WKE

MAY 2017

PROJECT ID: 1370-15-71

WITH:

COUNTY: WAUKESHA

ORDER OF SHEETS

Section No.	1	Title
Section No.	2	Typical Sections and Details
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 = 694

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
1370-15-71	WISC 2017266	1

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

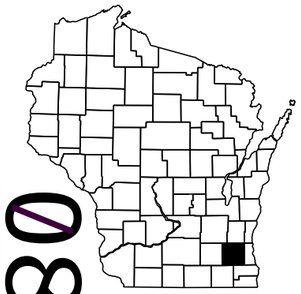
PLAN OF PROPOSED IMPROVEMENT

OCONOMOWOC - WAUKESHA

CTH P (BROWN STREET) TO IH-94

STH 16

WAUKESHA COUNTY



N

BEGIN PROJECT
STA. 70+00
X = 621683.41
Y = 196382.04

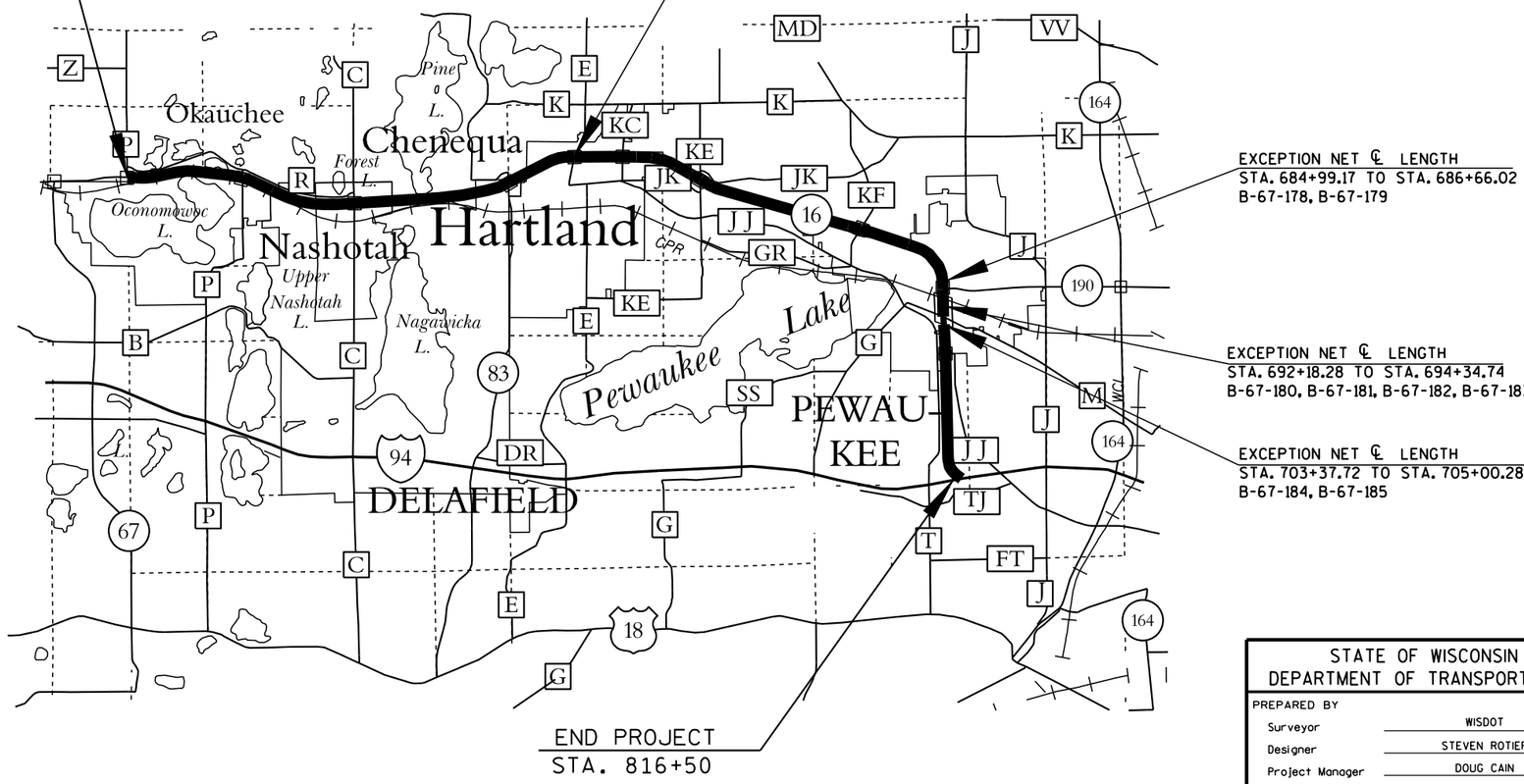
STATE PROJECT NUMBER
1370-15-71

EXCEPTION NET ℄ LENGTH
STA. 391+04.05 TO STA. 392+25.20
B-67-169, B-67-170

EXCEPTION NET ℄ LENGTH
STA. 684+99.17 TO STA. 686+66.02
B-67-178, B-67-179

EXCEPTION NET ℄ LENGTH
STA. 692+18.28 TO STA. 694+34.74
B-67-180, B-67-181, B-67-182, B-67-183

EXCEPTION NET ℄ LENGTH
STA. 703+37.72 TO STA. 705+00.28
B-67-184, B-67-185



DESIGN DESIGNATION		CTH P - CTH KF	CTH KF - CTH JJ	CTH JJ - IH-94
A.A.D.T. (2015)	=	39,000	41,600	40,700
A.A.D.T. (2037)	=	45,000	47,800	47,600
D.H.V.	=	8.2%	8.2%	8.2%
D.D.	=	58 / 42	58/ 42	58 / 42
T.	=	10.2%	10.2%	10.2%
DESIGN SPEED	=	70 MPH	70 MPH	70 MPH
ESALS	=	9,526,500	11,388,00	10,395,200

CONVENTIONAL SYMBOLS

PLAN

- CORPORATE LIMITS
- PROPERTY LINE
- 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

LAYOUT
SCALE 0 2 MI.

TOTAL NET LENGTH OF CENTERLINE = 13.810 MI.

ELEVATIONS ON THIS PLAN ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 NAVD 88 (2007).

-"COORDINATES ON THIS PLAN ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM (WCCS), WAUKESHA COUNTY NAD 83(2007)."

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	WISDOT
Designer	STEVEN ROTIER
Project Manager	DOUG CAIN
Regional Examiner	
Regional Supervisor	BEN ERUCHALU
C.O. Examiner	

APPROVED FOR THE DEPARTMENT

DATE: 2/1/2017 (Signature)

E

GENERAL NOTES

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

THE CONTRACTOR SHALL NOTIFY DIGGER'S HOTLINE AND AFFECTED UTILITIES PRIOR TO THE START OF WORK.

THE LOCATION OF EXISTING OR PROPOSED UTILITIES AS NOTED ON THE PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN.

RE-TOPSOIL OF GRADED AREAS, AS DESIGNATED BY THE ENGINEER, IMMEDIATELY AFTER GRADING IS COMPLETED WITHIN THOSE AREAS. SEED, FERTILIZE, AND MULCH/EROSION MAT TOP-SOILED AREAS, AS DESIGNATED BY THE ENGINEER, WITHIN FIVE (5) CALENDAR DAYS AFTER PLACEMENT OF TOPSOIL. IF GRADED AREAS ARE LEFT EXPOSED FOR MORE THAN (14) CALENDAR DAYS, SEED THOSE AREAS WITH TEMPORARY SEED AND MULCH.

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 AND MULCH.

THE CONTRACTOR IS RESPONSIBLE FOR RESHAPING AND FINISHING ANY PREVIOUSLY GRASSED AREAS WHICH ARE DISTURBED BY THEIR OPERATION OUTSIDE THE NORMAL CONSTRUCTION LIMITS.

EROSION CONTROL BMP'S ARE AT SUGGESTED LOCATIONS. THE ACTUAL LOCATIONS WILL BE DETERMINED BY THE CONTRACTORS 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.

THE MILLING OPERATIONS WILL INCLUDE MILLING ASPHALT PAVEMENT AND EXISTING AND NEW CONCRETE BASE PATCHING. MILLING CONCRETE BASE PATCHING WILL BE PAID FOR AS "REMOVING ASPHALTIC SURFACE MILLING."

THE CONTRACTORS HMA PAVING OPERATION SHALL BE CONSISTANT WITH THE TYPICAL SECTIONS AND CONSTRUCTED TO PREVENT LONGITUDINAL JOINTS FROM BEING LOCATED WITHIN A DRIVING, TURNING, OR PARKING LANE.

A SAWED JOINT IS REQUIRED WHERE NEW HMA PAVEMENT MEETS EXISTING ASPHALTIC CONCRETE PAVEMENT.

REMOVAL ITEMS REQUIRING RESTORATION OF CONCRETE OR ASPHALT SHALL BE REMOVED TO AN EXISTING JOINT OR SAWED AS DETERMINED BY THE ENGINEER.

TRAFFIC CONTROL DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.

SEE STANDARD DETAIL DRAWING "DELINEATOR LAYOUT" FOR LOCATION OF DELINATORS.

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

ALL CURB AND GUTTER RADII ARE MEASURE TO THE FACE OF CURB.

CURB AND GUTTER PLAN GRADES ARE AT THE FLANGE LINE UNLESS OTHERWISE NOTED.

HMA PAVEMENT, WHEN INDICATED ON THE PLANS, SHALL CONSIST OF COURSES AS FOLLOWS UNLESS OTHERWISE NOTED ON THE PLANS.

LOCATION	LAYERS	PAVEMENT TYPE
STH 16 MAINLINE DRIVING LANES	1 3/4" UPPER 2 1/4" - 3 3/4" LOWER	4 HT58-28 H 3 MT58-28 S
STH 16 MAINLINE INSIDE SHOULDER (STA 187+00 TO STA 447+00)	1 3/4" UPPER UPPER 2 1/4" LOWER UPPER 4" LOWER	4 MT58-28 S 3 MT58-28 S 3 MT58-28 S
STH 16 MAINLINE INSIDE SHOULDER (STA 637+34 TO STA 744+00)	4" UPPER	4 MT58-28 S
STH 16 MAINLINE INSIDE SHOULDER (STA 744+00 TO 816+50)	1 3/4" UPPER 4" LOWER	4 MT58-28 S 3 MT58-28 S
STH 16 MAINLINE OUTSIDE SHOULDER	4" UPPER	4 MT58-28 S
RAMP SHOULDERS	4" UPPER	4 MT58-28 S
CTH E WB ON-RAMP DRIVING LANE	2" - 2 3/4" UPPER	4 HT58-28 H

SECTION 2 SHEET ORDER

GENERAL NOTES
PROJECT OVERVIEW
TYPICAL SECTIONS
CONSTRUCTION DETAILS
PAVING DETAILS
PLAN DETAILS
FTMS
EROSION CONTROL
PERMANENT SIGNING
PAVEMENT MARKING
TRAFFIC CONTROL AND CONSTRUCTION STAGING
DETOURS
ALIGNMENTS

UTILITY CONTACTS

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ABBREVIATIONS

ASPH	ASPHALT PAVEMENT	FE	FIELD ENTRANCE	R	RADIUS
BAD	BASE AGGREGATE DENSE	FL	FLOW LINE	RC	REVERSE CROWN
BL	BASELINE	FO	FIBER OPTIC	REQ'D	REQUIRED
BLDG	BUILDING	FOC	FACE OF CURB	RHF	RIGHT HAND FORWARD
BOC	BACK OF CURB	G	GARAGE	RD	ROAD
CONC	CONCRETE	H	HOUSE	RL	REFERENCE LINE
COR	CORNER	HMA	HOT MIX ASPHALT	RT	RIGHT
CP	CULVERT PIPE	I.E.	INVERT ELEVATION	S	SHED
CPRC	CULVERT PIPE REINFORCED CONCRETE	D	LANE DISTRIBUTION	SD	SPECIAL DITCH
CSCP	CORRUGATED STEEL CULVERT PIPE	L	LENGTH (OF CURVE)	SE	SUPERELEVATION
C.E.	COMMERCIAL ENTRANCE	LHF	LEFT HAND FORWARD	SHLD	SHOULDER
CSW	CONCRETE SIDEWALK	LC	LONG CHORD	SS	STORM SEWER
DHV	DESIGN HOURLY VOLUME	LP	LOW POINT	SSPRC	STORM SEWER PIPE REINFORCED
V	DESIGN SPEED	LT	LEFT	TEL	TELEPHONE
DIA	DIAMETER	MAR	WETLAND BOUNDARY	T.L.E.	TEMPORARY LIMITED EASEMENT
DIM	DIMENSION	NOR	NORMAL	TYP	TYPICAL
E	EAST	N	NORTH	ULO	UTILITY LINE OPENING
EB	EASTBOUND	NC	NORMAL CROWN	VOL	VOLUME
ECIP	EROSION CONTROL IMPLEMENTATION PLAN	OH	OVERHEAD ELECTRIC	W	WEST
EL OR ELEV	ELEVATION	T	PERCENT OF TRUCKS	WB	WESTBOUND
ESAL	EQUIVALENT SINGLE AXLE LOAD	P.E.	PRIVATE ENTRANCE		
EOP	EDGE OF PAVEMENT	PL	PROPERTY LINE		

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

2

N

BEGIN PROJECT
STA. 70+00

100+00

150+00

CTH P (BROWN STREET)
CTH P (SAWYER ROAD)
INSTALL BARRICADE RACKS

BEGIN CONSTRUCTION
STA. 187+00 WB
STA. 194+00 EB

200+00

250+00

CTH C
INSTALL RAMP CLOSURE GATES
RECONSTRUCT RAMPS
WB ON
WB OFF
DIAMOND GRIND RAMPS
EB ON
EB OFF

300+00

MILL 1"
PAVE 4" HMA

350+00

CTH E
INSTALL RAMP CLOSURE GATES
EB OFF RAMP DIAMOND GRIND
WB ON RAMP REPAIR
RAMP TERMINAL & OVERLAY

400+00

STH 83
INSTALL RAMP CLOSURE GATES
WB OFF RAMP BASE PATCHING
RECONSTRUCT RAMPS
WB OFF
EB ON
EB OFF

450+00

CTH KC
INSTALL RAMP CLOSURE GATES
EB ON RAMP RECONSTRUCT
WB OFF RAMP DIAMOND GRIND

END CONSTRUCTION
STA. 447+00

500+00

550+00

600+00

BEGIN CONSTRUCTION
STA. 637+34 WB
STA. 649+47 EB

650+00

CONCRETE PAVEMENT
CONTINUOUS DIAMOND
GRINDING

CTH KE
CTH KF
INSTALL RAMP CLOSURE GATES

700+00

STH 190
INSTALL RAMP CLOSURE GATES
RECONSTRUCT RAMPS
EB OFF
WB ON
EB ON
WB OFF

CTH JJ
INSTALL RAMP CLOSURE GATES
RECONSTRUCT RAMPS
EB OFF
WB ON
EB ON
WB OFF

STA. 744+30 WB
STA. 744+00 EB

750+00

MILL 4"
PAVE 4" HMA

800+00

END PROJECT
STA. 816+50 WB
STA. 802+10 EB

LEGEND

RESURFACING

CONCRETE PAVEMENT CONTINUOUS DIAMOND GRINDING

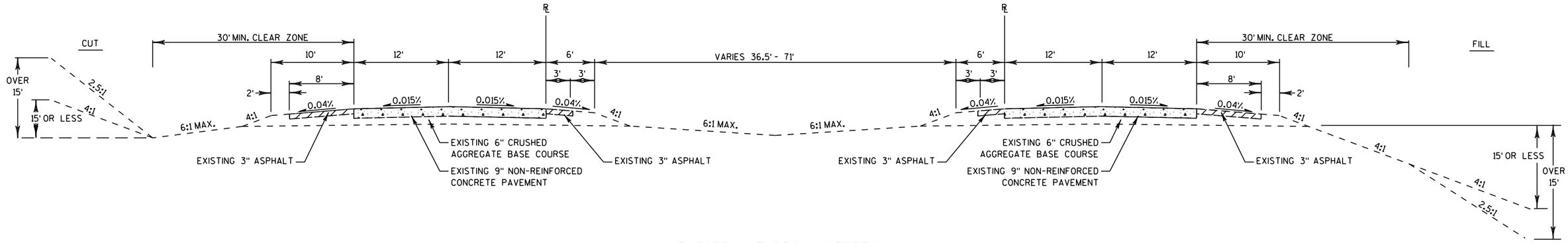
North Lake
Okauchee Lake
Pine Lake
Oconomowoc Lake
Bark R.
Nagawicka Lake
Pewaukee Lake

Sussex
Hartland
Delafield
Pewaukee

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PROJECT OVERVIEW	SHEET 4	E

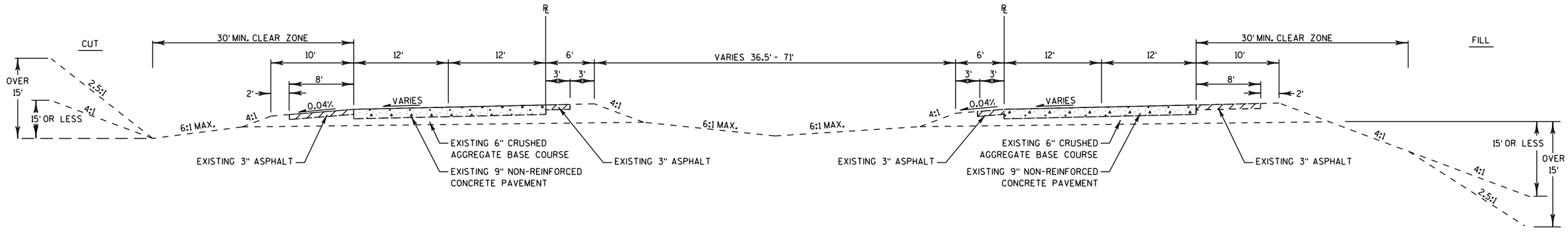
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WISDOT/CADDS SHEET 42



EXISTING TYPICAL SECTION

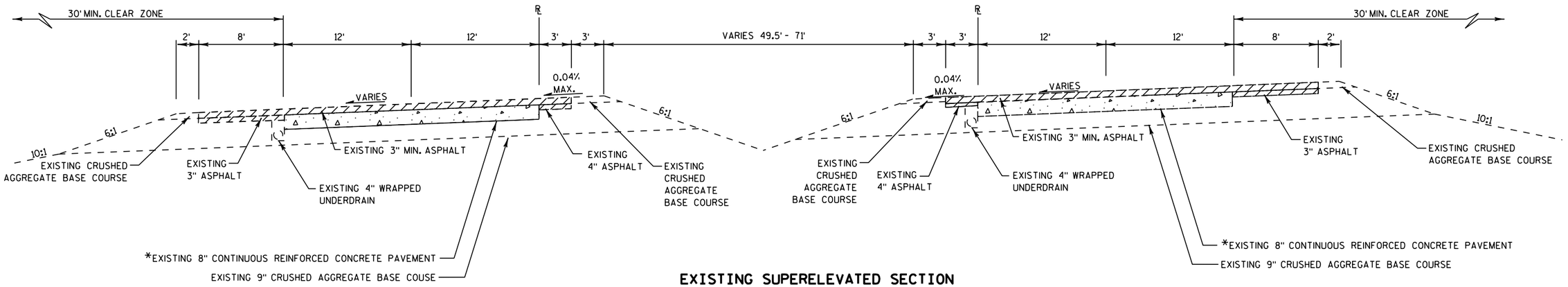
STH 16
STA. 626+65 - STA. 648+18
STA. 680+95 - STA. 744+00



EXISTING TYPICAL SECTION

STH 16
STA. 648+18 - STA. 680+95

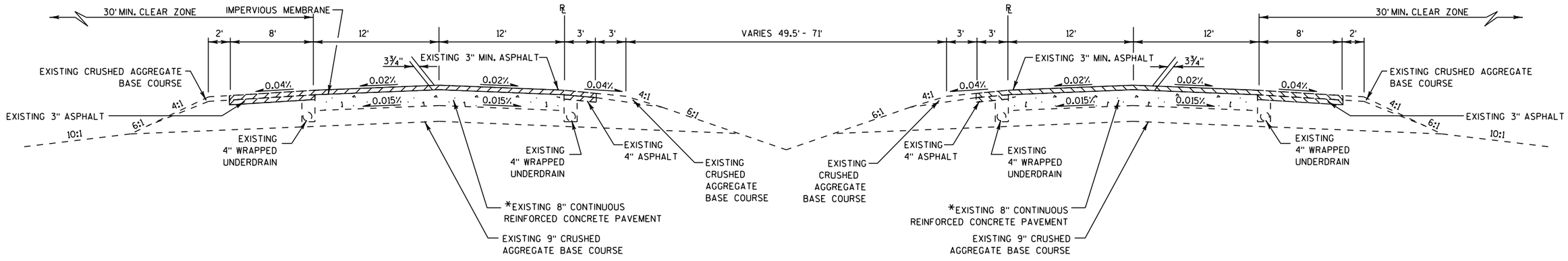
PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	TYPICAL SECTIONS	SHEET 5	E



EXISTING SUPERELEVATED SECTION

STH 16
STA. 187+00 - STA. 222+20
STA. 271+25 - STA. 283+65
STA. 318+45 - STA. 342+35
STA. 367+05 - STA. 390+35
STA. 432+00 - STA. 447+00

*CONCRETE BASE PATCHING EXISTS ALONG THE PROJECT.
THE TOP OF THE BASE PATCHING IS EVEN WITH THE TOP
OF THE EXISTING ASPHALT PAVEMENT.
THE MILLING OPERATIONS WILL INCLUDE MILLING THE BASE PATCHING.
MILLING CONCRETE BASE PATCHING WILL BE PAID FOR AS "REMOVING
ASPHALTIC SURFACE MILLING."

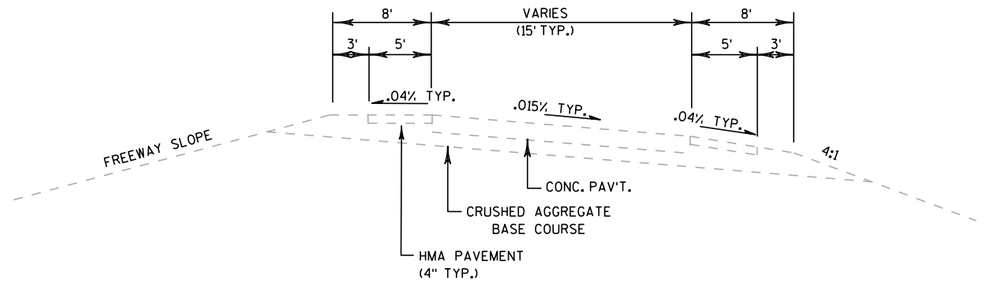


EXISTING TYPICAL SECTION

STH 16
STA. 222+20 - STA. 271+25
STA. 283+65 - STA. 318+45
STA. 342+35 - STA. 367+05
STA. 390+35 - STA. 432+00

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	TYPICAL SECTIONS	SHEET 6	E

2



EXISTING TYPICAL SECTION RAMPS

CTH C INTERCHANGE - 9" NON-REINFORCED CONCRETE PAVEMENT,
8" CRUSHED AGGREGATE BASE COURSE
WB OFF-RAMP
WB ON-RAMP
EB OFF-RAMP
EB ON-RAMP

STH 83 INTERCHANGE - 9" NON-REINFORCED CONCRETE PAVEMENT,
9" CRUSHED AGGREGATE BASE COURSE
WB ON-RAMP - EXISTING HMA OVERLAY
WB ON-RAMP
WB OFF-RAMP
EB ON-RAMP

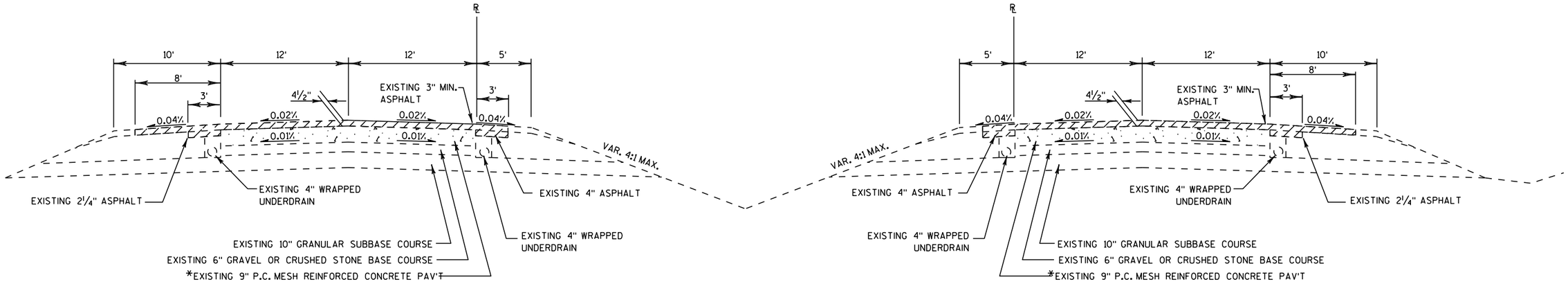
CTH E INTERCHANGE - 8" NON-REINFORCED CONCRETE PAVEMENT,
9" CRUSHED AGGREGATE BASE COURSE
WB ON-RAMP - EXISTING HMA OVERLAY
EB OFF-RAMP

CTH KC INTERCHANGE - 8" NON-REINFORCED CONCRETE PAVEMENT,
9" CRUSHED AGGREGATE BASE COURSE
WB OFF-RAMP
EB ON-RAMP

STH 190 INTERCHANGE - 8" NON-REINFORCED CONCRETE PAVEMENT,
6" CRUSHED AGGREGATE BASE COURSE
WB OFF-RAMP
WB ON-RAMP
EB OFF-RAMP
EB ON-RAMP

CTH JJ INTERCHANGE - 8" NON-REINFORCED CONCRETE PAVEMENT,
6" CRUSHED AGGREGATE BASE COURSE
WB OFF-RAMP
WB ON-RAMP
EB OFF-RAMP
EB ON-RAMP

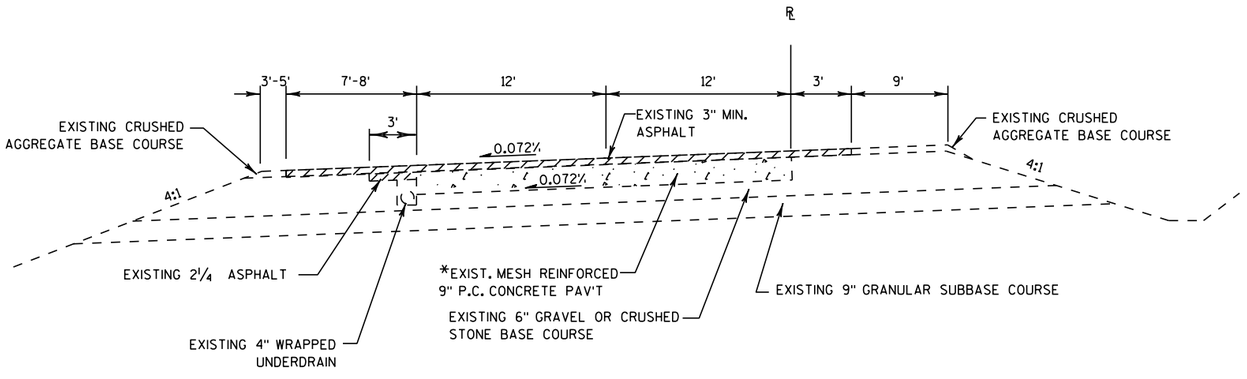
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WISDOT/CADDS SHEET 42



EXISTING TYPICAL SECTION

STH 16
STA. 744+30 - STA. 801+31 WB
STA. 744+00 - STA. 802+10 EB

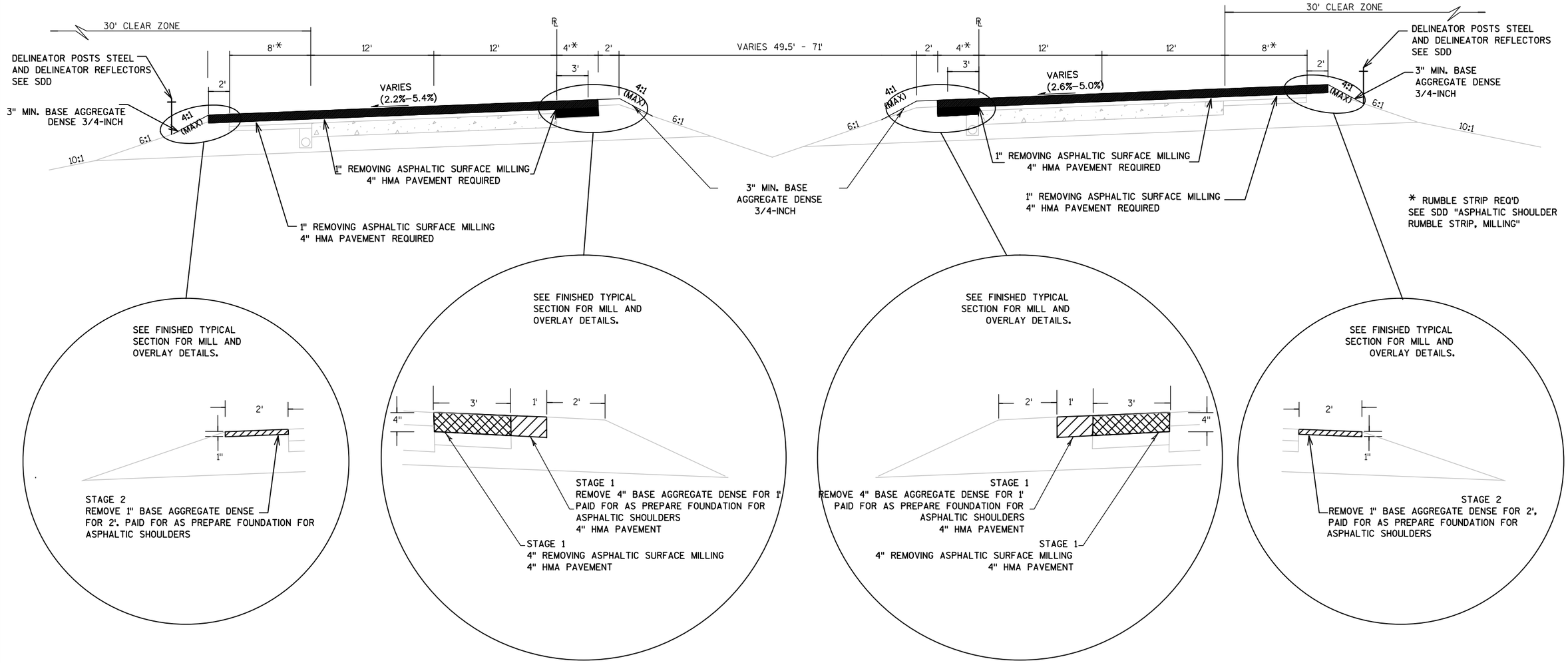
*CONCRETE BASE PATCHING EXISTS ALONG THE PROJECT.
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MILLING CONCRETE BASE PATCHING WILL BE PAID FOR AS "REMOVING
ASPHALTIC SURFACE MILLING."



EXISTING SUPERELEVATED SECTION

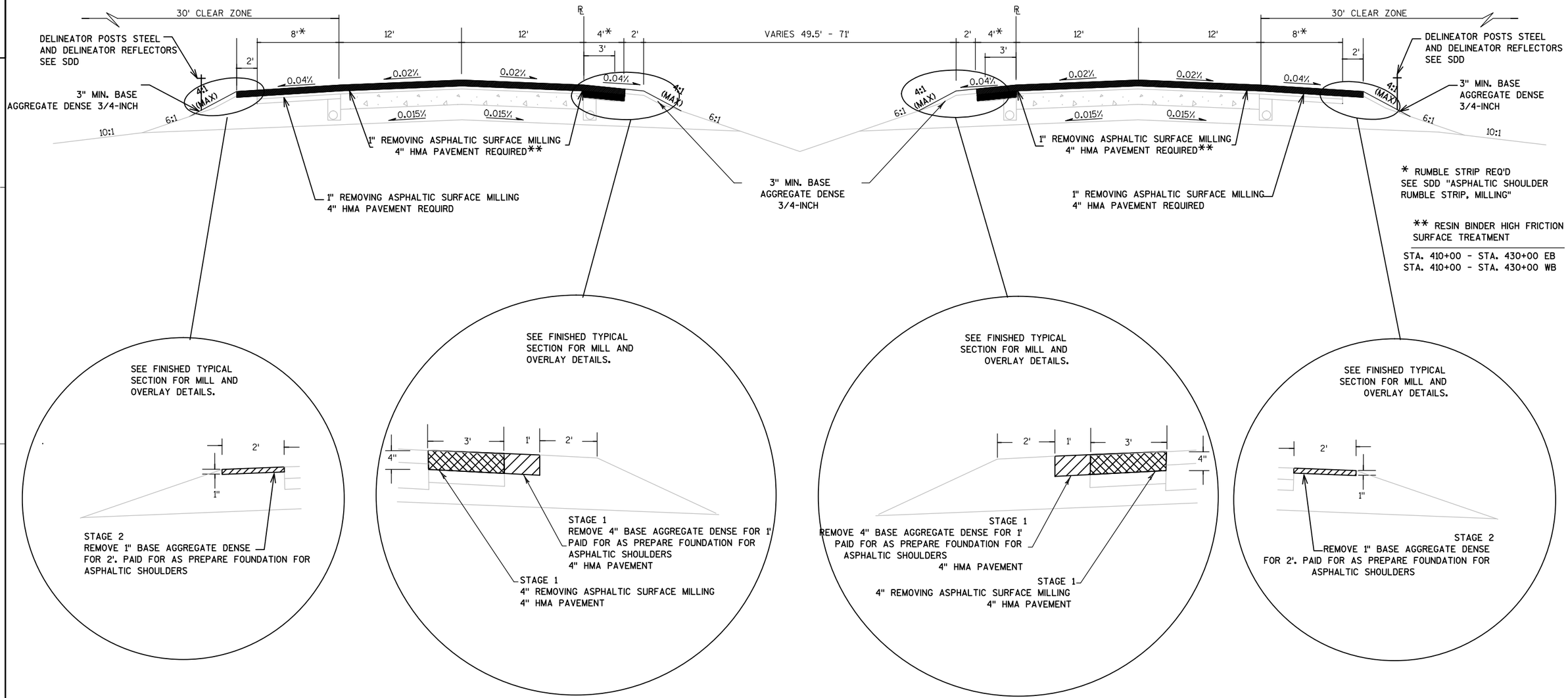
STH 16
STA. 801+31 - STA. 816+50 WB

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	TYPICAL SECTIONS	SHEET 8	E



SUPERELEVATED FINISHED SECTION

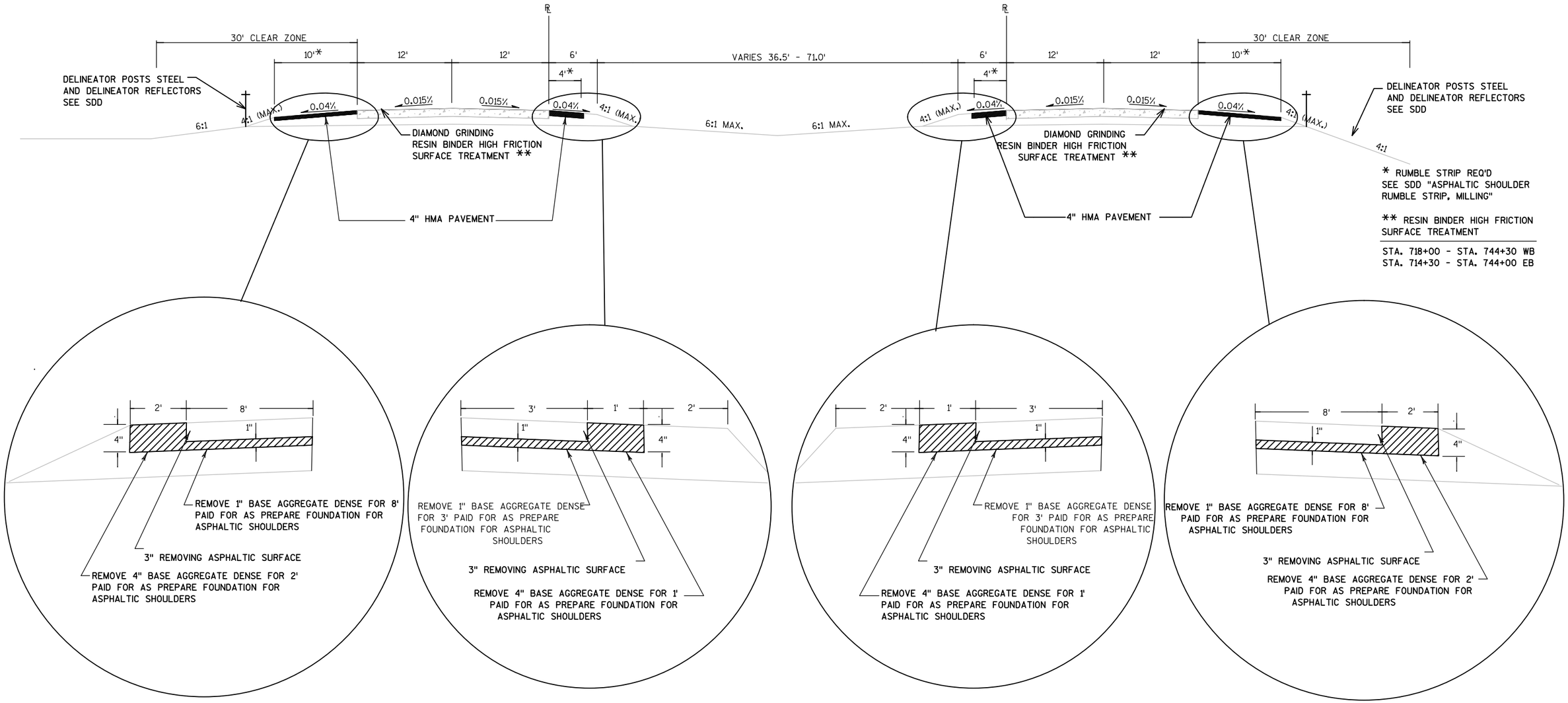
STH 16
STA. 187+00 – STA. 222+20
STA. 271+25 – STA. 283+65
STA. 318+45 – STA. 342+35
STA. 367+05 – STA. 390+35
STA. 432+00 – STA. 447+00



TYPICAL FINISHED SECTION

STH 16
STA. 222+20 – STA. 271+25
STA. 283+65 – STA. 318+45
STA. 342+35 – STA. 367+05
STA. 390+35 – STA. 432+00

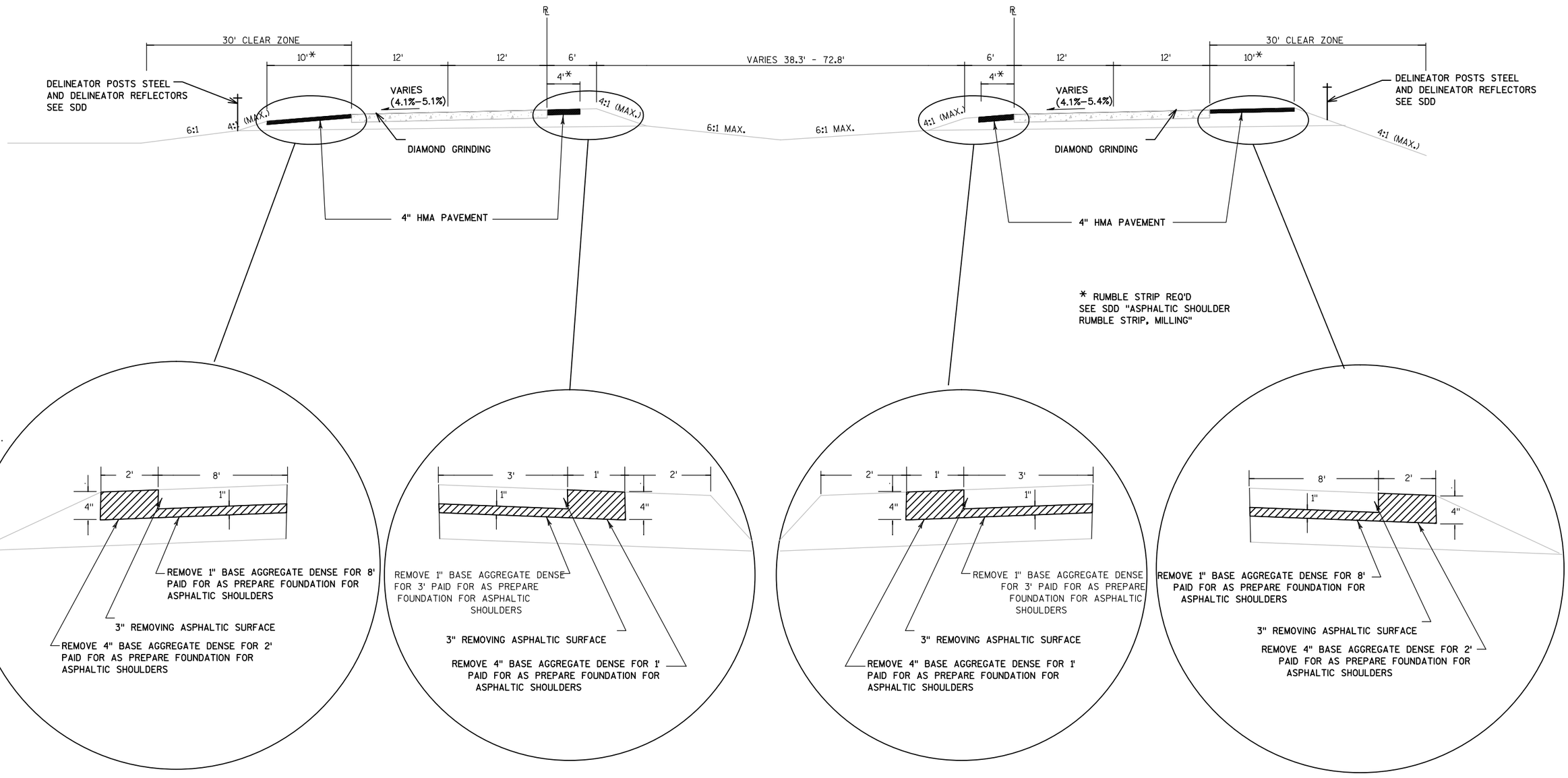
PROJECT NO: 1370–15–71	HWY: STH 16	COUNTY: WAUKESHA	TYPICAL SECTIONS	SHEET 10	E



TYPICAL FINISHED SECTION

STH 16
STA. 637+34 – STA. 648+18 WB
STA. 680+95 – STA. 744+30 WB
STA. 680+95 – STA. 744+00 EB

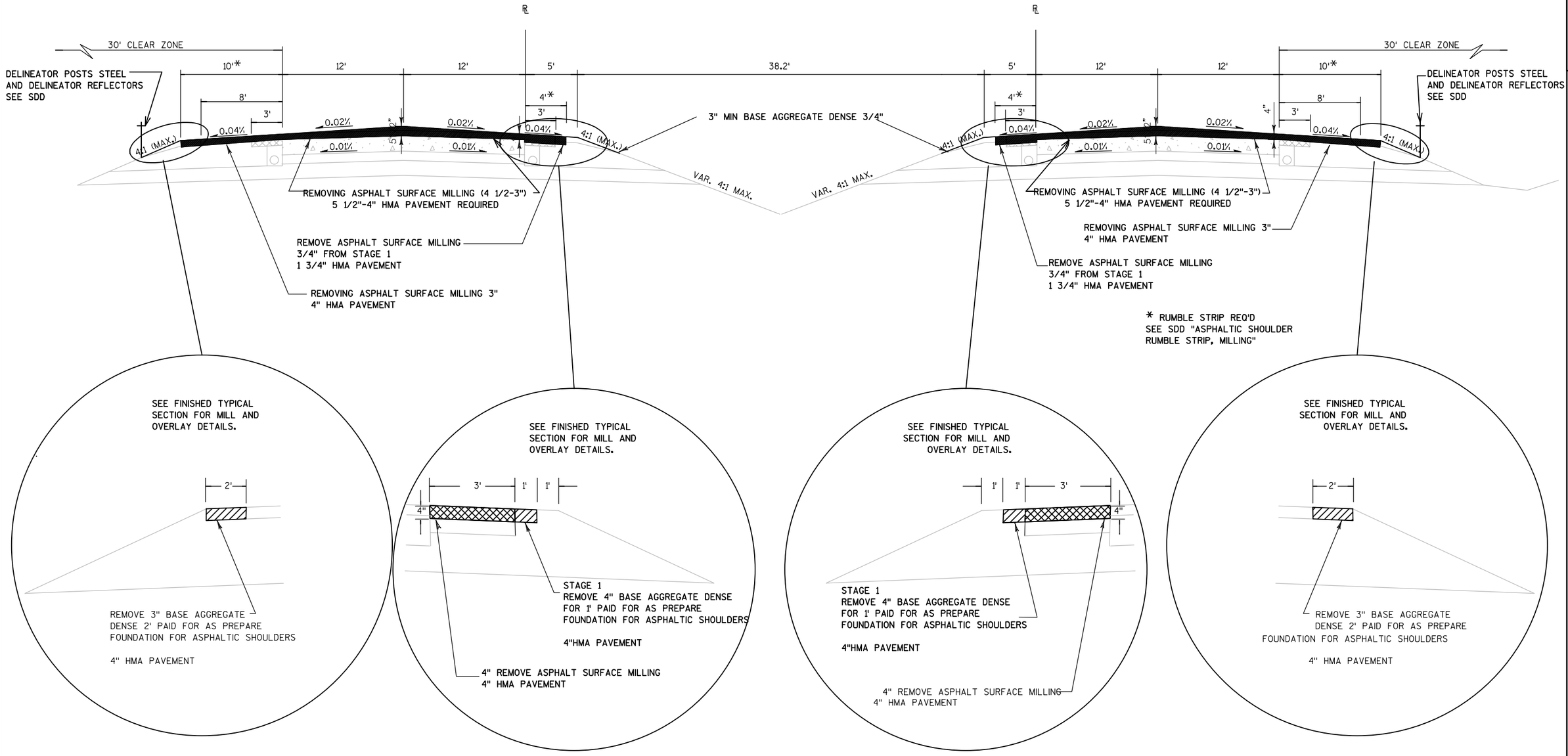
PROJECT NO: 1370–15–71	HWY: STH 16	COUNTY: WAUKESHA	TYPICAL SECTIONS	SHEET 11	E



TYPICAL FINISHED SECTION

STH 16
STA. 648+18 – STA. 680+95 WB
STA. 649+47 – STA. 680+95 EB

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	TYPICAL SECTIONS	SHEET 12	E

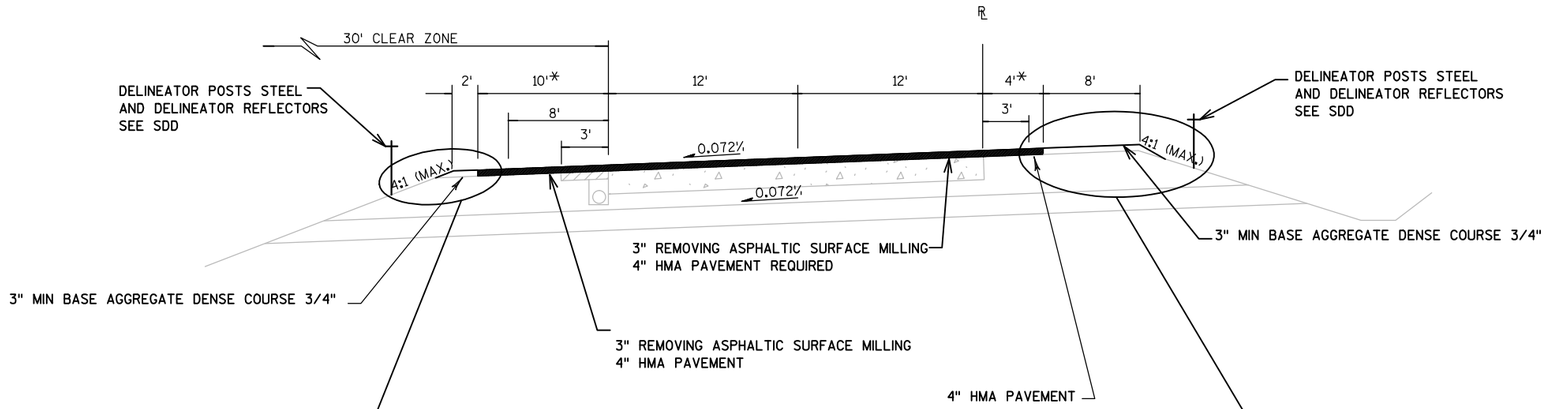


TYPICAL FINISHED SECTION

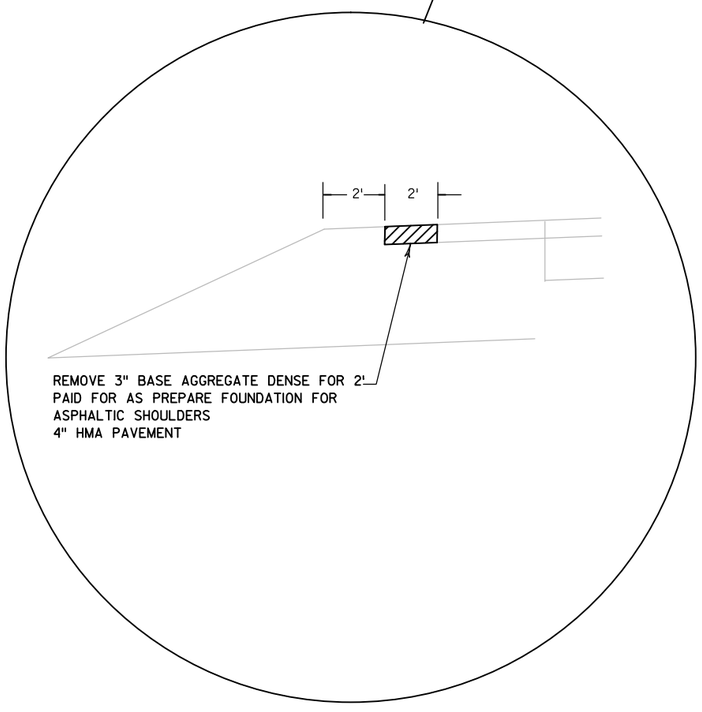
STH 16
STA. 744+30 – STA. 801+31 WB
STA. 744+00 – STA. 802+10 EB

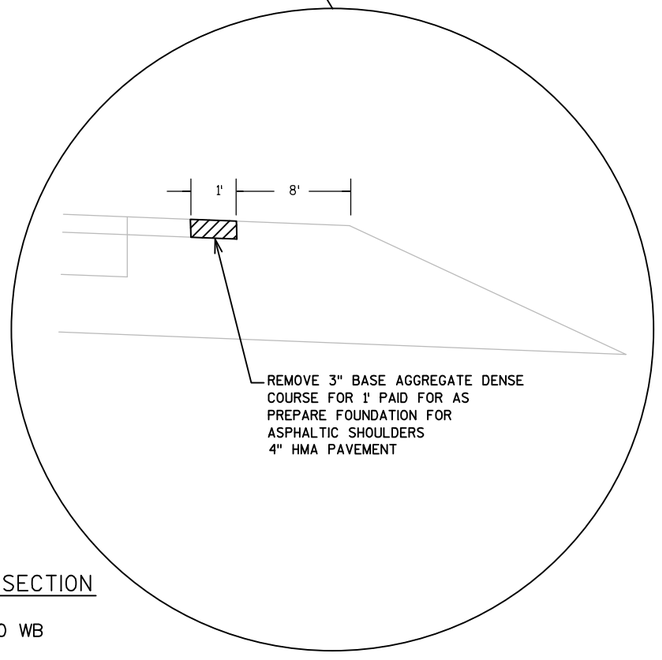
PROJECT NO: 1370–15–71	HWY: STH 16	COUNTY: WAUKESHA	TYPICAL SECTIONS	SHEET 13	E

2



* RUMBLE STRIP REQ'D
SEE SDD "ASPHALTIC SHOULDER
RUMBLE STRIP, MILLING"





SUPERELEVATED FINISHED SECTION

STH 16

STA. 801+31 – STA. 816+50 WB

PROJECT NO: 1370–15–71	HWY: STH 16	COUNTY: WAUKESHA	TYPICAL SECTIONS	SHEET 14	E

CTH C INTERCHANGE
WB OFF-RAMP - 8-INCH CONCRETE PAVEMENT, BREAKER RUN
WB ON-RAMP - 8-INCH CONCRETE PAVEMENT, BREAKER RUN
EB OFF-RAMP - BASE PATCHING, 8-INCH CONCRETE PAVEMENT
EB ON-RAMP - BASE PATCHING

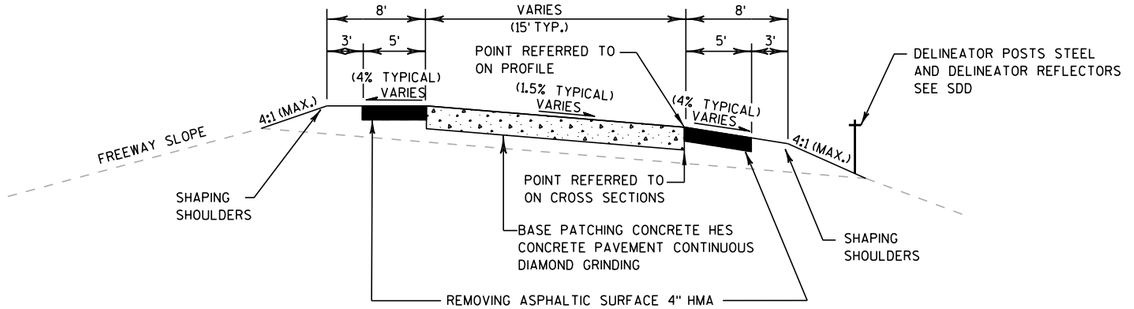
CTH E INTERCHANGE
WB ON-RAMP - OVERLAY
EB OFF-RAMP - BASE PATCHING, 8-INCH CONCRETE PAVEMENT

CTH KC INTERCHANGE
WB OFF-RAMP - BASE PATCHING
EB ON-RAMP - 8-INCH CONCRETE PAVEMENT

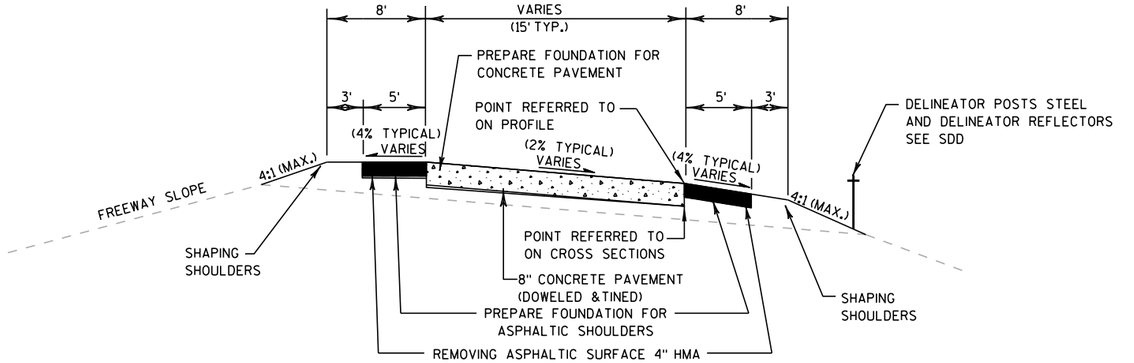
STH 190 INTERCHANGE
WB OFF-RAMP - 8-INCH CONCRETE PAVEMENT
WB ON-RAMP - 8-INCH CONCRETE PAVEMENT, BREAKER RUN
EB OFF-RAMP - 8-INCH CONCRETE PAVEMENT, BREAKER RUN
EB ON-RAMP - BREAKER RUN

CTH JJ INTERCHANGE
WB OFF-RAMP - 8-INCH CONCRETE PAVEMENT, BREAKER RUN
WB ON-RAMP - BREAKER RUN
EB OFF-RAMP - 8-INCH CONCRETE PAVEMENT, BREAKER RUN
EB ON-RAMP - 8-INCH CONCRETE PAVEMENT, BREAKER RUN

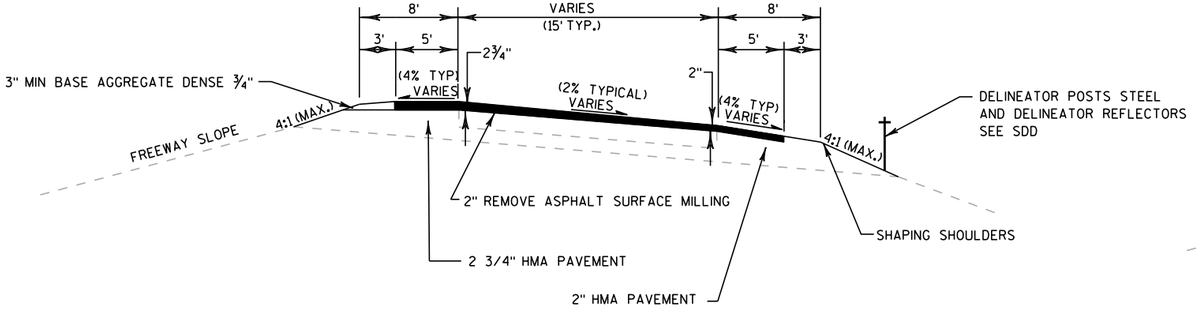
STH 83 INTERCHANGE
WB OFF-RAMP - BASE PATCHING
WB ON-RAMP - 8-INCH CONCRETE PAVEMENT, BREAKER RUN
EB OFF-RAMP - 8-INCH CONCRETE PAVEMENT
EB ON-RAMP - 8-INCH CONCRETE PAVEMENT



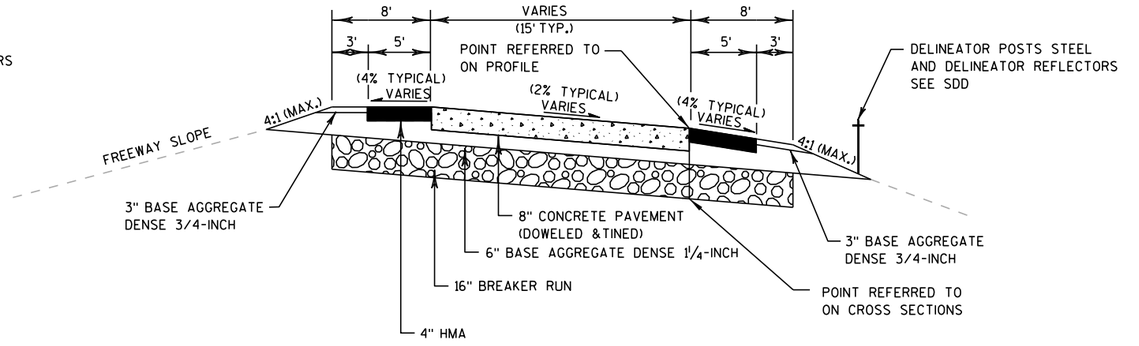
TYPICAL FINISHED SECTION RAMPS
BASE PATCHING SECTION



TYPICAL FINISHED SECTION RAMPS
8-INCH CONCRETE PAVEMENT SECTION

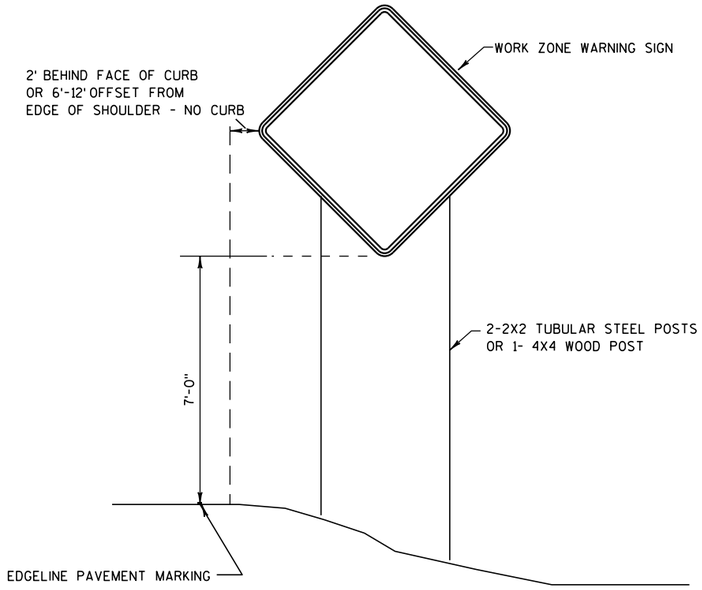


TYPICAL FINISHED SECTION RAMPS
OVERLAY SECTION



TYPICAL FINISHED SECTION RAMPS
BREAKER RUN SECTION

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	TYPICAL SECTIONS	SHEET	E

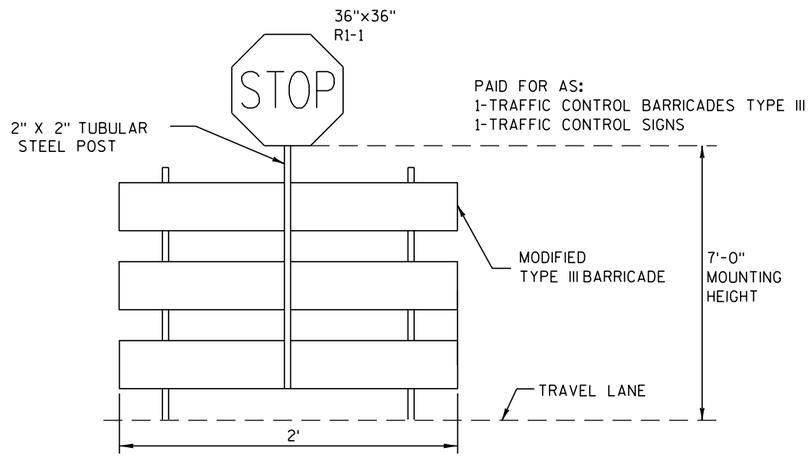


TYPICAL TEMPORARY TRAFFIC CONTROL DETAIL
MOUNTING ON FIXED SUPPORT

LONG TERM
7 DAYS OR MORE

GENERAL NOTES FOR TRAFFIC CONTROL

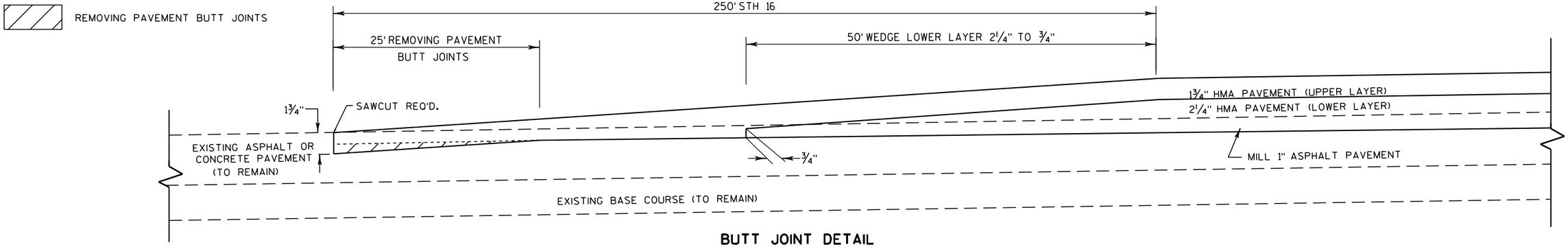
1. TRAFFIC CONTROL DRUMS IN TAPERS, SHALL BE EQUIPPED WITH WARNING LIGHTS, TYPE "C", ONE WAY LIGHTS IN TAPERS ONLY, UNLESS OTHERWISE SHOWN.
2. SIGN LOCATIONS ARE APPROXIMATE. THE ACTUAL LOCATION SPACING MAY BE ADJUSTED AS DIRECTED BY THE ENGINEER TO MEET FIELD CONDITIONS.
3. "WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS REFLECTIVE ORANGE.
4. ALL TRAFFIC CONTROL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED IN THE PLANS.
5. BARRICADE STRIPES ARE TO BE SLOPED DOWNWARD IN THE DIRECTION OF TRAFFIC FLOW.



TEMPORARY STOP SIGN

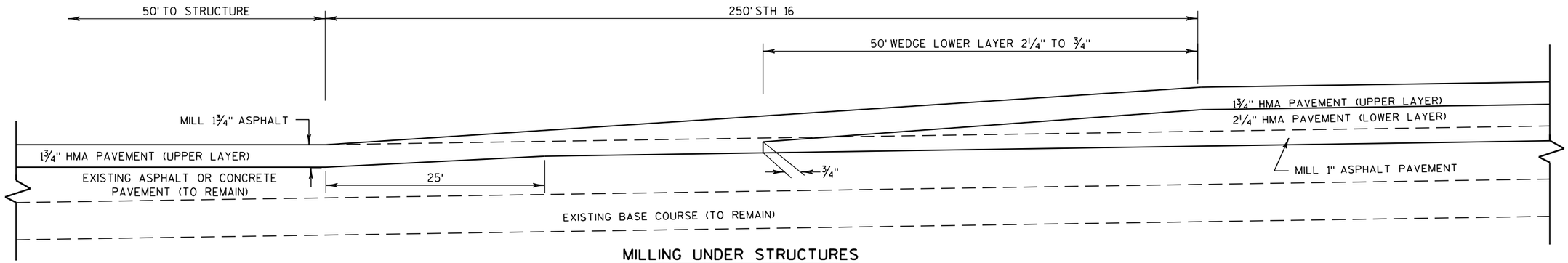
PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	TEMPORARY TRAFFIC CONTROL DETAIL	SHEET 16	E

2



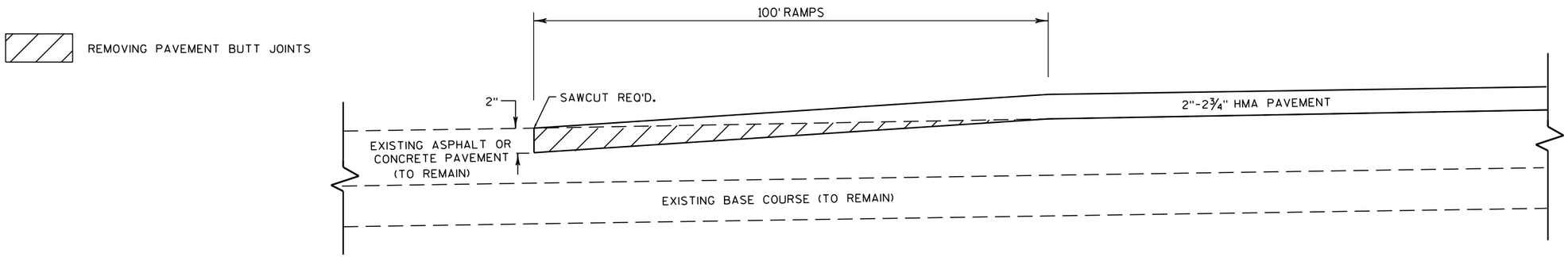
BUTT JOINT DETAIL

STH 16 & RAMPS



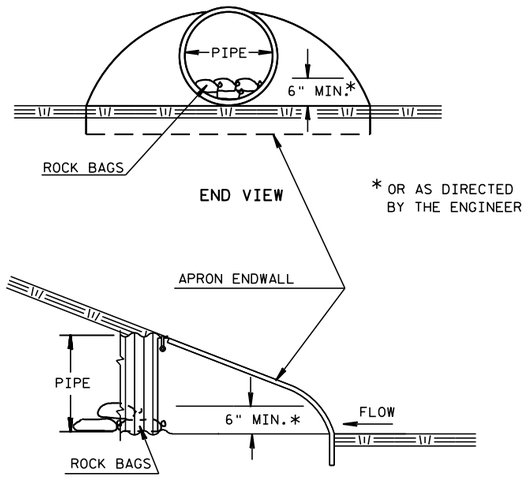
MILLING UNDER STRUCTURES

STH 16 AT
B-67-164 (CTH C)
B-67-166 (STH 83)
B-67-172 (CTH KC)



BUTT JOINT DETAIL

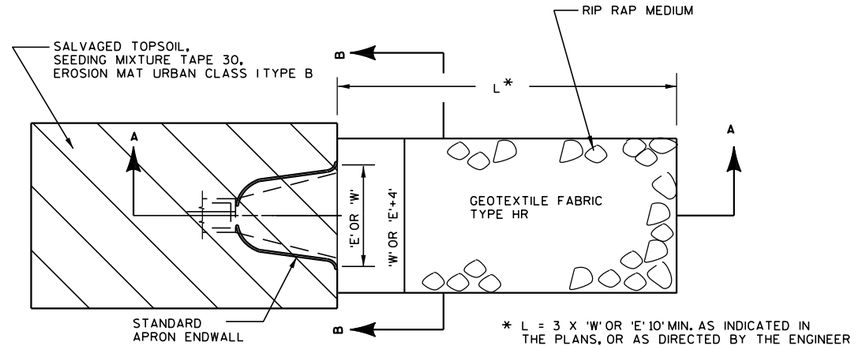
OVERLAY RAMPS

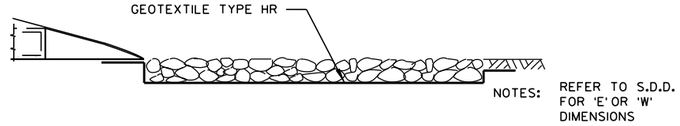


SIDE VIEW

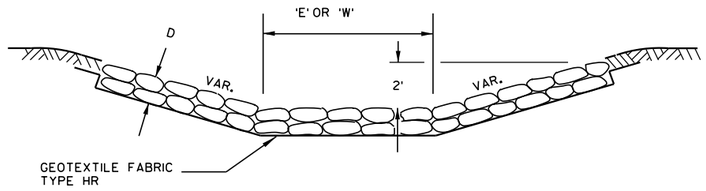
CULVERT PIPE CHECK

PIPE SIZE	ESTIMATED NUMBER OF ROCK BAGS
12" 15" 18"	1 2 2
21" 24" 30"	3 3 5
36" 42" 48"	7 8 10
ESTIMATED ROCK BAG SIZE 18"X12"X6"	





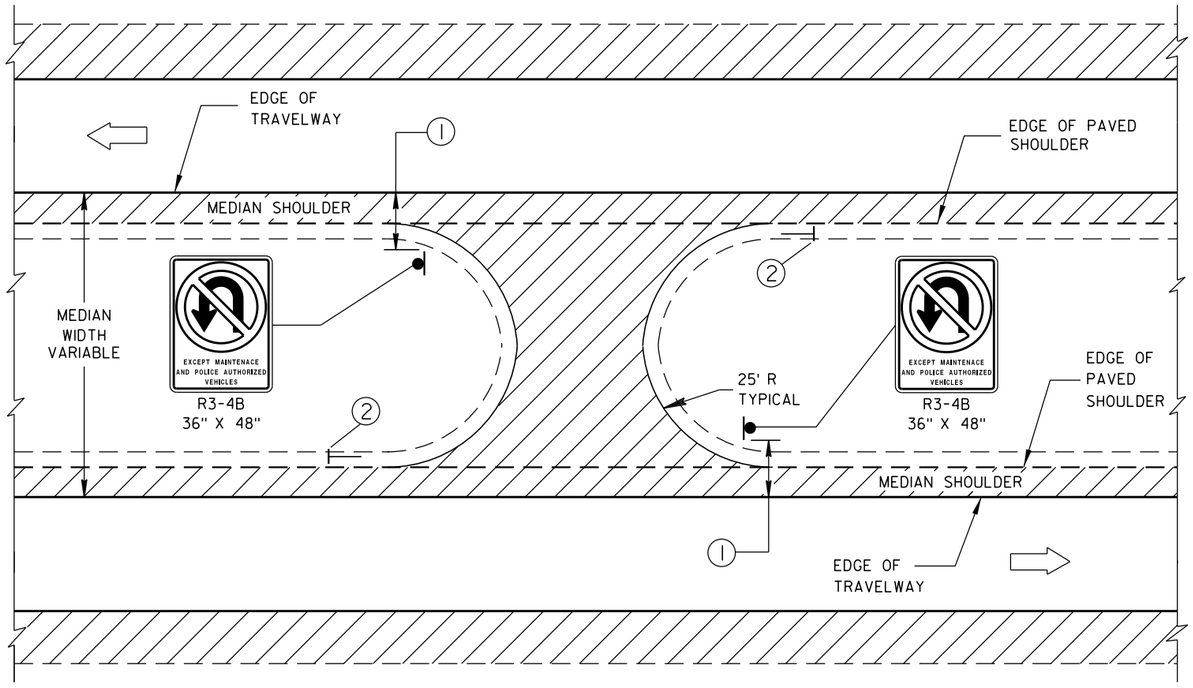
SECTION A-A



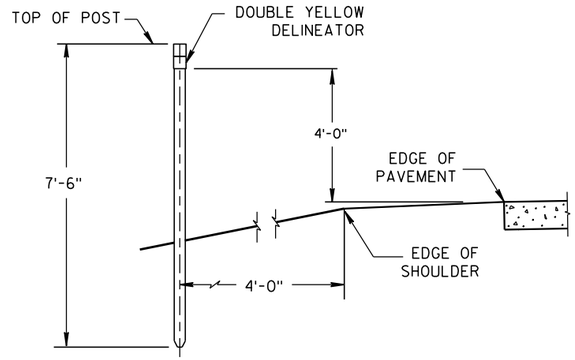
SECTION B-B

EROSION CONTROL TREATMENT AT PIPE ENDWALLS

SEE EROSION CONTROL PLAN FOR LOCATIONS



PLAN VIEW



DOUBLE YELLOW DELINEATOR INSTALLATION

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) SIGNING DETAILS AND SPECIFICATIONS ARE PROVIDED ELSEWHERE IN THE CONTRACT.

(2) INSTALL DOUBLE YELLOW DELINEATOR. SEE STANDARD DETAIL DRAWING 15A2.

MAINTENANCE CROSSOVER FOR FREEWAY DETAIL

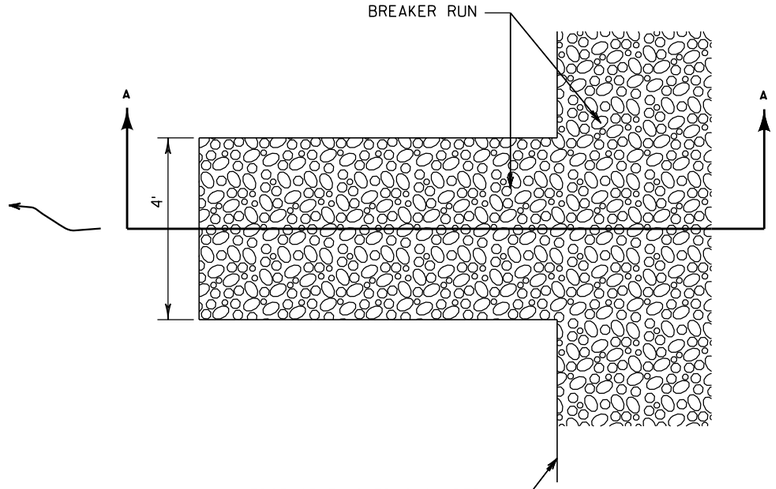
EXISTING HMA CROSSOVERS

STA 187+00 - STA 447+00
1" REMOVE ASPHALTIC SURFACE MILLING
4" HMA PAVEMENT TYPE E-3 REQ'D

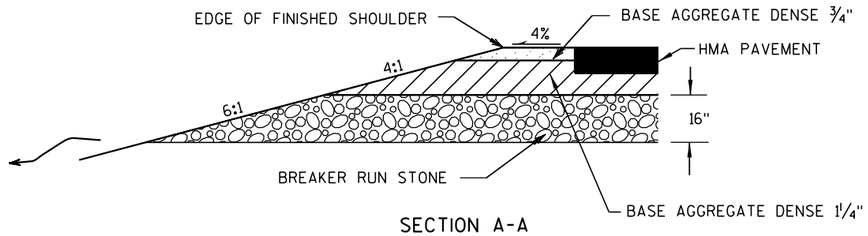
STA 638+82 - STA 733+95
4" REMOVE ASPHALTIC SURFACE MILLING
4" HMA PAVEMENT TYPE E-3 REQ'D

STA 637+34 - STA 816+50
4" REMOVE ASPHALTIC SURFACE MILLING
4" HMA PAVEMENT TYPE E-3 REQ'D

2



PLAN VIEW



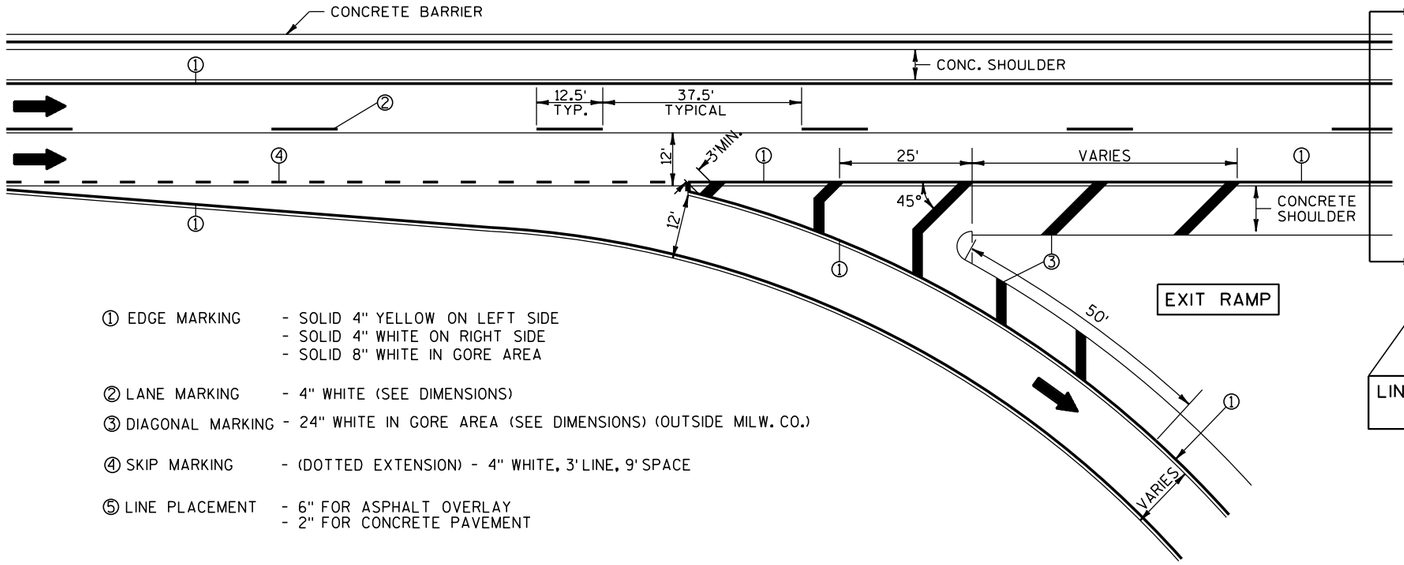
SECTION A-A

SECTION B-B

DETAIL FOR FRENCH DRAINS

(LOCATIONS TO BE DETERMINED IN THE FIELD BY ENGINEER)

* EXCAVATION REQUIRED TO CONSTRUCT FRENCH DRAINS SHALL BE CONSIDERED INCIDENTAL TO THE ITEM BREAKER RUN.



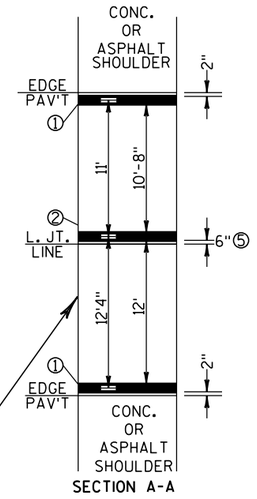
① EDGE MARKING - SOLID 4" YELLOW ON LEFT SIDE
- SOLID 4" WHITE ON RIGHT SIDE
- SOLID 8" WHITE IN GORE AREA

② LANE MARKING - 4" WHITE (SEE DIMENSIONS)

③ DIAGONAL MARKING - 24" WHITE IN GORE AREA (SEE DIMENSIONS) (OUTSIDE MILW. CO.)

④ SKIP MARKING - (DOTTED EXTENSION) - 4" WHITE, 3' LINE, 9' SPACE

⑤ LINE PLACEMENT - 6" FOR ASPHALT OVERLAY
- 2" FOR CONCRETE PAVEMENT



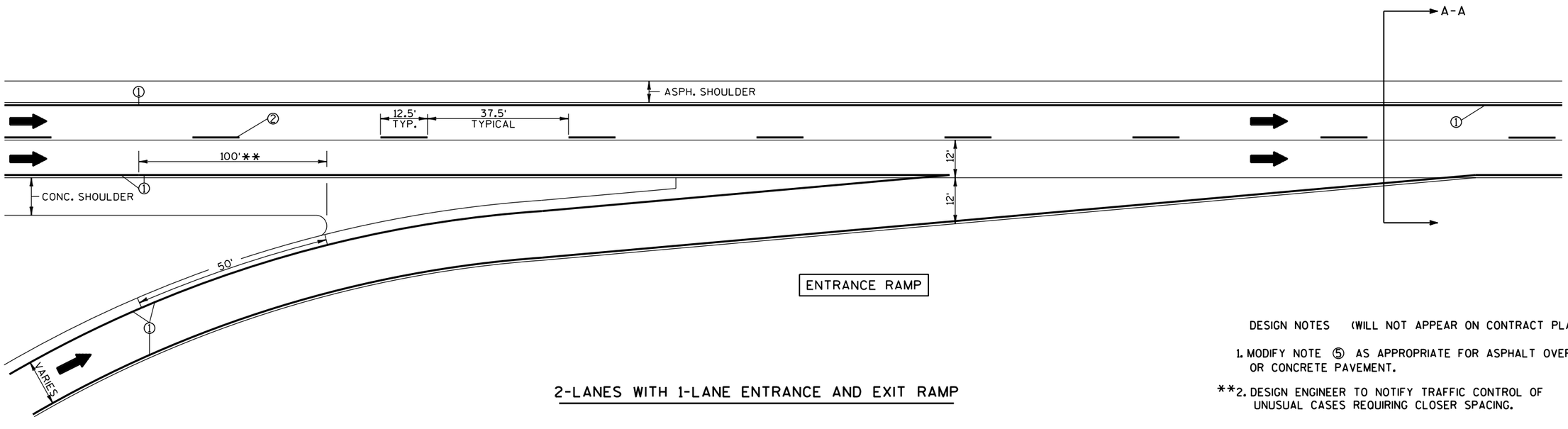
SECTION A-A

LINE PLACEMENT DETAILS

RACINE, KENOSHA, WALWORTH, WAUKESHA, FOND DU LAC, OZAUKEE & WASHINGTON COUNTIES

NOTES:

1. WHERE THE DOTTED EXTENSION OF THE RIGHT EDGE LINE IS SHOWN ON THE PLAN, IT SHALL BE 4" WIDE, WITH A LINE SKIP PATTERN CONSISTING OF A 3' LONG LINE AND A 9' SKIP.
2. PAVEMENT LANE MARKINGS SHALL BE LOCATED 6" OFF THE LONGITUDINAL JOINT OF THE UNDERLYING CONC. PAVEMENT.
3. ARROWS SHOWN ON THIS MARKING PLAN DESIGNATE TRAFFIC FLOW, AND SHALL NOT BE TAKEN AS PROPOSED PAVEMENT MARKINGS.
4. SPOTTING FOR PAVEMENT LANE MARKINGS AND EDGE LINES SHALL BE 4"x4" PIECES OF REFLECTORIZED PAV'T MARKING TAPE SPACED AT 50' INTERVALS, INCIDENTAL TO PAV'T MARKING.
5. SEE STANDARD DETAIL DRAWING FOR RAISED PAVEMENT MARKERS IN GORE AND LINE WIDTH TOLERANCES.



ENTRANCE RAMP

2-LANES WITH 1-LANE ENTRANCE AND EXIT RAMP

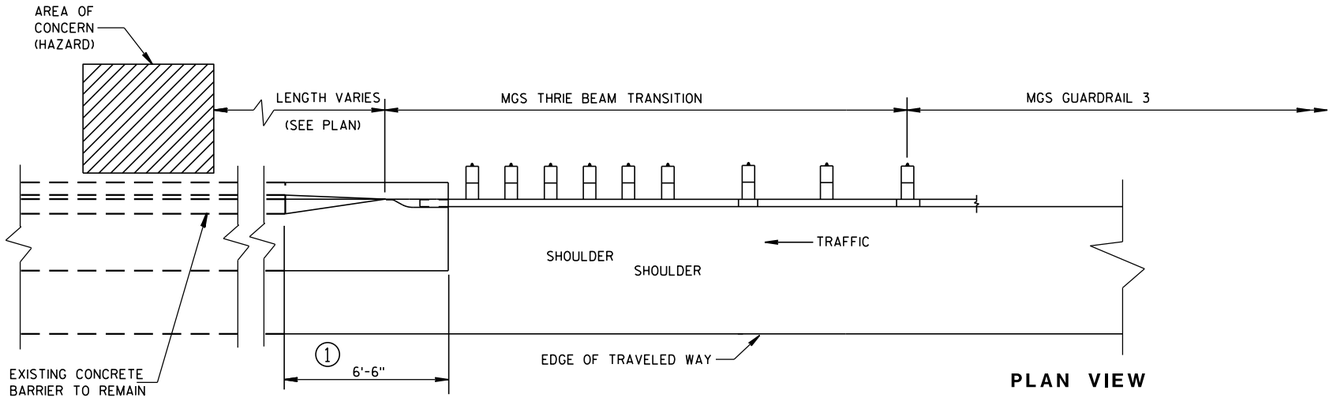
DESIGN NOTES (WILL NOT APPEAR ON CONTRACT PLANS)

1. MODIFY NOTE ⑤ AS APPROPRIATE FOR ASPHALT OVERLAY OR CONCRETE PAVEMENT.

**2. DESIGN ENGINEER TO NOTIFY TRAFFIC CONTROL OF UNUSUAL CASES REQUIRING CLOSER SPACING.

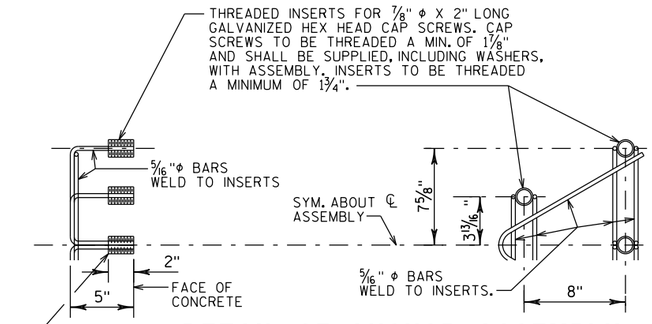
GORES, FREEWAYS, & EXPRESSWAYS

PROJECT NO:	HWY:	COUNTY: OUTSIDE MILWAUKEE CO.	EPOXY PAVEMENT MARKING, RAMPS	SHEET 21	E



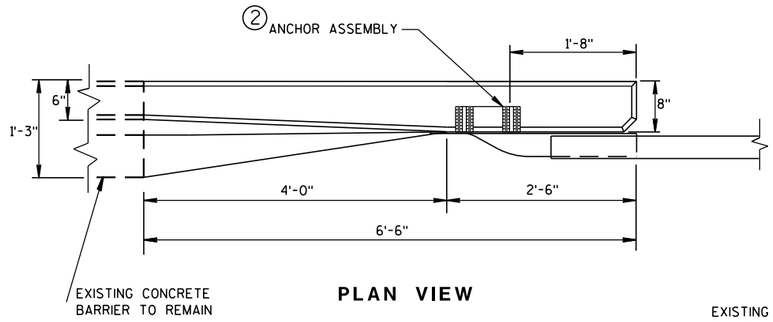
PLAN VIEW

TRANSITION TO MGS THRIE BEAM



DETAIL OF ANCHOR ASSEMBLY

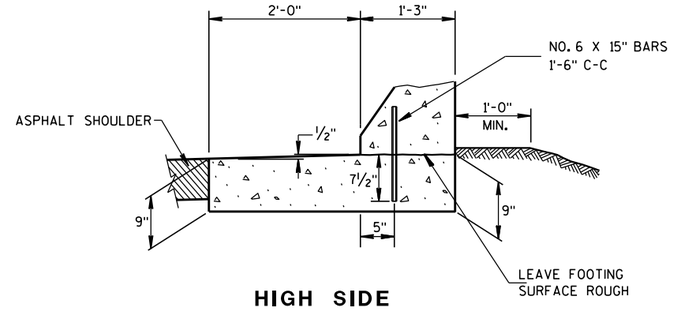
NOTE: HEX HEAD CAP SCREWS & WASHERS TO BE GALVANIZED IN ACCORDANCE WITH AASHTO M232 CLASS C.



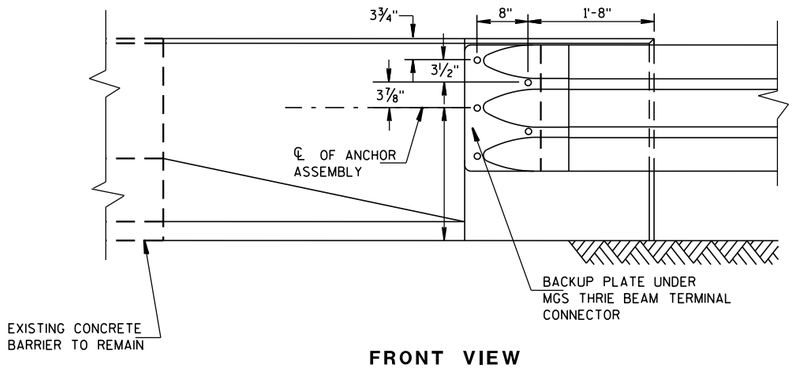
PLAN VIEW

GENERAL NOTES

1. A SPECIAL END IS REQUIRED ON THE CONCRETE BARRIER TO TRANSITION TO A CONNECTION WITH THE MGS THRIE BEAM TRANSITION. SEE THE DETAILS ON THIS SHEET.
2. SEE SDD MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION
3. REINFORCEMENT REQUIRED AT EXPANSION JOINTS AND WHERE CONCRETE BARRIER IS TERMINATED.

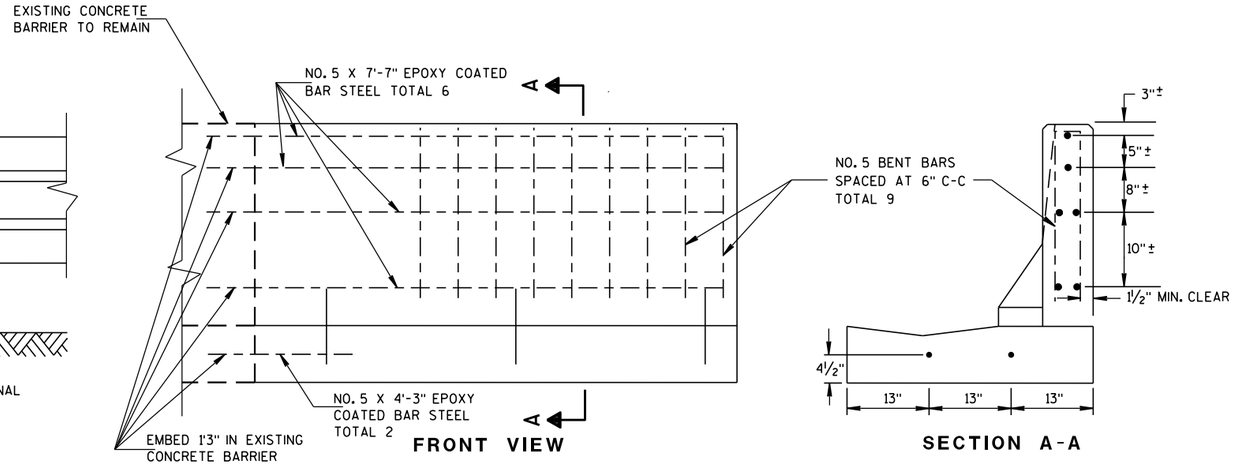


HIGH SIDE CONCRETE BARRIER FOOTING DETAIL



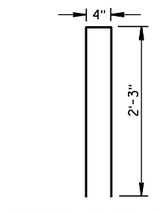
FRONT VIEW

CONCRETE BARRIER TRANSITION TO MGS THRIE BEAM



FRONT VIEW **SECTION A-A**

3 REINFORCEMENT AT BARRIER END

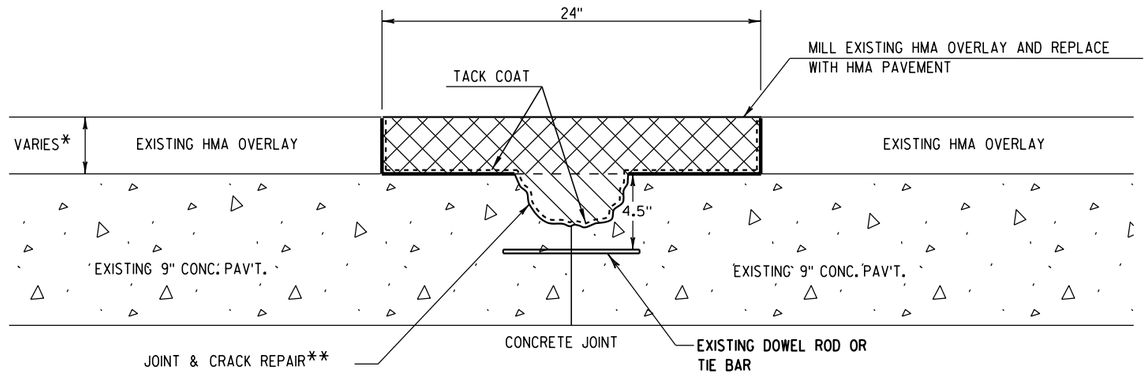


BENT BAR DETAIL

CONCRETE BARRIER, SINGLE-FACED (WITH ANCHORAGE)

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	CONSTRUCTION DETAILS	SHEET 22	E

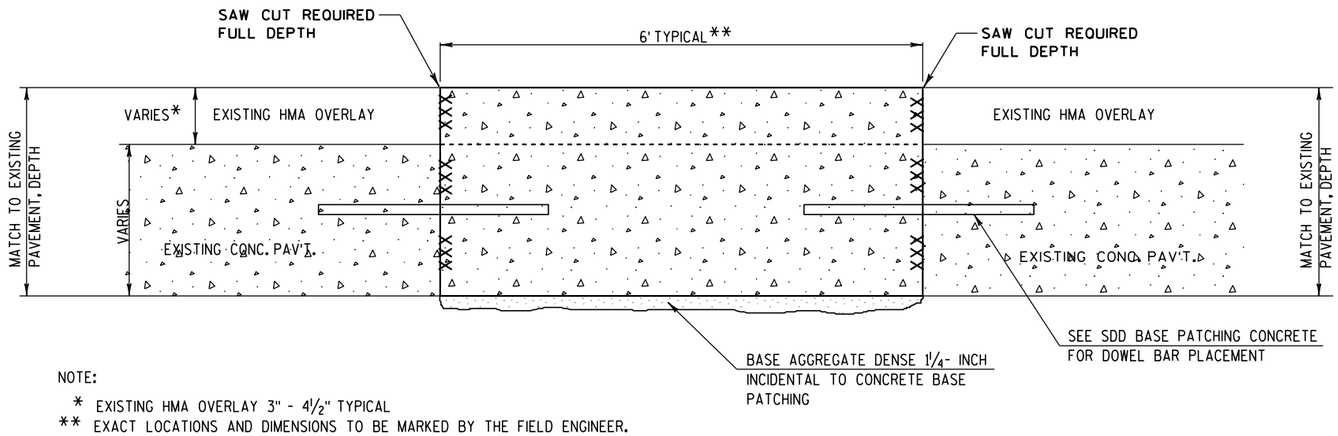
2



NOTE:

* EXISTING HMA OVERLAY 3" - 4½" TYPICAL
** LOCATIONS TO BE MARKED BY THE FIELD ENGINEER

JOINT AND CRACK REPAIR

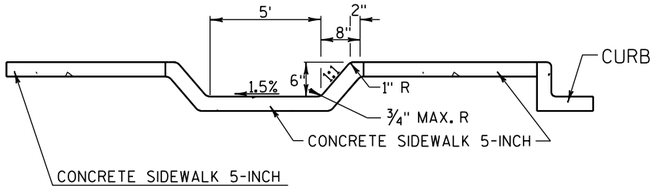


NOTE:

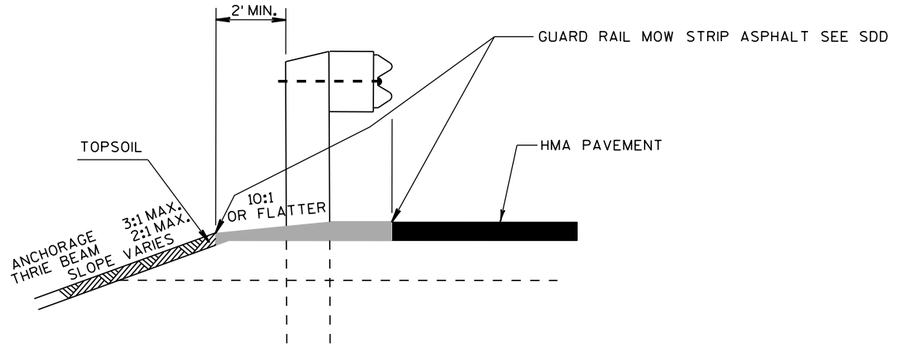
* EXISTING HMA OVERLAY 3" - 4½" TYPICAL
** EXACT LOCATIONS AND DIMENSIONS TO BE MARKED BY THE FIELD ENGINEER.
DEPTH OF CONC. BASE PATCHING IS EQUAL TO THICKNESS OF EXISTING CONC. PAVEMENT PLUS ASPHALTIC OVERLAY.
REFER TO SDD BASE PATCHING CONCRETE; FOR TIE BAR AND DOWEL BAR PLACEMENT ONLY

XXX SAWING CONCRETE

BASE PATCHING CONCRETE SHES



ISLAND CURB RAMP DETAIL



ASPHALTIC SHOULDER AT GUARD RAIL

2

N

STH 16 WB

+00

70+00

SLOPE INTERCEPT

71+00

+23

+08

STEEL THRIE BEAM
BULLNOSE TERMINAL
SEE SDD

BRIDGE COLUMN

72+00

19'

14'

19'

STEEL THRIE BEAM
SEE SDD

73+00

+03

+18

REMOVING GUARDRAIL

STEEL THRIE BEAM
BULLNOSE TERMINAL
SEE SDD

74+00

75+00

SLOPE INTERCEPT

STH 16 EB

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	STH 16 MEDIAN AT CTH P (BROWN ST)	SHEET 25	E

2

2

N

191+00

192+00

193+00

194+00

EB STH 16

CONCRETE BARRIER TRANSITION SECTION 32-INCH
SEE CONSTRUCTION DETAIL

STA 193+59-193+98
MGS GUARDRAIL THRIE BEAM TRANSITION
SEE S.D.D.

4" HMA PAVEMENT
PAVE TO FACE OF GUARDRAIL

8'

12'

STA 191+00
BEGIN SHOULDER TAPER

MGS GUARDRAIL 3
SEE S.D.D.

STA 193+48-193+98
GUARDRAIL MOW STRIP ASPHALT
SEE S.D.D.

STA 191+40, 67.5' RT
MGS GUARDRAIL TERMINAL EAT
SEE S.D.D.

BARRIER SYSTEM
GRADING SHAPING FINISHING

SLOPE INTERCEPT

STA 193+14-193+98
REMOVING CONCRETE BARRIER

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	STA 191+40 BEAMGUARD	SHEET	E

FILE NAME : N:\PDS\C3D\13701501\DESIGN\STA193+40BEAMGUARD.DWG PLOT DATE : 1/30/2017 7:35 AM PLOT BY : ROTIER, STEVEN J PLOT NAME : PLOT SCALE : 1 IN:20 FT
WISDOT/CADDS SHEET 42

2

N

STH 16 EB OFF RAMP

231+63.83, -0.01' LT

CONCRETE MEDIAN SLOPED NOSE TYPE 1

232+00"A"

939.084

938.995

940.611

940.438

5'

3'

15'

3'

940.343

940.578

3" BASE AGGREGATE DENSE 3/4"

4" HMA PAVEMENT

CONCRETE PAVEMENT 8-INCH HES

232+64.36, 23.82' RT

SALVAGED TOPSOIL, SEEDING MIXTURE TYPE 30, MULCHING, FERTILIZER TYPE B

STA 232+68.63, 66.82' RT RADIUS 39.0'

SLOPE INTERCEPT

233+09.69, 57.43' RT

REMOVING CONCRETE SIDEWALK, CONCRETE SIDEWALK 4-INCH REQ'D

233+00"A"

STA 233+02.78, 3.67' RT RADIUS 2.0'

BP: 37+66.00

STA 233+04.95, 13.93' RT RADIUS 2.0'

941.808

REMOVING CURB AND GUTTER, CONCRETE CURB AND GUTTER 30-INCH TYPE A REQ'D

CTH C

EP: 233+40.02"A"

BP: 233+06.78"B"

CP231

BM1010

18" CMP

I.E.=934.60

RIM=941.30

MH

233+57.37, -24.00' LT

REMOVING CONCRETE SIDEWALK, CONCRETE SIDEWALK 5-INCH REQ'D

CURB RAMP TYPE 2

233+82.87, -15.24' LT

ASPHALTIC FLUME

SALVAGED TOPSOIL, SEEDING MIXTURE TYPE 30, MULCHING, FERTILIZER TYPE B

3" BASE AGGREGATE DENSE 3/4"

SLOPE INTERCEPT

4" HMA PAVEMENT

STA 234+25.15"B"

3'

5'

940.757

941.068

941.314

941.379

STH 16 EB ON RAMP

CONCRETE PAVEMENT 8-INCH HES

234+00"B"

940.502

940.808

940.972

941.439

REMOVING CURB AND GUTTER, CONCRETE CURB AND GUTTER 30-INCH TYPE A REQ'D

5'

3'

233+95.05, 5.64' RT

ASPHALTIC FLUME

SLOPE INTERCEPT

3" BASE AGGREGATE DENSE 3/4"

4" HMA PAVEMENT

CURB RAMP TYPE 2

941.341

RAMP CLOSURE GATE SOLAR POWERED 40-FT (G67-58) SEE FTMS PLAN

941.554

233+49.25, 30.77' RT

REMOVING CONCRETE SIDEWALK, CONCRETE SIDEWALK 5-INCH REQ'D

SALVAGED TOPSOIL, SEEDING MIXTURE TYPE 30, MULCHING, FERTILIZER TYPE B

I.E.=934.68

RIM=941.37

BM No.	STATION	OFFSET	DESCRIPTION	ELEVATION
CP 231	233+07.58"B"	5' RT	24" FENO spikes w/plastic cap (Berntsen)	942.5430
BM 1010	233+63.01"B"	78.34' LT	Aluminum cap at SE corner of CTH C bridge over STH 16.	943.7700

2

N

SALVAGED TOPSOIL,
SEEDING MIXTURE TYPE 30,
EROSION MAT CLASS I TYPE B
FERTILIZER TYPE B

REMOVE AND REPLACE STEEL PLATE
BEAM GUARD CLASS A

SLOPE
INTERCEPT

STA 232+90.92"D", 45.67'LT
37' RADIUS

CONCRETE PAVEMENT 8-INCH

233+00"D"

4" HMA PAVEMENT

3" BASE AGGREGATE DENSE ¾-INCH

STA 232+93.29"D", 34.94'RT
20' RADIUS

STEEL PLATE BEAM GUARD
SHORT RADIUS
RADIUS = 24', 9 CRT POSTS

SLOPE INTERCEPT

RAMP CLOSURE GATE SOLAR
POWERED 40-FT
(G67-57) SEE FTMS PLAN

SALVAGED TOPSOIL,
SEEDING MIXTURE TYPE 30,
EROSION MAT CLASS I TYPE B
FERTILIZER TYPE B

CTH C

CP229

EP: 233+57.62"D"

BP: 233+31.01"C"

STA 233+65.08"C", 13.84'LT
2.0' RADIUS

STA 233+68.96"C", 4.39'LT
2.5' RADIUS

CONCRETE CURB AND GUTTER
30-INCH TYPE A

STA 233+70.87"C", 20.98' RT
2.5' RADIUS

XXXX

RIM=938.87

CURB RAMP TYPE 2

233+78.67, 30.46' RT

SALVAGED TOPSOIL,
SEEDING MIXTURE TYPE 30,
MULCHING,
FERTILIZER TYPE B

STA 233+98.47"C", 68.54'LT
42' RADIUS

SALVAGED TOPSOIL,
SEEDING MIXTURE TYPE 30,
EROSION MAT CLASS I TYPE B
FERTILIZER TYPE B

CURB RAMP TYPE 6
SEE SDD AND
CONSTRUCTION DETAILS

CONCRETE MEDIAN SLOPED NOSE TYPE 1

SLOPE INTERCEPT

REMOVING CURB ANG GUTTER,
CONCRETE CURB AND GUTTER
30-INCH TYPE A REQ'D

15'

5'

3'

CONCRETE PAVEMENT 8-INCH

4" HMA PAVEMENT

3" BASE AGGREGATE DENSE 3/4-INCH

234+00"C"

REMOVING CONCRETE SIDEWALK,
CONCRETE SIDEWALK 5-INCH REQ'D

234+07.77, 15.24' RT

15'

5'

3'

235+05.80, -0.67' LT

235+00"C"

STH 16 WB OFF RAMP

ASPHALTIC FLUME

RIPRAP MEDIUM
6' X 10'

SLOPE INTERCEPT

SALVAGED TOPSOIL,
SEEDING MIXTURE TYPE 30,
EROSION MAT CLASS I TYPE B
FERTILIZER TYPE B

18" CMP

I.E.=932.69

BM No.	STATION	OFFSET	DESCRIPTION	ELEVATION
CP 229	233+56.40"D"	6.39' LT	24" FENO spikes w/plastic cap (Berntsen)	939.5220

PROJECT NO:1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	CTH C/STH 16 WB RAMPS	SHEET 28	E

2

2

N

18" CMP
I.E.=930.71
RIM=940.10

CTH C

CTH C

STH 16 WB

STA 232+75, 25' LT
MGS GUARDRAIL
TERMINAL TYPE 2
SEE S.D.D.

+50

REMOVING GUARDRAIL

+00 229+00 230+00 231+00 232+00 233+00 234+00

EXISTING INLET

BRIDGE PIERS

+45

+40

4'

2%

STA 229+65 23' RT
MGS GUARDRAIL
TERMINAL EAT
SEE S.D.D.

STH 16 EB

6'

PAVE TO FACE OF RAIL

30" RCP

30" RCP E=898.84

30" RCP W=904.74

30" RCP E=904.75

30" RCP

30" RCP

BM 1010
EL: 943.77

RIM=941.30

18" CMP

I.E.=934.60

CHAIN LINK FENCE

MH

PROJECT NO:1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	STH 16 MEDIAN AT CTH C	SHEET 29	E

2

2

N

CTH C

I.E.=932.69

6" CPP
I.E.=923.37

STH 16 WB

6'

PAVE TO FACE OF RAIL

+25

+20

4'

2'

STA 237+00, 23' LT
MGS GUARDRAIL
TERMINAL EAT
SEE S.D.D.

BRIDGE PIERS

234+00

235+00

236+00

237+00

238+00

239+00

REMOVING GUARDRAIL

EXISTING INLET

STH 16

+15

STA 233+90, 25' RT
MGS GUARDRAIL
TERMINAL TYPE 2
SEE S.D.D.

STH 16 EB

18" RCP

6" CPP
I.E.=926.84

I.E.=922.99

30" RCP W=910.68

I.E.=927.42

24" RCP

18" CMP

I.E.=934.60

I.E.=929.74

CHAIN LINK FENCE

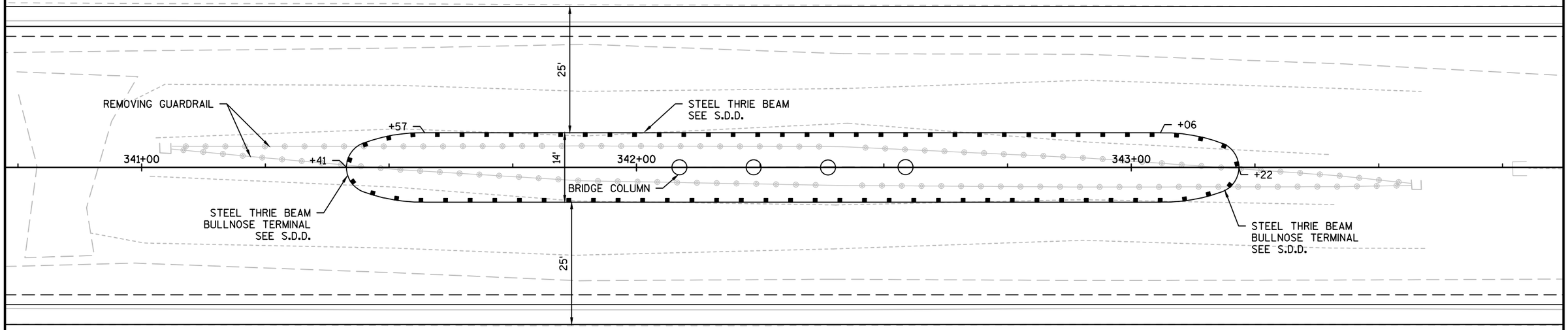
PROJECT NO:1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	STH 16 MEDIAN AT CTH C	SHEET 30	E

2

2

N

STH 16 WB



STH 16 EB

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	STH 16 MEDIAN AT STH 83	SHEET 31	E

2

N

BM2017

RIM=924.00
30" RCP SE=920.78

I.E.=923.67

18" RCP

CONC

RIM=924.25

STH 16 EB OFF RAMP

389+00"E"

390+00"E"

38+00

CTH E

PC: 37+83.17

390+19.40"E", -27.11' LT

REMOVING CONCRETE SIDEWALK,
CONCRETE SIDEWALK 5-INCH REQ'D

SLOPE INTERCEPT

CURB RAMP TYPE 2

STA 390+21.42"E", 35.54' LT
RADIUS 18.5'

REMOVING CURB AND GUTTER,
CURB AND GUTTER 30-INCH TYPE A REQ'D

REMOVING CONCRETE SIDEWALK,
CONCRETE SIDEWALK 5-INCH REQ'D

STA 390+25.15"E",
5.50' RT RADIUS 3.5'

CONCRETE MEDIAN
SLOPED NOSE TYPE 1

STA 389+60.40"E", 97.16' RT
RADIUS 95'

REMOVING CURB AND GUTTER,
CURB AND GUTTER 30-INCH TYPE A REQ'D

CURB RAMP TYPE 6

EP: 390+61.67"E"

RIM=923.99

ADJUST INLET COVER
SALVAGE INLET COVER

RIM=923.57

RIM=923.25

30" RCP NW=919.2

30" RCP E=919.20

ADJUSTING INLET COVER
SALVAGE INLET COVER

CURB RAMP TYPE 2

STA 390+24.05"E", 24.58' RT
RADIUS 1.5'

SLOPE INTERCEPT

STA 389+73.07"E", 60.18' RT
RADIUS 35.5'

REMOVING CONCRETE SIDEWALK,
CONCRETE SIDEWALK 5-INCH REQ'D

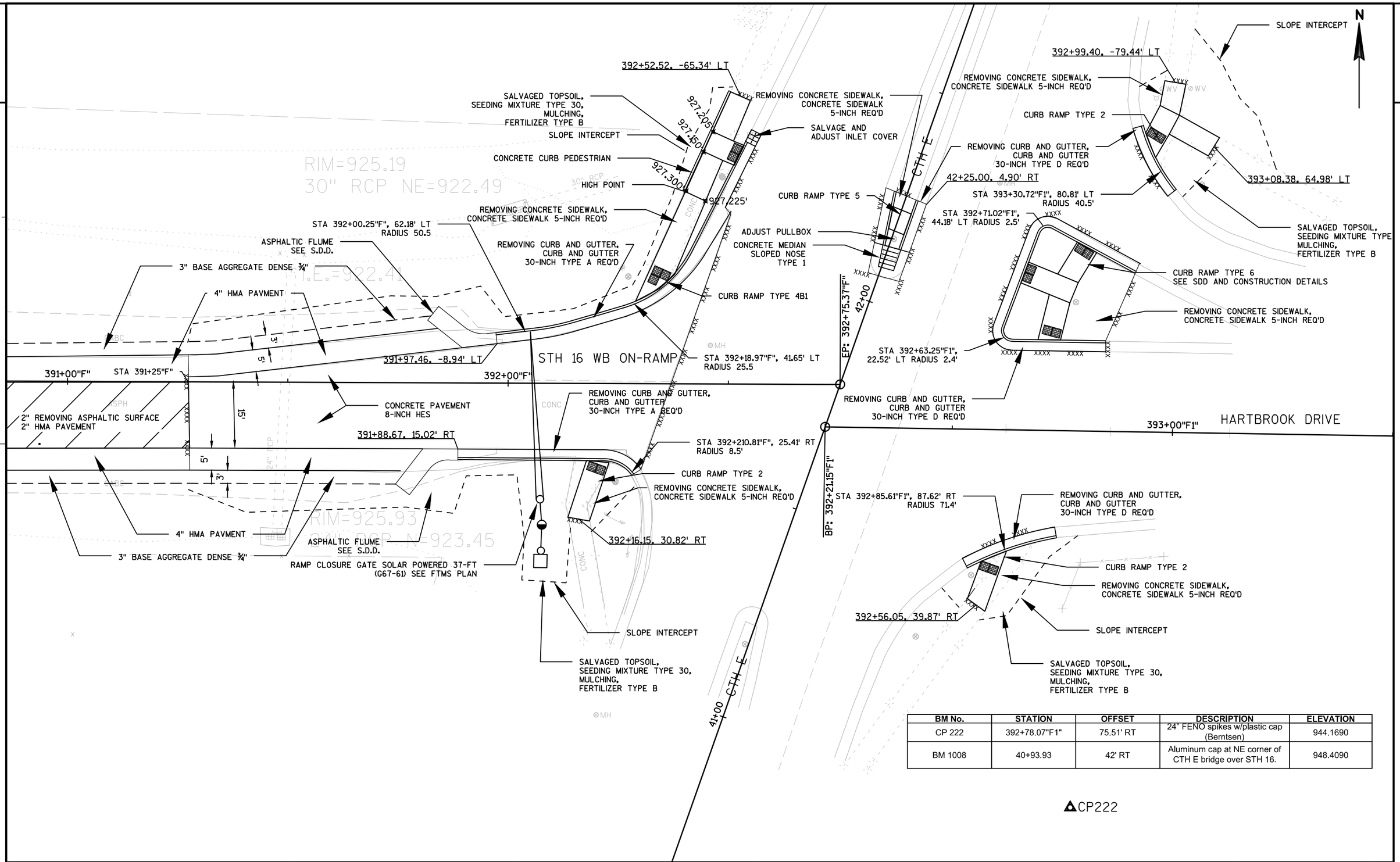
390+02.36"E", 52.77' RT

C.T.H. "E"

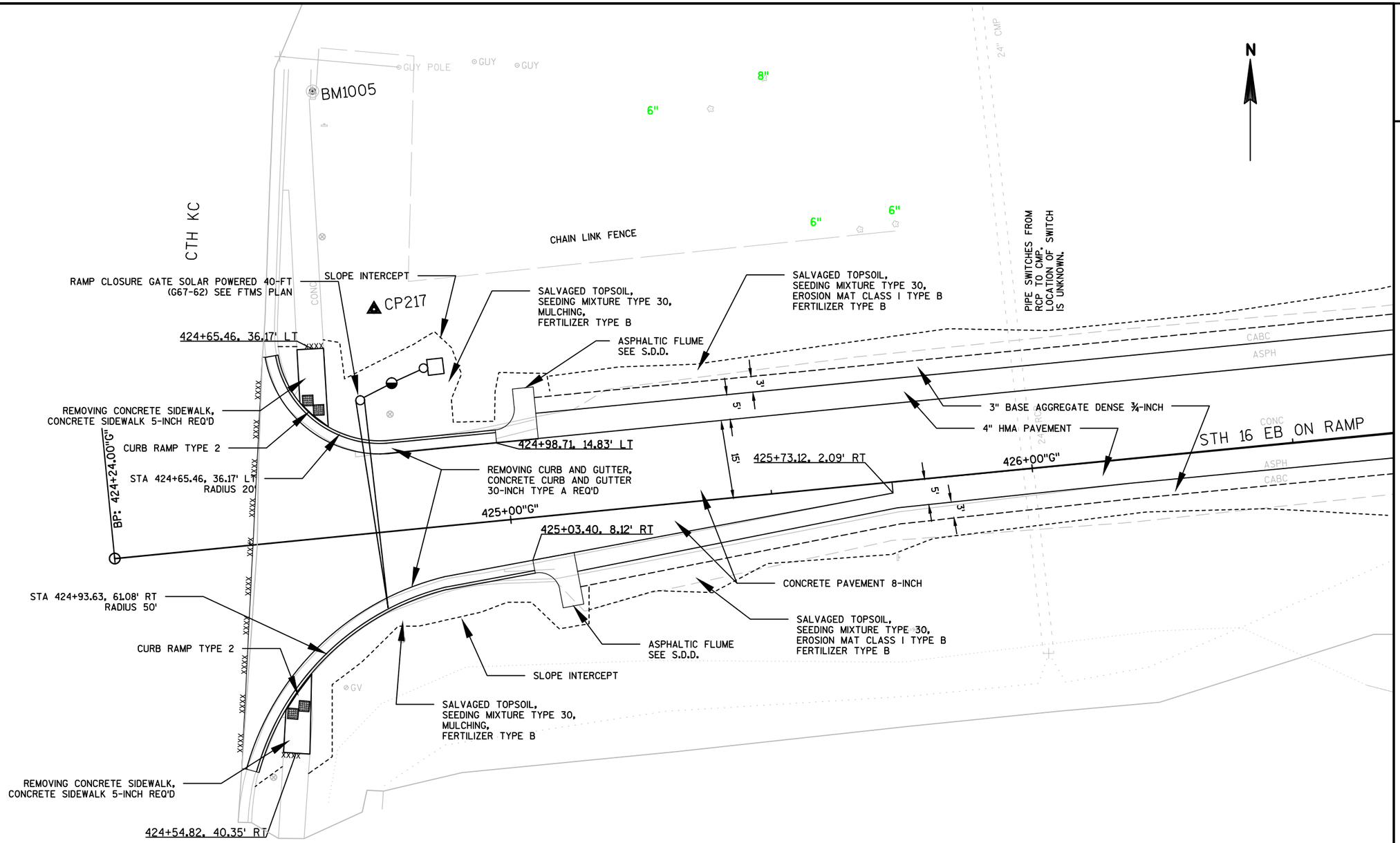
37+00

BM No.	STATION	OFFSET	DESCRIPTION	ELEVATION
BM 2017	38+51.98	1.25' LT	Concrete monument in CTH E median	925.5220

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	CTH E/STH 16 EB OFF RAMP	SHEET 32	E



BM No.	STATION	OFFSET	DESCRIPTION	ELEVATION
CP 222	392+78.07"F1"	75.51' RT	24" FENO spikes w/plastic cap (Berntsen)	944.1690
BM 1008	40+93.93	42' RT	Aluminum cap at NE corner of CTH E bridge over STH 16.	948.4090



BM No.	STATION	OFFSET	DESCRIPTION	ELEVATION
CP 217	424+77.94"G"	42.55' LT	24" FENO spikes w/plastic cap (Berntsen)	959.1710
BM 1005	424+70.33"G"	85.14' LT	Aluminum cap at SE corner of CTH KC bridge over STH 16.	962.0970

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	CTH KC/STH 16 EB ON-RAMP	SHEET 34	E

2

N

GUY POLE

CHAIN LINK FENCE

CONCRETE PAVEMENT 8-INCH HES

SLOPE INTERCEPT

REMOVING CONCRETE SIDEWALK, CONCRETE SIDEWALK 5-INCH REQ'D

CURB RAMP TYPE 4A1

SALVAGED TOPSOIL, SEEDING MIXTURE TYPE 30, MULCHING, FERTILIZER TYPE B

12"

STA 425+07.98"H", 63.89' LT
RADIUS 37.2'

REMOVING CURB AND GUTTER, CONCRETE CURB & GUTTER 30-INCH TYPE A REQ'D

15"

SALVAGED TOPSOIL, SEEDING MIXTURE TYPE 30, MULCHING, FERTILIZER TYPE B

REMOVING CONCRETE SIDEWALK, CONCRETE SIDEWALK 5-INCH REQ'D

EXISTING CURB RAMP TO REMAIN

CTH KC

BP: 424+38.36"H"

STA 424+70.35"H",
12.43' LT
RADIUS 2.2'

CURB RAMP TYPE 6
SEE SDD AND CONSTRUTION DETAILS

CURB RAMP TYPE 1

REMOVING CURB AND GUTTER, CONCRETE CURB & GUTTER 30-INCH TYPE D REQ'D

STA 41+09.32"H1", 74.96' LT
RADIUS 39.0'

STA 424+71.69"H", 4.32' LT
RADIUS 2.8'

425+00"H"

CONCRETE MEDIAN SLOPED NOSE TYPE 1

REMOVING PULLBOX

CONC

CURB RAMP TYPE 2

REMOVING CURB AND GUTTER, CONCRETE CURB & GUTTER 30-INCH TYPE A REQ'D

425+09.57, 15.46' RT

STH 16 WB OFF RAMP

426+00"H"

REMOVING CURB AND GUTTER, CONCRETE CURB & GUTTER 30-INCH TYPE D REQ'D

STA 41+49.22"H1", 9.21' LT RADIUS 2.0'

STA 41+48.18"H1", 4.72' LT RADIUS 3.0'

HARTBROOK DRIVE

EP: 41+82.00"H1"

REMOVING CONCRETE SIDEWALK, CONCRETE SIDEWALK 5-INCH REQ'D

ADJUST PULLBOX

REMOVING CONCRETE SIDEWALK, CONCRETE SIDEWALK 5-INCH REQ'D

CURB RAMP 5

CP216

SLOPE INTERCEPT

ASPHALTIC FLUME SEE S.D.D.

SALVAGED TOPSOIL, SEEDING MIXTURE TYPE 30, MULCHING, FERTILIZER TYPE B

CHAIN LINK FENCE

4" REMOVING ASPHALTIC SURFACE MILLING
4" HMA PAVEMENT

STA 41+13.75"H1", 59.25' RT
RADIUS 35.0'

REMOVING CURB AND GUTTER, CONCRETE CURB & GUTTER 30-INCH TYPE D REQ'D

CURB RAMP TYPE 4A1

SLOPE INTERCEPT

REMOVING CONCRETE SIDEWALK, CONCRETE SIDEWALK 5-INCH REQ'D

BM1006

REMOVING PULLBOX
41+46.65, 48.88' RT

SALVAGED TOPSOIL, SEEDING MIXTURE TYPE 30, MULCHING, FERTILIZER TYPE B

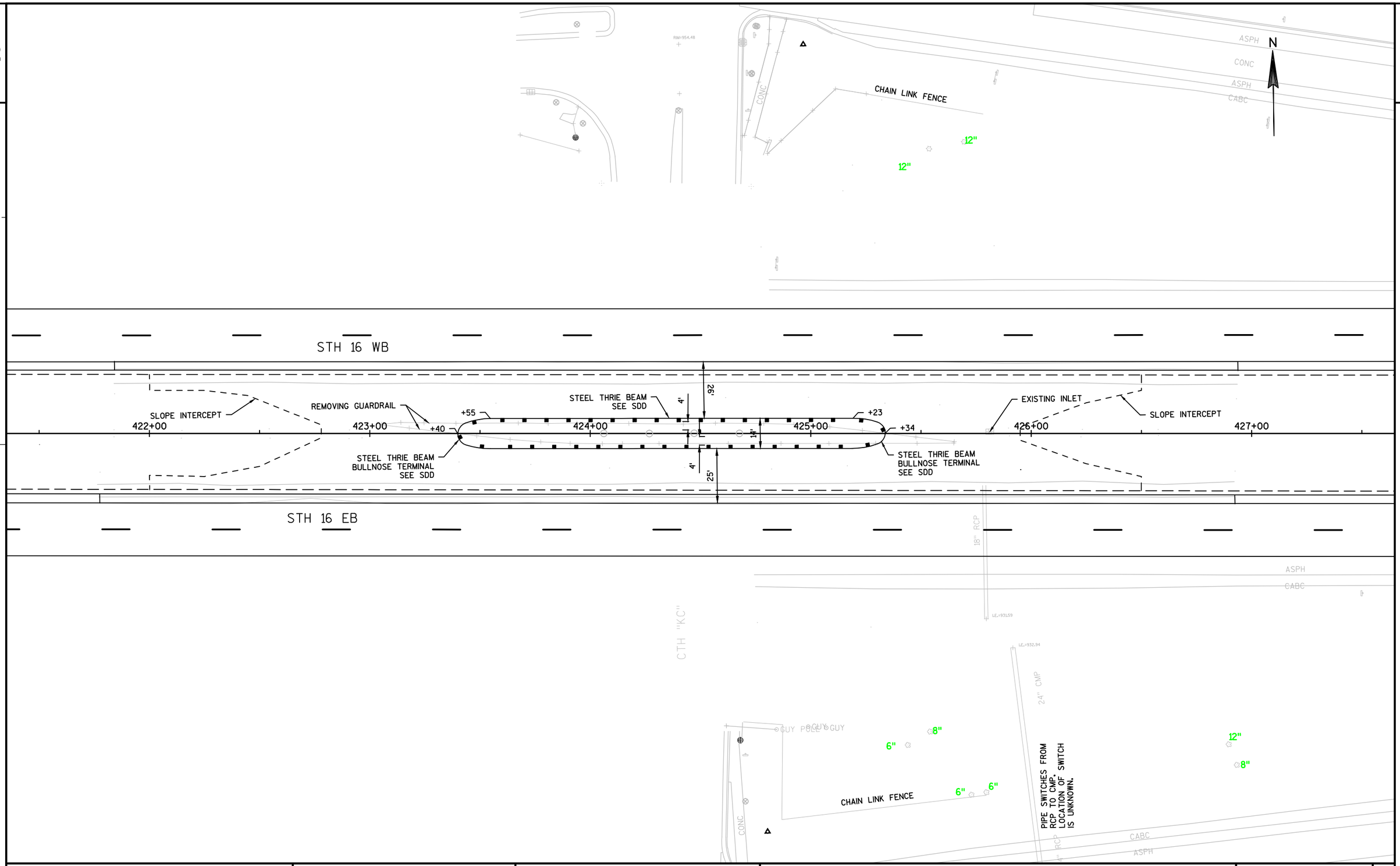
12"

12"

BM No.	STATION	OFFSET	DESCRIPTION	ELEVATION
CP 216	424+96.57"H"	28.26' RT	24" FENO spikes w/plastic cap (Berntsen)	954.1920
BM 1006	41+33.07"H1"	45.61' RT	Aluminum cap at NW corner of CTH KC bridge over STH 16.	958.7910

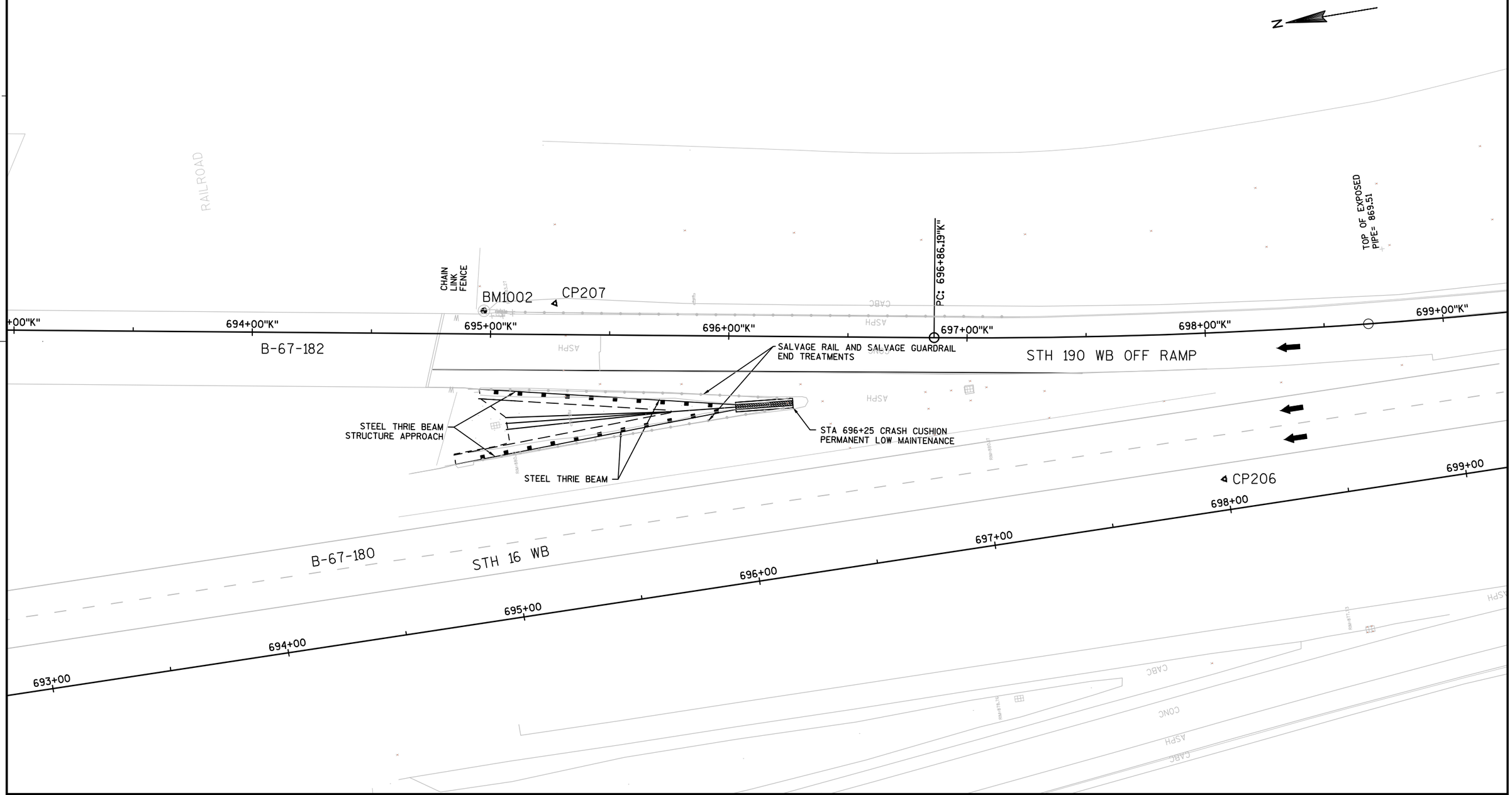
PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	CTH KC/STH 16 WB OFF-RAMP	SHEET 35	E

2



PROJECT NO:1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	STH 16 MEDIAN AT CTH KC	SHEET 36	E

BM#	STATION	OFFSET	DESCRIPTION	ELEVATION
CP 206	697+99.32	12.96' LT	24" FENO spikes w /plastic cap (Berntsen)	878.070
CP 207	695+26.91"K"	13.05' LT	24" FENO spikes w /plastic cap (Berntsen)	882.273
BM 1002	694+97.12"K"	9.72' LT	Aluminum cap at SE corner of Capital Drive Northbound Exit ramp bridge over railroad.	886.331



PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	CRASH CUSHION STA 696+25	SHEET 37	E

FILE NAME : N:\PDS\C3D\13701501\DESIGN\CRASHCUSHION.DWG PLOT DATE : 1/30/2017 8:42 AM PLOT BY : ROTIER, STEVEN J PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

STH 190

N

BP: 685+13.26"J"

EP: 685+70.75

REMOVING CURB AND GUTTER,
CONCRETE CURB AND GUTTER 30-INCH TYPE A REQ'D

SALVAGED TOPSOIL,
SEEDING MIXTURE TYPE 30,
MULCHING,
FERTILIZER TYPE B

STA 685+65.42"J", 70.77' LT
RADIUS 47.5'

685+61.19"J", -23.97' LT

RAMP CLOSURE GATE SOLAR POWERED 40-FT
(G67-69) SEE FTMS PLAN

CONCRETE PAVEMENT 8-INCH

685+80.48"J", -0.36' LT

SALVAGED TOPSOIL,
SEEDING MIXTURE TYPE 30,
MULCHING,
FERTILIZER TYPE B

686+00"J"

STH 16 EB ON RAMP

CONCRETE PAVEMENT 8-INCH

4" HMA PAVEMENT TYPE E-3

3" BASE AGGREGATE DENSE ¾"

686+21.05"J", -17.41' LT

SALVAGED TOPSOIL,
SEEDING MIXTURE TYPE 30,
EROSION MAT CLASS I TYPE B
FERTILIZER TYPE B

SALVAGED TOPSOIL,
SEEDING MIXTURE TYPE 30,
EROSION MAT CLASS I TYPE B
FERTILIZER TYPE B

4" HMA PAVEMENT TYPE E-3

3" BASE AGGREGATE DENSE ¾"

686+50.50"J", 1.28' RT

18"

15'

5'

3'

5'

3'

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	STH 190/STH 16 EB ON-RAMP	SHEET 38	E

2

N

CONCRETE PAVEMENT 8-INCH

4" HMA PAVEMENT

3" BASE AGGREGATE DENSE ¾"

5'

3'

SLOPE INTERCEPT

SALVAGED TOPSOIL,
SEEDING MIXTURE TYPE 30,
EROSION MAT CLASS I TYPE B
FERTILIZER TYPE B

684+23.14"L", -3.56' LT

685+00"L"

685+02.58"L", 7.44' RT

RAMP CLOSURE GATE SOLAR POWERED 26-FT
(G67-67) SEE FTMS PLAN

STH 16 WB ON RAMP

SALVAGED TOPSOIL,
SEEDING MIXTURE TYPE 30,
MULCHING,
FERTILIZER TYPE B

RAMP CLOSURE GATE SOLAR POWERED 26-FT
(G67-68) SEE FTMS PLAN

24" RCP

ASPH

CONC

STH 190

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	STH 190/STH 16 WB ON-RAMP	SHEET 39	E

2

N

SLOPE INTERCEPT

SALVAGED TOPSOIL,
SEEDING MIXTURE TYPE 30,
MULCHING,
FERTILIZER TYPE B

SALVAGED TOPSOIL,
SEEDING MIXTURE TYPE 30,
EROSION MAT CLASS I TYPE B
FERTILIZER TYPE B

SLOPE INTERCEPT

4" HMA PAVEMENT
TYPE E-3

3" BASE AGGREGATE
DENSE 3/4"

ASPHALTIC FLUME

REMOVING CURB AND GUTTER,
CONCRETE CURB AND GUTTER
30-INCH TYPE A REQ'D

STA 735+28.58"N", 24.46' RT
42.0' RADIUS

735+60.14"N", -15.76' LT

3'

5'

15'

STH 16 EB ON RAMP

CONCRETE PAVEMENT
8-INCH

736+32.72"N", 0.81' RT

737+00"N

736+00"N"

REMOVING CURB AND GUTTER,
CONCRETE CURB AND GUTTER
6-INCH SLOPED 36-INCH TYPE A REQ'D

735+63.66, 6.50' RT

PI: 735+05.55"N"

735+00"N"

5'

3'

RAMP CLOSURE GATE SOLAR POWERED 40-FT
(G67-72) SEE FTMS PLAN

3" BASE AGGREGATE
DENSE 3/4"

4" HMA PAVEMENT
TYPE E-3

SALVAGED TOPSOIL,
SEEDING MIXTURE TYPE 30,
EROSION MAT CLASS I TYPE B
FERTILIZER TYPE B

ASPHALTIC FLUME

SALVAGED TOPSOIL,
SEEDING MIXTURE TYPE 30,
MULCHING,
FERTILIZER TYPE B

STA 735+46.64"N", 34.98' RT
RADIUS 28.0'

SLOPE INTERCEPT

6'

4" HMA PAVEMENT
TYPE E-3

REMOVING ASPHALTIC SURFACE

735+69.15"N", 64.15' RT

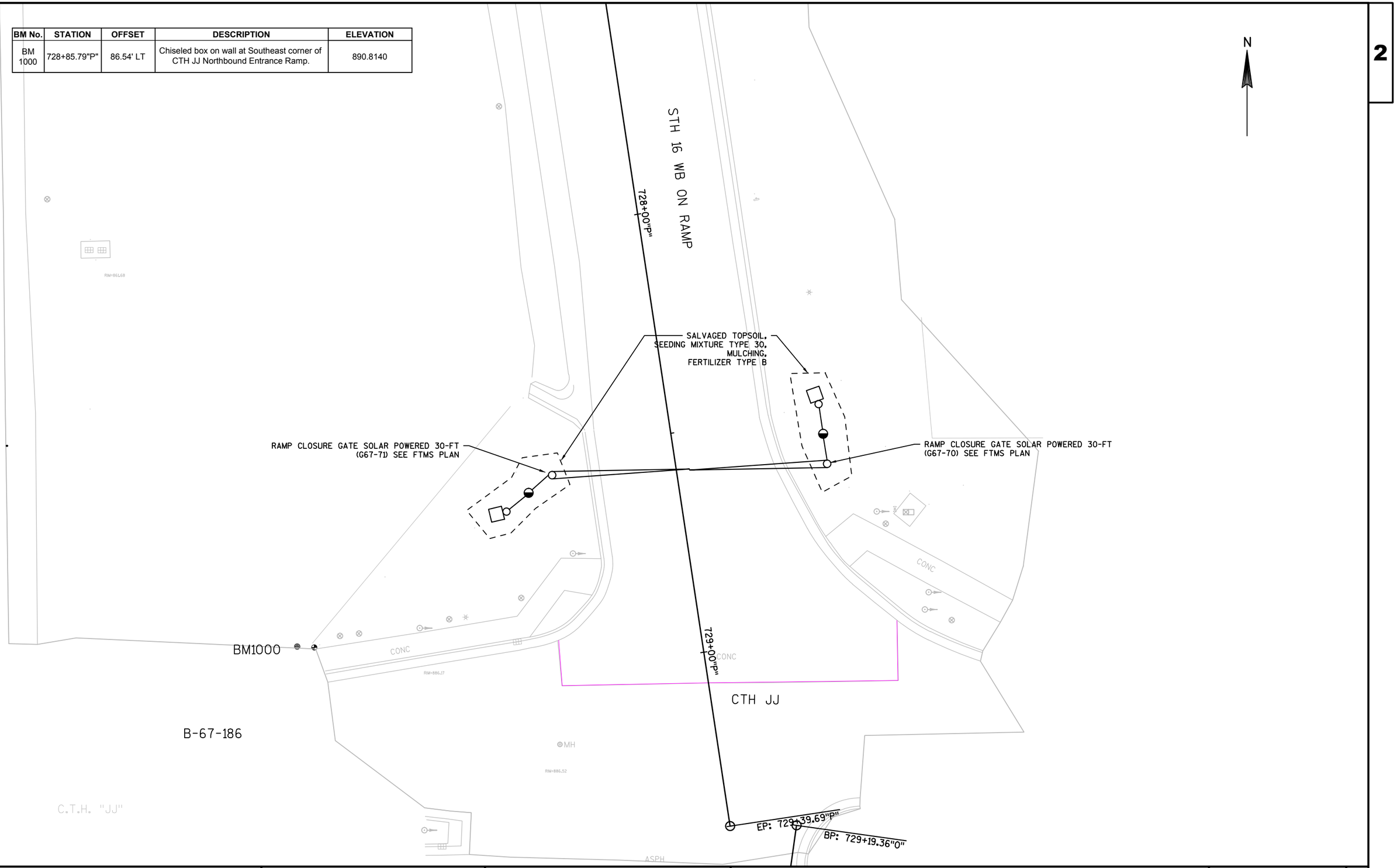
CTH T

BP: 734+20.55"N"

PROJECT NO:1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	CTH JJ/STH 16 EB ON RAMP	SHEET 40	E

FILE NAME : N:\PDS\C3D\13701501\DESIGN\CTHJJEBONRAMP.DWG PLOT DATE : 1/30/2017 8:51 AM PLOT BY : ROTIER, STEVEN J PLOT NAME : PLOT SCALE : 1 IN:20 FT

BM No.	STATION	OFFSET	DESCRIPTION	ELEVATION
BM 1000	728+85.79"P"	86.54' LT	Chiseled box on wall at Southeast corner of CTH JJ Northbound Entrance Ramp.	890.8140



PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	CTH JJ/STH 16 WB ON RAMP	SHEET 41	E

FILE NAME : N:\PDS\C3D\13701501\DESIGN\CTHJJEBONRAMP.DWG PLOT DATE : 1/30/2017 8:51 AM PLOT BY : ROTIER, STEVEN J PLOT NAME : PLOT SCALE : 1 IN:20 FT

2

WB ON RAMP

CTH JJ

BM 1000
EL:890.81

CP 202
EL:885.92

N

STH 16 WB

STA 728+70 19' LT
MGS GUARDRAIL
TERMINAL TYPE 2
SEE S.D.D.

PI 729+31.27

PAVE TO FACE OF RAIL

4'

2'

6'

+45

SLOPE INTERCEPT

+00

725+00

726+00

727+00

728+00

729+00

730+00

BRIDGE PIERS

REMOVING GUARDRAIL

+20

+10

PAVE TO FACE OF RAIL

STA 725+35 17' RT
MGS GUARDRAIL
TERMINAL EAT
SEE S.D.D.

STH 16 EB

PROJECT NO:1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	STH 16 MEDIAN AT CTH JJ	SHEET 42	E

FILE NAME : N:\PDS\C3D\13701501\DESIGN\CHJJMEDIANDETAIL2.DWG
LAYOUT NAME - CTHJJMEDIANDETAIL1

PLOT DATE : 1/30/2017 8:53 AM PLOT BY : ROTIER, STEVEN J PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

2

WB OFF RAMP

CP 202:
EL:885.92

CTH JJ

STH 16 WB

PAVE TO FACE OF RAIL

REMOVING GUARDRAIL

STA 733+45 17' LT
MGS GUARDRAIL
TERMINAL EAT
SEE S.D.D.

6'

4'

2'

730+00 731+00 732+00 733+00 734+00 735+00

SLOPE INTERCEPT

BRIDGE PIERS

EXISTING INLET

STA 730+10 19' RT
MGS GUARDRAIL
TERMINAL TYPE 2
SEE S.D.D.

