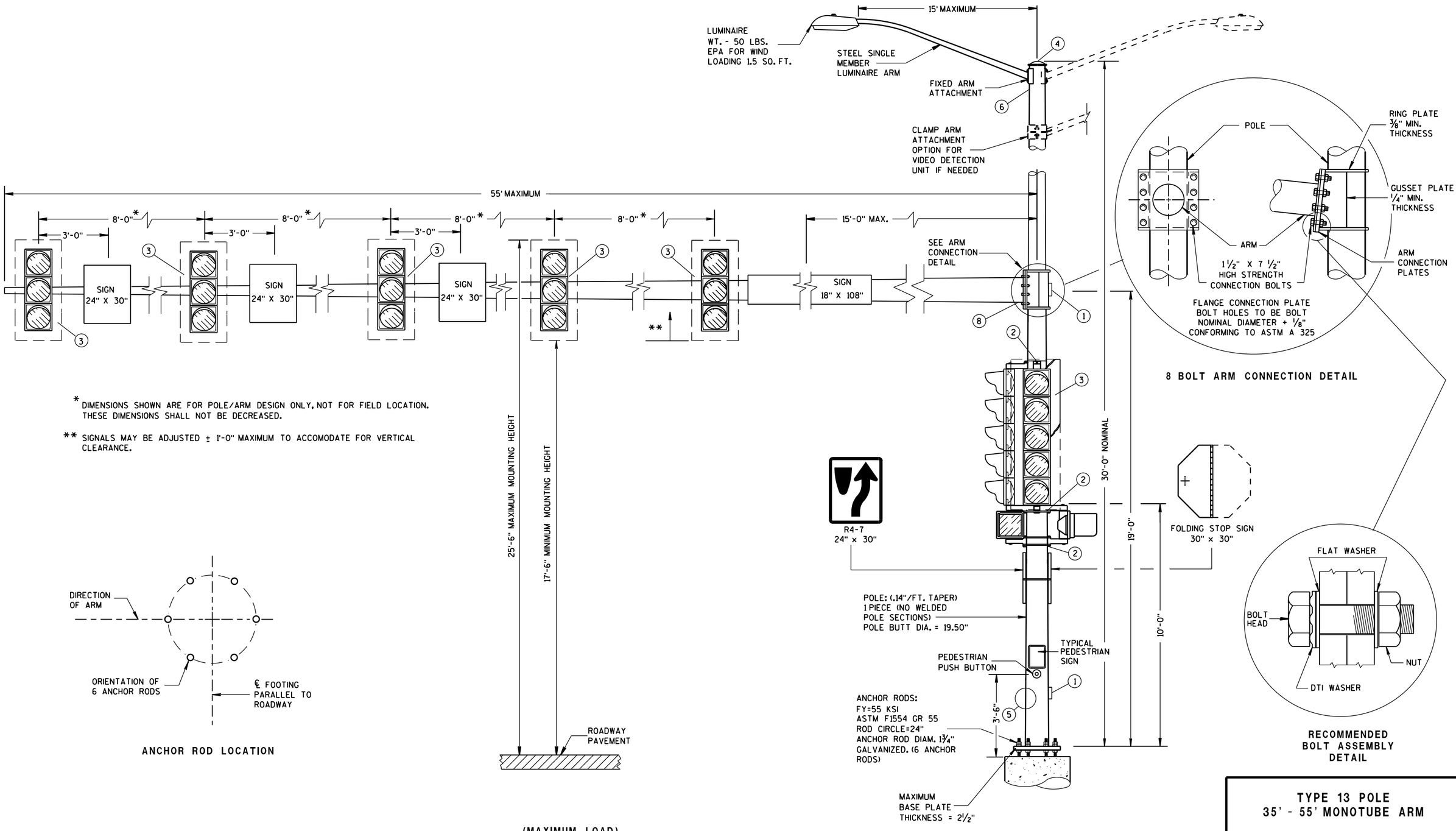
TYPE 10 POLE
15'- 30' MONOTUBE ARM

TYPE 10 POLE
15' - 30' MONOTUBE ARM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014
DATE
/S/ Ahmet Demirbilek
STATE ELECTRICAL 658
FHWA

6
S.D.D. 9 E 8-6b



8 BOLT ARM CONNECTION DETAIL

RECOMMENDED
BOLT ASSEMBLY
DETAIL

* DIMENSIONS SHOWN ARE FOR POLE/ARM DESIGN ONLY, NOT FOR FIELD LOCATION. THESE DIMENSIONS SHALL NOT BE DECREASED.

** SIGNALS MAY BE ADJUSTED ± 1'-0" MAXIMUM TO ACCOMODATE FOR VERTICAL CLEARANCE.

ANCHOR ROD LOCATION

(MAXIMUM LOAD)

TYPE 13 POLE 35'- 55' MONOTUBE ARM

TYPE 13 POLE 35' - 55' MONOTUBE ARM
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION
APPROVED Sept. 2014 DATE /S/ Ahmet Demirbilek STATE ELECTRICAL 659 FHWA

6
S.D.D. 9 E 8-6d

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

POLE TYPES 9 AND 10 ARE FOR ARM LENGTHS 15-FOOT TO 30-FOOT.

POLE TYPES 12 AND 13 ARE FOR ARM LENGTHS 35-FOOT TO 55-FOOT.

MONOTUBE POLE AND ARM SHALL BE GALVANIZED STEEL.

RING-STIFFENED BUILT-UP BOX TYPE OF ATTACHMENT FOR TRAFFIC SIGNAL ARM.

ONE (1) PIECE POLE CONSTRUCTION (NO WELDED POLE SECTIONS).

STANDARD STRAIGHT ARM DESIGN (3 % ± RISE).

SECTION 657, POLES OF THE STANDARD SPECIFICATIONS SHALL APPLY TO THIS DRAWING.

PROVIDE WIREWAY THRU POLE WALL AND ARM CONNECTION PLATES. PROVIDE ROUND, SMOOTH INSIDE SURFACE.

MANUFACTURER'S SUBMITTED POLE DESIGNS AND DRAWINGS SHALL BE SIGNED AND STAMPED BY A REGISTERED PROFESSIONAL ENGINEER AND CERTIFIED AS BEING IN COMPLIANCE WITH THE AASHTO 2013 6TH EDITION AND ALL PERTINENT WISDOT SPECIFICATIONS AND DRAWINGS FOR TRAFFIC AND LIGHTING STRUCTURES AND AS FOLLOWS:

- CATEGORY III FATIGUE LOADS OF GALLOPING, TRUCK GUSTS (AT 45 MPH VEHICLE VELOCITY) AND NATURAL WIND GUSTS FOR DESIGN OF TYPE 9 AND TYPE 10 STRUCTURES.
- CATEGORY II FATIGUE LOADS OF GALLOPING, TRUCK GUSTS (AT 45 MPH VEHICLE VELOCITY) AND NATURAL WIND GUSTS FOR DESIGN OF TYPE 12 AND TYPE 13 STRUCTURES.
- 90 MPH (3-SECOND GUST) WIND SPEED AND A 50 YEAR DESIGN LIFE.

SECURE THE OPENING BELOW THE BASE PLATE WITH STAINLESS STEEL OR GALVANIZED STEEL MESH AND SECURE THE MESH WITH ¾" S.S. BANDING AROUND THE LEVELING NUTS.

INDENT PRINT (NOMINAL ½" HIGH) THE POLE LENGTH AND FIRST TWO LETTERS OF THE MANUFACTURERS NAME ON TWO SIDES OF THE BASE PLATE 180 DEGREES APART, BEFORE GALVANIZING. THE ARM SHALL BE IDENTIFIED WITH THE SAME INFORMATION BY INDENT PRINT.

SIGNAL FACE SHALL BE MOUNTED 6 INCHES (NOMINAL) FROM THE END OF THE MONOTUBE ARM OR AS SHOWN ON THE PLAN CONSTRUCTION DETAIL OR AS DIRECTED BY THE PROJECT ENGINEER/ELECTRICAL OPERATIONS PERSONNEL. MOUNT ALL LIKE HEADS AT SAME ELEVATION.

SIGN MOUNTING BRACKETS SHALL BE FURNISHED IN ACCORDANCE WITH SECTION 637 OF THE STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION.

(1) DESIGN FOR MAXIMUM ALLOWABLE HANDHOLE WITH COVER ASSEMBLY WITH TWO ¼" X ¾" - 20 TPI STAINLESS STEEL HEX HEAD BOLTS.

(2) SIGNAL MOUNTING BRACKETS FOR POLE MOUNTING, MOUNT WITH CAP SCREW AND BANDING, (SEE SPECIFICATIONS SEC. 658).

(3) SECURELY MOUNT BACKPLATES, PROJECTING 5" BEYOND ALL SIDES OF THE SIGNAL FACE HOUSING, PER MANUFACTURERS RECOMMENDATIONS.

(4) THE TOP OF THE POLE SHAFT AND THE END OF THE MONOTUBE ARM SHALL BE EQUIPPED WITH A REMOVABLE, VENTILATED CAP HELD SECURELY IN PLACE WITH SET SCREWS.

(5) FACTORY-WELDED BRACKET FOR GROUNDING LUG, OPPOSITE HANDHOLE, (LUG AND HARDWARE PAID UNDER SEPARATE ITEM). PROVIDE HOLE IN BRACKET FOR ¼" X ¾" - 20 TPI STAINLESS STEEL HEX HEAD BOLT.

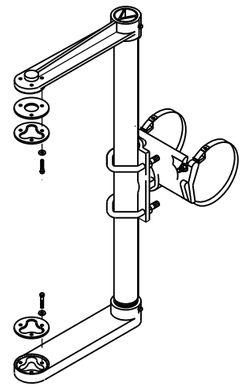
(6) FACTORY-WELDED "J" HOOK FOR STRAIN RELIEF FOR POLE LUMINAIRE WIRE.

(7) INSTALL DEPARTMENT PROVIDED STRUCTURAL IDENTIFICATION PLAQUES.

STRUCTURAL IDENTIFICATION PLAQUES SHALL BE PLACED ON THE POLES IN THE SAME DIRECTION AS THE ARM.

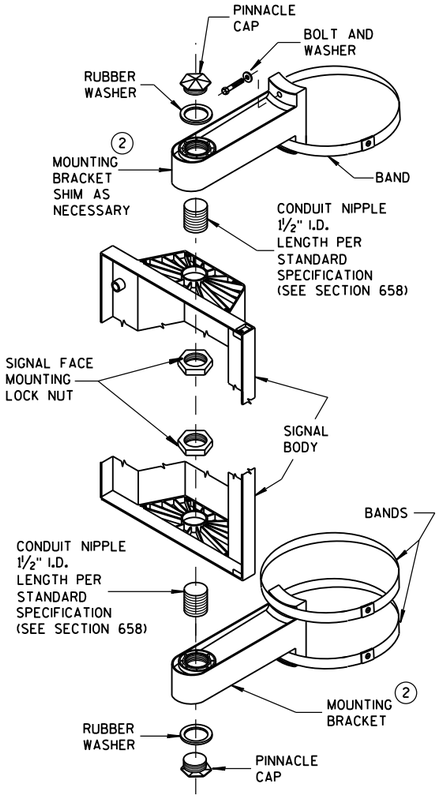
MOUNTING HEIGHT SHALL BE 5'-0" ABOVE THE CURB OR SHOULDER . ADJUST IF IT IS KNOWN THAT REQUIRED TRAFFIC SIGNS WILL BE OBSTRUCTED.

(8) FACTORY DRILLED ½" DRAIN HOLE 2" FROM FLANGE CONNECTION PLATE.

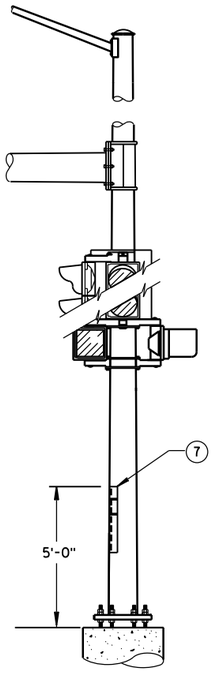


SIGNAL FACE MOUNTING BRACKET DETAIL FOR MONOTUBE ARM

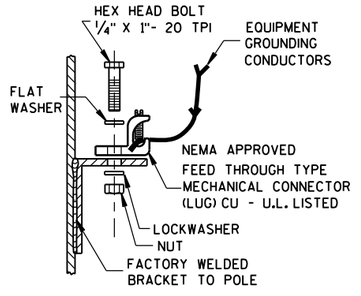
(MOUNT PER MANUFACTURER'S RECOMMENDATION)



SIGNAL FACE VERTICAL MOUNTING DETAIL

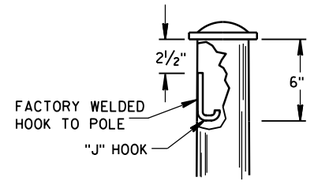


STRUCTURAL IDENTIFICATION PLAQUE PLACEMENT



TYPICAL GROUNDING CONNECTIONS (5)

NUT, BOLT AND WASHERS SHALL BE STAINLESS STEEL



"J" HOOK WIRE SUPPORT (6)

GENERAL NOTES AND HARDWARE DETAILS FOR TYPE 9, 10, 12 & 13 POLES WITH MONOTUBE ARMS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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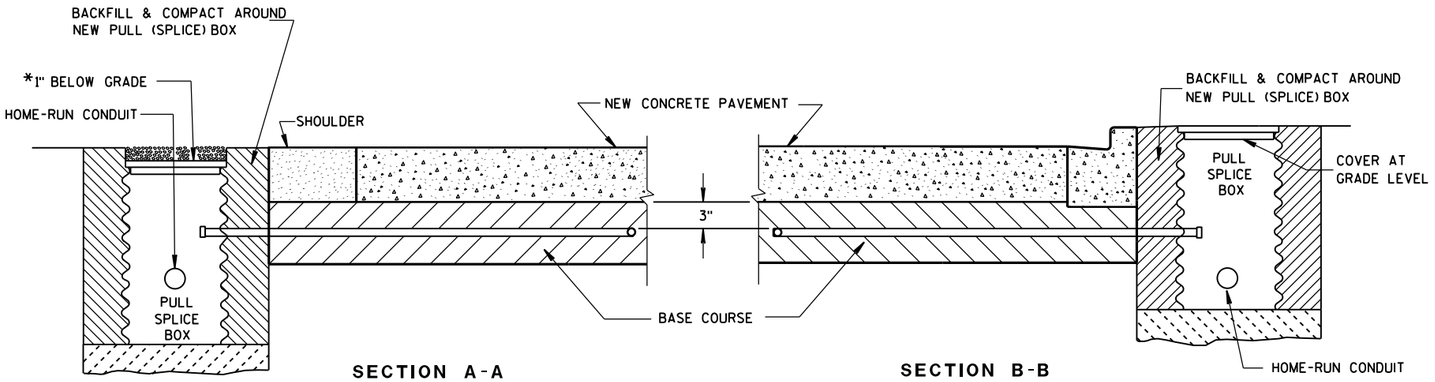
Sept. 2014 — DATE

/S/ Ahmet Demirbilek — STATE ELECTRICAL 660

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SECTION A-A
NO CURB & GUTTER

SECTION B-B
CURB & GUTTER

*RECESS PULL (SPLICE) BOX SO THAT THE COVER IS 3" BELOW GRADE IN SHOULDER AREAS OF CRUSHED AGGREGATE. BACKFILL OVER COVER WITH THE CRUSHED AGGREGATE TO BRING THE AREA TO GRADE LEVEL.

LOOP DETECTOR INSTALLATION DETAIL

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

LOOP SIZE, CONFIGURATION LOCATION, NUMBER OF TURNS OF WIRE AND ASSOCIATED SIGNAL PHASE SHALL BE AS SHOWN ON THE PLANS.

PITCH LEAD OUT CONDUIT TO DRAIN TO ROADSIDE PULL (SPLICE) BOX.

SPLICES SHALL BE INSTALLED BY USING CAST IN PLACE SPLICE KITS LISTED ON THE DEPARTMENTS APPROVED PRODUCTS LIST OR AN ENGINEER APPROVED EQUAL. NON-INSULATED BUTT SPLICES TO FIT #12 AWG STRANDED WIRE SHALL BE USED. SPLICES SHALL BE SOLDERED AND INSULATED FROM EACH OTHER AS PER INSTRUCTIONS INCLUDED IN THE SPLICE KIT.

MEASURE GROUND RESISTANCE USING A MEGGER. REPLACE LOOP WIRE NOT ATTAINING A READING OF INFINITY TO GROUND.

AFTER SPLICING THE LOOP WIRE TO THE LOOP LEAD-IN CABLE, THE CONTRACTOR SHALL MEASURE INDUCTANCE, GROUND RESISTANCE AND WIRE RESISTANCE AT THE CABINET END OF THE LEAD-IN CABLE AND FURNISH A COPY OF THE READINGS TO THE PROJECT ENGINEER FOR EVALUATION.

LOOP DETECTOR LEADS SHALL BE IDENTIFIED WITH THEIR ASSOCIATED LOOP BY USE OF WATERPROOF TAGS AT BOTH ENDS OF THE CABLE. A LISTING OF THE CABLE IDENTIFICATION PER INDIVIDUAL LOOP LEAD-IN SHALL BE PLACED IN THE CABINET.

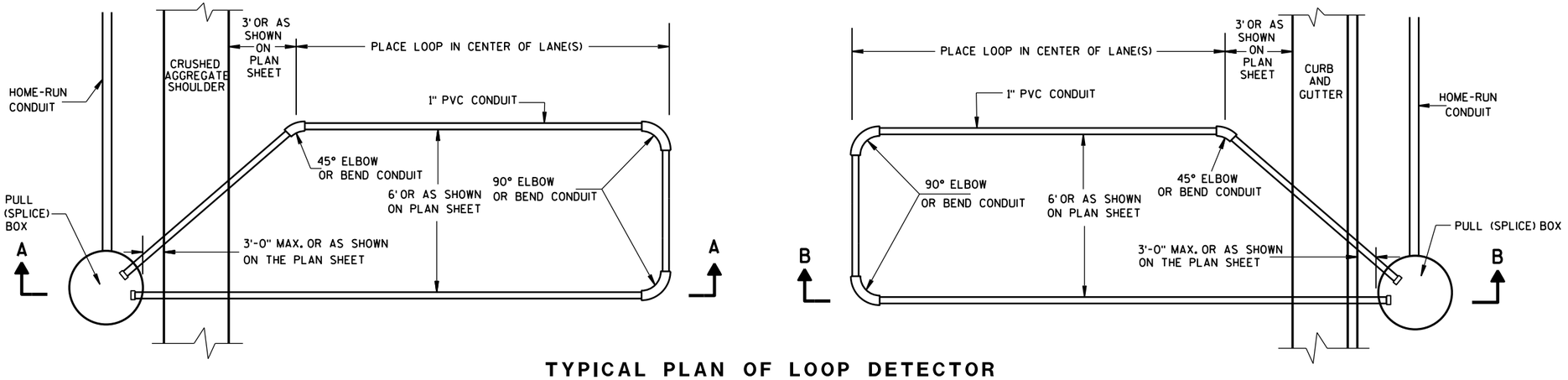
THE #12 AWG. LOOP WIRE IN THE PULL (SPLICE) BOX SHALL BE HAND TWISTED AT LEAST 3 TWISTS PER FOOT BEFORE BEING SPLICED TO THE LOOP LEAD-IN CABLE.

SPLICES OF LOOP WIRE TO LEAD-IN CABLE SHALL BE MADE ONLY IN PULL (SPLICE) BOXES AT THE SIDE OF THE ROAD.

THE #12 AWG LOOP WIRE SHALL BE INSTALLED FROM THE ROADSIDE PULL (SPLICE) BOX THROUGH THE LOOP CONDUIT, BACK TO THE ROADSIDE PULL (SPLICE) BOX, AND BE INSTALLED IN ONE, NON-SPLICE CONTINUOUS LENGTH.

PROTECTION OF THE CONDUIT IN THE BASE COURSE, SHALL BE REQUIRED AFTER INSTALLATION AND BEFORE NEW PAVEMENT IS INSTALLED.

SHOULD INSTALLATION REPAIR BE REQUIRED, IT SHALL BE DONE UNDER THE DIRECTION OF THE PROJECT ENGINEER.



TYPICAL PLAN OF LOOP DETECTOR WITH 18" OR 24" PULL (SPLICE) BOX

LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 1)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

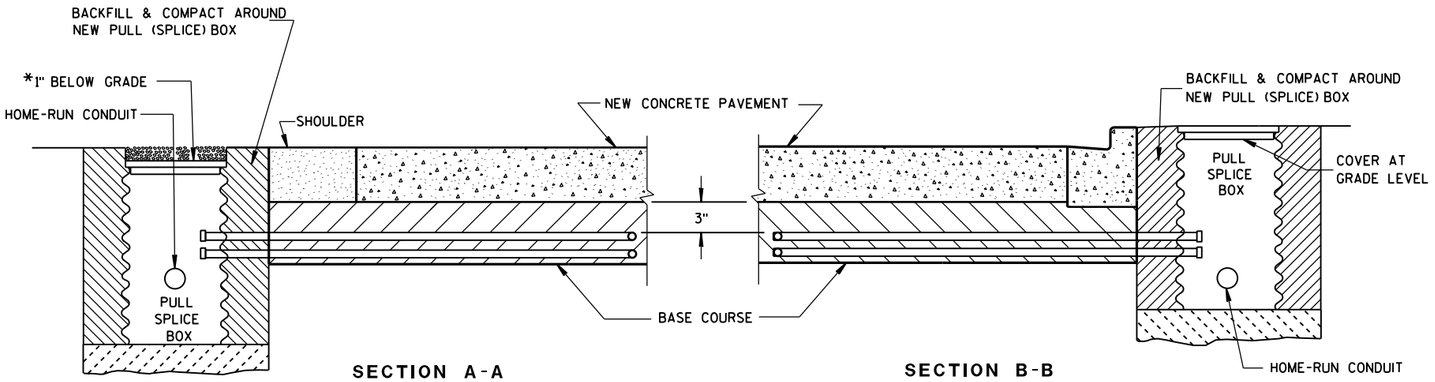
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Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
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S.D.D. 9 F 15-4a

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S.D.D. 9 F 15-4a



SECTION A-A
NO CURB & GUTTER

SECTION B-B
CURB & GUTTER

*RECESS PULL (SPLICE) BOX SO THAT THE COVER IS 3" BELOW GRADE IN SHOULDER AREAS OF CRUSHED AGGREGATE. BACKFILL OVER COVER WITH THE CRUSHED AGGREGATE TO BRING THE AREA TO GRADE LEVEL.

LOOP DETECTOR INSTALLATION DETAIL

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

LOOP SIZE, CONFIGURATION LOCATION, NUMBER OF TURNS OF WIRE AND ASSOCIATED SIGNAL PHASE SHALL BE AS SHOWN ON THE PLANS.

PITCH LEAD OUT CONDUIT TO DRAIN TO ROADSIDE PULL (SPLICE) BOX.

SPLICES SHALL BE INSTALLED BY USING CAST IN PLACE SPLICE KITS LISTED ON THE DEPARTMENTS APPROVED PRODUCTS LIST OR AN ENGINEER APPROVED EQUAL. NON-INSULATED BUTT SPLICES TO FIT #12 AWG STRANDED WIRE SHALL BE USED. SPLICES SHALL BE SOLDERED AND INSULATED FROM EACH OTHER AS PER INSTRUCTIONS INCLUDED IN THE SPLICE KIT.

MEASURE GROUND RESISTANCE USING A MEGGER. REPLACE LOOP WIRE NOT ATTAINING A READING OF INFINITY TO GROUND.

AFTER SPLICING THE LOOP WIRE TO THE LOOP LEAD-IN CABLE, THE CONTRACTOR SHALL MEASURE INDUCTANCE, GROUND RESISTANCE AND WIRE RESISTANCE AT THE CABINET END OF THE LEAD-IN CABLE AND FURNISH A COPY OF THE READINGS TO THE PROJECT ENGINEER FOR EVALUATION.

LOOP DETECTOR LEADS SHALL BE IDENTIFIED WITH THEIR ASSOCIATED LOOP BY USE OF WATERPROOF TAGS AT BOTH ENDS OF THE CABLE. A LISTING OF THE CABLE IDENTIFICATION PER INDIVIDUAL LOOP LEAD-IN SHALL BE PLACED IN THE CABINET.

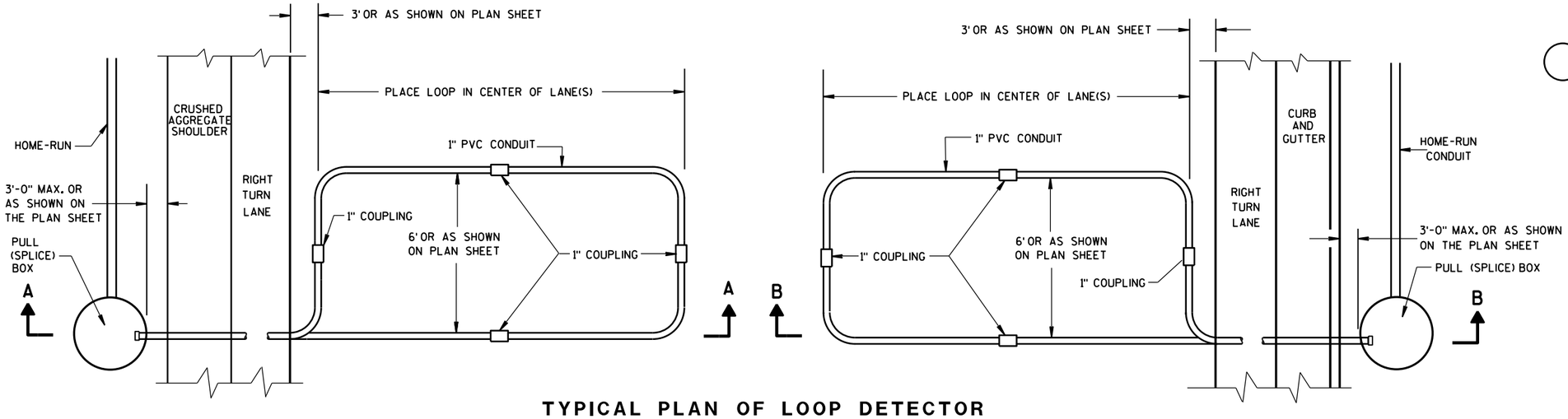
THE #12 AWG. LOOP WIRE IN THE PULL (SPLICE) BOX SHALL BE HAND TWISTED AT LEAST 3 TWISTS PER FOOT BEFORE BEING SPLICED TO THE LOOP LEAD-IN CABLE.

SPLICES OF LOOP WIRE TO LEAD-IN CABLE SHALL BE MADE ONLY IN PULL (SPLICE) BOXES AT THE SIDE OF THE ROAD.

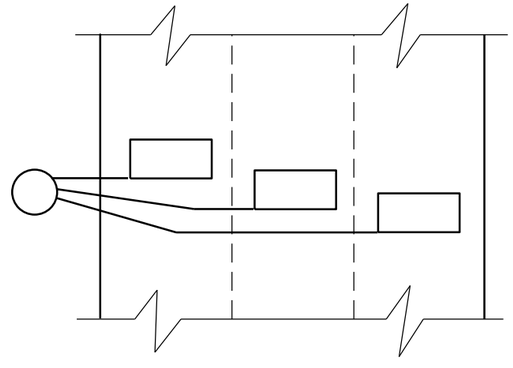
THE #12 AWG LOOP WIRE SHALL BE INSTALLED FROM THE ROADSIDE PULL (SPLICE) BOX, THROUGH THE LOOP CONDUIT, BACK TO THE ROADSIDE PULL (SPLICE) BOX, AND BE INSTALLED IN ONE, NON-SPLICED CONTINUOUS LENGTH.

PROTECTION OF THE CONDUITS IN THE BASE COURSE SHALL BE REQUIRED AFTER INSTALLATION AND BEFORE NEW PAVEMENT IS INSTALLED.

SHOULD INSTALLATION REPAIR BE REQUIRED, IT SHALL BE DONE UNDER THE DIRECTION OF THE PROJECT ENGINEER.



TYPICAL PLAN OF LOOP DETECTOR WITH 24" PULL (SPLICE) BOX



MULTI-LANE INSTALLATION

LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
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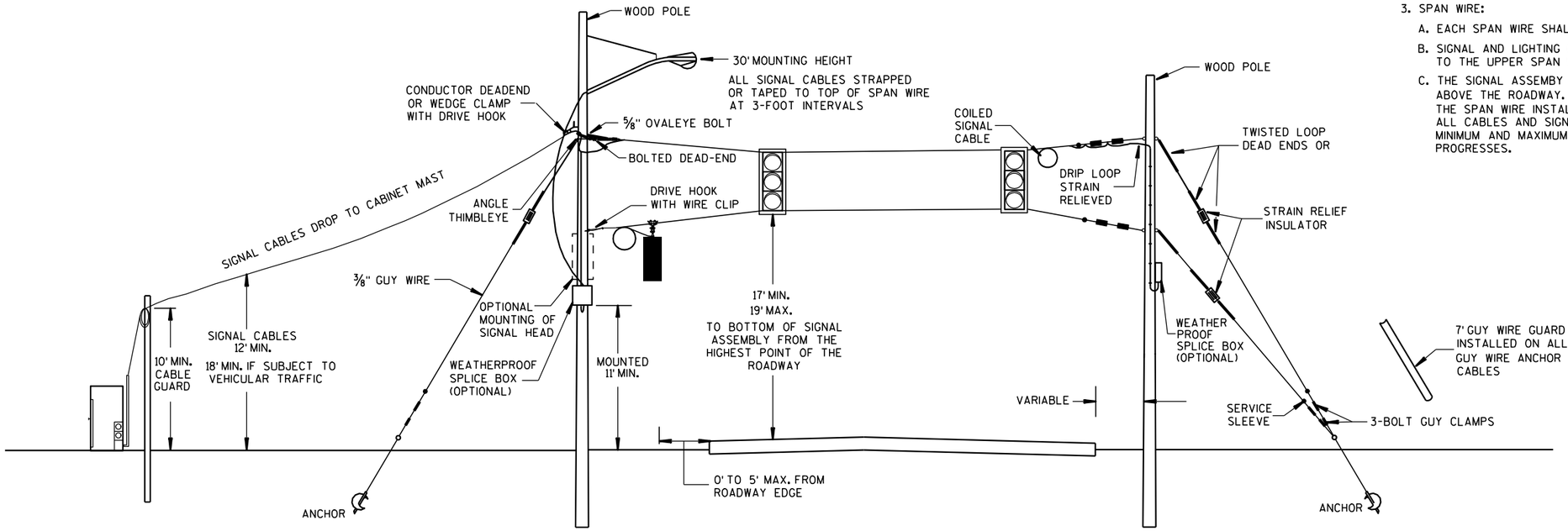
GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

1. WOOD POLES SHALL BE CLASS 4. LENGTH DETERMINED BY SIGNAL PLAN.

2. SIGNAL FACES:
   A. ALL SECTIONS SHALL BE 12" AND POLYCARBONATE.
   B. EACH SHALL CONTAIN A 5" WIDE DULL BLACK POLYCARBONATE BACKPLATE.
   C. EACH SHALL BE WIRED FROM THE TOP SIGNAL MOUNTING BRACKET.
   D. NEAR RIGHT SIGNAL FACE SUSPENDED ON THE TETHER (NO BACKPLATE) SHALL NOT BE OVER THE TRAVELED WAY. IF THE POLE IS WITHIN 5 FEET OF THE TRAVELED WAY MOUNT THE SIGNAL FACE ON THE WOOD POLE WITH BACKPLATE.

3. SPAN WIRE:
   A. EACH SPAN WIRE SHALL BE INDIVIDUALLY DOWN GUYED.
   B. SIGNAL AND LIGHTING CABLES SHALL ONLY BE ATTACHED TO THE UPPER SPAN WIRE.
   C. THE SIGNAL ASSEMBY SHALL HAVE A 17' MIN. HEIGHT ABOVE THE ROADWAY. THIS SHALL BE MEASURED AFTER THE SPAN WIRE INSTALLATION IS COMPLETED WITH ALL CABLES AND SIGNAL FACES IN PLACE. MAINTAIN MINIMUM AND MAXIMUM HEIGHTS AS ROADWAY WORK PROGRESSES.



SPAN WIRE
TEMPORARY SIGNALS

MINIMUM POLE LENGTHS	POLE BURIEL DEPTHS
25'	5'
30'	6'
35'	7'
40'	8'
45'	9'

SPAN WIRE TEMPORARY TRAFFIC SIGNAL

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DEPARTMENT OF TRANSPORTATION

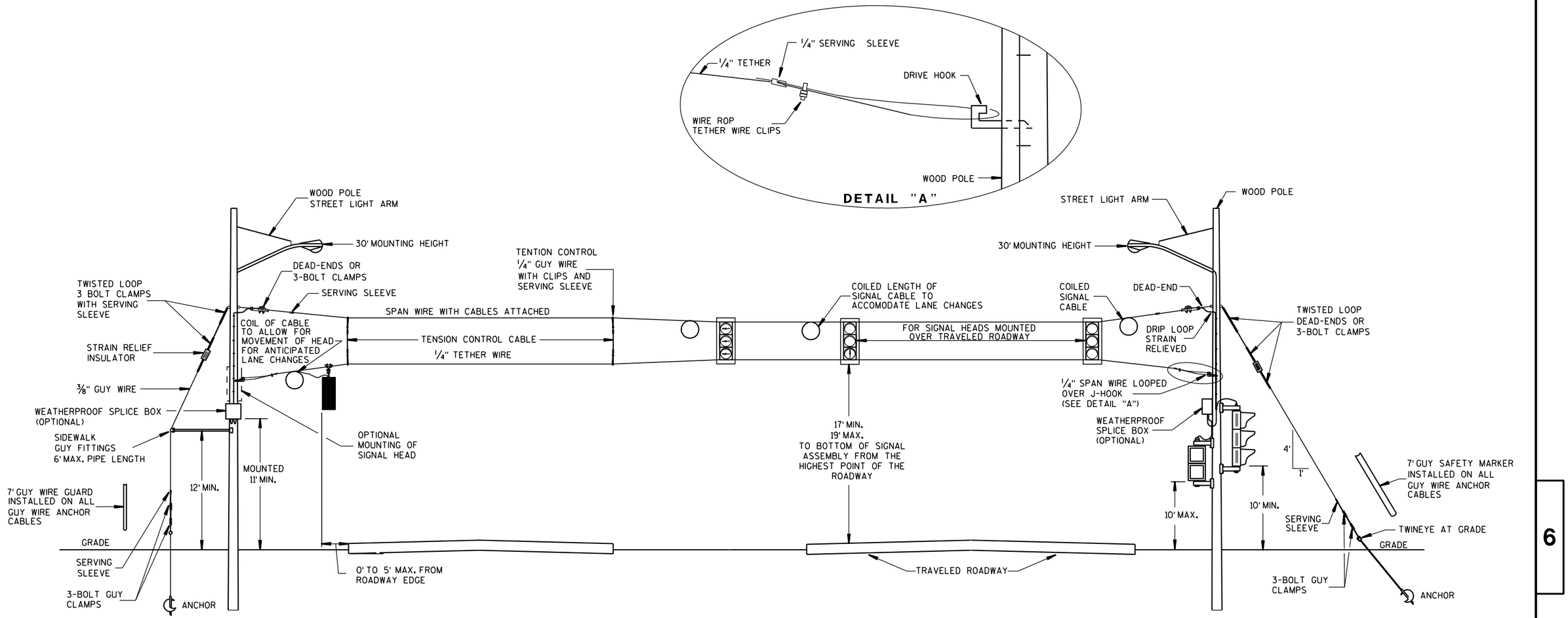
APPROVED

7-14-08 DATE

/S/ Balu Ananthar [illegible] n
STATE ELECTRICAL ENGI 663 HWYS

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GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

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   D. NEAR RIGHT SIGNAL FACE SUSPENDED ON THE TETHER (NO BACKPLATE) SHALL NOT BE OVER THE TRAVELED WAY. IF THE POLE IS WITHIN 5 FEET OF THE TRAVELED WAY MOUNT THE SIGNAL FACE ON THE WOOD POLE WITH BACKPLATE.
   E. FAR INDICATION SHALL BE MAINTAINED OVER CENTER OF TRAFFIC LANE.
3. SPAN WIRE:
   A. EACH SPAN WIRE SHALL BE INDIVIDUALLY DOWN GUYED.
   B. SIGNAL AND LIGHTING CABLES SHALL ONLY BE ATTACHED TO THE UPPER SPAN WIRE.
   C. THE SIGNAL ASSEMBY SHALL HAVE A 17' MIN. HEIGHT ABOVE THE ROADWAY. THIS SHALL BE MEASURED AFTER THE SPAN WIRE INSTALLATION IS COMPLETED WITH ALL CABLES AND SIGNAL FACES IN PLACE. MAINTAIN MINIMUM AND MAXIMUM HEIGHTS AS ROADWAY WORK PROGRESSES.

SPAN WIRE
TEMPORARY SIGNALS
4 LANE ROADWAYS

MINIMUM POLE LENGTHS	CLASS	MIN. BURIAL DEPTHS
25'	V	5'
30'	V	6'
35'	IV	7'
40'	IV	8'
45'	IV	9'

SPAN WIRE
TEMPORARY TRAFFIC SIGNAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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7-14-08 DATE

/S/ Balu Ananthanarayanan
STATE ELECTRICAL ENGI 664 HWYS

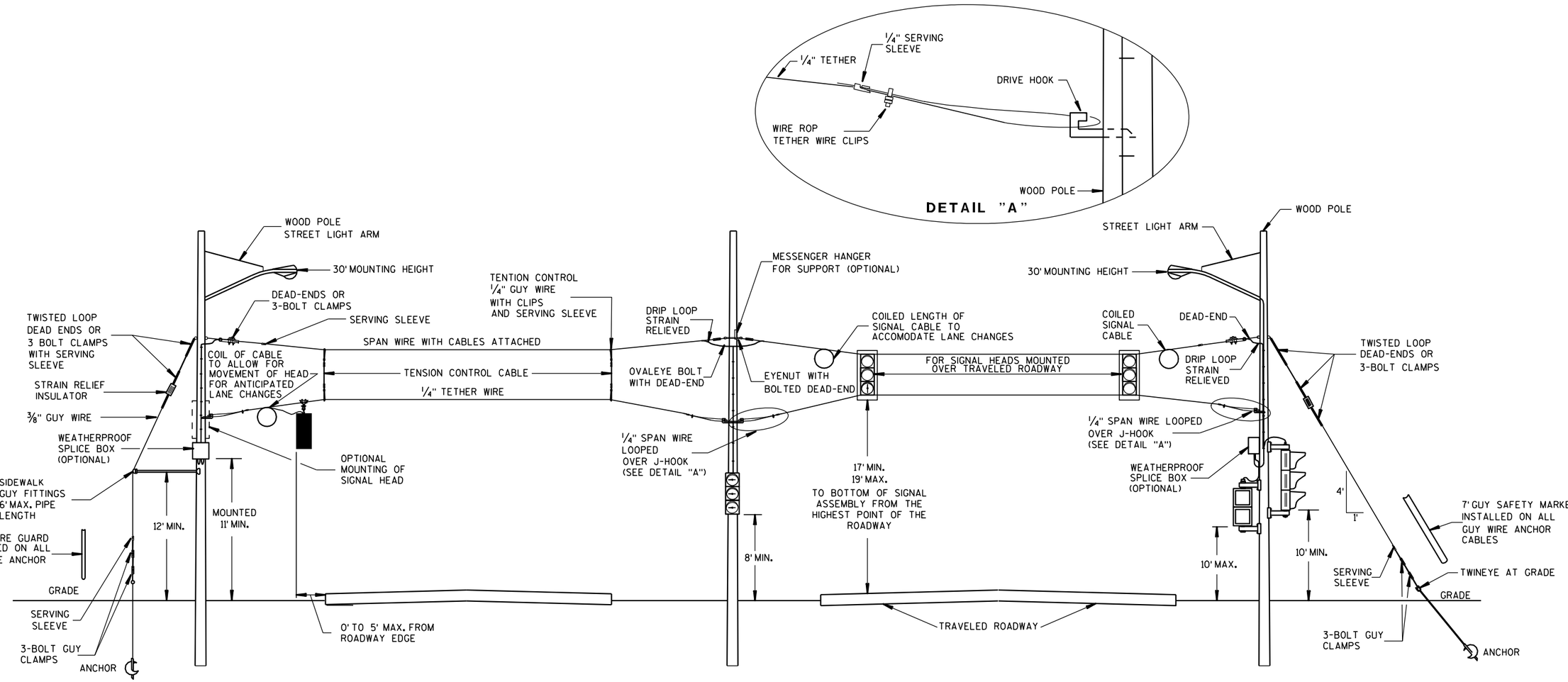
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S.D.D. 9 G 1-3b



SPAN WIRE
TEMPORARY SIGNALS
4 LANE ROADWAYS

GENERAL NOTES

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MINIMUM POLE LENGTHS	CLASS	MIN. BURIAL DEPTHS
25'	V	5'
30'	V	6'
35'	IV	7'
40'	IV	8'
45'	IV	9'

SPAN WIRE TEMPORARY TRAFFIC SIGNAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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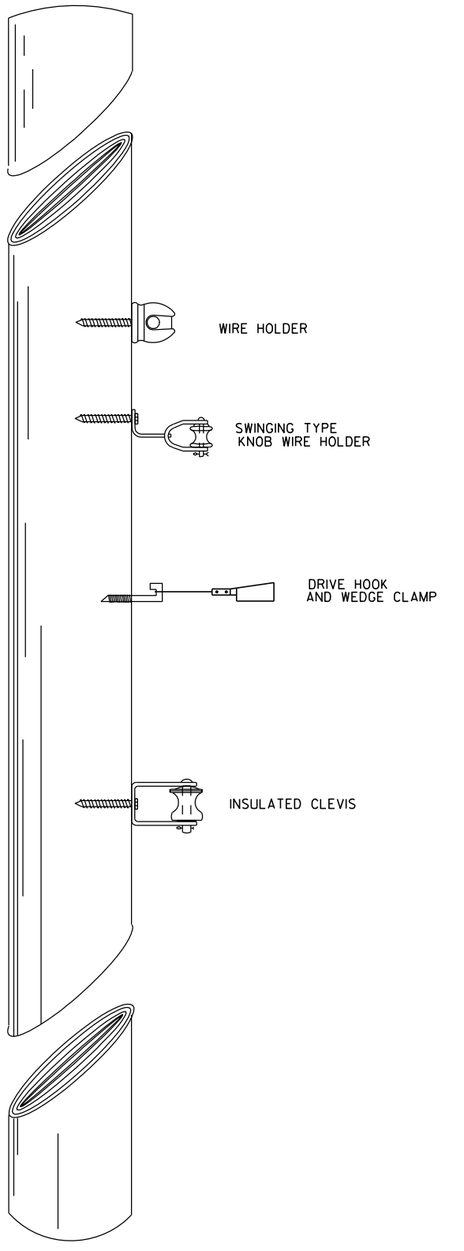
7-14-08 DATE

/S/ Balu Aganthaparayanan
STATE ELECTRICAL ENGI 665 HWYS

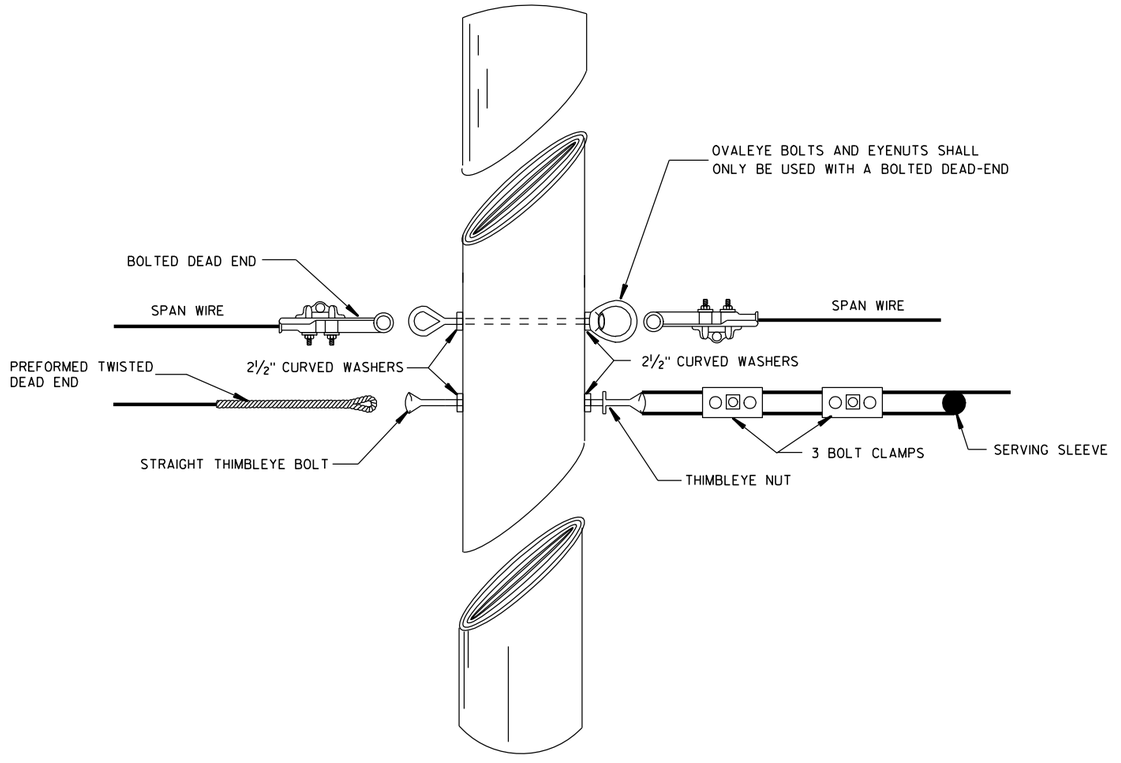
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TYPICAL CABLE HANGERS



TYPICAL DEAD-ENDING

6

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SPAN WIRE
TEMPORARY TRAFFIC SIGNAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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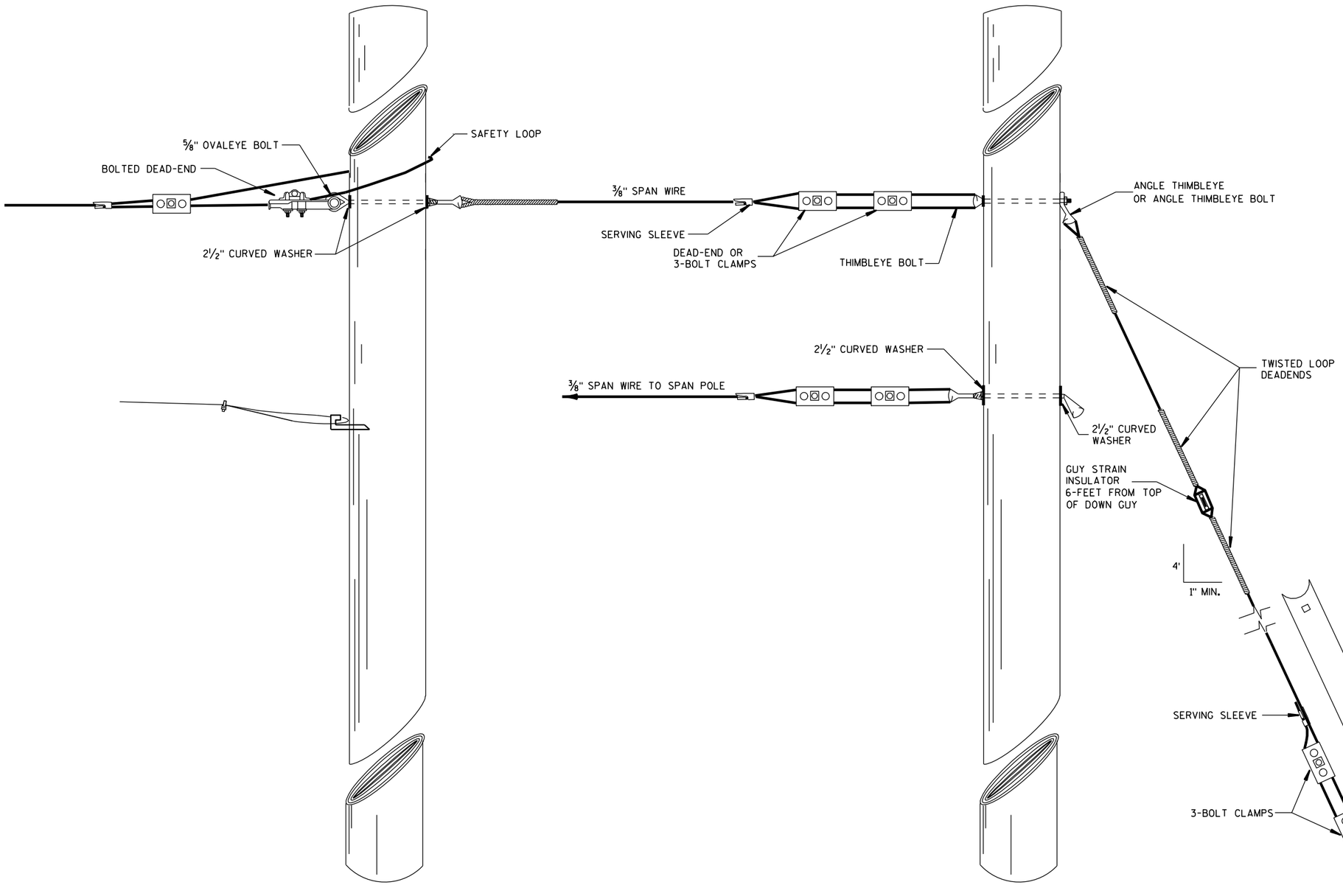
7-14-08
DATE

/S/ Balu Ananthanarayanan
STATE ELECTRICAL ENGI 666 HWYS

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GENERAL NOTES

1. USE ¾" DRILL IN WOOD POLE TO PROVIDE HOLE FOR ⅝" BOLTS.
2. SAFTY LOOP REQUIRED ON EACH END OF ALL SPAN WIRES.



SPAN WIRE POLE

GUY POLE

TYPICAL DEAD-ENDINGS OR GUYING

SPAN WIRE TEMPORARY TRAFFIC SIGNAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

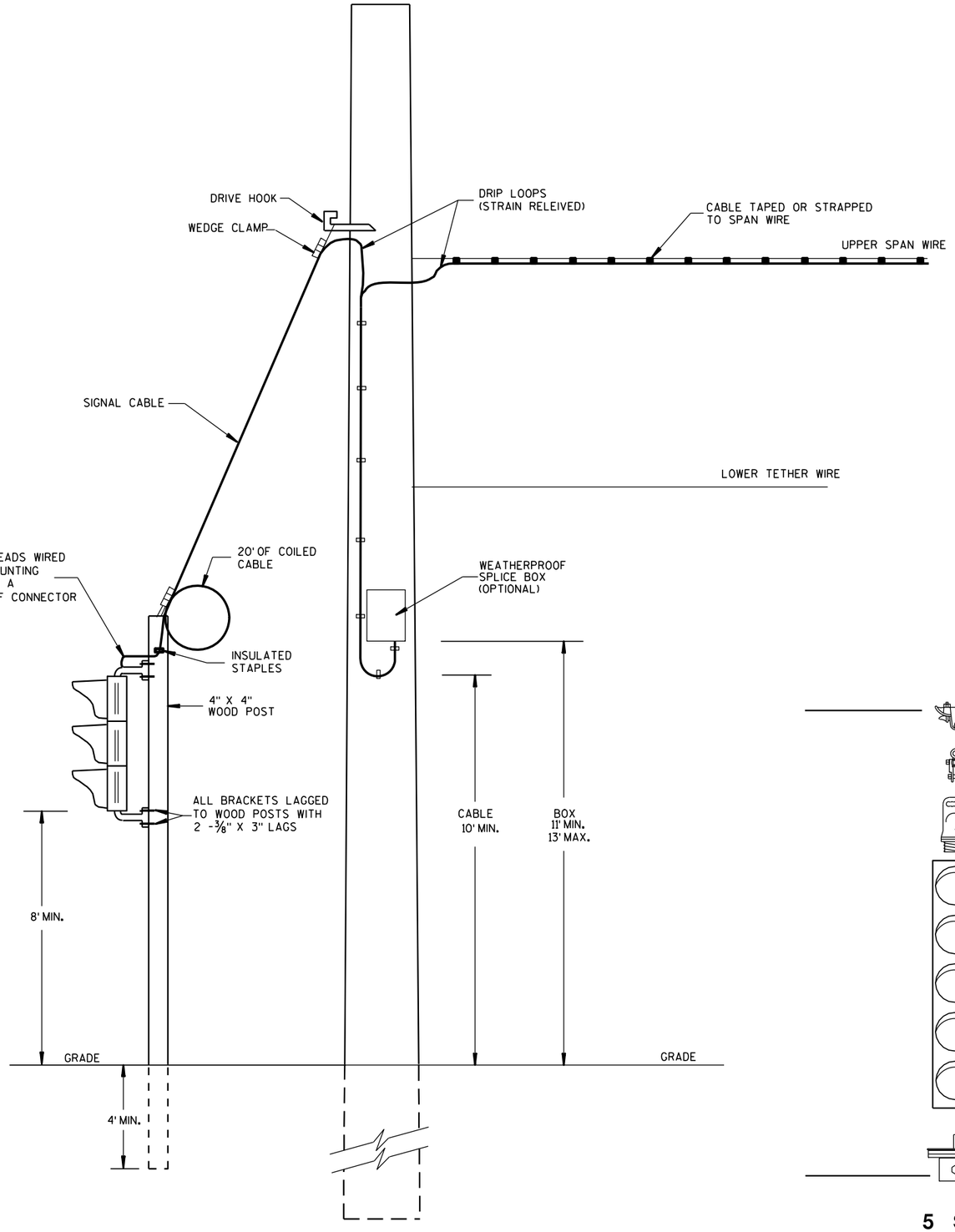
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7-14-08 DATE
/S/ Balu Ananthanarayanan
STATE ELECTRICAL ENGI 667 HWYS
FHWA

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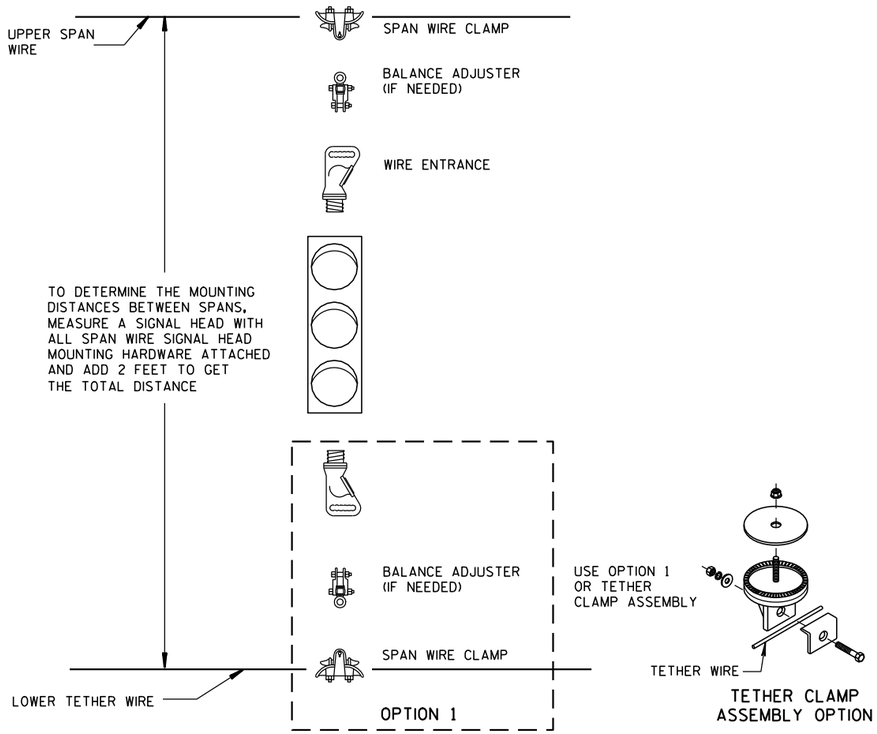
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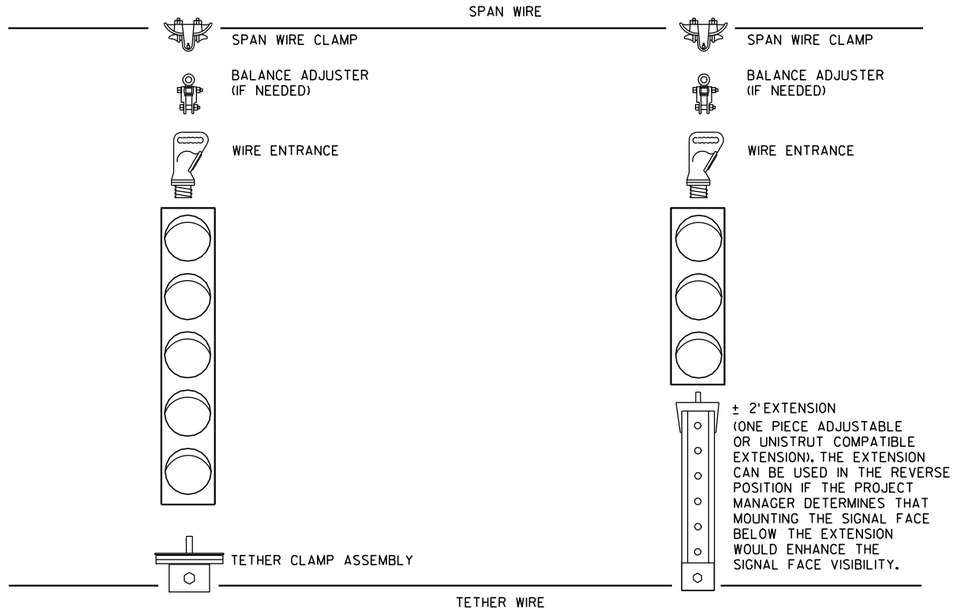
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TYPICAL DROP TO TEMPORARY MOVEABLE SIGNAL



TYPICAL SPAN WIRE MOUNTING HARDWARE



5 SECTION VERTICAL WITH 3 SECTION VERTICAL ON ONE SPAN WIRE

SPAN WIRE TEMPORARY TRAFFIC SIGNAL

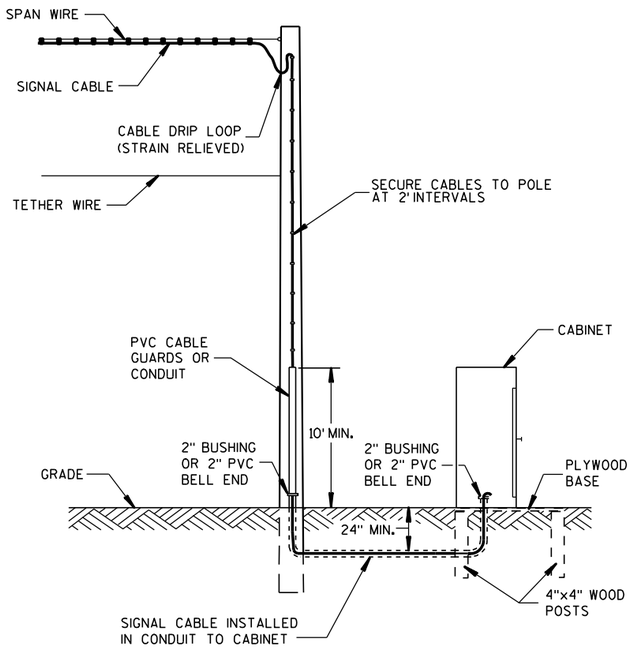
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

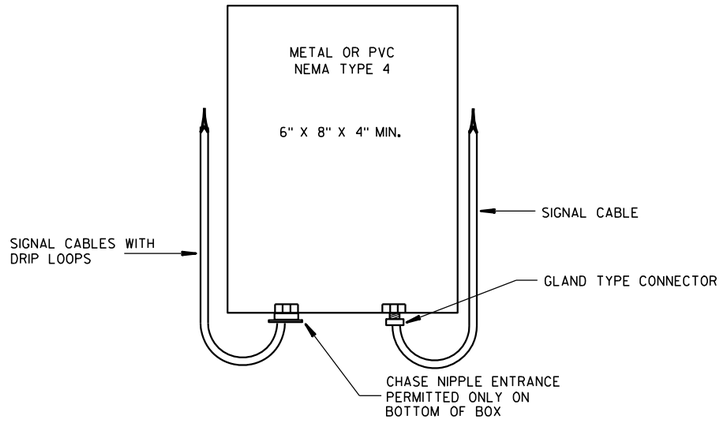
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7-14-08	/S/ Balu Aganthangarayanan	
DATE	STATE ELECTRICAL ENGI 668	HWYS

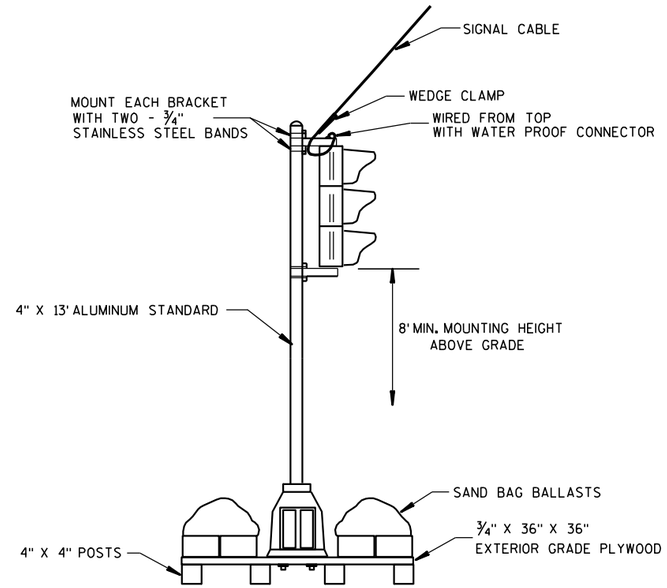
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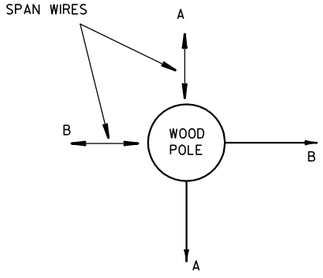




SPLICE BOX

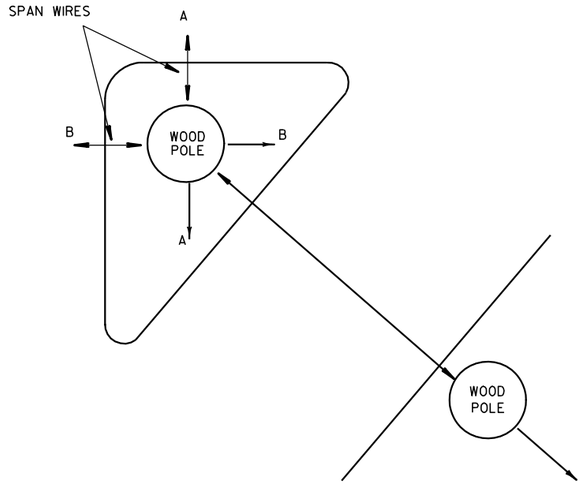


TYPICAL SKID TYPE TEMPORARY

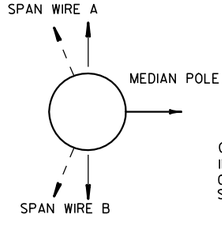


ALL DOWN OR SIDEWALK GUYS SHALL BE INSTALLED IN THE OPPOSITE DIRECTION OF THE STRAIN OF THE SPAN WIRE

CORNER POLES



ISLAND POLES



GUY AWAY FROM INTERSECTION OR IN OPPOSITE DIRECTION OF THE SPAN LOADING

MEDIAN POLES

SPAN WIRE
TEMPORARY TRAFFIC SIGNAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

7-14-08 DATE

/S/ Balu Ananthanarayanan
STATE ELECTRICAL ENGI 669 HWYS

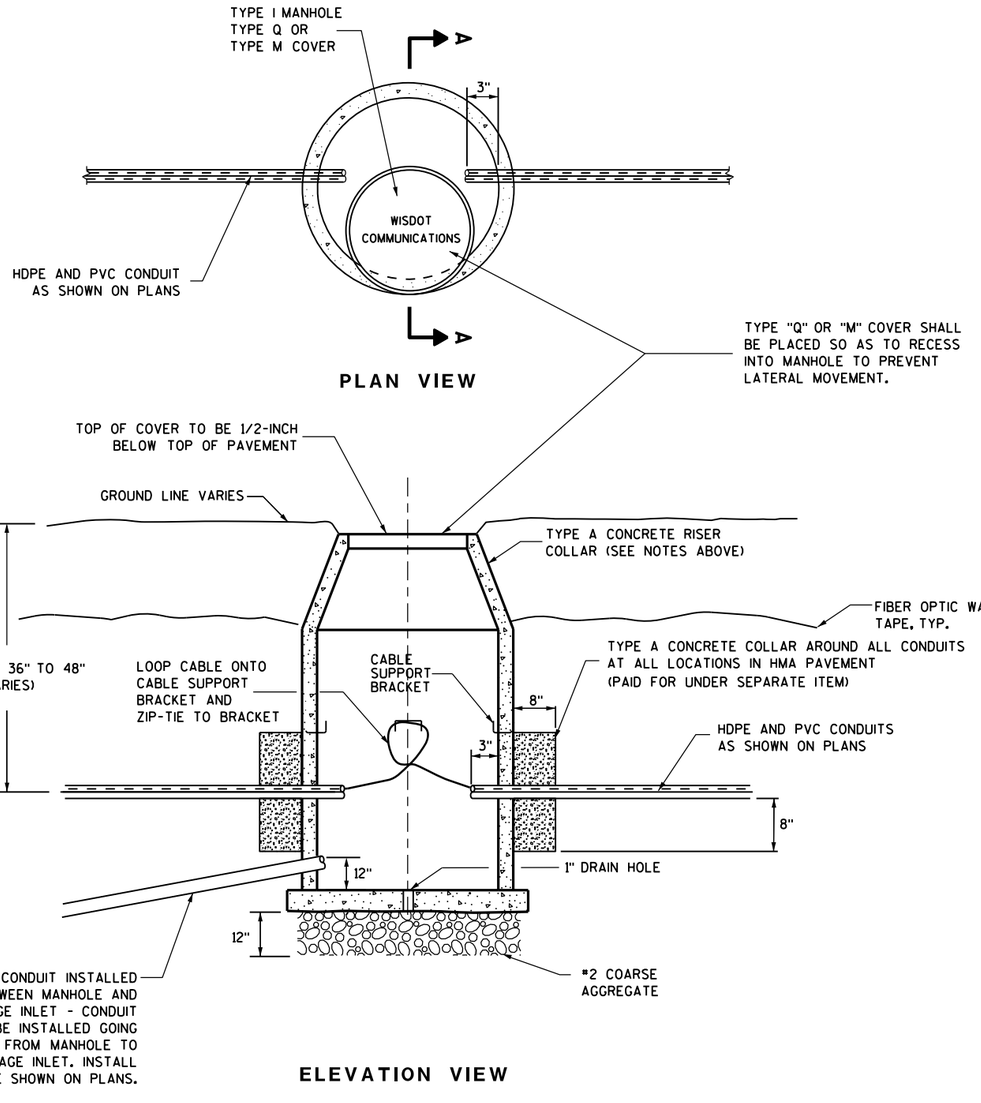
FHWA

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S.D.D. 9 G 1-3g

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S.D.D. 9 G 1-3g



PLAN VIEW

ELEVATION VIEW

GENERAL NOTES

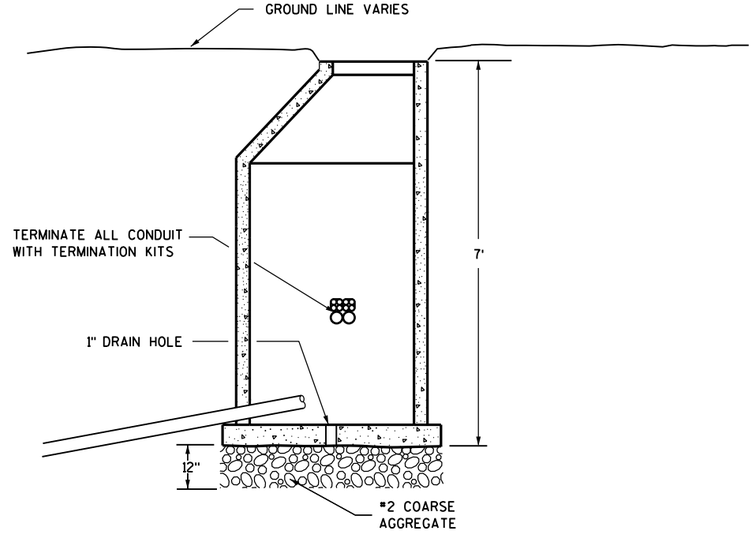
ALL OPENINGS IN STRUCTURE MUST BE CORED OR BLOCKED OUT AT TIME OF FABRICATION, OR CORED AT TIME OF PLACEMENT.

FOR MANHOLES PLACED OUTSIDE PAVED AREA, TYPE "M" COVERS SHALL BE INSTALLED SO THAT THE FRAME AND LID ARE RECESSED INTO THE TOP OF THE CONCRETE MANHOLE AS TO PREVENT LATERAL MOVEMENT OF THE COVER. THE FRAME SHALL BE INVERTED AND PLACED INTO THE OPENING OF THE MANHOLE PROTRUDING LESS THAN 1-INCH ABOVE THE TOP OF THE CONCRETE.

FOR MANHOLES WITHIN PAVED AREAS, TYPE "Q" COVERS SHALL BE USED.

MANHOLE COVERS TO BE IMPRINTED WITH "WISDOT COMMUNICATIONS" IN 2-INCH LETTERING.

ALL MANHOLES, INLETS, AND PULL BOXES LOCATED WITHIN WARRANTED HMA PAVEMENT SHALL BE COVER PLATED AT OR BELOW THE TOP OF THE BASE COURSE AND COVERS BROUGHT TO FINAL GRADE PRIOR TO PLACING THE TOP SMA LAYER. ALL WORK IS INCIDENTAL TO OTHER ITEMS OF WORK.



SECTION A-A

COMMUNICATIONS MANHOLE

COMMUNICATIONS
MANHOLE DETAILS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

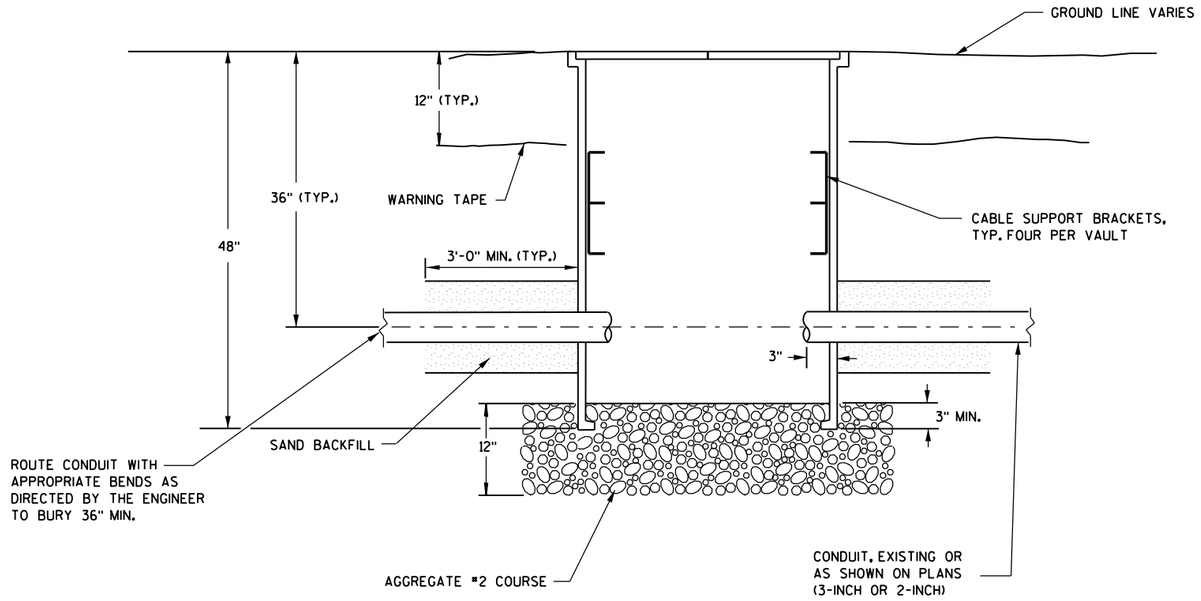
APPROVED
Sept. 2014
DATE
/S/ Ahmet Demirbilek
STATE ELECTRICAL 670
FHWA

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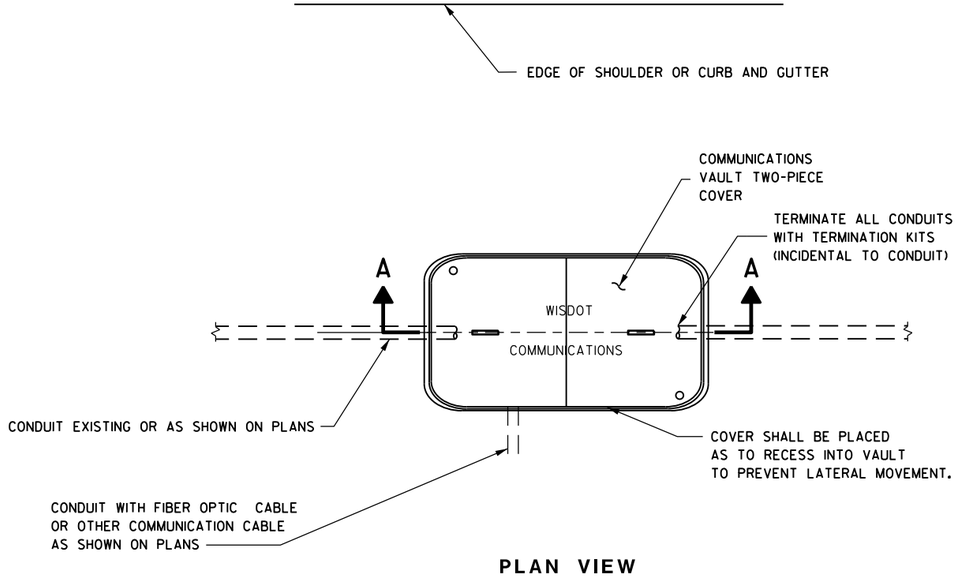
S.D.D. 9 H 8-1

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S.D.D. 9 H 8-1



SECTION A-A



PLAN VIEW

COMMUNICATIONS VAULT

GENERAL NOTES

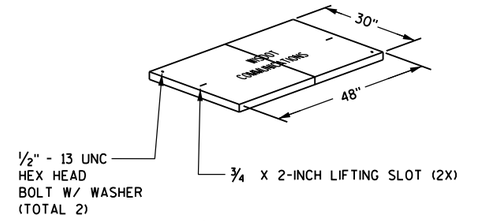
BOX SHALL HAVE AN OPEN BASE.

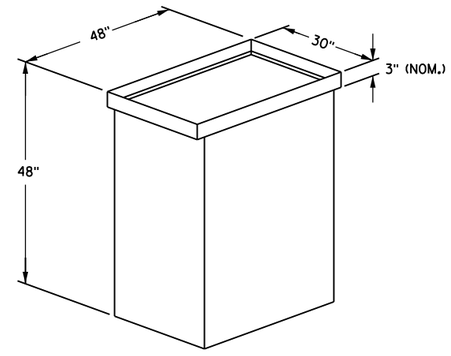
COVER SHALL BE DETECTABLE, AND HAVE A MINIMUM DESIGN LOAD OF 15,000 LBS AND SHALL LOCK.

ALL OPENINGS IN STRUCTURE MUST BE MACHINED AT TIME OF FABRICATION, OR PUNCH DRIVEN AT TIME OF PLACEMENT.

VAULTS SHALL BE OF ONE-PIECE CONSTRUCTION. TWO-PIECE/STACKABLE VAULTS WILL NOT BE PERMITTED.

FIELD PLACEMENT OF COMMUNICATIONS VAULTS SHALL BE AS DIRECTED BY THE ENGINEER.

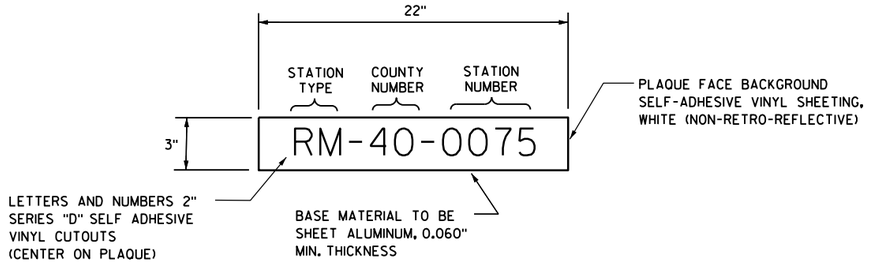




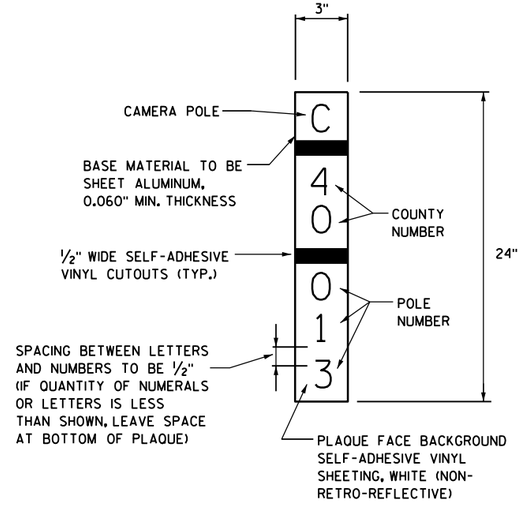
ISOMETRIC VIEW

COMMUNICATION VAULT
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION
APPROVED Sept. 2014 — DATE /S/ Ahmet Demirbilek — STATE ELECTRICAL FHWA

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S.D.D. 9 H 9-1



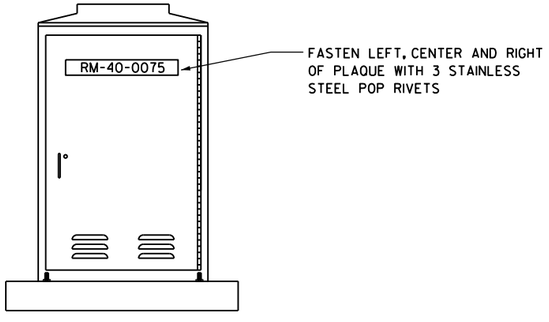
CONTROL CABINET IDENTIFICATION PLAQUE DETAIL



POLE IDENTIFICATION PLAQUE DETAIL

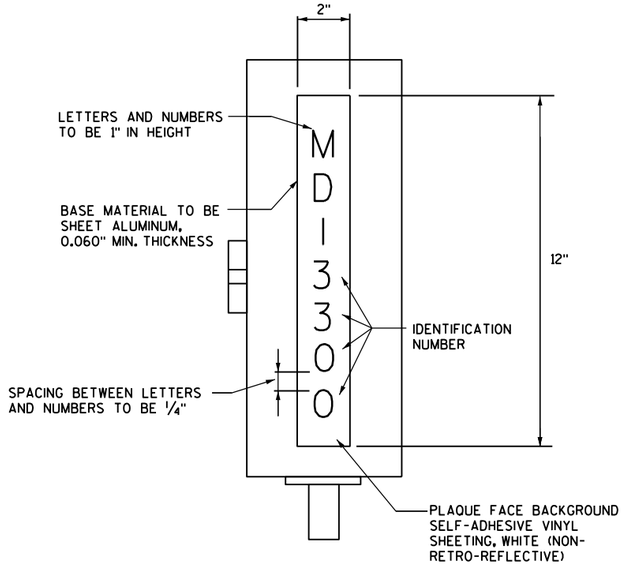
GENERAL NOTES

1. TWO PLAQUES PER CABINET REQUIRED ON CONTROL CABINET.
2. FASTEN ONE PLAQUE ON FRONT DOOR, UPPER HALF.
3. FASTEN ONE PLAQUE ON SIDE FACING LOCAL STREET. IF NO LOCAL STREET NEARBY, OR IF SUCH LOCATION COINCIDES WITH LOCATION OF PLAQUE IN NOTE (2), FASTEN PLAQUE ON REAR OF CABINET, UPPER HALF.
4. COUNTY NUMBER NOT REQUIRED ON RAMP METER CABINETS.



CONTROL CABINET IDENTIFICATION PLAQUE REQUIREMENTS AND PLACEMENTS

(TYPICAL ALL CONTROL CABINETS)



MICROWAVE DETECTOR FIELD CABINET IDENTIFICATION PLAQUE DETAIL

LEGEND STATION TYPE

RM - RAMP METER
CCTV - CLOSED CIRCUIT TELEVISION
ATR - AUTOMATIC TRAFFIC RECORDER
SDS - SYSTEM DETECTOR STATION
MD - MICROWAVE DETECTOR

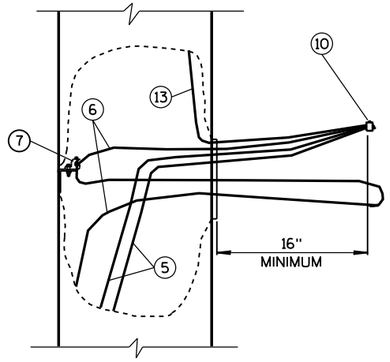
IDENTIFICATION PLAQUE REQUIREMENTS AND PLACEMENTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

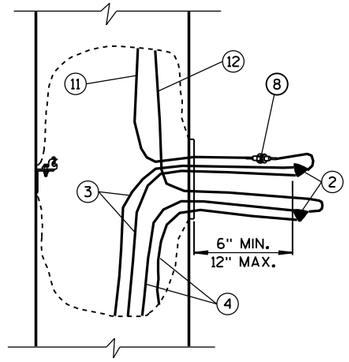
APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demribilek — STATE ELECTRICAL
FHWA

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S.D.D. 9 H 11-1

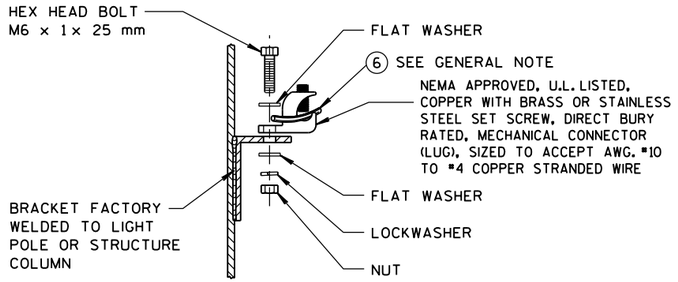


EQUIPMENT GROUNDING CONDUCTOR SLACK



UNGROUNDED CONDUCTOR SLACK (AND GROUNDED NEUTRAL SLACK IN GROUNDED NEUTRAL SYSTEM)

TYPICAL CONDUCTOR SLACK AT HANDHOLES



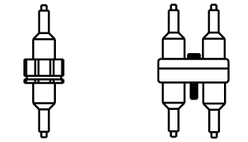
HANDHOLE GROUNDING LUG

(NUT, BOLT, WASHERS, AND LOCK WASHERS SHALL BE STAINLESS STEEL)

CONDUCTOR COLOR CODES

KEY	CONDUCTOR	COLOR
3	UNGROUNDED LINE WIRE	*
4	GROUNDED LINE WIRE	WHITE
5	SYSTEM GROUNDING LINE WIRE	GREEN
6	GROUNDING ELECTRODE CONDUCTOR	BARE
11	UNGROUNDED POLE WIRE	*
12	GROUNDED POLE WIRE	WHITE
13	EQUIPMENT GROUNDING POLE WIRE	GREEN

* FOLLOW COLOR CODING SHOWN IN THE PLANS. WHERE THE PLANS DO NOT SHOW COLOR CODING, USE BLACK FOR SINGLE LUMINAIRE POLES; BLACK AND RED FOR TWIN LUMINAIRE POLES.



1 POLE (1P) 2 POLE (2P)

FUSE ASSEMBLIES

GENERAL NOTES

DETAILS OF CONSTRUCTION AND WORKMANSHIP NOT SHOWN IN THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

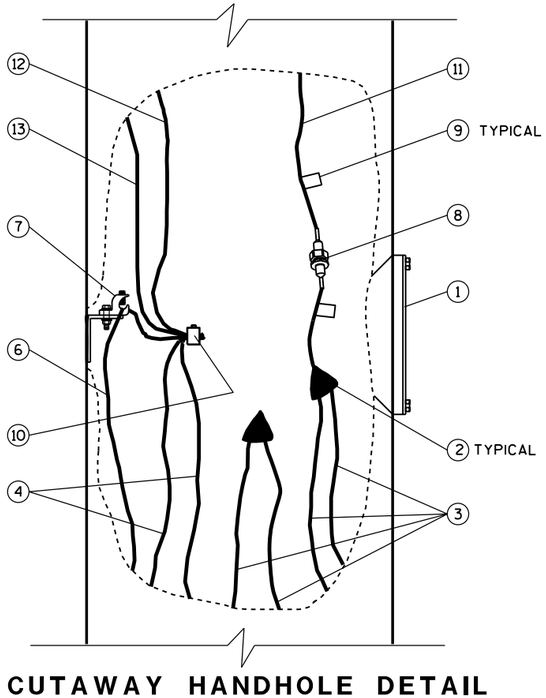
USE THIS DETAIL IN CONJUNCTION WITH THE ELECTRICAL DETAILS FOR THE APPLICATION, WHICH MAY BE A LIGHT POLE, SIGN BRIDGE, ETC.

THE GROUNDING ELECTRODE CONDUCTOR SHALL BE CONTINUOUS WITHOUT SPLICES FROM THE GROUNDING ELECTRODE THROUGH THE HANDHOLE GROUNDING LUG TO THE CONNECTOR.

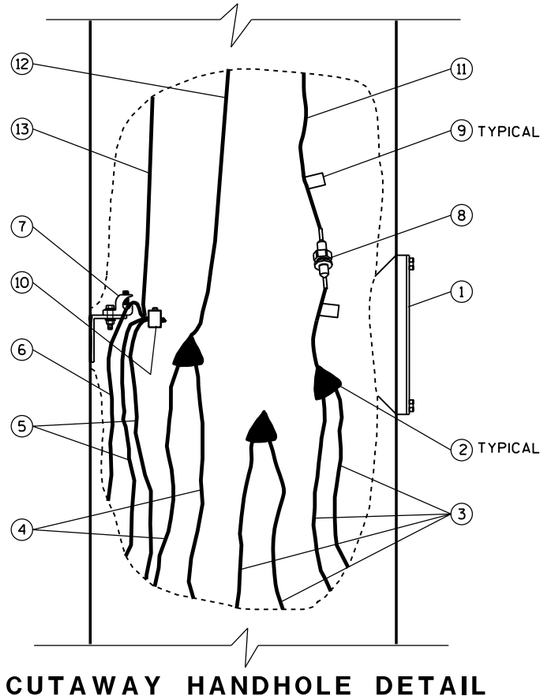
THREE POLE WIRES ARE SHOWN FOR A SINGLE LUMINAIRE LIGHT POLE. THREE ADDITIONAL POLE WIRES REQUIRED FOR TWIN LUMINAIRE LIGHT POLES ARE OMITTED FROM THE DRAWING FOR CLARITY. IN THE TWIN POLE CASE, BUNDLE EACH SET OF THREE WIRES WITH A NYLON CABLE TIE.

IN 3-PHASE SYSTEMS, THERE WILL BE ONE MORE UNGROUNDED LINE WIRE, WHICH IS OMITTED FROM THE DRAWING FOR CLARITY.

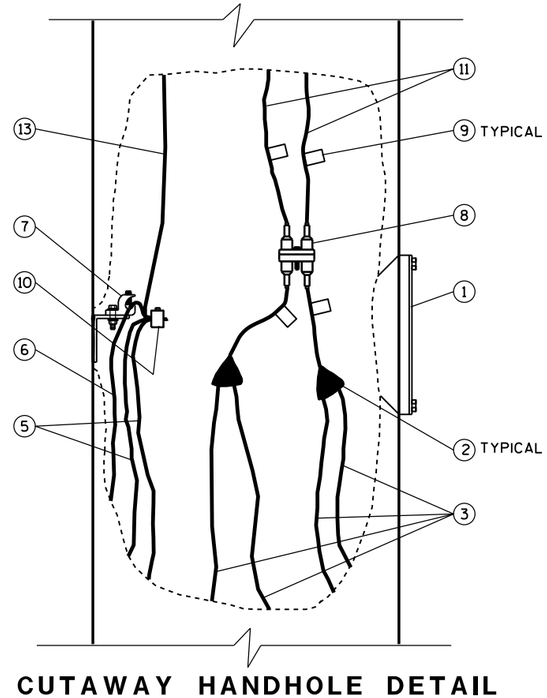
CIRCUIT TAGS SHALL BE INSTALLED ONLY WHERE REQUIRED IN THE SPECIAL PROVISIONS.



CUTAWAY HANDHOLE DETAIL
GROUNDED NEUTRAL SYSTEMS
1-Φ



CUTAWAY HANDHOLE DETAIL
ISOLATED NEUTRAL SYSTEMS
1-Φ SHOWN; 3-Φ WYE SIMILAR
(SEE GENERAL NOTE)



CUTAWAY HANDHOLE DETAIL
PHASE-TO-PHASE SYSTEMS
1-Φ SHOWN; 3-Φ DELTA SIMILAR
(SEE GENERAL NOTE)

NOTE: REQUIRED CONDUCTOR SLACK NOT SHOWN ON "CUTAWAY HAND HOLE" DETAILS FOR DRAWING CLARITY, SEE "TYPICAL CONDUCTOR SLACK AT HANDHOLES" ON THIS SHEET.

1. HANDHOLE AND COVER
2. INSULATED SPLICE
3. UNGROUNDED LINE WIRE
4. GROUNDED LINE WIRE
5. SYSTEM GROUNDING LINE WIRE
6. GROUNDING ELECTRODE CONDUCTOR
7. HANDHOLE GROUNDING LUG
8. FUSE ASSEMBLY, 1P OR 2P AS REQUIRED
9. CIRCUIT TAG (SEE GENERAL NOTE)
10. REVERSIBLE PRESSURE OR COMPRESSION GROUNDING CONNECTOR (NOT INSULATED)
11. UNGROUNDED POLE WIRE
12. GROUNDED POLE WIRE
13. EQUIPMENT GROUNDING POLE WIRE

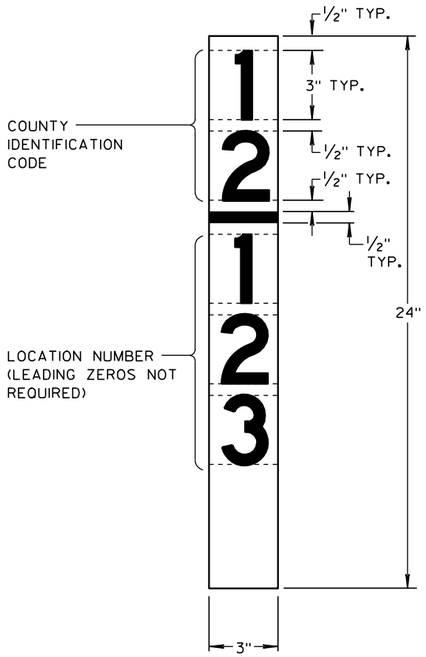
ELECTRICAL HANDHOLE WIRING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

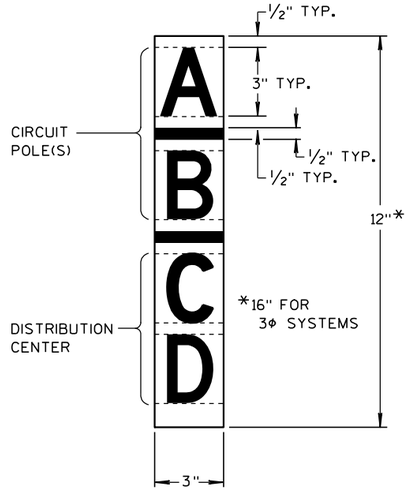
APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

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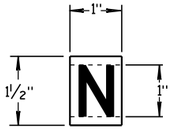
S.D.D. 10 A 1-3



HIGH MAST LIGHT TOWER STRUCTURE PLAQUE

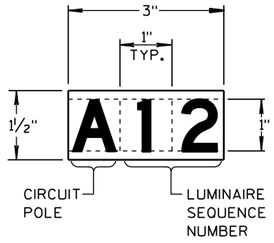


UNDERDECK LIGHTING OR HIGH MAST LIGHT TOWER CIRCUIT PLAQUE



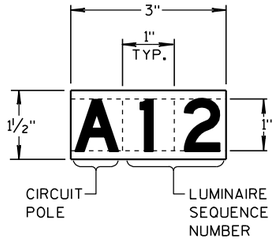
HIGH MAST LIGHT TOWER NORTH PLAQUE

(MOUNT ON LOWERING RING - INDICATING NORTH HEADING ^{2} ± 10°^{3} WHEN RING IS RAISED AND LATCHED)



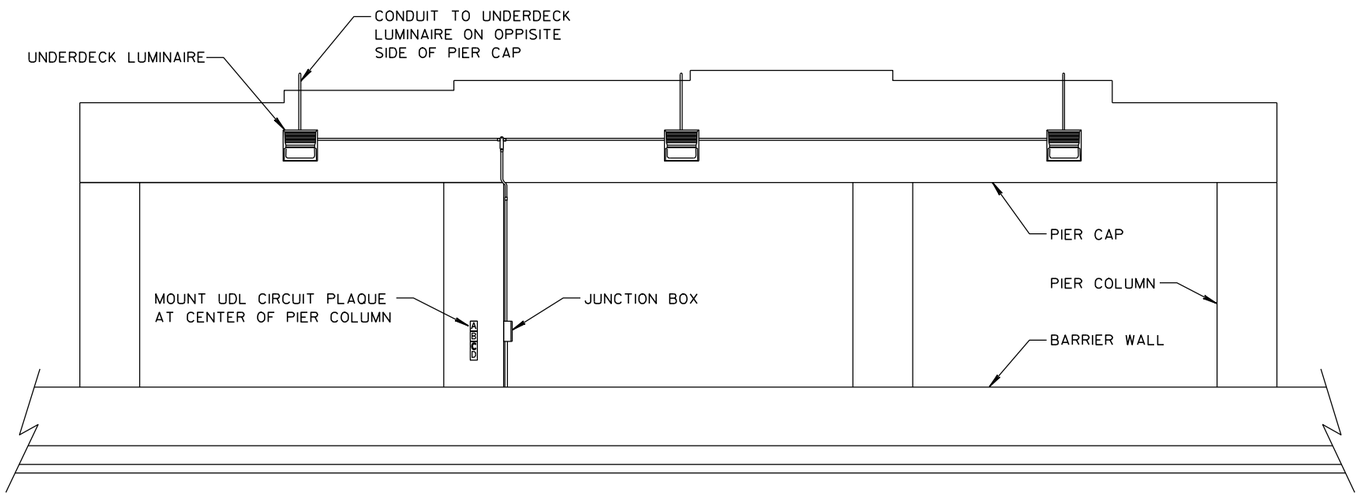
HIGH MAST LIGHT TOWER LUMINAIRE SEQUENCE PLAQUE

(MOUNT ON LUMINAIRE RING)



UNDER DECK LUMINAIRE SEQUENCE DECAL

(MOUNT ON LUMINAIRE)



LOCATION OF UNDERDECK LIGHTING CIRCUIT PLAQUE

GENERAL NOTES

DETAILS OF CONSTRUCTION AND WORKMANSHIP NOT SHOWN IN THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

PLAQUES SHALL BE INCIDENTAL TO ALL NEW INSTALLATIONS.

WHERE SHOWN IN THE PLANS, REPLACEMENT PLAQUES WILL BE MEASURED AND PAID SEPARATELY.

FASTEN TOP, CENTER AND BOTTOM OF PLAQUE TO POLE OR OTHER LOCATION AS FOLLOWS:

CONCRETE SURFACE - MASONRY ANCHORS

GALVANIZED STEEL SHAFT - STAINLESS STEEL POP RIVETS

A588 STEEL SHAFT - SHIM FOR DRAINAGE WITH STAINLESS WASHERS; FASTEN WITH STAINLESS SELF-TAPPING SCREWS

PLAQUE MATERIALS:

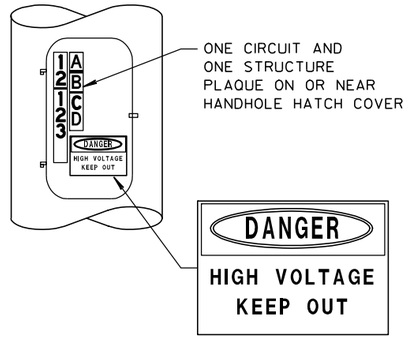
BASE - SHEET ALUMINUM, 0.060" THICK.

FACE - WHITE, SELF-ADHESIVE VINYL SHEETING, NON-RETRORFLECTIVE

LINES - BLACK, 1/2" WIDE, SELF-ADHESIVE

CHARACTERS - BLACK, SELF-ADHESIVE, SERIES "D", SIZE AS SHOWN

ALTERNATIVE COMPUTER-GENERATED SIGN LETTERING MAY BE ACCEPTED IF THE ENGINEER FINDS IT TO BE EQUIVALENT.



NOTE: NEMA PLAQUE SHOWN ABOVE IS REQUIRED ONLY IN PARK AND RIDE LOTS OR IN OTHER PEDESTRIAN ACCESSIBLE AREAS.

LOCATION OF HIGH MAST LIGHT TOWER STRUCTURE PLAQUE AND CIRCUIT PLAQUE

IDENTIFICATION PLAQUES UNDERDECK AND HIGH MAST LIGHTING	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED	
10/25/2010 DATE	/S/ John Corbin STATE ELECTRICAL ENGI 674 HWYS
FHWA	

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S.D.D. 10 A 4-2

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S.D.D. 10 A 4-2

GENERAL NOTES

DETAILS OF CONSTRUCTION AND WORKMANSHIP NOT SHOWN IN THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

USE THIS DETAIL IN CONJUNCTION WITH THE DETAIL FOR ELECTRICAL HANDHOLE WIRING.

THE GROUNDING ELECTRODE CONDUCTOR SHALL BE CONTINUOUS WITHOUT SPLICES FROM THE GROUNDING ELECTRODE THROUGH THE HANDHOLE GROUNDING LUG TO THE CONNECTOR.

WIRING FOR SINGLE LUMINAIRE POLES IS SHOWN WITH SOLID LINES. WIRING FOR THE SECOND LUMINAIRE OF TWIN LUMINAIRE POLES IS SHOWN WITH DOTTED LINES.

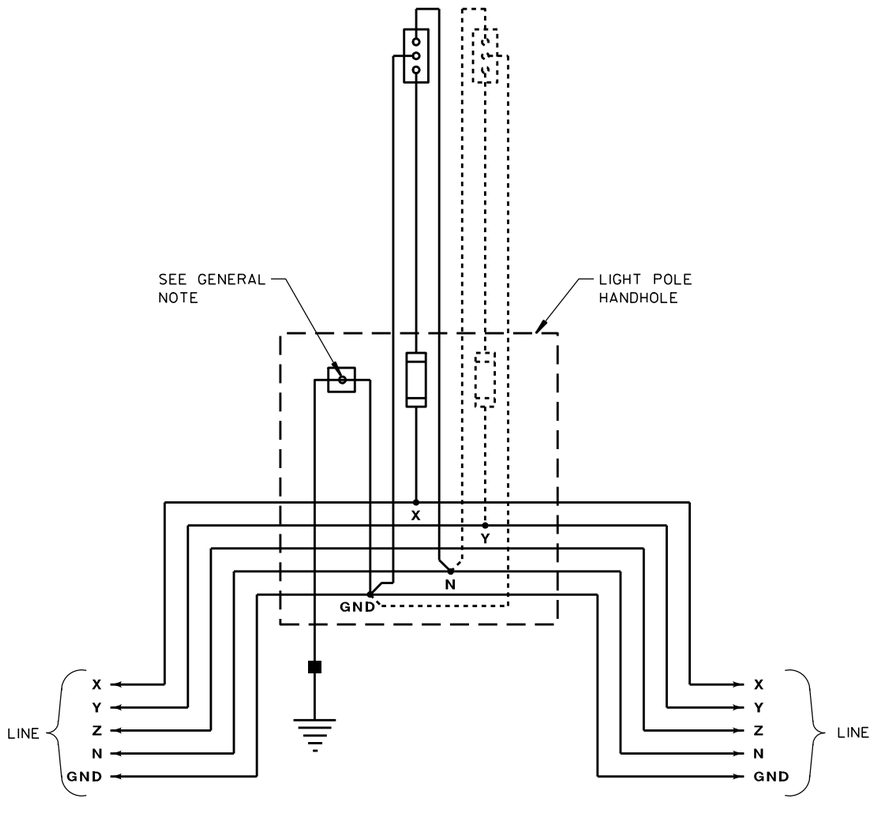
THE PLANS WILL SHOW WHICH CIRCUIT LEG(S) ARE CONNECTED TO EACH INSTALLATION.

HANDHOLE FUSE SCHEDULES

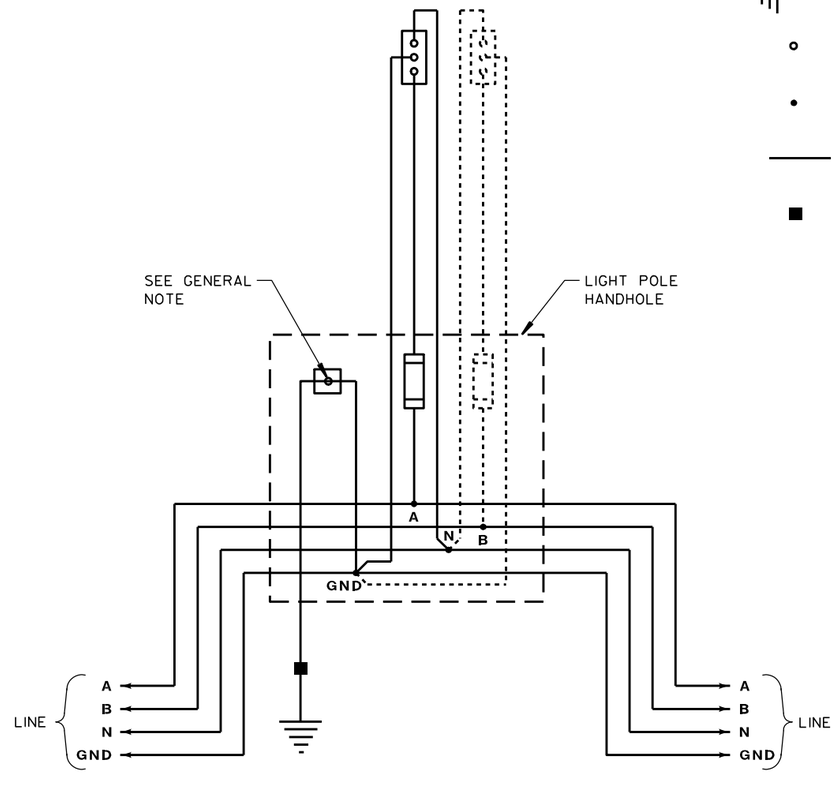
LINE VOLTAGE	BALLAST WATTAGE	
φ-GROUND	70-200 W	250-400 W
120 VAC	5 A	10 A
240 VAC	5 A	5 A
277 VAC	5 A	5 A
480 VAC	3 A	5 A

LEGEND

A,B,X,Y,Z	UNGROUNDED CIRCUIT CONDUCTORS
N	GROUNDED CIRCUIT CONDUCTORS
GND	EQUIPMENT GROUNDING CONDUCTOR
P	POLE (ELECTRICAL CIRCUIT)
φ	PHASE (ELECTRICAL CURRENT)
	HANDHOLE GROUND LUG
	SINGLE-POLE (1P) FUSE ASSEMBLY
	TWO-POLE (2P) FUSE ASSEMBLY
	UNFUSED LUMINAIRE
	EQUIPMENT GROUNDING ELECTRODE
	TERMINAL
	SPLICE
	CONDUCTOR
	EXOTHERMIC WELD



TYPICAL WIRING DIAGRAM
ISOLATED NEUTRAL SYSTEM
3-φ 208Y/120VAC OR 480Y/277VAC 4 WIRE



TYPICAL WIRING DIAGRAM
ISOLATED NEUTRAL SYSTEM
1-φ 120/240VAC OR 240/480VAC 3 WIRE

ELECTRICAL DETAILS
GROUND MOUNT LIGHT POLES
ISOLATED NEUTRAL SYSTEM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
10/25/2010 DATE
/S/ John Corbin
STATE ELECTRICAL ENGI 675
FHWA
HWYS

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S.D.D. 10 A 5-2

6

S.D.D. 10 A 5-2

HANDHOLE FUSE SCHEDULES

LINE VOLTAGE φ-GROUND	BALLAST WATTAGE	
	70-200 W	250-400 W
120 VAC	5 A	10 A
240 VAC	5 A	5 A
277 VAC	5 A	5 A
480 VAC	3 A	5 A

GENERAL NOTES

DETAILS OF CONSTRUCTION AND WORKMANSHIP NOT SHOWN IN THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

USE THIS DETAIL IN CONJUNCTION WITH THE DETAIL FOR ELECTRICAL HANDHOLE WIRING.

WIRING FOR SINGLE LUMINAIRE POLES IS SHOWN WITH SOLID LINES. WIRING FOR THE SECOND LUMINAIRE OF TWIN LUMINAIRE POLES IS SHOWN WITH DOTTED LINES.

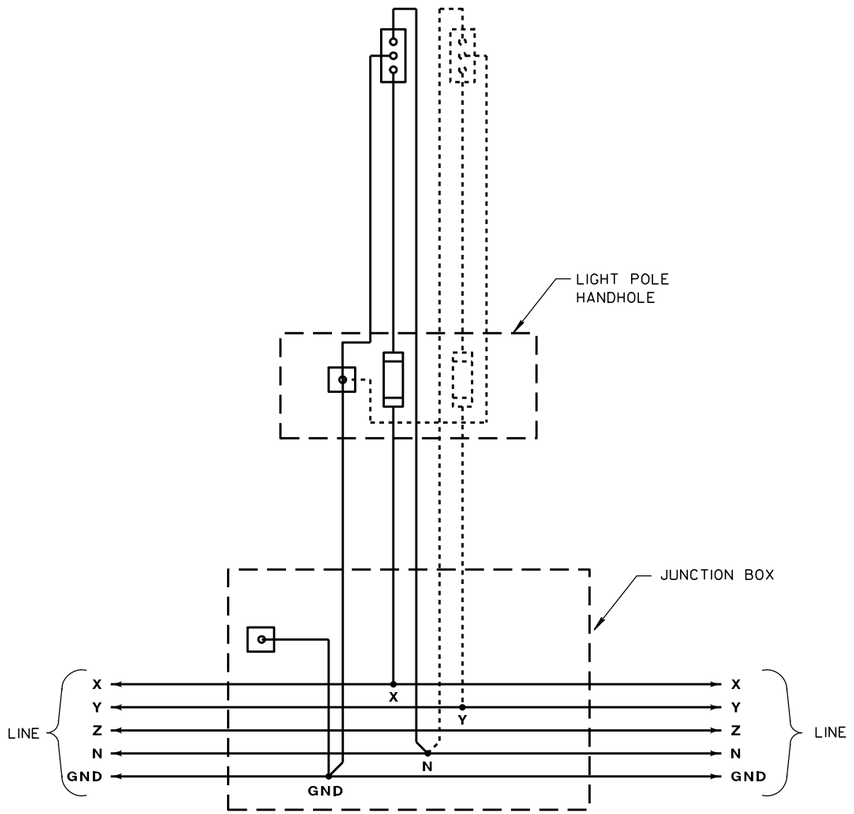
THE PLANS WILL SHOW WHICH CIRCUIT LEG(S) ARE CONNECTED TO EACH INSTALLATION.

WIRE SIZE FROM THE JUNCTION BOX TO THE POLE HANDHOLE SHALL EQUAL THE SIZE OF THE POLE WIRE.

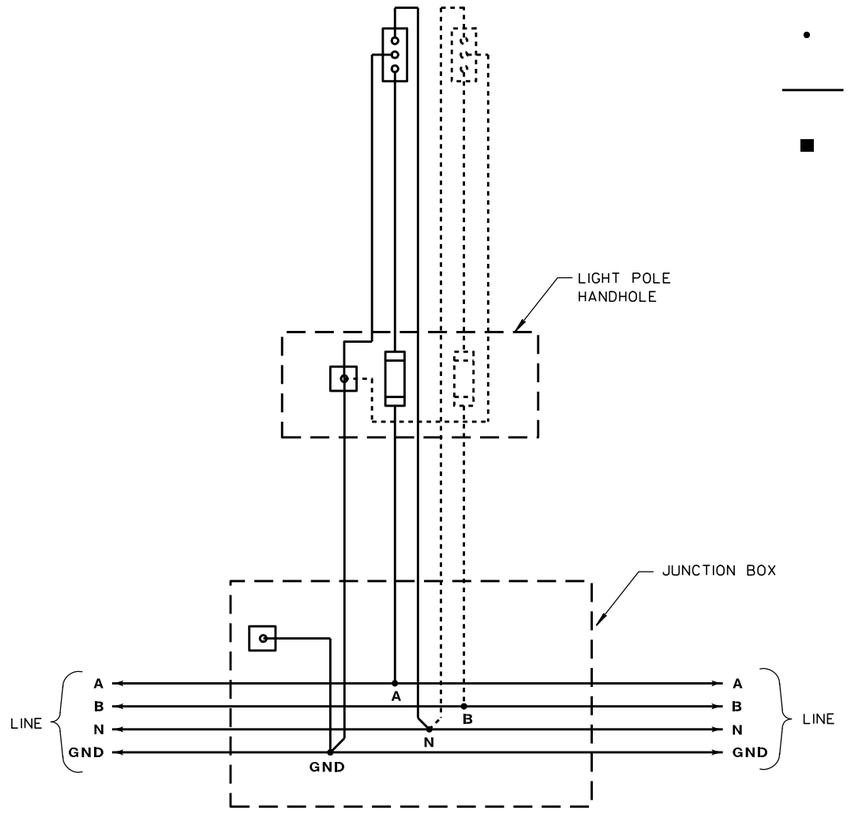
THE INTENT OF JUNCTION BOX SPLICES AS SHOWN IN THIS DETAIL IS FOR LIGHTING SYSTEMS WITH HEAVY LINE WIRE TOO LARGE TO PULL THROUGH THE CONDUIT INTO THE POLE HANDHOLE, DUE TO CONDUIT FILL REQUIREMENTS OF N.E.C., AND/OR THE STIFFNESS OF THE WIRE COMPARED TO THE NUMBER OF BENDS IN THE CONDUIT. IN CASES WHERE LINE WIRE IS LIGHTER, SUCH AS SMALLER SYSTEMS OR TOWARD THE FURTHEST END OF A LARGER SYSTEM, PULL THE LINE WIRE INTO THE POLE HANDHOLE FOR SPLICING.

LEGEND

A,B,X,Y,Z	UNGROUNDED CIRCUIT CONDUCTORS
N	GROUNDED CIRCUIT CONDUCTORS
GND	EQUIPMENT GROUNDING CONDUCTOR
P	POLE (ELECTRICAL CIRCUIT)
φ	PHASE (ELECTRICAL CURRENT)
	HANDHOLE GROUND LUG
	SINGLE-POLE (1P) FUSE ASSEMBLY
	TWO-POLE (2P) FUSE ASSEMBLY
	UNFUSED LUMINAIRE
	EQUIPMENT GROUNDING ELECTRODE
	TERMINAL
	SPLICE
	CONDUCTOR
	EXOTHERMIC WELD



TYPICAL WIRING DIAGRAM
ISOLATED NEUTRAL SYSTEM
3-φ 208Y/120VAC OR 480Y/277VAC 4 WIRE



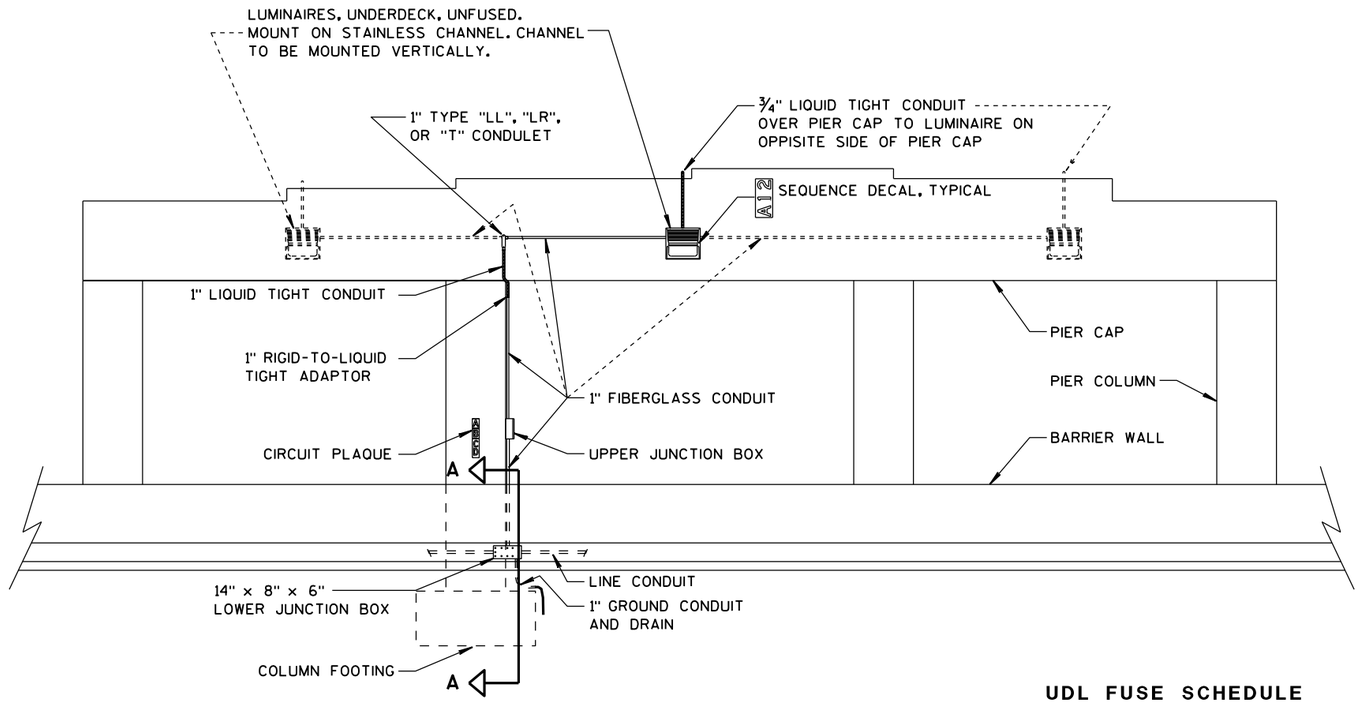
TYPICAL WIRING DIAGRAM
ISOLATED NEUTRAL SYSTEM
1-φ 120/240VAC OR 240/480VAC 3 WIRE

ELECTRICAL DETAILS
STRUCTURE MOUNT LIGHT POLES
ISOLATED NEUTRAL SYSTEMS

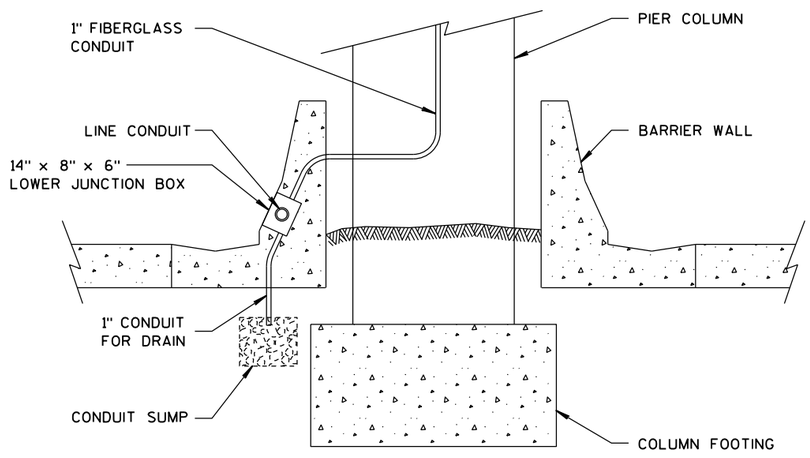
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
10/25/2010 — DATE
/S/ John Corbin — STATE ELECTRICAL ENGI 676 — HWYS
FHWA

6
S.D.D. 10 A 8-2



TYPICAL UNDERDECK LIGHTING INSTALLATION



SECTION "A-A"

UDL FUSE SCHEDULE

LINE VOLTAGE ϕ-GROUND	TOP JUNCTION BOX FUSES
120VAC	5 A
208VAC	5 A
240VAC	5 A
480VAC	3 A

GENERAL NOTES

DETAILS OF CONSTRUCTION AND WORKMANSHIP NOT SHOWN IN THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

USE THIS DETAIL IN CONJUNCTION WITH THE DETAIL FOR ELECTRICAL HANDHOLE WIRING, SUBSTITUTING THE LOWER JUNCTION BOX FOR THE HANDHOLE SHOWN IN THAT DETAIL.

THE PLANS WILL SHOW WHICH CIRCUIT LEGS(S) ARE CONNECTED TO EACH INSTALLATION AND THE REQUIRED NUMBER OF LUMINAIRES.

THE UPPER JUNCTION BOX (FOR FUSE ASSEMBLIES) SHALL CONFORM TO THE APPLICABLE PROVISIONS OF SECTION 653.2.2 OF THE STANDARD SPECIFICATIONS; SHALL BE SUITABLE FOR SURFACE MOUNTING WITH EXTERNAL MOUNTING LUGS; AND SHALL HAVE A HINGED COVER, WING-NUT FASTENERS, AND PADLOCK HASP. ALL HARDWARE SHALL BE STAINLESS STEEL. FURNISH O-Z/GEDNEY YW-120603, SPRING CITY HC-12-06-04, CROUSE-HINDS WTB-120604, OR APPROVED EQUAL.

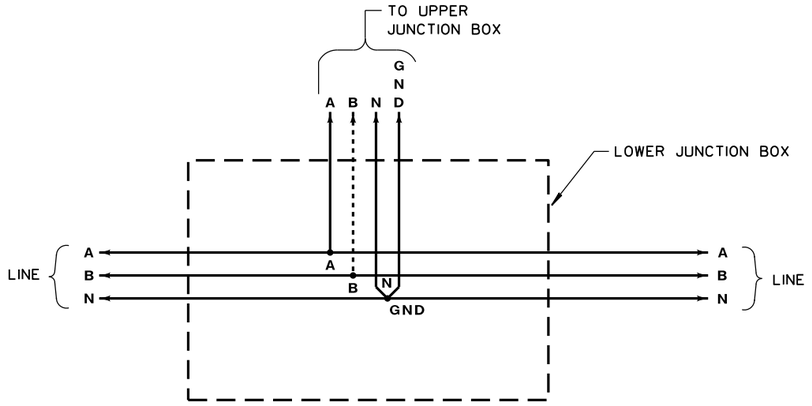
MEDIAN CONFIGURATIONS VARY; NOT ALL CASES CAN BE SHOWN IN THIS DETAIL.

WIRING FOR THE FIRST LUMINAIRE PAIR IS SHOWN IN SOLID LINES. WIRING FOR ADDITIONAL LUMINAIRE PAIRS, WHERE REQUIRED, IS SHOWN IN DOTTED LINES.

LEGEND

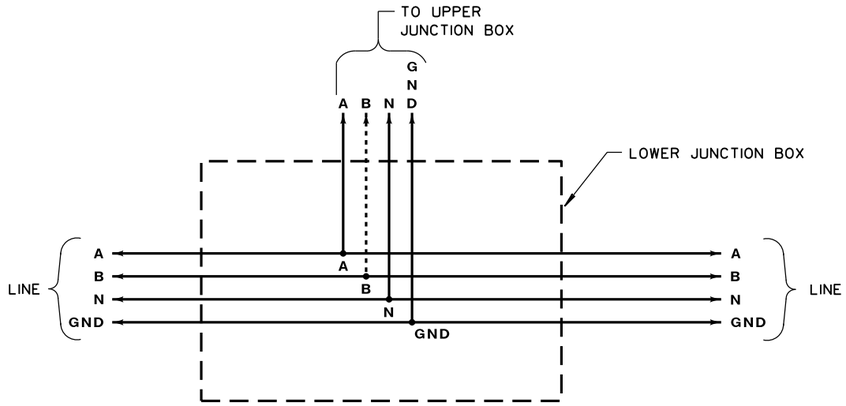
A,B,X,Y,Z	UNGROUNDED CIRCUIT CONDUCTORS
N	GROUNDED CIRCUIT CONDUCTORS
GND	EQUIPMENT GROUNDING CONDUCTOR
P	POLE (ELECTRICAL CIRCUIT)
ϕ	PHASE (ELECTRICAL CURRENT)
	HANDHOLE GROUND LUG
	UNFUSED LUMINAIRE
	SINGLE POLE (1P) FUSE ASSEMBLY
	TERMINAL
	SPLICE
	CONDUCTOR

ELECTRICAL DETAILS
UNDERDECK LIGHTING



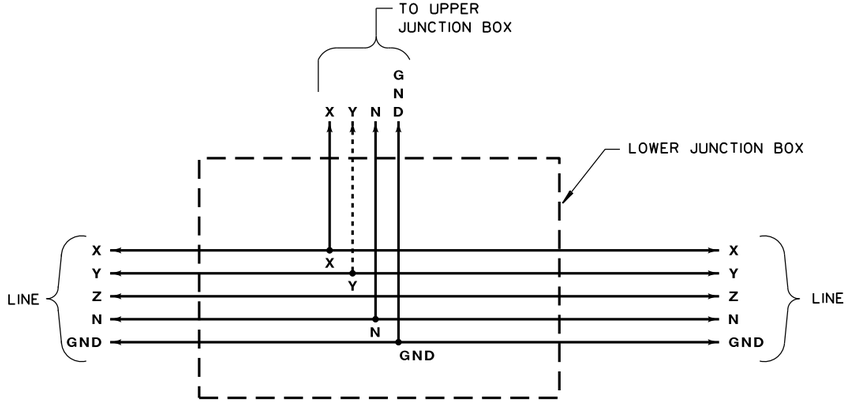
TYPICAL WIRING DIAGRAM, LOWER JUNCTION BOX

GROUNDED NEUTRAL SYSTEM
1-ϕ 240/480VAC OR 3 WIRE OR 480VAC 2 WIRE



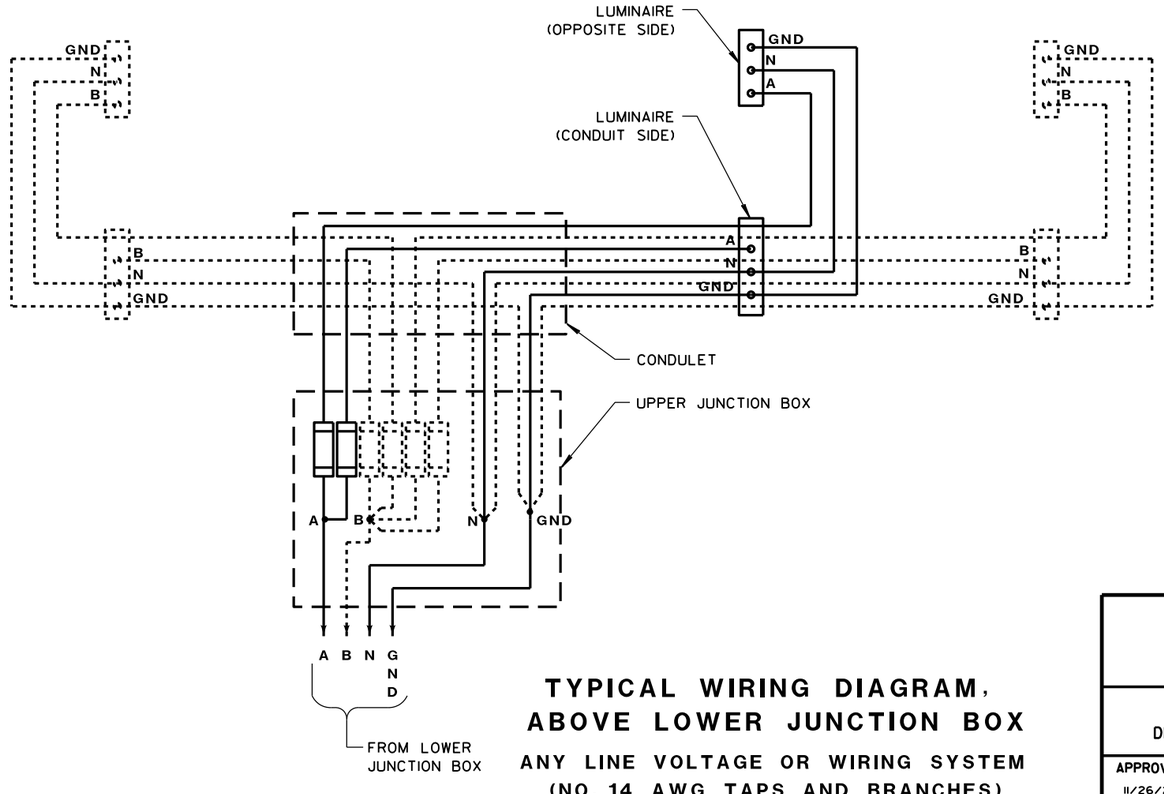
TYPICAL WIRING DIAGRAM, LOWER JUNCTION BOX

ISOLATED NEUTRAL SYSTEM
1-ϕ 120/240VAC OR 240/480VAC 3 WIRE



TYPICAL WIRING DIAGRAM, LOWER JUNCTION BOX

ISOLATED NEUTRAL SYSTEM
3-ϕ 208Y/120VAC OR 480Y/277VAC 4 WIRE



TYPICAL WIRING DIAGRAM, ABOVE LOWER JUNCTION BOX

ANY LINE VOLTAGE OR WIRING SYSTEM
(NO. 14 AWG TAPS AND BRANCHES)

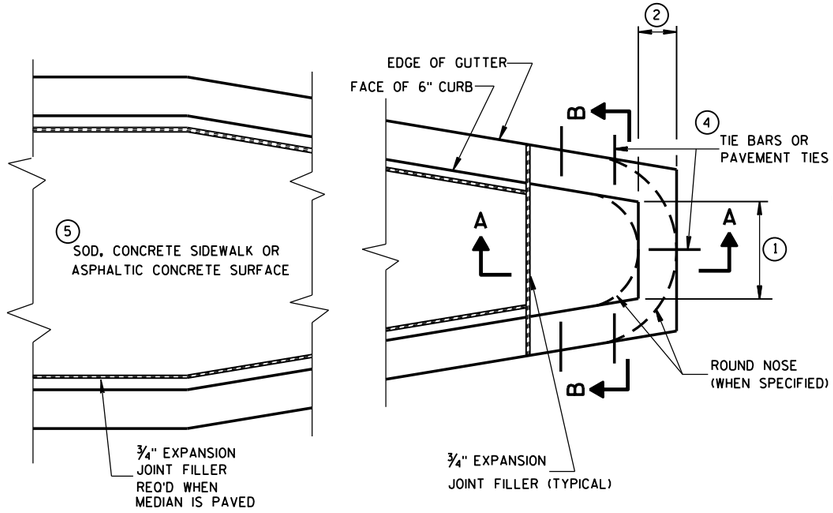
ELECTRICAL DETAILS
UNDERDECK LIGHTING

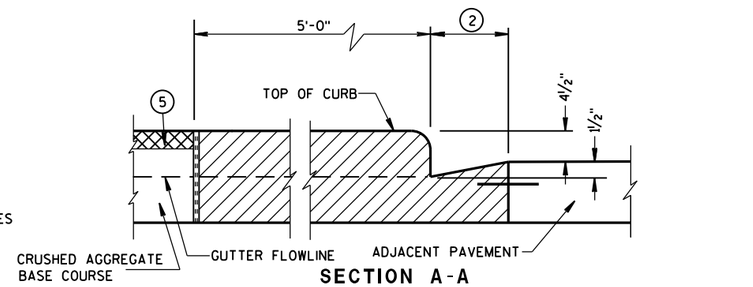
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11/26/2013
DATE
/S/ Ahmet Demirbilek
STATE ELECTRICAL
FHWA

6

S.D.D. 10 A 15-4b





CONCRETE MEDIAN BLUNT NOSE DETAIL

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

(1) SEE PLAN FOR MEDIAN NOSE WIDTH AND RADIUS (FOR ROUND NOSE ALTERNATE).

(2) WIDTH OF GUTTER TO MATCH EXISTING ADJACENT GUTTER OR AS SPECIFIED ELSEWHERE IN THE PLAN.

(3) DEPTH EQUAL TO ADJACENT PAVEMENT. ADJACENT PAVEMENT STRUCTURE DETAILS ARE SHOWN ON THE PLAN. TYPICAL OPTIONS ARE:

(1) NEW OR EXISTING CONCRETE PAVEMENT.

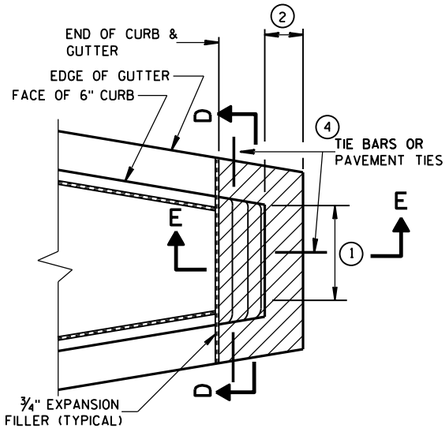
(2) ASPHALTIC CONCRETE PAVEMENT OVER NEW OR EXISTING CONCRETE BASE COURSE.

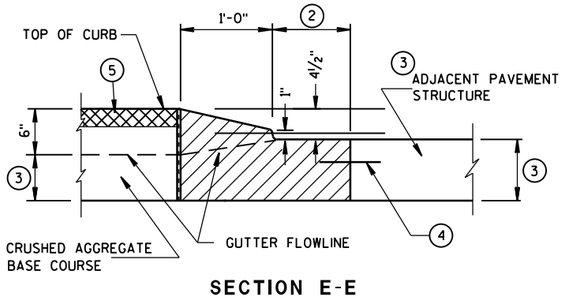
(3) ASPHALTIC CONCRETE PAVEMENT OVER CRUSHED AGGREGATE BASE COURSE.

(4) TIE BARS OR PAVEMENT TIES REQUIRED IN NEW CONCRETE PAVEMENT OR CONCRETE BASE COURSE. TIE BARS SHALL BE NO. 4 X 2'-0" SPACED AT 2'-0" C-C.

PAVEMENT TIES REQUIRED IN EXISTING CONCRETE BASE COURSE. PAVEMENT TIES SHALL BE NO. 6 X 1'-0" SPACED AT 3'-0" C-C INSTALLED ON A HORIZONTAL SKEW OF 6:1. THE DIRECTION OF SKEW SHALL ALTERNATE AFTER EVERY ONE OR TWO BARS.

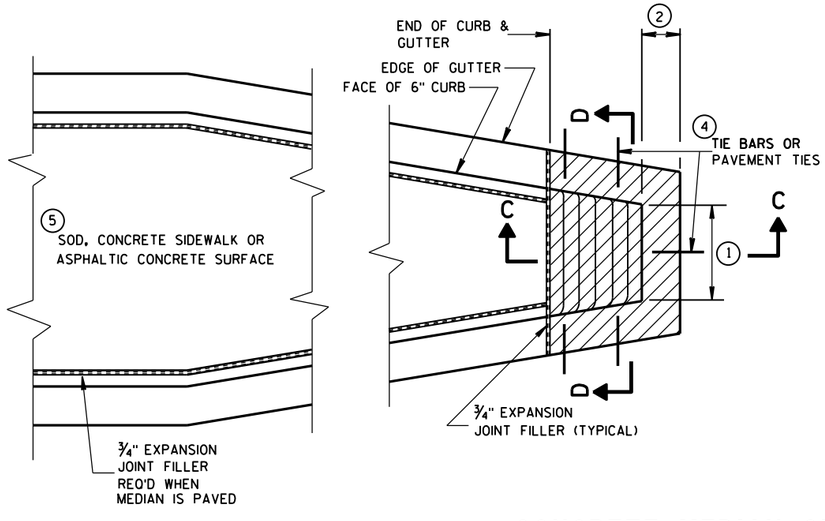
(5) SURFACE TYPE AND DETAILS ARE SHOWN ELSEWHERE IN THE PLAN.

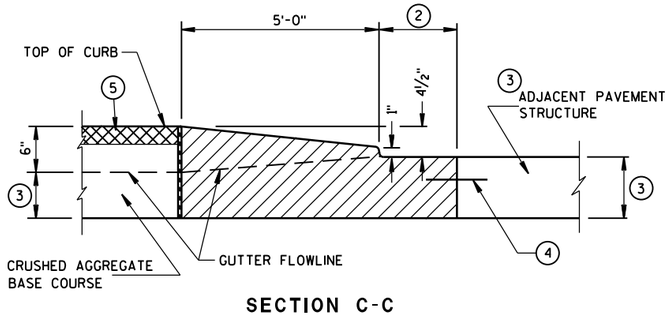




SECTION E-E

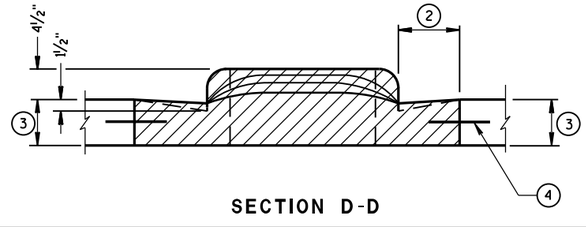
CONCRETE MEDIAN SLOPED NOSE TYPE 2





SECTION C-C

CONCRETE MEDIAN SLOPED NOSE TYPE 1



SECTION D-D

CONCRETE MEDIAN NOSE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

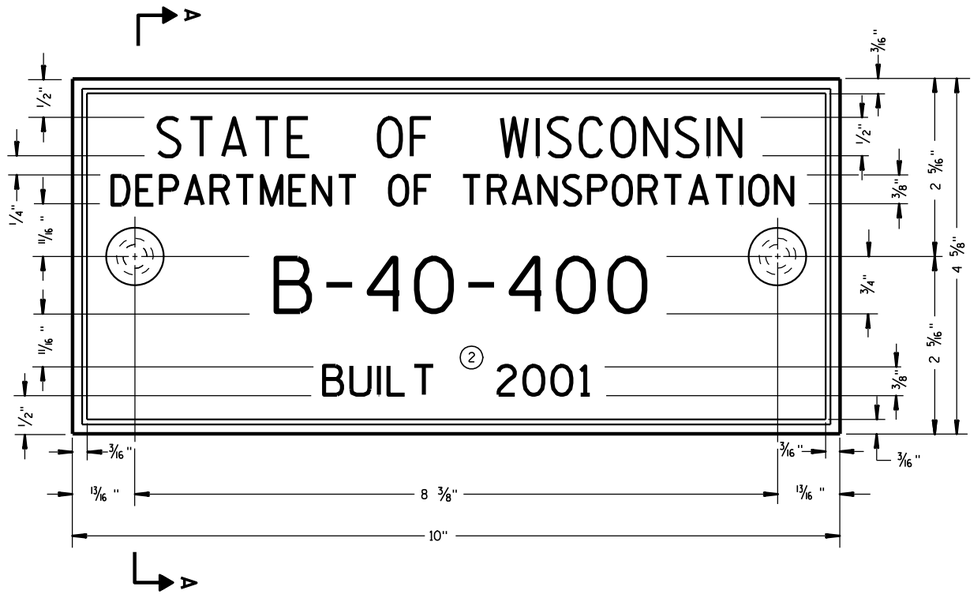
APPROVED
6/8/2006
DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

6

S.D.D. 11 B 2-2

6

S.D.D. 11 B 2-2



TYPICAL NAME PLATE
(BRIDGES, CULVERTS, AND RETAINING WALLS)

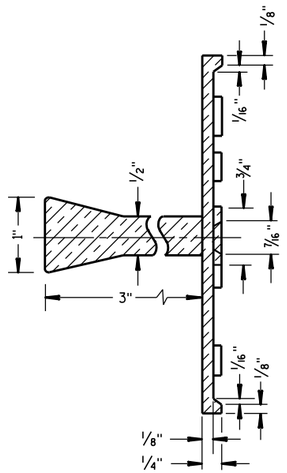
GENERAL NOTES

NAME PLATES TO BE INSTALLED ON BRIDGES, CULVERTS, AND RETAINING WALLS SHALL CONFORM TO THE REQUIREMENTS OF SECTION 502.3.11 OF THE STANDARD SPECIFICATIONS.

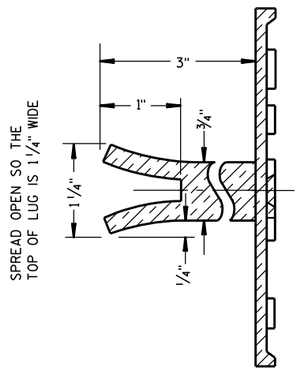
THE BRIDGE NUMBER AND YEAR BUILT SHOWN ON THIS DRAWING ARE EXAMPLES ONLY. SEE CONSTRUCTION PLANS FOR INDIVIDUAL NUMBERING AND YEAR BUILT.

(1) EPOXY RESIN SHALL BE FROM AN APPROVED MANUFACTURER AND USED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

(2) REHABILITATION OF AN EXISTING STRUCTURE SHOULD USE THE DATE OF ORIGINAL STRUCTURE CONSTRUCTION.



SECTION A-A



ALTERNATE LUG

FOR MULTI-UNIT STRUCTURES LINE 3 ABOVE SHALL READ

B = BRIDGE
C = CULVERT
R = RETAINING WALL

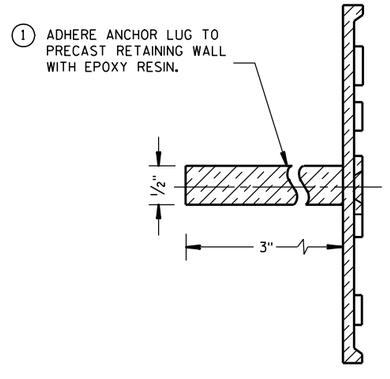
COUNTY NO.

BRIDGE NO.

UNIT NO. FOR MULTIPLE UNIT BRIDGE

B-40-400-1A

NUMBERING DESIGNATION
MULTI-UNIT STRUCTURES



ALTERNATE LUG
(FOR ATTACHMENT TO PRECAST STRUCTURES)

NAME PLATE (STRUCTURES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

3/26/10
DATE

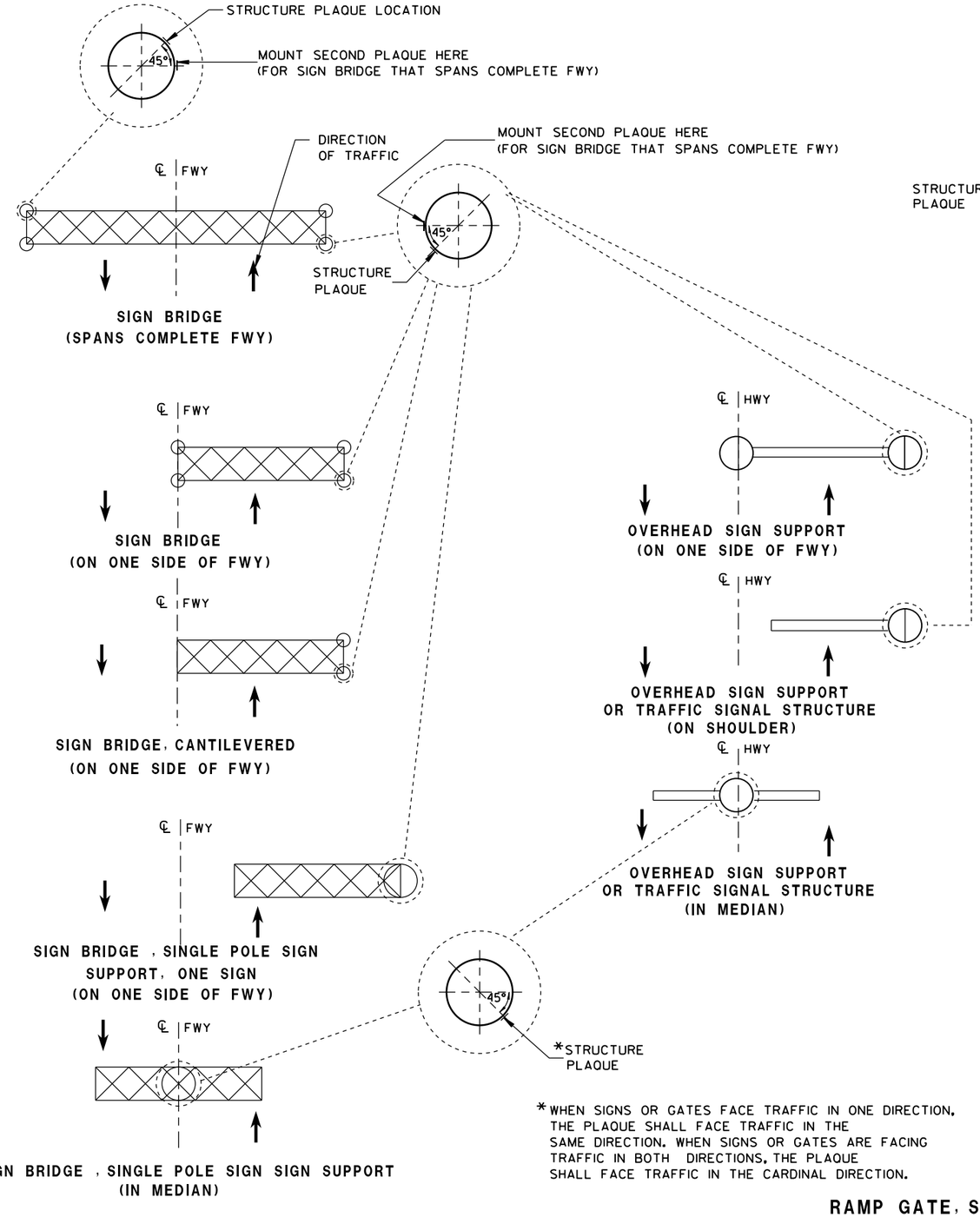
/S/ Scot Beck
CHIEF STRUCTURAL DEVELOPMENT ENGINEER

FHWA

680

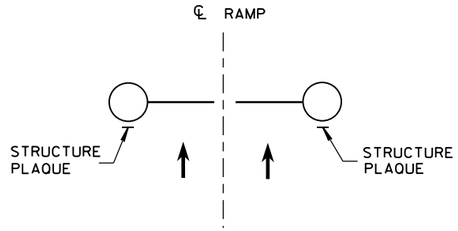
6

S.D.D. 12 A 3-10

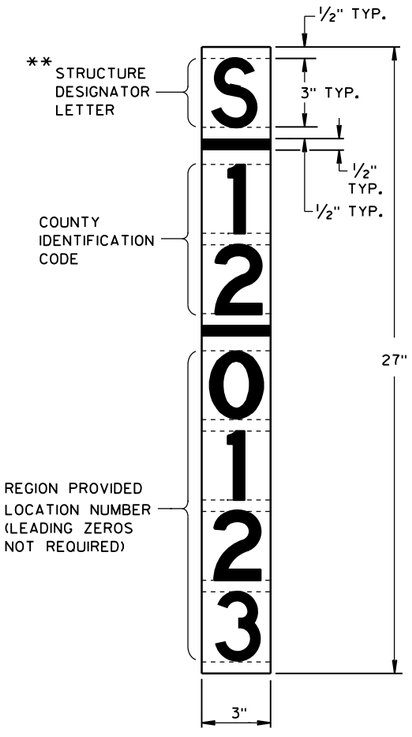


*WHEN SIGNS OR GATES FACE TRAFFIC IN ONE DIRECTION, THE PLAQUE SHALL FACE TRAFFIC IN THE SAME DIRECTION. WHEN SIGNS OR GATES ARE FACING TRAFFIC IN BOTH DIRECTIONS, THE PLAQUE SHALL FACE TRAFFIC IN THE CARDINAL DIRECTION.

LOCATION OF RAMP GATE, SIGN BRIDGE, OVERHEAD SIGN SUPPORT & TRAFFIC SIGNAL STRUCTURE PLAQUES



**RAMP GATE
(ACROSS FWY ON-RAMP)**



RAMP GATE, SIGN BRIDGE, OVERHEAD SIGN SUPPORT AND TRAFFIC SIGNAL STRUCTURE PLAQUE FOR SIGN BRIDGES AND OVERHEAD SIGN SUPPORT WHICH ARE NOT STRUCTURE MOUNTED

** LETTER "G" UTILIZED FOR RAMP GATES. LETTER "S" UTILIZED FOR SIGN BRIDGES, OVERHEAD SIGN SUPPORTS, AND TRAFFIC SIGNALS.

GENERAL NOTES

DETAILS OF CONSTRUCTION AND WORKMANSHIP NOT SHOWN IN THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

PLAQUES SHALL BE INCIDENTAL TO ALL NEW INSTALLATIONS.

IF THE PROPOSED SIGN BRIDGE OR OVERHEAD SIGN SUPPORT IS REPLACING AN EXISTING SIGN BRIDGE OR OVERHEAD SIGN SUPPORT, A NEW IDENTIFICATION PLAQUE WILL BE REQUIRED.

FASTEN TOP, CENTER AND BOTTOM OF PLAQUE TO POLE OR OTHER LOCATION AS FOLLOWS:

GALVANIZED STEEL SHAFT - 3 STAINLESS STEEL POP RIVETS

A588 STEEL SHAFT - SHIM FOR DRAINAGE WITH STAINLESS WASHERS; FASTEN WITH STAINLESS SELF-TAPPING SCREWS

ALUMINUM SHAFTS - 3 ALUMINUM POP RIVETS

MOUNTING HEIGHT SHALL BE APPROXIMATELY 5.0' ABOVE CURB OR SHOULDER. ADJUST IF IT IS KNOWN THAT REQUIRED TRAFFIC SIGNS WILL OBSTRUCT.

PLAQUE MATERIALS:

BASE - SHEET ALUMINUM, 0.060" THICK.

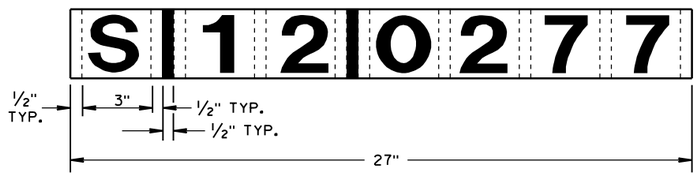
FACE - WHITE, SELF-ADHESIVE VINYL SHEETING, NON-RETROREFLECTIVE

LINES - BLACK, ½" WIDE, SELF-ADHESIVE

CHARACTERS:- BLACK, SELF ADHESIVE, SERIES "D", SIZE AS SHOWN.

FOR SIGN BRIDGES, STRUCTURE MOUNTED, THE STRUCTURE PLAQUE SHALL BE MOUNTED HORIZONTALLY AS SHOWN ON THE DRAWING. THE STRUCTURE PLAQUE SHALL BE MOUNTED HORIZONTALLY TO THE BACK OF THE SIGN, BETWEEN THE ALUMINUM EXTRUSIONS, NEAR THE TOP LEFT HAND CORNER OF THE SIGN. THE BASE MATERIAL SHALL BE OMITTED AND THE FACE ADHERED DIRECTLY TO THE ALUMINUM SURFACE. PRIOR TO ADHERING THE MATERIAL, THE ALUMINUM SURFACE SHALL BE SMOOTH, CLEAN AND DRY.

WHERE SIGN BRIDGE ILLUMINATION IS PROVIDED, THE STRUCTURE MUST ALSO HAVE A SIGN BRIDGE CIRCUIT PLAQUE AS SHOWN IN THE ELECTRICAL DETAILS.



IDENTIFICATION PLAQUE FOR SIGN BRIDGE, STRUCTURE MOUNTED

STRUCTURE IDENTIFICATION PLAQUES, RAMP GATES, SIGN BRIDGES, OVERHEAD SIGN SUPPORTS, & TRAFFIC SIGNALS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

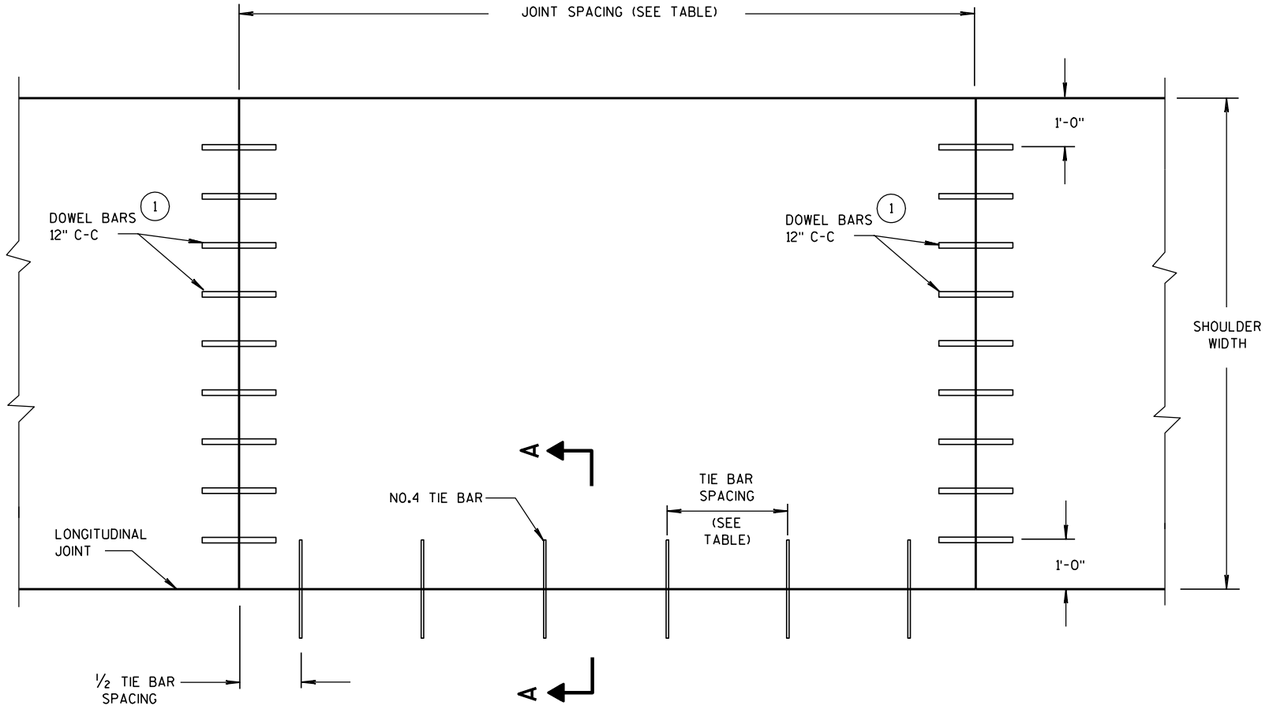
APPROVED
12/4/2012 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER
FHWA

6

S.D.D. 12 A 4-3

6

S.D.D. 12 A 4-3



PLAN VIEW

CONCRETE PAVEMENT SHOULDER

PAVEMENT TYPE OF TRAFFIC LANES	TIE BAR SPACING	SHOULDER JOINT SPACING
NON-REINFORCED	30"	MATCH JOINT SPACING OF ADJACENT TRAFFIC LANE
CONTINUOUSLY REINFORCED	30"	15' FOR 6' TO 10' WIDE SHOULDERS
CONTINUOUSLY REINFORCED	36"	12' FOR 3' WIDE SHOULDERS

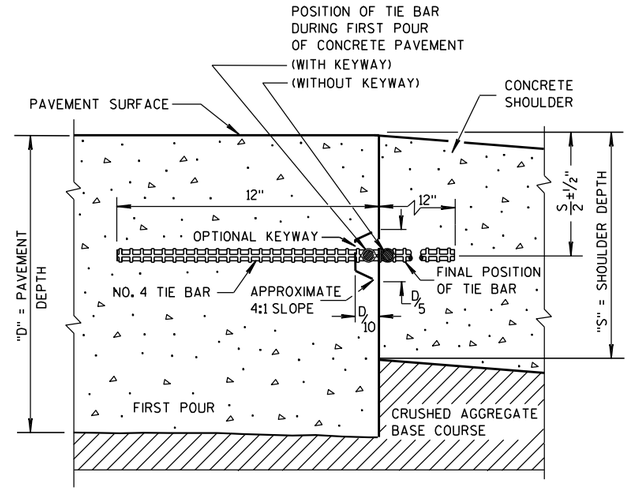
GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

TRANSVERSE JOINT DETAILS ARE SHOWN ELSEWHERE IN THE PLAN.

FINISH THE SHOULDER PAVEMENT CONFORMING TO SUBSECTION 415.3.8 OF THE STANDARD SPECIFICATIONS.

TIE BARS SHALL CONFORM TO SUBSECTION 505.2.4 OF THE STANDARD SPECIFICATIONS.



SECTION A-A

LONGITUDINAL CONSTRUCTION JOINT

(1) **PAVEMENT DEPTH, DOWEL BAR SIZE AND JOINT SPACING TABLE**

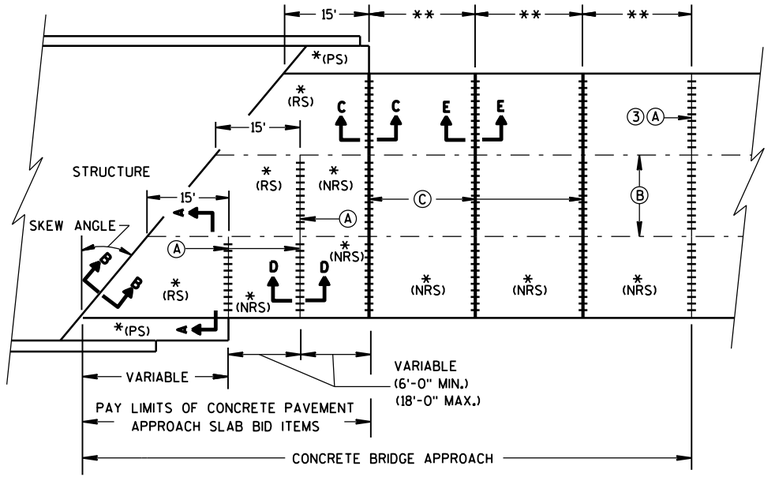
PAVEMENT DEPTH (D)	DOWEL BAR DIAMETER	CONTRACTION JOINT SPACING
5 ½", 6", 6 ½"	NONE	12'
7", 7 ½"	1"	14'
8", 8 ½"	1 ¼"	15'
9", 9 ½"	1 ¼"	15'
10" & ABOVE	1 ½"	15'

FOR DOWELED CONCRETE SHOULDERS WITH TRAPEZOIDAL CROSS SECTIONS, CHOSE THE APPROPRIATE DOWEL BAR DIAMETER BASED ON THE SMALLER PAVEMENT DEPTH (LIKELY THE OUTSIDE EDGE OF THE SHOULDER). IF USING BASKETS, USE BASKETS FOR THE AVERAGE THICKNESS OF THE CROSS SECTION.

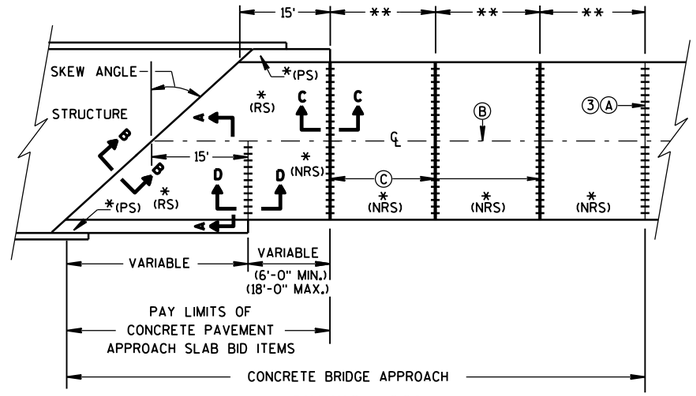
CONCRETE PAVEMENT SHOULDERS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

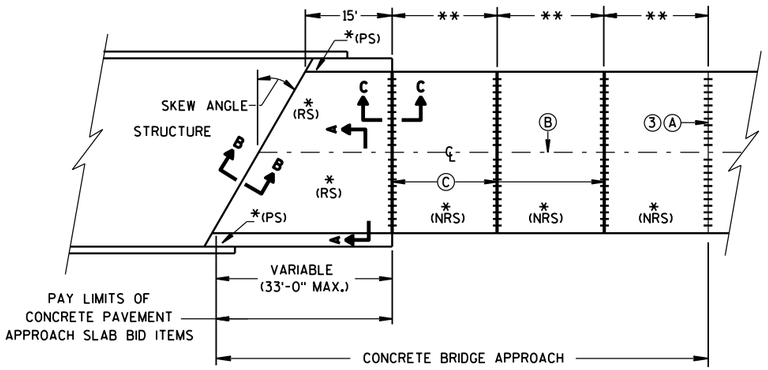
APPROVED
8/15/2011 — DATE
/S/ Deb Bischoff — PAVEMENT POLICY & D 682 — INEER
FHWA



SKEWED APPROACH
(PAVEMENT MORE THAN 2 LANES)



SKEWS >30°
(PAVEMENT WIDTH ≤30')



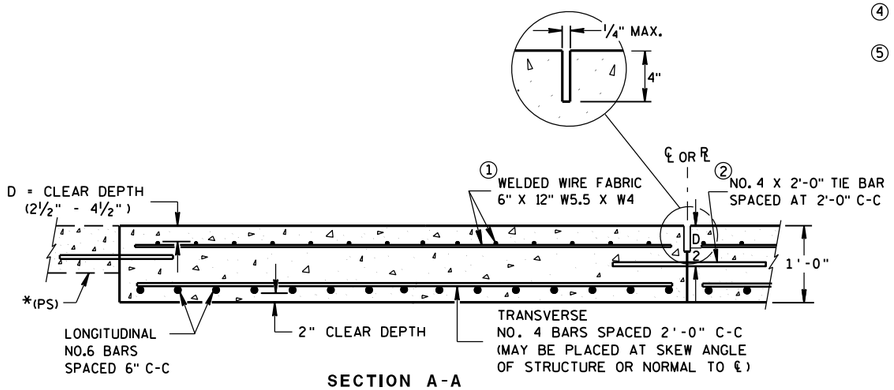
SKEWS ≤30°
(PAVEMENT WIDTH ≤30')

APPROACH SLAB AND ADJACENT PAVEMENT

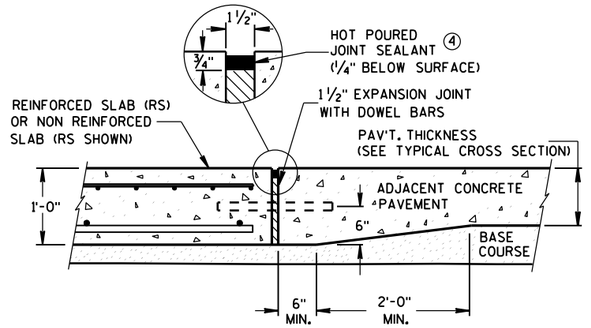
*(RS) = REINFORCED CONCRETE SLAB
*(PS) = PAVED CONCRETE SHOULDER: CONCRETE PAVEMENT, OR CONCRETE SURFACE DRAIN (SEE DETAILS ELSEWHERE IN THE PLAN)
*(NRS) = NON-REINFORCED CONCRETE SLAB

**STANDARD TRANSVERSE JOINT SPACING (SEE SDD 13C4, SDD 13C11, & SDD 13C13)
***STANDARD DOWEL BAR DIAMETER (SEE SDD 13C11, & SDD 13C13)

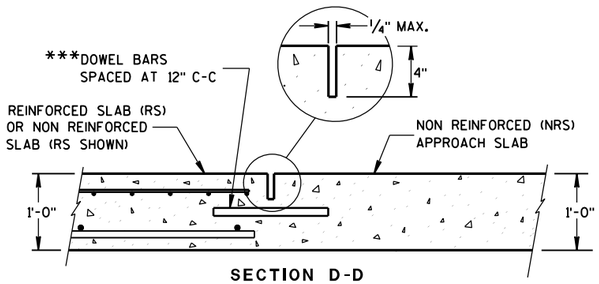
(A) STANDARD CONTRACTION JOINT NORMAL TO ℄ OR ℄
(B) STANDARD LONGITUDINAL JOINT AND TIE BARS.
(C) 1½" EXPANSION JOINT WITH DOWEL BARS NORMAL TO ℄ OR ℄



SECTION A-A
REINFORCEMENT POSITIONING DETAIL



SECTION C-C
TRANSITION DETAIL
APPROACH SLAB TO ADJACENT PAVEMENT



SECTION D-D
CONTRACTION JOINT

GENERAL NOTES

THE CONTRACTOR MAY SPLICE NO. 6 BARS IN THE APPROACH SLAB FOR SKEWED STRUCTURES ONLY. STAGGER SPLICES WITH A MAXIMUM OF ONE SPLICE PER BAR. THE LENGTH OF LAP IS 20 INCHES.

TACK WELD DOWEL BARS TO THE BASKETS ON ALTERNATE ENDS.

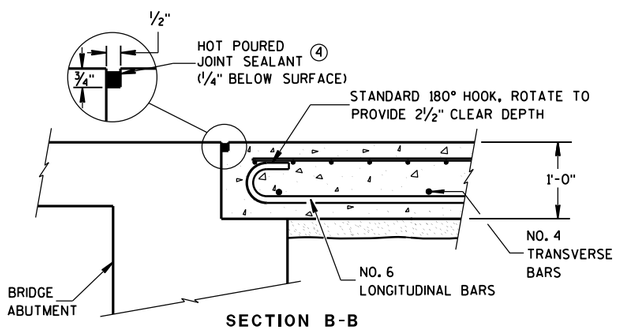
(1) THE CONTRACTOR MAY USE NO. 4 BARS SPACED AT 2'-0" C-C IN BOTH THE LONGITUDINAL AND TRANSVERSE DIRECTIONS FOR TOP REINFORCEMENT AS AN ALTERNATIVE TO THE WELDED WIRE FABRIC.

(2) THE CONTRACTOR MAY OMIT TIE BARS BETWEEN REINFORCED SLABS WHERE SLAB REINFORCEMENT BARS EXTEND ACROSS THE CENTERLINE OR REFERENCE LINE.

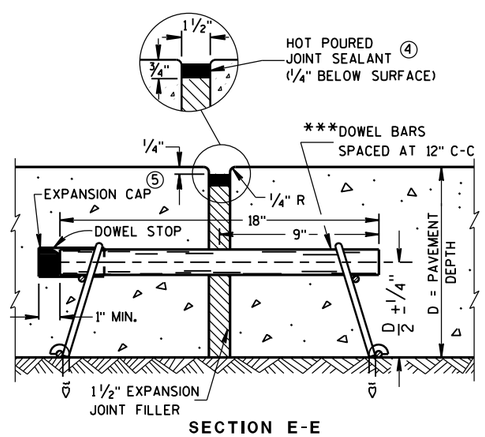
(3) DO NOT DOWEL A CONTRACTION JOINT THAT ABUTS AN HMA PAVEMENT.

(4) USE A JOINT SEALANT MEETING THE REQUIREMENTS OF ASTM D6690.

(5) PLACE EXPANSION CAP ON THE END OF THE DOWEL THAT IS NOT TACK WELDED TO THE BASKET. DO NOT FORCE DOWEL BAR PAST THE DOWEL STOP.



SECTION B-B
BEND DETAIL
BOTTOM REINFORCEMENT



SECTION E-E
EXPANSION JOINT

CONCRETE BRIDGE APPROACH

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

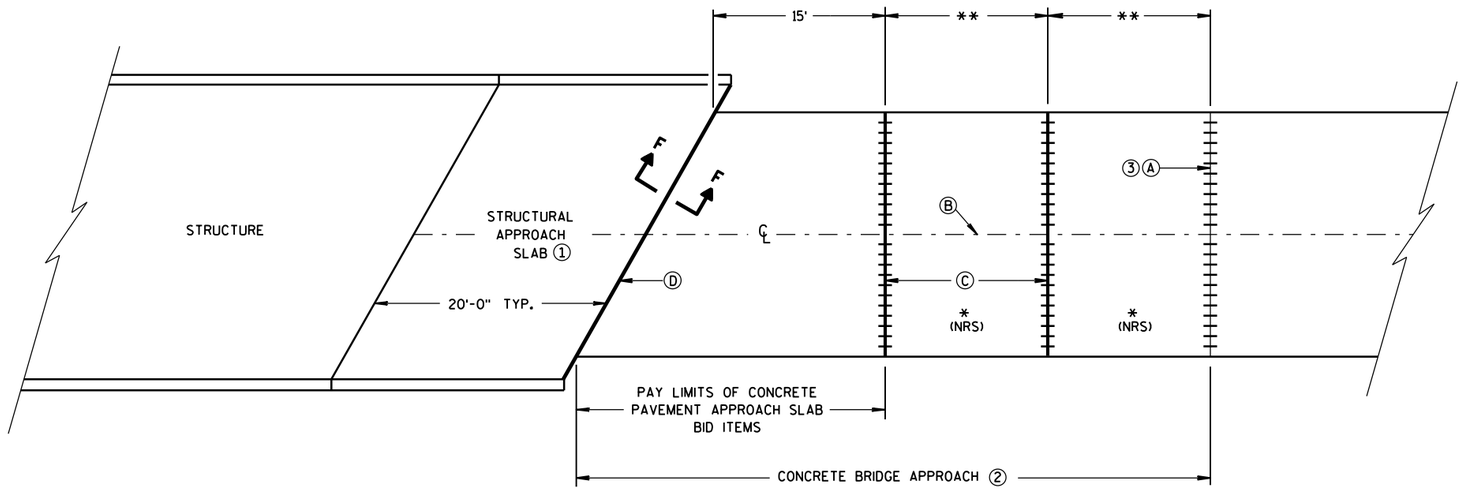
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June, 2014 — DATE
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S.D.D. 13 B 2-7a

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S.D.D. 13 B 2-7a



BRIDGE APPROACHES

GENERAL NOTES

ALL PROJECTS THAT INVOLVE A STRUCTURAL APPROACH SLAB WILL ALSO HAVE A CONCRETE BRIDGE APPROACH.

① CONFORM TO APPLICABLE BRIDGE MANUAL STANDARD DRAWINGS FOR *STRUCTURAL APPROACH SLABS* (SEE CHAPTER 12 - ABUTMENTS).

② CONFORM TO SHEET (a) OF THIS SET FOR *CONCRETE BRIDGE APPROACH* DETAILS, WITH ONE EXCEPTION — WHEN CONSTRUCTING A *CONCRETE BRIDGE APPROACH* NEXT TO A *STRUCTURAL APPROACH SLAB*, AS SHOWN IN THE DETAIL DRAWING, THE *CONCRETE BRIDGE APPROACH* WILL ONLY HAVE TWO EXPANSION JOINTS; THE THIRD EXPANSION JOINT IS AT THE END OF THE *STRUCTURAL APPROACH SLAB*.

③ DO NOT DOWEL A CONTRACTION JOINT THAT ABUTS AN HMA PAVEMENT.

*(NRS) = NON-REINFORCED CONCRETE SLAB

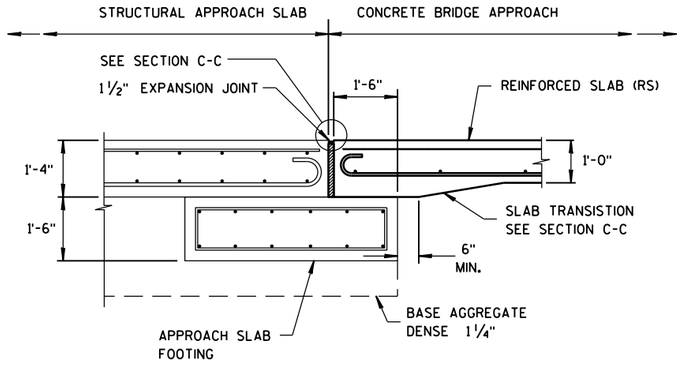
**STANDARD TRANSVERSE JOINT SPACING (SEE SDD 13C4, SDD 13C11, & SDD 13C13)

Ⓐ STANDARD CONTRACTION JOINT NORMAL TO ℄ OR ℄

Ⓑ STANDARD LONGITUDINAL JOINT AND TIE BARS.

Ⓒ 1½" EXPANSION JOINT WITH DOWEL BARS NORMAL TO ℄ OR ℄

Ⓓ 1½" EXPANSION JOINT (NO DOWELS)



SECTION F-F

FOOTING DETAIL

STRUCTURAL APPROACH SLAB TO CONCRETE BRIDGE APPROACH

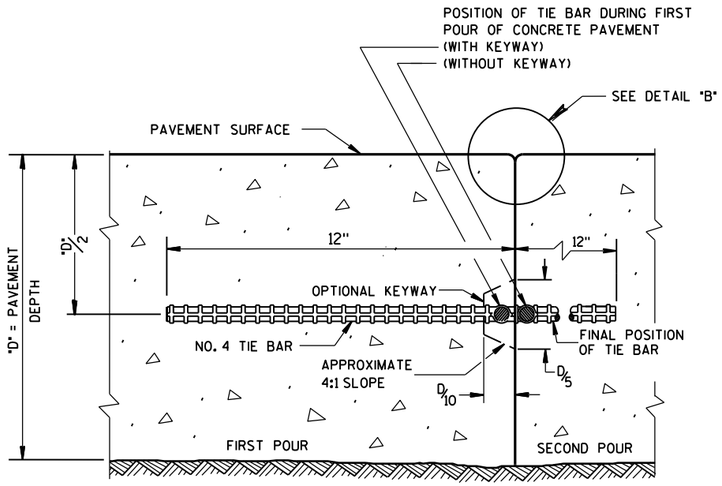
STRUCTURAL APPROACH SLAB AND CONCRETE BRIDGE APPROACH

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

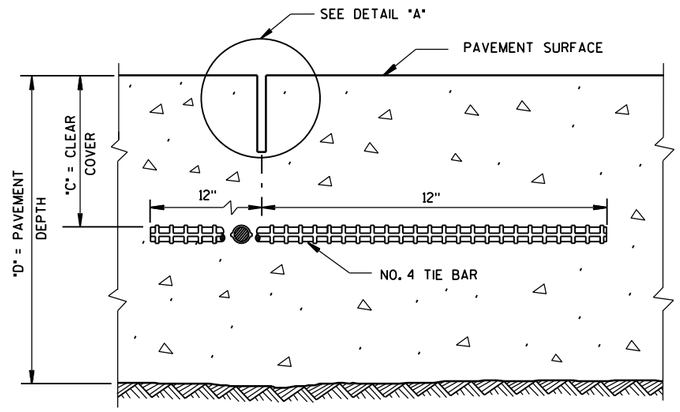
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S.D.D. 13 B 2-7b



CONSTRUCTION JOINT



SAWED JOINT

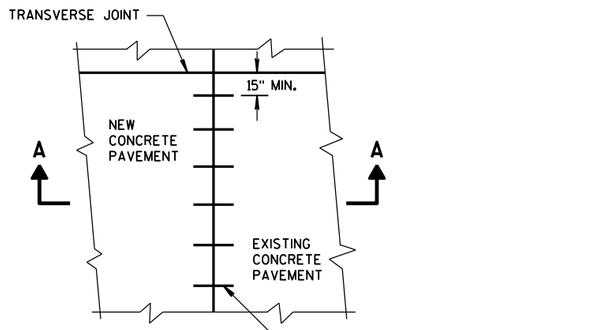
GENERAL NOTES

DO NOT SEAL OR FILL LONGITUDINAL JOINTS.

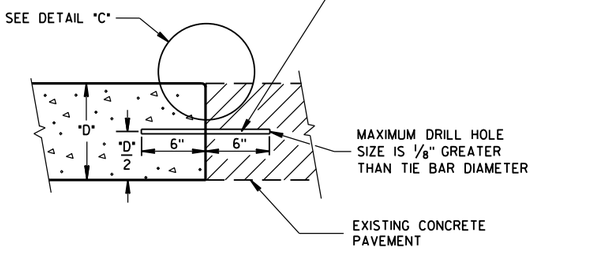
CREATE A LONGITUDINAL JOINT FOR PAVEMENT WIDTHS GREATER THAN 15 FEET.

CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

(1) ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.

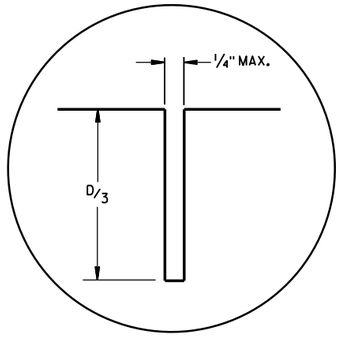


PLAN VIEW

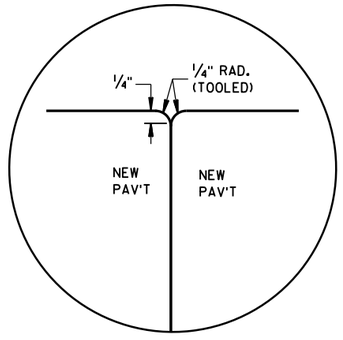


SECTION A-A

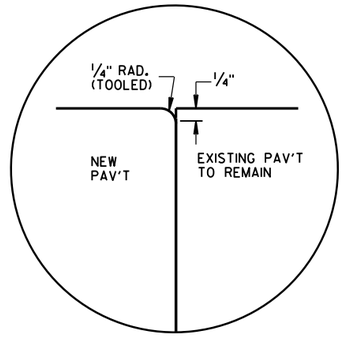
LONGITUDINAL CONSTRUCTION JOINT TIE BARS ANCHORED INTO EXISTING PAVEMENT



DETAIL "A"



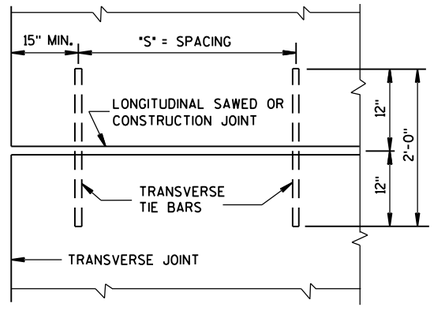
DETAIL "B"



DETAIL "C"

TIE BAR TABLE

PAVEMENT DEPTH "D"	CLEAR COVER "C"	MAXIMUM TIE BAR SPACING "S"	
		PAVEMENT WIDTH	
		24' OR 26'	≥30'
6, 6 1/2"	3"±1/2"	48"	42"
7, 7 1/2"	3 1/4"±1"	45"	36"
8, 8 1/2"	3 3/4"±1"	39"	30"
9, 9 1/2"	4 1/4"±1"	33"	27"
10, 10 1/2"	4 3/4"±1"	30"	24"
11, 11 1/2"	5 1/4"±1"	27"	21"
12"	5 3/4"±1"	24"	21"



PLAN VIEW
SHOWING LOCATION OF TIE BARS

CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

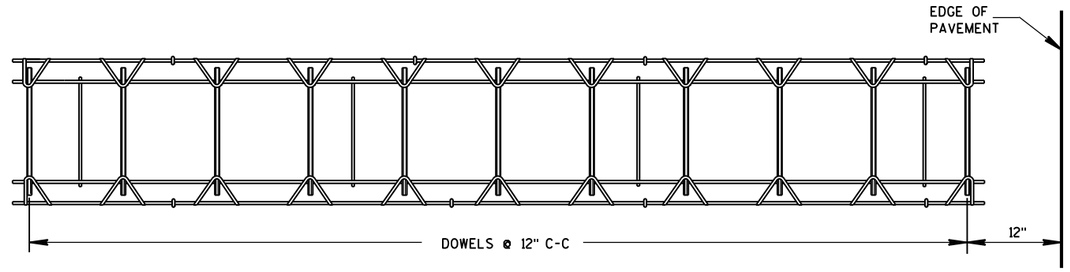
9/2014 — DATE

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S.D.D. 13 C 1-17

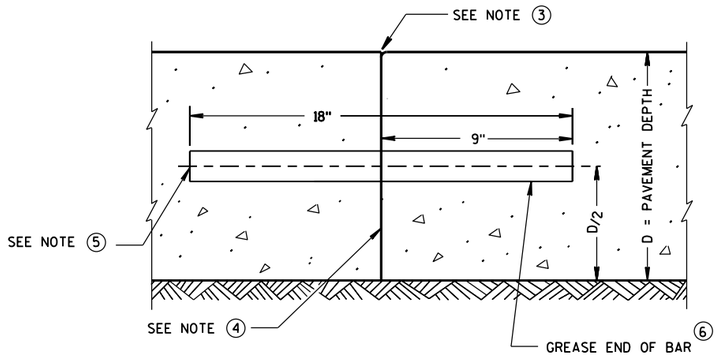


PLAN VIEW

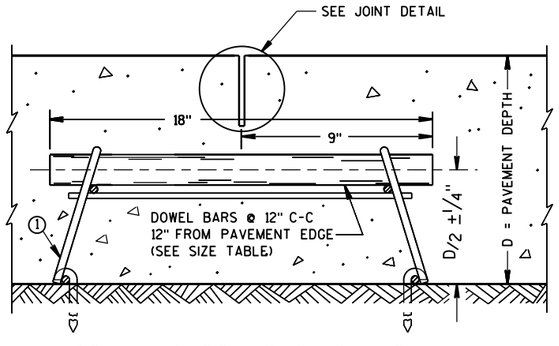


SIDE VIEW

CONTRACTION JOINT DOWEL ASSEMBLY ①



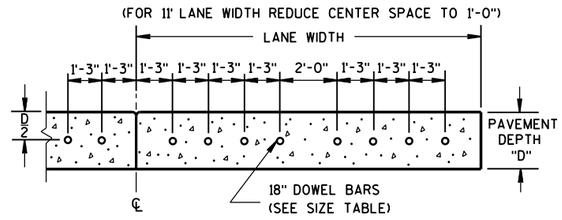
TRANSVERSE CONSTRUCTION JOINT



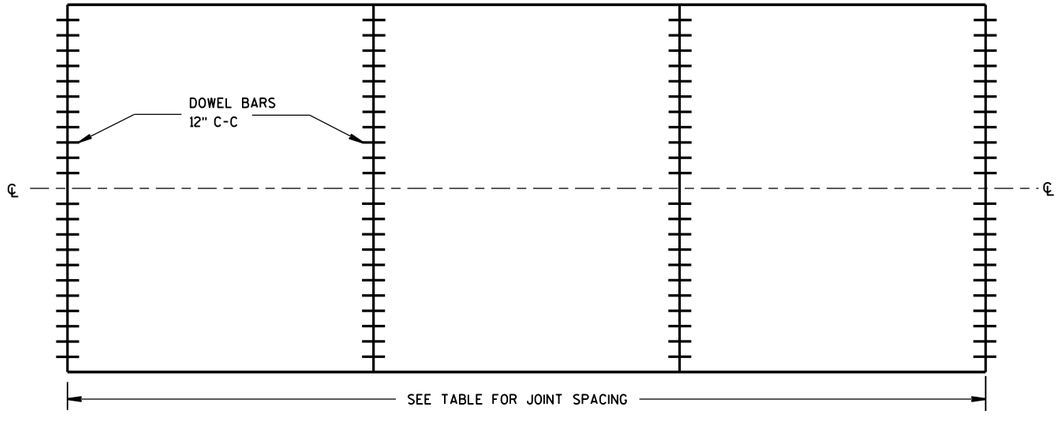
DOWELED CONTRACTION JOINT

PAVEMENT DEPTH, DOWEL BAR SIZE AND JOINT SPACING TABLE

PAVEMENT DEPTH (D)	DOWEL BAR DIAMETER	CONTRACTION JOINT SPACING
5 ½", 6", 6 ½"	NONE	12'
7", 7 ½"	1"	14'
8", 8 ½"	1 ¼"	15'
9", 9 ½"	1 ¼"	15'
10" & ABOVE	1 ½"	15'



DRILLED DOWEL BAR CONSTRUCTION JOINT ⑦



CONTRACTION JOINT LOCATIONS

GENERAL NOTES

CONTRACTION JOINTS

CONSTRUCT TRANSVERSE CONTRACTION JOINTS NORMAL TO THE CENTERLINE. SHOW THE LOCATION OF CONTRACTION JOINTS THROUGH INTERSECTIONS ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

DO NOT SEAL OR FILL CONTRACTION JOINTS.

INSTALL DOWEL BARS PARALLEL TO THE PAVEMENT CENTERLINE AND PAVEMENT SURFACE.

FOR PAVEMENT SLABS OF VARYING WIDTHS, LOCATE THE OUTER MOST DOWEL BAR SO THAT THE CENTER OF THE BAR IS A MINIMUM OF 6 INCHES AND A MAXIMUM OF 18 INCHES FROM THE LONGITUDINAL JOINT AND THE FREE EDGE OF PAVEMENT.

CONSTRUCTION JOINTS

LOCATE CONSTRUCTION JOINTS A MINIMUM OF 6 FEET FROM THE NEAREST CONTRACTION JOINT AND ALIGN PARALLEL TO CONTRACTION JOINTS.

① **OBTAIN THE ENGINEER'S APPROVAL FOR THE USE OF ALTERNATIVE DESIGNS OF THE DOWEL ASSEMBLY. USE MECHANICAL DOWEL BAR INSERTERS OR DOWEL ASSEMBLIES WHEN CONSTRUCTING CONTRACTION JOINTS.**

② SECURE BASKETS WITH ANCHORS TO HOLD DOWEL BARS IN THE CORRECT POSITION AND ALIGNMENT. TYPE, LOCATION, NUMBER AND LENGTH OF ANCHORS ARE DEPENDENT UPON FIELD CONDITIONS.

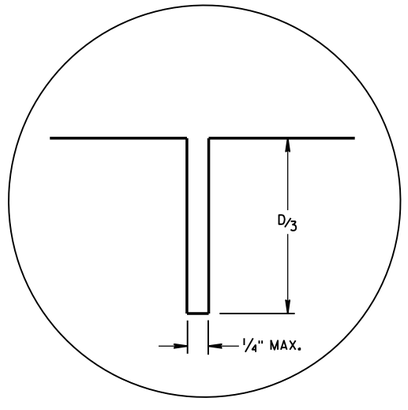
③ FORM OR SAW CONSTRUCTION JOINTS. PROVIDE A ¼-INCH RADIUS AT FORMED JOINTS.

④ PROVIDE A SMOOTH VERTICAL FACE FOR THE ENTIRE DEPTH OF THE PAVEMENT WHEN FORMING CONSTRUCTION JOINTS.

⑤ INSTALL DOWEL BARS AT CONSTRUCTION JOINTS BY FORMING OR DRILLING. INSTALL FORMED DOWEL BARS 12 INCHES C-C AND 12 INCHES FROM PAVEMENT EDGE. REMOVE EXCESS CONCRETE FROM THE FREE END OF THE DOWEL BAR IF DOWEL BARS ARE FORMED THROUGH A HEADER BOARD. INSTALL DRILLED DOWEL BARS ACCORDING TO *DRILLED DOWEL BAR CONSTRUCTION JOINT* DETAIL.

⑥ APPLY A THIN UNIFORM COATING OF SURFACE TREATMENT TO THE FREE END OF DOWEL BARS TO PREVENT BONDING.

⑦ ANCHOR DOWEL BARS INTO DRILLED HOLES WITH AN EPOXY. MAXIMUM DRILLED HOLE SIZE IS ⅛-INCH GREATER THAN DOWEL BAR DIAMETER, 9 INCHES IN LENGTH.



JOINT DETAIL

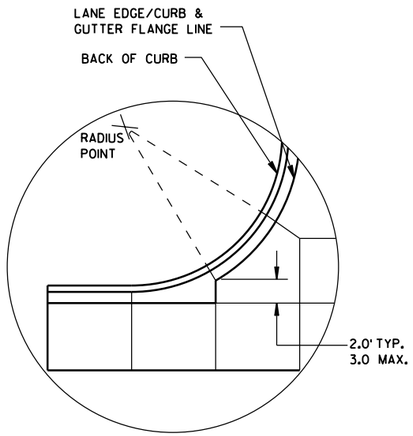
URBAN DOWELED CONCRETE PAVEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

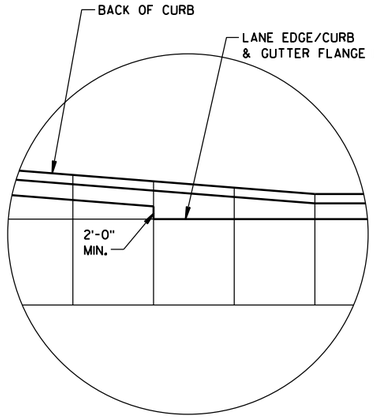
APPROVED
5/3/2013 DATE
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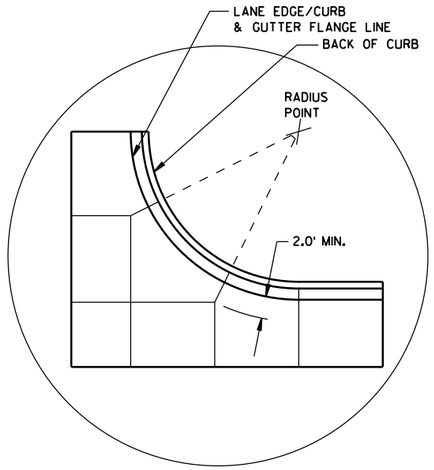
S.D.D. 13 C 13-8



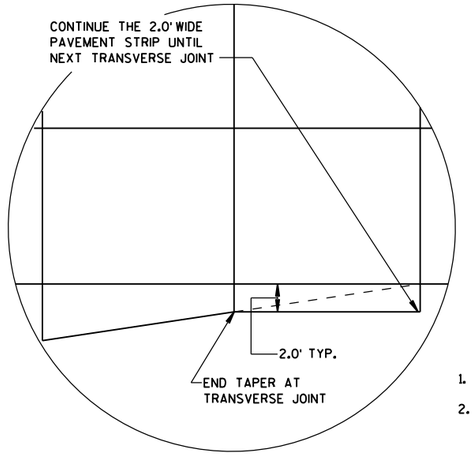
DETAIL "A"



DETAIL "B"



DETAIL "C"



DETAIL "D"

GENERAL NOTES

THE PRIMARY ROADWAY CONTROLS THE TRANSVERSE JOINT PATTERN.

ALIGN NEW JOINTS WITH EXISTING JOINTS OR CRACKS.

CONSTRUCT TRANSVERSE JOINTS PERPENDICULAR TO THE ROADWAY.

ADJUST TRANSVERSE JOINTS TO ALIGN WITH UTILITY FIXTURES (E.G. MANHOLES AND INLETS) IN THE PAVEMENT STRUCTURE WHEN POSSIBLE. WATER VALVES DO NOT REQUIRE JOINT ADJUSTMENT.

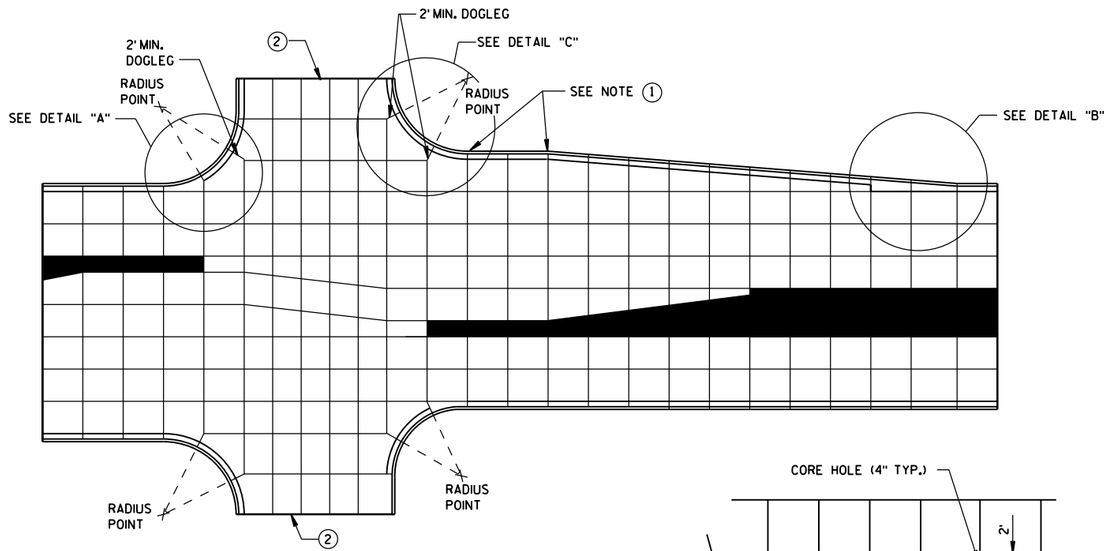
AVOID SLABS LESS THAN 2 FEET WIDE OR GREATER THAN 15 FEET WIDE.

SEE TABLE FOR TRANSVERSE JOINT SPACING. JOINT SPACING SPECIFIED IS MAXIMUM AND ACTUAL SPACING CAN BE ADJUSTED TO ACCOMMODATE INTERSECTIONS.

AVOID ANGLES LESS THAN 60° BY DOGLEGGING JOINTS THROUGH CURVE RADIUS POINTS. USE 90° ANGLES WHEN POSSIBLE.

CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

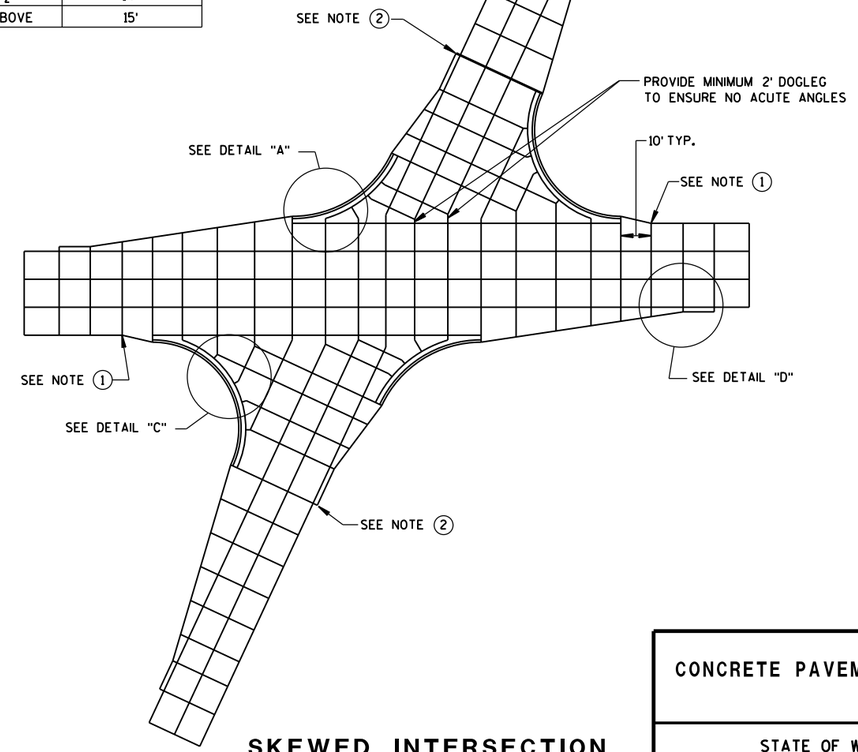
1. PROVIDE TRANSVERSE JOINTS AT ALL PAVEMENT WIDTH CHANGES.
2. CONSTRUCT DOWELED EXPANSION JOINT ON THE SIDE ROAD OF AN INTERSECTION IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH. ALIGN EXPANSION JOINT WITH EDGE OF RADIUS.
3. THE ENGINEER MAY APPROVE SLIGHT VARIATIONS FROM THESE JOINTING DETAILS.



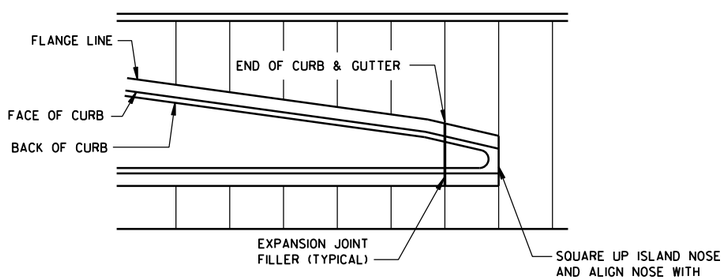
STANDARD INTERSECTION

PAVEMENT DEPTH AND JOINT SPACING TABLE

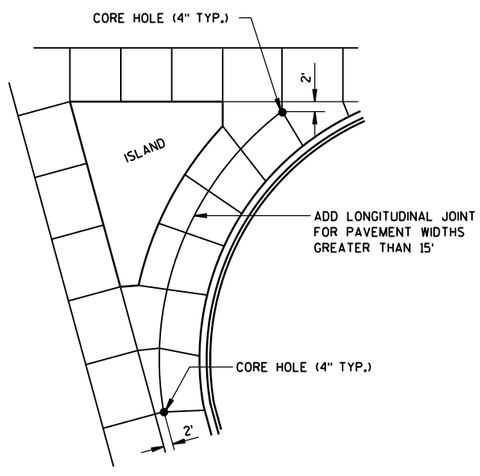
PAVEMENT DEPTH (D)	CONTRACTION JOINT SPACING
6", 6½"	12'
7", 7½"	14'
8" & ABOVE	15'



SKEWED INTERSECTION



APPROACH TO MEDIAN



LARGE RIGHT TURN

CONCRETE PAVEMENT JOINTING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR 687

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S.D.D. 13 C 18-2a

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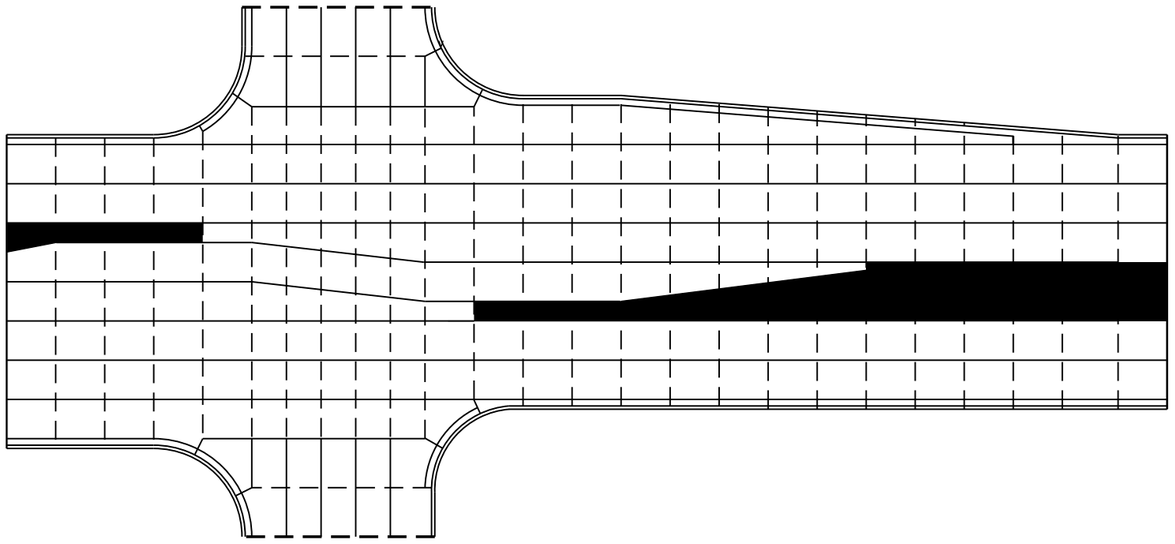
S.D.D. 13 C 18-2a

LEGEND

POTENTIAL DOWELED EXPANSION JOINT

DOWELED JOINT

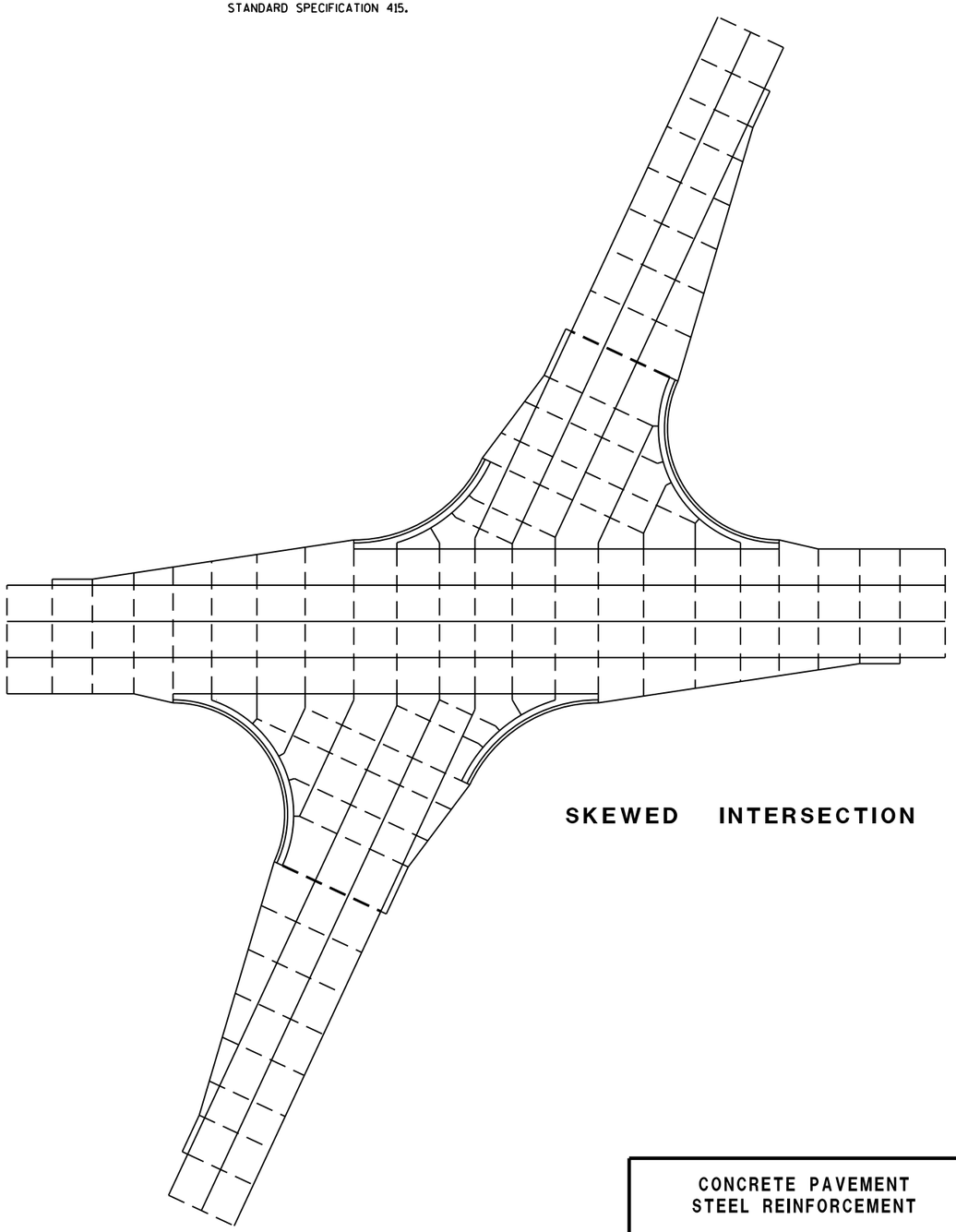
TIED JOINT



STANDARD INTERSECTION

GENERAL NOTES

USE AN EXPANSION JOINT FILLER MEETING THE REQUIREMENTS OF STANDARD SPECIFICATION 415.



SKEWED INTERSECTION

CONCRETE PAVEMENT
STEEL REINFORCEMENT

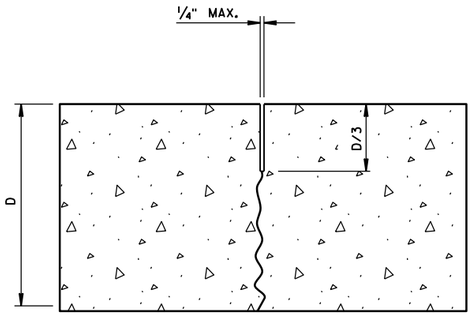
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR 688

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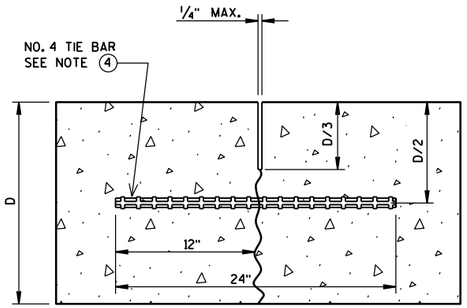
S.D.D. 13 C 18-2b

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S.D.D. 13 C 18-2b



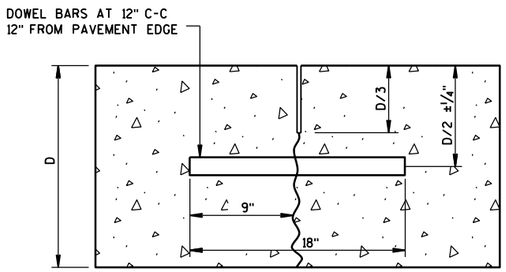
UNDOWELED-TRANSVERSE



TIED LONGITUDINAL

GENERAL NOTES

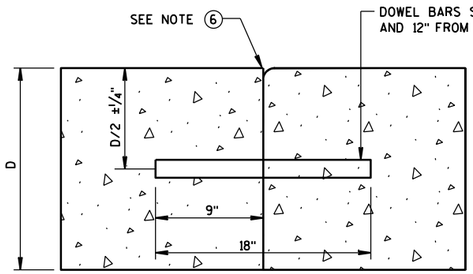
1. USE DOWELED EXPANSION JOINTS ON SIDE ROADS AT INTERSECTIONS (TO ISOLATE THE SIDE ROAD FROM THE THROUGH STREET) IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH.
2. SPACE CONTRACTION JOINTS IN ACCORDANCE WITH 13C4, 13C11 OR 13C13.
3. LOCATE CONSTRUCTION JOINTS A MINIMUM OF 6 FEET FROM THE NEAREST CONTRACTION JOINT AND ALIGN PARALLEL TO CONTRACTION JOINTS.
4. SPACE TIE BARS AT LONGITUDINAL CONSTRUCTION OR CONTRACTION JOINTS IN ACCORDANCE WITH SDD 13C1.
5. CONSTRUCTION JOINTS CAN BE FORMED OR SAWED.
6. IF JOINT IS FORMED, PROVIDE A 1/4-INCH RADIUS.



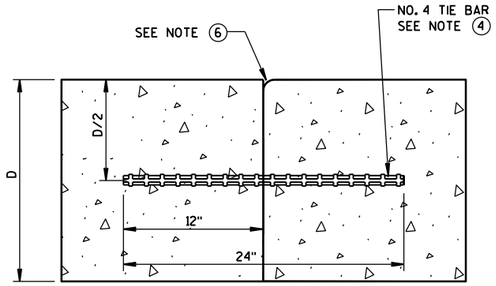
DOWELED-TRANSVERSE

CONTRACTION JOINTS

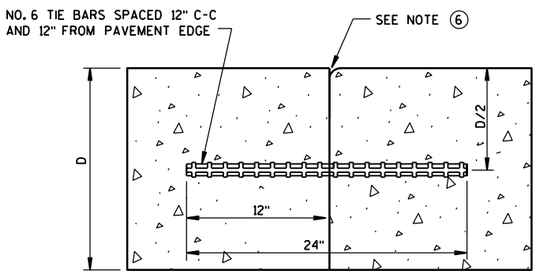
SEE NOTE (2)



DOWELED TRANSVERSE

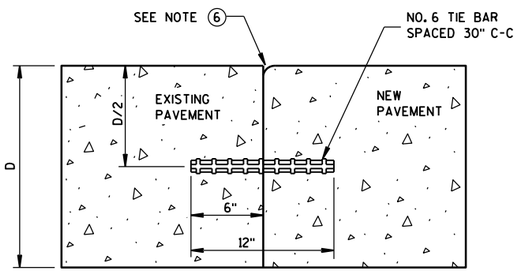


TIED LONGITUDINAL



TIED TRANSVERSE

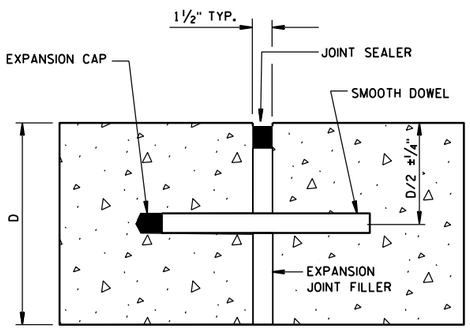
(FOR USE ON NON-DOWELED PAVEMENTS ONLY)



TIED LONGITUDINAL TO EXISTING

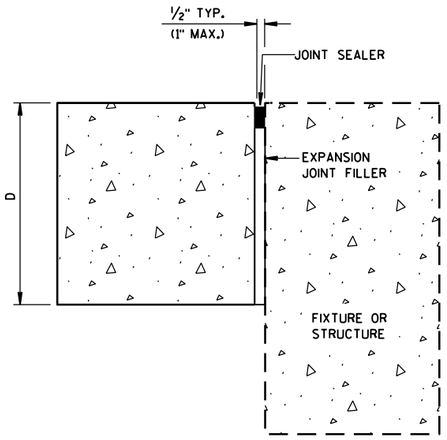
CONSTRUCTION JOINTS

SEE NOTE (5)



DOWELED-TRANSVERSE

SEE NOTE (1)



UNTIED-LONGITUDINAL

EXPANSION JOINTS

CONCRETE PAVEMENT
JOINT TYPES

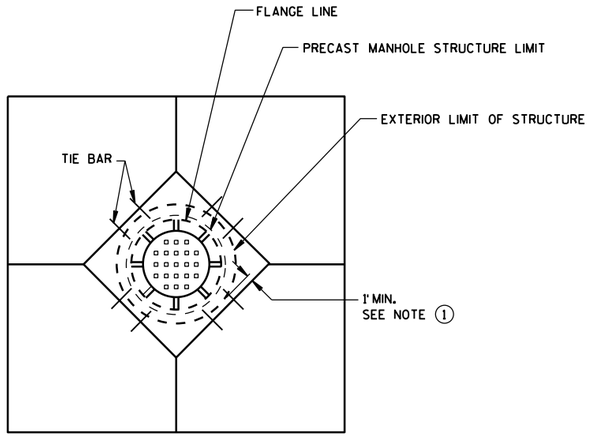
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

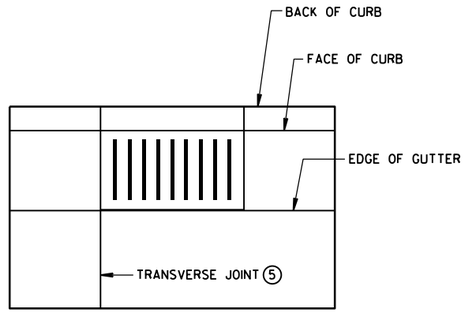
S.D.D. 13 C 18-2c

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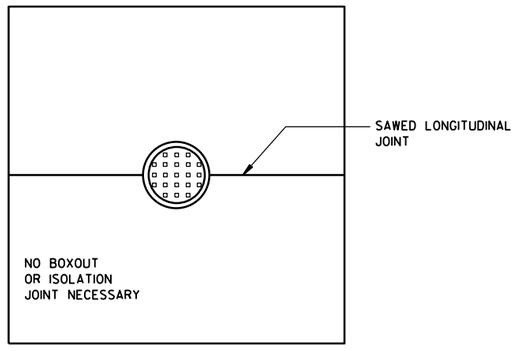
S.D.D. 13 C 18-2c



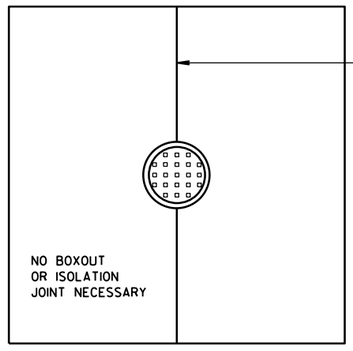
DIAGONAL MANHOLE BOXOUT FOR CONSTRUCTION JOINTS



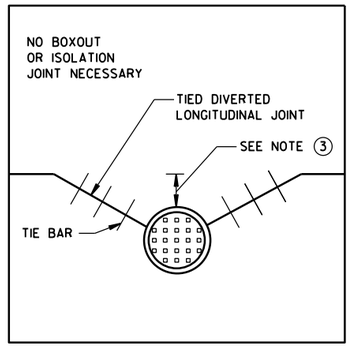
INLET WITH TRANSVERSE JOINT



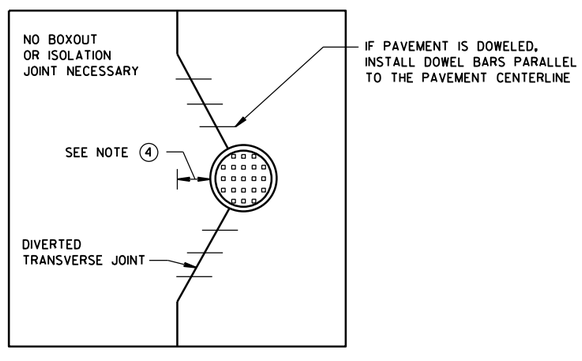
MANHOLE WITH LONGITUDINAL JOINT



MANHOLE WITH TRANSVERSE JOINT



MANHOLE WITH DIVERTED LONGITUDINAL CONTRACTION JOINT



MANHOLE WITH DIVERTED TRANSVERSE CONTRACTION JOINT

GENERAL NOTES

(1) USE BOXOUTS WHEN UTILITY STRUCTURE IS IN THE PATH OF CONSTRUCTION JOINTS. PROVIDE A 1-FOOT MINIMUM CLEARANCE BETWEEN THE EXTERIOR LIMIT OF THE STRUCTURE TO THE DIAMOND BOXOUT.

(2) ADJUST TRANSVERSE JOINT TO INTERSECT MANHOLE IF POSSIBLE.

(3) IF DISTANCE BETWEEN THE LONGITUDINAL JOINT AND THE EDGE OF MANHOLE IS 2 FEET OR LESS, DIVERT THE LONGITUDIAL JOINT AT A 2:1 TAPER RATE TO THE CENTER OF THE MANHOLE. IF THE DISTANCE IS GREATER THAN 2 FEET, DO NOT DIVERT THE JOINT AND SAW AS NORMAL. PLACE REBAR REINFORCEMENT AROUND THE MANHOLE.

(4) IF DISTANCE FROM THE EDGE OF THE MANHOLE TO THE NEAREST TRANSVERSE JOINT IS 4 FEET OR LESS, REDIRECT JOINT TO INTERSECT THE CENTER OF THE MANHOLE. IF DISTANCE IS GREATER THAN 4 FEET, DO NOT DIVERT THE JOINT AND SAW AS NORMAL. PLACE REBAR REINFORCEMENT AROUND THE MANHOLE.

(5) ALIGN TRANSVERSE JOINT WITH ONE EDGE OF INLET WHEN PRACTICAL.

CONCRETE PAVEMENT JOINTING AT UTILITY FIXTURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

5-3-2013 DATE

/S/ Deb Bischoff PAVEMENT POLICY & DE

690

NEER

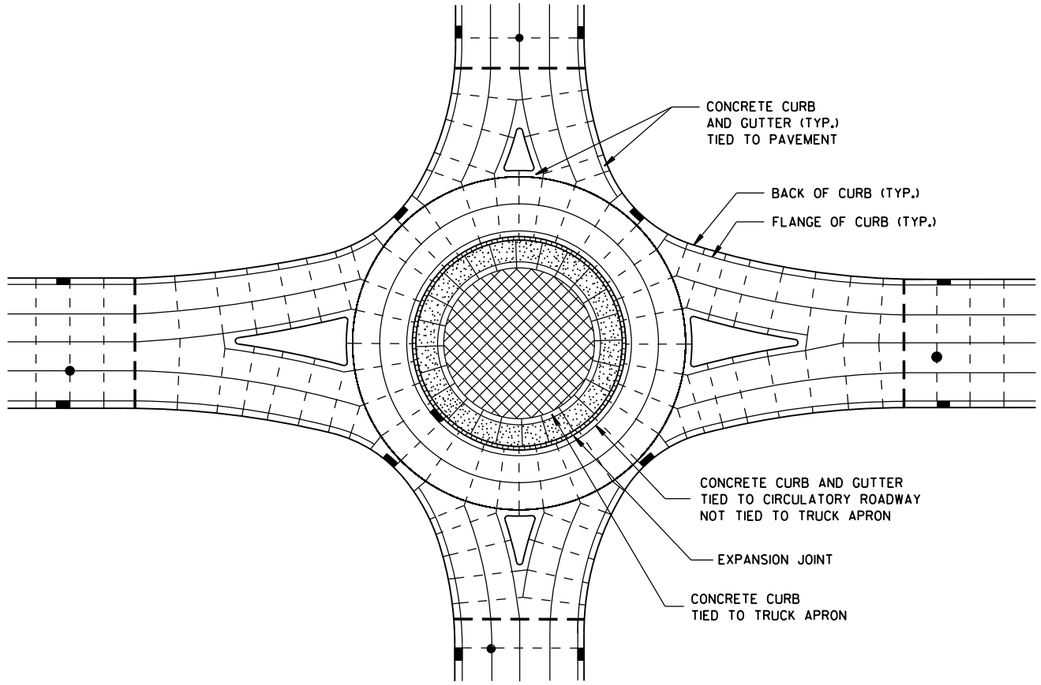
FHWA

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S.D.D. 13 C 18-2d

LEGEND

- DOWELED JOINT
- TIED JOINT
- EXPANSION JOINT
- POTENTIAL DOWELED EXPANSION JOINT
- TRUCK APRON
- CENTRAL ISLAND
- UTILITY STRUCTURES



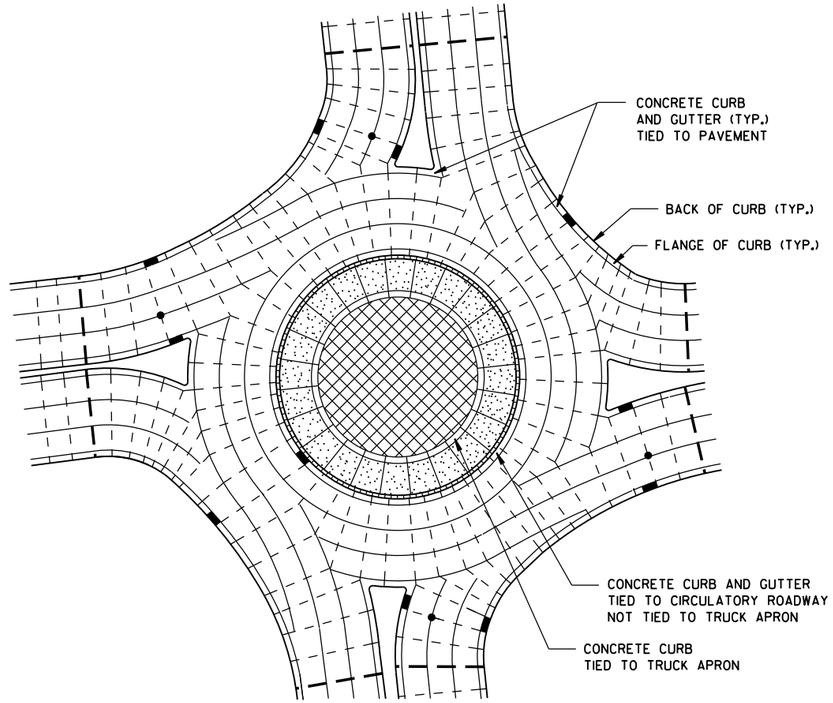
ISOLATED CIRCLE JOINT LAYOUT FOR ROUNDABOUTS

GENERAL NOTES

MAXIMUM JOINT SPACING IS IN ACCORDANCE WITH THE TABLE SHOWN ON SDD 13C18 SHEET "a".

USE AN EXPANSION JOINT FILLER MEETING THE REQUIREMENTS OF STANDARD SPECIFICATION 415.

DO NOT DOWEL OR TIE THE TRUCK APRON TRANSVERSE JOINTS.



PINWHEEL JOINT LAYOUT FOR ROUNDABOUTS

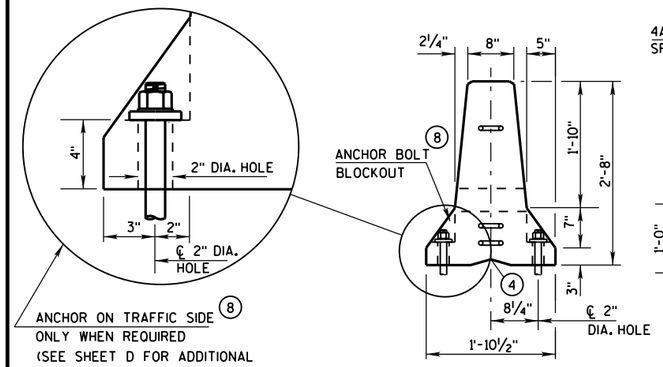
CONCRETE PAVEMENT JOINTING AND STEEL REINFORCEMENT IN ROUNDABOUTS	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED	
5-3-2013 DATE	/S/ Deb Bischoff PAVEMENT POLICY & DE[illegible]NEER
FHWA	

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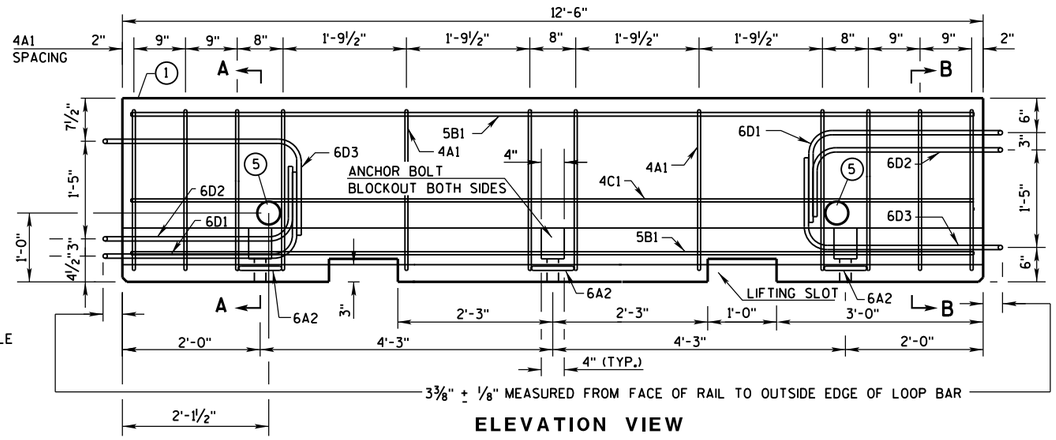
S.D.D. 13 C 18-2e

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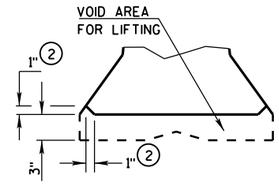
S.D.D. 13 C 18-2e



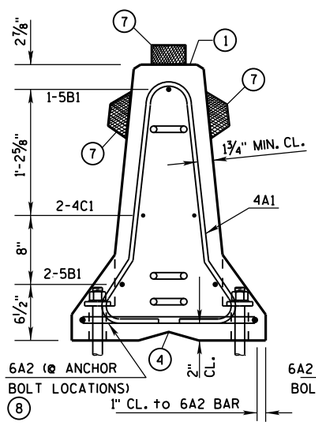
END VIEW



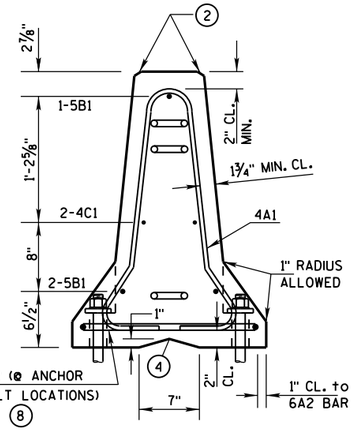
ELEVATION VIEW



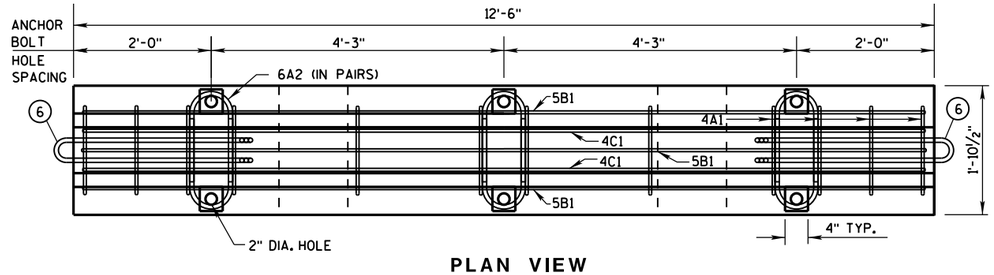
DETAIL "B"
LIFTING SLOT DETAIL



SECTION A-A
(STIRRUP PLACEMENT)

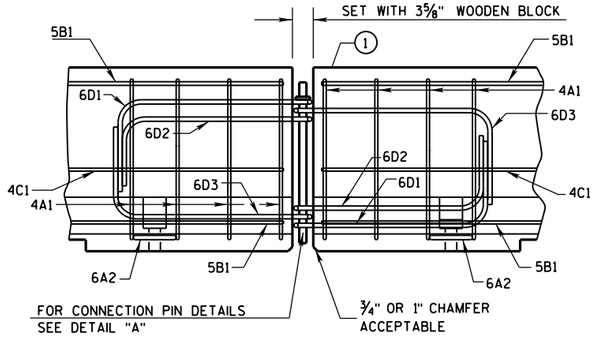


SECTION B-B
(STIRRUP PLACEMENT)

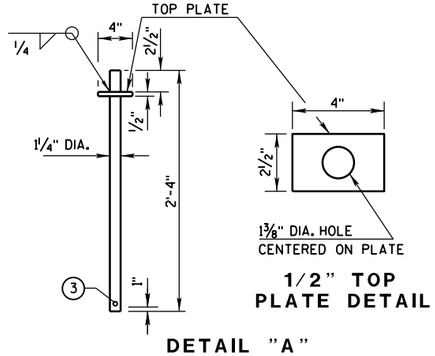


PLAN VIEW

DETAILS OF BARRIER SECTION

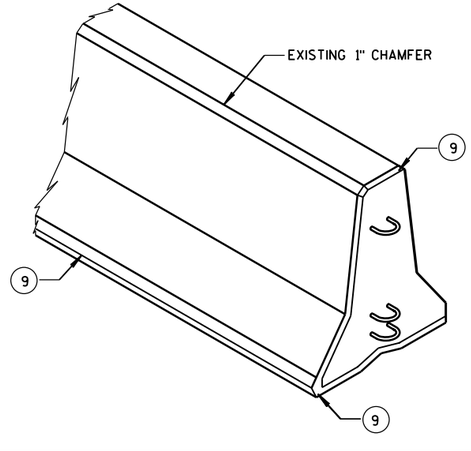


DETAILS OF BARRIER CONNECTION



1/2" TOP
PLATE DETAIL

DETAIL "A"
CONNECTION PIN
(A36 STEEL (10.9 LB EACH))



GENERAL NOTES

THESE GENERAL NOTES APPLY TO SHEETS 14B7-14(a) THRU 14B7-14(h).

DO NOT INTERMIX CONCRETE BARRIER TEMPORARY PRCAST, 12'-6" (CBTP12.5) WITH OTHER TEMPORARY CONCRETE BARRIERS.

USE ASTM A-615, GRADE 60, DEFORMED STEEL BARS FOR BARS 4A1, 6A2, 5B1 AND 4C1 IN THE BARRIER SECTION AND FOR 4V1, 4V2, 4V3, 4V4, 4V5, 4V6, 4F1, 4F2 AND 5F3 IN THE BARRIER TAPER SECTION.

LOOP BARS 6D1, 6D2 AND 6D3 SHALL BE ¾" SMOOTH STEEL BARS WITH A MINIMUM YIELD STRENGTH OF 60 KSI, A TENSILE STRENGTH OF NOT LESS THAN 1.25 TIMES THE YIELD STRENGTH BUT A MINIMUM OF 80 KSI, A MINIMUM 14% ELONGATION IN 8 INCHES AND PASSING A 180 DEGREE BEND TEST USING A 3-½" PIN BEND DIAMETER FOR BEND TESTS. THE LOOPS SHALL BE INSTALLED WITHIN ⅛" OF THE PLAN DIMENSION.

CONSTRUCT LIFTING SLOTS AS SPECIFIED ON THE PLANS TO FACILITATE THE DRAINAGE OF WATER AFTER INSTALLATION.

PLACE BARRIER ON A PAVED SURFACE. REMOVE ALL LOOSE DIRT AND SAND FROM THE ROADWAY SURFACE PRIOR TO PLACEMENT OF THE BARRIER.

INSTALL MECHANICAL OR EPOXY ANCHORS PER MANUFACTURER'S RECOMMENDATIONS. PROVIDE MANUFACTURER'S INFORMATION TO PROJECT ENGINEER.

(1) MARK ONE END OF EACH BARRIER PERMANENTLY BY FORMING INTO THE BARRIER THE FOLLOWING INFORMATION:
- a. TYPE: WI CBTP
- b. MANUFACTURER
- c. DATE MANUFACTURED (MONTH AND YEAR)

(2) 1" CHAMFER TO PREVENT SPALLING.

(3) A ⅜" HOLE IN THE CONNECTION PIN, AT THE LOCATION SHOWN, IS ACCEPTABLE, BUT NOT REQUIRED..

(4) "V" NOTCH IS OPTIONAL.

(5) THE 4" DIAMETER, 11 GAUGE STEEL, ROUND MECHANICAL TUBING SLEEVE FOR LIFTING (OPTIONAL).

(6) NEVER USE LOOP BARS (6D1, 6D2 OR 6D3) TO LIFT, MOVE OR REPOSITION THE BARRIER.

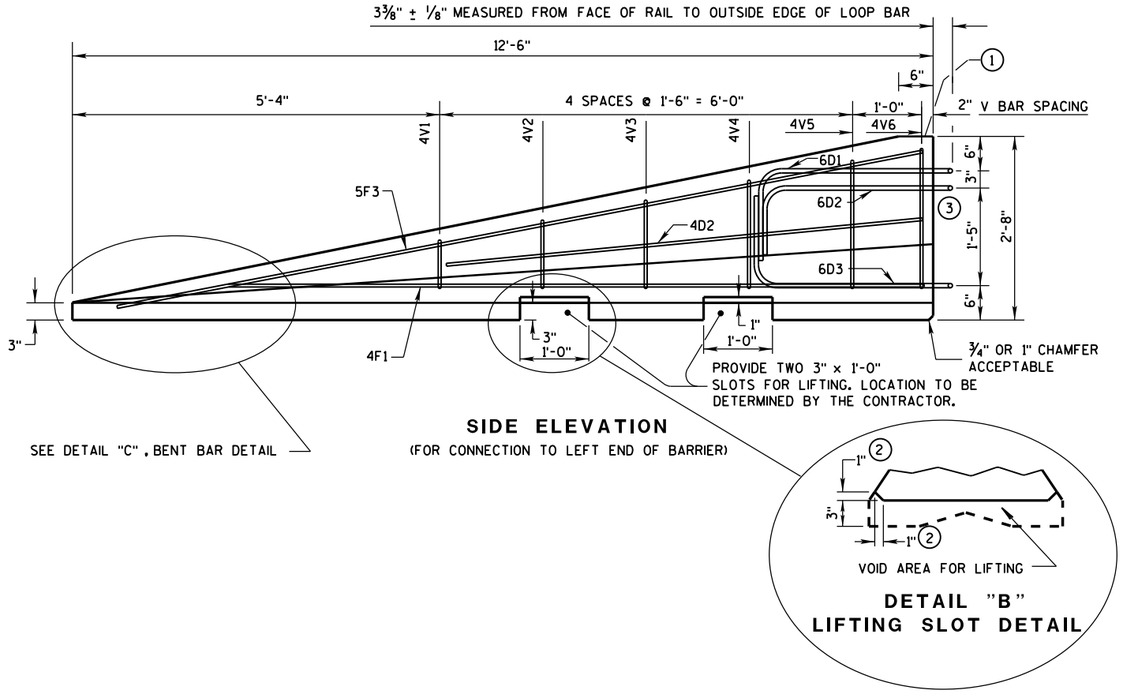
(7) USE DELINEATORS CONFORMING TO SECTION 633 OF THE STANDARD SPECIFICATIONS. CONTRACTOR MAY USE ALTERNATE SHAPES AND HOUSING. INSTALL DELINEATORS ACCORDING TO MANUFACTURES INSTRUCTION. INSTALL YELLOW REFLECTORS WHEN BARRIER IS LOCATED TO THE LEFT OF TRAFFIC AND WHITE REFLECTORS WHEN BARRIER IS LOCATED TO THE RIGHT OF TRAFFIC. SPACE DELINEATORS A MAXIMUM OF 25 FEET APART. PROVIDE TOP MOUNTED DELINEATORS IN ADDITION TO THE SIDE MOUNTED DELINEATORS ON ALL BARRIER INSTALLATIONS LOCATED ON A CURVED ALIGNMENT LONGER THAN 200 FEET AND ON BARRIERS USED TO SEPARATE OPPOSING TRAFFIC.

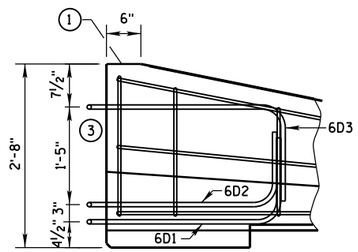
(8) SEE SHEET D FOR ANCHORING CRITERIA.

(9) 1" CHAMFER OPTIONAL.

CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"

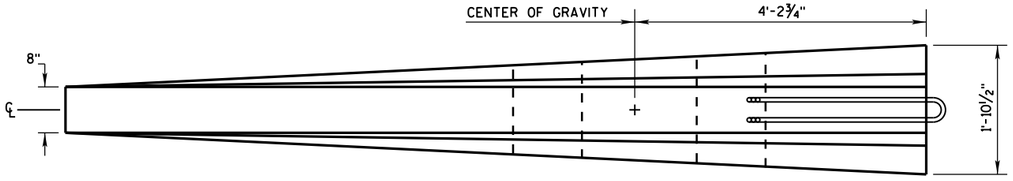
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR 692

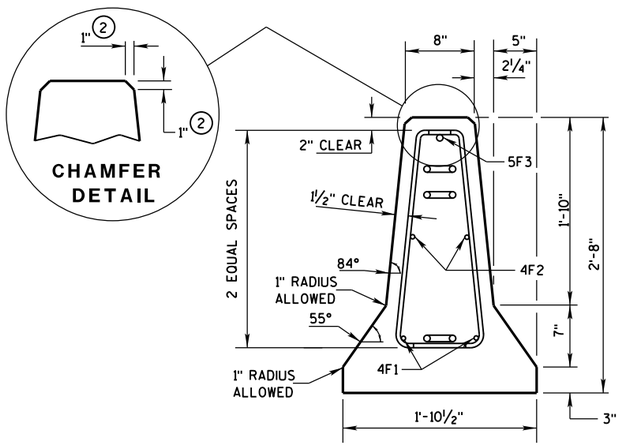


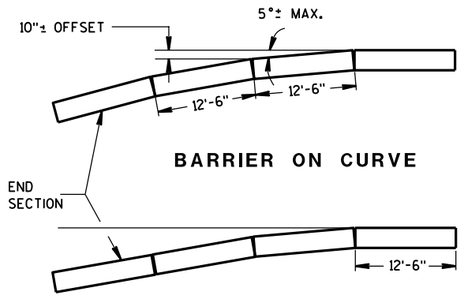


GENERAL NOTES

1. MARK ONE END OF EACH BARRIER PERMANENTLY BY FORMING INTO THE BARRIER THE FOLLOWING INFORMATION:
   a. TYPE WICBTP
   b. MANUFACTURER
   c. DATE MANUFACTURED (MONTH AND YEAR)
2. 1" CHAMFER TO PREVENT SPALLING.
3. NEVER USE LOOP BARS (6D1, 6D2 OR 6D3) TO LIFT, MOVE OR REPOSITION THE BARRIER.







POSTED SPEED, (MPH)	FLARE RATE
40 OR LESS	6:1
45 OR GREATER	8:1

DETAILS OF BARRIER TAPER SECTION

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

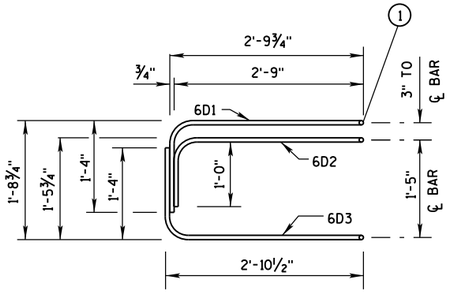
6

S.D.D. 14 B 7-14b

BARRIER TAPER SECTION BILL OF MATERIALS

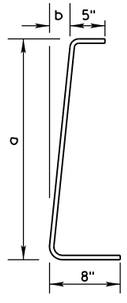
(PER 12'-6" BARRIER TAPER SECTION)

BAR	BAR SIZE	NO. OF BARS	LENGTH FT.
4V1	4	2	1'-11"
4V2	4	2	2'-2"
4V3	4	2	2'-6"
4V4	4	2	2'-9"
4V5	4	2	3'-2"
4V6	4	2	3'-4"
4F1	4	2	12'-0"
4F2	4	2	7'-6"
5F3	5	1	11'-9"
LOOP ASSEMBLY			
6D1	6	1	8'-5"
6D2	6	1	7'-7"
6D3	6	1	8'-6"



ELEVATION
LOOP BAR ASSEMBLY

DETAIL "C"
BENT BAR DETAIL



BAR	a	b
V1	10"	1"
V2	1'-1"	1¼"
V3	1'-5"	1⅝"
V4	1'-8"	1⅞"
V5	2'-0½"	2⅜"
V6	2'-3"	2¾"

4V BARS
2 AT EACH SIZE REQUIRED
FOR STIRRUP ASSEMBLY

TAPER BARRIER SECTION

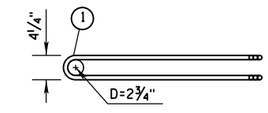
GENERAL NOTES

(1) NEVER USE LOOP BARS (6D1, 6D2 OR 6D3) TO LIFT, MOVE OR REPOSITION THE BARRIER.

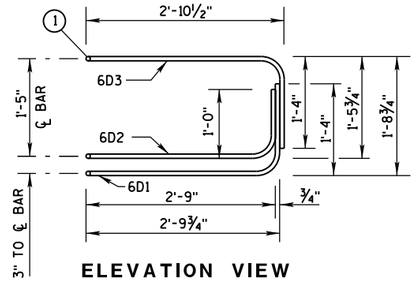
BARRIER SECTION BILL OF MATERIALS

(PER 12'-6" BARRIER SECTION)

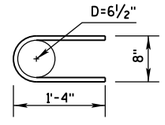
BAR	BAR SIZE	NO. OF BARS	LENGTH FT.
4A1	4	12	6'-0"
6A2	6	6	2'-11"
5B1	5	3	12'-2"
4C1	4	2	12'-2"
LOOP ASSEMBLY			
6D1	6	2	8'-5"
6D2	6	2	7'-7"
6D3	6	2	8'-6"



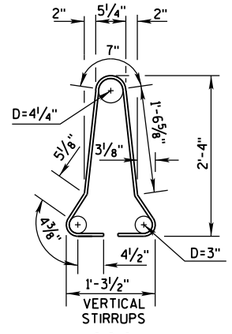
PLAN VIEW
LOOP BAR ASSEMBLY
(MARKED END SHOWN, INVERT FOR OTHER END)



ELEVATION VIEW



6A2



4A1

BARRIER SECTION

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

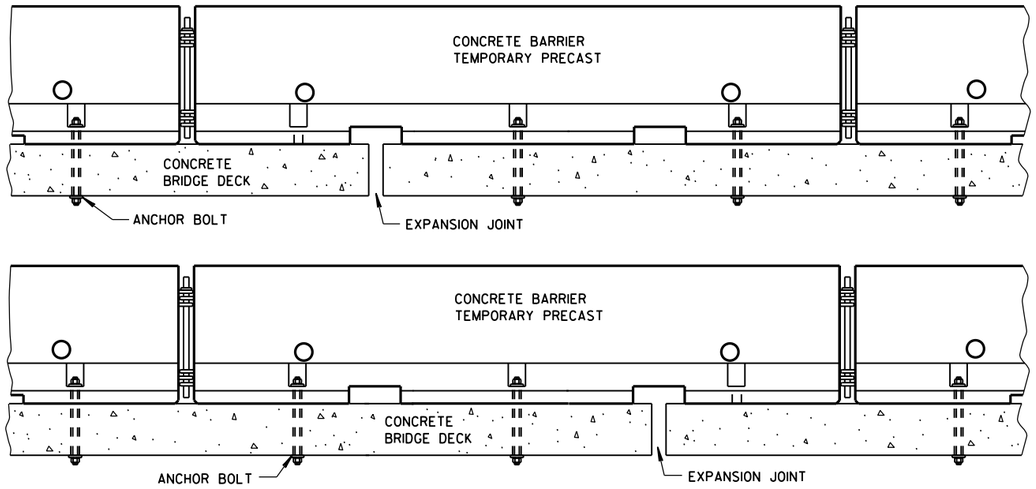
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR 694

6

S.D.D. 14 B 7-14c

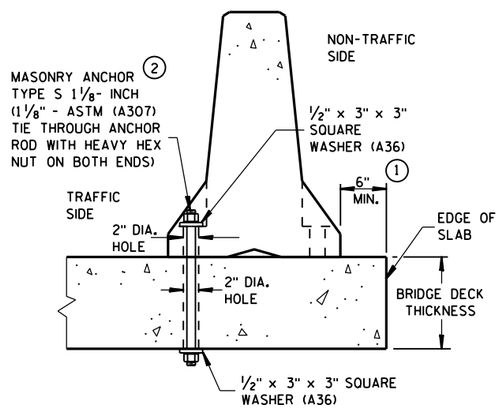
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S.D.D. 14 B 7-14c



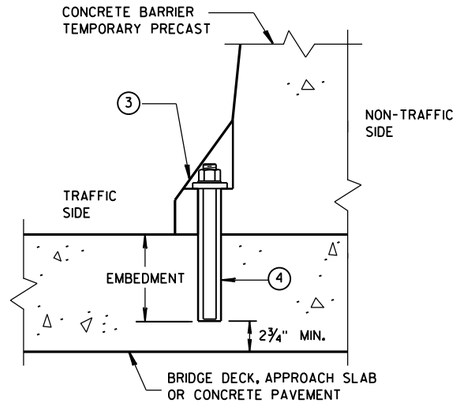
TREATMENT AT BRIDGE DECK EXPANSION JOINTS

(NO SINGLE CONCRETE BARRIER SECTION SHALL BE ANCHORED TO BOTH THE BRIDGE DECK AND THE APPROACH SLAB. ALL ANCHOR BOLT LOCATIONS SHALL BE ANCHORED TO THE DECK IN ACCORDANCE WITH THE DETAIL. NO MORE THAN ONE ANCHOR BOLT SHALL BE ELIMINATED FROM A BARRIER SECTION WHEN SPANNING AN EXPANSION JOINT.)



THROUGH BOLTED ANCHOR INSTALLATION ON BRIDGE DECK

(DO NOTUSE ON CONCRETE BRIDGE DECK WITH ASPHALT OVERLAY)



REMOVABLE ADHESIVE BONDED ANCHOR ② INSTALLATION ON CONCRETE BRIDGE DECK, CONCRETE APPROACH SLAB, OR CONCRETE PAVEMENT

(DO NOT USE ON CONCRETE WITH AN ASPHALTIC OVERLAY)

GENERAL NOTES

① CONCRETE BARRIER TEMPORARY PRECAST, 12'-6" SHALL BE ANCHORED IF:
THE DISTANCE TO A 2 FOOT OR GREATER DROPOFF THAT IS STEEPER THAN 3H : 1V, FOR EXAMPLE THE EDGE OF A BRIDGE DECK OR A DROPOFF AT THE EDGE OF PAVEMENT, IS LESS THAN 4 FEET FROM THE SIDE OF THE BARRIER CLOSEST TO THE DROPOFF AND THE POSTED SPEED IS 45 MPH OR GREATER, OR

THE DISTANCE TO A 2 FOOT OR GREATER DROPOFF THAT IS STEEPER THAN 3H : 1V, FOR EXAMPLE THE EDGE OF A BRIDGE DECK OR A DROPOFF AT THE EDGE OF PAVEMENT. IS LESS THAN 2 FEET FROM THE SIDE OF THE BARRIER CLOSEST TO THE DROPOFF AND THE POSTED SPEED IS 40 MPH OR LESS.

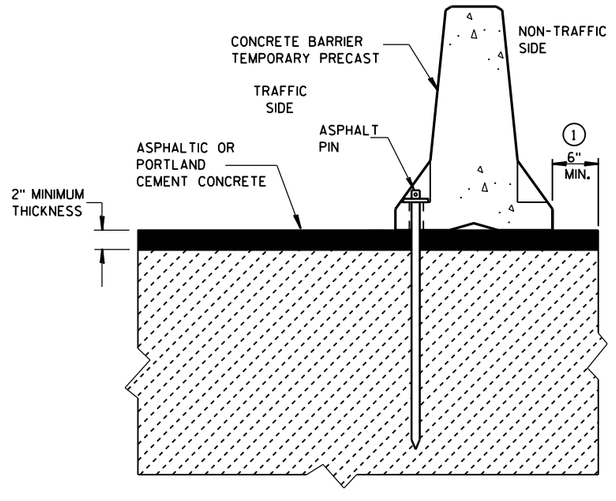
② ANCHORING IS INCIDENTAL TO CONCRETE BARRIER TEMPORARY PRECAST.

WITH THE APPROVAL OF THE ENGINEER, REMOVABLE ADHESIVE BONDED (EPOXY) ANCHOR BOLT INSTALLATION MAY BE USED IN LIEU OF THROUGH BOLTED ANCHOR INSTALLATION. THE ADHESIVE BONDED ANCHOR BOLT MUST BE REMOVABLE. USE ASTM (A307) MASONRY ANCHORS TYPE S 1⅛-INCH, EMBEDDED TO A DEPTH SUFFICIENT TO DEVELOP THE ULTIMATE CAPACITY OF THE ANCHOR BOLT AND PROVIDE DOCUMENTATION TO CONFIRM THIS.

UPON REMOVAL OR RELOCATION OF THE BARRIER UNITS, REMOVE ALLANCHOR BOLTS AND COMPLETELY FILL IN THE REMAINING HOLES IN CONCRETE BRIDGE DECKS, CONCRETE APPROACH SLABS AND CONCRETE PAVEMENTS THAT ARE TO REMAIN, WITH A NON-SHRINK COMMERICAL GROUT OR EPOXY MATERIAL IDENTIFIED ON THE CURRENT WISDOT APPROVED PRODUCTS LIST.

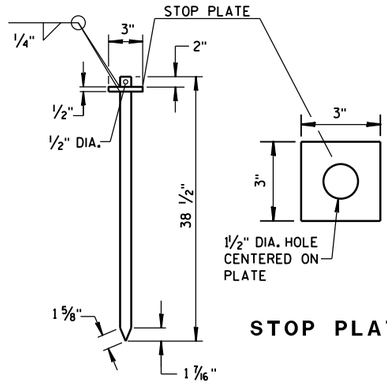
③ 1⅛" DIAMENTER A307 THREADED ROD, ½" X 3" X 3" SQUARE PLATE WASHER WITH ASTM A36 STEEL, ASTM A563A HEAVY HEX NUT.

④ ADHESIVE ANCHORS WITH A MINIMUM BOND STRENGTH OF 1,800 PSI AND 5¼" EMBEDMENT. SEE 603.2 AND 603.3.1.2 OF THE WISCONSIN STANDARD SPECIFICATIONS FOR MORE INFORMATION ON ADHESIVE ANCHORS.



STAKE DOWN INSTALLATION FOR ASPHALTIC OR PORTLAND CEMENT CONCRETE SURFACE

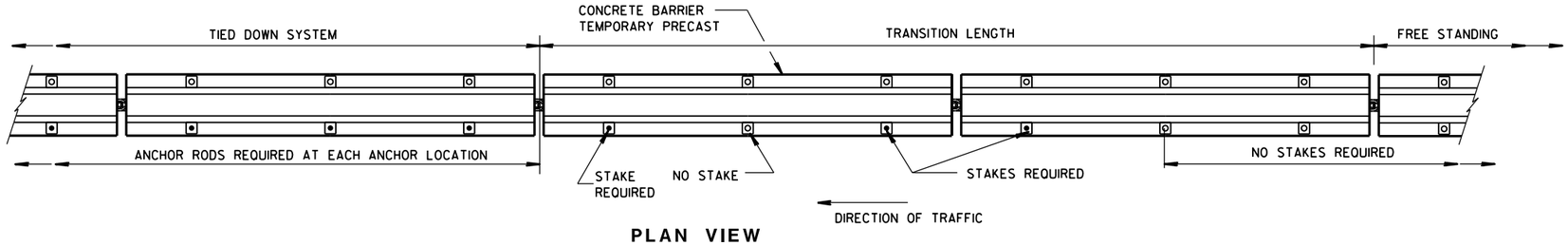
(STAKING IS INCIDENTAL TO CONCRETE BARRIER TEMPORARY PRECAST)



STOP PLATE

ASPHALT PIN

(ASTM A36 STEEL)



PLAN VIEW

FREE STANDING TRANSITION TO TIED-DOWN SYSTEM

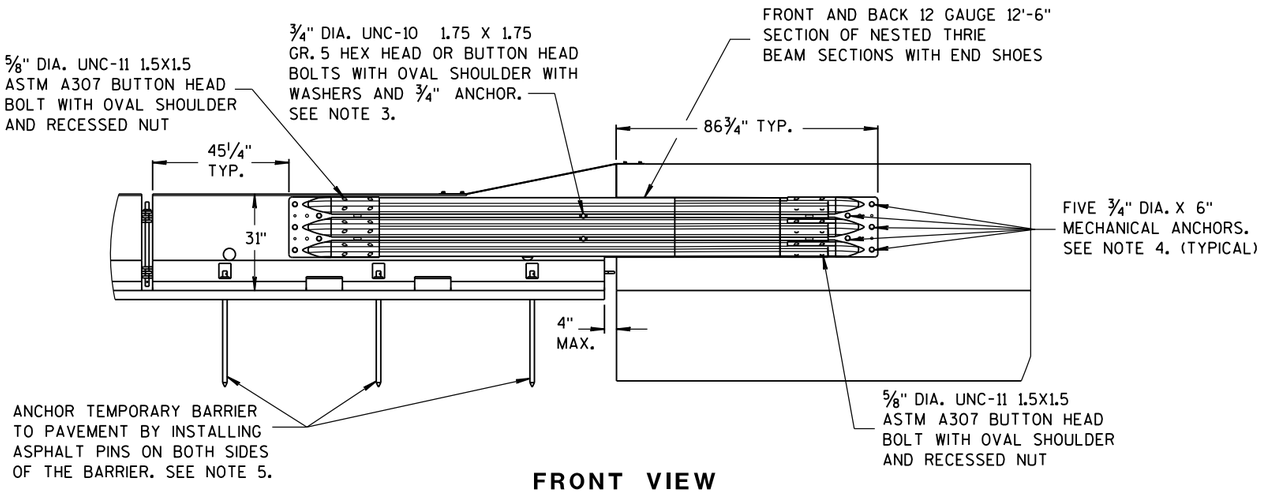
(PLACE TRANSITION IN A TANGENT SECTION OF BARRIER PARALLEL TO THE ROADWAY. IF TRANSITION OCCURS ON STRUCTURAL SLAB, ANCHOR AS SHOWN.)

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

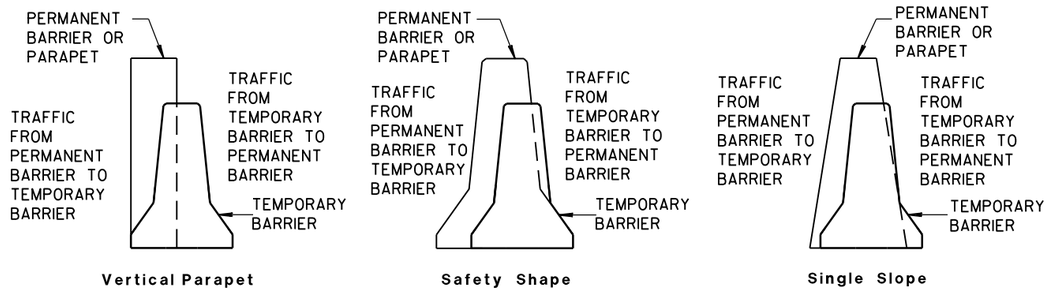
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

S.D.D. 14 B 7-14d



FRONT VIEW

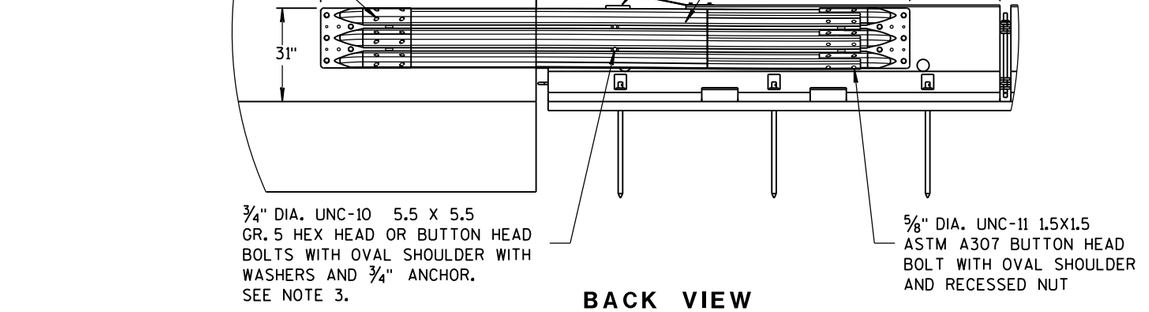


TEMPORARY BARRIER PLACEMENT FOR BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM

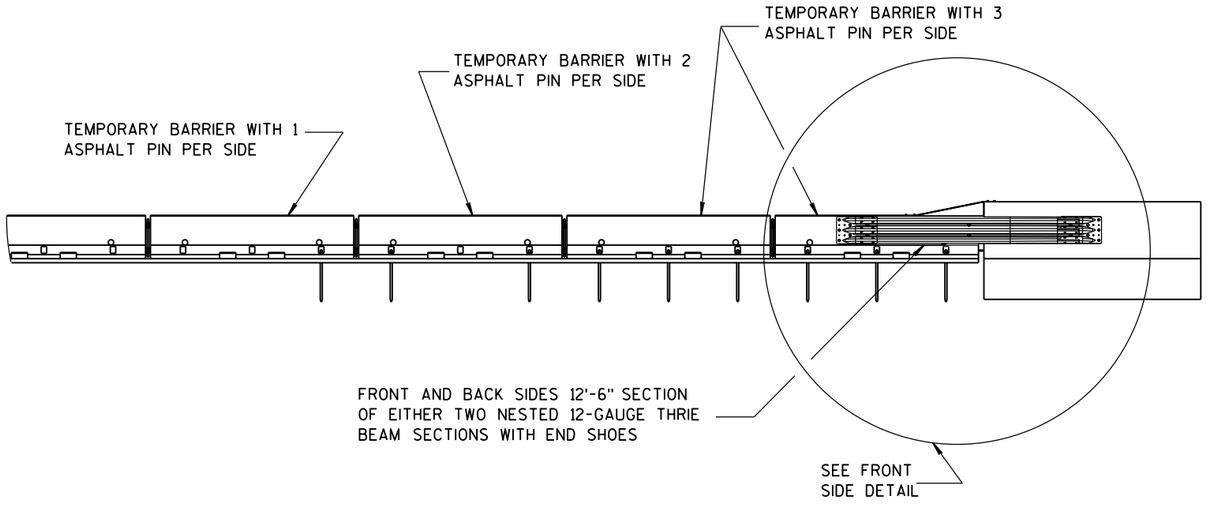
NOTES

NESTED THRIE BEAM IS REQUIRED ON BOTH SIDES OF THE TEMPORARY BARRIER FOR ALL INSTALLATIONS.

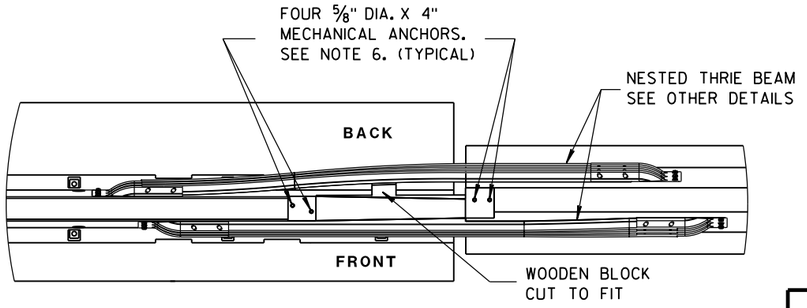
1. CAP END PLATE PLACED FLUSH WITH UPSTREAM END OF PERMANENT BARRIER OR PARAPET.
2. THRIE BEAM PIECES ARE OFFSET 15 1/4" TO PREVENT INTERFERENCE FROM THE ANCHORS ON OPPOSING SIDES.
3. MINIMUM MECHANICAL OR EPOXY ANCHOR STRENGTH REQUIREMENTS: ULTIMATE TENSILE LOAD 9.48 KIPS AND ULTIMATE SHEAR LOAD 10.48 KIPS.
4. MINIMUM MECHANICAL OR EPOXY ANCHOR STRENGTH REQUIREMENTS: ULTIMATE TENSILE LOAD 17.9 KIPS AND ULTIMATE SHEAR LOAD 21.96 KIPS.
5. MAY BE USED ON CONCRETE OR ASPHALT PAVEMENTS. ASPHALT OPTION SHOWN. FOR CONCRETE OPTION SEE OTHER DETAILS.
6. MINIMUM MECHANICAL OR EPOXY ANCHOR STRENGTH REQUIREMENTS: ULTIMATE TENSILE LOAD 12.14 KIPS AND ULTIMATE SHEAR LOAD 17.5 KIPS.



BACK VIEW



FRONT VIEW



PLAN VIEW

BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM

CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"

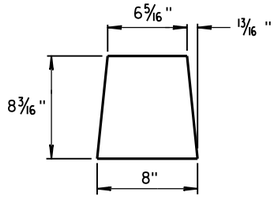
STATE OF WISCONSIN
DEPARTMENT OF TRANSPO 696

6

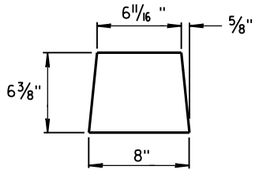
S.D.D. 14 B 7-14e

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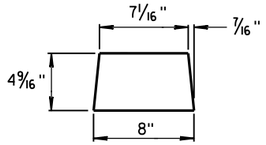
S.D.D. 14 B 7-14e



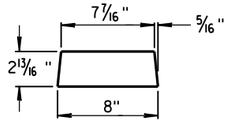
GUSSET 1



GUSSET 2

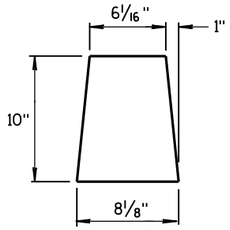


GUSSET 3

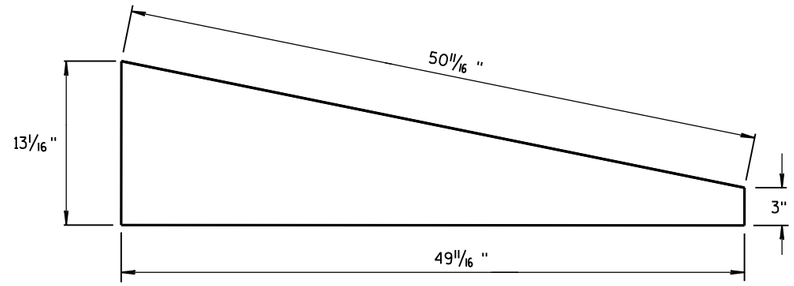


GUSSET 4

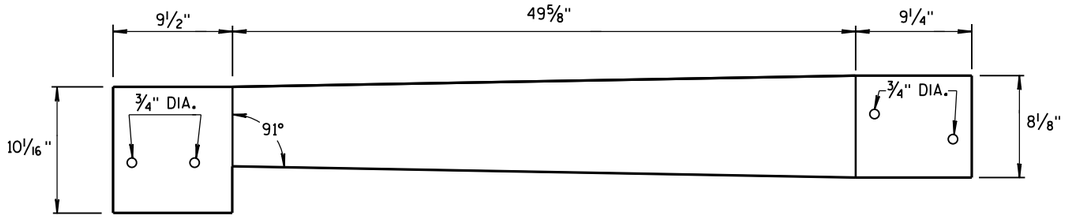
GUSSETS

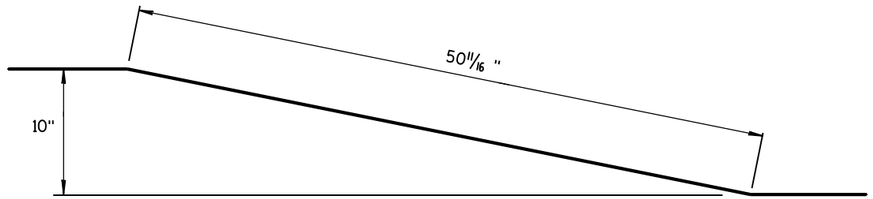


END PLATE



SIDE PLATE

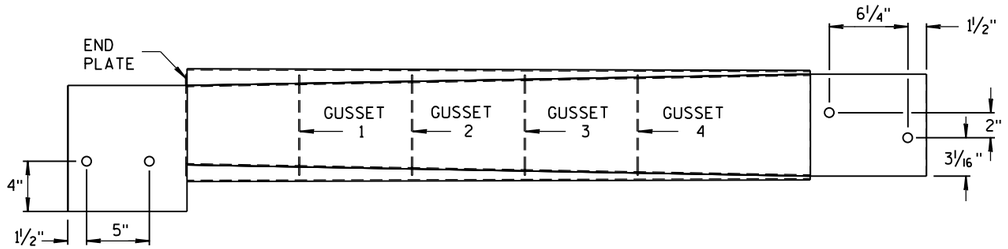


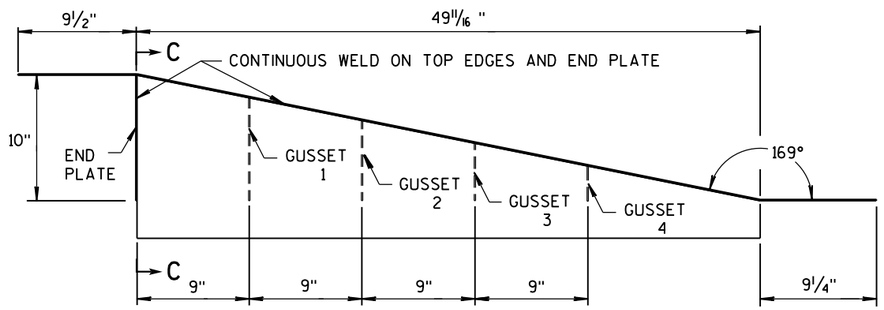


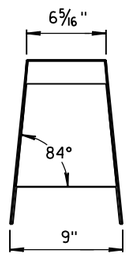
TOP PLATE

SIDE, TOP AND END PLATES FOR CAP FROM TEMPORARY CONCRETE BARRIER TO 42" PERMANENT CONCRETE BARRIER

SIDE PLATES, TOP PLATE, END PLATE AND GUSSETS ARE 12 GAUGE ASTM A36 GALVANIZED STEEL.







SECTION C-C

NOTES

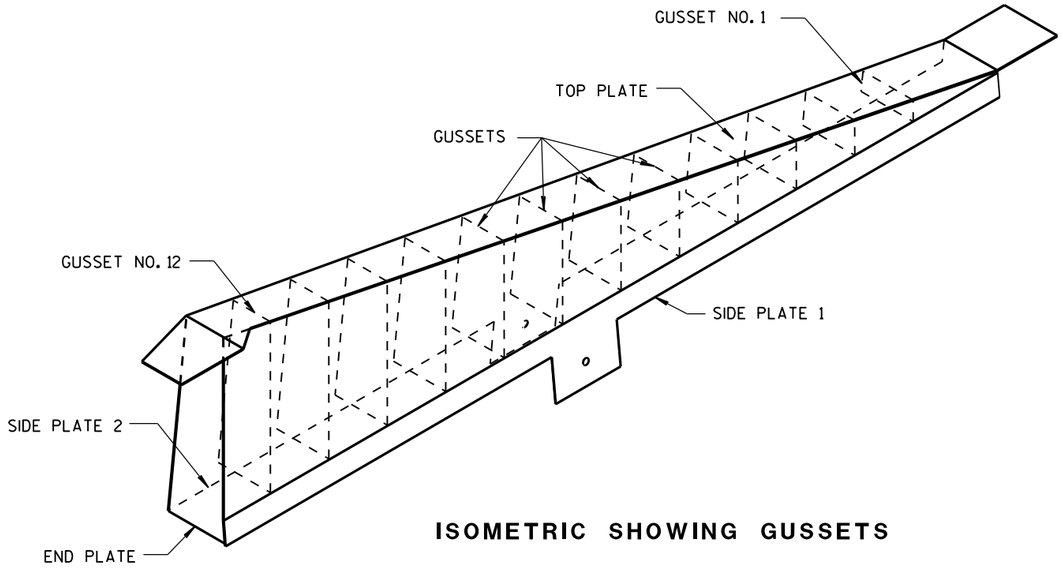
1. FOUR GUSSETS AND END PLATE ARE STITCH WELDED ON THREE SIDES.
2. TWO TRIANGULAR SIDE PLATES ARE STITCH WELDED TO TOP PLATE, END PLATE, AND GUSSETS.

CAP DETAILS FOR TEMPORARY CONCRETE BARRIER TO 42" PERMANENT CONCRETE BARRIER

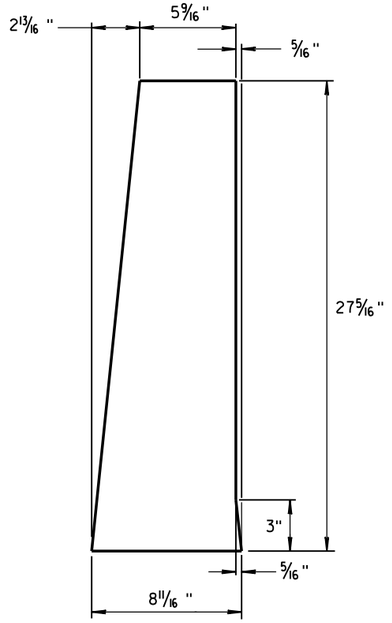
CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6
S.D.D. 14 B 7-14f

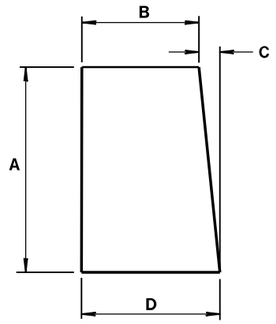


ISOMETRIC SHOWING GUSSETS



END PLATE

1/8" STEEL PLATE



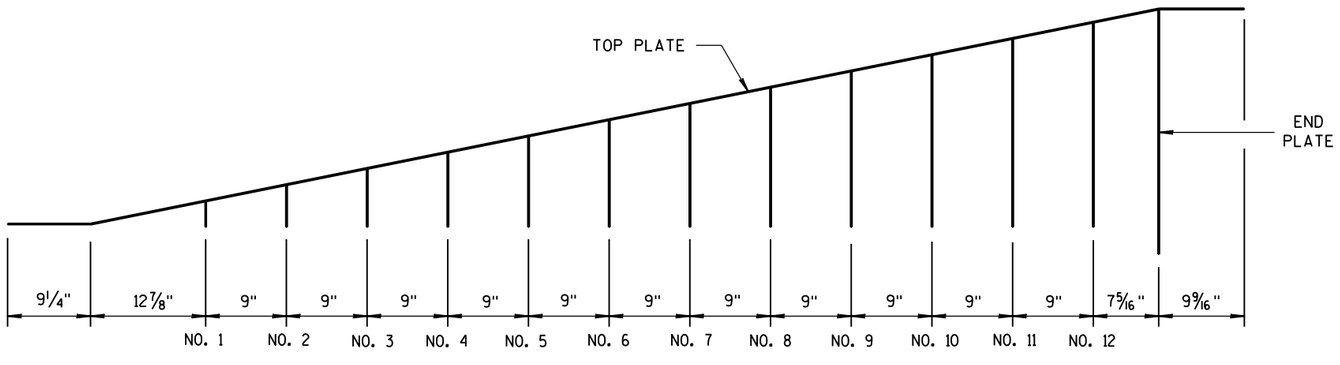
GUSSETS 1 - 12

ALL GUSSETS 1/8" STEEL PLATE

GUSSET DIMENSIONS				
GUSSET NO.	A	B	C	D
1	2 7/8"	7 3/4"	1/4"	8
2	4 11/16 "	7 9/16 "	1/2"	8
3	6 1/2"	7 3/8"	11/16 "	8 1/16 "
4	8 5/16 "	7 3/16 "	7/8"	8 1/16 "
5	10 1/8"	7"	1 1/16 "	8 1/16 "
6	11 15/16 "	6 13/16 "	1 1/4"	8 1/16 "
7	13 3/4"	6 5/8"	1 7/16 "	8 1/16 "
8	15 9/16 "	6 7/16 "	1 9/16 "	8 1/16 "
9	17 3/8"	6 1/4"	1 13/16 "	8 1/16 "
10	19 3/16 "	6 1/16 "	1 15/16 "	8 1/16 "
11	21"	5 7/8"	2 3/16 "	8 1/16 "
12	22 13/16 "	5 11/16 "	2 5/16 "	8 1/16 "

SIDE PLATES, TOP PLATE, END PLATE AND GUSSETS ARE 12 GAUGE ASTM A36 STEEL AND GALVANIZED.

GUSSETS AND END PLATE ARE STITCH WELDED ON 3 SIDES. TWO TRIANGULAR SIDE PLATES ARE STITCH WELDED TO TOP PLATE, END PLATE AND GUSSETS.



GUSSET LOCATION

CAP DETAILS FOR TEMPORARY CONCRETE BARRIER TO 56" PERMANENT CONCRETE BARRIER

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

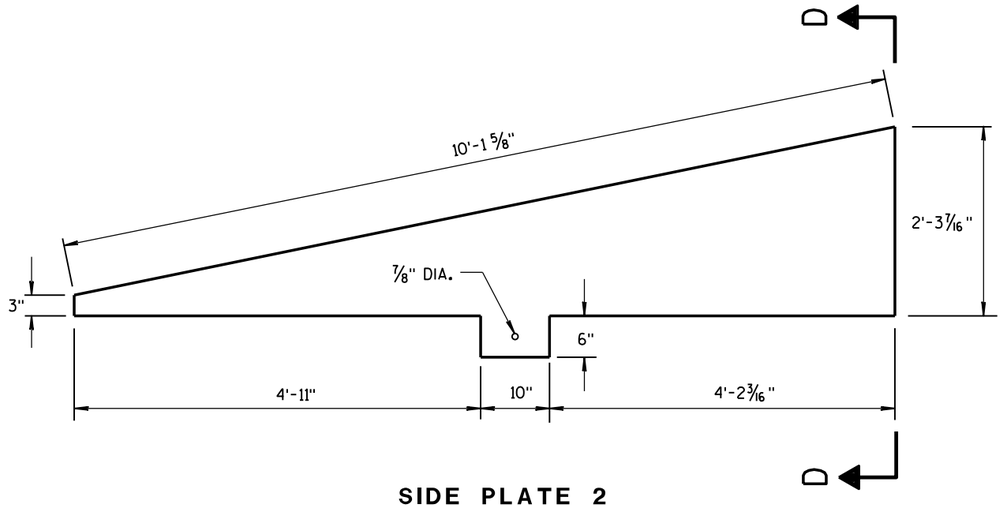
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI 698

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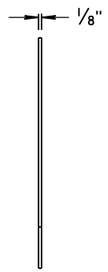
S.D.D. 14 B 7-14g

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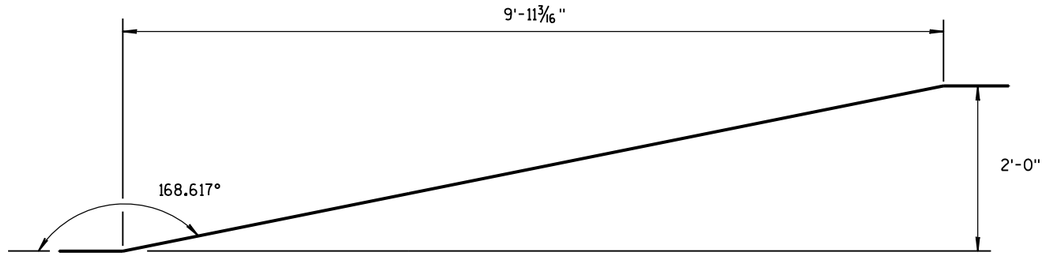
S.D.D. 14 B 7-14g



SIDE PLATE 2

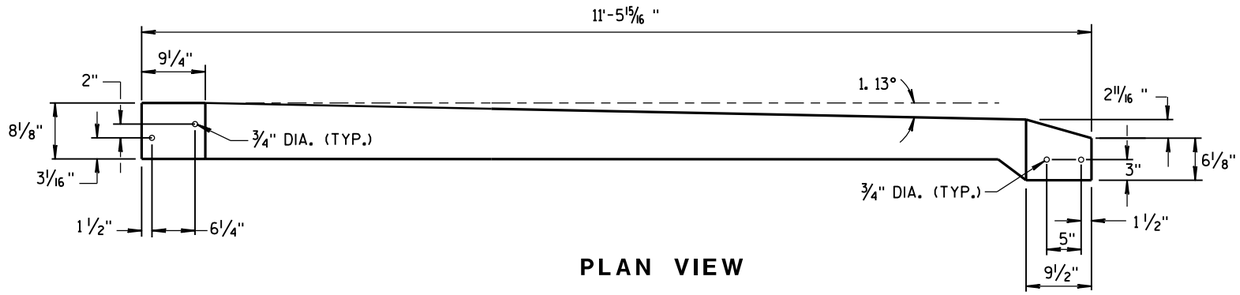


END VIEW



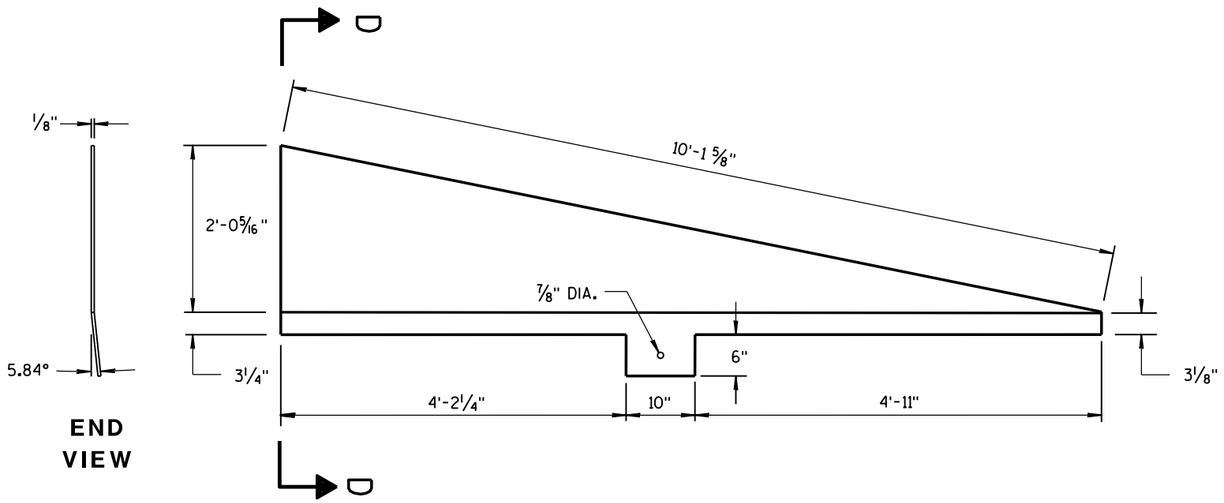
SIDE VIEW

TOP PLATE



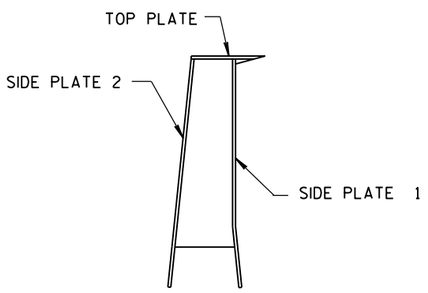
PLAN VIEW

TOP PLATE



END VIEW

SIDE PLATE 1



SECTION D-D

CAP DETAILS FOR TEMPORARY CONCRETE BARRIER TO 56" PERMANENT CONCRETE BARRIER

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2014 — DATE
/S/ Jerry H. Zoda — ROADWAY STANDARD DEVELOPMENT ENGINEER
FHWA

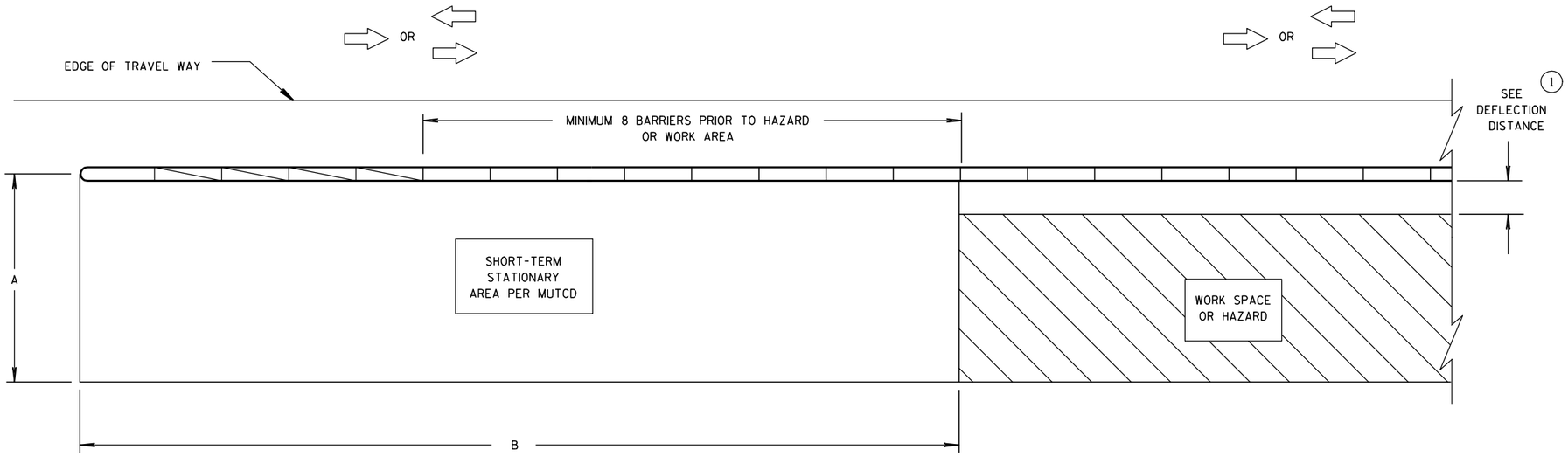
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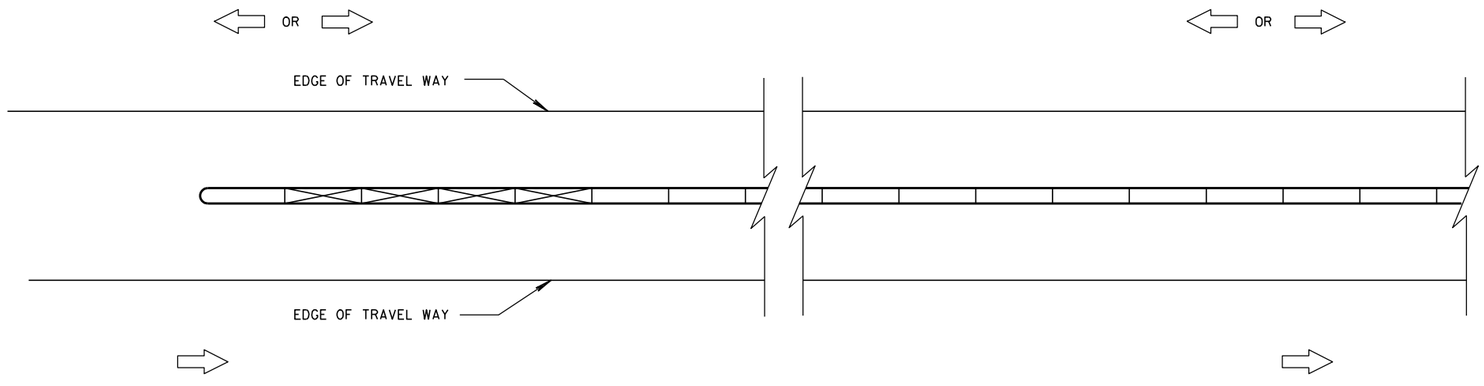
S.D.D. 14 B 7-14h

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S.D.D. 14 B 7-14h



CRASH CUSHION/SAND BARREL ARRAY AND TEMPORARY BARRIER INSTALLATION FOR TRAFFIC ON ONE SIDE OF BARRIER



CRASH CUSHION/SAND BARREL ARRAY AND TEMPORARY BARRIER INSTALLATION FOR TRAFFIC ON BOTH SIDES OF BARRIER

DIMENSION A TABLE (2)

FACILITY	POSTED SPEED MPH	DIMENSION A	
		MIN. FT	MAX. FT
FREEWAY/EXPRESSWAY	ALL	15	20
NON-FREEWAY/EXPRESSWAY	GREATER THAN OR EQUAL TO 45	10	15
NON-FREEWAY/EXPRESSWAY	LESS THAN 45	8	10
AADT LESS THAN 1,500	ALL	8	10

DIMENSION B TABLE (2)

POSTED SPEEDS MPH	DIMENSION B FT
20	115
25	155
30	200
35	250
40	305
45	360
50	425
55	495
60	570
65	645

LEGEND

DIRECTION OF TRAVEL

CRASH CUSHION OR SAND BARREL ARRAY

SEE FREE STANDING TRANSITION TO TIED-DOWN SYSTEM DETAILS

SEE BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM DETAILS

3 PINS PLACED ON TRAFFIC SIDE OF BARRIER

PERMANENT CONCRETE BARRIER OR CONCRETE PARAPET

FREE STANDING TEMPORARY BARRIER

GENERAL NOTES

SEE STANDARD DETAIL DRAWING 14B7 FOR MORE INFORMATION.

DETAILS PROVIDE A GENERAL LAYOUT OF TEMPORARY CONCRETE BARRIER, CRASH CUSHIONS, SAND BARREL ARRAYS AND TIE DOWN TRANSITIONS. DETAILS PROVIDED MAY NOT FIT ALL POSSIBLE SITUATIONS OR SITE CONDITIONS. SEE OTHER SECTIONS OF THE CONTRACT OR PROJECT ENGINEER FOR MORE DETAILS.

ADDITIONAL TEMPORARY BARRIER MAY BE REQUIRED TO PROTECT TRAVELING PUBLIC FROM HAZARDS, CONTRACTOR'S OPERATIONS OR TO CONTROL TRAFFIC.

TEMPORARY BARRIER MAY BE REQUIRED TO BE ANCHORED TO PAVEMENT OR BRIDGE DECK.

FOR DETAILS ON CRASH CUSHION OR SAND BARREL ARRAYS SEE OTHER SECTIONS OF THE PLAN AND MANUFACTURE'S DETAILS.

SLOPES LEADING TO TEMPORARY BARRIER, CRASH CUSHION OR SAND BARREL ARRAY ARE 10:1 OR LESS.

(1) FOR DEFLECTION INFORMATION SEE STANDARD DETAIL DRAWING 14B7.

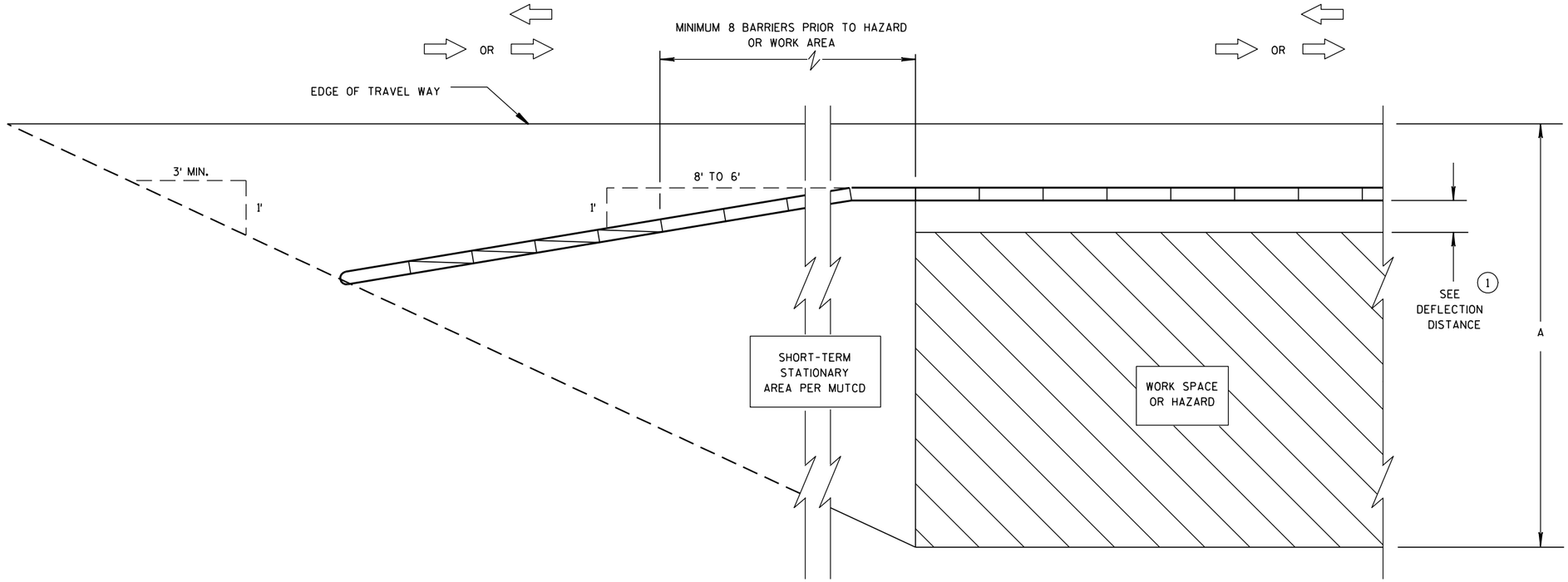
(2) VALUES PROVIDED MAY NOT FIT ALL POSSIBLE SITUATIONS OR SITE CONDITIONS. SEE OTHER SECTIONS OF THE CONTRACT OR PROJECT ENGINEER FOR MORE DETAILS.

CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS

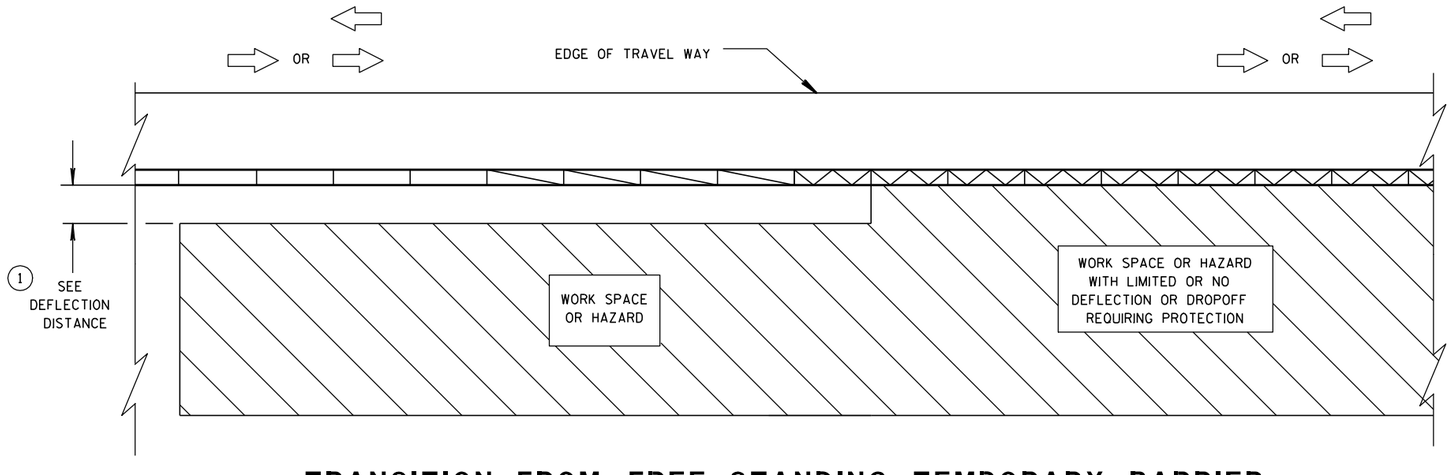
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

S.D.D. 14 B 8-1a



CRASH CUSHION/SAND BARREL ARRAY AND TEMPORARY BARRIER INSTALLATION FOR TRAFFIC ON ONE SIDE - FLARED INSTALLATION



TRANSITION FROM FREE STANDING TEMPORARY BARRIER TO ANCHORED BARRIER

LEGEND

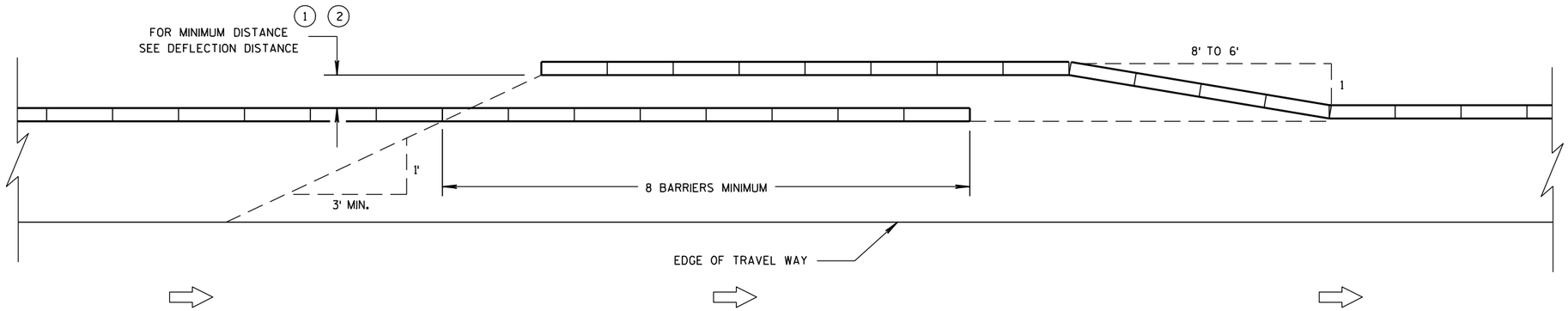
- DIRECTION OF TRAVEL
- CRASH CUSHION OR SAND BARREL ARRAY
- SEE FREE STANDING TRANSITION TO TIED-DOWN SYSTEM DETAILS
- SEE BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM DETAILS
- 3 PINS PLACED ON TRAFFIC SIDE OF BARRIER
- PERMANENT CONCRETE BARRIER OR CONCRETE PARAPET
- FREE STANDING TEMPORARY BARRIER

CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS

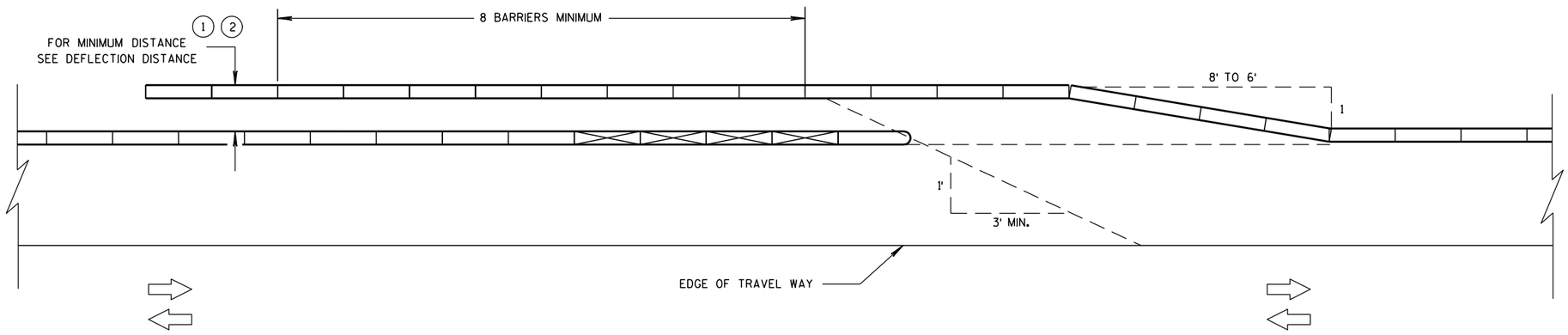
STATE OF WISCONSIN
DEPARTMENT OF TRANSPO...

6

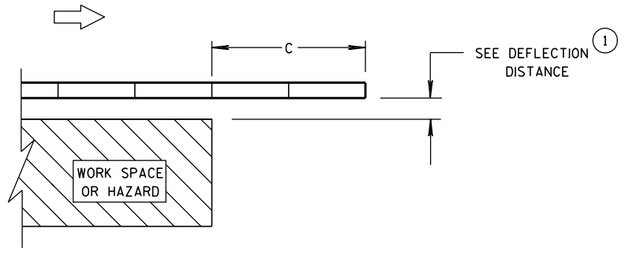
S.D.D. 14 B 8-1b



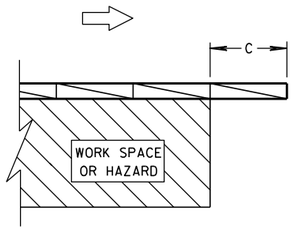
TEMPORARY BARRIER OVERLAP - ONE-WAY TRAFFIC



TEMPORARY BARRIER OVERLAP - TWO-WAY TRAFFIC



ENDING TEMPORARY BARRIER DOWNSTREAM - UNANCHORED



ENDING TEMPORARY BARRIER DOWNSTREAM - ANCHORED

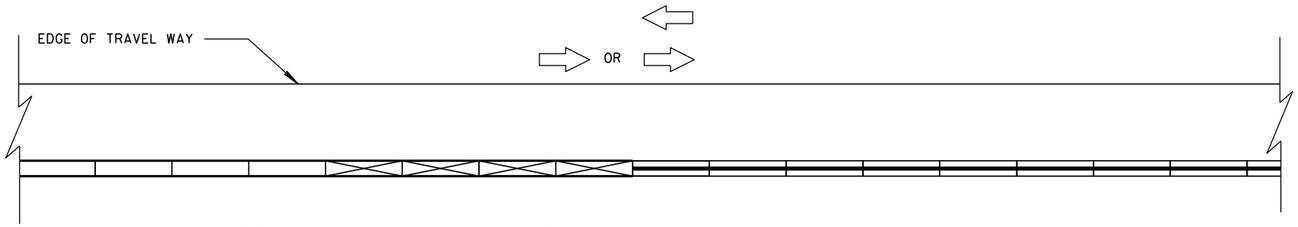
LEGEND

- DIRECTION OF TRAVEL
- CRASH CUSHION OR SAND BARREL ARRAY
- SEE FREE STANDING TRANSITION TO TIED-DOWN SYSTEM DETAILS
- SEE BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM DETAILS
- 3 PINS PLACED ON TRAFFIC SIDE OF BARRIER
- PERMANENT CONCRETE BARRIER OR CONCRETE PARAPET
- FREE STANDING TEMPORARY BARRIER

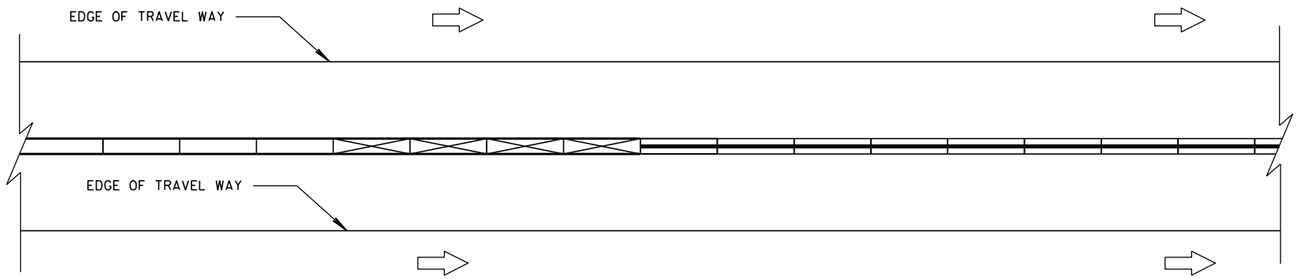
CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6
S.D.D. 14 B 8-1c



CONNECTING TEMPORARY BARRIER TO PERMANENT
CONCRETE BARRIER-TRAFFIC ON ONE SIDE



CONNECTING TEMPORARY BARRIER TO PERMANENT
CONCRETE BARRIER-TRAFFIC ON BOTH SIDES

LEGEND

DIRECTION OF TRAVEL

CRASH CUSHION OR
SAND BARREL ARRAY

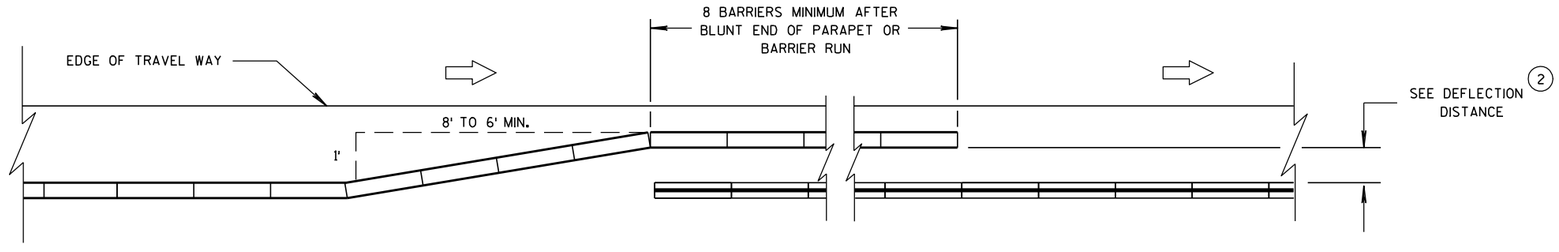
SEE FREE STANDING TRANSITION
TO TIED-DOWN SYSTEM DETAILS

SEE BI-DIRECTIONAL TRANSITION
TO TIED-DOWN SYSTEM DETAILS

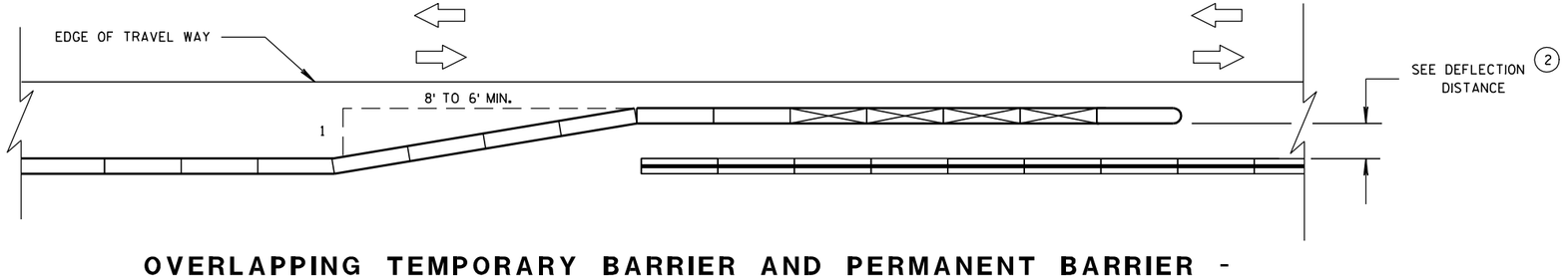
3 PINS PLACED ON
TRAFFIC SIDE OF BARRIER

PERMANENT CONCRETE BARRIER
OR CONCRETE PARAPET

FREE STANDING TEMPORARY
BARRIER



OVERLAPPING TEMPORARY BARRIER AND PERMANENT BARRIER -
ONE WAY TRAFFIC



OVERLAPPING TEMPORARY BARRIER AND PERMANENT BARRIER -
TWO WAY TRAFFIC

CRASH CUSHION/SAND BARREL
ARRAY AND OTHER TEMPORARY
BARRIER LAYOUT DETAILS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPO...

6
S.D.D. 14 B 8-1d

LEGEND

DIRECTION OF TRAVEL

CRASH CUSHION OR SAND BARREL ARRAY

SEE FREE STANDING TRANSITION TO TIED-DOWN SYSTEM DETAILS

SEE BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM DETAILS

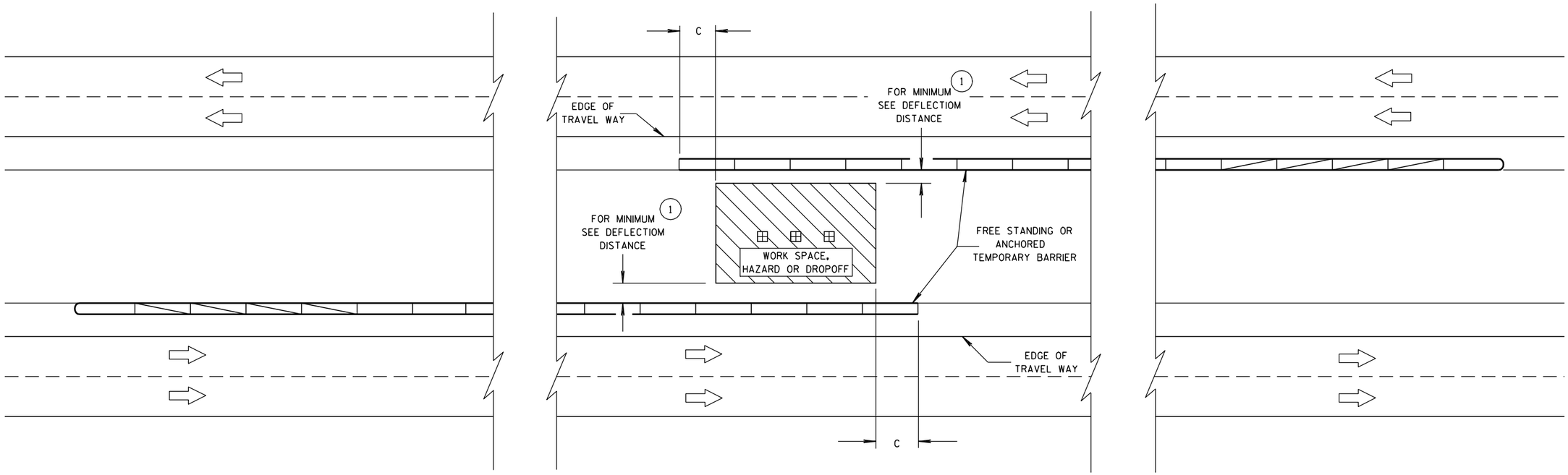
3 PINS PLACED ON TRAFFIC SIDE OF BARRIER

PERMANENT CONCRETE BARRIER OR CONCRETE PARAPET

FREE STANDING TEMPORARY BARRIER

DIMENSION C TABLE (2)

AVAILABLE DEFLECTION DISTANCE	MINIMUM LENGTH OF BARRIER BEYOND HAZARD FT
GREATER THAN 8'	12.5
LESS THAN OR EQUAL TO 8' BUT GREATER THAN 4'	50
LESS THAN OR EQUAL TO 4'	100



CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

8/31/2012
DATE

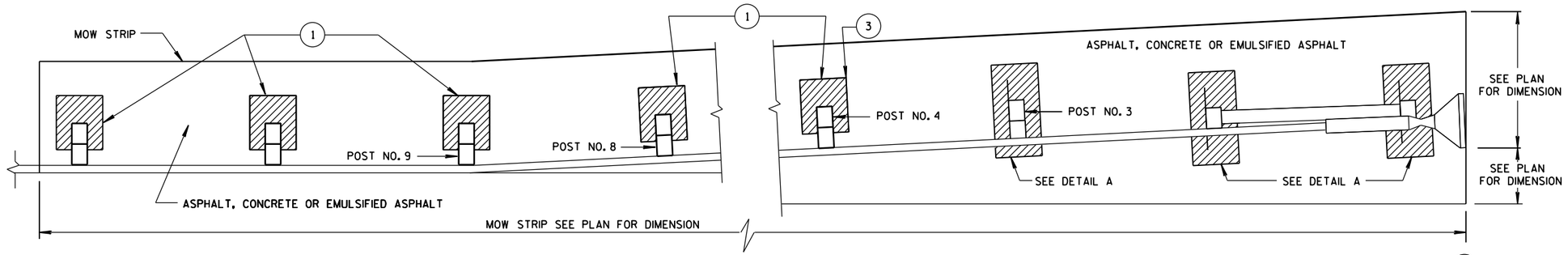
/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINNER

704

FHWA

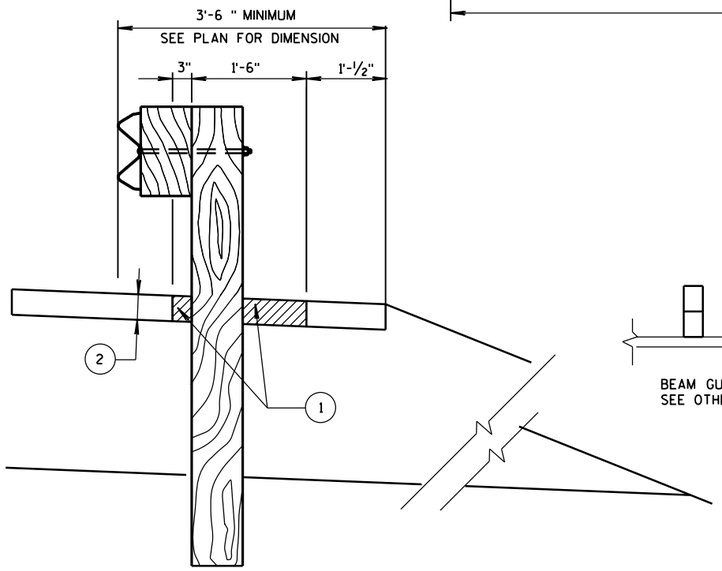
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S.D.D. 14 B 8-1e

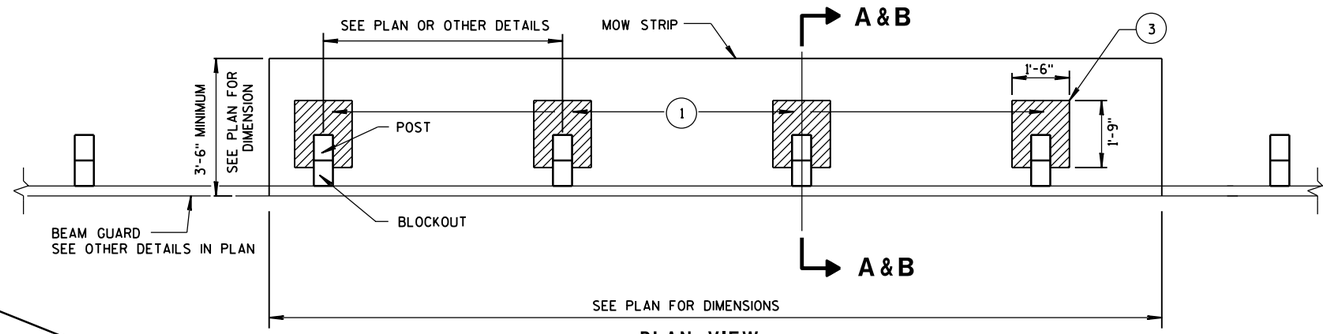


PLAN VIEW

MOW STRIP LAYOUT FOR ENERGY ABORBING TERMINAL

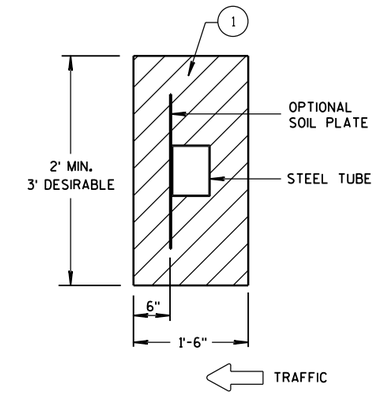


SECTION A-A

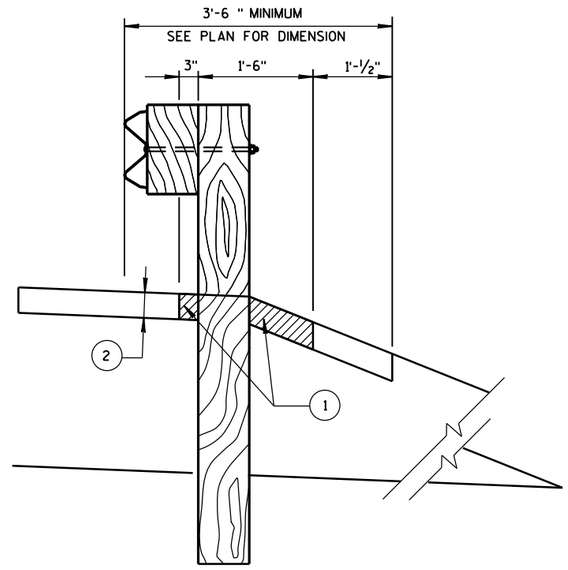


PLAN VIEW

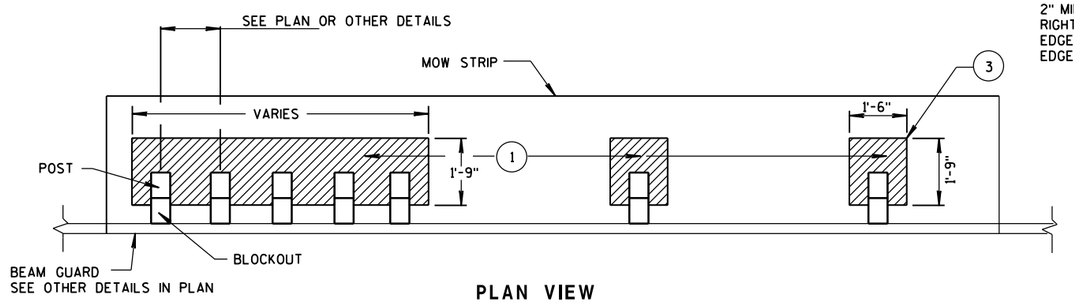
MOW STRIP FOR TYPICAL BLOCKOUT LAYOUT



DETAIL A

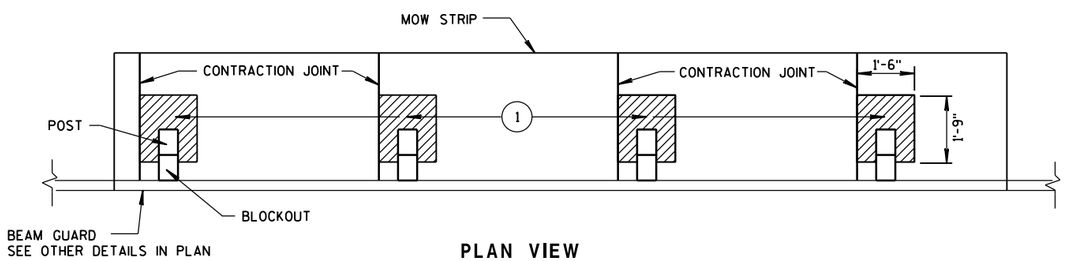


SECTION B-B



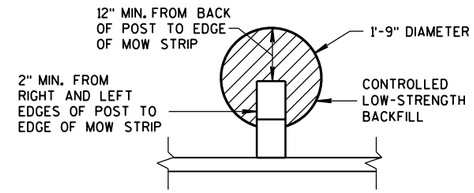
PLAN VIEW

MOW STRIP FOR TIGHT SPACING LAYOUT



PLAN VIEW

JOINT PLACEMENT FOR CONCRETE MOW STRIP



ALTERNATIVE HMA
MOW STRIP DESIGN

(1) CONTROLLED LOW-STRENGTH BACKFILL OR EMULSIFIED ASPHALT.

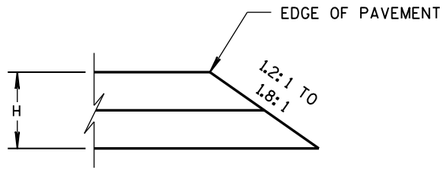
(2) DEPTH OF MOW STRIP:
ASPHALT - 4"
CONCRETE - 4"
EMULSIFIED ASPHALT - 1" OR LESS

(3) FOR EMULSIFIED ASPHALT MOW STRIP LEAVE OUTS NOT REQUIRED. (TYPICAL FOR ALL POSTS.)

GUARDRAIL MOW STRIP

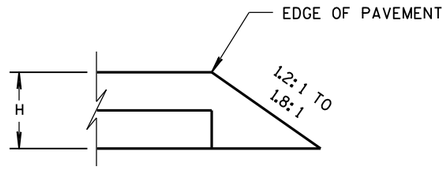
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2014
DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA



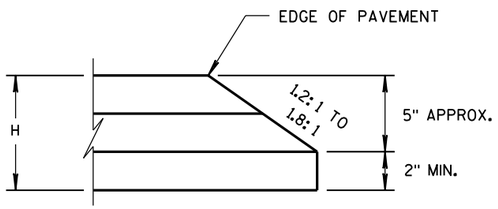
CONSTRUCTED WITH FINAL TWO LAYERS

FOR H 5" OR LESS



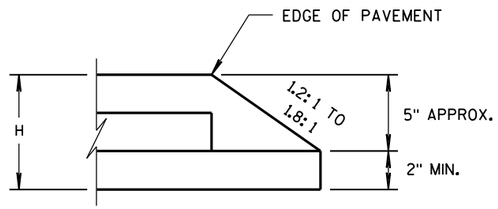
CONSTRUCTED WITH FINAL LAYER

FOR H 5" OR LESS



CONSTRUCTED WITH FINAL TWO LAYERS

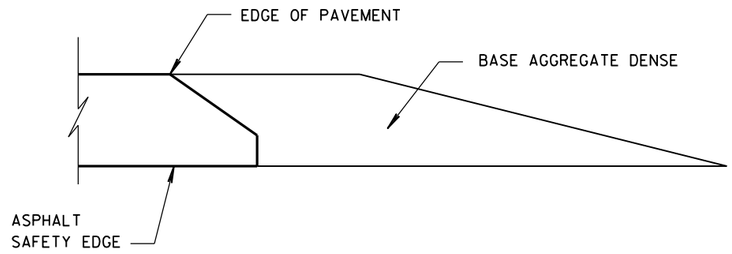
FOR H GREATER THAN 5"



CONSTRUCTED WITH FINAL LAYER

FOR H GREATER THAN 5"

HMA PAVEMENT AND HMA OVERLAYS



FINISHED SHOULDER AGGREGATE PLACEMENT

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6

S.D.D. 14 B 29-1

S.D.D. 14 B 29-1

SAFETY EDGE SM

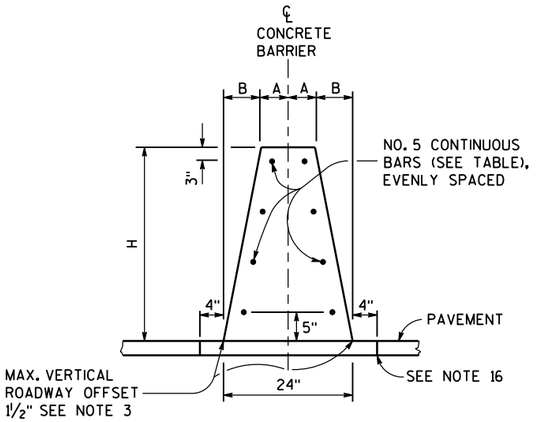
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

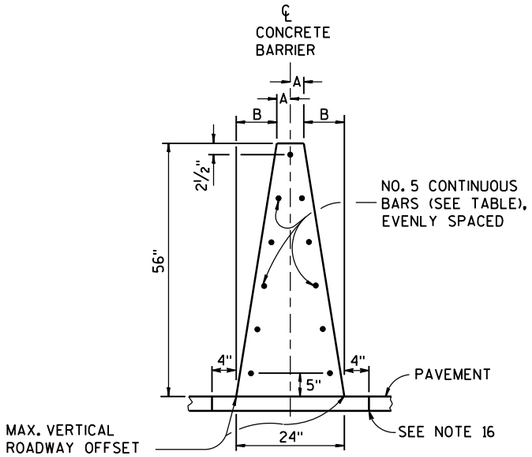
11/30/2012
DATE

/S/ Jerry H. Zoda
ROADWAY STANDARDS DEVELOPMENT ENGINEER

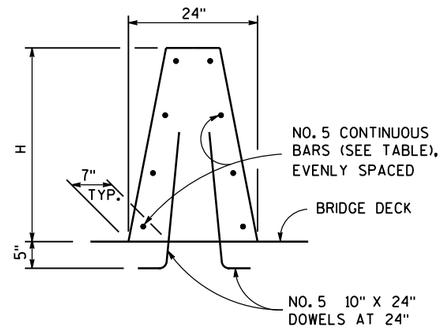
FHWA



32-INCH, 36-INCH OR 42-INCH SINGLE SLOPE CONCRETE BARRIER (TYPE S32, TYPE S36, AND TYPE S42)



56-INCH SINGLE SLOPE CONCRETE BARRIER (TYPE S56)



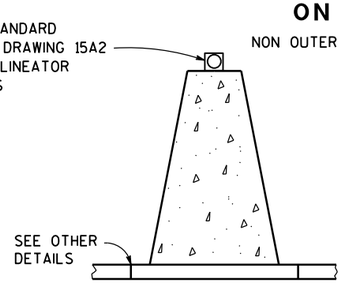
SINGLE SLOPE CONCRETE BARRIER ON BRIDGE

NON OUTER PARAPET APPLICATION

GENERAL NOTES

1. WHERE THE CONCRETE BARRIER IS ADDED TO THE FACE OF EXISTING CONCRETE STRUCTURE, MATCH EXISTING WEEP HOLES.
2. EXPANSION JOINTS IN CONCRETE BARRIER SHALL BE LOCATED AT ALL DECK, AND PRINCIPAL WALL JOINTS. EXPANSION JOINT FILLER MATERIAL SHALL BE THE SAME SIZE AS JOINT OR ½" MINIMUM.
3. WHERE VERTICAL ROADWAY OFFSET IS GREATER THAN 1½", USE TYPE A
4. PLACE BARRIER PERPENDICULAR TO SHOULDER GRADE, UNLESS INDICATED IN PLAN.
5. EXCEPT IN ANCHORS, VERTICAL REINFORCING STIRRUP NOT REQUIRED FOR ROADWAY OFFSETS LESS THAN 1'-0".
6. FOR TYPE S32, TYPE S36, TYPE S42, AND S56 MONOLITHIC FOOTING OR DOWELED FOOTING WITH 2-#8 x 8" @ 2'-0".
7. STAGGER LAPPING OF LONGITUDINAL STEEL. MINIMUM OVERLAP OF STEEL 2 FEET. BARS AT LAPS TO BE FIRMLY TIED OR CONNECTED.
8. 4000 PSI CONCRETE AIR ENTRAINMENT PER STANDARD SPECIFICATION 501.
9. WHEN SWITCHING BETWEEN SLIP FORM AND CAST-IN-PLACE OPERATIONS, EXTEND LONGITUDINAL STEEL 3 FEET BEYOND SLIP-FORMING CUT OFF POINT. EXPOSED STEEL INTO NEXT POURS REINFORCEMENT. LAPS TO BE FIRMLY TIED.
10. USE ¾" BEVEL OR 1" RADIUS ON ALL EXPOSED SHARP EDGES UNLESS OTHERWISE NOTED.
11. 2" CLEAR COVER TYPICAL.
12. COLD-JOINTS MAY BE USED BETWEEN ANCHOR INSTALLATIONS. WHEN A COLD JOINT IS NEEDED, 3 FEET OF LAP OF LONGITUDINAL STEEL IS REQUIRED. LAPS TO BE FIRMLY TIED.
13. IN TYPE S32, TYPE S36, TYPE S42 AND TYPE S56 NO ADDITIONAL VERTICAL STEEL NEEDED. IN TYPE S32A, TYPE S36A, TYPE S42A AND TYPE S56A REQUIRES VERTICAL STEEL. SEE OTHER DETAIL.
14. IN TYPE S32, TYPE S36, TYPE S42 AND TYPE S56 DEPTH OF FOOTING 10". IN TYPE S32A, TYPE S36A, TYPE S42A AND TYPE S56A MATCH TOTAL HEIGHT OF SINGLE SLOPE BARRIER RETAINING WALL.
15. FOR ALL BARRIER TYPES SHOWN, ANCHOR IS REQUIRED AT CONCRETE BARRIER ENDS AND AT INTERRUPTIONS IN CONCRETE BARRIER. ANCHOR MAY BE AS SHOWN ON DRAWING OR DETAILS SHOWN ON S.D.D. 14B33. ANCHORS INCIDENTAL TO CBSS.
16. CONCRETE PAD UNDER CBSS MAY BE PLACED INTEGRAL WITH BARRIER, PLACED SEPARATELY OR PLACED WITH CONCRETE SHOULDER AND SAWED FULL DEPTH. CONCRETE PAD MINIMUM DEPTH IS 6 INCHES, OR EQUAL TO THE DEPTH OF THE CONCRETE SHOULDER.

BARRIER HEIGHT H INCHES	A INCHES	B INCHES	NUMBER OF NO. 5 BARS EACH
32	7	5	8
36	6¼	5¾	8
42	5¼	6¾	10
56	3	9	11



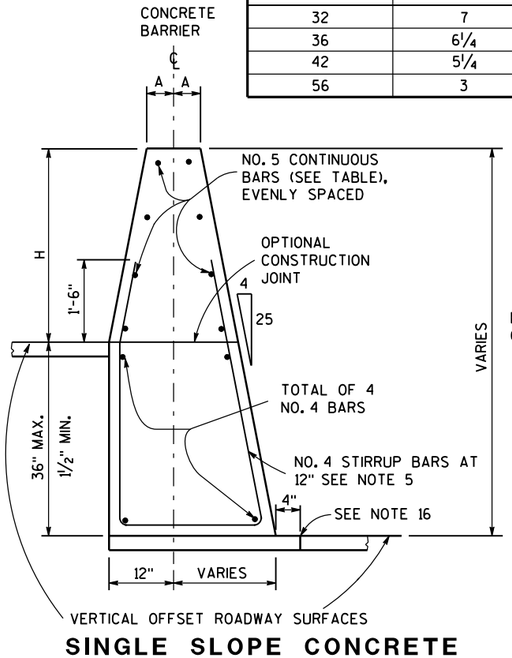
DELINEATION

DELINEATOR SPACING ON HORIZONTAL CURVES

RADIUS OF CURVE	APPROXIMATE SPACING ON CURVE
50 FEET	20 FEET
115 FEET	25 FEET
180 FEET	35 FEET
250 FEET	40 FEET
300 FEET	50 FEET
400 FEET	55 FEET
500 FEET	65 FEET
600 FEET	70 FEET
700 FEET	75 FEET
800 FEET	80 FEET
900 FEET	85 FEET
1000 FEET	90 FEET

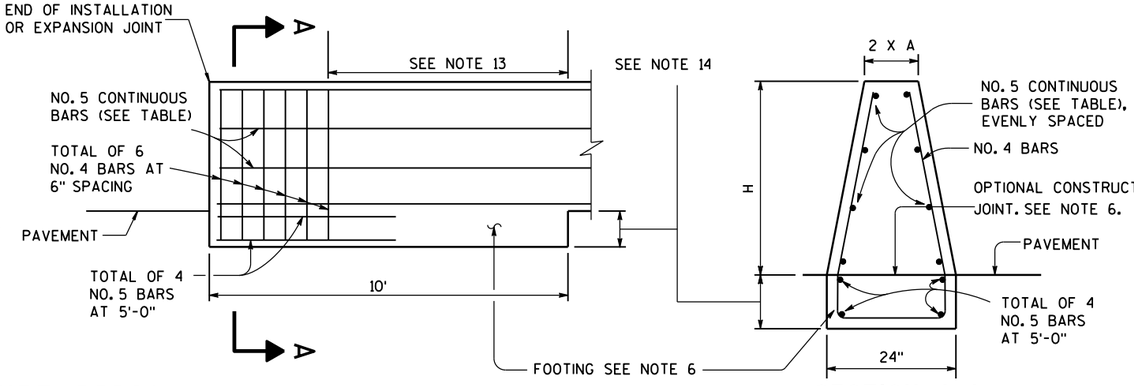
DELINEATOR SPACING ON RADIUS GREATER THAN 1000 FEET OR TANGENT SECTIONS

	LENGTH OF BARRIER	REFLECTOR SPACING	NO. SURFACES REFLECTORIZED	MIN. NO. REFLECTORS
ONE WAY TRAFFIC	< 200'	50' C-C	1	3
	> 200'	100' C-C	1	
TWO WAY TRAFFIC	< 200'	25' C-C	1	6
	> 200'	50' C-C	1	
TWO WAY TRAFFIC	< 200'	50' C-C	2	3
	> 200'	100' C-C	2	



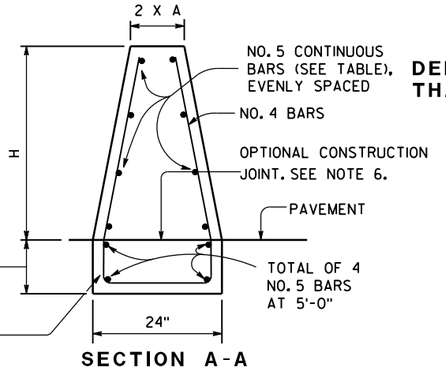
SINGLE SLOPE CONCRETE BARRIER AND RETAINING WALL (TYPE S32A, TYPE S36A, TYPE S42A, TYPE S56A)

(BETWEEN ADJACENT ROADWAYS)



END ANCHOR SINGLE SLOPE CONCRETE BARRIER

AT CONSTRUCTION JOINT



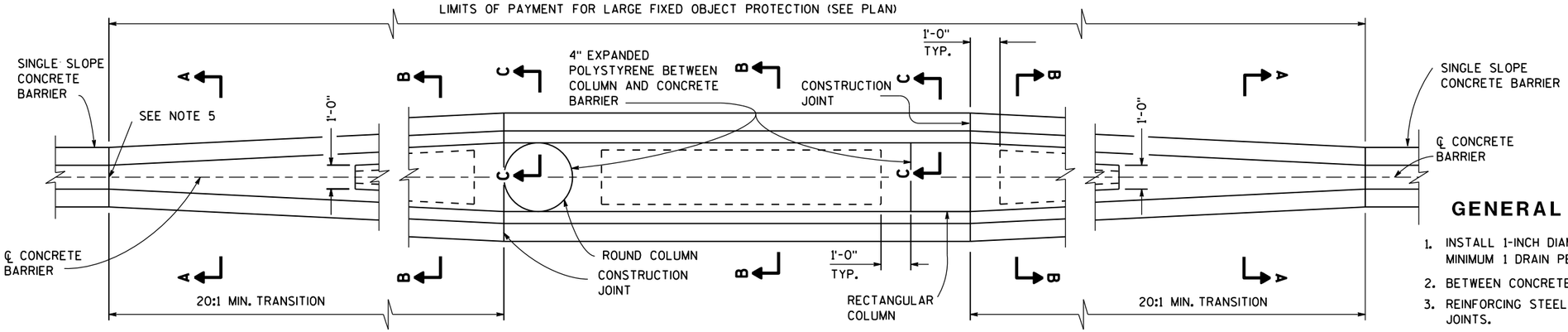
SECTION A-A

CONCRETE BARRIER SINGLE SLOPE (CBSS)

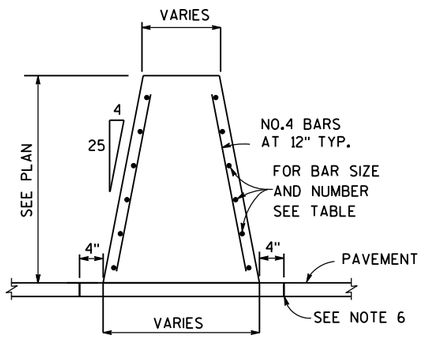
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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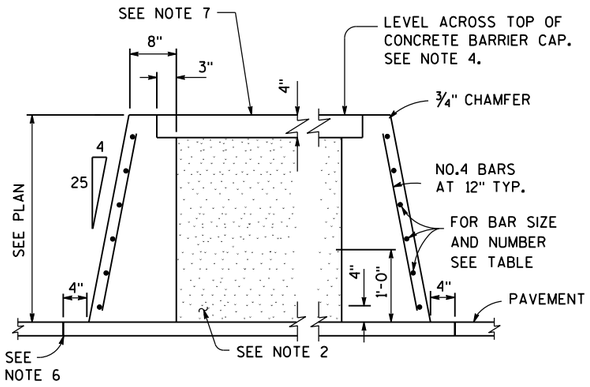
S.D.D. 14 B 32-3a



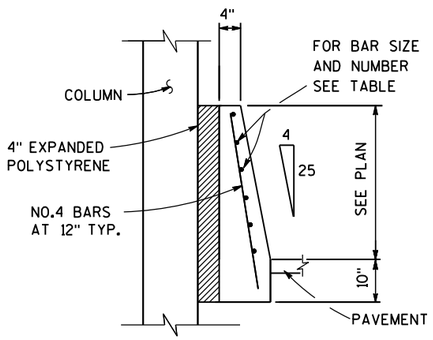
LARGE FIXED OBJECTS PROTECTION
TYPE S32, TYPE S36, TYPE S42, TYPE S56



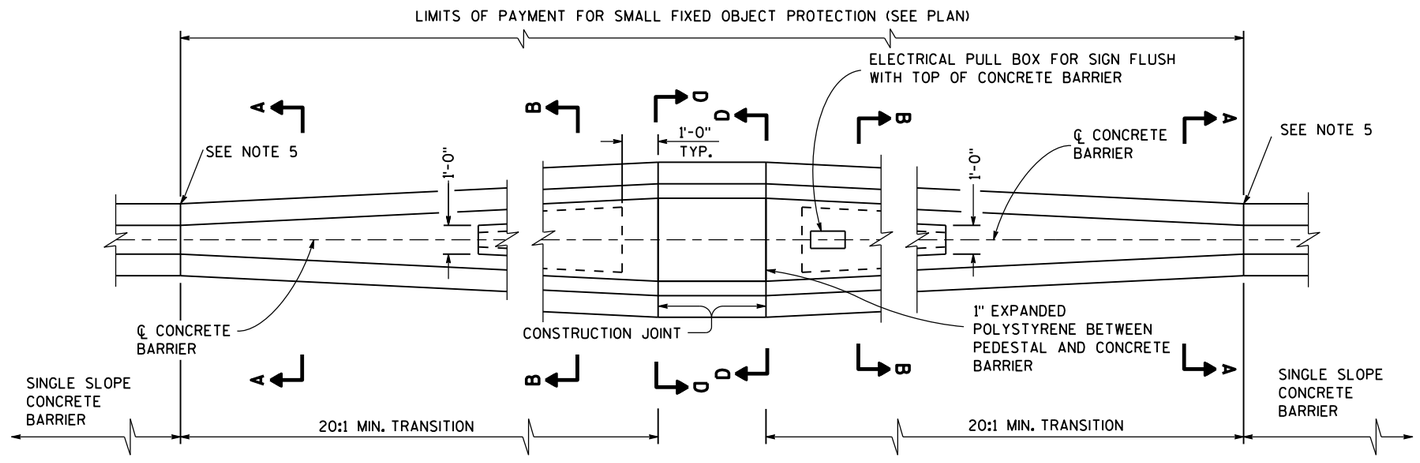
SECTION A-A



SECTION B-B



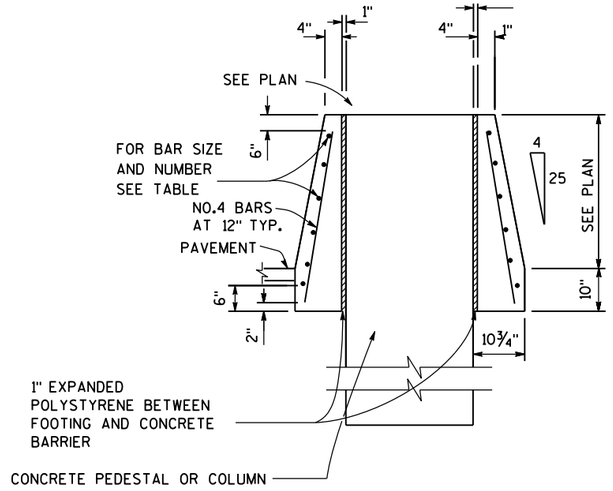
SECTION C-C



SMALL FIXED OBJECTS PROTECTION
TYPE S32, TYPE S36, TYPE S42, TYPE S56

GENERAL NOTES

1. INSTALL 1-INCH DIAMETER DRAIN PIPE EVERY 20 FEET OF CROSS SECTION B-B. MINIMUM 1 DRAIN PER CAVITY.
2. BETWEEN CONCRETE BARRIER WALLS FILL WITH GRANULAR BACKFILL GRADE 2
3. REINFORCING STEEL SHALL EXTEND CONTINUOUS THROUGH CONSTRUCTION JOINTS.
4. ADJUST HEIGHT OF CONCRETE BARRIER WALL ON LOW SIDE OF OFFSET OR SUPERELEVATED ROADWAYS TO PROVIDE LEVEL GRADE ACROSS TOP OF CONCRETE CAP.
5. IF FIXED OBJECT PROTECTION IS INSTALLED FIRST, USE COLD JOINTS. IF CBSS PLACED FIRST, USE EXPANSION JOINT.
6. CONCRETE PAD UNDER CBSS MAY BE PLACED INTEGRAL WITH BARRIER, PLACED SEPARATELY OR PLACED WITH CONCRETE SHOULDER AND SAWED FULL DEPTH. SAWING OF CONCRETE SHOULDER IS INCIDENTAL TO CONCRETE BARRIER BID ITEM. CONCRETE PAD MINIMUM DEPTH IS 6 INCHES, OR EQUAL TO THE DEPTH OF THE CONCRETE SHOULDER.
7. USE NO. 3 BAR SPACED 12 INCHES CENTER TO CENTER (PLACED IN EACH DIRECTION) OR EQUIVALENT WIRE MESH.



SECTION D-D

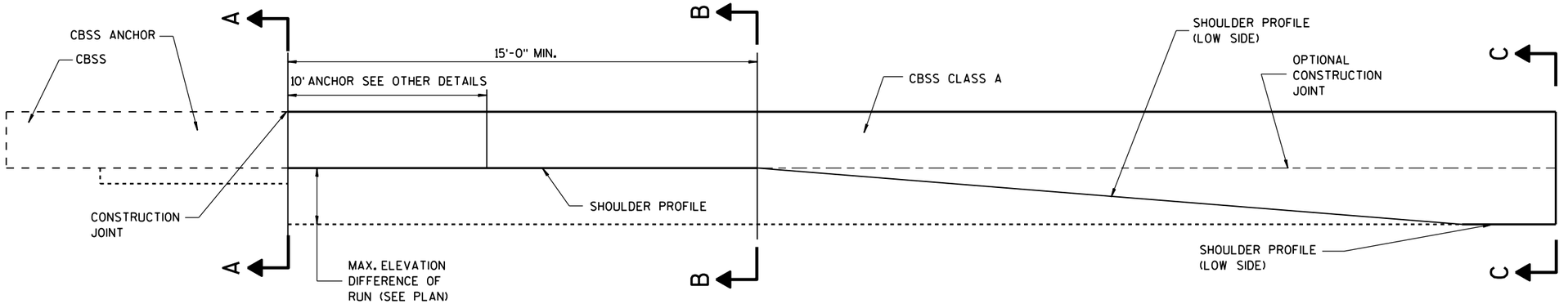
BARRIER HEIGHT H INCHES	BAR SIZE	NUMBER OF BARS EACH
32	4	6
36	4	6
42	5	6
56	5	9

CONCRETE BARRIER SINGLE SLOPE (CBSS)

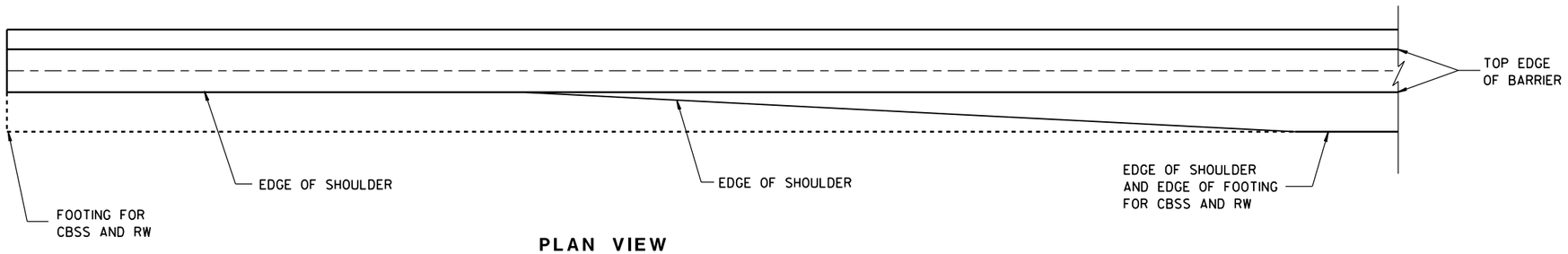
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

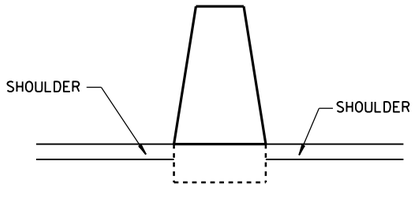
S.D.D. 14 B 32-3b



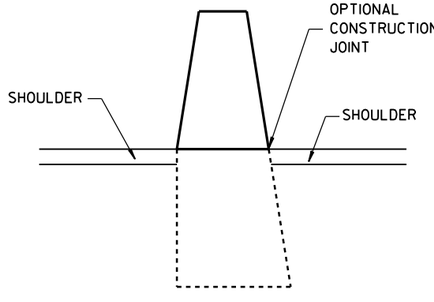
ELEVATION VIEW
TRANSITION TO CBSS CLASS A
(TYPE S32A, TYPE S36A, TYPE S42A, TYPE S56A)



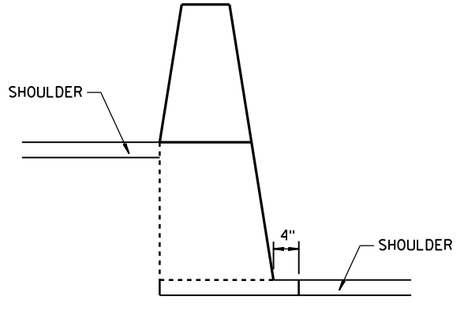
PLAN VIEW
TRANSITION TO CBSS CLASS A
(TYPE S32A, TYPE S36A, TYPE S42A, TYPE S56A)



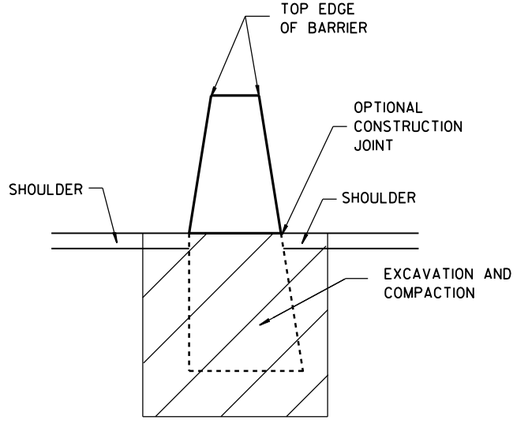
SECTION A-A



SECTION B-B



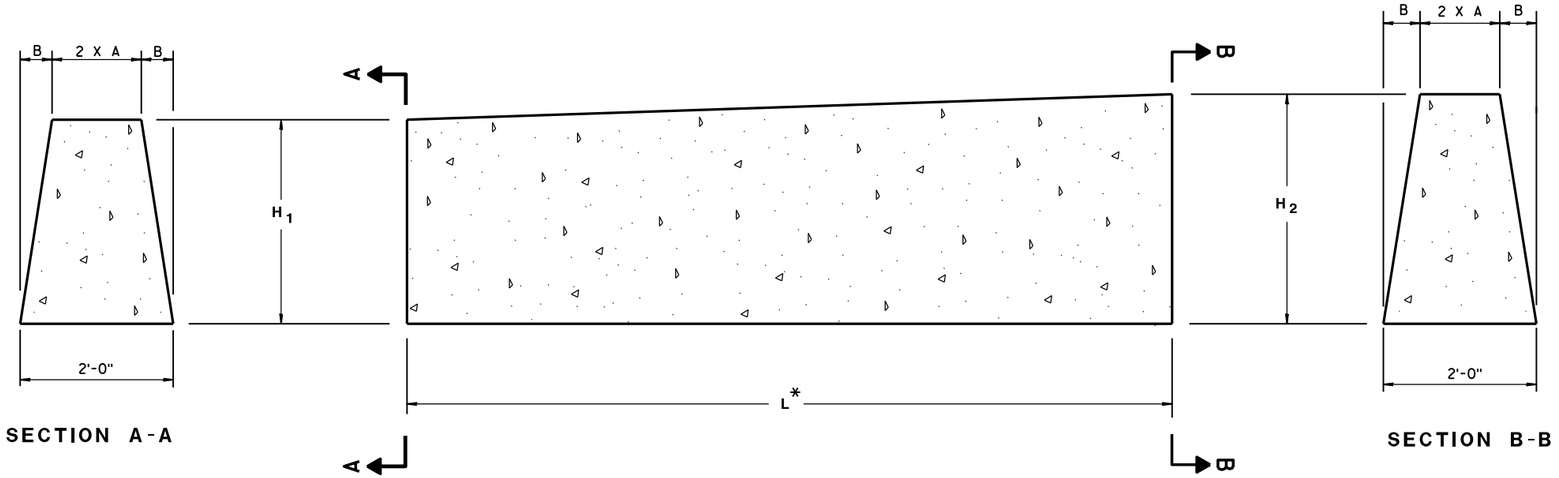
SECTION C-C



CONCRETE BARRIER SINGLE SLOPE (CBSS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6
S.D.D. 14 B 32-3c



SECTION A-A

SECTION B-B

DOUBLE COLD JOINT HEIGHT TRANSITION

BARRIER DIMENSIONS

BARRIER HEIGHT INCHES	A INCHES	B INCHES
32	7	5
36	6 1/4	5 3/4
42	5 1/4	6 3/4
56	3	9

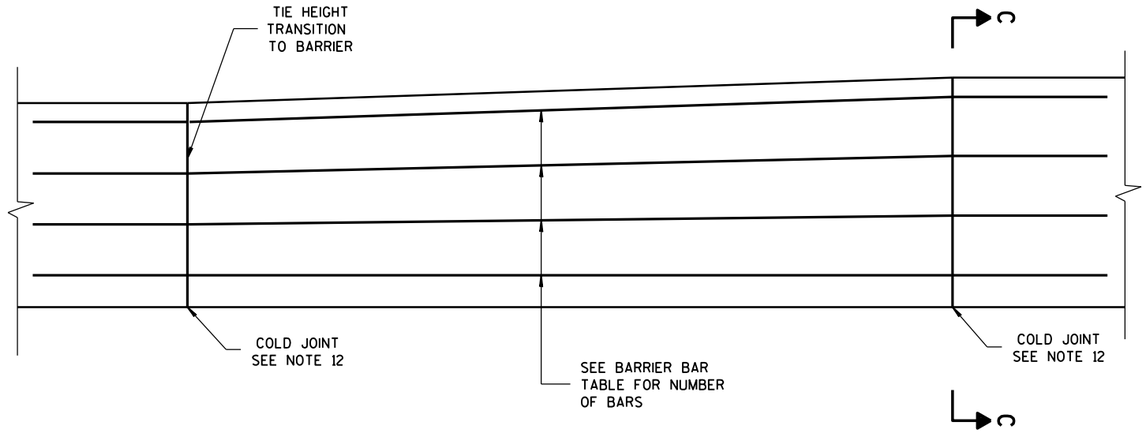
MULTIPLE HEIGHT TRANSITIONS MAY BE USED IN SEQUENCE TO GET TO APPROPRIATE HEIGHT.

USE COLD JOINT TO CONNECT MULTIPLE HEIGHT TRANSITIONS.

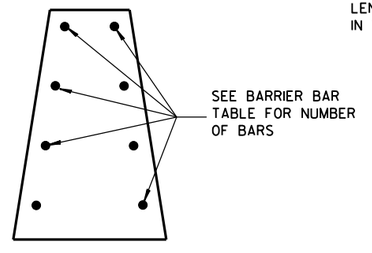
BARRIER BARS

H_1	H_2	L*	NUMBER OF NO. 5 BARS
32"	36"	10'-0"	8
36"	42"	10'-6"	10
42"	56"	24'-6"	11

*
LENGTH OF DOUBLE COLD JOINT INCLUDED IN THE TOTAL LENGTH OF CBSS.



STEEL REINFORCEMENT DETAIL



SECTION C-C

CONCRETE BARRIER
SINGLE SLOPE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

June 2014
DATE

/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER

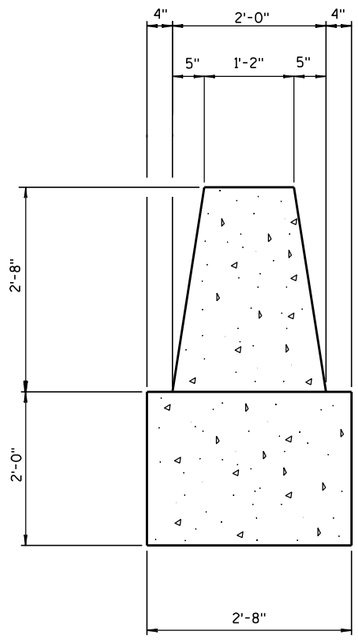
FHWA

6

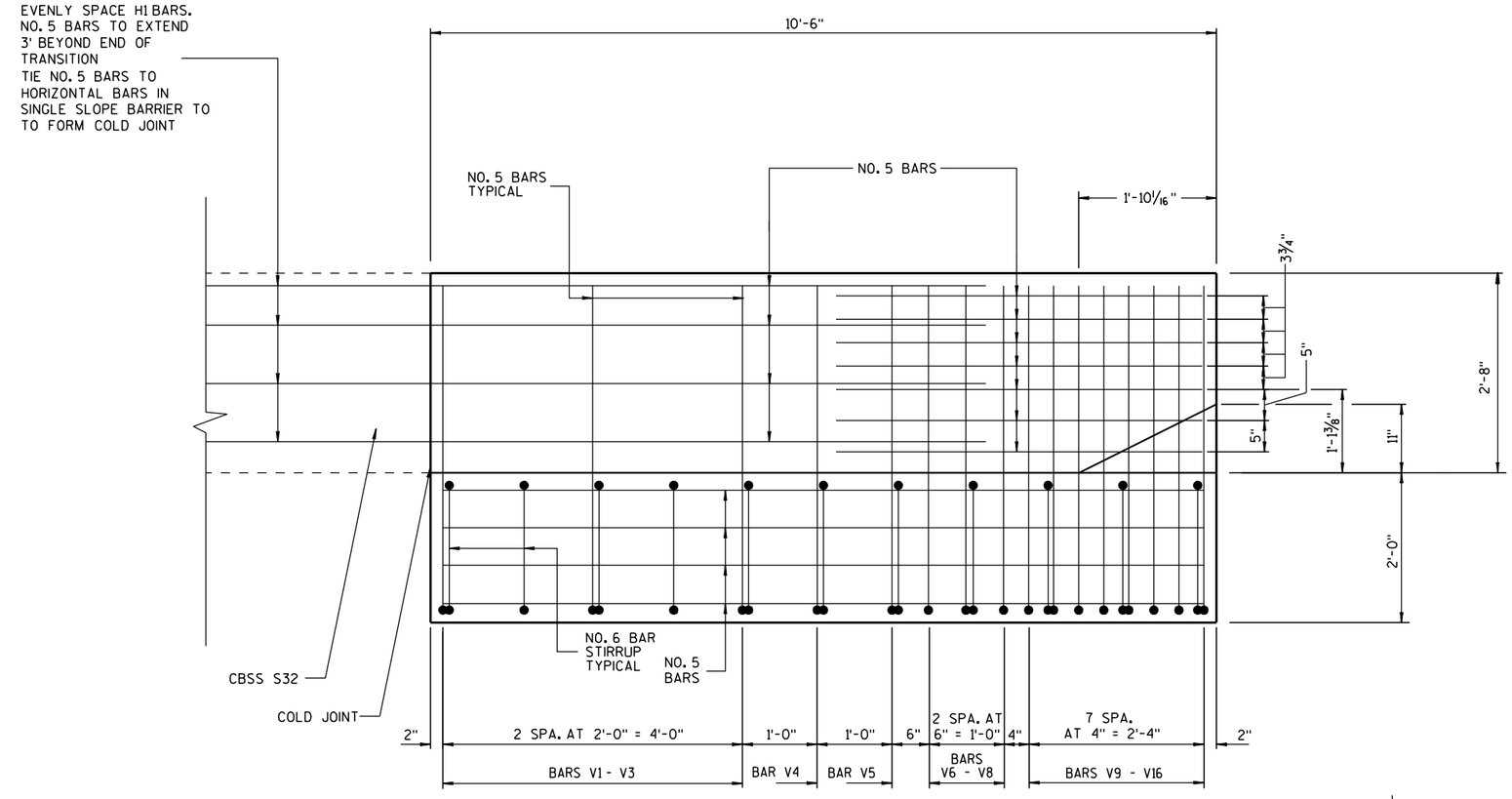
S.D.D. 14 B 32-3d

6

S.D.D. 14 B 32-3d

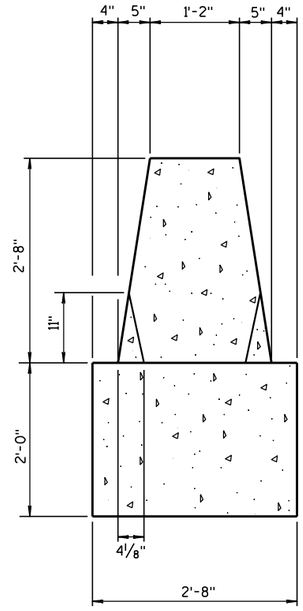


SECTION A-A

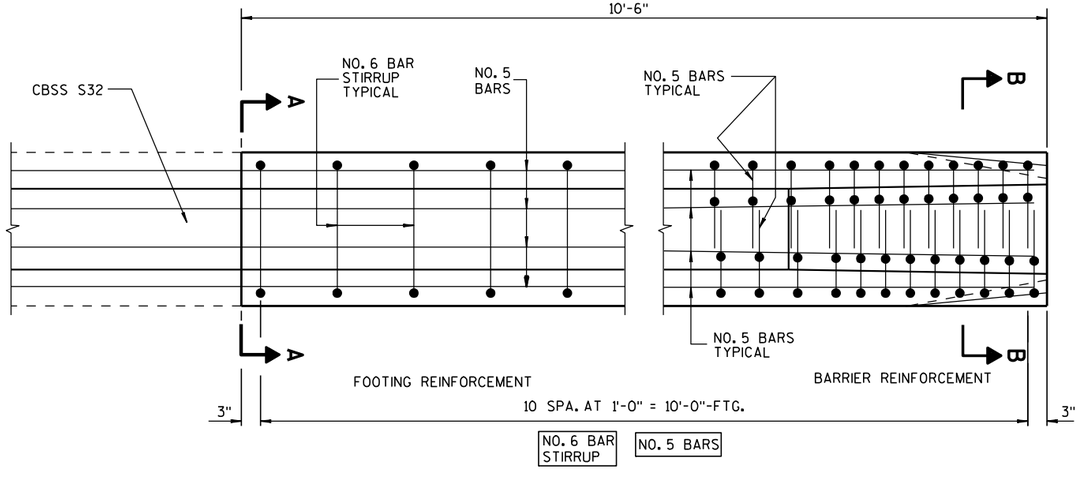


SEE SECTIONS (1) THRU (16)

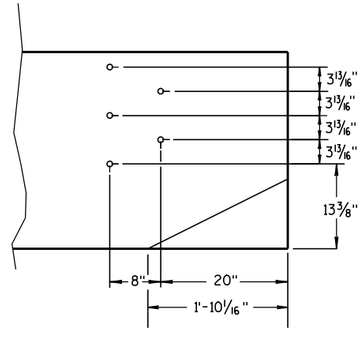
ELEVATION VIEW



SECTION B-B



PLAN VIEW



PVC PIPE LOCATIONS

GENERAL NOTES

CONSTRUCT PER STANDARD SPECIFICATION 603.

SPLICES OF LONGITUDINAL BARS TO BE 2' LONG AND FIRMLY TIED AND FASTENED TOGETHER UNLESS NOTED OTHERWISE.

4000 PSI CONCRETE AIR ENTRAINMENT PER STANDARD SPECIFICATIONS SECTION 501.

USE 3/4" BEVEL OR 1" RADIUS ON ALL EXPOSED SHARP EDGES UNLESS NOTED OTHERWISE.

THRIE BEAM ANCHOR INCIDENTAL TO CONCRETE BARRIER ITEM.

INSTALL SCHEDULE 40 PVC PIPE 1" DIAMETER AT LOCATIONS INDICATED.

EXTEND PVC PIPE COMPLETELY THROUGH BARRIER.

CUT ENDS OF PVC PIPE FLUSH WITH FINISHED FACE of BARRIER.

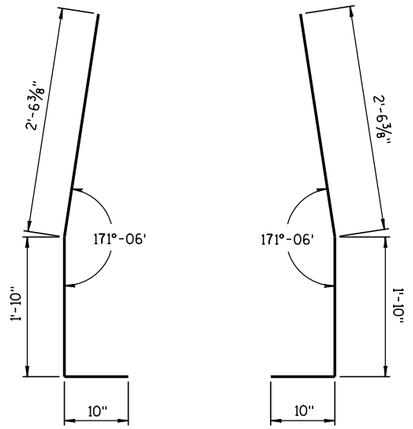
THE NUMBER IN BAR DESIGNATION REPRESENTS THE BARS LOCATION.

2" CLEAR COVER TYPICAL.

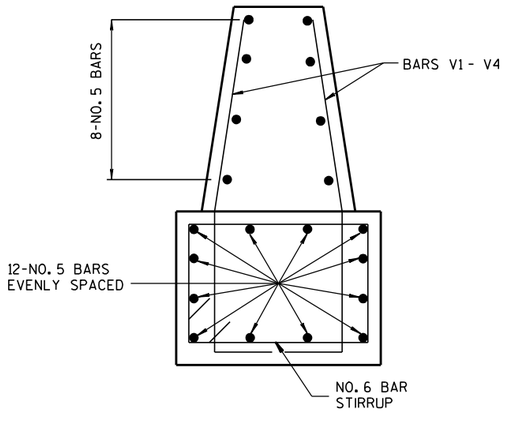
CONCRETE BARRIER
SINGLE SLOPE 32"
THRIE BEAM ANCHOR

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

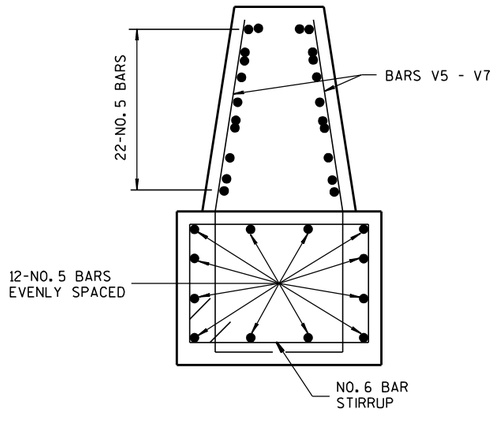
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S.D.D. 14 B 33-1a



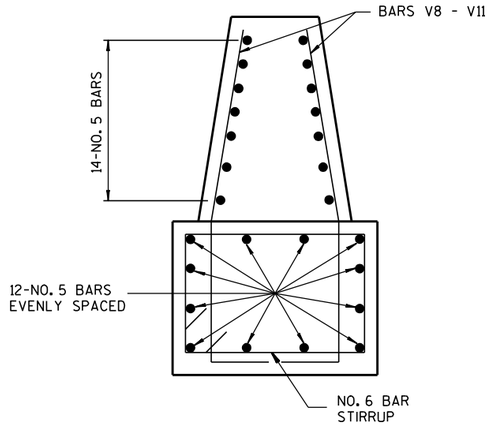
BAR BENDING DETAIL
FOR BARS V1 - V11



BAR DETAIL
SECTIONS 1 - 4



BAR DETAIL
SECTIONS 5 - 7



BAR DETAIL
SECTIONS 8 - 11

CONCRETE BARRIER
SINGLE SLOPE 32"
THRIE BEAM ANCHOR

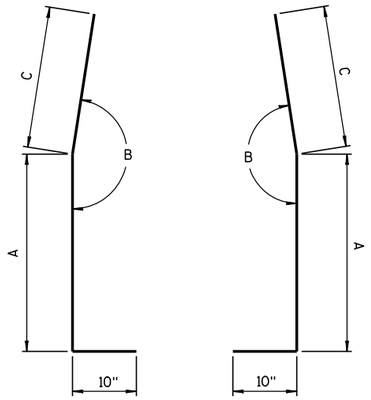
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

S.D.D. 14 B 33-1b

BAR CHART
SECTIONS V12 - V13

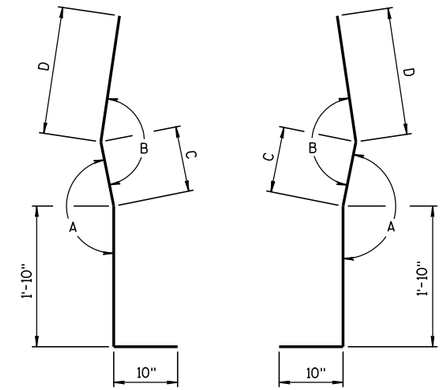
BAR	A	B	C
V12	2'-2"	171°-15'	2'-1 3/4"
V13	2'-7"	171°-05'	1'-9 3/8"



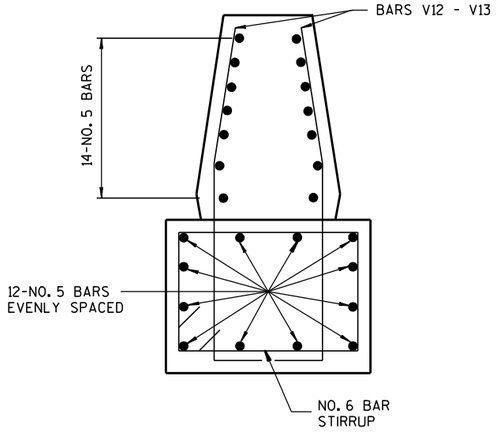
BAR BENDING DETAIL
FOR BARS V12 - V13

BAR CHART
SECTIONS V14 - V16

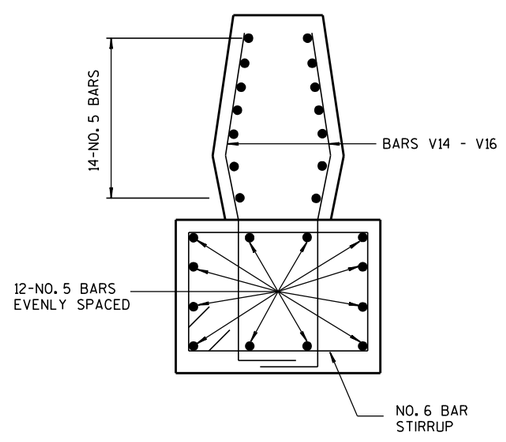
BAR	A	B	C	D
V14	168°-15'	159°-15'	6"	2'-0"
V15	169°-20'	161°-00'	8"	1'-10"
V16	168°-40'	160°-10'	10"	1'-8"



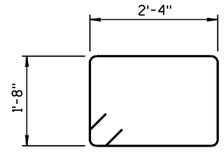
BAR BENDING DETAIL
FOR BARS V14 - V16



BAR DETAIL
SECTIONS 12 - 13



BAR DETAIL
SECTIONS 14 - 16



STIRRUP BAR
BENDING DETAIL

CONCRETE BARRIER
SINGLE SLOPE 32"
THRIE BEAM ANCHOR

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

6-3-2010
DATE

/S/ Jerry H. Zoss
ROADWAY STANDARDS ENGINEER

713

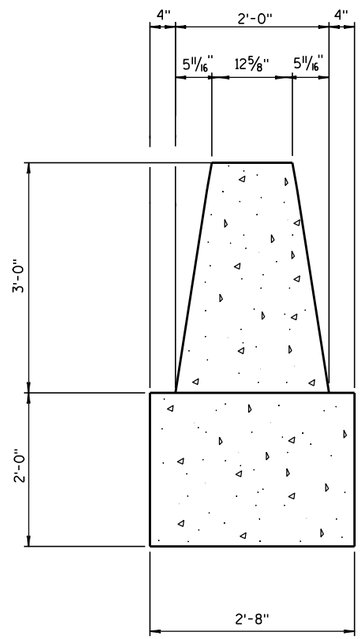
FHWA

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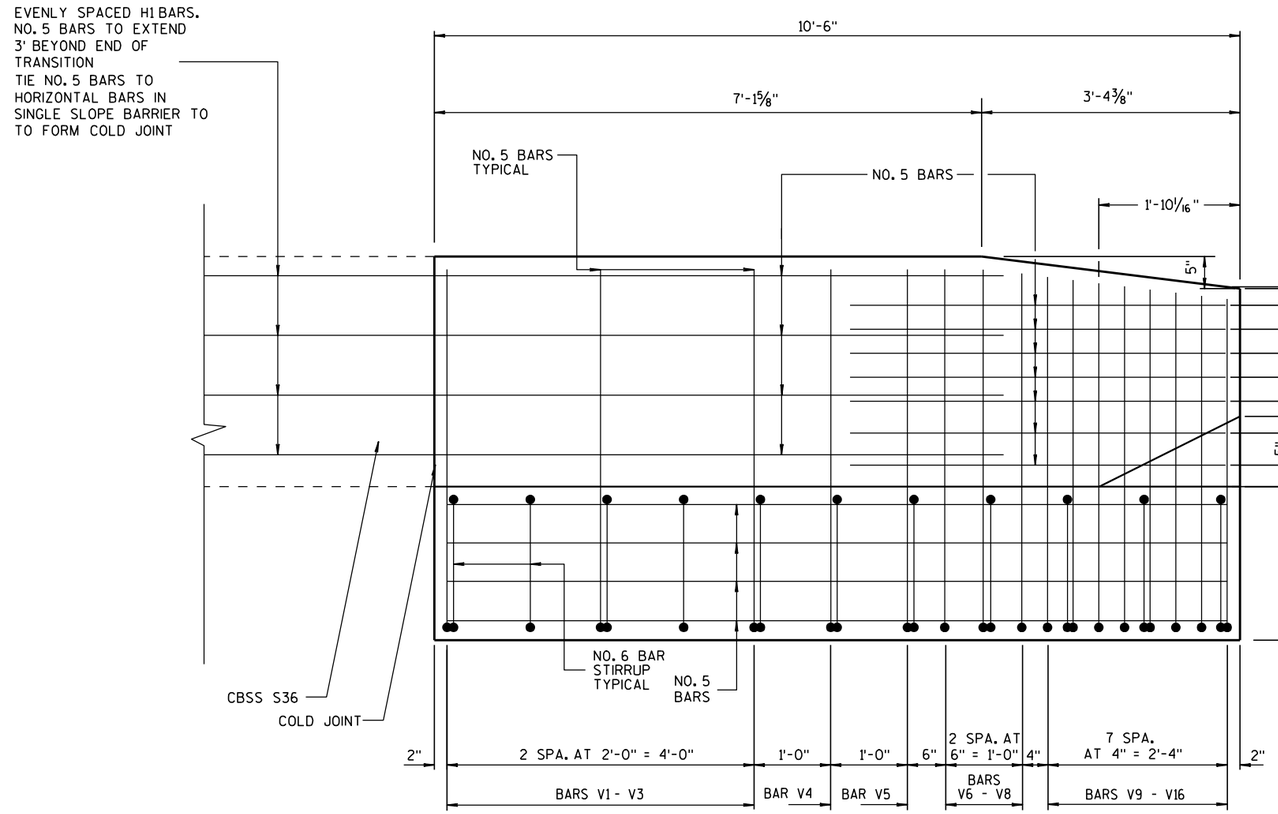
S.D.D. 14 B 33-1c

6

S.D.D. 14 B 33-1c

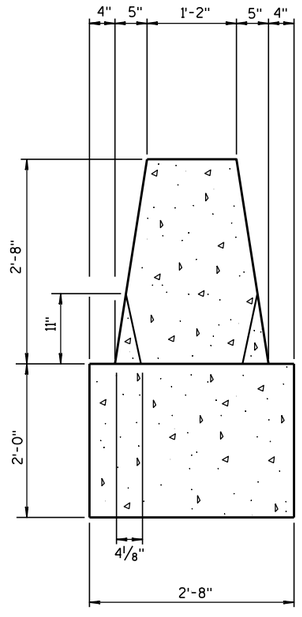


SECTION A-A

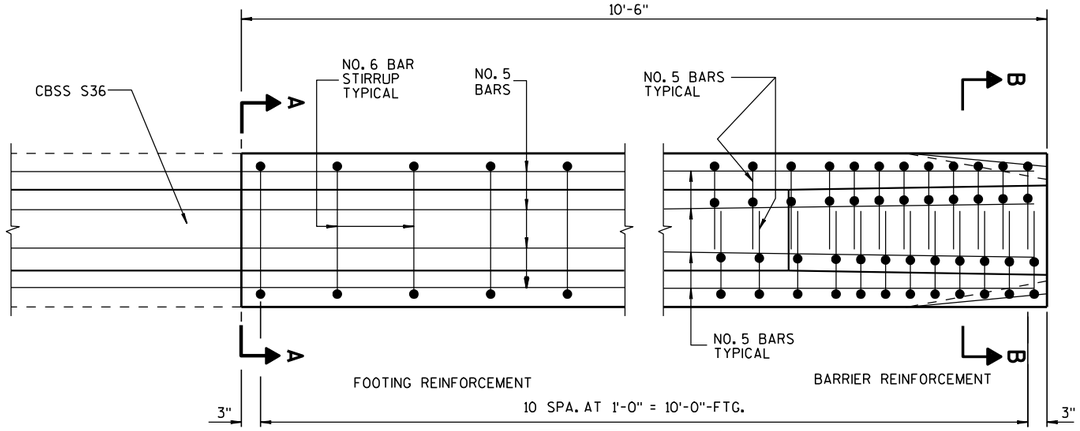


SEE SECTIONS (1) THRU (16)

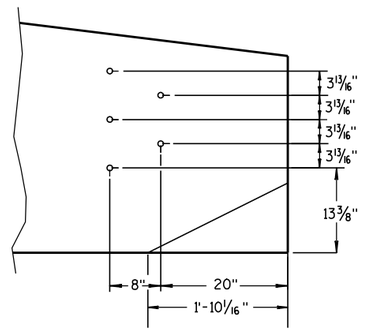
ELEVATION VIEW



SECTION B-B



PLAN VIEW



PVC PIPE LOCATIONS

GENERAL NOTES

CONSTRUCT PER STANDARD SPECIFICATION 603.

SPLICES OF LONGITUDINAL BARS TO BE 2' LONG AND FIRMLY TIED AND FASTENED TOGETHER UNLESS NOTED OTHERWISE.

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CUT ENDS OF PVC PIPE FLUSH WITH FINISHED FACE of BARRIER.

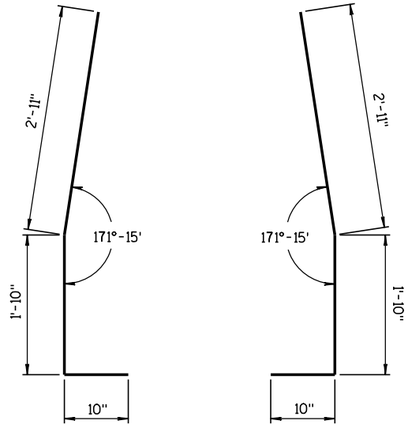
THE NUMBER IN BAR DESIGNATION REPRESENTS THE BARS LOCATION.

2" CLEAR COVER TYPICAL.

CONCRETE BARRIER
SINGLE SLOPE 36"
THRIE BEAM ANCHOR

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

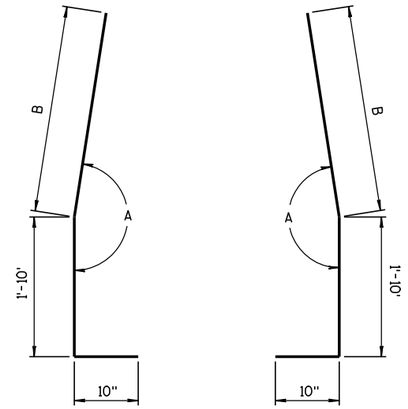
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S.D.D. 14 B 33-1d



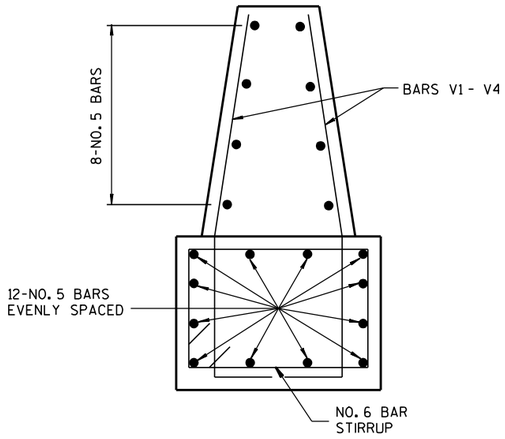
BAR BENDING DETAIL
FOR BARS V1 - V6

BAR CHART
SECTIONS V7 - V11

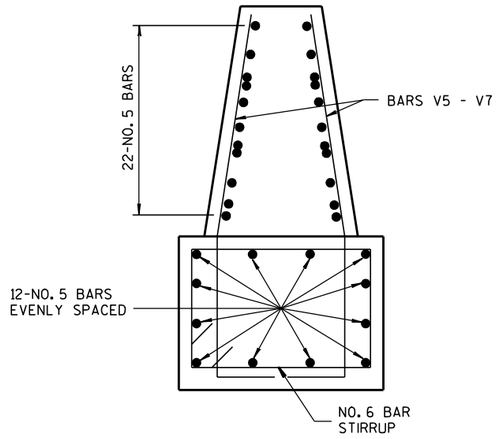
BAR	A	B
V7	171°-20'	2'-10½"
V8	171°-10'	2'-9½"
V9	171°-10'	2'-9"
V10	171°-05'	2'-8½"
V11	171°-10'	2'-8"



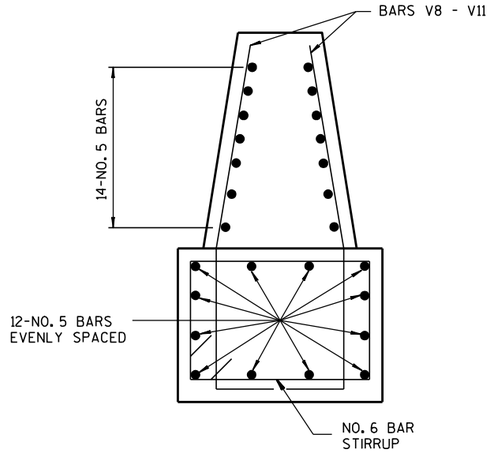
BAR BENDING DETAIL
FOR BARS V7 - V11



BAR DETAIL
SECTIONS 1 - 4



BAR DETAIL
SECTIONS 5 - 7



BAR DETAIL
SECTIONS 8 - 11

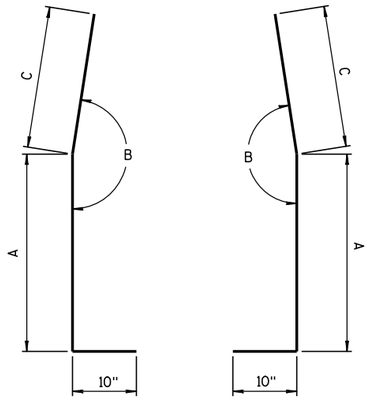
CONCRETE BARRIER
SINGLE SLOPE 36"
THRIE BEAM ANCHOR

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6
S.D.D. 14 B 33-1e

BAR CHART
SECTIONS V12 - V13

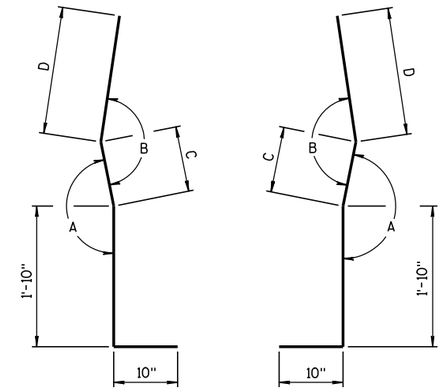
BAR	A	B	C
V12	2'-2"	171°-15'	2'-3½"
V13	2'-7"	171°-05'	1'-10"



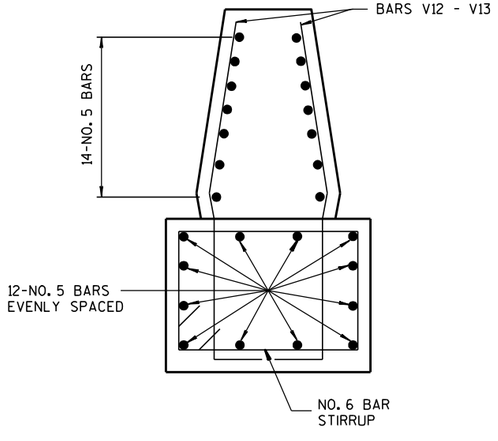
BAR BENDING DETAIL
FOR BARS V12 - V13

BAR CHART
SECTIONS V14 - V16

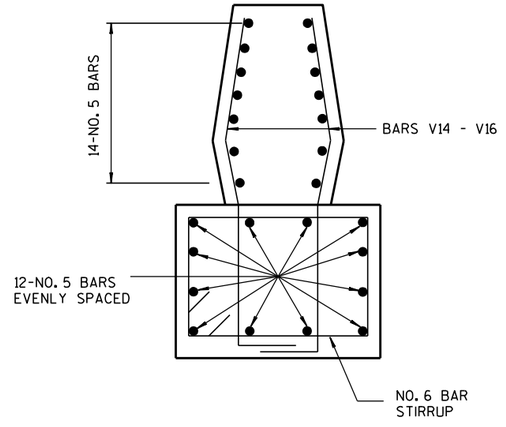
BAR	A	B	C	D
V14	168°-15'	159°-15'	6"	2'-0"
V15	169°-20'	161°-00'	8"	1'-10"
V16	168°-40'	160°-10'	10"	1'-8"



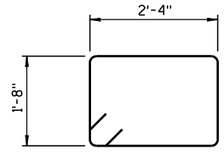
BAR BENDING DETAIL
FOR BARS V14 - V16



BAR DETAIL
SECTIONS 12 - 13



BAR DETAIL
SECTIONS 14 - 16



STIRRUP BAR
BENDING DETAIL

CONCRETE BARRIER
SINGLE SLOPE 36"
THRIE BEAM ANCHOR

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

6-3-2010
DATE

/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER

716

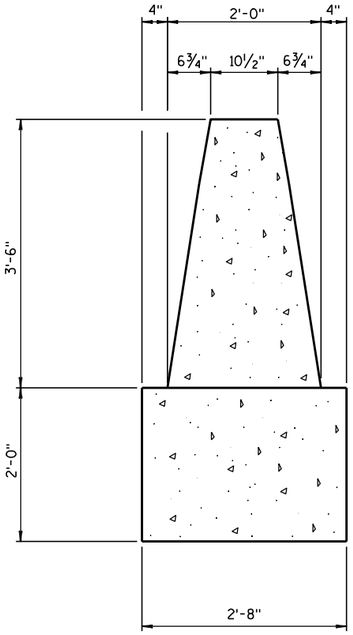
FHWA

6

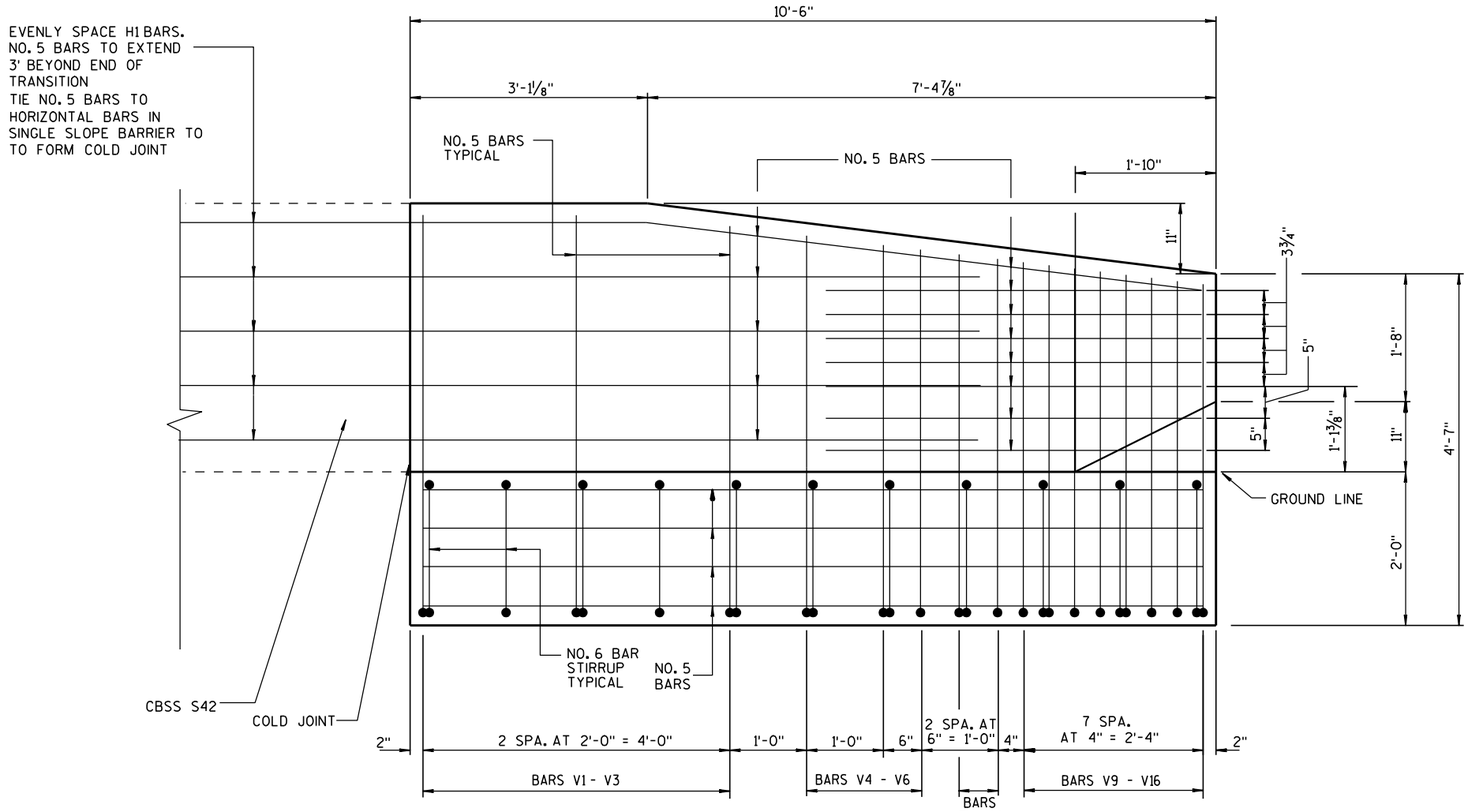
S.D.D. 14 B 33-1f

6

S.D.D. 14 B 33-1f

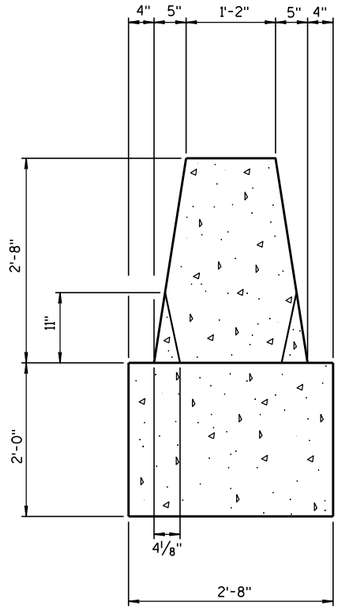


SECTION A-A

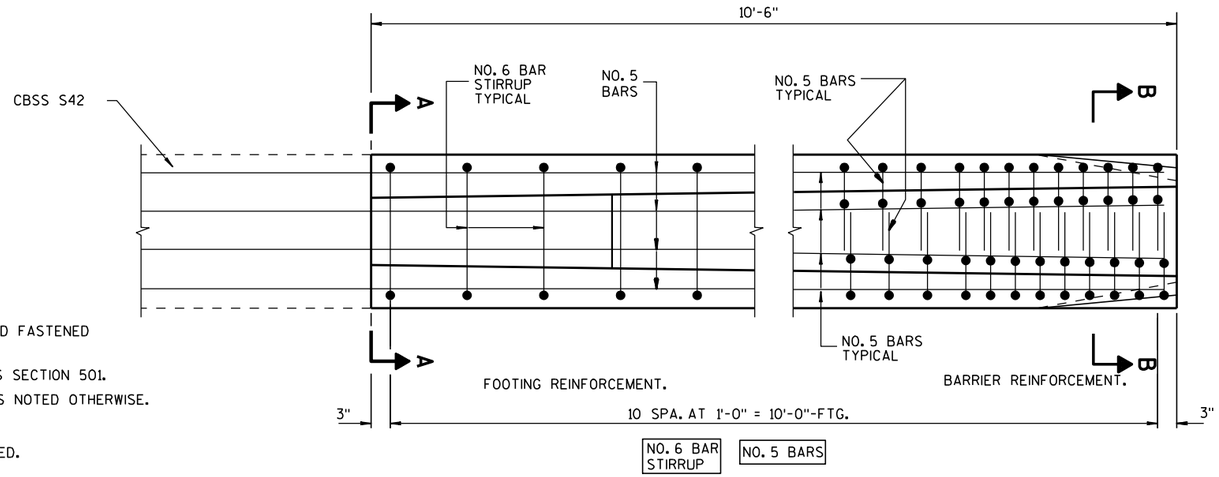


SEE SECTIONS ① THRU ⑯

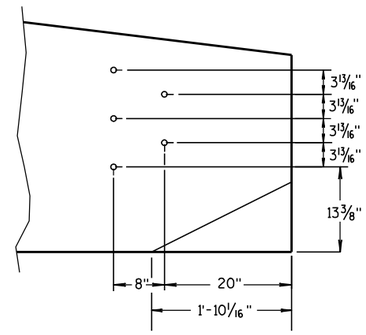
ELEVATION VIEW



SECTION B-B



PLAN VIEW



PVC PIPE LOCATIONS

GENERAL NOTES

CONSTRUCT PER STANDARD SPECIFICATION 603.

SPLICES OF LONGITUDINAL BARS TO BE 2'LONG AND FIRMLY TIED AND FASTENED TOGETHER UNLESS NOTED OTHERWISE.

4000 PSI CONCRETE AIR ENTRAINMENT PER STANDARD SPECIFICATIONS SECTION 501.

USE ¾" BEVEL OR 1" RADIUS ON ALL EXPOSED SHARP EDGES UNLESS NOTED OTHERWISE.

THRIE BEAM ANCHOR INCIDENTAL TO CONCRETE BARRIER ITEM.

INSTALL SCHEDULE 40 PVC PIPE 1" DIAMETER AT LOCATIONS INDICATED.

EXTEND PVC PIPE COMPLETELY THROUGH BARRIER.

CUT ENDS OF PVC PIPE FLUSH WITH FINISHED FACE of BARRIER.

THE NUMBER IN BAR DESIGNATION REPRESENTS THE BARS LOCATION.

2" CLEAR COVER TYPICAL.

CONCRETE BARRIER SINGLE SLOPE 42" THRIE BEAM ANCHOR

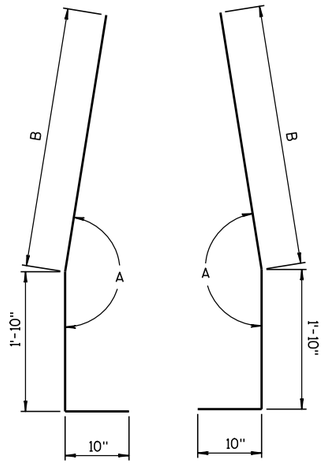
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

S.D.D. 14 B 33-1g

BAR CHART
SECTIONS V1 - V11

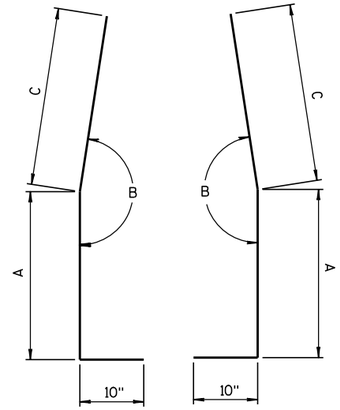
BAR	A	B
V1	170°-50'	3'-4½"
V2	171°-20'	3'-4½"
V3	171°-30'	3'-2½"
V4	171°-25'	3'-1½"
V5	171°-15'	3'-0"
V6	171°-15'	2'-11"
V7	171°-20'	2'-10½"
V8	171°-10'	2'-9½"
V9	171°-10'	2'-9"
V10	171°-05'	2'-8½"
V11	171°-10'	2'-8"



BAR BENDING DETAIL
FOR BARS V1 - V11

BAR CHART
SECTIONS V12 - V13

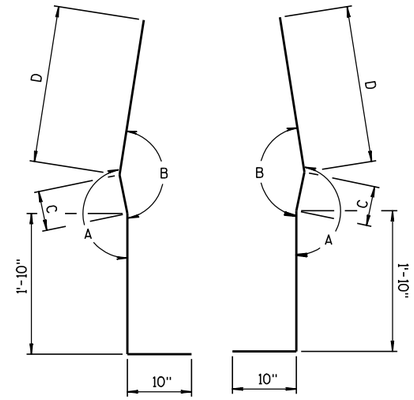
BAR	A	B	C
V12	2'-2"	171°-15'	2'-3½"
V13	2'-7"	171°-05'	1'-10"



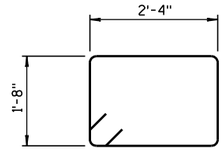
BAR BENDING DETAIL
FOR BARS V12 - V13

BAR CHART
SECTIONS V14 - V16

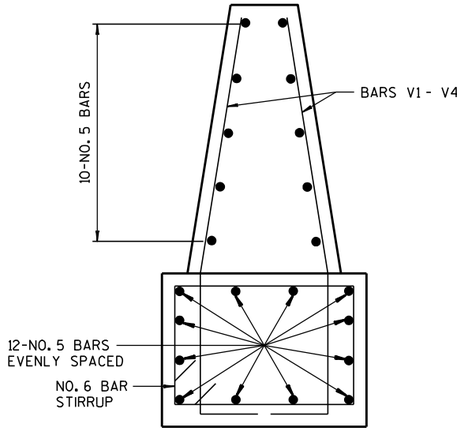
BAR	A	B	C	D
V14	168°-15'	159°-15'	6"	2'-0"
V15	169°-20'	161°-00'	8"	1'-10"
V16	168°-40'	160°-10'	10"	1'-8"



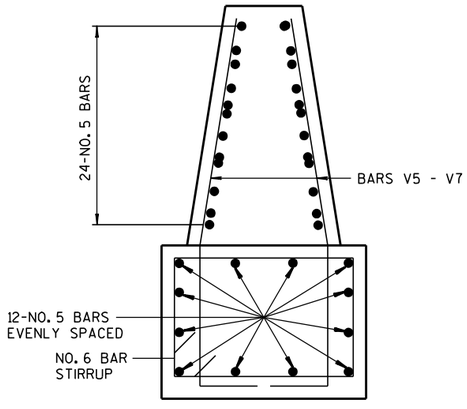
BAR BENDING DETAIL
FOR BARS V14 - V16



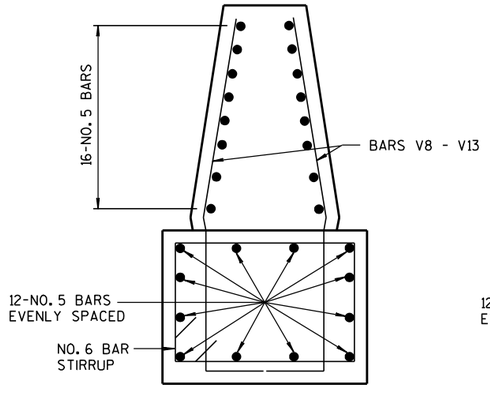
STIRRUP BAR
BENDING DETAIL



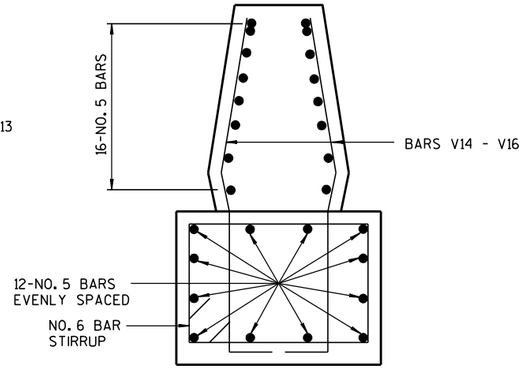
BAR DETAIL
SECTIONS V1 - V4



BAR DETAIL
SECTIONS V5 - V7



BAR DETAIL
SECTIONS V8 - V13



BAR DETAIL
SECTIONS V14 - V16

CONCRETE BARRIER
SINGLE SLOPE 42"
THRIE BEAM ANCHOR

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

6-3-2010
DATE

/S/ Jerry H. Z---
ROADWAY STANDARDS ENGINEER

718

FHWA

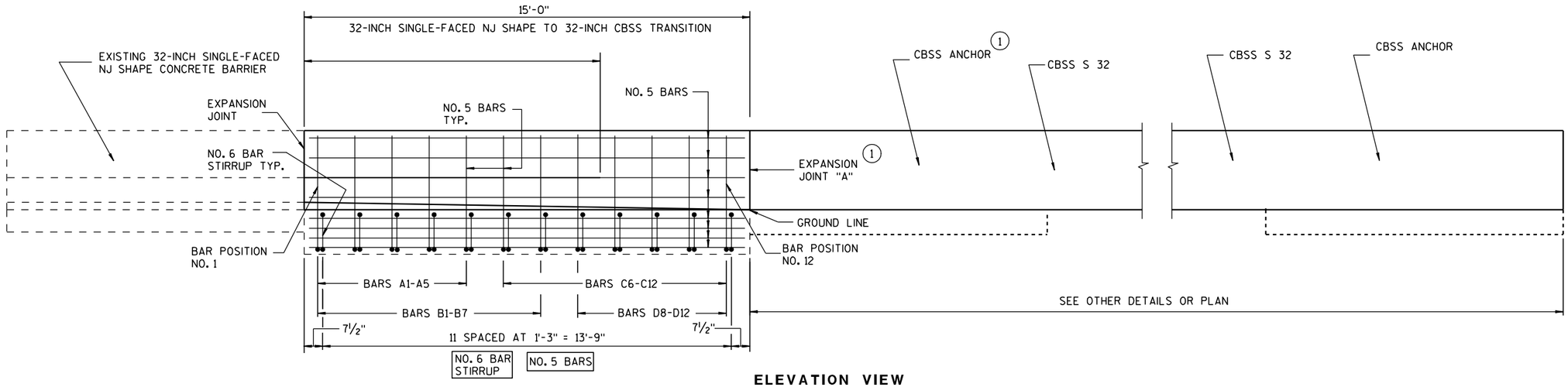
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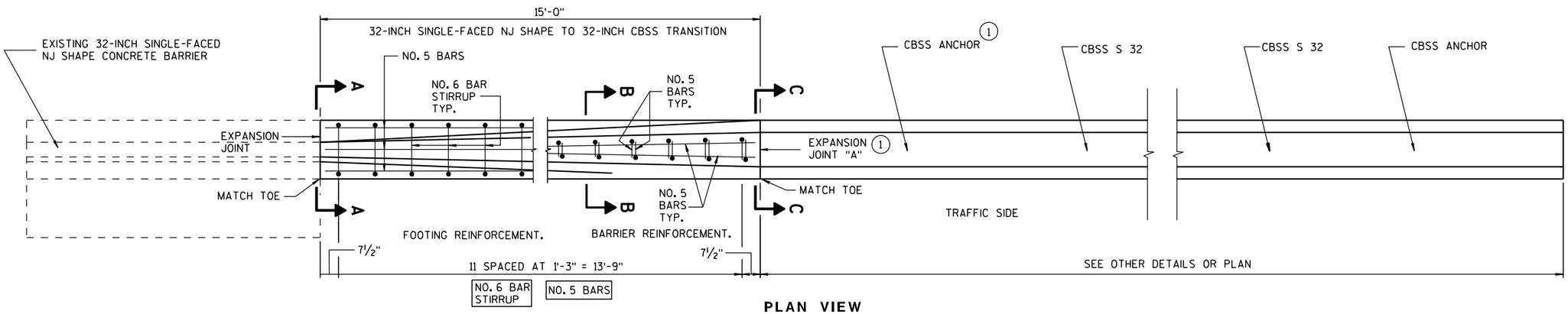
S.D.D. 14 B 33-1h

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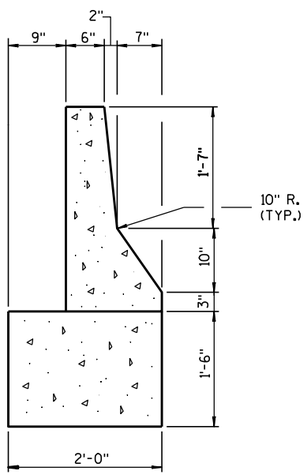
S.D.D. 14 B 33-1h



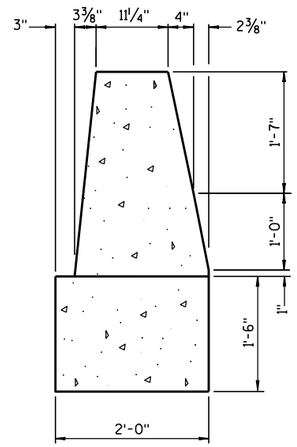
ELEVATION VIEW



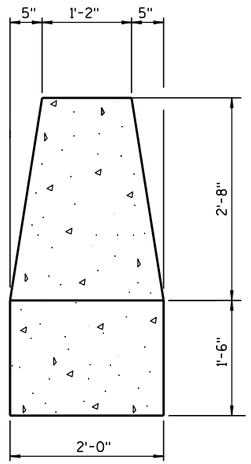
PLAN VIEW



SECTION A-A



SECTION B-B



SECTION C-C

GENERAL NOTES

CONSTRUCT PER STANDARD SPECIFICATION 603.

SPLICES OF LONGITUDINAL BARS TO BE 2'LONG AND FIRMLY TIED AND FASTENED TOGETHER UNLESS NOTED OTHERWISE.

4000 PSI CONCRETE AIR ENTRAINMENT PER STANDARD SPECIFICATIONS 501.

USE ¾" BEVEL OR 1" RADIUS ON ALL EXPOSED SHARP EDGES UNLESS NOTED OTHERWISE.

THE NUMBER IN BAR DESIGNATION REPRESENTS THE BARS LOCATION.

2" CLEAR COVER TYPICAL.

(1) EXPANSION JOINT "A" MAY BE REPLACED WITH A COLD -JOINT PROVIDED THAT 3 FEET OF LAP OF LONGITUDINAL STEEL IS PROVIDED. IF COLD-JOINT IS USED ANCHOR NOT REQUIRED.

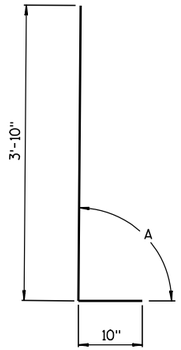
32-INCH SINGLE-FACED NJ SHAPE CONCRETE BARRIER TO 32-INCH SINGLE SLOPE CONCRETE BARRIER TRANSITION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6
S.D.D. 14 B 35-1a

"A" BAR CHART
BAR POSITIONS NO.1 - NO.5

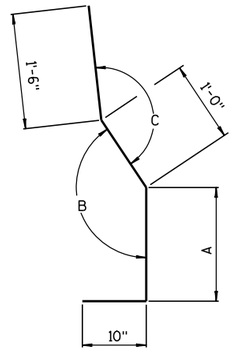
BAR	A
A1	90°
A2	89°-15'
A3	88°-50'
A4	88°-15'
A5	87°-50'



"A" BAR
BENDING DETAIL

"B" BAR CHART
BAR POSITIONS NO.1 - NO. 7

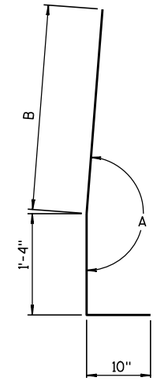
BAR	A	B	C
B1	1'-6"	146°-20'	152°-40'
B2	1'-6"	149°-25'	156°-35'
B3	1'-6"	152°-35'	160°-30'
B4	1'-5½"	155°-20'	163°-55'
B5	1'-5½"	158°-30'	167°-50'
B6	1'-5"	161°-45'	171°-50'
B7	1'-5"	164°-20'	175°-10'



"B" BAR
BENDING DETAIL

"C" BAR CHART
BAR POSITIONS NO. 6 - NO. 12

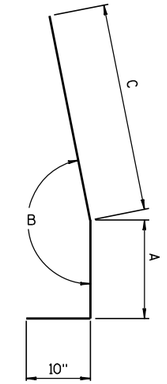
BAR	A	B
C6	176°	2'-6"
C7	175°-05'	2'-6"
C8	174°-25'	2'-6"
C9	173°-45'	2'-6¼"
C10	172°-50'	2'-6¼"
C11	172°-10'	2'-6½"
C12	171°-30'	2'-6½"



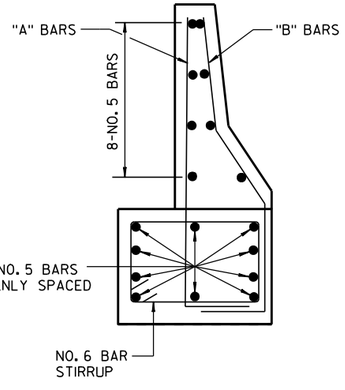
"C" BAR
BENDING DETAIL

"D" BAR CHART
BAR POSITIONS NO. 8 - NO. 12

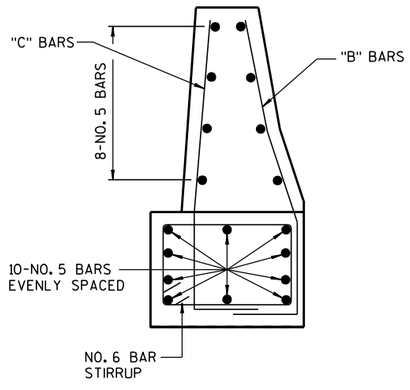
BAR	A	B	C
D8	1'-5"	168°-05'	2'-6"
D9	1'-5"	168°-50'	2'-6"
D10	1'-5"	169°-25'	2'-6"
D11	1'-4"	170°-10'	2'-6½"
D12	1'-4"	170°-50'	2'-6½"



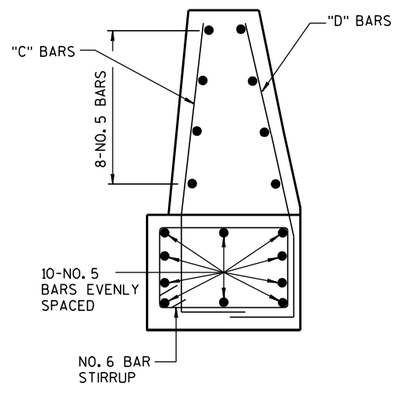
"D" BAR
BENDING DETAIL



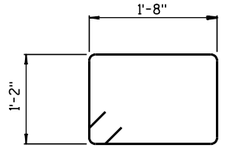
BAR DETAIL
BAR POSITIONS NO. 1 - NO. 5



BAR DETAIL
BAR POSITION NO. 6 - NO. 8



BAR DETAIL
BAR POSITIONS NO. 9 - NO. 12



STIRRUP BAR
BENDING DETAIL

32-INCH SINGLE-FACED NJ SHAPE CONCRETE BARRIER TO 32-INCH SINGLE SLOPE CONCRETE BARRIER TRANSITION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

6-3-2010
DATE

/S/ Jerry H. [illegible]
ROADWAY STANDARDS DEVELOPMENT ENGINEER

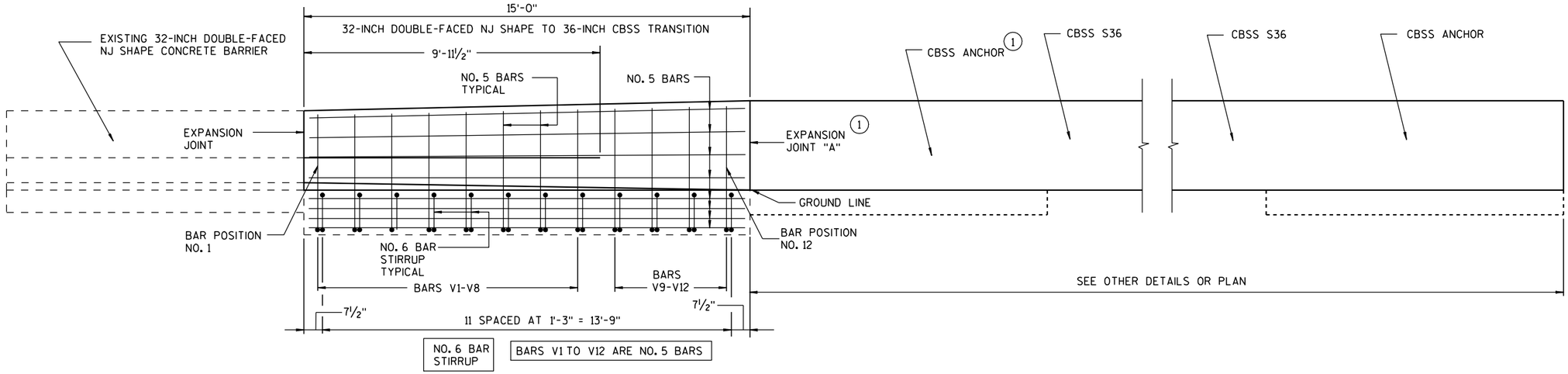
FHWA

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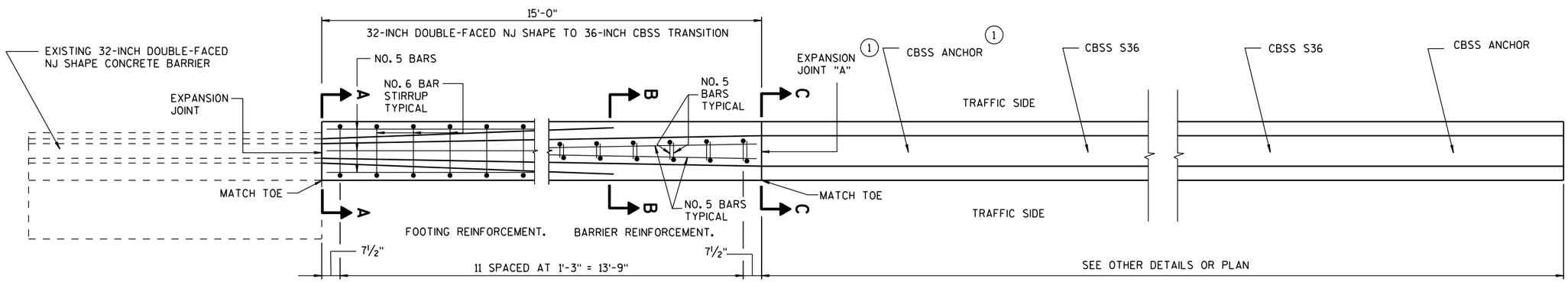
S.D.D. 14 B 35-1b

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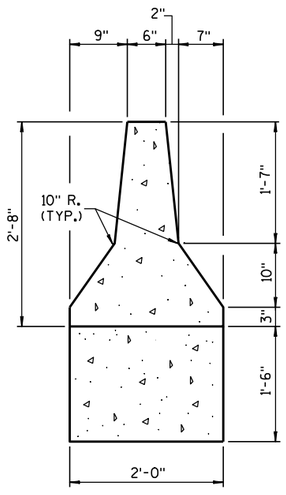
S.D.D. 14 B 35-1b



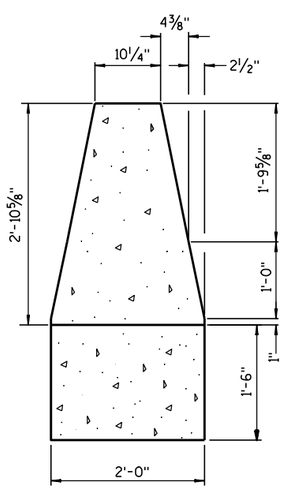
ELEVATION VIEW



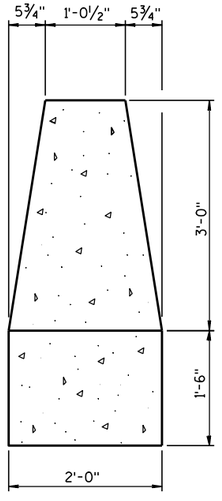
PLAN VIEW



SECTION A-A



SECTION B-B



SECTION C-C

GENERAL NOTES

CONSTRUCT PER STANDARD SPECIFICATION 603.

SPLICES OF LONGITUDINAL BARS TO BE 2' LONG AND FIRMLY TIED AND FASTENED TOGETHER UNLESS NOTED OTHERWISE.

4000 PSI CONCRETE AIR ENTRAINMENT PER STANDARD SPECIFICATIONS 501.

USE ¾" BEVEL OR 1" RADIUS ON ALL EXPOSED SHARP EDGES UNLESS NOTED OTHERWISE.

THE NUMBER IN BAR DESIGNATION REPRESENTS THE BARS LOCATION.

2" CLEAR COVER TYPICAL.

(1) EXPANSION JOINT "A" MAY BE REPLACED WITH A COLD-JOINT PROVIDED THAT 3 FEET OF LAP OF LONGITUDINAL STEEL IS PROVIDED. IF COLD-JOINT IS USED ANCHOR NOT REQUIRED.

32-INCH DOUBLE-FACED NJ SHAPE CONCRETE BARRIER TO 36-INCH SINGLE SLOPE CONCRETE BARRIER TRANSITION

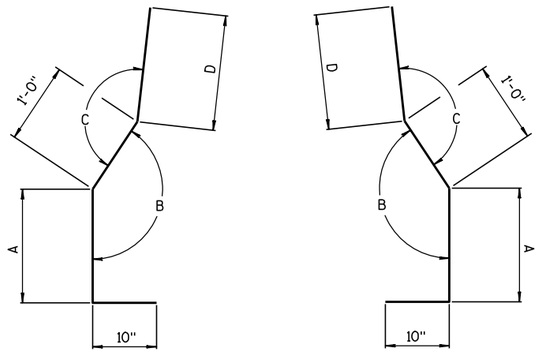
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

S.D.D. 14 B 37-1c

BAR CHART
BARS V1 - V8

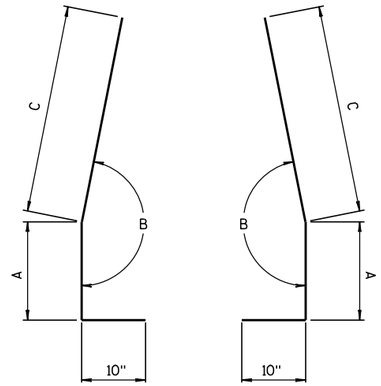
BAR	A	B	C	D
V1	1'-6"	146°-20'	152°-40'	1'-6"
V2	1'-6"	149°-25'	156°-45'	1'-6"
V3	1'-6"	152°-40'	160°-55'	1'-6½"
V4	1'-6"	155°-40'	164°-30'	1'-7"
V5	1'-5½"	158°-30'	167°-55'	1'-7"
V6	1'-5"	161°-45'	172°	1'-7½
V7	1'-5"	164°-25'	175°-05'	1'-8"
V8	1'-5"	167°-30'	179°	1'-8"



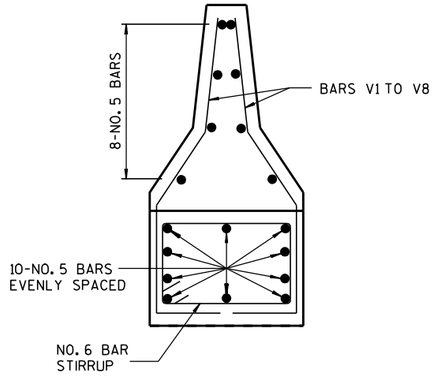
BAR BENDING DETAIL
FOR BARS V1 - V8

BAR CHART
BARS V9 - V12

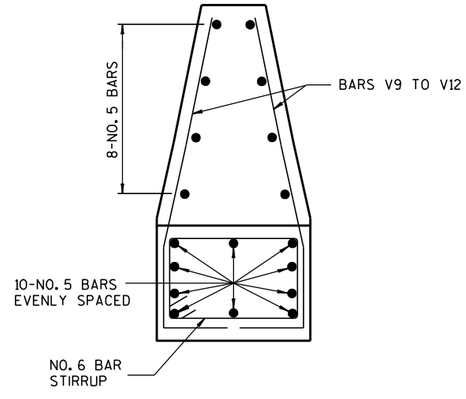
BAR	A	B	C
V9	1'-5"	167°-45'	2'-8½"
V10	1'-4½"	169°-30'	2'-9"
V11	1'-4"	170°-15'	2'-9½"
V12	1'-4"	170°-40'	2'-10"



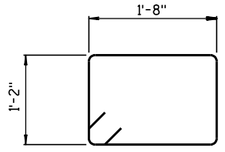
BAR BENDING DETAIL
FOR BARS V9 - V12



BAR DETAIL
BARS V1 - V8



BAR DETAIL
BARS V9 - V12



STIRRUP BAR
BENDING DETAIL

32-INCH DOUBLE-FACED NJ SHAPE CONCRETE BARRIER TO 36-INCH SINGLE SLOPE CONCRETE BARRIER TRANSITION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

6-3-2010
DATE

/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER

722

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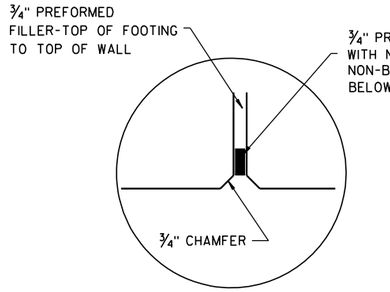
FHWA

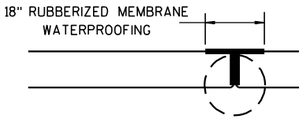
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S.D.D. 14 B 37-1d

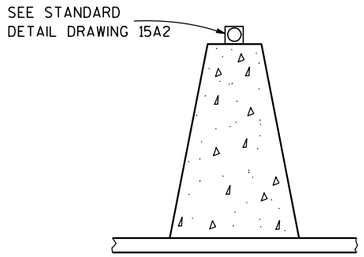
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S.D.D. 14 B 37-1d





VERTICAL EXPANSION JOINT



DELINEATION

SPACING FOR DELINEATORS ON HORIZONTAL CURVES

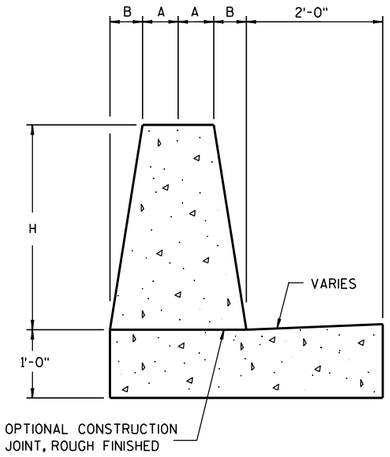
RADIUS OF CURVE	APPROXIMATE SPACING ON CURVE
50 FEET	20 FEET
115 FEET	25 FEET
180 FEET	35 FEET
250 FEET	40 FEET
300 FEET	50 FEET
400 FEET	55 FEET
500 FEET	65 FEET
600 FEET	70 FEET
700 FEET	75 FEET
800 FEET	80 FEET
900 FEET	85 FEET
1000 FEET	90 FEET

GENERAL NOTES

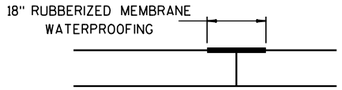
PROVIDE EXPANSION JOINTS WHERE EXISTING EXPANSION JOINTS OR AT THE END OF EACH POUR.

NO HORIZONTAL STEEL CROSSES EXPANSION JOINTS.

CONSTRUCT PER STANDARD SPECIFICATION 603.
SPLICES OF LONGITUDINAL BARS TO BE 2' LONG AND FIRMLY TIED AND FASETENED TOGETHER UNLESS NOTED OTHERWISES.
4000 PSI CONCRETE AIR ENTRAINMENT PER STANDARD SPECIFICATIONS 501.
USE ¾" BEVEL OR 1" RADIUS ON ALL EXPOSED SHARP EDGES UNLESS NOTED OTHERWISE.
2" CLEAR COVER (TYP.)

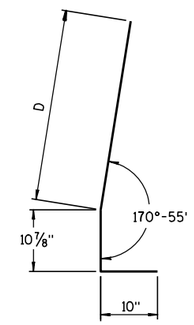


ROADSIDE RETAINING WALL

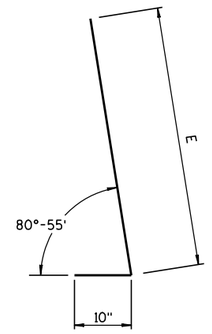


CONSTRUCTION JOINT

BARRIER HEIGHT H INCHES	A INCHES	B INCHES	NUMBER OF NO. 5 BARS EACH
36	6¼	5¾	8
42	5¼	6¾	10
56	3	9	11



V1 BAR BENDING DETAIL



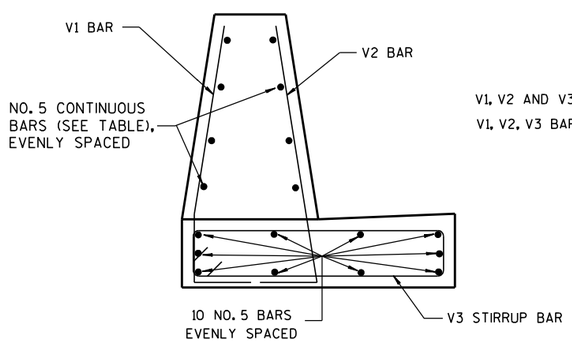
V2 BAR BENDING DETAIL

REFLECTOR SPACING

	LENGTH OF BARRIER	REFLECTOR SPACING	NO. SURFACES REFLECTORIZED	MIN. NO. REFLECTORS
ONE WAY TRAFFIC	< 200' > 200'	50' C-C 100' C-C	1 1	3
TWO WAY TRAFFIC	< 200' > 200'	25' C-C 50' C-C	1 1	6
TWO WAY TRAFFIC	< 200' > 200'	50' C-C 100' C-C	2 2	3

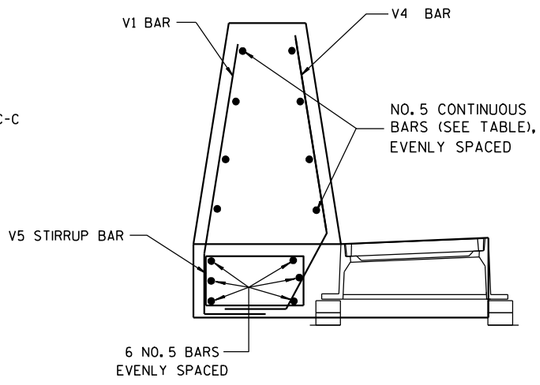
BAR CHART ROADSIDE RETAINING WALL

BARRIER HEIGHT	V1 BAR D	V2 BAR E	V4 BAR F
36"	2'-9⅝"	3'-9¾"	2'-8"
42"	3'-3⅝"	4'-2⅝"	3'-2⅛"
56"	4'-7½"	5'-6½"	4'-4⅜"

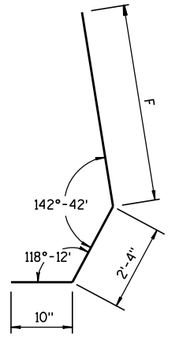


V1, V2 AND V3 ARE SPACED 18" C-C
V1, V2, V3 BARS ARE NO. 5 BARS

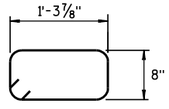
ROADSIDE RETAINING WALL NORMAL BAR PLACEMENT



ROADSIDE RETAINING WALL BAR PLACEMENT NEAR INLET



V4 BAR BENDING DETAIL



V5 STIRRUP BAR BENDING DETAIL



V3 STIRRUP BAR BENDING DETAIL

SINGLE SLOPE ROADSIDE RETAINING WALL

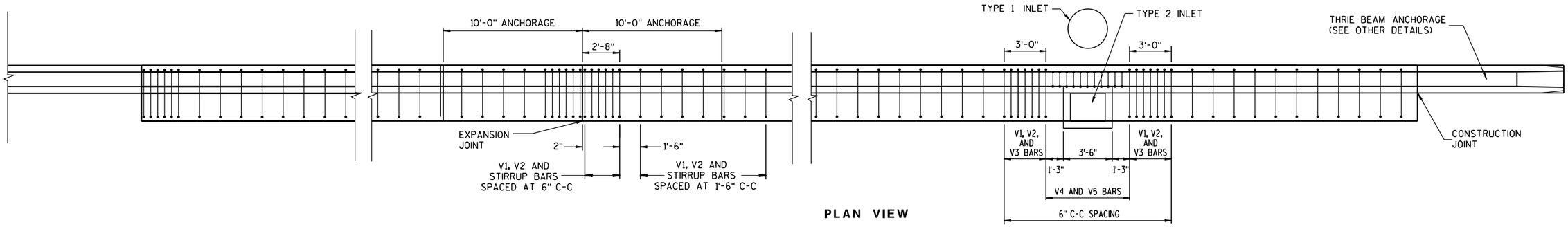
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

S.D.D. 14 B 41-1a

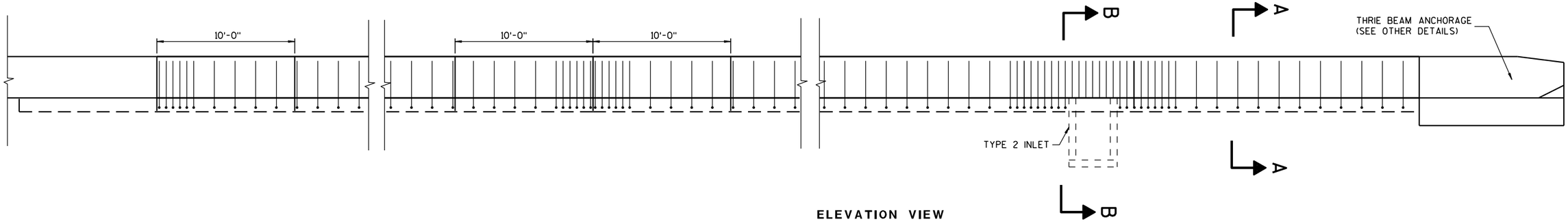
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S.D.D. 14 B 41-1a



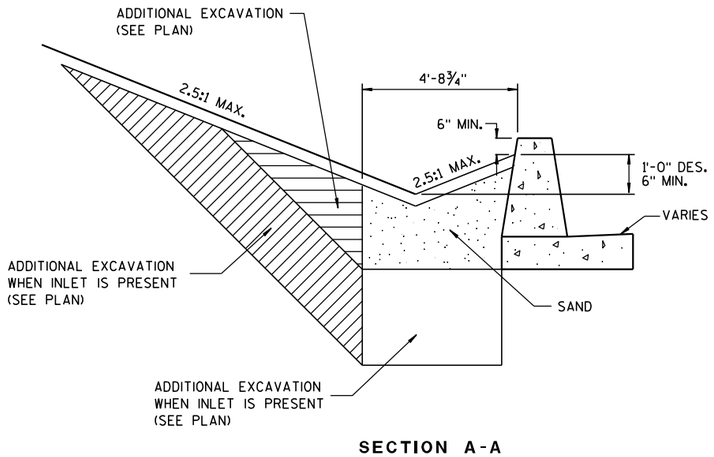
PLAN VIEW

NOTE: HORIZONTAL BARS ARE NOT SHOWN
SEE OTHER DETAILS FOR HORIZONTAL BARS.

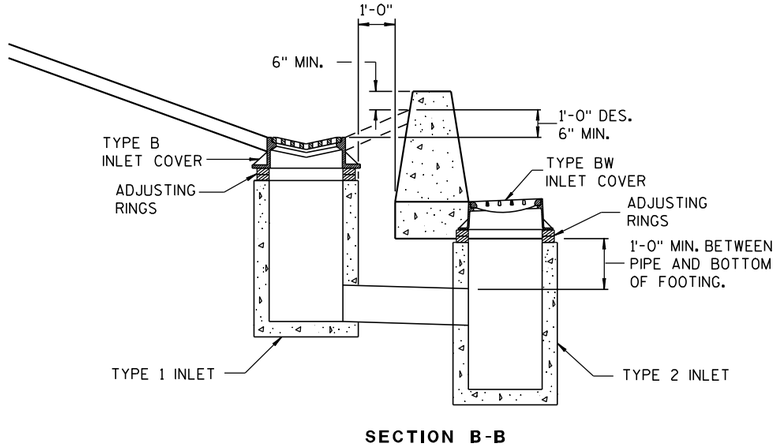


ELEVATION VIEW

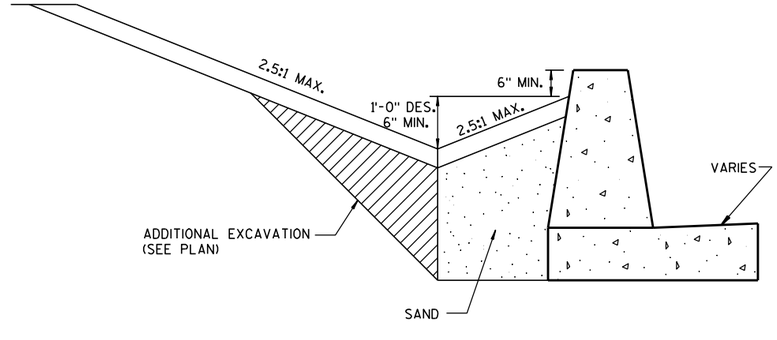
NOTE: HORIZONTAL BARS ARE NOT SHOWN
SEE OTHER DETAILS FOR HORIZONTAL BARS.



SECTION A-A



SECTION B-B



MINIMUM DESIGN OF EARTH WORK

MINIMUM DESIGN OF EARTH WORK FOR INLET

SINGLE SLOPE ROADSIDE RETAINING WALL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

6/13/2011
DATE

/S/ Jerry H. Zaaa
ROADWAY STANDARDS ENGINEER

724

ENT

FHWA

6

S.D.D. 14 B 41-1b

6

S.D.D. 14 B 41-1b

GENERAL NOTES

1. WOOD OR STEEL POSTS (w6X9 OR w6X8.5) MAY BE USED. DO NOT INTERMIX WOOD AND STEEL POSTS. INSTALL STEEL POSTS WITH HOLES ON APPROACHING TRAFFIC SIDE.

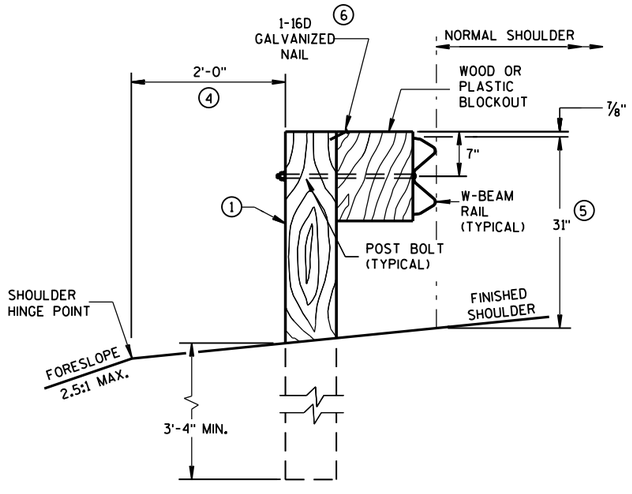
2. USE WOOD OR APPROVED PLASTIC BLOCKOUTS. WOOD BLOCKOUTS MAY BE CONSTRUCTED OUT OF TWO OR MORE WOOD BLOCKOUTS. SEE ALTERNATE WOOD BLOCKOUT DETAIL. DIMENSIONS OF APPROVED PLASTIC BLOCKOUTS MAY VARY.

3. IF ROCK IS ENCOUNTERED DURING EXCAVATION, PROVIDE A HOLE 12 INCHES IN DIAMETER EXTENDING 20 INCHES DEEP INTO THE ROCK. PLACE APPROXIMATELY 2½ INCHES OF GRANULAR MATERIAL IN THE BOTTOM OF THE HOLE. CUT THE POSTS THE TO LENGTH AMD INSTALL. BACKFILL WITH EXCAVATED MATERIAL AND COMPACT. BACKFILL IS TO BE FREE OF LARGE ROCKS.

4. WHEN THE DISTANCE FROM BACK OF POST TO SHOULDER HINGE POINT IS LESS THAN 2 FEET INSTALL LONGER POST AT HALF POST SPACING (K).

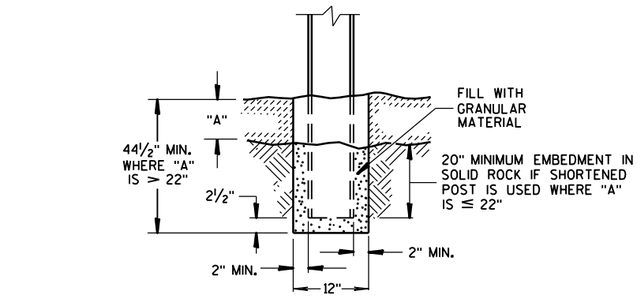
5. FOR NEW MGS INSTALLATION TOP OF W-BEAM RAIL TOLERANCE IS ± 1". FOR EXISTING MGS INSTALLATION TOP OF W-BEAM IS BETWEEN 27¾" TO 32".

6. WHEN USING STEEL POST AND WOOD BLOCKOUTS INSTALL FOUR 16D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.



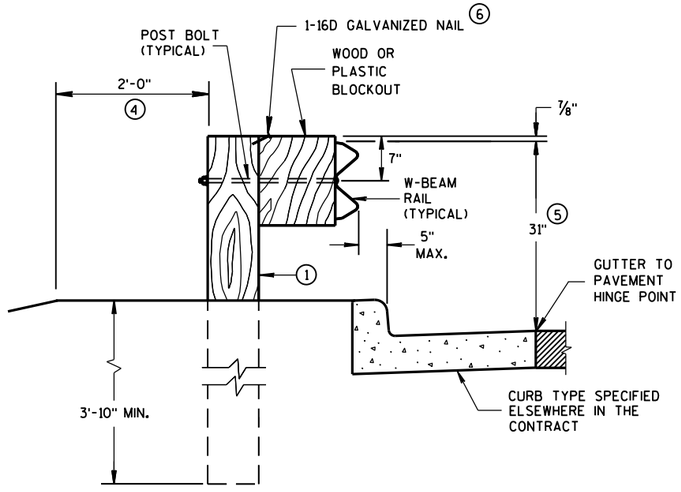
END VIEW

LOCATED ALONG A ROADWAY SHOULDER
STANDARD INSTALLATION



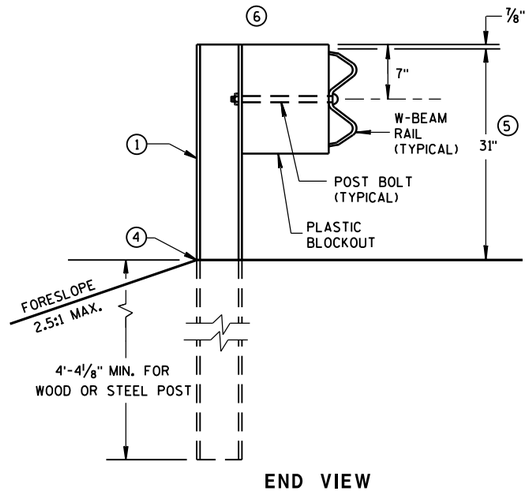
END VIEW

SETTING STEEL OR WOOD POST IN ROCK 3



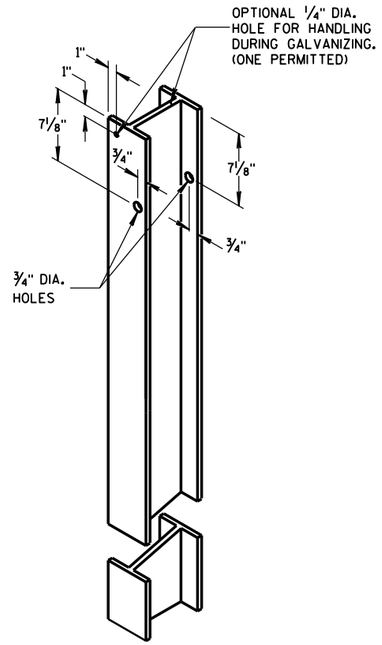
END VIEW

LOCATED ALONG A CURBED ROADWAY

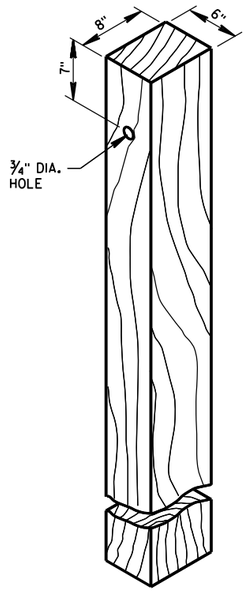


END VIEW

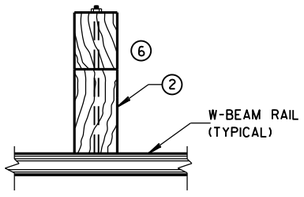
MGS LONGER POST AT HALFPOST SPACING W BEAM (K)



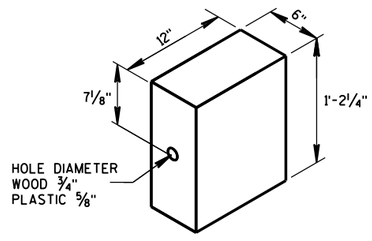
STEEL POST &
HOLE PUNCHING DETAIL
(w6X9) 1



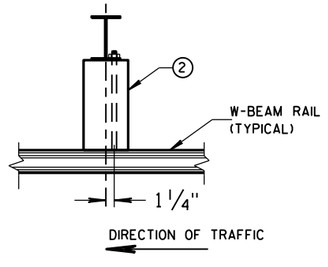
WOOD POST
(6" X 8") NOMINAL 1



PLAN VIEW
WOOD POST,
BLOCKOUT & BEAM



WOOD OR
PLASTIC BLOCKOUT 2

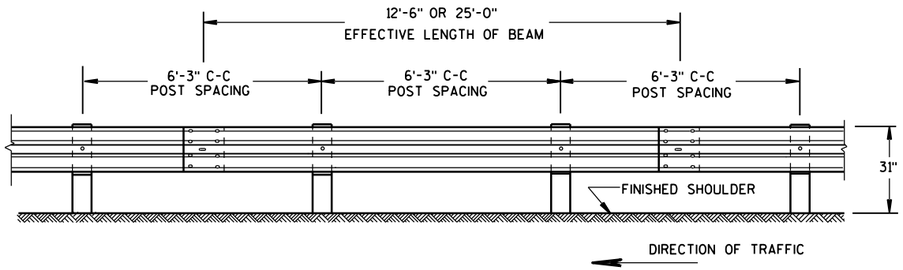


PLAN VIEW
STEEL POST,
PLASTIC BLOCKOUT & BEAM

MIDWEST GUARDRAIL SYSTEM
(MGS) GUARDRAIL

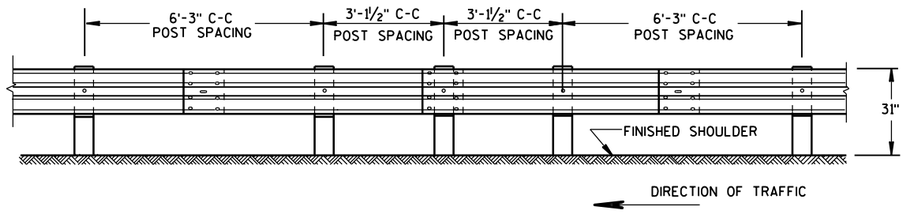
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6
S.D.D. 14 B 42-3a



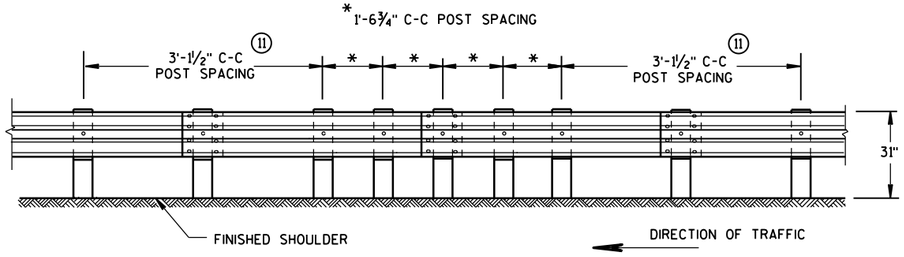
FRONT VIEW

POST SPACING STANDARD INSTALLATION



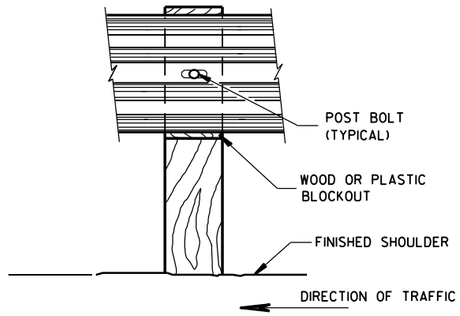
FRONT VIEW

HALF POST SPACING (HS) AND HALF POST SPACING WITH LONGER POSTS (K)

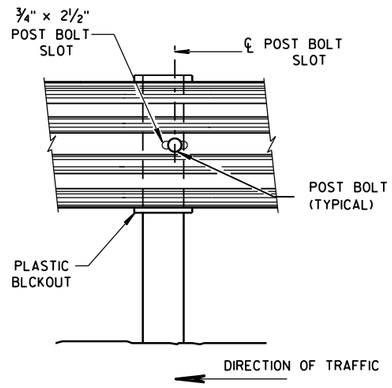


FRONT VIEW

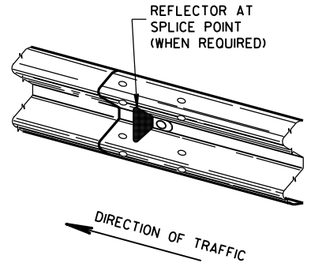
QUARTER POST SPACING (QS)

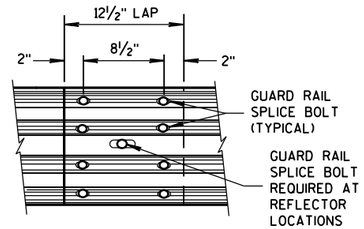


FRONT VIEW AT WOOD POST

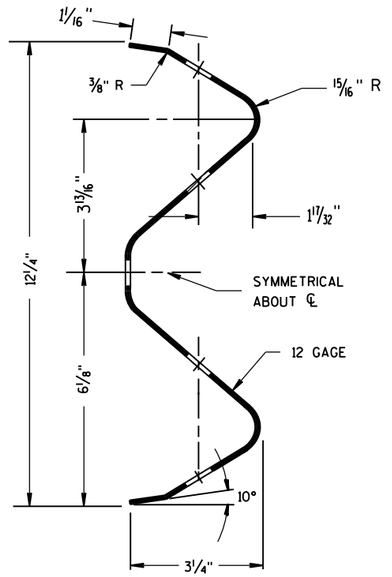


FRONT VIEW AT STEEL POST

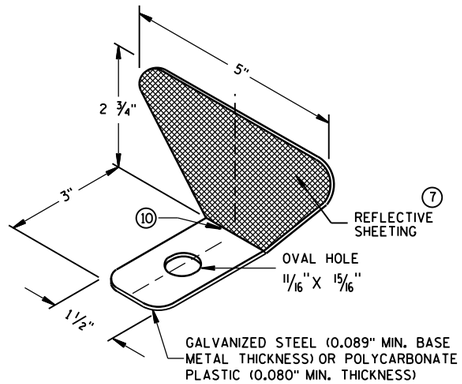




FRONT VIEW
MID-SPAN BEAM SPLICE



SECTION THRU W-BEAM RAIL



ONE SIDED REFLECTOR DETAIL AND TYPICAL INSTALLATION ⑦

GENERAL NOTES

⑦ PROVIDE SILVER REFLECTIVE SHEETING ON ALL REFLECTORS EXCEPT THOSE LOCATED ALONG THE LEFT EDGE OF ONE-WAY ROADWAYS, WHICH SHALL BE PROVIDED WITH YELLOW REFLECTIVE SHEETING. SHEETING IS TYPE H. SEE STANDARD SPECIFICATION 637.

⑧ DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL. RAIL SPLICE LOCATIONS ARE THE ONLY ACCEPTABLE LOCATIONS FOR REFLECTORS.

⑨ REVERSE EVERY OTHER REFLECTOR FOR 2-WAY VISIBILITY. THE CONTRACTOR MAY FURNISH TWO-SIDED REFLECTORS IN LIEU OF ONE-SIDED REFLECTORS.

⑩ PROVIDE AN ANGLE OF BEND OF 90° ± 1° FOR TWO-SIDED REFLECTORS.

⑪ 25 FEET OF HALF POST SPACING IS REQUIRED ON APPROACH AND DEPARTURE ENDS OF QUARTER POST SPACING.

POST BOLTS ARE A ⅝" DIAMETER ASTM A307 GUARDRAIL BOLT. A POST BOLT REQUIRES ⅝" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT AND ⅝" DIAMETER F844 FLAT WASHER. POST BOLTS MAY BE LONGER IF MULTIPLE BLOCKOUTS ARE BEING USED.

GUARD RAIL SPLICE BOLTS ARE A ⅝" DIAMETER ASTM A307 GUARDRAIL HEAD BOLT. A GUARDRAIL SPLICE BOLT REQUIRES ⅝" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT.

REFLECTOR SPACING ⑧

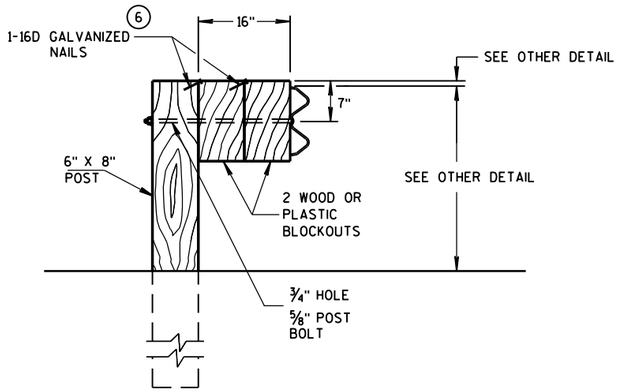
	BEAM GUARD LENGTH	REFLECTOR SPACING	NO. SURFACES REFLECTORIZED	MIN. NO. REFLECTORS
ONE WAY TRAFFIC	< 200'	50' C-C	1	3
	> 200'	100' C-C	1	
TWO WAY TRAFFIC	< 200'	25' C-C	1 ⑨	6
	> 200'	50' C-C	1	
TWO WAY TRAFFIC	< 200'	50' C-C	2	3
	> 200'	100' C-C	2 ⑩	

MIDWEST GUARDRAIL SYSTEM
(MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPO

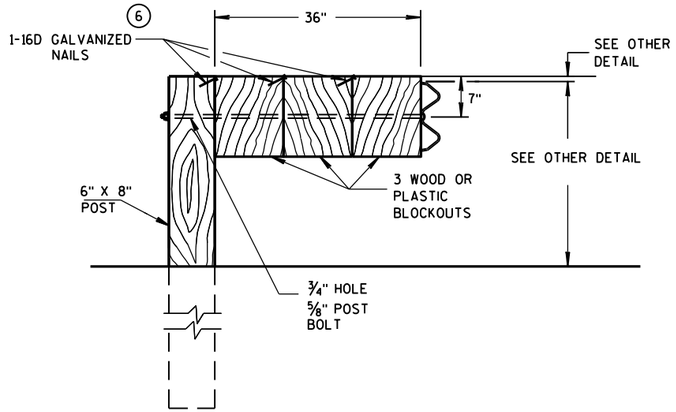
6

S.D.D. 14 B 42-3b



DETAIL FOR 16" BLOCKOUT DEPTH

IT IS ACCEPTABLE TO USE BLOCKOUTS UP TO 16" DEEP TO INCREASE THE POST OFFSET TO AVOID UNDERGROUND OBSTACLES. THERE IS NO LIMIT TO THE NUMBER OF POSTS THAT CAN HAVE ADDITIONAL BLOCKOUTS UP TO 16" DEEP.

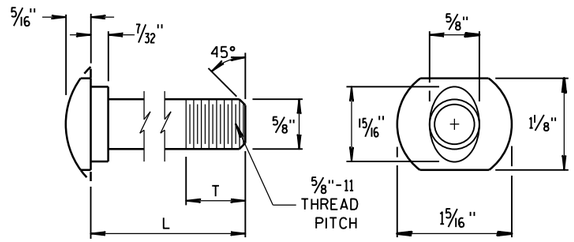


DETAIL FOR 36" BLOCKOUT DEPTH

NOTES: UNDER SPECIAL CIRCUMSTANCES, SUCH AS AVOIDING OBSTACLES THAT ARE NOT RELOCATED, IT IS ACCEPTABLE TO INSTALL ADDITIONAL BLOCKOUTS TO OBTAIN UP TO 36" DEPTH FOR ONE OR TWO POSTS IN A SECTION OF GUARDRAIL.

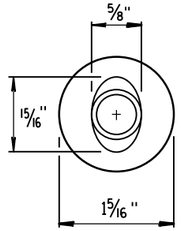
DO NOT USE 16" OR 36" BLOCKOUTS IF IT CAUSES THE POST TO BE DRIVEN BEYOND SHOULDER HINGE POINT OR CAUSES A FIXED OBJECT TO BE WITHIN THE DEFLECTION DISTANCE OF THE BARRIER.

NOTE: 1. ALL FILLETS SHALL HAVE A MINIMUM RADIUS OF 1/16".
2. IF THE BOLT EXTENDS MORE THAN 1/4" FROM THE NUT THE BOLT SHOULD BE TRIMMED BACK.

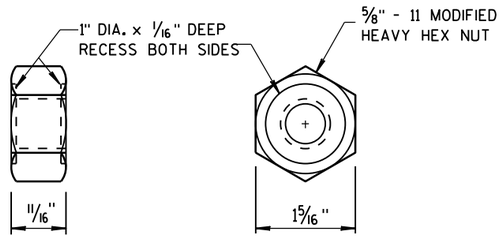


POST BOLT TABLE

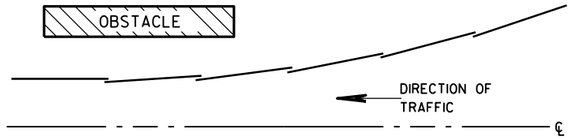
L	T (MIN.)
1¼"	1⅛"
2"	1¾"
10"	4"
14"	4 1/16"
18"	4"
21"	4 1/16"
25"	4"



ALTERNATE BOLT HEAD

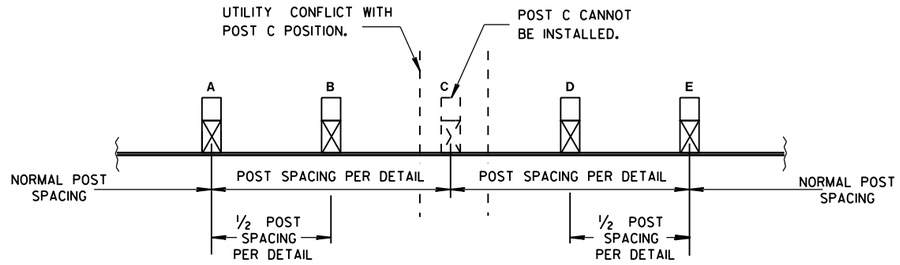


POST BOLT AND RECESS NUT

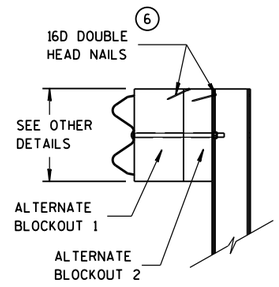


PLAN VIEW

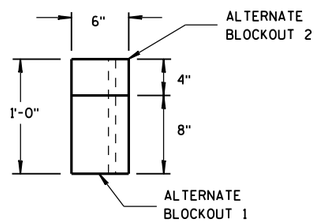
BEAM LAPPING DETAIL



POST DRIVING FOR CONTINUOUS UNDERGROUND OBSTRUCTION



SIDE VIEW



TOP VIEW

ALTERNATE WOOD BLOCKOUT DETAIL

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2014
DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER
FHWA

6

S.D.D. 14 B 42-3c

GENERAL NOTES

(A) THE SLOPE IN THE AREA BOUNDED BY THE GRADELINE, THE HINGE POINT LINE (HPL), AND THE CLEAR ZONE LIMITS (CZL) SHALL BE 4:1 OR FLATTER.

(B) AFTER FINAL ASSEMBLY, RECHECK CABLE TO BE SURE IT IS TAUT AND HAS NOT RELAXED.

(C) DIFFERENT MANUFACTURES REQUIRE DIFFERENT PERFORATED W-BEAM RAIL END PANELS. SEE MANUFACTURES INFORMATION.

(D) THE TOP OF THE STEEL TUBE ON POST 1 AND POST 2 SHALL NOT BE MORE THAN 3" ABOVE THE FINISH GROUND ELEVATION.

(F) ATTACH ALUMINUM SHEET TO E.A.T. HEAD USING 4 STAINLESS STEEL SELF-TAPPING SCREWS. ONE SCREW PER CORNER.

(G) ½" DIAMETER X 3" LONG LAG BOLT AND WASHER.

(H) HARDWARE VARIES BETWEEN DIFFERENT MANUFACTURES. SEE MANUFACTURE'S DRAWING FOR INFORMATION.

(I) DIMENSIONS MAY VARY. SEE MANUFACTURE'S INFORMATION.

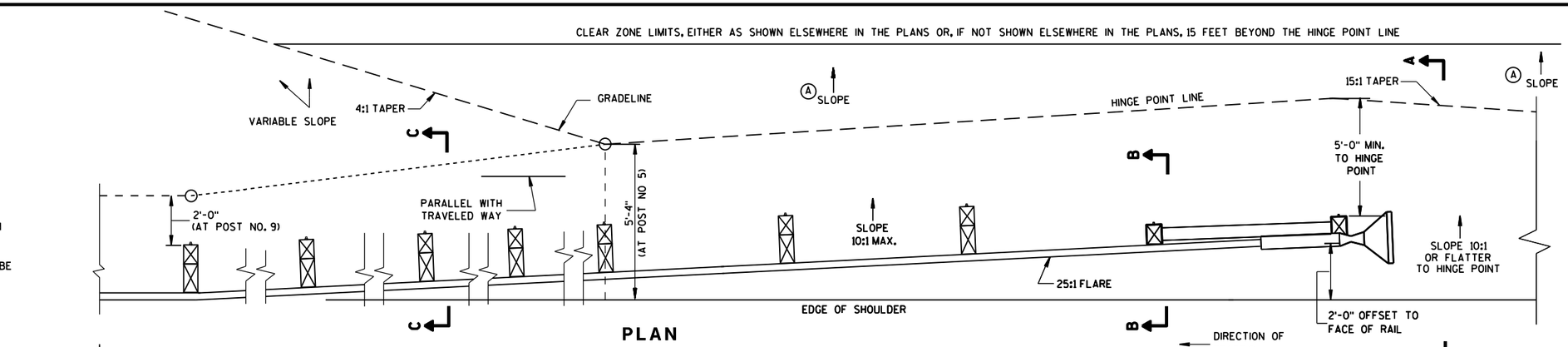
SEE SDD 14B42 FOR MORE INFORMATION.

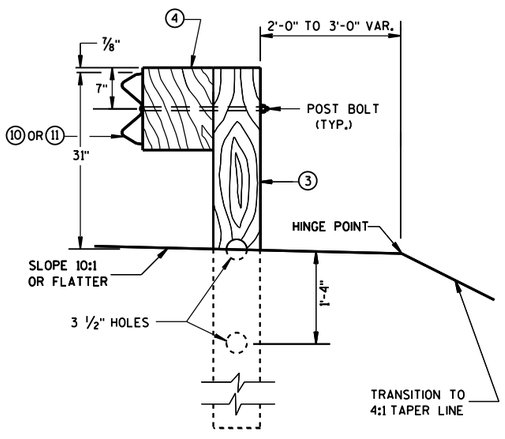
* DO NOT ATTACH BLOCKOUTS TO POSTS 1 AND 2.

DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

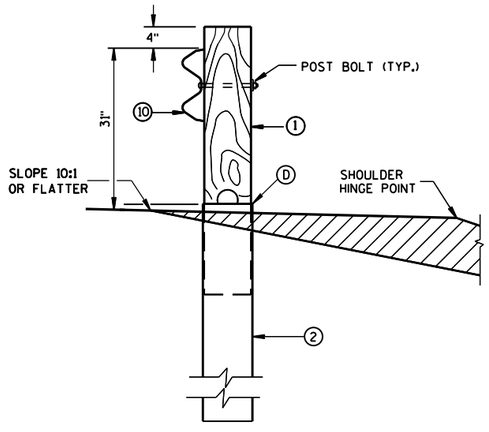
W-BEAM RAIL SPLICES ARE LOCATED AT POST NUMBER 3, AND BETWEEN POST 5 AND 6, BETWEEN POSTS 7 AND 8, AND MIDDLE OF THE SPAN AFTER POST 9.

THE CENTER OF THE UPPER 3½" DIAMETER HOLE ON POST NUMBER 3 THROUGH POST 9 IS TO BE FLUSH WITH THE GROUND LINE UP TO A MAXIMUM OF 2" ABOVE GROUND LINE.

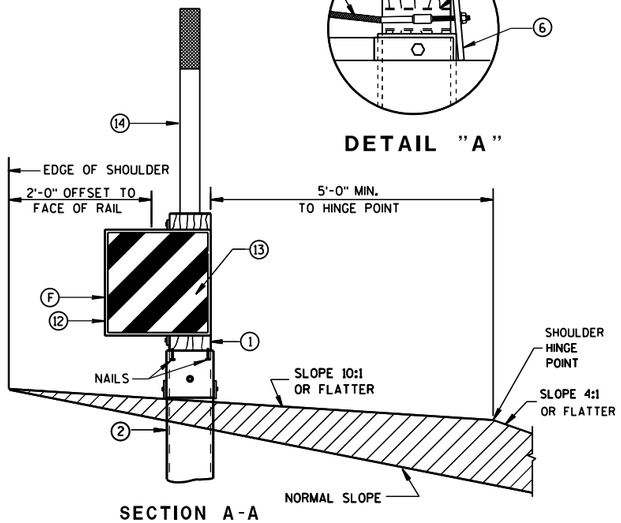




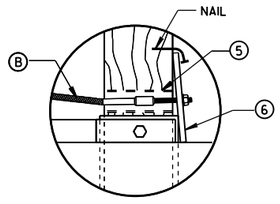
SECTION C-C
TYPICAL AT POST NOS. 3-9



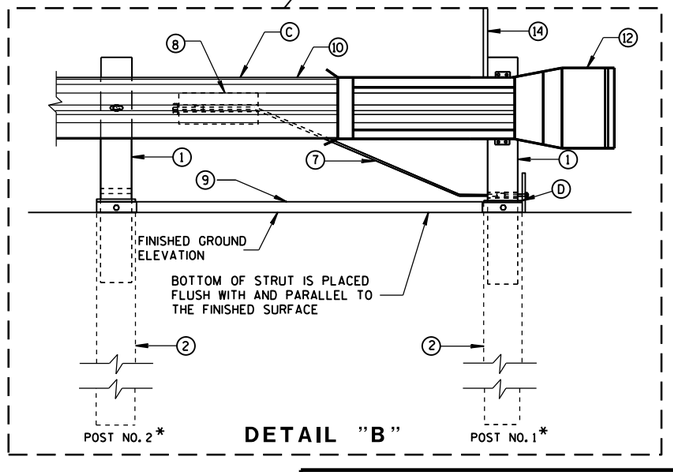
SECTION B-B
TYPICAL AT POST NO. 2*



SECTION A-A
TYPICAL AT POST NO. 1*



DETAIL "A"



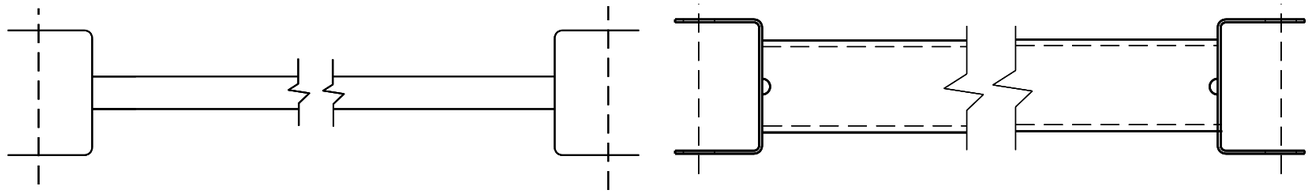
DETAIL "B"

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPO 728

S.D.D. 14 B 44-2a

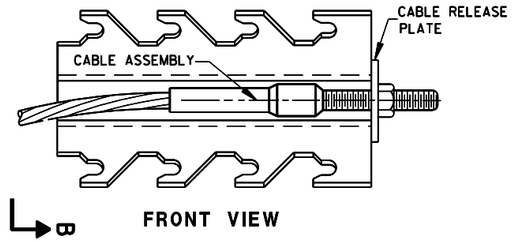
S.D.D. 14 B 44-2a



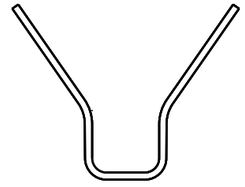
GENERIC GROUND STRUT (9) (H)

BILL OF MATERIALS

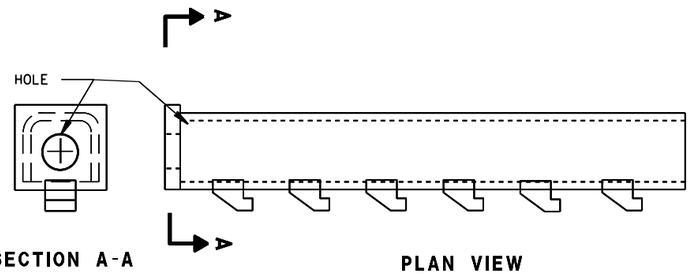
PART NO.	DESCRIPTION MATERIALS PROVIDED BY MGS EAT MANUFACTURER. SEE MANUFACTURER'S DETAILS FOR MORE INFORMATION.
(1)	WOOD BREAKAWAY POST
(2)	6" X 8" X 0.188", 6'-0" LONG FOUNDATION TUBE AT POSTS 1 AND 2
(3)	WOOD CRT
(4)	WOOD BLOCKOUT
(5)	PIPE SLEEVE
(6)	BEARING PLATE
(7)	BCT CABLE ASSEMBLY
(8)	ANCHOR CABLE BOX
(9)	GROUND STRUT
(10)	PERFORATED W-BEAM RAIL END PANEL, 12'-6" LONG.
(11)	STANDARD W-BEAM RAIL. MULTIPLE SECTIONS REQUIRED. SECTIONS VARY IN LENGTH.
(12)	END SECTION EAT
(13)	0.040" ALUMINUM SHEET WITH REFLECTIVE SHEETING TYPE F PER SECTION 637 OF THE STANDARD SPECIFICATIONS
(14)	EAT MARKER POST - YELLOW (SEE APPROVED PRODUCTS LIST)



FRONT VIEW



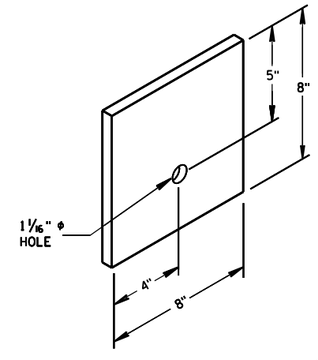
SECTION B-B



SECTION A-A

PLAN VIEW

GENERIC ANCHOR CABLE BOX (8) (H)



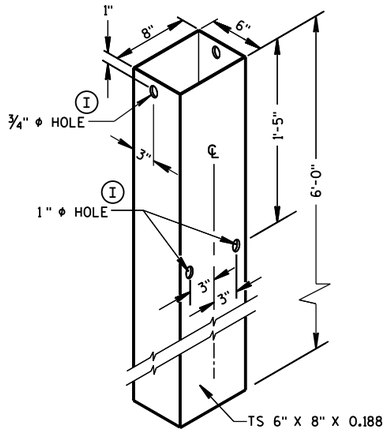
BEARING PLATE (6)

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL
(MGS)

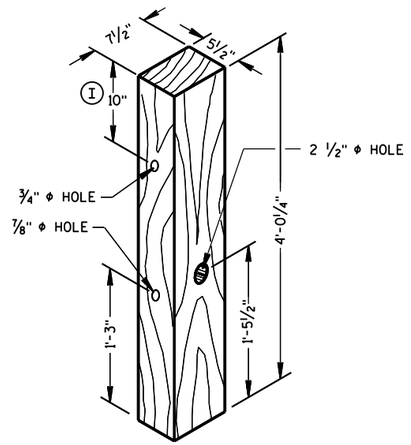
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

S.D.D. 14 B 44-2b

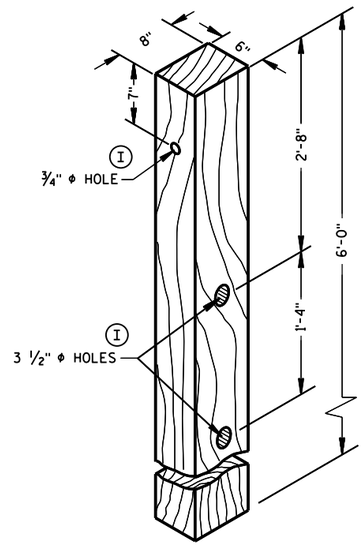


FOUNDATION TUBE (2)



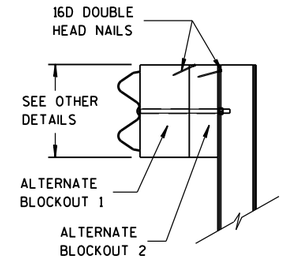
POSTS NUMBER 1 AND 2

WOOD BREAKAWAY POST (1)

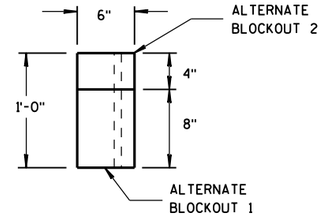


POSTS NUMBER 3-9

WOOD CRT POST (3)

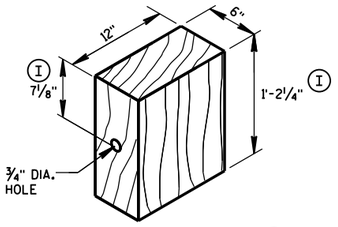


SIDE VIEW



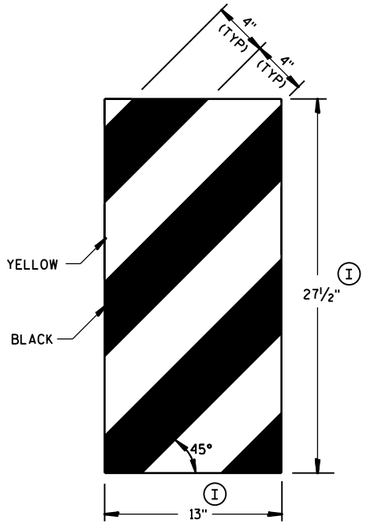
TOP VIEW

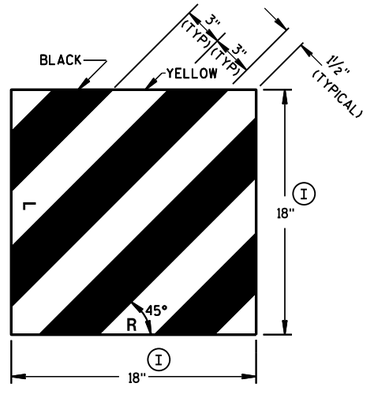
ALTERNATE WOOD BLOCKOUT DETAIL



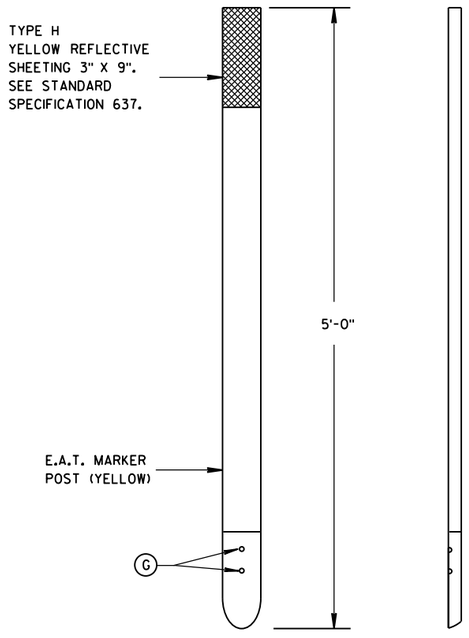
WOOD BLOCKOUT (4)

REQ'D. AT ALL POSTS EXCEPT POST NO'S 1 & 2





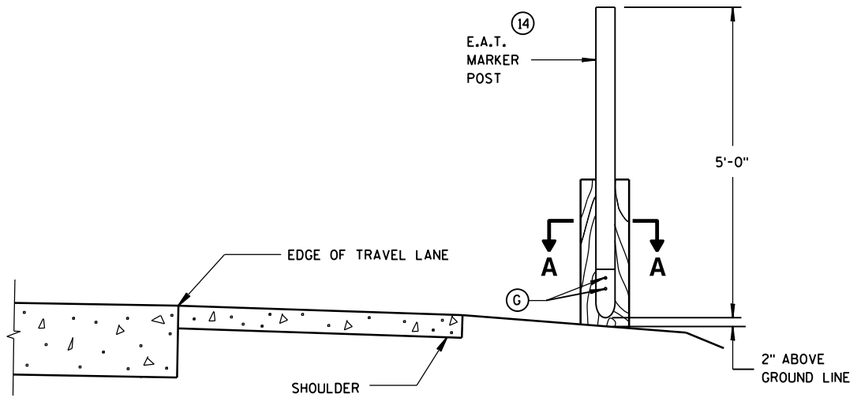
GENERIC REFLECTIVE SHEETING (13) (H)



FRONT VIEW

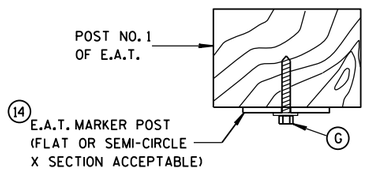
SIDE VIEW

E.A.T. MARKER POST (14)



TYPICAL INSTALLATION OF E.A.T. MARKER POST BACKSIDE OF POST NO. 1

(E.A.T. AND RAIL REMOVED FOR CLARITY)



SECTION A-A

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL
(MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2014
DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER

FHWA

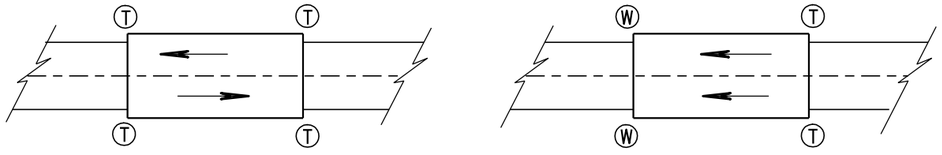
730

6

S.D.D. 14 B 44-2c

6

S.D.D. 14 B 44-2c



TWO WAY TRAFFIC

ONE WAY TRAFFIC

Ⓣ THRIE BEAM CONNECTION

Ⓦ W-BEAM CONNECTION WHEN REQUIRED

TYPICAL LOCATIONS OF THRIE BEAM AND W-BEAM CONNECTIONS TO BRIDGE

GENERAL NOTES

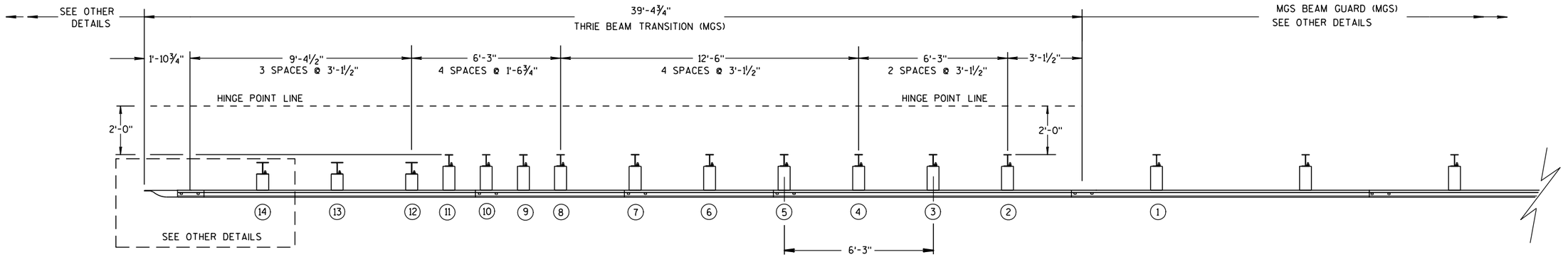
BOLT THE THRIE BEAM TO ALL POSTS AND BLOCKOUTS. DRILL OR PUNCH BOLT HOLES IN THE BEAM IF THE POST SPACING IS LESS THAN 6'-3.

IF ROCK IS ENCOUNTERED, REMOVE ROCK TO FULL DEPTH OF POST PLUS 2½", AND 12" DIAMETER AROUND POST. SEE 14B42 FOR MORE DETAILS.

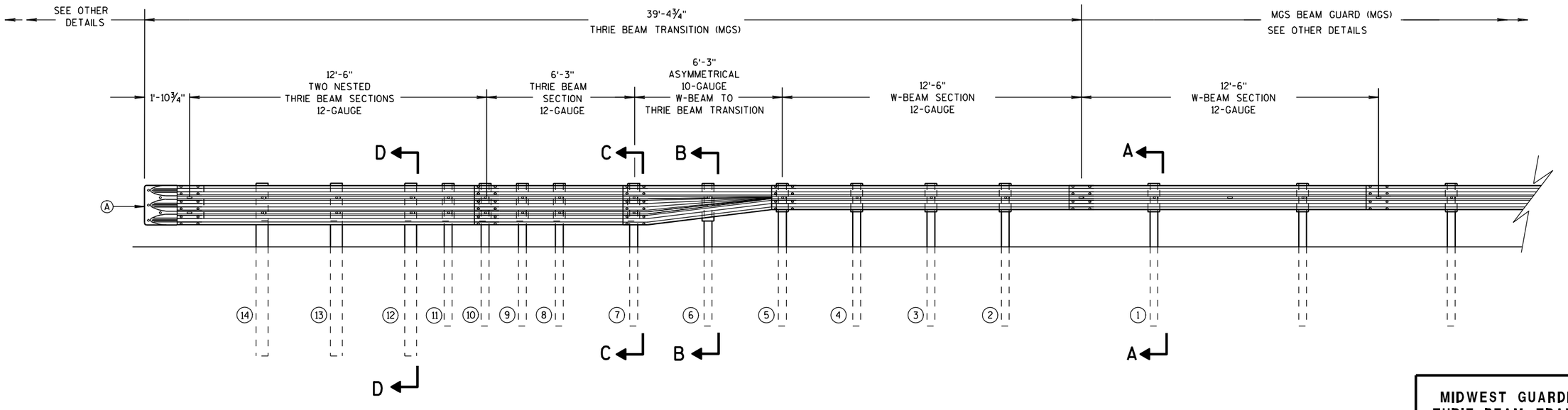
TRANSITION USES STEEL POSTS ONLY.

SEE STANDARD DETAIL DRAWING 14 B 42 FOR MORE INFORMATION.

Ⓐ BRIDGE RAILING TYPE "W" DOES NOT REQUIRE A TERMINAL CONNECTOR.



PLAN VIEW



ELEVATION VIEW

MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION

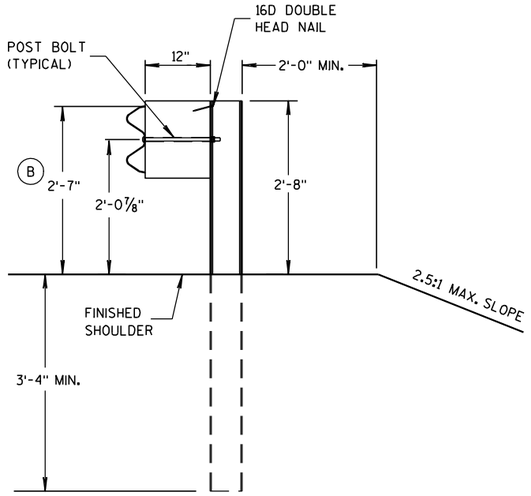
MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6
S.D.D. 14 B 45-3a

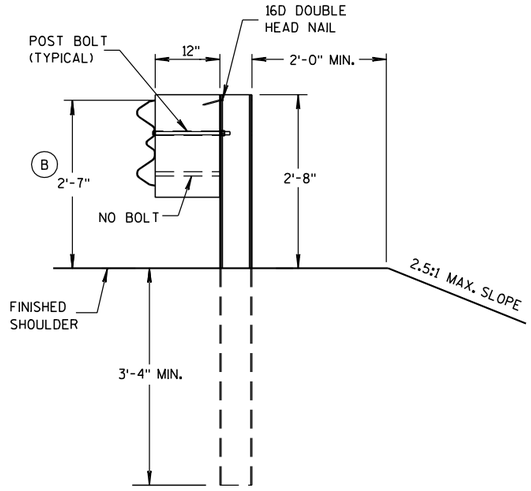
GENERAL NOTES

(B) TOLERANCE FOR TOP OF W-BEAM RAIL IS ± 1".



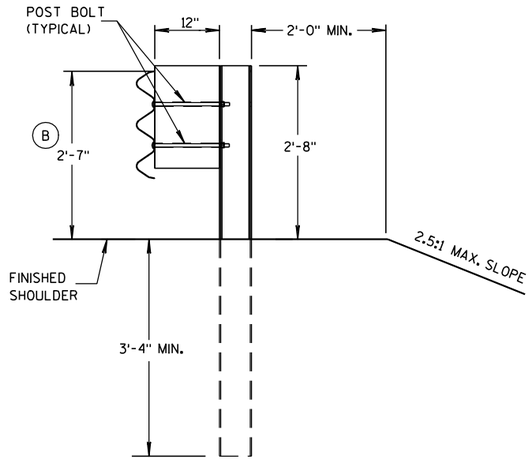
SECTION A-A

POSTS 1-5



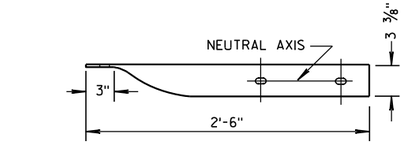
SECTION B-B

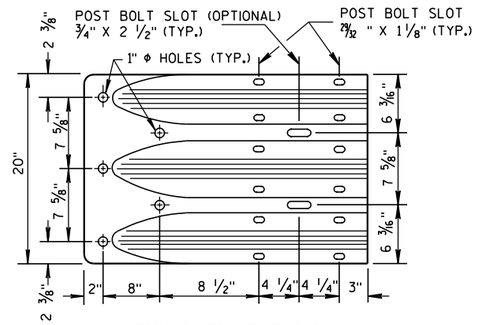
POST 6



SECTION C-C

POSTS 7-11





THRIE BEAM TERMINAL CONNECTOR

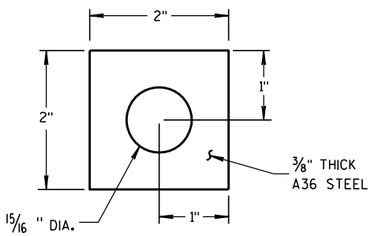
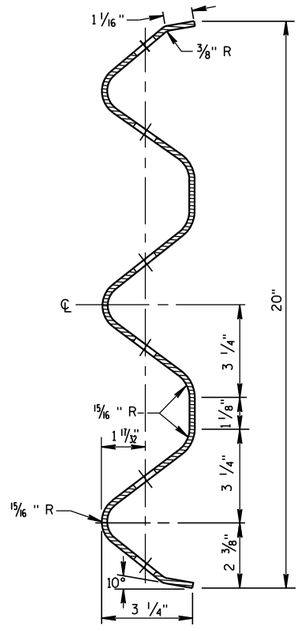
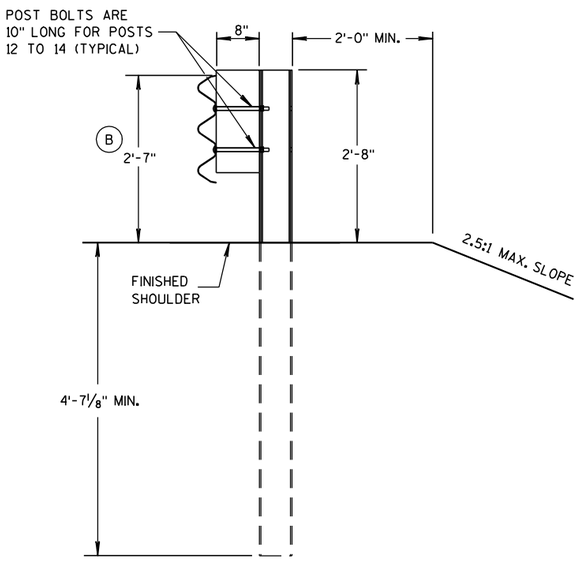


PLATE WASHER DETAIL

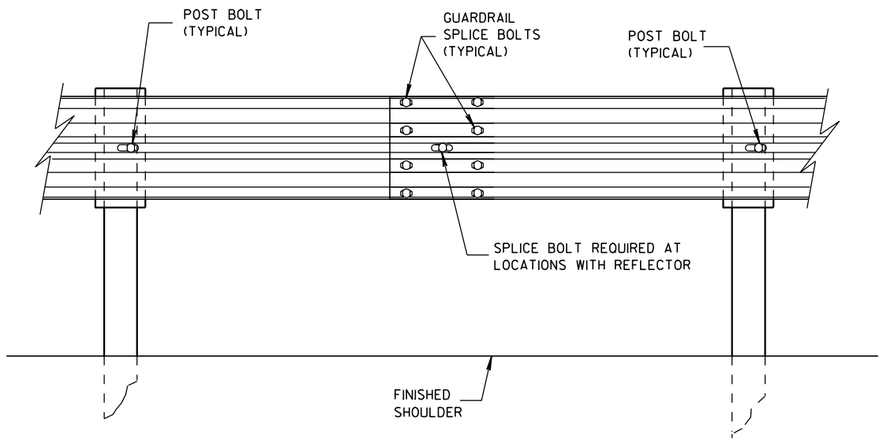


SECTION THRU THRIE BEAM RAIL ELEMENT



SECTION D-D

POSTS 12-14



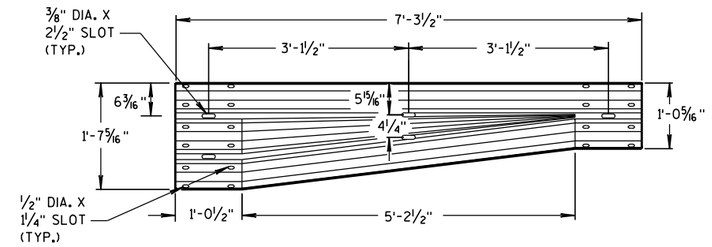
SPLICE DETAIL

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

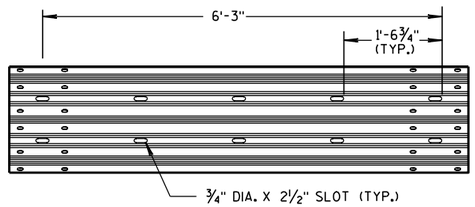
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

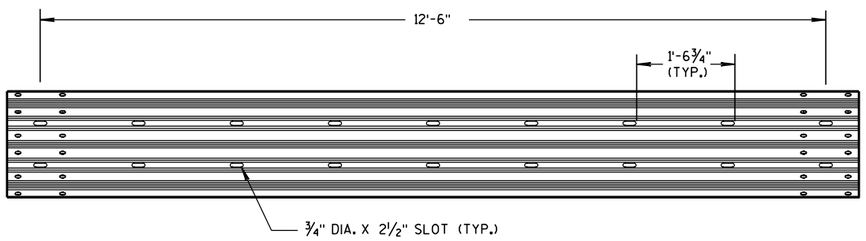
S.D.D. 14 B 45-3b



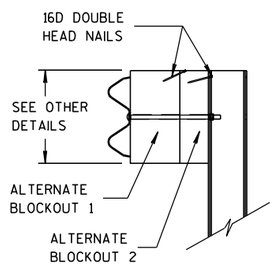
W-BEAM TO THRIE BEAM TRANSITION SECTION



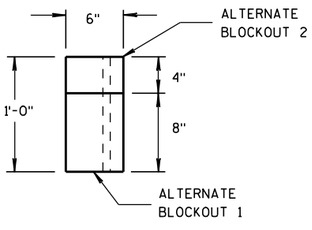
6'-3" THRIE BEAM SECTION



12'-6" THRIE BEAM SECTION

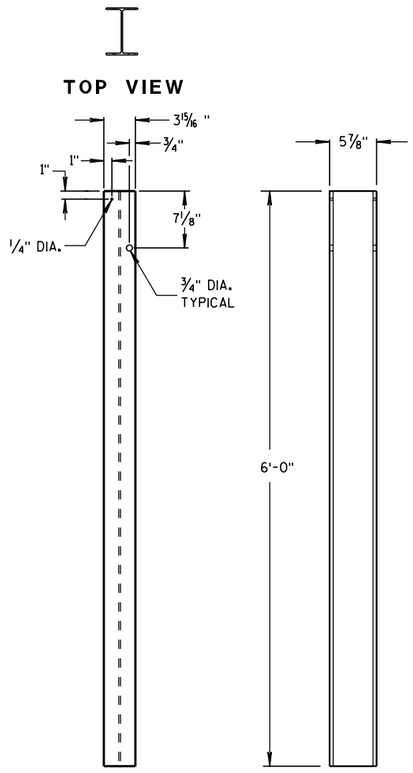


SIDE VIEW



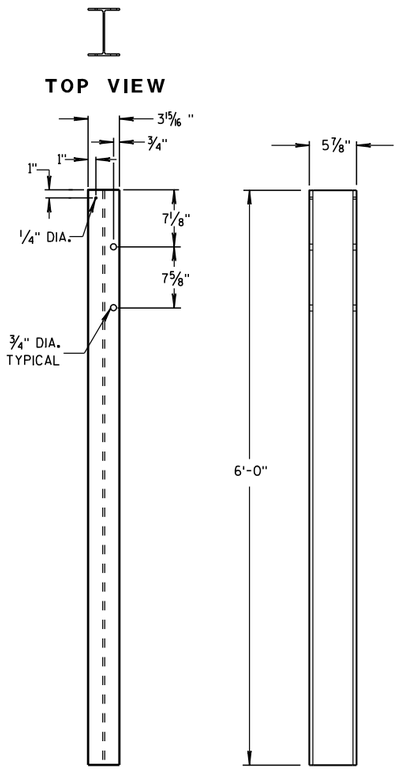
TOP VIEW

ALTERNATE WOOD BLOCKOUT DETAIL



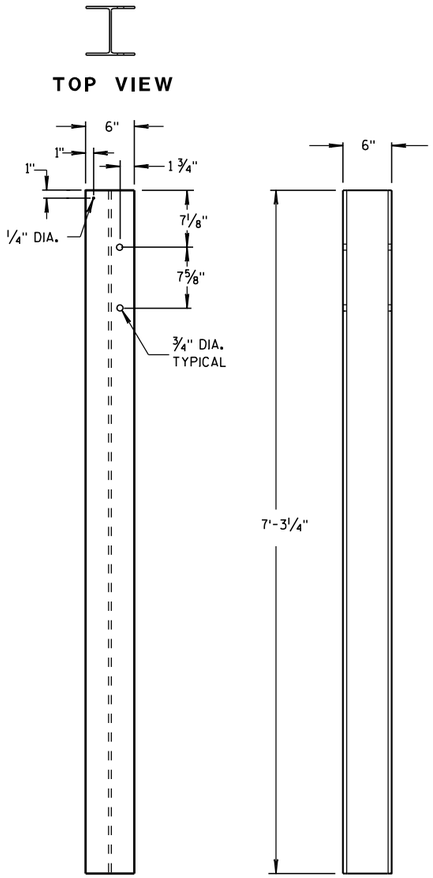
FRONT VIEW SIDE VIEW

STEEL POSTS 1-5



FRONT VIEW SIDE VIEW

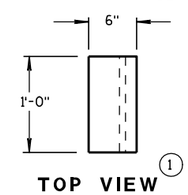
STEEL POSTS 6-11



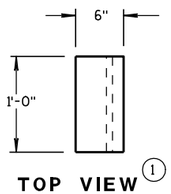
FRONT VIEW SIDE VIEW

STEEL POSTS 12-14

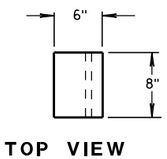
(1) WOOD BLOCKS MAY BE CONSTRUCTED OUT OF 2 WOOD BLOCKS. SEE ALTERNATE WOOD BLOCK DETAIL.



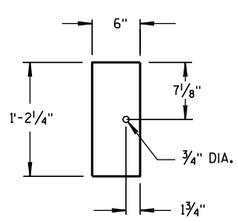
TOP VIEW (1)



TOP VIEW (1)

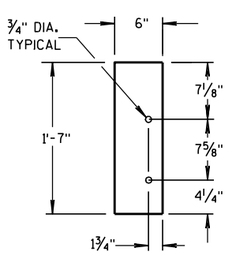


TOP VIEW



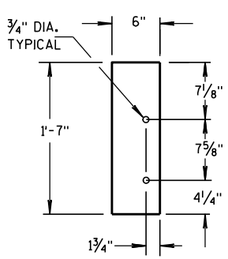
FRONT VIEW

BLOCKOUT POSTS 1-5



FRONT VIEW

BLOCKOUT POSTS 6-11



FRONT VIEW

BLOCKOUT POSTS 12-14

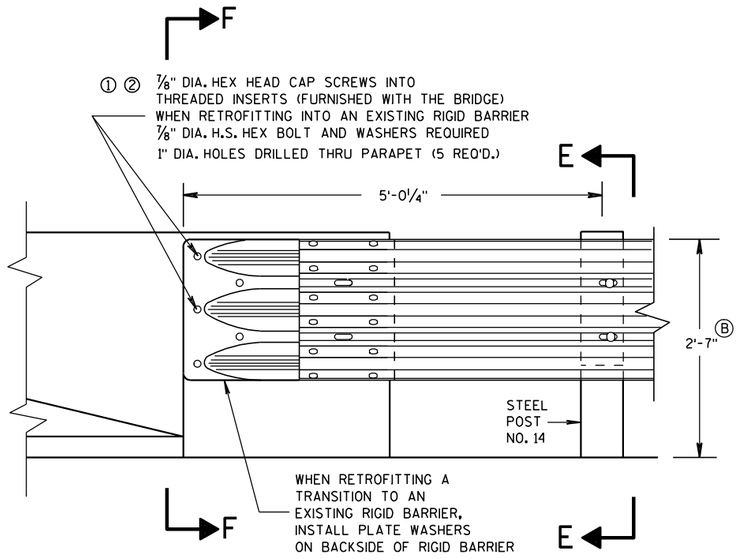
STEEL POST SIZES

POST NUMBER	SECTION TYPE	LENGTH
1	W6x9	72"
2	W6x9	72"
3	W6x9	72"
4	W6x9	72"
5	W6x9	72"
6	W6x9	72"
7	W6x9	72"
8	W6x9	72"
9	W6x9	72"
10	W6x9	72"
11	W6x9	72"
12	W6x15	87 1/8"
13	W6x15	87 1/8"
14	W6x15	87 1/8"

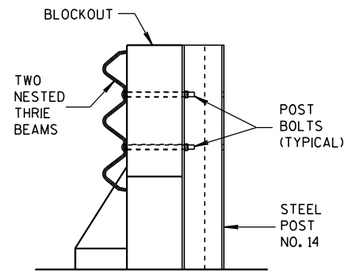
MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6
S.D.D. 14 B 45-3c



FRONT VIEW



SECTION E-E

GENERAL NOTES

THESE ARE TYPICAL CONNECTION DETAILS. ADJUST THE POSTION OF CONNECTIONS TO EXISTING BRIDGES TO FIT THE ACTUAL BRIDGE AND SITE DIMENSIONS.

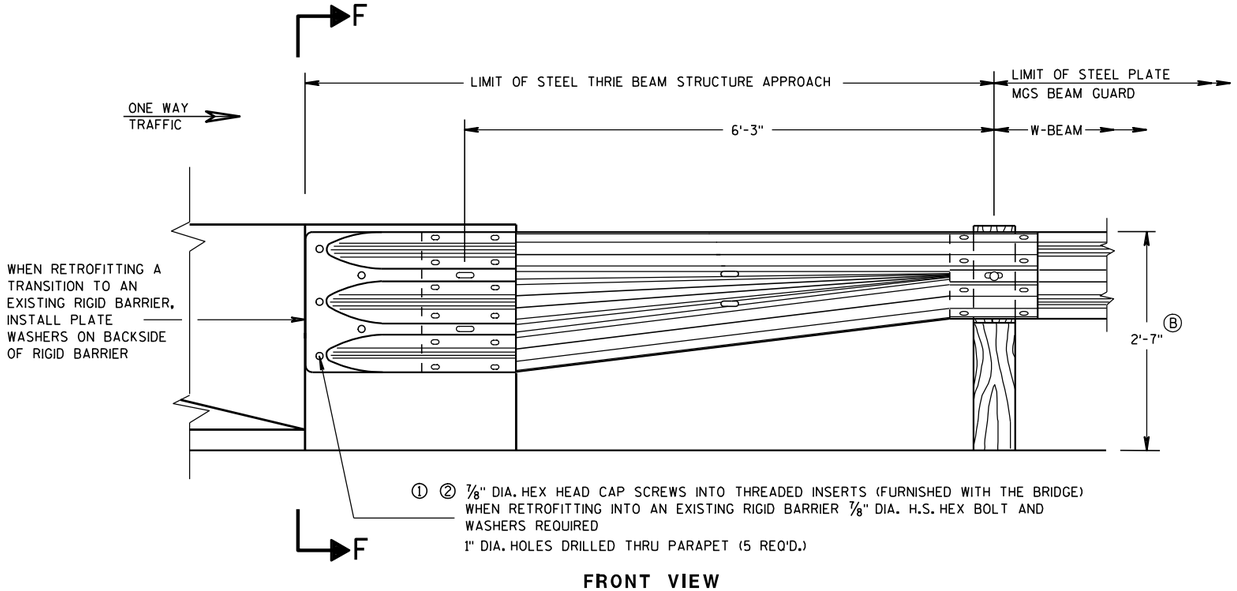
① DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

② BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE. BOLTS THAT EXTEND THROUGH THE PARAPET AND OUT THE BACK FACE REQUIRE A HARDENED ROUND STEEL WASHER THAT IS 2" O.D. X 5/8" THICK AND ONE PLATE WASHER. REPAIR ANY DAMAGED CONCRETE FROM BOLT INSTALLATION.

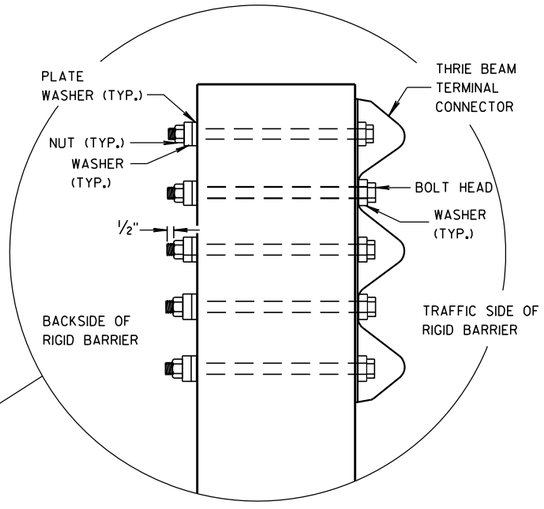
③ THE RECESS FOR A W-BEAM CONNECTION, WHICH EXISTS ON SOME PARAPETS OF THIS TYPE, SHALL BE FILLED WITH A TREATED TIMBER BLOCKOUT. BLOCKOUT SIZE IS 1'-6" X 2'-0" X 3 1/2".

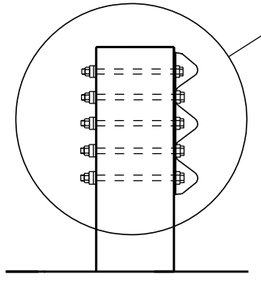
Ⓑ TOLERANCE FOR TOP OF BEAM IS ± 1".

THRIE BEAM CONNECTION TO BRIDGE PARAPET WITH SQUARE ENDS



FRONT VIEW





SECTION F-F

W BEAM TRANSITION AND CONNECTION TO BRIDGE PARAPETS WITH SQUARE ENDS

(USE ONLY ON THE TRAFFIC EXIT END OF ONE WAY BRIDGES)

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

8/31/2012 — DATE

/S/ Jerry H. [illegible] — ROADWAY STANDARDS (734) — ENGINEER

FHWA

6

S.D.D. 14 B 45-3d

6

S.D.D. 14 B 45-3d

GENERAL NOTES

THESE ARE TYPICAL CONNECTION DETAILS. ADJUST THE POSTION OF CONNECTIONS TO EXISTING BRIDGES TO FIT THE ACTUAL BRIDGE AND SITE DIMENSIONS.

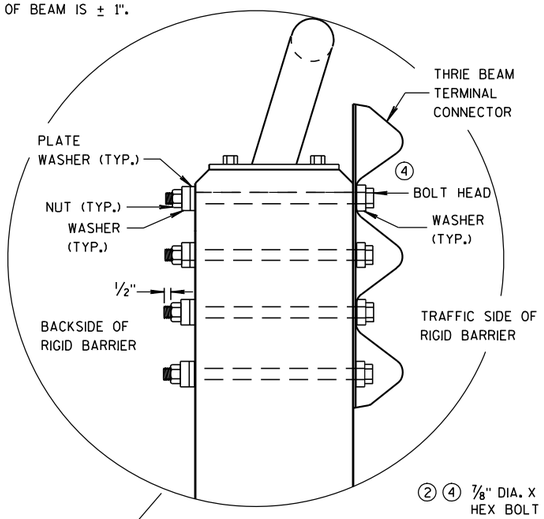
① DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

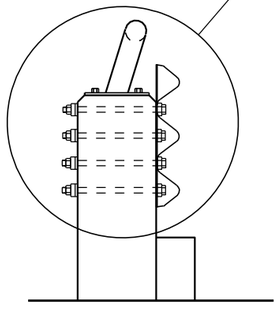
② BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE. BOLTS THAT EXTEND THROUGH THE PARAPET AND OUT THE BACK FACE REQUIRE A HARDENED ROUND STEEL WASHER THAT IS 2" O.D. X 5/8" THICK AND ONE PLATE WASHER. REPAIR ANY DAMAGED CONCRETE FROM BOLT INSTALLATION.

③ THE RECESS FOR A W-BEAM CONNECTION, WHICH EXISTS ON SOME PARAPETS OF THIS TYPE, SHALL BE FILLED WITH A TREATED TIMBER BLOCKOUT. BLOCKOUT SIZE IS 1'-6" X 2'-0" X 3 1/2". BLOCK IS INCIDENTAL TO THE CONTRACT.

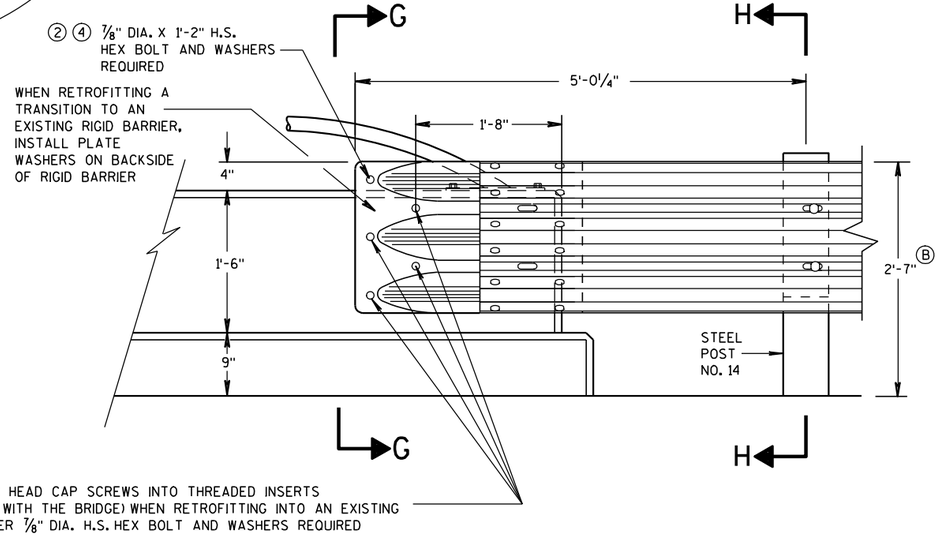
④ BOLT, NUT AND WASHERS NOT REQUIRED FOR THIS LOCATION WHEN RETROFITTING AN EXISTING PAPAPET AND THE HOLE IS EITHER ABOVE PARAPET OR WITHIN 4 INCHES OF THE EDGE OF PARAPET.

Ⓑ TOLERANCE FOR TOP OF BEAM IS ± 1".

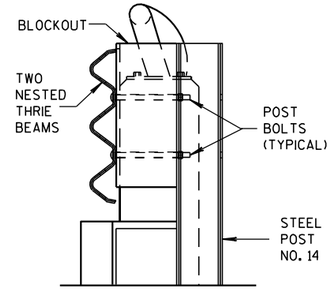




SECTION G-G

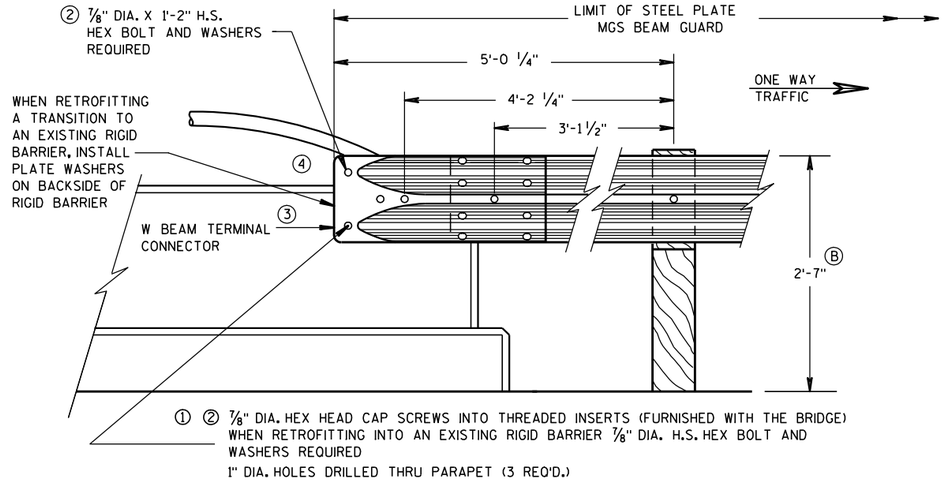


FRONT VIEW



SECTION H-H

THRIE BEAM CONNECTION TO VERTICAL FACED PARAPETS



FRONT VIEW

W BEAM CONNECTION TO VERTICAL FACE PARAPET
(USE ONLY ON THE TRAFFIC EXIT END OF ONE WAY BRIDGES)

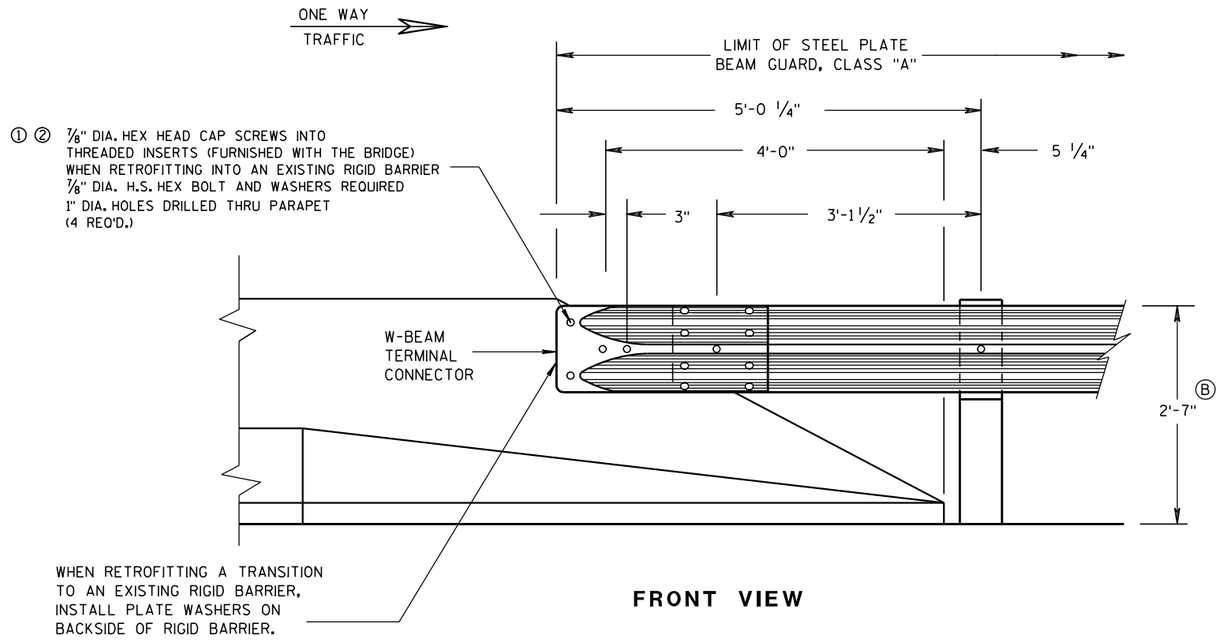
MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED	
8-31-2012 DATE	/S/ Jerry H. Zogg ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA	

6

S.D.D. 14 B 45-3e

6

S.D.D. 14 B 45-3e



FRONT VIEW

W BEAM CONNECTION TO PARAPETS WITH SLOPED ENDS

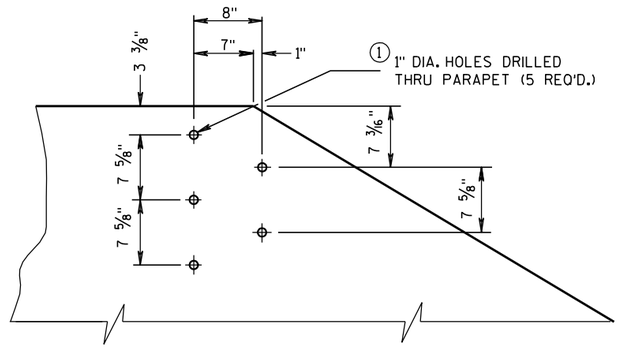
(USE ONLY AT TRAFFIC EXIT END OF ONE WAY BRIDGE)

GENERAL NOTES

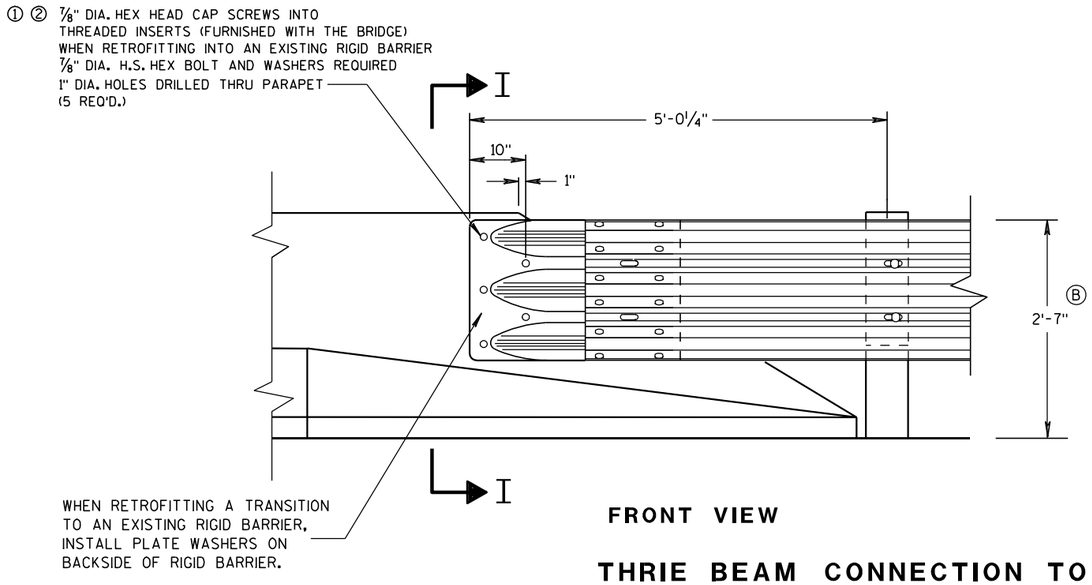
① DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

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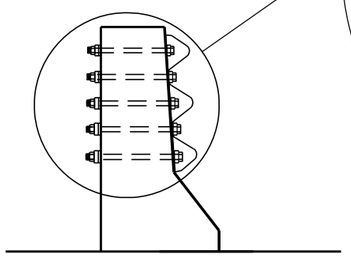
Ⓑ TOLERANCE FOR TOP OF BEAM IS ± 1".



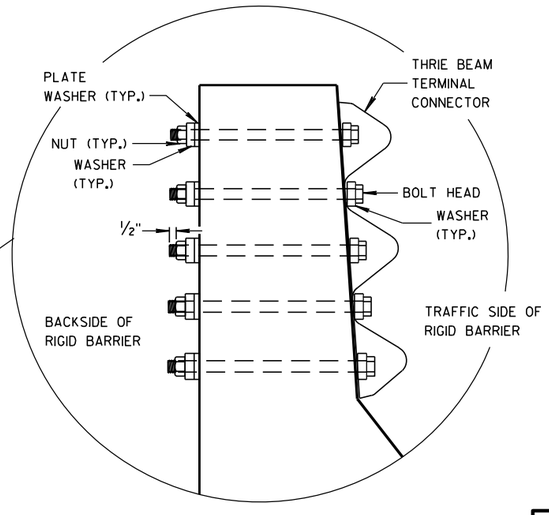
DRILL HOLE LOCATION AND PATTERN FOR THRIE BEAM CONNECTION



FRONT VIEW



SECTION I-I



THRIE BEAM CONNECTION TO BRIDGE PARAPETS WITH SLOPED ENDS

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

8/31/2012 — DATE

/S/ Jerry H. [illegible] — ROADWAY STANDARDS ENGINEER

736

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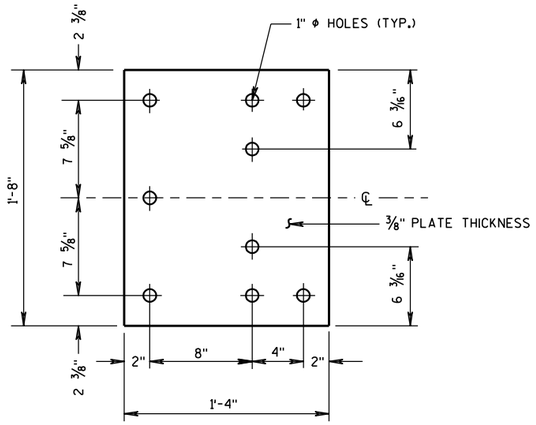
FHWA

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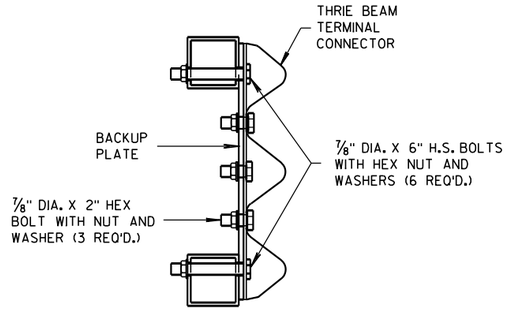
S.D.D. 14 B 45-3f

6

S.D.D. 14 B 45-3f



BACK-UP PLATE DETAIL

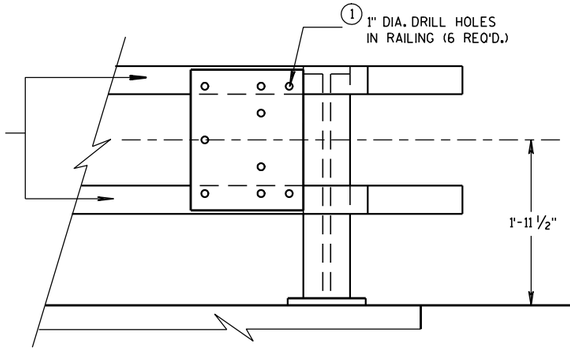


SECTION J-J

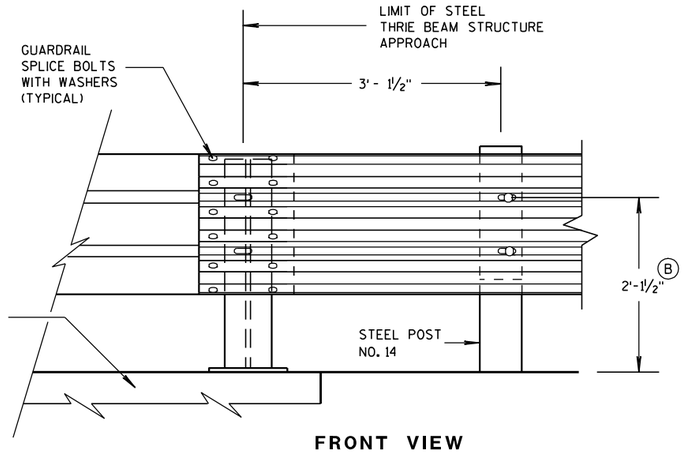
GENERAL NOTES

(1) DRILLING HOLES THROUGH THE PAPRPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

(B) TOLERANCE FOR TOP OF BEAM IS ± 1".

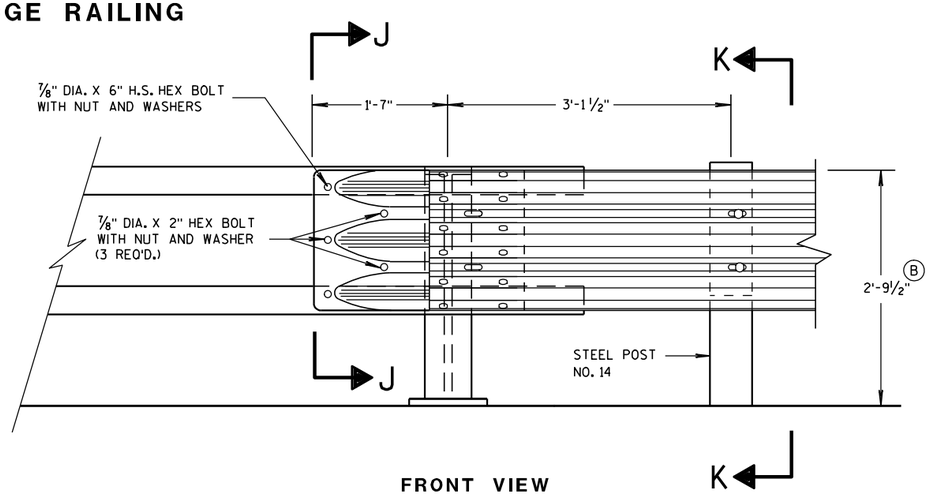


BACK-UP PLATE MOUNTING ONTO BRIDGE RAILING

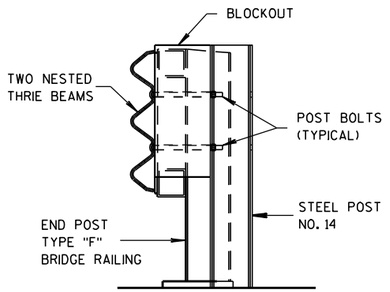


FRONT VIEW

THRIE BEAM CONNECTION TO STEEL RAILING TYPE "W"



FRONT VIEW



SECTION K-K

THRIE BEAM CONNECTION TO TUBULAR RAILING TYPE "F"

MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION
APPROVED 8/31/2012 DATE /S/ Jerry H. Zogg ROADWAY STANDARDS DEVELOPMENT ENGINEER 737 FHWA

6

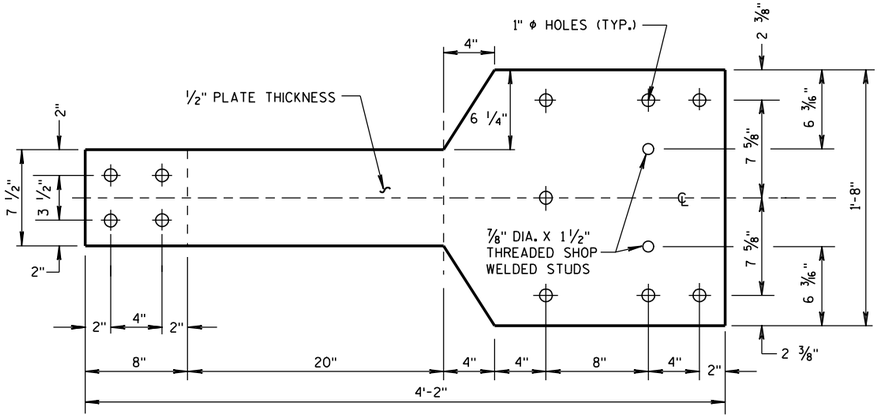
S.D.D. 14 B 45-3g

6

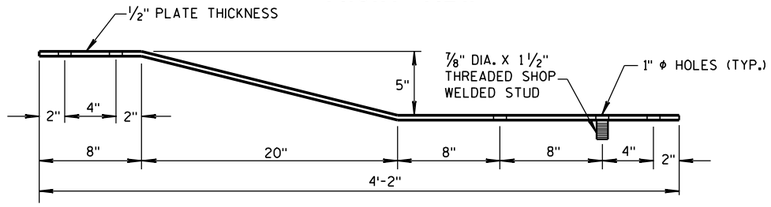
S.D.D. 14 B 45-3g

GENERAL NOTES

(B) TOLERANCE FOR TOP OF W-BEAM RAIL IS ± 1".

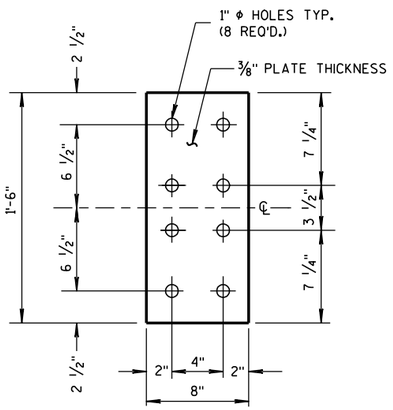


FRONT VIEW



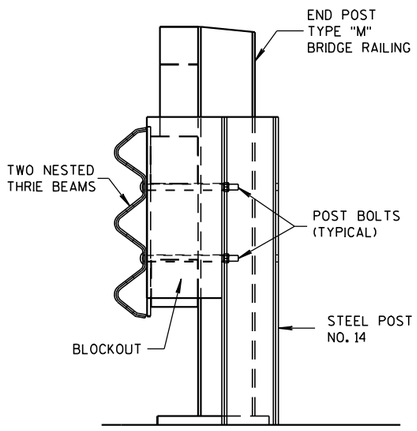
PLAN VIEW

BACK-UP PLATE DETAIL, TYPE "M"

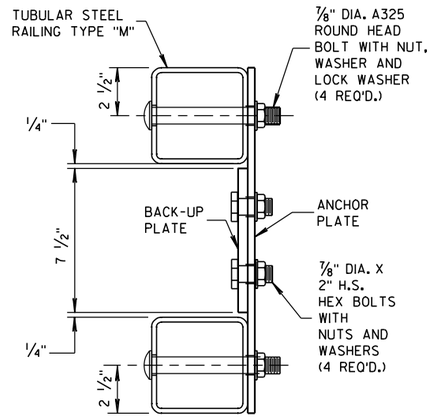


FRONT VIEW

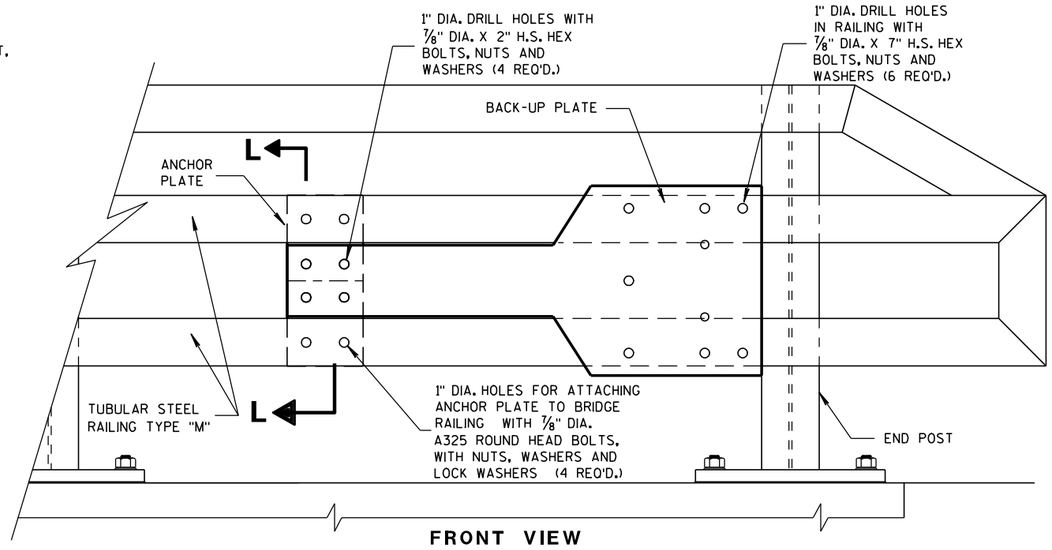
ANCHOR PLATE DETAIL, TYPE "M"



SECTION M-M

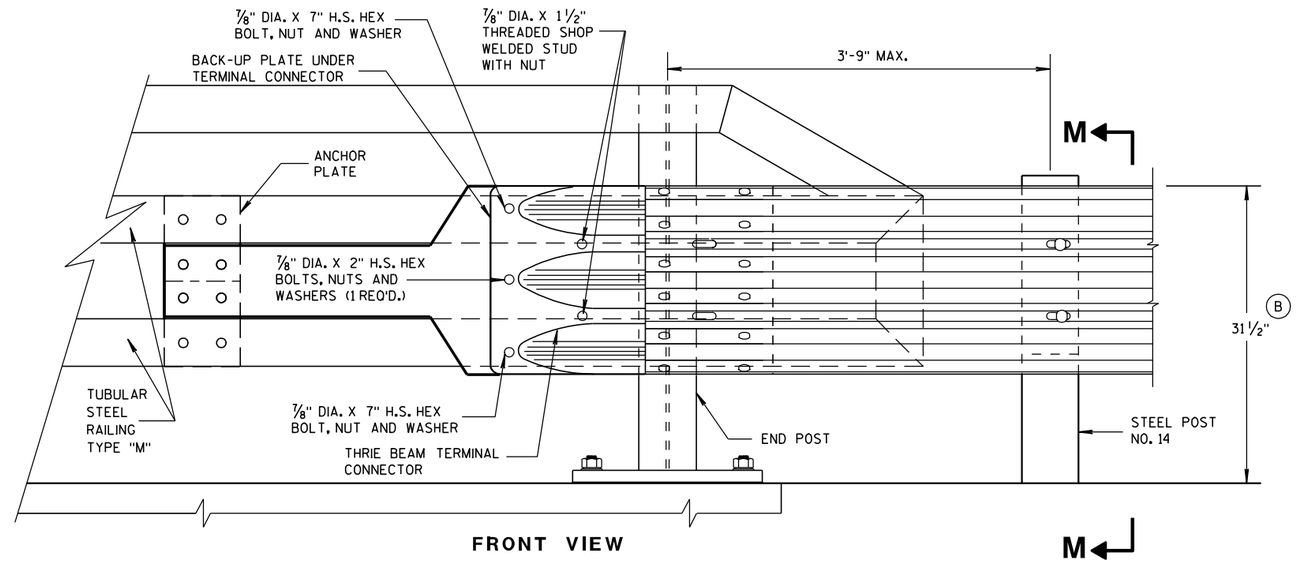


SECTION L-L

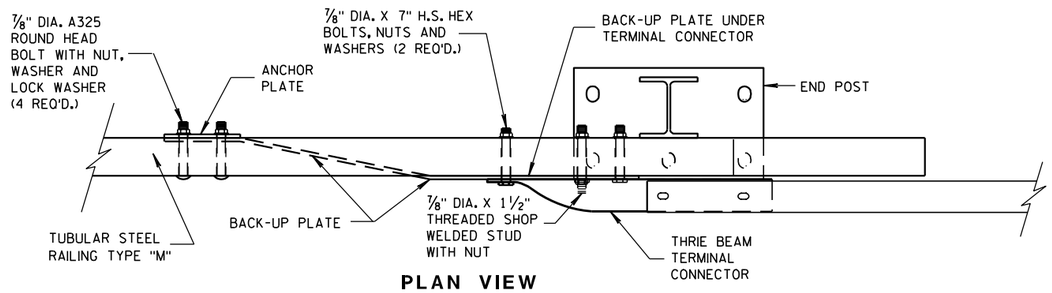


FRONT VIEW

ANCHOR AND BACK-UP PLATE MOUNTING TO BRIDGE RAILING, TYPE "M"



FRONT VIEW



PLAN VIEW

THRIE BEAM CONNECTION TO TUBULAR RAILING, TYPE "M"

MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

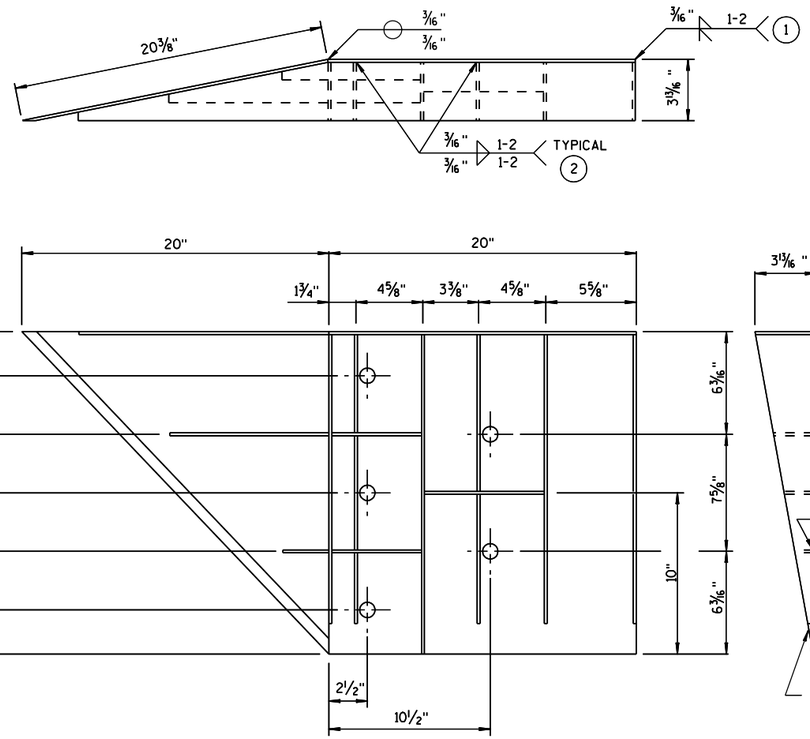
8-31-2012
DATE

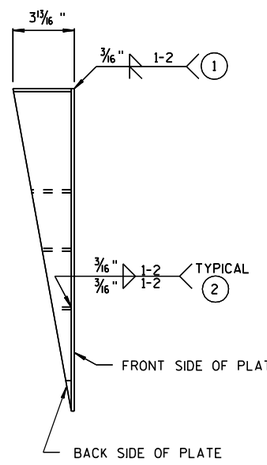
/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER

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FHWA





WELDING INSTRUCTION

(VIEWED FROM BACK SIDE OF PLATE)

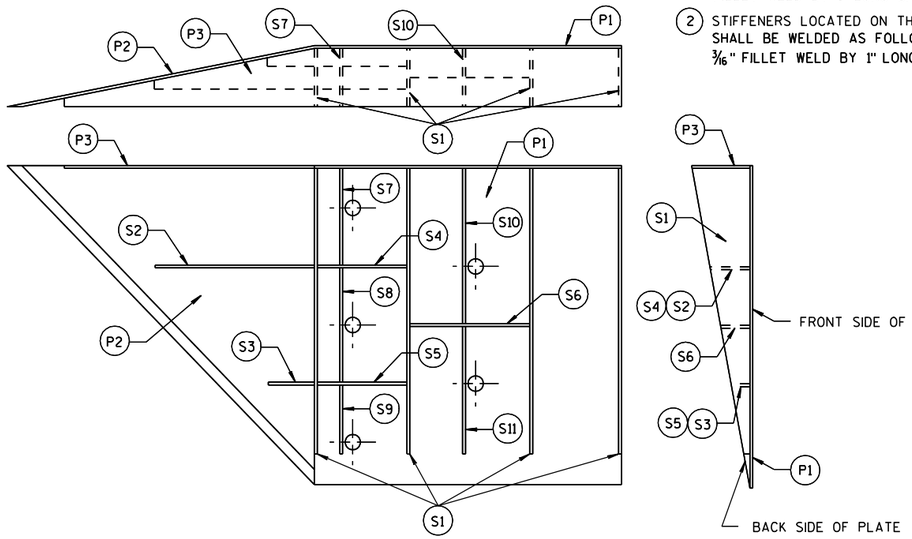


PLATE AND STIFFENER IDENTIFICATION

(VIEWED FROM BACK SIDE OF PLATE)

GENERAL NOTES

COVER PLATE PANELS ARE ⅜" THICK.

ALL STIFFENERS ARE ¼" THICK.

CONNECTOR PLATE SHALL BE FABRICATED FROM ASTM GRADE A36 STEEL AND GALVANIZED.

FOR GALVANIZED REQUIREMENTS, SEE SECTION 614 OF THE STANDARD SPECIFICATIONS.

ALL HOLE DIAMETERS SHALL BE 1".

FOR OPPOSITE SIDE INSTALLATION MIRROR DRAWINGS.

(1) STIFFENERS LOCATED AT THE OUTSIDE EDGES OF THE COVER PLATES SHALL BE WELDED AS FOLLOWS:
SINGLE BEVEL GROOVE WELD ON EXTERNAL SIDES AND ⅜" FILLET WELD BY 1" LONG SPACED AT 2" ON INTERNAL SIDES.

(2) STIFFENERS LOCATED ON THE INSIDE OF THE COVER PLATE SHALL BE WELDED AS FOLLOWS:
⅜" FILLET WELD BY 1" LONG SPACED AT 2".

CONNECTOR PLATE DIMENSION (PER ASSEMBLY)

PLATE	QUANTITY	SHAPE	SIZE (A x B x C x D)	THICKNESS
P1	1		20" x 20"	⅜"
P2	1		20" x 20" x 28⁹⁄₁₆"	⅜"
P3	1		39" x 3⅝" x 20" x 19⅝"	⅜"
S1	4		18⁷⁄₁₆" x 3⅝" x 18¾"	¼"
S2	1		10¼" x 2⁷⁄₁₆" x 10⅜" x ½"	¼"
S3	1		3" x 1⅛" x 3⅛" x ½"	¼"
S4	1		6⅛" x 2⁷⁄₁₆"	¼"
S5	1		6⅛" x 1⅛"	¼"
S6	1		7¾" x 1¾"	¼"
S7	1		2⁹⁄₁₆" x 6" x 3⅝" x 5⅞"	¼"
S8	1		1⁵⁄₃₂" x 7½" x 2½" x 7⅜"	¼"
S9	1		6⅛" x 6⅜" x 1³⁄₃₂"	¼"
S10	1		1⅞" x 9⅞" x 3⅝" x 9¹¹⁄₁₆"	¼"
S11	1		8½" x 8¾" x 1¹³⁄₁₆"	¼"

SINGLE SLOPE CONNECTION PLATE

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

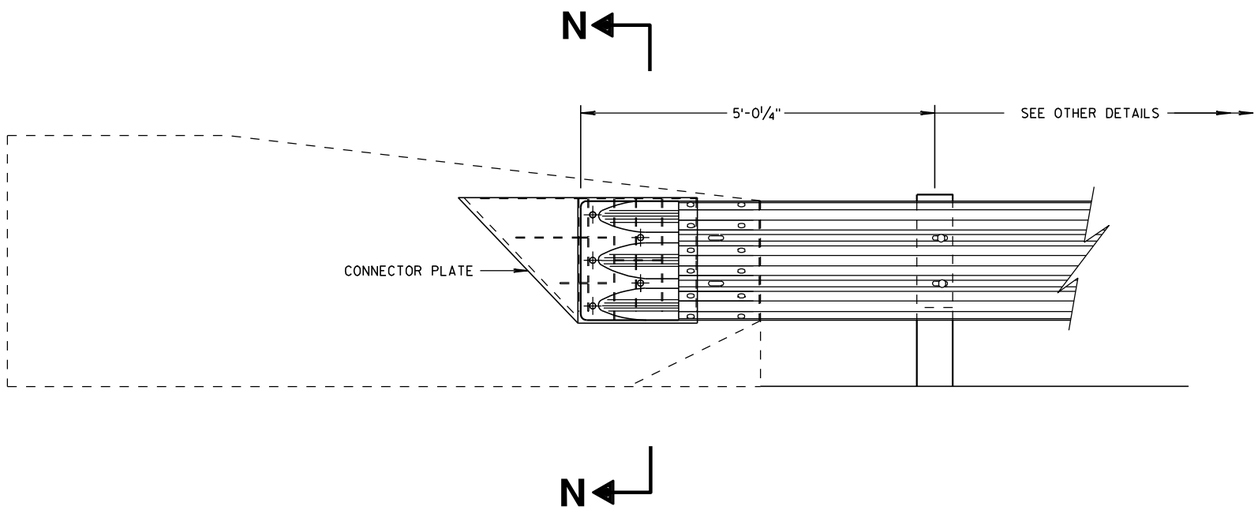
APPROVED
8/31/2012
DATE
/S/ Jerry H ...
ROADWAY STANDARDS ENGINEER
739
FHWA

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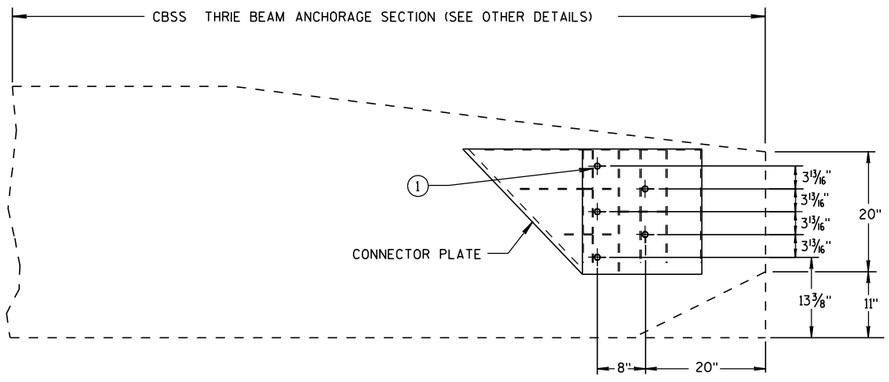
S.D.D. 14 B 45-3i

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S.D.D. 14 B 45-3i



THRIE BEAM CONNECTION TO SINGLE SLOPE BARRIER

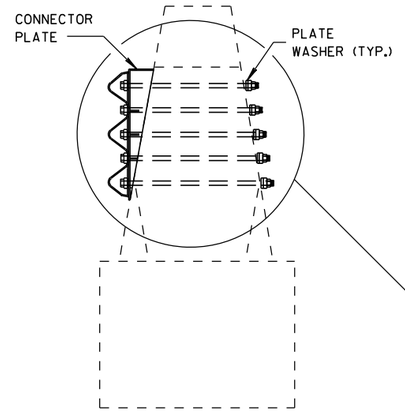


SINGLE SLOPE CONNECTION PLATE PLACEMENT

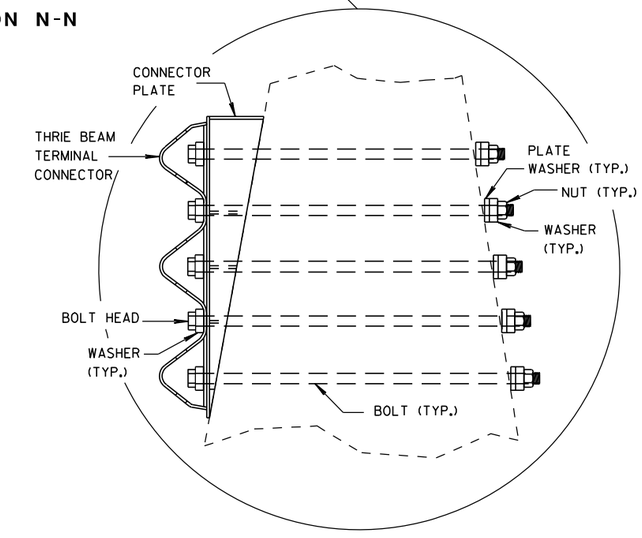
GENERAL NOTES

CONNECTOR PLATE, DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

(1) BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE. BOLTS THAT EXTEND THROUGH THE PARAPET AND OUT THE BACK FACE REQUIRE A HARDENED ROUND STEEL WASHER THAT IS 2" O.D. X 5/8" THICK AND ONE PLATE WASHER. REPAIR ANY DAMAGED CONCRETE FROM BOLT INSTALLATION.



SECTION N-N



MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

8/31/2012
DATE

/S/ Jerry H. [illegible]
ROADWAY STANDARDS [illegible]740
ENGINEER

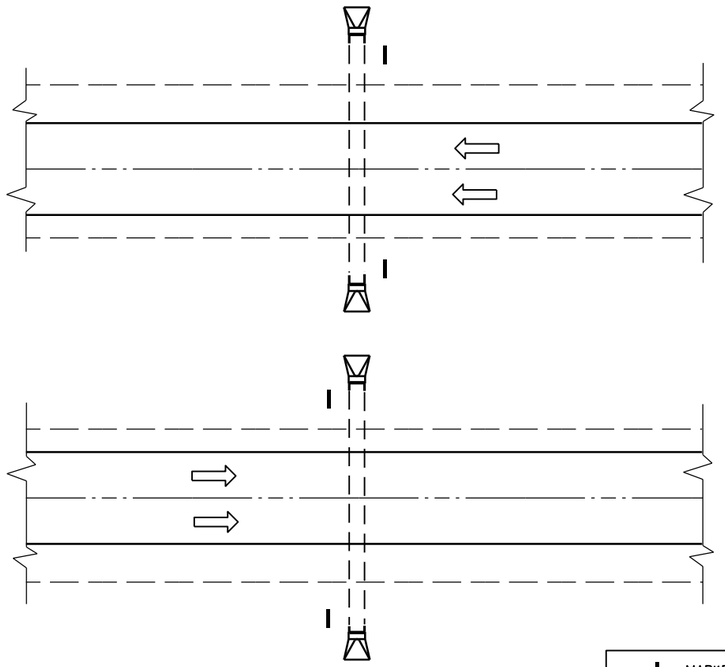
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S.D.D. 14 B 45-3j

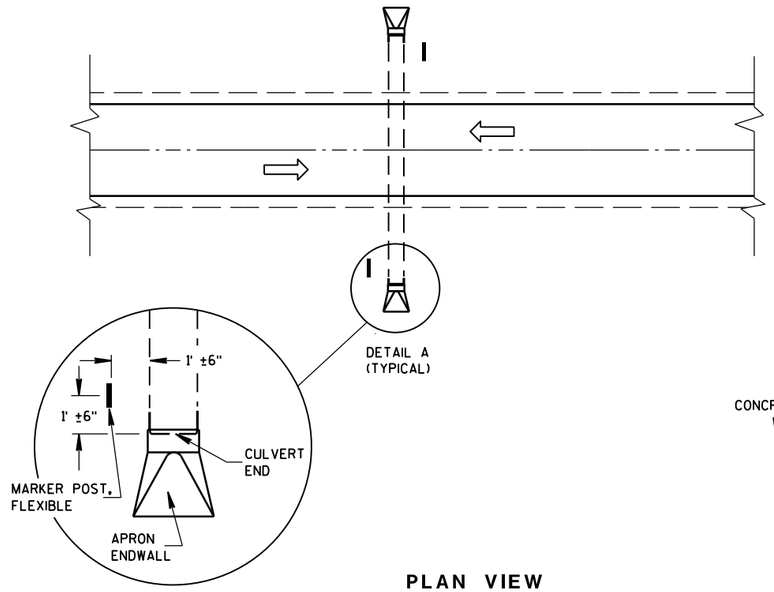
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S.D.D. 14 B 45-3j



PLAN VIEW

DIVIDED HIGHWAY



DETAIL A
(TYPICAL)

PLAN VIEW

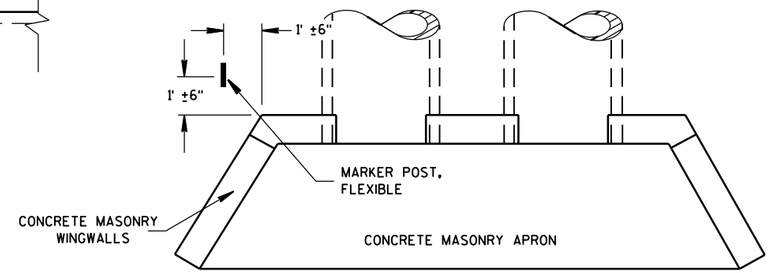
UNDIVIDED HIGHWAY

MARKER POST, FLEXIBLE

DIRECTION OF TRAFFIC FLOW

GENERAL NOTES

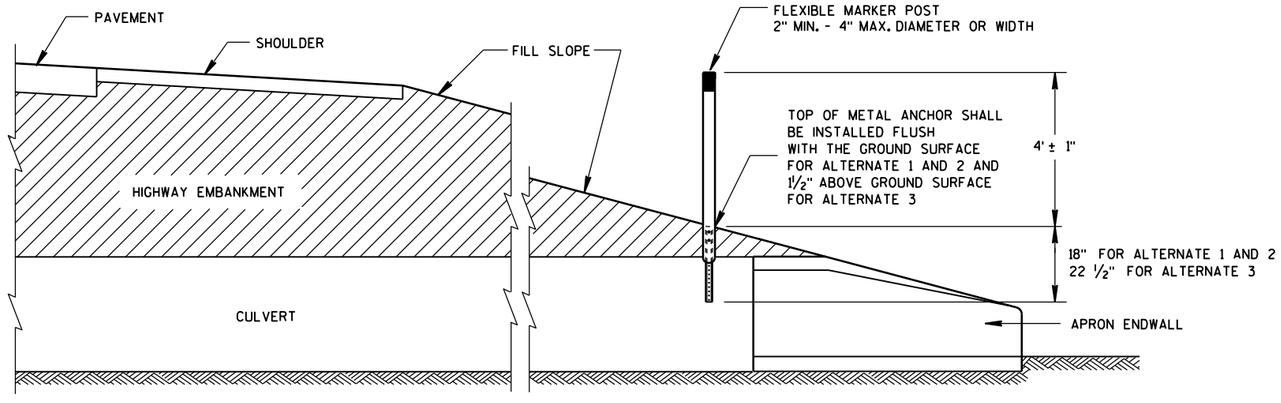
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.