STH 16 EB

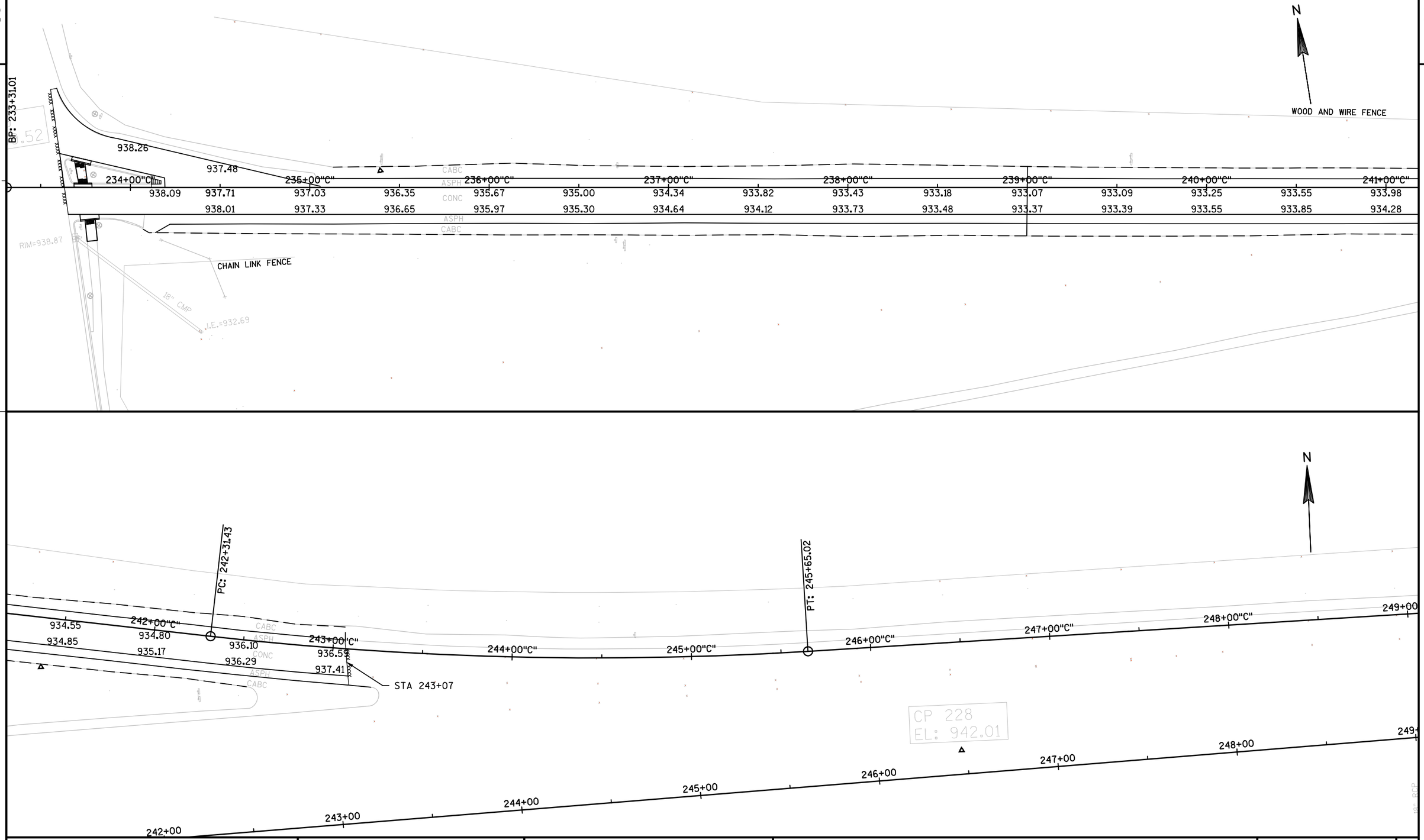
EB ON RAMP

PROJECT NO:1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	STH 16 MEDIAN AT CTH JJ	SHEET 43	E

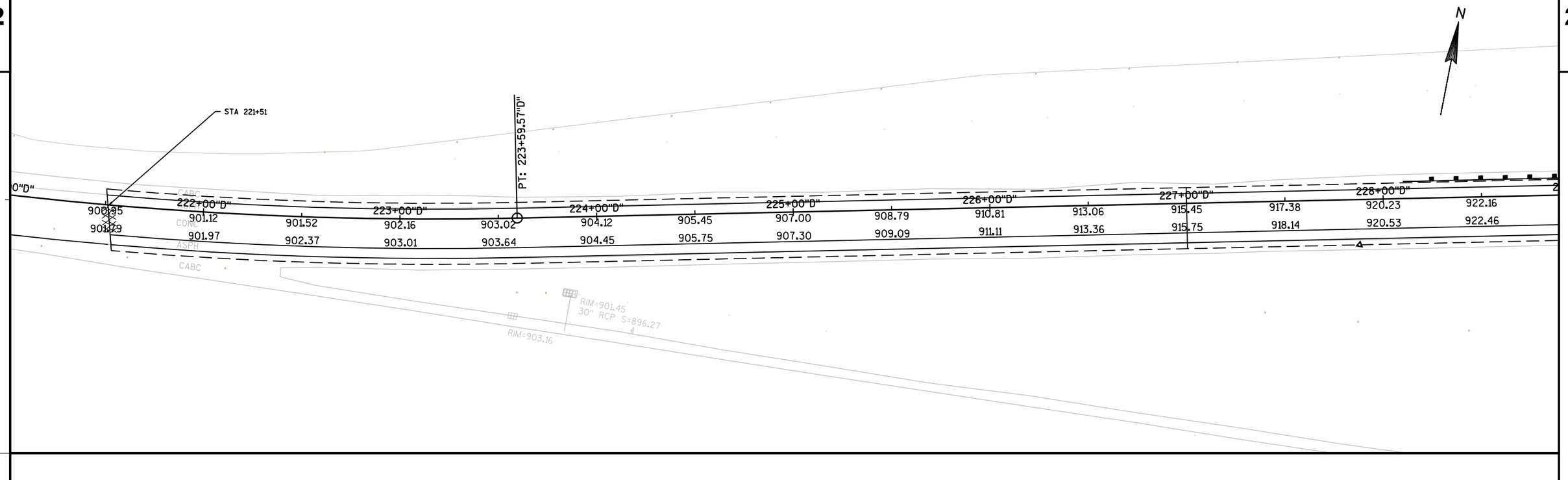
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LAYOUT NAME - CTHJJMEDIANDETAIL2

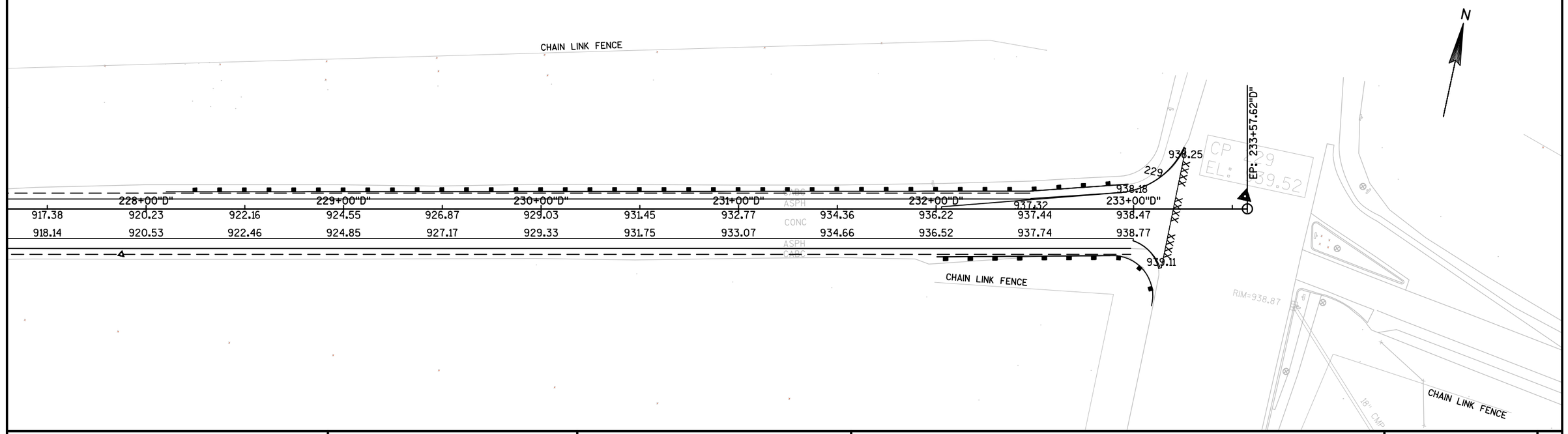
PLOT DATE : 1/30/2017 8:53 AM PLOT BY : ROTIER, STEVEN J PLOT NAME : PLOT SCALE : 1 IN:40 FT

2



PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PAVING DETAILS - CTH C WB OFF-RAMP	SHEET 44	E





PROJECT NO:1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PAVING DETAILS - CTH C WB ON-RAMP	SHEET 45	E

2

N

I.E.=954.19

24" RCP

I.E.=952.74

329+00"Q"

330+00"Q"

331+00"Q"

332+00"Q"

333+00"Q"

334+00"Q"

335+00"Q"

336+00"Q"

965.73 967.31 968.91 970.79 972.83 974.98 977.31 979.72 982.25 984

966.03 967.62 969.24 971.11 973.15 975.29 977.63 980.04 982.56 985

WOOD AND WIRE FENCE

N

12" 12" 10" 10"

982.25 984.77 987.27 989.79 992.26 994.71 996.80 998.29 999.31

982.56 985.09 987.59 990.10 992.56 995.03 997.12 998.61 999.61

336+00"Q" 337+00"Q" 338+00"Q" 339+00"Q" 340+00"Q"

CABC ASPH

CONC

ASPH CABC

341+00"Q"

BP: 340+06.42"R"

EP: 341+19.33"Q"

340

STH "83"

PC: 341+76.43"R"

342+00"R"

341+00"R"

ASPH CONC

CONC ASPH

MH

8"

WOOD AND WIRE FENCE

BP: 338+03.23

CP 227
EL:998.85

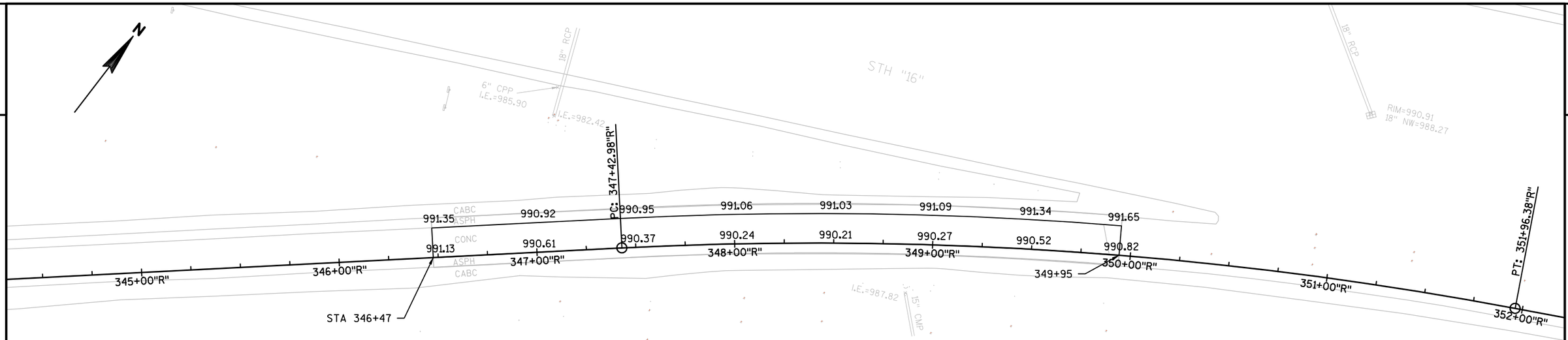
PROJECT NO:1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PAVING DETAILS - STH 83 EB OFF-RAMP	SHEET 46	E

FILE NAME : N:\PDS\C3D\13701501\SHEETSOTHER\PG STH 83 WB ON RAMP.DWG
LAYOUT NAME - SHEET - (3)

PLOT DATE : 1/23/2017 11:23 AM PLOT BY : ROTIER, STEVEN J PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 44

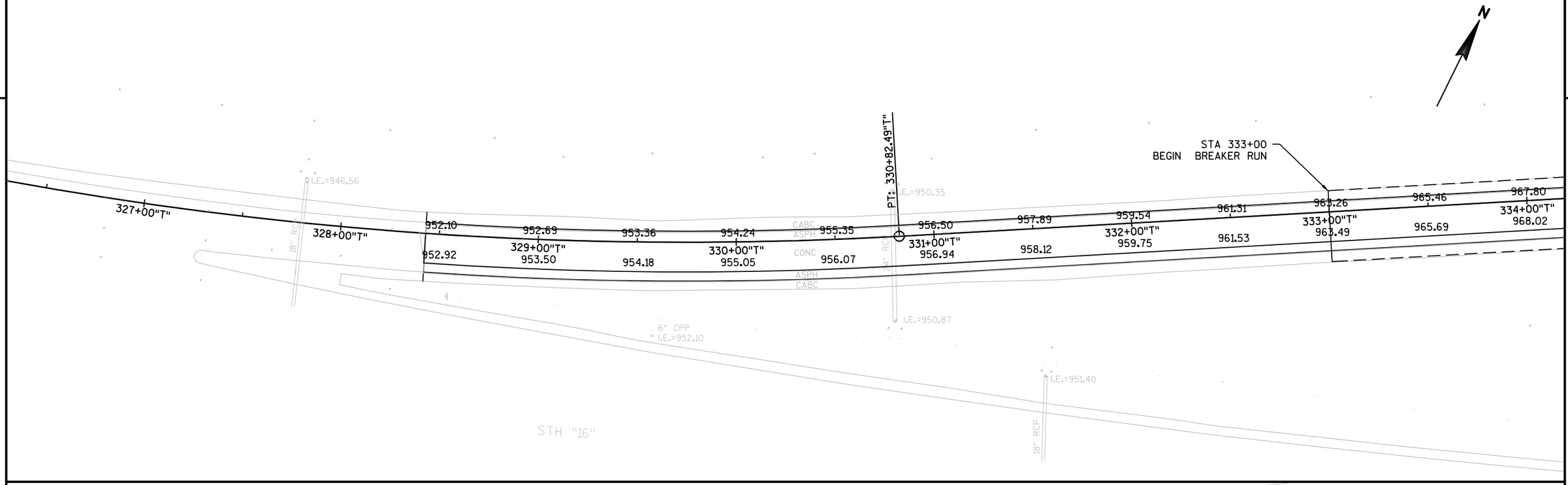
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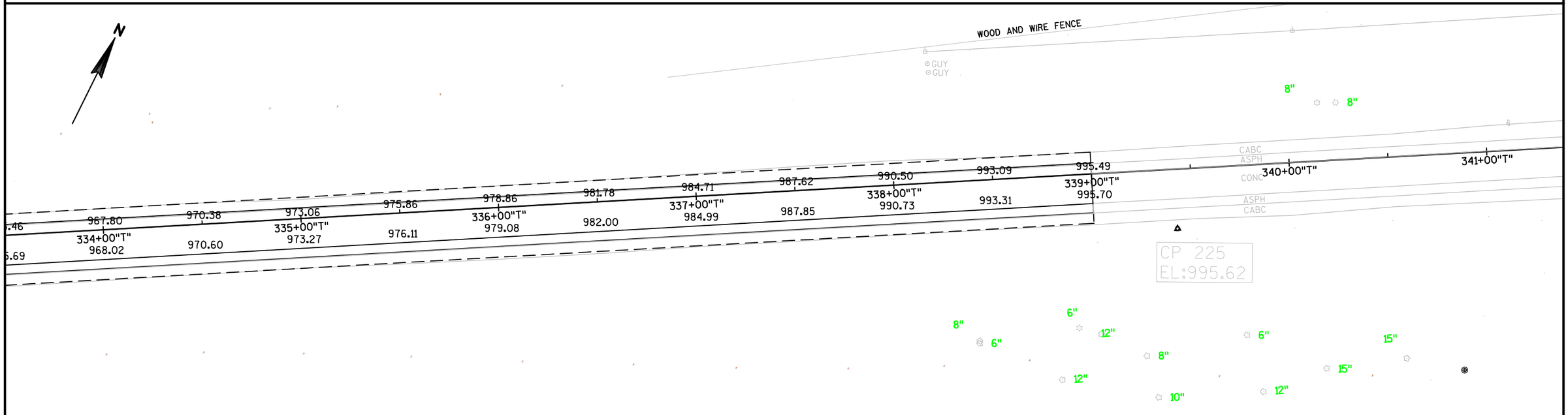


PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PAVING DETAILS - STH 83 EB ON-RAMP	SHEET 47	E

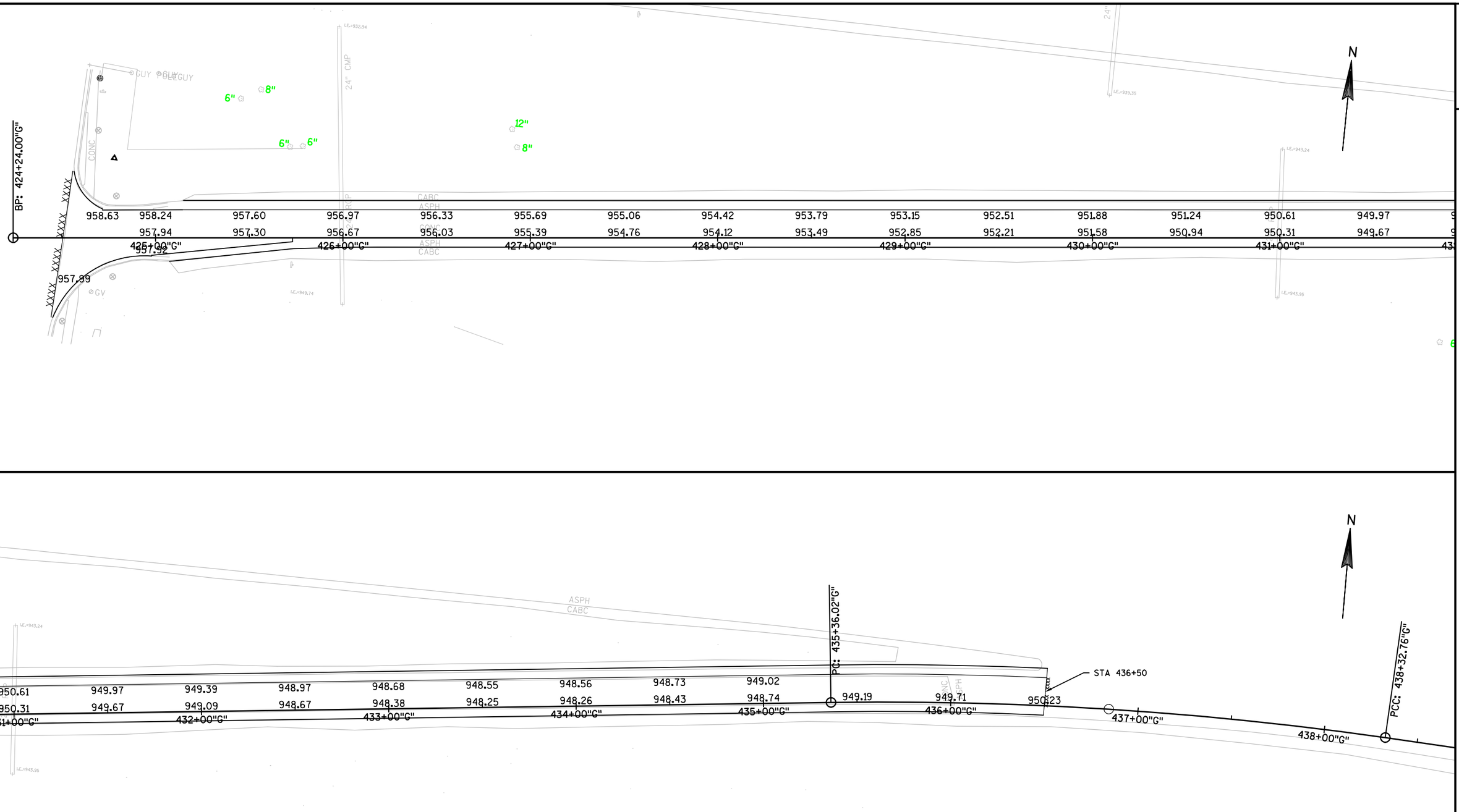
FILE NAME : N:\PDS\C3D\13701501\SHEETSOTHER\PG STH 83 WB ON RAMP.DWG
LAYOUT NAME - SHEET - (5)
PLOT DATE : 1/23/2017 11:23 AM PLOT BY : ROTIER, STEVEN J PLOT NAME : PLOT SCALE : 1 IN:50 FT

2



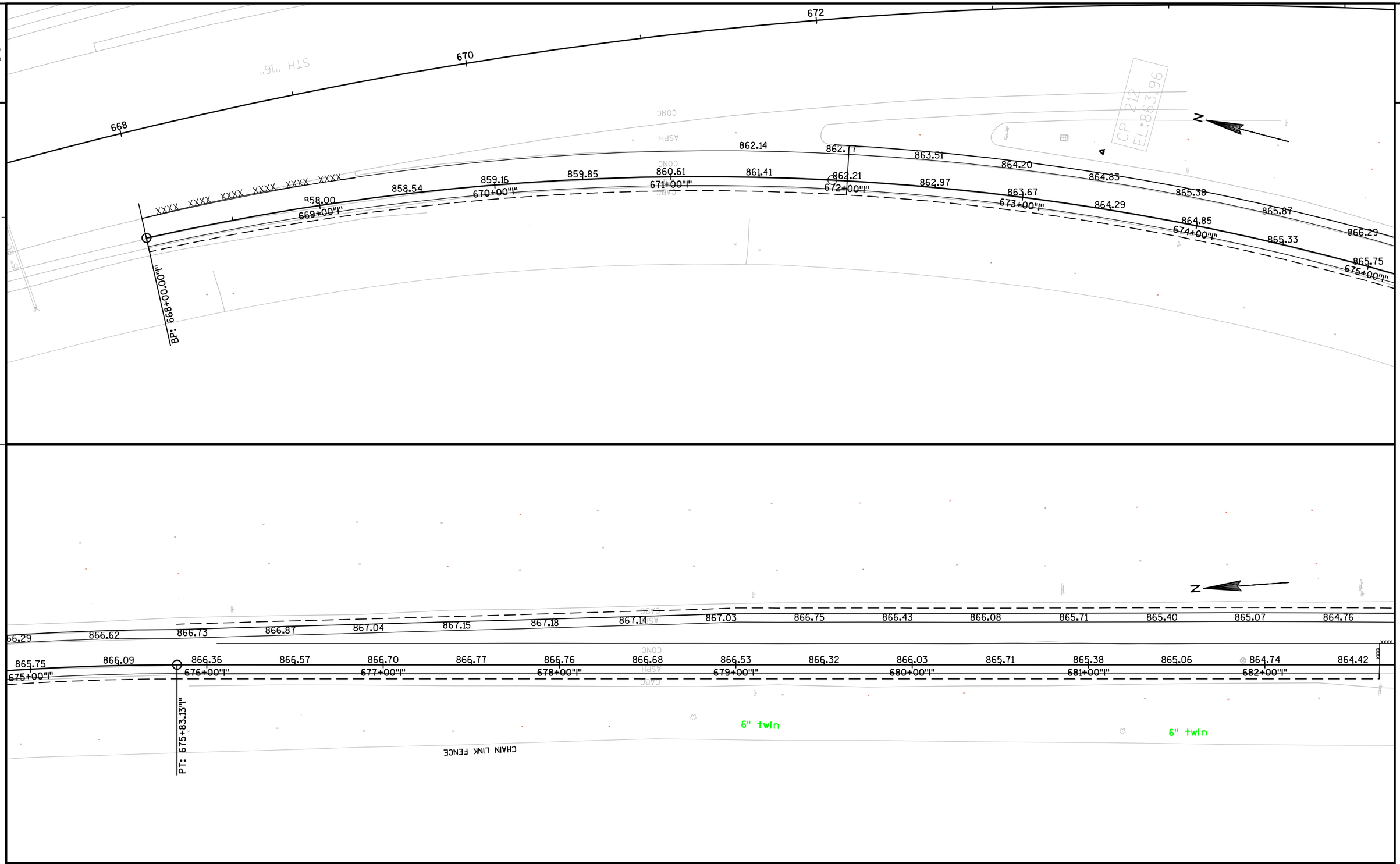


PROJECT NO:1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PAVING DETAILS - STH 83 WB ON-RAMP	SHEET 48	E



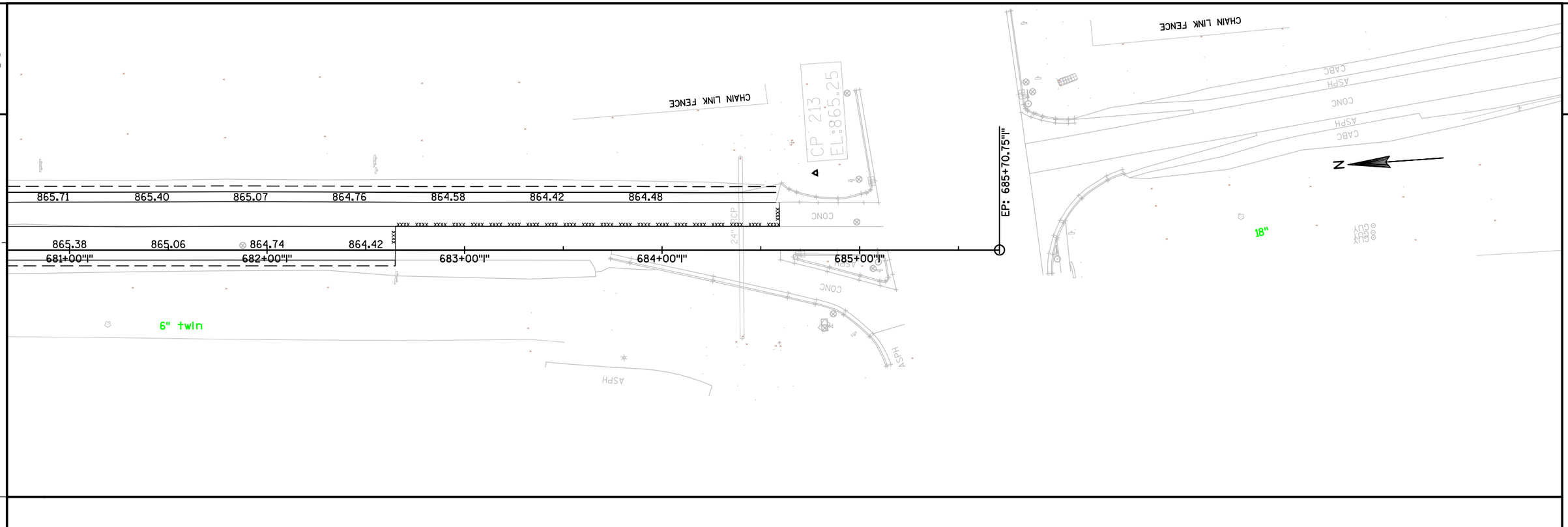
PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PAVING DETAILS - CTH KC EB ON-RAMP	SHEET 49	E

2



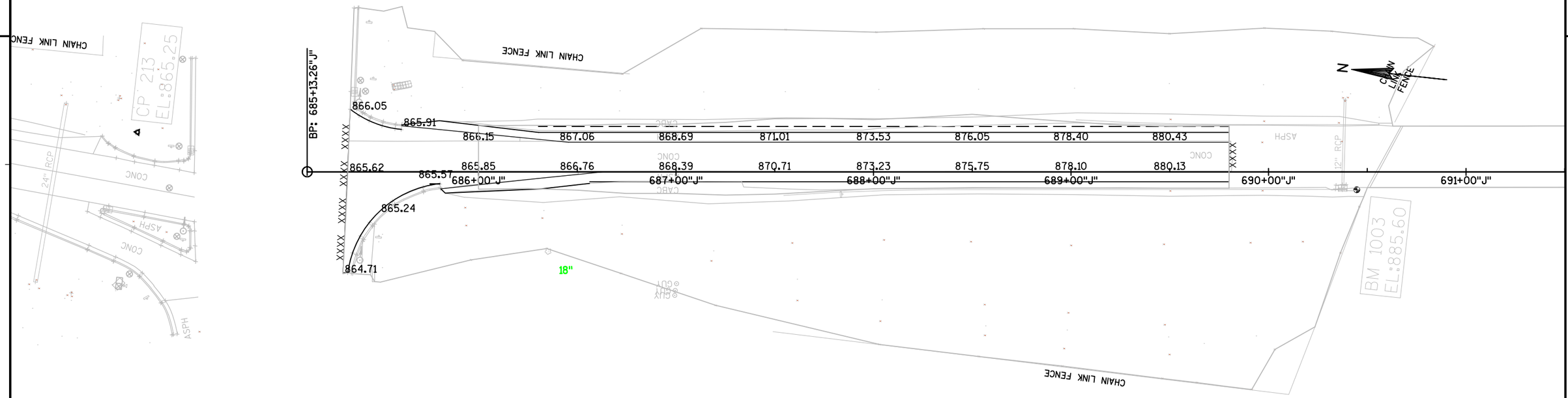
PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PAVING DETAILS - STH 190 EB OFF-RAMP	SHEET 50	E

FILE NAME : N:\PDS\C3D\13701501\SHEETSOTHER\PG STH 190 NW OFF RAMP.DWG PLOT DATE : 1/23/2017 12:43 PM PLOT BY : ROTIER, STEVEN J PLOT NAME : PLOT SCALE : 1 IN:50 FT

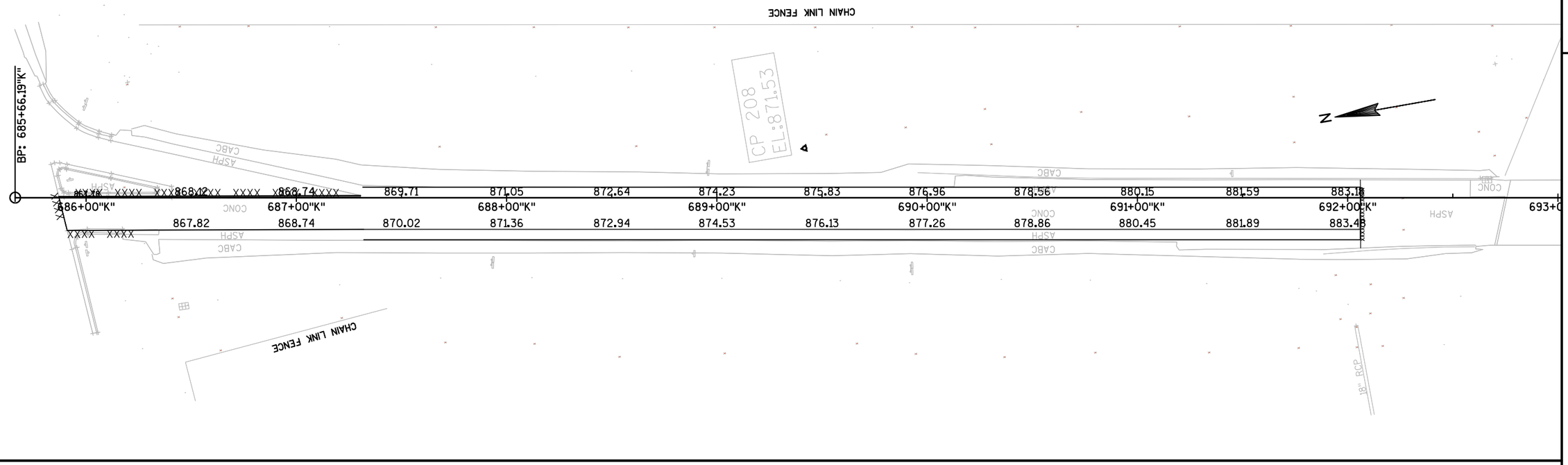


2

PROJECT NO:1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PAVING DETAILS - STH 190 EB OFF-RAMP	SHEET 51	E

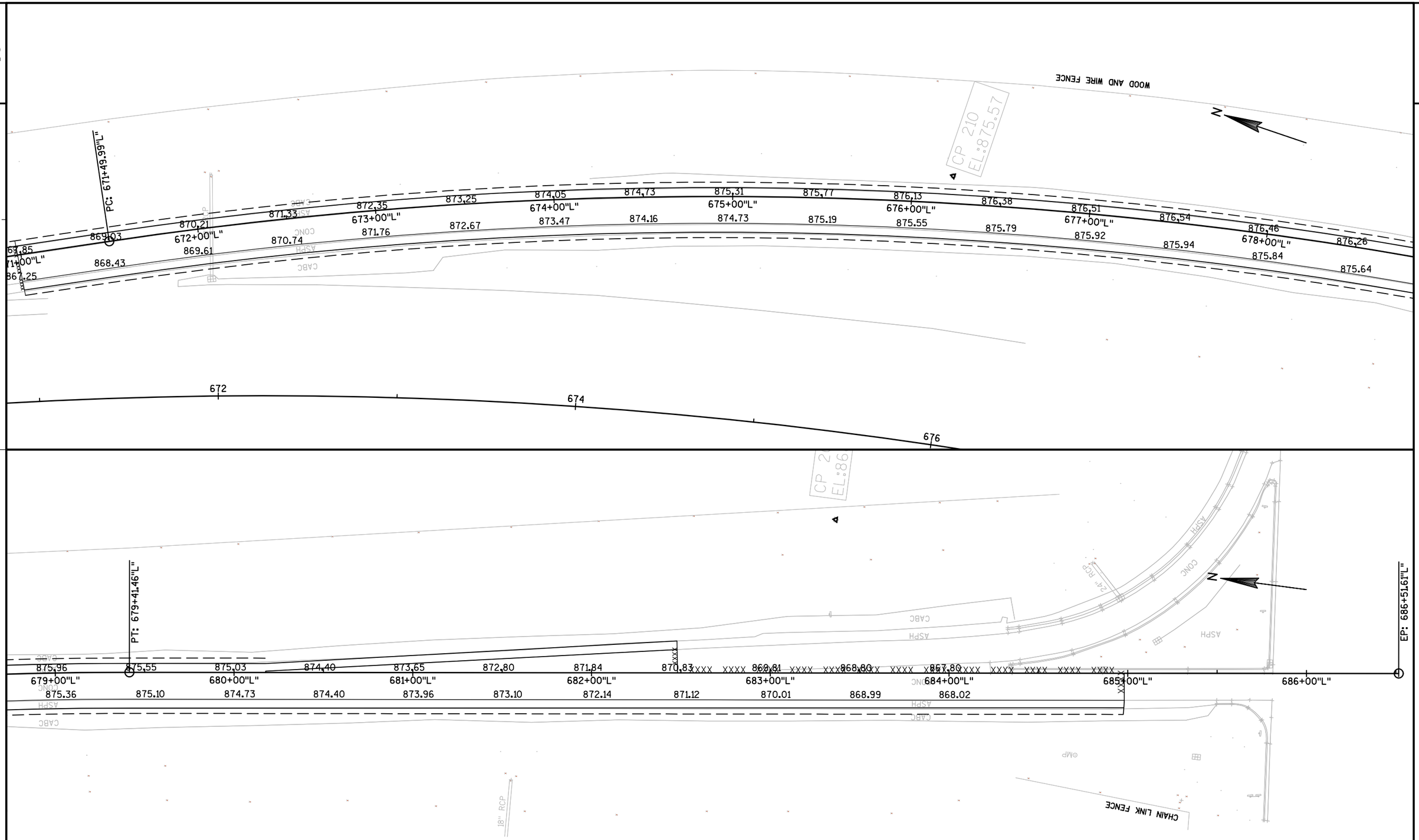

CHAIN LINK FENC
CP 213
EL:865.25
24" RCP
CONC
ASPH
CONC
ASPH
CHAIN LINK FENCE
BP: 685+13.26"J"
866.05
865.91
866.15
867.06
868.69
871.01
873.53
876.05
878.40
880.43
865.62
865.57
865.85
866.76
868.39
870.71
873.23
875.75
878.10
880.13
686+00"J"
687+00"J"
688+00"J"
689+00"J"
690+00"J"
691+00"J"
865.24
864.71
18"
CONC
ASPH
12" RCP
N
CHAIN LINK FENCE
BM 1003
EL:885.60
CHAIN LINK FENCE

2



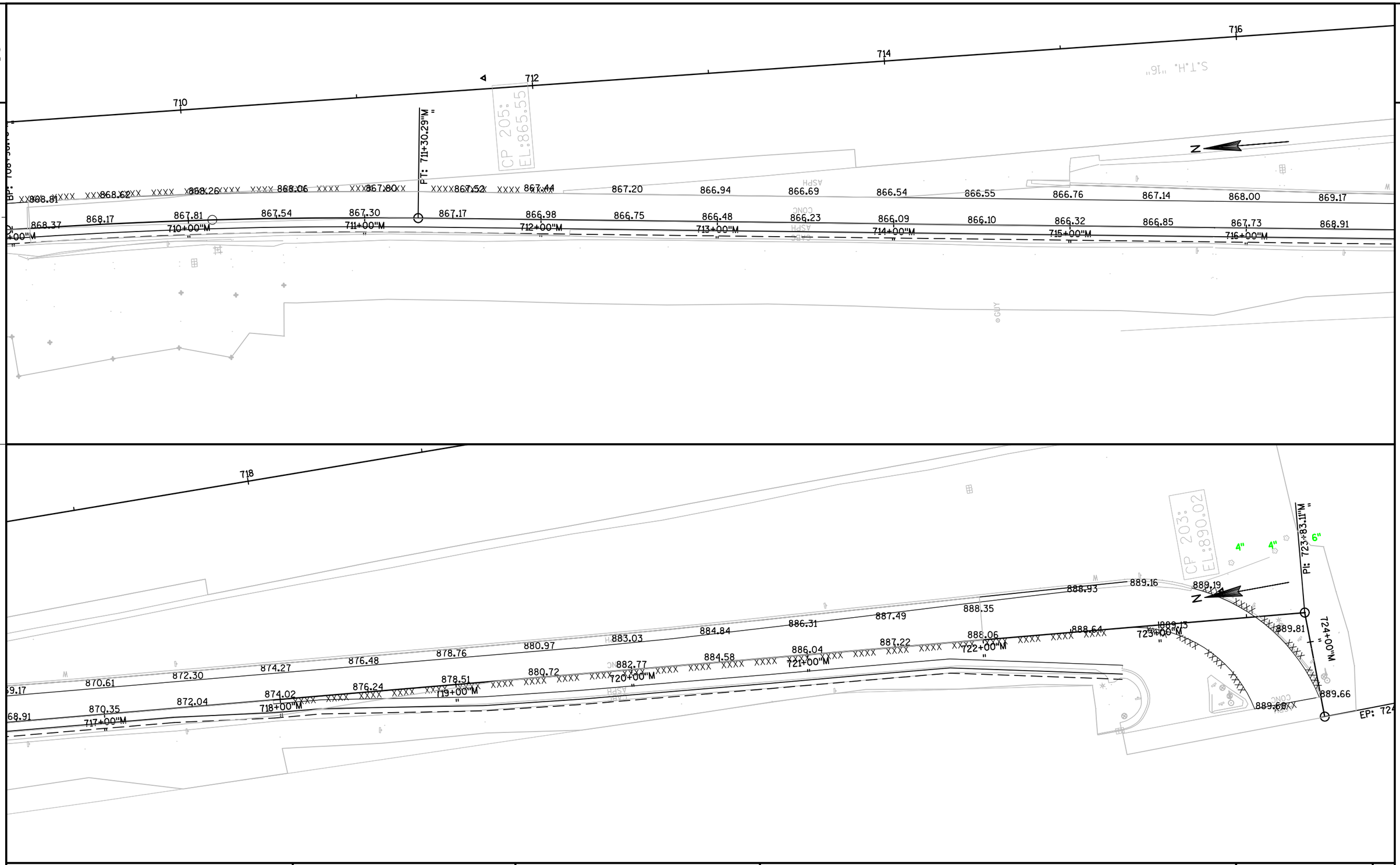
PROJECT NO:1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PAVING DETAILS - STH 190 WB OFF RAMP	SHEET 53	E

2

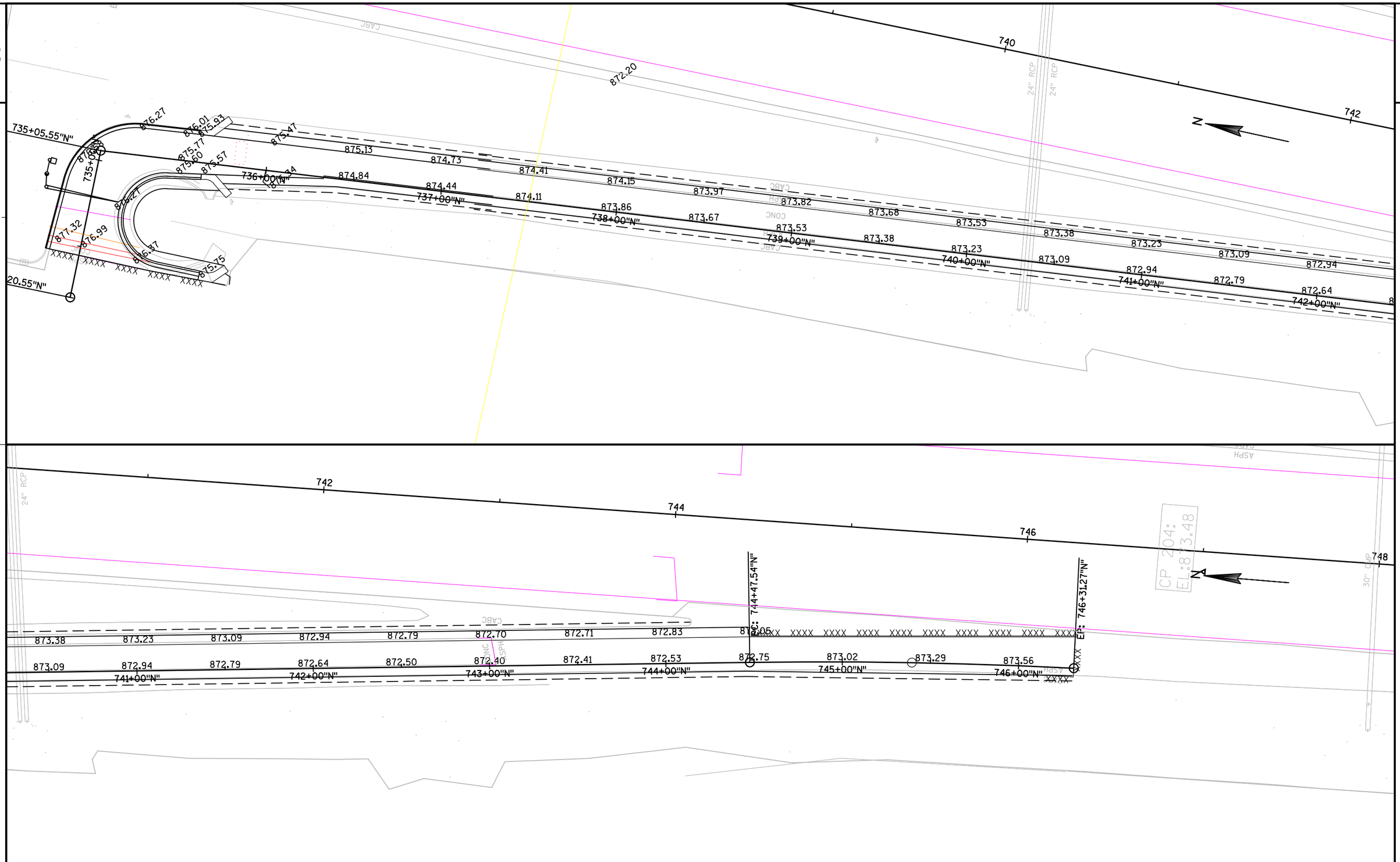


PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PAVING DETAILS - STH 190 WB ON-RAMP	SHEET 54	E

FILE NAME : N:\PDS\C3D\13701501\SHEETSOTHER\PG STH 190 NE ON RAMP.DWG PLOT DATE : 1/23/2017 12:40 PM PLOT BY : ROTIER, STEVEN J PLOT NAME : PLOT SCALE : 1 IN:50 FT



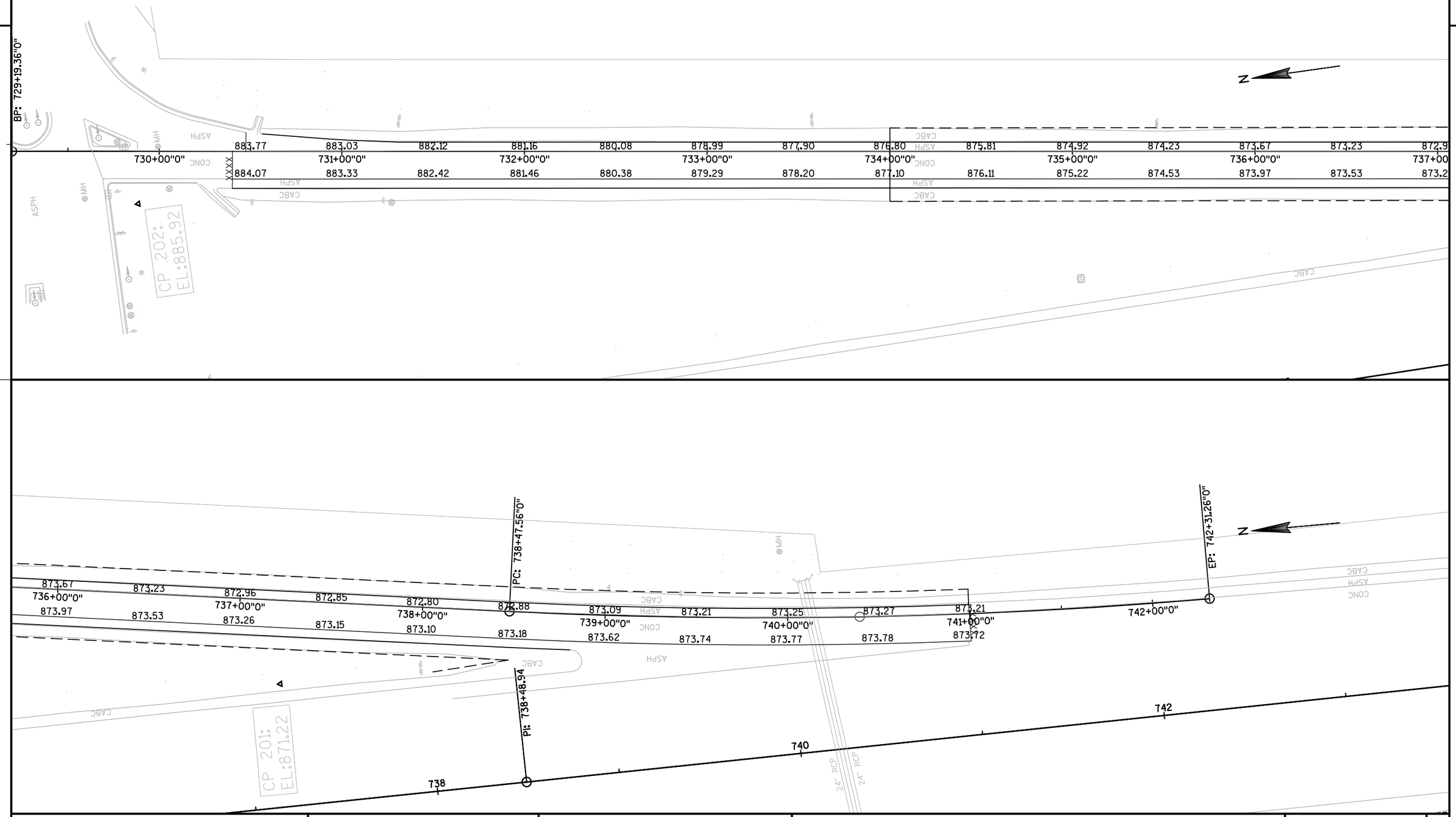
PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PAVING DETAILS - CTH JJ EB OFF-RAMP	SHEET 55	E



PROJECT NO:1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PAVING DETAILS - CTH JJ EB ON-RAMP	SHEET 56	E

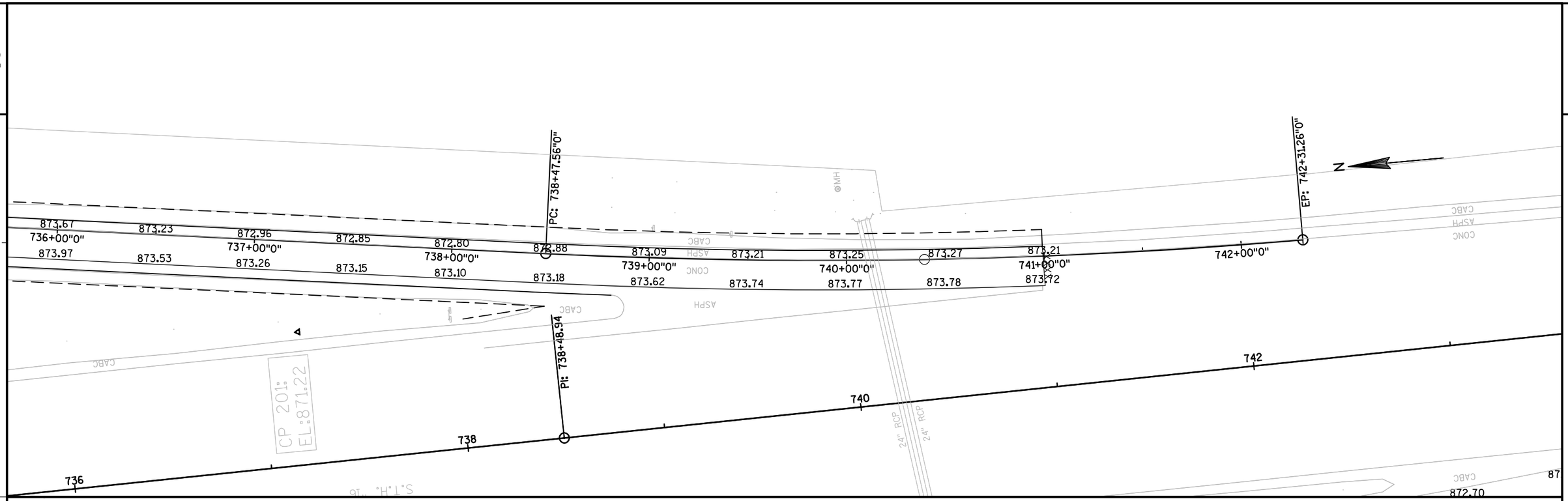
FILE NAME : N:\PDS\C3D\13701501\SHEETSOTHER\PG CTH JJ SW ON RAMP.DWG PLOT DATE : 1/23/2017 9:49 AM PLOT BY : ROTIER, STEVEN J PLOT NAME : PLOT SCALE : 1 IN:50 FT

2



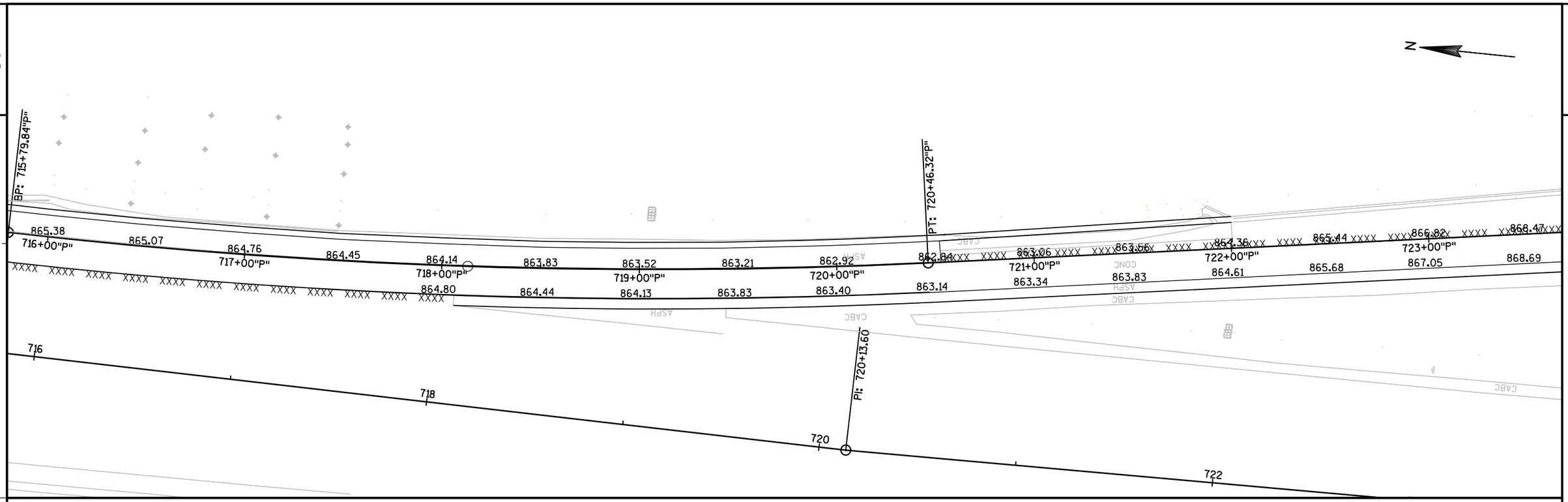
PROJECT NO:1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PAVING DETAILS - CTH JJ WB OFF-RAMP	SHEET 57	E

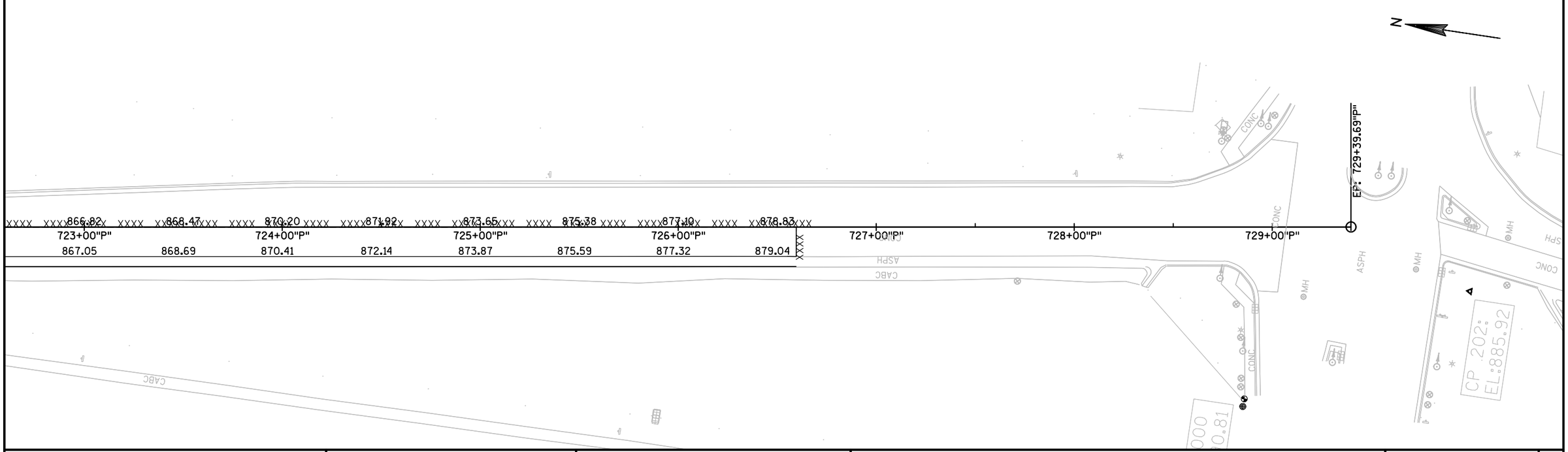
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PROJECT NO:1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PAVING DETAILS - CTH JJ WB OFF-RAMP	SHEET 58	E

2





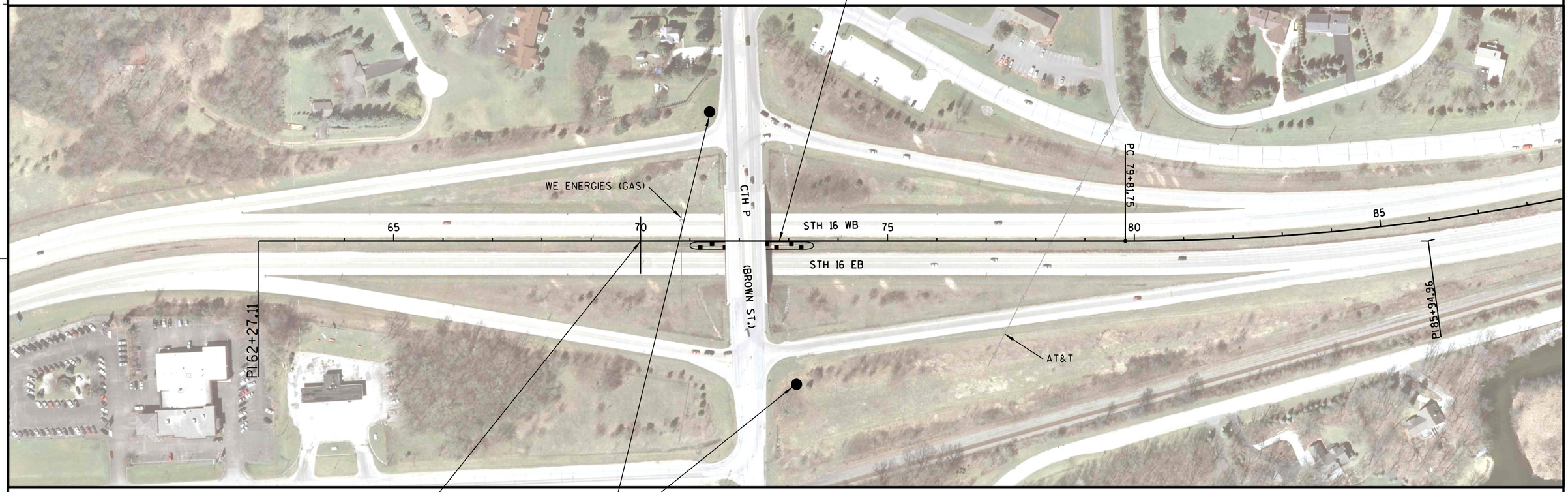
PROJECT NO:1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PAVING DETAILS - CTH JJ WB ON-RAMP	SHEET 59	E

2

2

N

STA. 71+05 - STA. 73+17 MEDIAN
REMOVE EXISTING BEAM GUARD
INSTALL STEEL THRIE BEAM AND
STEEL THRIE BEAM TERMINAL (SEE S.D.D.)



BEGIN PROJECT
STA. 70+00

INSTALL BARRICADE RACK
(SEE SDD)

LEGEND

- WETLANDS
- RESIN BINDER HIGH FRICTION SURFACE TREATMENT
- REMOVING PAVEMENT, PAVEMENT REPLACEMENT (SEE PROPOSED TYPICAL SECTIONS)
- REMOVING PAVEMENT, BREAKER RUN, PAVEMENT REPLACEMENT (SEE PROPOSED TYPICAL SECTIONS)
- XXXX SAWCUT
- RAMP CLOSURE GATE
- BARRICADE RACK
- APRON ENDWALL REPAIR
- CULVERT LINER
- MGS GUARDRAIL, STEEL PLATE THRIE BEAM, OR STEEL PLATE CLASS A

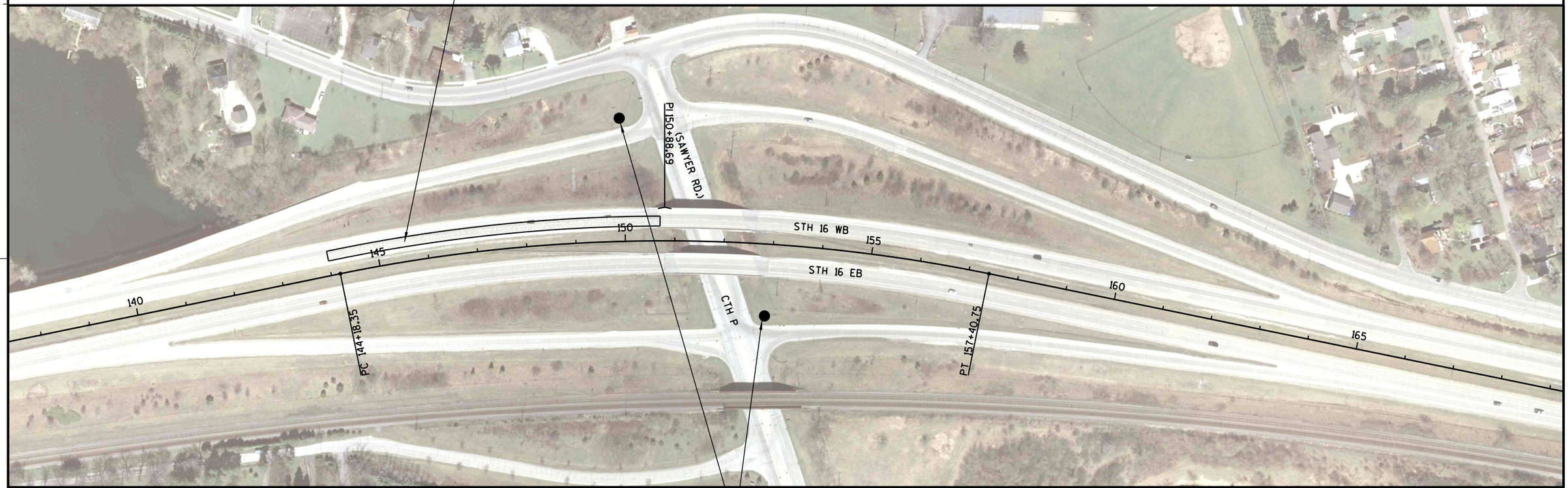
PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PLAN DETAILS	SHEET 60	E

2

2

STA. 149+61 - STA. 150+62 WB, 22'LT
INSTALL MGS GUARDRAIL 3
STA. 149+62 22'LT
MGS GUARDRAIL TERMINAL TYPE 2

STA. 144+00 - STA. 150+70 WB



INSTALL BARRICADE RACK
(SEE SDD)

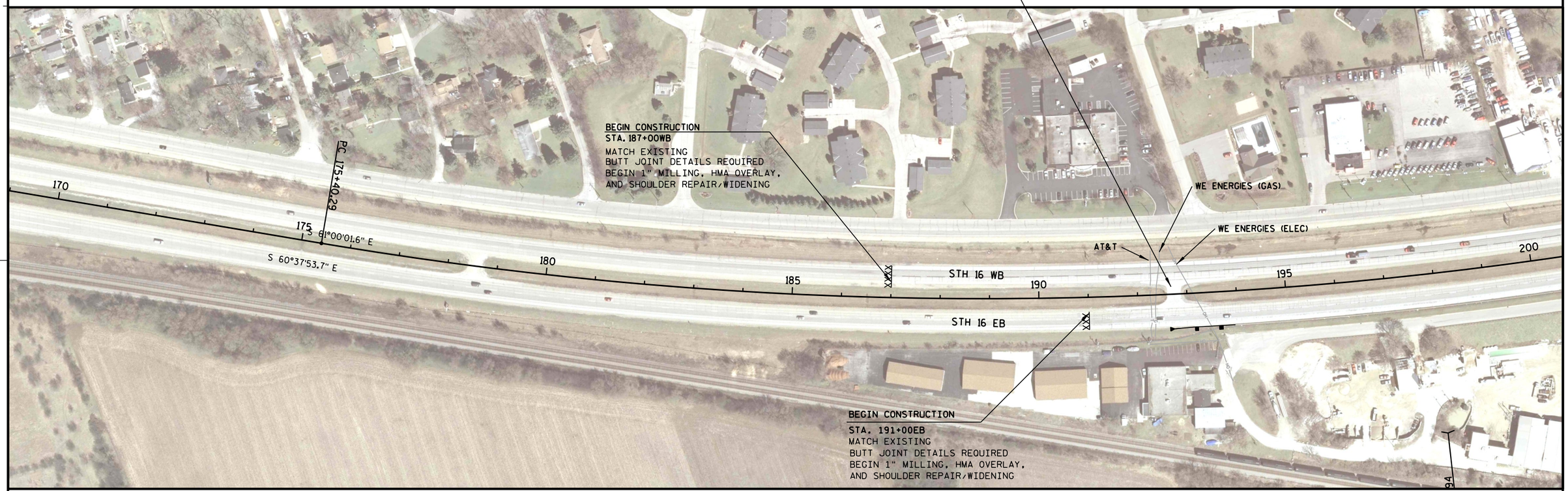
LEGEND

- WETLANDS
- RESIN BINDER HIGH FRICTION SURFACE TREATMENT
- REMOVING PAVEMENT, PAVEMENT REPLACEMENT (SEE PROPOSED TYPICAL SECTIONS)
- REMOVING PAVEMENT, BREAKER RUN, PAVEMENT REPLACEMENT (SEE PROPOSED TYPICAL SECTIONS)
- XXXX SAWCUT
- RAMP CLOSURE GATE
- BARRICADE RACK
- APRON ENDWALL REPAIR
- CULVERT LINER
- MGS GUARDRAIL, STEEL PLATE THRIE BEAM. OR STEEL PLATE CLASS A

STA. 152+75 - STA. 153+75 EB, 22'LT
INSTALL MGS GUARDRAIL 3
STA. 153+75 22'RT
MGS GUARDRAIL TERMINAL TYPE 2

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PLAN DETAILS	SHEET 61	E

2



LEGEND

- WETLANDS
- RESIN BINDER HIGH FRICTION SURFACE TREATMENT
- REMOVING PAVEMENT, PAVEMENT REPLACEMENT (SEE PROPOSED TYPICAL SECTIONS)
- REMOVING PAVEMENT, BREAKER RUN, PAVEMENT REPLACEMENT (SEE PROPOSED TYPICAL SECTIONS)
- XXXX SAWCUT
- RAMP CLOSURE GATE
- BARRICADE RACK
- APRON ENDWALL REPAIR
- CULVERT LINER
- MGS GUARDRAIL, STEEL PLATE THRIE BEAM. OR STEEL PLATE CLASS A

STA. 193+14 EB - STA. 193+98 EB, RT
REMOVE CONCRETE BARRIER
STA. 191+40
MGS GUARDRAIL TERMINAL EAT
STA. 193+59 - STA. 193+98
MGS THRIE BEAM TRANSITION
STA. 193+91.5 - STA. 193+98
CONCRETE BARRIER SINGLE FACED (WITH ANCHORAGE)
(SEE CONSTRUCTION DETAIL)
STA. 193+48 - STA. 193+98
GUARDRAIL MOW STRIP ASPHALT

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PLAN DETAILS	SHEET 62	E

2

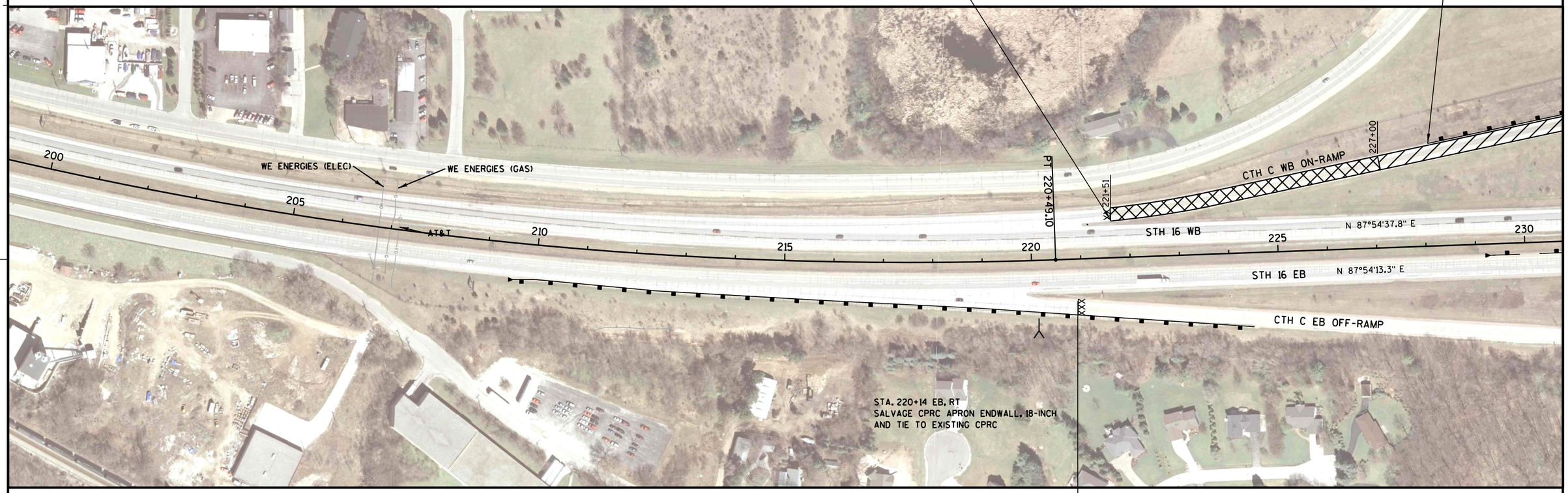
2

N

STA. 228+10 WB - STA. 233+00 WB ON
REMOVE GUARDRAIL
INSTALL STEEL PLATE BEAMGUARD CLASS A

MATCH EXISTING PAVEMENT
SEE BUTT JOINT DETAIL - STH 16

STA. 223+15
TYPE 2 TERMINAL



LEGEND

- WETLANDS
- RESIN BINDER HIGH FRICTION SURFACE TREATMENT
- REMOVING PAVEMENT, PAVEMENT REPLACEMENT (SEE PROPOSED TYPICAL SECTIONS)
- REMOVING PAVEMENT, BREAKER RUN, PAVEMENT REPLACEMENT (SEE PROPOSED TYPICAL SECTIONS)
- XXXX SAWCUT
- RAMP CLOSURE GATE
- BARRICADE RACK
- APRON ENDWALL REPAIR
- CULVERT LINER
- MGS GUARDRAIL, STEEL PLATE THRIE BEAM, OR STEEL PLATE CLASS A

STA. 209+53 EB - STA. 224+50 EB, RT
REMOVE GUARDRAIL
INSTALL MGS GUARDRAIL 3
STA. 209+53
MGS GUARDRAIL TERMINAL EAT
STA. 224+50
MGS GUARDRAIL TERMINAL TYPE 2

MILL 1" PAVE 4"

BASE PATCHING
CONCRETE CONTINUOUS DIAMOND GRINDING

STA. 220+94 EB OFF RAMP
SEE BUTT JOINT DETAIL

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PLAN DETAILS	SHEET 63	E

2

2

N

STA. 232+00 - STA. 233+00 WB ON
REMOVE GUARDRAIL
INSTALL STEEL PLATE BEAMGUARD CLASS A

STA. 232+00
TYPE 2 TERMINAL

SEE CONSTRUCTION DETAIL

CTH C WB ON-RAMP

CTH C

B-67-164

CTH C WB OFF-RAMP

239+00

243+24

INSTALL RAMP CLOSURE
GATE SOLAR 40-FT
(G67-57)

STA. 232+00 - STA. 234+80
MILLING UNDER STRUCTURES
(SEE DETAIL)

STH 16 WB

N 87°54'37.8" E

230 235 240 245 250 255 260

N 87°54'13.3" E

STH 16 EB

CTH C EB OFF-RAMP

CTH C EB ON-RAMP

STA. 232+45 EB - STA. 234+52 MEDIAN
REMOVE EXISTING BEAM GUARD

STA. 238+12 EB, RT
SALVAGE CPRC APRON ENDWALL, 18-INCH
AND TIE TO EXISTING CPRC

SEE CONSTRUCTION DETAIL

INSTALL RAMP CLOSURE GATE SOLAR 40-FT
(G67-58)

BASE PATCHING
CONCRETE CONTINUOUS DIAMOND GRINDING

MILL 1" PAVE 4"

STA. 242+19 EB ON RAMP
SEE BUTT JOINT DETAIL RAMPS

STA. 229+65 23'RT
INSTALL MGS GUARDRAIL TERMINAL EAT
SEE S.D.D.
STA. 229+65 - STA. 233+85 25'RT
SEE CONSTRUCTION DETAIL AND S.D.D.

STA. 237+00 23'LT
INSTALL MGS GUARDRAIL TERMINAL EAT
SEE S.D.D.
STA. 232+75 - STA. 237+00 25'LT
SEE CONSTRUCTION DETAIL AND S.D.D.

LEGEND

- WETLANDS
- RESIN BINDER HIGH FRICTION SURFACE TREATMENT
- REMOVING PAVEMENT, PAVEMENT REPLACEMENT (SEE PROPOSED TYPICAL SECTIONS)
- REMOVING PAVEMENT, BREAKER RUN, PAVEMENT REPLACEMENT (SEE PROPOSED TYPICAL SECTIONS)
- XXXX SAWCUT
- RAMP CLOSURE GATE
- BARRICADE RACK
- APRON ENDWALL REPAIR
- CULVERT LINER
- MGS GUARDRAIL, STEEL PLATE THRIE BEAM. OR STEEL PLATE CLASS A

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PLAN DETAILS	SHEET 64	E

2

2

N

MAINTENANCE CROSSOVER
(SEE CONSTRUCTION DETAIL)

WE ENERGIES (ELEC)

TIME WARNER

AT&T

STH 16 WB

STH 16 EB

PC 273+08.49

PT 282+13.69

PI 277+61.32

260 265 270 275 280 285 290

WE ENERGIES (ELEC)

CP RR

VETTELSON RD

STA. 265+13 EB, RT
SALVAGE 8' CPRC, 30-INCH
SALVAGE CPRC APRON ENDWALL, 30-INCH
AND TIE TO EXISTING CPRC

STA. 268+12 EB, RT
SALVAGE 16' CPRC, 18-INCH
SALVAGE CPRC APRON ENDWALL, 18-INCH
AND TIE TO EXISTING CPRC
CLEAN CULVERT PIPE

STA. 278+14 EB, RT
SALVAGE 40' CPRC, 18-INCH
SALVAGE CPRC APRON ENDWALL, 18-INCH
AND TIE TO EXISTING CPRC
CLEAN CULVERT PIPE

LEGEND

- WETLANDS
- RESIN BINDER HIGH FRICTION SURFACE TREATMENT
- REMOVING PAVEMENT, PAVEMENT REPLACEMENT (SEE PROPOSED TYPICAL SECTIONS)
- REMOVING PAVEMENT, BREAKER RUN, PAVEMENT REPLACEMENT (SEE PROPOSED TYPICAL SECTIONS)
- XXXX SAWCUT
- RAMP CLOSURE GATE
- BARRICADE RACK
- APRON ENDWALL REPAIR
- CULVERT LINER
- MGS GUARDRAIL, STEEL PLATE THRIE BEAM OR STEEL PLATE CLASS A

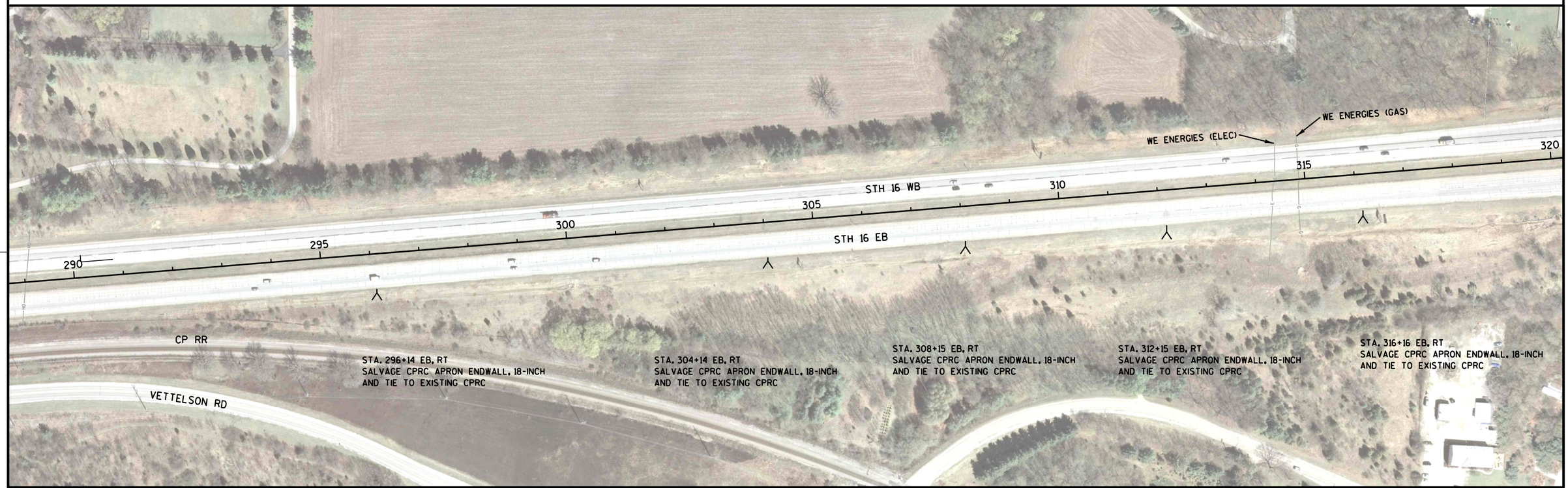
STA. 260+00 EB - STA. 266+00 EB, RT
REMOVE GUARDRAIL
INSTALL MGS GUARDRAIL 3
STA. 260+00
MGS GUARDRAIL TERMINAL EAT
STA. 266+00
MGS GUARDRAIL TERMINAL TYPE 2

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PLAN DETAILS	SHEET 65	E

2

2

N



LEGEND

- WETLANDS
- RESIN BINDER HIGH FRICTION SURFACE TREATMENT
- REMOVING PAVEMENT, PAVEMENT REPLACEMENT (SEE PROPOSED TYPICAL SECTIONS)
- REMOVING PAVEMENT, BREAKER RUN, PAVEMENT REPLACEMENT (SEE PROPOSED TYPICAL SECTIONS)
- XXXX SAWCUT
- RAMP CLOSURE GATE
- BARRICADE RACK
- APRON ENDWALL REPAIR
- CULVERT LINER
- MGS GUARDRAIL, STEEL PLATE THRIE BEAM. OR STEEL PLATE CLASS A

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PLAN DETAILS	SHEET 66	E

2

N

STA. 326+34
MATCH EXISTING PAVEMENT
SEE BUTT JOINT DETAIL - STH 16

STA. 328+43
MATCH EXISTING PAVEMENT
SEE BUTT JOINT DETAIL - STH 16

STEEL THRIE BEAM BULLNOSE TERMINAL
SEE CONSTRUCTION DETAIL

STA. 330+86 WB, LT ON-RAMP
SALVAGE CPRC APRON ENDWALL, 24-INCH
AND TIE TO EXISTING CPRC

PC 320+88.87

320

325

330

335

340

345

350

STA. 333+00

STA. 339+50

STH 83 WB ON-RAMP

INSTALL RAMP CLOSURE
SOLAR 40-FT
GATE (G67-59)

WISDOT SIGNALS

STH 83

STH 83 WB OFF-RAMP

VILLAGE OF HARTLAND

STA. 341+10 - STA. 343+70
MILLING UNDER STRUCTURES
(SEE DETAIL)

PT 340+33.01

STA. 320+15 EB, RT
SALVAGE CPRC APRON ENDWALL, 36-INCH
AND TIE TO EXISTING CPRC

STH 16 WB

STH 16 EB

STA. 332+00

STH 83 EB OFF-RAMP

PI 330+73.47

STA. 329+03 EB, RT OFF-RAMP
(2) SALVAGE CPRC APRON ENDWALL, 24-INCH
AND TIE TO EXISTING CPRC

STA. 340+00

B-67-166

TIME WARNER

STA. 347+26 EB, RT
SALVAGE CPRC APRON ENDWALL, 18-INCH
AND TIE TO EXISTING CPRC

STH 83 EB ON-RAMP

STA. 346+50

STA. 349+89

STA. 349+89 EB
MATCH ON-RAMP
BUTT JOINT REO'D
(SEE DETAIL)

INSTALL LOOP DETECTOR
SEE TRAFFIC SIGNAL PLAN

INSTALL RAMP CLOSURE SOLAR 37-FT
GATE (G67-60)

LEGEND

- WETLANDS
- RESIN BINDER HIGH FRICTION SURFACE TREATMENT
- REMOVING PAVEMENT, PAVEMENT REPLACEMENT (SEE PROPOSED TYPICAL SECTIONS)
- REMOVING PAVEMENT, BREAKER RUN, PAVEMENT REPLACEMENT (SEE PROPOSED TYPICAL SECTIONS)
- XXXX SAWCUT
- RAMP CLOSURE GATE
- BARRICADE RACK
- APRON ENDWALL REPAIR
- CULVERT LINER
- MGS GUARDRAIL, STEEL PLATE THRIE BEAM, OR STEEL PLATE CLASS A

STA. 341+00 - STA. 343+75
REMOVING EXISTING BEAM GUARD
INSTALL STEEL THRIE BEAM AND STEEL
THRIE BEAM BULLNOSE TERMINAL
SEE S.D.D.

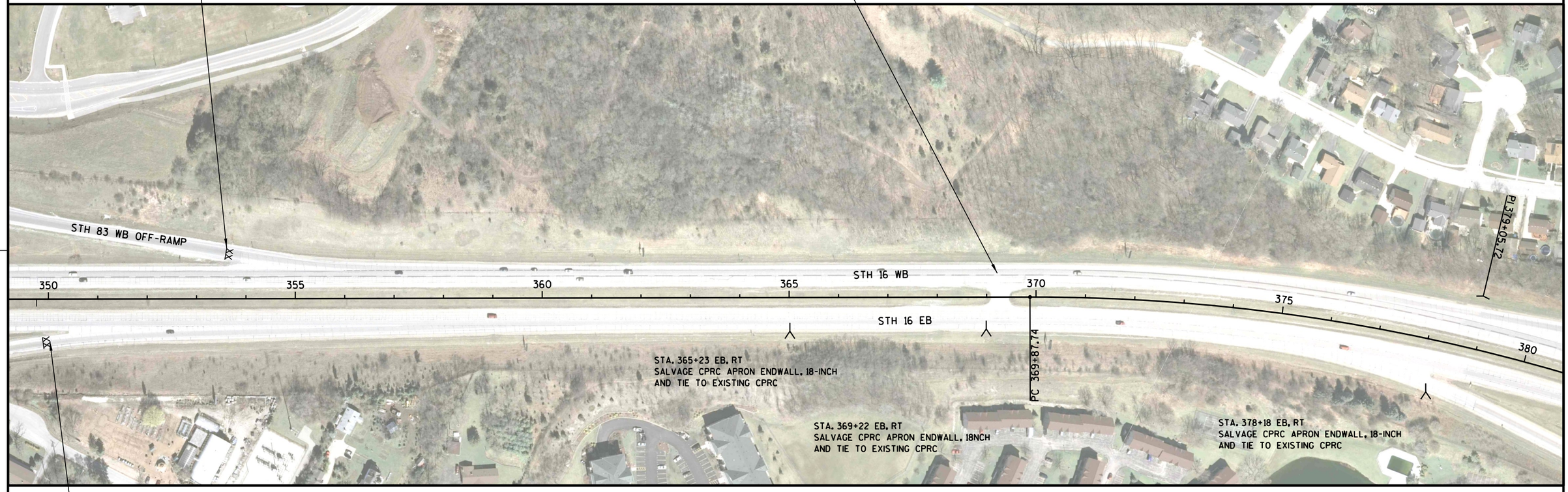
PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PLAN DETAILS	SHEET 67	E

2

2

STA. 353+30 WB
MATCH OFF-RAMP
MATCH EXISTING PAVEMENT
SEE BUTT JOINT DETAIL - STH 16

MAINTENANCE CROSSOVER
(SEE CONSTRUCTION DETAIL)



STA. 349+90
MATCH EXISTING PAVEMENT
SEE BUTT JOINT DETAIL - STH 16

LEGEND

- WETLANDS
- RESIN BINDER HIGH FRICTION SURFACE TREATMENT
- REMOVING PAVEMENT, PAVEMENT REPLACEMENT (SEE PROPOSED TYPICAL SECTIONS)
- REMOVING PAVEMENT, BREAKER RUN, PAVEMENT REPLACEMENT (SEE PROPOSED TYPICAL SECTIONS)
- XXXX SAWCUT
- RAMP CLOSURE GATE
- BARRICADE RACK
- APRON ENDWALL REPAIR
- CULVERT LINER
- MGS GUARDRAIL, STEEL PLATE THRIE BEAM, OR STEEL PLATE CLASS A

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PLAN DETAILS	SHEET 68	E

2

STA. 392+65 WB - STA. 399+75 WB
REMOVE GUARDRAIL
INSTALL MGS GUARDRAIL 3
STA. 392+65 - STA. 393+04
MGS THRIE BEAM TRANSITION
STA. 399+19
MGS GUARDRAIL TERMINAL EAT
STA. 392+65 - STA. 393+15
GUARDRAIL MOW STRIP ASPHALT

N

STA. 381+50 WB ON RAMP
SEE BUTT JOINT DETAIL RAMPS
MILL 1" PAVE 4"
MILL 2" PAVE 2¾" - 2" OVERLAY

SEE CONSTRUCTION DETAIL

STA. 391+25 WB
MATCH ON-RAMP
BUTT JOINT REQ'D
(SEE DETAIL)

CTH E

WE ENERGIES (GAS)

BARK RIVER

STA. 403+88 WB, LT
SALVAGE CPRC APRON ENDWALL, 24-INCH
AND TIE TO EXISTING CPRC

P.I. 379+05.72

CTH E WB ON-RAMP

HARTBROOK DR

MATCH EXISTING STRUCTURES
BUTT JOINT REQ'D (SEE DETAIL)

INSTALL RAMP CLOSURE GATE SOLAR 40-FT (G67-61)

VILLAGE OF HARTLAND

B-67-169

STH 16 WB

380 385 390 395 400 405

B-67-170

STH 16 EB

STA. 381+16 EB, RT
SALVAGE CPRC APRON ENDWALL, 18-INCH
AND TIE TO EXISTING CPRC

P.T. 387+89.53

CTH E EB OFF-RAMP

STA. 400+10 EB, RT
SALVAGE CPRC APRON ENDWALL, 18-INCH
AND TIE TO EXISTING CPRC

BARK RIVER

SEE CONSTRUCTION DETAIL

LEGEND

MILL 1" PAVE 4"
BASE PATCHING HES
CONCRETE CONTINUOUS DIAMOND GRINDING
STA. 379+13 EB OFF
SEE BUTT JOINT DETAIL RAMPS

- WETLANDS
- RESIN BINDER HIGH FRICTION SURFACE TREATMENT
- REMOVING PAVEMENT, PAVEMENT REPLACEMENT (SEE PROPOSED TYPICAL SECTIONS)
- REMOVING PAVEMENT, BREAKER RUN, PAVEMENT REPLACEMENT (SEE PROPOSED TYPICAL SECTIONS)
- XXXX SAWCUT
- RAMP CLOSURE GATE
- BARRICADE RACK
- APRON ENDWALL REPAIR
- CULVERT LINER
- MGS GUARDRAIL, STEEL PLATE THRIE BEAM, OR STEEL PLATE CLASS A

STA. 392+28 EB - STA. 399+09 EB
REMOVE GUARDRAIL
INSTALL MGS GUARDRAIL 3
STA. 392+28 - STA. 392+68
MGS THRIE BEAM TRANSITION
STA. 399+09
MGS GUARDRAIL TERMINAL TYPE 2
STA. 392+28 - STA. 392+78
GUARDRAIL MOW STRIP ASPHALT

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PLAN DETAILS	SHEET 69	E

2

N

STA. 432+59 WB OFF RAMP
SEE BUTT JOINT DETAIL RAMPS

BASE PATCHING HES
CONCRETE CONTINUOUS DIAMOND GRINDING

MILL 1" PAVE 4"

SEE CONSTRUCTION DETAIL

STA. 410+00 EB, RT
SALVAGE CPRC APRON ENDWALL, 18-INCH
AND TIE TO EXISTING CPRC

HARTBROOK DR

STA. 410+00 EB - STA. 430+00 EB
STA. 410+00 WB - STA. 430+00 WB

CTH KC

STA. 423+00 - STA. 425+70
MILLING UNDER STRUCTURES
(SEE DETAIL)

VILLAGE OF HARTLAND

CTH KC WB OFF-RAMP

410 415 STH 16 WB 420 425 430 435

WE ENERGIES (GAS)

WE ENERGIES (ELEC)

STH 16 EB

STA. 423+44 EB - STA. 425+47 MEDIAN
REMOVE EXISTING BEAM GUARD
INSTALL STEEL THRIE BEAM AND STEEL THRIE BEAM
BULLNOSE TERMINAL
(SEE S.D.D.)

B-67-172

STA. 425+89 EB, RT
SALVAGE CPRC APRON ENDWALL, 18-INCH
AND TIE TO EXISTING CPRC

STA. 407+11 EB, RT
SALVAGE CPRC APRON ENDWALL, 18-INCH
AND TIE TO EXISTING CPRC

PI 411+99.80

STA. 413+12 EB, RT
SALVAGE CPRC APRON ENDWALL, 18-INCH
AND TIE TO EXISTING CPRC

CTH KC EB ON-RAMP

PC 434+56.02

436+00

STA. 436+50 EB
MATCH ON-RAMP
BUTT JOINT REO'D
(SEE DETAIL)

INSTALL RAMP CLOSURE GATE SOLAR 40-FT (G67-62)

424+51

STA. 430+14 EB, RT
SALVAGE CPRC APRON ENDWALL, 18-INCH
AND TIE TO EXISTING CPRC

STA. 431+10 EB, RT ON-RAMP
(2) SALVAGE CPRC APRON ENDWALL, 24-INCH
AND TIE TO EXISTING CPRC

SEE CONSTRUCTION DETAIL

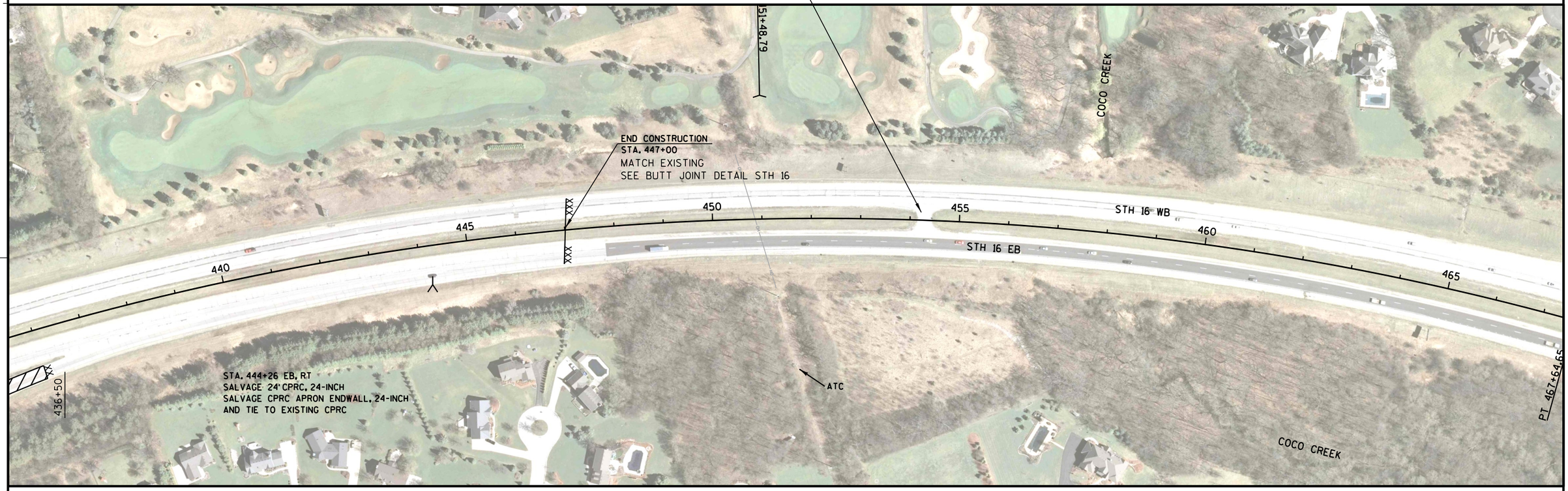
MATCH EXISTING PAVEMENT
SEE BUTT JOINT DETAIL - STH 16

LEGEND

- WETLANDS
- RESIN BINDER HIGH FRICTION SURFACE TREATMENT
- REMOVING PAVEMENT, PAVEMENT REPLACEMENT (SEE PROPOSED TYPICAL SECTIONS)
- REMOVING PAVEMENT, BREAKER RUN, PAVEMENT REPLACEMENT (SEE PROPOSED TYPICAL SECTIONS)
- XXXX SAWCUT
- RAMP CLOSURE GATE
- BARRICADE RACK
- APRON ENDWALL REPAIR
- CULVERT LINER
- MGS GUARDRAIL, STEEL PLATE THRIE BEAM, OR STEEL PLATE CLASS A

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PLAN DETAILS	SHEET 70	E

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LEGEND

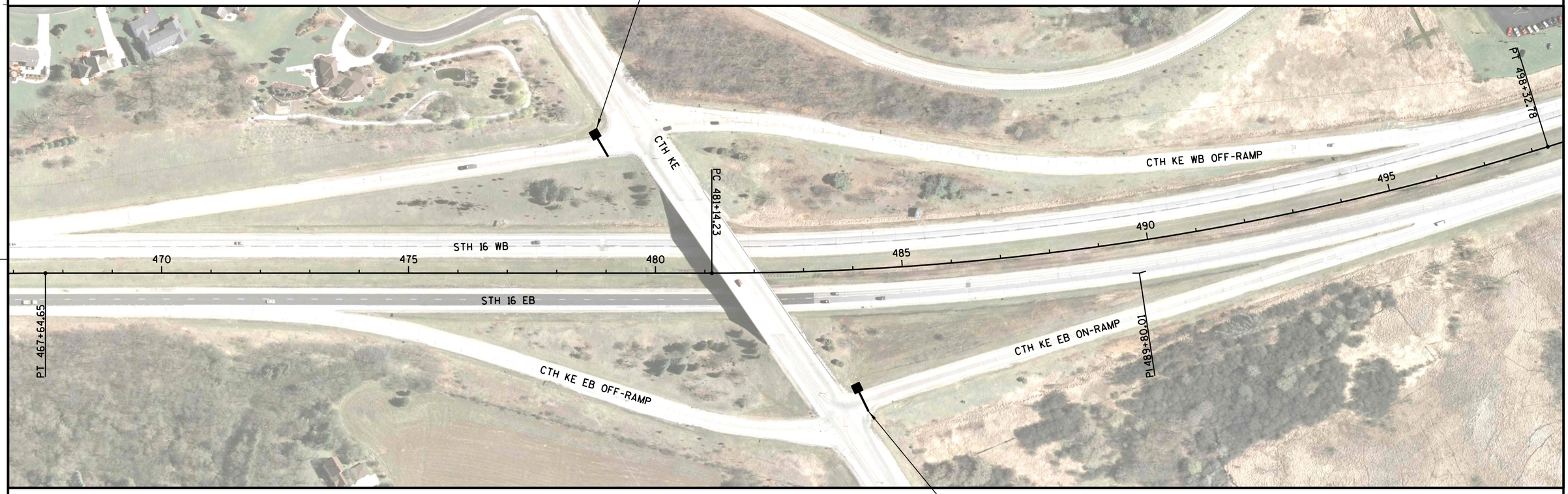
- WETLANDS
- RESIN BINDER HIGH FRICTION SURFACE TREATMENT
- REMOVING PAVEMENT, PAVEMENT REPLACEMENT (SEE PROPOSED TYPICAL SECTIONS)
- REMOVING PAVEMENT, BREAKER RUN, PAVEMENT REPLACEMENT (SEE PROPOSED TYPICAL SECTIONS)
- XXXX SAWCUT
- RAMP CLOSURE GATE
- BARRICADE RACK
- APRON ENDWALL REPAIR
- CULVERT LINER
- MGS GUARDRAIL, STEEL PLATE THRIE BEAM. OR STEEL PLATE CLASS A

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PLAN DETAILS	SHEET 71	E

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2

INSTALL RAMP CLOSURE
GATE SOLAR 40-FT
(G67-63)



LEGEND

- WETLANDS
- RESIN BINDER HIGH FRICTION SURFACE TREATMENT
- REMOVING PAVEMENT, PAVEMENT REPLACEMENT (SEE PROPOSED TYPICAL SECTIONS)
- REMOVING PAVEMENT, BREAKER RUN, PAVEMENT REPLACEMENT (SEE PROPOSED TYPICAL SECTIONS)
- XXXX SAWCUT
- RAMP CLOSURE GATE
- BARRICADE RACK
- APRON ENDWALL REPAIR
- CULVERT LINER
- MGS GUARDRAIL, STEEL PLATE THRIE BEAM, OR STEEL PLATE CLASS A

INSTALL RAMP CLOSURE
GATE SOLAR 40-FT
(G67-64)

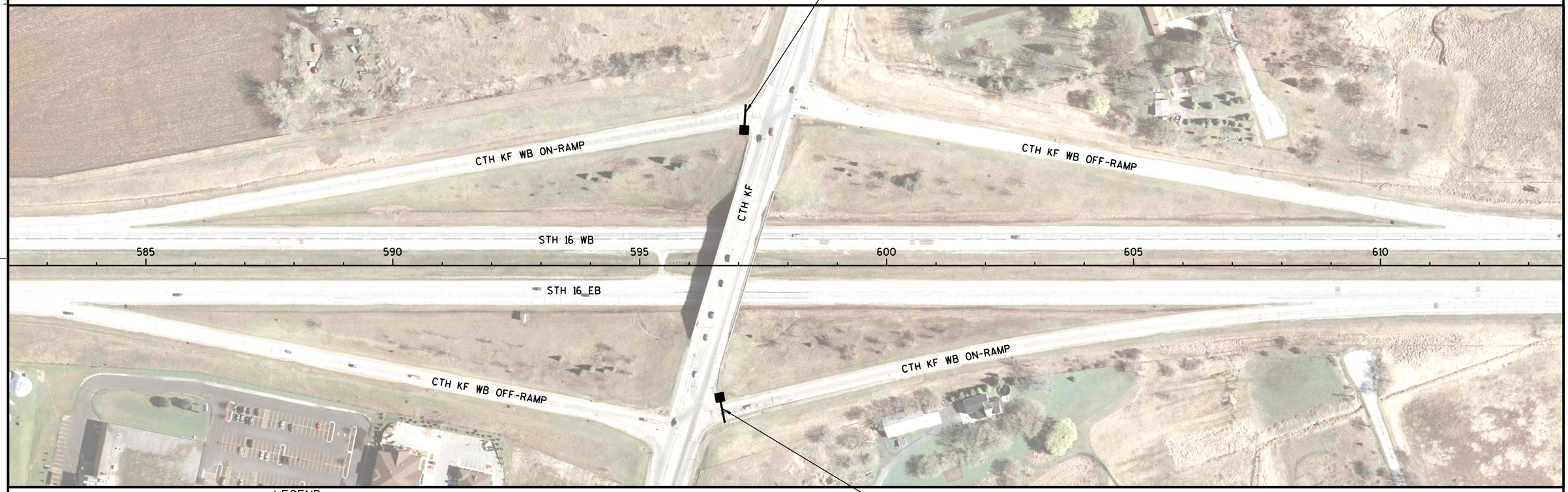
PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PLAN DETAILS	SHEET 72 E

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N

INSTALL RAMP CLOSURE
GATE SOLAR 40-FT
(G67-65)



LEGEND

- WETLANDS
- RESIN BINDER HIGH FRICTION SURFACE TREATMENT
- REMOVING PAVEMENT, PAVEMENT REPLACEMENT (SEE PROPOSED TYPICAL SECTIONS)
- REMOVING PAVEMENT, BREAKER RUN, PAVEMENT REPLACEMENT (SEE PROPOSED TYPICAL SECTIONS)
- XXXX SAWCUT
- RAMP CLOSURE GATE
- BARRICADE RACK
- APRON ENDWALL REPAIR
- CULVERT LINER
- MGS GUARDRAIL, STEEL PLATE THRIE BEAM. OR STEEL PLATE CLASS A

INSTALL RAMP CLOSURE
GATE SOLAR 40-FT
(G67-66)

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PLAN DETAILS	SHEET 73	E

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MAINTENANCE CROSSOVER
(SEE CONSTRUCTION DETAIL)

STA. 637+00 WB, LT
SALVAGE CPRC APRON ENDWALL, 18-INCH
AND TIE TO EXISTING CPRC

STA. 637+34 WB
BEGIN CONSTRUCTION
BEGIN CONCRETE PAVEMENT CONTINUOUS DIAMOND GRINDING
& SHOULDER REPLACEMENT/WIDENING

STH 16 WB

620 640 645 650 655 660

STH 16 EB

PI 624+99.21
PI 635+65.72

PC 648+18.13

STA. 649+47 EB
BEGIN CONSTRUCTION
BEGIN CONCRETE PAVEMENT CONTINUOUS DIAMOND GRINDING
& SHOULDER REPLACEMENT/WIDENING

UN-NAMED TRIBUTARY TO PEWAUKEE LAKE

UN-NAMED TRIBUTARY TO PEWAUKEE LAKE

WE ENERGIES (GAS)

LEGEND

- WETLANDS
- RESIN BINDER HIGH FRICTION SURFACE TREATMENT
- REMOVING PAVEMENT, PAVEMENT REPLACEMENT (SEE PROPOSED TYPICAL SECTIONS)
- REMOVING PAVEMENT, BREAKER RUN, PAVEMENT REPLACEMENT (SEE PROPOSED TYPICAL SECTIONS)
- XXXX SAWCUT
- RAMP CLOSURE GATE
- BARRICADE RACK
- APRON ENDWALL REPAIR
- CULVERT LINER
- MGS GUARDRAIL, STEEL PLATE THRIE BEAM. OR STEEL PLATE CLASS A

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PLAN DETAILS	SHEET 74	E

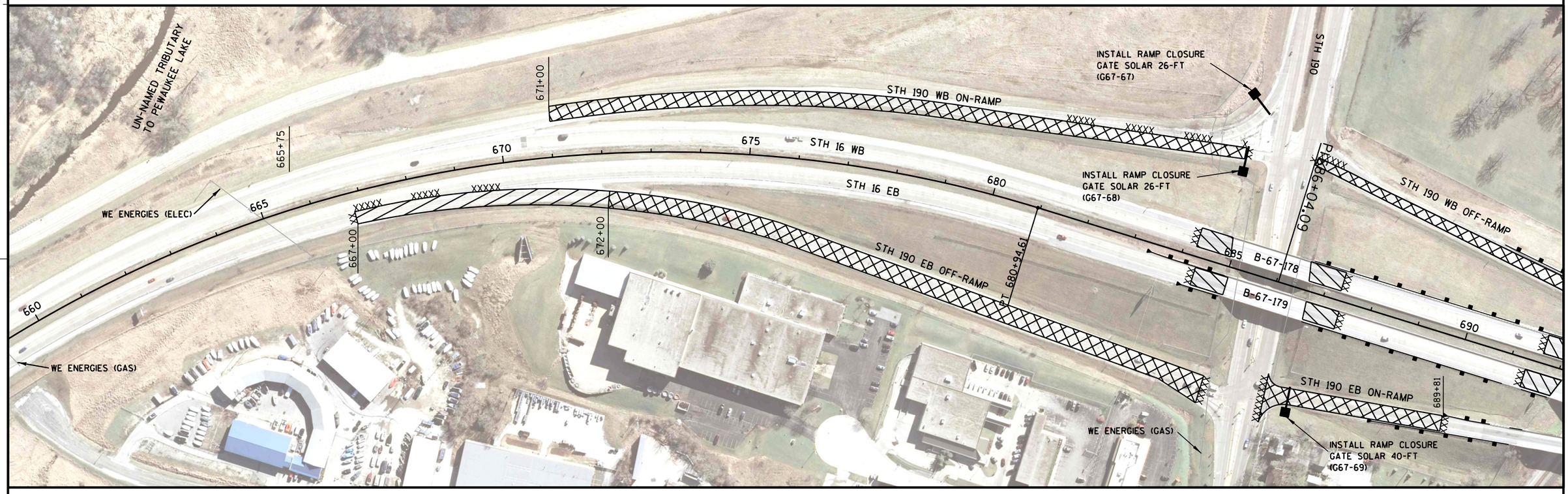
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STA. 683+34 - STA. 684+90 EB, 19'RT
REMOVE GUARDRAIL
INSTALL MGS GUARDRAIL 3
STA. 683+34MGS GUARDRAIL TERMINAL EAT
STA. 684+51 - STA. 684+90
MGS THRIE BEAM TRANSITION
STA. 684+40 - STA. 684+90
GUARDRAIL MOW STRIP ASPHALT

STA. 684+10 - STA. 684+90 EB, 59'RT
REMOVE GUARDRAIL
INSTALL MGS GUARDRAIL 3
STA. 684+10MGS GUARDRAIL TERMINAL EAT
STA. 684+51 - STA. 684+90
MGS THRIE BEAM TRANSITION
STA. 684+40 - STA. 684+90
GUARDRAIL MOW STRIP ASPHALT

STA. 686+75 - STA. 692+25 WB, 59'LT
REMOVE GUARDRAIL
INSTALL MGS GUARDRAIL 3
STA. 686+75 - STA. 687+14
MGS THRIE BEAM TRANSITION
STA. 686+75 - STA. 692+25
GUARDRAIL MOW STRIP ASPHALT

STA. 689+95 - STA. 692+67 WB, OFF RAMP LT
REMOVE GUARDRAIL
INSTALL MGS GUARDRAIL 3
STA. 689+75
MGS GUARDRAIL TERMINAL TYPE 2
STA. 692+17 - STA. 692+67
GUARDRAIL MOW STRIP ASPHALT



LEGEND

- WETLANDS
- RESIN BINDER HIGH FRICTION SURFACE TREATMENT
- REMOVING PAVEMENT, PAVEMENT REPLACEMENT (SEE PROPOSED TYPICAL SECTIONS)
- REMOVING PAVEMENT, BREAKER RUN, PAVEMENT REPLACEMENT (SEE PROPOSED TYPICAL SECTIONS)
- XXXX SAWCUT
- RAMP CLOSURE GATE
- BARRICADE RACK
- APRON ENDWALL REPAIR
- CULVERT LINER
- MGS GUARDRAIL, STEEL PLATE THRIE BEAM. OR STEEL PLATE CLASS A
- REMOVING ASPHALTIC SURFACE MILLING (2") INSTALL HMA PAVEMENT 2"

STA. 686+75 - STA. 692+00 EB, 59'RT
REMOVE GUARDRAIL
INSTALL MGS GUARDRAIL 3
STA. 691+61 - STA. 692+00
MGS THRIE BEAM TRANSITION
STA. 686+75 - STA. 692+00
GUARDRAIL MOW STRIP ASPHALT

STA. 689+02 - STA. 690+56 EB, ON RAMP LT
REMOVE GUARDRAIL
INSTALL MGS GUARDRAIL 3
STA. 689+02
MGS GUARDRAIL TERMINAL EAT
STA. 690+17 - STA. 690+56
MGS THRIE BEAM TRANSITION
STA. 690+06 - STA. 690+56
GUARDRAIL MOW STRIP ASPHALT

STA. 687+54 - STA. 690+36 EB, ON RAMP RT
REMOVE GUARDRAIL
INSTALL MGS GUARDRAIL 3
STA. 687+54
MGS GUARDRAIL TERMINAL EAT
STA. 690+00 - STA. 690+39
MGS THRIE BEAM TRANSITION
STA. 689+84 - STA. 690+36
GUADRAIL MOW STRIP ASPHALT

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PLAN DETAILS	SHEET E

2

STA. 692+20 - STA. 692+80 WB, OFF RAMP RT
REMOVE GUARDRAIL
INSTALL MGS GUARDRAIL 3
STA. 692+20
MGS GUARDRAIL TERMINAL TYPE 2
STA. 692+30 - STA. 692+80
GUARDRAIL MOW STRIP ASPHALT

STA. 695+38 - STA. 703+88 WB, OFF RAMP LT
REMOVE GUARDRAIL
INSTALL MGS GUARDRAIL 3
STA. 695+38 - STA. 695+77
MGS THRIE BEAM TRANSITION
STA. 695+38 - STA. 703+88
GUARDRAIL MOW STRIP ASPHALT

STA. 705+57 - STA. 707+25 WB, 70'LT
REMOVE GUARDRAIL
INSTALL MGS GUARDRAIL 3
STA. 706+72
MGS GUARDRAIL TERMINAL EAT
STA. 705+57 - STA. 705+96
MGS THRIE BEAM TRANSITION
STA. 705+57 - STA. 706+07
GUARDRAIL MOW STRIP ASPHALT

STA. 705+28 - STA. 706+85 WB, 19'LT
REMOVE GUARDRAIL
INSTALL MGS GUARDRAIL 3
STA. 706+32
MGS GUARDRAIL TERMINAL EAT
STA. 705+28 - STA. 705+67
MGS THRIE BEAM TRANSITION
STA. 705+28 - STA. 705+78
GUARDRAIL MOW STRIP ASPHALT

STA. 714+84 - STA. 715+99 WB, 70'LT
REMOVE GUARDRAIL
INSTALL MGS GUARDRAIL 3
STA. 715+46
MGS GUARDRAIL TERMINAL EAT
STA. 714+84
MGS GUARDRAIL TERMINAL TYPE 2

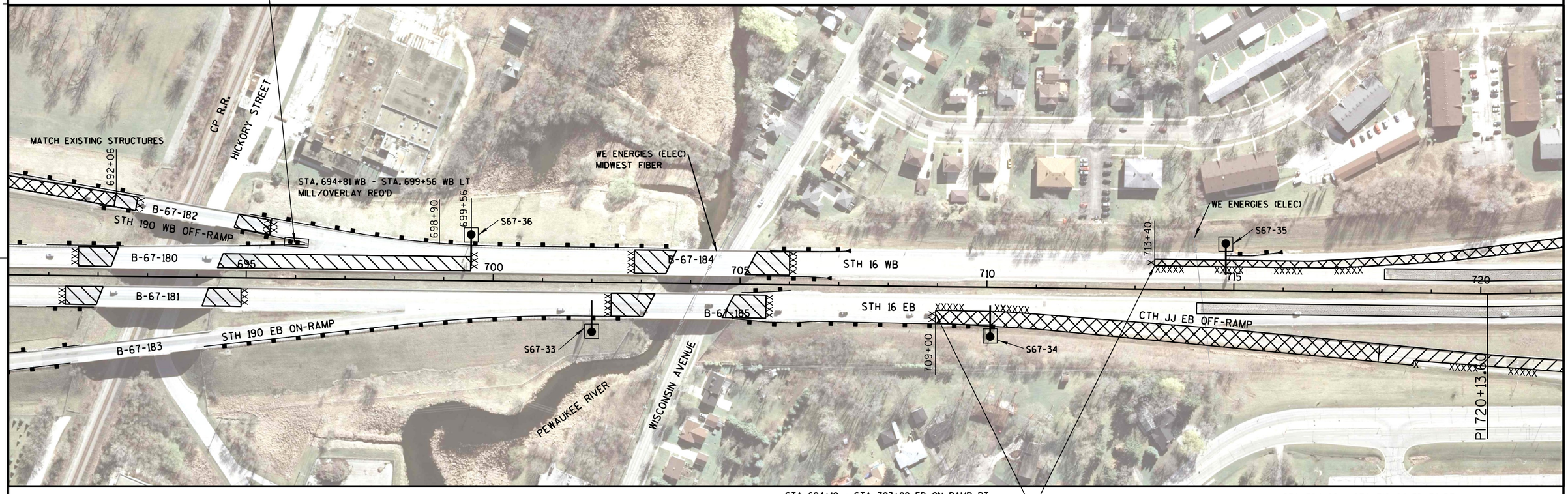
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STA. 696+25 WB, LT
CRASH CUSHION LOW MAINTENANCE
(SEE CONSTRUCTION DETAIL)

STA. 694+96 - STA. 696+37 WB, 90'LT
SALVAGED RAIL
STA. 694+96 - STA. 696+00 WB, 90'LT
STEEL THRIE BEAM

STA. 694+83 - STA. 696+15 WB, 69'LT
SALVAGED RAIL
STA. 694+83 - STA. 696+00 WB, 69'LT
STEEL THRIE BEAM



LEGEND

- WETLANDS
- RESIN BINDER HIGH FRICTION SURFACE TREATMENT
- REMOVING PAVEMENT, PAVEMENT REPLACEMENT (SEE PROPOSED TYPICAL SECTIONS)
- REMOVING PAVEMENT, BREAKER RUN, PAVEMENT REPLACEMENT (SEE PROPOSED TYPICAL SECTIONS)
- XXXX SAWCUT
- RAMP CLOSURE GATE
- BARRICADE RACK
- APRON ENDWALL REPAIR
- CULVERT LINER
- MGS GUARDRAIL, STEEL PLATE THRIE BEAM, OR STEEL PLATE CLASS A
- REMOVING ASPHALTIC SURFACE MILLING (2") INSTALL HMA PAVEMENT 2"

STA. 694+10 - STA. 703+88 EB, ON RAMP RT
REMOVE GUARDRAIL
INSTALL MGS GUARDRAIL 3
STA. 703+49 - STA. 703+88
MGS THRIE BEAM TRANSITION
STA. 694+10 - STA. 703+88
GUARDRAIL MOW STRIP ASPHALT

MATCH EXISTING PAVEMENT
SEE BUTT JOINT DETAIL - STH 16

STA. 704+86 - STA. 710+24 EB, 70'RT
REMOVE GUARDRAIL
INSTALL MGS GUARDRAIL 3
STA. 710+24
MGS GUARDRAIL TERMINAL TYPE 2
STA. 704+90 - STA. 705+40
GUARDRAIL MOW STRIP ASPHALT

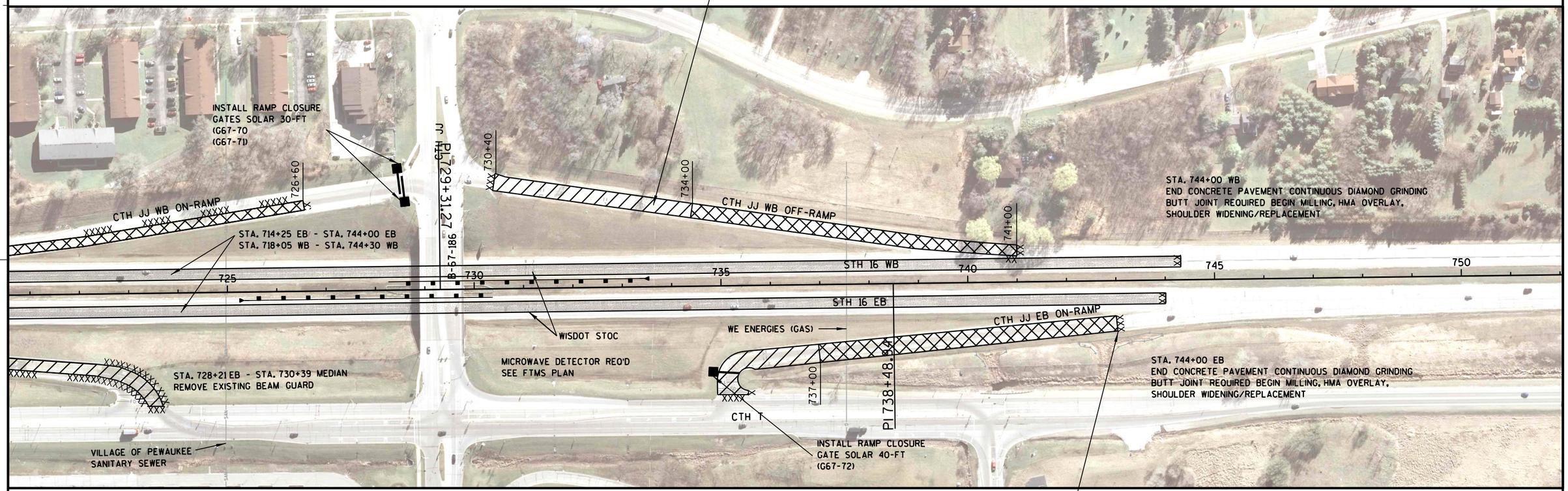
STA. 705+13 - STA. 706+13 EB, 19'RT
INSTALL MGS GUARDRAIL 3
STA. 706+13 EB, 19'RT
MGS GUARDRAIL TERMINAL TYPE 2

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PLAN DETAILS	SHEET	E

STA. 725+35 17'RT
MGS GUARDRAIL TERMINAL EAT
SEE S.D.D.
STA. 725+35 - STA. 730+10 19'RT
MGS GUARDRAIL 3
SEE CONSTRUCTION DETAIL AND S.D.D.

STA. 733+45 17'LT
MGS GUARDRAIL TERMINAL EAT
SEE S.D.D.
STA. 728+70 - STA. 733+45 17'LT
MGS GUARDRAIL 3
SEE CONSTRUCTION DETAIL AND S.D.D.

N



LEGEND

- WETLANDS
- RESIN BINDER HIGH FRICTION SURFACE TREATMENT
- REMOVING PAVEMENT, PAVEMENT REPLACEMENT (SEE PROPOSED TYPICAL SECTIONS)
- REMOVING PAVEMENT, BREAKER RUN, PAVEMENT REPLACEMENT (SEE PROPOSED TYPICAL SECTIONS)
- XXXX SAWCUT
- RAMP CLOSURE GATE
- BARRICADE RACK
- APRON ENDWALL REPAIR
- CULVERT LINER
- MGS GUARDRAIL, STEEL PLATE THRIE BEAM. OR STEEL PLATE CLASS A

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PLAN DETAILS	SHEET 77	E

2

N

STA. 765+75 WB, LT
76 LF CULVERT PIPE
LINER, 15-INCH REQ'D

STA. 772+00 WB, LT
82 LF CULVERT PIPE
LINER, 15-INCH REQ'D

STA. 777+90 WB, LT
76 LF CULVERT PIPE
LINER, 15-INCH REQ'D

WISDOT STOC

STH 16 WB

755 760 765 770 775 780

STH 16 EB

MICROWAVE DETECTOR REQ'D
SEE FTMS PLAN

STA. 757+00 EB, RT
72 LF CULVERT PIPE
LINER, 15-INCH REQ'D

CTH T

LEGEND

- WETLANDS
- RESIN BINDER HIGH FRICTION SURFACE TREATMENT
- REMOVING PAVEMENT, PAVEMENT REPLACEMENT (SEE PROPOSED TYPICAL SECTIONS)
- REMOVING PAVEMENT, BREAKER RUN, PAVEMENT REPLACEMENT (SEE PROPOSED TYPICAL SECTIONS)
- XXXX SAWCUT
- RAMP CLOSURE GATE
- BARRICADE RACK
- APRON ENDWALL REPAIR
- CULVERT LINER
- MGS GUARDRAIL, STEEL PLATE THRIE BEAM, OR STEEL PLATE CLASS A

STA. 770+50 - STA. 773+40 EB, 59'RT
REMOVE GUARDRAIL
INSTALL MGS GUARDRAIL 3
STA. 770+50
MGS GUARDRAIL TERMINAL EAT
STA. 773+40
MGS GUARDRAIL TERMINAL TYPE 2

STA. 772+40 - STA. 775+95 WB, 59'LT
REMOVE GUARDRAIL
INSTALL MGS GUARDRAIL 3
STA. 775+42
MGS GUARDRAIL TERMINAL EAT
STA. 772+40
MGS GUARDRAIL TERMINAL TYPE 2

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PLAN DETAILS	SHEET 78	E

2

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MAINTENANCE CROSSOVER
(SEE CONSTRUCTION DETAIL)

STA. 793+25 WB, LT
88 LF CULVERT PIPE
LINER, 15-INCH REO'D

STA. 799+25 WB, LT
86 LF CULVERT PIPE
LINER, 15-INCH REO'D

EXISTING TYPE
9 MS INLET

PC 801+31.00

780 785 790 795 800 805 810

STH 16 WB

STH 16 EB

CTH T

PI 804+38.87

END CONSTRUCTION
STA. 802+10 EB
MATCH EXISTING
SEE BUTT JOINT DETAILS STH 16

LEGEND

- WETLANDS
- RESIN BINDER HIGH FRICTION SURFACE TREATMENT
- REMOVING PAVEMENT, PAVEMENT REPLACEMENT (SEE PROPOSED TYPICAL SECTIONS)
- REMOVING PAVEMENT, BREAKER RUN, PAVEMENT REPLACEMENT (SEE PROPOSED TYPICAL SECTIONS)
- XXXX SAWCUT
- RAMP CLOSURE GATE
- BARRICADE RACK
- APRON ENDWALL REPAIR
- CULVERT LINER
- MGS GUARDRAIL, STEEL PLATE THRIE BEAM. OR STEEL PLATE CLASS A

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PLAN DETAILS	SHEET	E

FILE NAME : J:\projects\D2_13701516\71\021216_pd.dgn PLOT DATE : 01-FEB-2017 11:36 PLOT BY : dotshw PLOT NAME : PLOT SCALE : 200:1
WISDOT/CADDS SHEET 42

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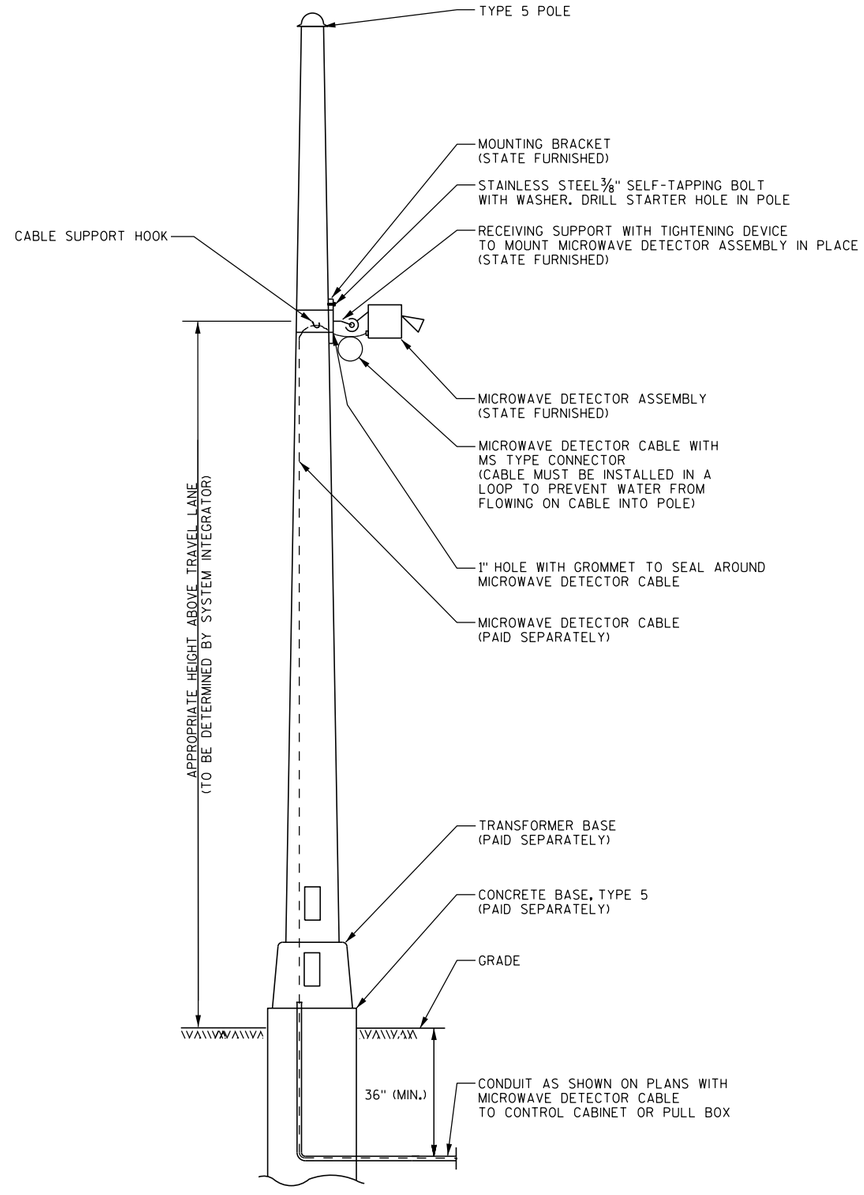


LEGEND

- WETLANDS
- RESIN BINDER HIGH FRICTION SURFACE TREATMENT
- REMOVING PAVEMENT, PAVEMENT REPLACEMENT (SEE PROPOSED TYPICAL SECTIONS)
- REMOVING PAVEMENT, BREAKER RUN, PAVEMENT REPLACEMENT (SEE PROPOSED TYPICAL SECTIONS)
- XXXX SAWCUT
- RAMP CLOSURE GATE
- BARRICADE RACK
- APRON ENDWALL REPAIR
- CULVERT LINER
- MGS GUARDRAIL, STEEL PLATE THRIE BEAM. OR STEEL PLATE CLASS A

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PLAN DETAILS	SHEET 80	E

2



MICROWAVE DETECTOR INSTALLATION

ON TYPE 5 POLE

NOT TO SCALE

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	FTMS MICROWAVE DETECTOR INSTALLATION	SHEET 81	E

FTMS STANDARD ABBREVIATIONS

CCTV	CLOSED CIRCUIT TELEVISION SITE
RM	RAMP METER
DMS	DYNAMIC MESSAGE SIGN
SDS	SYSTEM DETECTOR STATION
ATR	AUTOMATIC TRAFFIC RECORDER
FY	ADVANCE FLASHER (ASSEMBLY)
CB	CONTROLLER CABINET
PB	PULL BOX
GPB	GROUNDED PULL BOX
MH	MANHOLE
V	COMMUNICATIONS VAULT
SB	SIGNAL BASE
MD	MICROWAVE DETECTOR

LEGEND

	EXISTING	PROPOSED
JUNCTION BOX		
CCTV CAMERA AND POLE		
RAMP METER SIDEMOUNT SIGNAL		
RAMP METER OVERHEAD SIGNAL		
FTMS CONTROL CABINET AND BASE		
FTMS CONTROL CABINET, SPECIAL BASE WITH STEP-DOWN TRANSFORMER		
POLE MOUNTED CABINET		
METER BREAKER PEDESTAL		
24"X36" STEEL PULL BOX		
24"X36" GROUNDED STEEL PULL BOX		
ANTENNA POLE		
MANHOLE		
ADVANCE FLASHER ASSEMBLY		
MICROWAVE DETECTOR		
DETECTION ZONE		
LOOP DETECTOR		
ITS CONDUIT	—ITS—	
BREAKER DISCONNECT BOX		
COMMUNICATION VAULT		

FTMS GENERAL NOTES

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.

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. YOU ARE FULLY RESPONSIBLE FOR LOCATING AND AVOIDING ALL UNDERGROUND AND ABOVE GROUND STRUCTURES AND FACILITIES.

BE AWARE THAT NO TEST BORINGS WERE MADE WHERE CONDUITS, PULLBOXES, POLES, CABINET FOUNDATIONS, OR OTHER EQUIPMENT IS TO BE INSTALLED. YOU ARE FULLY RESPONSIBLE FOR EXAMINING THE JOB SITE CONDITIONS BEFORE SUBMITTING BID PROPOSALS.

NO TREES (AND/OR SHRUBS) ARE TO BE REMOVED WITHOUT APPROVAL OF THE ENGINEER.

AREAS WITHIN THE RIGHT-OF-WAY DISTURBED SPECIFICALLY FOR FTMS CONSTRUCTION ARE TO BE RESTORED TO THE ORIGINAL CONDITION WITH TOPSOIL, FERTILIZER AND SEED, AND MULCH. RESTORATION FOR AREAS DISTURBED FOR OTHER CONSTRUCTION OPERATIONS BUT ALSO CONTAINING FTMS CONSTRUCTION WILL BE DONE ACCORDING TO REQUIREMENTS AND PAYMENT PROVISIONS FOR THE OTHER CONSTRUCTION OPERATIONS. NO PAYMENT WILL BE MADE FOR RESTORING AREAS DISTURBED FOR FTMS CONSTRUCTION OPERATIONS.

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.

BE ADVISED THAT DUE TO RAMP, LANE, AND SHOULDER CLOSURE RESTRICTIONS, AND WORK UNDER OTHER CONTRACTS, SOME WORK MAY BE REQUIRED TO BE PERFORMED AT NIGHT.

THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING RAMP, LANE, SHOULDER, AND ROADWAY CLOSURES WITH OTHER CONTRACTS IN THE AREA.

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.

ALL LOOP DETECTORS STATIONED TO CENTER OF LEADING EDGE AS APPROACHED BY NORMAL VEHICLE PATH.

HAND DIG TRENCHES CROSSING EXISTING CONDUIT CONTAINING FIBER OPTIC CABLE.

VISUALLY VERIFY DEPTHS OF EXISTING CONDUITS CONTAINING FIBER OPTIC CABLE PRIOR TO CROSSING BY DIRECTIONAL BORE OR SPECIAL METHOD.

2

2

N

INSTALL 2-2" NONMETALLIC CONDUITS
(1) WITH MICROWAVE DETECTOR CABLE
(1) FOR FUTURE USE

INSTALL CONDUIT INTO EXISTING ITEM

INSTALL ON TYPE 5 CONCRETE BASE
(1) TRANSFORMER BASE
(1) TYPE 5 POLE
(1) MICROWAVE DETECTOR ASSEMBLY (STATE-FURNISHED)

EXPB13

MD11

INSTALL IN EXISTING CONDUIT
(1) MICROWAVE DETECTOR CABLE

REMOVE CABLE

EXPB12

INSTALL CONDUIT INTO EXISTING ITEM

INSTALL ON TYPE 5 CONCRETE BASE
(1) TRANSFORMER BASE
(1) TYPE 5 POLE
(1) MICROWAVE DETECTOR ASSEMBLY (STATE-FURNISHED)

STH 16 WB

724 726 728 730 732 734 736 738

STH 16 EB

REMOVE CABLES
(MAINLINE LEAD-IN CABLE AND
NB OFF-RAMP LEAD-IN CABLE)

EXPB11

MD10

INSTALL 2-2" NONMETALLIC CONDUITS
(1) WITH MICROWAVE DETECTOR CABLE
(1) FOR FUTURE USE

EXPB10

EXCB02/SDS-67-0078

INSTALL IN EXISTING CONDUIT
(2) MICROWAVE DETECTOR CABLES

INSTALL IN EXISTING CABINET
(5) MICROWAVE DETECTOR MODULES (STATE-FURNISHED)

CTH JJ

LEGEND

- EXISTING PULL BOX, STEEL, 24"X36"
- EXISTING FTMS CONTROL CABINET AND BASE
- MICROWAVE DETECTOR INSTALLATION
- EXISTING CONDUIT

PROJECT NO: 1370-15-70	HWY: STH 16	COUNTY: WAUKESHA	FTMS PLAN	SHEET 83	E

FILE NAME : J:\projects\D2_13701516\71\021402_fm.dgn PLOT DATE : 01-FEB-2017 11:37 PLOT BY : dotshw PLOT NAME : PLOT SCALE : 100:1

WISDOT/CADDS SHEET 42

2

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LEGEND

EXISTING PULL BOX, STEEL, 24"X36"

EXISTING FTMS CONTROL CABINET AND BASE

MICROWAVE DETECTOR INSTALLATION

EXISTING CONDUIT

N

INSTALL CONDUIT INTO EXISTING ITEM

INSTALL IN EXISTING CABINET
(4) MICROWAVE DETECTOR MODULES (STATE-FURNISHED)

INSTALL ON TYPE 5 CONCRETE BASE
(1) TRANSFORMER BASE
(1) TYPE 5 POLE
(1) MICROWAVE DETECTOR ASSEMBLY (STATE-FURNISHED)

EXCB01/SDS-67-0077

REMOVE CABLE
(LOOP DETECTOR LEAD-IN CABLE)

EXPB02

MD01

EXPB01

INSTALL IN EXISTING CONDUIT
(1) MICROWAVE DETECTOR CABLE

STH 16 WB

766 768 770 772 774 776 778 780

INSTALL 2-2" NONMETALLIC CONDUITS
(1) WITH MICROWAVE DETECTOR CABLE
(1) FOR FUTURE USE

REMOVE CABLES
(LOOP DETECTOR LEAD-IN CABLE)

STH 16 EB

EXPB03

CTH T

PROJECT NO: 1370-15-70	HWY: STH 16	COUNTY: WAUKESHA	FTMS PLAN	SHEET 84	E

FILE NAME : J:\projects\D2_13701516\71\021403_fm.dgn PLOT DATE : 01-FEB-2017 11:37 PLOT BY : dotshw PLOT NAME : PLOT SCALE : 100:1

WISDOT/CADDS SHEET 42

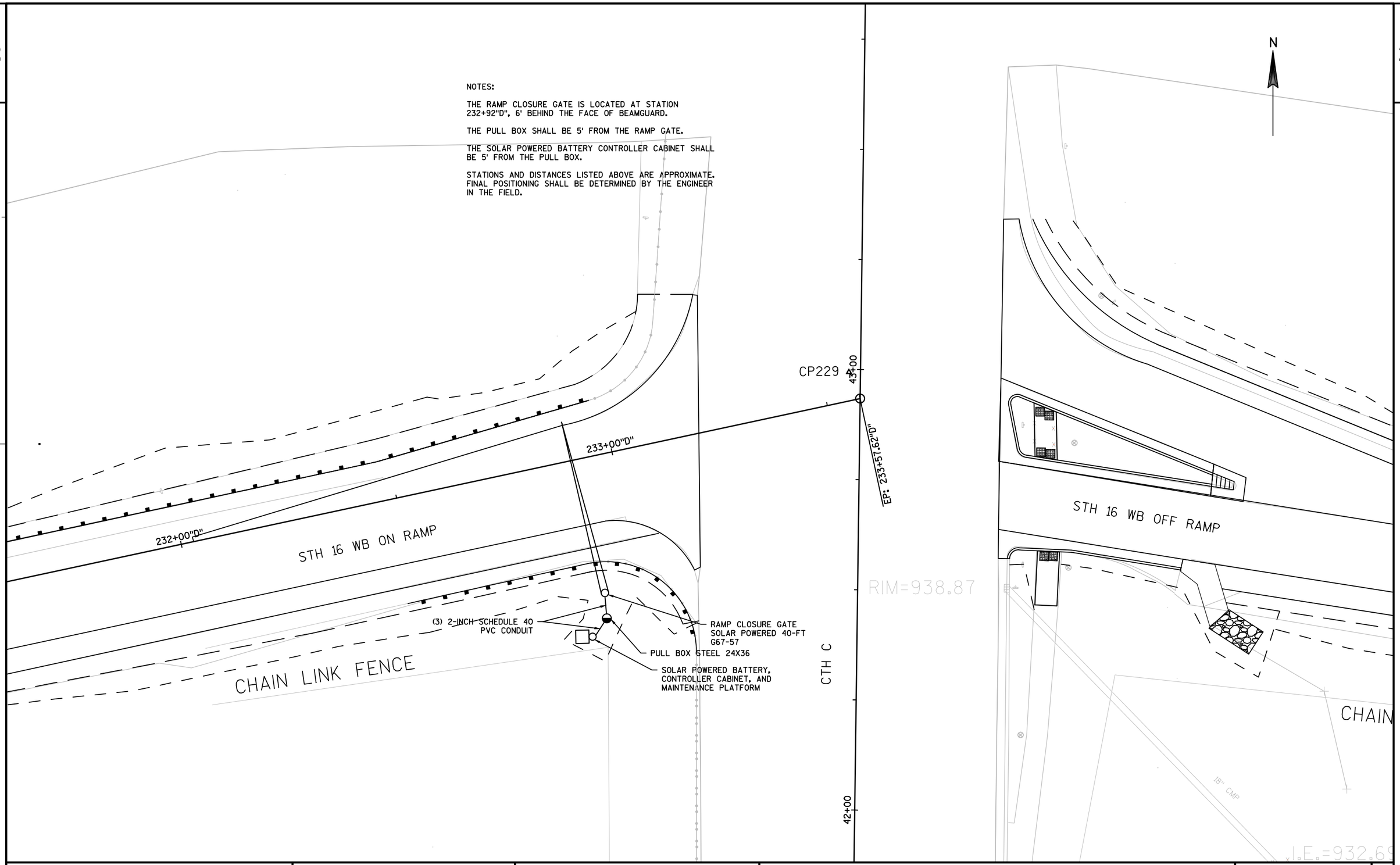
NOTES:

THE RAMP CLOSURE GATE IS LOCATED AT STATION 232+92"D", 6' BEHIND THE FACE OF BEAMGUARD.

THE PULL BOX SHALL BE 5' FROM THE RAMP GATE.

THE SOLAR POWERED BATTERY CONTROLLER CABINET SHALL BE 5' FROM THE PULL BOX.

STATIONS AND DISTANCES LISTED ABOVE ARE APPROXIMATE. FINAL POSITIONING SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.



PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	FTMS - CTH C/STH 16 WB ON-RAMP (G67-57)	SHEET 85	E

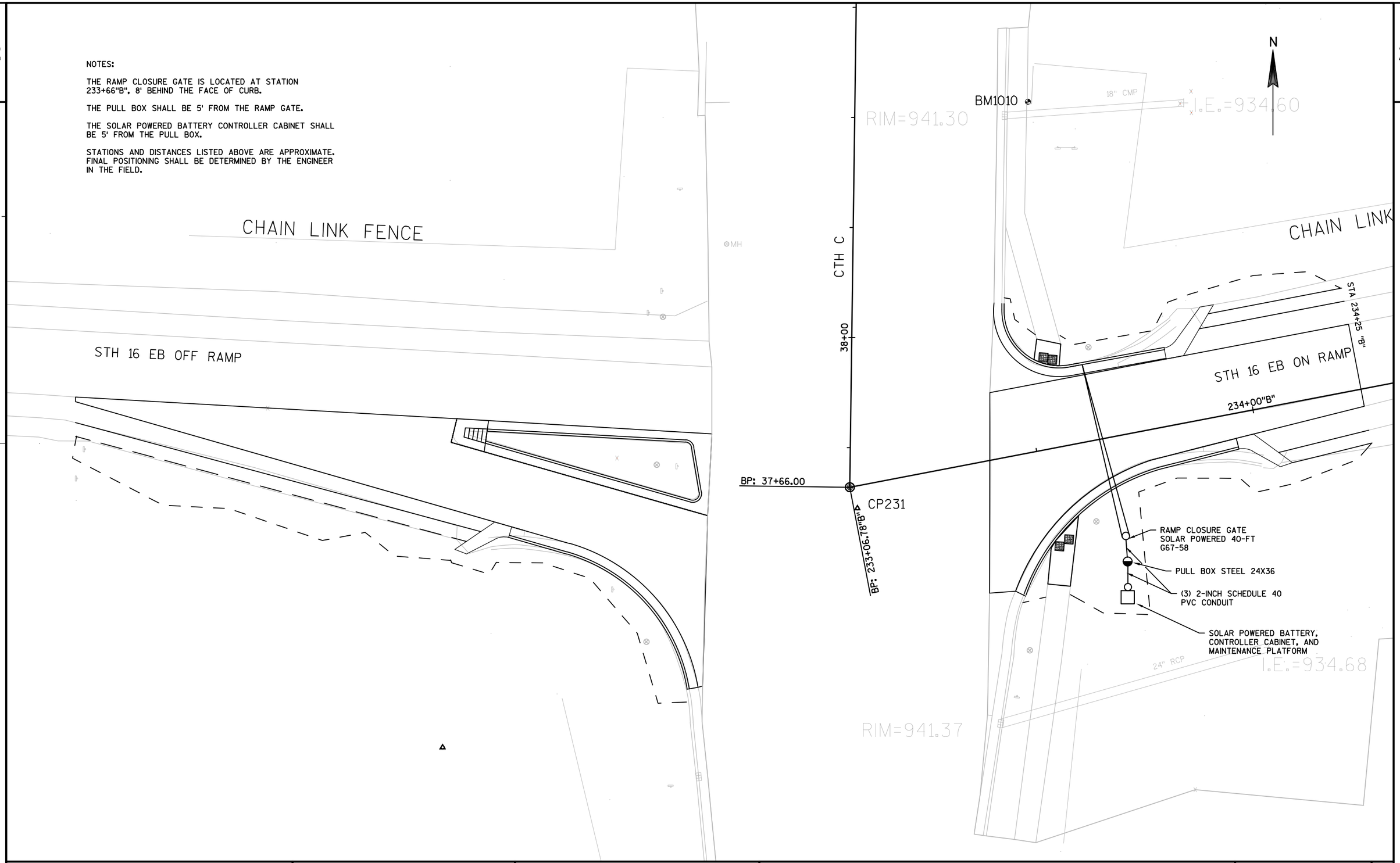
NOTES:

THE RAMP CLOSURE GATE IS LOCATED AT STATION 233+66"B", 8' BEHIND THE FACE OF CURB.

THE PULL BOX SHALL BE 5' FROM THE RAMP GATE.

THE SOLAR POWERED BATTERY CONTROLLER CABINET SHALL BE 5' FROM THE PULL BOX.

STATIONS AND DISTANCES LISTED ABOVE ARE APPROXIMATE. FINAL POSITIONING SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.



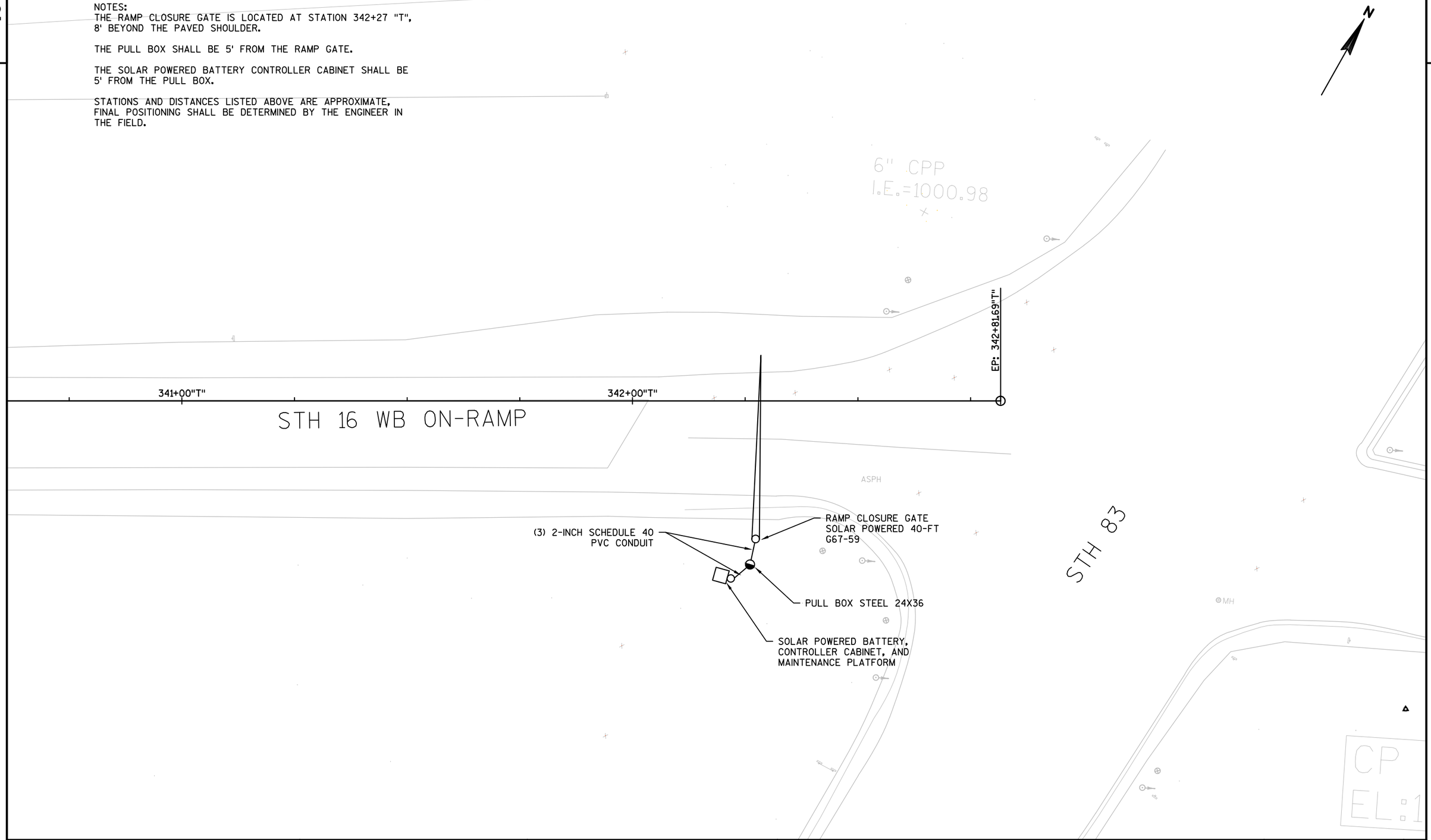
PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	FTMS - CTH C/STH 16 EB ON-RAMP (G67-58)	SHEET 86	E

NOTES:
THE RAMP CLOSURE GATE IS LOCATED AT STATION 342+27 "T",
8' BEYOND THE PAVED SHOULDER.

THE PULL BOX SHALL BE 5' FROM THE RAMP GATE.

THE SOLAR POWERED BATTERY CONTROLLER CABINET SHALL BE
5' FROM THE PULL BOX.

STATIONS AND DISTANCES LISTED ABOVE ARE APPROXIMATE,
FINAL POSITIONING SHALL BE DETERMINED BY THE ENGINEER IN
THE FIELD.



PROJECT NO:1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	FTMS - STH 83/STH 16 WB ON-RAMP (G67-59)	SHEET 87	E

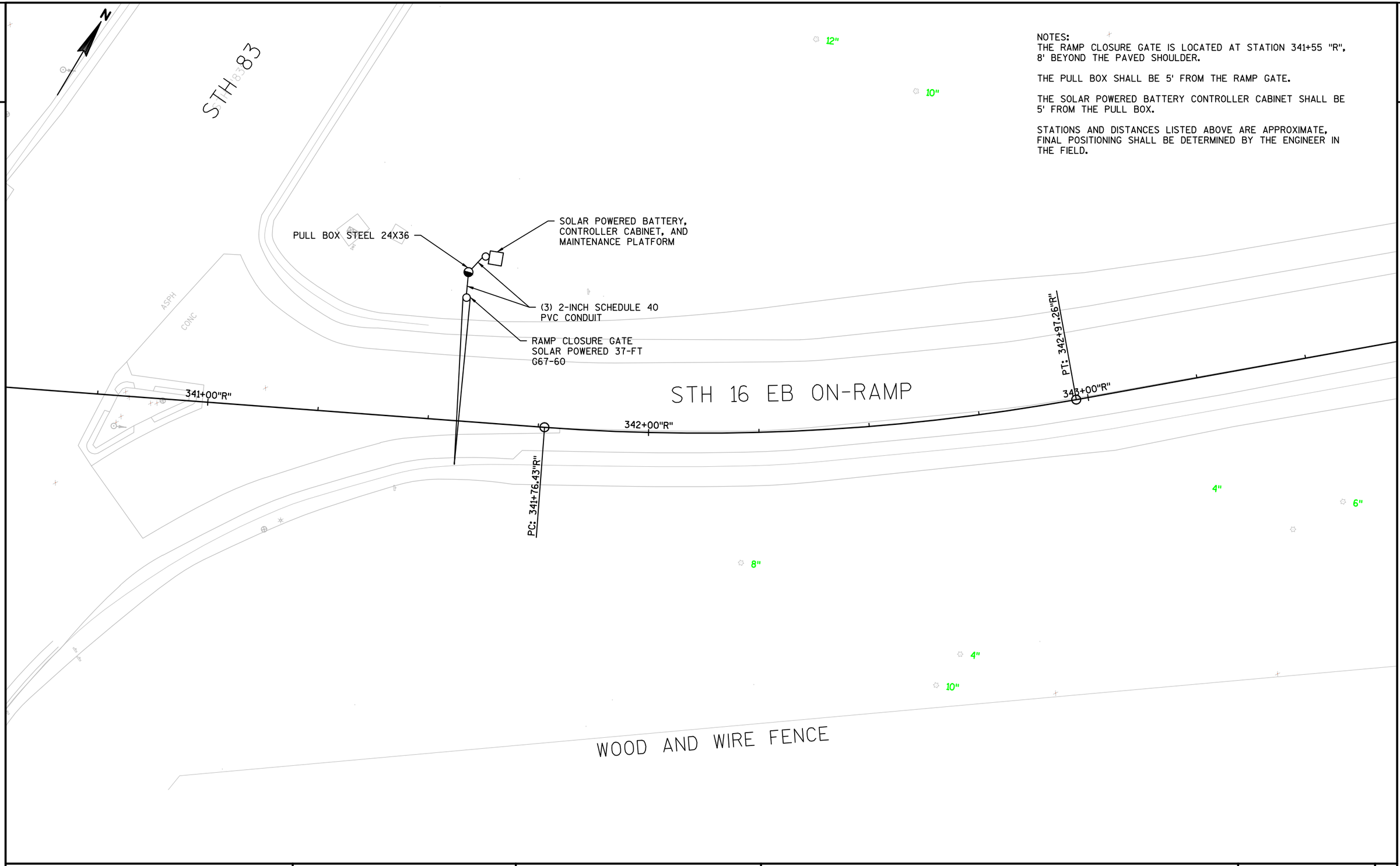
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NOTES:
THE RAMP CLOSURE GATE IS LOCATED AT STATION 341+55 "R", 8' BEYOND THE PAVED SHOULDER.

THE PULL BOX SHALL BE 5' FROM THE RAMP GATE.

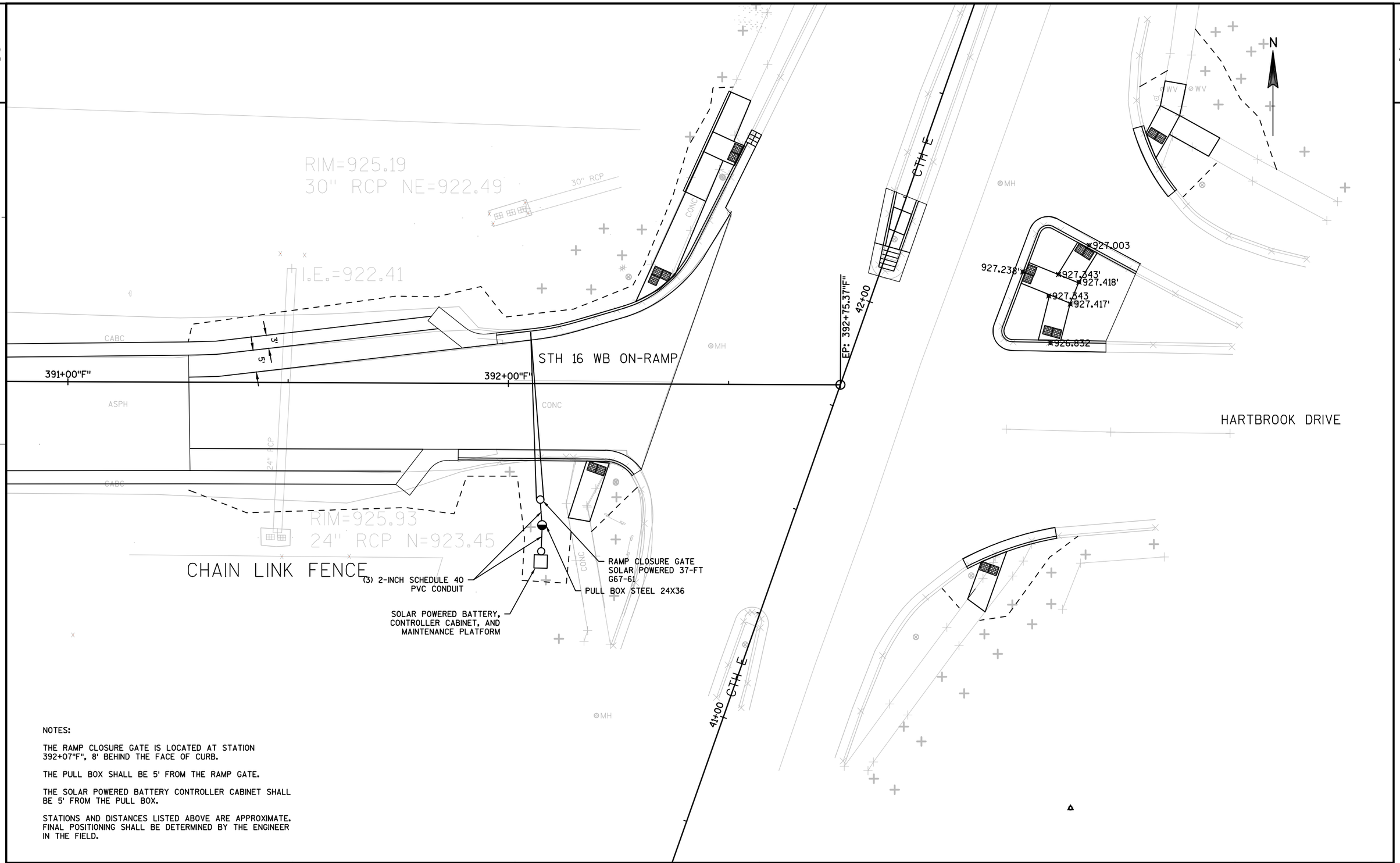
THE SOLAR POWERED BATTERY CONTROLLER CABINET SHALL BE 5' FROM THE PULL BOX.

STATIONS AND DISTANCES LISTED ABOVE ARE APPROXIMATE, FINAL POSITIONING SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.



PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	FTMS - STH 83/STH 16 EB ON-RAMP (G67-60)	SHEET 88	E

2



NOTES:

THE RAMP CLOSURE GATE IS LOCATED AT STATION 392+07"F", 8' BEHIND THE FACE OF CURB.

THE PULL BOX SHALL BE 5' FROM THE RAMP GATE.

THE SOLAR POWERED BATTERY CONTROLLER CABINET SHALL BE 5' FROM THE PULL BOX.

STATIONS AND DISTANCES LISTED ABOVE ARE APPROXIMATE. FINAL POSITIONING SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	FTMS - CTH E/STH 16 WB ON-RAMP (G67-61)	SHEET 89	E

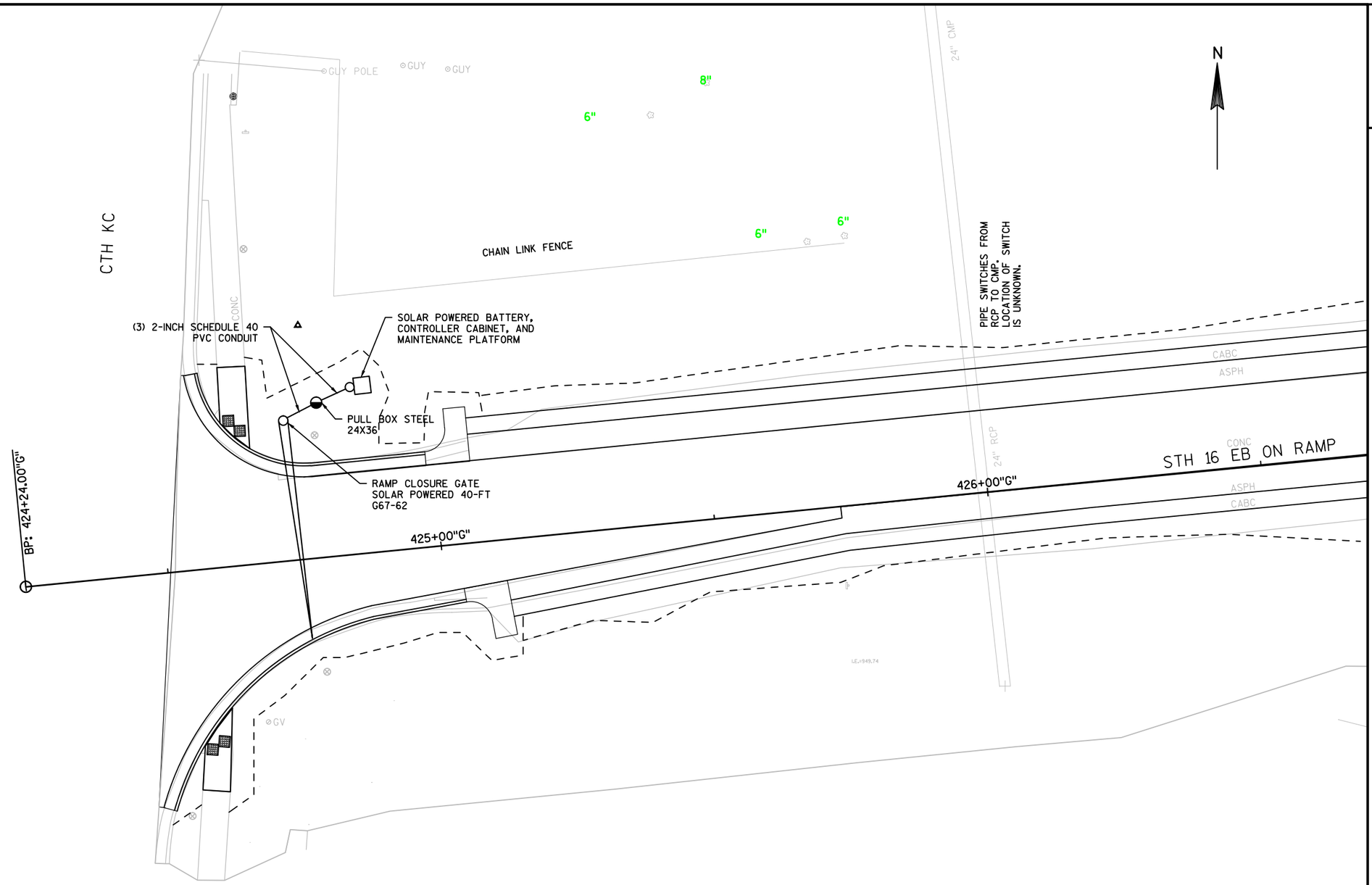
NOTES:

THE RAMP CLOSURE GATE IS LOCATED AT STATION 424+74"G", 8' BEHIND THE FACE OF CURB.

THE PULL BOX SHALL BE 5' FROM THE RAMP GATE.

THE SOLAR POWERED BATTERY CONTROLLER CABINET SHALL BE 5' FROM THE PULL BOX.

STATIONS AND DISTANCES LISTED ABOVE ARE APPROXIMATE. FINAL POSITIONING SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.



PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	FTMS - CTH KC/STH 16 EB ON-RAMP (G67-62)	SHEET 90	E

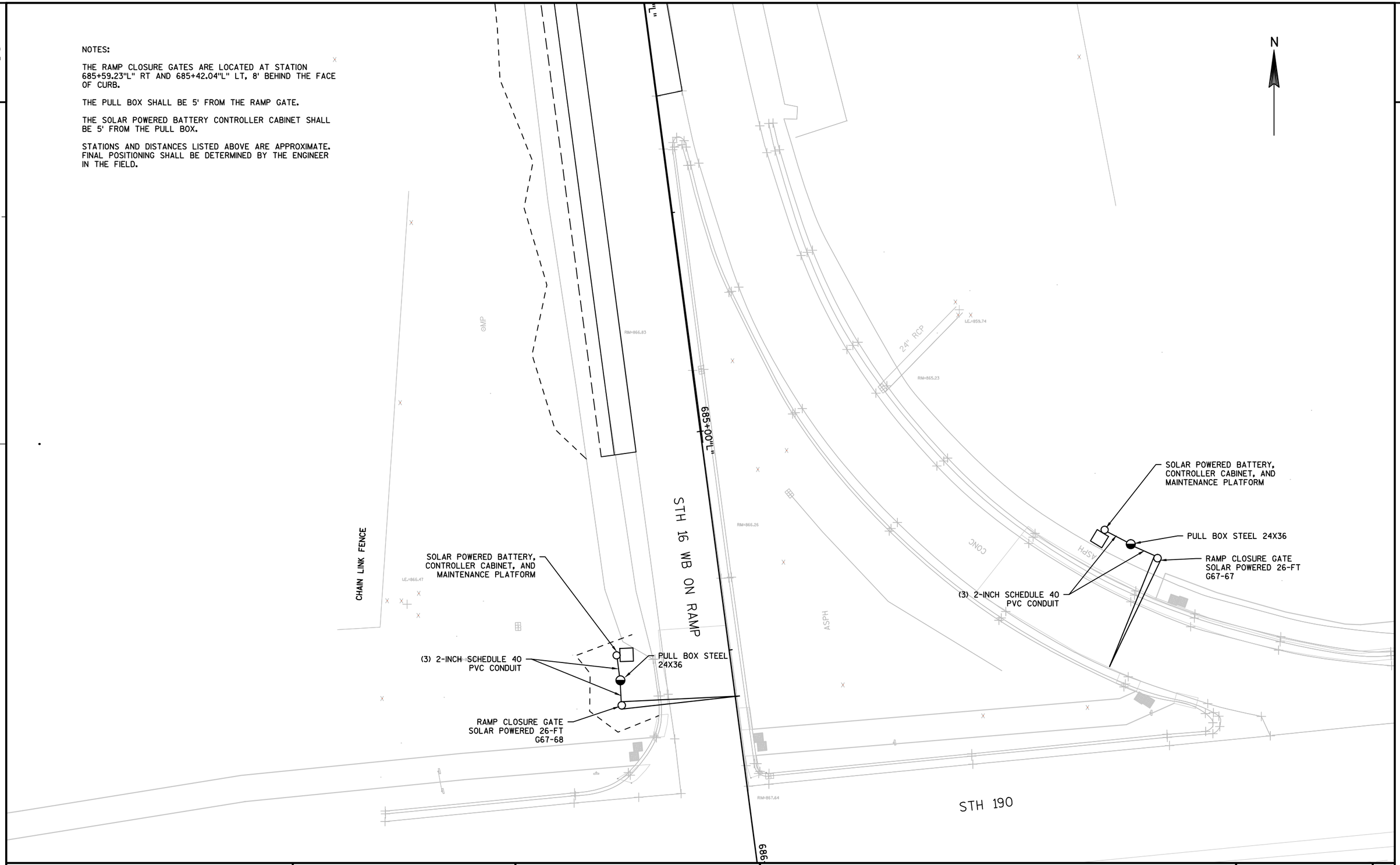
NOTES:

THE RAMP CLOSURE GATES ARE LOCATED AT STATION 685+59.23"L" RT AND 685+42.04"L" LT, 8' BEHIND THE FACE OF CURB.

THE PULL BOX SHALL BE 5' FROM THE RAMP GATE.

THE SOLAR POWERED BATTERY CONTROLLER CABINET SHALL BE 5' FROM THE PULL BOX.

STATIONS AND DISTANCES LISTED ABOVE ARE APPROXIMATE. FINAL POSITIONING SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.



PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	FTMS - STH 190/STH 16 WB ON-RAMP (G67-67 & G67-68)	SHEET 91	E

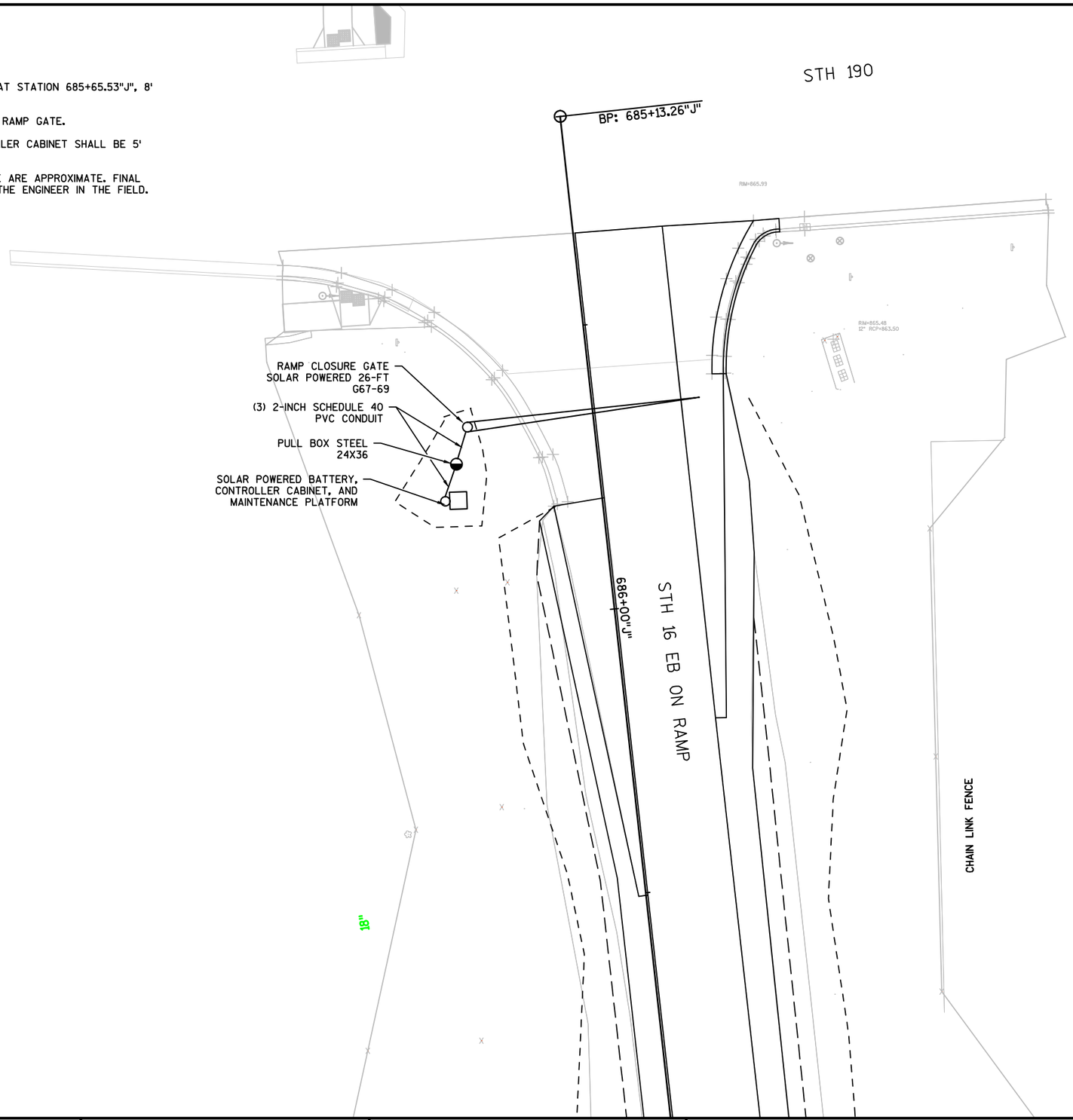
NOTES:

THE RAMP CLOSURE GATE IS LOCATED AT STATION 685+65.53"J", 8' BEHIND THE FACE OF CURB.

THE PULL BOX SHALL BE 5' FROM THE RAMP GATE.

THE SOLAR POWERED BATTERY CONTROLLER CABINET SHALL BE 5' FROM THE PULL BOX.

STATIONS AND DISTANCES LISTED ABOVE ARE APPROXIMATE. FINAL POSITIONING SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.



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PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	FTMS - STH 190/STH 16 EB ON-RAMP (G67-69)	SHEET 92	E

FILE NAME : N:\PDS\C3D\13701501\DESIGN\FTMS\STH190RAMPGATES.DWG PLOT DATE : 1/21/2017 11:32 AM PLOT BY : ROTIER, STEVEN J PLOT NAME : PLOT SCALE : 1 IN:20 FT

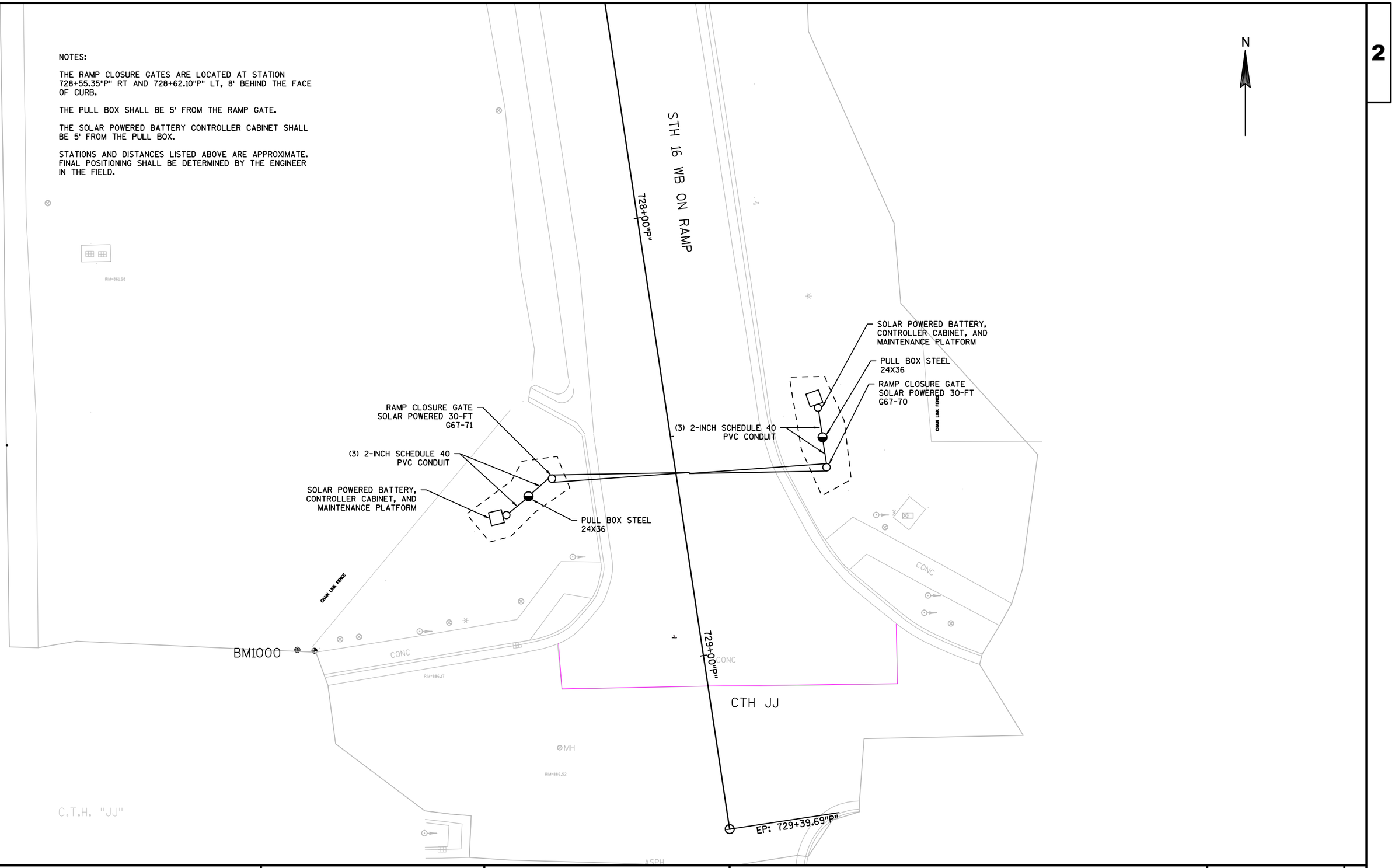
NOTES:

THE RAMP CLOSURE GATES ARE LOCATED AT STATION 728+55.35"P" RT AND 728+62.10"P" LT, 8' BEHIND THE FACE OF CURB.

THE PULL BOX SHALL BE 5' FROM THE RAMP GATE.

THE SOLAR POWERED BATTERY CONTROLLER CABINET SHALL BE 5' FROM THE PULL BOX.

STATIONS AND DISTANCES LISTED ABOVE ARE APPROXIMATE. FINAL POSITIONING SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.



PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	FTMS - CTH JJ/STH 16 WB ON-RAMP (G67-70 & G67-71)	SHEET 93	E

FILE NAME : N:\PDS\C3D\13701501\DESIGN\FTMS\CTHJJRAMPGATES.DWG PLOT DATE : 1/21/2017 11:27 AM PLOT BY : ROTIER, STEVEN J PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 42

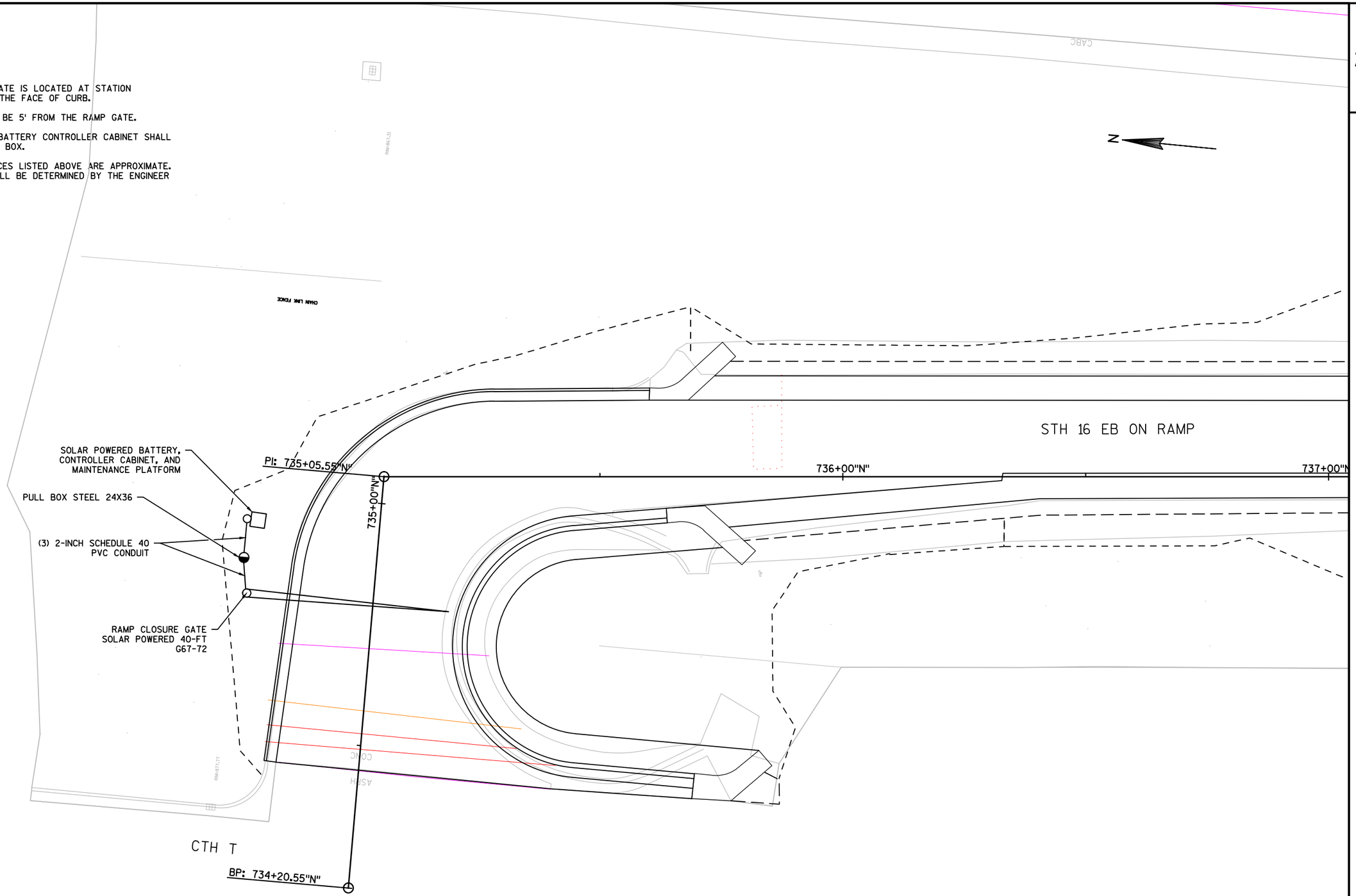
NOTES:

THE RAMP CLOSURE GATE IS LOCATED AT STATION 734+79"N", 8' BEHIND THE FACE OF CURB.

THE PULL BOX SHALL BE 5' FROM THE RAMP GATE.

THE SOLAR POWERED BATTERY CONTROLLER CABINET SHALL BE 5' FROM THE PULL BOX.

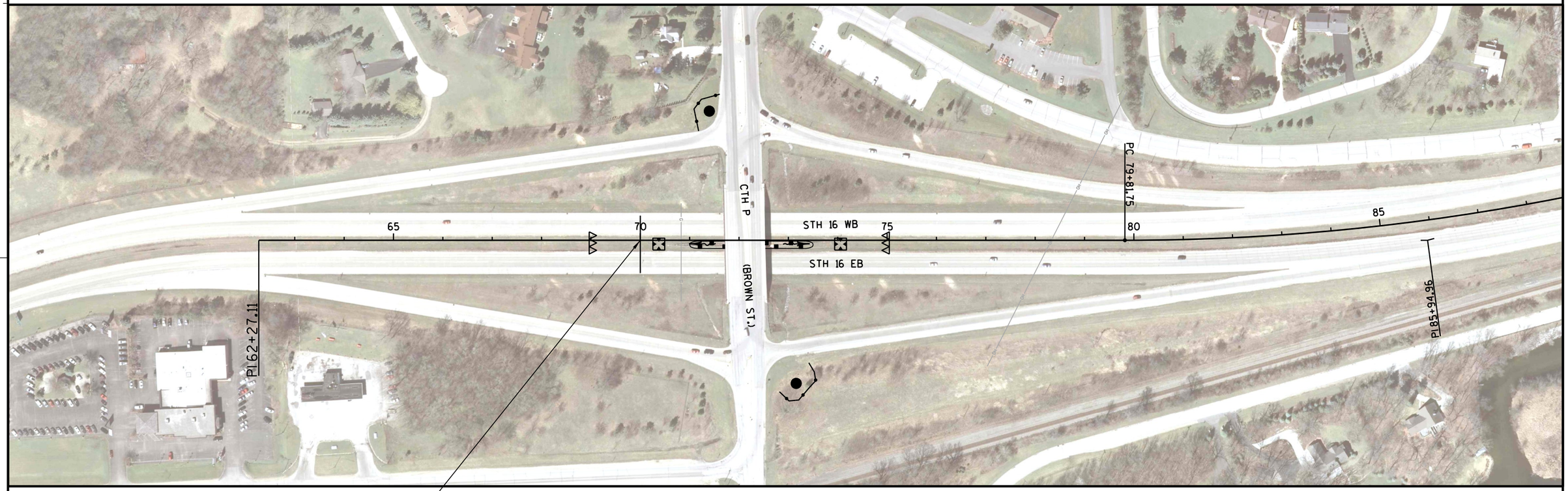
STATIONS AND DISTANCES LISTED ABOVE ARE APPROXIMATE. FINAL POSITIONING SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.



PROJECT NO:1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	FTMS - CTH JJ/STH 16 EB ON-RAMP (G67-72)	SHEET 94	E

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BEGIN PROJECT
STA. 70+00

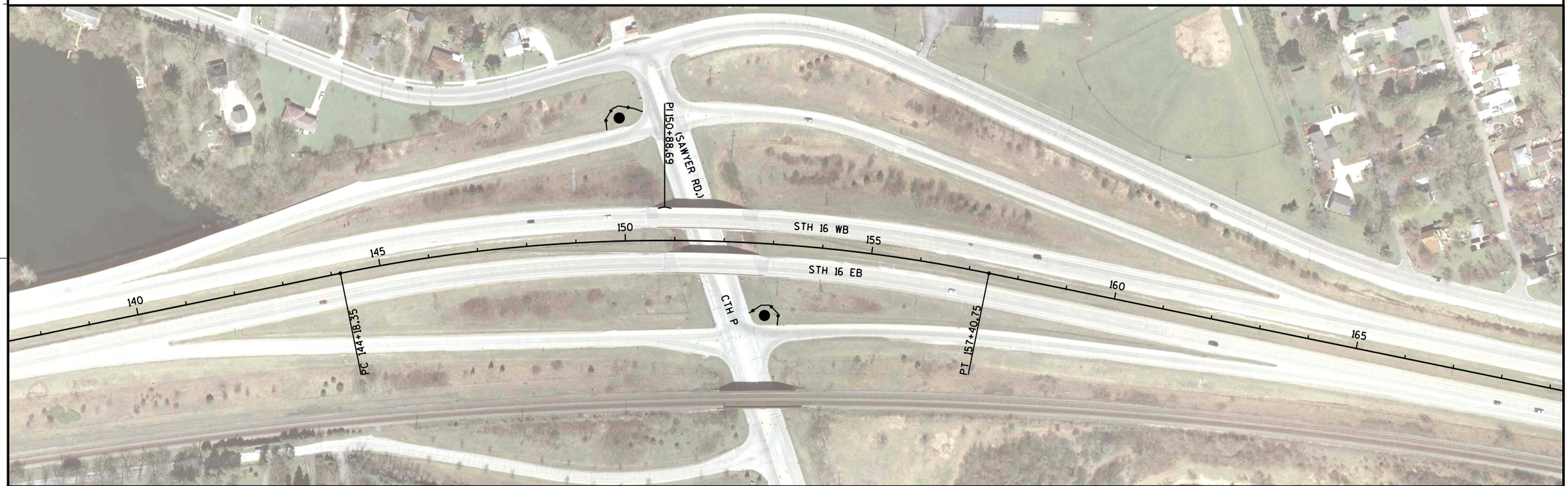
LEGEND

- TEMPORARY DITCH CHECKS
- CULVERT PIPE CHECKS
- SILT FENCE
- SURFACE WATER FLOW
- INLET PROTECTION TYPE B (UNLESS NOTED)
- WETLAND
- APRON ENDWALL REPAIR
- BARRICADE RACKS
- RAMP CLOSURE GATES
- INSTALL CULVERT LINER

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	EROSION CONTROL	SHEET 95	E

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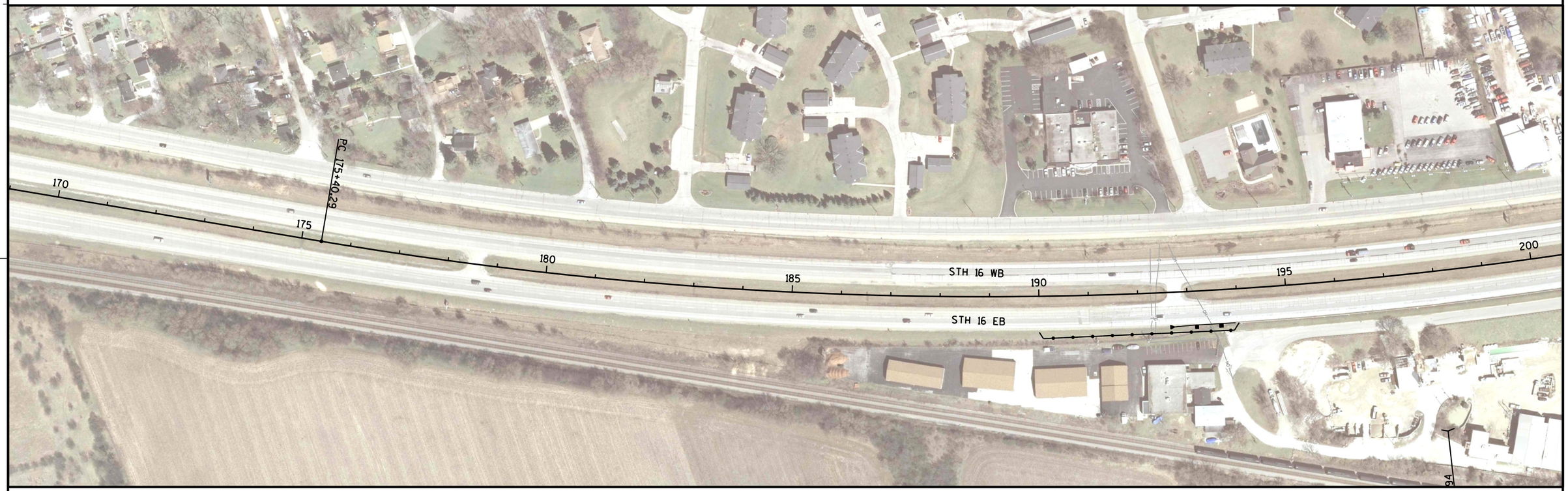


LEGEND

- TEMPORARY DITCH CHECKS
- CULVERT PIPE CHECKS
- SILT FENCE
- SURFACE WATER FLOW
- INLET PROTECTION TYPE B (UNLESS NOTED)
- WETLAND
- APRON ENDWALL REPAIR
- BARRICADE RACKS
- RAMP CLOSURE GATES
- INSTALL CULVERT LINER

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	EROSION CONTROL	SHEET 96	E

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LEGEND

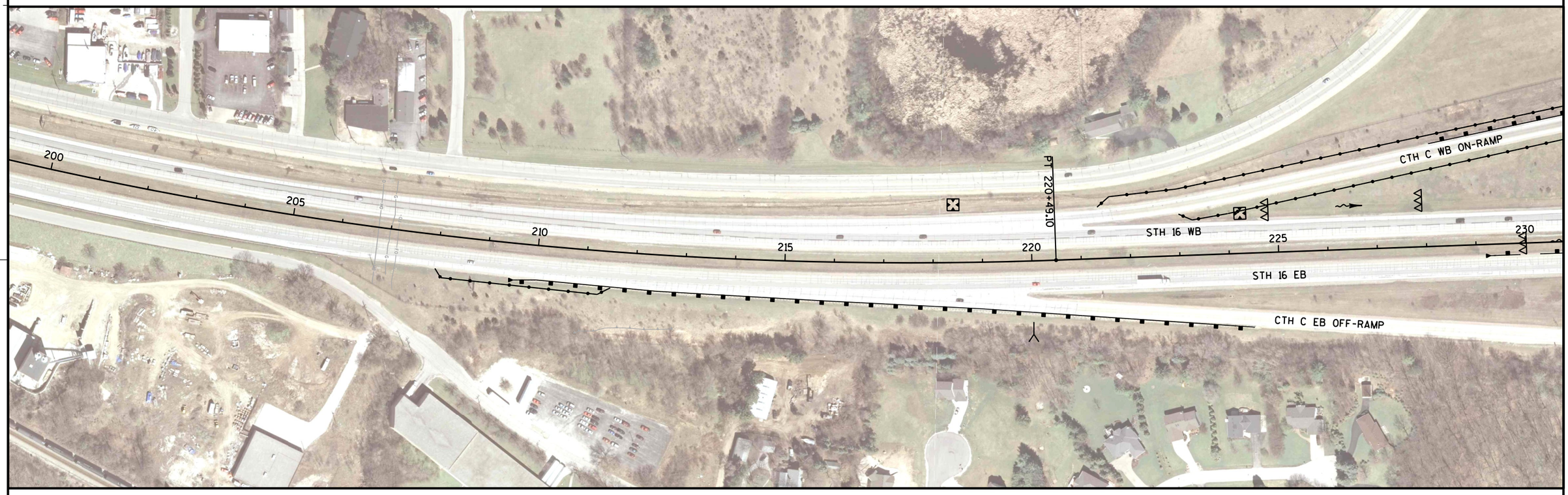
- TEMPORARY DITCH CHECKS
- CULVERT PIPE CHECKS
- SILT FENCE
- SURFACE WATER FLOW
- INLET PROTECTION TYPE B (UNLESS NOTED)
- WETLAND
- APRON ENDWALL REPAIR
- BARRICADE RACKS
- RAMP CLOSURE GATES
- INSTALL CULVERT LINER

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	EROSION CONTROL	SHEET 97	E

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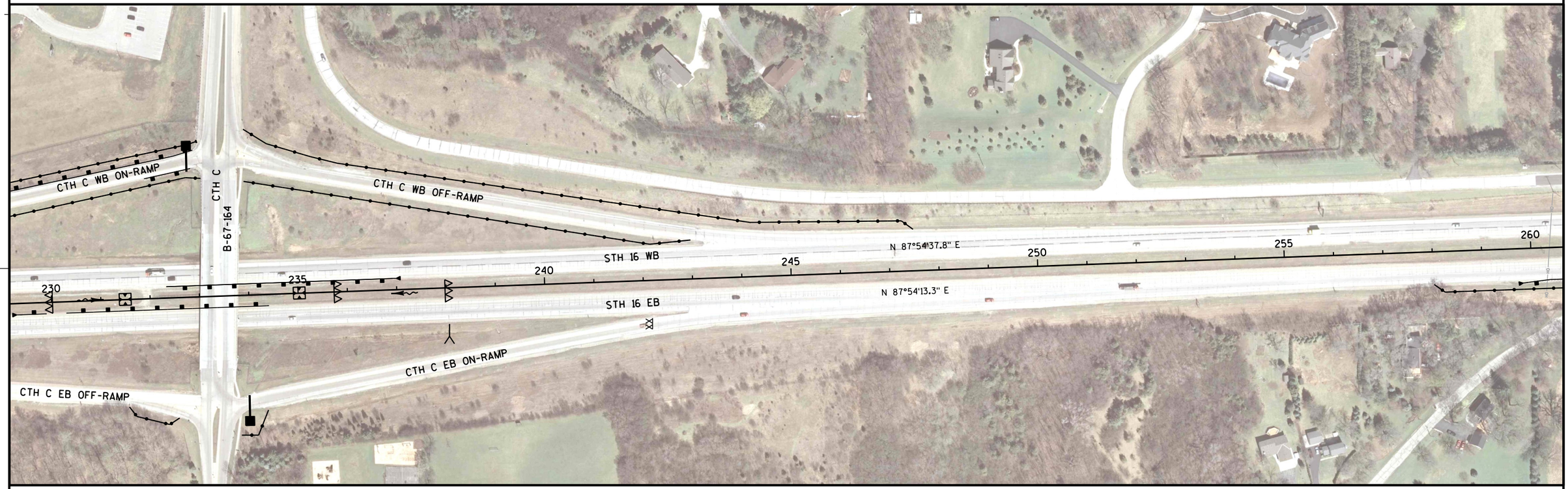
LEGEND

- TEMPORARY DITCH CHECKS
- CULVERT PIPE CHECKS
- SILT FENCE
- SURFACE WATER FLOW
- INLET PROTECTION TYPE B (UNLESS NOTED)
- WETLAND
- APRON ENDWALL REPAIR
- BARRICADE RACKS
- RAMP CLOSURE GATES
- INSTALL CULVERT LINER

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	EROSION CONTROL	SHEET 98	E

2

2



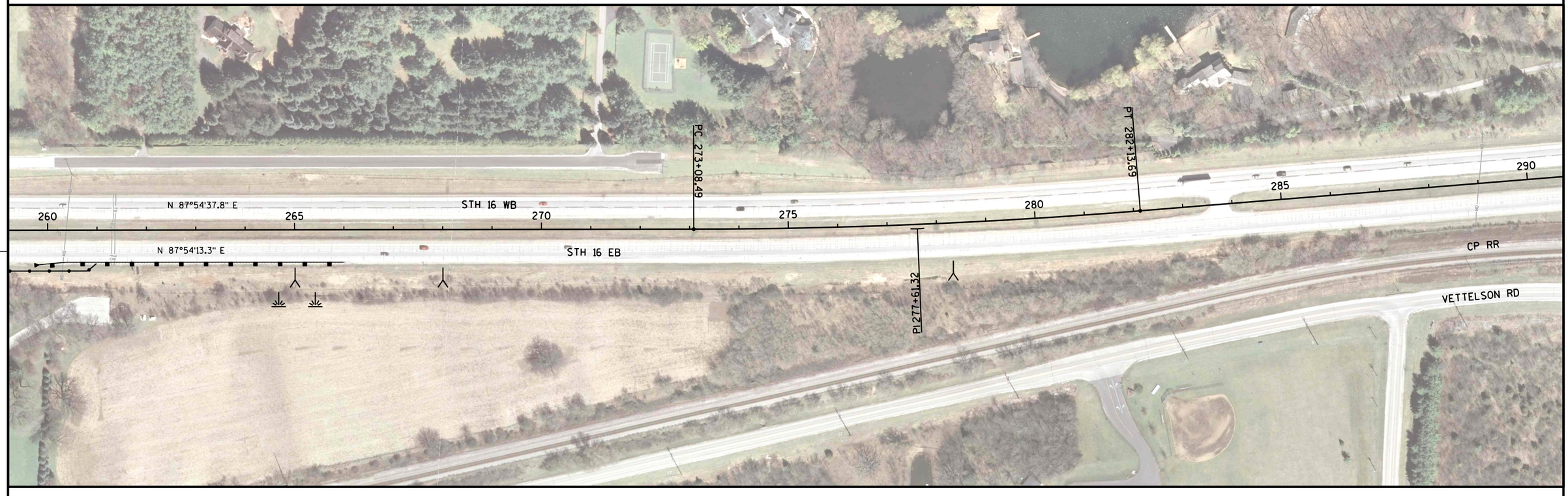
LEGEND

- TEMPORARY DITCH CHECKS
- CULVERT PIPE CHECKS
- SILT FENCE
- SURFACE WATER FLOW
- INLET PROTECTION TYPE B (UNLESS NOTED)
- WETLAND
- APRON ENDWALL REPAIR
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- RAMP CLOSURE GATES
- INSTALL CULVERT LINER

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	EROSION CONTROL	SHEET 99	E

2

2



LEGEND

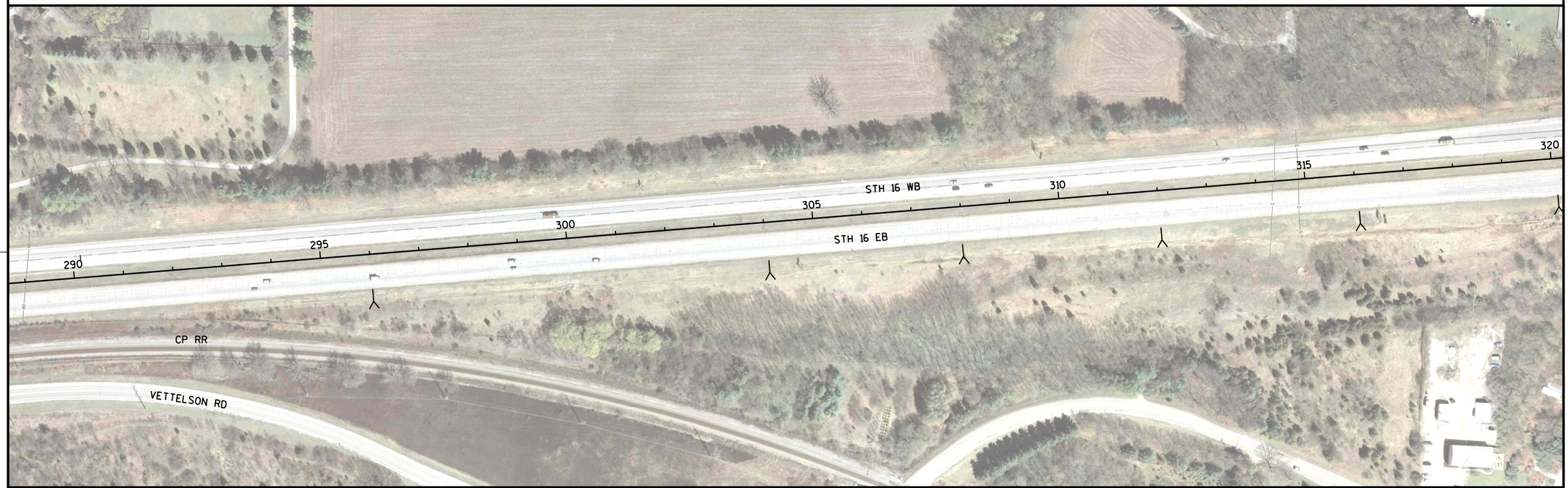
- TEMPORARY DITCH CHECKS
- CULVERT PIPE CHECKS
- SILT FENCE
- SURFACE WATER FLOW
- INLET PROTECTION TYPE B (UNLESS NOTED)
- WETLAND
- APRON ENDWALL REPAIR
- BARRICADE RACKS
- RAMP CLOSURE GATES
- INSTALL CULVERT LINER

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	EROSION CONTROL	SHEET 100	E

2

N

2



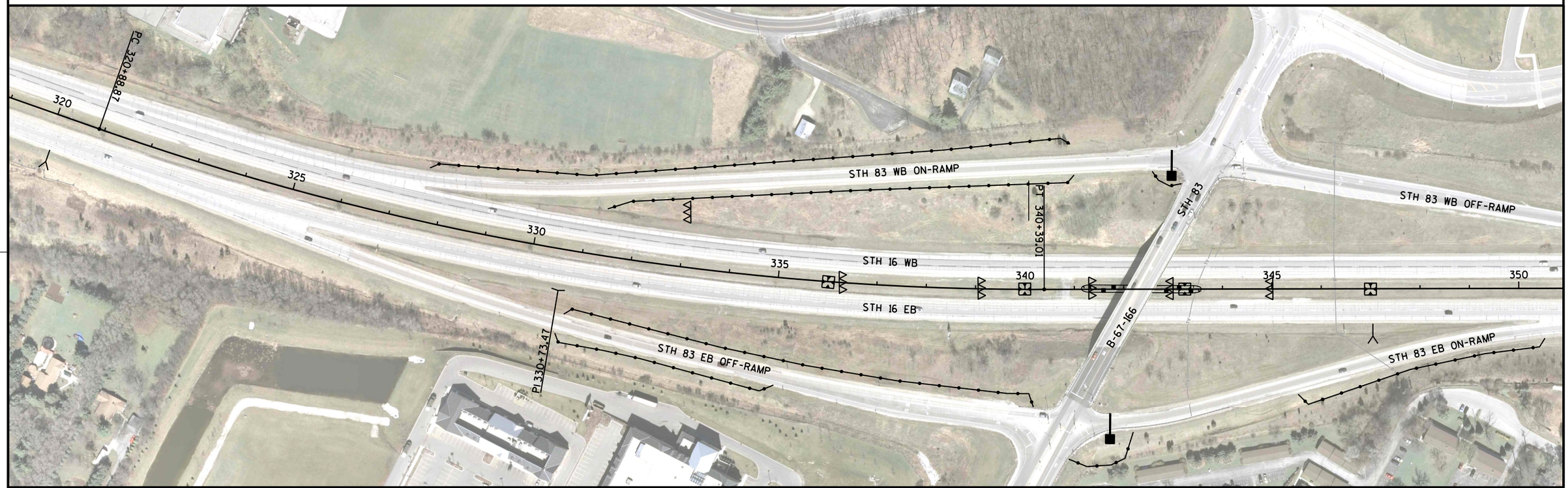
LEGEND

- TEMPORARY DITCH CHECKS
- CULVERT PIPE CHECKS
- SILT FENCE
- SURFACE WATER FLOW
- INLET PROTECTION TYPE B (UNLESS NOTED)
- WETLAND
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- BARRICADE RACKS
- RAMP CLOSURE GATES
- INSTALL CULVERT LINER

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	EROSION CONTROL	SHEET 101	E

2

2



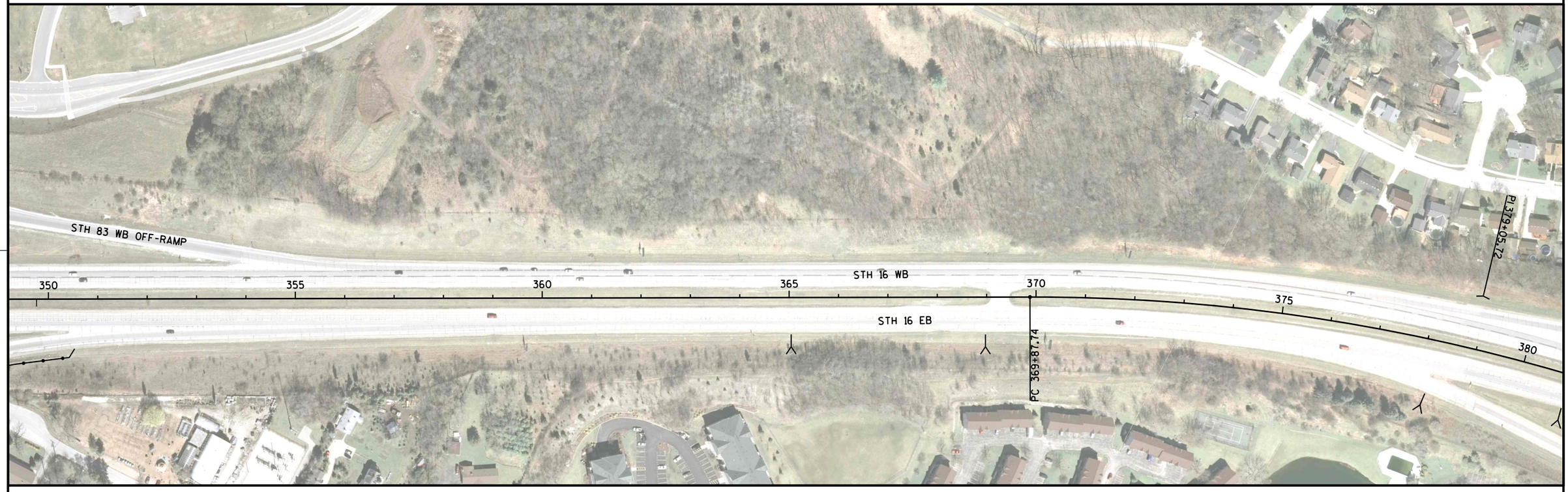
LEGEND

- TEMPORARY DITCH CHECKS
- CULVERT PIPE CHECKS
- SILT FENCE
- SURFACE WATER FLOW
- INLET PROTECTION TYPE B (UNLESS NOTED)
- WETLAND
- APRON ENDWALL REPAIR
- BARRICADE RACKS
- RAMP CLOSURE GATES
- INSTALL CULVERT LINER

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	EROSION CONTROL	SHEET 102	E

2

2



LEGEND

- TEMPORARY DITCH CHECKS
- CULVERT PIPE CHECKS
- SILT FENCE
- SURFACE WATER FLOW
- INLET PROTECTION TYPE B (UNLESS NOTED)
- WETLAND
- APRON ENDWALL REPAIR
- BARRICADE RACKS
- RAMP CLOSURE GATES
- INSTALL CULVERT LINER

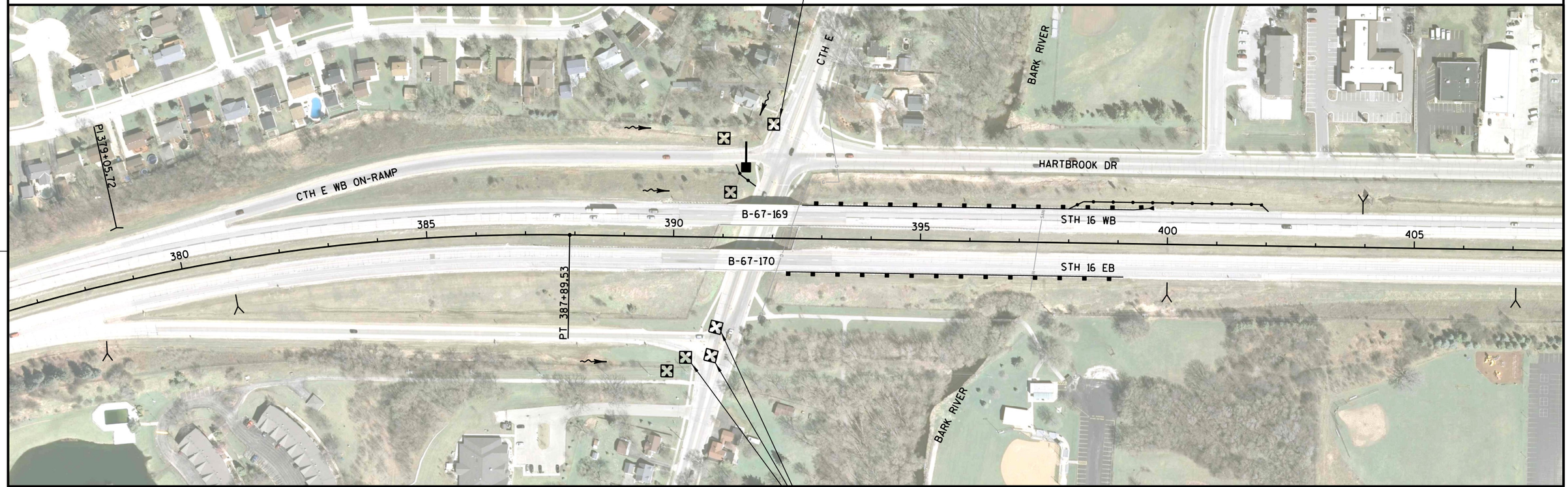
PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	EROSION CONTROL	SHEET 103	E

2

2

N

INLET PROTECTION
TYPE C



INLET PROTECTION
TYPE C

LEGEND

- TEMPORARY DITCH CHECKS
- CULVERT PIPE CHECKS
- SILT FENCE
- SURFACE WATER FLOW
- INLET PROTECTION TYPE B (UNLESS NOTED)
- WETLAND
- APRON ENDWALL REPAIR
- BARRICADE RACKS
- RAMP CLOSURE GATES
- INSTALL CULVERT LINER

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	EROSION CONTROL	SHEET 104	E

2

2

N

INLET PROTECTION
TYPE C

HARTBROOK DR

CTH KC

CTH KC WB OFF-RAMP

STH 16 WB

STH 16 EB

410 415 420 425 430 435

PI 411+99.80

B-67-172

PC 434+36.02

LEGEND

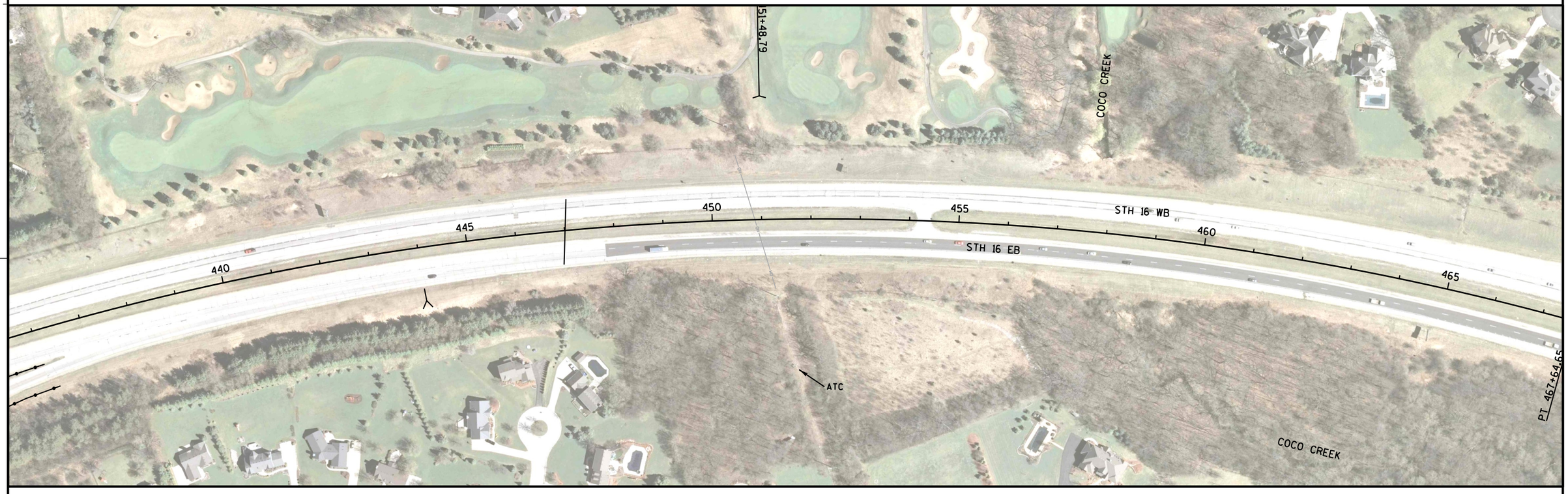
- TEMPORARY DITCH CHECKS
- CULVERT PIPE CHECKS
- SILT FENCE
- SURFACE WATER FLOW
- INLET PROTECTION TYPE B (UNLESS NOTED)
- WETLAND
- APRON ENDWALL REPAIR
- BARRICADE RACKS
- RAMP CLOSURE GATES
- INSTALL CULVERT LINER

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	EROSION CONTROL	SHEET 105	E

FILE NAME : J:\projects\D2_13701516\71\022011_ec.dgn PLOT DATE : 01-FEB-2017 11:38 PLOT BY : dotshw PLOT NAME : PLOT SCALE : 200:1

WISDOT/CADDS SHEET 42

2



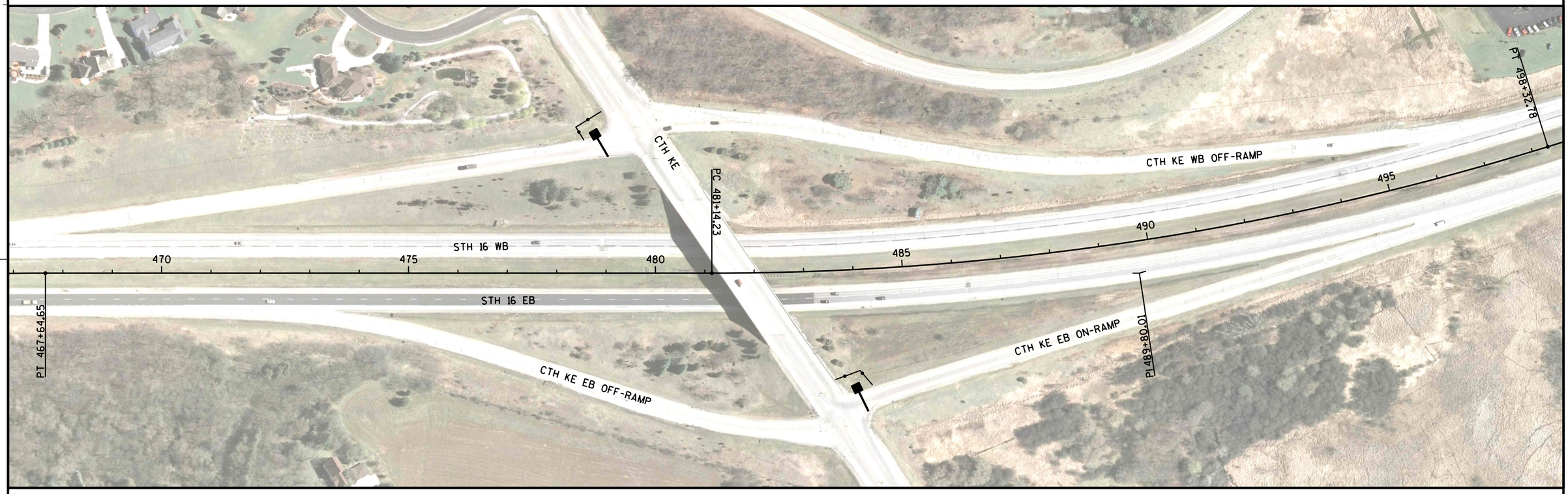
LEGEND

- TEMPORARY DITCH CHECKS
- CULVERT PIPE CHECKS
- SILT FENCE
- SURFACE WATER FLOW
- INLET PROTECTION TYPE B (UNLESS NOTED)
- WETLAND
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- BARRICADE RACKS
- RAMP CLOSURE GATES
- INSTALL CULVERT LINER

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	EROSION CONTROL	SHEET 106	E

2

2



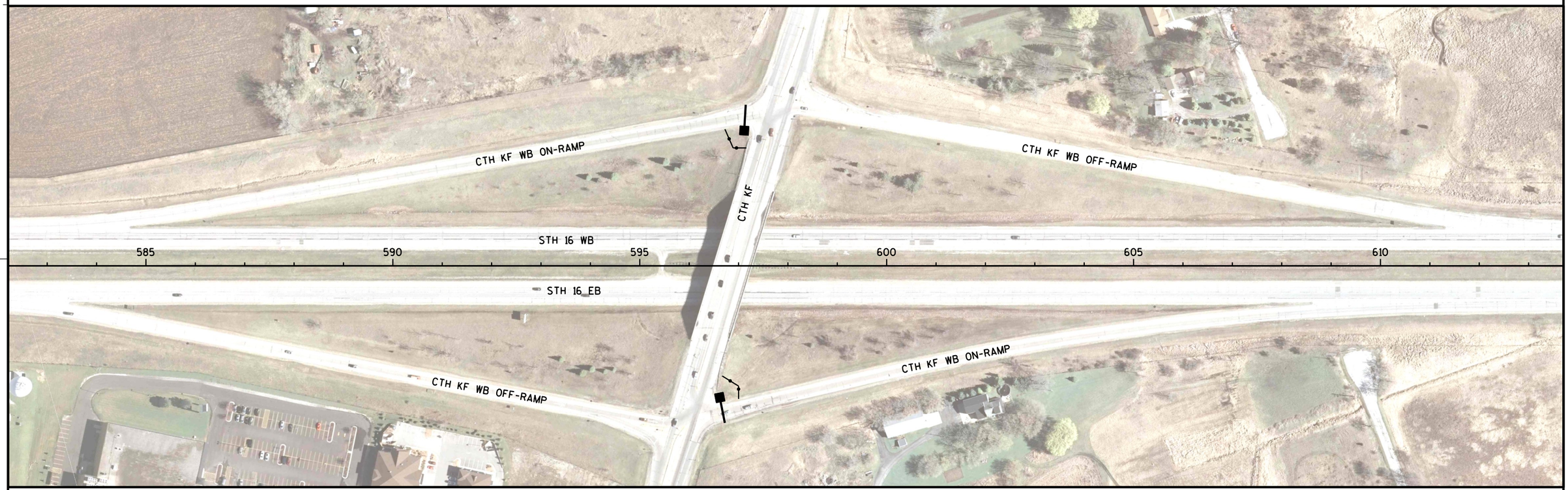
LEGEND

- TEMPORARY DITCH CHECKS
- CULVERT PIPE CHECKS
- SILT FENCE
- SURFACE WATER FLOW
- INLET PROTECTION TYPE B (UNLESS NOTED)
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- INSTALL CULVERT LINER

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	EROSION CONTROL	SHEET 107	E

2

2

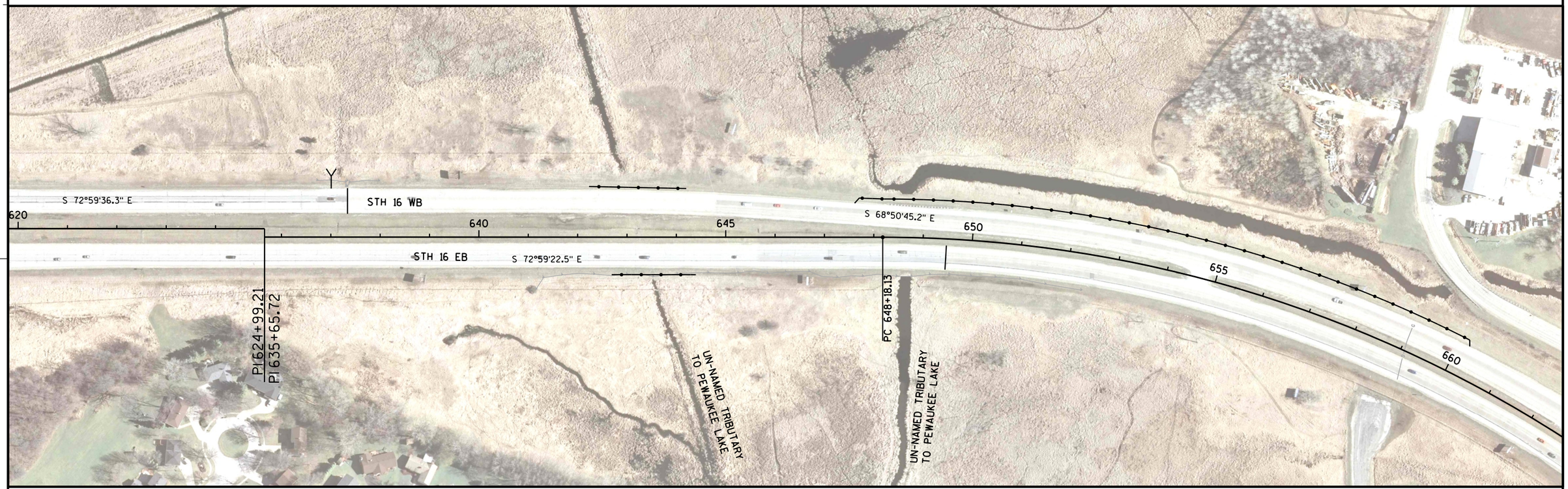


LEGEND

- TEMPORARY DITCH CHECKS
- CULVERT PIPE CHECKS
- SILT FENCE
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- INSTALL CULVERT LINER

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	EROSION CONTROL	SHEET 108	E

2



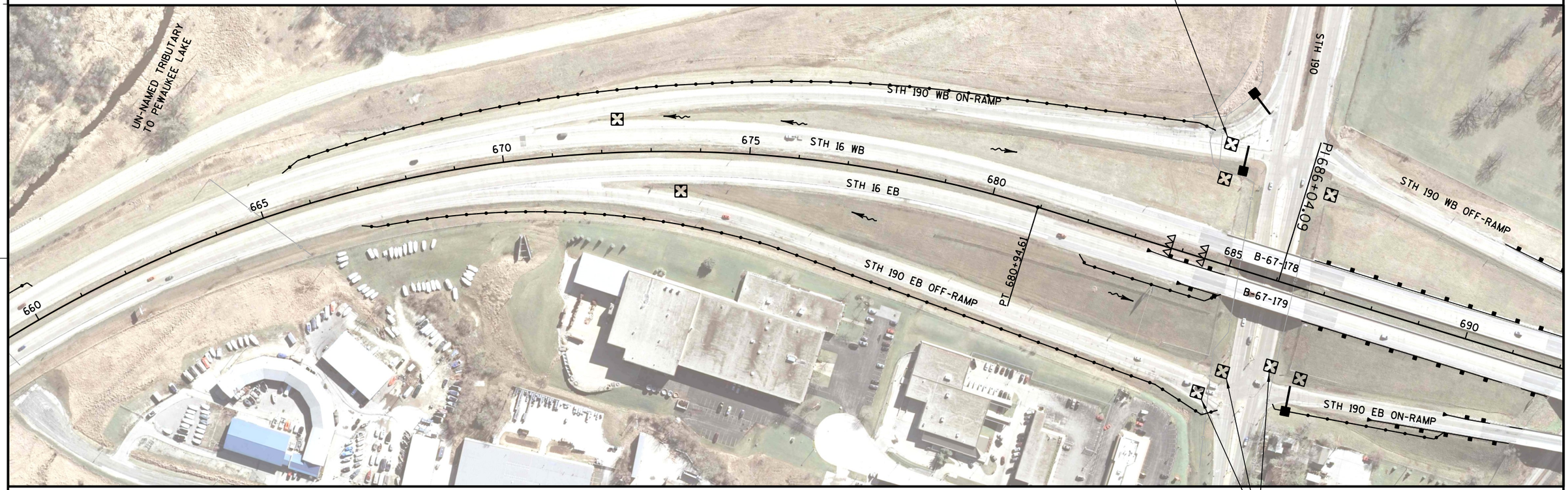
LEGEND

- TEMPORARY DITCH CHECKS
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- SILT FENCE
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- INSTALL CULVERT LINER

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	EROSION CONTROL	SHEET 109	E

2

2

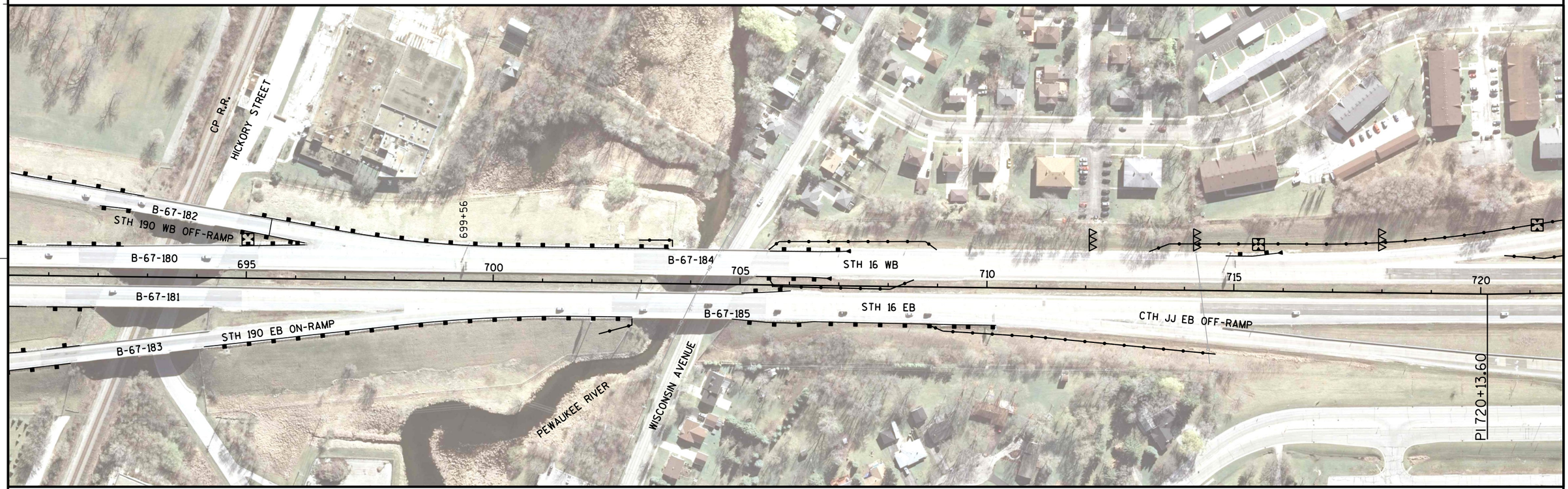


LEGEND

- TEMPORARY DITCH CHECKS
- CULVERT PIPE CHECKS
- SILT FENCE
- SURFACE WATER FLOW
- INLET PROTECTION TYPE B (UNLESS NOTED)
- WETLAND
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- BARRICADE RACKS
- RAMP CLOSURE GATES
- INSTALL CULVERT LINER

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	EROSION CONTROL	SHEET 110	E

2



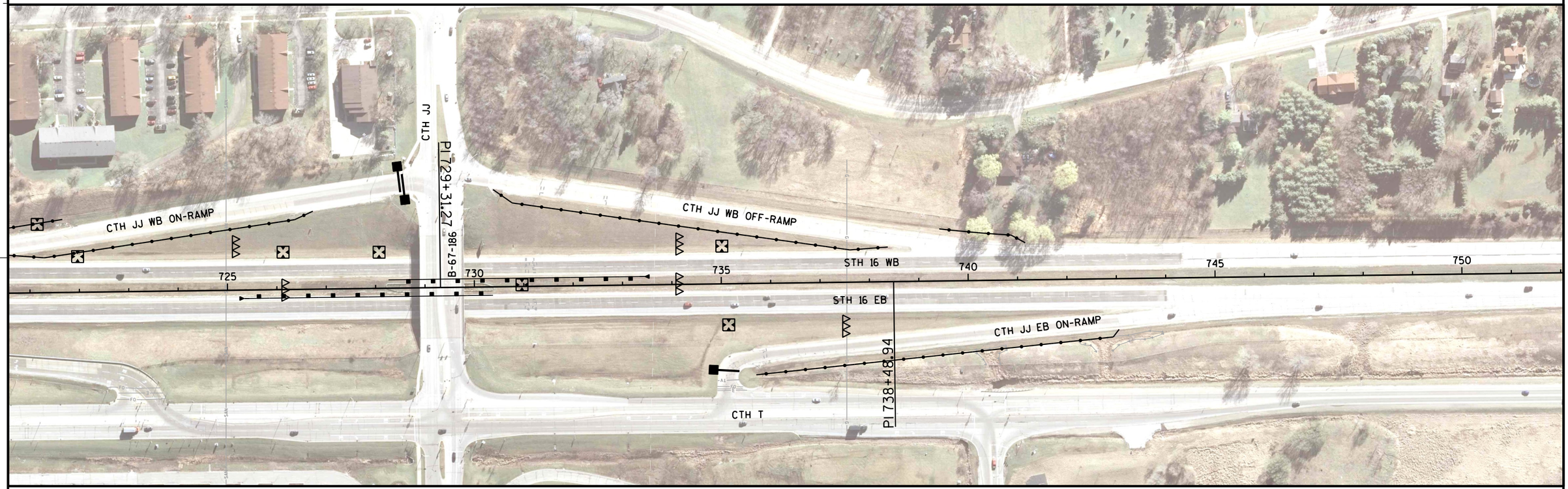
LEGEND

- TEMPORARY DITCH CHECKS
- CULVERT PIPE CHECKS
- SILT FENCE
- SURFACE WATER FLOW
- INLET PROTECTION TYPE B (UNLESS NOTED)
- WETLAND
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- BARRICADE RACKS
- RAMP CLOSURE GATES
- INSTALL CULVERT LINER

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	EROSION CONTROL	SHEET 111	E

2

N



LEGEND

- TEMPORARY DITCH CHECKS
- CULVERT PIPE CHECKS
- SILT FENCE
- SURFACE WATER FLOW
- INLET PROTECTION TYPE B (UNLESS NOTED)
- WETLAND
- APRON ENDWALL REPAIR
- BARRICADE RACKS
- RAMP CLOSURE GATES
- INSTALL CULVERT LINER

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	EROSION CONTROL	SHEET 112 E

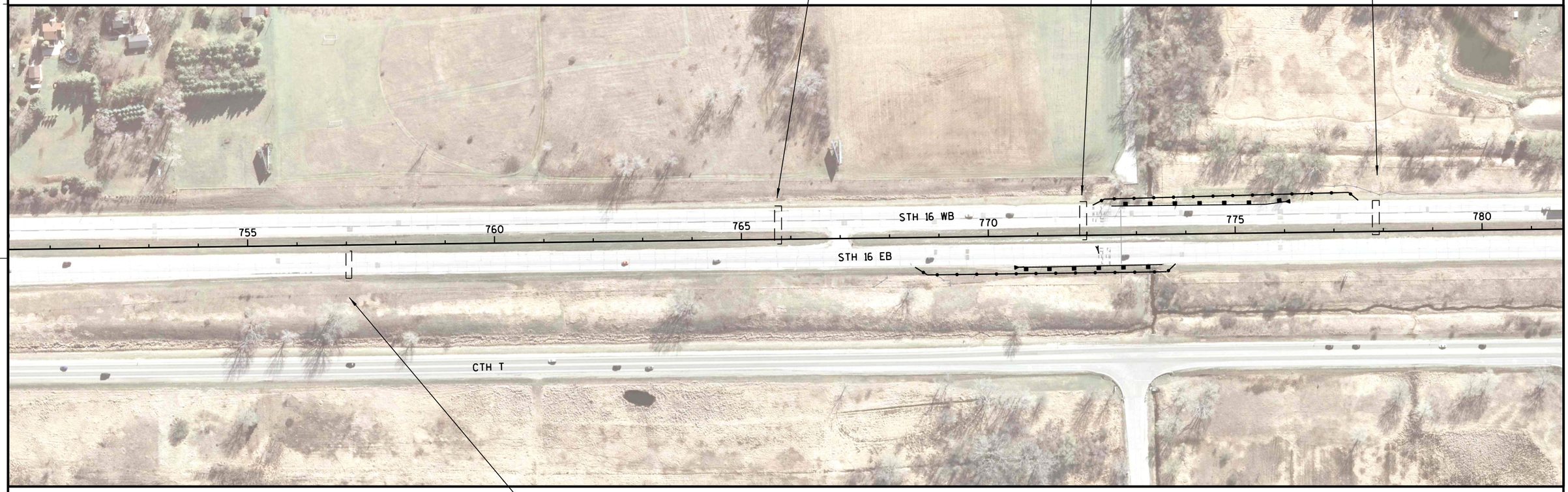
2

N

STA. 765+75
CULVERT PIPE LINER 15-INCH

STA. 772+00
CULVERT PIPE LINER 15-INCH

STA. 777+90
CULVERT PIPE LINER 15-INCH



STA. 757+00
CULVERT PIPE LINER 15-INCH

LEGEND

- TEMPORARY DITCH CHECKS
- CULVERT PIPE CHECKS
- SILT FENCE
- SURFACE WATER FLOW
- INLET PROTECTION TYPE B (UNLESS NOTED)
- WETLAND
- APRON ENDWALL REPAIR
- BARRICADE RACKS
- RAMP CLOSURE GATES
- INSTALL CULVERT LINER

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	EROSION CONTROL	SHEET 113	E

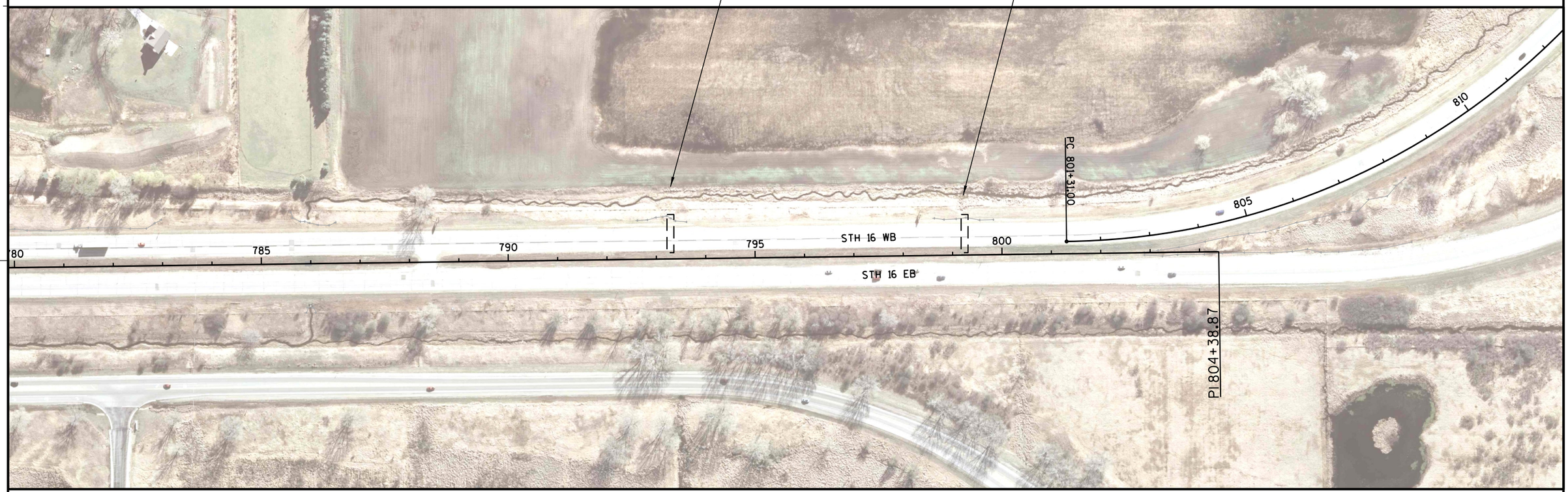
2

2

N

STA. 793+25
CULVERT PIPE LINER 15-INCH

STA. 799+25
CULVERT PIPE LINER 15-INCH



LEGEND

- TEMPORARY DITCH CHECKS
- CULVERT PIPE CHECKS
- SILT FENCE
- SURFACE WATER FLOW
- INLET PROTECTION TYPE B (UNLESS NOTED)
- WETLAND
- APRON ENDWALL REPAIR
- BARRICADE RACKS
- RAMP CLOSURE GATES
- INSTALL CULVERT LINER

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	EROSION CONTROL	SHEET 114	E

2

N



LEGEND

- TEMPORARY DITCH CHECKS
- CULVERT PIPE CHECKS
- SILT FENCE
- SURFACE WATER FLOW
- INLET PROTECTION TYPE B (UNLESS NOTED)
- WETLAND
- APRON ENDWALL REPAIR
- BARRICADE RACKS
- RAMP CLOSURE GATES
- INSTALL CULVERT LINER

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	EROSION CONTROL	SHEET 115	E

2

LEGEND

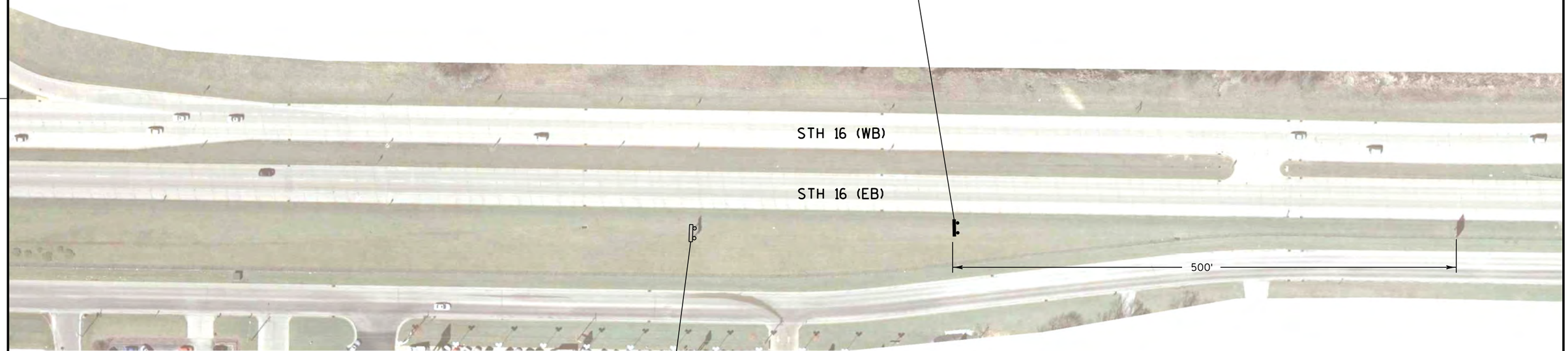
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- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- [XX] INDICATES SIGN YEAR
- NEW SIGN - REUSE POSTS

N

2

Okauchee
Oconomowoc
Lake
NEXT 2 EXITS (688)

TYPE I
MOUNT ON
STEEL SUPPORTS



GAS-EXIT 176

TYPE I SIGN
ESTR
WISCONSIN BUSINESS LOGOS
(608) 579-1570

SHEET 1 OF 72

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PERMANENT SIGNING PLAN	SHEET 116	E

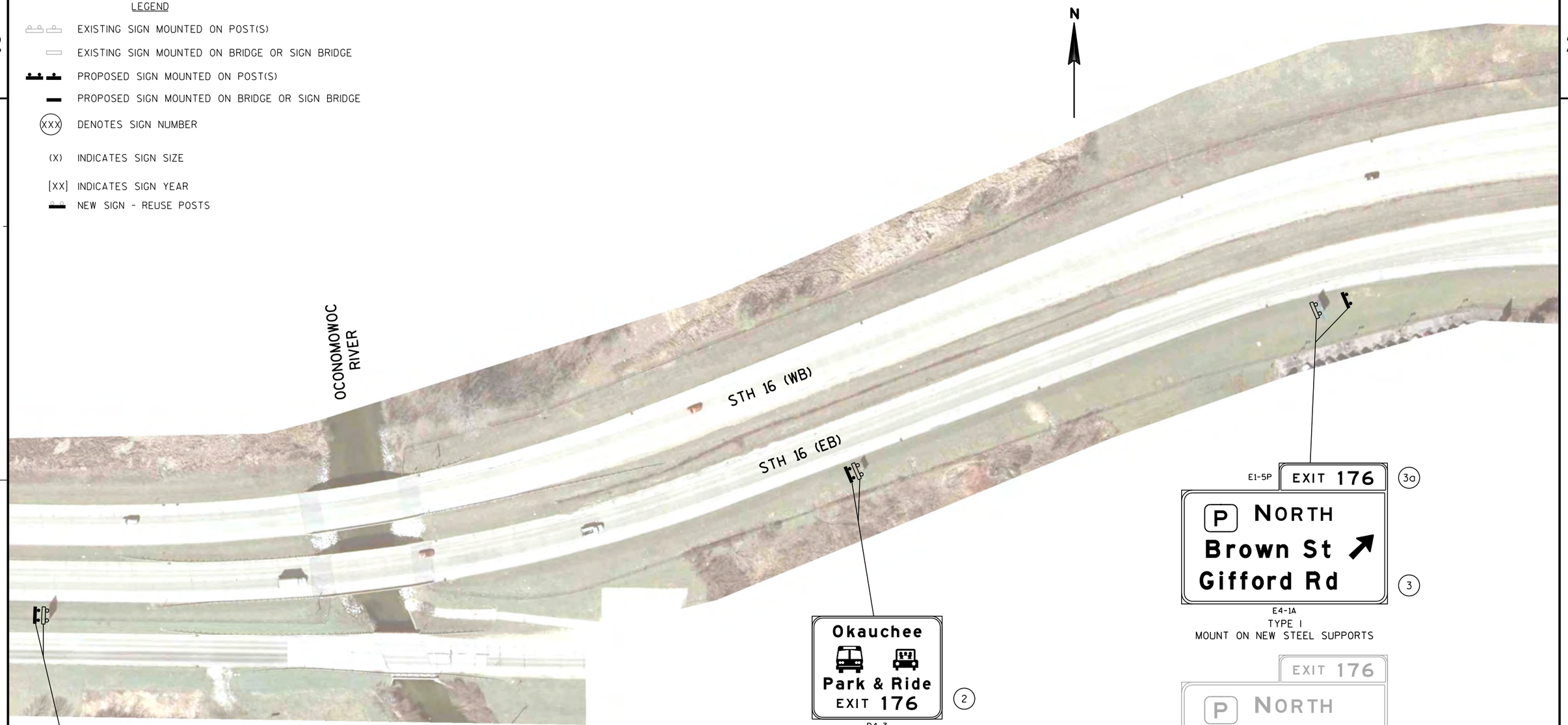
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WISDOT/CADDS SHEET 42

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
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- [XX] INDICATES SIGN YEAR
- NEW SIGN - REUSE POSTS



1

E5-1P EXIT 176 1a

P NORTH
Brown St
Gifford Rd
1/4 MILE

E1-1A
TYPE I
REUSE STEEL POSTS

EXIT 176
P NORTH
Brown St
Gifford Rd
1/4 MILE

REMOVE

Okauchee
Park & Ride
EXIT 176

2

D4-3
TYPE I
SIGN ON
NEW STEEL SUPPORTS
20' IN FRONT OF
EXISTING SIGN

Okauchee
Park & Ride
EXIT 176

REMOVE
EXISTING SIGN
AND SUPPORTS

E1-5P EXIT 176 3a

P NORTH
Brown St
Gifford Rd

3

E4-1A
TYPE I
MOUNT ON NEW STEEL SUPPORTS

EXIT 176
P NORTH
Brown St
Gifford Rd

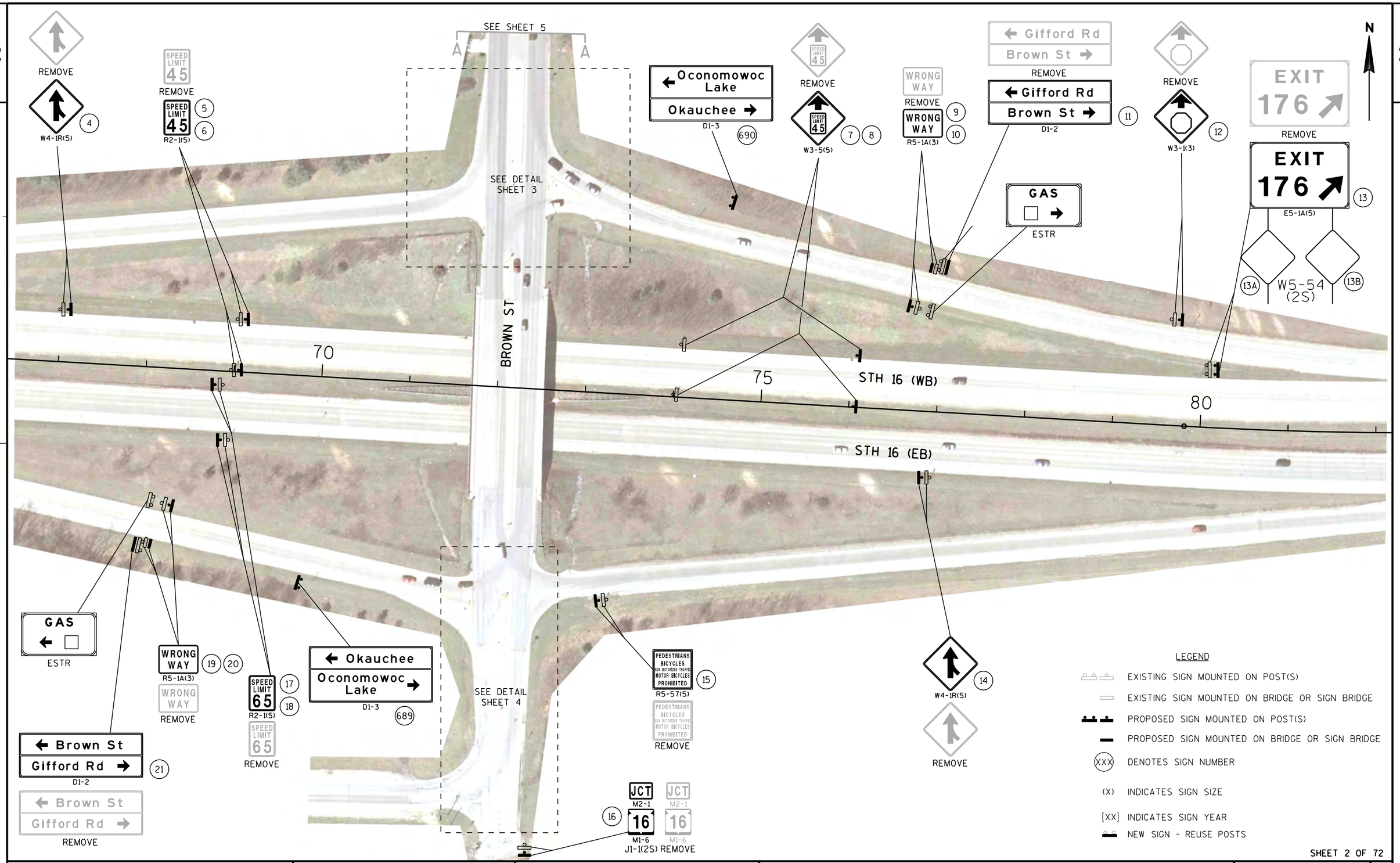
REMOVE
EXISTING SIGN AND SUPPORTS

SHEET 1A OF 72

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PERMANENT SIGNING PLAN	SHEET 117	E

FILE NAME : J:\projects\D2_13701516\71\sign\023201a_ps.dgn PLOT DATE : 13-JAN-2017 07:58 PLOT BY : dotshw PLOT NAME : PLOT SCALE : 100:1

WISDOT/CADDS SHEET 42



SHEET 2 OF 72

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PERMANENT SIGNING PLAN	SHEET 118 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
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- [XX] INDICATES SIGN YEAR
- NEW SIGN - REUSE POSTS

N

STH 16 WB ON RAMP

STH 16 WB OFF RAMP

CTH P (BROWN ST)

22 PEDESTRIANS BICYCLES NON MOTORIZED TRAFFIC MOTOR BICYCLES PROHIBITED — REMOVE
PEDESTRIANS BICYCLES NON MOTORIZED TRAFFIC MOTOR BICYCLES PROHIBITED — R5-57(5)

23 END COUNTY P — REMOVE
END M4-6 / COUNTY P M1-5A — J1-1(2S)

24 EAST M3-2 / WEST M3-4 / TO M4-5
16 M1-6 M6-1 / 16 M1-6 M6-1 / 67 M1-6 M6-1 — REMOVE
J3-3(2S)

25 PARK & RIDE — REMOVE
PARK & RIDE — D4-2R(2S)

26 R3-2(2S) — REMOVE

27 STOP — REMOVE
STOP — R1-1(3)

28 DO NOT ENTER — R5-1(3)

29 WRONG WAY — R5-1A(2S) 3' MOUNT HEIGHT

30 STOP — REMOVE

31 NORTH M3-1 / COUNTY P M1-5A / M6-1 — J3-1(2S)

32 W12-1D(2S) 2' MOUNT HEIGHT

33 PARK & RIDE — REMOVE
PARK & RIDE — D4-2R(2S)

34 ONE WAY — REMOVE
ONE WAY — R6-2L(2S)

35 ONE WAY — REMOVE
ONE WAY [13] — R6-2R(2S)

36 STOP — R1-1(3)
STOP — REMOVE

37 R3-1(2S) — REMOVE

38 DO NOT ENTER — R5-1(3)

39 WRONG WAY — R5-1A(2S) 3' MOUNT HEIGHT
DO NOT ENTER
WRONG WAY — REMOVE

40 R4-7(2S)

41 REMOVE

42 Milwaukee — D1-1
Milwaukee — REMOVE

ONE WAY — R6-2L ESTR

W5-52R ESTR

WEST M3-4 / 16 M1-6 / M6-1 — J3-1 ESTR

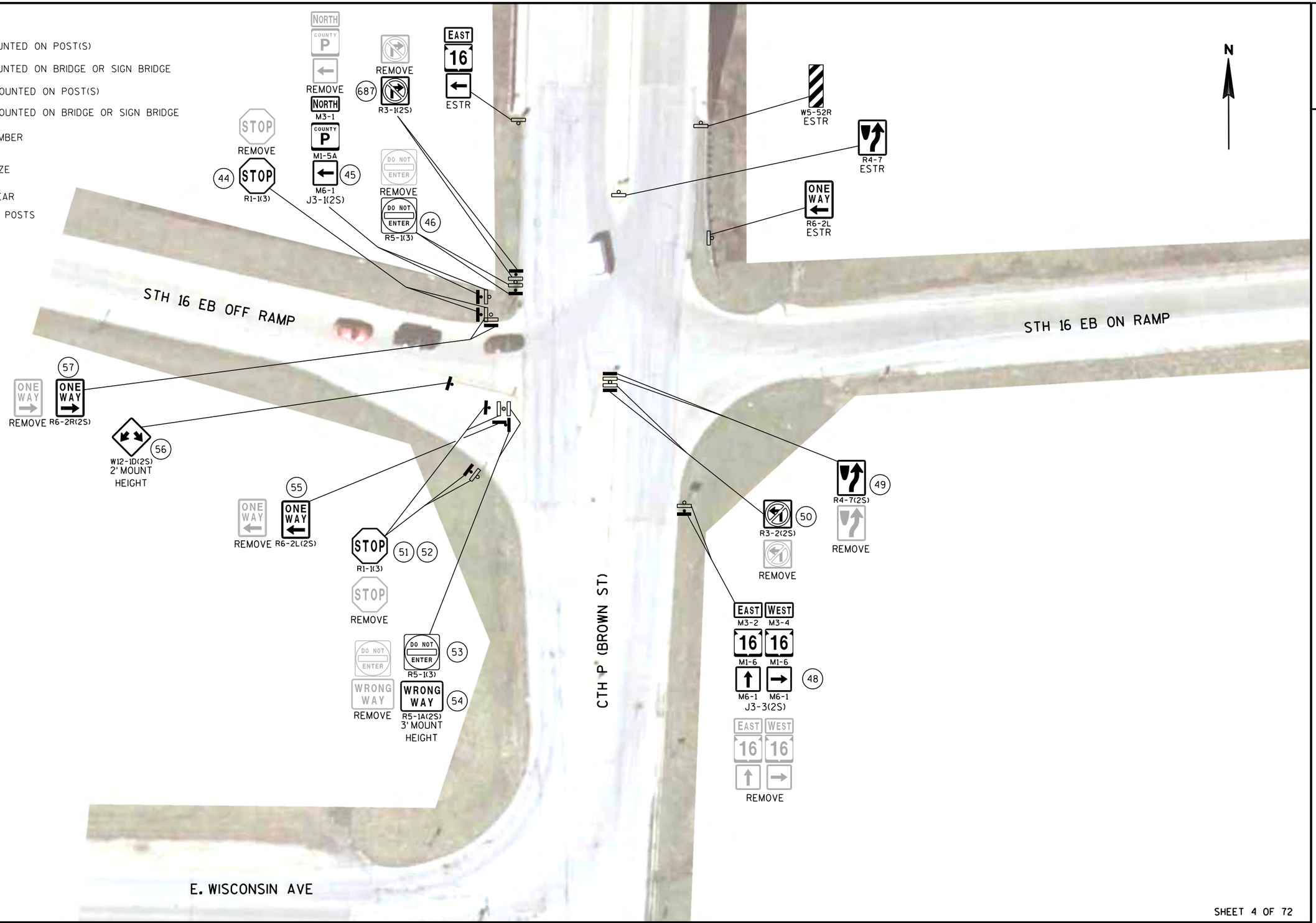
SHEET 3 OF 72

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PERMANENT SIGNING PLAN	SHEET 119 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
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- [XX] INDICATES SIGN YEAR
- NEW SIGN - REUSE POSTS



SHEET 4 OF 72

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PERMANENT SIGNING PLAN	SHEET 120 E

FILE NAME : J:\projects\D2_13701516\71\sign\023204_ps.dgn PLOT DATE : 13-JAN-2017 07:59 PLOT BY : dotshw 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

(XXX) DENOTES SIGN NUMBER

(X) INDICATES SIGN SIZE

[XX] INDICATES SIGN YEAR

NEW SIGN - REUSE POSTS

N

Milwaukee
Oconomowoc
REMOVE

Milwaukee
Oconomowoc
58
D1-2

A

SEE SHEET 2

BROWN ST

A

E. WISCONSIN AVE

TO
59
M4-5
SOUTH
M3-3
JCT
M2-1
TO
M4-5
COUNTY
P
M1-5A
16
M1-6
67
M1-6
M6-1
M6-1
M5-1R
J1-3(2S)
J1-1(2S)

TO
SOUTH JCT
COUNTY
P
16
REMOVE

TO
67
60
REMOVE

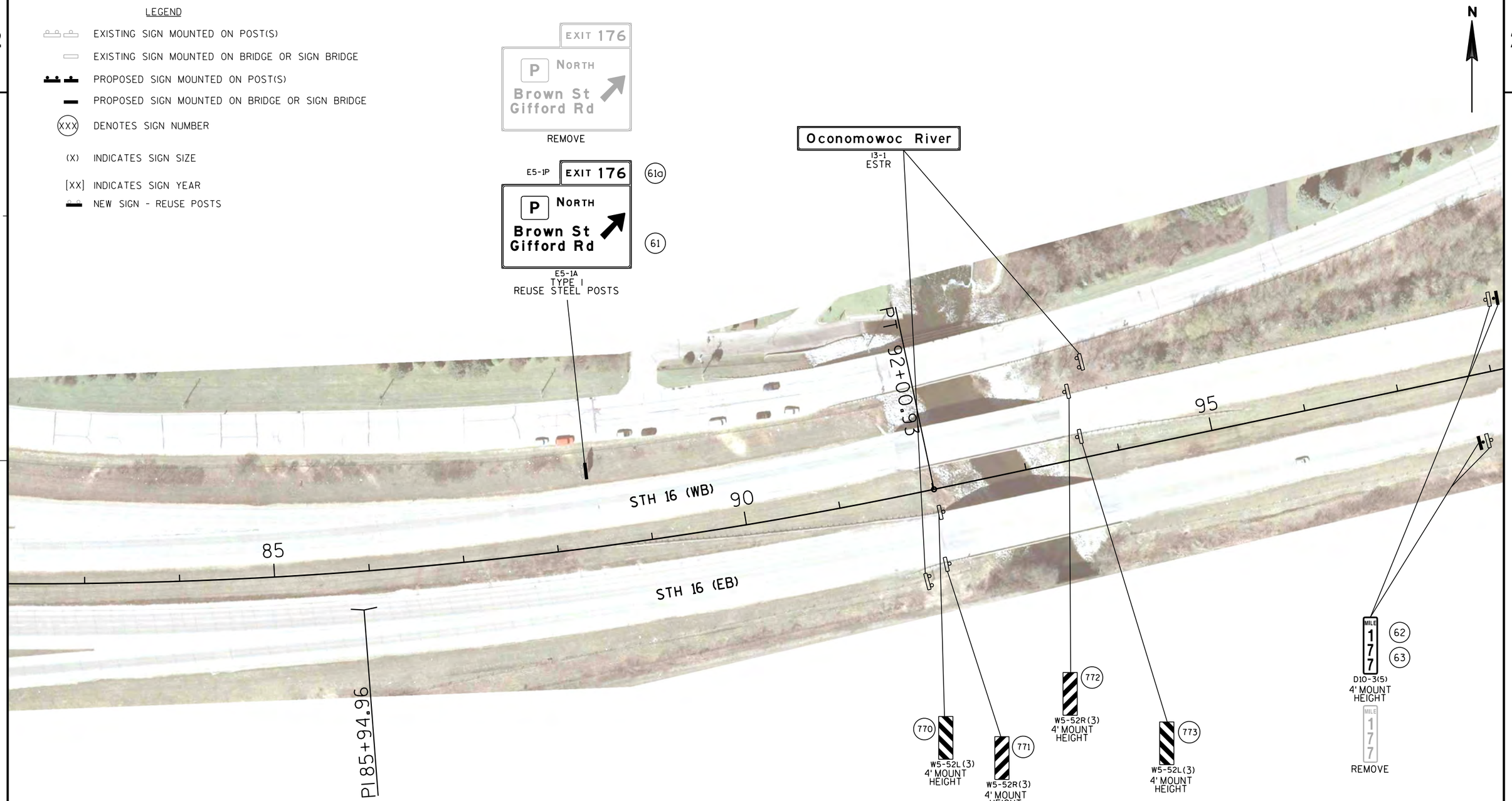
SHEET 5 OF 72

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PERMANENT SIGNING PLAN	SHEET 121	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
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- [XX] INDICATES SIGN YEAR
- NEW SIGN - REUSE POSTS



2

SHEET 6 OF 72

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PERMANENT SIGNING PLAN	SHEET 122	E

FILE NAME : J:\projects\D2_13701516\71\sign\023206_ps.dgn PLOT DATE : 13-JAN-2017 07:59 PLOT BY : dotshw PLOT NAME : PLOT SCALE : 100:1

WISDOT/CADDS SHEET 42

2

N

FREEWAY ENDS 1 MILE
REMOVE

FREEWAY ENDS 1 MILE
W19-1
TYPE I
REUSE STEEL POSTS
64

REMOVE
EXCEPT MAINTENANCE AND POLICE AUTHORIZED VEHICLES
71
R3-4B(5)

REMOVE
SPEED LIMIT 65
SPEED LIMIT 65
77
R2-1(5)

Okauchee
Park & Ride
EXIT 176
D4-3(2M)
TYPE I
SIGN ON NEW
STEEL SUPPORTS
20' IN FRONT OF
EXISTING SIGN
66

Park & Ride
EXIT 176
REMOVE
EXISTING SIGN AND SUPPORT

WEST
16
REMOVE
WEST
M3-4
16
M1-6
J4-1(3)
65

PI 109+98.51

100
105
110

PC 98+67.92

EXCEPT MAINTENANCE AND POLICE AUTHORIZED VEHICLES
72
R3-4B(5)
REMOVE

EAST
M3-2
16
M1-6
J4-1(3)
70
EAST
16
REMOVE

ALTERNATE
MB4-1
EAST
MB3-2
INTERSTATE
94
M1-1
69
MB6-1
J4-1(3)
ALTERNATE
INTERSTATE
94
REMOVE

E5-1P
EXIT 178
P SOUTH
Sawyer Rd
½ MILE
68a
68
E1-1A
TYPE I
REUSE STEEL POSTS

EXIT 178
P SOUTH
Sawyer Rd
½ MILE
REMOVE

SPEED LIMIT 65
67
R2-1(5)
SPEED LIMIT 65
REMOVE

FREEWAY ENDS 1 MILE
ESTR

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
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- [XX] INDICATES SIGN YEAR
- NEW SIGN - REUSE POSTS

SHEET 7 OF 72

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PERMANENT SIGNING PLAN	SHEET 123 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
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- [XX] INDICATES SIGN YEAR
- NEW SIGN - REUSE POSTS

N

2

REMOVE

R3-4B(5)

74

PI 121+09.04

115

120

STH 16 (WB)

125

STH 16 (EB)

PT 121+09.04

Okauchee
EXIT 178

73

E3-1
REUSE STEEL POSTS

Okauchee
EXIT 178

REMOVE

75

R3-4B(5)

REMOVE

E1-5P

EXIT 176

76a

P NORTH
Brown St
Gifford Rd
3/4 MILE

76

E1-1A
TYPE I
REUSE STEEL POSTS

EXIT 176
P NORTH
Brown St
Gifford Rd
3/4 MILE

REMOVE

SHEET 8 OF 72

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PERMANENT SIGNING PLAN	SHEET 124 E

FILE NAME : J:\projects\D2_13701516\71\sign\023208_ps.dgn PLOT DATE : 13-JAN-2017 07:59 PLOT BY : dotshw PLOT NAME : PLOT SCALE : 100:1

WISDOT/CADDS SHEET 42

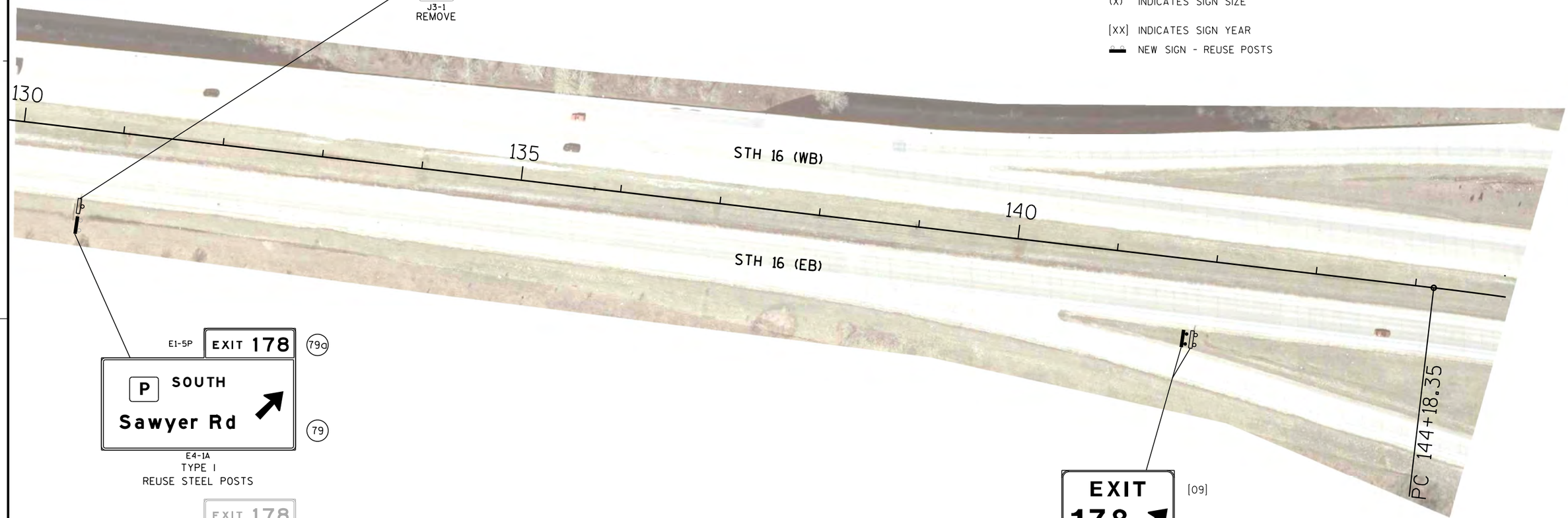
2

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
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- [XX] INDICATES SIGN YEAR
- NEW SIGN - REUSE POSTS

N



SOUTH COUNTY P (78)
J3-1
REMOVE

E1-5P EXIT 178 (79a)
P SOUTH
Sawyer Rd (79)
E4-1A
TYPE I
REUSE STEEL POSTS

EXIT 178
P SOUTH
Sawyer Rd
REMOVE

EXIT 178 [09] (80)
E5-1A(5)
(80A) W5-54 (2S) (80B)
EXIT 178
REMOVE

SHEET 9 OF 72

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PERMANENT SIGNING PLAN	SHEET 125	E

FILE NAME : J:\projects\D2_13701516\71\sign\023209_ps.dgn PLOT DATE : 13-JAN-2017 07:59 PLOT BY : dotshw PLOT NAME : PLOT SCALE : 100:1

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
- XXX DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- [XX] INDICATES SIGN YEAR
- NEW SIGN - REUSE POSTS

N

REMOVE
W4-1R(5)
81

693
Chenequa
NEXT 2 EXITS
TYPE I
MOUNT ON
STEEL SUPPORTS
STA 146+00 EB

MILE 178
REMOVE
MILE 178
D10-3(5)
4' MOUNT HEIGHT
82

774
W5-52L(3)
4' MOUNT HEIGHT

775
W5-52R(3)
4' MOUNT HEIGHT

SEE DETAIL
SHEET 11

GAS - EXIT 176
ESTR

ALTERNATE
MB4-1
WEST
MB3-4
INTERSTATE 94
M1-1
MB6-1
J4-1(3)
83

ALTERNATE INTERSTATE 94
REMOVE

WRONG WAY
REMOVE
WRONG WAY
R5-1A(3)
84
85

Oconomowoc Lake
Okauchee
D1-3
86

Okauchee
REMOVE

REMOVE
W3-1(3)
87

FOOD
ESTR

STH 16 ON RAMP (WB)
STH 16 (WB)
STH 16 OFF RAMP (WB)
N. SAWYER RD
150
155
16
STH 16 (EB)
STH 16 OFF RAMP (EB)
STH 16 ON RAMP (EB)
SEE DETAIL
SHEET 12

Okauchee
Oconomowoc Lake
D1-3
106

Okauchee
REMOVE

WRONG WAY
R5-1A(3)
104
105

WRONG WAY
REMOVE

MILE 178
D10-3(5)
103

776
W5-52L(3)
4' MOUNT HEIGHT

777
W5-52R(3)
4' MOUNT HEIGHT

107
W3-1(3)
REMOVE

SPEED LIMIT 65
REMOVE
102

WEST M3-4 EAST M3-2
16 M1-6 16 M1-6
M6-1 M5-1R
J2-2(2S)
100

WEST EAST
16 16
REMOVE

JCT
M2-1
16
M1-6
J1-1(2S)
JCT 16
REMOVE
101

E1-5P
EXIT 179
C
Nashotah
Delafield
1 MILE
E1-1A
TYPE I
REUSE STEEL POSTS
89a
89

EXIT 179
C
Nashotah
Delafield
1 MILE
REMOVE

W4-1R(5)
88
REMOVE

SHEET 10 OF 72

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PERMANENT SIGNING PLAN	SHEET E

FILE NAME : J:\projects\D2_13701516\71\sign\023210_ps.dgn PLOT DATE : 13-JAN-2017 07:59 PLOT BY : dotshw PLOT NAME : PLOT SCALE : 100:1

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
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- [XX] INDICATES SIGN YEAR
- NEW SIGN - REUSE POSTS

N

STH 16 OFF RAMP (WB)

STH 16 ON RAMP (WB)

N. SAWYER RD

EAST 16 / WEST 16 — REMOVE

EAST M3-2 / WEST M3-4; 16 M1-6; M6-1 J3-1(2S) — 109

PEDESTRIANS BICYCLES NON MOTORIZED TRAFFIC MOTOR BICYCLES PROHIBITED — REMOVE

PEDESTRIANS BICYCLES NON MOTORIZED TRAFFIC MOTOR BICYCLES PROHIBITED R5-57(5) — 108

BEGIN SOUTH COUNTY P — ESTR COUNTY SIGN

END COUNTY P — ESTR COUNTY SIGN

DO NOT ENTER — REMOVE

DO NOT ENTER R5-1(3) — 112

WRONG WAY — REMOVE

WRONG WAY R5-1A(2S) 3' MOUNT HEIGHT — 113

YIELD — REMOVE

YIELD R1-2(2S) — 110

STOP — REMOVE

STOP R1-1(3) — 111

W12-1D(2S) 2' MOUNT HEIGHT — 114

SOUTH M3-3 / NORTH M3-3 / TO M4-5; COUNTY P M1-5A / COUNTY P M1-5A / COUNTY R M1-5A; M6-1 / M6-1 / M6-1 J3-3(2S) — 115

SOUTH / NORTH / TO; COUNTY P / COUNTY P / COUNTY R — REMOVE

ONE WAY R6-2L(2S) — 116

ONE WAY — REMOVE

STOP R1-1(3) — 118

STOP — REMOVE

R3-1(2S) — 119

REMOVE

ONE WAY R6-2R(2S) — 117

ONE WAY — REMOVE

JCT M2-1; COUNTY R M1-5A J1-1(2S) — 120

JCT COUNTY R — REMOVE

WEST M3-4; 16 M1-6; M6-1 J3-1(2S) — 121

WEST 16 — REMOVE

ONE WAY — REMOVE

ONE WAY R6-2L(2M) — 126

R4-7(2M) — 124 125

REMOVE

R3-2(2S) — 128

REMOVE

DO NOT ENTER — REMOVE

DO NOT ENTER R5-1(3) — 122

WRONG WAY — REMOVE

WRONG WAY R5-1A(2S) 3' MOUNT HEIGHT — 123

SHEET 11 OF 72

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PERMANENT SIGNING PLAN	SHEET 127	E

FILE NAME : J:\projects\D2_13701516\71\sign\023211_ps.dgn PLOT DATE : 13-JAN-2017 07:59 PLOT BY : dotshw PLOT NAME : PLOT SCALE : 40:1

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
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- [XX] INDICATES SIGN YEAR
- NEW SIGN - REUSE POSTS

STH 16 EB

STH 16 OFF RAMP (EB)

STH 16 ON RAMP (EB)

N. SAWYER RD

(133) EAST M3-2 / 16 M1-6 / M6-1 J3-1(2S)
EAST 16 REMOVE

Oconomowoc REMOVE
(136) Oconomowoc D1-1

(134) DO NOT ENTER R5-1(3)
DO NOT ENTER REMOVE

(135) WRONG WAY R5-1A(2S) 3' MOUNT HEIGHT
WRONG WAY REMOVE

(132) R3-1(2S)
REMOVE

STOP REMOVE
(130) STOP R1-1(3)

(131) ONE WAY R6-2R(2S)
ONE WAY REMOVE

REMOVE
(138) (139) R4-7(2M)

ONE WAY REMOVE
(137) ONE WAY R6-2L(2M)

(150) W12-1D(2S) 2' MOUNT HEIGHT

(149) ONE WAY R6-2L(2M)
ONE WAY REMOVE

(146) STOP R1-1(3)
STOP REMOVE

(145) YIELD R1-2(2S)
YIELD REMOVE

DO NOT ENTER REMOVE
(147) DO NOT ENTER R5-1(3)

WRONG WAY REMOVE
(148) WRONG WAY R5-1A(2S) 3' MOUNT HEIGHT

(141) R3-2(2S)
REMOVE

(129) TO M4-5 / NORTH M3-3 / SOUTH M3-3
COUNTY R P P
M1-5A M1-5A M1-5A
M6-1 M6-1 M6-1
J3-3(2S)
TO NORTH SOUTH COUNTY R P P REMOVE

(142) PEDESTRIANS BICYCLES NON MOTORIZED TRAFFIC MOTOR BICYCLES PROHIBITED R5-57(5)
PEDESTRIANS BICYCLES NON MOTORIZED TRAFFIC MOTOR BICYCLES PROHIBITED REMOVE

(144) WEST M3-4 / EAST M3-2 / 16 M1-6 / M6-1 M6-1 J3-2(2S)
WEST EAST 16 16 REMOVE

(143) Oconomowoc Milwaukee D1-2
Oconomowoc Milwaukee REMOVE

SHEET 12 OF 72

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PERMANENT SIGNING PLAN	SHEET 128 E

FILE NAME : J:\projects\D2_13701516\71\sign\023212_ps.dgn PLOT DATE : 13-JAN-2017 07:59 PLOT BY : dotshw 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
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- [XX] INDICATES SIGN YEAR
- NEW SIGN - REUSE POSTS

EXIT 178

REMOVE

EXIT 178

140

E5-1A(5)

140A W5-54 (2S) 140B

EXIT 178

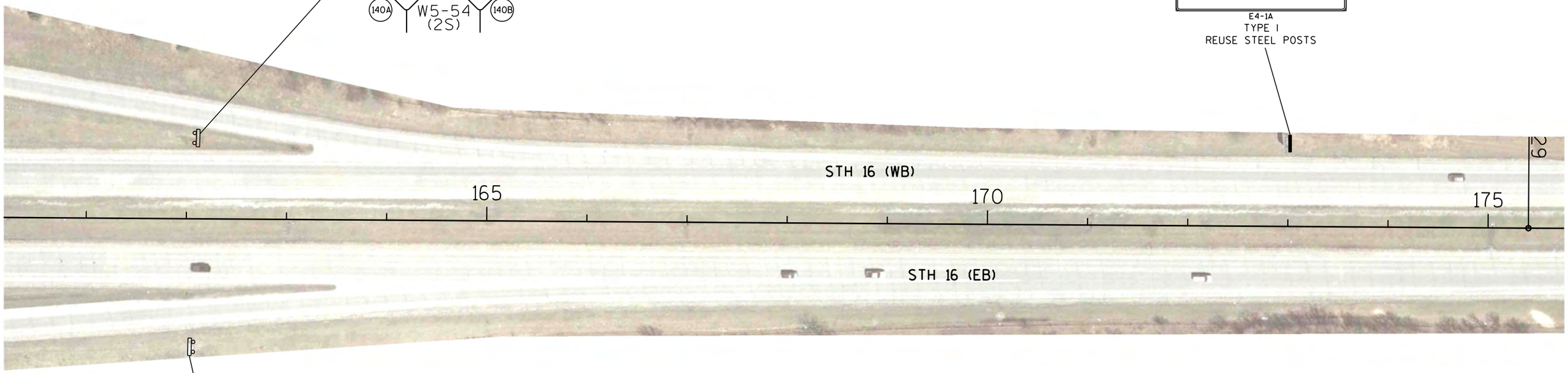
P SOUTH Sawyer Rd

REMOVE

E1-5P EXIT 178 151a

P SOUTH Sawyer Rd 151

E4-1A
TYPE I
REUSE STEEL POSTS



FOOD

ATTRACTION

ESTR

SHEET 13 OF 72

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PERMANENT SIGNING PLAN	SHEET 129	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
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- [XX] INDICATES SIGN YEAR
- NEW SIGN - REUSE POSTS

N

Okauchee
EXIT 178
157
REMOVE
EXISTING SIGN
AND SUPPORTS

FOOD
ESTR

154
REMOVE

NOTE:
BEING CLOSED

STH 16 (WB)

180 185 190

STH 16 (EB)

153
REMOVE

EAST
M3-2
16
M1-6
J4-1(3)
155

EAST
16
REMOVE

SPEED LIMIT
65
R2-1(5)
156

SPEED LIMIT
65
REMOVE

Nashotah
Park & Ride
EXIT 179
D4-3(2M)
TYPE I
MOUNT ON
NEW STEEL SUPPORTS
20' INFRONT OF
EXISTING SIGN
152

Park & Ride
EXIT 179
REMOVE
EXISTING SIGN AND SUPPORTS

2

SHEET 14 OF 72

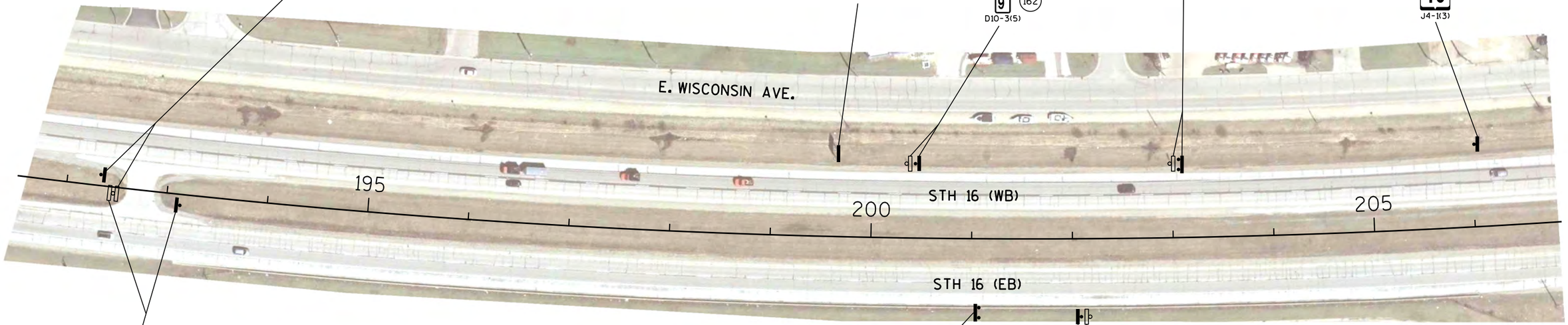
PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PERMANENT SIGNING PLAN	SHEET 130 E

FILE NAME : J:\projects\D2_13701516\71\sign\023214_ps.dgn PLOT DATE : 13-JAN-2017 08:00 PLOT BY : dotshw PLOT NAME : PLOT SCALE : 100:1

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
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- [XX] INDICATES SIGN YEAR
- NEW SIGN - REUSE POSTS



EXIT 178
P SOUTH
Sawyer Rd
1/2 MILE
REMOVE

E1-5P
EXIT 178
P SOUTH
Sawyer Rd
1/2 MILE
161a
161
E1-1A
TYPE I
REUSE STEEL POSTS

MILE 179
REMOVE

MILE 179
162
D10-3(5)

SPEED LIMIT 65
REMOVE

SPEED LIMIT 65
163
R2-1(5)

778 WEST 16
J4-1(3)

EXCEPT MAINTENANCE AND POLICE AUTHORIZED VEHICLES
REMOVE

EXCEPT MAINTENANCE AND POLICE AUTHORIZED VEHICLES
158
R3-4B(5)

EXCEPT MAINTENANCE AND POLICE AUTHORIZED VEHICLES
160
R3-4B(5)

EXCEPT MAINTENANCE AND POLICE AUTHORIZED VEHICLES
REMOVE

Lakeland Dr
EXIT 179
TYPE I
159

MILE 179
164
D10-3(5)

MILE 179
REMOVE

N

SHEET 15 OF 72

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PERMANENT SIGNING PLAN	SHEET 131	E

FILE NAME : J:\projects\D2_13701516\71\sign\023215_ps.dgn PLOT DATE : 13-JAN-2017 08:00 PLOT BY : dotshw PLOT NAME : PLOT SCALE : 100:1

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

(XXX) DENOTES SIGN NUMBER

(X) INDICATES SIGN SIZE

[XX] INDICATES SIGN YEAR

NEW SIGN - REUSE POSTS

N

2

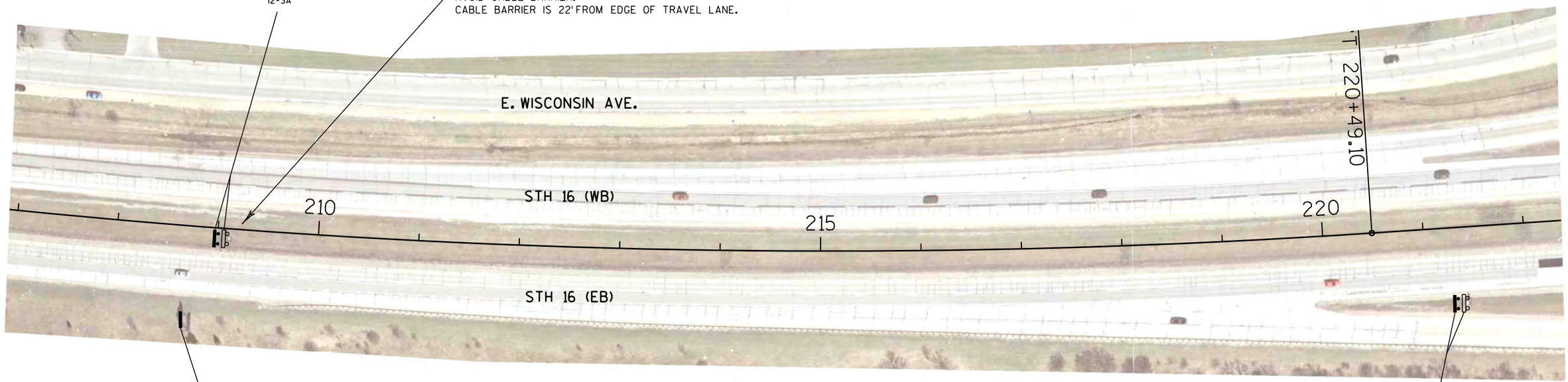
VILLAGE OF Nashotah

REMOVE

VILLAGE OF Nashotah (166)

12-3A

NOTE:
AVOID CABLE BARRIER.
CABLE BARRIER IS 22' FROM EDGE OF TRAVEL LANE.



E1-5P EXIT 179 (165a)

C

Nashotah
Delafield (165)

E4-1A

TYPE I
REUSE STEEL POSTS

EXIT 179

C

Nashotah
Delafield

REMOVE

EXIT
179 (167)

E5-1A(5)

(167A) W5-54 (2S) (167B)

EXIT
179

REMOVE

SHEET 16 OF 72

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PERMANENT SIGNING PLAN	SHEET 132	E

FILE NAME : J:\projects\D2_13701516\71\sign\023216_ps.dgn PLOT DATE : 13-JAN-2017 08:00 PLOT BY : dotshw PLOT NAME : PLOT SCALE : 100:1

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
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- [XX] INDICATES SIGN YEAR
- NEW SIGN - REUSE POSTS

N

REMOVE

168 W4-1R(5)

WRONG WAY
REMOVE

173 WRONG WAY R5-1A(2S)

EAST 16
REMOVE

Milwaukee
169 D1-1

EAST MB3-2 16 M1-6
170 M5-1L J2-1(2S)

JCT M2-1
171 16 M1-6 J1-1(2S)

JCT 16
REMOVE

EAST M3-2 16 M1-6 M6-1
WEST M3-4 16 M1-6 M5-1R
172 J2-2(2S)

EAST 16 WEST 16
REMOVE

Okauchee
Oconomowoc Lake
NEXT 2 EXITS
E3-1
TYPE I
MOUNT ON
STEEL POSTS
STA 236+00 WB
157

SEE DETAIL SHEET 18

STH 16 ON RAMP (WB)

STH 16 OFF RAMP (WB)

(LAKELAND DR.)

CTH C

225 STH 16 (WB) 230 235

STH 16 (EB)

STH 16 OFF RAMP (EB)

178 W3-1(3)

REMOVE

Chenequa
Nashotah Delafield
177 D1-3

Nashotah Delafield
REMOVE

SEE DETAIL SHEET 19

STH 16 ON RAMP (EB)

ADOPT-A-HIGHWAY SPONSOR
I55-56
ESTR

WEST M3-4 16 M1-6 M6-1
EAST M3-2 16 M1-6 M5-1R
175 J2-2(2S)

WEST 16 EAST 16
REMOVE

176 R3-4(2S)

JCT M2-1
174 16 M1-6 J1-1(2S)

JCT 16
REMOVE

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PERMANENT SIGNING PLAN	SHEET 133 E

FILE NAME : J:\projects\D2_13701516\71\sign\023217_ps.dgn PLOT DATE : 13-JAN-2017 08:00 PLOT BY : dotshw PLOT NAME : PLOT SCALE : 100:1
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
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- [XX] INDICATES SIGN YEAR
- NEW SIGN - REUSE POSTS

CTH C (LAKELAND DR.)

STH 16 ON RAMP (WB)

STH 16 OFF RAMP (WB)

N

REMOVE
201 R3-2(2S)

REMOVE
202 R4-7(2M)

R5-1C(3) 183
WRONG WAY 182
R5-1A(2S)
3' MOUNT HEIGHT

REMOVE
STOP 181 184
R1-1(3)

REMOVE
ONE WAY 185
R6-2L(2S)

REMOVE
WILDLIFE VIEWING INFO 187
MI-87
MI-88A
J3-1(2S)

REMOVE
COUNTY C, KETTLE MORAINE SCENIC DRIVE
SOUTH M3-3, NORTH M3-1
COUNTY C M1-5A, COUNTY C M1-5A, KETTLE MORAINE SCENIC DRIVE M1-97 188
M6-1, M6-1, MG6-4
J3-3(2S)

REMOVE
Nashotah Delafield
Chenequa 694
D1-3

REMOVE
WRONG WAY 189
R5-1A(3)

REMOVE
PARK & RIDE 190
D4-2R(2S)

W12-1D(2S)
2' MOUNT HEIGHT 186

RAMP CLOSED USE ALT ROUTE 715
R11-54F(2S)

REMOVE
WEST M3-4
16 M1-6 180
M6-1 J3-1(2S)

REMOVE
PEDESTRIANS BICYCLES NON MOTORIZED TRAFFIC MOTOR BICYCLES PROHIBITED 179
R5-57(5)

ONE WAY 193
R6-2R(2S)

REMOVE
DO NOT ENTER 194
R5-1(3)

REMOVE
WRONG WAY 195
R5-1A(2S)
3' MOUNT HEIGHT

716 RAMP CLOSED USE ALT ROUTE
R11-54F(2S)

ONE WAY 200
R6-2L(2S)

REMOVE
ONE WAY

199 REMOVE
R4-7(2M)

REMOVE
WEST M3-4
16 M1-6
M6-1 198
J3-1(2S)

DO NOT ENTER 197
R5-1

REMOVE
DO NOT ENTER

WRONG WAY 695
R5-1A(3)

196 R3-1(2S)
REMOVE

STOP 192
R1-1(3)
REMOVE
STOP

WRONG WAY 191
R5-1A(3)
REMOVE
WRONG WAY

FOOD
ATTRACTION
ESTR

SHEET 18 OF 72

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PERMANENT SIGNING PLAN	SHEET 134 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
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- [XX] INDICATES SIGN YEAR
- NEW SIGN - REUSE POSTS

2

2

N

STH 16 OFF RAMP (EB)

STH 16 ON RAMP (EB)

CTH C (LAKELAND RD.)

FOOD
ATTRACTION
ESTR

REMOVE
WRONG WAY
R5-1A(3)
203

ONE WAY
REMOVE
ONE WAY
R6-2R(2S)
207

STOP
REMOVE
STOP
R1-1(3)
206

DO NOT ENTER
WRONG WAY
REMOVE
DO NOT ENTER
R5-1(3)
204

WRONG WAY
R5-1A(2S)
3' MOUNT HEIGHT
[13]
205

REMOVE
R3-1(2S)
209

DO NOT ENTER
REMOVE
DO NOT ENTER
R5-1(3)
208

REMOVE
R4-7(2M)
211

EAST
REMOVE
EAST
16
210

EAST
M3-2
16
M1-6
M6-1
J3-1(2S)

WRONG WAY
R5-1A
696

WRONG WAY
REMOVE

WEST
16
Oconomowoc
REMOVE
Oconomowoc
D1-1
214

WEST
M3-4
16
M1-6
M5-1L
J1-1(2S)
213

DO NOT ENTER
R5-1C(3)
227

WRONG WAY
R5-1A(2S)
3' MOUNT HEIGHT
228

ONE WAY
REMOVE
ONE WAY
R6-2L(2S)
215

RAMP CLOSED
USE
ALT ROUTE
R11-54F(2S)
717
718

PARK & RIDE
D4-2L(2S)
232

PARK & RIDE
REMOVE
233

WRONG WAY
R5-1A(3)
234

WRONG WAY
REMOVE

NORTH
M3-1
COUNTY C
M1-5A
M6-1

SOUTH
M3-3
COUNTY C
M1-5A
M6-1

KETTLE MORAINE SCENIC DRIVE
M1-97
MG6-4
231
J3-3(2S)

COUNTY C
KETTLE MORAINE SCENIC DRIVE
REMOVE

WILDLIFE VIEWING INFO
M1-87
230

WILDLIFE VIEWING INFO
REMOVE
M1-88A
J3-1(2S)

W12-1D(2S)
2' MOUNT HEIGHT
229

ONE WAY
R6-2L(2S)
216

ONE WAY
REMOVE
224
226

STOP
R1-1(3)

STOP
REMOVE

DO NOT ENTER
R5-1(3)
225

DO NOT PLACE BEHIND STOP SIGN

R3-2(2S)
223

REMOVE

222

KETTLE MORAINE SCENIC DRIVE
M1-97
J4-1

KETTLE MORAINE SCENIC DRIVE
REMOVE

DO NOT ENTER
R5-1(3)
219

DO NOT ENTER
REMOVE

PEDESTRIANS
BICYCLES
NON MOTORIZED TRAFFIC
MOTOR BICYCLES
PROHIBITED
R5-57(5)
220

PEDESTRIANS
BICYCLES
NON MOTORIZED TRAFFIC
MOTOR BICYCLES
PROHIBITED
REMOVE

EAST
M3-2
16
M1-6
218
M6-1
J3-1(2S)

EAST
16
REMOVE

Oconomowoc
Milwaukee
D1-2
221

Oconomowoc
Milwaukee
REMOVE

R4-7(2M)
217

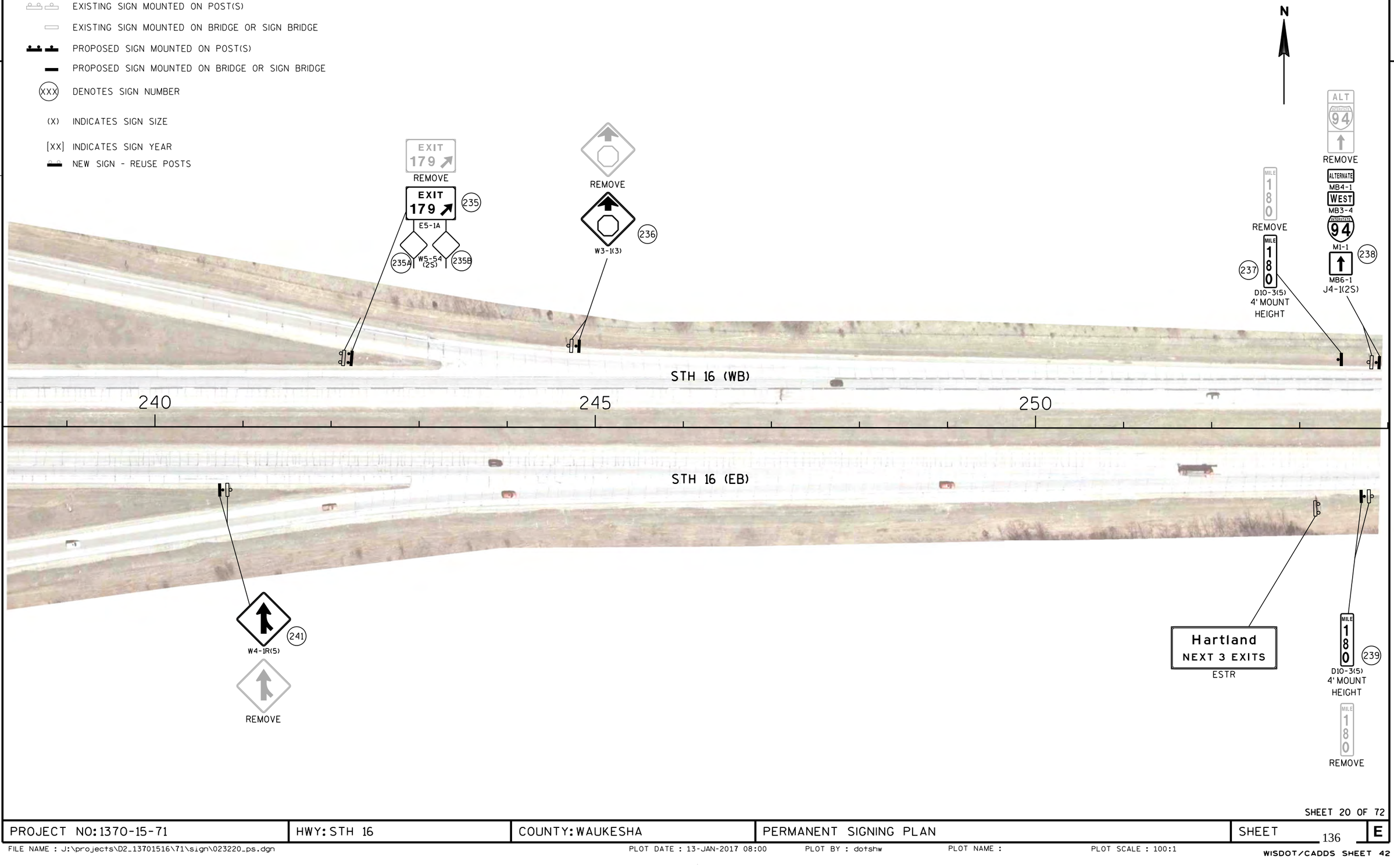
SHEET 19 OF 72

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PERMANENT SIGNING PLAN	SHEET 135	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
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- [XX] INDICATES SIGN YEAR
- NEW SIGN - REUSE POSTS



SHEET 20 OF 72

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PERMANENT SIGNING PLAN	SHEET 136	E

FILE NAME : J:\projects\D2_13701516\71\sign\023220_ps.dgn PLOT DATE : 13-JAN-2017 08:00 PLOT BY : dotshw PLOT NAME : PLOT SCALE : 100:1

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
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- [XX] INDICATES SIGN YEAR
- NEW SIGN - REUSE POSTS

N

2

EXIT 179
C
Nashotah
Delafield
REMOVE

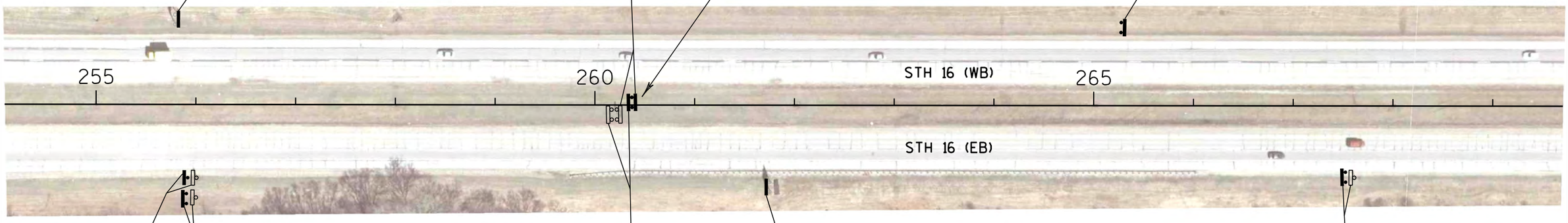
E1-5P
EXIT 179
C
Nashotah
Delafield
242a
242
E4-1A
TYPE I
REUSE STEEL POSTS

VILLAGE OF
Nashotah
REMOVE

VILLAGE OF
Nashotah
243
12-3A(5)

Lakeland Dr
EXIT 179
697
TYPE I
SIGN ON STEEL SUPPORTS
STA 265+30 WB

NOTE:
AVOID CABLE BARRIER.
CABLE BARRIER IS 22' FROM RIGHT EDGE OF TRAVEL LANE.



EAST
M3-2
16
248
M1-6
J4-1(3)
EAST
16
REMOVE

ALTERNATE
MB4-1
EAST
MB3-2
INTERSTATE
94
M1-1
247
MB6-1
J4-1(3)
ALT
INTERSTATE
94
REMOVE

VILLAGE OF
Chenequa
244
12-3A(5)
VILLAGE OF
Chenequa
REMOVE

E1-5P
EXIT 181
83
Delafield
Chenequa
1 MILE
246a
246
E1-1A
TYPE I
REUSE STEEL POSTS

EXIT 181
83
Delafield
Chenequa
1 MILE
REMOVE

SPEED LIMIT
65
R2-1(5)
245
SPEED LIMIT
65
REMOVE

SHEET 21 OF 72

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PERMANENT SIGNING PLAN	SHEET 137 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
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- [XX] INDICATES SIGN YEAR
- NEW SIGN - REUSE POSTS



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
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- [XX] INDICATES SIGN YEAR
- NEW SIGN - REUSE POSTS

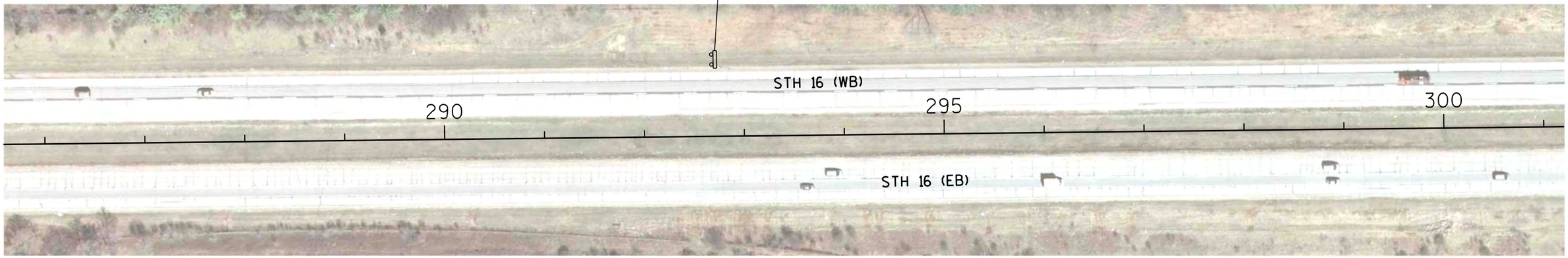
N

2

FOOD-EXIT 179

ATTRACTION-EXIT 179

ESTR



SHEET 23 OF 72

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PERMANENT SIGNING PLAN	SHEET 139	E

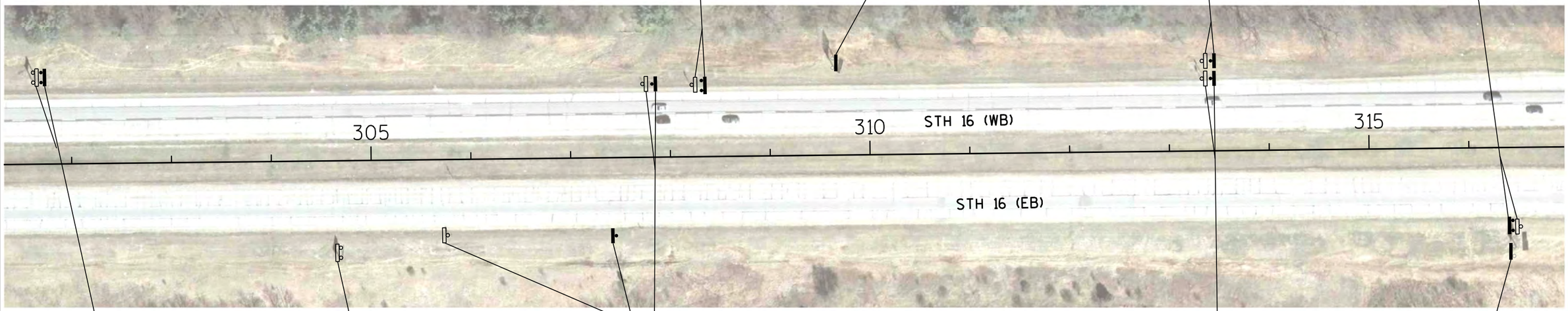
FILE NAME : J:\projects\D2_13701516\71\sign\023223_ps.dgn PLOT DATE : 13-JAN-2017 08:01 PLOT BY : dotshw PLOT NAME : PLOT SCALE : 100:1

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
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- [XX] INDICATES SIGN YEAR
- NEW SIGN - REUSE POSTS



SPEED LIMIT 65
REMOVE
SPEED LIMIT 65 (257)
R2-1(5)

EXIT 179
C
Nashotah
Delafield
1 MILE
REMOVE

E1-5P EXIT 179 (252a)
C
Nashotah
Delafield
1 MILE (252)
E1-1A
TYPE I
REUSE STEEL POSTS

ALTERNATE
MB4-1
WEST
MB3-4
INTERSTATE 94
M1-1
(254)
MB6-1
J4-1(3)

ALTERNATE INTERSTATE 94
REMOVE

ALTERNATE INTERSTATE 94
REMOVE
ALTERNATE
MB4-1
EAST
MB3-2
INTERSTATE 94
M1-1
(255)
MB6-1
J4-1(3)

N

2

Nashotah
Park & Ride
EXIT 179 (251)
D4-3(2S)
TYPE I
MOUNT ON NEW STEEL SUPPORTS

Park & Ride
EXIT 179
REMOVE
EXISTING SIGN AND SUPPORTS

GAS-EXIT 181
FOOD-EXIT 181
ESTR

(259) (258)
MILE 1 8 1
D10-3(5)
4' MOUNT
HEIGHT
MILE 1 8 1
REMOVE

WEST 16
REMOVE
WEST
M3-4
16 (253)
M1-6
J4-1(3)

E1-5P EXIT 181 (256a)
83
Delafield
Chenequa (256)
E1-1A
TYPE I
REUSE STEEL POSTS

EXIT 181
83
Delafield
Chenequa
REMOVE

SHEET 24 OF 72

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PERMANENT SIGNING PLAN	SHEET 140	E

FILE NAME : J:\projects\D2_13701516\71\sign\023224_ps.dgn PLOT DATE : 13-JAN-2017 08:01 PLOT BY : dotshw PLOT NAME : PLOT SCALE : 100:1

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)

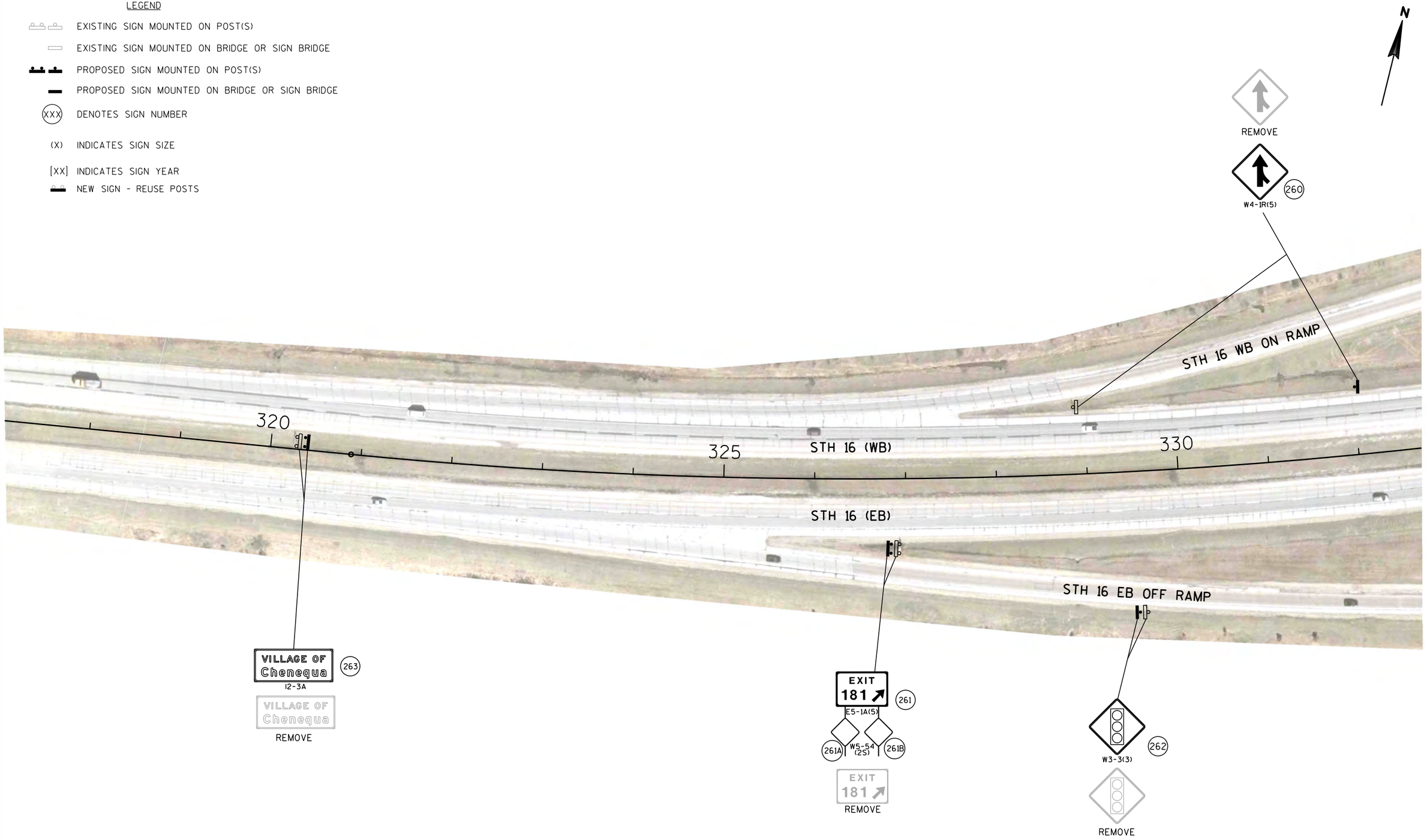
PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE

(XXX) DENOTES SIGN NUMBER

(X) INDICATES SIGN SIZE

[XX] INDICATES SIGN YEAR

NEW SIGN - REUSE POSTS



2

SHEET 25 OF 72

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PERMANENT SIGNING PLAN	SHEET 141	E

FILE NAME : J:\projects\D2_13701516\71\sign\023225_ps.dgn PLOT DATE : 13-JAN-2017 08:01 PLOT BY : dotshw PLOT NAME : PLOT SCALE : 100:1

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
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- [XX] INDICATES SIGN YEAR
- NEW SIGN - REUSE POSTS

EXIT 182
E KC
Hartland
Merton
½ MILE
REMOVE

E1-5P
EXIT 182
E KC
Hartland
Merton
½ MILE
266a
266
E1-1A
TYPE I
REUSE STEEL POSTS

STAY IN LANE
REMOVE
269
STAY IN LANE
R4-9(2M)

N

SEE DETAIL SHEET 27

PT 340+39.01

335
340
345

STH 16 (WB)
STH 16 (EB)
STH 83

780
NORTH M3-1
SOUTH M3-3
83 M1-6
83 M1-6
M5-1L
M5-1R
J2-2(2S)

ONLY ONLY
R3-8(MOD)
264
264A

ONLY ONLY
REMOVE

265
REMOVE

SEE DETAIL SHEET 28

CITY OF Delafield
REMOVE
267

268
W4-1R(5)
REMOVE

Downtown
Merton
EXIT 184
ESTR
TYPE I

FOOD
ATTRACTION
ESTR

2

SHEET 26 OF 72

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PERMANENT SIGNING PLAN	SHEET 142 E

FILE NAME : J:\projects\D2_13701516\71\sign\023226_ps.dgn PLOT DATE : 13-JAN-2017 08:01 PLOT BY : dotshw PLOT NAME : PLOT SCALE : 100:1

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
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- [XX] INDICATES SIGN YEAR
- NEW SIGN - REUSE POSTS

STH 16 WB ON RAMP

STH 83

STH 16 WB OFF RAMP

N

270 PEDESTRIANS BICYCLES NON MOTORIZED TRAFFIC MOTOR BICYCLES PROHIBITED R5-57(5)
REMOVE PEDESTRIANS BICYCLES NON MOTORIZED TRAFFIC MOTOR BICYCLES PROHIBITED

271 STOP R1-1F(3) MOUNT ON SIGNAL POLE

272 WEST M3-4 16 M1-6 M6-1 J3-1(2S)
REMOVE STOP

273 R3-2(2S)
REMOVE

274 DO NOT ENTER R5-1(3) MOUNT ON SIGNAL POLE
274A WRONG WAY R5-1A(2S) 3' MOUNT HEIGHT
REMOVE DO NOT ENTER
REMOVE WRONG WAY
REMOVE WEST 16

275 DO NOT ENTER R5-1(3)
276 WRONG WAY R5-1A(2S) 3' MOUNT HEIGHT
REMOVE DO NOT ENTER
REMOVE WRONG WAY

277 STOP R1-1(3)
278
REMOVE STOP

279 NORTH 83 M3-1 M6-1 J3-1(2S)
REMOVE NORTH 83

280 WRONG WAY R5-1A(3)
REMOVE WRONG WAY

281 Delafield Industrial Park / Chenequa D1-3
REMOVE Delafield Industrial Park / Chenequa

282 WRONG WAY R5-1A(3)
REMOVE WRONG WAY

283 SOUTH M3-3 83 M1-6 M6-1 J3-1(2S)
REMOVE SOUTH 83

284 ALTERNATE WEST INTERSTATE 94 MB4-1 MB3-4 M1-1 MB6-1 J3-1(2S)
REMOVE ALTERNATE WEST INTERSTATE 94

285 W12-1D(2S) METAL POST
REMOVE

286 STOP R1-1F(3) MOUNT ON SIGNAL POLE
REMOVE STOP
286A ONE WAY R6-2L(2S)
REMOVE ONE WAY

287 DO NOT ENTER R5-1(3)
REMOVE DO NOT ENTER

288 WEST M3-4 16 M1-6 M6-1 J3-1(2S)
REMOVE WEST 16

289 STOP R1-1F(3) MOUNT ON SIGNAL POLE
REMOVE STOP

290 R3-1
REMOVE

291 DO NOT ENTER R5-1(3)
REMOVE DO NOT ENTER

292 R3-2(2S)
REMOVE

293 ONE WAY R6-2R(2S)
REMOVE ONE WAY

294 EAST M3-2 16 M1-6 M5-1L J2-1(2S)
REMOVE EAST 16

295 Delafield / Milwaukee D1-2
REMOVE Delafield / Milwaukee

SHEET 27 OF 72

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PERMANENT SIGNING PLAN	SHEET 143 E

FILE NAME : J:\projects\D2_13701516\71\sign\023227_ps.dgn PLOT DATE : 13-JAN-2017 08:01 PLOT BY : dotshw PLOT NAME : PLOT SCALE : 40:1

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
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- [XX] INDICATES SIGN YEAR
- NEW SIGN - REUSE POSTS

REMOVE WRONG WAY R5-1A(3) 296 297

GAS FOOD ESTR

781 SOUTH M3-3 83 M1-6 MB6-1 J3-1(2S)

298 W12-1D 18" x 18" ON STEEL POST 2' HEIGHT

782 NORTH M3-1 83 M1-6 M6-1 J3-1(2S)

REMOVE R3-18(2S) 315 MOUNT ON SIGNAL POLE

ONE WAY REMOVE ONE WAY R6-2R 299

REMOVE R3-1(2S) 300

REMOVE DO NOT ENTER DO NOT ENTER R5-1(3) 305

REMOVE STOP REMOVE R3-1(2S) 302 STOP R1-1F(3) 301 MOUNT ON SIGNAL POLE

EAST 16 REMOVE EAST M3-2 16 M1-6 M6-1 J3-1(2S) 303

W5-52R [13] ESTR

Chenequa Oconomowoc REMOVE

Chenequa Oconomowoc D1-2 304 INSTALL ON EXISTING POSTS

[12] NO PARKING ANY TIME ESTR

312 AHEAD SIGNAL R10-10A(2S) MOUNT ABOVE SIGNAL AHEAD SIGNAL REMOVE

313 STOP R1-1F(3) MOUNT ON SIGNAL POLE STOP REMOVE

REMOVE R4-7(2S) 306 MOUNT ON SIGNAL POLE

314 W12-1D 18" x 18" ON SIGNAL POLE 2' HEIGHT REMOVE

STH 16 EB ON RAMP

STH 16 EB OFF RAMP

STH 83

Chenequa Hartland Delafield D1-3 698

317 318 STOP R1-1F(3) MOUNT ON SIGNAL POLE STOP REMOVE

REMOVE DO NOT ENTER DO NOT ENTER R5-1(3) 316 MOUNT ON SIGNAL POLE

REMOVE WRONG WAY WRONG WAY R5-1A(2S) 316A 3' MOUNT HEIGHT

REMOVE NO TURN ON RED FROM LEFT LANE NO TURN ON RED FROM LEFT LANE R10-11F(2M) 319

REMOVE R3-2(2S) 320 MOUNT ON SIGNAL POLE

YIELD R1-2(2S) 311 YIELD REMOVE

EAST M3-2 16 M1-6 M6-1 J3-1(2S) 310

EAST 16 REMOVE

EAST M3-2 16 M1-6 308 M6-1 J3-1(2S) MOUNT ON LIGHT POLE

EAST 16 REMOVE

PEDESTRIANS BICYCLES NON MOTORIZED TRAFFIC MOTOR BICYCLES PROHIBITED R5-57(5) 307

PEDESTRIANS BICYCLES NON MOTORIZED TRAFFIC MOTOR BICYCLES PROHIBITED REMOVE

ADOPT-A-HIGHWAY SPONSOR 155-56 ESTR

ALT MB4-1A EAST MB3-1 INTERSTATE 94 M1-1 309 MB6-1 J3-1(2S)

ALT EAST INTERSTATE 94 REMOVE

SHEET 28 OF 72

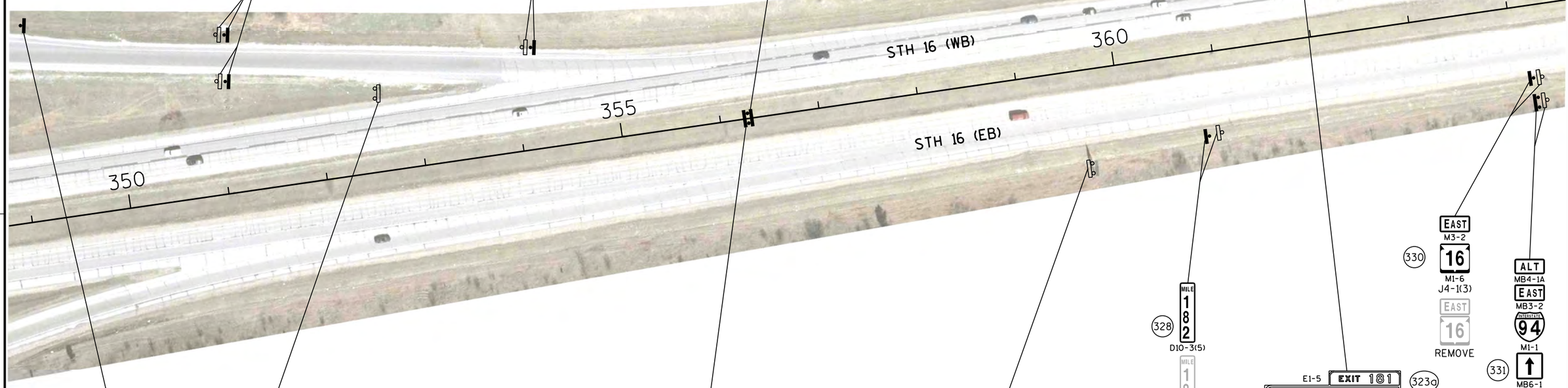
PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PERMANENT SIGNING PLAN	SHEET 144 E

FILE NAME : J:\projects\D2_13701516\71\sign\023228_ps.dgn PLOT DATE : 13-JAN-2017 08:01 PLOT BY : dotshw 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
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- [XX] INDICATES SIGN YEAR
- NEW SIGN - REUSE POSTS



REMOVE
ONLY
R3-8(2S)
321 322

REMOVE
W3-3(3)
324

CITY OF
Delafield
I2-3A
325

REMOVE
MILE 182
327
D10-3(5)

REMOVE
SPEED LIMIT 65
R2-1(5)
329

SOUTH M3-3 / NORTH M3-1
83 M1-6 / 83 M1-6
M5-1L M5-1R
779
J2-2(2S)

EXIT 181
E5-1A
739
739A W5-54 (2S) 739B

EXIT 181
REMOVE

VILLAGE OF
Hartland
I2-3A
326

GAS-EXIT 182
FOOD-EXIT 182
LODGING
ESTR

MILE 182
328
D10-3(5)
REMOVE

E1-5 EXIT 181
83
Delafield
Chenequa
323a
323
E4-1A
REUSE STEEL POSTS

EXIT 181
83
Delafield
Chenequa
REMOVE

EAST M3-2
330
16 M1-6
J4-1(3)

EAST 16
REMOVE

ALT MB4-1A
EAST MB3-2
INTERSTATE 94 M1-1
331
MB6-1
J4-1(3)

ALT EAST INTERSTATE 94
REMOVE

SHEET 29 OF 72

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PERMANENT SIGNING PLAN	SHEET 145 E

FILE NAME : J:\projects\D2_13701516\71\sign\023229_ps.dgn PLOT DATE : 13-JAN-2017 08:01 PLOT BY : dotshw 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
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- [XX] INDICATES SIGN YEAR
- NEW SIGN - REUSE POSTS

N

GAS
FOOD
ESTR

ALT
WEST
94
REMOVE

ALT
MB4-1A
WEST
MB3-4
94
M1-1
332
MB6-2R
J4-1(3)

STH 16 (WB)
STH 16 (EB)
365
370
375
380

North Ave
EXIT 182
710
TYPE I
MOUNT ON
STEEL SUPPORTS
STA 365+35 EB

R3-4B(5)
333
334
REMOVE

E1-5P
EXIT 182
335a
E
KC
Hartland
Merton
335
E4-1A
TYPE I
REUSE STEEL POSTS

EXIT 182
E
KC
Hartland
Merton
REMOVE

EXIT
182
336
E5-1A
336A
W5-54 (2S)
336B

EXIT
182
REMOVE

337
W3-1(3)
REMOVE

TO EAST 16 WEST 16
REMOVE

374
RIGHT LANE MUST TURN RIGHT
R3-7R(2S)

TO MB4-5
EAST M3-2 16 M1-6
WEST M3-4 16 M1-6
372
M5-1L M5-1R
J2-2(2S)

JCT 16
REMOVE

RIGHT LANE MUST TURN RIGHT
REMOVE

JCT M2-1 16 M1-6
373
J1-1(2S)

TO COUNTY KC
REMOVE

TO M4-5
COUNTY KC M1-5A
347
M5-1L
J2-1(2S)

SPEED LIMIT 65
REMOVE

SPEED LIMIT 65
351
R2-1(5)

NORTH AVE

G G

H H

JCT M2-1 16 M1-6
343
J1-1(2S)

JCT 16
REMOVE

Downtown Hartland
REMOVE

Downtown Hartland
349
D1-2

REMOVE
W4-1R(5)
338

TO MERTON AVE
GAS FOOD
ESTR

WEST 16
REMOVE

WEST M3-4 16 M1-6
344
M6-1

G G

(HWY E)

N

Hwy E
339
M1-94(5)

SEE DETAIL SHEET 32

HARTBROOK DR

STH 16 WB ON RAMP

STH 16 (WB)

385

390

395

STH 16 (EB)

PT 387+89.53

SEE DETAIL SHEET 33

NORTH AVE

H H

RIDESHARE INFORMATION www.rideshare.wi.gov
340
D12-2B(5)

RIDESHARE INFORMATION www.rideshare.wi.gov
REMOVE

341 711
W5-52L(3)
4' MOUNT HEIGHT
REMOVE

342 712
W5-52R(3)
4' MOUNT HEIGHT
REMOVE

TO M4-5
348
COUNTY KC M1-5A
M6-1
COUNTY E M1-5A
M6-4
J3-2(2S)

TO COUNTY KC COUNTY E
REMOVE

FOOD
ESTR

North Ave
NORTH SOUTH
To Merton Ave
Business Dist
D1-4
350

345 346
WRONG WAY
R5-1A(3)

WRONG WAY
REMOVE

GAS
GAS
ESTR

NO PARKING
ALL VILLAGE STREET NOV 1ST TO APR 1ST FROM 2AM TO 8AM
PER VILLAGE ORDINANCE
ESTR
MUNICIPAL SIGN

North Ave
NORTH SOUTH
To Merton Ave
Business Dist
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
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- [XX] INDICATES SIGN YEAR
- NEW SIGN - REUSE POSTS

SHEET 31 OF 72

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PERMANENT SIGNING PLAN	SHEET 147 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
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- [XX] INDICATES SIGN YEAR
- NEW SIGN - REUSE POSTS

N

NORTH AVE (CTH E)

STH 16 WB ON RAMP

HARTBROOK DR

STH 16 (WB)

ADOPT-A-HIGHWAY SPONSOR
ESTR

352 PEDESTRIANS BICYCLES NON MOTORIZED TRAFFIC MOTOR BICYCLES PROHIBITED
REMOVE
PEDESTRIANS BICYCLES NON MOTORIZED TRAFFIC MOTOR BICYCLES PROHIBITED
R5-57(5)
ESTR

358A 358B STOP
ESTR
ALL WAY
R1-3P(2S)

719 RAMP CLOSED USE ALT ROUTE 720
R11-54F(2S)

WEST 16 COUNTY E
REMOVE

353 WEST M3-4 16 M1-6 COUNTY E M1-5A M6-1 M6-4
J3-2(2S)

STOP
ESTR
ALL WAY
358C 358D
R1-3P(2S)

357 TO M4-5 EAST M3-2 WEST M3-4 FRONTAGE ROAD 16 16 M1-95 M1-6 M1-6 M6-1 M6-1 M6-1
J3-3(2S)

358 ONE WAY
R6-2L(2S)

356 Downtown Hartland / Downtown Merton
D1-4

Downtown Hartland / Downtown Merton
REMOVE

TO EAST WEST M3-2 M3-4 FRONTAGE ROAD 16 16 ONE WAY M6-1
REMOVE

STOP
ESTR
ALL WAY
358E 358F
R1-3P(2S)

ESTR

354 TO M4-5 EAST M3-2 TO M4-5 16 COUNTY KC M1-6 M1-5A M6-1 M6-1
J3-2(2S)

TO EAST TO 16 COUNTY KC
REMOVE

355 DO NOT ENTER
R5-1(3)

DO NOT ENTER
REMOVE

SHEET 32 OF 72

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PERMANENT SIGNING PLAN	SHEET 148 E

FILE NAME : J:\projects\D2_13701516\71\sign\023232_ps.dgn PLOT DATE : 13-JAN-2017 08:02 PLOT BY : dotshw 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
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- [XX] INDICATES SIGN YEAR
- NEW SIGN - REUSE POSTS

(SIS)
TYPE I
ESTR

STH 16 (EB)

STH 16 EB OFF RAMP

NORTH AVE (CTH E)

N

WRONG WAY
REMOVE
WRONG WAY 362
R5-1A(3)

REMOVE
364
R3-1(2S)

[08] RIGHT LANE MUST TURN RIGHT 363
R3-7R(2S)
RIGHT LANE MUST TURN RIGHT
REMOVE

[09] 368
W3-1(2M)
REMOVE

367
R4-7(2M)
REMOVE

Downtown Hartland 359
D1-2
Downtown Hartland
REMOVE

TO
M4-5
COUNTY KC M1-5A
COUNTY E M1-5A
360
M6-1 M6-4
J3-2(2S)
TO
COUNTY KC
COUNTY E
REMOVE

STOP 361
R1-1(3)
STOP
REMOVE
STOP
ESTR

371
DO NOT ENTER
R5-1(3)
DO NOT ENTER
REMOVE

369
R3-2(2S)

DO NOT ENTER 365
R5-1(3)
DO NOT ENTER
REMOVE
WRONG WAY 366
R5-1A(2S)
3' MOUNT HEIGHT
WRONG WAY
REMOVE

[13] ONE WAY
ESTR
[13] ONE WAY
ESTR

RIGHT LANE MUST TURN RIGHT 370
R3-7R(2S)
RIGHT LANE MUST TURN RIGHT
REMOVE

[13] DO NOT ENTER
ESTR
[13] WRONG WAY
ESTR

SHEET 33 OF 72

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PERMANENT SIGNING PLAN	SHEET 149 E

FILE NAME : J:\projects\D2_13701516\71\sign\023233_ps.dgn PLOT DATE : 13-JAN-2017 08:02 PLOT BY : dotshw PLOT NAME : PLOT SCALE : 40:1

WISDOT/CADDS SHEET 42

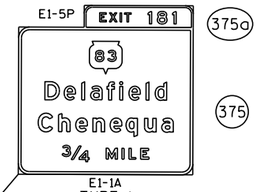
2

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
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- [XX] INDICATES SIGN YEAR
- NEW SIGN - REUSE POSTS



REMOVE



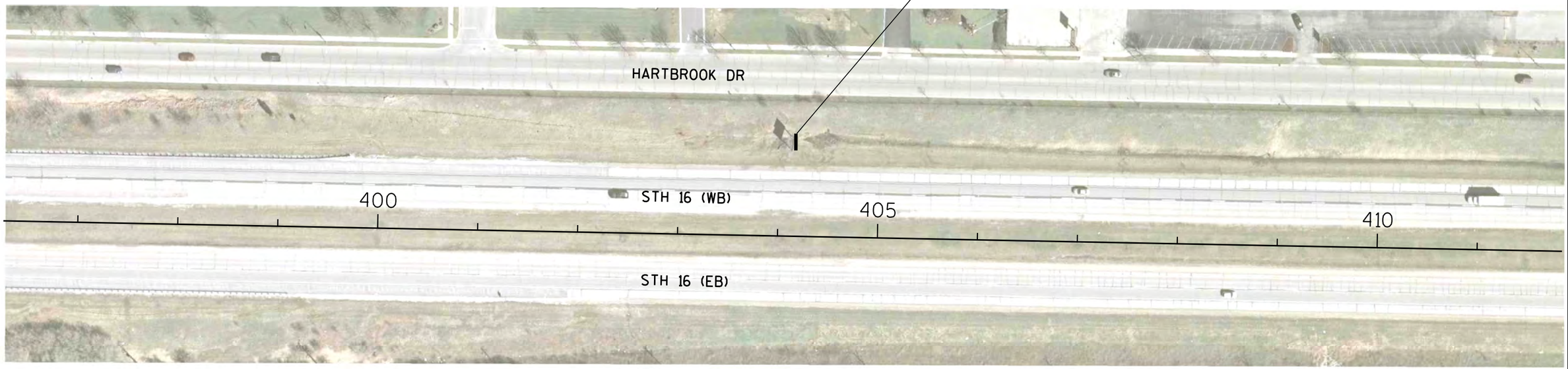
375a

375

E1-1A
TYPE I
REUSE STEEL POSTS

N

2



C
a

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
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- [XX] INDICATES SIGN YEAR
- NEW SIGN - REUSE POSTS

HARTBROOK DR

STH 16 (WB)

STH 16 (EB)

415

420

425

MERTON AVENUE

MERTON AVENUE

MERTON AVENUE

SEE DETAIL SHEET 36

SEE DETAIL SHEET 37

N

A

A

J

J

RIDESHARE INFO CALL 1-800-455-POOL
REMOVE

RIDESHARE INFO CALL 1-800-455-POOL
379
D12-2A(5)

TO M4-5
EAST M3-2
WEST M3-4
16 M1-6
16 M1-6
385
M6-1
M5-1R
J2-2(2S)

RIDESHARE INFO CALL 1-800-455-POOL
REMOVE

RIDESHARE INFO CALL 1-800-455-POOL
384
D12-2A(5)

GAS
FOOD
ESTR

(SIS)
TYPE I
ESTR

NO PARKING
ALL VILLAGE STREET NOV 1ST TO APR 1ST FROM 2AM TO 8AM
PER VILLAGE ORDINANCE
ESTR
MUNICIPAL SIGN

E1-5P
EXIT 184
JK
KE
Jungbluth Rd
North Shore Dr
1 MILE
376a
376
E1-1A
TYPE I
REUSE STEEL POSTS

EXIT 184
JK
KE
Jungbluth Rd
North Shore Dr
1 MILE
REMOVE

MILE
1
8
3
377
378
D10-3(5)

MILE
1
8
3
REMOVE

JCT
M2-1
16
M1-6
386
J1-1(2S)

JCT
16
REMOVE

JCT
M2-1
16
M1-6
381
J1-1(2S)

JCT
16
REMOVE

Hwy KC
M1-94(MOD)
380

PEDESTRIANS
BICYCLES
NON MOTORIZED TRAFFIC
MOTOR BICYCLES
PROHIBITED
383
R5-57(5)

PEDESTRIANS
BICYCLES
NON MOTORIZED TRAFFIC
MOTOR BICYCLES
PROHIBITED
REMOVE

382
W4-1(5)

REMOVE

SHEET 35 OF 72

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PERMANENT SIGNING PLAN	SHEET 151 E

FILE NAME : J:\projects\D2_13701516\71\sign\023235_ps.dgn PLOT DATE : 13-JAN-2017 08:02 PLOT BY : dotshw PLOT NAME : PLOT SCALE : 100:1

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
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- [XX] INDICATES SIGN YEAR
- NEW SIGN - REUSE POSTS

HARTBROOK DR

REMOVE DO NOT ENTER
R5-1(3) DO NOT ENTER 703
REMOVE WRONG WAY
R5-1A(2S) WRONG WAY 704
3' MOUNT HEIGHT

ESTR ONE WAY [12]

CLIP CORNERS
REMOVE DO NOT ENTER
R5-1C(3) DO NOT ENTER 387
REMOVE WRONG WAY
R5-1A(2S) WRONG WAY 388
3' MOUNT HEIGHT

NOTE:
PLACE BETWEEN SIDEWALK & CURB
1 FOOT OFFSET

M4-5 TO 783
M3-4 WEST
M1-6 16
M6-1 J3-1(2S)

R1-1(3) STOP
ESTR ALL WAY 391B 391C
R1-3P(2S)

ESTR

M4-5 TO
M1-5A COUNTY KC
M1-5A COUNTY E
M6-4 M6-1 392
J3-2(2S)

REMOVE TO COUNTY KC COUNTY E

STOP
REMOVE
R1-1(3) STOP 391
ALL WAY 391A
R1-3P(2S)

REMOVE STOP
R1-1(3) 389
ALL WAY 389A
R1-3P(2S)

REMOVE ONE WAY
R6-2L(2S) 390

R5-1A(3) WRONG WAY 393 394
REMOVALS ON SHEET 38

(SIS)
ESTR

NO PARKING
ALL VILLAGE STREET NOV 1ST TO APR 1ST FROM 2AM TO 8AM
PER VILLAGE ORDINANCE
ESTR
MUNICIPAL SIGN

STH 16 WB OFF RAMP

R1-1(3) STOP 707

R3-1(2S) 397
REMOVE

R6-2R(2S) ONE WAY 396
REMOVE ONE WAY

D1-2 Downtown Hartland 395
REMOVE Downtown Hartland

M4-5 TO
M3-4 WEST
M1-6 16 400
M6-1 J3-1(2S)
REMOVE TO WEST 16

R1-1(3) STOP 398 399
ALL WAY 398A 399A
R1-3P(2S)
REMOVE STOP

706 R5-1(3) DO NOT ENTER
REMOVE DO NOT ENTER

M3-2 EAST
M1-6 16 403
M5-1L
J2-1(2S)
REMOVE EAST 16

706 R5-1(3) DO NOT ENTER

R4-7(2S) 401
R3-2(2S) 402
REMOVE
REMOVE

MERTON AVENUE

STH 16 (WB)

STH 16 (EB)

(SIS)
ESTR

N

2

LEGEND

EXISTING SIGN MOUNTED ON POST(S)

EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE

PROPOSED SIGN MOUNTED ON POST(S)

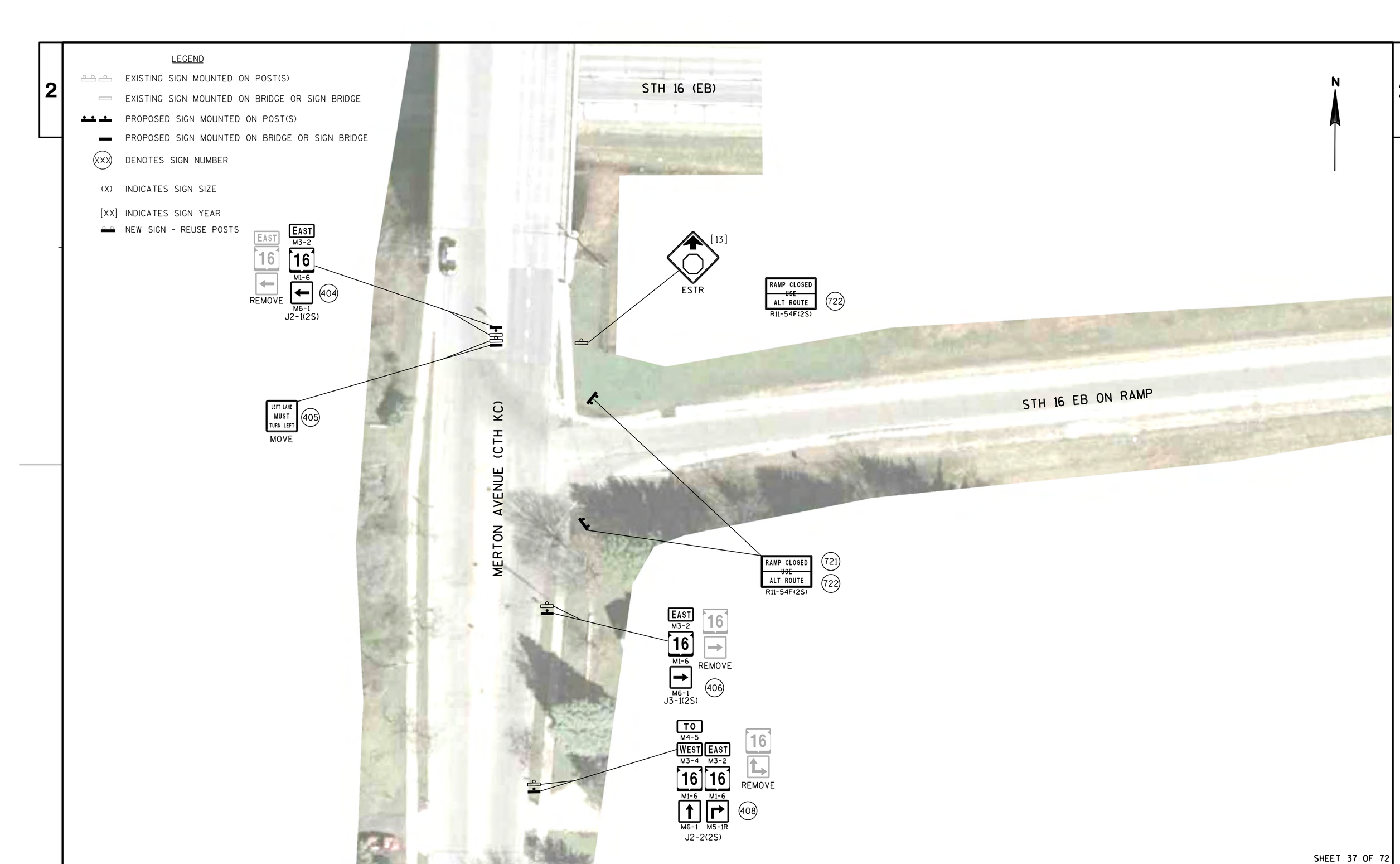
PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE

(XXX) DENOTES SIGN NUMBER

(X) INDICATES SIGN SIZE

[XX] INDICATES SIGN YEAR

NEW SIGN - REUSE POSTS



SHEET 37 OF 72

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PERMANENT SIGNING PLAN	SHEET 153	E

FILE NAME : J:\projects\D2_13701516\71\sign\023237_ps.dgn PLOT DATE : 13-JAN-2017 08:02 PLOT BY : dotshw PLOT NAME : PLOT SCALE : 40:1

WISDOT/CADDS SHEET 42

ADOPT-A-HIGHWAY SPONSOR

ESTR

WRONG WAY 393 394
REMOVE

EXIT 183
REMOVE

EXIT 183 410
E5-1A
410A W5-54 (25) 410B

REMOVE
W3-1(3) 409

EXIT 183
KC E
Hartland
Merton
REMOVE

EXIT 183 411a
KC E
Hartland
Merton 411
TYPE I
REUSE STEEL POSTS

N

430 435 440

STH 16 (WB)

STH 16 (EB)

Merton Ave
SOUTH NORTH
To North Ave
Business Dist
Industrial
Park 686

Merton Ave
NORTH SOUTH
To North Ave
Business Dist
Industrial
Park
REMOVE

VILLAGE OF
Hartland 412
I2-3A(5)

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
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- [XX] INDICATES SIGN YEAR
- NEW SIGN - REUSE POSTS

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

(XXX) DENOTES SIGN NUMBER

(X) INDICATES SIGN SIZE

[XX] INDICATES SIGN YEAR

NEW SIGN - REUSE POSTS

N

2

REMOVE

ALTERNATE MB4-1

WEST MB3-4

INTERSTATE 94 M1-1

MB6-1 J3-1(3) (413)

REMOVE SPEED LIMIT 65

SPEED LIMIT 65 R2-1(2S) (414)

GAS

FOOD

ESTR

REMOVE

EXCEPT MAINTENANCE AND POLICE AUTHORIZED VEHICLES

EXCEPT MAINTENANCE AND POLICE AUTHORIZED VEHICLES R3-4B(5) (417)

REMOVE WEST 16

WEST M3-4

16 M1-6 J4-1(3) (415)

STH 16 (WB)

STH 16 (EB)

445

450

455

EAST M3-2

16 M1-6 J4-1(3) (419)

REMOVE EAST 16

EXCEPT MAINTENANCE AND POLICE AUTHORIZED VEHICLES R3-4B(5) (418)

REMOVE

SPEED LIMIT 65 R2-1(5) (416)

REMOVE SPEED LIMIT 65

SHEET 39 OF 72

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PERMANENT SIGNING PLAN	SHEET 155	E

2

LEGEND

EXISTING SIGN MOUNTED ON POST(S)

EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE

PROPOSED SIGN MOUNTED ON POST(S)

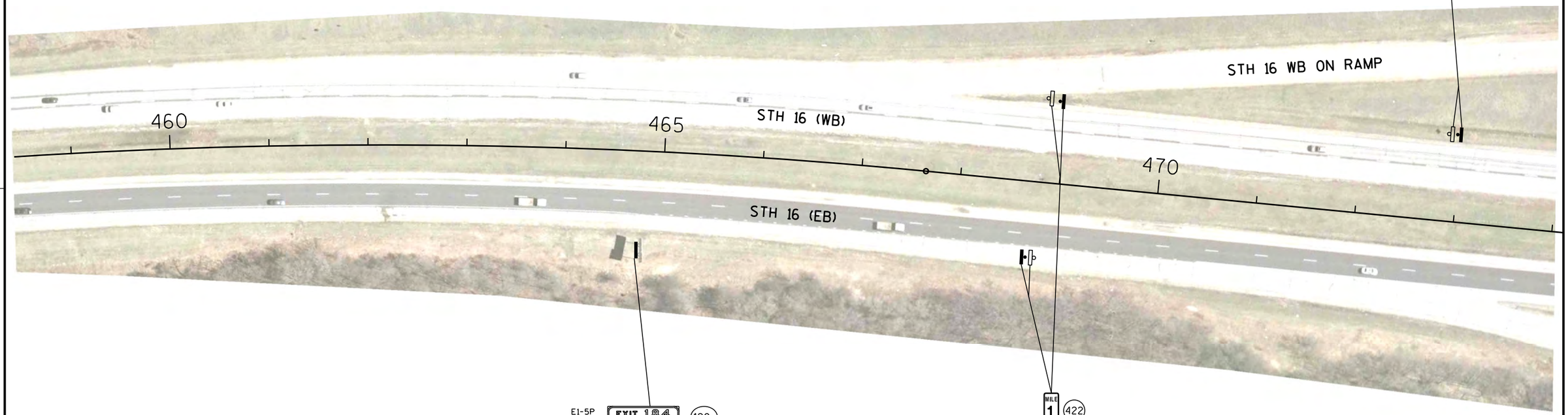
PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE

(XXX) DENOTES SIGN NUMBER

(X) INDICATES SIGN SIZE

[XX] INDICATES SIGN YEAR

NEW SIGN - REUSE POSTS



N

REMOVE

W4-1R(5)

423

E1-5P

EXIT 184

JK KE

Jungbluth Rd

North Shore Dr

420a

420

E4-1A
TYPE I
REUSE STEEL POSTS

EXIT 184

JK KE

Jungbluth Rd

North Shore Dr

REMOVE

MILE 184

422

421

D10-3(5)

MILE 184

REMOVE

2

SHEET 40 OF 72

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PERMANENT SIGNING PLAN	SHEET 156 E

FILE NAME : J:\projects\D2_13701516\71\sign\023240_ps.dgn PLOT DATE : 13-JAN-2017 08:03 PLOT BY : dotshw PLOT NAME : PLOT SCALE : 100:1

WISDOT/CADDS SHEET 42

425

EXIT
184 ↗
E5-1A(5)
425A W5-54 (2S) 425B

EXIT
184 ↗
REMOVE

K K

SEE DETAIL
SHEET 42

STH 16 WB ON RAMP

475

480

NORTH SHORE DR

485

STH 16 (WB)

STH 16 EB OFF RAMP

STH 16 EB ON RAMP

SEE DETAIL
SHEET 44

80.01

N

Hartland
NEXT 2 EXITS
REMOVE

426
Hartland
NEXT 2 EXITS
TYPE I
REUSE STEEL POSTS

North Shore Dr
Jungbluth Rd
REMOVE

432
North Shore Dr
Jungbluth Rd
D1-2

EXIT 183
KC E
Hartland
Merton
3/4 MILE
REMOVE

E1-5P EXIT 183 431a
KC E
Hartland
Merton
3/4 MILE
431
E4-1A
TYPE I
SIGN ON STEEL SUPPORTS

STH 16 WB OFF RAMP

424
W3-1(3)
REMOVE

Jungbluth Rd
North Shore Dr
427
D1-2

Jungbluth Rd
North Shore Dr
REMOVE

428
Oconomowoc
Milwaukee
D1-2

Oconomowoc
Milwaukee
REMOVE

430
W4-1R(5)
REMOVE

429
JCT M2-1
16
M1-6 J1-1(2S)

JCT
16
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
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- [XX] INDICATES SIGN YEAR
- NEW SIGN - REUSE POSTS

SHEET 41 OF 72

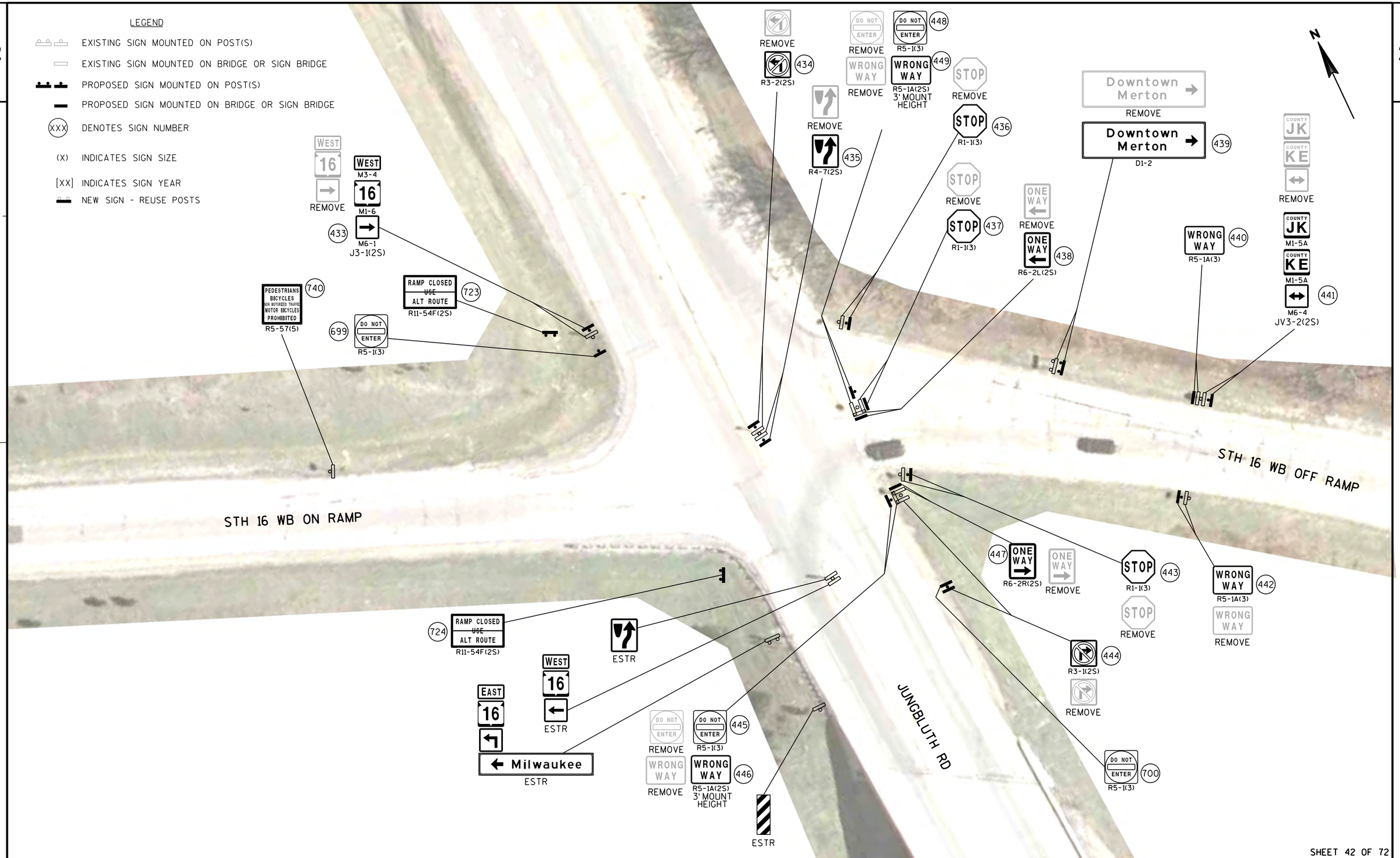
PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PERMANENT SIGNING PLAN	SHEET 157	E

FILE NAME : J:\projects\D2_13701516\71\sign\023241_ps.dgn PLOT DATE : 24-FEB-2017 07:49 PLOT BY : dotshw PLOT NAME : PLOT SCALE : 100:1

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
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- [XX] INDICATES SIGN YEAR
- NEW SIGN - REUSE POSTS



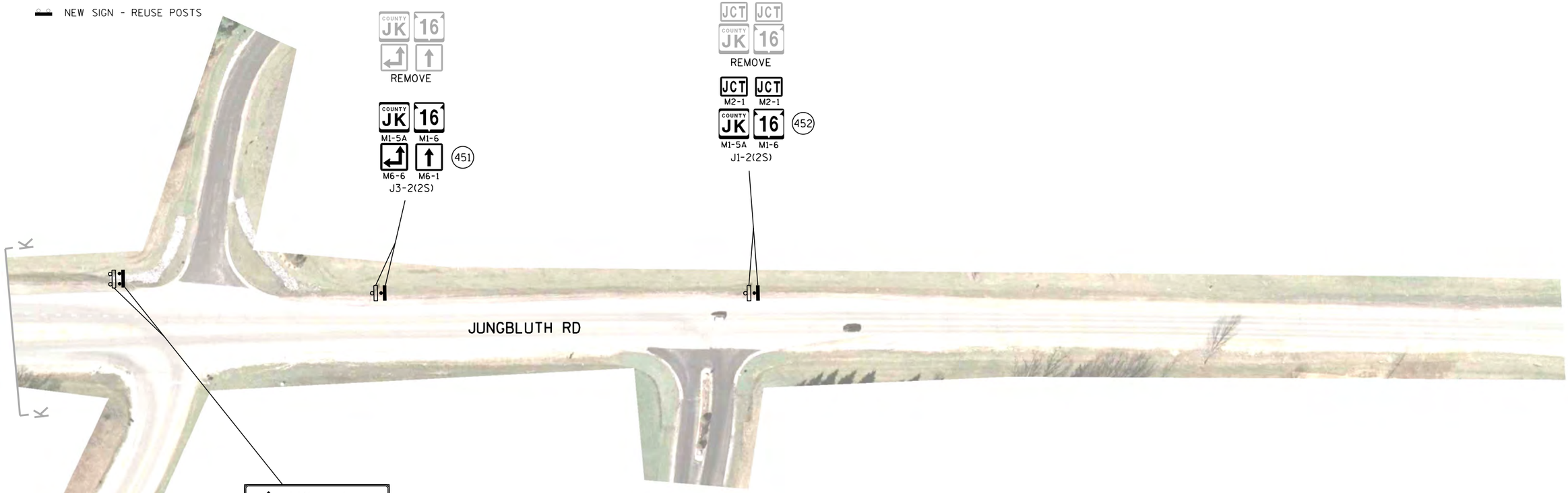
SHEET 42 OF 72

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PERMANENT SIGNING PLAN	SHEET 158	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
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- [XX] INDICATES SIGN YEAR
- NEW SIGN - REUSE POSTS

N



REMOVE
COUNTY JK 16

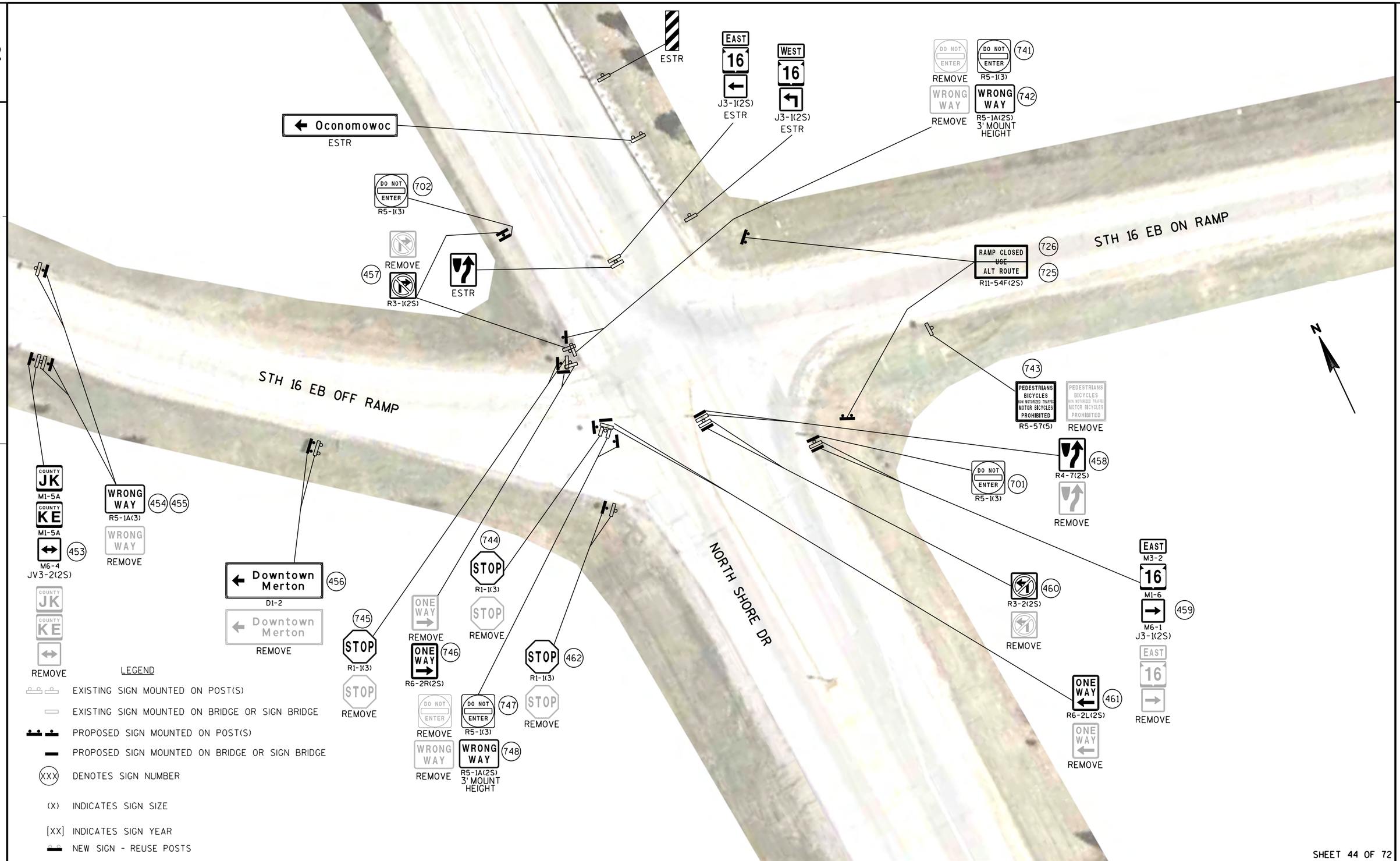
COUNTY JK 16 (M1-5A, M1-6) (451)
M6-6 M6-1
J3-2(2S)

REMOVE
JCT JCT
COUNTY JK 16

JCT JCT (M2-1, M2-1)
COUNTY JK 16 (M1-5A, M1-6) (452)
J1-2(2S)

Milwaukee
Oconomowoc (450)
D1-2

Milwaukee
Oconomowoc
REMOVE



SHEET 44 OF 72

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PERMANENT SIGNING PLAN	SHEET 160 E

FILE NAME : J:\projects\D2_13701516\71\sign\023244_ps.dgn PLOT DATE : 13-JAN-2017 08:03 PLOT BY : dotshw 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

(XXX) DENOTES SIGN NUMBER

(X) INDICATES SIGN SIZE

[XX] INDICATES SIGN YEAR

NEW SIGN - REUSE POSTS

REMOVE

463

W3-1(3)

EXIT 184

REMOVE

EXIT 184

464

E5-1A

464A

W5-54 (2S)

464B

EXIT 184

JK KE

Jungbluth Rd

North Shore Dr

REMOVE

E1-5 EXIT 184

465a

JK KE

Jungbluth Rd

North Shore Dr

465

E4-1A

TYPE I

REUSE STEEL POSTS

490

495

500

50

+32.78

STH 16 (WB)

STH 16 (EB)

SHEET 45 OF 72

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PERMANENT SIGNING PLAN	SHEET 161	E

FILE NAME : J:\projects\D2_13701516\71\sign\023245_ps.dgn PLOT DATE : 13-JAN-2017 08:03 PLOT BY : dotshw PLOT NAME : PLOT SCALE : 100:1

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
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- [XX] INDICATES SIGN YEAR
- NEW SIGN - REUSE POSTS

N

ALTERNATE INTERSTATE 94
REMOVE

ALTERNATE
MB4-1
WEST
MB3-4
INTERSTATE 94
M1-1
MB6-1
J4-1(3)
466

REMOVE
EXCEPT MAINTENANCE AND POLICE AUTHORIZED VEHICLES
R3-4B(5)
469

STH 16 (WB)

510 515 520

STH 16 (EB)

EAST
M3-2
16
M1-6
J4-1(3)
467

EAST
16
REMOVE

EXCEPT MAINTENANCE AND POLICE AUTHORIZED VEHICLES
R3-4B(5)
468

EXCEPT MAINTENANCE AND POLICE AUTHORIZED VEHICLES
REMOVE

2

SHEET 46 OF 72

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PERMANENT SIGNING PLAN	SHEET 162	E

FILE NAME : J:\projects\D2_13701516\71\sign\023246_ps.dgn PLOT DATE : 13-JAN-2017 08:03 PLOT BY : dotshw PLOT NAME : PLOT SCALE : 100:1

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

(XXX) DENOTES SIGN NUMBER

(X) INDICATES SIGN SIZE

[XX] INDICATES SIGN YEAR

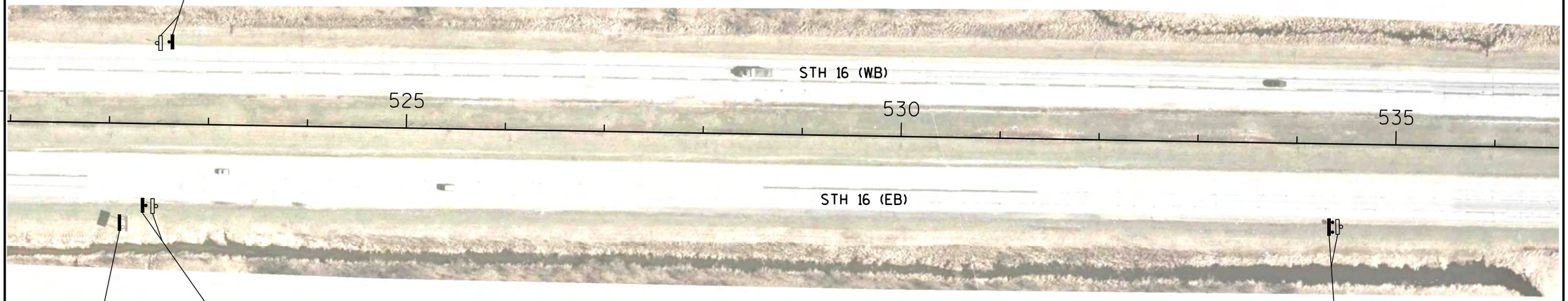
NEW SIGN - REUSE POSTS

N

2

MILE 185
REMOVE

MILE 185 (470)
D10-3(5)
4' MOUNT
HEIGHT



Pewaukee Exits
Ryan St 1
Capitol Dr 2 1/2
Main St 3 1/2
(471)
E8-1
TYPE I
REUSE EXISTING POSTS

Pewaukee Exits
Ryan St 1
Capitol Dr 2 1/2
Main St 3 1/2
REMOVE

MILE 185 (472)
D10-3(5)
4' MOUNT
HEIGHT

MILE 185
REMOVE

SPEED LIMIT 65 (473)
R2-1(5)

SPEED LIMIT 65
REMOVE

SHEET 47 OF 72

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PERMANENT SIGNING PLAN	SHEET 163 E

FILE NAME : J:\projects\D2_13701516\71\sign\023247_ps.dgn PLOT DATE : 13-JAN-2017 08:03 PLOT BY : dotshw PLOT NAME : PLOT SCALE : 100:1

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

(XXX) DENOTES SIGN NUMBER

(X) INDICATES SIGN SIZE

[XX] INDICATES SIGN YEAR

NEW SIGN - REUSE POSTS

N

2

Downtown
Merton
EXIT 182

ESTR



E1-5P EXIT 186 474a

KF

Ryan St
½ MILE

474

E1-1A
TYPE I
REUSE STEEL POSTS

EXIT 186
KF
Ryan St
½ MILE
REMOVE

SHEET 48 OF 72

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PERMANENT SIGNING PLAN	SHEET 164 E

FILE NAME : J:\projects\D2_13701516\71\sign\023248_ps.dgn PLOT DATE : 13-JAN-2017 08:03 PLOT BY : dotshw PLOT NAME : PLOT SCALE : 100:1

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
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- [XX] INDICATES SIGN YEAR
- NEW SIGN - REUSE POSTS

N

EXIT 184
JK KE
Jungbluth Rd
North Shore Dr
1 MILE
REMOVE

E1-5P
EXIT 184 475a
JK KE
Jungbluth Rd
North Shore Dr
1 MILE 475
E4-1A
TYPE I
REUSE STEEL POSTS

Hartland 2
Oconomowoc 10
REMOVE

Hartland 2
Oconomowoc 10 476
E8-1
TYPE I
REUSE STEEL POSTS

SPEED LIMIT 65
REMOVE

SPEED LIMIT 65 477
R2-1(5)



EXIT 186
GAS | FOOD | ATTRACTIONS
ESTR

2

LEGEND

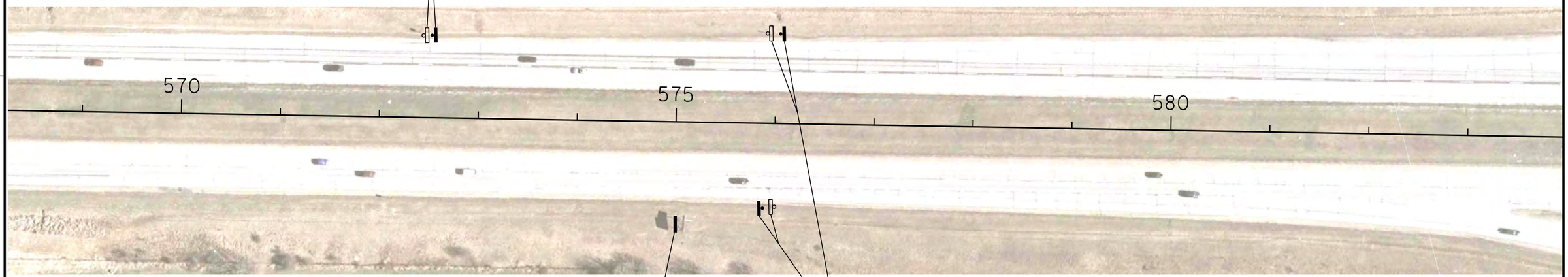
- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- [XX] INDICATES SIGN YEAR
- NEW SIGN - REUSE POSTS

N

2

WEST
16
REMOVE

WEST
M3-4
16
M1-6
J2-2(3)
478



E1-5P EXIT 186
KF
Ryan St
479a
479
E4-1A
TYPE I
REUSE STEEL POSTS

EXIT 186
KF
Ryan St
REMOVE

MILE
186
480
481
D10-3(5)
4' MOUNT
HEIGHT

MILE
186
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
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- [XX] INDICATES SIGN YEAR
- NEW SIGN - REUSE POSTS

N

REMOVE

W4-1R(5) 482

EXIT 187
190
Capitol Dr
1 MILE
REMOVE

E1-5P
EXIT 187
190
Capitol Dr
1 MILE
485a
485
E1-1A
TYPE I
REUSE STEEL POSTS

Milwaukee
Oconomowoc
REMOVE

Milwaukee
Oconomowoc
483
D1-2

JCT
16
REMOVE

JCT
M2-1
16
484
M1-6
J1-1(2S)

EAST WEST EAST WEST 784
16 16 16 16
REMOVE
J2-2(2S)

600'
950'

SEE DETAIL
SHEET 52

STH 16 WB ON RAMP

585 590 595

STH 16 (WB)

RYAN RD

STH 16 (EB)

STH 16 EB OFF RAMP

EXIT
186
486
E5-1A(5)
486A W5-54 (2S) 486B

EXIT
186
REMOVE

749
W3-1(3)

Downtown
Pewaukee
ESTR

GAS
ATTRACTION
ESTR

SEE DETAIL
SHEET 53

N N

SHEET 51 OF 72

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PERMANENT SIGNING PLAN	SHEET 167 E

FILE NAME : J:\projects\D2_13701516\71\sign\023251_ps.dgn PLOT DATE : 13-JAN-2017 08:04 PLOT BY : dotshw PLOT NAME : PLOT SCALE : 100:1

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

(XXX) DENOTES SIGN NUMBER

(X) INDICATES SIGN SIZE

[XX] INDICATES SIGN YEAR

NEW SIGN - REUSE POSTS

N

RYAN RD

STH 16 WB ON RAMP

STH 16 WB OFF RAMP

STH 16 (WB)

750 PEDESTRIANS BICYCLES NON MOTORIZED TRAFFIC MOTOR BICYCLES PROHIBITED R5-57(5)

PEDESTRIANS BICYCLES NON MOTORIZED TRAFFIC MOTOR BICYCLES PROHIBITED REMOVE

727 728 RAMP CLOSED USE ALT ROUTE R11-54F(2S)

DO NOT ENTER REMOVE

751 DO NOT ENTER R5-1(3)

WRONG WAY REMOVE

752 WRONG WAY R5-1A(2S) 3' MOUNT HEIGHT

REMOVE 487 R4-7(2S)

REMOVE 488 R3-2(2S)

WEST 16 M3-4 M1-6 489 M6-1 J3-1(2S)

WEST 16 REMOVE

STOP REMOVE 753 STOP R1-1(3)

STOP REMOVE 754 STOP R1-1(3)

WRONG WAY REMOVE 491 WRONG WAY R5-1A(3)

COUNTY KF REMOVE

COUNTY KF M1-5A 492 M6-4 J3-1(2S)

DO NOT ENTER REMOVE

756 DO NOT ENTER R5-1(3)

WRONG WAY REMOVE

757 WRONG WAY R5-1A(2S) 3' MOUNT HEIGHT

EAST 16 ESTR

ESTR

ESTR

REMOVE ONE WAY REMOVE 493 ONE WAY R6-2R(2S)

STOP REMOVE 755 STOP R1-1(3)

ONE WAY 490 R6-2L(2S)

ONE WAY REMOVE

WRONG WAY REMOVE

758 WRONG WAY R5-1A(3)

(SIS) ESTR

ESTR

495 R3-1(2S) REMOVE

DO NOT ENTER 494 R5-1(3)

DO NOT ENTER REMOVE

WEST 16 ESTR

Milwaukee ESTR

SHEET 52 OF 72

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PERMANENT SIGNING PLAN	SHEET 168 E

FILE NAME : J:\projects\D2_13701516\71\sign\023252_ps.dgn PLOT DATE : 13-JAN-2017 08:04 PLOT BY : dotshw 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
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- [XX] INDICATES SIGN YEAR
- NEW SIGN - REUSE POSTS

N

STH 16 EB OFF RAMP

STH 16 EB ON RAMP

RYAN RD (CTH KF)

ESTR

Oconomowoc
ESTR

WEST 16
ESTR

ESTR

EAST 16
ESTR

WRONG WAY
REMOVE
WRONG WAY (497) (498)
R5-1A(3)

REMOVE
(500)
R3-1(2S)

ONE WAY
REMOVE
(499) ONE WAY
R6-2R(2S)

(507) ONE WAY
R6-2L(2S)

ONE WAY
REMOVE

RAMP CLOSED
USE
ALT ROUTE
R11-54F(2S)
(730)

COUNTY KF
M1-5A
(496)
M6-4
J13-1(2S)

COUNTY KF
REMOVE

STOP
REMOVE
(759) STOP
R1-1(3)

(501) DO NOT ENTER
R5-1(3)

DO NOT ENTER
REMOVE

(502) WRONG WAY
REMOVE

WRONG WAY
R5-1A(2S)
3' MOUNT HEIGHT

STOP
(505) (506)
R1-1(3)

STOP
REMOVE

(510)
R4-7(2S)

REMOVE

PEDESTRIANS
BICYCLES
NON MOTORIZED TRAFFIC
MOTOR BICYCLES
PROHIBITED
[08] (511)
R5-57(5)

PEDESTRIANS
BICYCLES
NON MOTORIZED TRAFFIC
MOTOR BICYCLES
PROHIBITED
REMOVE

(509)
R3-2(2S)

REMOVE

RAMP CLOSED
USE
ALT ROUTE
(729)
R11-54F(2S)

DO NOT ENTER
REMOVE

WRONG WAY
REMOVE

DO NOT ENTER
R5-1(3)

WRONG WAY
R5-1A(2S)
3' MOUNT HEIGHT

EAST
M3-2
16
M1-6
M6-1
J2-1(2S)

EAST
16
REMOVE
(508)

SHEET 53 OF 72

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PERMANENT SIGNING PLAN	SHEET 169 E

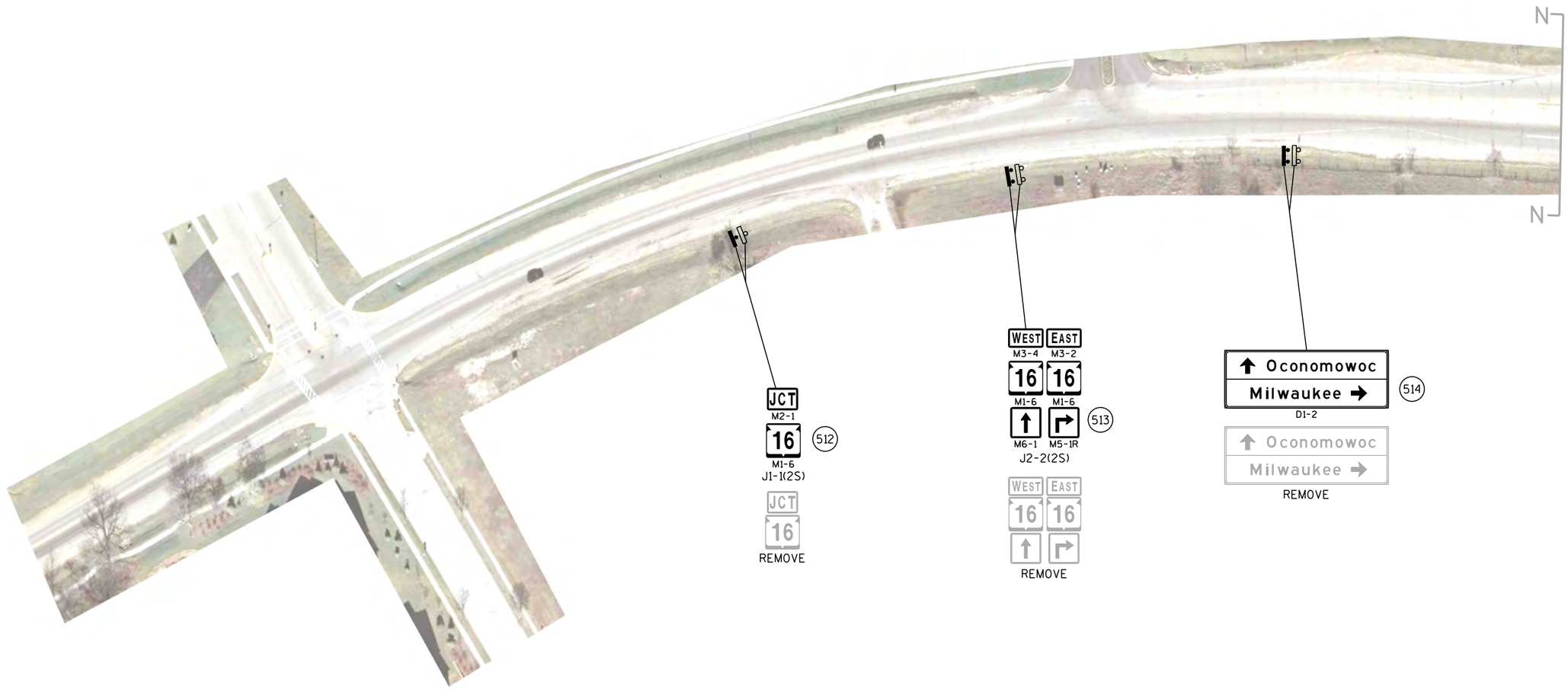
FILE NAME : J:\projects\D2_13701516\71\sign\023253_ps.dgn PLOT DATE : 13-JAN-2017 08:04 PLOT BY : dotshw PLOT NAME : PLOT SCALE : 40:1

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
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- [XX] INDICATES SIGN YEAR
- NEW SIGN - REUSE POSTS



JCT
M2-1
16
M1-6
J1-1(2S)
512

JCT
16
REMOVE

WEST M3-4
EAST M3-2
16
16
M1-6
M1-6
M6-1
M5-1R
J2-2(2S)
513

WEST
EAST
16
16
REMOVE

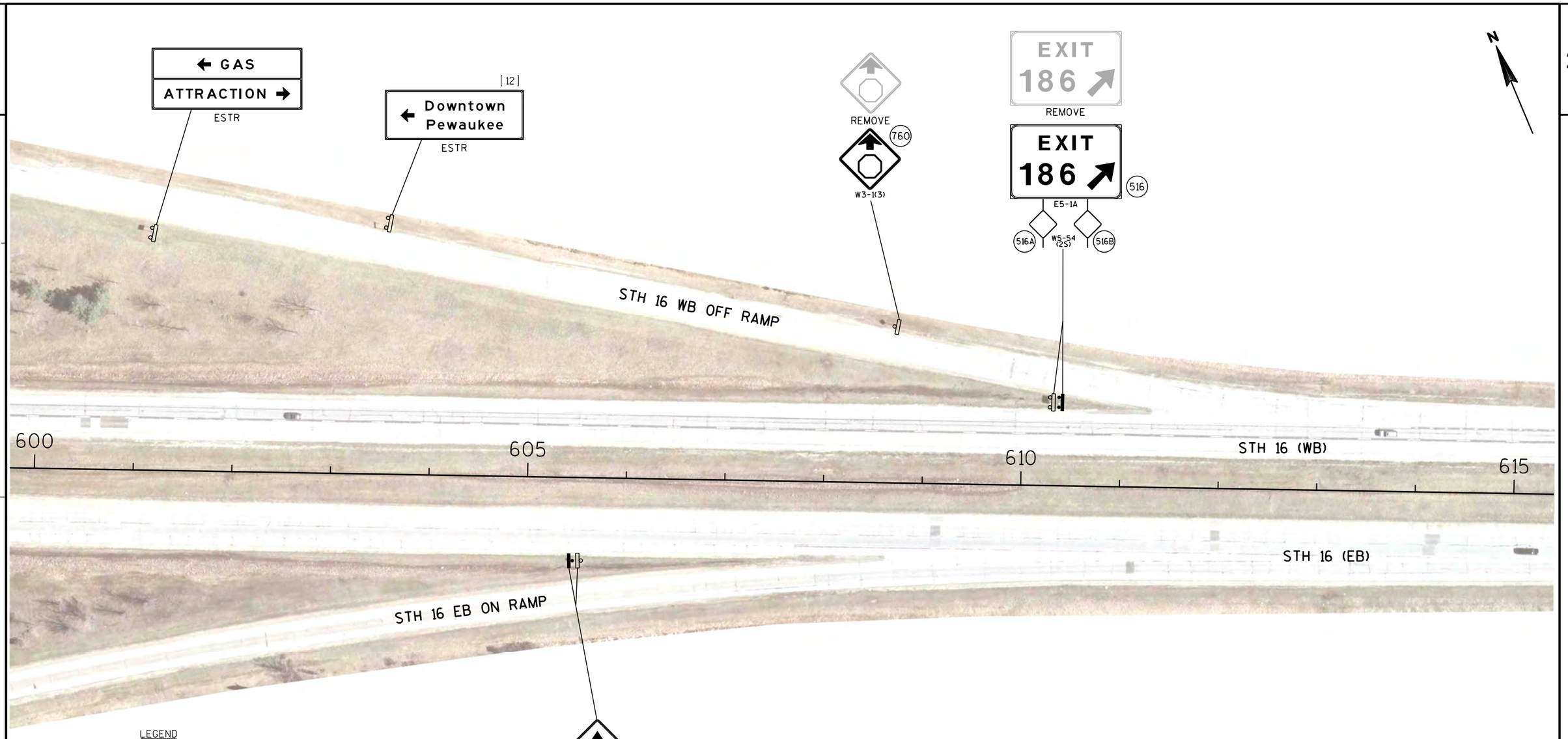
Oconomowoc
Milwaukee
D1-2
514

Oconomowoc
Milwaukee
REMOVE

2

SHEET 54 OF 72

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PERMANENT SIGNING PLAN	SHEET 170	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
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- [XX] INDICATES SIGN YEAR
- NEW SIGN - REUSE POSTS

SHEET 55 OF 72

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PERMANENT SIGNING PLAN	SHEET 171	E

FILE NAME : J:\projects\D2_13701516\71\sign\023255_ps.dgn PLOT DATE : 13-JAN-2017 08:04 PLOT BY : dotshw PLOT NAME : PLOT SCALE : 100:1

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
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- [XX] INDICATES SIGN YEAR
- NEW SIGN - REUSE POSTS

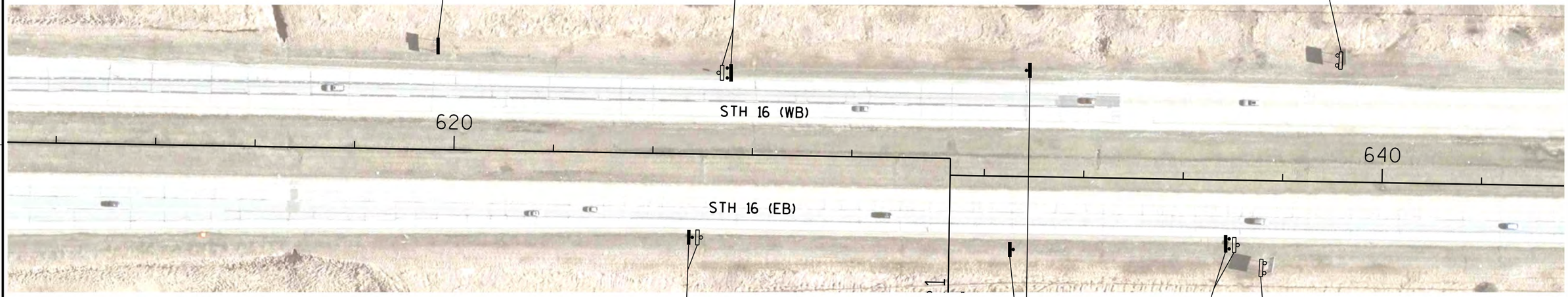
EXIT 186 / KF / Ryan St
REMOVE

E1-5P EXIT 186 (517a) / KF / Ryan St (517)
E4-1A
TYPE I
REUSE STEEL POSTS

ALTERNATE 94
REMOVE

ALTERNATE
MB4-1
WEST
MB3-4
94
M1-1
518
MB6-1
J4-1(3)

(SIS)
GAS | FOOD | ATTRACTIONS
ESTR



EAST
M3-2
16 (519)
M1-6
J4-1(3)

EAST
16
REMOVE

MILE 187 (708) (709)
D10-3(5)
4' MOUNT HEIGHT

MILE 187
REMOVE

SPEED LIMIT 65 (520)
R2-1(5)

SPEED LIMIT 65
REMOVE

FOOD–EXIT 187
ESTR

SHEET 56 OF 72

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PERMANENT SIGNING PLAN	SHEET 172 E

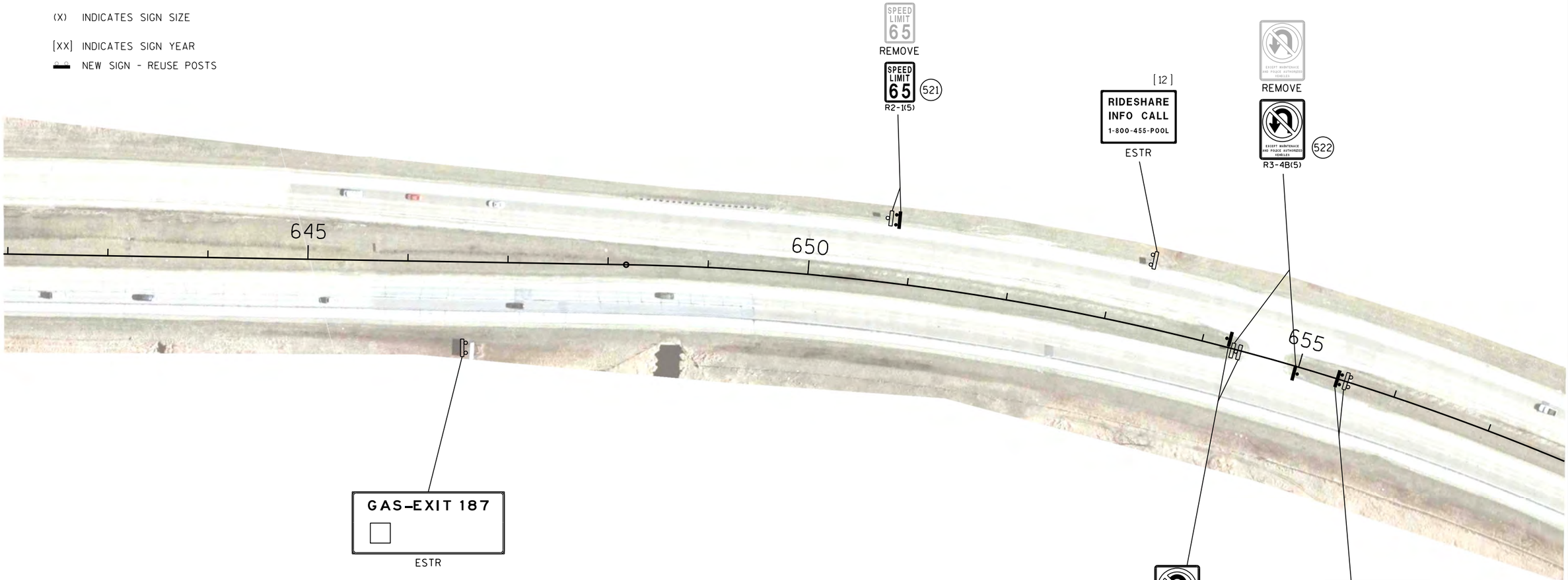
FILE NAME : J:\projects\D2_13701516\71\sign\023256_ps.dgn PLOT DATE : 13-JAN-2017 08:04 PLOT BY : dotshw PLOT NAME : PLOT SCALE : 100:1

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
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- [XX] INDICATES SIGN YEAR
- NEW SIGN - REUSE POSTS



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
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- [XX] INDICATES SIGN YEAR
- NEW SIGN - REUSE POSTS

EXIT 186
KF
Ryan St
1/2 MILE
REMOVE

E1-5P EXIT 186 525a
KF
Ryan St
1/2 MILE
525
E1-1A
TYPE I
REUSE STEEL POSTS

WEST
16
REMOVE

WEST
M3-4
16 527
M1-6
J4-1(3)

665
STH 16 (WB)
660
670
STH 16 (EB)

ALTERNATE
MB4-1
INTERSTATE
94
M1-1
526
MB6-1
J4-1(3)

ALTERNATE
INTERSTATE
94
REMOVE

E1-5P EXIT 187 528a
190
Capitol Dr
528
E4-1A
TYPE I
REUSE STEEL POSTS

EXIT 187
190
Capitol Dr
REMOVE

EXIT
187
529
E5-1A(5)
529A W5-54 (25) 529B

EXIT
187
REMOVE

SHEET 58 OF 72

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PERMANENT SIGNING PLAN	SHEET 174 E

FILE NAME : J:\projects\D2_13701516\71\sign\023258_ps.dgn PLOT DATE : 13-JAN-2017 08:04 PLOT BY : dotshw 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
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- [XX] INDICATES SIGN YEAR
- NEW SIGN - REUSE POSTS

EXIT 188
JJ T
To 94 WEST
Main Street
½ MILE
REMOVE

E1-5P EXIT 188
JJ T
To 94 WEST
Main Street
½ MILE
530a 530
E4-1A
TYPE I
REUSE STEEL POSTS

PEDESTRIANS BICYCLES NON MOTORIZED TRAFFIC MOTOR BICYCLES PROHIBITED
REMOVE

PEDESTRIANS BICYCLES NON MOTORIZED TRAFFIC MOTOR BICYCLES PROHIBITED
531
R5-57(5)

REMOVE

532
W4-1R(5)

RAMP CLOSED
USE
ALT ROUTE
R11-54F(2S)
731 732

GAS
ESTR

N

STH 16 (WB) ON RAMP

680 STH 16 (WB) 685

675

STH 16 (EB)

STH 16 (EB) OFF RAMP

CAPITOL DR

REMOVE
761
762
W3-3(3)

BRIDGE MAY BE ICY
W8-64(5)
537 538

BRIDGE MAY BE ICY
REMOVE

EAST
M3-2
190
M1-6
M5-1L
J2-1(2S) 536

EAST
190
REMOVE

ONLY
ESTR

FOOD
ESTR

GAS
ESTR

Milwaukee
Downtown Pewaukee
ESTR

WRONG WAY
R5-1A(3)
534
535

WRONG WAY
REMOVE

RAMP CLOSED
USE
ALT ROUTE
R11-54F(2S)
734 733

PEDESTRIANS BICYCLES NON MOTORIZED TRAFFIC MOTOR BICYCLES PROHIBITED
R5-57(5)
533

PEDESTRIANS BICYCLES NON MOTORIZED TRAFFIC MOTOR BICYCLES PROHIBITED
REMOVE

SHEET 59 OF 72

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PERMANENT SIGNING PLAN	SHEET 175 E

FILE NAME : J:\projects\D2_13701516\71\sign\023259_ps.dgn PLOT DATE : 13-JAN-2017 08:04 PLOT BY : dotshw PLOT NAME : PLOT SCALE : 100:1

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
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- [XX] INDICATES SIGN YEAR
- NEW SIGN - REUSE POSTS

N

[13]

WRONG WAY
REMOVE
WRONG WAY (539) (540)
R5-1A(3)

Downtown Pewaukee
Milwaukee →
ESTR

FOOD →
ESTR

EAST 190
REMOVE
EAST
M3-2
190
M1-6
(541)
M5-1R
J2-1(2S)

(542) (543)
W5-52R(3)
4' MOUNT
HEIGHT

(544)
W5-52L(3)
4' MOUNT
HEIGHT

EXIT 187
REMOVE

EXIT 187 (545)
E5-1A(5)
(545A) (545B)
W5-54 (2S)

REMOVE
(763)
W3-1(3)

EXIT 187
190
Capitol Dr
EXIT ONLY
REMOVE

E1-5P EXIT 187 (546a)
190
Capitol Dr
EXIT ONLY (546)
E6-1

EAST 94 AHEAD
ESTR

690 695 STH 16 (WB) 700

S-67-36

STH 16 (EB)

S-67-33

(547)
W5-52R(3)
4' MOUNT
HEIGHT

E1-5P EXIT 188 (549a)
JJ T
To 94 WEST
Main Street
EXIT ONLY (549)
E6-51

EXIT 188
JJ T
To 94 WEST
Main Street
EXIT ONLY
REMOVE

Wisconsin Ave
M1-94(MOD)
(548)

MILE 188 (552) (553)
D10-3(5)
4' MOUNT
HEIGHT

MILE 188
REMOVE

Waukesha Co Tech College
EXIT 188
ESTR

Hickory St (550) (551)
M1-94(MOD)

SHEET 60 OF 72

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PERMANENT SIGNING PLAN	SHEET 176 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

(XXX) DENOTES SIGN NUMBER

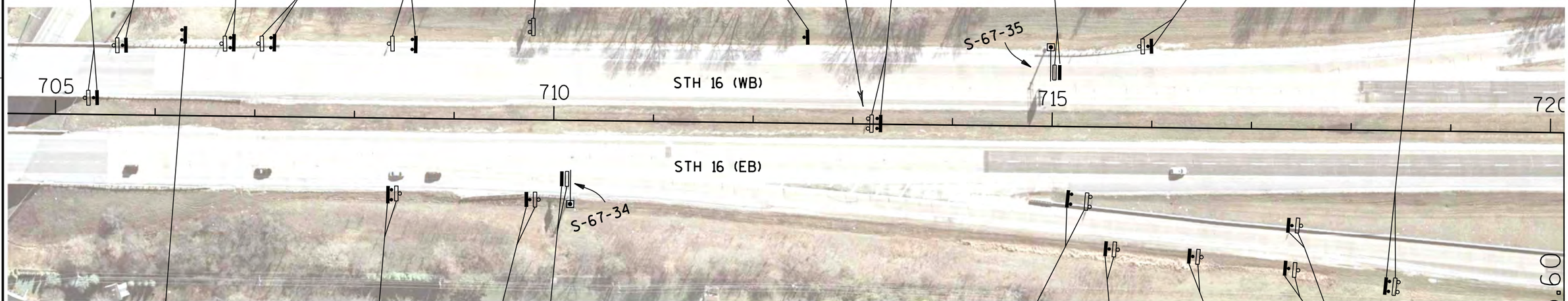
(X) INDICATES SIGN SIZE

[XX] INDICATES SIGN YEAR

NEW SIGN - REUSE POSTS

N

NOTE:
AVOID CABLE BARRIER.
CABLE BARRIER IS 14' FROM EDGE OF TRAVEL LANE.



554 REMOVE — W5-52L(3) 4' MOUNT HEIGHT

555 REMOVE — W5-52R(3) 4' MOUNT HEIGHT

556 ALTERNATE MB4-1 / WEST MB3-4 / 94 M1-1 — MB6-1 J4-1(3) — ALTERNATE 94 REMOVE

557 RIGHT LANE MUST EXIT R3-33R(5) — RIGHT LANE FOR EXIT ONLY REMOVE

558 SPEED LIMIT 65 REMOVE — SPEED LIMIT 65 R2-1(5)

FOOD–EXIT 187 / GAS — TYPE I SIGN ESTR

785 WEST MB3-4 / 16 M1-6 — J4-1(3)

VILLAGE OF Pewaukee REMOVE — 559 VILLAGE OF Pewaukee I2-3A(5)

EXIT 187 / 190 Capitol Dr / EXIT ONLY REMOVE

E1-5P EXIT 187 / 190 Capitol Dr / EXIT ONLY — 560a 560 — E6-51

562 REMOVE — W5-52R(3) 4' MOUNT HEIGHT

TO WEST SOUTH SOUTH NORTH / 94 T JJ JJ REMOVE

TO MB4-5 / WEST MB3-4 / SOUTH M3-3 / SOUTH M3-3 / NORTH M3-1 / 94 M1-1 / T M1-5A / JJ M1-5A / JJ M1-5A — MB5-1L M5-1L M5-1L M5-1R — 563 — J2-4(2S)

573 Wisconsin Ave — M1-94(MOD)

572 TO WEST 94 REMOVE — TO MB4-5 / WEST MB3-4 / 94 M1-1 — MB6-2 J3-1(3)

571 W5-52R(3) 4' MOUNT HEIGHT — REMOVE

570a E1-5P EXIT 188 / JJ T / To 94 WEST / Main Street / EXIT ONLY — 570 — E6-1

EXIT 188 / JJ T / To 94 WEST / Main Street / EXIT ONLY — REMOVE

EXIT 188 REMOVE

561 EXIT 188 — E5-1A(5) — 561A W5-54 (2S) 561B

569 W3-3(3) — REMOVE

568 W8-5(3) — REMOVE

564 566 W1-1R(3) — 565 567 15 M.P.H. W13-1(3) — 15 M.P.H. REMOVE

SHEET 61 OF 72

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PERMANENT SIGNING PLAN	SHEET 177 E

FILE NAME : J:\projects\D2_13701516\71\sign\023261_ps.dgn PLOT DATE : 13-JAN-2017 08:05 PLOT BY : dotshw PLOT NAME : PLOT SCALE : 100:1

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

(XXX) DENOTES SIGN NUMBER

(X) INDICATES SIGN SIZE

[XX] INDICATES SIGN YEAR

NEW SIGN - REUSE POSTS

REMOVE

W4-2R(3) 577

REMOVE

W4-1R(5) 576

REMOVE

PEDESTRIANS BICYCLES NON MOTORIZED TRAFFIC MOTOR BICYCLES PROHIBITED

REMOVE

PEDESTRIANS BICYCLES NON MOTORIZED TRAFFIC MOTOR BICYCLES PROHIBITED

R5-57(5) 578

BRIDGE MAY BE ICY

REMOVE

BRIDGE MAY BE ICY

W8-64(5) 574 575

SEE DETAIL SHEET 65

COUNTY JJ

REMOVE

COUNTY JJ

M1-5A 579

M6-4

J13-1(2S)

EXIT 187

190 Capitol Dr ½ MILE

REMOVE

E1-5P EXIT 187 580a

190 Capitol Dr ½ MILE 580

E1-1A TYPE I REUSE STEEL POSTS

To Main St

To Bluemound Road

REMOVE

To Main St

To Bluemound Road 583

D1-5

WEST EAST COUNTY JJ COUNTY JJ

REMOVE

WEST EAST M3-4 M3-2

585 COUNTY JJ COUNTY JJ M1-5A M1-5A

M5-1L M5-1R

J2-1(2S)

N

MAIN ST

725 730 735

STH 16 (WB)

STH 16 (EB)

WRONG WAY 591 592

R5-1A(3)

WEST 16 ONLY

REMOVE

WEST 16 ONLY 588 587

SEE DETAIL SHEET 63

GRANDVIEW BLVD

ONLY ONLY ONLY 589 590

R3-8R(2S)

ONLY

REMOVE

581 582 WRONG WAY

R5-1A(3)

WRONG WAY

REMOVE

Waukesha Co Tech College 584

D1-2

Waukesha Co Tech College

REMOVE

586

W4-1R(5)

REMOVE

SEE DETAIL SHEET 64

SHEET 62 OF 72

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PERMANENT SIGNING PLAN	SHEET 178 E

FILE NAME : J:\projects\D2_13701516\71\sign\023262_ps.dgn PLOT DATE : 13-JAN-2017 08:05 PLOT BY : dotshw PLOT NAME : PLOT SCALE : 100:1

WISDOT/CADDS SHEET 42

2

STH 16 EB OFF RAMP

GRANDVIEW BLVD

N

REMOVE STOP R1-1(3) 613

REMOVE ONLY ONLY R3-8Y(2S) 614

REMOVE 610 W12-1D(2S) 2' MOUNT HEIGHT

REMOVE STOP R1-1F(3) MOUNT ON SIGNAL POLE 605

REMOVE 606 607 608 609 W1-8(4) 4' MOUNT HEIGHT

REMOVE STOP R1-1F(3) MOUNT ON SIGNAL POLE 764

REMOVE DO NOT ENTER R5-1(3) 603

REMOVE DO NOT ENTER R5-1(3) MOUNT ON SIGNAL POLE 604

601 NO TURNS R3-3(2S)

602 STOP R1-1F(3) MOUNT ON SIGNAL POLE

NO TURNS STOP REMOVE

765 WRONG WAY R5-1A(2S) 3' MOUNT HEIGHT

REMOVE ONE WAY 766

ONE WAY R6-2L(2S) ON SIGNAL POST 767

REMOVE ONE WAY

ON SIGNAL POLE DO NOT ENTER R5-1(3) 768

REMOVE DO NOT ENTER

REMOVE WRONG WAY 769

WRONG WAY R5-1A(2S) 3' MOUNT HEIGHT

ONE WAY R6-2L(2S) ON SIGNAL POST

R6-2R 611

ONE WAY REMOVE

NORTH M3-1 COUNTY JJ M1-5A M6-1 J3-1(2S) 612

NORTH COUNTY JJ REMOVE

R3-2(2S) 594

STOP R1-1F(3) MOUNT ON SIGNAL POLE 595

STOP REMOVE

STOP ESTR

DO NOT ENTER R5-1(3) 593

DO NOT ENTER REMOVE

TO WEST TO SOUTH [13] INTERSTATE 94 COUNTY T COUNTY JJ ESTR

R4-7(2S) MOUNT ON SIGNAL POLE 596

REMOVE

ONE WAY R6-2L(2S) 597

ONE WAY REMOVE

R4-7(2S) MOUNT ON SIGNAL POLE 598

REMOVE

STOP R1-1F(3) MOUNT ON SIGNAL POLE 599

STOP REMOVE

600 Milwaukee D1-1

Milwaukee 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
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- [XX] INDICATES SIGN YEAR
- NEW SIGN - REUSE POSTS
- EXISTING SIGNAL OR LIGHT POLE

SHEET 63 OF 72

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PERMANENT SIGNING PLAN	SHEET E

FILE NAME : J:\projects\D2_13701516\71\sign\023263_ps.dgn PLOT DATE : 13-JAN-2017 08:05 PLOT BY : dotshw 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
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- [XX] INDICATES SIGN YEAR
- NEW SIGN - REUSE POSTS

N

2

STH 16 EB ON RAMP

GRANDVIEW BLVD

REMOVE
PEDESTRIANS
BICYCLES
NON MOTORIZED TRAFFIC
MOTOR BICYCLES
PROHIBITED

621
PEDESTRIANS
BICYCLES
NON MOTORIZED TRAFFIC
MOTOR BICYCLES
PROHIBITED
R5-57(5)

REMOVE
622
W1-6(2S)

REMOVE
TO
WEST EAST
COUNTY JJ 16 16

620
TO
M4-5
WEST EAST
M3-4 M3-2
COUNTY JJ 16 16
M1-5A M1-6 M1-6
M6-1 M6-1 M6-1
J3-3(2S)

735
736
RAMP CLOSED
USE
ALT ROUTE
R11-54F(2S)

615
Madison
Milwaukee
D1-2

Madison
Milwaukee
REMOVE

ESTR

TO
MB4-5
EAST
MB3-2
94
M1-1
MB6-1
J3-1(2S)

TO
EAST
94

REMOVE

JCT
M2-1
COUNTY SS
M1-5A
J1-1(2S)

617

JCT
COUNTY SS
REMOVE

TO
MB4-5
WEST
MB3-4
618
94
M1-1
MB6-1
J3-1(2S)

TO
WEST
94

REMOVE

619
DO NOT
ENTER
R5-1(3)

DO NOT
ENTER
REMOVE

SHEET 64 OF 72

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PERMANENT SIGNING PLAN	SHEET 180 E

FILE NAME : J:\projects\D2_13701516\71\sign\023264_ps.dgn PLOT DATE : 13-JAN-2017 08:05 PLOT BY : dotshw 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
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- [XX] INDICATES SIGN YEAR
- NEW SIGN - REUSE POSTS
- EXISTING SIGNAL OR LIGHT POLE

Oconomowoc →
REMOVE
Oconomowoc →
D1-1
630

EAST 16 ↑ | WEST 16 →
REMOVE

EAST M3-2 16 M1-6 ↑ M6-1 | WEST M3-4 16 M1-6 → M6-1
J3-2(2S)
629

STOP
REMOVE
STOP
R1-1F(3)
MOUNT ON SIGNAL POLE
627
628

REMOVE
R3-2(2S)
631

RAMP CLOSED USE ALT ROUTE
R11-54F(2S)
737

WRONG WAY
REMOVE
WRONG WAY
R5-1A(3)
713

ONE WAY
REMOVE
ONE WAY
R6-2R(2M)
MOUNT ON SIGNAL POLE
632

DO NOT ENTER
REMOVE
DO NOT ENTER
R5-1(3)
MOUNT ON SIGNAL POLE
634

STOP
REMOVE
STOP
R1-1(3)
635

WRONG WAY
REMOVE
WRONG WAY
R5-1A(2S)
3' MOUNT HEIGHT
634A

DIVIDED HIGHWAY
STOP
REMOVE
DIVIDED HIGHWAY
R6-3(2S)
636

STOP
R1-1F(3)
MOUNT ON SIGNAL POLE
637

N

STH 16 WB ON RAMP

CTH JJ

STH 16 WB OFF RAMP

RAMP CLOSED USE ALT ROUTE
R11-54F(2S)
738

ONE WAY
R6-2L(2S)
MOUNT ON SIGNAL POLE
625

ONE WAY
REMOVE

DO NOT ENTER
R5-1(3)
MOUNT ON SIGNAL POLE
624

DO NOT ENTER
REMOVE

623
626
R4-7(2S)
MOUNT ON SIGNAL POLE

REMOVE

STOP
R1-1F(3)
MOUNT ON SIGNAL POLE
645

STOP
REMOVE

WEST 16 COUNTY JJ
REMOVE

J3-2(2S)
WEST M3-4 16 M1-6 COUNTY JJ M1-5A
642
← M6-1 ↑ M6-1
643
R3-1(2S)

DO NOT ENTER
R5-1(3)
MOUNT ON SIGNAL POLE
714

DO NOT ENTER
REMOVE

WRONG WAY
R5-1A(3)
MOUNT ON SIGNAL POLE
644

WRONG WAY
REMOVE

DIVIDED HIGHWAY
R6-3(2S)
639

STOP
R1-1F(3)
MOUNT ON SIGNAL POLE
640

DIVIDED HIGHWAY
STOP
REMOVE

DO NOT ENTER
R5-1(3)
MOUNT ON SIGNAL POLE
641

WRONG WAY
ESTR
[13]

DO NOT ENTER
REMOVE

ONE WAY
R6-2L(2M)
MOUNT ON SIGNAL POLE
633

ONE WAY
REMOVE

W12-1D(2S)
2' MOUNT HEIGHT
638

REMOVE

SHEET 65 OF 72

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PERMANENT SIGNING PLAN	SHEET 181	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
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- [XX] INDICATES SIGN YEAR
- NEW SIGN - REUSE POSTS

N

EXIT 188 → REMOVE

EXIT 188 → 647
E5-1A(5)
647A W5-54 (2S) 647B

REMOVE → 646
W3-3(3)

MILE 189 → REMOVE

MILE 189 → 650 651
D10-3(5)
4' MOUNT HEIGHT

NOTE:
AVOID CABLE BARRIER.
CABLE BARRIER IS 14' FROM EDGE OF TRAVEL LANE.

EXIT 188 JJ Main St → REMOVE

E1-5P EXIT 188 JJ Main St → 648a 648
E4-1A
TYPE I
REUSE STEEL POSTS

ALTERNATE 94 → REMOVE

ALTERNATE MB4-1 94 M1-1 → 649
MB6-1
J4-1(3)

740 745 750

STH 16 (WB)

STH 16 (EB)

GRANDVIEW BLVD

1738+48.94

2

SHEET 66 OF 72

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PERMANENT SIGNING PLAN	SHEET 182	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

(XXX) DENOTES SIGN NUMBER

(X) INDICATES SIGN SIZE

[XX] INDICATES SIGN YEAR

NEW SIGN - REUSE POSTS

N

2

653

654

REMOVE

NOTE:
BEING CLOSED

STH 16 (WB)

755

760

765

STH 16 (EB)

GRANDVIEW BLVD

652

EAST
M3-2
16
M1-6
J4-1(3)

EAST
16
REMOVE

SHEET 67 OF 72

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PERMANENT SIGNING PLAN	SHEET 183	E

FILE NAME : J:\projects\D2_13701516\71\sign\023267_ps.dgn PLOT DATE : 13-JAN-2017 08:05 PLOT BY : dotshw PLOT NAME : PLOT SCALE : 100:1

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
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- [XX] INDICATES SIGN YEAR
- NEW SIGN - REUSE POSTS

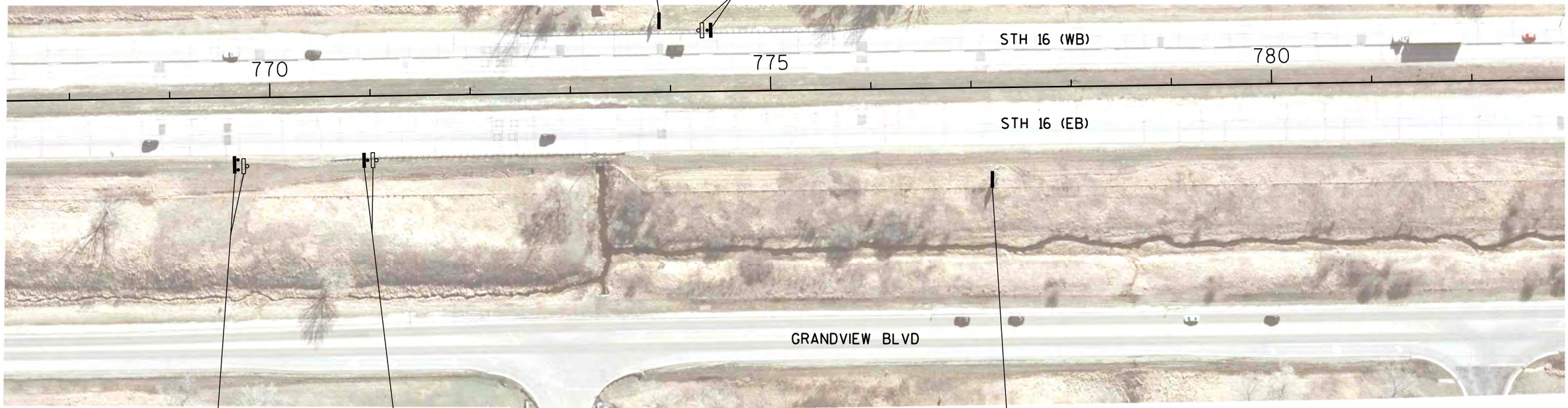
N

2

Waukesha Co
Tech College
EXIT 188
REMOVE

Waukesha Co
Tech College
EXIT 188
655
TYPE I
REUSE STEEL POSTS

REMOVE
656
W5-52R(3)
4' MOUNT
HEIGHT



SPEED LIMIT 65
R2-1(5)
659
SPEED LIMIT 65
REMOVE

658
W5-52R(3)
4' MOUNT
HEIGHT
REMOVE

EAST
94
16
ENDS
1 MILE
REMOVE

EAST
94
16
ENDS
1 MILE
657
TYPE I
REUSE STEEL POSTS

SHEET 68 OF 72

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PERMANENT SIGNING PLAN	SHEET 184	E

FILE NAME : J:\projects\D2_13701516\71\sign\023268_ps.dgn PLOT DATE : 13-JAN-2017 08:05 PLOT BY : dotshw PLOT NAME : PLOT SCALE : 100:1

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
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- [XX] INDICATES SIGN YEAR
- NEW SIGN - REUSE POSTS

N

SPEED LIMIT 65
REMOVE

SPEED LIMIT 65
R2-1(5)
660

EXIT 188
JJ
Main St
1/2 MILE
REMOVE

E1-5P
EXIT 188
JJ
Main St
1/2 MILE
661a
661

E1-1A
TYPE I
REUSE STEEL POSTS

WIS 190
REMOVE

WIS 190
662
664
D10-3(5)

Pewaukee Exits
Main St 1
Capitol Dr 2
Ryan St 3 1/4
REMOVE

Pewaukee Exits
Main St 1
Capitol Dr 2
Ryan St 3 1/4
663
D2-4
TYPE I
REUSE STEEL POSTS

785
790
795
STH 16 (WB)
STH 16 (EB)
GRANDVIEW BLVD

R3-4
EXCEPT MAINTENANCE AND POLICE AUTHORIZED VEHICLES
R3-4A
REMOVE

EXCEPT MAINTENANCE AND POLICE AUTHORIZED VEHICLES
R3-4B
665
666

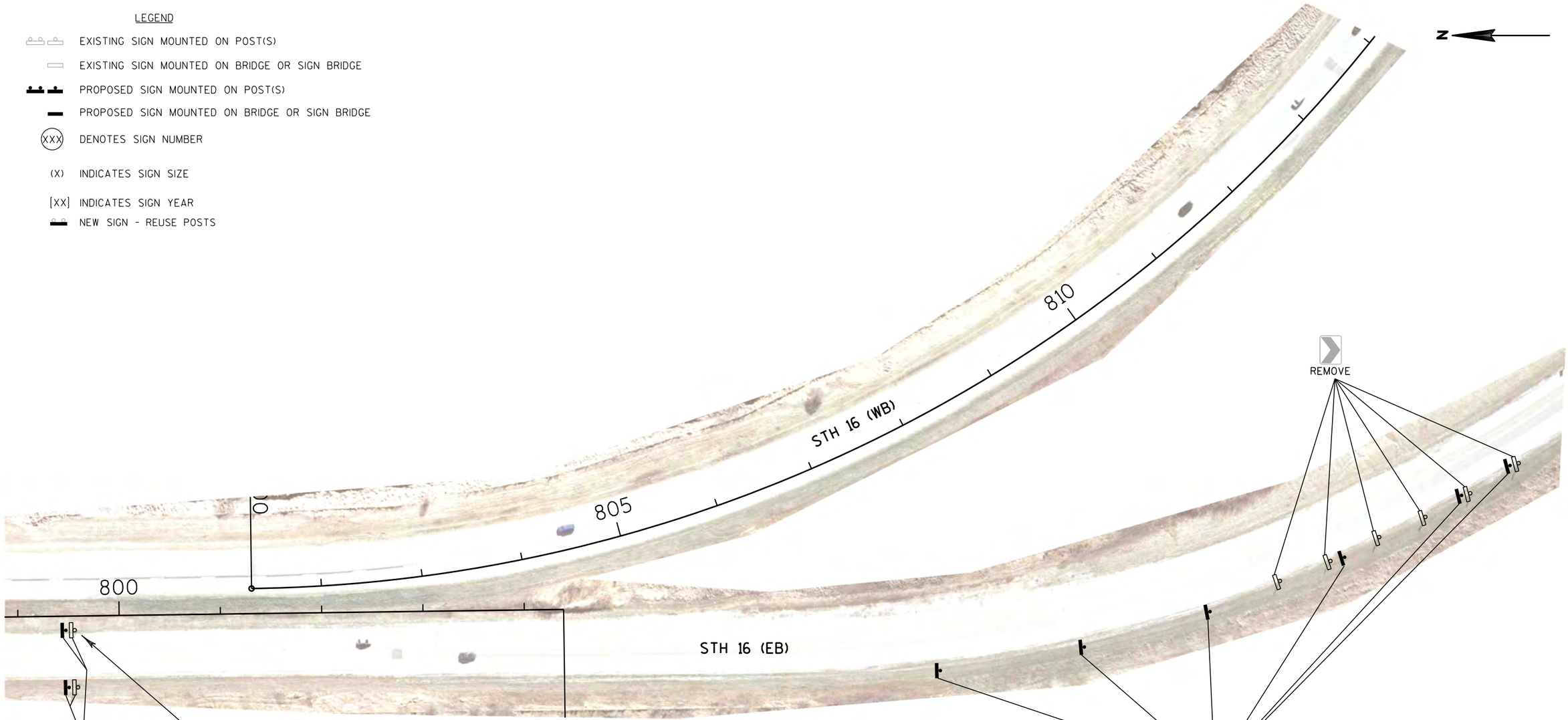
PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PERMANENT SIGNING PLAN	SHEET 185	E

FILE NAME : J:\projects\D2_13701516\71\sign\023269_ps.dgn
PLOT DATE : 13-JAN-2017 08:05
PLOT BY : dotshw
PLOT NAME :
PLOT SCALE : 100:1
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
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- [XX] INDICATES SIGN YEAR
- NEW SIGN - REUSE POSTS



NOTE:
AVOID CABLE BARRIER.
CABLE BARRIER IS 14' FROM EDGE OF TRAVEL LANE.

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
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- [XX] INDICATES SIGN YEAR
- NEW SIGN - REUSE POSTS

N

815

820

825

STH 16 (WB)

IH 94

STH 16 (EB)

ALTERNATE
MB4-1
WEST
MB3-4
Interstate
94
M1-1
M6-1
J4-1(3)

ALTERNATE
WEST
Interstate
94
REMOVE
680

WEST
M3-4
16
M1-6
J4-1(3)

WEST
16
REMOVE
681

REMOVE

W4-2L(5)
684

LEFT LANE ENDS
W9-1L(5)
677 678

LEFT LANE ENDS
REMOVE

END
M4-6
16
679
M1-6
J1-1(3)

END
16
REMOVE

ESTR

ESTR

LANE ENDS MERGE RIGHT
W9-2R(5)
682 683

LANE ENDS MERGE RIGHT
REMOVE

SHEET 71 OF 72

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PERMANENT SIGNING PLAN	SHEET 187	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

(XXX) DENOTES SIGN NUMBER

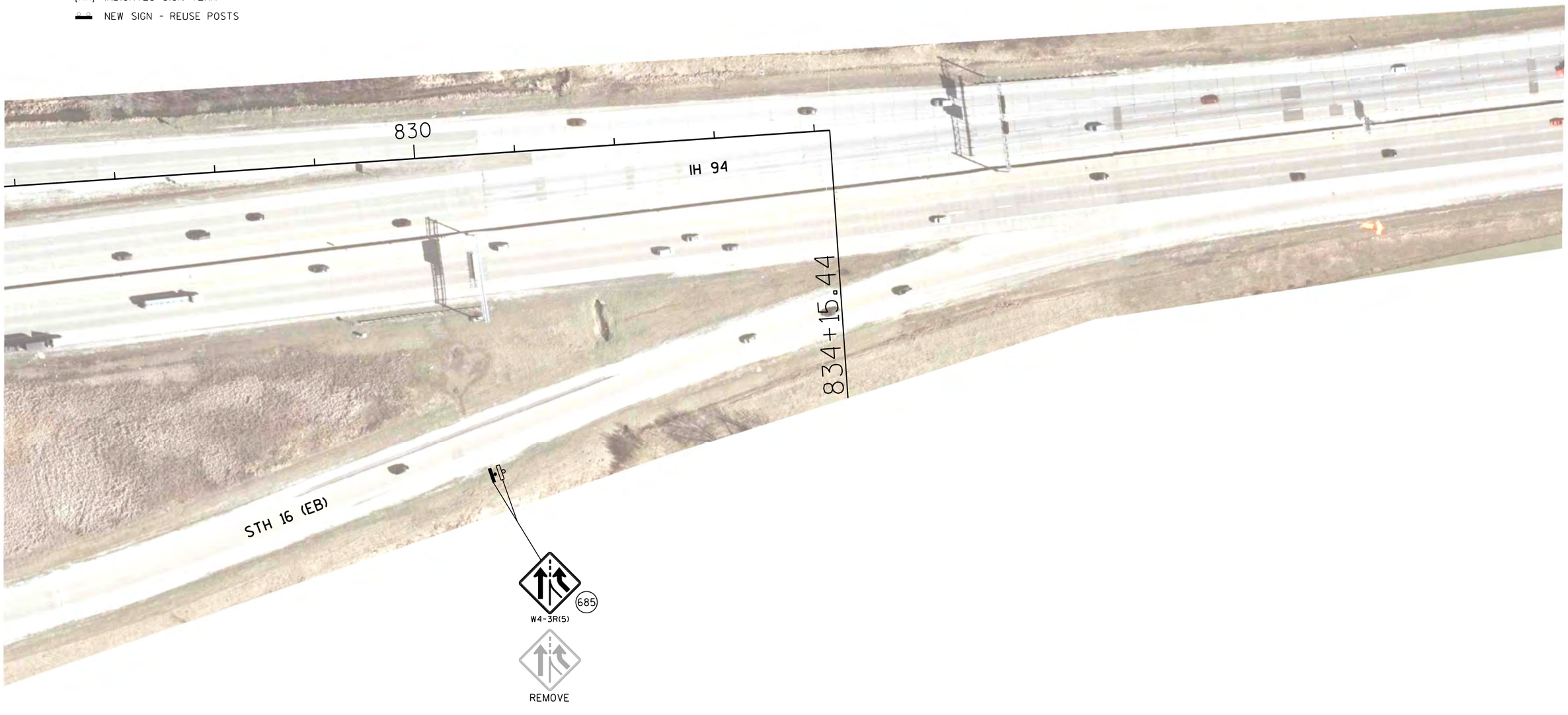
(X) INDICATES SIGN SIZE

[XX] INDICATES SIGN YEAR

NEW SIGN - REUSE POSTS

N

2



SHEET 72 OF 72

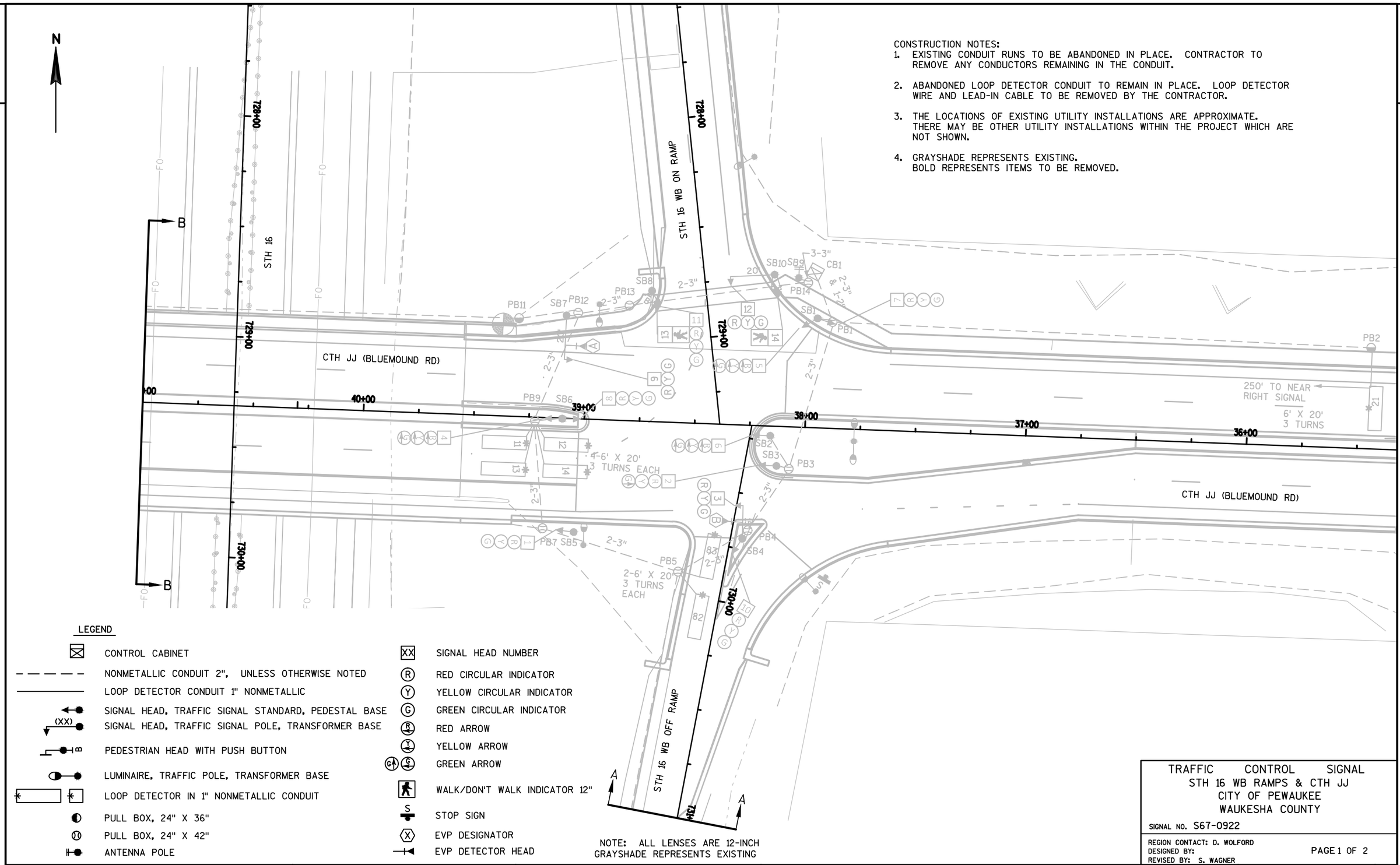
PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PERMANENT SIGNING PLAN	SHEET 188	E

FILE NAME : J:\projects\D2_13701516\71\sign\023272_ps.dgn PLOT DATE : 13-JAN-2017 08:06 PLOT BY : dotshw PLOT NAME : PLOT SCALE : 100:1

WISDOT/CADDS SHEET 42

2

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. THE LOCATIONS OF EXISTING UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.
4. GRAYSHADE REPRESENTS EXISTING. BOLD REPRESENTS ITEMS TO BE REMOVED.



LEGEND

☒	CONTROL CABINET	ⓧⓧ	SIGNAL HEAD NUMBER
- - - - -	NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED	Ⓡ	RED CIRCULAR INDICATOR
———	LOOP DETECTOR CONDUIT 1" NONMETALLIC	Ⓨ	YELLOW CIRCULAR INDICATOR
◄●	SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE	Ⓖ	GREEN CIRCULAR INDICATOR
(XX) ●	SIGNAL HEAD, TRAFFIC SIGNAL POLE, TRANSFORMER BASE	Ⓡ	RED ARROW
⊢●B	PEDESTRIAN HEAD WITH PUSH BUTTON	Ⓨ	YELLOW ARROW
●—	LUMINAIRE, TRAFFIC POLE, TRANSFORMER BASE	GA GA	GREEN ARROW
▭	LOOP DETECTOR IN 1" NONMETALLIC CONDUIT		WALK/DON'T WALK INDICATOR 12"
◐	PULL BOX, 24" X 36"	S	STOP SIGN
⊗	PULL BOX, 24" X 42"	Ⓧ	EVP DESIGNATOR
⊢●	ANTENNA POLE	⊣◄	EVP DETECTOR HEAD

NOTE: ALL LENSES ARE 12-INCH
GRAYSHADE REPRESENTS EXISTING

TRAFFIC CONTROL SIGNAL
STH 16 WB RAMPS & CTH JJ
CITY OF PEWAUKEE
WAUKESHA COUNTY

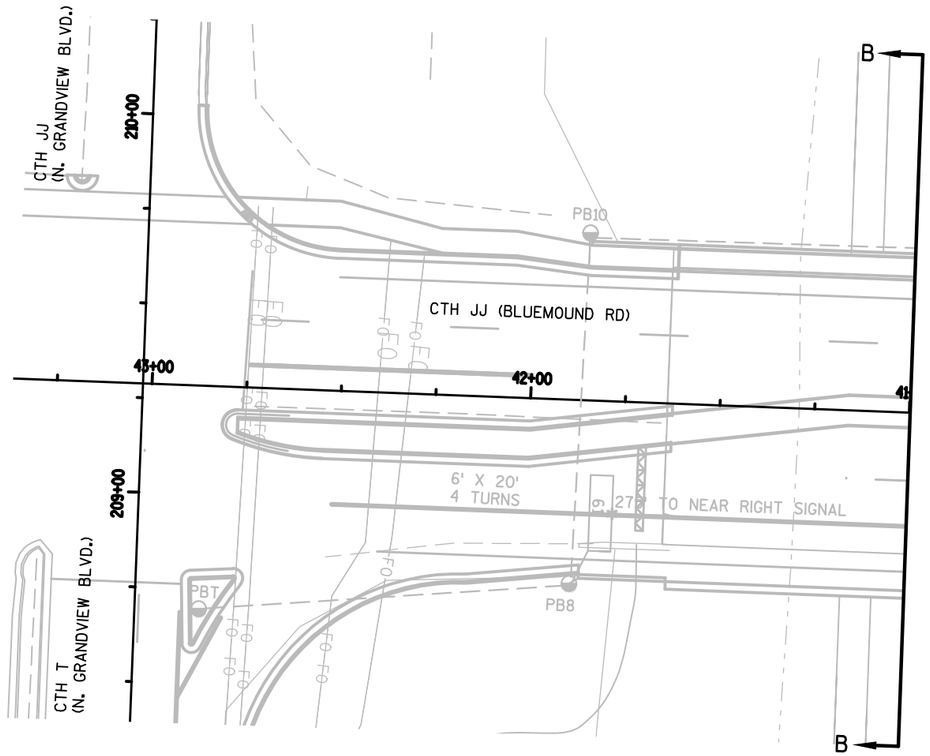
SIGNAL NO. S67-0922

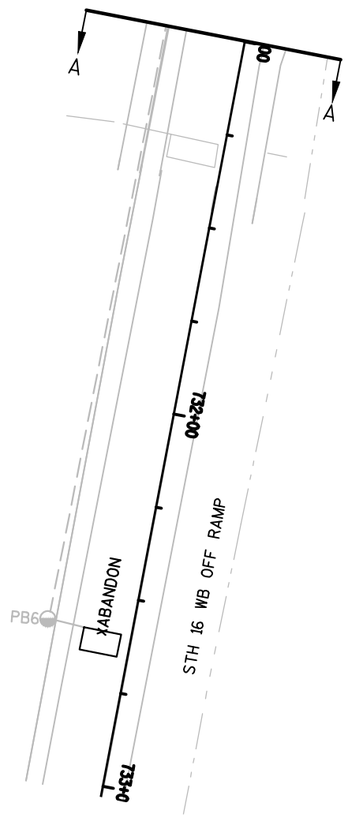
REGION CONTACT: D. WOLFORD
DESIGNED BY:
REVISED BY: S. WAGNER

PAGE 1 OF 2

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	TRAFFIC SIGNAL REMOVAL PLAN	SHEET 189	E

2





TRAFFIC CONTROL SIGNAL
STH 16 WB RAMPS & CTH JJ
CITY OF PEWAUKEE
WAUKESHA COUNTY

SIGNAL NO. S67-0922

REGION CONTACT: D. WOLFORD
DESIGNED BY:
REVISED BY: S. WAGNER

PAGE 2 OF 2

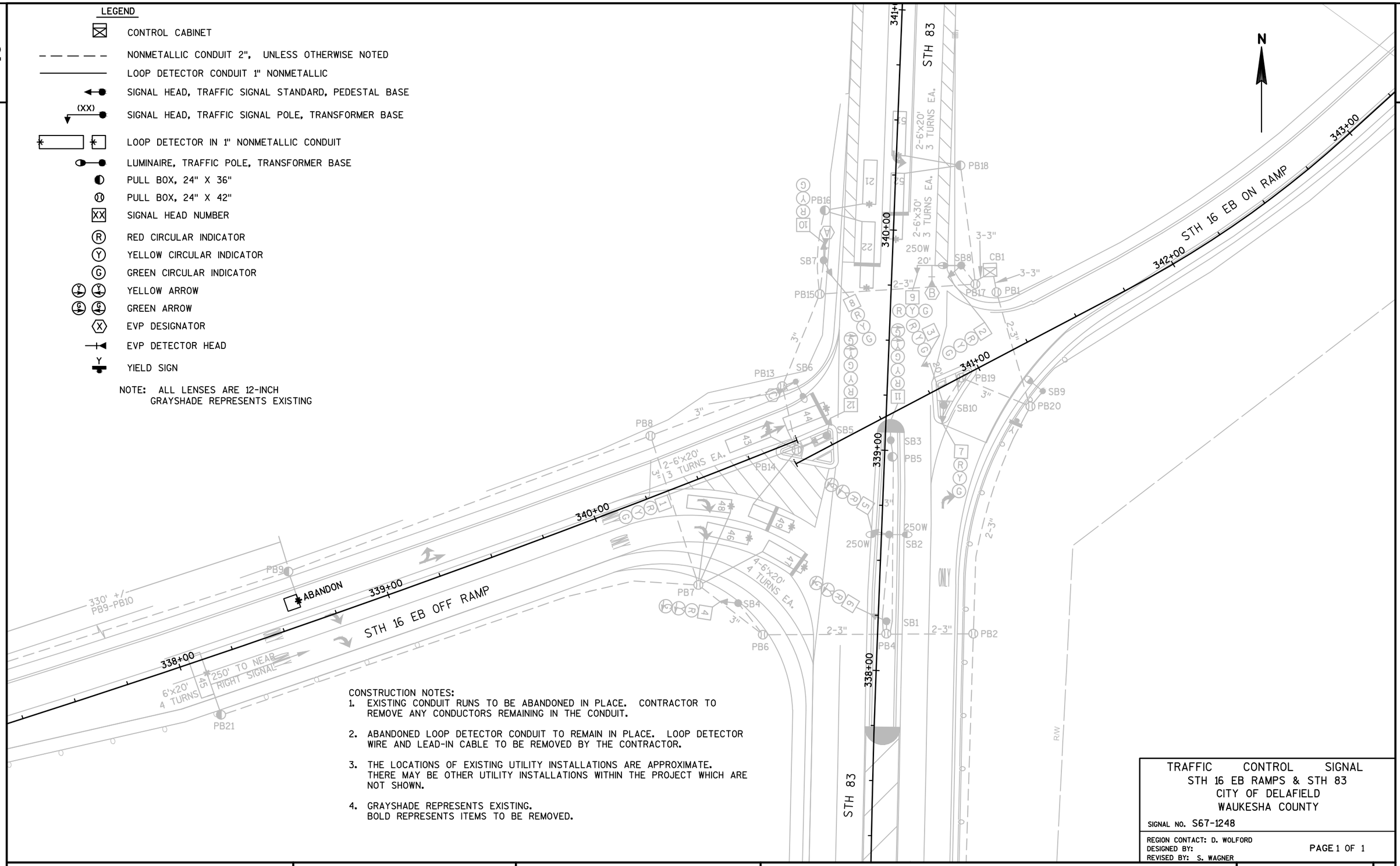
PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	TRAFFIC SIGNAL REMOVAL PLAN	SHEET 190	E

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
- LOOP DETECTOR IN 1" NONMETALLIC CONDUIT
- LUMINAIRE, TRAFFIC POLE, TRANSFORMER BASE
- PULL BOX, 24" X 36"
- PULL BOX, 24" X 42"
- XX SIGNAL HEAD NUMBER
- (R) RED CIRCULAR INDICATOR
- (Y) YELLOW CIRCULAR INDICATOR
- (G) GREEN CIRCULAR INDICATOR
- YELLOW ARROW
- GREEN ARROW
- (X) EVP DESIGNATOR
- EVP DETECTOR HEAD
- Y YIELD SIGN

NOTE: ALL LENSES ARE 12-INCH
GRAYSHADE REPRESENTS EXISTING



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. THE LOCATIONS OF EXISTING UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.
4. GRAYSHADE REPRESENTS EXISTING.
   BOLD REPRESENTS ITEMS TO BE REMOVED.

TRAFFIC CONTROL SIGNAL
STH 16 EB RAMPS & STH 83
CITY OF DELAFIELD
WAUKESHA COUNTY

SIGNAL NO. S67-1248

REGION CONTACT: D. WOLFORD
DESIGNED BY:
REVISED BY: S. WAGNER

PAGE 1 OF 1

PROJECT NO: 1370-15-71	HWY: STH 83	COUNTY: WAUKESHA	TRAFFIC SIGNAL REMOVAL PLAN	SHEET 191	E

2

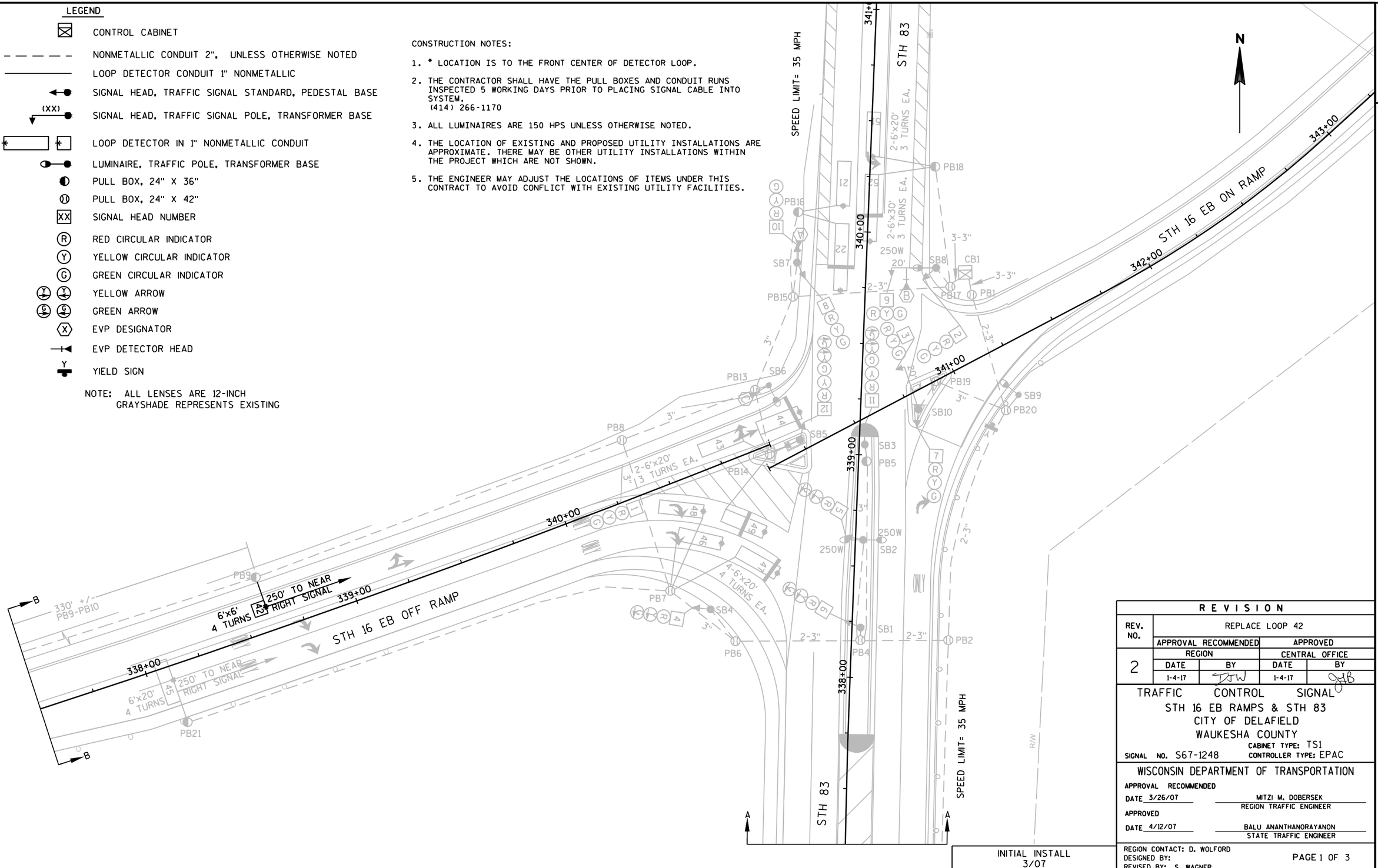
LEGEND

- 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
- LOOP DETECTOR IN 1" NONMETALLIC CONDUIT
- LUMINAIRE, TRAFFIC POLE, TRANSFORMER BASE
- PULL BOX, 24" X 36"
- PULL BOX, 24" X 42"
- XX SIGNAL HEAD NUMBER
- (R) RED CIRCULAR INDICATOR
- (Y) YELLOW CIRCULAR INDICATOR
- (G) GREEN CIRCULAR INDICATOR
- YELLOW ARROW
- GREEN ARROW
- (X) EVP DESIGNATOR
- EVP DETECTOR HEAD
- Y YIELD SIGN

NOTE: ALL LENSES ARE 12-INCH
GRAYSHADE REPRESENTS EXISTING

CONSTRUCTION NOTES:

1. * LOCATION IS TO THE 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.
   (414) 266-1170
3. ALL LUMINAIRES ARE 150 HPS UNLESS OTHERWISE NOTED.
4. THE LOCATION OF EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.
5. THE ENGINEER MAY ADJUST THE LOCATIONS OF ITEMS UNDER THIS CONTRACT TO AVOID CONFLICT WITH EXISTING UTILITY FACILITIES.



REVISION				
REV. NO.	REPLACE LOOP 42			
	APPROVAL RECOMMENDED		APPROVED	
2	REGION		CENTRAL OFFICE	
	DATE	BY	DATE	BY
	1-4-17	JTW	1-4-17	QJB

TRAFFIC CONTROL SIGNAL
STH 16 EB RAMPS & STH 83
CITY OF DELAFIELD
WAUKESHA COUNTY
CABINET TYPE: TS1
SIGNAL NO. S67-1248 CONTROLLER TYPE: EPAC

WISCONSIN DEPARTMENT OF TRANSPORTATION

APPROVAL RECOMMENDED
DATE 3/26/07 MITZI M. DOBERSEK, REGION TRAFFIC ENGINEER

APPROVED
DATE 4/12/07 BALU ANANTHANORAYANON, STATE TRAFFIC ENGINEER

INITIAL INSTALL 3/07

REGION CONTACT: D. WOLFORD
DESIGNED BY:
REVISED BY: S. WAGNER

PAGE 1 OF 3

PROJECT NO: 1370-15-71	HWY: STH 83	COUNTY: WAUKESHA	TRAFFIC SIGNAL PLAN	SHEET 192	E

FILE NAME : N:\PDS\C3D\CAD\00820300\SIG\S67-1248\S67-1248_B.DWG
LAYOUT NAME - S67-1248_B_PG1
PLOT DATE : 1/9/2017 3:16 PM PLOT BY : VANDE LEEST, CYNTHIA PLOT NAME : PLOT SCALE : 1:40_XREF

WISDOT/CADDS SHEET 42

CONSTRUCTION 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. ALL LUMINAIRES ARE LED-C UNLESS OTHERWISE NOTED.

LEGEND

⊠	CONTROL CABINET	XX	SIGNAL HEAD NUMBER
- - - - -	NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED	R	RED CIRCULAR INDICATOR
———	LOOP DETECTOR CONDUIT 1" NONMETALLIC	Y	YELLOW CIRCULAR INDICATOR
←●	SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE	G	GREEN CIRCULAR INDICATOR
(XX) ↓●	SIGNAL HEAD, TRAFFIC SIGNAL POLE, TRANSFORMER BASE	R	RED ARROW
⊢●⊣B	PEDESTRIAN HEAD WITH PUSH BUTTON	Y	YELLOW ARROW
		GA	GREEN ARROW
●—	LUMINAIRE, TRAFFIC POLE, TRANSFORMER BASE		WALK/DON'T WALK INDICATOR 12"
▭	LOOP DETECTOR IN 1" NONMETALLIC CONDUIT	S	STOP SIGN
◐	PULL BOX, 24" X 36"	X	EVP DESIGNATOR
Ⓘ	PULL BOX, 24" X 42"		EVP DETECTOR HEAD
⊢●	ANTENNA POLE		

NOTE: ALL LENSES ARE 12-INCH GRAYSHADE REPRESENTS EXISTING

REVISION				
REV. NO.	REPLACE LOOP 81; UPDATE EVP OPERATION			
	APPROVAL RECOMMENDED		APPROVED	
	REGION		CENTRAL OFFICE	
3	DATE	BY	DATE	BY
	1-4-17	DJW	1-4-17	DJB

CHANGED TO REFLECT TWO STANDARDS ON EAST MEDIAN. RENUMBER SB'S. 10/06

ADDED SB9 WITH TYPE II POLE AND 20' ARM BEFORE TURN-ON 1/10/06

ADD EB AND WB EVP 9/05

TRAFFIC CONTROL SIGNAL
STH 16 WB RAMPS & CTH JJ
CITY OF PEWAUKEE
WAUKESHA COUNTY
CABINET TYPE: TS1
SIGNAL NO. S67-0922 CONTROLLER TYPE: EPAC

WISCONSIN DEPARTMENT OF TRANSPORTATION

APPROVAL RECOMMENDED
DATE 11/16/04 DEBRA EVERS, REGION TRAFFIC ENGINEER

APPROVED
DATE 2/10/05 WILLIAL C. GILDING, STATE TRAFFIC ENGINEER

REGION CONTACT: D. WOLFORD
DESIGNED BY:
REVISED BY: S. WAGNER

PAGE 1 OF 3

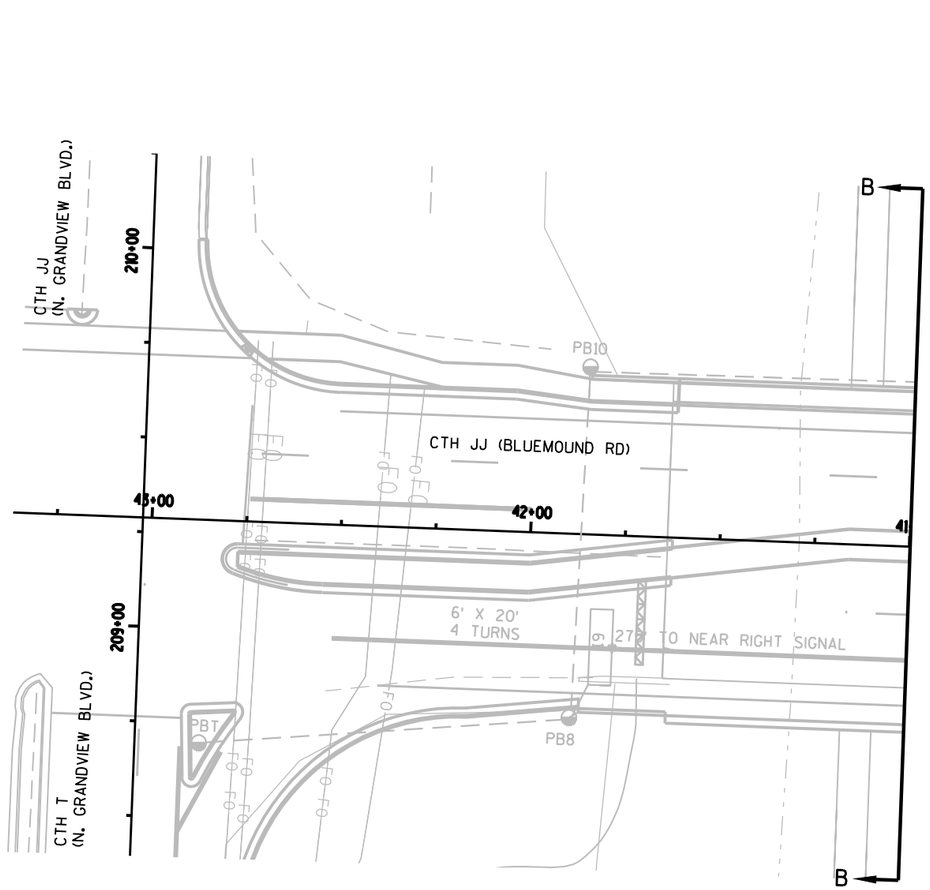
PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	TRAFFIC SIGNAL PLAN	SHEET 193 E

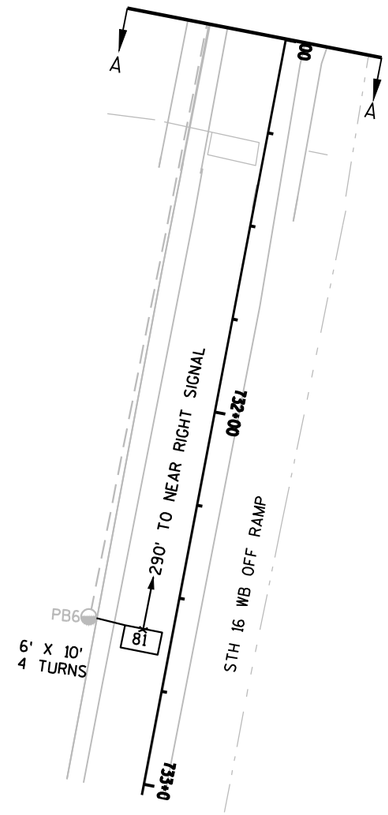
FILE NAME : N:\PDS\C3D\CAD\00820300\SIG\S67-0922\S67-0922_D.DWG
LAYOUT NAME - S67-0922_D_PG1

PLOT DATE : 1/9/2017 3:26 PM PLOT BY : VANDE LEEST, CYNTHIA PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2





TRAFFIC CONTROL SIGNAL
STH 16 WB RAMPS & CTH JJ
CITY OF PEWAUKEE
WAUKESHA COUNTY

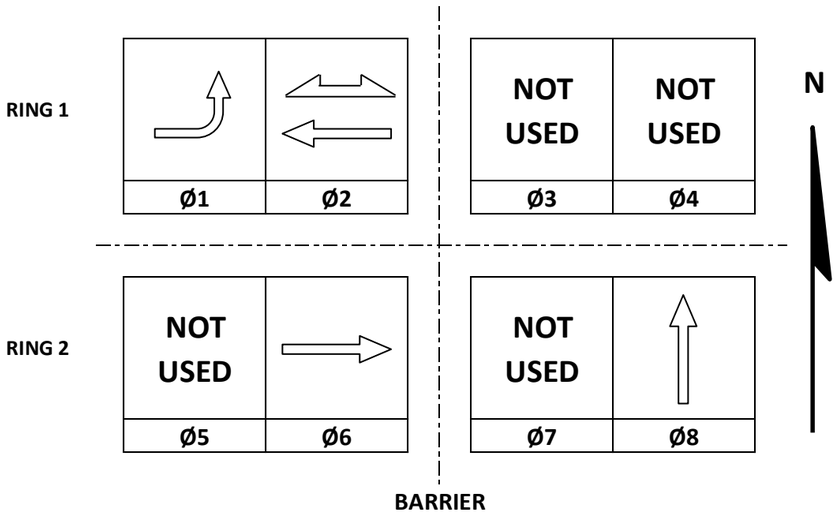
SIGNAL NO. S67-0922

REGION CONTACT: D. WOLFORD
DESIGNED BY:
REVISED BY: S. WAGNER

PAGE 2 OF 3

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	TRAFFIC SIGNAL PLAN	SHEET 194	E

	HEAD NUMBERS	FLASH
Ø1	4,5,6	R ←
Ø2	7,8,9	R
Ø3		
Ø4		
Ø5		
Ø6	1,2,3	R
Ø7		
Ø8	10,11,12	R
Ø2P	13,14	
Ø4P		
Ø6P		
Ø8P		
OLA		
OLB		
OLC		
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	1	X			1	1				6'X20'	3
12	1	X			1	1				6'X20'	3
13	1	X			1	1				6'X20'	3
14	1	X			1	1				6'X20'	3
21	2	X			2	2				6'X20'	3
61	6	X			6	6				6'X20'	4
81	8			X		8			X	6'X10'	4
82	8	X			8	8				6'X20'	3
83	8	X			8	8				6'X20'	3

CONTROLLER LOGIC

PHASE NUMBER	PHASE LOCKING	DUAL ENTRY W / Ø	PHASE RECALL	PHASE ACTIVE
1		6		X
2	X	6	MIN	X
3				
4				X
5				
6	X	2	MIN	X
7				
8				X

TYPE OF INTERCONNECT/COMMUNICATION	
NONE	
CLOSED LOOP	
TWISTED PAIR	
FIBER OPTIC*	
FIBER OPTIC (ETHERNET)	
RADIO	X
CELL MODEM	

TYPE OF COORDINATION	
NONE	
TBC	X
TRAFFIC RESPONSIVE	
ADAPTIVE	
*LOCATION OF MASTER CONTROLLER NO:	S- 67-0922
SIGNAL SYSTEM NO:	SS- 67-0093

TYPE OF LIGHTING	
BY OTHER AGENCY	
IN TRAFFIC CABINET	
IN SEPARATE DOT LIGHTING CABINET	X

TYPE OF PRE-EMPT	
NONE	
RAILROAD	
EMERGENCY VEHICLE	X
GTT	
TOMAR	X
HARDWIRE	
OTHER	
LIFT BRIDGE	
QUEUE DETECTION	

EMERGENCY VEHICLE PREEMPTION SEQUENCE

EMERGENCY VEHICLE PREEMPTOR	A	B
MOVEMENT	← →	↗ →
PHASE	2+6	6+1

AFTER PREEMPTION SEQUENCE 2+6 OR 6+1, CONTROLLER SHALL RETURN TO PHASES 2+6.

GENERAL NOTES:

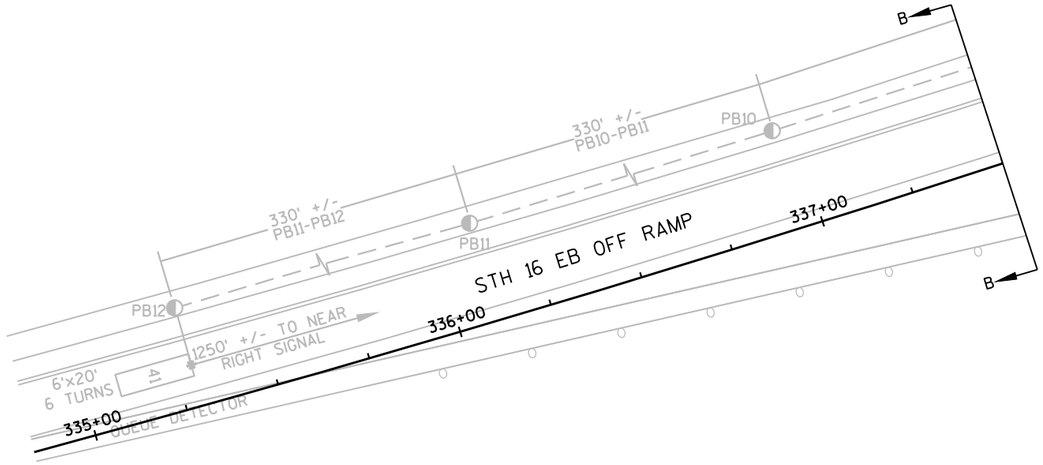
1. ANY ACTUATED PHASE FOR WHICH THERE IS NO CALL SHALL BE SKIPPED.
2. WHEN ONE PHASE IS ON ALONE, ANY NONCONFLICTING PHASE MAY START TIMING CONCURRENTLY WITHOUT A CLEARANCE INTERVAL.

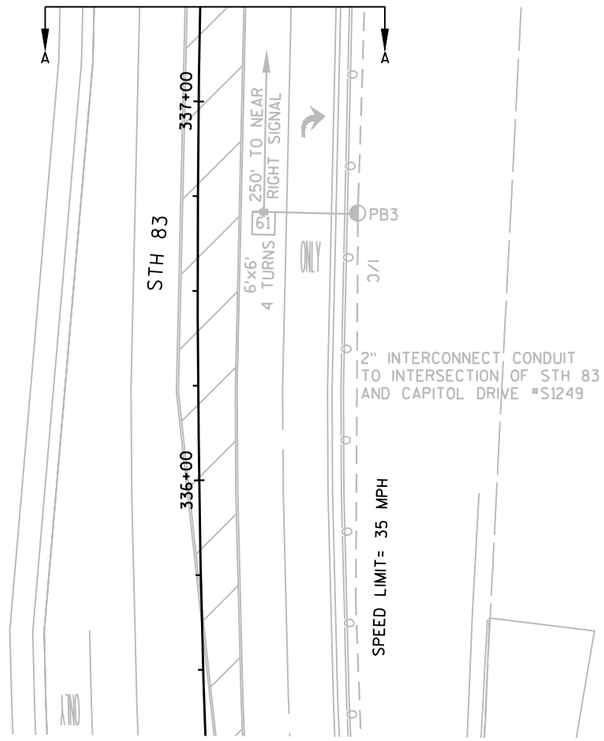
STH 16 WB RAMPS & CTH JJ
CITY OF PEWAUKEE
WAUKESHA COUNTY
SIGNAL NO: S67-0922 CABINET TYPE: TS1
CONTROLLER TYPE: EPAC
DATE: 11/16 PAGE NO. 3 OF 3

FILE NAME : \\WKERTOVFILPI01\n3public\SPO\Operations\Signals\Databases\Signal Intersection Files\S67-0922\PLANS\TS1.pptm PLOT DATE : 11/21/2016 2:30PM PLOT BY : WOLFORD, DERRIN PLOT NAME : _____ PLOT SCALE : 1:1

2

N





TRAFFIC CONTROL SIGNAL
STH 16 EB RAMPS & STH 83
CITY OF DELAFIELD
WAUKESHA COUNTY

SIGNAL NO. S67-1248

REGION CONTACT: D. WOLFORD
DESIGNED BY:
REVISED BY: S. WAGNER

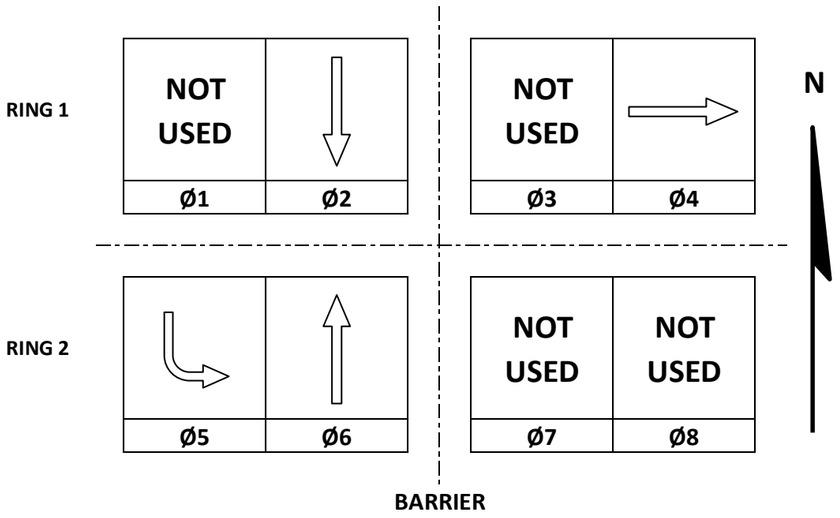
PAGE 2 OF 3

PROJECT NO:1370-15-71	HWY: STH 83	COUNTY: WAUKESHA	TRAFFIC SIGNAL PLAN	SHEET 196	E

FILE NAME : N:\PDS\C3D\CAD\00820300\SIG\S67-1248\S67-1248_B.DWG
LAYOUT NAME - S67-1248_B_PG2

PLOT DATE : 1/9/2017 3:16 PM PLOT BY : VANDE LEEST, CYNTHIAPLOT NAME : PLOT SCALE : 1:40_XREF

	HEAD NUMBERS	FLASH
Ø1		
Ø2	10,11,12	R
Ø3		
Ø4	1,2,3,4,5,6	R
Ø5	11,12	-
Ø6	7,8,9	R
Ø7		
Ø8		
Ø2P		
Ø4P		
Ø6P		
Ø8P		
OLA		
OLB		
OLC		
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							
21	1	X			2	2				6'X20'	3
22	1	X			2	2				6'X30'	3
41	2	QUEUE DETECTOR			4			X		6'X20'	6
42	3			X		4			X	6'X6'	4
43	4	X			4	4				6'X20'	3
44	4	X			4	4				6'X20'	3
45	5			X		4			X	6'X20'	4
46	6	X			4	4		X		6'X20'	4
47	6	X			4	4		X		6'X20'	4
48	7	X			4	4				6'X20'	4
49	7	X			4	4				6'X20'	4
51	8	X			5	5		X		6'X20'	3
52	8	X			5	5		X		6'X30'	3
61	9	X			6	6				6'X6'	4

CONTROLLER LOGIC

PHASE NUMBER	PHASE LOCKING	DUAL ENTRY W / Ø	PHASE RECALL	PHASE ACTIVE
1				
2	X	6	MIN	X
3				
4				X
5		2		X
6	X	2	MIN	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- 67-0091

TYPE OF LIGHTING	
BY OTHER AGENCY	
IN TRAFFIC CABINET	X
IN SEPARATE DOT LIGHTING CABINET	

TYPE OF PRE-EMPT	
NONE	
RAILROAD	
EMERGENCY VEHICLE	X
GTT	
TOMAR	X
HARDWIRE	
OTHER	
LIFT BRIDGE	
QUEUE DETECTION	X

EMERGENCY VEHICLE PREEMPTION SEQUENCE

EMERGENCY VEHICLE PREEMPTOR	A	B	C	D (QUEUE)
MOVEMENT	↓↑	↓↑	→	→
PHASE	2+6	6+2	4	4

AFTER PREEMPTION SEQUENCE 2+6 OR 6+2, CONTROLLER SHALL RETURN TO PHASES 2+6.
AFTER PREEMPTION SEQUENCE 4 OR 4, CONTROLLER SHALL RETURN TO PHASE 4.

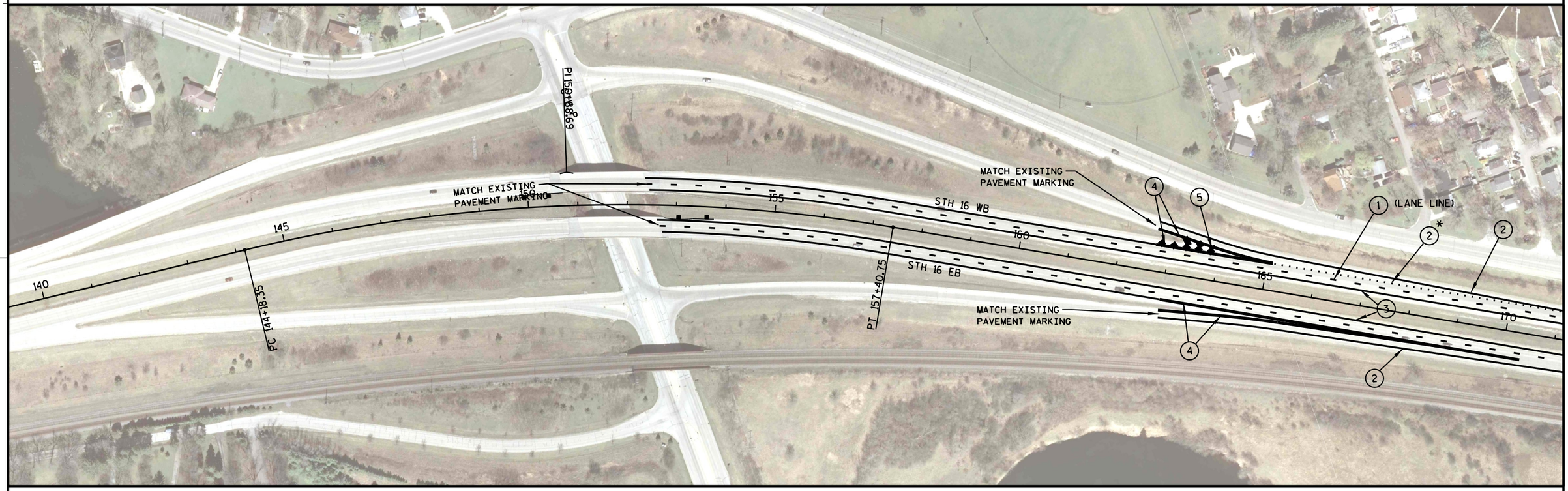
GENERAL NOTES:

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.
3. IF ANY OPPOSING THRU PHASES ARE TIMING CONCURRENTLY, THEY SHALL TERMINATE TOGETHER DUE TO PERMISSIVE LEFT TURN CONFLICT.
4. LOOP 41 USED TO CALL A PRE-EMPT THAT CLEARS SIGNAL TO PHASE 4 GREEN.

STH 16 EB RAMPS & STH 83
CITY OF DELAFIELD
WAUKESHA COUNTY
SIGNAL NO: S67-1248 CABINET TYPE: TS1
CONTROLLER TYPE: EPAC
DATE: 11/16 PAGE NO. 3 OF 3

FILE NAME : \\WKERTOVFILPI01\n3public\SPO\Operations\Signals\Databases\Signal Intersection Files\S67-1248\PLANS\TS1.pptm PLOT DATE : 11/21/2016 3:00PM PLOT BY : WOLFORD, DERRIN PLOT NAME : _____ PLOT SCALE : 1:1

2



PAVEMENT MARKING LEGEND

1. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH (WHITE) (12.5' LINE, 37.5' SPACE)
2. PAVEMENT MARKING GROOVED WET REFLECTIVE EPOXY 4-INCH (WHITE)
3. PAVEMENT MARKING GROOVED WET REFLECTIVE EPOXY 4-INCH (YELLOW)
4. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 8-INCH (WHITE)
5. PAVEMENT MARKING EPOXY DIAGONAL 24-INCH (WHITE) (45°)
5A. PAVEMENT MARKING EPOXY DIAGONAL 12-INCH (WHITE) (45°)
6. PAVEMENT MARKING ARROWS EPOXY TYPE 4 (WHITE)
7. PAVEMENT MARKING GROOVED WET REFLECTIVE TAPE 8-INCH (WHITE)
8. PAVEMENT MARKING STOP EPOXY LINE 18-INCH (WHITE)
9. PAVEMENT MARKING ARROWS EPOXY TYPE 2 (WHITE)
10. PAVEMENT MARKING ARROWS EPOXY TYPE 3 (WHITE)
11. PAVEMENT MARKING WORDS EPOXY (WHITE)
12. PAVEMENT MARKING CROSSWALK EPOXY 6-INCH (WHITE)
13. PAVEMENT MARKING ARROW EPOXY TYPE 7 (WHITE)
14. PAVEMENT MARKING ISLAND NOSE EPOXY (YELLOW)

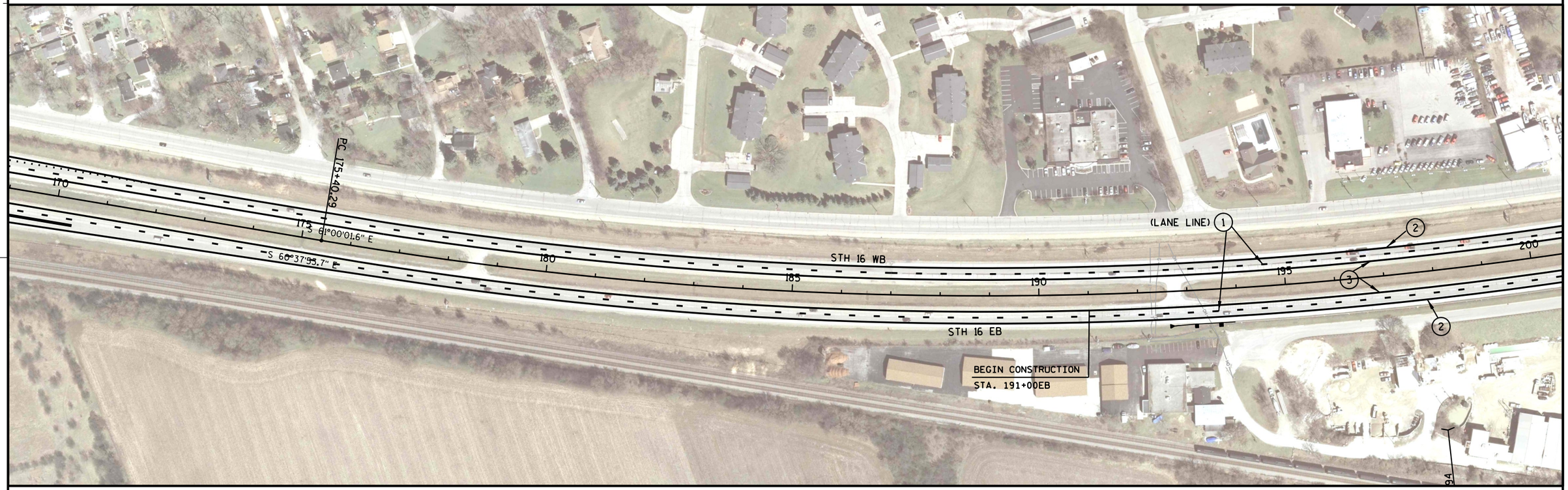
* (3' LINE, 9' GAP)

** REMOVE PAVEMENT MARKING GROOVED TAPE

*** POSITION TIP OF ARROW AT "WRONG WAY" SIGN LOCATION

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 198	E

2



PAVEMENT MARKING LEGEND

1. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH (WHITE) (12.5' LINE, 37.5' SPACE)
2. PAVEMENT MARKING GROOVED WET REFLECTIVE EPOXY 4-INCH (WHITE)
3. PAVEMENT MARKING GROOVED WET REFLECTIVE EPOXY 4-INCH (YELLOW)
4. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 8-INCH (WHITE)
5. PAVEMENT MARKING EPOXY DIAGONAL 24-INCH (WHITE) (45°)
5A. PAVEMENT MARKING EPOXY DIAGONAL 12-INCH (WHITE) (45°)
6. PAVEMENT MARKING ARROWS EPOXY TYPE 4 (WHITE)
7. PAVEMENT MARKING GROOVED WET REFLECTIVE TAPE 8-INCH (WHITE)
8. PAVEMENT MARKING STOP EPOXY LINE 18-INCH (WHITE)
9. PAVEMENT MARKING ARROWS EPOXY TYPE 2 (WHITE)
10. PAVEMENT MARKING ARROWS EPOXY TYPE 3 (WHITE)
11. PAVEMENT MARKING WORDS EPOXY (WHITE)
12. PAVEMENT MARKING CROSSWALK EPOXY 6-INCH (WHITE)
13. PAVEMENT MARKING ARROW EPOXY TYPE 7 (WHITE)
14. PAVEMENT MARKING ISLAND NOSE EPOXY (YELLOW)

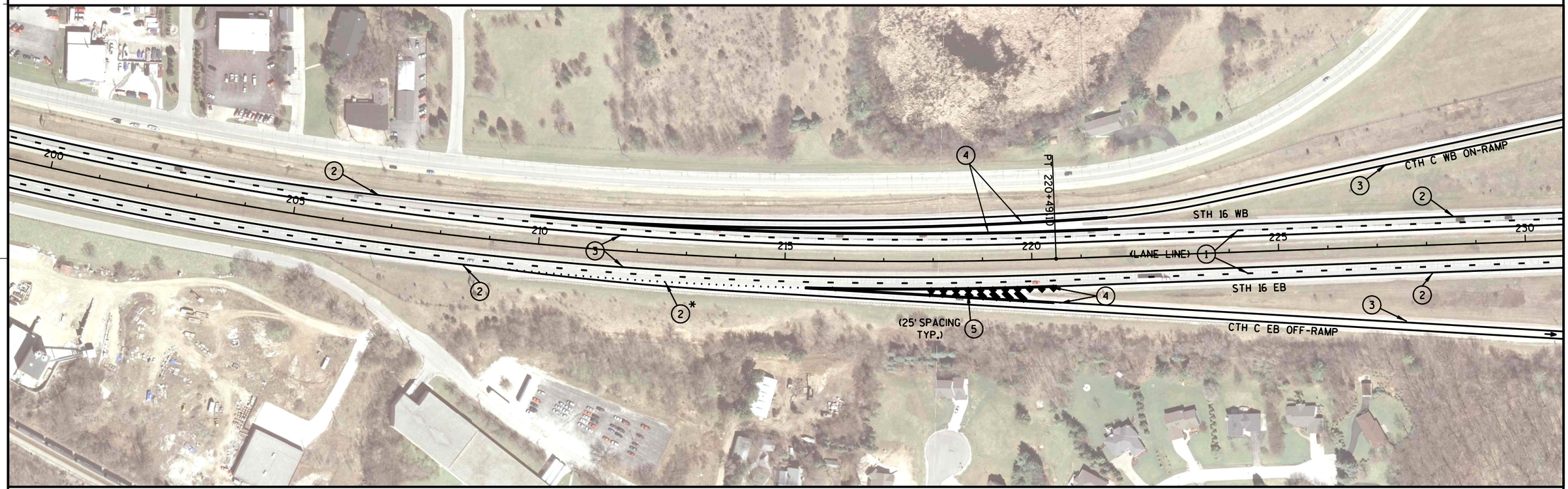
* (3' LINE, 9' GAP)

** REMOVE PAVEMENT MARKING GROOVED TAPE

*** POSITION TIP OF ARROW AT "WRONG WAY" SIGN LOCATION

2

N



PAVEMENT MARKING LEGEND

1. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH (WHITE) (12.5' LINE, 37.5' SPACE)
2. PAVEMENT MARKING GROOVED WET REFLECTIVE EPOXY 4-INCH (WHITE)
3. PAVEMENT MARKING GROOVED WET REFLECTIVE EPOXY 4-INCH (YELLOW)
4. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 8-INCH (WHITE)
5. PAVEMENT MARKING EPOXY DIAGONAL 24-INCH (WHITE) (45°)
5A. PAVEMENT MARKING EPOXY DIAGONAL 12-INCH (WHITE) (45°)
6. PAVEMENT MARKING ARROWS EPOXY TYPE 4 (WHITE)
7. PAVEMENT MARKING GROOVED WET REFLECTIVE TAPE 8-INCH (WHITE)
8. PAVEMENT MARKING STOP EPOXY LINE 18-INCH (WHITE)
9. PAVEMENT MARKING ARROWS EPOXY TYPE 2 (WHITE)
10. PAVEMENT MARKING ARROWS EPOXY TYPE 3 (WHITE)
11. PAVEMENT MARKING WORDS EPOXY (WHITE)
12. PAVEMENT MARKING CROSSWALK EPOXY 6-INCH (WHITE)
13. PAVEMENT MARKING ARROW EPOXY TYPE 7 (WHITE)
14. PAVEMENT MARKING ISLAND NOSE EPOXY (YELLOW)

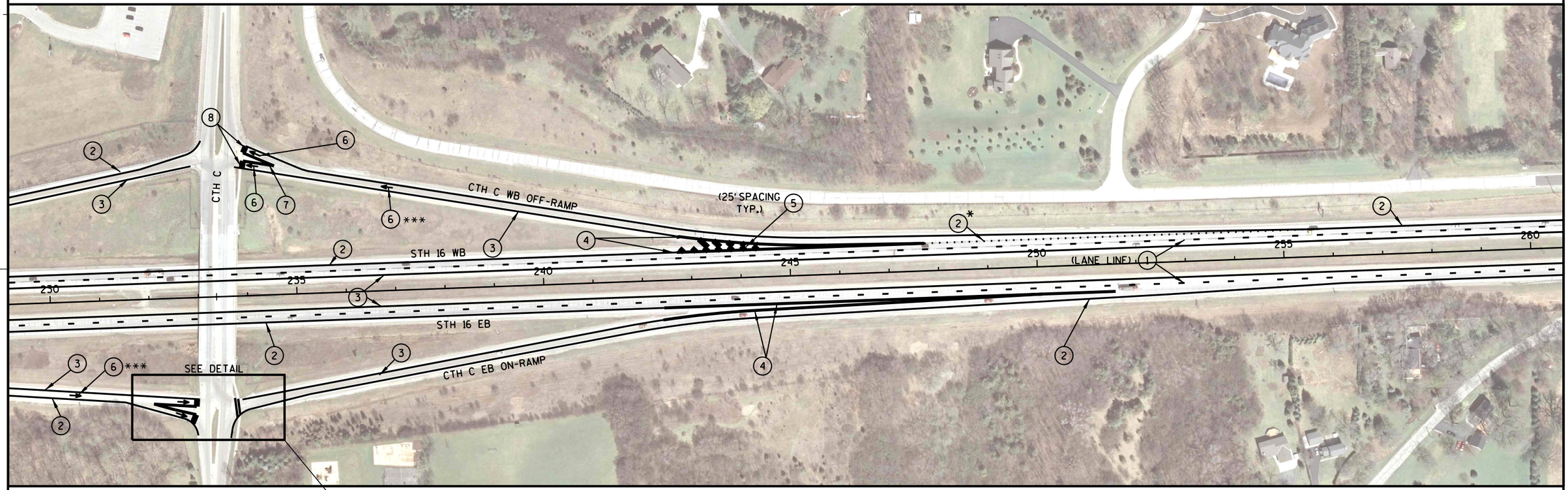
* (3' LINE, 9' GAP)

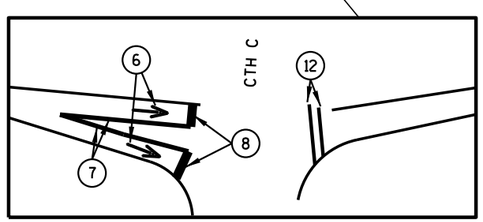
** REMOVE PAVEMENT MARKING GROOVED TAPE

*** POSITION TIP OF ARROW AT "WRONG WAY" SIGN LOCATION

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 200	E

2





PAVEMENT MARKING LEGEND

1. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH (WHITE) (12.5' LINE, 37.5' SPACE)
2. PAVEMENT MARKING GROOVED WET REFLECTIVE EPOXY 4-INCH (WHITE)
3. PAVEMENT MARKING GROOVED WET REFLECTIVE EPOXY 4-INCH (YELLOW)
4. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 8-INCH (WHITE)
5. PAVEMENT MARKING EPOXY DIAGONAL 24-INCH (WHITE) (45°)
5A. PAVEMENT MARKING EPOXY DIAGONAL 12-INCH (WHITE) (45°)
6. PAVEMENT MARKING ARROWS EPOXY TYPE 4 (WHITE)
7. PAVEMENT MARKING GROOVED WET REFLECTIVE TAPE 8-INCH (WHITE)
8. PAVEMENT MARKING STOP EPOXY LINE 18-INCH (WHITE)
9. PAVEMENT MARKING ARROWS EPOXY TYPE 2 (WHITE)
10. PAVEMENT MARKING ARROWS EPOXY TYPE 3 (WHITE)
11. PAVEMENT MARKING WORDS EPOXY (WHITE)
12. PAVEMENT MARKING CROSSWALK EPOXY 6-INCH (WHITE)
13. PAVEMENT MARKING ARROW EPOXY TYPE 7 (WHITE)
14. PAVEMENT MARKING ISLAND NOSE EPOXY (YELLOW)

* (3' LINE, 9' GAP)

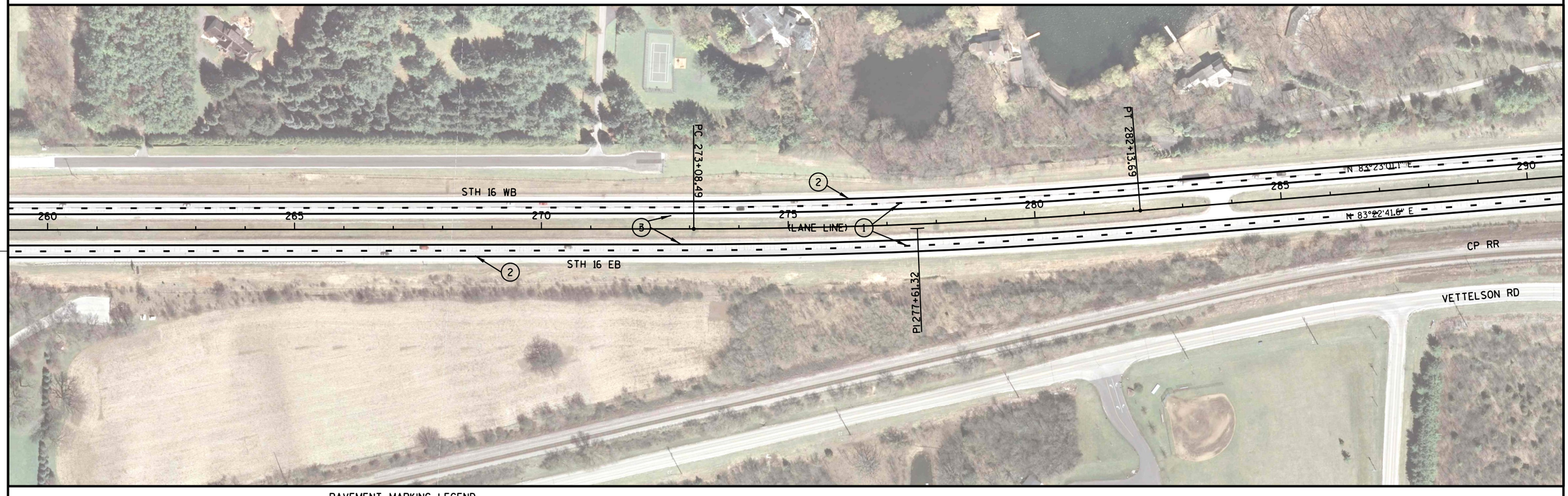
** REMOVE PAVEMENT MARKING GROOVED TAPE

*** POSITION TIP OF ARROW AT "WRONG WAY" SIGN LOCATION

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 201	E

2

N



PAVEMENT MARKING LEGEND

1. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH (WHITE) (12.5' LINE, 37.5' SPACE)
2. PAVEMENT MARKING GROOVED WET REFLECTIVE EPOXY 4-INCH (WHITE)
3. PAVEMENT MARKING GROOVED WET REFLECTIVE EPOXY 4-INCH (YELLOW)
4. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 8-INCH (WHITE)
5. PAVEMENT MARKING EPOXY DIAGONAL 24-INCH (WHITE) (45°)
5A. PAVEMENT MARKING EPOXY DIAGONAL 12-INCH (WHITE) (45°)
6. PAVEMENT MARKING ARROWS EPOXY TYPE 4 (WHITE)
7. PAVEMENT MARKING GROOVED WET REFLECTIVE TAPE 8-INCH (WHITE)
8. PAVEMENT MARKING STOP EPOXY LINE 18-INCH (WHITE)
9. PAVEMENT MARKING ARROWS EPOXY TYPE 2 (WHITE)
10. PAVEMENT MARKING ARROWS EPOXY TYPE 3 (WHITE)
11. PAVEMENT MARKING WORDS EPOXY (WHITE)
12. PAVEMENT MARKING CROSSWALK EPOXY 6-INCH (WHITE)
13. PAVEMENT MARKING ARROW EPOXY TYPE 7 (WHITE)
14. PAVEMENT MARKING ISLAND NOSE EPOXY (YELLOW)

* (3' LINE, 9' GAP)

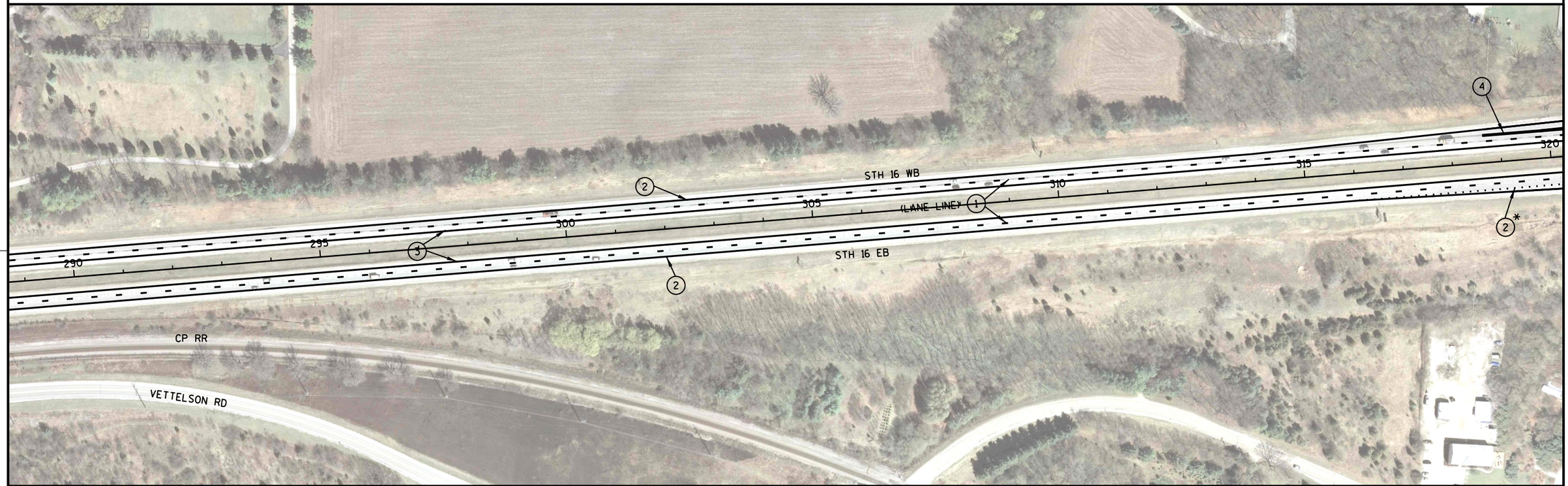
** REMOVE PAVEMENT MARKING GROOVED TAPE

*** POSITION TIP OF ARROW AT "WRONG WAY" SIGN LOCATION

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 202	E

2

N



PAVEMENT MARKING LEGEND

1. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH (WHITE) (12.5' LINE, 37.5' SPACE)
2. PAVEMENT MARKING GROOVED WET REFLECTIVE EPOXY 4-INCH (WHITE)
3. PAVEMENT MARKING GROOVED WET REFLECTIVE EPOXY 4-INCH (YELLOW)
4. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 8-INCH (WHITE)
5. PAVEMENT MARKING EPOXY DIAGONAL 24-INCH (WHITE) (45°)
5A. PAVEMENT MARKING EPOXY DIAGONAL 12-INCH (WHITE) (45°)
6. PAVEMENT MARKING ARROWS EPOXY TYPE 4 (WHITE)
7. PAVEMENT MARKING GROOVED WET REFLECTIVE TAPE 8-INCH (WHITE)
8. PAVEMENT MARKING STOP EPOXY LINE 18-INCH (WHITE)
9. PAVEMENT MARKING ARROWS EPOXY TYPE 2 (WHITE)
10. PAVEMENT MARKING ARROWS EPOXY TYPE 3 (WHITE)
11. PAVEMENT MARKING WORDS EPOXY (WHITE)
12. PAVEMENT MARKING CROSSWALK EPOXY 6-INCH (WHITE)
13. PAVEMENT MARKING ARROW EPOXY TYPE 7 (WHITE)
14. PAVEMENT MARKING ISLAND NOSE EPOXY (YELLOW)

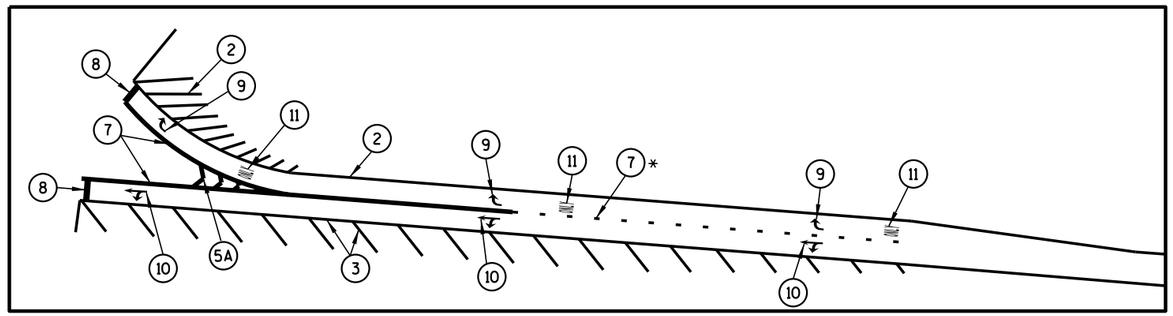
* (3' LINE, 9' GAP)

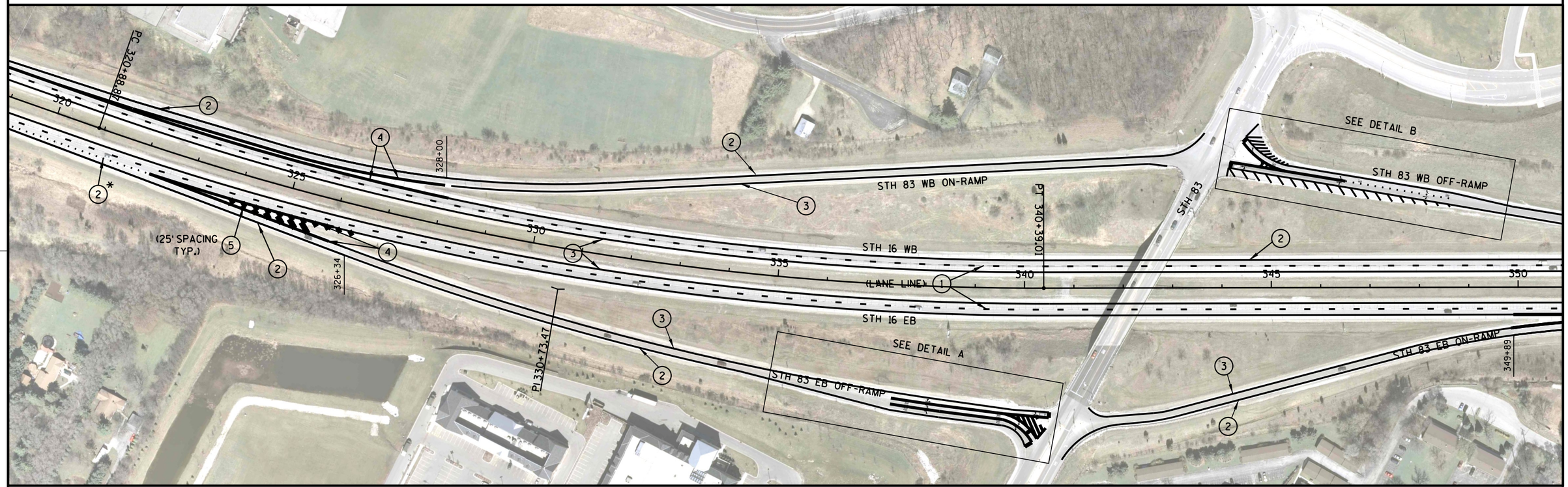
** REMOVE PAVEMENT MARKING GROOVED TAPE

*** POSITION TIP OF ARROW AT "WRONG WAY" SIGN LOCATION

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 203	E

DETAIL B





PAVEMENT MARKING LEGEND

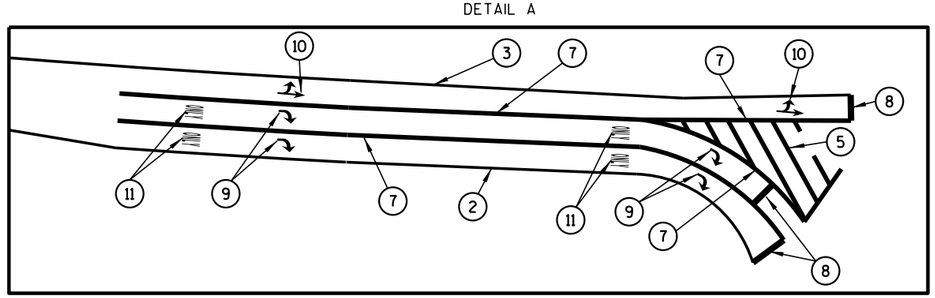
1. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH (WHITE) (12.5' LINE, 37.5' SPACE)
2. PAVEMENT MARKING GROOVED WET REFLECTIVE EPOXY 4-INCH (WHITE)
3. PAVEMENT MARKING GROOVED WET REFLECTIVE EPOXY 4-INCH (YELLOW)
4. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 8-INCH (WHITE)
5. PAVEMENT MARKING EPOXY DIAGONAL 24-INCH (WHITE) (45°)
5A. PAVEMENT MARKING EPOXY DIAGONAL 12-INCH (WHITE) (45°)
6. PAVEMENT MARKING ARROWS EPOXY TYPE 4 (WHITE)
7. PAVEMENT MARKING GROOVED WET REFLECTIVE TAPE 8-INCH (WHITE)
8. PAVEMENT MARKING STOP EPOXY LINE 18-INCH (WHITE)
9. PAVEMENT MARKING ARROWS EPOXY TYPE 2 (WHITE)
10. PAVEMENT MARKING ARROWS EPOXY TYPE 3 (WHITE)
11. PAVEMENT MARKING WORDS EPOXY (WHITE)
12. PAVEMENT MARKING CROSSWALK EPOXY 6-INCH (WHITE)
13. PAVEMENT MARKING ARROW EPOXY TYPE 7 (WHITE)
14. PAVEMENT MARKING ISLAND NOSE EPOXY (YELLOW)

* (3' LINE, 9' GAP)

** REMOVE PAVEMENT MARKING GROOVED TAPE

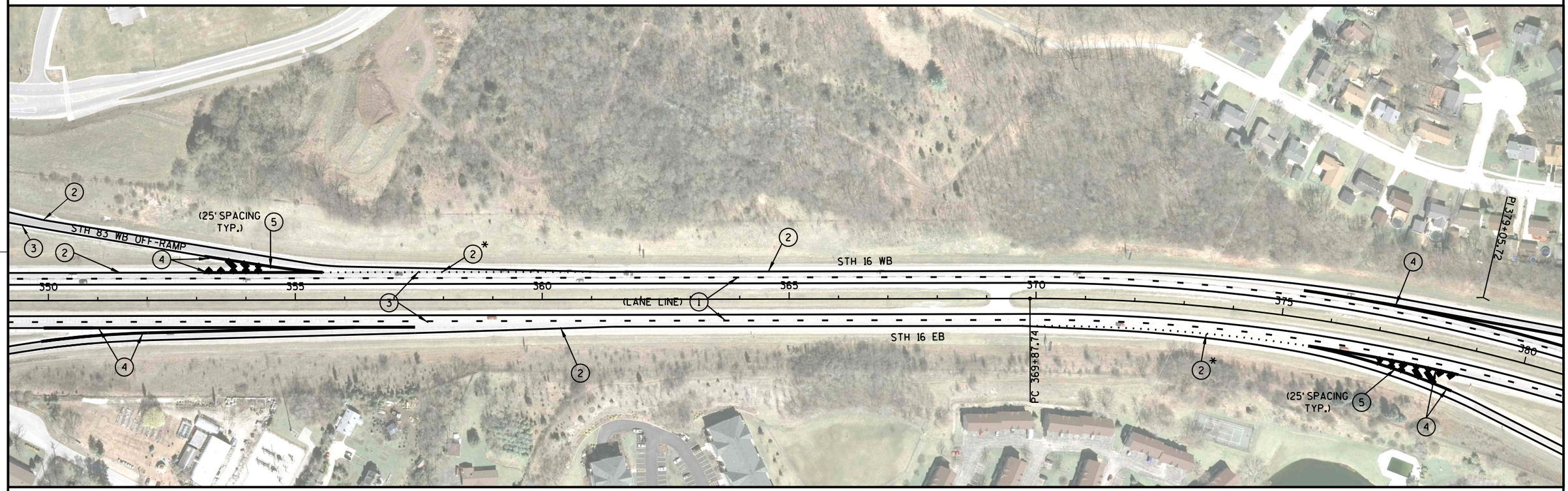
*** POSITION TIP OF ARROW AT "WRONG WAY" SIGN LOCATION

DETAIL A



PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 204 E

2



PAVEMENT MARKING LEGEND

1. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH (WHITE) (12.5' LINE, 37.5' SPACE)
2. PAVEMENT MARKING GROOVED WET REFLECTIVE EPOXY 4-INCH (WHITE)
3. PAVEMENT MARKING GROOVED WET REFLECTIVE EPOXY 4-INCH (YELLOW)
4. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 8-INCH (WHITE)
5. PAVEMENT MARKING EPOXY DIAGONAL 24-INCH (WHITE) (45°)
5A. PAVEMENT MARKING EPOXY DIAGONAL 12-INCH (WHITE) (45°)
6. PAVEMENT MARKING ARROWS EPOXY TYPE 4 (WHITE)
7. PAVEMENT MARKING GROOVED WET REFLECTIVE TAPE 8-INCH (WHITE)
8. PAVEMENT MARKING STOP EPOXY LINE 18-INCH (WHITE)
9. PAVEMENT MARKING ARROWS EPOXY TYPE 2 (WHITE)
10. PAVEMENT MARKING ARROWS EPOXY TYPE 3 (WHITE)
11. PAVEMENT MARKING WORDS EPOXY (WHITE)
12. PAVEMENT MARKING CROSSWALK EPOXY 6-INCH (WHITE)
13. PAVEMENT MARKING ARROW EPOXY TYPE 7 (WHITE)
14. PAVEMENT MARKING ISLAND NOSE EPOXY (YELLOW)

* (3' LINE, 9' GAP)

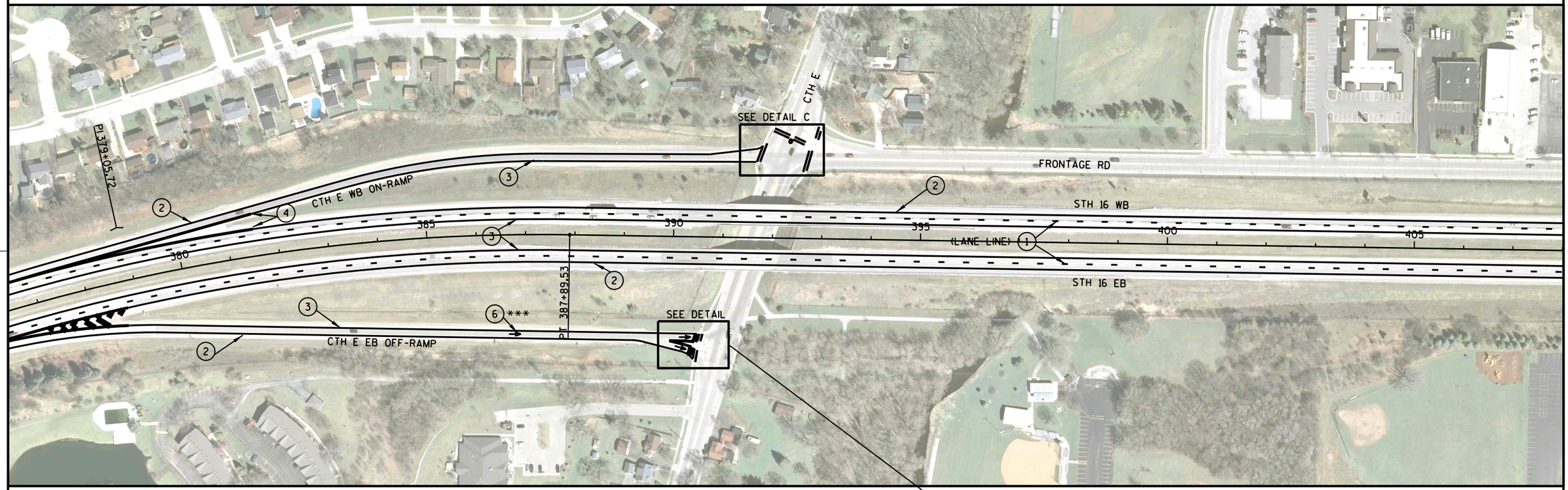
** REMOVE PAVEMENT MARKING GROOVED TAPE

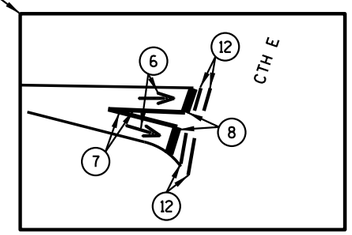
*** POSITION TIP OF ARROW AT "WRONG WAY" SIGN LOCATION

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 205	E

2

N





PAVEMENT MARKING LEGEND

1. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH (WHITE) (12.5' LINE, 37.5' SPACE)
2. PAVEMENT MARKING GROOVED WET REFLECTIVE EPOXY 4-INCH (WHITE)
3. PAVEMENT MARKING GROOVED WET REFLECTIVE EPOXY 4-INCH (YELLOW)
4. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 8-INCH (WHITE)
5. PAVEMENT MARKING EPOXY DIAGONAL 24-INCH (WHITE) (45°)
5A. PAVEMENT MARKING EPOXY DIAGONAL 12-INCH (WHITE) (45°)
6. PAVEMENT MARKING ARROWS EPOXY TYPE 4 (WHITE)
7. PAVEMENT MARKING GROOVED WET REFLECTIVE TAPE 8-INCH (WHITE)
8. PAVEMENT MARKING STOP EPOXY LINE 18-INCH (WHITE)
9. PAVEMENT MARKING ARROWS EPOXY TYPE 2 (WHITE)
10. PAVEMENT MARKING ARROWS EPOXY TYPE 3 (WHITE)
11. PAVEMENT MARKING WORDS EPOXY (WHITE)
12. PAVEMENT MARKING CROSSWALK EPOXY 6-INCH (WHITE)
13. PAVEMENT MARKING ARROW EPOXY TYPE 7 (WHITE)
14. PAVEMENT MARKING ISLAND NOSE EPOXY (YELLOW)