PLAN VIEW

CONCRETE MASONRY ENDWALLS FOR CULVERT PIPE AND PIPE ARCH

FLEXIBLE MARKER POST LOCATION



CROSS SECTION

FLEXIBLE MARKER POST

FLEXIBLE MARKER POST FOR CULVERT END

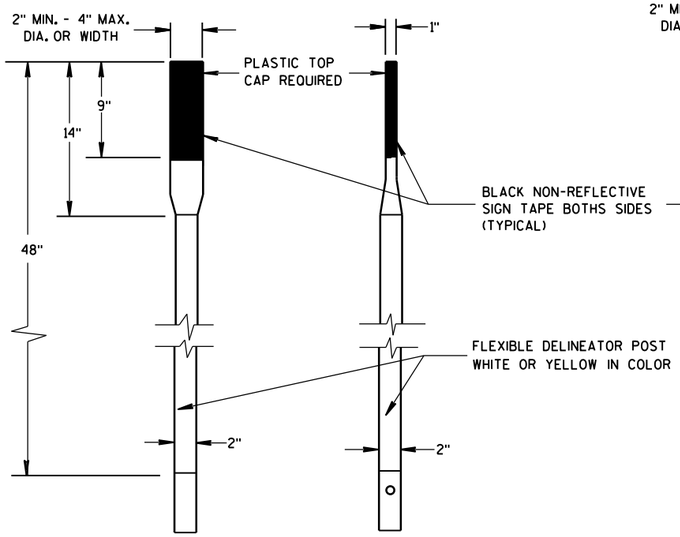
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

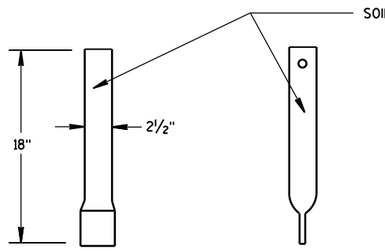
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S.D.D. 15 A 3-2a

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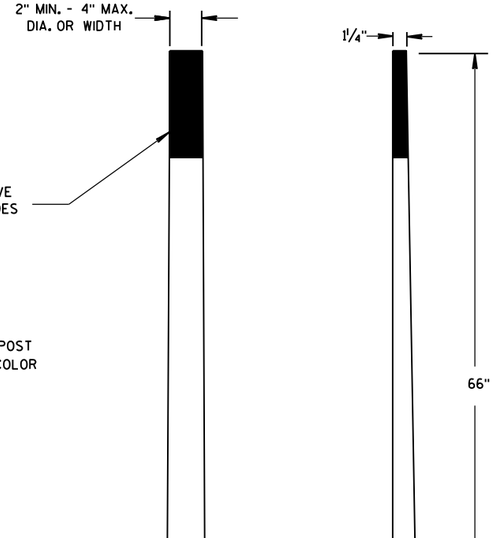
S.D.D. 15 A 3-2a





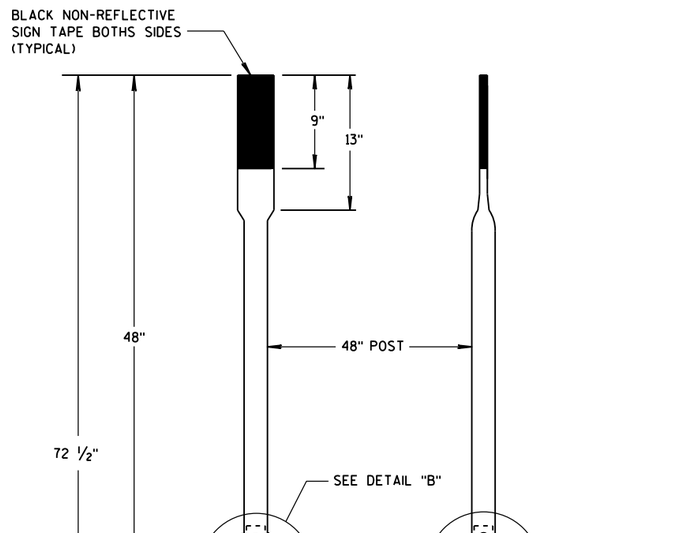
FRONT VIEW SIDE VIEW

ALTERNATE 1



FRONT VIEW SIDE VIEW

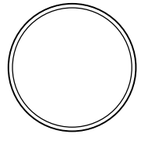
ALTERNATE 2



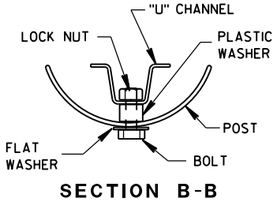
FRONT VIEW SIDE VIEW

ALTERNATE 3

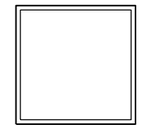
FLEXIBLE MARKER POSTS



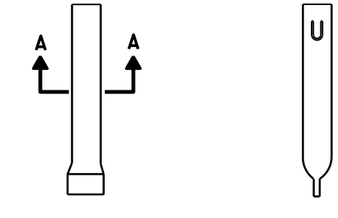
SECTION A-A



SECTION B-B

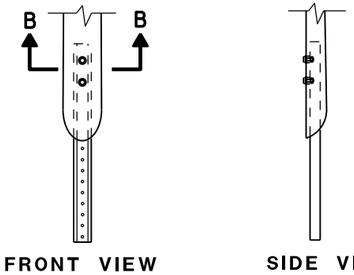


SECTION C-C



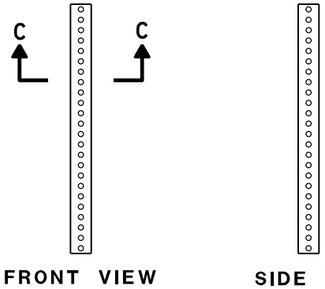
FRONT VIEW SIDE VIEW

ALTERNATE 1



FRONT VIEW SIDE VIEW

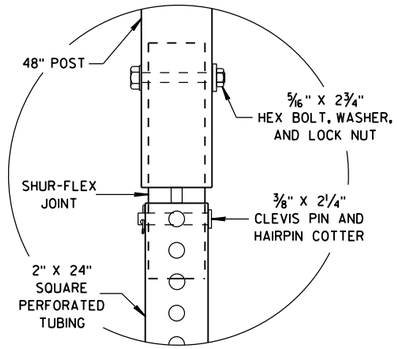
ALTERNATE 2



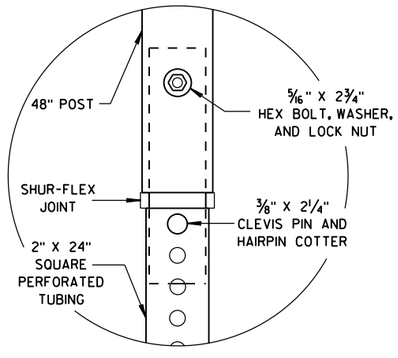
FRONT VIEW SIDE VIEW

ALTERNATE 3

FLEXIBLE MARKER POST ANCHORS



DETAIL B



DETAIL C

FLEXIBLE MARKER POST
FOR CULVERT END

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

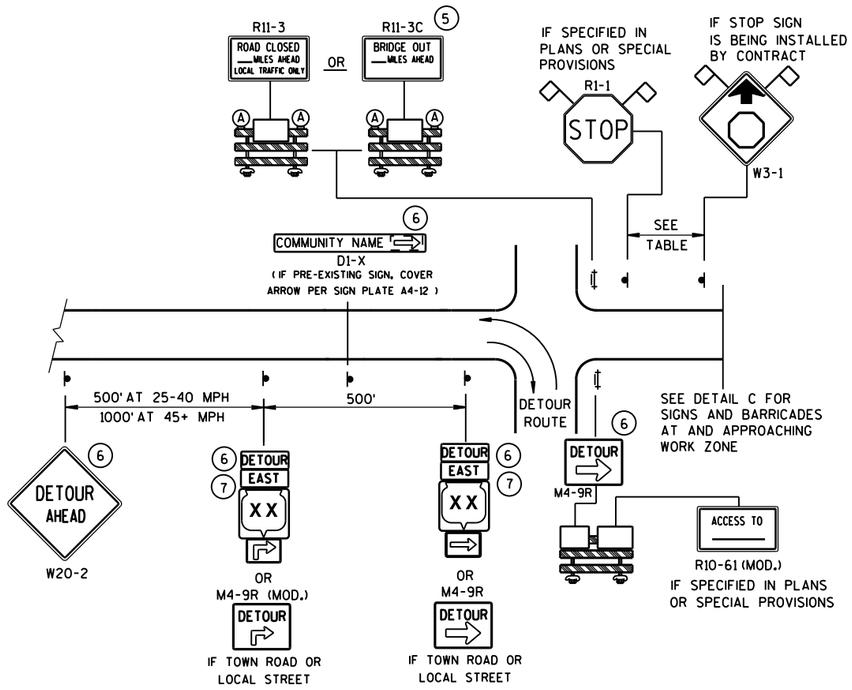
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S.D.D. 15 A 3-2b

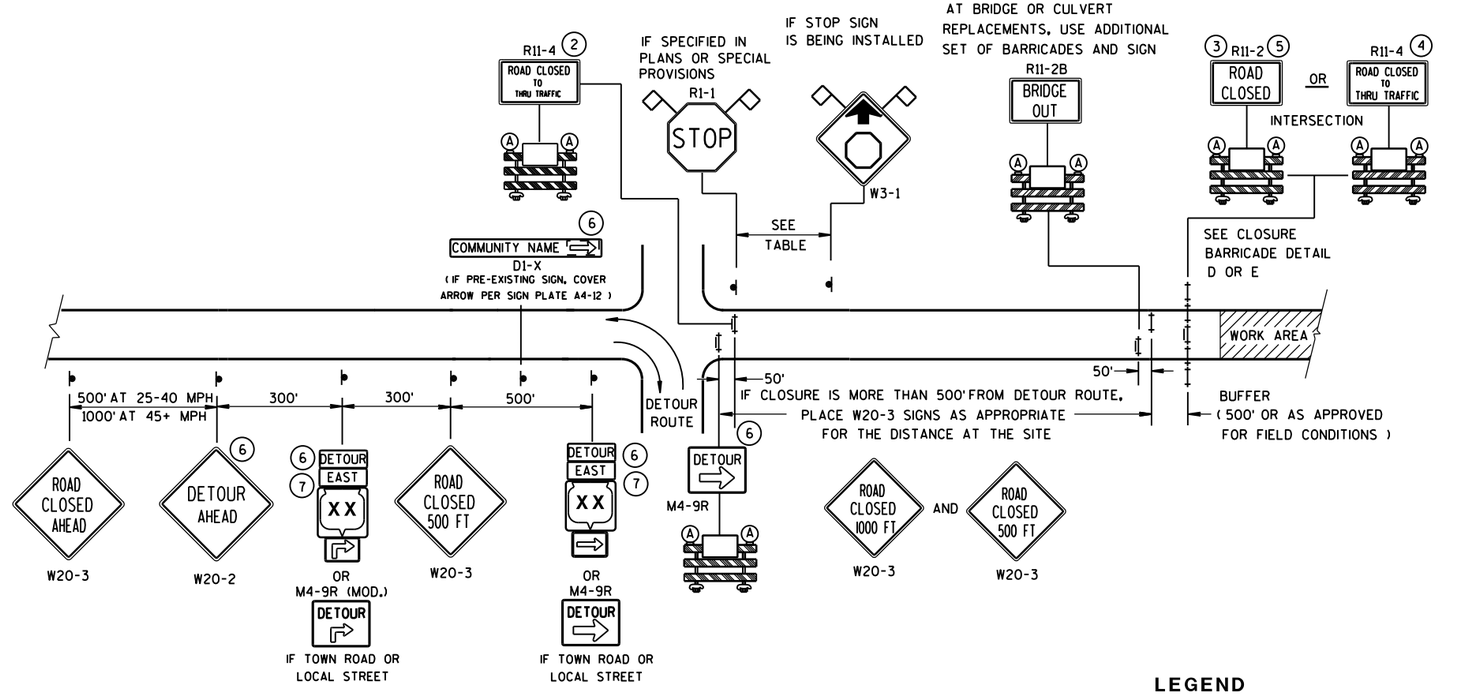
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S.D.D. 15 A 3-2b



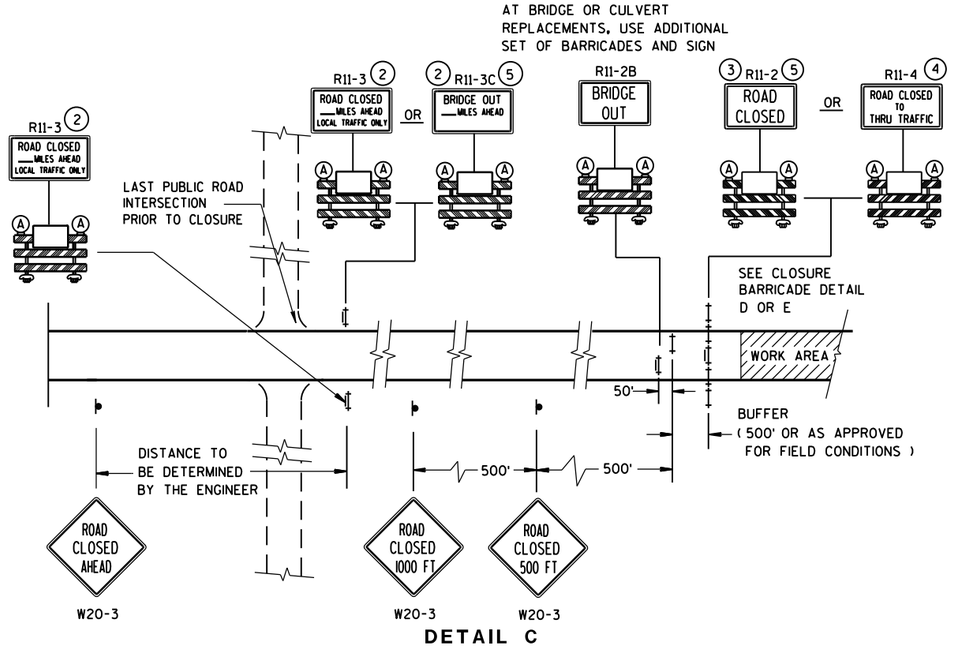
DETAIL A
MAINLINE CLOSURE WITH POSTED DETOUR

WORK ZONE GREATER THAN ½ MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)



DETAIL B
MAINLINE CLOSURE WITH POSTED DETOUR

WORK ZONE LESS THAN ½ MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)



DETAIL C
MAINLINE CLOSURE, NO POSTED DETOUR

SPEED LIMIT (MPH)	"STOP AHEAD" ADVANCE WARNING DISTANCE (FT)
25	200
30	200
35	350
40	350
45	500
50	550
55	750

SEE SDD 15C2-SHEET "**b**" FOR GENERAL NOTES AND FOOTNOTES ① THROUGH ⑦

LEGEND

- SIGN ON PERMANENT SUPPORT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- (A) TYPE "A" WARNING LIGHT (FLASHING)
- WORK AREA
- DETOUR / EAST — M4-8 / M3-X
- XX — M1-4; COUNTY XX — M1-5A; XX — M1-6
- M05-1 OR M06-1
- FLAGS, 16" X 16" MIN., (ORANGE)

BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

8/2013 DATE

/S/ Travis Feltes
STATE TRAFFIC ENGINEER

743

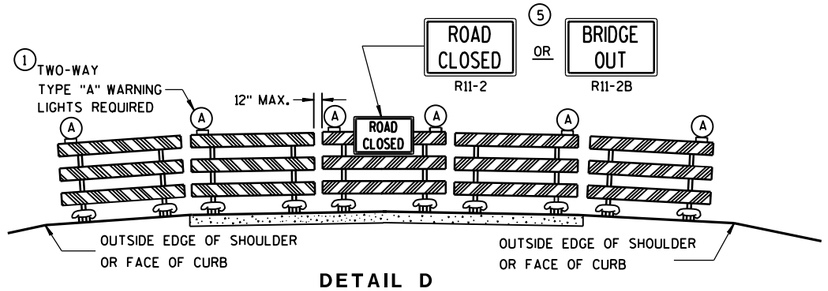
FHWA

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S.D.D. 15 C 2-5a

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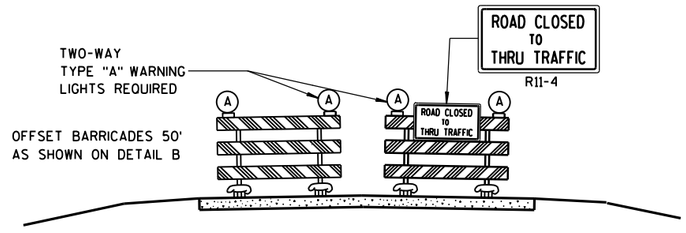
S.D.D. 15 C 2-5a



DETAIL D

ROAD CLOSURE BARRICADE DETAIL

APPROACH VIEW



DETAIL E

LANE CLOSURE BARRICADE DETAIL

APPROACH VIEW

SEE SDD 15C2-SHEET "**a**" FOR LEGEND

GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND BARRICADES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

BARRICADES THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED UPON COMPLETION OF THE OPERATION OR, FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

ALL TYPE III BARRICADES SHALL HAVE RAILS REFLECTORIZED ON BOTH FACES. STRIPES SHALL BE PROPERLY SLOPED DOWN TOWARD THE TRAFFIC SIDE OR AS SHOWN IN THE ROAD CLOSURE BARRICADE DETAIL D FOR FULL ROAD CLOSURES.

TYPE "A" LOW-INTENSITY FLASHING WARNING LIGHTS SHALL BE VISIBLE ON BOTH SIDES OF THE BARRICADE.

THE R11-2, R11-3, M4-9, R11-4 AND R10-61 SIGNS PLACED ON BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE OR BOTTOM RAILS.

"WO AND "MO" SIGNS ARE THE SAME AS "W" AND "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:
- R11-2 SHALL BE 48" X 30".
- R11-3, R11-4 AND R10-61 SHALL BE 60" X 30".
- M4-9 SHALL BE 30" X 24".
- M3-X SHALL BE 24" X 12". (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS.)
- M4-8 SHALL BE 24" X 12". (30" X 15" IF NEEDED TO MATCH EXISTING SIGNS.)
- M1-4, M1-5A, AND M1-6 SHALL BE 24" X 24". (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS.)
- M05-1 AND M06-1 SHALL BE 21" X 21". (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS.)
- D1-X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.
- R1-1 SHALL BE 36" X 36".

(1) TWO WARNING LIGHTS SHALL BE PROVIDED ON THE CENTER BARRICADE AND A MINIMUM OF ONE WARNING LIGHT SHALL BE PROVIDED ON EACH OF THE OTHER BARRICADES WITHIN THE ROADWAY LIMITS. SPACING OF THE WARNING LIGHTS SHALL BE UNIFORM TO THE EDGE OF ROADWAY AS SHOWN (APPROX. 8-FOOT LIGHT SPACING).

(2) THESE SIGNS AND BARRICADES ARE NOT REQUIRED IF ROAD CLOSURE BEGINS AT INTERSECTION.

(3) FOR ROAD CLOSURE WITHOUT LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL D.

(4) FOR ROAD CLOSURE WITH LOCAL ACCESS TO PROJECT, SEE LANE CLOSURE BARRICADE DETAIL E.

(5) FOR BRIDGE OR CULVERT REPLACEMENTS, SUBSTITUTE "BRIDGE OUT" INSTEAD OF "ROAD CLOSED" ON R11-2 AND R11-3 SIGNS.

(6) INSTALL DETOUR AND COMMUNITY GUIDE SIGNS AND ARROWS ONLY IF SPECIFIED IN THE CONTRACT. IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. MODIFY EXISTING SIGNS WHERE POSSIBLE. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. IF DETOUR SIGNS ARE BEING INSTALLED BY OTHERS, PLACE THE CONTRACTED TRAFFIC CONTROL SIGNS TO ALLOW FOR PLACEMENT OF ALL WARNING, DETOUR AND GUIDE SIGNS AS SHOWN.

(7) "EAST" CARDINAL DIRECTION MARKERS AND RIGHT TURN ARROWS ARE SHOWN. USE OTHER CARDINAL DIRECTIONS AND ARROWS AS APPROPRIATE.

BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

8/2013 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER
FHWA

6

S.D.D. 15 C 2-5b

THIS DRAWING PROVIDES GENERAL GUIDANCE ON TYPICAL DETOUR SIGN LAYOUT AND SPACING. SEE PROJECT DETOUR SIGNING SHEETS FOR SPECIFIC DETAILS FOR EACH PROJECT.

GENERAL NOTES

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. MODIFY EXISTING SIGNS WHERE POSSIBLE.

THE SPACING BETWEEN TRAFFIC CONTROL AND DETOUR SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE", SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

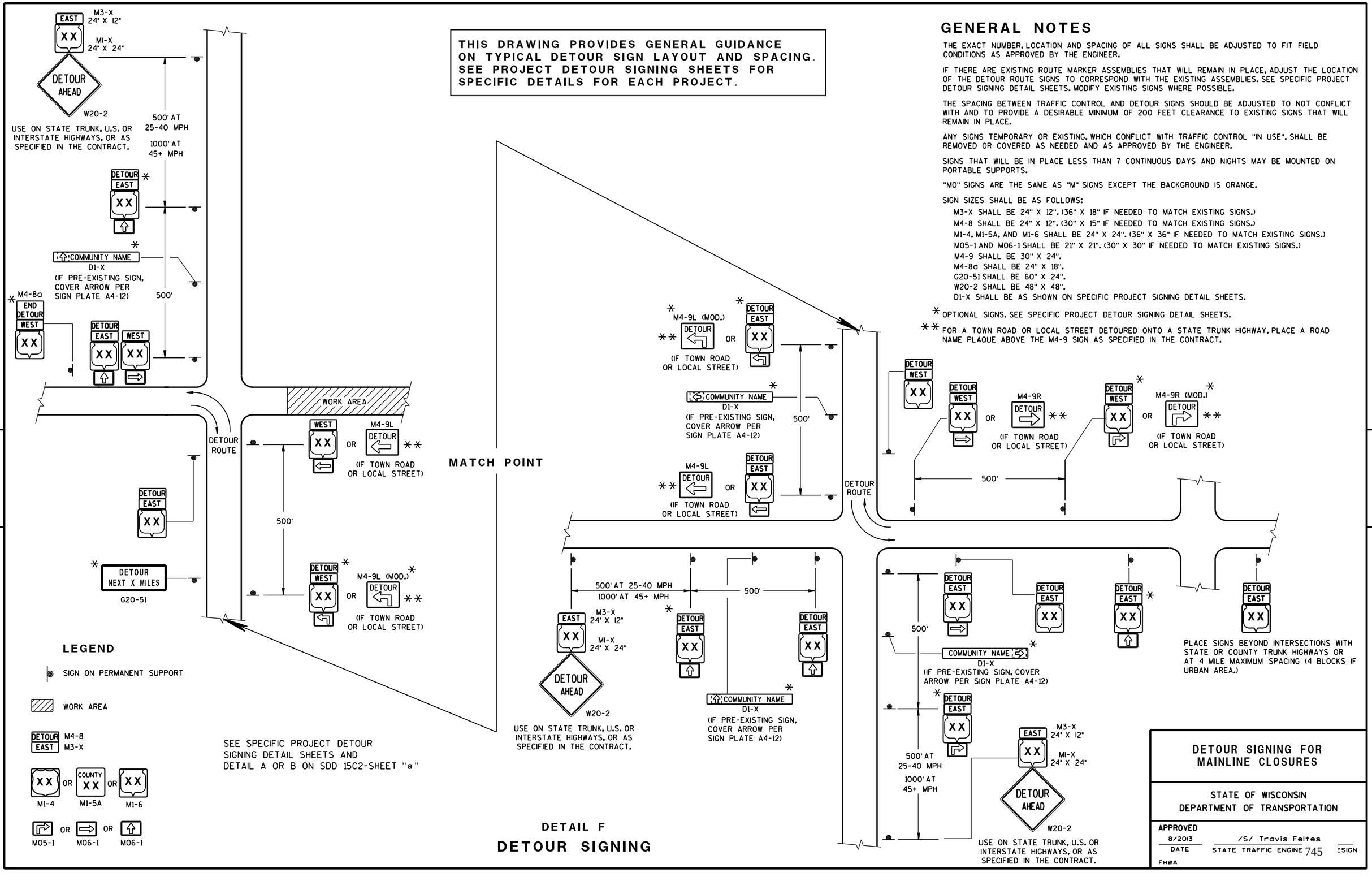
"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

SIGN SIZES SHALL BE AS FOLLOWS:

- M3-X SHALL BE 24" X 12". (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS.)
- M4-8 SHALL BE 24" X 12". (30" X 15" IF NEEDED TO MATCH EXISTING SIGNS.)
- M1-4, M1-5A, AND M1-6 SHALL BE 24" X 24". (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS.)
- M05-1 AND M06-1 SHALL BE 21" X 21". (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS.)
- M4-9 SHALL BE 30" X 24".
- M4-8a SHALL BE 24" X 18".
- G20-51 SHALL BE 60" X 24".
- W20-2 SHALL BE 48" X 48".
- D1-X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.

* OPTIONAL SIGNS. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS.

** FOR A TOWN ROAD OR LOCAL STREET DETOURED ONTO A STATE TRUNK HIGHWAY, PLACE A ROAD NAME PLAQUE ABOVE THE M4-9 SIGN AS SPECIFIED IN THE CONTRACT.



LEGEND

- SIGN ON PERMANENT SUPPORT
- WORK AREA
- DETOUR EAST — M4-8, M3-X
- XX OR COUNTY XX OR XX — M1-4, M1-5A, M1-6
- M05-1 OR M06-1 OR M06-1

SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS AND DETAIL A OR B ON SDD 15C2-SHEET "a"

DETAIL F

DETOUR SIGNING

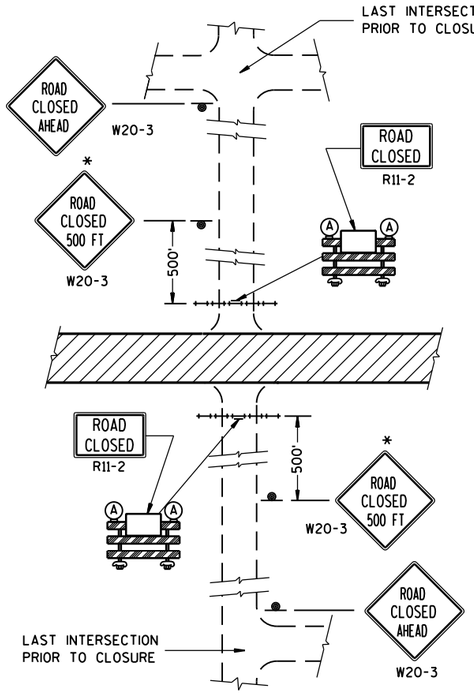
DETOUR SIGNING FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
8/2013 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER
FHWA

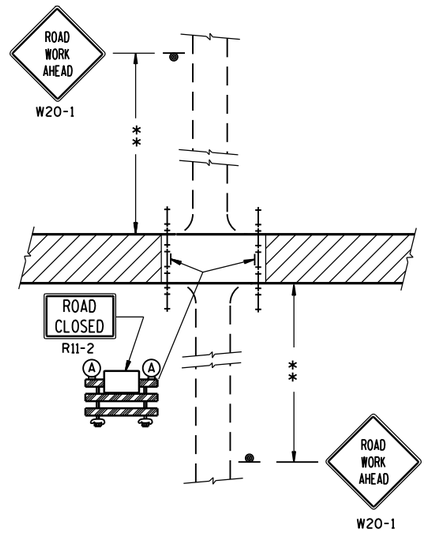
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S.D.D. 15 C 2-5c



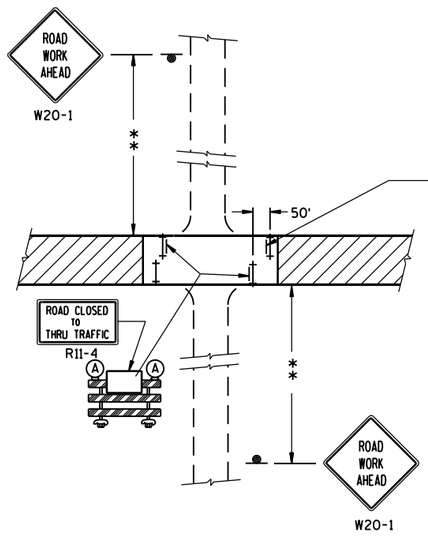
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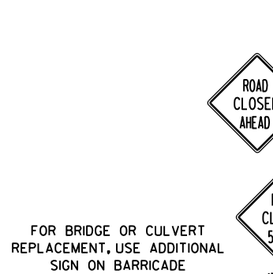
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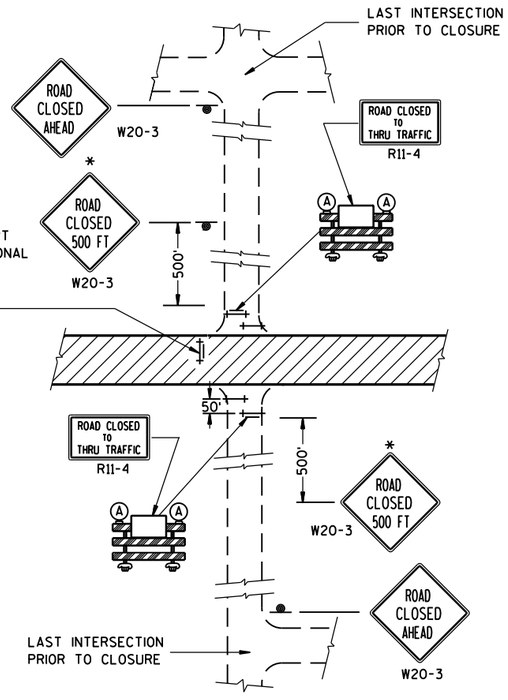
(PUBLIC CROSS-TRAFFIC MAINTAINED. NO ACCESS TO PROJECT).





DETAIL 3

(PUBLIC CROSS-TRAFFIC MAINTAINED. CONTRACTOR, LOCAL BUSINESS AND RESIDENT ACCESS).



DETAIL 4

(CONTRACTOR, LOCAL BUSINESS AND RESIDENT ACCESS TO PROJECT)

GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND BARRICADES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

IF A "STOP" SIGN MUST BE REMOVED FOR A WORK OPERATION, A TEMPORARY "STOP" SIGN SHALL BE PLACED PRIOR TO THE SIGN REMOVAL, OR A FLAGGER SHALL BE PROVIDED UNTIL THE SIGN IS RE-ESTABLISHED.

BARRICADES THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED UPON COMPLETION OF THE OPERATION OR, FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

ALL TYPE III BARRICADES SHALL HAVE RAILS REFLECTORIZED ON BOTH FACES. STRIPES SHALL BE PROPERLY SLOPED DOWN TOWARD THE TRAFFIC SIDE OR AS SHOWN IN THE ROAD CLOSURE BARRICADE DETAIL D FOR FULL ROAD CLOSURES.

TYPE "A" LOW-INTENSITY FLASHING WARNING LIGHTS SHALL BE VISIBLE ON BOTH SIDES OF THE BARRICADE.

THE R11-2, R11-3 AND R11-4 SIGNS PLACED ON BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE OR BOTTOM RAILS.

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:
R11-2 SHALL BE 48" X 30".
R11-4 AND R11-3 SHALL BE 60" X 30".

*OMIT THE "ROAD CLOSED 500 FT." SIGN IF THE LAST INTERSECTION IS 500 FT. OR LESS FROM THE WORK ZONE.

**500' MAX. OR AT LAST INTERSECTION WHICHEVER IS CLOSER.

LEGEND

- SIGN ON PERMANENT SUPPORT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- (A) TYPE "A" WARNING LIGHT (FLASHING)
- WORK AREA

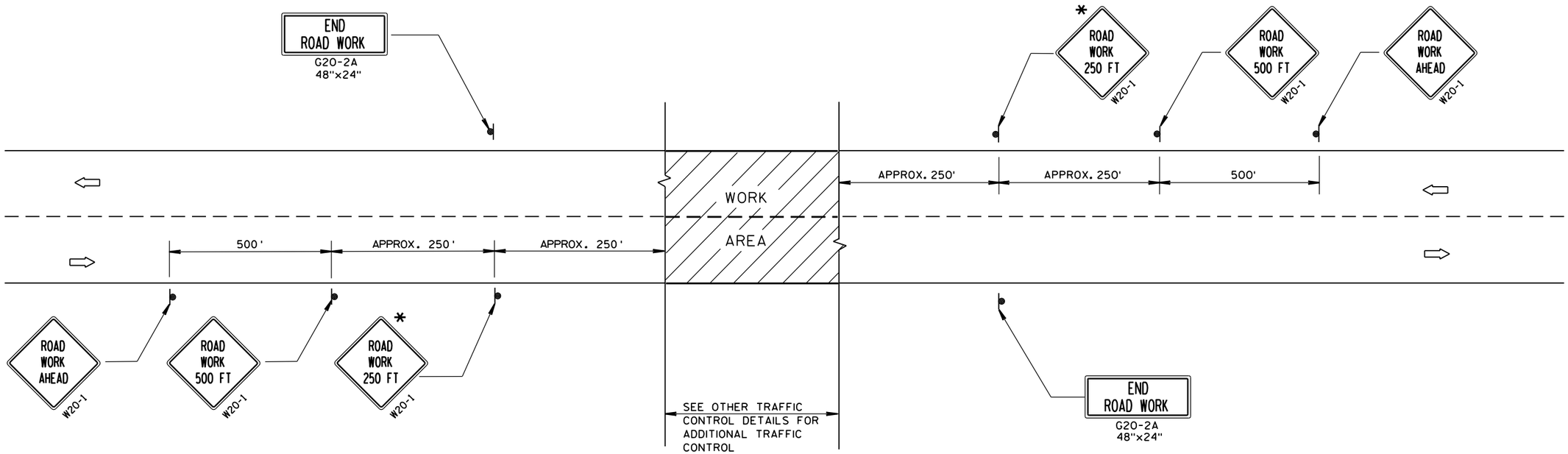
BARRICADES AND SIGNS FOR SIDEROAD CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

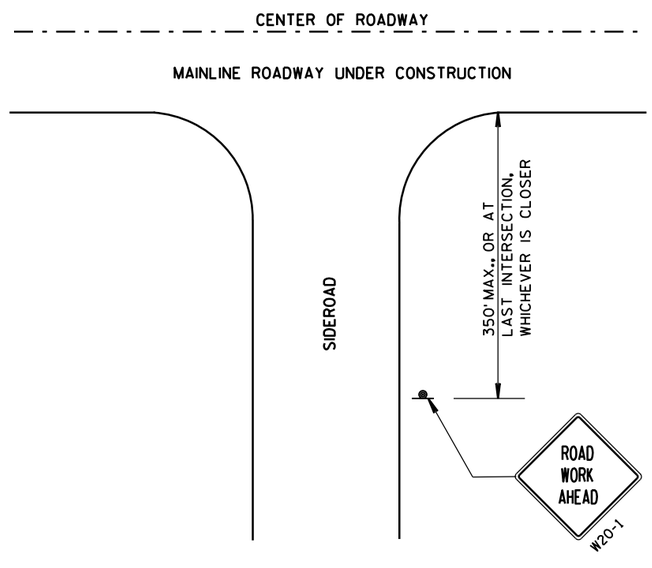
APPROVED
8/2013 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER
FHWA

6

S.D.D. 15 C 3-2



TYPICAL SIDEROAD APPROACH WARNING SIGN DETAIL



GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS, 36"x36" SIGNS MAY BE USED INSTEAD OF 48"x48" SIGNS.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

IF A "STOP" SIGN MUST BE REMOVED FOR A WORK OPERATION, A TEMPORARY "STOP" SIGN SHALL BE PLACED PRIOR TO THE SIGN REMOVAL, OR A FLAGGER SHALL BE PROVIDED UNTIL THE SIGN IS RE-ESTABLISHED.

* THE THIRD W20-1 SIGN IS REQUIRED ONLY IF THERE IS AN INTERSECTION BETWEEN THE "ROAD WORK 500 FT" SIGN AND THE WORK ZONE. ADJUST THE PLACEMENT OF THIS SIGN BASED ON INTERSECTION LOCATION AND OTHER FIELD CONDITIONS.

LEGEND

- SIGN ON PERMANENT SUPPORT
- DIRECTION OF TRAFFIC
- WORK AREA

TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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8/2013 — DATE

/S/ Travis Feltes — STATE TRAFFIC ENGINEER

747 — SIGN

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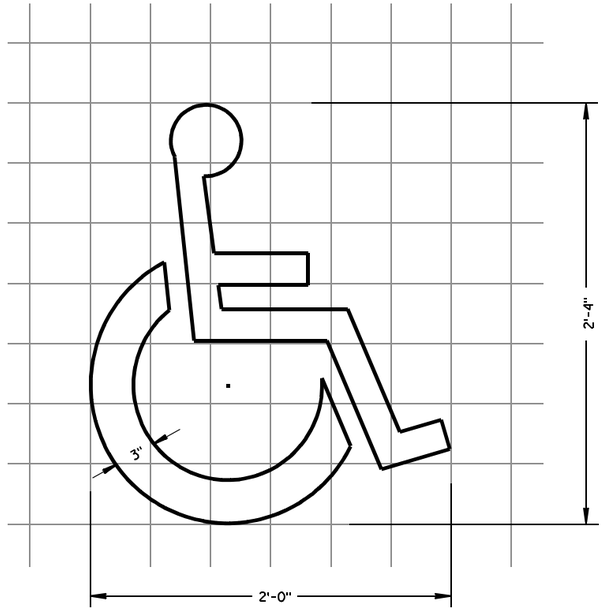
S.D.D. 15 C 5-2

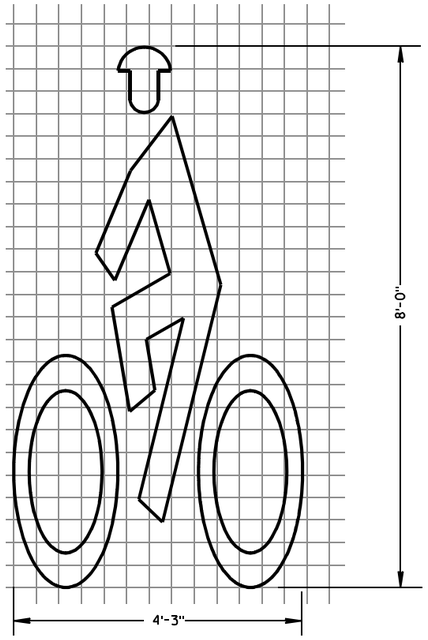
GENERAL NOTES

DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

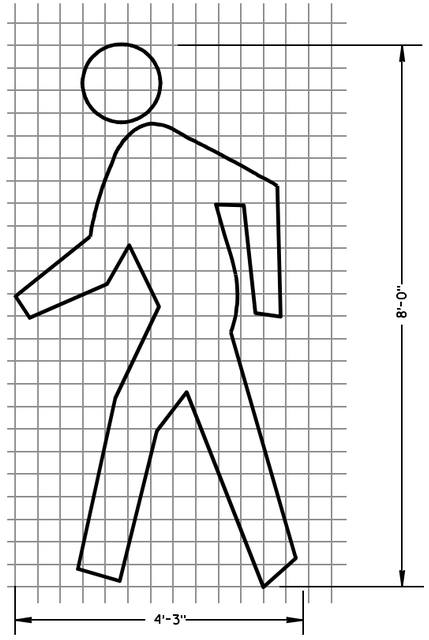
ALL LETTERS, ARROWS AND SYMBOLS SHALL BE IN CONFORMANCE WITH REQUIREMENTS INCLUDED IN "STANDARD ALPHABETS FOR HIGHWAY SIGNS AND PAVEMENT MARKING" BOOK BY THE FEDERAL HIGHWAY ADMINISTRATION. ALL LETTERS, ARROWS AND SYMBOLS SHALL BE WHITE AND REFLECTORIZED. SMALL DIFFERENCES IN DIMENSIONS WITHIN THE TOLERANCES OF THAT BOOK ARE ACCEPTABLE.

A DETAILED DRAWING OF THE HANDICAPPED PARKING SYMBOL IS ILLUSTRATED IN THE "STANDARD HIGHWAY SIGNS MANUAL" BY THE FEDERAL HIGHWAY ADMINISTRATION.

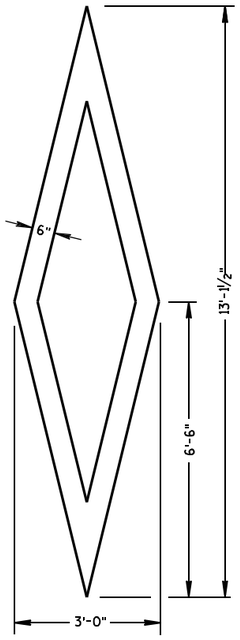




BIKE CROSSING SYMBOL



PEDESTRIAN SYMBOL



PREFERENTIAL LANE SYMBOL

6

6

S.D.D. 15 C 7-12a

S.D.D. 15 C 7-12a

PAVEMENT MARKING SYMBOLS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

7/1/11
DATE

/S/ Thomas N Nathan
STATE TRAFFIC ENGINEER

748

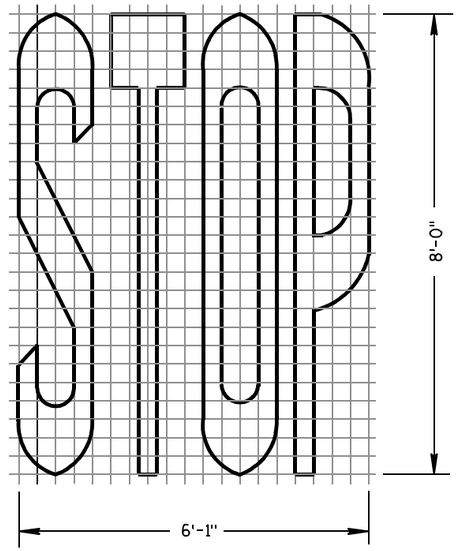
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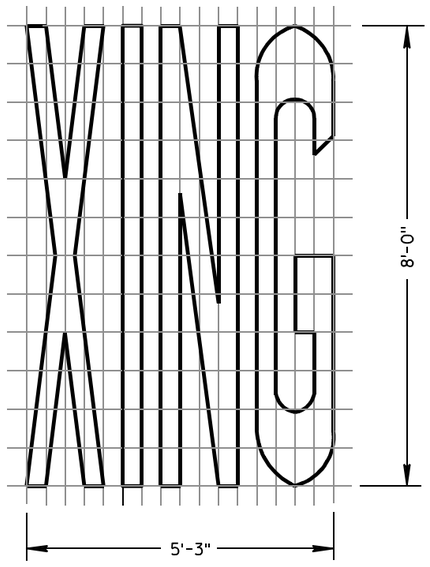
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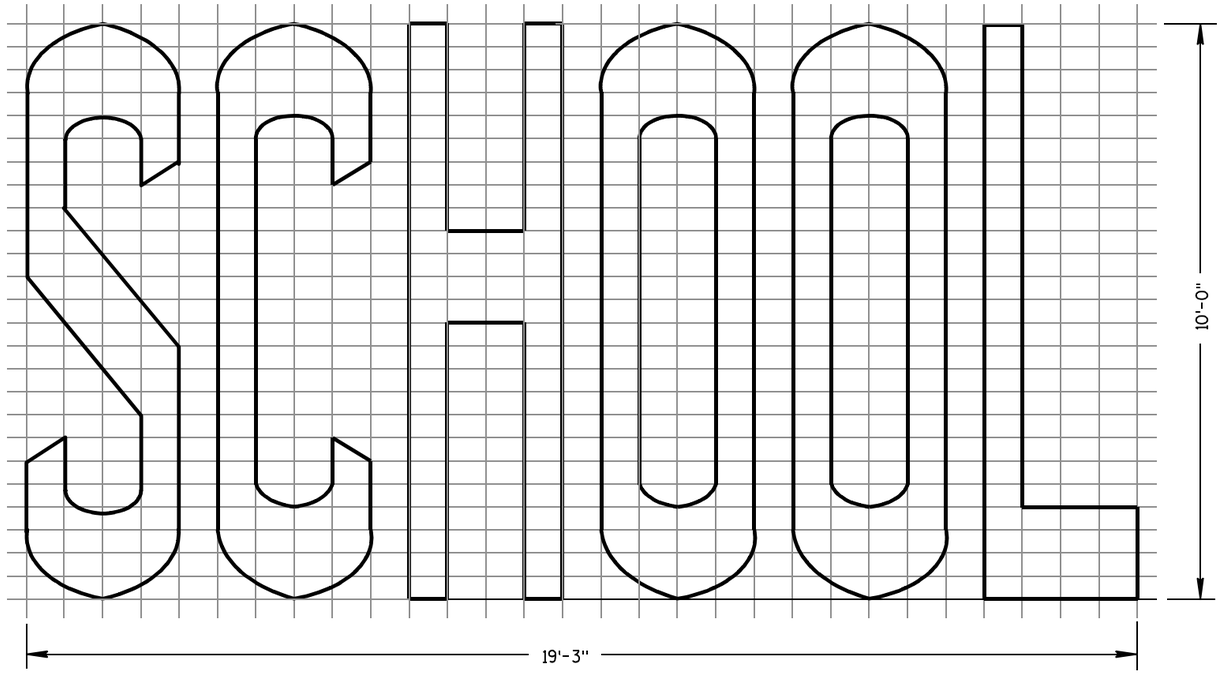
GENERAL NOTES

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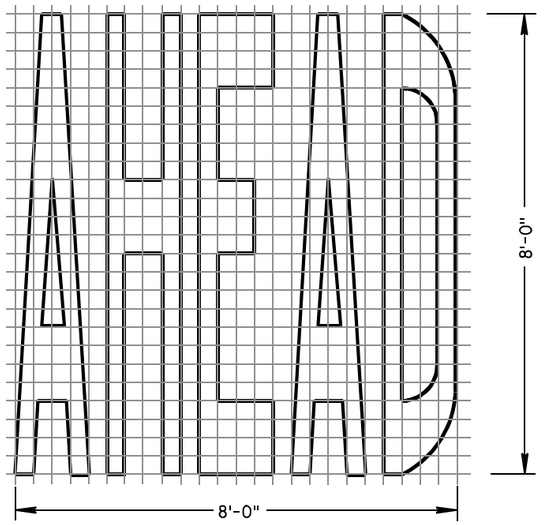
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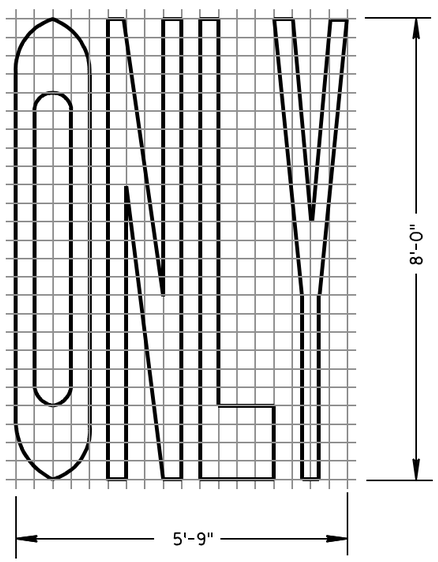


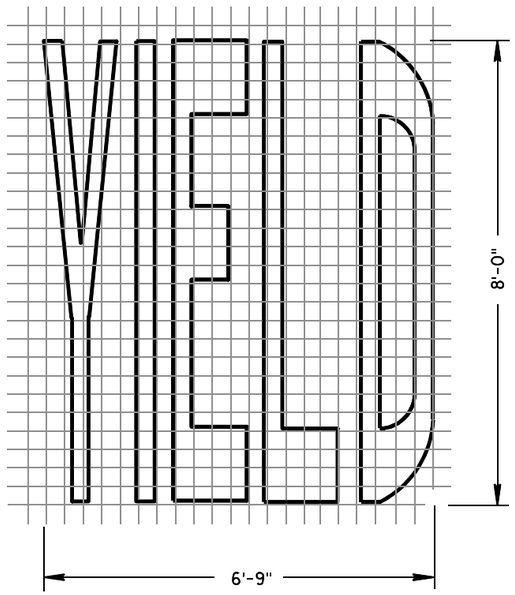


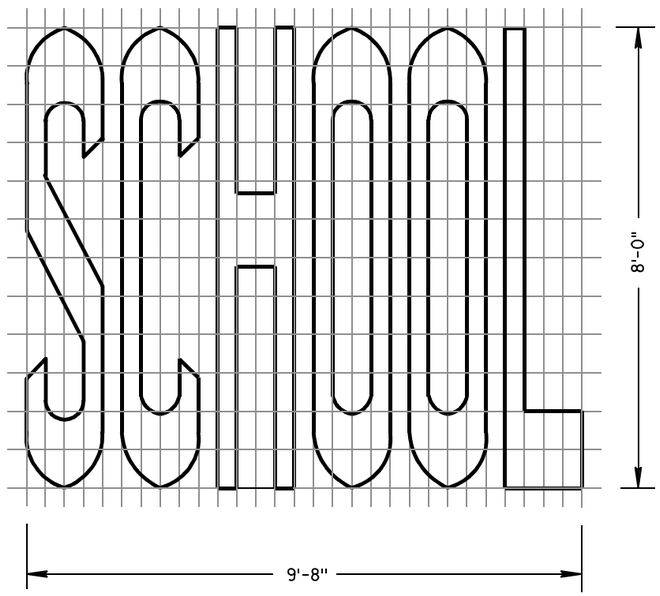


TWO-LANE









SINGLE-LANE

PAVEMENT MARKING WORDS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

7-1-11 — DATE

/S/ Thomas N. Nothohm — STATE TRAFFIC ENGINEER

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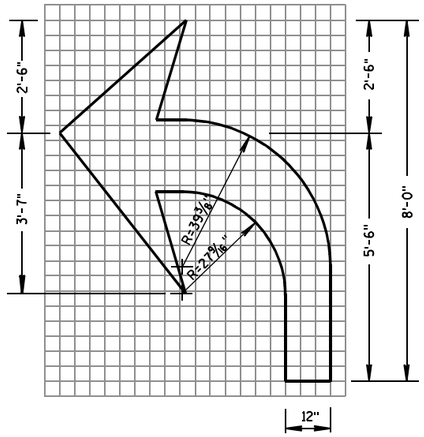
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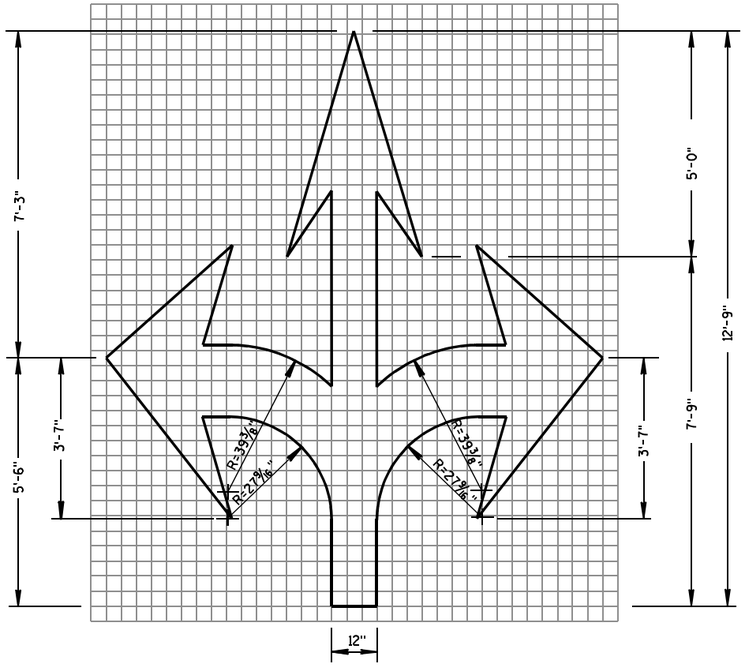
S.D.D. 15 C 7-12b

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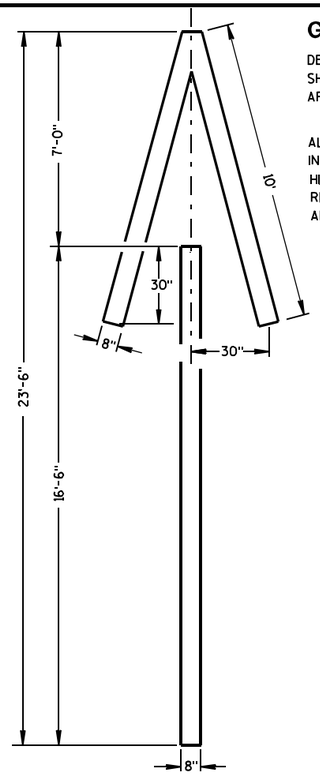
S.D.D. 15 C 7-12b



TYPE 2



TYPE 6

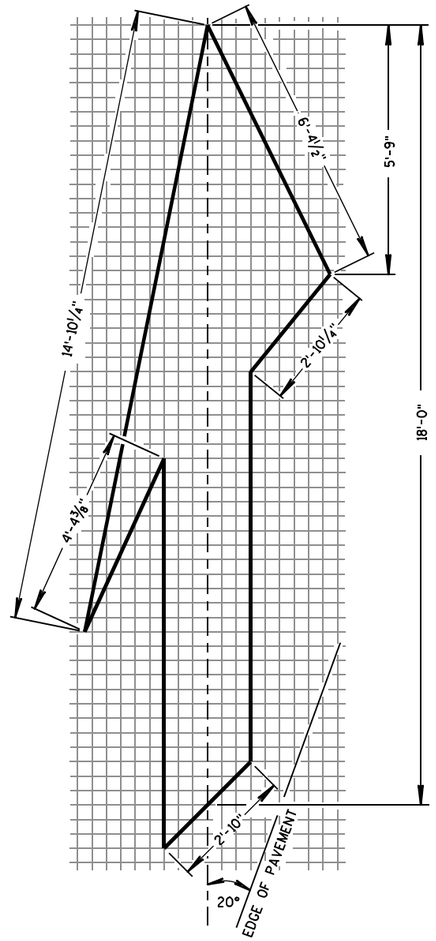


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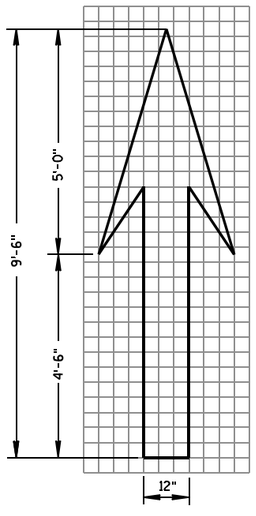
GENERAL NOTES

DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

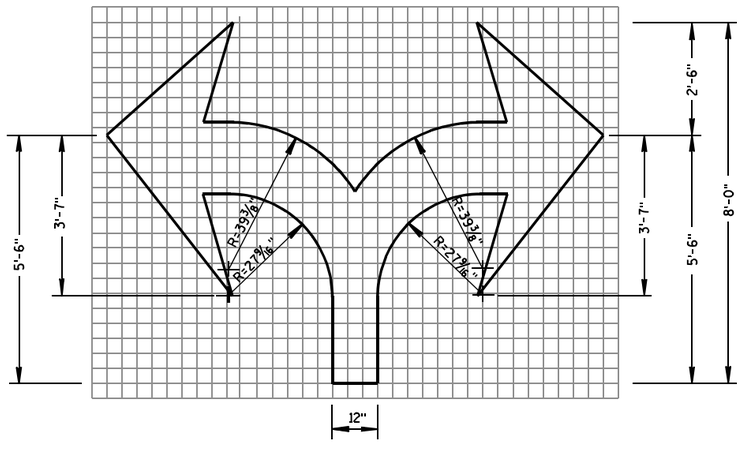
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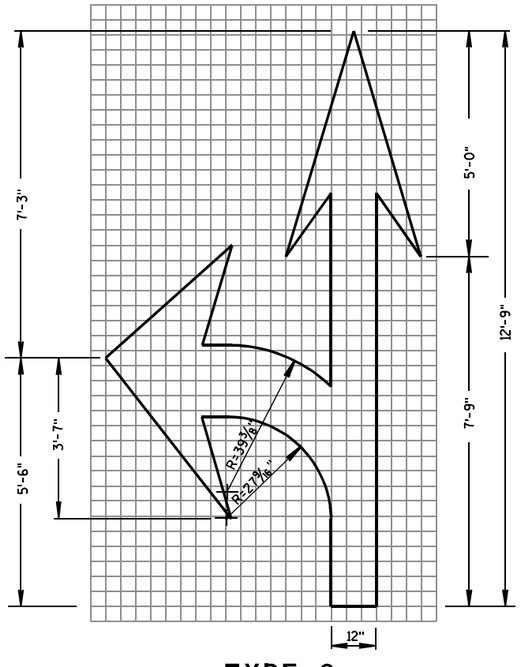
TYPE 5 LANE DROP ARROW



TYPE 1



TYPE 7



TYPE 3

PAVEMENT MARKING ARROWS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

7/1/11 — DATE

/S/ Thomas N. Nothdurft — STATE TRAFFIC ENGINEER

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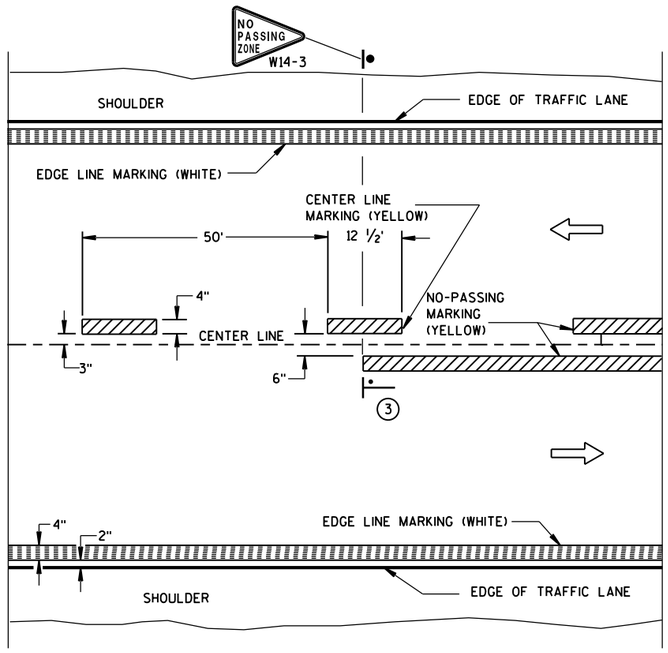
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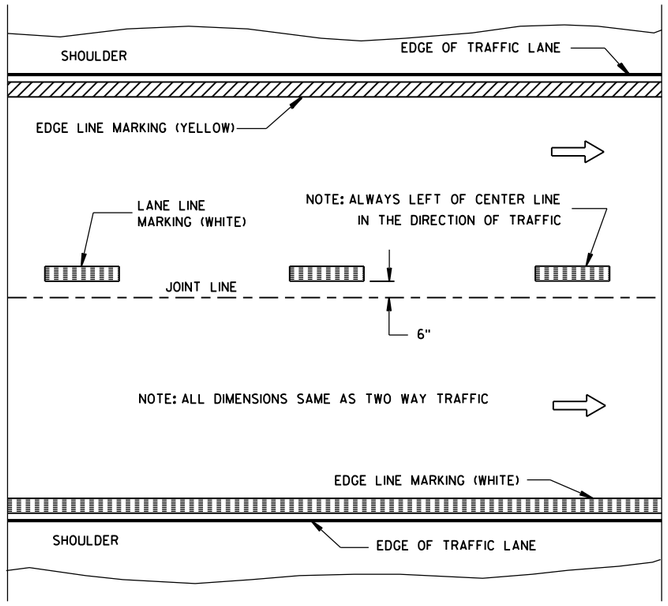
S.D.D. 15 C 7-12c

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S.D.D. 15 C 7-12c

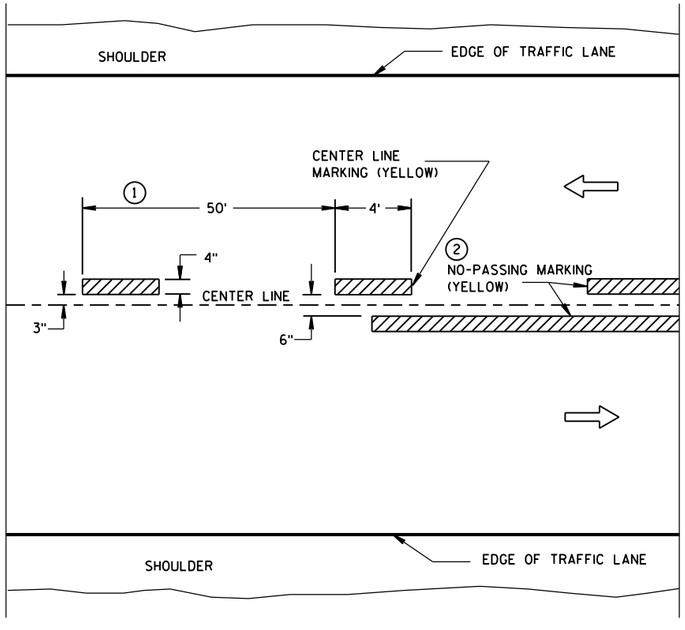


TWO WAY TRAFFIC

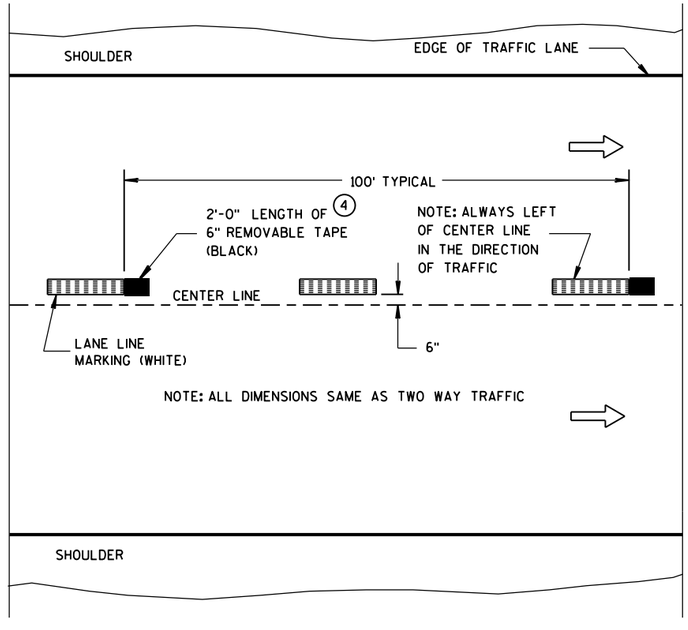


ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY (INTERMEDIATE) PAVEMENT MARKING

(SHOWS CYCLE FOR TEMPORARY CENTER LINE OR TEMPORARY LANE LINE MARKING)

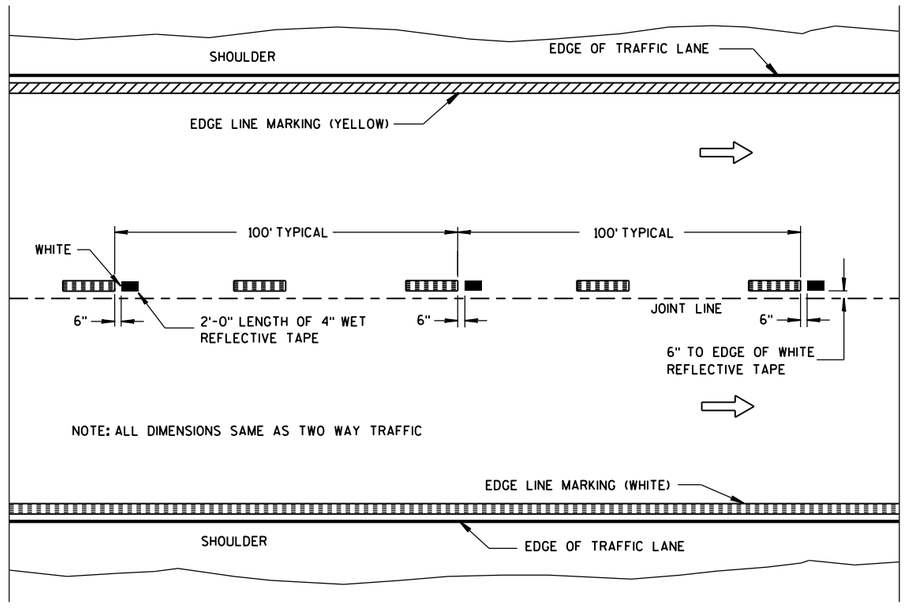
GENERAL NOTES

DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.

1. HALF CYCLE LENGTHS (25'±) WITH 2' MINIMUM STRIPE LENGTHS SHALL BE PROVIDED ON ROADWAYS (INCLUDING TEMPORARY TRAVELED WAYS) WITH REVERSE CURVATURE, CURVATURE OF OVER 5 DEGREES OR WHEN DIRECTED BY THE ENGINEER TO MARK UNUSUAL ALIGNMENT OF THE TRAVELED WAY.
2. NO PASSING ZONE TEMPORARY PAVEMENT MARKING IS REQUIRED TO BE PLACED, WHERE APPROPRIATE, ALONG WITH CENTERLINE TEMPORARY PAVEMENT MARKING WHEN A SAME DAY PERMANENT PAVEMENT MARKING ITEM IS INCLUDED IN THE CONTRACT.
3. NO PASSING ZONE MARKINGS ARE PLACED ACCORDING TO "T" MARKINGS. IF EXISTING NO PASSING ZONE W14-3 SIGNS ARE BEYOND 50 FEET IN EITHER DIRECTION, THE SIGNS SHALL BE MOVED TO THE "T" MARKINGS.
4. CONCRETE ONLY.

NOTE

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL



WET REFLECTIVE TAPE SUPPLEMENT TO
SPRAYED OR NON WET REFLECTIVE TAPE LANE LINE

LEGEND

"T" MARKING

POST MOUNTED SIGN

PAVEMENT MARKING (MAINLINE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

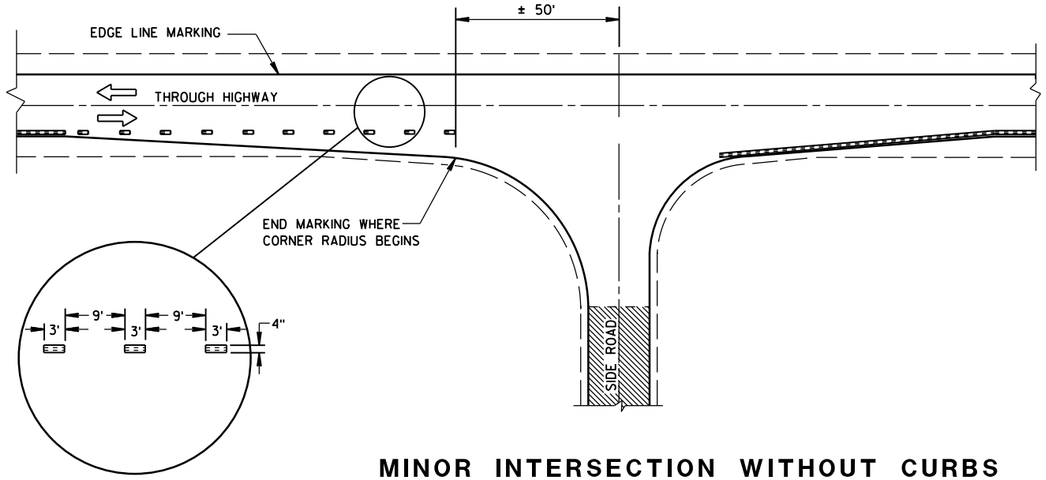
APPROVED
5-13-2013 DATE
/S/ Travis Feltes STATE TRAFFIC E 751
FHWA

6

S.D.D. 15 C 8-16a

6

S.D.D. 15 C 8-16a



MINOR INTERSECTION WITHOUT CURBS

GENERAL NOTES

EDGE LINES SHALL BE OMITTED THROUGH INTERSECTIONS. EDGE LINES SHALL BE CONTINUED THROUGH DRIVEWAYS.

(1) WHEN DISTANCE "A" IS LESS THAN 250 FEET, OMIT LANE LINE.

(2) WHEN DISTANCE "B" IS LESS THAN 100 FEET, OMIT CHANNELIZING LANE LINE.

(3) ALTERNATIVE MARKING SHALL BE PROVIDED WHEN SPECIFIED IN THE CONTRACT. TYPICAL SITUATIONS WHERE THIS MARKING MAY BE REQUIRED ARE WHERE THE INTERSECTION IS ON A SHARP HORIZONTAL CURVE OR CREST VERTICAL CURVE IN AN UNLIGHTED AREA SUCH THAT THE EDGE LINE MAY BE MISLEADING TO THE MOTORIST OR DISAPPEAR FROM SIGHT.

(4) THE EDGE LINE IN THE TAPER AREAS OF THE BYPASS LANE AND THE BYPASS LANE SHALL BE LOCATED 1-FOOT FROM EDGE OF PAVEMENT TO THE OUTSIDE EDGE OF EDGE LINE.

(5) BARRIER LINE ENDS AT SIDE ROAD PAVEMENT/SURFACE EDGE EXTENSION.

(6) BARRIER LINE STARTS 500 FEET PRIOR TO THE BYPASS TAPER.

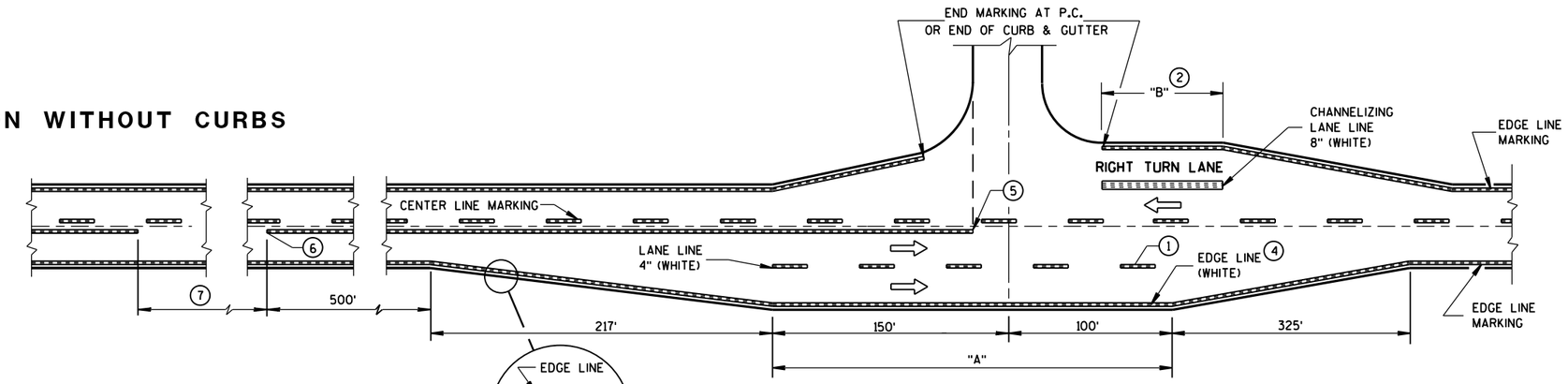
(7) IF THE DISTANCE BETWEEN 2 SUCCESSIVE NO-PASSING ZONES IS LESS THAN THE MINIMUM DISTANCE BETWEEN ZONES, CONNECT THE 2 ZONES.

(8) 3' LINE 9' GAP, EXCEPT RETRACE THE EXISTING LINE - GAP PATTERN WHERE EXISTING MARKINGS ARE IN PLACE.

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL

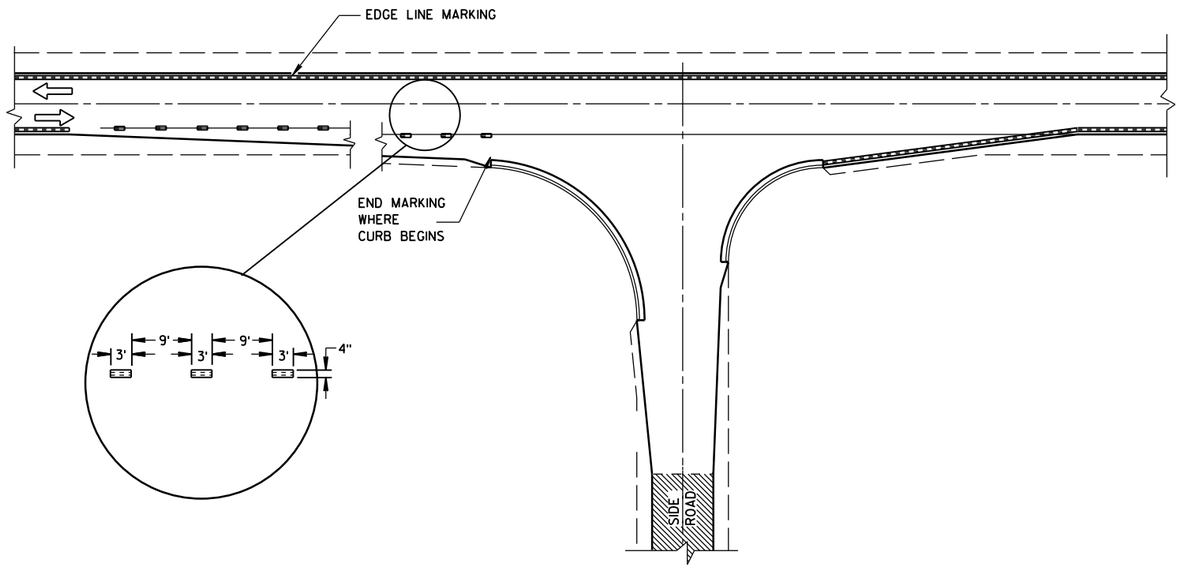
(7)

POSTED SPEED (MPH)	MINIMUM DISTANCE BETWEEN ZONES (FEET)
25 - 30	528
35 - 40	528
45 - 50	686
55	792



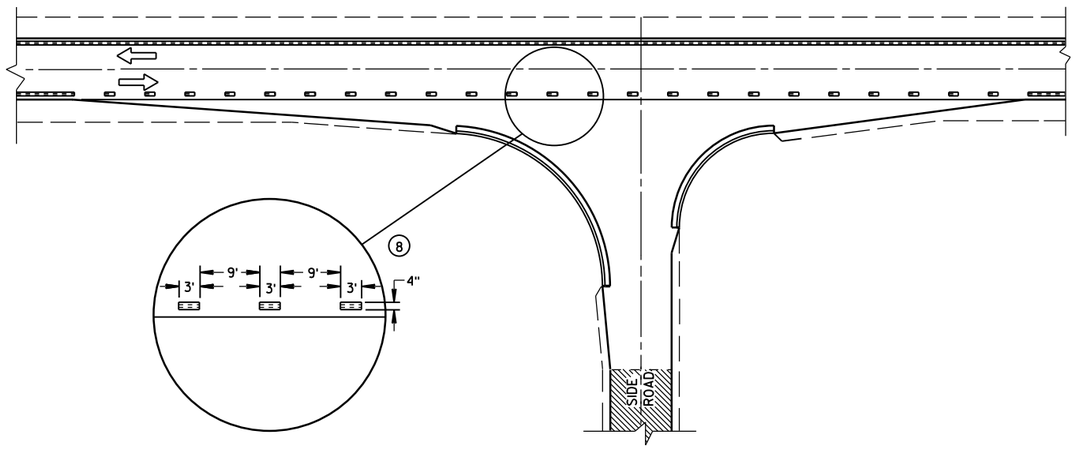
MAJOR INTERSECTIONS

(INTERSECTION WITH FULL RIGHT TURN LANE OR BYPASS LANES)



MINOR INTERSECTION WITH CURBS

(TYPICAL MARKING)



MINOR INTERSECTION WITH CURBS

(3) (FOR SPECIAL CONDITIONS AS SPECIFIED)

PAVEMENT MARKING
(INTERSECTIONS)

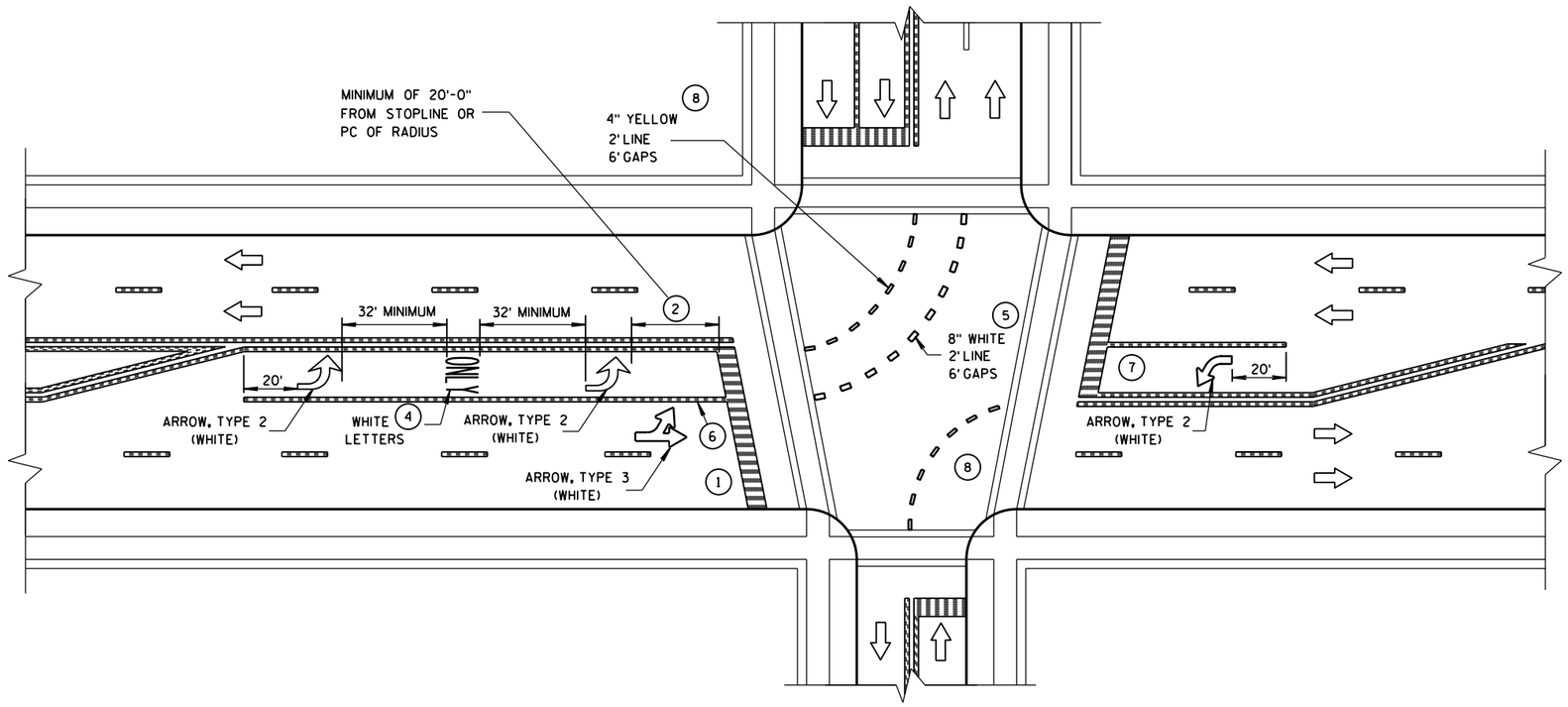
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR 752

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S.D.D. 15 C 8-16b

6

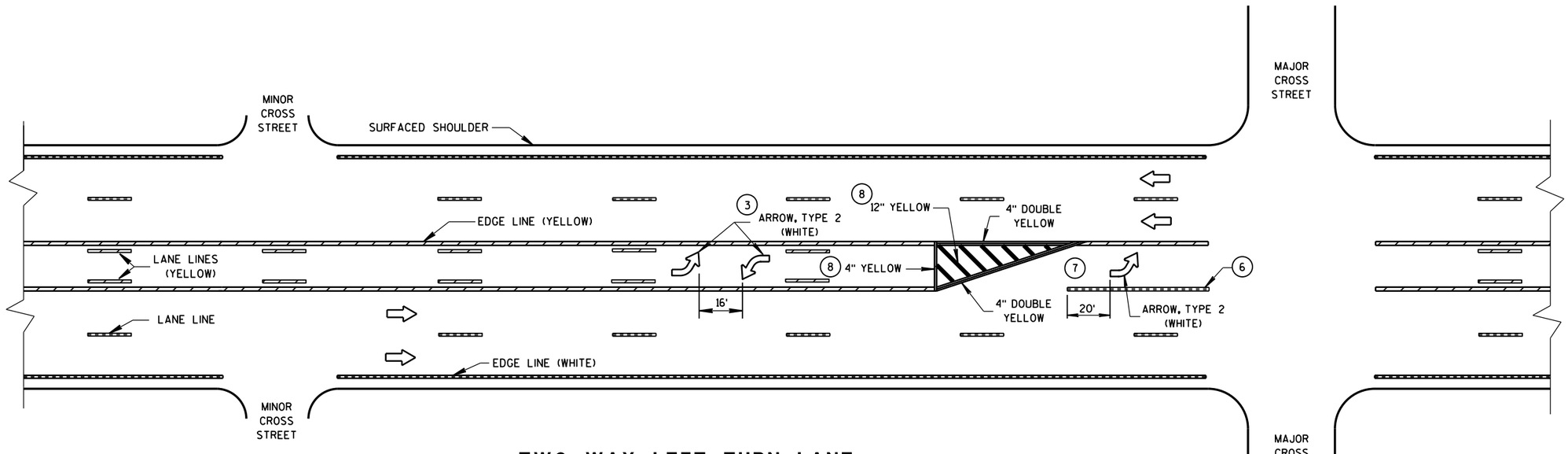
S.D.D. 15 C 8-16b



GENERAL NOTES

1. STOP BAR IS REQUIRED ONLY WHEN SPECIFIED IN THE CONTRACT.
2. DISTANCE MAY BE ADJUSTED TO ACCOMODATE SHORT LEFT TURN LANES. AS APPROVED BY THE ENGINEER.
3. A SET OF ARROWS IS REQUIRED EVERY 400 FEET OR NEAR INTERSECTIONS OR DRIVEWAYS WITH TURNING TRAFFIC.
4. ADD EXTRA SETS OF ONE ARROW AND ONE ONLY PER 160 FEET OR WHEN ON A CURVE.
5. 8" WHITE WITH 2' LINE 6' GAPS FOR DUAL TURN LANE.
6. 8" WHITE
7. ADD SECOND ARROW WHEN TURN BAY IS GREATER THAN OR EQUAL TO 108 FEET.
8. REQUIRED ONLY WHEN SPECIFIED IN THE CONTRACT.

NOTE:
ARROW SYMBOL (⇨)
SHOWS DIRECTION OF TRAVEL



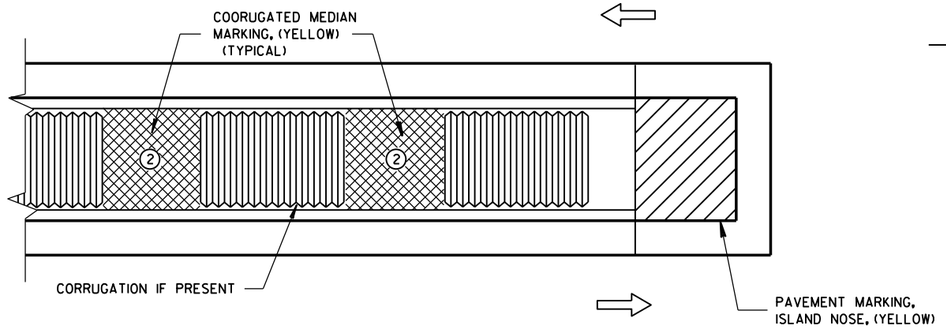
TWO WAY LEFT TURN LANE

PAVEMENT MARKING (LEFT TURN LANE)

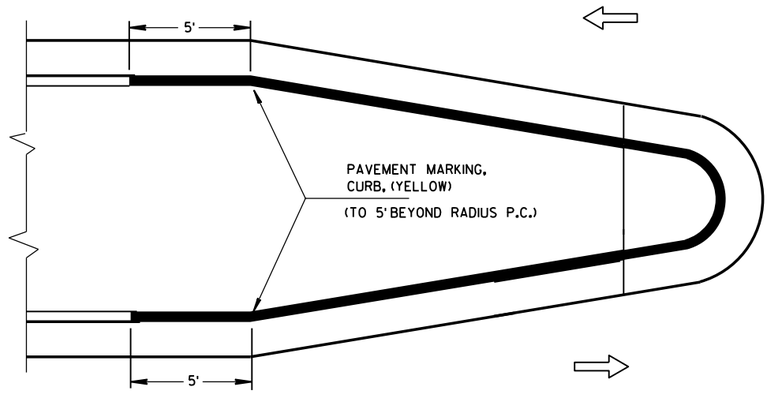
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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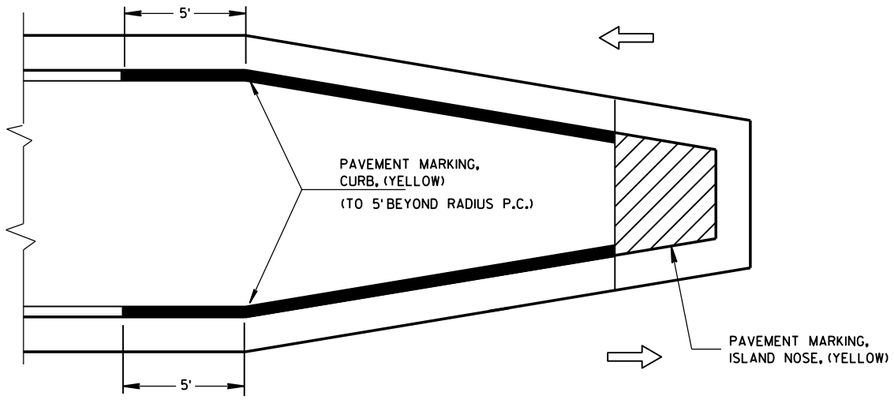
S.D.D. 15 C 8-16e



MEDIAN ISLAND WITH SQUARE BLUNT NOSE

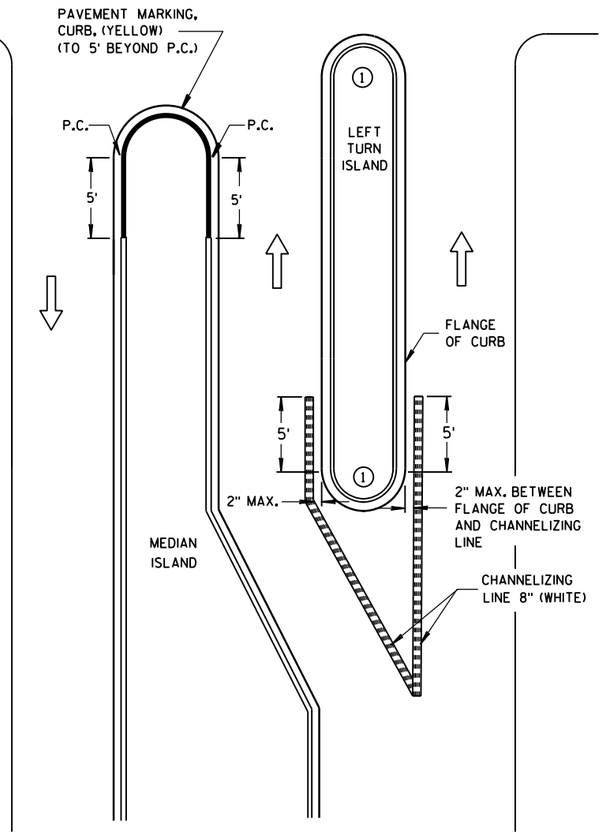


MEDIAN ISLAND WITH ROUND BLUNT NOSE



MEDIAN ISLAND WITH SLOPED NOSE

TYPICAL PLACEMENT OF PAVEMENT MARKING ON MEDIAN ISLANDS

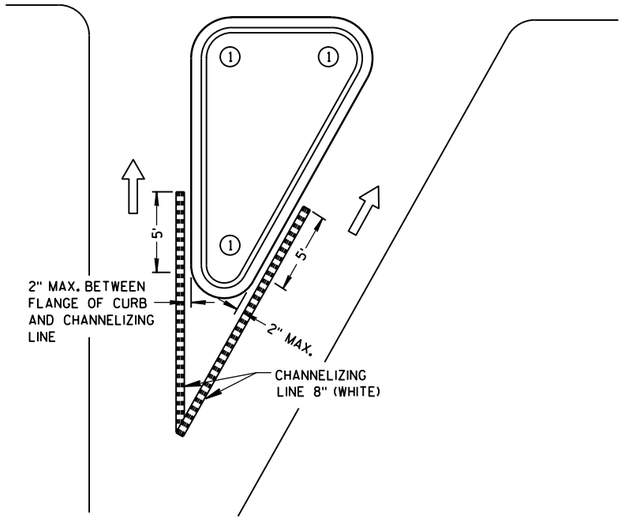


LEFT TURN & MEDIAN ISLAND

GENERAL NOTES

1. DO NOT MARK CURB NOSES THAT SEPARATE LANES OF TRAFFIC TRAVELING IN THE SAME DIRECTION.

2. WHEN CONCRETE CORRUGATED MEDIAN IS CONSTRUCTED TO SEPARATE TRAFFIC OPERATING IN THE OPPOSING DIRECTION YELLOW PAVEMENT MARKING SHALL BE APPLIED TO THE FLAT PORTION OF THE CONCRETE CORRUGATED MEDIAN. THE ITEM OF PAVEMENT MARKING, CONCRETE CORRUGATED MEDIAN, WILL BE MEASURED IN PLACE AND AND ACCEPTED IN ACCORDANCE WITH THE CONTRACT AND PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE FOOT.



RIGHT TURN ISLAND

LEGEND

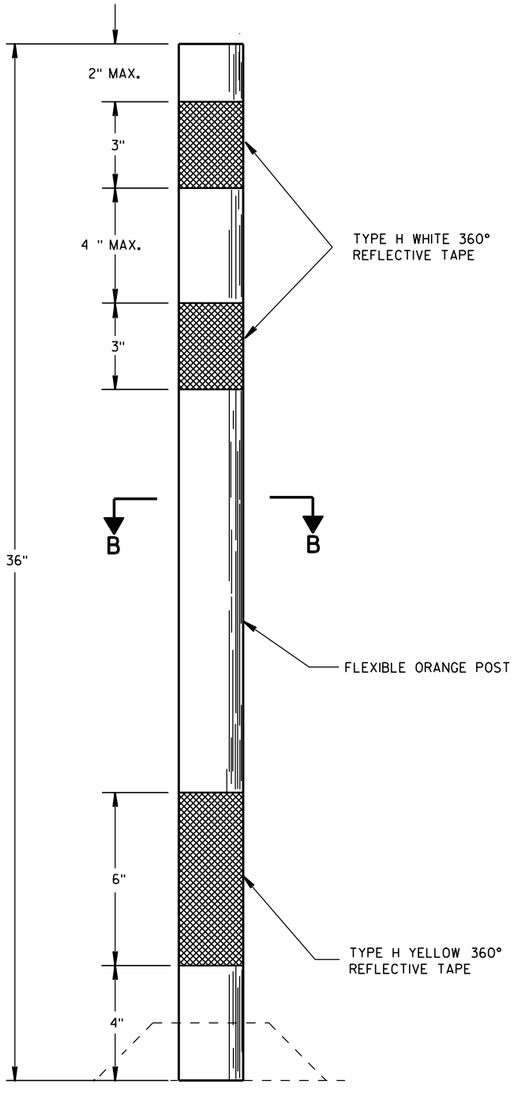
- ISLAND NOSE MARKING
- CURB MARKING
- CORRUGATED MEDIAN MARKING
- DIRECTION OF TRAVEL

PAVEMENT MARKING
(ISLANDS)

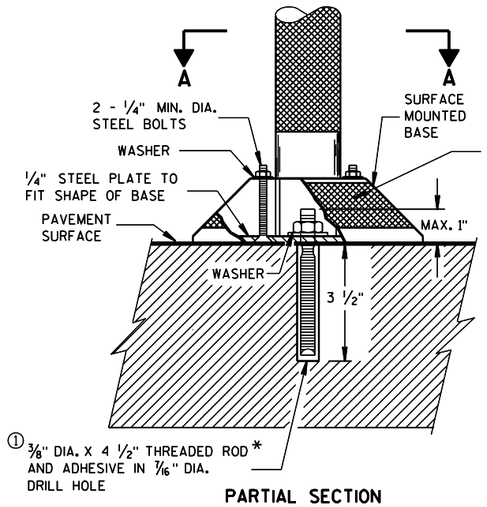
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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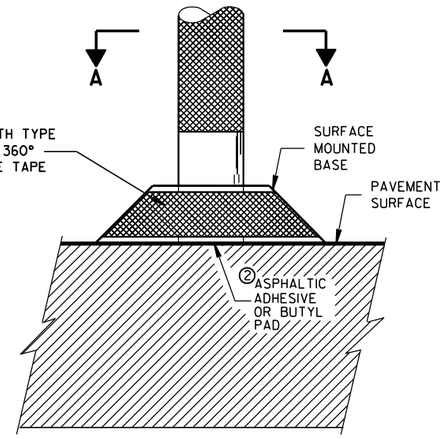
S.D.D. 15 C 8-16f



FLEXIBLE TUBULAR MARKER POST



PARTIAL SECTION TO SHOW BOLTS



POST BASES ON NEW OR EXISTING PAVEMENT

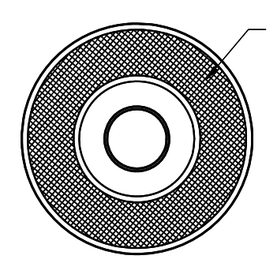
GENERAL NOTES

DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

SURFACE MOUNTED BASES SHALL BE FURNISHED IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS TO BE COMPATIBLE WITH FLEXIBLE TUBULAR MARKER POSTS TO A SIZE AND SHAPE THAT WILL PROVIDE A STABLE POST FOUNDATION WHEN SECURED TO THE PAVEMENT.

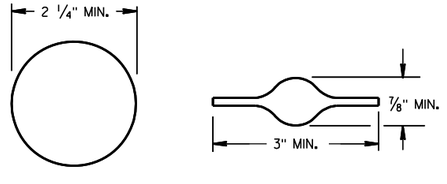
① THREADED ROD SHALL BE MACHINED DOWN TO 0.280 INCH DIA. 1 1/4 INCHES FROM THE TOP.

② THE ASPHALTIC ADHESIVE OR BUTYL PAD FURNISHED SHALL BE IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS.



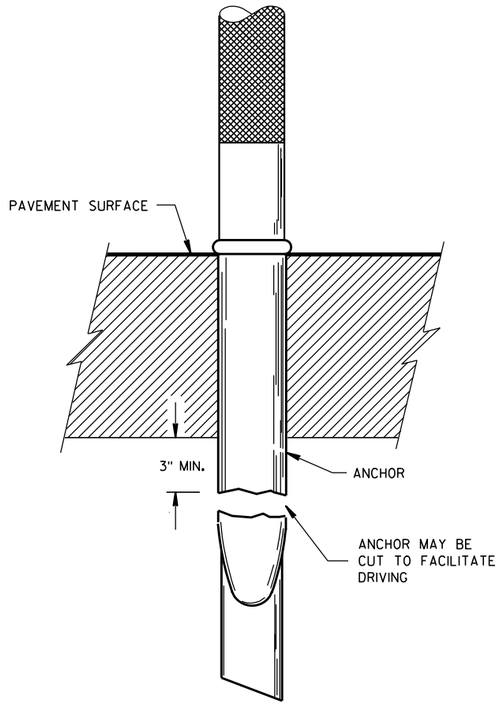
SECTION A-A

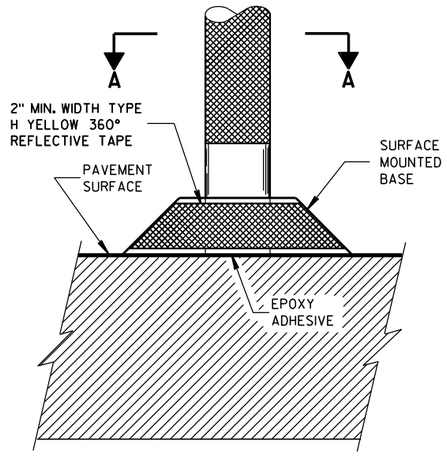
SURFACE MOUNTED BASE



SECTION B-B

ALTERNATIVE SHAPES





POST ANCHOR AND BASE ON PAVEMENT WHICH WILL BE REMOVED

FLEXIBLE TUBULAR MARKER POST, ANCHOR & BASES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

2/17/94 DATE

/S/ Chester J. [illegible] DIRECTOR, OFFICE O 755

FHWA

6

S.D.D. 15 C 11-5

6

S.D.D. 15 C 11-5

LEGEND

SIGN ON PORTABLE OR PERMANENT SUPPORT

DIRECTION OF TRAFFIC

WORK AREA

FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF

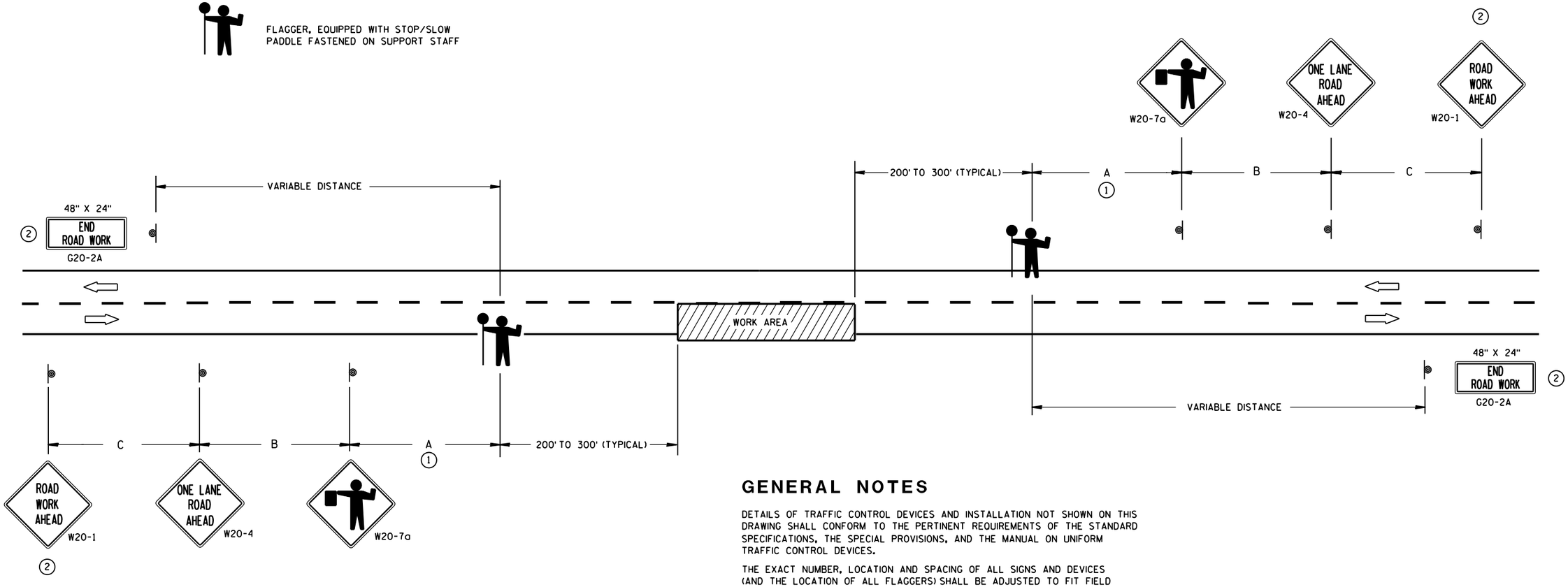
SIGN SPACING TABLE

SPEED LIMIT	SIGN SPACING A,B,C
25-35 MPH	200'
35-40 MPH	350'
45-55 MPH	500'



W3-4

USE OF THE "BE PREPARED TO STOP" SIGN IS OPTIONAL. WHEN USED, THIS SIGN SHALL BE LOCATED BETWEEN THE W20-7a AND W20-4 SIGNS. A 500' TYPICAL SPACING SHALL BE PROVIDED BETWEEN THE SIGNS.



(1) FOR A MOVING WORK OPERATION,
SIGNING FOR BOTH DIRECTIONS SHALL BE REESTABLISHED (AS SIMULTANEOUSLY AS PRACTICAL) AT APPROXIMATELY 3500 FOOT INTERVALS IN THE MOVING WORK OPERATION OR AS APPROVED BY THE ENGINEER.

(2) SIGN NOT REQUIRED IF FLAGGING OPERATION OCCURS WITHIN A SIGNED ROAD WORK ZONE AREA.

GENERAL NOTES

DETAILS OF TRAFFIC CONTROL DEVICES AND INSTALLATION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS, THE SPECIAL PROVISIONS, AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS AND DEVICES (AND THE LOCATION OF ALL FLAGGERS) SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

THE FIRST ADVANCE WARNING SIGN SHOULD TYPICALLY BE LOCATED IN ADVANCE OF THE ANTICIPATED TRAFFIC BACKUP OR QUEUE.

WHEN A SIDE ROAD OR RAMP INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, ADDITIONAL TRAFFIC CONTROLS SHALL BE PROVIDED AS SPECIFIED IN THE PLANS AND/OR THE SPECIAL PROVISIONS OR AS APPROVED BY THE ENGINEER.

FLAGGERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIMES. THEY SHALL BE EQUIPPED WITH STOP/SLOW PADDLES FASTENED ON SUPPORT STAFFS. WHEN THE FLAGGING OPERATION IS NOT IN EFFECT, COVER OR REMOVE ALL TEMPORARY TRAFFIC CONTROL SIGNS.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
8/2013
DATE
/S/ Travis Feltes
STATE TRAFFIC ENGINEER
FHWA

6

S.D.D. 15 C 12-4

6

S.D.D. 15 C 12-4

GENERAL NOTES

ORIENT ANCHOR BOLTS IN FOOTING AND PROVIDE ANCHOR BOLT STICK OUT ABOVE TOP OF CONCRETE FOOTING BASE PER FABRICATION DRAWING.

BENDING DIMENSIONS FOR REINFORCING BARS ARE OUT TO OUT.

USE 3" CLEAR FOR ALL REINFORCEMENT UNLESS NOTED OTHERWISE.

SIGN SUPPORTS SHALL BE LOCATED NORMAL TO ROADWAY.

THE CONTRACTOR IS RESPONSIBLE FOR MAKING HIS OWN DETERMINATION AS TO THE TYPE AND LOCATION OF UNDERGROUND UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE THERETO.

WELDING OF ANCHOR BOLTS TO THE CAGE IS UNACCEPTABLE. TEMPLATES SHALL BE USED.

BAR CAGE TO BE ASSEMBLED USING TIE WIRES ONLY, NO WELDING.

BASES (SHAFT) SHALL BE EXCAVATED BY THE USE OF A CIRCULAR AUGER. IF A BASE REQUIRES A DEEP FORM BECAUSE OF LOOSE SOIL, THE FORM SHALL BE REMOVED BEFORE BACK FILLING AROUND THE BASE. ANY REQUIRED BACKFILL SHALL BE WELL COMPACTED IN LAYERS OF 1 FOOT OR LESS. COMPACTION SHALL BE BY MECHANICAL MEANS. CARE SHALL BE TAKEN SO NO DAMAGE OCCURS TO THE CONCRETE BASE DURING COMPACTION.

EXCAVATION OF MATERIALS NOT OCCUPIED BY CONCRETE SHALL BE MINIMIZED TO REDUCE DISTURBANCE OF THE SURROUNDING SOILS.

THE BOTTOM OF THE DRILLED HOLE SHALL BE FIRM AND THOROUGHLY CLEANED SO NO LOOSE OR COMPRESSIBLE MATERIALS ARE PRESENT AT THE TIME OF THE CONCRETE PLACEMENT.

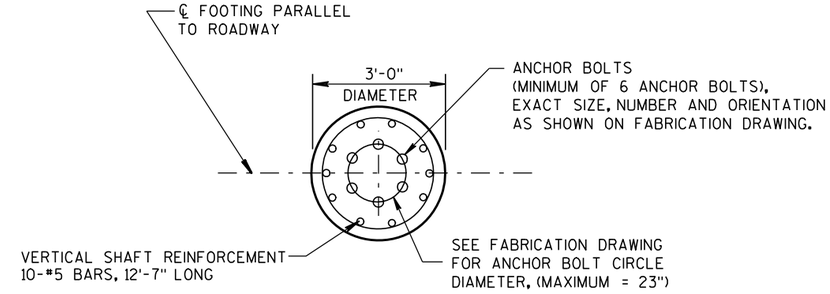
IF THE DRILLED HOLE CONTAINS STANDING WATER, THE CONCRETE SHALL BE PLACED USING A TREMIE TO DISPLACE THE WATER.

THE REINFORCEMENT AND ANCHOR BOLTS SHALL BE ADEQUATELY SUPPORTED IN THE PROPER POSITIONS SO NO MOVEMENT OCCURS DURING CONCRETE PLACEMENT.

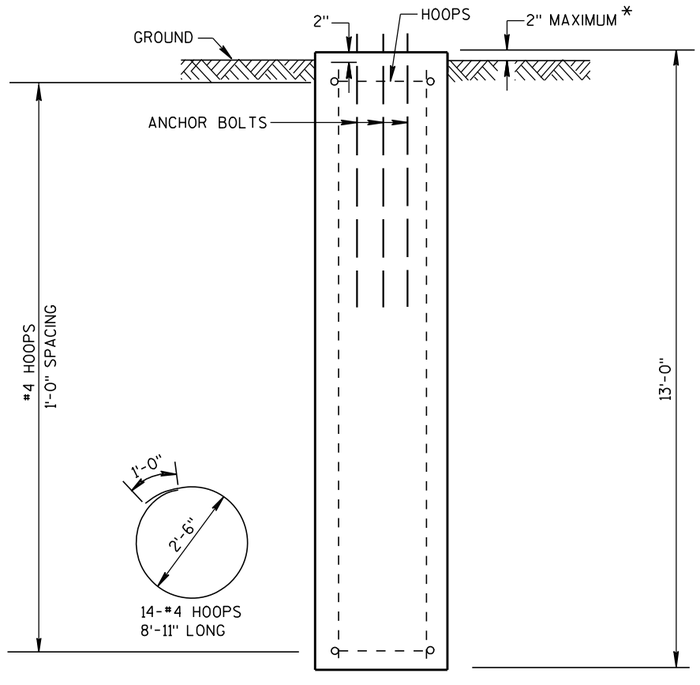
ANY DAMAGE TO THE CONCRETE BASE DURING CONSTRUCTION OPERATIONS SHALL BE REPAIRED AT THE ENGINEER'S DIRECTION, AT THE EXPENSE OF THE CONTRACTOR.

CONCRETE MASONRY	fc=3,500 p.s.i.
HIGH STRENGTH BAR STEEL REINFORCEMENT, GRADE 60	fy=60,000 p.s.i.
ANCHOR BOLTS	AASHTO M314 GRADE 55

THIS FOOTING HAS BEEN DESIGNED FOR SITES WHERE SOILS EXHIBIT A PHI-ANGLE GREATER THAN OR EQUAL TO 20 DEGREES (GRANULAR SOILS), OR A COHESION VALUE GREATER THAN OR EQUAL TO 350 PSF (COHESIVE SOILS).



PLAN VIEW



ELEVATION VIEW

* FOR OVERHEAD SIGN SUPPORTS THAT ARE INSTALLED ADJACENT TO SIDEWALKS, THE TOP OF THE BASE SHALL BE POURED FLUSH WITH THE GROUND.

CONCRETE - 3.4 C.Y. PER FOOTING
H.S. REINFORCEMENT - 215 LBS. PER FOOTING

36" DIAMETER FULL SPAN OVERHEAD SIGN SUPPORT BASE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

4/17/09 DATE

/S/ Thomas N. Nothdurm
STATE TRAFFIC ENGINEER

757 SIGN

FHWA

6

S.D.D. 15 C 15-3

GENERAL NOTES

ORIENT ANCHOR BOLTS IN FOOTING AND PROVIDE ANCHOR BOLT STICK OUT ABOVE TOP OF CONCRETE FOOTING BASE PER FABRICATION DRAWING.

BENDING DIMENSIONS FOR REINFORCING BARS ARE OUT TO OUT.

USE 3" CLEAR FOR ALL REINFORCEMENT UNLESS NOTED OTHERWISE.

SIGN SUPPORTS SHALL BE LOCATED NORMAL TO ROADWAY.

THE CONTRACTOR IS RESPONSIBLE FOR MAKING HIS OWN DETERMINATION AS TO THE TYPE AND LOCATION OF UNDERGROUND UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE THERETO.

WELDING OF ANCHOR BOLTS TO THE CAGE IS UNACCEPTABLE. TEMPLATES SHALL BE USED.

BAR CAGE TO BE ASSEMBLED USING TIE WIRES ONLY, NO WELDING.

BASES (SHAFT) SHALL BE EXCAVATED BY THE USE OF A CIRCULAR AUGER. IF A BASE REQUIRES A DEEP FORM BECAUSE OF LOOSE SOIL, THE FORM SHALL BE REMOVED BEFORE BACK FILLING AROUND THE BASE. ANY REQUIRED BACKFILL SHALL BE WELL COMPACTED IN LAYERS OF 1 FOOT OR LESS. COMPACTION SHALL BE BY MECHANICAL MEANS. CARE SHALL BE TAKEN SO NO DAMAGE OCCURS TO THE CONCRETE BASE DURING COMPACTION.

EXCAVATION OF MATERIALS NOT OCCUPIED BY CONCRETE SHALL BE MINIMIZED TO REDUCE DISTURBANCE OF THE SURROUNDING SOILS.

THE BOTTOM OF THE DRILLED HOLE SHALL BE FIRM AND THOROUGHLY CLEANED SO NO LOOSE OR COMPRESSIBLE MATERIALS ARE PRESENT AT THE TIME OF THE CONCRETE PLACEMENT.

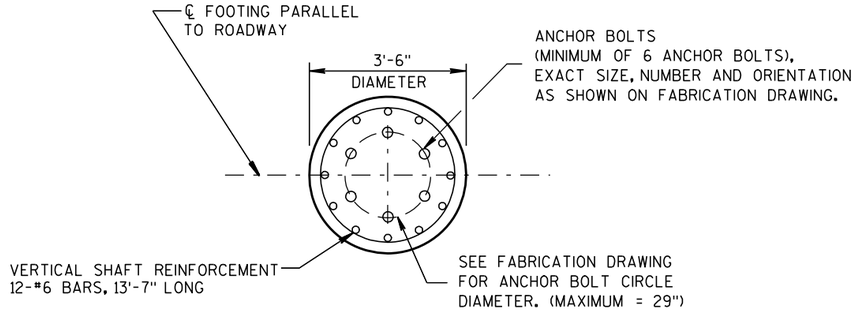
IF THE DRILLED HOLE CONTAINS STANDING WATER, THE CONCRETE SHALL BE PLACED USING A TREMIE TO DISPLACE THE WATER.

THE REINFORCEMENT AND ANCHOR BOLTS SHALL BE ADEQUATELY SUPPORTED IN THE PROPER POSITIONS SO NO MOVEMENT OCCURS DURING CONCRETE PLACEMENT.

ANY DAMAGE TO THE CONCRETE BASE DURING CONSTRUCTION OPERATIONS SHALL BE REPAIRED AT THE ENGINEER'S DIRECTION, AT THE EXPENSE OF THE CONTRACTOR.

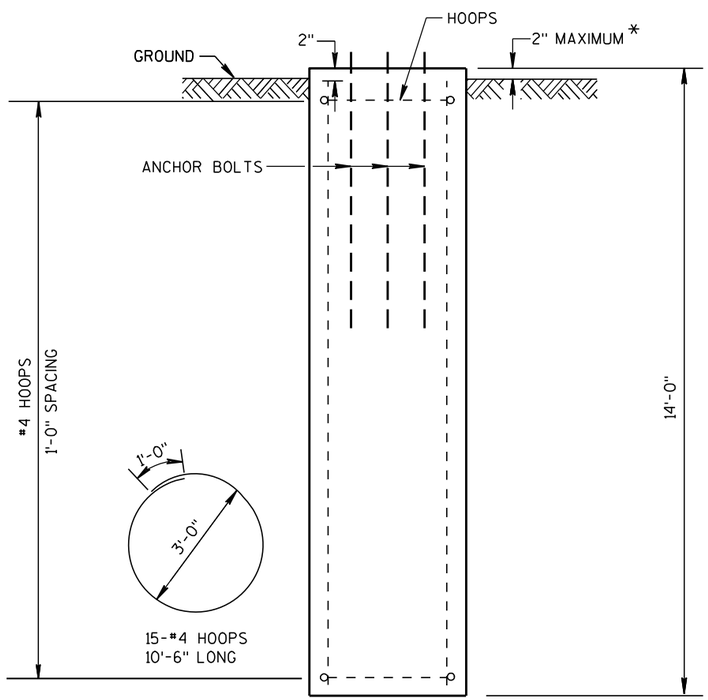
CONCRETE MASONRY ---------- fc=3,500 p.s.i.
HIGH STRENGTH BAR STEEL REINFORCEMENT, GRADE 60 ------- fy=60,000 p.s.i.
ANCHOR BOLTS ---------- AASHTO M314 GRADE 55

THIS FOOTING HAS BEEN DESIGNED FOR SITES WHERE SOILS EXHIBIT A PHI-ANGLE GREATER THAN OR EQUAL TO 20 DEGREES (GRANULAR SOILS), OR A COHESION VALUE GREATER THAN OR EQUAL TO 350 PSF (COHESIVE SOILS).



PLAN VIEW

* FOR OVERHEAD SIGN SUPPORTS THAT ARE INSTALLED ADJACENT TO SIDEWALKS, THE TOP OF THE BASE SHALL BE POURED FLUSH WITH THE GROUND.



ELEVATION VIEW

CONCRETE - 5.0 C.Y. PER FOOTING
H.S. REINFORCEMENT - 350 LBS. PER FOOTING

42" DIAMETER CANTILEVER OVERHEAD SIGN SUPPORT BASE

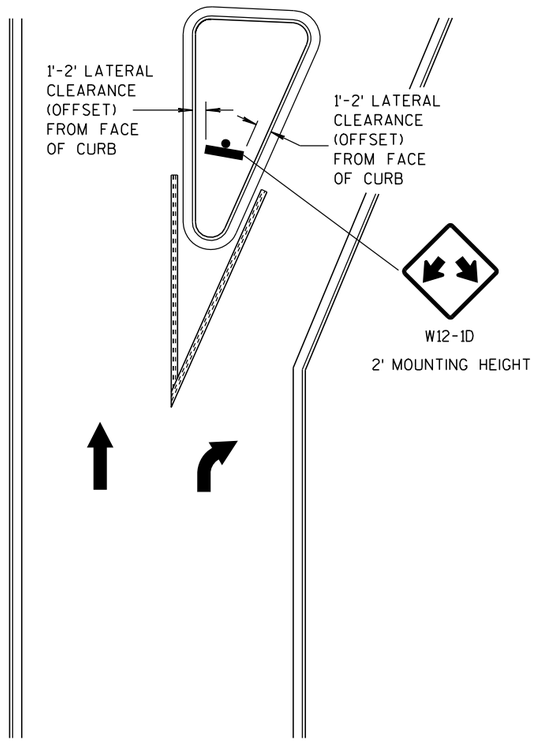
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
4-17-09 DATE
/S/ Thomas N. Nothnagel SIGN
STATE TRAFFIC ENGINEER
758
FHWA

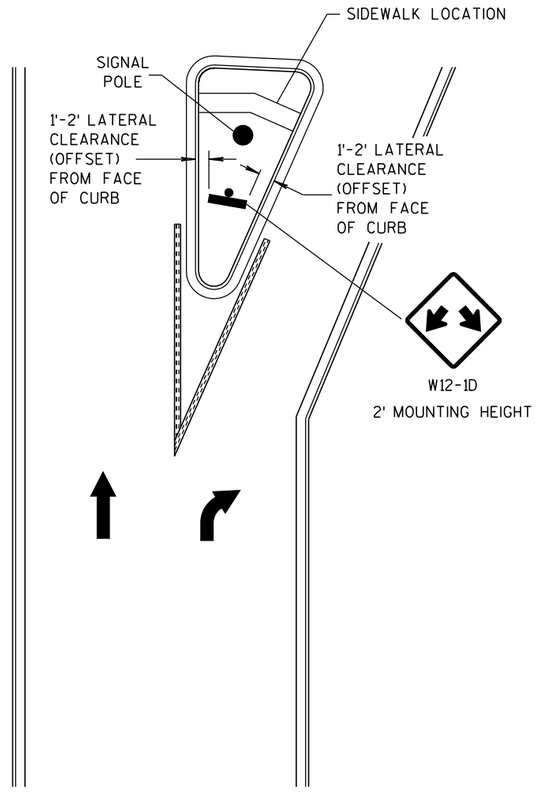
GENERAL NOTE

APPLIES TO ISLANDS AT LEFT TURNS AT ONE WAY ROADWAYS AS WELL.

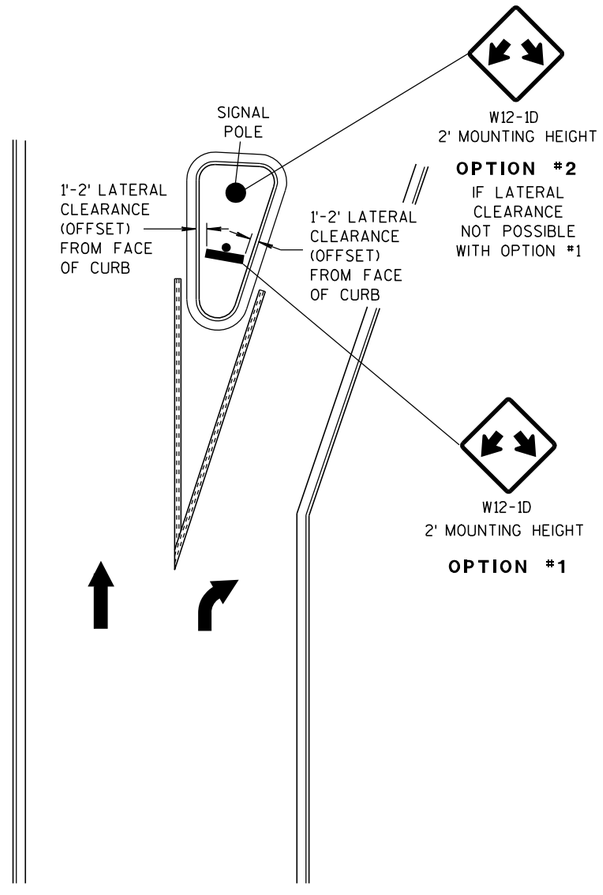
SEE MISCELLANEOUS QUANTITIES FOR SIGN SIZE.



LARGE RIGHT TURN ISLAND



LARGE RIGHT TURN ISLAND
WITH SIGNAL POLE



SMALL RIGHT TURN ISLAND

DOUBLE ARROW WARNING SIGN PLACEMENT

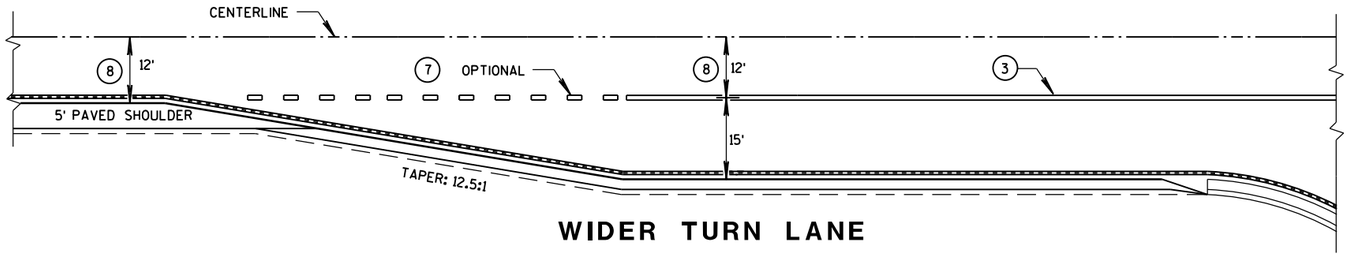
DOUBLE ARROW WARNING SIGN PLACEMENT	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED	
10-22-08 DATE	/S/ Thomas N. Nothdurft STATE TRAFFIC ENGINEER 759 IGN
FHWA	

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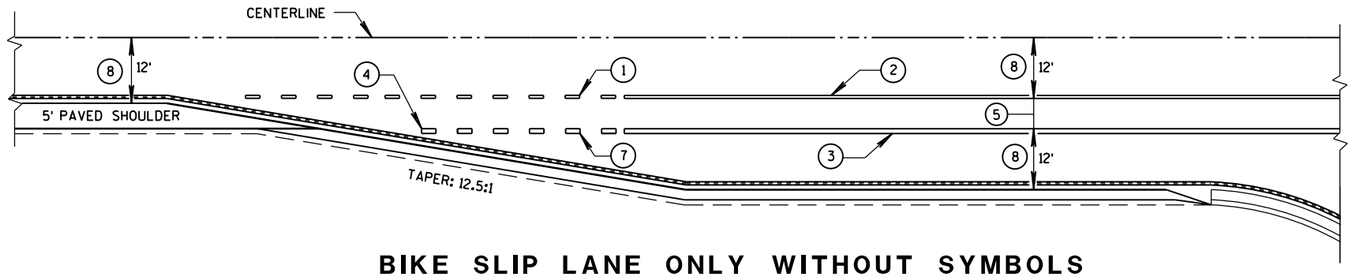
S.D.D. 15 C 27-1

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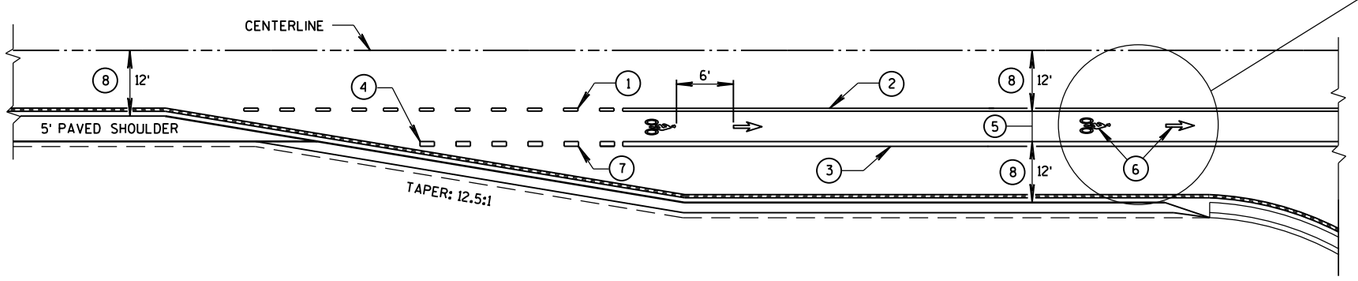
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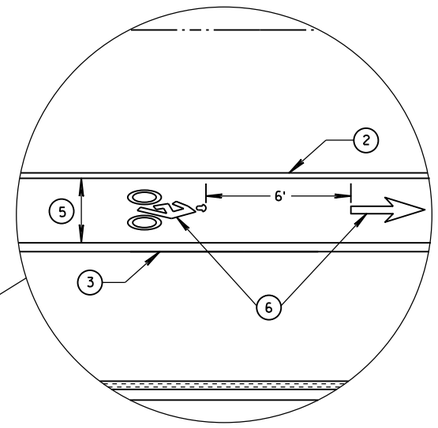
WIDER TURN LANE



BIKE SLIP LANE ONLY WITHOUT SYMBOLS



BIKE LANE WITH SYMBOLS



GENERAL NOTES

1. 3' LINE, 9' GAP - 4-INCH WIDE, WHITE.
2. 4-INCH, WHITE.
3. 8-INCH, WHITE.
4. IF SIGNED AND/OR MARKED AS A BICYCLE FACILITY INCLUDE SECOND LINE OF LINE-SPACE MARKING, OTHERWISE DO NOT.
5. BIKE ACCOMMODATION FOR CONCRETE PAVEMENT IS 5' WIDE. BIKE ACCOMMODATION FOR ASPHALT PAVEMENT IS A MINIMUM OF 4', 5' AT ≥ 45 MPH.
6. REQUIRED ONLY WHEN SPECIFIED IN THE CONTRACT.
7. 3' LINE, 9' GAP - 8-INCH WIDE, WHITE.
8. REFER TO CONTRACT PLANS.

6

S.D.D. 15 C 29-3a

BICYCLE LANE MARKING

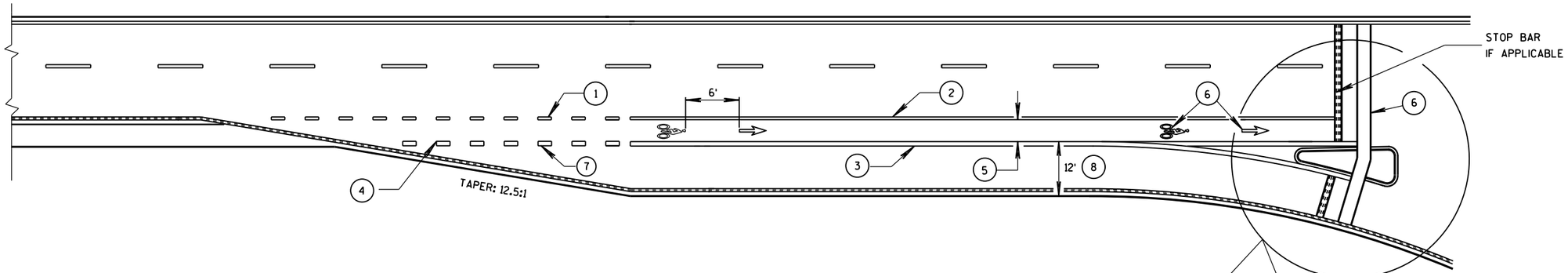
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
4/30/2013 DATE
/S/ Travis Feltes STATE TRAFFIC E
FHWA

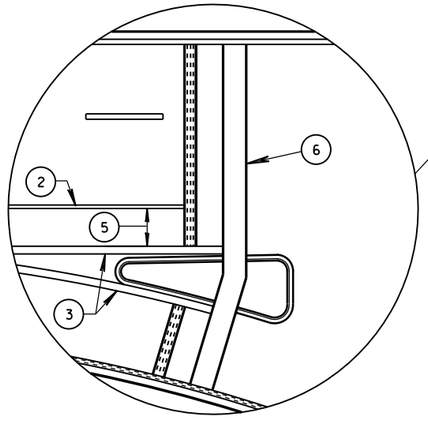
760

GENERAL NOTES

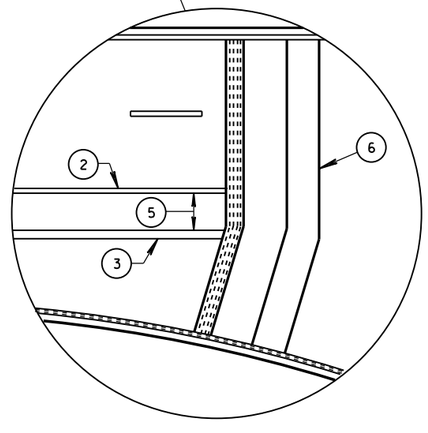
1. 3' LINE, 9' GAP - 4-INCH WIDE, WHITE.
2. 4-INCH, WHITE.
3. 8-INCH, WHITE.
4. IF SIGNED AND/OR MARKED AS A BICYCLE FACILITY INCLUDE SECOND LINE OF LINE-SPACE MARKING, OTHERWISE DO NOT.
5. 5' TYPICAL.
6. REQUIRED ONLY WHEN SPECIFIED IN THE CONTRACT.
7. 3' LINE, 9' GAP - 8-INCH WIDE, WHITE.
8. REFER TO CONTRACT PLANS.



BIKE LANE - 4-LANE DIVIDED WITH RIGHT TURN LANE



4 LANE DIVIDED WITH ISLAND



4 LANE DIVIDED WITHOUT ISLAND

BICYCLE LANE MARKING

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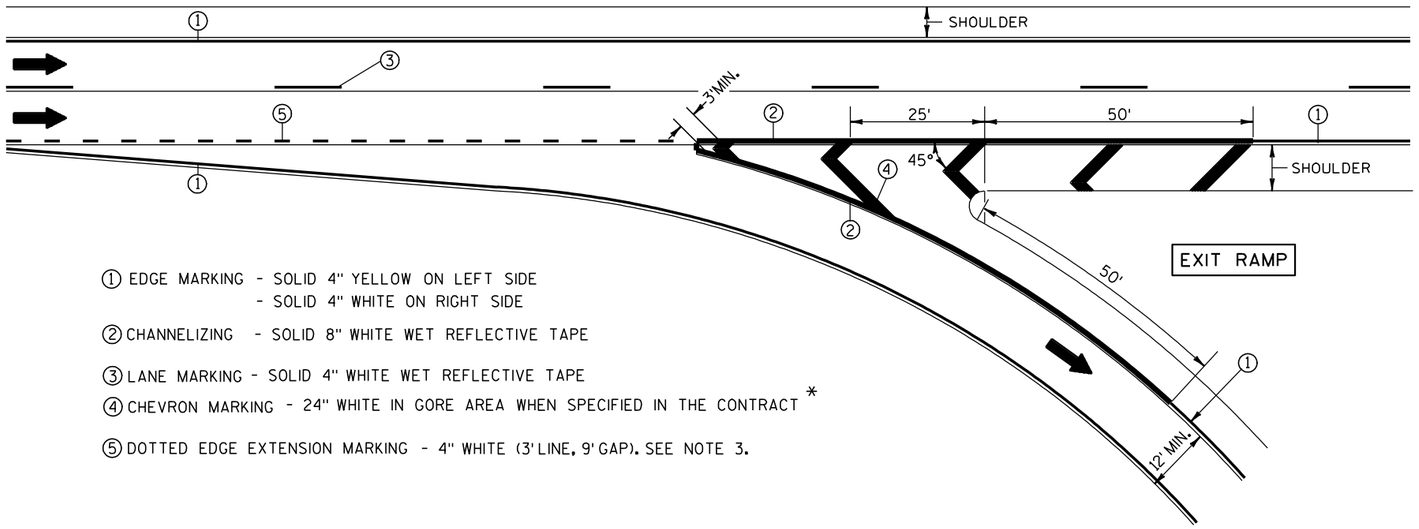
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① EDGE MARKING - SOLID 4" YELLOW ON LEFT SIDE
- SOLID 4" WHITE ON RIGHT SIDE

② CHANNELIZING - SOLID 8" WHITE WET REFLECTIVE TAPE

③ LANE MARKING - SOLID 4" WHITE WET REFLECTIVE TAPE

④ CHEVRON MARKING - 24" WHITE IN GORE AREA WHEN SPECIFIED IN THE CONTRACT *

⑤ DOTTED EDGE EXTENSION MARKING - 4" WHITE (3' LINE, 9' GAP). SEE NOTE 3.

NOTES:

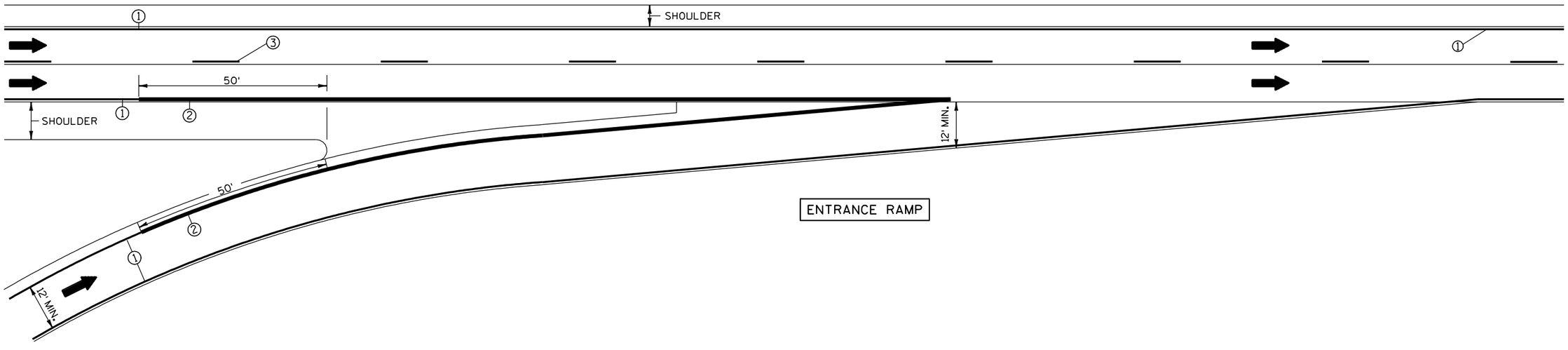
1. ARROWS SHOWN ON THIS MARKING PLAN DESIGNATE TRAFFIC FLOW, AND SHALL NOT BE TAKEN AS PROPOSED PAVEMENT MARKINGS.

2. PLACE WHITE EDGE OF TAPE 6" LEFT FROM JOINT.

3. 3' LINE 9' GAP, EXCEPT RETRACE THE EXISTING LINE-GAP PATTERN WHERE EXISTING MARKINGS ARE IN PLACE.

4. RETRACE EXISTING DIAGONAL MARKINGS.

* REFER TO DESIGN NOTES.



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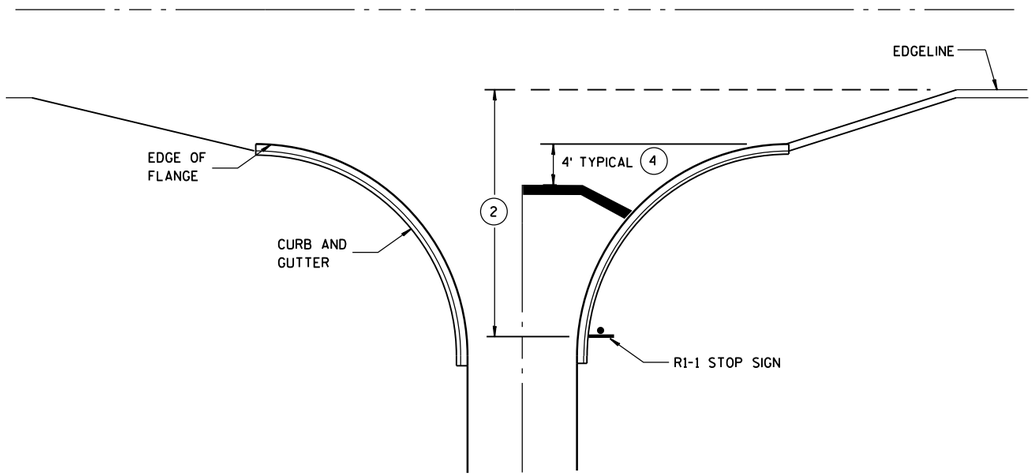
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S.D.D. 15 C 31-1a

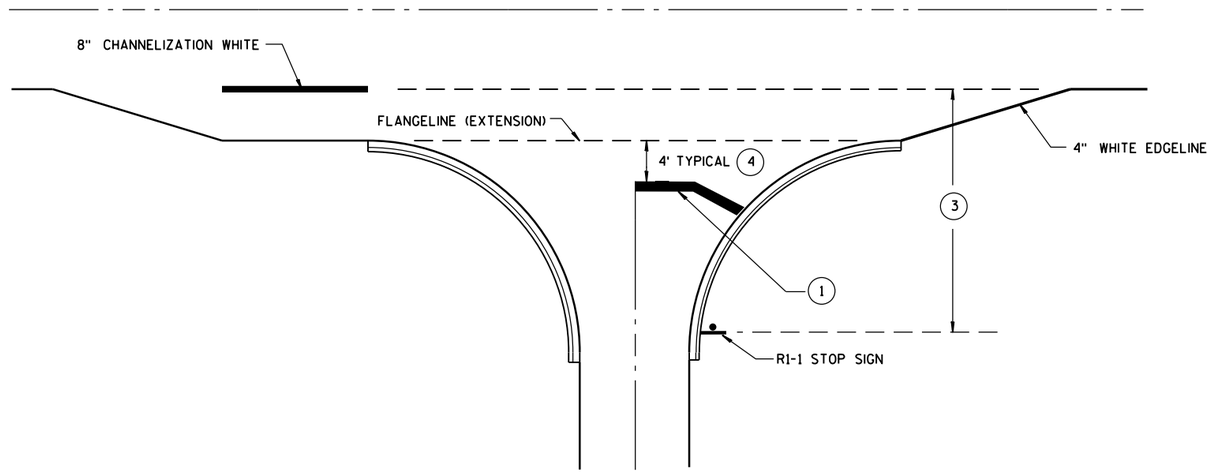
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PAVEMENT MARKING
(RAMPS AND GORES)

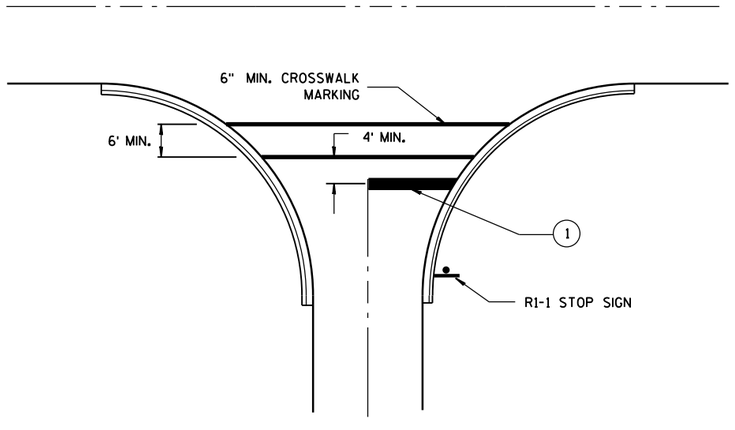
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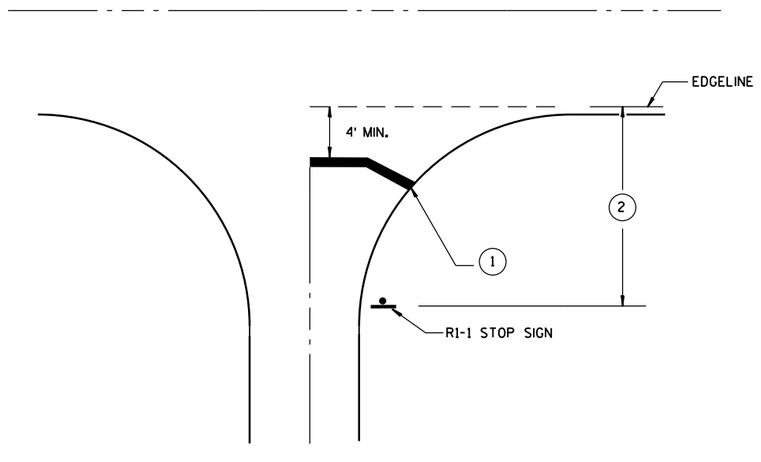
TYPICAL STOP LINE PAVEMENT MARKING WITH CURB AND GUTTER



TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH RIGHT TURN LANE



TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH CROSSWALK MARKING



TYPICAL STOP LINE PAVEMENT MARKING WITHOUT CURB AND GUTTER

GENERAL NOTES

1. 18-INCH STOP LINES MAY BE DELETED OR ADDED BY THE PROJECT ENGINEER BASED ON VISIBILITY AND SIGHT LINES.
2. IF STOP SIGN IS LESS THAN OR EQUAL TO 40 FEET FROM THE EDGELINE THAN NO STOP LINE IS REQUIRED.
3. IF STOP SIGN IS LESS THAN OR EQUAL TO 30 FEET FROM THE FLANGELINE EXTENSION THAN NO STOP LINE IS REQUIRED.
4. MOVE CLOSER TO EDGE OF TRAVEL LANE AS NEEDED FOR VISIBILITY AND SIGHT LINES.

STOP LINE AND CROSSWALK PAVEMENT MARKING

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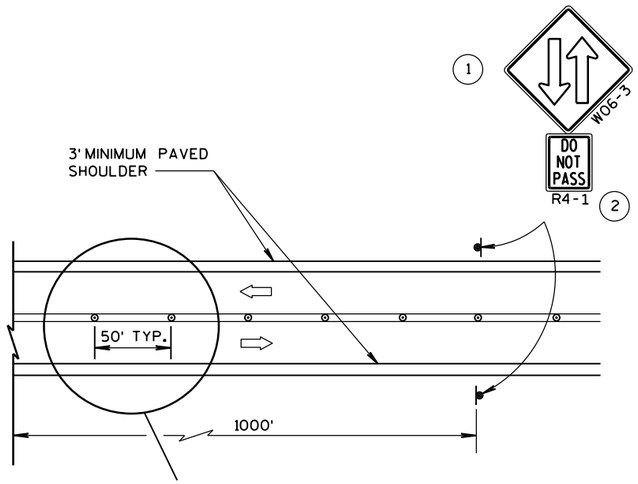
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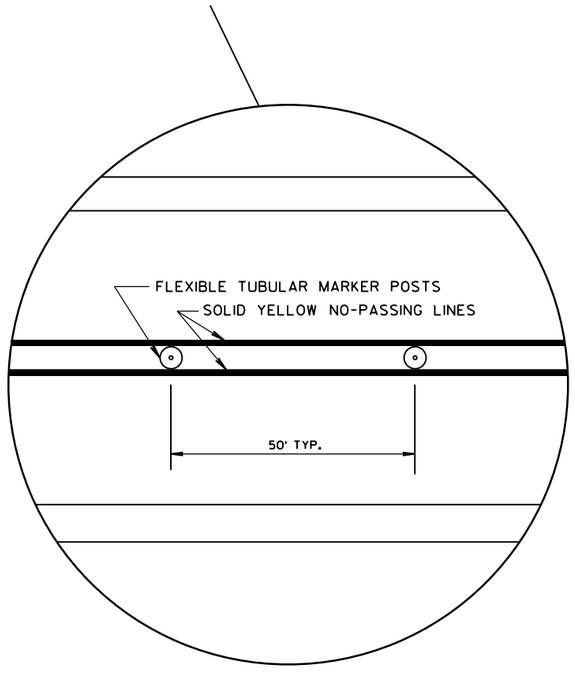
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TWO LANE, TWO WAY OPERATION



LEGEND

- SIGN ON PERMANENT SUPPORT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- DIRECTION OF TRAFFIC

GENERAL NOTES

ALL SIGNS ARE 48"x48" UNLESS OTHERS NOTED.

"WO" IS THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.

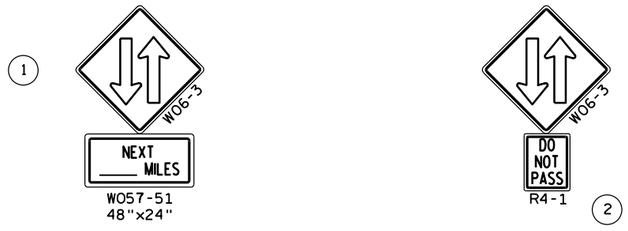
ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON "COVERED" OR "DOWNED" SIGNS.

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET, (500 FEET DESIRABLE) DISTANCE TO EXISTING SIGNS.

A SINGLE ROW OF FLEXIBLE TUBULAR MARKERS ON CENTERLINE EXTEND FOR THE ENTIRE LENGTH OF TWO-WAY TRAFFIC AT 50-FOOT SPACING.

COVER EXISTING CENTERLINE STRIPE WITH TEMPORARY PAVEMENT MARKING, 4-INCH DOUBLE YELLOW.



THE W06-3 WITH THE W057-51 SHALL BE LOCATED 200 FEET BEYOND THE END OF THE ACCELERATION LANE OF EACH ENTRANCE RAMP AND/OR 500 FEET BEYOND ANY SIDEROAD. THE W06-3 WITH THE R4-1 SHALL BE LOCATED 1000 FEET BEYOND THE W06-3 AND THE W057-51 AND THE SIGNS SHALL BE ALTERNATED WITH ONE MILE INTERVALS BETWEEN W06-3 SIGNS.

(2) CONVENTIONAL: 24"x30"
FREEWAY AND EXPRESSWAY: 36"x48"

TRAFFIC CONTROL, TWO LANE TWO WAY OPERATION

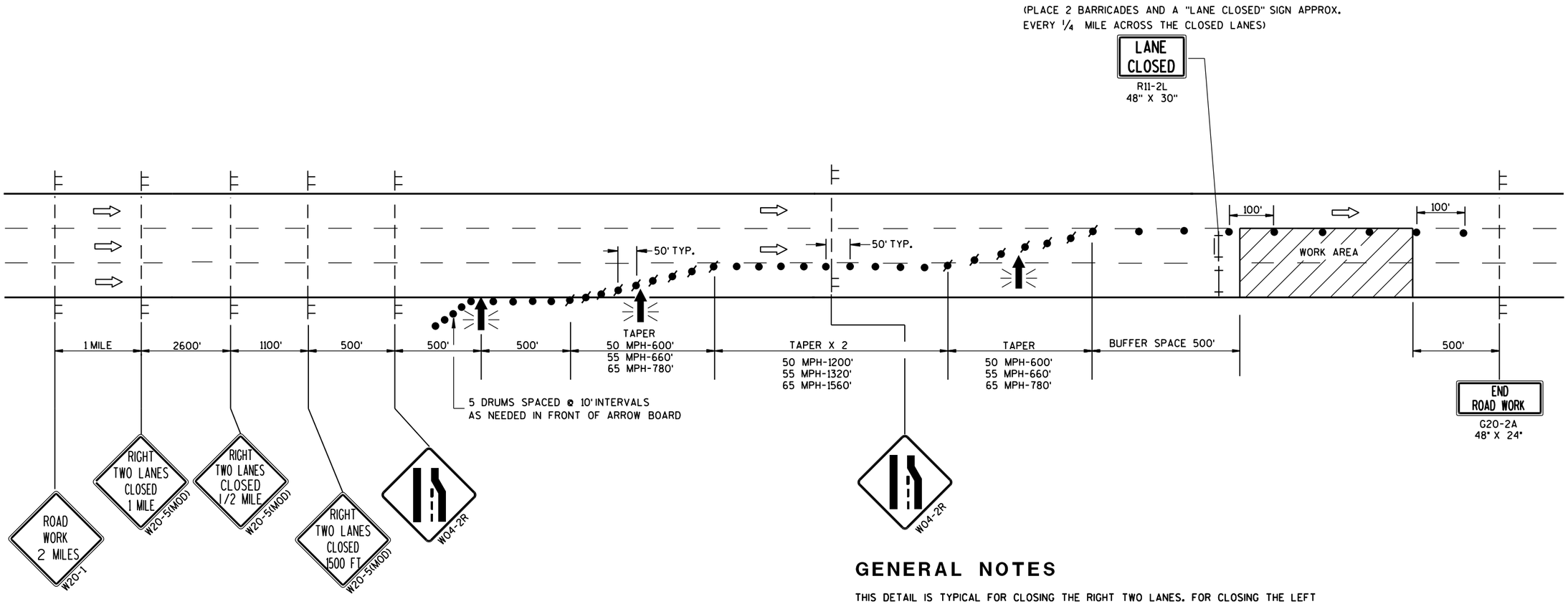
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(PLACE 2 BARRICADES AND A "LANE CLOSED" SIGN APPROX. EVERY 1/4 MILE ACROSS THE CLOSED LANES)



LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL DRUM
- FLASHING ARROW BOARD
- DIRECTION OF TRAFFIC
- WORK AREA

GENERAL NOTES

THIS DETAIL IS TYPICAL FOR CLOSING THE RIGHT TWO LANES. FOR CLOSING THE LEFT TWO LANES, REVERSE THE TRAFFIC CONTROL.

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

"WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

W20-1 AND G20-2A SIGNS ARE NOT REQUIRED IF THE LANE CLOSURE IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT.

CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROWBOARDS SO THE APPROACHING DRIVER HAS A CLEAR VIEW OF THE ARROWBOARDS AND LANE CLOSURE DRUMS FOR A MINIMUM 1500 FEET IN FRONT OF DRUMS.

WHEN A RAMP OR SIDE ROAD INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, ADDITIONAL TRAFFIC CONTROLS SHALL BE PROVIDED AS SPECIFIED IN THE PLANS AND/OR SPECIAL PROVISIONS OR AS APPROVED BY THE ENGINEER.

BARRICADES IN A CLOSED LANE THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED UPON COMPLETION OF THE OPERATION OR, FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

TRAFFIC CONTROL, TWO LANE CLOSURE ON FREEWAY OR EXPRESSWAY, SHORT TERM (LESS THAN 24 HOURS)

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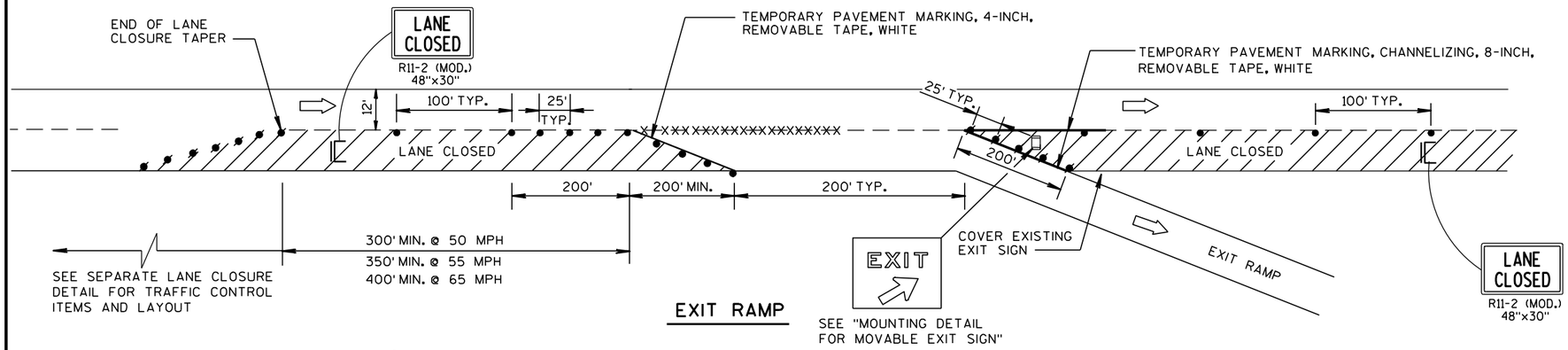
8/2013
DATE

/S/ Travis Feltes
STATE TRAFFIC ENGINEER

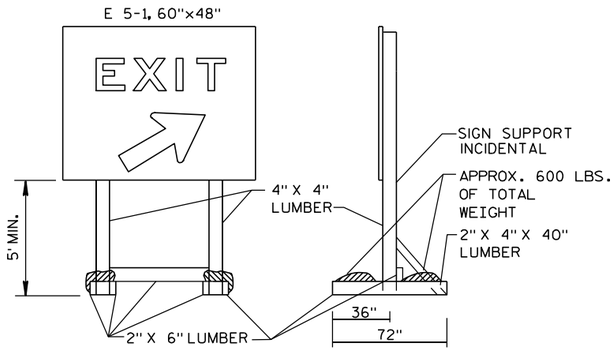
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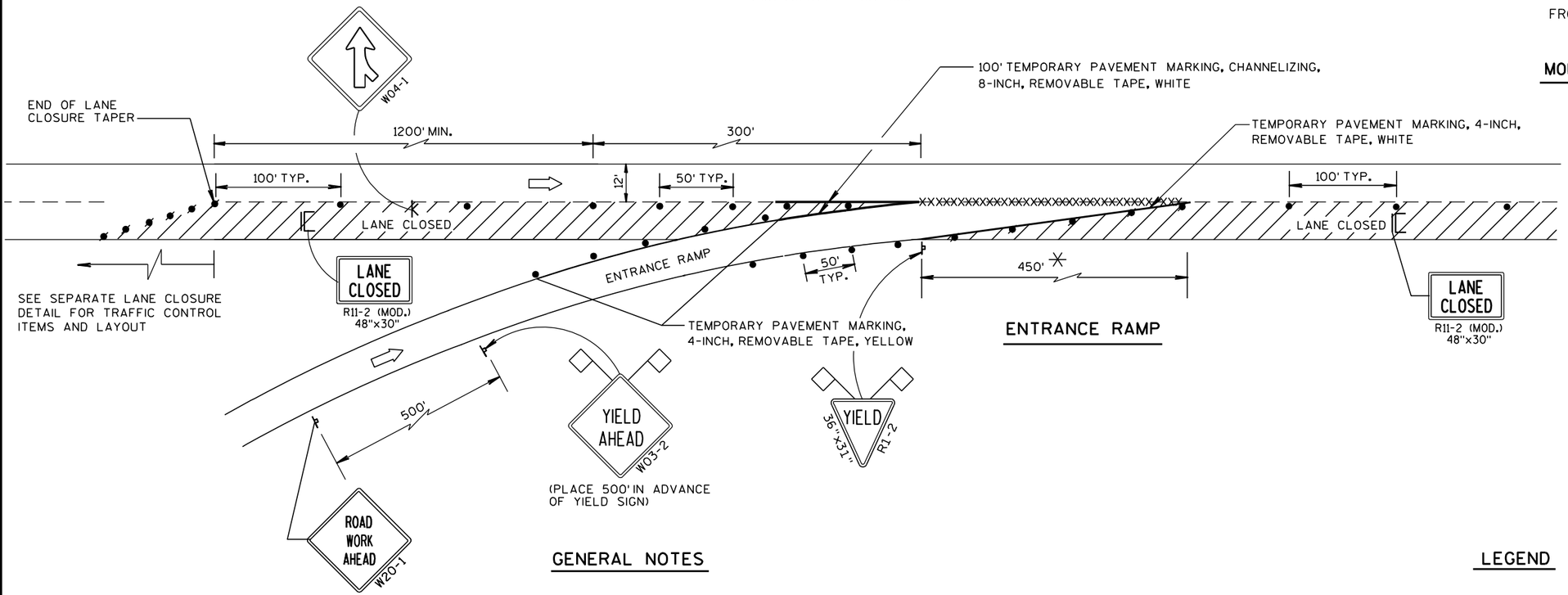


EXIT RAMP



NOTE: ALL LUMBER DIMENSIONS ARE NOMINAL

MOUNTING DETAIL FOR MOVABLE EXIT SIGN



ENTRANCE RAMP

GENERAL NOTES

THE INSTALLATIONS SHOWN ON THIS SHEET ARE TYPICAL EXAMPLES AND ARE NOT INTENDED TO REPRESENT ANY PARTICULAR RAMP. AT SPECIFIC FIELD LOCATIONS, SIMILAR INSTALLATIONS SHALL BE USED AND ADJUSTED TO THE GEOMETRICS OF THE RAMP AS COORDINATED WITH THE ENGINEER.

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A MINIMUM OF 200 FEET, (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

"WO" IS THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.

SEE SEPARATE LANE CLOSURE DETAIL FOR TYPICAL SPACING OF TYPE III BARRICADES AND R11-2 (MOD.) "LANE CLOSED" SIGNS.

YIELD SIGN AND WARNING SIGNS ON ENTRANCE RAMP ARE ALSO APPROPRIATE FOR CLOSURE OF THE MAINLINE LEFT LANE. OMIT THE YIELD SIGN IF MORE THAN ONE LANE REMAINS OPEN ON THE MAINLINE AND THE RAMP TAPER IS AT LEAST AS LONG AS THE NORMAL ENTRANCE RAMP TAPER AT THE SITE.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, OR THAT WILL BE PLACED IN A CLOSED LANE, MAY BE MOUNTED ON PORTABLE SUPPORTS.

IF INDICATED IN MISCELLANEOUS QUANTITIES, SUBSTITUTE FLEXIBLE TUBULAR MARKERS FOR DRUMS IN THE GORE BETWEEN THE ENTRANCE RAMP AND MAINLINE TRAFFIC.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE IF LANE CLOSURE IS TO BE IN PLACE FOR 7 OR MORE CONTINUOUS DAYS AND NIGHTS.

WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

✳ LENGTH OF OPENING MAY BE REDUCED TO 150 FEET DURING STAGING OF WORK IN IMMEDIATE AREA OF RAMP TAPER.

LEGEND

- POST MOUNTED SIGN
- SIGN ON PORTABLE SUPPORT
- TRAFFIC CONTROL, DRUM
- TRAFFIC CONTROL, DRUM WITH WARNING LIGHT, TYPE C (STEADY-BURN)
- REMOVING PAVEMENT MARKING (SEE GENERAL NOTES)
- TYPE III BARRICADE (8' EQUIVALENT) WITH SIGN
- FLAGS, 16"x16" MIN., ORANGE
- DIRECTION OF TRAFFIC FLOW

TRAFFIC CONTROL, EXIT AND ENTRANCE RAMP WITHIN LANE CLOSURE

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CHIEF SIGNS AND MARKINGS ENGINEER
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LEGEND

TYPE III BARRICADE

TYPE III BARRICADE WITH ATTACHED SIGN

TRAFFIC CONTROL DRUM

SIGN ON PERMANENT SUPPORT

TYPE "A" WARNING LIGHT (FLASHING)

DIRECTION OF TRAFFIC

GENERAL NOTES

THIS RAMP CLOSURE DETAIL IS TYPICAL FOR CLOSING A RIGHT SIDE EXIT RAMP. FOR A LEFT SIDE EXIT RAMP, REVERSE THE TRAFFIC CONTROL.

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

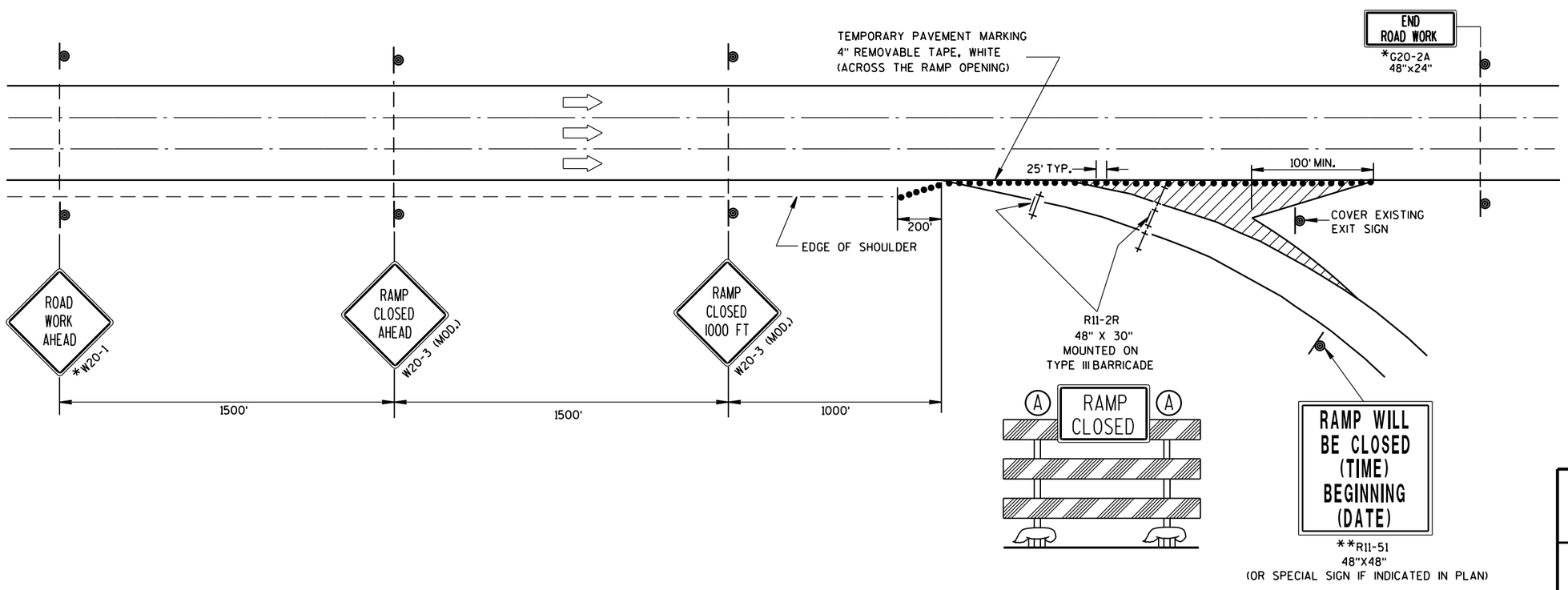
PLACE TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE IF RAMP CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

WORK AREAS WITH A DROPOFF ALONG THE EDGE OF AN OPEN TRAVEL LANE SHALL BE LEVELED WITH TEMPORARY FILL WHEN THE CONTRACTOR IS NOT WORKING ADJACENT TO THE TRAVEL LANE. DRUMS SHALL BE PLACED ENTIRELY OUTSIDE THE TRAVEL LANE, ALLOWING THE FULL UNOBSTRUCTED LANE WIDTH, WHEN THE WORK IS NOT IN PROGRESS.

WHERE MEDIAN BARRIER IS IN PLACE, SIGNS SHOWN ON LEFT SIDE OF ROADWAY MAY BE OMITTED FOR RIGHT SIDE RAMP CLOSURES OF LESS THAN 12-HOUR DURATION.

*W20-1 AND G20-2A SIGNS ARE NOT REQUIRED IF THE RAMP CLOSURE IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT.

** PLACE "RAMP WILL BE CLOSED" SIGN 10 CALENDAR DAYS PRIOR TO CLOSURE OR AS DIRECTED BY THE ENGINEER. SEE WISCONSIN STANDARD SIGN PLATES FOR SIGN LAYOUT.



TRAFFIC CONTROL,
EXIT RAMP CLOSURE

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DATE

/S/ Travis Feltes
STATE TRAFFIC ENGINEER

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DESIGN

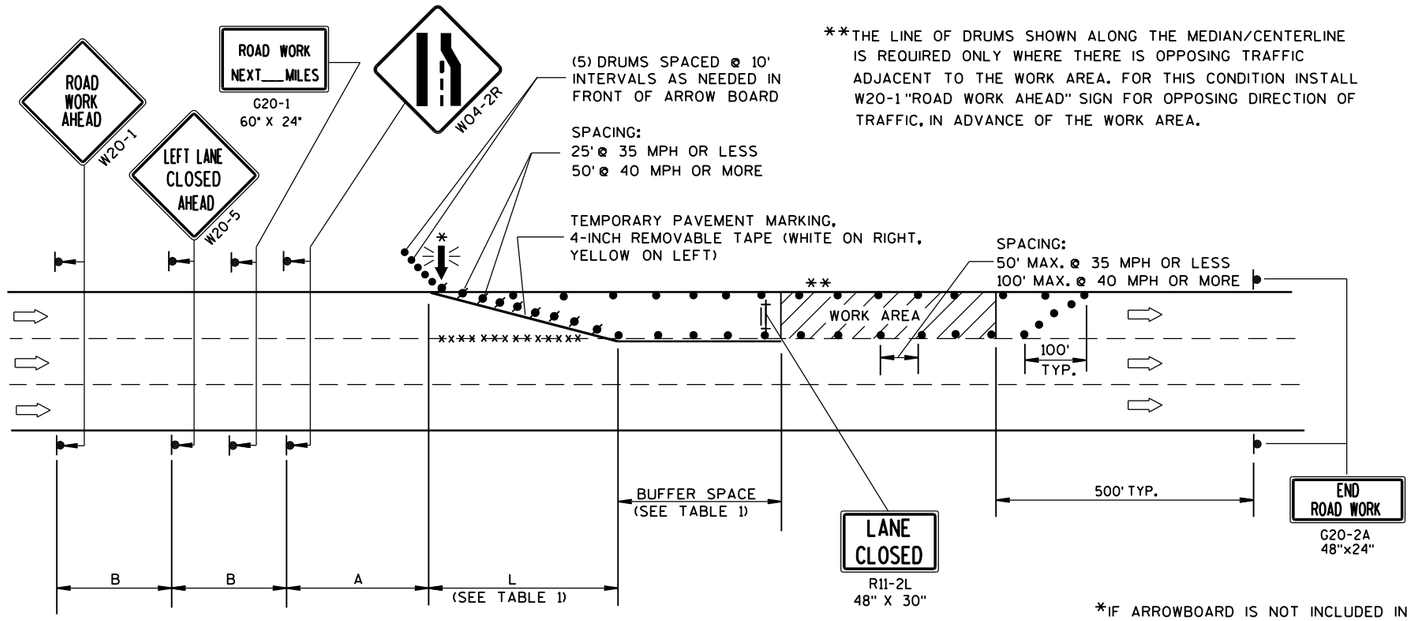
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**THE LINE OF DRUMS SHOWN ALONG THE MEDIAN/CENTERLINE IS REQUIRED ONLY WHERE THERE IS OPPOSING TRAFFIC ADJACENT TO THE WORK AREA. FOR THIS CONDITION INSTALL W20-1 "ROAD WORK AHEAD" SIGN FOR OPPOSING DIRECTION OF TRAFFIC, IN ADVANCE OF THE WORK AREA.

B=400' AT 25-30 MPH
700' AT 35-40 MPH
1000' AT 45-55 MPH

A=200' AT 25-30 MPH
350' AT 35-40 MPH
500' AT 45-55 MPH

(PLACE BARRICADE AND SIGN APPROX. EVERY 1000' ACROSS THE CLOSED LANE)

*IF ARROWBOARD IS NOT INCLUDED IN MISCELLANEOUS QUANTITIES, SUBSTITUTE A TYPE III BARRICADE WITH W01-6 SIGN IN THE LANE CLOSURE TAPER.

W01-6
48"x24"

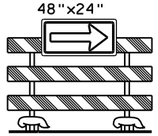


TABLE 1
TAPER AND BUFFER SPACE FOR 12' LANE WIDTH

S	L	BUFFER SPACE
25	125'	55'
30	180'	85'
35	245'	120'
40	320'	170'
45	540'	220'
50	600'	280'
55	660'	335'

FOR LANE WIDTH OTHER THAN 12':

L = WS AT 45 MPH OR GREATER

$L = \frac{WS^2}{60}$ AT 40 MPH OR LESS

L = TAPER LENGTH IN FEET

S = NON-CONSTRUCTION SPEED LIMIT (MPH)

W = WIDTH OF LANE CLOSURE

LEGEND

- TYPE III BARRICADE WITH ATTACHED SIGN
- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL DRUM
- FLASHING ARROW BOARD
- DIRECTION OF TRAFFIC
- REMOVING PAVEMENT MARKING (SEE GENERAL NOTES)
- WORK AREA

GENERAL NOTES

THIS LANE CLOSURE DETAIL IS TYPICAL FOR CLOSING THE LEFT LANE. FOR A RIGHT LANE CLOSURE, REVERSE THE TRAFFIC CONTROL.

THIS DETAIL MAY BE USED FOR ROADWAYS WITH EITHER TWO OR THREE LANES IN EACH DIRECTION.

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36" X 36" SIGNS MAY BE USED IF APPROVED BY DISTRICT TRAFFIC UNIT.

"WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, OR THAT WILL BE PLACED IN A CLOSED LANE, MAY BE MOUNTED ON PORTABLE SUPPORTS.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

ON UNDIVIDED ROADWAYS, OMIT THE SIGNS SHOWN ON LEFT SIDE OF ROAD.

W20-1, G20-1 AND G20-2A SIGNS ARE NOT REQUIRED IF THE LANE CLOSURE IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT.

OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS.

CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROWBOARDS SO THE APPROACHING DRIVER HAS A CLEAR VIEW OF THE ARROWBOARDS AND LANE CLOSURE DRUMS.

PLACE THE ARROWBOARD AS CLOSE AS POSSIBLE TO THE BEGINNING OF THE LANE CLOSURE TAPER, PREFERABLY ON THE SHOULDER OR TERRACE.

CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

BARRICADES IN A CLOSED LANE THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED UPON COMPLETION OF THE OPERATION OR, FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

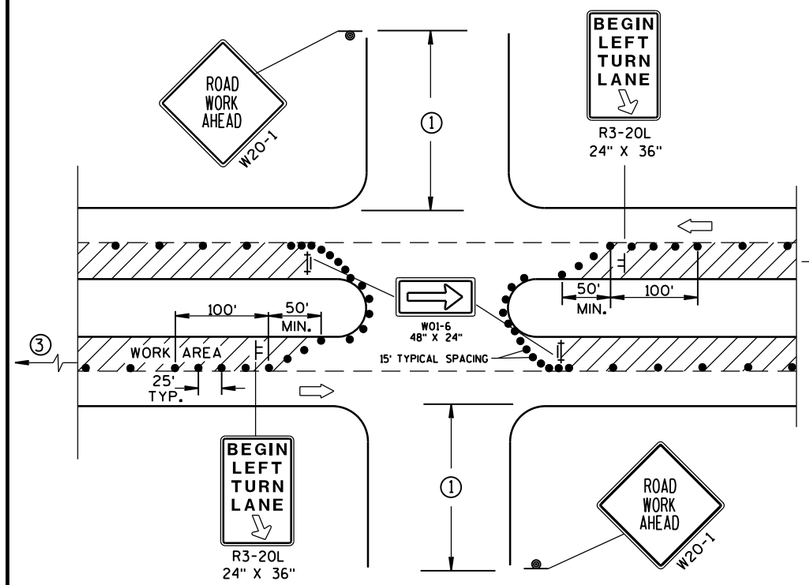
TRAFFIC CONTROL, SINGLE LANE CLOSURE, NON-FREEWAY/EXPRESSWAY

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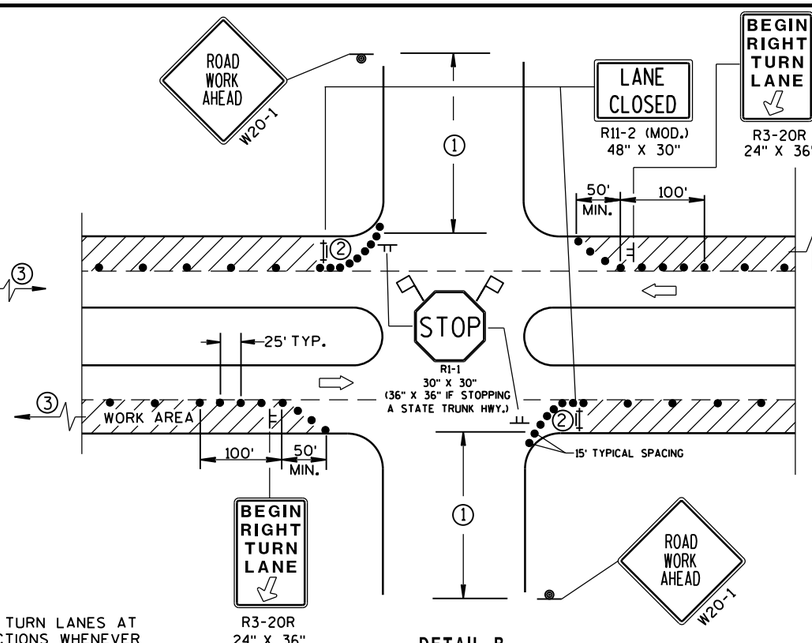
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S.D.D. 15 D 20-2



DETAIL A

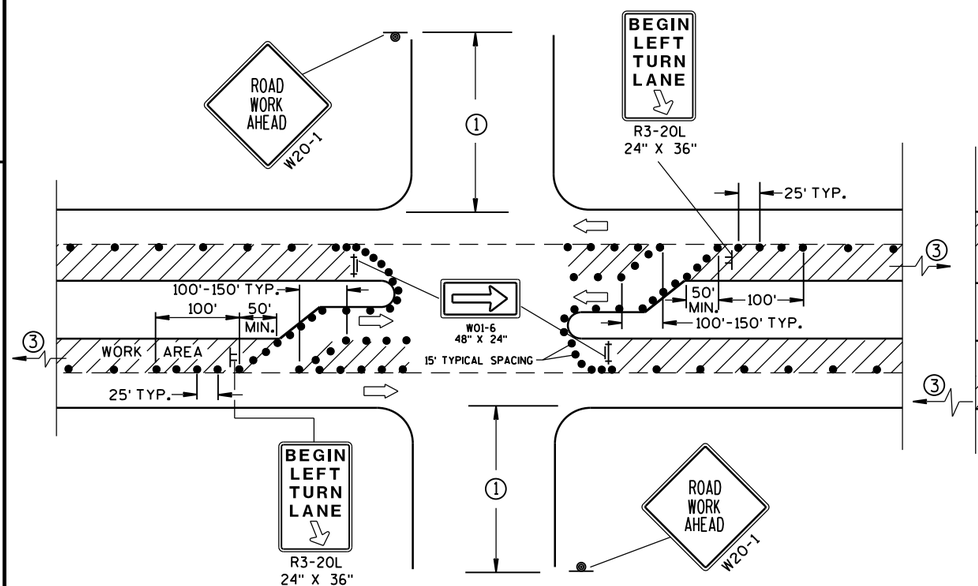
FOR LEFT LANE CLOSURE AT INTERSECTION OR MEDIAN OPENING



DETAIL B

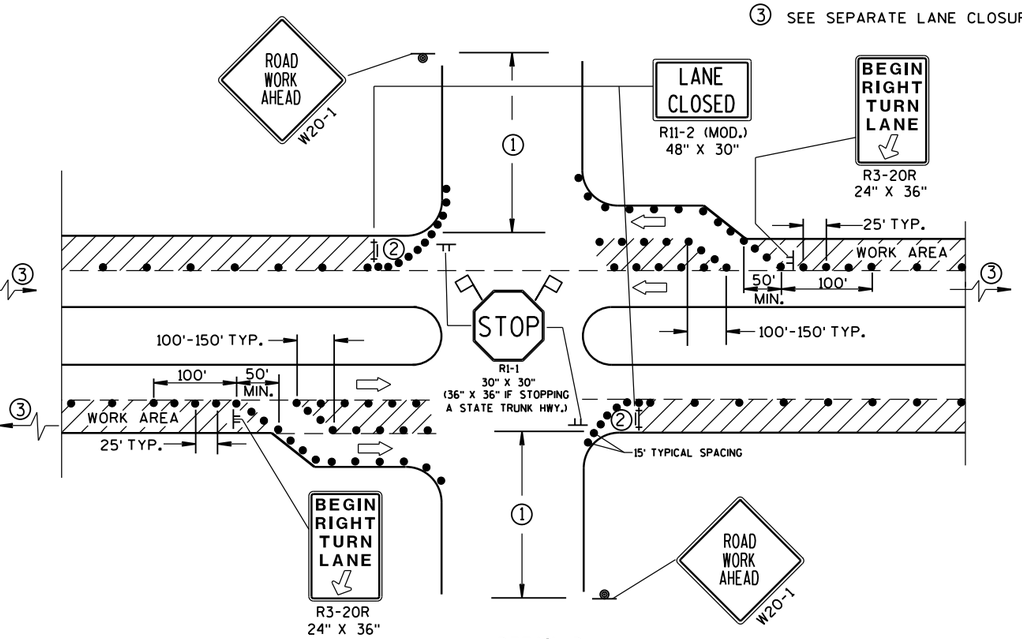
FOR RIGHT LANE CLOSURE AT INTERSECTION

PROVIDE TURN LANES AT INTERSECTIONS WHENEVER STAGING OF WORK ALLOWS. TAPER AND TURN LANE LENGTHS BASED ON FIELD CONDITIONS AS APPROVED BY THE ENGINEER.



DETAIL C

FOR LEFT LANE CLOSURE AT INTERSECTION OR MEDIAN OPENING (WITH LEFT TURN BAY OPEN)



DETAIL D

FOR RIGHT LANE CLOSURE AT INTERSECTION (WITH RIGHT TURN BAY OPEN)

GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36" X 36" SIGNS MAY BE USED IF APPROVED BY DISTRICT TRAFFIC UNIT.

"WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE FHWA'S MANUAL OF STANDARD HIGHWAY SIGNS OR THE WISCONSIN STANDARD SIGN PLATES.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, OR THAT WILL BE PLACED IN A CLOSED LANE, MAY BE MOUNTED ON PORTABLE SUPPORTS.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

BARRICADES IN A CLOSED LANE THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED UPON COMPLETION OF THE OPERATION OR, FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

① 500' TYPICAL OR AT LAST INTERSECTION, WHICHEVER IS CLOSER.
350' IF 35-40 MPH.
200' IF 25-30 MPH.

② ALSO USE BARRICADE AND 15-FOOT TYPICAL DRUM SPACING AT COMMERCIAL DRIVEWAYS.

③ SEE SEPARATE LANE CLOSURE DETAIL FOR ADDITIONAL TRAFFIC CONTROL.

LEGEND

- TRAFFIC CONTROL DRUM
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT (5' MIN. MOUNTING HEIGHT)
- TYPE III BARRICADE WITH ATTACHED SIGN AND TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC
- FLAGS, 16" X 16" MIN., (ORANGE)
- WORK AREA

TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE

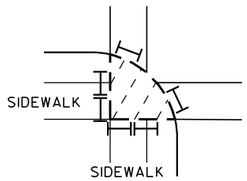
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

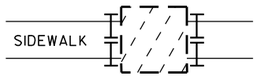
APPROVED
Nov. 2014 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER
FHWA

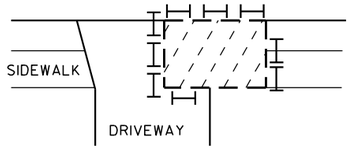
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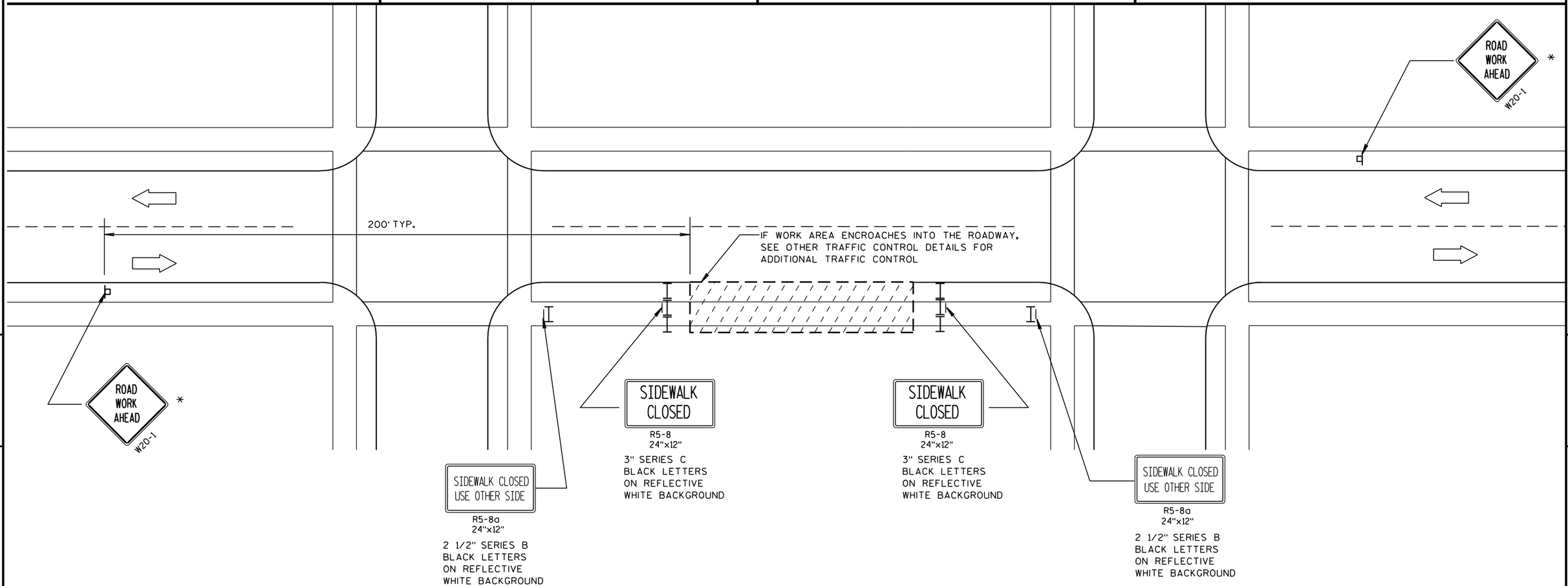
S.D.D. 15 D 21-3

WARNING OF LOCALIZED SIDEWALK WORK AREAS









LEGEND

- POST MOUNTED SIGN
- TYPE II BARRICADE WITH/WITHOUT SIGN (ALL WITH ONE WARNING LIGHT, TYPE A, LOW-INTENSITY FLASHING)
- WORK AREA
- DIRECTION OF TRAFFIC FLOW

GENERAL NOTES :

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS, 36"x36" SIGNS MAY BE USED INSTEAD OF 48"x48" SIGNS, IF APPROVED BY DISTRICT TRAFFIC UNIT.

THE EXACT LOCATION AND PLACEMENT OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.

"WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

* "ROAD WORK AHEAD" SIGNS ARE NOT REQUIRED IF THE SIDEWALK CLOSURE OCCURS WITHIN A LARGER WORK ZONE WHERE ADVANCE WARNING SIGNS ARE ALREADY PRESENT, OR IF THE WORK AREA AND EQUIPMENT ARE MORE THAN 2 FEET BEHIND THE CURB.

WARNING SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

TRAFFIC CONTROL, SIDEWALK CLOSURE

TRAFFIC CONTROL, SIDEWALK CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

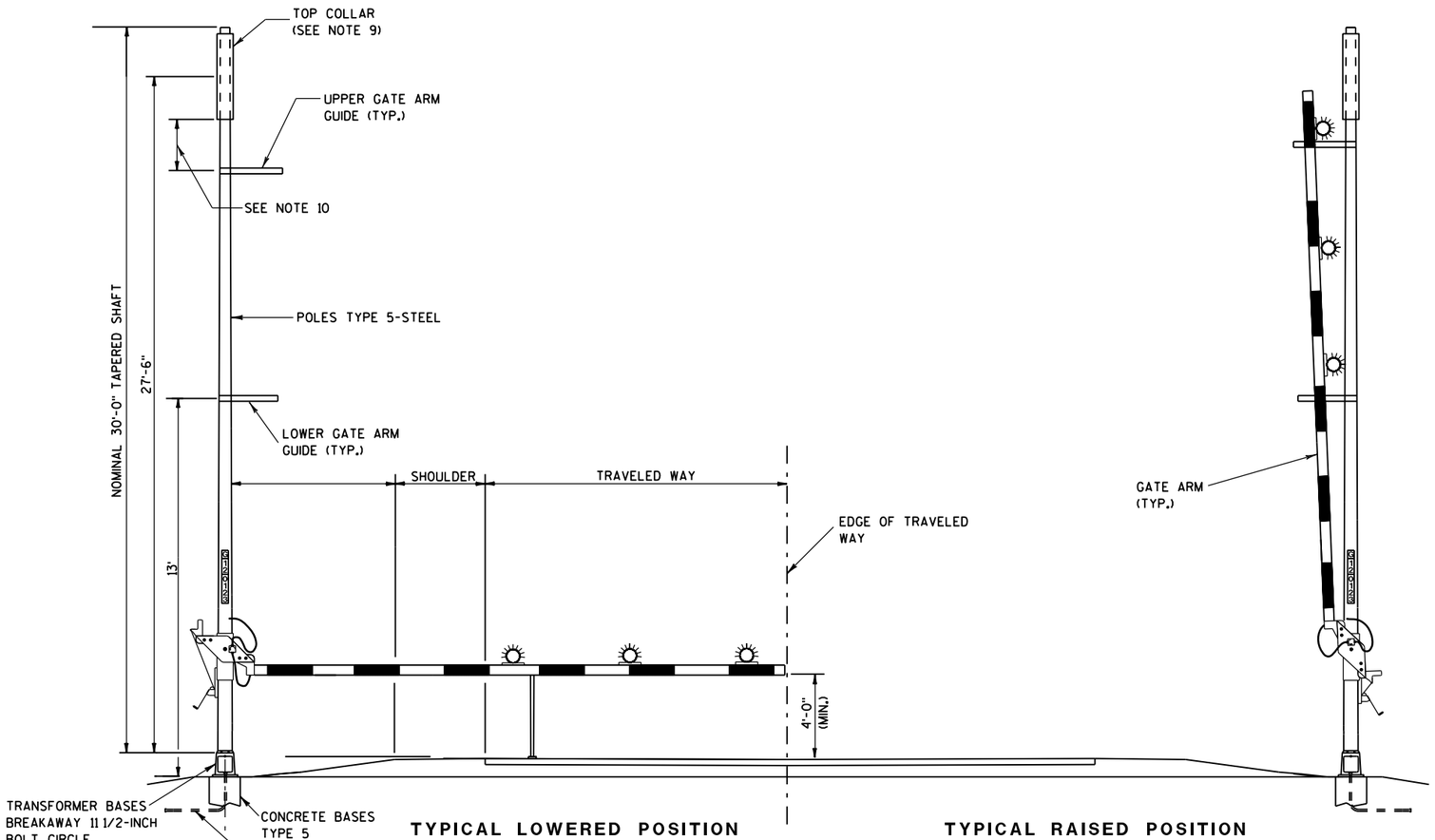
APPROVED
5/23/2000 DATE
/S/ Chester J. [illegible]
CHIEF SIGNS AND MARK 770 [illegible]
FHWA

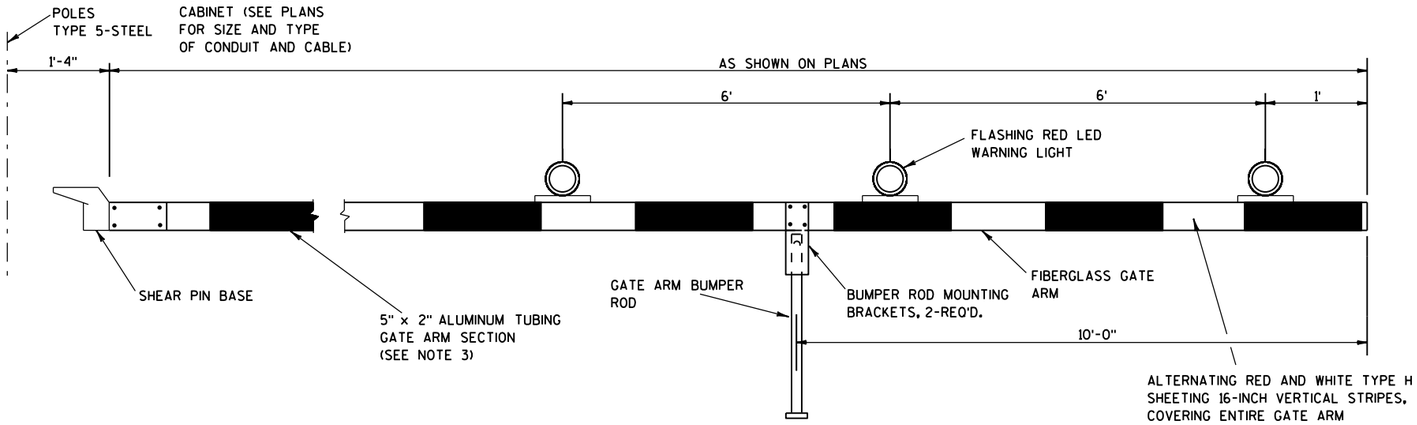
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S.D.D. 15 D 30-1

6

S.D.D. 15 D 30-1



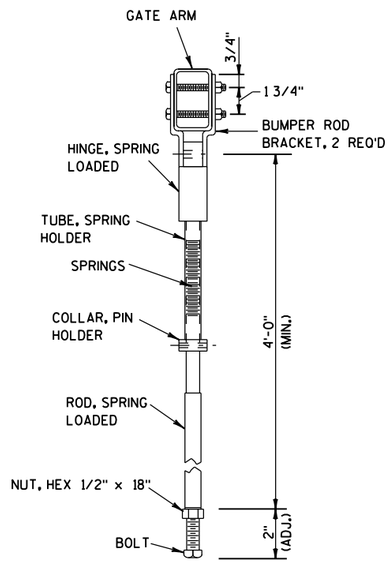


GATE DETAIL

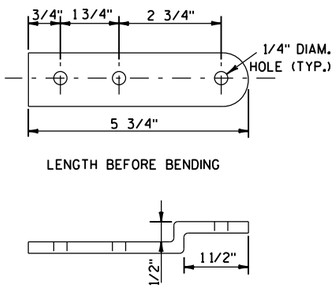
(SOLAR POWER OPTION)

GENERAL NOTES

1. THE LOCATION OF RAMP CLOSURE GATES AND MOUNTING HEIGHT OF GATE ARM PIVOT SHALL BE VERIFIED BY THE ENGINEER.
2. HEIGHT OF GATE ARM GUIDES MAY BE VARIED AS REQUIRED FOR WARNING LIGHT CLEARANCE.
3. FIBERGLASS/ALUMINUM GATE ARM AND SHEAR PIN BASE SHALL BE SUPPLIED BY THE SAME VENDOR.
4. GATE ARM TO BE MOUNTED ON PROPOSED POLE AS INDICATED ON THE PLANS. PROPOSED POLE SHALL BE TYPE 5 POLE.
5. LOCATION OF THE CONCRETE BASE AND LENGTH OF THE GATE ARM WILL BE VERIFIED BY THE ENGINEER TO ENSURE ADEQUATE COVERAGE OF THE TRAVELED LANE.
6. GATE PIVOTS, SUPPORTS AND GUIDES, AND ALL ASSOCIATED HARDWARE SHALL BE GALVANIZED. ALL ROUGH EDGES AND BURRS SHALL BE GROUND SMOOTH PRIOR TO GALVANIZING.
7. ALL EXPOSED BOLT THREADS SHALL BE PAINTED WITH TWO COATS OF ZINC RICH PAINT CONFORMING WITH THE REQUIREMENTS OF ASTM A 780.
8. ANY FIELD DAMAGE TO THE GALVANIZING SHALL BE REPAIRED WITH TWO COATS OF ZINC RICH PAINT CONFORMING WITH THE REQUIREMENTS OF ASTM A 780.
9. A STANDARD LIGHTING LUMINAIRE ARM MAY BE MOUNTED TO THE TYPE 5 POLE IN LIEU OF THE TOP COLLAR.
10. UPPER GATE ARM GUIDE IS TO BE INSTALLED 6 TO 12-INCHES BELOW THE BOTTOM OF THE TOP COLLAR.



GATE ARM BUMPER ROD DETAIL



BUMPER ROD MOUNTING
BRACKET DETAIL

RAMP GATE
SOLAR POWER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI 771

6

S.D.D. 15 D 34-1a

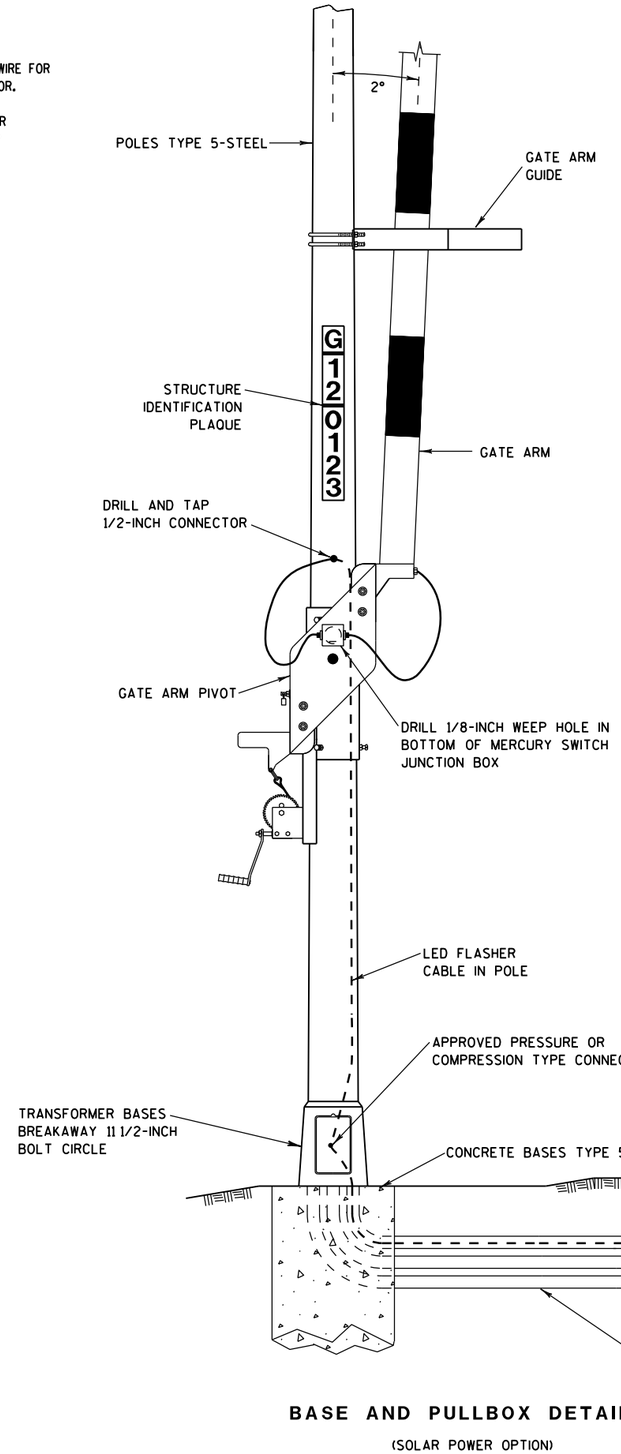
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S.D.D. 15 D 34-1a

WIRING NOTES

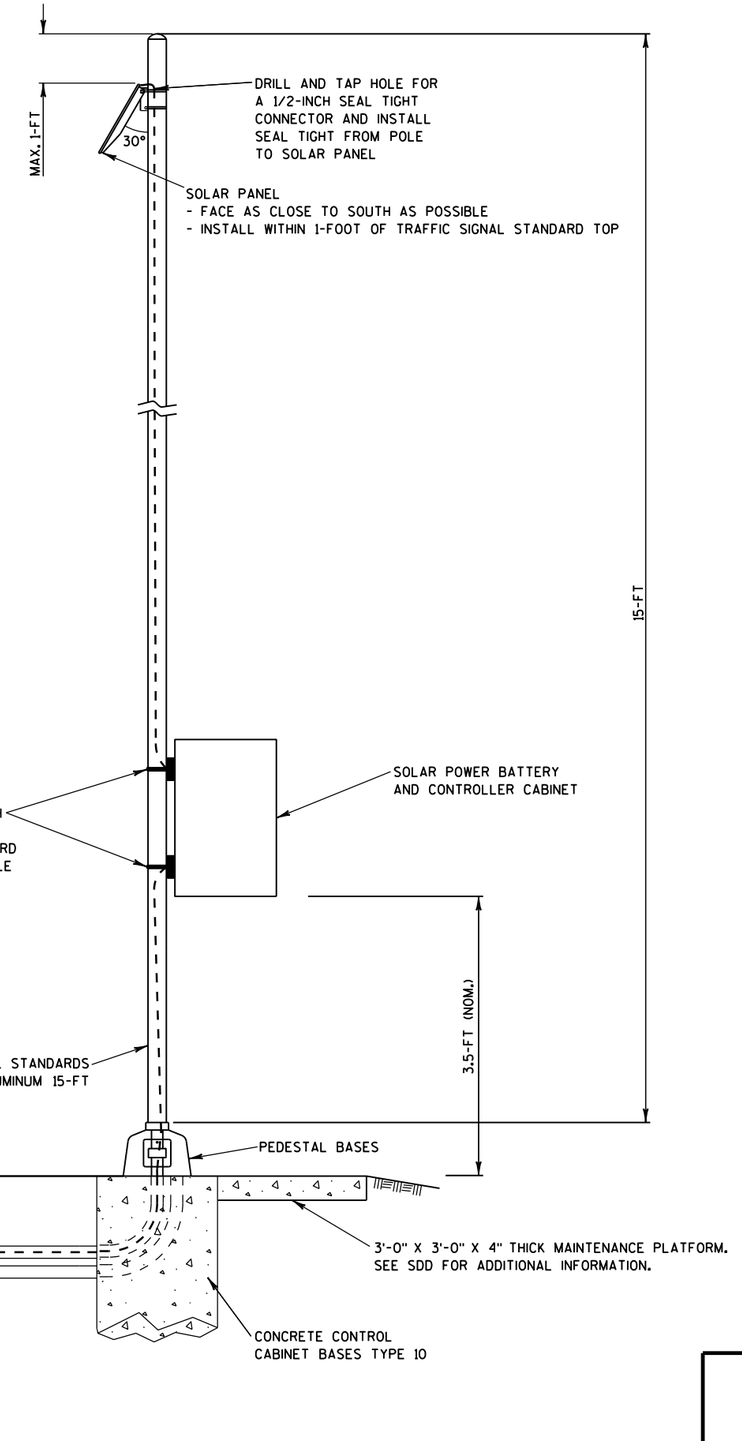
1. WIRING FROM SOLAR PANEL TO CABINET SHALL BE BLUE #10 XLP WIRE FOR POSITIVE CONDUCTOR AND WHITE #10 XLP FOR NEGATIVE CONDUCTOR.

2. WIRING FROM CABINET TO GATE ARM SHALL BE WHITE #10 XLP FOR COMMON, RED #10 XLP FOR FLASHER CIRCUIT 1, AND BLUE #10 XLP FOR FLASHER CIRCUIT 2.



BASE AND PULLBOX DETAIL

(SOLAR POWER OPTION)

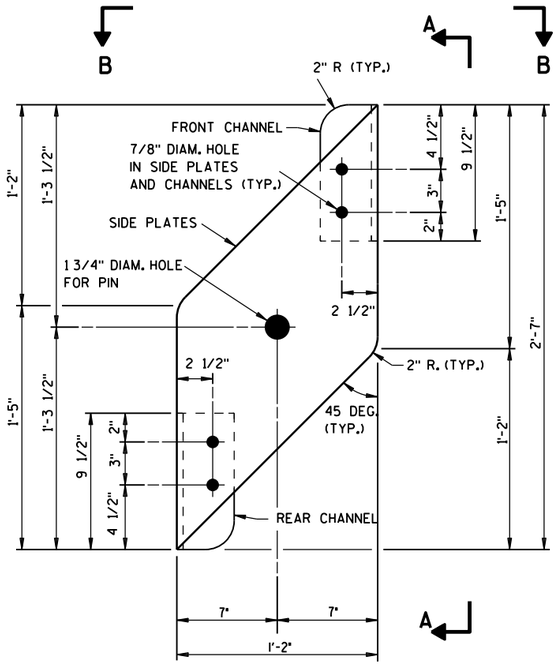


RAMP GATE
SOLAR POWER

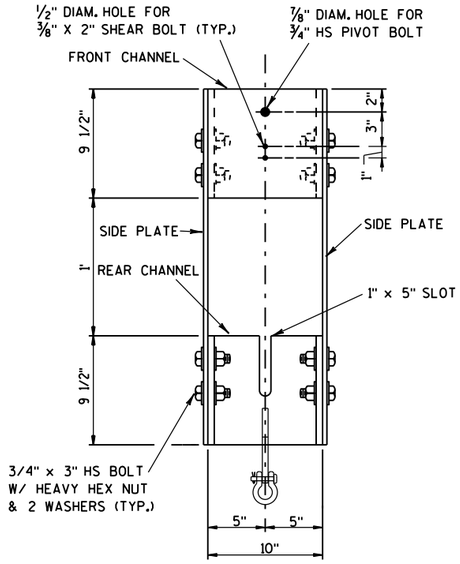
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

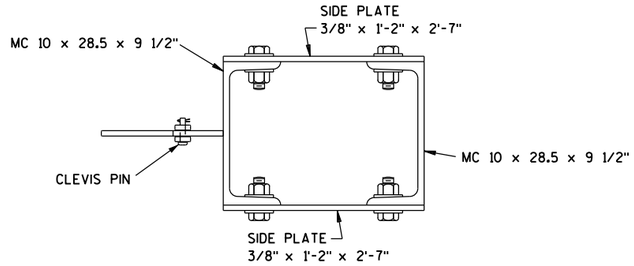
S.D.D. 15 D 34-1b



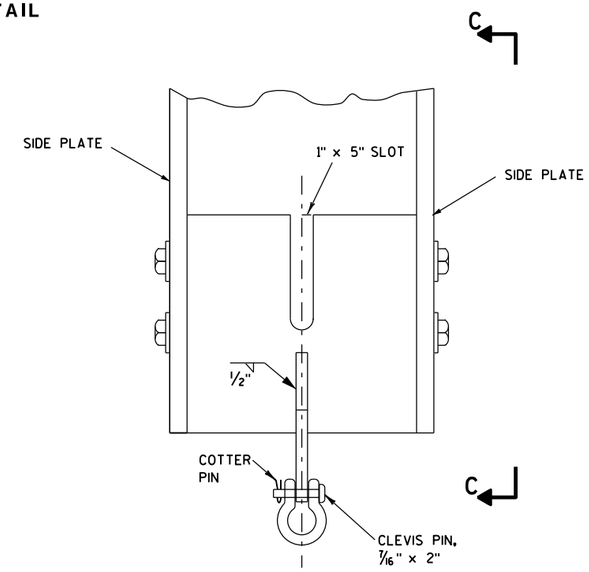
SIDE PLATE DETAIL



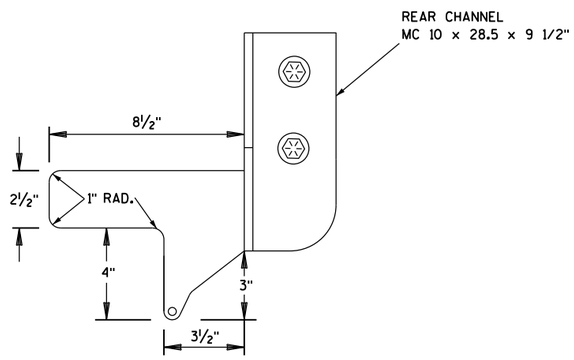
SECTION A-A



SECTION B-B



YOKE ASSEMBLY DETAIL



SECTION C-C

RAMP GATE
SOLAR POWER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR 773

6

S.D.D. 15 D 34-1c

6

S.D.D. 15 D 34-1c

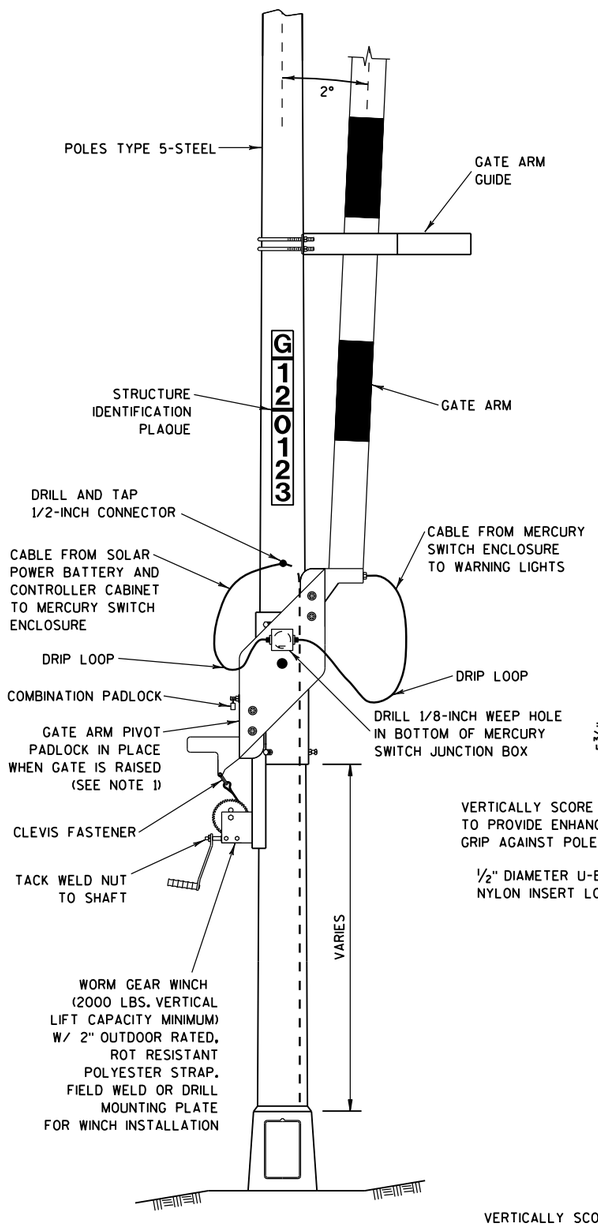
GENERAL NOTES

1. WHEN THE GATE IS FULLY RAISED, THE NUT AND WASHER SHALL BE PLACED SNUGLY AGAINST THE OUTSIDE OF THE REAR CHANNEL AND PADLOCKED IN PLACE.

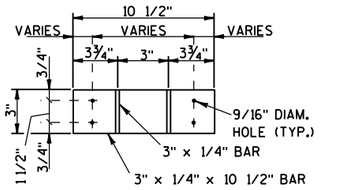
2. WHEN THE GATE IS FULLY LOWERED, THE NUT AND WASHER SHALL BE PLACED SNUGLY AGAINST THE INSIDE OF THE REAR CHANNEL AND PADLOCKED INTO PLACE.

3. ANTI-SEIZE LUBRICATING MATERIAL SHALL BE USED ON ALL BOLT THREADS BEFORE INSTALLATION.

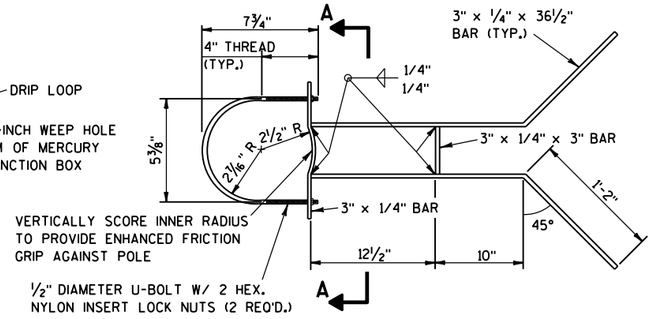
4. ALL BOLTS SHALL BE GALVANIZED AND CONFORM TO ASTM A307, GRADE A, UNLESS DESIGNATED AS HS (HIGH STRENGTH), WHICH SHALL CONFORM TO ASTM A325. BOLTS OF 1/2" NOMINAL DIAMTER OR LESS MAY BE STAINLESS STEEL.



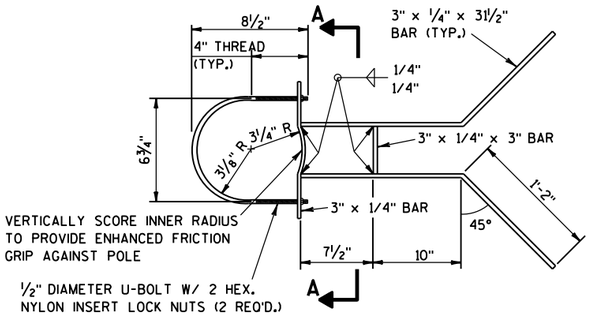
GATE PIVOT ASSEMBLY



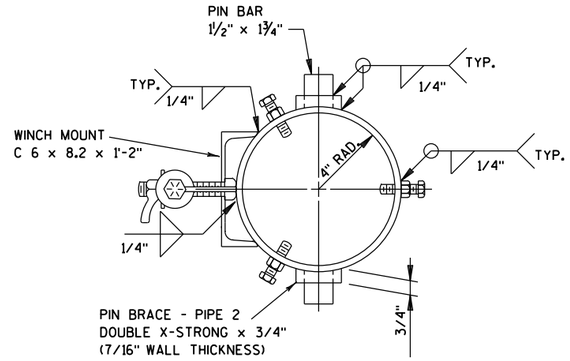
SECTION A-A
U-BOLTS NOT SHOWN



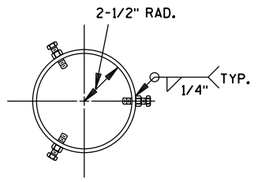
UPPER GATE ARM GUIDE DETAIL



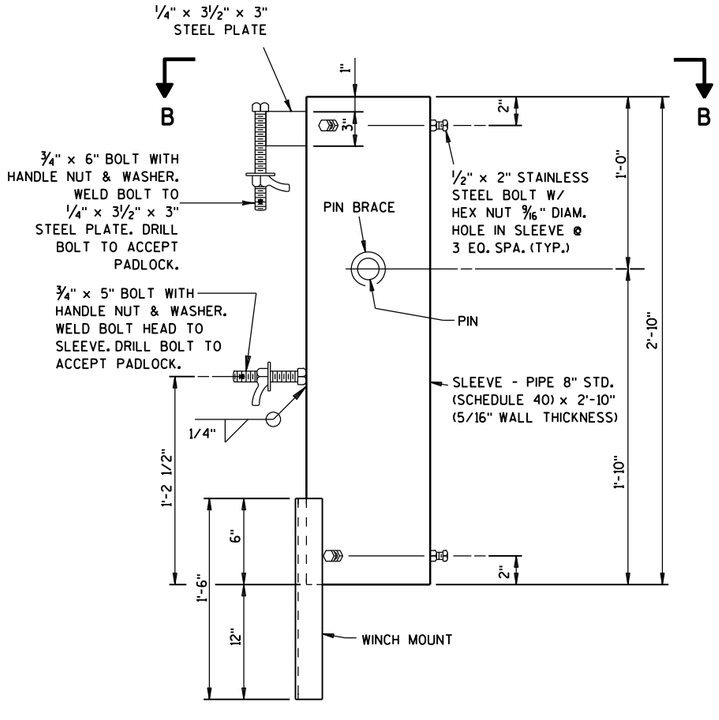
LOWER GATE ARM GUIDE DETAIL



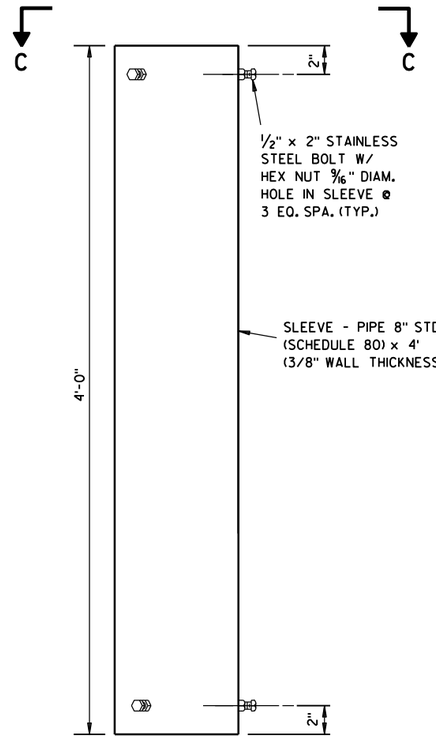
SECTION B-B



SECTION C-C



PIVOT SLEEVE DETAIL



TOP COLLAR

RAMP GATE
SOLAR POWER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

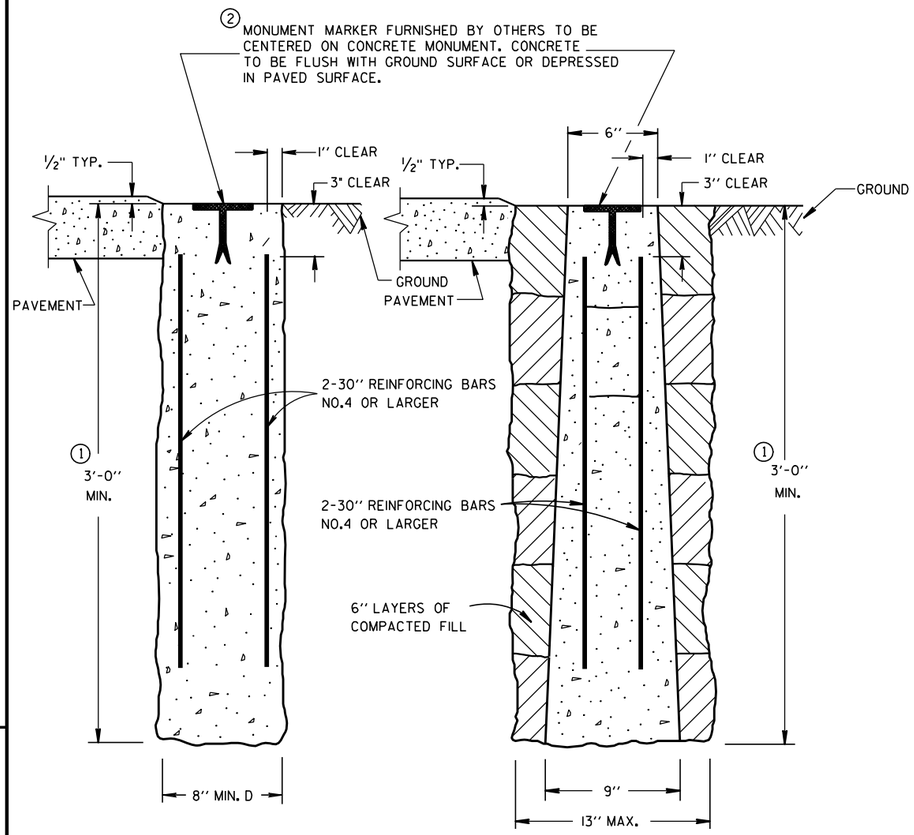
APPROVED
4-30-2013
DATE
/S/ Bill Wondrachek
STATE TRAFFIC ENGINEERING AND MANAGEMENT
FHWA

6

S.D.D. 15 D 34-1d

6

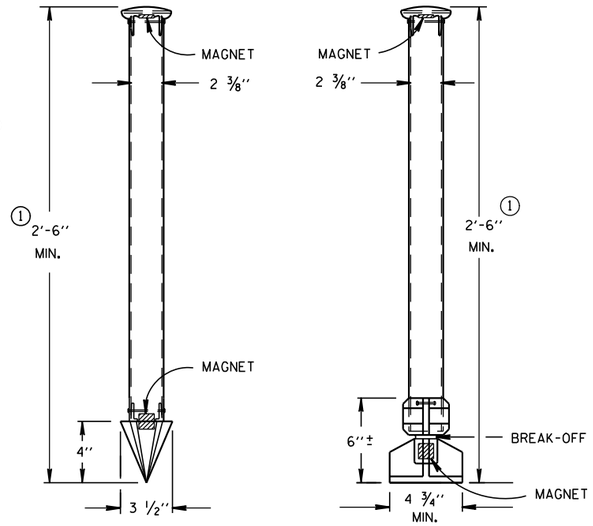
S.D.D. 15 D 34-1d



CAST-IN-PLACE PRECAST

CONCRETE MONUMENTS

TYPE A



TYPE C DRIVE-IN MONUMENT

TYPE D BREAK-OFF MONUMENT

ALUMINUM MONUMENTS

(INCLUDES MARKER)

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

DETAILED DRAWINGS OF PROPOSED ALTERNATE DESIGNS FOR METAL MONUMENTS OR MONUMENT COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

INSTALLED METAL MONUMENTS MUST BE EASILY DETECTED WITH A DIP NEEDLE. INSERT PERMANENT MAGNETS SHALL BE ATTACHED NEAR THE TOP AND BOTTOM OF THOSE MONUMENTS CONSTRUCTED OF A METAL ALLOY WHICH IS NOT ATTRACTIVE TO A DIP NEEDLE.

THE CAST IRON MONUMENT COVER SHALL BE A "NON-ROCKING" TYPE. ADJUSTMENT OF THE COVER TO GRADE MAY BE ACCOMPLISHED BY THE USE OF MORTAR AND BRICK, OR BY EITHER PRECAST OR CAST-IN-PLACE REINFORCED CONCRETE GRADE RINGS.

MONUMENTS SHALL BE LOCATED AND PLACED AT THE DIRECTION OF THE ENGINEER.

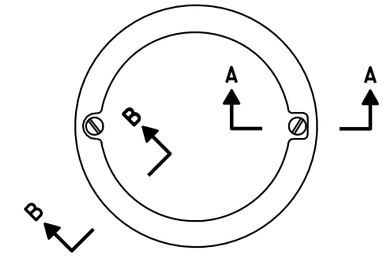
ALUMINUM MONUMENTS AND MONUMENT COVERS SHALL BE MADE FROM AN ALUMINUM AND MAGNESIUM ALLOY AS DETERMINED BY THE MANUFACTURER.

THE MONUMENT COVERS DETAILED ON THIS DRAWING ARE NOT EQUAL ALTERNATES. MONUMENT COVERS SHALL BE CAST IRON UNLESS ALUMINUM IS SPECIFIED ELSEWHERE IN THE CONTRACT.

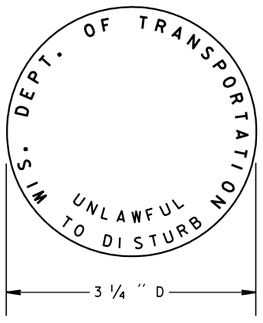
MONUMENT SHALL BE CAST-IN-PLACE CONCRETE UNLESS PRECAST CONCRETE OR ALUMINUM MONUMENTS ARE SPECIFIED IN THE CONTRACT OR PERMITTED BY THE ENGINEER.

① MINIMUM LENGTH SHALL BE 4'-0" FOR MONUMENTS INSTALLED IN PAVED AREAS.

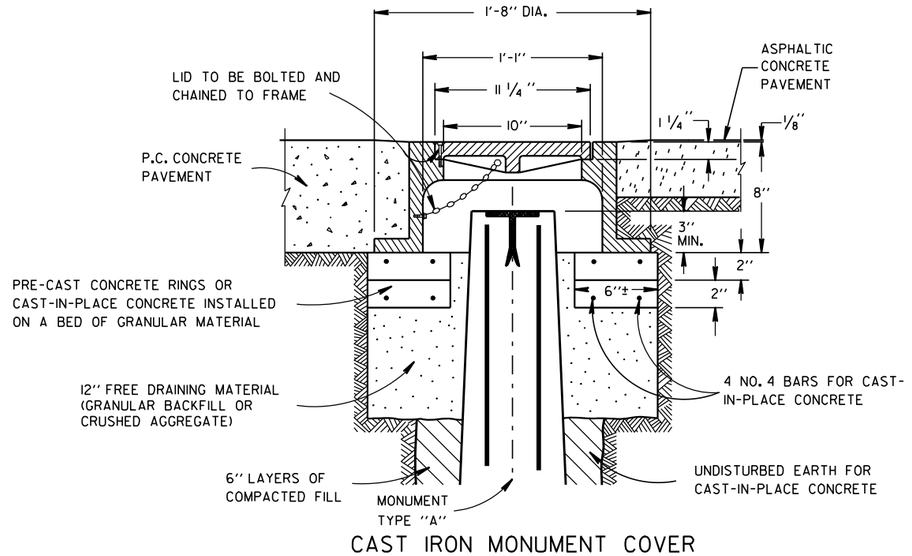
② AN OFFICIAL COUNTY MONUMENT MARKER SUPPLIED BY A COUNTY MAY BE REQUIRED FOR SOME SECTION CORNERS AND WITNESS MONUMENTS INSTEAD OF THIS WIS DOT MARKER.



TOP VIEW

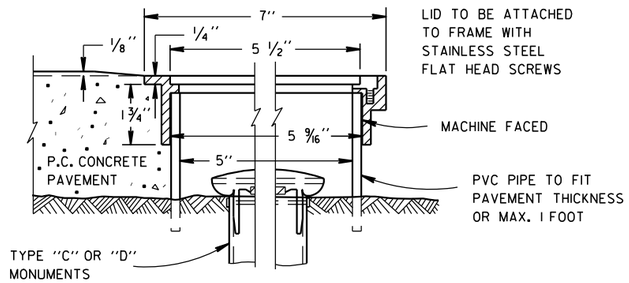


② WIS DOT MONUMENT MARKER LOGO FOR TYPES "A", "C" & "D"



CAST IRON MONUMENT COVER

(APPROXIMATE WEIGHT - 95 LBS.)



SECTION B-B SECTION A-A

ALUMINUM MONUMENT COVER

(APPROXIMATE WEIGHT 2 LBS)

(FOR CONCRETE PAVEMENT ONLY)

LANDMARK REFERENCE MOUNMENTS AND COVERS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

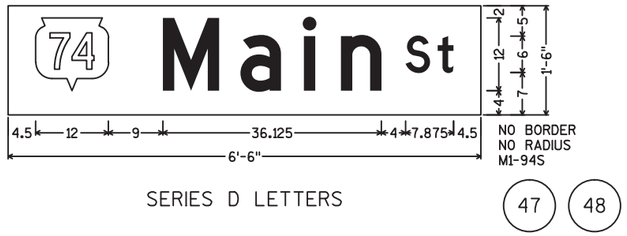
APPROVED
9/22/1999 DATE
/S/ Rory L. Rhinesmith
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

6

S.D.D. 16 A 1-6

6

S.D.D. 16 A 1-6



SERIES D LETTERS

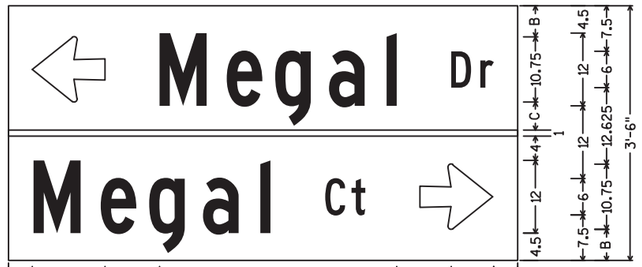
47 48



SERIES C LETTERS

80

A=4.125"
B=5.125"
C=4.625"



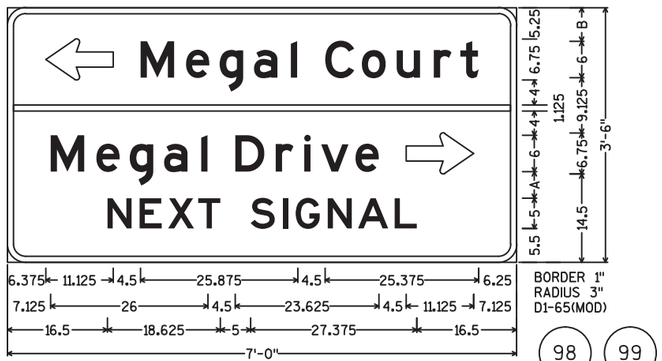
SERIES C LETTERS

81

A=4.125"
B=5.125"
C=4.625"

GENERAL NOTES:

1. DETAILS OF CONSTRUCTION, MATERIALS, AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS, THE SPECIAL PROVISIONS, AND THE PLANS.
2. UNLESS OTHERWISE NOTED, ALL SIGNS SHOWN ON THIS SHEET ARE "SIGNS, TYPE II".
3. UNLESS OTHERWISE NOTED, TYPE II SIGNS ON THIS SHEET SHALL HAVE "TYPE H REFLECTIVE SHEETING" AND "TYPE H MESSAGE MATERIAL". TYPE I SIGNS SHALL HAVE "TYPE SH REFLECTIVE SHEETING".
4. UNLESS OTHERWISE NOTED, ALL SIGNS SHOWN ON THIS SHEET SHALL HAVE A GREEN BACKGROUND AND WHITE MESSAGE.
5. TYPE II SIGNS ALL UPPERCASE MESSAGE (EXCEPT ON SHIELDS OR WHERE OTHERWISE NOTED) SHALL BE "SERIES E". ALL LOWERCASE MESSAGE WITH AN INITIAL UPPERCASE LETTER SHALL BE "SERIES E".
6. TYPE I SIGNS ALL UPPERCASE MESSAGE (EXCEPT ON SHIELDS OR WHERE OTHERWISE NOTED) SHALL BE "SERIES E MODIFIED". ALL LOWER CASE MESSAGE WITH AN INITIAL UPPERCASE LETTER SHALL BE "SERIES E MODIFIED". ALL CAP WORDS ARE "SERIES E".
7. UNLESS OTHERWISE NOTED, ALL SIGNS SHOWN ON THIS SHEET SHALL HAVE "TYPE A" OR "TYPE C" ARROWS AS SHOWN. SEE THE STANDARD SIGN PLATES FOR FURTHER DETAILS.
8. SEE THE STANDARD SIGN PLATES FOR FURTHER DETAILS ON ROUTE MARKER SHIELDS.
9. THE SIGN NUMBER IS DENOTED IN THE CIRCLE NEAR EACH DETAIL.
10. NUMBER FRACTIONS FOR INTERCHANGE SEQUENCE SIGNS SHALL BE "SERIES E" PER PLATES A11-7 AND A11-10.
11. DO NOT SCALE.



98 99

A=4.375"
B=5.625"



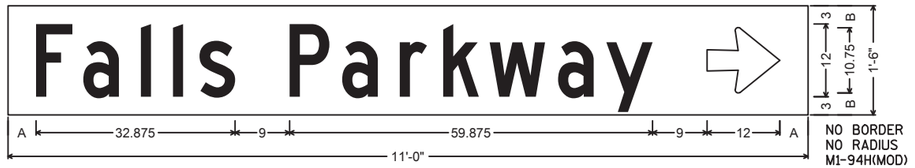
SERIES D LETTERS

49 50 211
212 79 82

A=5.625"

PROJECT NO: 2782-11-70	HWY: USH 41 (PILGRIM ROAD)	COUNTY: WAUKESHA	SIGNING DETAIL - TYPE II SIGNS	SCALE: 0 1/2" 1"	SHEET 776	E

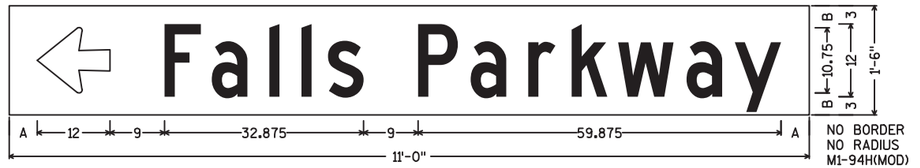
FILE NAME : J:\PROJECTS\D2_27821241\SIGN\070101_MS.DWG PLOT DATE : 9/23/2013 4:47 PM PLOT BY : LAROSA, PHILIP P PLOT NAME : _____ PLOT SCALE : *******
WISDOT/CADDS SHEET 47



SERIES C LETTERS

213

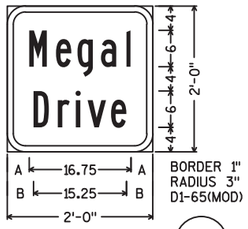
A=4.625"
B=3.625"



SERIES C LETTERS

214

A=4.625"
B=3.625"



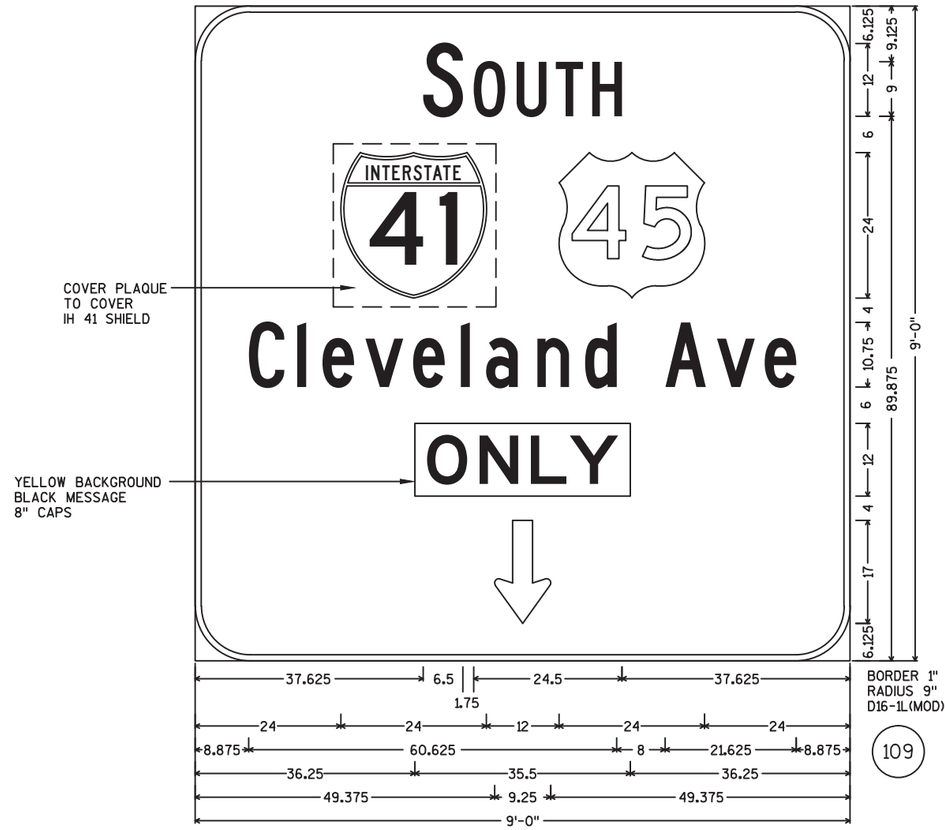
SERIES B
LETTERS

96

A=3.625"
B=4.375"

SERIES C LETTERS

327

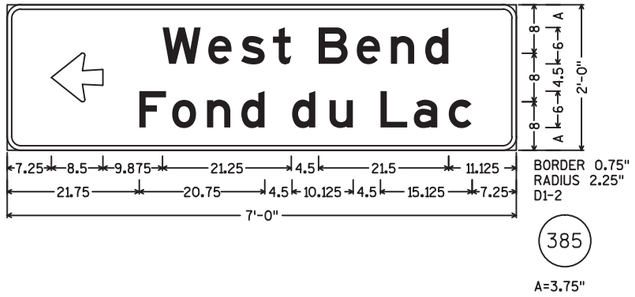


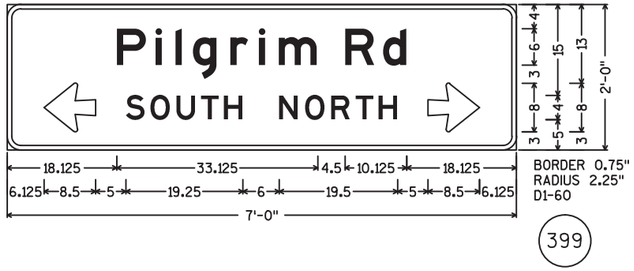
SERIES C LETTERS
S-67-960
TYPE I SIGN

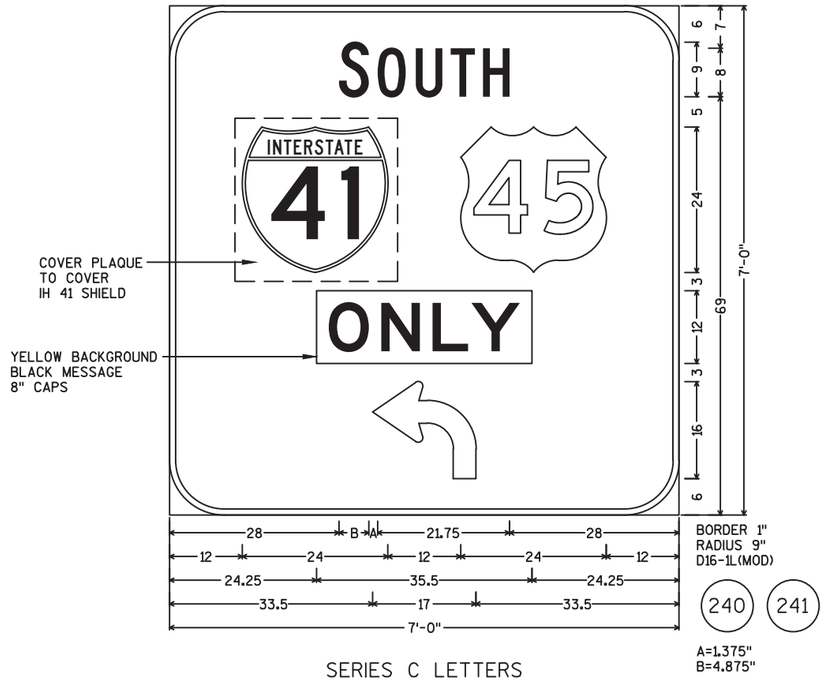
109

GENERAL NOTES:

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8. SEE THE STANDARD SIGN PLATES FOR FURTHER DETAILS ON ROUTE MARKER SHIELDS.
9. THE SIGN NUMBER IS DENOTED IN THE CIRCLE NEAR EACH DETAIL.
10. NUMBER FRACTIONS FOR INTERCHANGE SEQUENCE SIGNS SHALL BE "SERIES E" PER PLATES A11-7 AND A11-10.
11. DO NOT SCALE.



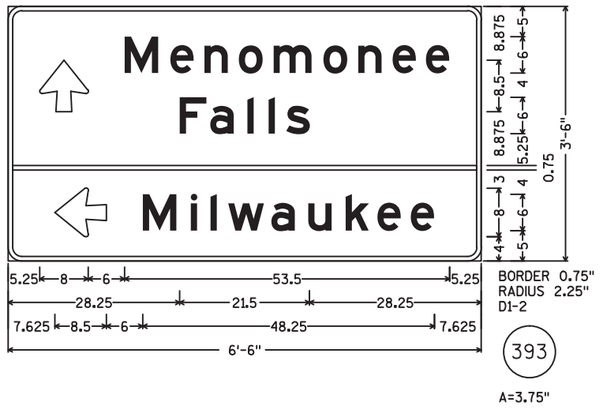


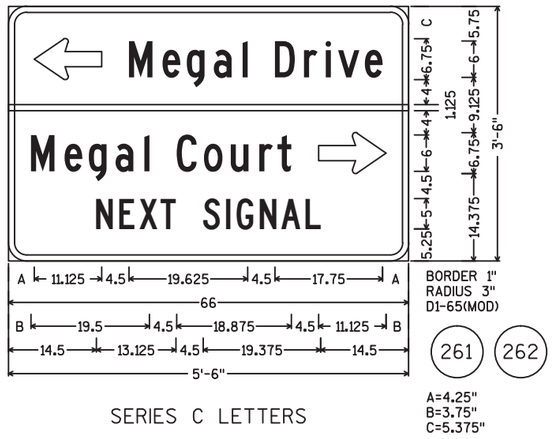


SERIES C LETTERS
S-67-961
TYPE I SIGN

GENERAL NOTES:

1. DETAILS OF CONSTRUCTION, MATERIALS, AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS, THE SPECIAL PROVISIONS, AND THE PLANS.
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11. DO NOT SCALE.





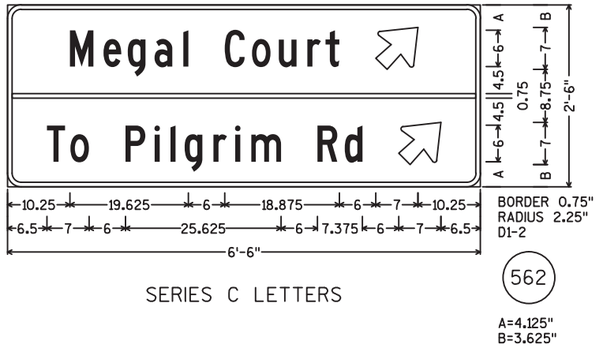
SERIES C LETTERS

SHEET 3 OF 4

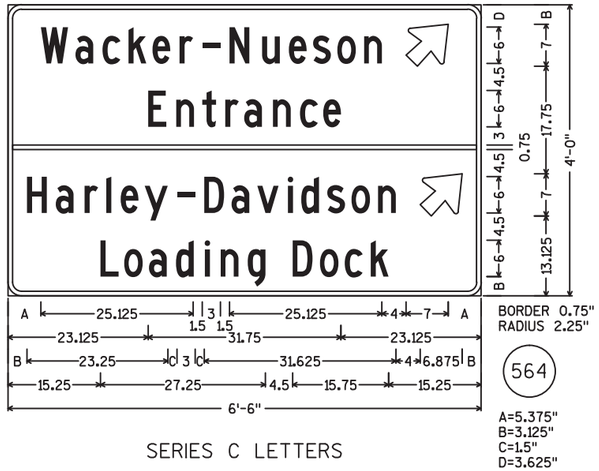
PROJECT NO: 2782-12-70	HWY: USH 41 (PILGRIM ROAD)	COUNTY: WAUKESHA	SIGNING DETAIL - TYPE I & II SIGNS	SCALE: 0 1/2" 1"	SHEET 778	E

FILE NAME : J:\PROJECTS\D2_27821241\SIGN\070101_MS.DWG PLOT DATE : 9/23/2013 4:47 PM PLOT BY : LAROSA, PHILIP P PLOT NAME : _____ PLOT SCALE : *******

WISDOT/CADDS SHEET 47



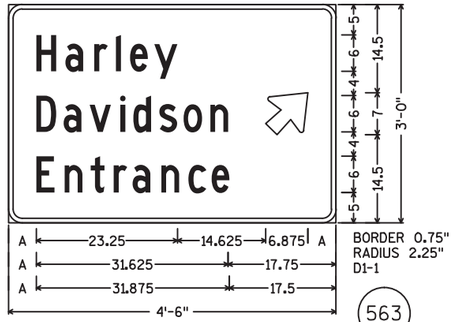
SERIES C LETTERS



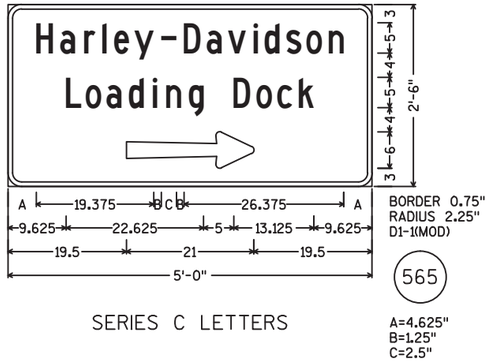
SERIES C LETTERS

GENERAL NOTES:

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11. DO NOT SCALE.



SERIES C LETTERS



SERIES C LETTERS

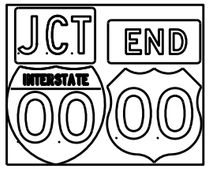
PROJECT NO: 2782-10-70	HWY: USH 41 (PILGRIM ROAD)	COUNTY: WAUKESHA	SIGNING DETAIL - TYPE II SIGNS	SCALE: 0 1/2" 1"	SHEET 779	E

FILE NAME : J:\PROJECTS\D2_27821241\SIGN\070101_MS.DWG PLOT DATE : 9/23/2013 4:47 PM PLOT BY : LAROSA, PHILIP P PLOT NAME : ---------- PLOT SCALE : *******
WISDOT/CADDS SHEET 47

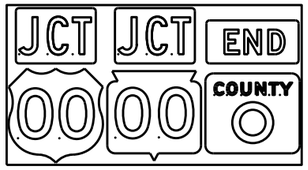
TYPICAL ASSEMBLIES



J1-1



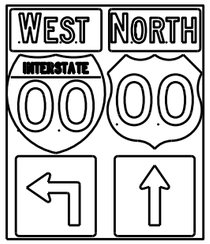
J1-2



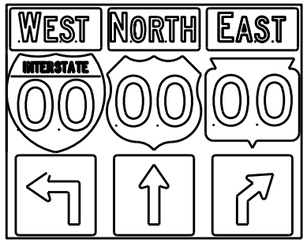
J1-3



J2-1



J2-2

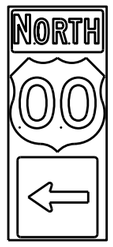


J2-3

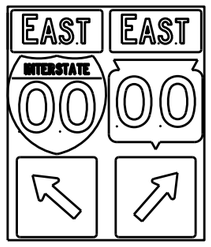


JV

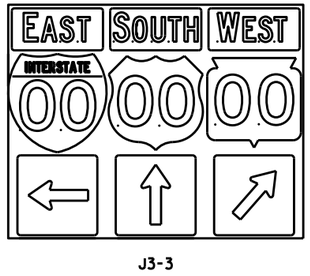
(Typical Vertical J-Assembly
See Note 10 and 11)



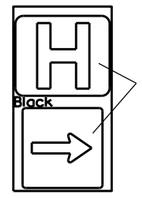
J3-1



J3-2



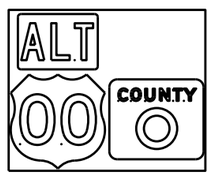
J3-3



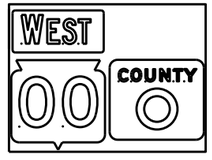
JH-1



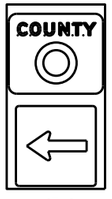
J4-1



J4-2



J4-2



J13-1



J12-1



J32-1



J33-1

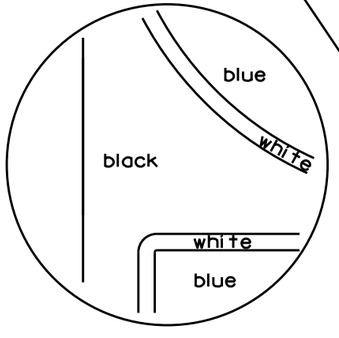


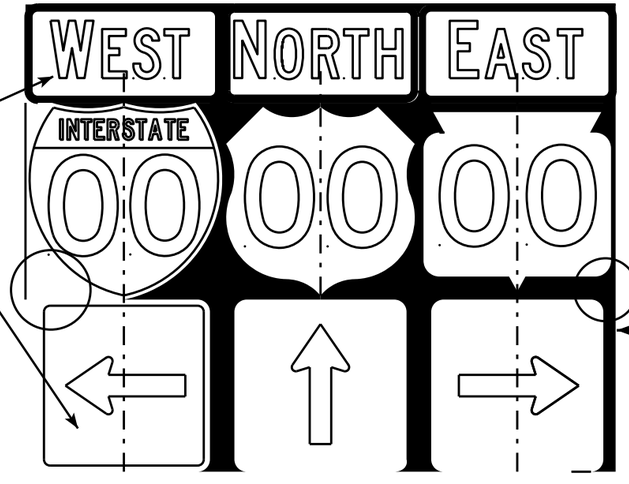
J23-1

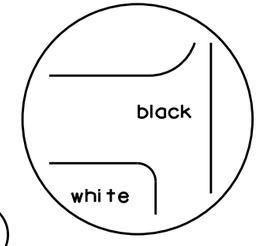


J22-1

[blue background with interstate]







[black background]

NOTES

1. Signs are Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Black Non-reflective
   Message - see Note 5
3. Message Series - See Note 5
4. Corners shall be square or rounded if base material is plywood. If base material is metal the corners shall be rounded.
5. The colors and message spacing on each marker shall be according to the applicable route marker panel specifications.
6. Certain marker heads require the component pieces to be the same color. As an example, all the components used with an M1-1 Interstate marker shall be blue.
7. Single panel j-assemblies shall only be used with route marker shields that are same size. If the route marker shields are different size use multiple piece component.
8. Route assemblies that have 24 inch route shields and have dimensions greater than 48 inches (both vertical and horizontal) shall have one horizontal splice between the arrows and route shields. Vertical splices shall not be used on route assemblies with a horizontal dimension of 144 inches or less. The contractor shall not use more than one vertical joint per sign and the joint shall be between route shields.
9. Route assemblies that have 36 inch shields and have dimensions greater than 48 inchs (both vertical and horizontal) shall have two horizontal splices. One horizontal splice shall be between the cardinal direction and route shields and the other horizontal splice shall be between the arrows and route shields. Vertical splices shall not be used on route assemblies with a horizontal dimension of 144 or less. The contractor shall not use more than one vertical joint per sign and the joint shall be between route shields.
10. All Vertical J Assemblies are given a Sign Code of JV
11. For JV Assemblies that have a mixture of Interstate and non Interstate shields, arrows and cardinals shall be white on blue.

ROUTE MARKERS & COMPONENTS
IN TYPICAL ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

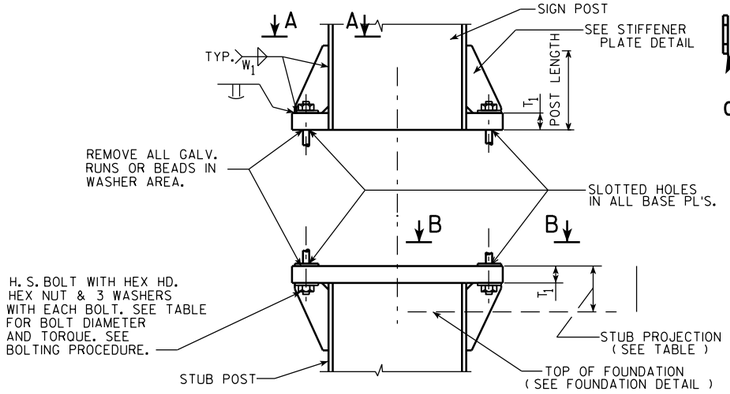
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/06/14 PL... A2-1S.8

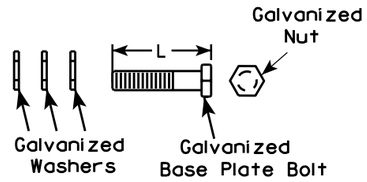
PROJECT NO: | SHEET NO: E

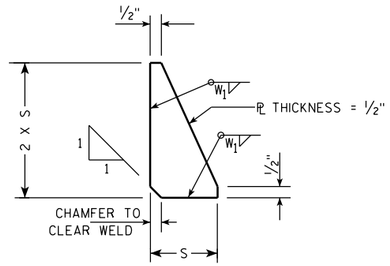
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A21S.DGN PLOT DATE : 06-FEB-2014 14:10 PLOT BY : mscsja PLOT NAME :

WISDOT/CADDS SHEET 42



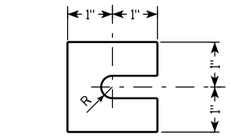
SIGN POST AND STUB POST ELEVATION





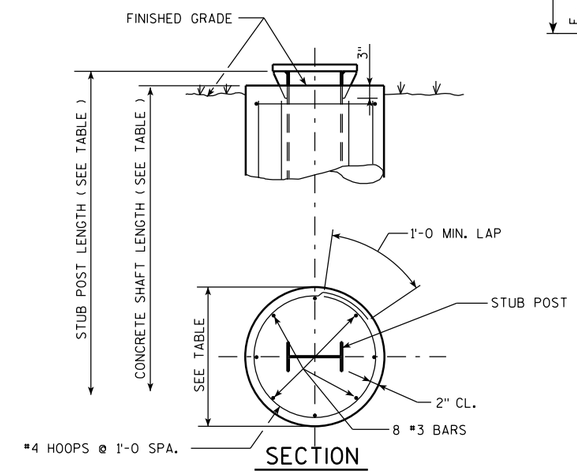
STIFFENER PLATE DETAIL

(SEE TABLE FOR DIMENSIONS)

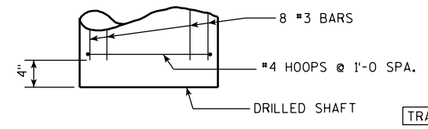


FURNISH 2 @ .012" ± THICK AND 2 @ .032" ± THICK SHIMS PER POST. SHIMS SHALL BE FABRICATED FROM BRASS SHIM STOCK OR STRIP CONFORMING TO A.S.T.M.- B36.

SHIM DETAIL



SECTION



FOUNDATION DETAIL

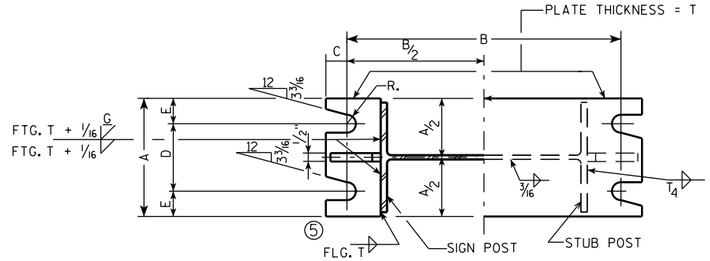
POST DETAIL

QUANTITIES FOR 1 FOOTING		
	CONC. MASONRY C.Y.	REINF. STEEL LBS.
A	0.6	34
B	0.8	49
C	0.9	50
D	0.9	56
E	1.0	62

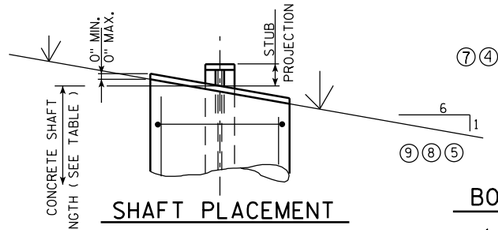
⑦

REINF.	TYPE	#3	#4
	A	8 @ 4'-5	5 @ 6'-3
	B	8 @ 6'-5	7 @ 6'-3
	C	8 @ 6'-11	7 @ 6'-3
	D	8 @ 7'-5	8 @ 6'-3
	E	8 @ 7'-11	9 @ 6'-3

⑦



SECTION A-A SECTION B-B



SHAFT PLACEMENT

DESIGN DATA

WIND PRESSURE = 75 M.P.H.
WIND COMPONENTS - NORMAL = 1.0 TRANSVERSE = 0.0
ICE LOAD = 3 P.S.F.

GROUP LOADS	PERCENT OF ALLOWABLE STRESS
1. DEAD	100
2. DEAD & WIND	140
3. DEAD, ICE & ½ WIND[4]	140 [4]25 P.S.F. MIN.

ALLOWABLE SOIL PRESSURE = 1½T / SQ. FT.
WIND LOAD WAS APPLIED TO THE AREA OF THE SIGN AND TO THE SUPPORTING MEMBERS.
ICE LOAD WAS APPLIED TO ONE FACE OF THE SIGN AND AROUND THE SURFACE OF THE SUPPORTING MEMBERS.

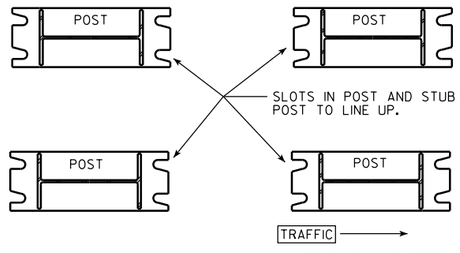
GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.
DESIGN CONFORMS WITH A.A.S.H.T.O. SPECIFICATIONS 1985.
ALL POSTS, POST STUBS & ATTACHMENTS SHALL BE A.S.T.M. A709 GRADE 50.
⑨ THE POST, BASE PLATES, UPPER SIX INCHES OF STUB POST FLANGE SPLICE PLATE AND FUSE PLATE SHALL BE GALVANIZED AFTER FABRICATION.
H.S. BOLTS, WASHERS & NUTS SHALL BE A325 GALVANIZED WHEN POSTS, POST STUBS AND ATTACHMENTS ARE A709 GRADE 50 AND GALVANIZED.

BOLTING PROCEDURE - BASE CONNECTION

1. ASSEMBLE SIGN POST TO STUB POST WITH BOLTS AND ONE OF THE FLAT WASHERS ON EACH BOLT BETW. PLATES.
2. SHIM AS REQ'D. TO PLUMB POST.
3. PRIOR TO BOLT TIGHTENING LUBRICATE BASE CONNECTION BOLTS WITH BEESWAX OR OTHER HIGH-WAX LUBRICANT.
4. TIGHTEN ALL BOLTS THE MAXIMUM POSSIBLE WITH 12" OR 15" WRENCH TO BED WASHERS & SHIMS AND TO CLEAN BOLT THREADS, THEN LOOSEN EACH BOLT IN TURN AND RETIGHTEN IN A SYSTEMATIC ORDER TO THE PRESCRIBED TORQUE. (SEE TABLE)
5. BURR THREADS AT JUNCTION WITH NUT USING A CENTER PUNCH TO PREVENT NUT LOOSENING.

NOTE:
TIGHTEN THE HIGH STRENGTH BOLTS TO THE TORQUE SHOWN. DO NOT OVERTIGHTEN.



POST SLOT ORIENTATION ⑦

L	X	TYPE	DIMENSION / POST SIZE	BASE CONNECTION DATA TABLE: BOLT SIZE & TORQUE	A	B	C	D	E	T_1	T_4	W_1	R	S	FOUNDATION DATA: STUB LENGTH	STUB PROJECTION	SHAFT DIAMETER	SHAFT LENGTH	② K
3 ¾	④	A	W10"X12.0 #/FT.	¾" ϕ @ 75#-FT.	5¼"	1'-0⅜	⅞"	3½"	⅞"	1"	3/16"	5/16"	13/32"	2⅛"	3'-6	3"	2'-0 ϕ	5'-0	76.0# ④
4 ¾	④	B	W12"X16.0 #/FT.	⅞" ϕ @ 85#-FT.	5½"	1'-4¼	1"	3½"	1"	1¼"	¼"	5/16"	15/32"	3"	5'-6	3"	2'-0 ϕ	7'-0	146.5# ④
5		C	W12"X19.0 #/FT.	⅞" ϕ @ 85#-FT.	5½"	1'-4¼	1"	3½"	1"	1½"	5/16"	5/16"	15/32"	3"	6'-0	3"	2'-0 ϕ	7'-6	182.1#
5		D	W12"X22.0 #/FT.	⅞" ϕ @ 85#-FT.	5½"	1'-4¼	1"	3½"	1"	1½"	⅜"	5/16"	15/32"	3"	6'-6	3"	2'-0 ϕ	8'-0	210.5#
5	③	E	W12"X26.0 #/FT.	1" ϕ @ 90#-FT.	7"	1'-4¼	1¼"	4"	1½"	1½"	⅜"	5/16"	11/32"	3"	7'-0	3"	2'-0 ϕ	8'-6	293.0# ③

① ⑥ ①

STRUCTURAL CARBON STEEL PAY WTS. (1 POST) = K+ (POST LENGTH X POST WT.)
" K " INCLUDES STUB, BASE PLATES, STIFFS., BOLTS, AND WASHERS.

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 6/30/14 PLATE NO. A3-1.15

⑩	1-21-14	LUBRICATION OF BASE BOLTS
⑨	4-26-11	REMOVE NON-GALVANIZED
⑧	10-30-96	NOT GALVANIZED/GALVANIZED
⑦	10-30-92	QUANT., A588 EXCEPT., ADD SLOT VIEW
⑥	8-24-87	BASE CONN. WELD
⑤	10-13-81	BASE CONN. WELD & FUSE PL WASHERS
④	10-19-79	POST A & B, A572 GR. 50, & K
②	11-28-78	"K" ③ 4-23-79 TYPE "E"
①	5-4-78	T_1 , T_2 & W_1
NO.	DATE	REVISION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

TYPE A, B, C, D, & E

CONST. SPEC. 2011	DRAWN BY JPH	PLANS CK'D.

FTG. & SIGN SUPPORT DETAILS GROUND MOUNT BREAK-AWAY SIGNS

SHEET 781

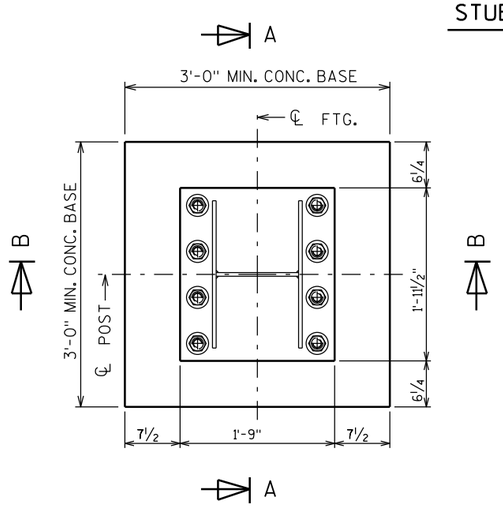
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A31.DGN PLOT DATE : 30-JUN-2014 10:43 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 5.351066:1.000000

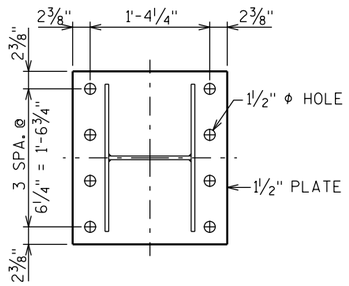
WISDOT/CADDS SHEET 42

7 7

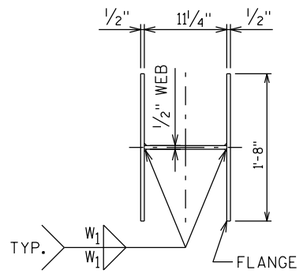
STUB AND MASONRY ANCHOR DETAILS



STUB SECTION



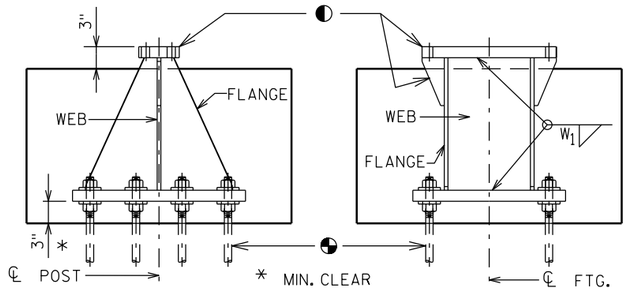
BASE PLATE



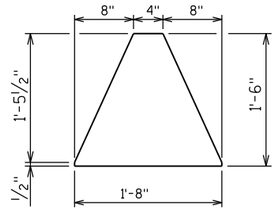
STUB

◐ SEE PLATE NO. A3-1 FOR DETAILS

◒ MASONRY ANCHORS TYPE S 1¼-INCHES (ADHESIVE). ALLOWABLE PULL OUT CAPACITY 14,995 KIPS. EMBED 1'-3" IN ROCK.



SECTION A SECTION B



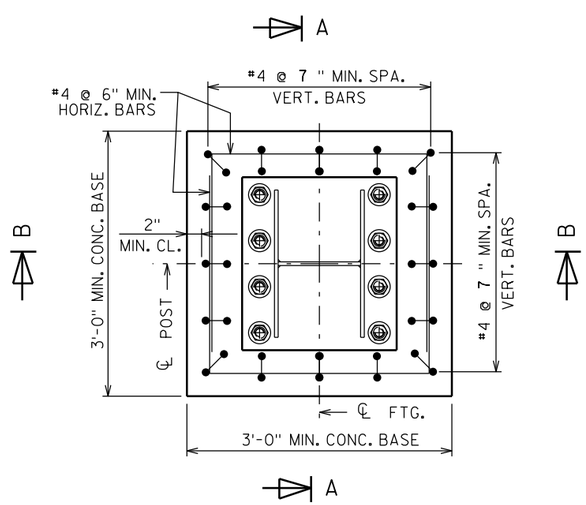
FLANGE

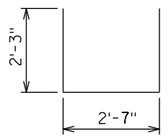
GENERAL NOTES

1. Quantities per Base:
   - REINFORCING BAR STEEL = 62 LBS
   - CONCRETE = 0.6 C.Y.
   - STEEL WEIGHT = 335 LBS
2. All materials, except anchor rod, nuts and washers, are to be A.S.T.M. A709 grade 50. All materials to be galvanized after fabrication.
3. If the contractor encounters rock before reaching the footing depth, per the A3-1 Sign Detail, determine the pull-out capacity of a test adhesive anchor installed in the rock. If the test result equals or exceeds the pull-out capacity of 14,995 KIPS, the contractor may install the breakaway stub for rock, according to this detail.

CONCRETE BASE AND REINFORCING STEEL DETAILS

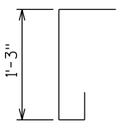
CONCRETE BASE SECTION





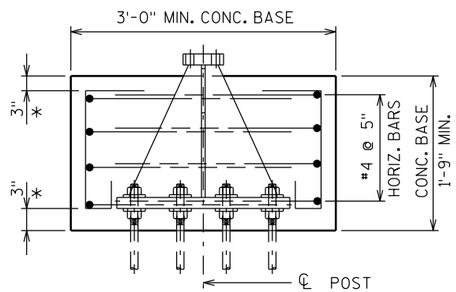
HORIZONTAL BAR

8 BARS @ 6'-11" LENGTH



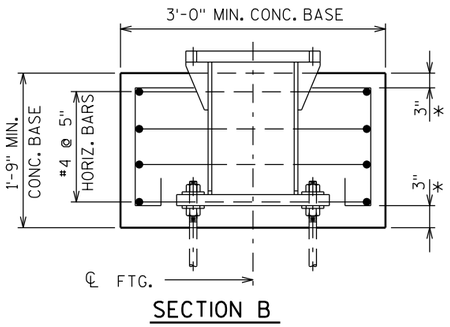
VERTICAL BARS

16 BARS @ 2'-4" LENGTH
MAY BE PLACED IN SKEW
FOR CLEARANCE NEED



SECTION A

* MIN. CLEAR



SECTION B

ALTERNATE BREAK-AWAY BASE ON ROCK
A3-1M

WISCONSIN DEPT OF TRANSPORTATION

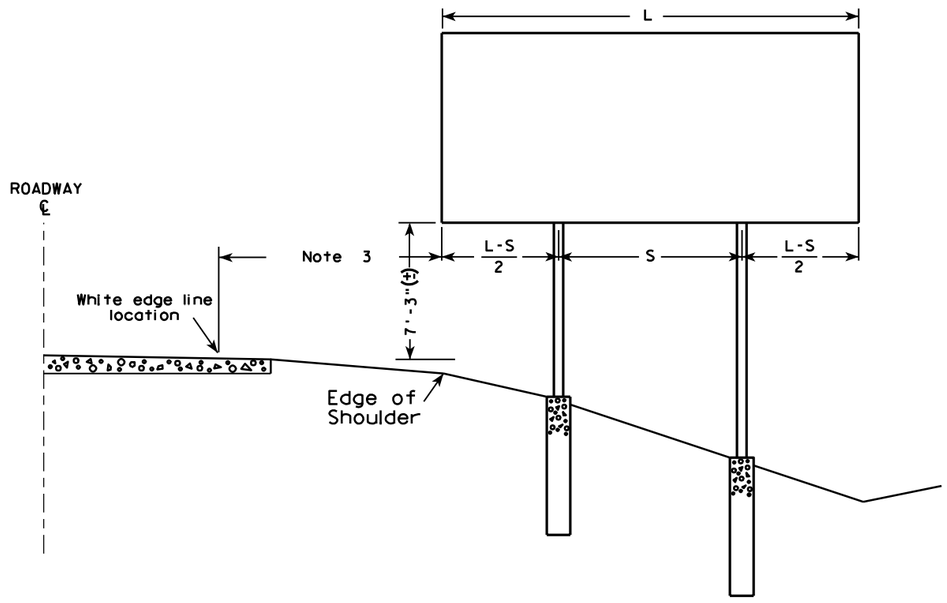
APPROVED Matthew R Rauch for State Traffic Engineer

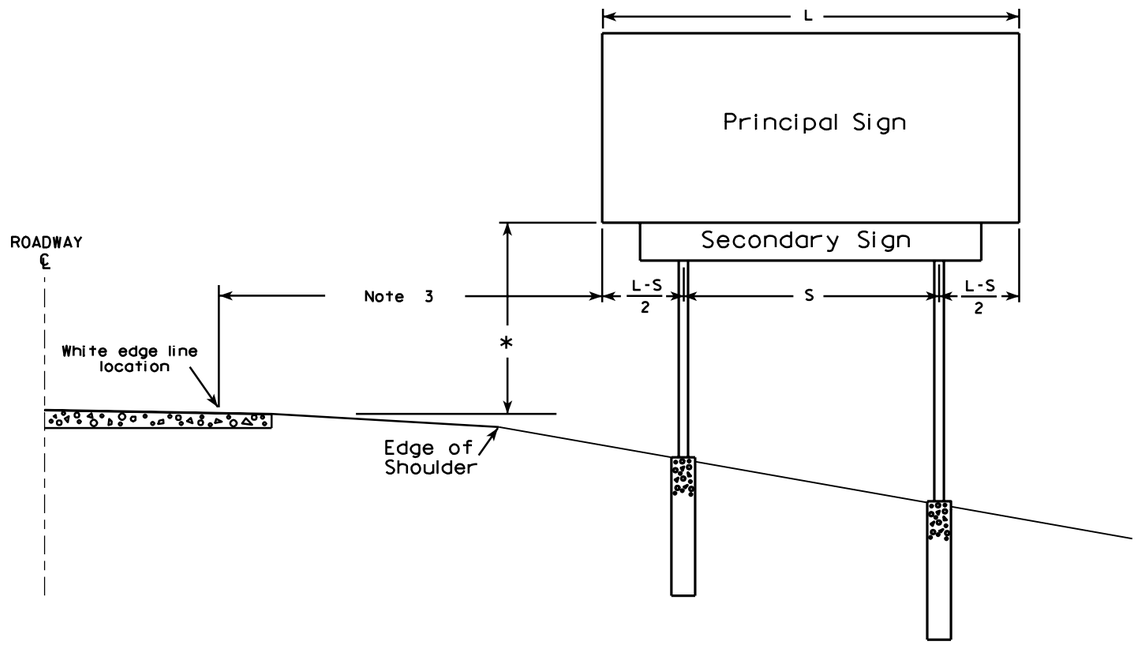
DATE 2/06/2014 PLATE A3-1M.1

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\A31M.DGN PLOT DATE : 10-MAR-2014 15:16 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 1.556674:1.000000

WISDOT/CADDS SHEET 42





GENERAL NOTES

1. For a 2 post installation, S equals 3L/5, but shall not be less than 9 ft.
2. For a 3 post installation, S equals 5L/7, but shall not be less than 18 ft., and the space between any two posts shall not be less than 9 ft.
3. Unless noted in the plan, the sign offset distance shall be a minimum of 17'-6", desirable 30'-0".
4. The (±) tolerance shown on this sheet is 3 in.
5. The vertical sign height clearance detailed is measured from the bottom of the sign to the near edge of pavement.
6. Post lengths shown in the miscellaneous quantities are estimated lengths. The contractor shall verify post lengths at the time of final grading.
7. Refer to the Traffic Guidelines Manual for further guidance on minimum vertical clearance requirements.

* Clearance is 8'-3"(±) when the secondary sign is 3 ft. or less in height. For secondary signs larger than 3 ft., the clearance to the bottom of the secondary sign shall be 5'-3"(±).

7

7

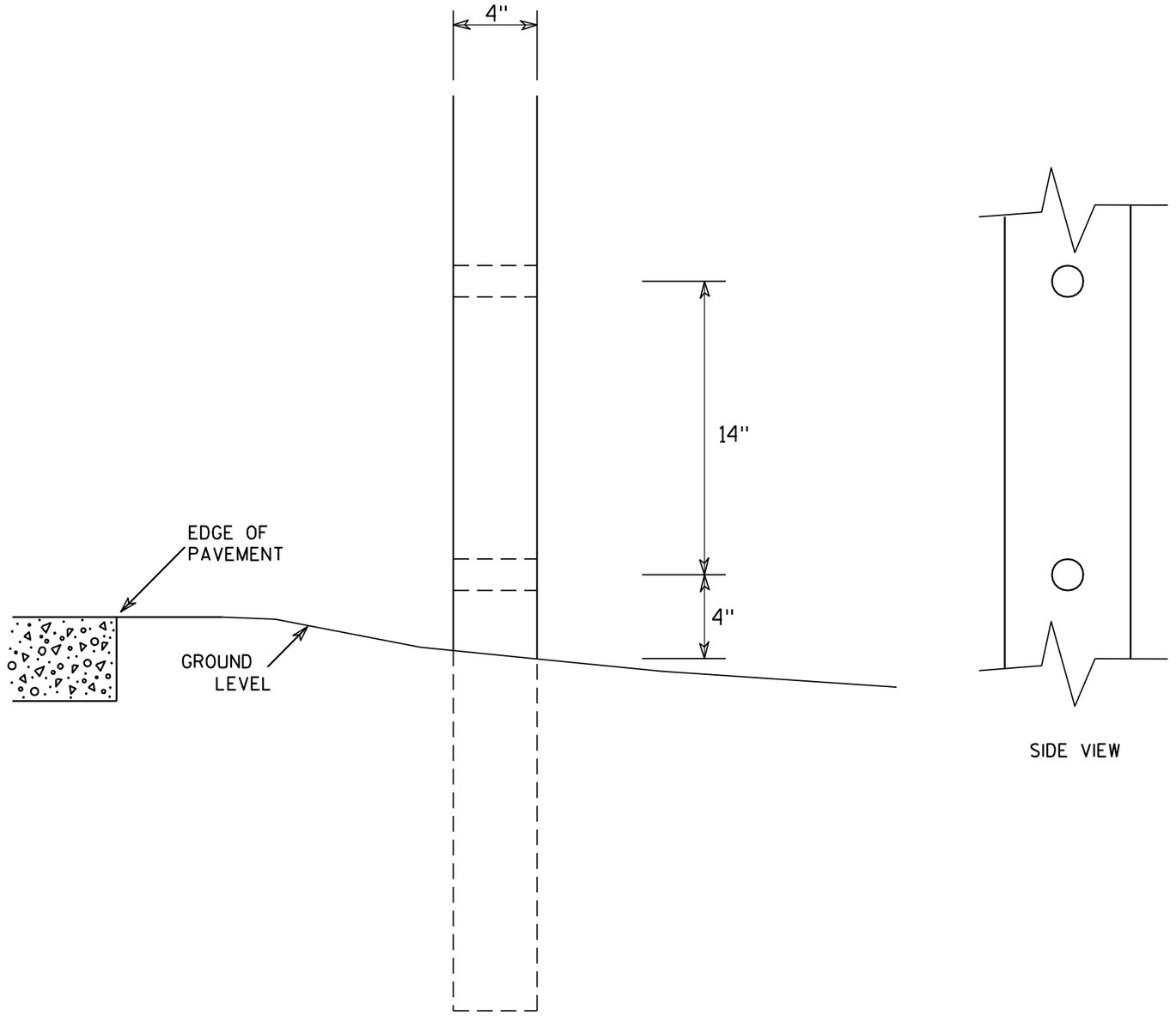
TYPICAL INSTALLATION
OF TYPE I SIGNS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/02/08 PLATE NO. A4-1.9

PROJECT NO:				SHEET NO: 783	E



SIDE VIEW

GENERAL NOTES

1. All 4 x 6 Wood Posts shall be modified by having two 1½" diameter holes drilled perpendicular to the roadway centerline.

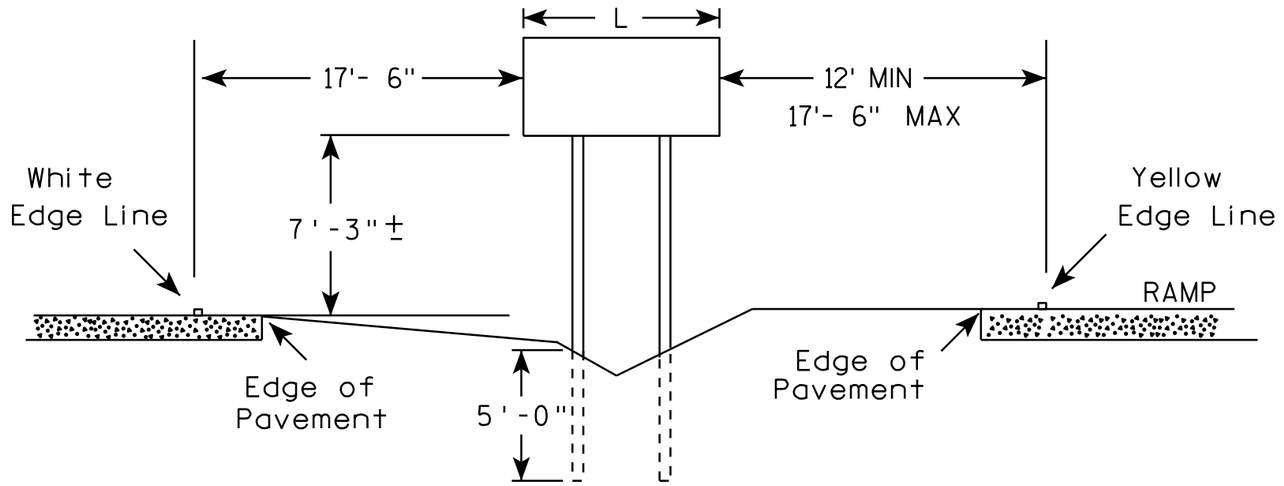
4 X 6 WOOD POST MODIFICATIONS

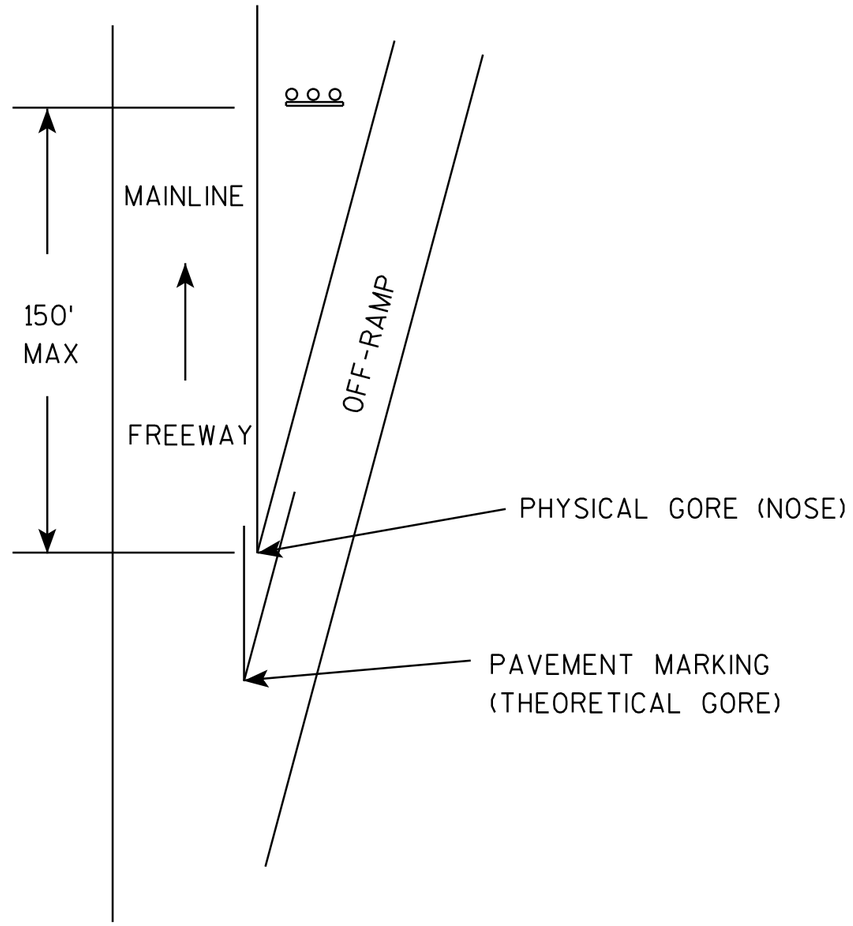
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spang for State Traffic Engineer

DATE 3/27/97 PLATE NO. A4-11.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 784	E





GENERAL NOTES

1. The 150 foot distance from the physical gore (where pavement ends) will normally provide the offsets as shown.
2. If roadway geometrics permit, the sign may be closer than the 150 foot distance as long as the offsets are maintained.
3. At no time shall the location be greater than 150 feet. If the normal offsets cannot be maintained, they can be reduced to 6 feet from the edge of the paved shoulder (both freeway and ramp).
4. The offset from edge of sign to the yellow edge line on the ramp is shown as a minimum of 12 feet and a maximum of 17 feet, 6 inches. Preference is adhering to the maximum rather than the minimum dimension.
5. When L is equal to or exceeds 10 feet, use 3 posts as per A4-4.
6. The (∓) tolerance for the mounting height is 3 inches.

TYPICAL INSTALLATION
OF TYPE II SIGNS ON
WOOD POSTS IN GORE

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

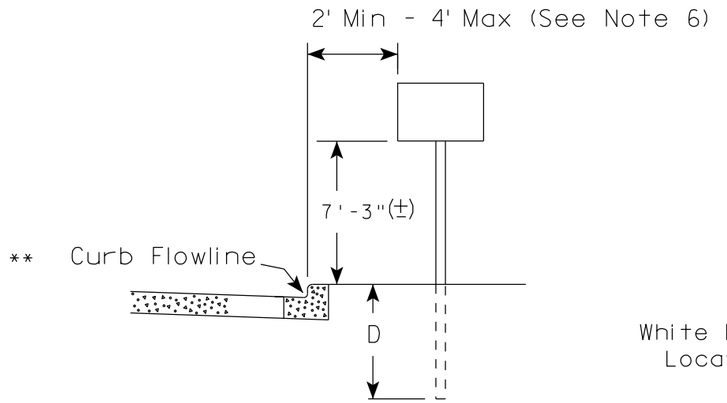
DATE 2/06/14 PLA 785 A4-2.3

PROJECT NO: | SHEET NO: E

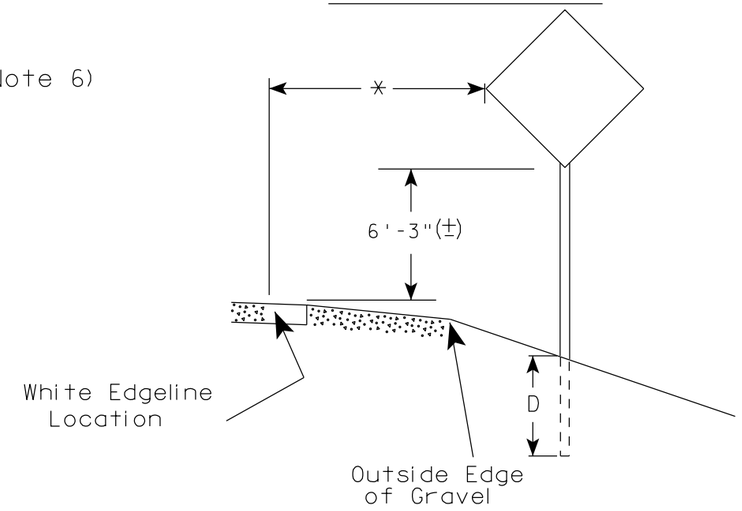
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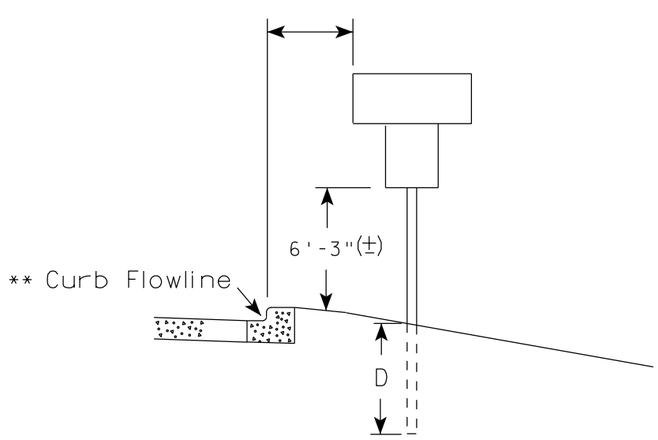
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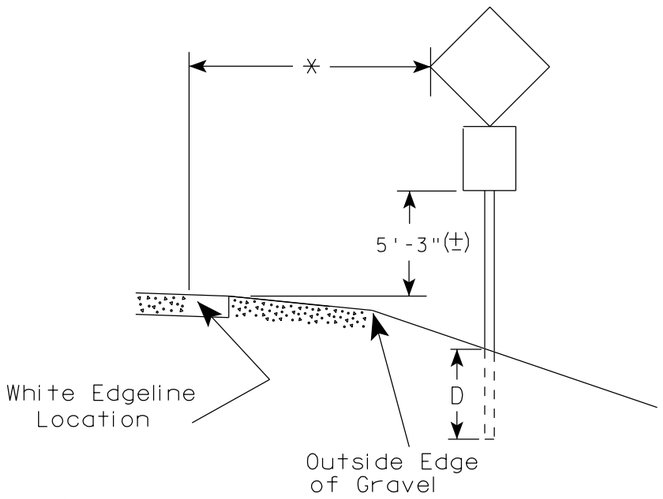
URBAN AREA



RURAL AREA (See Note 2)







GENERAL NOTES

1. Signs wider than 4 feet, 20 sq.ft or larger, shall be mounted on multiple posts. Refer to plate A4-4.
2. If signs are mounted on barrier wall, see A4-10 sign plate.
3. For expressways and freeways, mounting height is 7'- 3" (±) or 6'-3" (±) depending upon existence of a sub-sign.
4. Minimum mounting height for J assemblies (A2-1S) is 7'-3" (±) or 6'-3" (±) per urban or rural detail respectively.
5. Minimum mounting height for signs mounted on traffic signal poles is 5'- 3" (±).
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. The (±) tolerance for mounting height is 3 inches.
8. Folding signs shall be mounted at a height of 5'-3" (±) or as directd by the Engineer.
9. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Enhanced Reference Markers, Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4'-3" (±).

POST EMBEDMENT DEPTH

Area of Sign Installation (Sq. Ft.)	D (Min)
20 or Less	4'
Greater than 20	5'

** The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically measured where there is sidewalk adjacent to the roadway or parking is permitted. In the absence of sidewalk vertical clearance is measured from the top of the curb. Offset of signs is measured from the flow line.

* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

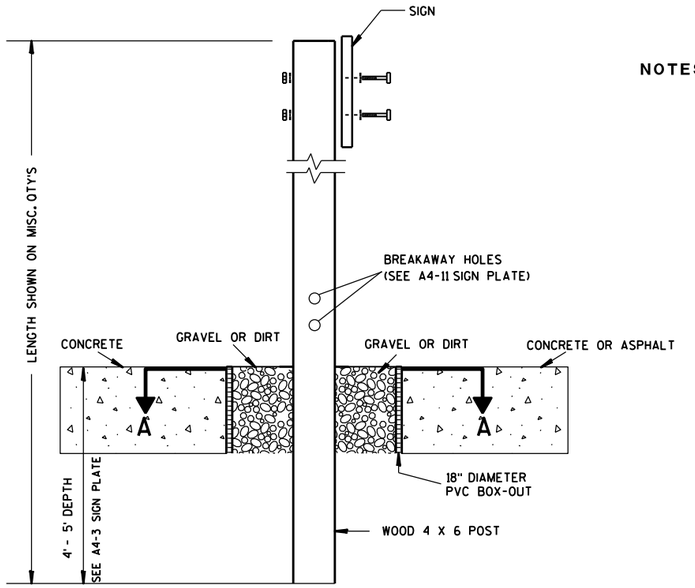
TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/12/14 PLATE NO. A4-3.19

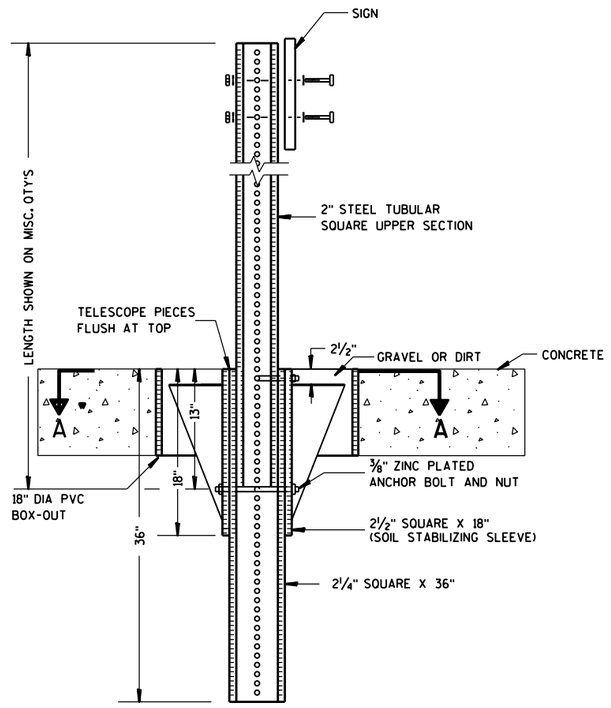
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



ELEVATION VIEW

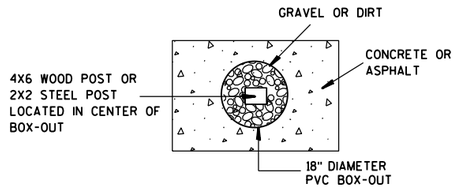
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

NOTES:
1. ALL MATERIAL TO BE APPROVED BY ENGINEER PRIOR TO INSTALLATION
2. SEE SIGN PLATE A4-8 FOR SIGN HARDWARE REQUIREMENTS
3. 18 INCH X 18 INCH SQUARE BOX-OUTS MAY BE USED FOR INSTALLATIONS IN EXISTING CONCRETE OR ASPHALT LOCATIONS.



ELEVATION VIEW

DETAIL OF STEEL 2 X 2 SIGN POST IN BOX-OUT



PLAN VIEW

FOR NEW CONCRETE/ASPHALT INSTALLATIONS

SIGN POST BOX-OUTS A4-3B

WISCONSIN DEPT OF TRANSPORTATION

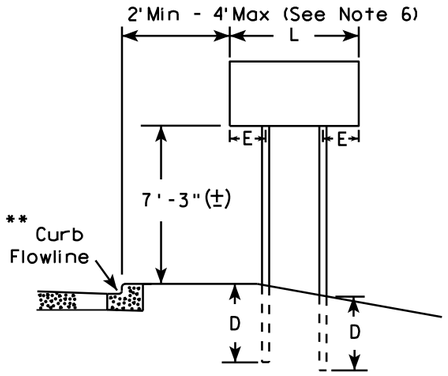
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/27/14 PLATE NO. A4-3B.1

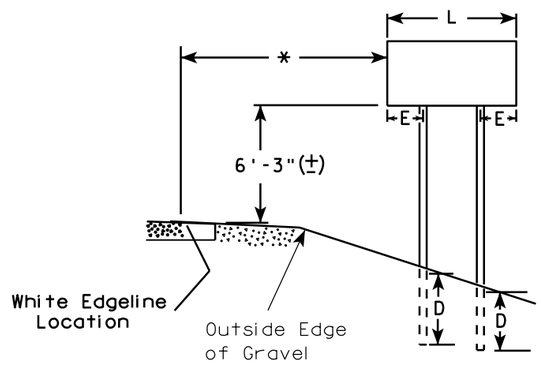
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

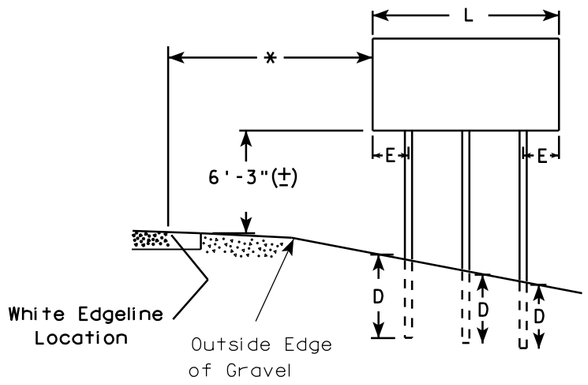
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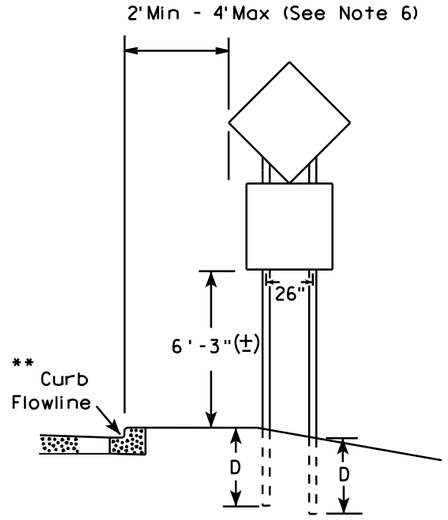
URBAN AREA



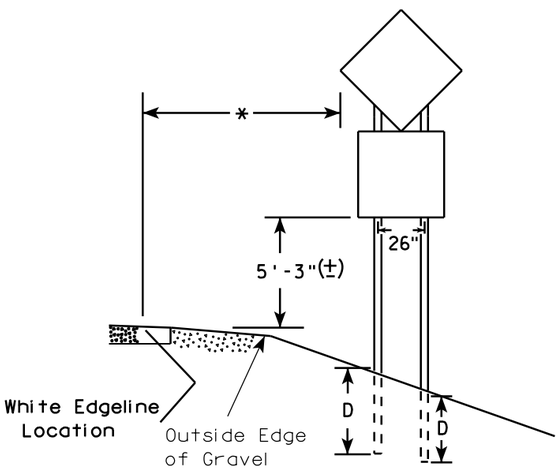
RURAL AREA (See Note 3)







48" DIAMOND WARNING SIGN



48" DIAMOND WARNING SIGN

GENERAL NOTES

1. For 3 or 4 post installations, individual post spacing shall be greater than 3'-6".
2. See tables below for required number of posts.
3. For expressways and freeways, mounting height is 7'-3" (±) or 6'-3" (±) depending upon existence of sub-sign.
4. The (±) tolerance for mounting height is 3 inches.
5. Minimum mounting height for J assemblies (A2-1S) is 7'-3" (±) or 6'-3" (±) per urban or rural detail respectively.
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. Folding signs shall be mounted at a height of 5'-3" (±) or as directed by the engineer.
8. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4"-3" (±).

* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

** The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically measured where there is sidewalk adjacent to the roadway or parking is permitted. In the absence of sidewalk vertical clearance is measured from the top of the curb. Offset of signs is measured from the flow line.

*** See A4-3 sign plate for signs 4' or less in width or less than 20 S.F. in area.

SIGN SHAPE OTHER THAN DIAMOND (TWO POSTS REQUIRED)	
L	E
Greater than 48" Less than 60"	12"
60" to 120"	L/5

***

SIGN SHAPE OTHER THAN DIAMOND (THREE POSTS REQUIRED)	
L	E
Greater than 120" less than 168"	12"

SIGN SHAPE OTHER THAN DIAMOND (FOUR POSTS REQUIRED)	
L	E
168" and greater	12"

POST EMBEDMENT DEPTH

Area of Sign Installation (Sq. Ft.)	D (Min)
20 or Less	4'
Greater than 20	5'

TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

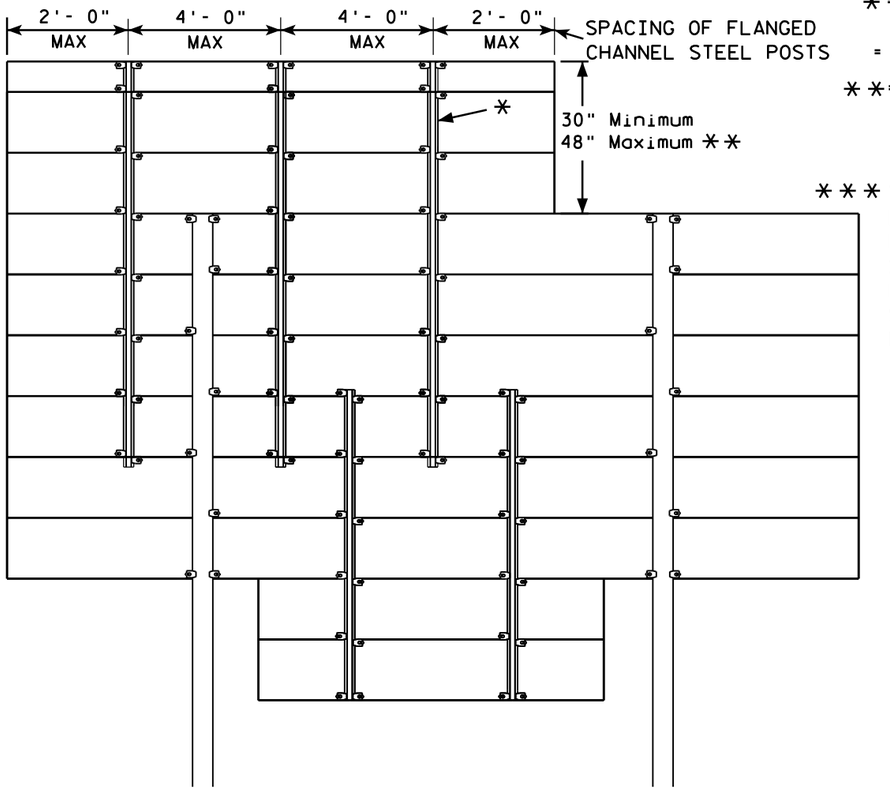
DATE 11/12/14 PLATE NO. A4-4 788 13

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A44.DGN PLOT DATE : 12-NOV-2014 14:01 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 107.021305:1.000000

WISDOT/CADDS SHEET 42

GROUND MOUNTED SIGN

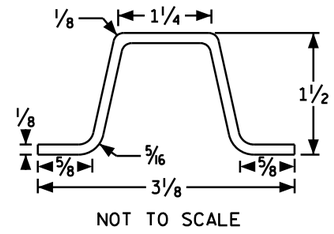


*=2.00 lb/ft FLANGED CHANNEL, MIN. YIELD STRENGTH = 60,000 PSI (GRADE 60) GALVANIZED

**=FOR 48" HEIGHT PANELS ON OVERHEAD STRUCTURES, ENTIRE SIGN SHALL BE CENTERED VERTICALLY ABOUT THE DEPTH OF THE TRUSS.

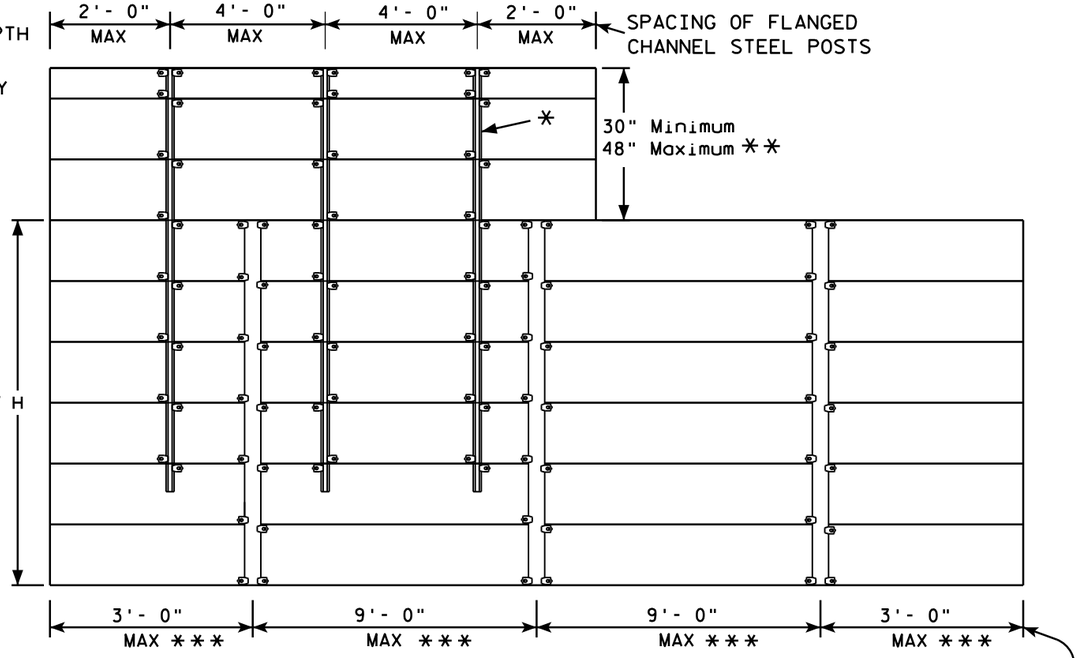
*** THESE SPACING DISTANCES SHALL ONLY BE USED WHEN THE MAIN SIGN HAS A MAXIMUM HEIGHT (DIMENSION H) OF 16 FT OR LESS. FOR SIGNS WITH A HEIGHT OF GREATER THAN 16 FT, STRUCTURAL CALCULATIONS SHALL BE PERFORMED.

FLANGE CHANNEL DETAIL



NOT TO SCALE

SIGN BRIDGE MOUNTED SIGN



SPACING OF ALUMINUM SIGN SUPPORTS
5" X 3.5" X 3.7 LBS./ft.

GENERAL NOTES

1. Flanged channel steel posts shall conform to size and material above, and shall be considered as incidental to other items in the contract.
2. Number of Flanged channel steel supports varies with length of panel and shall be spaced as shown:

   PANEL LENGTH 8'-0" OR LESS = 2 CHANNELS
   PANEL LENGTH 9'- 0" - 12'- 0" = 3 CHANNELS
   PANEL LENGTH 13'- 0" OR MORE = 4 CHANNELS

   If the flanged channel steel posts can not be horizontally spaced as shown, they can be moved so as to securely hold the sign.
3. The EXIT NUMBER PANEL shall normally be positioned above the guide sign aligned with the right edge of the guide sign. If the guide sign indicates a left exit, the EXIT NUMBER PANEL shall be aligned with the left edge of the guide sign.
4. If the bolt holes in the top panel (EXIT NUMBER), or sub panel (NEXT EXIT) line up with holes in main sign panel, stitch bolts shall be used in addition to the channels.
5. Provide post clips for each sign as shown. (Please note the differences between a ground mounted versus Sign bridge mounted sign as far as number of clips required on the main supports or beams)
6. Structural steel sign supports shall extend to the top of the main signs, as shown on the above details.

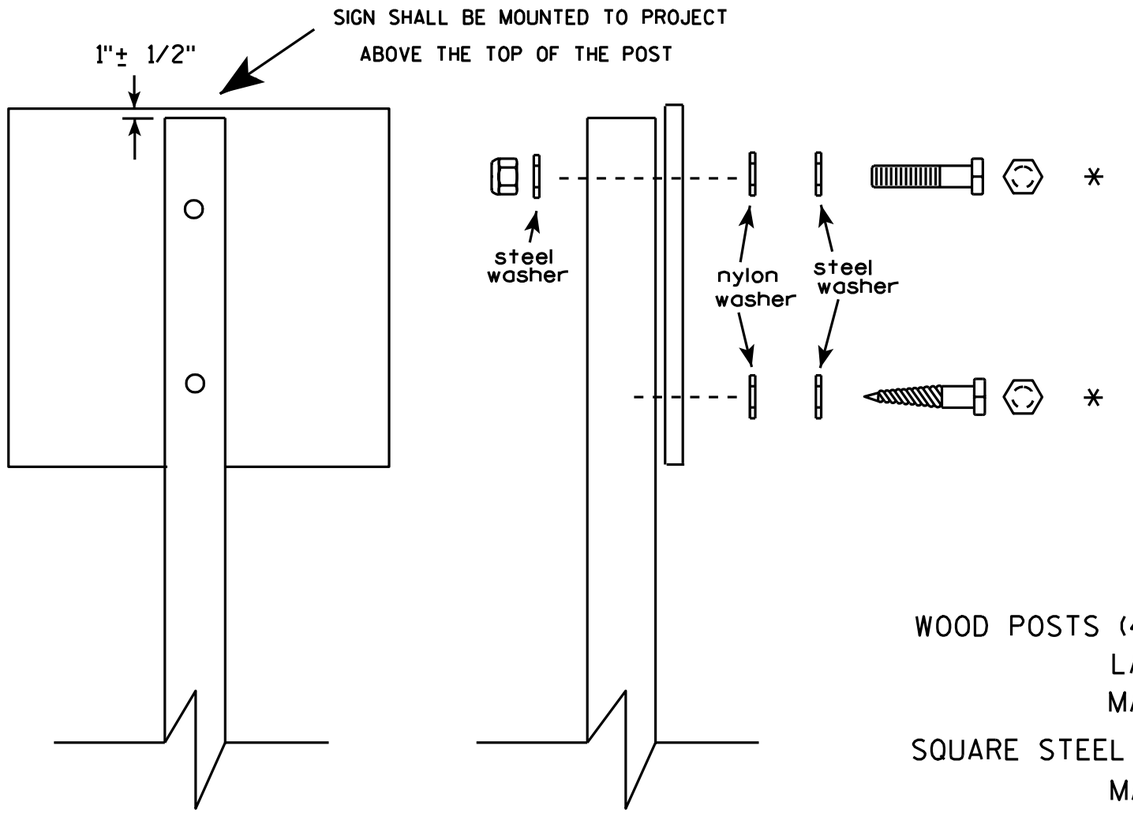
ATTACHMENT OF GUIDE SIGNS TO SUPPORTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/05/13 PLAT 789 A4-6.12

PROJECT NO:				SHEET NO:	E



Nuts, bolts and lags used for mounting signs shall have hexagonal heads and shall be either :

a. Hot dip galvanized in accordance with ASTM Designation: A 153, Class D, or SC 3

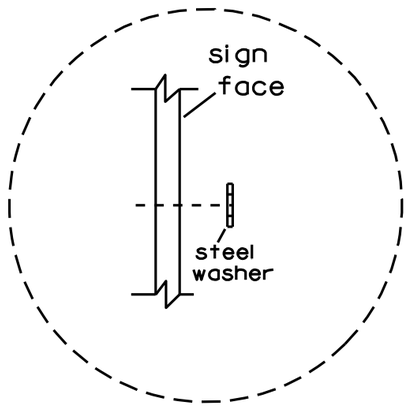
b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.

Threads on bolts and nuts shall be manufactured with sufficient allowance for the cadmium plate or galvanized coating to permit the nuts to run freely on the bolts.

WOOD POSTS (4" x 4" or 4" x 6")
LAG SCREWS - 3/8" X 3"
MACHINE BOLTS - 5/16" X 6-1/2" or 7" Length w/ nuts

SQUARE STEEL POSTS (2" x 2")
MACHINE BOLTS - 3/8" X 3-1/4" Length w/ nuts
RIVETS - 9/32 " (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL
O.D. FLANGE .720-.765 INCH, GRIP RANGE .042-.375 INCH

WASHERS (ALL POSTS) -
1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON for all Type H signs.



Washer Placement when Sign Has Other Than Type H or Type F Face

* Two different fastening systems are shown for illustration purposes. On any individual sign, either one or the other system shall be used. Actual number of fasteners per sign varies with the sign area, but normally there are two. For a single post installation, all signs greater than 9 sq. ft. require the use of 3 fasteners.

ATTACHMENT OF SIGNS TO POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

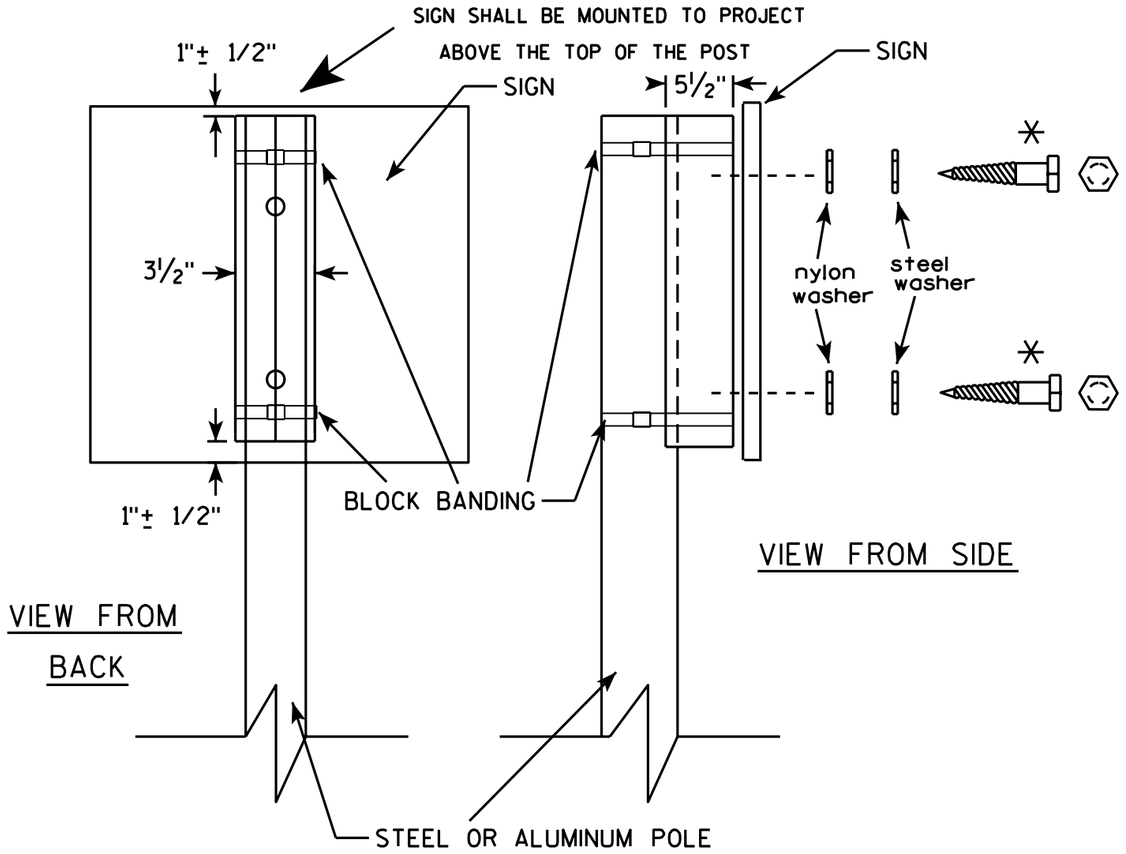
DATE 3/23/10 PLATE NO. A4-8.7

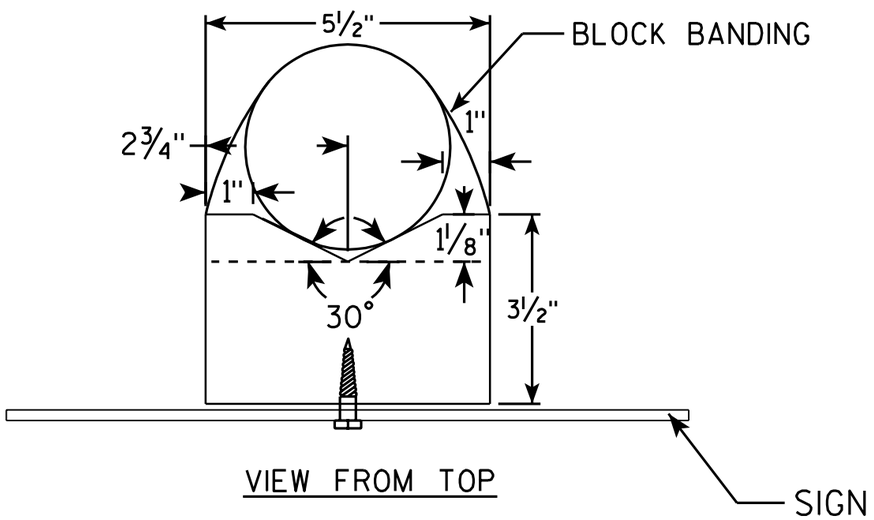
7

7

PROJECT NO:

SHEET NO: 790 E





GENERAL NOTES

1. WOOD 4"X6" POST MATERIAL SHALL CONFORM TO 507.2.2 OF THE WisDOT STANDARD SPECIFICATIONS
2. BLOCK BANDING AND CLIPS SHALL BE STAINLESS STEEL, ¾" WIDTH AND 0.025" THICKNESS
3. SIGNS 3' OR GREATER IN HEIGHT SHALL UTILIZE 3 BLOCK BANDS. SIGNS UNDER 3' IN HEIGHT SHALL UTILIZE 2 BLOCK BANDS
4. ACTUAL NUMBER OF FASTENERS PER SIGN VARIES WITH THE SIGN AREA, BUT NORNALLY THERE ARE TWO. FOR SIGNS GREATER THAN 9 S.F. 3 FASTENERS SHALL BE USED.
5. ALL SIGN MOUNTING BOLTS AND WASHERS SHALL BE EITHER:
   a. Hot dip or mechanically galvanized in accordance with ASTM Designation: A 153, Class D, or
   b. Cadmium plated in accordance with ASTM Designation : B 766 TYPE 3, Class 12, or
   c. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.
6. ALL BOLTS SHALL HAVE HEXAGONAL HEADS.
7. STEEL WASHERS SHALL BE 1¼" O.D. X ⅜" I.D. X 1/16"
8. NYLON WASHERS SHALL BE 1¼" O.D. X ⅜" I.D. X .080 FOR TYPE H OR TYPE F FACE SIGN

✳ LAG BOLTS SHALL BE ⅜" X 2½"

BLOCK BANDING DETAIL (V-BLOCK OPTION)

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 7/12/07 PLATE NO. A5-10.1

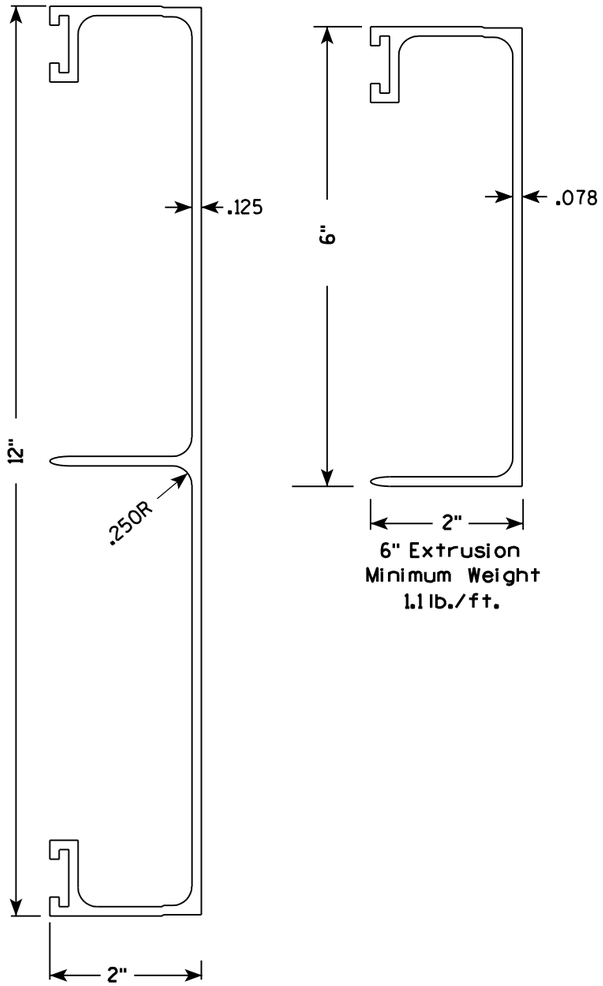
PROJECT NO:

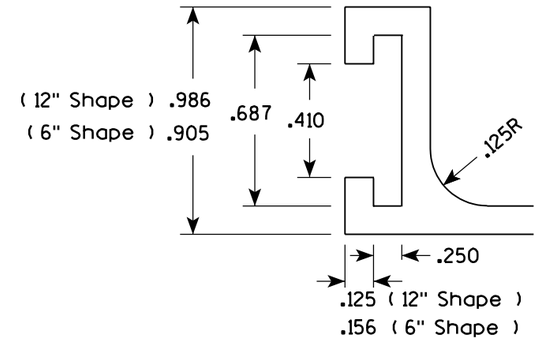
SHEET NO: 791 E

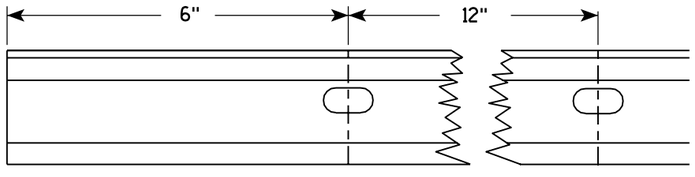
FILE NAME : C:\Users\Projects\tr_stdplate\A510.dgn PLOT DATE : 06-AUG-2007 13:37 PLOT BY : ditjph

WISDOT/CADDS SHEET 42

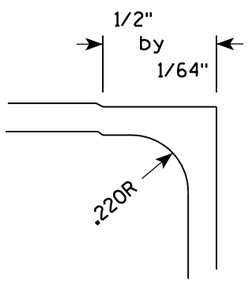
Extruded Shape







Punch 7/16" x 7/8" oval holes beginning 6" in from end of extrusion 12" CC on both edges of 6" and 12" panels.

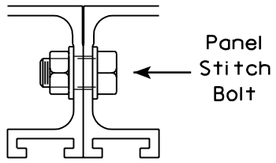


Hardware

STITCH BOLT, WASHER & NUT

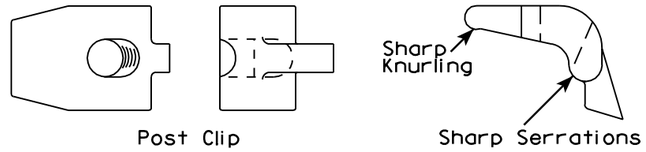
The hardware includes:

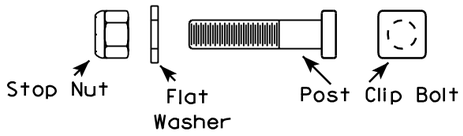
3/8 " - 16 X 3/4 " Economy Bolt 2024-T4 alloy
3/8 " - Stainless steel stop nut
3/8" X .064 Flat Washers, Alclad 2024-T4 alloy



POST CLIP, POST CLIP BOLT, WASHER & NUT

Post Clip shall be Alum. Alloy 356-T6
Post Clip Bolt shall be Stainless Steel.
Flat washer shall be 3/8" X .091, Stainless Steel.
Stop nut shall be stainless steel.





NOTES

1. The contractor may select any brand of extrusion that conforms to the illustrations or meets with the approval of the engineer, but all extrusions used on this contract shall be of the same brand.
2. Panel Stitch Bolts shall be used to assemble adjacent panels. Maximum stitch bolt spacing shall be 24" C-C, and a minimum of 4 bolts shall be used to connect any two extrusions.
3. Post Clips shall be used to attach the sign panel to the sign support.

ALUMINUM EXTRUSIONS FOR TYPE I SIGNS

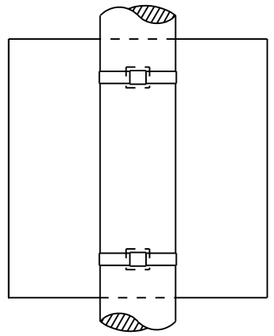
WISCONSIN DEPT OF TRANSPORTATION

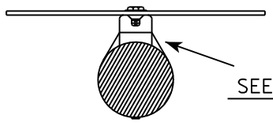
APPROVED Chester J Spang
for State Traffic Engineer

DATE 11/18/99 PLATE NO. A5-2.9

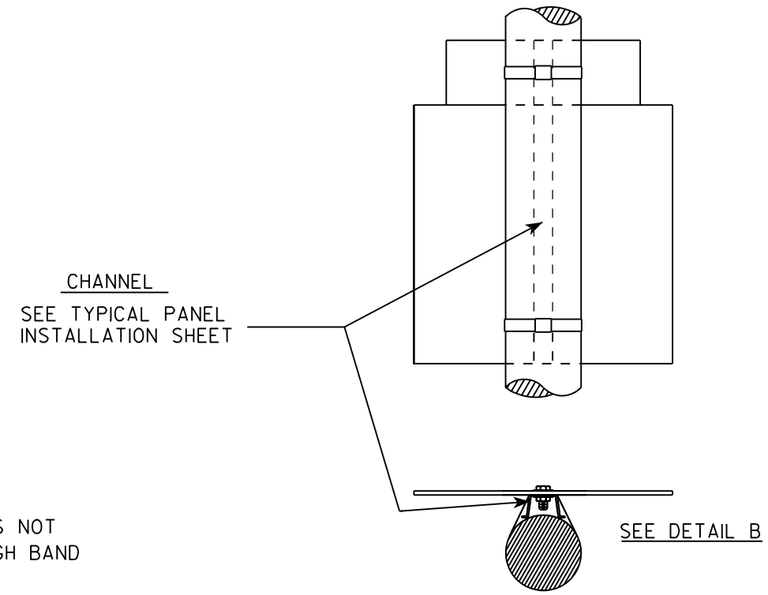
BANDING

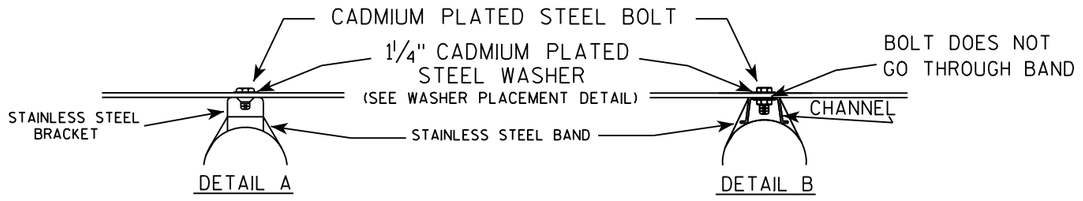
SINGLE SIGN



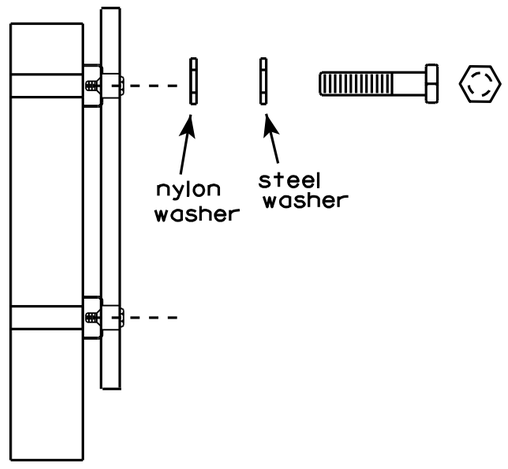


"J" ASSEMBLY





WASHER PLACEMENT



WASHERS (ALL POSTS) -
1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON
FOR ALL TYPE H SIGNS

GENERAL NOTES

1. Any sign over 3 feet in width shall use the V-Block banding method. See A5-10 standard plate.
2. Signs 3 feet or greater in height shall have three bracket bands installed. Signs less than 3 feet in height shall have two bracket bands installed.
3. Banding and assembly bracket shall be stainless steel. All bands shall be ¾" in width and 0.025" thickness.

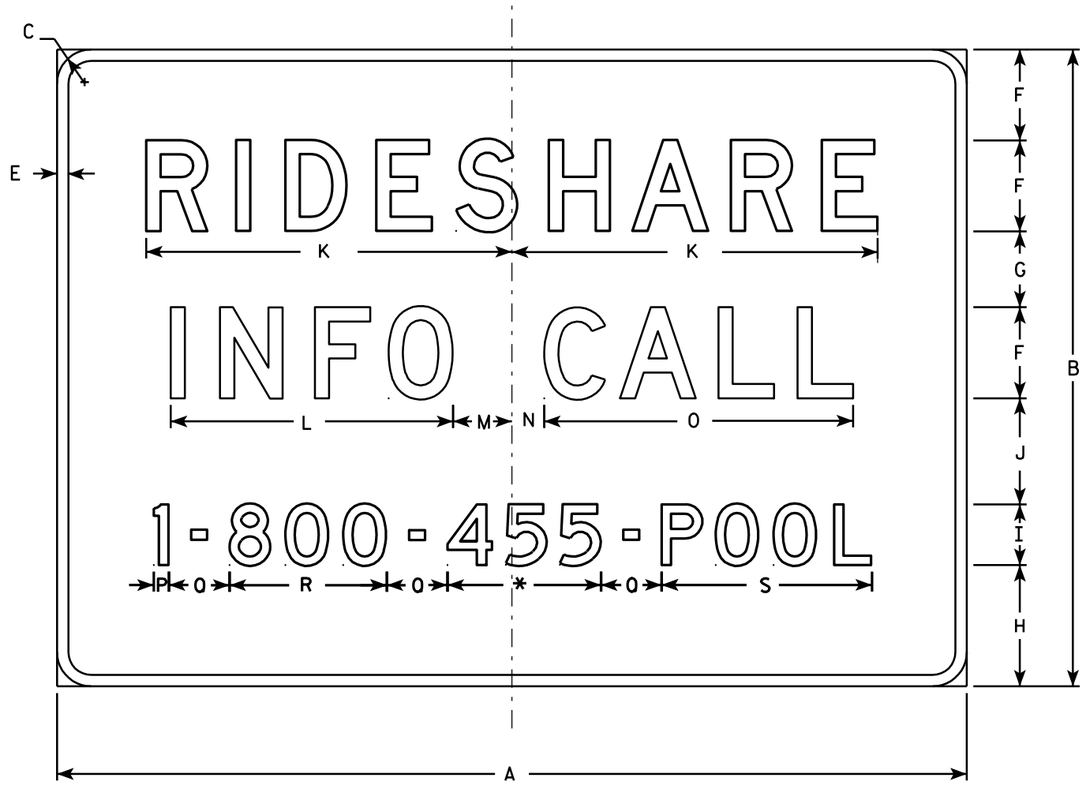
STANDARD SIGN
SIGN BANDING DETAILS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 8/16/13 PLATE NO. A5-9.3

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 793	E



D12-2A

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Blue
   Message - White - Type H Reflective
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals and adjust spacing as required to achieve proper balance.

* Variable (See note 5)

Metric equivalent for this sign is:

SIZE	
1	1200 mm X 525 mm
2	1500 mm X 1050 mm
3	
4	1500 mm X 1050 mm
5	1950 mm X 1350 mm

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m2
1	48	21	1 1/2		1/2	3	2 3/4	3 1/2	3	2 3/4	12 1/8	9 3/8	2	1 1/8	10 1/4	3/4	3	7 3/4	10 5/8								7.0	0.63
2	60	42	2 1/4		3/4	6	5	8	4	7	24 1/8	18 5/8	3 7/8	2 1/8	20 1/8	1	4	10 3/8	13 7/8								17.5	1.58
3																												
4	60	42	2 1/4		3/4	6	5	8	4	7	24 1/8	18 5/8	3 7/8	2 1/8	20 1/8	1	4	10 3/8	13 7/8								17.5	1.58
5	78	54	3		1	8	6	10	6	8	30 7/8	23 5/8	4 7/8	2 1/8	26 3/8	1 1/2	5	15 1/2	21 1/4								29.25	2.63

STANDARD SIGN
D12-2A

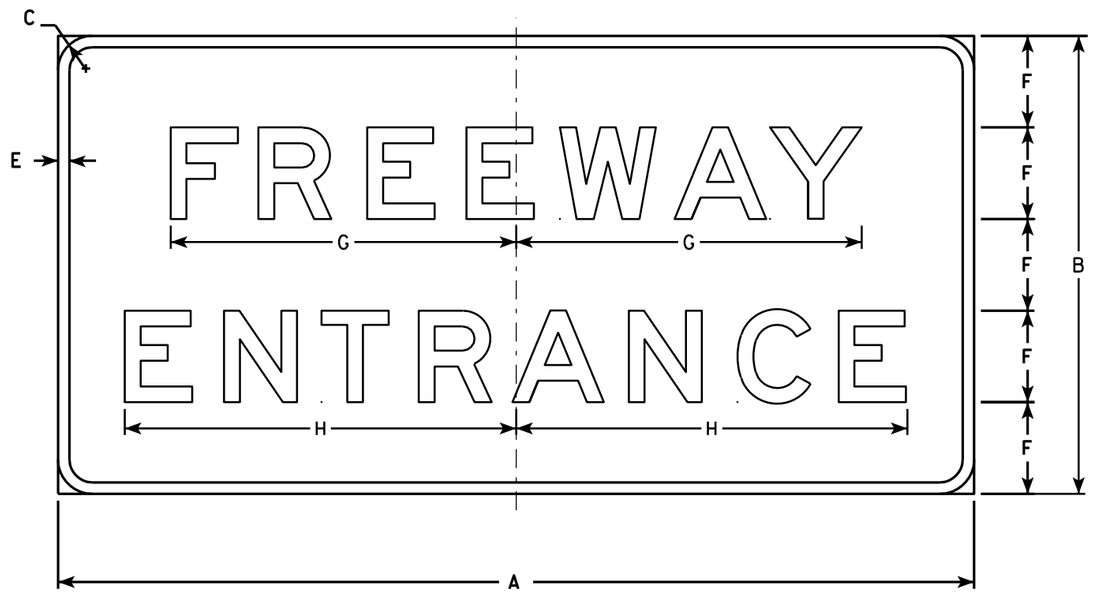
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spay for State Traffic Engineer

DATE 1/16/02 PLATE NO. D12-2A.3

PROJECT NO:

SHEET NO: 794 E



D13-3

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Green
   Message - White
3. Message Series - E
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	60	30	2 1/4		3/4	6	22 5/8	25 5/8																			12.5
3																											
4																											
5																											

STANDARD SIGN
D13-3

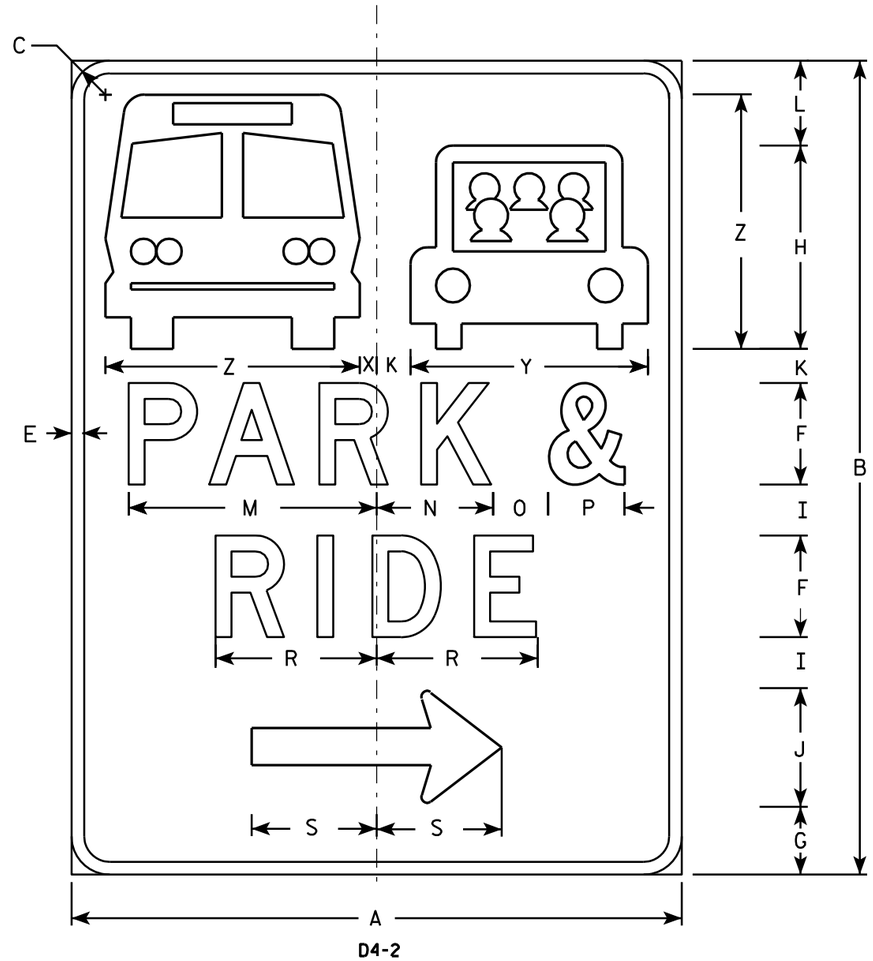
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/12/13 PLATE NO. D13-3.1

PROJECT NO:

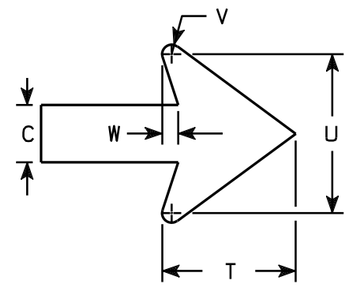
SHEET NO: 795 E



D4-2

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Green
   Message - White - Type H Reflective
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. The D4-2L is the same as a D4-2R except the arrow is reversed.
6. The D4-2 sign may have either symbol or both symbols at the same time.



Arrow Detail

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24	30	1 1/8		1/2	4	1 5/8	7 1/2	1 1/2	4 5/8	1 3/8	3 7/8	9 3/4	4	2 3/4	3		6 3/8	4 7/8	3 1/2	4 1/8	1/4	3/8	5/8	9 3/8	10	5.0
2	30	36	1 3/8		5/8	5	2	9	1 5/8	5 1/2	1 5/8	4 5/8	12 1/4	5 1/8	3 3/8	3 3/4		8	6 1/8	4 3/8	5 1/4	3/8	1/2	7/8	11 3/4	12 1/2	7.50
3	36	48	2 1/4		3/4	6	4	12	3	7	2	5	14 5/8	6 7/8	3 1/4	4 1/2		9 1/2	7 1/2	5 1/4	6 1/4	3/8	5/8	1	14	15	12.0
4																											
5																											

STANDARD SIGN
D4-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/20/10 PLATE NO. D4-2.5

PROJECT NO:

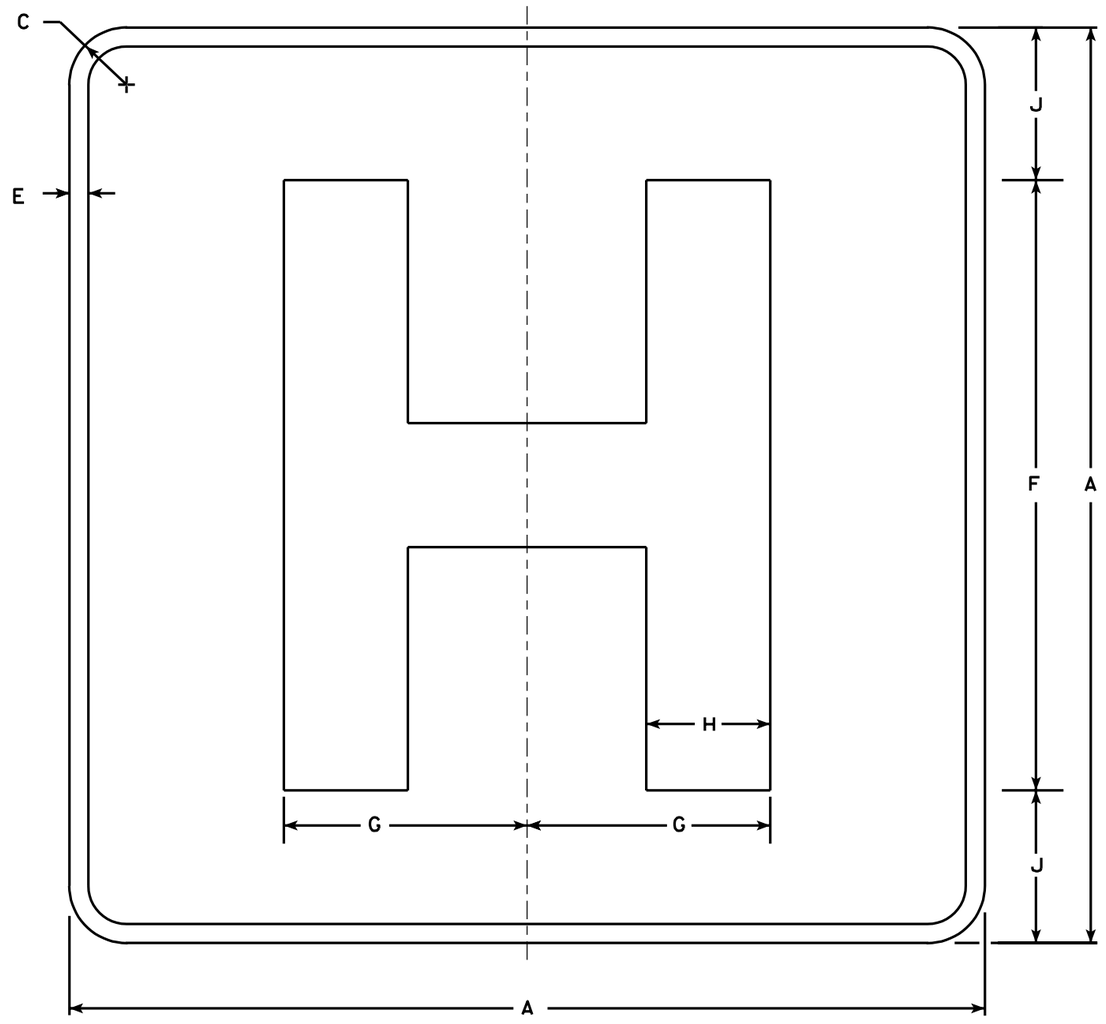
SHEET NO: 796 E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\D42.dgn PLOT DATE : 10-FEB-2011 14:21 PLOT BY : mscsja

WISDOT/CADDS SHEET 42

7

7



D9-2

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Blue
   Message - White - Type H Reflective
3. Message Series - E Modified
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

Metric equivalent for this sign is:

SIZE	
1	450 mmX 450 mm
2	600 mmX 600 mm
3	900 mmX 900 mm
4	X
5	X

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	18		1 1/8		1/2	12	4 3/4	2 3/8		3																	4.0
2	24		1 1/2		1/2	16	6 3/8	3 1/4		4																	4.0
3	36		2 1/4		3/4	24	9 1/2	4 7/8		6																	9.0
4																											
5																											

STANDARD SIGN
D9-2

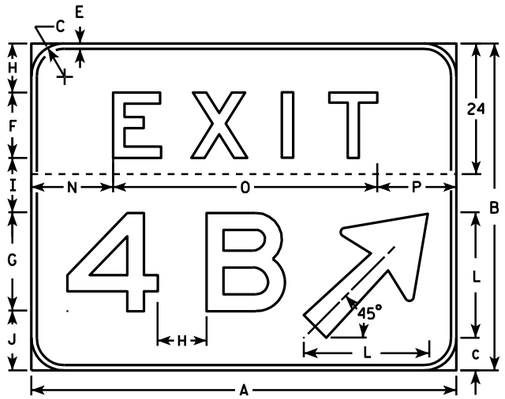
WISCONSIN DEPT OF TRANSPORTATION

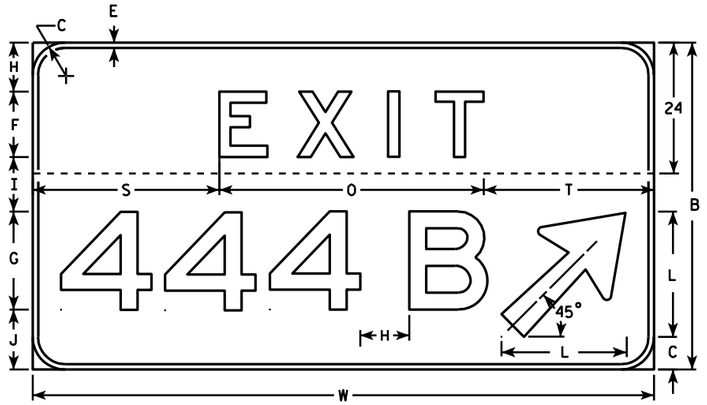
APPROVED Chester J Spong
for State Traffic Engineer

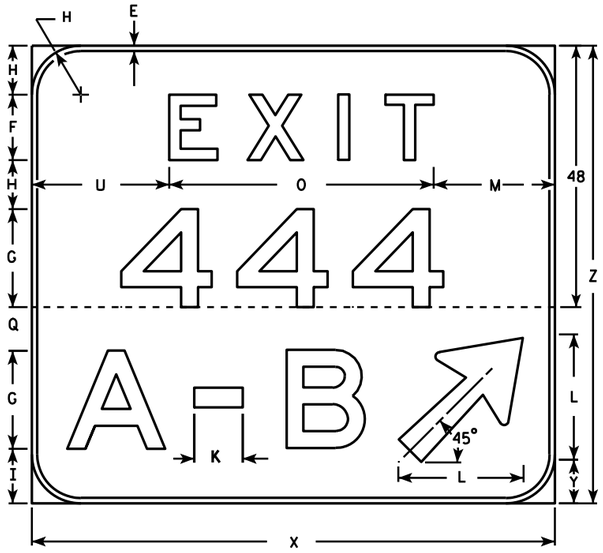
DATE 1/15/02 PLATE NO. D9-2.4

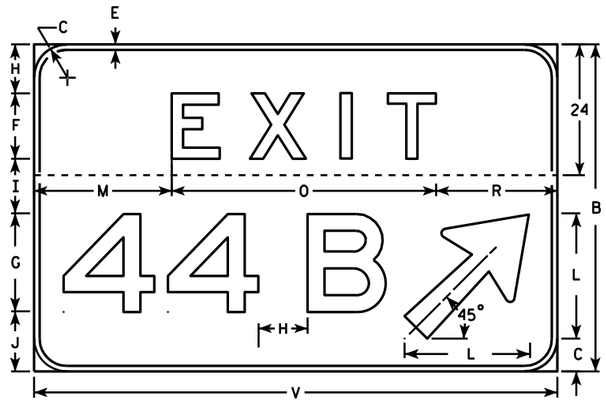
PROJECT NO:

SHEET NO: 797 E

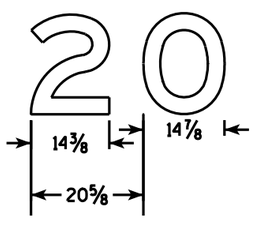








EXAMPLE FOR USING SPACING CHART



NOTES

1. Sign is Type II - Type H reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Green
   Message - White (Type H reflective)
3. Message Series - E
4. Corners may be square or rounded but the border shall be rounded as shown.
5. Base material for this sign shall be plywood and shall be split into two seperate pieces as shown on each detail by the dashed line (- - - - - - - - - - -).
6. Arrow is Type "A" from sign plate A1-1.
7. Substitute appropriate message, space per the table and adjust placement on sign to achieve proper balance.
8. When two letters are hyphenated, the distance between them should be equal to two letter heights and the hyphen is spaced optically between them.
9. As per the Standard Spec's, these signs shall not have a vertical joint.

SPACING CHART FOR 18" NUMERALS

NUMBERS	WIDTH	0	1	2	3	4	5	6	7	8	9	A	B	C
0	14 7/8	21 5/8	21 5/8	21 1/4	20 3/8	21 1/4	21 1/4	21 5/8	19 7/8	22 1/8	21 5/8	19 7/8	22 1/8	22 1/8
1	5 7/8	14	14	14	13 1/8	12 1/8	14	14	12 1/4	14	14	9 7/8	14	14
2	14 3/8	20 5/8	21 1/8	20 5/8	19 3/4	20 1/4	20 5/8	20 5/8	18 7/8	21 1/8	20 5/8	20 1/4	21 1/8	21 1/8
3	14 3/8	20 3/4	21 1/8	20 3/4	20 1/4	19 3/4	20 3/4	20 3/4	19 3/8	21 1/8	20 3/4	20 1/4	21 1/8	21 1/8
4	16 5/8	22 7/8	22	22 1/2	21 5/8	21 5/8	22 7/8	22 7/8	20 5/8	23 3/8	22 7/8	22 1/2	25 1/2	23 3/8
5	14 1/4	20 5/8	20 5/8	20 1/8	18 3/4	18 3/4	20 5/8	20 5/8	18 3/8	20 5/8	20 5/8	19 1/4	20 5/8	20 5/8
6	14 1/2	21 1/4	20 3/4	20 3/4	19 7/8	19 1/2	20 3/8	20 3/4	19	20 3/4	20 3/8	18	20 3/4	20 3/4
7	14 3/8	19 3/4	19 3/4	20 1/4	19 3/4	17	19 3/4	20 5/8	18 7/8	20 5/8	19 3/4	20 1/4	20 5/8	20 5/8
8	14 1/4	21 1/2	21 1/2	20 5/8	19 1/4	19 3/4	20 5/8	21 1/2	19 5/8	21 1/2	20 5/8	19 1/4	21 1/2	21 1/2
9	14 1/2	21 1/4	21 1/4	20 7/8	20	20 7/8	20 7/8	21 1/4	19 1/2	21 3/4	21 1/4	18	21 3/4	21 3/4
A	18	19 3/4	19 3/4	20 1/4	19 3/4	17	19 3/4	20 5/8	18 7/8	20 5/8	19 3/4	21 5/8	23 7/8	23
B	14 1/4	21 1/2	21 1/2	20 5/8	19 1/4	19 3/4	20 5/8	21 1/2	19 5/8	21 1/2	20 5/8	19 1/2	22 3/8	21 1/2
C	14 1/4	21 1/4	21 1/4	20 7/8	20	20 7/8	20 7/8	21 1/4	19 1/2	21 3/4	21 1/4	18 3/8	21	19 3/4

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
2																										
3																										
4																										
5	78	60	6		1	12	18	9	10	11	8 7/8	23	25 1/4	15	48 1/2	14 1/2	8	22 1/4	34 1/4	31 1/4	25 1/4	96	114	96	7 1/2	84

2 Digit Bid Area	3 Digit Bid Area	4 Digit Bid Area	5 Digit Bid Area
Sq. Ft.			
32.5	40.0	47.5	56.0

STANDARD SIGN
E5-1B

WISCONSIN DEPT OF TRANSPORTATION

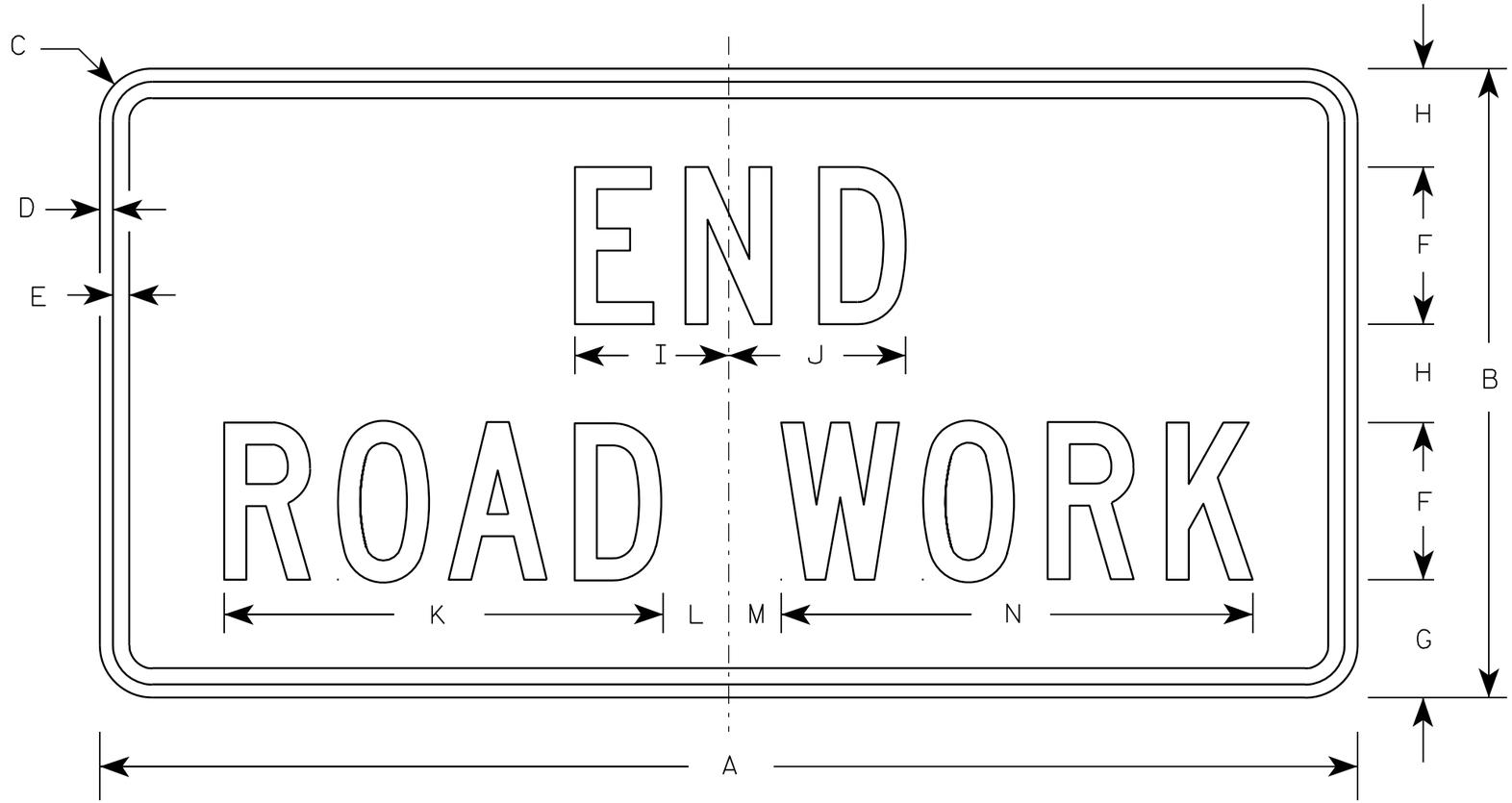
APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 6/8/10 PLATE NO. E5-1B.12

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 798 | E

7

FILE NAME : C:\Users\PROJECTS\tr_stdplate\E51B.DGN PLOT DATE : 08-JUN-2010 12:42 PLOT BY : ditjph PLOT NAME : PLOT SCALE : 27.808870:1.000000
WISDOT/CADDS SHEET 42



G20-2A

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

Metric equivalent for this sign is:

SIZE	
1	900 mm X 450 mm
2	1200 mm X 600 mm
3	1200 mm X 600 mm
4	1200 mm X 600 mm
5	1200 mm X 600 mm

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m2
1	36	18	1 1/8	3/8	1/2	4	3 3/4	2 1/2	4 1/8	4 1/8	11 1/8	2	1	12 1/8													4.5	0.41
2	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72
3	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72
4	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72
5	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72

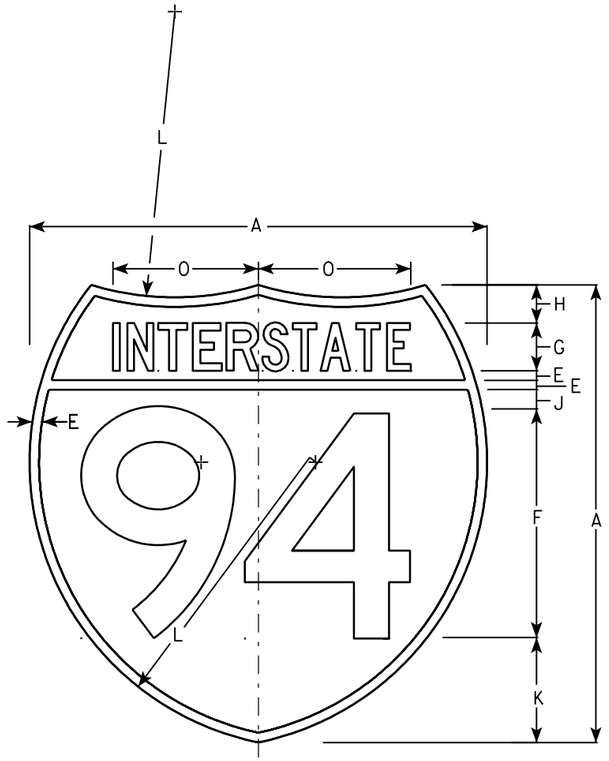
STANDARD SIGN
G20-2A

WISCONSIN DEPT OF TRANSPORTATION

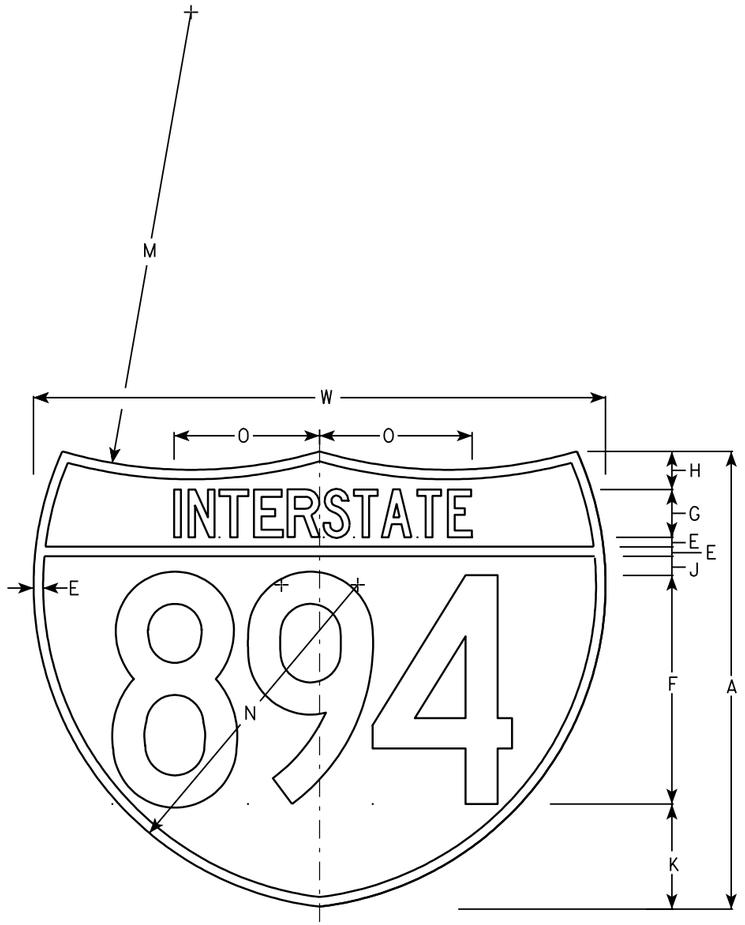
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 9/30/09 PLATE NO. G20-2A.8

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 799	E



M1-1



M1-1A

NOTES

1. Sign is Type II - See Note 6 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Top Red - Bottom Blue (See Note 6)
   Message - White - See Note 6
3. Message Series - See note 5
4. Substitute appropriate numerals & ajust spacing as per plate A10-1.
5. M1-1 - Numerals - D
   Interstate - C
   M1-1A - All copy - C
6. Permanent Signs
   Message - Type H Reflective
   Detour or other temporary signs
   Background - Reflective
   Message - Reflective

Metric equivalent for these signs are:

SIZE	M1-1	SIZE	M1-1A
1			
2	600 mm X 600 mm	2	600 mm X 750 mm
3	900 mm X 900 mm	3	900 mm X 1125 mm
4	900 mm X 900 mm	4	900 mm X 1125 mm
5	900 mm X 900 mm	5	900 mm X 1125 mm

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	M1-1 Area sq. ft.	M1-1A Area sq. ft.	M1-1 Area m2	M1-1A Area m2
1																													
2	24				1/2	12	2 1/2	2		1	5 1/2	15	24	17	7 7/8								30			3.13	3.91	.36	.46
3	36				3/4	18	3 3/4	3		1 1/2	8 1/4	22 1/2	36	25 1/2	11 3/4								45			7.03	8.79	.81	1.05
4	36				3/4	18	3 3/4	3		1 1/2	8 1/4	22 1/2	36	25 1/2	11 3/4								45			7.03	8.79	.81	1.05
5	36				3/4	18	3 3/4	3		1 1/2	8 1/4	22 1/2	36	25 1/2	11 3/4								45			7.03	8.79	.81	1.05

INTERSTATE ROUTE MARKER
M1-1 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

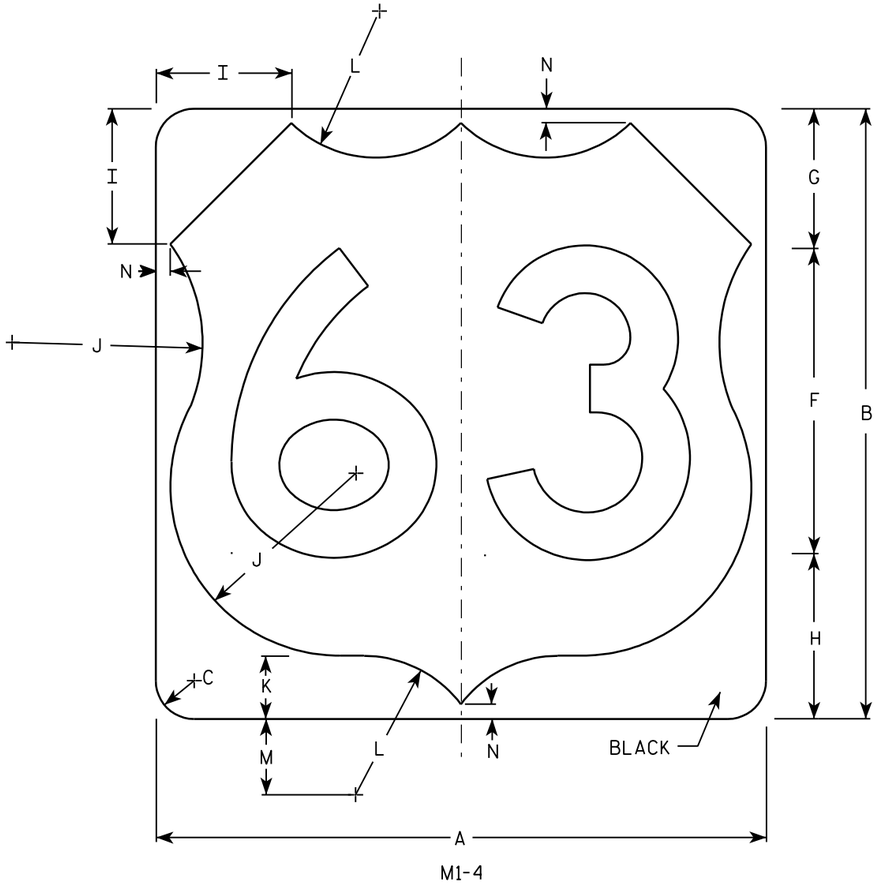
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 08/23/05 PLATE NO. M1-1.8

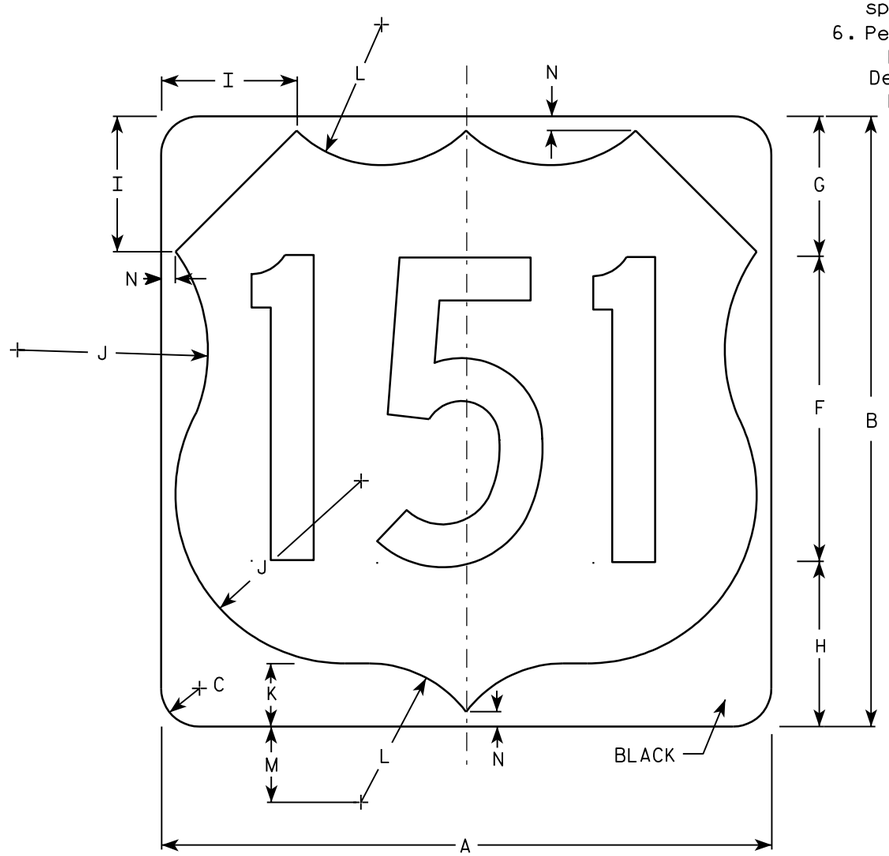
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 800	E

NOTES

1. Sign is Type II - See Note 6 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White & Black - See Note 6
   Message - Black
3. Message Series - See note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals and adjust spacing as per Plate A10-1.
6. Permanent Signs
   Background - Type H Reflective
   Detour or other temporary signs
   Background - Reflective



M1-4



M1-4

Metric equivalent for this sign is:

SIZE	
1	
2	600 mm X 600 mm
3	900 mm X 900 mm
4	900 mm X 900 mm
5	900 mm X 900 mm

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m2
1																												
2	24	24	1 1/2			12	5 1/2	6 1/2	5	7 1/2	2 1/2	5 1/2	3	1/2													4.0	.36
3	36	36	2 1/4			18	8 1/4	9 1/4	7 1/4	11 1/4	3 3/4	8 1/4	4 1/2	3/4													9.0	.81
4	36	36	2 1/4			18	8 1/4	9 1/4	7 1/4	11 1/4	3 3/4	8 1/4	4 1/2	3/4													9.0	.81
5	36	36	2 1/4			18	8 1/4	9 1/4	7 1/4	11 1/4	3 3/4	8 1/4	4 1/2	3/4													9.0	.81

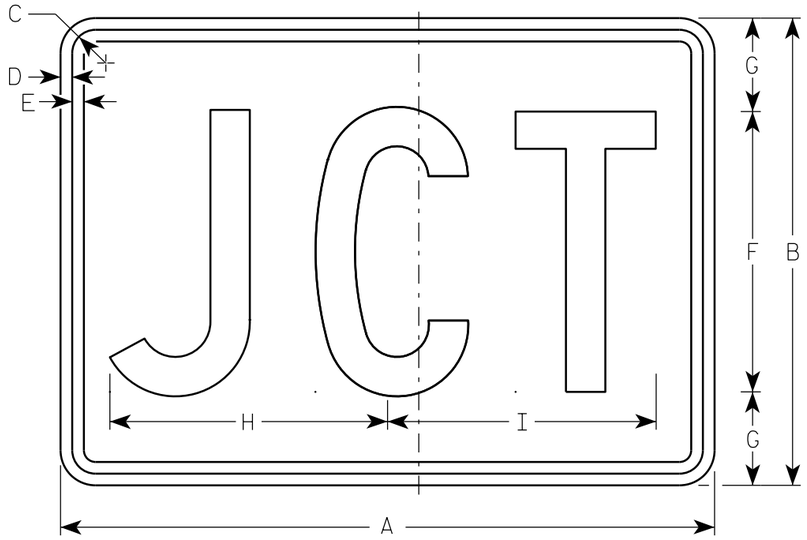
USH MARKER
M1-4 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

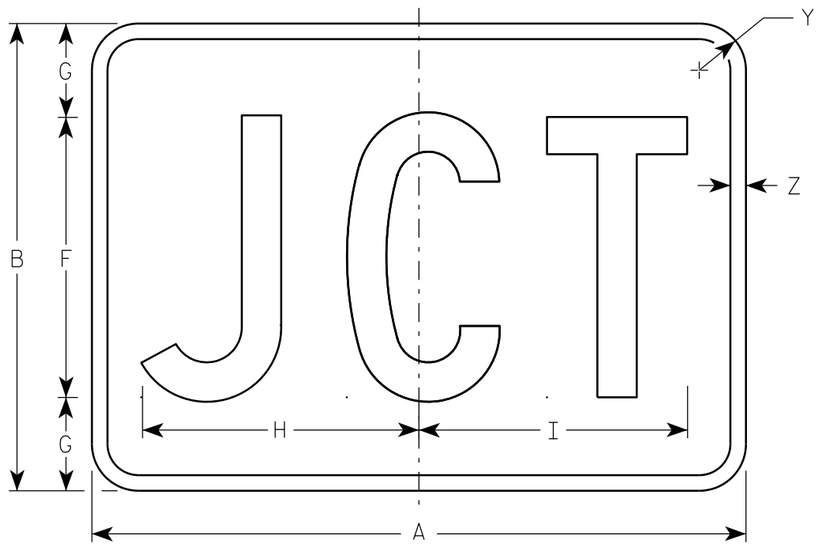
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 08/25/05 PLATE NO. M1-4.9

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 801 | E



M2-1
MK2-1
MM2-1
MN2-1
MR2-1



MB2-1

NOTES

1. Sign is Type II - Type H
2. Color:
   Background - See note 5
   Message - See note 5
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M2-1 Background - White
   Message - Black
   MB2-1 Background - Blue
   Message - White
   MK2-1 Background - Green
   Message - White
   MM2-1 Background - White
   Message - Green
   MN2-1 Background - Brown
   Message - White
   MR2-1 Background - Brown
   Message - Yellow

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	21	15	1 1/8	3/8	3/8	9	3	8 7/8	8 5/8																1 1/2	1/2	2.20
3	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40
4	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40
5	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40

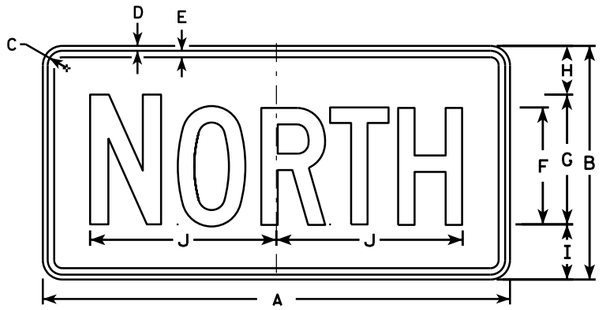
STANDARD SIGN
M2-1

WISCONSIN DEPT OF TRANSPORTATION

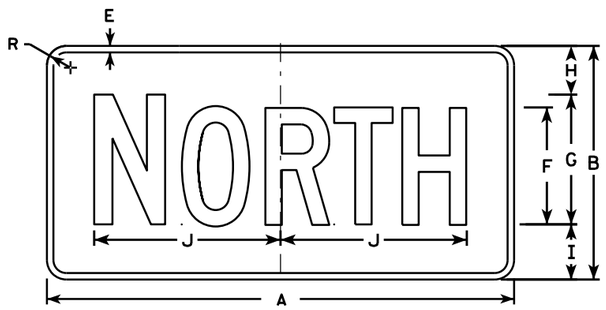
APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 6/30/14 PLATE 802 12-1.11

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



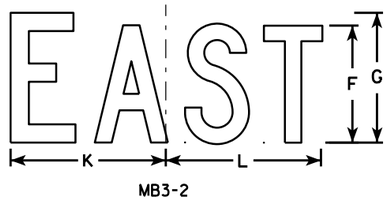
M3-1
MK3-1
MM3-1
MN3-1



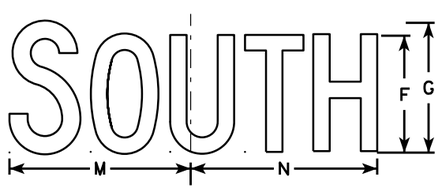
MB3-1



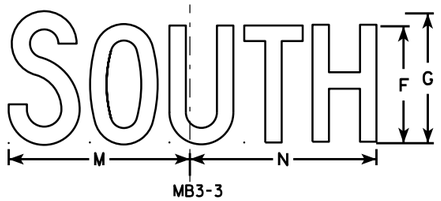
M3-2
MK3-2
MM3-2
MN3-2



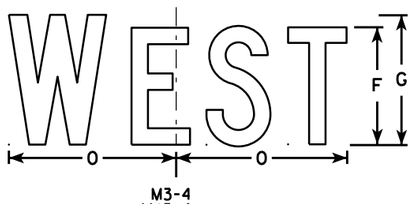
MB3-2



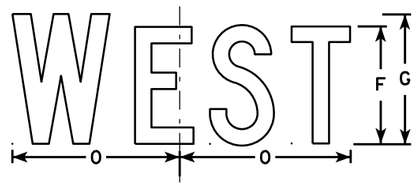
M3-3
MK3-3
MM3-3
MN3-3



MB3-3



M3-4
MK3-4
MM3-4
MN3-4



MB3-4

NOTES

1. All Signs Type II - Type H
2. Color:
   Background - See note 5
   Message - See note 5
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M3-1 thru M3-4 Background - White
   Message - Black
   MB3-1 thru MB3-4 Background - Blue
   Message - White
   MK3-1 thru MK3-4 Background - Green
   Message - White
   MM3-1 thru MM3-4 Background - White
   Message - Green
   MN3-1 thru MN3-4 Background - Brown
   Message - White
6. Note the first letter of each direction is larger than the remainder of the message.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	12	1 1/8	3/8	3/8	6	7	2 1/4	2 3/4	10 1/4	7 7/8	8 3/8	10 1/4	9 3/4	8 3/4			1 1/2									2.00
3	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5
4	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5
5	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5

STANDARD SIGNS
M3-1 thur M3-4
SERIES

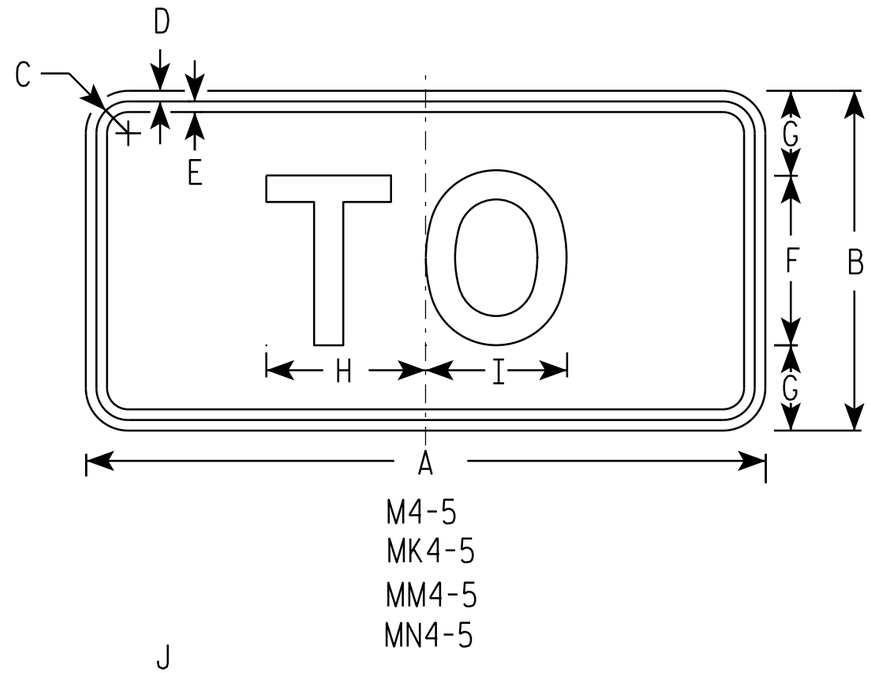
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

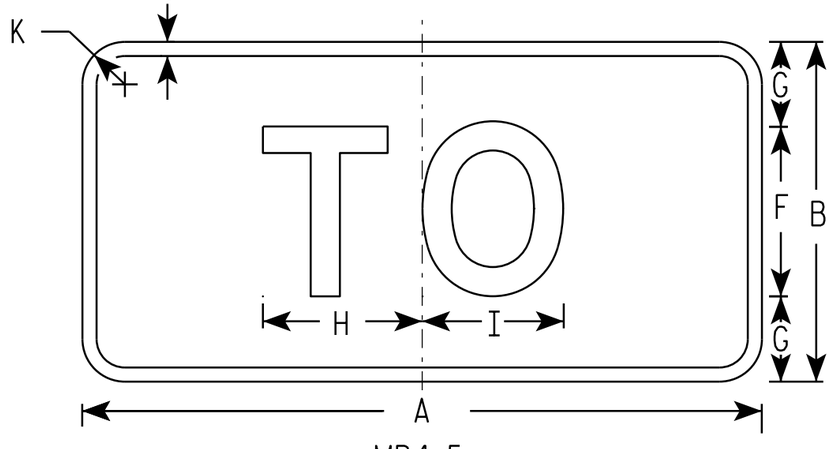
DATE 6/30/14 PLATE NO M3-1.13

PROJECT NO: | HWY: | COUNTY: | | SHEET NO: E

7



M4-5
MK4-5
MM4-5
MN4-5



MB4-5

NOTES

1. Sign is Type II - Type H
2. Color:
   Background - See note 5
   Message - See note 5
3. Message Series - E
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M4-5 Background - White
   Message - Black

   MB4-5 Background - Blue
   Message - White

   MK4-5 Background - Green
   Message - White

   MM4-5 Background - White
   Message - Green

   MN4-5 Background - Brown
   Message - White

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	12	1 1/8	3/8	3/8	6	3	5 3/8	5 1/4	1/2	1 1/2																2.00
3	36	18	1 3/8	3/8	1/2	9	4 1/2	8 1/4	8 3/8	1/2	1 1/2																4.5
4	36	18	1 3/8	3/8	1/2	9	4 1/2	8 1/4	8 3/8	1/2	1 1/2																4.5
5	36	18	1 3/8	3/8	1/2	9	4 1/2	8 1/4	8 3/8	1/2	1 1/2																4.5

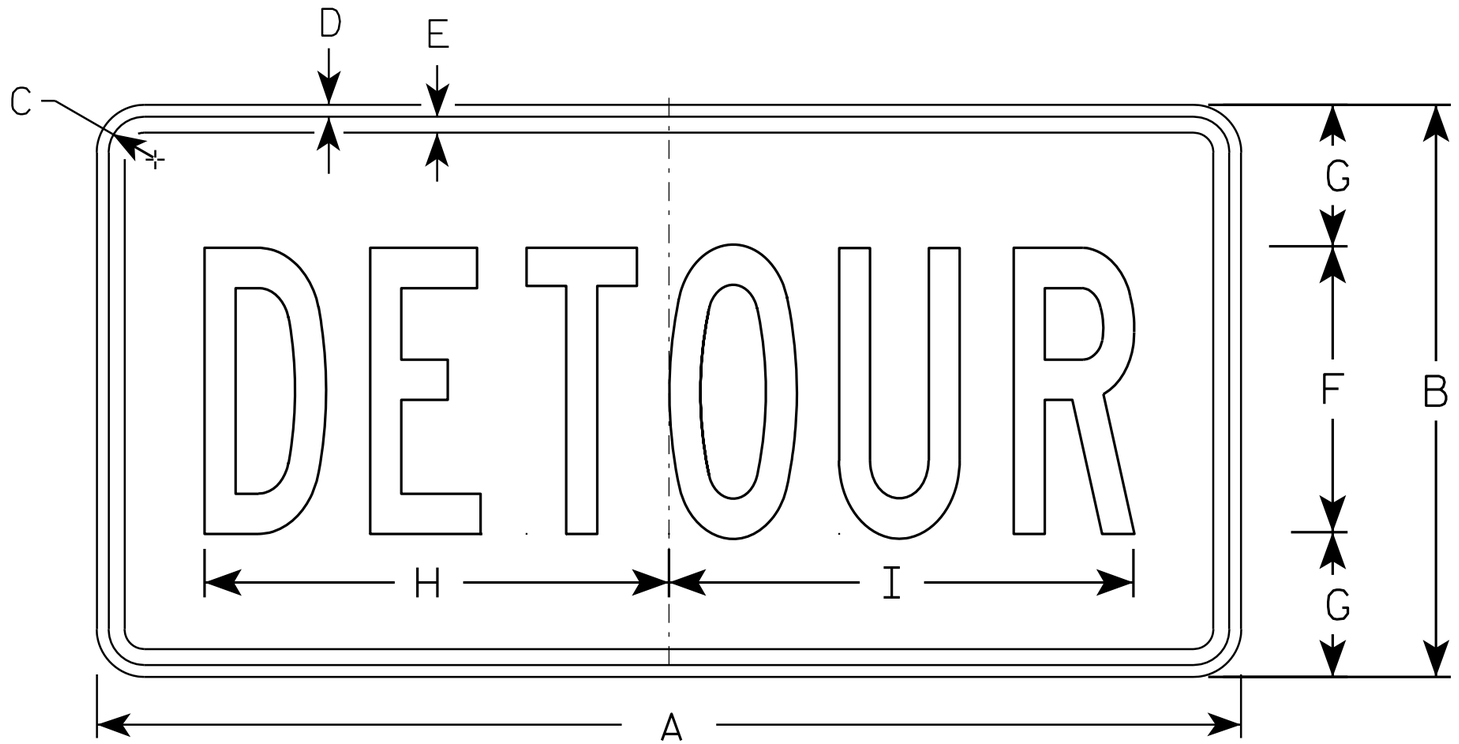
STANDARD SIGN
M4-5

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/30/14 PLATE M4-5.7

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E



M4-8

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - B
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	12	1 1/8	3/8	3/8	6	3	10	10 1/4																		2.0
3	36	18	1 1/8	3/8	1/2	9	4 1/2	14 5/8	14 1/2																		4.5
4																											
5																											

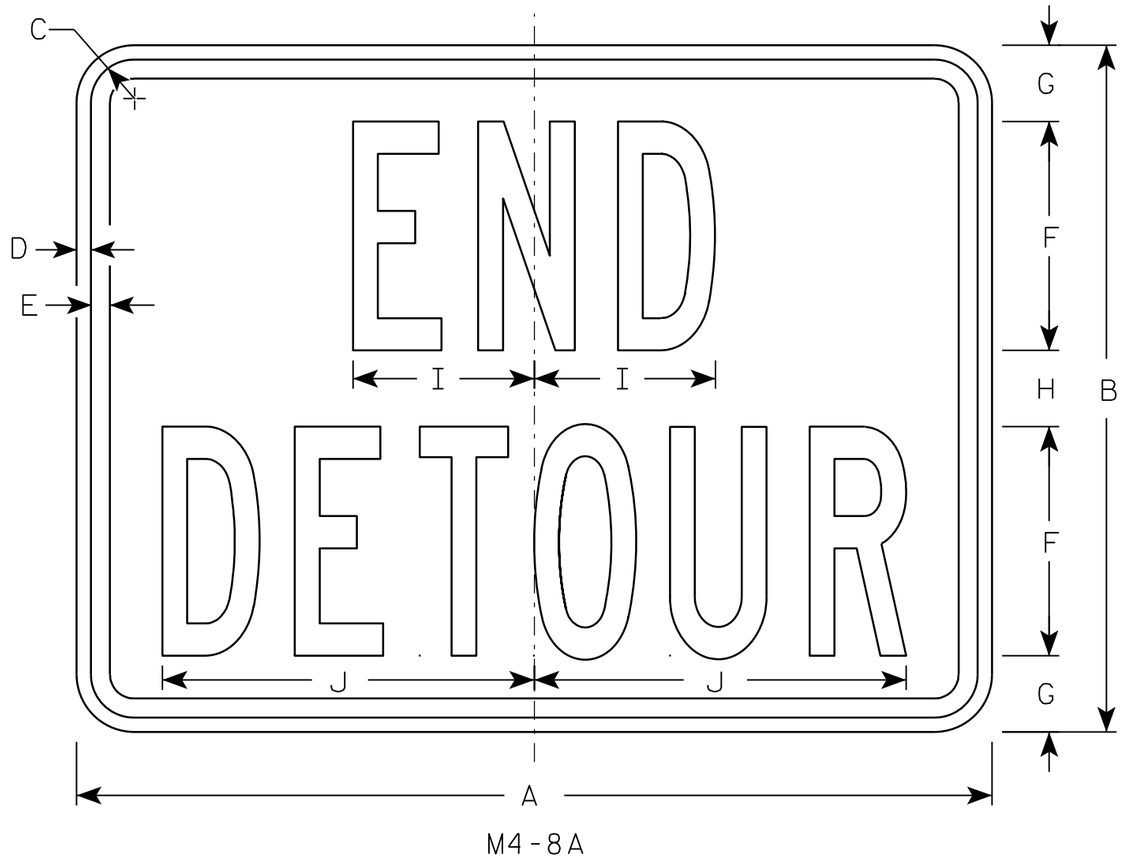
STANDARD SIGN
M4-8

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/10/10 PLATE NO. M4-8.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 805	E



M4-8A

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - B
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	18	1 1/8	3/8	1/2	6	2	2	4 3/4	9 3/4																	3.0
3	30	24	1 1/8	3/8	1/2	8	2 1/2	3	6 3/4	13																	5.0
4																											
5																											

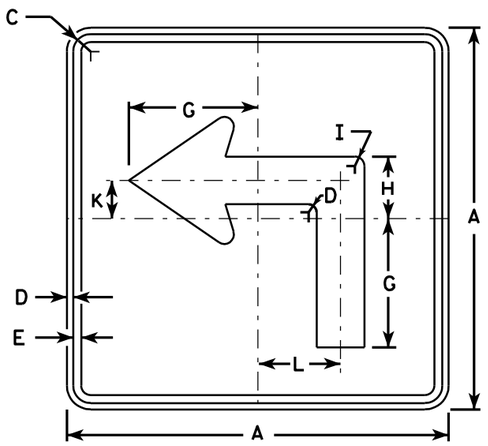
STANDARD SIGN
M4-8A

WISCONSIN DEPT OF TRANSPORTATION

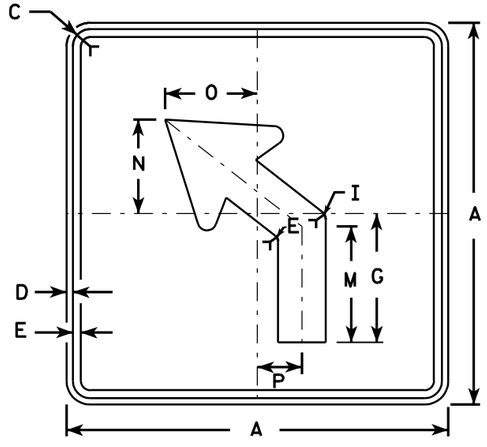
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/9/11 PLATE NO. M4-8A.2

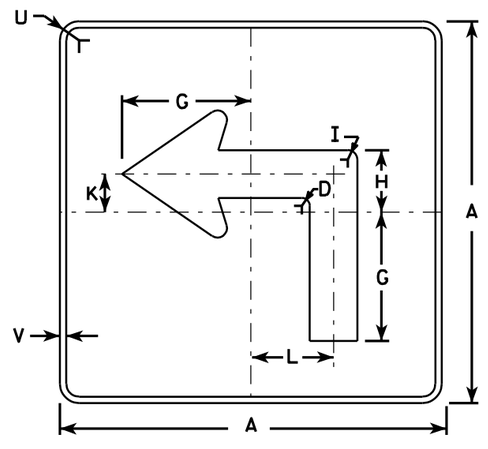
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 806	E



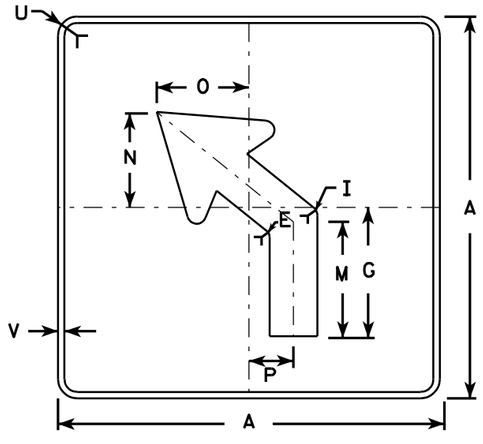
M5-1L
MK5-1L
MM5-1L
MO5-1L
MP5-1L
MR5-1L



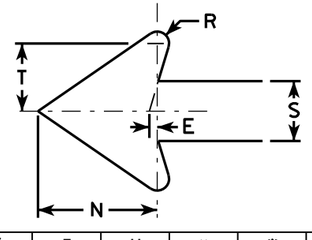
M5-2L
MK5-2L
MM5-2L
MO5-2L
MP5-2L
MR5-2L



MB5-1L
MG5-1L
MN5-1L



MB5-2L
MG5-2L
MN5-2L



NOTES

1. Signs are Type II - See Note 4 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - See note 4
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M5-1 and M5-2 Background - White - Type H Reflective
   Message - Black
   MB5-1 and MB5-2 Background - Blue
   Message - White - Type H Reflective
   MG5-1 and MG5-2 Background - Green
   Message - White - Type H Reflective
   MK5-1 and MK5-2 Background - Green
   Message - White Type H Reflective
   MM5-1 and MM5-2 Background - White - Type H Reflective
   Message - Green
   MN5-1 and MN5-2 Background - Brown
   Message - White - Type H Reflective
   MO5-1 and MO5-2 Background - Orange - Type F Reflective
   Message - Black
   MP5-1 and MP5-2 Background - White - Type H Reflective
   Message - Blue
   MR5-1 and MR5-2 Background - Brown
   Message - Yellow - Type H Reflective
5. M5-1R same as M5-1L except arrow points right.
6. M5-2R same as M5-2L except arrow tilts right.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	21		1 1/8	3/8	3/8		7	3 3/8	5/8		2 1/8	4 1/2	6 3/8	5 1/4	5	2 1/2		1/2	2 5/8	3	1 1/2	1/2					3.06
3	30		1 3/8	1/2	5/8		10 1/8	4 1/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25
4	30		1 3/8	1/2	5/8		10 1/8	4 1/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25
5	30		1 3/8	1/2	5/8		10 1/8	4 1/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25

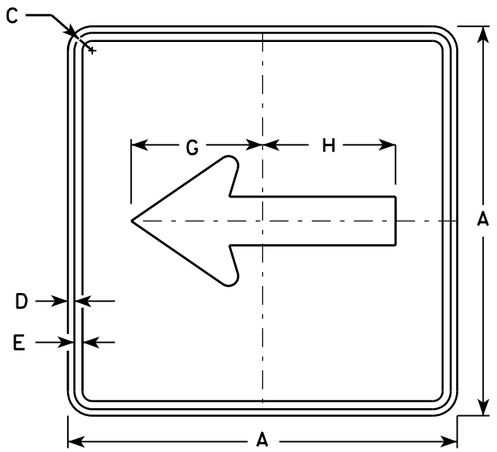
STANDARD SIGN
M5-1 & M5-2

WISCONSIN DEPT OF TRANSPORTATION

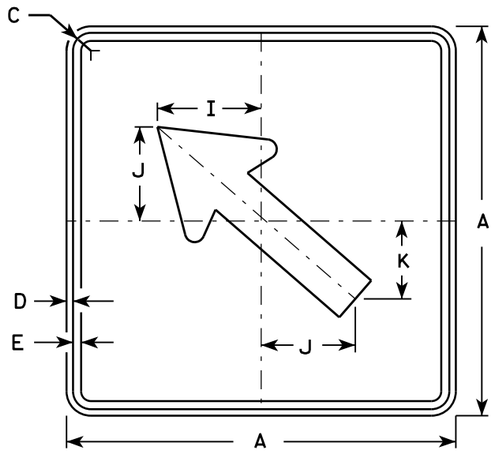
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 7/29/13 PLATE NO. M5-1.12

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 807	E



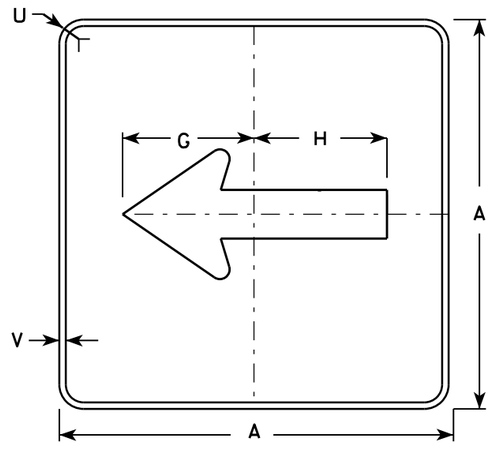
M6-1
MK6-1
MM6-1
MN6-1
MO6-1
MP6-1
MR6-1



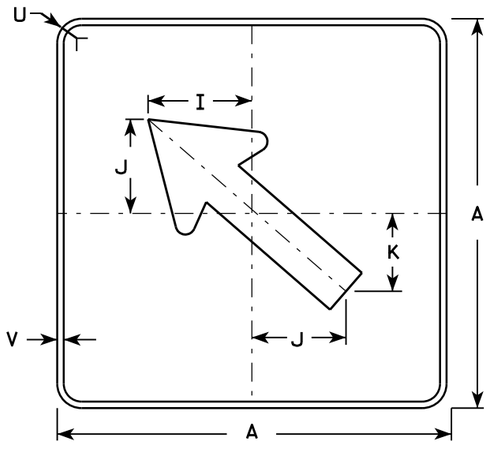
M6-2
MK6-2
MM6-2
MN6-2
MO6-2
MP6-2
MR6-2

NOTES

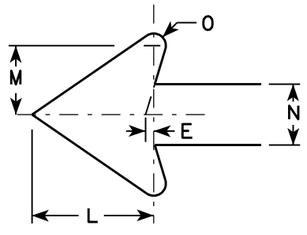
1. Signs are Type II - Type H except as Shown
2. Color:
   Background - See note 4
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M6-1 and M6-2 Background - White
   Message - Black
   MB6-1 and MB6-2 Background - Blue
   Message - White
   MG6-1 and MG6-2 Background - Green
   Message - White
   MK6-1 and MK6-2 Background - Green
   Message - White
   MM6-1 and MM6-2 Background - White
   Message - Green
   MN6-1 and MN6-2 Background - Brown
   Message - White
   MO6-1 and MO6-2 Background - Orange - Type F Reflective
   Message - Black
   MP6-1 and MP6-2 Background - White
   Message - Blue
   MR6-1 and MR6-2 Background - Brown
   Message - Yellow



MB6-1



MB6-2



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	21		1 1/8	3/8	3/8		7 1/2	7 1/8	5 5/8	5	4 1/4	5 1/4	3	2 5/8	1/2						1 1/2	1/2						3.06
3	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2						6.25
4	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2						6.25
5	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2						6.25

STANDARD SIGN M6-1 & M6-2 SERIES

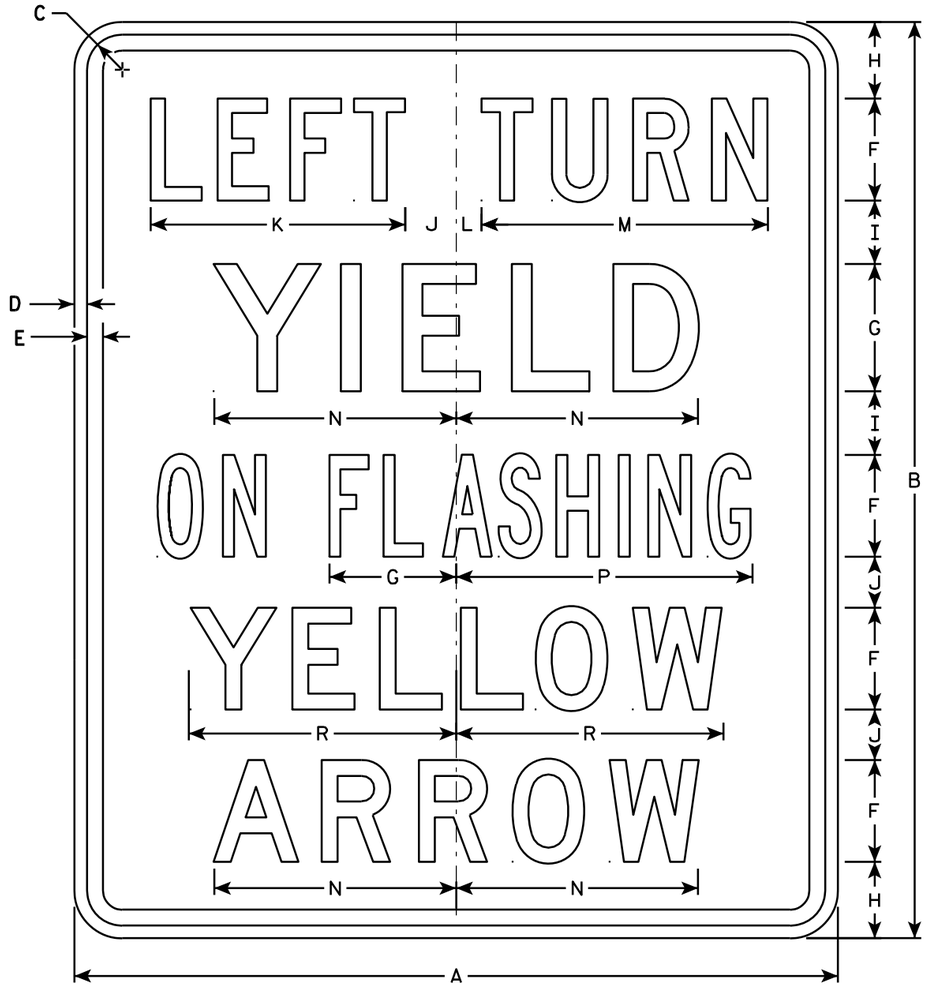
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 7/03/14 PLATE 808 M6-1.14

PROJECT NO: | HWY: | COUNTY: | | SHEET NO: E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\M61.DGN PLOT DATE : 03-JUL-2014 14:28 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 11.675051:1.000000

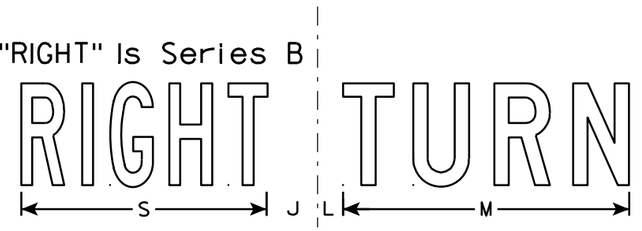


R10-50L

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - see note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Line 1 is Series C.
   Lines 2, 4 and 5 are Series D.
   Line 3 is Series B.

"RIGHT" Is Series B



R10-50R

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	36	1 3/8	1/2	5/8	4	5	3	2 1/2	2	10	1	11 1/4	9 1/2	4 1/4	11 5/8		10 1/2	9 5/8								7.5
2M	30	36	1 3/8	1/2	5/8	4	5	3	2 1/2	2	10	1	11 1/4	9 1/2	4 1/4	11 5/8		10 1/2	9 5/8								7.5
3																											
4																											
5																											

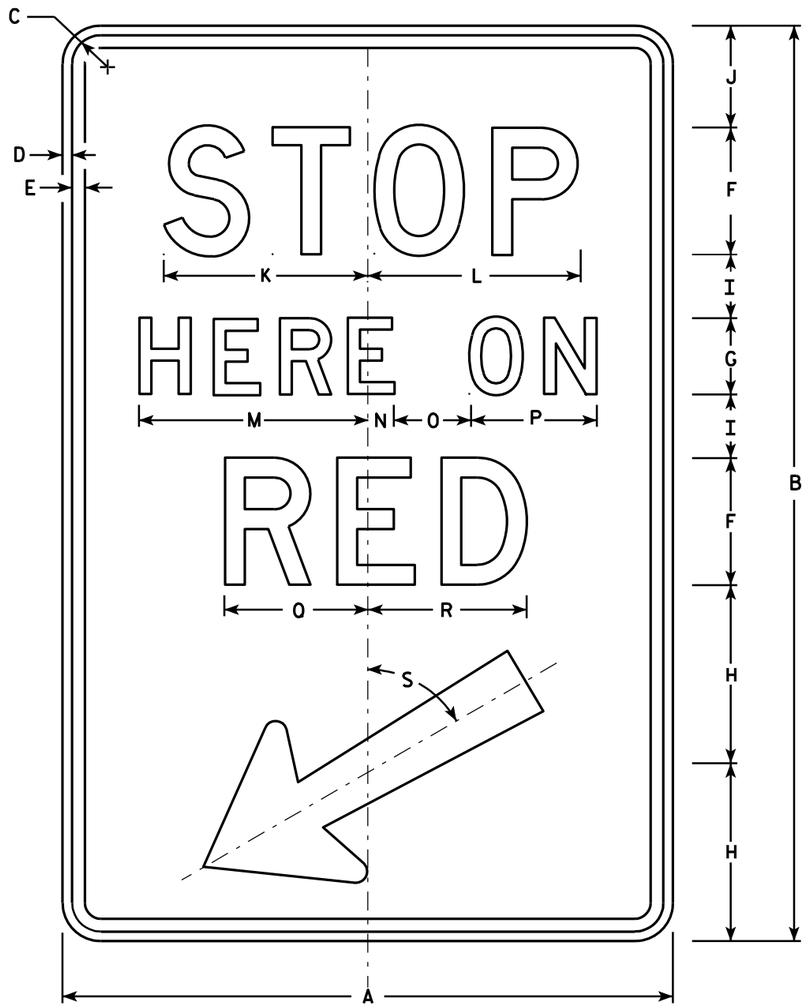
STANDARD SIGN
R10-50

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/11/13 PLATE NO. R10-50.2

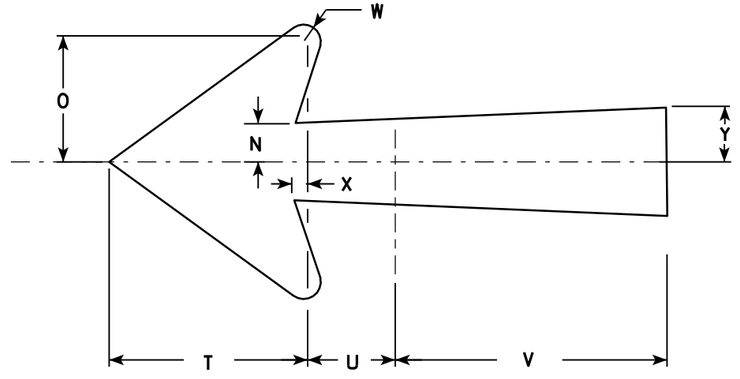
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 809	E



R10-6

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



Arrow Detail

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	O	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	36	1 1/8	3/8	1/2	5	3	7	2 1/2	4	8	8 3/8	9	1	3	5	5 5/8	6 1/4	60°	5 1/4	2 1/4	7 1/8	1/2	3/8	1 3/8		6.0
2M	24	36	1 1/8	3/8	1/2	5	3	7	2 1/2	4	8	8 3/8	9	1	3	5	5 5/8	6 1/4	60°	5 1/4	2 1/4	7 1/8	1/2	3/8	1 3/8		6.0
3																											
4																											
5																											

STANDARD SIGN
R10-6

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/5/11 PLATE NO. R10-6.6

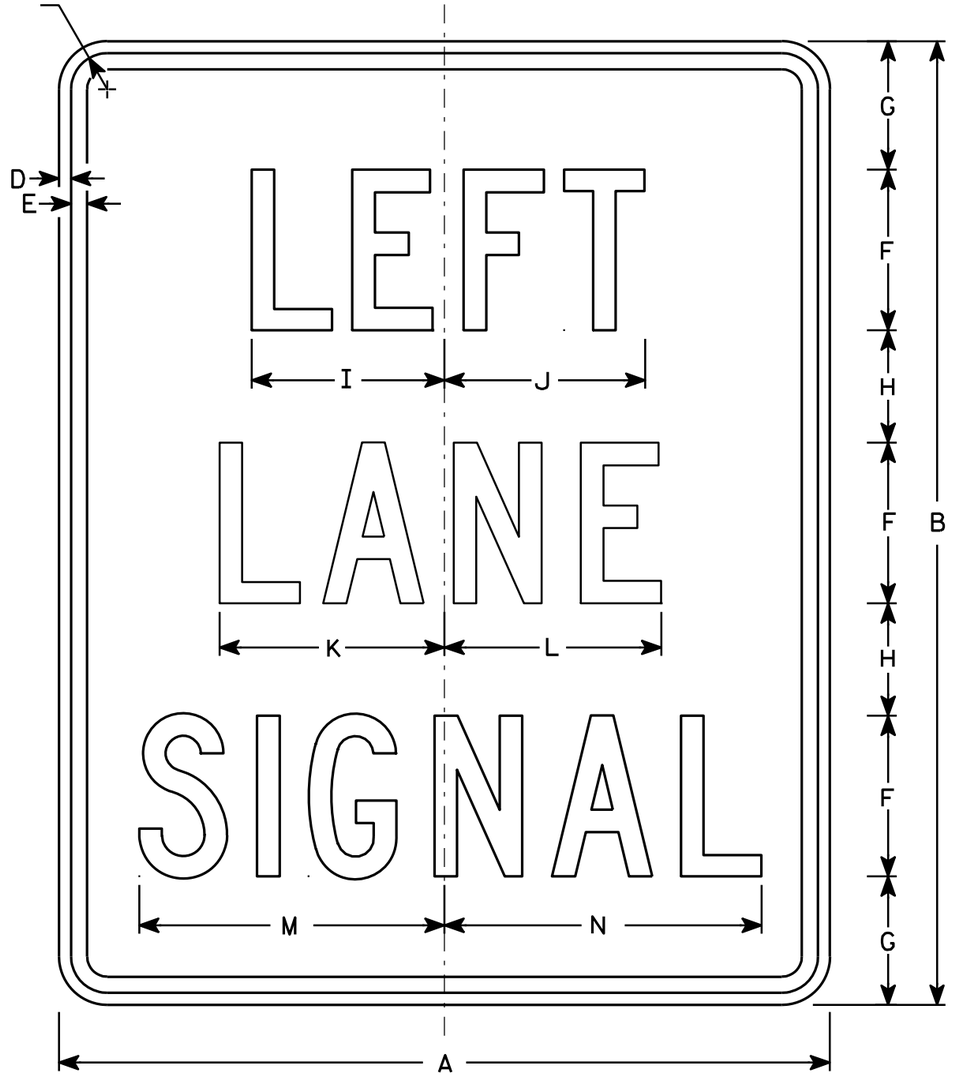
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 810	E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\R106.DGN PLOT DATE : 05-APR-2011 09:50 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 5.959043:1.000000

WISDOT/CADDS SHEET 42

7

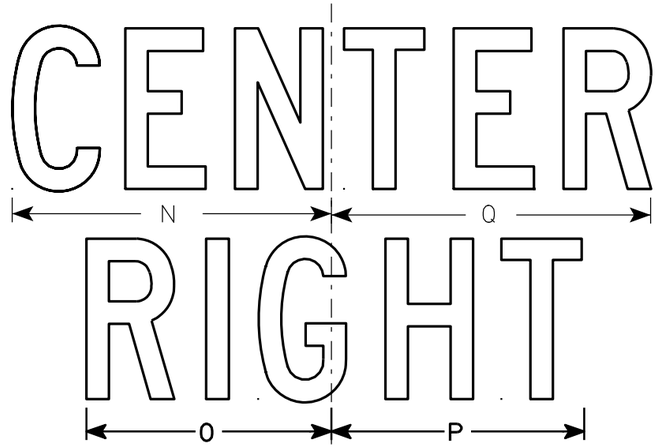
7



R10-65L

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



R10-65C

R10-65R

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	30	1 1/8	3/8	1/2	5	4	3 1/2	6	6 1/4	7	6 3/4	9 1/2	9 7/8	7 5/8	7 7/8	10										5.0
2M	24	30	1 1/8	3/8	1/2	5	4	3 1/2	6	6 1/4	7	6 3/4	9 1/2	9 7/8	7 5/8	7 7/8	10										5.0
3																											
4																											
5																											

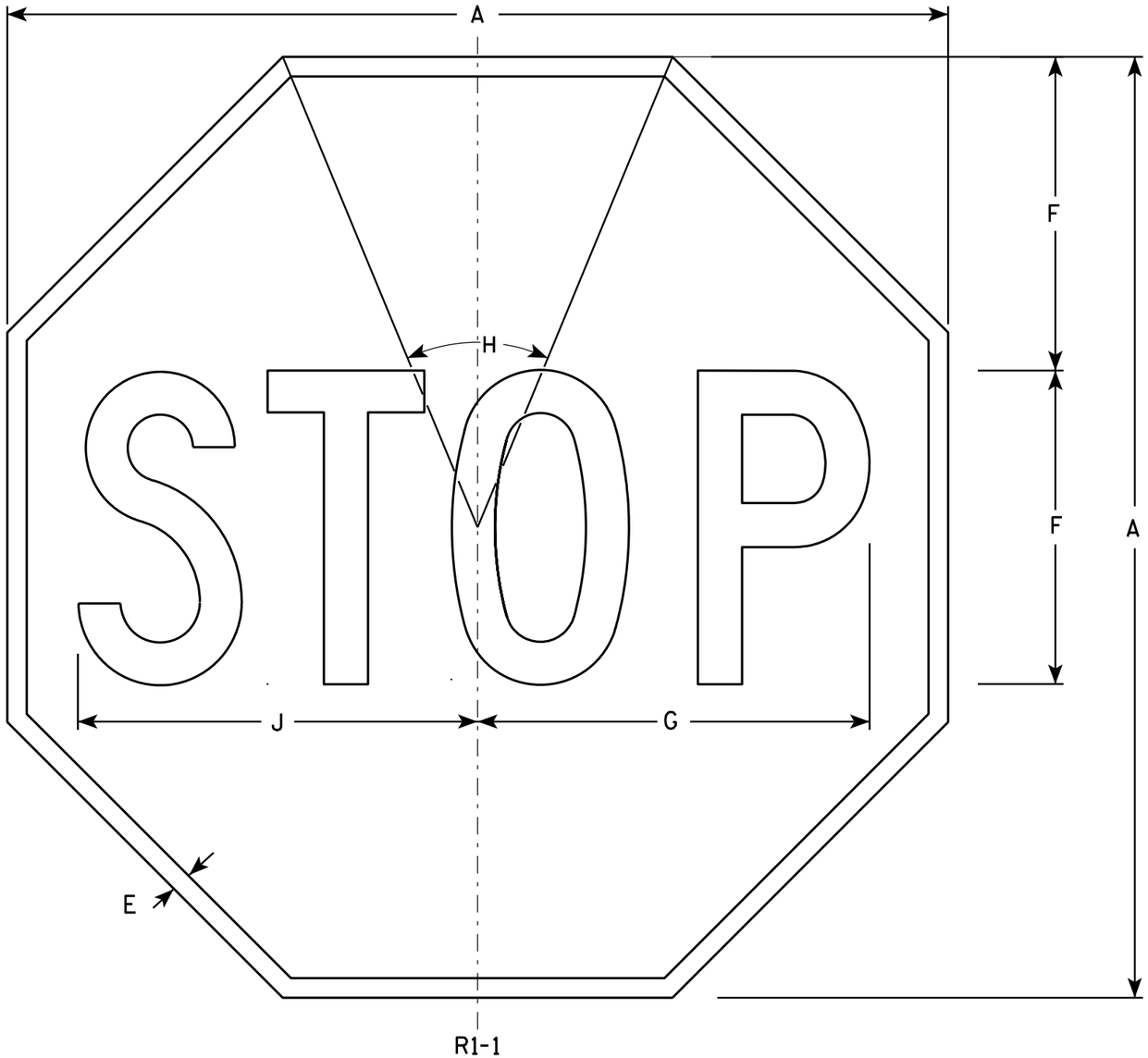
STANDARD SIGN
R10-65

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/4/11 PLATE NO. R10-65.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 811	E



NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Red
   Message - White
3. Message Series - C

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24				3/8	8	10	45°		10 1/4																	3.31
2S	30				5/8	10	12 1/2	45°		12 3/4																	5.18
2M	36				3/4	12	15	45°		15 3/8																	7.46
3	36				3/4	12	15	45°		15 3/8																	7.46
4	48				1	16	20	45°		20 1/2																	13.25
5	48				1	16	20	45°		20 1/2																	13.25
6	18				3/8	6	7 3/4	45°		7 3/4																	1.86
7	12				1/4	4	5	45°		5 1/8																	0.78

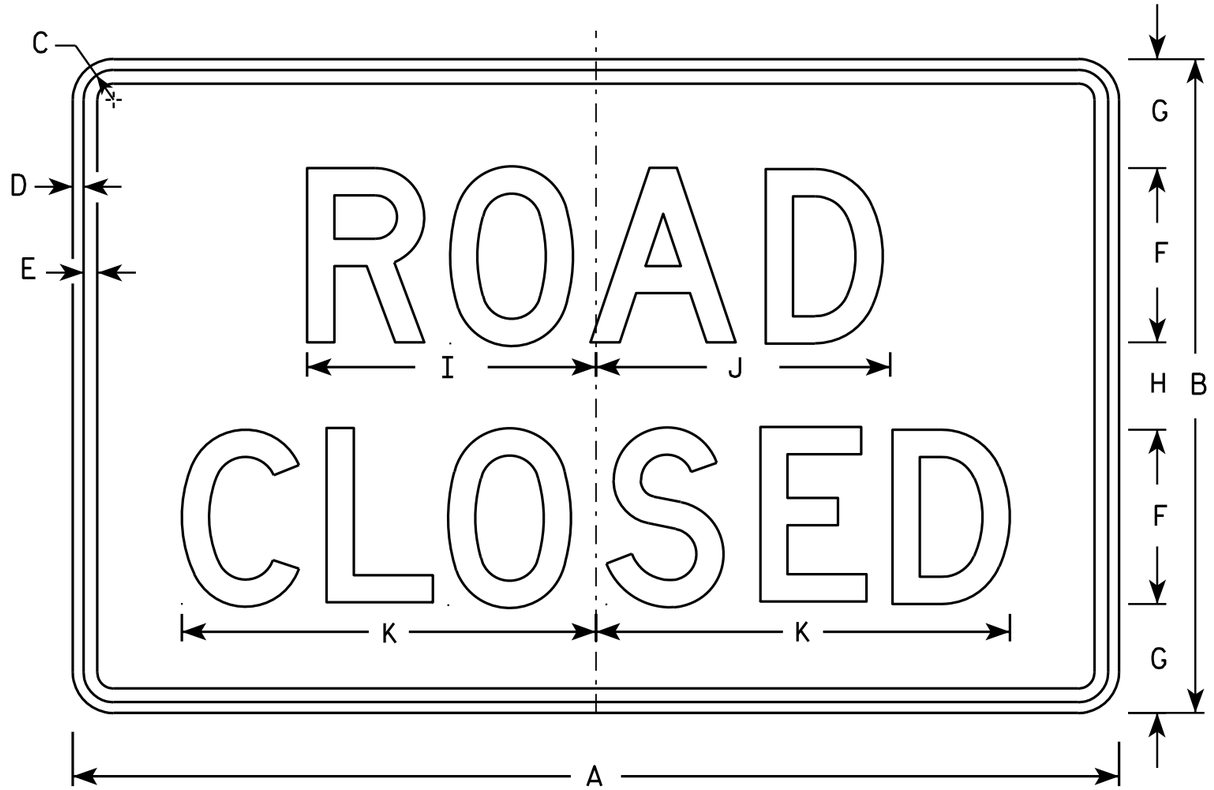
STANDARD SIGN
R1-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/03/10 PLATE NO. R1-1.12

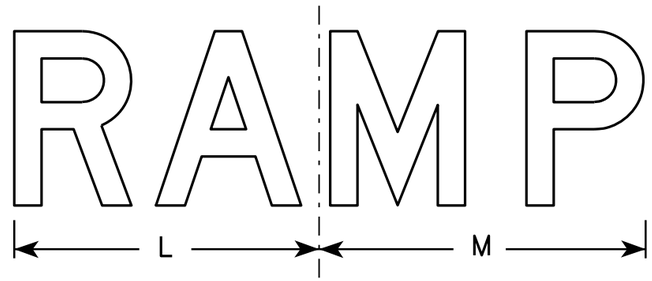
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 812	E



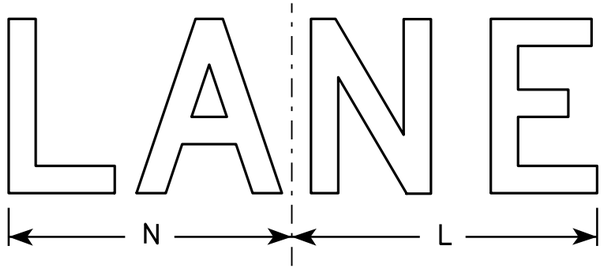
R11-2

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Modify the message as required.



R11-2R



R11-2L

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13													10.0
2M	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13													10.0
3	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13													10.0
4	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13													10.0
5	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13													10.0

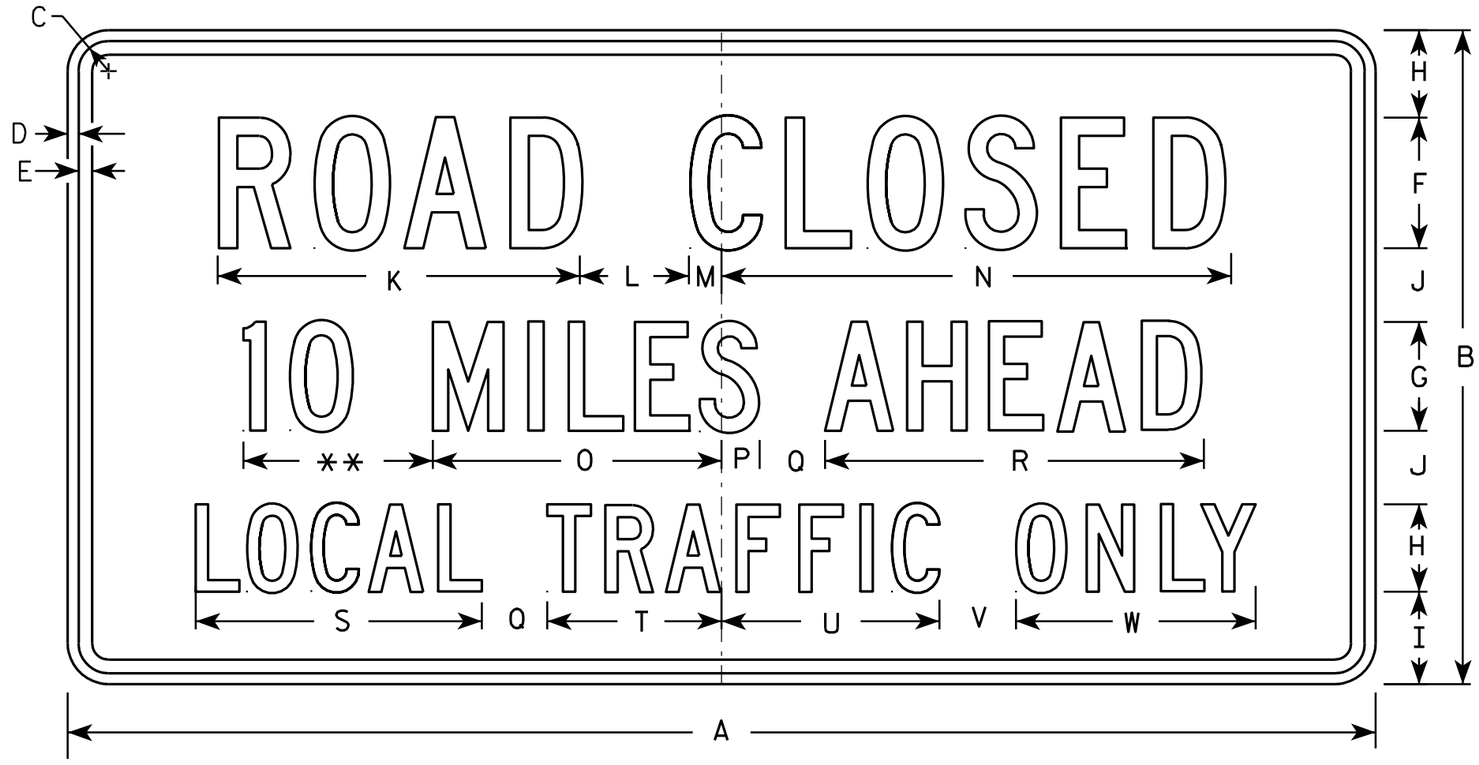
STANDARD SIGN
R11-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/1/11 PLATE NO. R11-2.10

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 813 | E



R11-3

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals and optically adjust spacing to achieve proper balance.

** See Note 5

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36	18	1 3/8	1/2	5/8	4	3	2 1/2	2	2	11 1/8	3	1 1/8	15 1/4	8	1 1/2	2	10 3/4	8 3/8	4 3/4	6 1/2	2	6 3/4				4.5
2S	60	30	1 3/8	1/2	5/8	6	5	4	4 1/4	3 3/8	16 5/8	5	1 1/2	23	13 1/4	1 3/4	3	17 3/8	13 1/8	8	10	3 1/2	11				12.5
2M	60	30	1 3/8	1/2	5/8	6	5	4	4 1/4	3 3/8	16 5/8	5	1 1/2	23	13 1/4	1 3/4	3	17 3/8	13 1/8	8	10	3 1/2	11				12.5
3																											
4																											
5																											

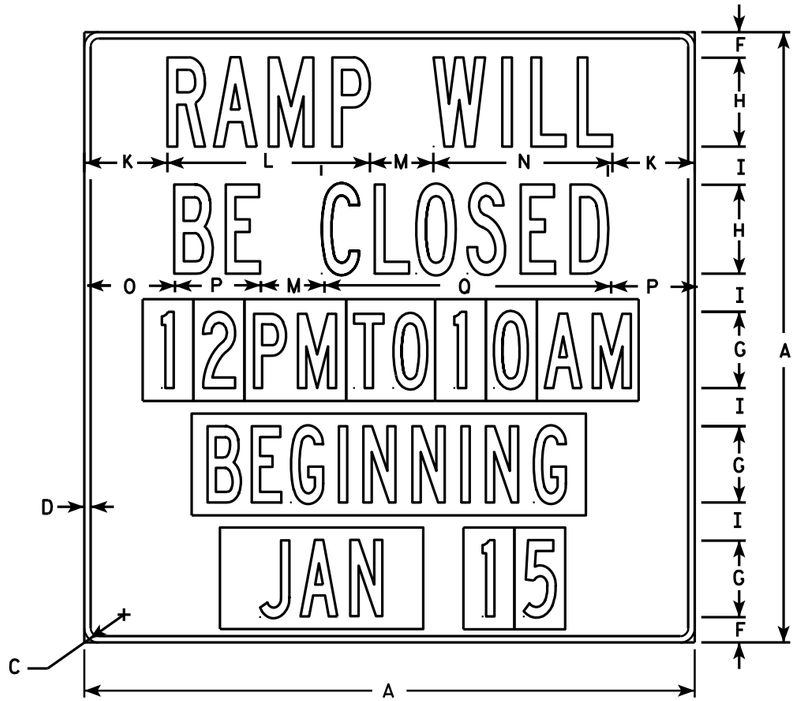
STANDARD SIGN
R11-3

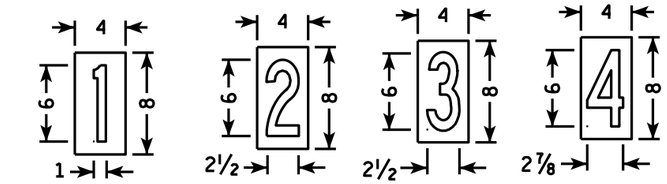
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/1/11 PLATE NO. R11-3.6

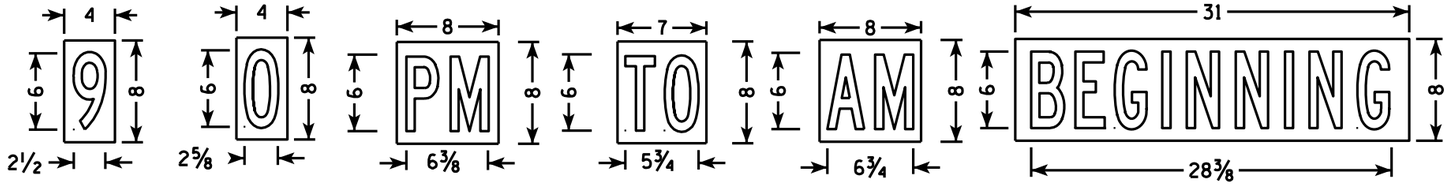
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 814	E

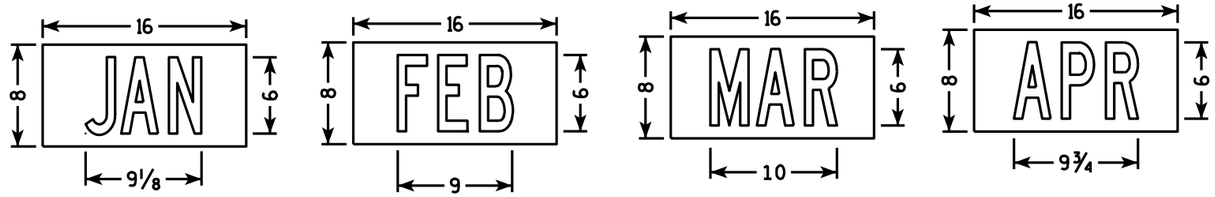


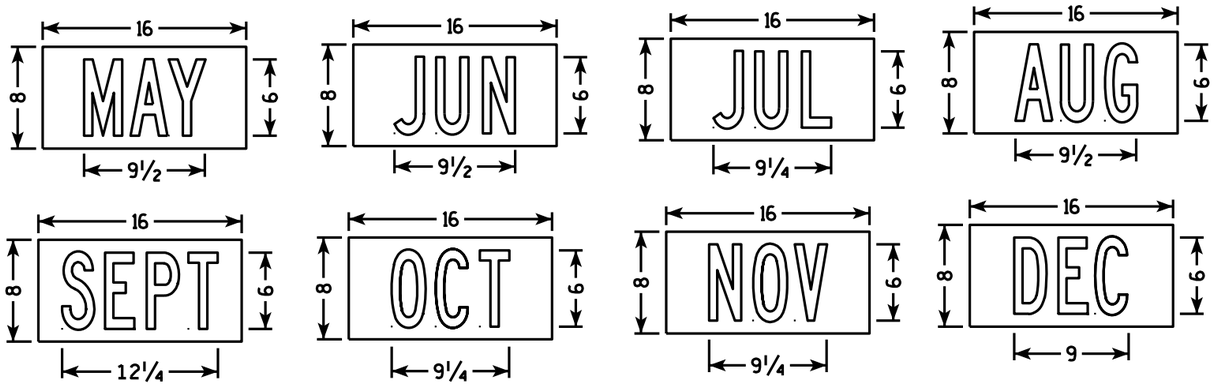


NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - B
4. Message plaques consist of Type H Reflective sheeting with the appropriate non-reflective black message applied to .040 aluminum and screwed to the base sign.









SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48		2 1/4	1/2		2	6	7	3		6 1/2	15 7/8	5	14 1/8	6 7/8	6 3/4	22 1/2										16.0
2M	48		2 1/4	1/2		2	6	7	3		6 1/2	15 7/8	5	14 1/8	6 7/8	6 3/4	22 1/2										16.0
3																											
4																											
5																											

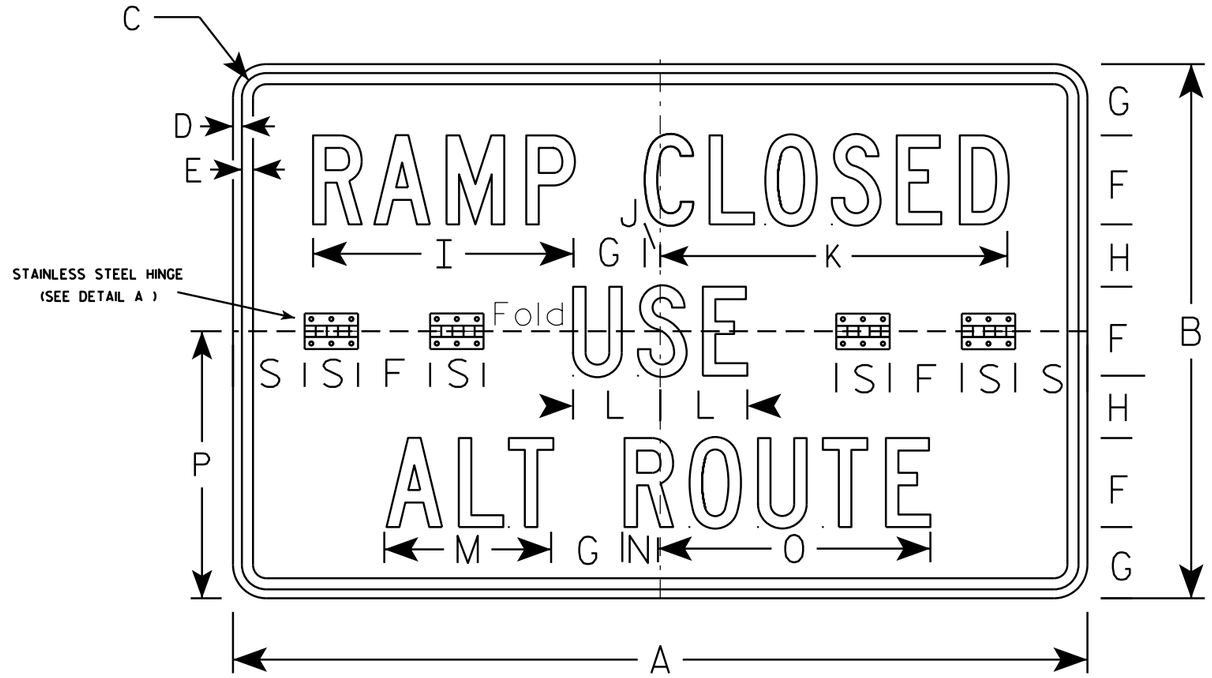
STANDARD SIGN
R11-51

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

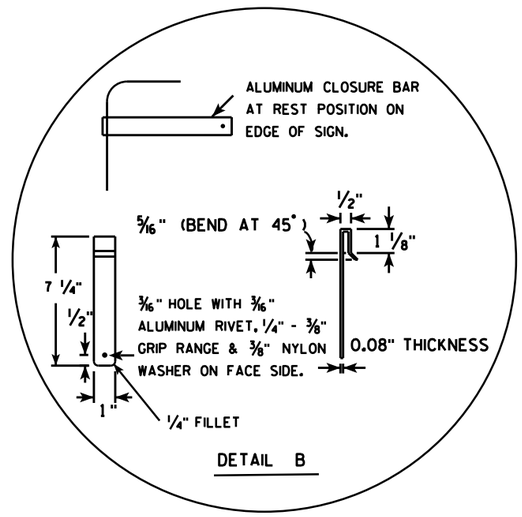
DATE 4/1/11 PLATE NO. R11-51.4

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 815	E



R11-54F

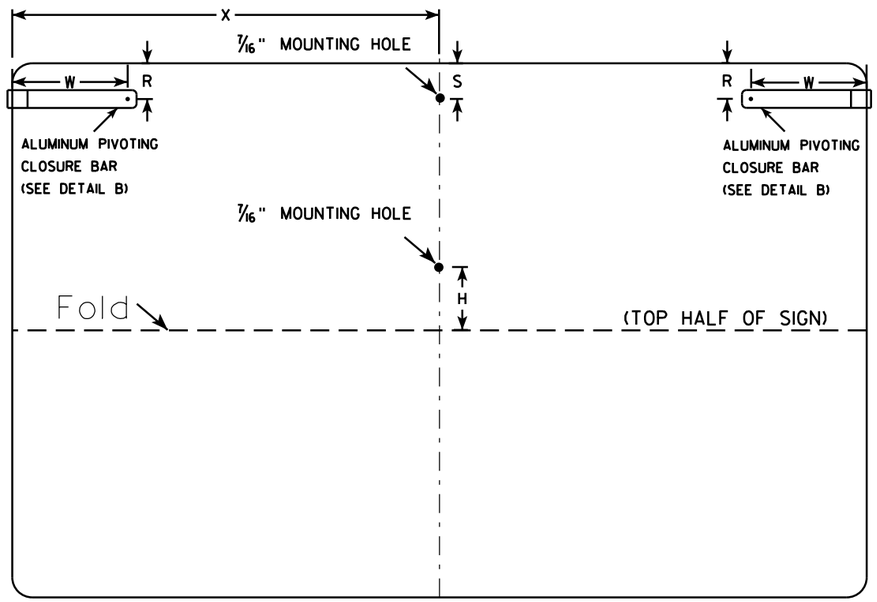
DETAIL A



DETAIL B

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - WHITE
   Message - BLACK
3. Message Series - C
4. Sign Base Material shall be aluminum, corners and borders shall be rounded.
5. All hardware used on the folding sign installation shall conform to 637.2.4 of the WIS DOT Standard Specification.
6. Refer to plate A5-3A for sign blank layout.



(BACK VIEW)

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	30	1 3/8	1/2	5/8	5	4	3 1/2	14 5/8	7/8	19 1/2	4 7/8	9 3/8	2	15 1/4	15		2	3	2 5/8	1 1/4	11/16	6 1/2	24			10.0
2M	48	30	1 3/8	1/2	5/8	5	4	3 1/2	14 5/8	7/8	19 1/2	4 7/8	9 3/8	2	15 1/4	15		2	3	2 5/8	1 1/4	11/16	6 1/2	24			10.0
3																											
4																											
5																											

STANDARD SIGN
R11-54F

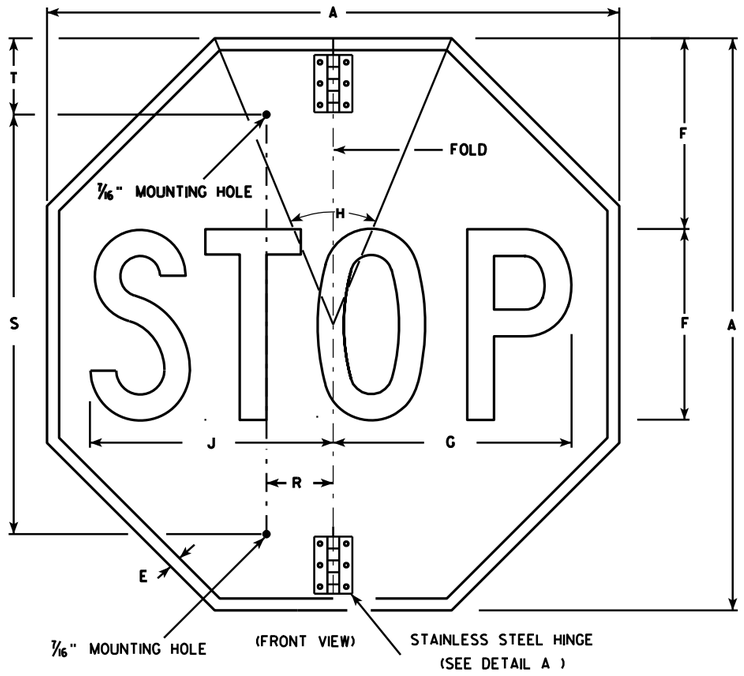
WISCONSIN DEPT OF TRANSPORTATION

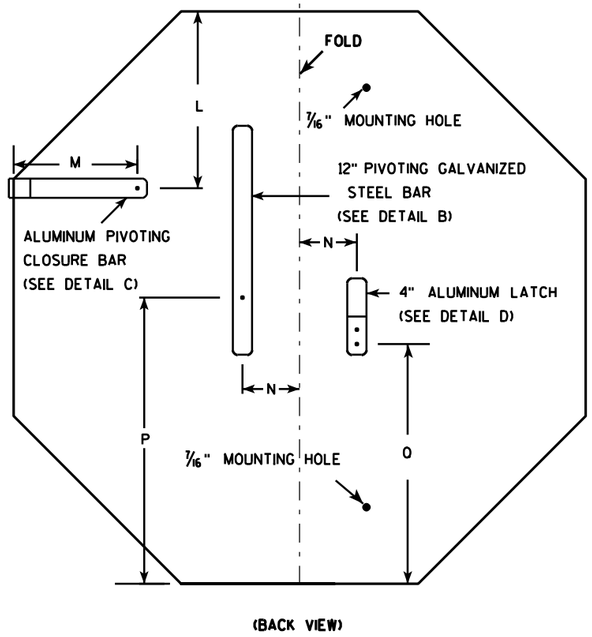
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/28/14 PLATE NO. R11-54F.3

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

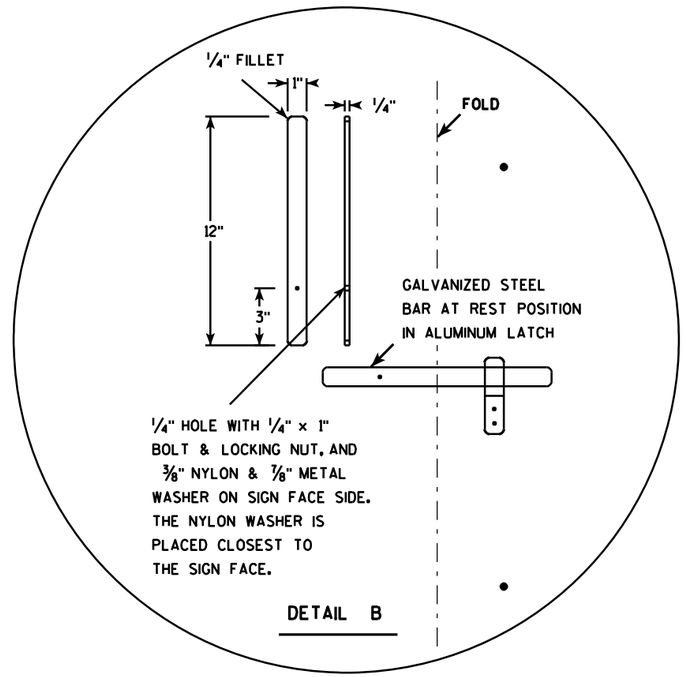
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\R1154F.DGN PLOT DATE : 28-MAY-2014 14:15 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 8.511110:1.000000
WISDOT/CADDS SHEET 42

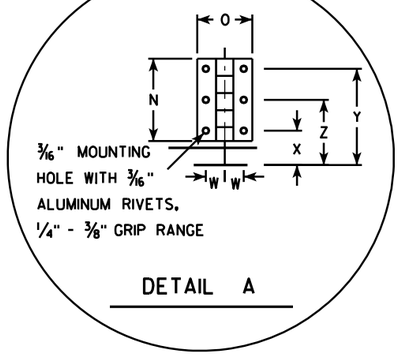


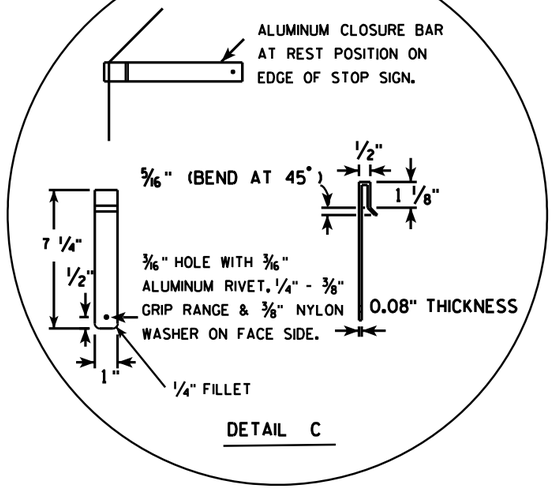


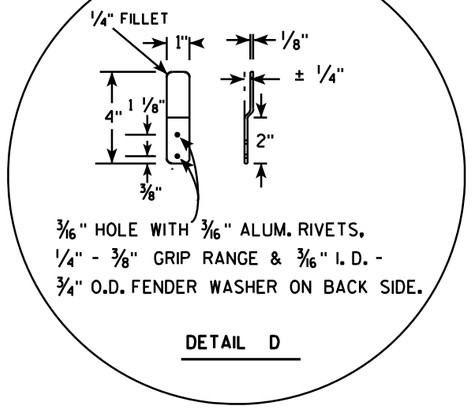
NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Red
   Message - White
3. Message Series - C
4. All hardware used on the folding STOP sign installation shall conform to 637.2.4 of the WIS DOT Standard Specification.









SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	O	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30				5/8	10	12 1/2	45		12 3/4		9 1/4	6 1/2	3	2	15	12 3/8	2 1/2	22	5			11/16	1 1/4	3 1/2	2 3/8	5.18
2M	36				3/4	12	15	45		15 3/8		11	6 1/2	3	2	18	15 3/8	2 1/2	26	5			11/16	1 1/4	3 1/2	2 3/8	7.46
3	36				3/4	12	15	45		15 3/8		11	6 1/2	3	2	18	15 3/8	2 1/2	26	5			11/16	1 1/4	3 1/2	2 3/8	7.46
4																											
5																											

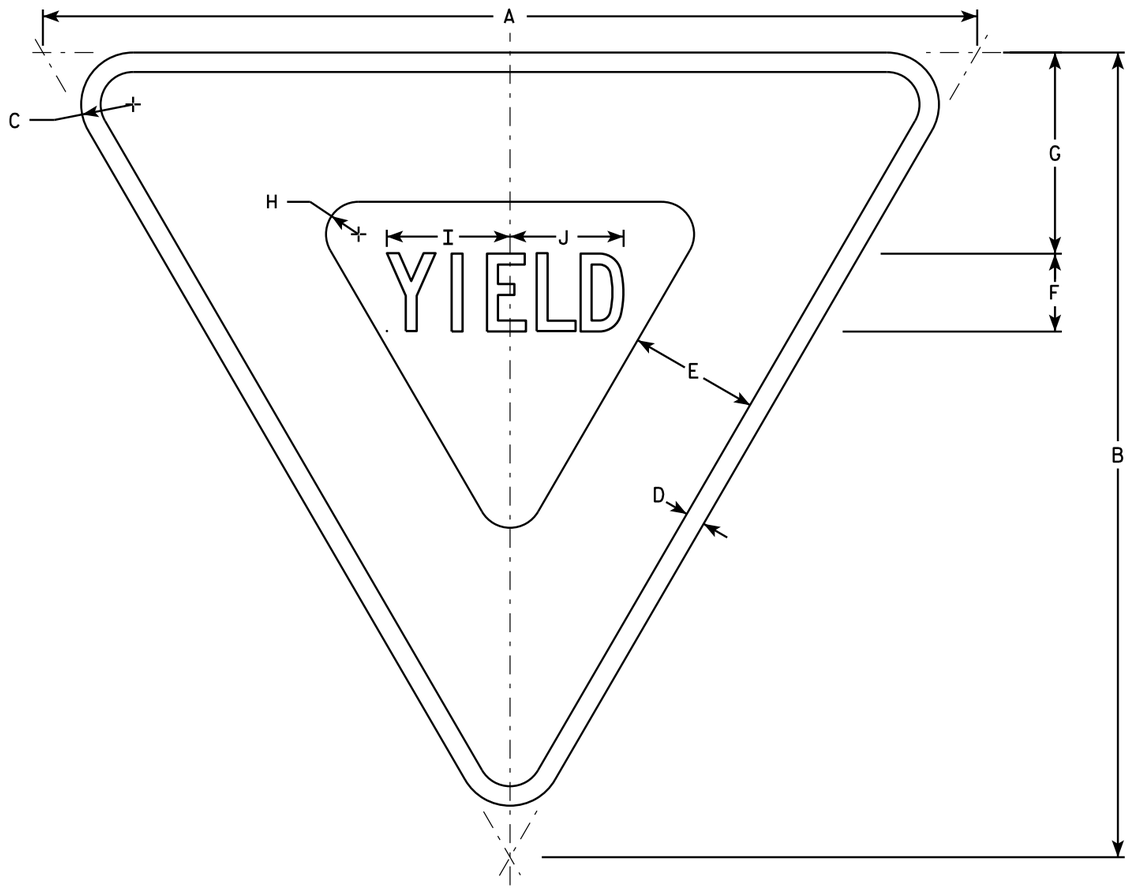
STANDARD SIGN
R1-1F

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/03/10 PLATE NO. R1-1F.3

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 817 | E



R1-2

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - See note 5
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. The border strip and word message are reflectorized red.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30	26	1 1/2	5/8	4	2 1/2	6 3/8	7/8	4	3 5/8																	2.71
2S	36	31	2	3/4	5	3	7 3/4	1 1/4	4 3/4	4 3/8																	3.88
2M	48	42	3	1	6	4	9 3/4	2	6 1/4	5 7/8																	7.00
3	48	42	3	1	6	4	9 3/4	2	6 1/4	5 7/8																	7.00
4	48	42	3	1	6	4	9 3/4	2	6 1/4	5 7/8																	7.00
5	60	52	3	1 1/2	8	5	13	2 1/2	7 7/8	7 1/4																	10.83
6																											
7	18	15 1/2	1	3/8	2 1/2	1 1/2	3 7/8	5/8	2 3/8	2 1/4																	0.97

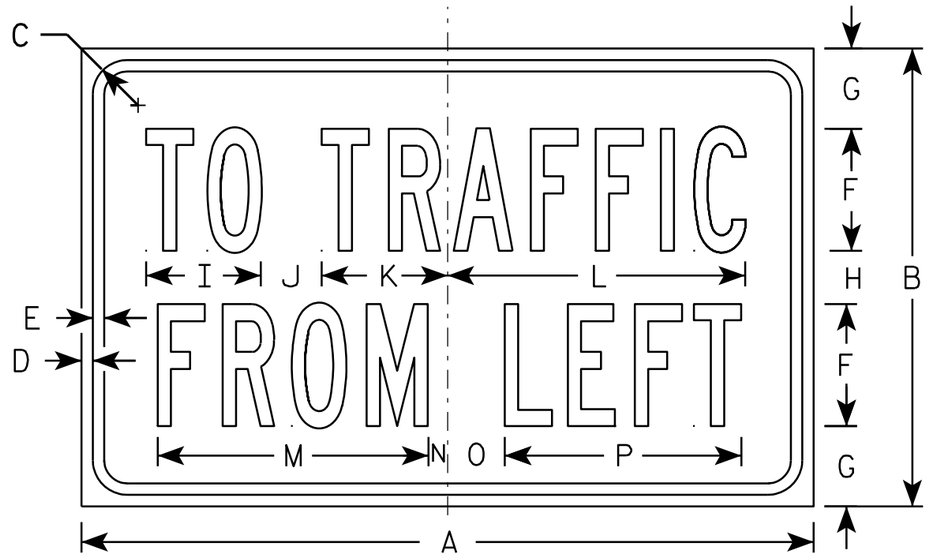
STANDARD SIGN
R1-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/13/14 PLATE P1-2.12

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



R1-54

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - B

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	15	1 1/8	3/8	3/8	4	2 5/8	1 3/4	3 3/4	2	4 1/8	9 3/4	8 7/8	5/8	1 7/8	7 3/4											2.5
2M	24	15	1 1/8	3/8	3/8	4	2 5/8	1 3/4	3 3/4	2	4 1/8	9 3/4	8 7/8	5/8	1 7/8	7 3/4											2.5
3																											
4																											
5																											

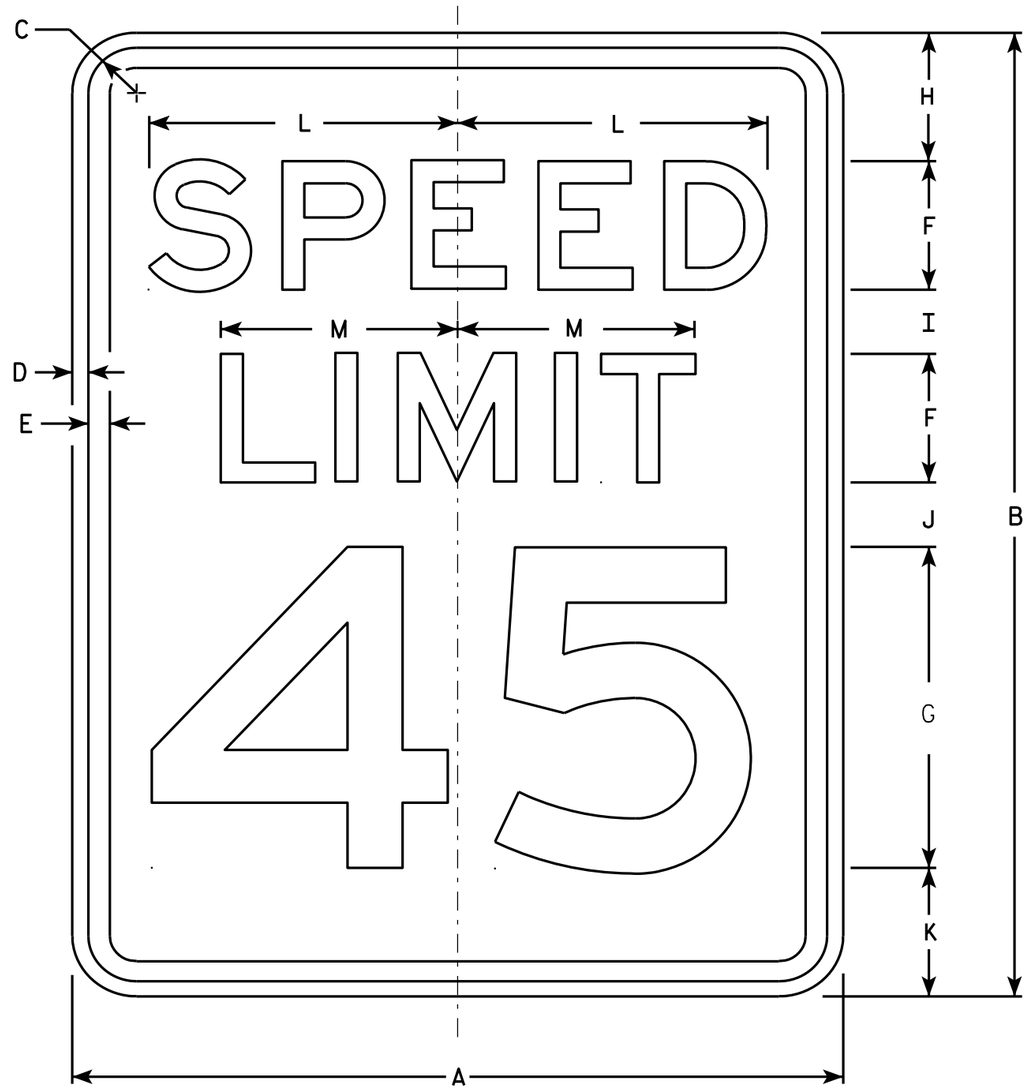
STANDARD SIGN
R1-54

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/03/10 PLATE NO. R1-54.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 819	E



R2-1

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - E
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals and optically adjust spacing to achieve proper balance.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	18	24	1 1/8	3/8	1/2	3	8	3	2	2	3	7 1/4	5 1/2														3.0
2S	24	30	1 1/8	3/8	1/2	4	10	3	2 1/4	3 3/8	3 3/8	9 5/8	7 3/8														5.0
2M	30	36	1 3/8	1/2	5/8	5	12	5	2 1/2	2 1/2	4	12	9 1/4														7.5
3	36	48	1 3/8	1/2	5/8	6	14	6	5	5	6	14 3/8	11														12.0
4	36	48	1 3/8	1/2	5/8	6	14	6	5	5	6	14 3/8	11														12.0
5	48	60	2 1/4	3/4	1	8	20	6	4 1/2	6 3/4	6 3/4	19 1/4	14 5/8														20.0

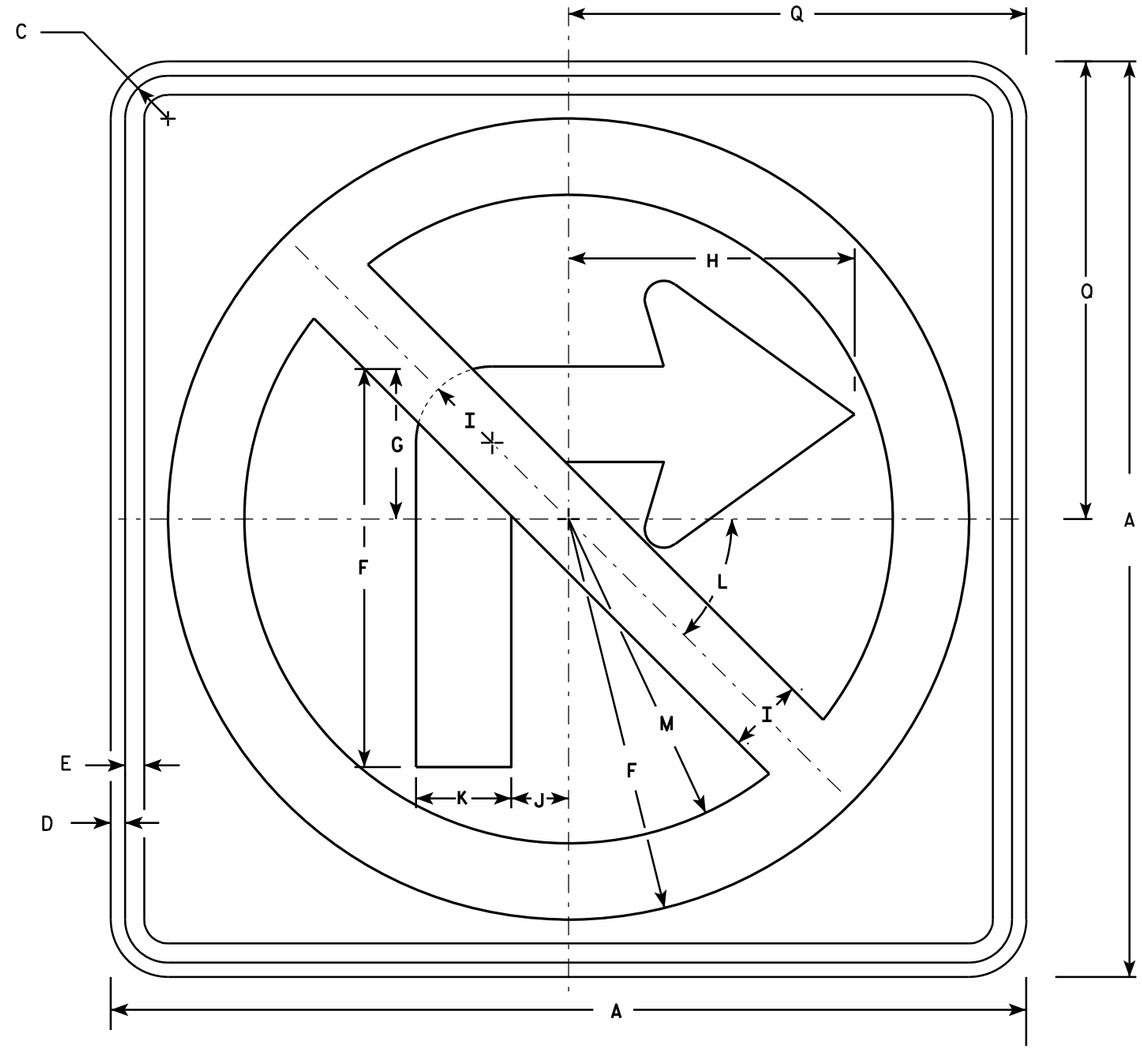
STANDARD SIGN
R2-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/26/10 PLATE NO. R2-1.13

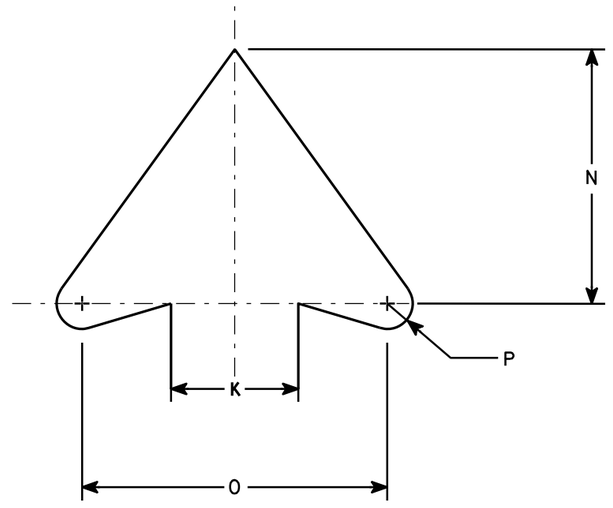
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 820	E



R3-1

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. Border & Arrow are non reflective black, the circle with diagonal bar is reflective red.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2	10 1/2	4	7 1/2	2	1 1/2	2 1/2	45	8 1/2	5	6	1/2	12										4.0
2S	24		1 1/8	3/8	1/2	10 1/2	4	7 1/2	2	1 1/2	2 1/2	45°	8 1/2	5	6	1/2	12										4.0
2M	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45	12 3/4	7 1/2	9	3/4	18										9.0
3	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45	12 3/4	7 1/2	9	3/4	18										9.0
4	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45°	12 3/4	7 1/2	9	3/4	18										9.0
5	48		2 1/4	3/4	1	21	8	15	4	3	5	45°	17	10	12	1	24										16.0

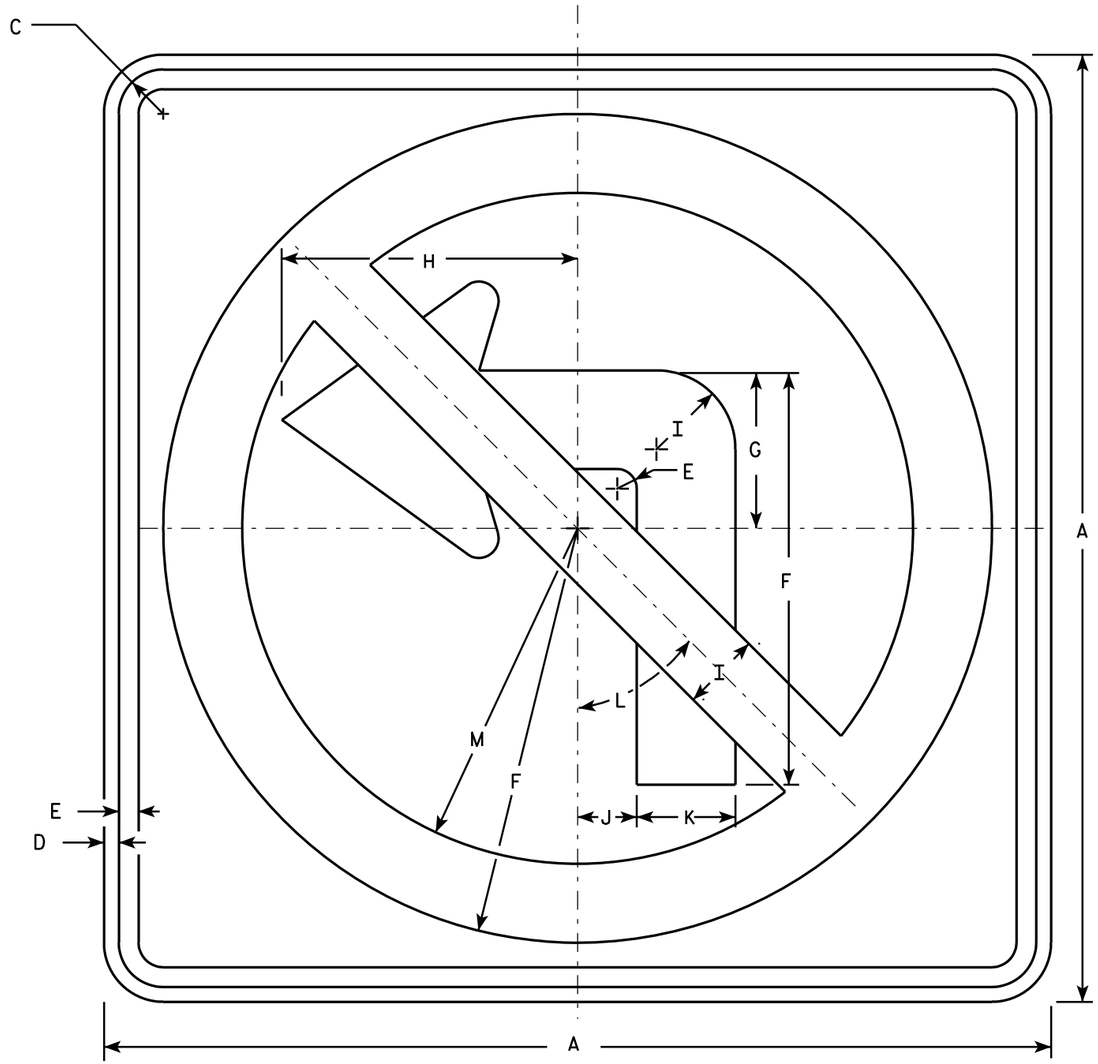
STANDARD SIGN
R3-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/08/10 PLATE NO. R3-1.5

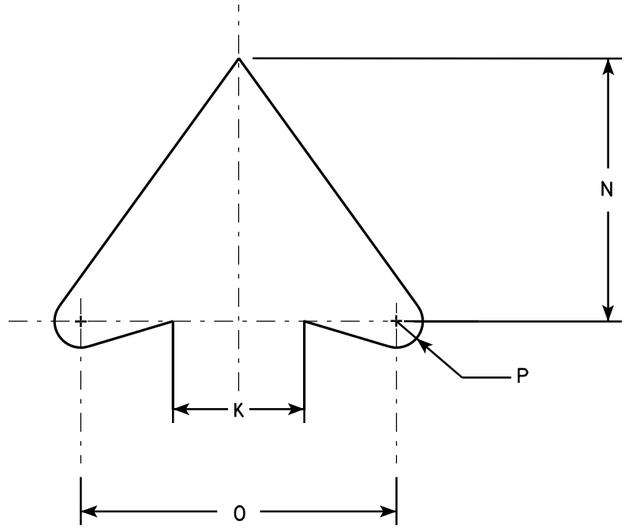
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 821	E



R3-2

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. Border & Arrow are non reflective black, the circle with diagonal bar is reflective red.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2	10 1/2	4	7 1/2	2	1 1/2	2 1/2	45°	8 1/2	5	6	1/2											4.0
2S	24		1 1/8	3/8	1/2	10 1/2	4	7 1/2	2	1 1/2	2 1/2	45°	8 1/2	5	6	1/2											4.0
2M	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45°	12 3/4	7 1/2	9	3/4											9.0
3	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45°	12 3/4	7 1/2	9	3/4											9.0
4	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45°	12 3/4	7 1/2	9	3/4											9.0
5	48		2 1/4	3/4	1	21	8	15	4	3	5	45°	17	10	12	1											16.0

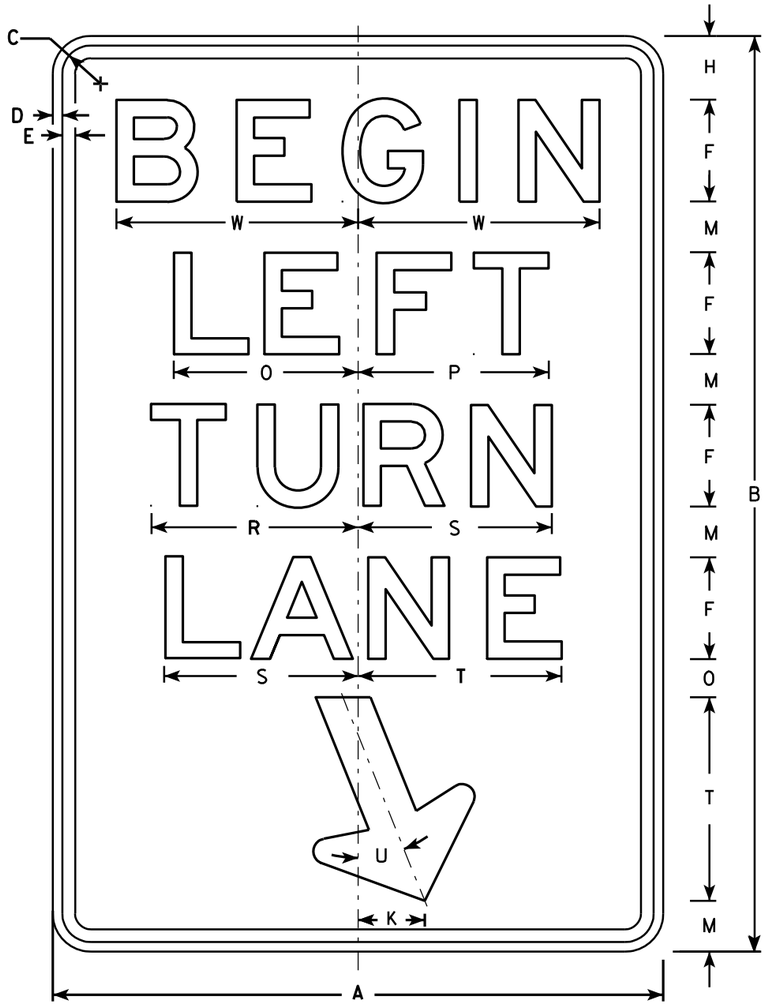
STANDARD SIGN
R3-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/08/10 PLATE NO. R3-2.10

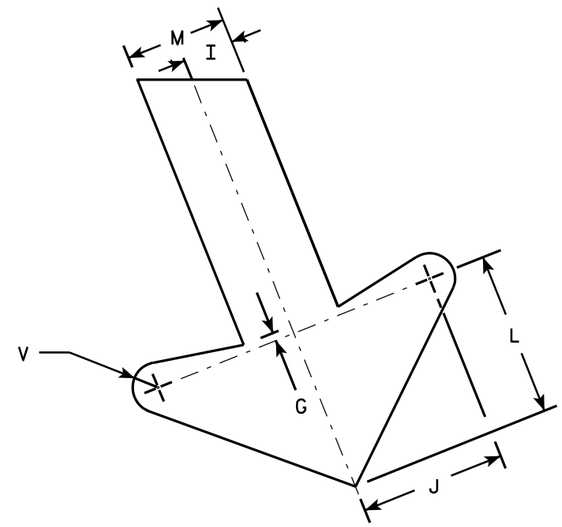
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 822	E



R3-20L

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - E
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	36	1 1/8	3/8	1/2	4	1/4	2 1/2	1	2 7/8	2 5/8	3 1/4	2	1 1/2	7 1/4	7 1/2		8 1/8	7 5/8	8	22°	1/2	9 1/2				6.0
2M	24	36	1 1/8	3/8	1/2	4	1/4	2 1/2	1	2 7/8	2 5/8	3 1/4	2	1 1/2	7 1/4	7 1/2		8 1/8	7 5/8	8	22°	1/2	9 1/2				6.0
3	36	54	1 3/4	1/2	5/8	6	3/8	3 3/4	1 1/2	4 1/4	4	4 7/8	3	2 1/4	10 7/8	11 1/4		12 1/4	11 1/2	12	22°	3/4	13 1/4				13.5
4																											
5																											

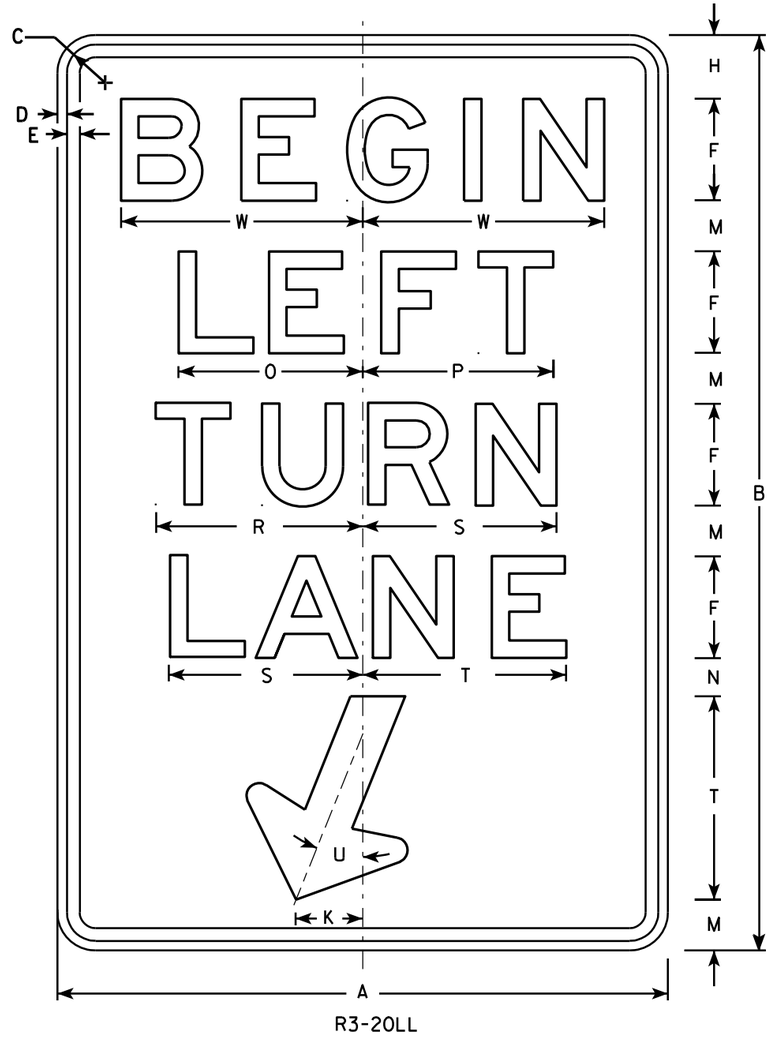
STANDARD SIGN
R3-20L

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/18/10 PLATE NO. R3-20L.7

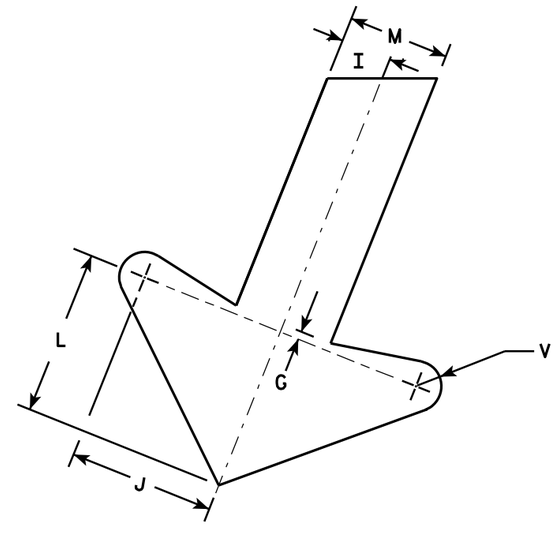
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 823 | E



R3-20LL

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - E
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	36	1 1/8	3/8	1/2	4	1/4	2 1/2	1	2 7/8	2 5/8	3 1/4	2	1 1/2	7 1/4	7 1/2		8 1/8	7 5/8	8	22°	1/2	9 1/2				6.0
2M	24	36	1 1/8	3/8	1/2	4	1/4	2 1/2	1	2 7/8	2 5/8	3 1/4	2	1 1/2	7 1/4	7 1/2		8 1/8	7 5/8	8	22°	1/2	9 1/2				6.0
3	36	54	1 3/4	1/2	5/8	6	3/8	3 3/4	1 1/2	4 1/4	4	4 7/8	3	2 1/4	10 7/8	11 1/4		12 1/4	11 1/2	12	22°	3/4	13 1/4				13.5
4																											
5																											

STANDARD SIGN
R3-20LL

WISCONSIN DEPT OF TRANSPORTATION

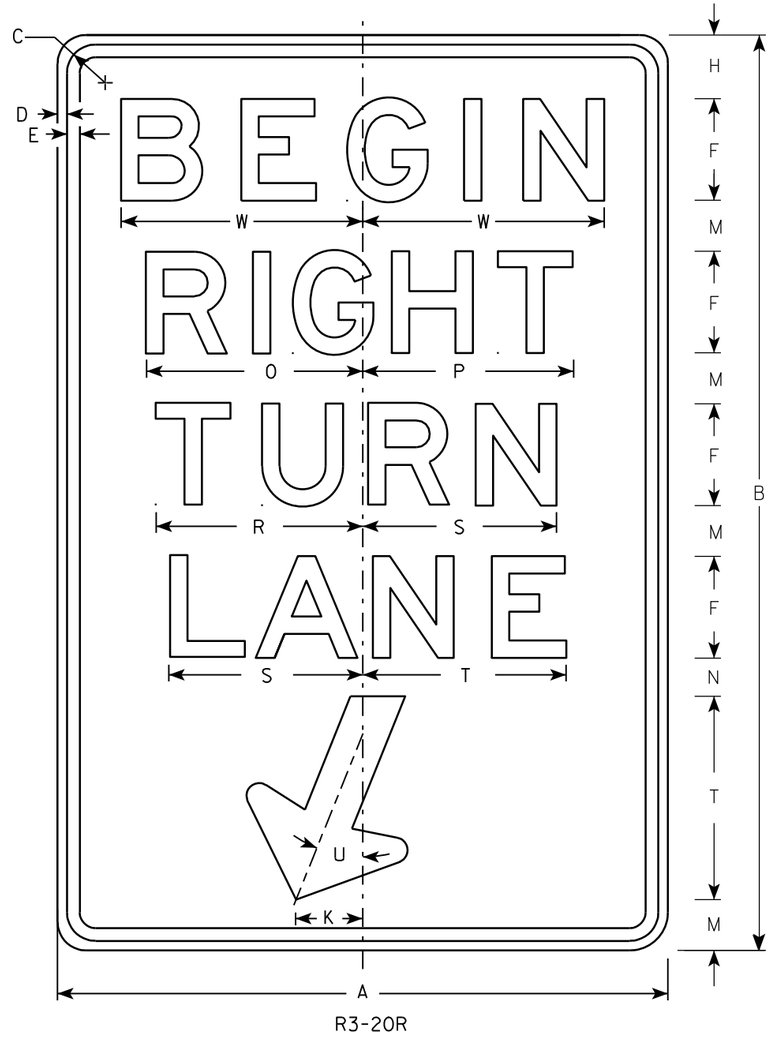
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/18/10 PLATE NO. R3-20LL.1

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 824	E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\R320LL.DGN PLOT DATE : 15-OCT-2010 14:38 PLOT BY : dotsja PLOT NAME : PLOT SCALE : 5.959043:1.000000

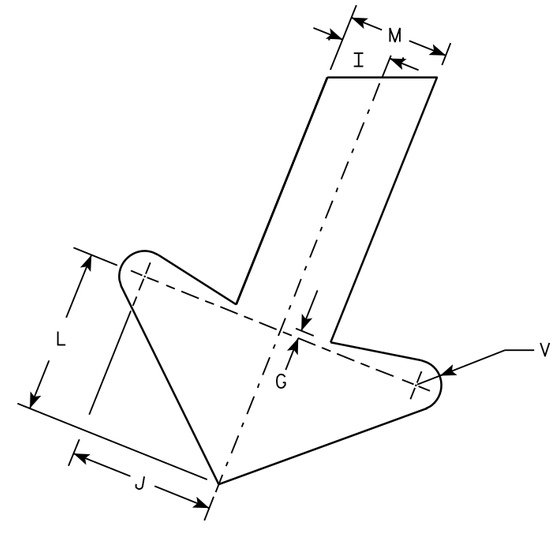
WISDOT/CADDS SHEET 42



R3-20R

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - E
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	36	1 1/8	3/8	1/2	4	1/4	2 1/2	1	2 7/8	2 5/8	3 1/4	2	1 1/2	8 1/2	8 1/4		8 1/8	7 5/8	8	22°	1/2	9 1/2				6.0
2M	24	36	1 1/8	3/8	1/2	4	1/4	2 1/2	1	2 7/8	2 5/8	3 1/4	2	1 1/2	8 1/2	8 1/4		8 1/8	7 5/8	8	22°	1/2	9 1/2				6.0
3	36	54	1 3/4	1/2	5/8	6	3/8	3 3/4	1 1/2	4 1/4	4	4 7/8	3	2 1/4	12 3/4	12 1/2		12 1/4	11 1/2	12	22°	3/4	13 1/4				13.5
4																											
5																											

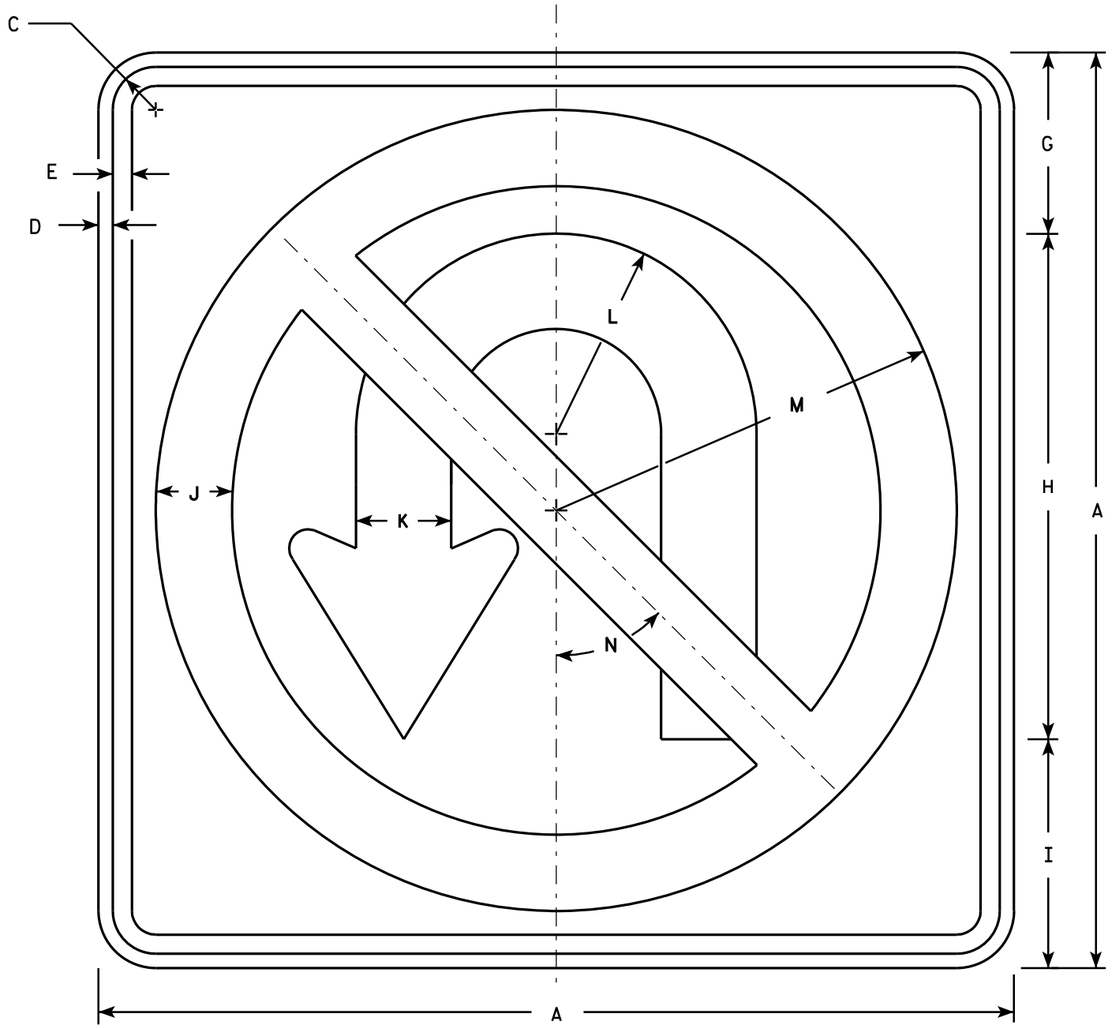
STANDARD SIGN
R3-20R

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/18/10 PLATE NO. R3-20R.6

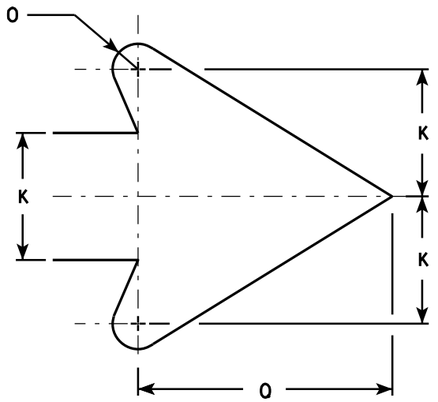
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 825 | E



R3-4

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. Border & Arrow are non reflective black, the circle with diagonal bar is reflective red.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	O	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24		1 1/8	3/8	1/2		4 3/4	13 1/4	6	2	2 1/2	5 1/4	10 1/2	45°	1/2		5										4.0
2M	36		1 5/8	5/8	3/4		7 1/8	19 7/8	9	3	3 3/4	7 7/8	15 3/4	45°	3/4		7 5/8										9.0
3	36		1 5/8	5/8	3/4		7 1/8	19 7/8	9	3	3 3/4	7 7/8	15 3/4	45°	3/4		7 5/8										9.0
4	36		1 5/8	5/8	3/4		7 1/8	19 7/8	9	3	3 3/4	7 7/8	15 3/4	45°	3/4		7 5/8										9.0
5	36		1 5/8	5/8	3/4		7 1/8	19 7/8	9	3	3 3/4	7 7/8	15 3/4	45°	3/4		7 5/8										9.0

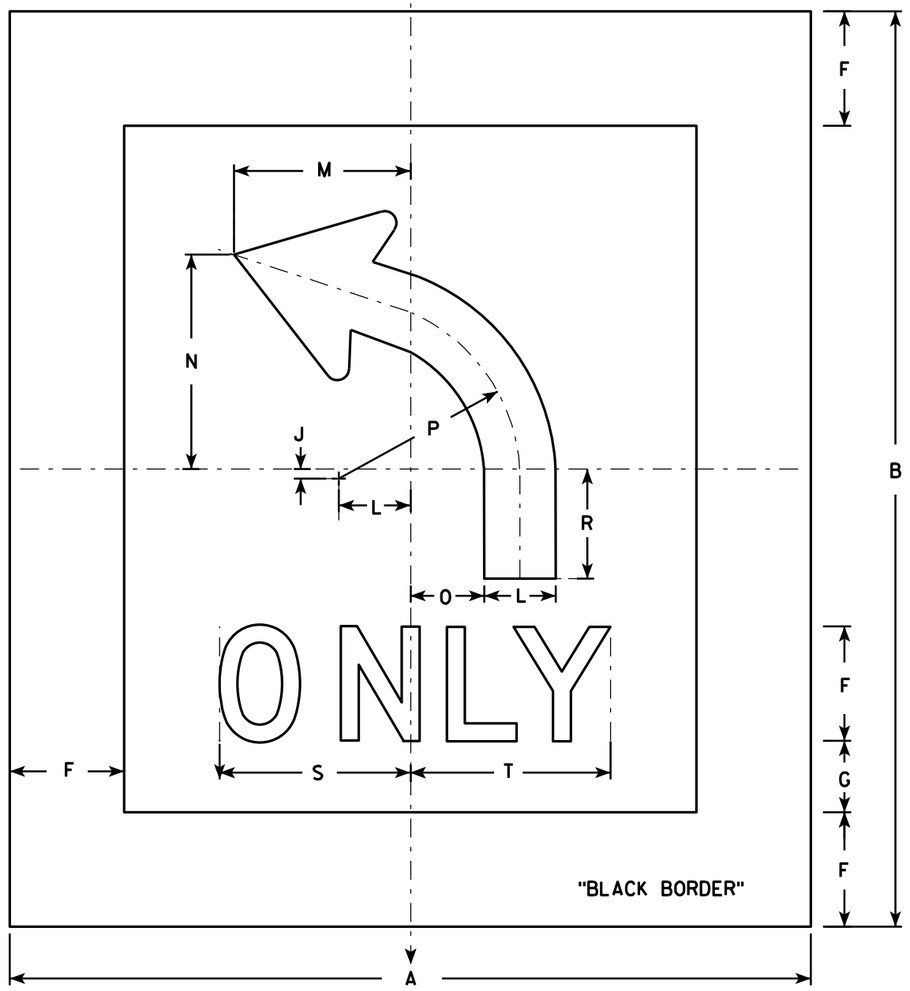
STANDARD SIGN
R3-4

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/08/10 PLATE NO. R3-4.11

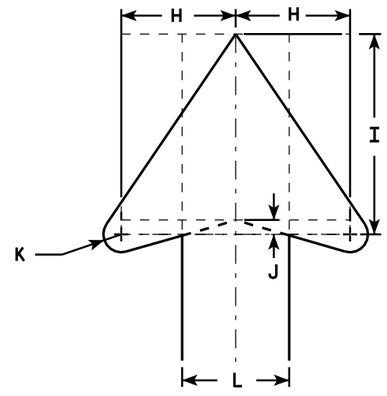
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 826	E



R3-5L

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood. When base material is metal, the corners shall be rounded.
5. R3-5R is the same as R3-5L except curved portion of arrow points right.
6. The 6" border is non-reflective black.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	42	48				6	3 3/4	4	7	1/2	5/8	3 3/4	9 1/4	11 1/4	3 7/8	9 1/2		5 3/4	10	10 1/2							1.26
2M	42	48				6	3 3/4	4	7	1/2	5/8	3 3/4	9 1/4	11 1/4	3 7/8	9 1/2		5 3/4	10	10 1/2							1.26
3																											
4																											
5																											

STANDARD SIGN
R3-5

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/24/11 PLATE NO. R3-5.6

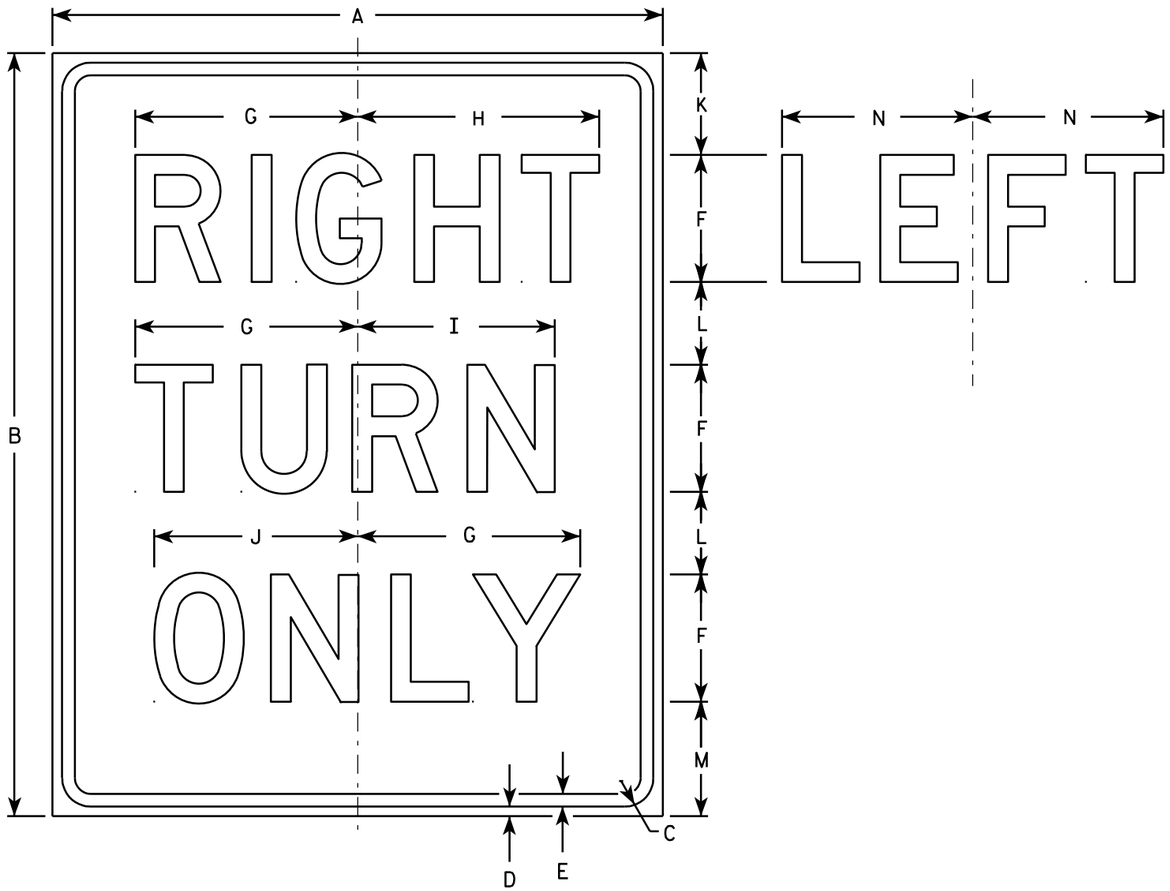
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 827 | E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\R35.DGN PLOT DATE : 24-FEB-2011 14:53 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 7.945391:1.000000

WISDOT/CADDS SHEET 42

7

7



R3-53R

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. R3-53L same as R3-53R except LEFT is substituted for RIGHT.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	30	1 1/8	3/8	1/2	5	8 3/4	9 1/2	7 3/4	8	4	3 1/4	4 1/2	7 1/2													5.0
2M	24	30	1 1/8	3/8	1/2	5	8 3/4	9 1/2	7 3/4	8	4	3 1/4	4 1/2	7 1/2													5.0
3	24	30	1 1/8	3/8	1/2	5	8 3/4	9 1/2	7 3/4	8	4	3 1/4	4 1/2	7 1/2													5.0
4																											
5																											

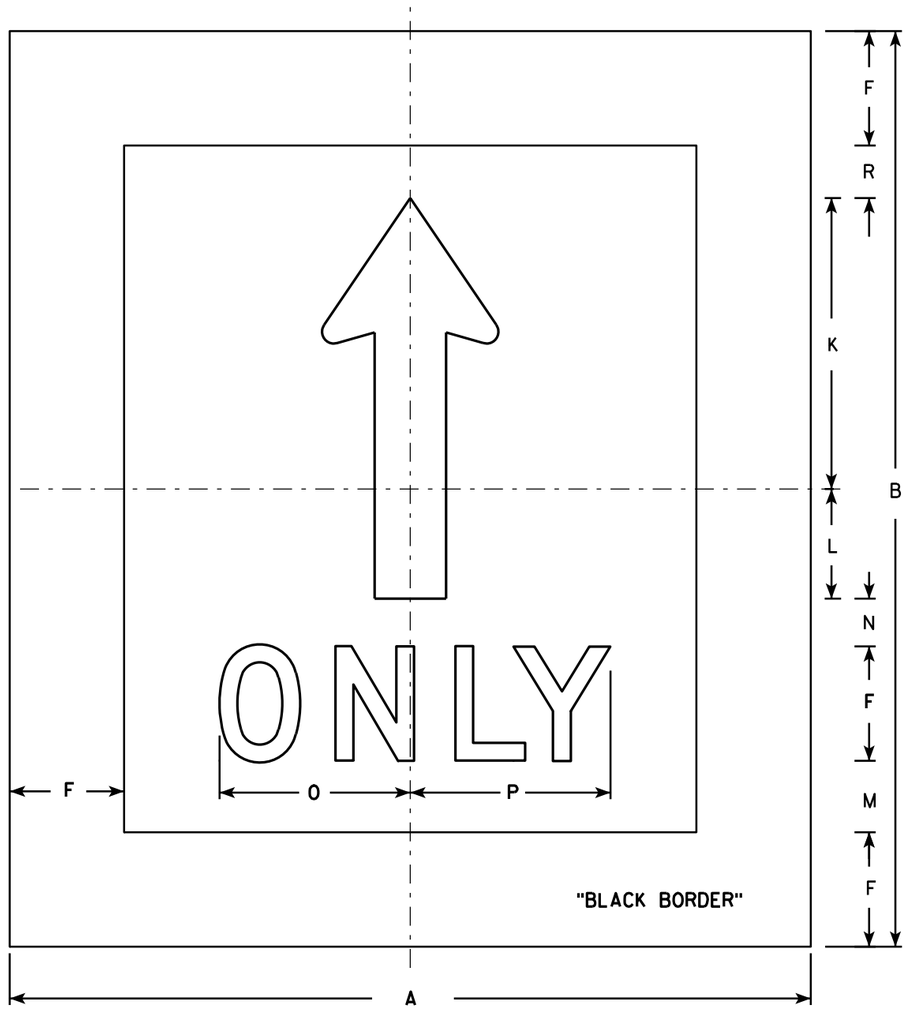
STANDARD SIGN
R3-53

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/24/2011 PLATE NO. R3-53.8

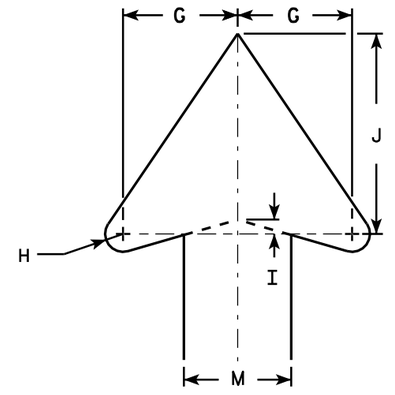
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 828	E



R3-5A

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood. When base material is metal, the corners shall be rounded.
5. The 6" border is non-reflective black.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	42	48				6	4	5/8	1/2	7	15 1/4	5 3/4	3 3/4	2 1/2	10	10 1/2		2 3/4									1.26
2M	42	48				6	4	5/8	1/2	7	15 1/4	5 3/4	3 3/4	2 1/2	10	10 1/2		2 3/4									1.26
3																											
4																											
5																											

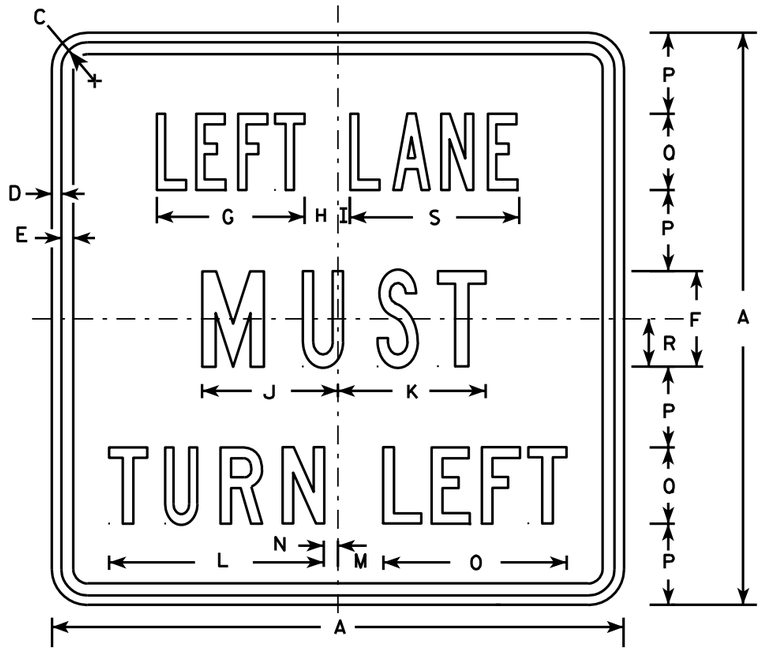
STANDARD SIGN
R3-5A

WISCONSIN DEPT OF TRANSPORTATION

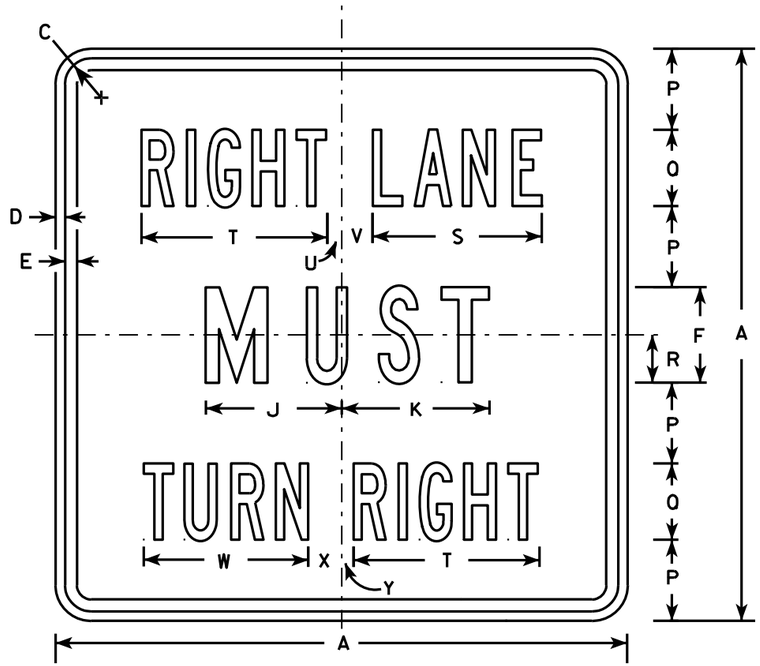
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/24/11 PLATE NO. R3-5A.5

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 829	E



R3-7L



R3-7R

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - Line 1 is Series B.
   Line 2 is Series C.
   Line 3 on plate R3-7R is Series B and Series C on plate R3-7L.
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30		1 3/8	1/2	5/8	5	7 3/4	1 3/4	5/8	7 1/8	7 3/4	11 1/4	2 3/8	3/4	9 5/8	4 1/4	4	2 1/2	8 7/8	9 3/4	3/4	1 5/8	8 5/8	1 5/8	5/8		6.25
2S	30		1 3/8	1/2	5/8	5	7 3/4	1 3/4	5/8	7 1/8	7 3/4	11 1/4	2 3/8	3/4	9 5/8	4 1/4	4	2 1/2	8 7/8	9 3/4	3/4	1 5/8	8 5/8	1 5/8	5/8		6.25
2M	30		1 3/8	1/2	5/8	5	7 3/4	1 3/4	5/8	7 1/8	7 3/4	11 1/4	2 3/8	3/4	9 5/8	4 1/4	4	2 1/2	8 7/8	9 3/4	3/4	1 5/8	8 5/8	1 5/8	5/8		6.25
3	36		1 5/8	5/8	3/4	6	9 5/8	2	1 1/8	8 3/4	9	13 1/2	3 7/8	1 1/2	12 1/2	5	5	3	10 5/8	12	7/8	2 1/4	10 5/8	2 1/8	1		9.00
4	48		2 1/4	3/4	1	8	13 1/2	2 3/8	1 1/2	11 1/2	11 7/8	17 3/4	3 5/8	2 1/2	16 3/8	6 1/2	7	4	14 3/8	16 7/8	5/8	3 1/4	15 1/8	2 3/4	1 1/8		16.00
5																											

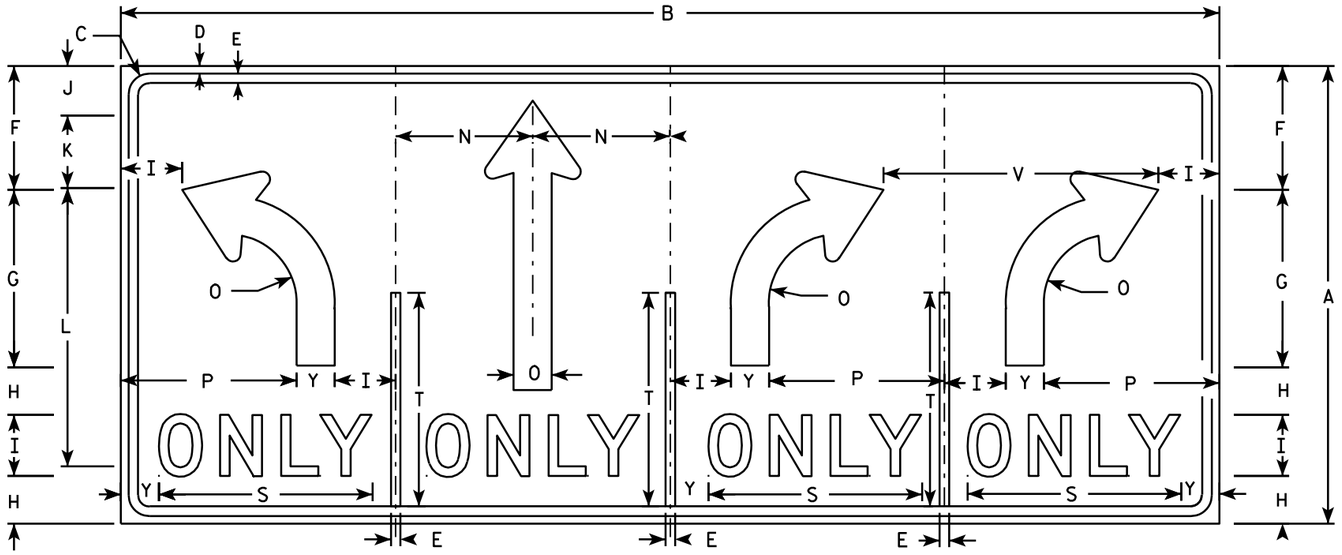
STANDARD SIGN
R3-7L & R3-7R

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/18/2011 PLATE NO. R3-7.3

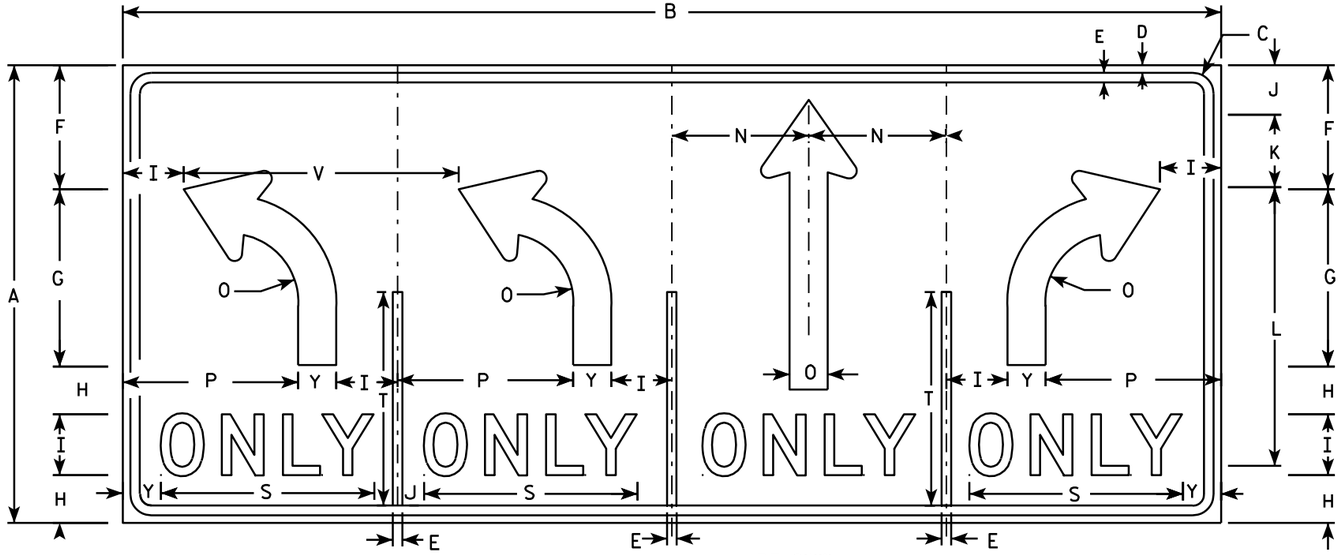
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 830	E



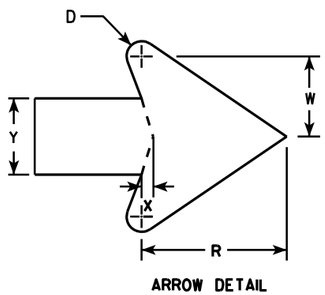
R3-8XX

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - WHITE
   Message - BLACK
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



R3-8WW



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	72	1 3/8	1/2	5/8	8 1/8	11 5/8	3 1/8	4	3 1/4	4 3/4	18 1/4		9	4 1/2	11 1/2		4 3/4	14	14	13 1/4	18	2 5/8	3/8	2 1/2		15.0
2M	30	72	1 3/8	1/2	5/8	8 1/8	11 5/8	3 1/8	4	3 1/4	4 3/4	18 1/4		9	4 1/2	11 1/2		4 3/4	14	14	13 1/4	18	2 5/8	3/8	2 1/2		15.0
3																											
4	48	108	2 1/4	3/4	1	13 1/4	18 1/2	5 1/8	6	8 1/4	7 5/8	29 1/4		14	6 3/4	17 1/4		7 1/8	20 5/8	22 3/8	19 7/8	27	4	5/8	4		36.0
5	48	108	2 1/4	3/4	1	13 1/4	18 1/2	5 1/8	6	8 1/4	7 5/8	29 1/4		14	6 3/4	17 1/4		7 1/8	20 5/8	22 3/8	19 7/8	27	4	5/8	4		36.0

STANDARD SIGN
R3-8WW & R3-8XX

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/24/2011 PLATE NO. R3-8WW.1

PROJECT NO:

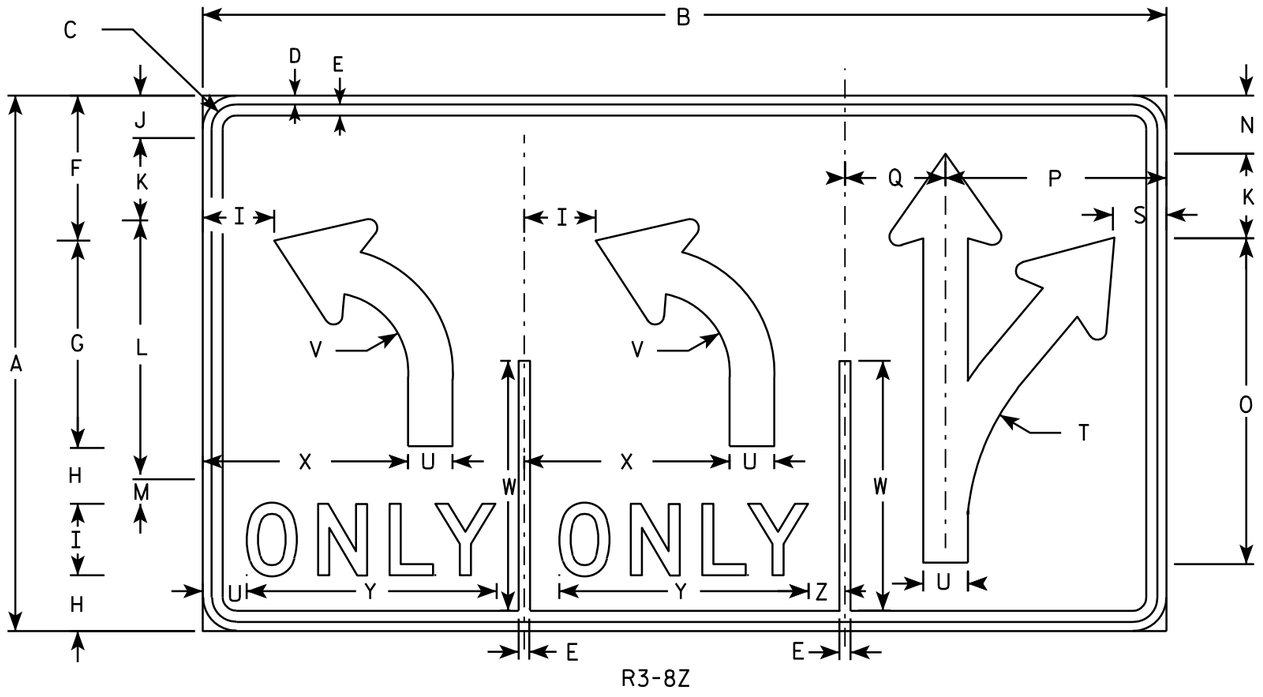
SHEET NO: 831 E

FILE NAME : c:\CAEFiles\Projects\tr_stdplate\R38WW.dgn PLOT DATE : 03-FEB-2012 10:14 PLOT BY : mscj9h

WISDOT/CADDS SHEET 42

7

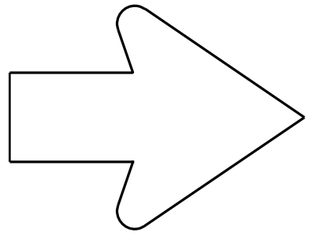
7



R3-8Z

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - WHITE
   Message - BLACK
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



SEE R3-8 FOR ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	54	1 3/8	1/2	5/8	8 1/8	11 5/8	3 1/8	4	2 1/4	4 3/4	14 1/4	1 5/8	3 1/4	18 1/4	12 3/8	5 5/8		3	13 1/4	2 1/2	4 1/2	14	11 1/2	14	2	11.25
2M	30	54	1 3/8	1/2	5/8	8 1/8	11 5/8	3 1/8	4	2 1/4	4 3/4	14 1/4	1 5/8	3 1/4	18 1/4	12 3/8	5 5/8		3	13 1/4	2 1/2	4 1/2	14	11 1/2	14	2	11.25
3																											
4	48	84	2 1/4	3/4	1	13 1/4	18 1/2	5 1/8	6	3 1/2	7	29 1/8	2 7/8	5 1/4	29 1/8	18 5/8	8 3/4		4 3/8	21 7/8	3 3/4	7 1/4	22 3/8	17 1/4	20 5/8	3 1/4	28.0
5	48	84	2 1/4	3/4	1	13 1/4	18 1/2	5 1/8	6	3 1/2	7	29 1/8	2 7/8	5 1/4	29 1/8	18 5/8	8 3/4		4 3/8	21 7/8	3 3/4	7 1/4	22 3/8	17 1/4	20 5/8	3 1/4	28.0

STANDARD SIGN
R3-8Z

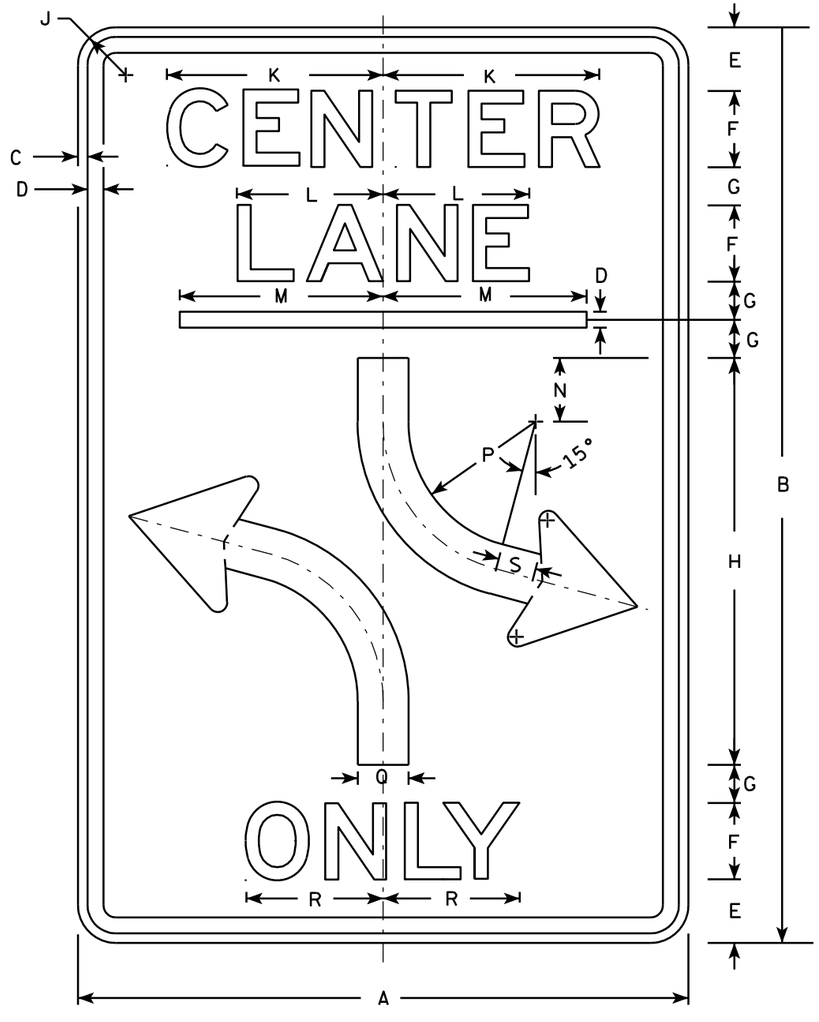
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/24/2011 PLATE NO. R3-8Z.2

PROJECT NO:

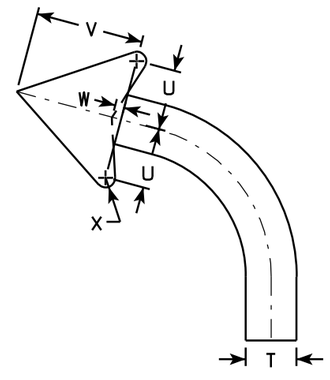
SHEET NO: 832 E



R3-9B

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - E
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	36	3/8	1/2	2 1/2	3	1 1/2	16		1 1/2	8 1/2	5 3/4	8	2 1/2		6	2	5 1/8	1 1/2		2 3/8	4 3/8	3/8				6.0
2M	24	36	3/8	1/2	2 1/2	3	1 1/2	16		1 1/2	8 1/2	5 3/4	8	2 1/2		6	2	5 1/8	1 1/2		2 3/8	4 3/8	3/8				6.0
3	36	48	5/8	7/8	3 1/2	5	1 1/2	20		2 1/4	14 1/8	9 1/2	12	3		4	3	9 7/8	2		3 1/2	6 1/8	1/2				12.0
4																											
5																											

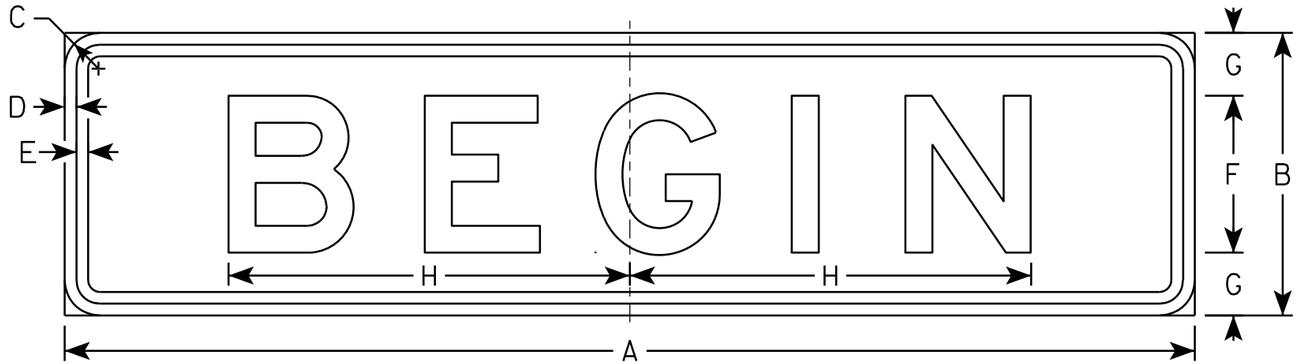
STANDARD SIGN
R3-9B

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/24/2011 PLATE NO. R3-9B.5

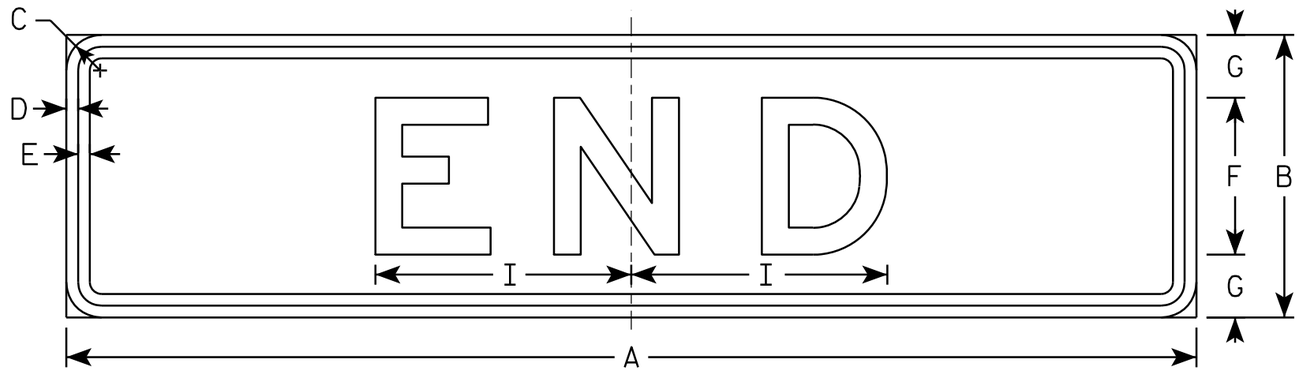
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 833 | E



R3-9C

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - E
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



R3-9D

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	6	1 1/8	3/8	3/8	3	1 1/2	7 3/4	4 7/8																		1.0
2M	24	6	1 1/8	3/8	3/8	3	1 1/2	7 3/4	4 7/8																		1.0
3	36	9	1 1/8	3/8	3/8	5	2	12 3/4	8 1/8																		1.86
4																											
5																											

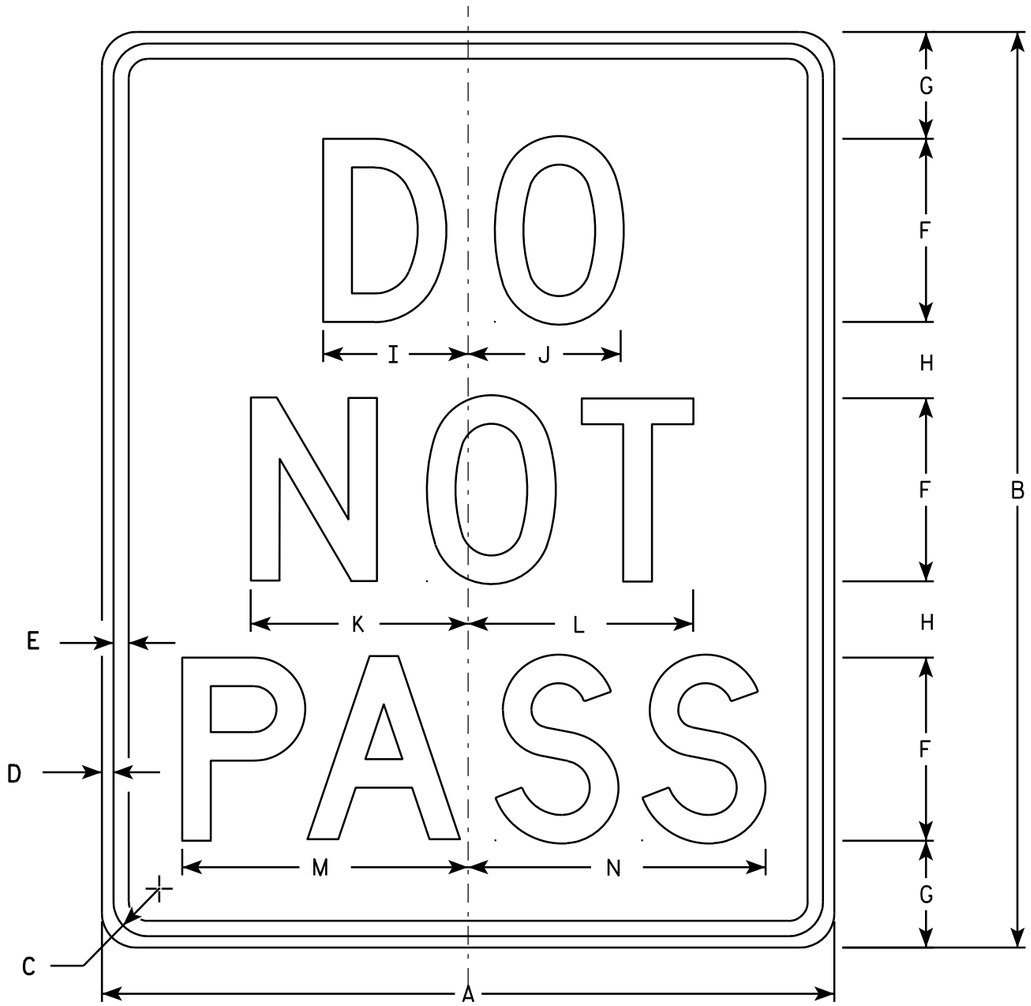
STANDARD SIGN
R3-9C & R3-9D

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/24/2011 PLATE NO. R3-9C.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 834	E



R4-1

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	18	24	1 1/8	3/8	1/2	4	3 1/2	2 1/2	3 1/8	3 1/4	4 3/4	4 7/8	6 1/4	6 1/2													3.0
2S	24	30	1 1/8	3/8	1/2	6	3 1/2	2 1/2	4 3/4	5	7 1/8	7 3/8	9 3/8	9 3/4													5.0
2M	24	30	1 1/8	3/8	1/2	6	3 1/2	2 1/2	4 3/4	5	7 1/8	7 3/8	9 3/8	9 3/4													5.0
3																											
4	36	48	1 5/8	5/8	3/4	8	7	5	6 1/4	6 5/8	9 1/2	9 3/4	12 1/2	13													12.0
5	48	60	2 1/4	3/4	1	10	8	7	7 3/4	8 3/8	11 7/8	12 1/4	15 5/8	16 1/4													20.0

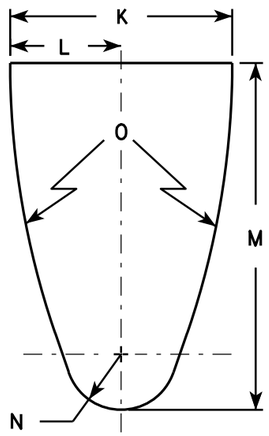
STANDARD SIGN
R4-1

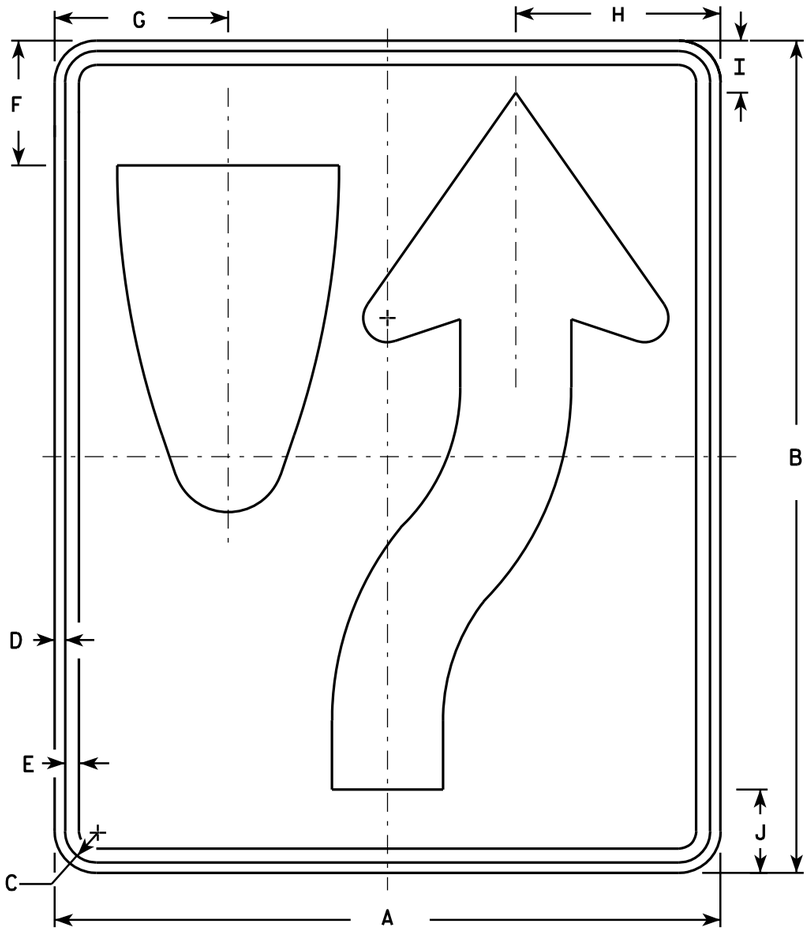
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/25/2011 PLATE NO. R4-1.7

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 835 | E

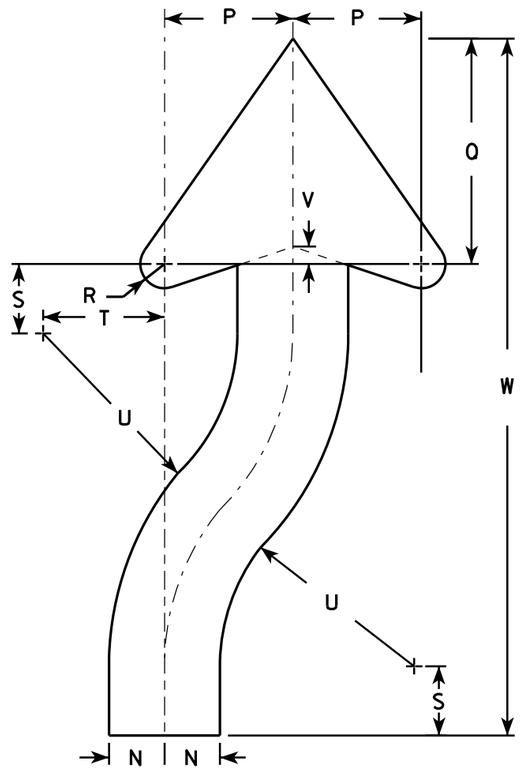




R4-7

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition. material is plywood but borders shall be rounded
2. Color:
   Background - White
   Message - Black
3. Corners may be square or rounded when base as shown. When base material is metal, the corners and borders shall be rounded.
4. R4-8 is the same as R4-7 except Legend is reversed.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	18	24	1 1/8	3/8	1/2	3 3/8	4 3/4	5 1/2	1 3/8	2 1/4	6	3	9 3/8	1 1/2	22 1/2	3 1/2	6 1/8	5/8	1 7/8	3 1/4	6 3/4	1/2	20 3/8				3.0
2S	24	30	1 1/8	3/8	1/2	4 1/2	6 1/4	7 3/8	1 7/8	3	8	4	12 1/2	2	30	4 5/8	8 1/8	7/8	2 1/2	4 3/8	9	5/8	25 1/8				5.0
2M	24	30	1 1/8	3/8	1/2	4 1/2	6 1/4	7 3/8	1 7/8	3	8	4	12 1/2	2	30	4 5/8	8 1/8	7/8	2 1/2	4 3/8	9	5/8	25 1/8				5.0
3	36	48	1 3/4	1/2	5/8	6 3/4	9 3/8	11 1/8	2 7/8	4 1/2	12	6	18 3/4	3	45	6 7/8	12 1/4	1 1/4	3 3/4	6 5/8	13 1/2	1	40 3/4				12.0
4	36	48	1 3/4	1/2	5/8	6 3/4	9 3/8	11 1/8	2 7/8	4 1/2	12	6	18 3/4	3	45	6 7/8	12 1/4	1 1/4	3 3/4	6 5/8	13 1/2	1	40 3/4				12.0
5	48	60	2 1/4	3/4	1	9	12 1/2	14 3/4	3 3/4	6	16	8	25	4	60	9 1/4	16 1/4	1 5/8	5	8 3/4	18	1 1/4	50 1/4				20.0

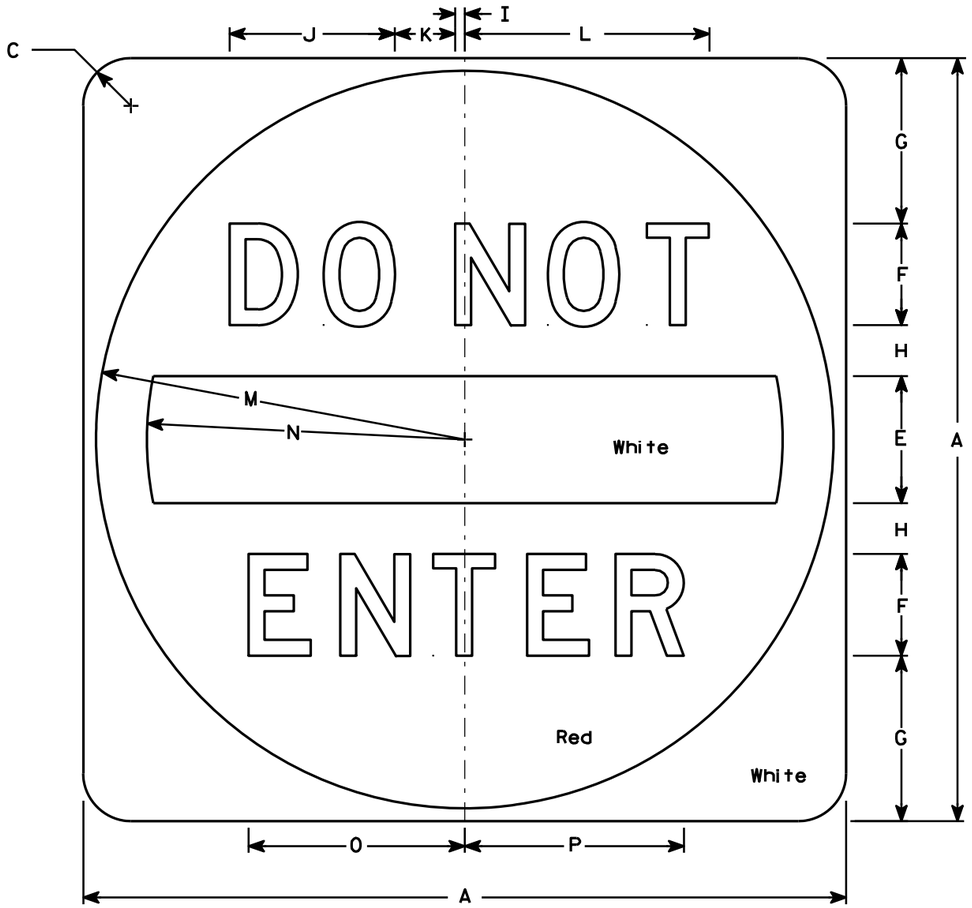
STANDARD SIGN
R4-7 & R4-8

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 3/25/2011 PLATE NO. R4-7.8

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 836	E



R5-1

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - See detail
   Message - White - Type H Reflective
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but when base material is metal, the cornors shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30		1 7/8		5	4	6 1/2	2	3/8	6 1/2	2 3/8	9 5/8	14 1/2	12 1/2	8 1/2	8 5/8											6.26
2M	36		2 1/4		6	5	7 1/2	2 1/2	1/2	8 1/8	3	12 1/8	17 1/2	15	10 5/8	10 3/4											9.0
3	36		2 1/4		6	5	7 1/2	2 1/2	1/2	8 1/8	3	12 1/8	17 1/2	15	10 5/8	10 3/4											9.0
4	36		2 1/4		6	5	7 1/2	2 1/2	1/2	8 1/8	3	12 1/8	17 1/2	15	10 5/8	10 3/4											9.0
5	48		3		8	6	11	3	5/8	9 3/4	3 5/8	14 1/2	23 1/2	20	12 3/4	12 7/8											16.0

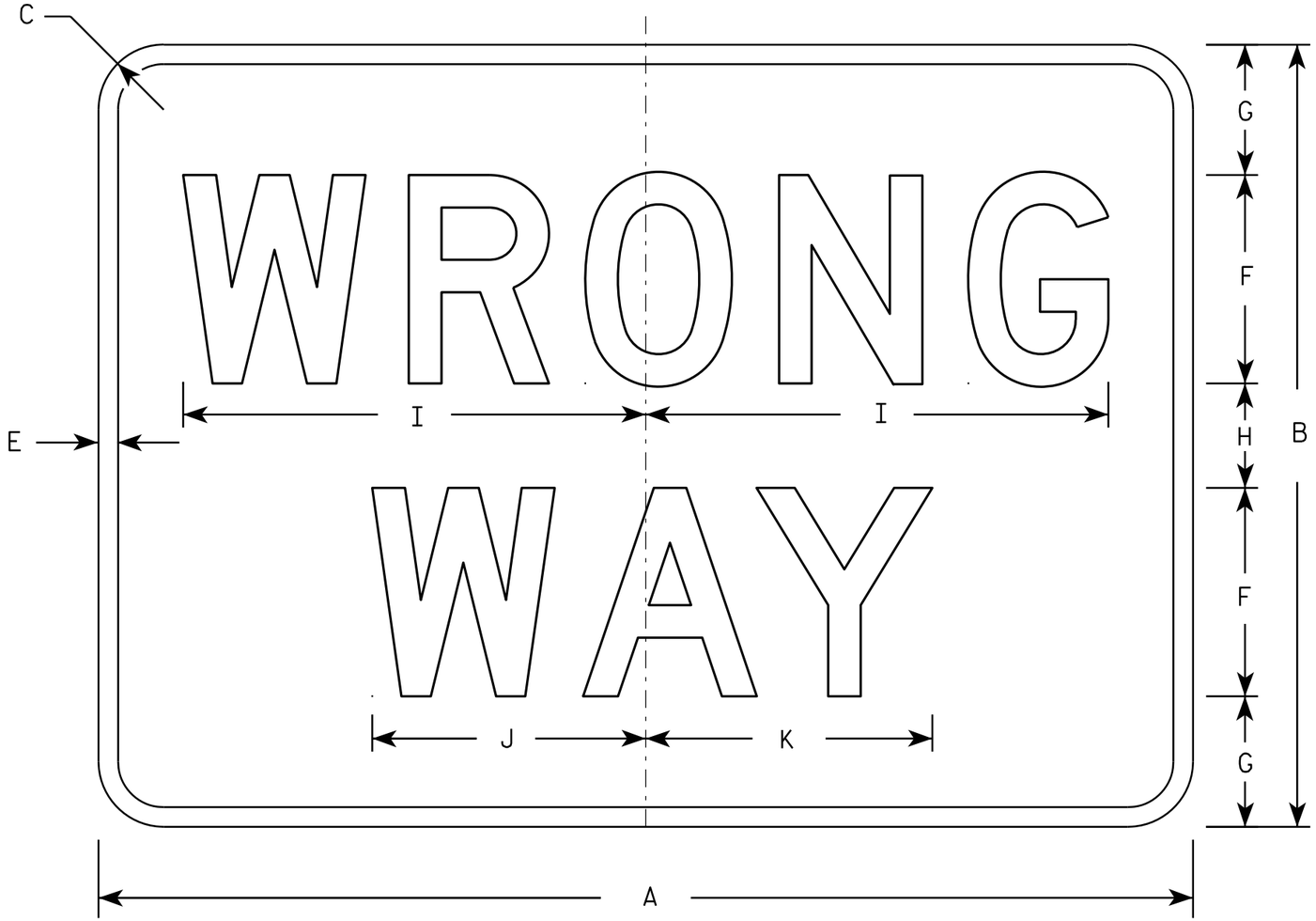
STANDARD SIGN
R5-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/17/10 PLATE NO. R5-1.15

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 837 | E



R5-1A

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Red
   Message - White
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30	18	1 1/2		1/2	5	3	2	11	6 1/2	6 7/8																3.75
2S	36	24	2		5/8	6	4 1/2	3	13 1/4	7 7/8	8 1/4																6.00
2M	42	30	2 1/2		3/4	8	5	4	17 3/4	10 1/2	11																8.75
3	42	30	2 1/2		3/4	8	5	4	17 3/4	10 1/2	11																8.75
4	42	30	2 1/2		3/4	8	5	4	17 3/4	10 1/2	11																8.75
5	42	30	2 1/2		3/4	8	5	4	17 3/4	10 1/2	11																8.75

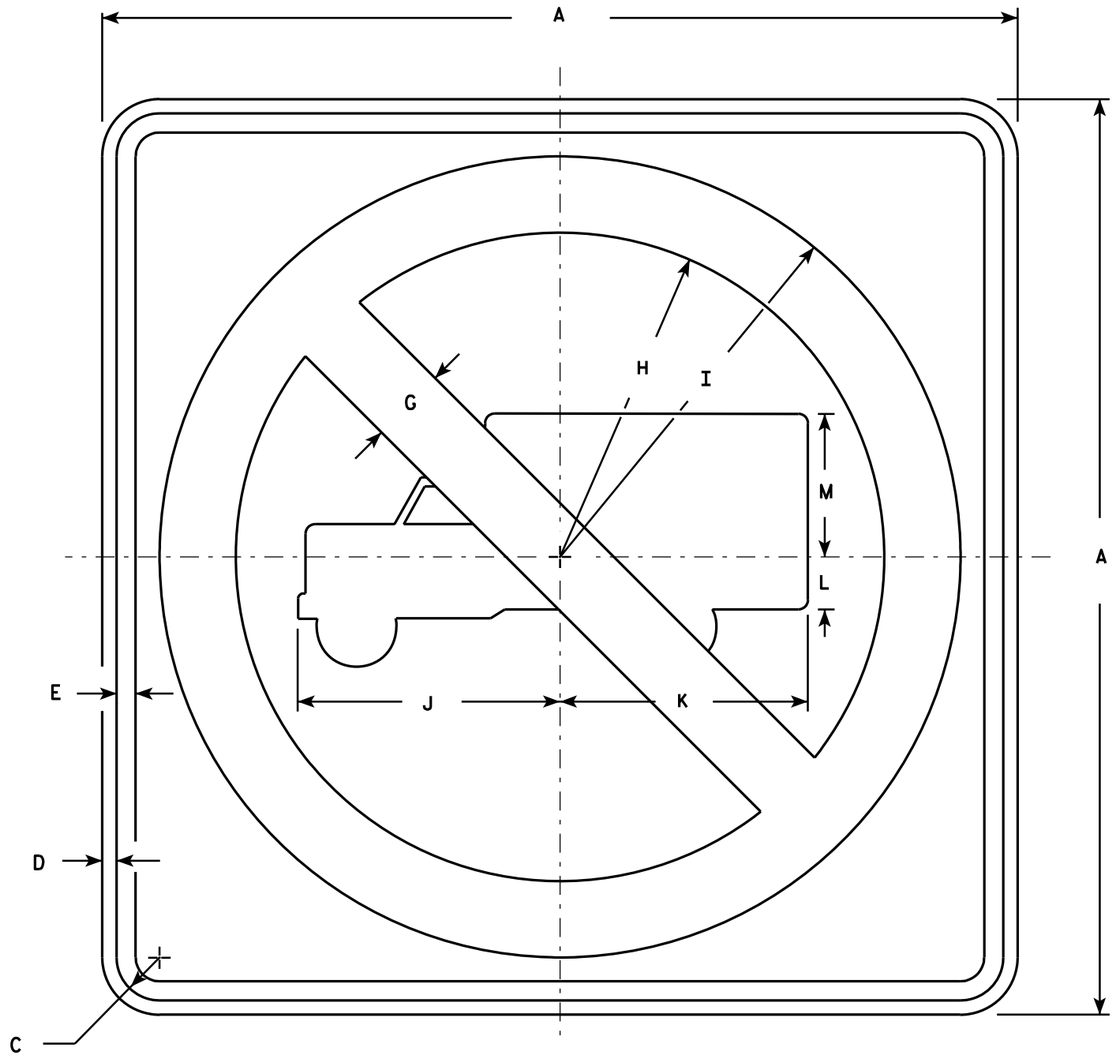
STANDARD SIGN
R5-1A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/17/10 PLATE NO. R5-1A.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 838	E



R5-2

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - See Note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. Circle & Diagonal - Reflective red.
   Truck Symbol & Border - Non-reflective black.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24		1 1/8	3/8	1/2		2	8 1/2	10 1/2	6 7/8	6 1/2	1 3/8	3 3/4														4.0
2M	24		1 1/8	3/8	1/2		2	8 1/2	10 1/2	6 7/8	6 1/2	1 3/8	3 3/4														4.0
3	30		1 3/8	1/2	5/8		2 1/2	10 5/8	13 1/8	8 1/2	8 1/8	1 5/8	4 3/4														6.25
4	36		1 5/8	5/8	3/4		3	12 3/4	15 3/4	10 1/4	9 3/4	2	5 3/4														9.0
5	48		2 1/4	3/4	1		4	17	21	13 5/8	13	2 5/8	7 5/8														16.0

STANDARD SIGN
R5-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/29/2011 PLATE NO. R5-2.6

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 839	E



R5-57

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - Lines 1, 2, and 5 are Series C.
   Lines 3 and 4 are Series B.
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S																											
2M																											
3																											
4	36		1 5/8	5/8	3/4	4	3	2	3 1/2	14 1/4	14 7/8	11	11 1/2	4 3/4	1 3/4	9		1 3/8	10	11	2 1/2	1 3/4	15 1/2	13	13 5/8		9.0
5	36		1 5/8	5/8	3/4	4	3	2	3 1/2	14 1/4	14 7/8	11	11 1/2	4 3/4	1 3/4	9		1 3/8	10	11	2 1/2	1 3/4	15 1/2	13	13 5/8		9.0

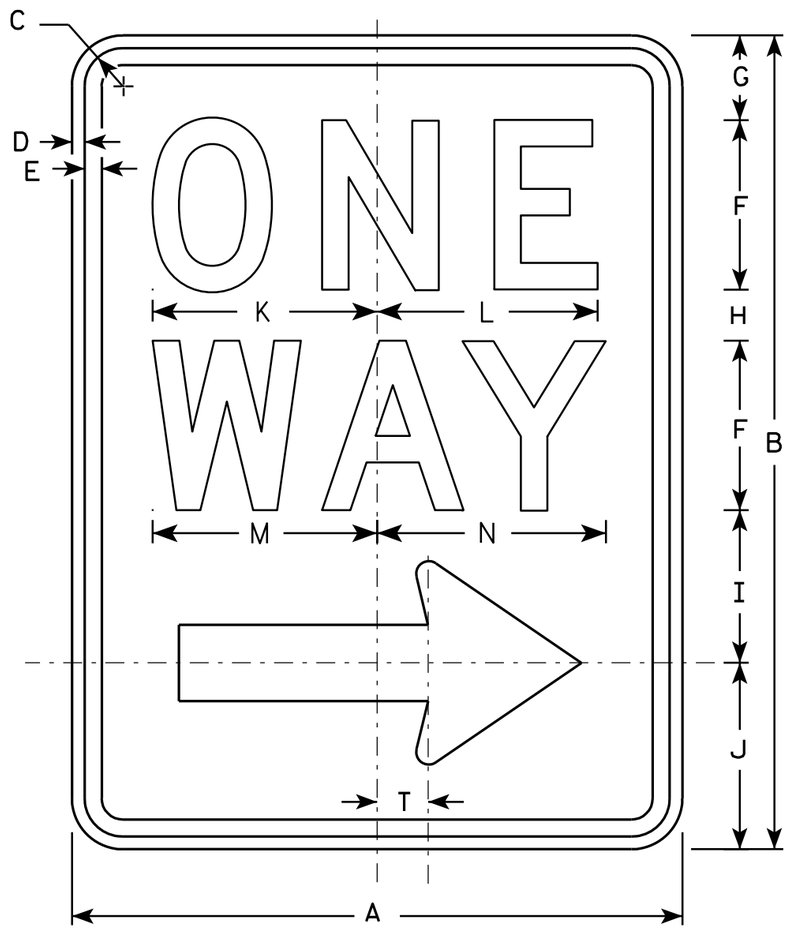
STANDARD SIGN
R5-57

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/29/2011 PLATE NO. R5-57.10

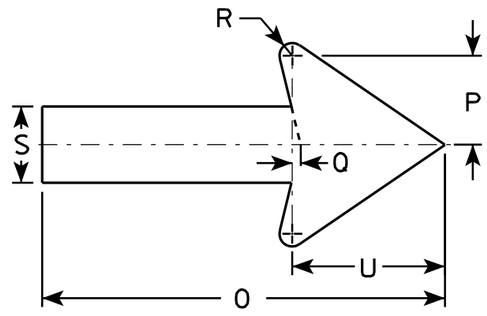
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 840 | E



R6-2R

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. R6-2L same as R6-2R except arrow points to the left.