* (3' LINE, 9' GAP)

** REMOVE PAVEMENT MARKING GROOVED TAPE

*** POSITION TIP OF ARROW AT "WRONG WAY" SIGN LOCATION

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET	E

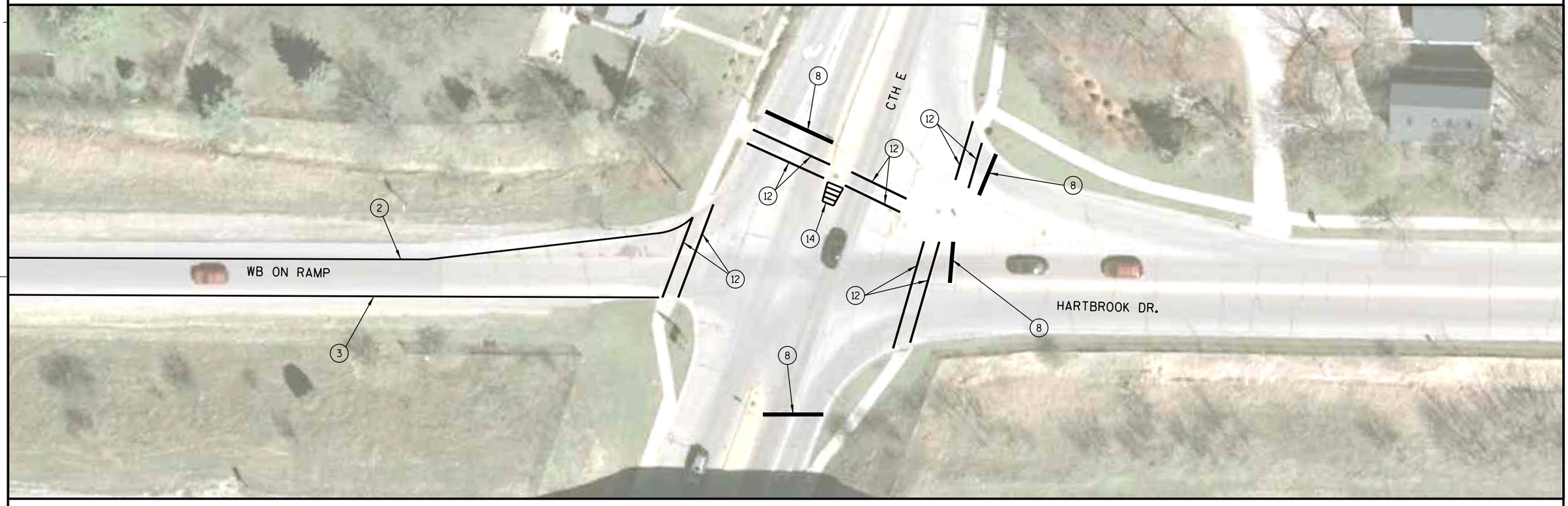
FILE NAME : J:\projects\D2_13701516\71\024509_pm.dgn PLOT DATE : 01-FEB-2017 11:41 PLOT BY : dotshw PLOT NAME : PLOT SCALE : 200:1

2

2

N

DETAIL C



PAVEMENT MARKING LEGEND

1. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH (WHITE)(12.5' LINE,37.5' SPACE)
2. PAVEMENT MARKING GROOVED WET REFLECTIVE EPOXY 4-INCH (WHITE)
3. PAVEMENT MARKING GROOVED WET REFLECTIVE EPOXY 4-INCH (YELLOW)
4. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 8-INCH (WHITE)
5. PAVEMENT MARKING EPOXY DIAGONAL 24-INCH (WHITE) (45°)
6. PAVEMENT MARKING ARROWS EPOXY TYPE 4 (WHITE)
7. PAVEMENT MARKING GROOVED WET REFLECTIVE TAPE 8-INCH (WHITE)
8. PAVEMENT MARKING STOP EPOXY LINE 18-INCH (WHITE)
9. PAVEMENT MARKING ARROWS EPOXY TYPE 2 (WHITE)
10. PAVEMENT MARKING ARROW EPOXY TYPE 3 (WHITE)
11. PAVEMENT MARKING WORDS EPOXY (WHITE)
12. PAVEMENT MARKING CROSSWALK EPOXY 6-INCH (WHITE)
13. PAVEMENT MARKING ARROW EPOXY TYPE 7 (WHITE)
14. PAVEMENT MARKING ISLAND NOSE EPOXY (YELLOW)

* (3' LINE, 12' GAP)

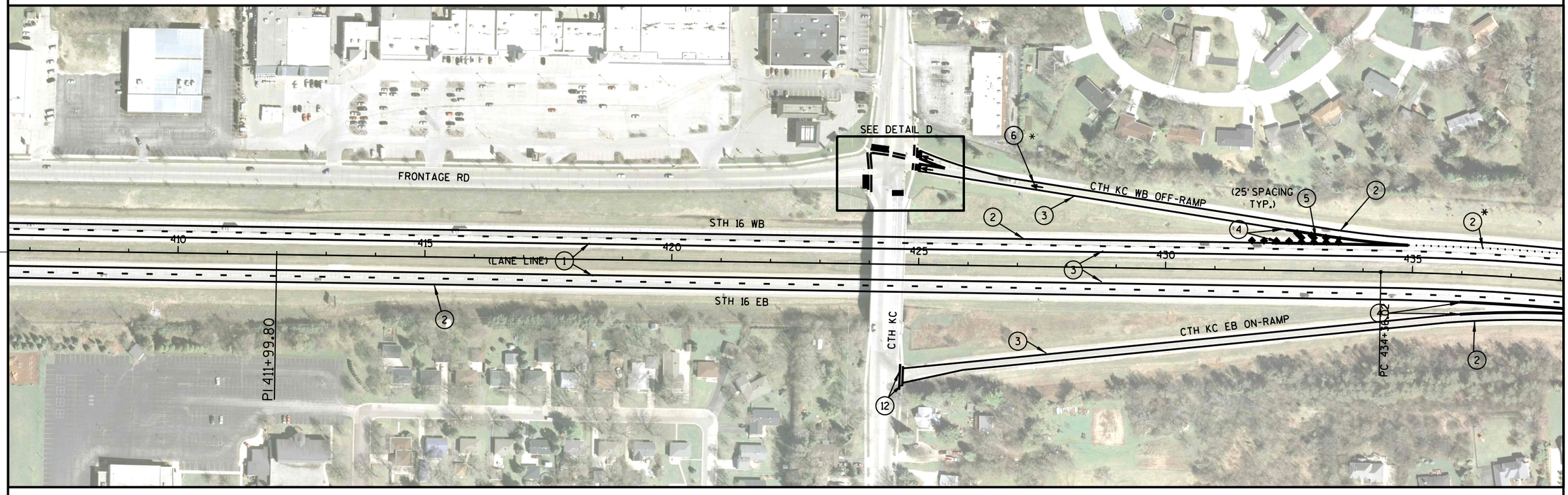
** REMOVE PAVEMENT MARKING GROOVED TAPE

*** POSITION TOP OF TIP OF ARROW AT "WRONG WAY" SIGN LOCATION

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 207	E

2

N



PAVEMENT MARKING LEGEND

1. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH (WHITE) (12.5' LINE, 37.5' SPACE)
2. PAVEMENT MARKING GROOVED WET REFLECTIVE EPOXY 4-INCH (WHITE)
3. PAVEMENT MARKING GROOVED WET REFLECTIVE EPOXY 4-INCH (YELLOW)
4. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 8-INCH (WHITE)
5. PAVEMENT MARKING EPOXY DIAGONAL 24-INCH (WHITE) (45°)
5A. PAVEMENT MARKING EPOXY DIAGONAL 12-INCH (WHITE) (45°)
6. PAVEMENT MARKING ARROWS EPOXY TYPE 4 (WHITE)
7. PAVEMENT MARKING GROOVED WET REFLECTIVE TAPE 8-INCH (WHITE)
8. PAVEMENT MARKING STOP EPOXY LINE 18-INCH (WHITE)
9. PAVEMENT MARKING ARROWS EPOXY TYPE 2 (WHITE)
10. PAVEMENT MARKING ARROWS EPOXY TYPE 3 (WHITE)
11. PAVEMENT MARKING WORDS EPOXY (WHITE)
12. PAVEMENT MARKING CROSSWALK EPOXY 6-INCH (WHITE)
13. PAVEMENT MARKING ARROW EPOXY TYPE 7 (WHITE)
14. PAVEMENT MARKING ISLAND NOSE EPOXY (YELLOW)

* (3' LINE, 9' GAP)

** REMOVE PAVEMENT MARKING GROOVED TAPE

*** POSITION TIP OF ARROW AT "WRONG WAY" SIGN LOCATION

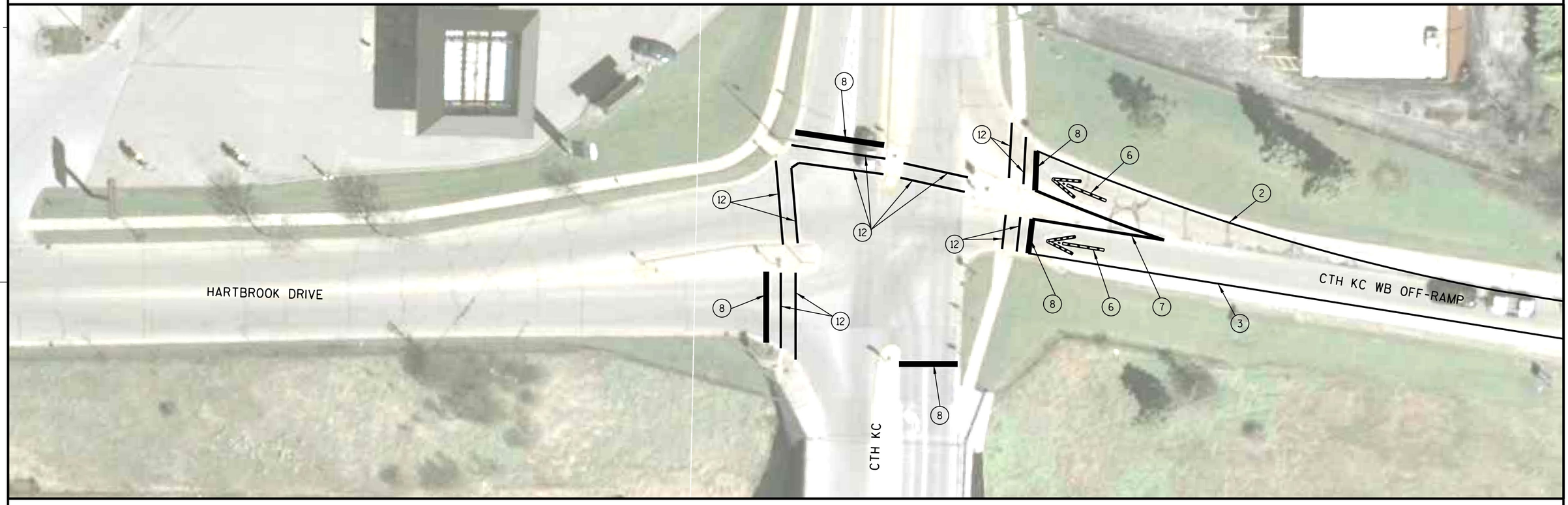
PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 208	E

2

2

DETAIL D

N



PAVEMENT MARKING LEGEND

1. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH (WHITE)(12.5' LINE,37.5' SPACE)
2. PAVEMENT MARKING GROOVED WET REFLECTIVE EPOXY 4-INCH (WHITE)
3. PAVEMENT MARKING GROOVED WET REFLECTIVE EPOXY 4-INCH (YELLOW)
4. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 8-INCH (WHITE)
5. PAVEMENT MARKING EPOXY DIAGONAL 24-INCH (WHITE)(45°)
6. PAVEMENT MARKING ARROWS EPOXY TYPE 4 (WHITE)
7. PAVEMENT MARKING GROOVED WET REFLECTIVE TAPE 8-INCH (WHITE)
8. PAVEMENT MARKING STOP EPOXY LINE 18-INCH (WHITE)
9. PAVEMENT MARKING ARROWS EPOXY TYPE 2 (WHITE)
10. PAVEMENT MARKING ARROW EPOXY TYPE 3 (WHITE)
11. PAVEMENT MARKING WORDS EPOXY (WHITE)
12. PAVEMENT MARKING CROSSWALK EPOXY 6-INCH (WHITE)
13. PAVEMENT MARKING ARROW EPOXY TYPE 7 (WHITE)
14. PAVEMENT MARKING ISLAND NOSE EPOXY (YELLOW)

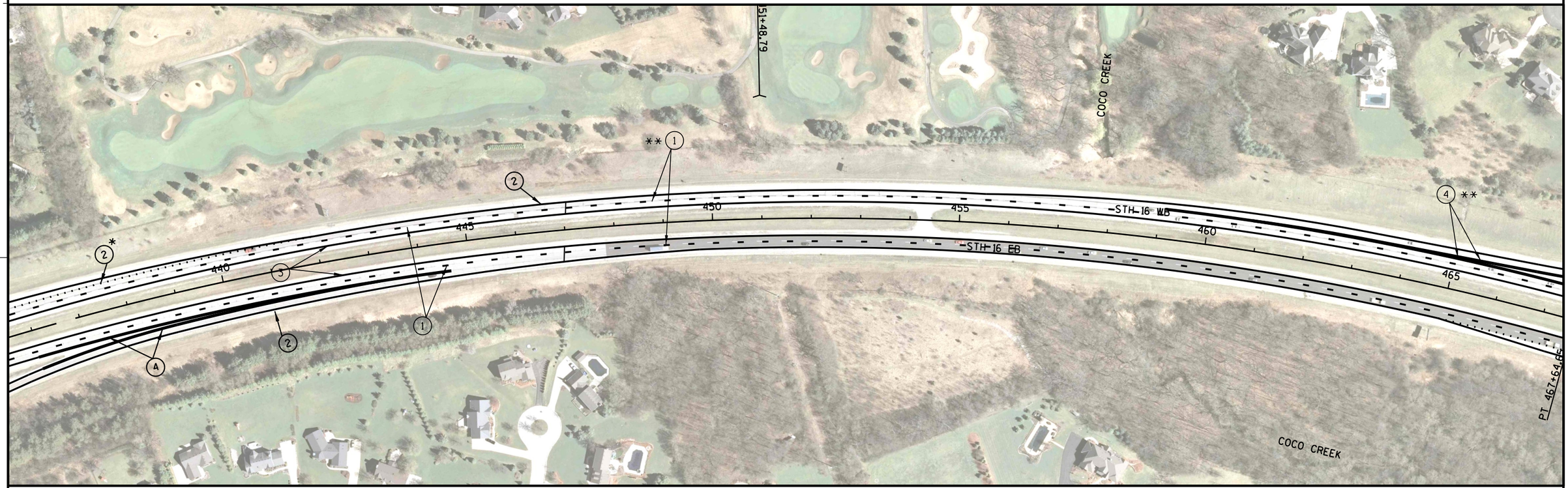
* (3' LINE, 12' GAP)

** REMOVE PAVEMENT MARKING GROOVED TAPE

*** POSITION TOP OF TIP OF ARROW AT "WRONG WAY" SIGN LOCATION

PROJECT NO: 1370-15-70	HWY: STH 16	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 209	E

2



PAVEMENT MARKING LEGEND

1. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH (WHITE) (12.5' LINE, 37.5' SPACE)
2. PAVEMENT MARKING GROOVED WET REFLECTIVE EPOXY 4-INCH (WHITE)
3. PAVEMENT MARKING GROOVED WET REFLECTIVE EPOXY 4-INCH (YELLOW)
4. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 8-INCH (WHITE)
5. PAVEMENT MARKING EPOXY DIAGONAL 24-INCH (WHITE) (45°)
5A. PAVEMENT MARKING EPOXY DIAGONAL 12-INCH (WHITE) (45°)
6. PAVEMENT MARKING ARROWS EPOXY TYPE 4 (WHITE)
7. PAVEMENT MARKING GROOVED WET REFLECTIVE TAPE 8-INCH (WHITE)
8. PAVEMENT MARKING STOP EPOXY LINE 18-INCH (WHITE)
9. PAVEMENT MARKING ARROWS EPOXY TYPE 2 (WHITE)
10. PAVEMENT MARKING ARROWS EPOXY TYPE 3 (WHITE)
11. PAVEMENT MARKING WORDS EPOXY (WHITE)
12. PAVEMENT MARKING CROSSWALK EPOXY 6-INCH (WHITE)
13. PAVEMENT MARKING ARROW EPOXY TYPE 7 (WHITE)
14. PAVEMENT MARKING ISLAND NOSE EPOXY (YELLOW)

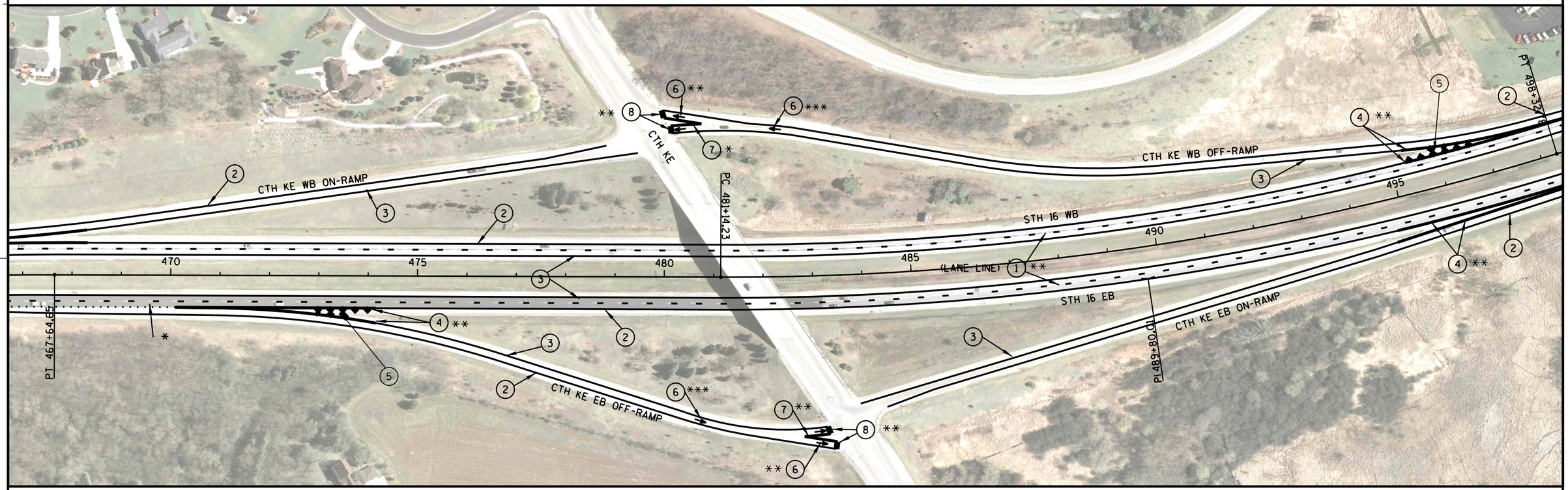
* (3' LINE, 9' GAP)

** REMOVE PAVEMENT MARKING GROOVED TAPE

*** POSITION TIP OF ARROW AT "WRONG WAY" SIGN LOCATION

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 210	E

2



PAVEMENT MARKING LEGEND

1. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH (WHITE) (12.5' LINE, 37.5' SPACE)
2. PAVEMENT MARKING GROOVED WET REFLECTIVE EPOXY 4-INCH (WHITE)
3. PAVEMENT MARKING GROOVED WET REFLECTIVE EPOXY 4-INCH (YELLOW)
4. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 8-INCH (WHITE)
5. PAVEMENT MARKING EPOXY DIAGONAL 24-INCH (WHITE) (45°)
5A. PAVEMENT MARKING EPOXY DIAGONAL 12-INCH (WHITE) (45°)
6. PAVEMENT MARKING ARROWS EPOXY TYPE 4 (WHITE)
7. PAVEMENT MARKING GROOVED WET REFLECTIVE TAPE 8-INCH (WHITE)
8. PAVEMENT MARKING STOP EPOXY LINE 18-INCH (WHITE)
9. PAVEMENT MARKING ARROWS EPOXY TYPE 2 (WHITE)
10. PAVEMENT MARKING ARROWS EPOXY TYPE 3 (WHITE)
11. PAVEMENT MARKING WORDS EPOXY (WHITE)
12. PAVEMENT MARKING CROSSWALK EPOXY 6-INCH (WHITE)
13. PAVEMENT MARKING ARROW EPOXY TYPE 7 (WHITE)
14. PAVEMENT MARKING ISLAND NOSE EPOXY (YELLOW)

* (3' LINE, 9' GAP)

** REMOVE PAVEMENT MARKING GROOVED TAPE

*** POSITION TIP OF ARROW AT "WRONG WAY" SIGN LOCATION

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 211 E

2

2

N

PT 498+32.18

STH 16 WB

500 505 510 515 520 525

(LANE LINE) (1) **

STH 16 EB

PAVEMENT MARKING LEGEND

(1) PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH (WHITE) (12.5' LINE, 37.5' SPACE)

(2) PAVEMENT MARKING GROOVED WET REFLECTIVE EPOXY 4-INCH (WHITE)

(3) PAVEMENT MARKING GROOVED WET REFLECTIVE EPOXY 4-INCH (YELLOW)

(4) PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 8-INCH (WHITE)

(5) PAVEMENT MARKING EPOXY DIAGONAL 24-INCH (WHITE) (45°)

(5A) PAVEMENT MARKING EPOXY DIAGONAL 12-INCH (WHITE) (45°)

(6) PAVEMENT MARKING ARROWS EPOXY TYPE 4 (WHITE)

(7) PAVEMENT MARKING GROOVED WET REFLECTIVE TAPE 8-INCH (WHITE)

(8) PAVEMENT MARKING STOP EPOXY LINE 18-INCH (WHITE)

(9) PAVEMENT MARKING ARROWS EPOXY TYPE 2 (WHITE)

(10) PAVEMENT MARKING ARROWS EPOXY TYPE 3 (WHITE)

(11) PAVEMENT MARKING WORDS EPOXY (WHITE)

(12) PAVEMENT MARKING CROSSWALK EPOXY 6-INCH (WHITE)

(13) PAVEMENT MARKING ARROW EPOXY TYPE 7 (WHITE)

(14) PAVEMENT MARKING ISLAND NOSE EPOXY (YELLOW)

* (3' LINE, 9' GAP)

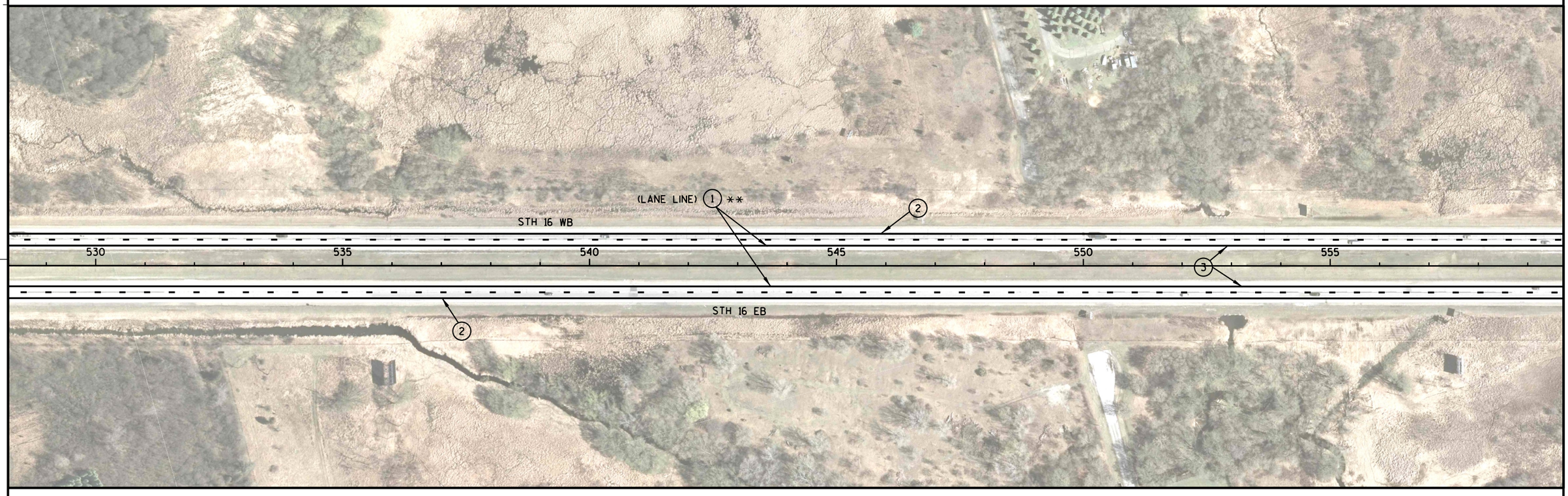
** REMOVE PAVEMENT MARKING GROOVED TAPE

*** POSITION TIP OF ARROW AT "WRONG WAY" SIGN LOCATION

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 212	E

2

2



PAVEMENT MARKING LEGEND

1. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH (WHITE) (12.5' LINE, 37.5' SPACE)
2. PAVEMENT MARKING GROOVED WET REFLECTIVE EPOXY 4-INCH (WHITE)
3. PAVEMENT MARKING GROOVED WET REFLECTIVE EPOXY 4-INCH (YELLOW)
4. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 8-INCH (WHITE)
5. PAVEMENT MARKING EPOXY DIAGONAL 24-INCH (WHITE) (45°)
5A. PAVEMENT MARKING EPOXY DIAGONAL 12-INCH (WHITE) (45°)
6. PAVEMENT MARKING ARROWS EPOXY TYPE 4 (WHITE)
7. PAVEMENT MARKING GROOVED WET REFLECTIVE TAPE 8-INCH (WHITE)
8. PAVEMENT MARKING STOP EPOXY LINE 18-INCH (WHITE)
9. PAVEMENT MARKING ARROWS EPOXY TYPE 2 (WHITE)
10. PAVEMENT MARKING ARROWS EPOXY TYPE 3 (WHITE)
11. PAVEMENT MARKING WORDS EPOXY (WHITE)
12. PAVEMENT MARKING CROSSWALK EPOXY 6-INCH (WHITE)
13. PAVEMENT MARKING ARROW EPOXY TYPE 7 (WHITE)
14. PAVEMENT MARKING ISLAND NOSE EPOXY (YELLOW)

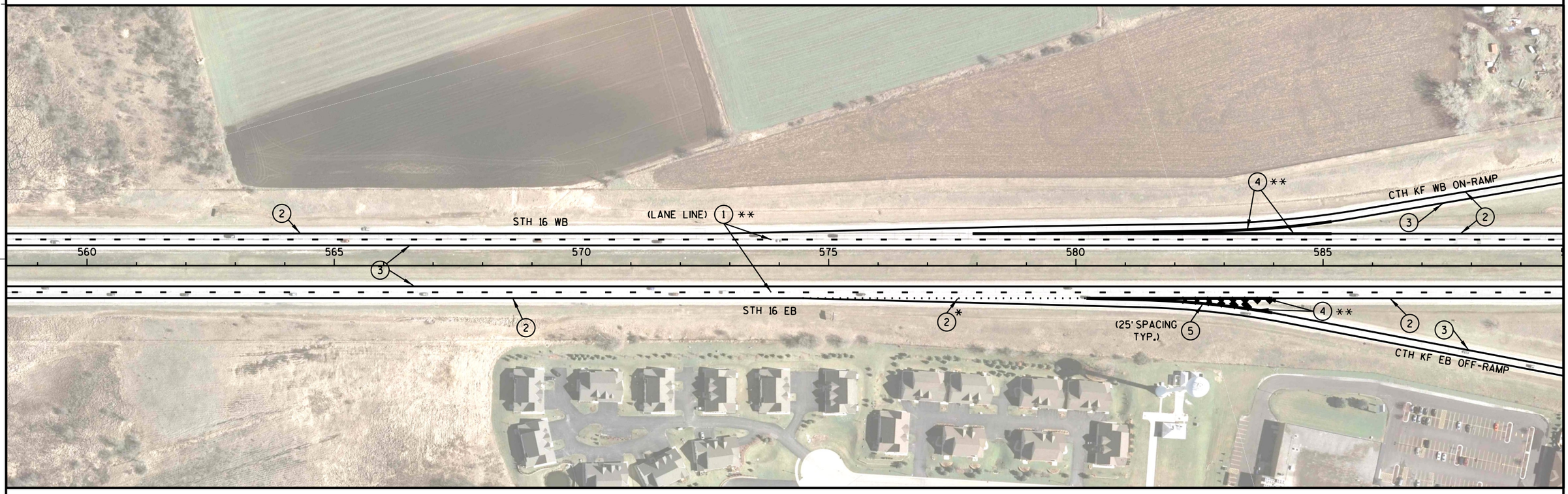
* (3' LINE, 9' GAP)

** REMOVE PAVEMENT MARKING GROOVED TAPE

*** POSITION TIP OF ARROW AT "WRONG WAY" SIGN LOCATION

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 213	E

2



PAVEMENT MARKING LEGEND

1. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH (WHITE) (12.5' LINE, 37.5' SPACE)
2. PAVEMENT MARKING GROOVED WET REFLECTIVE EPOXY 4-INCH (WHITE)
3. PAVEMENT MARKING GROOVED WET REFLECTIVE EPOXY 4-INCH (YELLOW)
4. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 8-INCH (WHITE)
5. PAVEMENT MARKING EPOXY DIAGONAL 24-INCH (WHITE) (45°)
5A. PAVEMENT MARKING EPOXY DIAGONAL 12-INCH (WHITE) (45°)
6. PAVEMENT MARKING ARROWS EPOXY TYPE 4 (WHITE)
7. PAVEMENT MARKING GROOVED WET REFLECTIVE TAPE 8-INCH (WHITE)
8. PAVEMENT MARKING STOP EPOXY LINE 18-INCH (WHITE)
9. PAVEMENT MARKING ARROWS EPOXY TYPE 2 (WHITE)
10. PAVEMENT MARKING ARROWS EPOXY TYPE 3 (WHITE)
11. PAVEMENT MARKING WORDS EPOXY (WHITE)
12. PAVEMENT MARKING CROSSWALK EPOXY 6-INCH (WHITE)
13. PAVEMENT MARKING ARROW EPOXY TYPE 7 (WHITE)
14. PAVEMENT MARKING ISLAND NOSE EPOXY (YELLOW)

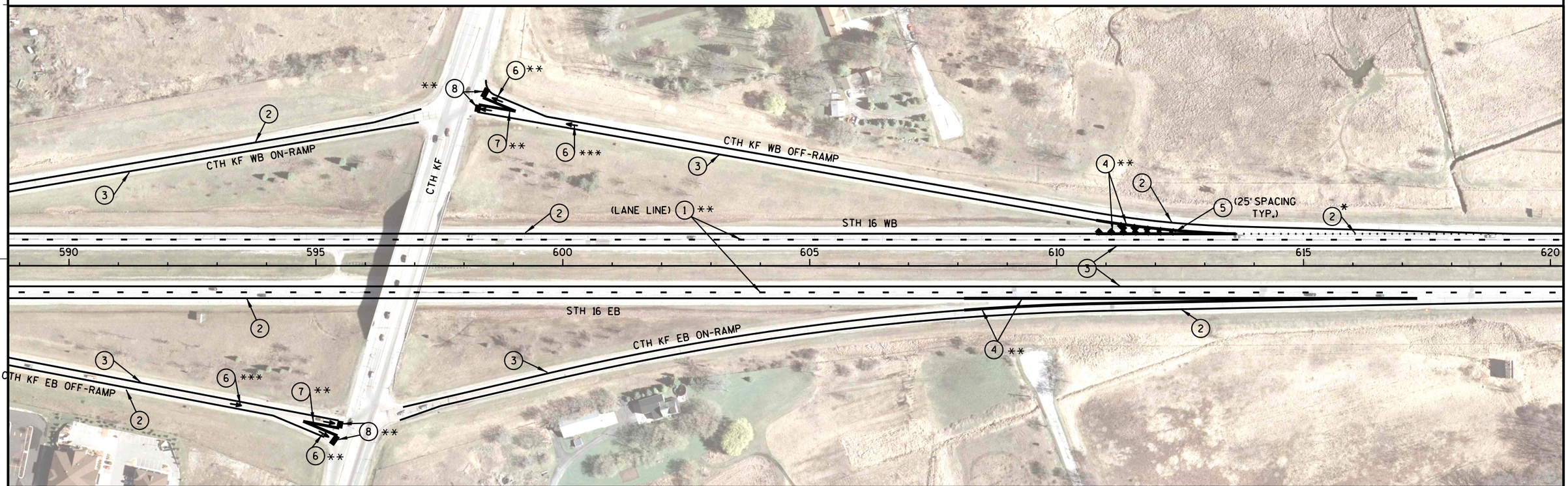
* (3' LINE, 9' GAP)

** REMOVE PAVEMENT MARKING GROOVED TAPE

*** POSITION TIP OF ARROW AT "WRONG WAY" SIGN LOCATION

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 214	E

2



PAVEMENT MARKING LEGEND

1. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH (WHITE) (12.5' LINE, 37.5' SPACE)
2. PAVEMENT MARKING GROOVED WET REFLECTIVE EPOXY 4-INCH (WHITE)
3. PAVEMENT MARKING GROOVED WET REFLECTIVE EPOXY 4-INCH (YELLOW)
4. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 8-INCH (WHITE)
5. PAVEMENT MARKING EPOXY DIAGONAL 24-INCH (WHITE) (45°)
5A. PAVEMENT MARKING EPOXY DIAGONAL 12-INCH (WHITE) (45°)
6. PAVEMENT MARKING ARROWS EPOXY TYPE 4 (WHITE)
7. PAVEMENT MARKING GROOVED WET REFLECTIVE TAPE 8-INCH (WHITE)
8. PAVEMENT MARKING STOP EPOXY LINE 18-INCH (WHITE)
9. PAVEMENT MARKING ARROWS EPOXY TYPE 2 (WHITE)
10. PAVEMENT MARKING ARROWS EPOXY TYPE 3 (WHITE)
11. PAVEMENT MARKING WORDS EPOXY (WHITE)
12. PAVEMENT MARKING CROSSWALK EPOXY 6-INCH (WHITE)
13. PAVEMENT MARKING ARROW EPOXY TYPE 7 (WHITE)
14. PAVEMENT MARKING ISLAND NOSE EPOXY (YELLOW)

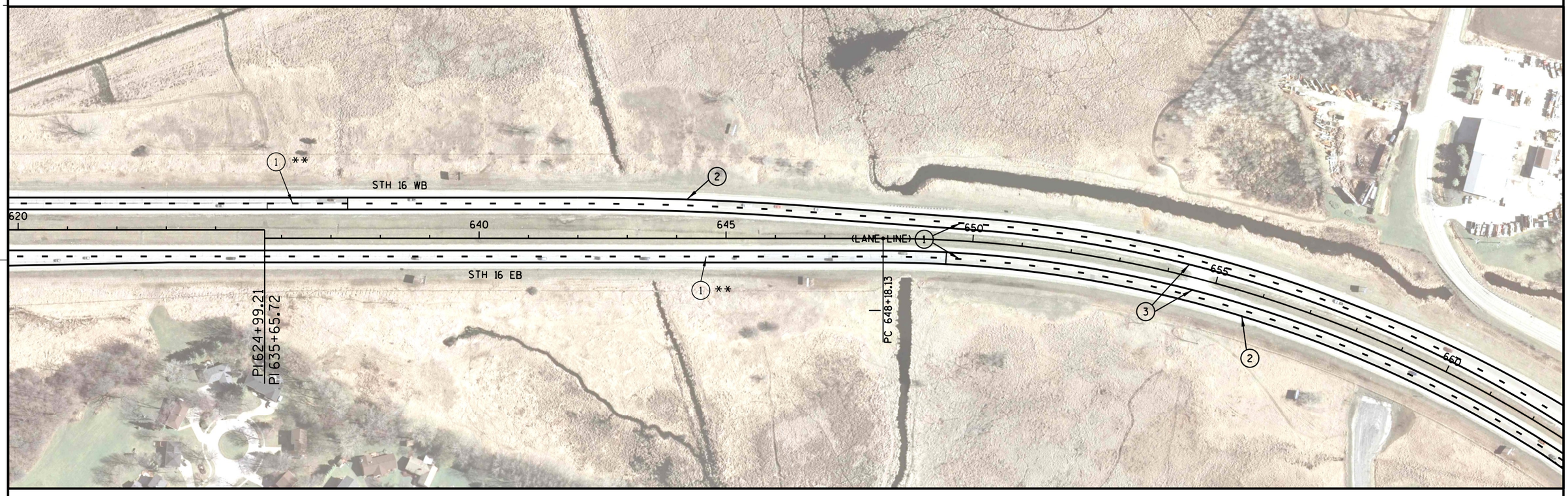
* (3' LINE, 9' GAP)

** REMOVE PAVEMENT MARKING GROOVED TAPE

*** POSITION TIP OF ARROW AT "WRONG WAY" SIGN LOCATION

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 215	E

2



PAVEMENT MARKING LEGEND

1. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH (WHITE) (12.5' LINE, 37.5' SPACE)
2. PAVEMENT MARKING GROOVED WET REFLECTIVE EPOXY 4-INCH (WHITE)
3. PAVEMENT MARKING GROOVED WET REFLECTIVE EPOXY 4-INCH (YELLOW)
4. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 8-INCH (WHITE)
5. PAVEMENT MARKING EPOXY DIAGONAL 24-INCH (WHITE) (45°)
5A. PAVEMENT MARKING EPOXY DIAGONAL 12-INCH (WHITE) (45°)
6. PAVEMENT MARKING ARROWS EPOXY TYPE 4 (WHITE)
7. PAVEMENT MARKING GROOVED WET REFLECTIVE TAPE 8-INCH (WHITE)
8. PAVEMENT MARKING STOP EPOXY LINE 18-INCH (WHITE)
9. PAVEMENT MARKING ARROWS EPOXY TYPE 2 (WHITE)
10. PAVEMENT MARKING ARROWS EPOXY TYPE 3 (WHITE)
11. PAVEMENT MARKING WORDS EPOXY (WHITE)
12. PAVEMENT MARKING CROSSWALK EPOXY 6-INCH (WHITE)
13. PAVEMENT MARKING ARROW EPOXY TYPE 7 (WHITE)
14. PAVEMENT MARKING ISLAND NOSE EPOXY (YELLOW)

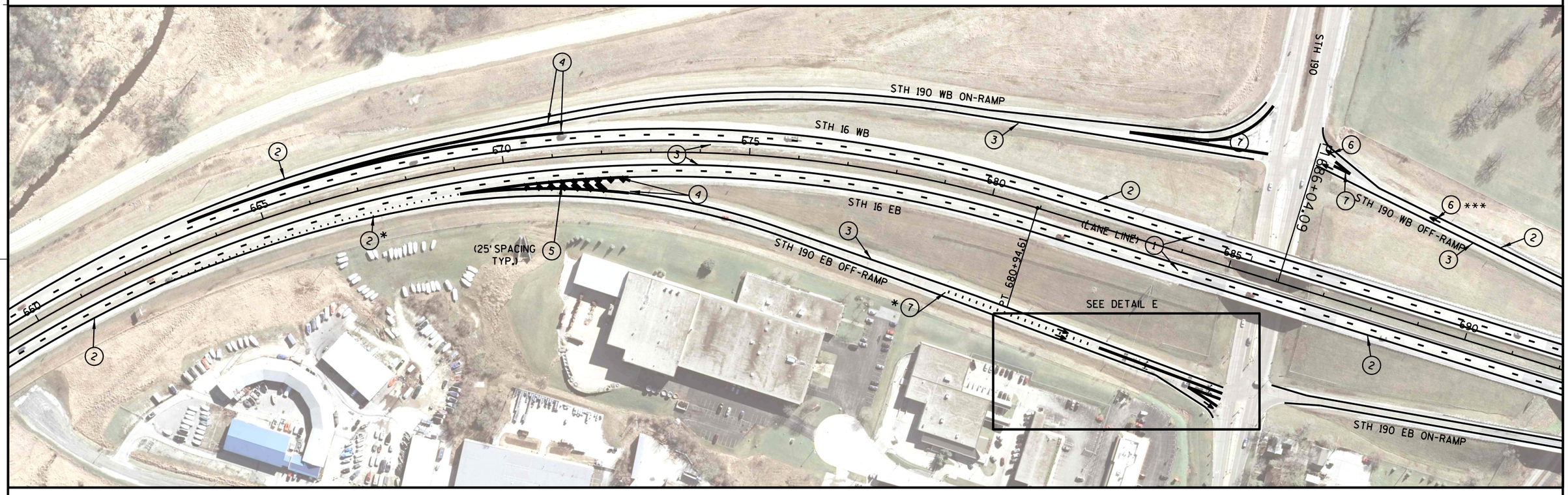
* (3' LINE, 9' GAP)

** REMOVE PAVEMENT MARKING GROOVED TAPE

*** POSITION TIP OF ARROW AT "WRONG WAY" SIGN LOCATION

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 216	E

2



PAVEMENT MARKING LEGEND

1. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH (WHITE) (12.5' LINE, 37.5' SPACE)
2. PAVEMENT MARKING GROOVED WET REFLECTIVE EPOXY 4-INCH (WHITE)
3. PAVEMENT MARKING GROOVED WET REFLECTIVE EPOXY 4-INCH (YELLOW)
4. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 8-INCH (WHITE)
5. PAVEMENT MARKING EPOXY DIAGONAL 24-INCH (WHITE) (45°)
5A. PAVEMENT MARKING EPOXY DIAGONAL 12-INCH (WHITE) (45°)
6. PAVEMENT MARKING ARROWS EPOXY TYPE 4 (WHITE)
7. PAVEMENT MARKING GROOVED WET REFLECTIVE TAPE 8-INCH (WHITE)
8. PAVEMENT MARKING STOP EPOXY LINE 18-INCH (WHITE)
9. PAVEMENT MARKING ARROWS EPOXY TYPE 2 (WHITE)
10. PAVEMENT MARKING ARROWS EPOXY TYPE 3 (WHITE)
11. PAVEMENT MARKING WORDS EPOXY (WHITE)
12. PAVEMENT MARKING CROSSWALK EPOXY 6-INCH (WHITE)
13. PAVEMENT MARKING ARROW EPOXY TYPE 7 (WHITE)
14. PAVEMENT MARKING ISLAND NOSE EPOXY (YELLOW)

* (3' LINE, 9' GAP)

** REMOVE PAVEMENT MARKING GROOVED TAPE

*** POSITION TIP OF ARROW AT "WRONG WAY" SIGN LOCATION

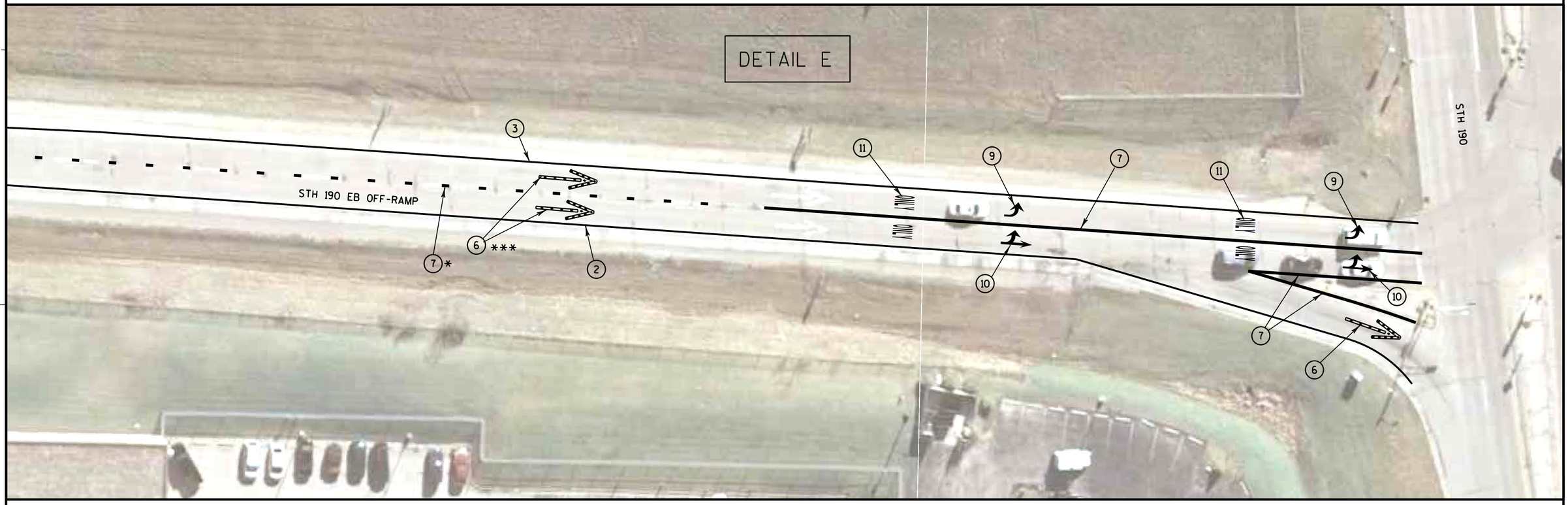
PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 217	E

2

N

2

DETAIL E



PAVEMENT MARKING LEGEND

1. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH (WHITE)(12.5' LINE,37.5' SPACE)
2. PAVEMENT MARKING GROOVED WET REFLECTIVE EPOXY 4-INCH (WHITE)
3. PAVEMENT MARKING GROOVED WET REFLECTIVE EPOXY 4-INCH (YELLOW)
4. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 8-INCH (WHITE)
5. PAVEMENT MARKING EPOXY DIAGONAL 24-INCH (WHITE)(45°)
6. PAVEMENT MARKING ARROWS EPOXY TYPE 4 (WHITE)
7. PAVEMENT MARKING GROOVED WET REFLECTIVE TAPE 8-INCH (WHITE)
8. PAVEMENT MARKING STOP EPOXY LINE 18-INCH (WHITE)
9. PAVEMENT MARKING ARROWS EPOXY TYPE 2 (WHITE)
10. PAVEMENT MARKING ARROW EPOXY TYPE 3 (WHITE)
11. PAVEMENT MARKING WORDS EPOXY (WHITE)
12. PAVEMENT MARKING CROSSWALK EPOXY 6-INCH (WHITE)
13. PAVEMENT MARKING ARROW EPOXY TYPE 7 (WHITE)
14. PAVEMENT MARKING ISLAND NOSE EPOXY (YELLOW)

* (3' LINE, 12' GAP)

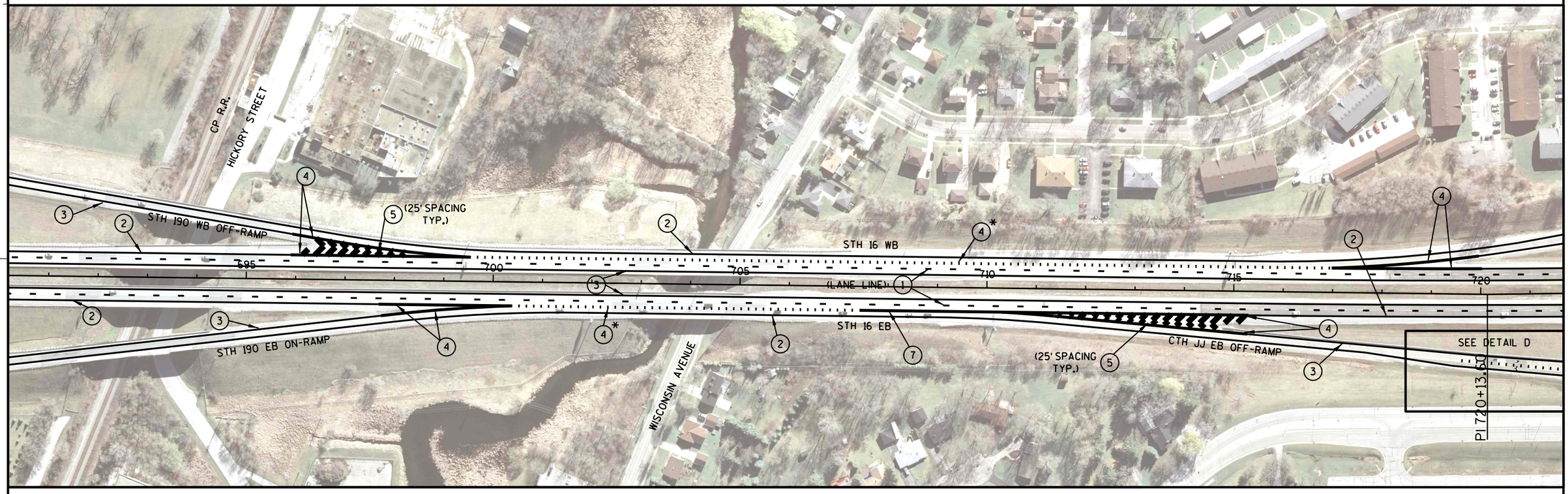
** REMOVE PAVEMENT MARKING GROOVED TAPE

*** POSITION TOP OF TIP OF ARROW AT "WRONG WAY" SIGN LOCATION

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 218	E

2

N



PAVEMENT MARKING LEGEND

1. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH (WHITE) (12.5' LINE, 37.5' SPACE)
2. PAVEMENT MARKING GROOVED WET REFLECTIVE EPOXY 4-INCH (WHITE)
3. PAVEMENT MARKING GROOVED WET REFLECTIVE EPOXY 4-INCH (YELLOW)
4. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 8-INCH (WHITE)
5. PAVEMENT MARKING EPOXY DIAGONAL 24-INCH (WHITE) (45°)
5A. PAVEMENT MARKING EPOXY DIAGONAL 12-INCH (WHITE) (45°)
6. PAVEMENT MARKING ARROWS EPOXY TYPE 4 (WHITE)
7. PAVEMENT MARKING GROOVED WET REFLECTIVE TAPE 8-INCH (WHITE)
8. PAVEMENT MARKING STOP EPOXY LINE 18-INCH (WHITE)
9. PAVEMENT MARKING ARROWS EPOXY TYPE 2 (WHITE)
10. PAVEMENT MARKING ARROWS EPOXY TYPE 3 (WHITE)
11. PAVEMENT MARKING WORDS EPOXY (WHITE)
12. PAVEMENT MARKING CROSSWALK EPOXY 6-INCH (WHITE)
13. PAVEMENT MARKING ARROW EPOXY TYPE 7 (WHITE)
14. PAVEMENT MARKING ISLAND NOSE EPOXY (YELLOW)

* (3' LINE, 9' GAP)

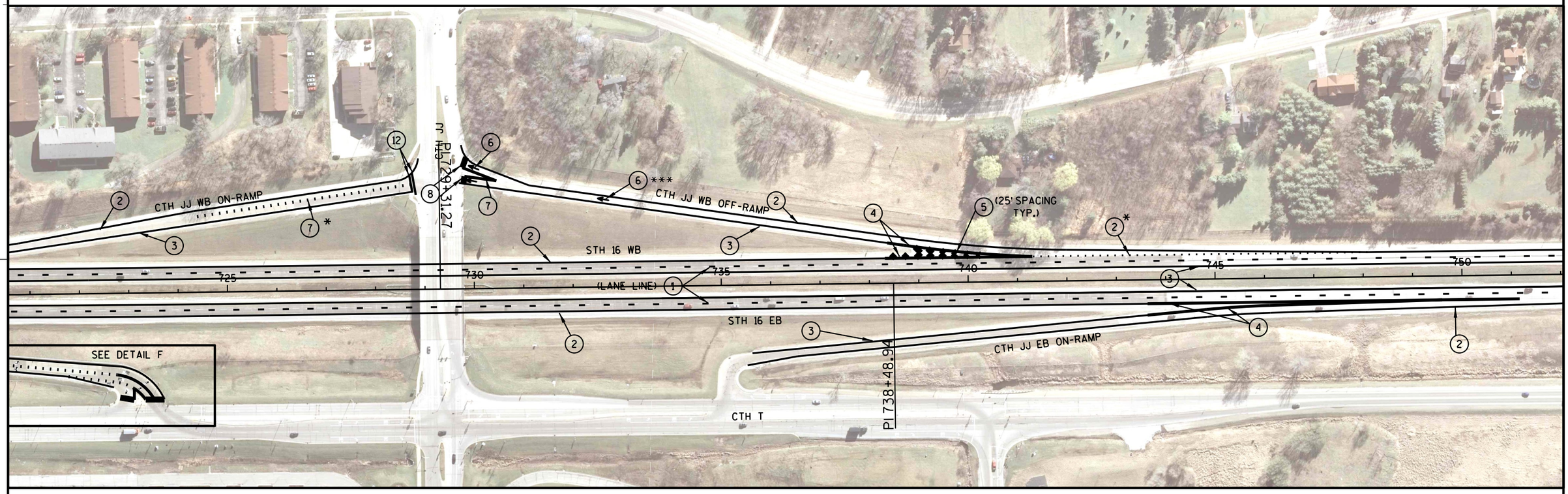
** REMOVE PAVEMENT MARKING GROOVED TAPE

*** POSITION TIP OF ARROW AT "WRONG WAY" SIGN LOCATION

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 219	E

2

N



PAVEMENT MARKING LEGEND

1. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH (WHITE) (12.5' LINE, 37.5' SPACE)
2. PAVEMENT MARKING GROOVED WET REFLECTIVE EPOXY 4-INCH (WHITE)
3. PAVEMENT MARKING GROOVED WET REFLECTIVE EPOXY 4-INCH (YELLOW)
4. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 8-INCH (WHITE)
5. PAVEMENT MARKING EPOXY DIAGONAL 24-INCH (WHITE) (45°)
5A. PAVEMENT MARKING EPOXY DIAGONAL 12-INCH (WHITE) (45°)
6. PAVEMENT MARKING ARROWS EPOXY TYPE 4 (WHITE)
7. PAVEMENT MARKING GROOVED WET REFLECTIVE TAPE 8-INCH (WHITE)
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9. PAVEMENT MARKING ARROWS EPOXY TYPE 2 (WHITE)
10. PAVEMENT MARKING ARROWS EPOXY TYPE 3 (WHITE)
11. PAVEMENT MARKING WORDS EPOXY (WHITE)
12. PAVEMENT MARKING CROSSWALK EPOXY 6-INCH (WHITE)
13. PAVEMENT MARKING ARROW EPOXY TYPE 7 (WHITE)
14. PAVEMENT MARKING ISLAND NOSE EPOXY (YELLOW)

* (3' LINE, 9' GAP)

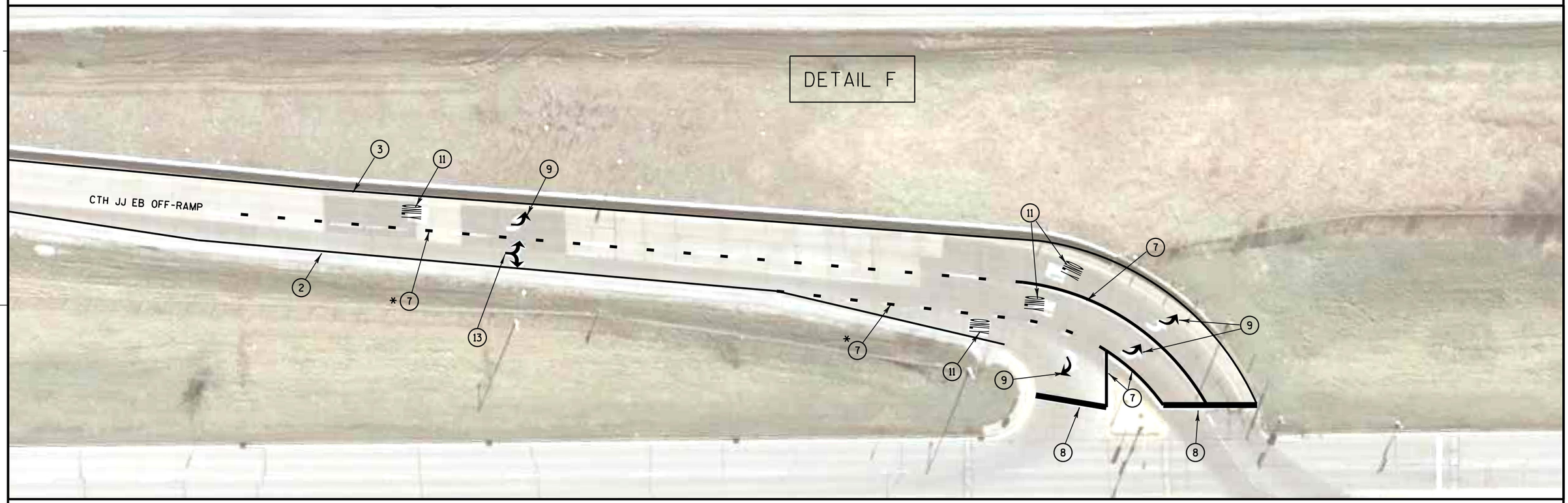
** REMOVE PAVEMENT MARKING GROOVED TAPE

*** POSITION TIP OF ARROW AT "WRONG WAY" SIGN LOCATION

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 220	E

N

2



PAVEMENT MARKING LEGEND

1. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH (WHITE)(12.5' LINE,37.5' SPACE)
2. PAVEMENT MARKING GROOVED WET REFLECTIVE EPOXY 4-INCH (WHITE)
3. PAVEMENT MARKING GROOVED WET REFLECTIVE EPOXY 4-INCH (YELLOW)
4. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 8-INCH (WHITE)
5. PAVEMENT MARKING EPOXY DIAGONAL 24-INCH (WHITE)(45°)
6. PAVEMENT MARKING ARROWS EPOXY TYPE 4 (WHITE)
7. PAVEMENT MARKING GROOVED WET REFLECTIVE TAPE 8-INCH (WHITE)
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10. PAVEMENT MARKING ARROW EPOXY TYPE 3 (WHITE)
11. PAVEMENT MARKING WORDS EPOXY (WHITE)
12. PAVEMENT MARKING CROSSWALK EPOXY 6-INCH (WHITE)
13. PAVEMENT MARKING ARROW EPOXY TYPE 7 (WHITE)
14. PAVEMENT MARKING ISLAND NOSE EPOXY (YELLOW)

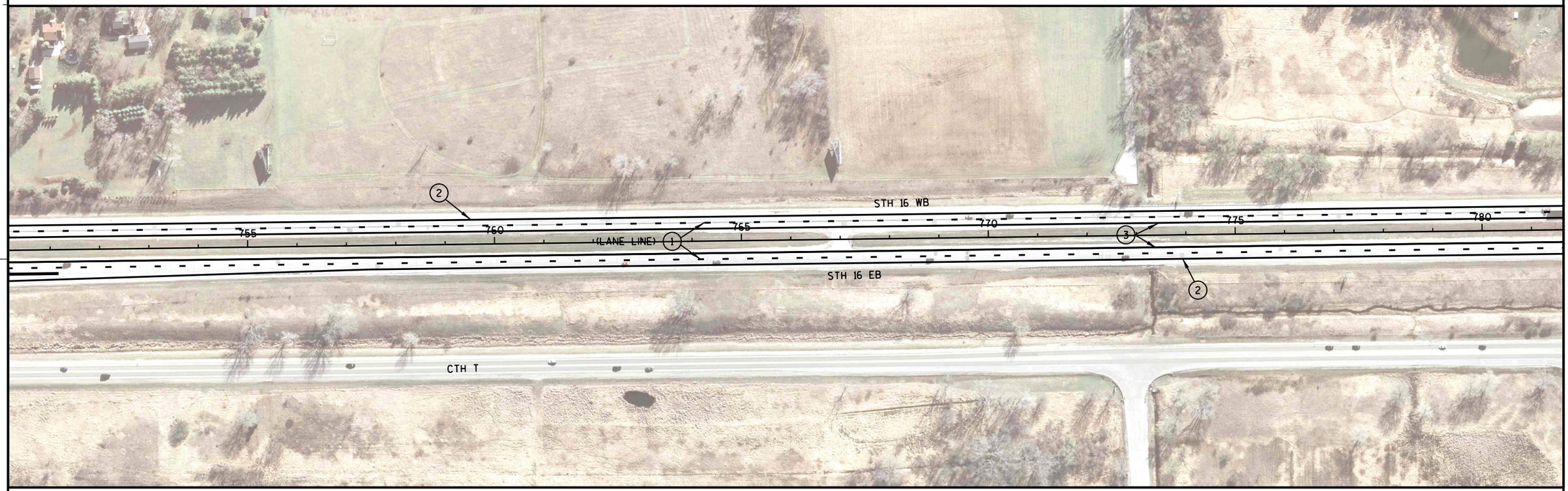
* (3' LINE, 12' GAP)

** REMOVE PAVEMENT MARKING GROOVED TAPE

*** POSITION TOP OF TIP OF ARROW AT "WRONG WAY" SIGN LOCATION

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 221	E

2



PAVEMENT MARKING LEGEND

1. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH (WHITE) (12.5' LINE, 37.5' SPACE)
2. PAVEMENT MARKING GROOVED WET REFLECTIVE EPOXY 4-INCH (WHITE)
3. PAVEMENT MARKING GROOVED WET REFLECTIVE EPOXY 4-INCH (YELLOW)
4. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 8-INCH (WHITE)
5. PAVEMENT MARKING EPOXY DIAGONAL 24-INCH (WHITE) (45°)
5A. PAVEMENT MARKING EPOXY DIAGONAL 12-INCH (WHITE) (45°)
6. PAVEMENT MARKING ARROWS EPOXY TYPE 4 (WHITE)
7. PAVEMENT MARKING GROOVED WET REFLECTIVE TAPE 8-INCH (WHITE)
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9. PAVEMENT MARKING ARROWS EPOXY TYPE 2 (WHITE)
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11. PAVEMENT MARKING WORDS EPOXY (WHITE)
12. PAVEMENT MARKING CROSSWALK EPOXY 6-INCH (WHITE)
13. PAVEMENT MARKING ARROW EPOXY TYPE 7 (WHITE)
14. PAVEMENT MARKING ISLAND NOSE EPOXY (YELLOW)

* (3' LINE, 9' GAP)

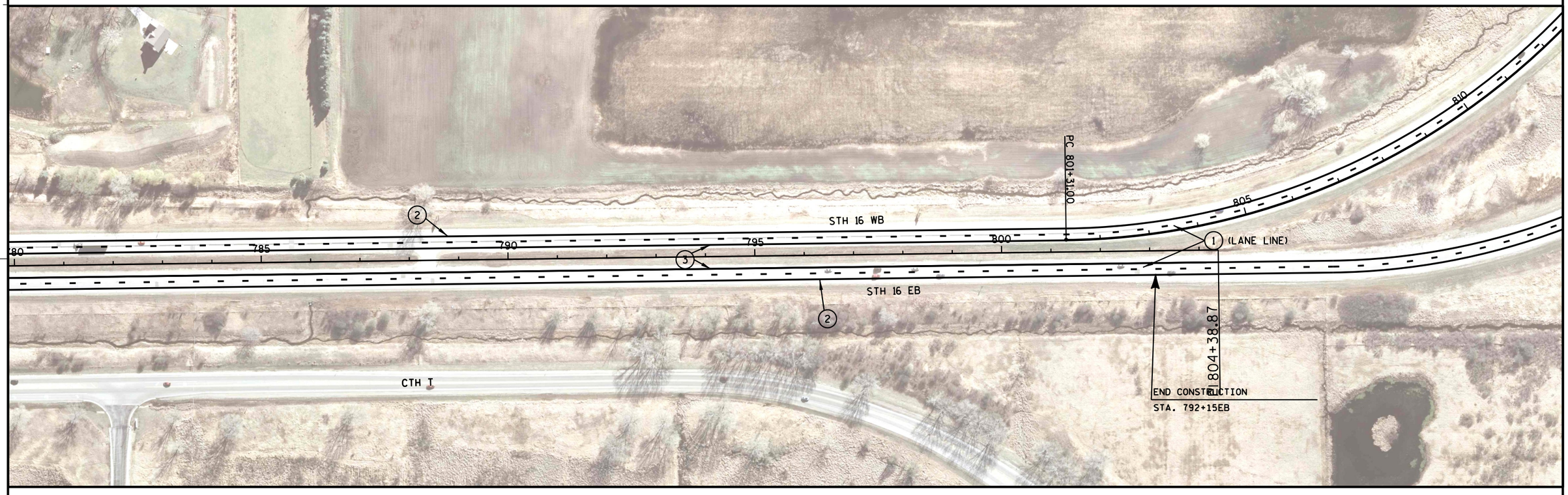
** REMOVE PAVEMENT MARKING GROOVED TAPE

*** POSITION TIP OF ARROW AT "WRONG WAY" SIGN LOCATION

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 222	E

2

N



PAVEMENT MARKING LEGEND

(1) PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH (WHITE) (12.5' LINE, 37.5' SPACE)

(2) PAVEMENT MARKING GROOVED WET REFLECTIVE EPOXY 4-INCH (WHITE)

(3) PAVEMENT MARKING GROOVED WET REFLECTIVE EPOXY 4-INCH (YELLOW)

(4) PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 8-INCH (WHITE)

(5) PAVEMENT MARKING EPOXY DIAGONAL 24-INCH (WHITE) (45°)

(5A) PAVEMENT MARKING EPOXY DIAGONAL 12-INCH (WHITE) (45°)

(6) PAVEMENT MARKING ARROWS EPOXY TYPE 4 (WHITE)

(7) PAVEMENT MARKING GROOVED WET REFLECTIVE TAPE 8-INCH (WHITE)

(8) PAVEMENT MARKING STOP EPOXY LINE 18-INCH (WHITE)

(9) PAVEMENT MARKING ARROWS EPOXY TYPE 2 (WHITE)

(10) PAVEMENT MARKING ARROWS EPOXY TYPE 3 (WHITE)

(11) PAVEMENT MARKING WORDS EPOXY (WHITE)

(12) PAVEMENT MARKING CROSSWALK EPOXY 6-INCH (WHITE)

(13) PAVEMENT MARKING ARROW EPOXY TYPE 7 (WHITE)

(14) PAVEMENT MARKING ISLAND NOSE EPOXY (YELLOW)

* (3' LINE, 9' GAP)

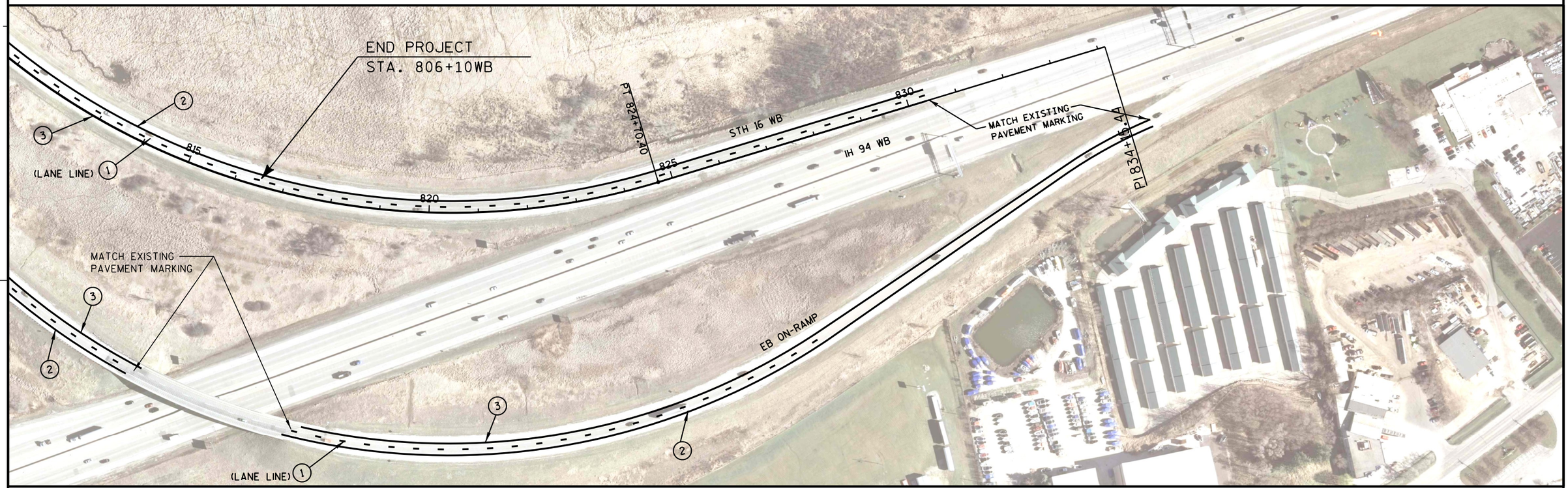
** REMOVE PAVEMENT MARKING GROOVED TAPE

*** POSITION TIP OF ARROW AT "WRONG WAY" SIGN LOCATION

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 223	E

2

N



PAVEMENT MARKING LEGEND

1. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH (WHITE) (12.5' LINE, 37.5' SPACE)
2. PAVEMENT MARKING GROOVED WET REFLECTIVE EPOXY 4-INCH (WHITE)
3. PAVEMENT MARKING GROOVED WET REFLECTIVE EPOXY 4-INCH (YELLOW)
4. PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 8-INCH (WHITE)
5. PAVEMENT MARKING EPOXY DIAGONAL 24-INCH (WHITE) (45°)
5A. PAVEMENT MARKING EPOXY DIAGONAL 12-INCH (WHITE) (45°)
6. PAVEMENT MARKING ARROWS EPOXY TYPE 4 (WHITE)
7. PAVEMENT MARKING GROOVED WET REFLECTIVE TAPE 8-INCH (WHITE)
8. PAVEMENT MARKING STOP EPOXY LINE 18-INCH (WHITE)
9. PAVEMENT MARKING ARROWS EPOXY TYPE 2 (WHITE)
10. PAVEMENT MARKING ARROWS EPOXY TYPE 3 (WHITE)
11. PAVEMENT MARKING WORDS EPOXY (WHITE)
12. PAVEMENT MARKING CROSSWALK EPOXY 6-INCH (WHITE)
13. PAVEMENT MARKING ARROW EPOXY TYPE 7 (WHITE)
14. PAVEMENT MARKING ISLAND NOSE EPOXY (YELLOW)

* (3' LINE, 9' GAP)

** REMOVE PAVEMENT MARKING GROOVED TAPE

*** POSITION TIP OF ARROW AT "WRONG WAY" SIGN LOCATION

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PAVEMENT MARKING	SHEET 224	E

2

2

MAX. XX WIDTH W12-52

XX MILES AHEAD W057-52 36" X 24"

INSTALL ON EACH APPROACH AT THE CLOSEST INTERSECTION WITH A STATE OR COUNTY TRUNK HIGHWAY, OR AS DIRECTED BY THE ENGINEER. WIDTH ON SIGN TO BE APPROX. 1 FOOT LESS THAN AVAILABLE WIDTH (OMIT IF AVAILABLE WIDTH IS MORE THAN 16 FEET).

N

FM-02

LANE CLOSURES AHEAD
16 EAST
EXPECT DELAYS

(SEE FIXED MESSAGE SIGN DETAIL)
PLACE ON STH 16 WEST OF STH 67
AND ON STH 67 NORTH OF STH 16

CTH E
SEE SDD TRAFFIC CONTROL,
EXIT AND ENTRANCE RAMP
WITHIN LANE CLOSURE
AND
SDD TRAFFIC CONTROL,
EXIT RAMP CLOSURE

CTH C
SEE SDD TRAFFIC CONTROL,
EXIT AND ENTRANCE RAMP
WITHIN LANE CLOSURE
AND
SDD TRAFFIC CONTROL,
EXIT RAMP CLOSURE

sth 83
SEE SDD TRAFFIC CONTROL,
EXIT AND ENTRANCE RAMP
WITHIN LANE CLOSURE
AND
SDD TRAFFIC CONTROL,
EXIT RAMP CLOSURE

CTH KC
SEE SDD TRAFFIC CONTROL,
EXIT AND ENTRANCE RAMP
WITHIN LANE CLOSURE
AND
SDD TRAFFIC CONTROL,
EXIT RAMP CLOSURE

BEGIN WESTBOUND LANE CLOSURE
SEE SDD TRAFFIC CONTROL,
LANE CLOSURE, SPEED REDUCED

BEGIN PROJECT

STH 16 MEDIAN AT CTH P
SEE TRAFFIC CONTROL DETAILS,
TRAFFIC CONTROL, SHOULDER CLOSURE
WITH CONCRETE BARRIER TEMPORARY

BEGIN EASTBOUND LANE CLOSURE
SEE SDD TRAFFIC CONTROL,
LANE CLOSURE, SPEEDS REDUCED

STH 16 MEDIAN AT CTH C
SEE TRAFFIC CONTROL DETAILS,
TRAFFIC CONTROL, SHOULDER CLOSURE
WITH CONCRETE BARRIER TEMPORARY

STH 16 MEDIAN AT CTH KC
SEE TRAFFIC CONTROL DETAILS,
TRAFFIC CONTROL, SHOULDER CLOSURE
WITH CONCRETE BARRIER TEMPORARY

STH 16 MEDIAN AT CTH C
SEE TRAFFIC CONTROL DETAILS,
TRAFFIC CONTROL, SHOULDER CLOSURE
WITH CONCRETE BARRIER TEMPORARY

CTH JJ
SEE SDD TRAFFIC CONTROL,
EXIT AND ENTRANCE RAMP
WITHIN LANE CLOSURE
AND
SDD TRAFFIC CONTROL,
EXIT RAMP CLOSURE

STH 16 MEDIAN AT CTH JJ
SEE TRAFFIC CONTROL DETAILS,
TRAFFIC CONTROL, SHOULDER CLOSURE
WITH CONCRETE BARRIER TEMPORARY

BEGIN EASTBOUND LANE CLOSURE
SEE SDD TRAFFIC CONTROL,
LANE CLOSURE, SPEED REDUCED

STH 190
SEE SDD TRAFFIC CONTROL,
EXIT AND ENTRANCE RAMP
WITHIN LANE CLOSURE
AND
SDD TRAFFIC CONTROL,
EXIT RAMP CLOSURE

FM-01

LANE CLOSURES AHEAD
16 WEST
EXPECT DELAYS

(SEE FIXED MESSAGE SIGN DETAIL)
PLACE ON WB IH-94 EAST OF
STH 16 EXIT

BEGIN WESTBOUND LANE CLOSURE
SEE SDD TRAFFIC CONTROL,
LANE CLOSURE, SPEED REDUCED

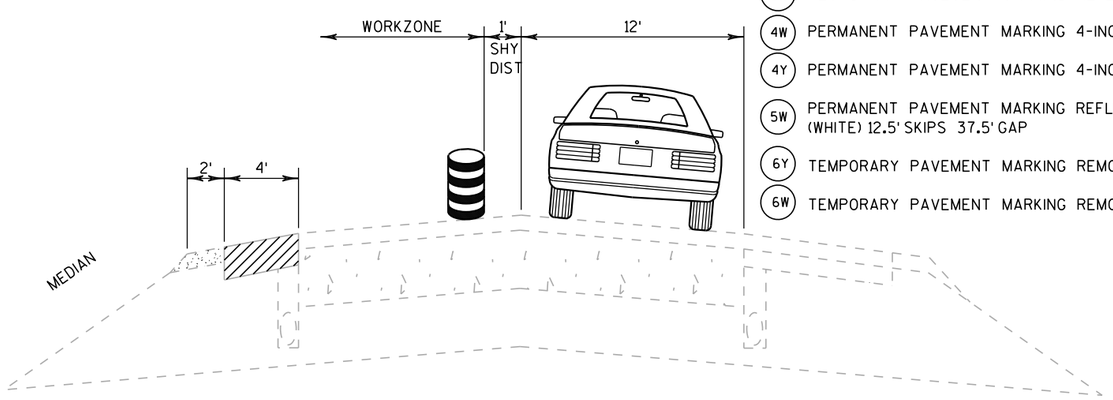
Sussex
Hartland
Delafield
Pewaukee
Bark R.

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	TRAFFIC CONTROL OVERVIEW	SHEET 225 E

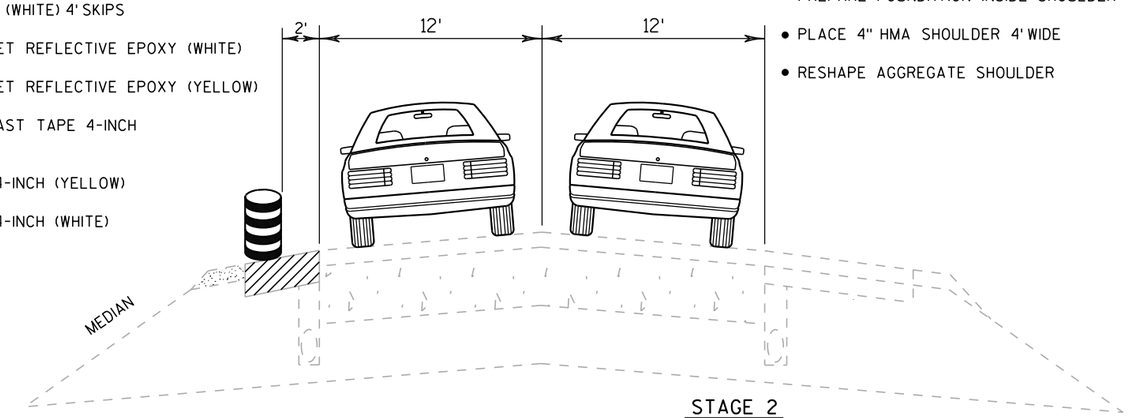
2

LEGEND

- (1W) TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH 4' SKIPS (WHITE)
- (2W) TEMPORARY PAVEMENT MARKING REFLECTIVE PAINT 4-INCH (WHITE)
- (2Y) TEMPORARY PAVEMENT MARKING REFLECTIVE PAINT 4-INCH (YELLOW)
- (3W) TEMPORARY PAVEMENT MARKING REFLECTIVE 4-INCH (WHITE) 4' SKIPS
- (4W) PERMANENT PAVEMENT MARKING 4-INCH GROOVED WET REFLECTIVE EPOXY (WHITE)
- (4Y) PERMANENT PAVEMENT MARKING 4-INCH GROOVED WET REFLECTIVE EPOXY (YELLOW)
- (5W) PERMANENT PAVEMENT MARKING REFLECTIVE CONTRAST TAPE 4-INCH (WHITE) 12.5' SKIPS 37.5' GAP
- (6Y) TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (YELLOW)
- (6W) TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE)



STAGE 1
OFF PEAK



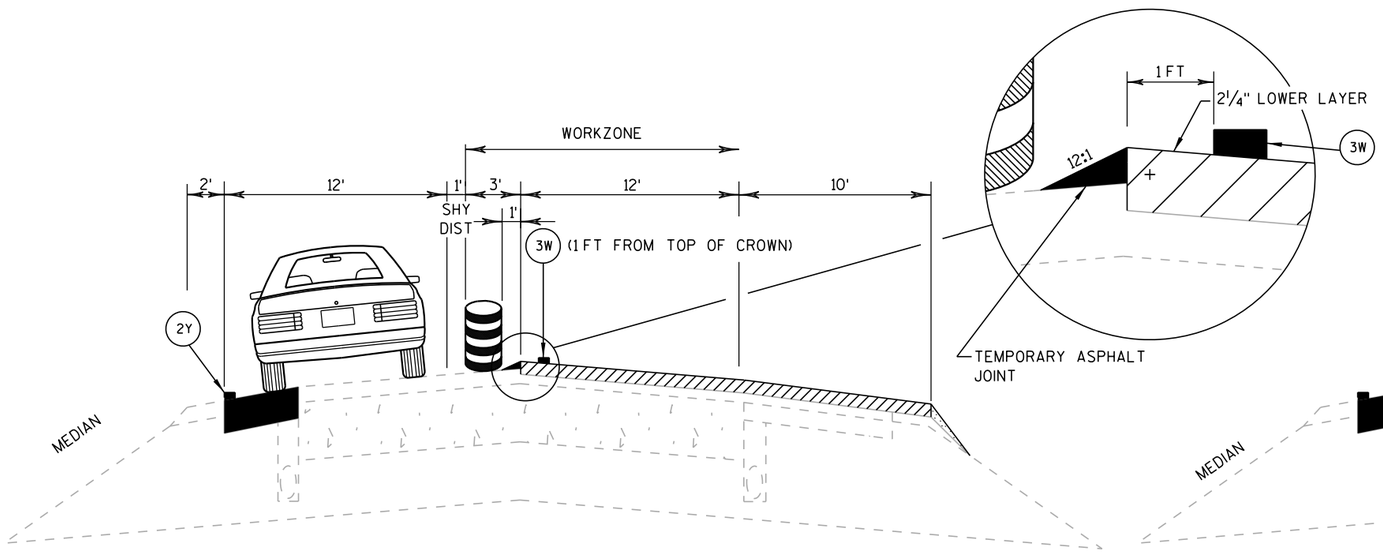
STAGE 1
PEAK

STAGE 1

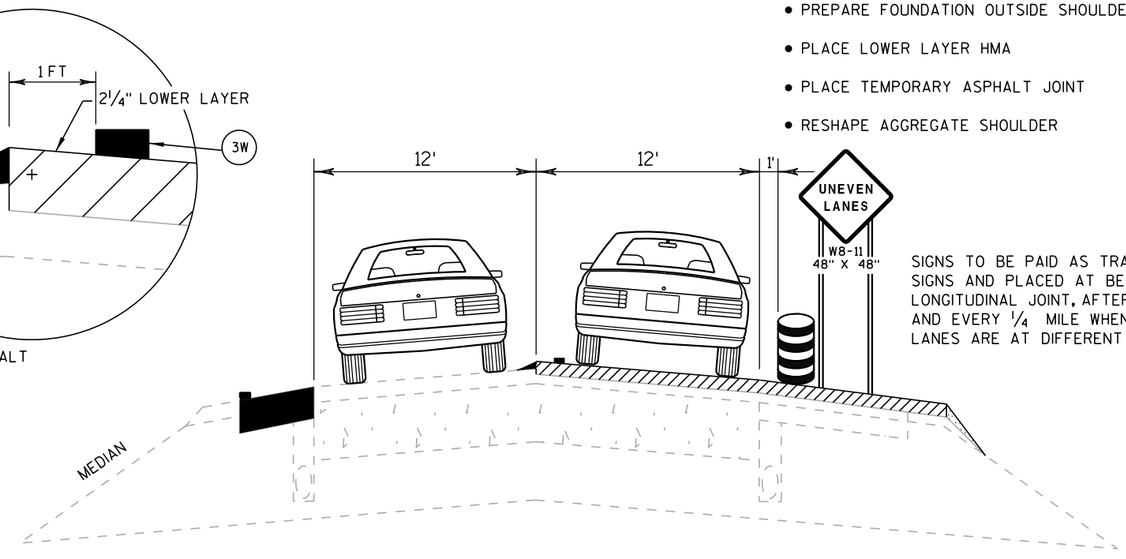
- MILL HMA INSIDE SHOULDER
- PREPARE FOUNDATION INSIDE SHOULDER
- PLACE 4" HMA SHOULDER 4' WIDE
- RESHAPE AGGREGATE SHOULDER

STAGE 2

- CONTINUOUSLY REINFORCED CONCRETE BASE PATCHING
- JOINT AND CRACK REPAIR
- MILL HMA PAVEMENT OF LANE 2 & SHOULDER
- PREPARE FOUNDATION OUTSIDE SHOULDER
- PLACE LOWER LAYER HMA
- PLACE TEMPORARY ASPHALT JOINT
- RESHAPE AGGREGATE SHOULDER



STAGE 2
OFF PEAK



SIGNS TO BE PAID AS TRAFFIC CONTROL SIGNS AND PLACED AT BEGINNING OF LONGITUDINAL JOINT, AFTER ON-RAMP, AND EVERY 1/4 MILE WHEN THE TWO LANES ARE AT DIFFERENT ELEVATIONS

STAGE 2
PEAK

STAGING TYPICAL SECTIONS

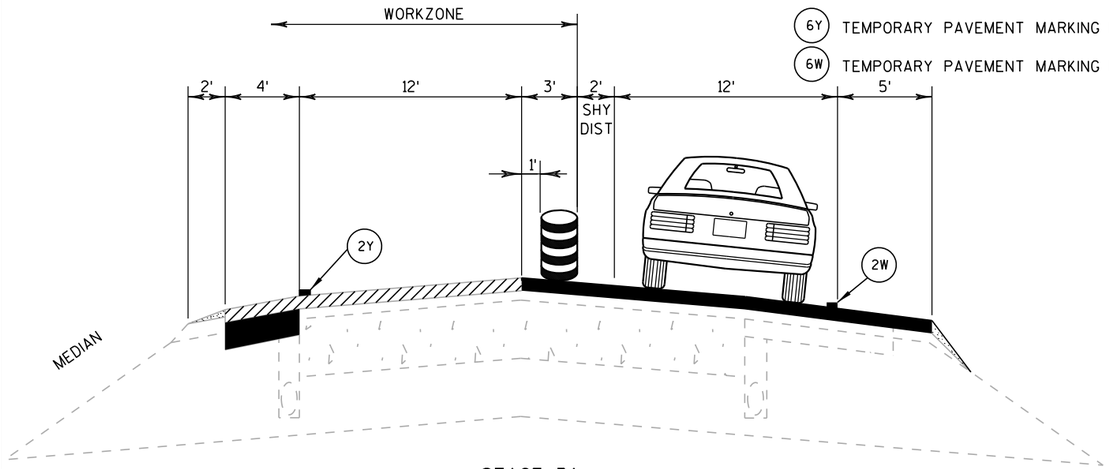
STA. 191+00 - STA. 447+00

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGING TYPICAL SECTIONS	SHEET 226 E

2

LEGEND

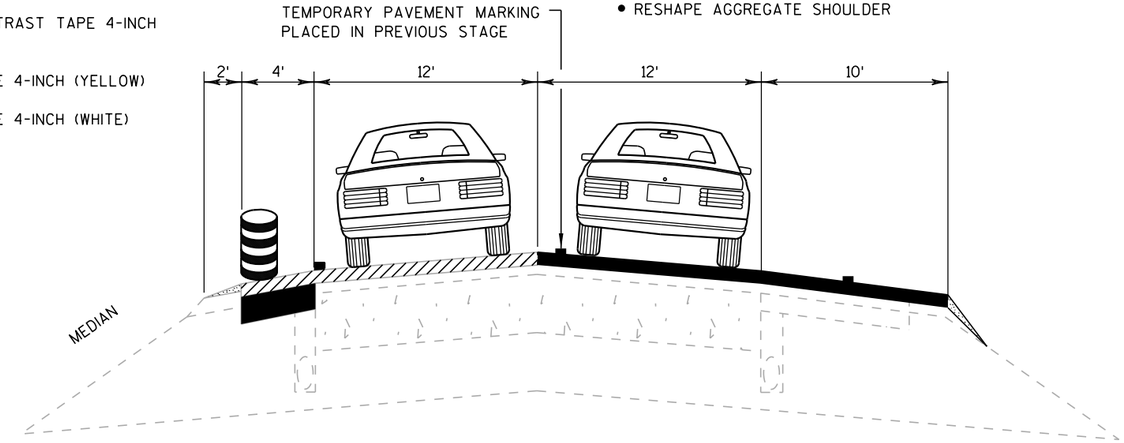
- (1W) TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH 4' SKIPS (WHITE)
- (2W) TEMPORARY PAVEMENT MARKING REFLECTIVE PAINT 4-INCH (WHITE)
- (2Y) TEMPORARY PAVEMENT MARKING REFLECTIVE PAINT 4-INCH (YELLOW)
- (3W) TEMPORARY PAVEMENT MARKING REFLECTIVE 4-INCH (WHITE) 4' SKIPS
- (4W) PERMANENT PAVEMENT MARKING 4-INCH GROOVED WET REFLECTIVE EPOXY (WHITE)
- (4Y) PERMANENT PAVEMENT MARKING 4-INCH GROOVED WET REFLECTIVE EPOXY (YELLOW)
- (5W) PERMANENT PAVEMENT MARKING REFLECTIVE CONTRAST TAPE 4-INCH (WHITE) 12.5' SKIPS 37.5' GAP
- (6Y) TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (YELLOW)
- (6W) TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE)



STAGE 3A
OFF PEAK

STAGE 3A

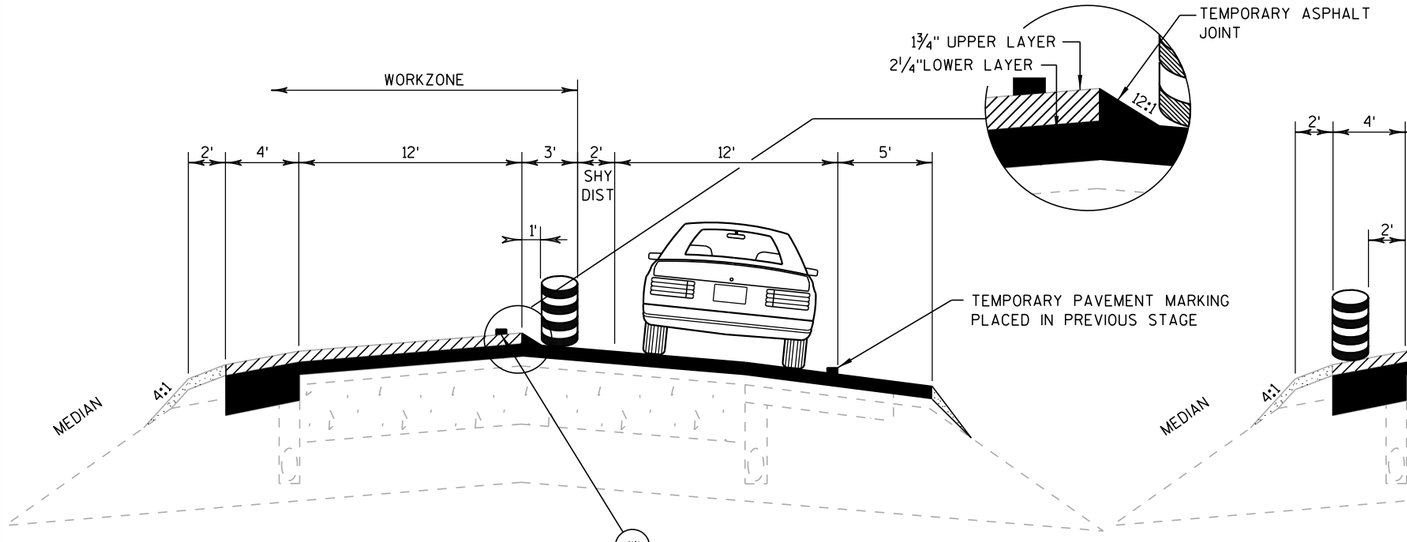
- CONTINUOUSLY REINFORCED CONCRETE BASE PATCHING
- MILL HMA PAVEMENT OF LANE 1 & SHOULDER
- MILL TEMPORARY ASPHALT JOINT (INCIDENTAL TO REMOVING ASPHALTIC SURFACE MILLING ITEM)
- PLACE LOWER LAYER HMA
- RESHAPE AGGREGATE SHOULDER



STAGE 3A
PEAK

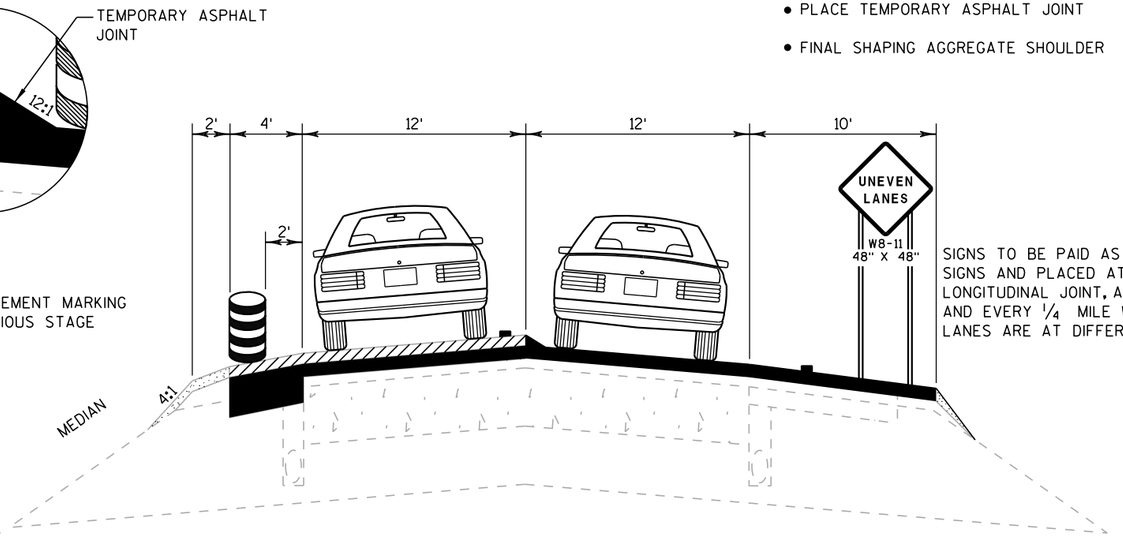
STAGE 3B

- PLACE UPPER LAYER HMA LANE 1 & INSIDE SHOULDER
- PLACE TEMPORARY ASPHALT JOINT
- FINAL SHAPING AGGREGATE SHOULDER



STAGE 3B
OFF PEAK

PLACE IN SAME LOCATION AS PERMANENT PAVEMENT MARKING



SIGNS TO BE PAID AS TRAFFIC CONTROL SIGNS AND PLACED AT BEGINNING OF LONGITUDINAL JOINT, AFTER ON-RAMP, AND EVERY ¼ MILE WHEN THE TWO LANES ARE AT DIFFERENT ELEVATIONS

STAGE 3B
PEAK

STAGING TYPICAL SECTIONS

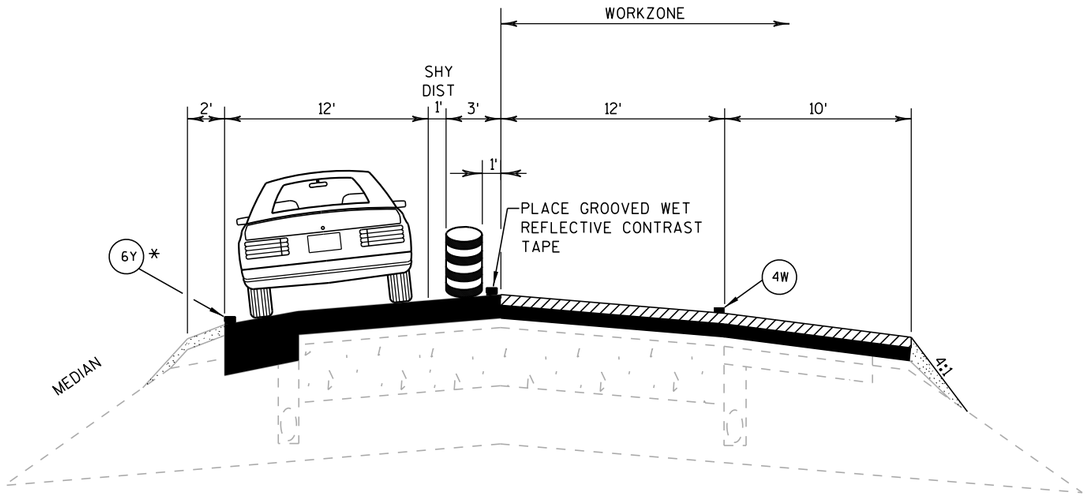
STA. 191+00 - STA. 447+00

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGING TYPICAL SECTIONS	SHEET 227	E

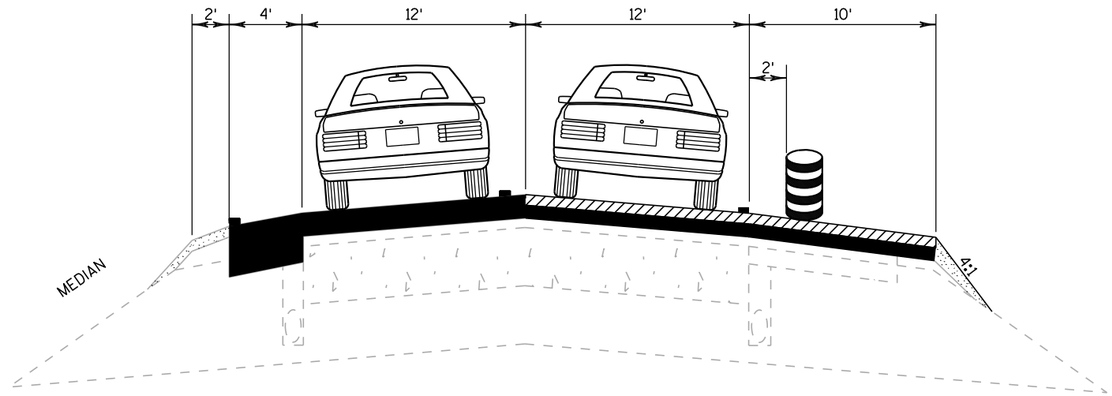
2

STAGE 4

- MILL TEMPORARY ASPHALT JOINT (PAID AS MILLING AND REMOVING TEMPORARY JOINT)
- REHEATING HMA PAVEMENT LONGITUDINAL JOINT
- PLACE UPPER LAYER HMA LANE 2 & SHOULDER
- FINAL SHAPING AGGREGATE SHOULDER
- PLACE GROOVED WET REFLECTIVE CONTRAST TAPE



STAGE 4
OFF PEAK



STAGE 4
PEAK

LEGEND

- (1W) TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH 4' SKIPS (WHITE)
- (2W) TEMPORARY PAVEMENT MARKING REFLECTIVE PAINT 4-INCH (WHITE)
- (2Y) TEMPORARY PAVEMENT MARKING REFLECTIVE PAINT 4-INCH (YELLOW)
- (3W) TEMPORARY PAVEMENT MARKING REFLECTIVE 4-INCH (WHITE) 4' SKIPS
- (4W) PERMANENT PAVEMENT MARKING 4-INCH GROOVED WET REFLECTIVE EPOXY (WHITE)
- (4Y) PERMANENT PAVEMENT MARKING 4-INCH GROOVED WET REFLECTIVE EPOXY (YELLOW)
- (5W) PERMANENT PAVEMENT MARKING REFLECTIVE CONTRAST TAPE 4-INCH (WHITE) 12.5' SKIPS 37.5' GAP
- (6Y) TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (YELLOW)
- (6W) TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE)

STAGING TYPICAL SECTIONS

STA. 191+00 - STA. 447+00

NOTE:

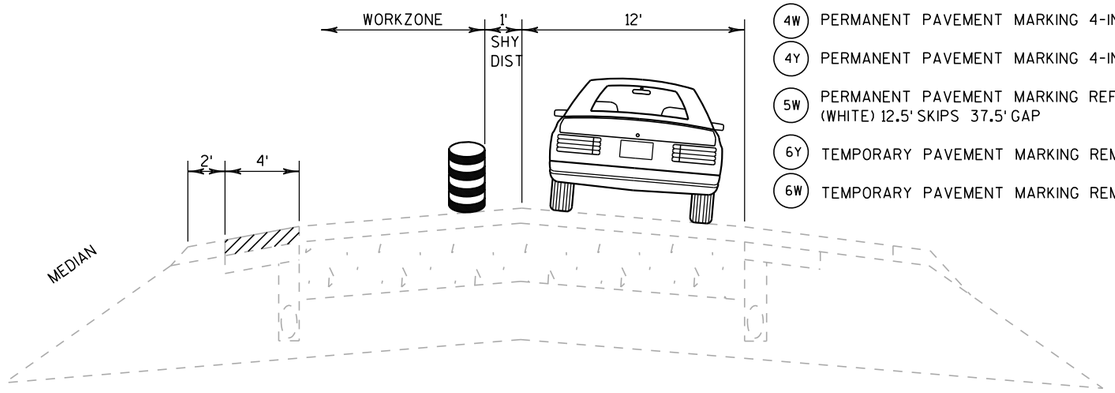
THE CONTRACTOR MAY CLOSE ONE LANE OF STH 16 FOR TRAFFIC DURING OFF PEAK HOURS TO COMPLETE PERMANENT PAVEMENT MARKING AND RUMBLE STRIP INSTALLATION, UTILIZE SDD TRAFFIC CONTROL, LANE CLOSURE, SPEED REDUCTION.

* REMOVE TEMPORARY PAVEMENT MARKING WHEN PERMANENT PAVEMENT MARKING EDGELINE IS INSTALLED.

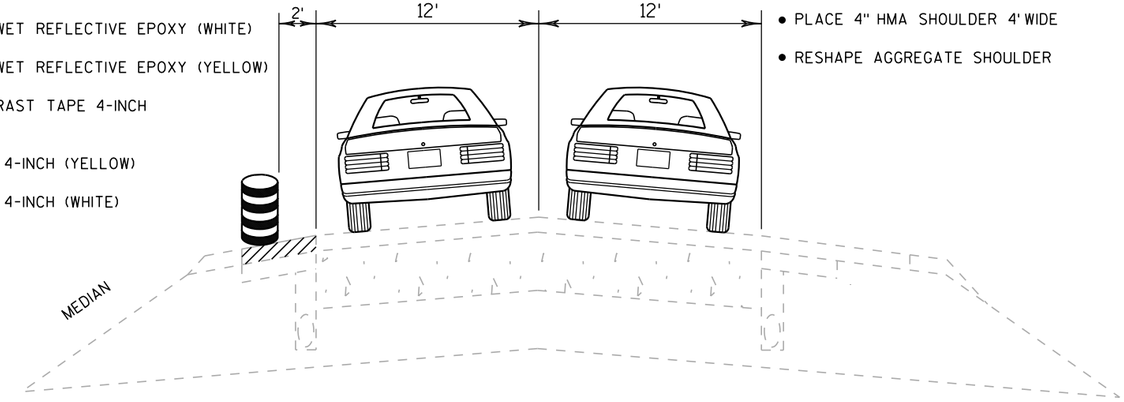
2

LEGEND

- (1W) TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH 4' SKIPS (WHITE)
- (2W) TEMPORARY PAVEMENT MARKING REFLECTIVE PAINT 4-INCH (WHITE)
- (2Y) TEMPORARY PAVEMENT MARKING REFLECTIVE PAINT 4-INCH (YELLOW)
- (3W) TEMPORARY PAVEMENT MARKING REFLECTIVE 4-INCH (WHITE) 4' SKIPS
- (4W) PERMANENT PAVEMENT MARKING 4-INCH GROOVED WET REFLECTIVE EPOXY (WHITE)
- (4Y) PERMANENT PAVEMENT MARKING 4-INCH GROOVED WET REFLECTIVE EPOXY (YELLOW)
- (5W) PERMANENT PAVEMENT MARKING REFLECTIVE CONTRAST TAPE 4-INCH (WHITE) 12.5' SKIPS 37.5' GAP
- (6Y) TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (YELLOW)
- (6W) TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE)



STAGE 1
OFF PEAK



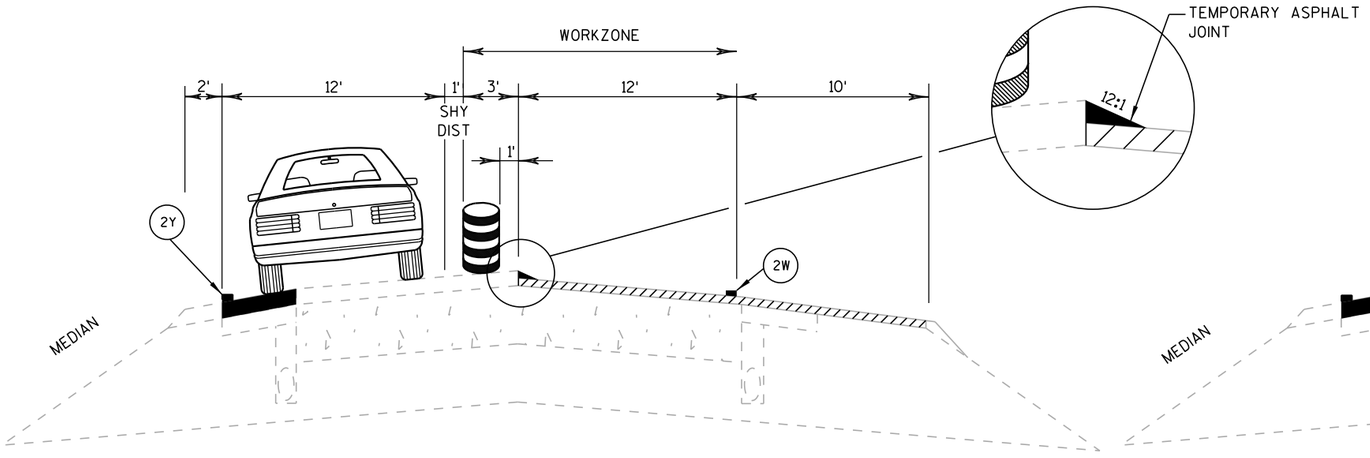
STAGE 1
PEAK

STAGE 1

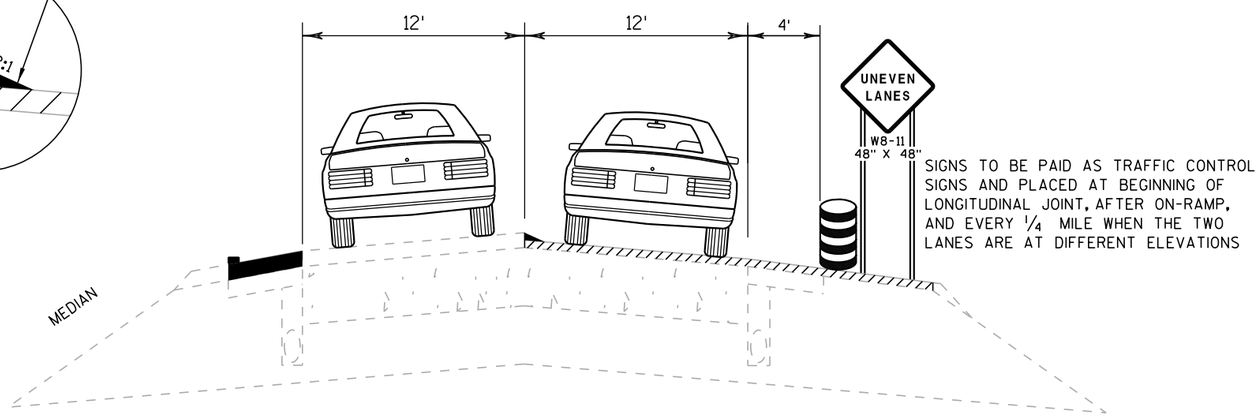
- MILL EXISTING INSIDE SHOULDER (4")
- PREPARE FOUNDATION INSIDE SHOULDER
- PLACE 4" HMA SHOULDER 4' WIDE
- RESHAPE AGGREGATE SHOULDER

STAGE 2A

- MILL HMA PAVEMENT OF LANE 2 & SHOULDER
- PREPARE FOUNDATION OUTSIDE SHOULDER
- PLACE LOWER LAYER HMA IN LANE 2 AND OUTSIDE SHOULDER
- PLACE TEMPORARY ASPHALT JOINT



STAGE 2A
OFF PEAK



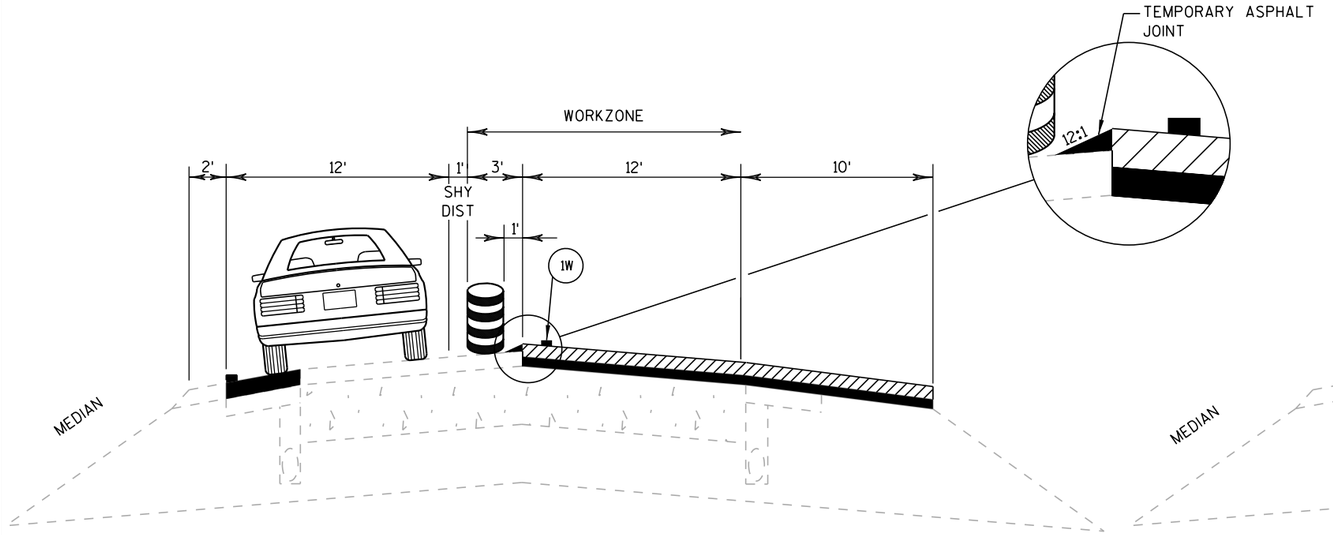
SIGNS TO BE PAID AS TRAFFIC CONTROL SIGNS AND PLACED AT BEGINNING OF LONGITUDINAL JOINT, AFTER ON-RAMP, AND EVERY 1/4 MILE WHEN THE TWO LANES ARE AT DIFFERENT ELEVATIONS

STAGE 2A
PEAK

STAGING TYPICAL SECTIONS

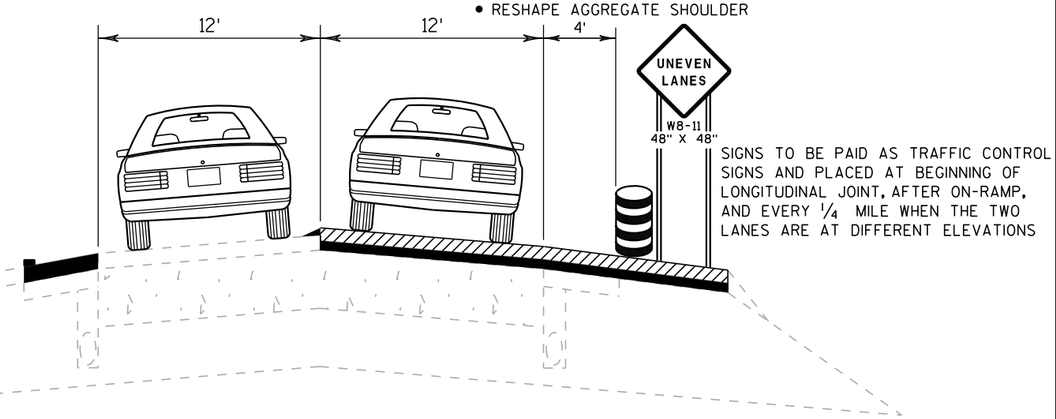
STA. 744+00 - STA. 816+50

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGING TYPICAL SECTIONS	SHEET 229 E



STAGE 2B

- MILL TEMPORARY ASPHALT JOINT (PAID AS MILLING AND REMOVING TEMPORARY JOINT)
- PLACE UPPER LAYER HMA IN LANE 2 AND OUTSIDE SHOULDER
- PLACE TEMPORARY ASPHALT JOINT
- RESHAPE AGGREGATE SHOULDER

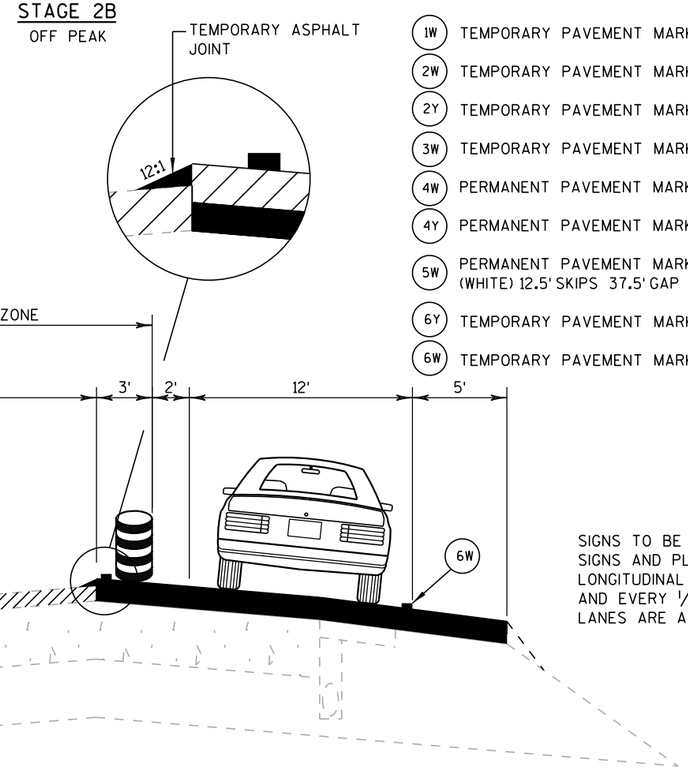


SIGNS TO BE PAID AS TRAFFIC CONTROL SIGNS AND PLACED AT BEGINNING OF LONGITUDINAL JOINT, AFTER ON-RAMP, AND EVERY 1/4 MILE WHEN THE TWO LANES ARE AT DIFFERENT ELEVATIONS

LEGEND

- 1W TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH 4' SKIPS (WHITE)
- 2W TEMPORARY PAVEMENT MARKING REFLECTIVE PAINT 4-INCH (WHITE)
- 2Y TEMPORARY PAVEMENT MARKING REFLECTIVE PAINT 4-INCH (YELLOW)
- 3W TEMPORARY PAVEMENT MARKING REFLECTIVE 4-INCH (WHITE) 4' SKIPS
- 4W PERMANENT PAVEMENT MARKING 4-INCH GROOVED WET REFLECTIVE EPOXY (WHITE)
- 4Y PERMANENT PAVEMENT MARKING 4-INCH GROOVED WET REFLECTIVE EPOXY (YELLOW)
- 5W PERMANENT PAVEMENT MARKING REFLECTIVE CONTRAST TAPE 4-INCH (WHITE) 12.5' SKIPS 37.5' GAP
- 6Y TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (YELLOW)
- 6W TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE)

STAGE 2B
OFF PEAK

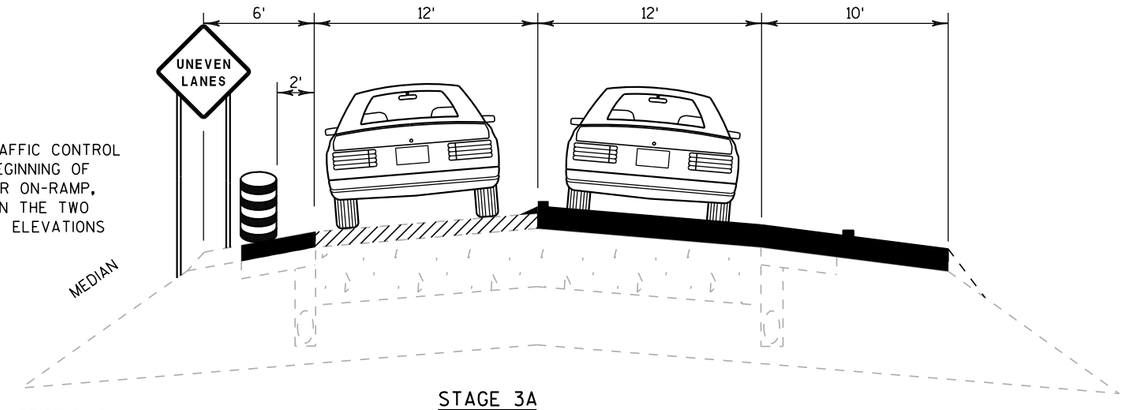


STAGE 2B
PEAK

STAGE 3A

- MILL EXISTING ASPHALT LANE 1
- MILL TEMPORARY ASPHALT JOINT (INCIDENTAL TO REMOVING ASPHALTIC SURFACE MILLING ITEM)
- PLACE LOWER LAYER HMA IN LANE 1
- PLACE TEMPORARY ASPHALT JOINT
- MILL 3/4" INSIDE SHOULDER (MATCH LOWER LAYER HMA)

SIGNS TO BE PAID AS TRAFFIC CONTROL SIGNS AND PLACED AT BEGINNING OF LONGITUDINAL JOINT, AFTER ON-RAMP, AND EVERY 1/4 MILE WHEN THE TWO LANES ARE AT DIFFERENT ELEVATIONS



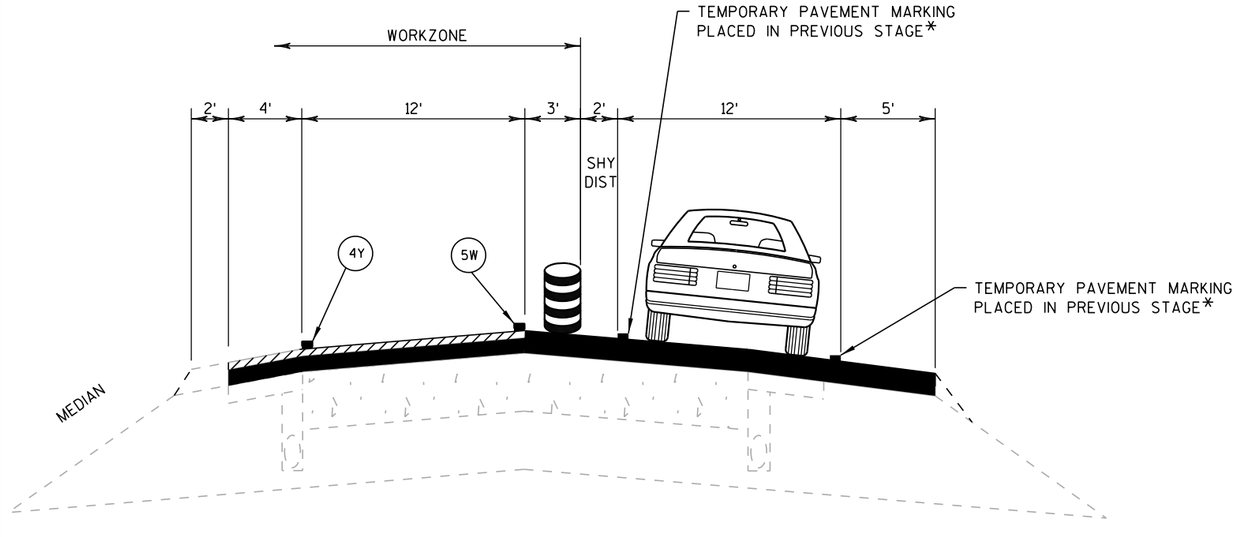
STAGE 3A
OFF PEAK

STAGE 3A
PEAK

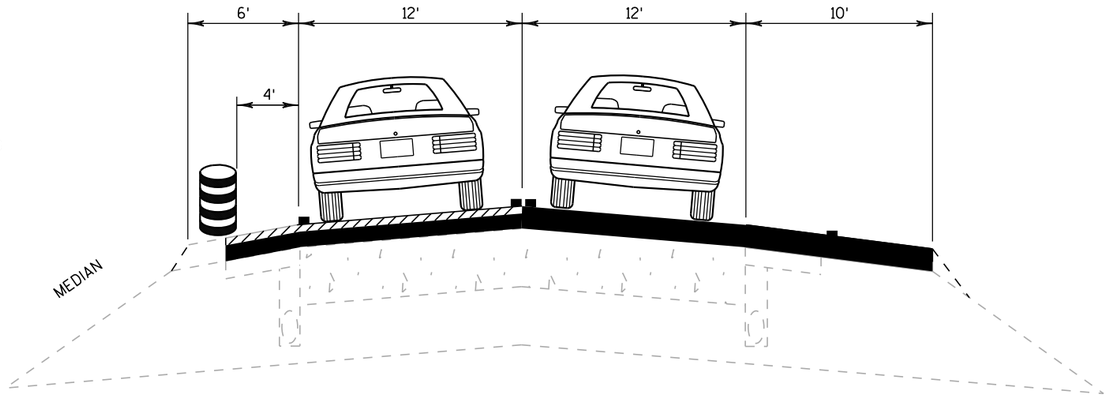
STAGING TYPICAL SECTIONS
STA. 744+00 - STA. 816+50

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGING TYPICAL SECTIONS	SHEET 230 E

2



STAGE 3B
OFF PEAK



STAGE 3B
PEAK

STAGE 3B

- MILL TEMPORARY ASPHALT JOINT (PAID AT MILLING AND REMOVING TEMPORARY JOINT)
- REHEATING HMA LONGITUDINAL JOINTS
- PLACE UPPER LAYER HMA IN LANE INSIDE SHOULDER
- RESHAPE AGGREGATE SHOULDER

STAGING TYPICAL SECTIONS

STA. 744+00 - STA. 816+50

LEGEND

(1W) TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH 4' SKIPS (WHITE)

(2W) TEMPORARY PAVEMENT MARKING REFLECTIVE PAINT 4-INCH (WHITE)

(2Y) TEMPORARY PAVEMENT MARKING REFLECTIVE PAINT 4-INCH (YELLOW)

(3W) TEMPORARY PAVEMENT MARKING REFLECTIVE 4-INCH (WHITE) 4' SKIPS

(4W) PERMANENT PAVEMENT MARKING 4-INCH GROOVED WET REFLECTIVE EPOXY (WHITE)

(4Y) PERMANENT PAVEMENT MARKING 4-INCH GROOVED WET REFLECTIVE EPOXY (YELLOW)

(5W) PERMANENT PAVEMENT MARKING REFLECTIVE CONTRAST TAPE 4-INCH (WHITE) 12.5' SKIPS 37.5' GAP

(6Y) TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (YELLOW)

(6W) TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (WHITE)

NOTE:

THE CONTRACTOR MAY CLOSE ONE LANE OF STH 16 FOR TRAFFIC DURING OFF PEAK HOURS TO COMPLETE PERMANENT PAVEMENT MARKING AND RUMBLE STRIP INSTALLATION, UTILIZE SDD TRAFFIC CONTROL, LANE CLOSURE, SPEEDS GREATER THAN 40 MPH.

* REMOVE TEMPORARY PAVEMENT MARKING WHEN PERMANENT PAVEMENT MARKING EDGELINE IS INSTALLED.

2

N

LANE CLOSED
R11-2-L
48"X30"

BM1010

18" CMP

I.E.=934.60

RIM=941.30

TEMPORARY CURB RAMP

SIDEWALK CLOSED
R9-9
48"X24"

MH

CTH C

38+00

EP: 233+40.02"A"

"A"

BP: 37+66.00

37+66

CP231

BP: 233+06.78"B"

STA 234+25 "B"

3'

5'

4'

STH 16 EB ON RAMP

234+00"B"

WORK ZONE

24" RCP

I.E.=934.68

RIM=941.37

TEMPORARY PEDESTRIAN SURFACE

LANE CLOSED
R11-2-L
48"X30"

CP229

42+00

EP: 233+57.62"D"

BP: 233+31.01"C"

WORK ZONE

234+00"C"

STH 16 WB OFF RAMP

15'

6'

3'

RIM=938.87

CTH C

TEMPORARY CURB RAMP

TEMPORARY PEDESTRIAN SURFACE

LANE CLOSED
R11-2-L
48"X30"

LEGEND

TYPE II BARRICADE WITH/WITHOUT SIGN (ALL WITH ONE WARNING LIGHT, TYPE A, LOW-INTENSITY FLASHING

WORK ZONE

TYPE III BARRICADE WITH/WITHOUT SIGN (ALL WITH ONE WARNING LIGHT, TYPE A, LOW-INTENSITY FLASHING

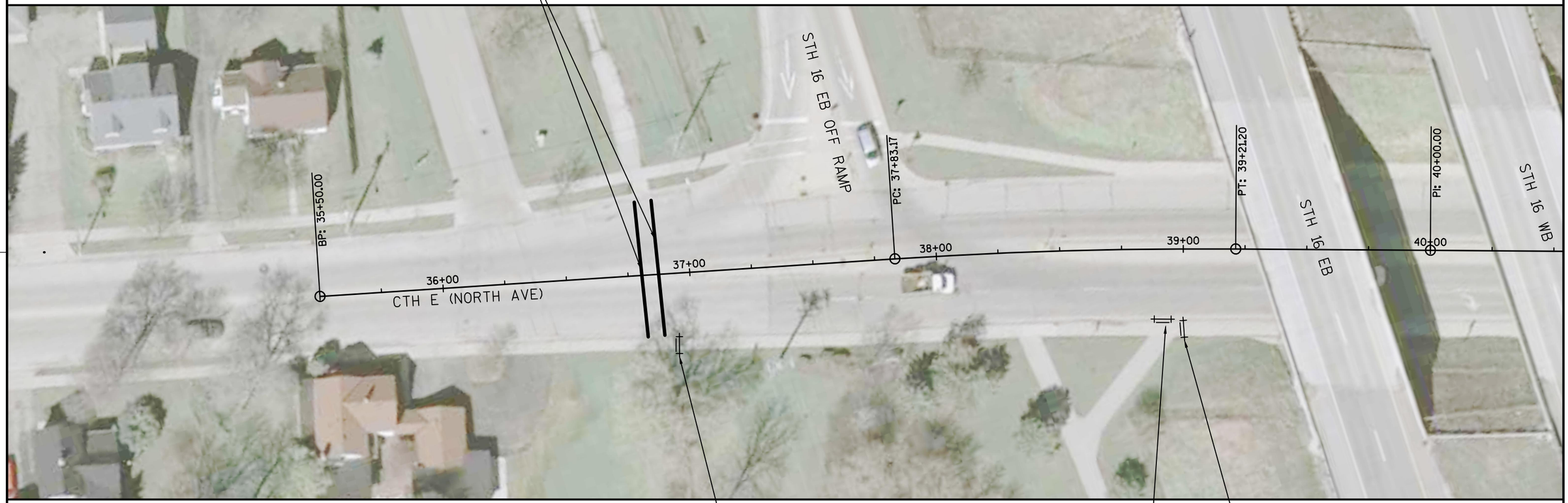
TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C STEADY BURN LIGHT

PROJECT NO:1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	TRAFFIC CONTROL - SIDEWALK CLOSURE - CTH C	SHEET 232	E

FILE NAME : N:\PDS\C3D\13701501\DESIGN\CTHCCURBRAMPSDETOUR.DWG PLOT DATE : 2/6/2017 3:18 PM PLOT BY : ROTIER, STEVEN J PLOT NAME : PLOT SCALE : 1 IN:20 FT

2 2

PAVEMENT MARKING
CROSSWALK EPOXY 6-INCH (WHITE)



LEGEND

TYPE II BARRICADE WITH/WITHOUT SIGN (ALL WITH ONE WANING LIGHT, TYPE A, LOW-INTENSITY

WORK ZONE

SIDEWALK CLOSED AHEAD
CROSS HERE
R9-11
48"X24"

SIDEWALK CLOSED AHEAD
CROSS HERE
R9-11
48"X24"

SIDEWALK CLOSED
R9-9
24"X12"

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 1 SIDEWALK CLOSURE -CTH E EAST	SHEET 233	E

2

2

N

SIDEWALK CLOSED
R9-9
24"X12"

STH 16 WB ON RAMP

STH 16 EB

STH 16 WB

PI: 40+00.00

40+00

41+00

42+00

43+00

44+00

45+00

CTH E (NORTH AVE)

CTH E (NORTH AVE)

WORK ZONE

HARTBROOK DRIVE

SIDEWALK CLOSED
R9-9
24"X12"

TEMPORARY PEDESTRIAN SURFACE
5' WIDE

LEGEND

TYPE II BARRICADE WITH/WITHOUT SIGN (ALL WITH ONE WANING LIGHT, TYPE A, LOW-INTENSITY

WORK ZONE

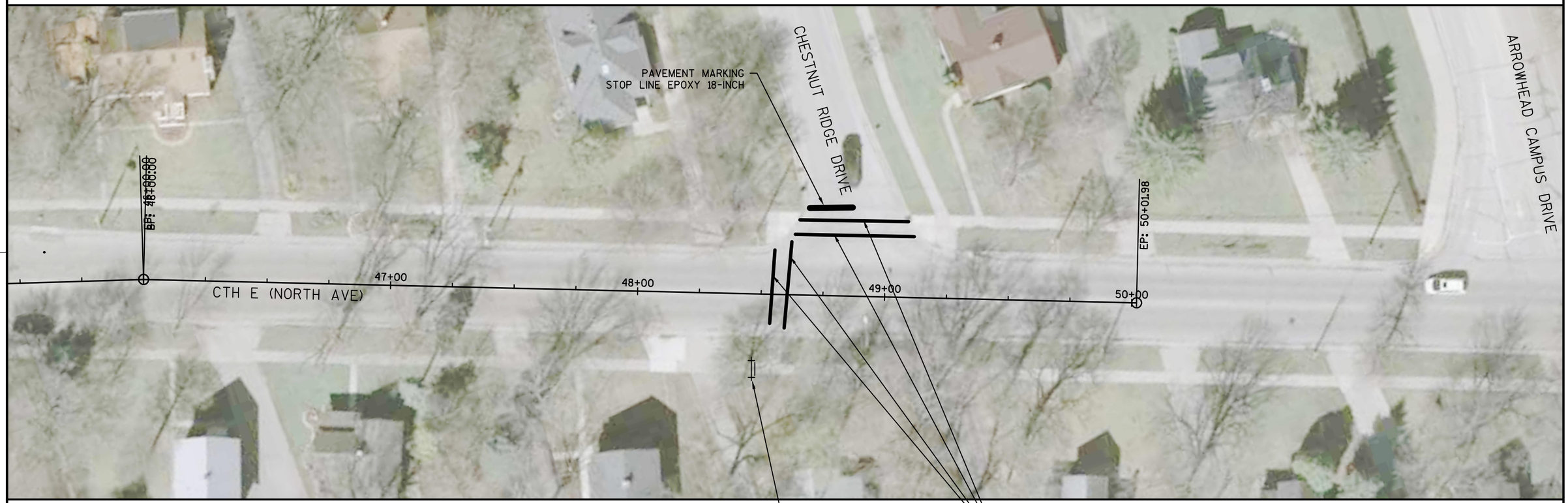
PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 1 SIDEWALK CLOSURE - CTH E EAST	SHEET 234	E

FILE NAME : N:\PDS\C3D\13701501\DESIGN\SIDEWALKDETOUR.DWG PLOT DATE : 2/6/2017 3:18 PM PLOT BY : ROTIER, STEVEN J PLOT NAME : PLOT SCALE : 1:40_XREF

WISDOT/CADDS SHEET 42

2 2

N



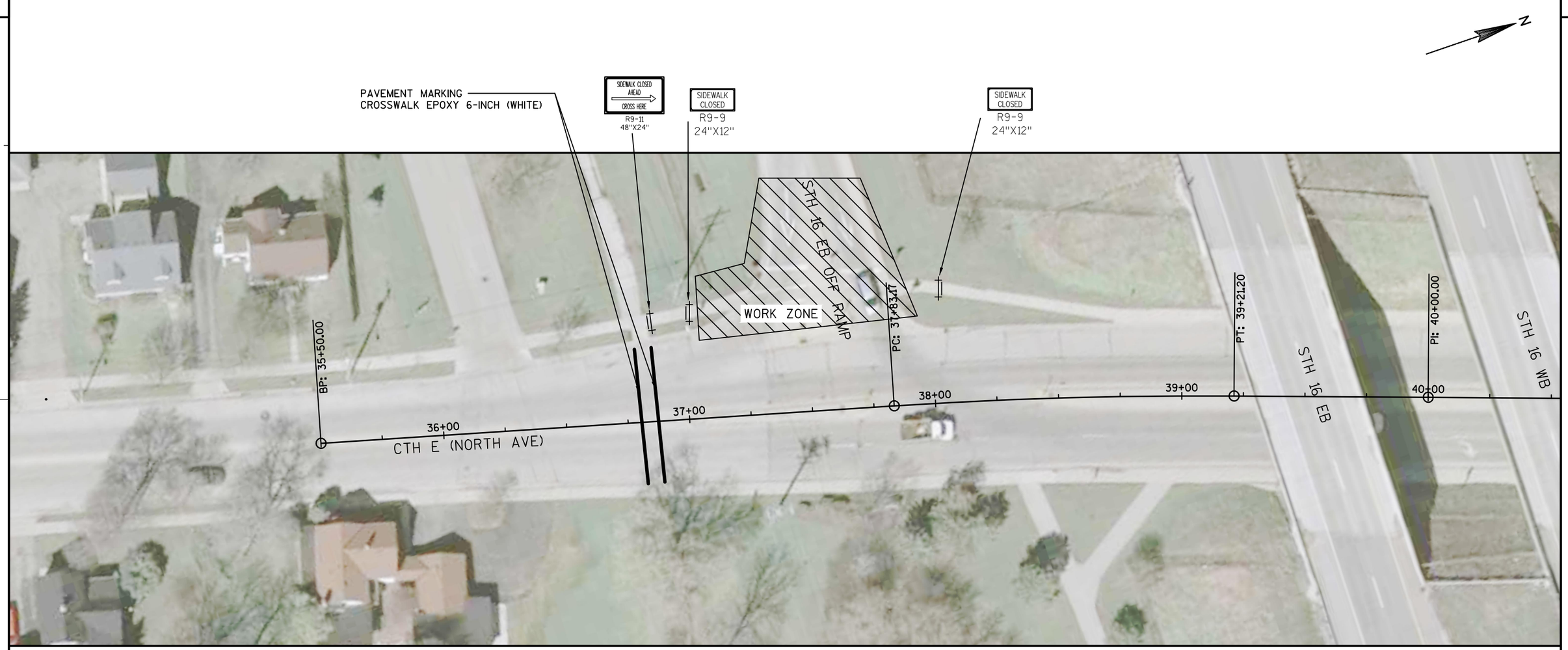
LEGEND

TYPE II BARRICADE WITH/WITHOUT SIGN (ALL WITH ONE WANING LIGHT, TYPE A, LOW-INTENSITY

WORK ZONE

PROJECT NO: 1370-15-71	HWY: STH 26	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 1 SIDEWALK CLOSURE - CTH E EAST	SHEET 235	E

2



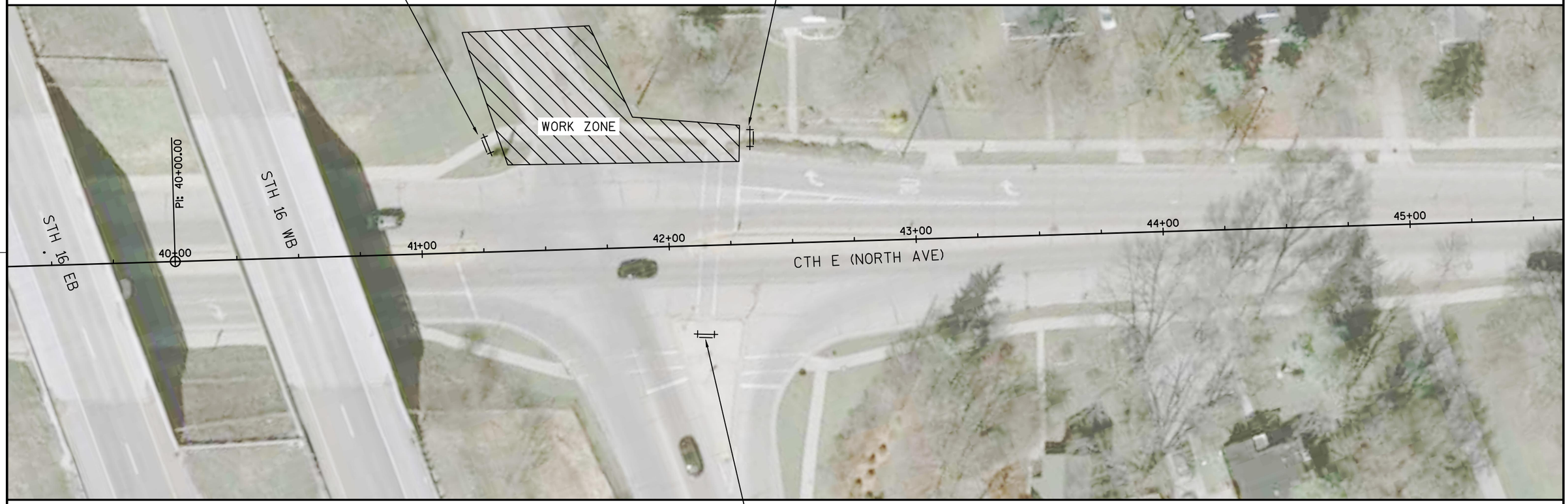
LEGEND

TYPE II BARRICADE WITH/WITHOUT SIGN (ALL WITH ONE WANING LIGHT, TYPE A, LOW-INTENSITY

WORK ZONE

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 2 SIDEWALK CLOSURE - CTH E WEST	SHEET 236	E

2



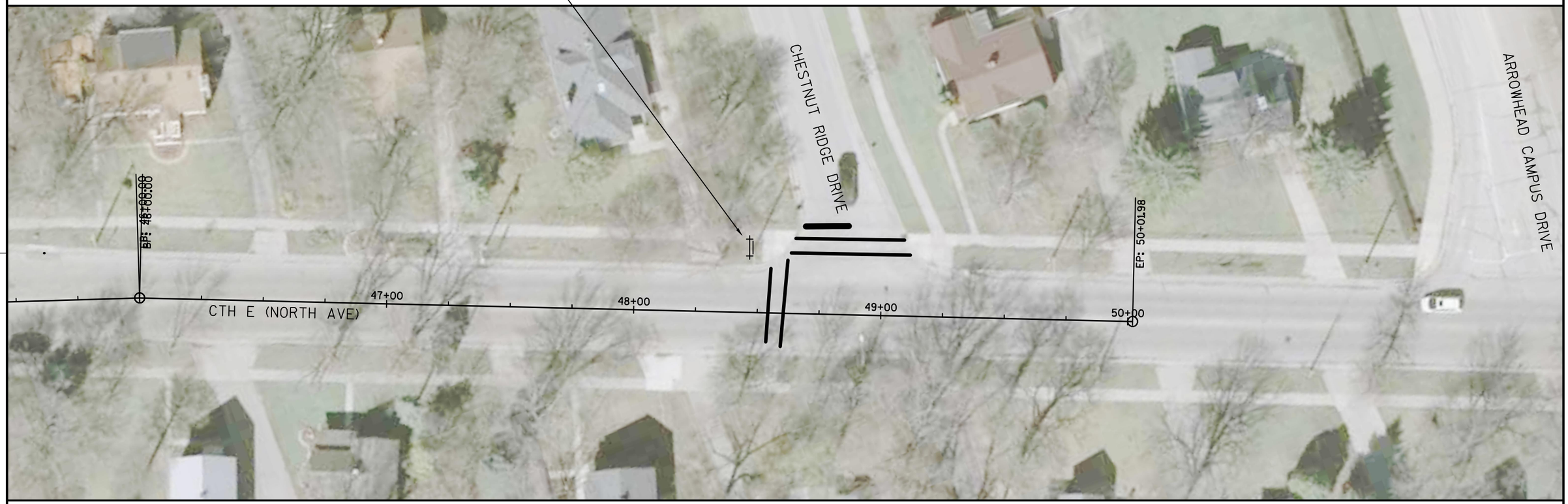
LEGEND

TYPE II BARRICADE WITH/WITHOUT SIGN (ALL WITH ONE WANING LIGHT, TYPE A, LOW-INTENSITY

WORK ZONE

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 2 SIDEWALK CLOSURE - CTH E WEST	SHEET 237	E

2



LEGEND

TYPE II BARRICADE WITH/WITHOUT SIGN (ALL WITH ONE WANING LIGHT, TYPE A, LOW-INTENSITY

WORK ZONE

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 2 SIDEWALK CLOSURE - CTH E WEST	SHEET 238	E

2

2

N

PAVEMENT MARKING
STOP LINE EPOXY 18-INCH

RENSON ROAD

BP: 0+00.00

1+00 2+00 3+00 4+00 5+00 6+00

CTH KC (MERTON AVE)

STH 16 EB ON RAMP

PAVEMENT MARKING
CROSSWALK EPOXY 6-INCH (WHITE)

SIDEWALK CLOSED AHEAD
CROSS HERE
R9-11
48"X24"

SIDEWALK CLOSED
R9-9
24"X12"

LEGEND

TYPE II BARRICADE WITH/WITHOUT SIGN (ALL WITH ONE WANING LIGHT, TYPE A, LOW-INTENSITY

WORK ZONE

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 1 SIDEWALK CLOSURE - CTH KC EAST	SHEET 239	E

2

2

N

SIDEWALK CLOSED
R9-9
24"X12"

PAVEMENT MARKING
CROSSWALK EPOXY 6-INCH (WHITE)

PAVEMENT MARKING
STOP LINE EPOXY 18-INCH

HARTBROOK DRIVE

SUNNYSLOPE DRIVE

9+00 10+00 11+00 12+00 13+00 14+00

CTH KC (MERTON AVE)

WORK ZONE

STH 16 WB OFF

SIDEWALK CLOSED AHEAD
CROSS HERE
R9-11
48"X24"

PAVEMENT MARKING
CROSSWALK EPOXY 6-INCH (WHITE)

LEGEND

TYPE II BARRICADE WITH/WITHOUT SIGN (ALL WITH ONE WANING LIGHT, TYPE A, LOW-INTENSITY

WORK ZONE

SIDEWALK CLOSED
R9-9
24"X12"

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 1 SIDEWALK CLOSURE - CTH KC EAST	SHEET 240	E

FILE NAME : N:\PDS\C3D\13701501\DESIGN\SIDEWALKDETOUR.DWG PLOT DATE : 2/6/2017 3:18 PM PLOT BY : ROTIER, STEVEN J PLOT NAME : PLOT SCALE : 1:40_XREF

WISDOT/CADDS SHEET 42

2

2

N

SIDEWALK CLOSED AHEAD
CROSS HERE
R9-11
48"X24"

RENSON ROAD

BP: 0+00.00

1+00 2+00 3+00 4+00 5+00 6+00

CTH KC (MERTON AVE)

STH 16 EB ON RAMP

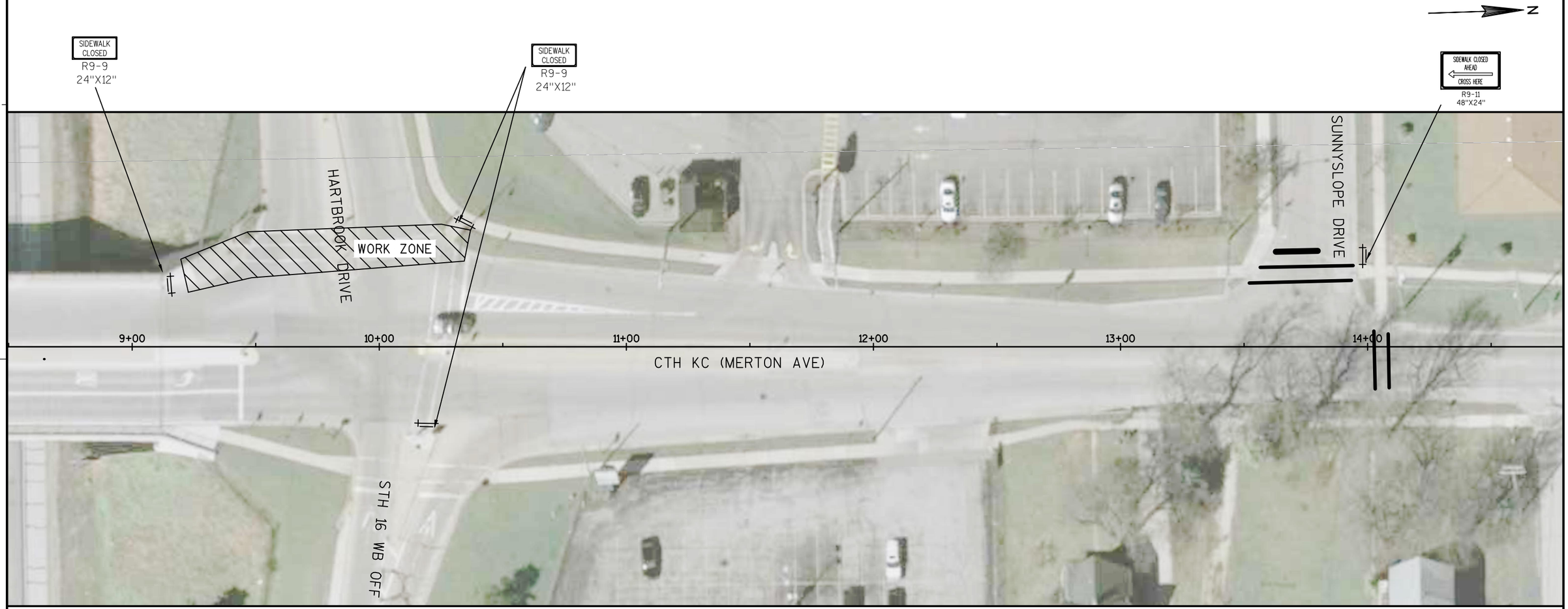
LEGEND

TYPE II BARRICADE WITH/WITHOUT SIGN (ALL WITH ONE WANING LIGHT, TYPE A, LOW-INTENSITY

WORK ZONE

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 2 SIDEWALK CLOSURE - CTH KC WEST	SHEET 241	E

2



LEGEND

TYPE II BARRICADE WITH/WITHOUT SIGN (ALL WITH ONE WANING LIGHT, TYPE A, LOW-INTENSITY

WORK ZONE

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	TRAFFIC CONTROL - STAGE 2 SIDEWALK CLOSURE - CTH KC WEST	SHEET 242	E

2

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.

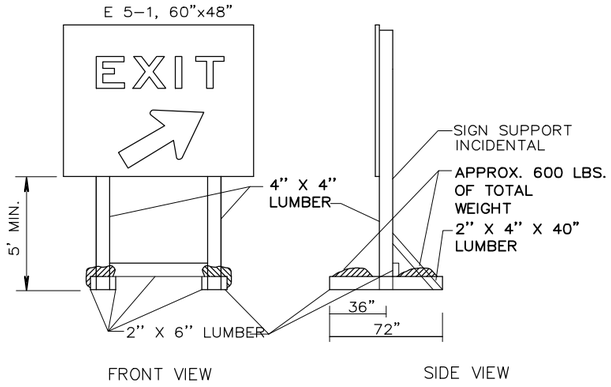
SEE SEPARATE LANE CLOSURE DETAIL FOR TYPICAL SPACING OF TYPE III BARRICADES AND R11-2 (MOD.) "LANE CLOSED" SIGNS.

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.

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, OR THAT WILL BE PLACED IN A CLOSED LANE, MAY BE MOUNTED ON PORTABLE SUPPORTS.

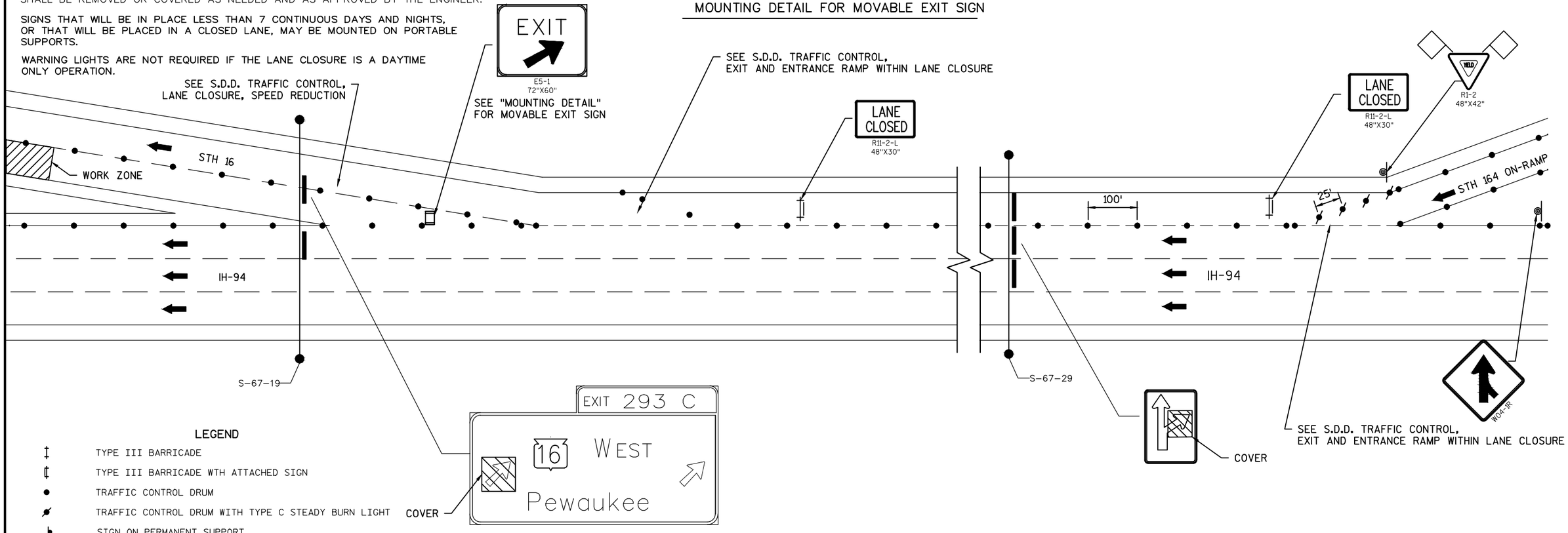
WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.



NOTE: ALL LUMBER DIMENSIONS ARE NOMINAL

MOUNTING DETAIL FOR MOVABLE EXIT SIGN

N



LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- WORK AREA
- DIRECTION OF TRAFFIC
- FLAGS, 16" x 16" (ORANGE)

IH-94 TO WB STH 16 RAMP - STH 16 INSIDE LANE CLOSURE

PROJECT NO:1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	TRAFFIC CONTROL DETAIL - IH-94 TO WB STH 16 RAMP	SHEET 243	E

2

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.

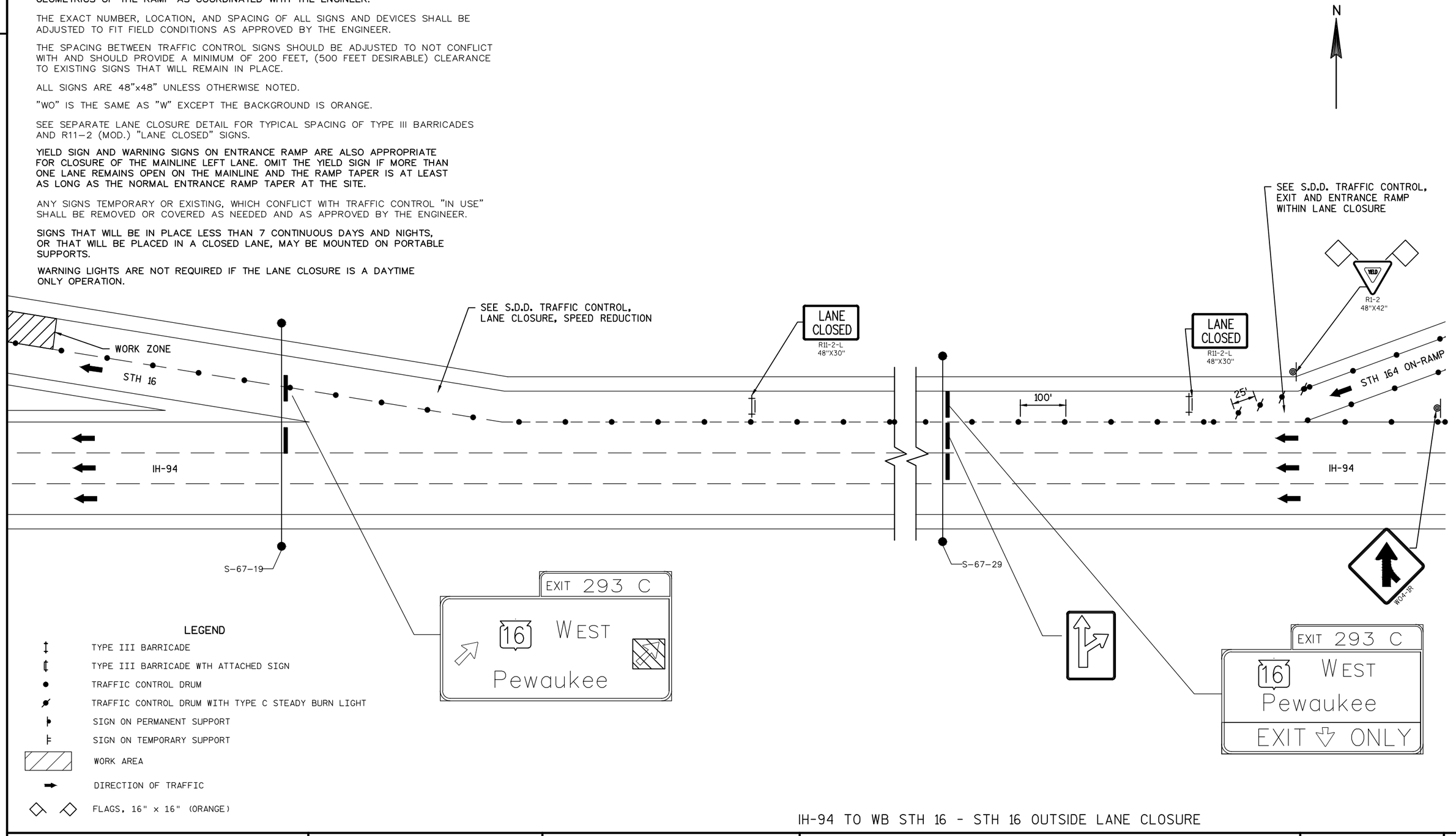
SEE SEPARATE LANE CLOSURE DETAIL FOR TYPICAL SPACING OF TYPE III BARRICADES AND R11–2 (MOD.) "LANE CLOSED" SIGNS.

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.

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, OR THAT WILL BE PLACED IN A CLOSED LANE, MAY BE MOUNTED ON PORTABLE SUPPORTS.

WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.



LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- WORK AREA
- DIRECTION OF TRAFFIC
- FLAGS, 16" x 16" (ORANGE)

IH-94 TO WB STH 16 - STH 16 OUTSIDE LANE CLOSURE

PROJECT NO:1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	TRAFFIC CONTROL DETAIL - IH-94 TO WB STH 16 RAMP	SHEET 244	E

GENERAL NOTES

EASTBOUND DIRECTION SHOWN. REVERSE FOR WESTBOUND.

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 LANE CLOSURE DETAIL FOR TYPICAL SPACING OF TYPE III BARRICADES AND R11-2 (MOD.) "LANE CLOSED" SIGNS.

SEE S.D.D. TRAFFIC CONTROL, EXIT AND ENTRANCE RAMP WITHIN LANE CLOSURE FOR ADDITIONAL DETAILS.

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.