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	O	R	S	T	U	V	W	X	Y	Z
1	18	24	1 1/8	3/8	1/2	5	2 1/2	1 1/2	4 1/2	5 1/2	6 5/8	6 1/2	6 5/8	6 3/4	11 7/8	2 5/8	1/4	3/8	2 1/4	1 1/2	4 1/2					
2S	24	30	1 1/8	3/8	1/2	6	3	2 1/2	5 1/2	7	8 1/8	8 1/8	8 1/2	8 5/8	16	3 1/2	3/8	1/2	3	2	6					
2M	30	36	1 3/8	1/2	5/8	8	2 1/2	2 5/8	6 7/8	8	10 1/2	10 1/2	11 1/4	11 1/4	20	4 3/8	1/2	5/8	3 3/4	2 1/2	7 1/2					
3	36	48	1 7/8	1/2	5/8	10	5 1/4	3 1/4	9	10 1/2	12 3/4	12 3/4	13 1/4	13 1/2	24	5 5/8	1/2	3/4	4 3/4	3	9					
4	36	48	1 7/8	1/2	5/8	10	5 1/4	3 1/4	9	10 1/2	12 3/4	12 3/4	13 1/4	13 1/2	24	5 5/8	1/2	3/4	4 3/4	3	9					
5																										

STANDARD SIGN
R6-2 R&L

WISCONSIN DEPT OF TRANSPORTATION

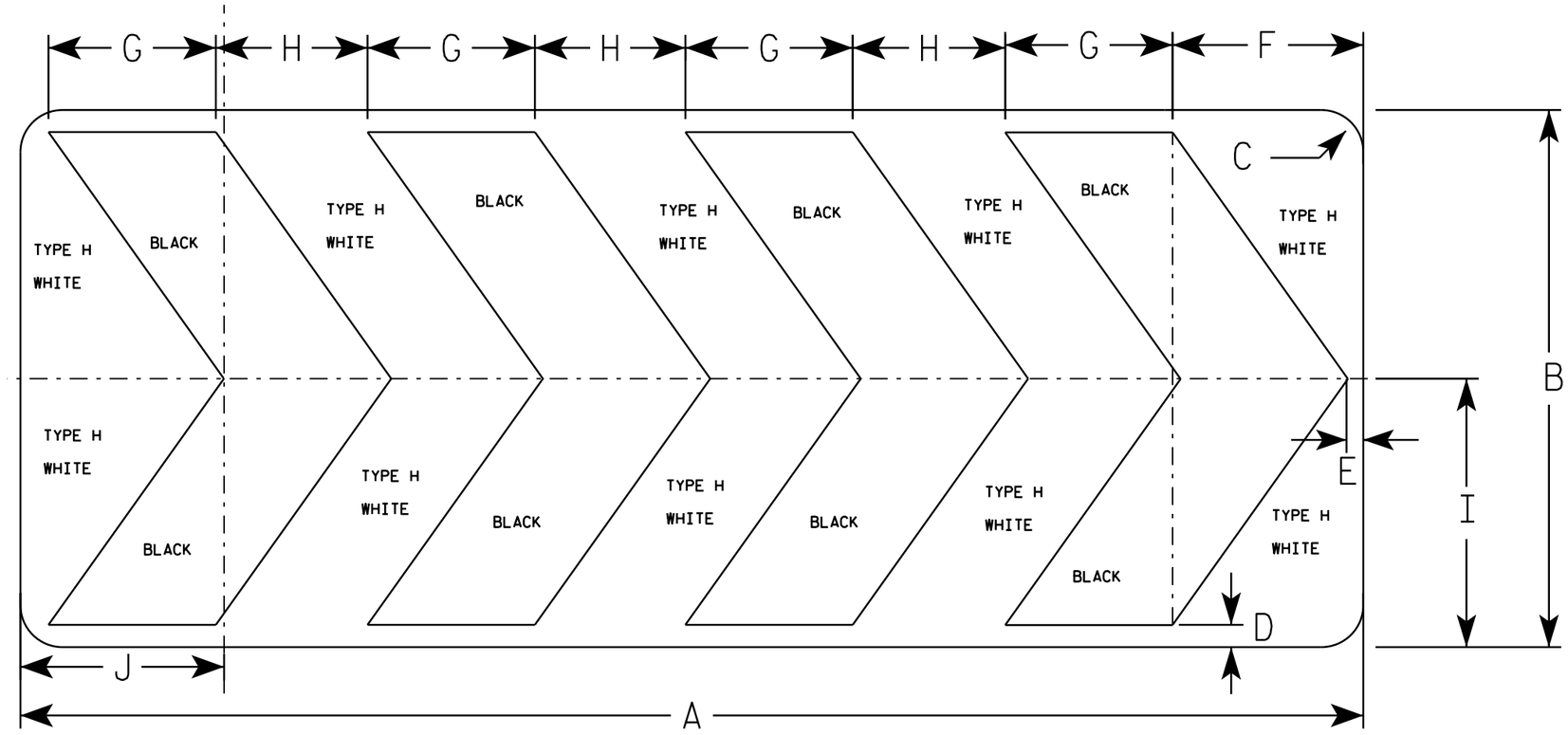
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/2/10 PLATE NO. R6-2.8

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 841	E

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - WHITE
   Message - BLACK
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



R6-4B

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	60	24	1 7/8	1	3/4	8 1/2	7 1/2	6 3/4	12	9 1/8																	10.0
2M	60	24	1 7/8	1	3/4	8 1/2	7 1/2	6 3/4	12	9 1/8																	10.0
3																											
4																											
5																											

STANDARD SIGN
R6-4B

WISCONSIN DEPT OF TRANSPORTATION

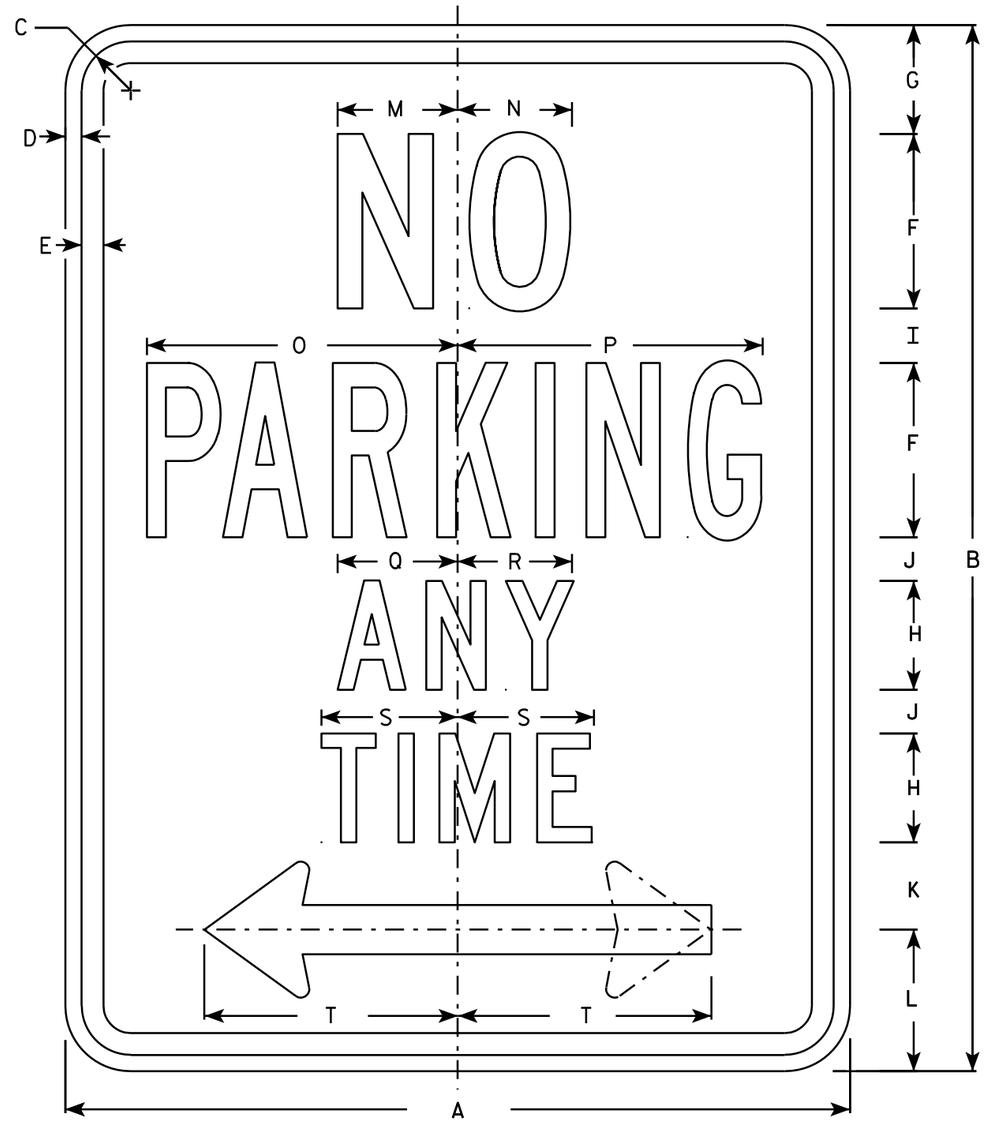
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 8/21/14 PLATE NO. R6-4.3

PROJECT NO: | SHEET NO: E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\R64B.DGN PLOT DATE : 21-AUG-2014 15:01 PLOT BY : mscsja

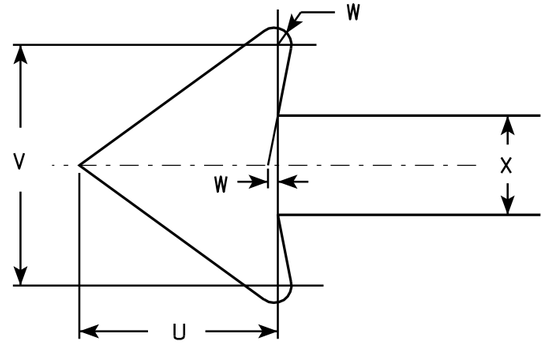
WISDOT/CADDS SHEET 42



R7-1

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Red
3. Message Series - See Note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Lines 1, 3 and 4 are series C, line 2 is series B.
6. R7-1D (double arrow)
   R7-1L (left arrow)
   R7-1R (right arrow)



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	12	18	1 1/8	3/8	3/8	3	1 7/8	2	7/8	5/8	1 1/2	2 1/2	2	2	4 7/8	4 7/8	2 1/4	2 1/8	2 1/2	3 7/8	1 1/2	1 3/4	1/8	3/4			1.5
2S	18	24	1 1/8	3/8	1/2	4	2 1/2	2 1/2	1 1/4	1	2	3 1/4	2 3/4	2 5/8	7 1/8	7	2 3/4	2 5/8	3 1/8	5 7/8	2 1/4	2 5/8	1/4	1 1/8			3.0
2M	24	30	1 1/8	3/8	1/2	5	3	3	2	1 1/4	2 1/2	4	3 1/4	3 3/8	9 1/4	9 1/4	3 1/4	3 1/4	3 3/4	7 3/4	3	3 1/2	1/4	1 1/2			5.0
3	24	30	1 1/8	3/8	1/2	5	3	3	2	1 1/4	2 1/2	4	3 1/4	3 3/8	9 1/4	9 1/4	3 1/4	3 1/4	3 3/4	7 3/4	3	3 1/2	1/4	1 1/2			5.0
4																											
5																											

STANDARD SIGN
R7-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/31/2011 PLATE NO. R7-1.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 843	E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\R71.DGN PLOT DATE : 31-MAR-2011 09:20 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 3.476110:1.000000

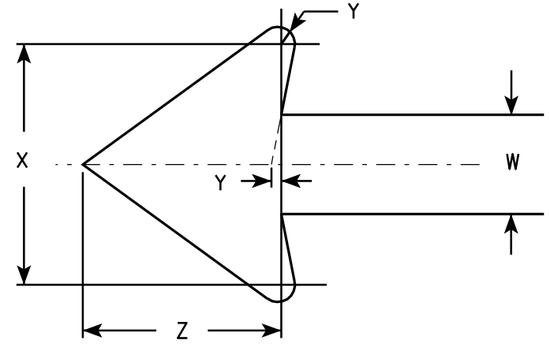
WISDOT/CADDS SHEET 42



R7-51

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Red
3. Message Series - See Note 6
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. R7-51D (double arrow)
   R7-51R (right arrow)
   R7-51L (left arrow)
6. Lines 1, 3 and 4 are Series C.
   Line 2 is Series B.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	12	18	1 1/8	3/8	3/8	3	1 7/8	2	7/8	5/8	1 1/2	2 1/2	2	2	4 7/8	4 7/8	4 7/8	5/8	1 3/4	2 1/2	4 3/8	3 7/8	3/4	1 3/4	1/8	1 1/2	1.5
2S	18	24	1 1/8	3/8	1/2	4	2 1/2	2 1/2	1 1/4	1	2	3 1/4	2 3/4	2 5/8	7 1/8	7	5 3/4	1 1/8	1 1/2	3 1/8	5 1/2	5 7/8	1 1/8	2 5/8	1/4	2 1/4	3.0
2M	24	30	1 1/8	3/8	1/2	5	3	3	2	1 1/4	2 1/2	4	3 1/4	3 3/8	9 1/4	9 1/4	7 1/8	1 1/4	2	3 3/4	6 1/2	7 3/4	1 1/2	3 1/2	1/4	3	5.0
3	24	30	1 1/8	3/8	1/2	5	3	3	2	1 1/4	2 1/2	4	3 1/4	3 3/8	9 1/4	9 1/4	7 1/8	1 1/4	2	3 3/4	6 1/2	7 3/4	1 1/2	3 1/2	1/4	3	5.0
4																											
5																											

STANDARD SIGN
R7-51

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/31/2011 PLATE NO. R7-51.6

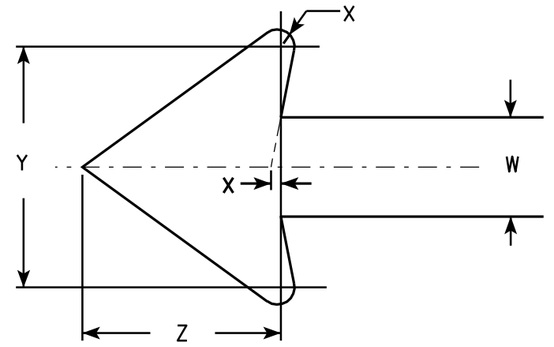
PROJECT NO:	HWY:	COUNTY:			SHEET NO: 844	E



R7-53

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Red
3. Message Series - See Note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Lines 1, 3 and 4 are series C, line 2 is series B.
6. R7-53D (double arrow)
   R7-53L (left arrow)
   R7-53R (right arrow)



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	12	18	1 1/8	3/8	3/8	3	1 7/8	2	7/8	5/8	1 1/2	2 1/2	2	2	4 7/8	4 7/8	2 5/8	1 3/4	1/4	4 1/2	2 3/8	3 7/8	3/4	1/8	1 3/4	1 1/2	1.5
2S	18	24	1 1/8	3/8	1/2	4	2 1/2	2 1/2	1 1/4	1	2	3 1/4	2 3/4	2 5/8	7 1/8	7	3 3/8	1 1/2	5/8	5 3/8	3	5 7/8	1 1/8	1/4	2 5/8	2 1/4	3.0
2M	24	30	1 1/8	3/8	1/2	5	3	3	2	1 1/4	2 1/2	4	3 1/4	3 3/8	9 1/4	9 1/4	4	2	5/8	6 5/8	3 5/8	7 3/4	1 1/2	1/4	3 1/2	3	5.0
3	24	30	1 1/8	3/8	1/2	5	3	3	2	1 1/4	2 1/2	4	3 1/4	3 3/8	9 1/4	9 1/4	4	2	5/8	6 5/8	3 5/8	7 3/4	1 1/2	1/4	3 1/2	3	5.0
4																											
5																											

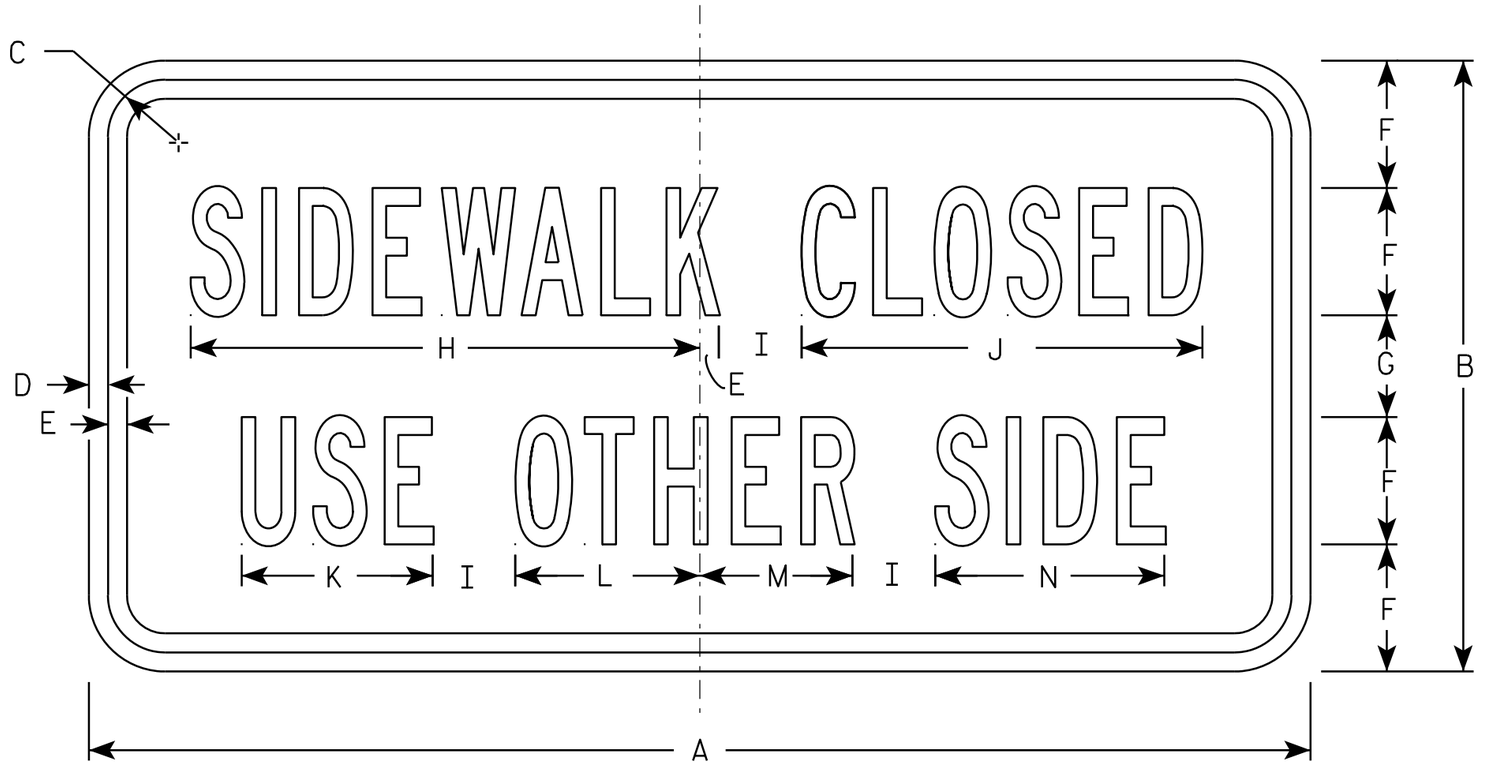
STANDARD SIGN
R7-53

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/31/2011 PLATE NO. R7-53.6

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 845	E



R9-10

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - B
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24	12	1 1/8	3/8	3/8	2 1/2	2	10	1 5/8	7 7/8	3 3/4	3 5/8	3	4 1/2													2.0
2S	48	24	2 3/4	3/4	3/4	5	4	20	3 1/4	15 3/4	7 1/2	7 1/4	6	9													8.0
2M	48	24	2 3/4	3/4	3/4	5	4	20	3 1/4	15 3/4	7 1/2	7 1/4	6	9													8.0
3																											
4																											
5																											

STANDARD SIGN
R9-10

WISCONSIN DEPT OF TRANSPORTATION

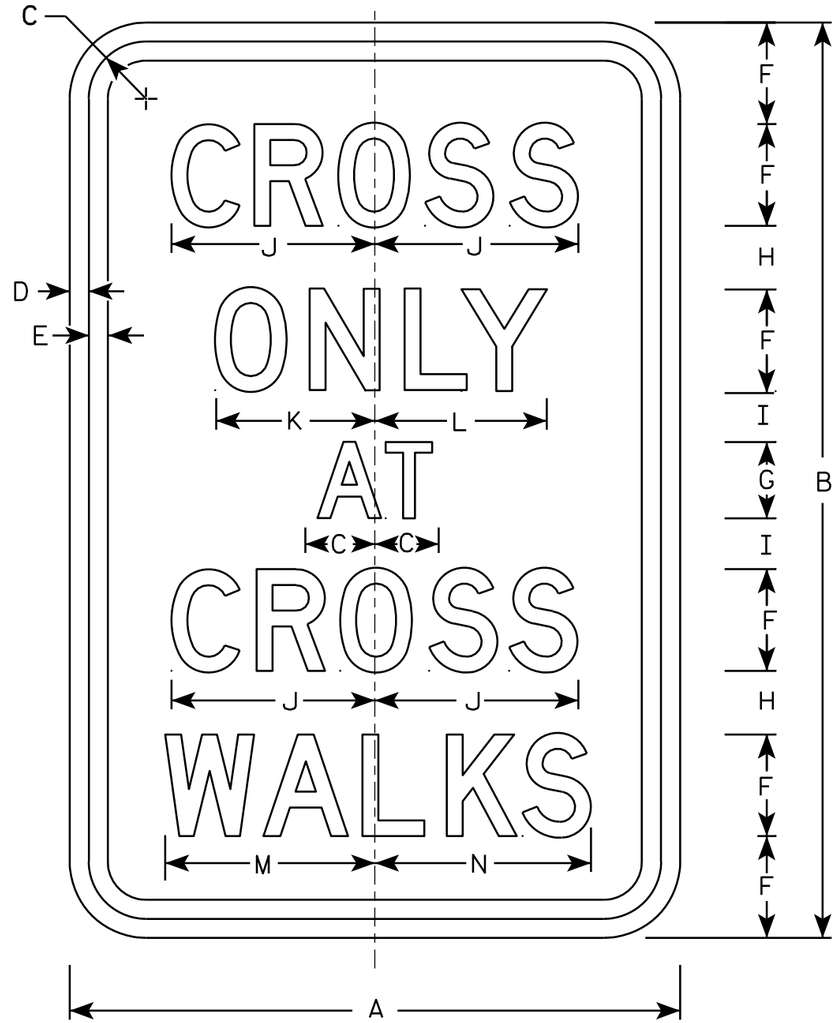
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 8/16/2012 PLATE NO. R9-10.5

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 846 | E

7

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\R910.DGN PLOT DATE : 16-AUG-2012 09:37 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 2.977140:1.000000 WISDOT/CADDS SHEET 42



R9-2

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	12	18	1 1/8	3/8	3/8	2	1 1/2	1 1/4	1	4	3 1/8	3 3/8	4 1/8	4 1/4													1.5
2M	12	18	1 1/8	3/8	3/8	2	1 1/2	1 1/4	1	4	3 1/8	3 3/8	4 1/8	4 1/4													1.5
3																											
4																											
5																											

STANDARD SIGN
R9-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 4/1/2011 PLATE NO. R9-2.5

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 847 | E



R9-3

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - See note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Lines 1 & 3 are Series C
   Line 2 is Series B

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	12	18	1 1/8	3/8	3/8	3	2	2 1/4	3 1/2	4 7/8																	1.5
2M	12	18	1 1/8	3/8	3/8	3	2	2 1/4	3 1/2	4 7/8																	1.5
3																											
4																											
5																											

STANDARD SIGN
R9-3

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/1/2011 PLATE NO. R9-3.6

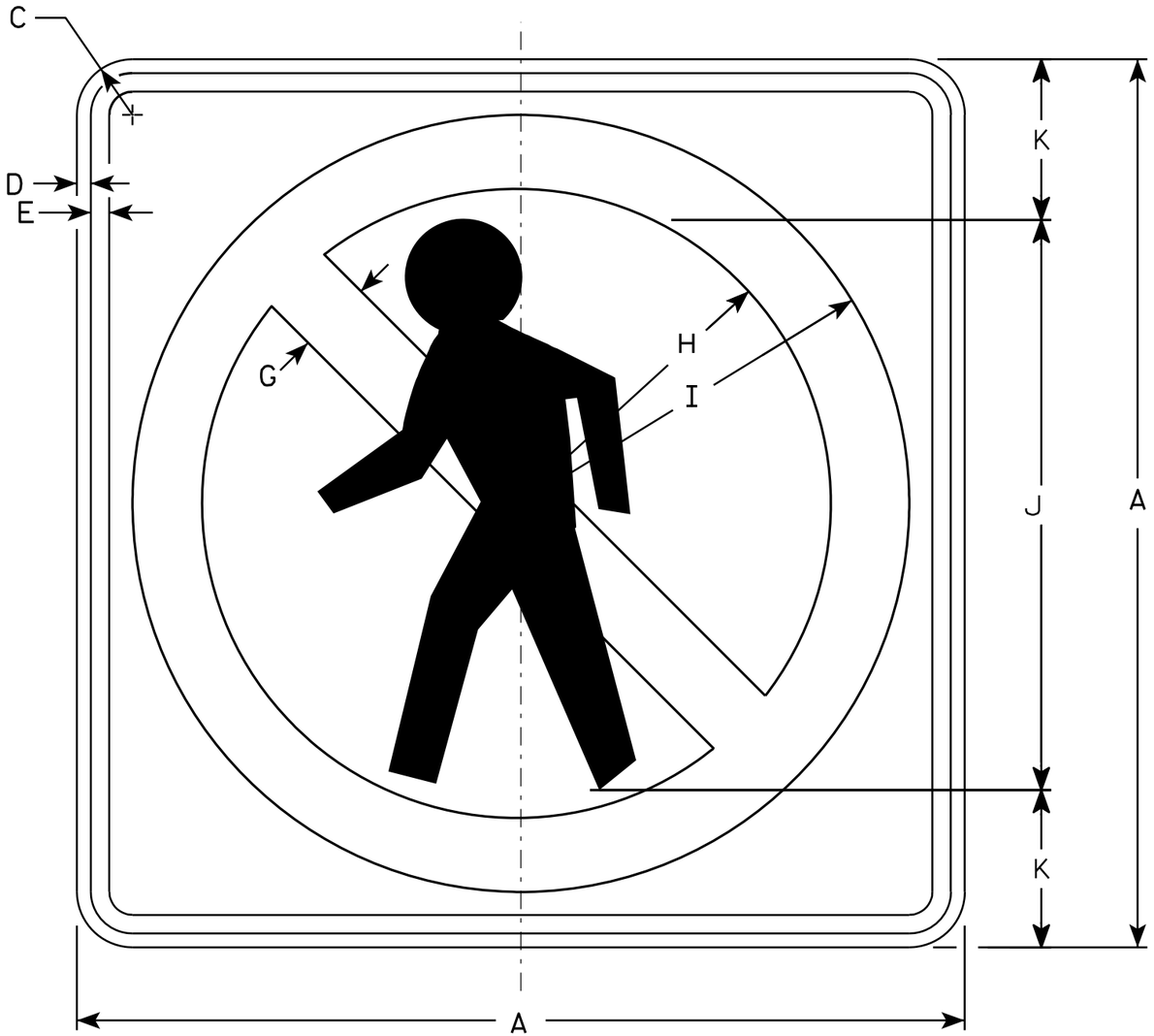
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 848	E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\R93.DGN PLOT DATE : 01-APR-2011 10:44 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 2.731229:1.000000

WISDOT/CADDS SHEET 42

7

7



R9-3A

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. Border & Pedistrian are non-reflective black. Circle with diagonal bar is reflective red.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	18		1 1/8	3/8	3/8		1 1/2	6 1/4	7 7/8	12	3																2.25
2M	18		1 1/8	3/8	3/8		1 1/2	6 1/4	7 7/8	12	3																2.25
3																											
4	24		1 1/8	3/8	1/2		2	8 1/2	10 1/2	15	4																4.00
5																											

STANDARD SIGN
R9-3A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/4/10 PLATE NO. R9-3A.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 849	E



R9-9

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	18	1 3/4	1/2	1/2	4	3 1/2	3	10 3/4	8 1/8																	3.75
2M	30	18	1 3/4	1/2	1/2	4	3 1/2	3	10 3/4	8 1/8																	3.75
3																											
4																											
5																											

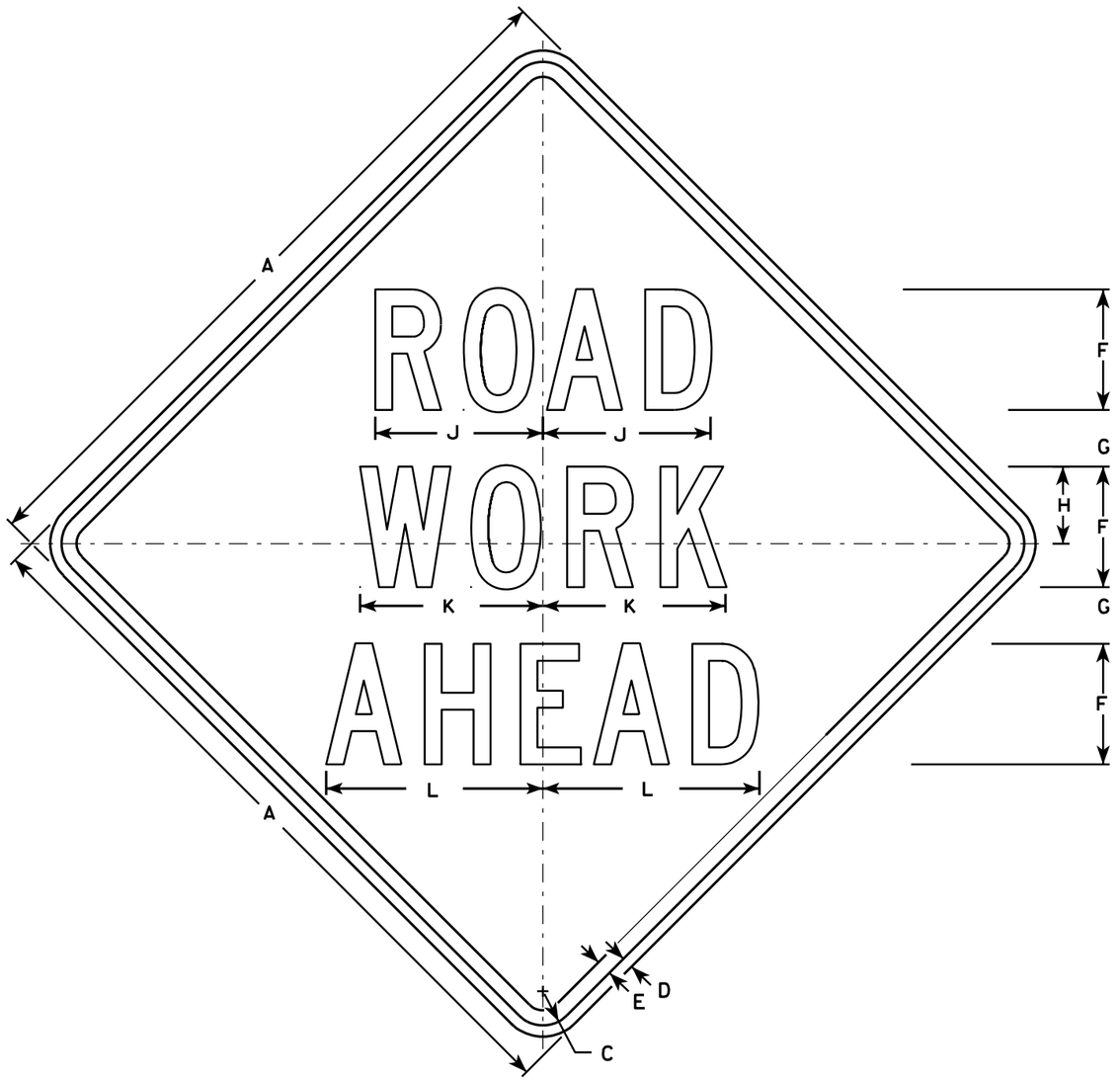
STANDARD SIGN
R9-9

WISCONSIN DEPT OF TRANSPORTATION

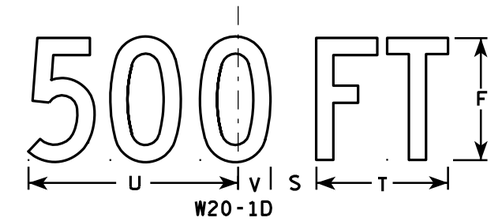
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/1/2011 PLATE NO. R9-9.5

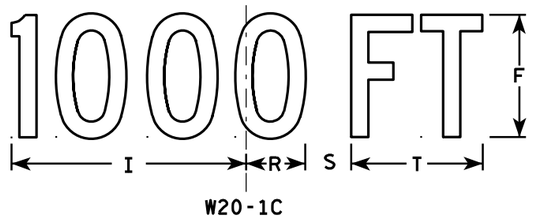
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 850	E



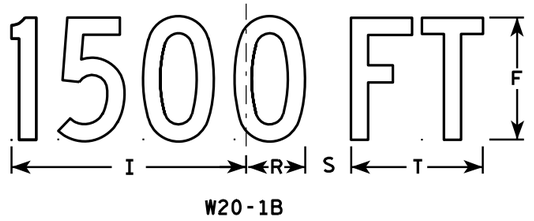
W20-1A



W20-1D



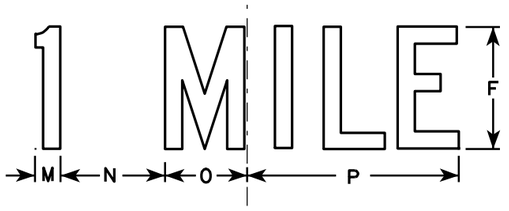
W20-1C



W20-1B



W20-1G



W20-1F

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 3/8	1/2	5/8	5	2 5/8	3 1/4	10 1/8	7	7 5/8	8 7/8	1 1/8	4 1/2	3 1/2	9		2 1/2	1 7/8	5 5/8	9	1 3/8	8	1 3/4	10 3/4	6	9.0
2S	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8		3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
2M	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8		3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
3	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8		3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
4	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8		3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
5	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8		3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0

STANDARD SIGN
W20-1A, B, C, D, F & G

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/18/11 PLATE NO. W20-1.9

PROJECT NO:

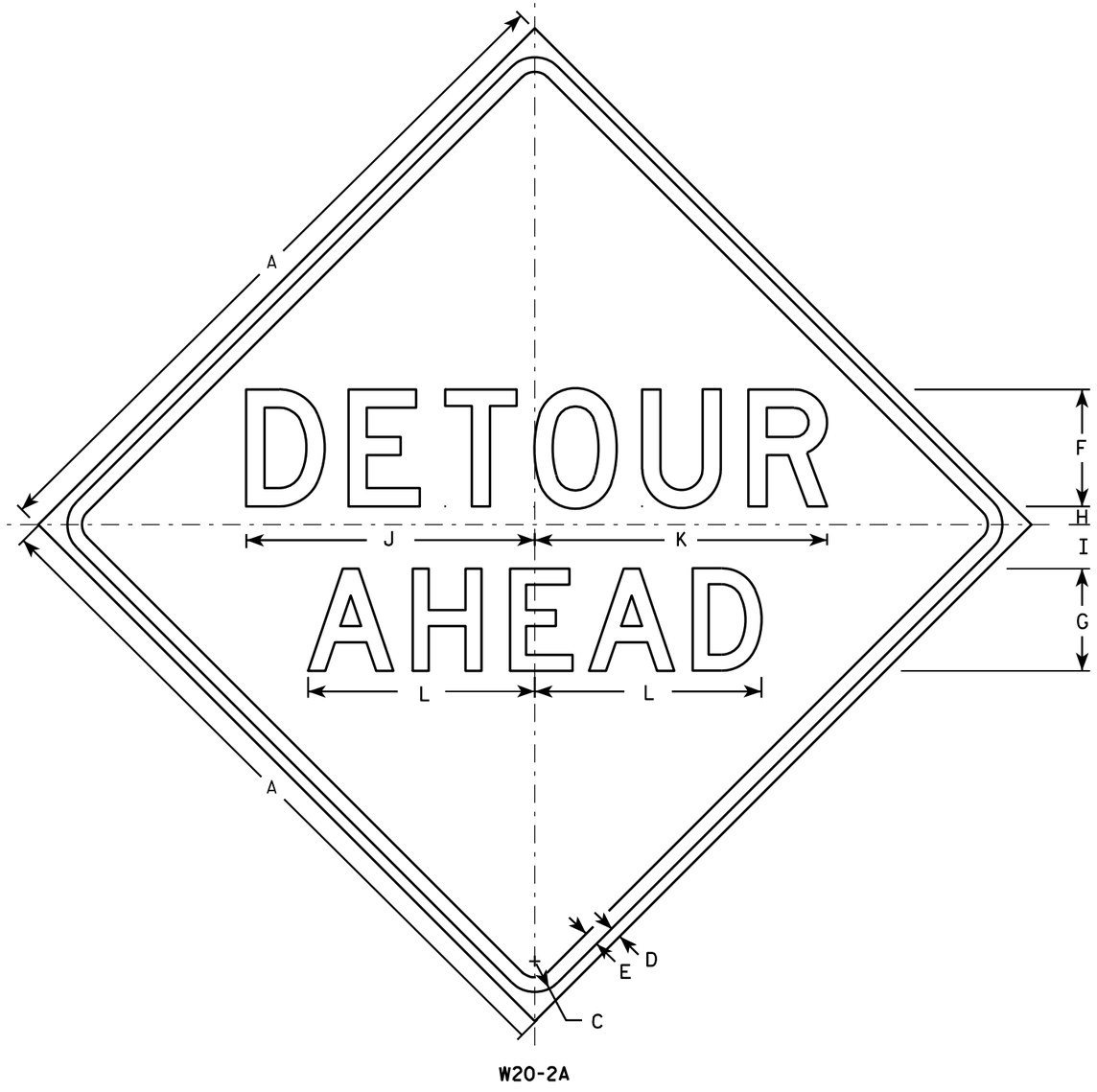
SHEET NO: 851 E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\W201.DGN PLOT DATE : 18-MAR-2011 09:56 PLOT BY : mscj9h

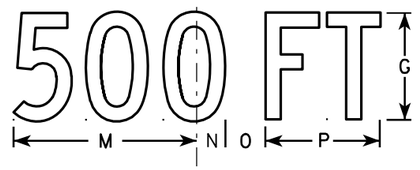
WISDOT/CADDS SHEET 42

7

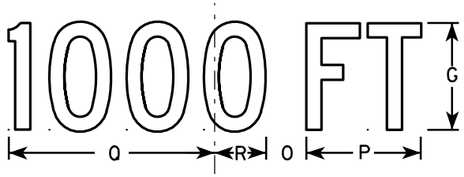
7



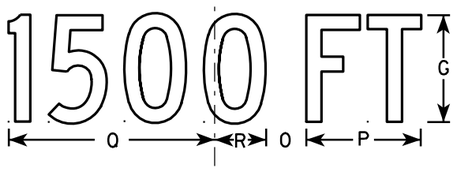
W20-2A



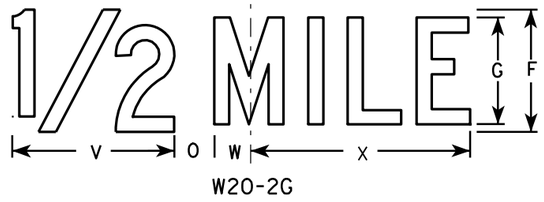
W20-2D



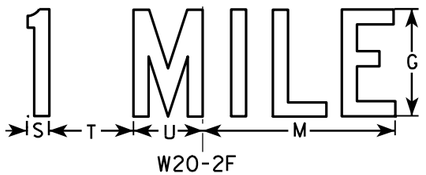
W20-2C



W20-2B



W20-2G



W20-2F

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - See note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Line 1 is Series D.
   Line 2 is Series D for AHEAD and Series C for all other distances.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	O	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	6	5	1	2 1/4	14 3/4	15	11 5/8	9	1 3/8	1 7/8	5 5/8	10 1/8	2 1/2	1 1/8	4 1/2	3 1/2	8	1 3/4	10 3/4			9.0
2S	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
2M	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
3	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
4	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
5	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0

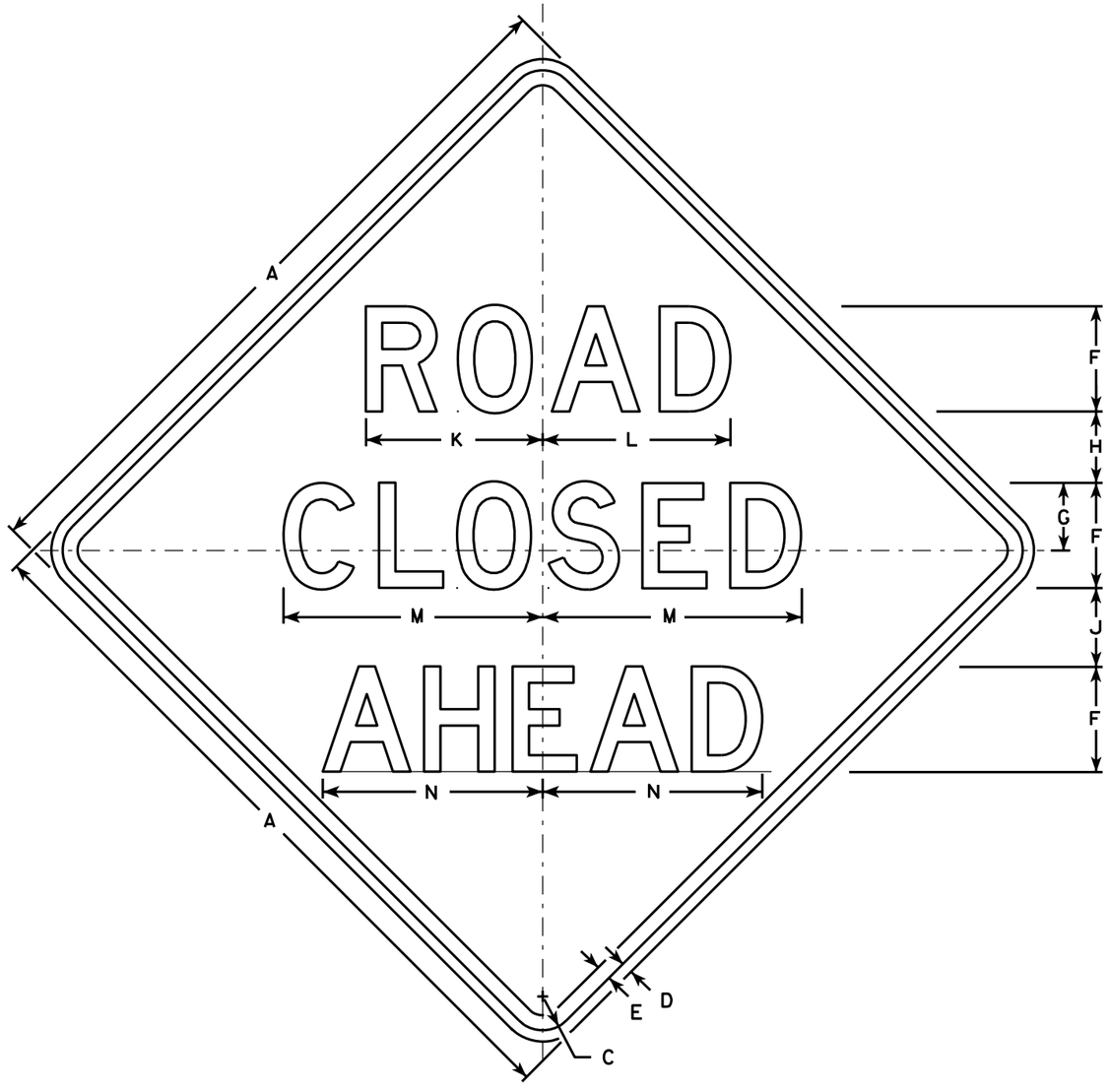
STANDARD SIGN
W20-2A,B,C,D,F & G

WISCONSIN DEPT OF TRANSPORTATION

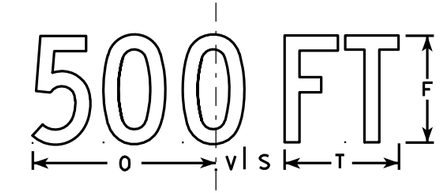
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/18/11 PLATE NO. W20-2.6

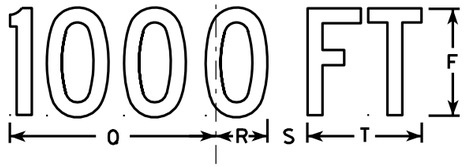
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 852	E



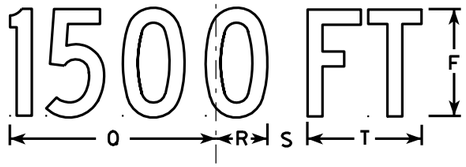
W20-3A



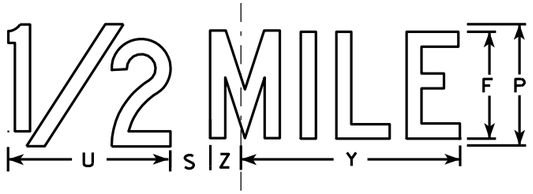
W20-3D



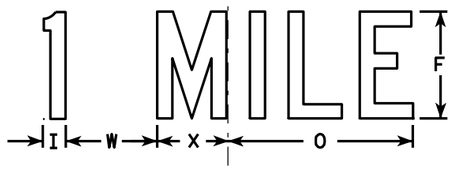
W20-3C



W20-3B



W20-3G



W20-3F

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - see note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Lines 1 and 2 are Series D.
   Line 3 is Series D for AHEAD and Series C for all other distances.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	5	3 3/8	3 1/2	1 1/8	4	8 3/8	8 7/8	12 1/2	11	9	6	10 1/8	2 1/2	1 7/8	5 5/8	8	1 3/8	4 1/2	3 1/2	10 3/4	1 3/4	9.0
2S	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
2M	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
3	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
4	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
5	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0

STANDARD SIGN
W20-3A, B, C, D, F & G

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/18/11 PLATE NO. W20-3.7

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 853 | E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\W203.DGN PLOT DATE : 18-MAR-2011 12:08 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 9.931739:1.000000

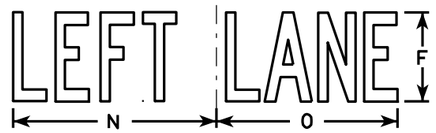
WISDOT/CADDS SHEET 42

7

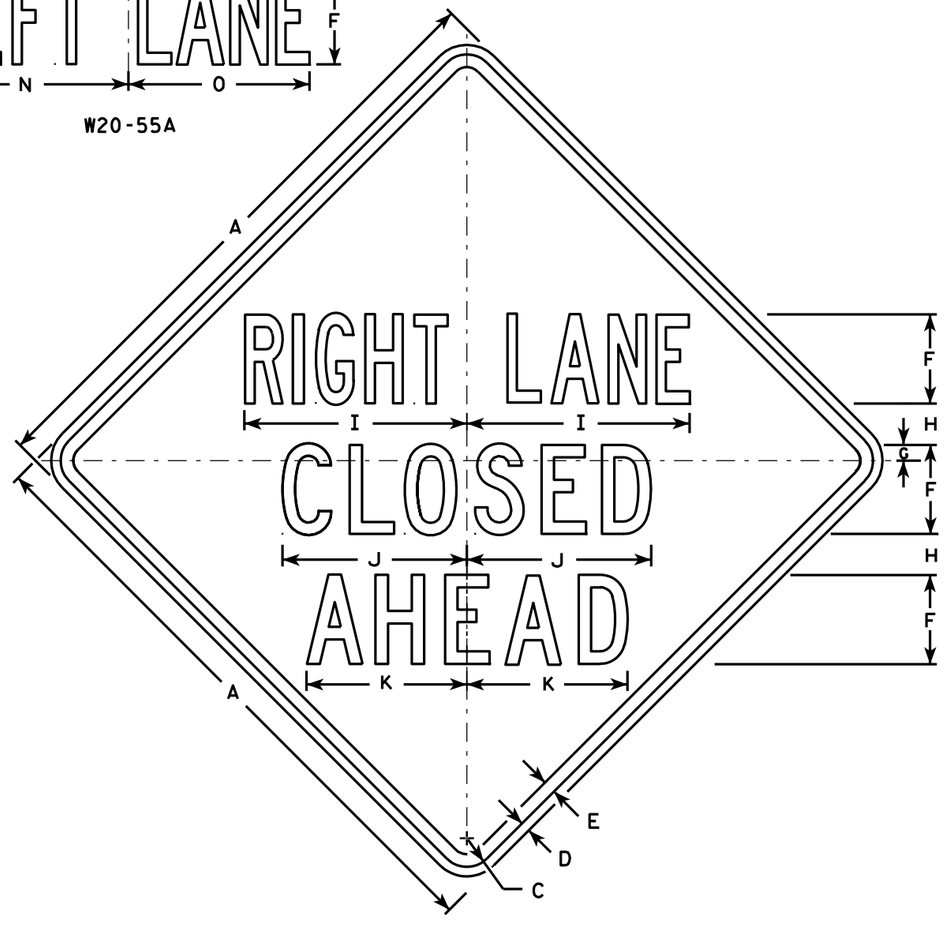
7



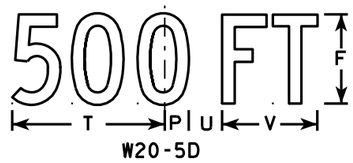
W20-56A



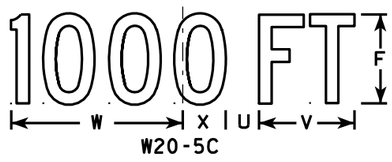
W20-55A



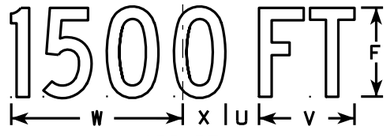
W20-5A



W20-5D



W20-5C



W20-5B



W20-5G



W20-5F

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - See Note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. " _____ LANE" is Series B.
   All other copy is Series C.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36	6	1 5/8	5/8	3/4	5	1/8	2 1/2	13 1/8	10 3/4	9 1/2	14 1/4	13 5/8	12	12	1 3/8	1 1/8	4 1/2	3 1/2	9	1 1/8	5 5/8	10 1/8	2 1/2	1 3/4	8	9.0
2S	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
2M	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
3	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
4	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
5	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0

STANDARD SIGN
W20-5A, B, C, D, F & G

WISCONSIN DEPT OF TRANSPORTATION

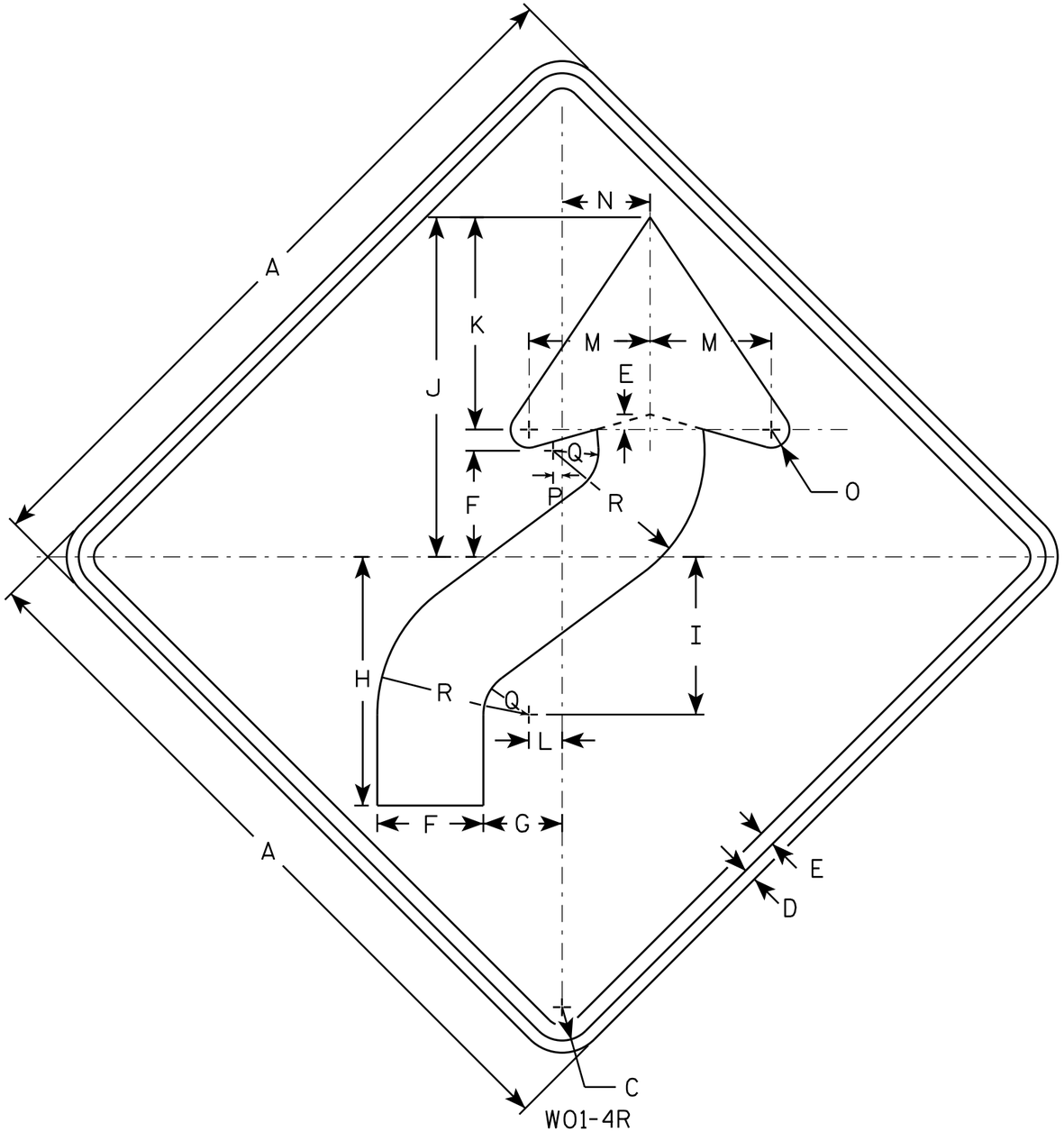
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/18/11 PLATE NO. W20-5.11

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 854 | E

7

FILE NAME : C:\Users\PROJECTS\tr_stdplate\W205.DGN PLOT DATE : 18-MAR-2011 12:15 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 11.918087:1.000000
WISDOT/CADDS SHEET 42



W01-4R

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W01-4L is the same as W01-4R except the arrow is reversed along the vertical centerline.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	5 1/4	4	12 3/8	7 7/8	16 7/8	10 1/2	1 5/8	6	4 1/2	1	1/2	2 1/4	7 1/2									9.0
2S	48		2 1/4	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0
2M	48		2 1/4	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0
3	48		2 1/4	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0
4	48		2 1/4	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0
5	48		2 1/4	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0

STANDARD SIGN
W01-4

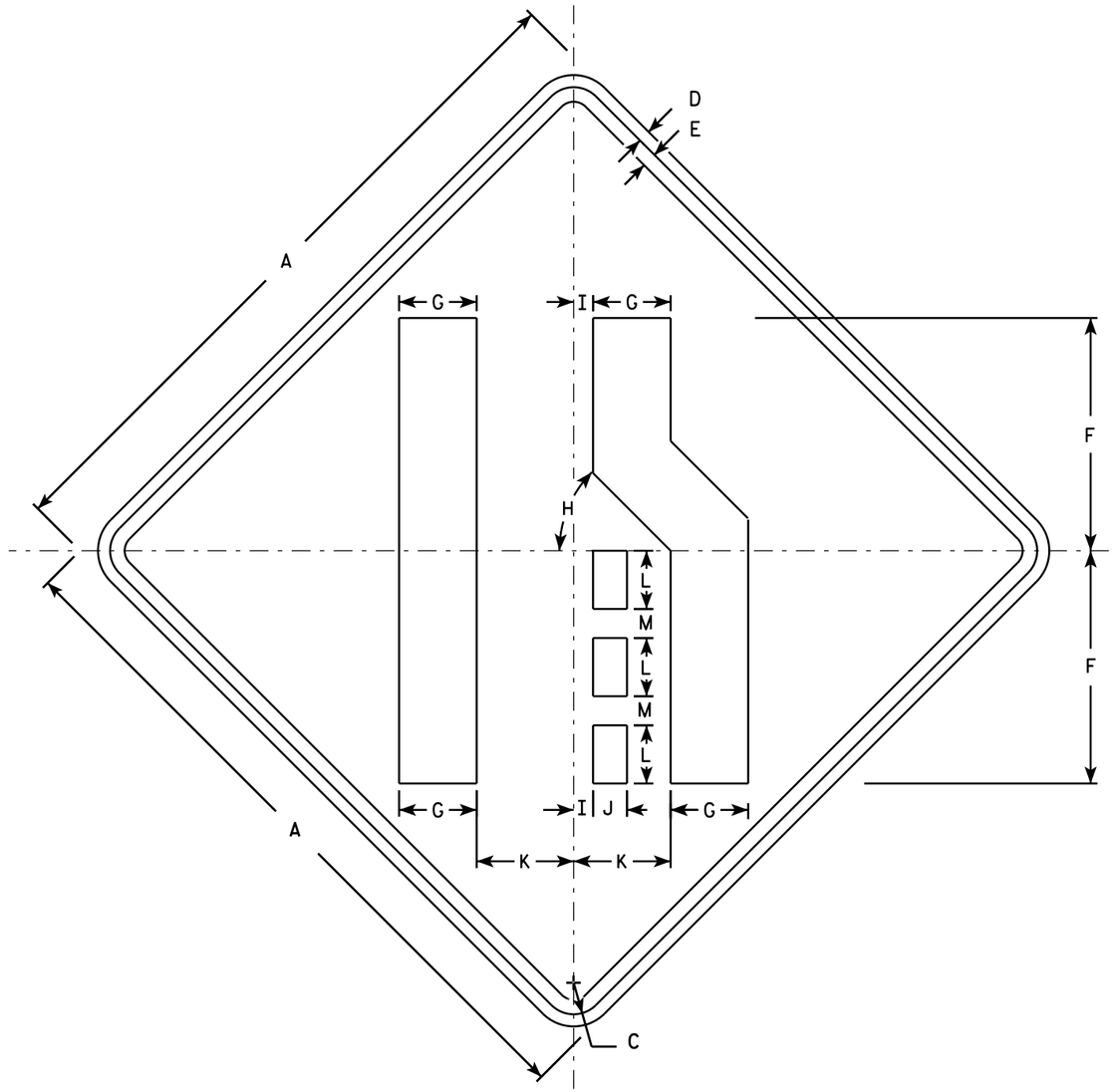
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/18/13 PLATE NO W01-4.1

855

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



W04-2R

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W04-2L is the same as W04-2R except the symbol is reversed along the vertical centerline.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	12	4	45°	1	1 3/4	5	3	1 1/2														9.0
2S	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
2M	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
3	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
4	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
5	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0

STANDARD SIGN
W04-2

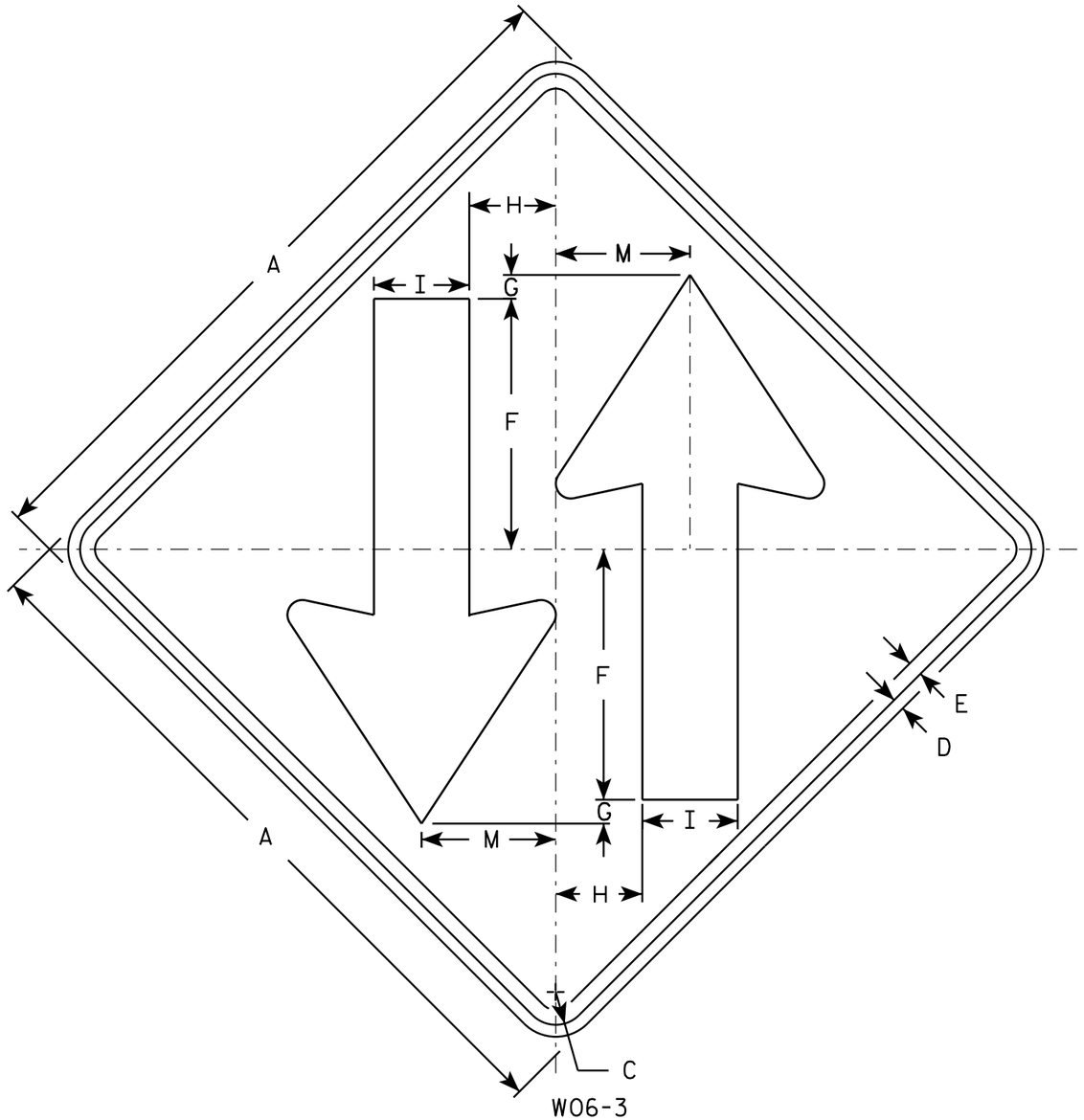
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/20/13 PLATE 856 W04-2.1

PROJECT NO:

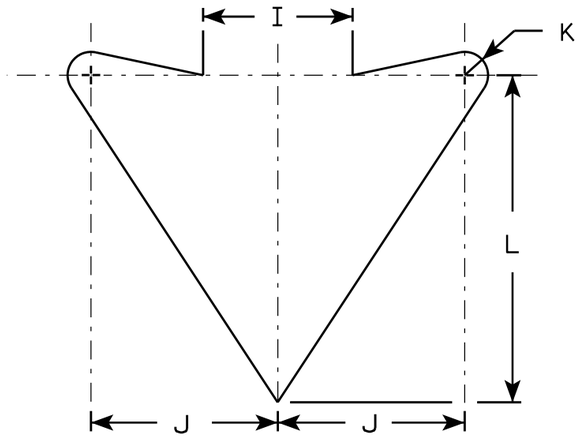
SHEET NO: E



W06-3

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	12	1	4 1/4	5	6	3/4	10 1/2	6 3/4														9.0
2S	48		2 1/4	3/4	1	15 1/2	1	6	6	8	1	14	9														16.0
2M	48		2 1/4	3/4	1	15 1/2	1	6	6	8	1	14	9														16.0
3	48		2 1/4	3/4	1	15 1/2	1	6	6	8	1	14	9														16.0
4	48		2 1/4	3/4	1	15 1/2	1	6	6	8	1	14	9														16.0
5	48		2 1/4	3/4	1	15 1/2	1	6	6	8	1	14	9														16.0

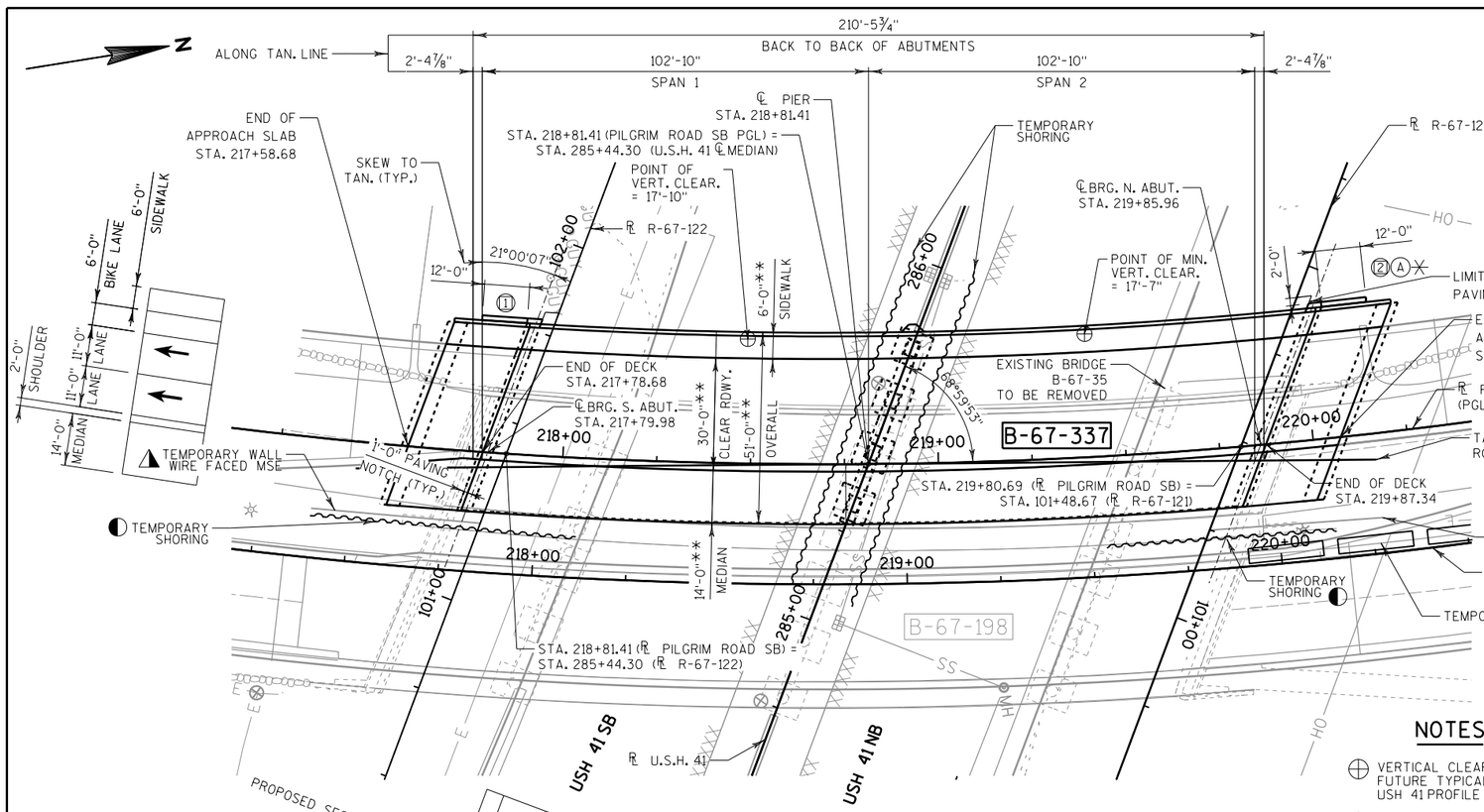
STANDARD SIGN
W06-3

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/20/13 PLATE 857 W06-3.1

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E



HORIZONTAL ALIGNMENTS

PILGRIM ROAD SB PGL
PI STA= 220+26.08
N= 437016.69
E= 2506506.89
DELTA= 42°24'22.37"
Dc= 4°23'50.05"
T= 505.48'
L= 964.38'
R= 1303.00'
PC STA.= 215+20.60
PT STA.= 224+84.99

PILGRIM ROAD ℞
PI STA= 220+38.20
N= 437014.69
E= 2506541.15
DELTA= 42°24'22.38"
Dc= 4°17'30.60"
T= 517.89'
L= 988.07'
R= 1335.00'
PC STA.= 215+20.31
PT STA.= 225+08.37

DESIGN DATA

STATE PROJECT NUMBER
1100-37-70

LIVE LOAD:

DESIGN LOADING: HL-93
INVENTORY RATING: RF = 1.08
OPERATING RATING: RF = 1.78
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV): 250 KIPS

STRUCTURE IS DESIGNED FOR A FUTURE WEARING SURFACE OF 20 P.S.F.

ULTIMATE DESIGN STRESSES:

CONCRETE MASONRY
SUPERSTRUCTURE ..... f'c = 4,000 psi
ALL OTHER ..... f'c = 3,500 psi

BAR STEEL REINFORCEMENT,
HIGH STRENGTH, GRADE 60 .....fy = 60,000 psi

45W-INCH PRESTRESSED GIRDERS,
CONCRETE MASONRY .....f'c = 8,000 psi
.....f'ci = 6,800 psi

0.6" DIA. PRESTRESSING STRANDS f's = 270,000 psi

FOUNDATION DATA:

ABUTMENTS AND PIERS SUPPORTED ON HP 10X42 PILING DRIVEN TO THE FOLLOWING REQUIRED DRIVING RESISTANCE AS DETERMINED BY THE PDA/CAPWAP METHOD.
REQUIRED DRIVING RESISTANCE*:
SOUTH ABUTMENT: 180 TONS
PIER: 140 TONS
NORTH ABUTMENT: 140 TONS
ESTIMATED PILE LENGTH:
SOUTH ABUTMENT: 80 FEET
PIER: 35 FEET
NORTH ABUTMENT: 40 FEET

*THE FACTORED AXIAL RESISTANCE OF PILES IN COMPRESSION USED FOR DESIGN IS THE REQUIRED DRIVING RESISTANCE MULTIPLIED BY A RESISTANCE FACTOR OF 0.65 USING THE PDA/CAPWAP METHOD TO DETERMINE PILE CAPACITY.

TRAFFIC DATA:

PILGRIM ROAD	U.S.H. 41 / U.S.H. 45
A.D.T. = 22,700 (2011)	A.D.T. = 82,800 (2012)
A.D.T. = 39,600 (2031)	A.D.T. = 137,200 (2023)
R.D.S. = 40 M.P.H.	R.D.S. = 70 M.P.H.

BRIDGE OFFICE CONTACT:
WILLIAM DREHER
(608) 266-8489

CONSULTANT CONTACT:
MICHAEL D. RADTKE
(414) 347-1607

LOCATION	TANGENT OFFSET TO ℞ SB PILGRIM■
℄ BRG. S. ABUT.	4'-2¾" RT.
℄ BRG. N. ABUT.	4'-5⅞" RT.

NOTES

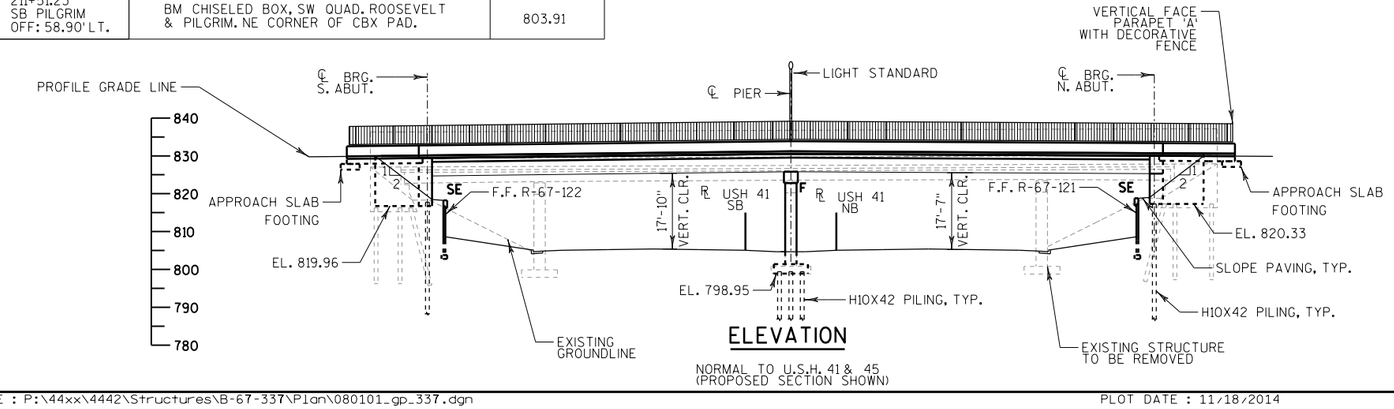
⊕ VERTICAL CLEARANCE POINT. ELEVATION OF USH 41 IS BASED ON FUTURE TYPICAL SECTION SHOWN ON SHEET 2 AND BEST FIT USH 41 PROFILE SHOWN ON SHEET 3.
Ⓐ NAME PLATE LOCATION
Ⓘ DENOTES WING NUMBER
■ MEASURED ALONG ℄ BRG. SUBSTRUCTURE UNIT
** MEASURED ON RADIAL LINES
◐ TEMPORARY SHORING INSTALLED DURING CONSTRUCTION OF B-67-337 . REMOVE SHORING WHEN CONSTRUCTION IS COMPLETE.
⚹ ANCHOR ASSEMBLY FOR THRIE BEAM TYPE GUARDRAIL
⚠ TEMPORARY WALL WIRE FACED MSE INSTALLED DURING CONSTRUCTION OF WALLS R-67-121 AND R-67-122. SEE RETAINING WALL PLANS FOR DETAILS. CONTRACTOR MUST COORDINATE CONSTRUCTION OF B-67-337 WITH WALLS R-67-121 AND R-67-122.

BENCHMARKS

NO.	STATION	DESCRIPTION	ELEVATION
BM1	217+57.99 NB PILGRIM OFF: 32' RT.	BM ALUM CAP. WISDOT SW CORNER BRIDGE OVER U.SH. 45 IN CONCRETE WALK, SOUTH OF JOINT.	827.32
BM2O	211+51.23 SB PILGRIM OFF: 58.90' LT.	BM CHISELED BOX, SW QUAD. ROOSEVELT & PILGRIM. NE CORNER OF CBX PAD.	803.91

PLAN

2 SPAN 45W" PRESTRESSED GIRDER BRIDGE



ELEVATION

NORMAL TO U.S.H. 41 & 45
(PROPOSED SECTION SHOWN)

WISCONSIN
MICHAEL D. RADTKE
40967
Elm Grove WI
PROFESSIONAL ENGINEER
Nov 18, 2014

LIST OF DRAWINGS

1. GENERAL PLAN AND ELEVATION
2. CROSS SECTION & GENERAL NOTES
3. QUANTITIES & PROFILE GRADE LINES
4. CONSTUCTION STAGING
5. SUBSURFACE EXPLORATION
6. SOUTH ABUTMENT
7. SOUTH ABUTMENT DETAILS
8. WING 1 DETAILS
9. NORTH ABUTMENT
10. NORTH ABUTMENT DETAILS
11. WING 2 DETAILS
12. PIER
13. PIER DETAILS
14. PIER FOOTINGS
15. 45W" PRESTRESSED GIRDER
16. 45W" PRESTRESSED GIRDER DETAILS
17. STEEL DIAPHRAGM
18. SUPERSTRUCTURE FRAMING PLAN
19. SUPERSTRUCTURE REINFORCEMENT
20. SUPERSTRUCTURE CROSS SECTION
21. SUPERSTRUCTURE DETAILS
22. SOUTH STRUCTURAL APPROACH SLAB
23. NORTH STRUCTURAL APPROACH SLAB
24. STRUCTURAL APPROACH SLAB DETAILS
25. VERTICAL FACE PARAPET TYPE 'A'
26. LIGHT SUPPORT DETAILS
27. ORNAMENTAL PROTECTIVE SCREENING
28. AESTHETICS

NO.	DATE	REVISION	BY

emcs LLC
1300 W. Canal Street, Suite 200
Milwaukee, WI 53233
414.347.1607 Fax 414.347.1347

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
ACCEPTED William C. Dreher KAR 11/26/14
CHIEF STRUCTURES DESIGN ENGINEER DATE

STRUCTURE B-67-337

PILGRIM ROAD SB OVER U.S.H. 41 & U.S.H. 45

COUNTY: WAUKESHA
VILLAGE: MENOMONEE FALLS

DESIGN SPEC.
AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS

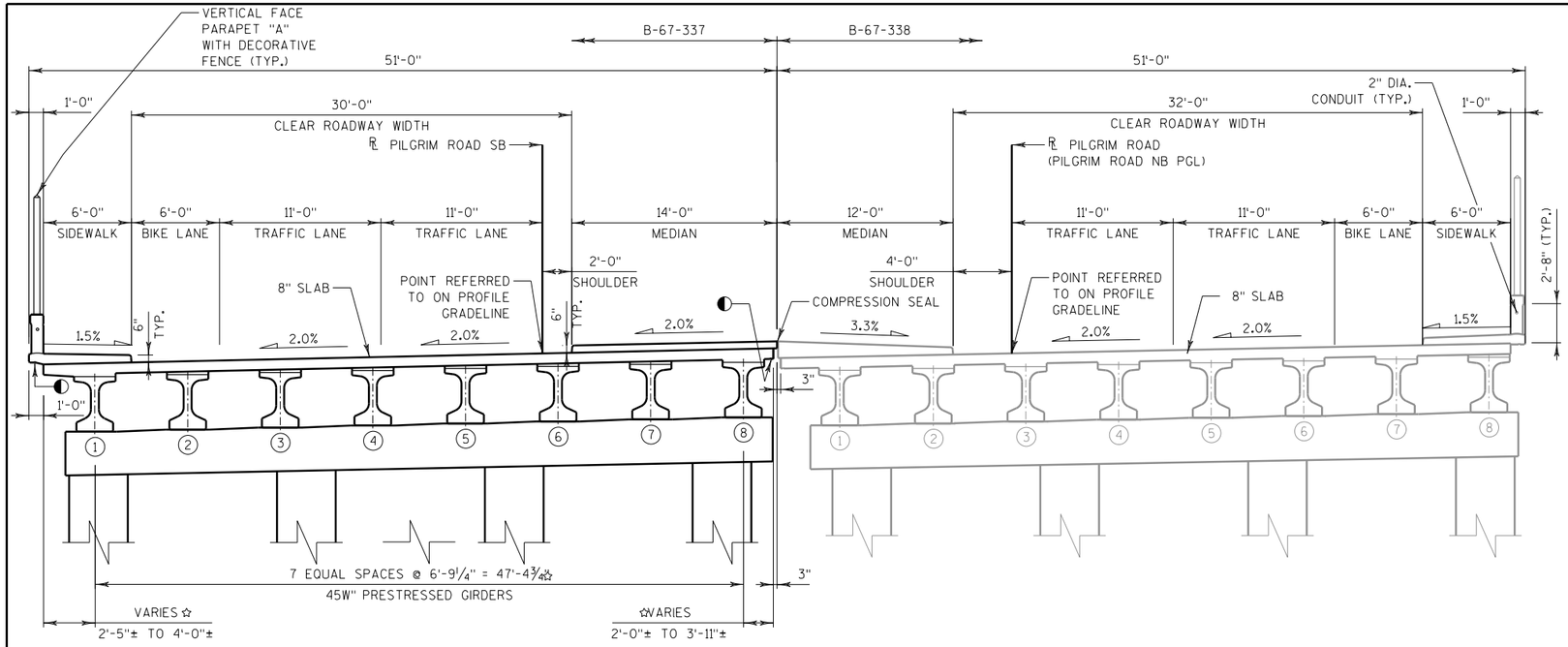
DESIGNED BY	SKR	DESIGN CK'D.	MDR	DRAWN BY	SKR	PLANS CK'D.	MDR

GENERAL PLAN AND ELEVATION

SHEET 1 OF 28
858

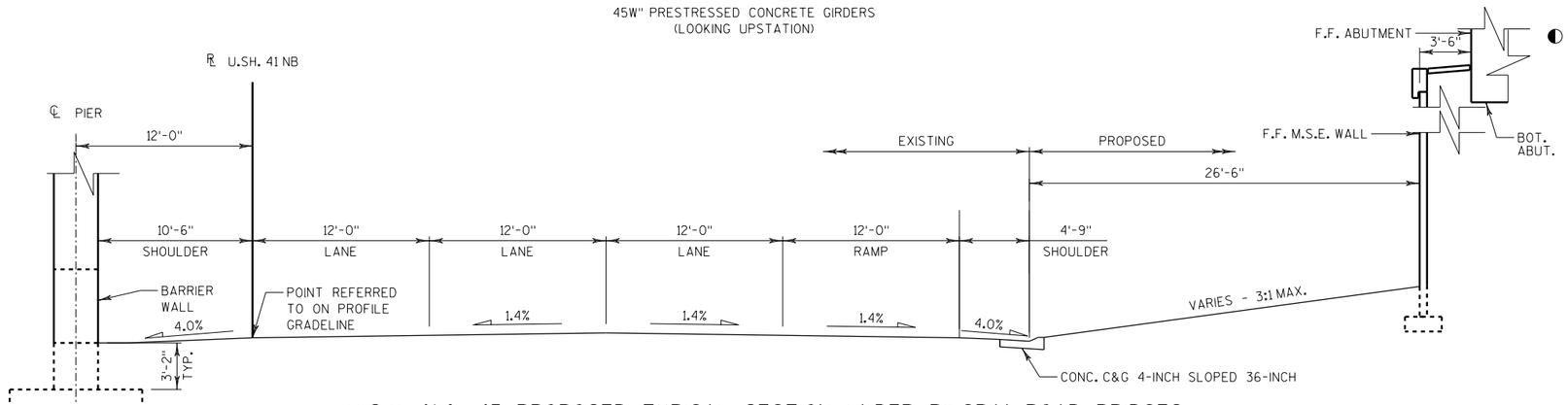
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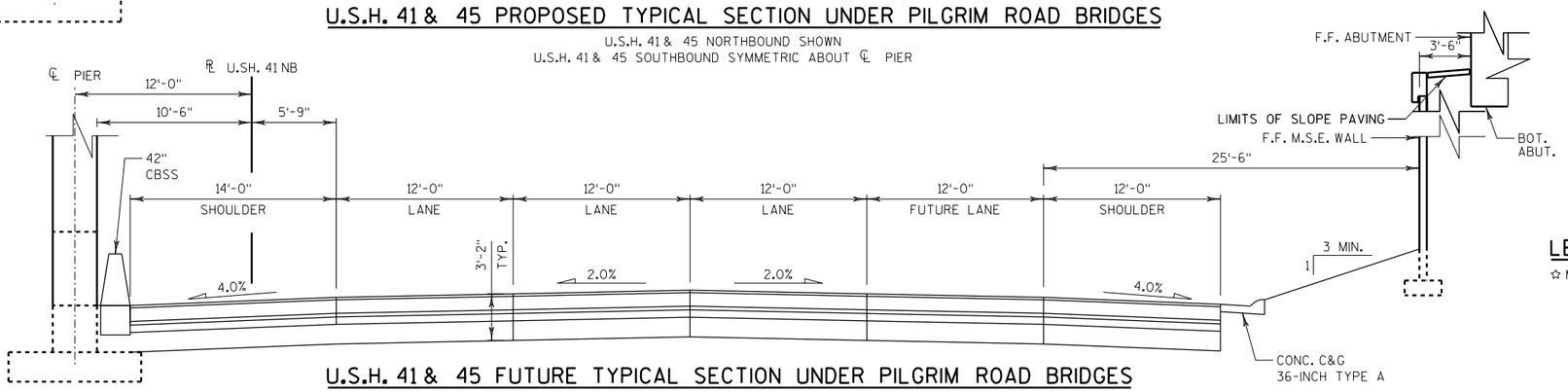
TYPICAL SECTION THRU PILGRIM ROAD

45W" PRESTRESSED CONCRETE GIRDERS
(LOOKING UPSTATION)



U.S.H. 41 & 45 PROPOSED TYPICAL SECTION UNDER PILGRIM ROAD BRIDGES

U.S.H. 41 & 45 NORTHBOUND SHOWN
U.S.H. 41 & 45 SOUTHBOUND SYMMETRIC ABOUT ℄ PIER



U.S.H. 41 & 45 FUTURE TYPICAL SECTION UNDER PILGRIM ROAD BRIDGES

U.S.H. 41 & 45 NORTHBOUND SHOWN
U.S.H. 41 & 45 SOUTHBOUND SYMMETRIC ABOUT ℄ PIER

STATE PROJECT NUMBER

1100-37-70

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

ALL DIMENSIONS ARE IN FEET AND INCHES UNLESS OTHERWISE NOTED.

ALL STATIONS AND ALL ELEVATIONS ARE IN FEET. ELEVATIONS REFERENCED TO NGVD 29 DATUM.

BEVEL EXPOSED EDGES OF CONCRETE 3/4" UNLESS OTHERWISE NOTED.

ELASTOMERIC BEARING PADS NEED NOT BE INDIVIDUALLY MOLDED PROVIDED THE CUT EDGES ARE SMOOTH AND TRUE.

BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2" CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

ALL REINFORCING BARS ARE ENGLISH DESIGNATION AND THE FIRST DIGIT OF A 3-DIGIT BAR MARK OR FIRST TWO DIGITS OF A 4-DIGIT BAR MARK SIGNIFY THE BAR SIZE.

JOINT FILLER SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M153 TYPE 1, 2, OR 3, OR AASHTO M213.

THE EXISTING GROUNDLINE SHALL BE THE UPPER LIMITS OF "EXCAVATION FOR STRUCTURES, BRIDGE B-67-337".

FILL/EXCAVATE TO BOTTOM OF ABUTMENT ELEVATION BEFORE PILE DRIVING.

AT ABUTMENTS, ALL SPACES EXCAVATED AND NOT OCCUPIED BY THE NEW STRUCTURE SHALL BE BACKFILLED WITH STRUCTURE BACKFILL ON THE BACK FACE.

THE SLOPE OF THE FILL IN FRONT OF THE ABUTMENTS SHALL BE COVERED WITH SLOPE PAVING MATERIAL TO THE EXTENT SHOWN ON SHEET 1 AND IN THE ABUTMENT DETAILS.

THE HAUNCH CONCRETE QUANTITY IS BASED ON THE AVERAGE HAUNCH SHOWN ON THE PRESTRESSED GIRDER DETAILS SHEET.

APPLY PROTECTIVE SURFACE TREATMENT TO TOP OF BRIDGE DECK, TOP OF SIDEWALK, TOP OF MEDIAN, CURB FACES, AND TOP AND INSIDE FACES OF PARAPETS.

THE EXISTING STRUCTURE (B-67-35) IS A FOUR-SPAN STEEL GIRDER STRUCTURE WITH AN OVERALL LENGTH OF 221'-7", AN OVERALL WIDTH OF 38'-6", AND IS TO BE REMOVED PRIOR TO CONSTRUCTING B-67-337. THE CONTRACTOR SHALL REMOVE ALL ELEMENTS OF THE EXISTING BRIDGE THAT INTERFERE WITH THE CONSTRUCTION OF THE PROPOSED BRIDGE.

VERTICAL CLEARANCES SHOWN ARE BASED ON EXISTING PROFILE OF U.S.H. 41 AND THE PROPOSED TYPICAL SECTION.

INFORMATION ON THE DRAWINGS RELATING TO THE EXISTING BRIDGE IS BASED UPON AS-BUILT INFORMATION AVAILABLE FROM THE WISCONSIN DEPARTMENT OF TRANSPORTATION.

◐ PROVIDE 3/4" V GROOVE 5" FROM EDGE.

LEGEND

☆ MEASURED ALONG ℄ BRG. SUBSTRUCTURE

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-67-337

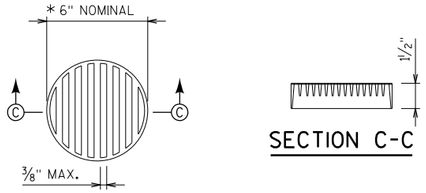
DRAWN BY SKR | PLANS CK'D. MDR

CROSS SECTION & GENERAL NOTES

SHEET 2 OF 28
859

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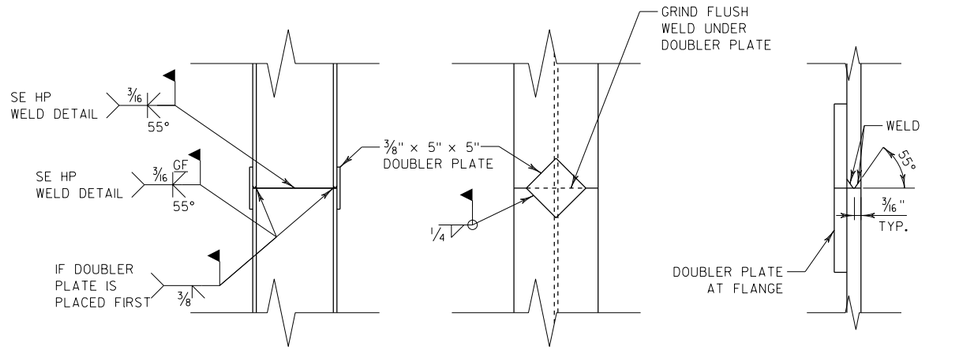
RODENT SHIELD

NOTES:

*DIMENSIONS ARE APPROXIMATE. THE GRATE IS SIZED TO FIT INTO A PIPE COUPLING. ORIENT SHIELD SO SLOTS ARE VERTICAL.

THE RODENT SCREEN, PIPE COUPLING AND SCREWS SHALL BE INCIDENTAL TO THE BID ITEM "PIPE UNDERDRAIN WRAPPED 6-INCH"

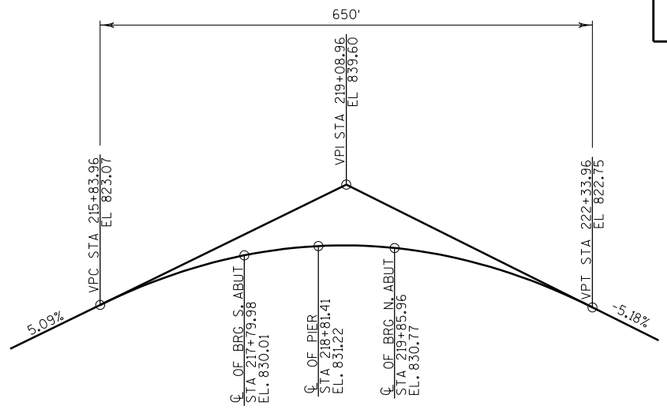
THE RODENT SHIELD SHALL BE A PVC GRATE SIMILAR TO THIS DETAIL. THE GRATE IS COMMERCIALLY AVAILABLE AS A FLOOR STRAINER. A PIPE COUPLING IS REQUIRED FOR THE ATTACHMENT OF THIS SHIELD TO THE EXPOSED END OF THE PIPE UNDERDRAIN. THE SHIELD SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO. 10 X 1-INCH STAINLESS STEEL SHEET METAL SCREWS.



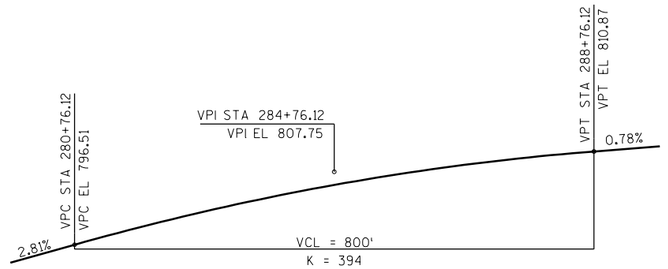
HP 10 X 42 SPLICE DETAIL

HP WELD DETAIL

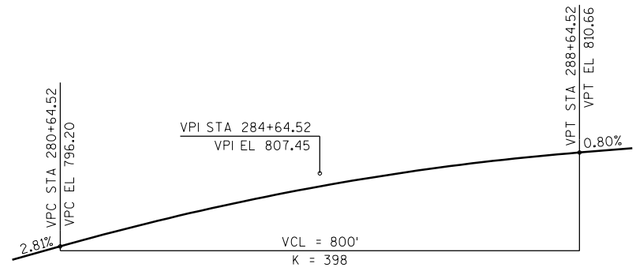
FLANGE SHOWN, WEB SIMILAR



PROFILE GRADE LINE - PILGRIM RD. SB



BEST FIT PROFILE GRADE LINE - USH 41 SB



BEST FIT PROFILE GRADE LINE - USH 41 NB

TOTAL ESTIMATED QUANTITIES

BID ITEM NO.	BID ITEMS	UNIT	SOUTH APPROACH	SOUTH ABUTMENT	PIER	NORTH ABUTMENT	NORTH APPROACH	SUPER	TOTAL
203.0200	REMOVING OLD STRUCTURE STATION 218+81	LS	--	--	--	--	--	--	1
206.1000	EXCAVATION FOR STRUCTURES BRIDGES B-67-337	LS	--	--	--	--	--	--	1
210.0100	BACKFILL STRUCTURE	CY	--	150	--	170	--	--	320
305.0120	BASE AGGREGATE DENSE 1 1/4-INCH	TON	--	180	--	190	--	--	370
502.0100	CONCRETE MASONRY BRIDGES	CY	77	49	142	53	82	466	869
502.3200	PROTECTIVE SURFACE TREATMENT	SY	123	--	--	--	124	1279	1526
503.0146	PRESTRESSED GIRDER TYPE I 45W-INCH	LF	--	--	--	--	--	1657	1657
505.0405	BAR STEEL REINFORCEMENT HS BRIDGES	LB	--	3500	2180	3800	--	--	9480
505.0605	BAR STEEL REINFORCEMENT HS COATED BRIDGES	LB	11710	370	29370	370	12380	83090	137290
506.2605	BEARING PADS ELASTOMERIC NON-LAMINATED	EACH	--	8	16	8	--	--	32
506.4000	STEEL DIAPHRAGMS B-67-337	EACH	--	--	--	--	--	28	28
511.1200	TEMPORARY SHORING B-67-337	SF	--	785	1330	775	--	--	2890
513.4090	RAILING TUBULAR SCREENING B-67-337	LS	--	--	--	--	--	--	1
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	--	14	--	15	--	--	29
517.1010.S	CONCRETE STAINING B-67-337	SF	60	300	1820	330	60	3350	5920
550.1100	PILING STEEL HP 10-INCH X 42 LB	LF	--	720	1260	440	--	--	2420
604.0400	SLOPE PAVING CONCRETE	SY	--	18	--	19	--	--	37
612.0206	PIPE UNDERDRAIN UNPERFORATED 6-INCH	LF	--	19	--	19	--	--	38
612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	--	70	--	74	--	--	144
614.0150	ANCHOR ASSEMBLIES FOR STEEL PLATE BEAM GUARD	EACH	--	--	--	1	--	--	1
652.0125	CONDUIT RIGID METALLIC 2-INCH	LF	--	5	--	5	--	--	10
652.0225	CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH	LF	20	--	--	--	21	211	252
652.0235	CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH	LF	--	--	167	--	--	--	167
653.0222	JUNCTION BOXES 18X12X6-INCH	EACH	--	--	--	--	--	1	1
657.6005.S	ANCHOR ASSEMBLIES LIGHT POLES ON STRUCTURES	EACH	--	--	--	--	--	1	1
SPV.0060.0010	PILE DYNAMIC ANALYZER (PDA) TESTING	EACH	--	2	2	2	--	--	6
SPV.0060.0011	PILE DYNAMIC ANALYZER (PDA) RESTRIKES	EACH	--	2	2	2	--	--	6
SPV.0085.0001	BAR STEEL REINFORCEMENT HS STAINLESS BRIDGES	LB	910	--	--	--	970	--	1880
	NON-BID ITEMS								
	NON-BITUMINOUS JOINT SEALER	SIZE							
	PREFORMED JOINT FILLER	SIZE							

ALL BID ITEMS CATEGORY 0020 (EXCEPT BID ITEM 517.1010.S WHICH IS CATEGORY 0040)

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-67-337

DRAWN BY SKR | PLANS CK'D. MDR

QUANTITIES & PROFILE GRADE LINES

SHEET 3 OF 28
860

8

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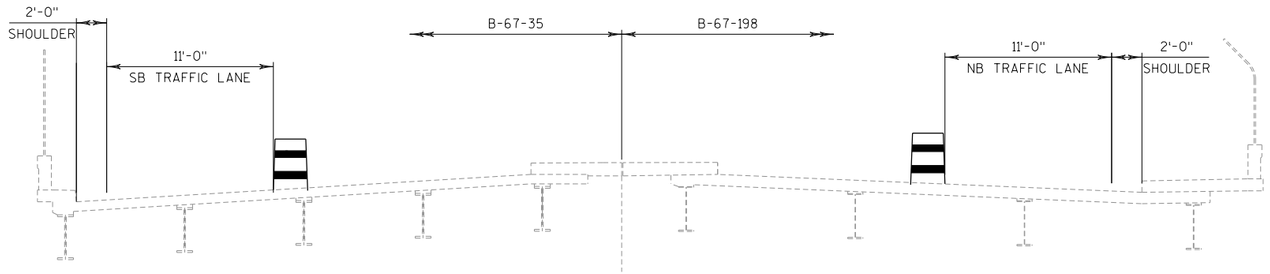
STATE PROJECT NUMBER
1100-37-70

CONSTRUCTION STAGING

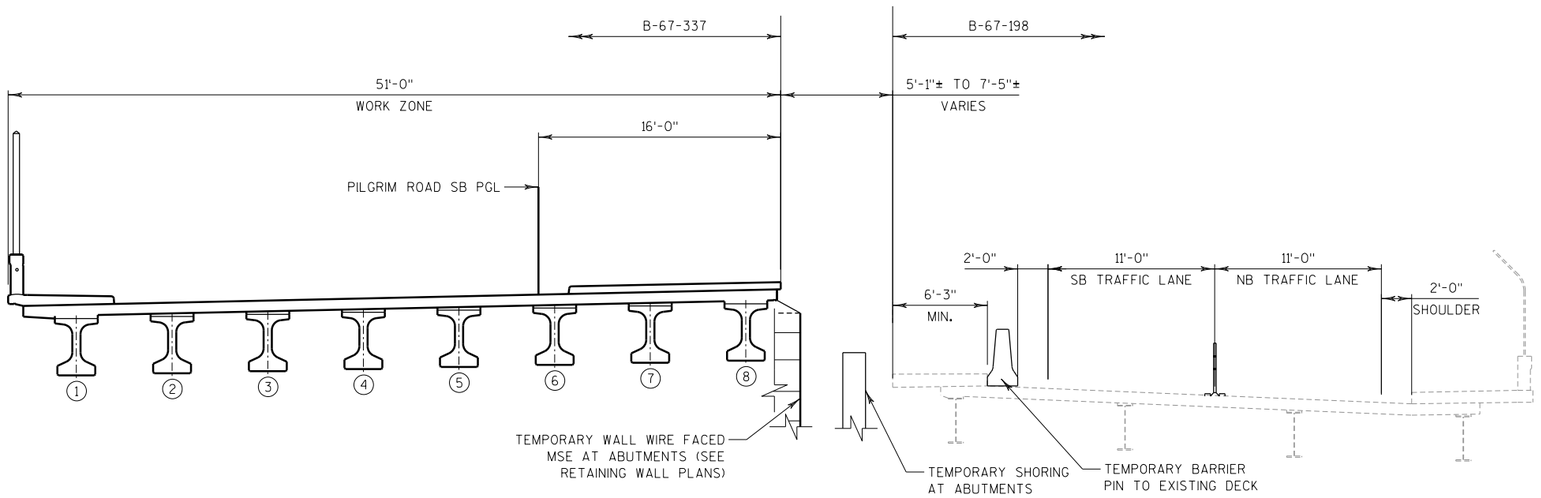
STAGE 1 CONSTUCTION DOES NOT INCLUDE WORK ON THE BRIDGES.

IN STAGE 2, EXISTING BRIDGE B-67-35 WILL BE DEMOLISHED AND B-67-337 WILL BE CONSTRUCTED. EXISTING BRIDGE B-67-198 WILL CARRY ONE LANE OF TRAFFIC NORTHBOUND AND ONE LANE OF TRAFFIC SOUTHBOUND ON PILGRIM ROAD.

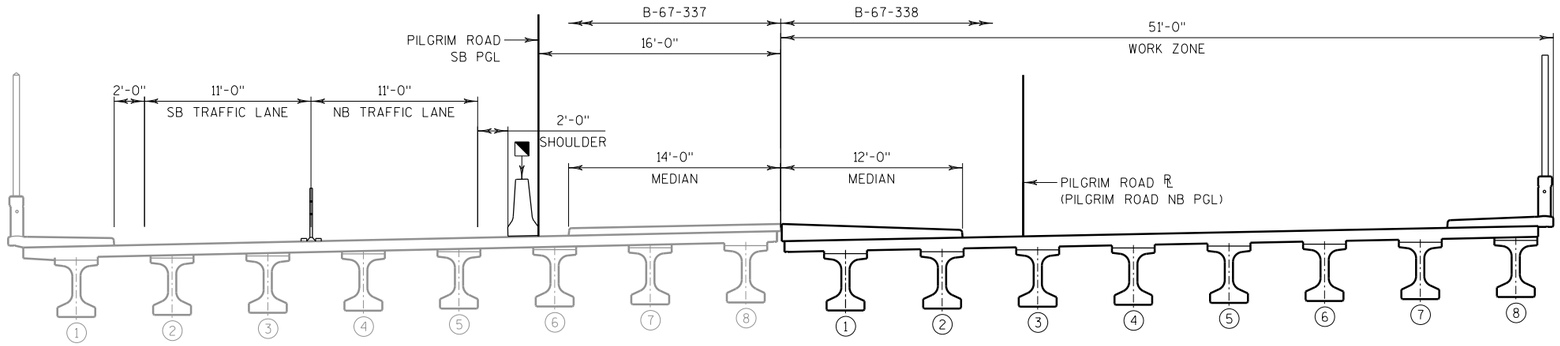
IN STAGE 3, TRAFFIC WILL BE SWITCHED TO NEW BRIDGE B-67-337, CARRYING ONE LANE OF TRAFFIC NORTHBOUND AND ONE LANE OF TRAFFIC SOUTHBOUND ON PILGRIM ROAD. EXISTING BRIDGE B-67-198 WILL BE DEMOLISHED AND NEW BRIDGE B-67-338 WILL BE CONSTRUCTED.



STAGE 1 CONSTRUCTION
(LOOKING NORTH)



STAGE 2 CONSTRUCTION
(LOOKING NORTH)



◥ DO NOT PIN TEMPORARY BARRIER TO NEW DECK

STAGE 3 CONSTRUCTION
(LOOKING NORTH)

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-67-337

DRAWN BY SKR | PLANS CK'D. MDR

CONSTRUCTION STAGING

SHEET 4 OF 28
861

8

8

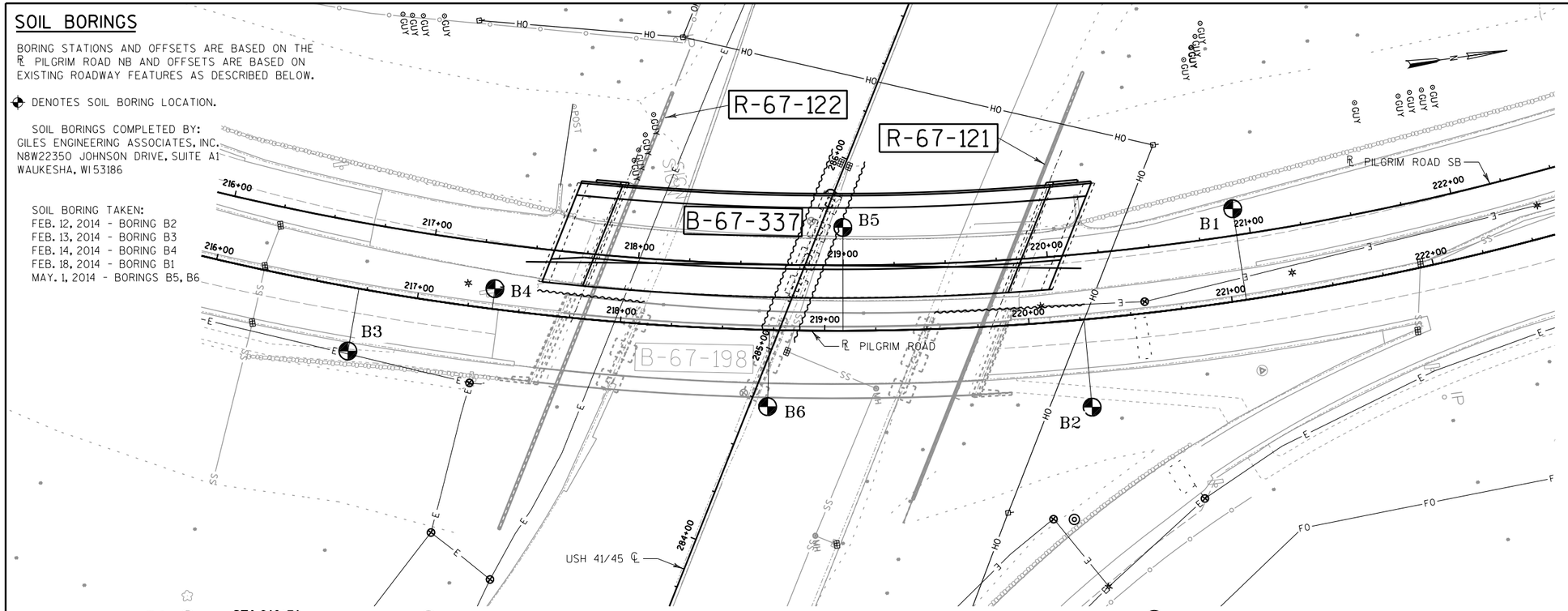
SOIL BORINGS

BORING STATIONS AND OFFSETS ARE BASED ON THE ℄ PILGRIM ROAD NB AND OFFSETS ARE BASED ON EXISTING ROADWAY FEATURES AS DESCRIBED BELOW.

⌖ DENOTES SOIL BORING LOCATION.

SOIL BORINGS COMPLETED BY:
GILES ENGINEERING ASSOCIATES, INC.
N8W22350 JOHNSON DRIVE, SUITE A1
WAUKESHA, WI 53186

SOIL BORING TAKEN:
FEB. 12, 2014 - BORING B2
FEB. 13, 2014 - BORING B3
FEB. 14, 2014 - BORING B4
FEB. 18, 2014 - BORING B1
MAY. 1, 2014 - BORINGS B5, B6



CROSS SECTION

SCALE: VERTICAL: 1" = 20'
HORIZONTAL: N.T.S.

*N-VALUE MAY BE ELEVATED DUE TO COBBLES AND BOULDERS

STATE PROJECT NUMBER

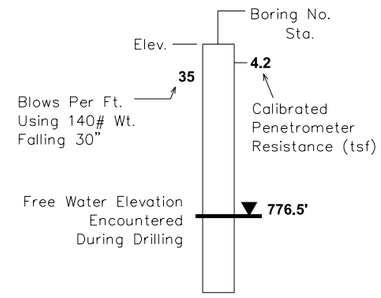
1100-37-70

MATERIAL SYMBOLS

- PAVEMENT
- TOP SOIL
- FILL / POSSIBLE FILL (SILTY CLAY / CLAYEY SILT)
- SILTY CLAY
- CLAYEY SILT / SILT
- SILTY SAND / SANDY SILT
- BOULDERS

NOTE: SOIL CONTACT LINES ARE INFERRED

LEGEND OF BORING



Unless otherwise specified, the blows per foot at the locations indicated are based on driving a 2" O.D.x 1. 4" I.D. split spoon sampler with a 140# hammer having a free fall of 30". The blow count is taken in undisturbed soil immediately below a cased or open hole eliminating side friction on the drive pipe.

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

TO OBTAIN RELATIVE DATA CONCERNING THE CHARACTER OF MATERIAL IN AND UPON WHICH THE FOUNDATION MIGHT BE BUILT, BORINGS AND/OR SOUNDINGS WERE MADE AT POINTS APPROXIMATELY AS INDICATED ON THIS DRAWING. THE DATA PRESENTED HEREIN REPRESENTS THE FINDINGS OF THE SUBSURFACE EXPLORATIONS MADE. HOWEVER, BECAUSE THE DEPTHS INVESTIGATED ARE LIMITED AND THE AREA OF THE BORINGS AND/OR SOUNDINGS IS VERY SMALL IN RELATION TO THE ENTIRE AREA, THE WISCONSIN DEPARTMENT OF TRANSPORTATION DOES NOT WARRANT CONDITIONS BELOW THE DEPTHS INVESTIGATED OR THAT THE CLASSIFICATION OF MATERIAL ENCOUNTERED IN THESE INVESTIGATIONS IS NECESSARILY TYPICAL OF THE ENTIRE SITE.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-67-337

DRAWN BY SKR | PLANS CK'D. MDR

SUBSURFACE EXPLORATION

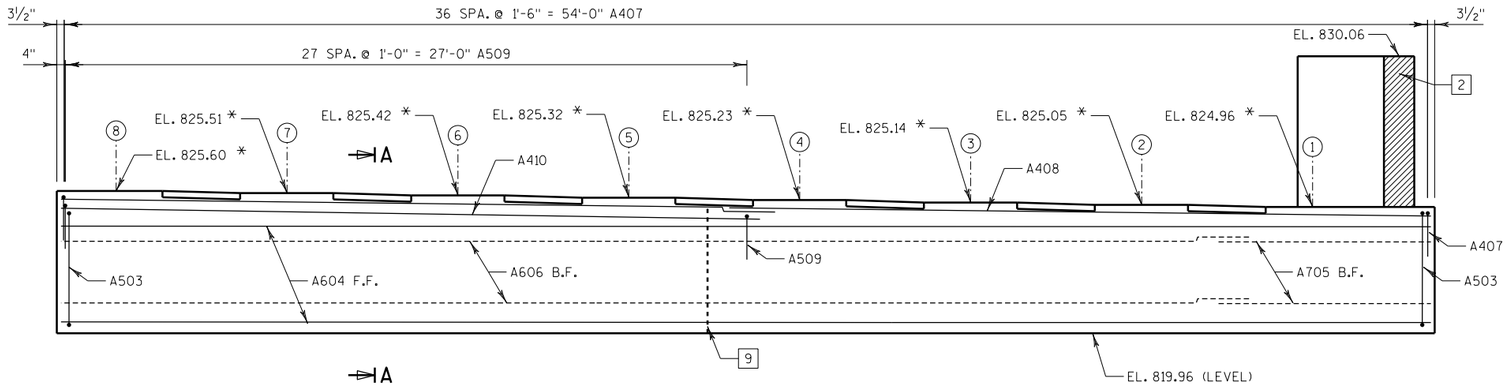
SHEET 5 OF 28
862

8

8

STATE PROJECT NUMBER

1100-37-70



ELEVATION

(LOOKING SOUTH)

NOTES

SEAL ALL EXPOSED HORIZONTAL AND VERTICAL SURFACES OF ½" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD ⅛" BELOW SURFACE OF CONCRETE.)

SEE SHEET 7 FOR SECTION A.

LEGEND

F.F. - FRONT FACE
B.F. - BACK FACE
E.F. - EACH FACE

(X) INDICATES GIRDER NUMBER

[1] 18" RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZONTAL AND VERTICAL JOINTS ON BACK FACE.

[2] ½" FILLER - EXTENDED FROM BEAM SEAT TO TOP OF CONCRETE PARAPET, INCLUDED IN WING LENGTH.

[4] 4" X ¾" FILLER LENGTH OF ABUTMENT.

[5] ¾" PREFORMED FILLER UNDER GIRDERS.

[6] BEARING PAD ELASTOMERIC NON-LAMINATED ½" X 8" X 2'-10"

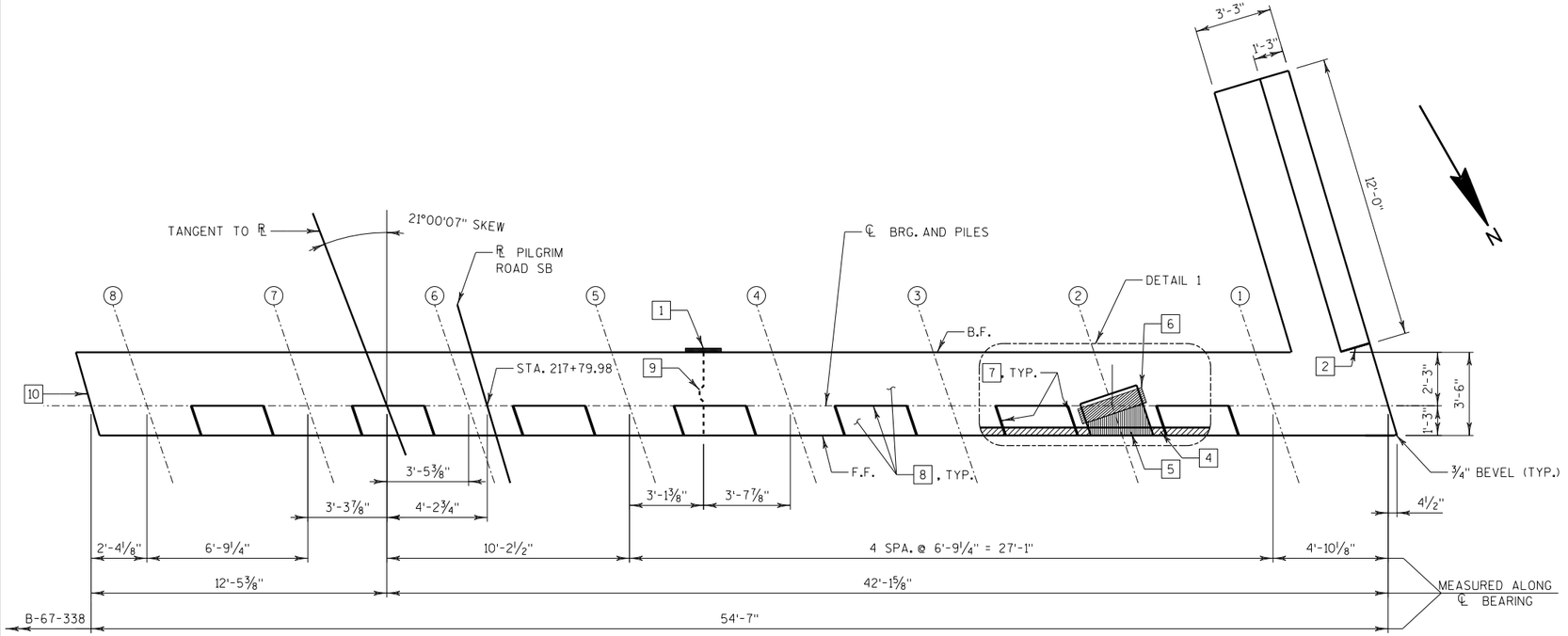
[7] ¾" CORK FILLER ON VERTICAL BEAM SEAT FACES THAT RUN PARALLEL WITH GIRDER

[8] STEEL TROWEL TOP SURFACE OF ABUTMENT. PLACE MULTIPLE LAYERS OF POLYETHYLENE SHEETS OVER ENTIRE ABUTMENT TOP BEFORE PLACING BEARING PADS AND/OR SUPERSTRUCTURE. TOTAL THICKNESS OF SHEETS SHALL BE AT LEAST 0.03".

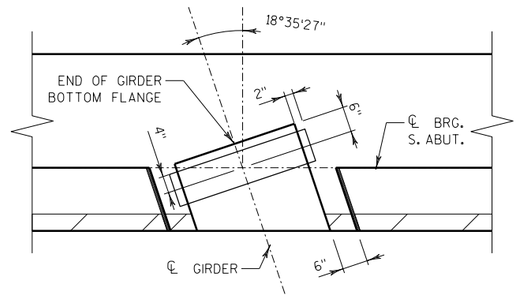
[9] VERTICAL CONSTRUCTION JOINT KEYWAY FORMED BY BEVELED 2"X8". DEFINE BY ¾" V-GROOVE ON FRONT FACE.

[10] ⅛" PLASTIC OR ZINC PLATE ON ABUTMENT END, FULL HEIGHT. USE ¾" CHAMFER ON FRONT FACE OF ABUTMENT.

✳ ELEVATIONS AND DIMENSIONS TAKEN AT ℄ OF BRG. & PILES S. ABUT.



PLAN



DETAIL 1

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-67-337

DRAWN BY AJC | PLANS CK'D. MDR

SOUTH ABUTMENT

SHEET 6 OF 28
863

8

8

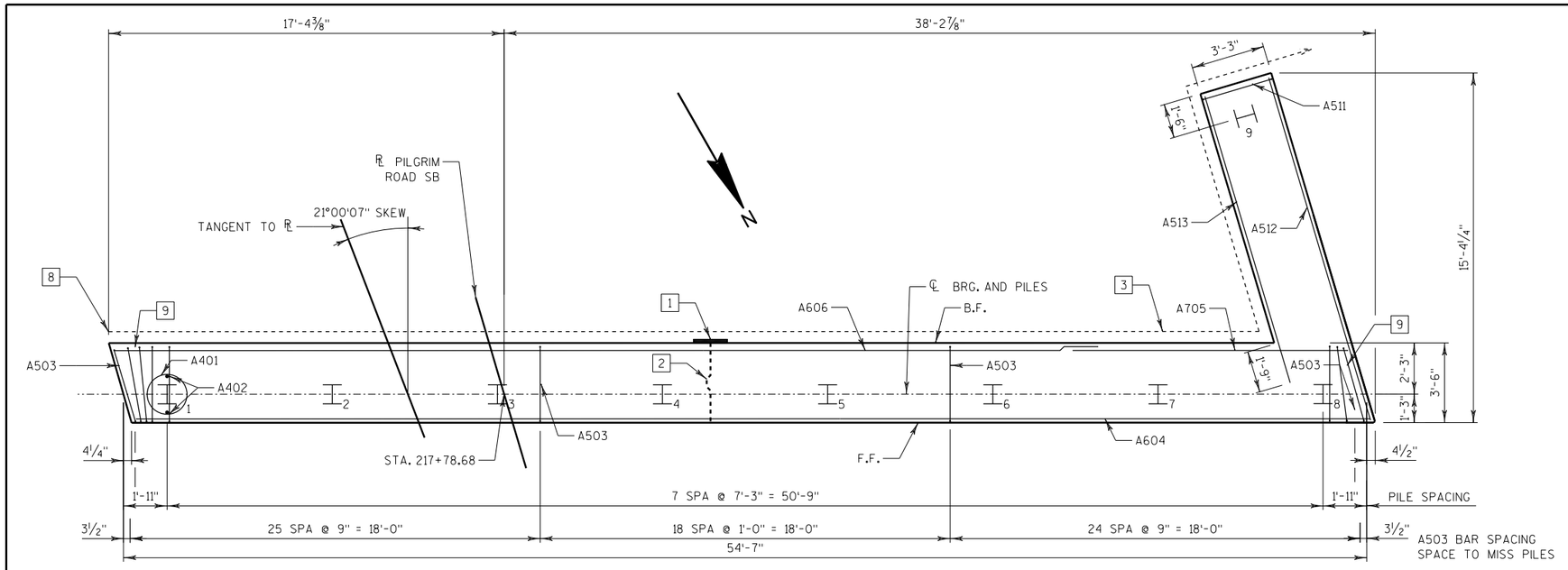
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PLOT DATE : 11/18/2014

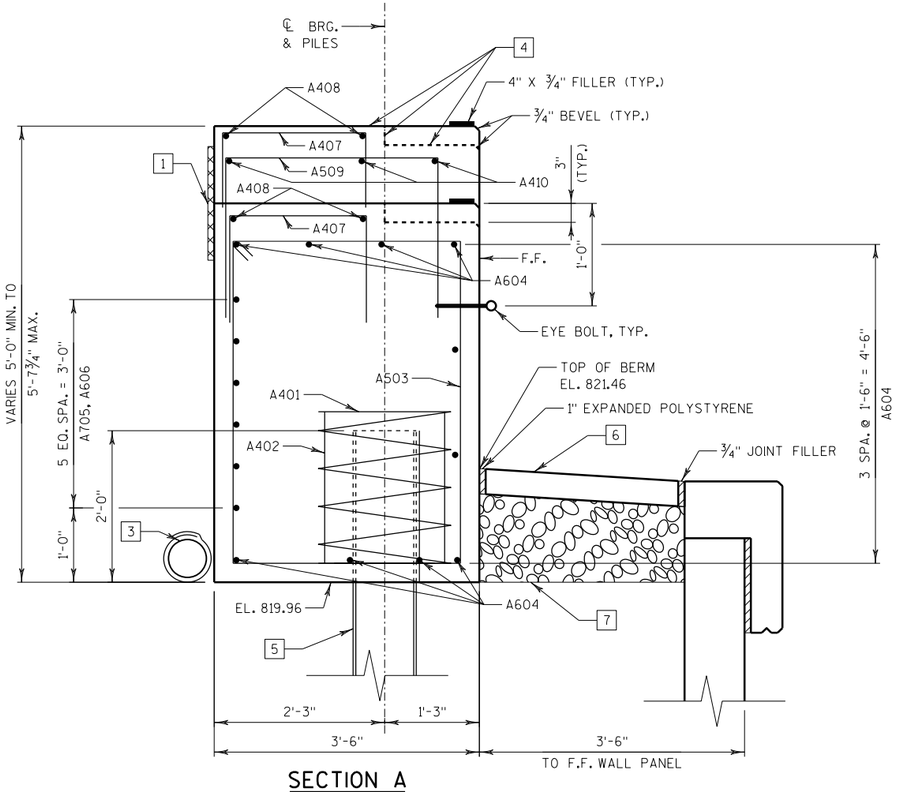
PLOT BY : mdr

STATE PROJECT NUMBER

1100-37-70

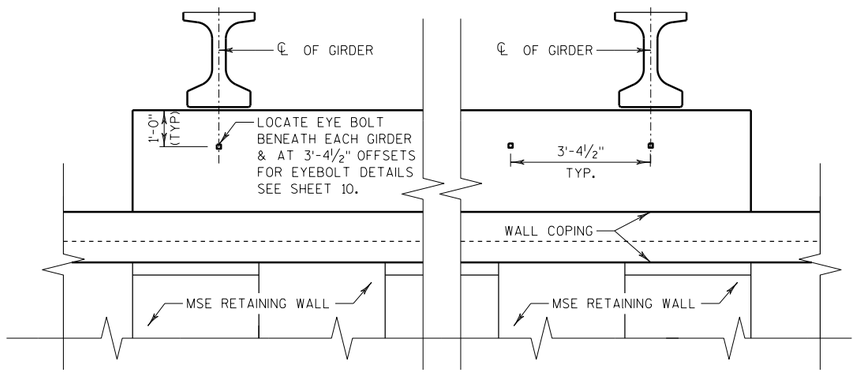


PILE PLAN



SECTION A

FOR LOCATION SEE SHEET 6



ABUTMENT ELEVATION

(SHOWING FALL PROTECTION - LOOKING SOUTH)

NOTES

INSTALL BRIDGE PILING BEFORE MSE WALL. PLACE REINFORCING MAT AROUND PILING FOR ABUTMENT.

DO NOT PLACE FILL ABOVE ELEVATION 824.96 AT SOUTH ABUTMENT BEFORE SUPERSTRUCTURE IS IN PLACE.

LEGEND

F.F. - FRONT FACE
B.F. - BACK FACE
E.F. - EACH FACE

1. 18" RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZONTAL AND VERTICAL JOINTS ON BACK FACE.
2. VERTICAL CONSTRUCTION JOINT KEYWAY FORMED BY BEVELED 2"X8". DEFINE BY 3/4" V-GROOVE ON FRONT FACE.
3. PIPE UNDERDRAIN WRAPPED (6-INCH) SLOPE 0.5% MIN. TO SUITABLE DRAINAGE AS DIRECTED BY THE ENGINEER. ATTACH RODENT SHIELD AS DETAILED ON SHEET 3 FOR PIPE UNDERDRAIN. RODENT SHIELD TO BE INCLUDED IN BID PRICE OF "PIPE UNDERDRAIN WRAPPED 6-INCH". CAP END AS SHOWN.
4. STEEL TROWEL TOP SURFACE OF ABUTMENT. PLACE MULTIPLE LAYERS OF POLYETHYLENE SHEETS OVER ENTIRE ABUTMENT TOP BEFORE PLACING BEARING PADS AND/OR SUPERSTRUCTURE. TOTAL THICKNESS OF SHEETS SHALL BE AT LEAST 0.03".
5. ABUTMENT TO BE SUPPORTED ON HP 10 X 42 STEEL PILING WITH A REQUIRED DRIVING RESISTANCE OF 180 TONS AS DETERMINED BY THE PDA/CAPWAP METHOD. ESTIMATED 80' LONG.
6. 4" CONCRETE (SLOPE 3/4") TO BE PAID AS "SLOPE PAVING CONCRETE".
7. MSE BACKFILL OR SIZE 2 COARSE AGGREGATE. COST INCIDENTAL TO BID ITEM "SLOPE PAVING CONCRETE".
8. HIGH END OF PIPE UNDERDRAIN WRAPPED. CAP END. TO BE CONNECTED IN THE FUTURE WHEN STRUCTURE B-67-338 IS CONSTRUCTED.
9. ROTATE AND FAN OUT REINFORCING BARS AS NEEDED AT SKEWED ENDS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-67-337

DRAWN BY AJC | PLANS CK'D. MDR

SOUTH ABUTMENT DETAILS

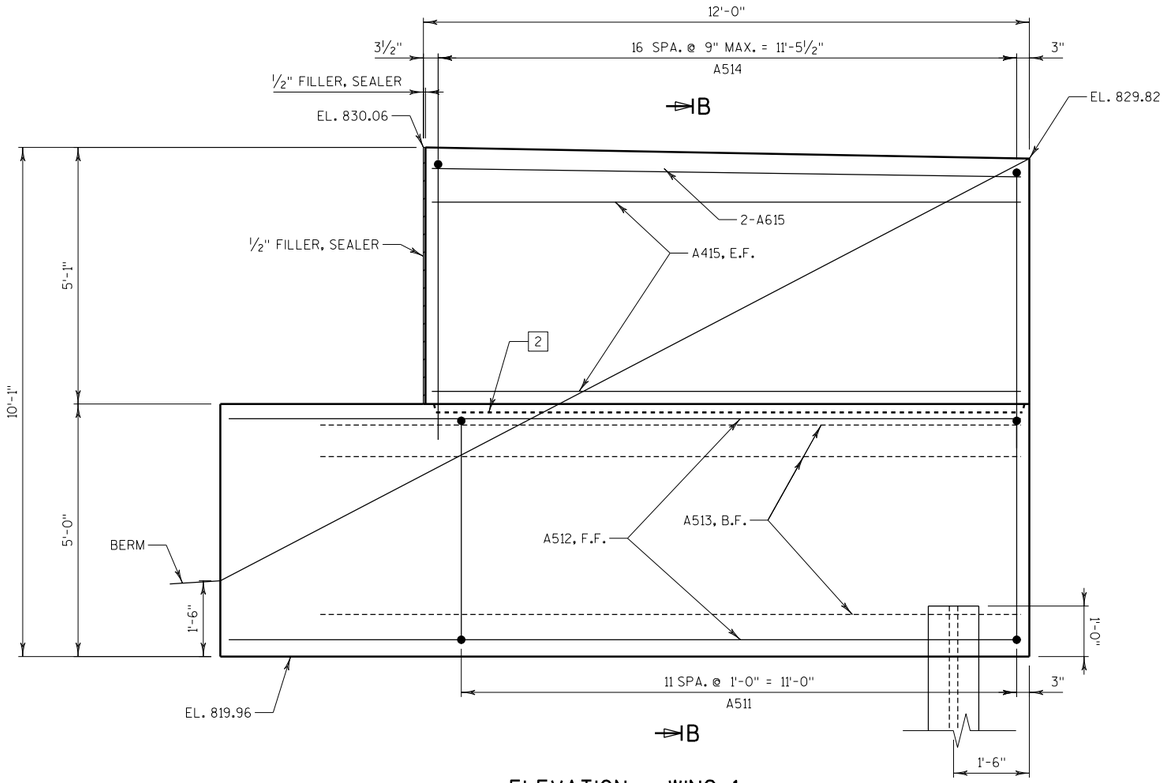
SHEET 7 OF 28
864

8

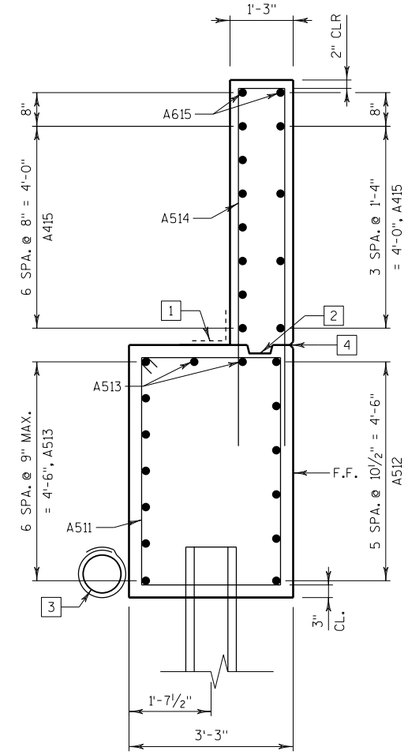
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STATE PROJECT NUMBER

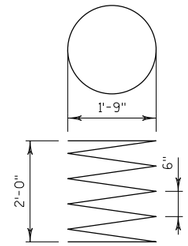
1100-37-70



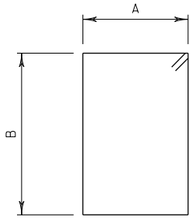
ELEVATION - WING 1



SECTION B

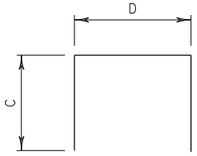


A401



A503, A511

BAR MARK	DIM. A	DIM. B
A503	3'-2"	4'-4"
A511	2'-11"	4'-6"



A407, A509, A514

BAR MARK	DIM. C	DIM. D
A407	1'-3"	1'-11"
A509	1'-5"	3'-2"
A514	6'-11"	11"

SOUTH ABUTMENT BILL OF BARS

BAR MARK	COAT	NO.	LENGTH	BENT	BAR SERIES	LOCATION
A401		9	28'-0"	X		ABUT. BODY AT PILES
A402		18	2'-3"			ABUT. BODY AT PILES
A503		68	15'-8"	X		ABUT. BODY VERT. STIRRUPS
A604		10	54'-3"			ABUT. BODY HORIZ.
A705		6	12'-0"			ABUT. BODY HORIZ B.F.
A606		6	45'-2"			ABUT. BODY HORIZ B.F.
A407		37	4'-3"	X		ABUT. BODY VERT.
A408		4	28'-1"			ABUT. BODY HORIZ.
A509		28	5'-9"	X		ABUT. BODY VERT.
A410		3	26'-4"			ABUT. BODY HORIZ.
A511		12	15'-6"	X		WING 1 VERT. STIRRUPS
A512		6	14'-6"			WING 1 HORIZ F.F.
A513		9	13'-9"			WING 1 HORIZ B.F.
A514	X	16	14'-6"	X		WING 1 VERT.
A615	X	2	11'-8"			WING 1 HORIZ.
A416	X	11	11'-8"			WING 1 HORIZ.

LEGEND

F.F. - FRONT FACE
B.F. - BACK FACE
E.F. - EACH FACE

1 18" RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZONTAL AND VERTICAL JOINTS ON BACK FACE.

2 OPTIONAL CONST. JOINT FORMED BY BEVELED 2" X 6" KEYWAY WITH MEMBRANE ON BACKFACE.

3 PIPE UNDERDRAIN WRAPPED (6-INCH) SLOPE 0.5% MIN. TO SUITABLE DRAINAGE AS DIRECTED BY THE ENGINEER. ATTACH RODENT SHIELD AS DETAILED ON SHEET 3 FOR PIPE UNDERDRAIN. RODENT SHIELD TO BE INCLUDED IN BID PRICE OF "PIPE UNDERDRAIN WRAPPED 6-INCH". CAP END AS SHOWN.

4 ¾" "V" GROVE ON F.F. OF WINGWALL

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-67-337

DRAWN BY AJC | PLANS CK'D. MDR

WING 1
DETAILS

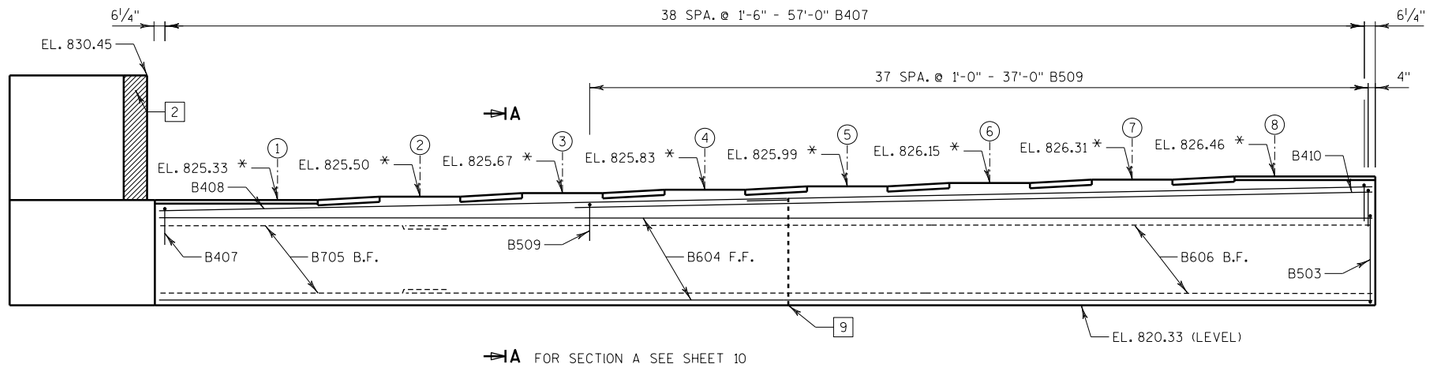
SHEET 8 OF 28
865

8

8

STATE PROJECT NUMBER

1100-37-70



ELEVATION

(LOOKING NORTH)

NOTES

SEAL ALL EXPOSED HORIZONTAL AND VERTICAL SURFACES OF ½" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD ⅛" BELOW SURFACE OF CONCRETE.)

LEGEND

F.F. - FRONT FACE
B.F. - BACK FACE
E.F. - EACH FACE

(X) INDICATES GIRDER NUMBER

[1] 18" RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZONTAL AND VERTICAL JOINTS ON BACK FACE.

[2] ½" FILLER - EXTENDED FROM BEAM SEAT TO TOP OF CONCRETE PARAPET, INCLUDED IN WING LENGTH.

[4] 4" X ¾" FILLER LENGTH OF ABUTMENT.

[5] ¾" PREFORMED FILLER UNDER GIRDERS.

[6] BEARING PAD ELASTOMERIC NON-LAMINATED ½" X 8" X 2'-10"

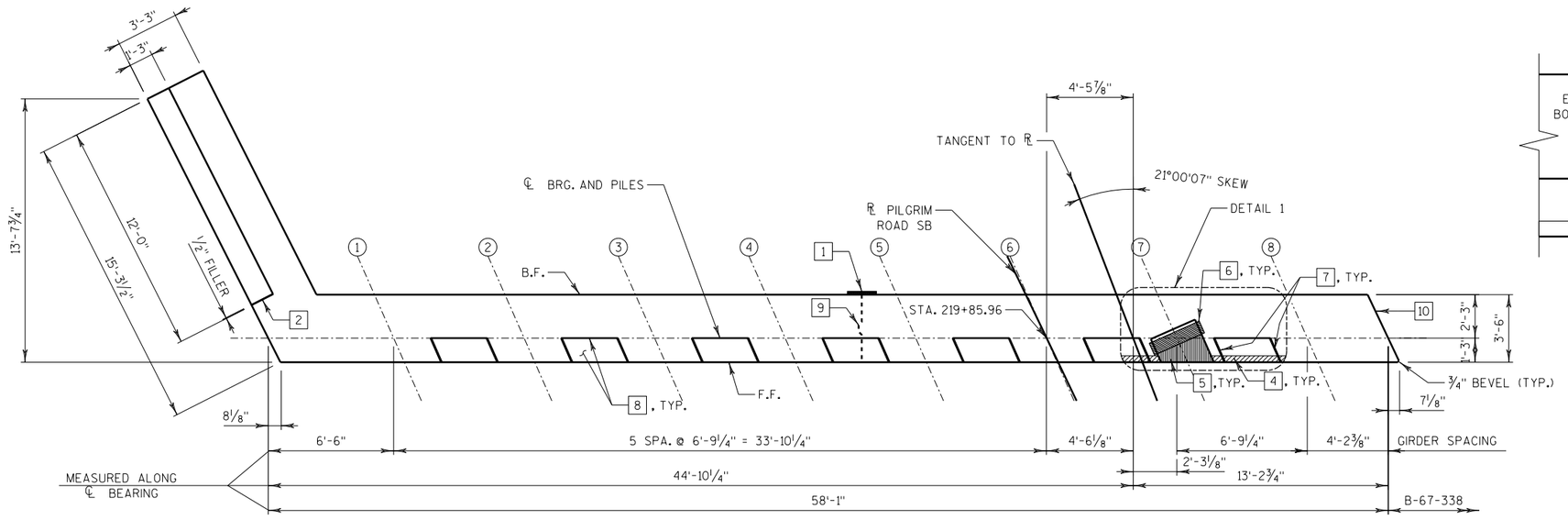
[7] ¾" CORK FILLER ON VERTICAL BEAM SEAT FACES THAT RUN PARALLEL WITH GIRDER

[8] STEEL TROWEL TOP SURFACE OF ABUTMENT. PLACE MULTIPLE LAYERS OF POLYETHYLENE SHEETS OVER ENTIRE ABUTMENT TOP BEFORE PLACING BEARING PADS AND/OR SUPERSTRUCTURE. TOTAL THICKNESS OF SHEETS SHALL BE AT LEAST 0.03".

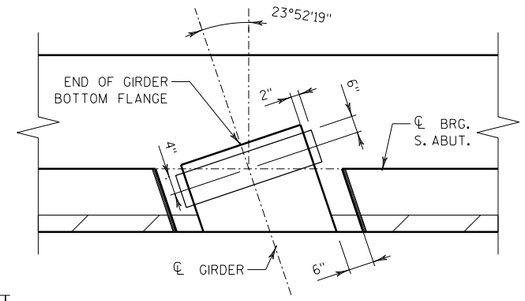
[9] VERTICAL CONSTRUCTION JOINT KEYWAY FORMED BY BEVELED 2"X8". DEFINE BY ¾" V-GROOVE ON FRONT FACE.

[10] ⅛" PLASTIC OR ZINC PLATE ON ABUTMENT END, FULL HEIGHT. USE ¾" CHAMFER ON FRONT FACE OF ABUTMENT.

* ELEVATIONS AND DIMENSIONS TAKEN AT ℄ OF BRG. & PILES N. ABUT.



PLAN



DETAIL 1

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-67-337

DRAWN BY AJC | PLANS CK'D. MDR

NORTH ABUTMENT

SHEET 9 OF 28
866

8

8

FILE NAME : P:\44xx\4442\Structures\B-67-337\Plan\080109_na_337.dgn

PLOT DATE : 11/18/2014

PLOT BY : mdr

STATE PROJECT NUMBER

1100-37-70

NOTES

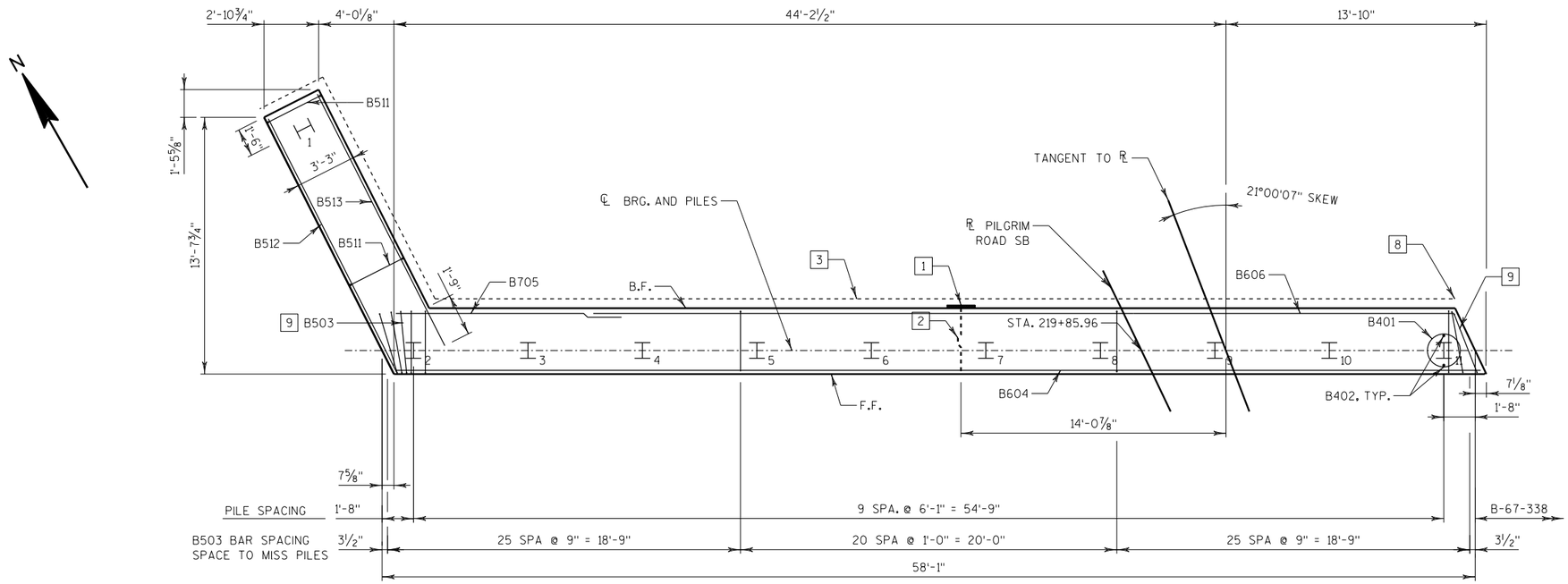
INSTALL BRIDGE PILING BEFORE MSE WALL. PLACE REINFORCING MAT AROUND PILING FOR ABUTMENT.

DO NOT PLACE FILL ABOVE ELEVATION 825.33 AT NORTH ABUTMENT BEFORE SUPERSTRUCTURE IS IN PLACE.

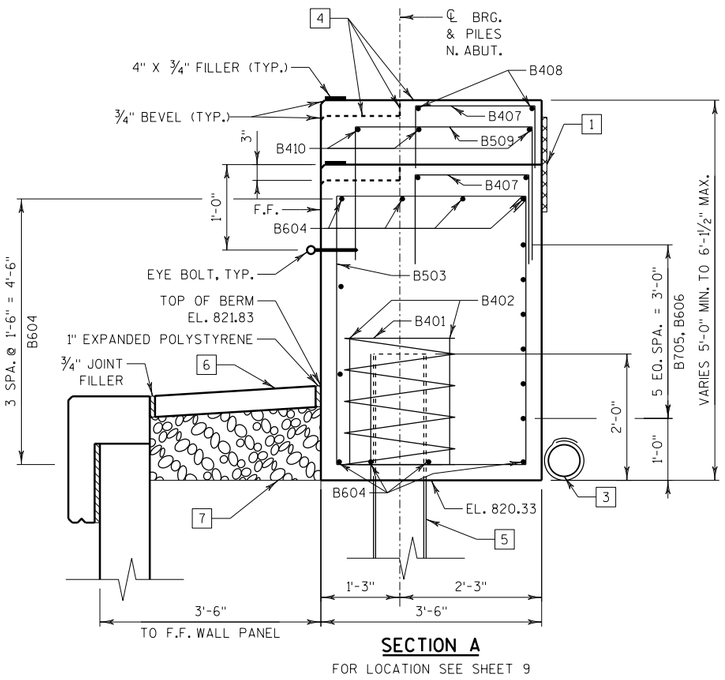
LEGEND

F.F. - FRONT FACE
B.F. - BACK FACE
E.F. - EACH FACE

1. 18" RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZONTAL AND VERTICAL JOINTS ON BACK FACE.
2. VERTICAL CONSTRUCTION JOINT KEYWAY FORMED BY BEVELED 2"X8". DEFINE BY ¾" V-GROOVE ON FRONT FACE.
3. PIPE UNDERDRAIN WRAPPED (6-INCH) SLOPE 0.5% MIN. TO SUITABLE DRAINAGE AS DIRECTED BY THE ENGINEER. ATTACH RODENT SHIELD AS DETAILED ON SHEET 3 FOR PIPE UNDERDRAIN. RODENT SHIELD TO BE INCLUDED IN BID PRICE OF "PIPE UNDERDRAIN WRAPPED 6-INCH". CAP END AS SHOWN.
4. STEEL TROWEL TOP SURFACE OF ABUTMENT. PLACE MULTIPLE LAYERS OF POLYETHYLENE SHEETS OVER ENTIRE ABUTMENT TOP BEFORE PLACING BEARING PADS AND/OR SUPERSTRUCTURE. TOTAL THICKNESS OF SHEETS SHALL BE AT LEAST 0.03".
5. ABUTMENT TO BE SUPPORTED ON HP 10 X 42 STEEL PILING WITH A REQUIRED DRIVING RESISTANCE OF 140 TONS AS DETERMINED BY THE PDA/CAPWAP METHOD. ESTIMATED 40' LONG.
6. 4" CONCRETE (SLOPE ¾") TO BE PAID AS "SLOPE PAVING CONCRETE".
7. MSE BACKFILL OR SIZE 2 COARSE AGGREGATE. COST INCIDENTAL TO BID ITEM "SLOPE PAVING CONCRETE".
8. HIGH END OF PIPE UNDERDRAIN WRAPPED. CAP END. TO BE CONNECTED IN THE FUTURE WHEN STRUCTURE B-67-338 IS CONSTRUCTED.
9. ROTATE AND FAN OUT REINFORCING BARS AS NEEDED AT SKEWED ENDS.

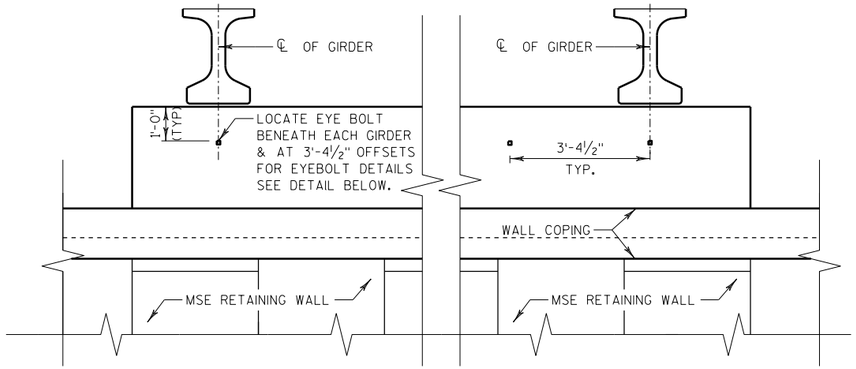


PILE PLAN



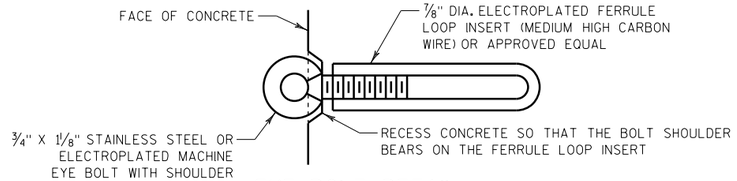
SECTION A

FOR LOCATION SEE SHEET 9



ABUTMENT ELEVATION

(SHOWING FALL PROTECTION - LOOKING NORTH)



EYE BOLT DETAIL

EYE BOLTS AND FERRULE LOOP INSERTS ARE INCLUDED IN THE BID ITEM "CONCRETE MASONRY BRIDGES". MINIMUM STRENGTH OF EYE BOLT AND LOOP INSERT IS 3500 LB.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-67-337

DRAWN BY SKR | PLANS CK'D. MDR

NORTH ABUTMENT DETAILS

SHEET 10 OF 28
867

8

8

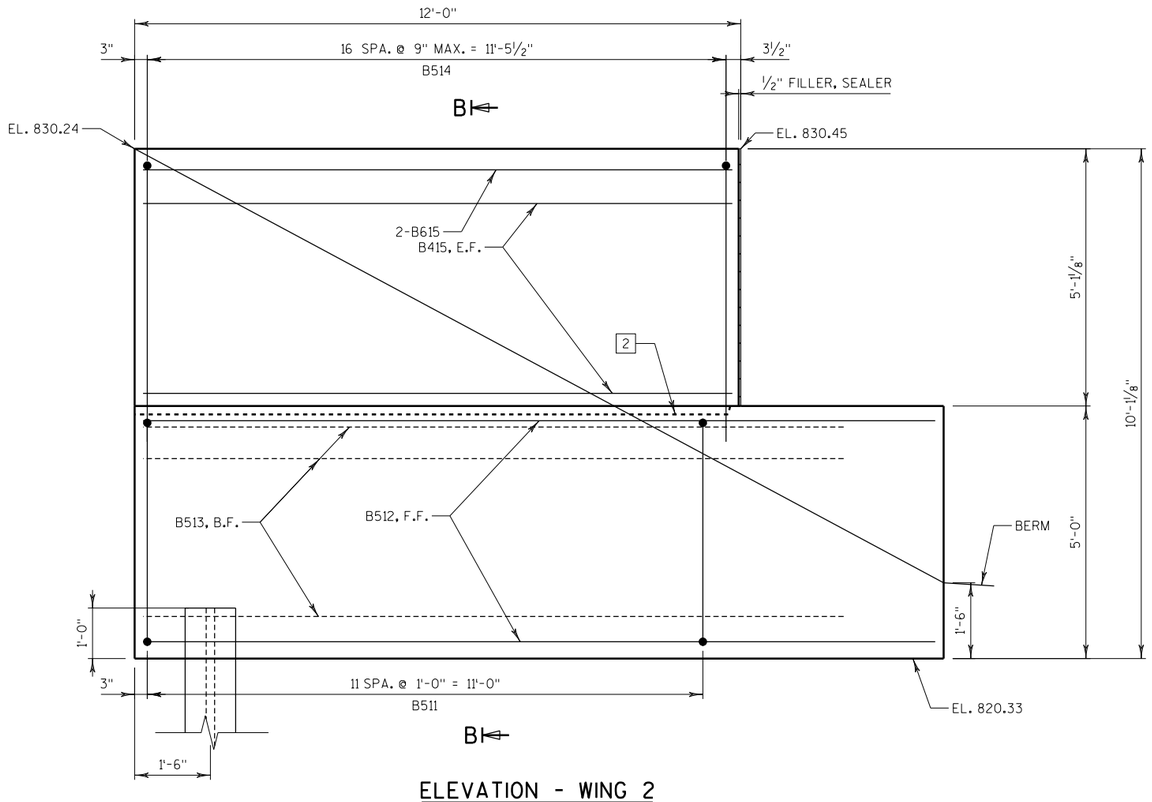
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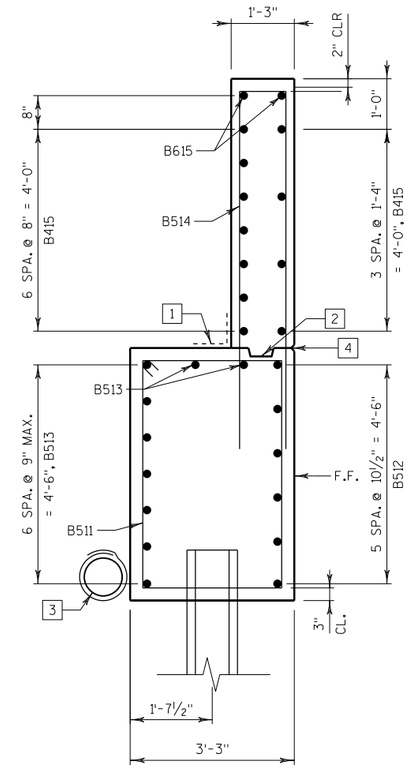
PLOT BY : mdr

STATE PROJECT NUMBER

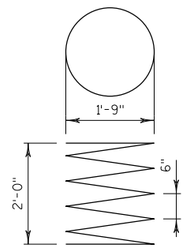
1100-37-70



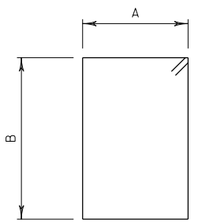
ELEVATION - WING 2



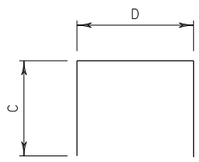
SECTION B



B401



B503, B511



B407, B509, B514

BAR MARK	DIM. A	DIM. B
B503	3'-2"	4'-4"
B511	2'-11"	4'-6"

BAR MARK	DIM. C	DIM. D
B407	1'-3"	1'-11"
B509	1'-5"	3'-2"
B514	6'-11"	11"

NORTH ABUTMENT BILL OF BARS

BAR MARK	COAT	NO.	LENGTH	BENT	BAR SERIES	LOCATION
B401		11	28'-0"	X		ABUT. BODY AT PILES
B402		22	2'-3"			ABUT. BODY AT PILES
B503		71	15'-8"	X		ABUT. BODY VERT.
B604		10	57'-9"			ABUT. BODY HORIZ.
B705		6	12'-0"			ABUT. BODY HORIZ. B.F.
B606		6	48'-8"			ABUT. BODY HORIZ. B.F.
B407		40	4'-3"	X		ABUT. BODY VERT.
B408		4	29'-10"			ABUT. BODY HORIZ.
B509		38	6'-9"	X		ABUT. BODY VERT.
B410		3	36'-8"			ABUT. BODY HORIZ.
B511		11	15'-6"	X		WING 2 VERT. STIRRUPS
B512		6	15'-1"			WING 2 HORIZ. F.F.
B513		9	14'-6"			WING 2 HORIZ. B.F.
B514	X	16	14'-8"	X		WING 2 VERT.
B615	X	2	11'-8"			WING 2 HORIZ.
B416	X	11	11'-8"			WING 2 HORIZ.

LEGEND

F.F. - FRONT FACE
B.F. - BACK FACE
E.F. - EACH FACE

1. 18" RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZONTAL AND VERTICAL JOINTS ON BACK FACE.
2. OPTIONAL CONST. JOINT FORMED BY BEVELED 2" X 6" KEYWAY WITH MEMBRANE ON BACKFACE.
3. PIPE UNDERDRAIN WRAPPED (6-INCH) SLOPE 0.5% MIN. TO SUITABLE DRAINAGE AS DIRECTED BY THE ENGINEER. ATTACH RODENT SHIELD AS DETAILED ON SHEET 3 FOR PIPE UNDERDRAIN. RODENT SHIELD TO BE INCLUDED IN BID PRICE OF "PIPE UNDERDRAIN WRAPPED 6-INCH". CAP END AS SHOWN.
4. ¾" "V" GROVE ON F.F. OF WINGWALL

NO.	DATE	REVISION	BY

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DEPARTMENT OF TRANSPORTATION

STRUCTURE B-67-337

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WING 2 DETAILS

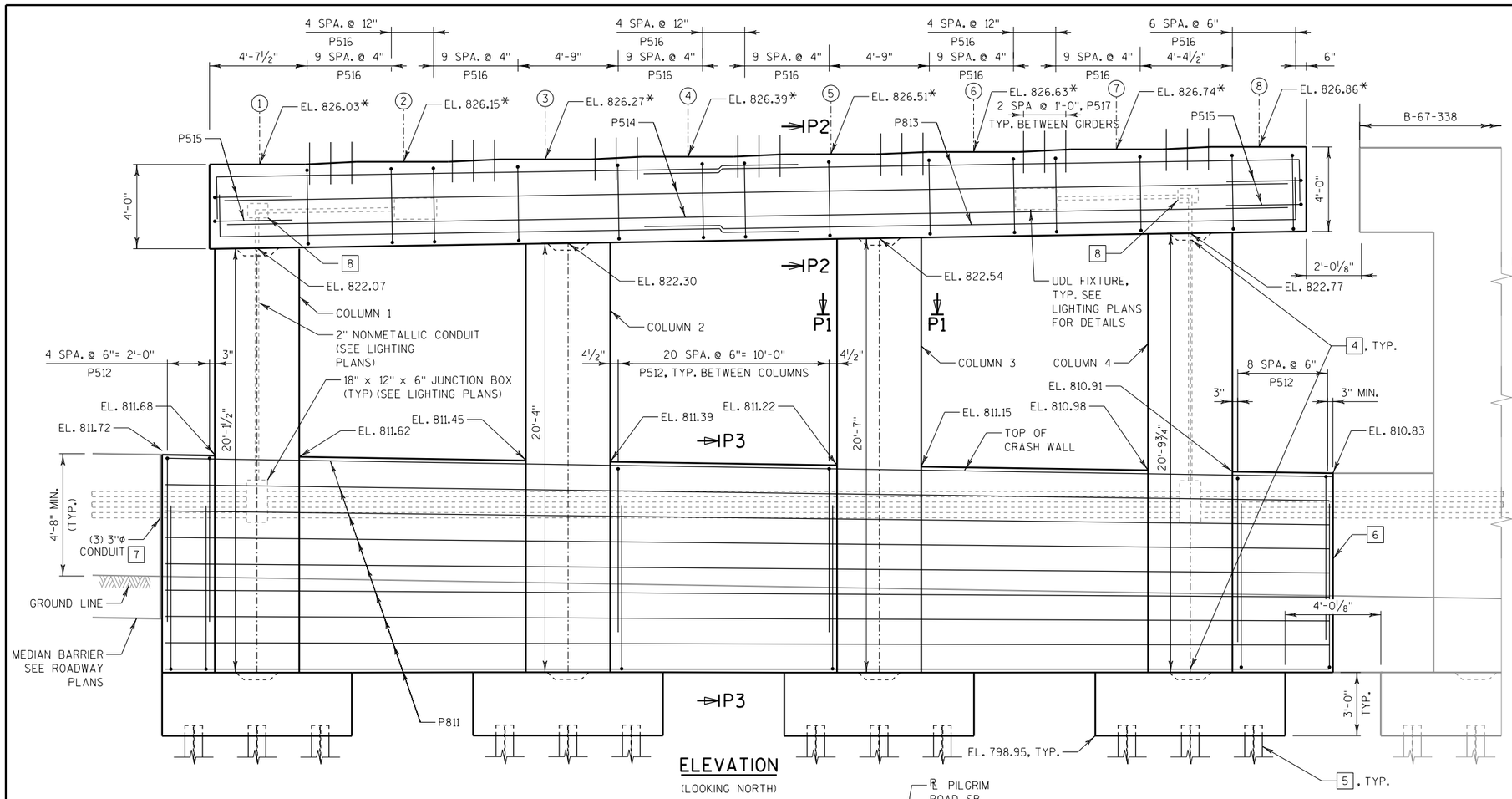
SHEET 11 OF 28
868

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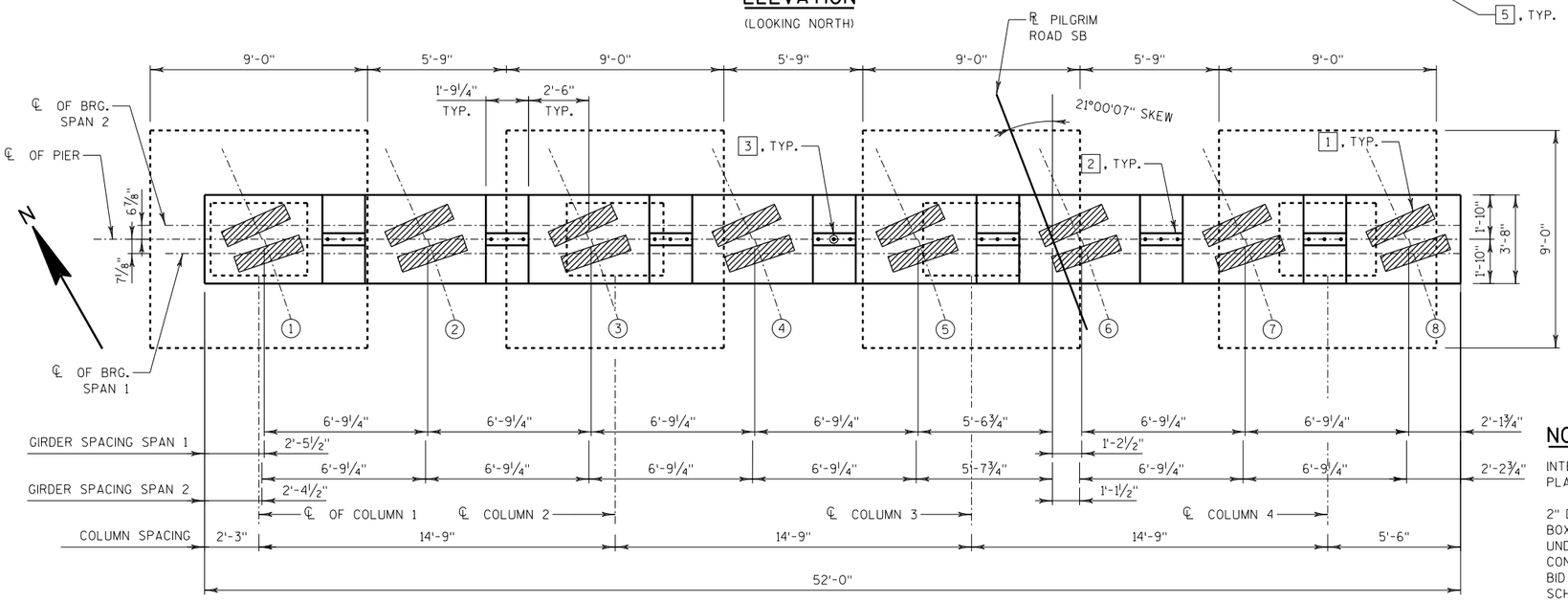
STATE PROJECT NUMBER

1100-37-70

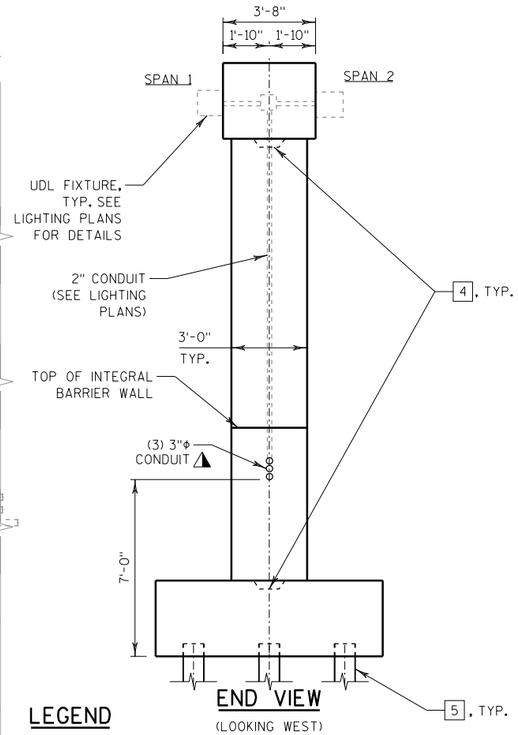


ELEVATION

(LOOKING NORTH)



PLAN



END VIEW

(LOOKING WEST)

LEGEND

(X) INDICATES GIRDER NUMBER

1 BEARING PAD ELASTOMERIC NON-LAMINATED ½" X 8" X 2'-10"

2 KEYED CONSTRUCTION JOINT. FORMED BY SURFACE BEVELED 2" X 6" BETWEEN BEAM SEATS.

3 P517 BARS AT 1'-0" CENTERS, BETWEEN BEAM SEATS. EMBED 1'-0" INTO CAP CONCRETE.

4 1'-3" X 2'-0" X 4" DEEP CONSTRUCTION JOINT FORMED BY BEVELED KEYWAY.

5 PIER TO BE SUPPORTED ON HP 10X42 STEEL PILING WITH A REQUIRED DRIVING RESISTANCE OF 140 TONS/PILE. EST. LENGTH 35'.

6 1" PREFORMED FILLER. SEAL ALL EXPOSED HORZ. AND VERT. SURFACES OF FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD ⅛" BELOW SURFACE OF CONCRETE). PROVIDE EXPANSION FITTING FOR CONDUIT. WORK TO BE INCLUDED IN BID ITEM "CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH".

7 PROVIDE EXPANSION FITTING BETWEEN INTEGRAL BARRIER WALL AND MEDIAN BARRIER. WORK TO BE PAID FOR UNDER BID ITEM "CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH."

8 1" TYPE "LL", "LR", OR "T" CONDULET (SEE ROADWAY PLANS FOR LIGHTING DETAILS)

◭ TO BE PAID FOR UNDER BID ITEM "CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH."

✕ ELEVATIONS AND DIMENSIONS TAKEN AT ℄ OF PIER.

FOR SECTIONS P1, P2, AND P3 SEE SHEET 13.

NOTES

INTEGRAL BARRIER WALL NOT SHOWN ON PLAN VIEW FOR CLARITY.

2" DIA. CONDUIT, UDL FIXTURES, JUNCTION BOXES, AND CONDULET TO BE PAID FOR UNDER ROADWAY BID ITEMS. THE (3) - 3" DIA. CONDUITS ARE TO BE PAID FOR UNDER THE BID ITEM CONDUIT "RIGID NONMETALLIC SCHEDULE 40 3-INCH" AS SHOWN ON THE QUANITIES SHEET.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-67-337

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PIER

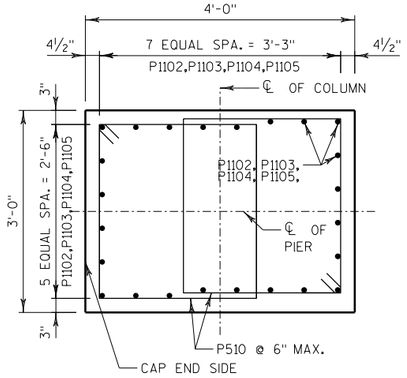
SHEET 12 OF 28
869

8

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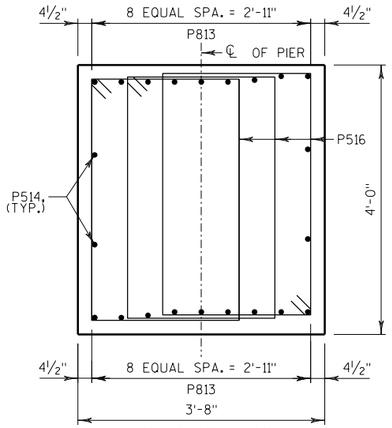
STATE PROJECT NUMBER

1100-37-70



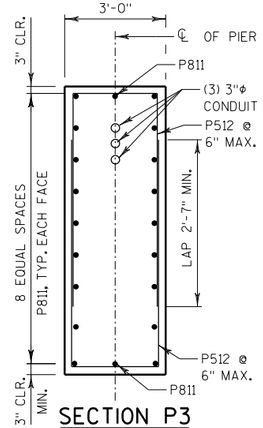
SECTION P1

PIER COLUMN



SECTION P2

PIER CAP

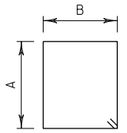


SECTION P3

CRASH WALL

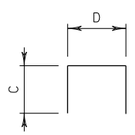
PIER BILL OF BARS

BAR MARK	COAT	NO.	LENGTH	BENT	LOCATION
P801		96	8'-6"		PIER FOOTING - BOTTOM
P1102	X	24	27'-8"	X	PIER VERT. COLUMN 1
P1103	X	24	27'-10"	X	PIER VERT. COLUMN 2
P1104	X	24	28'-1"	X	PIER VERT. COLUMN 3
P1105	X	24	28'-4"	X	PIER VERT. COLUMN 4
P510	X	346	10'-4"	X	COLUMN STIRRUPS
P811	X	20	55'-0"		INTEGRAL BARRIER - HORIZ.
P512	X	154	13'-7"	X	INTEGRAL BARRIER - VERT.
P813	X	36	30'-8"	X	PIER CAP - HORIZ. TOP & BOT.
P514	X	4	51'-8"		PIER CAP FACE - HORZ.
P515	X	4	6'-6"	X	PIER CAP - HORZ. AT END
P516	X	228	12'-8"	X	PIER CAP - STIRRUPS
P517	X	21	2'-0"		PIER CAP - VERT. TOP W/ BEAM SEATS



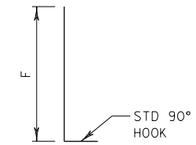
P510, P516

BAR MARK	DIM. A	DIM. B
P510	2'-6"	2'-4"
P516	3'-8"	2'-4"



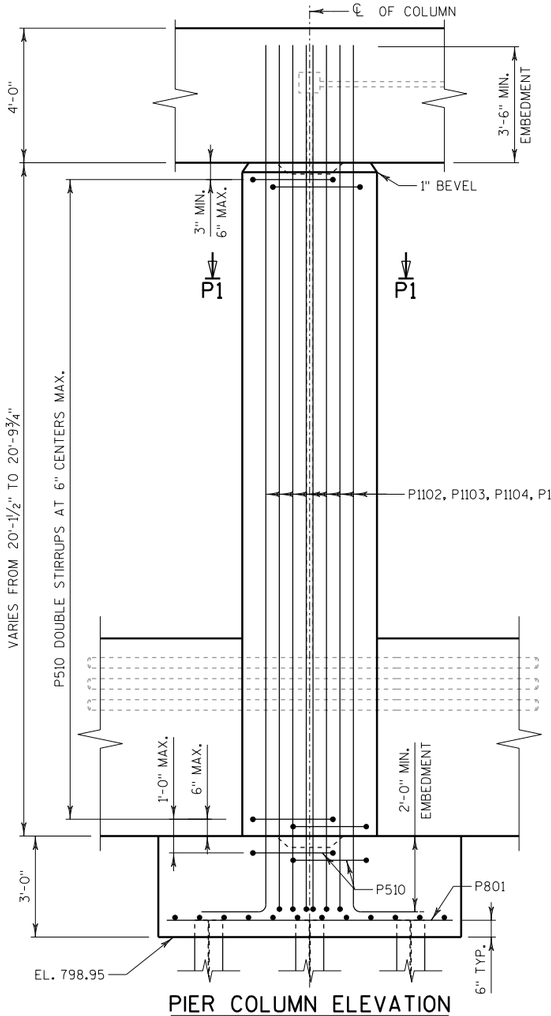
P512, P515

BAR MARK	DIM. C	DIM. D
P515	1'-9"	3'-2"
P512	5'-9"	2'-4"



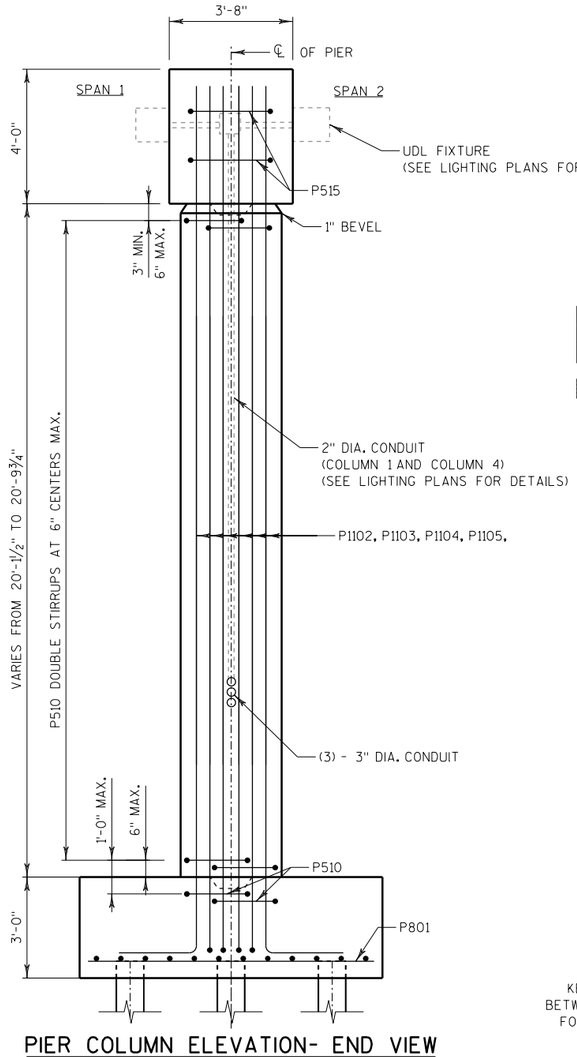
P1102, P1103, P1104, P1105, P813

BAR MARK	DIM. F
P1102	26'-0"
P1103	26'-2"
P1104	26'-5"
P1105	25'-8"
P813	29'-6"



PIER COLUMN ELEVATION

LOOKING UP STATION



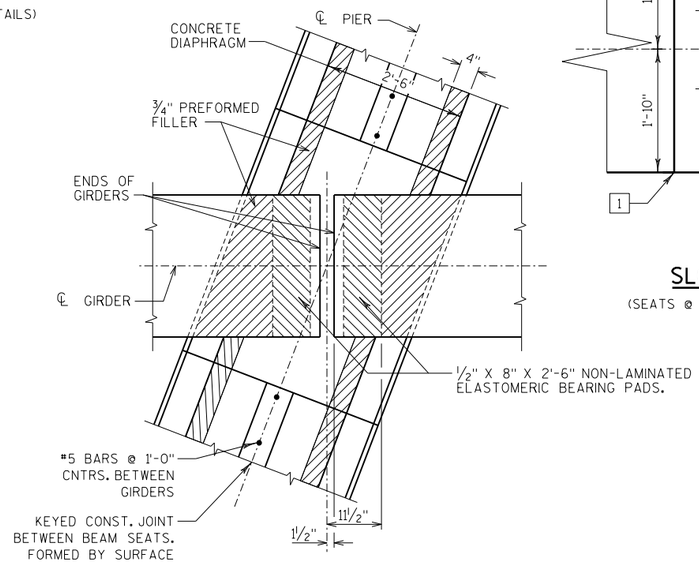
PIER COLUMN ELEVATION- END VIEW

(LOOKING WEST)

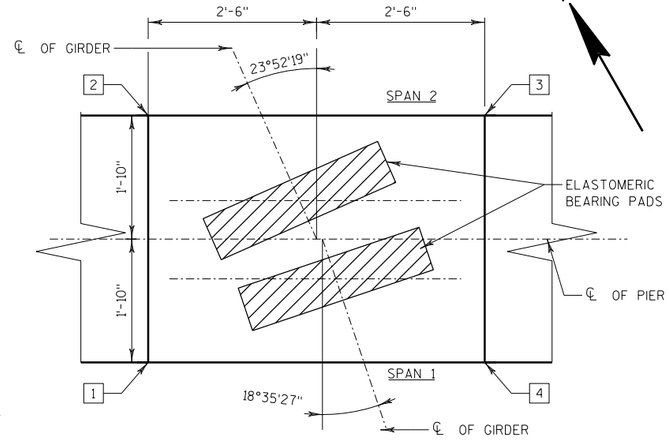
PIER BEAM SEAT ELEVATION CORRECTIONS

GIRDER	ELEVATION CORRECTION AT POINTS			
	1	2	3	4
1-8	-0.01	-0.01	-0.00	-0.03

▨ VALUES ARE IN FEET. ADD THESE VALUES TO THE SEAT ELEVATIONS SHOWN TO OBTAIN ELEVATIONS OF POINTS 1, 2, 3, &4.



BEARING PAD DETAILS



SLOPING BEAM SEAT DETAILS

(SEATS ø GIRDERS 2 THRU 7 SHOWN, GIRDERS 1 & 8 SIMILAR)

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-67-337

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PIER DETAILS

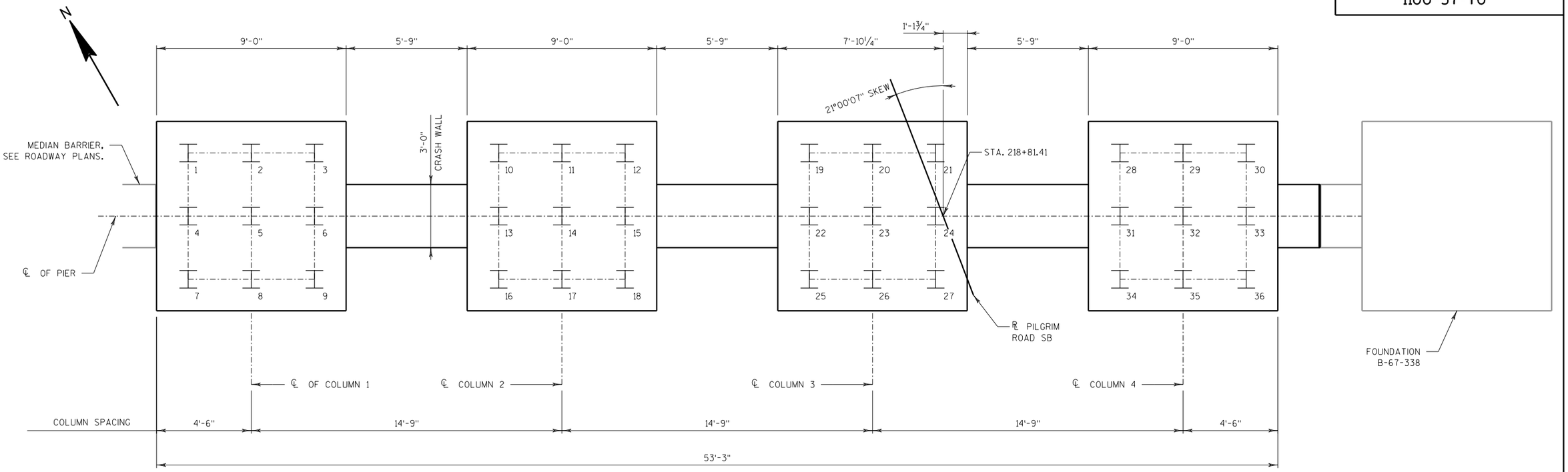
SHEET 13 OF 28
870

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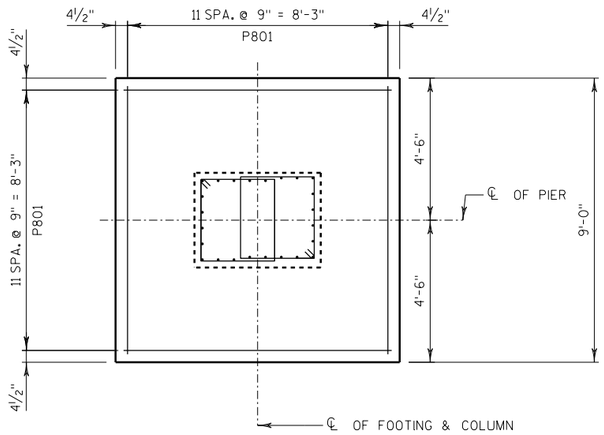
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STATE PROJECT NUMBER

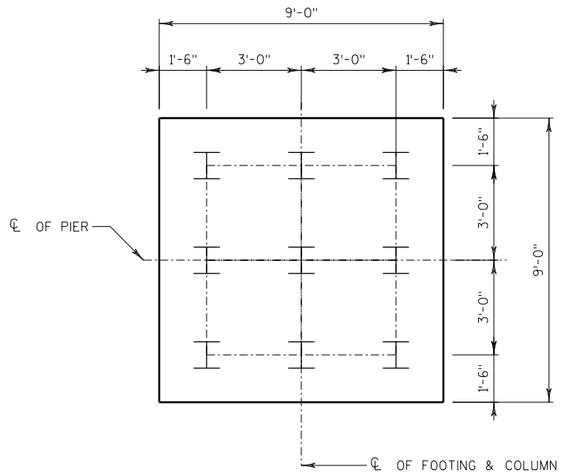
1100-37-70



PILE LOCATION PLAN



TYPICAL FOOTING REINFORCEMENT PLAN



TYPICAL FOOTING PILE LAYOUT

8

8

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STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-67-337

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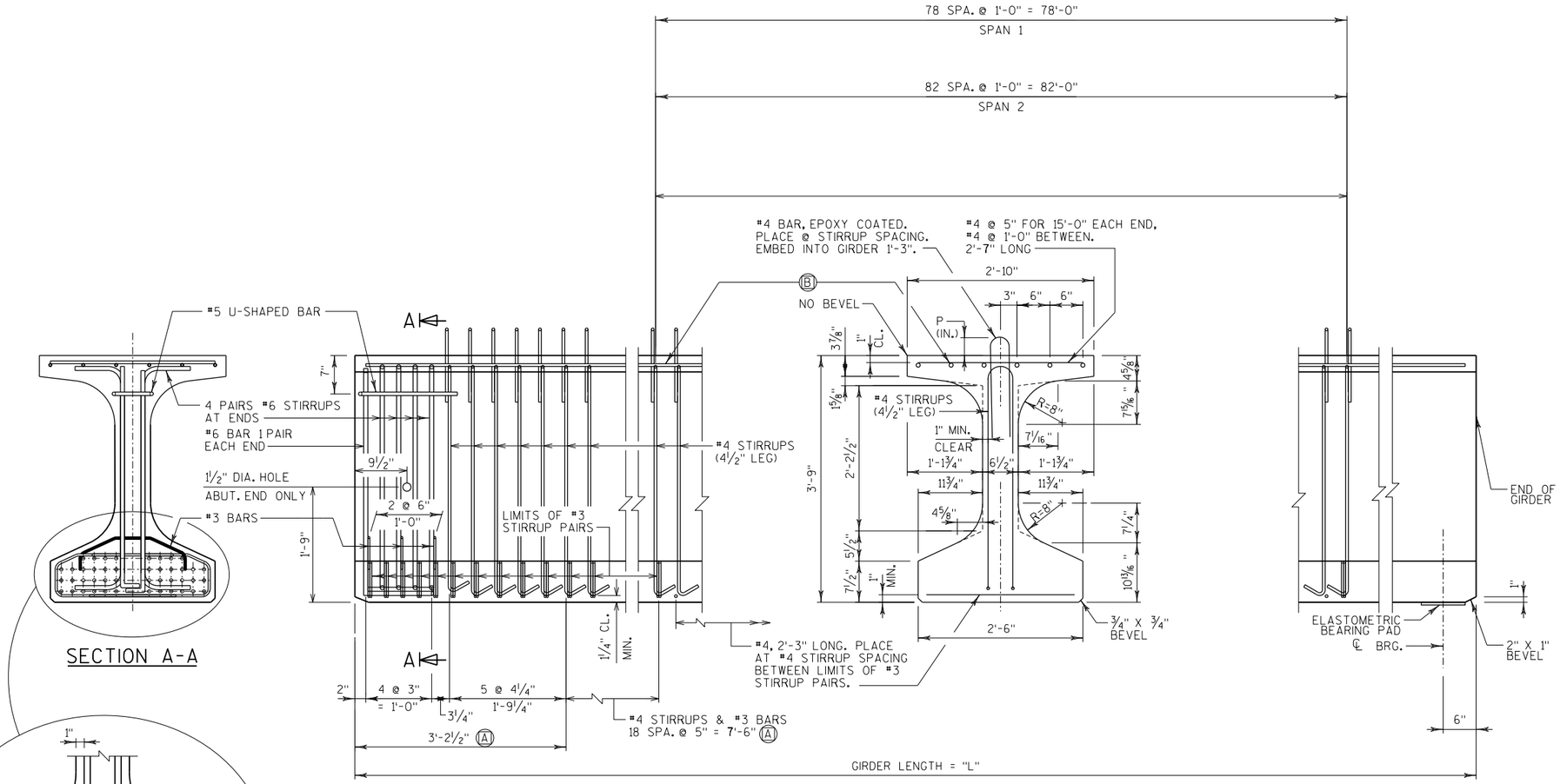
PIER FOOTINGS

SHEET 14 OF 28
871

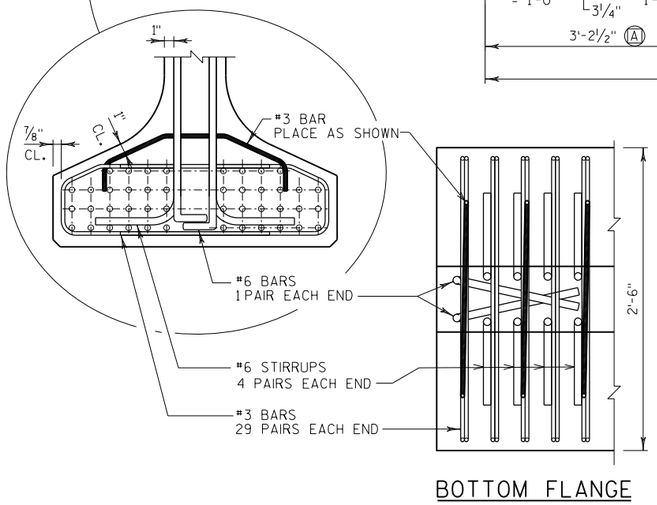
STATE PROJECT NUMBER
1100-37-70

78 SPA. @ 1'-0" = 78'-0"
SPAN 1

82 SPA. @ 1'-0" = 82'-0"
SPAN 2



SECTION A-A

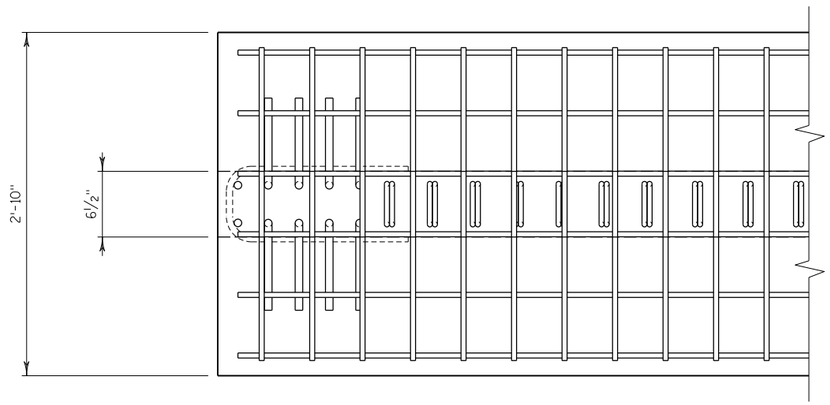


BOTTOM FLANGE

SIDE VIEW & TYPICAL SECTION IN SPAN

Ⓐ DETAIL TYP. AT EACH END

Ⓑ 6 #4BARS, FULL LENGTH, MIN. LAP = 2'-11"



TOP FLANGE

NOTES

TOP OF GIRDER TO BE ROUGH FLOATED AND BROOMED TRANSVERSELY, EXCEPT THE OUTSIDE 8" OF GIRDER, WHICH SHALL RECEIVE A SMOOTH FINISH. AN APPROVED CONCRETE SEALER SHALL BE APPLIED TO ALL SMOOTH SURFACES INCLUDING THE OUTSIDE 8" OF THE TOP FLANGE.

DO NOT APPLY CONCRETE SEALER TO SURFACES RECEIVING APPLICATION OF CONCRETE STAINING.

THE GIRDERS SHALL BE PROVIDED WITH A SUITABLE LIFTING DEVICE FOR HANDLING AND ERECTING THE GIRDERS.

STRANDS SHALL BE FLUSH WITH END OF GIRDER. FOR GIRDER ENDS EMBEDDED COMPLETELY IN CONCRETE, END OF STRANDS SHALL BE COATED WITH NON-BITUMINOUS JOINT SEALER. FOR GIRDER ENDS THAT ARE FINALLY EXPOSED, COAT THE GIRDER ENDS, EXPOSED STRAND ENDS AND ALL NON-BONDING SURFACES WITHIN 2 FEET OF THE GIRDER ENDS WITH A NON-PIGMENTED EPOXY CONFORMING TO AASHTO M-235 TYPE III, CLASS B OR C. THE EPOXY SHALL BE APPLIED AT LEAST 3 DAYS AFTER MOIST CURING HAS CEASED AND PRIOR TO THE APPLICATION OF THE SEALER.

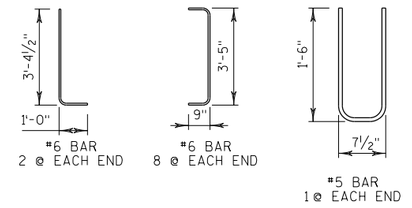
ALL GIRDERS SHALL BE CAST FULL LENGTH AS SHOWN.

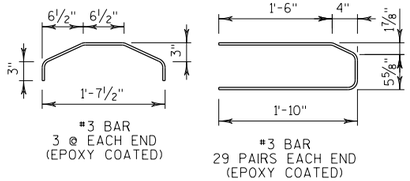
SPACING SHOWN FOR #4 STIRRUPS IS FOR GRADE 60 REINFORCEMENT.

AN ALTERNATE EQUIVALENT OF WELDED WIRE FABRIC (WWF) ASTM A497 MAY BE SUBSTITUTED FOR THE STIRRUP REINFORCEMENT SHOWN, UPON APPROVAL OF THE STRUCTURES DEVELOPMENT SECTION.

PRESTRESSING STRANDS SHALL BE (0.6" DIA.)-7 WIRE LOW-RELAXATION STRANDS WITH AN ULTIMATE STRENGTH OF 270,000 PSI.

FOR DIAPHRAGM INSERT & CONNECTION DETAILS SEE "STEEL DIAPHRAGM" SHEET.





NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-67-337

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45W" PRESTRESSED GIRDER

SHEET 15 OF 28
872

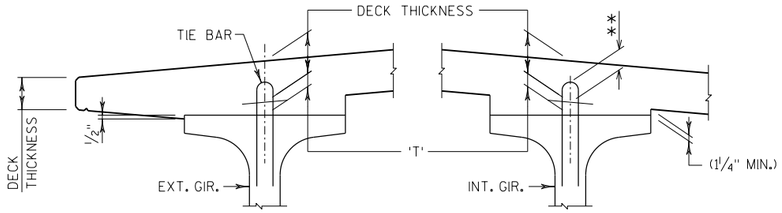
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FILE NAME : P:\44xx\4442\Structures\B-67-337\Plan\080115_gi_337.dgn

PLOT DATE : 11/18/2014

PLOT BY : mdr



DECK HAUNCH DETAIL

IF 1¼" MINIMUM HAUNCH HEIGHT AT EDGE OF GIRDER CANNOT BE MAINTAINED, THE GRADE LINE MAY BE REVISED BY THE ENGINEER AT THE OPTION OF THE CONTRACTOR, THE PLAN DECK THICKNESS SHALL BE HELD. NOTIFY THE STRUCTURES SECTION IF THE GRADE LINE IS RAISED FROM THE PLAN PROFILE BY MORE THAN ½" OR,

** IF 3" MINIMUM DECK EMBEDMENT OF TIE BAR CANNOT BE OBTAINED.

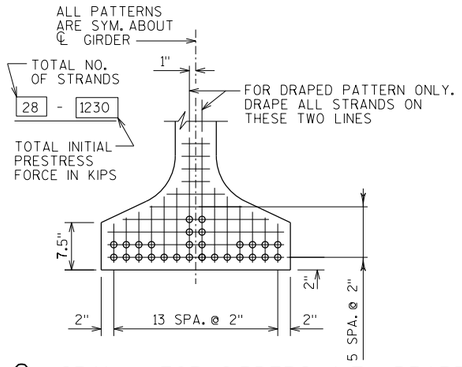
TO DETERMINE 'T', ELEV. OF TOP OF GIRDERS AT ℄ OF SUBSTRUCTURE UNITS & AT 1/10 POINTS OF EACH SPAN SHALL BE TAKEN. THEN FOLLOW THIS PROCESS:

TOP OF DECK ELEV. AT FINAL GRADE
\- TOP OF GIRDER ELEVATION
\+ DEAD LOAD DEFLECTION
\- DECK THICKNESS
= HAUNCH HEIGHT 'T'

NOTE: AN AVERAGE HAUNCH ('T') OF 3.25" WAS USED IN THE QUANTITY "CONCRETE MASONRY BRIDGES".

GIRDER DATA																						
SPAN	GIRDER	GIRDER LENGTH "L"	DEAD LOAD DEFL. (IN)									CONC. STRGTH. f'c (psi)	"P" FIRST 1/3 OF GIRDER	"P" MID 1/3 OF GIRDER	"P" END 1/3 OF GIRDER	DIA. OF STRAND (IN.)	DRAPED PATTERN					
			1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10						TOTAL NO. OF STRANDS	f'ci (psi) ☆	(IN.) "A"	"B" MIN.	"B" MAX"	"C"
1	1	100'-8"	0.4	0.8	1.1	1.3	1.4	1.3	1.1	0.8	0.4	8,000	7.00	7.00	7.00	0.6	28	6,800	39	13.5	16.5	5
1	2-7	100'-8"	0.5	0.9	1.2	1.4	1.5	1.4	1.2	0.9	0.5	8,000	7.00	8.00	7.00	0.6	28	6,800	39	13.5	16.5	5
1	8	100'-8"	0.4	0.8	1.1	1.3	1.4	1.3	1.1	0.8	0.4	8,000	7.00	7.00	7.00	0.6	28	6,800	39	13.5	16.5	5
2	1	105'-4 1/4"	0.5	1.0	1.4	1.7	1.7	1.7	1.4	1.0	0.5	8,000	8.00	8.00	8.00	0.6	28	6,800	39	13.5	16.5	5
2	2-7	105'-4 1/4"	0.5	1.0	1.4	1.6	1.7	1.6	1.4	1.0	0.5	8,000	8.00	8.00	8.00	0.6	28	6,800	39	13.5	16.5	5
2	8	105'-4 1/4"	0.6	1.1	1.5	1.8	1.8	1.8	1.5	1.1	0.6	8,000	7.00	8.00	8.00	0.6	28	6,800	39	13.5	16.5	5

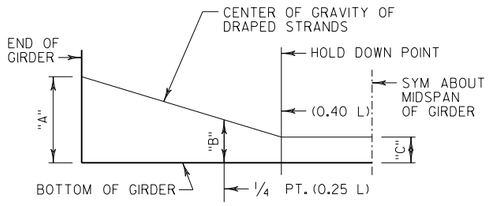
☆ MINIMUM CYLINDER STRENGTH OF CONCRETE @ TIME OF TRANSFER OF PRESTRESS FORCE.



ARRANGEMENT AT ℄ SPAN - FOR GIRDERS WITH DRAPED STRANDS

0.6"Φ STRANDS

8



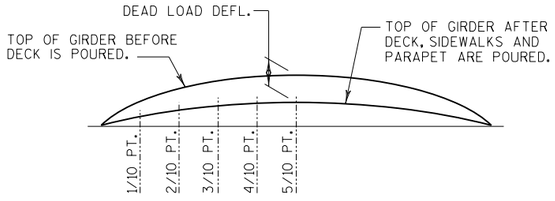
DRAPED STRAND PROFILE

*THE THEORETICAL INITIAL CAMBER VALUE AT THE TIME OF STRAND RELEASE AT MIDSPAN MULTIPLIED BY A FACTOR OF 1.4 TO ACCOUNT FOR CAMBER GROWTH FROM THE TIME OF STRAND RELEASE TO JOBSITE PLACEMENT.

SPAN	CAMBER (IN.) *
1	2.41"
2	2.38"

THESE VALUES ARE NOT TO BE USED IN DETERMINING 'T', USE ACTUAL GIRDER SHOTS.

THESE VALUES ARE FOR INFORMATIONAL PURPOSES ONLY.



DEAD LOAD DEFLECTION DIAGRAM

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-67-337

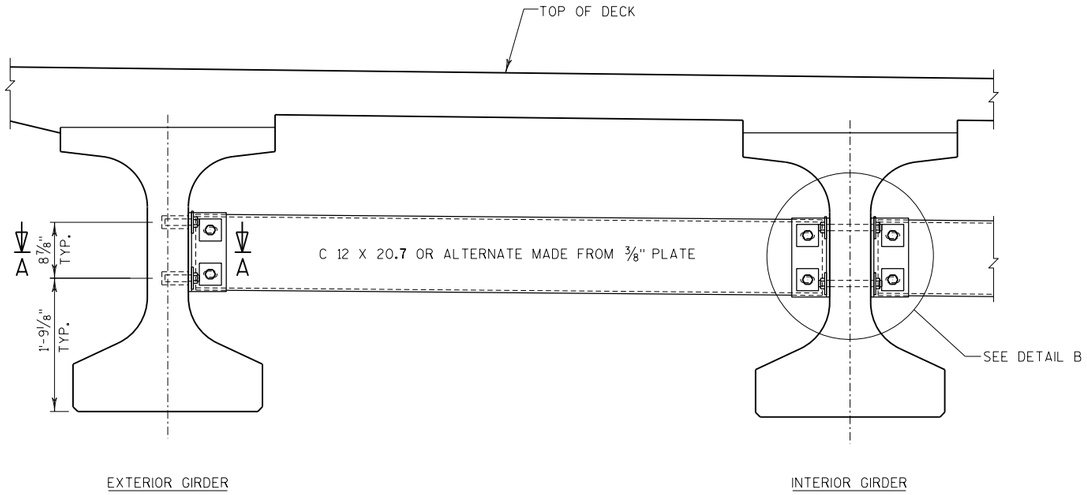
DRAWN BY SKR | PLANS CK'D. MDR

45W" PRESTRESSED GIRDER DETAILS

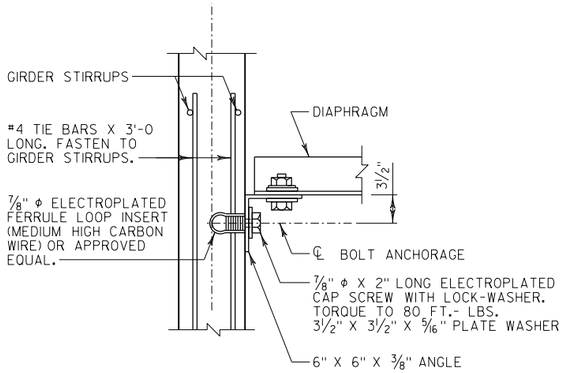
SHEET 16 OF 28
873

STATE PROJECT NUMBER

1100-37-70

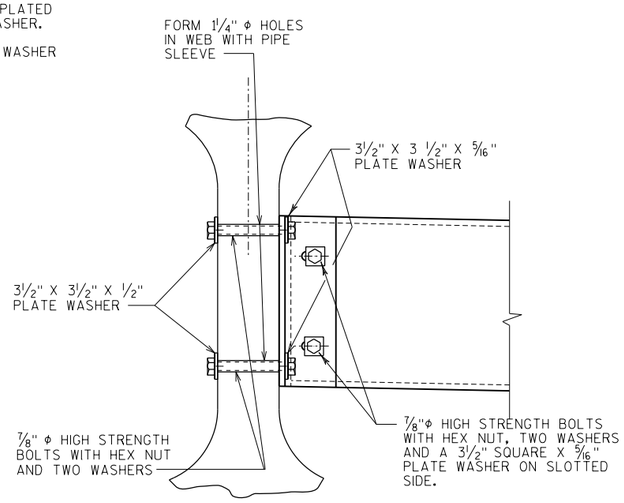


PART TRANSVERSE SECTION AT DIAPHRAGM

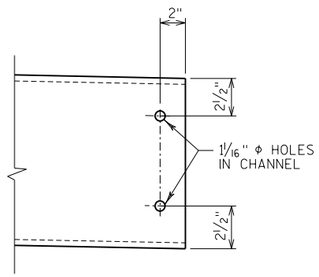


SECTION A-A

(FOR EXTERIOR ATTACHMENT)



(FOR STAGGERED DIAPHRAGM)



DETAIL B

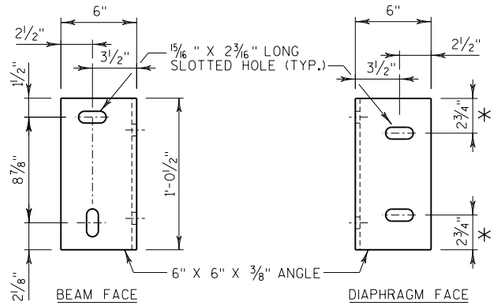
NOTES

ALL DIAPHRAGM MATERIAL NOT EMBEDDED IN THE CONCRETE GIRDER SHALL BE PAID FOR AT THE UNIT PRICE BID FOR "STEEL DIAPHRAGMS B-67-337", EACH.

EACH DIAPHRAGM BETWEEN GIRDERS SHALL CONSTITUTE ONE UNIT.

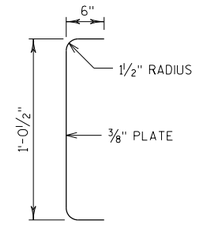
ALL DIAPHRAGM STRUCTURAL STEEL SHALL BE ASTM A709 GRADE 36. ALL BOLTS, NUTS AND WASHERS SHALL BE ASTM A325 TYPE 1.

ALL DIAPHRAGM STRUCTURAL STEEL SHOWN SHALL BE HOT-DIPPED GALVANIZED. ALL BOLTS, NUTS AND WASHERS SHALL BE HOT-DIPPED GALVANIZED IN ACCORDANCE WITH ASTM A153 CLASS C. GALVANIZED NUTS SHALL BE TAPPED OVERSIZED IN ACCORDANCE WITH THE REQUIREMENTS OF ASTM A563 AND SHALL MEET THE REQUIREMENTS OF SUPPLEMENTARY REQUIREMENT S1 OF ASTM A563, LUBRICANT AND TEST FOR COATED NUTS.



DIAPHRAGM SUPPORT

* 2½" FOR ALTERNATE PLATE DIAPHRAGM



SECTION THRU ALTERNATE DIAPHRAGM

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-67-337

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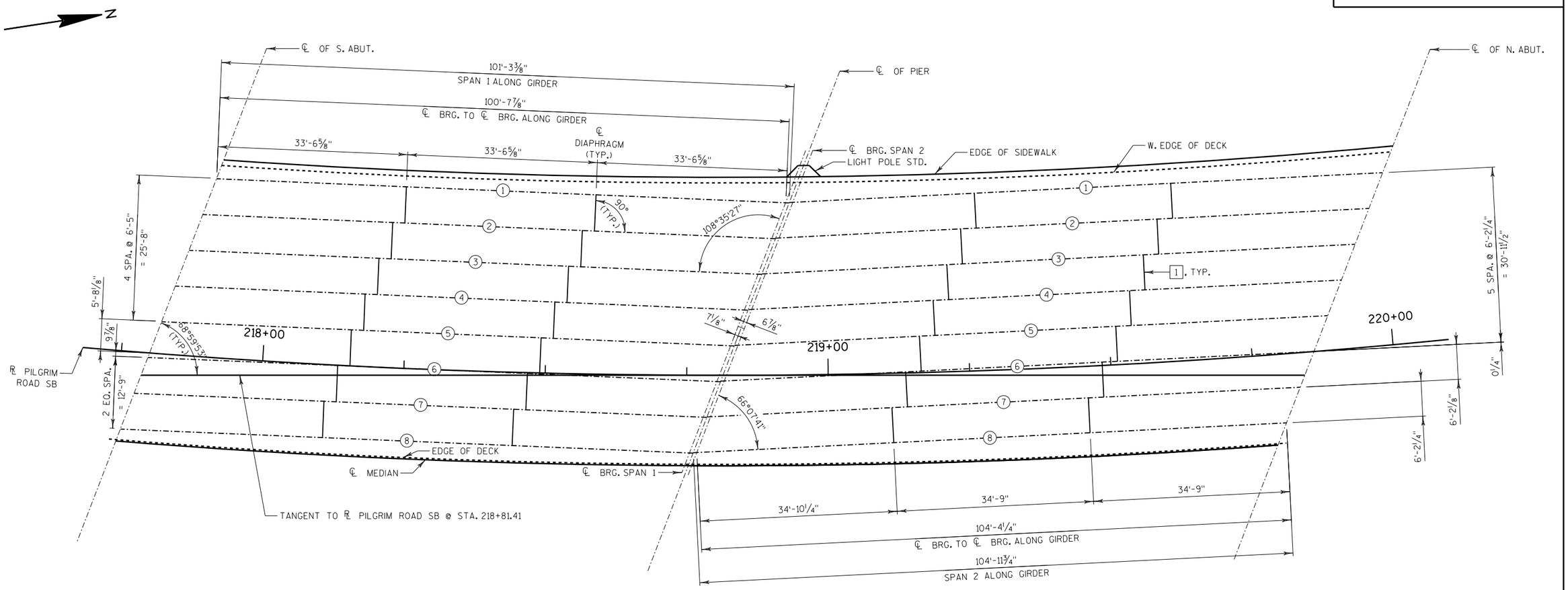
STEEL DIAPHRAGM

SHEET 17 OF 28
874

8

8

STATE PROJECT NUMBER
1100-37-70



GIRDER FRAMING PLAN

TOP OF DECK ELEVATIONS

LOCATION	C/L BRG. S. ABUT.	0.1 PT	0.2 PT	0.3 PT	0.4 PT	0.5 PT	0.6 PT	0.7 PT	0.8 PT	0.9 PT	C/L PIER	0.1 PT	0.2 PT	0.3 PT	0.4 PT	0.5 PT	0.6 PT	0.7 PT	0.8 PT	0.9 PT	C/L BRG. N. ABUT.
W. EDGE OF DECK	829.53	829.72	829.88	830.03	830.17	830.28	830.38	830.45	830.52	830.56	830.59	830.60	830.59	830.56	830.52	830.45	830.37	830.27	830.15	830.01	829.85
GIRDER 1	829.57	829.75	829.91	830.06	830.19	830.30	830.40	830.49	830.56	830.61	830.65	830.66	830.65	830.62	830.57	830.51	830.43	830.33	830.22	830.09	829.95
GIRDER 2	829.66	829.84	830	830.15	830.29	830.41	830.51	830.6	830.67	830.73	830.77	830.78	830.78	830.75	830.71	830.65	830.57	830.48	830.38	830.25	830.11
GIRDER 3	829.75	829.93	830.10	830.25	830.39	830.51	830.62	830.71	830.79	830.85	830.89	830.91	830.90	830.88	830.84	830.79	830.72	830.63	830.53	830.41	830.28
GIRDER 4	829.84	830.03	830.20	830.35	830.49	830.61	830.72	830.82	830.90	830.96	831.01	831.03	831.03	831.01	830.98	830.93	830.87	830.78	830.69	830.57	830.44
GIRDER 5	829.93	830.12	830.29	830.45	830.59	830.72	830.83	830.93	831.01	831.08	831.13	831.15	831.15	831.14	831.11	831.07	831.01	830.93	830.84	830.73	830.61
GIRDER 6	830.03	830.21	830.39	830.54	830.69	830.82	830.93	831.03	831.12	831.19	831.25	831.27	831.28	831.27	831.24	831.20	831.15	831.08	830.99	830.88	830.76
GIRDER 7	830.12	830.31	830.48	830.64	830.79	830.92	831.04	831.14	831.23	831.30	831.36	831.39	831.40	831.40	831.38	831.34	831.29	831.22	831.14	831.04	830.92
GIRDER 8	830.21	830.40	830.58	830.74	830.89	831.02	831.14	831.25	831.34	831.42	831.48	831.51	831.53	831.52	831.51	831.47	831.43	831.36	831.29	831.19	831.08
E. EDGE OF DECK	830.24	830.44	830.62	830.79	830.94	831.08	831.20	831.30	831.39	831.46	831.52	831.56	831.58	831.59	831.58	831.56	831.51	831.45	831.38	831.28	831.17

LEGEND

(X) INDICATES GIRDER NUMBER

[1] INTERMEDIATE STEEL DIAPHRAGM, TYP. DIAPHRAGMS TO BE PERPENDICULAR TO ℄ OF GIRDER. SEE SHEET 17 FOR DETAILS.

ALL GIRDERS IN SPAN 1 ARE PARALLEL TO EACH OTHER. LIKEWISE ALL GIRDERS IN SPAN 2 ARE PARALLEL TO EACH OTHER. GIRDER SPACINGS ARE MEASURED PERPENDICULAR TO THE ℄ GIRDER.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-67-337

DRAWN BY SKR | PLANS CK'D. MDR

SUPERSTRUCTURE FRAMING PLAN

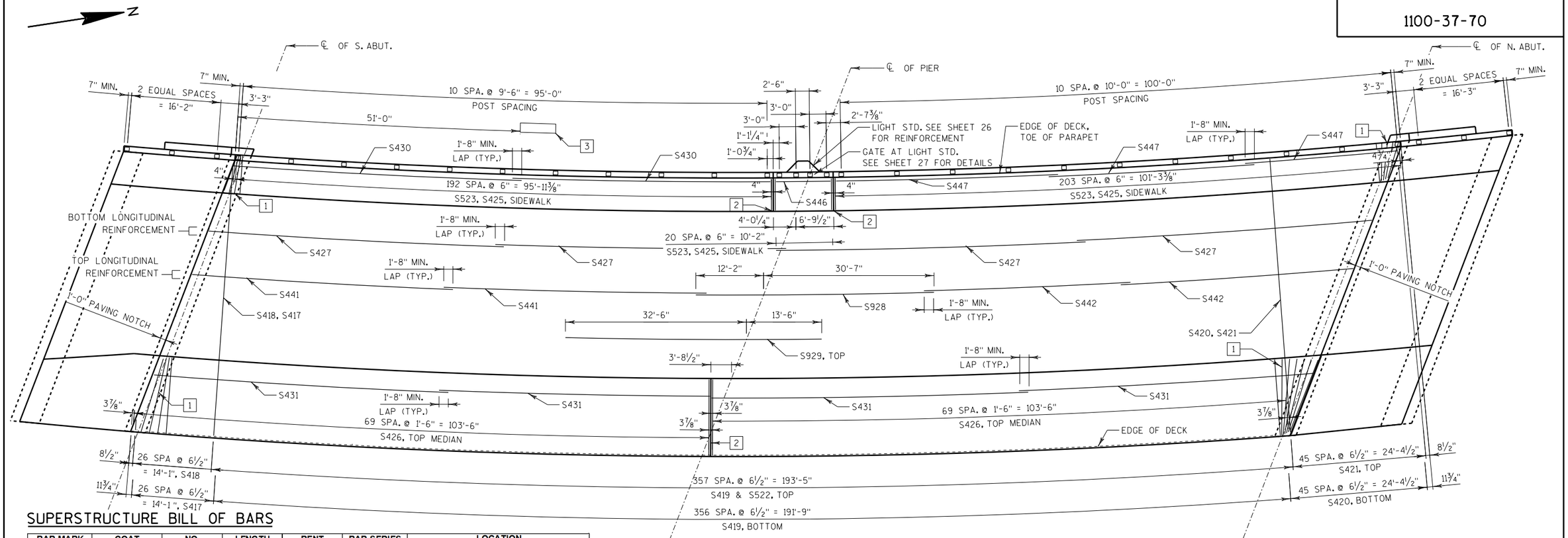
SHEET 18 OF 28
875

8

8

STATE PROJECT NUMBER

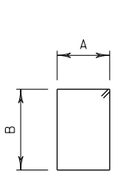
1100-37-70



SUPERSTRUCTURE BILL OF BARS

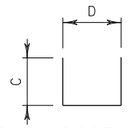
BAR MARK	COAT	NO.	LENGTH	BENT	BAR SERIES	LOCATION
S401	X	42	3'-7"	X		DIAPH. @ ABUT. VERT. @ NOTCH
S402	X	28	2'-8"			DIAPH. HORIZ. @ NOTCH
S503	X	108	12'-10"	X		ABUT. DIAPHRAGM STIRRUP
S604	X	6	54'-3"			S. ABUT. DIAPHRAGM HORIZ.
S605	X	6	57'-9"			N. ABUT. DIAPHRAGM HORIZ.
S606	X	56	3'-5"			ABUT. DIAPHRAGM HORIZ. F.F.
S607	X	4	9'-0"	X		S. ABUT. DIAPH. HORIZ. F.F. WEST END
S608	X	4	4'-0"	X		S. ABUT. DIAPH. HORIZ. F.F. EAST END
S609	X	4	12'-2"	X		N. ABUT. DIAPH. HORIZ. F.F. WEST END
S610	X	4	7'-6"	X		N. ABUT. DIAPH. HORIZ. F.F. EAST END
S511	X	112	6'-3"	X		ABUT. DIAPHRAGM VERT.
S512	X	32	6'-0"			ABUT. DIAPH. HORIZ. THRU GIRDERS
S513	X	32	10'-8"	X		ABUT. DIAPHRAGM STIRRUP
S514	X	14	8'-8"	X		PIER DIAPHRAGM STIRRUP
S515	X	28	11'-6"	X		PIER DIAPHRAGM VERT.
S416	X	42	3'-4"			PIER DIAPHRAGM HORIZ.
S417	X	27	25'-10"		X	SLAB TRANS. BOT.
S418	X	27	24'-11"		X	SLAB TRANS. TOP.
S419	X	711	49'-5"			SLAB TRANS. TOP/BOT.
S420	X	46	25'-6"		X	SLAB TRANS. BOT.
S421	X	46	25'-1"		X	SLAB TRANS. TOP.
S522	X	384	6'-8"	X		SLAB TRANS. TOP AT OVERHANGS
S523	X	418	7'-3"	X		TRANS. TOP AT SIDEWALK
S424	X	140	2'-0"			TRANS. BOT. AT SIDEWALK
S425	X	836	2'-9"	X		TRANS. AT SIDEWALK
S426	X	140	13'-8"			TRANS. TOP AT MEDIAN
S427	X	330	43'-1"			SLAB LONG. BOT.
S928	X	67	42'-9"			SLAB LONG. TOP AT PIER
S929	X	67	46'-0"			SLAB LONG. TOP AT PIER
S430	X	36	33'-0"			SDWK. LONG. TOP/BOT. - SPAN 1
S431	X	44	52'-7"			MEDIAN LONG. TOP
S532	X	209	6'-8"	X		PARAPET VERT.
S433	X	18	33'-0"			PARAPET HORIZ. - SPAN 1
S441	X	198	31'-4"			SLAB LONG. TOP
S442	X	132	38'-9"			SLAB LONG. TOP
S543	X	4	15'-6"	X		ABUT. DIAPHRAGM STIRRUP
S644	X	4	7'-11"			ABUT. DIAPHRAGM HORIZ. SIDEWALK
S645	X	4	13'-8"			ABUT. DIAPHRAGM HORIZ. MEDIAN
S446	X	12	9'-10"			SDWK. LONG. TOP/BOT. - BTN. DEFL. JTS.
S447	X	36	34'-11"			SDWK. LONG. TOP/BOT. - SPAN 2
S448	X	6	9'-10"			PARA. HORIZ. - BTN. DEFL. JOINTS
S449	X	18	34'-11"			PARAPET HORIZ. - SPAN 2

TRANSVERSE BAR STEEL LAYOUT



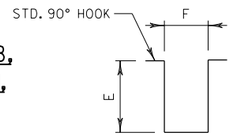
S503, S513, S514, S543

BAR MARK	DIM. A	DIM. B
S503	3'-2"	2'-11"
S513	3'-2"	1'-10"
S514	2'-2"	1'-10"
S543	3'-2"	4'-3"



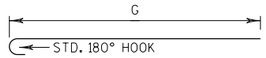
S401, S607, S608, S609, S610, S511, S425

BAR MARK	DIM. C	DIM. D
S401	1'-5"	11"
S607	3'-1"	3'-2"
S608	0'-7"	3'-2"
S609	4'-8"	3'-2"
S610	2'-4"	3'-2"
S511	2'-2"	2'-2"
S425	1'-0"	0'-11"



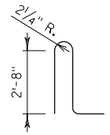
S515

BAR MARK	DIM. E	DIM. F
S515	4'-1"	2'-2"



S522, S523

BAR MARK	DIM. G
S522	6'-1"
S523	6'-8"



S532

LEGEND

1. ROTATE AND FAN OUT REINFORCING BARS AS NEEDED AT SKEWED ENDS.
2. DEFLECTION JOINT AT PARAPET, SIDEWALK AND MEDIAN. SEE SHEET 25 FOR DETAILS.
3. STREET NAME INSET DETAIL. SEE "AESTHETIC DETAILS".

BAR SERIES TABLE

BAR MARK	NO. REQ'D		LENGTHS FOR EACH SERIES		
S417	1 SERIES OF	27	2'-9"	TO	48'-11"
S418	1 SERIES OF	27	1'-9"	TO	48'-1"
S420	1 SERIES OF	46	1'-7"	TO	49'-5"
S421	1 SERIES OF	46	1'-0"	TO	49'-2"

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-67-337

DRAWN BY SKR | PLANS CK'D. MDR

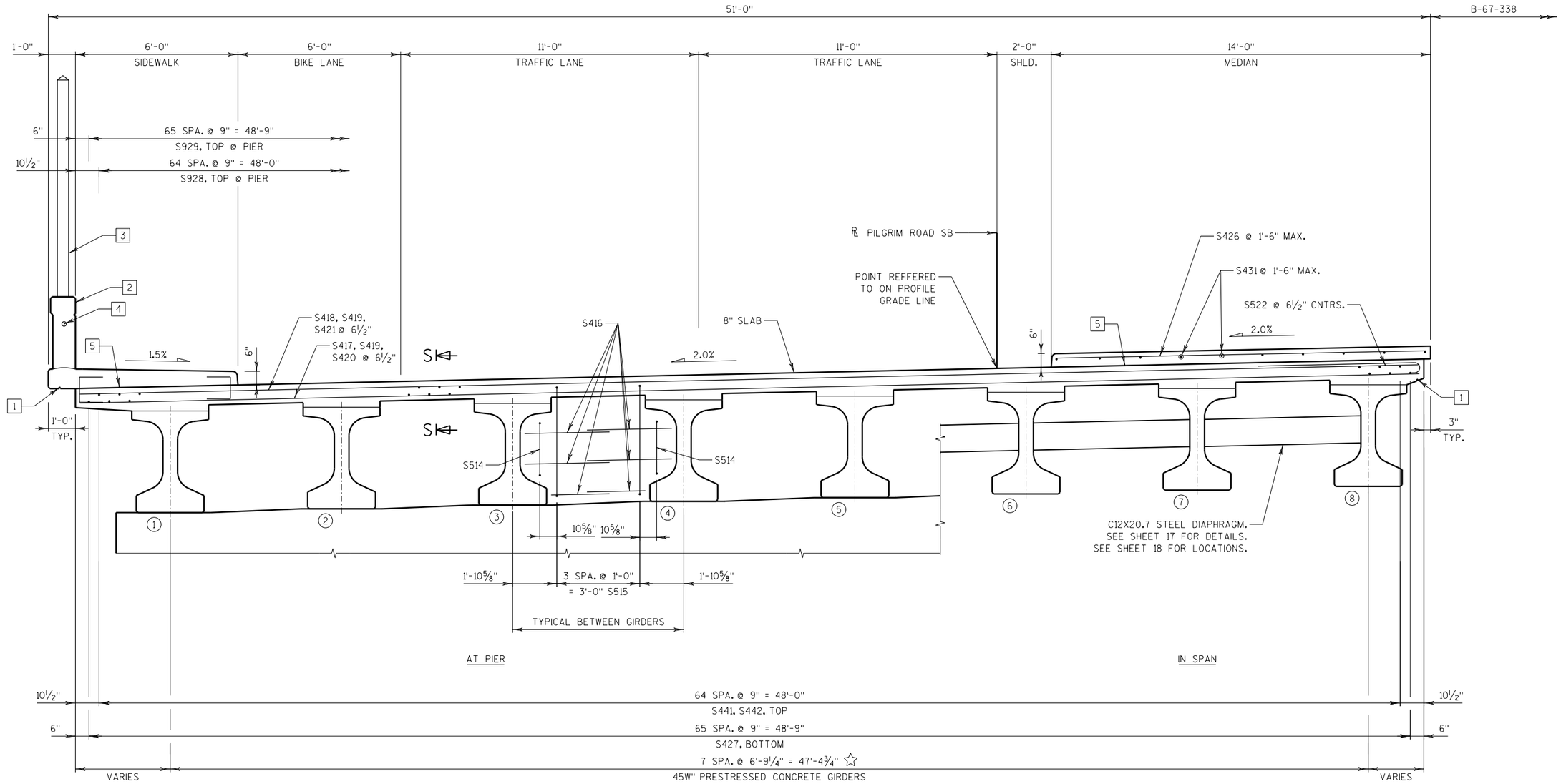
SUPERSTRUCTURE REINFORCEMENT

SHEET 19 OF 28
876

8

8

STATE PROJECT NUMBER
1100-37-70

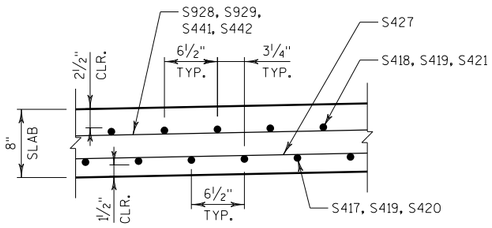


TYPICAL CROSS SECTION THRU DECK

(LOOKING NORTH)

LEGEND

- (X) INDICATES GIRDER NUMBER
- [1] ¾" CONTINUOUS DRIP GROOVE. TERMINATE 2'-0" FROM ABUTMENTS - TYP.
- [2] VERTICAL FACE PARPAPET "A". FOR DETAILS SEE SHEET 25.
- [3] ORNAMENTAL PROTECTIVE SCREENING. FOR DETAILS SEE SHEET 27.
- [4] 2" DIAMETER NON-METALLIC CONDUIT - TYP.
- [5] ROUGH FLOAT SURFACE OR SAME FINISH AS EXPOSED DECK. DO NOT APPLY PROTECTIVE SURFACE TREATMENT TO THE AREA UNDER THE MEDIAN.
- ☆ MEASURED ALONG ℄ SUBSTRUCTURE



SECTION S-S

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-67-337

DRAWN BY SKR | PLANS CK'D. MDR

SUPERSTRUCTURE CROSS SECTION

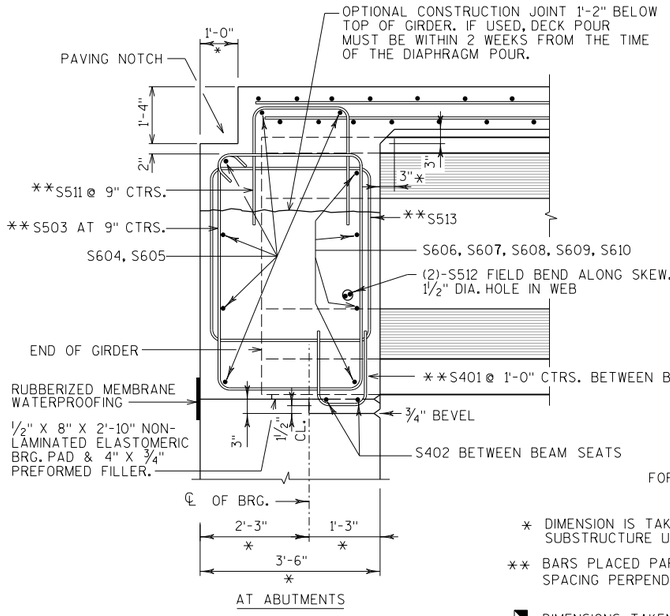
SHEET 20 OF 28
877

8

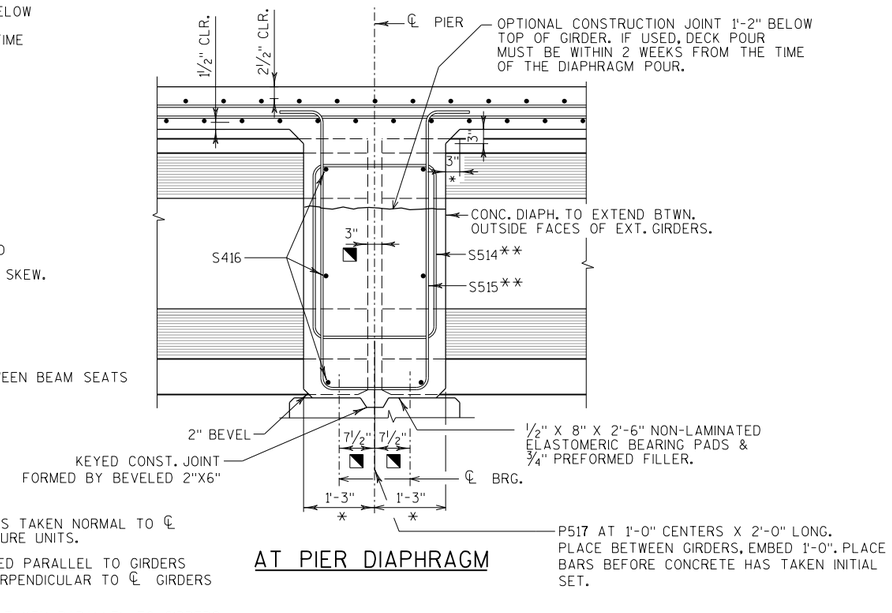
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STATE PROJECT NUMBER

1100-37-70



PART LONGIT. SECTION

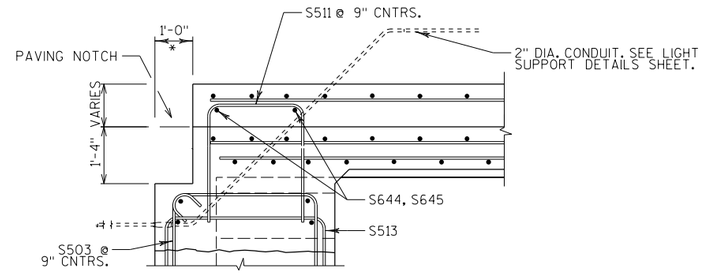


* DIMENSION IS TAKEN NORMAL TO ℄ SUBSTRUCTURE UNITS.

** BARS PLACED PARALLEL TO GIRDERS SPACING PERPENDICULAR TO ℄ GIRDERS

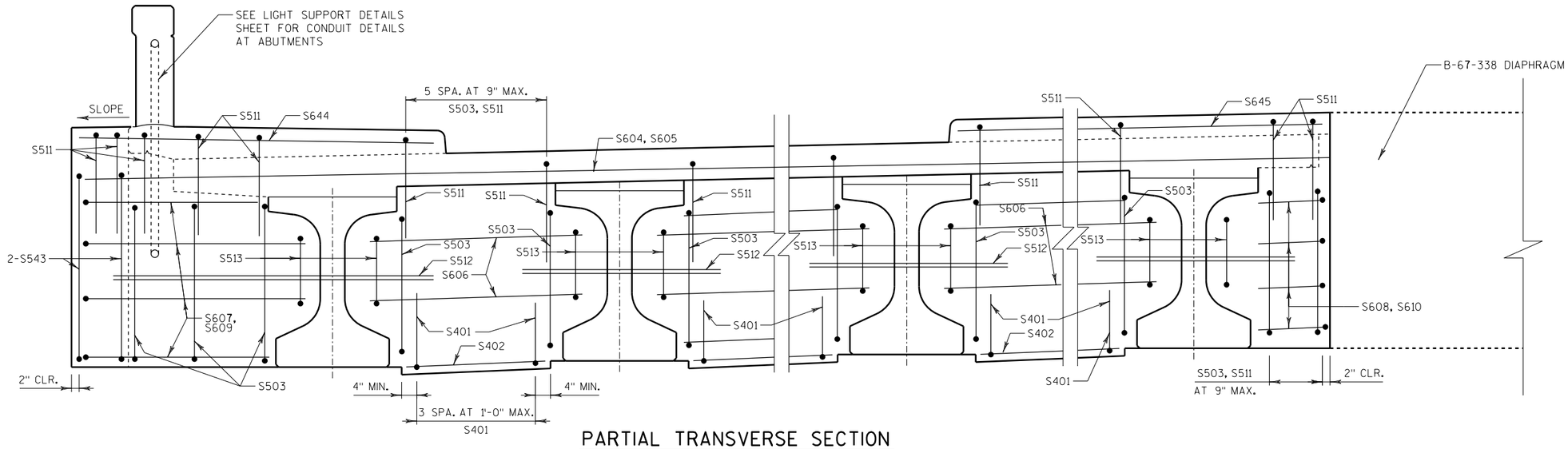
◥ DIMENSIONS TAKEN PARALLEL TO GIRDERS

AT PIER DIAPHRAGM



AT ABUTMENTS

SECTION AT MEDIAN/SIDEWALK



PARTIAL TRANSVERSE SECTION AT ABUTMENT DIAPHRAGM

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-67-337

DRAWN BY SKR | PLANS CK'D. MDR

SUPERSTRUCTURE DETAILS

SHEET 21 OF 28
878

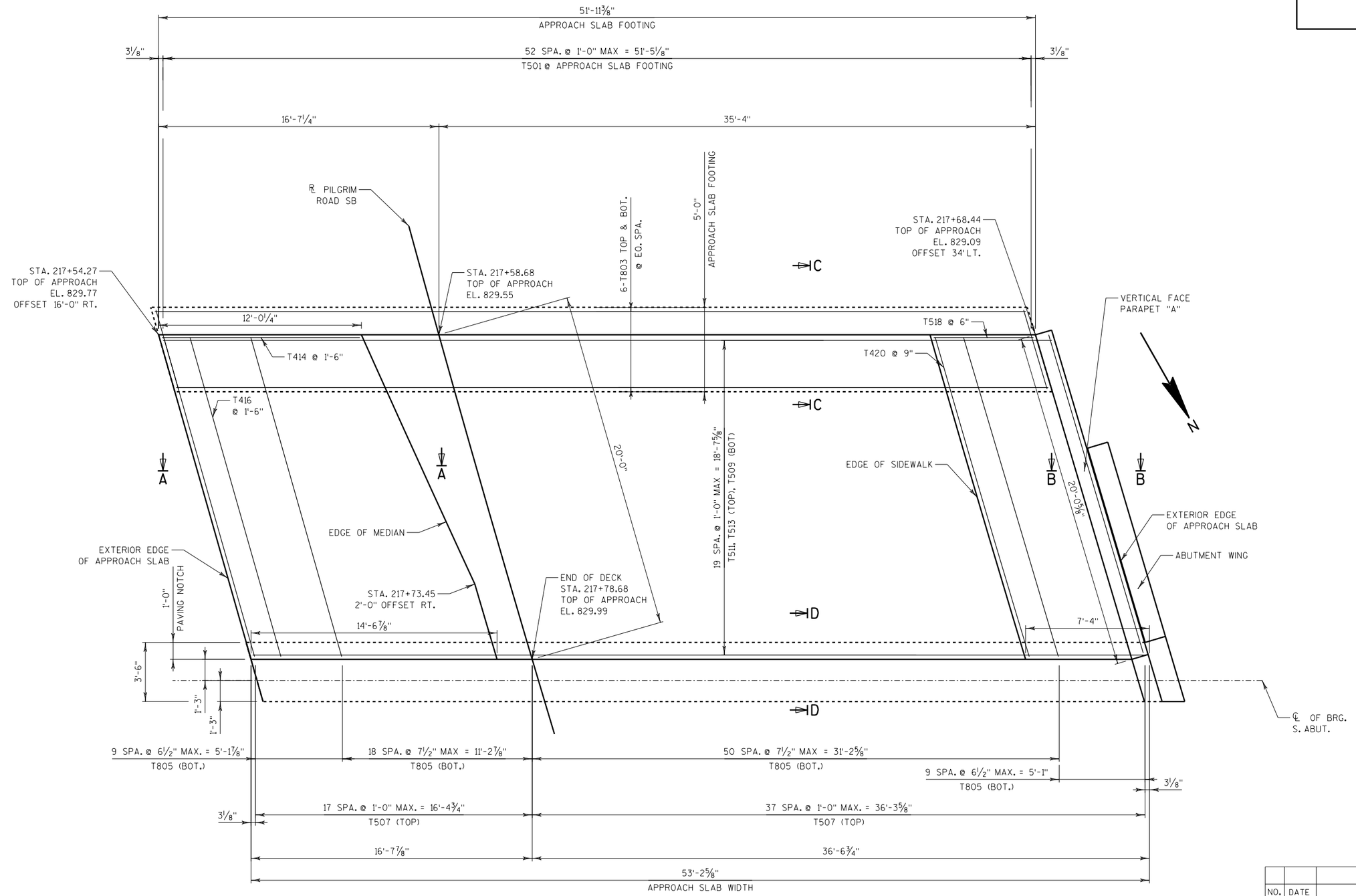
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PLOT DATE : 11/18/2014

PLOT BY : mdr

STATE PROJECT NUMBER

1100-37-70



APPROACH SLAB PLAN

NOTES

FOR LOCATIONS OF SECTIONS A, B, C, & D SEE SHEET 24.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-67-337

DRAWN BY SKR | PLANS CK'D. MDR

SOUTH STRUCTURAL APPROACH SLAB

SHEET 22 OF 28
879

8

8

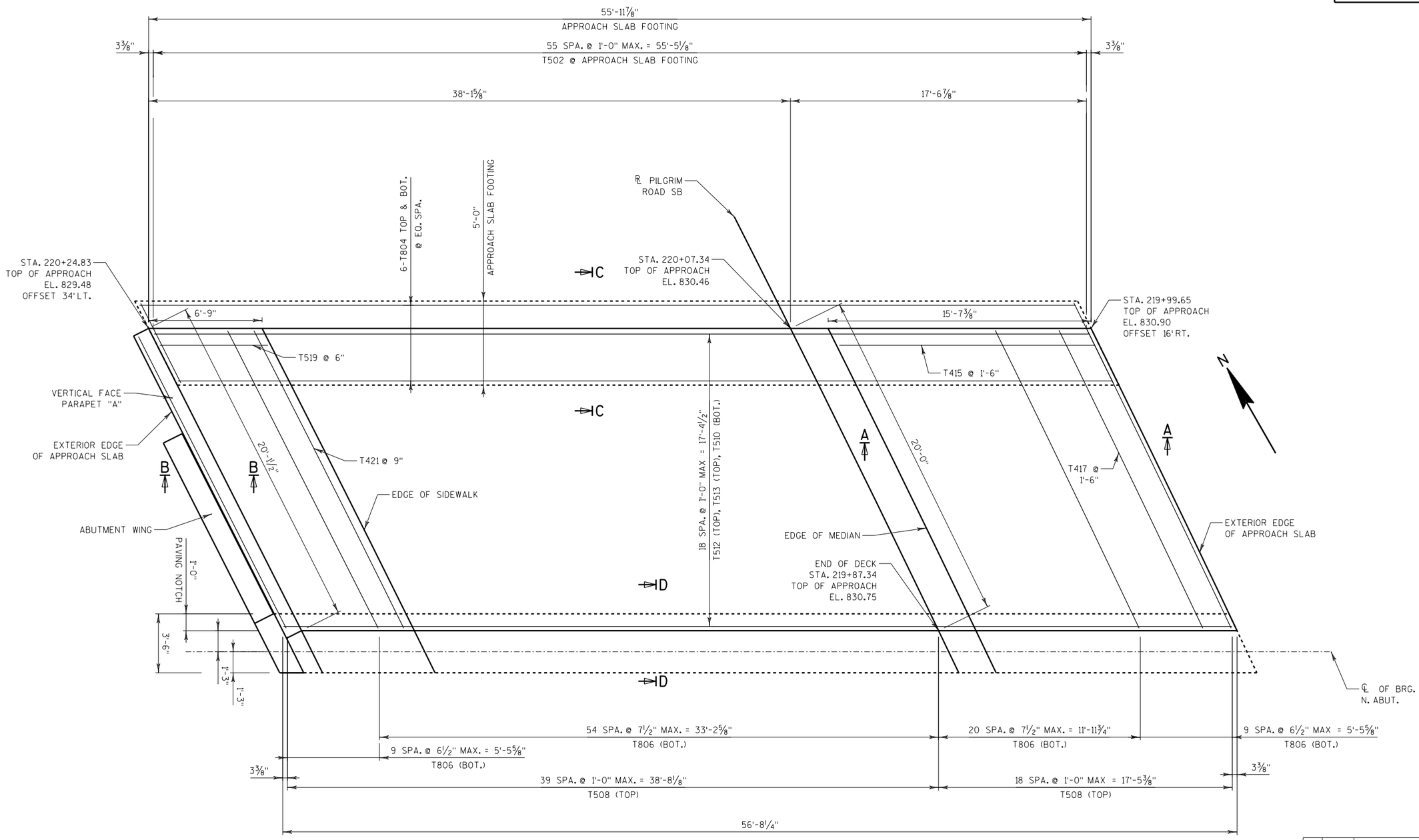
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PLOT DATE : 11/18/2014

PLOT BY : mdr

STATE PROJECT NUMBER

1100-37-70



APPROACH SLAB PLAN

NOTES

FOR LOCATIONS OF SECTIONS A, B, C, & D SEE SHEET 24.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-67-337

DRAWN BY SKR | PLANS CK'D. MDR

NORTH STRUCTURAL APPROACH SLAB

SHEET 23 OF 28
880

8

8

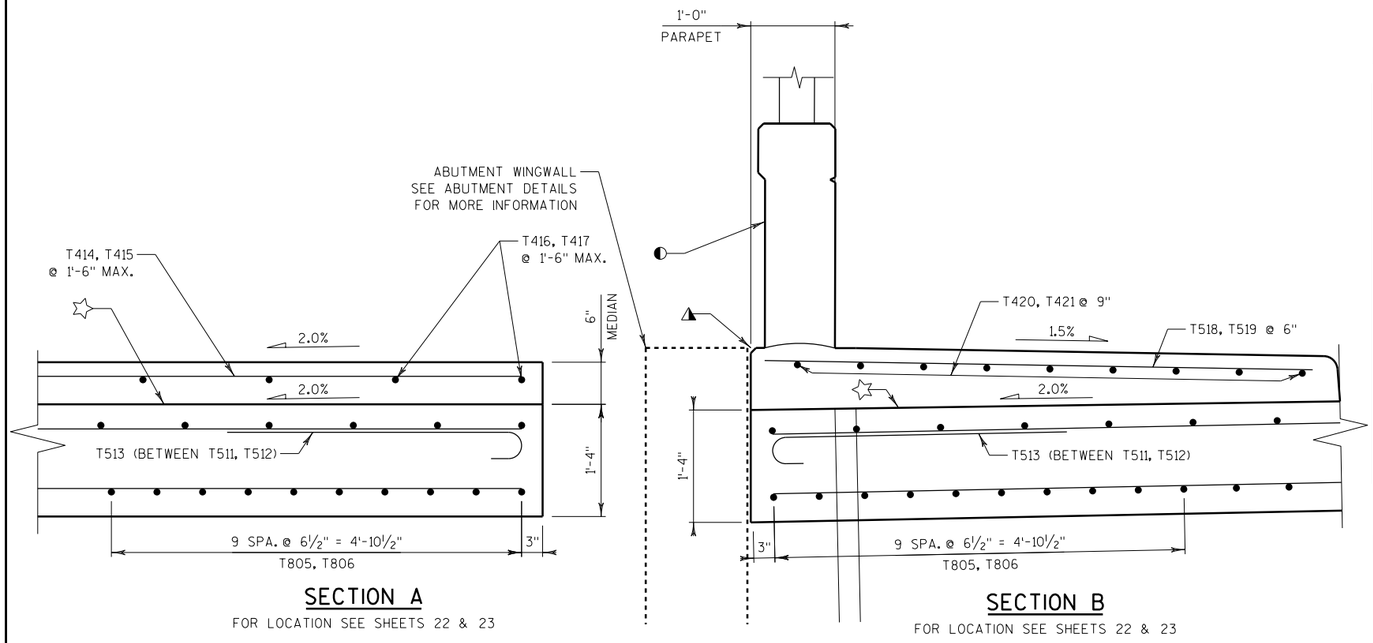
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PLOT DATE : 11/18/2014

PLOT BY : mdr

STATE PROJECT NUMBER

1100-37-70



SECTION A

FOR LOCATION SEE SHEETS 22 & 23

SECTION B

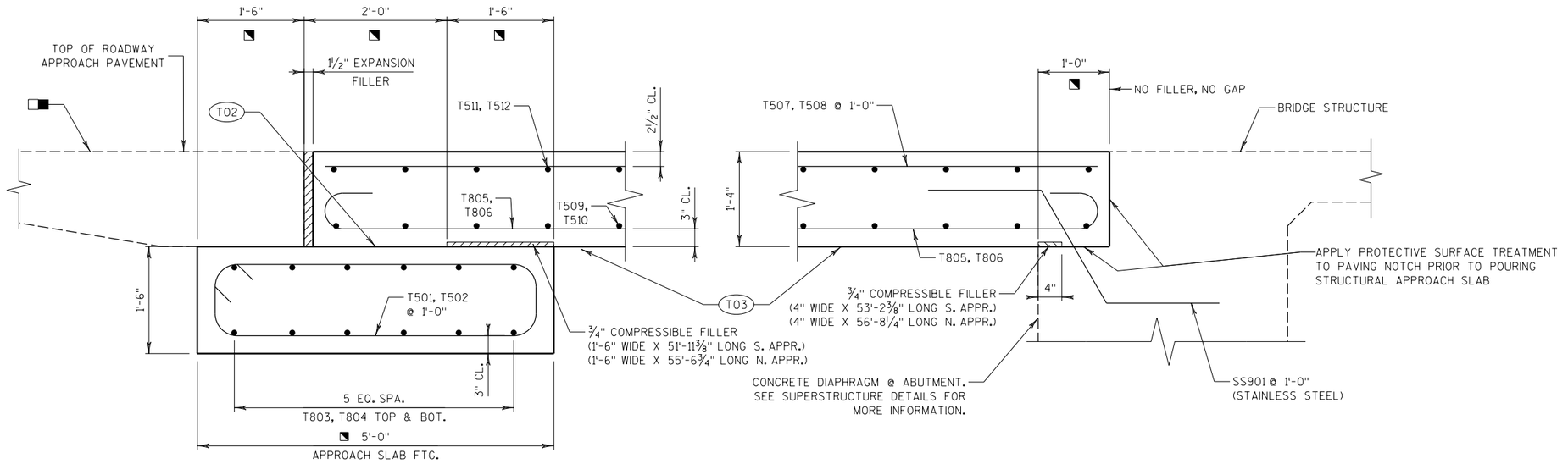
FOR LOCATION SEE SHEETS 22 & 23

BILL OF BARS

BAR MARK	COAT	NO. S. APPR.	NO. N. APPR.	LENGTH	BENT	BAR SERIES	LOCATION
SS901	SS	53	57	5'-0"	X		CONC. ABUT. DIAPH. TO APPROACH SLAB
T501	X	52	0	12'-4"	X		S. APPR. SLAB FTG. - STIRRUP
T502	X	0	56	13'-1"	X		N. APPR. SLAB FTG. - STIRRUP
T803	X	12	0	51'-6"			S. APPR. SLAB FTG. - TRANS.
T804	X	0	12	55'-1"			N. APPR. SLAB FTG. - TRANS.
T805	X	88	0	21'-5"	X		S. APPROACH SLAB LONG. - BOT.
T806	X	0	93	21'-6"	X		N. APPROACH SLAB LONG. - BOT.
T507	X	53	0	19'-7"			S. APPROACH SLAB LONG. - TOP
T508	X	0	57	19'-8"			N. APPROACH SLAB LONG. - TOP
T509	X	20	0	52'-9"			S. APPROACH SLAB TRANS. - BOT.
T510	X	0	20	56'-3"			N. APPROACH SLAB TRANS. - BOT.
T511	X	20	0	52'-9"			S. APPROACH SLAB TRANS. - TOP.
T512	X	0	20	56'-3"			N. APPROACH SLAB TRANS. - TOP.
T513	X	20	20	4'-1"	X		APPROACH SLAB TRANS. - TOP - WING
T414	X	14	0	13'-0"		X	S. APPROACH SLAB MEDIAN TRANS.
T415	X	0	14	14'-11"			N. APPROACH SLAB MEDIAN TRANS.
T416	X	10	0	19'-7"			S. APPROACH SLAB MEDIAN LONG.
T417	X	0	10	19'-8"			N. APPROACH SLAB MEDIAN LONG.
T518	X	40	0	7'-0"			S. APPROACH SLAB SIDEWALK TRANS.
T519	X	0	40	6'-5"			N. APPROACH SLAB SIDEWALK TRANS.
T420	X	10	0	19'-7"			S. APPROACH SLAB SIDEWALK LONG.
T421	X	0	9	19'-8"			N. APPROACH SLAB SIDEWALK LONG.

BAR SERIES

BAR MARK	NO. REQ'D	LENGTHS FOR EACH SERIES		
T414	1 SERIES OF 14	11'-9"	TO	14'-3"



SECTION C

FOR LOCATION SEE SHEETS 22 & 23

SECTION THRU APPROACH SLAB

SECTION D

FOR LOCATION SEE SHEETS 22 & 23

LEGEND

(T02) STEEL TROWEL TOP SURFACE OF FOOTING AND PLACE MULTIPLE LAYERS (0.03" MIN. TOTAL THK.) OF POLYETHYLENE SHEETS OVER THE ENTIRE TOP OF FOOTING.

(T03) PLACE MULTIPLE LAYERS (0.03" MIN. TOTAL THK.) OF POLYETHYLENE SHEETS OVER THE ENTIRE TOP SUBGRADE BENEATH SLAB.

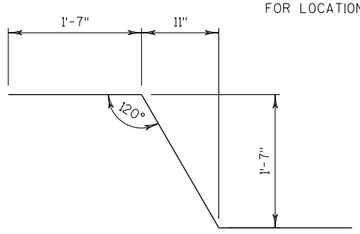
▲ SEAL ALL EXPOSED HORIZONTAL AND VERTICAL SURFACES WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD ⅛" BELOW SURFACE OF CONCRETE".) EXTEND SEALER 3" BELOW GUTTERLINE AT INSIDE SURFACE.

◐ SEE PARAPET STANDARD DETAILS FOR REINFORCEMENT. LOCATION OF NAME PLATE AND BENCH MARK WITH RESPECT TO THE END OF PARAPET, ETC.

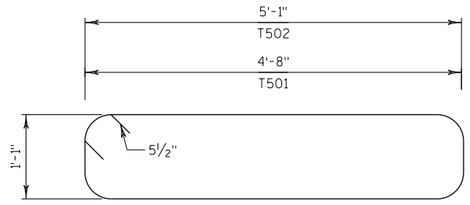
▀ FOLLOW FDM 14-10-15 REQUIREMENTS FOR ROADWAY APPROACH PAVEMENT.

◥ MEASURED NORMAL TO THE ABUTMENT.

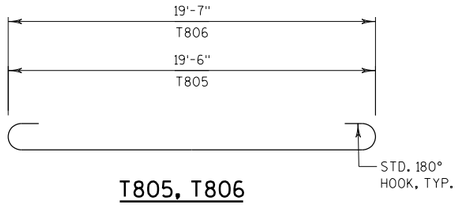
☆ ROUGH FLOAT SURFACE OR SAME FINISH AS EXPOSED APPROACH SLAB. DO NOT APPLY PROTECTIVE SURFACE TREATMENT TO THIS AREA.



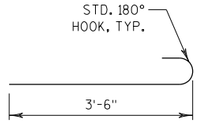
SS901



T501, T502



T805, T806



T513

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-67-337

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STRUCTURAL APPROACH SLAB DETAILS

SHEET 24 OF 28

881

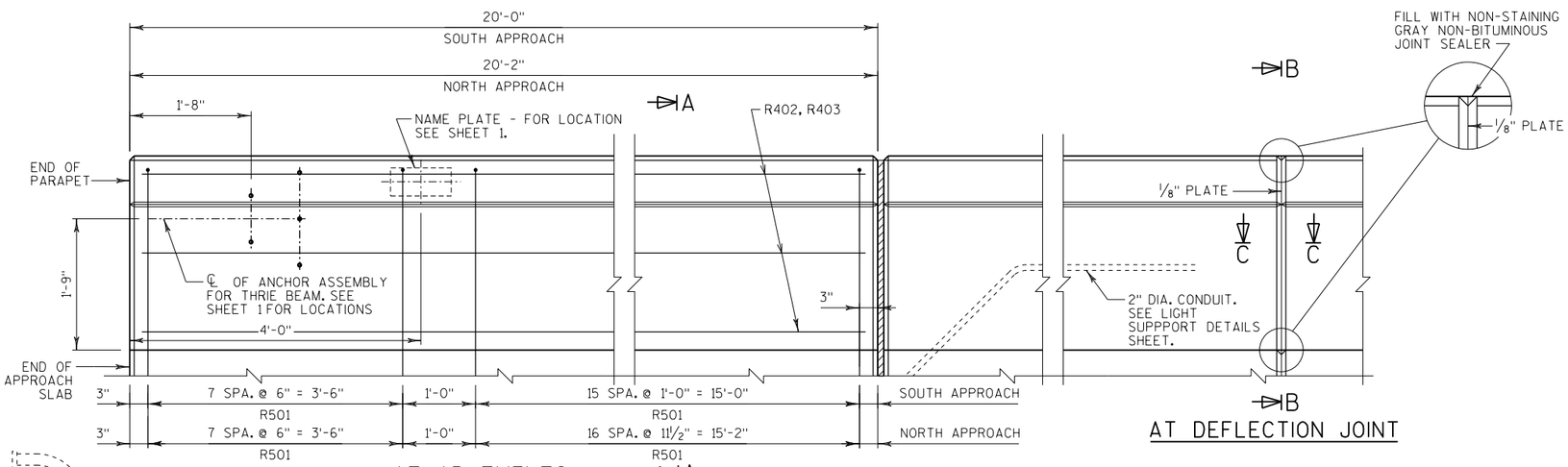
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PLOT DATE : 11/18/2014

PLOT BY : mdr

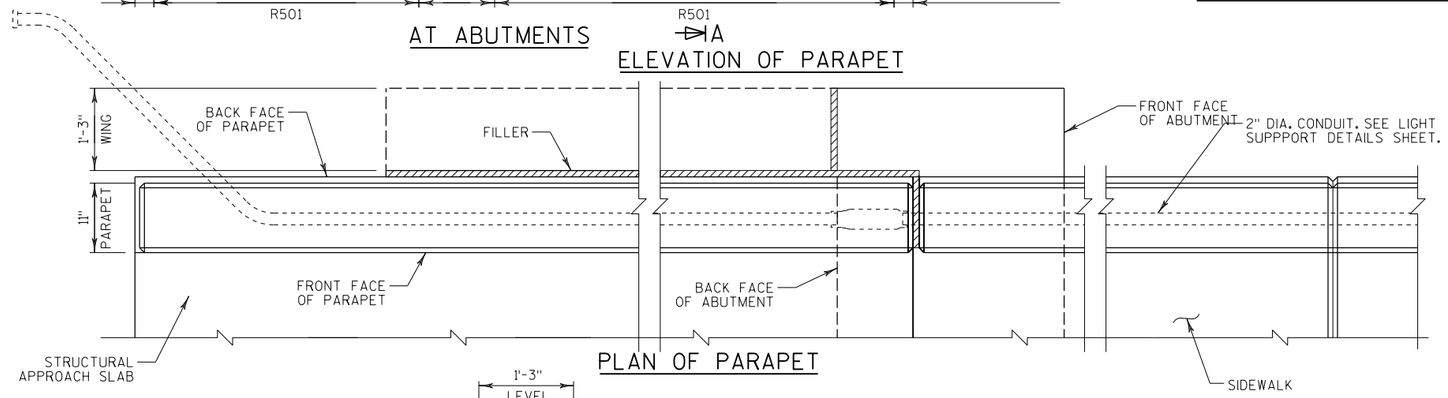
STATE PROJECT NUMBER

1100-37-70

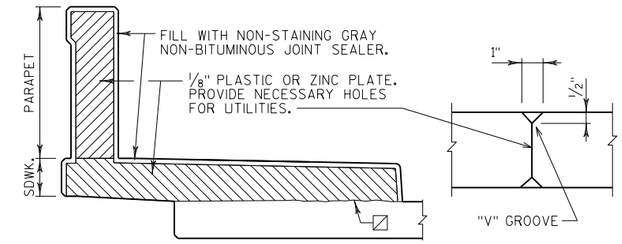


AT ABUTMENTS

AT DEFLECTION JOINT



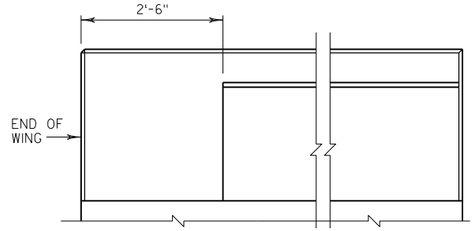
PLAN OF PARAPET



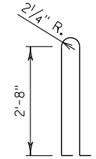
SECTION B-B

(SHOWING DEFLECTION JOINT IN PARAPET AND SIDEWALK.)

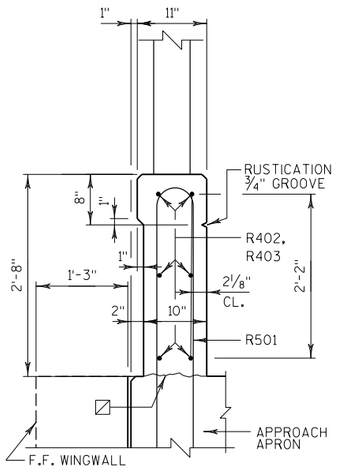
SECTION C-C



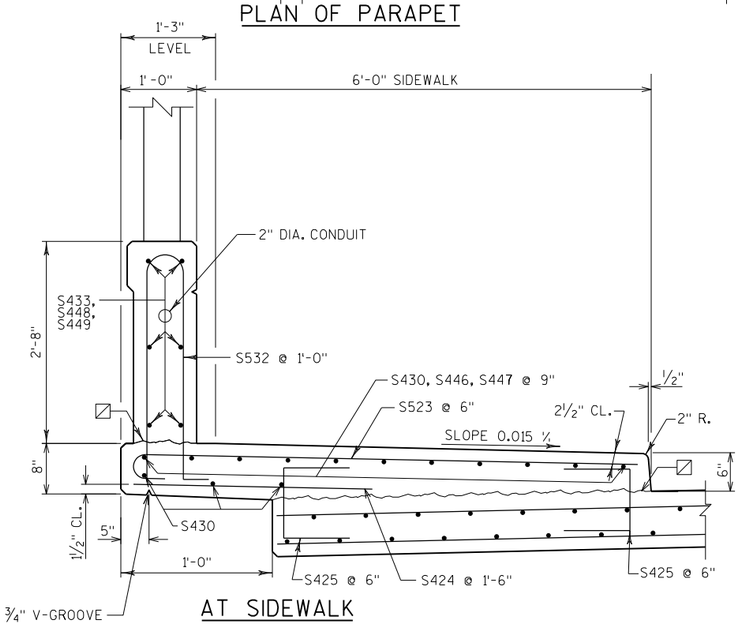
FRONT FACE OF PARAPET



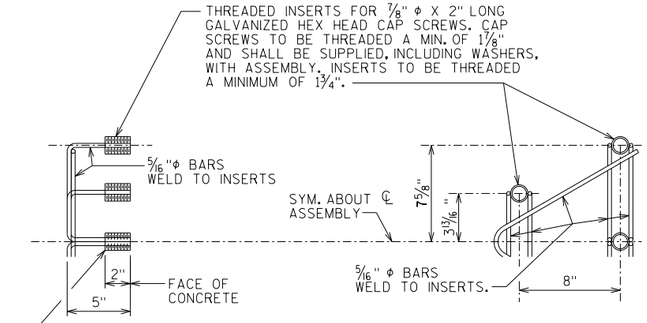
R501



SECTION A-A



AT SIDEWALK



DETAIL OF ANCHOR ASSEMBLY

NOTE: HEX HEAD CAP SCREWS & WASHERS TO BE GALVANIZED IN ACCORDANCE WITH AASHTO M232 CLASS C.

ASSEMBLY BID ITEM SHALL BE "ANCHOR ASSEMBLIES FOR STEEL PLATE BEAM GUARD", EACH.

NOTES:

WHEN PARAPETS ARE POURED CONTINUOUSLY FROM END TO END, THEY SHALL BE SEPARATED AT THE DEFLECTION JOINTS BY A PIECE OF ⅛" ZINC OR PLASTIC PLATE CUT AS SHOWN IN SECTION B-B BY SHADED AREA. IF CONSTRUCTION JOINTS IN PARAPETS ARE USED AT THE DEFLECTION JOINTS, ONE SIDE OF JOINT SHALL BE COATED WITH AN APPROVED LIQUID BOND BREAKER AND PLATE SEPARATORS MAY BE OMITTED.

▨ HORIZONTAL CONST. JOINT - STRIKE OFF AS SHOWN AND LEAVE ROUGH. FOR DECK POUR, MATCH BRIDGE X-SLOPE.

BILL OF BARS

BAR MARK	COAT	NO. S. APPR.	NO. N. APPR.	LENGTH	BENT	BAR SERIES	LOCATION
R501	X	24	24	6'-8"	X		APPROACH SLAB PARAPET - VERT.
R402	X	6	0	19'-7"			S. APPROACH SLAB PARAPET - HORIZ.
R403	X	0	6	19'-8"			N. APPROACH SLAB PARAPET - HORIZ.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-67-337

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VERTICAL FACE PARAPET TYPE A

SHEET 25 OF 28
882

8

8

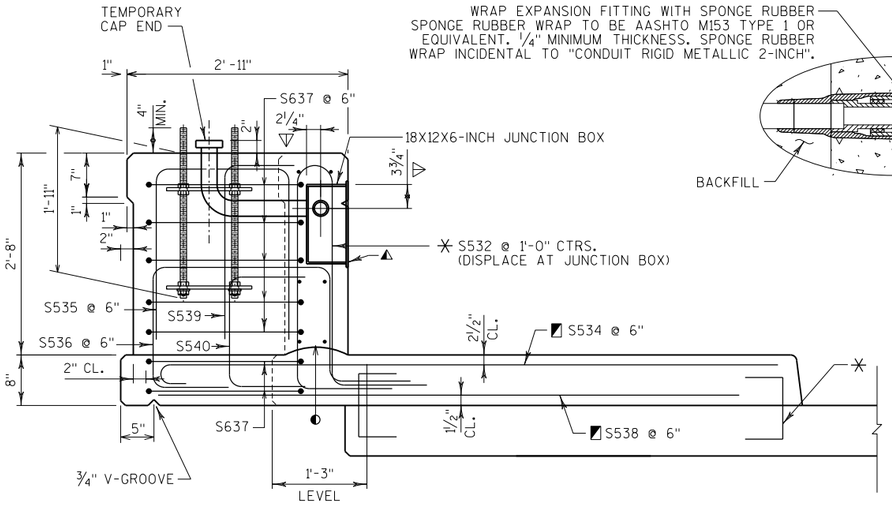
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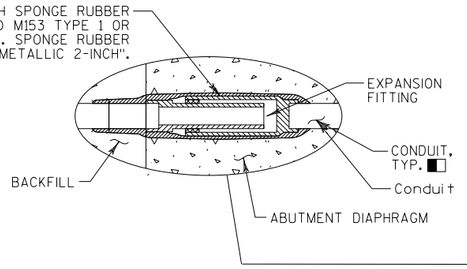
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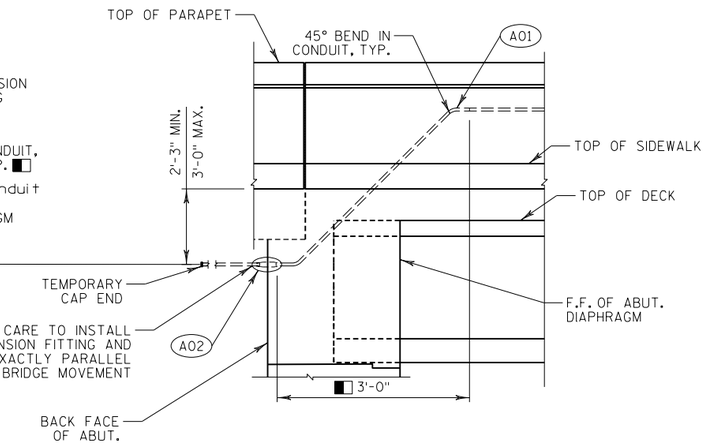
STATE PROJECT NUMBER

1100-37-70



SECTION A-A





ELEVATION AT ABUTMENT SHOWING CONDUITS

(A01) EXPANSION FITTINGS, ANGLES AND ADAPTER FITTINGS TO BE INCIDENTAL TO THE BID ITEM "CONDUIT RIGID METALLIC 2-INCH".

WHEN CONNECTING METALLIC CONDUIT ONLY ADAPTER FITTINGS U.L. LISTED FOR ELECTRICAL USE SHALL BE USED.

(A02) APPROVED MANUFACTURER OR EQUIVALENT- EXPANSION FITTING: O-Z/GEDNEY TYPE AXDX AND BONDING JUMPER (4" TOTAL LONGITUDINAL CONDUIT MOVEMENT). ALSO USE EXPANSION FITTING AT PARAPET DEFLECTION JOINTS.

NOTES

BID ITEMS SHALL BE:
"JUNCTION BOXES 18X12X6-INCH", EACH.
"ANCHOR ASSEMBLIES LIGHT POLES", EACH.
"CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH"
"CONDUIT RIGID METALLIC 2-INCH".

APPROVED MANUFACTURERS - JUNCTION BOXES: SEE APPROVED MATERIAL LIST.

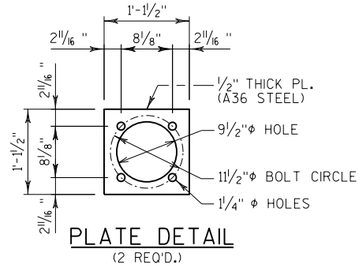
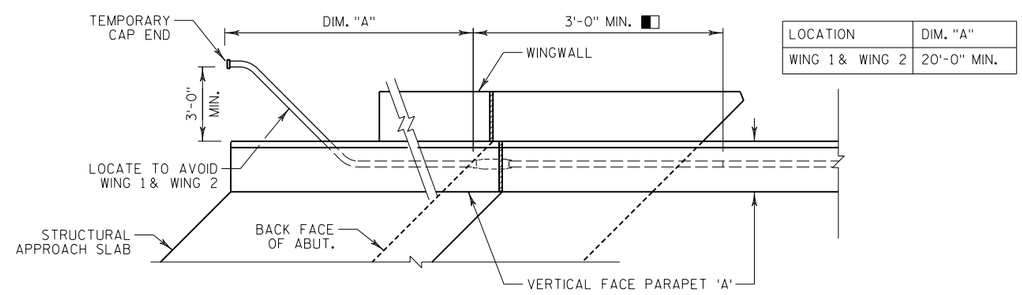


PLATE DETAIL
(2 REQ'D.)



LOCATION	DIM. "A"
WING 1 & WING 2	20'-0" MIN.

PLAN OF PARAPET AT ABUTMENT SHOWING CONDUIT

■ USE RIGID METALLIC CONDUIT 3'-0" MIN. INTO PARAPET ON BRIDGE SIDE OF THE JOINT OPENING.

◐ CONSTR. JT. STRIKE OFF AS SHOWN

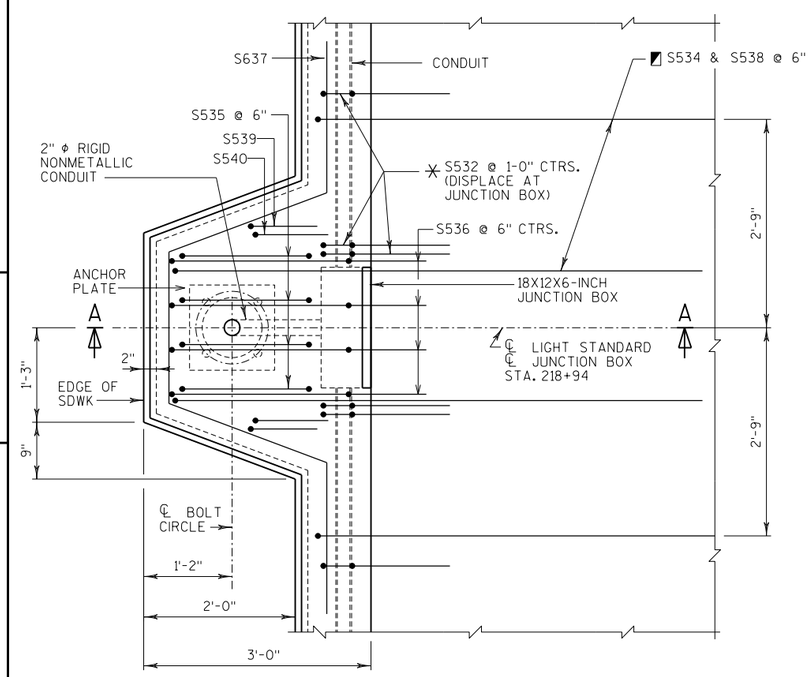
◭ CUT OUT ± 1" OF GASKET AT BOTTOM OF JUNCTION BOX COVER TO ALLOW FOR DRAINAGE.

▽ LOCATION OF CONDUIT IS MEASURED FROM OUTSIDE EDGE OF JUNCTION BOX.

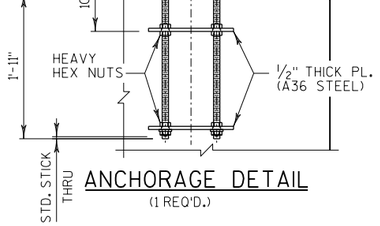
◩ THESE BARS ARE IN ADDITION TO STANDARD TRANSVERSE BARS IN SIDEWALK.

◒ 1"Φ THREADED ANCHOR BOLTS ASTM A449 OR AASHTO M 314-90 GR 55. HOT DIP ASTM A153, CLASS C, UPPER 8" OF BOLT INCLUDING NUTS & WASHERS. PROVIDE ENLARGED THREAD ON NUTS FOR PROPER FIT AFTER GALVANIZING. PROVIDE DOUBLE FLAT WASHERS & NUTS.

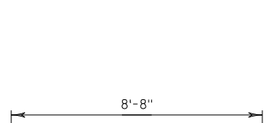
✳ SEE VERTICAL FACE PARAPET "A", SHEET FOR ADDITIONAL BAR STEEL DETAILS.



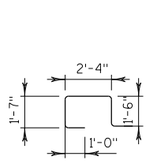
PLAN AT LIGHT STANDARD



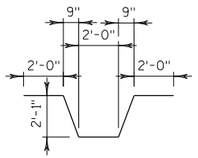
ANCHORAGE DETAIL
(1 REQ'D.)



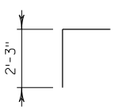
S534



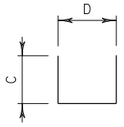
S536



S637



S539



S535, S540

BAR MARK	DIM. C	DIM. D
S535	2'-3"	1'-9"
S540	1'-0"	1'-7"

BILL OF BARS

BAR MARK	COAT	NO.	LENGTH	BENT	BAR SERIES	LOCATION
S534	X	12	7'-3"	X		SIDEWALK HORIZ. @ JUNCTION BOX
S535	X	4	6'-0"	X		PARA. VERT. @ JUNCTION BOX
S536	X	4	6'-11"	X		PARA. VERT. @ LIGHT STD.
S637	X	7	10'-0"	X		PARA. HORIZ. @ LIGHT STD.
S538	X	12	6'-8"			SIDEWALK HORIZ. @ JUNCTION BOX
S539	X	2	3'-2"	X		PARA. VERT. @ LIGHT STD.
S540	X	2	3'-4"	X		PARA. VERT. @ LIGHT STD.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-67-337

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LIGHT SUPPORT DETAILS

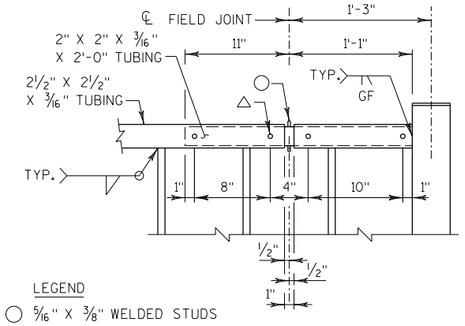
SHEET 26 OF 28
883

8

8

STATE PROJECT NUMBER

1100-37-70

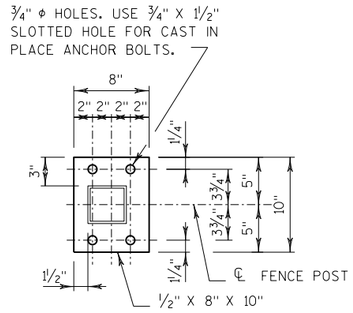


LEGEND

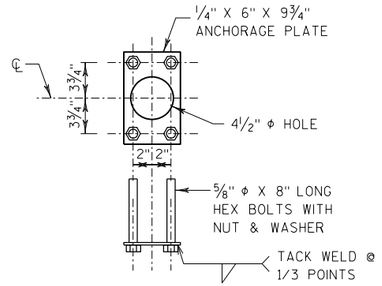
○ 5/16" X 3/8" WELDED STUDS

△ WELD BEAD ON EACH SIDE OF TUBE. GRIND BEADS SO THAT SLEEVE FITS FREELY INSIDE THE 2 1/2" X 2 1/2" TUBE.

RAILING EXPANSION JOINT DETAIL



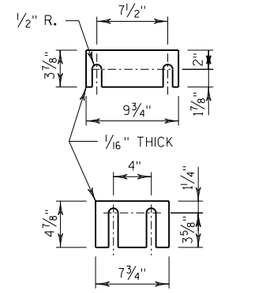
BASE PLATE



ANCHORAGE DETAIL

5/8" CAST-IN-PLACE ANCHOR BOLTS. MASONRY ANCHORS MAY BE SUBSTITUTED FOR C.I.P. ANCHOR BOLTS. ANCHORAGE PLATE NOT REQUIRED WHEN TYPE S ANCHORS ARE USED.

MASONRY ANCHOR TYPE S 5/8-INCH. EMBED 7" IN CONCRETE.



SHIM PLATE DETAILS

TWO SHIMS OF EACH SIZE REQUIRED PER POST

NOTES

POST BASE PLATES SHALL BE FLAT WITH ALL SURFACES SMOOTH AND FREE FROM WARP AND ALL EDGES SMOOTH, STRAIGHT, AND VERTICAL. ALL PLATE CUTS SHALL BE MACHINE OR MACHINE FLAME CUT.

RAILS AND POSTS TO BE ASTM A500, GRADE B. BASE PLATES AND SHIMS TO BE ASTM A709, GRADE 36. ALL GALVANIZED AFTER FABRICATION.

ANCHORAGES SHALL BE ACCURATELY PLACED TO PROVIDE CORRECT ALIGNMENT OF RAILING. SET POSTS NORMAL TO GRADE.

ALL POST SPA. ARE TAKEN HORIZ. ALONG CENTER LINE OF RAILING AT BASE OF POST.

SHIMS SHALL BE USED UNDER BASE PLATES WHERE REQUIRED FOR ALIGNMENT.

CAULK AROUND PERIMETER OF BASE PLATES AND FILL PORTION OF SLOTTED HOLES AROUND ANCHOR BOLTS WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER.

CUT BOTTOM OF POST TO MAKE VERTICAL IN TRANSVERSE DIRECTION.

ANCHOR BOLTS, NUTS AND WASHERS SHALL BE EITHER STAINLESS STEEL OR ASTM 307. IF 307 IS USED, ANCHOR BOLTS, NUTS, AND WASHERS SHALL BE GALVANIZED.

RAILING TO BE PAINTED AND FENCE FABRIC AND TIES TO BE VINYL COATED FEDERAL COLOR NO. 27038 "BLACK".