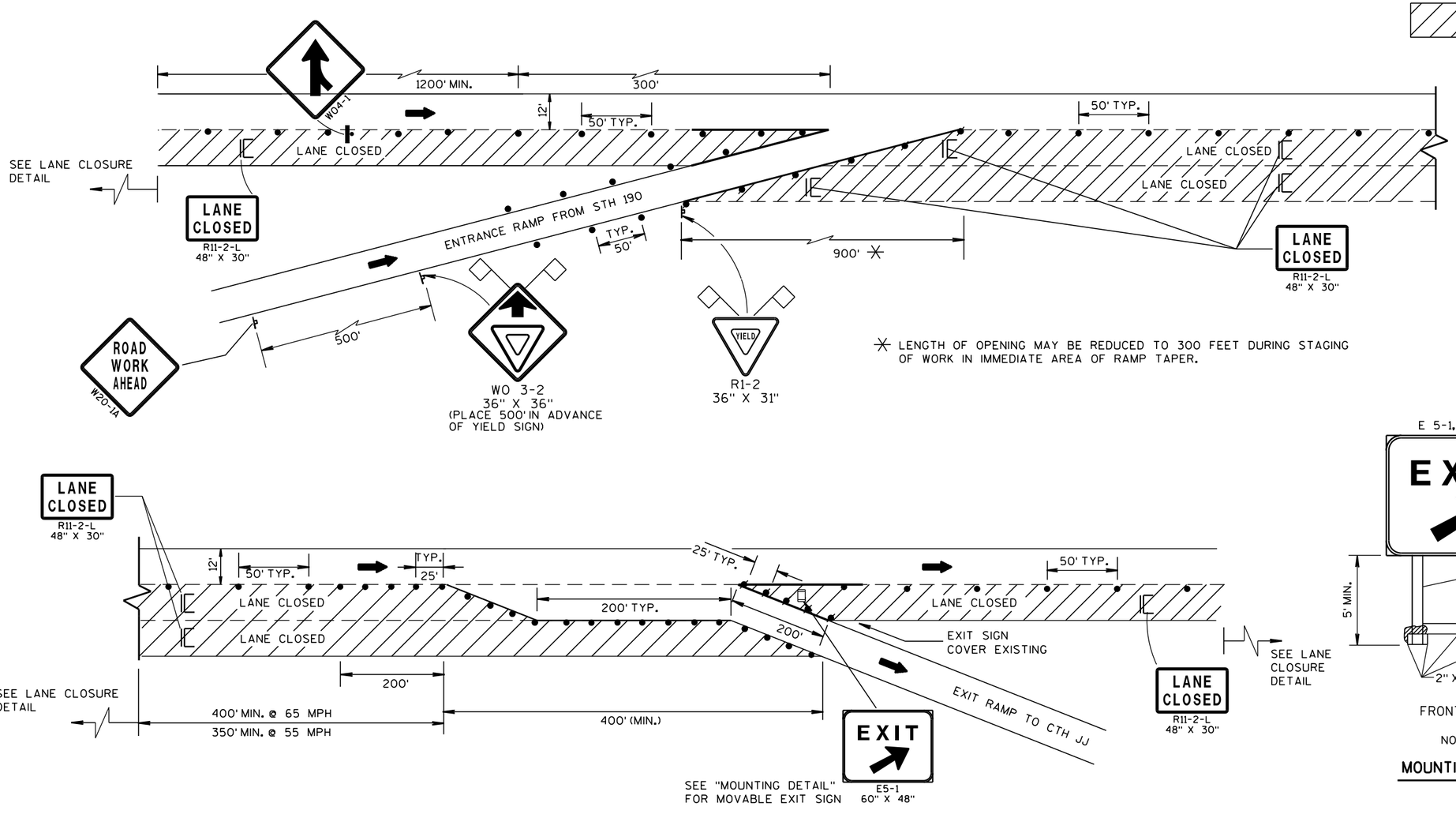
ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

LEGEND

- POST(S) MOUNTED SIGN
- SIGN ON PORTABLE SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH WARNING LIGHT TYPE C
- REMOVING PAVEMENT MARKING (SEE GENERAL NOTES)
- BARRICADE TYPE III WITH SIGN
- FLAGS, 16"x16" MIN., ORANGE, INCIDENTAL
- DIRECTION OF TRAFFIC
- WORK AREA

N



NOTE: ALL LUMBER DIMENSIONS ARE NOMINAL

MOUNTING FOR MOVABLE EXIT SIGN DETAIL

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	TRAFFIC CONTROL DETAIL - STH 190 - CTH JJ OUTSIDE LANE CLOSURE	SHEET 245	E

LEGEND

- TRAFFIC CONTROL DRUM
- SIGN ON PERMANENT SUPPORT
- DIRECTION OF TRAFFIC
- FLASHING ARROW BOARD
- WORK AREA
- CRASH CUSHION TEMPORARY
- CONCRETE BARRIER TEMPORARY

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.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

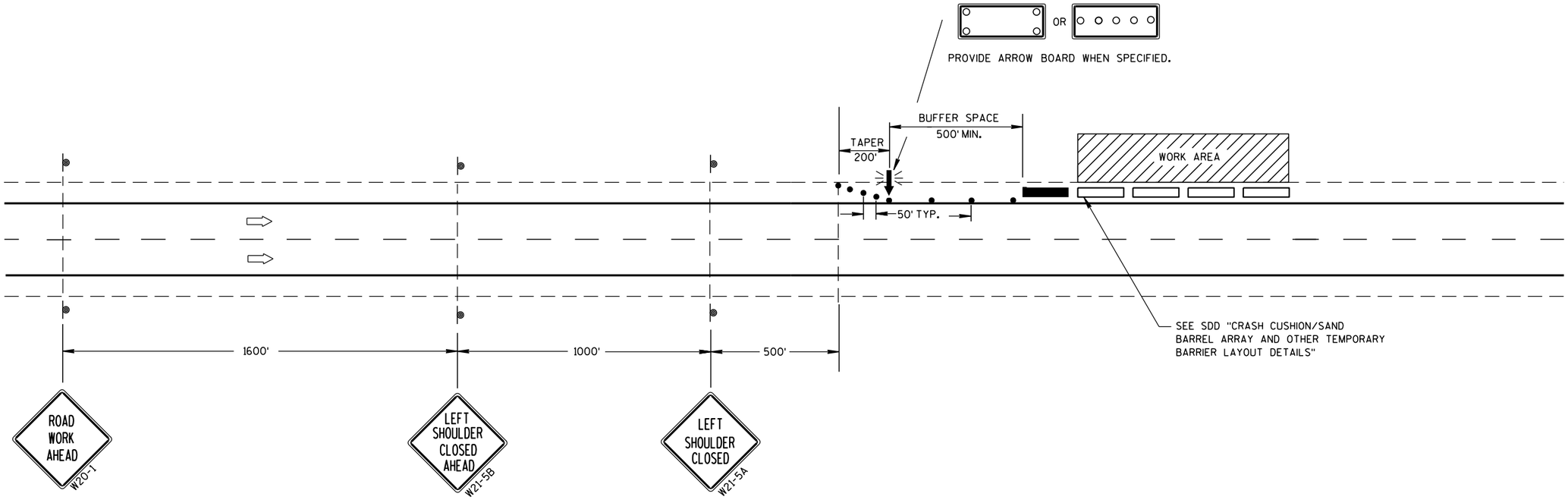
SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE FHWA'S MANUAL OF STANDARD HIGHWAY SIGNS OR THE WISCONSIN STANDARD SIGN PLATES.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS AS APPROVED BY THE ENGINEER.

TRAFFIC CONTROL DRUMS PLACED ADJACENT TO THE WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

WHEN WORK IS EXPECTED TO EXCEED 7 DAYS INCLUDE ARROW BOARD AS DIRECTED BY THE ENGINEER.

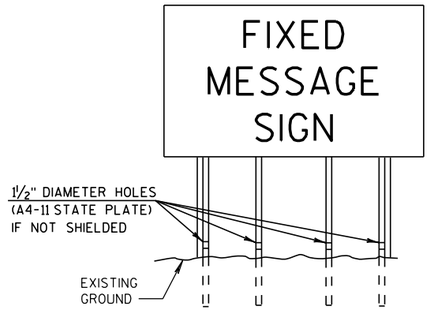
THIS DETAIL IS TYPICAL FOR CLOSING THE LEFT SHOULDER. FOR CLOSING THE RIGHT SHOULDER, REVERSE THE TRAFFIC CONTROL



TRAFFIC CONTROL' SHOULDER CLOSURE WITH CONCRETE BARRIER TEMPORARY

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	TRAFFIC CONTROL DETAIL	SHEET 246	E

2



FRONT VIEW

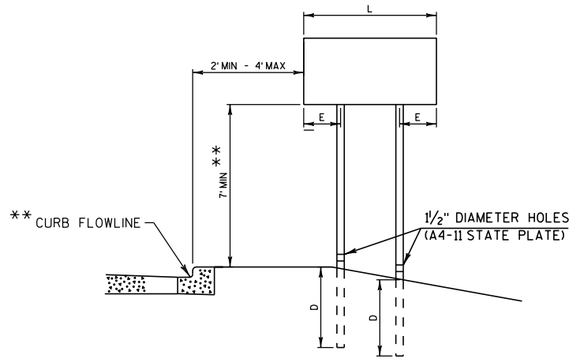
NOTES

1. SEE TRAFFIC CONTROL SHEETS FOR SIGN LOCATIONS.
2. SEE TABLES BELOW FOR REQUIRED NUMBER OF POSTS.

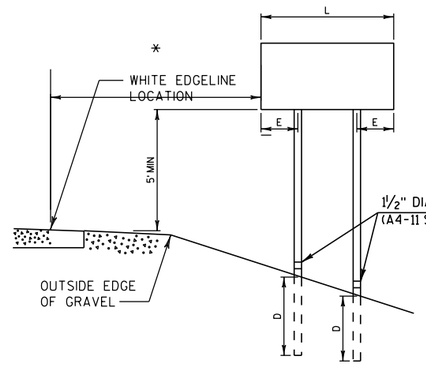
* 6' FROM EDGE OF A PAVED SHOULDER OR 12' FROM THE EDGE OF PAVEMENT (EDGE LINE LOCATION) OR 2' FROM OUTSIDE EDGE OF GRAVEL, WHICHEVER IS GREATER UNLESS DIRECTED BY PROJECT ENGINEER.

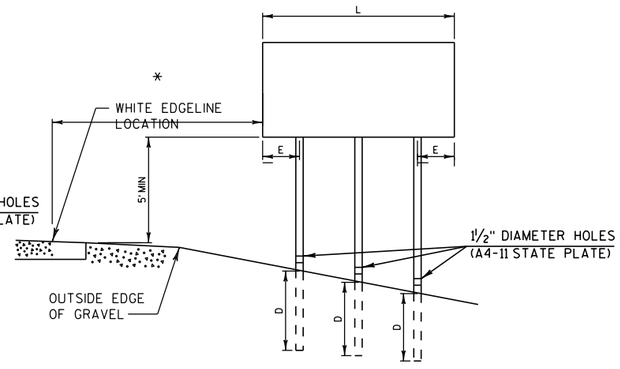
** THE EXISTENCE OF CURB AND GUTTER DOES NOT IN ITSELF MANDATE THE VERTICAL CLEARANCE ILLUSTRATED. THAT HEIGHT IS TYPICALLY MEASURED WHERE THERE IS SIDEWALK ADJACENT TO THE ROADWAY OR PARKING IS PERMITTED. IN THE ABSENCE OF SIDEWALK, VERTICAL CLEARANCE IS MEASURED FROM THE TOP OF THE CURB. IF NO SIDEWALK AND NO PARKING, VERTICAL CLEARANCE MAY BE REDUCED TO 5' MINIMUM. OFFSET OF SIGNS IS MEASURED FROM THE CURB FLOWLINE.

3. 4X6 WOOD POSTS SHALL HAVE TWO HOLES PER STATE PLATE A4-11



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'

NOTE TO DESIGNERS: SHOW POSTS ON FMS SIGN DETAILS.

POST MOUNTING DETAIL FOR TRAFFIC CONTROL FIXED MESSAGE SIGNS

2

FIXED MESSAGE SIGNS (DETAILS SHEETS)

GENERAL NOTES:

1. ALL SIGNS TO HAVE FLUORESCENT REFLECTIVE SHEETING - REFERENCE: "WISDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION," LATEST EDITION.

2. AFTER SIGNS HAVE BEEN LOCATED IN THE FIELD, BUT BEFORE INSTALLATION, THE PROJECT ENGINEER SHALL VERIFY EACH SIGN LOCATION.

3. ALL SIGNS TO BE MOUNTED ON WOODEN POST SUPPORTS (4"x6") (FREEWAY) OR TUBULAR STEEL POSTS OR 4X6 WOOD POSTS (NON-FREEWAY). THE NUMBER OF POST REQUIRED FOR EACH LAYOUT IS SHOWN.

4. SIGNS ON THIS SHEET TO BE PAID UNDER THE ITEM "FIXED MESSAGE SIGNS."

5. SIGNS SHALL BE BLACK NON-REFLECTIVE MESSAGE ON ORANGE FLUORESCENT REFLECTIVE BACKGROUND PER SPEC 643 & 637.
6. ALL SIGNS SHALL HAVE CAPITAL LETTERS AND NUMERALS:
   12" CAPS SHALL BE SERIES "D"
   6" CAPS SHALL BE SERIES "C" - UNLESS OTHERWISE SHOWN

7. ALL SIGNS SHALL HAVE BORDER & RADIUS OF BORDERS AS FOLLOWS:

SIGN AREA	WIDTH OF BORDER
GREATER THAN 150 SQ FT	3"
60-150 SQ FT	2"
LESS THAN 60 SQ FT	1"

RADIUS SMALLEST OUTSIDE DIMENSION	CORNER RADIUS
≥ 8 FT	12"
≥ 6 FT	9"
> 4 FT	6"
LESS THAN 4 FT	3"

8. BEGIN XXX XX SIGNS SHALL BE SEPARATE PANELS, BUT SHALL BE CONSIDERED AS PART OF THE SIGN AND SHOULD BE REMOVED OR COVERED AFTER THEIR EFFECTIVE DATE. THE MONTH AND DAY SHALL BE AS DIRECTED BY THE ENGINEER IN THE FIELD.

9. SIGN BASE MATERIAL SHALL BE ACCORDING TO SECTION 643 & 637.

10. SIGNS TO BE IN PLACE 10 DAYS PRIOR TO CONSTRUCTION.

(X) = SIGN NUMBER

FOR PLAN SHEETS

LEGEND: FIXED MESSAGE SIGNS

- EXISTING GUIDE SIGN TO BE COVERED
- FIXED MESSAGE SIGN(S) ON WOOD POST SUPPORTS OR TUBULAR STEEL POSTS
- (XX) FIXED MESSAGE SIGN NUMBER
- (A1) CONTRACTOR SHALL COVER AS DIRECTED BY THE ENGINEER ALL ROUTE MARKINGS PERTAINING TO THE PROJECT. INCIDENTAL TO WORK ZONE TRAFFIC CONTROL SIGNING.
- [CMS] CHANGEABLE MESSAGE SIGN

NOTES: FIXED MESSAGE SIGNS

1. CONTRACTOR SHOULD LOCATE FIXED MESSAGE SIGNS A MINIMUM OF 400' FROM ANY EXISTING TYPE "I" SIGN.

2. ALL FIXED MESSAGE SIGNS SHALL BE BLACK NON-REFLECTIVE MESSAGE ON ORANGE FLORESCENT REFLECTIVE BACKGROUND PER SPEC 643 & 637

3. SEE FIXED MESSAGE SIGNS AND SPECIAL MESSAGE SIGNS LAYOUT SHEETS FOR MORE INFORMATION.

4. COVER DETOUR SIGNING WHEN NOT IN USE. INCIDENTAL TO WORK ZONE TRAFFIC CONTROL SIGNING.

5. SIGNS TO BE PLACED 10 DAYS PRIOR TO CONSTRUCTION.

NOTE:

ALL SIGNS SHALL BE PLACED IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

EXACT NUMBER, LOCATION, AND SPACING OF SIGNS AND DEVICES MAY BE ADJUSTED TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.

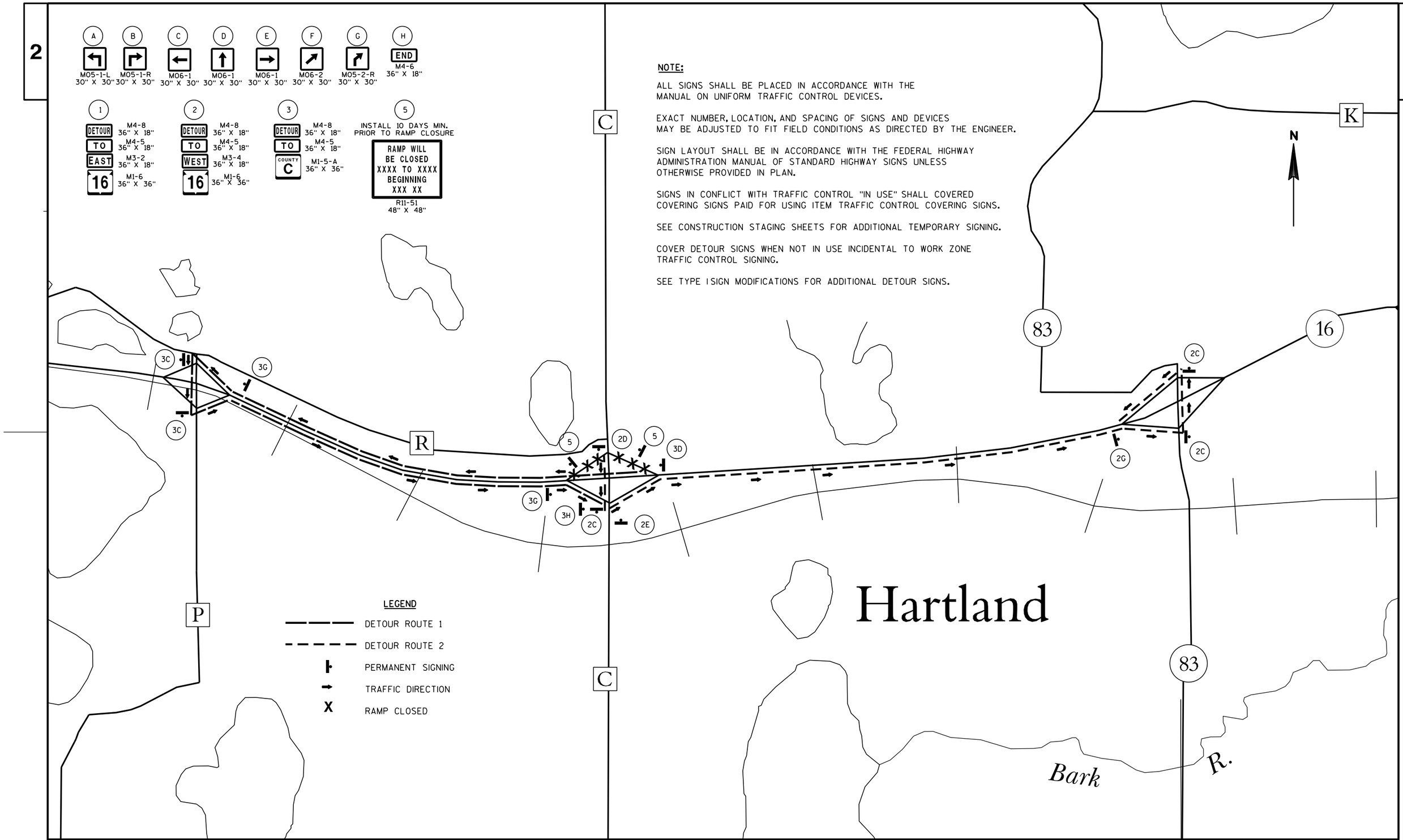
SIGN LAYOUT SHALL BE IN ACCORDANCE WITH THE FEDERAL HIGHWAY ADMINISTRATION MANUAL OF STANDARD HIGHWAY SIGNS UNLESS OTHERWISE PROVIDED IN PLAN.

SIGNS IN CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL COVERED COVERING SIGNS PAID FOR USING ITEM TRAFFIC CONTROL COVERING SIGNS.

SEE CONSTRUCTION STAGING SHEETS FOR ADDITIONAL TEMPORARY SIGNING.

COVER DETOUR SIGNS WHEN NOT IN USE INCIDENTAL TO WORK ZONE TRAFFIC CONTROL SIGNING.

SEE TYPE I SIGN MODIFICATIONS FOR ADDITIONAL DETOUR SIGNS.



PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	DETOUR ROUTE - CTH C WB-OFF & WB-ON	SHEET	E

FILE NAME : J:\projects\D2_13701516\71\027001_dt.dgn PLOT DATE : 01-FEB-2017 11:43 PLOT BY : dotshw PLOT NAME : PLOT SCALE : 200:1
WISDOT/CADDS SHEET 42

A — M0-5-1L 30" X 30"
B — M0-5-1R 30" X 30"
C — M06-1 30" X 30"
D — M06-1 30" X 30"
E — M06-1 30" X 30"
F — M06-2 30" X 30"
G — M05-2R 30" X 30"
H — END M4-6 36" X 18"

1
DETOUR M4-8 36" X 18"
TO M4-5 36" X 18"
EAST M3-2 36" X 18"
16 M1-6 36" X 36"

2
DETOUR M4-8 36" X 18"
TO M4-5 36" X 18"
WEST M3-4 36" X 18"
16 M1-6 36" X 36"

3
DETOUR M4-8 36" X 18"
TO M4-5 36" X 18"
COUNTY C M1-5-A 36" X 36"

5
INSTALL 10 DAYS MIN. PRIOR TO RAMP CLOSURE
RAMP WILL BE CLOSED XXXX TO XXXX BEGINNING XXX XX
R11-51 48" X 48"

NOTE:

ALL SIGNS SHALL BE PLACED IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

EXACT NUMBER, LOCATION, AND SPACING OF SIGNS AND DEVICES MAY BE ADJUSTED TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.

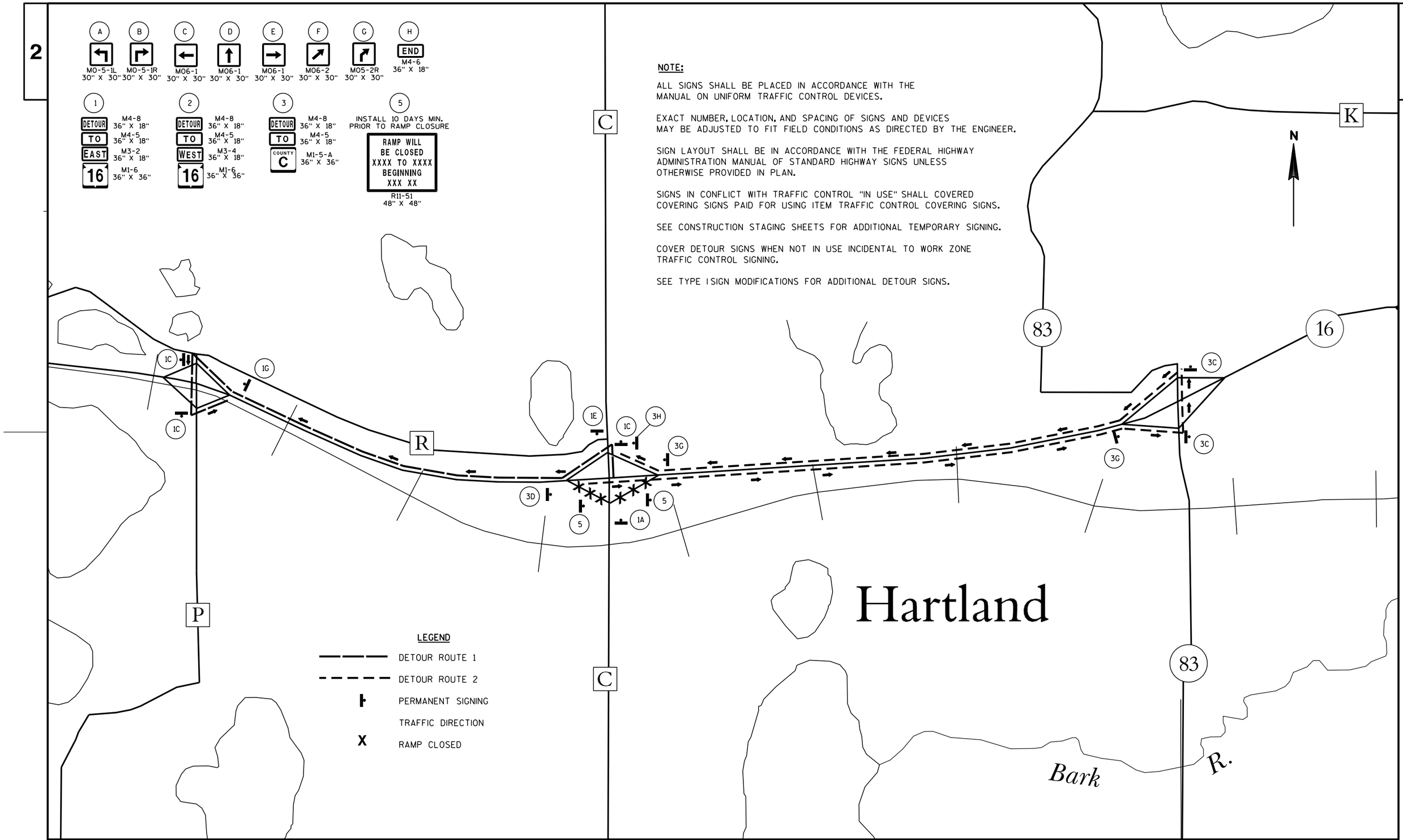
SIGN LAYOUT SHALL BE IN ACCORDANCE WITH THE FEDERAL HIGHWAY ADMINISTRATION MANUAL OF STANDARD HIGHWAY SIGNS UNLESS OTHERWISE PROVIDED IN PLAN.

SIGNS IN CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL COVERED COVERING SIGNS PAID FOR USING ITEM TRAFFIC CONTROL COVERING SIGNS.

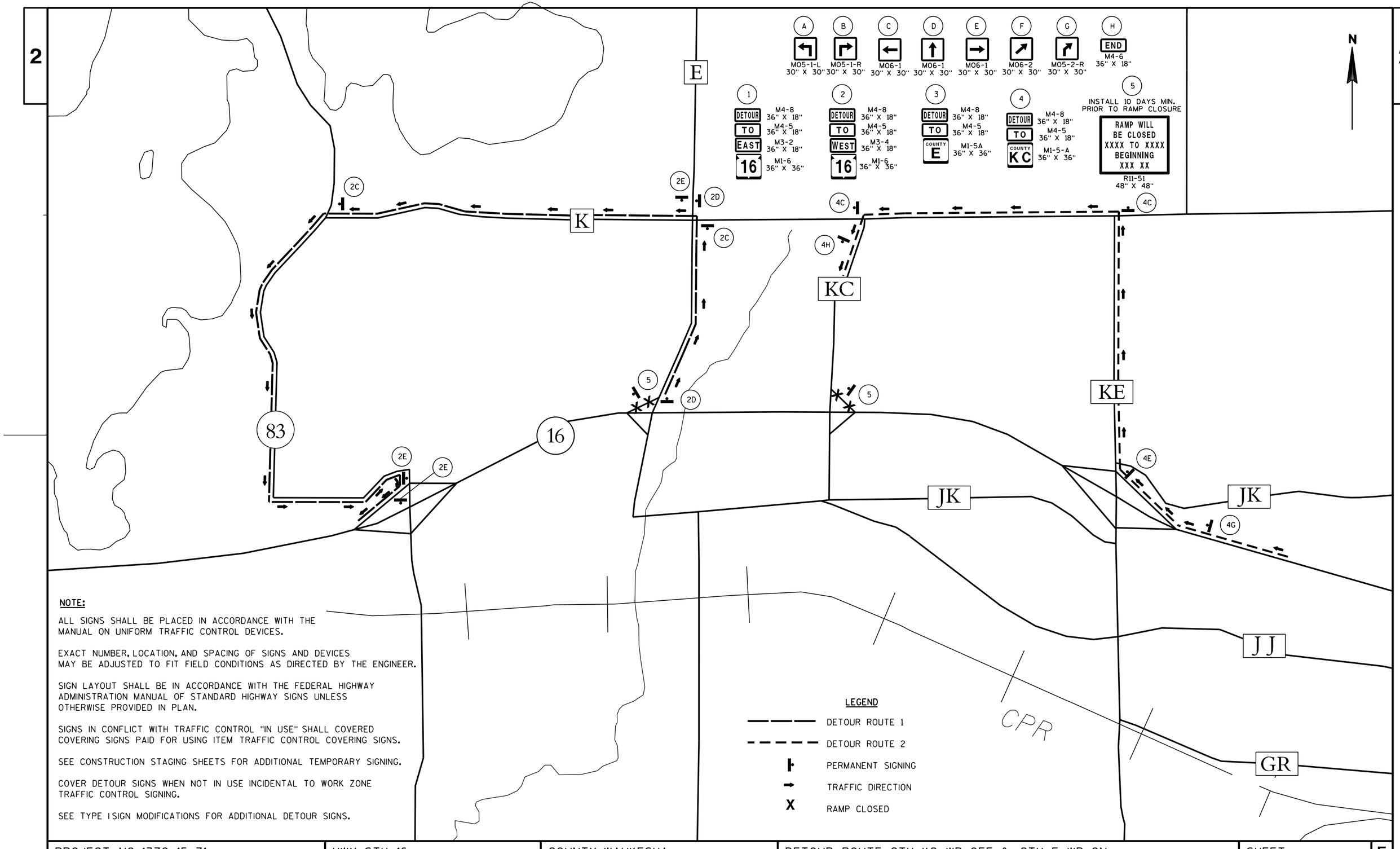
SEE CONSTRUCTION STAGING SHEETS FOR ADDITIONAL TEMPORARY SIGNING.

COVER DETOUR SIGNS WHEN NOT IN USE INCIDENTAL TO WORK ZONE TRAFFIC CONTROL SIGNING.

SEE TYPE I SIGN MODIFICATIONS FOR ADDITIONAL DETOUR SIGNS.



PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	DETOUR ROUTE - CTH C EB-OFF & EB-ON	SHEET 250	E



NOTE:

ALL SIGNS SHALL BE PLACED IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

EXACT NUMBER, LOCATION, AND SPACING OF SIGNS AND DEVICES MAY BE ADJUSTED TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.

SIGN LAYOUT SHALL BE IN ACCORDANCE WITH THE FEDERAL HIGHWAY ADMINISTRATION MANUAL OF STANDARD HIGHWAY SIGNS UNLESS OTHERWISE PROVIDED IN PLAN.

SIGNS IN CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL COVERED COVERING SIGNS PAID FOR USING ITEM TRAFFIC CONTROL COVERING SIGNS.

SEE CONSTRUCTION STAGING SHEETS FOR ADDITIONAL TEMPORARY SIGNING.

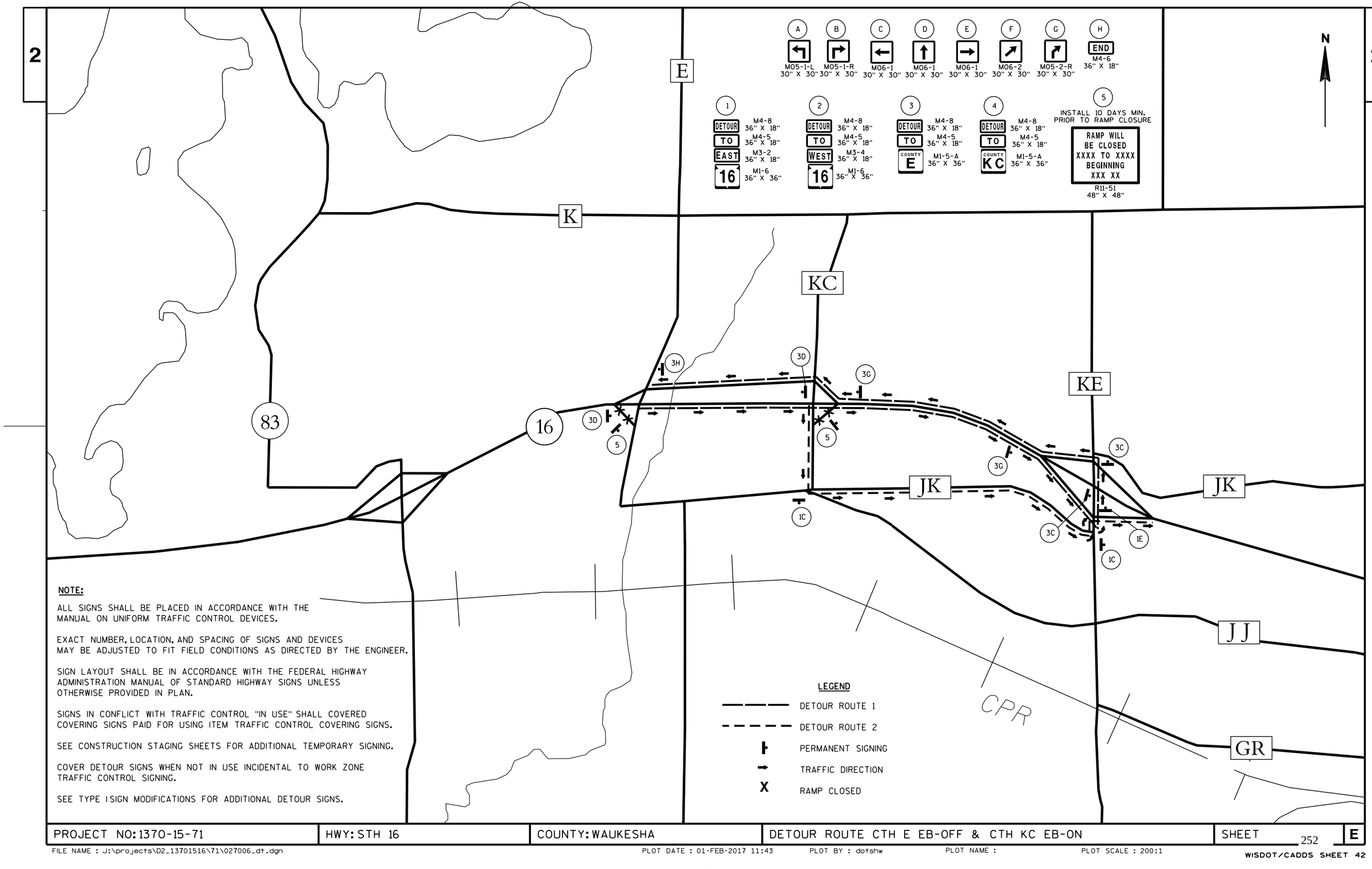
COVER DETOUR SIGNS WHEN NOT IN USE INCIDENTAL TO WORK ZONE TRAFFIC CONTROL SIGNING.

SEE TYPE I SIGN MODIFICATIONS FOR ADDITIONAL DETOUR SIGNS.

LEGEND

- DETOUR ROUTE 1
- DETOUR ROUTE 2
- PERMANENT SIGNING
- TRAFFIC DIRECTION
- X RAMP CLOSED

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	DETOUR ROUTE CTH KC WB-OFF & CTH E WB-ON	SHEET 251 E



NOTE:

ALL SIGNS SHALL BE PLACED IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

EXACT NUMBER, LOCATION, AND SPACING OF SIGNS AND DEVICES MAY BE ADJUSTED TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.

SIGN LAYOUT SHALL BE IN ACCORDANCE WITH THE FEDERAL HIGHWAY ADMINISTRATION MANUAL OF STANDARD HIGHWAY SIGNS UNLESS OTHERWISE PROVIDED IN PLAN.

SIGNS IN CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL COVERED COVERING SIGNS PAID FOR USING ITEM TRAFFIC CONTROL COVERING SIGNS.

SEE CONSTRUCTION STAGING SHEETS FOR ADDITIONAL TEMPORARY SIGNING.

COVER DETOUR SIGNS WHEN NOT IN USE INCIDENTAL TO WORK ZONE TRAFFIC CONTROL SIGNING.

SEE TYPE I SIGN MODIFICATIONS FOR ADDITIONAL DETOUR SIGNS.

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	DETOUR ROUTE CTH E EB-OFF & CTH KC EB-ON	SHEET 252 E

A — M05-1-L 30" X 30"
B — M05-1-R 30" X 30"
C — M06-1 30" X 30"
D — M06-1 30" X 30"
E — M06-1 30" X 30"
F — M06-2 30" X 30"
G — M05-2-R 30" X 30"
H — END M4-6 36" X 18"

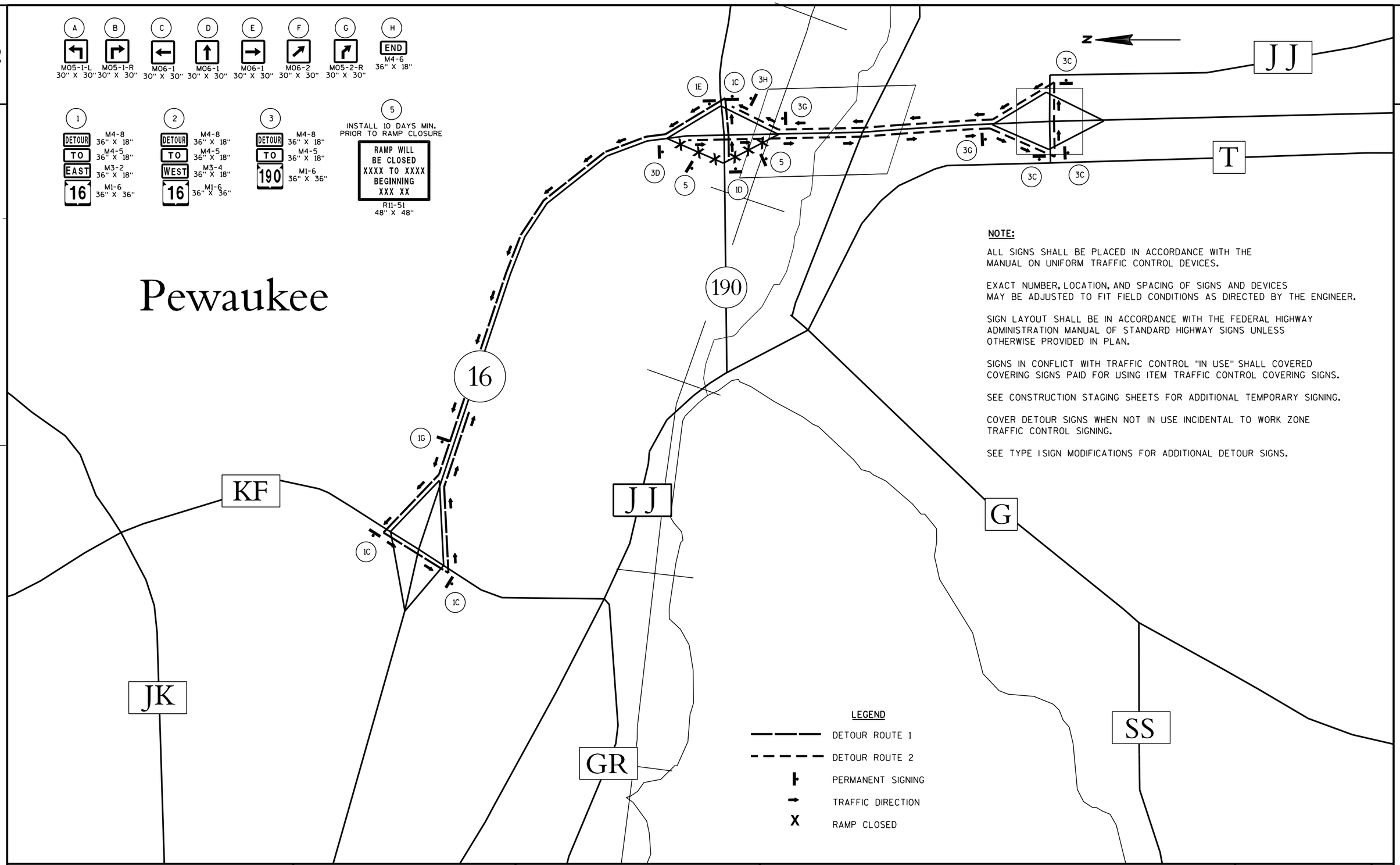
1
DETOUR M4-8 36" X 18"
TO M4-5 36" X 18"
EAST M3-2 36" X 18"
16 M1-6 36" X 36"

2
DETOUR M4-8 36" X 18"
TO M4-5 36" X 18"
WEST M3-4 36" X 18"
16 M1-6 36" X 36"

3
DETOUR M4-8 36" X 18"
TO M4-5 36" X 18"
190 M1-6 36" X 36"

5
INSTALL 10 DAYS MIN. PRIOR TO RAMP CLOSURE
RAMP WILL BE CLOSED XXXX TO XXXX BEGINNING XXX XX
R11-51 48" X 48"

Pewaukee



NOTE:

ALL SIGNS SHALL BE PLACED IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

EXACT NUMBER, LOCATION, AND SPACING OF SIGNS AND DEVICES MAY BE ADJUSTED TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.

SIGN LAYOUT SHALL BE IN ACCORDANCE WITH THE FEDERAL HIGHWAY ADMINISTRATION MANUAL OF STANDARD HIGHWAY SIGNS UNLESS OTHERWISE PROVIDED IN PLAN.

SIGNS IN CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL COVERED COVERING SIGNS PAID FOR USING ITEM TRAFFIC CONTROL COVERING SIGNS.

SEE CONSTRUCTION STAGING SHEETS FOR ADDITIONAL TEMPORARY SIGNING.

COVER DETOUR SIGNS WHEN NOT IN USE INCIDENTAL TO WORK ZONE TRAFFIC CONTROL SIGNING.

SEE TYPE ISIGN MODIFICATIONS FOR ADDITIONAL DETOUR SIGNS.

LEGEND

- DETOUR ROUTE 1
- DETOUR ROUTE 2
- PERMANENT SIGNING
- TRAFFIC DIRECTION
- X RAMP CLOSED

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	DETOUR ROUTE STH 190 WB-OFF & WB-ON	SHEET 253	E

A — M05-1-L 30" X 30"
B — M05-1-R 30" X 30"
C — M06-1 30" X 30"
D — M06-1 30" X 30"
E — M06-1 30" X 30"
F — M06-2 30" X 30"
G — M05-2-R 30" X 30"
H — END M4-6 36" X 18"

1 — DETOUR M4-8 36" X 18" / TO M4-5 36" X 18" / EAST M3-2 36" X 18" / 16 M1-6 36" X 36"

2 — DETOUR M4-8 36" X 18" / TO M4-5 36" X 18" / WEST M3-4 36" X 18" / 16 M1-6 36" X 36"

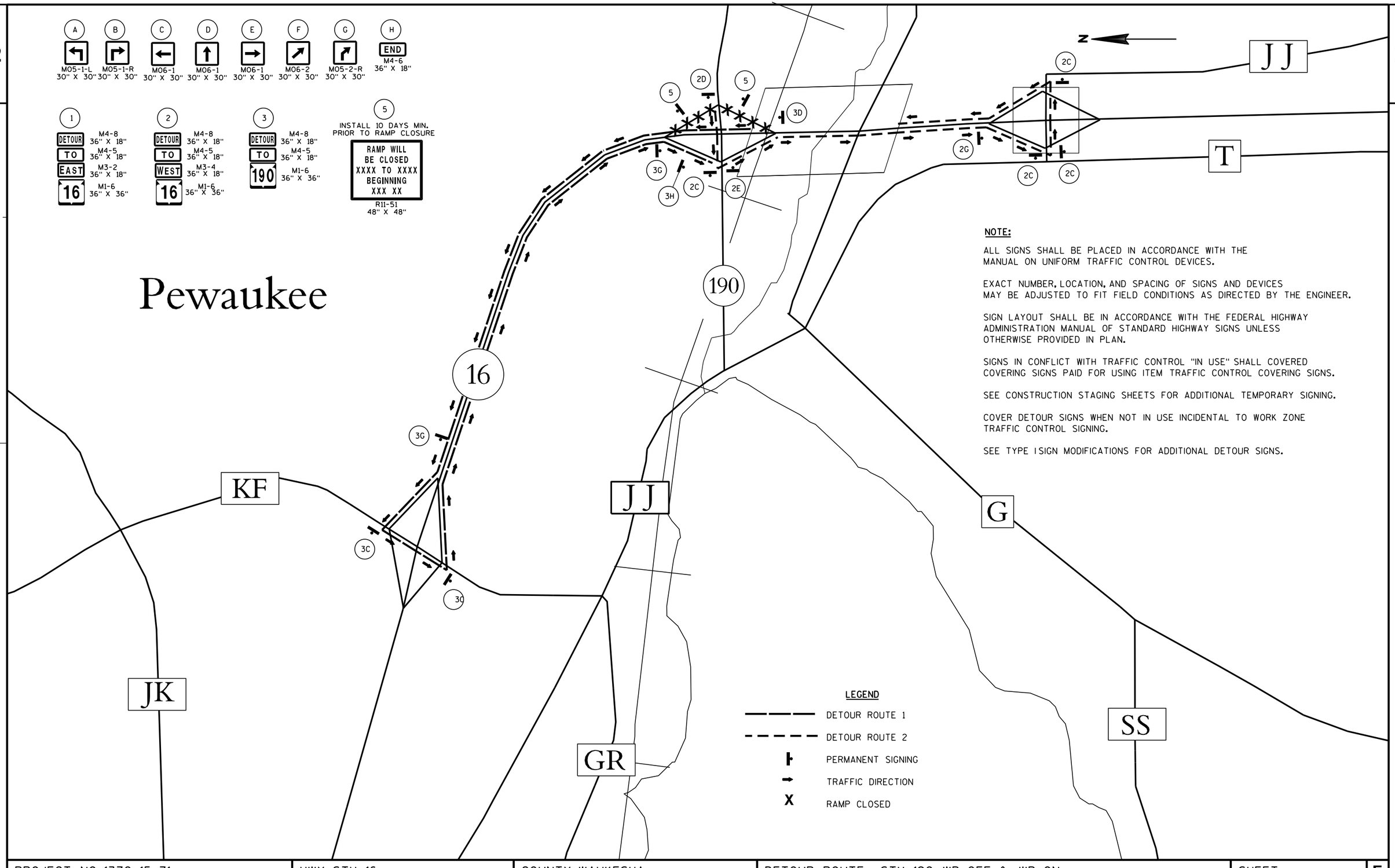
3 — DETOUR M4-8 36" X 18" / TO M4-5 36" X 18" / 190 M1-6 36" X 36"

5 — INSTALL 10 DAYS MIN. PRIOR TO RAMP CLOSURE

RAMP WILL BE CLOSED XXXX TO XXXX BEGINNING XXX XX

R11-51 48" X 48"

Pewaukee



NOTE:

ALL SIGNS SHALL BE PLACED IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

EXACT NUMBER, LOCATION, AND SPACING OF SIGNS AND DEVICES MAY BE ADJUSTED TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.

SIGN LAYOUT SHALL BE IN ACCORDANCE WITH THE FEDERAL HIGHWAY ADMINISTRATION MANUAL OF STANDARD HIGHWAY SIGNS UNLESS OTHERWISE PROVIDED IN PLAN.

SIGNS IN CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL COVERED COVERING SIGNS PAID FOR USING ITEM TRAFFIC CONTROL COVERING SIGNS.

SEE CONSTRUCTION STAGING SHEETS FOR ADDITIONAL TEMPORARY SIGNING.

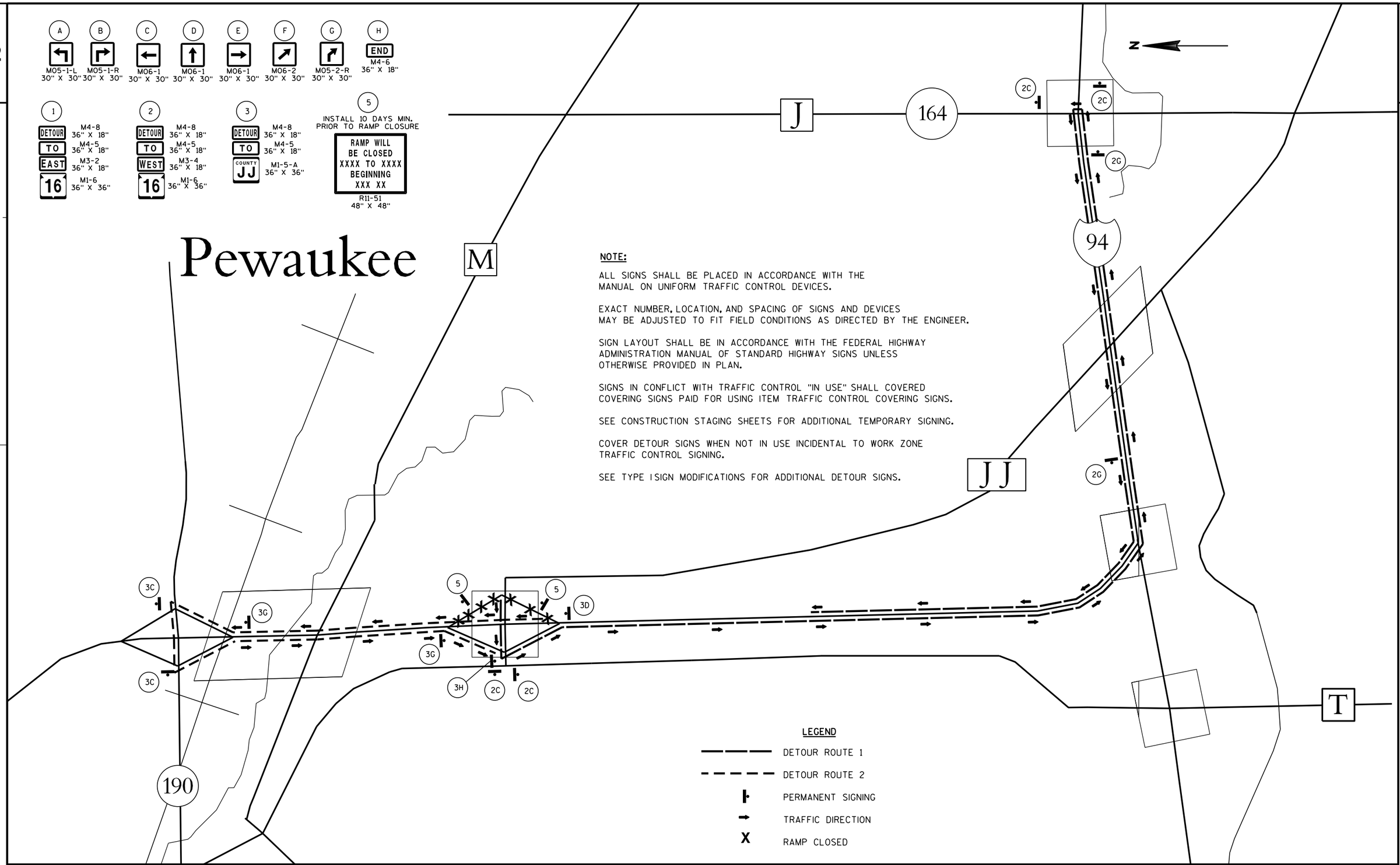
COVER DETOUR SIGNS WHEN NOT IN USE INCIDENTAL TO WORK ZONE TRAFFIC CONTROL SIGNING.

SEE TYPE ISIGN MODIFICATIONS FOR ADDITIONAL DETOUR SIGNS.

LEGEND

- DETOUR ROUTE 1
- DETOUR ROUTE 2
- PERMANENT SIGNING
- TRAFFIC DIRECTION
- X — RAMP CLOSED

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	DETOUR ROUTE STH 190 WB-OFF & WB-ON	SHEET 254 E



NOTE:

ALL SIGNS SHALL BE PLACED IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

EXACT NUMBER, LOCATION, AND SPACING OF SIGNS AND DEVICES MAY BE ADJUSTED TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.

SIGN LAYOUT SHALL BE IN ACCORDANCE WITH THE FEDERAL HIGHWAY ADMINISTRATION MANUAL OF STANDARD HIGHWAY SIGNS UNLESS OTHERWISE PROVIDED IN PLAN.

SIGNS IN CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL COVERED COVERING SIGNS PAID FOR USING ITEM TRAFFIC CONTROL COVERING SIGNS.

SEE CONSTRUCTION STAGING SHEETS FOR ADDITIONAL TEMPORARY SIGNING.

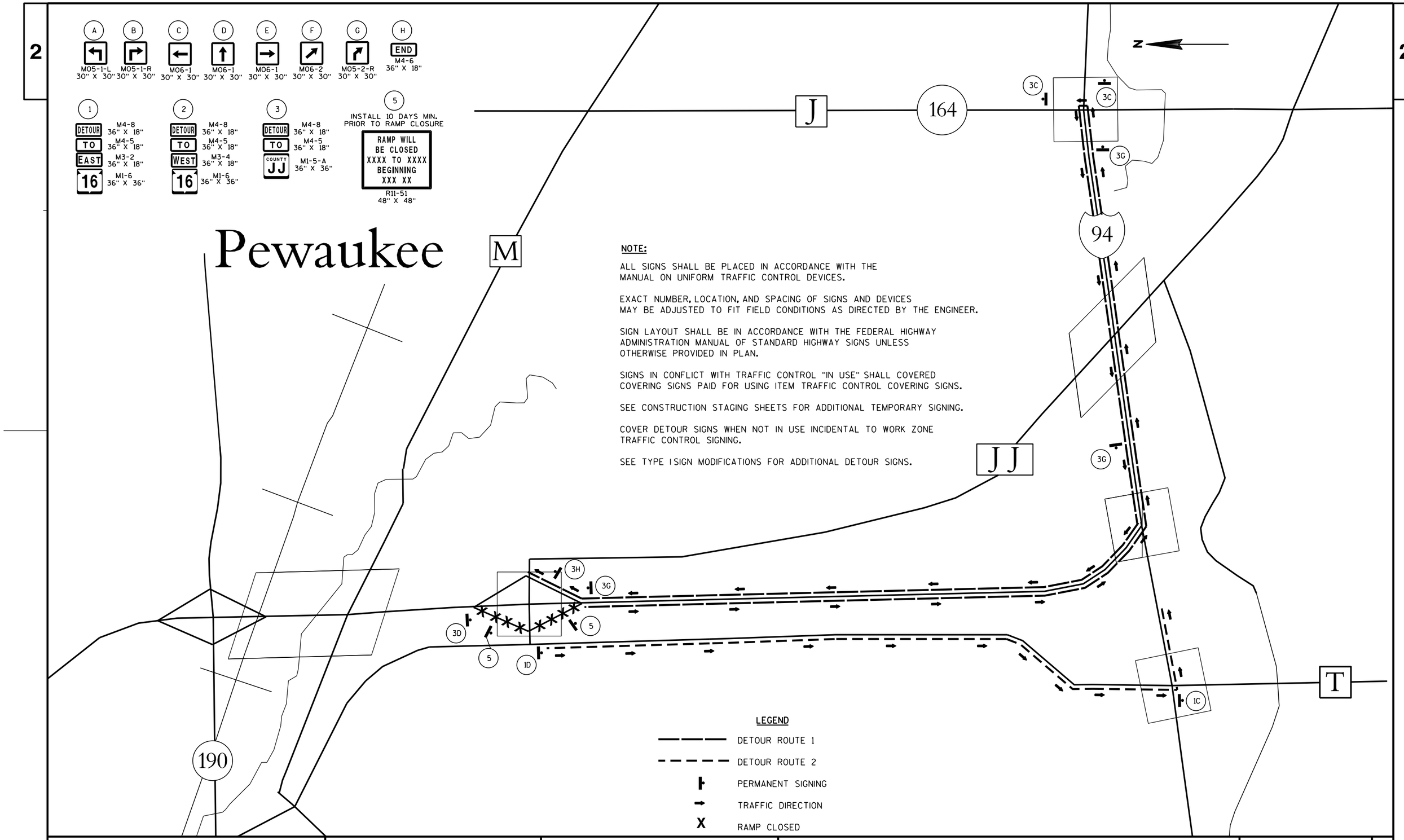
COVER DETOUR SIGNS WHEN NOT IN USE INCIDENTAL TO WORK ZONE TRAFFIC CONTROL SIGNING.

SEE TYPE ISIGN MODIFICATIONS FOR ADDITIONAL DETOUR SIGNS.

LEGEND

- DETOUR ROUTE 1
- DETOUR ROUTE 2
- PERMANENT SIGNING
- TRAFFIC DIRECTION
- X RAMP CLOSED

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	DETOUR ROUTE CTH JJ WB-OFF & WB-ON	SHEET 255	E



NOTE:

ALL SIGNS SHALL BE PLACED IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

EXACT NUMBER, LOCATION, AND SPACING OF SIGNS AND DEVICES MAY BE ADJUSTED TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.

SIGN LAYOUT SHALL BE IN ACCORDANCE WITH THE FEDERAL HIGHWAY ADMINISTRATION MANUAL OF STANDARD HIGHWAY SIGNS UNLESS OTHERWISE PROVIDED IN PLAN.

SIGNS IN CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL COVERED COVERING SIGNS PAID FOR USING ITEM TRAFFIC CONTROL COVERING SIGNS.

SEE CONSTRUCTION STAGING SHEETS FOR ADDITIONAL TEMPORARY SIGNING.

COVER DETOUR SIGNS WHEN NOT IN USE INCIDENTAL TO WORK ZONE TRAFFIC CONTROL SIGNING.

SEE TYPE ISIGN MODIFICATIONS FOR ADDITIONAL DETOUR SIGNS.

LEGEND

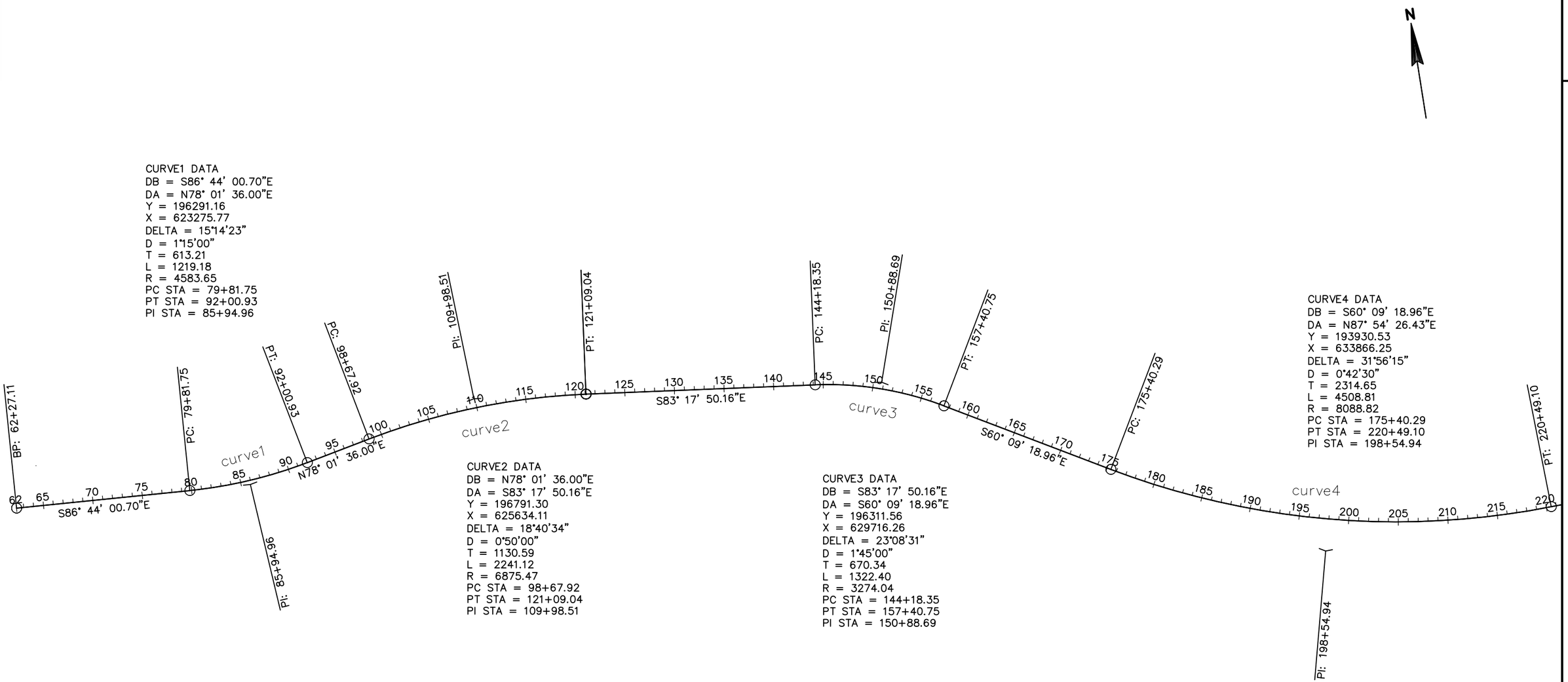
- DETOUR ROUTE 1
- DETOUR ROUTE 2
- PERMANENT SIGNING
- TRAFFIC DIRECTION
- X RAMP CLOSED

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	DETOUR ROUTE CTH JJ EB-OFF & EB-ON	SHEET 256	E

Point Table				
Point #	Raw Description	Elevation	Northing	Easting
201	CP	871.217	182215.2560	678019.5150
202	CP	885.917	182941.4780	678138.7470
203	CP	890.015	183602.3620	677773.2110
204	CP	873.475	181233.7430	677953.7490
205	CP	865.549	184761.7340	677946.7780
206	CP	878.070	186134.9150	677971.1670
207	CP	882.273	186400.2130	678089.7090
208	CP	871.527	186975.0570	678200.1360
209	CP	868.571	187671.5370	678270.2120
210	CP	875.574	188368.3370	678084.8570
211	CP	858.159	189498.2900	677492.2550
212	CP	863.958	188542.2030	677804.6870
213	CP	865.250	187401.6460	677752.9810
214	CP	883.824	186494.8990	677821.0030
215	CP	946.412	196898.2060	656780.9600
216	CP	954.192	197075.1170	656148.0090
217	CP	959.171	196718.4210	656126.2440
218	CP	959.501	197113.7940	652088.6650
219	CP	985.917	196741.7080	650899.0280
220	CP	959.594	196846.5550	651908.9470
221	CP	944.774	196874.2370	652899.4050
222	CP	944.169	197025.1760	652928.3220
223	CP	993.257	195816.4490	649145.4680
224	CP	1000.942	195627.9540	648311.0630
225	CP	995.616	195454.6440	647916.0650
226	CP	951.746	194813.9230	646677.8840
227	CP	998.853	194928.9480	648080.7520
228	CP	942.012	194123.3530	638775.0470

Point Table				
Point #	Raw Description	Elevation	Northing	Easting
229	CP	939.522	194361.4870	637467.7620
230	CP	902.919	193998.7150	635885.9960
231	CP	942.543	193823.3670	637465.0610
1002	MON	886.331	186430.1330	678091.5180
1003	MON	885.595	186784.8200	677791.7520
1005	MON	962.097	196760.0580	656114.4920
1006	MON	958.791	197034.4850	656044.0680
1007	MON	951.995	196885.3260	652713.1900
1008	MON	948.409	190307.4050	652912.0180
1009	MON	1003.653	195189.3930	648188.4060
1010	MON	943.770	193915.6610	637503.7820
2002	MON	947.001	194722.5970	646187.1170
2003	MON	971.882	195269.5710	648048.9950
2004	MON	985.261	196567.7720	650696.4670
2005	MON	996.819	194928.1860	648156.0510
2006	HANDHOLE	998.195	194928.1510	648155.8280
2007	MON	900.890	194015.0510	636179.3550
2008	MON	850.815	190307.4050	676178.8880
2009	MON	869.501	194395.6470	662874.2190
2010	MON	897.779	195135.2370	661330.5270
2011	MON	918.095	195894.0460	660213.8070
2012	MON	948.759	196883.8110	657084.5820
2013	MON	923.938	196919.2150	654848.6120
2014	MON	952.995	196957.4460	652438.3430
2017	MON	925.522	196811.8170	652767.0910
2018	MON	881.157	187839.6210	677980.0430

2



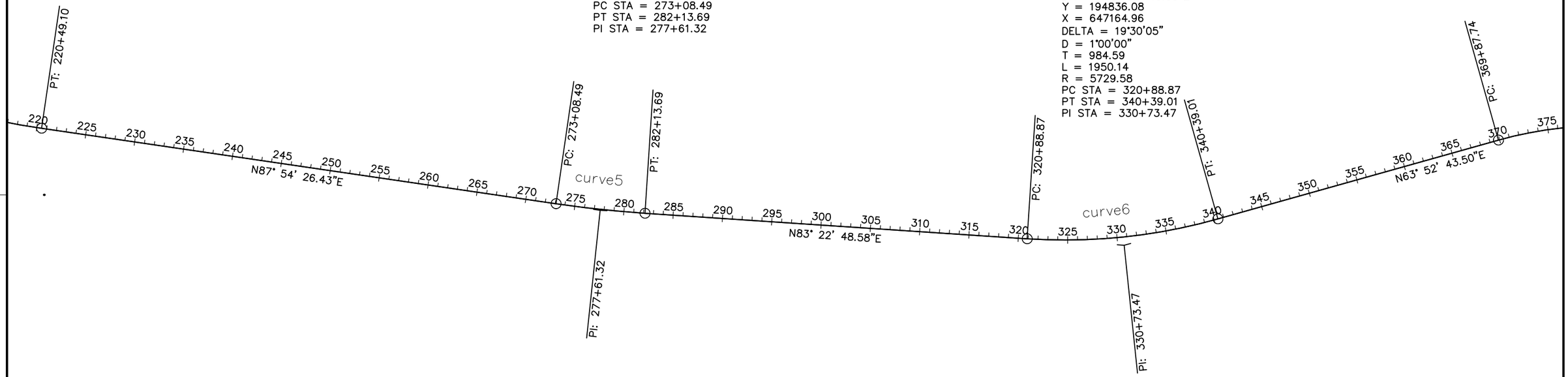
PROJECT NO: 1370-15-71	HWY: STH16	COUNTY: WAUKESHA	ALIGNMENTS	SHEET 258	E

2

N

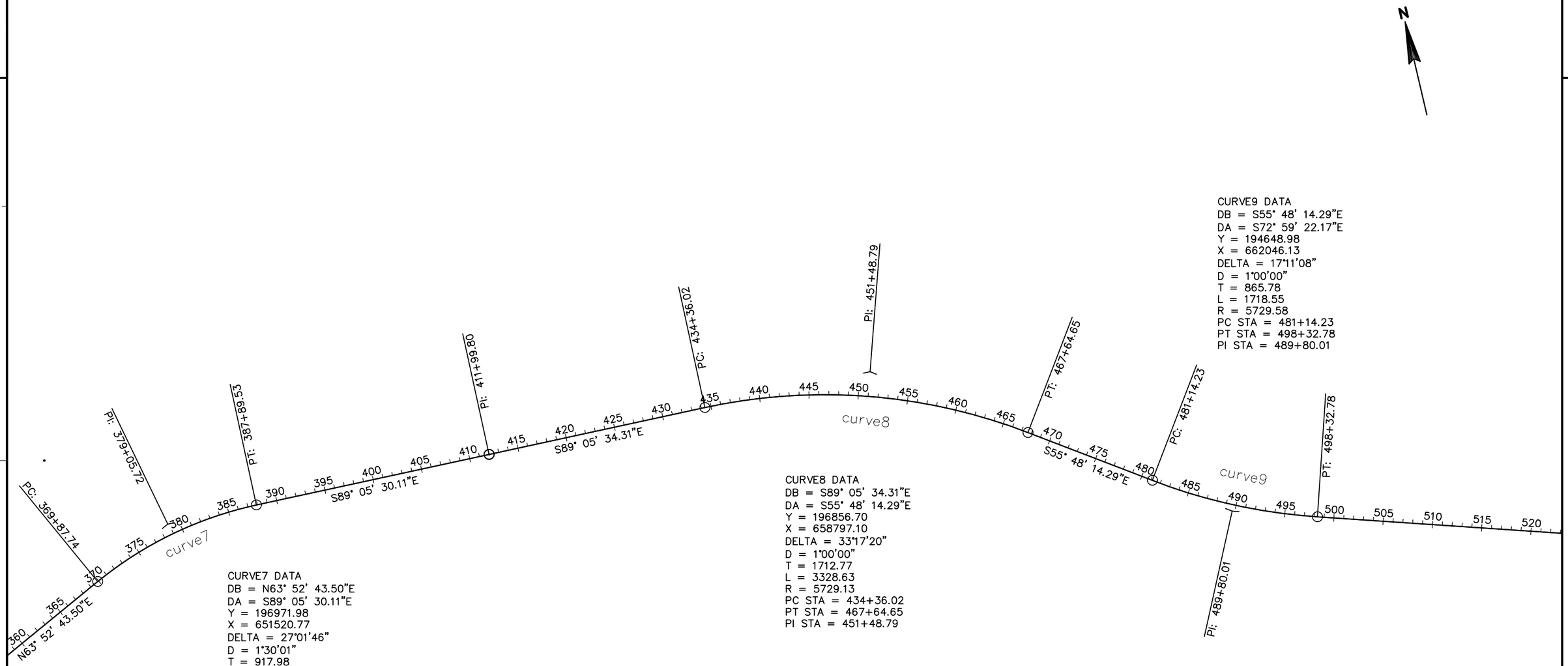
CURVE5 DATA
DB = N87° 54' 26.43"E
DA = N83° 22' 48.58"E
Y = 194223.64
X = 641887.77
DELTA = 4°31'38"
D = 0°30'00"
T = 452.83
L = 905.20
R = 11456.14
PC STA = 273+08.49
PT STA = 282+13.69
PI STA = 277+61.32

CURVE6 DATA
DB = N83° 22' 48.58"E
DA = N63° 52' 43.50"E
Y = 194836.08
X = 647164.96
DELTA = 19°30'05"
D = 1°00'00"
T = 984.59
L = 1950.14
R = 5729.58
PC STA = 320+88.87
PT STA = 340+39.01
PI STA = 330+73.47



PROJECT NO: 1370-15-71	HWY: STH16	COUNTY: WAUKESHA	ALIGNMENTS	SHEET 259	E

2



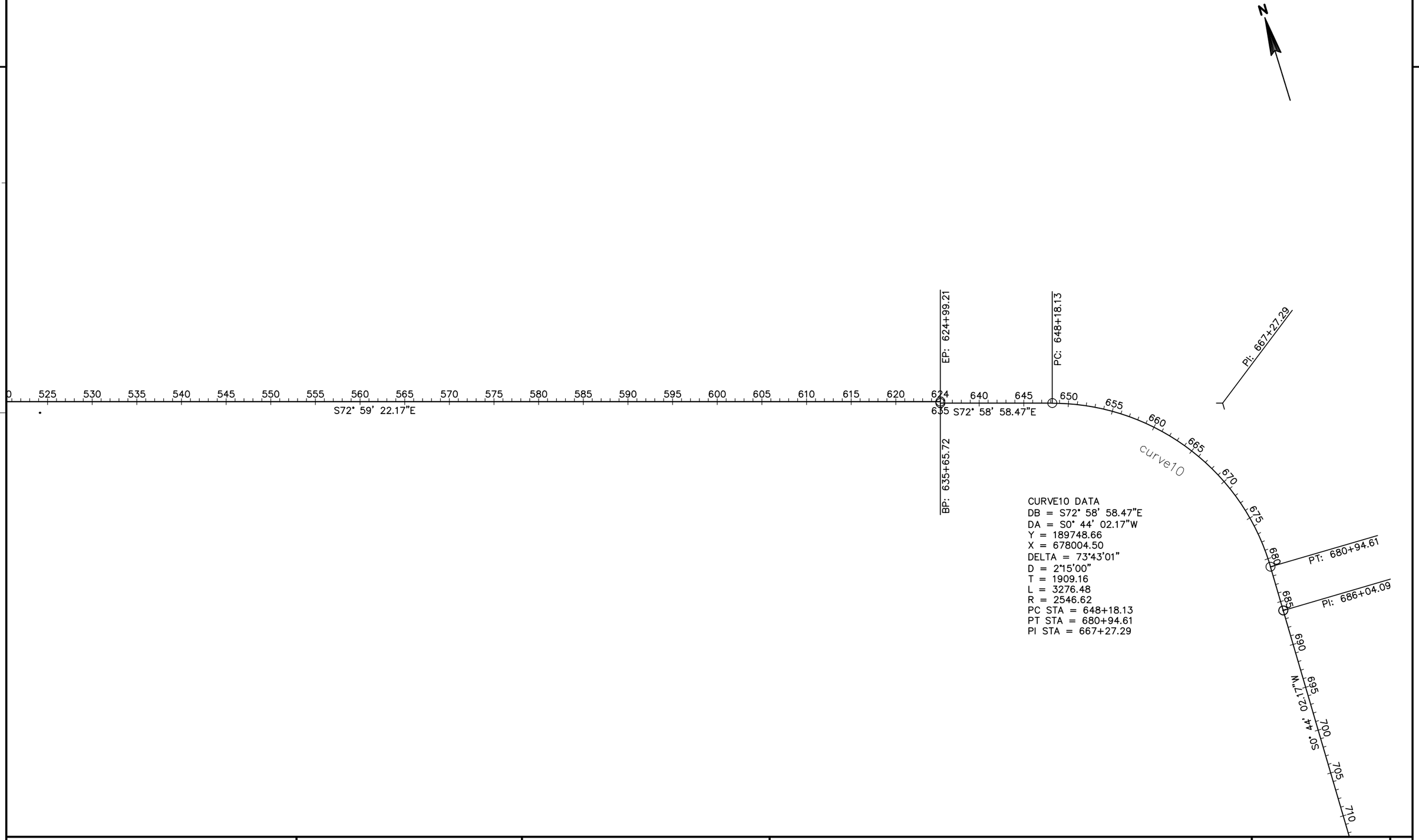
CURVE7 DATA
DB = N63° 52' 43.50"E
DA = S89° 05' 30.11"E
Y = 196971.98
X = 651520.77
DELTA = 27°01'46"
D = 1°30'01"
T = 917.98
L = 1801.79
R = 3819.34
PC STA = 369+87.74
PT STA = 387+89.53
PI STA = 379+05.72

CURVE8 DATA
DB = S89° 05' 34.31"E
DA = S55° 48' 14.29"E
Y = 196856.70
X = 658797.10
DELTA = 33°17'20"
D = 1°00'00"
T = 1712.77
L = 3328.63
R = 5729.13
PC STA = 434+36.02
PT STA = 467+64.65
PI STA = 451+48.79

CURVE9 DATA
DB = S55° 48' 14.29"E
DA = S72° 59' 22.17"E
Y = 194648.98
X = 662046.13
DELTA = 17°11'08"
D = 1°00'00"
T = 865.78
L = 1718.55
R = 5729.58
PC STA = 481+14.23
PT STA = 498+32.78
PI STA = 489+80.01

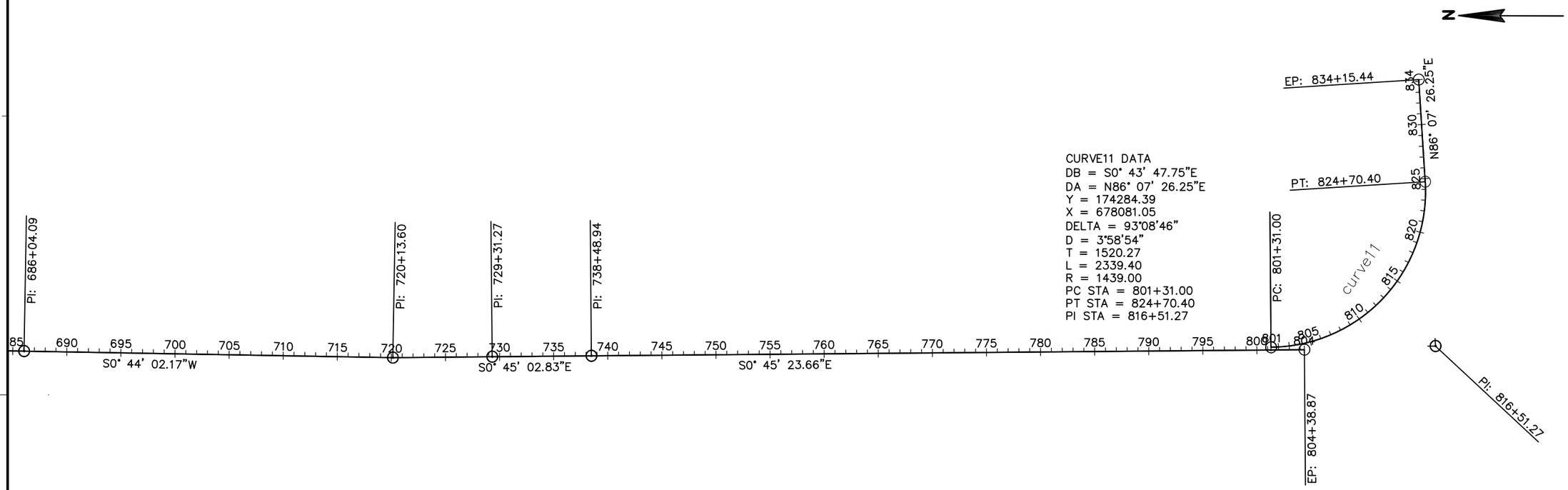
PROJECT NO: 1370-15-71	HWY: STH16	COUNTY: WAUKESHA	ALIGNMENTS	SHEET 260	E

2



PROJECT NO: 1370-15-71	HWY: STH16	COUNTY: WAUKESHA	ALIGNMENTS	SHEET 261	E

2



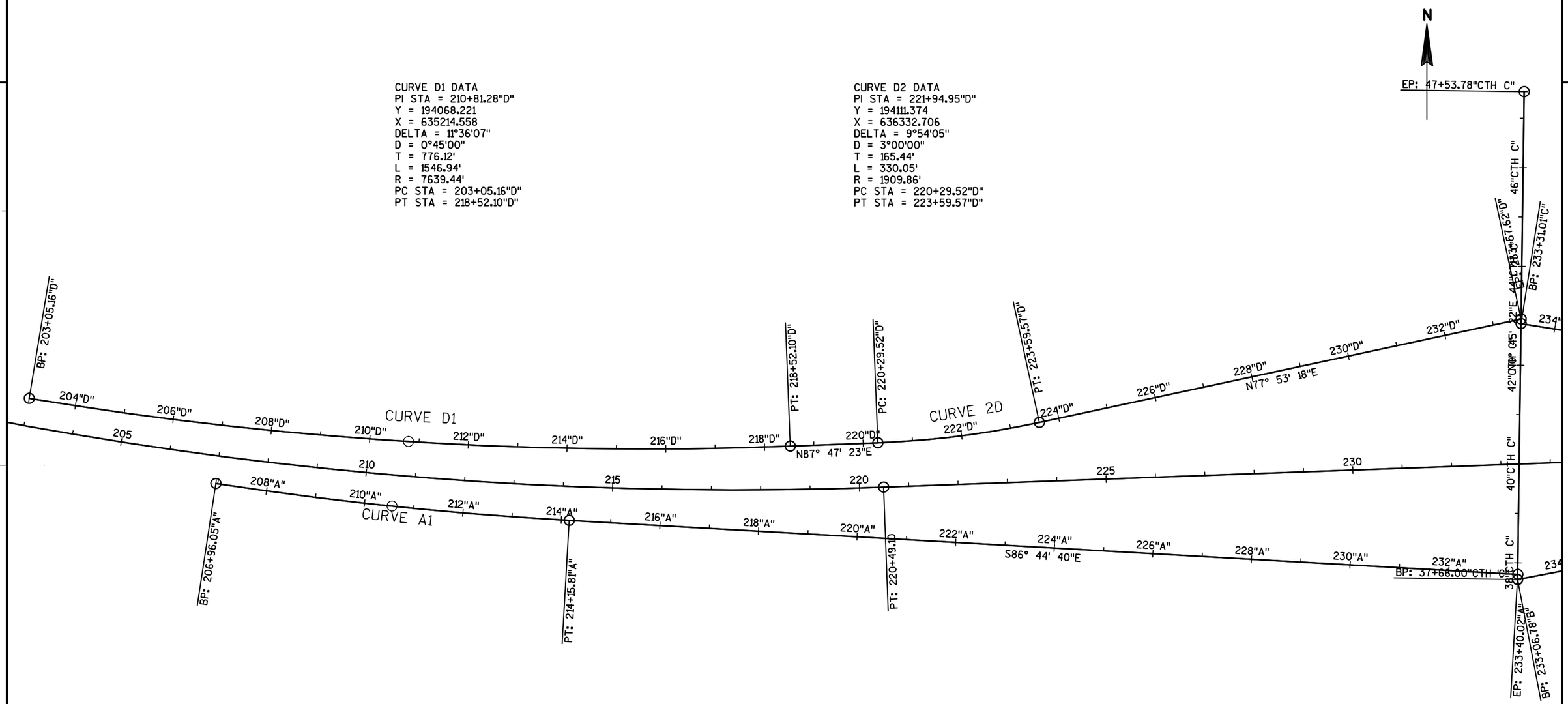
PROJECT NO: 1370-15-71	HWY: STH16	COUNTY: WAUKESHA	ALIGNMENTS	SHEET 262	E

2

CURVE D1 DATA
PI STA = 210+81.28"D"
Y = 194068.221
X = 635214.558
DELTA = 11°36'07"
D = 0°45'00"
T = 776.12'
L = 1546.94'
R = 7639.44'
PC STA = 203+05.16"D"
PT STA = 218+52.10"D"

CURVE D2 DATA
PI STA = 221+94.95"D"
Y = 194111.374
X = 636332.706
DELTA = 9°54'05"
D = 3°00'00"
T = 165.44'
L = 330.05'
R = 1909.86'
PC STA = 220+29.52"D"
PT STA = 223+59.57"D"

CURVE A1 DATA
PI STA = 210+56.20"A"
Y = 193968.359
X = 635182.801
DELTA = 5°23'54"
D = 0°45'00"
T = 360.15'
L = 719.76'
R = 7639.44'
PC STA = 206+96.05"A"
PT STA = 214+15.81"A"



PROJECT NO: 1370-15-71	HWY: STH16	COUNTY: WAUKESHA	ALIGNMENTS - CTH C	SHEET 263	E

2

N

EP: 47+53.78"CTH C"

CURVE C1 DATA
PI STA = 243+98.65"C"
Y = 194179.265
X = 638524.698
DELTA = 10°00'28"
D = 3°00'00"
T = 167.22'
L = 333.59'
R = 1909.86'
PC STA = 242+31.43"C"
PT STA = 245+65.02"C"

46"CTH C"

BP: 233+67.62"D"

EP: 233+31.01"C"

BP: 233+31.01"C"

232"D"

42"CTH C"

234"C"

236"C"

238"C"

S81° 00' 39"E

240"C"

242"C"

PC: 242+31.43"C"

CURVE C1

244"C"

PT: 245+65.02"C"

246"C"

248"C"

250"C"

252"C"

254"C"

EP: 255+94.58"C"

N88° 58' 53"E

235

240

245

250

255

260

40"CTH C"

232"A"

BP: 37+66.00"CTH C"

234"B"

236"B"

238"B"

N79° 07' 56"E

240"B"

242"B"

CURVE B1

244"B"

246"B"

248"B"

250"B"

252"B"

254"B"

256"B"

N86° 45' 42"E

38"CTH C"

EP: 233+40.02"A"

BP: 233+06.78"B"

PC: 241+50.71"B"

PT: 244+05.03"B"

EP: 257+54.63"B"

CURVE B1 DATA
PI STA = 242+78.06"B"
Y = 194011.258
X = 638417.190
DELTA = 7°37'46"
D = 3°00'00"
T = 127.35'
L = 254.32'
R = 1909.86'
PC STA = 241+50.71"B"
PT STA = 244+05.03"B"

PROJECT NO: 1370-15-71	HWY: STH16	COUNTY: WAUKESHA	ALIGNMENTS - CTH C	SHEET 264	E

2

N

PI STA = 321+85.35"T"
Y = 194809.602
X = 646294.048
DELTA = 2°55'16"
D = 0°30'00"
T = 292.19'
L = 584.25'
R = 11459.16'
PC STA = 318+93.16"T"
PT STA = 324+77.41"T"

PI STA = 327+83.38"T"
Y = 194920.585
X = 646881.821
DELTA = 18°05'56"
D = 3°00'00"
T = 304.18'
L = 603.30'
R = 1909.86'
PC STA = 324+79.20"T"
PT STA = 330+82.49"T"

PI STA = 334+01.15"Q"
Y = 194779.606
X = 647479.937
DELTA = 14°26'26"
D = 1°00'00"
T = 725.87'
L = 1444.05'
R = 5729.58'
PC STA = 326+75.28"Q"
PT STA = 341+19.33"Q"

2

N

PI STA = 355+29.43"S"
Y = 195992.673
X = 649364.446
DELTA = 7°59'03"
D = 4°00'00"
T = 99.96'
L = 199.61'
R = 1432.40'
PC STA = 354+29.47"S"
PT STA = 356+29.08"S"

PI STA = 349+70.75"R"
Y = 195602.293
X = 648921.636
DELTA = 13°36'07"
D = 3°00'00"
T = 227.77'
L = 453.40'
R = 1909.86'
PC STA = 347+42.98"R"
PT STA = 351+96.38"R"

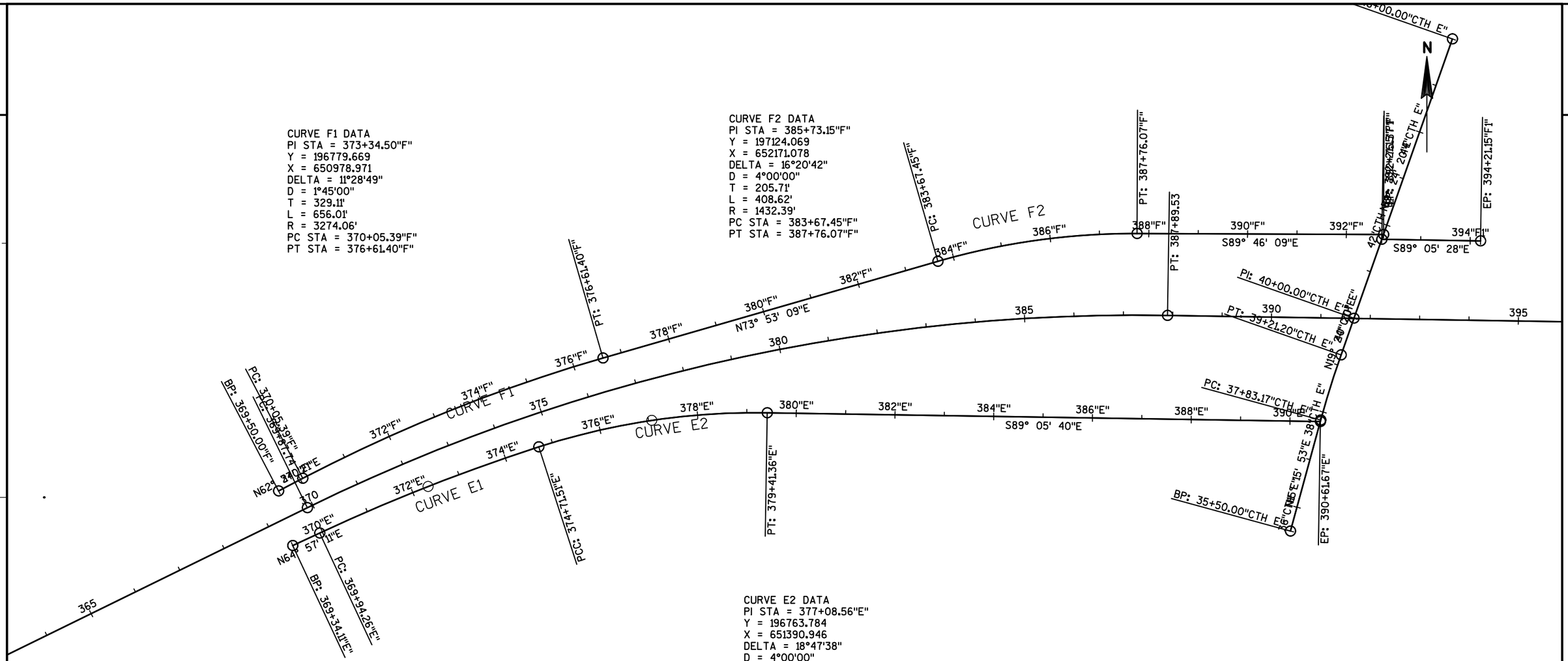
PI STA = 342+37.17"R"
Y = 195120.194
X = 648367.855
DELTA = 14°30'00"
D = 12°00'01"
T = 60.74'
L = 120.83'
R = 477.45'
PC STA = 341+76.43"R"
PT STA = 342+97.26"R"

EP: 348+86.83
EP: 342+91.63
BP: 343+10.00"S"
EP: 362+87.69"S"
EP: 362+86.64"R"
PC: 354+29.47"S"
PT: 356+29.08"S"
PT: 340+39.01
PC: 341+76.43"R"
PT: 342+97.26"R"
PC: 347+42.98"R"
PT: 351+96.38"R"
BP: 340+06.22"R"
BP: 341+19.33"R"
BP: 338+03.23
CURVE Q1
CURVE R1
CURVE R2
CURVE S1
334"Q"
336"Q"
338"Q"
340"Q"
335
336"T"
338"T"
340"T"
342"T"
340
345
344"R"
346"R"
348"R"
350"R"
352"R"
350
355
354"R"
356"R"
358"R"
360"R"
362"R"
360
365
344"S"
346"S"
348"S"
350"S"
352"S"
354"S"
356"S"
358"S"
360"S"
362"S"

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	ALIGNMENTS - STH 83	SHEET 266	E

FILE NAME : N:\PDS\C3D\13701501\SHEETSPLAN\027203_AD.DWG
LAYOUT NAME - 050102
PLOT DATE : 1/31/2017 1:26 PM
PLOT BY : ROTIER, STEVEN J
PLOT NAME :
PLOT SCALE : 1 IN:200 FT
WISDOT/CADDS SHEET 42

2



PROJECT NO: 1370-15-71	HWY: STH16	COUNTY: WAUKESHA	ALIGNMENTS - CTH E	SHEET 267	E

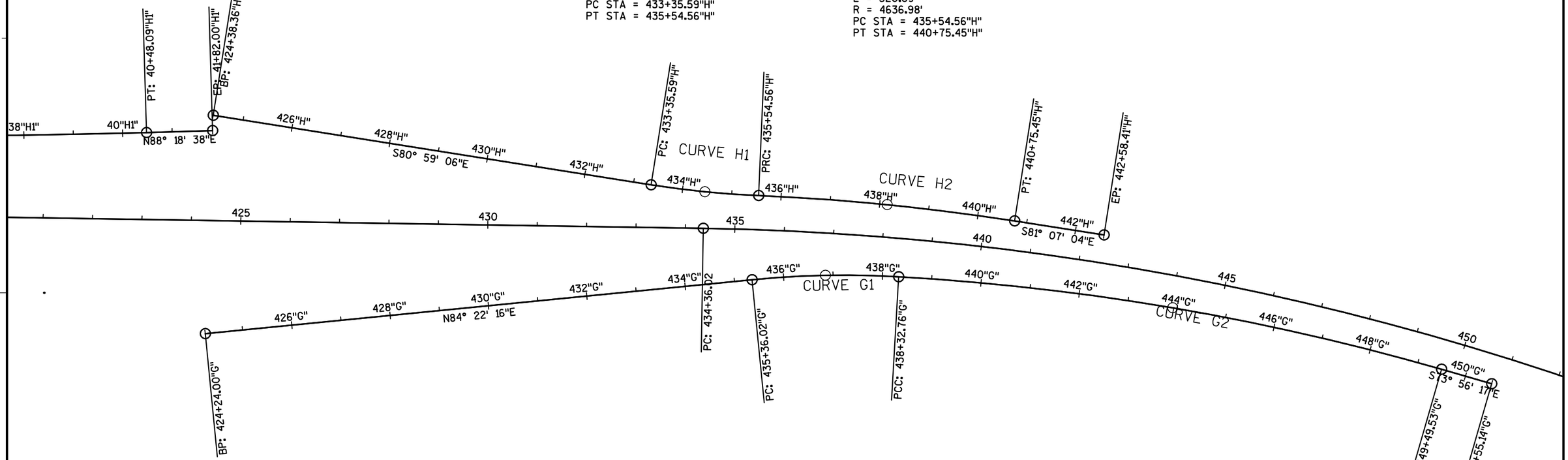
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2

N

CURVE H1 DATA
PI STA = 434+45.19"H"
Y = 196954.732
X = 657087.151
DELTA = 6°34'09"
D = 3°00'00"
T = 109.60'
L = 218.97'
R = 1909.86'
PC STA = 433+35.59"H"
PT STA = 435+54.56"H"

CURVE H2 DATA
PI STA = 438+15.28"H"
Y = 196938.928
X = 657457.137
DELTA = 6°26'10"
D = 1°14'08"
T = 260.72'
L = 520.89'
R = 4636.98'
PC STA = 435+54.56"H"
PT STA = 440+75.45"H"

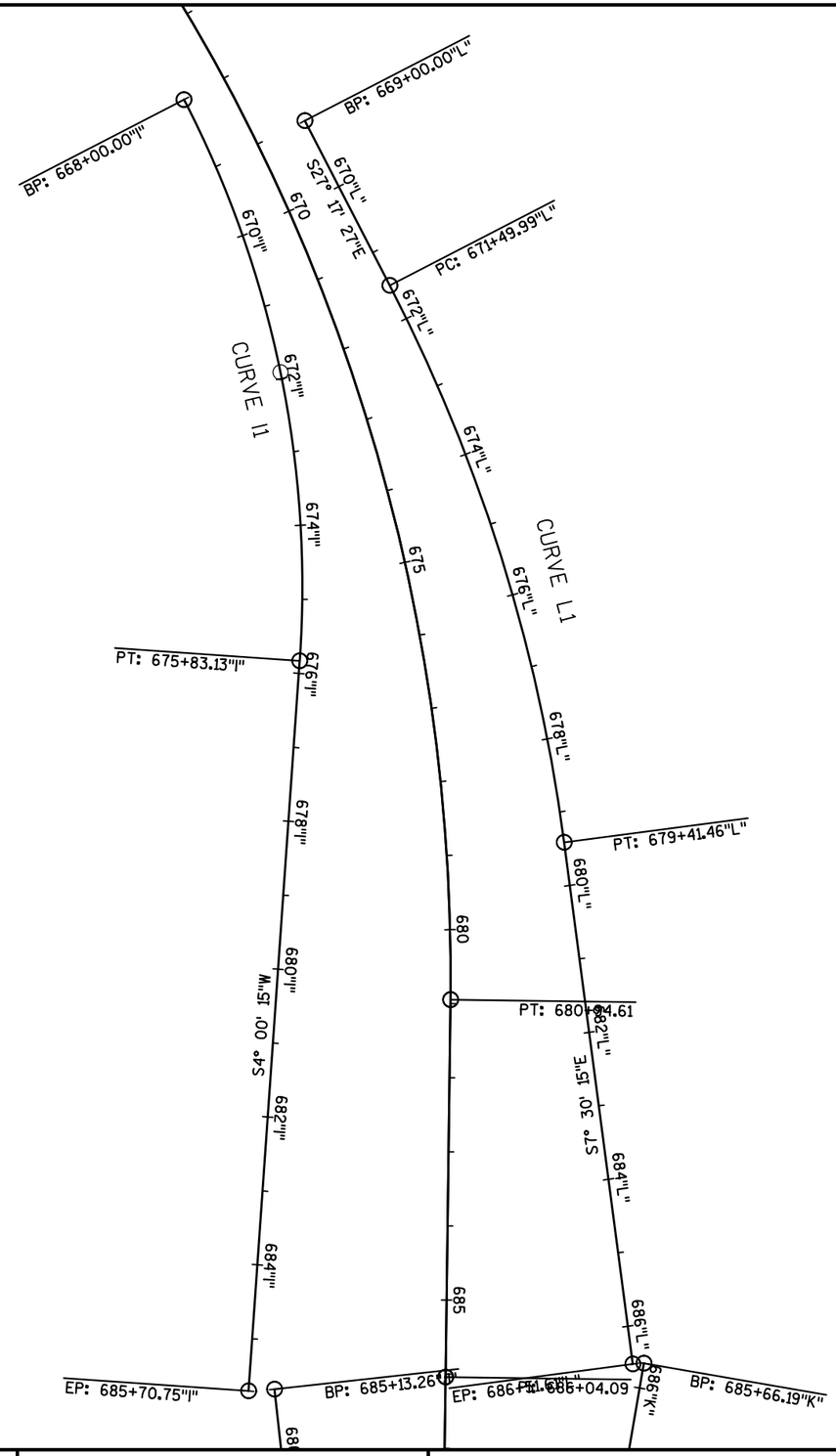


CURVE G1 DATA
PI STA = 436+84.69"G"
Y = 196794.440
X = 657331.351
DELTA = 8°54'08"
D = 3°00'00"
T = 148.67'
L = 296.74'
R = 1909.85'
PC STA = 435+36.02"G"
PT STA = 438+32.76"G"

CURVE G2 DATA
PI STA = 443+93.48"G"
Y = 196753.933
X = 658039.578
DELTA = 12°47'18"
D = 1°08'42"
T = 560.71'
L = 1116.77'
R = 5003.46'
PC STA = 438+32.76"G"
PT STA = 449+49.53"G"

PROJECT NO: 1370-15-71	HWY: STH16	COUNTY: WAUKESHA	ALIGNMENTS - CTH KC	SHEET 268	E

2

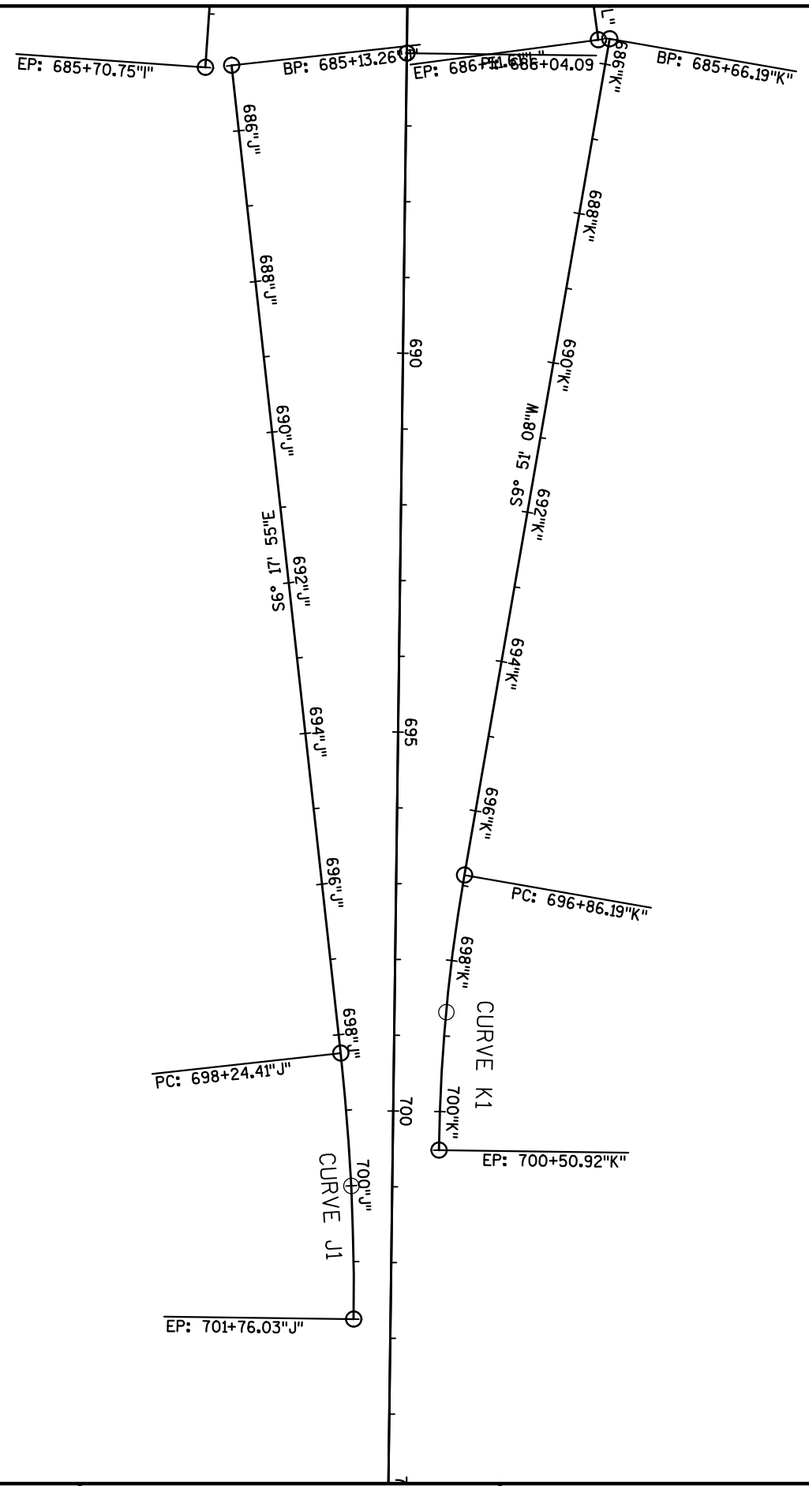


CURVE I1 DATA
PI STA = 672+01.62"I"
Y = 188697.409
X = 677804.552
DELTA = 31°19'31"
D = 4°00'00"
T = 401.62'
L = 783.13'
R = 1432.39'
PC STA = 668+00.00"I"
PT STA = 675+83.13"I"

CURVE L1 DATA
PI STA = 675+49.71"L"
Y = 188448.302
X = 678081.323
DELTA = 19°47'12"
D = 2°30'00"
T = 399.72'
L = 791.47'
R = 2291.84'
PC STA = 671+49.99"L"
PT STA = 679+41.46"L"

PROJECT NO: 1370-15-71	HWY: STH16	COUNTY: WAUKESHA	ALIGNMENTS - STH 190	SHEET 269	E

2

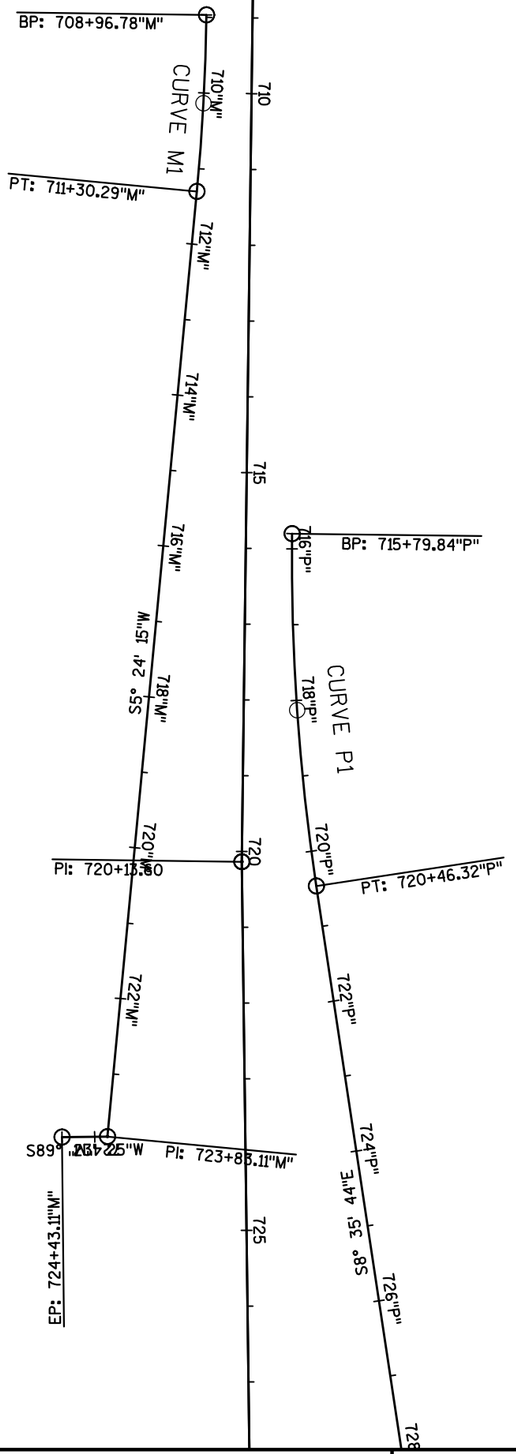


CURVE J1 DATA
PI STA = 700+00.44"J"
Y = 185835.807
X = 677905.619
DELTA = 7°01'56"
D = 2°00'00"
T = 176.03'
L = 351.62'
R = 2864.81'
PC STA = 698+24.41"J"
PT STA = 701+76.03"J"

CURVE K1 DATA
PI STA = 698+68.94"K"
Y = 186065.459
X = 678018.324
DELTA = 9°07'06"
D = 2°30'00"
T = 182.75'
L = 364.73'
R = 2291.84'
PC STA = 696+86.19"K"
PT STA = 700+50.92"K"

PROJECT NO: 1370-15-71	HWY: STH16	COUNTY: WAUKESHA	ALIGNMENTS - STH 190	SHEET 270	E

2



CURVE M1 DATA
PI STA = 710+13.60"M"
Y = 184921.689
X = 677881.660
DELTA = 4°40'13"
D = 2°00'00"
T = 116.82'
L = 233.51'
R = 2864.78'
PC STA = 708+96.78"M"
PT STA = 711+30.29"M"

CURVE P1 DATA
PI STA = 718+13.60"P"
Y = 184120.198
X = 677993.399
DELTA = 9°19'47"
D = 2°00'00"
T = 233.76'
L = 466.48'
R = 2864.75'
PC STA = 715+79.84"P"
PT STA = 720+46.32"P"

PROJECT NO: 1370-15-71	HWY: STH16	COUNTY: WAUKESHA	ALIGNMENTS - CTH JJ	SHEET 271	E

2

N

728"P"

PI: 729+31.27

EP: 729+39.69"P"

BP: 729+19.36"O"

730

730"O"

732"O"

734"O"

S 7° 15' 59" W

735

736"O"

738"O"

PI: 738+48.94

PC: 738+47.56"O"

740

740"O"

CURVE O1

742"O"

EP: 742+31.26"O"

BP: 734+20.55"N"

PI: 735+05.55"N"

N89° 23' 25" E

736"N"

738"N"

S 5° 34' 31" E

740"N"

742"N"

744"N"

PC: 744+47.54"N"

CURVE N1

745

746"N"

EP: 746+31.27"N"

CURVE N1 DATA
PI STA = 745+39.44"N"
Y = 181394.463
X = 677890.111
DELTA = 3°40'28"
D = 2°00'00"
T = 91.89'
L = 183.73'
R = 2864.91'
PC STA = 744+47.54"N"
PT STA = 746+31.27"N"

CURVE O1 DATA
PI STA = 740+39.70"O"
Y = 181896.456
X = 678020.982
DELTA = 7°40'27"
D = 2°00'00"
T = 192.14'
L = 383.70'
R = 2864.75'
PC STA = 738+47.56"O"
PT STA = 742+31.26"O"

PROJECT NO: 1370-15-71	HWY: STH16	COUNTY: WAUKESHA	ALIGNMENTS - CTH JJ	SHEET 272	E

1370-15-71

Line	Item	Item Description	Unit	Total	Qty
0010	108.4400	CPM Progress Schedule	EACH	1.000	1.000
0020	204.0100	Removing Pavement	SY	26,630.000	26,630.000
0030	204.0110	Removing Asphaltic Surface	SY	37,150.000	37,150.000
0040	204.0115	Removing Asphaltic Surface Butt Joints	SY	2,930.000	2,930.000
0050	204.0120	Removing Asphaltic Surface Milling	SY	261,265.000	261,265.000
0060	204.0150	Removing Curb & Gutter	LF	1,818.000	1,818.000
0070	204.0155	Removing Concrete Sidewalk	SY	443.000	443.000
0080	204.0157	Removing Concrete Barrier	LF	84.000	84.000
0090	204.0165	Removing Guardrail	LF	11,087.000	11,087.000
0100	204.0180	Removing Delineators and Markers	EACH	500.000	500.000
0110	205.0100	Excavation Common	CY	49,289.000	49,289.000
0120	211.0100	Prepare Foundation for Asphaltic Paving (project) 01. 1370-15-71	LS	1.000	1.000
0130	211.0400	Prepare Foundation for Asphaltic Shoulders	STA	1,696.000	1,696.000
0140	213.0100	Finishing Roadway (project) 01. 1370-15-71	EACH	1.000	1.000
0150	305.0110	Base Aggregate Dense 3/4-Inch	TON	14,720.000	14,720.000
0160	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	21,040.000	21,040.000
0170	305.0500	Shaping Shoulders	STA	194.000	194.000
0180	311.0110	Breaker Run	TON	25,440.000	25,440.000
0190	390.0403	Base Patching Concrete Shes	SY	2,867.000	2,867.000
0200	415.0080	Concrete Pavement 8-Inch	SY	27,490.000	27,490.000
0210	415.1080	Concrete Pavement HES 8-Inch	SY	1,350.000	1,350.000
0220	416.0610	Drilled Tie Bars	EACH	365.000	365.000
0230	416.0620	Drilled Dowel Bars	EACH	14,338.000	14,338.000
0240	416.0750.S	Concrete Pavement Partial Depth Repair Joint Repair	LF	10,000.000	10,000.000
0250	416.1715	Concrete Pavement Repair SHES	SY	3,911.000	3,911.000
0260	416.1725	Concrete Pavement Replacement SHES	SY	2,655.000	2,655.000
0270	420.1000	Continuous Diamond Grinding Concrete Pavement	SY	60,080.000	60,080.000
0280	440.4410	Incentive IRI Ride	DOL	37,441.000	37,441.000
0290	455.0605	Tack Coat	GAL	24,663.000	24,663.000
0300	460.2005	Incentive Density PWL HMA Pavement	DOL	55,029.000	55,029.000
0310	460.2010	Incentive Air Voids HMA Pavement	DOL	86,721.000	86,721.000
0320	460.4110.S	Reheating HMA Pavement Longitudinal Joints	LF	64,628.000	64,628.000
0330	460.6223	HMA Pavement 3 MT 58-28 S	TON	32,910.000	32,910.000
0340	460.6224	HMA Pavement 4 MT 58-28 S	TON	34,880.000	34,880.000
0350	460.7424	HMA Pavement 4 HT 58-28 H	TON	18,931.000	18,931.000
0360	465.0315	Asphaltic Flumes	SY	113.000	113.000
0370	465.0400	Asphaltic Shoulder Rumble Strips	LF	142,508.000	142,508.000
0380	520.8700	Cleaning Culvert Pipes	EACH	8.000	8.000
0390	520.9700.S	Culvert Pipe Liners (size) 01. 15-Inch	LF	480.000	480.000

1370-15-71

Line	Item	Item Description	Unit	Total	Qty
0400	520.9750.S	Cleaning Culvert Pipes for Liner Verification	EACH	6.000	6.000
0410	524.0118	Culvert Pipe Salvaged 18-Inch	LF	56.000	56.000
0420	524.0124	Culvert Pipe Salvaged 24-Inch	LF	24.000	24.000
0430	524.0130	Culvert Pipe Salvaged 30-Inch	LF	8.000	8.000
0440	524.0618	Apron Endwalls for Culvert Pipe Salvaged 18-Inch	EACH	20.000	20.000
0450	524.0624	Apron Endwalls for Culvert Pipe Salvaged 24-Inch	EACH	7.000	7.000
0460	524.0630	Apron Endwalls for Culvert Pipe Salvaged 30-Inch	EACH	1.000	1.000
0470	524.0636	Apron Endwalls for Culvert Pipe Salvaged 36-Inch	EACH	1.000	1.000
0480	601.0409	Concrete Curb & Gutter 30-Inch Type A	LF	1,315.000	1,315.000
0490	601.0411	Concrete Curb & Gutter 30-Inch Type D	LF	309.000	309.000
0500	601.0555	Concrete Curb & Gutter 6-Inch Sloped 36-Inch Type A	LF	143.000	143.000
0510	601.0600	Concrete Curb Pedestrian	LF	25.000	25.000
0520	602.0410	Concrete Sidewalk 5-Inch	SF	3,980.000	3,980.000
0530	602.0505	Curb Ramp Detectable Warning Field Yellow	SF	264.000	264.000
0540	603.0405	Concrete Barrier Transition Section 32-Inch	LF	6.500	6.500
0550	606.0200	Riprap Medium	CY	23.000	23.000
0560	611.8115	Adjusting Inlet Covers	EACH	3.000	3.000
0570	611.9710	Salvaged Inlet Covers	EACH	3.000	3.000
0580	614.0010	Barrier System Grading Shaping Finishing	EACH	20.000	20.000
0590	614.0115	Anchorages for Steel Plate Beam Guard Type 2	EACH	2.000	2.000
0600	614.0150	Anchor Assemblies for Steel Plate Beam Guard	EACH	4.000	4.000
0610	614.0200	Steel Thrie Beam Structure Approach	LF	42.000	42.000
0620	614.0220	Steel Thrie Beam Bullnose Terminal	EACH	6.000	6.000
0630	614.0230	Steel Thrie Beam	LF	729.000	729.000
0640	614.0305	Steel Plate Beam Guard Class A	LF	575.000	575.000
0650	614.0345	Steel Plate Beam Guard Short Radius	LF	38.000	38.000
0660	614.0396	Guardrail Mow Strip Asphalt	SY	1,785.500	1,785.500
0670	614.0805	Crash Cushions Permanent Low Maintenance	EACH	1.000	1.000
0680	614.0920	Salvaged Rail	LF	509.000	509.000
0690	614.0925	Salvaged Guardrail End Treatments	EACH	11.000	11.000
0700	614.2300	MGS Guardrail 3	LF	10,083.000	10,083.000
0710	614.2500	MGS Thrie Beam Transition	LF	480.000	480.000
0720	614.2610	MGS Guardrail Terminal EAT	EACH	17.000	17.000
0730	614.2620	MGS Guardrail Terminal Type 2	EACH	16.000	16.000
0740	619.1000	Mobilization	EACH	1.000	1.000
0750	620.0300	Concrete Median Sloped Nose	SF	300.000	300.000
0760	625.0500	Salvaged Topsoil	SY	16,312.000	16,312.000
0770	627.0200	Mulching	SY	1,660.000	1,660.000
0780	628.1504	Silt Fence	LF	30,680.000	30,680.000
0790	628.1520	Silt Fence Maintenance	LF	3,071.000	3,071.000

1370-15-71

Line	Item	Item Description	Unit	Total	Qty
0800	628.1905	Mobilizations Erosion Control	EACH	5.000	5.000
0810	628.1910	Mobilizations Emergency Erosion Control	EACH	5.000	5.000
0820	628.2004	Erosion Mat Class I Type B	SY	14,211.000	14,211.000
0830	628.2008	Erosion Mat Urban Class I Type B	SY	490.000	490.000
0840	628.7010	Inlet Protection Type B	EACH	24.000	24.000
0850	628.7015	Inlet Protection Type C	EACH	10.000	10.000
0860	628.7504	Temporary Ditch Checks	LF	680.000	680.000
0870	628.7555	Culvert Pipe Checks	EACH	51.000	51.000
0880	628.7570	Rock Bags	EACH	200.000	200.000
0890	629.0210	Fertilizer Type B	CWT	142.800	142.800
0900	630.0130	Seeding Mixture No. 30	LB	299.000	299.000
0910	630.0160	Seeding Mixture No. 60	LB	9.500	9.500
0920	630.0200	Seeding Temporary	LB	25.000	25.000
0930	633.0100	Delineator Posts Steel	EACH	534.000	534.000
0940	633.0500	Delineator Reflectors	EACH	714.000	714.000
0950	634.0618	Posts Wood 4x6-Inch X 18-FT	EACH	611.000	611.000
0960	634.0622	Posts Wood 4x6-Inch X 22-FT	EACH	62.000	62.000
0970	634.0816	Posts Tubular Steel 2x2-Inch X 16-FT	EACH	18.000	18.000
0980	635.0200	Sign Supports Structural Steel HS	LB	11,600.000	11,600.000
0990	635.0300	Sign Supports Replacing Base Connection Bolts	EACH	76.000	76.000
1000	636.0100	Sign Supports Concrete Masonry	CY	19.000	19.000
1010	636.0500	Sign Supports Steel Reinforcement	LB	1,156.000	1,156.000
1020	637.1220	Signs Type I Reflective SH	SF	9,653.500	9,653.500
1030	637.1230	Signs Type I Reflective F	SF	127.500	127.500
1040	637.2210	Signs Type II Reflective H	SF	6,352.120	6,352.120
1050	637.2215	Signs Type II Reflective H Folding	SF	366.820	366.820
1060	637.2230	Signs Type II Reflective F	SF	1,113.250	1,113.250
1070	638.2102	Moving Signs Type II	EACH	3.000	3.000
1080	638.2601	Removing Signs Type I	EACH	50.000	50.000
1090	638.2602	Removing Signs Type II	EACH	500.000	500.000
1100	638.3000	Removing Small Sign Supports	EACH	527.000	527.000
1110	638.3100	Removing Structural Steel Sign Supports	EACH	16.000	16.000
1120	642.5201	Field Office Type C	EACH	1.000	1.000
1130	643.0100	Traffic Control (project) 01. 1370-15-71	EACH	1.000	1.000
1140	643.0300	Traffic Control Drums	DAY	233,250.000	233,250.000
1150	643.0410	Traffic Control Barricades Type II	DAY	448.000	448.000
1160	643.0420	Traffic Control Barricades Type III	DAY	13,105.000	13,105.000
1170	643.0453	Traffic Control Barricades Permanent Type III	EACH	12.000	12.000
1180	643.0705	Traffic Control Warning Lights Type A	DAY	26,210.000	26,210.000
1190	643.0715	Traffic Control Warning Lights Type C	DAY	20,294.000	20,294.000

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Line	Item	Item Description	Unit	Total	Qty
1200	643.0800	Traffic Control Arrow Boards	DAY	696.000	696.000
1210	643.0900	Traffic Control Signs	DAY	31,672.000	31,672.000
1220	643.0910	Traffic Control Covering Signs Type I	EACH	32.000	32.000
1230	643.0920	Traffic Control Covering Signs Type II	EACH	1,280.000	1,280.000
1240	643.1000	Traffic Control Signs Fixed Message	SF	590.000	590.000
1250	643.1050	Traffic Control Signs PCMS	DAY	14.000	14.000
1260	643.2000	Traffic Control Detour (project) 01. 1370-15-71	EACH	1.000	1.000
1270	643.3000	Traffic Control Detour Signs	DAY	8,043.000	8,043.000
1280	644.1410.S	Temporary Pedestrian Surface Asphalt	SF	120.000	120.000
1290	644.1601.S	Temporary Curb Ramp	EACH	3.000	3.000
1300	645.0120	Geotextile Type HR	SY	47.000	47.000
1310	646.0600	Removing Pavement Markings	LF	51,000.000	51,000.000
1320	646.0790.S	Removing Raised Pavement Markers	EACH	850.000	850.000
1330	646.0841.S	Pavement Marking Grooved Wet Reflective Contrast Tape 4-Inch	LF	33,105.000	33,105.000
1340	646.0843.S	Pavement Marking Grooved Wet Reflective Contrast Tape 8-Inch	LF	28,568.000	28,568.000
1350	646.0883.S	Pavement Marking Grooved Wet Reflective Tape 8-Inch	LF	2,973.000	2,973.000
1360	646.2304.S	Pavement Marking Grooved Wet Reflective Epoxy 4-Inch	LF	325,484.000	325,484.000
1370	647.0136	Pavement Marking Arrows Epoxy Type 7	EACH	1.000	1.000
1380	647.0166	Pavement Marking Arrows Epoxy Type 2	EACH	13.000	13.000
1390	647.0176	Pavement Marking Arrows Epoxy Type 3	EACH	7.000	7.000
1400	647.0186	Pavement Marking Arrows Epoxy Type 4	EACH	32.000	32.000
1410	647.0356	Pavement Marking Words Epoxy	EACH	15.000	15.000
1420	647.0566	Pavement Marking Stop Line Epoxy 18-Inch	LF	431.000	431.000
1430	647.0606	Pavement Marking Island Nose Epoxy	EACH	1.000	1.000
1440	647.0726	Pavement Marking Diagonal Epoxy 12-Inch	LF	40.000	40.000
1450	647.0746	Pavement Marking Diagonal Epoxy 24-Inch	LF	3,260.000	3,260.000
1460	647.0766	Pavement Marking Crosswalk Epoxy 6-Inch	LF	1,499.000	1,499.000
1470	649.0400	Temporary Pavement Marking Removable Tape 4-Inch	LF	72,060.000	72,060.000
1480	649.0402	Temporary Pavement Marking Paint 4-Inch	LF	223,760.000	223,760.000
1490	650.4500	Construction Staking Subgrade	LF	8,850.000	8,850.000
1500	650.7000	Construction Staking Concrete Pavement	LF	16,454.000	16,454.000
1510	650.8000	Construction Staking Resurfacing Reference	LF	86,779.000	86,779.000
1520	650.8500	Construction Staking Electrical Installations (project) 01. 1370-15-71	LS	1.000	1.000
1530	650.9910	Construction Staking Supplemental Control (project) 01. 1370-15-71	LS	1.000	1.000
1540	650.9920	Construction Staking Slope Stakes	LF	18,150.000	18,150.000
1550	652.0225	Conduit Rigid Nonmetallic Schedule 40 2-Inch	LF	540.000	540.000

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Line	Item	Item Description	Unit	Total	Qty
1560	652.0800	Conduit Loop Detector	LF	98.000	98.000
1570	653.0135	Pull Boxes Steel 24x36-Inch	EACH	16.000	16.000
1580	653.0900	Adjusting Pull Boxes	EACH	2.000	2.000
1590	653.0905	Removing Pull Boxes	EACH	2.000	2.000
1600	654.0105	Concrete Bases Type 5	EACH	19.000	19.000
1610	654.0220	Concrete Control Cabinet Bases Type 10	EACH	16.000	16.000
1620	655.0615	Electrical Wire Lighting 10 AWG	LF	2,880.000	2,880.000
1630	655.0700	Loop Detector Lead In Cable	LF	884.000	884.000
1640	655.0800	Loop Detector Wire	LF	392.000	392.000
1650	657.0100	Pedestal Bases	EACH	16.000	16.000
1660	657.0255	Transformer Bases Breakaway 11 1/2-Inch Bolt Circle	EACH	19.000	19.000
1670	657.0321	Poles Type 5-Steel	EACH	16.000	16.000
1680	657.0322	Poles Type 5-Aluminum	EACH	3.000	3.000
1690	657.0425	Traffic Signal Standards Aluminum 15-FT	EACH	16.000	16.000
1700	662.2026.S	Ramp Closure Gates Solar 26-FT	EACH	2.000	2.000
1710	662.2030.S	Ramp Closure Gates Solar 30-FT	EACH	2.000	2.000
1720	662.2037.S	Ramp Closure Gates Solar 37-FT	EACH	2.000	2.000
1730	662.2040.S	Ramp Closure Gates Solar 40-FT	EACH	10.000	10.000
1740	662.3026.S	Ramp Closure Gate Arms Stockpile 26-FT	EACH	2.000	2.000
1750	662.3030.S	Ramp Closure Gate Arms Stockpile 30-FT	EACH	2.000	2.000
1760	662.3037.S	Ramp Closure Gate Arms Stockpile 37-FT	EACH	2.000	2.000
1770	662.3040.S	Ramp Closure Gate Arms Stockpile 40-FT	EACH	4.000	4.000
1780	662.4000.S	Ramp Closure Gate Flashers Stockpile	EACH	30.000	30.000
1790	662.6030.S	Ramp Closure Barricade Rack 3-Unit	EACH	4.000	4.000
1800	674.0200	Cable Microwave Detector	LF	275.000	275.000
1810	674.0300	Remove Cable	LF	435.000	435.000
1820	675.0300	Install Mounted Controller Microwave Detector Assembly	EACH	3.000	3.000
1830	690.0150	Sawing Asphalt	LF	3,138.000	3,138.000
1840	690.0250	Sawing Concrete	LF	41,700.000	41,700.000
1850	715.0415	Incentive Strength Concrete Pavement	DOL	1,923.000	1,923.000
1860	ASP.1T0A	On-the-Job Training Apprentice at $5.00/HR	HRS	4,000.000	4,000.000
1870	ASP.1T0G	On-the-Job Training Graduate at $5.00/HR	HRS	6,000.000	6,000.000
1880	SPV.0060	Special 01. Install Conduit Into Existing Item	EACH	3.000	3.000
1890	SPV.0060	Special 02. Install Microwave Detector Module, 2 Port	EACH	9.000	9.000
1900	SPV.0060	Special 03. HMA Percent Within Limits (PLW) Test Strip	EACH	3.000	3.000
1910	SPV.0060	Special 04. Section Corner Monuments Special	EACH	1.000	1.000
1920	SPV.0090	Special 01. Remove Pavement Marking Grooved Tape	LF	15,780.000	15,780.000
1930	SPV.0105	Special 01. Remove Loop Detector Wire and Lead-in Cable STH 16 WB Ramps & CTH JJ	LS	1.000	1.000

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Line	Item	Item Description	Unit	Total	Qty
1940	SPV.0105	Special 02. Remove Loop Detector Wire and Lead-In Cable STH 16 EB Ramps & STH 83	LS	1.000	1.000
1950	SPV.0105	Special 03. Milling And Removing Temporary Joint	LS	1.000	1.000
1960	SPV.0180	Special 02. Resin Binder High Friction Surface Treatment	SY	25,620.000	25,620.000
1970	SPV.0195	Special 01. Joint And Crack Repair	TON	550.000	550.000

Division	From / To Station	Location	Common Excavation (1) (ITEM # 205.0100) Cut (2)	Common Excavation (1) (ITEM # 205.0100) EBS Excavation (3)	Salvaged / Unusable Pavement Material (4)	Available Material (5)	Reduced EBS in Fill (9) Factor 0.80	Expanded EBS Backfill (11) Factor 1.30	Unexpanded Fill	Expanded Fill (13) Factor 1.25	Mass Ordinate + / - (14)	Waste	Comment:
CTH C	234+22"C" TO 246+75"C"	WB OFF	2,126	1,590	1,401	725	1,272	2,067	69	87	638		
	221+51"D" TO 233+20"D"	WB ON	1,984	1,562	1,300	684	1,250	2,031	68	85	599		
		CTH C SUBTOTAL	4,109	3,152	2,700	1,409	2,522	4,098	137	172	1,237		
STH 83		WB ON	2,454	2,292	2,454	0	1,834	2,980	15	19	-19		
		EB OFF	427		427	0	0	0	0	0	0		
		EB ON	179		179	0	0	0	2	3	-3		
		STH 83 SUBTOTAL	3,060	2,292	3,060	0	1,834	2,980	17	21	-21	0	
CTH KC	424+50"G" TO 436+50"G"	EB ON	1,528	0	1,403	125	0	0	0	0	124		
		CTH KC SUBTOTAL	1,528	0	1,403	125	0	0	0	0	124	0	
STH 190	668+00"I" TO 684+60"I"	EB OFF	3,793	4,050	1,579	2,215	3,240	5,265	239	299	1,916		
	685+33"J" TO 689+90"J"	EB ON	1,207	1,369	492	715	1,095	1,780	11	14	701		
	671+00"M" TO 685+00"M"	WB ON	1,461	4,044	1,461	0	3,236	5,258	158	198	-198		
	686+05"L" TO 692+00"L"	WB OFF	610	0	610	0	0	0	3	4	-3		
		STH 190 SUBTOTAL	7,071	9,463	4,141	2,930	7,571	12,302	411	514	2,416	0	
CTH JJ	710+00"N" TO 724+45"N"	EB OFF	1,286	966	1,286	0	773	1,256	3	3	-3		
	734+50"N" TO 746+31"N"	EB ON	3,020	2,868	1,622	1,398	2,295	3,729	45	56	1,342		
	730+40"O" TO 740+00"O"	WB OFF	1,701	1,759	1,018	684	1,407	2,287	56	70	613		
	713+40"P" TO 726+60"P"	WB ON	3,285	3,727	1,435	1,850	2,982	4,845	173	216	1,635		
		CTH JJ SUBTOTAL	9,292	9,321	5,360	3,932	7,457	12,117	276	345	3,586	0	
		GRAND TOTAL	25,060	24,229	16,665	8,395	19,383	31,497	842	1,053	7,342	7,342	
		TOTAL COMMON EXCAVATION:		49,289									

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.
4) Salvaged/Unusable Pavement Material
5) Available Material = Cut - Salvaged/Unusable Pavement Material
9) Reduced EBS in Fill - Excavated EBS material is usuable in Fills outside the 1:1 slope. EBS in Fill Reduction factor = 0.8
11) Expanded EBS Backfill - This is to be filled with Select Borrow material. EBS Backfill Factor = 1.3. Item number 208.1100
13) Expanded Fill. Factor = 1.25 Expanded Fill = (Unexpanded Fill - Reduced EBS) * 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.

3

MILLING AND REMOVING TEMPORARY JOINT

SPV.0105.03

LOCATION	MILLING AND REMOVING TEMPORARY JOINT LS
PROJECT 1370-15-71	1
	1

STAGE	STATION	TO	STATION	LOCATION	LF FOR INFORMATION ONLY LF
4	191+00	TO	233+00	EB	4,200
4	233+00	TO	341+50	EB	10,850
4	341+50	TO	391+50	EB	5,000
4	391+50	TO	424+50	EB	3,300
4	424+50	TO	447+00	EB	2,250
2B	744+32	TO	802+10	EB	5,778
3B	744+32	TO	802+10	EB	5,778
4	187+00	TO	233+00	WB	4,600
4	233+00	TO	341+50	WB	10,850
4	341+50	TO	391+50	WB	5,000
4	391+50	TO	424+50	WB	3,300
4	424+50	TO	447+00	WB	2,250
2B	744+00	TO	816+50	WB	7,250
3B	744+00	TO	816+50	WB	7,250
TOTAL					77,656

REMOVING PAVEMENT

LOCATION		204.0100 SY
CTH C	WB ON	1,920
CTH C	WB OFF	2,100
CTH C	EB OFF	225
CTH C	EB ON	250
STH 83	WB ON	1,850
STH 83	EB OFF	1,335
STH 83	EB ON	565
CTH E	EB OFF	1,850
CTH E	WB ON	1,350
CTH KC	WB OFF	570
CTH KC	EB ON	495
STH 190	EB OFF	295
STH 190	WB ON	85
STH 190	EB ON	2,000
STH 190	WB OFF	3,030
CTH JJ	EB OFF	3,130
CTH JJ	WB ON	1,540
CTH JJ	EB ON	1,620
CTH JJ	WB OFF	2,420
TOTAL		26,630

REMOVING ASPHALTIC SURFACE

STATION	TO	STATION	LOCATION	204.0110 REMOVING ASPHALTIC SURFACE SY	204.0115 REMOVING ASPHALTIC SURFACE BUTT JOINTS SY	* 204.0120 REMOVING ASPHALTIC SURFACE MILLING SY	NOTES
191+00	TO	233+00	EB	--	67	16,350	
CTH C EB RAMPS				1,875	168	--	
233+00	TO	341+50	EB	--	--	42,200	
STH 83 EB RAMPS				1,200	168	--	
341+50	TO	391+50	EB	--	--	19,450	
CTH E EB RAMPS				475	84	--	
391+50	TO	424+50	EB	--	--	12,850	
CTH KC EB RAMPS				950	84	--	
424+50	TO	447+00	EB	--	--	8,750	
649+47	TO	686+00	EB	4,500	--	--	
STH 190 EB RAMPS				300	168	--	
686+00	TO	744+32	EB	7,150	--	--	
CTH JJ EB RAMPS				2,900	168	--	
744+32	TO	802+10	EB	--	67	22,500	
187+00	TO	233+00	WB	--	67	17,900	
CTH C WB RAMPS				2,300	1,150	--	
233+00	TO	341+50	WB	--	--	42,200	
STH 83 WB RAMPS				1,300	168	--	
341+50	TO	391+50	WB	--	--	19,450	
CTH E WB RAMPS				--	84	1,400	
391+50	TO	424+50	WB	--	--	12,850	
CTH KC WB RAMPS				450	84	--	
424+50	TO	447+00	WB	--	--	8,750	
637+34	TO	686+00	WB	5,950	--	1,300	MILL EXISTING OVERLAY STA 694+81 TO STA 699+56 LT
STH 190 WB RAMPS				250	168	--	
686+00	TO	744+00	WB	7,100	--	--	
CTH JJ WB RAMPS				450	168	--	
744+00	TO	816+50	WB	--	67	28,200	
TOTAL				37,150	2,930	254,150	

NOTE: * ADDITIONAL QUANTITIES SHOWN ELSEWHERE

REMOVING CONCRETE BARRIER

STATION	TO	STATION	LOCATION	204.0157 REMOVING CONCRETE BARRIER LF	603.0405 CONCRETE BARRIER TRANSITION SECTION 32-INCH LF	* 614.0150 ANCHOR ASSEMBLIES FOR STEEL PLATE BEAM GUARD EACH
193+14	TO	193+98	EB	84	6.5	1
TOTAL				84	6.5	1

NOTE:
* ADDITIONAL QUANTITIES SHOWN ELSEWHERE

BASE AGGREGATE DENSE

STATION	TO	STATION	LOCATION	305.0110 BASE AGGREGATE DENSE 3/4-INCH TON	305.0120 BASE AGGREGATE DENSE 1 1/4-INCH TON	305.0500 SHAPING SHOULDERS STA	311.0110 BREAKER RUN TON
191+00	TO	233+50	EB	790	--	--	--
CTH C EB RAMPS			EB	550	180	42	--
233+50	TO	342+50	EB	2,020	--	--	--
342+50	TO	391+00	EB	900	--	--	--
CTH E EB RAMP			EB	280	--	23	--
392+20	TO	424+50	EB	600	--	--	--
424+50	TO	447+00	EB	420	--	--	--
CTH KC EB RAMP			EB	340	--	23	--
STH 190 EB RAMPS			EB	180	3,930	5	4,620
CTH JJ EB RAMPS			EB	570	3,280	6	4,020
649+47	TO	744+00	EB	--	--	--	--
744+00	TO	802+10	EB	360		--	
187+00	TO	233+00	WB	860	--	--	--
CTH C WB RAMPS			WB	190	2,630	24	3,170
233+00	TO	342+00	WB	2,020	--	--	--
STH 83 RAMPS			WB	210	1,400	34	1,750
342+00	TO	391+10	WB	910	--	--	--
CTH E WB RAMP			WB	100	40	20	--
392+25	TO	425+20	WB	620	--	--	--
425+20	TO	447+00	WB	410	--	--	--
CTH KC WB RAMP			WB	250	--	8	--
STH 190 WB RAMPS			WB	570	4,190	--	5,240
CTH JJ WB RAMPS			WB	440	4,380	9	5,420
637+34	TO	744+30	WB	--	--	--	--
744+30	TO	816+50	WB	450	--	--	--
UNDISTRIBUTED				680	1,010	--	1,220
TOTAL				14,720	21,040	194	25,440

CONCRETE PAVEMENT

LOCATION		415.0080 CONCRETE PAVEMENT 8-INCH SY	415.1080 CONCRETE PAVEMENT 8-INCH HES SY	715.0415 INCENTIVE STRENGTH CONCRETE PAVEMENT DOL
CTH C	WB ON	1,920	--	128
CTH C	WB OFF	2,100	--	140
CTH C	EB OFF	--	225	15
CTH C	EB ON	--	250	17
STH 83	WB ON	1,850	--	123
STH 83	EB OFF	1,350	--	90
STH 83	EB ON	570	--	38
CTH E	EB OFF	--	495	33
CTH E	WB ON	--	295	20
CTH KC	WB OFF	--	85	6
CTH KC	EB ON	2,000	--	133
STH 190	EB OFF	3,030	--	202
STH 190	WB ON	3,130	--	209
STH 190	EB ON	1,540	--	103
STH 190	WB OFF	1,620	--	108
CTH JJ	EB OFF	2,420	--	161
CTH JJ	WB ON	2,200	--	147
CTH JJ	EB ON	1,990	--	133
CTH JJ	WB OFF	1,770	--	118
		27,490	1,350	1,923

CONCRETE PAVEMENT CONTINUOUS DIAMOND GRINDING

STA	TO	STA	LOCATION	420.1000 SY
220+94	TO	233+00	CTHC EB OFF RAMP	2,010
233+70	TO	242+19	CTH C WB ON RAMP	1,420
379+13	TO	390+75	CTH E EB OFF RAMP	1,940
424+55	TO	432+59	CTH KC WB OFF RAMP	1,340
649+47	TO	686+00	EB	8,950
686+00	TO	744+32	EB	15,420
694+50	TO	709+00	EB AUXILIARY LANE	1,540
637+34	TO	686+00	WB	12,180
686+00	TO	744+00	WB	13,740
698+90	TO	713+40	WB AUXILIARY LANE	1,540
TOTAL				60,080

JOINT REPAIR

STATION	TO	STATION	LOCATION	416.0750.S CONCRETE PAVEMENT PARTIAL DEPTH JOINT REPAIR LF	SPV.0195.01 JOINT AND CRACK REPAIR TON	* 455.0605 TACK COAT GAL	# JOINT AND CRACK REPAIR **LF FOR INFORMATION ONLY** LF
626+63	TO	733+95	WB	5,000	--	--	--
638+82	TO	733+06	EB	4,500	--	--	--
			UNDISTRIBUTED	500	550	56	10,500
TOTAL				10,000	550	56	

NOTE:
* ADDITIONAL QUANTITIES SHOWN ELSEWHERE
# FOR INFORMATION ONLY

BASE PATCHING CONCRETE

STATION	TO	STATION	LOCATION	390.0403 BASE PATCHING CONCRETE SHES SY	416.0610 DRILLED TIE BARS EACH	416.0620 DRILLED DOWEL BARS EACH	416.1715 CONCRETE PAVEMENT REPAIR SHES SY	416.1725 CONCRETE PAVEMENT REPLACEMENT SHES SY	* 690.0250 SAWING CONCRETE LF
191+00	TO	200+00	EASTBOUND	112	5	--	--	--	420
200+00	TO	230+00	EASTBOUND	--	--	--	--	--	--
220+94	TO	233+00	CTH C EB OFF RAMP	100	--	160	--	--	300
234+00	TO	242+19	CTH C EB ON RAMP	80	--	112	--	--	210
230+00	TO	260+00	EASTBOUND	16	1	--	--	--	60
290+00	TO	320+00	EASTBOUND	192	4	--	--	--	576
320+00	TO	350+00	EASTBOUND	96	2	--	--	--	288
350+00	TO	380+00	EASTBOUND	78	1	--	--	--	144
380+00	TO	407+00	EASTBOUND	26	1	--	--	--	60
437+00	TO	447+00	EASTBOUND	18	--	--	--	--	30
649+47	TO	660+00	EASTBOUND	--	6	274	152	--	570
660+00	TO	690+00	EASTBOUND	--	28	1,196	364	300	2,490
690+00	TO	720+00	EASTBOUND	--	33	1,424	492	300	2,970
720+00	TO	750+00	EASTBOUND	--	12	504	205	75	1,050
750+00	TO	780+00	EASTBOUND	39	2	80	--	--	150
780+00	TO	802+50	EASTBOUND	800	33	1,440	--	--	3,000
187+00	TO	200+00	WESTBOUND	10	1	32	--	--	60
200+00	TO	230+00	WESTBOUND	22	1	64	--	--	120
230+00	TO	260+00	WESTBOUND	14	1	48	--	--	90
260+00	TO	290+00	WESTBOUND	--	--	--	--	--	--
290+00	TO	320+00	WESTBOUND	14	1	32	--	--	60
320+00	TO	350+00	WESTBOUND	19	1	--	--	--	90
350+00	TO	380+00	WESTBOUND	178	4	--	--	--	330
353+65	TO	353+83	STH 83 WB OFF RAMP	--	--	16	--	30	30
380+00	TO	407+00	WESTBOUND	388	12	--	--	--	1,080
391+25	TO	392+37	CTH E WB ON RAMP	70	--	134	--	--	210
407+00	TO	437+00	WESTBOUND	242	10	--	--	--	870
424+55	TO	432+59	CTH KC WB OFF RAMP	70	--	134	--	--	210
437+00	TO	447+00	WESTBOUND	98	4	--	--	--	330
637+34	TO	660+00	WESTBOUND	--	32	1,392	576	200	2,910
660+00	TO	690+00	WESTBOUND	--	10	432	240	--	900
690+00	TO	720+00	WESTBOUND	--	51	2,214	882	350	4,620
720+00	TO	750+00	WESTBOUND	--	100	4,250	1,000	1,400	9,000
750+00	TO	780+00	WESTBOUND	61	3	128	--	--	240
780+00	TO	810+00	WESTBOUND	66	3	144	--	--	270
810+00	TO	834+50	WESTBOUND	58	3	128	--	--	240
				2,867	365	14,338	3,911	2,655	33,978

NOTE:

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE

HMA PAVEMENT ITEMS

STA	TO	STA	LOCATION	211.0400 PREPARE FOUNDATION FOR ASPHALTIC SHOULDERS STA	* 440.4410 INCENTIVE IRI RIDE DOL	* 455.0605 TACK COAT GAL	460.6223 HMA PAVEMENT 3 MT 58-28 S TON	460.6224 HMA PAVEMENT 4 MT 58-28 S TON	460.7424 HMA PAVEMENT 4 HT 58-28 H TON	* 460.2005 INCENTIVE DENSITY PWL HMA PAVEMENT DOL	* 460.2010 INCENTIVE AIR VOIDS HMA PAVEMENT DOL	460.4110.S REHEATING HMA PAVEMENT LONGITUDINAL JOINTS LF
191+00		233+00	EB	84	2,272	1,570	2,180	1,300	1,160	2,643	4,640	4,200
CTH C EB RAMPS			EB	--	--	--	--	860	--	--	860	--
233+00		341+50	EB	217	5,864	4,040	5,620	3,350	2,990	6,828	11,960	10,850
STH 83 EB RAMPS			EB	--	--	--	--	600	--	--	600	--
341+50		391+50	EB	100	2,704	1,870	2,590	1,550	1,380	3,147	5,520	5,000
CTH E EB RAMPS			EB	--	--	--	--	420	--	--	420	--
391+50		424+50	EB	66	1,784	1,230	1,710	1,020	910	2,077	3,640	3,300
CTH KC EB RAMPS			EB	--	--	--	--	270	--	--	270	--
424+50		447+00	EB	45	1,216	840	1,170	700	620	1,416	2,490	2,250
649+47		686+00	EB	73	--	--	--	1,350	--	2,299	1,350	--
STH 190 EB RAMPS			EB	--	--	--	--	850	--	--	850	--
686+00		744+32	EB	117	--	--	--	2,150	--	3,670	2,150	--
CTH JJ EB RAMPS			EB	--	--	--	--	690	--	--	690	--
744+32		802+10	EB	116	3,672	2,190	2,730	1,790	1,600	3,636	6,120	5,778
187+00		233+00	WB	92	2,488	1,720	2,390	1,420	1,270	2,895	5,080	4,600
CTH C WB RAMPS			WB	--	--	--	--	930	--	--	930	--
233+00		341+50	WB	217	5,864	4,040	5,620	3,350	2,990	6,828	11,960	10,850
STH 83 WB RAMPS			WB	--	--	140	--	330	--	--	330	--
341+50		391+50	WB	100	2,704	1,870	2,590	1,550	1,380	3,147	5,520	5,000
CTH E WB RAMPS			WB	--	248	110	--	280	310	--	590	--
391+50		424+50	WB	66	1,784	1,230	1,710	1,020	910	2,077	3,640	3,300
CTH KC WB RAMPS			WB	--	--	--	--	310	--	--	310	--
424+50		447+00	WB	45	1,216	840	1,170	960	620	1,416	2,750	2,250
637+34		686+00	WB	97	--	--	--	1,790	--	3,062	1,790	--
STH 190 WB RAMPS			WB	--	--	--	--	910	--	--	910	--
686+00		744+00	WB	116	--	--	--	2,130	--	3,650	2,130	--
CTH JJ WB RAMPS			WB	--	--	--	--	280	--	--	280	--
744+00		816+50	WB	145	4,608	2,740	3,430	2,240	2,000	4,563	7,670	7,250
			TOTAL	1,696	36,424	24,430	32,910	34,400	18,140	53,354	85,450	64,628

NOTE: * ADDITIONAL QUANTITES SHOWN ELSEWHERE

PREPARE FOUNDATION FOR ASPHALTIC PAVING

STA	TO	STA	LOCATION	211.0100 PREPARE FOUNDATION FOR ASPHALTIC PAVING 1370-15-71 LS
70+00		816+50	STH 16	1
			TOTAL	1

HMA PAVEMENT AT BRIDGE APPROACHES

LOCATION	* 204.0120 REMOVING ASPHALTIC SURFACE MILLING SY	* 440.4410 INCENTIVE IRI RIDE DOL	* 455.0605 TACK COAT GAL	460.6224 HMA PAVEMENT 4 MT 58-28 S TON	460.7424 HMA PAVEMENT 4 HT 58-28 H TON	* 460.2005 INCENTIVE DENSITY PWL HMA PAVEMENT DOL	* 460.2010 INCENTIVE AIR VOIDS HMA PAVEMENT DOL
CTH P (SAWYER RD) UNDER STH 16	455	384	11	480	--	107	480
B-67-178	625	59	16	--	74	147	74
B-67-179	610	58	15	--	72	143	72
B-67-180	740	70	18	--	88	174	88
B-67-181	655	62	16	--	78	154	78
B-67-182	490	47	12	--	59	115	59
B-67-183	515	50	13	--	62	122	62
B-67-184	870	83	22	--	104	205	104
B-67-185	885	83	22	--	104	208	104
STA 694+81 - 699+56 LT	1270	120	32	--	150	299	150
TOTAL	7115	1,017	177	480	791	1,675	1,271

NOTE: * ADDITIONAL QUANTITES SHOWN ELSEWHERE

CULVERT PIPE SALVAGED & APRON ENDWALLS SALVAGED

		524.0118	524.0124	524.0130	524.0618	524.0624	524.0630	524.0636	#	520.8700	* 606.0200	645.0120
		CULVERT PIPE SALVAGED			APRON ENDWALLS FOR CULVERT PIPE SALVAGED				JOINT	CLEANING CULVERT	RIPRAP	GEOTEXTILE
		18-INCH	24-INCH	30-INCH	18-INCH	24-INCH	30-INCH	36-INCH	TIES	PIPES	MEDIUM	TYPE HR
STATION	LOCATION	LF	LF	LF	EACH	EACH	EACH	EACH	EACH	EACH	CY	SY
220+14	STH 16 EB, RT	--	--	--	1	--	--	--	3	--	--	--
238+12	STH 16 EB, RT	--	--	--	1	--	--	--	3	--	--	--
265+13	STH 16 EB, RT	--	--	8	--	--	1	--	6	--	--	--
268+12	STH 16 EB, RT	16	--	--	1	--	--	--	9	1	--	--
278+14	STH 16 EB, RT	40	--	--	1	--	--	--	9	1	--	--
296+14	STH 16 EB, RT	--	--	--	1	--	--	--	3	--	--	--
304+14	STH 16 EB, RT	--	--	--	1	--	--	--	3	--	--	--
308+15	STH 16 EB, RT	--	--	--	1	--	--	--	3	--	--	--
312+15	STH 16 EB, RT	--	--	--	1	--	--	--	3	--	--	--
316+16	STH 16 EB, RT	--	--	--	1	--	--	--	3	--	--	--
320+15	STH 16 EB, RT	--	--	--	--	--	--	1	3	--	19	47
329+03	STH 16 EB, RT OFF-RAMP	--	--	--	--	2	--	--	6	--	--	--
330+86	STH 16 WB, LT ON-RAMP	--	--	--	--	1	--	--	3	--	--	--
347+26	STH 16 EB, RT	--	--	--	1	--	--	--	3	--	--	--
365+23	STH 16 EB, RT	--	--	--	1	--	--	--	3	--	--	--
369+22	STH 16 EB, RT	--	--	--	1	--	--	--	3	--	--	--
378+18	STH 16 EB, RT	--	--	--	1	--	--	--	3	--	--	--
381+16	STH 16 EB, RT	--	--	--	1	--	--	--	3	--	--	--
400+10	STH 16 EB, RT	--	--	--	1	--	--	--	3	--	--	--
403+88	STH 16 WB, LT	--	--	--	--	1	--	--	3	--	--	--
407+11	STH 16 EB, RT	--	--	--	1	--	--	--	3	--	--	--
410+11	STH 16 EB, RT	--	--	--	1	--	--	--	3	--	--	--
413+12	STH 16 EB, RT	--	--	--	1	--	--	--	3	--	--	--
425+89	STH 16 EB, RT	--	--	--	1	--	--	--	3	--	--	--
430+14	STH 16 EB, RT	--	--	--	1	--	--	--	3	--	--	--
431+10	STH 16 EB, RT ON-RAMP	--	--	--	--	2	--	--	6	--	--	--
444+26	STH 16 EB, RT	--	24	--	--	1	--	--	9	--	--	--
	UNDISTRIBUTED	--	--	--	--	--	--	--		6	--	--
TOTAL		56	24	8	20	7	1	1	108	8	19	47

NOTE:
* ADDITIONAL QUANTITIES SHOWN ELSEWHERE
# FOR INFORMATION ONLY

ASPHALTIC SHOULDER RUMBLE STRIP

STA	TO	STA	LOCATION	465.0400 LF
191+00		233+00	EB	6,000
233+00		341+50	EB	17,900
341+50		391+50	EB	6,800
391+50		424+50	EB	6,600
424+50		447+00	EB	2,900
649+47		686+00	EB	9,406
686+00		744+32	EB	9,864
744+32		802+10	EB	10,356
187+00		233+00	WB	7,300
233+00		341+50	WB	18,900
341+50		391+50	WB	6,400
391+50		424+50	WB	6,600
424+50		447+00	WB	2,650
637+34		686+00	WB	8,582
686+00		744+00	WB	7,750
744+00		816+50	WB	14,500
				142,508

HMA PERCENT WITHIN LIMITS (PWL) TEST STRIP

STA	TO	STA	LOCATION	SPV.0060.03 HMA PERCENT WITHIN LIMITS (PWL) TEST STRIP EACH
70+00		447+00	LOWER LAYER MAINLINE RESURFACING	1
744+32		816+50	LOWER LAYER MAINLINE RESURFACING	1
70+00		816+50	UPPER LAYER MAINLINE	1
			TOTAL	3

CULVERT PIPE LINER

STATION	LOCATION	520.9700.S.01 CULVERT PIPE LINER 15-INCH LF	520.9750.S CLEANING CULVERT PIPES FOR LINER VERIFICATION EACH
757+00	STH 16 EB, RT	72	1
765+75	STH 16 WB,LT	76	1
772+00	STH 16 WB,LT	82	1
777+90	STH 16 WB,LT	76	1
793+25	STH 16 WB,LT	88	1
799+25	STH 16 WB,LT	86	1
TOTAL		480	6

CONCRETE SIDEWALK ITEMS

LOCATION	204.0150 REMOVING CURB AND GUTTER LF	204.0155 REMOVING CONCRETE SIDEWALK SY	601.0409 CONCRETE CURB AND GUTTER 30-INCH TYPE A LF	601.0411 CONCRETE CURB AND GUTTER 30-INCH TYPE D LF	601.0555 CONCRETE CURB AND GUTTER 6-INCH SLOPED 36-INCH TYPE A	601.0600 CONCRETE CURB PEDESTRIAN LF	602.0410 CONCRETE SIDEWALK 5-INCH SF	602.0505 CURB RAMP DETECTABLE WARNING FIELD SF	620.0300 CONCRETE MEDIAN SLOPED NOSE SF	653.0900 ADJUSTING PULL BOXES EACH	653.0905 REMOVING PULL BOXES EACH	* 690.0250 SAWING CONCRETE LF	611.8115 ADJUSTING INLET COVERS EACH	611.9700 SALVAGE INLET COVERS EACH	465.0315 ASPHALTIC FLUMES SY	* 606.0200 RIPRAP MEDIUM CY
CTH C EB OFF-RAMP	182	41	167	--	--	--	370	--	50	--	--	212	--	--	8	--
CTH C EB ON-RAMP	133	11	118	--	--	--	95	16	--	--	--	87	--	--	16	--
CTH C WB OFF-RAMP	157	47	147	--	--	--	420	24	50	--	--	83	--	--	9	4
CTH C WB ON RAMP	109	40	109	--	--	--	360	--	50	--	--	63	--	--	--	--
CTH E WB ON-RAMP	118	37	118	--	--	25	331	36	--	--	--	66	1	1	16	--
CTH E/HARTBROOK DRIVE	146	84	--	138	--	--	756	68	50	1	--	213	--	--	--	--
CTH E EB OFF-RAMP	151	67	141	--	--	--	603	32	50	--	--	152	2	2	--	--
CTH KC WB OFF RAMP	145	44	139	--	--	--	397	40	50	--	1	252	--	--	8	--
CTH KC/HARTBROOK DRIVE	71	36	--	71	--	--	326	32	--	1	1	113	--	--	--	--
CTH KC EB ON-RAMP	133	14	121	--	--	--	122	16	--	--	--	91	--	--	16	--
STH 190 EB ON-RAMP	30	--	30	--	--	--	--	--	--	--	--	34	--	--	--	--
CTH JJ/T EB ON-RAMP	243	--	125	--	118	--	--	--	--	--	--	97	--		30	--
UNDISTRIBUTED	200	22	100	100	25	--	200	--	--	--	--	100	--	--	10	--
TOTAL	1,818	443	1,315	309	143	25	3,980	264	300	2	2	1,563	3	3	113	4

NOTE:
* ADDITIONAL QUANTITIES SHOWN ELSEWHERE

CONSTRUCTION STAKING

STATION	TO	STATION	LOCATION	650.4500 SUBGRADE LF	650.7000 CONCRETE PAVEMENT LF	650.8000 RESURFACING REFERENCE LF	650.8500 ELECTRICAL INSTALLATIONS LS	650.9910 SUPPLEMENTAL CONTROL LS	650.9920 SLOPE STAKING LF	SPV.0060.04 SECTION CORNER MONUMENTS SPECIAL EACH
191+00	TO	447+00	EB	--	--	25,600	--	--	--	--
649+47	TO	802+10	EB	--	--	15,263	--	--	--	--
187+00	TO	447+00	WB	--	--	26,000	--	--	--	--
637+34	TO	816+50	WB	--	--	17,916	--	--	--	1
		CTH C RAMPS		1,050	2,404	--	--	--	2,200	--
		STH 83		650	2,250	--	--	--	1,400	--
		CTH E RAMPS		--	--	2,000	--	--	--	--
		CTH KC RAMPS		--	1,199	--	--	--	--	--
		STH 190 RAMPS		3,675	5,580	--	--	--	7,450	--
		CTH JJ RAMPS		3,475	5,021	--	--	--	7,100	--
		PROJECT 1370-15-71		--	--	--	1	1	--	--
TOTAL				8,850	16,454	86,779	1	1	18,150	1

GUARDRAIL ITEMS

STATION	TO	STATION		LOCATION	204.0165 REMOVING GUARDRAIL LF	614.0010 BARRIER SYSTEM GRADING SHAPING FINISHING EACH	614.0115 ANCHORAGES FOR STEEL PLATE BEAM GUARD TYPE 2 EACH	614.0150 * ANCHORAGE ASSEMBLIES FOR STEEL PLATE BEAMGUARD EACH	614.0200 STEEL THRIE BEAM STRUCTURE APPROACH LF	614.0220 STEEL THRIE BEAM BULLNOSE TERMINAL EACH	614.0230 STEEL THRIE BEAM LF	614.0305 STEEL PLATE BEAM GUARD CLASS A LF	614.0345 STEEL PLATE BEAM GUARD SHORT RADIUS LF	614.0396 GUARDRAIL MOW STRIP ASPHALT SY	614.0920 SALVAGED RAIL LF	614.0925 SALVAGED GUARDRAIL END TREATMENTS EACH	614.2300 MGS GUARDRAIL 3 LF	614.2500 MGS THRIE BEAM TRANSITION LF	614.2610 MGS GUARDRAIL TERMINAL EAT EACH	614.2620 MGS GUARDRAIL TERMINAL TYPE 2 EACH
71+05	TO	73+17		STH 16 MEDIAN AT CTH P	616	2	--	--	--	2	210	--	--	--	--	--	--	--	--	--	--
149+62	TO	150+62	LT	STH 16 WB	--	--	--	1	--	--	--	--	--	--	--	--	100	--	--	1
152+75	TO	153+75	RT	STH 16 EB	--	--	--	1	--	--	--	--	--	--	--	--	100	--	--	1
192+93	TO	193+98	RT	STH 16 EB	--	1	--	--	--	--	--	--	--	40.0	--	--	91	40	1	--
209+53	TO	224+50	RT	STH 16 EB	1,515	1	--	--	--	--	--	--	--	--	--	--	1,497	--	1	1
228+18	TO	233+00	LT	CTH C WB ON RAMP	487	--	1	--	--	--	--	487	--	--	--	--	--	--	--	--
232+00	TO	233+00	RT	CTH C WB ON RAMP	88	--	1	--	--	--	--	88	38	--	--	--	--	--	--	--
232+45	TO	234+52		STH 16 MEDIAN AT CTH C	530	2	--	--	--	--	--	--	--	322.0	--	--	826	--	2	2
260+00	TO	266+00	RT	STH 16 EB	600	--	--	--	--	--	--	--	--	--	--	--	600	--	1	1
				STH 16 MEDIAN AT STH 83	510	2	--	--	--	2	148	--	--	--	--	--	--	--	--	--
392+65	TO	399+72	LT	STH 16 WB	707	1	--	--	--	--	--	--	--	19.5	--	1	667	40	1	--
392+28	TO	399+09	RT	STH 16 EB	681	1	--	--	--	--	--	--	--	19.5	--	--	681	--	--	1
423+44	TO	425+47		STH 16 MEDIAN AT CTH KC	519	2	--	--	--	2	192	--	--	--	--	--	--	--	--	--
683+34	TO	684+90	RT	STH 16 EB	--	--	--	--	--	--	--	--	--	19.5	156	1	116	40	1	--
684+10	TO	684+90	RT	STH 16 EB	--	--	--	--	--	--	--	--	--	19.5	80	1	40	40	1	--
686+75	TO	692+25	RT	STH 16 WB	550	1	--	--	--	--	--	--	--	203.0	--	--	510	40	--	--
687+54	TO	690+39	RT	STH 190 EB ON-RAMP	285	1	--	--	--	--	--	--	--	19.5	--	1	245	40	1	--
689+02	TO	690+56	LT	STH 16 EB ON-RAMP	154	1	--	--	--	--	--	--	--	19.5	--	1	114	40	1	--
689+95	TO	692+67	LT	STH 190 WB OFF-RAMP	272	--	--	--	--	--	--	--	--	19.5	--	--	272	--	--	1
692+20	TO	692+80	RT	STH 190 WB OFF-RAMP	60	--	--	--	--	--	--	--	--	19.5	--	--	60	--	--	1
694+10	TO	702+51	RT	STH 190 EB ON-RAMP	841	--	--	--	--	--	--	--	--	316.0	--	--	801	40	--	--
695+38	TO	703+88	LT	STH 190 WB OFF-RAMP	850	--	--	--	--	--	--	--	--	320.0	--	--	810	40	--	--
694+83	TO	696+00	LT	STH 190 WB-OFF RAMP	--	--	--	--	21	--	96	--	--	--	132	1	--	--	--	--
694+96	TO	696+00	LT	STH 190 WB	--	--	--	--	21	--	83	--	--	--	141	1	--	--	--	--
704+86	TO	710+24	RT	STH 16 EB	287	1	--	--	--	--	--	--	--	19.5	--	1	498	40	--	1
705+13	TO	706+13	RT	STH 16 EB	--	--	--	1	--	--	--	--	--	--	--	--	100	--	--	1
705+28	TO	706+85	LT	STH 16 WB	157	--	--	--	--	--	--	--	--	19.5	--	1	117	40	1	--
705+57	TO	707+25	LT	STH 16 WB	168	--	--	--	--	--	--	--	--	19.5	--	1	128	40	1	--
714+84	TO	715+99	LT	STH 16 WB	115	--	--	--	--	--	--	--	--	--	--	1	115	--	1	1
728+21	TO	730+39		STH 16 MEDIAN AT CTH JJ	450	2	--	--	--	--	--	--	--	370.0	--	--	950	--	2	2
770+50	TO	773+40	RT	STH 16 EB	290	1	--	--	--	--	--	--	--	--	--	--	290	--	1	1
772+40	TO	775+95	LT	STH 16 WB	355	1	--	--	--	--	--	--	--	--	--	--	355	--	1	1
TOTAL					11,087	20	2	3	42	6	729	575	38	1,785.5	509	11	10,083	480	17	16

NOTE:
* ADDITIONAL QUANTITIES SHOWN ELSEWHERE

CRASH CUSHION PERMANENT LOW MAINTENANCE

LOCATION	614.0805 CRASH CUSHION PERMANENT LOW MAINTENANCE EACH	BACK WIDTH	OBJECT MARKING PATTERN	CRASH TEST LEVEL	TRAFFIC DIRECTION	TRAFFIC LOCATION	CRASH CUSHION SHIELDS
STA 695+25, 71.7'LT STH 16 WB/STH 190 OFF RAMP	1	4-FT	OM-3C	TL-3	UNIDIRECTIONAL	LEFT AND RIGHT	CONCRETE PARAPETS AT STRUCTURES B-67-180 AND B-67-182
TOTAL	1						

EROSION CONTROL ITEMS

STATION	TO	STATION	628.7010 INLET PROTECTION TYPE B EACH	628.7015 INLET PROTECTION TYPE C EACH	628.1504 SILT FENCE LF	628.1520 SILT FENCE MAINTENANCE LF	628.7504 TEMPORARY DITCH CHECKS LF	628.7555 CULVERT PIPE CHECK EACH	628.7570 ROCK BAGS EACH
STH 16 MEDIAN AT CTH P (BROWN ST)			2	--	--	--	60	--	--
CTH P (BROWN ST) BARRICADE RACKS			--	--	250	25	--	--	--
CTH P (SAWYER RD) BARRICADE RACKS			--	--	300	30	--	--	--
152+75	TO	190+00	--	--	--	--	--	--	--
190+00	TO	220+00	1	--	750	75	--	--	--
CTH C RAMPS			3	--	4,515	452	--	--	--
220+00	TO	341+50	--	--	300	30	150	20	--
STH 83 RAMPS			--	--	1,800	180	--	10	--
341+50	TO	391+50	--	--	--	--	--	--	--
CTH E RAMPS			3	1	50	5	--	--	--
391+50	TO	424+50	--	--	400	40	60	6	--
CTH KC RAMPS			1	3	2,275	228	--	--	--
424+50	TO	447+00	--	--	--	--	110	5	--
CTH KE/KF RAMP CLOSURE GATES			--	--	400	40	--	--	--
637+34	TO	686+00	--	--	2,000	200	60	--	--
STH 190 RAMPS			3	3	7,205	721	--	--	--
686+00	TO	744+32	--	--	950	95	200	--	--
CTH JJ RAMPS			6	1	6,715	672	--	--	--
744+32	TO	816+50	--	--	1,300	130	--	--	--
		UNDISTRIBUTED	5	2	1,470	150	40	10	200
TOTAL			24	10	30,680	3,071	680	51	200

DELINEATORS

LOCATION	204.0180 REMOVING DELINEATORS AND MARKERS	633.0100 POSTS STEEL EACH	633.0500 REFLECTORS EACH
PROJECT 1370-15-71	500	534	714
TOTAL	500	534	714

MOBILIZATIONS EROSION CONTROL

LOCATION	628.1905 MOBILIZATIONS	628.1910 MOBILIZATIONS EMERGENCY
ID 1370-15-71	5	5

TRAFFIC CONTROL ITEMS

STAGE	LOCATION		# OF DAYS	643.0300 DRUMS DAYS	643.0410 BARRICADES TYPE II DAYS	643.0420 BARRICADES TYPE III DAYS	643.0705 WARNING LIGHTS TYPE A DAYS	643.0715 WARNING LIGHTS TYPE C DAYS	643.0800 ARROW BOARDS DAYS	643.0900 SIGNS DAYS	643.0910 COVERING SIGNS TYPE I EACH	# OF CYCLES	# OF SIGNS	643.0920 COVERING SIGNS TYPE II EACH	# OF CYCLES	# OF SIGNS	643.1000 SIGNS FIXED MESSAGE SF	643.1050 SIGNS PCMS DAYS	643.3000 DETOUR SIGNS DAYS	644.1410.S TEMPORARY PEDESTRIAN SURFACE ASPHALT SF	644.1601.S TEMPORARY PEDESTRIAN CURB RAMP EACH
1	STH 16 (CTH P to STH 190)	INSIDE LANE CLOSURE	14	15,680	--	840	1,680	1,400	56	1,540	--	--	--	98	14	7	180	--	--	--	--
2	STH 16 (CTH P to STH 190)	OUTSIDE LANE CLOSURE	30	33,600	--	1,800	3,600	3,000	120	6,600	--	--	--	210	30	7	--	--	--	--	--
3A	STH 16 (CTH P to STH 190)	INSIDE LANE CLOSURE	30	33,600	--	1,800	3,600	3,000	120	3,300	--	--	--	210	30	7	--	--	--	--	--
3B	STH 16 (CTH P to STH 190)	INSIDE LANE CLOSURE	21	23,520	--	1,260	2,520	2,100	84	2,310	--	--	--	147	21	7	--	--	--	--	--
4	STH 16 (CTH P to STH 190)	OUTSIDE LANE CLOSURE	21	23,520	--	1,260	2,520	2,100	84	4,620	--	--	--	147	21	7	--	--	--	--	--
1	STH 16 (STH 190 to IH-94)	INSIDE LANE CLOSURE	14	10,920	--	560	1,120	826	28	1,120	--	--	--	42	14	3	90	--	--	--	--
2A	STH 16 (STH 190 to IH-94)	OUTSIDE LANE CLOSURE	30	24,000	--	1,200	2,400	2,010	60	3,300	--	--	--	90	30	3	--	--	--	--	--
2B	STH 16 (STH 190 to IH-94)	INSIDE LANE CLOSURE	30	23,400	--	1,200	2,400	1,770	60	2,400	--	--	--	90	30	3	--	--	--	--	--
3A	STH 16 (STH 190 to IH-94)	INSIDE LANE CLOSURE	21	16,380	--	840	1,680	1,239	42	1,680	--	--	--	63	21	3	--	--	--	--	--
3B	STH 16 (STH 190 to IH-94)	OUTSIDE LANE CLOSURE	21	16,800	--	840	1,680	1,407	42	2,310	--	--	--	63	21	3	--	--	--	--	--
	CTH C	EASTBOUND DETOURS	21	1,260	--	126	252	--	--	210	2	1	2	10	1	10	32	--	1050	--	--
	CTH C	WESTBOUND DETOURS	21	1,260	--	126	252	--	--	210	2	1	2	10	1	10	32	--	1050	--	--
	CTH E	EASTBOUND DETOURS	21	1,050	--	84	168	--	--	147	2	1	2	6	1	6	32	--	504	--	--
	CTH E	WESTBOUND DETOURS	21	840	--	42	84	--	--	63	2	1	2	6	1	6	32	--	735	--	--
	CTH KC	EASTBOUND DETOURS	21	840	--	42	84	--	--	63	2	1	2	8	1	8	32	--	315	--	--
	CTH KC	WESTBOUND DETOURS	21	1,050	--	84	168	--	--	147	2	1	2	8	1	8	32	--	336	--	--
	STH 190	EASTBOUND DETOURS	21	1,050	--	126	252	--	--	210	5	1	5	18	1	18	32	--	1134	--	--
	STH 190	WESTBOUND DETOURS	21	840	--	168	336	546	--	336	5	1	5	18	1	18	32	--	1155	--	--
	CTH JJ	EASTBOUND DETOURS	21	1,890	--	189	378	756	--	294	5	1	5	18	1	18	32	--	714	--	--
	CTH JJ	WESTBOUND DETOURS	21	1,050	--	168	336	--	--	210	5	1	5	18	1	18	32	--	1050	--	--
	PEDESTRIAN ACCOMMODATION CTH C, CTH E, CTH KC		14	700	448	350	700	140	--	602	--	--	--	--	--	--	--	--	--	120	3
	PROJECT 1370-15-71			--	--	--	--	--	--	--	--	--	--	--	--	--	--	14	--	--	--
		TOTALS		233,250	448	13,105	26,210	20,294	696	31,672	32			1280			590	14	8043	120	3

TEMPORARY PAVEMENT MARKING

LOCATION	646.0600 REMOVING PAVEMENT MARKING LF	649.0402 TEMPORARY PAVEMENT MARKING PAINT 4-INCH WHITE (4' SKIPS) LF	YELLOW LF	WHITE LF	649.0400 TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH WHITE (4' SKIPS) LF	YELLOW LF	WHITE LF
STA 191+00 TO STA 447+00							
STAGE 1	-	--	--	--	--	--	--
STAGE 2	--	4,100	51,000	51,000	--	--	--
STAGE 3A/B	51,000	--	51,000	51,000	5,400	--	--
STAGE 4	--	--	--	--	--	51,000	--
STA 744+00 TO STA 816+50							
STAGE 1	--	--	--	--	--	--	--
STAGE 2A/B	--	1,160	14,500	--	--	--	--
STAGE 3A/B	--	--	--	--	1,160	--	14,500
SUBTOTAL	51,000	5,260	116,500	102,000	6,560	51,000	14,500
TOTAL	51,000		223,760			72,060	

DETOURS

DETOUR ROUTE	643.2000 TRAFFIC CONTROL DETOUR 1370-15-71 EACH
CTH C WB RAMPS	0.1
CTH C EB RAMPS	0.1
STH 83 WB DETOURS	0.1
STH 83 EB DETOURS	0.1
CTH E & KC EB RAMPS	0.1
CTH E & KC WB RAMPS	0.1
STH 190 WB RAMPS	0.1
STH 190 EB RAMPS	0.1
CTH JJ WB RAMPS	0.1
CTH JJ EB RAMPS	0.1
TOTAL	1

TRAFFIC CONTROL

PROJECT	643.0100 EACH
ID 1370-15-71	1
TOTAL	1

PAVEMENT MARKING

STATION	TO	STATION	LOCATION	646.2304.S GROOVED WET REFLECTIVE EPOXY 4-INCH YELLOW LF	646.2304.S GROOVED WET REFLECTIVE EPOXY 4-INCH WHITE LF	646.0841.S GROOVED WET CONTRAST TAPE 4-INCH LF	646.0843.S REFLECTIVE CONTRAST TAPE 8-INCH LF	646.0883.S GROOVED WET REFLECTIVE TAPE 8-INCH LF	647.0186 ARROWS EPOXY TYPE 4 EACH	647.0726 DIAGONAL EPOXY 12-INCH LF	647.0746 DIAGONAL EPOXY 24-INCH LF	647.0136 ARROWS EPOXY TYPE 7 EACH	647.0166 ARROWS EPOXY TYPE 2 EACH	647.0176 ARROWS EPOXY TYPE 3 EACH	647.0356 WORDS EPOXY EACH	647.0566 STOP LINE EPOXY 18-INCH LF	647.0606 ISLAND NOSE EPOXY EACH	647.0766 CROSSWALK EPOXY 6-INCH LF	SPV.0090.01 REMOVE PAVEMENT MARKING GROOVED TAPE LF
CTH P(SAWYER RD) EB RAMP			EB	--	--	--	1,500	--	--	--	--	--	--	--	--	--	--	--	--
152+75	TO	191+00	EB	3,825	3,825	960	--	--	--	--	--	--	--	--	--	--	--	--	--
191+00	TO	233+00	EB	4,200	3,700	1,050	--	--	--	--	--	--	--	--	--	--	--	--	--
CTH C EB RAMPS			EB	2,150	3,750	--	3,000	100	3	--	370	--	--	--	--	30	--	75	--
233+00	TO	341+50	EB	10,850	9,450	2,715	--	--	--	--	--	--	--	--	--	--	--	--	--
STH 83 EB RAMPS			EB	2,380	4,745	--	2,130	510	--	--	300	--	4	2	4	40	--	--	--
341+50	TO	391+50	EB	5,000	4,650	1,250	--	--	--	--	--	--	--	--	--	--	--	--	--
CTH E EB RAMPS			EB	1,150	1,500	--	650	100	2	--	200	--	--	--	--	30	--	75	--
391+50	TO	424+50	EB	3,300	3,300	825	--	--	--	--	--	--	--	--	--	--	--	--	--
CTH KC EB RAMPS			EB	1,100	2,000	--	1,700	--	--	--	--	--	--	--	--	--	--	95	--
424+50	TO	447+00	EB	2,250	1,300	565	--	--	--	--	--	--	--	--	--	--	--	--	--
447+00		482+00	EB	3,500	3,000	875	--	--	--	--	--	--	--	--	--	--	--	--	875
CTH KE EB RAMPS				2,090	4,490	--	1,040	60	3	--	150	--	--	--	--	30	--	--	1,100
482+00		597+00	EB	11,500	10,750	2,875	--	--	--	--	--	--	--	--	--	--	--	--	2,875
CTH KF EB RAMPS			EB	2,330	2,490	1,155	1,155	80	3	--	160	--	--	--	--	35	--	--	2,390
597+00		649+47	EB	5,250	5,000	1,315	--	--	--	--	--	--	--	--	--	--	--	--	1,315
649+47	TO	686+00	EB	3,653	3,303	915	--	--	--	--	--	--	--	--	--	--	--	--	--
STH 190 EB RAMPS			EB	2,350	3,100	--	1,200	363	3	--	210	--	2	2	4	--	--	--	--
686+00	TO	744+32	EB	5,832	4,532	1,460	--	--	--	--	--	--	--	--	--	--	--	--	--
CTH JJ EB RAMPS			EB	1,782	2,850	--	2,500	500	--	--	480	1	4	--	4	63	--	--	--
744+32	TO	802+10	EB	5,775	5,775	1,445	--	--	--	--	--	--	--	--	--	--	--	--	--
CTH P(SAWYER RD) WB RAMP			WB	--	--	--	490	--	--	--	120	--	--	--	--	--	--	--	--
152+50	TO	187+00	WB	3,450	3,585	865	--	--	--	--	--	--	--	--	--	--	--	--	--
187+00	TO	233+00	WB	4,600	3,450	1,150	--	--	--	--	--	--	--	--	--	--	--	--	--
CTH C WB RAMPS			WB	2,650	3,800	--	3,650	100	3	--	210	--	--	--	--	30	--	--	--
233+00	TO	341+50	WB	10,850	9,900	2,715	--	--	--	--	--	--	--	--	--	--	--	--	--
STH 83 WB RAMPS			WB	2,710	5,100	--	2,230	410	--	--	150	--	3	3	3	24	--	--	--
341+50	TO	391+50	WB	5,000	4,400	1,250	--	--	--	40	--	--	--	--	--	--	--	--	--
CTH E WB RAMPS			WB	1,000	1,600	--	1,200	--	--	--	--	--	--	--	--	--	1	320	--
391+50	TO	424+50	WB	3,300	3,300	825	--	--	--	--	--	--	--	--	--	--	--	--	--
CTH KC WB RAMPS			WB	750	1,050	--	750	100	3	--	160	--	--	--	--	30	--	324	--
424+50	TO	447+00	WB	2,250	1,950	565	--	--	--	--	--	--	--	--	--	--	--	--	--
447+00		482+00	WB	3,500	3,200	875	--	--	--	--	--	--	--	--	--	--	--	--	875
CTH KE WB RAMPS				2,610	4,790	--	1,110	80	3	--	150	--	--	--	--	30	--	--	1,190
482+00		597+00	WB	11,500	10,250	2,875	--	--	--	--	--	--	--	--	--	--	--	--	2,875
CTH KF WB RAMPS			WB	2,490	4,690	--	890	80	3	--	140	--	--	--	--	35	--	--	970
597+00		649+47	WB	4,866	4,091	1,315	--	--	--	--	--	--	--	--	--	--	--	--	1,315
STH 190 WB RAMPS			WB	2,225	3,350	--	2,150	300	3	--	170	--	--	--	--	--	--	--	--
686+00	TO	744+00	WB	5,800	4,850	1,450	348	--	--	--	--	--	--	--	--	--	--	--	--
CTH JJ WB RAMPS			WB	1,850	2,450	--	875	190	3	--	290	--	--	--	--	37	--	60	--
744+00	TO	816+50	WB	7,250	7,250	1,815	--	--	--	--	--	--	--	--	--	--	--	--	--
CTH E SIDEWALK DETOUR				--	--	--	--	--	--	--	--	--	--	--	--	17	--	270	--
CTH KC SIDEWALK DETOUR				--	--	--	--	--	--	--	--	--	--	--	--	--	--	280	--
SUBTOTAL				158,918	166,566	33,105	28,568	2,973	32	40	3,260	1	13	7	15	431	1	1,499	15,780
TOTAL				325,484		33,105	28,568	2,973	32	40	3,260	1	13	7	15	431	1	1,499	15,780

RAMP CLOSURE GATES

ID#	LOCATION		* 652.0225 CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH LF	653.0135 PULL BOXES STEEL 24X36-INCH EACH	* 654.0105 CONCRETE BASES TYPE 5 EACH	654.0220 CONCRETE CONTROL CABINET BASES TYPE 10 EACH	655.0615 ELECTRICAL WIRE LIGHTING 10 AWG LF	657.0100 PEDESTAL BASES EACH	* 657.0255 TRANSFORMER BASE BREAKAWAY 11 1/2-INCH BOLT CIRCLE EACH	657.0321 POLES TYPE 5 - STEEL EACH	657.0425 TRAFFIC SIGNAL STANDARDS ALUMINUM 15-FT EACH	662.2026.S RAMP CLOSURE GATE SOLAR POWERED 26-FT EACH	662.2030.S 30-FT EACH	662.2037.S 37-FT EACH	662.2040.S 40-FT EACH	662.6030.S RAMP CLOSURE BARRICADE RACK, 3-UNIT EACH	643.0453 BARRICADES PERMANENT TYPE III
	CTH P (BROWN STREET)	WB ON RAMP	--	--	--	--	--	--	--	--	--	--	--	--	--	1	3
	CTH P (BROWN STREET)	EB ON RAMP	--	--	--	--	--	--	--	--	--	--	--	--	--	1	3
	CTH P (SAWYER ROAD)	WB ON RAMP	--	--	--	--	--	--	--	--	--	--	--	--	--	1	3
	CTH P (SAWYER ROAD)	EB ON RAMP	--	--	--	--	--	--	--	--	--	--	--	--	--	1	3
G67-57	CTH C WB ON RAMP	WB ON RAMP	30	1	1	1	180	1	1	1	1	--	--	--	1	--	--
G67-58	CTH C EB ON RAMP	EB ON RAMP	30	1	1	1	180	1	1	1	1	--	--	--	1	--	--
G67-59	STH 83 WB ON RAMP	WB ON RAMP	30	1	1	1	180	1	1	1	1	--	--	--	1	--	--
G67-60	STH 83 EB ON RAMP	EB ON RAMP	30	1	1	1	180	1	1	1	1	--	--	1	--	--	--
G67-61	CTH E WB ON RAMP	WB ON RAMP	30	1	1	1	180	1	1	1	1	--	--	1	--	--	--
G67-62	CTH KC EB ON RAMP	EB ON RAMP	30	1	1	1	180	1	1	1	1	--	--	--	1	--	--
G67-63	CTH KE WB ON RAMP	WB ON RAMP	30	1	1	1	180	1	1	1	1	--	--	--	1	--	--
G67-64	CTH KE EB ON RAMP	EB ON RAMP	30	1	1	1	180	1	1	1	1	--	--	--	1	--	--
G67-65	CTH KF WB ON RAMP	WB ON RAMP	30	1	1	1	180	1	1	1	1	--	--	--	1	--	--
G67-66	CTH KF EB ON RAMP	EB ON RAMP	30	1	1	1	180	1	1	1	1	--	--	--	1	--	--
G67-67,G67-68	STH 190 WB ON RAMP	WB ON RAMP	60	2	2	2	360	2	2	2	2	2	--	--	--	--	--
G67-69,G67-70	STH 190 EB ON RAMP	EB ON RAMP	30	1	1	1	180	1	1	1	1	--	--	--	1	--	--
G67-70,G67-71	CTH JJ WB ON RAMP	WB ON RAMP	60	2	2	2	360	2	2	2	2	--	2	--	--	--	--
G67-72	CTH JJ EB ON RAMP	EB ON RAMP	30	1	1	1	180	1	1	1	1	--	--	--	1	--	--
	TOTAL		480	16	16	16	2,880	16	16	16	16	2	2	2	10	4	12

NOTE:
* ADDITIONAL QUANTITIES SHOWN ELSEWHERE

MICROWAVE DETECTORS

ITEM I.D.	STATION	* 654.0105 CONCRETE BASE TYPE 5 EACH	* 657.0255 TRANSFORMER BASES STANDARD 11 1/2-INCH BOLT CIRCLE EACH	657.0322 POLES TYPE 5 - ALUMINUM EACH	675.0300 CONTROLLER MICROWAVE DETECTOR ASSEMBLY EACH	NOTES
MD01	772+50	1	1	1	1	
MD10	731+40	1	1	1	1	STH 16 MAINLINE
MD11	731+40	1	1	1	1	STH 16 WB OFF-RAMP
TOTAL		3	3	3	3	

NOTE:
* ADDITIONAL QUANTITIES SHOWN ELSEWHERE

FIELD CABINET ITEMS

ITEM I.D.	STATION	SPV.0060.02 INSTALL MICROWAVE DETECTOR MODULE, 2 PORT EACH
EXCB01/SDS-67-0077	772+50	4
EXCB02/SDS-67-0078	731+40	5
	TOTAL	9

PULL BOXES

ITEM I.D.	STATION	SPV.0060.01 INSTALL CONDUIT INTO EXISTING ITEM EACH
EXPB02	772+50	1
EXPB11	731+40	1
EXPB13	731+40	1
	TOTAL	3

CONDUIT AND CABLE

FROM	TO	LINEAR DISTANCE	* 652.0225 CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH LF	674.0200 CABLE MICROWAVE DETECTOR LF	674.0300 REMOVE CABLE LF
EXCB01	EXPB01/SDS-67-0677	10	--	25	10
EXPB01	EXPB02	25	--	25	25
EXPB02	EXPB03	125	--	--	125
EXPB02	MD01	10	20	20	--
EXCB01	EXPB10	10	--	25	10
EXPB10	EXPB11	40	--	40	40
EXPB11	EXPB12	125	--	--	125
EXPB12	EXPB13	100	--	100	100
EXPB11	MD10	10	20	20	--
EXPB13	MD11	10	20	20	--
			60	275	435

NOTE:
* ADDITIONAL QUANTITIES SHOWN ELSEWHERE

3

SAWING

STATION	LOCATION	690.0150 SAWING ASPHALT	* 690.0250 SAWING CONCRETE LF
187+00	STH 16 WB	11	24
	CTH C WB RAMPS	50	240
	STH 83 WB RAMPS	0	388
	CTH E WB RAMP	0	324
	CTH KC WB RAMP	0	164
447+00	STH 16 WB	11	24
744+30	STH 16 WB	11	24
	STH 190 WB RAMPS	650	848
	CTH JJ WB RAMPS	600	1,230
816+50	STH 16 WB	11	24
191+00	STH 16 EB	11	24
	CTH C EB RAMPS	300	425
	STH 83 EB RAMPS	300	878
	CTH E EB RAMP	0	124
	CTH KC EB RAMP	0	104
447+00	STH 16 EB	11	24
744+00	STH 16 EB	11	24
	STH 190 EB RAMPS	550	572
	CTH JJ EB RAMPS	600	670
802+10	STH 16 EB	11	24
TOTAL		3,138	6,159

NOTE: * ADDITIONAL QUANTITIES ELSEWHERE

RESIN BINDER HIGH FRICTION SURFACE TREATMENT

STATION	TO	STATION	LOCATION	SPV.0180.02 SY
144+00	TO	150+70	STH 16 WB	1,790
410+00	TO	430+00	STH 16 WB	5,340
410+00	TO	430+00	STH 16 EB	5,340
718+05	TO	744+30	STH 16 WB	7,000
714+25	TO	744+00	STH 16 EB	7,940
				25,620

REMOVING RAISED PAVEMENT MARKERS

LOCATION	646.0790.S EACH
STH 16 WB	440
STH 16 EB	410
TOTAL	850

FINISHING ITEMS

LOCATION	625.0500 SALVAGED TOPSOIL SY	627.0200 MULCHING SY	628.2004 EROSION MAT CLASS I TYPE B SY	628.2008 EROSION MAT URBAN CLASS I TYPE B SY	629.0210 FERTILIZER TYPE B CWT	630.0130 SEEDING MIXTURE TYPE 30 LB	630.0160 SEEDING MIXTURE TYPE 60 LB	630.0200 SEEDING TEMPORARY LB
CTH P (BROWN ST) EB RAMPS	22	22	--	--	0.2	0.5	0.5	--
CTH P (SAWYER RD) EB RAMPS	22	22	--	--	0.2	0.5	0.5	--
CTH C EB RAMPS	267	267	--	--	2.4	5.0	--	--
STH 83 EB RAMPS	11	11	--	--	0.1	0.5	--	--
CTH E EB RAMPS	11	11	--	--	0.1	0.5	--	--
CTH KC EB RAMPS	1,000	200	800	--	9.0	18.0	--	--
CTH KE EB RAMPS	22	22	--	--	0.2	0.5	--	--
CTH KF EB RAMPS	22	22	--	--	0.2	0.5	--	--
STH 190 EB RAMPS	2,894	28	2,867	--	26.1	52.5	--	--
CTH JJ EB RAMPS	1,833	111	1,722	--	16.5	33.5	--	--
CTH P (BROWN ST) WB RAMPS	22	22	--	--	0.2	0.5	--	--
CTH P (SAWYER RD) WB RAMPS	22	22	--	--	0.2	0.5	--	--
CTH C WB RAMPS	2,289	156	2,133	--	20.6	41.5	--	--
STH 83 WB RAMPS	589	11	578	--	5.3	11.0	--	--
CTH E WB RAMPS	310	310	--	--	2.8	6.0	--	--
CTH KC WB RAMPS	167	167	--	--	1.5	3.0	--	--
CTH KE WB RAMPS	22	22	--	--	0.2	0.5	--	--
CTH KF WB RAMPS	22	22	--	--	0.2	0.5	--	--
STH 190 WB RAMPS	2,222	--	2,222	--	20.0	40.5	--	--
CTH JJ RAMPS	2,902	13	2,889	--	26.1	52.5	--	--
APRON ENDWALL LOCATIONS	340	--	--	340	--	0.0	6.5	--
CULVERT PIPE LINER LOCATIONS	100	--	--	100	--	0.0	2.0	--
UNDISTRIBUTED	1,200	200	1,000	50	10.8	30.5	--	25.0
TOTAL	16,312	1,660	14,211	490	142.8	299.0	9.5	25.0

RAMP CLOSURE GATE STOCKPILE

LOCATION	662.3026.S RAMP CLOSURE GATE ARMS STOCKPILE 26-FT EACH	662.3030.S RAMP CLOSURE GATE ARMS STOCKPILE 30-FT EACH	662.3037.S RAMP CLOSURE GATE ARMS STOCKPILE 37-FT EACH	662.3040.S RAMP CLOSURE GATE ARMS STOCKPILE 40-FT EACH	662.4000.S RAMP GATE FLASHERS STOCKPILE EACH
PROJECT 1370-15-71	2	2	2	4	30
TOTAL	2	2	2	4	30

STH 16 EB RAMPS & STH 83
CITY OF DELAFIED
WAUKESHA COUNTY
CATEGORY 0010
S67-1248

3

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.
81	PB9	SAME LOCATION IN FIELD	6' X 6'	4	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 1)	46	438	184
					TOTAL	46	438	184

REMOVE LOOP DETECTOR WIRE AND LEAD-IN CABLE

LOCATION	SPV.0105.02 REMOVE LOOP DETECTOR WIRE & LEAD-IN CABLE L.S.
STH 16 EB RAMPS & STH 83	1
TOTAL	1

FILE NAME : N:\PDS\C3D\CAD\13701501\SIG\S67-1248\S67-1248_mq.pptx PLOT DATE : 12/9/2016 PLOT BY : DOTSHW PLOT NAME : S67-1248_mq.pdf PLOT SCALE : 1:1

STH 16 WB RAMPS & CTH JJ
CITY OF PEWAUKEE
WAUKESHA COUNTY
CATEGORY 0010
S67-0922

3

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.
81	PB6	SAME LOCATION IN FIELD	6' X 10'	4	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 1)	52	446	208
					TOTAL	52	446	208

REMOVE LOOP DETECTOR WIRE AND LEAD-IN CABLE

LOCATION	SPV.0105.01 REMOVE LOOP DETECTOR WIRE & LEAD-IN CABLE L.S.
STH 16 WB RAMPS & CTH JJ	1
TOTAL	1

FILE NAME : N:\PDS\C3D\CAD\13701501\SIG\S67-0922\S67-0922_mq.pptx PLOT DATE : 12/9/2016 PLOT BY : DOTSHW PLOT NAME : S67-0922_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]	638.2602 REMOVING SIGNS TYPE II [EA]	638.3000 REMOVING SMALL SIGN SUP [EA]	634.0618 WOOD POSTS 4"X 6"x18' [EA]	634.0622 WOOD POSTS 4"X 6"x22' [EA]	634.0816 TUBULAR STEEL POSTS 2"X2"X16' [EA]	638.2102 MOVE 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]	637.1230 SIGNS TYPE I REFLC F [SF]	638.2601 REMOVING SIGNS TYPE I [EA]	638.3100 REMOVING STRUC STEEL SIGN SUPPORTS [EA]	STEEL POST TYPE	636.0100 SIGN SUPPORTS CONCRETE MASONRY [CY]	636.0500 SIGN SUPPORTS STEEL REINF [LBS]	635.0200 SIGN SUPPORTS STRUCTURAL STEEL HS [EST LBS]	635.0300 SIGN SUPPORTS REPLACING BASE CONN. BOLTS [EA]
1	E1-1A	I	[P] NORTH BROWN ST GIFFORD RD 1/4 MILE	-- x --	--	--	--	--	--	--	--	--	--	--	REUSE STEEL POSTS	16 x 13	208.00	--	1	--	--	--	--	--	2
1A	E1-5P	I	EXIT 176	-- x --	--	--	--	--	--	--	--	--	--	--	--	9 x 2.5	22.50	--	--	--	--	--	--	--	--
2	D4-3(2M)	I	OKAUCHEE [LOGO] [LOGO] PARK & RIDE EXIT 176	-- x --	--	--	--	--	--	--	--	--	--	--	INSTALL NEW STEEL SUPPORTS OFFSET 20' IN FRONT OF EXISTING SIGN	12 x 9.5	114.00	--	1	2	B	1.6	98	1000	--
3	E4-1A	I	[P] NORTH BROWN ST [A] GIFFORD RD	-- x --	--	--	--	--	--	--	--	--	--	--	NEW STEEL POSTS	19 x 10.5	199.50	--	1	2	B	1.6	98	1000	--
3A	E1-5P	I	EXIT 176	-- x --	--	--	--	--	--	--	--	--	--	--	--	9 x 2.5	22.50	--	--	--	--	--	--	--	--
4	W4-1R(5)	II	--	48 x 48	--	16.000	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
5	R2-1(5)	II	45 MPH	48 x 60	20.000	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
6	R2-1(5)	II	45 MPH	48 x 60	20.000	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
7	W3-5(5)	II	45 MPH	48 x 48	--	16.000	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
8	W3-5(5)	II	45 MPH	48 x 48	--	16.000	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
9	R5-1A(3)	II	--	42 x 30	8.750	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
10	R5-1A(3)	II	--	42 x 30	8.750	--	--	--	--	--	--	--	--	11	BACK OF SIGN #11	-- x --	--	--	--	--	--	--	--	--	--
11	D1-2	II	[A] GIFFORD RD BROWN ST [A]	72 x 30	15.000	--	--	1	2	2	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
12	W3-1(3)	II	--	36 x 36	--	9.000	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
13	E5-1A(5)	II	EXIT 176	90 x 60	37.500	--	--	1	2	--	2	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
13A	W5-54(2S)	II	--	18 x 18	--	2.250	--	--	--	--	--	--	--	13	4 FT MOUNTING HEIGHT	-- x --	--	--	--	--	--	--	--	--	--
13B	W5-54(2S)	II	--	18 x 18	--	2.250	--	--	--	--	--	--	--	13	4 FT MOUNTING HEIGHT	-- x --	--	--	--	--	--	--	--	--	--
14	W4-1R(5)	II	--	48 x 48	--	16.000	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
15	R5-57(5)	II	--	36 x 36	9.000	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
16	J1-1(2S)	II	--	24 x 39	6.500	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
	M2-1		--	21 x 15																					
	M1-6		STH 16	24 x 24																					
17	R2-1(5)	II	65 MPH	48 x 60	20.000	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
18	R2-1(5)	II	65 MPH	48 x 60	20.000	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
19	R5-1A(3)	II	--	42 x 30	8.750	--	--	--	--	--	--	--	--	21	BACK OF SIGN #21	-- x --	--	--	--	--	--	--	--	--	--
20	R5-1A(3)	II	--	42 x 30	8.750	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
21	D1-2	II	[A] BROWN ST GIFFORD RD [A]	72 x 30	15.000	--	--	1	2	2	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
22	R5-57(5)	II	--	36 x 36	9.000	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
23	J1-1(2S)	II	--	24 x 36	6.000	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
	M4-6		--	24 x 12																					
	M1-5A		CTH P	24 x 24																					
24	J3-3(2S)	II	--	72 x 57	28.500	--	--	1	2	2	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
	M3-2		--	24 x 12																					
	M1-6		STH 16	24 x 24																					
	M6-1		--	21 x 21																					
	M3-4		--	24 x 12																					
	M1-6		STH 16	24 x 24																					
	M6-1		--	21 x 21																					
	M4-5		--	24 x 12																					
	M1-6		STH 67	24 x 24																					
	M6-1		--	21 x 21																					
25	D4-2R(2S)	II	--	30 x 36	7.500	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
26	R3-2(2S)	II	--	24 x 24	4.000	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
27	R1-1(3)	II	--	36 x 36	7.460	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
28	R5-1(3)	II	--	36 x 36	9.000	--	--	--	--	--	--	1	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
29	R5-1A(2S)	II	--	36 x 24	6.000	--	--	--	--	--	--	--	--	30	3 FT MOUNTING HEIGHT	-- x --	--	--	--	--	--	--	--	--	--
30	R1-1(3)	II	--	36 x 36	7.460	--	--	1	1	--	--	1	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
31	J3-1(2S)	II	--	24 x 57	9.500	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
	M3-1		--	24 x 12																					
	M1-5A		CTH P	24 x 24																					
	M6-1		--	21 x 21																					
32	W12-1D(2S)	II	--	24 x 24	--	4.000	--	1	1	--	--	1	--	--	2 FT MOUNTING HEIGHT	-- x --	--	--	--	--	--	--	--	--	--
33	D4-2R(2S)	II	--	30 x 36	7.500	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
34	R6-2L(2S)	II	--	24 x 30	5.000	--	--	--	--	--	--	--	--	30	BELOW #30 AT 90° ANGLE	-- x --	--	--	--	--	--	--	--	--	--
35	R6-2R(2S)	II	--	24 x 30	5.000	--	--	--	--	--	--	--	--	38	--	-- x --	--	--	--	--	--	--	--	--	--
36	R1-1(3)	II	--	36 x 36	7.460	--	--	1	1	1	--	--	--	--	--	-- 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]	638.2602 REMOVING SIGNS TYPE II [EA]	638.3000 REMOVING SMALL SIGN SUP [EA]	634.0618 WOOD POSTS 4"X 6"x18' [EA]	634.0622 WOOD POSTS 4"X 6"x22' [EA]	634.0816 TUBULAR STEEL POSTS 2"X2"X16' [EA]	638.2102 MOVE 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]	637.1230 SIGNS TYPE I REFLC F [SF]	638.2601 REMOVING SIGNS TYPE I [EA]	638.3100 REMOVING STRUC STEEL SIGN SUPPORTS [EA]	STEEL POST TYPE	636.0100 SIGN SUPPORTS CONCRETE MASONRY [CY]	636.0500 SIGN SUPPORTS STEEL REINF [LBS]	635.0200 SIGN SUPPORTS STRUCTURAL STEEL HS [EST LBS]	635.0300 SIGN SUPPORTS REPLACING BASE CONN. BOLTS [EA]
37	R3-1(2S)	II	--	24 x 24	4.000	--	--	--	--	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
38	R5-1(3)	II	--	36 x 36	9.000	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
39	R5-1A(2S)	II	--	36 x 24	6.000	--	--	--	--	--	--	--	--	38	3 FT MOUNTING HEIGHT	-- x --	--	--	--	--	--	--	--	--	--
40	R4-7(2M)	II	--	24 x 30	5.000	--	--	1	--	--	--	--	--	26	BACK OF SIGN #26	-- x --	--	--	--	--	--	--	--	--	--
41	R4-7(2M)	II	--	24 x 30	5.000	--	--	1	--	--	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
42	D1-1	II	[A] MILWAUKEE	72 x 15	7.500	--	--	1	2	2	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
43	*NOT USED*	--	--	-- x --	--	--	--	--	--	--	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
44	R1-1(3)	II	--	36 x 36	7.460	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
45	J3-1(2S)	II	--	24 x 57	9.500	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
	M3-1		--	24 x 12																					
	M1-5A		CTH P	24 x 24																					
	M6-1		--	21 x 21																					
46	R5-1A(3)	II	--	36 x 36	9.000	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
47	*NOT USED*	--	--	-- x --	--	--	--	--	--	--	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
48	J3-2(2S)	II	--	48 x 57	19.000	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
	M3-4		--	24 x 12																					
	M1-6		STH 16	24 x 24																					
	M6-1		--	21 x 21																					
	M3-2		--	24 x 12																					
	M1-6		STH 16	24 x 24																					
	M6-1		--	21 x 21																					
49	R4-7(2S)	II	--	24 x 30	5.000	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
50	R3-2(2S)	II	--	24 x 24	4.000	--	--	--	--	--	--	--	--	49	--	-- x --	--	--	--	--	--	--	--	--	--
51	R1-1(3)	II	--	36 x 36	7.460	--	--	1	1	1	--	--	--	--	ON RIGHT	-- x --	--	--	--	--	--	--	--	--	--
52	R1-1(3)	II	--	36 x 36	7.460	--	--	1	1	--	--	1	--	--	IN PORK CHOP ISLAND	-- x --	--	--	--	--	--	--	--	--	--
53	R5-1(3)	II	--	36 x 36	9.000	--	--	--	--	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
54	R5-1A(2S)	II	--	36 x 24	6.000	--	--	--	--	--	--	--	--	53	3 FT MOUNTING HEIGHT	-- x --	--	--	--	--	--	--	--	--	--
55	R6-2L(2S)	II	--	24 x 30	5.000	--	--	--	--	--	--	--	--	53	--	-- x --	--	--	--	--	--	--	--	--	--
56	W12-1D(2S)	II	--	24 x 24	--	4.000	--	--	--	--	--	1	--	--	2 FT MOUNTING HEIGHT	-- x --	--	--	--	--	--	--	--	--	--
57	R6-2R(2S)	II	--	24 x 30	5.000	--	--	--	--	--	--	--	--	44	--	-- x --	--	--	--	--	--	--	--	--	--
58	D1-2	II	[A] MILWAUKEE	84 x 30	17.500	--	--	1	2	2	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
			OCONOMOWOC [A]																						
59	J1-3(2S)	II	--	72 x 69	34.500	--	--	1	1	2	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
	M4-5		--	24 x 12																					
	M3-3		--	24 x 12																					
	M1-5A		CTH P	24 x 24																					
	M6-1		--	21 x 21																					
	M2-1		--	21 x 15																					
	M1-6		STH 16	24 x 24																					
	M6-1		--	21 x 21																					
	M4-5		--	24 x 12																					
	M1-6		STH 67	24 x 24																					
	M5-1R		--	21 x 21																					
60	J23-1	--	--	-- x --	--	--	--	1	1	--	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
61	E4-1A	I	[P] NORTH	-- x --	--	--	--	--	--	--	--	--	--	--	REUSE STEEL POSTS	19 x 10.5	199.50	--	1	--	--	--	--	--	2
			BROWN ST [A]																						
			GIFFORD RD																						
61A	E1-5P	I	EXIT 176	-- x --	--	--	--	--	--	--	--	--	--	--	--	9 x 2.5	22.50	--	--	--	--	--	--	--	--
62	D10-3(5)	II	MILE 177	12 x 48	4.000	--	--	1	1	1	--	--	--	--	4 FT MOUNTING HEIGHT	-- x --	--	--	--	--	--	--	--	--	--
63	D10-3(5)	II	MILE 177	12 x 48	4.000	--	--	1	1	1	--	--	--	--	4 FT MOUNTING HEIGHT	-- x --	--	--	--	--	--	--	--	--	--
64	W19-1(5)	I	FREEWAY	-- x --	--	--	--	--	--	--	--	--	--	--	REUSE STEEL POSTS	15 x 8.5	--	127.50	1	--	--	--	--	--	2
			ENDS																						
			1 MILE																						
65	J4-1(3)	II	--	36 x 54	13.500	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
	M3-4		--	36 x 18																					
	M1-6		STH 16	36 x 36																					
66	D4-3(2M)	I	OKAUCHEE	-- x --	--	--	--	--	--	--	--	--	--	--	INSTALL NEW STEEL SUPPORTS	12 x 9.5	114.00	--	1	2	B	1.6	98	1000	--
			[LOGO] [LOGO]												OFFSET 20' IN FRONT OF EXISTING SIGN										
			PARK & RIDE																						
			EXIT 176																						
67	R2-1(5)	II	65 MPH	48 x 60	20.000	--	--	1	1	2	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
68	E1-1A	I	[P] SOUTH	-- x --	--	--	--	--	--	--	--	--	--	--	REUSE STEEL POSTS	17 x 10	170.00	--	1	--	--	--	--	--	2
			SAWYER RD																						
			1/2 MILE																						
68A	E1-5P	I	EXIT 178	-- x --	--	--	--	--	--	--	--	--	--	--	--	9 x 2.5	22.50	--	--	--	--	--	--	--	--

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]	638.2602 REMOVING SIGNS TYPE II [EA]	638.3000 REMOVING SMALL SIGN SUP [EA]	634.0618 WOOD POSTS 4"X 6"x18' [EA]	634.0622 WOOD POSTS 4"X 6"x22' [EA]	634.0816 TUBULAR STEEL POSTS 2"X2"X16' [EA]	638.2102 MOVE 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]	637.1230 SIGNS TYPE I REFLC F [SF]	638.2601 REMOVING SIGNS TYPE I [EA]	638.3100 REMOVING STRUC STEEL SIGN SUPPORTS [EA]	STEEL POST TYPE	636.0100 SIGN SUPPORTS CONCRETE MASONRY [CY]	636.0500 SIGN SUPPORTS STEEL REINF [LBS]	635.0200 SIGN SUPPORTS STRUCTURAL STEEL HS [EST LBS]	635.0300 SIGN SUPPORTS REPLACING BASE CONN. BOLTS [EA]
69	J4-1(3)	II	--	36	x	102	25.500	--	--	1	1	--	2	--	--	--	--	--	x	--	--	--	--	--	--	--	--	--	--
	MB4-1		--	36	x	18																							
	MB3-2		--	36	x	18																							
	M1-1		IH 94	36	x	36																							
	MB6-1		--	30	x	30																							
70	J4-1(3)	II	--	36	x	54	13.500	--	--	1	1	1	--	--	--	--	--	--	x	--	--	--	--	--	--	--	--	--	--
	M3-2			36	x	18																							
	M1-6		STH 16	36	x	36																							
71	R3-4B(5)	II	--	36	x	48	12.000	--	--	1	1	1	--	--	--	--	--	--	x	--	--	--	--	--	--	--	--	--	--
72	R3-4B(5)	II	--	36	x	48	12.000	--	--	--	--	1	--	--	--	--	--	--	x	--	--	--	--	--	--	--	--	--	--
73	E3-1	I	OKAUCHEE EXIT 178	--	x	--	--	--	--	--	--	--	--	--	--	--	REUSE STEEL POSTS	11	x	5	55.00	--	1	--	--	--	--	--	2
74	R3-4B(5)	II	--	36	x	48	12.000	--	--	1	1	1	--	--	--	--	--	--	x	--	--	--	--	--	--	--	--	--	--
75	R3-4B(5)	II	--	36	x	48	12.000	--	--	--	--	1	--	--	--	--	--	--	x	--	--	--	--	--	--	--	--	--	--
76	E1-1A	I	[P] NORTH BROWN ST GIFFORD RD 3/4 MILE	--	x	--	--	--	--	--	--	--	--	--	--	--	REUSE STEEL POSTS	16	x	13	208.00	--	1	--	--	--	--	--	2
76A	E1-5P	I	EXIT 176	--	x	--	--	--	--	--	--	--	--	--	--	--	--	9	x	2.5	22.50	--	--	--	--	--	--	--	--
77	R2-1(5)	II	65 MPH	48	x	60	20.000	--	--	1	1	2	--	--	--	--	SHEET 7 OF 72	--	x	--	--	--	--	--	--	--	--	--	--
78	J3-1	--	--	--	x	--	--	--	--	1	1	--	--	--	--	--	--	--	x	--	--	--	--	--	--	--	--	--	--
79	E4-1A	I	[P] SOUTH SAWYER RD [A]	--	x	--	--	--	--	--	--	--	--	--	--	--	REUSE STEEL POSTS	20	x	7.5	150.00	--	1	--	--	--	--	--	2
79A	E1-5P	I	EXIT 178	--	x	--	--	--	--	--	--	--	--	--	--	--	--	9	x	2.5	22.50	--	--	--	--	--	--	--	--
80	E5-1A(5)	II	EXIT 178	90	x	60	37.500	--	--	1	2	--	2	--	--	--	--	--	x	--	--	--	--	--	--	--	--	--	--
80A	W5-54(2S)	II	--	18	x	18	--	2.250	--	--	--	--	--	--	--	80	4 FT MOUNTING HEIGHT												
80B	W5-54(2S)	II	--	18	x	18	--	2.250	--	--	--	--	--	--	--	80	4 FT MOUNTING HEIGHT												
81	W4-1R(5)	II	--	48	x	48	--	16.000	--	1	1	1	--	--	--	--	--	--	x	--	--	--	--	--	--	--	--	--	--
82	D10-3(5)	II	MILE 178	12	x	48	4.000	--	--	1	1	1	--	--	--	--	4 FT MOUNTING HEIGHT	--	x	--	--	--	--	--	--	--	--	--	--
83	J4-1(3)	II	--	36	x	102	25.500	--	--	1	1	--	2	--	--	--	--	--	x	--	--	--	--	--	--	--	--	--	--
	MB4-1		--	36	x	18																							
	MB3-4		--	36	x	18																							
	M1-1		IH 94	36	x	36																							
	MB6-1		--	30	x	30																							
84	R5-1A(3)	II	--	42	x	30	8.750	--	--	1	1	1	--	--	--	--	--	--	x	--	--	--	--	--	--	--	--	--	--
85	R5-1A(3)	II	--	42	x	30	8.750	--	--	--	--	--	--	--	--	86	BACK OF SIGN #86	--	x	--	--	--	--	--	--	--	--	--	--
86	D1-3	II	[A] OCONOMOWOC LAKE OKAUCHEE [A]	84	x	36	21.000	--	--	1	2	2	--	--	--	--	--	--	x	--	--	--	--	--	--	--	--	--	--
87	W3-1(3)	II	--	36	x	36	--	9.000	--	1	1	1	--	--	--	--	--	--	x	--	--	--	--	--	--	--	--	--	--
88	W4-1R(5)	II	--	48	x	48	--	16.000	--	1	1	1	--	--	--	--	--	--	x	--	--	--	--	--	--	--	--	--	--
89	E1-1A	I	[C] NASHOTAH DELAFIELD 1 MILE	--	x	--	--	--	--	--	--	--	--	--	--	--	REUSE STEEL POSTS	15	x	13	195.00	--	1	--	--	--	--	--	2
89A	E1-5P	I	EXIT 179	--	x	--	--	--	--	--	--	--	--	--	--	--	--	9	x	2.5	22.50	--	--	--	--	--	--	--	--
90 - 99	*NOT USED*	--	--	--	x	--	--	--	--	--	--	--	--	--	--	--	--	--	x	--	--	--	--	--	--	--	--	--	--
100	J2-2(2S)	II	--	48	x	57	19.000	--	--	1	2	2	--	--	--	--	--	--	x	--	--	--	--	--	--	--	--	--	--
	M3-4		--	24	x	12																							
	M1-6		STH 16	24	x	24																							
	M6-1		--	21	x	21																							
	M3-2		--	24	x	12																							
	M1-6		STH 16	24	x	24																							
	M5-1R		--	21	x	21																							
101	J1-1(2S)	II	--	24	x	39	6.500	--	--	1	1	1	--	--	--	--	--	--	x	--	--	--	--	--	--	--	--	--	--
	M2-1		--	21	x	15																							
	M1-6		STH 16	24	x	24																							
102	R2-1	--	65 MPH	--	x	--	--	--	--	1	1	--	--	--	--	--	--	--	x	--	--	--	--	--	--	--	--	--	--
103	D10-3(5)	II	MILE 178	12	x	48	4.000	--	--	--	--	1	--	--	--	--	4 FT MOUNTING HEIGHT	--	x	--	--	--	--	--	--	--	--	--	--
104	R5-1A(3)	II	--	42	x	30	8.750	--	--	1	1	1	--	--	--	--	--	--	x	--	--	--	--	--	--	--	--	--	--
105	R5-1A(3)	II	--	42	x	30	8.750	--	--	--	--	--	--	--	--	106	BACK OF SIGN #106	--	x	--	--	--	--	--	--	--	--	--	--
106	D1-3	II	[A] OKAUCHEE OCONOMOWOC [A] LAKE	84	x	36	21.000	--	--	1	2	2	--	--	--	--	--	--	x	--	--	--	--	--	--	--	--	--	--

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]	637.2230 SIGNS TYPE II REFLC F [SF]	637.2215 SIGNS TYPE II REFLC H FOLDING [SF]	638.2602 REMOVING SIGNS TYPE II [EA]	638.3000 REMOVING SMALL SIGN SUP [EA]	634.0618 WOOD POSTS 4"X 6"x18' [EA]	634.0622 WOOD POSTS 4"X 6"x22' [EA]	634.0816 TUBULAR STEEL POSTS 2"X2"X16' [EA]	638.2102 MOVE 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]	637.1230 SIGNS TYPE I REFLC F [SF]	638.2601 REMOVING SIGNS TYPE I [EA]	638.3100 REMOVING STRUC STEEL SIGN SUPPORTS [EA]	STEEL POST TYPE	636.0100 SIGN SUPPORTS CONCRETE MASONRY [CY]	636.0500 SIGN SUPPORTS STEEL REINF [LBS]	635.0200 SIGN SUPPORTS STRUCTURAL STEEL HS [EST LBS]	635.0300 SIGN SUPPORTS REPLACING BASE CONN. BOLTS [EA]
107	W3-1(3)	II	--	36 x 36	--	9.000	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
108	R5-57(5)	II	--	36 x 36	9.000	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
109	J3-1(2S)	II	--	48 x 57	19.000	--	--	1	2	2	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
	M3-2		--	24 x 12																					
	M1-6		STH 16	24 x 24																					
	M6-1		--	21 x 21																					
	M3-4		--	24 x 12																					
	M1-6		STH 16	24 x 24																					
	M6-1		--	21 x 21																					
110	R1-2(2S)	II	--	36 x 31	3.880	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
111	R1-1(3)	II	--	36 x 36	7.460	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
112	R5-1(3)	II	--	36 x 36	9.000	--	--	--	--	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
113	R5-1A(2S)	II	--	36 x 24	6.000	--	--	--	--	--	--	--	--	112	3 FT MOUNTING HEIGHT	-- x --	--	--	--	--	--	--	--	--	--
114	W12-1D(2S)	II	--	24 x 24	--	4.000	--	--	--	--	--	1	--	--	2 FT MOUNTING HEIGHT	-- x --	--	--	--	--	--	--	--	--	--
115	J3-3(2S)	II	--	72 x 57	28.500	--	--	1	2	2	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
	M3-3		--	24 x 12																					
	M1-5A		CTH P	24 x 24																					
	M6-1		--	21 x 21																					
	M3-1		--	24 x 12																					
	M1-5A		CTH P	24 x 24																					
	M6-1		--	21 x 21																					
	M4-5		--	24 x 12																					
	M1-5A		CTH R	24 x 24																					
	M6-1		--	21 x 21																					
116	R6-2L(2S)	II	--	24 x 30	5.000	--	--	1	--	--	--	--	--	111	--	-- x --	--	--	--	--	--	--	--	--	--
117	R6-2R(2S)	II	--	24 x 30	5.000	--	--	--	--	--	--	--	--	122	--	-- x --	--	--	--	--	--	--	--	--	--
118	R1-1(3)	II	--	36 x 36	7.460	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
119	R3-1(2S)	II	--	24 x 24	4.000	--	--	--	--	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
120	J1-1(2S)	II	--	24 x 39	6.500	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
	M2-1		--	21 x 15																					
	M1-5A		CTH R	24 x 24																					
121	J3-1(2S)	II	--	24 x 57	9.500	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
	M3-4		--	24 x 12																					
	M1-6		STH 16	24 x 24																					
	M6-1		--	21 x 21																					
122	R5-1(3)	II	--	36 x 36	9.000	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
123	R5-1A(2S)	II	--	36 x 24	6.000	--	--	--	--	--	--	--	--	122	3 FT MOUNTING HEIGHT	-- x --	--	--	--	--	--	--	--	--	--
124	R4-7(2M)	II	--	24 x 30	5.000	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
125	R4-7(2M)	II	--	24 x 30	5.000	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
126	R6-2L(2M)	II	--	30 x 36	7.500	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
127	*NOT USED*	--	--	-- x --	--	--	--	--	--	--	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
128	R3-2(2S)	II	--	24 x 24	4.000	--	--	--	--	--	--	--	--	124	BACK OF SIGN #124	-- x --	--	--	--	--	--	--	--	--	--
129	J3-3(2S)	II	--	72 x 57	28.500	--	--	1	2	2	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
	M4-5		--	24 x 12																					
	M1-5A		CTH R	24 x 24																					
	M6-1		--	21 x 21																					
	M3-1		--	24 x 12																					
	M1-5A		CTH P	24 x 24																					
	M6-1		--	21 x 21																					
	M3-3		--	24 x 12																					
	M1-5A		CTH P	24 x 24																					
	M6-1		--	21 x 21																					
130	R1-1(3)	II	--	36 x 36	7.460	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
131	R6-2R(2S)	II	--	24 x 30	5.000	--	--	--	--	--	--	--	--	134	--	-- x --	--	--	--	--	--	--	--	--	--
132	R3-1(2S)	II	--	24 x 24	4.000	--	--	--	--	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
133	J3-1(2S)	II	--	24 x 57	9.500	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
	M3-2		--	24 x 12																					
	M1-6		STH 16	24 x 24																					
	M6-1		--	21 x 21																					
134	R5-1(3)	II	--	36 x 36	9.000	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
135	R5-1A(2S)	II	--	36 x 24	6.000	--	--	--	--	--	--	--	--	134	3 FT MOUNTING HEIGHT	-- x --	--	--	--	--	--	--	--	--	--
136	D1-1	II	[A] OCONOMOWOC	84 x 15	8.750	--	--	1	2	2	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
137	R6-2L(2M)	II	--	30 x 36	7.500	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
138	R4-7(2M)	II	--	24 x 30	5.000	--	--	1	1	1	--	--	--	--	--	-- 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]	638.2602 REMOVING SIGNS TYPE II [EA]	638.3000 REMOVING SMALL SIGN SUP [EA]	634.0618 WOOD POSTS 4"X 6"x18' [EA]	634.0622 WOOD POSTS 4"X 6"x22' [EA]	634.0816 TUBULAR STEEL POSTS 2"X2"X16' [EA]	638.2102 MOVE 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]	637.1230 SIGNS TYPE I REFLC F [SF]	638.2601 REMOVING SIGNS TYPE I [EA]	638.3100 REMOVING STRUC STEEL SIGN SUPPORTS [EA]	STEEL POST TYPE	636.0100 SIGN SUPPORTS CONCRETE MASONRY [CY]	636.0500 SIGN SUPPORTS STEEL REINF [LBS]	635.0200 SIGN SUPPORTS STRUCTURAL STEEL HS [EST LBS]	635.0300 SIGN SUPPORTS REPLACING BASE CONN. BOLTS [EA]
139	R4-7(2M)	II	--	24	x	30	5.000	--	--	1	1	1	--	--	--	--	--	--	x	--	--	--	--	--	--	--	--	--	--
140	E5-1A(5)	II	EXIT 178	90	x	60	37.500	--	--	1	2	2	--	--	--	--	SHEET 13	--	x	--	--	--	--	--	--	--	--	--	--
140A	W5-54(2S)	II	--	18	x	18	--	2.250	--	--	--	--	--	--	--	140	4 FT MOUNTING HEIGHT - SHEET 13												
140B	W5-54(2S)	II	--	18	x	18	--	2.250	--	--	--	--	--	--	--	140	4 FT MOUNTING HEIGHT - SHEET 13												
141	R3-2(2S)	II	--	24	x	24	4.000	--	--	--	--	--	--	--	--	139	BACK OF SIGN #139	--	x	--	--	--	--	--	--	--	--	--	--
142	R5-57(5)	II	--	36	x	36	9.000	--	--	1	1	1	--	--	--	--	--	--	x	--	--	--	--	--	--	--	--	--	--
143	D1-2	II	[A] OCONOMOWOC MILWAUKEE [A]	84	x	30	17.500	--	--	1	2	2	--	--	--	--	--	--	x	--	--	--	--	--	--	--	--	--	--
144	J3-2(2S)	II	--	48	x	57	19.000	--	--	1	1	1	--	--	--	--	--	--	x	--	--	--	--	--	--	--	--	--	--
	M3-4		--	24	x	12																							
	M1-6		STH 16	24	x	24																							
	M6-1		--	21	x	21																							
	M3-2		--	24	x	12																							
	M1-6		STH 16	24	x	24																							
	M6-1		--	21	x	21																							
145	R1-2(2S)	II	--	36	x	31	3.880	--	--	1	1	1	--	--	--	--	--	--	x	--	--	--	--	--	--	--	--	--	--
146	R1-1(3)	II	--	36	x	36	7.460	--	--	1	1	1	--	--	--	--	--	--	x	--	--	--	--	--	--	--	--	--	--
147	R5-1(3)	II	--	36	x	36	9.000	--	--	--	--	1	--	--	--	--	--	--	x	--	--	--	--	--	--	--	--	--	--
148	R5-1A(2S)	II	--	36	x	24	6.000	--	--	--	--	--	--	--	--	147	3 FT MOUNTING HEIGHT	--	x	--	--	--	--	--	--	--	--	--	--
149	R6-2L(2S)	II	--	24	x	30	5.000	--	--	--	--	--	--	--	--	146	--	--	x	--	--	--	--	--	--	--	--	--	--
150	W12-1D(2S)	II	--	24	x	24	--	4.000	--	--	--	--	--	1	--	--	2 FT MOUNTING HEIGHT	--	x	--	--	--	--	--	--	--	--	--	--
151	E4-1A	I	[P] SOUTH SAWYER RD [A]	--	x	--	--	--	--	--	--	--	--	--	--	--	REUSE STEEL POSTS	20	x	7.5	150.00	--	1	--	--	--	--	--	2
151A	E1-5P	I	EXIT 178	--	x	--	--	--	--	--	--	--	--	--	--	151	--	9	x	2.5	22.50	--	--	--	--	--	--	--	--
152	D4-3(2M)	I	NASHOTAH [LOGO] [LOGO] PARK & RIDE EXIT 179	--	x	--	--	--	--	--	--	--	--	--	--	--	INSTALL NEW STEEL SUPPORTS OFFSET 20' IN FRONT OF EXISTING SIGN	12	x	9.5	114.00	--	1	2	B	1.6	98	1000	--
153	R3-4B(5)	II	--	--	x	--	--	--	--	1	1	--	--	--	--	--	--	--	x	--	--	--	--	--	--	--	--	--	--
154	R3-4B(5)	II	--	36	x	48	12.000	--	--	--	--	1	--	--	--	--	--	--	x	--	--	--	--	--	--	--	--	--	--
155	J4-1(3)	II	--	36	x	54	13.500	--	--	1	1	1	--	--	--	--	--	--	x	--	--	--	--	--	--	--	--	--	--
	M3-2		--	36	x	18																							
	M1-6		STH 16	36	x	36																							
156	R2-1(5)	II	65 MPH	48	x	60	20.000	--	--	1	1	2	--	--	--	--	--	--	x	--	--	--	--	--	--	--	--	--	--
157	E9-1	I	OKAUCHEE OCONOMOWOC LAKE NEXT 2 EXITS	--	x	--	--	--	--	--	--	--	--	--	--	--	INSTALL NEW STEEL SUPPORTS STA 236+00 WB	13	x	8.5	110.50	--	1	2	B	1.6	98	1000	--
158	R3-4B(5)	II	--	36	x	48	12.000	--	--	1	1	1	--	--	--	--	--	--	x	--	--	--	--	--	--	--	--	--	--
159	--	I	LAKELAND DR EXIT 179	--	x	--	--	--	--	--	--	--	--	--	--	--	STA 201+00 EB	13	x	5	65.00	--	--	--	A	1.2	68	600	--
160	R3-4B(5)	II	--	36	x	48	12.000	--	--	--	--	1	--	--	--	--	--	--	x	--	--	--	--	--	--	--	--	--	--
161	E1-1A	I	[P] SOUTH SAWYER RD 1/2 MILE	--	x	--	--	--	--	--	--	--	--	--	--	--	REUSE STEEL POSTS	17	x	10	170.00	--	1	--	--	--	--	--	2
161A	E1-5P	I	EXIT 178	--	x	--	--	--	--	--	--	--	--	--	--	--	--	9	x	2.5	22.50	--	--	--	--	--	--	--	--
162	D10-3(5)	II	MILE 179	12	x	48	4.000	--	--	1	1	1	--	--	--	--	4 FT MOUNTING HEIGHT	--	x	--	--	--	--	--	--	--	--	--	--
163	R2-1(5)	II	65 MPH	48	x	60	20.000	--	--	1	1	2	--	--	--	--	--	--	x	--	--	--	--	--	--	--	--	--	--
164	D10-3(5)	II	MILE 179	12	x	48	4.000	--	--	1	1	1	--	--	--	--	4 FT MOUNTING HEIGHT	--	x	--	--	--	--	--	--	--	--	--	--
165	E4-1A	I	[C] NASHOTAH [A] DELAFIELD	--	x	--	--	--	--	--	--	--	--	--	--	--	REUSE STEEL POSTS	18	x	10.5	189.00	--	1	--	--	--	--	--	2
165A	E1-5P	I	EXIT 179	--	x	--	--	--	--	--	--	--	--	--	--	--	--	9	x	2.5	22.50	--	--	--	--	--	--	--	--
166	I2-3A(5)	II	VILLAGE OF NASHOTAH	78	x	30	16.250	--	--	1	2	2	--	--	--	--	--	--	x	--	--	--	--	--	--	--	--	--	--
167	E5-1A(5)	II	EXIT 179	90	x	60	37.500	--	--	1	2	--	2	--	--	--	--	--	x	--	--	--	--	--	--	--	--	--	--
167A	W5-54(2S)	II	--	18	x	18	--	2.250	--	--	--	--	--	--	--	167	4 FT MOUNTING HEIGHT												
167B	W5-54(2S)	II	--	18	x	18	--	2.250	--	--	--	--	--	--	--	167	4 FT MOUNTING HEIGHT												
168	W4-1R(5)	II	--	48	x	48	--	16.000	--	1	1	1	--	--	--	--	--	--	x	--	--	--	--	--	--	--	--	--	--
169	D1-1	II	[A] MILWAUKEE	72	x	15	7.500	--	--	1	2	2	--	--	--	--	--	--	x	--	--	--	--	--	--	--	--	--	--
170	J2-1(2S)	II	--	24	x	57	9.500	--	--	1	--	1	--	--	--	--	--	--	x	--	--	--	--	--	--	--	--	--	--
	M3-2		--	24	x	12																							
	M1-6		STH 16	24	x	24																							
	M5-1L		--	21	x	21																							

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]	638.2602 REMOVING SIGNS TYPE II [EA]	638.3000 REMOVING SMALL SIGN SUP [EA]	634.0618 WOOD POSTS 4"X 6"x18' [EA]	634.0622 WOOD POSTS 4"X 6"x22' [EA]	634.0816 TUBULAR STEEL POSTS 2"X2"X16' [EA]	638.2102 MOVE 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]	637.1230 SIGNS TYPE I REFLC F [SF]	638.2601 REMOVING SIGNS TYPE I [EA]	638.3100 REMOVING STRUC STEEL SIGN SUPPORTS [EA]	STEEL POST TYPE	636.0100 SIGN SUPPORTS CONCRETE MASONRY [CY]	636.0500 SIGN SUPPORTS STEEL REINF [LBS]	635.0200 SIGN SUPPORTS STRUCTURAL STEEL HS [EST LBS]	635.0300 SIGN SUPPORTS REPLACING BASE CONN. BOLTS [EA]
171	J1-1(2S)	II	--	24 x 39	6.500	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
	M2-1		--	21 x 15																					
	M1-6		STH 16	24 x 24																					
172	J2-2(2S)	II	--	48 x 57	19.000	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
	M3-2		--	24 x 12																					
	M1-6		STH 16	24 x 24																					
	M6-1		--	21 x 21																					
	M3-4		--	24 x 12																					
	M1-6		STH 16	24 x 24																					
	M6-1		--	21 x 21																					
173	R5-1A(2S)	II	--	36 x 24	6.000	--	--	--	--	--	--	--	--	169	BACK OF SIGN #169	-- x --	--	--	--	--	--	--	--	--	--
174	J1-1(2S)	II	--	24 x 39	6.500	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
	M2-1		--	21 x 15																					
	M1-6		STH 16	24 x 24																					
175	J2-2(2S)	II	--	48 x 57	19.000	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
	M3-4		--	24 x 12																					
	M1-6		STH 16	24 x 24																					
	M6-1		--	21 x 21																					
	M3-2		--	24 x 12																					
	M1-6		STH 16	24 x 24																					
	M5-1R		--	21 x 21																					
176	R3-4(2S)	II	--	24 x 24	4.000	--	--	--	--	--	--	--	--	175	--	-- x --	--	--	--	--	--	--	--	--	--
177	D1-3	II	[A] CHENEQUA	72 x 36	18.000	--	--	1	2	2	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
			NASHOTAH [A]																						
			DELAFIELD																						
178	W3-1(3)	II	--	36 x 36	--	9.000	--	1	2	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
179	R5-57(5)	II	--	36 x 36	9.000	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
180	J3-1(2S)	II	--	24 x 57	9.500	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
	M3-4		--	24 x 12																					
	M1-6		STH 16	24 x 24																					
	M6-1		--	21 x 21																					
181	R1-1(3)	II	--	36 x 36	7.460	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
182	R5-1A(2S)	II	--	36 x 24	6.000	--	--	--	--	--	--	--	--	184	3 FT MOUNTING HEIGHT	-- x --	--	--	--	--	--	--	--	--	--
183	R5-1C(3)	II	--	36 x 36	9.000	--	--	--	--	--	--	--	--	184	BACK OF SIGN #184 - CLIP CORNERS	-- x --	--	--	--	--	--	--	--	--	--
184	R1-1(3)	II	--	36 x 36	7.460	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
185	R6-2L(2S)	II	--	24 x 30	5.000	--	--	1	--	--	--	--	--	184	--	-- x --	--	--	--	--	--	--	--	--	--
186	W12-1D(2S)	II	--	24 x 24	--	4.000	--	--	--	--	--	1	--	--	2 FT MOUNTING HEIGHT	-- x --	--	--	--	--	--	--	--	--	--
187	J3-1(2S)	II	--	18 x 48	6.000	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
	M1-87		--	18 x 36																					
	M1-88A		--	12 x 12																					
188	J3-2(2S)	II	--	72 x 57	28.500	--	--	1	1	2	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
	M3-3		--	24 x 12																					
	M1-5A		CTH C	24 x 24																					
	M6-1		--	21 x 21																					
	M3-1		--	24 x 12																					
	M1-5A		CTH C	24 x 24																					
	M6-1		--	21 x 21																					
	M1-97		--	24 x 24																					
	MG6-4		--	21 x 21																					
189	R5-1A(3)	II	--	42 x 30	8.750	--	--	1	--	--	--	--	--	190	BACK OF SIGN #190	-- x --	--	--	--	--	--	--	--	--	--
190	D4-2R(2S)	II	--	30 x 36	7.500	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
191	R5-1A(3)	II	--	42 x 30	8.750	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
192	R1-1(3)	II	--	36 x 36	7.460	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
193	R6-2R(2S)	II	--	24 x 30	5.000	--	--	--	--	--	--	--	--	194	--	-- x --	--	--	--	--	--	--	--	--	--
194	R5-1(3)	II	--	36 x 36	9.000	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
195	R5-1A(2S)	II	--	36 x 24	6.000	--	--	--	--	--	--	--	--	194	3 FT MOUNTING HEIGHT	-- x --	--	--	--	--	--	--	--	--	--
196	R3-1(2S)	II	--	24 x 24	4.000	--	--	--	--	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
197	R5-1(3)	II	--	36 x 36	9.000	--	--	1	1	--	--	--	--	196	BACK OF SIGN #196	-- x --	--	--	--	--	--	--	--	--	--
198	J3-1(2S)	II	--	24 x 57	9.500	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
	M3-4		--	24 x 12																					
	M1-6		STH 16	24 x 24																					
	M6-1		--	21 x 21																					

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]	638.2602 REMOVING SIGNS TYPE II [EA]	638.3000 REMOVING SMALL SIGN SUP [EA]	634.0618 WOOD POSTS 4"X 6"x18' [EA]	634.0622 WOOD POSTS 4"X 6"x22' [EA]	634.0816 TUBULAR STEEL POSTS 2"X2"X16' [EA]	638.2102 MOVE 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]	637.1230 SIGNS TYPE I REFLC F [SF]	638.2601 REMOVING SIGNS TYPE I [EA]	638.3100 REMOVING STRUC STEEL SIGN SUPPORTS [EA]	STEEL POST TYPE	636.0100 SIGN SUPPORTS CONCRETE MASONRY [CY]	636.0500 SIGN SUPPORTS STEEL REINF [LBS]	635.0200 SIGN SUPPORTS STRUCTURAL STEEL HS [EST LBS]	635.0300 SIGN SUPPORTS REPLACING BASE CONN. BOLTS [EA]
199	R4-7(2M)	II	--	24 x 30	5.000	--	--	1	--	--	--	--	--	198	BACK OF SIGN #198	-- x --	--	--	--	--	--	--	--	--
200	R6-2L(2S)	II	--	24 x 30	5.000	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--
201	R3-2(2S)	II	--	24 x 24	4.000	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--
202	R4-7(2M)	II	--	24 x 30	5.000	--	--	--	--	--	--	--	--	201	BACK OF SIGN #201	-- x --	--	--	--	--	--	--	--	--
203	R5-1A(3)	II	--	42 x 30	8.750	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--
204	R5-1(3)	II	--	36 x 36	9.000	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--
205	R5-1A(2S)	II	--	36 x 24	6.000	--	--	--	--	--	--	--	--	204	3 FT MOUNTING HEIGHT	-- x --	--	--	--	--	--	--	--	--
206	R1-1(3)	II	--	36 x 36	7.460	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--
207	R6-2R(2S)	II	--	24 x 30	5.000	--	--	1	--	--	--	--	--	206	--	-- x --	--	--	--	--	--	--	--	--
208	R5-1(3)	II	--	36 x 36	9.000	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--
209	R3-1(2S)	II	--	24 x 24	4.000	--	--	--	--	--	--	--	--	208	BACK OF SIGN #208	-- x --	--	--	--	--	--	--	--	--
210	J3-1(2S)	II	--	24 x 57	9.500	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--
	M3-2		--	24 x 12																				
	M1-6		STH 16	24 x 24																				
	M6-1		--	21 x 21																				
211	R4-7(2M)	II	--	24 x 30	5.000	--	--	--	--	--	--	--	--	210	BACK OF SIGN #210	-- x --	--	--	--	--	--	--	--	--
212	*NOT USED*	--	--	-- x --	--	--	--	--	--	--	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--
213	J2-1(2S)	II	--	24 x 57	9.500	--	--	1	--	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--
	M3-4		--	24 x 12																				
	M1-6		STH 16	24 x 24																				
	M5-1L		--	21 x 21																				
214	D1-1	II	[A] OCONOMOWOC	84 x 15	8.750	--	--	1	2	2	--	--	--	--	ALSO REMOVE R5-1A ON BACK	-- x --	--	--	--	--	--	--	--	--
215	R6-2L(2S)	II	--	24 x 30	5.000	--	--	1	--	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--
216	R6-2L(2S)	II	--	24 x 30	5.000	--	--	--	--	--	--	--	--	226	--	-- x --	--	--	--	--	--	--	--	--
217	R4-7(2M)	II	--	24 x 30	5.000	--	--	--	--	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--
218	J3-1(2S)	II	--	24 x 57	9.500	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--
	M3-2		--	24 x 12																				
	M1-6		STH 16	24 x 24																				
	M6-1		--	21 x 21																				
219	R5-1(3)	II	--	36 x 36	9.000	--	--	--	--	--	--	--	--	218	BACK OF SIGN #218	-- x --	--	--	--	--	--	--	--	--
220	R5-57(5)	II	--	36 x 36	9.000	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--
221	D1-2	II	[A] OCONOMOWOC	84 x 30	17.500	--	--	1	2	2	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--
			MILWAUKEE [A]																					
222	M1-97(2S)	II	--	24 x 24	4.000	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--
223	R3-2(2S)	II	--	24 x 24	4.000	--	--	--	--	--	--	--	--	217	BACK OF SIGN #217	-- x --	--	--	--	--	--	--	--	--
224	R1-1(3)	II	--	36 x 36	7.460	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--
225	R5-1(3)	II	--	36 x 36	9.000	--	--	--	--	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--
226	R1-1(3)	II	--	36 x 36	7.460	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--
227	R5-1C(3)	II	--	36 x 36	9.000	--	--	--	--	--	--	--	--	226	BACK OF SIGN #226 - CLIP CORNERS	-- x --	--	--	--	--	--	--	--	--
228	R5-1A(2S)	II	--	36 x 24	6.000	--	--	--	--	--	--	--	--	226	3 FT MOUNTING HEIGHT	-- x --	--	--	--	--	--	--	--	--
229	W12-1D(2S)	II	--	24 x 24	--	4.000	--	--	--	--	--	1	--	--	2 FT MOUNTING HEIGHT	-- x --	--	--	--	--	--	--	--	--
230	J3-1(2S)	II	--	18 x 48	6.000	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--
	M1-87			18 x 36																				
	M1-88A			12 x 12																				
231	J3-3(2S)	II	--	72 x 57	28.500	--	--	1	1	2	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--
	M3-1		--	24 x 12																				
	M1-5A		CTH C	24 x 24																				
	M6-1		--	21 x 21																				
	M3-3		--	24 x 12																				
	M1-5A		CTH C	24 x 24																				
	M6-1		--	21 x 21																				
	M1-97		--	24 x 24																				
	MG6-4		--	21 x 21																				
232	D4-2L(2S)	II	--	30 x 36	7.500	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--
233	*NOT USED*	--	--	-- x --	--	--	--	--	--	--	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--
234	R5-1A(3)	II	--	42 x 30	8.750	--	--	--	--	--	--	--	--	232	BACK OF SIGN #232	-- x --	--	--	--	--	--	--	--	--
235	E5-1A(5)	II	EXIT 179	90 x 60	37.500	--	--	1	2	--	2	--	--	--	--	-- x --	--	--	--	--	--	--	--	--
235A	W5-54(2S)	II	--	18 x 18	--	2.250	--	--	--	--	--	--	--	235	4 FT MOUNTING HEIGHT	-- x --	--	--	--	--	--	--	--	--
235B	W5-54(2S)	II	--	18 x 18	--	2.250	--	--	--	--	--	--	--	235	4 FT MOUNTING HEIGHT	-- x --	--	--	--	--	--	--	--	--
236	W3-1(3)	II	--	36 x 36	--	9.000	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--
237	D10-3(5)	II	MILE 180	12 x 48	4.000	--	--	--	--	1	--	--	--	--	4 FT MOUNTING HEIGHT	-- 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]	638.2602 REMOVING SIGNS TYPE II [EA]	638.3000 REMOVING SMALL SIGN SUP [EA]	634.0618 WOOD POSTS 4"X 6"x18' [EA]	634.0622 WOOD POSTS 4"X 6"x22' [EA]	634.0816 TUBULAR STEEL POSTS 2"X2"X16' [EA]	638.2102 MOVE 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]	637.1230 SIGNS TYPE I REFLC F [SF]	638.2601 REMOVING SIGNS TYPE I [EA]	638.3100 REMOVING STRUC STEEL SIGN SUPPORTS [EA]	STEEL POST TYPE	636.0100 SIGN SUPPORTS CONCRETE MASONRY [CY]	636.0500 SIGN SUPPORTS STEEL REINF [LBS]	635.0200 SIGN SUPPORTS STRUCTURAL STEEL HS [EST LBS]	635.0300 SIGN SUPPORTS REPLACING BASE CONN. BOLTS [EA]
238	J4-1(2S)	II	--	24 x 69	11.500	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
	MB4-1		--	24 x 12																					
	MB3-4		--	24 x 12																					
	M1-1		IH 94	24 x 24																					
	MB6-1		--	21 x 21																					
239	D10-3(5)	II	MILE 180	12 x 48	4.000	--	--	1	1	1	--	--	--	--	4 FT MOUNTING HEIGHT	-- x --	--	--	--	--	--	--	--	--	--
240	*NOT USED*	--	--	-- x --	--	--	--	--	--	--	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
241	W4-1R(5)	II	--	48 x 48	--	16.000	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
242	E4-1A	I	[C] NASHOTAH [A] DELAFIELD	-- x --	--	--	--	--	--	--	--	--	--	--	REUSE STEEL POSTS	18 x 10.5	189.00	--	--	--	--	--	--	--	--
242A	E1-5P	I	EXIT 179	-- x --	--	--	--	--	--	--	--	--	--	--	--	9 x 2.5	22.50	--	--	--	--	--	--	--	--
243	I2-3A(5)	II	VILLAGE OF NASHOTAH	78 x 30	16.250	--	--	1	2	2	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
244	I2-3A(5)	II	VILLAGE OF CHENEQUA	78 x 30	16.250	--	--	--	--	--	--	--	--	243	BACK OF SIGN #243	-- x --	--	--	--	--	--	--	--	--	--
245	R2-1(5)	II	65 MPH	48 x 60	20.000	--	--	1	1	2	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
246	E1-1A	I	[83] DELAFIELD CHENEQUA 1 MILE	-- x --	--	--	--	--	--	--	--	--	--	--	REUSE STEEL POSTS	15 x 13.5	202.50	--	1	--	--	--	--	--	2
246A	E1-5P	I	EXIT 181	-- x --	--	--	--	--	--	--	--	--	--	--	--	9 x 2.5	22.50	--	--	--	--	--	--	--	--
247	J4-1(3)	II	--	36 x 102	25.500	--	--	1	1	--	2	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
	MB4-1		--	36 x 18																					
	MB3-2		--	36 x 18																					
	M1-1		IH 94	36 x 36																					
	MB6-1		--	30 x 30																					
248	J4-1(3)	II	--	36 x 54	13.500	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
	M3-2		--	36 x 18																					
	M1-6		STH 16	36 x 36																					
249	R3-4B(5)	II	--	36 x 48	12.000	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
250	R3-4B(5)	II	--	36 x 48	12.000	--	--	--	--	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
251	D4-3(2M)	I	NASHOTAH [LOGO] [LOGO] PARK & RIDE EXIT 179	-- x --	--	--	--	--	--	--	--	--	--	--	INSTALL NEW STEEL SUPPORTS OFFSET 20' IN FRONT OF EXISTING SIGN	12 x 9.5	114.00	--	1	2	B	1.6	98	1000	--
252	E1-1A	I	[C] NASHOTAH DELAFIELD 1 MILE	-- x --	--	--	--	--	--	--	--	--	--	--	REUSE STEEL POSTS	15 x 13	195.00	--	1	--	--	--	--	--	2
252A	E1-5P	I	EXIT 179	-- x --	--	--	--	--	--	--	--	--	--	--	--	9 x 2.5	22.50	--	--	--	--	--	--	--	--
253	J4-1(3)	II	--	36 x 54	13.500	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
	M3-4		--	36 x 18																					
	M1-6		STH 16	36 x 36																					
254	J4-1(3)	II	--	36 x 102	25.500	--	--	1	1	--	2	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
	MB4-1		--	36 x 18																					
	MB3-4		--	36 x 18																					
	M1-1		IH 94	36 x 36																					
	MB6-1		--	30 x 30																					
255	J4-1(3)	II	--	36 x 102	25.500	--	--	1	1	--	2	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
	MB4-1			36 x 18																					
	MB3-2			36 x 18																					
	M1-1			36 x 36																					
	MB6-1			30 x 30																					
256	E4-1A	I	[83] DELAFIELD [A] CHENEQUA	-- x --	--	--	--	--	--	--	--	--	--	--	REUSE STEEL POSTS	19 x 11	209.00	--	1	--	--	--	--	--	2
256A	E1-5P	I	EXIT 181	-- x --	--	--	--	--	--	--	--	--	--	--	--	9 x 2.5	22.50	--	--	--	--	--	--	--	--
257	R2-1(5)	II	65 MPH	48 x 60	20.000	--	--	1	1	2	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
258	D10-3(5)	II	MILE 181	12 x 48	4.000	--	--	1	1	1	--	--	--	--	4 FT MOUNTING HEIGHT	-- x --	--	--	--	--	--	--	--	--	--	--
259	D10-3(5)	II	MILE 181	12 x 48	4.000	--	--	1	1	1	--	--	--	--	4 FT MOUNTING HEIGHT	-- x --	--	--	--	--	--	--	--	--	--	--
260	W4-1R(5)	II	--	48 x 48	--	16.000	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--	--
261	E5-1A(5)	II	EXIT 181	90 x 60	37.500	--	--	1	2	--	2	--	--	--	--	-- 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]	638.2602 REMOVING SIGNS TYPE II [EA]	638.3000 REMOVING SMALL SIGN SUP [EA]	634.0618 WOOD POSTS 4"X 6"x18' [EA]	634.0622 WOOD POSTS 4"X 6"x22' [EA]	634.0816 TUBULAR STEEL POSTS 2"X2"X16' [EA]	638.2102 MOVE 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]	637.1230 SIGNS TYPE I REFLC F [SF]	638.2601 REMOVING SIGNS TYPE I [EA]	638.3100 REMOVING STRUC STEEL SIGN SUPPORTS [EA]	STEEL POST TYPE	636.0100 SIGN SUPPORTS CONCRETE MASONRY [CY]	636.0500 SIGN SUPPORTS STEEL REINF [LBS]	635.0200 SIGN SUPPORTS STRUCTURAL STEEL HS [EST LBS]	635.0300 SIGN SUPPORTS REPLACING BASE CONN. BOLTS [EA]
261A	W5-54(2S)	II	--	18 x 18	--	2.250	--	--	--	--	--	--	--	261	4 FT MOUNTING HEIGHT	-- x --	--	--	--	--	--	--	--	--	--
261B	W5-54(2S)	II	--	18 x 18	--	2.250	--	--	--	--	--	--	--	261	4 FT MOUNTING HEIGHT	-- x --	--	--	--	--	--	--	--	--	--
262	W3-3(3)	II	--	36 x 36	--	9.000	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
263	I2-3A(5)	II	VILLAGE OF CHENEQUA	78 x 30	16.250	--	--	1	2	2	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
264	R3-8(MOD)(2S)	II	--	54 x 30	11.250	--	--	1	2	2	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
264A	R3-8(MOD)(2S)	II	--	54 x 30	11.250	--	--	1	2	2	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
265	W5-52R	--	--	-- x --	--	--	--	1	1	--	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
266	E1-1A	I	[E] [KC] HARTLAND MERTON 1/2 MILE	-- x --	--	--	--	--	--	--	--	--	--	--	REUSE STEEL POSTS	14 x 13	182.00	--	1	--	--	--	--	--	2
266A	E1-5P	I	EXIT 182	-- x --	--	--	--	--	--	--	--	--	--	--	--	9 x 2.5	22.50	--	--	--	--	--	--	--	--
267	I2-3A	--	CITY OF DELAFIELD	-- x --	--	--	--	1	2	--	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
268	W4-1R(5)	II	--	48 x 48	--	16.000	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
269	R4-9(2M)	II	--	24 x 30	5.000	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
270	R5-57(5)	II	--	36 x 36	9.000	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
271	R1-1F(3)	II	--	36 x 36	--	--	7.460	1	--	--	--	--	--	--	MOUNT ON SIGNAL POLE	-- x --	--	--	--	--	--	--	--	--	--
272	J3-1(2S)	II	--	24 x 57	9.500	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
	M3-4		--	24 x 12																					
	M1-6		STH 16	24 x 24																					
	M6-1		--	21 x 21																					
273	R3-2(2S)	II	--	24 x 24	4.000	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
274	R5-1(3)	II	--	36 x 36	9.000	--	--	1	--	--	--	--	--	--	MOUNT ON SIGNAL POLE	-- x --	--	--	--	--	--	--	--	--	--
274A	R5-1A(2S)	II	--	36 x 24	6.000	--	--	--	--	--	--	--	--	274	MOUNT ON SIGNAL POLE - 3 FT HEIGHT	-- x --	--	--	--	--	--	--	--	--	--
275	R5-1(3)	II	--	36 x 36	9.000	--	--	1	1	--	--	1	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
276	R5-1A(2S)	II	--	36 x 24	6.000	--	--	--	--	--	--	--	--	275	3 FT MOUNTING HEIGHT	-- x --	--	--	--	--	--	--	--	--	--
277	R1-1(3)	II	--	36 x 36	7.460	--	--	1	1	--	--	1	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
278	R1-1(3)	II	--	36 x 36	7.460	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
279	J3-1(2S)	II	--	24 x 57	9.500	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
	M3-1		--	24 x 12																					
	M1-6		STH 83	24 x 24																					
	M6-1		--	21 x 21																					
280	R5-1A(3)	II	--	42 x 30	8.750	--	--	--	--	--	--	--	--	281	BACK OF SIGN #281	-- x --	--	--	--	--	--	--	--	--	--
281	D1-4	II	HARTLAND [A] DELAFIELD INDUSTRIAL PARK CHENEQUA [A]	96 x 48	32.000	--	--	1	2	2	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
282	R5-1A(3)	II	--	42 x 30	8.750	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
283	J3-1(2S)	II	--	24 x 57	9.500	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
	M3-3		--	24 x 12																					
	M1-6		STH 83	24 x 24																					
	M6-1		--	21 x 21																					
284	J3-1(2S)	II	--	24 x 69	11.500	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
	MB4-1		--	24 x 12																					
	MB3-4		--	24 x 12																					
	M1-1		IH 94	24 x 24																					
	MB6-1		--	21 x 21																					
285	W12-1D(2S)	II	--	24 x 24	--	4.000	--	1	1	--	--	1	--	--	2 FT MOUNTING HEIGHT	-- x --	--	--	--	--	--	--	--	--	--
286	R1-1F(3)	II	--	36 x 36	--	--	7.460	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE	-- x --	--	--	--	--	--	--	--	--	--
286A	R6-2L(2S)	II	--	24 x 30	5.000	--	--	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE										
287	R5-1(3)	II	--	36 x 36	9.000	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
288	J3-1(2S)	II	--	24 x 57	9.500	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
	M3-4		--	24 x 12																					
	M1-6		STH 16	24 x 24																					
	M6-1		--	21 x 21																					
289	R1-1F(3)	II	--	36 x 36	--	--	7.460	1	--	--	--	--	--	--	MOUNT ON SIGNAL POLE	-- x --	--	--	--	--	--	--	--	--	--
290	R3-1(2S)	II	--	24 x 24	4.000	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
291	R5-1(3)	II	--	36 x 36	9.000	--	--	--	--	--	--	--	--	290	--	-- x --	--	--	--	--	--	--	--	--	--
292	R3-2(2S)	II	--	24 x 24	4.000	--	--	--	--	--	--	--	--	290	--	-- x --	--	--	--	--	--	--	--	--	--
293	R6-2R(2S)	II	--	24 x 30	5.000	--	--	--	--	--	--	--	--	290	--	-- x --	--	--	--	--	--	--	--	--	--
294	J2-1(2S)	II	--	24 x 57	9.500	--	--	--	--	--	--	--	--	295	--	-- x --	--	--	--	--	--	--	--	--	--
	M3-2		--	24 x 12																					
	M1-6		STH 16	24 x 24																					
	M5-1L		--	21 x 21																					

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]	637.2230 SIGNS TYPE II REFLC F [SF]	637.2215 SIGNS TYPE II REFLC H FOLDING [SF]	638.2602 REMOVING SIGNS TYPE II [EA]	638.3000 REMOVING SMALL SIGN SUP [EA]	634.0618 WOOD POSTS 4"X 6"x18' [EA]	634.0622 WOOD POSTS 4"X 6"x22' [EA]	634.0816 TUBULAR STEEL POSTS 2"X2"X16' [EA]	638.2102 MOVE 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]	637.1230 SIGNS TYPE I REFLC F [SF]	638.2601 REMOVING SIGNS TYPE I [EA]	638.3100 REMOVING STRUC STEEL SIGN SUPPORTS [EA]	STEEL POST TYPE	636.0100 SIGN SUPPORTS CONCRETE MASONRY [CY]	636.0500 SIGN SUPPORTS STEEL REINF [LBS]	635.0200 SIGN SUPPORTS STRUCTURAL STEEL HS [EST LBS]	635.0300 SIGN SUPPORTS REPLACING BASE CONN. BOLTS [EA]
295	D1-2	II	[A] DELAFIELD [A] MILWAUKEE	72 x 30	15.000	--	--	1	2	2	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
296	R5-1A(3)	II	--	42 x 30	8.750	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
297	R5-1A(3)	II	--	42 x 30	8.750	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
298	W12-1D	II	--	18 x 18	--	2.250	--	1	1	--	--	1	--	--	2 FT MOUNTING HEIGHT	-- x --	--	--	--	--	--	--	--	--	--
299	R6-2R(2S)	II	--	24 x 30	5.000	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
300	R3-1(2S)	II	--	24 x 24	4.000	--	--	--	--	--	--	--	--	299	--	-- x --	--	--	--	--	--	--	--	--	--
301	R1-1F(3)	II	--	36 x 36	--	--	7.460	1	--	--	--	--	--	--	MOUNT ON SIGNAL POLE	-- x --	--	--	--	--	--	--	--	--	--
302	R3-1(2S)	II	--	24 x 24	4.000	--	--	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE	-- x --	--	--	--	--	--	--	--	--	--
303	J3-1(2S) M3-2 M1-6 M6-1	II	-- -- STH 16 --	24 x 57 24 x 12 24 x 24 21 x 21	9.500	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
304	D1-2	II	[A] CHENEQUA [A] OCONOMOWOC	84 x 30	17.500	--	--	1	--	--	--	--	--	--	INSTALL ON EXISTING POSTS	-- x --	--	--	--	--	--	--	--	--	--
305	R5-1(3)	II	--	36 x 36	9.000	--	--	--	--	--	--	--	--	299	--	-- x --	--	--	--	--	--	--	--	--	--
306	R4-7(2S)	II	--	24 x 30	5.000	--	--	1	--	--	--	--	--	--	MOUNT ON SIGNAL POLE	-- x --	--	--	--	--	--	--	--	--	--
307	R5-57(5)	II	--	36 x 36	9.000	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
308	J3-1(2S) M3-2 M1-6 M6-1	II	-- -- STH 16 --	24 x 57 24 x 12 24 x 24 21 x 21	9.500	--	--	1	--	--	--	--	--	--	MOUNT ON LIGHT POLE	-- x --	--	--	--	--	--	--	--	--	--
309	J3-1(2S) MB4-1 MB3-2 M1-1 MB6-1	II	-- -- -- IH 94 --	24 x 69 24 x 12 24 x 12 24 x 24 21 x 21	11.500	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
310	J3-1(2S) M3-2 M1-6 M6-1	II	-- -- STH 16 --	24 x 57 24 x 12 24 x 24 21 x 21	9.500	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
311	R1-2(2S)	II	--	36 x 31	3.880	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
312	R10-10A(2S)	II	--	24 x 30	5.000	--	--	1	--	--	--	--	--	--	MOUNT ON SIGNAL POLE	-- x --	--	--	--	--	--	--	--	--	--
313	R1-1F(3)	II	--	36 x 36	--	--	7.460	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE	-- x --	--	--	--	--	--	--	--	--	--
314	W12-1D(2S)	II	--	24 x 24	--	4.000	--	--	--	--	--	--	--	--	2 FT MOUNT HEIGHT ON SIGNAL POLE	-- x --	--	--	--	--	--	--	--	--	--
315	R3-18(2S)	II	--	24 x 24	4.000	--	--	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE	-- x --	--	--	--	--	--	--	--	--	--
316	R5-1(3)	II	--	36 x 36	9.000	--	--	1	--	--	--	--	--	--	MOUNT ON SIGNAL POLE	-- x --	--	--	--	--	--	--	--	--	--
316A	R5-1A(2S)	II	--	36 x 24	6.000	--	--	--	--	--	--	--	--	316	MOUNT ON SIGNAL POLE - 3 FT HEIGHT										
317	R1-1F(3)	II	--	36 x 36	--	--	7.460	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE	-- x --	--	--	--	--	--	--	--	--	--
318	R1-1F(3)	II	--	36 x 36	--	--	7.460	1	--	--	--	--	--	--	MOUNT ON SIGNAL POLE	-- x --	--	--	--	--	--	--	--	--	--
319	R10-11F(2M)	II	--	30 x 36	7.500	--	--	1	--	--	--	--	--	--	MOUNT ON SIGNAL POLE	-- x --	--	--	--	--	--	--	--	--	--
320	R3-2(2S)	II	--	24 x 24	4.000	--	--	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE	-- x --	--	--	--	--	--	--	--	--	--
321	R3-8(2S)	II	--	30 x 36	7.500	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
322	R3-8(2S)	II	--	30 x 36	7.500	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
323	E4-1A	I	[83] DELAFIELD [A] CHENEQUA	-- x --	--	--	--	--	--	--	--	--	--	--	REUSE STEEL POSTS	19 x 11	209.00	--	1	--	--	--	--	--	2
323A	E1-5P	I	EXIT 181	-- x --	--	--	--	--	--	--	--	--	--	--	--	9 x 2.5	22.50	--	--	--	--	--	--	--	--
324	W3-3(3)	II	--	36 x 36	--	9.000	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
325	I2-3A(5)	II	CITY OF DELAFIELD	66 x 30	13.750	--	--	--	--	2	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
326	I2-3A(5)	II	VILLAGE OF HARTLAND	78 x 30	16.250	--	--	--	--	--	--	--	--	325	--	-- x --	--	--	--	--	--	--	--	--	--
327	D10-3(5)	II	MILE 182	12 x 48	4.000	--	--	1	1	1	--	--	--	--	4 FT MOUNTING HEIGHT	-- x --	--	--	--	--	--	--	--	--	--
328	D10-3(5)	II	MILE 182	12 x 48	4.000	--	--	1	1	1	--	--	--	--	4 FT MOUNTING HEIGHT	-- x --	--	--	--	--	--	--	--	--	--
329	R2-1(5)	II	65 MPH	48 x 60	20.000	--	--	1	1	2	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
330	J4-1(3) M3-2 M1-6	II	-- -- STH 16	36 x 54 36 x 18 36 x 36	13.500	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
331	J4-1(3) MB4-1 MB3-2 M1-1 MB6-1	II	-- -- -- IH 94 --	36 x 102 36 x 18 36 x 18 36 x 36 30 x 30	25.500	--	--	1	1	--	2	--	--	--	--	-- 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]	638.2602 REMOVING SIGNS TYPE II [EA]	638.3000 REMOVING SMALL SIGN SUP [EA]	634.0618 WOOD POSTS 4"X 6"x18' [EA]	634.0622 WOOD POSTS 4"X 6"x22' [EA]	634.0816 TUBULAR STEEL POSTS 2"X2"X16' [EA]	638.2102 MOVE 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]	637.1230 SIGNS TYPE I REFLC F [SF]	638.2601 REMOVING SIGNS TYPE I [EA]	638.3100 REMOVING STRUC STEEL SIGN SUPPORTS [EA]	STEEL POST TYPE	636.0100 SIGN SUPPORTS CONCRETE MASONRY [CY]	636.0500 SIGN SUPPORTS STEEL REINF [LBS]	635.0200 SIGN SUPPORTS STRUCTURAL STEEL HS [EST LBS]	635.0300 SIGN SUPPORTS REPLACING BASE CONN. BOLTS [EA]
332	J3-1(3)	II	--	36 x 102	25.500	--	--	1	1	--	2	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
	MB4-1		--	36 x 18																					
	MB3-4		--	36 x 18																					
	M1-1		IH 94	36 x 36																					
	MB6-2R		--	30 x 30																					
333	R3-4B(5)	II	--	36 x 48	12.000	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
334	R3-4B(5)	II	--	36 x 48	12.000	--	--	--	--	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
335	E4-1A	I	[E] [KC] HARTLAND [A] MERTON	-- x --	--	--	--	--	--	--	--	--	--	--	REUSE STEEL POSTS	17 x 10.5	178.50	--	1	--	--	--	--	--	2
335A	E1-5P	I	EXIT 182	-- x --	--	--	--	--	--	--	--	--	--	--	--	9 x 2.5	22.50	--	--	--	--	--	--	--	--
336	E5-1A(5)	II	EXIT 182	90 x 60	37.500	--	--	1	2	--	2	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
336A	W5-54(2S)	II	--	18 x 18	2.250	--	--	--	--	--	--	--	--	336	4 FT MOUNTING HEIGHT	-- x --	--	--	--	--	--	--	--	--	--
336B	W5-54(2S)	II	--	18 x 18	2.250	--	--	--	--	--	--	--	--	336	4 FT MOUNTING HEIGHT	-- x --	--	--	--	--	--	--	--	--	--
337	W3-1(3)	II	--	36 x 36	--	9.000	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
338	W4-1R(5)	II	--	48 x 48	--	16.000	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
339	M1-94(5)	II	HWY E	54 x 21	7.875	--	--	--	--	2	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
340	D12-2B(5)	II	--	114 x 48	38.000	--	--	1	2	2	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
341	W5-52L(3)	II	--	18 x 54	--	6.750	--	1	1	1	--	--	--	--	4 FT MOUNTING HEIGHT	-- x --	--	--	--	--	--	--	--	--	--
342	W5-52R(3)	II	--	18 x 54	--	6.750	--	1	1	1	--	--	--	--	4 FT MOUNTING HEIGHT	-- x --	--	--	--	--	--	--	--	--	--
343	J1-1(2S)	II	--	24 x 39	6.500	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
	M2-1		--	21 x 15																					
	M1-6		STH 16	24 x 24																					
344	J3-1(2S)	II	--	24 x 57	9.500	--	--	1	1	--	--	1	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
	M3-4		--	24 x 12																					
	M1-6		STH 16	24 x 24																					
	M6-1		--	21 x 21																					
345	R5-1A(3)	II	--	42 x 30	8.750	--	--	--	--	--	--	--	--	347	BACK OF SIGN #347	-- x --	--	--	--	--	--	--	--	--	--
346	R5-1A(3)	II	--	42 x 30	8.750	--	--	--	--	--	--	--	--	350	BACK OF SIGN #350	-- x --	--	--	--	--	--	--	--	--	--
347	J2-1(2S)	II	--	24 x 57	9.500	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
	M4-5		--	24 x 12																					
	M1-5A		CTH KC	24 x 24																					
	M5-1L		--	21 x 21																					
348	J3-2(2S)	II	--	48 x 57	19.000	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
	M4-5		--	24 x 12																					
	M1-5A		CTH KC	24 x 24																					
	M6-1		--	21 x 21																					
	M1-5A		CTH E	24 x 24																					
	M6-4		--	21 x 21																					
349	D1-2	II	DOWNTOWN HARTLAND [A]	72 x 24	12.000	--	--	1	2	2	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
350	D1-4	II	NORTH AVE [A] NORTH SOUTH [A] [A] TO MERTON AVE BUSINESS DIST [A]	90 x 54	33.750	--	--	1	2	2	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
351	R2-1(5)	II	65 MPH	48 x 60	20.000	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
352	R5-57(5)	II	--	36 x 36	9.000	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
353	J3-2(2S)	II	--	48 x 57	19.000	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
	M3-4		--	24 x 12																					
	M1-6		STH 16	24 x 24																					
	M6-1		--	21 x 21																					
	M1-5A		CTH E	24 x 24																					
	M6-4		--	21 x 21																					
354	J3-2(2S)	II	--	48 x 69	23.000	--	--	1	1	2	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
	M4-5		--	24 x 12																					
	M3-2		--	24 x 12																					
	M1-6		STH 16	24 x 24																					
	M6-1		--	21 x 21																					
	M4-5		--	24 x 12																					
	M1-5A		CTH KC	24 x 24																					
	M6-1		--	21 x 21																					
355	R5-1(3)	II	--	36 x 36	9.000	--	--	1	--	--	--	--	--	354	BACK OF SIGN #354	-- 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]	638.2602 REMOVING SIGNS TYPE II [EA]	638.3000 REMOVING SMALL SIGN SUP [EA]	634.0618 WOOD POSTS 4"X 6"x18' [EA]	634.0622 WOOD POSTS 4"X 6"x22' [EA]	634.0816 TUBULAR STEEL POSTS 2"X2"X16' [EA]	638.2102 MOVE 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]	637.1230 SIGNS TYPE I REFLC F [SF]	638.2601 REMOVING SIGNS TYPE I [EA]	638.3100 REMOVING STRUC STEEL SIGN SUPPORTS [EA]	STEEL POST TYPE	636.0100 SIGN SUPPORTS CONCRETE MASONRY [CY]	636.0500 SIGN SUPPORTS STEEL REINF [LBS]	635.0200 SIGN SUPPORTS STRUCTURAL STEEL HS [EST LBS]	635.0300 SIGN SUPPORTS REPLACING BASE CONN. BOLTS [EA]
356	D1-4	II	[A] DOWNTOWN HARTLAND DOWNTOWN [A] MERTON	72 x 48	24.000	--	--	1	2	2	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
357	J3-3(2S)	II	--	72 x 69	34.500	--	--	1	2	2	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
	M1-95		--	24 x 24																					
	M6-1		--	21 x 21																					
	M4-5		--	24 x 12																					
	M3-2		--	24 x 12																					
	M1-6		STH 16	24 x 24																					
	M6-1		--	21 x 21																					
	M3-4		--	24 x 12																					
	M1-6		STH 16	24 x 24																					
	M6-1		--	21 x 21																					
358	R6-2L(2S)	II	--	24 x 30	5.000	--	--	1	--	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
358A	R1-3P(2S)	II	--	18 x 6	0.750	--	--	--	--	--	--	--	--	--	MOUNT BELOW EXSTING STOP SIGN	-- x --	--	--	--	--	--	--	--	--	--
358B	R1-3P(2S)	II	--	18 x 6	0.750	--	--	--	--	--	--	--	--	--	MOUNT BELOW EXSTING STOP SIGN	-- x --	--	--	--	--	--	--	--	--	--
358C	R1-3P(2S)	II	--	18 x 6	0.750	--	--	--	--	--	--	--	--	--	MOUNT BELOW EXSTING STOP SIGN	-- x --	--	--	--	--	--	--	--	--	--
358D	R1-3P(2S)	II	--	18 x 6	0.750	--	--	--	--	--	--	--	--	--	MOUNT BELOW EXSTING STOP SIGN	-- x --	--	--	--	--	--	--	--	--	--
358E	R1-3P(2S)	II	--	18 x 6	0.750	--	--	--	--	--	--	--	--	--	MOUNT BELOW EXSTING STOP SIGN	-- x --	--	--	--	--	--	--	--	--	--
358F	R1-3P(2S)	II	--	18 x 6	0.750	--	--	--	--	--	--	--	--	--	MOUNT BELOW EXSTING STOP SIGN	-- x --	--	--	--	--	--	--	--	--	--
359	D1-2	II	DOWNTOWN HARTLAND [A]	72 x 24	12.000	--	--	1	2	2	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
360	J3-1(2S)	II	--	48 x 57	19.000	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
	M4-5		--	24 x 12																					
	M1-5A		CTH KC	24 x 24																					
	M6-1		--	21 x 21																					
	M1-5A		CTH E	24 x 24																					
	M6-4		--	21 x 21																					
361	R1-1(3)	II	--	36 x 36	7.460	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
362	R5-1A(3)	II	--	42 x 30	8.750	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
363	R3-7R(2S)	II	--	30 x 30	6.250	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
364	R3-1(2S)	II	--	24 x 24	4.000	--	--	1	--	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
365	R5-1(3)	II	--	36 x 36	9.000	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
366	R5-1A(2S)	II	--	36 x 24	6.000	--	--	--	--	--	--	--	--	365	3 FT MOUNTING HEIGHT	-- x --	--	--	--	--	--	--	--	--	--
367	R4-7(2M)	II	--	24 x 30	5.000	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
368	W3-1(2M)	II	--	36 x 36	--	9.000	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
369	R3-2(2S)	II	--	24 x 24	4.000	--	--	--	--	--	--	1	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
370	R3-7R(2S)	II	--	30 x 30	6.250	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
371	R5-1(3)	II	--	36 x 36	9.000	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
372	J2-2(2S)	II	--	48 x 69	23.000	--	--	1	1	2	--	--	--	--	SHEET 31 OF 72	-- x --	--	--	--	--	--	--	--	--	--
	M4-5		--	24 x 12																					
	M3-2		--	24 x 12																					
	M1-6		STH 16	24 x 24																					
	M5-1L		--	21 x 21																					
	M3-4		--	24 x 12																					
	M1-6		STH 16	24 x 24																					
	M5-1R		--	21 x 21																					
373	J1-1(2S)	II	--	24 x 36	6.000	--	--	1	1	1	--	--	--	--	SHEET 31 OF 72	-- x --	--	--	--	--	--	--	--	--	--
	M2-1		--	24 x 12																					
	M1-6		STH 16	24 x 24																					
374	R3-7R(2S)	II	--	30 x 30	6.250	--	--	--	--	1	--	--	--	--	SHEET 31 OF 72	-- x --	--	--	--	--	--	--	--	--	--
375	E1-1A	I	[83] DELAFIELD CHENEQUA 3/4 MILE	-- x --	--	--	--	--	--	--	--	--	--	--	REUSE STEEL POSTS	15 x 13.5	202.50	--	1	--	--	--	--	--	2
375A	E1-5P	I	EXIT 181	-- x --	--	--	--	--	--	--	--	--	--	--	--	9 x 2.5	22.50	--	--	--	--	--	--	--	--
376	E1-1A	I	[JK] [KE] JUNGBLUTH RD NORTH SHORE DR 1 MILE	-- x --	--	--	--	--	--	--	--	--	--	--	REUSE STEEL POSTS	23 x 13	299.00	--	1	--	--	--	--	--	2
376A	E1-5P	I	EXIT 184	-- x --	--	--	--	--	--	--	--	--	--	--	--	9 x 2.5	22.50	--	--	--	--	--	--	--	--
377	D10-3(5)	II	MILE 183	12 x 48	4.000	--	--	1	1	1	--	--	--	--	4 FT MOUNTING HEIGHT	-- x --	--	--	--	--	--	--	--	--	--
378	D10-3(5)	II	MILE 183	12 x 48	4.000	--	--	1	1	1	--	--	--	--	4 FT MOUNTING HEIGHT	-- x --	--	--	--	--	--	--	--	--	--
379	D12-2A(5)	II	--	78 x 54	29.250	--	--	1	2	2	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
380	M1-94MOD(5)	II	HWY KC	66 x 21	9.625	--	--	--	--	2	--	--	--	--	--	-- 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]	638.2602 REMOVING SIGNS TYPE II [EA]	638.3000 REMOVING SMALL SIGN SUP [EA]	634.0618 WOOD POSTS 4"X 6"x18' [EA]	634.0622 WOOD POSTS 4"X 6"x22' [EA]	634.0816 TUBULAR STEEL POSTS 2"X2"X16' [EA]	638.2102 MOVE 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]	637.1230 SIGNS TYPE I REFLC F [SF]	638.2601 REMOVING SIGNS TYPE I [EA]	638.3100 REMOVING STRUC STEEL SIGN SUPPORTS [EA]	STEEL POST TYPE	636.0100 SIGN SUPPORTS CONCRETE MASONRY [CY]	636.0500 SIGN SUPPORTS STEEL REINF [LBS]	635.0200 SIGN SUPPORTS STRUCTURAL STEEL HS [EST LBS]	635.0300 SIGN SUPPORTS REPLACING BASE CONN. BOLTS [EA]
381	J1-1(2S)	II	--	24 x 39	6.500	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
	M2-1		--	21 x 15																					
	M1-6		STH 16	24 x 24																					
382	W4-1R(5)	II	--	48 x 48	--	16.000	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
383	R5-57(5)	II	--	36 x 36	9.000	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
384	D12-2A(5)	II	--	78 x 54	29.250	--	--	1	2	2	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
385	J2-2(2S)	II	--	48 x 69	23.000	--	--	1	1	2	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
	M3-2		--	24 x 12																					
	M1-6		STH 16	24 x 24																					
	M6-1		--	21 x 21																					
	M4-5		--	24 x 12																					
	M3-4		--	24 x 12																					
	M1-6		STH 16	24 x 24																					
	M5-1R		--	21 x 21																					
386	J1-1(2S)	II	--	24 x 39	6.500	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
	M2-1		--	21 x 15																					
	M1-6		STH 16	24 x 24																					
387	R5-1C(3)	II	--	36 x 36	9.000	--	--	--	--	--	--	--	--	389	CLIP CORNERS	-- x --	--	--	--	--	--	--	--	--	--
388	R5-1A(2S)	II	--	36 x 24	6.000	--	--	--	--	--	--	--	--	389	3 FT MOUNTING HEIGHT	-- x --	--	--	--	--	--	--	--	--	--
389	R1-1(3)	II	--	36 x 36	7.460	--	--	1	1	--	--	2	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
389A	R1-3P(2S)	II	--	18 x 6	0.750	--	--	--	--	--	--	--	--	389	--	-- x --	--	--	--	--	--	--	--	--	--
390	R6-2L(2S)	II	--	24 x 30	5.000	--	--	--	--	--	--	--	--	389	--	-- x --	--	--	--	--	--	--	--	--	--
391	R1-1(3)	II	--	36 x 36	7.460	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
391A	R1-3P(2S)	II	--	18 x 6	0.750	--	--	--	--	--	--	--	--	391	--	-- x --	--	--	--	--	--	--	--	--	--
391B	R1-3P(2S)	II	--	18 x 6	0.750	--	--	--	--	--	--	--	--	--	MOUNT BELOW EXSTING STOP SIGN	-- x --	--	--	--	--	--	--	--	--	--
391C	R1-3P(2S)	II	--	18 x 6	0.750	--	--	--	--	--	--	--	--	--	MOUNT BELOW EXSTING STOP SIGN	-- x --	--	--	--	--	--	--	--	--	--
392	J3-2(2S)	II	--	48 x 57	19.000	--	--	1	1	--	--	1	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
	M1-5A		CTH KC	24 x 24																					
	M6-4		--	21 x 21																					
	M4-5		--	24 x 12																					
	M1-5A		CTH E	24 x 24																					
	M6-1		--	21 x 21																					
393	R5-1A(3)	II	--	42 x 30	8.750	--	--	1	--	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
394	R5-1A(3)	II	--	42 x 30	8.750	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
395	D1-2	II	[A] DOWNTOWN HARTLAND	72 x 24	12.000	--	--	1	2	2	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
396	R6-2R(2S)	II	--	24 x 30	5.000	--	--	--	--	--	--	--	--	703	--	-- x --	--	--	--	--	--	--	--	--	--
397	R3-1(2S)	II	--	24 x 24	4.000	--	--	1	--	--	--	--	--	706	BACK OF SIGN #706	-- x --	--	--	--	--	--	--	--	--	--
398	R1-1(3)	II	--	36 x 36	7.460	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
398A	R1-3P(2S)	II	--	18 x 6	0.750	--	--	--	--	--	--	--	--	398	--	-- x --	--	--	--	--	--	--	--	--	--
399	R1-1(3)	II	--	36 x 36	7.460	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
399A	R1-3P(2S)	II	--	18 x 6	0.750	--	--	--	--	--	--	--	--	399	--	-- x --	--	--	--	--	--	--	--	--	--
400	J3-1(2S)	II	--	24 x 69	11.500	--	--	--	--	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
	M4-5		--	24 x 12																					
	M3-4		--	24 x 12																					
	M1-6		STH 16	24 x 24																					
	M6-1		--	21 x 21																					
401	R4-7(2S)	II	--	24 x 30	5.000	--	--	--	--	--	--	--	--	398	--	-- x --	--	--	--	--	--	--	--	--	--
402	R3-2(2S)	II	--	24 x 24	4.000	--	--	--	--	--	--	--	--	398	--	-- x --	--	--	--	--	--	--	--	--	--
403	J2-1(2S)	II	--	24 x 57	9.500	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
	M3-2		--	24 x 12																					
	M1-6		STH 16	24 x 24																					
	M5-1L		--	21 x 21																					
404	J3-1(2S)	II	--	24 x 57	9.500	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
	M3-2		--	24 x 12																					
	M1-6		STH 16	24 x 24																					
	M6-1		--	21 x 21																					
405	R3-7L	--	--	-- x --	--	--	--	--	--	--	--	--	1	404	BACK OF SIGN #404	-- x --	--	--	--	--	--	--	--	--	--
406	J3-1(2S)	II	--	24 x 57	9.500	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
	M3-2		--	24 x 12																					
	M1-6		STH 16	24 x 24																					
	M6-1		--	21 x 21																					
407	*NOT USED*	--	--	-- x --	--	--	--	--	--	--	--	--	--	--	--	-- 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]	638.2602 REMOVING SIGNS TYPE II [EA]	638.3000 REMOVING SMALL SIGN SUP [EA]	634.0618 WOOD POSTS 4"X 6"x18' [EA]	634.0622 WOOD POSTS 4"X 6"x22' [EA]	634.0816 TUBULAR STEEL POSTS 2"X2"X16' [EA]	638.2102 MOVE 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]	637.1230 SIGNS TYPE I REFLC F [SF]	638.2601 REMOVING SIGNS TYPE I [EA]	638.3100 REMOVING STRUC STEEL SIGN SUPPORTS [EA]	STEEL POST TYPE	636.0100 SIGN SUPPORTS CONCRETE MASONRY [CY]	636.0500 SIGN SUPPORTS STEEL REINF [LBS]	635.0200 SIGN SUPPORTS STRUCTURAL STEEL HS [EST LBS]	635.0300 SIGN SUPPORTS REPLACING BASE CONN. BOLTS [EA]
408	J2-2(2S)	II	--	48 x 69	23.000	--	--	1	1	2	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	
	M4-5		--	24 x 12																					
	M3-4		--	24 x 12																					
	M1-6		STH 16	24 x 24																					
	M6-1		--	21 x 21																					
	M3-2		--	24 x 12																					
	M1-6		STH 16	24 x 24																					
	M5-1R		--	21 x 21																					
409	W3-1(3)	II	--	36 x 36	--	9.000	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	
410	E5-1A(5)	II	EXIT 183	90 x 60	37.500	--	--	1	2	--	2	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	
410A	W5-54(2S)	II	--	18 x 18	--	2.250	--	--	--	--	--	--	--	410	4 FT MOUNTING HEIGHT	-- x --	--	--	--	--	--	--	--	--	
410B	W5-54(2S)	II	--	18 x 18	--	2.250	--	--	--	--	--	--	--	410	4 FT MOUNTING HEIGHT	-- x --	--	--	--	--	--	--	--	--	
411	E4-1A	I	[E] [KC] HARTLAND [A] MERTON	-- x --	--	--	--	--	--	--	--	--	--	--	REUSE STEEL POSTS	17 x 10.5	178.50	--	1	--	--	--	--	--	2
411A	E1-5P	I	EXIT 183	-- x --	--	--	--	--	--	--	--	--	--	--	--	9 x 2.5	22.50	--	--	--	--	--	--	--	--
412	I2-3A(5)	II	VILLAGE OF HARTLAND	78 x 30	16.250	--	--	--	--	2	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
413	J3-1(3)	II	--	36 x 102	25.500	--	--	1	1	--	2	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
	MB4-1		--	36 x 18																					
	MB3-4		--	36 x 18																					
	M1-1		IH 94	36 x 36																					
	MB6-1		--	30 x 30																					
414	R2-1(5)	II	65 MPH	48 x 60	20.000	--	--	1	1	2	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
415	J4-1(3)	II	--	36 x 54	13.500	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
	M3-4		--	36 x 18																					
	M1-6		STH 16	36 x 36																					
416	R2-1(5)	II	65 MPH	48 x 60	20.000	--	--	1	1	2	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
417	R3-4B(5)	II	--	36 x 48	12.000	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
418	R3-4B(5)	II	--	36 x 48	12.000	--	--	--	--	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
419	J4-1(3)	II	--	36 x 54	13.500	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
	M3-2		--	36 x 18																					
	M1-6		STH 16	36 x 36																					
420	E4-1A	I	[JK] [KE] JUNGBLUTH RD [A] NORTH SHORE DR	-- x --	--	--	--	--	--	--	--	--	--	--	REUSE STEEL POSTS	25 x 10.5	262.50	--	1	--	--	--	--	--	2
420A	E1-5P	I	EXIT 184	-- x --	--	--	--	--	--	--	--	--	--	--	--	9 x 2.5	22.50	--	--	--	--	--	--	--	--
421	D10-3(5)	II	MILE 184	12 x 48	4.000	--	--	1	1	1	--	--	--	--	4 FT MOUNTING HEIGHT	-- x --	--	--	--	--	--	--	--	--	--
422	D10-3(5)	II	MILE 184	12 x 48	4.000	--	--	1	1	1	--	--	--	--	4 FT MOUNTING HEIGHT	-- x --	--	--	--	--	--	--	--	--	--
423	W4-1R(5)	II	--	48 x 48	--	16.000	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
424	W3-1(3)	II	--	36 x 36	--	9.000	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
425	E5-1A(5)	II	EXIT 184	90 x 60	37.500	--	--	1	2	--	2	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
425A	W5-54(2S)	II	--	18 x 18	--	2.250	--	--	--	--	--	--	--	425	4 FT MOUNTING HEIGHT	-- x --	--	--	--	--	--	--	--	--	--
425B	W5-54(2S)	II	--	18 x 18	--	2.250	--	--	--	--	--	--	--	425	4 FT MOUNTING HEIGHT	-- x --	--	--	--	--	--	--	--	--	--
426	E9-1	I	HARTLAND NEXT 2 EXITS	-- x --	--	--	--	--	--	--	--	--	--	--	REUSE STEEL POSTS	11 x 4.5	49.50	--	1	--	--	--	--	--	2
427	D1-2	II	[A] JUNGBLUTH RD NORTH SHORE DR [A]	102 x 30	21.250	--	--	1	2	2	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
428	D1-2	II	[A] OCONOMOWOC MILWAUKEE [A]	84 x 30	17.500	--	--	1	2	2	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
429	J1-1(2S)	II	--	24 x 36	6.000	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
	M2-1		--	24 x 12																					
	M1-6		STH 16	24 x 24																					
430	W4-1R(5)	II	--	48 x 48	--	16.000	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
431	E1-1A	I	[E] [KC] HARTLAND MERTON 3/4 MILE	-- x --	--	--	--	--	--	--	--	--	--	--	INSTALL ON NEW STEEL SUPPORTS OFFSET 20' IN FRONT OF EXISTING SIGN	14 x 13	182.00	--	1	2	B	1.6	98	1000	--
431A	E1-5P	I	EXIT 183	-- x --	--	--	--	--	--	--	--	--	--	--	--	9 x 2.5	22.50	--	--	--	--	--	--	--	--
432	D1-2	II	[A] NORTH SHORE DR JUNGBLUTH RD [A]	102 x 30	21.250	--	--	1	2	2	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--

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]	637.2230 SIGNS TYPE II REFLC F [SF]	637.2215 SIGNS TYPE II REFLC H FOLDING [SF]	638.2602 REMOVING SIGNS TYPE II [EA]	638.3000 REMOVING SMALL SIGN SUP [EA]	634.0618 WOOD POSTS 4"X 6"x18' [EA]	634.0622 WOOD POSTS 4"X 6"x22' [EA]	634.0816 TUBULAR STEEL POSTS 2"X2"X16' [EA]	638.2102 MOVE 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]	637.1230 SIGNS TYPE I REFLC F [SF]	638.2601 REMOVING SIGNS TYPE I [EA]	638.3100 REMOVING STRUC STEEL SIGN SUPPORTS [EA]	STEEL POST TYPE	636.0100 SIGN SUPPORTS CONCRETE MASONRY [CY]	636.0500 SIGN SUPPORTS STEEL REINF [LBS]	635.0200 SIGN SUPPORTS STRUCTURAL STEEL HS [EST LBS]	635.0300 SIGN SUPPORTS REPLACING BASE CONN. BOLTS [EA]
433	J3-1(2S)	II	--	24 x 57	9.500	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
	M3-4		--	24 x 12																					
	M1-6		STH 16	24 x 24																					
	M6-1		--	21 x 21																					
434	R3-2(2S)	II	--	24 x 24	4.000	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
435	R4-7(2S)	II	--	24 x 30	5.000	--	--	--	--	--	--	--	--	434	BACK OF SIGN #434	-- x --	--	--	--	--	--	--	--	--	--
436	R1-1(3)	II	--	36 x 36	7.460	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
437	R1-1(3)	II	--	36 x 36	7.460	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
438	R6-2L(2S)	II	--	24 x 30	5.000	--	--	--	--	--	--	--	--	437	--	-- x --	--	--	--	--	--	--	--	--	--
439	D1-2	II	DOWNTOWN [A] MERTON	72 x 24	12.000	--	--	1	2	2	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
440	R5-1A(3)	II	--	42 x 30	8.750	--	--	--	--	--	--	--	--	441	BACK OF SIGN #441	-- x --	--	--	--	--	--	--	--	--	--
441	JV3-2(2S)	II	--	24 x 69	11.500	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
	M1-5A		CTH JK	24 x 24																					
	M1-5A		CTH KE	24 x 24																					
	M6-4			21 x 21																					
442	R5-1A(3)	II	--	42 x 30	8.750	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
443	R1-1(3)	II	--	36 x 36	7.460	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
444	R3-1(2S)	II	--	24 x 24	4.000	--	--	1	--	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
445	R5-1(3)	II	--	36 x 36	9.000	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
446	R5-1A(2S)	II	--	36 x 24	6.000	--	--	--	--	--	--	--	--	445	3 FT MOUNTING HEIGHT	-- x --	--	--	--	--	--	--	--	--	--
447	R6-2R(2S)	II	--	24 x 30	5.000	--	--	--	--	--	--	--	--	445	--	-- x --	--	--	--	--	--	--	--	--	--
448	R5-1(3)	II	--	36 x 36	9.000	--	--	--	--	1	--	--	1	--	--	-- x --	--	--	--	--	--	--	--	--	--
449	R5-1A(2S)	II	--	36 x 24	6.000	--	--	--	--	--	--	--	1	448	3 FT MOUNTING HEIGHT	-- x --	--	--	--	--	--	--	--	--	--
450	D1-2	II	[A] MILWAUKEE OCONOMOWOC [A]	84 x 30	17.500	--	--	1	2	2	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
451	J3-2(2S)	II	--	48 x 45	15.000	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
	M1-5A		CTH JK	24 x 24																					
	M6-6L		--	21 x 21																					
	M1-6		STH 16	24 x 24																					
	M6-1		--	21 x 21																					
452	J1-2(2S)	II	--	48 x 39	13.000	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
	M2-1		--	21 x 15																					
	M1-6		STH 16	24 x 24																					
	M2-1		--	21 x 15																					
	M1-5A		CTH JK	24 x 24																					
453	JV3-2(2S)	II	--	24 x 69	11.500	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
	M1-5A		CTH JK	24 x 24																					
	M1-5A		CTH KE	24 x 24																					
	M6-4		--	21 x 21																					
454	R5-1A(3)	II	--	42 x 30	8.750	--	--	--	--	--	--	--	--	453	BACK OF SIGN #453	-- x --	--	--	--	--	--	--	--	--	--
455	R5-1A(3)	II	--	42 x 30	8.750	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
456	D1-2	II	[A] DOWNTOWN MERTON	72 x 24	12.000	--	--	1	2	2	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
457	R3-1(2S)	II	--	24 x 24	4.000	--	--	1	--	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
458	R4-7(2S)	II	--	24 x 30	5.000	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
459	J3-1(2S)	II	--	24 x 57	9.500	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
	M3-2		--	24 x 12																					
	M1-6		STH 16	24 x 24																					
	M6-1		--	21 x 21																					
460	R3-2(2S)	II	--	24 x 24	4.000	--	--	--	--	--	--	--	--	458	BACK OF SIGN #458	-- x --	--	--	--	--	--	--	--	--	--
461	R6-2L(2S)	II	--	24 x 30	5.000	--	--	--	--	--	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
462	R1-1(3)	II	--	36 x 36	7.460	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
463	W3-1(3)	II	--	36 x 36	--	9.000	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
464	E5-1A(5)	II	EXIT 184	90 x 60	37.500	--	--	1	2	--	2	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
464A	W5-54(2S)	II	--	18 x 18	--	2.250	--	--	--	--	--	--	--	464	4 FT MOUNTING HEIGHT	-- x --	--	--	--	--	--	--	--	--	--
464B	W5-54(2S)	II	--	18 x 18	--	2.250	--	--	--	--	--	--	--	464	4 FT MOUNTING HEIGHT	-- x --	--	--	--	--	--	--	--	--	--
465	E4-1A	I	[JK] [KE] JUNGBLUTH RD [A] NORTH SHORE DR	-- x --	--	--	--	--	--	--	--	--	--	--	REUSE STEEL POSTS	25 x 10.5	262.50	--	1	--	--	--	--	--	2
465A	E1-5P	I	EXIT 184	-- x --	--	--	--	--	--	--	--	--	--	--	--	9 x 2.5	22.50	--	--	--	--	--	--	--	--

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]	638.2602 REMOVING SIGNS TYPE II [EA]	638.3000 REMOVING SMALL SIGN SUP [EA]	634.0618 WOOD POSTS 4"X 6"x18' [EA]	634.0622 WOOD POSTS 4"X 6"x22' [EA]	634.0816 TUBULAR STEEL POSTS 2"X2"X16' [EA]	638.2102 MOVE 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]	637.1230 SIGNS TYPE I REFLC F [SF]	638.2601 REMOVING SIGNS TYPE I [EA]	638.3100 REMOVING STRUC STEEL SIGN SUPPORTS [EA]	STEEL POST TYPE	636.0100 SIGN SUPPORTS CONCRETE MASONRY [CY]	636.0500 SIGN SUPPORTS STEEL REINF [LBS]	635.0200 SIGN SUPPORTS STRUCTURAL STEEL HS [EST LBS]	635.0300 SIGN SUPPORTS REPLACING BASE CONN. BOLTS [EA]
466	J4-1(3) MB4-1 MB3-4 M1-1 MB6-1	II	-- -- -- IH 94 --	36 36 36 36 30	x x x x x	102 18 18 36 30	25.500	--	--	1	1	--	2	--	--	--	--	--	x	--	--	--	--	--	--	--	--	--	--
467	J4-1(3) M3-2 M1-6	II	-- -- STH 16	36 36 36	x x x	54 18 36	13.500	--	--	1	1	1	--	--	--	--	--	--	x	--	--	--	--	--	--	--	--	--	--
468	R3-4B(5)	II	--	36	x	48	12.000	--	--	1	1	1	--	--	--	--	--	--	x	--	--	--	--	--	--	--	--	--	--
469	R3-4B(5)	II	--	36	x	48	12.000	--	--	--	--	1	--	--	--	--	--	--	x	--	--	--	--	--	--	--	--	--	--
470	D10-3(5)	II	MILE 185	12	x	48	4.000	--	--	1	1	1	--	--	--	--	4 FT MOUNTING HEIGHT	--	x	--	--	--	--	--	--	--	--	--	--
471	D2-4	I	PEWAUKEE EXITS RYAN ST 1 CAPITOL DR 2 1/2 MAIN ST 3 1/2	--	x	--	--	--	--	--	--	--	--	--	--	--	REUSE STEEL POSTS	16	x	9.5	152.00	--	1	--	--	--	--	--	2
472	D10-3(5)	II	MILE 185	12	x	48	4.000	--	--	1	1	1	--	--	--	--	4 FT MOUNTING HEIGHT	--	x	--	--	--	--	--	--	--	--	--	--
473	R2-1(5)	II	65 MPH	48	x	60	20.000	--	--	1	1	2	--	--	--	--	--	--	x	--	--	--	--	--	--	--	--	--	--
474	E1-1A	I	[KF] RYAN ST 1/2 MILE	--	x	--	--	--	--	--	--	--	--	--	--	--	REUSE STEEL POSTS	13	x	10	130.00	--	1	--	--	--	--	--	2
474A	E1-5P	I	EXIT 186	--	x	--	--	--	--	--	--	--	--	--	--	--	--	9	x	2.5	22.50	--	--	--	--	--	--	--	--
475	E1-1A	I	[JK] [KE] JUNGBLUTH RD NORTH SHORE DR 1 MILE	--	x	--	--	--	--	--	--	--	--	--	--	--	REUSE STEEL POSTS	23	x	13	299.00	--	1	--	--	--	--	--	2
475A	E1-5P	I	EXIT 184	--	x	--	--	--	--	--	--	--	--	--	--	--	--	9	x	2.5	22.50	--	--	--	--	--	--	--	--
476	D2-2	I	HARTLAND 2 OCONOMOWOC 10	--	x	--	--	--	--	--	--	--	--	--	--	--	REUSE STEEL POSTS	17	x	5	85.00	--	1	--	--	--	--	--	2
477	R2-1(5)	II	65 MPH	48	x	60	20.000	--	--	1	1	2	--	--	--	--	--	--	x	--	--	--	--	--	--	--	--	--	--
478	J4-1(3) M3-4 M1-6	II	-- -- STH 16	36 36 36	x x x	54 18 36	13.500	--	--	1	1	1	--	--	--	--	--	--	x	--	--	--	--	--	--	--	--	--	--
479	E4-1A	I	[KF] RYAN ST [A]	--	x	--	--	--	--	--	--	--	--	--	--	--	REUSE STEEL POSTS	17	x	7.5	127.50	--	1	--	--	--	--	--	2
479A	E1-5P	I	EXIT 186	--	x	--	--	--	--	--	--	--	--	--	--	--	--	9	x	2.5	22.50	--	--	--	--	--	--	--	--
480	D10-3(5)	II	MILE 186	12	x	48	4.000	--	--	1	1	1	--	--	--	--	4 FT MOUNTING HEIGHT	--	x	--	--	--	--	--	--	--	--	--	--
481	D10-3(5)	II	MILE 186	12	x	48	4.000	--	--	1	1	1	--	--	--	--	4 FT MOUNTING HEIGHT	--	x	--	--	--	--	--	--	--	--	--	--
482	W4-1R(5)	II	--	48	x	48	--	16.000	--	1	1	1	--	--	--	--	--	--	x	--	--	--	--	--	--	--	--	--	--
483	D1-2	II	[A] MILWAUKEE OCONOMOWOC [A]	84	x	30	17.500	--	--	1	2	2	--	--	--	--	--	--	x	--	--	--	--	--	--	--	--	--	--
484	J1-1(2S) M2-1 M1-6	II	-- -- STH 16	24 21 24	x x x	39 15 24	6.500	--	--	1	1	1	--	--	--	--	--	--	x	--	--	--	--	--	--	--	--	--	--
485	E1-1A	I	[190] CAPITOL DR 1 MILE	--	x	--	--	--	--	--	--	--	--	--	--	--	REUSE STEEL POSTS	16	x	10.5	168.00	--	1	--	--	--	--	--	2
485A	E1-5P	I	EXIT 187	--	x	--	--	--	--	--	--	--	--	--	--	--	--	9	x	2.5	22.50	--	--	--	--	--	--	--	--
486	E5-1A(5)	II	EXIT 186	90	x	60	37.500	--	--	1	2	--	2	--	--	--	--	--	x	--	--	--	--	--	--	--	--	--	--
486A	W5-54(2S)	II	--	18	x	18	--	2.250	--	--	--	--	--	--	--	486	4 FT MOUNTING HEIGHT	--	x	--	--	--	--	--	--	--	--	--	--
486B	W5-54(2S)	II	--	18	x	18	--	2.250	--	--	--	--	--	--	--	486	4 FT MOUNTING HEIGHT	--	x	--	--	--	--	--	--	--	--	--	--
487	R4-7(2S)	II	--	24	x	30	5.000	--	--	1	1	1	--	--	--	--	--	--	x	--	--	--	--	--	--	--	--	--	--
488	R3-2(2S)	II	--	24	x	24	4.000	--	--	--	--	--	--	--	--	487	BACK OF SIGN #487	--	x	--	--	--	--	--	--	--	--	--	--
489	J3-1(2S) M3-4 M1-6 M6-1	II	-- -- STH 16 --	24 24 24 21	x x x x	57 12 24 21	9.500	--	--	1	1	1	--	--	--	--	--	--	x	--	--	--	--	--	--	--	--	--	--
490	R6-2L(2S)	II	--	24	x	30	5.000	--	--	1	1	1	--	--	--	--	--	--	x	--	--	--	--	--	--	--	--	--	--
491	R5-1A(3)	II	--	36	x	24	6.000	--	--	--	--	--	--	--	--	492	BACK OF SIGN #492	--	x	--	--	--	--	--	--	--	--	--	--
492	J3-1(2S) M1-5A M6-4	II	-- CTH KF --	24 24 21	x x x	45 24 21	7.500	--	--	1	1	1	--	--	--	--	--	--	x	--	--	--	--	--	--	--	--	--	--
493	R6-2R(2S)	II	--	24	x	30	5.000	--	--	1	1	1	--	--	--	--	--	--	x	--	--	--	--	--	--	--	--	--	--
494	R5-1(3)	II	--	36	x	36	9.000	--	--	1	1	1	--	--	--	--	--	--	x	--	--	--	--	--	--	--	--	--	--
495	R3-1(2S)	II	--	24	x	24	4.000	--	--	--	--	--	--	--	--	494	BACK OF SIGN #494	--	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]	638.2602 REMOVING SIGNS TYPE II [EA]	638.3000 REMOVING SMALL SIGN SUP [EA]	634.0618 WOOD POSTS 4"X 6"x18' [EA]	634.0622 WOOD POSTS 4"X 6"x22' [EA]	634.0816 TUBULAR STEEL POSTS 2"X2"X16' [EA]	638.2102 MOVE 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]	637.1230 SIGNS TYPE I REFLC F [SF]	638.2601 REMOVING SIGNS TYPE I [EA]	638.3100 REMOVING STRUC STEEL SIGN SUPPORTS [EA]	STEEL POST TYPE	636.0100 SIGN SUPPORTS CONCRETE MASONRY [CY]	636.0500 SIGN SUPPORTS STEEL REINF [LBS]	635.0200 SIGN SUPPORTS STRUCTURAL STEEL HS [EST LBS]	635.0300 SIGN SUPPORTS REPLACING BASE CONN. BOLTS [EA]
496	J13-1(2S)	II	--	24 x 45	7.500	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
	M1-5A		CTH KF	24 x 24																					
	M6-4		--	21 x 21																					
497	R5-1A(3)	II	--	42 x 30	8.750	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
498	R5-1A(3)	II	--	42 x 30	8.750	--	--	--	--	--	--	--	--	498	BACK OF SIGN #498	-- x --	--	--	--	--	--	--	--	--	--
499	R6-2R(2S)	II	--	24 x 30	5.000	--	--	--	--	--	--	--	--	501	--	-- x --	--	--	--	--	--	--	--	--	--
500	R3-1(2S)	II	--	24 x 24	4.000	--	--	--	--	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
501	R5-1(3)	II	--	36 x 36	9.000	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
502	R5-1A(2S)	II	--	36 x 24	6.000	--	--	--	--	--	--	--	--	501	3 FT MOUNTING HEIGHT	-- x --	--	--	--	--	--	--	--	--	--
503	R5-1(3)	II	--	36 x 36	9.000	--	--	--	--	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
504	R5-1A(2S)	II	--	36 x 24	6.000	--	--	--	--	--	--	--	--	505	3 FT MOUNTING HEIGHT	-- x --	--	--	--	--	--	--	--	--	--
505	R1-1(3)	II	--	36 x 36	7.460	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
506	R1-1(3)	II	--	36 x 36	7.460	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
507	R6-2L(2S)	II	--	24 x 30	5.000	--	--	--	--	--	--	--	--	505	--	-- x --	--	--	--	--	--	--	--	--	--
508	J2-1(2S)	II	--	24 x 57	9.500	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
	M3-2		--	24 x 12																					
	M1-6		STH 16	24 x 24																					
	M6-1		--	21 x 21																					
509	R3-2(2S)	II	--	24 x 24	4.000	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
510	R4-7(2S)	II	--	24 x 30	5.000	--	--	--	--	--	--	--	--	509	BACK OF SIGN #509	-- x --	--	--	--	--	--	--	--	--	--
511	R5-57(5)	II	--	36 x 36	9.000	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
512	J1-1(2S)	II	--	24 x 39	6.500	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
	M2-1		--	21 x 15																					
	M1-6		STH 16	24 x 24																					
513	J2-2(2S)	II	--	48 x 57	19.000	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
	M3-4		--	24 x 12																					
	M1-6		STH 16	24 x 24																					
	M6-1		--	21 x 21																					
	M3-2		--	24 x 12																					
	M1-6		STH 16	24 x 24																					
	M5-1R		--	21 x 21																					
514	D1-2	II	[A] OCONOMOWOC MILWAUKEE [A]	84 x 30	17.500	--	--	1	2	2	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
515	W4-1R(5)	II	--	48 x 48	--	16.000	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
516	E5-1A(5)	II	EXIT 186	90 x 60	37.500	--	--	1	2	--	2	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
516A	W5-54(2S)	II	--	18 x 18	--	2.250	--	--	--	--	--	--	--	516	4 FT MOUNTING HEIGHT	-- x --	--	--	--	--	--	--	--	--	--
516B	W5-54(2S)	II	--	18 x 18	--	2.250	--	--	--	--	--	--	--	516	4 FT MOUNTING HEIGHT	-- x --	--	--	--	--	--	--	--	--	--
517	E4-1A	I	[KF] RYAN ST [A]	-- x --	--	--	--	--	--	--	--	--	--	--	REUSE STEEL POSTS	17 x 7.5	127.50	--	1	--	--	--	--	--	2
517A	E1-5P	I	EXIT 186	-- x --	--	--	--	--	--	--	--	--	--	--	--	9 x 2.5	22.50	--	--	--	--	--	--	--	--
518	J4-1(3)	II	--	36 x 102	25.500	--	--	1	1	--	2	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
	MB4-1		--	36 x 18																					
	MB3-4		--	36 x 18																					
	M1-1		IH 94	36 x 36																					
	MB6-1		--	30 x 30																					
519	J4-1(3)	II	--	36 x 54	13.500	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
	M3-2		--	36 x 18																					
	M1-6		STH 16	36 x 36																					
520	R2-1(5)	II	65 MPH	48 x 60	20.000	--	--	1	1	2	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
521	R2-1(5)	II	65 MPH	48 x 60	20.000	--	--	1	1	2	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
522	R3-4B(5)	II	--	36 x 48	12.000	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
523	R3-4B(5)	II	--	36 x 48	12.000	--	--	--	--	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
524	I2-3A(5)	II	VILLAGE OF PEWAUKEE	78 x 30	16.250	--	--	1	2	2	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
525	E1-1A	I	[KF] RYAN ST 1/2 MILE	-- x --	--	--	--	--	--	--	--	--	--	--	REUSE STEEL POSTS	13 x 10	130.00	--	1	--	--	--	--	--	2
525A	E1-5P	I	EXIT 186	-- x --	--	--	--	--	--	--	--	--	--	--	--	9 x 2.5	22.50	--	--	--	--	--	--	--	--
526	J4-1(3)	II	--	36 x 84	21.000	--	--	1	1	--	2	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
	MB4-1		--	36 x 18																					
	M1-1		IH 94	36 x 36																					
	MB6-1		--	30 x 30																					
527	J4-1(3)	II	--	36 x 54	13.500	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
	M3-4		--	36 x 18																					
	M1-6		STH 16	36 x 36																					

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]	638.2602 REMOVING SIGNS TYPE II [EA]	638.3000 REMOVING SMALL SIGN SUP [EA]	634.0618 WOOD POSTS 4"X 6"x18' [EA]	634.0622 WOOD POSTS 4"X 6"x22' [EA]	634.0816 TUBULAR STEEL POSTS 2"X2"X16' [EA]	638.2102 MOVE 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]	637.1230 SIGNS TYPE I REFLC F [SF]	638.2601 REMOVING SIGNS TYPE I [EA]	638.3100 REMOVING STRUC STEEL SIGN SUPPORTS [EA]	STEEL POST TYPE	636.0100 SIGN SUPPORTS CONCRETE MASONRY [CY]	636.0500 SIGN SUPPORTS STEEL REINF [LBS]	635.0200 SIGN SUPPORTS STRUCTURAL STEEL HS [EST LBS]	635.0300 SIGN SUPPORTS REPLACING BASE CONN. BOLTS [EA]
528	E4-1A	I	[190] CAPITOL DR [A]	-- x --	--	--	--	--	--	--	--	--	--	--	REUSE STEEL POSTS	20 x 8	160.00	--	1	--	--	--	--	--	2
528A	E1-5P	I	EXIT 187	-- x --	--	--	--	--	--	--	--	--	--	--	--	9 x 2.5	22.50	--	--	--	--	--	--	--	--
529	E5-1A(5)	II	EXIT 187	90 x 60	37.500	--	--	1	2	--	2	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
529A	W5-54(2S)	II	--	18 x 18	--	2.250	--	--	--	--	--	--	--	529	4 FT MOUNTING HEIGHT	-- x --	--	--	--	--	--	--	--	--	--
529B	W5-54(2S)	II	--	18 x 18	--	2.250	--	--	--	--	--	--	--	529	4 FT MOUNTING HEIGHT	-- x --	--	--	--	--	--	--	--	--	--
530	E1-1A	I	[JJ] [T] TO [94] WEST MAIN STREET 1/2 MILE	-- x --	--	--	--	--	--	--	--	--	--	--	--	20 x 13	260.00	--	1	2	C	1.8	100	1200	--
530A	E1-5P	I	EXIT 188	-- x --	--	--	--	--	--	--	--	--	--	--	--	9 x 2.5	22.50	--	--	--	--	--	--	--	--
531	R5-57(5)	II	--	36 x 36	9.000	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
532	W4-1R(5)	II	--	48 x 48	--	16.000	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
533	R5-57(5)	II	--	36 x 36	9.000	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
534	R5-1A(3)	II	--	42 x 30	8.750	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
535	R5-1A(3)	II	--	42 x 30	8.750	--	--	1	--	--	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
536	J2-1(2S)	II	--	24 x 57	9.500	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
	M3-2		--	24 x 12																					
	M1-6		STH 16	24 x 24																					
	M5-1L		--	21 x 21																					
537	W8-64(5)	II	--	48 x 48	--	16.000	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
538	W8-64(5)	II	--	48 x 48	--	16.000	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
539	R5-1A(3)	II	--	42 x 30	8.750	--	--	1	--	--	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
540	R5-1A(3)	II	--	42 x 30	8.750	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
541	J2-1(2S)	II	--	24 x 57	9.500	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
	M3-2		--	24 x 12																					
	M1-6		STH 190	24 x 24																					
	M5-1R		--	21 x 21																					
542	W5-52R(3)	II	--	18 x 54	--	6.750	--	--	--	1	--	--	--	--	4 FT MOUNTING HEIGHT	-- x --	--	--	--	--	--	--	--	--	--
543	W5-52R(3)	II	--	18 x 54	--	6.750	--	--	--	1	--	--	--	--	4 FT MOUNTING HEIGHT	-- x --	--	--	--	--	--	--	--	--	--
544	W5-52L(3)	II	--	18 x 54	--	6.750	--	--	--	1	--	--	--	--	4 FT MOUNTING HEIGHT	-- x --	--	--	--	--	--	--	--	--	--
545	E5-1A(5)	II	EXIT 187	90 x 60	37.500	--	--	1	2	--	2	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
545A	W5-54(2S)	II	--	18 x 18	--	2.250	--	--	--	--	--	--	--	--	4 FT MOUNTING HEIGHT	-- x --	--	--	--	--	--	--	--	--	--
545B	W5-54(2S)	II	--	18 x 18	--	2.250	--	--	--	--	--	--	--	--	4 FT MOUNTING HEIGHT	-- x --	--	--	--	--	--	--	--	--	--
546	E6-1	I	[190] CAPITOL DR EXIT [A] ONLY	-- x --	--	--	--	--	--	--	--	--	--	--	INSTALL ON S-67-36 BRACKETS INCIDENTAL	14 x 11	154.00	--	1	--	--	--	--	--	--
546A	E1-5P	I	EXIT 187	-- x --	--	--	--	--	--	--	--	--	--	--	--	9 x 2.5	22.50	--	--	--	--	--	--	--	--
547	W5-52R(3)	II	--	18 x 54	--	6.750	--	--	--	1	--	--	--	--	4 FT MOUNTING HEIGHT	-- x --	--	--	--	--	--	--	--	--	--
548	M1-94MOD(5)	II	WISCONSIN AVE	102 x 21	14.875	--	--	--	--	2	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
549	E6-51	I	[JJ] [T] TO [94] WEST MAIN STREET EXIT [A] ONLY	-- x --	--	--	--	--	--	--	--	--	--	--	INSTALL ON S-67-33 PROVIDE NEW I-BEAMS INCIDENTAL TO SIGN	18 x 12.5	225.00	--	1	--	--	--	--	--	--
549A	E1-5P	I	EXIT 188	-- x --	--	--	--	--	--	--	--	--	--	--	--	9 x 2.5	22.50	--	--	--	--	--	--	--	--
550	M1-94MOD(5)	II	HICKORY ST	84 x 21	12.250	--	--	--	--	2	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
551	M1-94MOD(5)	II	HICKORY ST	84 x 21	12.250	--	--	--	--	2	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
552	D10-3(5)	II	MILE 188	12 x 48	4.000	--	--	1	1	1	--	--	--	--	4 FT MOUNTING HEIGHT	-- x --	--	--	--	--	--	--	--	--	--
553	D10-3(5)	II	MILE 188	12 x 48	4.000	--	--	1	1	1	--	--	--	--	4 FT MOUNTING HEIGHT	-- x --	--	--	--	--	--	--	--	--	--
554	W5-52L(3)	II	--	18 x 54	--	6.750	--	1	1	1	--	--	--	--	4 FT MOUNTING HEIGHT	-- x --	--	--	--	--	--	--	--	--	--
555	W5-52R(3)	II	--	18 x 54	--	6.750	--	1	1	1	--	--	--	--	4 FT MOUNTING HEIGHT	-- x --	--	--	--	--	--	--	--	--	--
556	J4-1(3)	II	--	36 x 102	25.500	--	--	1	1	--	2	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
	MB4-1		--	36 x 18																					
	MB3-4		--	36 x 18																					
	M1-1		IH 94	36 x 36																					
	MB6-1		--	30 x 30																					
557	R3-33R(5)	II	--	78 x 36	19.500	--	--	1	1	2	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
558	R2-1(5)	II	65 MPH	48 x 60	20.000	--	--	1	1	2	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
559	I2-3A(5)	II	VILLAGE OF PEWAUKEE	78 x 30	16.250	--	--	1	2	2	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
560	E6-51	I	[190] CAPITOL DR EXIT [A] ONLY	-- x --	--	--	--	--	--	--	--	--	--	--	INSTALL ON S-67-35 BRACKETS INCIDENTAL	14 x 10.5	147.00	--	1	--	--	--	--	--	--
560A	E1-5P	I	EXIT 187	-- x --	--	--	--	--	--	--	--	--	--	--	--	9 x 2.5	22.50	--	--	--	--	--	--	--	--

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]	638.2602 REMOVING SIGNS TYPE II [EA]	638.3000 REMOVING SMALL SIGN SUP [EA]	634.0618 WOOD POSTS 4"X 6"x18' [EA]	634.0622 WOOD POSTS 4"X 6"x22' [EA]	634.0816 TUBULAR STEEL POSTS 2"X2"X16' [EA]	638.2102 MOVE 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]	637.1230 SIGNS TYPE I REFLC F [SF]	638.2601 REMOVING SIGNS TYPE I [EA]	638.3100 REMOVING STRUC STEEL SIGN SUPPORTS [EA]	STEEL POST TYPE	636.0100 SIGN SUPPORTS CONCRETE MASONRY [CY]	636.0500 SIGN SUPPORTS STEEL REINF [LBS]	635.0200 SIGN SUPPORTS STRUCTURAL STEEL HS [EST LBS]	635.0300 SIGN SUPPORTS REPLACING BASE CONN. BOLTS [EA]
561	E5-1A(5)	II	EXIT 188	90 x 60	37.500	--	--	1	2	--	2	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
561A	W5-54(2S)	II	--	18 x 18	--	2.250	--	--	--	--	--	--	--	561	4 FT MOUNTING HEIGHT	-- x --	--	--	--	--	--	--	--	--	--
561B	W5-54(2S)	II	--	18 x 18	--	2.250	--	--	--	--	--	--	--	561	4 FT MOUNTING HEIGHT	-- x --	--	--	--	--	--	--	--	--	--
562	W5-52R(3)	II	--	18 x 54	--	6.750	--	1	1	1	--	--	--	--	4 FT MOUNTING HEIGHT	-- x --	--	--	--	--	--	--	--	--	--
563	J2-4(2S)	II	--	96 x 69	46.000	--	--	1	2	2	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
	MB4-5		--	24 x 12																					
	MB3-4		--	24 x 12																					
	M1-1		IH 94	24 x 24																					
	MB5-1L		--	21 x 21																					
	M4-5		--	24 x 12																					
	M3-3		--	24 x 12																					
	M1-5a		CTH T	24 x 24																					
	M5-1L		--	21 x 21																					
	M3-3		--	24 x 12																					
	M1-5a		CTH JJ	24 x 24																					
	M5-1L		--	21 x 21																					
	M3-1		--	24 x 12																					
	M1-5A		CTH JJ	24 x 24																					
	M5-1R		--	21 x 21																					
564	W1-1R(3)	II	--	36 x 36	--	9.000	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
565	W13-1(3)	II	15 MPH	24 x 24	--	4.000	--	1	--	--	--	--	--	564	--	-- x --	--	--	--	--	--	--	--	--	--
566	W1-1R(3)	II	--	36 x 36	--	9.000	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
567	W13-1(3)	II	15 MPH	24 x 24	--	4.000	--	1	--	--	--	--	--	566	--	-- x --	--	--	--	--	--	--	--	--	--
568	W8-5(3)	II	--	36 x 36	--	9.000	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
569	W3-3(3)	II	--	36 x 36	--	9.000	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
570	E6-1	I	[JJ] [T] TO [94] WEST MAIN STREET EXIT [A] ONLY	-- x --	--	--	--	--	--	--	--	--	--	--	INSTALL ON S-67-34 PROVIDE NEW I-BEAMS INCIDENTAL TO SIGN	18 x 13	234.00	--	1	--	--	--	--	--	--
570A	E1-5P	I	EXIT 188	-- x --	--	--	--	--	--	--	--	--	--	--	--	10 x 2.5	25.00	--	--	--	--	--	--	--	--
571	W5-52R(3)	II	--	18 x 54	--	6.750	--	1	1	1	--	--	--	--	4 FT MOUNTING HEIGHT	-- x --	--	--	--	--	--	--	--	--	--
572	J3-1(3)	II	--	36 x 102	25.500	--	--	1	1	--	2	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
	MB4-5		--	36 x 18																					
	MB3-4		--	36 x 18																					
	M1-1		IH 94	36 x 36																					
	MB6-2R		--	30 x 30																					
573	M1-94MOD(5)	II	WISCONSIN AVE	102 x 21	14.875	--	--	--	--	2	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
574	W8-64(5)	II	--	48 x 48	--	16.000	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
575	W8-64(5)	II	--	48 x 48	--	16.000	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
576	W4-1R(5)	II	--	48 x 48	--	16.000	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
577	W4-2R(3)	II	--	36 x 36	--	9.000	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
578	R5-57(5)	II	--	36 x 36	9.000	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
579	J13-1(2S)	II	--	24 x 45	7.500	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
	M1-5A		CTH JJ	24 x 24																					
	M6-4		--	21 x 21																					
580	E1-1A	I	[190] CAPITOL DR 1/2 MILE	-- x --	--	--	--	--	--	--	--	--	--	--	REUSE STEEL POSTS	16 x 10.5	168.00	--	1	--	--	--	--	--	2
580A	E1-5P	I	EXIT 187	-- x --	--	--	--	--	--	--	--	--	--	--	--	9 x 2.5	22.50	--	--	--	--	--	--	--	--
581	R5-1A(3)	II	--	42 x 30	8.750	--	--	--	--	--	--	--	--	583	BACK OF SIGN #583	-- x --	--	--	--	--	--	--	--	--	--
582	R5-1A(3)	II	--	42 x 30	8.750	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
583	D1-5	II	[A] TO MAIN ST TO BLUEMOUND RD [A]	108 x 30	22.500	--	--	1	2	2	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
584	D1-2	II	[A] WAUKESHA CO TECH COLLEGE	90 x 24	15.000	--	--	1	2	2	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
585	J2-1(2S)	II	--	48 x 57	19.000	--	--	1	2	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
	M3-4		--	24 x 12																					
	M1-5A		CTH JJ	24 x 24																					
	M5-1L		--	21 x 21																					
	M3-2		--	24 x 12																					
	M1-5A		CTH JJ	24 x 24																					
	M5-1L		--	21 x 21																					