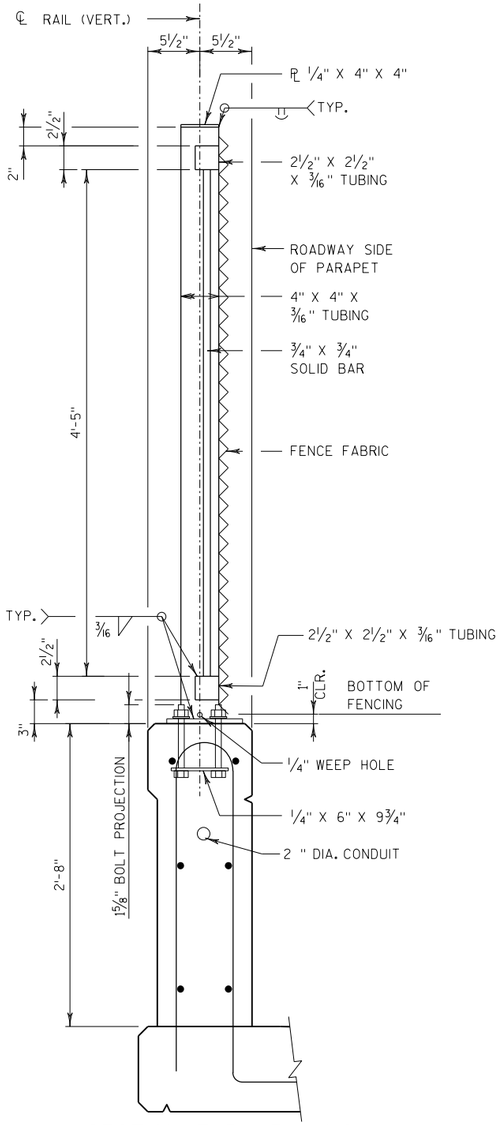
BID ITEM SHALL BE "RAILING TUBULAR SCREENING B-67-337" WHICH SHALL INCLUDE ALL ITEMS SHOWN.

RAILING SHALL BE FABRICATED IN LENGTHS THAT INCLUDE NOT MORE THAN 3 POSTS.

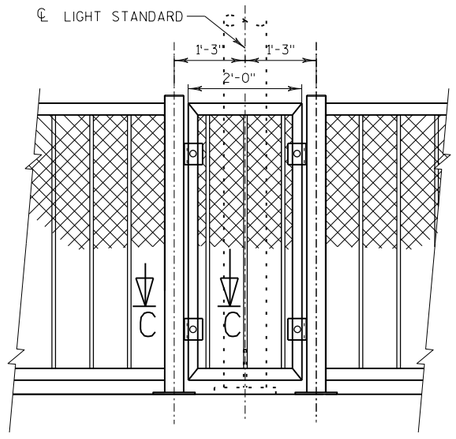
VENT HOLES SHALL BE DRILLED IN MEMBERS AS REQUIRED TO FACILITATE GALVANIZING.

ALL MATERIAL SHALL BE GALVANIZED AFTER FABRICATION. PRIOR TO GALVANIZING ALL STEEL RAILING POSTS AND STEEL TUBING SHALL BE GIVEN A #6 BLAST CLEANING BY SSPC SPECIFICATIONS. PAINT OVER GALVANIZING WITH APPROVED TIE COAT AND TOPCOAT.

THE END OF THE FABRIC SHALL BE ATTACHED TO THE POST BY MEANS OF A TENSION BAR THREADED THROUGH THE END LOOPS OF THE FABRIC AND SECURED TO THE POST WITH CLAMPS & BOLT. THE FABRIC SHALL BE STRETCHED TO REMOVE ALL SLACK.

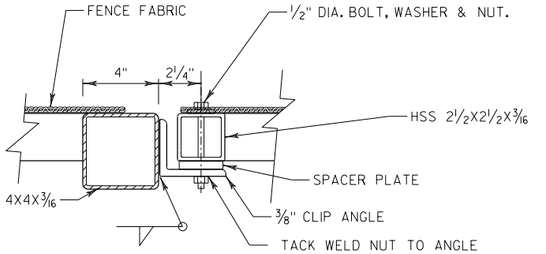


SECTION THRU RAILING

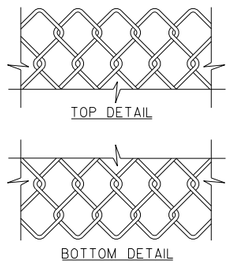


OUTSIDE ELEVATION OF RAILING

(LOOKING EAST AT LIGHT STANDARD)

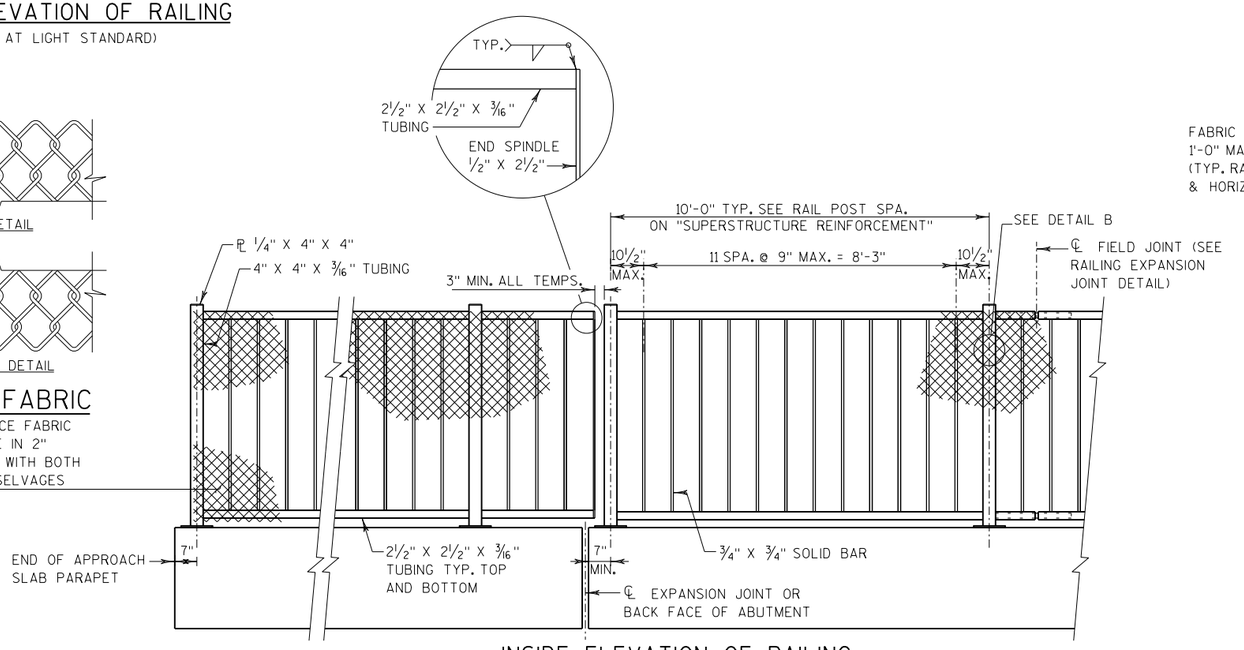


SECTION C-C

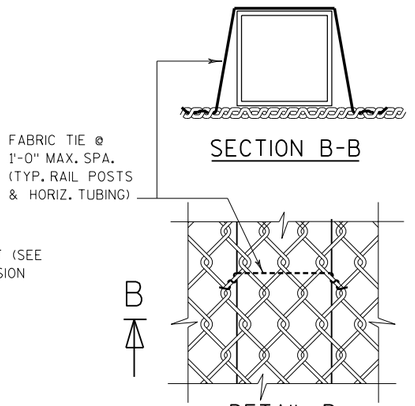


FENCE FABRIC

5'-0" VINYL COATED FENCE FABRIC WOVEN OF 9-GAUGE WIRE IN 2" DIAMOND PATTERN MESH WITH BOTH THE TOP AND BOTTOM SELVAGES KNUCKLED.



INSIDE ELEVATION OF RAILING



SECTION B-B

DETAIL B

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-67-337

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ORNAMENTAL PROTECTIVE SCREENING

SHFT 27 OF 28
884

8

8

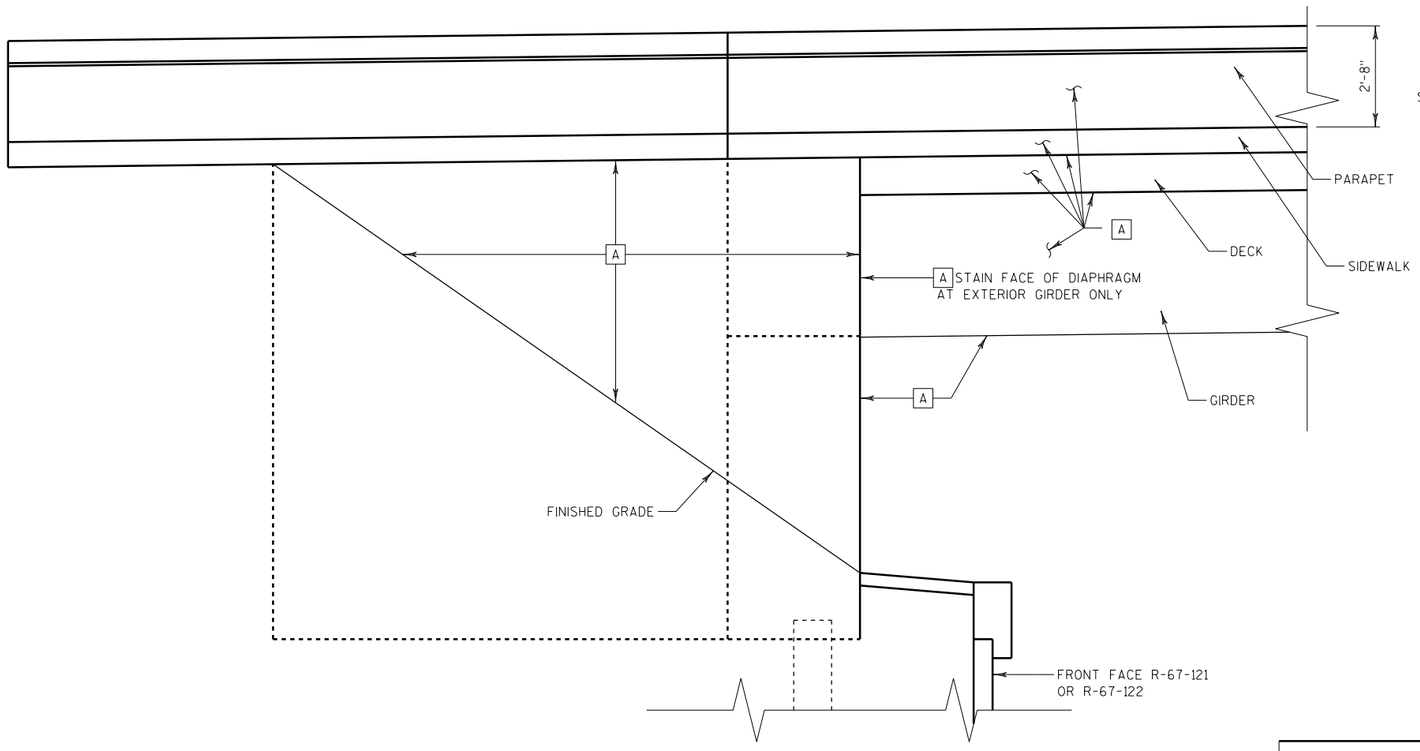
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PLOT DATE : 11/18/2014

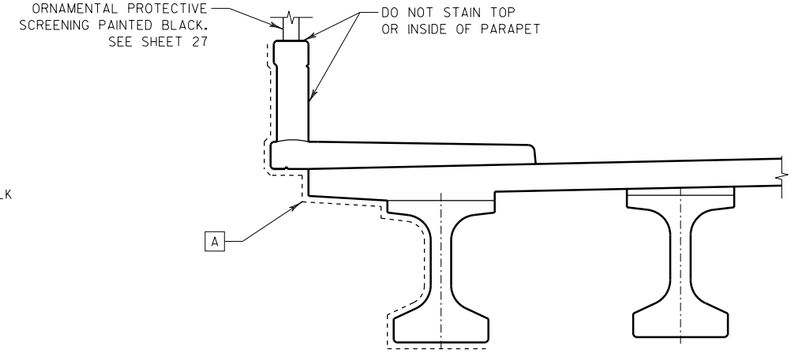
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STATE PROJECT NUMBER

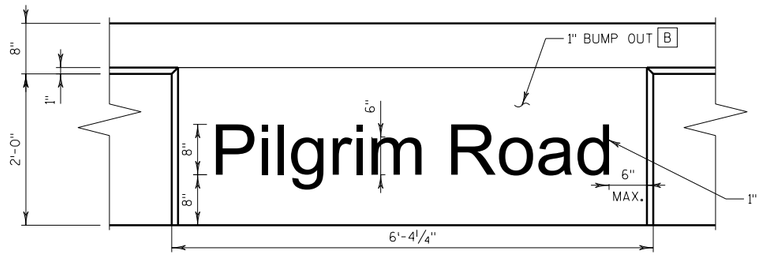
1100-37-70



OUTSIDE ELEVATION OF PARAPET & ABUTMENT



PARTIAL SECTION OF DECK

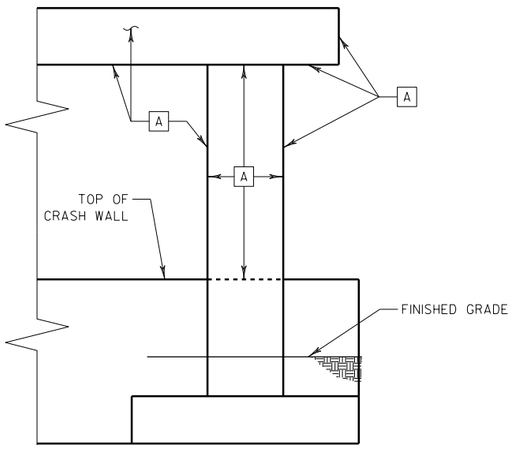


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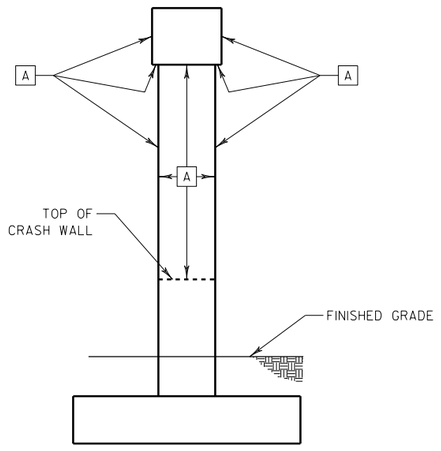
EXTERIOR FACE OF PARAPET ONLY

NOTES:
LETTERING SHALL BE HELVETICA, 8" UPPER CASE AND 6" LOWER CASE.

SEE SUPERSTRUCTURE REINFORCEMENT SHEET FOR LOCATION.



ELEVATION OF PIER



END OF PIER

CONCRETE STAINING SCHEDULE

MARK	COLOR	LOCATION	NOTES
A	BASE COLOR	PARAPETS	EXTERIOR FACE ONLY
		SIDEWALKS	FASCIA & EXPOSED UNDERSIDE
		DECK	FASCIA & EXPOSED UNDERSIDE TO EXTERIOR GIRDER FLANGE
		ABUTMENT	FRONT FACE FROM TOP OF ABUTMENT TO TOP OF CONCRETE SLOPE PAVING
		WING WALLS	TOP OF WALL TO FINISHED GRADE
		PIERS	SIDES OF GIRDER PEDESTALS, SIDES AND BOTTOM OF CAP BEAM AND COLUMNS TO TOP OF CRASH WALL
		GIRDERS	EXTERIOR FACE AND UNDERSIDE OF EXTERIOR GIRDERS
B	ACCENT COLOR #1	PARAPETS	PANEL AT ROADWAY NAME
C	ACCENT COLOR #2	PARAPETS	LETTERING AT ROADWAY NAME

THE FINAL COLOR OF THE CONCRETE FOLLOWING APPLICATION OF THE STAIN SYSTEM SHALL MATCH THE FEDERAL STANDARD COLOR SYSTEM LISTED BELOW:

BASE COLOR: 33564
ACCENT COLOR #1: 33448
ACCENT COLOR #2: 37038

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-67-337

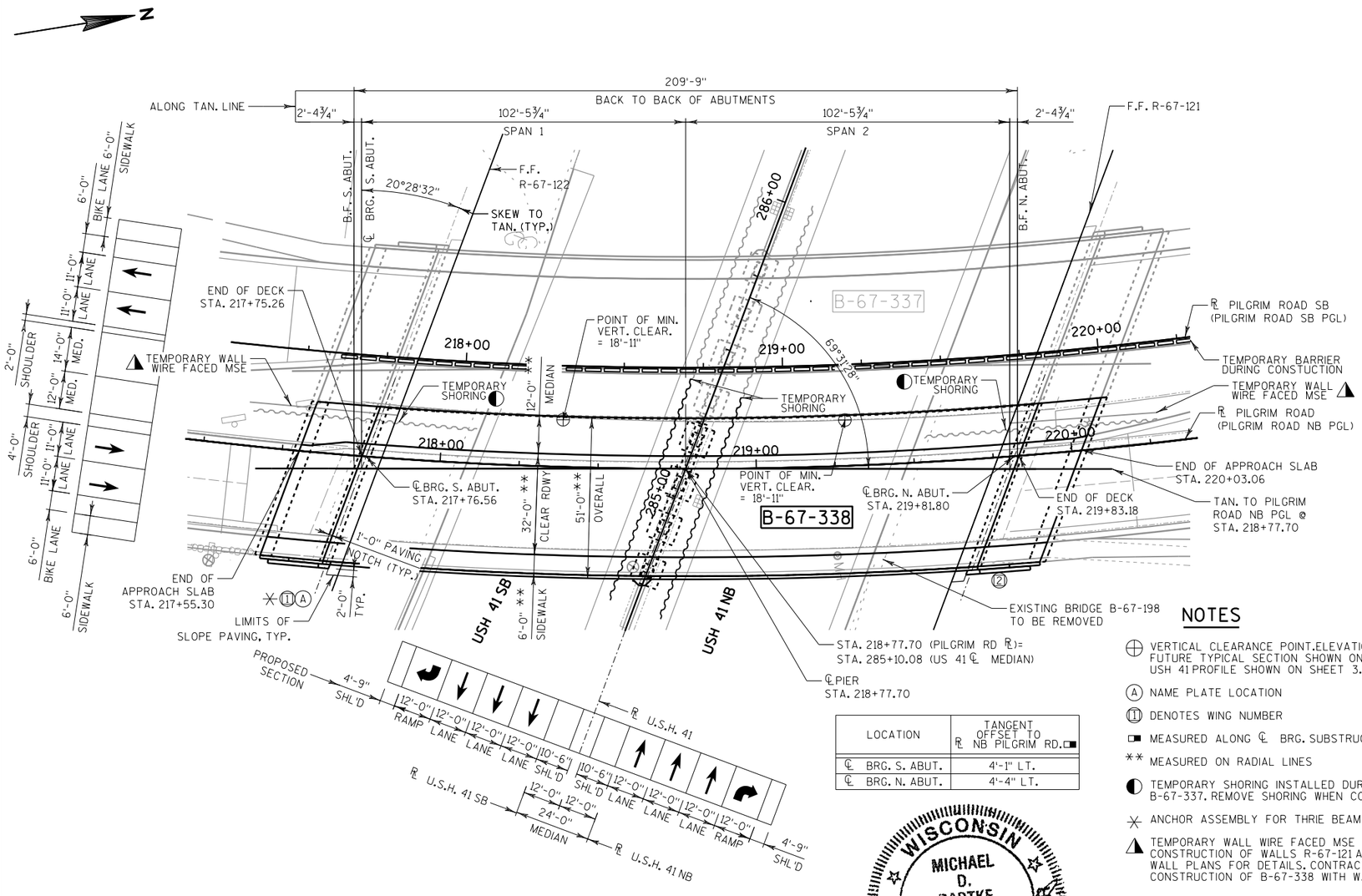
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AESTHETIC DETAILS

SHEET 28 OF 28
885

8

8



LOCATION	TANGENT OFFSET TO ℄ NB PILGRIM RD.
℄ BRG. S. ABUT.	4'-1" LT.
℄ BRG. N. ABUT.	4'-4" LT.

HORIZONTAL ALIGNMENTS

PILGRIM ROAD SB ℄
PI STA= 220+26.08
N= 437016.69
E= 2506506.89
DELTA= 42°24'22.37"
Dc= 4°23'50.05"
T= 505.48'
L= 964.38'
R= 1303.00'
PC STA.= 215+20.60
PT STA.= 224+84.99

PILGRIM ROAD ℄
PI STA= 220+38.20
N= 437014.69
E= 2506541.15
DELTA= 42°24'22.38"
Dc= 4°17'30.60"
T= 517.89'
L= 988.07'
R= 1335.00'
PC STA.= 215+20.31
PT STA.= 225+08.37

DESIGN DATA

LIVE LOAD:

DESIGN LOADING: HL-93
INVENTORY RATING: RF = 1.12
OPERATING RATING: RF = 1.82
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV): 250 KIPS

STRUCTURE IS DESIGNED FOR A FUTURE WEARING SURFACE OF 20 P.S.F.

ULTIMATE DESIGN STRESSES:

CONCRETE MASONRY
SUPERSTRUCTURE ..... f'c = 4,000 psi
ALL OTHER ..... f'c = 3,500 psi

BAR STEEL REINFORCEMENT,
HIGH STRENGTH, GRADE 60 .....fy = 60,000 psi

45W-INCH PRESTRESSED GIRDERS,
CONCRETE MASONRY .....f'c = 8,000 psi
.....f'ci = 6,800 psi

0.6" DIA. PRESTRESSING STRANDS f's = 270,000 psi

FOUNDATION DATA:

ABUTMENTS AND PIERS SUPPORTED ON HP 10X42 PILING DRIVEN TO THE FOLLOWING REQUIRED DRIVING RESISTANCE AS DETERMINED BY THE PDA/CAPWAP METHOD.
REQUIRED DRIVING RESISTANCE*:
SOUTH ABUTMENT: 180 TONS
PIER: 140 TONS
NORTH ABUTMENT: 140 TONS
ESTIMATED PILE LENGTH:
SOUTH ABUTMENT: 80 FEET
PIER: 35 FEET
NORTH ABUTMENT: 40 FEET

*THE FACTORED AXIAL RESISTANCE OF PILES IN COMPRESSION USED FOR DESIGN IS THE REQUIRED DRIVING RESISTANCE MULTIPLIED BY A RESISTANCE FACTOR OF 0.65 USING THE PDA/CAPWAP METHOD TO DETERMINE PILE CAPACITY.

TRAFFIC DATA:

PILGRIM ROAD	U.S.H. 41 / U.S.H. 45
A.D.T. = 22,700 (2011)	A.D.T. = 82,800 (2012)
A.D.T. = 39,600 (2031)	A.D.T. = 137,200 (2023)
R.D.S. = 40 M.P.H.	R.D.S. = 70 M.P.H.

BRIDGE OFFICE CONTACT:
WILLIAM DREHER
(608) 266-8489

CONSULTANT CONTACT:
MICHAEL D. RADTKE
(414) 347-1607

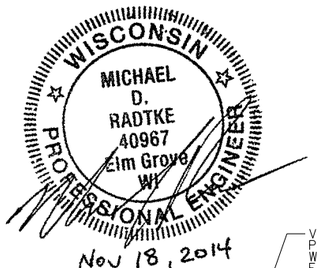
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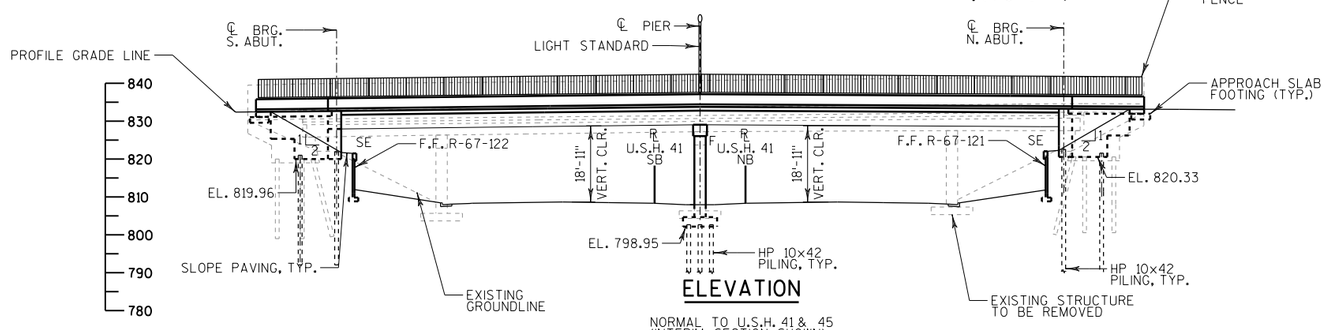
⊕ VERTICAL CLEARANCE POINT. ELEVATION OF USH 41 IS BASED ON FUTURE TYPICAL SECTION SHOWN ON SHEET 2 AND BEST FIT USH 41 PROFILE SHOWN ON SHEET 3.
Ⓐ NAME PLATE LOCATION
① DENOTES WING NUMBER
℄ MEASURED ALONG ℄ BRG. SUBSTRUCTURE UNIT
** MEASURED ON RADIAL LINES
◐ TEMPORARY SHORING INSTALLED DURING CONSTRUCTION OF B-67-337. REMOVE SHORING WHEN CONSTRUCTION IS COMPLETE
⚹ ANCHOR ASSEMBLY FOR THRIE BEAM TYPE GUARDRAIL
◭ TEMPORARY WALL WIRE FACED MSE INSTALLED DURING CONSTRUCTION OF WALLS R-67-121 AND R-67-122. SEE RETAINING WALL PLANS FOR DETAILS. CONTRACTOR MUST COORDINATE CONSTRUCTION OF B-67-338 WITH WALLS R-67-121 AND R-67-122.

NO.	STATION	DESCRIPTION	ELEVATION
BM1	217+57.99 NB PILGRIM OFF: 32' RT.	BM ALUM CAP. WISDOT SW CORNER BRIDGE OVER U.S.H. 45 IN CONCRETE WALK, SOUTH OF JOINT.	827.32
BM20	211+51.23 SB PILGRIM OFF: 58.90' LT.	BM CHISELED BOX, SW QUAD. ROOSEVELT & PILGRIM. NE CORNER OF CBX PAD.	803.91

PLAN

2 SPAN 45W" PRESTRESSED GIRDER BRIDGE





ELEVATION

NORMAL TO U.S.H. 41 & 45
(INTERIM SECTION SHOWN)

LIST OF DRAWINGS

1. GENERAL PLAN AND ELEVATION
2. CROSS SECTION & GENERAL NOTES
3. QUANTITIES & PROFILE GRADE LINES
4. CONSTUCTION STAGING
5. SUBSURFACE EXPLORATION
6. SOUTH ABUTMENT
7. SOUTH ABUTMENT DETAILS
8. WING 1 DETAILS
9. NORTH ABUTMENT
10. NORTH ABUTMENT DETAILS
11. WING 2 DETAILS
12. PIER
13. PIER DETAILS
14. PIER FOOTINGS
15. 45W" PRESTRESSED GIRDER
16. 45W" PRESTRESSED GIRDER DETAILS
17. STEEL DIAPHRAGM
18. SUPERSTRUCTURE FRAMING PLAN
19. SUPERSTRUCTURE REINFORCEMENT
20. SUPERSTRUCTURE CROSS SECTION
21. SUPERSTRUCTURE DETAILS
22. SOUTH STRUCTURAL APPROACH SLAB
23. NORTH STRUCTURAL APPROACH SLAB
24. STRUCTURAL APPROACH SLAB DETAILS
25. VERTICAL FACE PARAPET TYPE 'A'
26. LIGHT SUPPORT DETAILS
27. ORNAMENTAL PROTECTIVE SCREENING
28. AESTHETICS

STATE PROJECT NUMBER
1100-37-70

NO.	DATE	REVISION	BY

emcs INC
1300 W. Canal Street, Suite 200
Milwaukee, WI 53233
414.347.1607 Fax 414.347.1347

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
ACCEPTED William C. Dreher KAR 11/26/14
CHIEF STRUCTURES DESIGN ENGINEER DATE

STRUCTURE B-67-338

PILGRIM ROAD NB OVER U.S.H. 41 & U.S.H. 45

COUNTY	VILLAGE
WAUKESHA	MENOMONEE FALLS

DESIGN SPEC.
AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS

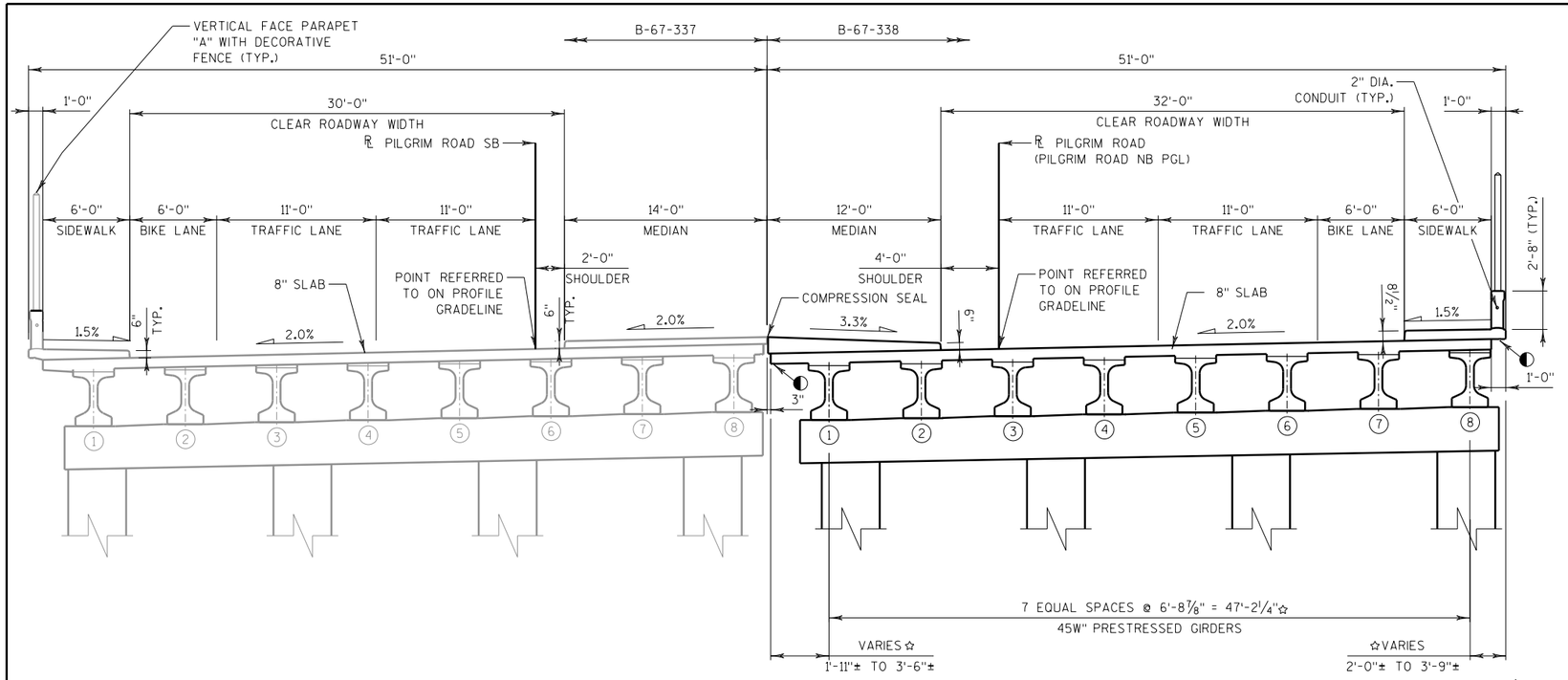
DESIGNED BY	DESIGN CK'D.	DRAWN BY	PLANS CK'D.
SKR	MDR	SKR	MDR

GENERAL PLAN AND ELEVATION

SHEET 1 OF 28
886

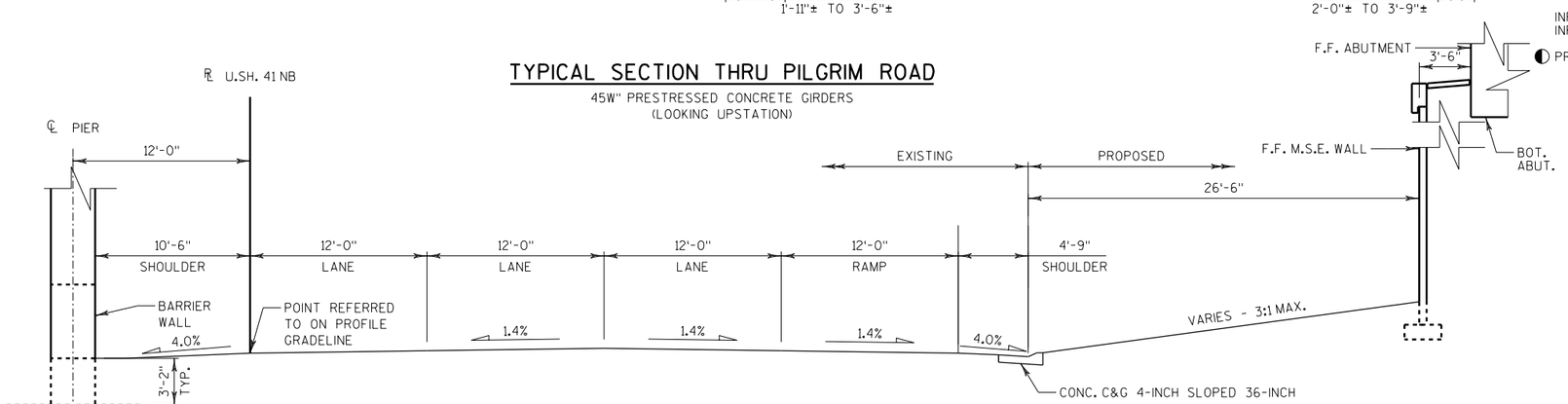
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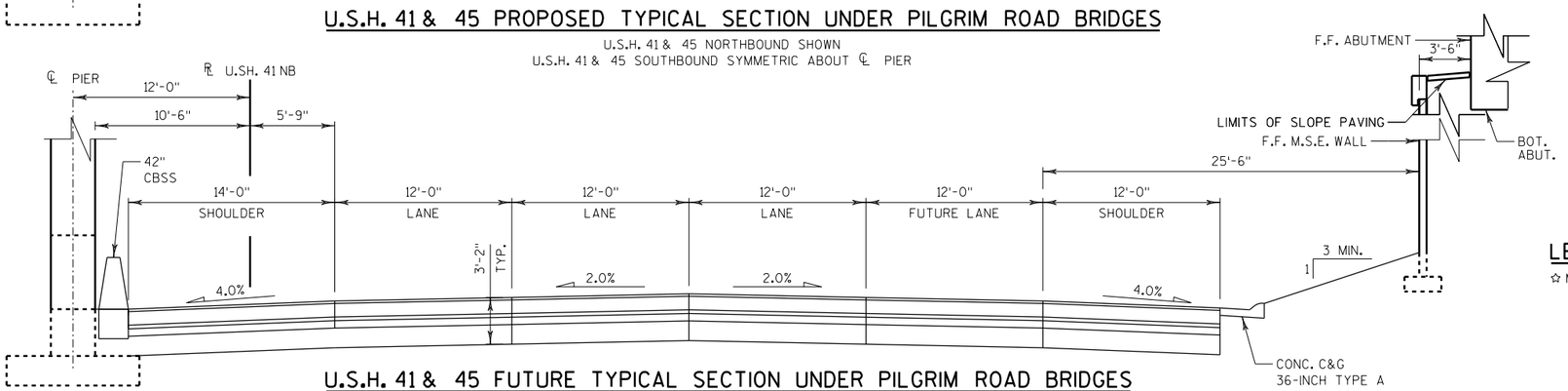
TYPICAL SECTION THRU PILGRIM ROAD

45W" PRESTRESSED CONCRETE GIRDERS
(LOOKING UPSTATION)



U.S.H. 41 & 45 PROPOSED TYPICAL SECTION UNDER PILGRIM ROAD BRIDGES

U.S.H. 41 & 45 NORTHBOUND SHOWN
U.S.H. 41 & 45 SOUTHBOUND SYMMETRIC ABOUT ℄ PIER



U.S.H. 41 & 45 FUTURE TYPICAL SECTION UNDER PILGRIM ROAD BRIDGES

U.S.H. 41 & 45 NORTHBOUND SHOWN
U.S.H. 41 & 45 SOUTHBOUND SYMMETRIC ABOUT ℄ PIER

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

ALL DIMENSIONS ARE IN FEET AND INCHES UNLESS OTHERWISE NOTED.

ALL STATIONS AND ALL ELEVATIONS ARE IN FEET. ELEVATIONS REFERENCED TO NGVD 29 DATUM.

BEVEL EXPOSED EDGES OF CONCRETE 3/4" UNLESS OTHERWISE NOTED.

ELASTOMERIC BEARING PADS NEED NOT BE INDIVIDUALLY MOLDED PROVIDED THE CUT EDGES ARE SMOOTH AND TRUE.

BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2" CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

ALL REINFORCING BARS ARE ENGLISH DESIGNATION AND THE FIRST DIGIT OF A 3-DIGIT BAR MARK OR FIRST TWO DIGITS OF A 4-DIGIT BAR MARK SIGNIFY THE BAR SIZE.

JOINT FILLER SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M153 TYPE 1, 2, OR 3, OR AASHTO M213.

THE EXISTING GROUNDLINE SHALL BE THE UPPER LIMITS OF "EXCAVATION FOR STRUCTURES, BRIDGE B-67-338".

FILL/EXCAVATE TO BOTTOM OF ABUTMENT ELEVATION BEFORE PILE DRIVING.

AT ABUTMENTS, ALL SPACES EXCAVATED AND NOT OCCUPIED BY THE NEW STRUCTURE SHALL BE BACKFILLED WITH STRUCTURE BACKFILL ON THE BACK FACE.

THE SLOPE OF THE FILL IN FRONT OF THE ABUTMENTS SHALL BE COVERED WITH SLOPE PAVING MATERIAL TO THE EXTENT SHOWN ON SHEET 1 AND IN THE ABUTMENT DETAILS.

THE HAUNCH CONCRETE QUANTITY IS BASED ON THE AVERAGE HAUNCH SHOWN ON THE PRESTRESSED GIRDER DETAILS SHEET.

APPLY PROTECTIVE SURFACE TREATMENT TO TOP OF BRIDGE DECK, TOP OF SIDEWALK, TOP OF MEDIAN, CURB FACES, AND TOP AND INSIDE FACES OF PARAPETS.

THE EXISTING STRUCTURE (B-67-198) IS A FOUR-SPAN STEEL GIRDER STRUCTURE WITH AN OVERALL LENGTH OF 222'-8 3/4", AN OVERALL WIDTH OF 38'-6", AND IS TO BE REMOVED PRIOR TO CONSTRUCTING B-67-338. THE CONTRACTOR SHALL REMOVE ALL ELEMENTS OF THE EXISTING BRIDGE THAT INTERFERE WITH THE CONSTRUCTION OF THE PROPOSED BRIDGE.

VERTICAL CLEARANCES SHOWN ARE BASED ON EXISTING PROFILE OF U.S.H. 41 AND THE PROPOSED TYPICAL SECTION.

INFORMATION ON THE DRAWINGS RELATING TO THE EXISTING BRIDGE IS BASED UPON AS-BUILT INFORMATION AVAILABLE FROM THE WISCONSIN DEPARTMENT OF TRANSPORTATION.

◐ PROVIDE 3/4" "V" GROOVE 5" FROM EDGE.

LEGEND

☆ MEASURED ALONG ℄ BRG. SUBSTRUCTURE

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-67-338

DRAWN BY SKR | PLANS CK'D. MDR

CROSS SECTION & GENERAL NOTES

SHEET 2 OF 28
887

STATE PROJECT NUMBER
1100-37-70

8

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STATE PROJECT NUMBER

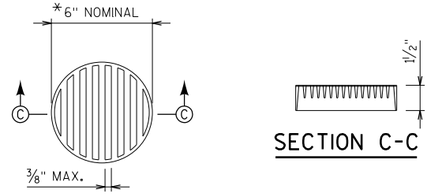
1100-37-70

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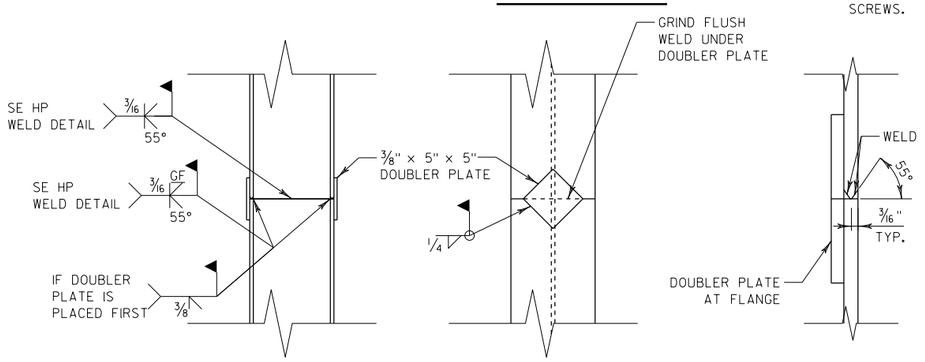
* DIMESNSIONS ARE APPROXIMATE. THE GRATE IS SIZED TO FIT INTO A PIPE COUPLING. ORIENT SHEILD SO SLOTS ARE VERTICAL.

THE RODENT SCREEN, PIPE COUPLING AND SCREWS SHALL BE INCIDENTAL TO THE BID ITEM "PIPE UNDERDRAIN WRAPPED 6-INCH".

THE RODENT SHEILD SHALL BE A PVC GRATE SIMILAR TO THIS DETAIL. THE GRATE IS COMMERCIALLY AVAILABLE AS A FLOOR STRAINER. A PIPE COUPLING IS REQUIRED FOR THE ATTACHMENT OF THIS SHIELD TO THE EXPOSED END OF THE PIPE UNDERDRAIN. THE SHEILD SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO. 10 X 1-INCH STAINLESS STEEL METAL SCREWS.



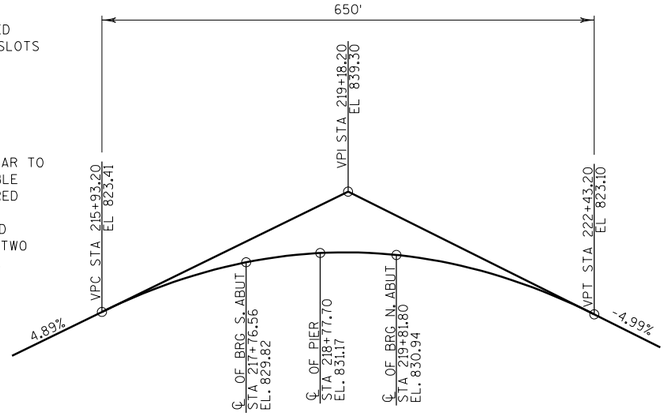
RODENT SHIELD



HP 10 X 42 SPLICE DETAIL

HP WELD DETAIL

FLANGE SHOWN, WEB SIMILAR

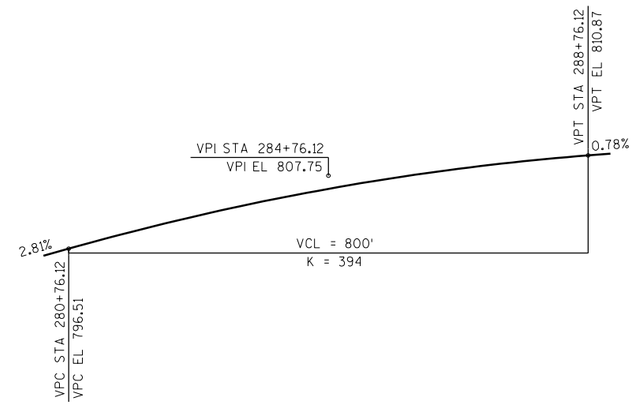


PROFILE GRADE LINE - PILGRIM RD. NB

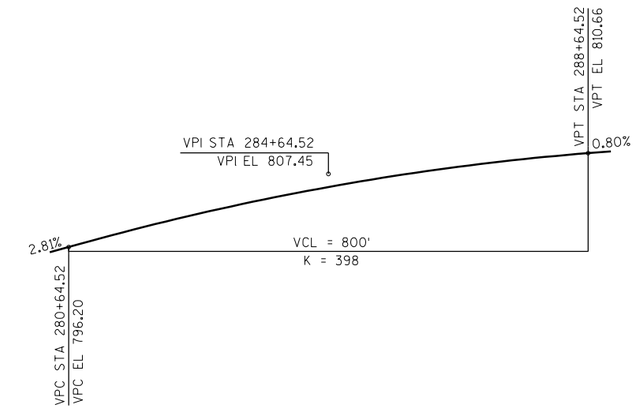
TOTAL ESTIMATED QUANTITIES

BID ITEM NO.	BID ITEMS	UNIT	SOUTH APPROACH	SOUTH ABUTMENT	PIER	NORTH ABUTMENT	NORTH APPROACH	SUPER	TOTAL
203.0200	REMOVING OLD STRUCTURE STATION 218+77	LS	--	--	--	--	--	--	1
206.1000	EXCAVATION FOR STRUCTURES BRIDGES B-67-338	LS	--	--	--	--	--	--	1
210.0100	BACKFILL STRUCTURE	CY	--	180	--	150	--	--	330
305.0120	BASE AGGREGATE DENSE 1 1/4-INCH	TON	--	180	--	170	--	--	350
502.0100	CONCRETE MASONRY BRIDGES	CY	78	49	139	59	78	487	890
502.3200	PROTECTIVE SURFACE TREATMENT	SY	115	--	--	--	115	1264	1494
503.0146	PRESTRESSED GIRDER TYPE I 45W-INCH	LF	--	--	--	--	--	1647	1647
505.0405	BAR STEEL REINFORCEMENT HS BRIDGES	LB	--	3720	2180	4390	--	--	10290
505.0605	BAR STEEL REINFORCEMENT HS COATED BRIDGES	LB	11190	530	29660	540	11760	82730	136410
506.2605	BEARING PADS ELASTOMERIC NON-LAMINATED	EACH	--	8	16	8	--	--	32
506.4000	STEEL DIAPHRAGMS B-67-338	EACH	--	--	--	--	--	28	28
511.1200	TEMPORARY SHORING B-67-338	SF	--	--	1100	--	--	--	1100
513.4090	RAILING TUBULAR SCREENING B-67-338	LS	--	--	--	--	--	--	1
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	--	16	--	17	--	--	33
517.1010.S	CONCRETE STAINING B-67-338	SF	60	330	1290	370	60	2830	4940
550.1100	PILING STEEL HP 10-INCH X 42 LB	LF	--	720	1260	440	--	--	2420
604.0400	SLOPE PAVING CONCRETE	SY	--	17	--	18	--	--	35
612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	--	73	--	76	--	--	149
614.0150	ANCHOR ASSEMBLIES FOR STEEL PLATE BEAM GUARD	EACH	1	--	--	--	--	--	1
652.0125	CONDUIT RIGID METALLIC 2-INCH	LF	--	--	--	--	--	10	10
652.0225	CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH	LF	--	--	--	--	--	248	248
652.0235	CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH	LF	--	--	166	--	--	--	166
653.0222	JUNCTION BOXES 18X12X6-INCH	EACH	--	--	--	--	--	1	1
657.6005.S	ANCHOR ASSEMBLIES LIGHT POLES STRUCTURES	EACH	--	--	--	--	--	1	1
SPV.0060.0010	PILE DYNAMIC ANALYZER (PDA) TESTING	EACH	--	2	2	2	--	--	6
SPV.0060.0011	PILE DYNAMIC ANALYZER (PDA) RESTRIKES	EACH	--	2	2	2	--	--	6
SPV.0085.0001	BAR STEEL REINFORCEMENT HS STAINLESS BRIDGES	LB	910	--	--	--	970	--	1880
	NON-BID ITEMS								
	NON-BITUMINOUS JOINT SEALER	SIZE							
	PREFORMED JOINT FILLER	SIZE							

ALL ITEMS CATEGORY 0030 (EXCEPT BID ITEM 517.1010.S WHICH IS CATEGORY 0040)



BEST FIT PROFILE GRADE LINE - USH 41 SB



BEST FIT PROFILE GRADE LINE - USH 41 NB

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-67-338

DRAWN BY SKR | PLANS CK'D. MDR

QUANTITIES & PROFILE GRADE LINES

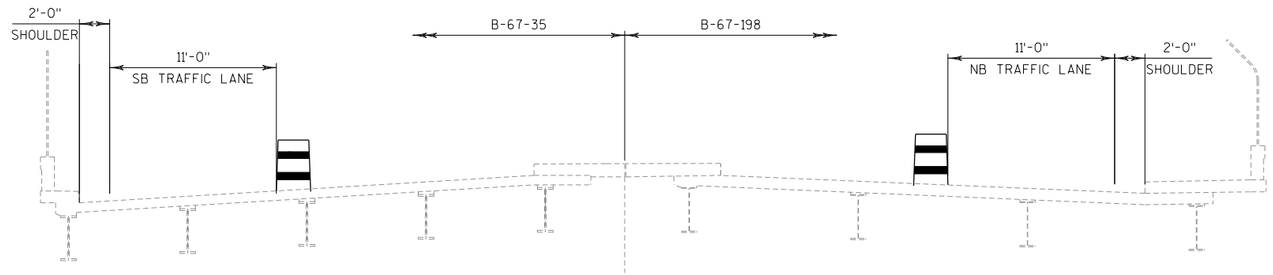
SHEET 3 OF 28

888

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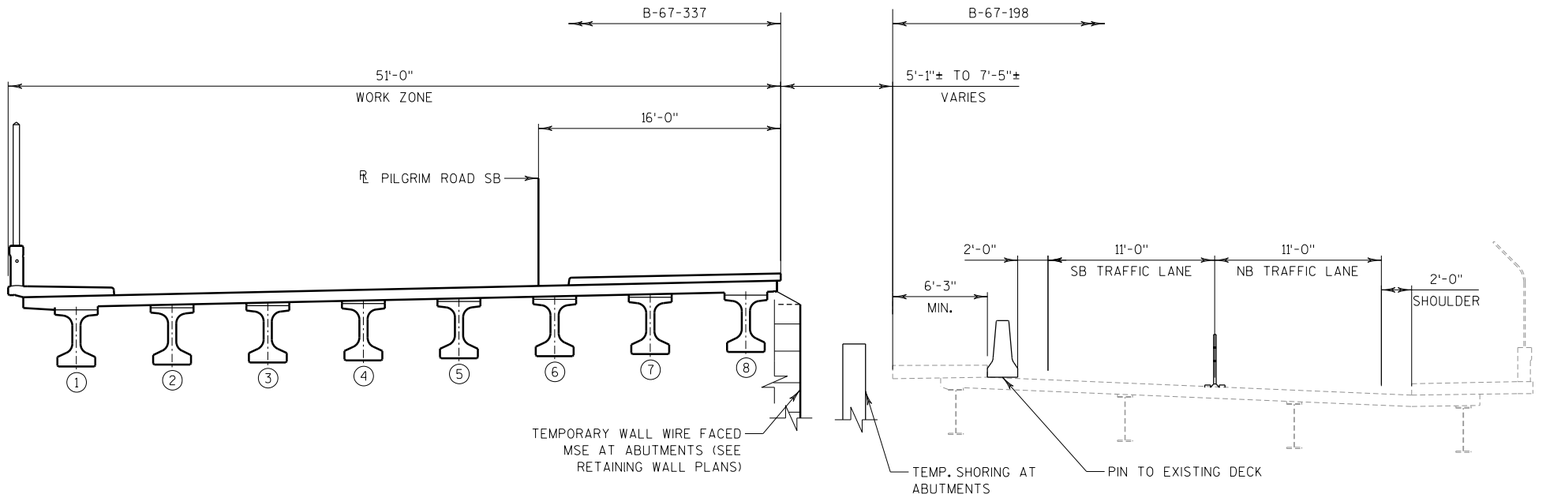
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STATE PROJECT NUMBER
1100-37-70



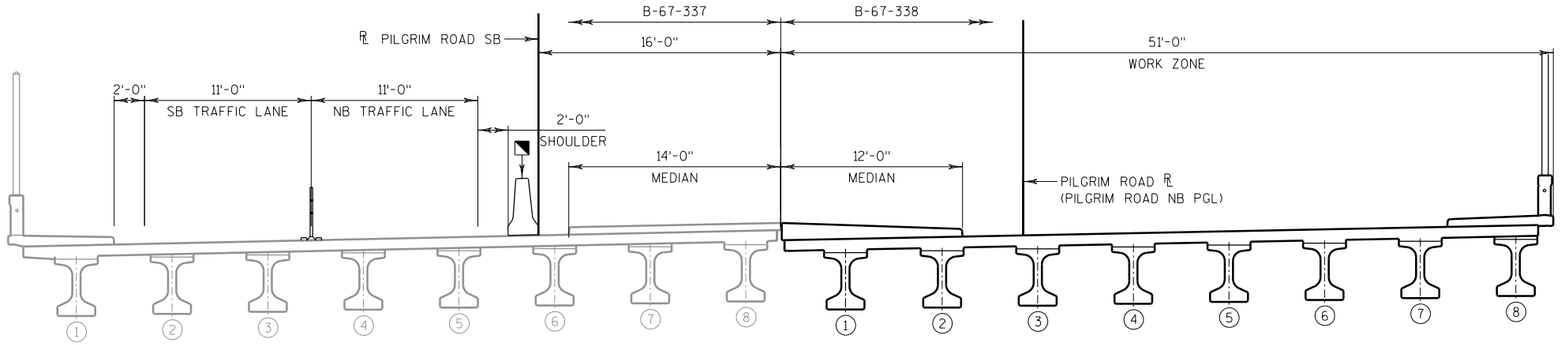
STAGE 1 CONSTRUCTION

(LOOKING NORTH)



STAGE 2 CONSTRUCTION

(LOOKING NORTH)



DO NOT PIN TEMPORARY BARRIER TO NEW DECK

STAGE 3 CONSTRUCTION

(LOOKING NORTH)

CONSTRUCTION STAGING

STAGE 1 CONSTUCTION DOES NOT INCLUDE WORK ON THE BRIDGES.

IN STAGE 2, EXISTING BRIDGE B-67-35 WILL BE DEMOLISHED AND B-67-337 WILL BE CONSTRUCTED. EXISTING BRIDGE B-67-198 WILL CARRY ONE LANE OF TRAFFIC NORTHBOUND AND ONE LANE OF TRAFFIC SOUTHBOUND ON PILGRIM ROAD.

IN STAGE 3, TRAFFIC WILL BE SWITCHED TO NEW BRIDGE B-67-337, CARRYING ONE LANE OF TRAFFIC NORTHBOUND AND ONE LANE OF TRAFFIC SOUTHBOUND ON PILGRIM ROAD. EXISTING BRIDGE B-67-198 WILL BE DEMOLISHED AND NEW BRIDGE B-67-338 WILL BE CONSTRUCTED.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-67-338

DRAWN BY SKR | PLANS CK'D. MDR

CONSTRUCTION STAGING

SHEET 4 OF 28
889

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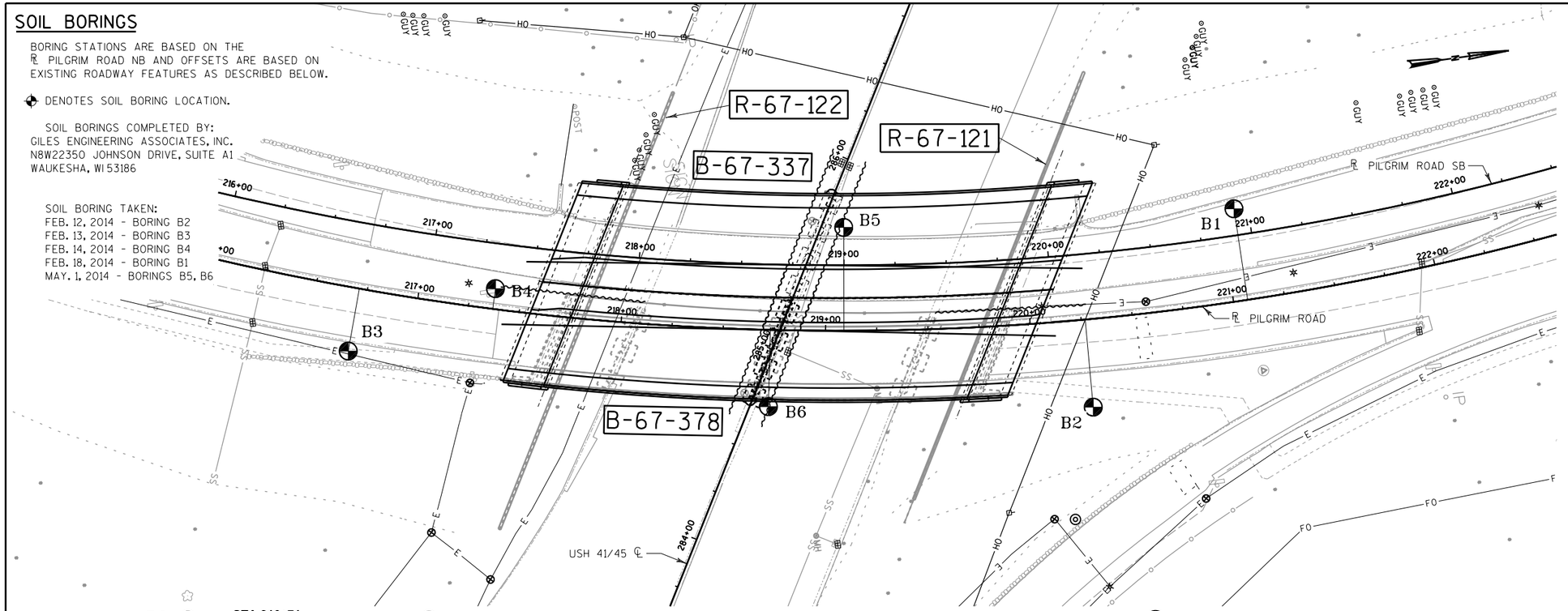
SOIL BORINGS

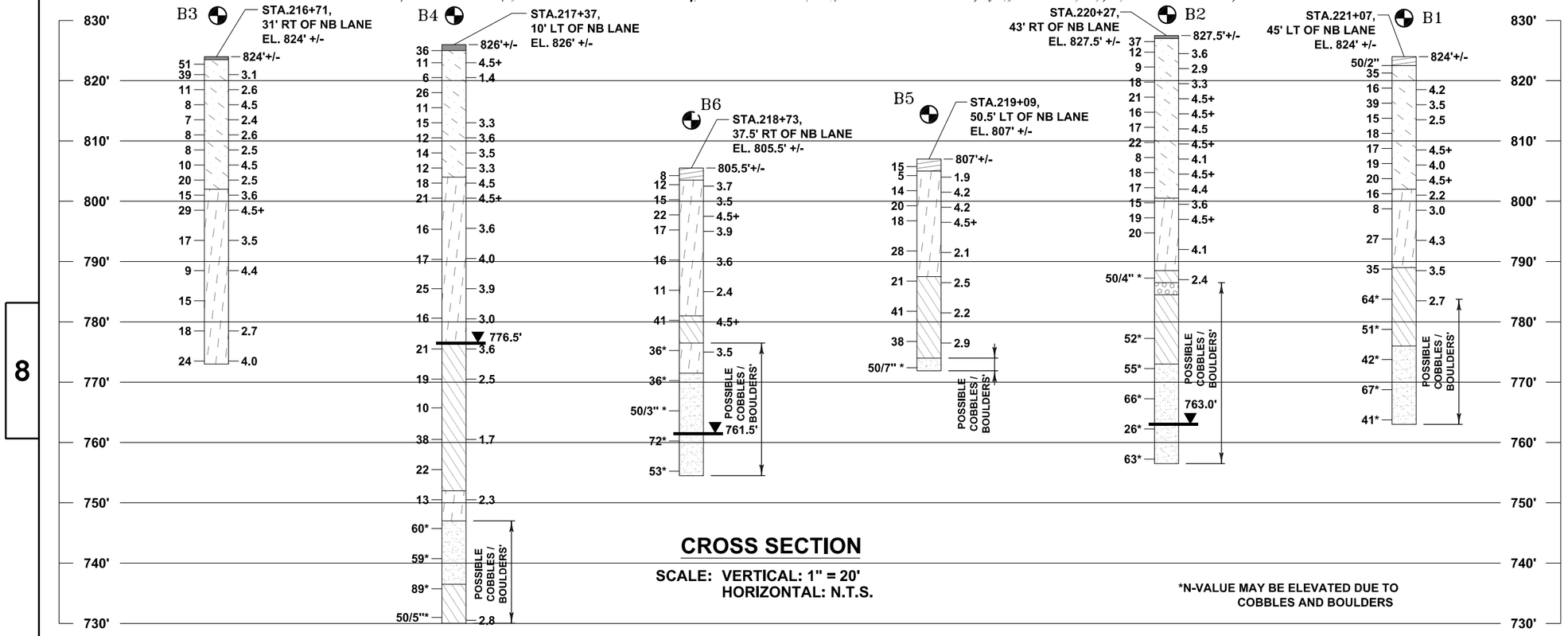
BORING STATIONS ARE BASED ON THE ℄ PILGRIM ROAD NB AND OFFSETS ARE BASED ON EXISTING ROADWAY FEATURES AS DESCRIBED BELOW.

⊕ DENOTES SOIL BORING LOCATION.

SOIL BORINGS COMPLETED BY:
GILES ENGINEERING ASSOCIATES, INC.
N8W22350 JOHNSON DRIVE, SUITE A1
WAUKESHA, WI 53186

SOIL BORING TAKEN:
FEB. 12, 2014 - BORING B2
FEB. 13, 2014 - BORING B3
FEB. 14, 2014 - BORING B4
FEB. 18, 2014 - BORING B1
MAY. 1, 2014 - BORINGS B5, B6





CROSS SECTION

SCALE: VERTICAL: 1" = 20'
HORIZONTAL: N.T.S.

*N-VALUE MAY BE ELEVATED DUE TO COBBLES AND BOULDERS

STATE PROJECT NUMBER

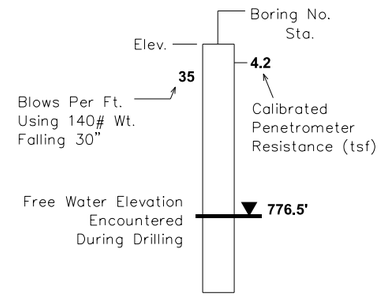
1100-37-70

MATERIAL SYMBOLS

- PAVEMENT
- TOP SOIL
- FILL / POSSIBLE FILL (SILTY CLAY / CLAYEY SILT)
- SILTY CLAY
- CLAYEY SILT / SILT
- SILTY SAND / SANDY SILT
- BOULDERS

NOTE: SOIL CONTACT LINES ARE INFERRED

LEGEND OF BORING



Unless otherwise specified, the blows per foot at the locations indicated are based on driving a 2" O.D.x 1. 4" I.D. split spoon sampler with a 140# hammer having a free fall of 30". The blow count is taken in undisturbed soil immediately below a cased or open hole eliminating side friction on the drive pipe.

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

TO OBTAIN RELATIVE DATA CONCERNING THE CHARACTER OF MATERIAL IN AND UPON WHICH THE FOUNDATION MIGHT BE BUILT, BORINGS AND/OR SOUNDINGS WERE MADE AT POINTS APPROXIMATELY AS INDICATED ON THIS DRAWING. THE DATA PRESENTED HEREIN REPRESENTS THE FINDINGS OF THE SUBSURFACE EXPLORATIONS MADE. HOWEVER, BECAUSE THE DEPTHS INVESTIGATED ARE LIMITED AND THE AREA OF THE BORINGS AND/OR SOUNDINGS IS VERY SMALL IN RELATION TO THE ENTIRE AREA, THE WISCONSIN DEPARTMENT OF TRANSPORTATION DOES NOT WARRANT CONDITIONS BELOW THE DEPTHS INVESTIGATED OR THAT THE CLASSIFICATION OF MATERIAL ENCOUNTERED IN THESE INVESTIGATIONS IS NECESSARILY TYPICAL OF THE ENTIRE SITE.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-67-338

DRAWN BY SKR | PLANS CK'D. MDR

SUBSURFACE EXPLORATION

SHEET 5 OF 28
890

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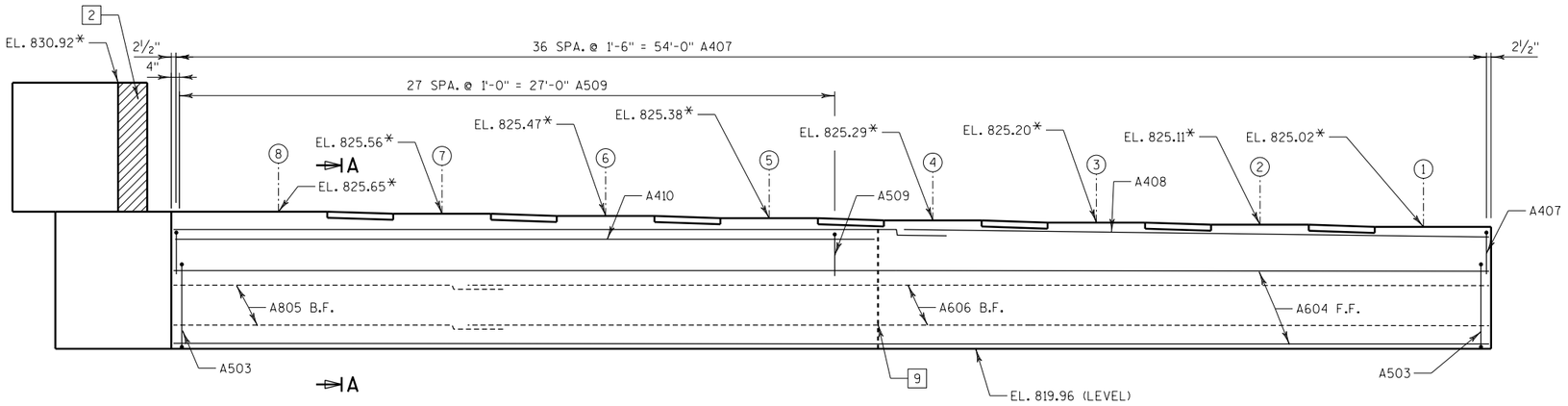
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PLOT BY : mdr

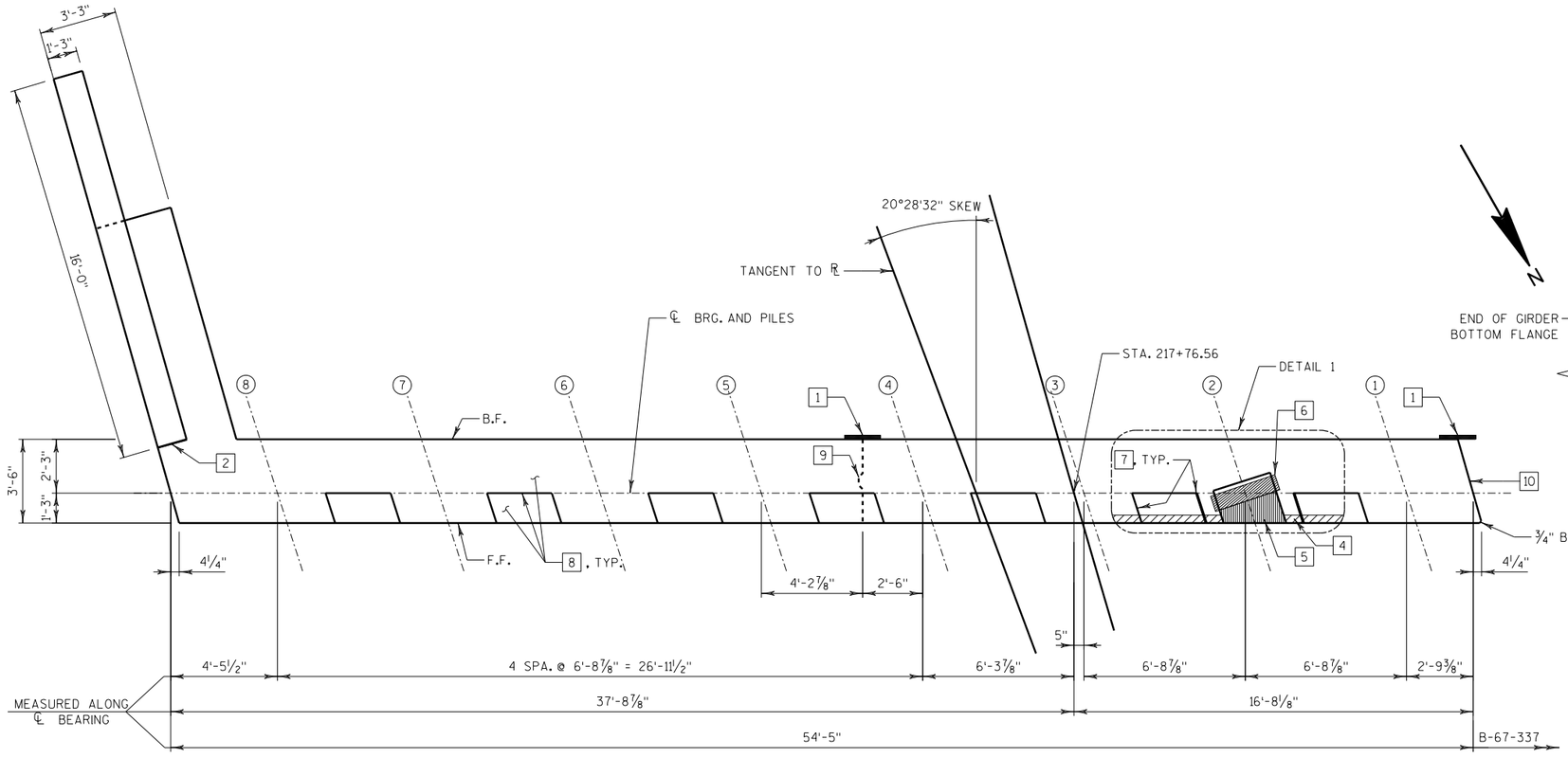
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1100-37-70

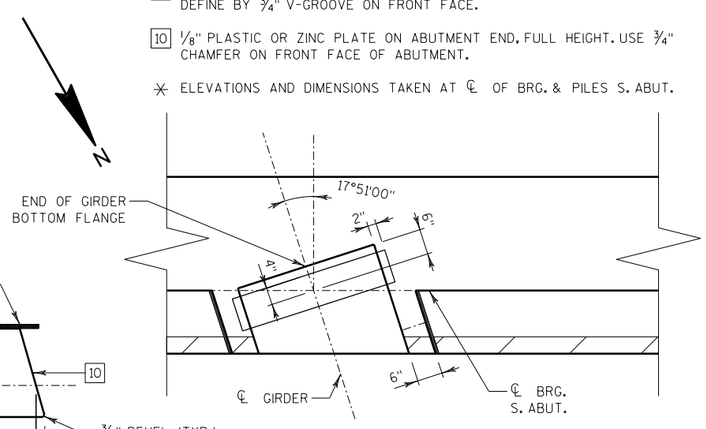


ELEVATION

(LOOKING SOUTH)



PLAN



DETAIL 1

NOTES

SEAL ALL EXPOSED HORIZONTAL AND VERTICAL SURFACES OF ½" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD ⅛" BELOW SURFACE OF CONCRETE.)

SEE SHEET 7 FOR SECTION A.

LEGEND

F.F. - FRONT FACE
B.F. - BACK FACE
E.F. - EACH FACE

(X) INDICATES GIRDER NUMBER

[1] 18" RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZONTAL AND VERTICAL JOINTS ON BACK FACE.

[2] ½" FILLER - EXTENDED FROM BEAM SEAT TO TOP OF CONCRETE PARAPET, INCLUDED IN WING LENGTH.

[4] 4" X ¾" FILLER LENGTH OF ABUTMENT.

[5] ¾" PREFORMED FILLER UNDER GIRDERS.

[6] BEARING PAD ELASTOMERIC NON-LAMINATED ½" X 8" X 2'-10"

[7] ¾" CORK FILLER ON VERTICAL BEAM SEAT FACES THAT RUN PARALLEL WITH GIRDER

[8] STEEL TROWEL TOP SURFACE OF ABUTMENT. PLACE MULTIPLE LAYERS OF POLYETHYLENE SHEETS OVER ENTIRE ABUTMENT TOP BEFORE PLACING BEARING PADS AND/OR SUPERSTRUCTURE. TOTAL THICKNESS OF SHEETS SHALL BE AT LEAST 0.03".

[9] VERTICAL CONSTRUCTION JOINT KEYWAY FORMED BY BEVELED 2"X8". DEFINE BY ¾" V-GROOVE ON FRONT FACE.

[10] ⅛" PLASTIC OR ZINC PLATE ON ABUTMENT END, FULL HEIGHT. USE ¾" CHAMFER ON FRONT FACE OF ABUTMENT.

✳ ELEVATIONS AND DIMENSIONS TAKEN AT ℄ OF BRG. & PILES S. ABUT.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-67-338

DRAWN BY AJC | PLANS CK'D. MDR

SOUTH ABUTMENT

SHEET 6 OF 28

891

8

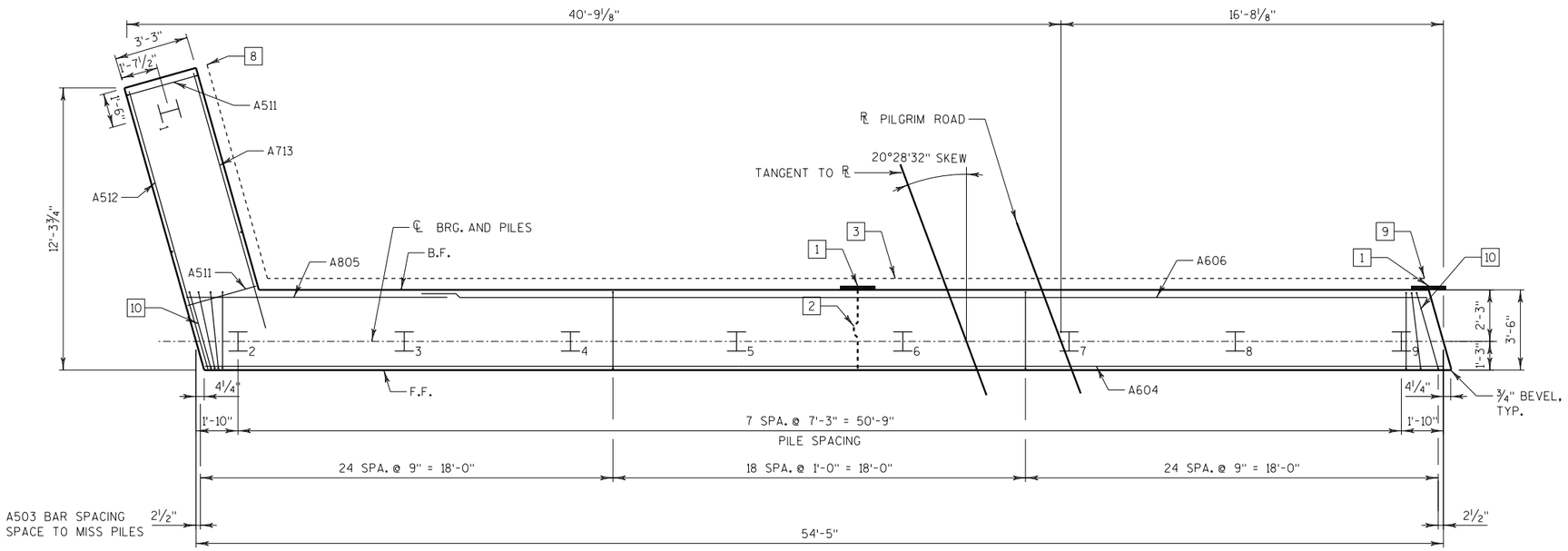
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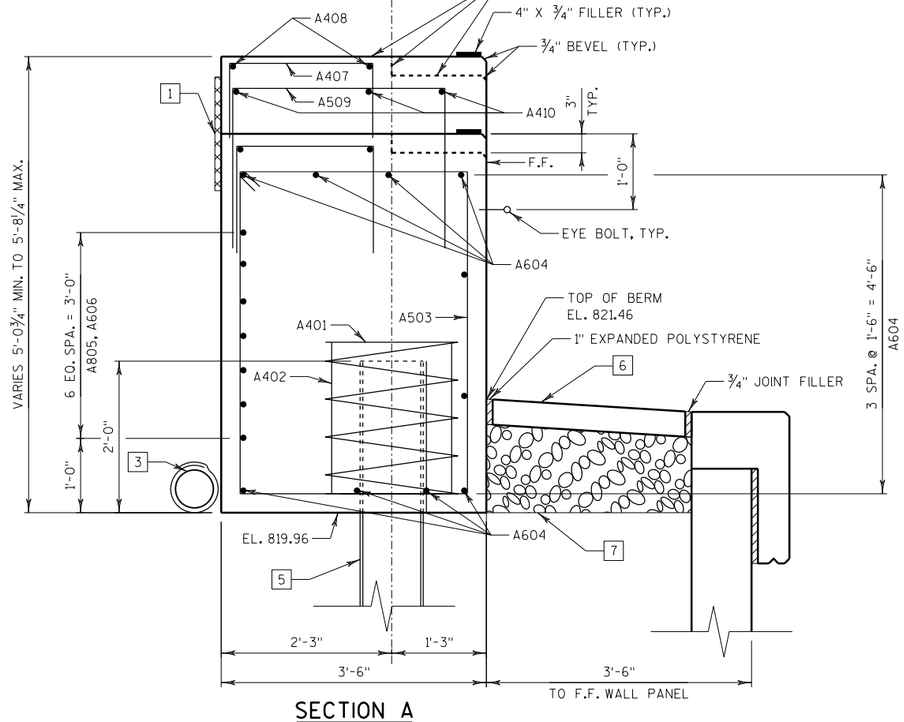
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STATE PROJECT NUMBER
1100-37-70

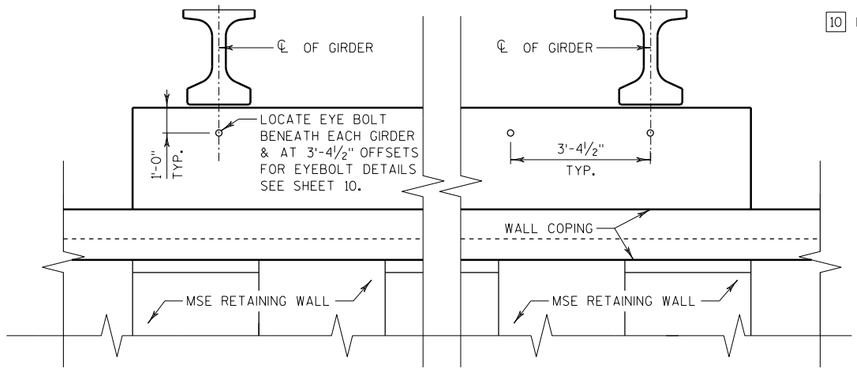


PILE PLAN



SECTION A

FOR LOCATION SEE SHEET 6



ABUTMENT ELEVATION

(SHOWING FALL PROTECTION - LOOKING SOUTH)

NOTES

INSTALL BRIDGE PILING BEFORE MSE WALL. PLACE REINFORCING MAT AROUND PILING FOR ABUTMENT.

DO NOT PLACE FILL ABOVE ELEVATION 824.98 AT SOUTH ABUTMENT BEFORE SUPERSTRUCTURE IS IN PLACE.

LEGEND

F.F. - FRONT FACE
B.F. - BACK FACE
E.F. - EACH FACE

1. 18" RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZONTAL AND VERTICAL JOINTS ON BACK FACE.
2. VERTICAL CONSTRUCTION JOINT KEYWAY FORMED BY BEVELED 2"X8". DEFINE BY ¾" V-GROOVE ON FRONT FACE.
3. PIPE UNDERDRAIN WRAPPED (6-INCH) SLOPE 0.5% MIN. TO SUITABLE DRAINAGE AS DIRECTED BY THE ENGINEER. ATTACH RODENT SHIELD AS DETAILED ON SDD REINFORCED CONCRETE APRON ENDWALL FOR PIPE UNDERDRAIN. RODENT SHIELD TO BE INCLUDED IN BID PRICE OF "PIPE UNDERDRAIN WRAPPED 6-INCH". SEE DETAIL ON SHEET 3. CAP END AS SHOWN.
4. STEEL TROWEL TOP SURFACE OF ABUTMENT. PLACE MULTIPLE LAYERS OF POLYETHYLENE SHEETS OVER ENTIRE ABUTMENT TOP BEFORE PLACING BEARING PADS AND/OR SUPERSTRUCTURE. TOTAL THICKNESS OF SHEETS SHALL BE AT LEAST 0.03".
5. ABUTMENT TO BE SUPPORTED ON HP 10 X 42 STEEL PILING. WITH A REQUIRED DRIVING RESISTANCE OF 180 TONS AS DETERMINED BY THE PDA/CAPWAP METHOD. ESTIMATED 80' LONG.
6. 4" CONCRETE (SLOPE ¾") TO BE PAID AS "SLOPE PAVING CONCRETE".
7. MSE BACKFILL OR SIZE 2 COARSE AGGREGATE. COST INCIDENTAL TO BID ITEM "SLOPE PAVING CONCRETE".
8. HIGH END OF PIPE UNDERDRAIN WRAPPED. CAP END.
9. LOW END OF PIPE UNDERDRAIN WRAPPED. CONNECT WITH B-67-337 PIPE UNDERDRAIN WRAPPED.
10. ROTATE AND FAN OUT REINFORCING BARS AS NEEDED AT SKEWED ENDS.

8

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NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-67-338

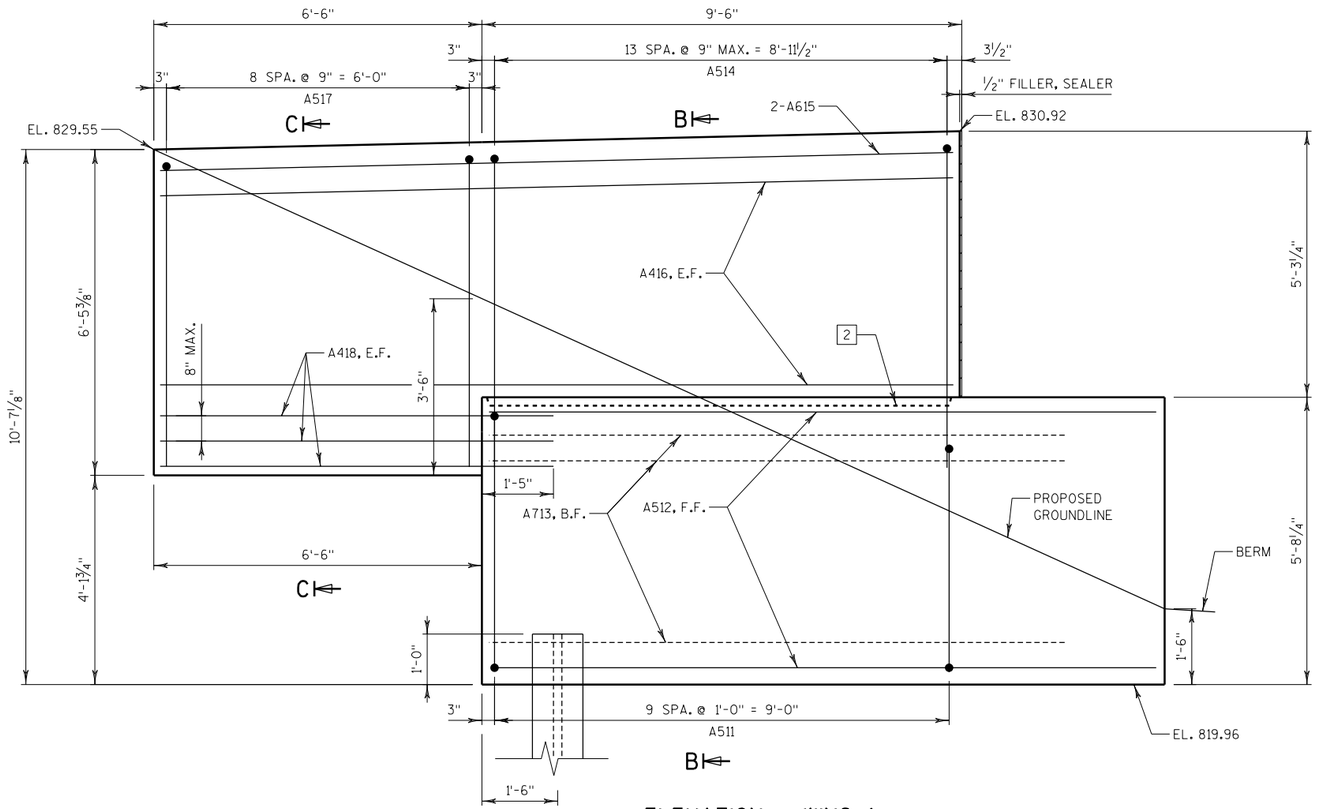
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SOUTH ABUTMENT DETAILS

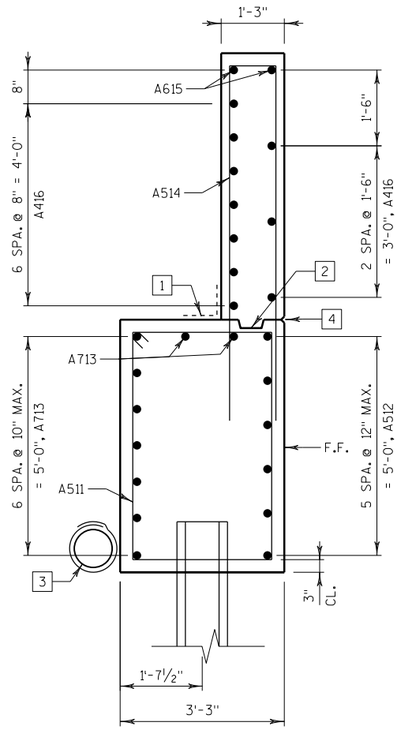
SHEET 7 OF 28
892

STATE PROJECT NUMBER

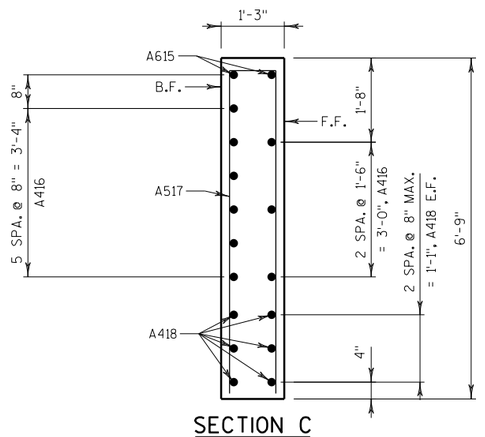
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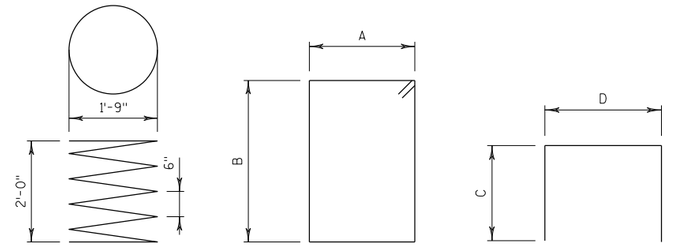
ELEVATION - WING 1



SECTION B



SECTION C



A401 | A503, A511 | A407, A509, A514, A517

SOUTH ABUTMENT BILL OF BARS

BAR MARK	COAT	NO.	LENGTH	BENT	BAR SERIES	LOCATION
A401		9	28'-0"	X		ABUT. BODY AT PILES
A402		18	2'-3"			ABUT. BODY AT PILES
A503		67	15'-10"	X		ABUT. BODY VERT. STIRRUPS
A604		10	54'-1"			ABUT. BODY HORIZ.
A805		7	16'-0"			ABUT. BODY HORIZ. B.F.
A606		7	41'-0"			ABUT. BODY HORIZ. B.F.
A407		37	4'-3"	X		ABUT. BODY VERT.
A408		4	28'-0"			ABUT. BODY HORIZ.
A509		28	5'-9"	X		ABUT. BODY VERT.
A410		3	26'-4"			ABUT. BODY HORIZ.
A511		10	16'-10"	X		WING 1 VERT. STIRRUPS
A512		6	11'-1"			WING 1 HORIZ. F.F.
A713		9	12'-1"			WING 1 HORIZ. B.F.
A514	X	14	15'-0"	X		WING 1 VERT.
A615	X	2	15'-8"			WING 1 HORIZ.
A416	X	10	15'-8"			WING 1 HORIZ.
A517	X	9	13'-0"	X		WING 1 VERT.
A418	X	6	7'-9"			WING 1 HORIZ.

BAR MARK	DIM. A	DIM. B
A503	3'-2"	4'-5"
A511	2'-11"	5'-2"

BAR MARK	DIM. C	DIM. D
A407	1'-3"	1'-11"
A509	1'-5"	3'-2"
A514	7'-2"	11"
A517	6'-2"	11"

LEGEND

F.F. - FRONT FACE
B.F. - BACK FACE
E.F. - EACH FACE

1. 18" RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZONTAL AND VERTICAL JOINTS ON BACK FACE.
2. OPTIONAL CONST. JOINT FORMED BY BEVELED 2" X 6" KEYWAY WITH MEMBRANE ON BACKFACE.
3. PIPE UNDERDRAIN WRAPPED (6-INCH) SLOPE 0.5% MIN. TO SUITABLE DRAINAGE AS DIRECTED BY THE ENGINEER. ATTACH RODENT SHIELD AS DETAILED ON SHEET 3. RODENT SHIELD TO BE INCLUDED IN BID PRICE OF "PIPE UNDERDRAIN WRAPPED 6-INCH". SEE DETAIL ON SHEET 3. CAP END AS SHOWN.
4. ¾" "V" GROVE ON F.F. OF WINGWALL

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-67-338

DRAWN BY AJC | PLANS CK'D. MDR

WING 1 DETAILS

SHEET 8 OF 28
893

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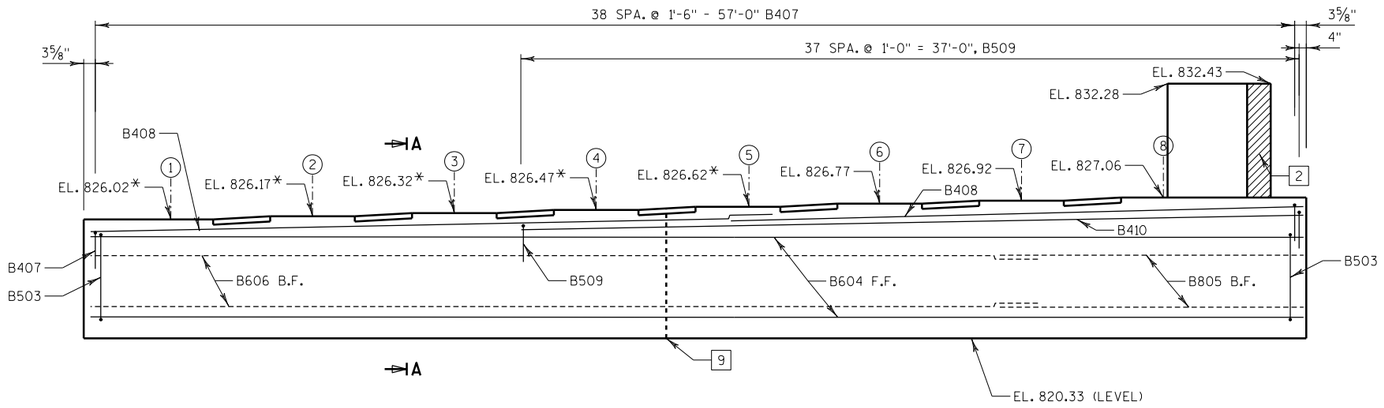
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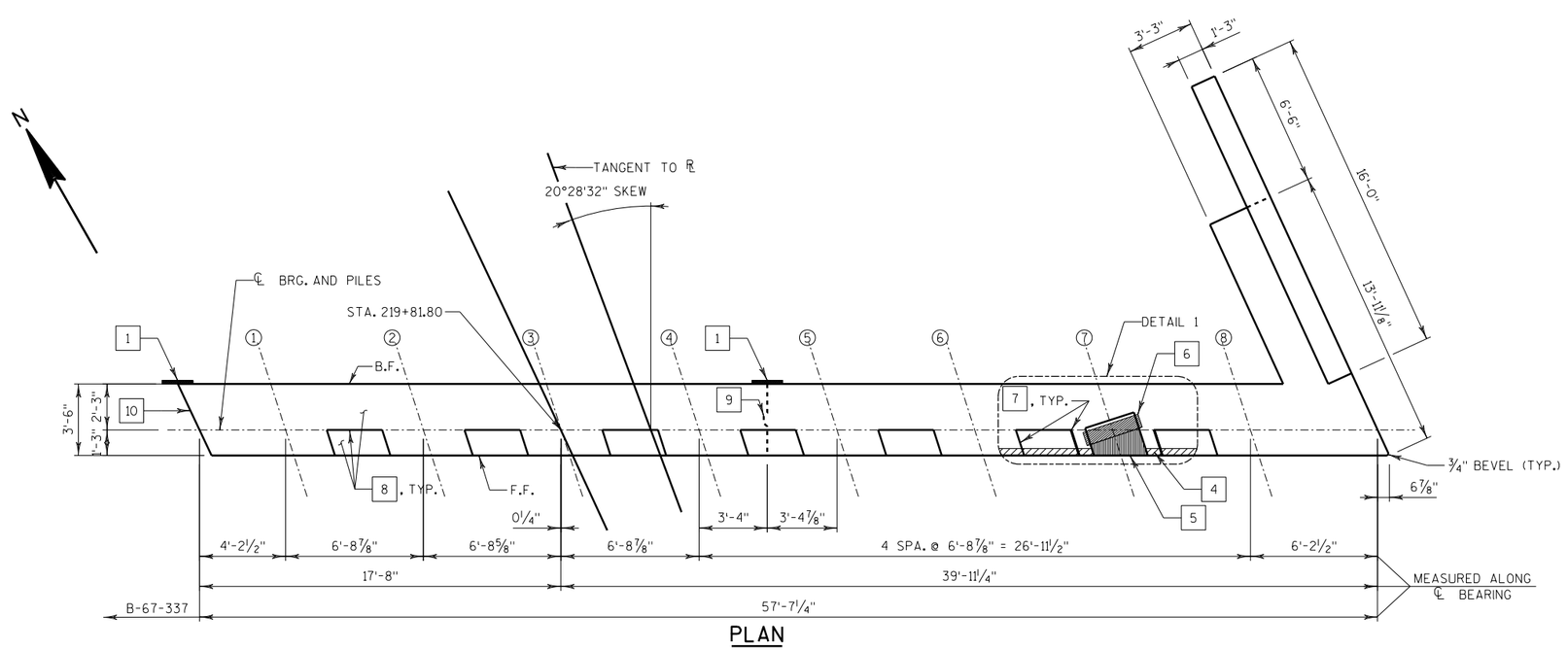
STATE PROJECT NUMBER

1100-37-70



ELEVATION

(LOOKING NORTH)



PLAN

NOTES

SEAL ALL EXPOSED HORIZONTAL AND VERTICAL SURFACES OF ½" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD ⅛" BELOW SURFACE OF CONCRETE.)

SEE SHEET 10 FOR SECTION A.

LEGEND

F.F. - FRONT FACE
B.F. - BACK FACE
E.F. - EACH FACE

(X) INDICATES GIRDER NUMBER

[1] 18" RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZONTAL AND VERTICAL JOINTS ON BACK FACE.

[2] ½" FILLER - EXTENDED FROM BEAM SEAT TO TOP OF CONCRETE PARAPET, INCLUDED IN WING LENGTH.

[4] 4" X ¾" FILLER LENGTH OF ABUTMENT.

[5] ¾" PREFORMED FILLER UNDER GIRDERS.

[6] BEARING PAD ELASTOMERIC NON-LAMINATED ½" X 8" X 2'-10"

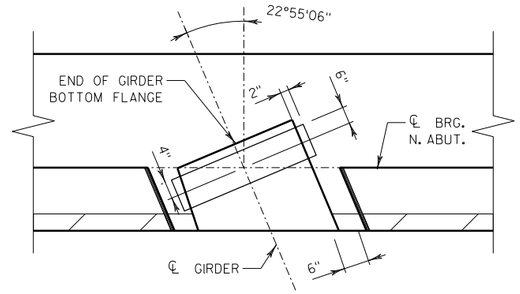
[7] ¾" CORK FILLER ON VERTICAL BEAM SEAT FACES THAT RUN PARALLEL WITH GIRDER

[8] STEEL TROWEL TOP SURFACE OF ABUTMENT. PLACE MULTIPLE LAYERS OF POLYETHYLENE SHEETS OVER ENTIRE ABUTMENT TOP BEFORE PLACING BEARING PADS AND/OR SUPERSTRUCTURE. TOTAL THICKNESS OF SHEETS SHALL BE AT LEAST 0.03".

[9] VERTICAL CONSTRUCTION JOINT KEYWAY FORMED BY BEVELED 2"X8". DEFINE BY ¾" V-GROOVE ON FRONT FACE.

[10] ⅛" PLASTIC OR ZINC PLATE ON ABUTMENT END, FULL HEIGHT. USE ¾" CHAMFER ON FRONT FACE OF ABUTMENT.

✳ ELEVATIONS AND DIMENSIONS TAKEN AT ℄ OF BRG. & PILES N. ABUT.



DETAIL 1

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-67-338

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NORTH ABUTMENT

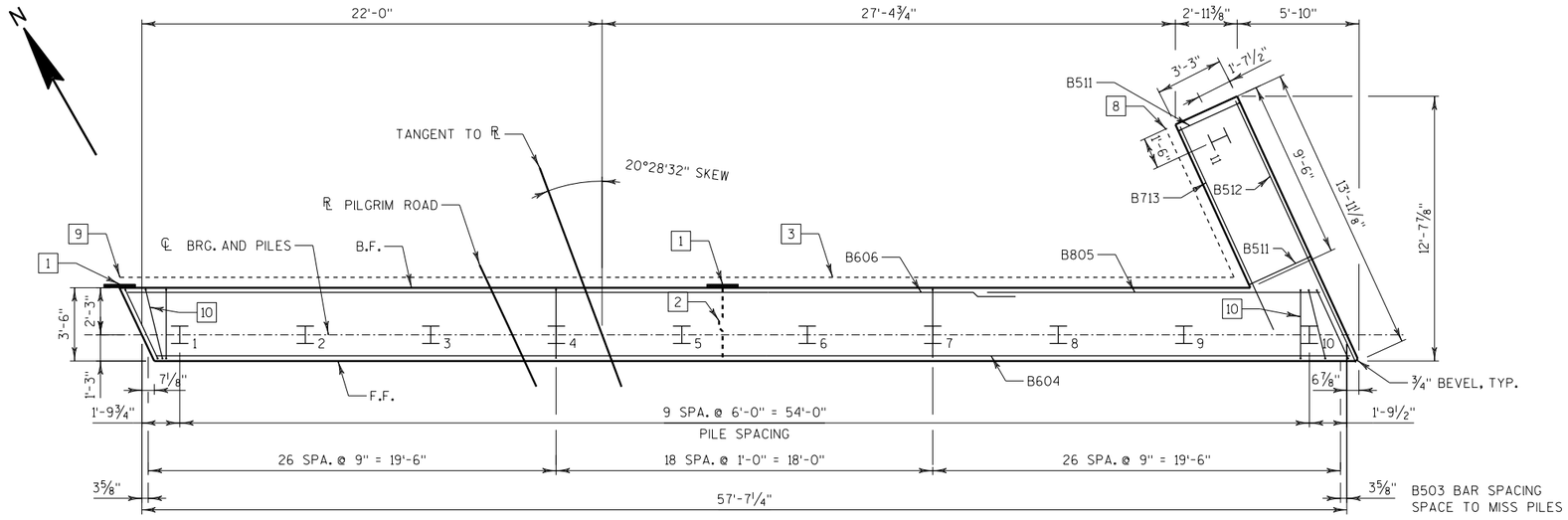
SHEET 9 OF 28
894

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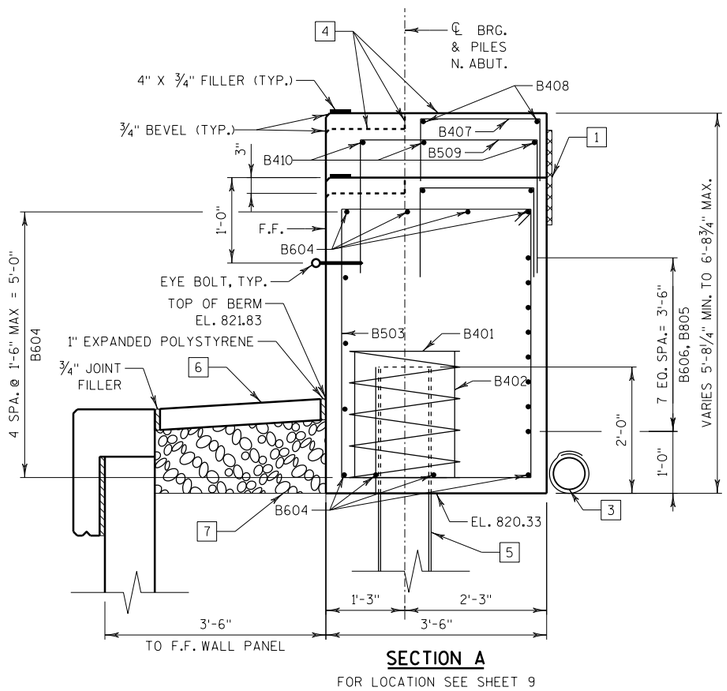
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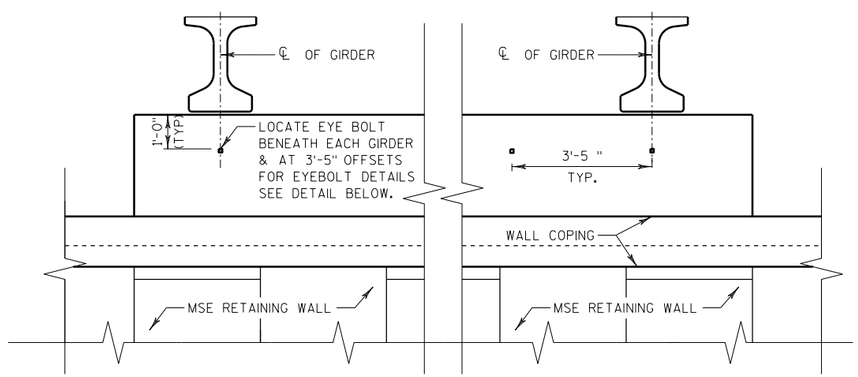


PILE PLAN



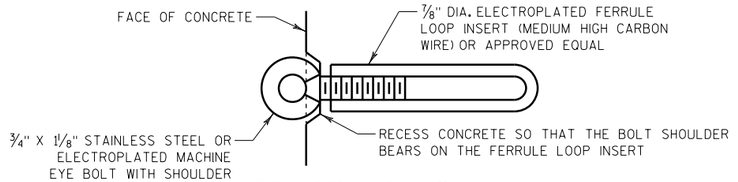
SECTION A

FOR LOCATION SEE SHEET 9



ABUTMENT ELEVATION

(SHOWING FALL PROTECTION - LOOKING NORTH)



EYE BOLT DETAIL

EYE BOLTS AND FERRULE LOOP INSERTS ARE INCLUDED IN THE BID ITEM "CONCRETE MASONRY BRIDGES". MINIMUM STRENGTH OF EYE BOLT AND LOOP INSERT IS 3500 LB.

NOTES

INSTALL BRIDGE PILING BEFORE MSE WALL. PLACE REINFORCING MAT AROUND PILING FOR ABUTMENT.

DO NOT PLACE FILL ABOVE ELEVATION 825.33 AT NORTH ABUTMENT BEFORE SUPERSTRUCTURE IS IN PLACE.

LEGEND

F.F. - FRONT FACE
B.F. - BACK FACE
E.F. - EACH FACE

1. 18" RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZONTAL AND VERTICAL JOINTS ON BACK FACE.
2. VERTICAL CONSTRUCTION JOINT KEYWAY FORMED BY BEVELED 2"X8". DEFINE BY ¾" V-GROOVE ON FRONT FACE.
3. PIPE UNDERDRAIN WRAPPED (6-INCH) SLOPE 0.5% MIN. TO SUITABLE DRAINAGE AS DIRECTED BY THE ENGINEER. ATTACH RODENT SHIELD AS DETAILED ON SDD REINFORCED CONCRETE APRON ENDWALL FOR PIPE UNDERDRAIN. RODENT SHIELD TO BE INCLUDED IN BID PRICE OF "PIPE UNDERDRAIN WRAPPED 6-INCH". SEE DETAIL ON SHEET 3. CAP END AS SHOWN.
4. STEEL TROWEL TOP SURFACE OF ABUTMENT. PLACE MULTIPLE LAYERS OF POLYETHYLENE SHEETS OVER ENTIRE ABUTMENT TOP BEFORE PLACING BEARING PADS AND/OR SUPERSTRUCTURE. TOTAL THICKNESS OF SHEETS SHALL BE AT LEAST 0.03".
5. ABUTMENT TO BE SUPPORTED ON HP 10 X 42 STEEL PILING WITH A REQUIRED DRIVING RESISTANCE OF 140 TONS AS DETERMINED BY THE PDA/CAPWAP METHOD. ESTIMATED 40' LONG.
6. 4" CONCRETE (SLOPE ¾") TO BE PAID AS "SLOPE PAVING CONCRETE".
7. MSE BACKFILL OR SIZE 2 COARSE AGGREGATE. COST INCIDENTAL TO BID ITEM "SLOPE PAVING CONCRETE".
8. HIGH END OF PIPE UNDERDRAIN WRAPPED. CAP END.
9. LOW END OF PIPE UNDERDRAIN WRAPPED. CONNECT WITH B-67-337 PIPE UNDERDRAIN WRAPPED.
10. ROTATE AND FAN OUT REINFORCING BARS AS NEEDED AT SKEWED ENDS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-67-338

DRAWN BY AJC | PLANS CK'D. MDR

NORTH ABUTMENT DETAILS

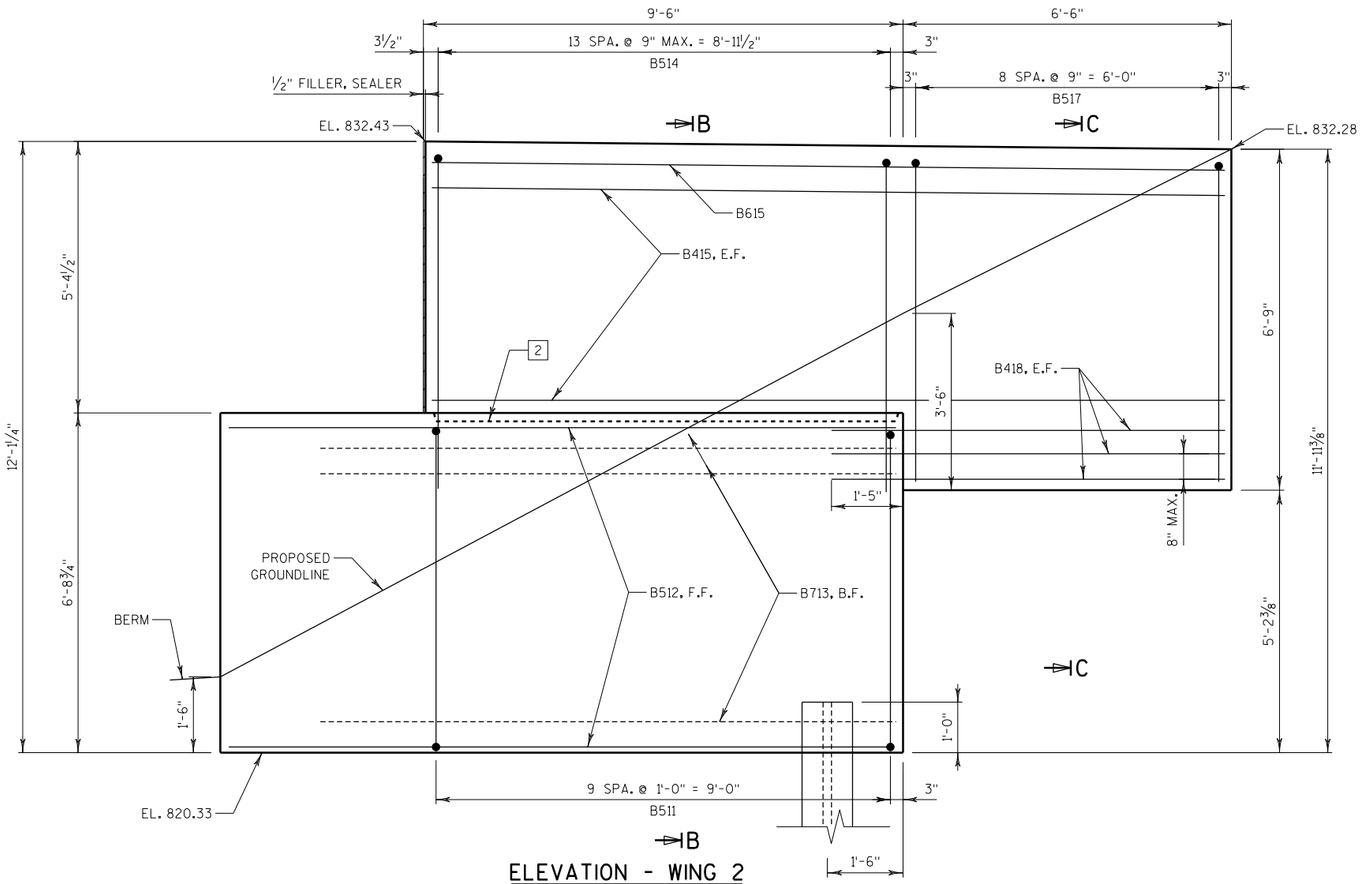
SHEET 10 OF 28
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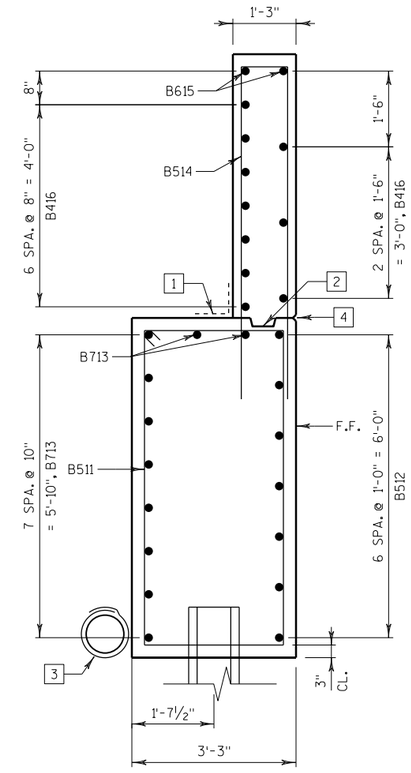
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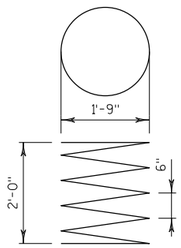
1100-37-70



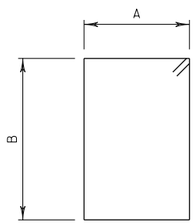
ELEVATION - WING 2



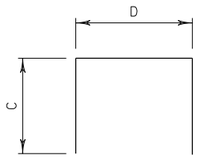
SECTION B



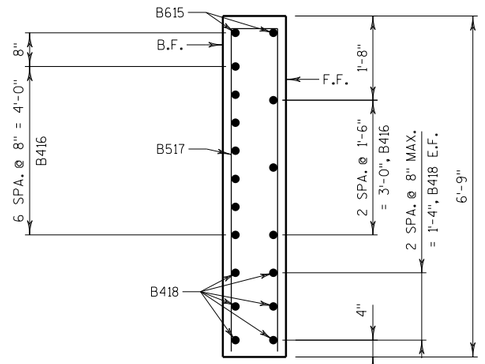
B401



B503, B511



B407, B509, B514, B517



SECTION C

NORTH ABUTMENT BILL OF BARS

BAR MARK	COAT	NO.	LENGTH	BENT	BAR SERIES	LOCATION
B401		11	28'-0"	X		ABUT. BODY AT PILES
B402		22	2'-3"			ABUT. BODY AT PILES
B503		71	17'-2"	X		ABUT. BODY VERT.
B604		11	57'-4"			ABUT. BODY HORIZ.
B805		8	16'-0"			ABUT. BODY HORIZ. B.F.
B606		8	44'-3"			ABUT. BODY HORIZ. B.F.
B407		39	4'-3"	X		ABUT. BODY VERT.
B408		4	29'-10"			ABUT. BODY HORIZ.
B509		38	6'-7"	X		ABUT. BODY VERT.
B410		3	37'-6"			ABUT. BODY HORIZ.
B511		10	18'-10"	X		WING 2 VERT. STIRRUPS
B512		7	11'-1"			WING 2 HORIZ. F.F.
B713		10	12'-1"			WING 2 HORIZ. B.F.
B514	X	14	15'-2"	X		WING 2 VERT.
B615	X	2	15'-8"			WING 2 HORIZ.
B416	X	10	15'-8"			WING 2 HORIZ.
B517	X	9	13'-6"	X		WING 2 VERT.
B418	X	6	7'-9"			WING 1 HORIZ.

BAR MARK	DIM. A	DIM. B
B503	3'-2"	5'-1"
B511	2'-11"	6'-2"

BAR MARK	DIM. C	DIM. D
B407	1'-3"	1'-11"
B509	1'-10"	3'-2"
B514	7'-3"	11"
B517	6'-5"	11"

LEGEND

F.F. - FRONT FACE
B.F. - BACK FACE
E.F. - EACH FACE

1. 18" RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZONTAL AND VERTICAL JOINTS ON BACK FACE.
2. OPTIONAL CONST. JOINT FORMED BY BEVELED 2" X 6" KEYWAY WITH MEMBRANE ON BACKFACE.
3. PIPE UNDERDRAIN WRAPPED (6-INCH) SLOPE 0.5% MIN. TO SUITABLE DRAINAGE AS DIRECTED BY THE ENGINEER. ATTACH RODENT SHIELD AS DETAILED ON SHEET 3. RODENT SHIELD TO BE INCLUDED IN BID PRICE OF "PIPE UNDERDRAIN WRAPPED 6-INCH". SEE DETAIL ON SHEET 3. CAP END AS SHOWN.
4. ¾" "V" GROVE ON F.F. OF WINGWALL

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-67-338

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WING 2 DETAILS

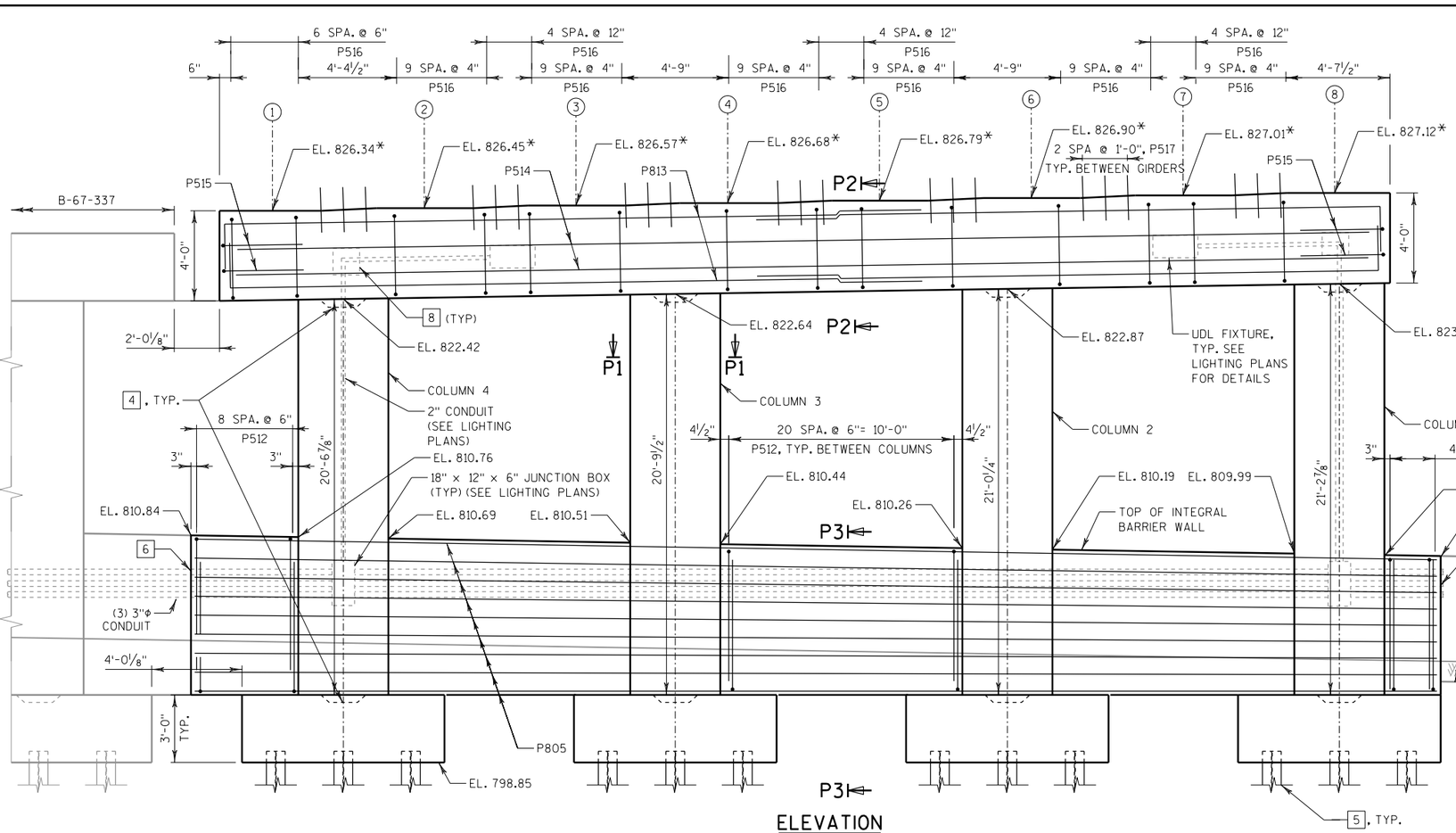
SHEET 11 OF 28
896

8

8

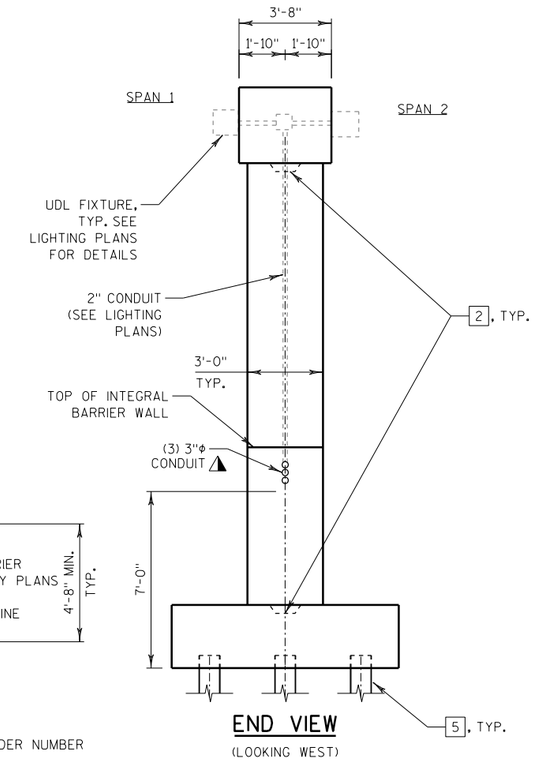
STATE PROJECT NUMBER

1100-37-70



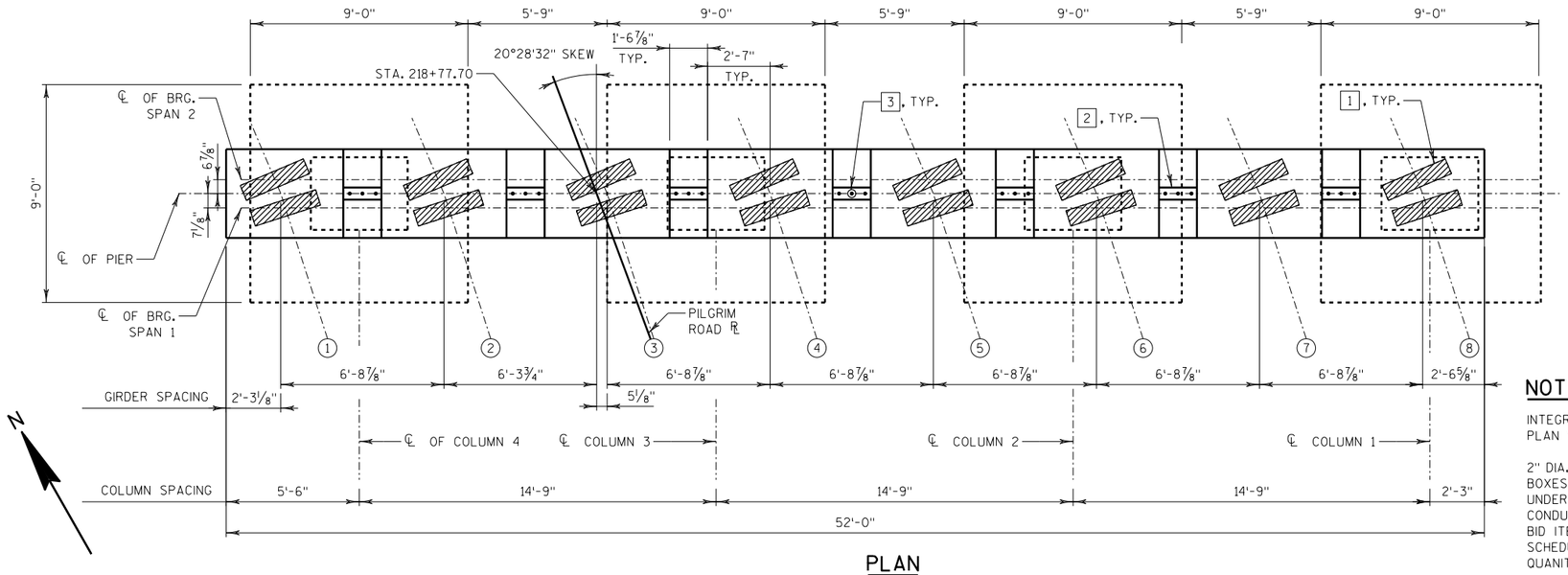
ELEVATION

(LOOKING NORTH)



END VIEW

(LOOKING WEST)



PLAN

LEGEND

(X) INDICATES GIRDER NUMBER

1 BEARING PAD ELASTOMERIC NON-LAMINATED ½" X 8" X 2'-10"

2 KEYED CONSTRUCTION JOINT. FORMED BY SURFACE BEVELED 2" X 6" BETWEEN BEAM SEATS.

3 P517 BARS AT 1'-0" CENTERS, BETWEEN BEAM SEATS. EMBED 1'-0" INTO CAP CONCRETE.

4 1'-3" X 2'-0" X 4" DEEP CONSTRUCTION JOINT FORMED BY BEVELED KEYWAY.

5 PIER TO BE SUPPORTED ON HP 10X42 STEEL PILING WITH A REQUIRED DRIVING RESISTANCE OF 140 TONS/PILE. EST. LENGTH 35'.

6 1" PREFORMED FILLER. SEAL ALL EXPOSED HORZ. AND VERT. SURFACES OF FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD ⅛" BELOW SURFACE OF CONCRETE). PROVIDE EXPANSION FITTING FOR CONDUIT. WORK TO BE INCLUDED IN BID ITEM "CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH" FOR STRUCTURE B-67-337.

7 PROVIDE EXPANSION FITTING BETWEEN INTEGRAL BARRIER WALL AND MEDIAN BARRIER. WORK TO BE PAID FOR UNDER BID ITEM "CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH."

8 1" TYPE "LL", "LR", OR "T" CONDULET. SEE LIGHTING PLANS FOR DETAILS.

▲ TO BE PAID FOR UNDER BID ITEM "CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH."

✳ ELEVATIONS AND DIMENSIONS TAKEN AT ℄ OF PIER.

FOR SECTIONS P1, P2, AND P3 SEE SHEET 13.

NOTES

INTEGRAL BARRIER WALL NOT SHOWN ON PLAN VIEW FOR CLARITY.

2" DIA. CONDUIT, UDL FIXTURES, JUNCTION BOXES, AND CONDULET TO BE PAID FOR UNDER ROADWAY BID ITEMS. THE (3) - 3" DIA. CONDUITS ARE TO BE PAID FOR UNDER THE BID ITEM CONDUIT "RIGID NONMETALLIC SCHEDULE 40 3-INCH" AS SHOWN ON THE QUANITIES SHEET.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-67-338

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PIER

SHEET 12 OF 28

897

8

8

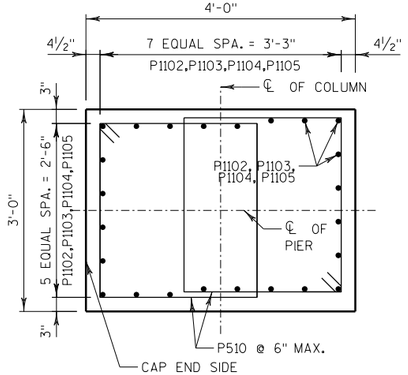
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PLOT DATE : 11/18/2014

PLOT BY : mdr

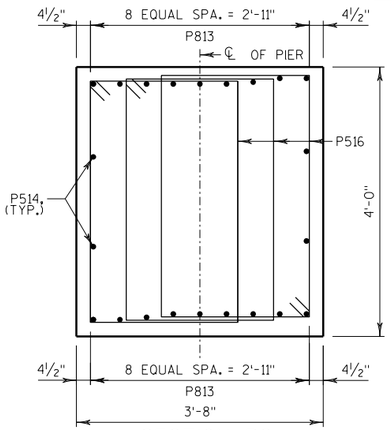
STATE PROJECT NUMBER

1100-37-70



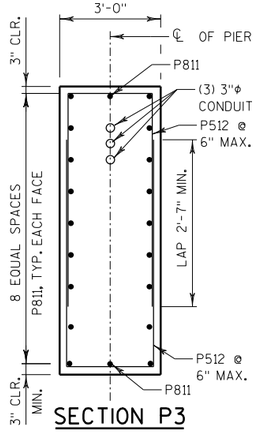
SECTION P1

PIER COLUMN



SECTION P2

PIER CAP

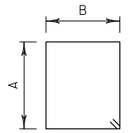


SECTION P3

INTEGRAL BARRIER WALL

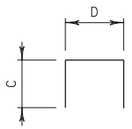
PIER BILL OF BARS

BAR MARK	COAT	NO.	LENGTH	BENT	LOCATION
P801		96	8'-6"		PIER FOOTING - BOTTOM
P1102	X	24	28'-9"	X	PIER VERT. COLUMN 1
P1103	X	24	28'-7"	X	PIER VERT. COLUMN 2
P1104	X	24	28'-4"	X	PIER VERT. COLUMN 3
P1105	X	24	28'-1"	X	PIER VERT. COLUMN 4
P510	X	354	10'-4"	X	COLUMN STIRRUPS
P811	X	20	54'-9"		INTEGRAL BARRIER - HORIZ.
P512	X	153	13'-7"	X	INTEGRAL BARRIER - HORIZ.
P813	X	36	30'-8"	X	PIER CAP - HORIZ. TOP & BOT.
P514	X	4	51'-8"		PIER CAP FACE - HORZ.
P515	X	4	6'-5"	X	PIER CAP - HORZ. AT END
P516	X	228	12'-8"	X	PIER CAP - STIRRUPS
P517	X	21	2'-0"		PIER CAP - VERT. TOP W/ BEAM SEATS



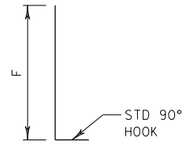
P510, P516

BAR MARK	DIM. A	DIM. B
P510	2'-6"	2'-4"
P516	3'-8"	2'-4"



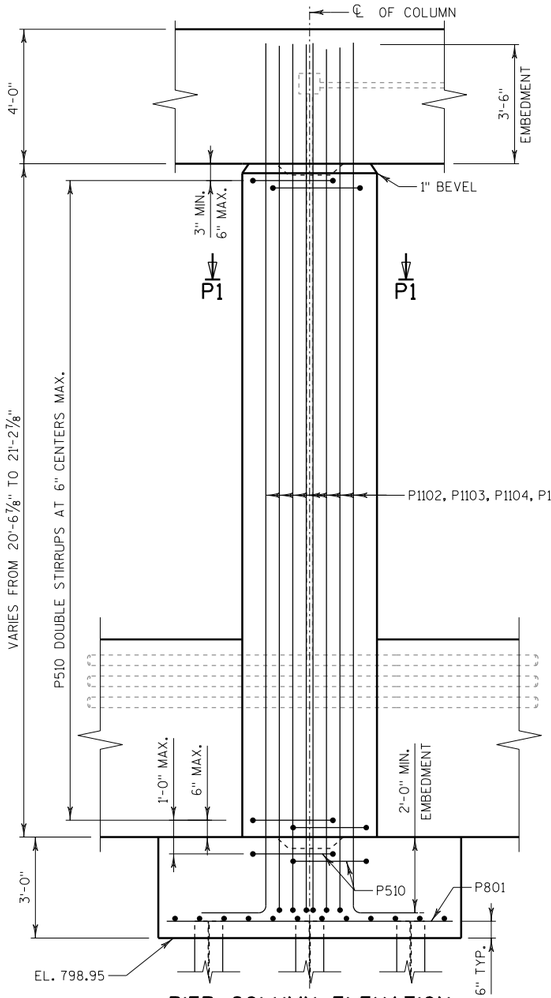
P512, P515

BAR MARK	DIM. C	DIM. D
P512	5'-9"	2'-4"
P515	1'-9"	3'-2"



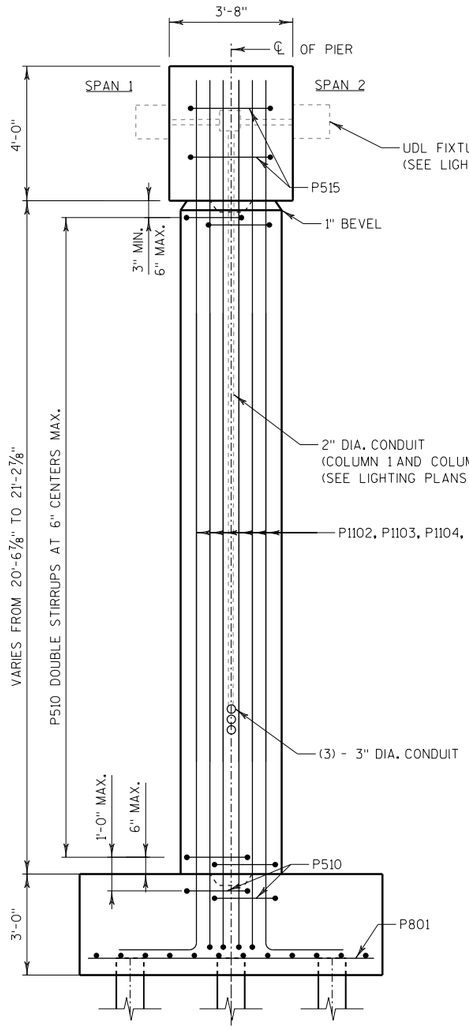
P1102, P1103, P1104, P1105, P813

BAR MARK	DIM. F
P1102	27'-1"
P1103	26'-11"
P1104	26'-8"
P1105	26'-5"
P813	29'-6"



PIER COLUMN ELEVATION

LOOKING UP STATION



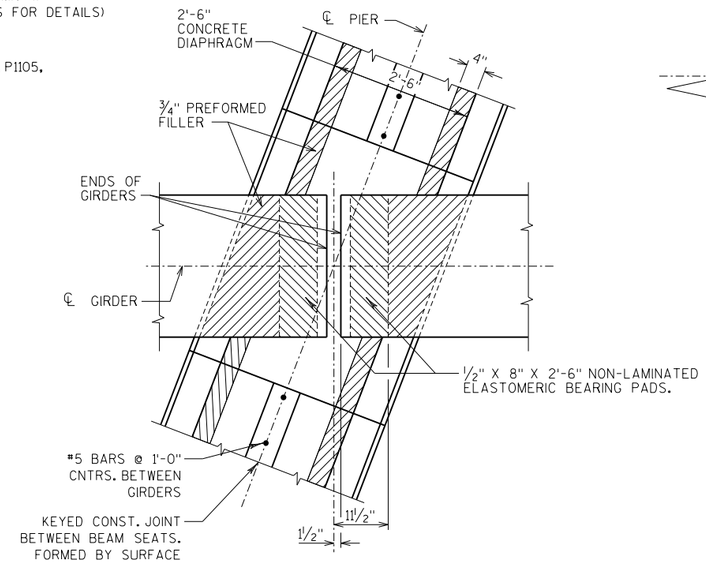
PIER COLUMN ELEVATION- END VIEW

(LOOKING WEST)

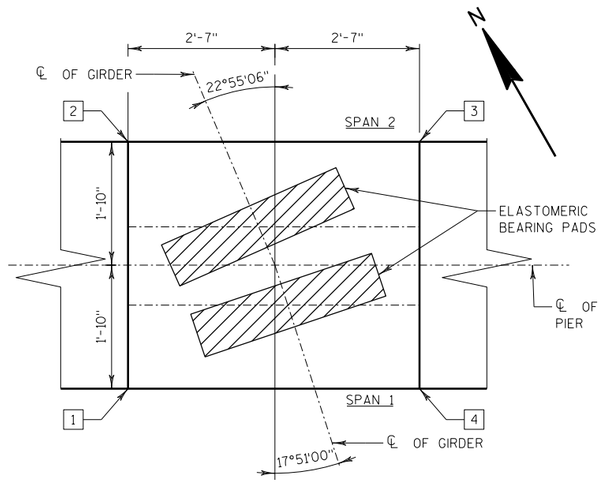
PIER BEAM SEAT ELEVATION CORRECTIONS

GIRDER	ELEVATION CORRECTION AT POINTS			
	1	2	3	4
1-8	-0.01	-0.01	-0.00	-0.03

▨ VALUES ARE IN FEET. ADD THESE VALUES TO THE SEAT ELEVATIONS SHOWN TO OBTAIN ELEVATIONS OF POINTS 1, 2, 3, &4.



BEARING PAD DETAILS



SLOPING BEAM SEAT DETAILS

(SEATS @ GIRDERS 2 THRU 7 SHOWN, GIRDERS 1 & 8 SIMILAR)

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STRUCTURE B-67-338

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PIER DETAILS

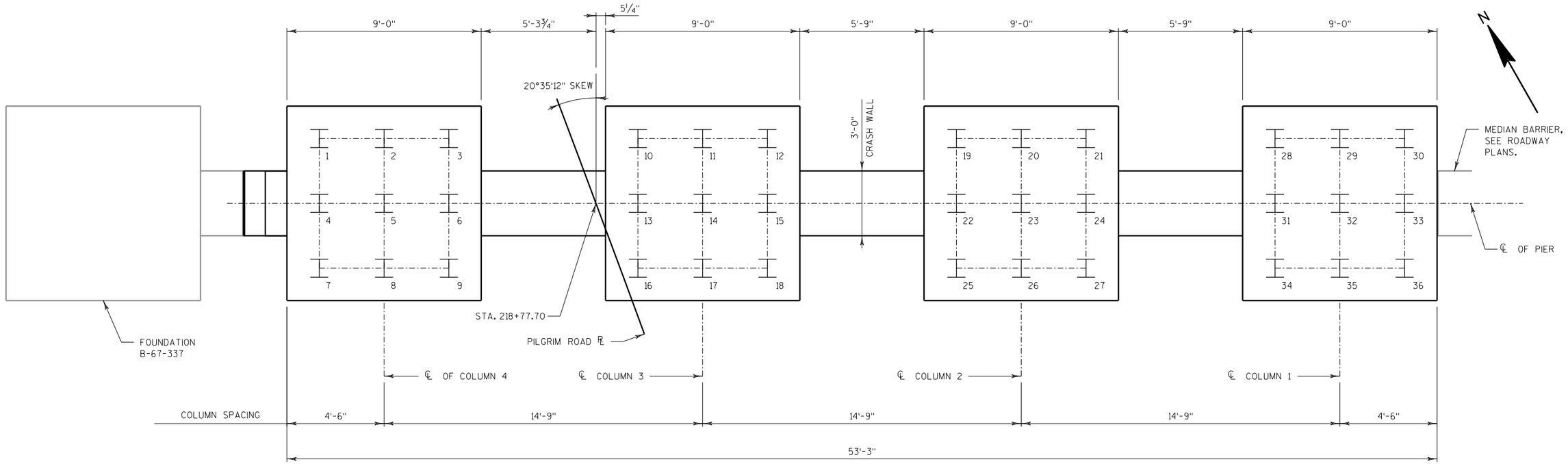
SHEET 13 OF 28
898

8

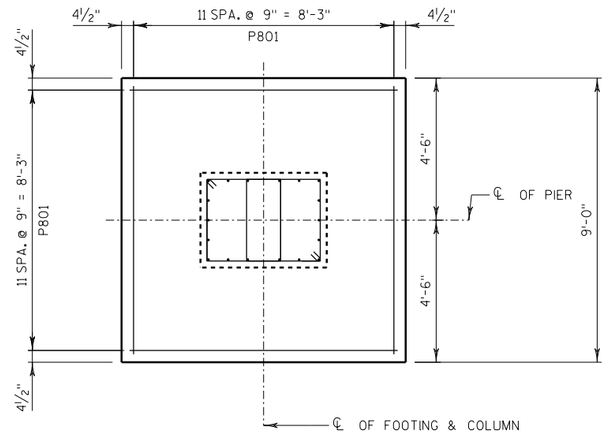
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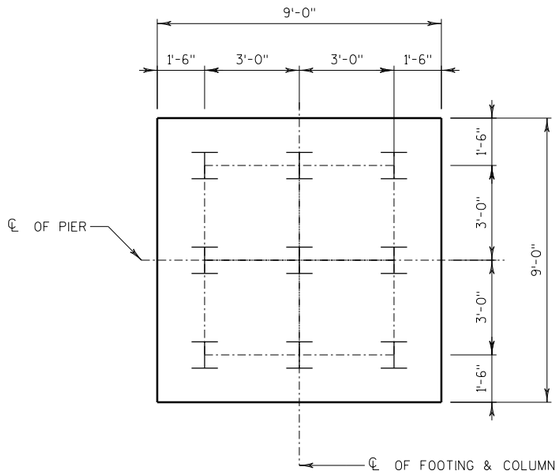
1100-37-70



PILE LOCATION PLAN



TYPICAL FOOTING REINFORCEMENT PLAN



TYPICAL FOOTING PILE LAYOUT

8

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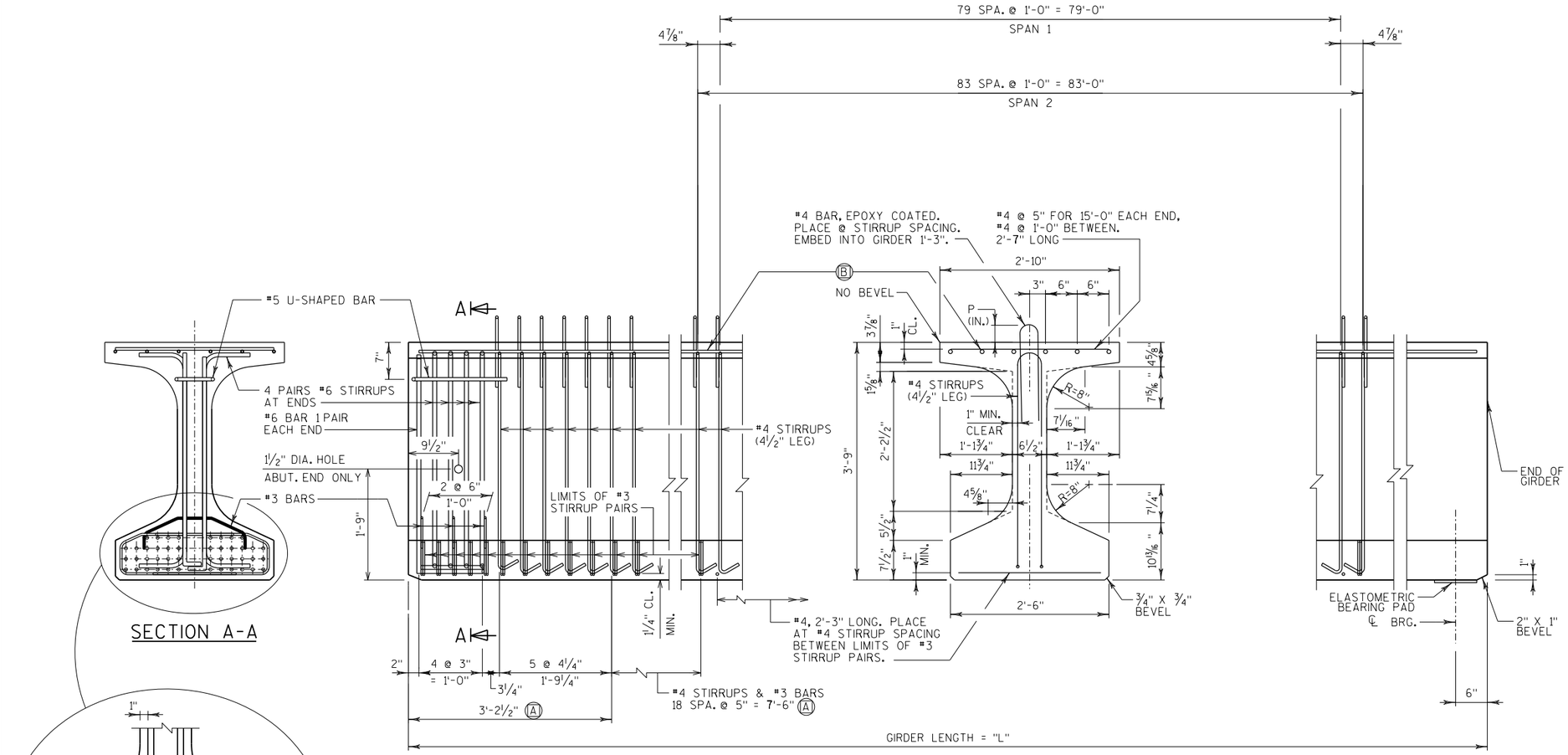
STRUCTURE B-67-338

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PIER FOOTINGS

SHEET 14 OF 28
899

STATE PROJECT NUMBER
1100-37-70



NOTES

TOP OF GIRDER TO BE ROUGH FLOATED AND BROOMED TRANSVERSELY, EXCEPT THE OUTSIDE 8" OF GIRDER, WHICH SHALL RECEIVE A SMOOTH FINISH. AN APPROVED CONCRETE SEALER SHALL BE APPLIED TO ALL SMOOTH SURFACES INCLUDING THE OUTSIDE 8" OF THE TOP FLANGE.

DO NOT APPLY CONCRETE SEALER TO SURFACES RECEIVING APPLICATION OF CONCRETE STAINING.

THE GIRDERS SHALL BE PROVIDED WITH A SUITABLE LIFTING DEVICE FOR HANDLING AND ERECTING THE GIRDERS.

STRANDS SHALL BE FLUSH WITH END OF GIRDER. FOR GIRDER ENDS EMBEDDED COMPLETELY IN CONCRETE, END OF STRANDS SHALL BE COATED WITH NON-BITUMINOUS JOINT SEALER. FOR GIRDER ENDS THAT ARE FINALLY EXPOSED, COAT THE GIRDER ENDS, EXPOSED STRAND ENDS AND ALL NON-BONDING SURFACES WITHIN 2 FEET OF THE GIRDER ENDS WITH A NON-PIGMENTED EPOXY CONFORMING TO AASHTO M-235 TYPE III, CLASS B OR C. THE EPOXY SHALL BE APPLIED AT LEAST 3 DAYS AFTER MOIST CURING HAS CEASED AND PRIOR TO THE APPLICATION OF THE SEALER.

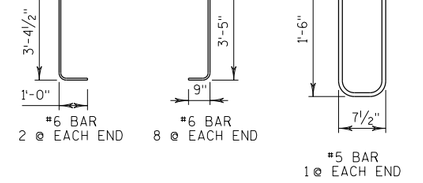
ALL GIRDERS SHALL BE CAST FULL LENGTH AS SHOWN.

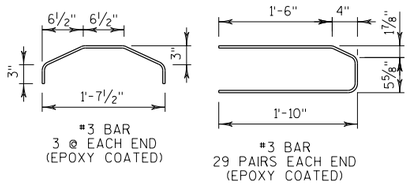
SPACING SHOWN FOR #4 STIRRUPS IS FOR GRADE 60 REINFORCEMENT.

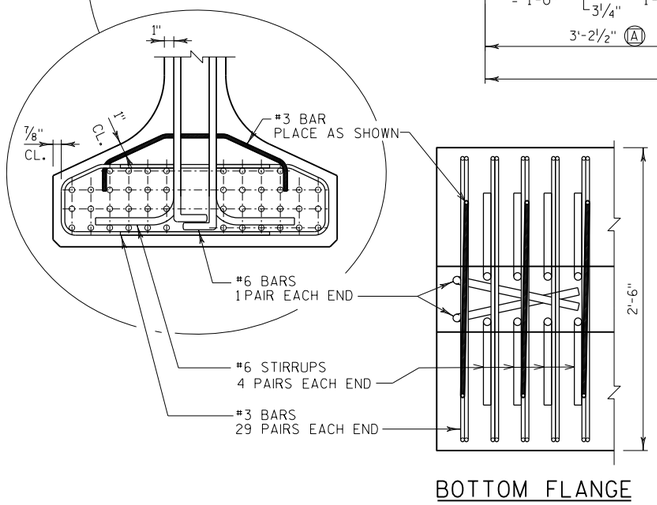
AN ALTERNATE EQUIVALENT OF WELDED WIRE FABRIC (WWF) ASTM A497 MAY BE SUBSTITUTED FOR THE STIRRUP REINFORCEMENT SHOWN, UPON APPROVAL OF THE STRUCTURES DEVELOPMENT SECTION.

PRESTRESSING STRANDS SHALL BE (0.6" DIA.)-7 WIRE LOW-RELAXATION STRANDS WITH AN ULTIMATE STRENGTH OF 270,000 PSI.

FOR DIAPHRAGM INSERT & CONNECTION DETAILS SEE "STEEL DIAPHRAGM" SHEET.





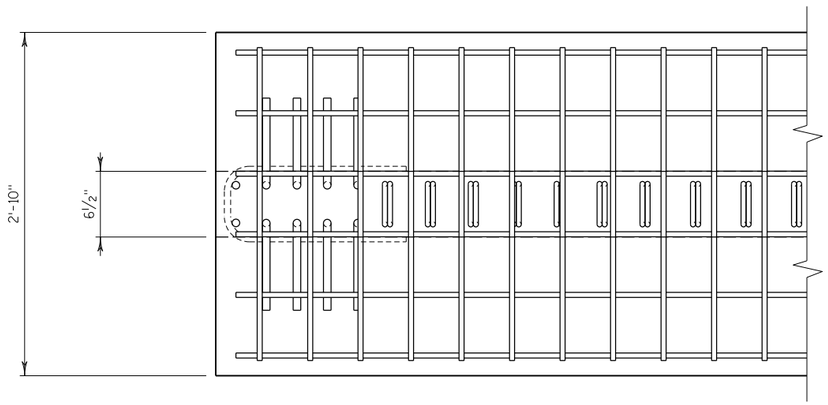


BOTTOM FLANGE

SIDE VIEW & TYPICAL SECTION IN SPAN

(A) DETAIL TYP. AT EACH END

(B) 6 #4 BARS, FULL LENGTH, MIN. LAP = 2'-11"



TOP FLANGE

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STRUCTURE B-67-338

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45W" PRESTRESSED GIRDER

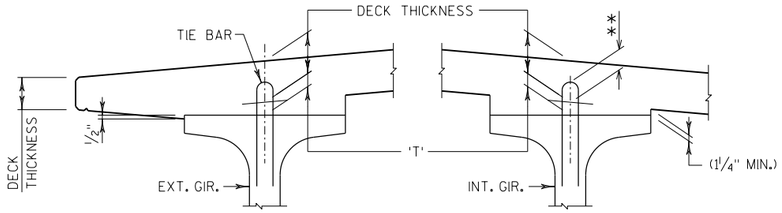
SHEET 15 OF 28
900

8

8

STATE PROJECT NUMBER

1100-37-70



DECK HAUNCH DETAIL

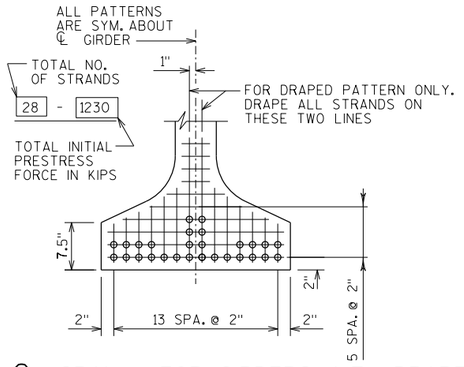
IF 1¼" MINIMUM HAUNCH HEIGHT AT EDGE OF GIRDER CANNOT BE MAINTAINED, THE GRADE LINE MAY BE REVISED BY THE ENGINEER AT THE OPTION OF THE CONTRACTOR, THE PLAN DECK THICKNESS SHALL BE HELD. NOTIFY THE STRUCTURES SECTION IF THE GRADE LINE IS RAISED FROM THE PLAN PROFILE BY MORE THAN ½" OR,

** IF 3" MINIMUM DECK EMBEDMENT OF TIE BAR CANNOT BE OBTAINED.

TO DETERMINE 'T', ELEV. OF TOP OF GIRDERS AT ℄ OF SUBSTRUCTURE UNITS & AT 1/10 POINTS OF EACH SPAN SHALL BE TAKEN. THEN FOLLOW THIS PROCESS:

TOP OF DECK ELEV. AT FINAL GRADE
\- TOP OF GIRDER ELEVATION
\+ DEAD LOAD DEFLECTION
\- DECK THICKNESS
= HAUNCH HEIGHT 'T'

NOTE: AN AVERAGE HAUNCH ('T') OF 2.75" WAS USED IN THE QUANTITY "CONCRETE MASONRY BRIDGES".

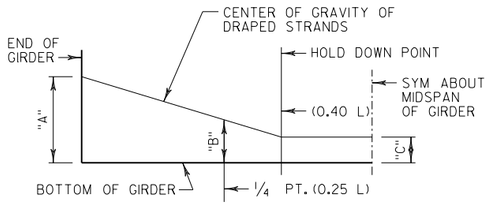


ARRANGEMENT AT ℄ SPAN - FOR GIRDERS WITH DRAPED STRANDS

0.6"Φ STRANDS

GIRDER DATA																						
SPAN	GIRDER	GIRDER LENGTH "L"	DEAD LOAD DEFL. (IN)									CONC. STRGTH. f'c (psi)	"P" FIRST 1/3 OF GIRDER	"P" MID 1/3 OF GIRDER	"P" END 1/3 OF GIRDER	DIA. OF STRAND (IN.)	DRAPED PATTERN					
			1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10						TOTAL NO. OF STRANDS	f'ci (psi) ☆	(IN.) "A"	"B" MIN.	"B" MAX"	"C"
1	1	101'-2 3/4"	0.4	0.8	1.2	1.4	1.4	1.4	1.2	0.8	0.4	8,000	7.00	7.00	7.00	0.6	28	6,800	39	13.5	16.5	5
1	2-7	101'-2 3/4"	0.4	0.9	1.2	1.4	1.5	1.4	1.2	0.9	0.4	8,000	7.00	7.00	7.00	0.6	28	6,800	39	13.5	16.5	5
1	8	101'-2 3/4"	0.4	0.8	1.1	1.3	1.4	1.3	1.1	0.8	0.4	8,000	7.00	7.00	7.00	0.6	28	6,800	39	13.5	16.5	5
2	1	104'-7 1/4"	0.5	1.0	1.4	1.7	1.8	1.7	1.4	1.0	0.5	8,000	8.00	8.00	8.00	0.6	28	6,800	39	13.5	16.5	5
2	2-7	104'-7 1/4"	0.5	1.0	1.3	1.6	1.7	1.6	1.3	1.0	0.5	8,000	7.00	8.00	8.00	0.6	28	6,800	39	13.5	16.5	5
2	8	104'-7 1/4"	0.5	1.0	1.4	1.6	1.7	1.6	1.4	1.0	0.5	8,000	7.00	7.00	7.00	0.6	28	6,800	39	13.5	16.5	5

☆ MINIMUM CYLINDER STRENGTH OF CONCRETE @ TIME OF TRANSFER OF PRESTRESS FORCE.



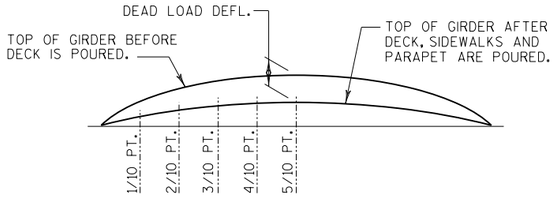
DRAPED STRAND PROFILE

*THE THEORETICAL INITIAL CAMBER VALUE AT THE TIME OF STRAND RELEASE AT MIDSPAN MULTIPLIED BY A FACTOR OF 1.4 TO ACCOUNT FOR CAMBER GROWTH FROM THE TIME OF STRAND RELEASE TO JOBSITE PLACEMENT.

SPAN	CAMBER (IN.) *
1	2.41
2	2.39

THESE VALUES ARE NOT TO BE USED IN DETERMINING 'T', USE ACTUAL GIRDER SHOTS.

THESE VALUES ARE FOR INFORMATIONAL PURPOSES ONLY.



DEAD LOAD DEFLECTION DIAGRAM

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-67-338

DRAWN BY SKR | PLANS CK'D. MDR

45W" PRESTRESSED GIRDER DETAILS

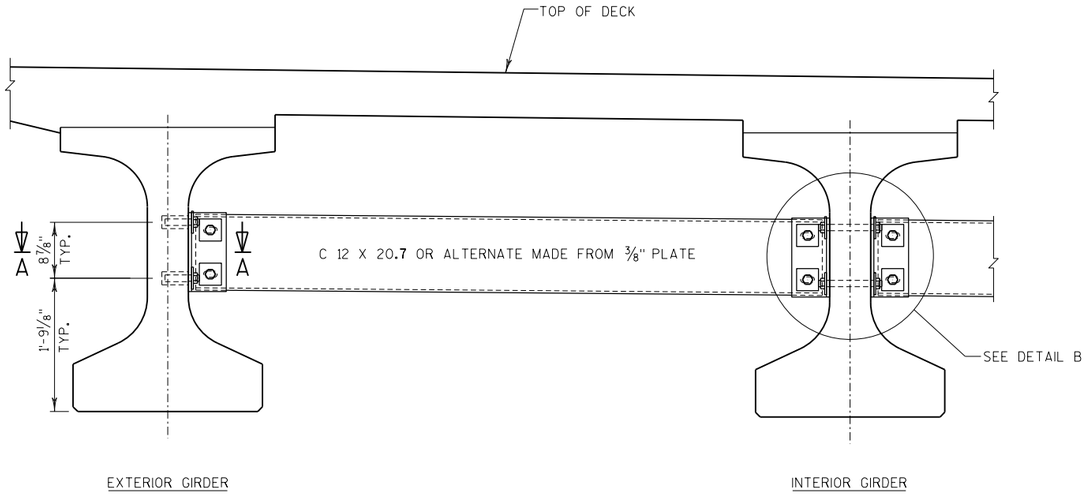
SHFFT 16 OF 28
901

8

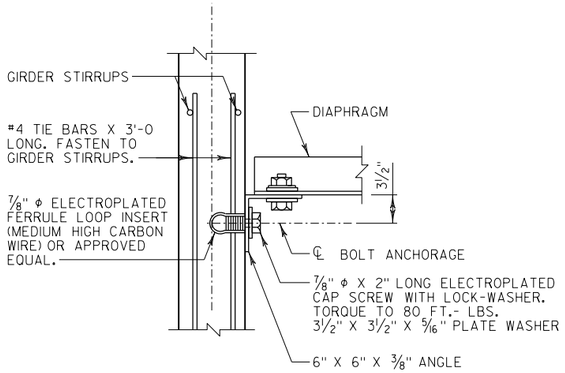
8

STATE PROJECT NUMBER

1100-37-70

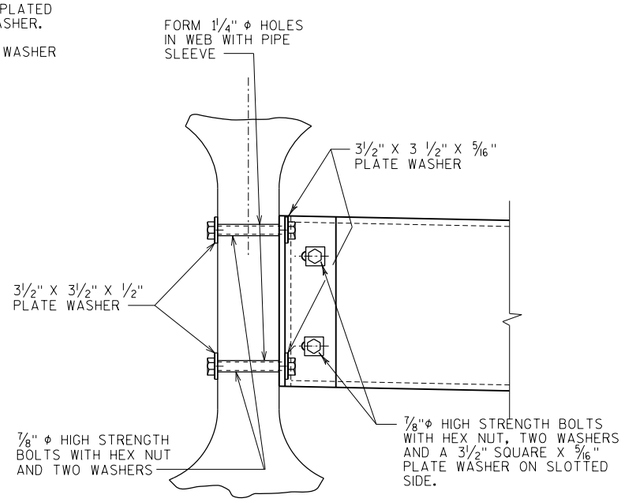


PART TRANSVERSE SECTION AT DIAPHRAGM

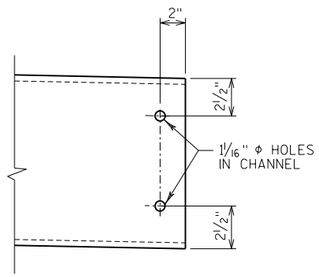


SECTION A-A

(FOR EXTERIOR ATTACHMENT)



(FOR STAGGERED DIAPHRAGM)



DETAIL B

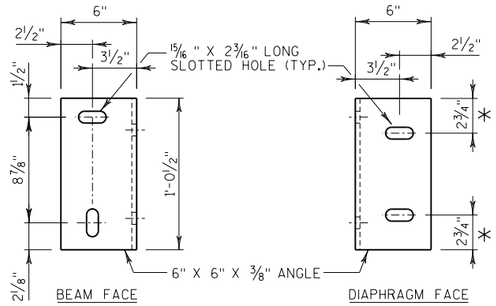
NOTES

ALL DIAPHRAGM MATERIAL NOT EMBEDDED IN THE CONCRETE GIRDER SHALL BE PAID FOR AT THE UNIT PRICE BID FOR "STEEL DIAPHRAGMS B-67-338", EACH.

EACH DIAPHRAGM BETWEEN GIRDERS SHALL CONSTITUTE ONE UNIT.

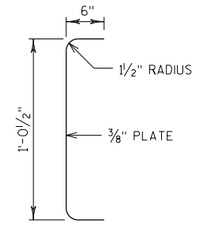
ALL DIAPHRAGM STRUCTURAL STEEL SHALL BE ASTM A709 GRADE 36. ALL BOLTS, NUTS AND WASHERS SHALL BE ASTM A325 TYPE 1.

ALL DIAPHRAGM STRUCTURAL STEEL SHOWN SHALL BE HOT-DIPPED GALVANIZED. ALL BOLTS, NUTS AND WASHERS SHALL BE HOT-DIPPED GALVANIZED IN ACCORDANCE WITH ASTM A153 CLASS C. GALVANIZED NUTS SHALL BE TAPPED OVERSIZED IN ACCORDANCE WITH THE REQUIREMENTS OF ASTM A563 AND SHALL MEET THE REQUIREMENTS OF SUPPLEMENTARY REQUIREMENT S1 OF ASTM A563, LUBRICANT AND TEST FOR COATED NUTS.



DIAPHRAGM SUPPORT

* 2½" FOR ALTERNATE PLATE DIAPHRAGM



SECTION THRU ALTERNATE DIAPHRAGM

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-67-338

DRAWN BY SKR | PLANS CK'D. MDR

STEEL DIAPHRAGM

SHEET 17 OF 28

902

8

8

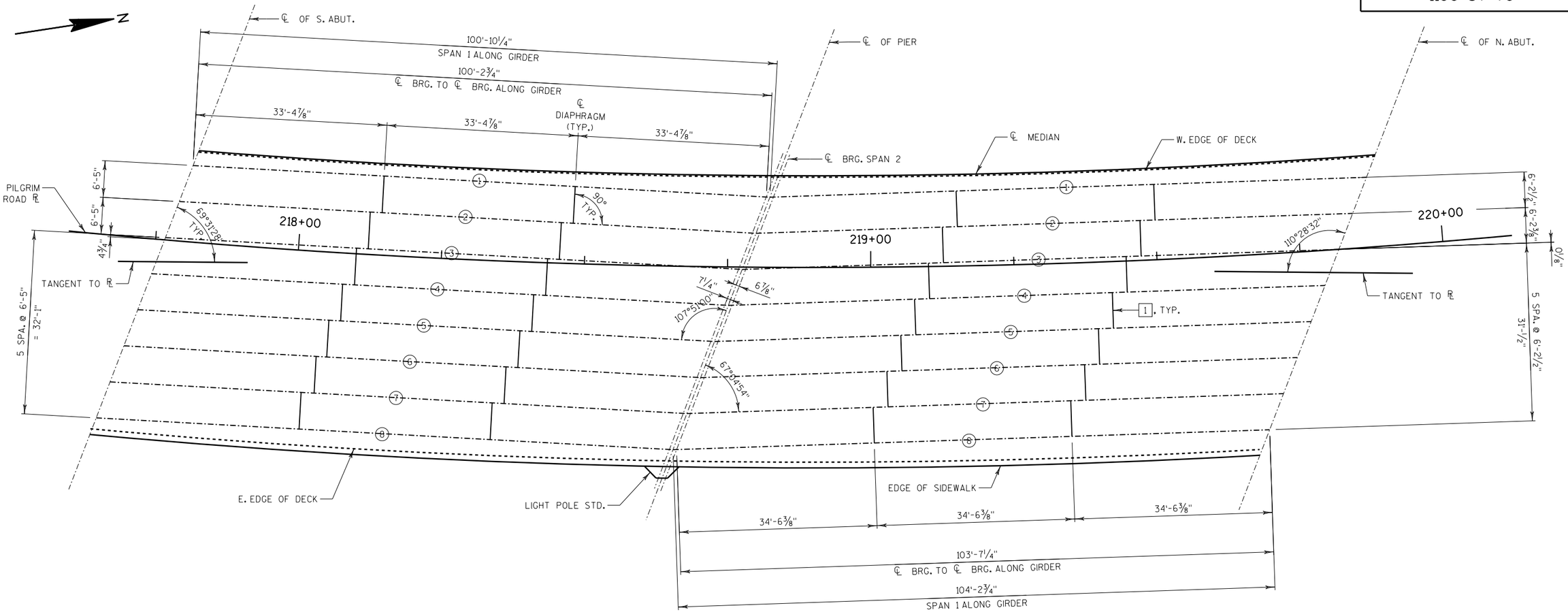
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PLOT DATE : 11/18/2014

PLOT BY : mdr

STATE PROJECT NUMBER

1100-37-70



GIRDER FRAMING PLAN

TOP OF DECK ELEVATIONS

LOCATION	C/L BRG. S. ABUT.	0.1 PT	0.2 PT	0.3 PT	0.4 PT	0.5 PT	0.6 PT	0.7 PT	0.8 PT	0.9 PT	C/L PIER	0.1 PT	0.2 PT	0.3 PT	0.4 PT	0.5 PT	0.6 PT	0.7 PT	0.8 PT	0.9 PT	C/L BRG. N. ABUT.
W. EDGE OF DECK	829.60	829.80	829.99	830.16	830.31	830.44	830.57	830.67	830.76	830.83	830.89	830.93	830.95	830.96	830.95	830.93	830.88	830.82	830.75	830.65	830.54
GIRDER 1	829.64	829.83	830.01	830.18	830.33	830.47	830.59	830.70	830.80	830.88	830.95	830.99	831.01	831.02	831.01	830.98	830.94	830.89	830.82	830.73	830.63
GIRDER 2	829.73	829.92	830.11	830.27	830.43	830.57	830.7	830.81	830.91	830.99	831.06	831.11	831.13	831.14	831.13	831.11	831.08	831.03	830.96	830.88	830.79
GIRDER 3	829.82	830.01	830.20	830.37	830.52	830.67	830.80	830.91	831.01	831.10	831.17	831.22	831.25	831.26	831.26	831.25	831.21	831.17	831.11	831.03	830.94
GIRDER 4	829.91	830.11	830.29	830.46	830.62	830.77	830.90	831.02	831.12	831.21	831.29	831.34	831.37	831.39	831.39	831.37	831.35	831.30	831.25	831.18	831.09
GIRDER 5	830.00	830.20	830.38	830.56	830.72	830.87	831.00	831.12	831.23	831.32	831.40	831.45	831.49	831.51	831.51	831.50	831.48	831.44	831.39	831.32	831.24
GIRDER 6	830.09	830.29	830.48	830.65	830.82	830.97	831.10	831.22	831.33	831.43	831.51	831.57	831.61	831.63	831.64	831.63	831.61	831.58	831.53	831.46	831.39
GIRDER 7	830.18	830.38	830.57	830.75	830.91	831.06	831.20	831.33	831.44	831.54	831.62	831.68	831.72	831.75	831.76	831.76	831.74	831.71	831.67	831.61	831.53
GIRDER 8	830.27	830.47	830.66	830.84	831.01	831.16	831.30	831.43	831.54	831.64	831.73	831.80	831.84	831.87	831.88	831.88	831.87	831.84	831.80	831.75	831.68
E. EDGE OF DECK	830.29	830.51	830.71	830.89	831.06	831.22	831.36	831.48	831.59	831.69	831.77	831.84	831.89	831.93	831.95	831.96	831.95	831.92	831.88	831.83	831.76

LEGEND

(X) INDICATES GIRDER NUMBER

[1] INTERMEDIATE STEEL DIAPHRAGM, TYP. DIAPHRAGMS TO BE PERPENDICULAR TO ℄ OF GIRDER. SEE SHEET 17 FOR DETAILS.

ALL GIRDERS IN SPAN 1 ARE PARALLEL TO EACH OTHER. LIKEWISE ALL GIRDERS IN SPAN 2 ARE PARALLEL TO EACH OTHER. GIRDER SPACINGS ARE MEASURED PERPENDICULAR TO THE ℄ GIRDER.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-67-338

DRAWN BY SKR | PLANS CK'D. MDR

SUPERSTRUCTURE FRAMING PLAN

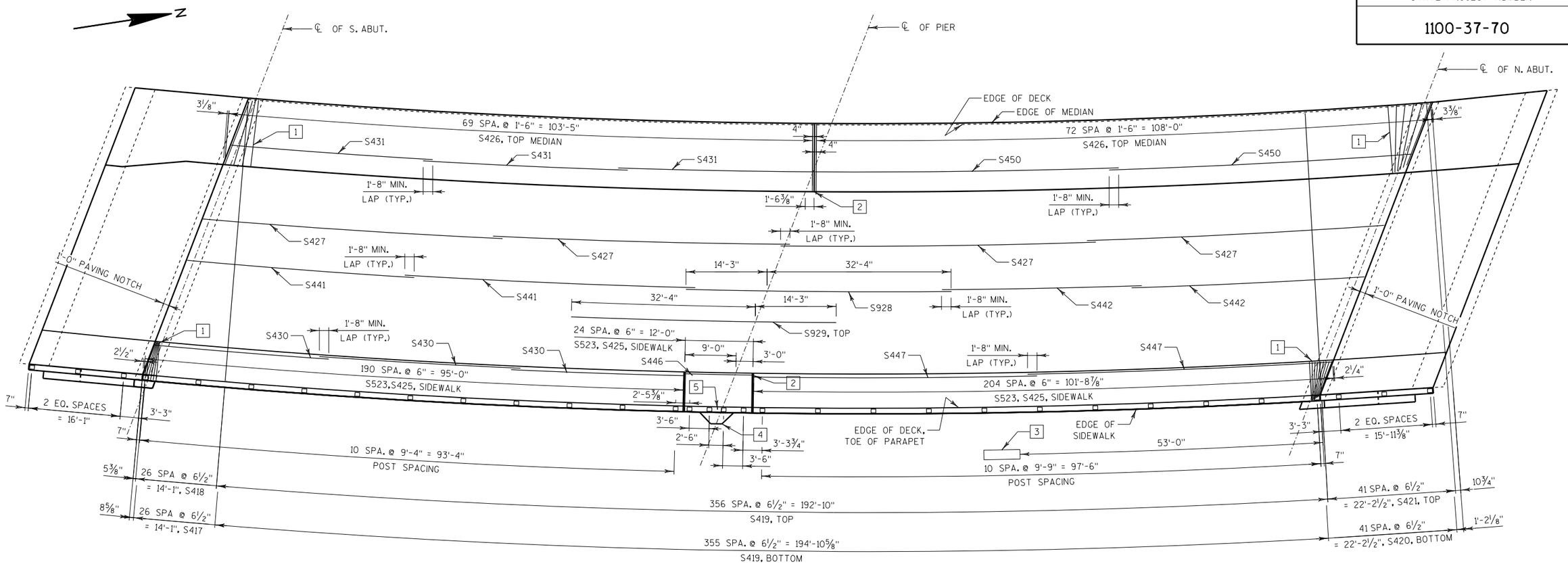
SHEET 18 OF 28
903

8

8

STATE PROJECT NUMBER

1100-37-70



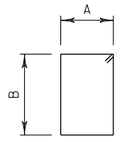
SUPERSTRUCTURE BILL OF BARS

BAR MARK	COAT	NO.	LENGTH	BENT	BAR SERIES	LOCATION
S401	X	42	3'-7"	X		DIAPH. @ ABUT. VERT. @ NOTCH
S402	X	28	2'-8"			DIAPH. HORIZ. @ NOTCH
S503	X	94	12'-10"	X		ABUT. DIAPHRAGM STIRRUP
S604	X	6	53'-11"			S. ABUT. DIAPHRAGM HORIZ.
S605	X	6	57'-2"			N. ABUT. DIAPHRAGM HORIZ.
S606	X	56	3'-4"			ABUT. DIAPHRAGM HORIZ. F.F.
S607	X	4	4'-10"			S. ABUT. DIAPH. HORIZ. F.F. WEST END
S608	X	4	8'-2"			S. ABUT. DIAPH. HORIZ. F.F. EAST END
S609	X	4	7'-6"			N. ABUT. DIAPH. HORIZ. F.F. WEST END
S610	X	4	11'-8"			N. ABUT. DIAPH. HORIZ. F.F. EAST END
S511	X	98	6'-3"	X		ABUT. DIAPHRAGM VERT.
S512	X	32	6'-0"			ABUT. DIAPH. HORIZ. THRU GIRDERS
S513	X	32	10'-8"	X		ABUT. DIAPHRAGM STIRRUP
S514	X	14	8'-8"	X		PIER DIAPHRAGM STIRRUP
S515	X	28	11'-6"	X		PIER DIAPHRAGM VERT.
S416	X	42	2'-3"			PIER DIAPHRAGM HORIZ.
S417	X	27	25'-8"		X	SLAB TRANS. BOT.
S418	X	27	25'-1"		X	SLAB TRANS. TOP.
S419	X	711	49'-5"			SLAB TRANS. TOP/BOT.
S420	X	42	25'-8"		X	SLAB TRANS. BOT.
S421	X	42	25'-0"		X	SLAB TRANS. TOP.
S522	X	382	6'-8"	X		SLAB TRANS. TOP AT OVERHANGS
S523	X	421	7'-3"	X		TRANS. TOP AT SIDEWALK
S424	X	140	2'-0"			TRANS. BOT. AT SIDEWALK
S425	X	834	2'-9"	X		TRANS. AT SIDEWALK
S426	X	143	11'-8"			TRANS. TOP AT MEDIAN
S427	X	330	42'-11"			SLAB LONG. BOT.
S928	X	67	46'-7"			SLAB LONG. TOP AT PIER
S929	X	67	46'-7"			SLAB LONG. TOP AT PIER
S430	X	36	32'-9"			SIDEWALK LONG. TOP AND BOT. SPAN 1
S431	X	27	35'-6"			MEDIAN LONG. TOP - SPAN 1
S532	X	208	6'-8"	X		PARAPET VERT.
S433	X	18	32'-9"			PARAPET HORIZ., SPAN 1
S441	X	130	47'-4"	X		SLAB LONG. TOP
S442	X	130	38'-3"	X		SLAB LONG. TOP
S543	X	4	15'-6"	X		ABUT. DIAPHRAGM STIRRUP
S644	X	4	7'-11"	X		ABUT. DIAPHRAGM HORIZ. SIDEWALK
S645	X	4	11'-8"	X		ABUT. DIAPHRAGM HORIZ. MEDIAN
S446	X	12	11'-8"	X		SDWK. LONG. TOP/BOT. - BTN. DEFL. JTS.
S447	X	36	35'-1"	X		SDWK. LONG. TOP/BOT. - SPAN 2
S448	X	6	11'-8"	X		PARA. HORIZ. - BTN. DEFL. JOINTS
S449	X	18	35'-1"	X		PARAPET HORIZ. - SPAN 2
S450	X	27	37'-0"	X		MEDIAN LONG. TOP - SPAN 2

TRANSVERSE BAR STEEL LAYOUT

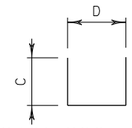
BAR SERIES TABLE

BAR MARK	NO. REQ'D		LENGTHS FOR EACH SERIES		
S417	1 SERIES OF	27	2'-0"	TO	49'-4"
S418	1 SERIES OF	27	1'-0"	TO	49'-2"
S420	1 SERIES OF	42	2'-1"	TO	49'-3"
S421	1 SERIES OF	42	1'-5"	TO	48'-7"



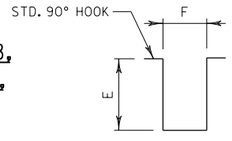
S503, S513, S514, S543

BAR MARK	DIM. A	DIM. B
S503	3'-2"	2'-11"
S513	3'-2"	1'-10"
S514	2'-2"	1'-10"
S543	3'-2"	4'-3"



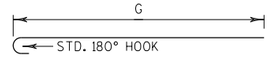
S401, S607, S608, S609, S610, S511, S425

BAR MARK	DIM. C	DIM. D
S401	1'-5"	11"
S607	1'-0"	3'-2"
S608	2'-8"	3'-2"
S609	2'-4"	3'-2"
S610	4'-5"	3'-2"
S511	2'-2"	2'-2"
S425	1'-0"	0'-11"



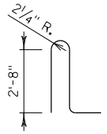
S515

BAR MARK	DIM. E	DIM. F
S515	4'-1"	2'-2"



S522, S523

BAR MARK	DIM. G
S522	6'-1"
S523	6'-8"



S532

LEGEND

1. ROTATE AND FAN OUT REINFORCING BARS AS NEEDED AT SKEWED ENDS.
2. DEFLECTION JOINT AT PARAPET, SIDEWALK AND MEDIAN. SEE SHEET 25 FOR DETAILS.
3. STREET NAME INSET DETAIL. SEE "AESTHETIC DETAILS".
4. LIGHT STD. SEE SHEET 26 FOR REINFORCEMENT.
5. GATE AT LIGHT STD. SEE SHEET 27 FOR DETAILS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-67-338

DRAWN BY AJC | PLANS CK'D. MDR

SUPERSTRUCTURE REINFORCEMENT

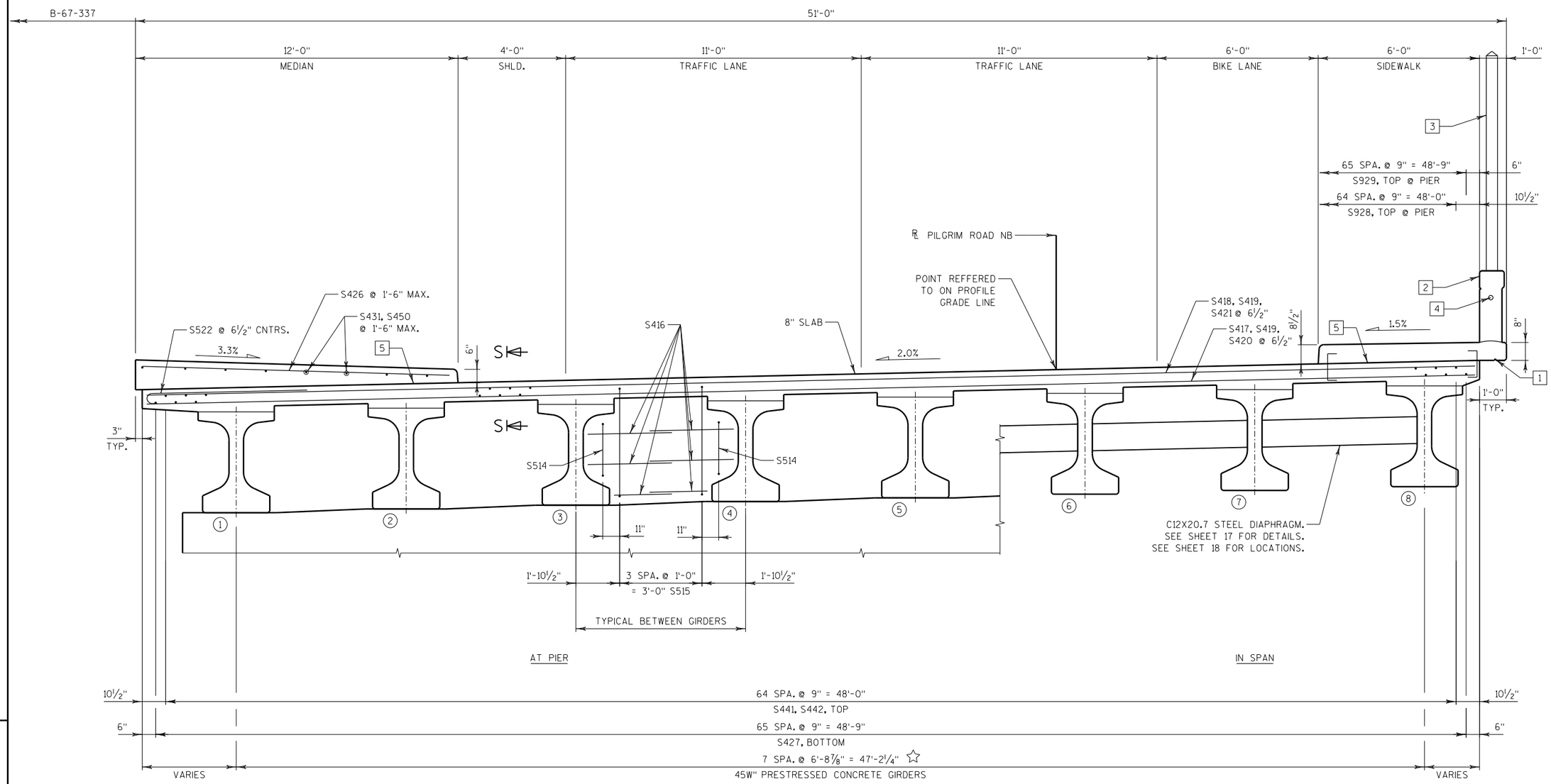
SHEET 19 OF 28
904

8

8

STATE PROJECT NUMBER

1100-37-70

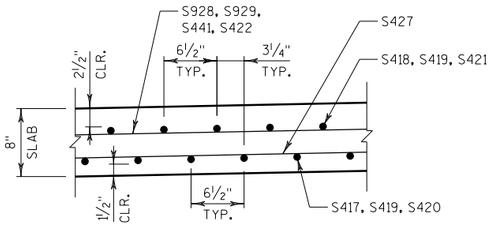


LEGEND

- (X) INDICATES GIRDER NUMBER
- [1] ¾" CONTINUOUS DRIP GROOVE. TERMINATE 2'-0" FROM ABUTMENTS - TYP.
- [2] VERTICAL FACE PARPAPET "A". FOR DETAILS SEE SHEET 25.
- [3] ORNAMENTAL PROTECTIVE SCREENING. FOR DETAILS SEE SHEET 27.
- [4] 2" DIAMETER NON-METALLIC CONDUIT - TYP.
- [5] ROUGH FLOAT SURFACE OR SAME FINISH AS EXPOSED DECK. DO NOT APPLY PROTECTIVE SURFACE TREATMENT TO THE AREA UNDER THE MEDIAN AND SIDEWALK.
- ☆ MEASURED ALONG ℄ SUBSTRUCTURE

TYPICAL CROSS SECTION THRU DECK

(LOOKING NORTH)



SECTION S-S

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-67-338

DRAWN BY AJC | PLANS CK'D. MDR

SUPERSTRUCTURE CROSS SECTION

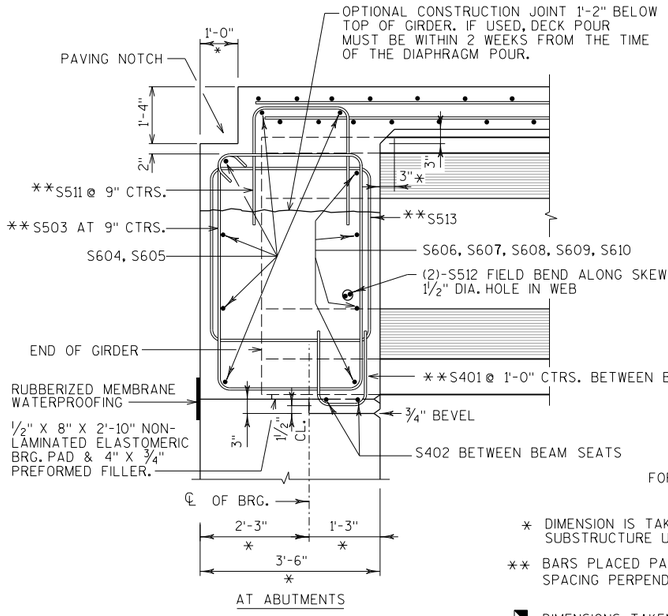
SHEET 20 OF 28
905

8

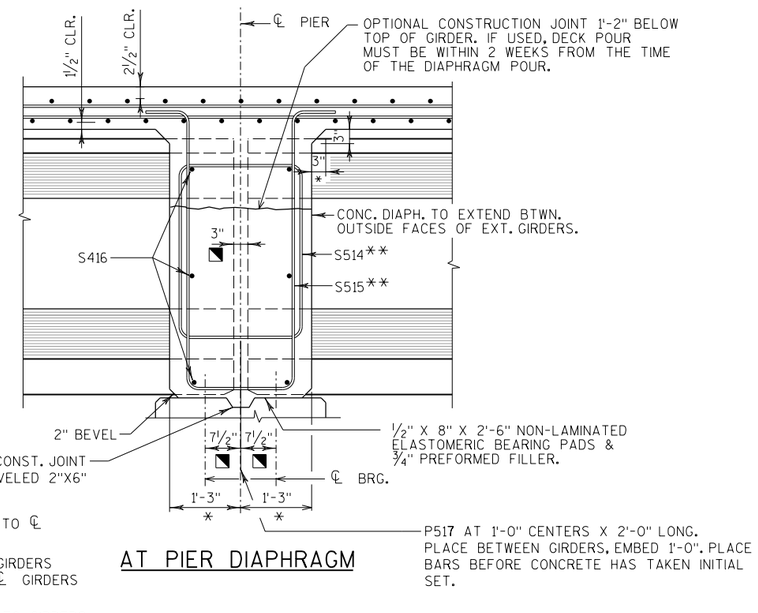
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STATE PROJECT NUMBER

1100-37-70



PART LONGIT. SECTION

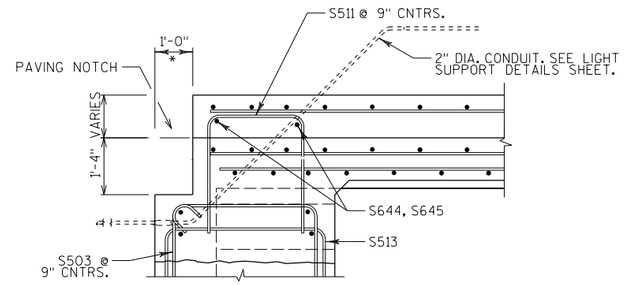


* DIMENSION IS TAKEN NORMAL TO ℄ SUBSTRUCTURE UNITS.

** BARS PLACED PARALLEL TO GIRDERS SPACING PERPENDICULAR TO ℄ GIRDERS

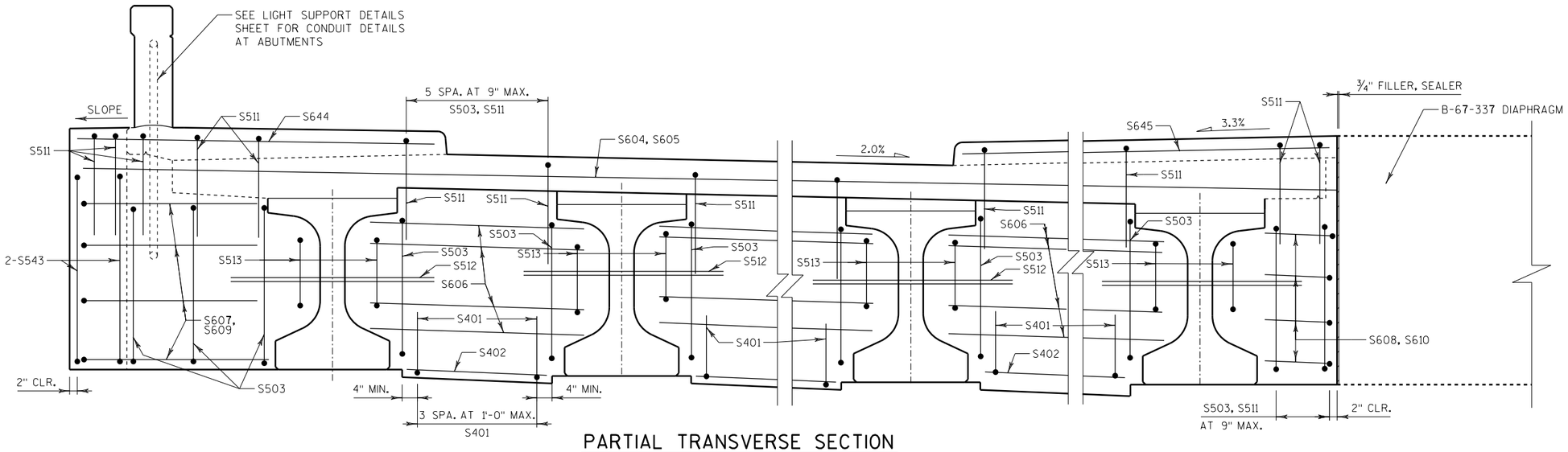
▙ DIMENSIONS TAKEN PARALLEL TO GIRDERS

AT PIER DIAPHRAGM



AT ABUTMENTS

SECTION AT MEDIAN/SIDEWALK



PARTIAL TRANSVERSE SECTION AT ABUTMENT DIAPHRAGM

(LOOKING SOUTH)

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-67-338

DRAWN BY SKR | PLANS CK'D. MDR

SUPERSTRUCTURE DETAILS

SHEET 21 OF 28

906

8

8

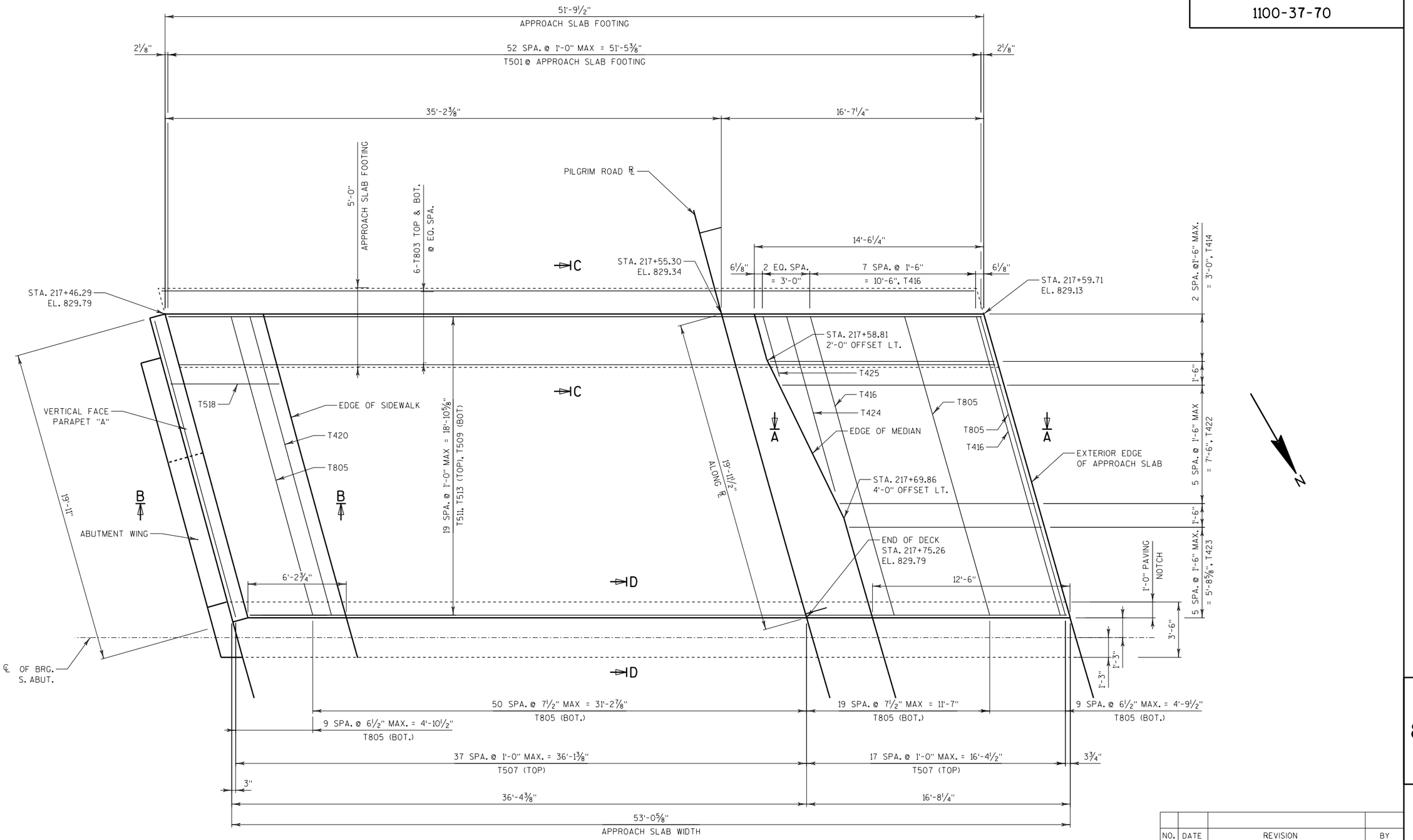
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PLOT DATE : 11/18/2014

PLOT BY : mdr

STATE PROJECT NUMBER

1100-37-70



APPROACH SLAB PLAN

NOTES

FOR LOCATIONS OF SECTIONS A, B, C, & D SEE SHEET 24.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-67-338

DRAWN BY SKR | PLANS CK'D. MDR

SOUTH STRUCTURAL APPROACH SLAB

SHEET 22 OF 28
907

8

8

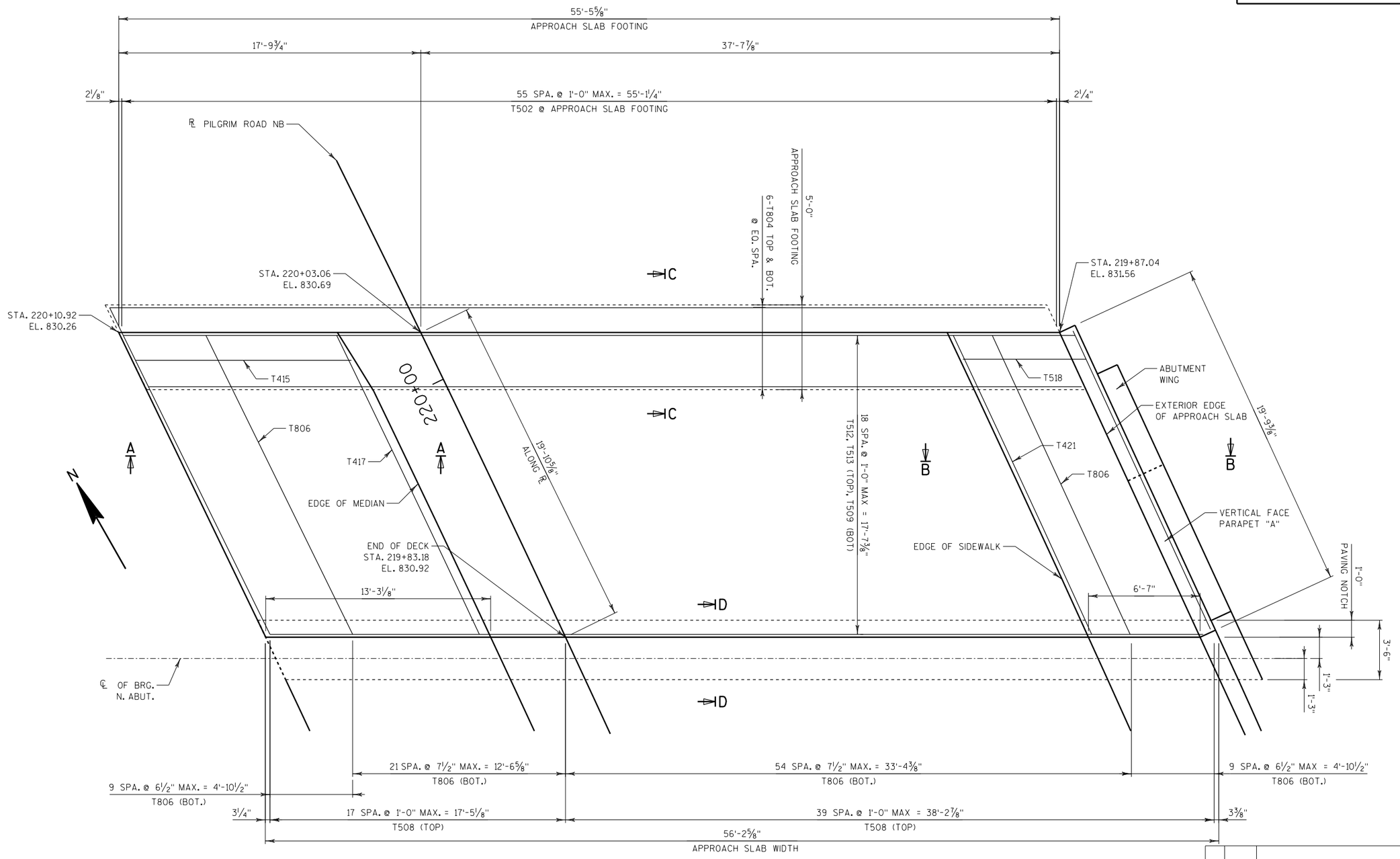
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PLOT BY : mdr

STATE PROJECT NUMBER

1100-37-70



APPROACH SLAB PLAN

NOTES

FOR LOCATIONS OF SECTIONS A, B, C, & D SEE SHEET 24.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-67-338

DRAWN BY SKR | PLANS CK'D. MDR

NORTH STRUCTURAL APPROACH SLAB

SHEET 23 OF 28
908

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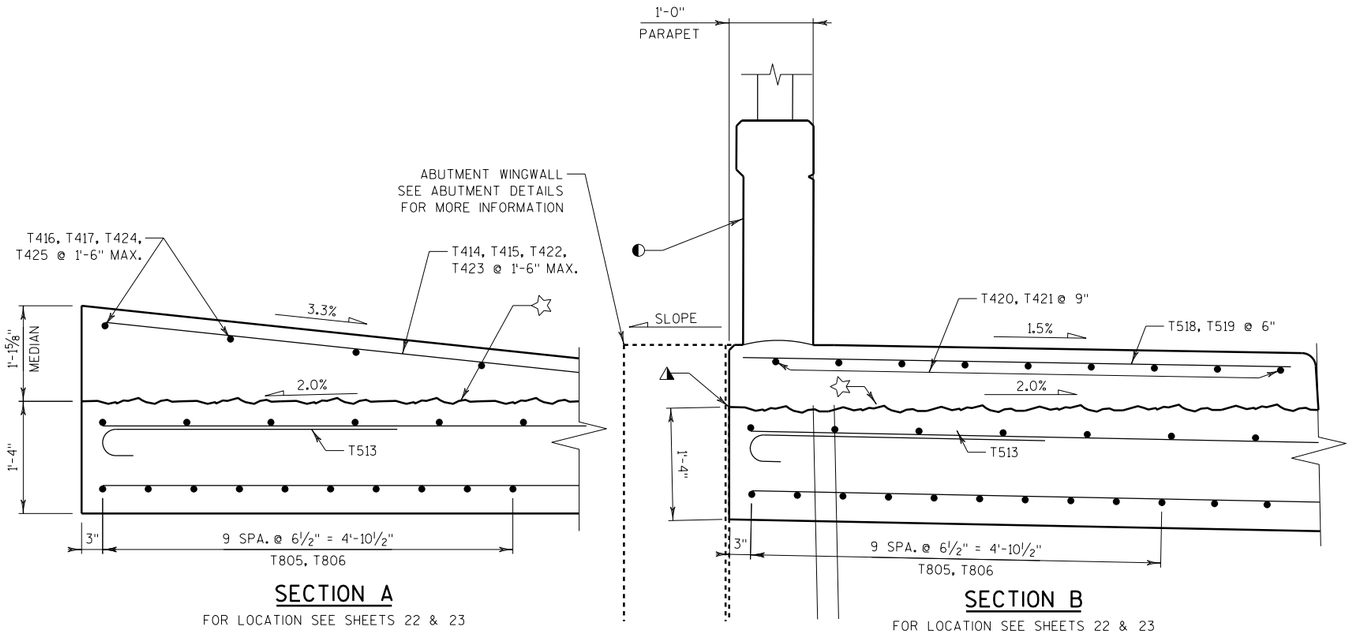
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PLOT DATE : 11/18/2014

PLOT BY : mdr

STATE PROJECT NUMBER

1100-37-70



SECTION A

FOR LOCATION SEE SHEETS 22 & 23

SECTION B

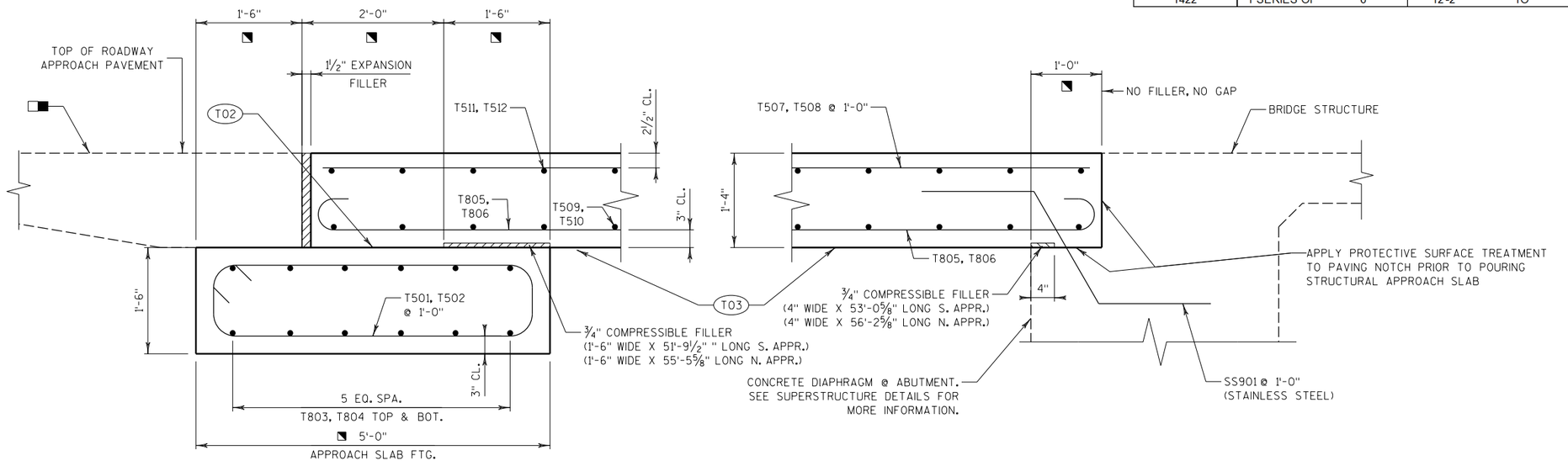
FOR LOCATION SEE SHEETS 22 & 23

BILL OF BARS

BAR MARK	COAT	NO. S. APPR.	NO. N. APPR.	LENGTH	BENT	BAR SERIES	LOCATION
SS901	SS	53	57	5'-0"	X		CONC. ABUT. DIAPH. TO APPROACH SLAB
T501	X	53	0	11'-9"	X		S. APPR. SLAB FTG. - STIRRUP
T502	X	0	56	12'-5"	X		N. APPR. SLAB FTG. - STIRRUP
T803	X	12	0	51'-4"			S. APPR. SLAB FTG. - TRANS.
T804	X	0	12	55'-0"			N. APPR. SLAB FTG. - TRANS.
T805	X	88	0	21'-3"	X		S. APPROACH SLAB LONG. - BOT.
T806	X	0	94	21'-2"	X		N. APPROACH SLAB LONG. - BOT.
T507	X	55	0	19'-5"			S. APPROACH SLAB LONG. - TOP
T508	X	0	57	19'-4"			N. APPROACH SLAB LONG. - TOP
T509	X	19	0	52'-7"			S. APPROACH SLAB TRANS. - BOT.
T510	X	0	18	55'-9"			N. APPROACH SLAB TRANS. - BOT.
T511	X	19	0	52'-7"			S. APPROACH SLAB TRANS. - TOP.
T512	X	0	19	55'-9"			N. APPROACH SLAB TRANS. - TOP.
T513	X	19	17	4'-1"	X		APPROACH SLAB TRANS. - TOP - WING
T414	X	3	0	14'-2"			S. APPROACH SLAB MEDIAN TRANS.
T415	X	0	12	12'-11"			N. APPROACH SLAB MEDIAN TRANS.
T416	X	10	0	19'-6"			S. APPROACH SLAB MEDIAN LONG.
T417	X	0	9	19'-4"			N. APPROACH SLAB MEDIAN LONG.
T518	X	38	0	5'-11"			S. APPROACH SLAB SIDEWALK TRANS.
T519	X	0	36	6'-3"			N. APPROACH SLAB SIDEWALK TRANS.
T420	X	8	0	19'-6"			S. APPROACH SLAB SIDEWALK LONG.
T421	X	0	9	19'-4"			N. APPROACH SLAB SIDEWALK LONG.
T422	X	6	0	13'-2"		X	S. APPROACH SLAB MEDIAN TRANS.
T423	X	5	0	12'-1"			S. APPROACH SLAB MEDIAN TRANS.
T424	X	1	0	11'-5"			S. APPROACH SLAB MEDIAN LONG.
T425	X	1	0	3'-11"			S. APPROACH SLAB MEDIAN LONG.

BAR SERIES

BAR MARK	NO. REQ'D	LENGTHS FOR EACH SERIES		
T422	1 SERIES OF 6	12'-2"	TO	14'-2"



SECTION C

FOR LOCATION SEE SHEETS 22 & 23

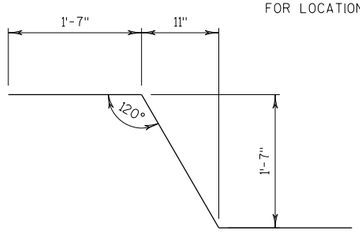
SECTION THRU APPROACH SLAB

SECTION D

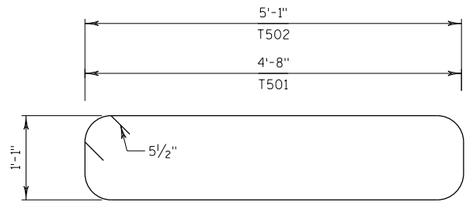
FOR LOCATION SEE SHEETS 22 & 23

LEGEND

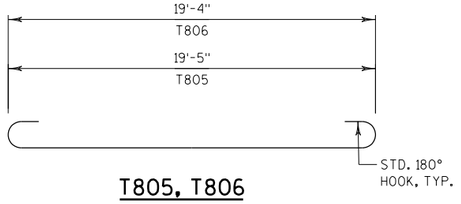
- (T02) STEEL TROWEL TOP SURFACE OF FOOTING AND PLACE MULTIPLE LAYERS (0.03" MIN. TOTAL THK.) OF POLYETHYLENE SHEETS OVER THE ENTIRE TOP OF FOOTING.
- (T03) PLACE MULTIPLE LAYERS (0.03" MIN. TOTAL THK.) OF POLYETHYLENE SHEETS OVER THE ENTIRE TOP SUBGRADE BENEATH SLAB.
- ◭ SEAL ALL EXPOSED HORIZONTAL AND VERTICAL SURFACES WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD ⅛" BELOW SURFACE OF CONCRETE"). EXTEND SEALER 3" BELOW GUTTERLINE AT INSIDE SURFACE.
- ◐ SEE PARAPET STANDARD DETAILS FOR REINFORCEMENT. LOCATION OF NAME PLATE AND BENCH MARK WITH RESPECT TO THE END OF PARAPET, ETC.
- ◨ FOLLOW FDM 14-10-15 REQUIREMENTS FOR ROADWAY APPROACH PAVEMENT.
- ◹ MEASURED NORMAL TO THE ABUTMENT.
- ☆ ROUGH FLOAT SURFACE OR SAME FINISH AS EXPOSED APPROACH SLAB. DO NOT APPLY PROTECTIVE SURFACE TREATMENT TO THIS AREA.



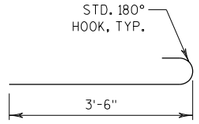
SS901



T501, T502



T805, T806



T513

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-67-338

DRAWN BY SKR | PLANS CK'D. MDR

STRUCTURAL APPROACH SLAB DETAILS

SHEET 24 OF 28
909

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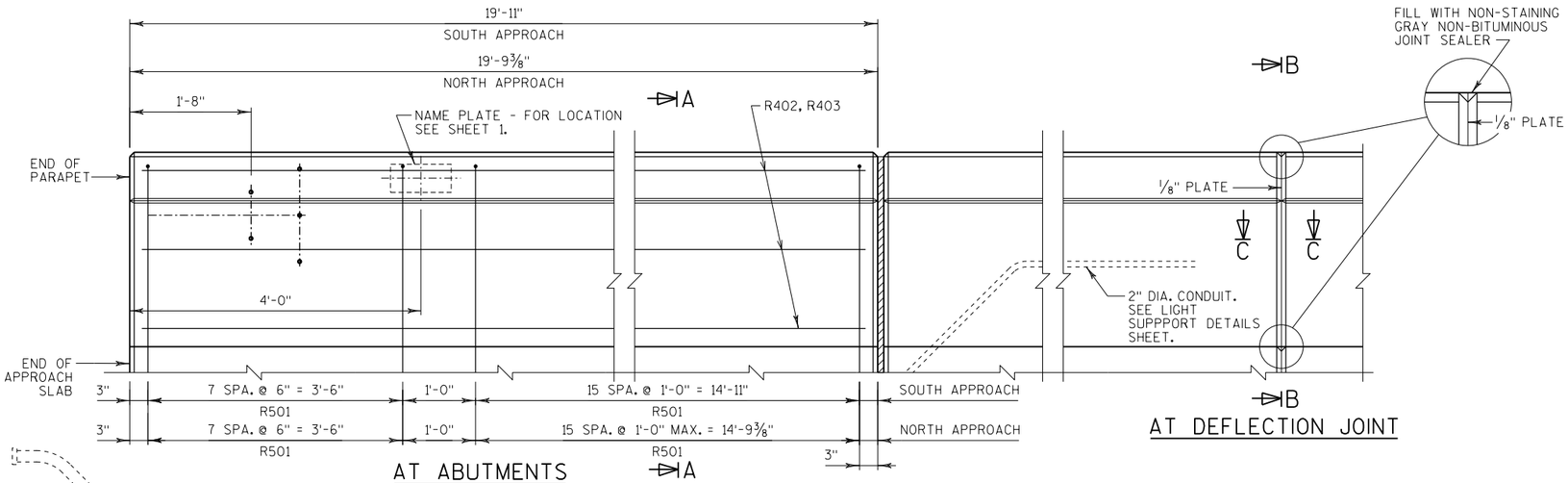
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PLOT DATE : 11/18/2014

PLOT BY : mdr

STATE PROJECT NUMBER

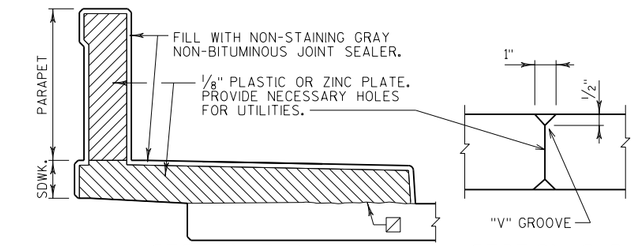
1100-37-70



AT ABUTMENTS

ELEVATION OF PARAPET

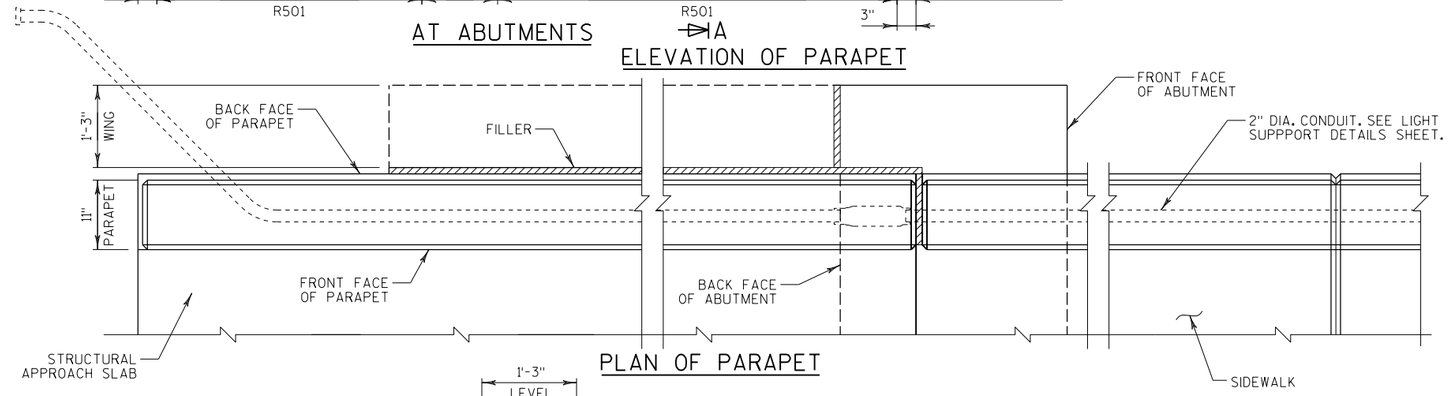
AT DEFLECTION JOINT



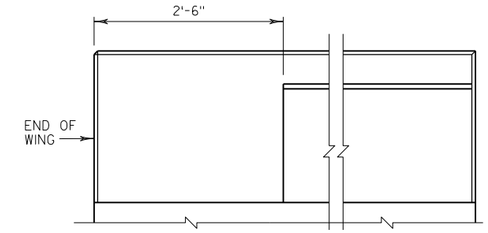
SECTION B-B

(SHOWING DEFLECTION JOINT IN PARAPET AND SIDEWALK.)

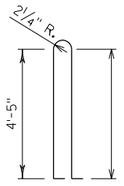
SECTION C-C



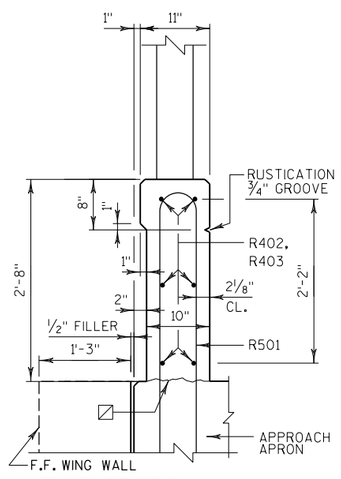
PLAN OF PARAPET



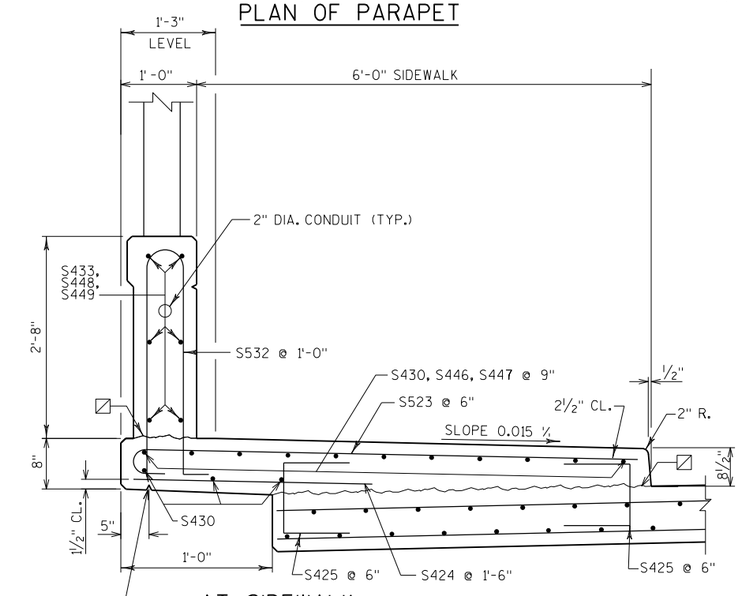
FRONT FACE OF PARAPET



R501

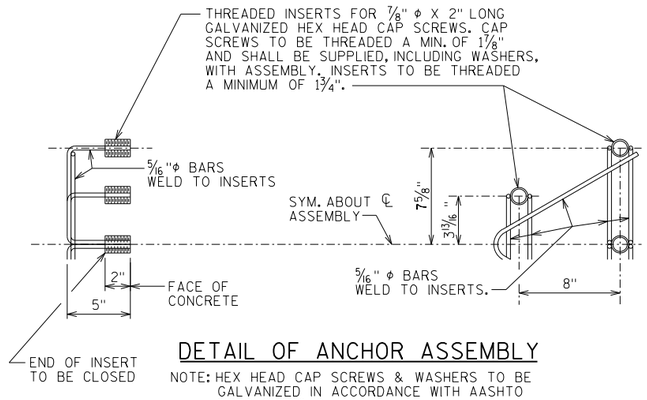


SECTION A-A



AT SIDEWALK

(LOOKING SOUTH)



DETAIL OF ANCHOR ASSEMBLY

NOTE: HEX HEAD CAP SCREWS & WASHERS TO BE GALVANIZED IN ACCORDANCE WITH AASHTO M232 CLASS C.

ASSEMBLY BID ITEM SHALL BE "ANCHOR ASSEMBLIES FOR STEEL PLATE BEAM GUARD", EACH.

NOTES:

WHEN PARAPETS ARE POURED CONTINUOUSLY FROM END TO END, THEY SHALL BE SEPARATED AT THE DEFLECTION JOINTS BY A PIECE OF ⅛" ZINC OR PLASTIC PLATE CUT AS SHOWN IN SECTION B-B BY SHADED AREA. IF CONSTRUCTION JOINTS IN PARAPETS ARE USED AT THE DEFLECTION JOINTS, ONE SIDE OF JOINT SHALL BE COATED WITH AN APPROVED LIQUID BOND BREAKER AND PLATE SEPARATORS MAY BE OMITTED.

☒ HORIZONTAL CONST. JOINT - STRIKE OFF AS SHOWN AND LEAVE ROUGH. FOR DECK POUR, MATCH BRIDGE X-SLOPE.

BILL OF BARS

BAR MARK	COAT	NO. S. APPR.	NO. N. APPR.	LENGTH	BENT	BAR SERIES	LOCATION
R501	X	24	24	6'-8"	X		APPROACH SLAB PARAPET - VERT.
R402	X	6	0	19'-5"			S. APPROACH SLAB PARAPET - HORIZ.
R403	X	0	6	19'-4"			N. APPROACH SLAB PARAPET - HORIZ.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-67-338

DRAWN BY SKR | PLANS CK'D. MDR

VERTICAL FACE PARAPET TYPE A

SHFFT 25 OF 28

910

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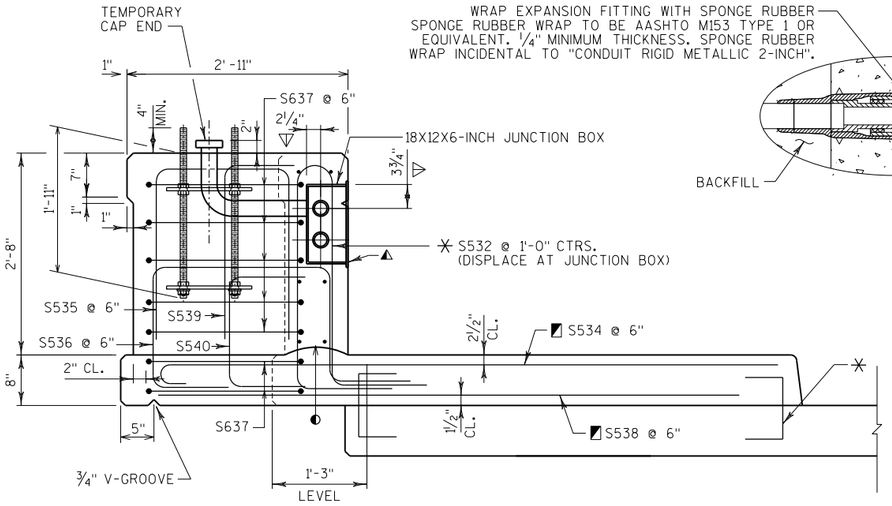
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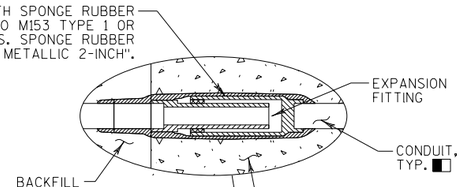
PLOT BY : mdr

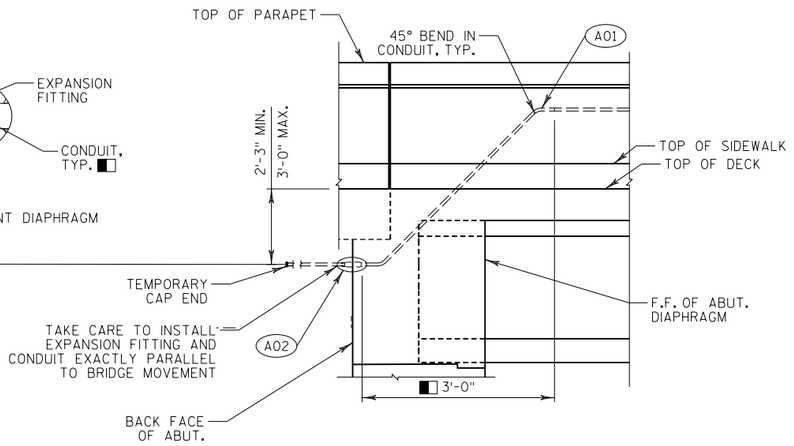
STATE PROJECT NUMBER

1100-37-70



SECTION A-A





(A01) EXPANSION FITTINGS, ANGLES AND ADAPTER FITTINGS TO BE INCIDENTAL TO THE BID ITEM "CONDUIT RIGID METALLIC 2-INCH".

WHEN CONNECTING METALLIC CONDUIT ONLY ADAPTER FITTINGS U.L. LISTED FOR ELECTRICAL USE SHALL BE USED.

(A02) APPROVED MANUFACTURER OR EQUIVALENT- EXPANSION FITTING: O-Z/GEDNEY TYPE AXDX AND BONDING JUMPER (4" TOTAL LONGITUDINAL CONDUIT MOVEMENT). ALSO USE EXPANSION FITTING AT PARAPET DEFLECTION JOINTS.

NOTES

BID ITEMS SHALL BE:
"JUNCTION BOXES 18X12X6-INCH", EACH.
"ANCHOR ASSEMBLIES LIGHT POLES", EACH.
"CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH"
"CONDUIT RIGID METALLIC 2-INCH".

APPROVED MANUFACTURERS - JUNCTION BOXES: SEE APPROVED MATERIAL LIST.

ELEVATION AT ABUTMENT SHOWING CONDUITS

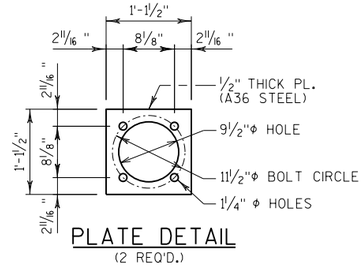
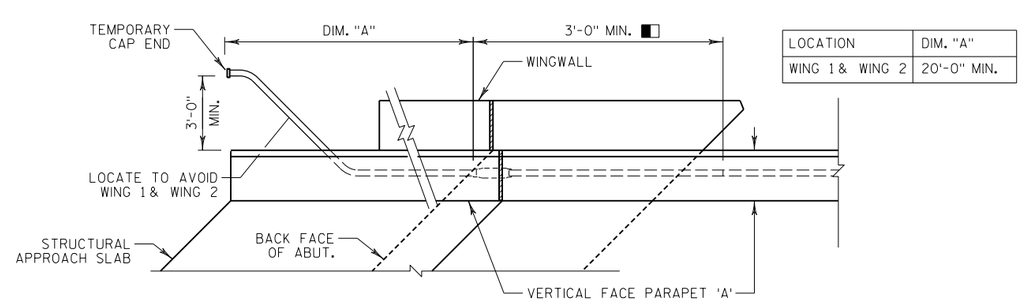
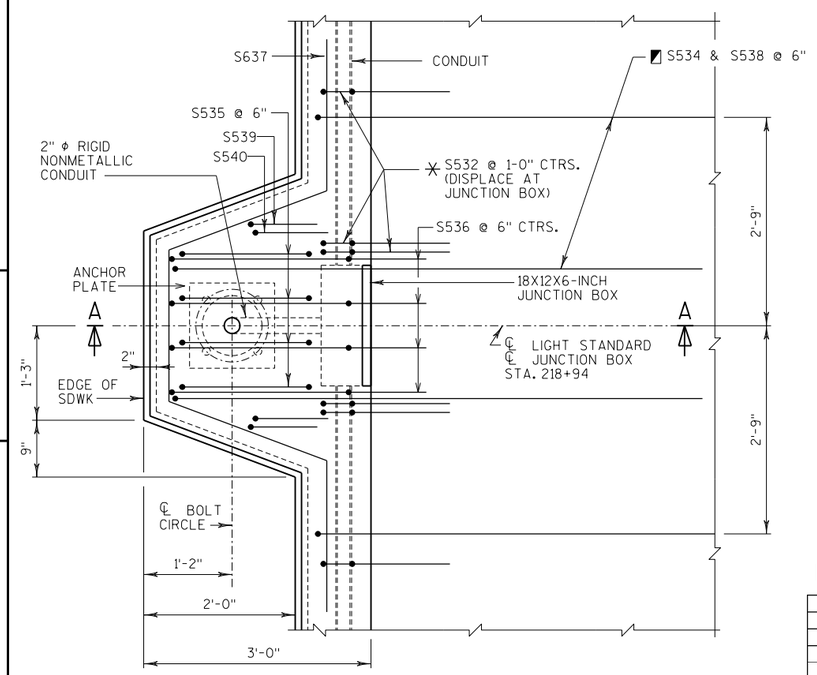


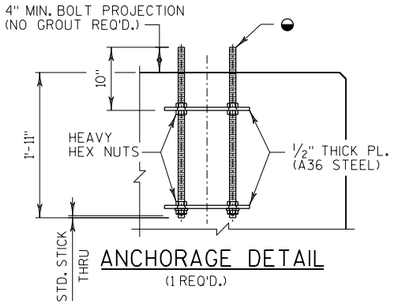
PLATE DETAIL
(2 REQ'D.)



LOCATION	DIM. "A"
WING 1 & WING 2	20'-0" MIN.



PLAN AT LIGHT STANDARD



ANCHORAGE DETAIL
(1 REQ'D.)

PLAN OF PARAPET AT ABUTMENT SHOWING CONDUIT

■ USE RIGID METALLIC CONDUIT 3'-0" MIN. INTO PARAPET ON BRIDGE SIDE OF THE JOINT OPENING.

◐ CONSTR. JT. STRIKE OFF AS SHOWN

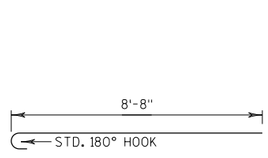
◭ CUT OUT ± 1" OF GASKET AT BOTTOM OF JUNCTION BOX COVER TO ALLOW FOR DRAINAGE.

▽ LOCATION OF CONDUIT IS MEASURED FROM OUTSIDE EDGE OF JUNCTION BOX.

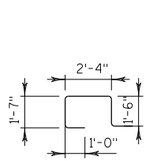
◩ THESE BARS ARE IN ADDITION TO STANDARD TRANSVERSE BARS IN SIDEWALK.

◒ 1"Φ THREADED ANCHOR BOLTS ASTM A449 OR AASHTO M 314-90 GR 55. HOT DIP ASTM A153, CLASS C, UPPER 8" OF BOLT INCLUDING NUTS & WASHERS. PROVIDE ENLARGED THREAD ON NUTS FOR PROPER FIT AFTER GALVANIZING. PROVIDE DOUBLE FLAT WASHERS & NUTS.

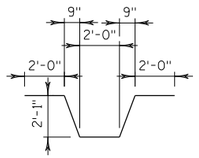
✳ SEE VERTICAL FACE PARAPET "A", SHEET FOR ADDITIONAL BAR STEEL DETAILS.



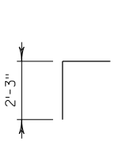
S534



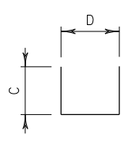
S536



S637



S539



S535, S540

BILL OF BARS

BAR MARK	COAT	NO.	LENGTH	BENT	BAR SERIES	LOCATION
S534	X	12	7'-3"	X		SIDEWALK HORIZ. @ JUNCTION BOX
S535	X	4	6'-0"	X		PARA. VERT. @ JUNCTION BOX
S536	X	4	6'-11"	X		PARA. VERT. @ LIGHT STD.
S637	X	7	10'-0"	X		PARA. HORIZ. @ LIGHT STD.
S538	X	12	6'-8"			SIDEWALK HORIZ. @ JUNCTION BOX
S539	X	2	3'-2"	X		PARA. VERT. @ LIGHT STD.
S540	X	2	3'-4"	X		PARA. VERT. @ LIGHT STD.

BAR MARK	DIM. C	DIM. D
S535	2'-3"	1'-9"
S540	1'-0"	1'-7"

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-67-338

DRAWN BY SKR | PLANS CK'D. MDR

LIGHT SUPPORT DETAILS

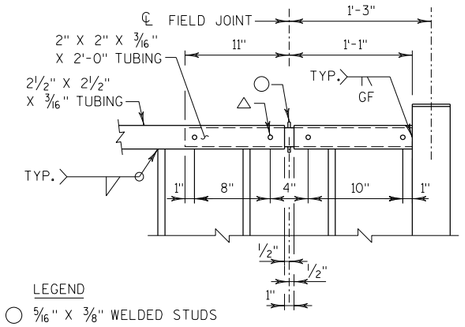
SHEET 26 OF 28
911

8

8

STATE PROJECT NUMBER

1100-37-70

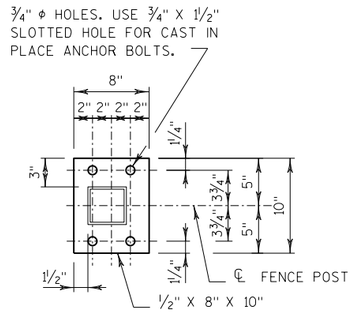


LEGEND

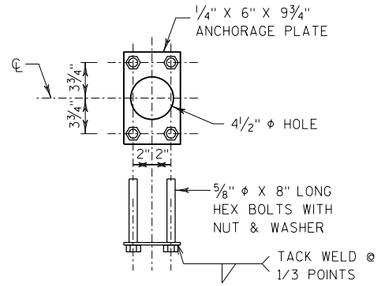
○ 5/16" X 3/8" WELDED STUDS

△ WELD BEAD ON EACH SIDE OF TUBE. GRIND BEADS SO THAT SLEEVE FITS FREELY INSIDE THE 2 1/2" X 2 1/2" TUBE.

RAILING EXPANSION JOINT DETAIL



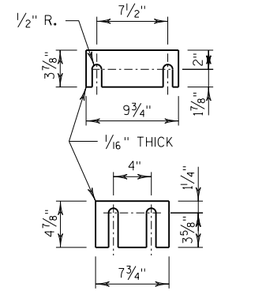
BASE PLATE



ANCHORAGE DETAIL

5/8" CAST-IN-PLACE ANCHOR BOLTS. MASONRY ANCHORS MAY BE SUBSTITUTED FOR C.I.P. ANCHOR BOLTS. ANCHORAGE PLATE NOT REQUIRED WHEN TYPE S ANCHORS ARE USED.

MASONRY ANCHOR TYPE S 5/8-INCH. EMBED 7" IN CONCRETE.



SHIM PLATE DETAILS

TWO SHIMS OF EACH SIZE REQUIRED PER POST

NOTES

POST BASE PLATES SHALL BE FLAT WITH ALL SURFACES SMOOTH AND FREE FROM WARP AND ALL EDGES SMOOTH, STRAIGHT, AND VERTICAL. ALL PLATE CUTS SHALL BE MACHINE OR MACHINE FLAME CUT.

RAILS AND POSTS TO BE ASTM A500, GRADE B. BASE PLATES AND SHIMS TO BE ASTM A709, GRADE 36. ALL GALVANIZED AFTER FABRICATION.

ANCHORAGES SHALL BE ACCURATELY PLACED TO PROVIDE CORRECT ALIGNMENT OF RAILING. SET POSTS NORMAL TO GRADE.

ALL POST SPA. ARE TAKEN HORIZ. ALONG CENTER LINE OF RAILING AT BASE OF POST.

SHIMS SHALL BE USED UNDER BASE PLATES WHERE REQUIRED FOR ALIGNMENT.

CAULK AROUND PERIMETER OF BASE PLATES AND FILL PORTION OF SLOTTED HOLES AROUND ANCHOR BOLTS WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER.

CUT BOTTOM OF POST TO MAKE VERTICAL IN TRANSVERSE DIRECTION.

ANCHOR BOLTS, NUTS AND WASHERS SHALL BE EITHER STAINLESS STEEL OR ASTM 307. IF 307 IS USED, ANCHOR BOLTS, NUTS, AND WASHERS SHALL BE GALVANIZED.

RAILING TO BE PAINTED AND FENCE FABRIC AND TIES TO BE VINYL COATED FEDERAL COLOR NO. 27038 "BLACK".

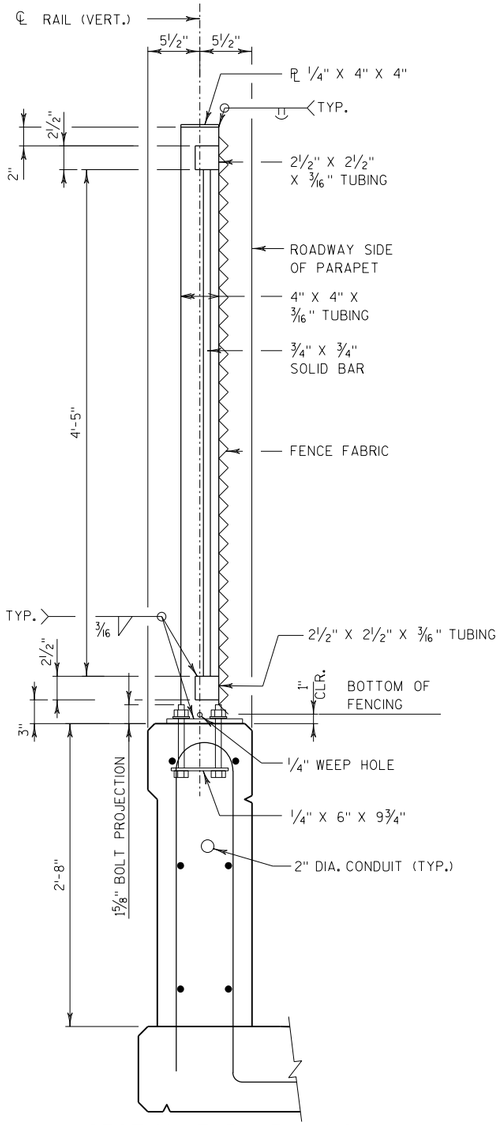
BID ITEM SHALL BE "RAILING TUBULAR SCREENING B-67-337" WHICH SHALL INCLUDE ALL ITEMS SHOWN.

RAILING SHALL BE FABRICATED IN LENGTHS THAT INCLUDE NOT MORE THAN 3 POSTS.

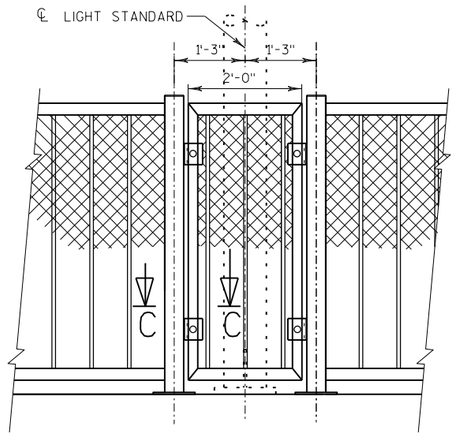
VENT HOLES SHALL BE DRILLED IN MEMBERS AS REQUIRED TO FACILITATE GALVANIZING.

ALL MATERIAL SHALL BE GALVANIZED AFTER FABRICATION. PRIOR TO GALVANIZING ALL STEEL RAILING POSTS AND STEEL TUBING SHALL BE GIVEN A #6 BLAST CLEANING BY SSPC SPECIFICATIONS. PAINT OVER GALVANIZING WITH APPROVED TIE COAT AND TOPCOAT.

THE END OF THE FABRIC SHALL BE ATTACHED TO THE POST BY MEANS OF A TENSION BAR THREADED THROUGH THE END LOOPS OF THE FABRIC AND SECURED TO THE POST WITH CLAMPS & BOLT. THE FABRIC SHALL BE STRETCHED TO REMOVE ALL SLACK.

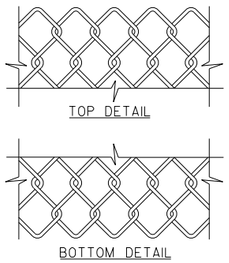


SECTION THRU RAILING



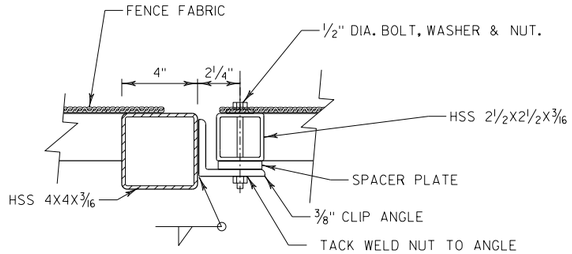
OUTSIDE ELEVATION OF RAILING

(LOOKING EAST AT LIGHT STANDARD)

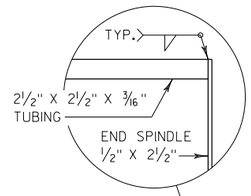


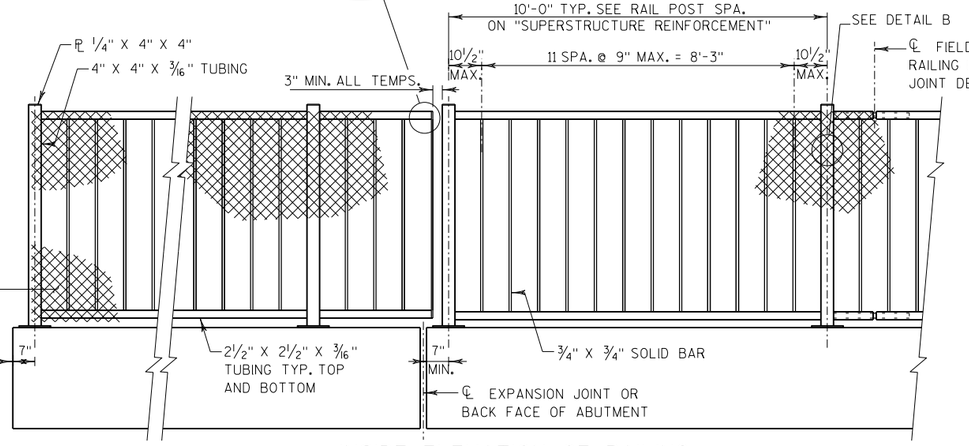
FENCE FABRIC

5'-0" VINYL COATED FENCE FABRIC WOVEN OF 9-GAUGE WIRE IN 2" DIAMOND PATTERN MESH WITH BOTH THE TOP AND BOTTOM SELVAGES KNUCKLED.

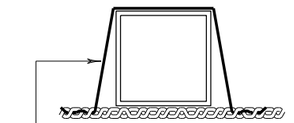


SECTION C-C

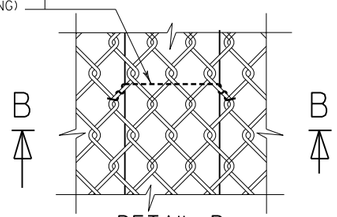




INSIDE ELEVATION OF RAILING



SECTION B-B



DETAIL B

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-67-338

DRAWN BY SKR | PLANS CK'D. MDR

ORNAMENTAL PROTECTIVE SCREENING

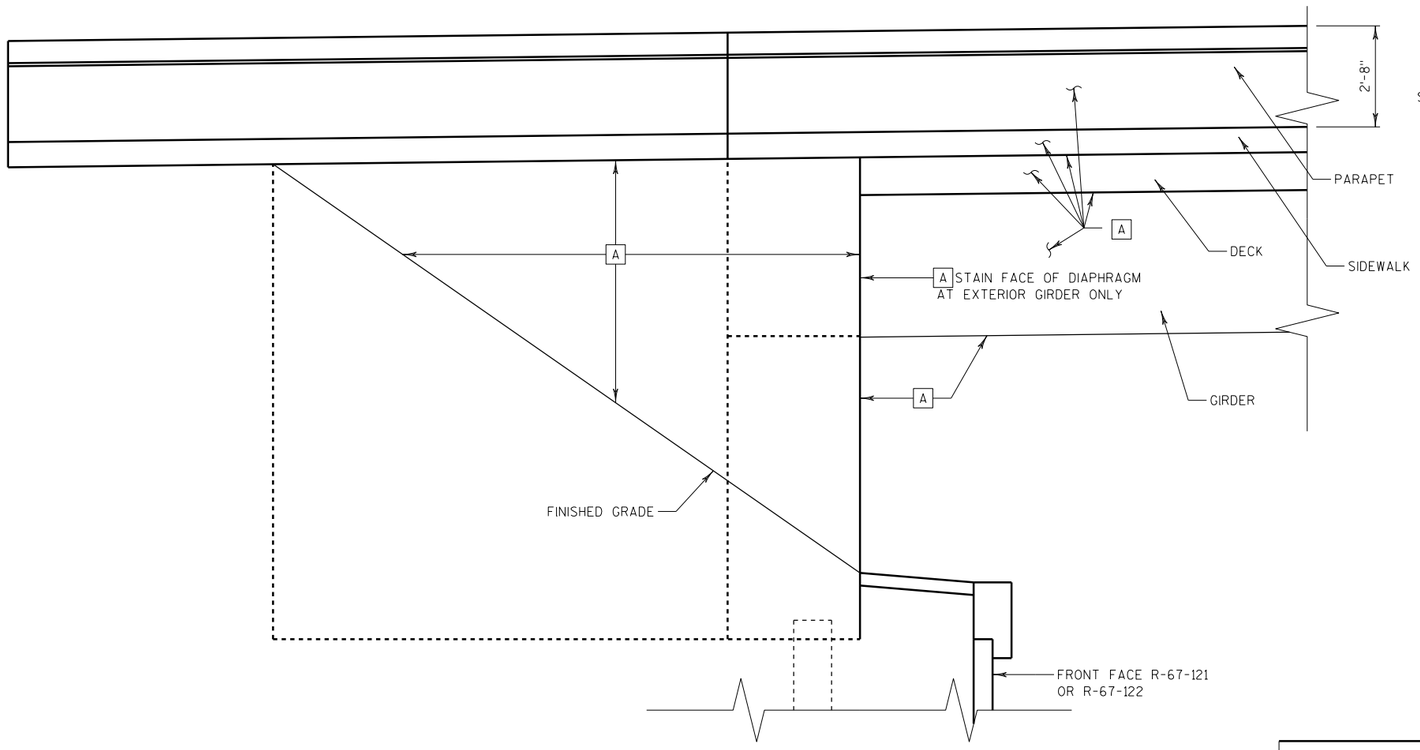
SHEET 27 OF 28
912

8

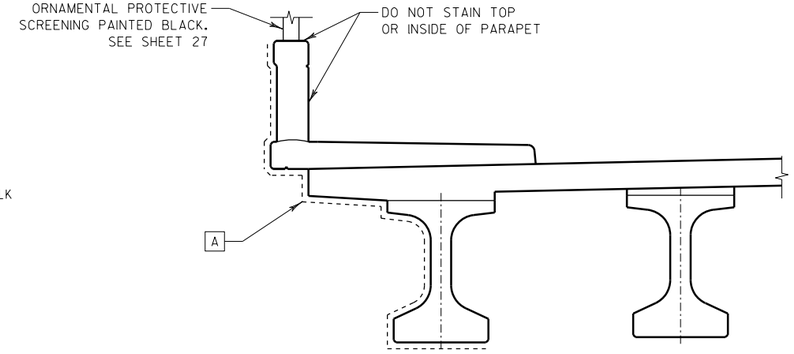
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STATE PROJECT NUMBER

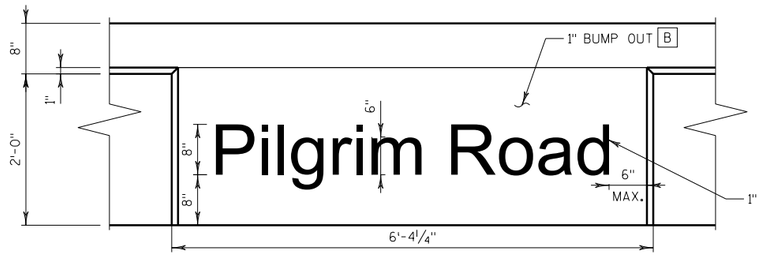
1100-37-70



OUTSIDE ELEVATION OF PARAPET & ABUTMENT



PARTIAL SECTION OF DECK



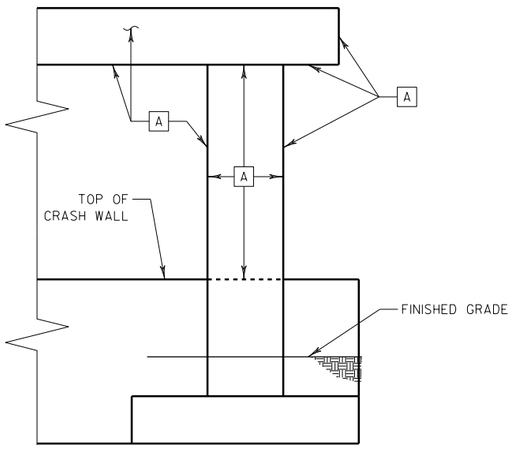
INDENTED TEXT

EXTERIOR FACE OF PARAPET ONLY

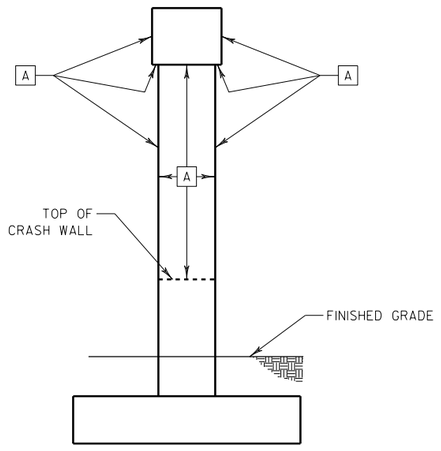
NOTES:

LETTERING SHALL BE HELVETICA, 8" UPPER CASE AND 6" LOWER CASE.

SEE SUPERSTRUCTURE REINFORCEMENT SHEET FOR LOCATION.



ELEVATION OF PIER



END OF PIER

8

CONCRETE STAINING SCHEDULE

MARK	COLOR	LOCATION	NOTES
A	BASE COLOR	PARAPETS	EXTERIOR FACE ONLY
		SIDEWALKS	FASCIA & EXPOSED UNDERSIDE
		DECK	FASCIA & EXPOSED UNDERSIDE TO EXTERIOR GIRDER FLANGE
		ABUTMENT	FRONT FACE FROM TOP OF ABUTMENT TO TOP OF CONCRETE SLOPE PAVING
		WING WALLS	TOP OF WALL TO FINISHED GRADE
		PIERS	SIDES OF GIRDER PEDESTALS, SIDES AND BOTTOM OF CAP BEAM AND COLUMNS TO TOP OF CRASH WALL
		GIRDERS	EXTERIOR FACE AND UNDERSIDE OF EXTERIOR GIRDERS
B	ACCENT COLOR #1	PARAPETS	PANEL AT ROADWAY NAME
C	ACCENT COLOR #2	PARAPETS	LETTERING AT ROADWAY NAME

THE FINAL COLOR OF THE CONCRETE FOLLOWING APPLICATION OF THE STAIN SYSTEM SHALL MATCH THE FEDERAL STANDARD COLOR SYSTEM LISTED BELOW:

BASE COLOR: 33564
ACCENT COLOR #1: 33448
ACCENT COLOR #2: 37038

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-67-338

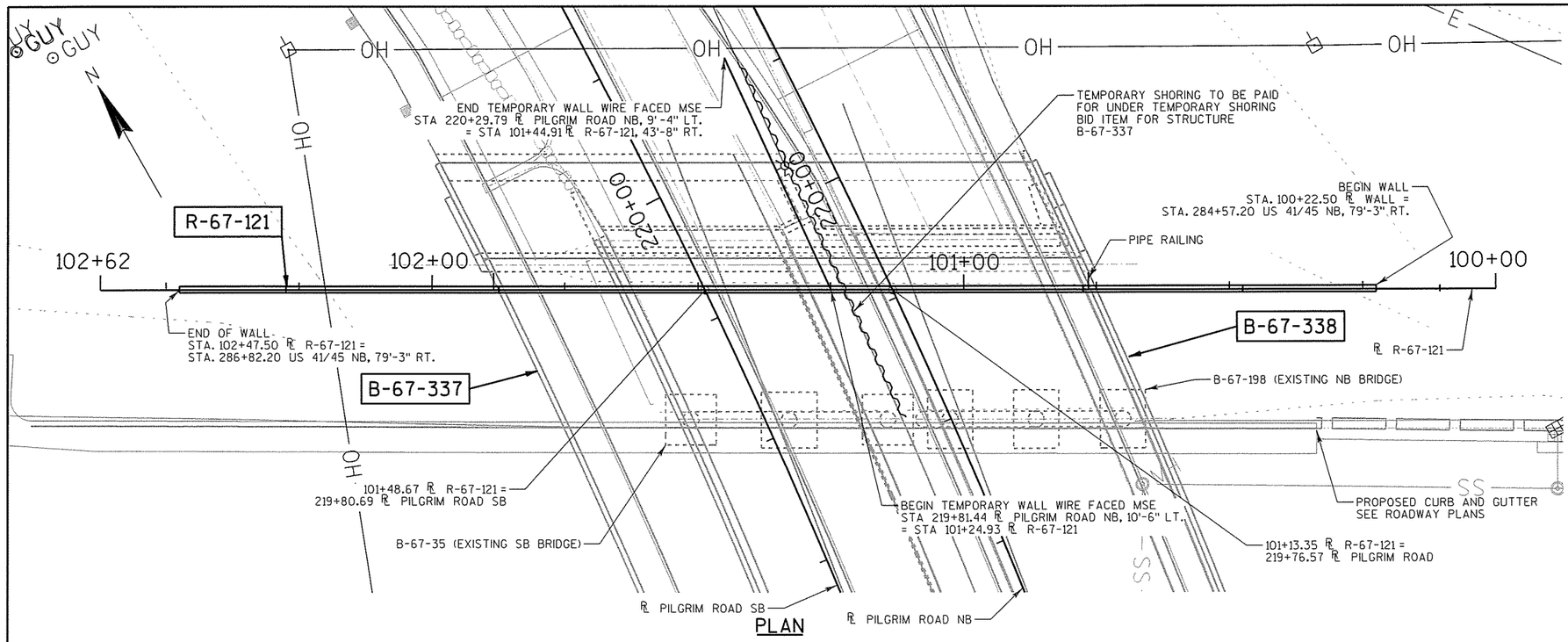
DRAWN BY SKR | PLANS CK'D. MDR

AESTHETIC DETAILS

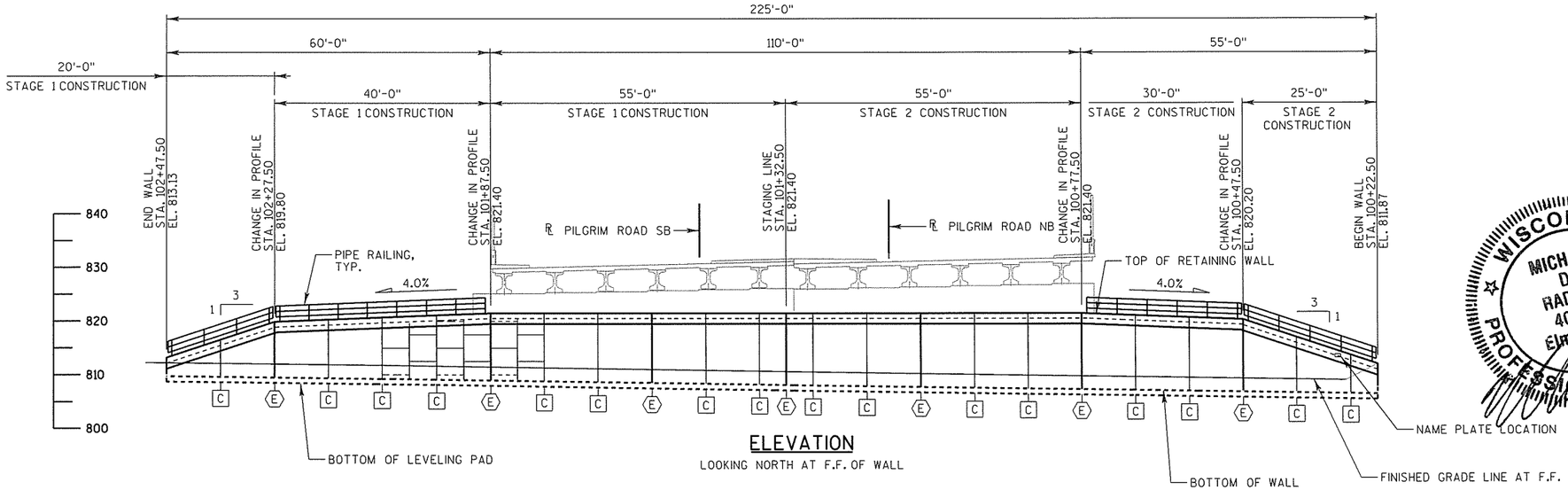
SHEET 28 OF 28
913

STATE PROJECT NUMBER

1100-37-70



PLAN



ELEVATION

LOOKING NORTH AT F.F. OF WALL

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

ALL DIMENSIONS ARE IN FEET AND INCHES UNLESS OTHERWISE NOTED. ALL STATIONS AND ALL ELEVATIONS ARE IN FEET. ELEVATIONS ARE REFERENCED TO THE 1988 NAVD DATUM.

ALL STATIONS AND DIMENSIONS ALONG THE ℄ FOR R-67-121 ARE ALONG THE FRONT FACE OF WALL UNLESS NOTED OTHERWISE.

BAR STEEL REINFORCEMENT SHALL HAVE 2" CLEAR COVER UNLESS SHOWN OTHERWISE.

JOINT FILLER SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M153 TYPE 1, 2, OR 3, OR AASHTO M213.

SEAL ALL EXPOSED HORIZONTAL AND VERTICAL SURFACES OF 1/2" OR 3/4" JOINT FILLER WITH NON-STAINING GRAY NON-ASPHALTIC JOINT SEALER (1" DEEP & HOLD 1/8" BELOW SURFACE OF CONCRETE.)

THE CONTRACTOR SHALL PROVIDE COMPLETE DESIGN, PLANS, SPECIFICATIONS, AND SHOP DRAWINGS FOR THE RETAINING WALL, IN ACCORDANCE WITH THE SPECIAL PROVISIONS. THE RETAINING WALL MANUFACTURER SHALL PROVIDE TECHNICAL ASSISTANCE TO THE CONTRACTOR DURING CONSTRUCTION. THE COST OF FURNISHING THESE ITEMS IS IN INCLUDED IN THE BID ITEM "WALL CONCRETE PANEL MECHANICALLY STABILIZED EARTH LRFD/OMP".

BEVEL ALL EXPOSED EDGES OF CONCRETE 3/4" UNLESS NOTED OTHERWISE.

ALL BARS IN CAST-IN-PLACE CONCRETE ARE TO BE EPOXY COATED.

PLANS, ELEVATIONS, AND DETAILS SHOWN ON THESE DRAWINGS ARE INTENDED TO INDICATE WALL LOCATIONS, LENGTHS, HEIGHTS, AND DETAILS COMMON TO THE WALL SYSTEM SELECTED. THE CONTRACTOR SHALL VERIFY THAT THE WALL SYSTEM SELECTED WILL CONFORM TO THE REQUIRED ALIGNMENTS AND DETAILS.

THE MAXIMUM VALUE OF THE ANGLE OF INTERNAL FRICTION OF THE WALL BACKFILL MATERIAL IN THE REINFORCED ZONE SHALL BE ASSUMED TO BE 30° WITHOUT CERTIFIED TEST VALUES.

DESIGN RETAINING WALL TO PROVIDE FOR FINISHED GRADE SLOPED BEHIND THE WALL AS SHOWN IN THESE PLANS AND THE ROADWAY CROSS SECTIONS.

COORDINATE THE CONSTRUCTION OF R-67-121 WITH THE NORTH ABUTMENTS OF STRUCTURES B-67-337 AND B-67-338. DESIGN THE MSE WALL IN FRONT OF THE ABUTMENT BODY TO RESIST THE FORCE FROM ALL HORIZONTAL EARTH PRESSURES ACTING ON THE BACK OF THE ABUTMENT BELOW THE BEAM SEATS.

THE COST OF FURNISHING AND PLACING THE LEVELING PAD CONCRETE AND REINFORCEMENT UNDER THE MSE WALL PANELS IS INCLUDED IN THE BID ITEM "WALL CONCRETE PANEL MECHANICALLY STABILIZED EARTH LRFD/OMP".

MINIMUM LENGTH OF SOIL REINFORCEMENT MUST BE 70% THE TOTAL WALL HEIGHT (EXPOSED HEIGHT PLUS EMBEDMENT DEPTH) OR 8.0 FEET, WHICHEVER IS GREATER. SOIL REINFORCEMENT MUST EXTEND A MINIMUM OF 3.0 FEET BEYOND THE FAILURE PLANE FOR INTERNAL STABILITY AS DEFINED BY AASHTO SPECIFICATIONS.

THE COST OF FURNISHING AND PLACING BACKFILL WITHIN THE REINFORCED SOIL ZONE IS TO BE INCLUDED IN THE BID ITEM "WALL CONCRETE PANEL MECHANICALLY STABALIZED EARTH LRFD/OMP".

DESIGN DATA

LIVE LOAD
- LIVE LOAD SURCHARGE (ROADWAY) ____ 240 PSF

MATERIAL PROPERTIES
- CONCRETE MASONRY RETAINING WALL ____ f'c = 3,500 PSI
- PRECAST CONCRETE WALL PANELS ____ f'c = 5,000 PSI
- BAR STEEL REINFORCEMENT ____ fy = 60,000 PSI

FOUNDATION DATA
- ALLOWABLE SOIL BEARING CAPACITIES
  - MSE WALL ____ SEE TABLE

LIST OF DRAWINGS

1. GENERAL PLAN & ELEVATION
2. WALL TYPICAL SECTIONS
3. WALL DETAILS & QUANTITIES
4. WALL DETAILS
5. PIPE RAILING DETAILS
6. SUBSURFACE EXPLORATION

LEGEND

(E) EXPANSION JOINT LOCATION IN COPING

[C] CONTRACTION JOINT LOCATION IN COPING

BENCHMARKS

NO.	STATION	DESCRIPTION	ELEVATION
BM1	217+57.99 NB PILGRIM OFF: 32' RT.	BM ALUM CAP. WISDOT SW CORNER BRIDGE OVER U.SH. 45 IN CONCRETE WALK, SOUTH OF JOINT.	827.32
BM20	211+51.23 SB PILGRIM OFF: 58.90' LT.	BM CHISELED BOX, SW QUAD. ROOSEVELT & PILGRIM. NE CORNER OF CBX PAD.	803.91

BRIDGE OFFICE CONTACT:
WILLIAM DREHER
(608) 266-8489

CONSULTANT CONTACT:
MICHAEL D. RADTKE
(414) 347-1607

WISCONSIN
MICHAEL D. RADTKE 40967 Elm Grove WI
PROFESSIONAL ENGINEER
NOV 3, 2014

NO.	DATE	REVISION	BY

emcs inc
1300 W. Canal Street, Suite 200
Milwaukee, WI 53233
414.347.1607 Fax 414.347.1347

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED William C. Dreher KAR 01/11/15
CHIEF STRUCTURES DESIGN ENGINEER DATE

STRUCTURE R-67-121

N. ABUT. OF PILGRIM ROAD OVER USH 41/45

COUNTY	VILLAGE
WAUKESHA	MENOMONEE FALLS

DESIGN SPEC.
AASHTO LRFD DESIGN SPEC.

DESIGNED BY	DESIGN CK'D.	DRAWN BY	PLANS CK'D.
MDR	AJC	MDR	AJC

GENERAL PLAN & ELEVATION

SHEET 1 OF 6
914

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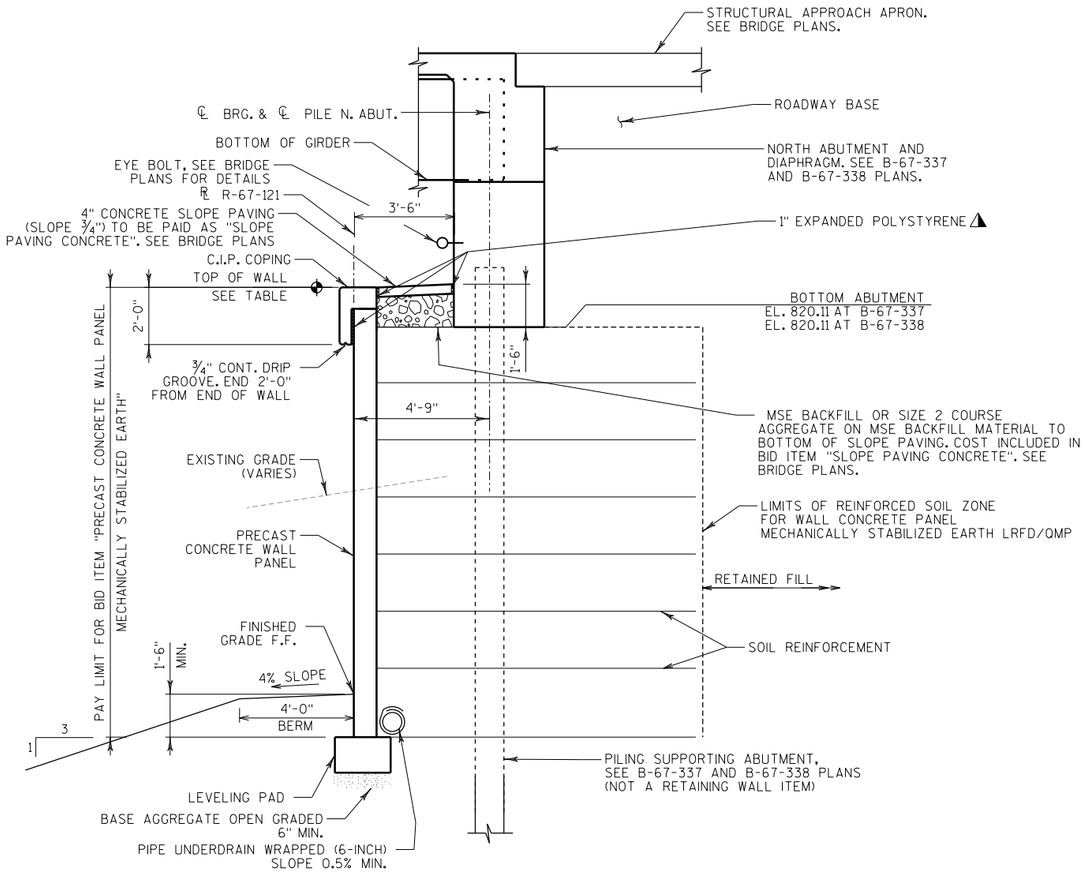
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PLOT DATE : 11/3/2014

PLOT BY : mdr

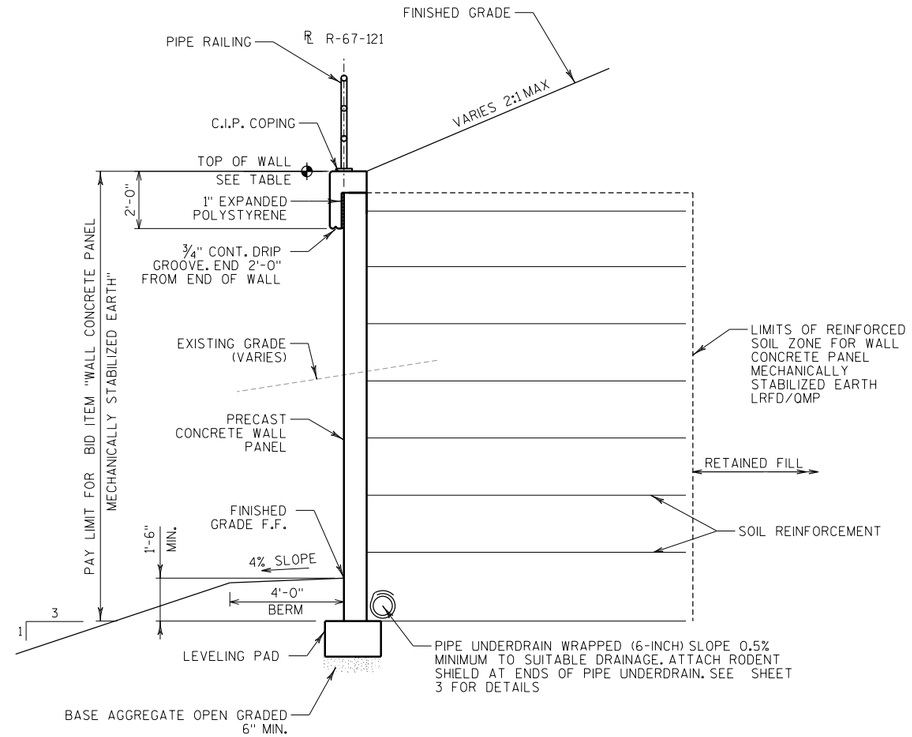
STATE PROJECT NUMBER

1100-37-70



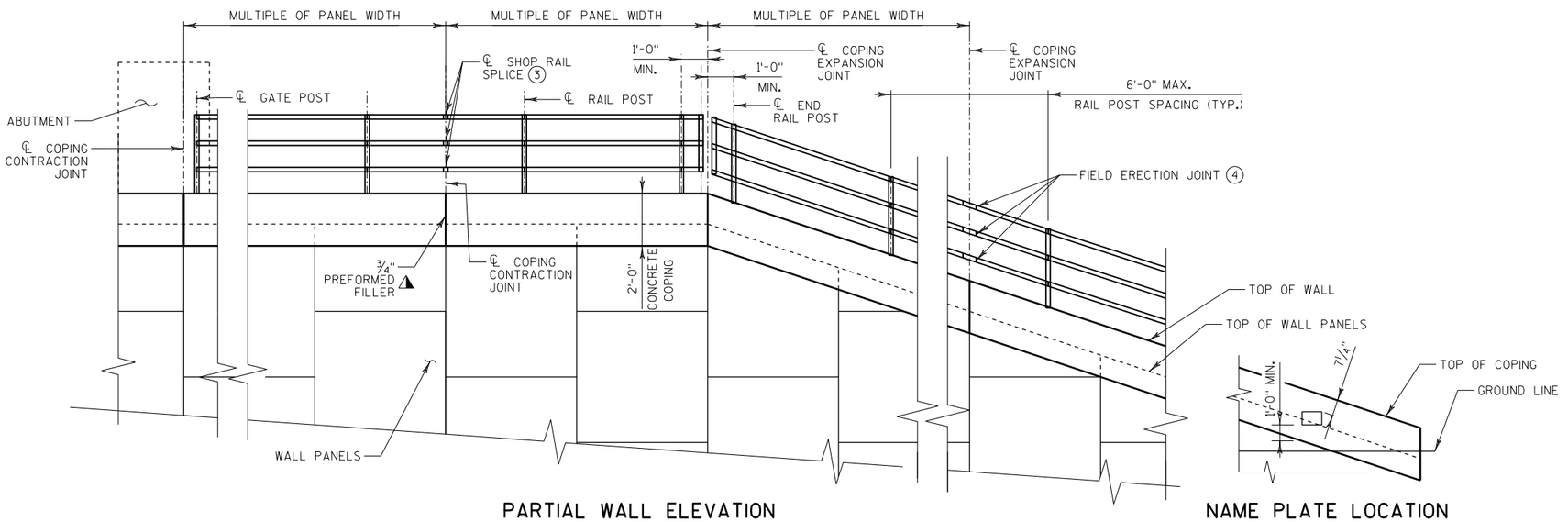
SECTION AT ABUTMENT

LOOKING WEST



SECTION AT WINGS

LOOKING WEST



PARTIAL WALL ELEVATION

LOOKING AT F.F. WALL

NAME PLATE LOCATION

LOOKING NORTH AT F.F. WALL

NOTES

1. THE PLAN QUANTITY FOR THE BID ITEMS "WALL CONCRETE PANEL MECHANICALLY STABILIZED EARTH LRFD/QMP" IS BASED ON A WALL HEIGHT MEASURED AS SHOWN IN SECTION. THE BOTTOM OF THE FOOTING IS ASSUMED TO BE A CONSTANT 1'-6" BELOW FINISHED GRADE. COPING CONCRETE AND COPING REINFORCEMENT IS TO BE INCLUDED IN THE BID ITEM "WALL CONCRETE PANEL MECHANICALLY STABILIZED EARTH LRFD/QMP"
2. ALL COPING JOINTS SHALL BE LOCATED AS SHOWN ON WALL ELEVATIONS AND MUST COINCIDE WITH PANEL JOINT ON FRONT FACE.

◭ SEAL ALL EXPOSED HORIZONTAL AND VERTICAL SURFACES OF FILLER AND EXPANDED POLYSTYRENE WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER (1" DEEP & HOLD ⅛" BELOW SURFACE OF CONCRETE).

(3),(4) SEE PIPE RAILING DETAILS FOR MORE INFORMATION.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-67-121

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WALL TYPICAL SECTIONS

SHEET 2 OF 6
915

8

8

STATE PROJECT NUMBER
1100-37-70

TOTAL ESTIMATED QUANTITIES

ITEM NO.	BID ITEMS	UNIT	TOTAL
513.2000	RAILING PIPE R-67-121	LS	1
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	3
517.1010.S	CONCRETE STAINING R-67-121	SF	2360
612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	255
SPV.0165.4710	WALL CONCRETE PANEL MECHANICALLY STABILIZED EARTH LRFD/QMP	SF	2490
SPV.0165.4740	TEMPORARY WALL WIRE FACE MECHANICIAL STABILIZED EARTH LRFD/QMP PILOT	SF	640
	NON-BID ITEMS		
	PREFORMED FILLER	SIZE	1", 3/4"
	NON-STAINING, NON-BITUMINOUS JOINT SEALER		

GEOMETRY TABLE

WALL STATION	USH 41 NB STATION	OFFSET TO F.F.	LOCATION	TOP OF WALL	FINISHED GRADE
100+22.50	284+57.21	79.25	BEGIN WALL	811.87	811.00
100+47.50	284+82.21	79.25	BREAK	820.20	809.24
100+77.50	285+12.21	79.25	BREAK	821.40	809.74
101+32.50	285+67.21	79.25	STAGE JOINT	821.40	810.58
101+87.50	286+22.21	79.25	BREAK	821.40	811.43
102+27.50	286+62.21	79.25	BREAK	819.80	811.95
102+47.50	286+82.21	79.25	END WALL	813.13	812.30

WALL EXTERNAL & OVERALL STABILITY EVALUATION

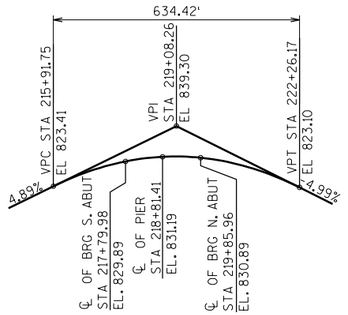
DIMENSIONS	EVALUATED LOCATIONS	
	AT ABUTMENT	AT WINGWALL
WALL HEIGHT (FEET)	14.58	14.58
EXPOSED WALL HEIGHT (FEET)	13.08	13.08
MINIMUM LENGTH OF REINFORCEMENT (FEET) ☆	10.21	12.45
WALL STATION	100+78	100+72
BORING USED	2/2A	2/2A
CAPACITY TO DEMAND RATIO (CDR)		
SLIDING (CDR>1.0)	1.14	1.01
ECCENTRICITY (CDR>1.0)	1.87	2.26
BEARING RESISTANCE (CDR>1.0)	1.85	1.59
GLOBAL STABILITY ANALYSIS		
FACTOR OF SAFETY	1.55	
CAPACITY TO DEMAND (CDR>1.0)	1.16	

ALL SAFETY FACTORS ARE CALCULATED FOR THE WALL HEIGHTS AND REINFORCEMENT LENGTHS SHOWN IN THE TABLE. SEE GEOTECH REPORT FOR FURTHER INFORMATION.

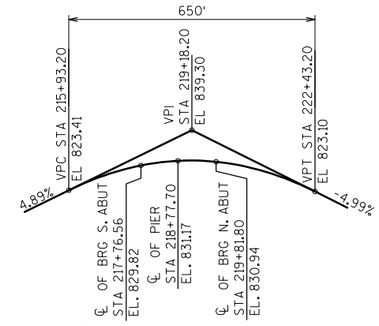
☆ FINAL DESIGN FOR INTERNAL STABILITY AND EXTERNAL SLIDING AND STABILITY IS THE RESPONSIBILITY OF THE CONTRACTOR'S WALL DESIGNER.

SOIL PARAMETERS

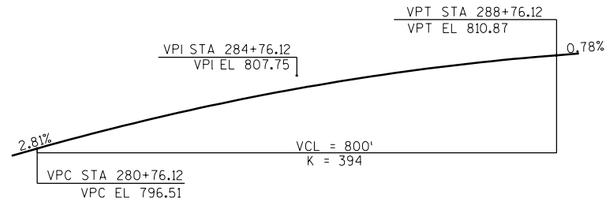
STRATUM LOCATIONS & SOIL DESCRIPTIONS	TOTAL UNIT WEIGHT (PCF)	FRICTION ANGLE (DEGREES)	COHESION (PCF)
WALL FILL	120	30	0
EL. 827.5 TO 800.5 EXISTING FILL	135	28.5	0
EL. 800.5 - EL. 788.5 (SILTY CLAY)	130	26	0
EL. 788.5 - EL. 788 (CLAYEY SILT)	130	30	0
EL. 788 - EL. 756.5 (SILTY SAND)	132	36	0
EL. 776.5 WATER LEVEL	-	-	-



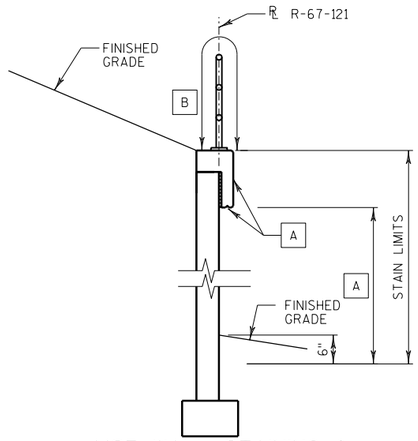
PROFILE GRADE LINE - PILGRIM RD. SB



PROFILE GRADE LINE - PILGRIM RD. NB



BEST FIT PROFILE GRADE LINE - USH 41 NB



MSE WALL STAINING & PIPE RAIL PAINTING DIAGRAM

MARK	COLOR	LOCATION	NOTES
A	BASE COLOR FED COLOR #33564 TAN	WALLS	EXPOSED FACES TO 6" BELOW GRADE
		COPING	FACE AND UNDERSIZED
B	FED COLOR #27038 BLACK	PIPE RAILING	TWO-COAT FOR SPECIFIC USE WITH GALVANIZED STEEL

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE R-67-121

DRAWN BY SKR | PLANS CK'D. MDR

WALL DETAILS & QUANTITIES

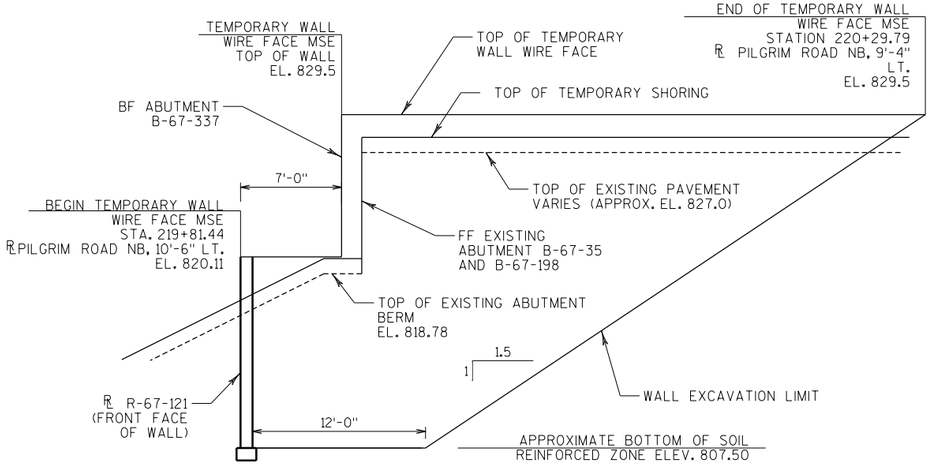
SHEET 3 OF 6
916

8

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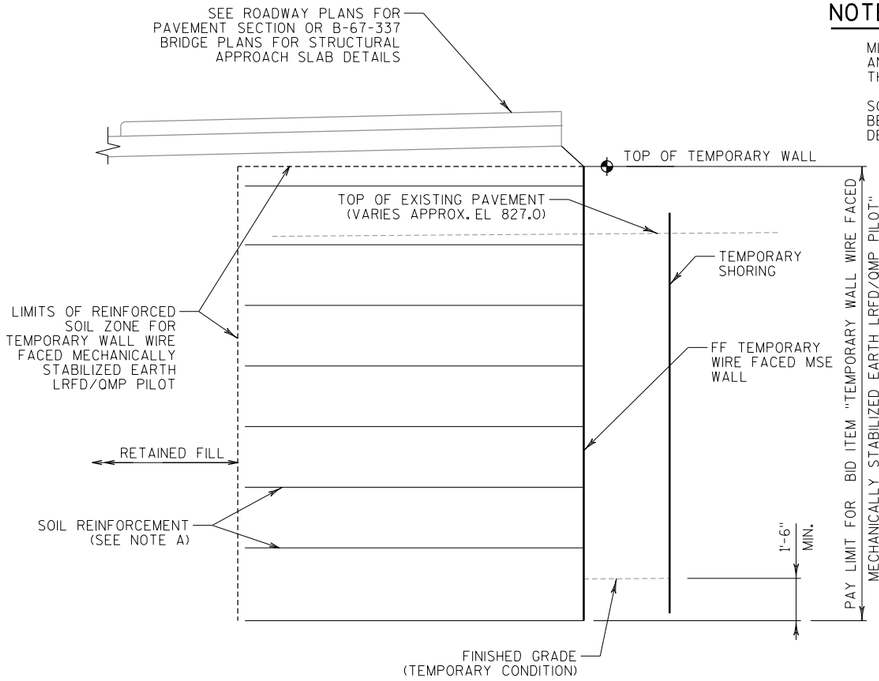
STATE PROJECT NUMBER

1100-37-70



ELEVATION TEMPORARY WALL WIRE FACED MSE

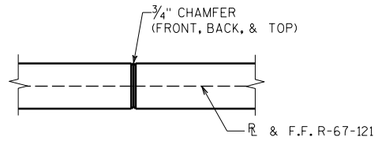
(LOOKING WEST)



NOTE A

MINIMUM LENGTH OF REINFORCEMENT FOR INTERNAL STABILITY AND EXTERNAL SLIDING AND STABILITY IS THE RESPONSIBILITY OF THE CONTRACTOR'S WALL DESIGNER

SOIL REINFORCEMENT MUST EXTEND A MINIMUM OF 3.0 FEET BEYOND THE FAILURE PLANE FOR INTERNAL STABILITY AS DEFINED BY AASHTO SPECIFICATIONS

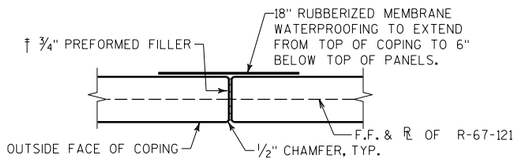


COPING CONTRACTION JOINT

DO NOT RUN BAR STEEL THRU JOINT

MAXIMUM SPACING OF JOINTS SHALL BE 12'-0" AND MUST LINE UP WITH THE WALL PANEL JOINTS.

ALL CONTRACTION JOINTS TO EXTEND THE FULL DEPTH OF COPING.



COPING EXPANSION JOINT

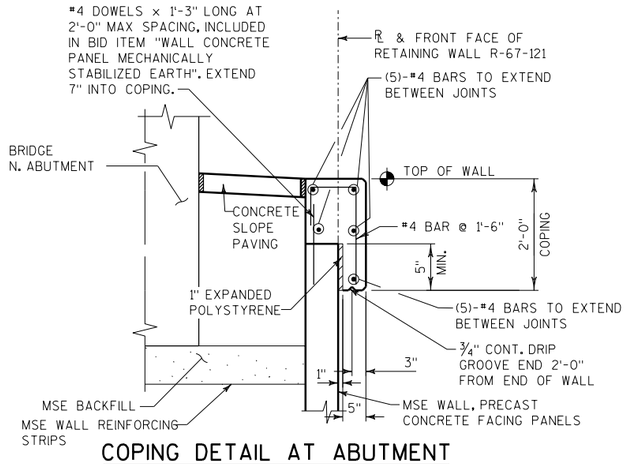
DO NOT RUN BAR STEEL THRU JOINT

MAXIMUM SPACING OF JOINTS SHALL BE 50'-0" AND MUST LINE UP WITH THE WALL PANEL JOINTS.

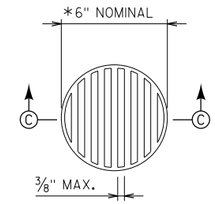
† SEAL ALL EXPOSED HORIZ. AND VERT. SURFACES OF PREFORMED FILLER WITH A NON-STAINING, COLOR TO MATCH WALL PANEL OR COPING STAINING, NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONC.)

WIRE FACED WALL- TYPICAL SECTION

LOOKING NORTH



COPING DETAIL AT ABUTMENT





SECTION C-C

RODENT SHIELD

NOTES:

*DIMENSIONS ARE APPROXIMATE. THE GRATE IS SIZED TO FIT INTO A PIPE COUPLING. ORIENT SHIELD SO SLOTS ARE VERTICAL.

THE RODENT SCREEN, PIPE COUPLING AND SCREWS SHALL BE INCIDENTAL TO THE BID ITEM "PIPE UNDERDRAIN WRAPPED 6-INCH"

THE RODENT SHIELD SHALL BE A PVC GRATE SIMILAR TO THIS DETAIL. THE GRATE IS COMMERCIALLY AVAILABLE AS A FLOOR STRAINER. A PIPE COUPLING IS REQUIRED FOR THE ATTACHMENT OF THIS SHIELD TO THE EXPOSED END OF THE PIPE UNDERDRAIN. THE SHIELD SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO. 10 X 1-INCH STAINLESS STEEL SHEET METAL SCREWS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE R-67-121

DRAWN BY SKR | PLANS CK'D. MDR

WALL DETAILS

SHEET 4 OF 6

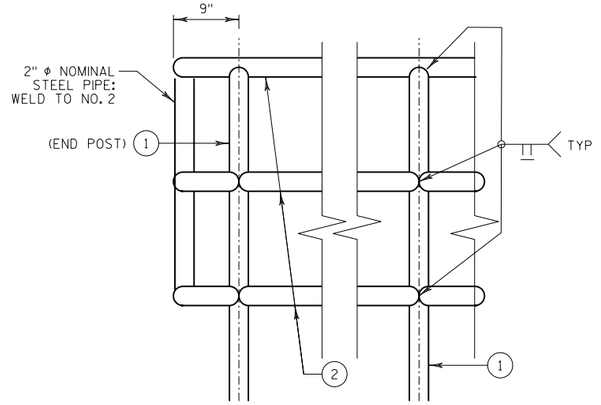
917

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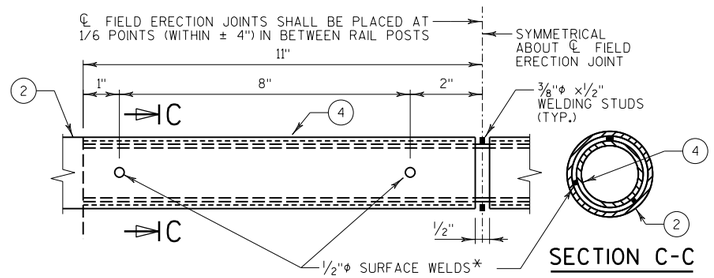
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STATE PROJECT NUMBER

1100-37-70



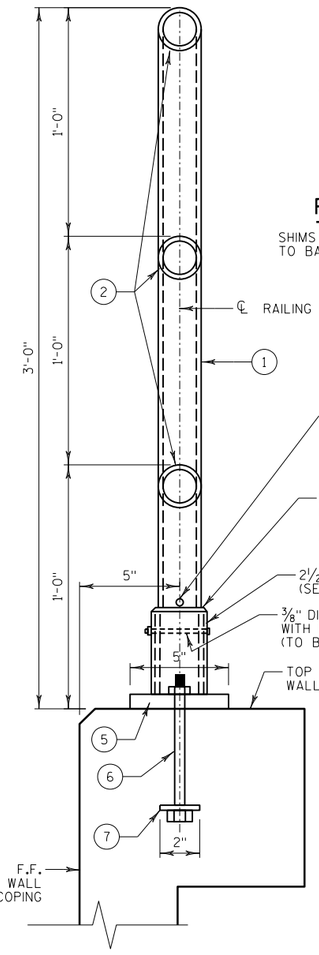
PART ELEVATION RAILING



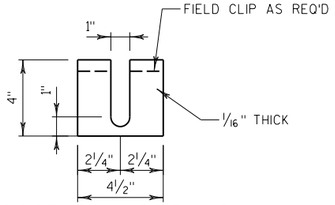
FIELD ERECTION JOINT DETAIL

*MIN. 5/8" FLAT SURFACE DIA. PUNCHINGS OR STUDS MAY BE USED AS AN ALTERNATE.

SECTION C-C

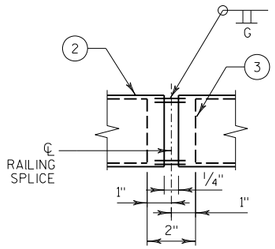


SECTION THRU RAILING



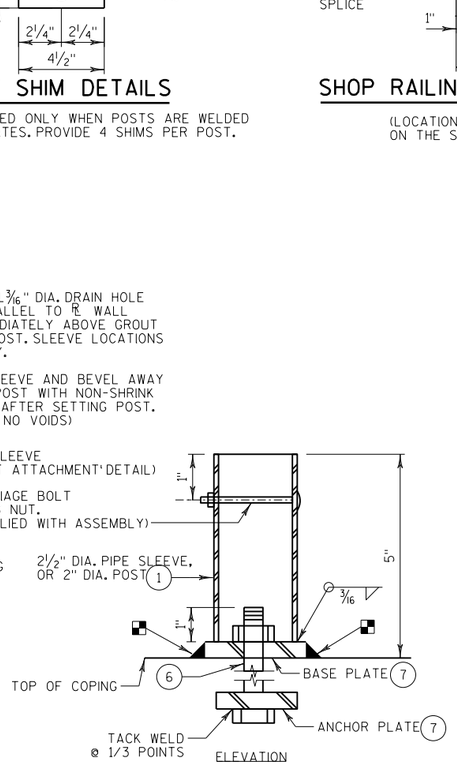
POST SHIM DETAILS

SHIMS REQUIRED ONLY WHEN POSTS ARE WELDED TO BASE PLATES. PROVIDE 4 SHIMS PER POST.



SHOP RAILING SPLICE DETAIL

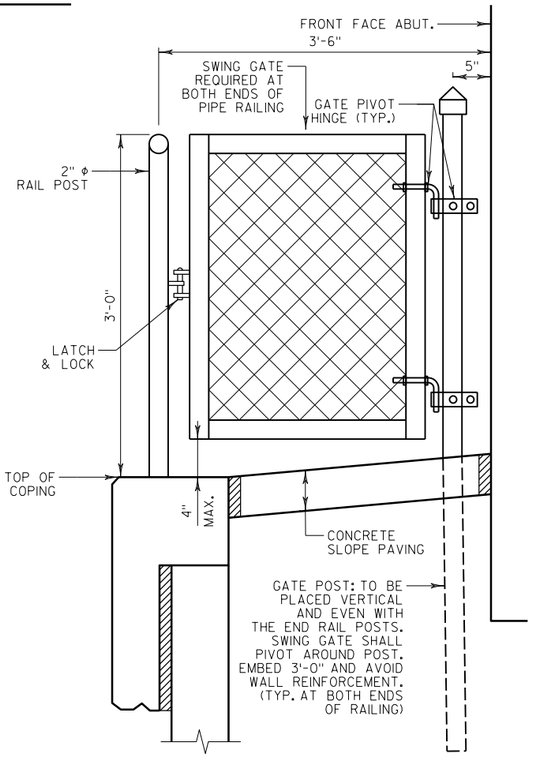
(LOCATION MUST BE SHOWN ON THE SHOP DRAWINGS)



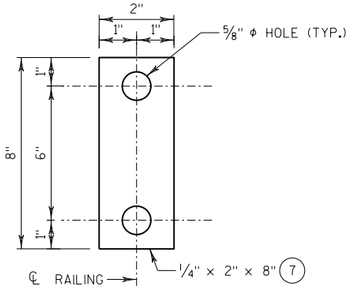
POST ATTACHMENT

UNIT SHALL BE GALVANIZED AFTER FABRICATION

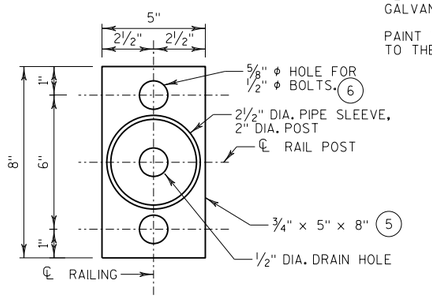
NOTE:
IN LIEU OF USING THE 2 1/2"ϕ SLEEVE, THE 2"ϕ RAIL POST MAY BE WELDED TO THE BASE PLATE.



SECTION THRU WALL AT GATES



ANCHOR PLATE



BASE PLATE

LEGEND

(1) 2" ϕ NOMINAL STEEL PIPE FOR POSTS: CUT BOTTOM OF POST TO MATCH TOP OF CONCRETE. POSTS ARE TO BE SET VERTICAL.

(2) 2" ϕ NOMINAL STEEL PIPE FOR RAILS: WELD TO NO. 1.

(3) 1 1/2" ϕ PIPE SLEEVE FOR NO. 2. PROVIDE "SLIDING FIT" WITH A MINIMUM OUT TO OUT DIMENSION OF 2 1/16"

(4) 1 1/2" ϕ PIPE SLEEVE x 1'-10" LONG FOR NO. 2. PROVIDE 1/2" ϕ SURFACE WELDS ON ALL SIDES AS SHOWN. GRIND WELDS TO FIT FREE INTO I.D. OF NO. 2. PROVIDE 3/8" ϕ x 1/2" WELDING STUDS ON TOP AND BOTTOM SURFACES AT CENTERLINE.

(5) PLATE 3/4" x 5" x 8". WITH 5/8"ϕ HOLE FOR ANCHOR BOLTS NO. 6 WELD TO NO. 1 OR PIPE SLEEVE AS SHOWN.

(6) 1/2"ϕ x 6 7/8" LONG HEX BOLTS (GALVANIZED) WITH NUT AND WASHER. 2 REQ'D PER POST. THREAD 3" AND PLACE NORMAL TO PLATE NO. 5 CHAMFER TOP OF BOLTS BEFORE THREADING. TYPE S, 1/2" CONCRETE MASONRY ANCHORS MAY BE SUBSTITUTED FOR 1/2" BOLTS. ANCHOR PLATE NOT REQUIRED WHEN TYPE S ANCHORS ARE USED. SEE NOTE ☆

☆ 1/2" DIA. CONCRETE MASONRY ANCHOR, TYPE "S", 6" MIN. EMBEDMENT (EPOXY ANCHORED) INTO CONCRETE AND MINIMUM PULLOUT CAPACITY OF 10 KIPS. ANCHOR , WASHER, AND NUT SHALL BE GALVANIZED.

(7) 1/4" x 2" x 8" FLAT BAR, WITH 5/8" ϕ HOLES FOR ANCHOR BOLTS NO. 6.

GENERAL NOTES

BID ITEM SHALL BE "RAILING PIPE R-67-121", WHICH INCLUDES ALL ITEMS SHOWN, GALVANIZING AND PAINTING.

RAILING SHALL BE FABRICATED IN LENGTHS THAT INCLUDE 3 OR 4 POSTS.

FIELD ERECTION JOINTS MUST BE PLACED IN BETWEEN RAIL POSTS WHERE THERE IS ALSO A CONCRETE COPING EXPANSION JOINT IN BETWEEN RAIL POSTS.

POST BASE PLATES SHALL BE FLAT WITH ALL SURFACES SMOOTH AND FREE FROM WARP AND ALL EDGES SMOOTH, STRAIGHT AND VERTICAL. ALL PLATE CUTS SHALL BE MACHINE OR MACHINE FLAME CUT.

ALL MATERIAL EXCEPT ANCHORAGE DETAIL (NO. 7) SHALL BE GALVANIZED AFTER FABRICATION. PRIOR TO GALVANIZING, ALL STEEL RAILING POSTS AND STEEL TUBING SHALL BE GIVEN A NO. 6 BLAST CLEANING BY S.S.P.C. SPECIFICATIONS. AFTER GALVANIZING PAINT RAILING ASSEMBLIES WITH A TWO COAT SYSTEM SPECIFICALLY INTENDED FOR PAINTING OF GALVANIZED SURFACES. THE FINISH COLOR SHALL BE FEDERAL COLOR NO. 27038 BLACK.

DRILL DRAIN HOLES PRIOR TO GALVANIZING.

ALL MATERIALS USED IN FABRICATION SHALL BE MADE FROM MATERIALS CONFORMING TO A.S.T.M. DESIGNATION A709 GRADE 36 UNLESS NOTED OTHERWISE.

STEEL POST SHIMS MAY BE USED UNDER POSTS WHERE REQ'D FOR ALIGNMENT.

ALL RAILS, POSTS AND SLEEVES ARE STANDARD WEIGHT PIPE, SCHEDULE 40.

PLACE ALL NUTS ON OUTSIDE OF POSTS.

ANCHORAGES SHALL BE ACCURATELY PLACED TO PROVIDE CORRECT ALIGNMENT OF RAILING SET TO NORMAL GRADE.

■ CAULK AROUND PERIMETER OF BASE PLATES AND FILL PORTION OF SLOTTED HOLES AROUND ANCHOR BOLTS IN POST SHIMS AND BASE PLATES WITH NON-STAINING, BLACK, NON-BITUMINOUS JOINT SEALER.

VENT HOLES SHALL BE DRILLED IN MEMBERS AS REQUIRED TO FACILITATE GALVANIZING AND DRAINAGE.

PAINT TOUCH-UP TO BE DONE AT COMPLETION OF STEEL RAILING INSTALLATION TO THE SATISFACTION OF THE ENGINEER AT NO EXTRA COST.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-67-121

DRAWN BY MDR | PLANS CK'D. AJC

PIPE RAILING DETAILS

SHEET 5 OF 6
918

8

8

FILE NAME : P:\44xx\4442\Structures\R-67-121\Plan\080305_pr_NA_wall.dgn

PLOT DATE : 11/3/2014

PLOT BY : mdr

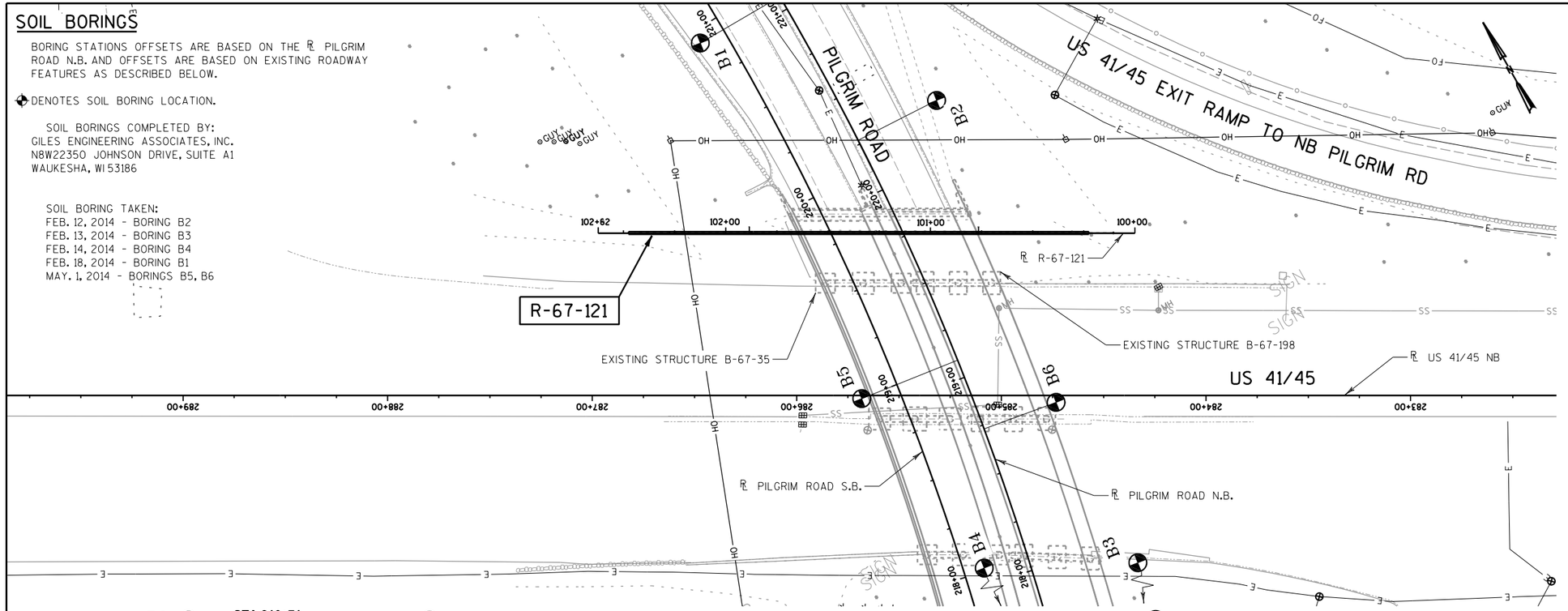
SOIL BORINGS

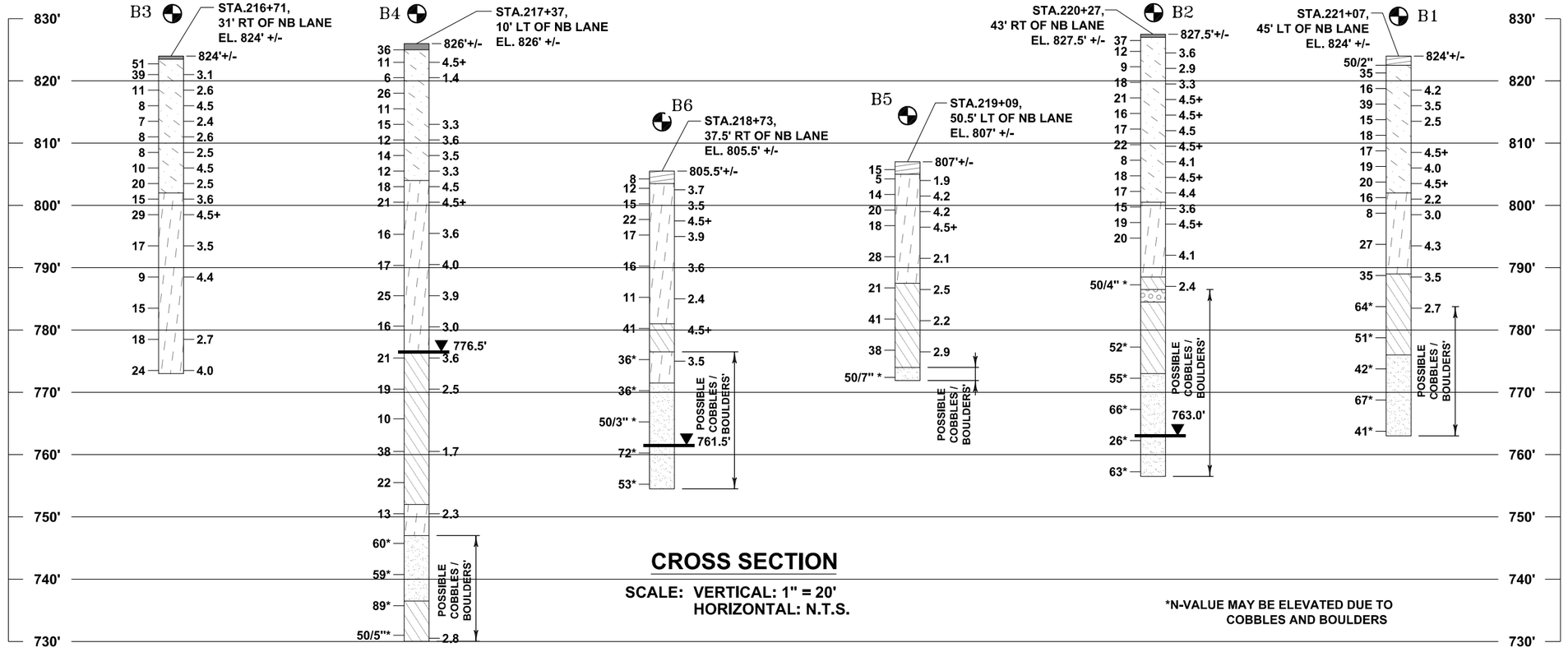
BORING STATIONS OFFSETS ARE BASED ON THE ℄ PILGRIM ROAD N.B. AND OFFSETS ARE BASED ON EXISTING ROADWAY FEATURES AS DESCRIBED BELOW.

⊕ DENOTES SOIL BORING LOCATION.

SOIL BORINGS COMPLETED BY:
GILES ENGINEERING ASSOCIATES, INC.
N8W22350 JOHNSON DRIVE, SUITE A1
WAUKESHA, WI 53186

SOIL BORING TAKEN:
FEB. 12, 2014 - BORING B2
FEB. 13, 2014 - BORING B3
FEB. 14, 2014 - BORING B4
FEB. 18, 2014 - BORING B1
MAY. 1, 2014 - BORINGS B5, B6





CROSS SECTION

SCALE: VERTICAL: 1" = 20'
HORIZONTAL: N.T.S.

*N-VALUE MAY BE ELEVATED DUE TO COBBLES AND BOULDERS

STATE PROJECT NUMBER

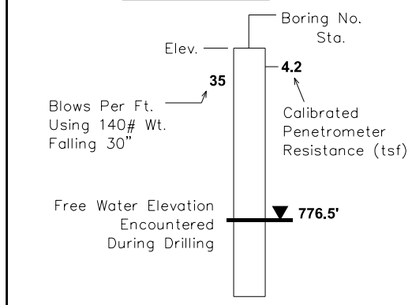
1100-37-70

MATERIAL SYMBOLS

- PAVEMENT
- TOP SOIL
- FILL / POSSIBLE FILL (SILTY CLAY / CLAYEY SILT)
- SILTY CLAY
- CLAYEY SILT / SILT
- SILTY SAND / SANDY SILT
- BOULDERS

NOTE: SOIL CONTACT LINES ARE INFERRED

LEGEND OF BORING



Unless otherwise specified, the blows per foot at the locations indicated are based on driving a 2" O.D.x 1. 4" I.D. split spoon sampler with a 140# hammer having a free fall of 30". The blow count is taken in undisturbed soil immediately below a cased or open hole eliminating side friction on the drive pipe.

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

TO OBTAIN RELATIVE DATA CONCERNING THE CHARACTER OF MATERIAL IN AND UPON WHICH THE FOUNDATION MIGHT BE BUILT, BORINGS AND/OR SOUNDINGS WERE MADE AT POINTS APPROXIMATELY AS INDICATED ON THIS DRAWING. THE DATA PRESENTED HEREIN REPRESENTS THE FINDINGS OF THE SUBSURFACE EXPLORATIONS MADE. HOWEVER, BECAUSE THE DEPTHS INVESTIGATED ARE LIMITED AND THE AREA OF THE BORINGS AND/OR SOUNDINGS IS VERY SMALL IN RELATION TO THE ENTIRE AREA, THE WISCONSIN DEPARTMENT OF TRANSPORTATION DOES NOT WARRANT CONDITIONS BELOW THE DEPTHS INVESTIGATED OR THAT THE CLASSIFICATION OF MATERIAL ENCOUNTERED IN THESE INVESTIGATIONS IS NECESSARILY TYPICAL OF THE ENTIRE SITE.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-67-121

DRAWN BY MDR | PLANS CK'D. AJC

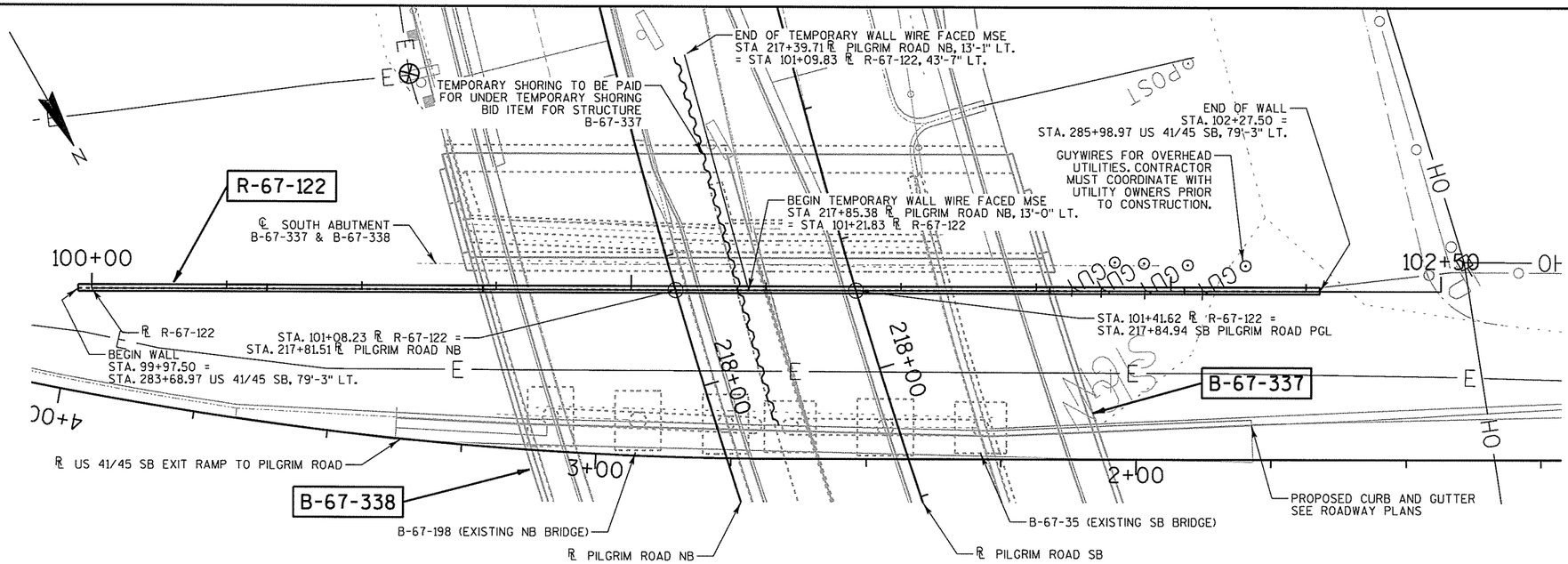
SUBSURFACE EXPLORATION

SHEET 6 OF 6
919

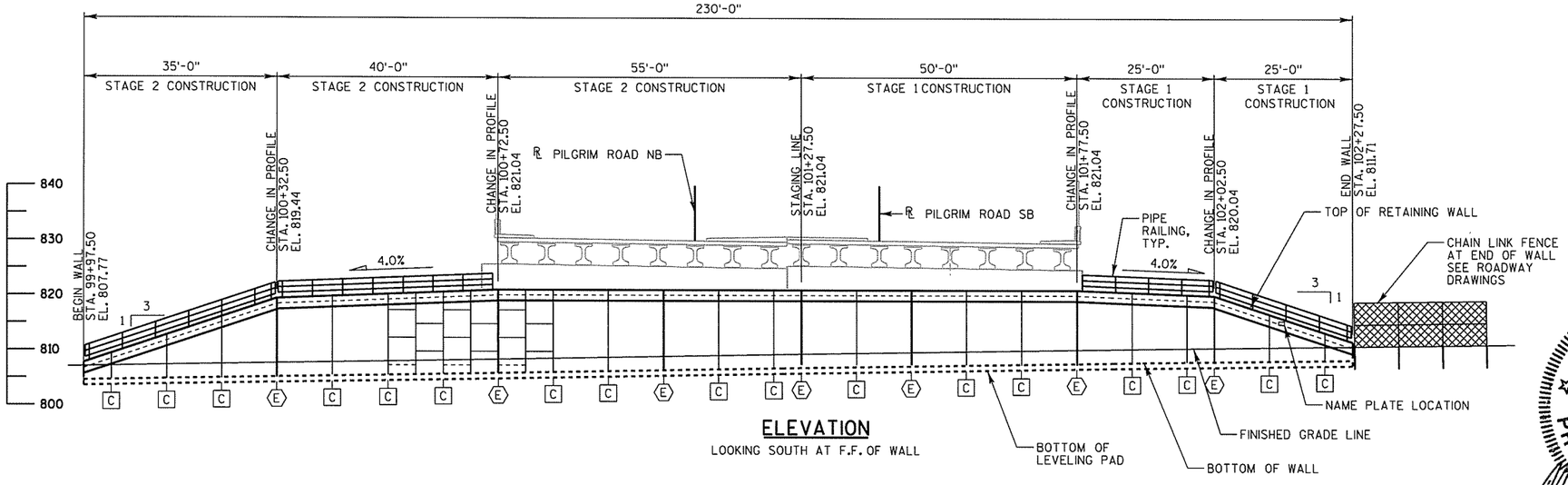
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STATE PROJECT NUMBER
1100-37-70



PLAN



ELEVATION

LOOKING SOUTH AT F.F. OF WALL

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

ALL DIMENSIONS ARE IN FEET AND INCHES UNLESS OTHERWISE NOTED. ALL STATIONS AND ALL ELEVATIONS ARE IN FEET. ELEVATIONS ARE REFERENCED TO THE 1988 NAVD DATUM.

ALL STATIONS AND DIMENSIONS ALONG THE ℄ FOR R-67-122 ARE ALONG THE FRONT FACE OF WALL UNLESS NOTED OTHERWISE.

BAR STEEL REINFORCEMENT SHALL HAVE 2" CLEAR COVER UNLESS SHOWN OTHERWISE.

JOINT FILLER SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M153 TYPE 1, 2, OR 3, OR AASHTO M213.

SEAL ALL EXPOSED HORIZONTAL AND VERTICAL SURFACES OF ½" OR ¾" JOINT FILLER WITH NON-STAINING GRAY NON-ASPHALTIC JOINT SEALER (1" DEEP & HOLD ⅛" BELOW SURFACE OF CONCRETE.)

THE CONTRACTOR SHALL PROVIDE COMPLETE DESIGN, PLANS, DETAILS, AND SHOP DRAWINGS FOR THE RETAINING WALL, IN ACCORDANCE WITH THE SPECIAL PROVISIONS. THE RETAINING WALL MANUFACTURER SHALL PROVIDE TECHNICAL ASSISTANCE TO THE CONTRACTOR DURING CONSTRUCTION. THE COST OF FURNISHING THESE ITEMS IS IN INCLUDED IN THE BID ITEM "WALL CONCRETE PANEL MECHANICALLY STABILIZED EARTH LRFD/GMP".

BEVEL ALL EXPOSED EDGES OF CONCRETE ¾" UNLESS NOTED OTHERWISE.

ALL BARS IN CAST-IN-PLACE CONCRETE ARE TO BE EPOXY COATED.

PLANS, ELEVATIONS, AND DETAILS SHOWN ON THESE DRAWINGS ARE INTENDED TO INDICATE WALL LOCATIONS, LENGTHS, HEIGHTS, AND DETAILS COMMON TO THE WALL SYSTEM SELECTED. THE CONTRACTOR SHALL VERIFY THAT THE WALL SYSTEM SELECTED WILL CONFORM TO THE REQUIRED ALIGNMENTS AND DETAILS.

THE MAXIMUM VALUE OF THE ANGLE OF INTERNAL FRICTION OF THE WALL BACKFILL MATERIAL IN THE REINFORCED ZONE SHALL BE ASSUMED TO BE 30DEG WITHOUT CERTIFIED TEST VALUES.

DESIGN RETAINING WALL TO PROVIDE FOR FINISHED GRADE SLOPED BEHIND THE WALL AS SHOWN IN THESE PLANS AND THE ROADWAY CROSS SECTIONS.

COORDINATE THE CONSTRUCTION OF R-67-122 WITH THE SOUTH ABUTMENTS OF STRUCTURES B-67-337 AND B-67-338. DESIGN THE MSE WALL IN FRONT OF THE ABUTMENT BODY TO RESIST THE FORCE FROM ALL HORIZONTAL EARTH PRESSURES ACTING ON THE BACK OF THE ABUTMENT BELOW THE BEAM SEATS.

THE COST OF FURNISHING AND PLACING THE LEVELING PAD CONCRETE AND REINFORCEMENT UNDER THE MSE WALL PANELS IS INCLUDED IN THE BID ITEM "WALL CONCRETE PANEL MECHANICALLY STABILIZED EARTH LRFD/GMP".

MINIMUM LENGTH OF SOIL REINFORCEMENT MUST BE 70% THE TOTAL WALL HEIGHT (EXPOSED HEIGHT PLUS EMBEDMENT DEPTH) OR 8.0 FEET, WHICHEVER IS GREATER. SOIL REINFORCEMENT MUST EXTEND A MINIMUM OF 3.0 FEET BEYOND THE FAILURE PLANE FOR INTERNAL STABILITY AS DEFINED BY AASHTO SPECIFICATIONS.

THE COST OF FURNISHING AND PLACING BACKFILL WITHIN THE REINFORCED SOIL ZONE IS TO BE INCLUDED IN THE BID ITEM "WALL CONCRETE PANEL MECHANICALLY STABALIZED EARTH LRFD/GMP".

DESIGN DATA

LIVE LOAD
LIVE LOAD SURCHARGE (ROADWAY) _____ 240 PSF

MATERIAL PROPERTIES
CONCRETE MASONRY RETAINING WALL ____ f'c = 3,500 PSI
PRECAST CONCRETE WALL PANELS _____ f'c = 5,000 PSI
BAR STEEL REINFORCEMENT _____ fy = 60,000 PSI

FOUNDATION DATA
ALLOWABLE SOIL BEARING CAPACITIES
MSE WALL _____ SEE TABLE

LIST OF DRAWINGS

1. GENERAL PLAN & ELEVATION
2. WALL TYPICAL SECTIONS
3. WALL DETAILS & QUANTITIES
4. WALL DETAILS
5. PIPE RAILING DETAILS
6. SUBSURFACE EXPLORATION

LEGEND

(E) EXPANSION JOINT LOCATION IN COPING

[C] CONTRACTION JOINT LOCATION IN COPING

BENCHMARKS

NO.	STATION	DESCRIPTION	ELEVATION
BM1	217+57.99 NB PILGRIM OFF: 32' RT.	BM ALUM CAP. WISDOT SW CORNER BRIDGE OVER U.SH. 45 IN CONCRETE WALK, SOUTH OF JOINT.	827.32
BM20	211+51.23 SB PILGRIM OFF: 58.90' LT.	BM CHISELED BOX, SW QUAD. ROOSEVELT & PILGRIM. NE CORNER OF CBX PAD.	803.91

WISCONSIN
MICHAEL D. RADTKE 40967 Elm Grove WI
PROFESSIONAL ENGINEER
Nov 3, 2014

BRIDGE OFFICE CONTACT:
WILLIAM DREHER
(608) 266-8489

CONSULTANT CONTACT:
MICHAEL D. RADTKE
(414) 347-1607

NO.	DATE	REVISION	BY

emcs inc
1300 W. Canal Street, Suite 200
Milwaukee, WI 53233
414.347.1607 Fax 414.347.1347

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
ACCEPTED William C. Dreher KAR 01/11/15
CHIEF STRUCTURES DESIGN ENGINEER DATE

STRUCTURE R-67-122

S. ABUT. OF PILGRIM ROAD OVER USH 41/45

COUNTY	VILLAGE
WAUKESHA	MENOMONEE FALLS

DESIGN SPEC.
AASHTO LRFD DESIGN SPEC.

DESIGNED BY	DESIGN CK'D.	DRAWN BY	PLANS CK'D.
MDR	AJC	MDR	AJC

GENERAL PLAN & ELEVATION

SHEET 1 OF 6
920

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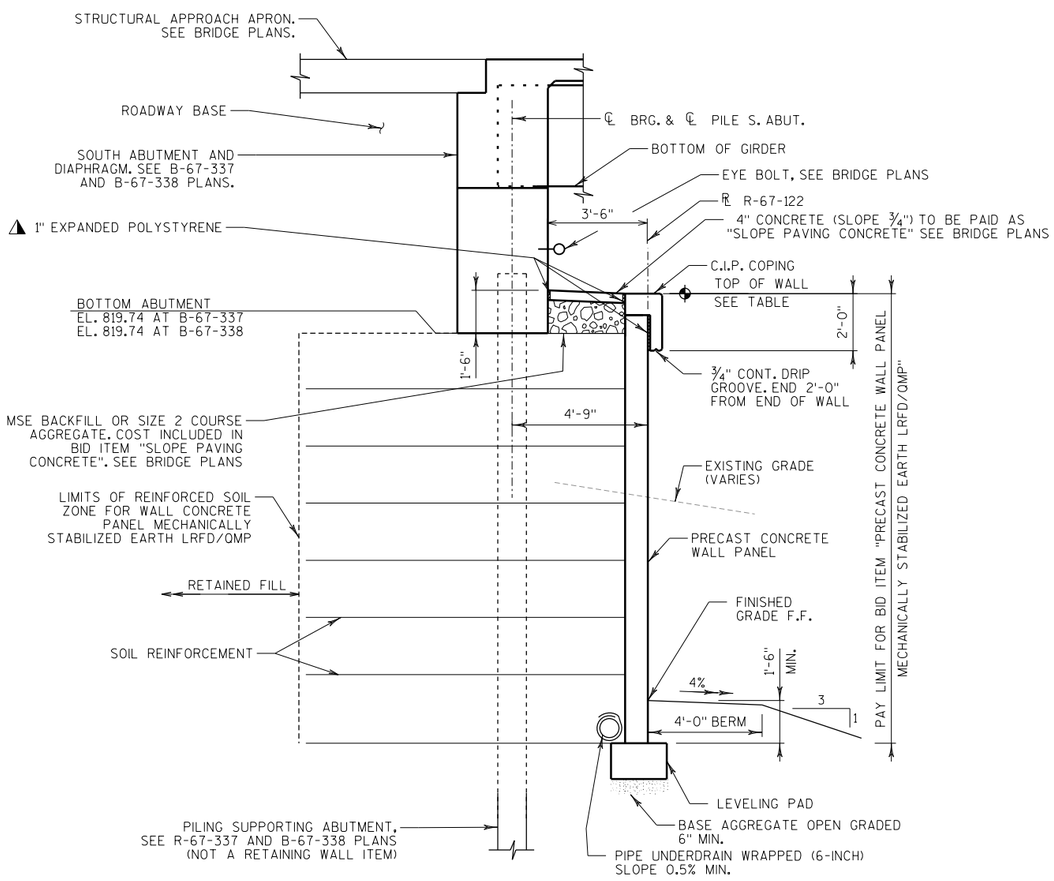
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PLOT DATE : 11/3/2014

PLOT BY : mdr

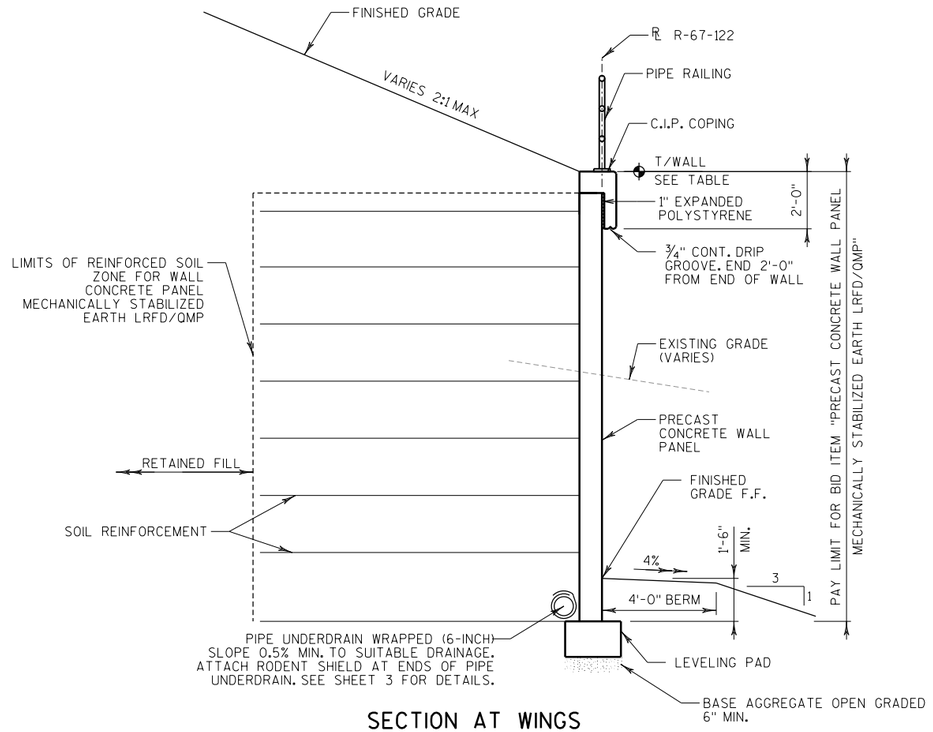
STATE PROJECT NUMBER

1100-37-70



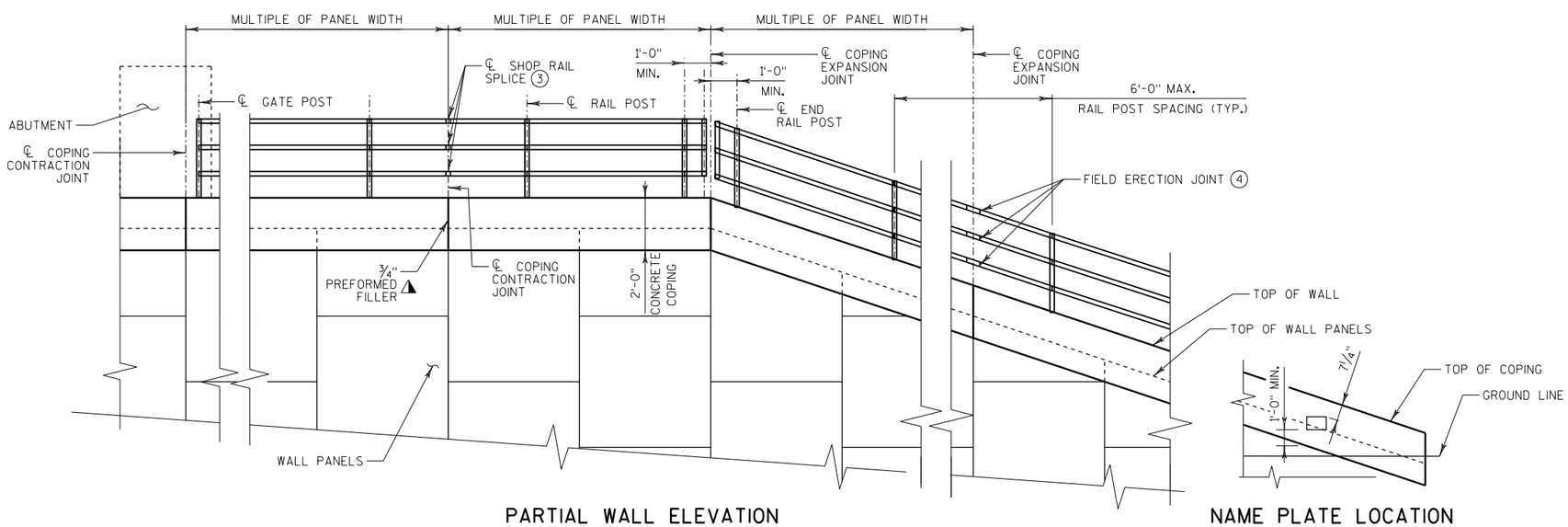
SECTION AT ABUTMENT

LOOKING WEST



SECTION AT WINGS

LOOKING WEST



PARTIAL WALL ELEVATION

LOOKING AT F.F. WALL

NAME PLATE LOCATION

LOOKING NORTH AT F.F. WALL

NOTES

1. THE PLAN QUANTITY FOR THE BID ITEMS "WALL CONCRETE PANEL MECHANICALLY STABILIZED EARTH LRFD/QMP" IS BASED ON A WALL HEIGHT MEASURED AS SHOWN IN SECTION. THE BOTTOM OF THE FOOTING IS ASSUMED TO BE A CONSTANT 1'-6" BELOW FINISHED GRADE. COPING CONCRETE AND COPING REINFORCEMENT IS TO BE INCLUDED IN THE BID ITEM "WALL CONCRETE PANEL MECHANICALLY STABILIZED EARTH LRFD/QMP"
2. ALL COPING JOINTS SHALL BE LOCATED AS SHOWN ON WALL ELEVATIONS AND MUST COINCIDE WITH PANEL JOINT ON FRONT FACE.

⚠ SEAL ALL EXPOSED HORIZONTAL AND VERTICAL SURFACES OF FILLER AND EXPANDED POLYSTYRENE WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER (1" DEEP & HOLD ⅛" BELOW SURFACE OF CONCRETE).

(3),(4) SEE PIPE RAILING DETAILS FOR MORE INFORMATION.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-67-122

DRAWN BY MDR | PLANS CK'D. AJC

WALL TYPICAL SECTIONS

SHEET 2 OF 6
921

8

8

STATE PROJECT NUMBER

1100-37-70

TOTAL ESTIMATED QUANTITIES

ITEM NO.	BID ITEMS	UNIT	TOTAL
513.2000	RAILING PIPE R-67-122	LS	1
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	3
517.1010.S	CONCRETE STAINING R-67-122	SF	2530
612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	260
SPV.0165.4710	WALL CONCRETE PANEL MECHANICALLY STABILIZED EARTH LRFD/QMP	SF	2670
SPV.0165.4740	TEMPORARY WALL WIRE FACE MECHANICIAL STABILIZED EARTH LRFD/QMP PILO	SF	610
	NON-BID ITEMS		
	PREFORMED FILLER	SIZE	3/4", 1"
	NON-STAINING, NON BITUMINOUS JOINT SEALER		

GEOMETRY TABLE

WALL STATION	USH 41 SB STATION	OFFSET	LOCATION	TOP OF WALL	FINISHED GRADE
099+97.50	283+68.97	79.25	BEGIN WALL	807.77	807.00
100+32.50	284+03.97	79.25	BREAK	819.44	807.70
100+72.50	284+43.97	79.25	BREAK	821.04	808.30
101+27.50	284+98.97	79.25	STAGE JOINT	821.04	809.40
101+77.50	285+48.97	79.25	BREAK	821.04	810.20
102+02.50	285+73.97	79.25	BREAK	820.04	810.60
102+27.50	285+98.97	79.25	END WALL	811.71	811.29

WALL EXTERNAL & OVERALL STABILITY EVALUATION

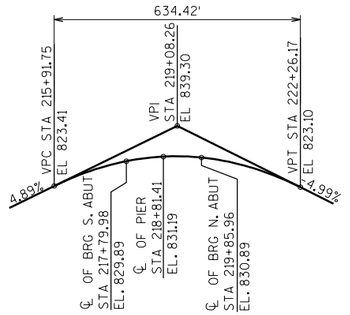
DIMENSIONS	EVALUATED LOCATIONS	
	AT ABUTMENT	AT WINGWALL
WALL HEIGHT (FEET)	15.21	15.21
EXPOSED WALL HEIGHT (FEET)	13.71	13.71
MINIMUM LENGTH OF REINFORCEMENT (FEET) ☆	10.65	12.95
WALL STATION	100+72	100+78
BORING USED	2/2A	2/2A
CAPACITY TO DEMAND RATIO (CDR)		
SLIDING (CDR>1.0)	1.15	1.01
ECCENTRICITY (CDR>1.0)	1.90	2.26
BEARING RESISTANCE (CDR>1.0)	1.79	1.59
GLOBAL STABILITY ANALYSIS		
FACTOR OF SAFETY	1.44	
CAPACITY TO DEMAND (CDR>1.0)	1.08	

ALL SAFETY FACTORS ARE CALCULATED FOR THE WALL HEIGHTS AND REINFORCEMENT LENGTHS SHOWN IN THE TABLE. SEE GEOTECH REPORT FOR FURTHER INFORMATION.

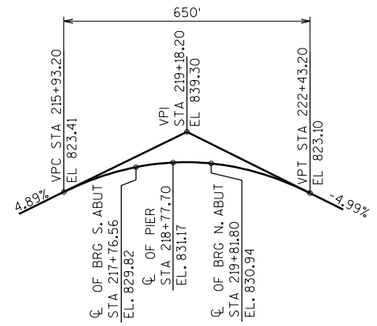
☆ FINAL DESING FOR INTERNAL STABILITY AND EXTERNAL SLIDING AND STABILITY IS THE RESPONSIBILITY OF THE CONTRACTOR'S WALL DESIGNER

SOIL PARAMETERS

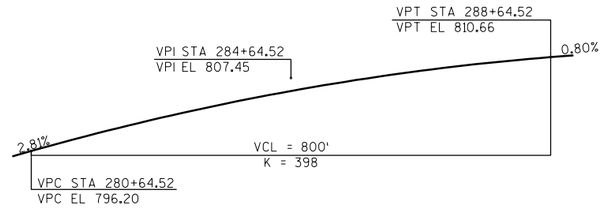
STRATUM LOCATIONS & SOIL DESCRIPTIONS	TOTAL UNIT WEIGHT (PCF)	FRICTION ANGLE (DEGREES)	COHESION (PCF)
EL. 826 TO 804 (EXISTING FILL)	135	28.5	0
EL. 804± TO 776.5± (SILTY CLAY)	130	26	0
EL.776.5 - EL. 747 (CLAYEY SILT)	125	22	0
EL. 747 - EL. 731 (SILTY SAND/SILT)	132	36	0
WALL FILL	120	30	0
EL. 763 WATER TABLE	-	-	-



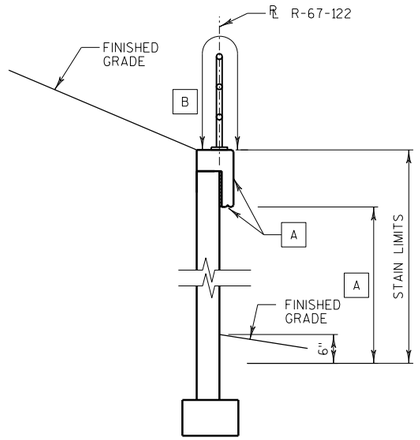
PROFILE GRADE LINE - PILGRIM RD. SB



PROFILE GRADE LINE - PILGRIM RD. NB



BEST FIT PROFILE GRADE LINE - USH 41 SB



MSE WALL STAINING & PIPE RAIL PAINTING DIAGRAM

MARK	COLOR	LOCATION	NOTES
A	BASE COLOR FED COLOR #33564	WALLS	EXPOSED FACES TO 6" BELOW GRADE
		COPING	FACE AND UNDERSIZED
B	FED COLOR #27038 BLACK	PIPE RAILING	TWO-COAT FOR SPECIFIC USE WITH GALVANIZED STEEL

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-67-122

DRAWN BY MDR | PLANS CK'D. AJC

WALL DETAILS & QUANTITIES

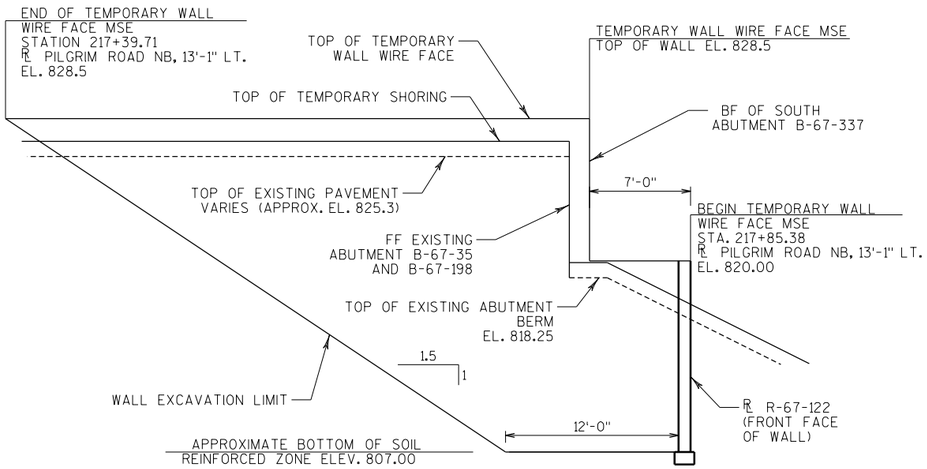
SHEET 3 OF 6
922

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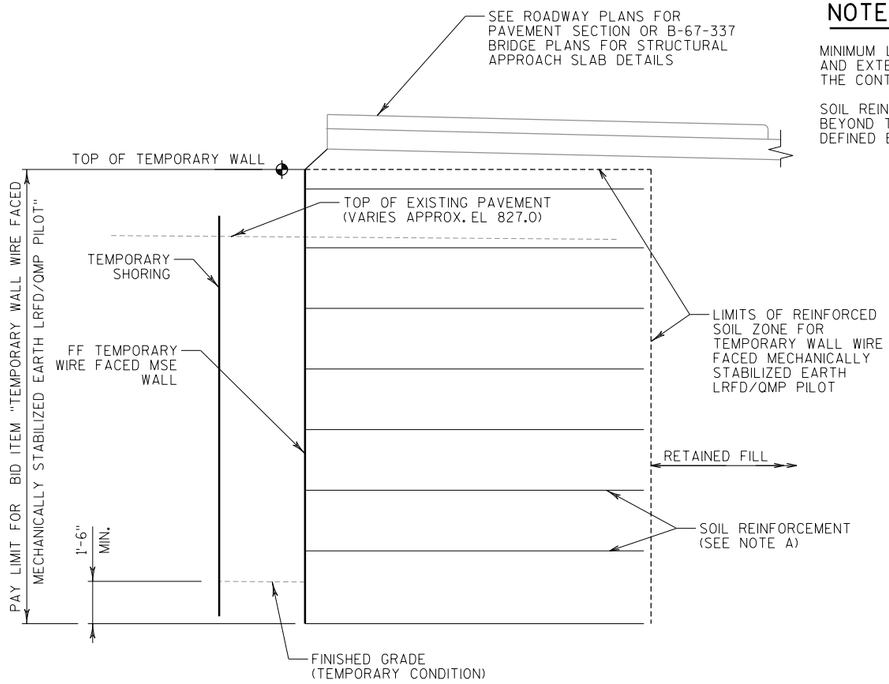
STATE PROJECT NUMBER

1100-37-70



ELEVATION TEMPORARY WALL WIRE FACED MSE

(LOOKING WEST)



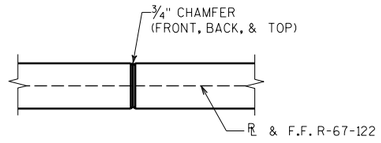
NOTE A

MINIMUM LENGTH OF REINFORCEMENT FOR INTERNAL STABILITY AND EXTERNAL SLIDING AND STABILITY IS THE RESPONSIBILITY OF THE CONTRACTOR'S WALL DESIGNER

SOIL REINFORCEMENT MUST EXTEND A MINIMUM OF 3.0 FEET BEYOND THE FAILURE PLANE FOR INTERNAL STABILITY AS DEFINED BY AASHTO SPECIFICATIONS

WIRE FACED WALL- TYPICAL SECTION

LOOKING SOUTH

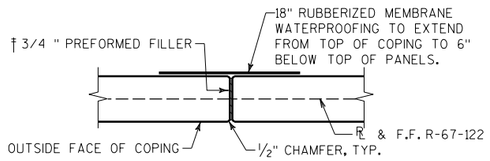


COPING CONTRACTION JOINT

DO NOT RUN BAR STEEL THRU JOINT

MAXIMUM SPACING OF JOINTS SHALL BE 12'-0" AND MUST LINE UP WITH THE WALL PANEL JOINTS.

ALL CONTRACTION JOINTS TO EXTEND THE FULL DEPTH OF COPING.

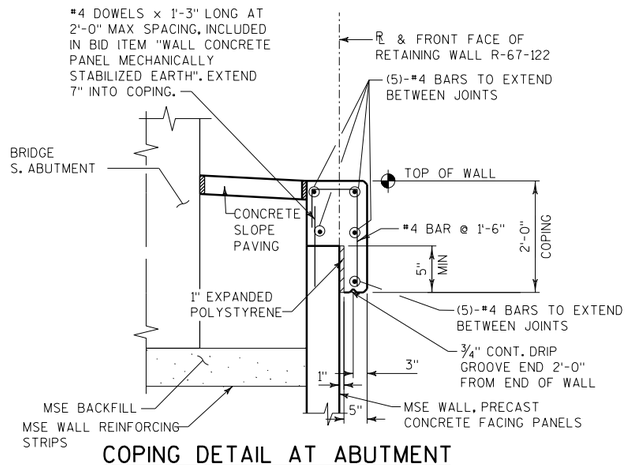


COPING EXPANSION JOINT

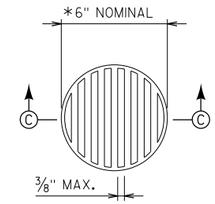
DO NOT RUN BAR STEEL THRU JOINT

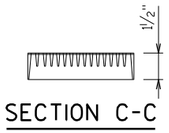
MAXIMUM SPACING OF JOINTS SHALL BE 50'-0" AND MUST LINE UP WITH THE WALL PANEL JOINTS.

† SEAL ALL EXPOSED HORIZ. AND VERT. SURFACES OF PREFORMED FILLER WITH A NON-STAINING, COLOR TO MATCH WALL PANEL OR COPING STAINING, NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONC.)



COPING DETAIL AT ABUTMENT





SECTION C-C

RODENT SHIELD

NOTES:

*DIMENSIONS ARE APPROXIMATE. THE GRATE IS SIZED TO FIT INTO A PIPE COUPLING. ORIENT SHIELD SO SLOTS ARE VERTICAL.

THE RODENT SCREEN, PIPE COUPLING AND SCREWS SHALL BE INCIDENTAL TO THE BID ITEM "PIPE UNDERDRAIN WRAPPED 6-INCH"

THE RODENT SHIELD SHALL BE A PVC GRATE SIMILAR TO THIS DETAIL. THE GRATE IS COMMERCIALLY AVAILABLE AS A FLOOR STRAINER. A PIPE COUPLING IS REQUIRED FOR THE ATTACHMENT OF THIS SHIELD TO THE EXPOSED END OF THE PIPE UNDERDRAIN. THE SHIELD SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO. 10 X 1-INCH STAINLESS STEEL SHEET METAL SCREWS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE R-67-122

DRAWN BY SKR | PLANS CK'D. MDR

WALL DETAILS

SHEET 4 OF 6

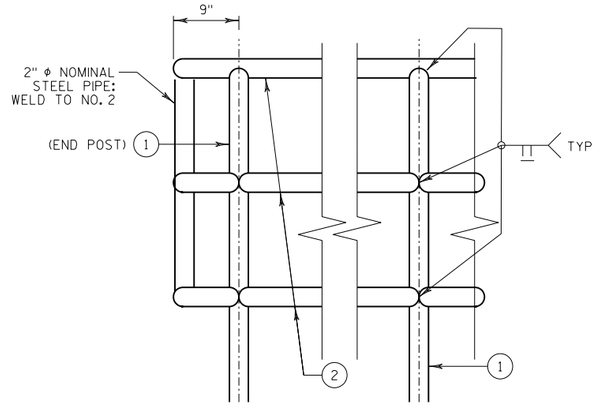
923

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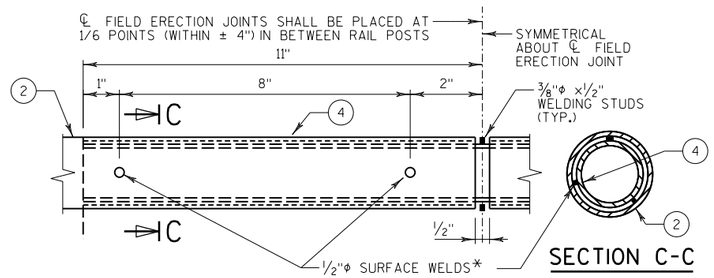
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STATE PROJECT NUMBER

1100-37-70



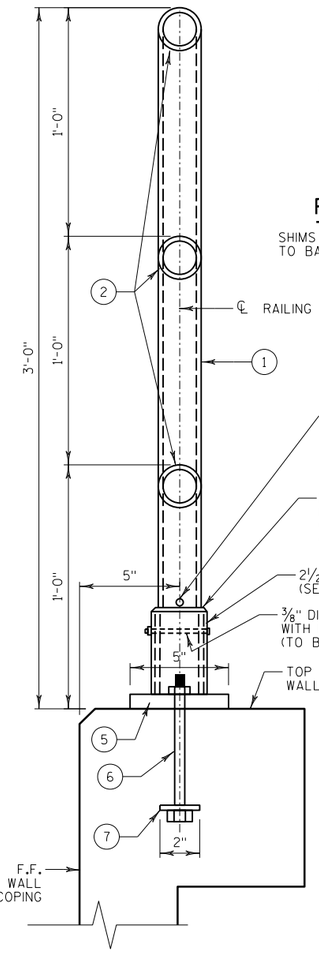
PART ELEVATION RAILING



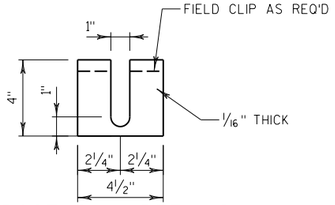
FIELD ERECTION JOINT DETAIL

*MIN. 5/8" FLAT SURFACE DIA. PUNCHINGS OR STUDS MAY BE USED AS AN ALTERNATE.

SECTION C-C

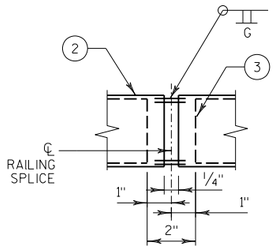


SECTION THRU RAILING



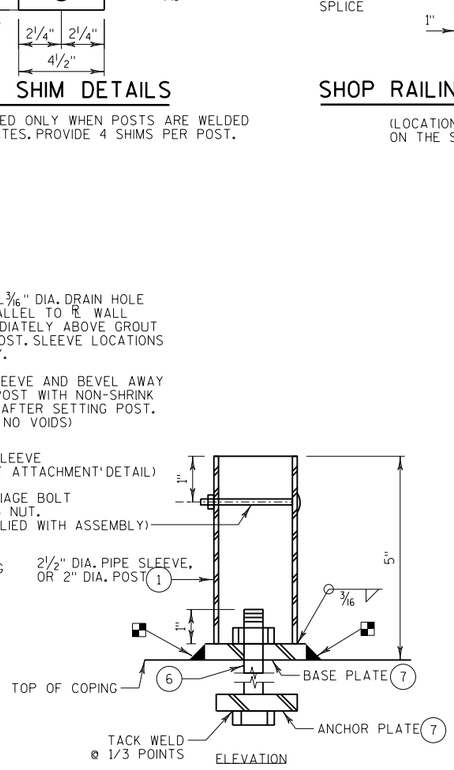
POST SHIM DETAILS

SHIMS REQUIRED ONLY WHEN POSTS ARE WELDED TO BASE PLATES. PROVIDE 4 SHIMS PER POST.



SHOP RAILING SPLICE DETAIL

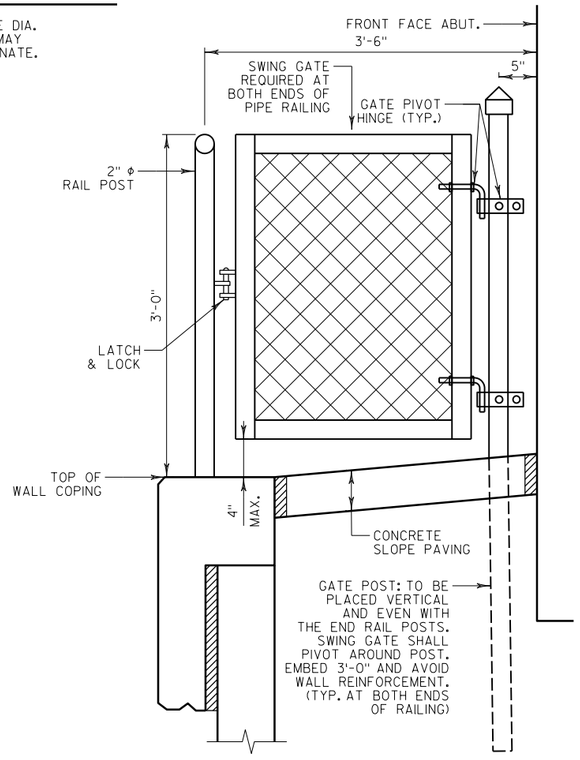
(LOCATION MUST BE SHOWN ON THE SHOP DRAWINGS)



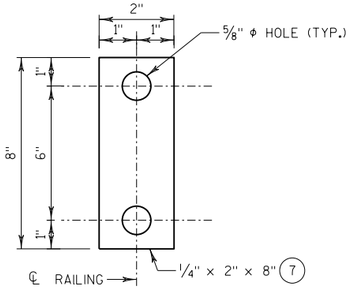
POST ATTACHMENT

UNIT SHALL BE GALVANIZED AFTER FABRICATION

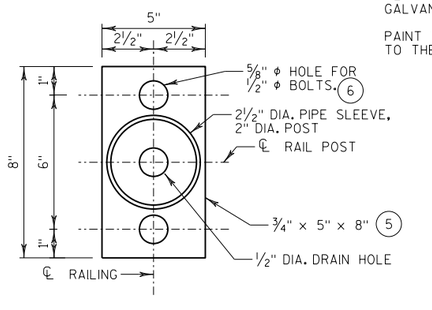
NOTE:
IN LIEU OF USING THE 2 1/2"ϕ SLEEVE, THE 2"ϕ RAIL POST MAY BE WELDED TO THE BASE PLATE.



SECTION THRU WALL AT GATES



ANCHOR PLATE



BASE PLATE

LEGEND

(1) 2" ϕ NOMINAL STEEL PIPE FOR POSTS: CUT BOTTOM OF POST TO MATCH TOP OF CONCRETE. POSTS ARE TO BE SET VERTICAL.

(2) 2" ϕ NOMINAL STEEL PIPE FOR RAILS: WELD TO NO. 1.

(3) 1 1/2" ϕ PIPE SLEEVE FOR NO. 2. PROVIDE "SLIDING FIT" WITH A MINIMUM OUT TO OUT DIMENSION OF 2 1/16"

(4) 1 1/2" ϕ PIPE SLEEVE x 1'-10" LONG FOR NO. 2. PROVIDE 1/2" ϕ SURFACE WELDS ON ALL SIDES AS SHOWN. GRIND WELDS TO FIT FREE INTO I.D. OF NO. 2. PROVIDE 3/8" ϕ x 1/2" WELDING STUDS ON TOP AND BOTTOM SURFACES AT CENTERLINE.

(5) PLATE 3/4" x 5" x 8". WITH 5/8"ϕ HOLE FOR ANCHOR BOLTS NO. 6 WELD TO NO. 1 OR PIPE SLEEVE AS SHOWN.

(6) 1/2"ϕ x 6 7/8" LONG HEX BOLTS (GALVANIZED) WITH NUT AND WASHER. 2 REQ'D PER POST. THREAD 3" AND PLACE NORMAL TO PLATE NO. 5 CHAMFER TOP OF BOLTS BEFORE THREADING. TYPE S, 1/2" CONCRETE MASONRY ANCHORS MAY BE SUBSTITUTED FOR 1/2" BOLTS. ANCHOR PLATE NOT REQUIRED WHEN TYPE S ANCHORS ARE USED. SEE NOTE ☆

☆ 1/2" DIA. CONCRETE MASONRY ANCHOR, TYPE "S", 6" MIN. EMBEDMENT (EPOXY ANCHORED) INTO CONCRETE AND MINIMUM PULLOUT CAPACITY OF 10 KIPS. ANCHOR , WASHER, AND NUT SHALL BE GALVANIZED.

(7) 1/4" x 2" x 8" FLAT BAR, WITH 5/8" ϕ HOLES FOR ANCHOR BOLTS NO. 6.

GENERAL NOTES

BID ITEM SHALL BE "RAILING PIPE R-67-122", WHICH INCLUDES ALL ITEMS SHOWN, GALVANIZING AND PAINTING.

RAILING SHALL BE FABRICATED IN LENGTHS THAT INCLUDE 3 OR 4 POSTS.

FIELD ERECTION JOINTS MUST BE PLACED IN BETWEEN RAIL POSTS WHERE THERE IS ALSO A CONCRETE COPING EXPANSION JOINT IN BETWEEN RAIL POSTS.

POST BASE PLATES SHALL BE FLAT WITH ALL SURFACES SMOOTH AND FREE FROM WARP AND ALL EDGES SMOOTH, STRAIGHT AND VERTICAL. ALL PLATE CUTS SHALL BE MACHINE OR MACHINE FLAME CUT.

ALL MATERIAL EXCEPT ANCHORAGE DETAIL (NO. 7) SHALL BE GALVANIZED AFTER FABRICATION. PRIOR TO GALVANIZING, ALL STEEL RAILING POSTS AND STEEL TUBING SHALL BE GIVEN A NO. 6 BLAST CLEANING BY S.S.P.C. SPECIFICATIONS. AFTER GALVANIZING PAINT RAILING ASSEMBLIES WITH A TWO COAT SYSTEM SPECIFICALLY INTENDED FOR PAINTING OF GALVANIZED SURFACES. THE FINISH COLOR SHALL BE FEDERAL COLOR NO. 27038 BLACK.

DRILL DRAIN HOLES PRIOR TO GALVANIZING.

ALL MATERIALS USED IN FABRICATION SHALL BE MADE FROM MATERIALS CONFORMING TO A.S.T.M. DESIGNATION A709 GRADE 36 UNLESS NOTED OTHERWISE.

STEEL POST SHIMS MAY BE USED UNDER POSTS WHERE REQ'D FOR ALIGNMENT.

ALL RAILS, POSTS AND SLEEVES ARE STANDARD WEIGHT PIPE, SCHEDULE 40.

PLACE ALL NUTS ON OUTSIDE OF POSTS.

ANCHORAGES SHALL BE ACCURATELY PLACED TO PROVIDE CORRECT ALIGNMENT OF RAILING SET TO NORMAL GRADE.

■ CAULK AROUND PERIMETER OF BASE PLATES AND FILL PORTION OF SLOTTED HOLES AROUND ANCHOR BOLTS IN POST SHIMS AND BASE PLATES WITH NON-STAINING, BLACK, NON-BITUMINOUS JOINT SEALER.

VENT HOLES SHALL BE DRILLED IN MEMBERS AS REQUIRED TO FACILITATE GALVANIZING AND DRAINAGE.

PAINT TOUCH-UP TO BE DONE AT COMPLETION OF STEEL RAILING INSTALLATION TO THE SATISFACTION OF THE ENGINEER AT NO EXTRA COST.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-67-122

DRAWN BY MDR | PLANS CK'D. AJC

PIPE RAILING DETAILS

SHFFT 5 OF 6
924

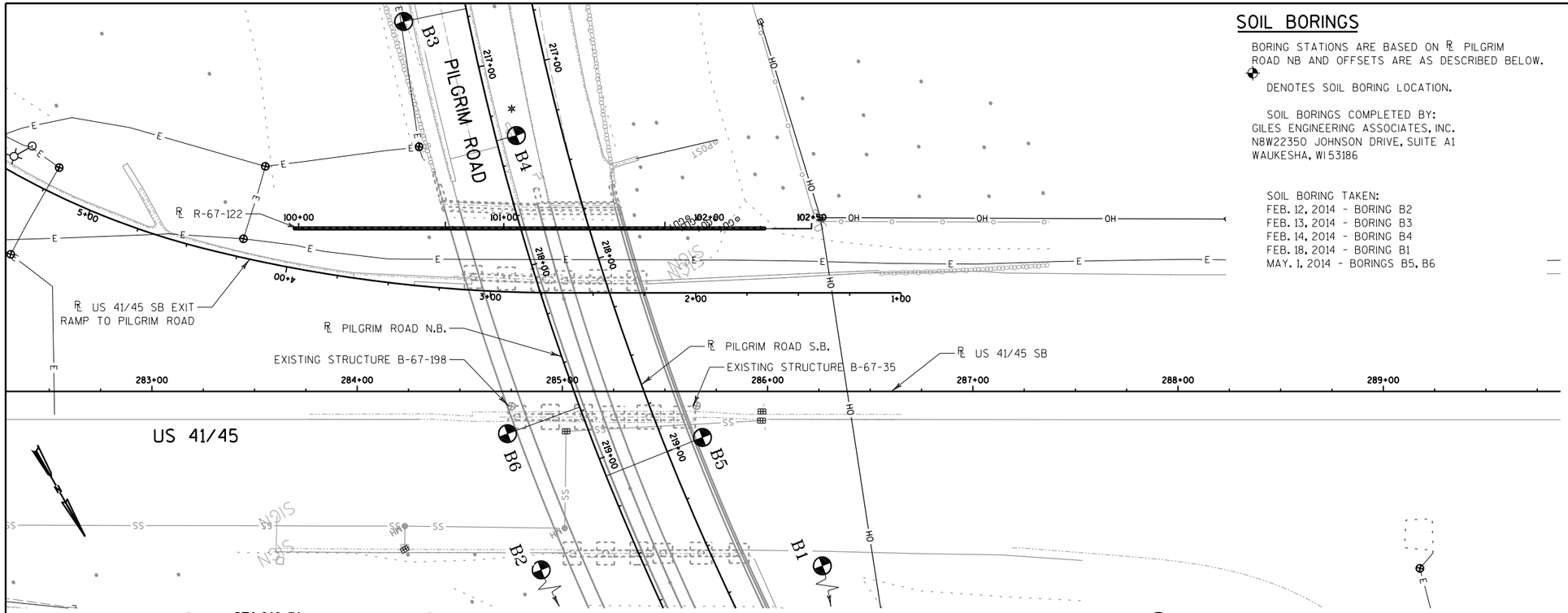
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8

FILE NAME : P:\44xx\4442\Structures\R-67-122\Plan\080305_pr_SA_wall.dgn

PLOT DATE : 11/3/2014

PLOT BY : mdr



SOIL BORINGS

BORING STATIONS ARE BASED ON ℄ PILGRIM ROAD NB AND OFFSETS ARE AS DESCRIBED BELOW.

DENOTES SOIL BORING LOCATION.

SOIL BORINGS COMPLETED BY:
GILES ENGINEERING ASSOCIATES, INC.
N8W22350 JOHNSON DRIVE, SUITE A1
WAUKESHA, WI 53186

SOIL BORING TAKEN:
FEB. 12, 2014 - BORING B2
FEB. 13, 2014 - BORING B3
FEB. 14, 2014 - BORING B4
FEB. 18, 2014 - BORING B1
MAY. 1, 2014 - BORINGS B5, B6

STATE PROJECT NUMBER

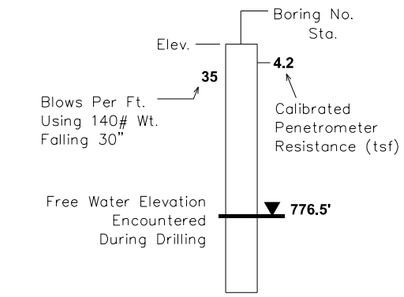
1100-37-70

MATERIAL SYMBOLS

- PAVEMENT
- TOP SOIL
- FILL / POSSIBLE FILL (SILTY CLAY / CLAYEY SILT)
- SILTY CLAY
- CLAYEY SILT / SILT
- SILTY SAND / SANDY SILT
- BOULDERS

NOTE: SOIL CONTACT LINES ARE INFERRED

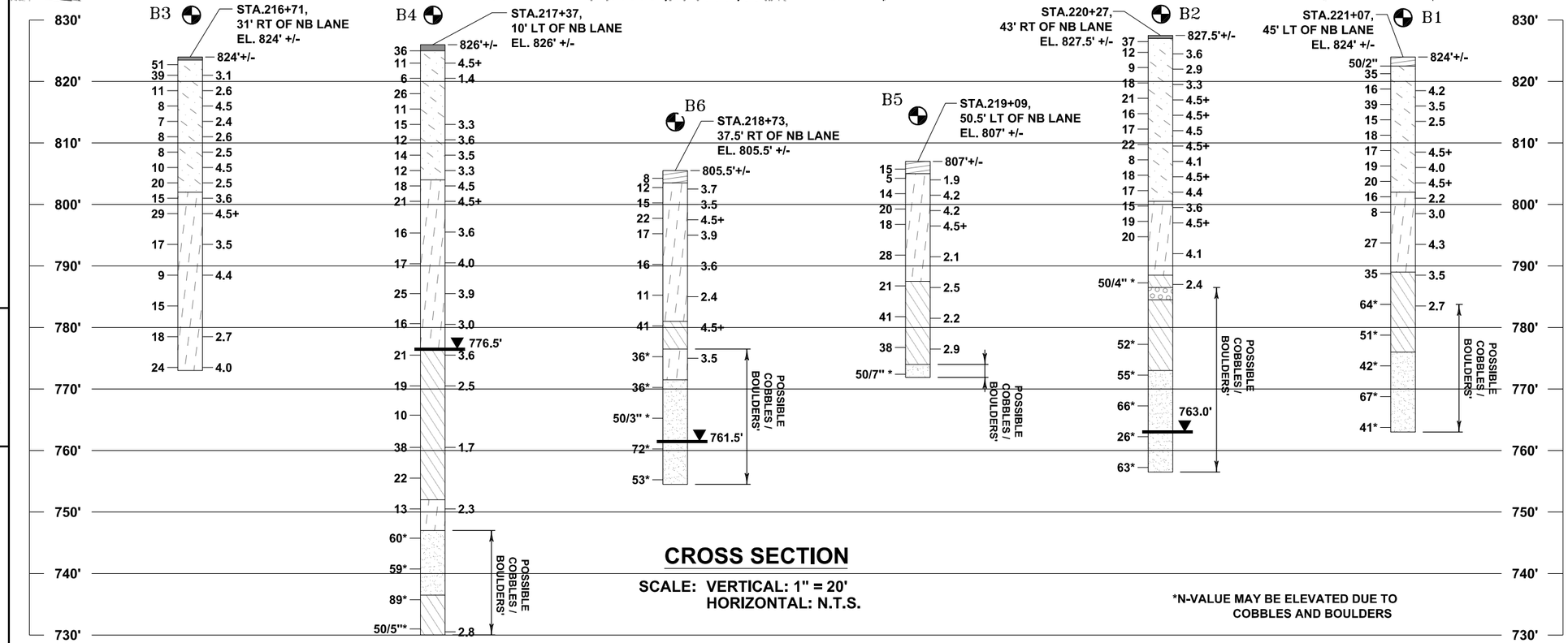
LEGEND OF BORING



Unless otherwise specified, the blows per foot at the locations indicated are based on driving a 2" O.D.x 1. 4" I.D. split spoon sampler with a 140# hammer having a free fall of 30". The blow count is taken in undisturbed soil immediately below a cased or open hole eliminating side friction on the drive pipe.

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

TO OBTAIN RELATIVE DATA CONCERNING THE CHARACTER OF MATERIAL IN AND UPON WHICH THE FOUNDATION MIGHT BE BUILT, BORINGS AND/OR SOUNDINGS WERE MADE AT POINTS APPROXIMATELY AS INDICATED ON THIS DRAWING. THE DATA PRESENTED HEREIN REPRESENTS THE FINDINGS OF THE SUBSURFACE EXPLORATIONS MADE. HOWEVER, BECAUSE THE DEPTHS INVESTIGATED ARE LIMITED AND THE AREA OF THE BORINGS AND/OR SOUNDINGS IS VERY SMALL IN RELATION TO THE ENTIRE AREA, THE WISCONSIN DEPARTMENT OF TRANSPORTATION DOES NOT WARRANT CONDITIONS BELOW THE DEPTHS INVESTIGATED OR THAT THE CLASSIFICATION OF MATERIAL ENCOUNTERED IN THESE INVESTIGATIONS IS NECESSARILY TYPICAL OF THE ENTIRE SITE.



CROSS SECTION

SCALE: VERTICAL: 1" = 20'
HORIZONTAL: N.T.S.

*N-VALUE MAY BE ELEVATED DUE TO COBBLES AND BOULDERS

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-67-122

DRAWN BY MDR | PLANS CK'D. AJC

SUBSURFACE EXPLORATION

SHEET 6 OF 6
925

8

8

FILE NAME : P:\44xx\4442\Structures\R-67-122\Plan\080306_se_SA_wall.dgn

PLOT DATE : 11/3/2014

PLOT BY : mdr

2782-11-70_STAGE 2

STATION	Distance	PILGRIM ROAD AREA (SF) Cut	Salvaged/Unusable Pavement Material	Fill	Incremental Vol (CY) (Unadjusted) Cut	Salvaged/Unusable Pavement Material	Fill	Cumulative Vol (CY) Cut 1.00	Salvaged/Unusable Pavement Material	Expanded Fill 1.10	Mass Ordinate
198+21.	0.00	45	9	0	0.00	0.00	0.00	0	0	0	0
198+50.	29.00	45	11	0	48.33	10.74	0.00	48	11	0	38
198+90.	40.00	45	10	0	66.67	15.56	0.00	115	26	0	89
199+00.	10.00	46	9	0	16.85	3.52	0.00	132	30	0	102
199+26.	26.00	45	10	0	43.81	9.15	0.00	176	39	0	137
199+50.	24.00	45	10	2	40.00	8.89	0.89	216	48	1	167
200+00.	50.00	56	10	0	93.52	18.52	1.85	309	66	3	240
200+50.	50.00	85	9	0	130.56	17.59	0.00	440	84	3	353
201+00.	50.00	81	41	0	153.70	46.30	0.00	593	130	3	460
201+50.	50.00	38	19	0	110.19	55.56	0.00	704	186	3	515
202+00.	50.00	54	22	0	85.19	37.96	0.00	789	224	3	562
202+50.	50.00	71	22	0	115.74	40.74	0.00	905	265	3	637
203+00.	50.00	71	22	0	131.48	40.74	0.00	1,036	305	3	728
203+50.	50.00	52	22	0	113.89	40.74	0.00	1,150	346	3	801
204+00.	50.00	49	25	0	93.52	43.52	0.00	1,243	390	3	851
204+50.	50.00	45	19	0	87.04	40.74	0.00	1,330	430	3	897
205+00.	50.00	40	20	0	78.70	36.11	0.00	1,409	466	3	940
205+50.	50.00	69	45	0	100.93	60.19	0.00	1,510	527	3	981
206+00.	50.00	48	34	6	108.33	73.15	5.56	1,618	600	9	1,010
206+50.	50.00	45	25	1	86.11	54.63	6.48	1,705	654	16	1,034
207+00.	50.00	52	21	7	89.81	42.59	7.41	1,794	697	24	1,073
207+50.	50.00	37	18	12	82.41	36.11	17.59	1,877	733	44	1,100
207+65.	15.00	28	19	11	18.06	10.28	6.39	1,895	743	51	1,101
208+00.	35.00	21	17	9	31.76	23.33	12.96	1,927	767	65	1,095
208+50.	50.00	49	47	37	64.81	59.26	42.59	1,991	826	112	1,054
209+00.	50.00	22	15	25	65.74	57.41	57.41	2,057	883	175	999
227+00.	0.00	65	28	1	0.00	0.00	0.00	2,057	883	175	999
227+50.	50.00	101	54	0	153.70	75.93	0.93	2,211	959	176	1,076
228+00.	50.00	51	23	1	140.74	71.30	0.93	2,352	1,031	177	1,144
228+24.92	24.92	3	21	0	24.92	20.31	0.46	2,377	1,051	178	1,148
		1504	657	112	2376.51	1050.84	161.44	2,377	1,051	178	1,148

2782-11-70_STAGE 3

STATION	Distance	PILGRIM ROAD AREA (SF) Cut	Salvaged/Unusable Pavement Material	Fill	Incremental Vol (CY) (Unadjusted) Cut	Salvaged/Unusable Pavement Material	Fill	Cumulative Vol (CY) Cut 1.00	Salvaged/Unusable Pavement Material	Expanded Fill 1.10	Mass Ordinate
198+21.	0.00	0	0	0	0.00	0.00	0.00	0	0	0	0
198+50.	29.00	0	0	0	0.00	0.00	0.00	0	0	0	0
198+90.	40.00	32	4	0	23.70	2.96	0.00	24	3	0	21
199+00.	10.00	32	5	0	11.85	1.67	0.00	36	5	0	31
199+26.	26.00	32	4	0	30.81	4.33	0.00	66	9	0	57
199+50.	24.00	33	4	0	28.89	3.56	0.00	95	13	0	83
200+00.	50.00	63	3	1	88.89	6.48	0.93	184	19	1	164
200+50.	50.00	98	2	0	149.07	4.63	0.93	333	24	2	308
201+00.	50.00	91	14	0	175.00	14.81	0.00	508	38	2	468
201+50.	50.00	128	15	0	202.78	26.85	0.00	711	65	2	644
202+00.	50.00	151	15	0	258.33	27.78	0.00	969	93	2	874
202+50.	50.00	150	15	0	278.70	27.78	0.00	1,248	121	2	1,125
203+00.	50.00	142	15	0	270.37	27.78	0.00	1,518	149	2	1,368
203+50.	50.00	100	23	0	224.07	35.19	0.00	1,742	184	2	1,557
204+00.	50.00	102	32	0	187.04	50.93	0.00	1,930	235	2	1,693
204+50.	50.00	196	62	0	275.93	87.04	0.00	2,205	322	2	1,882
205+00.	50.00	222	96	0	387.04	146.30	0.00	2,592	468	2	2,122
205+50.	50.00	123	51	0	319.44	136.11	0.00	2,912	604	2	2,306
206+00.	50.00	89	16	0	196.30	62.04	0.00	3,108	666	2	2,440
206+50.	50.00	88	27	10	163.89	39.81	9.26	3,272	706	12	2,554
207+00.	50.00	99	18	0	173.15	41.67	9.26	3,445	748	22	2,675
207+50.	50.00	74	18	0	160.19	33.33	0.00	3,605	781	22	2,802
207+65.	15.00	72	19	0	40.56	10.28	0.00	3,646	791	22	2,832
208+00.	35.00	45	20	3	75.83	25.28	1.94	3,722	817	25	2,881
208+50.	50.00	49	55	28	87.04	69.44	28.70	3,809	886	56	2,867
209+00.	50.00	31	26	0	74.07	75.00	25.93	3,883	961	85	2,837
227+00.	0.00	91	24	0	0.00	0.00	0.00	3,883	961	85	2,837
227+50.	50.00	165	53	0	237.04	71.30	0.00	4,120	1,032	85	3,003
228+00.	50.00	29	20	0	179.63	67.59	0.00	4,300	1,100	85	3,115
228+24.92	24.92	33	20	0	28.61	18.46	0.00	4,328	1,118	85	3,125
		2560	676	42	4328.22	1,118	76.94	4,328	1,118	85	3,125

2782-11-70_STAGE 4

STATION	Distance	PILGRIM ROAD AREA (SF) Cut	Salvaged/Unusable Pavement Material	Fill	Incremental Vol (CY) (Unadjusted) Cut	Salvaged/Unusable Pavement Material	Fill	Cumulative Vol (CY) Cut 1.00	Salvaged/Unusable Pavement Material	Expanded Fill 1.10	Mass Ordinate
198+21.	0.00	34	7	0	0.00	0.00	0.00	0	0	0	0
198+50.	29.00	29	6	0	33.83	6.98	0.00	34	7	0	27
198+90.	40.00	59	13	0	65.19	14.07	0.00	99	21	0	78
199+00.	10.00	62	13	0	22.41	4.81	0.00	121	26	0	96
199+26.	26.00	66	14	0	61.63	13.00	0.00	183	39	0	144
199+50.	24.00	57	15	2	54.67	12.89	0.89	238	52	1	185
200+00.	50.00	80	17	0	126.85	29.63	1.85	365	81	3	280
200+50.	50.00	101	19	0	167.59	33.33	0.00	532	115	3	414
201+00.	50.00	49	24	0	138.89	39.81	0.00	671	155	3	514
201+50.	50.00	52	25	0	93.52	45.37	0.00	765	200	3	562
202+00.	50.00	55	25	0	99.07	46.30	0.00	864	246	3	614
202+50.	50.00	61	24	0	107.41	45.37	0.00	971	292	3	676
203+00.	50.00	62	25	0	113.89	45.37	0.00	1,085	337	3	745
203+50.	50.00	47	25	0	100.93	46.30	0.00	1,186	383	3	800
204+00.	50.00	43	25	0	83.33	46.30	0.00	1,269	430	3	837
204+50.	50.00	54	24	0	89.81	45.37	0.00	1,359	475	3	881
205+00.	50.00	51	24	0	97.22	44.44	0.00	1,456	519	3	934
205+50.	50.00	45	25	0	88.89	45.37	0.00	1,545	565	3	977
206+00.	50.00	40	25	0	78.70	46.30	0.00	1,624	611	3	1,010
206+50.	50.00	36	25	2	70.37	46.30	1.85	1,694	657	5	1,032
207+00.	50.00	38	25	1	68.52	46.30	2.78	1,763	704	8	1,051
207+50.	50.00	31	25	4	63.89	46.30	4.63	1,827	750	13	1,064
207+65.	15.00	31	25	1	17.22	13.89	1.39	1,844	764	15	1,065
208+00.	35.00	29	25	3	38.89	32.41	2.59	1,883	796	18	1,069
208+50.	50.00	24	24	5	49.07	45.37	7.41	1,932	842	26	1,064
209+00.	50.00	25	25	23	45.37	45.37	25.93	1,977	887	54	1,036
227+00.	0.00	54	25	3	0.00	0.00	0.00	1,977	887	54	1,036
227+50.	50.00	66	34	0	111.11	54.63	2.78	2,088	942	57	1,089
228+00.	50.00	68	37	0	124.07	65.74	0.00	2,212	1,007	57	1,148
228+24.92	24.92	65	40	2	61.38	35.53	0.92	2,274	1,043	58	1,173
		1514	685	46	2273.73	1,043	53.02	2,274	1,043	58	1,173

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PROJECT NO: 2782-11-70 & 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	EARTHWORK	SHEET 928	E

2782-11-70_STAGE 2

STATION	Distance	CLEVELAND AVE. WEST AREA (SF) Cut	Salvaged/Unusable Pavement Material	Fill	Incremental Vol (CY) (Unadjusted) Cut	Salvaged/Unusable Pavement Material	Fill	Cumulative Vol (CY) Cut 1.00	Salvaged/Unusable Pavement Material	Expanded Fill 1.10	Mass Ordinate
500+04	0.00	65	31	0	0.00	0.00	0.00	0	0	0	0
500+50	46.00	42	29	4	91.15	51.11	3.41	91	51	4	36
500+67	17.00	41	30	13	26.13	18.57	5.35	117	70	10	38
501+00	33.00	39	35	30	48.89	39.72	26.28	166	109	39	18
		187	125	47	166.17	109.41	35.04	166	109	39	18

2782-11-70_STAGE 3

STATION	Distance	CLEVELAND AVE. EAST AREA (SF) Cut	Salvaged/Unusable Pavement Material	Fill	Incremental Vol (CY) (Unadjusted) Cut	Salvaged/Unusable Pavement Material	Fill	Cumulative Vol (CY) Cut 1.00	Salvaged/Unusable Pavement Material	Expanded Fill 1.10	Mass Ordinate
502+25	0.00	42	34	26	0.00	0.00	0.00	0	0	0	0
502+50	25.00	35	31	11	35.65	30.09	17.13	36	30	19	-13
502+63	13.00	46	33	4	19.50	15.41	3.61	55	46	23	-13
502+90	27.00	61	31	0	53.50	32.00	2.00	109	78	25	6
		184	129	41	108.65	77.50	22.74	109	78	25	6

2782-11-70_STAGE 2

STATION	Distance	MEGAL DRIVE AREA (SF) Cut	Salvaged/Unusable Pavement Material	Fill	Incremental Vol (CY) (Unadjusted) Cut	Salvaged/Unusable Pavement Material	Fill	Cumulative Vol (CY) Cut 1.00	Salvaged/Unusable Pavement Material	Expanded Fill 1.10	Mass Ordinate
700+50	0.00	14	1	0	0.00	0.00	0.00	0	0	0	0
701+00	50.00	23	3	0	34.26	3.70	0.00	34	4	0	31
701+50	50.00	88	18	0	102.78	19.44	0.00	137	23	0	114
702+00	50.00	37	7	0	115.74	23.15	0.00	253	46	0	206
702+50	50.00	54	2	0	84.26	8.33	0.00	337	55	0	282
702+67	17.00	71	13	0	39.35	4.72	0.00	376	59	0	317
703+00	50.00	58	4	0	119.44	15.74	0.00	496	75	0	421
703+50	50.00	43	4	1	93.52	7.41	0.93	589	83	1	506
703+67	17.00	64	10	0	33.69	4.41	0.31	623	87	1	535
		452	62	1	623.04	86.91	1.24	623	87	1	535

2782-11-70_STAGE 3

STATION	Distance	MEGAL DRIVE AREA (SF) Cut	Salvaged/Unusable Pavement Material	Fill	Incremental Vol (CY) (Unadjusted) Cut	Salvaged/Unusable Pavement Material	Fill	Cumulative Vol (CY) Cut 1.00	Salvaged/Unusable Pavement Material	Expanded Fill 1.10	Mass Ordinate
700+50	0.00	65	12	6	0.00	0.00	0.00	0	0	0	0
701+00	50.00	69	11	9	124.07	21.30	13.89	124	21	15	88
701+50	50.00	75	10	0	133.33	19.44	8.33	257	41	24	192
702+00	50.00	83	10	0	146.30	18.52	0.00	404	59	24	320
702+50	50.00	90	10	0	160.19	18.52	0.00	564	78	24	462
702+67	17.00	91	10	0	56.98	6.30	0.00	621	84	24	512
703+00	50.00	86	10	0	163.89	18.52	0.00	785	103	24	658
703+50	50.00	81	12	0	154.63	20.37	0.00	939	123	24	792
703+67	17.00	129	17	0	66.11	9.13	0.00	1,006	132	24	849
		769	102	15	1005.50	132.09	22.22	1,006	132	24	849

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2782-12-70_STAGE 2

STATION	Distance	PILGRIM ROAD AREA (SF) Cut	Salvaged/Unusable Pavement Material	Fill	Incremental Vol (CY) (Unadjusted) Cut	Salvaged/Unusable Pavement Material	Fill	Cumulative Vol (CY) Cut 1.00	Salvaged/Unusable Pavement Material	Expanded Fill 1.10	Mass Ordinate
209+50.	0.00	16	16	71	0.00	0.00	0.00	0	0	0	0
210+00.	50.00	17	16	55	30.56	29.63	116.67	31	30	128	-127
210+50.	50.00	24	21	30	37.96	34.26	78.70	69	64	215	-210
211+00.	50.00	26	26	21	46.30	43.52	47.22	115	107	267	-259
211+50.	50.00	74	41	24	92.59	62.04	41.67	207	169	313	-275
212+00.	50.00	20	20	18	87.04	56.48	38.89	294	226	355	-287
212+50.	50.00	32	28	85	48.15	44.44	95.37	343	270	460	-388
213+00.	50.00	28	27	257	55.56	50.93	316.67	398	321	809	-732
213+50.	50.00	27	27	385	50.93	50.00	594.44	449	371	1,463	-1,385
214+00.	50.00	28	28	437	50.93	50.93	761.11	500	422	2,300	-2,222
214+50.	50.00	26	26	451	50.00	50.00	822.22	550	472	3,204	-3,126
215+00.	50.00	24	24	437	46.30	46.30	822.22	596	519	4,109	-4,031
215+50.	50.00	22	22	423	42.59	42.59	796.30	639	561	4,985	-4,907
216+00.	50.00	18	18	468	37.04	37.04	825.00	676	598	5,892	-5,814
216+50.	50.00	27	16	580	41.67	31.48	970.37	718	630	6,960	-6,872
217+00.	50.00	54	14	683	75.00	27.78	1169.44	793	657	8,246	-8,111
217+50.	50.00	35	14	637	82.41	25.93	1222.22	875	683	9,590	-9,399
220+50.	0.00	11	11	759	0.00	0.00	0.00	875	683	9,590	-9,399
221+00.	50.00	14	14	750	23.15	23.15	1397.22	898	706	11,127	-10,936
221+50.	50.00	18	18	759	29.63	29.63	1397.22	928	736	12,664	-12,473
222+00.	50.00	20	20	698	35.19	35.19	1349.07	963	771	14,148	-13,957
222+50.	50.00	22	22	674	38.89	38.89	1270.37	1,002	810	15,546	-15,354
223+00.	50.00	22	22	646	40.74	40.74	1222.22	1,043	851	16,890	-16,698
223+50.	50.00	25	25	258	43.52	43.52	837.04	1,086	894	17,811	-17,619
224+00.	50.00	83	83	27	100.00	100.00	263.89	1,186	994	18,101	-17,909
224+50.	50.00	75	75	11	146.30	146.30	35.19	1,332	1,141	18,140	-17,948
225+00.	50.00	37	31	272	103.70	98.15	262.04	1,436	1,239	18,428	-18,231
225+50.	50.00	51	27	43	81.48	53.70	291.67	1,518	1,293	18,749	-18,524
226+00.	50.00	66	28	2	108.33	50.93	41.67	1,626	1,344	18,795	-18,512
226+50.	50.00	76	26	0	131.48	50.00	1.85	1,757	1,394	18,797	-18,433
	0.00	0	0	0	0.00	0.00	0.00	1,757	1,394	18,797	-18,433
	0.00	0	0	0	0.00	0.00	0.00	1,757	1,394	18,797	-18,433
	0.00	0	0	0	0.00	0.00	0.00	1,757	1,394	18,797	-18,433
	0.00	0	0	0	0.00	0.00	0.00	1,757	1,394	18,797	-18,433
	0.00	0	0	0	0.00	0.00	0.00	1,757	1,394	18,797	-18,433
	0.00	0	0	0	0.00	0.00	0.00	1,757	1,394	18,797	-18,433
	0.00	0	0	0	0.00	0.00	0.00	1,757	1,394	18,797	-18,433
		1018	786	9961	1757.41	1,393.52	17087.96	1,757	1,394	18,797	-18,433

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PROJECT NO: 2782-11-70 & 2782-12-70 | HWY: PILGRIM ROAD | COUNTY: WAUKESHA | EARTHWORK | SHEET 931 | E

FILE NAME : P:\44xx\4442\Plan\090101_ew.dgn PLOT DATE : 11/2/2014 PLOT BY : ajp PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 49

2782-12-70_STAGE 3

STATION	Distance	PILGRIM ROAD AREA (SF) Cut	Salvaged/Unusable Pavement Material	Fill	Incremental Vol (CY) (Unadjusted) Cut	Salvaged/Unusable Pavement Material	Fill	Cumulative Vol (CY) Cut 1.00	Salvaged/Unusable Pavement Material	Expanded Fill 1.10	Mass Ordinate
209+50.	0.00	31	24	78	0.00	0.00	0.00	0	0	0	0
210+00.	50.00	29	23	88	55.56	43.52	153.70	56	44	169	-157
210+50.	50.00	30	22	124	54.63	41.67	196.30	110	85	385	-360
211+00.	50.00	30	22	188	55.56	40.74	288.89	166	126	703	-663
211+50.	50.00	28	21	47	53.70	39.81	217.59	219	166	942	-888
212+00.	50.00	96	96	149	114.81	108.33	181.48	334	274	1,142	-1,082
212+50.	50.00	87	90	220	169.44	172.22	341.67	504	446	1,518	-1,460
213+00.	50.00	29	29	116	107.41	110.19	311.11	611	556	1,860	-1,805
213+50.	50.00	25	25	406	50.00	50.00	483.33	661	606	2,391	-2,337
214+00.	50.00	22	22	438	43.52	43.52	781.48	705	650	3,251	-3,196
214+50.	50.00	21	21	470	39.81	39.81	840.74	744	690	4,176	-4,121
215+00.	50.00	23	23	565	40.74	40.74	958.33	785	731	5,230	-5,175
215+50.	50.00	24	24	619	43.52	43.52	1096.30	829	774	6,436	-6,381
216+00.	50.00	23	23	731	43.52	43.52	1250.00	872	818	7,811	-7,756
216+50.	50.00	22	22	843	41.67	41.67	1457.41	914	859	9,414	-9,360
217+00.	50.00	23	23	683	41.67	41.67	1412.96	956	901	10,968	-10,914
217+50.	50.00	22	22	635	41.67	41.67	1220.37	997	943	12,311	-12,256
220+50.	0.00	21	21	134	0.00	0.00	0.00	997	943	12,311	-12,256
221+00.	50.00	22	22	121	39.81	39.81	236.11	1,037	982	12,571	-12,516
221+50.	50.00	21	21	56	39.81	39.81	163.89	1,077	1,022	12,751	-12,696
222+00.	50.00	19	19	42	37.04	37.04	90.74	1,114	1,059	12,851	-12,796
222+50.	50.00	20	20	29	36.11	36.11	65.74	1,150	1,095	12,923	-12,868
223+00.	50.00	20	20	23	37.04	37.04	48.15	1,187	1,132	12,976	-12,921
223+50.	50.00	20	20	19	37.04	37.04	38.89	1,224	1,169	13,019	-12,964
224+00.	50.00	20	20	12	37.04	37.04	28.70	1,261	1,206	13,050	-12,996
224+50.	50.00	20	20	8	37.04	37.04	18.52	1,298	1,244	13,071	-13,016
225+00.	50.00	20	20	6	37.04	37.04	12.96	1,335	1,281	13,085	-13,030
225+50.	50.00	36	29	6	51.85	45.37	11.11	1,387	1,326	13,097	-13,036
226+00.	50.00	42	26	4	72.22	50.93	9.26	1,459	1,377	13,107	-13,025
226+50.	50.00	67	24	9	100.93	46.30	12.04	1,560	1,423	13,121	-12,984
	0.00	0	0	0	0.00	0.00	0.00	1,560	1,423	13,121	-12,984
	0.00	0	0	0	0.00	0.00	0.00	1,560	1,423	13,121	-12,984
	0.00	0	0	0	0.00	0.00	0.00	1,560	1,423	13,121	-12,984
	0.00	0	0	0	0.00	0.00	0.00	1,560	1,423	13,121	-12,984
	0.00	0	0	0	0.00	0.00	0.00	1,560	1,423	13,121	-12,984
	0.00	0	0	0	0.00	0.00	0.00	1,560	1,423	13,121	-12,984
	0.00	0	0	0	0.00	0.00	0.00	1,560	1,423	13,121	-12,984
		913	814	6869	1560.19	1,423.15	11927.78	1,560	1,423	13,121	-12,984

2782-12-70_STAGE 4

STATION	Distance	PILGRIM ROAD AREA (SF) Cut	Salvaged/Unusable Pavement Material	Fill	Incremental Vol (CY) (Unadjusted) Cut	Salvaged/Unusable Pavement Material	Fill	Cumulative Vol (CY) Cut 1.00	Salvaged/Unusable Pavement Material	Expanded Fill 1.10	Mass Ordinate
209+50.	0.00	26	25	29	0.00	0.00	0.00	0	0	0	0
210+00.	50.00	25	26	24	47.22	47.22	49.07	47	47	54	-54
210+50.	50.00	26	25	14	47.22	47.22	35.19	94	94	93	-93
211+00.	50.00	29	25	10	50.93	46.30	22.22	145	141	117	-113
211+50.	50.00	25	25	13	50.00	46.30	21.30	195	187	141	-132
212+00.	50.00	24	24	26	45.37	45.37	36.11	241	232	180	-172
212+50.	50.00	25	24	32	45.37	44.44	53.70	286	277	239	-230
213+00.	50.00	25	25	38	46.30	45.37	64.81	332	322	311	-300
213+50.	50.00	24	24	39	45.37	45.37	71.30	378	368	389	-379
214+00.	50.00	25	25	43	45.37	45.37	75.93	423	413	473	-462
214+50.	50.00	25	25	46	46.30	46.30	82.41	469	459	563	-553
215+00.	50.00	25	25	45	46.30	46.30	84.26	516	506	656	-646
215+50.	50.00	25	25	41	46.30	46.30	79.63	562	552	744	-733
216+00.	50.00	25	25	55	46.30	46.30	88.89	608	598	841	-831
216+50.	50.00	25	25	77	46.30	46.30	122.22	655	644	976	-966
217+00.	50.00	26	26	95	47.22	47.22	159.26	702	692	1,151	-1,141
217+50.	50.00	28	28	108	50.00	50.00	187.96	752	742	1,358	-1,348
220+50.	0.00	24	24	116	0.00	0.00	0.00	752	742	1,358	-1,348
221+00.	50.00	24	24	91	44.44	44.44	191.67	796	786	1,569	-1,558
221+50.	50.00	25	25	71	45.37	45.37	150.00	842	831	1,734	-1,723
222+00.	50.00	24	24	55	45.37	45.37	116.67	887	877	1,862	-1,852
222+50.	50.00	25	25	47	45.37	45.37	94.44	932	922	1,966	-1,956
223+00.	50.00	24	24	38	45.37	45.37	78.70	978	968	2,052	-2,042
223+50.	50.00	25	25	30	45.37	45.37	62.96	1,023	1,013	2,122	-2,111
224+00.	50.00	24	24	22	45.37	45.37	48.15	1,069	1,058	2,175	-2,164
224+50.	50.00	23	23	38	43.52	43.52	55.56	1,112	1,102	2,236	-2,225
225+00.	50.00	34	25	6	52.78	44.44	40.74	1,165	1,146	2,280	-2,262
225+50.	50.00	46	25	2	74.07	46.30	7.41	1,239	1,193	2,289	-2,242
226+00.	50.00	44	24	3	83.33	45.37	4.63	1,322	1,238	2,294	-2,209
226+50.	50.00	54	25	3	90.74	45.37	5.56	1,413	1,283	2,300	-2,170
	0.00	0	0	0	0.00	0.00	0.00	1,413	1,283	2,300	-2,170
	0.00	0	0	0	0.00	0.00	0.00	1,413	1,283	2,300	-2,170
	0.00	0	0	0	0.00	0.00	0.00	1,413	1,283	2,300	-2,170
	0.00	0	0	0	0.00	0.00	0.00	1,413	1,283	2,300	-2,170
	0.00	0	0	0	0.00	0.00	0.00	1,413	1,283	2,300	-2,170
	0.00	0	0	0	0.00	0.00	0.00	1,413	1,283	2,300	-2,170
	0.00	0	0	0	0.00	0.00	0.00	1,413	1,283	2,300	-2,170
		829	744	1257	1412.96	1,283.33	2090.74	1,413	1,283	2,300	-2,170

2782-12-70_TC STAGE 2

STATION	Distance	MAIN STREET AREA (SF) Cut	Salvaged/Unusable Pavement Material	Fill	Incremental Vol (CY) (Unadjusted) Cut	Salvaged/Unusable Pavement Material	Fill	Cumulative Vol (CY) Cut 1.00	Salvaged/Unusable Pavement Material	Expanded Fill 1.10	Mass Ordinate
402+89.	0.00	70	38	0	0.00	0.00	0.00	0	0	0	0
403+00.	11.00	70	39	0	28.52	15.69	0.00	29	16	0	13
403+50.	50.00	62	41	0	122.22	74.07	0.00	151	90	0	61
404+00.	50.00	64	42	3	116.67	76.85	2.78	267	167	3	98
404+50.	50.00	70	46	1	124.07	81.48	3.70	391	248	7	136
404+91.	41.00	77	46	0	111.61	69.85	0.76	503	318	8	177
405+00.	9.00	73	45	0	25.00	15.17	0.00	528	333	8	187
405+14.	14.00	84	43	0	40.70	22.81	0.00	569	356	8	205
405+50.	36.00	72	43	1	104.00	57.33	0.67	673	413	9	251
405+93.	43.00	73	40	3	115.46	66.09	3.19	788	479	12	297
406+00.	7.00	70	40	2	18.54	10.37	0.65	807	490	13	304
406+05.	5.00	72	41	1	13.15	7.50	0.28	820	497	13	310
406+45.	40.00	98	39	0	125.93	59.26	0.74	946	556	14	375
406+50.	5.00	100	38	0	18.33	7.13	0.00	964	564	14	387
406+83.	33.00	99	41	0	121.61	48.28	0.00	1,086	612	14	460
407+00.	17.00	117	43	0	68.00	26.44	0.00	1,154	638	14	501
407+48.	48.00	138	51	0	226.67	83.56	0.00	1,380	722	14	645
407+50.	2.00	142	52	0	10.37	3.81	0.00	1,391	726	14	651
408+00.	50.00	166	72	0	285.19	114.81	0.00	1,676	841	14	821
408+50.	50.00	0	0	0	153.70	66.67	0.00	1,830	907	14	909
		1,717	840	11	1,829.74	907.19	12.76	1,830	907	14	909

2782-12-70_STAGE 4

STATION	Distance	MAIN STREET AREA (SF) Cut	Salvaged/Unusable Pavement Material	Fill	Incremental Vol (CY) (Unadjusted) Cut	Salvaged/Unusable Pavement Material	Fill	Cumulative Vol (CY) Cut 1.00	Salvaged/Unusable Pavement Material	Expanded Fill 1.10	Mass Ordinate
402+89.	0.00	0	0	0	0.00	0.00	0.00	0	0	0	0
403+00.	11.00	0	0	0	0.00	0.00	0.00	0	0	0	0
403+50.	50.00	1	1	0	0.93	0.93	0.00	1	1	0	0
404+00.	50.00	4	3	0	4.63	3.70	0.00	6	5	0	1
404+50.	50.00	11	6	0	13.89	8.33	0.00	19	13	0	6
404+91.	41.00	15	7	0	19.74	9.87	0.00	39	23	0	16
405+00.	9.00	15	8	1	5.00	2.50	0.17	44	25	0	19
405+14.	14.00	17	11	2	8.30	4.93	0.78	52	30	1	21
405+50.	36.00	19	14	5	24.00	16.67	4.67	76	47	6	23
405+93.	43.00	21	17	6	31.85	24.69	8.76	108	72	16	21
406+00.	7.00	23	18	5	5.70	4.54	1.43	114	76	17	21
406+05.	5.00	25	19	4	4.44	3.43	0.83	118	80	18	21
406+45.	40.00	36	21	0	45.19	29.63	2.96	164	109	22	33
406+50.	5.00	37	21	0	6.76	3.89	0.00	170	113	22	36
406+83.	33.00	51	22	0	53.78	26.28	0.00	224	139	22	63
407+00.	17.00	52	23	0	32.43	14.17	0.00	257	154	22	82
407+48.	48.00	50	22	0	90.67	40.00	0.00	347	194	22	132
407+50.	2.00	50	22	0	3.70	1.63	0.00	351	195	22	134
408+00.	50.00	47	22	0	89.81	40.74	0.00	441	236	22	183
408+50.	50.00	0	0	0	43.52	20.37	0.00	484	256	22	207
		474	257	23	484.33	256.28	19.59	484	256	22	207

2782-12-70_STAGE 3

STATION	Distance	MAIN STREET AREA (SF) Cut	Salvaged/Unusable Pavement Material	Fill	Incremental Vol (CY) (Unadjusted) Cut	Salvaged/Unusable Pavement Material	Fill	Cumulative Vol (CY) Cut 1.00	Salvaged/Unusable Pavement Material	Expanded Fill 1.10	Mass Ordinate
409+00.	0.00	0	0	0	0.00	0.00	0.00	0	0	0	0
409+50.	50.00	252	72	0	233.33	66.67	0.00	233	67	0	167
410+00.	50.00	154	49	0	375.93	112.04	0.00	609	179	0	431
410+50.	50.00	142	41	0	274.07	83.33	0.00	883	262	0	621
410+77.	27.00	148	38	0	145.00	39.50	0.00	1,028	302	0	727
411+00.	23.00	150	37	0	126.93	31.94	0.00	1,155	333	0	822
411+50.	50.00	129	37	0	258.33	68.52	0.00	1,414	402	0	1,012
412+00.	50.00	119	41	0	229.63	72.22	0.00	1,643	474	0	1,169
412+50.	50.00	105	38	0	207.41	73.15	0.00	1,851	547	0	1,303
412+64.	14.00	98	37	1	52.63	19.44	0.26	1,903	567	0	1,336
412+76.	12.00	106	38	0	45.33	16.67	0.22	1,949	583	1	1,365
413+00.	24.00	89	35	0	86.67	32.44	0.00	2,035	616	1	1,419
413+50.	50.00	114	39	0	187.96	68.52	0.00	2,223	684	1	1,538
414+00.	50.00	119	43	0	215.74	75.93	0.00	2,439	760	1	1,678
414+36.	36.00	127	41	0	164.00	56.00	0.00	2,603	816	1	1,786
414+50.	14.00	103	42	0	59.63	21.52	0.00	2,663	838	1	1,824
414+97.	47.00	96	40	0	173.20	71.37	0.00	2,836	909	1	1,926
	0.00	0	0	0	0.00	0.00	0.00	2,836	909	1	1,926
	0.00	0	0	0	0.00	0.00	0.00	2,836	909	1	1,926
	0.00	0	0	0	0.00	0.00	0.00	2,836	909	1	1,926
		2051	668	1	2835.80	909.26	0.48	2,836	909	1	1,926

2782-12-70_STAGE 4

STATION	Distance	MAIN STREET AREA (SF) Cut	Salvaged/Unusable Pavement Material	Fill	Incremental Vol (CY) (Unadjusted) Cut	Salvaged/Unusable Pavement Material	Fill	Cumulative Vol (CY) Cut 1.00	Salvaged/Unusable Pavement Material	Expanded Fill 1.10	Mass Ordinate
409+00.	0.00	0	0	0	0.00	0.00	0.00	0	0	0	0
409+50.	50.00	46	22	0	42.59	20.37	0.00	43	20	0	22
410+00.	50.00	49	22	0	87.96	40.74	0.00	131	61	0	69
410+50.	50.00	43	22	1	85.19	40.74	0.93	216	102	1	113
410+77.	27.00	44	21	0	43.50	21.50	0.50	259	123	2	134
411+00.	23.00	42	21	1	36.63	17.89	0.43	296	141	2	153
411+50.	50.00	46	21	3	81.48	38.89	3.70	377	180	6	191
412+00.	50.00	31	19	5	71.30	37.04	7.41	449	217	14	217
412+50.	50.00	37	17	0	62.96	33.33	4.63	512	251	19	242
412+64.	14.00	32	16	0	17.89	8.56	0.00	530	259	19	251
412+76.	12.00	30	16	0	13.78	7.11	0.00	543	266	19	258
413+00.	24.00	37	15	0	29.78	13.78	0.00	573	280	19	274
413+50.	50.00	31	13	0	62.96	25.93	0.00	636	306	19	311
414+00.	50.00	25	11	0	51.85	22.22	0.00	688	328	19	340
414+36.	36.00	22	10	0	31.33	14.00	0.00	719	342	19	358
414+50.	14.00	22	10	0	11.41	5.19	0.00	731	347	19	364
414+97.	47.00	21	9	0	37.43	16.54	0.00	768	364	19	385
	0.00	0	0	0	0.00	0.00	0.00	768	364	19	385
	0.00	0	0	0	0.00	0.00	0.00	768	364	19	385
	0.00	0	0	0	0.00	0.00	0.00	768	364	19	385
		558	265	10	768.04	363.81	17.59	768	364	19	385

2782-12-70_STAGE 2

STATION	Distance	FALLS PARKWAY AREA (SF) Cut	Salvaged/Unusable Pavement Material	Fill	Incremental Vol (CY) (Unadjusted) Cut	Salvaged/Unusable Pavement Material	Fill	Cumulative Vol (CY) Cut 1.00	Salvaged/Unusable Pavement Material	Expanded Fill 1.10	Mass Ordinate
85+13	0.00	100	33	8	0.00	0.00	0.00	0	0	0	0
85+50	37.00	116	34	33	148.00	45.91	28.09	148	46	31	71
86+00	50.00	134	31	78	231.48	60.19	102.78	379	106	144	129
86+50	50.00	108	33	51	224.07	59.26	119.44	604	165	275	163
87+00	50.00	64	28	46	159.26	56.48	89.81	763	222	374	167
87+50	50.00	36	23	238	92.59	47.22	262.96	855	269	663	-77
88+00	50.00	75	47	129	102.78	64.81	339.81	958	334	1,037	-413
88+05	5.00	0	0	0	6.94	4.35	11.94	965	338	1,050	-423
		633	229	583	965.13	338.22	954.85	965	338	1,050	-423

2782-12-70_STAGE 3

STATION	Distance	SB RAMPS AREA (SF) Cut	SB RAMPS AREA (SF) Salvaged/Unusable Pavement Material	SB RAMPS AREA (SF) Fill	Incremental Vol (CY) (Unadjusted) Cut	Incremental Vol (CY) (Unadjusted) Salvaged/Unusable Pavement Material	Incremental Vol (CY) (Unadjusted) Fill	Cumulative Vol (CY) Cut 1.00	Cumulative Vol (CY) Salvaged/Unusable Pavement Material	Cumulative Vol (CY) Expanded Fill 1.10	Mass Ordinate
6+40.	0.00	40	18	38	0.00	0.00	0.00	0	0	0	0
6+50.	10.00	44	18	50	15.56	6.67	16.30	16	7	18	-9
7+00.	50.00	54	17	60	90.74	32.41	101.85	106	39	130	-63
7+50.	50.00	46	18	66	92.59	32.41	116.67	199	71	258	-131
8+00.	50.00	47	16	76	86.11	31.48	131.48	285	103	403	-221
8+50.	50.00	28	17	48	69.44	30.56	114.81	354	134	529	-308
9+00.	50.00	22	17	70	46.30	31.48	109.26	401	165	649	-414
9+50.	50.00	17	16	115	36.11	30.56	171.30	437	196	838	-597
10+00.	50.00	61	43	168	72.22	54.63	262.04	509	250	1,126	-867
10+50.	50.00	53	42	255	105.56	78.70	391.67	615	329	1,557	-1,271
11+00.	50.00	44	43	362	89.81	78.70	571.30	704	408	2,185	-1,888
11+50.	50.00	48	44	589	85.19	80.56	880.56	790	488	3,154	-2,852
12+00.	50.00	180	44	0	211.11	81.48	545.37	1,001	570	3,754	-3,323
12+50.	50.00	69	70	672	230.56	105.56	622.22	1,231	675	4,438	-3,882
12+76.	26.00	80	81	351	71.74	72.70	492.56	1,303	748	4,980	-4,425
		833	504	2920	1303.04	747.89	4527.37	1,303	748	4,980	-4,425

2782-12-70_STAGE 3

STATION	Distance	NB RAMP TO NB PILGRIM AREA (SF) Cut	Salvaged/Unusable Pavement Material	Fill	Incremental Vol (CY) (Unadjusted) Cut	Salvaged/Unusable Pavement Material	Fill	Cumulative Vol (CY) Cut 1.00	Salvaged/Unusable Pavement Material	Expanded Fill 1.10	Mass Ordinate
17+07.41	0.00	39	17	22	0.00	0.00	0.00	0	0	0	0
17+50.	42.59	43	18	68	64.67	27.60	70.98	65	28	78	-41
18+00.	50.00	34	17	71	71.30	32.41	128.70	136	60	220	-144
18+50.	50.00	30	20	35	59.26	34.26	98.15	195	94	328	-227
19+00.	50.00	25	18	27	50.93	35.19	57.41	246	129	391	-274
19+50.	50.00	19	18	58	40.74	33.33	78.70	287	163	477	-353
20+00.	50.00	18	18	72	34.26	33.33	120.37	321	196	610	-485
20+50.	50.00	17	17	53	32.41	32.41	115.74	354	229	737	-612
21+00.	50.00	31	20	37	44.44	34.26	83.33	398	263	829	-694
21+50.	50.00	17	17	68	44.44	34.26	97.22	442	297	936	-790
22+00.	50.00	16	13	39	30.56	27.78	99.07	473	325	1,045	-896
22+50.	50.00	13	11	23	26.85	22.22	57.41	500	347	1,108	-955
23+00.	50.00	15	11	16	25.93	20.37	36.11	526	367	1,148	-989
23+50.	50.00	15	11	11	27.78	20.37	25.00	554	388	1,175	-1,009
24+00.	50.00	27	25	28	38.89	33.33	36.11	592	421	1,215	-1,043
24+50.	50.00	26	25	26	49.07	46.30	50.00	642	467	1,270	-1,096
24+97.24	47.24	16	13	1	36.74	33.24	23.62	678	501	1,296	-1,118
		401	289	655	678.27	500.66	1177.94	678	501	1,296	-1,118

1100-37-70_US 41/45

STATION	Distance	US 41/45 AREA (SF) Cut	Salvaged/Unusable Pavement Material	Fill	Incremental Vol (CY) (Unadjusted) Cut	Salvaged/Unusable Pavement Material	Fill	Cumulative Vol (CY) Cut 1.00	Salvaged/Unusable Pavement Material	Expanded Fill 1.10	Mass Ordinate
284+01.	0.00	61	0	60	0.00	0.00	0.00	0	0	0	0
284+50.	49.00	90	0	0	137.02	0.00	54.44	137	0	60	77
285+00.	50.00	202	0	39	270.37	0.00	36.11	407	0	100	308
285+50.	50.00	173	0	0	347.22	0.00	36.11	755	0	139	615
286+00.	50.00	106	0	0	258.33	0.00	0.00	1,013	0	139	874
286+50.	50.00	7	0	270	104.63	0.00	250.00	1,118	0	414	703
287+00.	50.00	8	0	2	13.89	0.00	251.85	1,131	0	691	440
287+23.	23.00	7	0	3	6.39	0.00	2.13	1,138	0	694	444
		654	0	374	1137.85	0.00	630.65	1,138	0	694	444

PROJECT ID 2782-11-70
MEGAL COURT (EASTBOUND)
PHASE I

STATION	Real Station	Distance	AREA (SF) Cut	AREA (SF) Fill	Incremental Vol (CY) (Unadjusted) Cut Note 1	Incremental Vol (CY) (Unadjusted) Fill Note 3	Cumulative Vol (CY) Cut 1.00 Note 1	Cumulative Vol (CY) Expanded Fill 1.2	Mass Ordinate Note 8
800+50.00	80050		128	3	0	0	0	0	0
800+75.00	80075	25	87	188	100	88	100	106	-7
801+00.00	80100	25	97	143	85	153	185	290	-105
801+25.00	80125	25	115	74	98	100	283	411	-128
801+50.00	80150	25	131	17	114	42	397	461	-64
801+75.00	80175	25	121	0	117	8	513	471	43
802+00.00	80200	25	106	1	105	0	619	471	147
802+25.00	80225	25	100	0	95	0	714	472	242
802+50.00	80250	25	97	0	91	0	805	472	333
802+75.00	80275	25	96	1	89	0	894	472	422
803+00.00	80300	25	93	3	88	2	982	474	508
803+25.00	80325	25	88	3	84	3	1066	478	588
803+50.00	80350	25	68	3	72	3	1138	481	657
803+75.00	80375	25	47	5	53	4	1191	486	706
			Column totals		1191	405			

PROJECT ID 2782-11-70
MEGAL COURT (WESTBOUND)
PHASE I

STATION	Real Station	Distance	AREA (SF) Cut	AREA (SF) Fill	Incremental Vol (CY) (Unadjusted) Cut Note 1	Incremental Vol (CY) (Unadjusted) Fill Note 3	Cumulative Vol (CY) Cut 1.00 Note 1	Cumulative Vol (CY) Expanded Fill 1.2	Mass Ordinate Note 8
800+50.00	80050		120	0	0	0	0	0	0
800+75.00	80075	25	166	0	132	0	132	0	132
801+00.00	80100	25	228	0	182	0	315	0	315
801+25.00	80125	25	223	0	209	0	524	0	524
801+50.00	80150	25	213	0	202	0	725	0	725
801+75.00	80175	25	204	0	193	0	919	0	919
802+00.00	80200	25	170	0	173	0	1092	0	1092
802+25.00	80225	25	151	0	149	0	1240	0	1240
802+50.00	80250	25	149	0	139	0	1379	0	1379
802+75.00	80275	25	147	0	137	0	1516	0	1516
803+00.00	80300	25	148	0	137	0	1653	0	1653
803+25.00	80325	25	170	0	147	0	1800	0	1800
803+50.00	80350	25	200	0	171	0	1971	0	1971
803+75.00	80375	25	205	0	188	0	2159	0	2159
			Column totals		2159	0			

PROJECT ID 2720-10-70
MEGAL COURT (EASTBOUND)
PHASE I

STATION	Real Station	Distance	AREA (SF) Cut	AREA (SF) Fill	Incremental Vol (CY) (Unadjusted) Cut Note 1	Incremental Vol (CY) (Unadjusted) Fill Note 3	Cumulative Vol (CY) Cut 1.00 Note 1	Cumulative Vol (CY) Expanded Fill 1.2	Mass Ordinate Note 8
803+75.00	80375		47	5	0	0	0	0	0
804+00.00	80400	25	35	19	38	11	38	13	25
804+25.00	80425	25	23	39	27	27	65	46	19
			Column totals		65	38			

PROJECT ID 2720-10-70
MEGAL COURT (WESTBOUND)
PHASE I

STATION	Real Station	Distance	AREA (SF) Cut	AREA (SF) Fill	Incremental Vol (CY) (Unadjusted) Cut Note 1	Incremental Vol (CY) (Unadjusted) Fill Note 3	Cumulative Vol (CY) Cut 1.00 Note 1	Cumulative Vol (CY) Expanded Fill 1.2	Mass Ordinate Note 8
803+75.00	80375		205	0	0	0	0	0	0
804+00.00	80400	25	175	0	176	0	176	0	176
804+25.00	80425	25	165	0	157	0	333	0	333
			Column totals		333	0			

PROJECT ID 2720-10-70
WACKER NEUSON ENTRANCE (EASTBOUND)
PHASE I

STATION	Real Station	Distance	AREA (SF) Cut	AREA (SF) Fill	Incremental Vol (CY) (Unadjusted) Cut Note 1	Incremental Vol (CY) (Unadjusted) Fill Note 3	Cumulative Vol (CY) Cut 1.00 Note 1	Cumulative Vol (CY) Expanded Fill 1.2	Mass Ordinate Note 8
806+00.00	80600		8	119	0	0	0	0	0
806+25.00	80625	25	13	102	10	102	10	123	-113
806+50.00	80650	25	29	93	19	90	29	231	-202
806+75.00	80675	25	0	100	13	89	43	338	-296
807+00.00	80700	25	2	93	1	89	44	446	-402
807+25.00	80725	25	10	81	6	81	49	542	-493
807+50.00	80750	25	18	67	13	69	62	624	-562
807+75.00	80775	25	33	61	24	59	86	696	-610
808+00.00	80800	25	61	25	44	40	129	743	-614
808+25.00	80825	25	75	37	63	29	192	778	-586
808+34.44	80834	9	75	37	26	13	218	793	-575
			Column totals		218	661			

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PROJECT NO: 2782-11-70 & 2720-10-70 | HWY: PILGRIM ROAD | COUNTY: WAUKESHA | EARTHWORK | SHEET 940 | E

PROJECT ID 2720-10-70
WACKER NEUSON ENTRANCE (WESTBOUND)
PHASE I

STATION	Real Station	Distance	AREA (SF) Cut	AREA (SF) Fill	Incremental Vol (CY) (Unadjusted) Cut Note 1	Incremental Vol (CY) (Unadjusted) Fill Note 3	Cumulative Vol (CY) Cut 1.00 Note 1	Cumulative Vol (CY) Expanded Fill 1.2	Mass Ordinate Note 8
806+00.00	80600		1	39	0	0	0	0	0
806+25.00	80625	25	3	41	2	37	2	44	-43
806+50.00	80650	25	3	35	3	35	5	87	-82
806+75.00	80675	25	5	31	4	31	8	123	-115
807+00.00	80700	25	10	28	7	27	15	156	-141
807+25.00	80725	25	15	23	12	24	27	184	-158
807+50.00	80750	25	21	19	17	19	44	208	-164
807+75.00	80775	25	32	16	25	16	68	227	-159
808+00.00	80800	25	33	16	30	15	98	245	-147
			Column totals		98	204			

PROJECT ID 2720-10-70
WACKER NEUSON NORTH LEG (NORTHBOUND)
PHASE I

STATION	Real Station	Distance	AREA (SF) Cut	AREA (SF) Fill	Incremental Vol (CY) (Unadjusted) Cut Note 1	Incremental Vol (CY) (Unadjusted) Fill Note 3	Cumulative Vol (CY) Cut 1.00 Note 1	Cumulative Vol (CY) Expanded Fill 1.2	Mass Ordinate Note 8
906+50.00	90650		167	0	0	0	0	0	0
906+75.00	90675	25	193	0	167	0	167	0	167
907+00.00	90700	25	67	0	120	0	287	0	287
907+25.00	90725	25	19	8	40	4	327	4	322
907+51.68	90752	27	19	8	19	8	346	14	332
			Column totals		346	12			

PROJECT ID 2720-10-70
WACKER NEUSON NORTH LEG (SOUTHBOUND)
PHASE I

STATION	Real Station	Distance	AREA (SF) Cut	AREA (SF) Fill	Incremental Vol (CY) (Unadjusted) Cut Note 1	Incremental Vol (CY) (Unadjusted) Fill Note 3	Cumulative Vol (CY) Cut 1.00 Note 1	Cumulative Vol (CY) Expanded Fill 1.2	Mass Ordinate Note 8
906+52.25	90652		156	0	0	0	0	0	0
906+75.00	90675	23	95	0	106	0	106	0	106
907+00.00	90700	25	48	0	66	0	172	0	172
907+25.00	90725	25	26	5	34	2	206	3	203
			Column totals		206	2			

PROJECT ID 2720-10-70
HARLEY DAVIDSON MAIN ENTRANCE (NORTHBOUND)
PHASE I

STATION	Real Station	Distance	AREA (SF) Cut	AREA (SF) Fill	Incremental Vol (CY) (Unadjusted) Cut Note 1	Incremental Vol (CY) (Unadjusted) Fill Note 3	Cumulative Vol (CY) Cut 1.00 Note 1	Cumulative Vol (CY) Expanded Fill 1.2	Mass Ordinate Note 8
904+75.00	90475	0	9	96	0	0	0	0	0
905+00.00	90500	25	6	62	7	73	7	88	-81
			Column totals		7	73			

PROJECT ID 2720-10-70
HARLEY DAVIDSON MAIN ENTRANCE (SOUTHBOUND)
PHASE I

STATION	Real Station	Distance	AREA (SF) Cut	AREA (SF) Fill	Incremental Vol (CY) (Unadjusted) Cut Note 1	Incremental Vol (CY) (Unadjusted) Fill Note 3	Cumulative Vol (CY) Cut 1.00 Note 1	Cumulative Vol (CY) Expanded Fill 1.2	Mass Ordinate Note 8
904+75.00	90475	0	0	175	0	0	0	0	0
905+00.00	90500	25	7	12	3	87	3	104	-101
			Column totals		3	87			

PROJECT ID 2720-10-70
HARLEY LOADING DOCK ENTRANCE
PHASE I

STATION	Real Station	Distance	AREA (SF) Cut	AREA (SF) Fill	Incremental Vol (CY) (Unadjusted) Cut Note 1	Incremental Vol (CY) (Unadjusted) Fill Note 3	Cumulative Vol (CY) Cut 1.00 Note 1	Cumulative Vol (CY) Expanded Fill 1.2	Mass Ordinate Note 8
12+75.00	1275		42	1	0	0	0	0	0
13+00.00	1300	25	50	0	43	0	43	1	42
13+25.00	1325	25	59	0	50	0	93	1	93
13+50.00	1350	25	87	0	68	0	161	1	160
13+75.00	1375	25	144	0	107	0	268	1	267
14+00.00	1400	25	174	0	147	0	415	1	414
14+25.00	1425	25	130	0	141	0	556	1	555
14+50.00	1450	25	85	3	100	1	655	2	653
14+90.19	1490	40	83	1	125	3	780	6	774
			Column totals		780	5			

PROJECT ID 2720-10-70
ROUNDABOUT
PHASE I

STATION	Real Station	Distance	AREA (SF) Cut	AREA (SF) Fill	Incremental Vol (CY) (Unadjusted) Cut Note 1	Incremental Vol (CY) (Unadjusted) Fill Note 3	Cumulative Vol (CY) Cut 1.00 Note 1	Cumulative Vol (CY) Expanded Fill 1.2	Mass Ordinate Note 8
01+00.00	100		123	308	0	0	0	0	0
01+25.00	125	25	157	299	130	281	130	337	-208
01+50.00	150	25	246	292	187	274	316	666	-349
01+75.00	175	25	189	329	201	288	518	1011	-493
02+00.00	200	25	24	370	99	324	616	1399	-783
02+25.00	225	25	22	252	21	288	638	1744	-1107
02+50.00	250	25	2	362	11	284	649	2086	-1437
			Column totals		649	1738			

PROJECT ID 2720-10-70
HARLEY DAVIDSON MAIN ENTRANCE (NORTHBOUND)
PHASE II

STATION	Real Station	Distance	AREA (SF)		Incremental Vol (CY) (Unadjusted)		Cumulative Vol (CY)		Mass Ordinate
			Cut	Fill	Cut Note 1	Fill Note 3	Cut 1.00 Note 1	Expanded Fill 1.2	Note 8
902+75.00	90275		199	10	0	0	0	0	0
903+00.00	90300	25	115	0	145	5	145	6	140
903+25.00	90325	25	120	1	109	0	254	6	248
903+50.00	90350	25	67	5	87	3	341	9	331
903+75.00	90375	25	15	22	38	13	379	24	354
904+00.00	90400	25	0	97	7	55	386	91	295
904+25.00	90425	25	37	39	17	63	403	166	237
904+50.00	90450	25	209	0	114	18	517	188	329
904+75.00	90475	25	9	96	101	44	618	241	376
				Column totals	618	201			

PROJECT ID 2720-10-70
HARLEY DAVIDSON MAIN ENTRANCE (SOUTHBOUND)
PHASE II

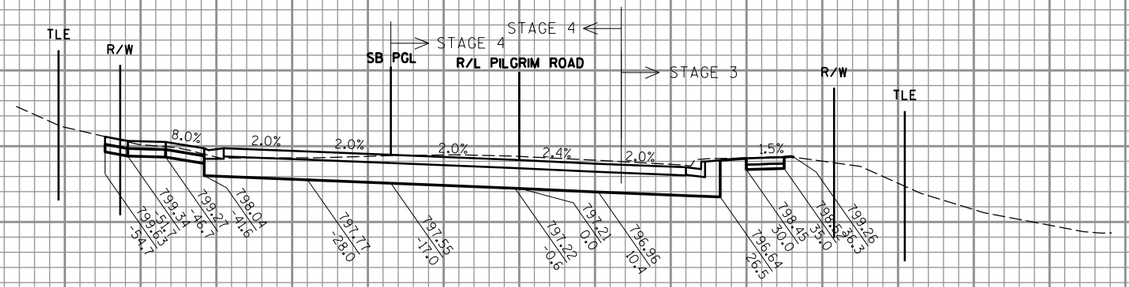
STATION	Real Station	Distance	AREA (SF)		Incremental Vol (CY) (Unadjusted)		Cumulative Vol (CY)		Mass Ordinate
			Cut	Fill	Cut Note 1	Fill Note 3	Cut 1.00 Note 1	Expanded Fill 1.2	Note 8
903+00.00	90300		131	4	0	0	0	0	0
903+25.00	90325	25	91	7	103	5	103	6	97
903+50.00	90350	25	45	3	63	5	166	12	154
903+75.00	90375	25	29	15	34	8	200	22	178
904+00.00	90400	25	8	30	17	21	217	47	170
904+25.00	90425	25	127	0	63	14	280	63	216
904+50.00	90450	25	27	44	71	20	351	88	263
904+75.00	90475	25	0	175	13	101	363	209	154
				Column totals	363	175			

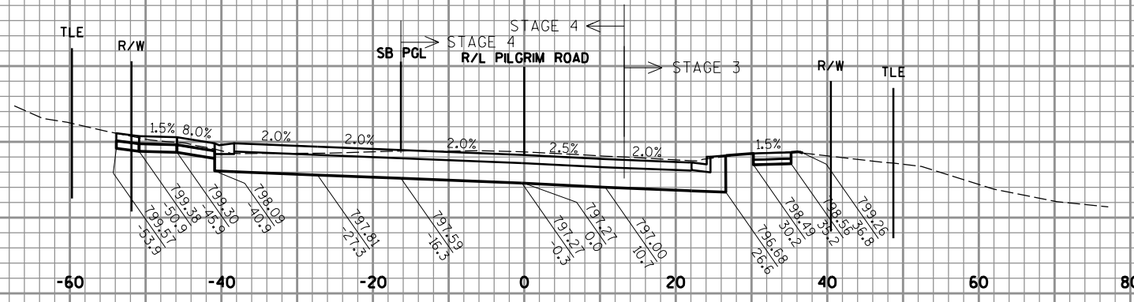
PROJECT ID 2720-10-70
HARLEY DAVIDSON MAIN ENTRANCE (NORTHBOUND)
PHASE III

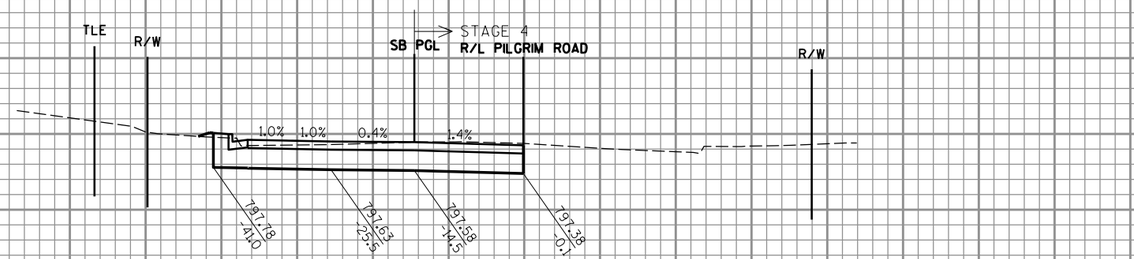
STATION	Real Station	Distance	AREA (SF)		Incremental Vol (CY) (Unadjusted)		Cumulative Vol (CY)		Mass Ordinate
			Cut	Fill	Cut Note 1	Fill Note 3	Cut 1.00 Note 1	Expanded Fill 1.2	Note 8
901+25.00	90125		50	5	0	0	0	0	0
901+50.00	90150	25	84	0	62	2	62	3	59
901+75.00	90175	25	96	0	83	0	145	3	143
902+00.00	90200	25	117	6	99	3	244	6	238
902+25.00	90225	25	136	0	117	3	361	9	352
902+50.00	90250	25	151	10	133	5	494	15	479
902+75.00	90275	25	199	10	162	9	656	26	630
				Column totals	656	22			

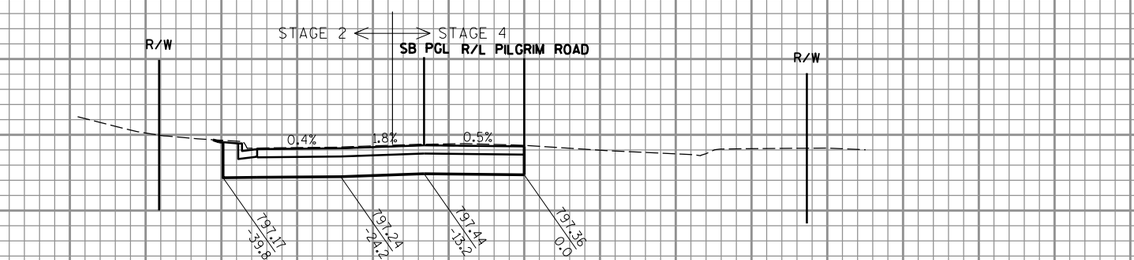
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STA 198+21 TO 199+00

PROJECT NO: 2782-11-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	CROSS SECTIONS: PILGRIM ROAD	SHEET 943	E

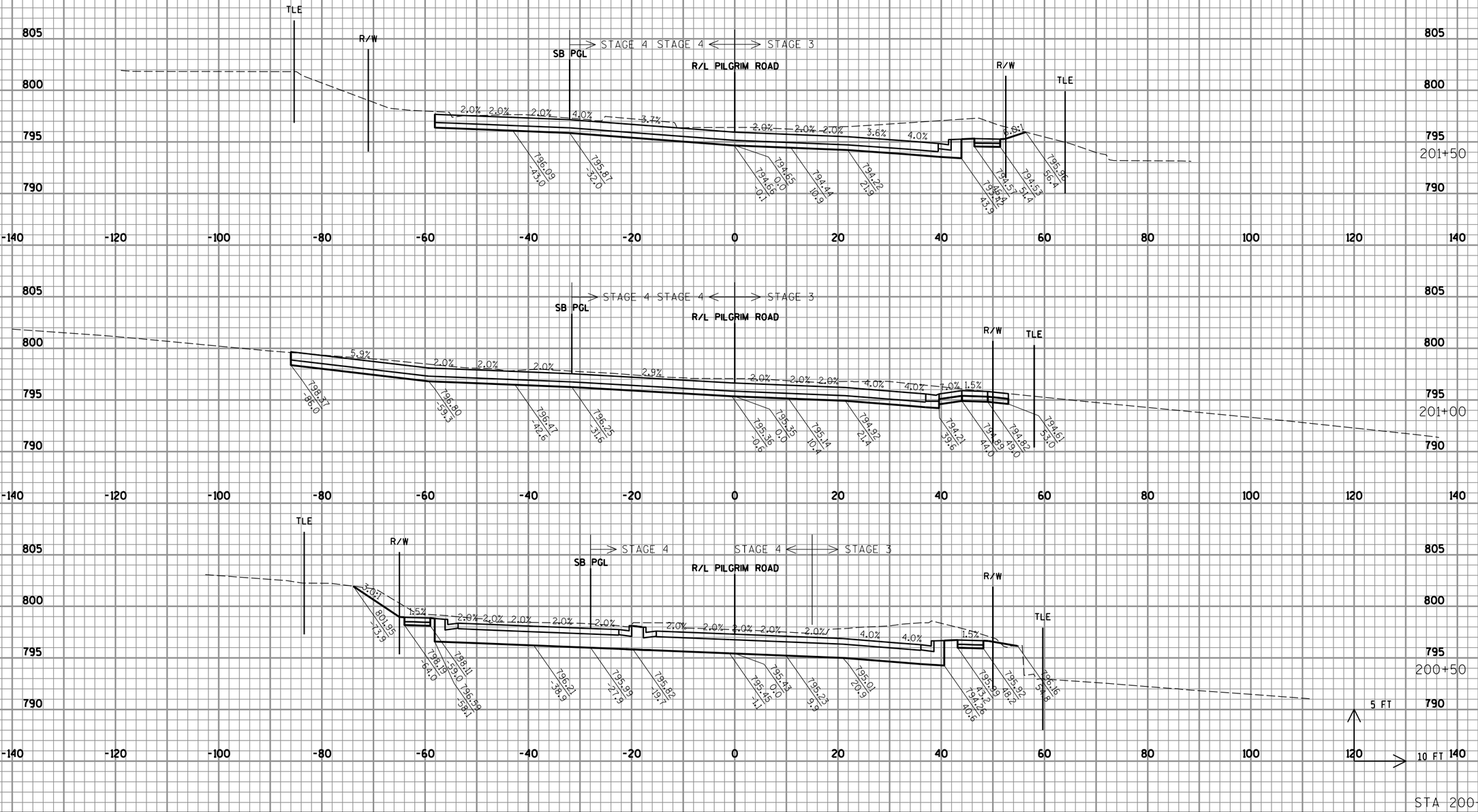
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PLOT DATE : 12/23/2014
PLOT BY : ajp
PLOT NAME :
PLOT SCALE : 1:20
WISDOT/CADDS SHEET 21

STA 199+26 TO 200+00

PROJECT NO: 2782-11-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	CROSS SECTIONS: PILGRIM ROAD	SHEET 944	E

FILE NAME : P:\44xx\4442\Plan\090201_xs_Pilgrim Road.DGN | PLOT DATE : 12/23/2014 | PLOT BY : ajp | PLOT NAME : | PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

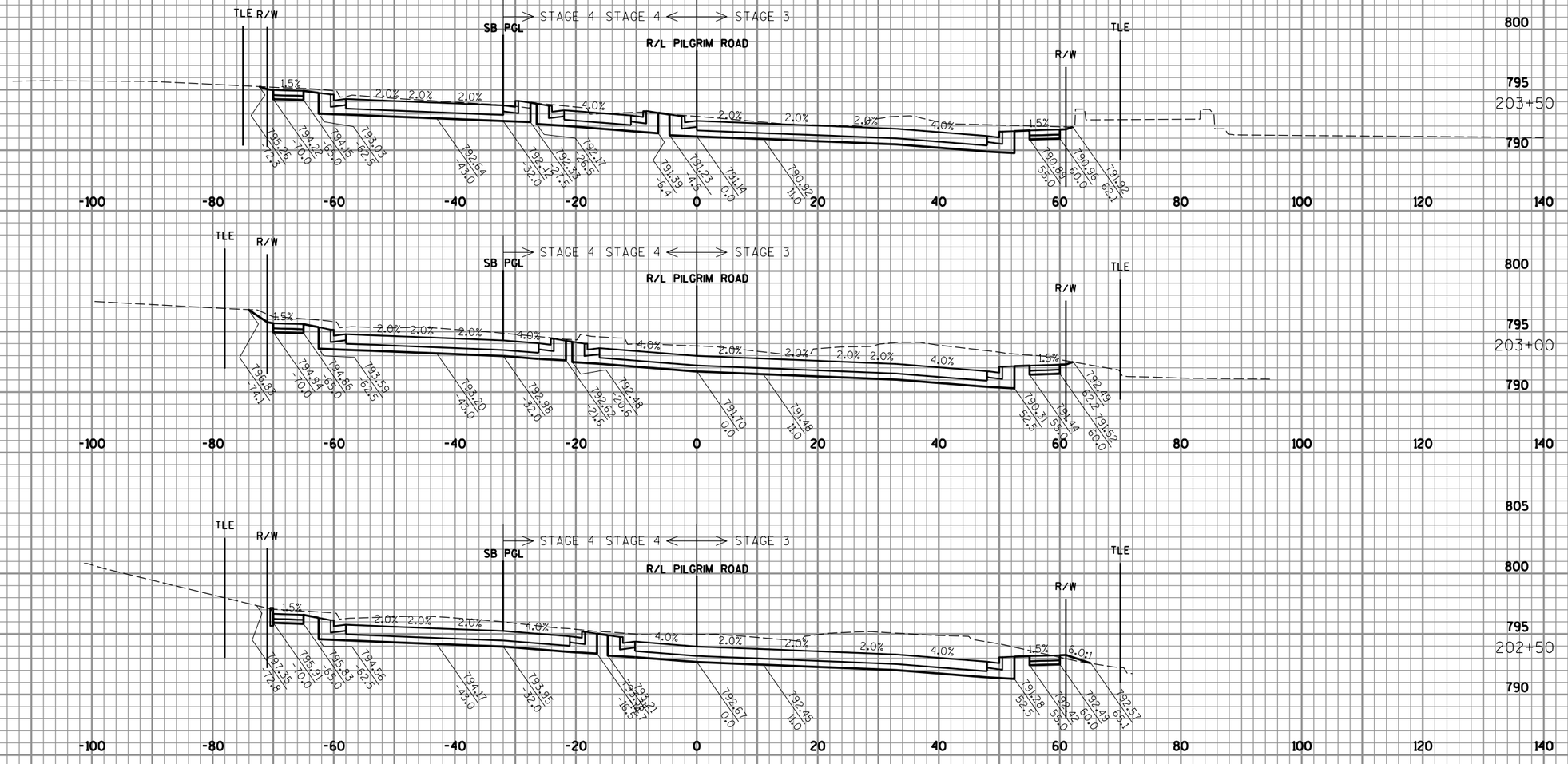


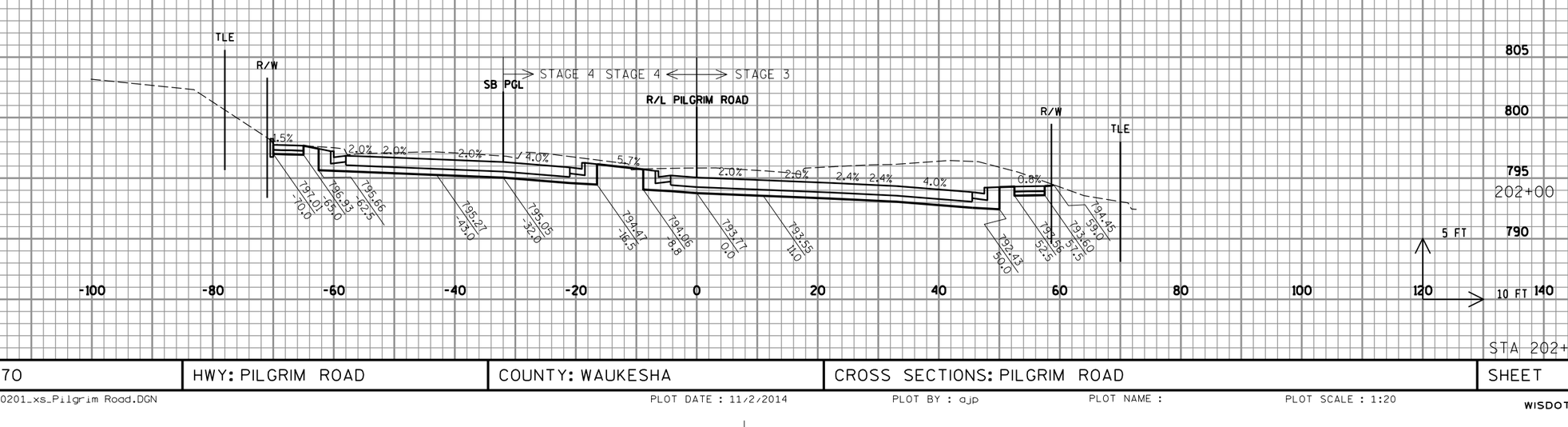
STA 200+50 TO 201+50

PROJECT NO: 2782-11-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	CROSS SECTIONS: PILGRIM ROAD	SHEET 945	E

FILE NAME : P:\44xx\4442\Plan\090201_xs_Pilgrim Road.DGN | PLOT DATE : 12/23/2014 | PLOT BY : ajp | PLOT NAME : | PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21





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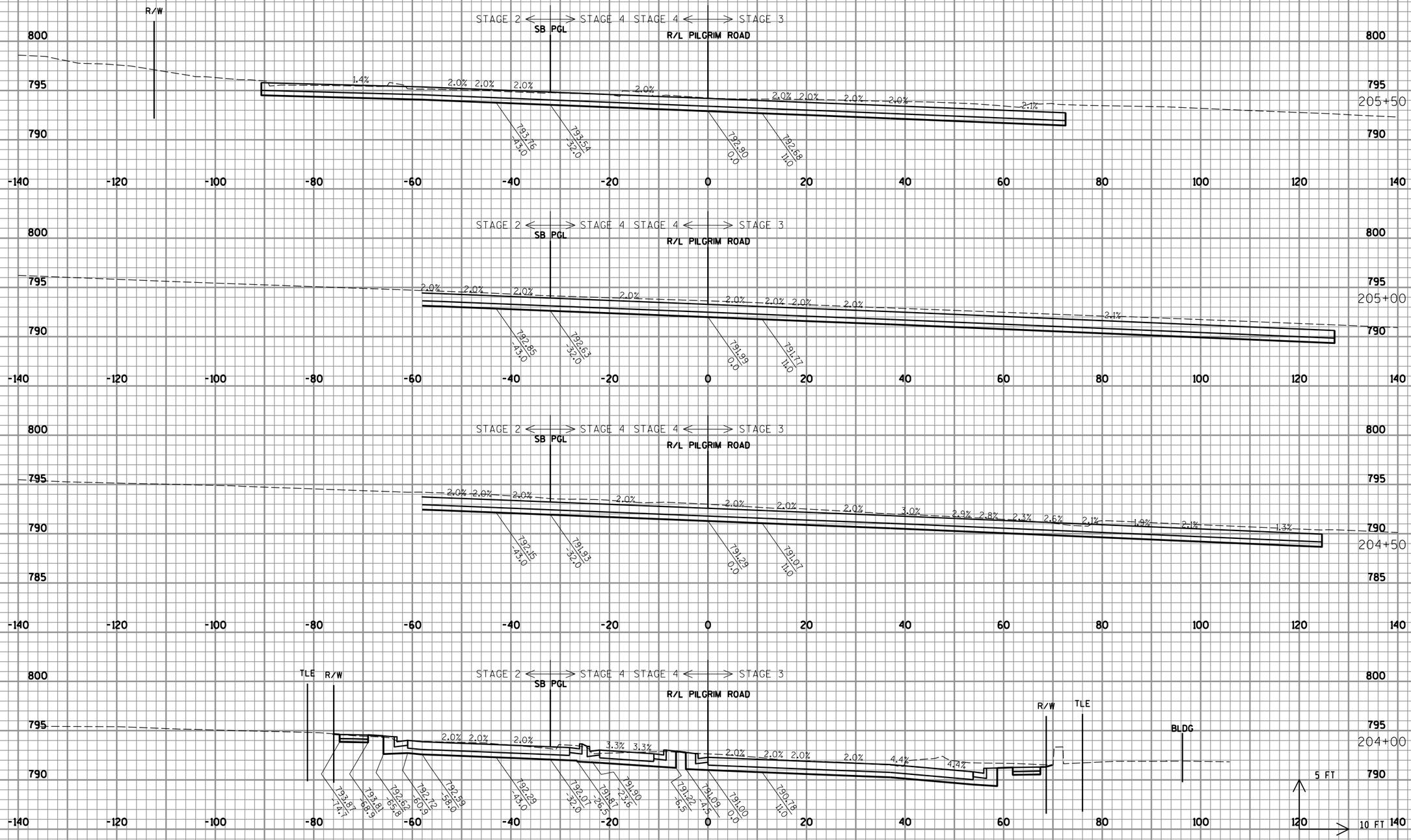
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STA 202+00 TO 203+50

PROJECT NO: 2782-11-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	CROSS SECTIONS: PILGRIM ROAD	SHEET 946	E

FILE NAME : P:\44xx\4442\Plan\090201_xs_Pilgrim Road.DGN | PLOT DATE : 11/2/2014 | PLOT BY : ajp | PLOT NAME : | PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21



STA 204+00 TO 205+50

PROJECT NO: 2782-11-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	CROSS SECTIONS: PILGRIM ROAD	SHEET 947	E

FILE NAME : P:\44xx\4442\Plan\090201_xs_Pilgrim Road.DGN | PLOT DATE : 11/2/2014 | PLOT BY : ajp | PLOT NAME : | PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

9

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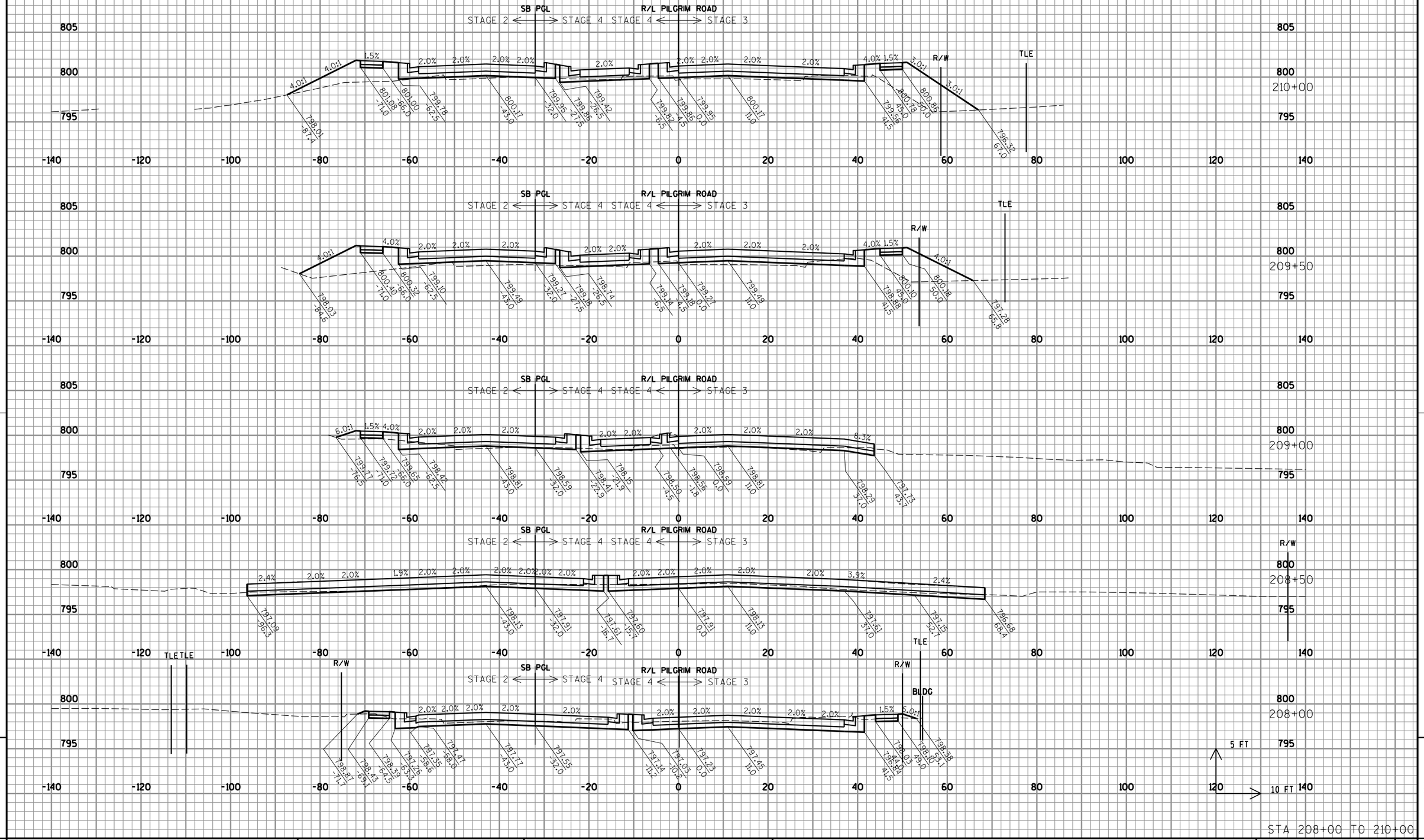
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STA 206+00 TO 207+65

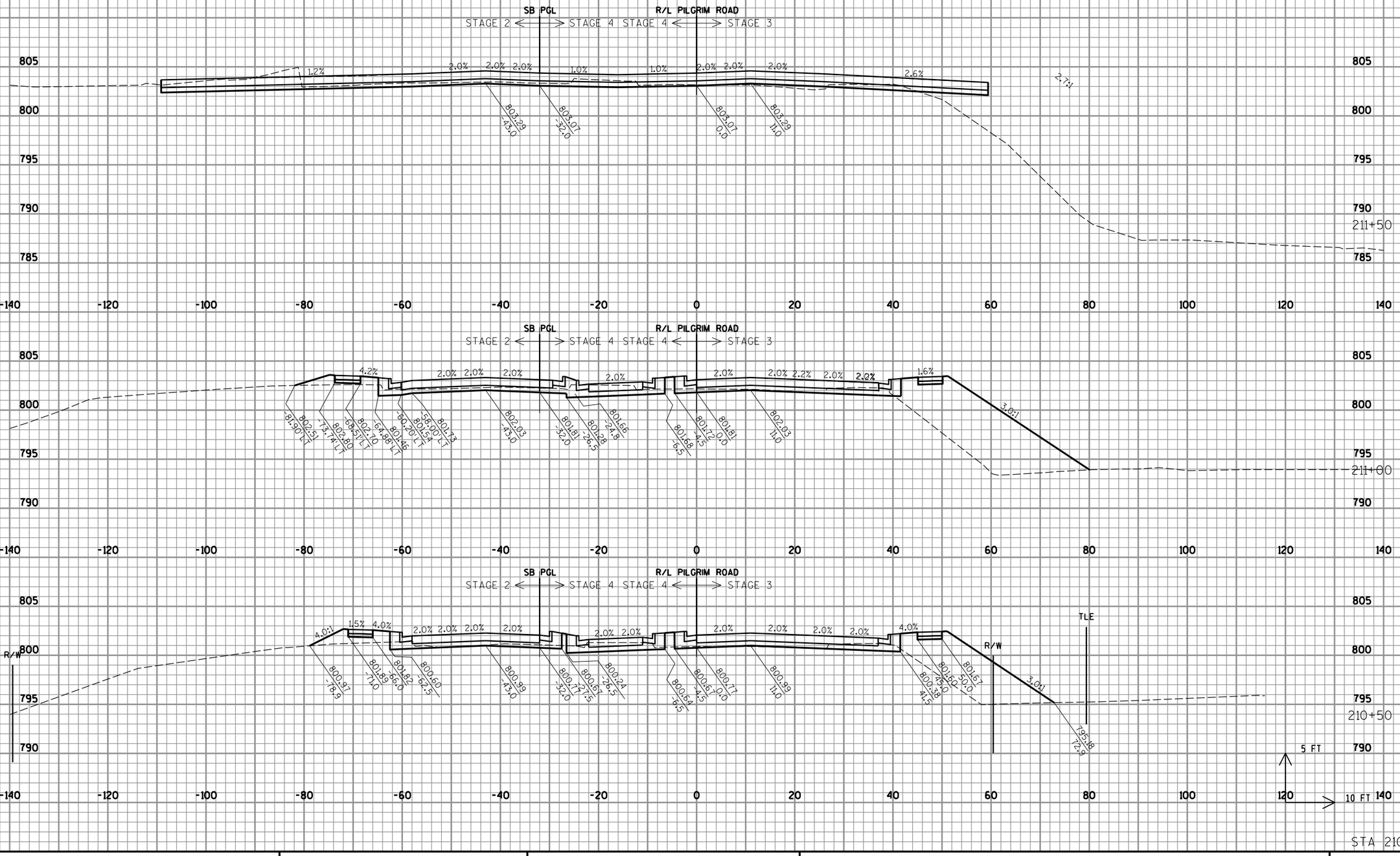
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WISDOT/CADDS SHEET 21



PROJECT NO: 2782-11-70 & 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	CROSS SECTIONS: PILGRIM ROAD	SHEET 949	E

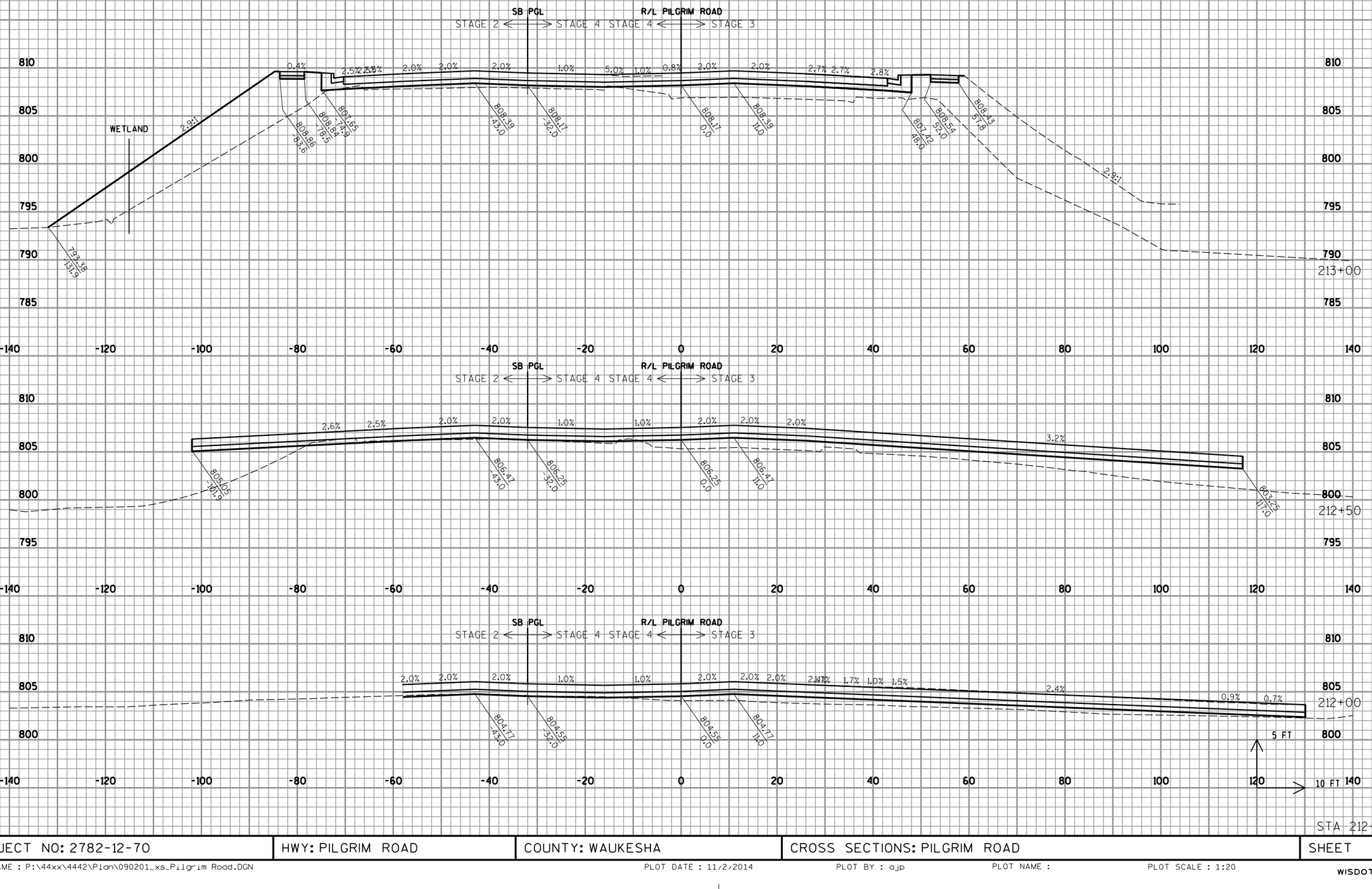


STA 210+50 TO 211+50

PROJECT NO: 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	CROSS SECTIONS: PILGRIM ROAD	SHEET 950	E

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WISDOT/CADDS SHEET 21



STA 212+00 TO 213+00

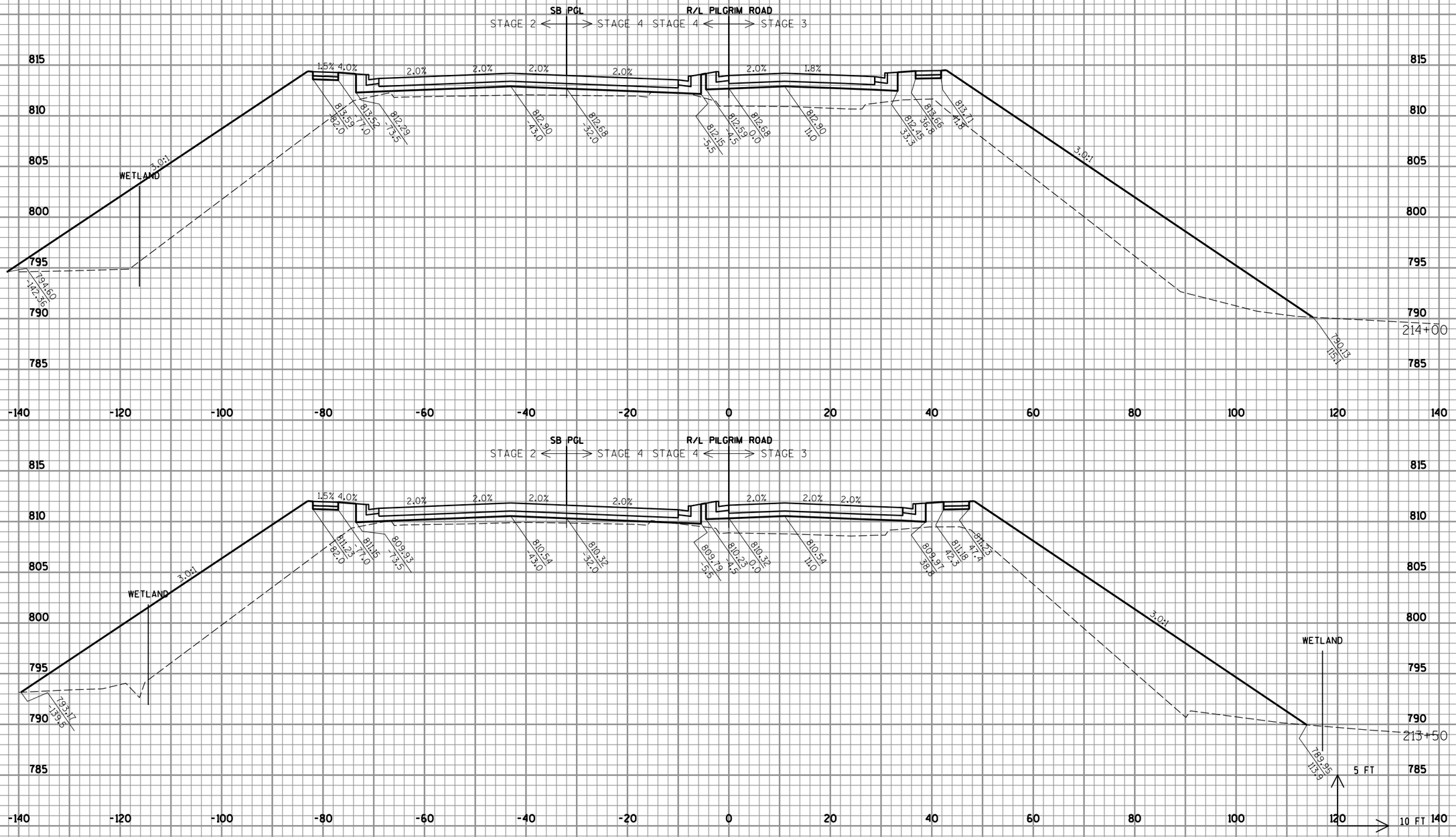
PROJECT NO: 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	CROSS SECTIONS: PILGRIM ROAD	SHEET 951	E

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WISDOT/CADDS SHEET 21

9

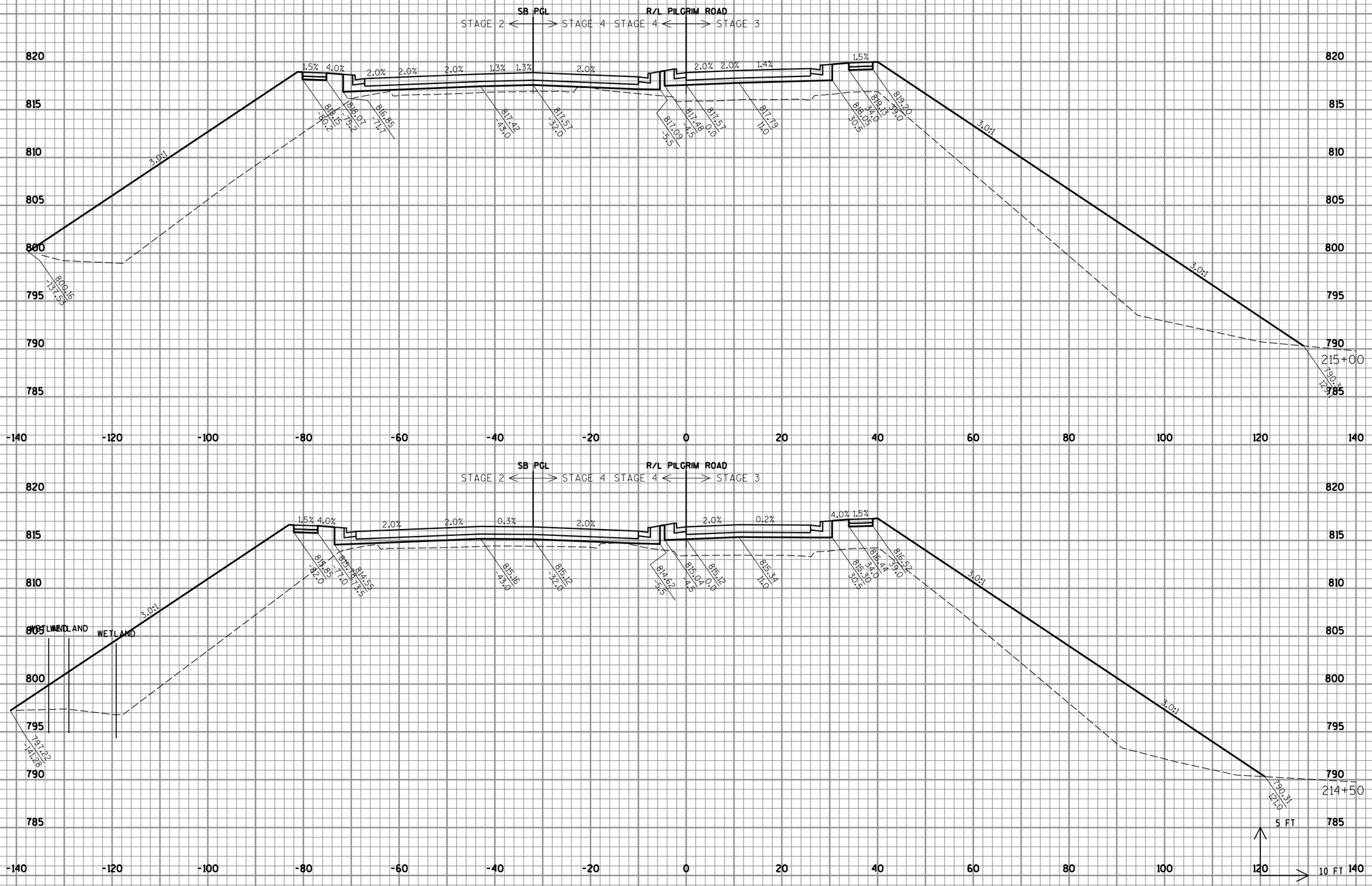
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PROJECT NO: 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	CROSS SECTIONS: PILGRIM ROAD	SHEET 952	E

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WISDOT/CADDS SHEET 21

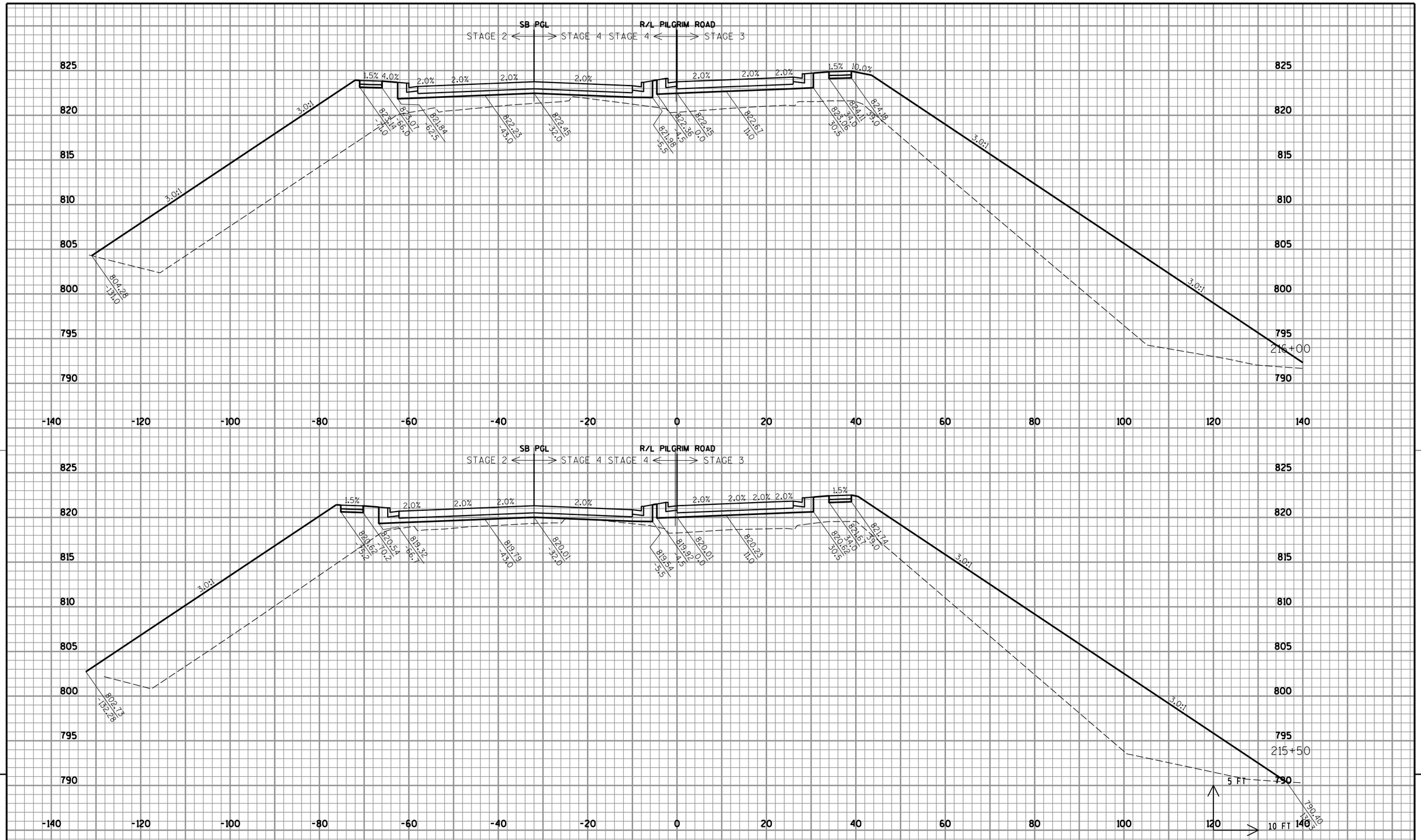


STA 214+50 TO 215+00

PROJECT NO: 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	CROSS SECTIONS: PILGRIM ROAD	SHEET 953	E

FILE NAME : P:\44xx\4442\Plan\090201_xs_Pilgrim Road.DGN PLOT DATE : 11/2/2014 PLOT BY : ajp PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

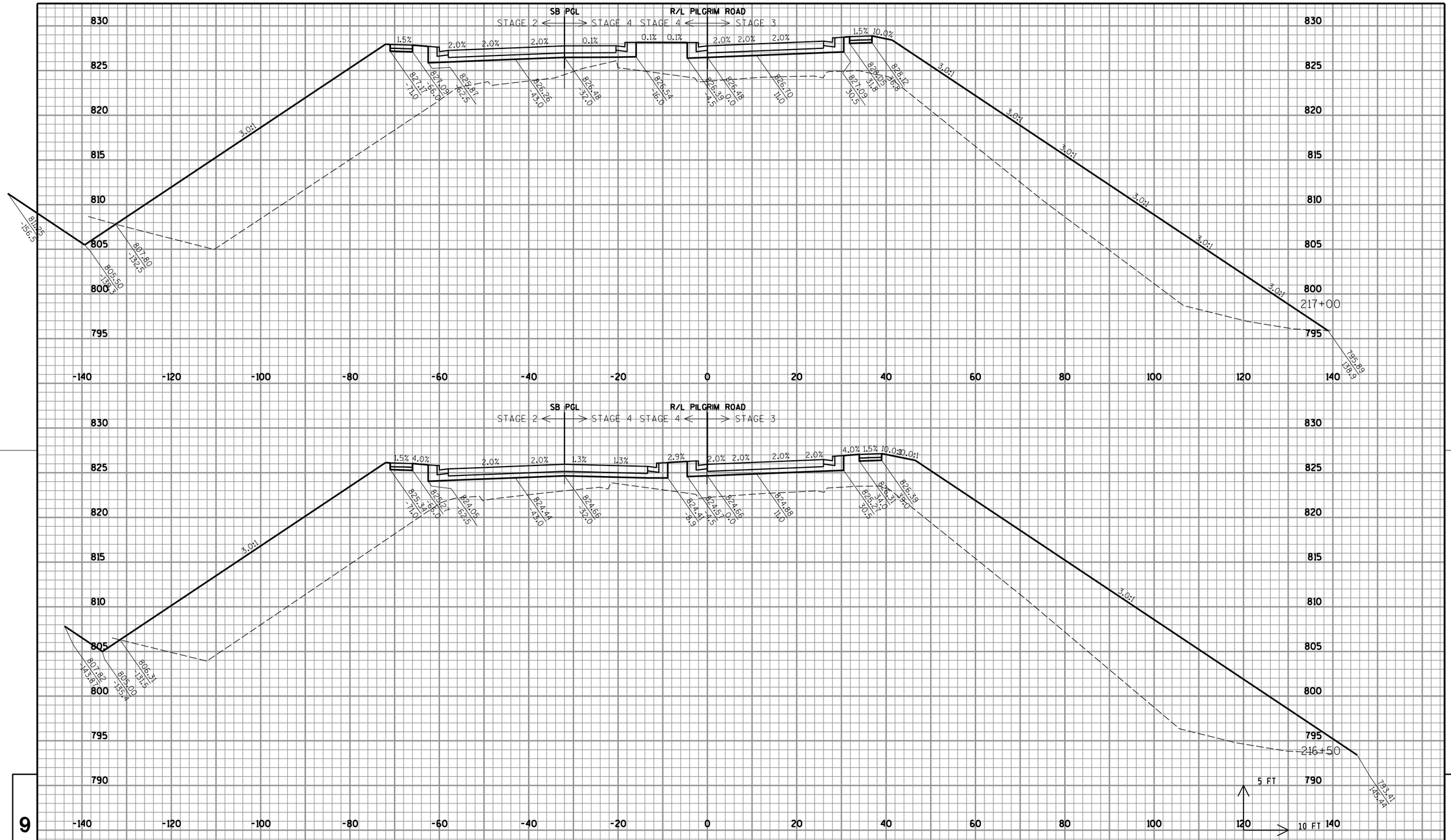


STA 215+50 TO 216+00

PROJECT NO: 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	CROSS SECTIONS: PILGRIM ROAD	SHEET 954	E

FILE NAME : P:\44xx\4442\Plan\090201_xs_Pilgrim Road.DGN | PLOT DATE : 11/2/2014 | PLOT BY : ajp | PLOT NAME : | PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21



9

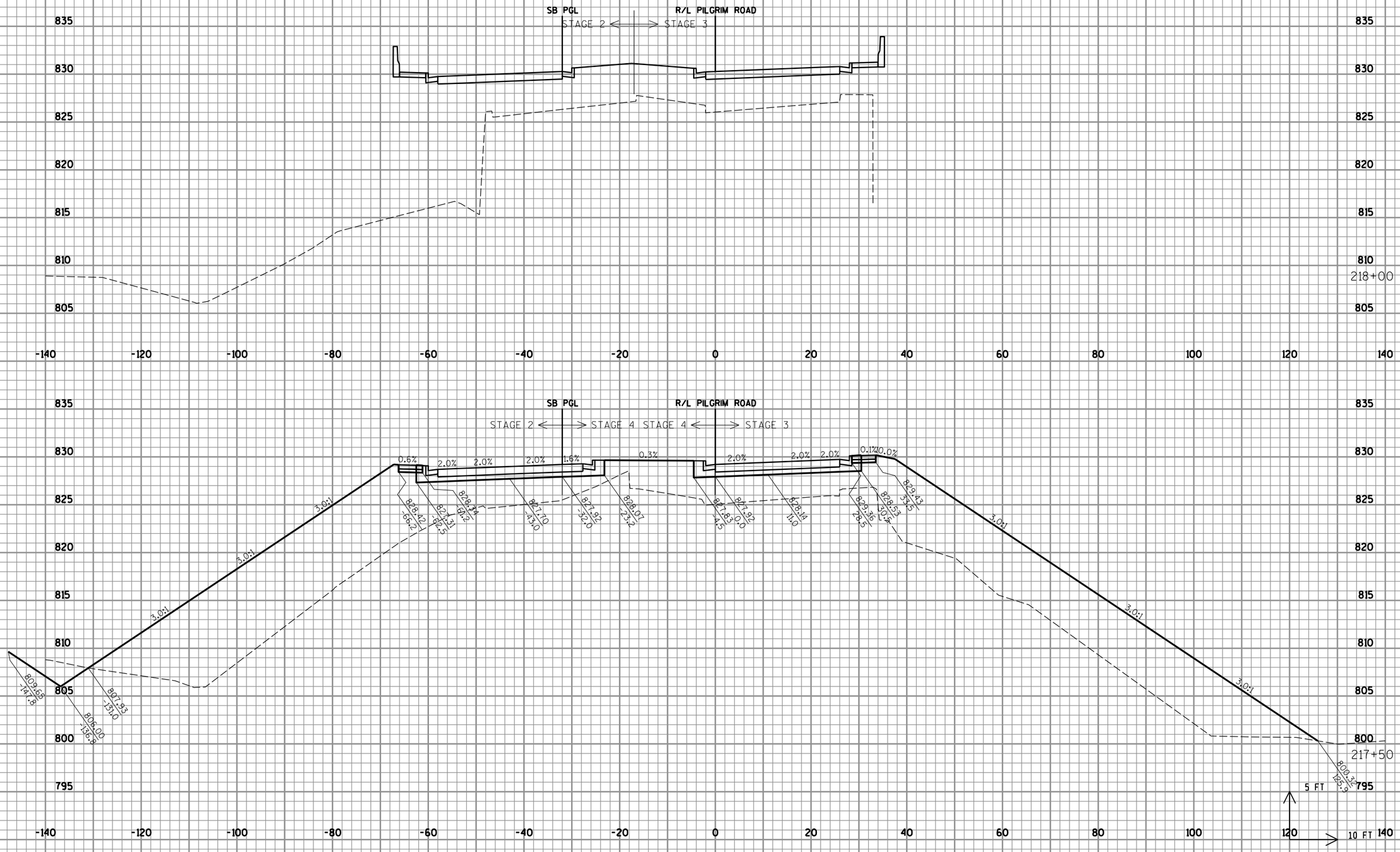
9

PROJECT NO: 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	CROSS SECTIONS: PILGRIM ROAD	SHEET 955	E

STA 216+50 TO 217+00

FILE NAME : P:\44xx\4442\Plan\090201_xs_Pilgrim Road.DGN | PLOT DATE : 11/2/2014 | PLOT BY : ajp | PLOT NAME : | PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

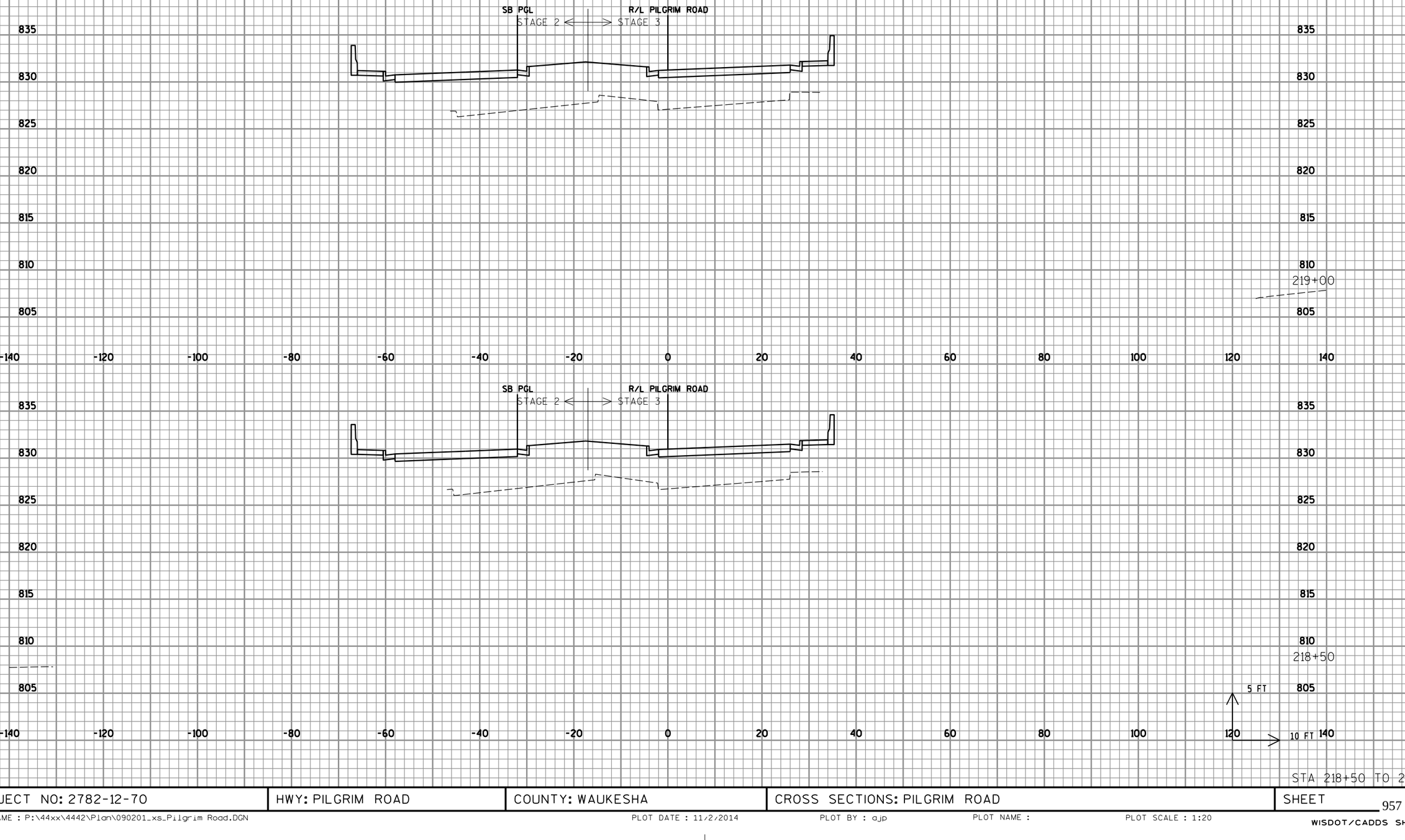


PROJECT NO: 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	CROSS SECTIONS: PILGRIM ROAD	SHEET 956	E

STA 217+50 TO 218+00

FILE NAME : P:\44xx\4442\Plan\090201_xs_Pilgrim Road.DGN | PLOT DATE : 11/2/2014 | PLOT BY : ajp | PLOT NAME : | PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21



9

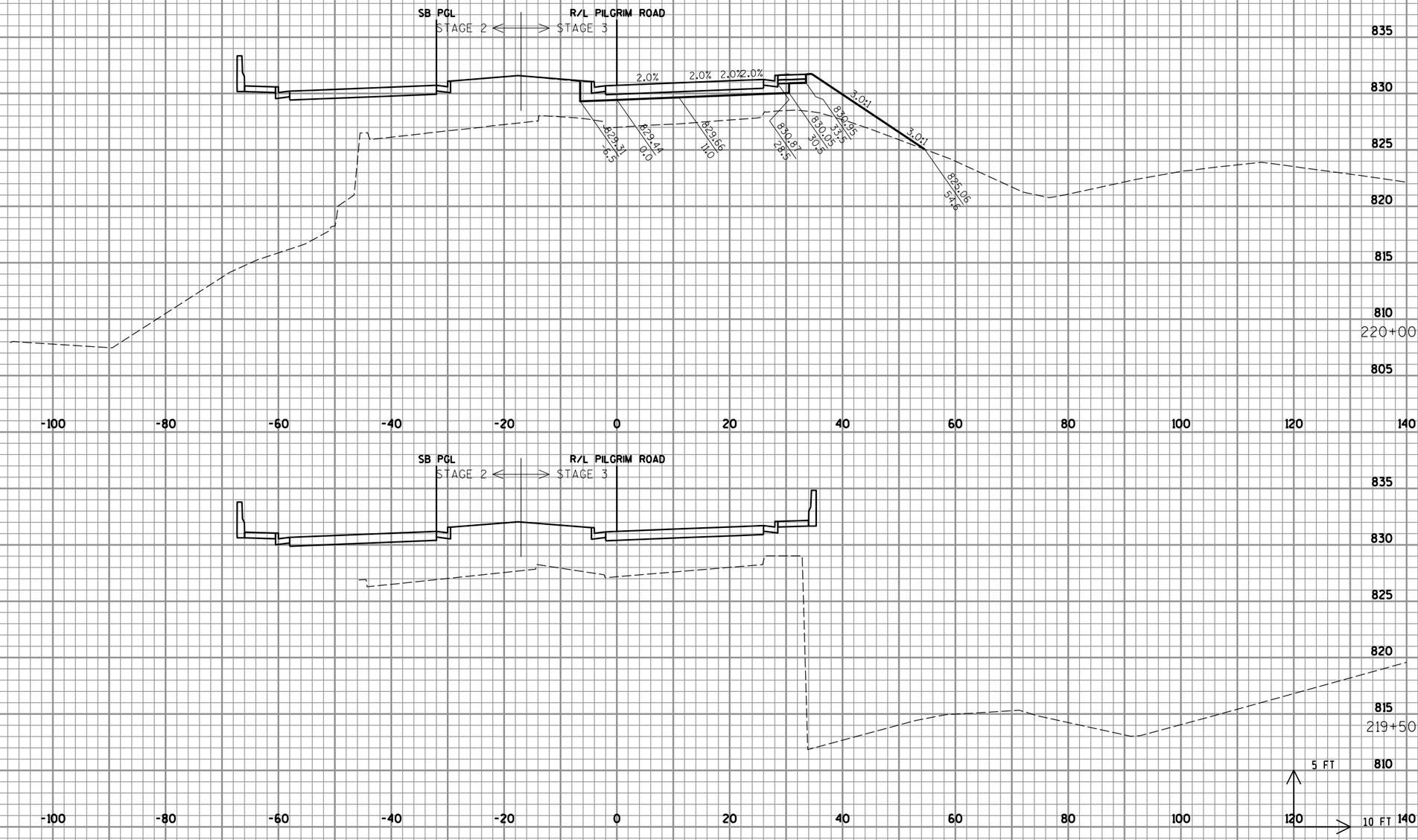
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STA 218+50 TO 219+00

PROJECT NO: 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	CROSS SECTIONS: PILGRIM ROAD	SHEET 957	E

FILE NAME : P:\44xx\4442\Plan\090201_xs_Pilgrim Road.DGN PLOT DATE : 11/2/2014 PLOT BY : ajp PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21



9

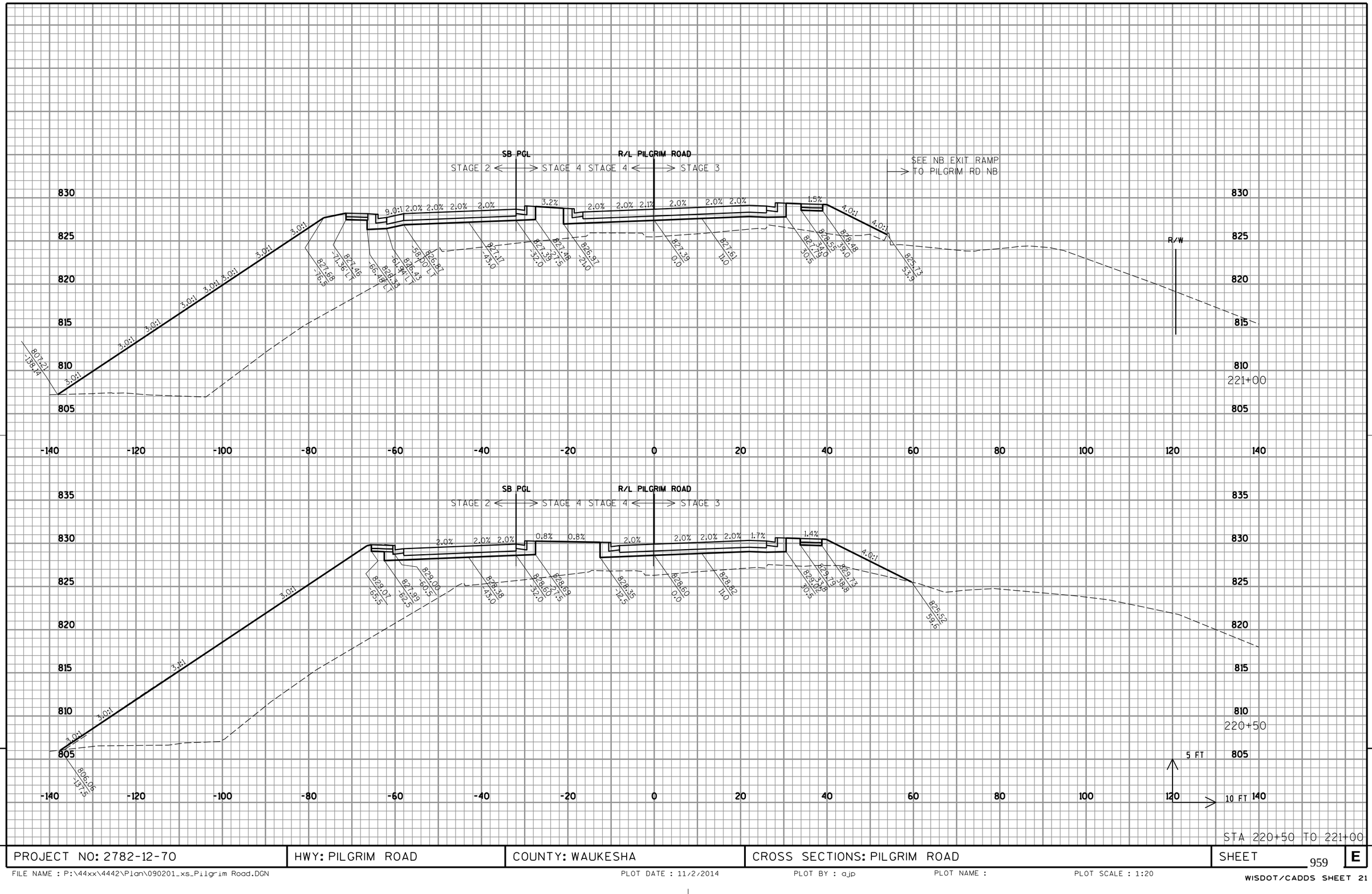
9

STA 219+50 TO 220+00

PROJECT NO: 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	CROSS SECTIONS: PILGRIM ROAD	SHEET 958	E

FILE NAME : P:\44xx\4442\Plan\090201_xs_Pilgrim Road.DGN PLOT DATE : 11/2/2014 PLOT BY : ajp PLOT NAME : PLOT SCALE : 1:20

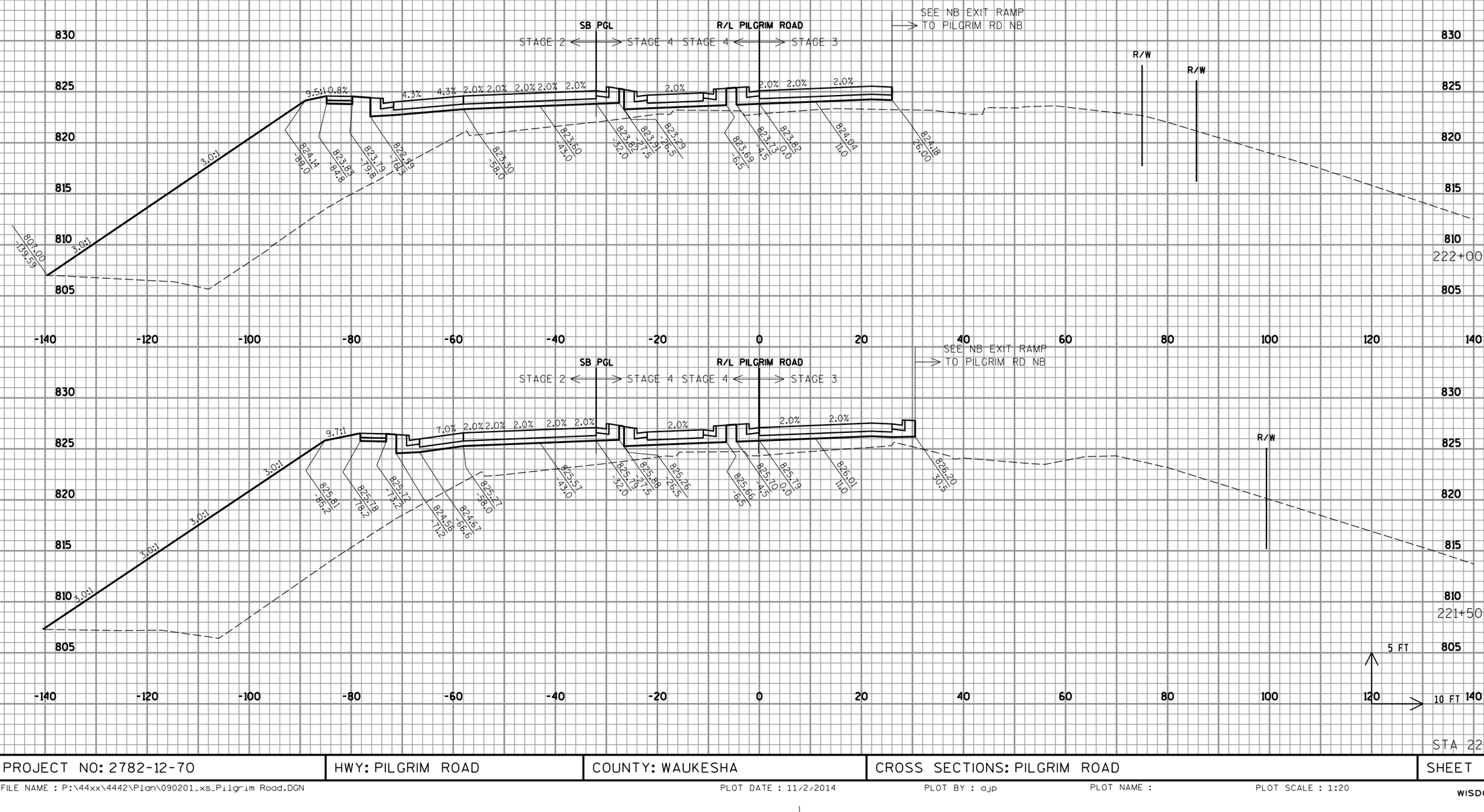
WISDOT/CADDS SHEET 21



PROJECT NO: 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	CROSS SECTIONS: PILGRIM ROAD	SHEET 959	E

FILE NAME : P:\44xx\4442\Plan\090201_xs_Pilgrim Road.DGN | PLOT DATE : 11/2/2014 | PLOT BY : ajp | PLOT NAME : | PLOT SCALE : 1:20

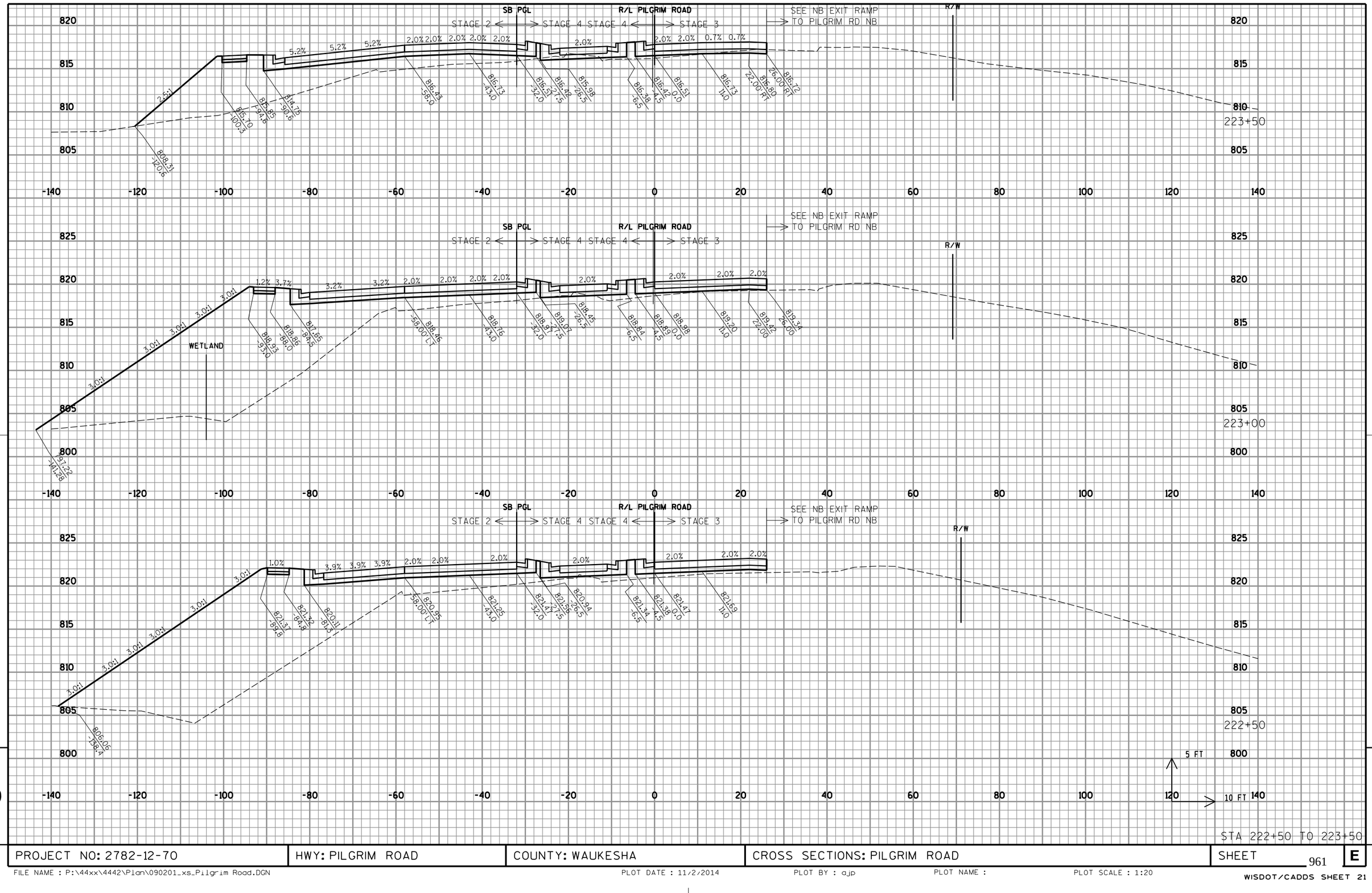
WISDOT/CADDS SHEET 21



PROJECT NO: 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	CROSS SECTIONS: PILGRIM ROAD	SHEET 960	E

FILE NAME : P:\44xx\4442\Plan\090201_xs_Pilgrim Road.DGN | PLOT DATE : 11/2/2014 | PLOT BY : ajp | PLOT NAME : | PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

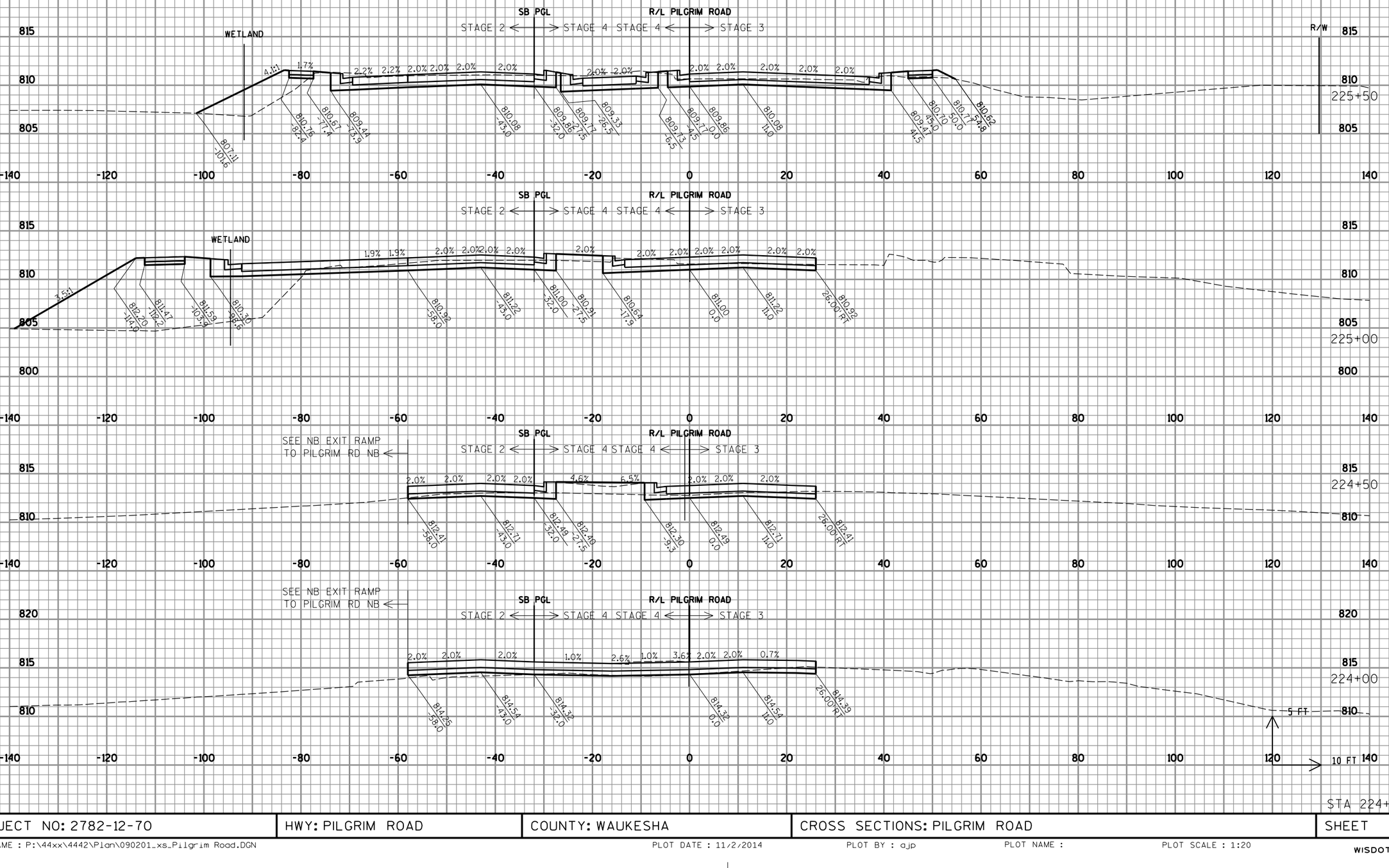


STA 222+50 TO 223+50

PROJECT NO: 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	CROSS SECTIONS: PILGRIM ROAD	SHEET 961	E

FILE NAME : P:\44xx\4442\Plan\090201_xs_Pilgrim Road.DGN | PLOT DATE : 11/2/2014 | PLOT BY : ajp | PLOT NAME : | PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

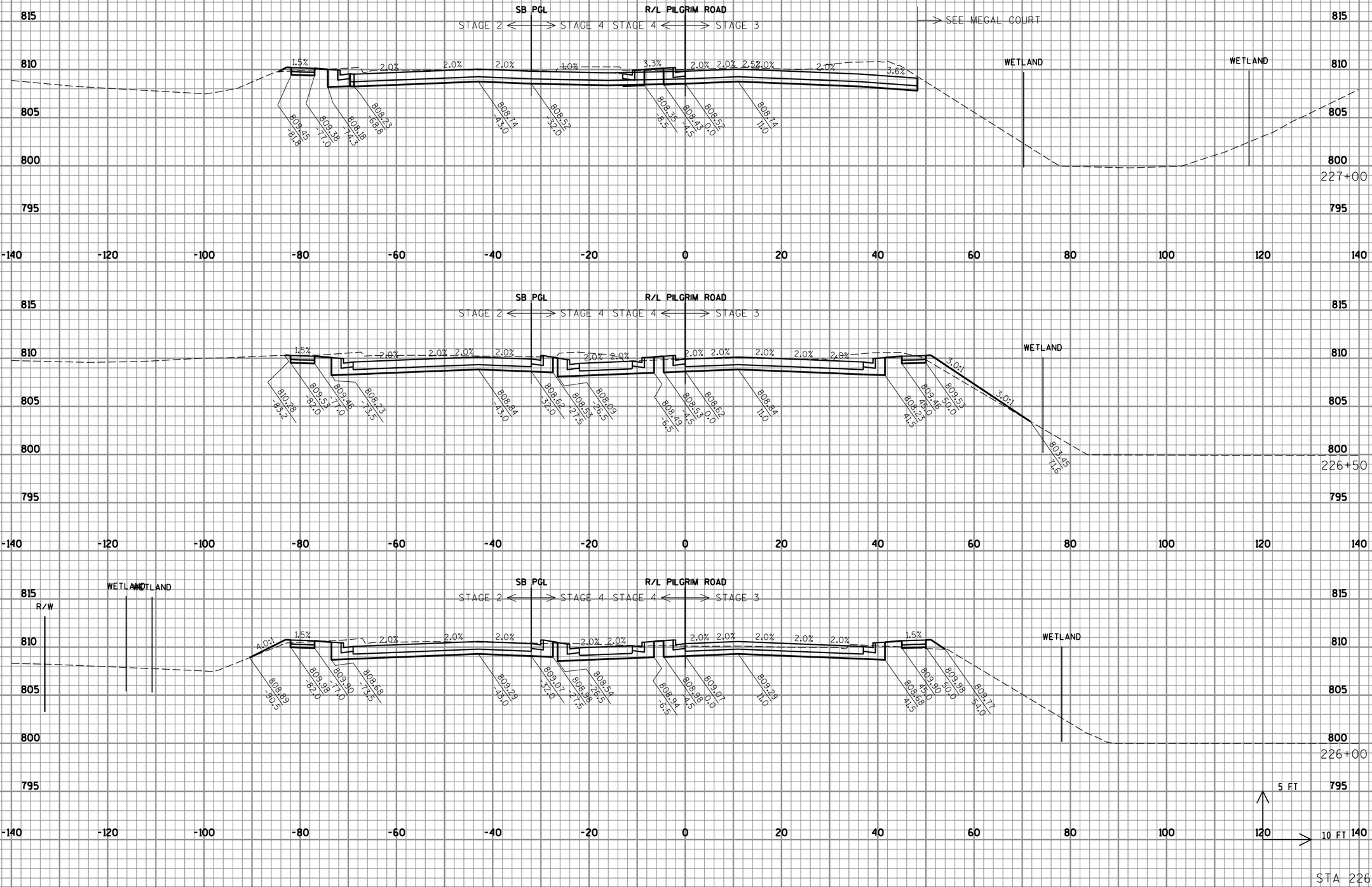


STA 224+00 TO 225+50

PROJECT NO: 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	CROSS SECTIONS: PILGRIM ROAD	SHEET 962	E

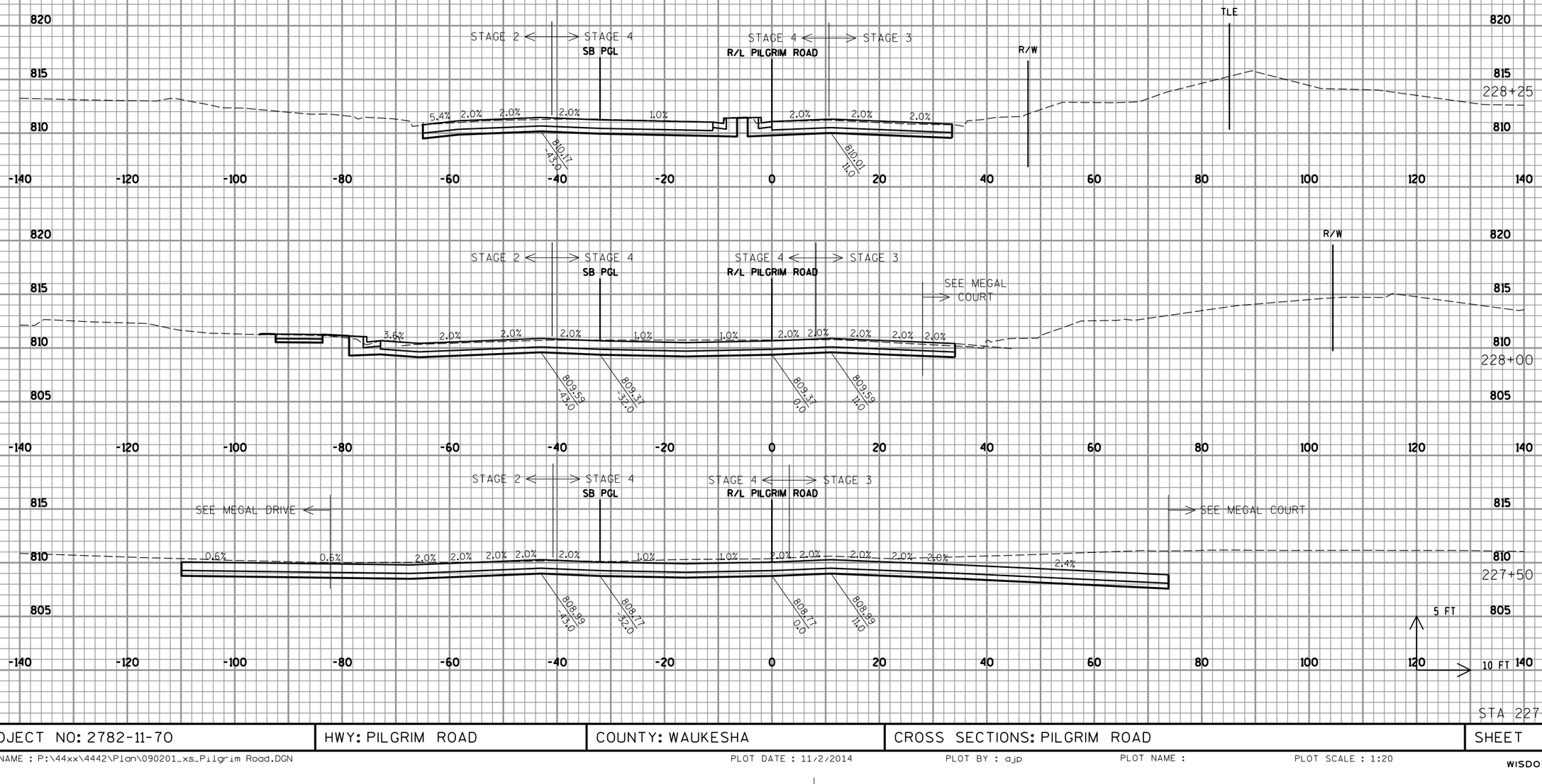
FILE NAME : P:\44xx\4442\Plan\090201_xs_Pilgrim Road.DGN | PLOT DATE : 11/2/2014 | PLOT BY : ajp | PLOT NAME : | PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21



STA 226+00 TO 227+00

PROJECT NO: 2782-11-70 & 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	CROSS SECTIONS: PILGRIM ROAD	SHEET 963	E

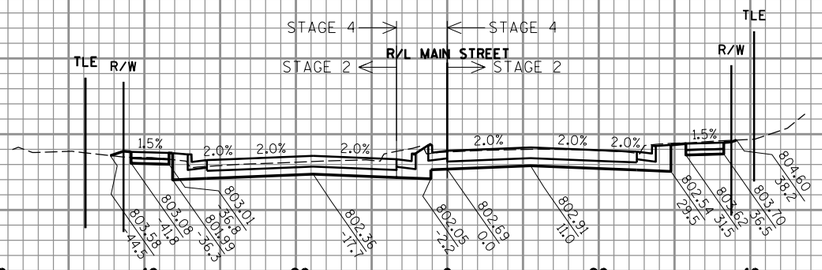


STA 227+50 TO 228+25

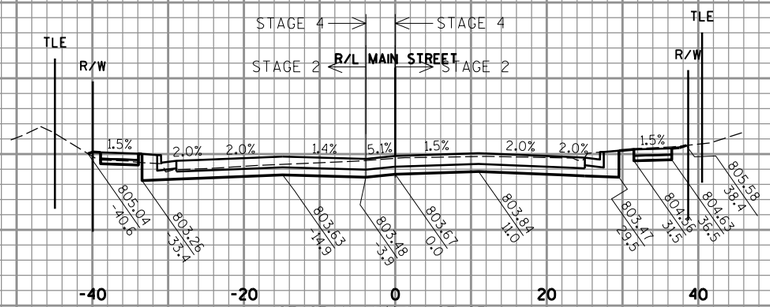
PROJECT NO: 2782-11-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	CROSS SECTIONS: PILGRIM ROAD	SHEET 964	E

FILE NAME : P:\44xx\4442\Plan\090201_xs_Pilgrim Road.DGN | PLOT DATE : 11/2/2014 | PLOT BY : ajp | PLOT NAME : | PLOT SCALE : 1:20

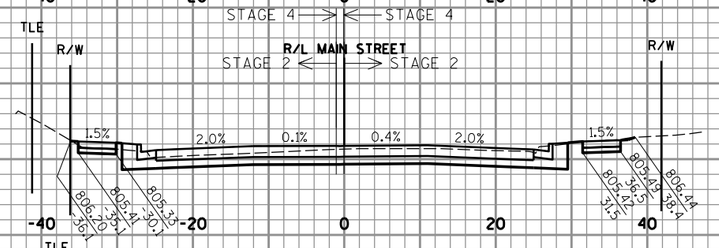
WISDOT/CADDS SHEET 21



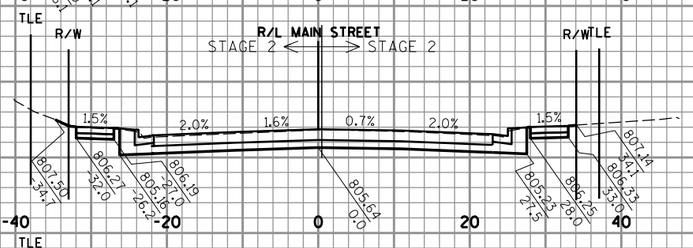
404+50



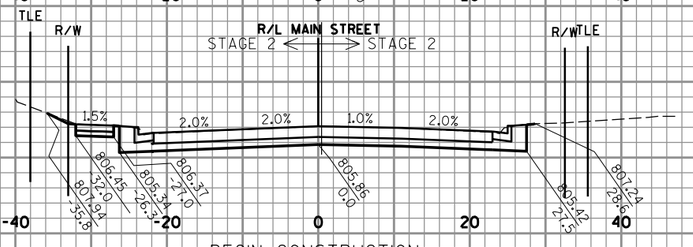
404+00



403+50



403+00



402+89

5 FT

10 FT

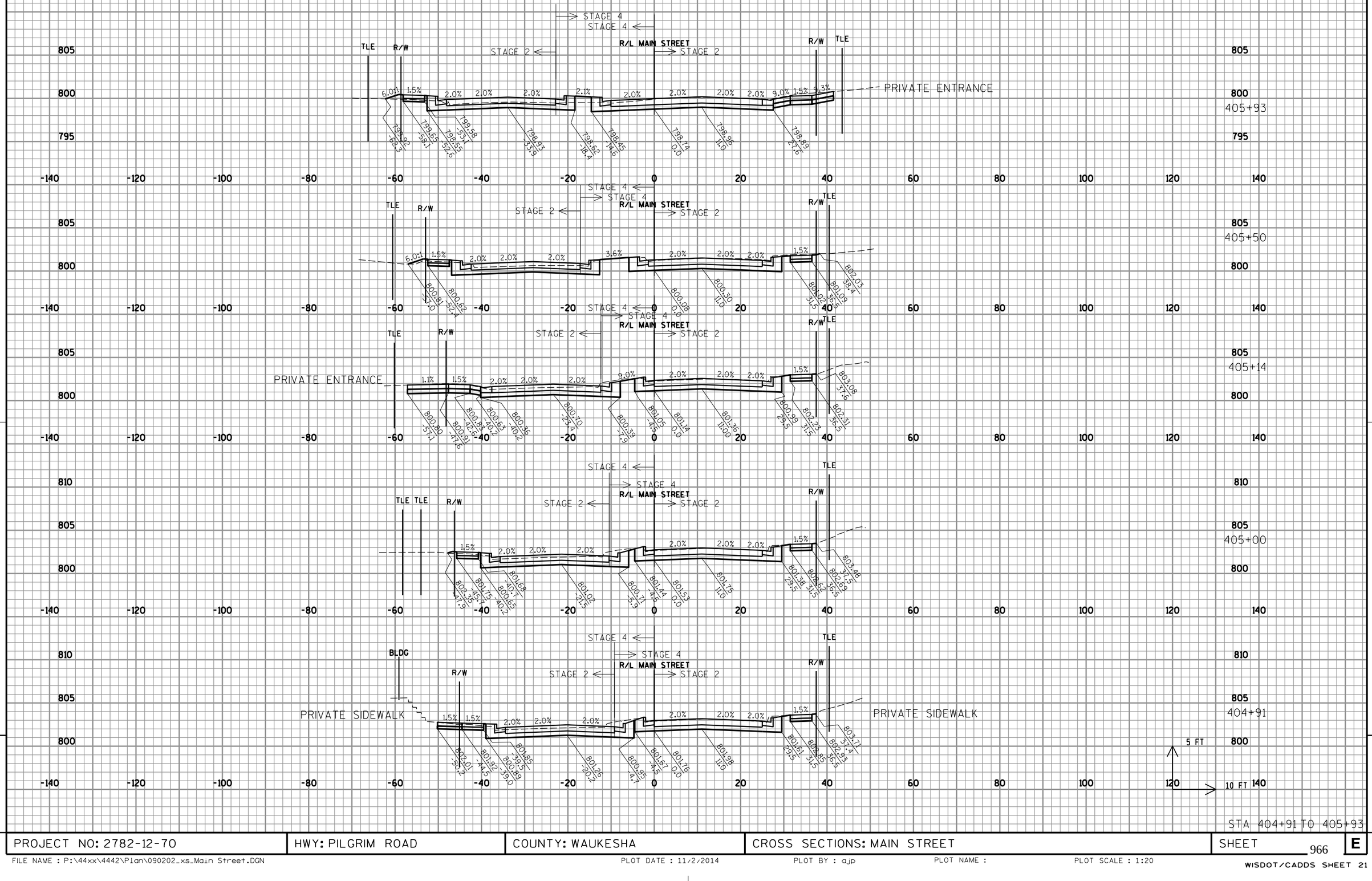
BEGIN CONSTRUCTION
PROJECT 2782-12-70
STA. 402+88.13

STA 402+89 TO 404+50

PROJECT NO: 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	CROSS SECTIONS: MAIN STREET	SHEET	E

FILE NAME : P:\44xx\4442\Plan\090202_xs_Main Street.DGN PLOT DATE : 11/2/2014 PLOT BY : ajp PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

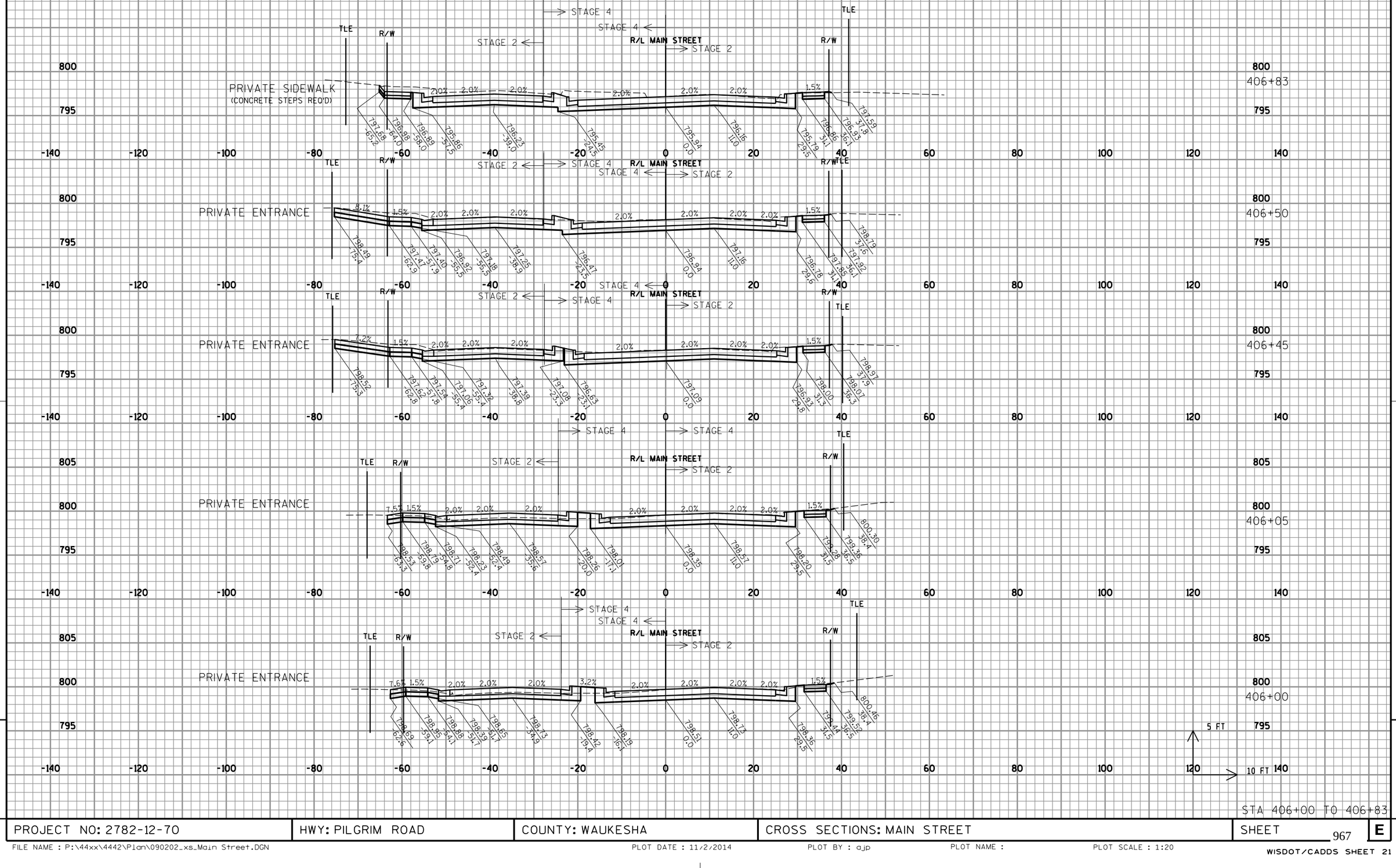


9

PROJECT NO: 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	CROSS SECTIONS: MAIN STREET	SHEET 966	E

FILE NAME : P:\44xx\4442\Plan\090202_xs_Main Street.DGN | PLOT DATE : 11/2/2014 | PLOT BY : ajp | PLOT NAME : | PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21



STA 406+00 TO 406+83

PROJECT NO: 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	CROSS SECTIONS: MAIN STREET	SHEET 967	E

FILE NAME : P:\44xx\4442\Plan\090202_xs_Main Street.DGN PLOT DATE : 11/2/2014 PLOT BY : ajp PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

PILGRIM ROAD

800 / 795 / 790

-140 -120 -100 -80 -60 -40 -20 0 20 40 60 80 100 120 140

408+50

R/W | TLE

STAGE 2 ← STAGE 4 | STAGE 4 ← R/L MAIN STREET → STAGE 2

0.6% 1.6% 0.6% 0.6% 1.6% 1.9% 1.5%

794.47 -70.5 | 794.03 55.0 | 793.60 124.5 | 793.46 0.0 | 792.62 52.6 | 793.71 54.1 | 793.78 59.7 | 794.92

408+00

PILGRIM ROAD

800 / 795 / 790

-140 -120 -100 -80 -60 -40 -20 0 20 40 60 80 100 120 140

407+50

TLE | R/W

STAGE 2 ← STAGE 4 | STAGE 4 ← R/L MAIN STREET → STAGE 2

1.5% 0.7% 1.8% 0.7% 0.7% 1.8% 1.8% 1.5%

798.37 -71.9 | 795.60 55.0 | 795.53 58.0 | 795.55 0.0 | 795.01 49.3 | 795.81 50.5

407+48

PRIVATE SIDEWALK
(CONCRETE STEPS REQ'D)

TLE | R/W

STAGE 2 ← STAGE 4 | STAGE 4 ← R/L MAIN STREET → STAGE 2

1.5% 0.8% 1.8% 0.8% 0.8% 1.8% 1.8% 1.5%

797.32 -66.8 | 795.65 54.0 | 795.56 58.0 | 795.59 0.0 | 795.06 48.9 | 795.84 50.0

407+00

TLE | R/W

STAGE 2 ← STAGE 4 | STAGE 4 ← R/L MAIN STREET → STAGE 2

6.0% 1.5% 2.0% 2.0% 2.0% 2.0% 2.0% 2.0% 2.0% 1.5%

798.18 -73.3 | 796.36 -58.0 | 795.34 57.5 | 795.71 139.0 | 795.49 0.0 | 795.71 1.0 | 795.29 31.9 | 796.38 33.9 | 797.04 41.0

5 FT | 10 FT

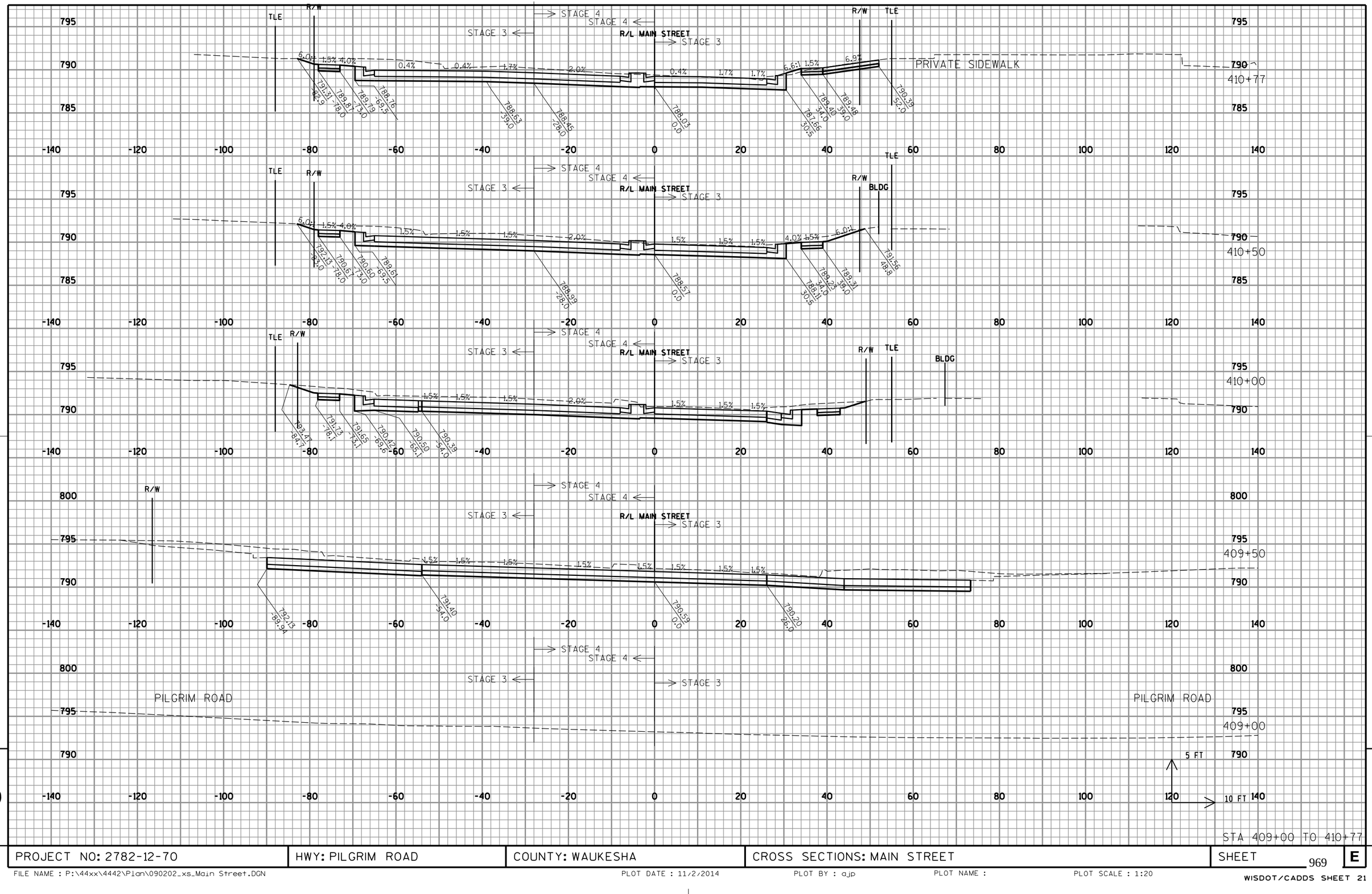
STA 407+00 TO 408+50

PROJECT NO: 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	CROSS SECTIONS: MAIN STREET	SHEET 968	E

FILE NAME : P:\44xx\4442\Plan\090202_xs_Main Street.DGN | PLOT DATE : 11/2/2014 | PLOT BY : ajp | PLOT NAME : | PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

9 9

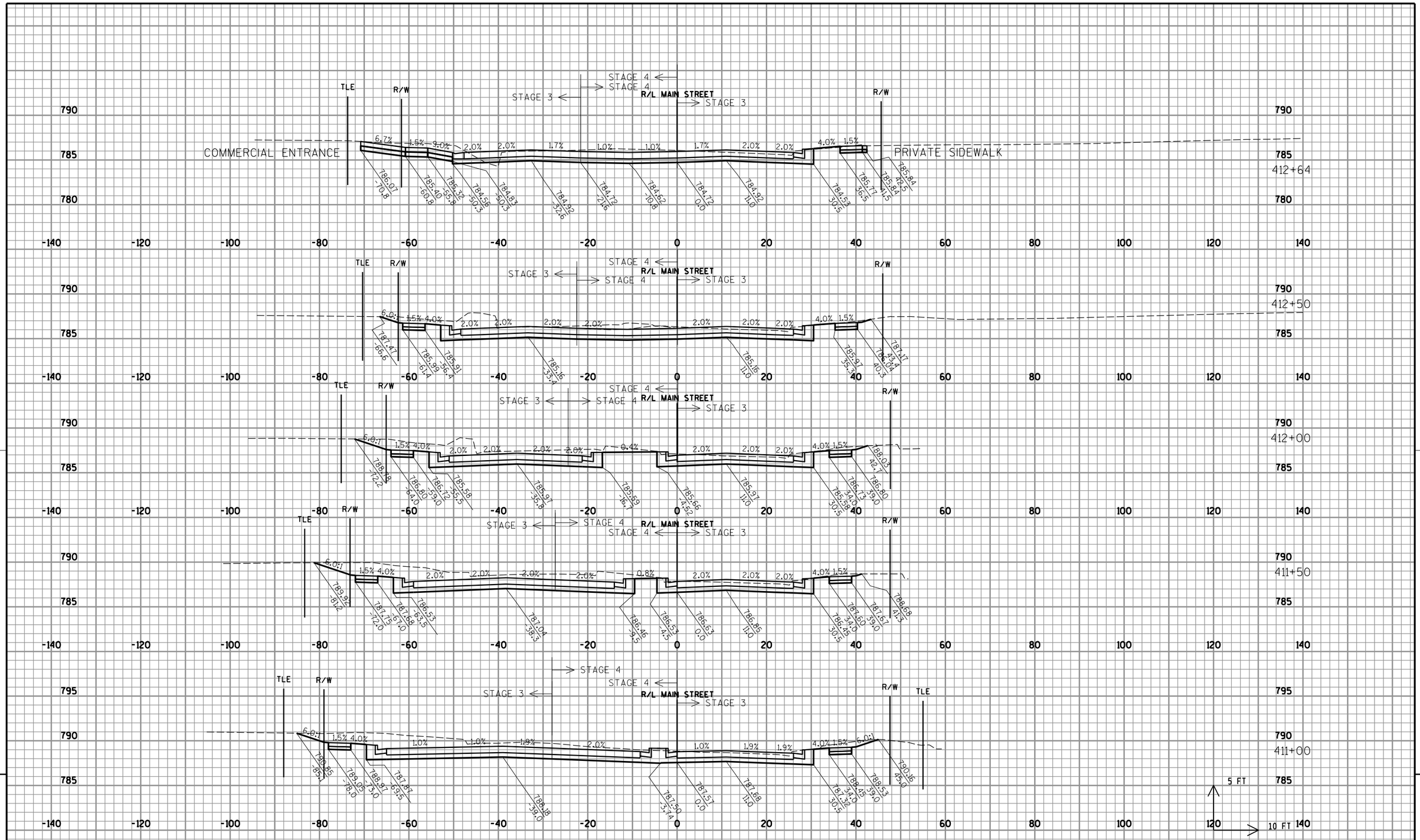


STA 409+00 TO 410+77

PROJECT NO: 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	CROSS SECTIONS: MAIN STREET	SHEET 969 E

FILE NAME : P:\44xx\4442\Plan\090202_xs_Main Street.DGN | PLOT DATE : 11/2/2014 | PLOT BY : ajp | PLOT NAME : | PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

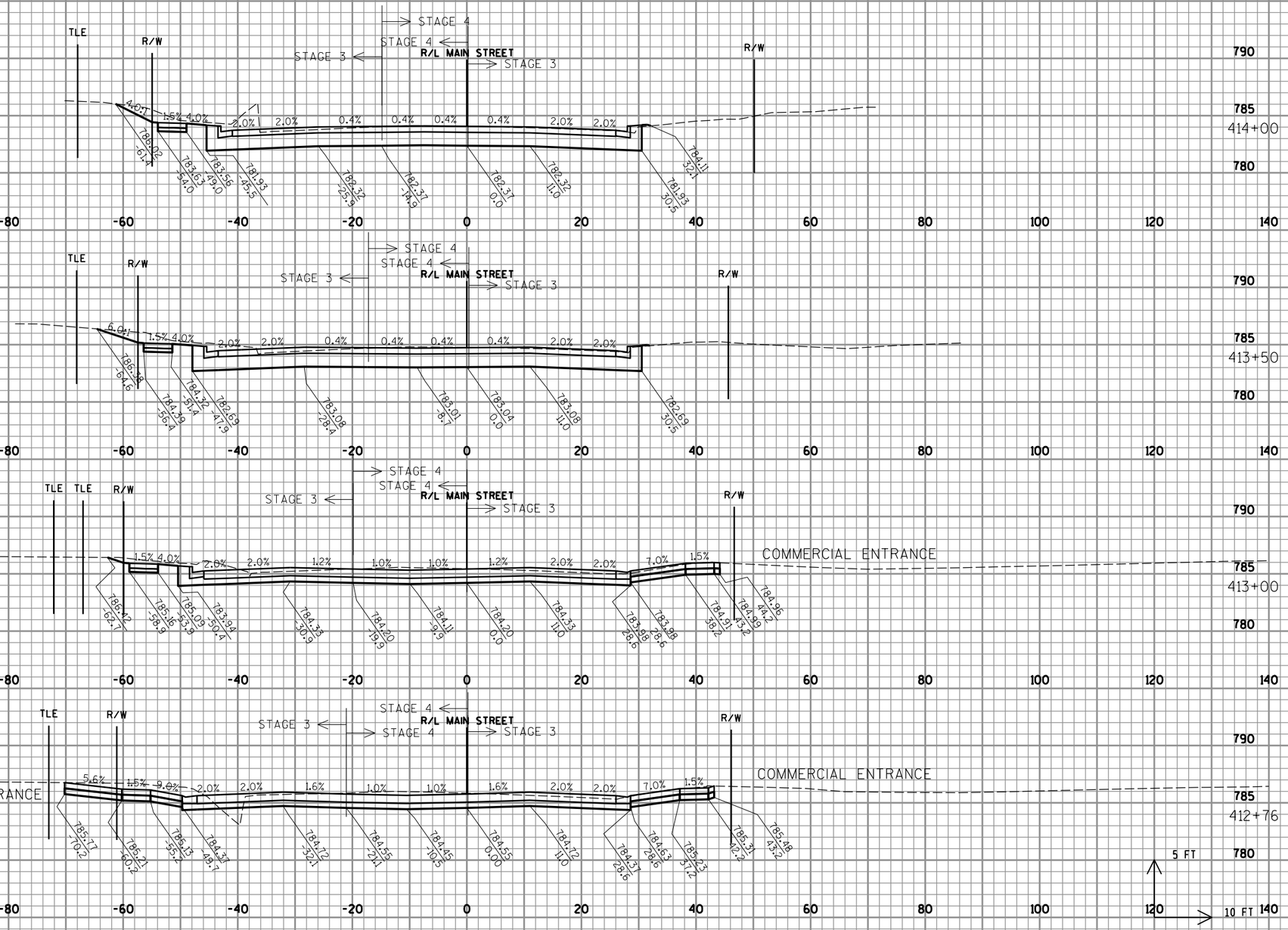


STA 411+00 TO 412+64

PROJECT NO: 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	CROSS SECTIONS: MAIN STREET	SHEET 970	E

FILE NAME : P:\44xx\4442\Plan\090202_xs_Main Street.DGN | PLOT DATE : 11/2/2014 | PLOT BY : ajp | PLOT NAME : | PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21



9

9

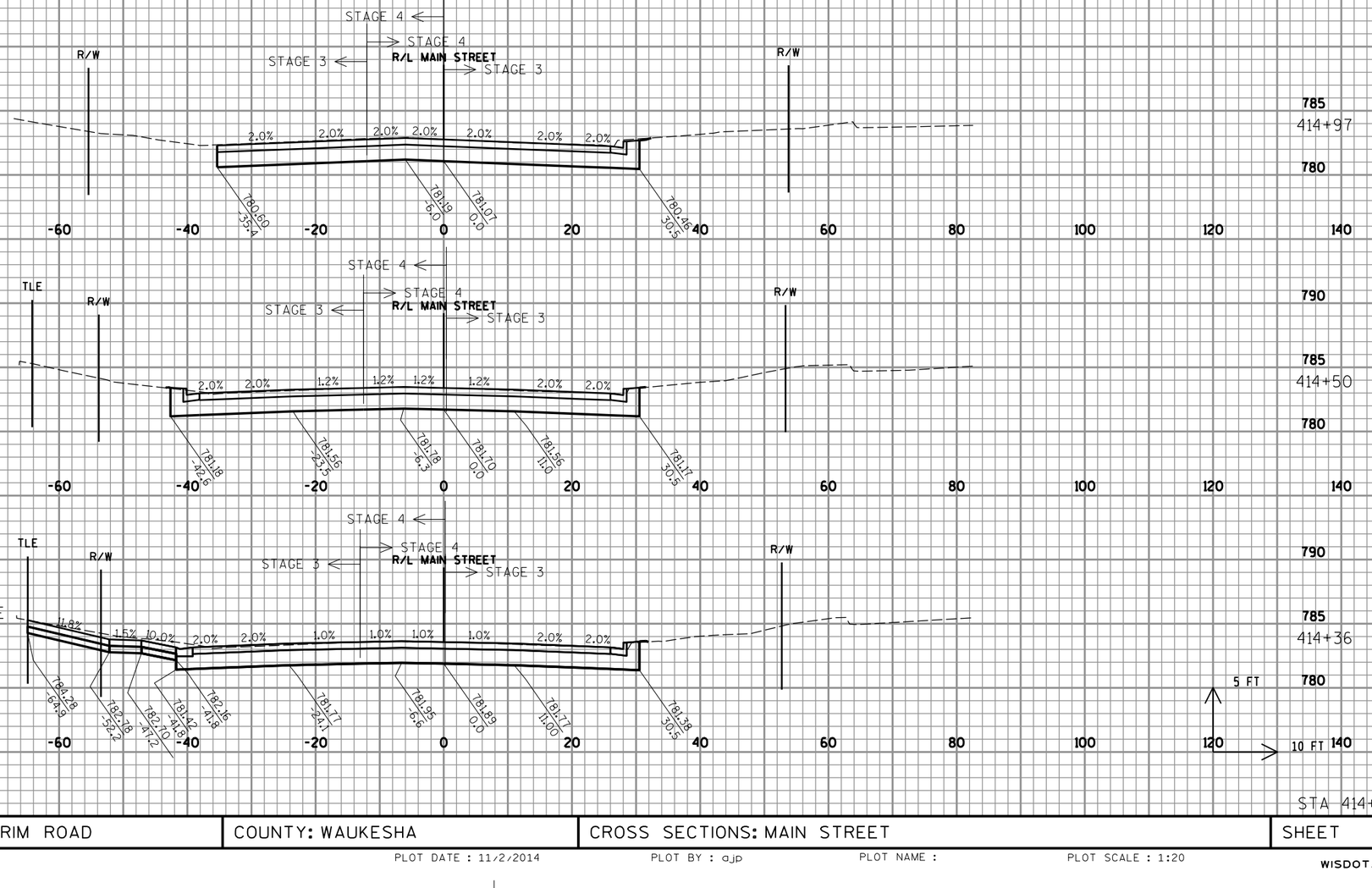
STA 412+76 TO 414+00

PROJECT NO: 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	CROSS SECTIONS: MAIN STREET	SHEET 971	E

FILE NAME : P:\44xx\4442\Plan\090202_xs_Main Street.DGN | PLOT DATE : 11/2/2014 | PLOT BY : ajp | PLOT NAME : | PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

END CONSTRUCTION
PROJECT 2782-12-70
STA. 414+96.77

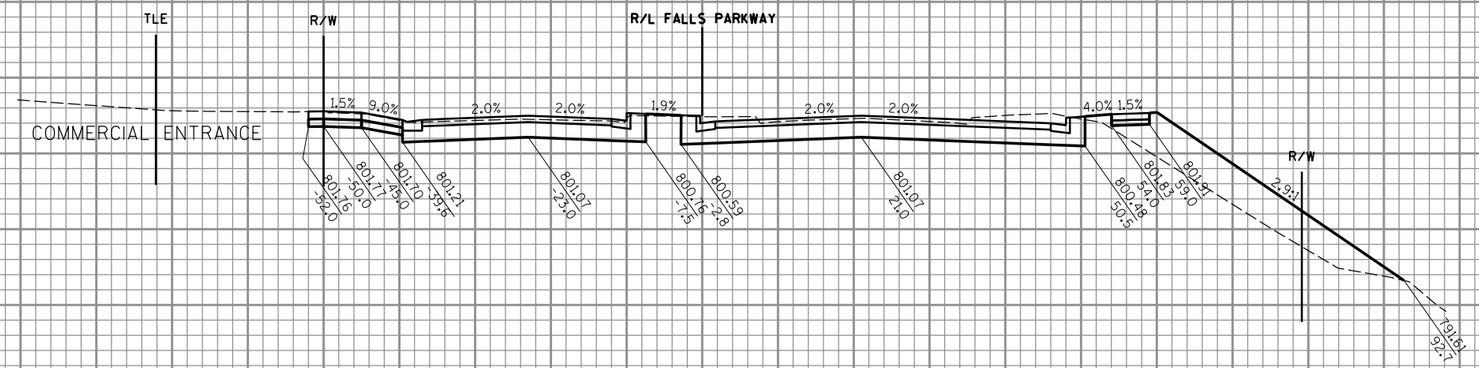


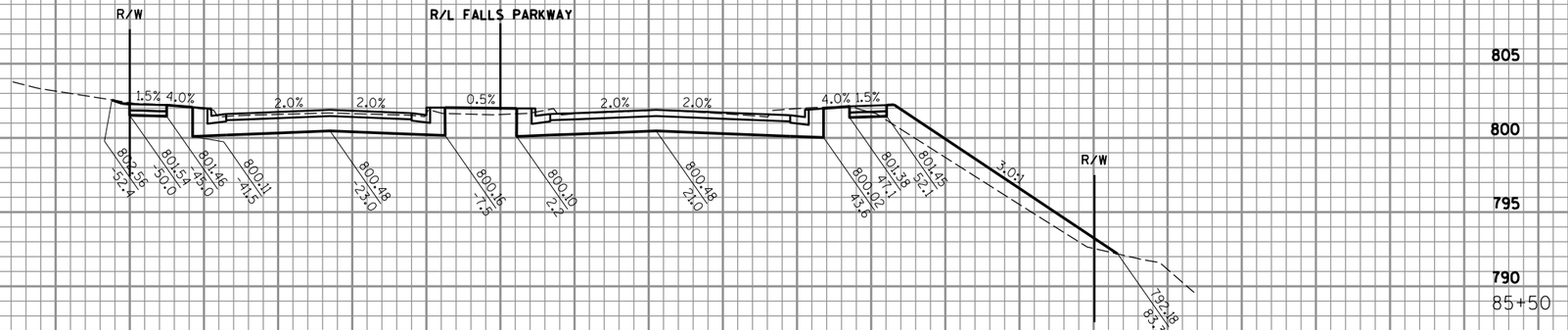
STA 414+36 TO 414+97

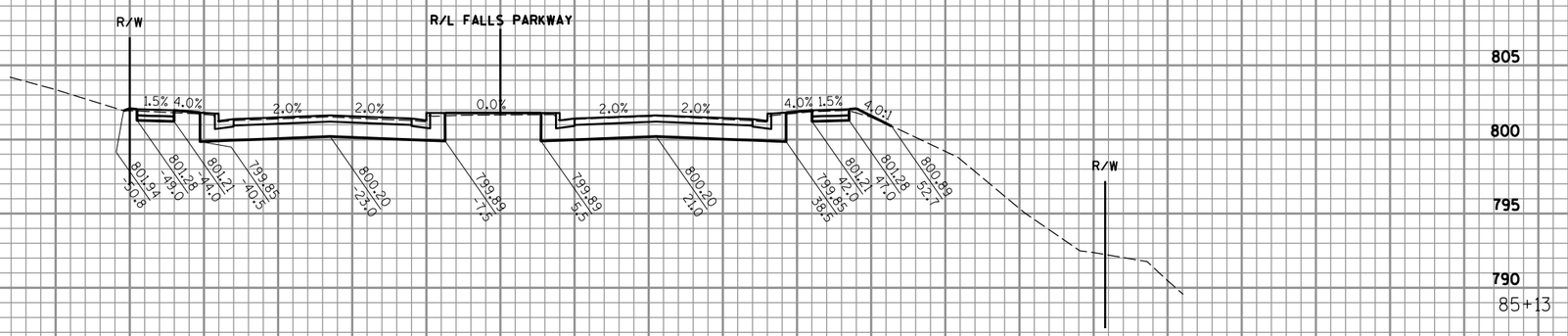
PROJECT NO: 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	CROSS SECTIONS: MAIN STREET	SHEET 972	E

FILE NAME : P:\44xx\4442\Plan\090202_xs_Main Street.DGN PLOT DATE : 11/2/2014 PLOT BY : ajp PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21







-140 -120 -100 -80 -60 -40 -20 0 20 40 60 80 100 120 140

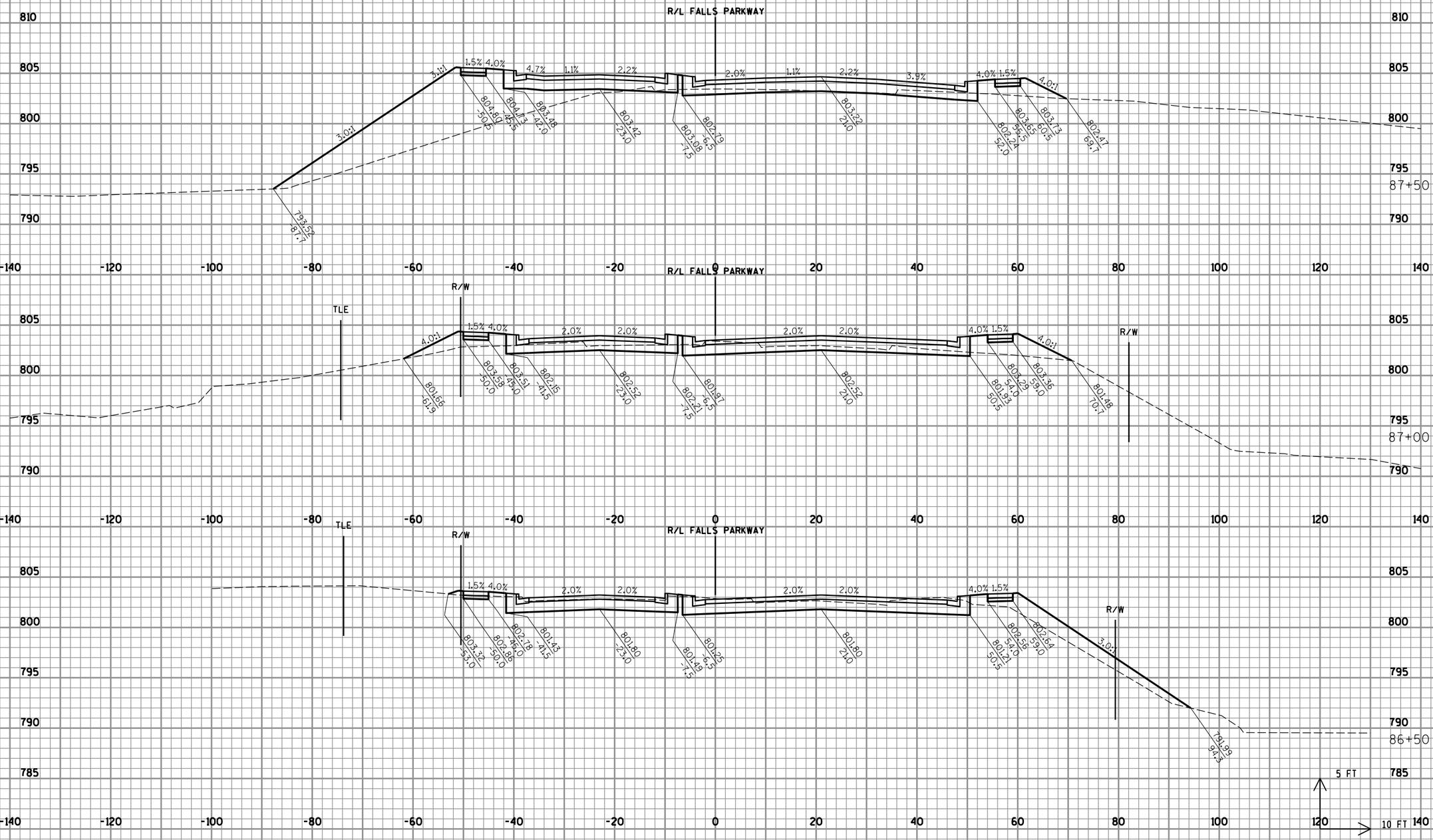
BEGIN CONSTRUCTION
PROJECT 2782-12-70
STA. 85+12.87

STA 85+13 TO 86+00

9 9

PROJECT NO: 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	CROSS SECTIONS: FALLS PARKWAY	SHEET 973 E

FILE NAME : P:\44xx\4442\Plan\090203_xs_Falls Parkway.DGN PLOT DATE : 11/2/2014 PLOT BY : ajp PLOT NAME : PLOT SCALE : 1:20



9

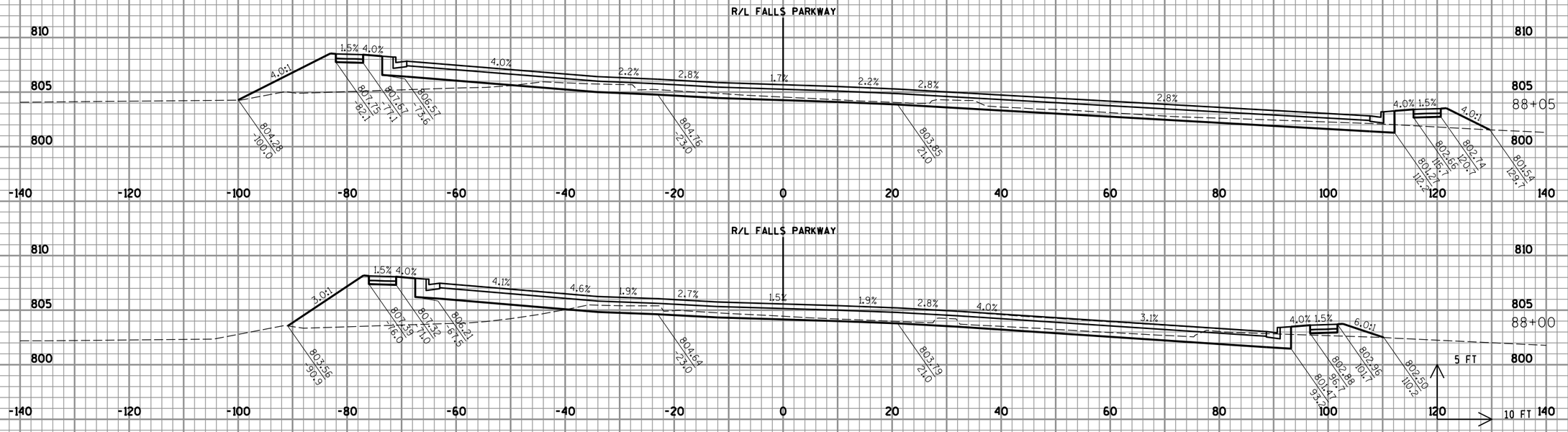
9

PROJECT NO: 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	CROSS SECTIONS: FALLS PARKWAY	SHEET 974	E

STA 86+50 TO 87+50

FILE NAME : P:\44xx\4442\Plan\090203_xs_Falls Parkway.DGN | PLOT DATE : 11/2/2014 | PLOT BY : ajp | PLOT NAME : | PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21



9

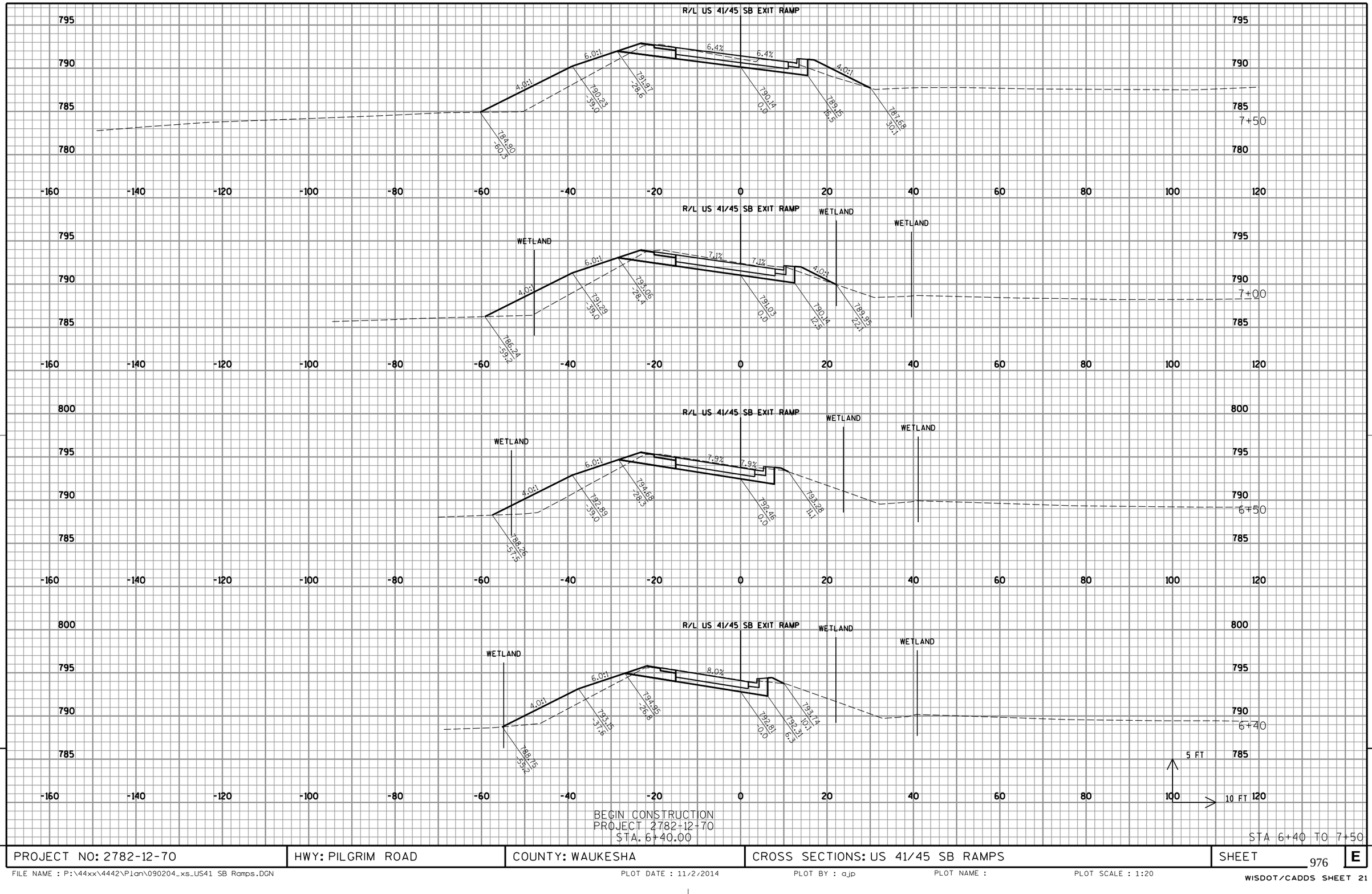
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STA 88+00 TO 88+05

PROJECT NO: 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	CROSS SECTIONS: FALLS PARKWAY	SHEET 975	E

FILE NAME : P:\44xx\4442\Plan\090203_xs_Falls Parkway.DGN PLOT DATE : 11/2/2014 PLOT BY : ajp PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21



9

9

PROJECT NO: 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	CROSS SECTIONS: US 41/45 SB RAMPS	SHEET 976 E

FILE NAME : P:\44xx\4442\Plan\090204_xs_US41 SB Ramps.DGN | PLOT DATE : 11/2/2014 | PLOT BY : ajp | PLOT NAME : | PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

9

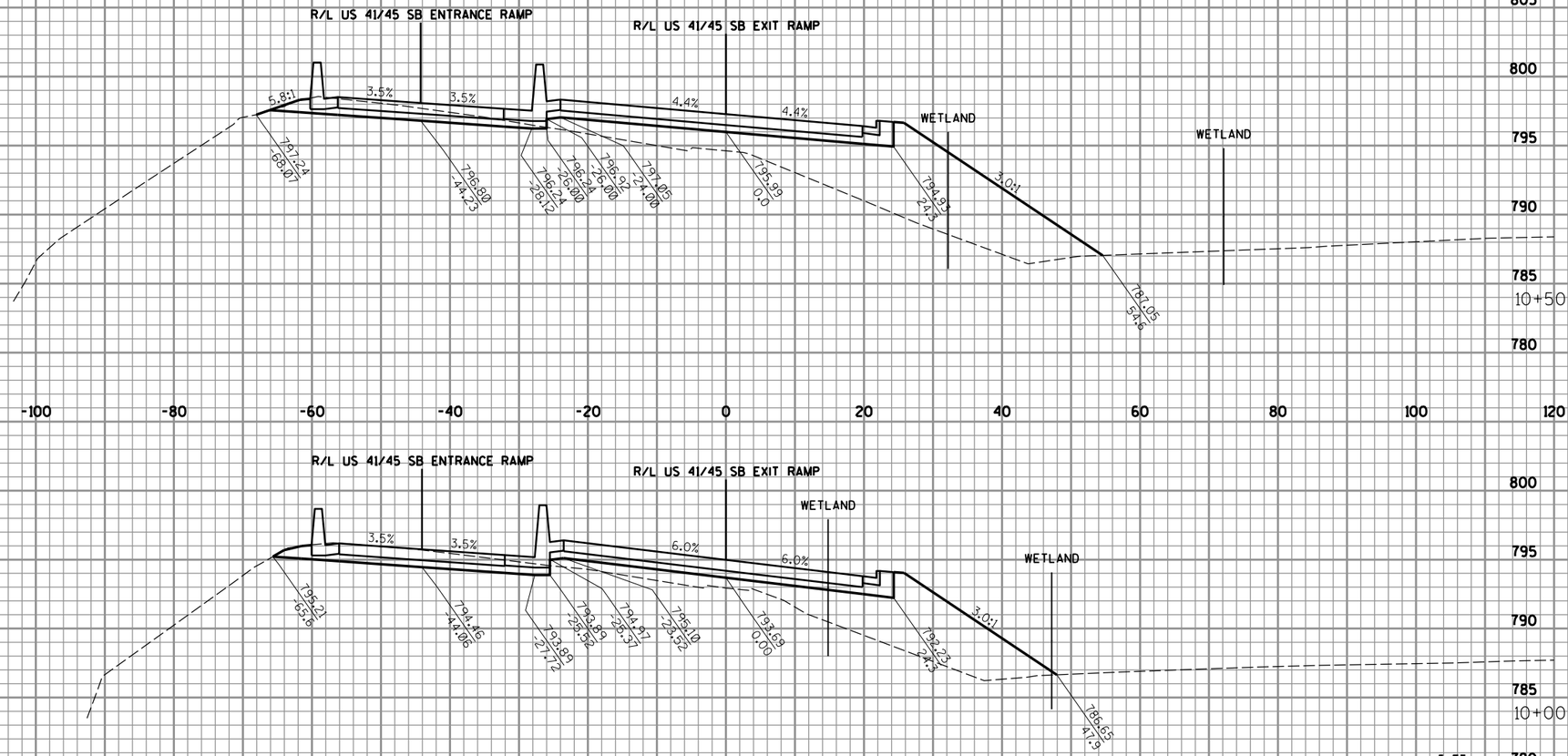
9

STA 8+00 TO 9+50

PROJECT NO: 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	CROSS SECTIONS: US 41/45 SB RAMPS	SHEET 977	E

FILE NAME : P:\44xx\4442\Plan\090204_xs_US41 SB Ramps.DGN | PLOT DATE : 11/2/2014 | PLOT BY : ajp | PLOT NAME : | PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

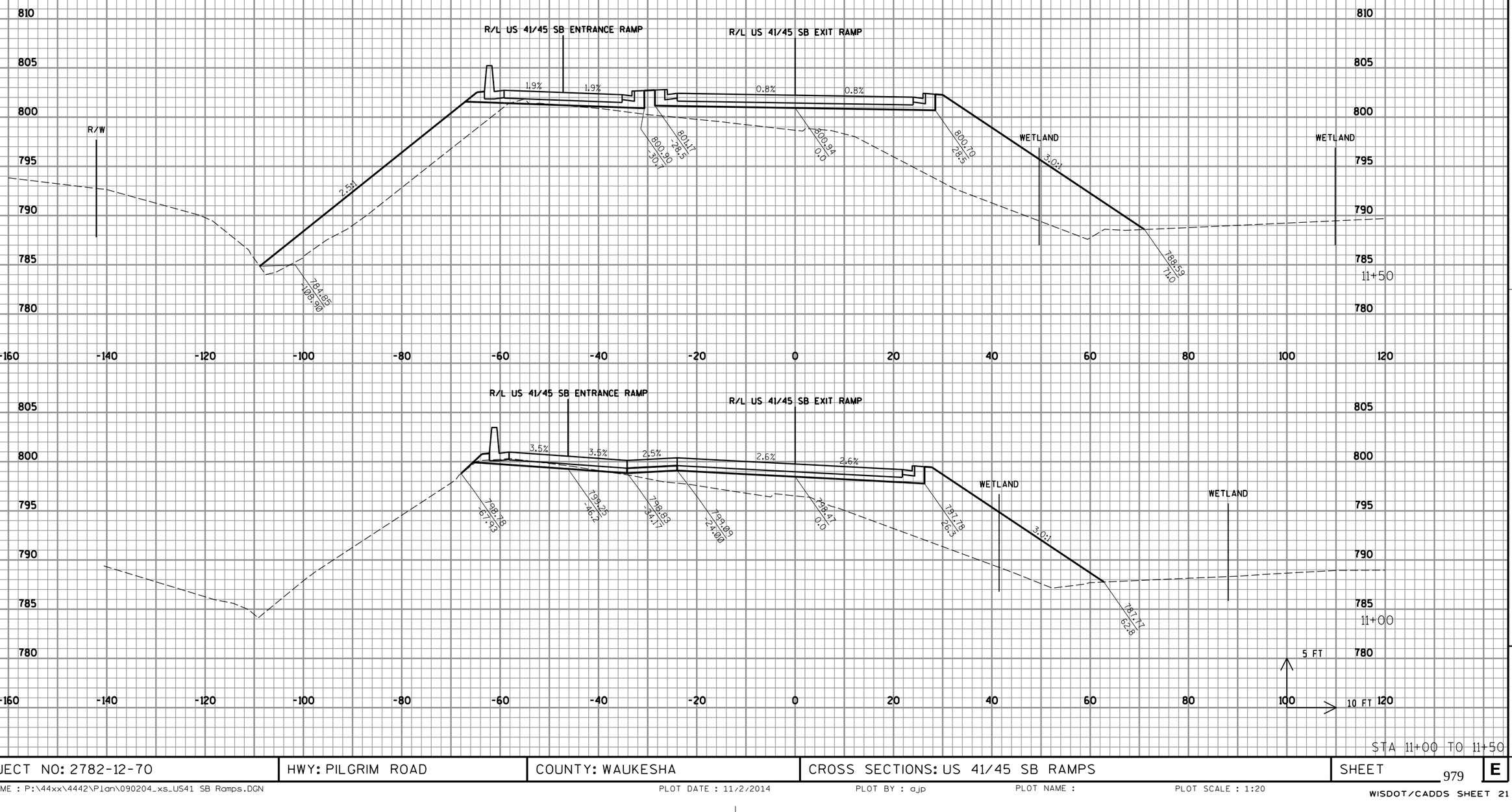


STA 10+00 TO 10+50

PROJECT NO: 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	CROSS SECTIONS: US 41/45 SB RAMPS	SHEET 978	E

FILE NAME : P:\44xx\4442\Plan\090204_xs_US41 SB Ramps.DGN | PLOT DATE : 11/2/2014 | PLOT BY : ajp | PLOT NAME : | PLOT SCALE : 1:20

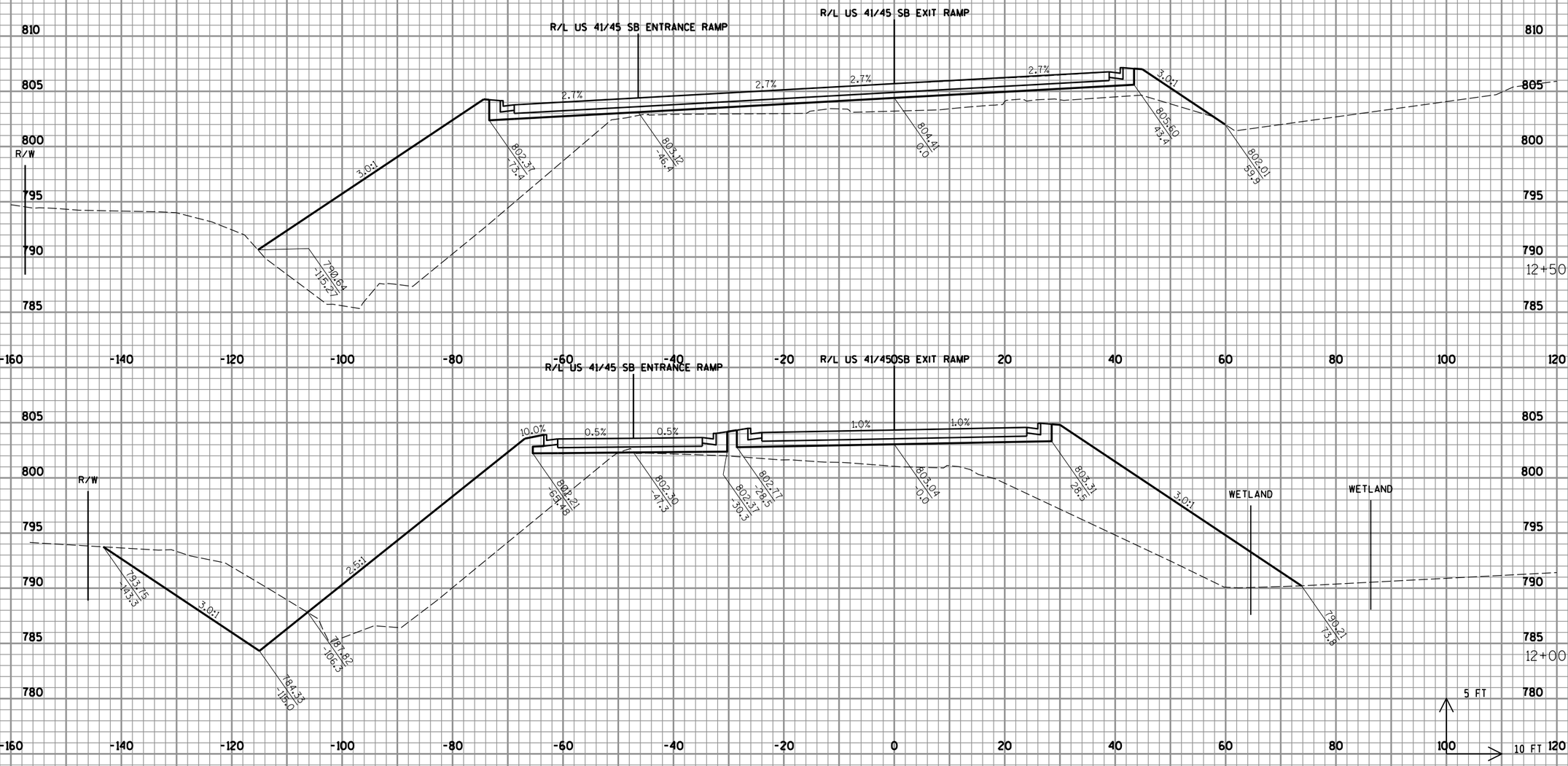
WISDOT/CADDS SHEET 21



PROJECT NO: 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	CROSS SECTIONS: US 41/45 SB RAMPS	SHEET 979	E

FILE NAME : P:\44xx\4442\Plan\090204_xs_US41 SB Ramps.DGN | PLOT DATE : 11/2/2014 | PLOT BY : ajp | PLOT NAME : | PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

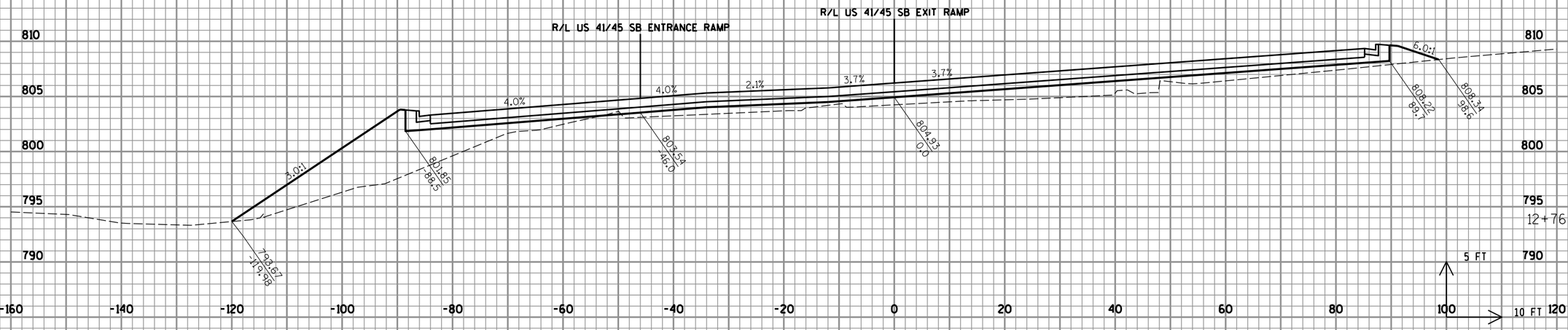


STA 12+00 TO 12+50

PROJECT NO: 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	CROSS SECTIONS: US 41/45 SB RAMPS	SHEET 980	E

FILE NAME : P:\44xx\4442\Plan\090204_xs_US41 SB Ramps.DGN | PLOT DATE : 11/2/2014 | PLOT BY : ajp | PLOT NAME : | PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21



9

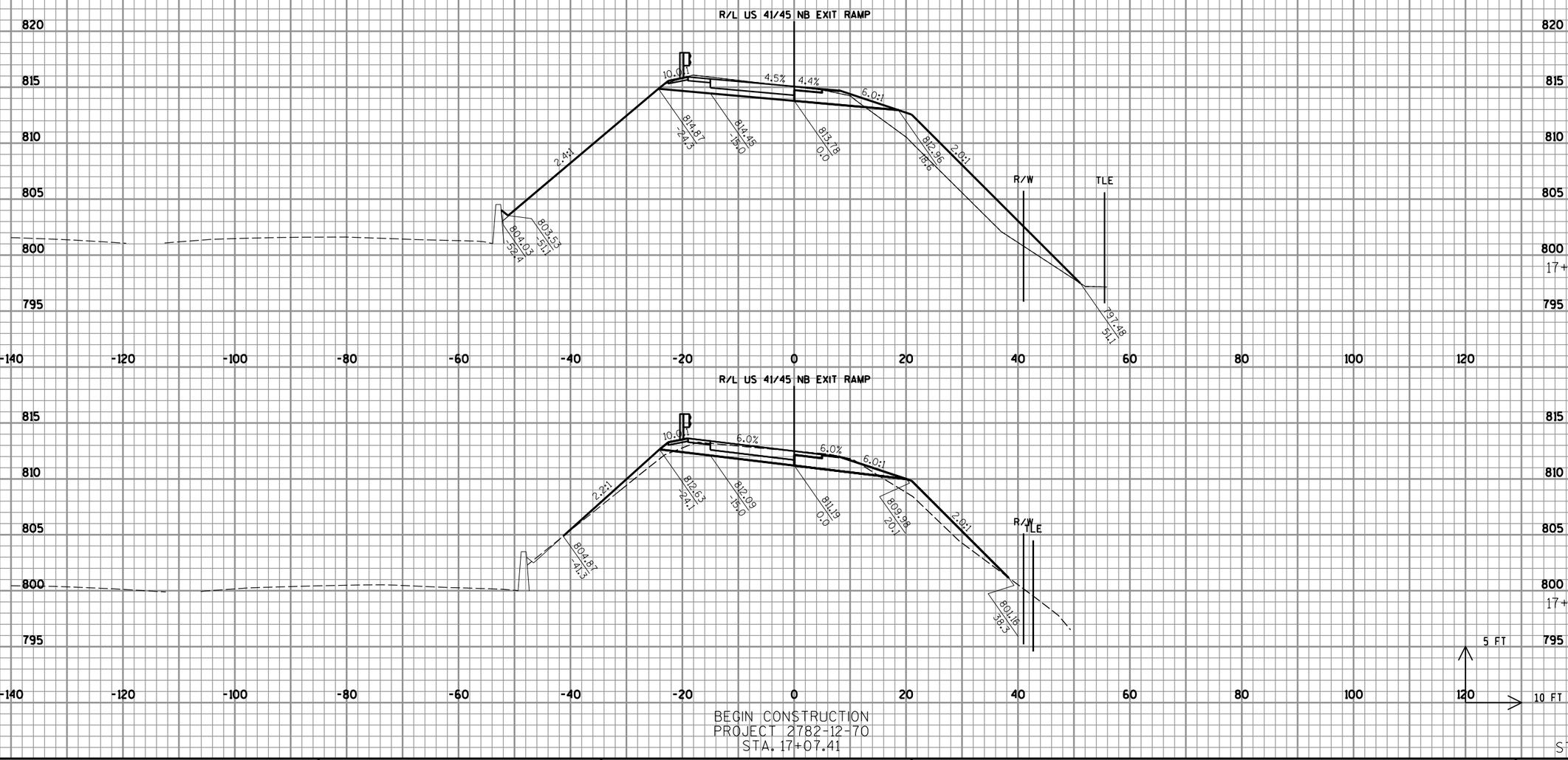
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STA 12+76 TO 12+76

PROJECT NO: 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	CROSS SECTIONS: US 41/45 SB RAMPS	SHEET 981	E

FILE NAME : P:\44xx\4442\Plan\090204_xs_US41 SB Ramps.DGN | PLOT DATE : 11/2/2014 | PLOT BY : ajp | PLOT NAME : | PLOT SCALE : 1:20

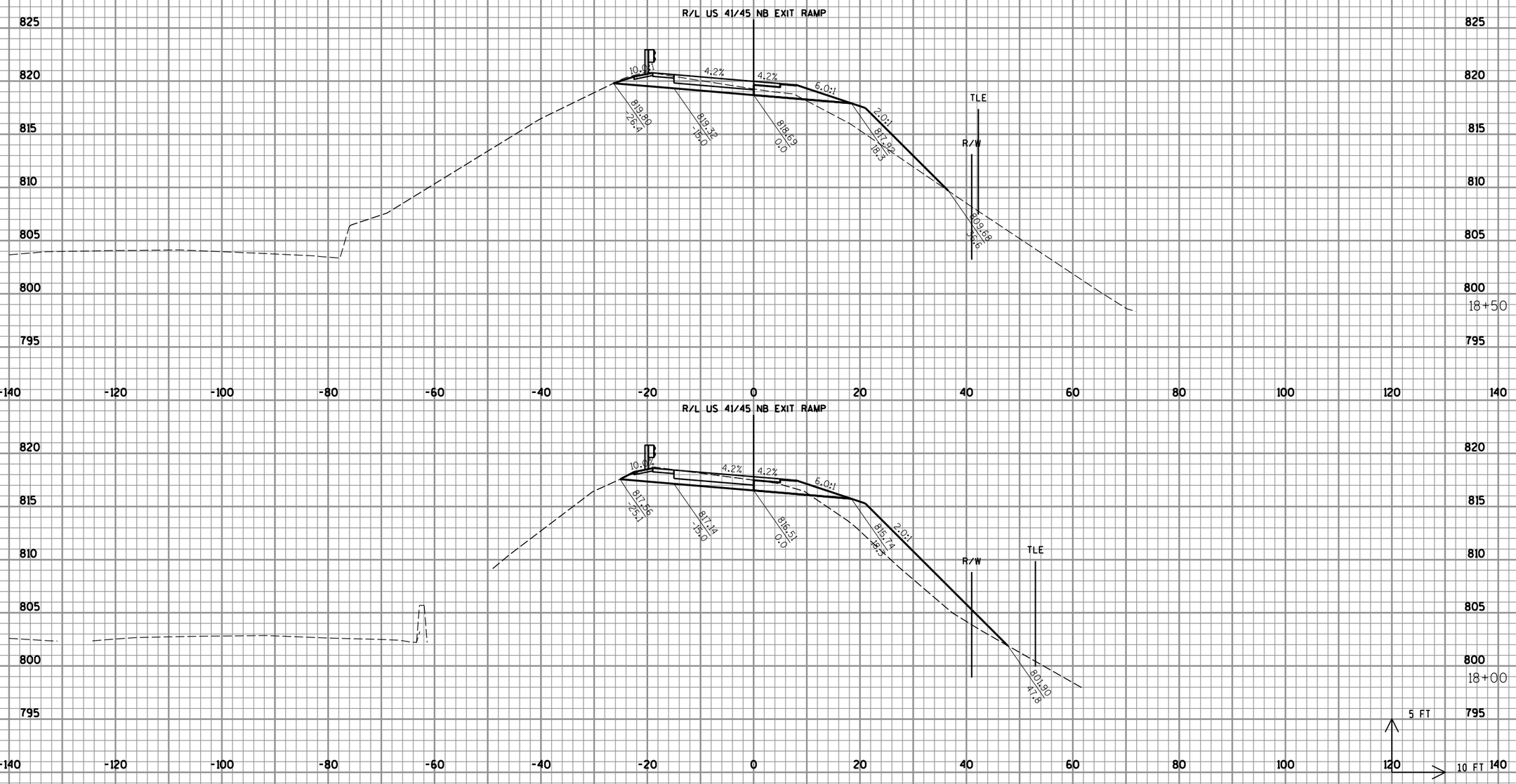
WISDOT/CADDS SHEET 21



PROJECT NO: 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	CROSS SECTIONS: US 41/45 NB EXIT RAMP TO NB PILGRIM	SHEET 982	E

FILE NAME : P:\44xx\4442\Plan\090205_xs_US41 NB Ramp.DGN | PLOT DATE : 11/2/2014 | PLOT BY : ajp | PLOT NAME : | PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21



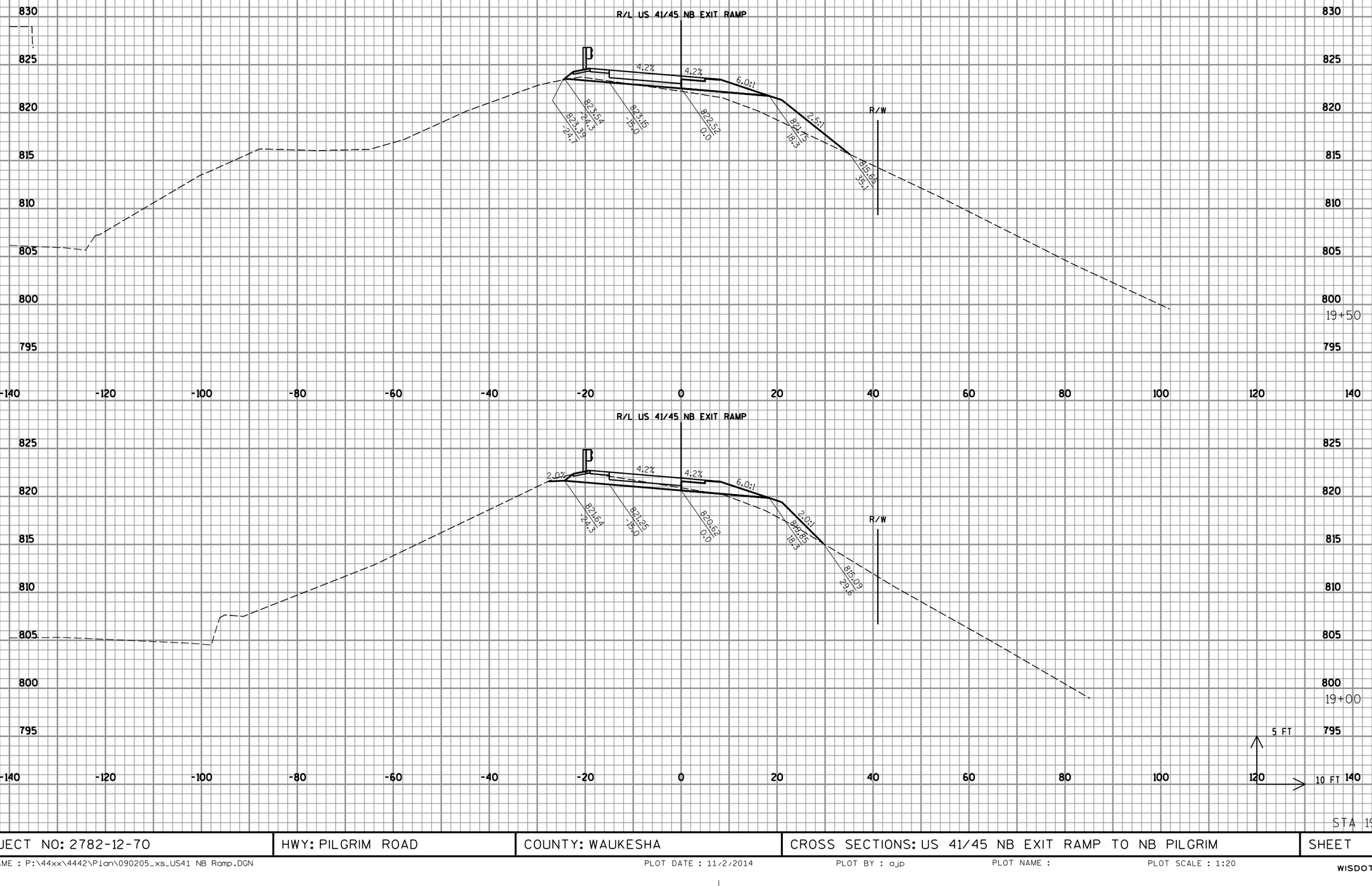
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PROJECT NO: 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	CROSS SECTIONS: US 41/45 NB EXIT RAMP TO NB PILGRIM	SHEET 983	E

FILE NAME : P:\44xx\4442\Plan\090205_xs_US41 NB Ramp.DGN | PLOT DATE : 11/2/2014 | PLOT BY : ajp | PLOT NAME : | PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

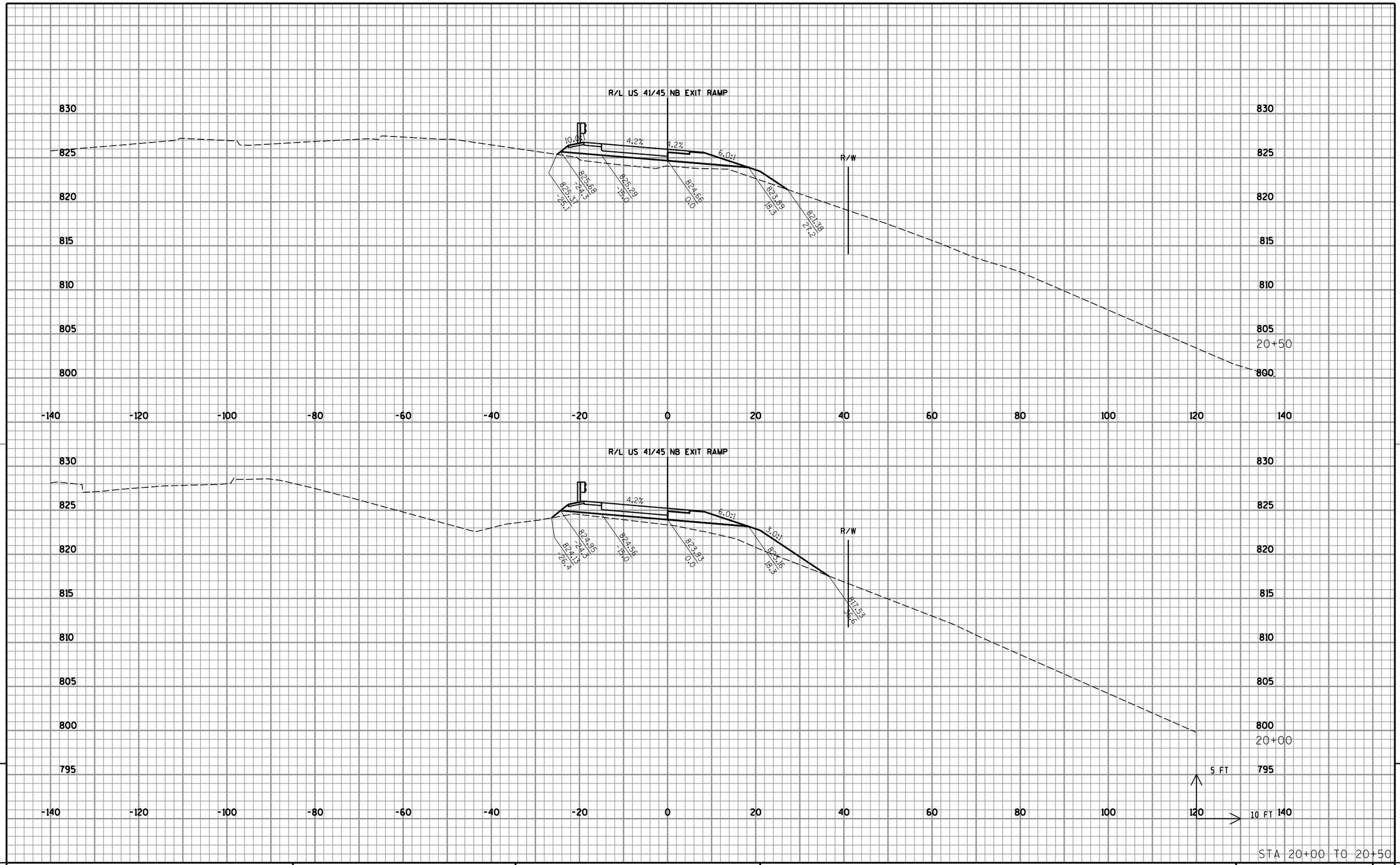


STA 19+00 TO 19+50

PROJECT NO: 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	CROSS SECTIONS: US 41/45 NB EXIT RAMP TO NB PILGRIM	SHEET 984	E

FILE NAME : P:\44xx\4442\Plan\090205_xs_US41 NB Ramp.DGN | PLOT DATE : 11/2/2014 | PLOT BY : ajp | PLOT NAME : | PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

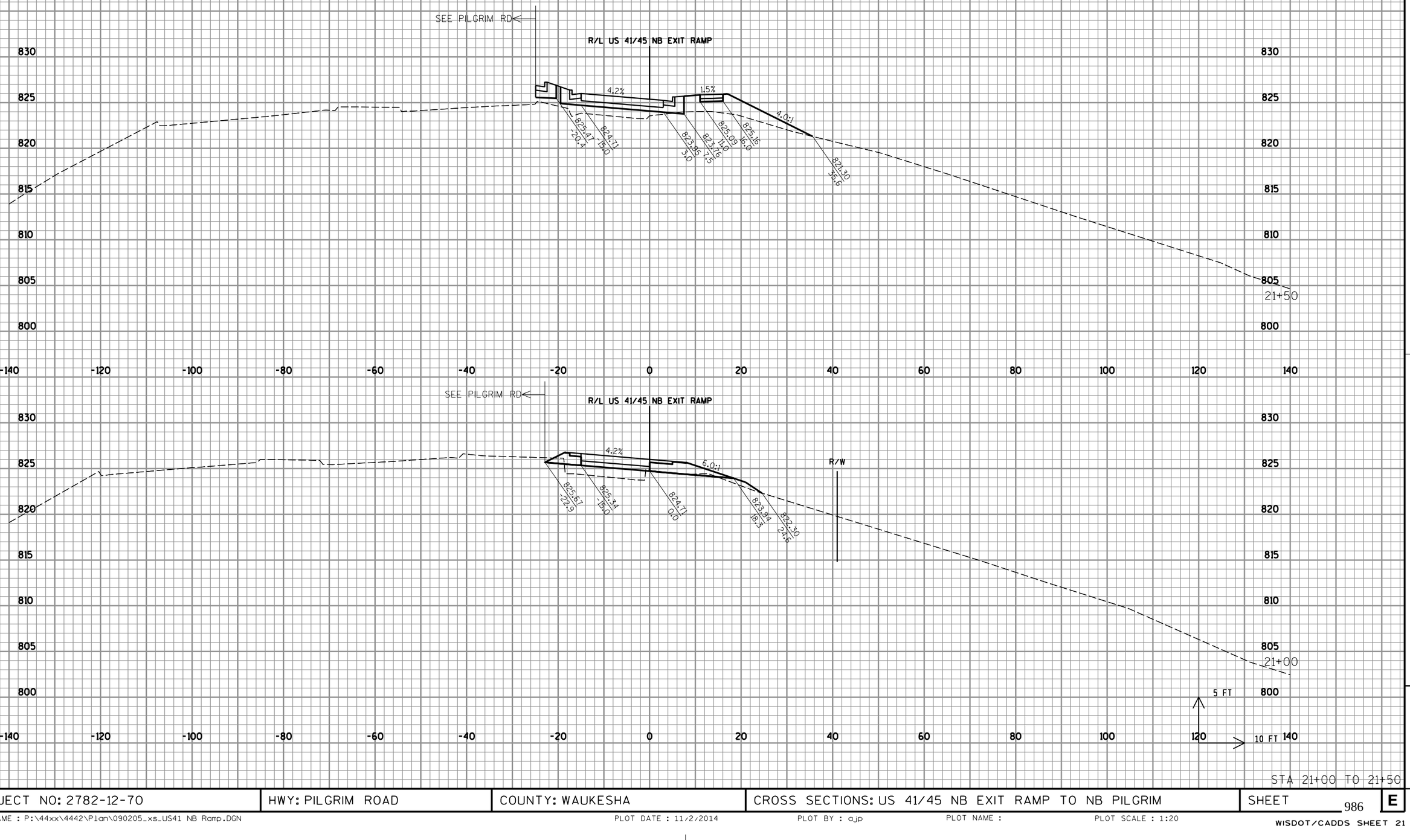


STA 20+00 TO 20+50

PROJECT NO: 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	CROSS SECTIONS: US 41/45 NB EXIT RAMP TO NB PILGRIM	SHEET 985	E

FILE NAME : P:\44xx\4442\Plan\090205_xs_US41 NB Ramp.DGN PLOT DATE : 11/2/2014 PLOT BY : ajp PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

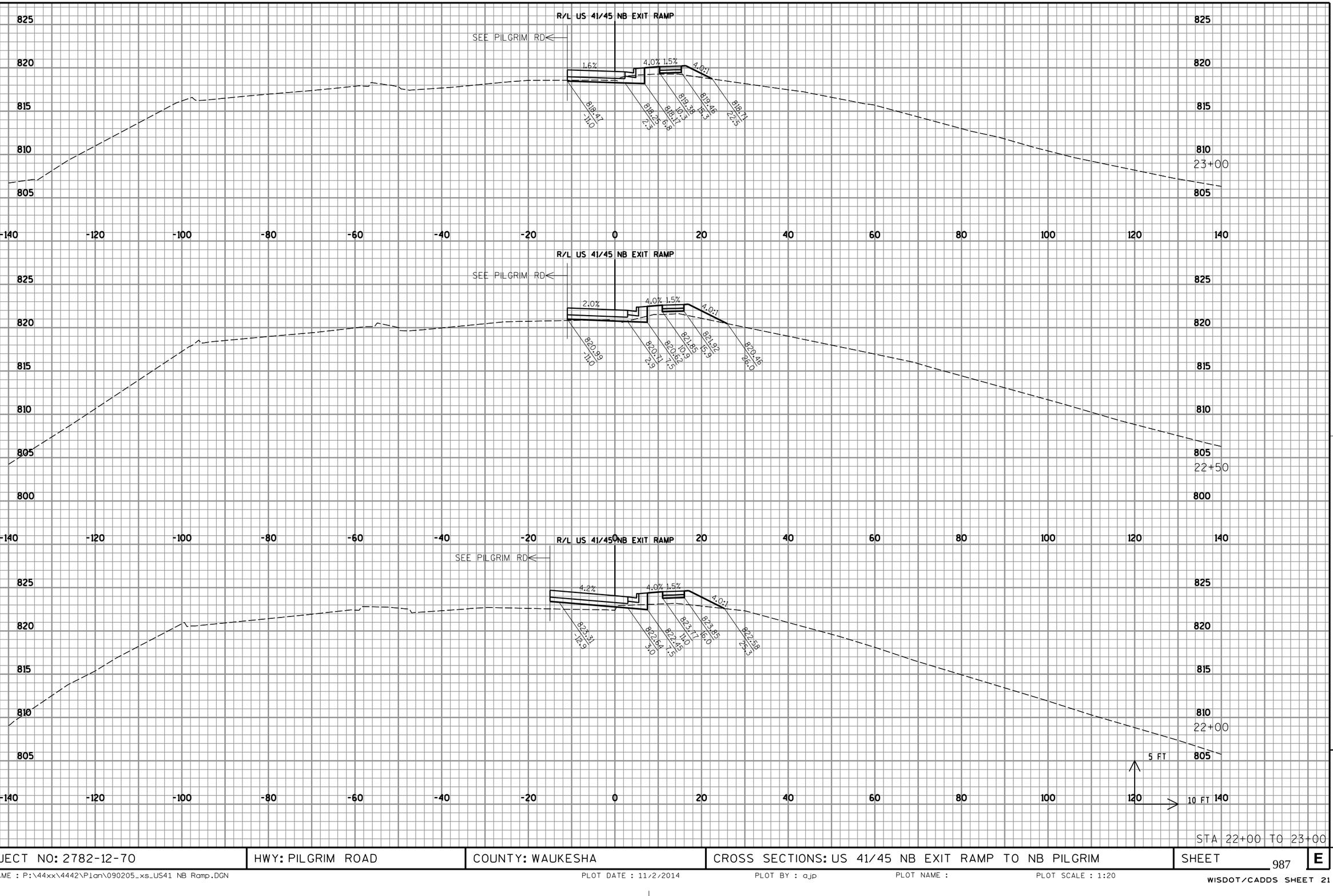


STA 21+00 TO 21+50

PROJECT NO: 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	CROSS SECTIONS: US 41/45 NB EXIT RAMP TO NB PILGRIM	SHEET 986	E

FILE NAME : P:\44xx\4442\Plan\090205_xs_US41 NB Ramp.DGN | PLOT DATE : 11/2/2014 | PLOT BY : ajp | PLOT NAME : | PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21



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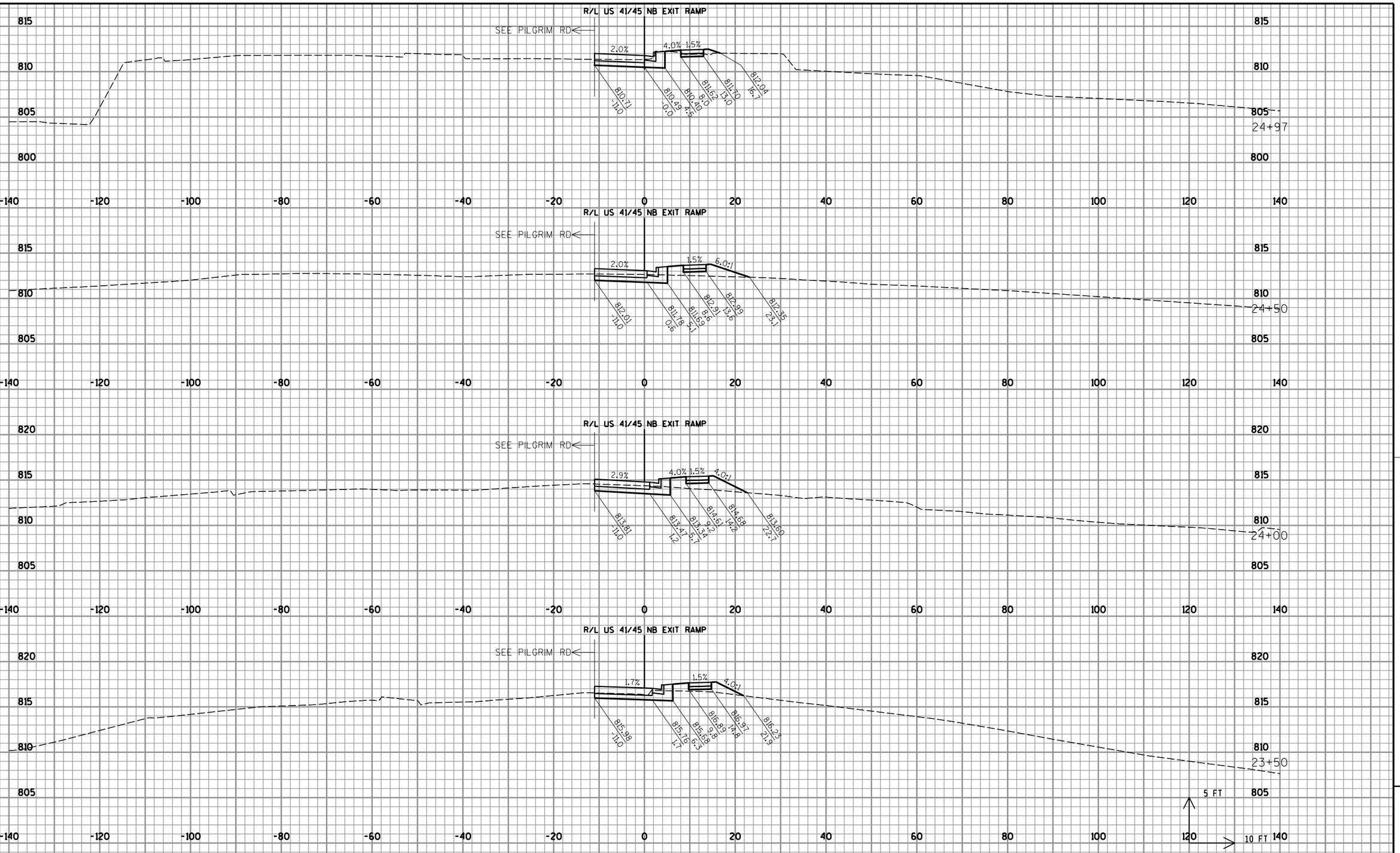
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STA 22+00 TO 23+00

PROJECT NO: 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	CROSS SECTIONS: US 41/45 NB EXIT RAMP TO NB PILGRIM	SHEET 987	E

FILE NAME : P:\44xx\4442\Plan\090205_xs_US41 NB Ramp.DGN | PLOT DATE : 11/2/2014 | PLOT BY : ajp | PLOT NAME : | PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

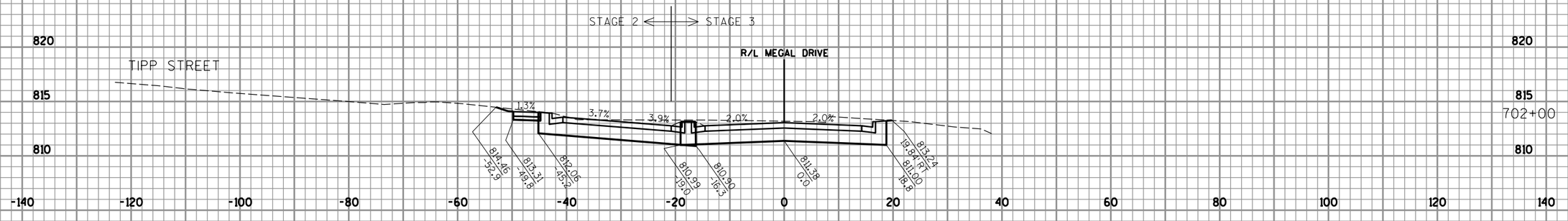


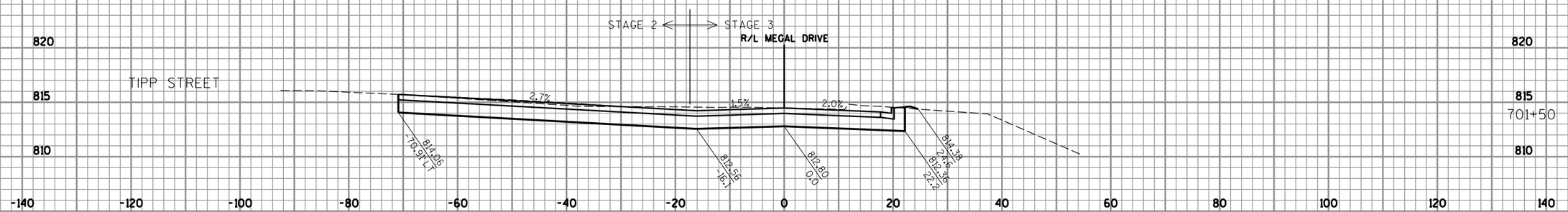
STA 23+50 TO 24+97

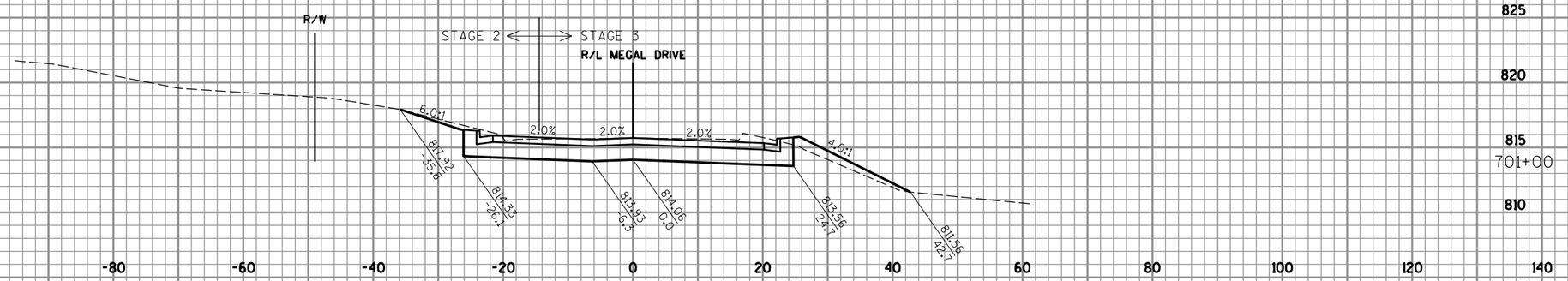
PROJECT NO: 2782-12-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	CROSS SECTIONS: US 41/45 NB EXIT RAMP TO NB PILGRIM	SHEET 988	E

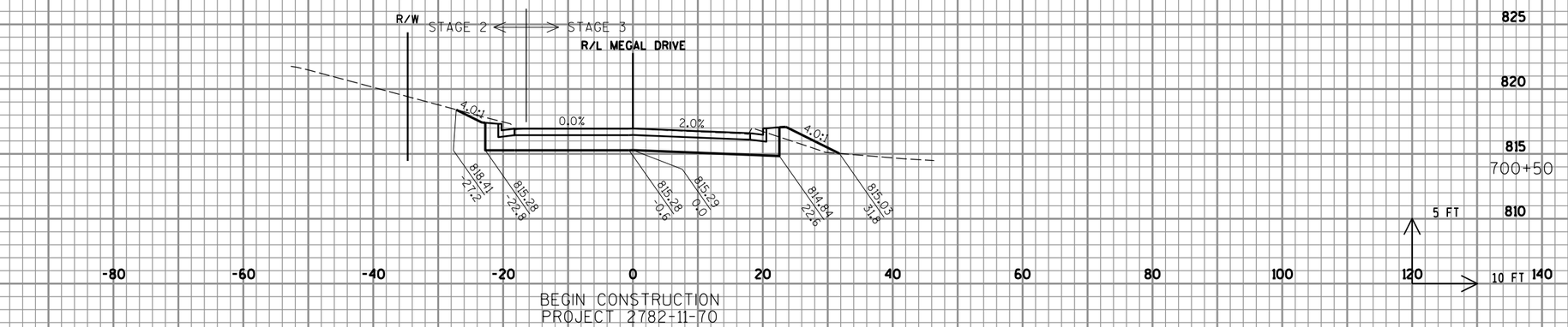
FILE NAME : P:\44xx\4442\Plan\090205_xs_US41 NB Ramp.DGN | PLOT DATE : 11/2/2014 | PLOT BY : ajp | PLOT NAME : | PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21









BEGIN CONSTRUCTION
PROJECT 2782-11-70
STA. 700+50.00

STA 700+50 TO 702+00

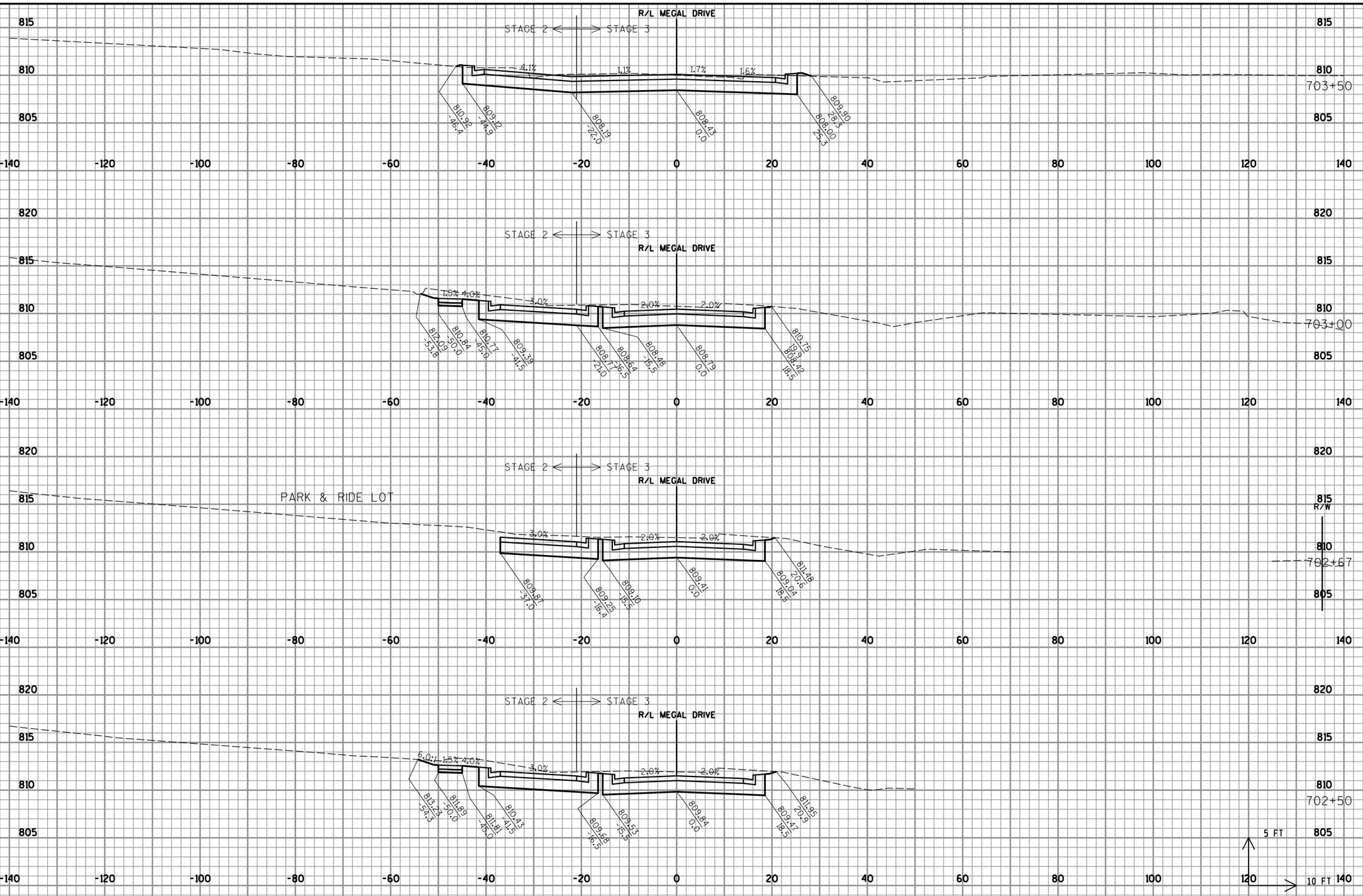
PROJECT NO: 2782-11-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	CROSS SECTIONS: MEGAL DRIVE	SHEET 989	E

FILE NAME : P:\44xx\4442\Plan\090206_xs_Megal Drive.DGN | PLOT DATE : 11/2/2014 | PLOT BY : ajp | PLOT NAME : | PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

9

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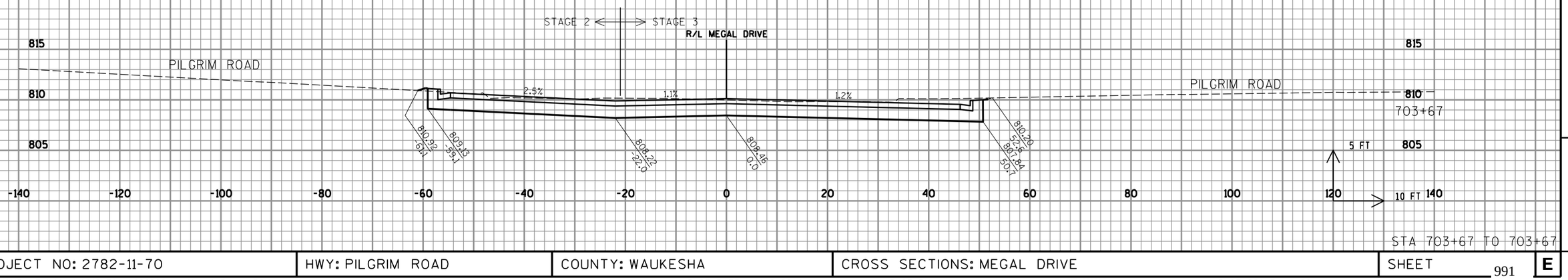


STA 702+50 TO 703+50

PROJECT NO: 2782-11-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	CROSS SECTIONS: MEGAL DRIVE	SHEET 990	E

FILE NAME : P:\44xx\4442\Plan\090206_xs_Megal Drive.DGN PLOT DATE : 11/2/2014 PLOT BY : ajp PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21



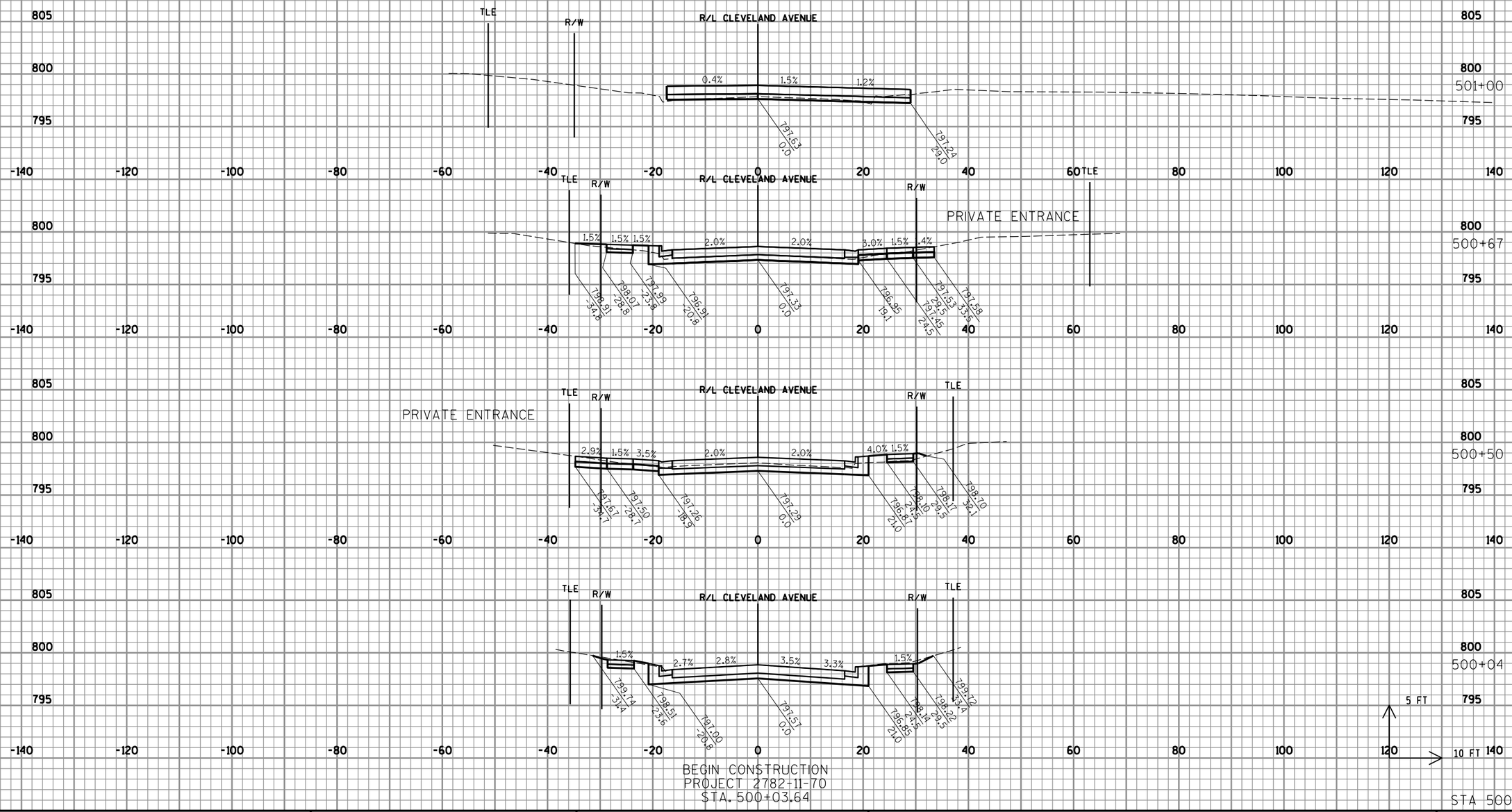
STA 703+67 TO 703+67

PROJECT NO: 2782-11-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	CROSS SECTIONS: MEGAL DRIVE	SHEET 991	E

FILE NAME : P:\44xx\4442\Plan\090206_xs_Megal Drive.DGN PLOT DATE : 11/2/2014 PLOT BY : ajp PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

END ABRUPT CONSTRUCTION
PROJECT 2782-11-70
STA. 501+00.00

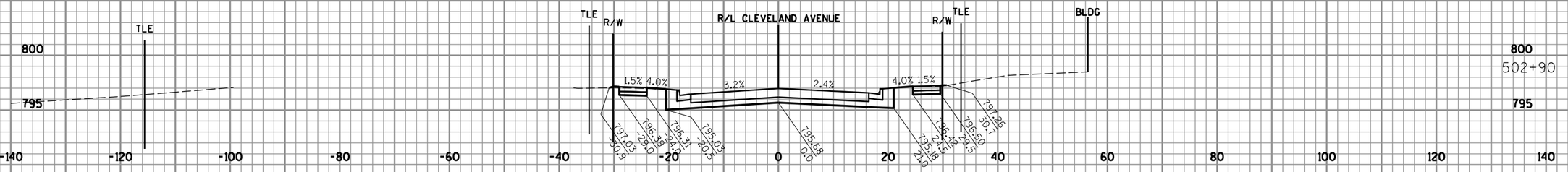


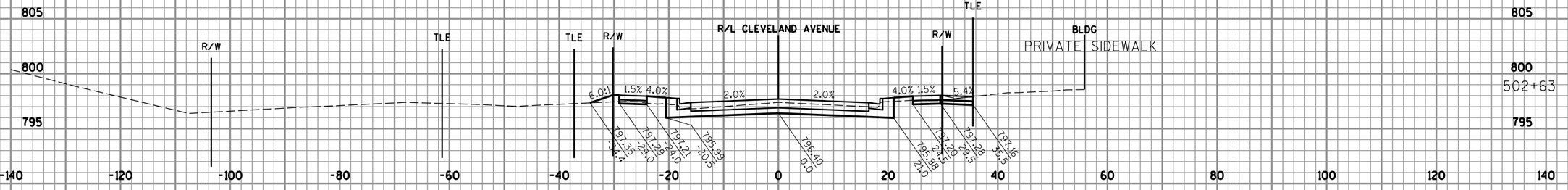
PROJECT NO: 2782-11-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	CROSS SECTIONS: CLEVELAND AVENUE	SHEET 992	E

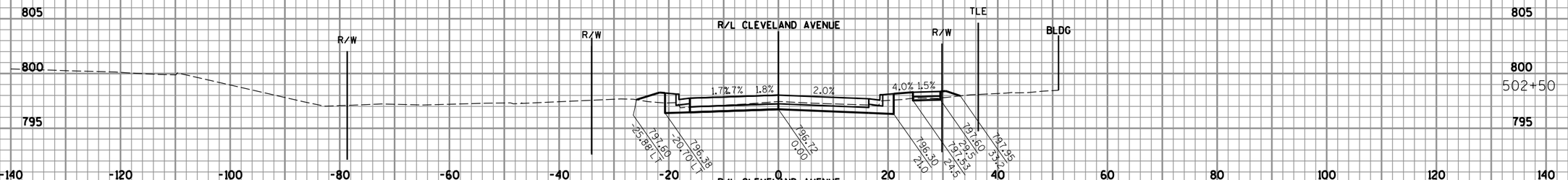
FILE NAME : P:\44xx\4442\Plan\090207_xs_Cleveland Ave.DGN | PLOT DATE : 11/2/2014 | PLOT BY : ajp | PLOT NAME : | PLOT SCALE : 1:20

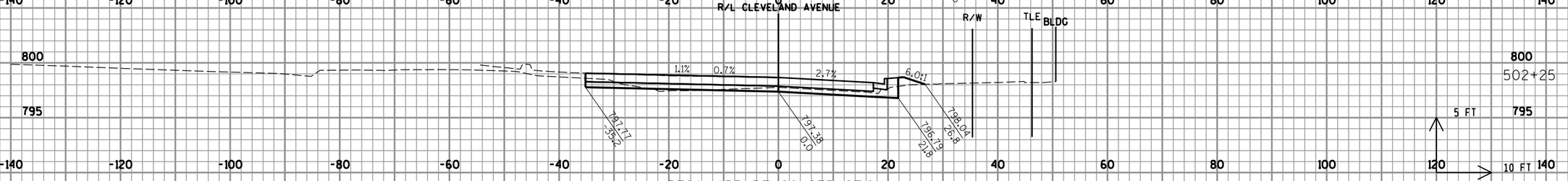
WISDOT/CADDS SHEET 21

END CONSTRUCTION
PROJECT 2782-11-70
STA. 502+90.00









BEGIN ABRUPT CONSTRUCTION
PROJECT 2782-11-70
STA. 502+25.00

STA 502+25 TO 502+90

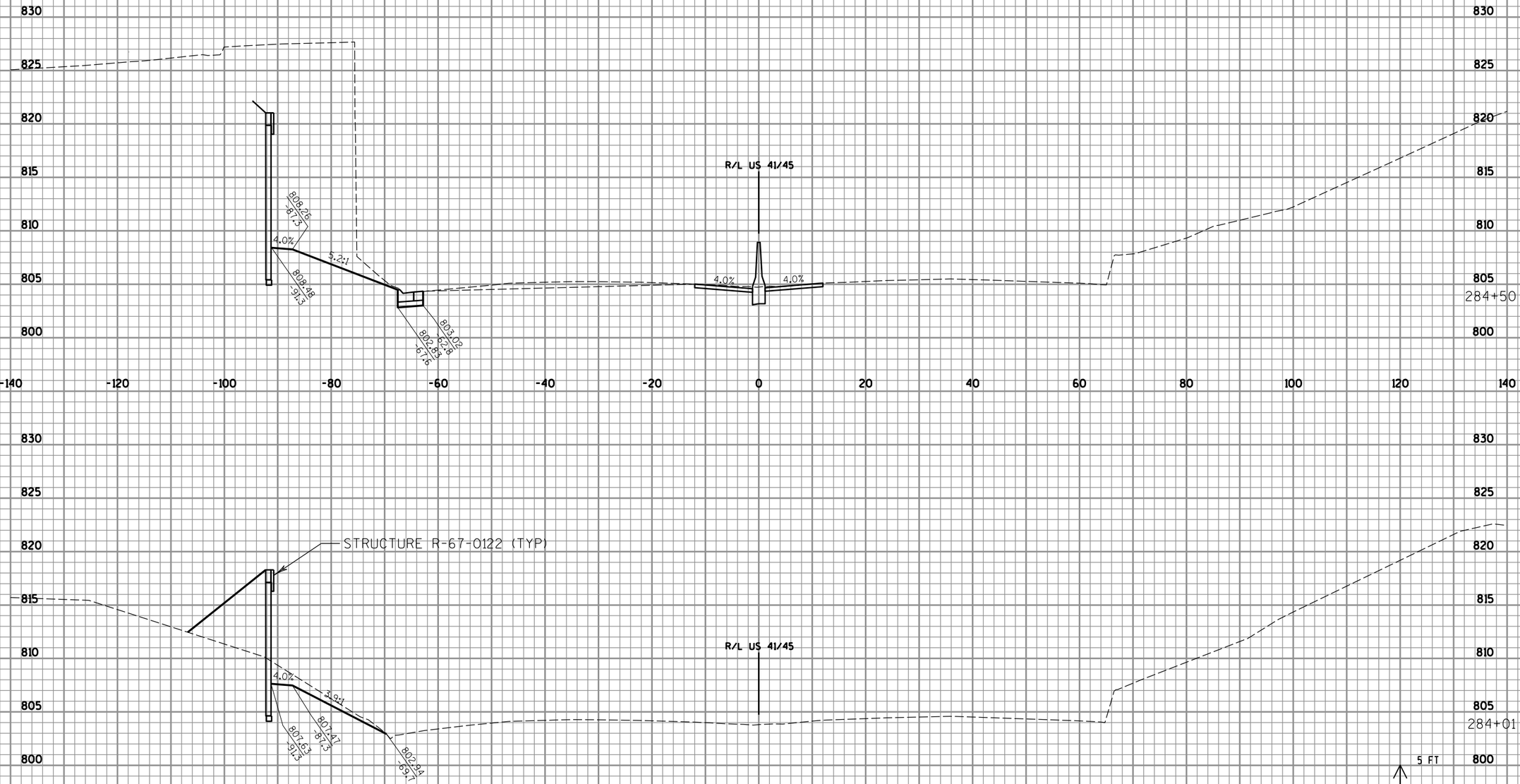
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PROJECT NO: 2720-11-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	CROSS SECTIONS: CLEVELAND AVENUE	SHEET 993	E

FILE NAME : P:\44xx\4442\Plan\090207_xs_Cleveland Ave.DGN
PLOT DATE : 11/2/2014
PLOT BY : ajp
PLOT NAME :
PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21



9

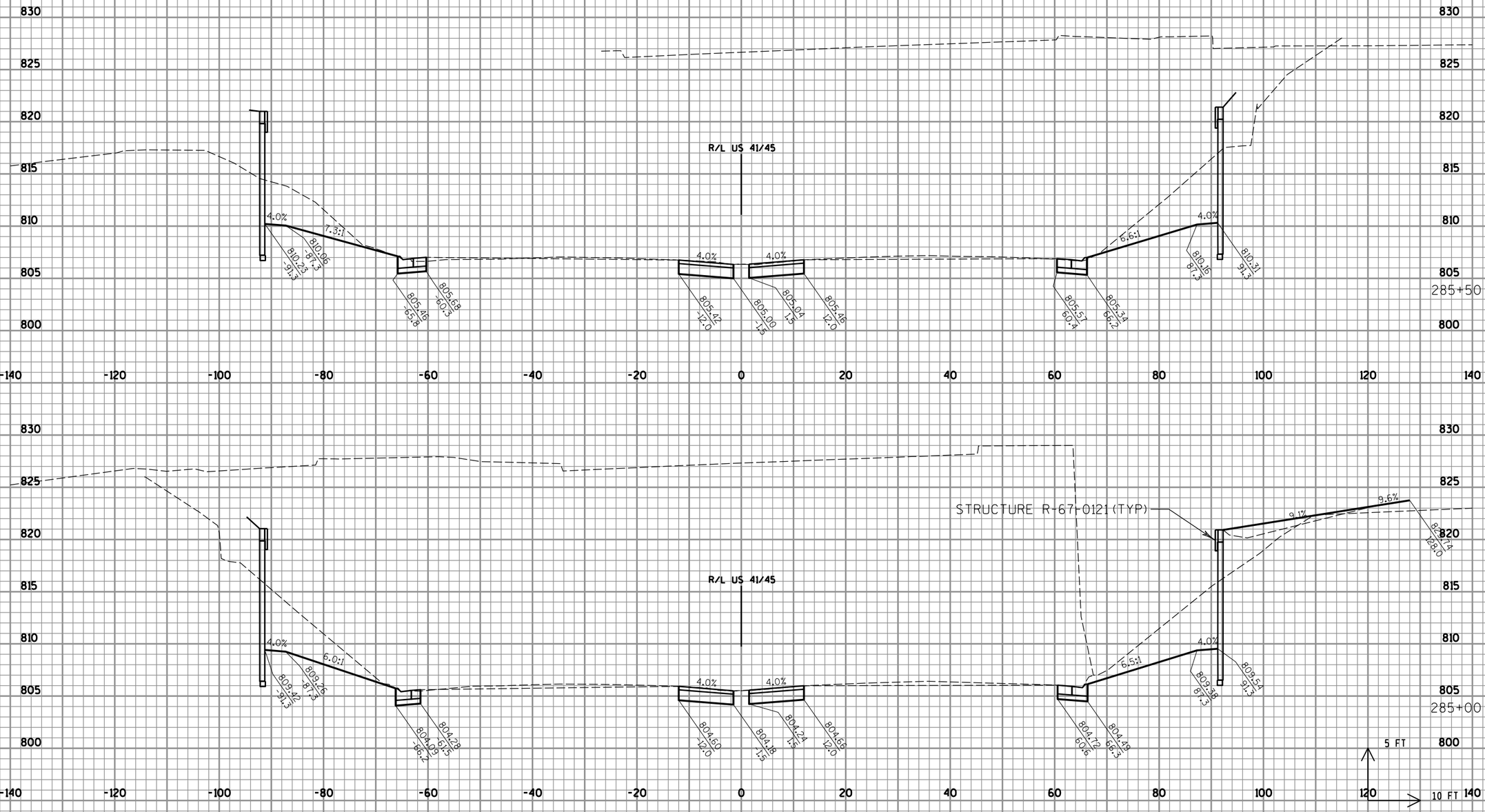
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PROJECT NO: 1100-37-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	CROSS SECTIONS: US 41/45	SHEET 994	E

STA 284+01 TO 284+50

FILE NAME : P:\44xx\4442\Plan\090208_xs_US41_Shoulders.DGN | PLOT DATE : 11/2/2014 | PLOT BY : ajp | PLOT NAME : | PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

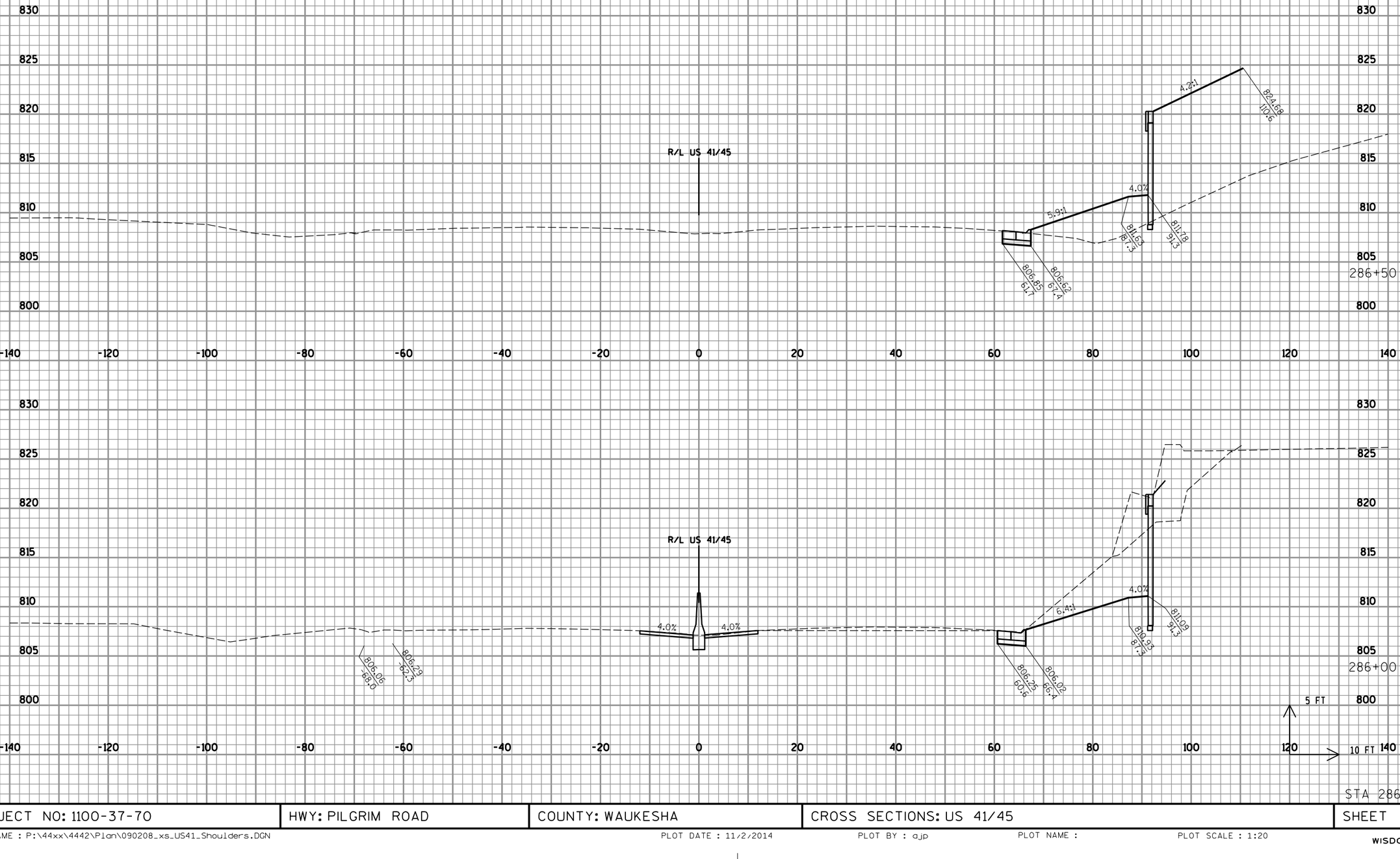


STA 285+00 TO 285+50

PROJECT NO: 1100-37-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	CROSS SECTIONS: US 41/45	SHEET 995	E

FILE NAME : P:\44xx\4442\Plan\090208_xs_US41_Shoulders.DGN | PLOT DATE : 11/2/2014 | PLOT BY : ajp | PLOT NAME : | PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21



9

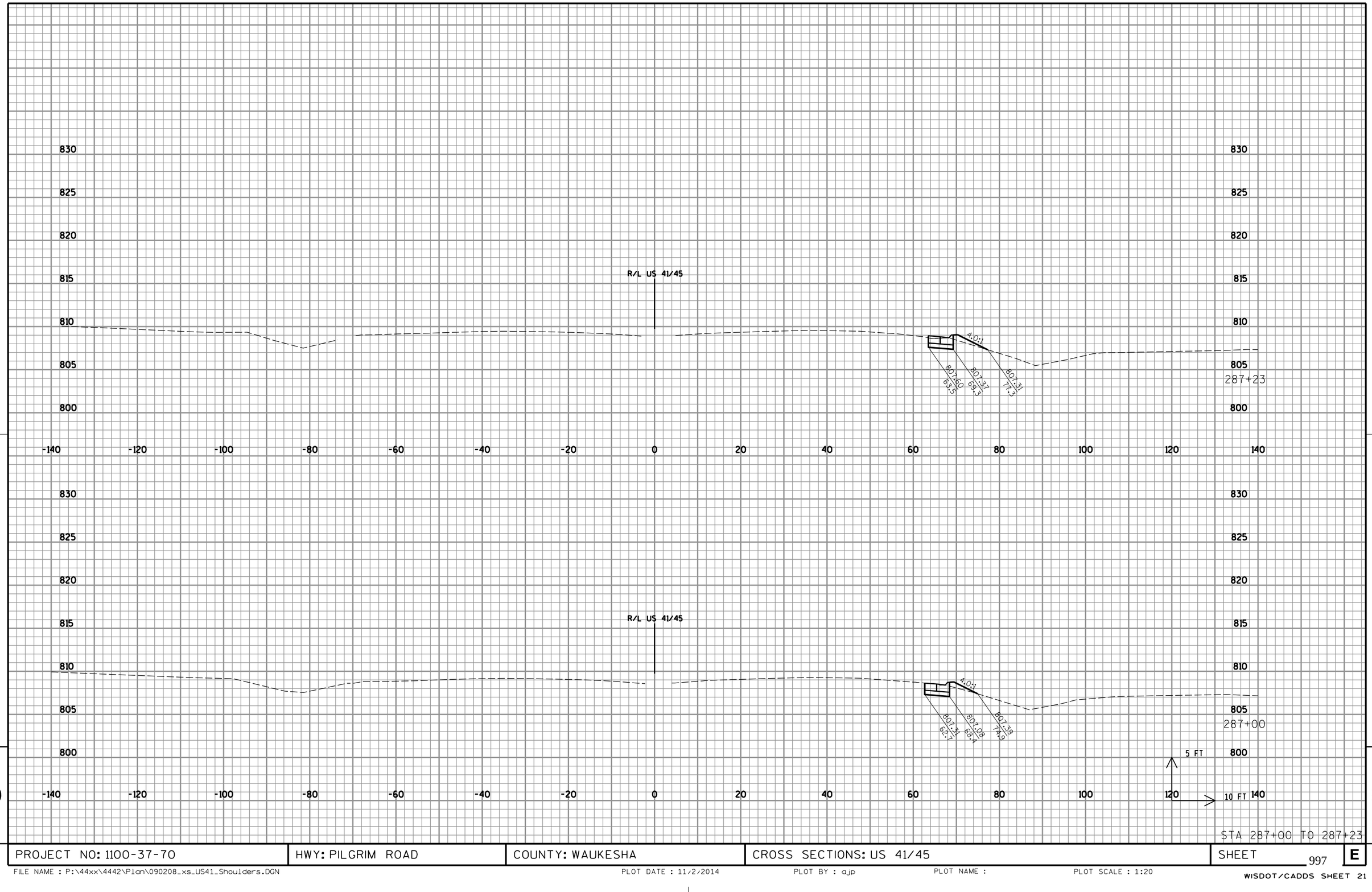
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STA 286+00 TO 286+50

PROJECT NO: 1100-37-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	CROSS SECTIONS: US 41/45	SHEET 996	E

FILE NAME : P:\44xx\4442\Plan\090208_xs_US41_Shoulders.DGN PLOT DATE : 11/2/2014 PLOT BY : ajp PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21



9

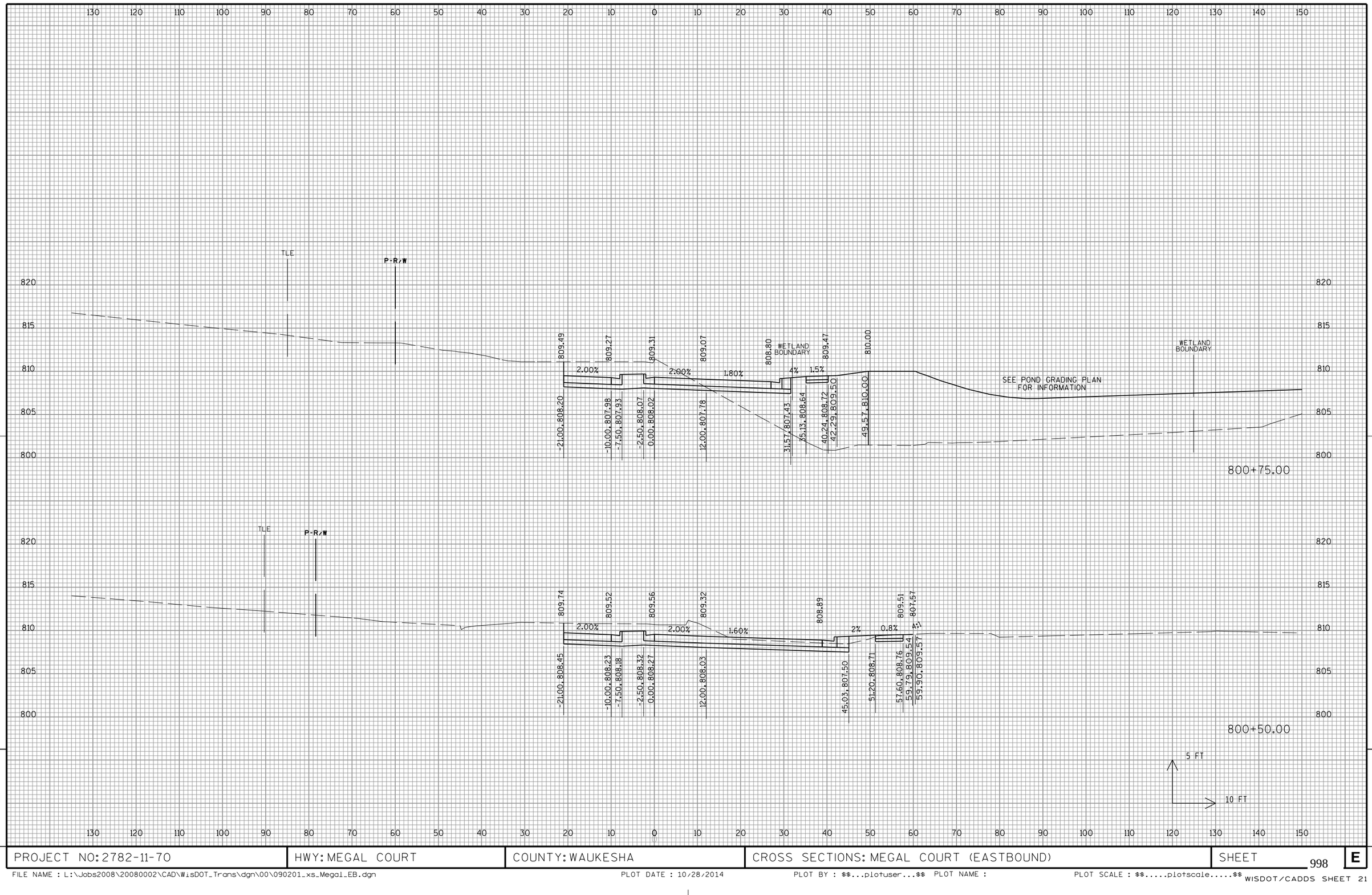
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STA 287+00 TO 287+23

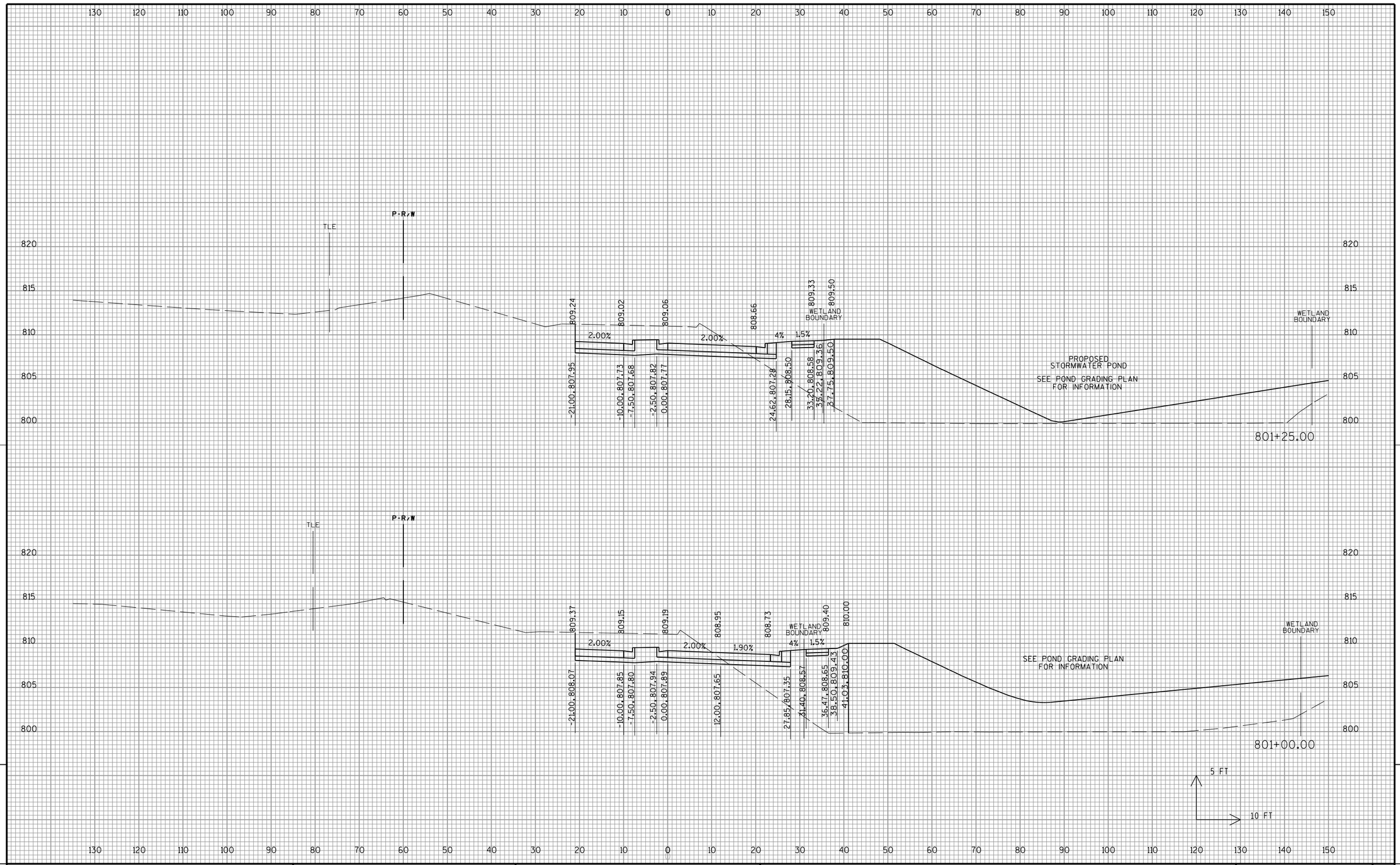
PROJECT NO: 1100-37-70	HWY: PILGRIM ROAD	COUNTY: WAUKESHA	CROSS SECTIONS: US 41/45	SHEET 997	E

FILE NAME : P:\44xx\4442\Plan\090208_xs_US41_Shoulders.DGN PLOT DATE : 11/2/2014 PLOT BY : ajp PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

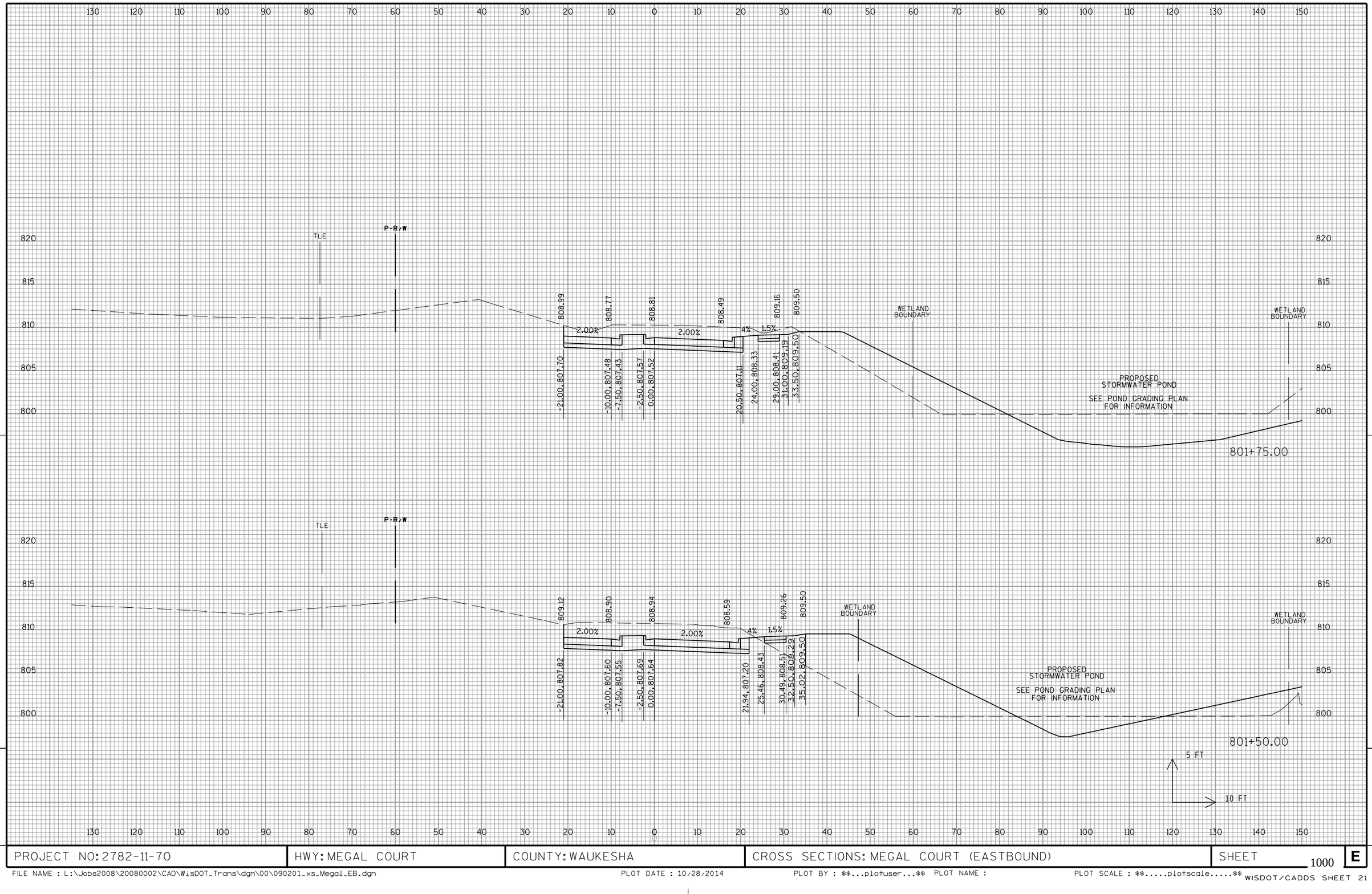


PROJECT NO: 2782-11-70	HWY: MEGAL COURT	COUNTY: WAUKESHA	CROSS SECTIONS: MEGAL COURT (EASTBOUND)	SHEET 998	E



PROJECT NO: 2782-11-70	HWY: MEGAL COURT	COUNTY: WAUKESHA	CROSS SECTIONS: MEGAL COURT (EASTBOUND)	SHEET 999	E

FILE NAME : L:\Jobs2008\20080002\CAD\WisDOT_Trans\dgn\00\090201_xs_Megal_EB.dgn PLOT DATE : 10/28/2014 PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 21

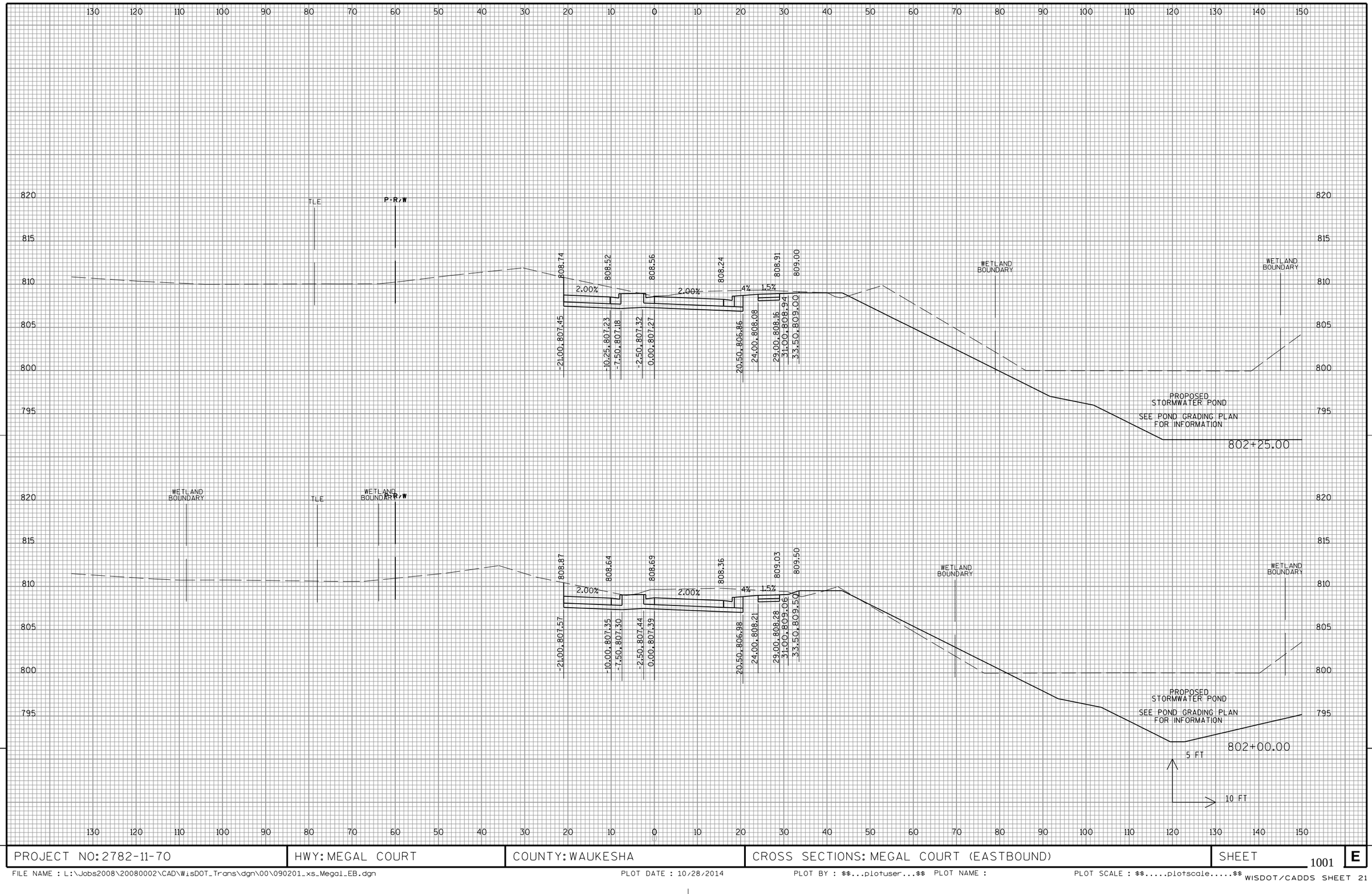


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PROJECT NO: 2782-11-70	HWY: MEGAL COURT	COUNTY: WAUKESHA	CROSS SECTIONS: MEGAL COURT (EASTBOUND)	SHEET 1000	E

FILE NAME : L:\Jobs2008\20080002\CAD\WisDOT_Trans\dgn\00\090201_xs_Megal_EB.dgn PLOT DATE : 10/28/2014 PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 21

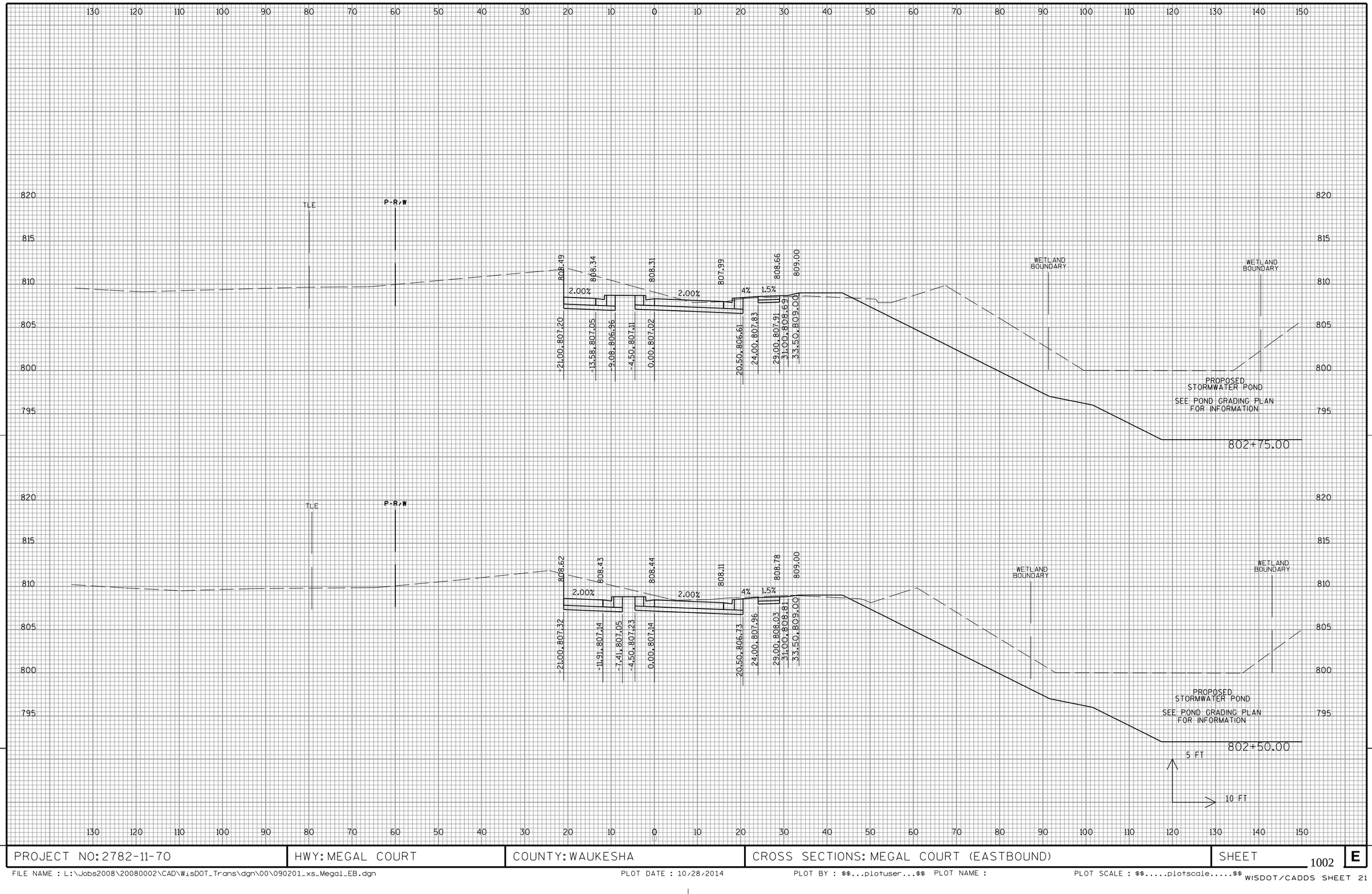


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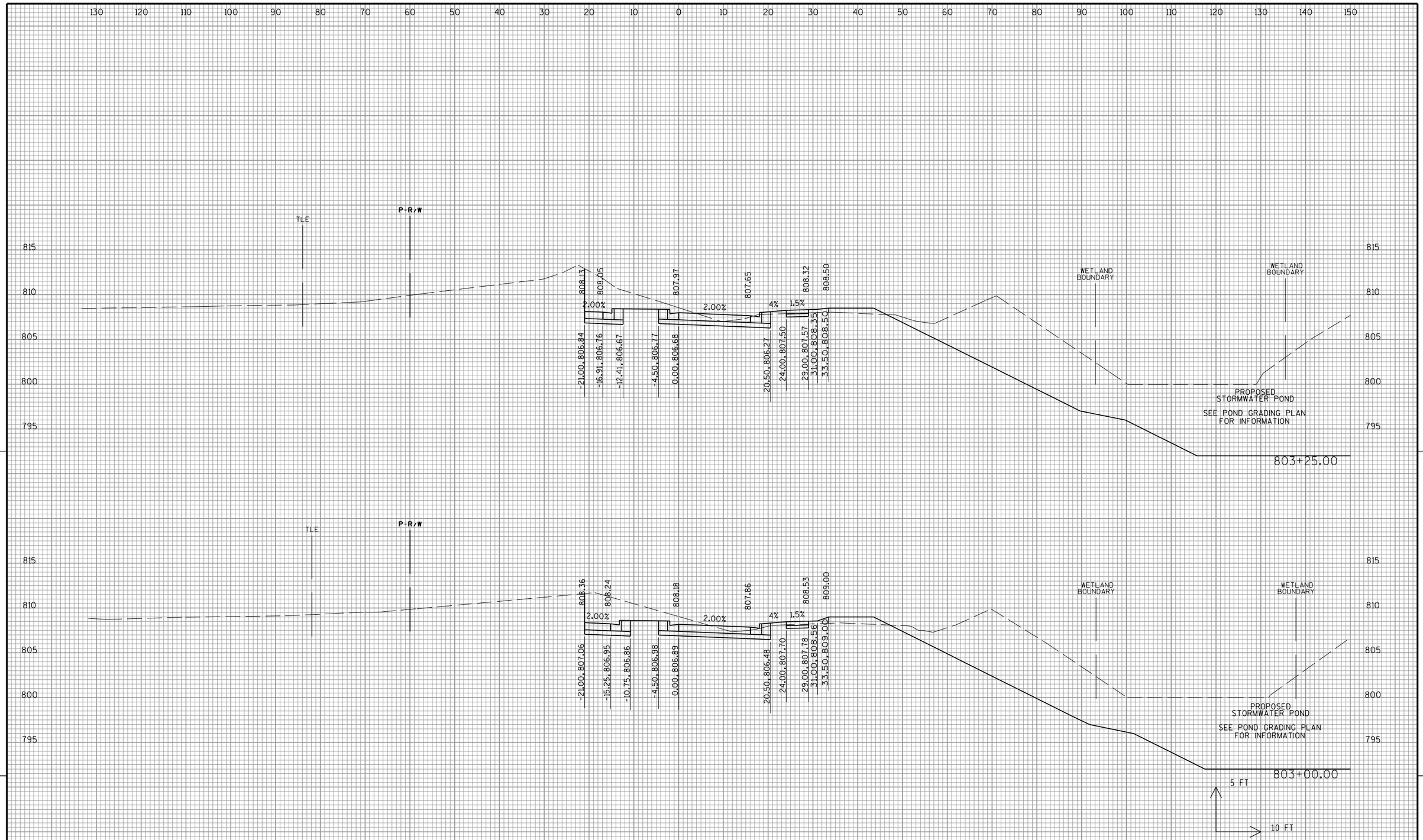
PROJECT NO: 2782-11-70	HWY: MEGAL COURT	COUNTY: WAUKESHA	CROSS SECTIONS: MEGAL COURT (EASTBOUND)	SHEET 1001	E

FILE NAME : L:\Jobs2008\20080002\CAD\WisDOT_Trans\dgn\00\090201_xs_Megal_EB.dgn PLOT DATE : 10/28/2014 PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 21



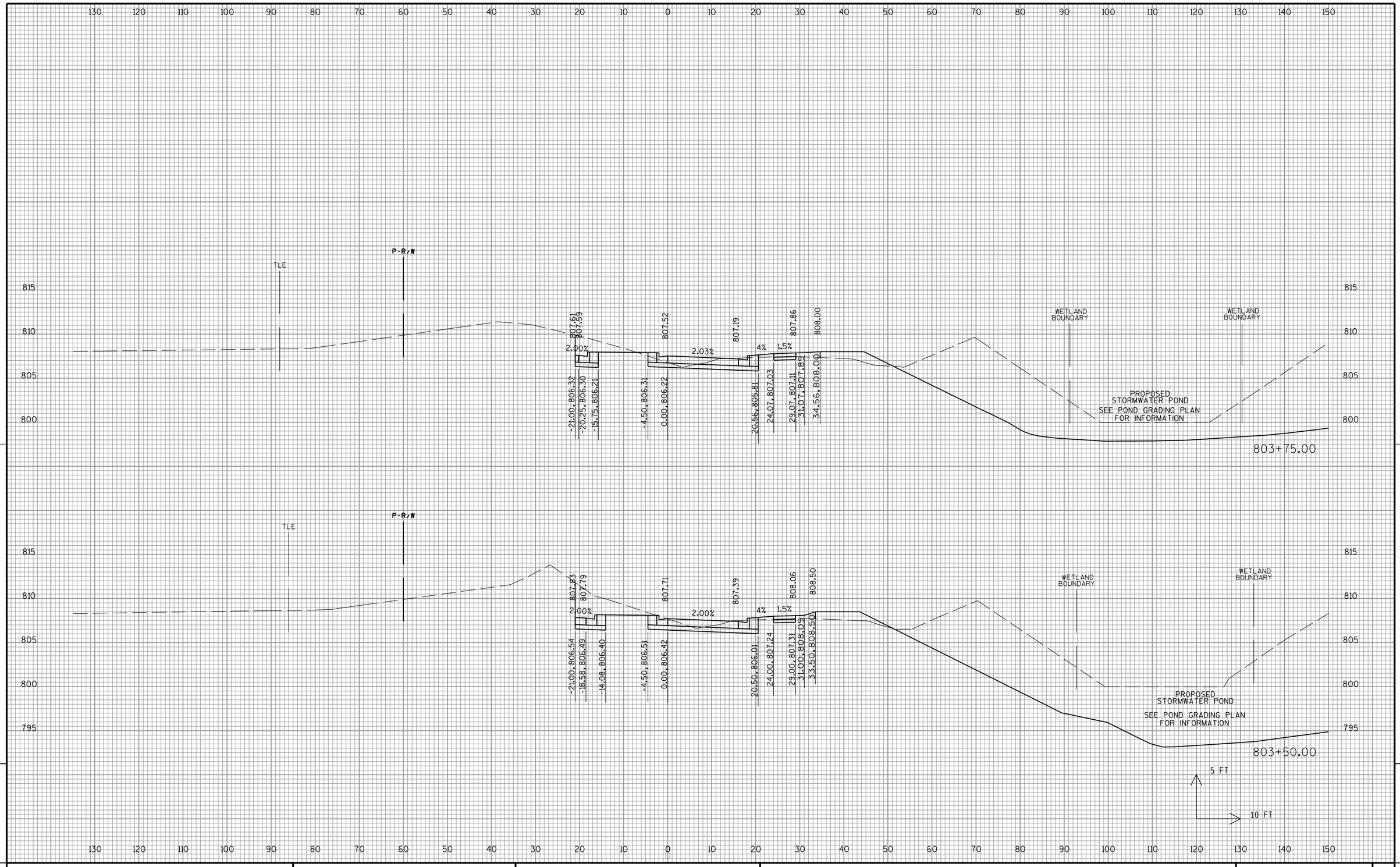
PROJECT NO: 2782-11-70	HWY: MEGAL COURT	COUNTY: WAUKESHA	CROSS SECTIONS: MEGAL COURT (EASTBOUND)	SHEET 1002	E

FILE NAME : L:\Jobs2008\20080002\CAD\WisDOT_Trans\dgn\00\090201_xs_Megal_EB.dgn PLOT DATE : 10/28/2014 PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 21



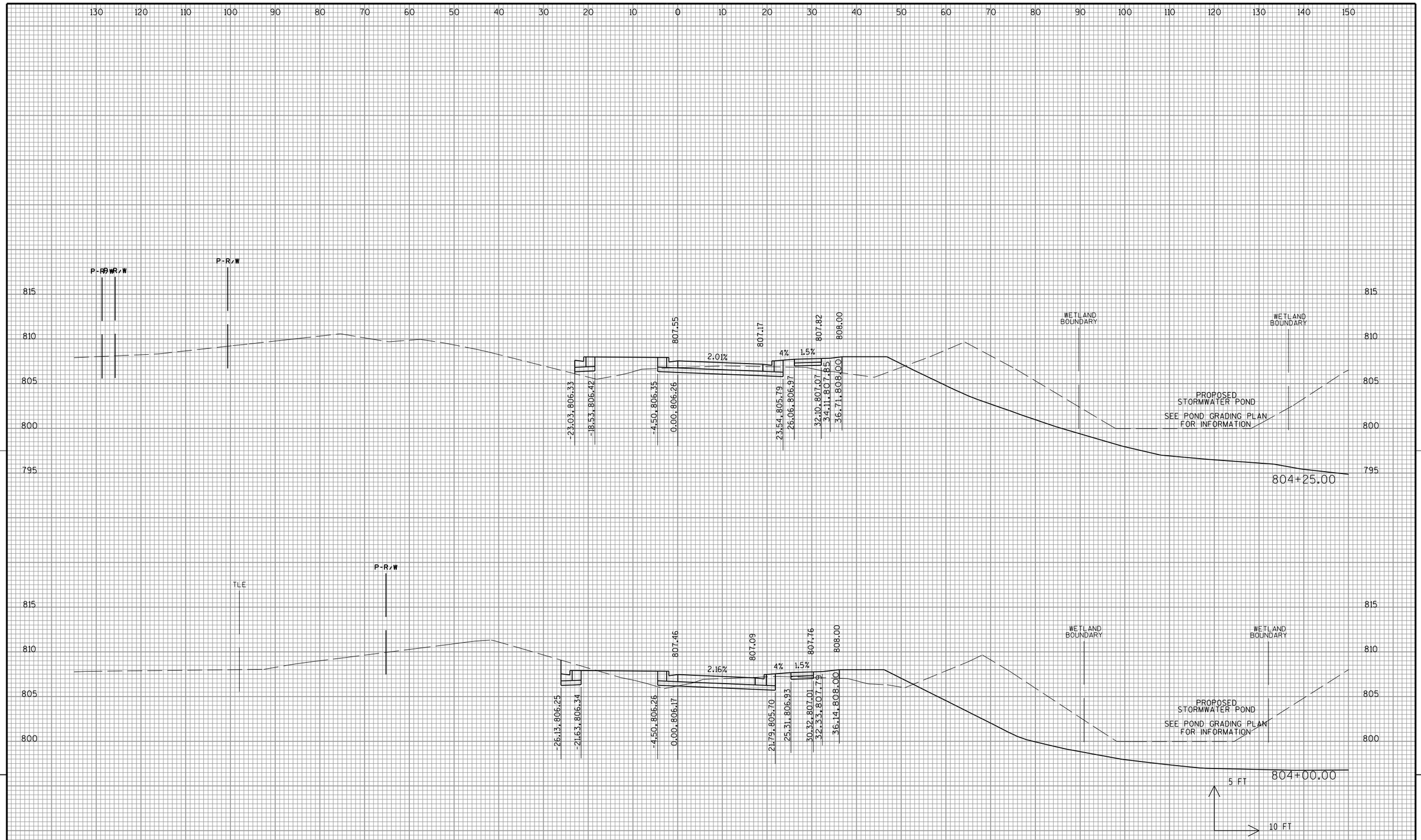
PROJECT NO: 2782-11-70	HWY: MEGAL COURT	COUNTY: WAUKESHA	CROSS SECTIONS: MEGAL COURT (EASTBOUND)	SHEET 1003	E

FILE NAME : L:\Jobs2008\20080002\CAD\WisDOT_Trans\dgn\00\090201_xs_Megal_EB.dgn PLOT DATE : 10/28/2014 PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$



PROJECT NO: 2782-11-70	HWY: MEGAL COURT	COUNTY: WAUKESHA	CROSS SECTIONS: MEGAL COURT (EASTBOUND)	SHEET 1004	E

FILE NAME : L:\Jobs2008\20080002\CAD\WisDOT_Trans\dgn\00\090201_xs_Megal_EB.dgn PLOT DATE : 10/28/2014 PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 21

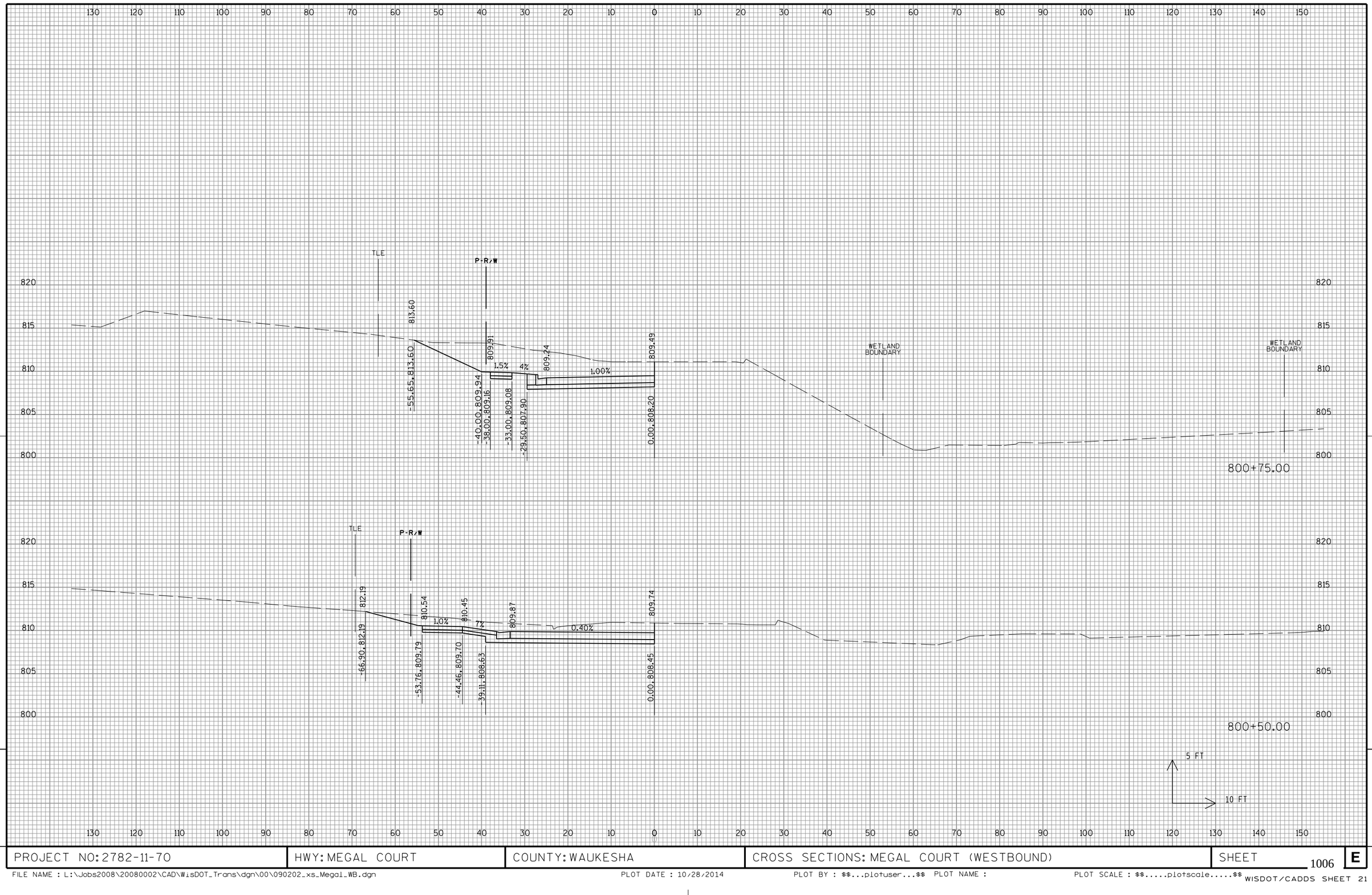


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PROJECT NO: 2720-10-70	HWY: MEGAL COURT	COUNTY: WAUKESHA	CROSS SECTIONS: MEGAL COURT (EASTBOUND)	SHEET 1005	E

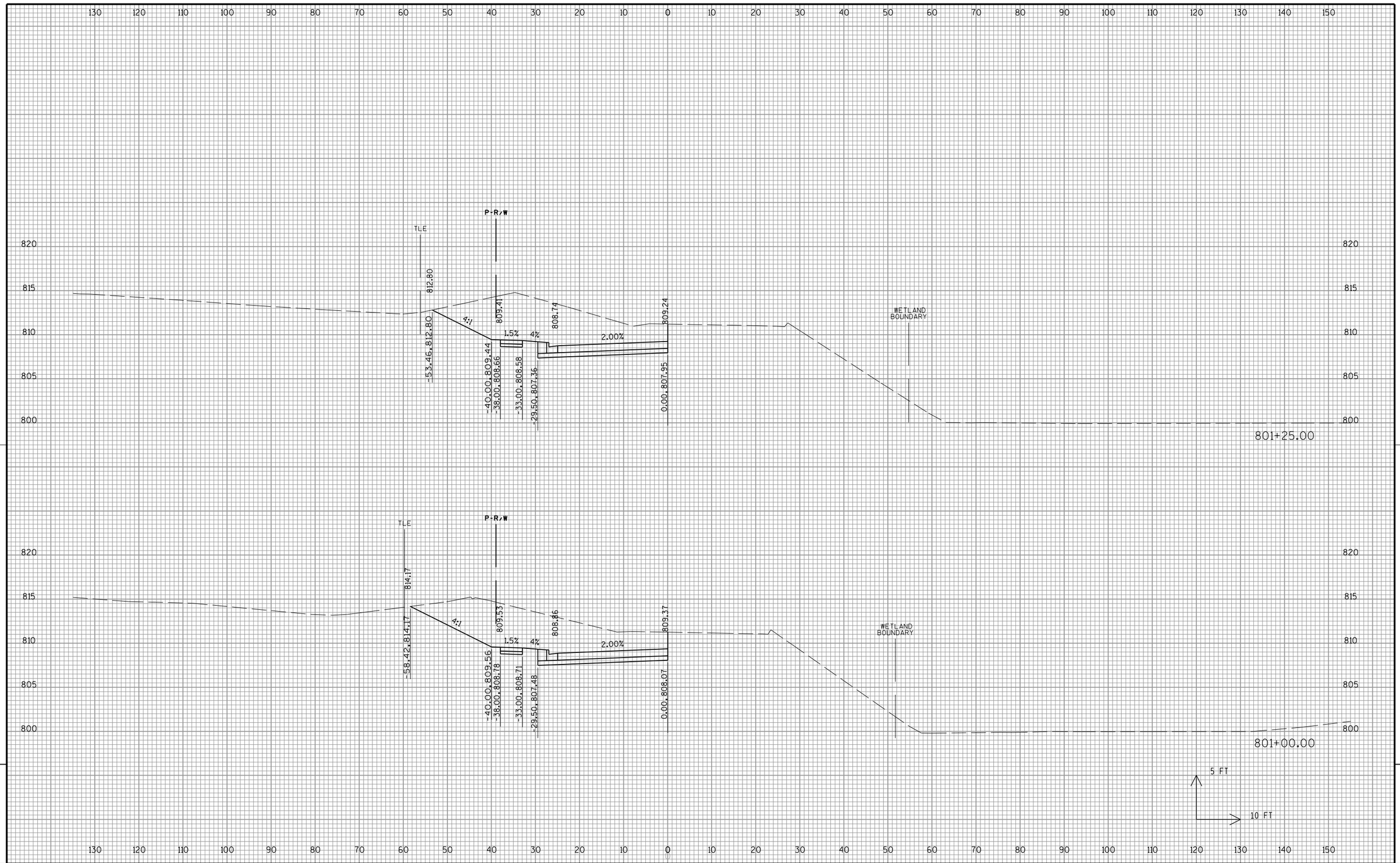
FILE NAME : L:\Jobs2008\20080002\CAD\WisDOT_Trans\dgn\00\090201_xs_Megal_EB.dgn PLOT DATE : 10/28/2014 PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$



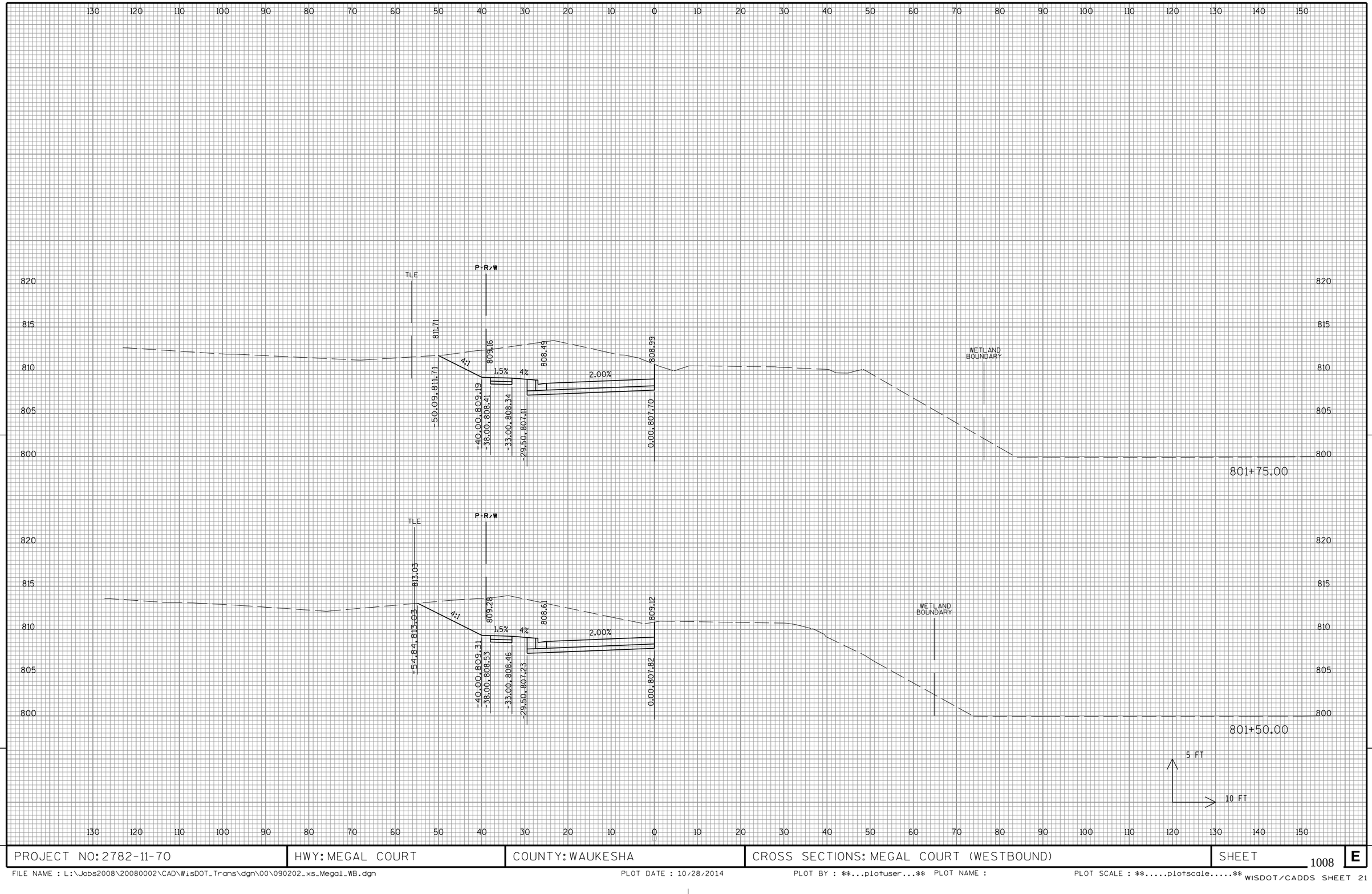
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PROJECT NO: 2782-11-70	HWY: MEGAL COURT	COUNTY: WAUKESHA	CROSS SECTIONS: MEGAL COURT (WESTBOUND)	SHEET 1006	E

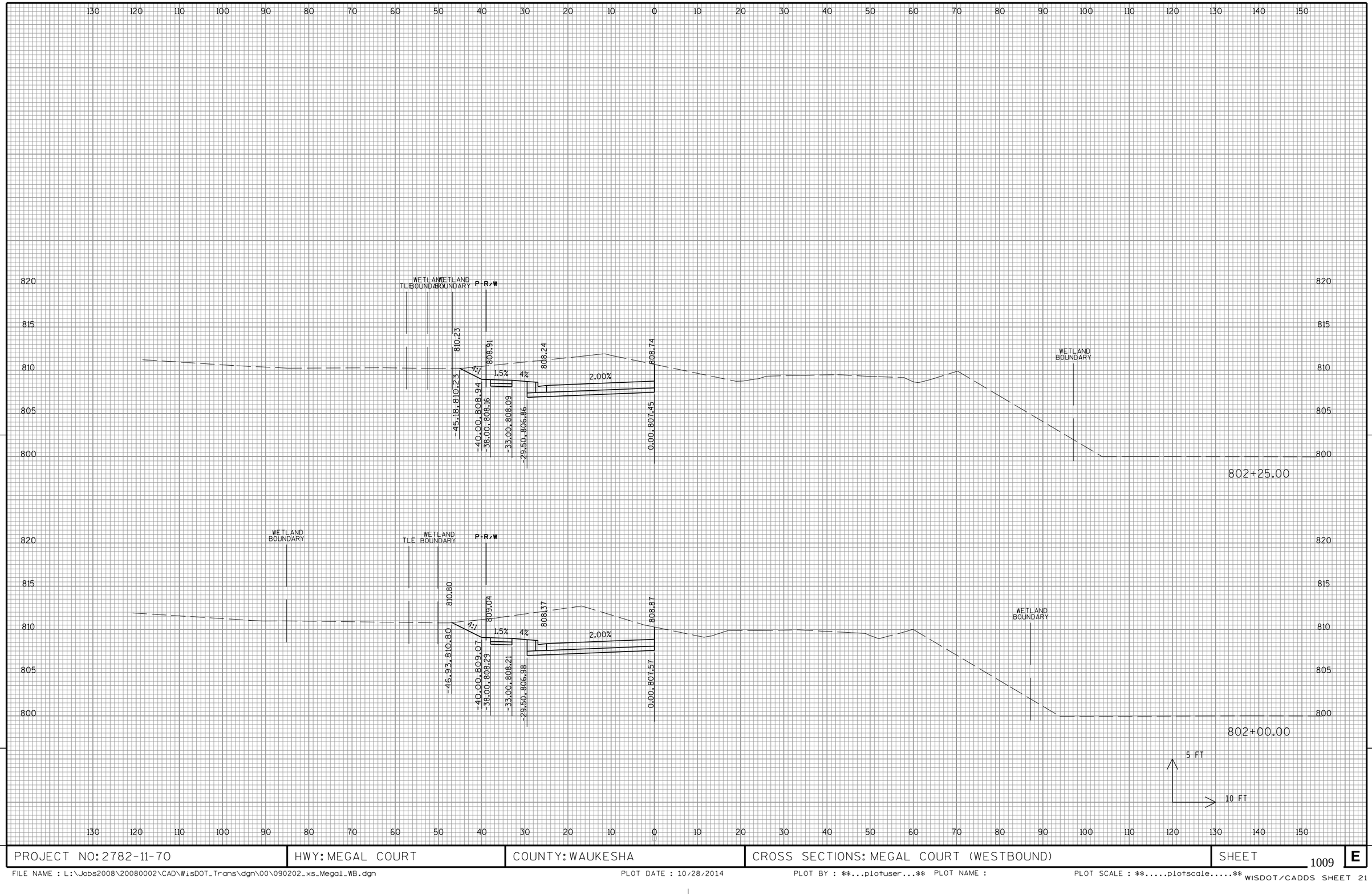


PROJECT NO: 2782-11-70	HWY: MEGAL COURT	COUNTY: WAUKESHA	CROSS SECTIONS: MEGAL COURT (WESTBOUND)	SHEET 1007	E



PROJECT NO: 2782-11-70	HWY: MEGAL COURT	COUNTY: WAUKESHA	CROSS SECTIONS: MEGAL COURT (WESTBOUND)	SHEET 1008	E

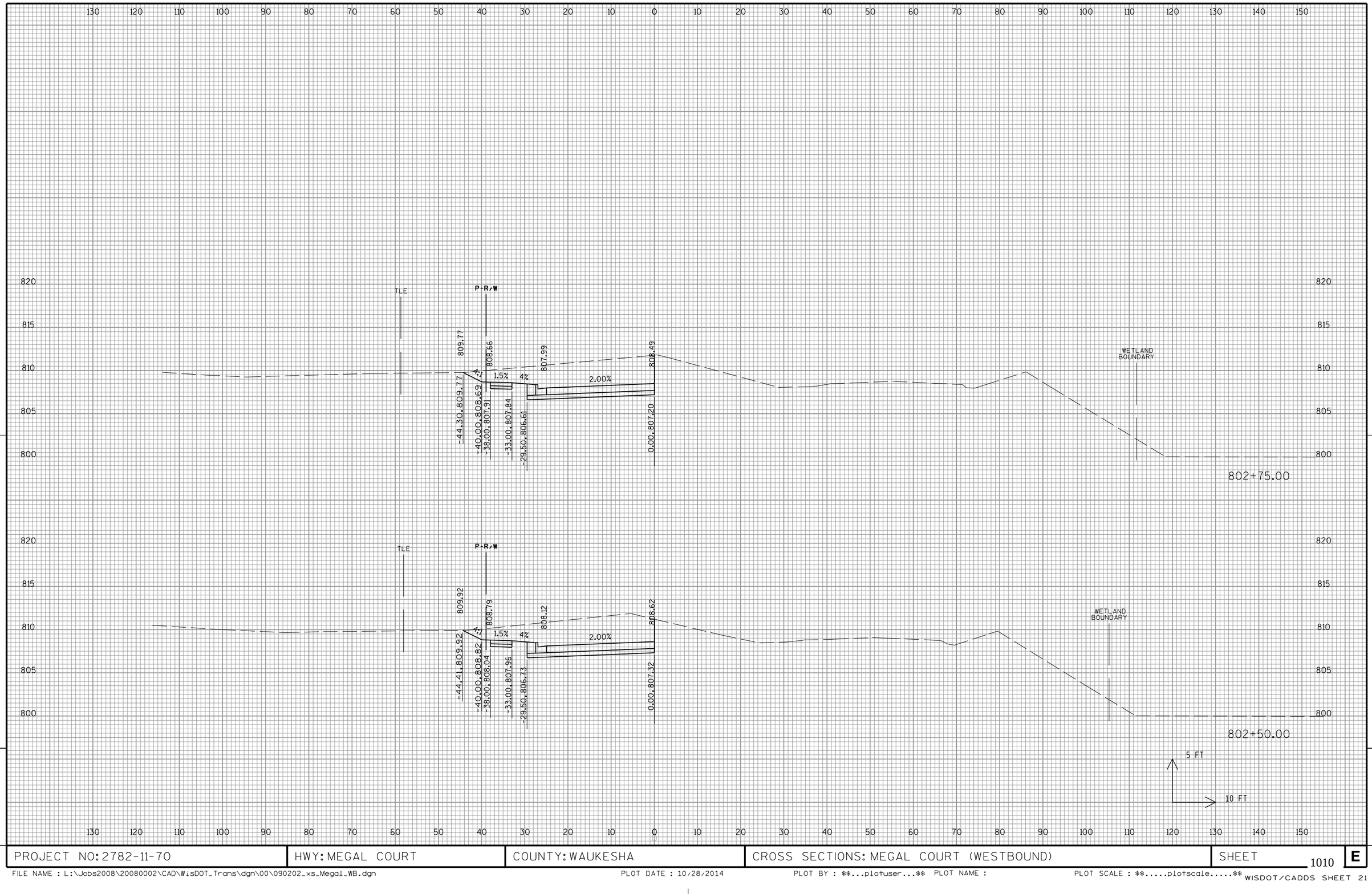
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PROJECT NO: 2782-11-70	HWY: MEGAL COURT	COUNTY: WAUKESHA	CROSS SECTIONS: MEGAL COURT (WESTBOUND)	SHEET 1009	E

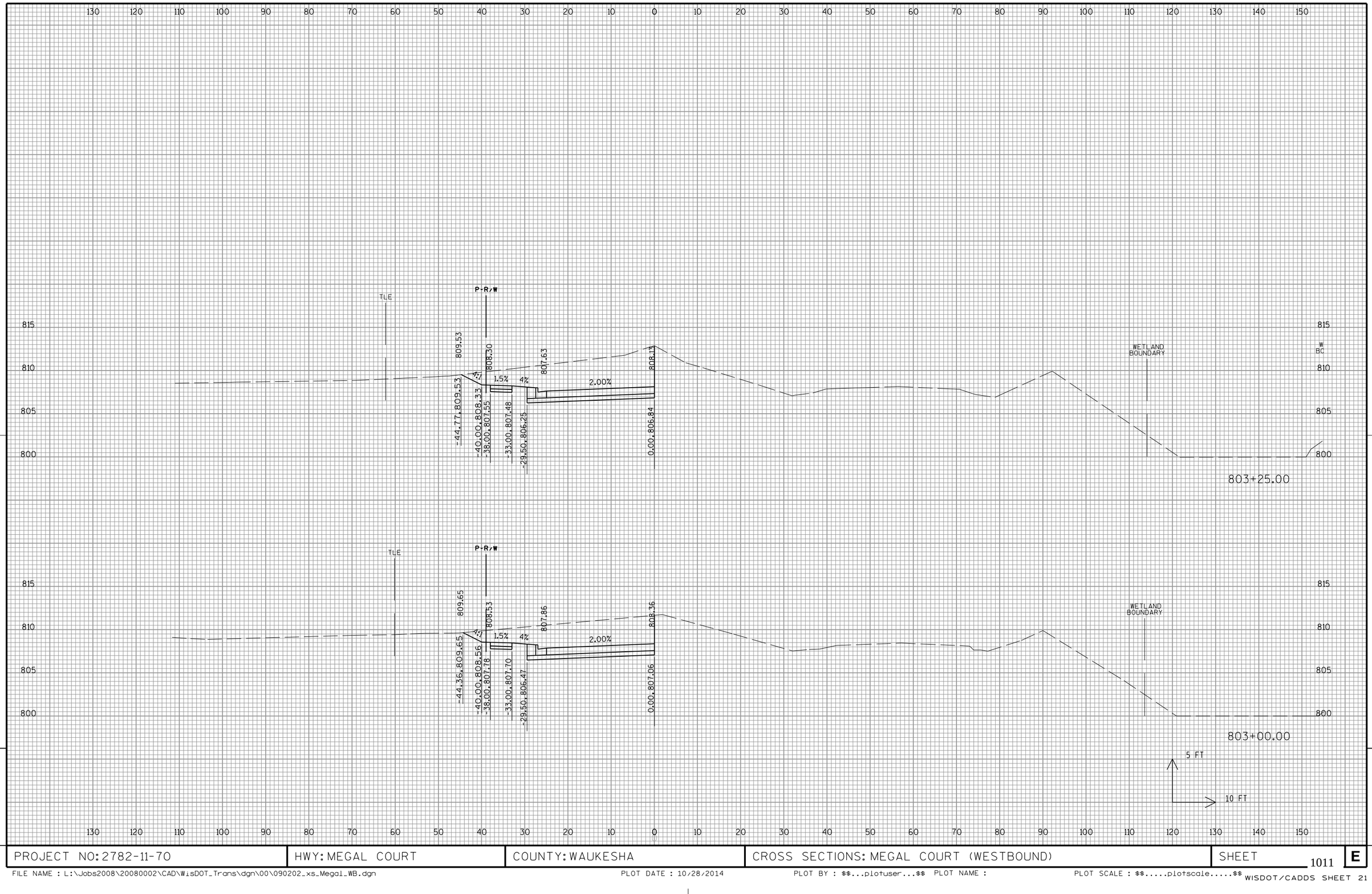


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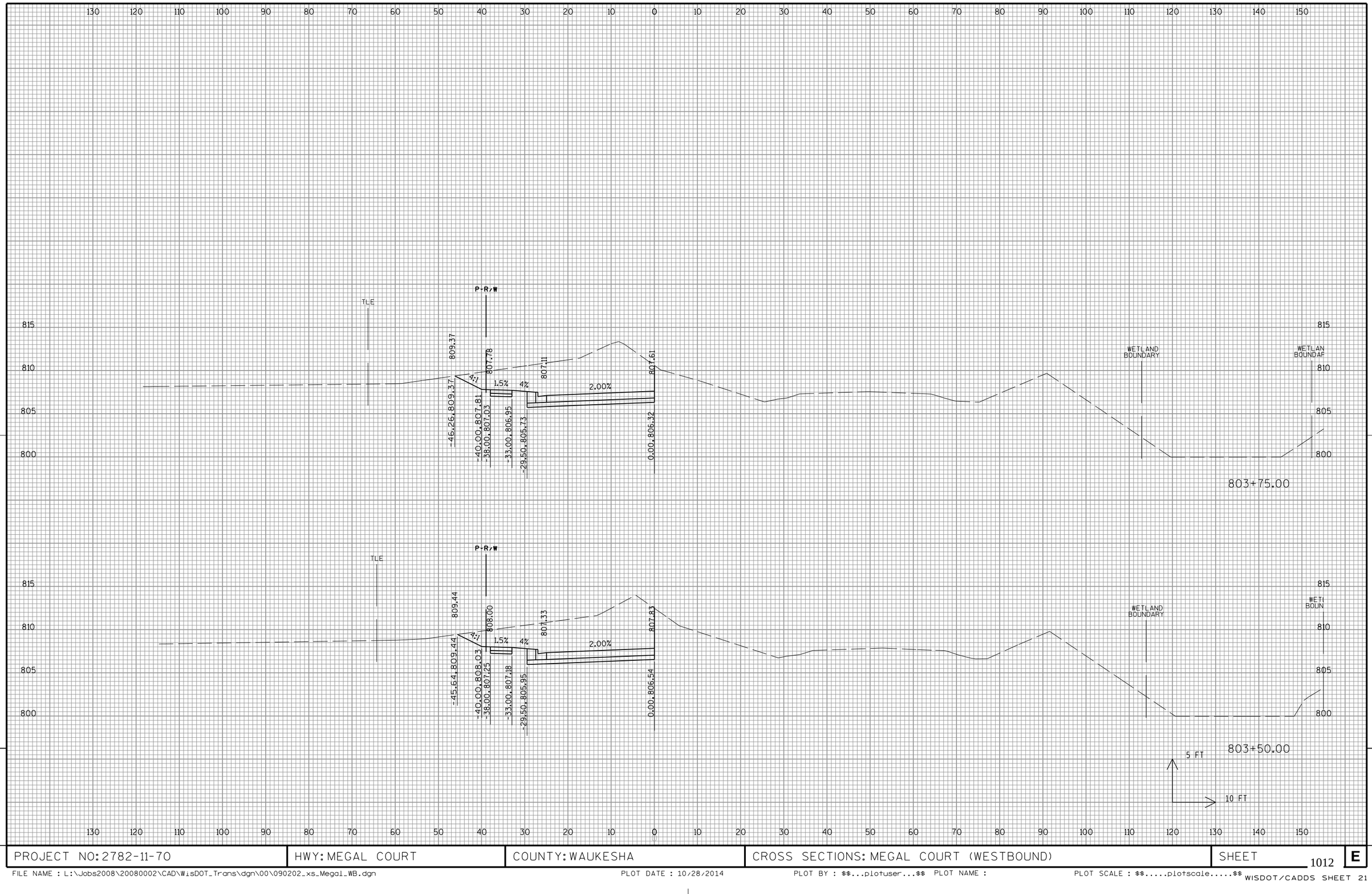
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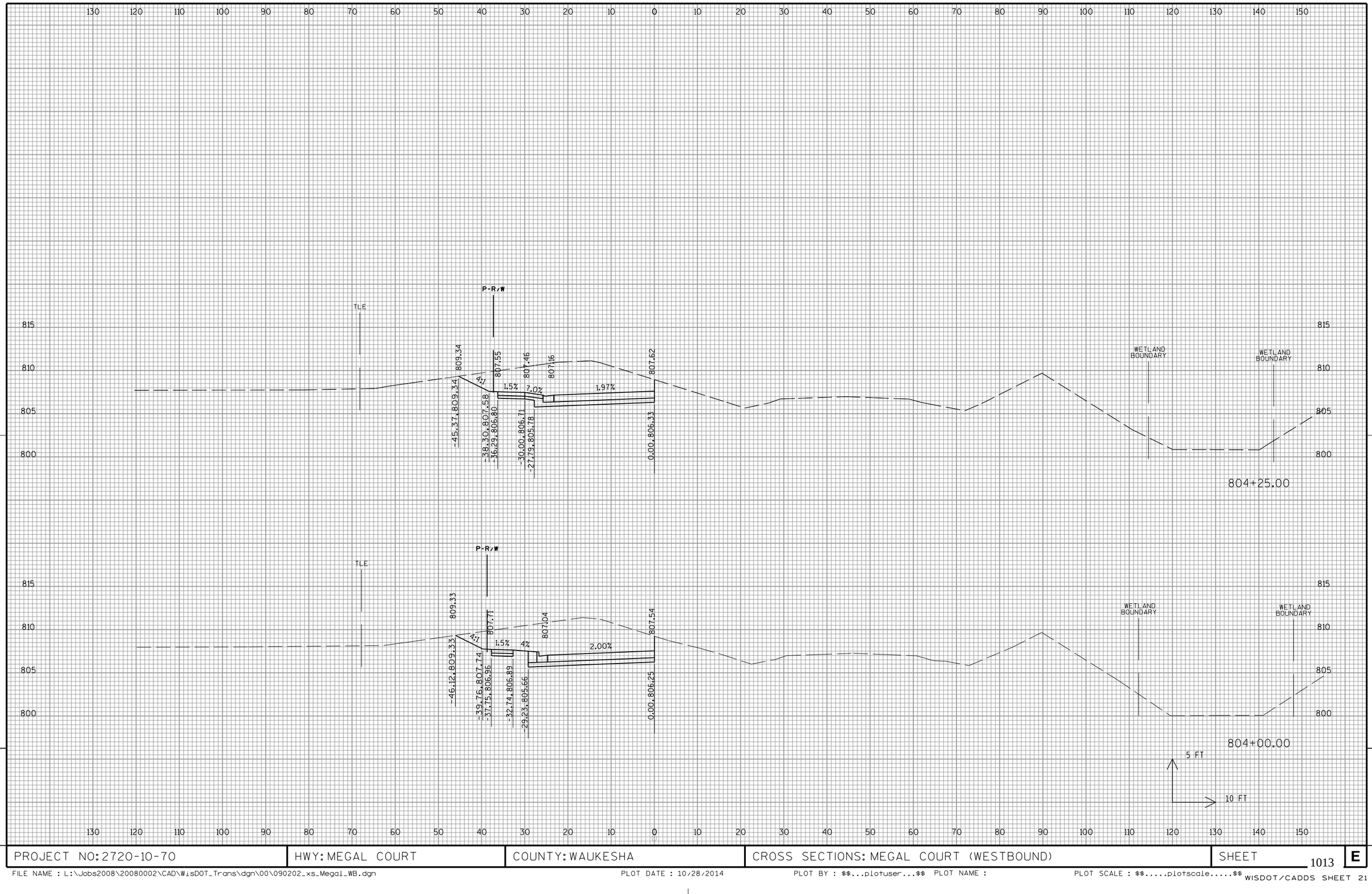
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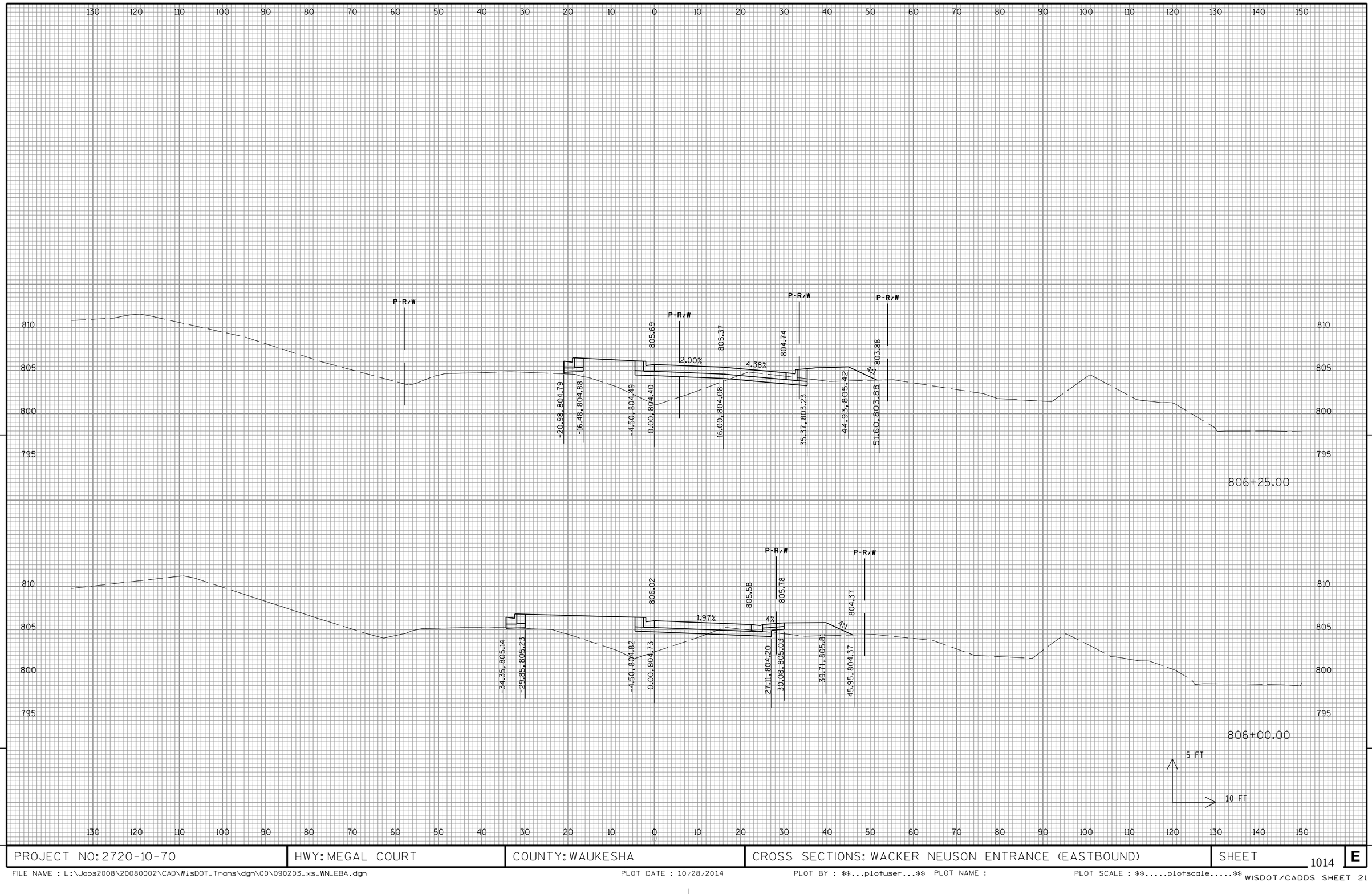
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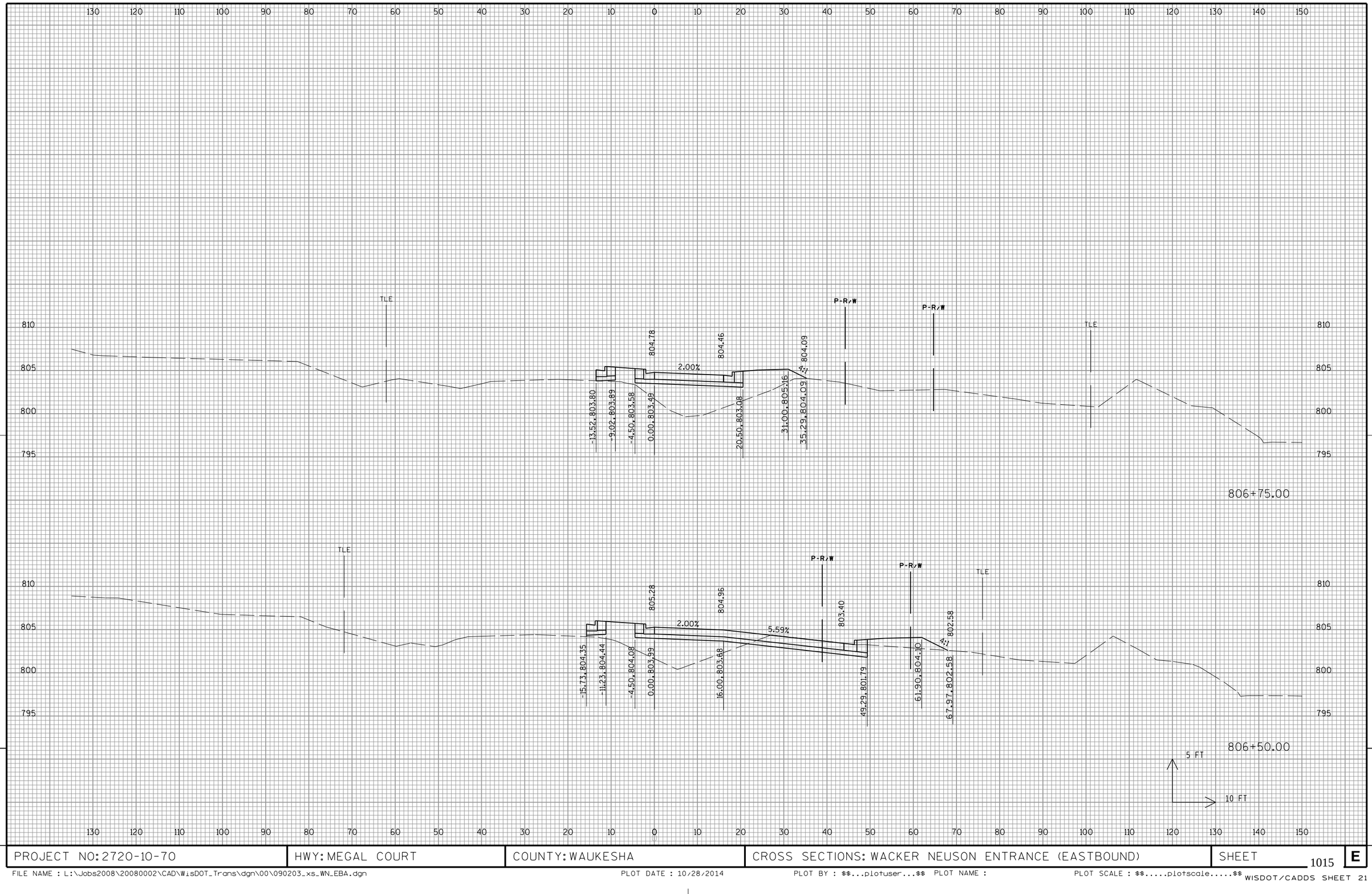
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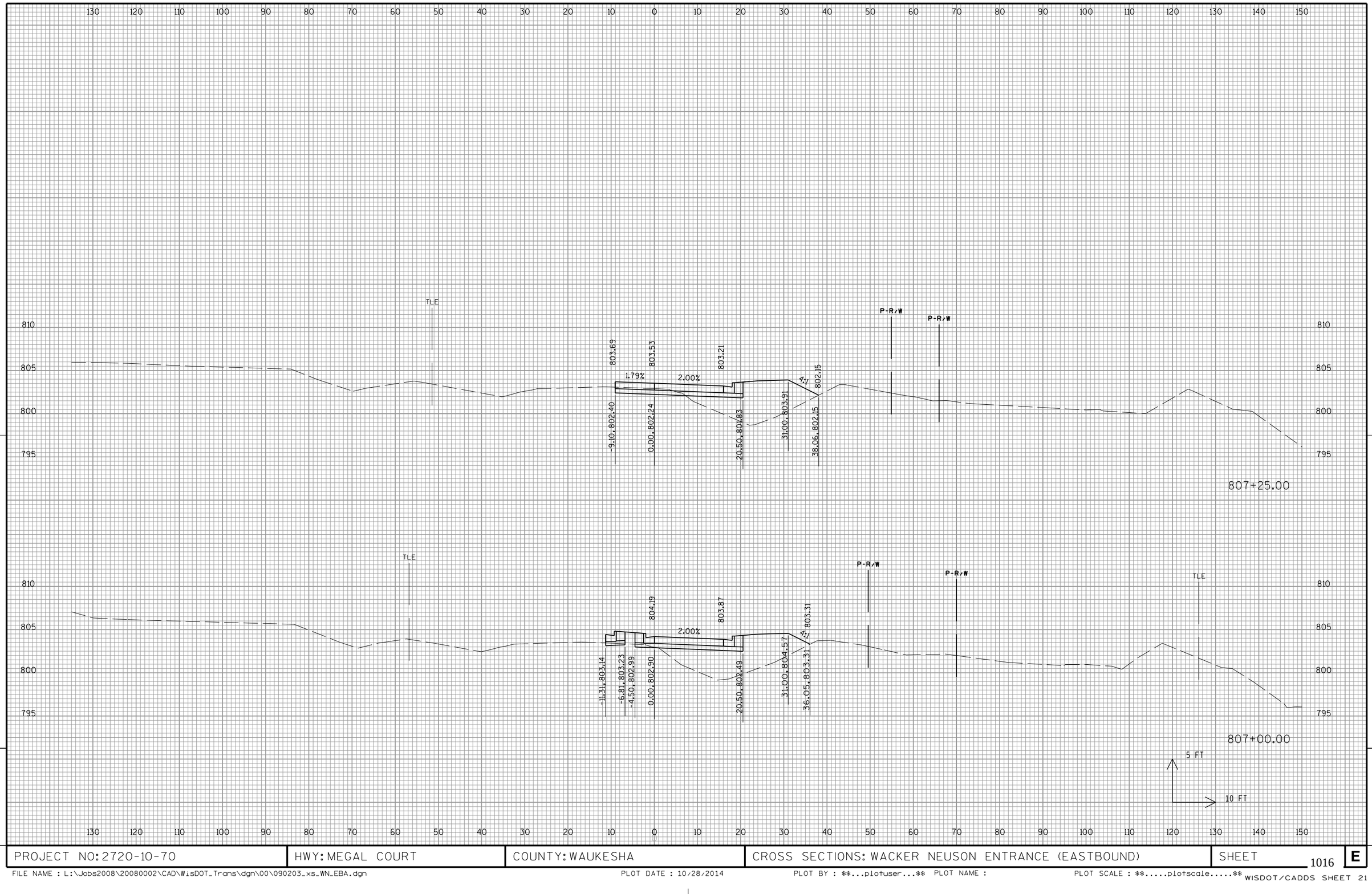


PROJECT NO: 2720-10-70	HWY: MEGAL COURT	COUNTY: WAUKESHA	CROSS SECTIONS: WACKER NEUSON ENTRANCE (EASTBOUND)	SHEET 1014	E

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PROJECT NO: 2720-10-70	HWY: MEGAL COURT	COUNTY: WAUKESHA	CROSS SECTIONS: WACKER NEUSON ENTRANCE (EASTBOUND)	SHEET 1015	E

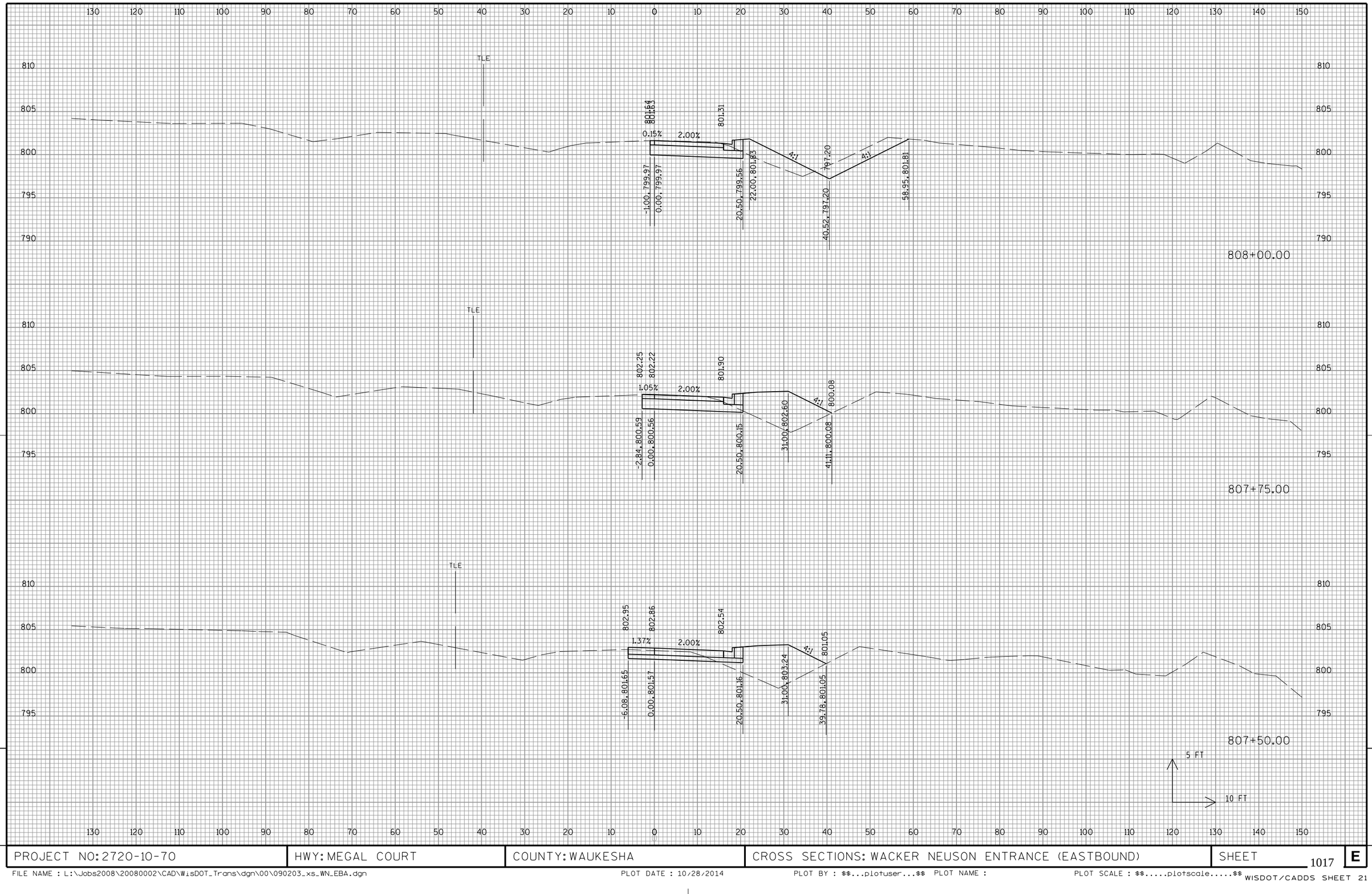


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PROJECT NO: 2720-10-70	HWY: MEGAL COURT	COUNTY: WAUKESHA	CROSS SECTIONS: WACKER NEUSON ENTRANCE (EASTBOUND)	SHEET 1016	E

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PROJECT NO: 2720-10-70	HWY: MEGAL COURT	COUNTY: WAUKESHA	CROSS SECTIONS: WACKER NEUSON ENTRANCE (EASTBOUND)	SHEET 1017	E

130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

810
805
800
795
790

TLE

808+50.00

808+25.00

800.47
4:1
800.75
801.07
800.75
2.00%
2.00%
4:1
797.08
4:1

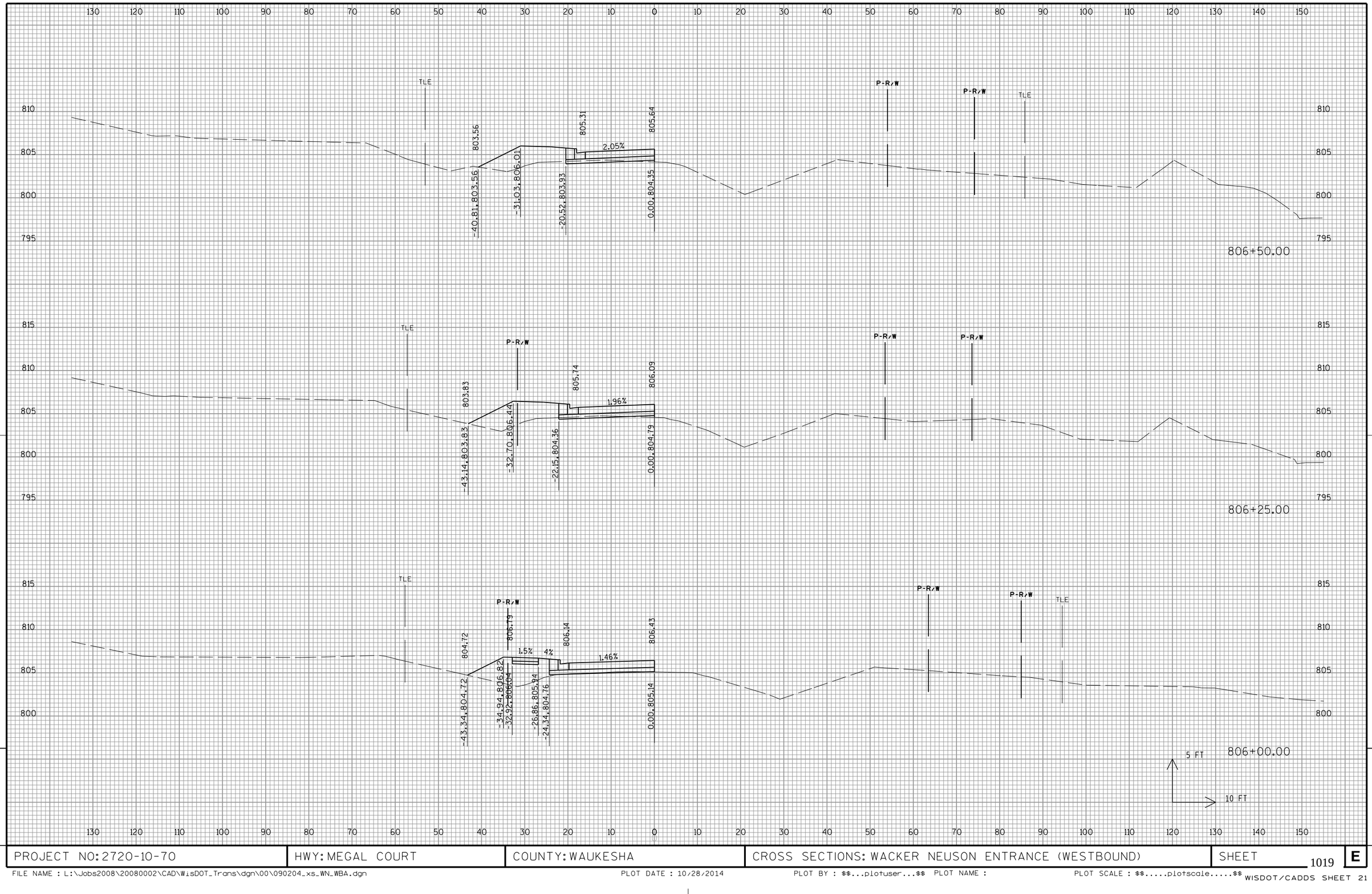
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20.50, 799.00
22.00, 801.27
38.75, 797.08
56.16, 801.43

5 FT
10 FT

9

PROJECT NO: 2720-10-70	HWY: MEGAL COURT	COUNTY: WAUKESHA	CROSS SECTIONS: WACKER NEUSON ENTRANCE (EASTBOUND)	SHEET 1018	E

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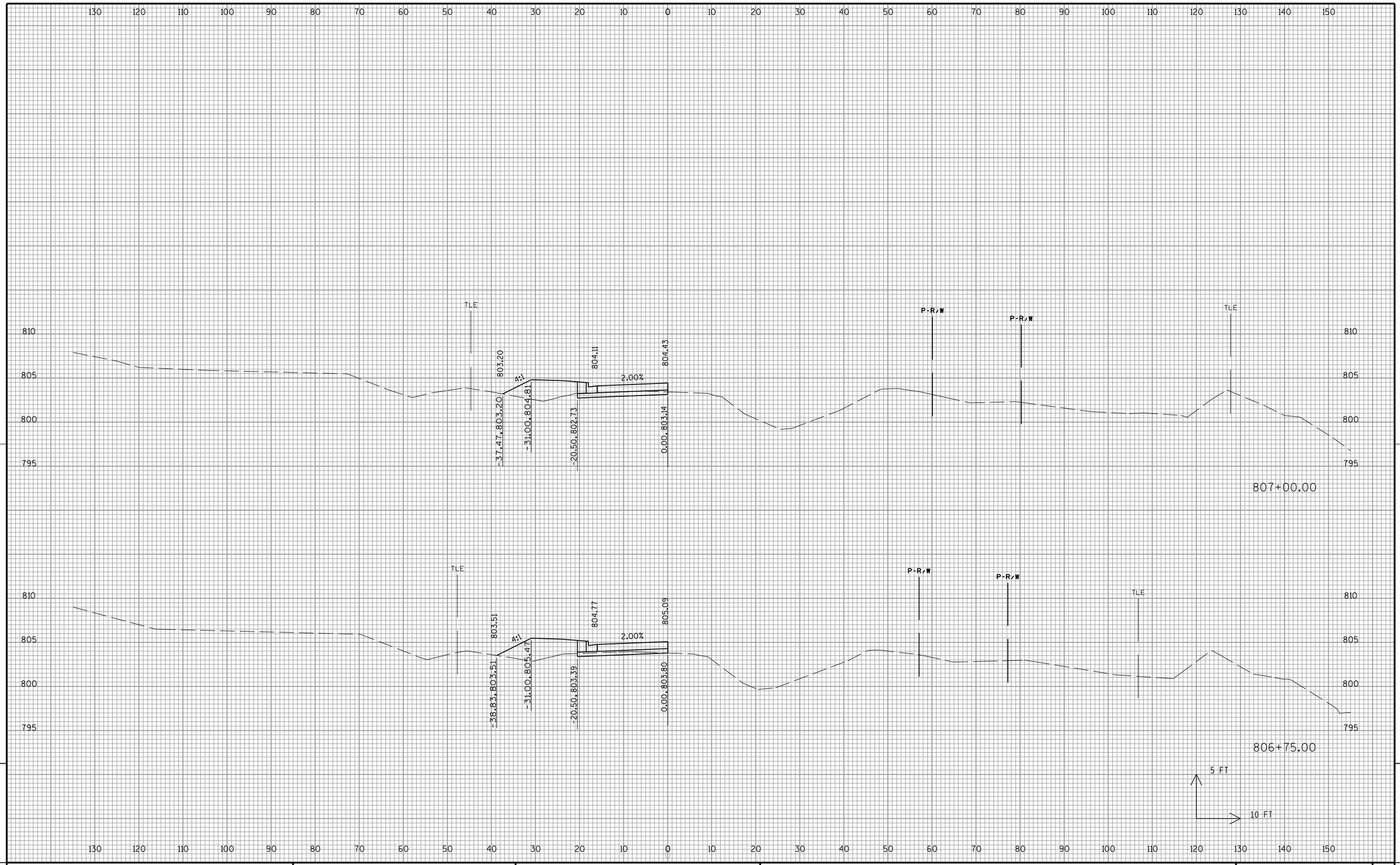


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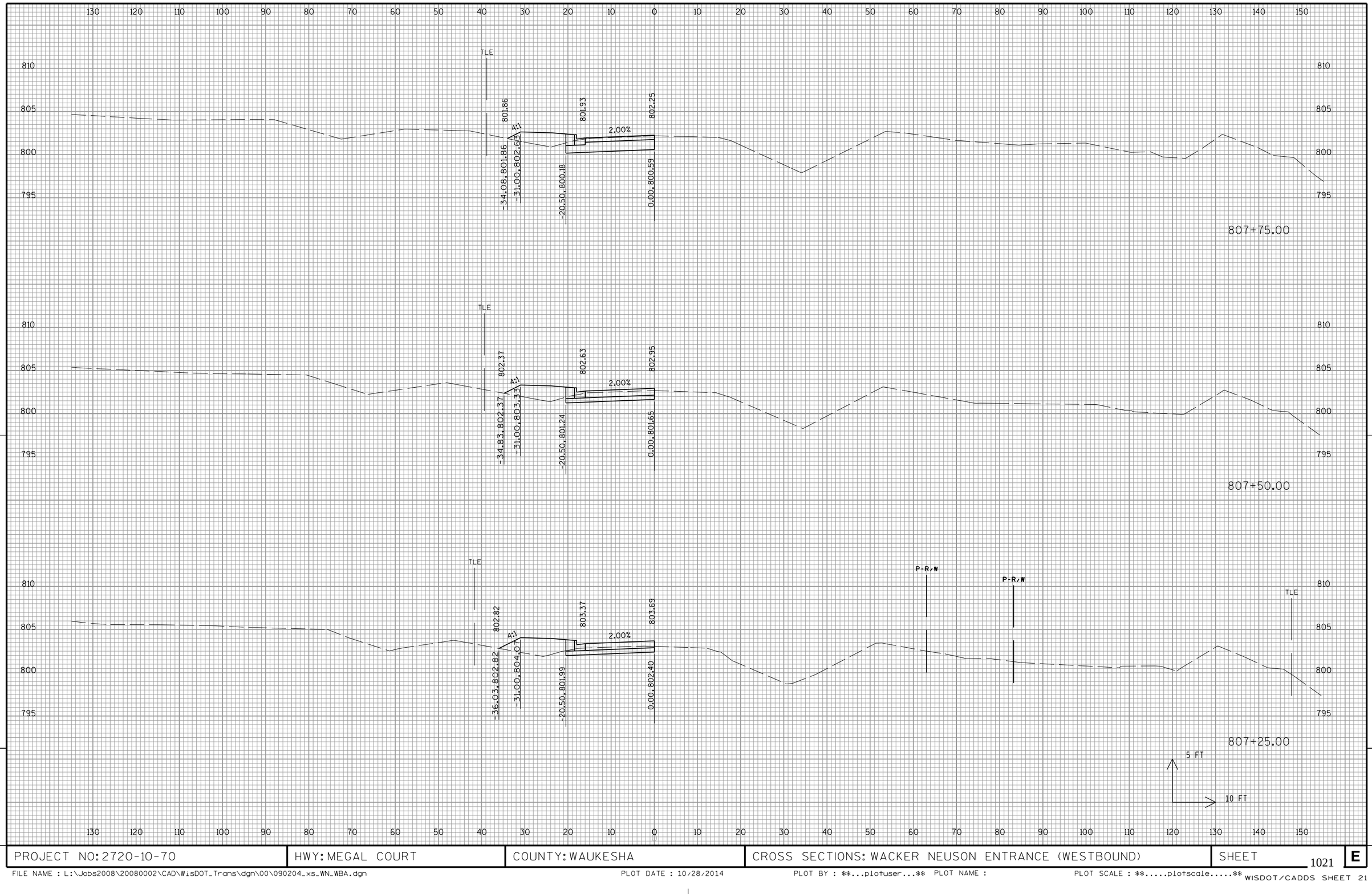
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PROJECT NO: 2720-10-70	HWY: MEGAL COURT	COUNTY: WAUKESHA	CROSS SECTIONS: WACKER NEUSON ENTRANCE (WESTBOUND)	SHEET 1020	E

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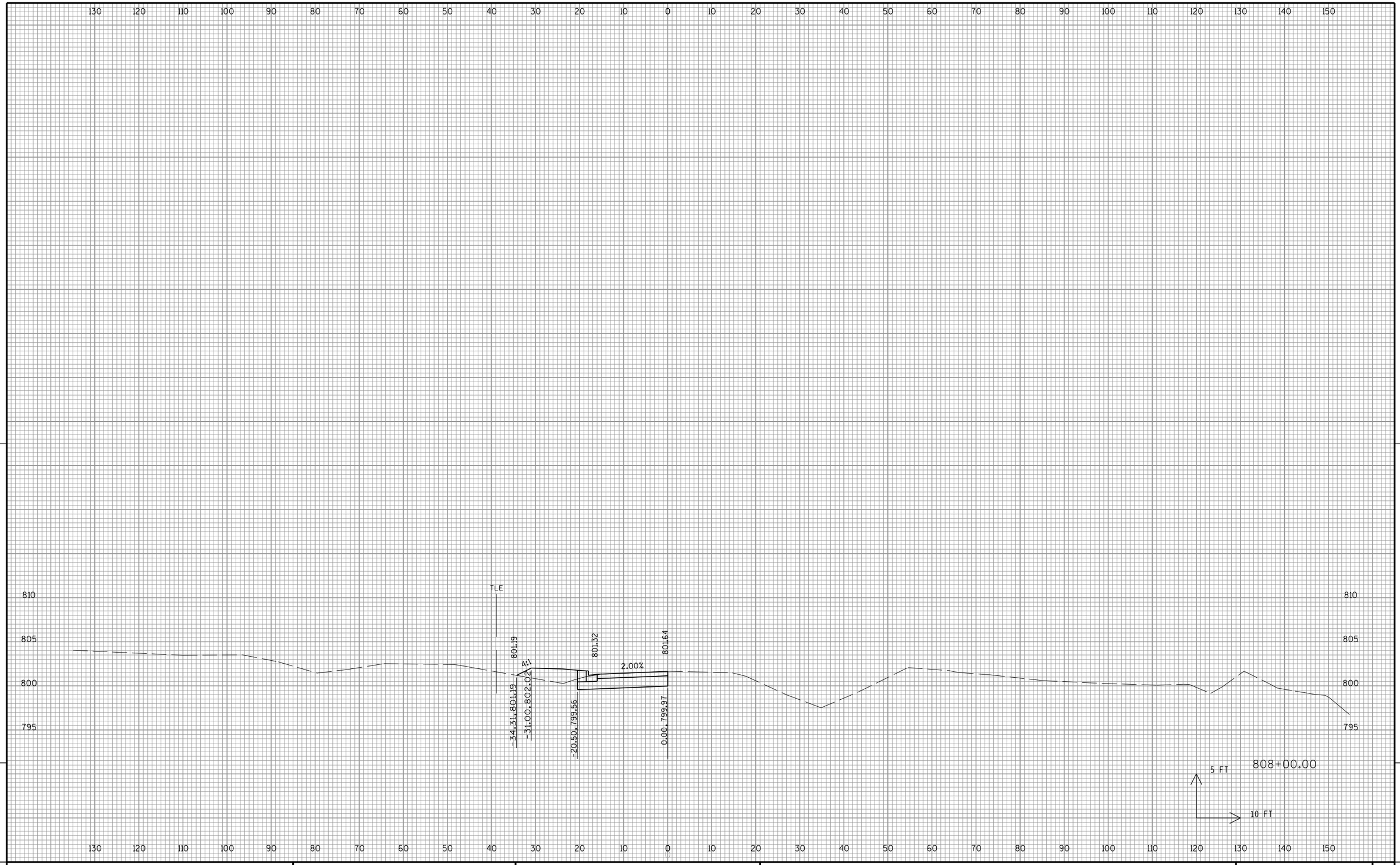


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PROJECT NO: 2720-10-70	HWY: MEGAL COURT	COUNTY: WAUKESHA	CROSS SECTIONS: WACKER NEUSON ENTRANCE (WESTBOUND)	SHEET 1021	E

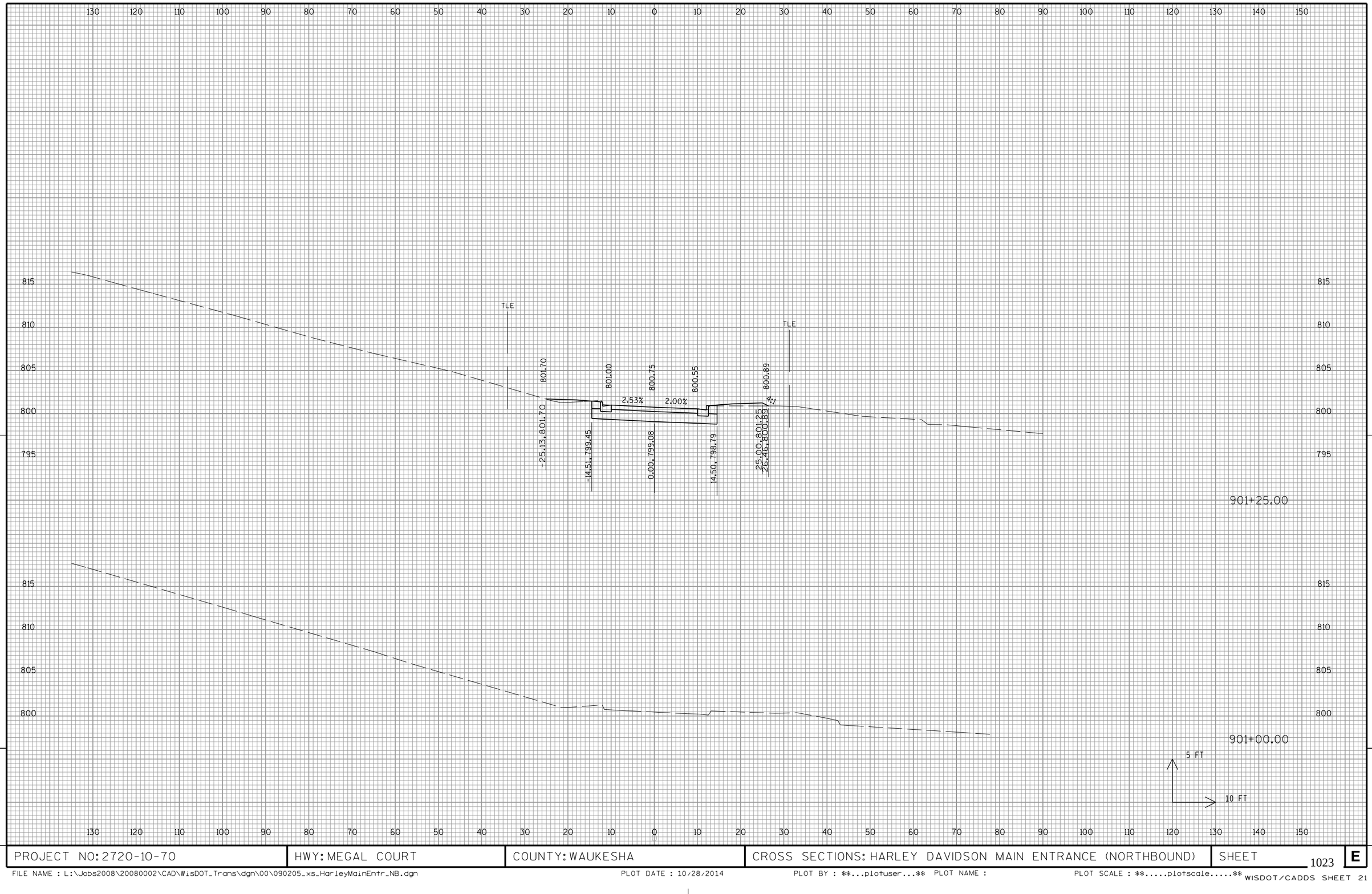
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WISDOT/CADDS SHEET 21



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PROJECT NO: 2720-10-70	HWY: MEGAL COURT	COUNTY: WAUKESHA	CROSS SECTIONS: WACKER NEUSON ENTRANCE (WESTBOUND)	SHEET 1022	E

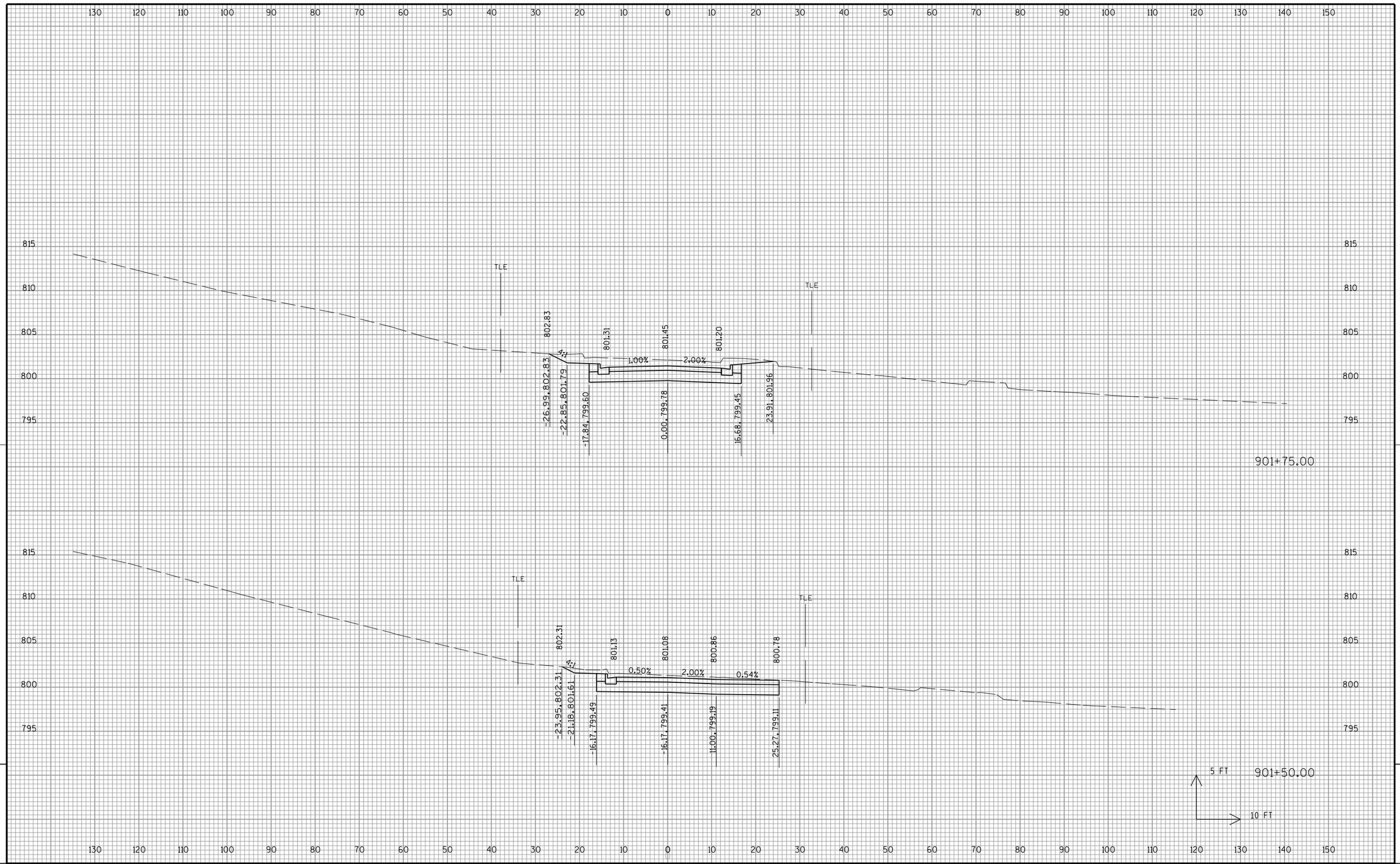


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PROJECT NO: 2720-10-70	HWY: MEGAL COURT	COUNTY: WAUKESHA	CROSS SECTIONS: HARLEY DAVIDSON MAIN ENTRANCE (NORTHBOUND)	SHEET 1023	E

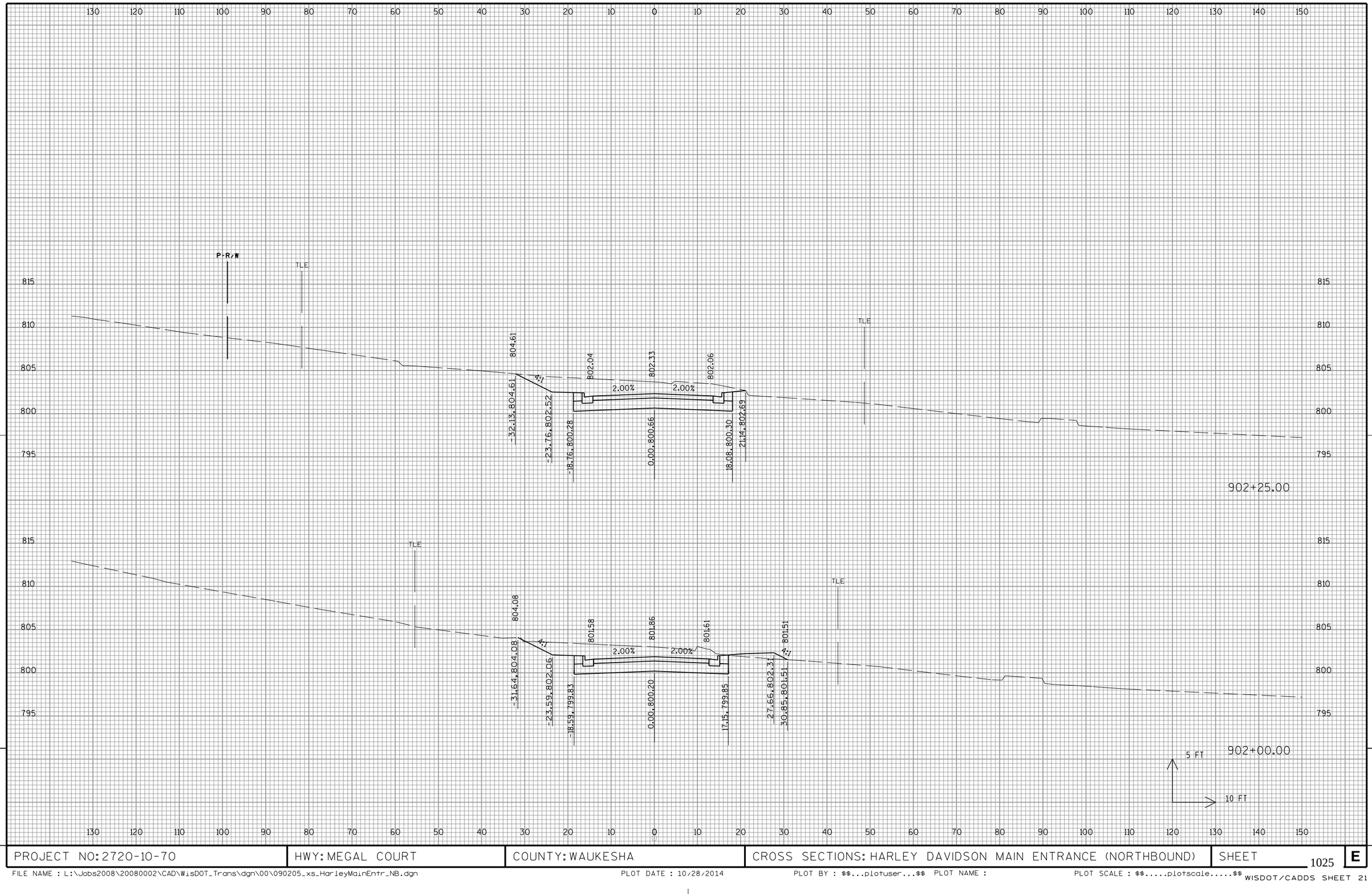
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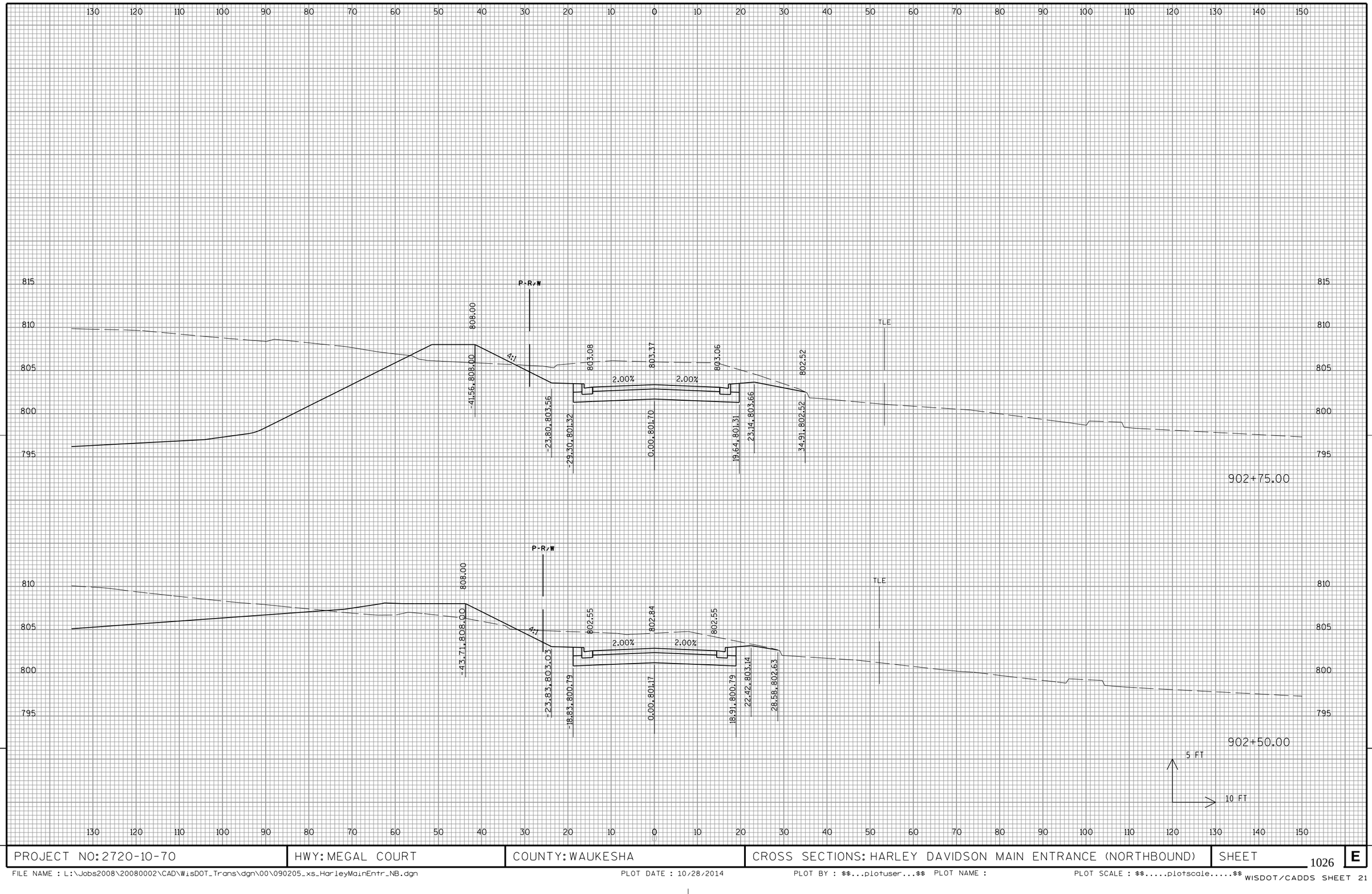
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PROJECT NO: 2720-10-70	HWY: MEGAL COURT	COUNTY: WAUKESHA	CROSS SECTIONS: HARLEY DAVIDSON MAIN ENTRANCE (NORTHBOUND)	SHEET 1024	E



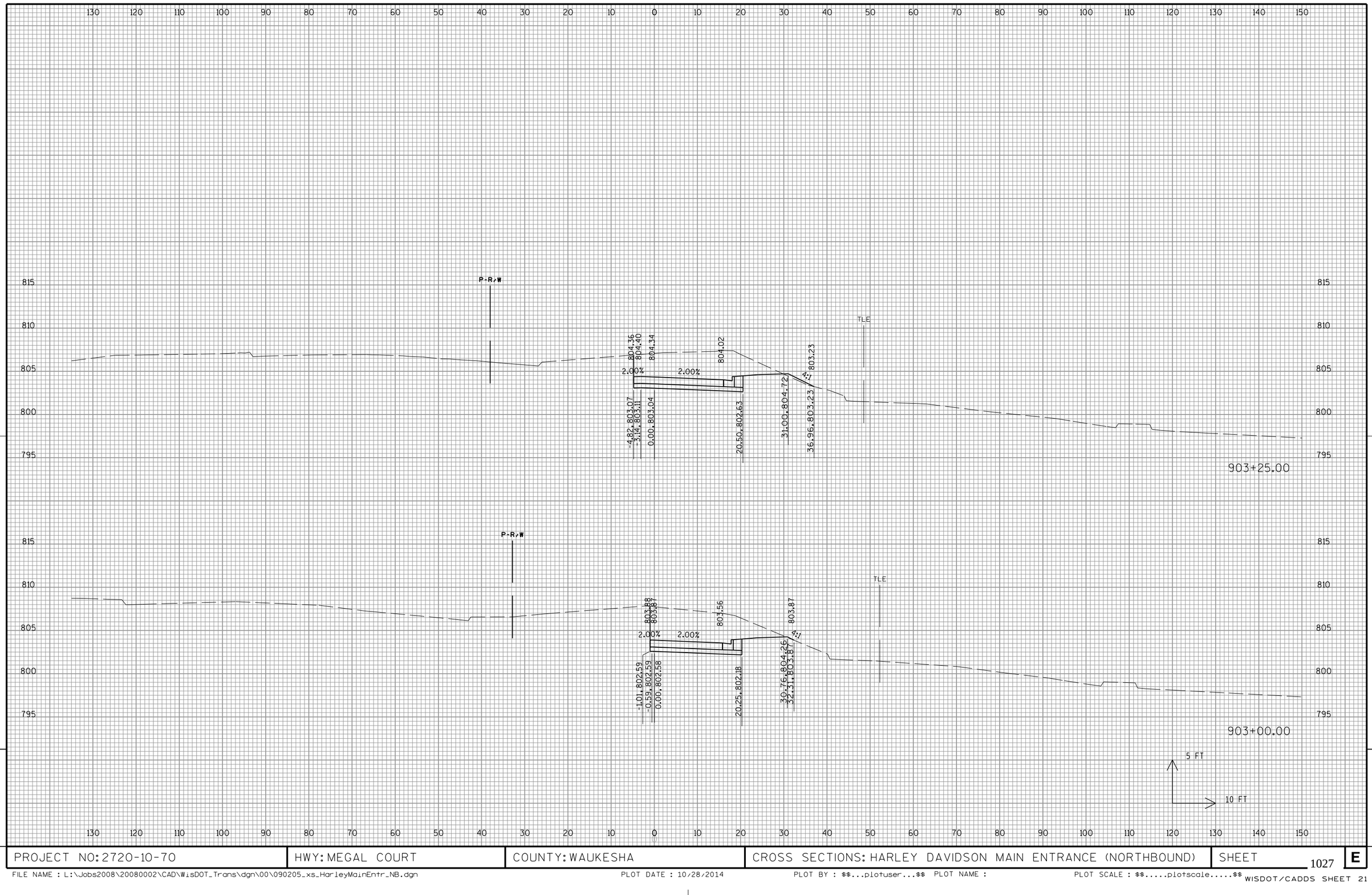
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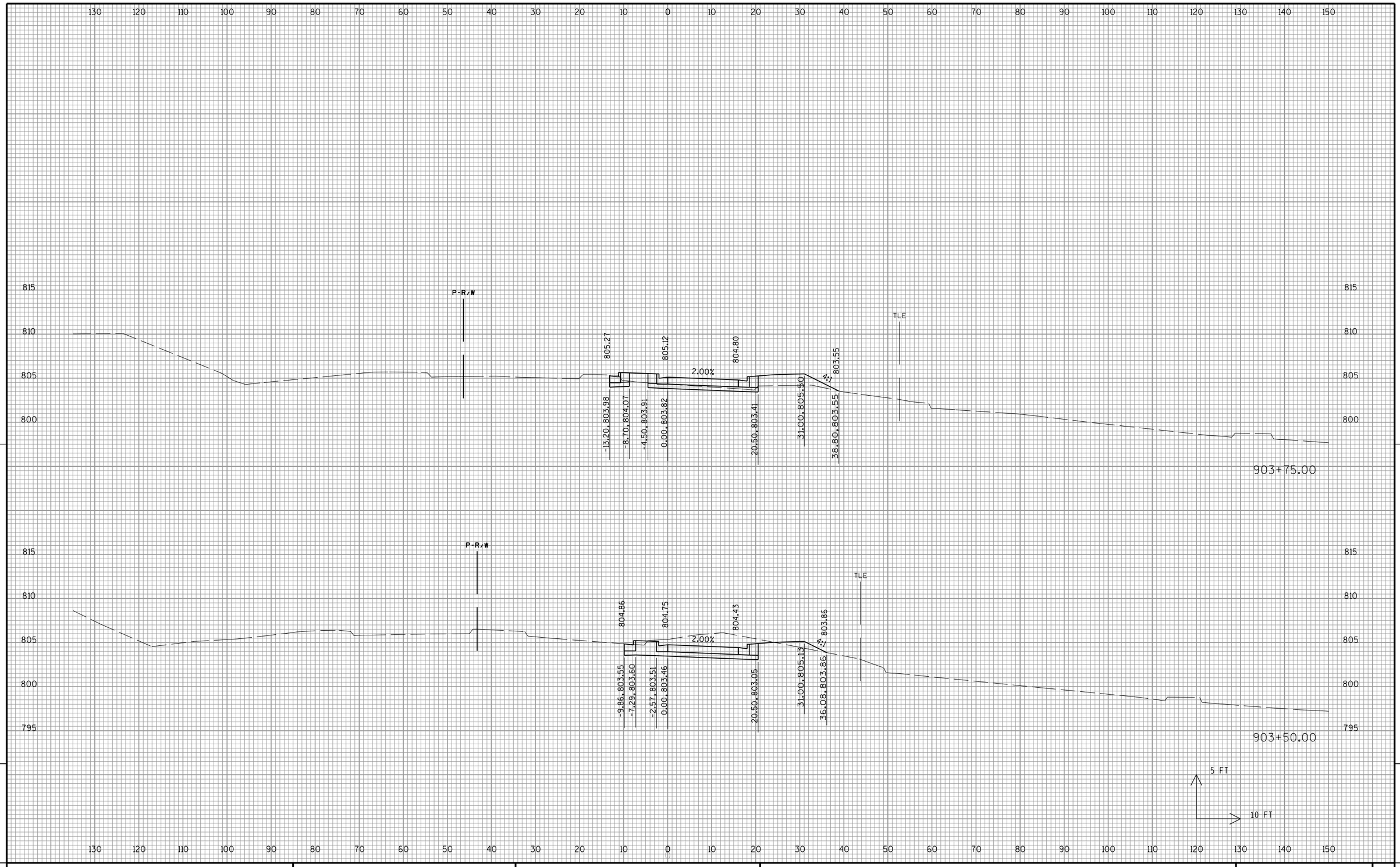


PROJECT NO: 2720-10-70	HWY: MEGAL COURT	COUNTY: WAUKESHA	CROSS SECTIONS: HARLEY DAVIDSON MAIN ENTRANCE (NORTHBOUND)	SHEET 1026	E

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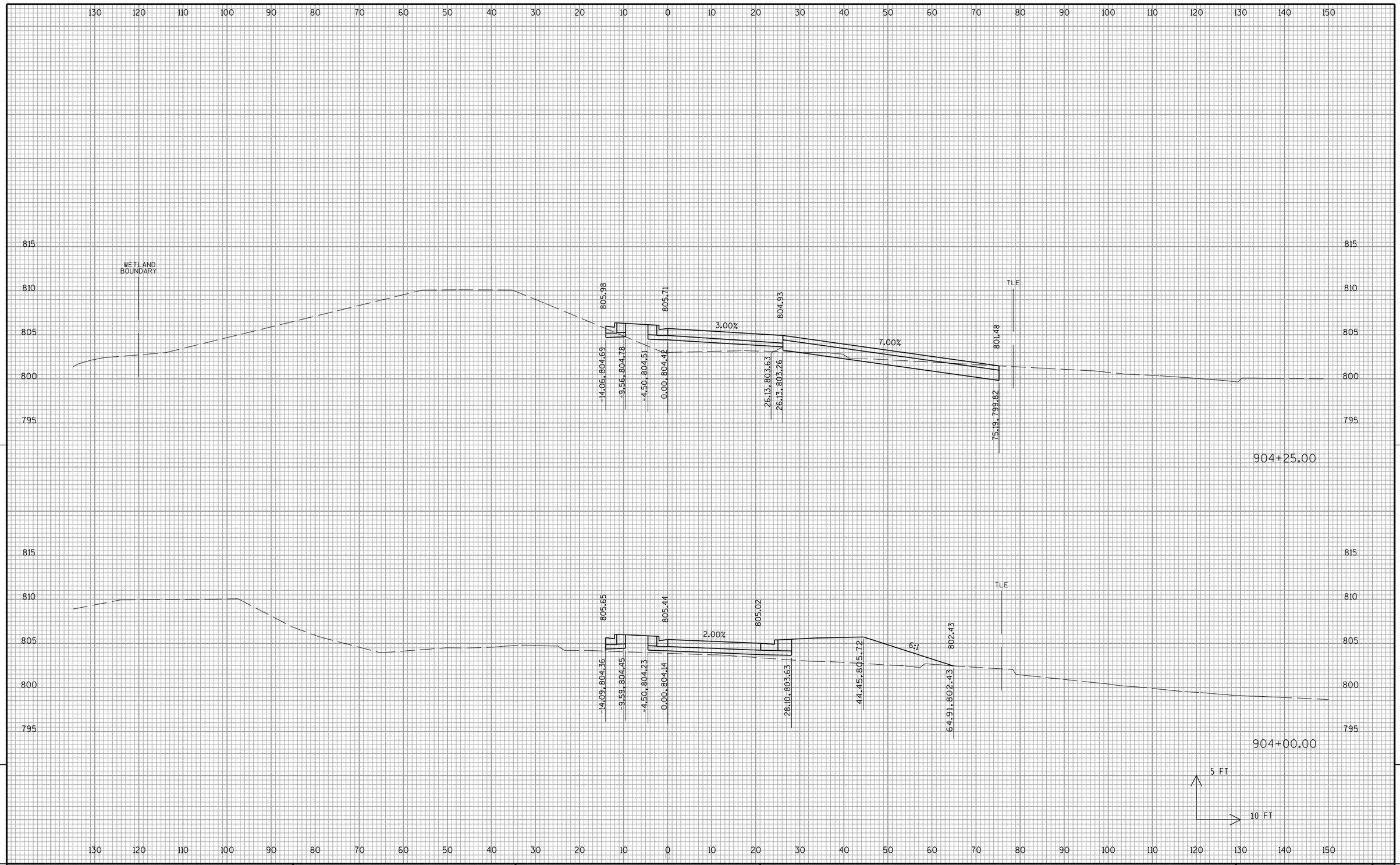
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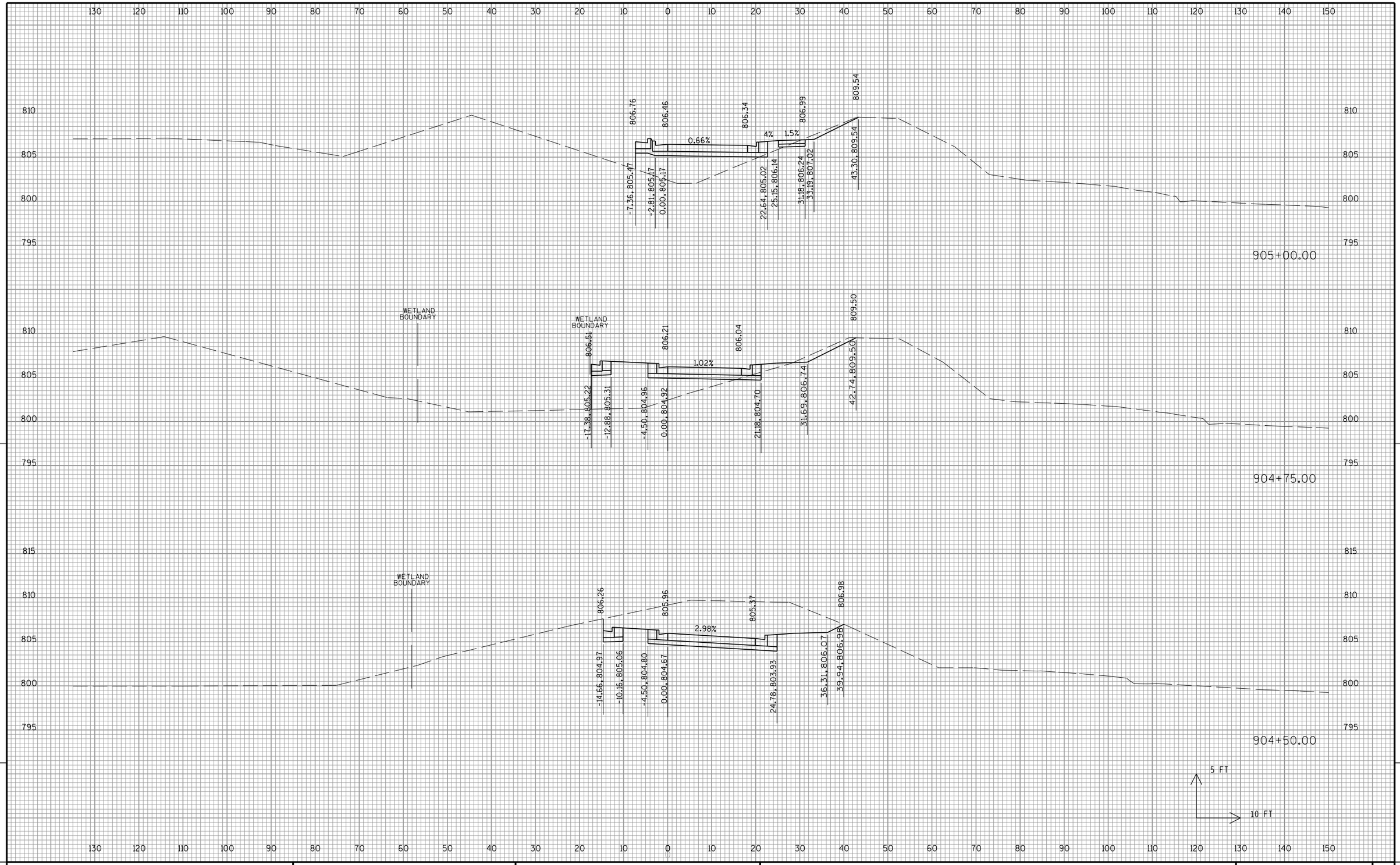
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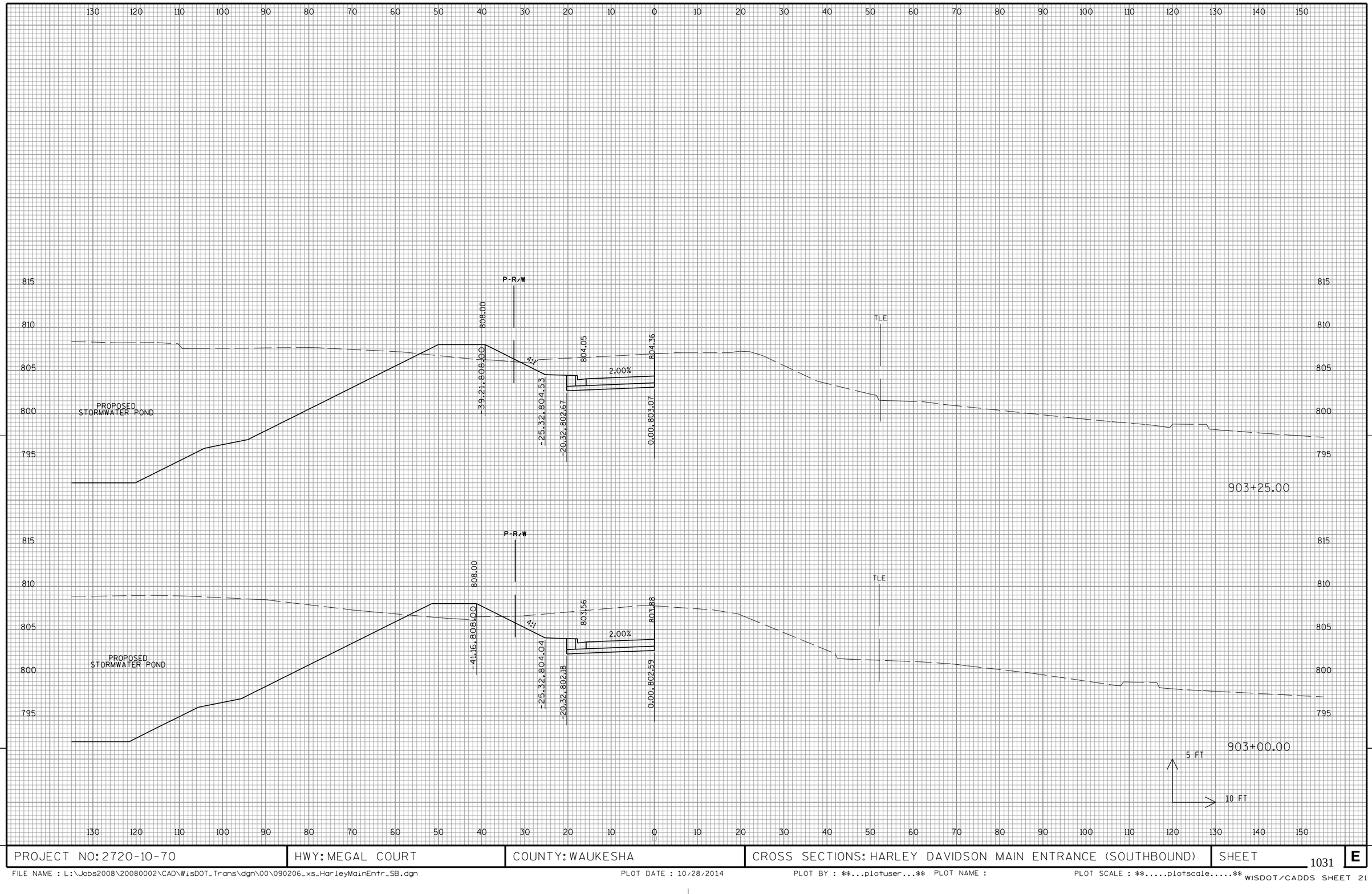
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PROJECT NO: 2720-10-70	HWY: MEGAL COURT	COUNTY: WAUKESHA	CROSS SECTIONS: HARLEY DAVIDSON MAIN ENTRANCE (NORTHBOUND)	SHEET 1029	E



PROJECT NO: 2720-10-70	HWY: MEGAL COURT	COUNTY: WAUKESHA	CROSS SECTIONS: HARLEY DAVIDSON MAIN ENTRANCE (NORTHBOUND)	SHEET 1030	E

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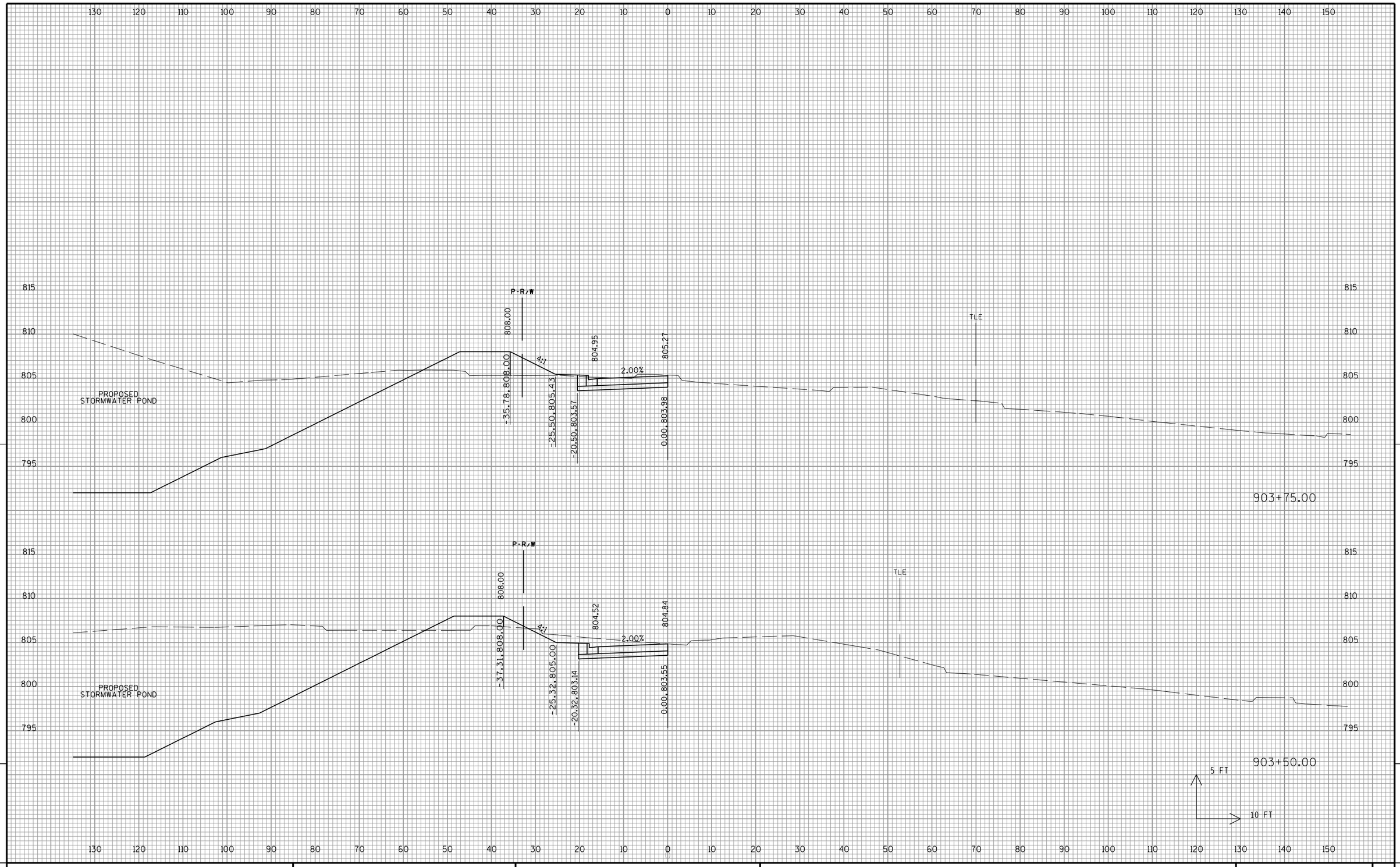


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PROJECT NO: 2720-10-70	HWY: MEGAL COURT	COUNTY: WAUKESHA	CROSS SECTIONS: HARLEY DAVIDSON MAIN ENTRANCE (SOUTHBOUND)	SHEET 1031	E

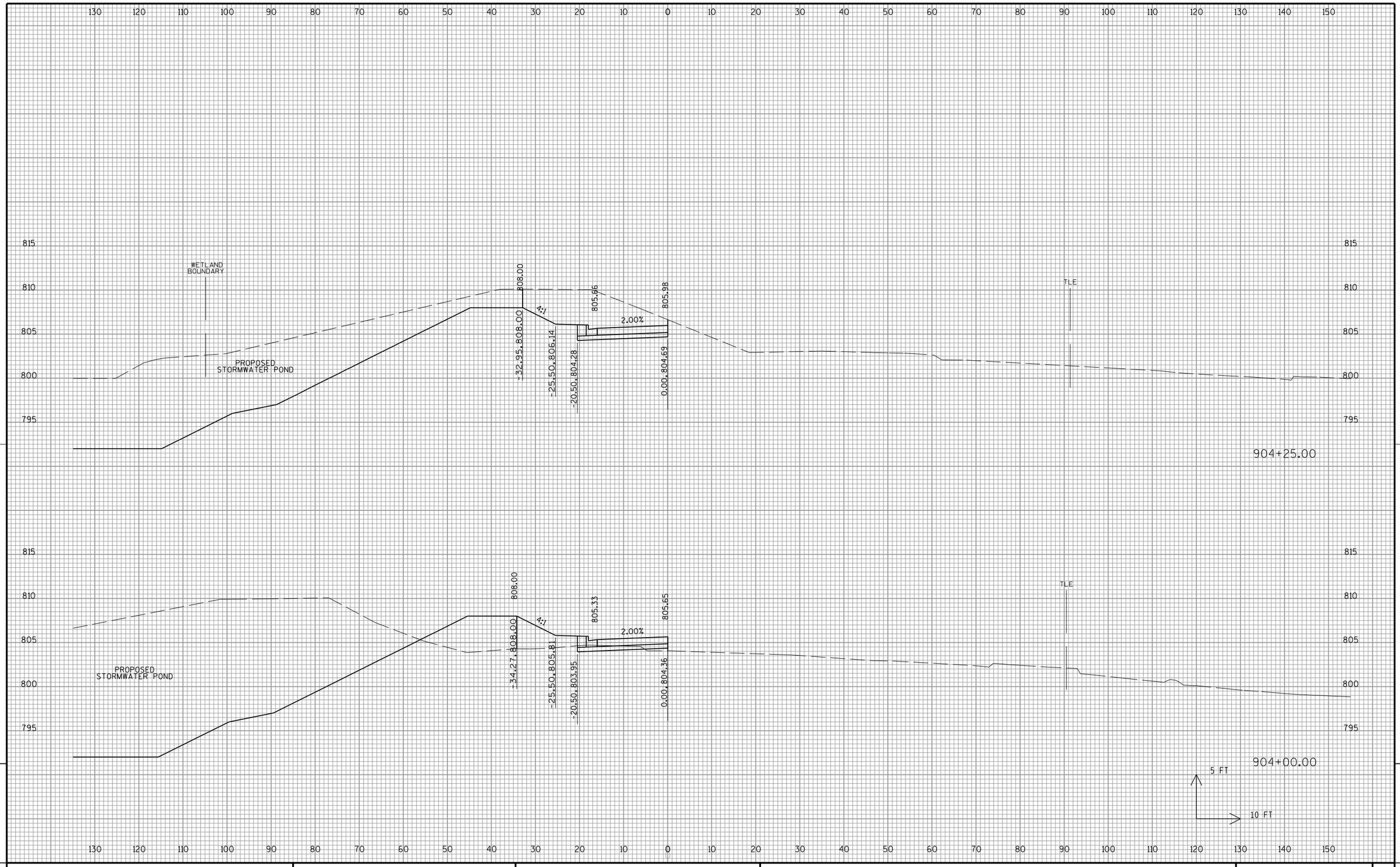
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PROJECT NO: 2720-10-70	HWY: MEGAL COURT	COUNTY: WAUKESHA	CROSS SECTIONS: HARLEY DAVIDSON MAIN ENTRANCE (SOUTHBOUND)	SHEET 1032	E

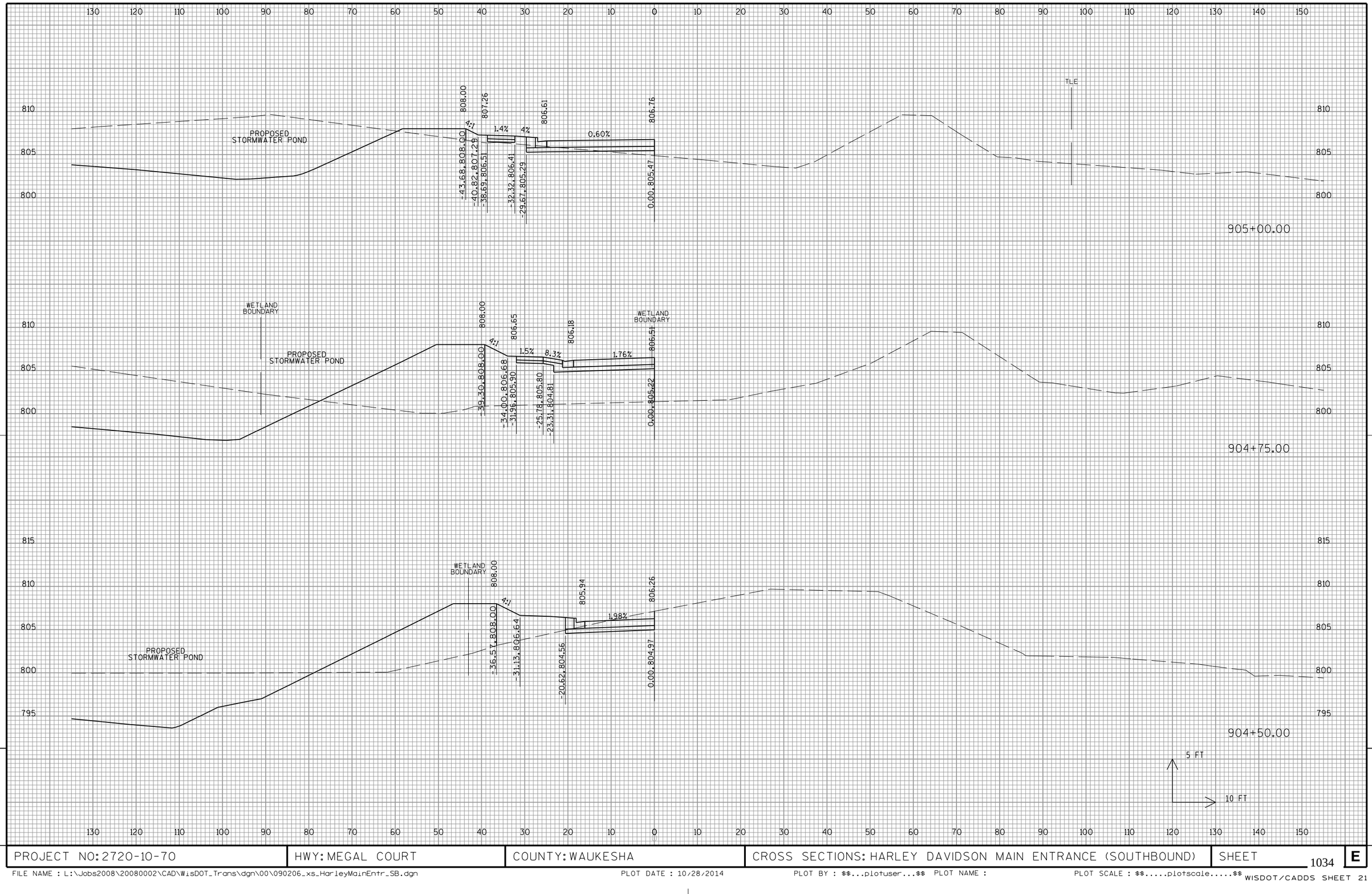


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PROJECT NO: 2720-10-70	HWY: MEGAL COURT	COUNTY: WAUKESHA	CROSS SECTIONS: HARLEY DAVIDSON MAIN ENTRANCE (SOUTHBOUND)	SHEET 1033	E

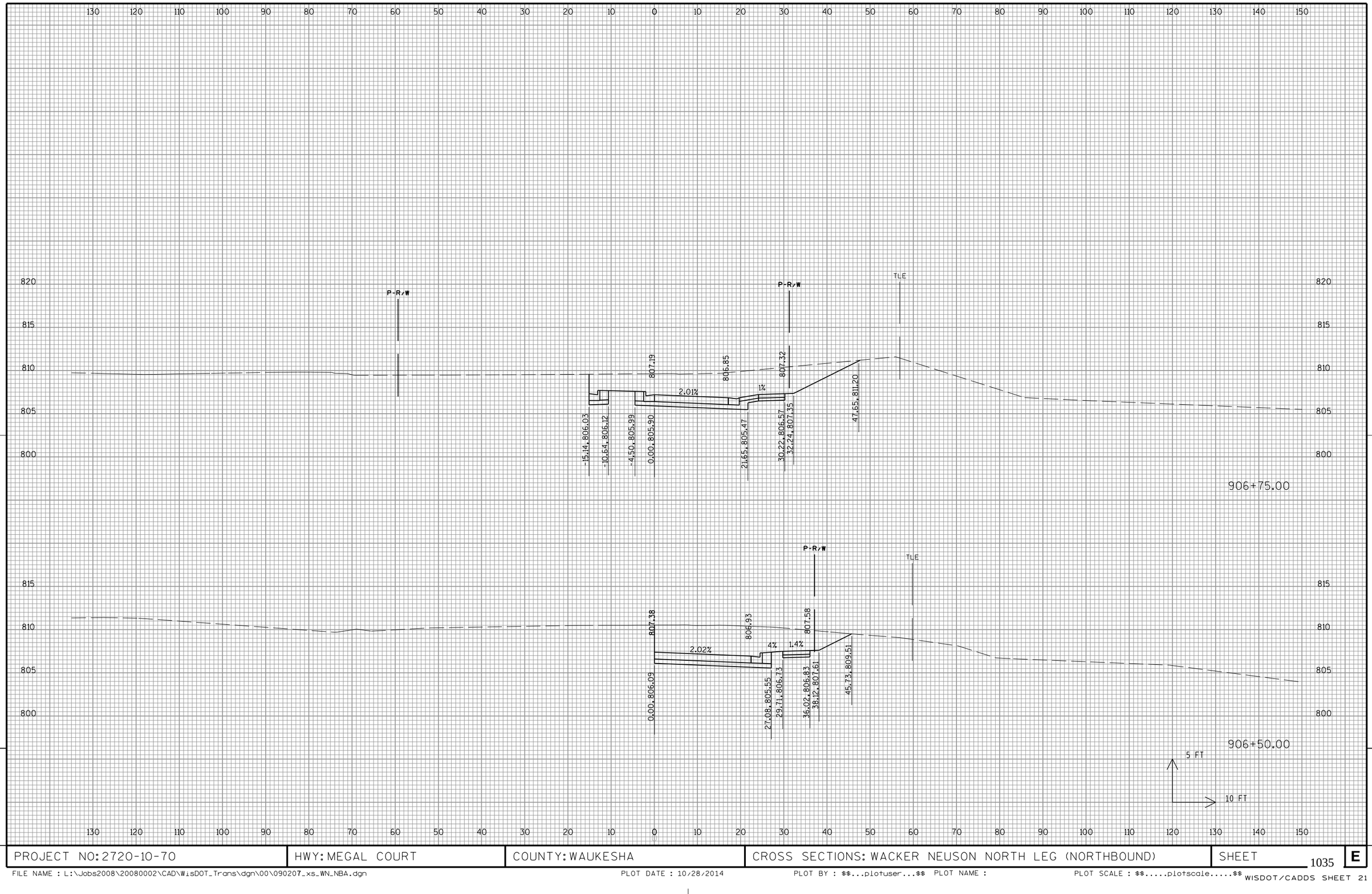
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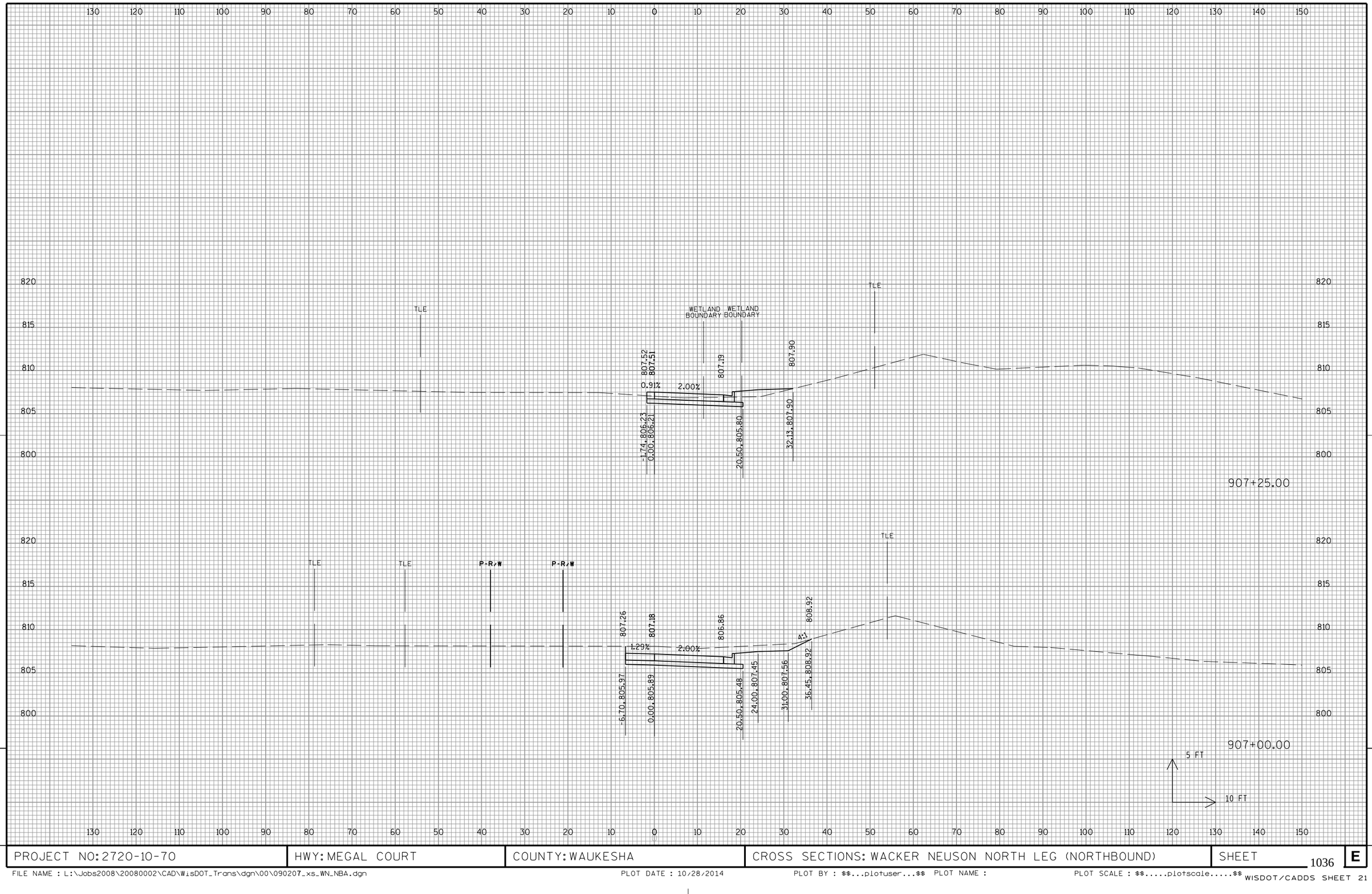
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PROJECT NO: 2720-10-70	HWY: MEGAL COURT	COUNTY: WAUKESHA	CROSS SECTIONS: WACKER NEUSON NORTH LEG (NORTHBOUND)	SHEET 1035	E

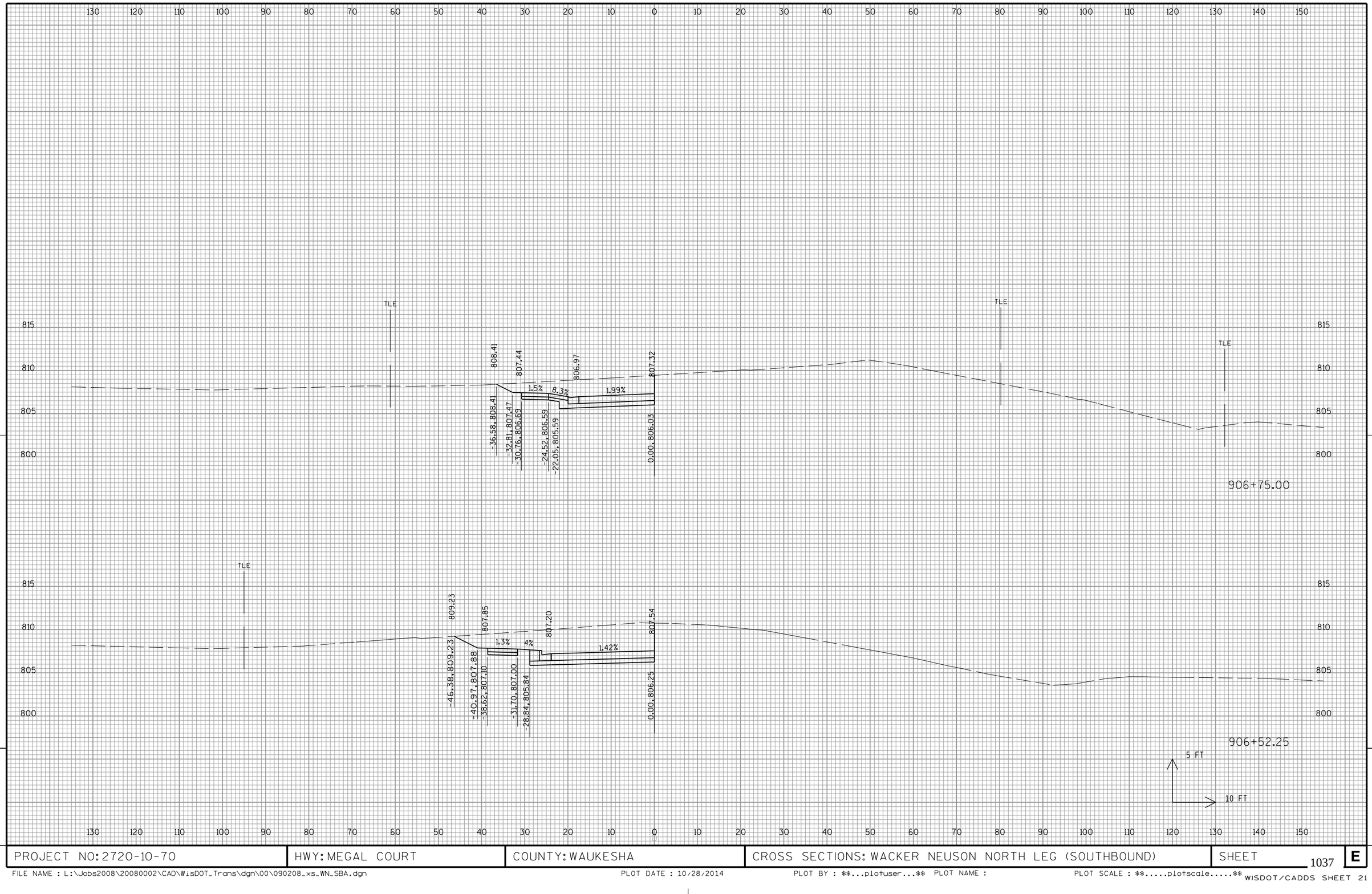


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PROJECT NO: 2720-10-70	HWY: MEGAL COURT	COUNTY: WAUKESHA	CROSS SECTIONS: WACKER NEUSON NORTH LEG (NORTHBOUND)	SHEET 1036	E

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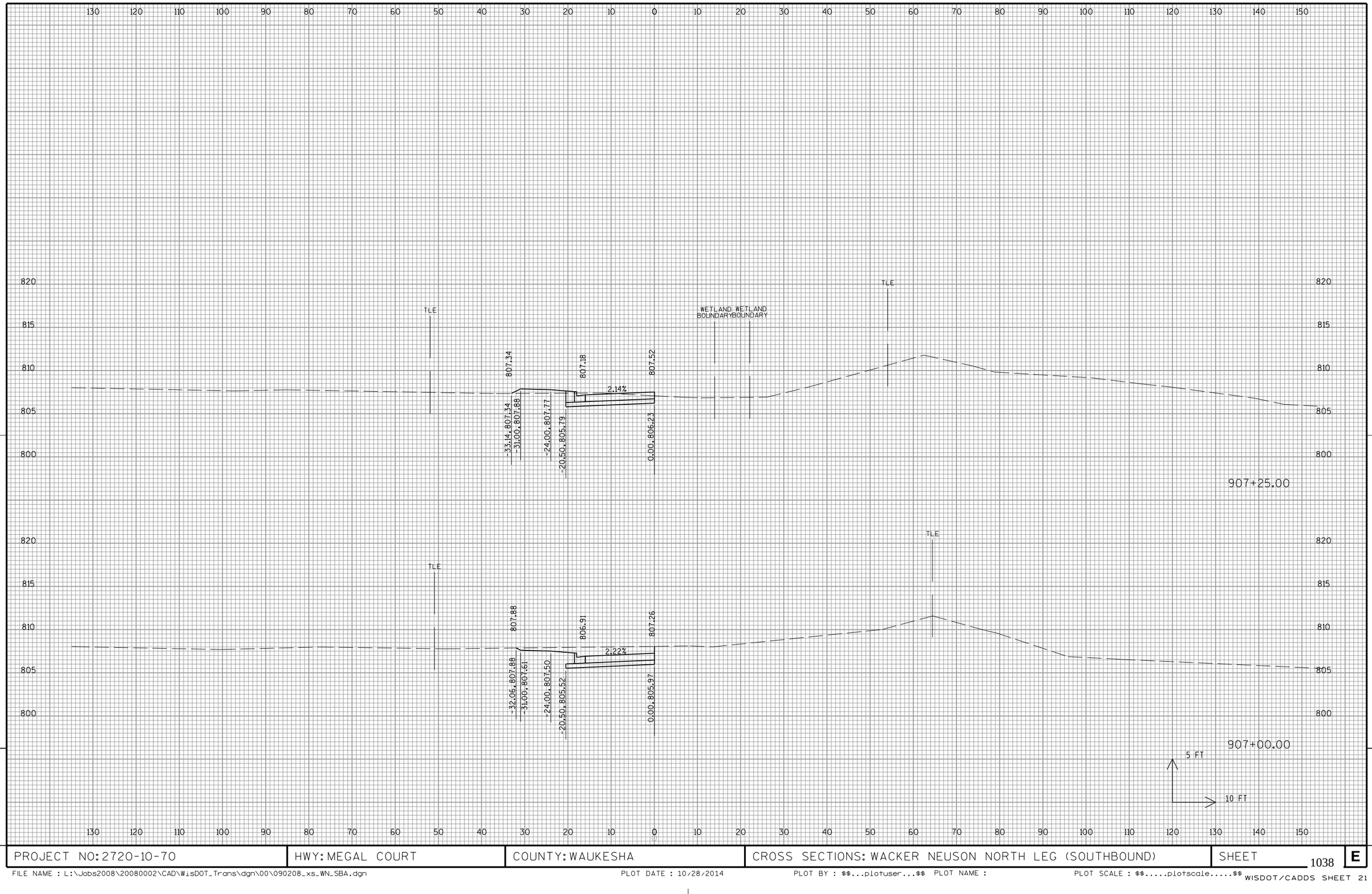
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PROJECT NO: 2720-10-70	HWY: MEGAL COURT	COUNTY: WAUKESHA	CROSS SECTIONS: WACKER NEUSON NORTH LEG (SOUTHBOUND)	SHEET 1037	E

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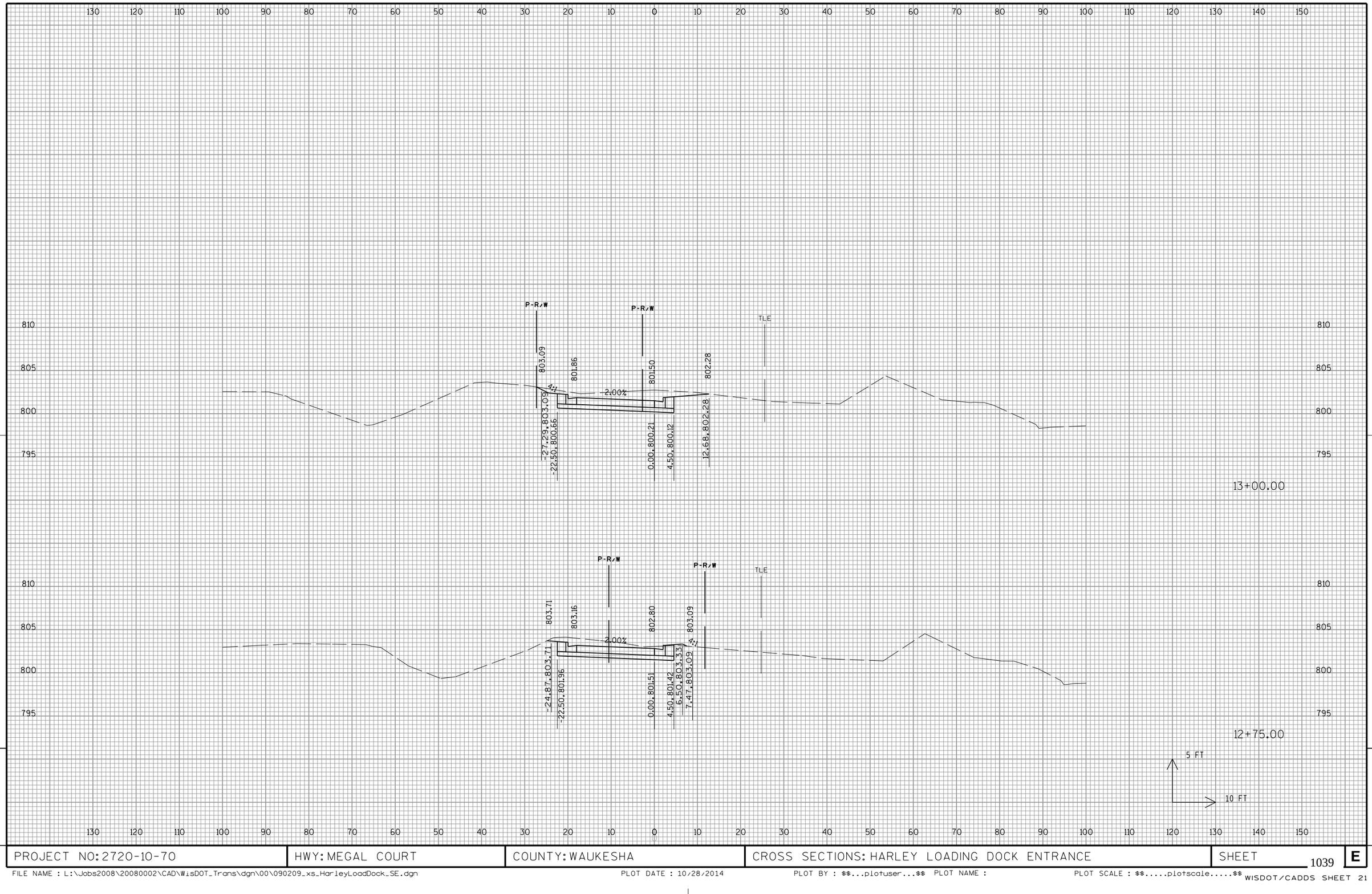
WISDOT/CADDS SHEET 21



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PROJECT NO: 2720-10-70	HWY: MEGAL COURT	COUNTY: WAUKESHA	CROSS SECTIONS: WACKER NEUSON NORTH LEG (SOUTHBOUND)	SHEET 1038	E

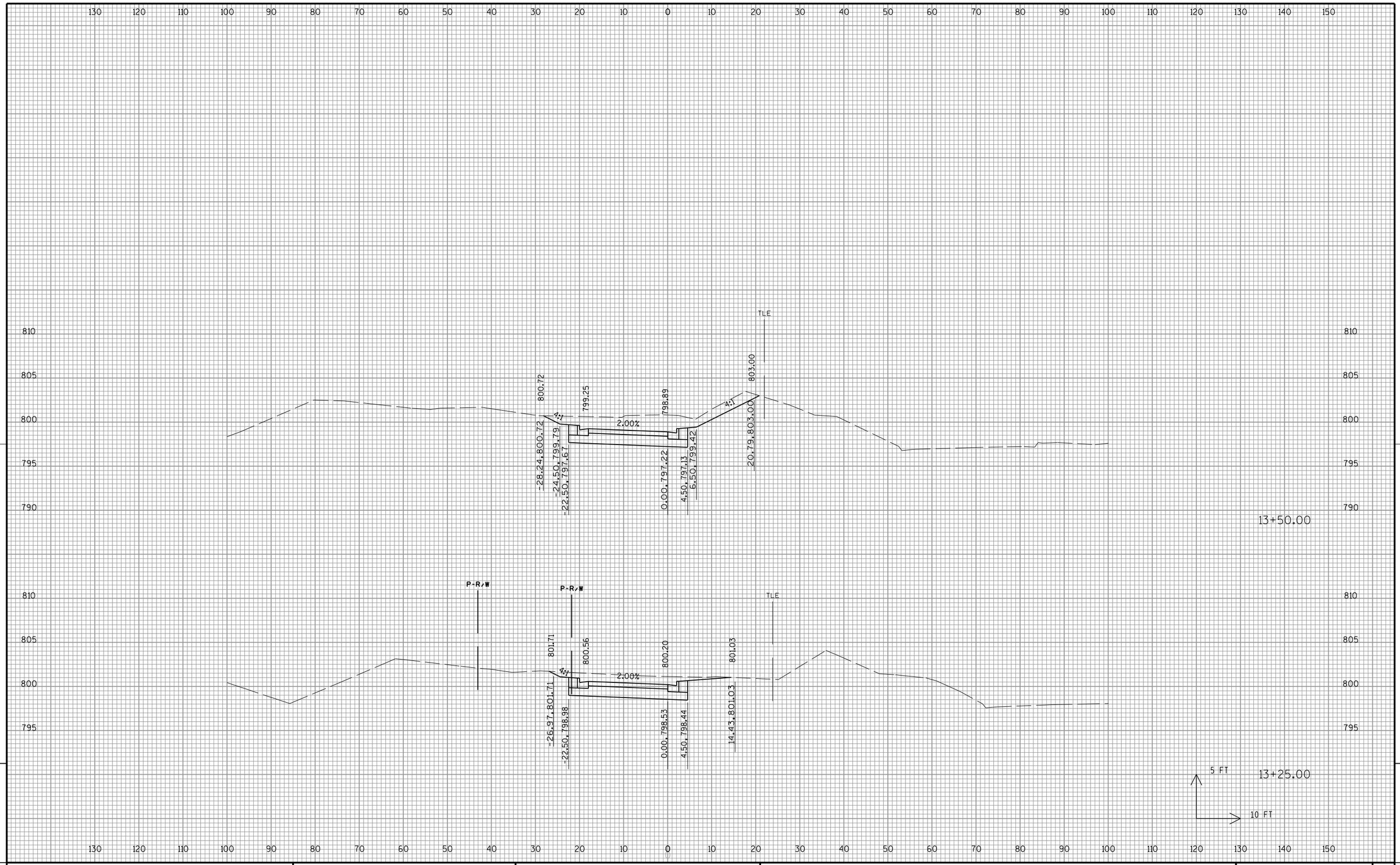


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PROJECT NO: 2720-10-70	HWY: MEGAL COURT	COUNTY: WAUKESHA	CROSS SECTIONS: HARLEY LOADING DOCK ENTRANCE	SHEET 1039	E

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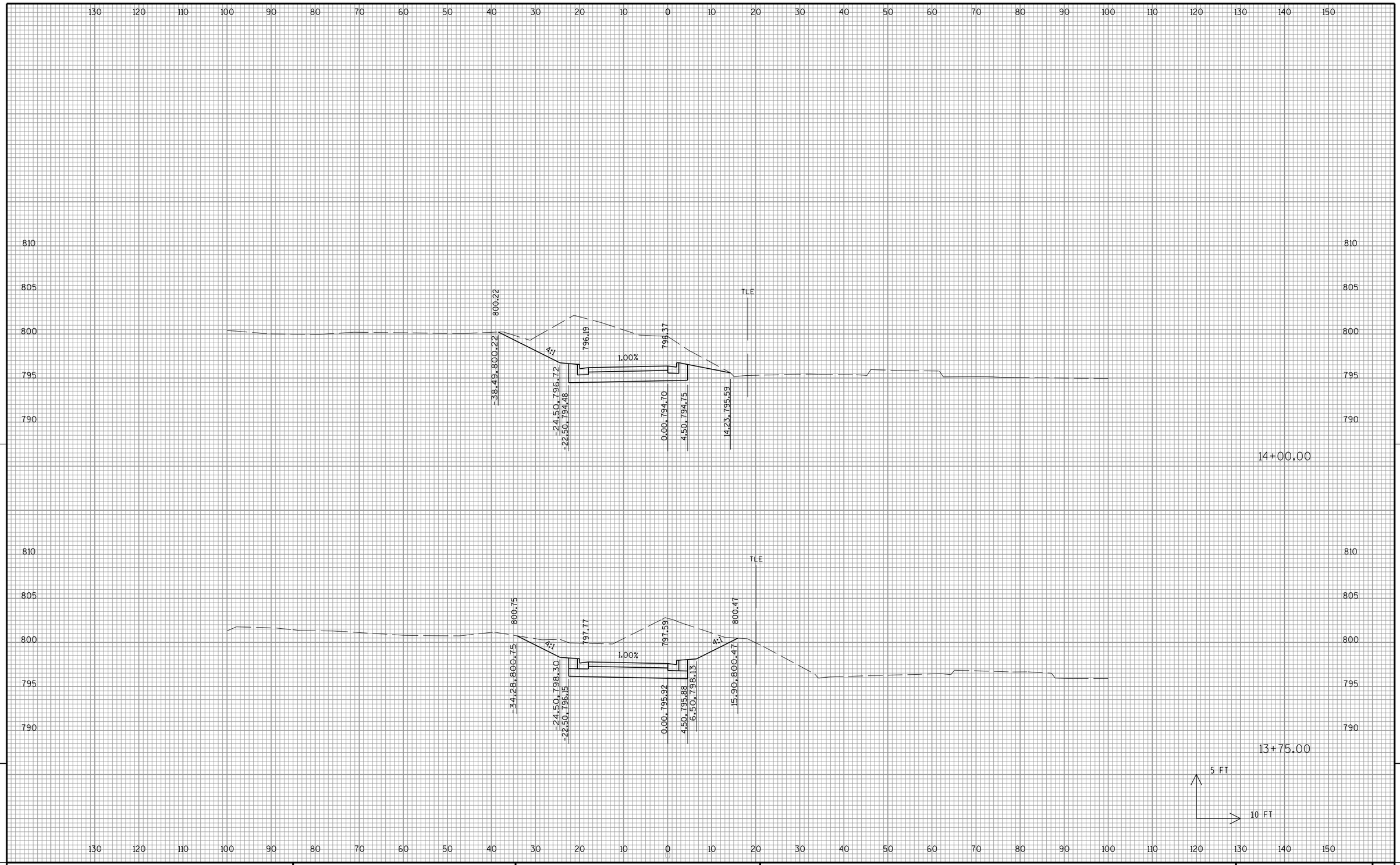


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PROJECT NO: 2720-10-70	HWY: MEGAL COURT	COUNTY: WAUKESHA	CROSS SECTIONS: HARLEY LOADING DOCK ENTRANCE	SHEET 1040	E

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PLOT SCALE : $$.....plotscale.....$$
WISDOT/CADDS SHEET 21

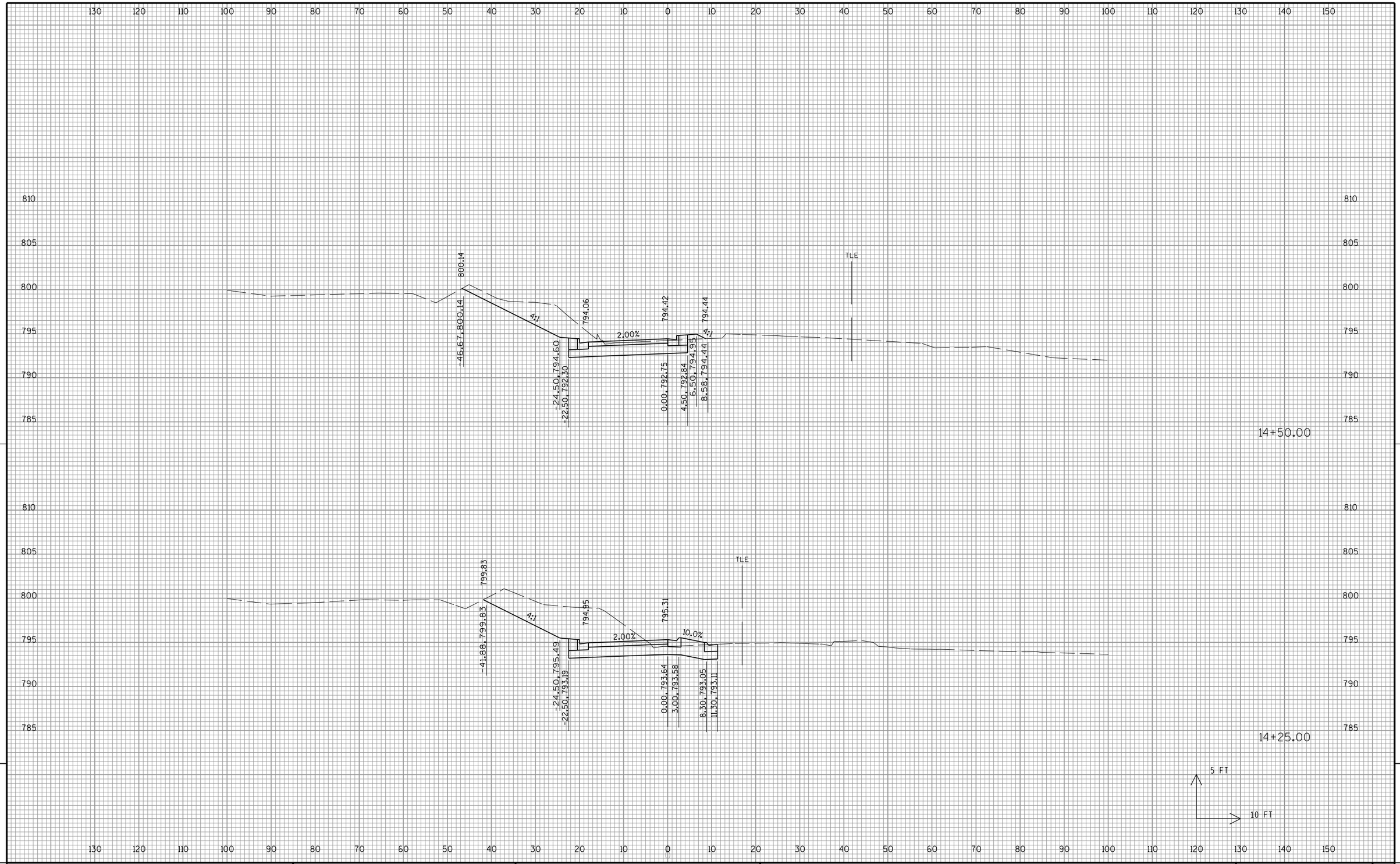


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PROJECT NO: 2720-10-70	HWY: MEGAL COURT	COUNTY: WAUKESHA	CROSS SECTIONS: HARLEY LOADING DOCK ENTRANCE	SHEET 1041	E

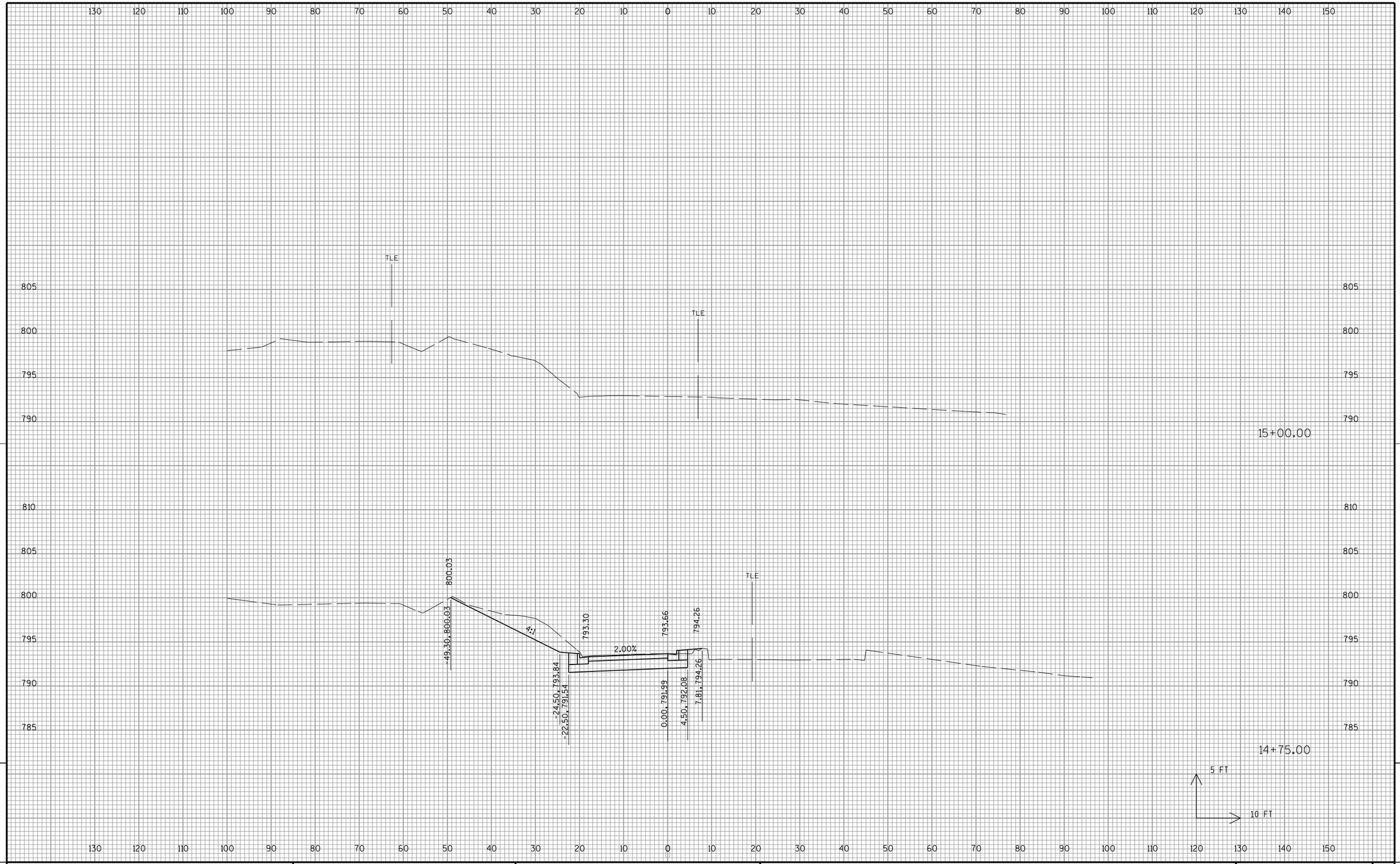
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PROJECT NO: 2720-10-70	HWY: MEGAL COURT	COUNTY: WAUKESHA	CROSS SECTIONS: HARLEY LOADING DOCK ENTRANCE	SHEET 1042	E



PROJECT NO: 2720-10-70	HWY: MEGAL COURT	COUNTY: WAUKESHA	CROSS SECTIONS: HARLEY LOADING DOCK ENTRANCE	SHEET 1043	E

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