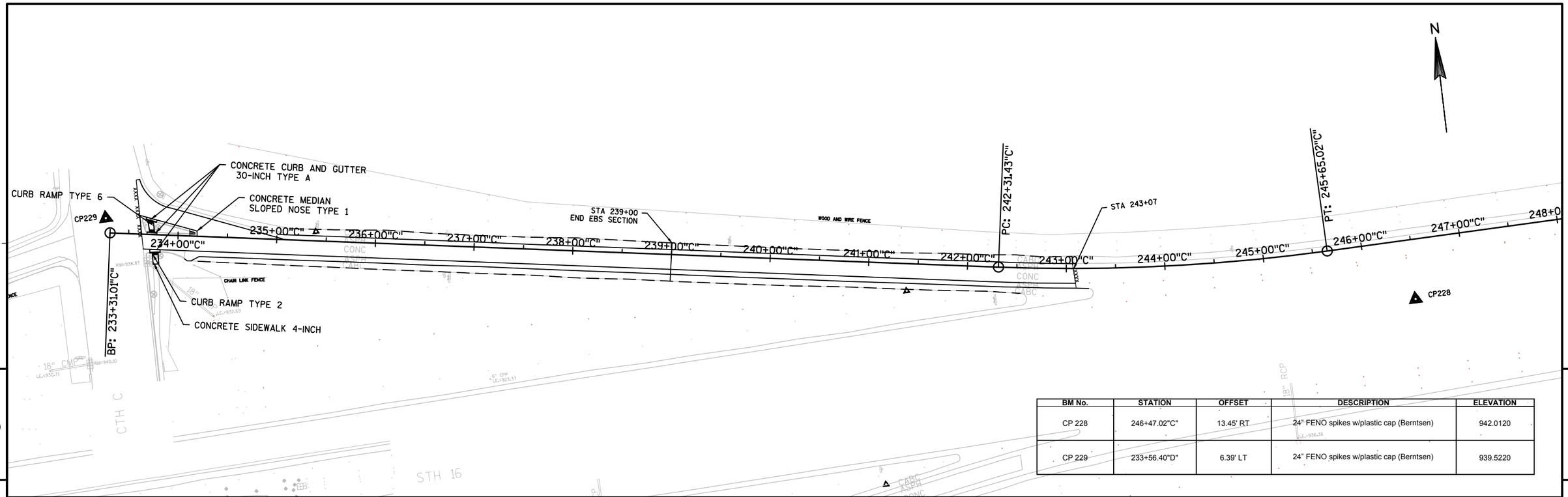
SIGN NO.	SIGN CODE & SIZE	SIGN TYPE	SIGN MESSAGE	TYPE II SIGN SIZE W [IN.] x H [IN.]	637.2210 SIGNS TYPE II REFLC H [SF]	637.2230 SIGNS TYPE II REFLC F [SF]	637.2215 SIGNS TYPE II REFLC H FOLDING [SF]	638.2602 REMOVING SIGNS TYPE II [EA]	638.3000 REMOVING SMALL SIGN SUP [EA]	634.0618 WOOD POSTS 4"X 6"x18' [EA]	634.0622 WOOD POSTS 4"X 6"x22' [EA]	634.0816 TUBULAR STEEL POSTS 2"X2"X16' [EA]	638.2102 MOVE 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]	637.1230 SIGNS TYPE I REFLC F [SF]	638.2601 REMOVING SIGNS TYPE I [EA]	638.3100 REMOVING STRUC STEEL SIGN SUPPORTS [EA]	STEEL POST TYPE	636.0100 SIGN SUPPORTS CONCRETE MASONRY [CY]	636.0500 SIGN SUPPORTS STEEL REINF [LBS]	635.0200 SIGN SUPPORTS STRUCTURAL STEEL HS [EST LBS]	635.0300 SIGN SUPPORTS REPLACING BASE CONN. BOLTS [EA]
586	W4-1R(5)	II	--	48 x 48	--	16.000	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
587	--	II	WEST [16] ONLY [A]	36 x 72	18.000	--	--	1	--	--	--	--	--	--	INSTALL ON S-67-266 BRACKETS INCIDENTAL	-- x --	--	--	--	--	--	--	--	--	--
588	--	II	WEST [16] ONLY [A]	36 x 72	18.000	--	--	1	--	--	--	--	--	--	INSTALL ON S-67-266 BRACKETS INCIDENTAL	-- x --	--	--	--	--	--	--	--	--	--
589	R3-8R(2S)	II	--	54 x 30	11.250	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
590	R3-8R(2S)	II	--	54 x 30	11.250	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
591	R5-1A(3)	II	--	42 x 30	8.750	--	--	--	--	--	--	--	--	589	BACK OF SIGN #589	-- x --	--	--	--	--	--	--	--	--	--
592	R5-1A(3)	II	--	42 x 30	8.750	--	--	--	--	--	--	--	--	590	BACK OF SIGN #590	-- x --	--	--	--	--	--	--	--	--	--
593	R5-1(3)	II	--	36 x 36	9.000	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
594	R3-2(2S)	II	--	24 x 24	4.000	--	--	1	--	--	--	--	--	--	MOUNT ON SIGNAL POLE	-- x --	--	--	--	--	--	--	--	--	--
595	R1-1F(3)	II	--	36 x 36	--	--	7.460	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE	-- x --	--	--	--	--	--	--	--	--	--
596	R4-7(2S)	II	--	24 x 30	5.000	--	--	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE	-- x --	--	--	--	--	--	--	--	--	--
597	R6-2L(2M)	II	--	30 x 36	7.500	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
598	R4-7(2S)	II	--	24 x 30	5.000	--	--	1	--	--	--	--	--	--	MOUNT ON SIGNAL POLE	-- x --	--	--	--	--	--	--	--	--	--
599	R1-1F(3)	II	--	36 x 36	--	--	7.460	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE	-- x --	--	--	--	--	--	--	--	--	--
600	D1-1	II	[A] MILWAUKEE	72 x 15	7.500	--	--	1	2	2	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
601	R3-3(2S)	II	--	24 x 24	4.000	--	--	1	--	--	--	--	--	--	MOUNT ON SIGNAL POLE	-- x --	--	--	--	--	--	--	--	--	--
602	R1-1F(3)	II	--	36 x 36	--	--	7.460	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE	-- x --	--	--	--	--	--	--	--	--	--
603	R5-1(3)	II	--	36 x 36	9.000	--	--	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE	-- x --	--	--	--	--	--	--	--	--	--
604	R5-1(3)	II	--	36 x 36	9.000	--	--	1	--	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
605	R1-1F(3)	II	--	36 x 36	--	--	7.460	1	--	--	--	--	--	--	MOUNT ON SIGNAL POLE	-- x --	--	--	--	--	--	--	--	--	--
606	W1-8(4)	II	--	30 x 36	--	7.500	--	1	1	1	--	--	--	--	4 FT MOUNTING HEIGHT SAFETY ISSUE	-- x --	--	--	--	--	--	--	--	--	--
607	W1-8(4)	II	--	30 x 36	--	7.500	--	1	1	1	--	--	--	--	4 FT MOUNTING HEIGHT SAFETY ISSUE	-- x --	--	--	--	--	--	--	--	--	--
608	W1-8(4)	II	--	30 x 36	--	7.500	--	1	1	1	--	--	--	--	4 FT MOUNTING HEIGHT SAFETY ISSUE	-- x --	--	--	--	--	--	--	--	--	--
609	W1-8(4)	II	--	30 x 36	--	7.500	--	1	1	1	--	--	--	--	4 FT MOUNTING HEIGHT SAFETY ISSUE	-- x --	--	--	--	--	--	--	--	--	--
610	W12-1D(2S)	II	--	24 x 24	--	4.000	--	1	1	1	--	--	--	--	2 FT MOUNTING HEIGHT	-- x --	--	--	--	--	--	--	--	--	--
611	R6-2R(2S)	II	--	24 x 30	5.000	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
612	J3-1(2S)	II	--	24 x 57	9.500	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
	M3-1			24 x 12																					
	M1-5A		CTH JJ	24 x 24																					
	M6-1			21 x 21																					
613	R1-1(3)	II	--	36 x 36	7.460	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
614	R3-8Y(2S)	II	--	36 x 30	7.500	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
615	D1-2	II	[A] MADISON [A] MILWAUKEE	72 x 30	15.000	--	--	1	2	2	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
616	J3-1(2S)	II	--	24 x 69	11.500	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
	MB4-5		--	24 x 12																					
	MB3-2		--	24 x 12																					
	M1-1		IH 94	24 x 24																					
	MB6-1		--	21 x 21																					
617	J1-1(2S)	II	--	24 x 39	6.500	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
	M2-1		--	21 x 15																					
	M1-5A		CTH SS	24 x 24																					
618	J3-1(2S)	II	--	24 x 69	11.500	11.500	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
	MB4-5		--	24 x 12																					
	MB3-4		--	24 x 12																					
	M1-1		IH 94	24 x 24																					
	MB6-1		--	21 x 21																					
619	R5-1(3)	II	--	36 x 36	9.000	--	--	--	--	--	--	--	--	620	BACK OF SIGN #620	-- x --	--	--	--	--	--	--	--	--	--
620	J3-3(2S)	II	--	72 x 69	34.500	--	--	1	2	2	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
	M1-5A		CTH JJ	24 x 24																					
	M6-1		--	21 x 21																					
	M4-5		--	24 x 12																					
	M3-4		--	24 x 12																					
	M1-6		STH 16	24 x 24																					
	M6-1		--	21 x 21																					
	M3-2		--	24 x 12																					
	M1-6		STH 16	24 x 24																					
	M6-1		--	21 x 21																					

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]	638.2602 REMOVING SIGNS TYPE II [EA]	638.3000 REMOVING SMALL SIGN SUP [EA]	634.0618 WOOD POSTS 4"X 6"x18' [EA]	634.0622 WOOD POSTS 4"X 6"x22' [EA]	634.0816 TUBULAR STEEL POSTS 2"X2"X16' [EA]	638.2102 MOVE 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]	637.1230 SIGNS TYPE I REFLC F [SF]	638.2601 REMOVING SIGNS TYPE I [EA]	638.3100 REMOVING STRUC STEEL SIGN SUPPORTS [EA]	STEEL POST TYPE	636.0100 SIGN SUPPORTS CONCRETE MASONRY [CY]	636.0500 SIGN SUPPORTS STEEL REINF [LBS]	635.0200 SIGN SUPPORTS STRUCTURAL STEEL HS [EST LBS]	635.0300 SIGN SUPPORTS REPLACING BASE CONN. BOLTS [EA]
621	R5-57(5)	II	--	36 x 36	9.000	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
622	W1-6(2S)	II	--	48 x 24	--	8.000	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
623	R4-7(2S)	II	--	24 x 30	5.000	--	--	1	--	--	--	--	--	--	MOUNT ON SIGNAL POLE	-- x --	--	--	--	--	--	--	--	--	--
624	R5-1(3)	II	--	36 x 36	9.000	--	--	1	--	--	--	--	--	--	MOUNT ON SIGNAL POLE	-- x --	--	--	--	--	--	--	--	--	--
625	R6-2L(2S)	II	--	24 x 30	5.000	--	--	1	--	--	--	--	--	--	MOUNT ON SIGNAL POLE	-- x --	--	--	--	--	--	--	--	--	--
626	R4-7(2S)	II	--	24 x 30	5.000	--	--	1	--	--	--	--	--	--	MOUNT ON SIGNAL POLE	-- x --	--	--	--	--	--	--	--	--	--
627	R1-1F(3)	II	--	36 x 36	--	--	7.460	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE	-- x --	--	--	--	--	--	--	--	--	--
628	R1-1F(3)	II	--	36 x 36	--	--	7.460	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE	-- x --	--	--	--	--	--	--	--	--	--
629	J3-2(2S)	II	--	48 x 57	19.000	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
	M3-2		--	24 x 12																					
	M1-6		STH 16	24 x 24																					
	M6-1		--	21 x 21																					
	M3-4		--	24 x 12																					
	M1-6		STH 16	24 x 24																					
	M6-1		--	21 x 21																					
630	D1-1	II	OCONOMOWOC [A]	84 x 15	8.750	--	--	1	2	2	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
631	R3-2(2S)	II	--	24 x 24	4.000	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
632	R6-2R(2S)	II	--	24 x 30	5.000	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
633	R6-2L(2S)	II	--	24 x 30	5.000	--	--	1	--	--	--	--	--	--	MOUNT ON SIGNAL POLE	-- x --	--	--	--	--	--	--	--	--	--
634	R5-1(3)	II	--	36 x 36	9.000	--	--	1	--	--	--	--	--	--	MOUNT ON SIGNAL POLE	-- x --	--	--	--	--	--	--	--	--	--
634A	R5-1A(2S)	II	--	36 x 24	6.000	--	--	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE 3 FT HEIGHT	-- x --	--	--	--	--	--	--	--	--	--
635	R1-1(3)	II	--	36 x 36	7.460	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
636	R6-3(2S)	II	--	30 x 24	5.000	--	--	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE	-- x --	--	--	--	--	--	--	--	--	--
637	R1-1F(3)	II	--	36 x 36	--	--	7.460	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE	-- x --	--	--	--	--	--	--	--	--	--
638	W12-1D(2S)	II	--	24 x 24	--	4.000	--	1	1	1	--	--	--	--	2 FT MOUNTING HEIGHT	-- x --	--	--	--	--	--	--	--	--	--
639	R6-3(2S)	II	--	30 x 24	5.000	--	--	1	--	--	--	--	--	--	MOUNT ON SIGNAL POLE	-- x --	--	--	--	--	--	--	--	--	--
640	R1-1F(3)	II	--	36 x 36	--	--	7.460	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE	-- x --	--	--	--	--	--	--	--	--	--
641	R5-1(3)	II	--	36 x 36	9.000	--	--	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE	-- x --	--	--	--	--	--	--	--	--	--
642	J3-2(2S)	II	--	48 x 57	19.000	--	--	1	2	2	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
	M3-4		--	24 x 12																					
	M1-6		STH 16	24 x 24																					
	M6-1		--	21 x 21																					
	M1-5A		CTH JJ	24 x 24																					
	M6-1		--	21 x 21																					
643	R3-1(2S)	II	--	24 x 24	4.000	--	--	--	--	--	--	--	--	642	--	-- x --	--	--	--	--	--	--	--	--	--
644	R5-1A(3)	II	--	42 x 30	8.750	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
645	R1-1F(3)	II	--	36 x 36	--	--	7.460	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE	-- x --	--	--	--	--	--	--	--	--	--
646	W3-3(3)	II	--	36 x 36	--	9.000	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
647	E5-1A(5)	II	EXIT 188	90 x 60	37.500	--	--	1	2	--	2	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
647A	W5-54(2S)	II	--	18 x 18	--	2.250	--	--	--	--	--	--	--	647	4 FT MOUNTING HEIGHT	-- x --	--	--	--	--	--	--	--	--	--
647B	W5-54(2S)	II	--	18 x 18	--	2.250	--	--	--	--	--	--	--	647	4 FT MOUNTING HEIGHT	-- x --	--	--	--	--	--	--	--	--	--
648	E4-1A	I	[JJ] MAIN ST [A]	-- x --	--	--	--	--	--	--	--	--	--	--	REUSE STEEL POSTS	16 x 7.5	120.00	--	1	--	--	--	--	--	2
648A	E1-5P	I	EXIT 188	-- x --	--	--	--	--	--	--	--	--	--	--	--	9 x 2.5	22.50	--	--	--	--	--	--	--	--
649	J4-1(3)	II	--	36 x 84	21.000	--	--	1	1	--	2	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
	MB4-1		--	36 x 18																					
	M1-1		IH 94	36 x 36																					
	MB6-1		--	30 x 30																					
650	D10-3(5)	II	MILE 189	12 x 48	4.000	--	--	1	1	1	--	--	--	--	4 FT MOUNTING HEIGHT	-- x --	--	--	--	--	--	--	--	--	--
651	D10-3(5)	II	MILE 189	12 x 48	4.000	--	--	1	1	1	--	--	--	--	4 FT MOUNTING HEIGHT	-- x --	--	--	--	--	--	--	--	--	--
652	J4-1(3)	II	--	36 x 54	13.500	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
	M3-2		--	36 x 18																					
	M1-6		STH 16	36 x 36																					
653	R3-4B(5)	II	--	-- x --	--	--	--	1	1	--	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
654	R3-4B(5)	II	--	-- x --	--	--	--	--	--	--	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
655	E3-1	I	WAUKESHA CO TECH COLLEGE EXIT 188	-- x --	--	--	--	--	--	--	--	--	--	--	REUSE STEEL POSTS	14 x 7	98.00	--	1	--	--	--	--	--	2
656	W5-52R(3)	II	--	18 x 54	--	6.750	--	1	1	1	--	--	--	--	4 FT MOUNTING HEIGHT	-- x --	--	--	--	--	--	--	--	--	--
657	--	I	[94] EAST [16] ENDS 1 MILE	-- x --	--	--	--	--	--	--	--	--	--	--	REUSE STEEL POSTS	13 x 10	130.00	--	1	--	--	--	--	--	2

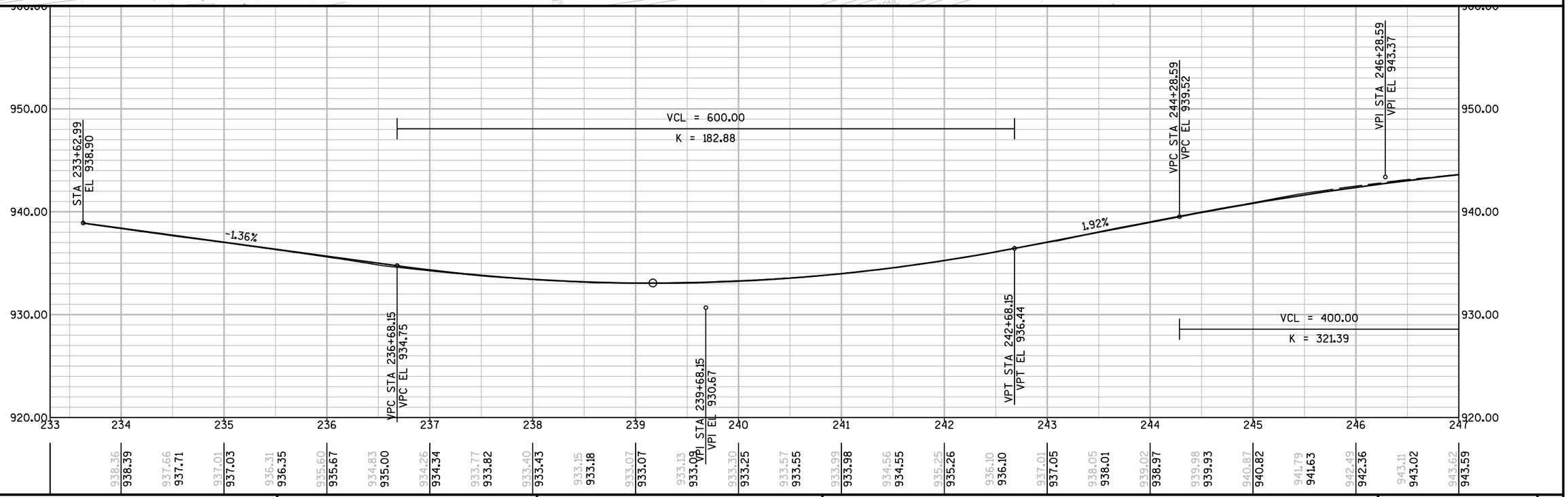
SIGN NO.	SIGN CODE & SIZE	SIGN TYPE	SIGN MESSAGE	TYPE II SIGN SIZE W [IN.] x H [IN.]	637.2210 SIGNS TYPE II REFLC H [SF]	637.2230 SIGNS TYPE II REFLC F [SF]	637.2215 SIGNS TYPE II REFLC H FOLDING [SF]	638.2602 REMOVING SIGNS TYPE II [EA]	638.3000 REMOVING SMALL SIGN SUP [EA]	634.0618 WOOD POSTS 4"X 6"x18' [EA]	634.0622 WOOD POSTS 4"X 6"x22' [EA]	634.0816 TUBULAR STEEL POSTS 2"X2"X16' [EA]	638.2102 MOVE 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]	637.1230 SIGNS TYPE I REFLC F [SF]	638.2601 REMOVING SIGNS TYPE I [EA]	638.3100 REMOVING STRUC STEEL SIGN SUPPORTS [EA]	STEEL POST TYPE	636.0100 SIGN SUPPORTS CONCRETE MASONRY [CY]	636.0500 SIGN SUPPORTS STEEL REINF [LBS]	635.0200 SIGN SUPPORTS STRUCTURAL STEEL HS [EST LBS]	635.0300 SIGN SUPPORTS REPLACING BASE CONN. BOLTS [EA]
658	W5-52R(3)	II	--	18 x 54	--	6.750	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
659	R2-1(5)	II	65 MPH	48 x 60	20.000	--	--	1	1	2	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
660	R2-1(5)	II	65 MPH	48 x 60	20.000	--	--	1	1	2	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
661	E1-1A	I	[JJ] MAIN ST 1/2 MILE	-- x --	--	--	--	--	--	--	--	--	--	--	REUSE STEEL POSTS	13 x 10	130.00	--	1	--	--	--	--	--	2
661A	E1-5P	I	EXIT 188	-- x --	--	--	--	--	--	--	--	--	--	--	--	9 x 2.5	22.50	--	--	--	--	--	--	--	--
662	D10-3(5)	II	MILE 190	12 x 48	4.000	--	--	1	1	1	--	--	--	--	4 FT MOUNTING HEIGHT	-- x --	--	--	--	--	--	--	--	--	--
663	D2-4	I	PEWAUKEE EXITS MAIN ST 1 CAPITOL DR 2 RYAN ST 3 1/4	-- x --	--	--	--	--	--	--	--	--	--	--	REUSE STEEL POSTS	16 x 9	144.00	--	1	--	--	--	--	--	2
664	D10-3(5)	II	MILE 190	12 x 48	4.000	--	--	1	1	1	--	--	--	--	4 FT MOUNTING HEIGHT	-- x --	--	--	--	--	--	--	--	--	--
665	R3-4B(5)	II	--	36 x 48	12.000	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
666	R3-4B(5)	II	--	36 x 48	12.000	--	--	--	--	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
667	W1-2L(5)	II	--	48 x 48	--	16.000	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
668	W13-1(5)	II	55 MPH	36 x 36	--	9.000	--	--	--	--	--	--	--	667	--	-- x --	--	--	--	--	--	--	--	--	--
669	W1-2L(5)	II	--	48 x 48	--	16.000	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
670	W13-1(5)	II	55 MPH	36 x 36	--	9.000	--	--	--	--	--	--	--	669	--	-- x --	--	--	--	--	--	--	--	--	--
671	W1-8(5)	II	--	36 x 48	--	12.000	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
672	W1-8(5)	II	--	36 x 48	--	12.000	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
673	W1-8(5)	II	--	36 x 48	--	12.000	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
674	W1-8(5)	II	--	36 x 48	--	12.000	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
675	W1-8(5)	II	--	36 x 48	--	12.000	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
676	W1-8(5)	II	--	36 x 48	--	12.000	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
677	W9-1L(5)	II	--	48 x 48	--	16.000	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
678	W9-1L(5)	II	--	48 x 48	--	16.000	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
679	J1-1(3) M4-6 M1-6	II	-- -- STH 16	36 x 54 36 x 18 36 x 36	13.500	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
680	J4-1(3) MB4-1 MB3-4 M1-1 MB6-1	II	-- -- -- IH 94 --	36 x 102 36 x 18 36 x 18 36 x 36 30 x 30	25.500	--	--	1	1	--	2	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
681	J4-1(3) M3-4 M1-6	II	-- -- STH 16	36 x 54 36 x 18 36 x 36	13.500	--	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
682	W9-2R(5)	II	--	48 x 48	--	16.000	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
683	W9-2R(5)	II	--	48 x 48	--	16.000	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
684	W4-2L(5)	II	--	48 x 48	--	16.000	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
685	W4-3R(5)	II	--	48 x 48	--	16.000	--	1	1	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
686	D1-6	II	MERTON AVE [A] SOUTH NORTH [A] [A] TO NORTH AVE BUSINESS DIST [A] INDUSTRIAL PARK	90 x 72	45.000	--	--	--	2	2	--	--	--	--	SHEET 38 OF 72	-- x --	--	--	--	--	--	--	--	--	--
687	R3-1(2S)	II	--	24 x 24	4.000	--	--	--	--	1	--	--	--	46	SHEET 4 OF 72	-- x --	--	--	--	--	--	--	--	--	--
688	E9-1	I	OKAUCHEE OCONOMOWOC LAKE NEXT 2 EXITS	-- x --	--	--	--	--	--	--	--	--	--	--	INSTALL NEW STEEL SUPPORTS SHEET 1 OF 72	13 x 8.5	110.50	--	--	--	B	1.6	98	1000	--
689	D1-3	II	[A] OKAUCHEE OCONOMOWOC [A] LAKE	84 x 36	21.000	--	--	--	--	2	--	--	--	--	SHEET 2 OF 72	-- x --	--	--	--	--	--	--	--	--	--
690	D1-3	II	[A] OCONOMOWOC LAKE OKAUCHEE [A]	84 x 36	21.000	--	--	--	--	2	--	--	--	--	SHEET 2 OF 72	-- x --	--	--	--	--	--	--	--	--	--
691	NOT USED	--	--	-- x --	--	--	--	--	--	--	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
692	NOT USED	--	--	-- x --	--	--	--	--	--	--	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
693	--	I	CHENEQUA NEXT 2 EXITS	-- x --	--	--	--	--	--	--	--	--	--	--	SHEET 10 OF 72 STA 146+00 EB	11 x 4.5	49.50	--	--	--	A	1.2	68	600	--
694	D1-3	II	[A] NASHOTAH DELAFIELD CHENEQUA [A]	72 x 36	18.000	--	--	--	--	2	--	--	--	--	SHEET 18 OF 72	-- 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]	638.2602 REMOVING SIGNS TYPE II [EA]	638.3000 REMOVING SMALL SIGN SUP [EA]	634.0618 WOOD POSTS 4"X 6"x18' [EA]	634.0622 WOOD POSTS 4"X 6"x22' [EA]	634.0816 TUBULAR STEEL POSTS 2"X2"X16' [EA]	638.2102 MOVE 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]	637.1230 SIGNS TYPE I REFLC F [SF]	638.2601 REMOVING SIGNS TYPE I [EA]	638.3100 REMOVING STRUC STEEL SIGN SUPPORTS [EA]	STEEL POST TYPE	636.0100 SIGN SUPPORTS CONCRETE MASONRY [CY]	636.0500 SIGN SUPPORTS STEEL REINF [LBS]	635.0200 SIGN SUPPORTS STRUCTURAL STEEL HS [EST LBS]	635.0300 SIGN SUPPORTS REPLACING BASE CONN. BOLTS [EA]
695	R5-1A(3)	II	--	42	x	30	8.750	--	--	--	--	1	--	--	--	--	SHEET 18 OF 72	--	x	--	--	--	--	--	--	--	--	--	--
696	R5-1A(3)	II	--	42	x	30	8.750	--	--	--	--	1	--	--	--	--	SHEET 19 OF 72	--	x	--	--	--	--	--	--	--	--	--	--
697	E3-1	I	LAKELAND DR EXIT 179	--	x	--	--	--	--	--	--	--	--	--	--	--	SHEET 21 OF 72 STA 265+30 WB	13	x	5	65.00	--	--	--	A	1.2	68	600	--
698	D1-3	II	[A] CHENEQUA HARTLAND [A] DELAFIELD	72	x	36	18.000	--	--	--	--	2	--	--	--	--	SHEET 28 OF 72	--	x	--	--	--	--	--	--	--	--	--	--
699	R5-1(3)	II	--	36	x	36	9.000	--	--	--	--	1	--	--	--	--	SHEET 42 OF 72	--	x	--	--	--	--	--	--	--	--	--	--
700	R5-1(3)	II	--	36	x	36	9.000	--	--	--	--	--	--	--	--	444	SHEET 42 OF 72	--	x	--	--	--	--	--	--	--	--	--	--
701	R5-1(3)	II	--	36	x	36	9.000	--	--	--	--	--	--	--	--	459	BACK OF SIGN 459 - SHEET 44 OF 72	--	x	--	--	--	--	--	--	--	--	--	--
702	R5-1(3)	II	--	36	x	36	9.000	--	--	--	--	--	--	--	--	457	BACK OF SIGN 457 - SHEET 44 OF 72	--	x	--	--	--	--	--	--	--	--	--	--
703	R5-1(3)	II	--	36	x	36	9.000	--	--	1	1	1	--	--	--	--	SHEET 36 OF 72	--	x	--	--	--	--	--	--	--	--	--	--
704	R5-1A(2S)	II	--	36	x	24	6.000	--	--	--	--	--	--	--	--	703	3 FT MOUNTING HEIGHT - SHEET 36 OF 72	--	x	--	--	--	--	--	--	--	--	--	--
705	R3-8(MOD)	II	--	54	x	30	11.250	--	--	1	2	2	--	--	--	--	SHEET 26 OF 72	--	x	--	--	--	--	--	--	--	--	--	--
706	R5-1(3)	II	--	36	x	36	9.000	--	--	1	1	1	--	--	--	--	SHEET 36 OF 72	--	x	--	--	--	--	--	--	--	--	--	--
707	R1-1(3)	II	--	36	x	36	7.460	--	--	--	--	1	--	--	--	--	SHEET 36 OF 72	--	x	--	--	--	--	--	--	--	--	--	--
708	D10-3(5)	II	MILE 187	12	x	48	4.000	--	--	--	--	1	--	--	--	--	4 FT MOUNTING HEIGHT-SHEET 56 OF 72	--	x	--	--	--	--	--	--	--	--	--	--
709	D10-3(5)	II	MILE 187	12	x	48	4.000	--	--	--	--	1	--	--	--	--	4 FT MOUNTING HEIGHT-SHEET 56 OF 72	--	x	--	--	--	--	--	--	--	--	--	--
710	E3-1	I	NORTH AVE EXIT 182	--	x	--	--	--	--	--	--	--	--	--	--	--	SHEET 30 OF 72 STA 365+35	11	x	5	55.00	--	--	--	A	1.2	68	600	--
711	W5-52L(3)	II	--	18	x	54	--	6.750	--	1	1	1	--	--	--	--	4 FT MOUNTING HEIGHT - SHEET 31 OF 72	--	x	--	--	--	--	--	--	--	--	--	--
712	W5-52R(3)	II	--	18	x	54	--	6.750	--	1	1	1	--	--	--	--	4 FT MOUNTING HEIGHT - SHEET 31 OF 72	--	x	--	--	--	--	--	--	--	--	--	--
713	R5-1A(3)	II	--	42	x	30	8.750	--	--	--	--	--	--	--	--	630	BACK OF SIGN #630 - SHEET 65 OF 72	--	x	--	--	--	--	--	--	--	--	--	--
714	R5-1(3)	II	--	36	x	36	9.000	--	--	1	--	--	--	--	--	--	MOUNT ON SIGNAL POLE - SHEET 65 OF 7	--	x	--	--	--	--	--	--	--	--	--	--
715	R11-54F(2S)	II	--	48	x	30	--	--	10.000	--	--	2	--	--	--	--	SHEET 18 OF 72	--	x	--	--	--	--	--	--	--	--	--	--
716	R11-54F(2S)	II	--	48	x	30	--	--	10.000	--	--	2	--	--	--	--	SHEET 18 OF 72	--	x	--	--	--	--	--	--	--	--	--	--
717	R11-54F(2S)	II	--	48	x	30	--	--	10.000	--	--	2	--	--	--	--	SHEET 19 OF 72	--	x	--	--	--	--	--	--	--	--	--	--
718	R11-54F(2S)	II	--	48	x	30	--	--	10.000	--	--	2	--	--	--	--	SHEET 19 OF 72	--	x	--	--	--	--	--	--	--	--	--	--
719	R11-54F(2S)	II	--	48	x	30	--	--	10.000	--	--	2	--	--	--	--	SHEET 32 OF 72	--	x	--	--	--	--	--	--	--	--	--	--
720	R11-54F(2S)	II	--	48	x	30	--	--	10.000	--	--	2	--	--	--	--	SHEET 32 OF 72	--	x	--	--	--	--	--	--	--	--	--	--
721	R11-54F(2S)	II	--	48	x	30	--	--	10.000	--	--	2	--	--	--	--	SHEET 37 OF 72	--	x	--	--	--	--	--	--	--	--	--	--
722	R11-54F(2S)	II	--	48	x	30	--	--	10.000	--	--	2	--	--	--	--	SHEET 37 OF 72	--	x	--	--	--	--	--	--	--	--	--	--
723	R11-54F(2S)	II	--	48	x	30	--	--	10.000	--	--	2	--	--	--	--	SHEET 42 OF 72	--	x	--	--	--	--	--	--	--	--	--	--
724	R11-54F(2S)	II	--	48	x	30	--	--	10.000	--	--	2	--	--	--	--	SHEET 42 OF 72	--	x	--	--	--	--	--	--	--	--	--	--
725	R11-54F(2S)	II	--	48	x	30	--	--	10.000	--	--	2	--	--	--	--	SHEET 44 OF 72	--	x	--	--	--	--	--	--	--	--	--	--
726	R11-54F(2S)	II	--	48	x	30	--	--	10.000	--	--	2	--	--	--	--	SHEET 44 OF 72	--	x	--	--	--	--	--	--	--	--	--	--
727	R11-54F(2S)	II	--	48	x	30	--	--	10.000	--	--	2	--	--	--	--	SHEET 52 OF 72	--	x	--	--	--	--	--	--	--	--	--	--
728	R11-54F(2S)	II	--	48	x	30	--	--	10.000	--	--	2	--	--	--	--	SHEET 52 OF 72	--	x	--	--	--	--	--	--	--	--	--	--
729	R11-54F(2S)	II	--	48	x	30	--	--	10.000	--	--	2	--	--	--	--	SHEET 53 OF 72	--	x	--	--	--	--	--	--	--	--	--	--
730	R11-54F(2S)	II	--	48	x	30	--	--	10.000	--	--	2	--	--	--	--	SHEET 53 OF 72	--	x	--	--	--	--	--	--	--	--	--	--
731	R11-54F(2S)	II	--	48	x	30	--	--	10.000	--	--	2	--	--	--	--	SHEET 59 OF 72	--	x	--	--	--	--	--	--	--	--	--	--
732	R11-54F(2S)	II	--	48	x	30	--	--	10.000	--	--	2	--	--	--	--	SHEET 59 OF 72	--	x	--	--	--	--	--	--	--	--	--	--
733	R11-54F(2S)	II	--	48	x	30	--	--	10.000	--	--	2	--	--	--	--	SHEET 59 OF 72	--	x	--	--	--	--	--	--	--	--	--	--
734	R11-54F(2S)	II	--	48	x	30	--	--	10.000	--	--	2	--	--	--	--	SHEET 59 OF 72	--	x	--	--	--	--	--	--	--	--	--	--
735	R11-54F(2S)	II	--	48	x	30	--	--	10.000	--	--	2	--	--	--	--	SHEET 64 OF 72	--	x	--	--	--	--	--	--	--	--	--	--
736	R11-54F(2S)	II	--	48	x	30	--	--	10.000	--	--	2	--	--	--	--	SHEET 64 OF 72	--	x	--	--	--	--	--	--	--	--	--	--
737	R11-54F(2S)	II	--	48	x	30	--	--	10.000	--	--	2	--	--	--	--	SHEET 65 OF 72	--	x	--	--	--	--	--	--	--	--	--	--
738	R11-54F(2S)	II	--	48	x	30	--	--	10.000	--	--	2	--	--	--	--	SHEET 65 OF 72	--	x	--	--	--	--	--	--	--	--	--	--
739	E5-1A(5)	II	EXIT 181	90	x	60	37.500	--	--	1	2	--	2	--	--	--	SHEET 29 OF 72	--	x	--	--	--	--	--	--	--	--	--	--
739A	W5-54(2S)	II	--	18	x	18	--	2.250	--	--	--	--	--	--	--	739	SHEET 29 OF 72	--	x	--	--	--	--	--	--	--	--	--	--
739B	W5-54(2S)	II	--	18	x	18	--	2.250	--	--	--	--	--	--	--	739	SHEET 29 OF 72	--	x	--	--	--	--	--	--	--	--	--	--
740	R5-57(5)	II	--	36	x	36	9.000	--	--	1	1	1	--	--	--	--	SHEET 42 OF 72	--	x	--	--	--	--	--	--	--	--	--	--
741	R5-1(3)	II	--	36	x	36	9.000	--	--	--	--	1	--	--	--	--	SHEET 44 OF 72	--	x	--	--	--	--	--	--	--	--	--	--
742	R5-1A(2S)	II	--	36	x	24	6.000	--	--	--	--	--	--	--	--	741	3 FT MOUNT HEIGHT - SHEET 44 OF 72	--	x	--	--	--	--	--	--	--	--	--	--
743	R5-57(5)	II	--	36	x	36	9.000	--	--	1	1	1	--	--	--	--	SHEET 44 OF 72	--	x	--	--	--	--	--	--	--	--	--	--
744	R1-1(3)	II	--	36	x	36	7.460	--	--	1	1	1	--	--	--	--	SHEET 44 OF 72	--	x	--	--	--	--	--	--	--	--	--	--
745	R1-1(3)	II	--	36	x	36	7.460	--	--	1	1	1	--	--	--	--	SHEET 44 OF 72	--	x	--	--	--	--	--	--	--	--	--	--
746	R6-2R(2S)	II	--	24	x	30	5.000	--	--	--	--	--	--	--	--	745	SHEET 44 OF 72	--	x	--	--	--	--	--	--	--	--	--	--
747	R5-1(3)	II	--	36	x	36	9.000	--	--	--	--	1	--	--	--	--	SHEET 44 OF 72	--	x	--	--	--	--	--	--	--	--	--	--
748	R5-1A(2S)	II	--	36	x	24	6.000	--	--	--	--	--	--	--	--	747	3 FT MOUNT HEIGHT - SHEET 44 OF 72	--	x	--	--	--	--	--	--	--	--	--	--
749	W3-1(3)	II	--	36	x	36	--	9.000	--	1	1	1	--	--	--	--	SHEET 51 OF 72	--	x	--	--	--	--	--	--	--	--	--	--
750	R5-57(5)	II	--	36	x	36	9.000	--	--	1	1	1	--	--	--	--	SHEET 52 OF 72	--	x	--	--	--	--	--	--	--	--	--	--
751	R5-1(3)	II	--	36	x	36	9.000	--	--	--	--	1	--	--	--	--	SHEET 52 OF 72	--	x	--	--	--	--	--	--	--	--	--	--
752	R5-1A(2S)	II	--	36	x	24	6.000	--	--	--	--	--	--	--	--	751	3 FT MOUNT HEIGHT - SHEET 52 OF 72	--	x	--	--	--	--	--	--	--	--	--	--
753	R1-1(3)	II	--	36	x	36	7.460	--	--	1	1	1	--	--	--	--	SHEET 52 OF 72	--	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]	638.2602 REMOVING SIGNS TYPE II [EA]	638.3000 REMOVING SMALL SIGN SUP [EA]	634.0618 WOOD POSTS 4"X 6"x18' [EA]	634.0622 WOOD POSTS 4"X 6"x22' [EA]	634.0816 TUBULAR STEEL POSTS 2"X2"X16' [EA]	638.2102 MOVE 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]	637.1230 SIGNS TYPE I REFLC F [SF]	638.2601 REMOVING SIGNS TYPE I [EA]	638.3100 REMOVING STRUC STEEL SIGN SUPPORTS [EA]	STEEL POST TYPE	636.0100 SIGN SUPPORTS CONCRETE MASONRY [CY]	636.0500 SIGN SUPPORTS STEEL REINF [LBS]	635.0200 SIGN SUPPORTS STRUCTURAL STEEL HS [EST LBS]	635.0300 SIGN SUPPORTS REPLACING BASE CONN. BOLTS [EA]
754	R1-1(3)	II	--	36 x 36	7.460	--	--	--	--	--	--	--	--	490	SHEET 52 OF 72	-- x --	--	--	--	--	--	--	--	--	--
755	R1-1(3)	II	--	36 x 36	7.460	--	--	1	1	1	--	--	--	--	SHEET 52 OF 72	-- x --	--	--	--	--	--	--	--	--	--
756	R5-1(3)	II	--	36 x 36	9.000	--	--	--	--	--	--	--	--	493	SHEET 52 OF 72	-- x --	--	--	--	--	--	--	--	--	--
757	R5-1A(2S)	II	--	36 x 24	6.000	--	--	--	--	--	--	--	--	756	3 FT MOUNT HEIGHT - SHEET 52 OF 72	-- x --	--	--	--	--	--	--	--	--	--
758	R5-1(3)	II	--	42 x 30	8.750	--	--	1	1	1	--	--	--	--	SHEET 52 OF 72	-- x --	--	--	--	--	--	--	--	--	--
759	R1-1(3)	II	--	36 x 36	7.460	--	--	1	1	1	--	--	--	--	SHEET 53 OF 72	-- x --	--	--	--	--	--	--	--	--	--
760	W3-1(3)	II	--	36 x 36	--	9.000	--	1	1	1	--	--	--	--	SHEET 55 OF 72	-- x --	--	--	--	--	--	--	--	--	--
761	W3-3(3)	II	--	36 x 36	--	9.000	--	1	1	1	--	--	--	--	SHEET 59 OF 72	-- x --	--	--	--	--	--	--	--	--	--
762	W3-3(3)	II	--	36 x 36	--	9.000	--	1	1	1	--	--	--	--	SHEET 59 OF 72	-- x --	--	--	--	--	--	--	--	--	--
763	W3-3(3)	II	--	36 x 36	--	9.000	--	1	1	1	--	--	--	--	SHEET 60 OF 72	-- x --	--	--	--	--	--	--	--	--	--
764	R1-1F(3)	II	--	36 x 36	--	--	7.460	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE - SHEET 63 OF 7	-- x --	--	--	--	--	--	--	--	--	--
765	R5-1A(2S)	II	--	36 x 24	6.000	--	--	--	--	--	--	--	--	603	3 FT MOUNT HEIGHT - SHEET 63 OF 72	-- x --	--	--	--	--	--	--	--	--	--
766	R6-2R(2S)	II	--	24 x 30	5.000	--	--	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE - SHEET 63 OF 7	-- x --	--	--	--	--	--	--	--	--	--
767	R6-2L(2S)	II	--	24 x 30	5.000	--	--	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE - SHEET 63 OF 7	-- x --	--	--	--	--	--	--	--	--	--
768	R5-1(3)	II	--	36 x 36	9.000	--	--	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE - SHEET 63 OF 7	-- x --	--	--	--	--	--	--	--	--	--
769	R5-1A(3)	II	--	36 x 24	6.000	--	--	--	--	--	--	--	--	--	3 FT HEIGHT ON SIGNAL POLE - SHEET 63	-- x --	--	--	--	--	--	--	--	--	--
770	W5-52L(3)	II	--	18 x 54	--	6.750	--	1	1	1	--	--	--	--	SHEET 6 OF 72 - 4 FT MOUNTING HEIGHT	-- x --	--	--	--	--	--	--	--	--	--
771	W5-52R(3)	II	--	18 x 54	--	6.750	--	1	1	1	--	--	--	--	SHEET 6 OF 72 - 4 FT MOUNTING HEIGHT	-- x --	--	--	--	--	--	--	--	--	--
772	W5-52R(3)	II	--	18 x 54	--	6.750	--	1	1	1	--	--	--	--	SHEET 6 OF 72 - 4 FT MOUNTING HEIGHT	-- x --	--	--	--	--	--	--	--	--	--
773	W5-52L(3)	II	--	18 x 54	--	6.750	--	1	1	1	--	--	--	--	SHEET 6 OF 72 - 4 FT MOUNTING HEIGHT	-- x --	--	--	--	--	--	--	--	--	--
774	W5-52L(3)	II	--	18 x 54	--	6.750	--	1	1	1	--	--	--	--	SHEET 10 OF 72 - 4 FT MOUNTING HEIGHT	-- x --	--	--	--	--	--	--	--	--	--
775	W5-52R(3)	II	--	18 x 54	--	6.750	--	1	1	1	--	--	--	--	SHEET 10 OF 72 - 4 FT MOUNTING HEIGHT	-- x --	--	--	--	--	--	--	--	--	--
776	W5-52L(3)	II	--	18 x 54	--	6.750	--	1	1	1	--	--	--	--	SHEET 10 OF 72 - 4 FT MOUNTING HEIGHT	-- x --	--	--	--	--	--	--	--	--	--
777	W5-52R(3)	II	--	18 x 54	--	6.750	--	1	1	1	--	--	--	--	SHEET 10 OF 72 - 4 FT MOUNTING HEIGHT	-- x --	--	--	--	--	--	--	--	--	--
778	J4-1(3)	II	--	36 x 54	13.500	--	--	--	--	1	--	--	--	--	SHEET 15 OF 72	-- x --	--	--	--	--	--	--	--	--	--
	M3-4		--	36 x 18																					
	M1-6		STH 16	36 x 36																					
779	J2-2(2S)	II	--	48 x 57	19.000	--	--	--	--	1	--	--	--	--	SHEET 29 OF 72	-- x --	--	--	--	--	--	--	--	--	--
	M3-3		--	24 x 12																					
	M1-6		STH 83	24 x 24																					
	M5-1L		--	21 x 21																					
	M3-1		--	24 x 12																					
	M1-6		STH 83	24 x 24																					
	M5-1R		--	21 x 21																					
780	J2-2(2S)	II	--	48 x 57	19.000	--	--	--	--	1	--	--	--	--	SHEET 26 OF 72	-- x --	--	--	--	--	--	--	--	--	--
	M3-1		--	24 x 12																					
	M1-6		STH 83	24 x 24																					
	M5-1L		--	21 x 21																					
	M3-3		--	24 x 12																					
	M1-6		STH 83	24 x 24																					
	M5-1R		--	21 x 21																					
781	J3-1(2S)	II	--	24 x 57	9.500	--	--	--	--	1	--	--	--	--	SHEET 28 OF 72	-- x --	--	--	--	--	--	--	--	--	--
	M3-3		--	24 x 12																					
	M1-6		STH 83	24 x 24																					
	M6-1		--	21 x 21																					
782	J3-1(2S)	II	--	24 x 57	9.500	--	--	--	--	1	--	--	--	--	SHEET 28 OF 72	-- x --	--	--	--	--	--	--	--	--	--
	M3-1		--	24 x 12																					
	M1-6		STH 83	24 x 24																					
	M6-1		--	21 x 21																					
783	J3-1(2S)	II	--	24 x 69	11.500	--	--	--	--	1	--	--	--	--	SHEET 36 OF 72	-- x --	--	--	--	--	--	--	--	--	--
	M4-5		--	24 x 12																					
	M3-4		--	24 x 12																					
	M1-6		STH 83	24 x 24																					
	M6-1		--	21 x 21																					
784	J2-2(2S)	II	--	48 x 57	19.000	--	--	1	1	1	--	--	--	--	SHEET 51 OF 72	-- x --	--	--	--	--	--	--	--	--	--
	M3-2		--	24 x 12																					
	M1-6		STH 16	24 x 24																					
	M6-1		--	21 x 21																					
	M3-4		--	24 x 12																					
	M1-6		STH 16	24 x 24																					
	M5-1R		--	21 x 21																					
785	J4-1(3)	II	--	36 x 54	13.500	--	--	--	--	1	--	--	--	--	SHEET 61 OF 72	-- x --	--	--	--	--	--	--	--	--	--
	M3-4		--	36 x 18																					
	M1-6		STH 16	36 x 36																					
--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
TOTALS					6352.120	1113.250	366.820	500	527	611	62	18	3				9653.500	127.500	50	16		19	1156	11600	76

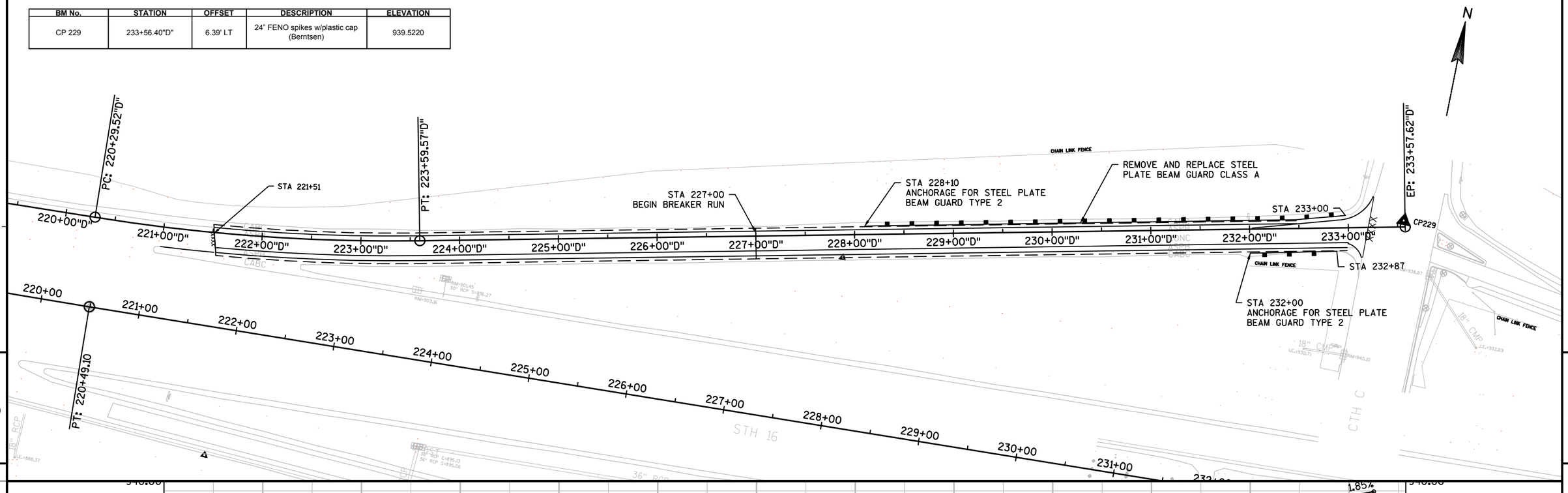


BM No.	STATION	OFFSET	DESCRIPTION	ELEVATION
CP 228	246+47.02"C"	13.45' RT	24" FENO spikes w/plastic cap (Berntsen)	942.0120
CP 229	233+56.40"D"	6.39' LT	24" FENO spikes w/plastic cap (Berntsen)	939.5220



PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PLAN AND PROFILE: CTH C WB OFF RAMP	SHEET 318	E

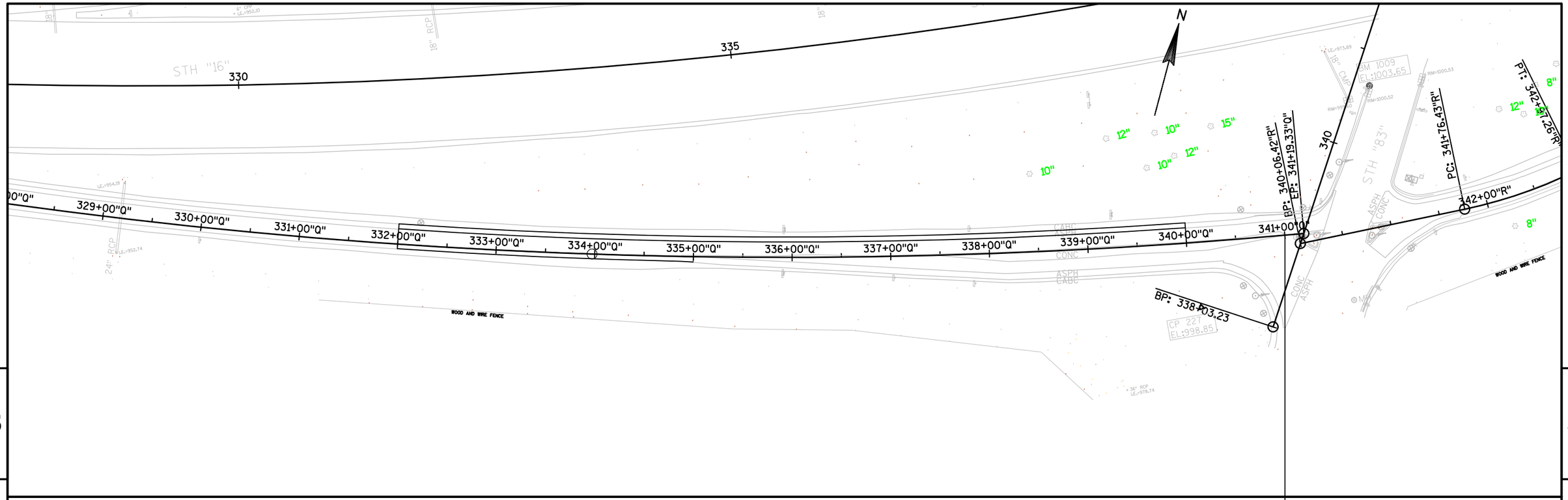
BM No.	STATION	OFFSET	DESCRIPTION	ELEVATION
CP 229	233+56.40"D"	6.39' LT	24" FENO spikes w/plastic cap (Berntsen)	939.5220

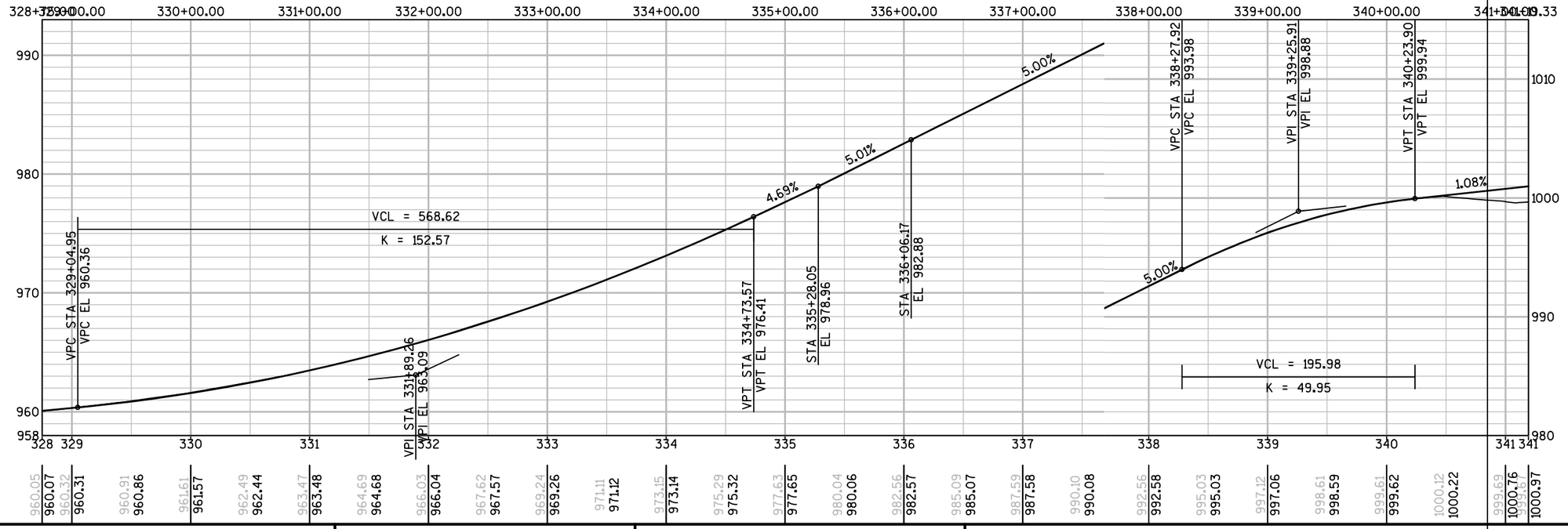


PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PLAN AND PROFILE: CTH C WB ON RAMP	SHEET E

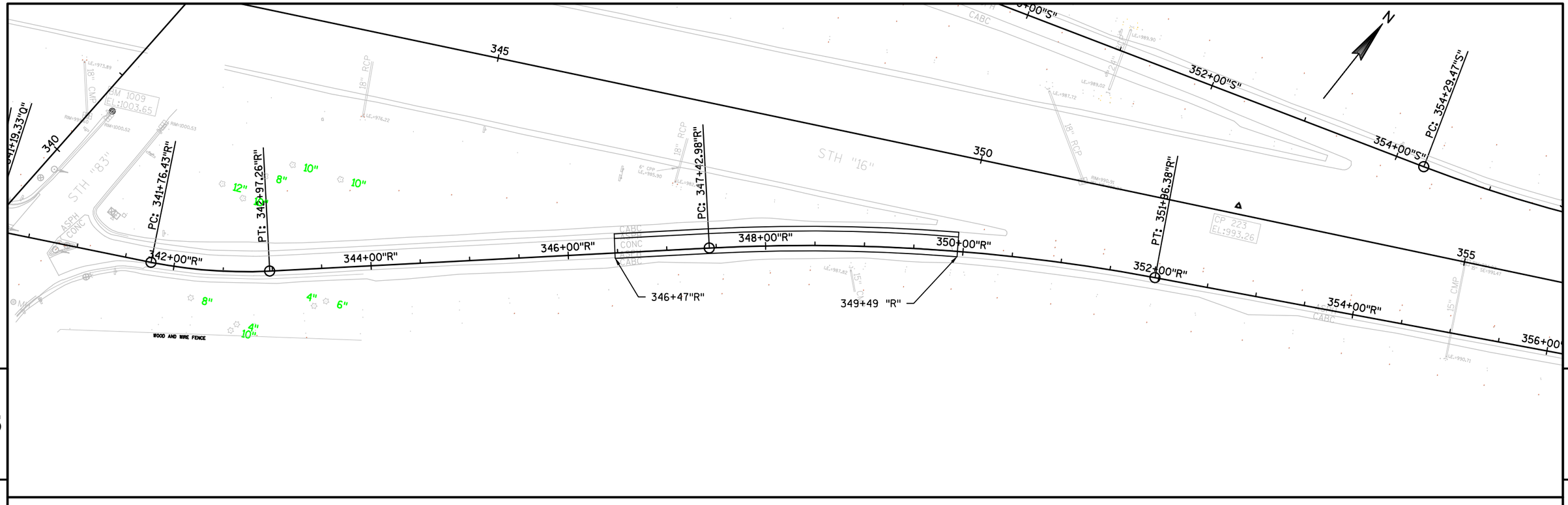
FILE NAME : N:\PDS\C3D\13701501\SHEETSOTHER\PP CTH C WB ON RAMP.DWG PLOT DATE : 1/26/2017 3:53 PM PLOT BY : ROTIER, STEVEN J PLOT NAME : PLOT SCALE : 1 IN:100 FT

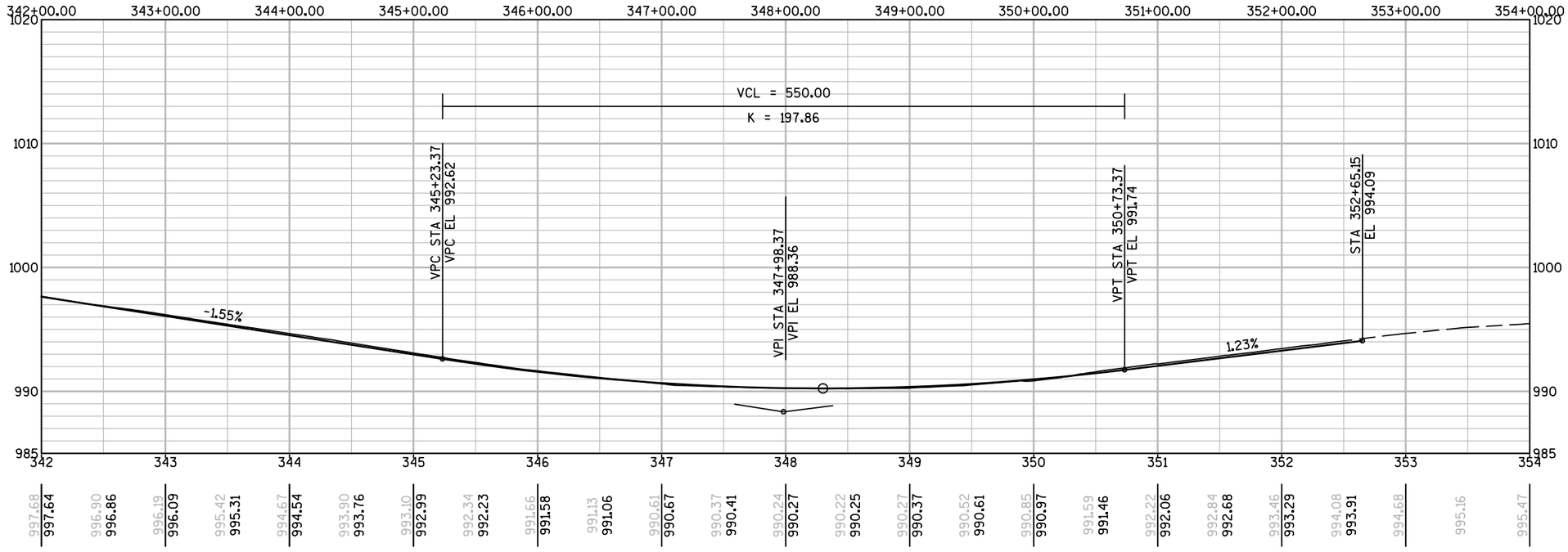
WISDOT/CADDS SHEET 44





PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PLAN AND PROFILE: STH 83 EB OFF-RAMP	SHEET 320 E



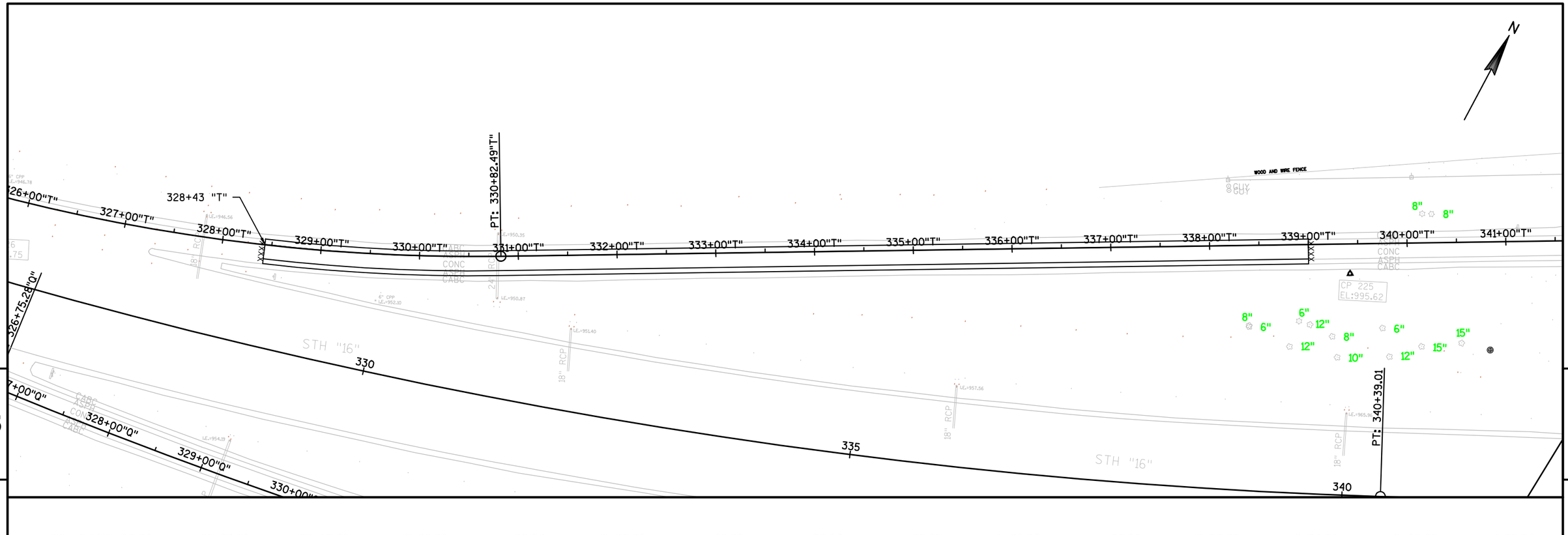


PROJECT NO:1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PLAN AND PROFILE: STH 83 EB ON-RAMP	SHEET 321	E

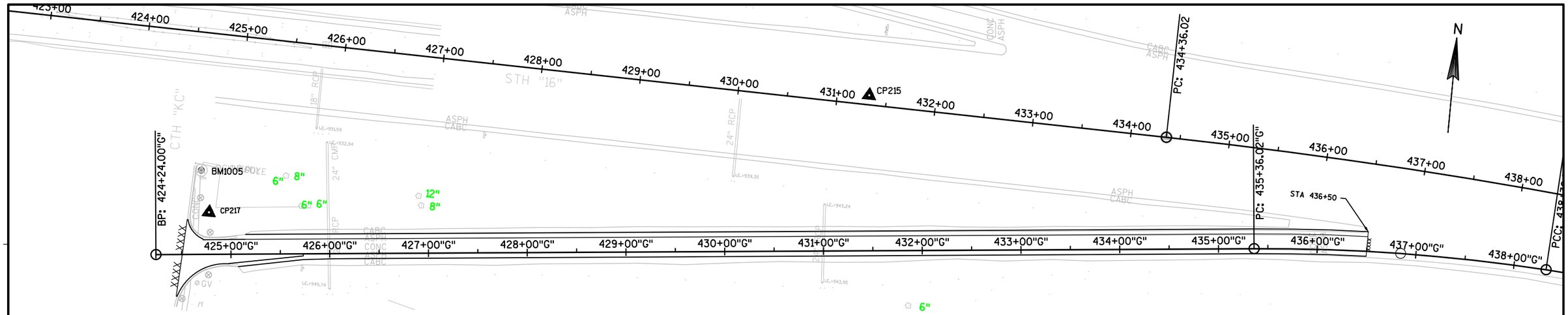
FILE NAME : N:\PDS\C3D\13701501\SHEETSOTHER\PP STH 83.DWG
LAYOUT NAME - SHEET - (5)

PLOT DATE : 1/27/2017 9:02 AM PLOT BY : ROTIER, STEVEN J PLOT NAME : PLOT SCALE : 1 IN:100 FT

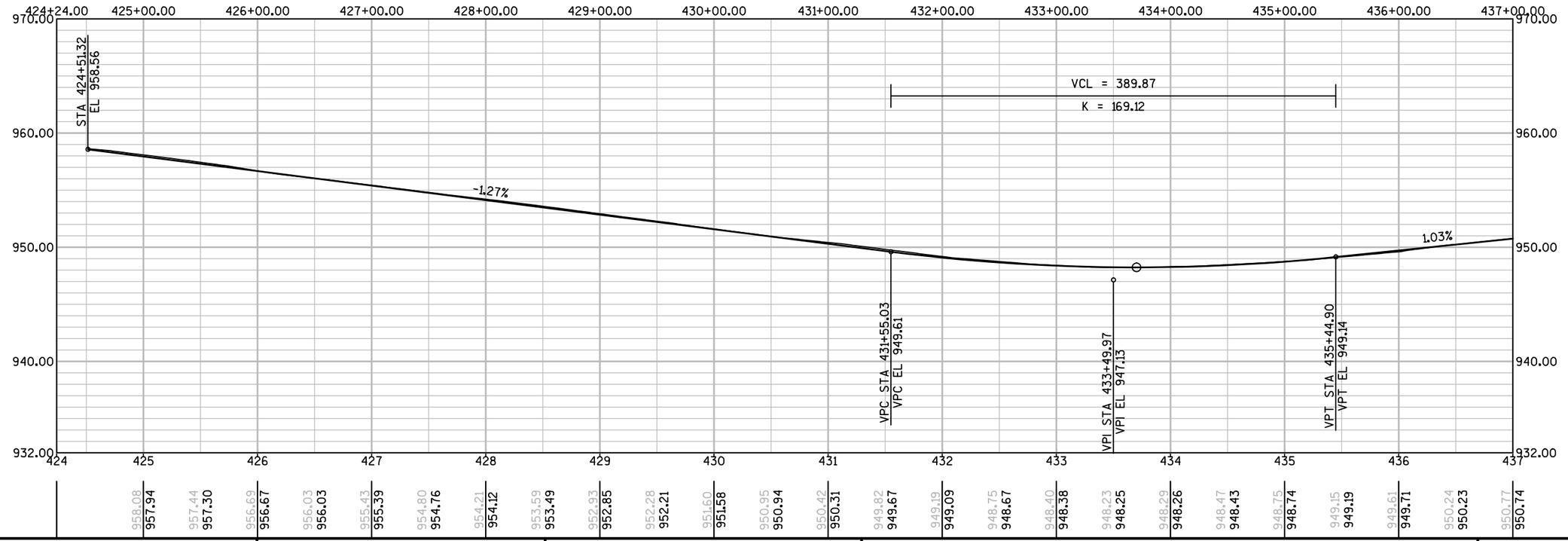
WISDOT/CADDS SHEET 44



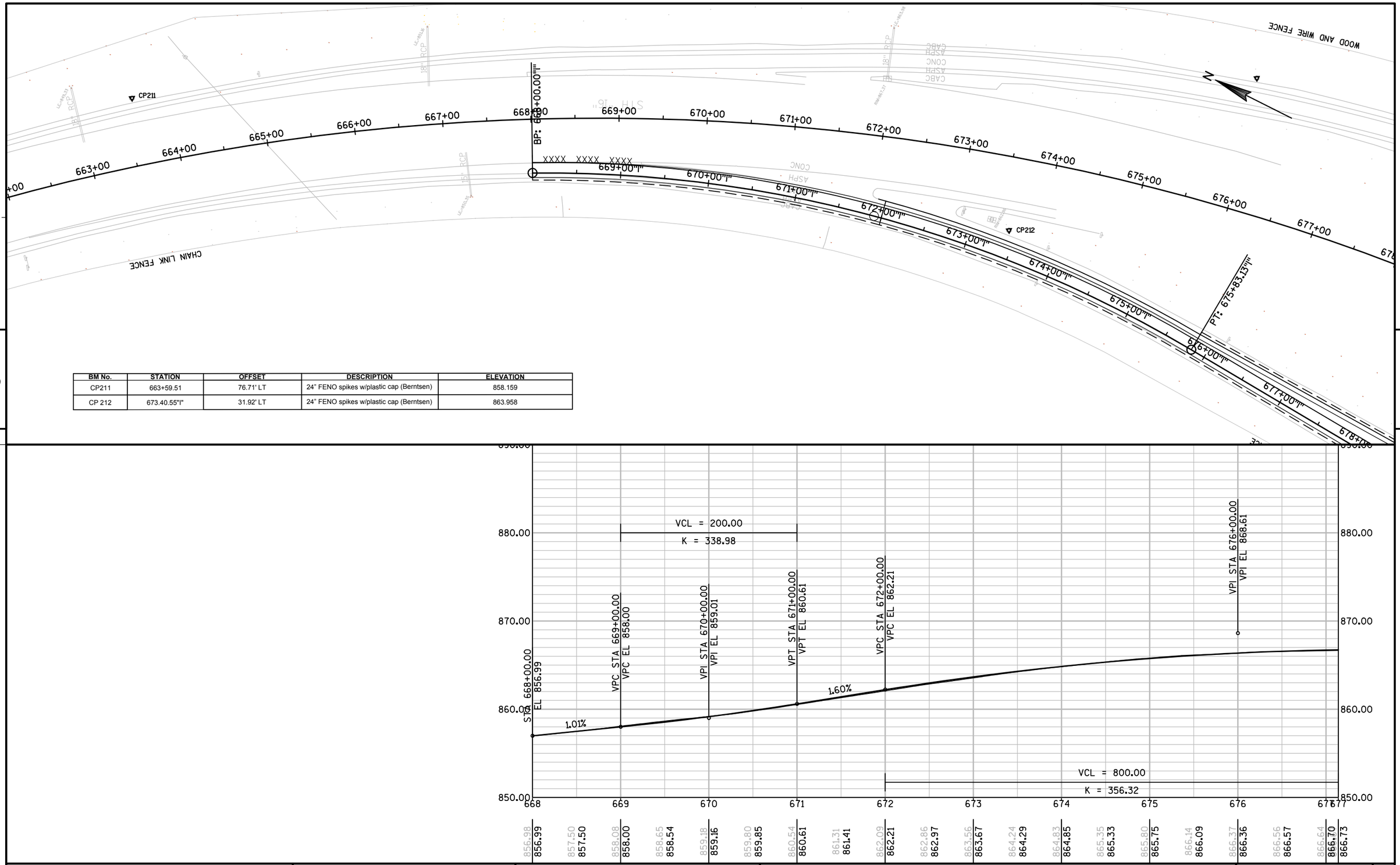
PROJECT NO:1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PLAN AND PROFILE: STH 83 WB ON-RAMP	SHEET 322 E



BM No.	STATION	OFFSET	DESCRIPTION	ELEVATION
CP 215	431+32.24	9.59' LT	24" FENO spikes w/plastic cap (Berntsen)	946.4120
CP 217	424+77.94"G"	42.55' LT	24" FENO spikes w/plastic cap (Berntsen)	959.1710
BM 1005	424+70.33"G"	85.14' LT	Aluminum cap at SE corner of CTH KC bridge over STH 16.	962.0970



PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PLAN AND PROFILE: CTH KC EB ON RAMP	SHEET 323 E

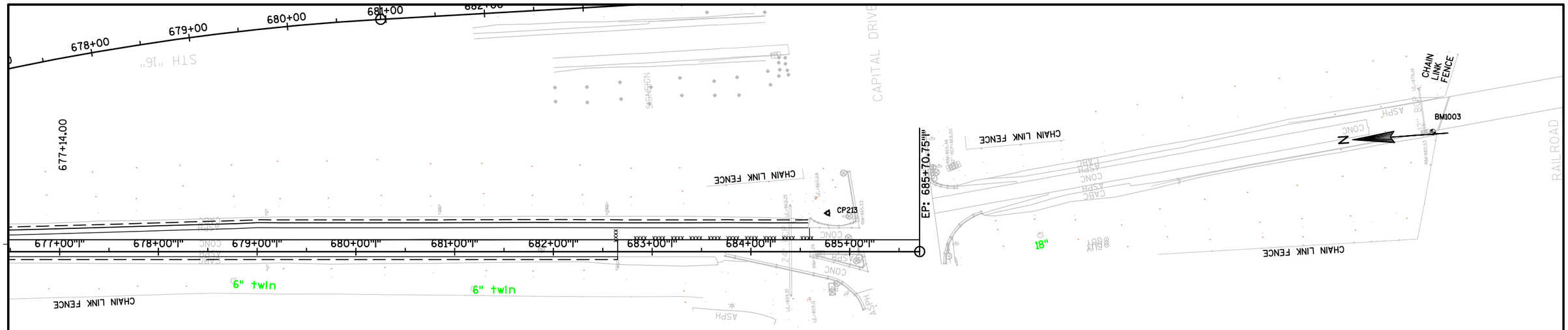


BM No.	STATION	OFFSET	DESCRIPTION	ELEVATION
CP211	663+59.51	76.71' LT	24" FENO spikes w/plastic cap (Berntsen)	858.159
CP 212	673.40.55"I"	31.92' LT	24" FENO spikes w/plastic cap (Berntsen)	863.958

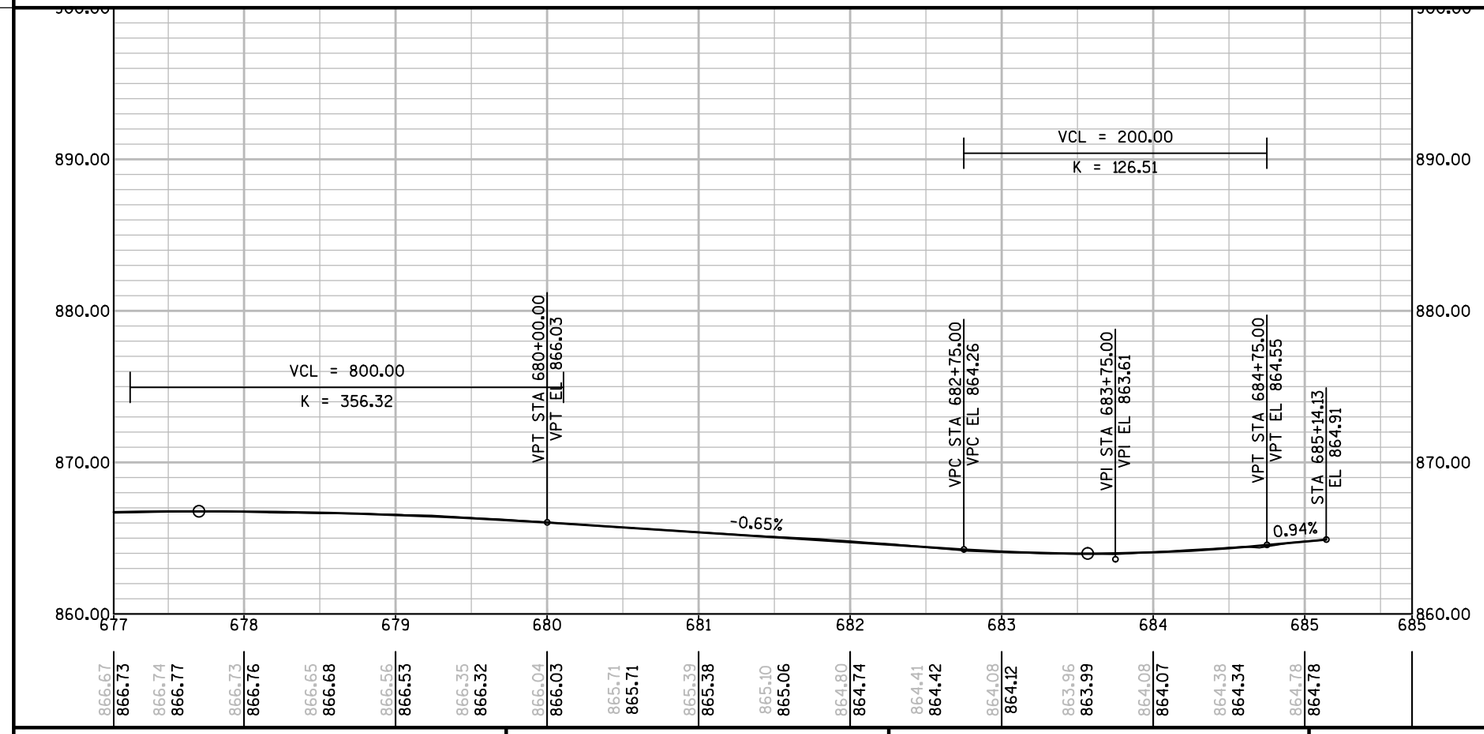
PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PLAN AND PROFILE: STH 190 EB OFF RAMP	SHEET 324	E

FILE NAME : N:\PDS\C3D\13701501\SHEETSOTHER\PP STH 190 NW OFF RAMP.DWG PLOT DATE : 1/26/2017 4:08 PM PLOT BY : ROTIER, STEVEN J PLOT NAME : PLOT SCALE : 1 IN:100 FT

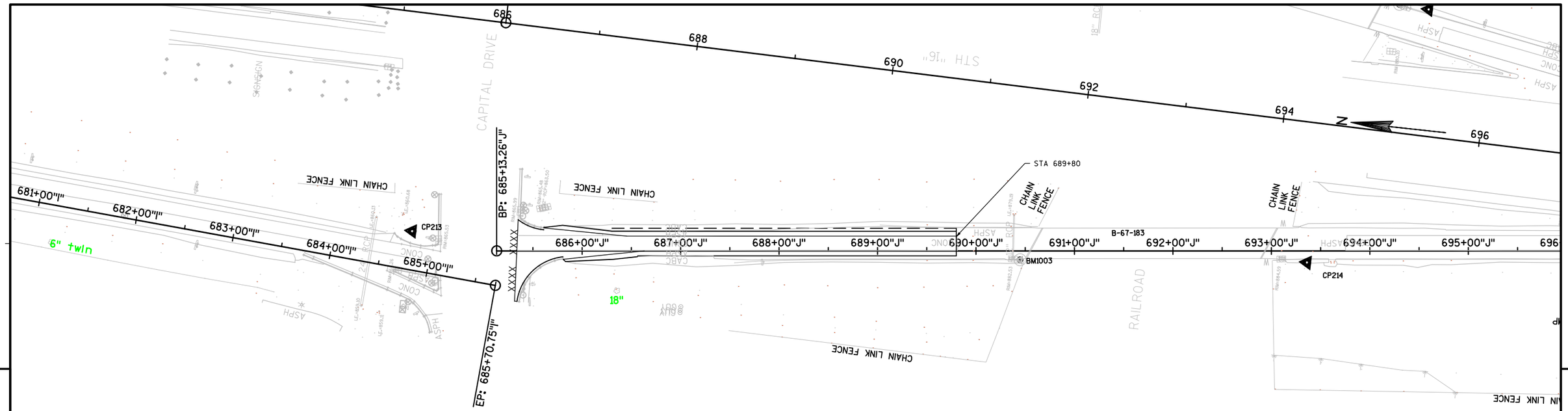
WISDOT/CADDS SHEET 44



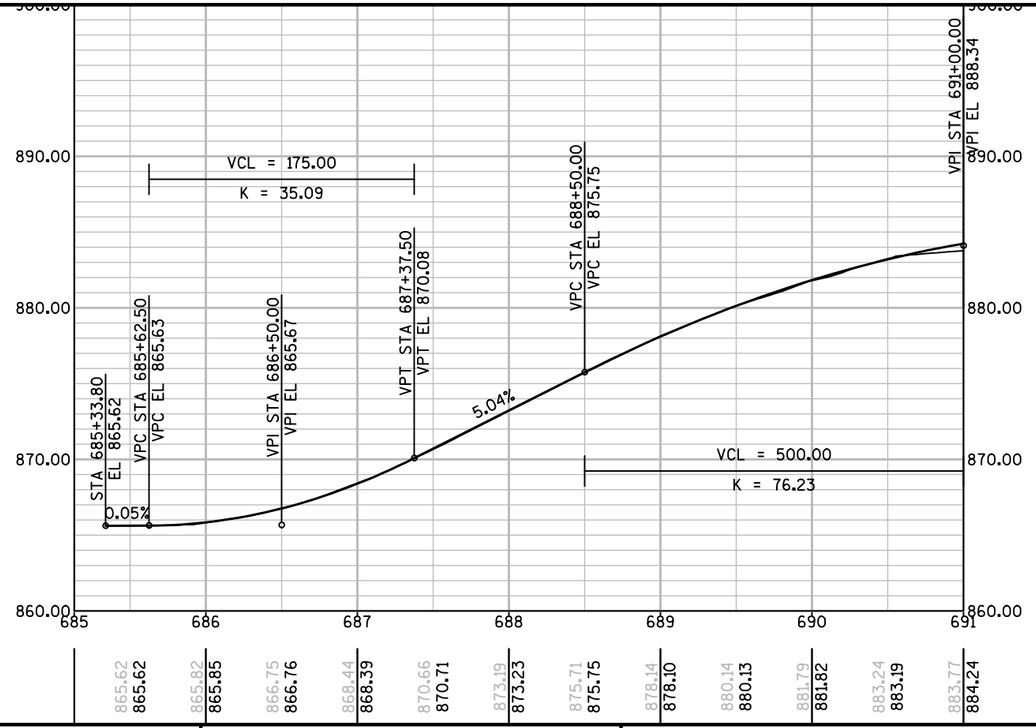
BM No.	STATION	OFFSET	DESCRIPTION	ELEVATION
CP 213	684+77.71"I"	39.04' LT	24" FENO spikes w/plastic cap (Berntsen)	865.250
BM1003	684+77.71"I"	39.04' LT	24" FENO spikes w/plastic cap (Berntsen)	865.250



PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PLAN AND PROFILE: STH 190 EB OFF RAMP	SHEET 325 E

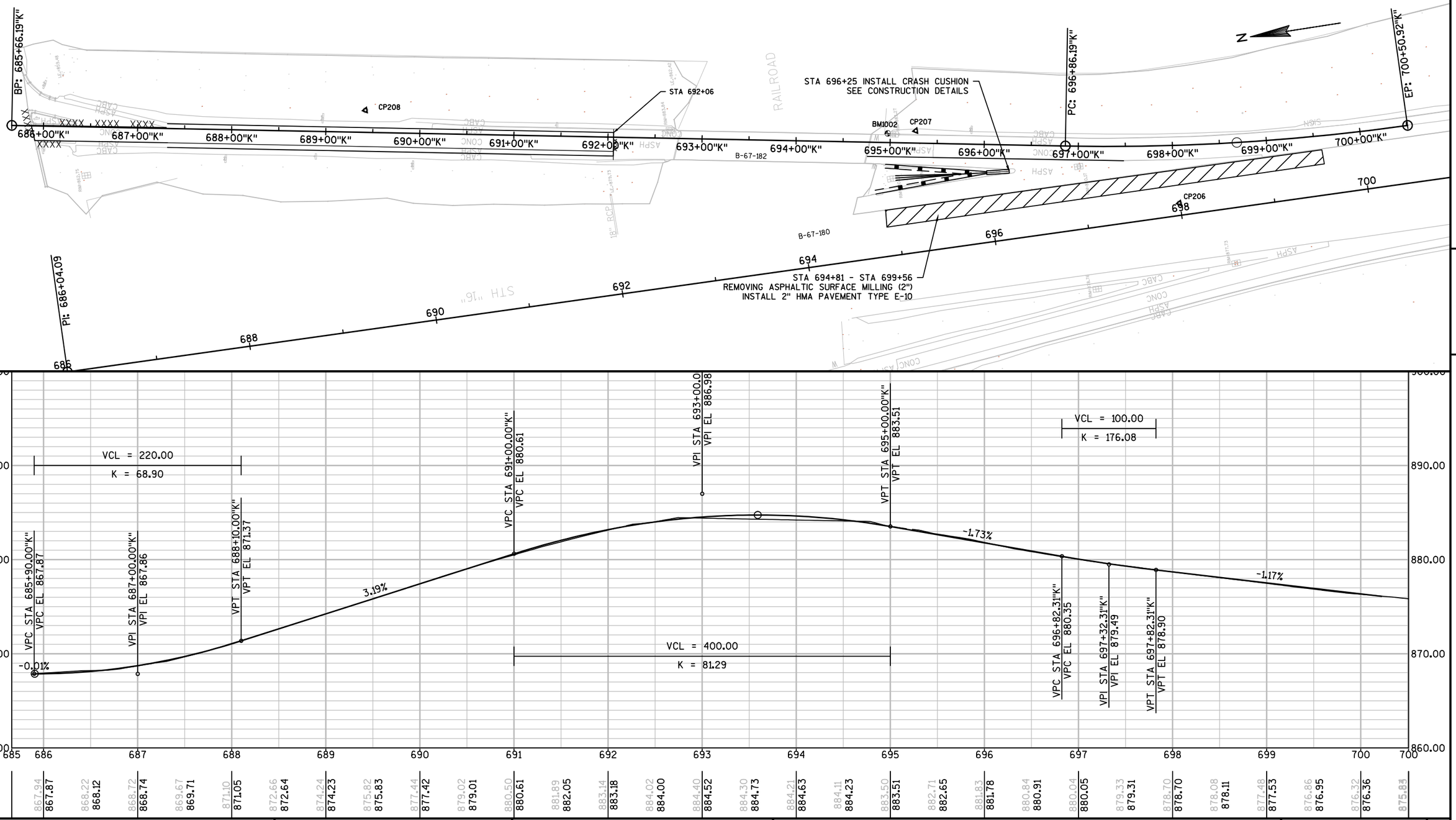


BM No.	STATION	OFFSET	DESCRIPTION	ELEVATION
CP 213	684+77.71"I"	39.04' LT	24" FENO spikes w/plastic cap (Berntsen)	865.250
CP 214	693+36.16"J"	11.85' RT	24" FENO spikes w/plastic cap (Berntsen)	883.824
BM 1003	690+44.66"J"	9.06' RT	Aluminum cap at NW corner of Capital Drive Southbound Entrance ramp bridge over railroad.	885.595



PROJECT NO: 1370-15-70	HWY: STH 16	COUNTY: WAUKESHA	PLAN AND PROFILE: STH 190 SW ON RAMP	SHEET 326	E

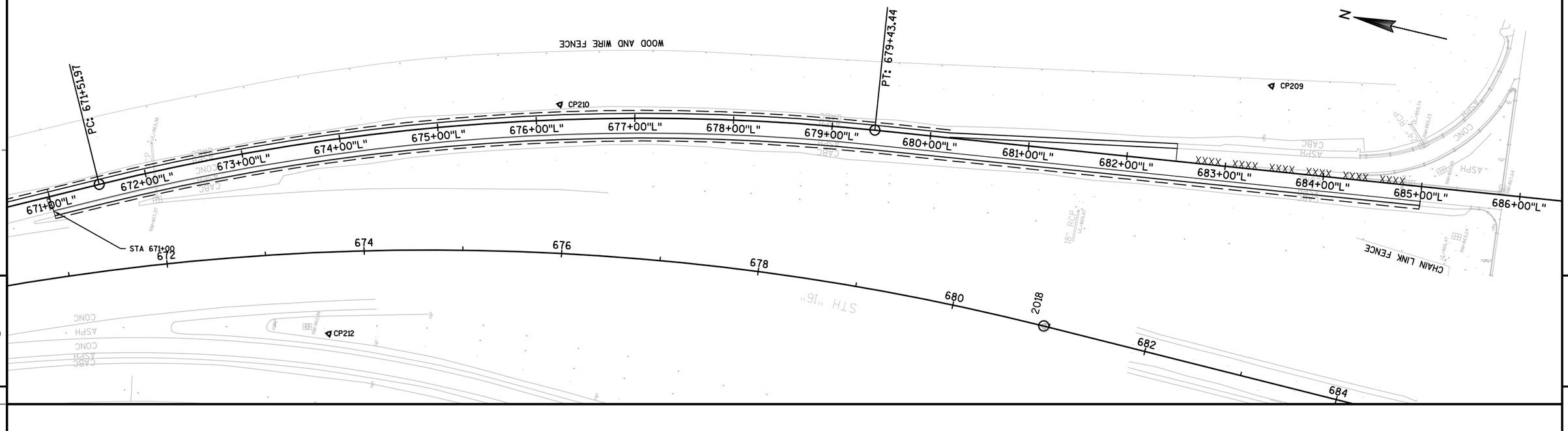
BM No.	STATION	OFFSET	DESCRIPTION	ELEVATION
CP 206	697+99.32	12.96' LT	24" FENO spikes w/plastic cap (Berntsen)	878.070
CP 207	695+26.91"K"	13.05' LT	24" FENO spikes w/plastic cap (Berntsen)	882.273
CP 208	695+26.91"K"	23.49' LT	24" FENO spikes w/plastic cap (Berntsen)	871.527
BM 1002	694+97.12"K"	9.72' LT	Aluminum cap at SE corner of Capital Drive Northbound Exit ramp bridge over railroad.	886.331

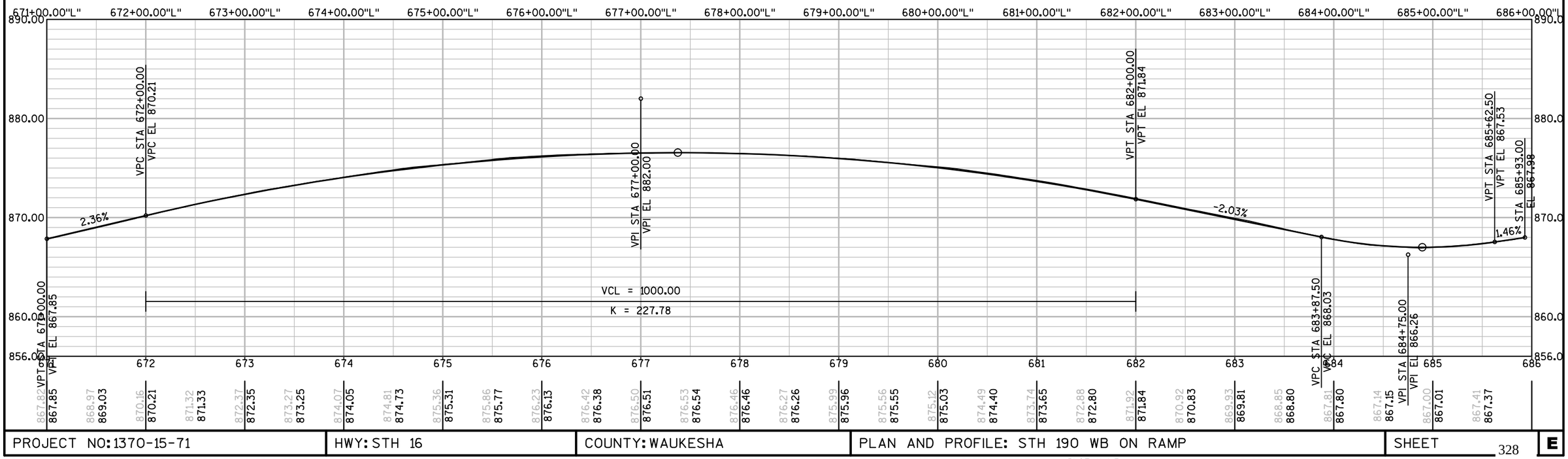


PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PLAN AND PROFILE: STH 190 WB OFF RAMP	SHEET 327	E

FILE NAME : N:\PDS\C3D\13701501\SHEETSOTHER\PP STH 190 SE OFF RAMP.DWG PLOT DATE : 1/26/2017 4:11 PM PLOT BY : ROTIER, STEVEN J PLOT NAME : PLOT SCALE : 1 IN:100 FT

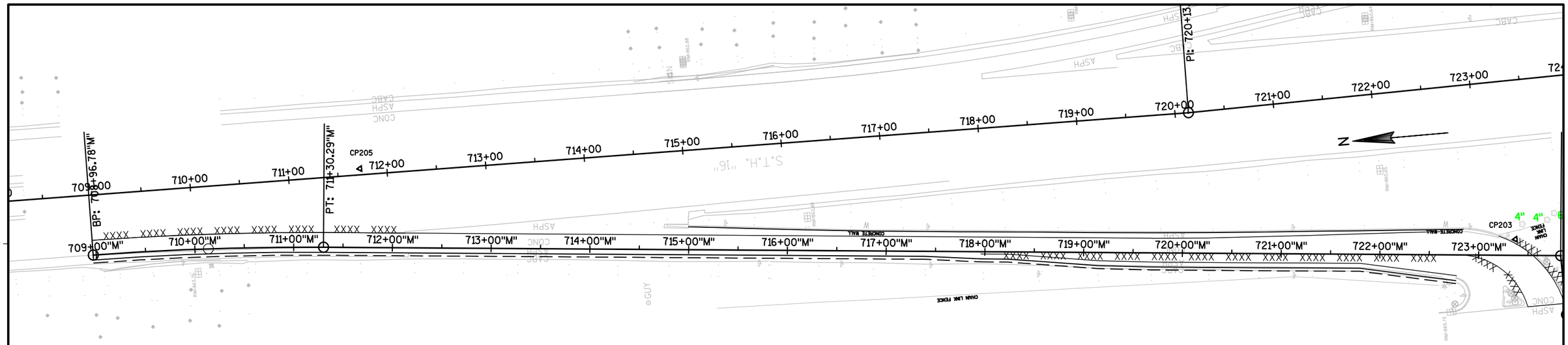
BM No.	STATION	OFFSET	DESCRIPTION	ELEVATION
CP 209	683+36.53"L"	85.83' LT	24" FENO spikes w/plastic cap (Berntsen)	868.571
CP 210	676+22.59"L"	15.36' LT	24" FENO spikes w/plastic cap (Berntsen)	875.574
CP 212	673.40.55"l"	31.92' LT	24" FENO spikes w/plastic cap (Berntsen)	863.958



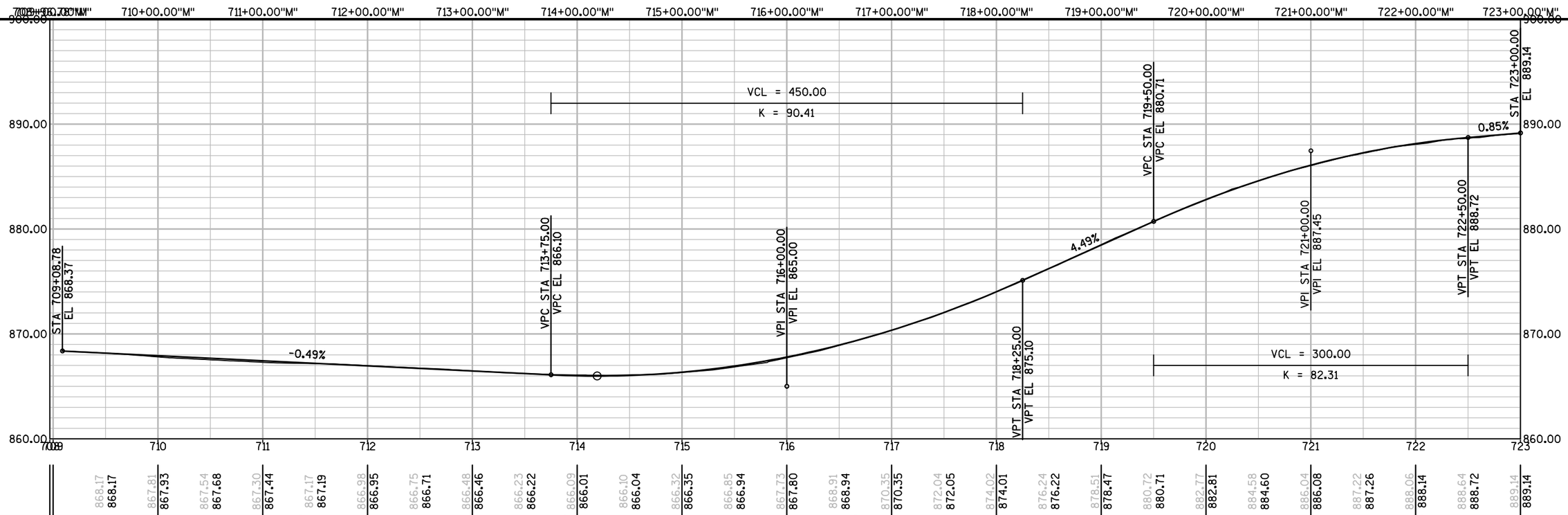


PROJECT NO:1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PLAN AND PROFILE: STH 190 WB ON RAMP	SHEET	E

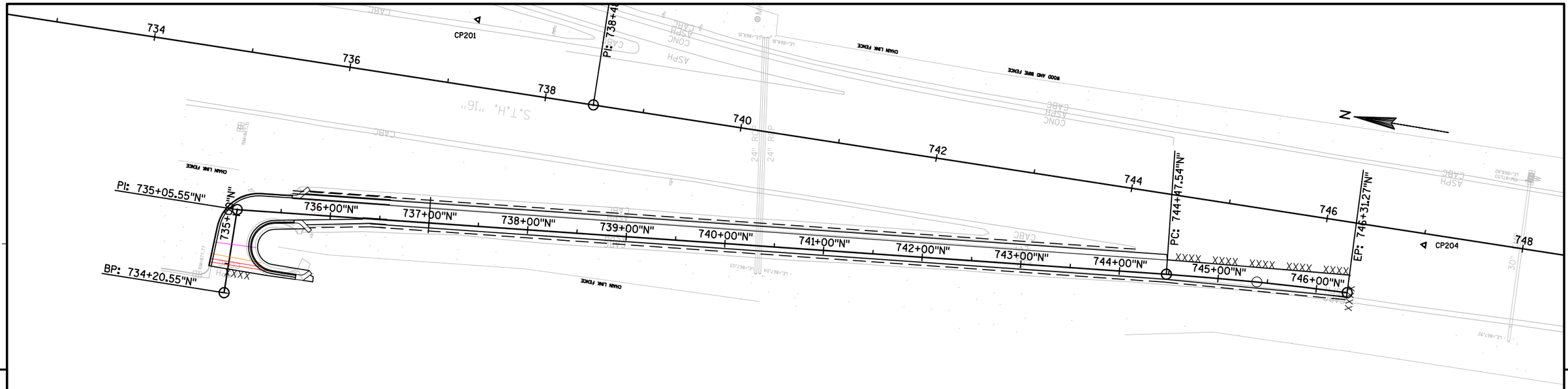
FILE NAME : N:\PDS\C3D\13701501\SHEETSOTHER\PP STH 190 NE ON RAMP.DWG PLOT DATE : 1/26/2017 4:06 PM PLOT BY : ROTIER, STEVEN J PLOT NAME : PLOT SCALE : 1 IN:100 FT



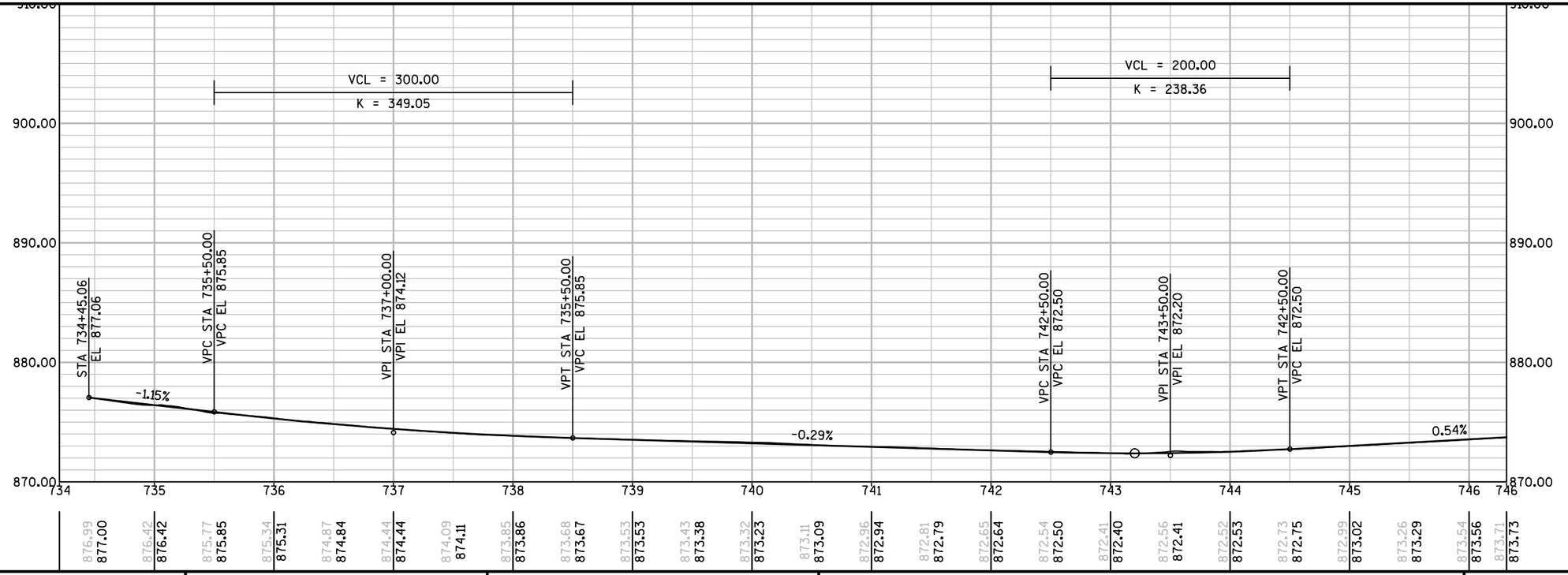
BM No.	STATION	OFFSET	DESCRIPTION	ELEVATION
CP 203	723+37.14"M"	16.29' LT	24" FENO spikes w/plastic cap (Berntsen)	890.0150
CP 205	711+72.71	6.16' LT	24" FENO spikes w/plastic cap (Berntsen)	865.5490



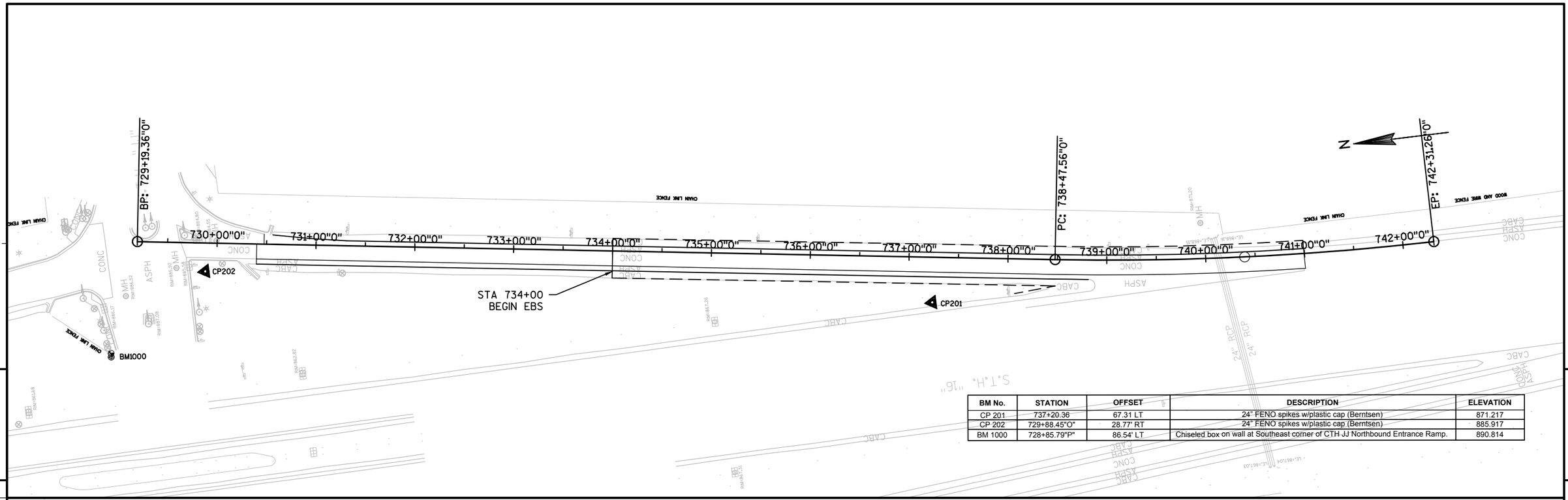
PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PLAN AND PROFILE: CTH JJ EB OFF RAMP	SHEET 329	E



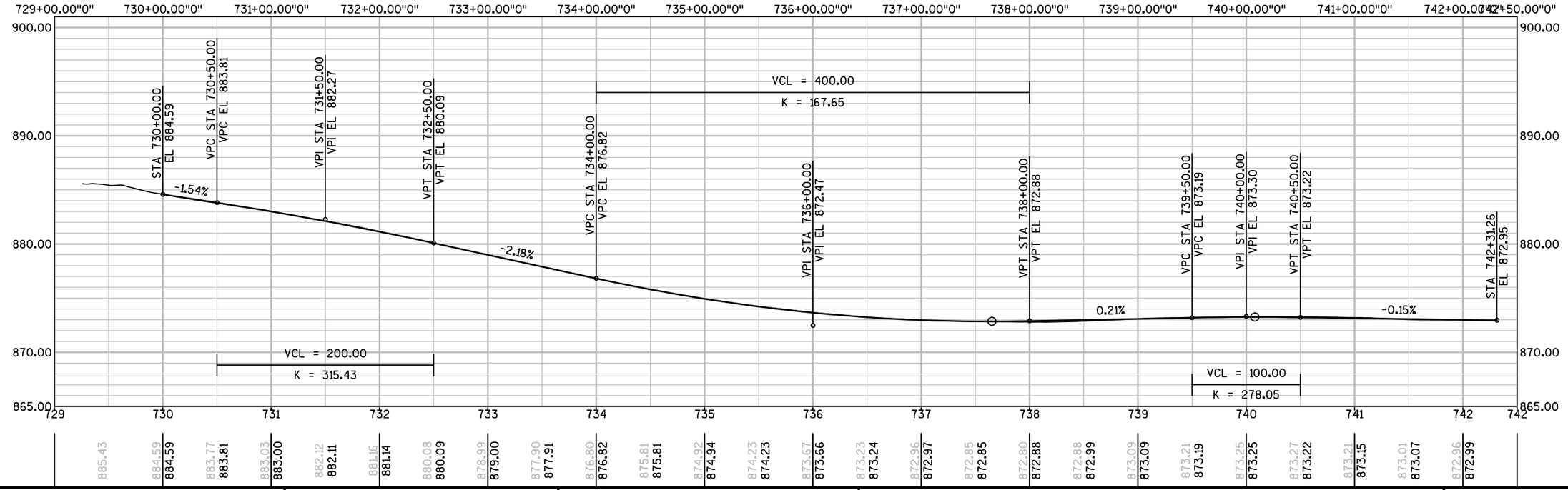
BM No.	STATION	OFFSET	DESCRIPTION	ELEVATION
CP 201	737+20.36	67.31 LT	24" FENO spikes w/plastic cap (Berntsen)	871.2170
CP 204	747+00.93	11.39' RT	24" FENO spikes w/plastic cap (Berntsen)	873.4750



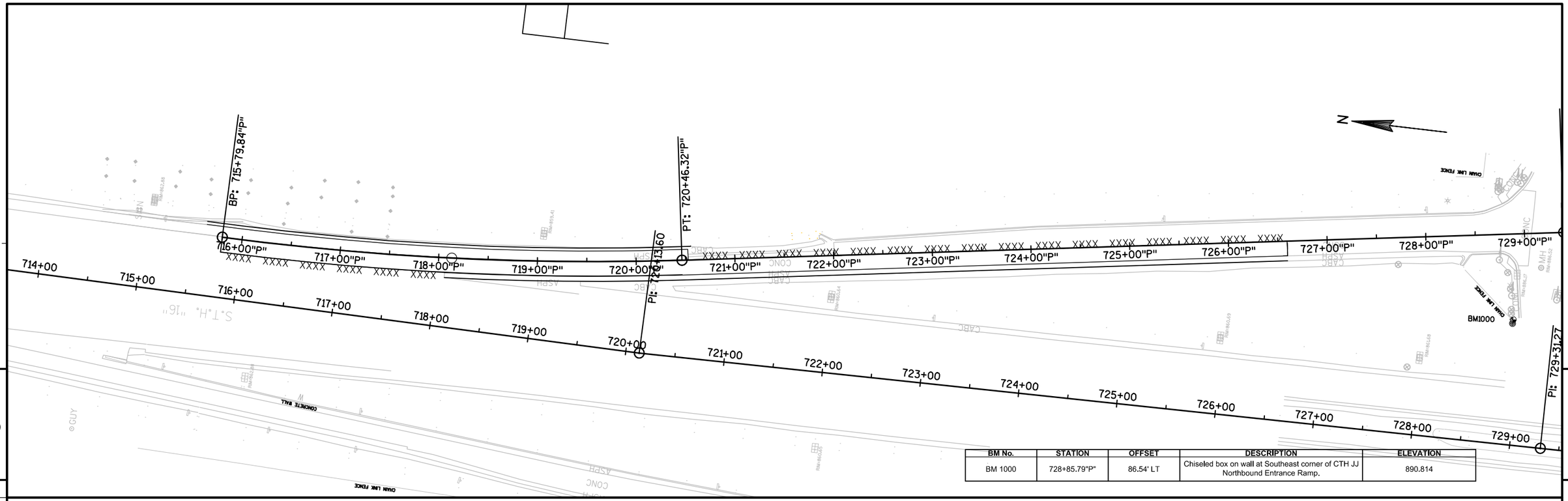
PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PLAN AND PROFILE: CTH JJ EB ON RAMP	SHEET 330 E



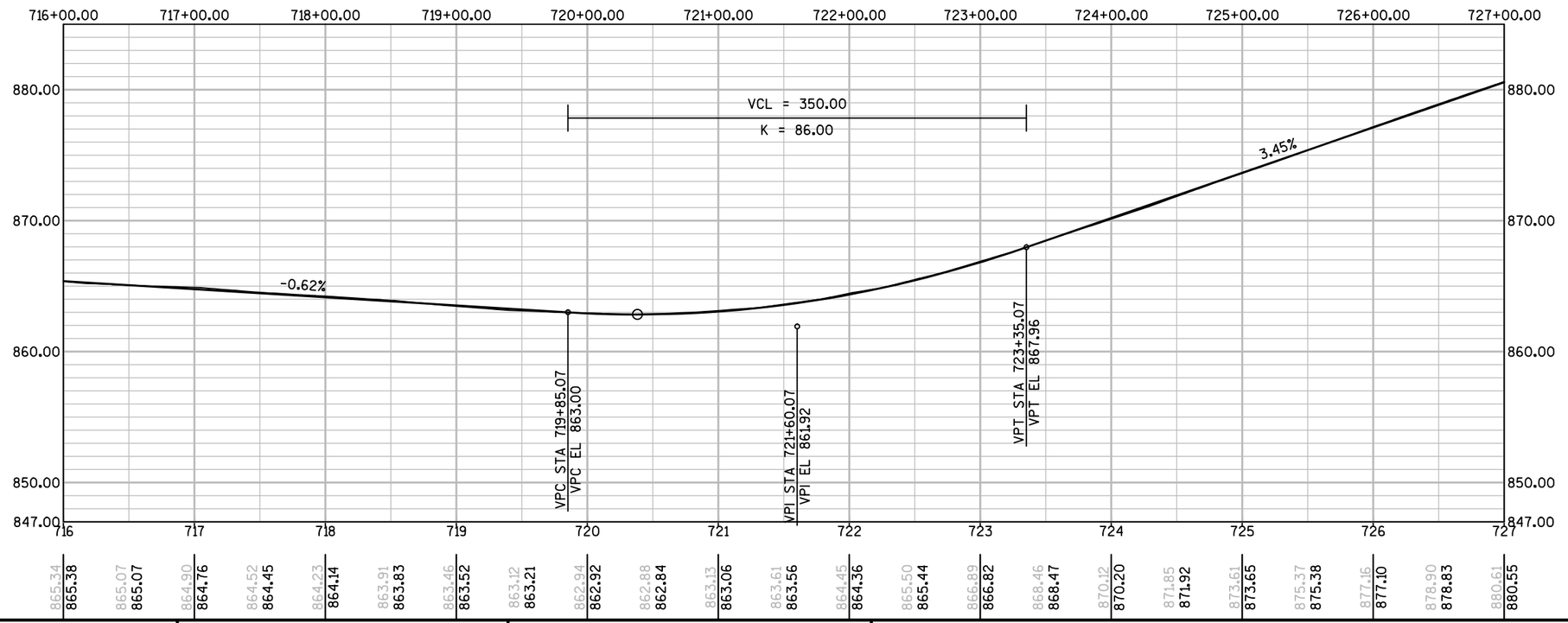
BM No.	STATION	OFFSET	DESCRIPTION	ELEVATION
CP 201	737+20.36	67.31 LT	24" FENO spikes w/plastic cap (Berntsen)	871.217
CP 202	729+88.45"O"	28.77' RT	24" FENO spikes w/plastic cap (Berntsen)	885.917
BM 1000	728+85.79"P"	86.54' LT	Chiseled box on wall at Southeast corner of CTH JJ Northbound Entrance Ramp.	890.814



PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PLAN AND PROFILE: CTH JJ WB OFF RAMP	SHEET 331	E



BM No.	STATION	OFFSET	DESCRIPTION	ELEVATION
BM 1000	728+85.79"P"	86.54' LT	Chiseled box on wall at Southeast corner of CTH JJ Northbound Entrance Ramp.	890.814



PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PLAN AND PROFILE: CTH JJ WB ON RAMP	SHEET 332 E

FILE NAME : N:\PDS\C3D\13701501\SHEETSOTHER\PP CTH JJ NE ON RAMP.DWG PLOT DATE : 1/26/2017 3:55 PM PLOT BY : ROTIER, STEVEN J PLOT NAME : PLOT SCALE : 1 IN:100 FT

Standard Detail Drawing List

08D04-05	CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES
08D05-18A	CURB RAMPS TYPES 1 AND 1-A
08D05-18B	CURB RAMPS TYPES 2 AND 3
08D05-18C	CURB RAMPS TYPES 4A AND 4A1
08D05-18D	CURB RAMPS TYPE 4B AND 4B1
08D05-18E	CURB RAMPS TYPES 5, 6, 7A, 7B & 8
08D16-10	CONCRETE GUTTER, CURB AND GUTTER AND PAVEMENT TIES
08E08-03	TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS
08E09-06	SILT FENCE
08E10-02	INLET PROTECTION TYPE A, B, C AND D
08F04-07	JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL
09B02-09	CONDUIT
09B04-11	PULL BOX
09C02-07	CONCRETE BASES, TYPES 1, 2, 5, & 6
09C03-04	TRANSFORMER/PEDESTAL BASES
09C05-10	CONCRETE CONTROL CABINET BASES
09F15-04A	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 1)
11A01-05	MAINTENANCE CROSSOVER FOR FREEWAYS
11B02-02	CONCRETE MEDIAN NOSE
13A05-05A	SHOULDER RUMBLE STRIP, MILLING
13A05-05B	SHOULDER RUMBLE STRIP, MILLING
13A07-02	CONTINUOUSLY REINFORCED CONCRETE PAVEMENT REPAIR AND REPLACEMENT
13C01-18	CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES
13C08-02	CONCRETE PAVEMENT PARTIAL DEPTH REPAIR
13C09-13A	CONCRETE PAVEMENT REPAIR AND REPLACEMENT
13C09-13B	CONCRETE PAVEMENT REPAIR AND REPLACEMENT
13C09-13C	CONCRETE PAVEMENT REPAIR AND REPLACEMENT
13C14-06A	BASE PATCHING CONCRETE
13C14-06B	BASE PATCHING CONCRETE
13C14-06C	BASE PATCHING CONCRETE
13C17-01A	CONCRETE JOINT DETAIL FOR EXIT RAMP TERMINI
13C17-01B	CONCRETE JOINT DETAIL FOR ENTRANCE RAMP TERMINI
13C18-05A	CONCRETE PAVEMENT JOINTING
13C18-05B	CONCRETE PAVEMENT STEEL REINFORCEMENT
13C18-05C	CONCRETE PAVEMENT JOINT TYPES
13C18-05D	CONCRETE PAVEMENT JOINTING AT UTILITY FIXTURES
14B15-09A	STEEL PLATE BEAM GUARD, CLASS "A" INSTALLATION & ELEMENTS
14B15-09B	STEEL PLATE BEAM GUARD, CLASS "A" INSTALLATION & ELEMENTS
14B15-09C	STEEL PLATE BEAM GUARD, CLASS "A", INSTALLATION & ELEMENTS
14B16-04A	ANCHORAGE FOR STEEL PLATE BEAM GUARD TYPE 2
14B16-04B	ANCHORAGE FOR STEEL PLATE BEAM GUARD TYPE 2
14B20-11A	STEEL THRIE BEAM STRUCTURE APPROACH
14B20-11B	STEEL THRIE BEAM STRUCTURE APPROACH, CONNECTION TO SQUARE END PARAPETS
14B26-03A	STEEL THRIE BEAM BULLNOSE TERMINAL
14B26-03B	STEEL THRIE BEAM BULLNOSE TERMINAL
14B26-03C	STEEL THRIE BEAM BULLNOSE TERMINAL
14B26-03D	STEEL THRIE BEAM BULLNOSE TERMINAL
14B26-03E	STEEL THRIE BEAM BULLNOSE TERMINAL
14B27-01A	STEEL PLATE BEAM GUARD SHORT RADIUS TERMINAL
14B27-01B	STEEL PLATE BEAM GUARD SHORT RADIUS TERMINAL
14B27-01C	STEEL PLATE BEAM GUARD SHORT RADIUS TERMINAL
14B28-03	GUARDRAIL MOW STRIP
14B42-04A	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-04B	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-04C	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)
14B45-04A	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-04B	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-04C	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-04D	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-04E	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-04F	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-04G	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-04H	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-04I	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)

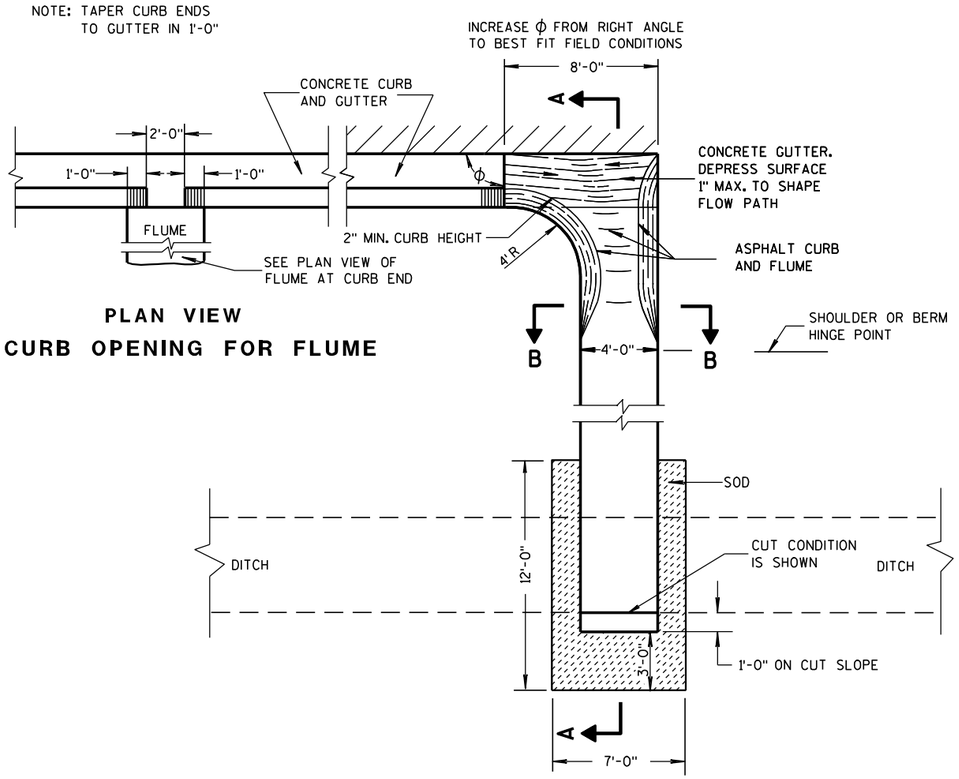
6

Standard Detail Drawing List

14B45-04J	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-04K	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-04L	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B47-02A	MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL
14B47-02B	MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL
14B47-02C	MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL
15A02-09	DELINEATOR POST, DELINEATOR REFLECTOR AND DELINEATOR BRACKET WITH REFLECTIVE SHEETING
15A06-02	DELINEATOR LAYOUT
15C02-06C	DETOUR SIGNING FOR MAINLINE CLOSURES
15C07-13B	PAVEMENT MARKING WORDS
15C07-13C	PAVEMENT MARKING ARROWS
15C08-16A	PAVEMENT MARKING (MAINLINE)
15C08-17A	LONGITUDINAL MARKING (MAINLINE)
15C08-17B	PAVEMENT MARKING (TURN LANES)
15C08-17C	PAVEMENT MARKING (ISLANDS)
15C19-04C	MOVING PAVEMENT MARKING OPERATION MULTI-LANE DIVIDED ROADWAY
15C27-01	DOUBLE ARROW WARNING SIGN PLACEMENT
15C31-02A	PAVEMENT MARKING (RAMPS AND GORES)
15C31-02C	PAVEMENT MARKING FOR PARALLEL ON-RAMP AND PARALLEL OFF-RAMP
15C33-02	STOP LINE AND CROSSWALK PAVEMENT MARKING
15D03-04	TRAFFIC CONTROL, LANE CLOSURE, SPEEDS GREATER THAN 40 M.P.H. WITH BARRIER
15D12-06B	TRAFFIC CONTROL, LANE CLOSURE, SPEED REDUCTION
15D15-02	TRAFFIC CONTROL, EXIT AND ENTRANCE RAMP WITHIN LANE CLOSURE
15D16-03	TRAFFIC CONTROL, EXIT RAMP CLOSURE
15D27-03	TRAFFIC CONTROL, SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 MPH
15D30-03A	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-03B	TRAFFIC CONTROL, TEMPORARY ADA COMPLIANT PEDESTRIAN ACCOMMODATION
15D30-03C	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D34-02A	RAMP GATE SOLAR POWER
15D34-02B	RAMP GATE SOLAR POWER
15D34-02C	RAMP GATE SOLAR POWER
15D34-02D	RAMP GATE SOLAR POWER
15D36-01	BARRICADE RACK
15D38-01A	TEMPORARY TRAFFIC CONTROL FIXED MESSAGE SIGNS
15D38-01B	ATTACHMENT OF SIGNS TO POSTS

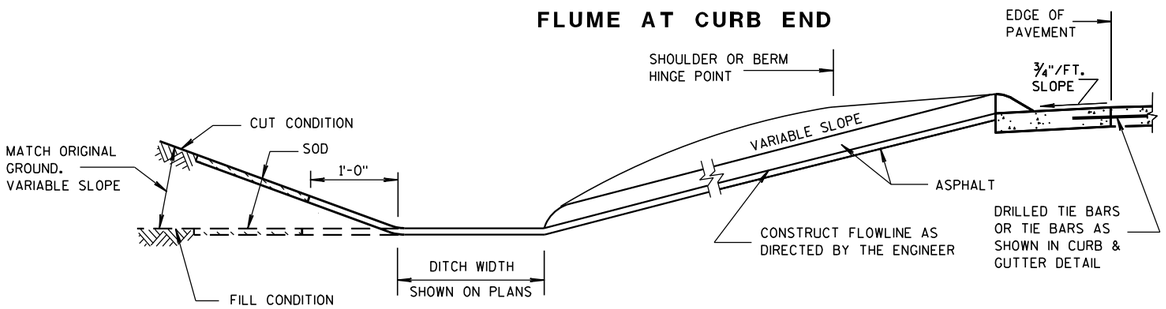
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ASPHALTIC FLUME

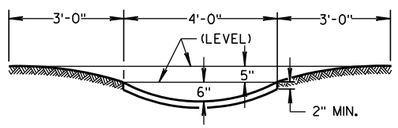


PLAN VIEW
CURB OPENING FOR FLUME

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.

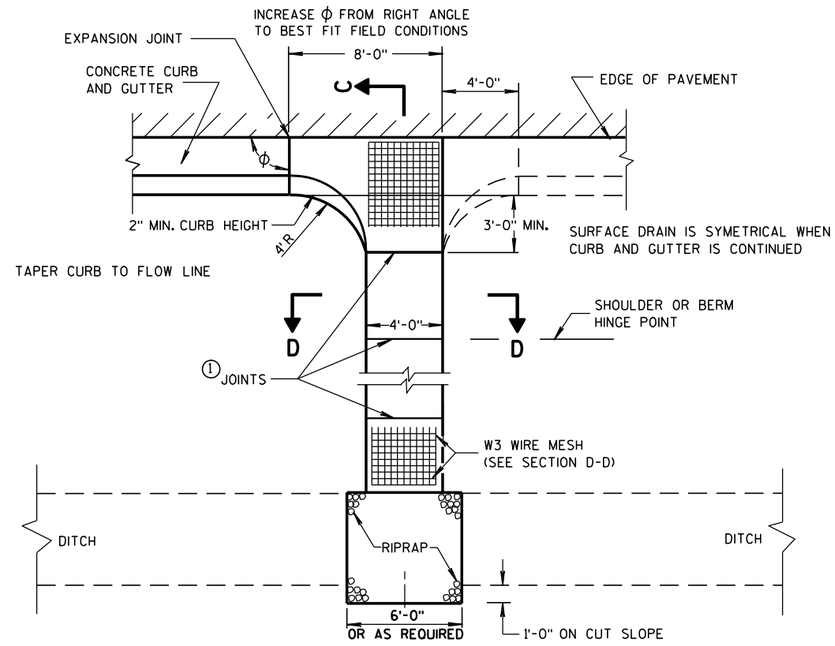
WELDED STEEL WIRE FABRIC SHALL BE IN ACCORDANCE WITH AASHTO SPECIFICATION M55.

① JOINTS SHALL BE $\frac{1}{8}$ TO $\frac{1}{4}$ INCH WIDE BY $1\frac{1}{2}$ INCHES DEEP AND SPACED AT UNIFORM INTERVALS OF APPROXIMATELY 4 FEET.

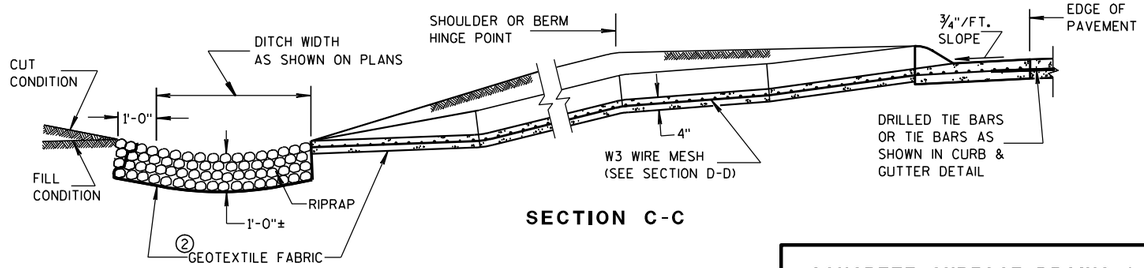
② GEOTEXTILE FABRIC TYPE "R" SHALL UNDERLAY THE FULL LENGTH AND WIDTH OF THE CONCRETE SURFACE DRAIN AND RIPRAP.

③ CONCRETE SURFACE DRAIN WITHOUT CURB AND GUTTER MAY BE USED ON BACKSLOPES WHEN SPECIFIED

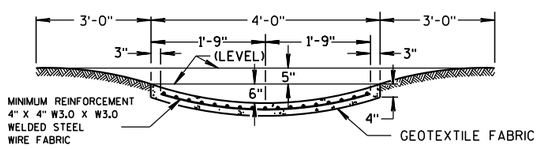
③ CONCRETE SURFACE DRAIN



PLAN VIEW



SECTION C-C



SECTION D-D

CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

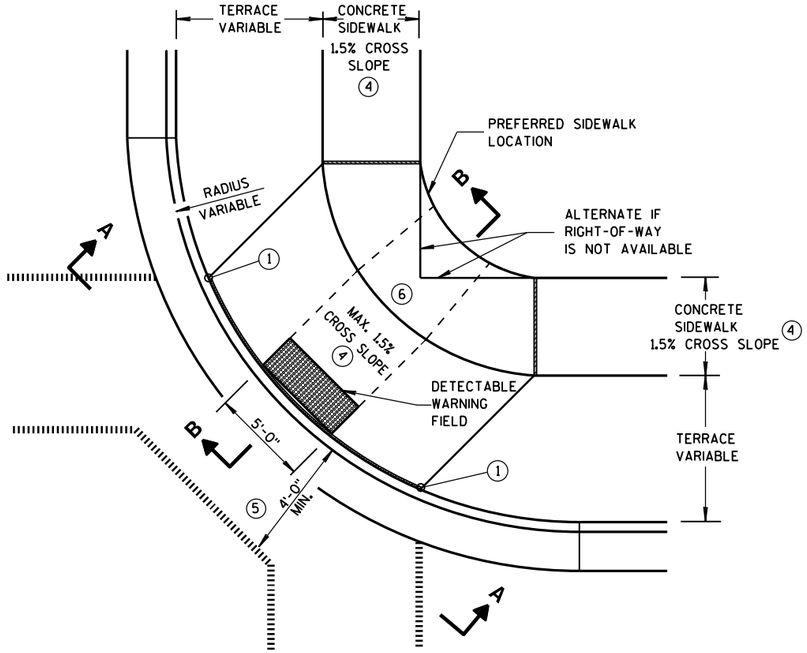
APPROVED
9-4-08 DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER
335
MENT
FHWA

6

S.D.D. 8 D 4-5

6

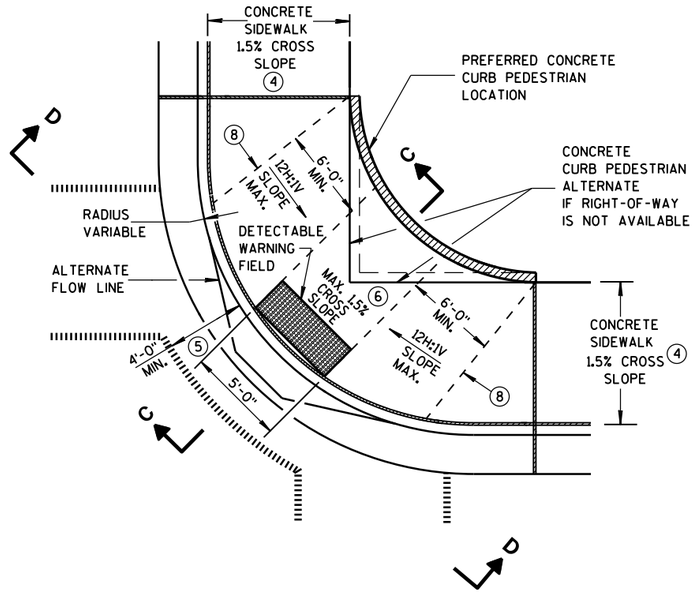
S.D.D. 8 D 4-5



PLAN VIEW

TYPE 1 RAMP

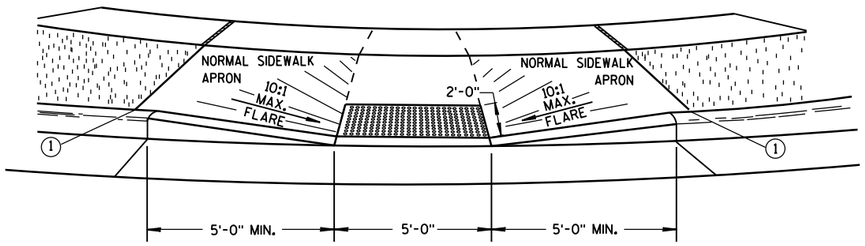
(CENTER OF CORNER RADIUS)



PLAN VIEW

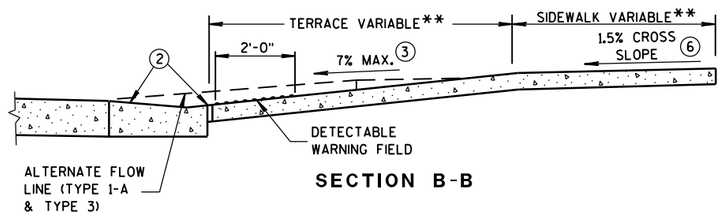
TYPE 1-A RAMP

(NO TERRACE)

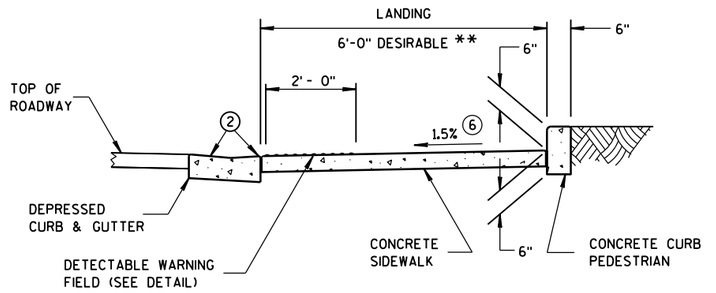


VIEW A-A

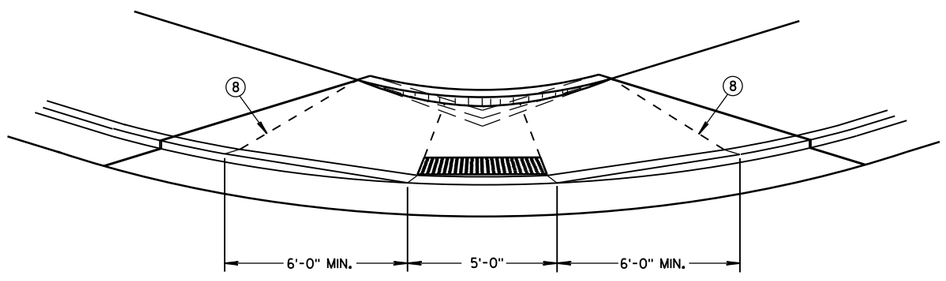
** WIDTH SHOWN ELSEWHERE IN THE PLANS



SECTION B-B



SECTION C-C



VIEW D-D

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.

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. POINT LOCATION MAY BE ADJUSTED TO ALIGN WITH BEGINNING OF FULL-HEIGHT CURB IF THIS DISTANCE IS SHORT.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/4-INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL NOT EXCEED 7%.

(3) ABSOLUTE MAXIMUM 12H:1V (8.33%) CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(5) PROVIDE A LEVEL LANDING IN THE STREET AND GUTTER AREA. (2% MAXIMUM SLOPE IN ANY DIRECTION). WHEN THE GUTTER SLOPE EXCEEDS 2%, CONSTRUCT THE LEVEL LANDING IN THE STREET AREA.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

LEGEND

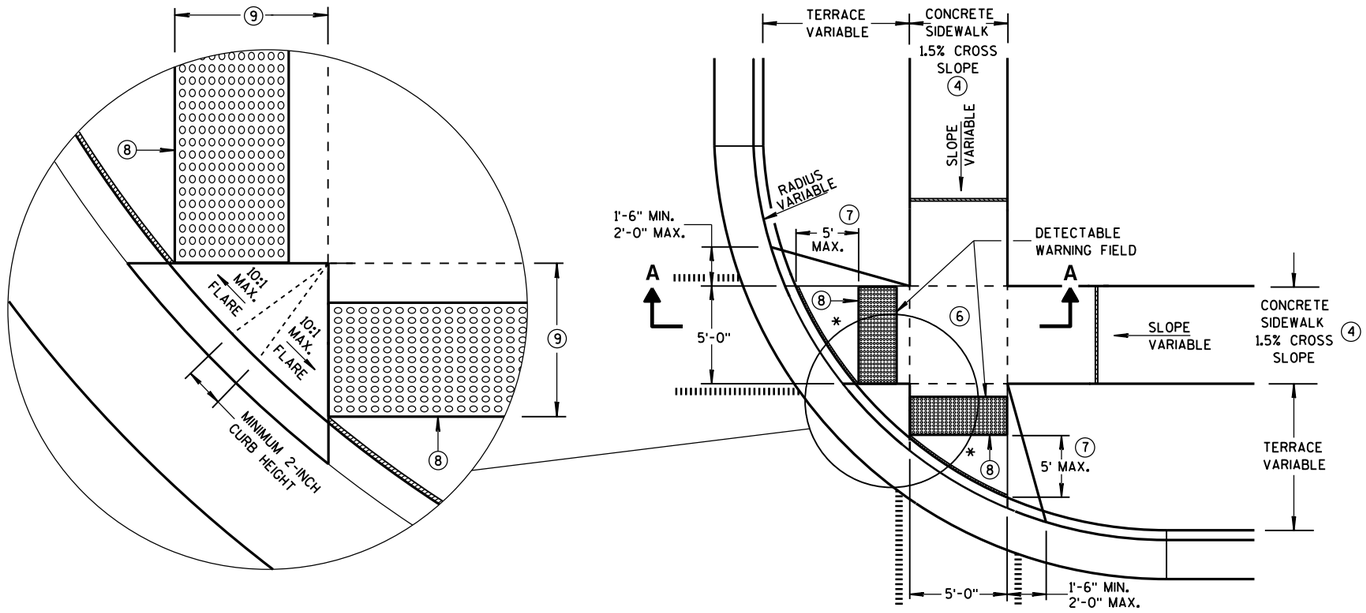
- 1/2" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)
- ALTERNATIVE LAYOUT

CURB RAMPS TYPES 1 AND 1-A

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

S.D.D. 8 D 5-18a

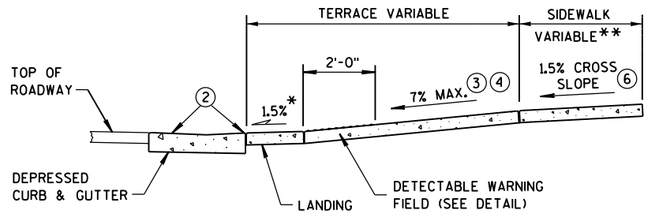


PLAN VIEW

TYPE 2 RAMP

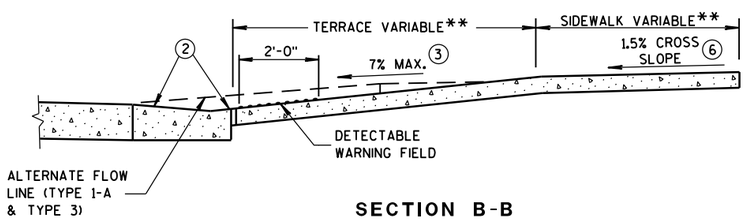
(ON LINE WITH SIDEWALK)

* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK



SECTION A-A

** WIDTH SHOWN ELSEWHERE IN THE PLANS



SECTION B-B

GENERAL NOTES

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/4-INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL NOT EXCEED 7%.

(3) ABSOLUTE MAXIMUM 12H:1V (8.33%) CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET.

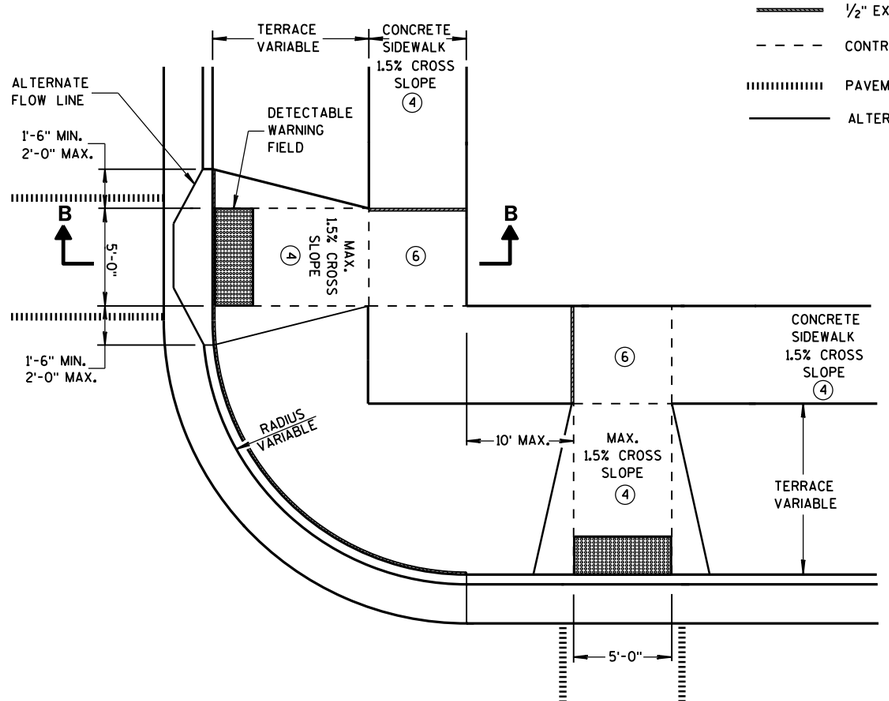
(7) WHEN THIS DISTANCE EXCEEDS 5 FEET, STAGGER ADDITIONAL DETECTABLE WARNING PANEL FORWARD TO REDUCE THIS DISTANCE. PROVIDE MINIMUM 12-INCH ROW OVERLAP TO AVOID SIDESTEP OF DOME DETECTION. USE EQUAL-SIZE PANELS TO DEVELOP OVERLAPPING, STAGGERED ROWS. ALIGN DOMES BETWEEN OVERLAPPING ROWS AND IN DIRECTION OF PEDESTRIAN TRAVEL.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

(9) WHEN THIS DISTANCE IS LESS THAN 6'-0", IT MAY BE DIFFICULT TO ACHIEVE A 7% SLOPE OR FLATTER ALONG THE RAMP. REDUCE CURB HEIGHT IN TRIANGLE AREA TO ACHIEVE 7% SLOPE OR FLATTER ON RAMP. CONSTRUCT 2-INCH MINIMUM CURB HEIGHT BETWEEN 10:1 FLARES.

LEGEND

- ½" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)
- ALTERNATIVE LAYOUT



PLAN VIEW

TYPE 3 RAMP

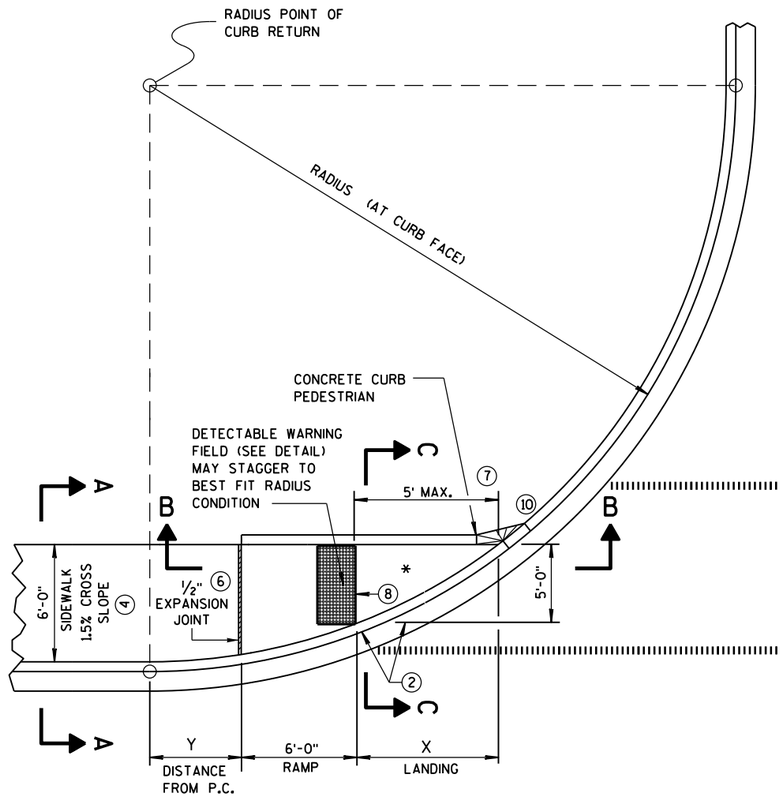
(OUTSIDE OF CROSSWALK AREA)

CURB RAMPS TYPES 2 AND 3

STATE OF WISCONSIN
DEPARTMENT OF TRANSPO

6

S.D.D. 8 D 5-18b

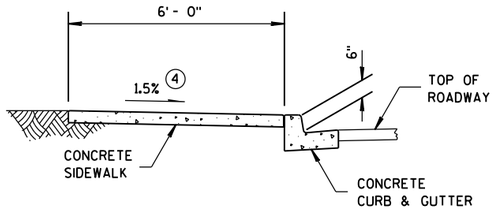


CURB RAMP TYPE 4A

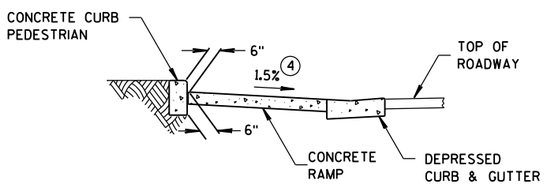
PLAN VIEW

RADIUS (AT CURB FACE)	X	Y
20 FEET	7'-11"	0'-2"
30 FEET	10'-2¾"	1'-7½"
40 FEET	12'-1¼"	2'-10"
50 FEET	13'-8¾"	3'-10¾"
60 FEET	15'-2"	4'-10¼"

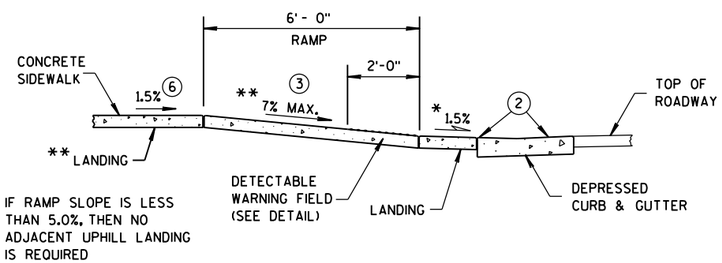
INTERMEDIATE RADII CAN BE INTERPOLATED



SECTION A-A FOR TYPE 4A



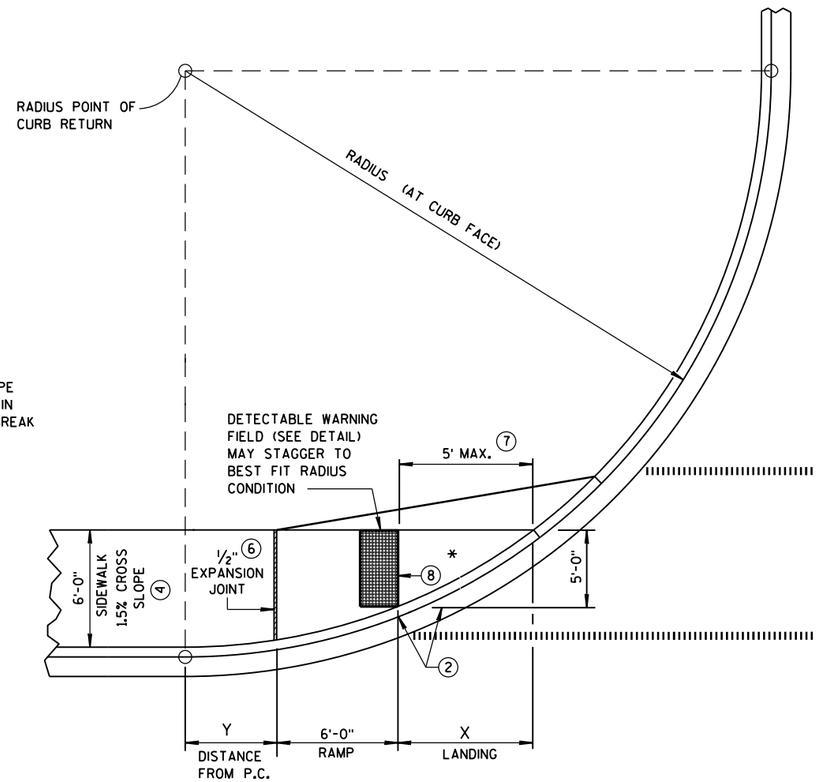
SECTION C-C FOR TYPE 4A



** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

SECTION B-B FOR TYPE 4A

* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK



CURB RAMP TYPE 4A1

PLAN VIEW

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/4-INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL NOT EXCEED 7%.

(3) ABSOLUTE MAXIMUM 12H:1V (8.33%) CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

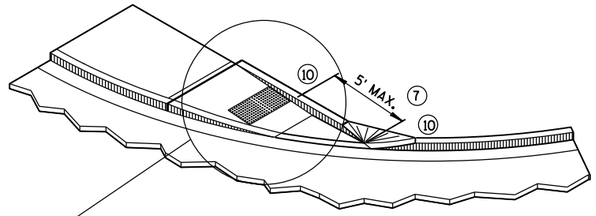
(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET.

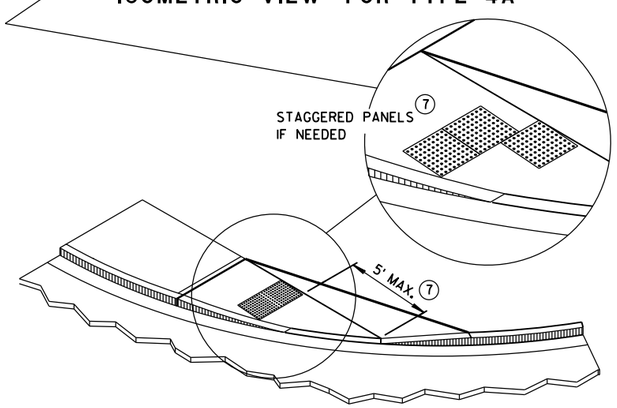
(7) WHEN THIS DISTANCE EXCEEDS 5 FEET, STAGGER ADDITIONAL DETECTABLE WARNING PANEL FORWARD TO REDUCE THIS DISTANCE. PROVIDE MINIMUM 12-INCH ROW OVERLAP TO AVOID SIDESTEP OF DOME DETECTION. USE EQUAL-SIZE PANELS TO DEVELOP OVERLAPPING, STAGGERED ROWS. ALIGN DOMES BETWEEN OVERLAPPING ROWS AND IN DIRECTION OF PEDESTRIAN TRAVEL.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

(10) INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.



ISOMETRIC VIEW FOR TYPE 4A



ISOMETRIC VIEW FOR TYPE 4A1

LEGEND

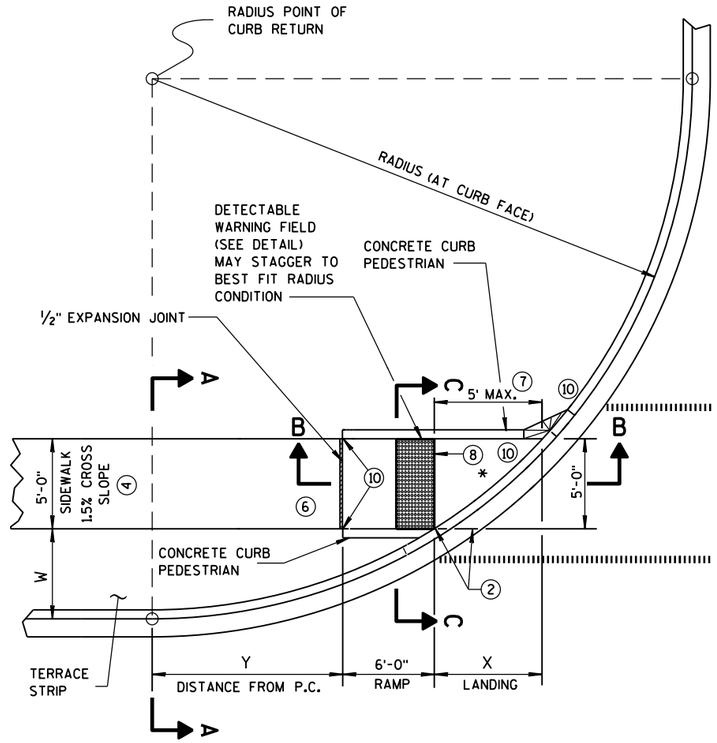
- ½" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)

CURB RAMPS
TYPES 4A AND 4A1

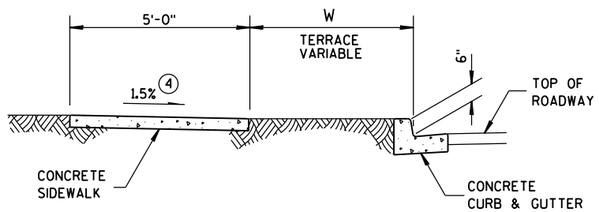
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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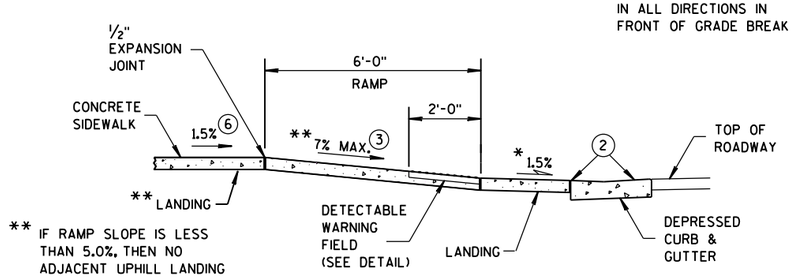
S.D.D. 8 D 5-18c



CURB RAMP TYPE 4B
PLAN VIEW



SECTION A-A FOR TYPE 4B



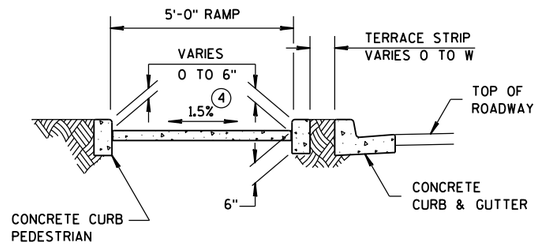
SECTION B-B FOR TYPE 4B

LEGEND

½" EXPANSION JOINT-SIDEWALK

CONTRACTION JOINT FIELD LOCATED

PAVEMENT MARKING CROSSWALK (WHITE)



SECTION C-C FOR TYPE 4B

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'-9¾"	3'-6½"	4'-11½"	5'-1¾"	4'-3¼"	6'-5½"	3'-8¾"	7'-6¾"	3'-3"	8'-6¼"
30 FEET	7'-9¼"	5'-10½"	6'-9½"	7'-11¼"	6'-0¼"	9'-8"	5'-5"	11'-1¾"	4'-10¾"	12'-5¾"
40 FEET	9'-4"	7'-10"	8'-2¾"	10'-3"	7'-4¾"	12'-3¾"	6'-8½"	14'-1¼"	6'-1¾"	15'-8½"
50 FEET	10'-8"	9'-6½"	9'-5½"	12'-3¼"	8'-6½"	14'-7½"	7'-9¾"	16'-8¼"	7'-2½"	18'-6¼"
60 FEET	11'-10¼"	11'-0¾"	10'-6½"	14'-1¼"	9'-6½"	16'-8½"	8'-9¼"	18'-11¾"	8'-1½"	21'-0½"

INTERMEDIATE RADII CAN BE INTERPOLATED

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼-INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL NOT EXCEED 7%.

(3) ABSOLUTE MAXIMUM 12H:1V (8.33%) CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

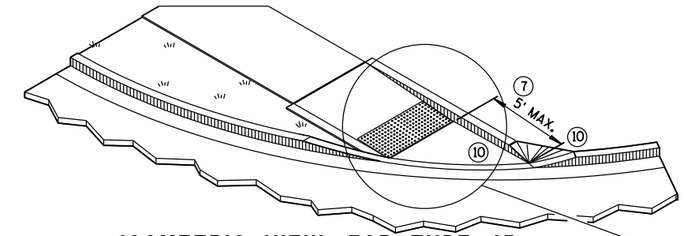
(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET.

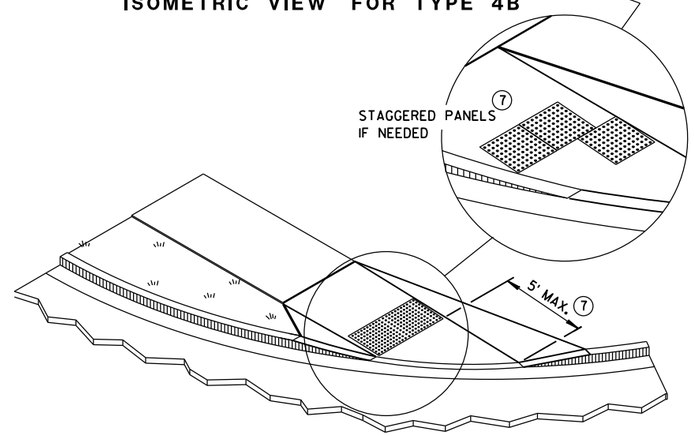
(7) WHEN THIS DISTANCE EXCEEDS 5 FEET, STAGGER ADDITIONAL DETECTABLE WARNING PANEL FORWARD TO REDUCE THIS DISTANCE. PROVIDE MINIMUM 12-INCH ROW OVERLAP TO AVOID SIDESTEP OF DOME DETECTION. USE EQUAL-SIZE PANELS TO DEVELOP OVERLAPPING, STAGGERED ROWS. ALIGN DOMES BETWEEN OVERLAPPING ROWS AND IN DIRECTION OF PEDESTRIAN TRAVEL.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

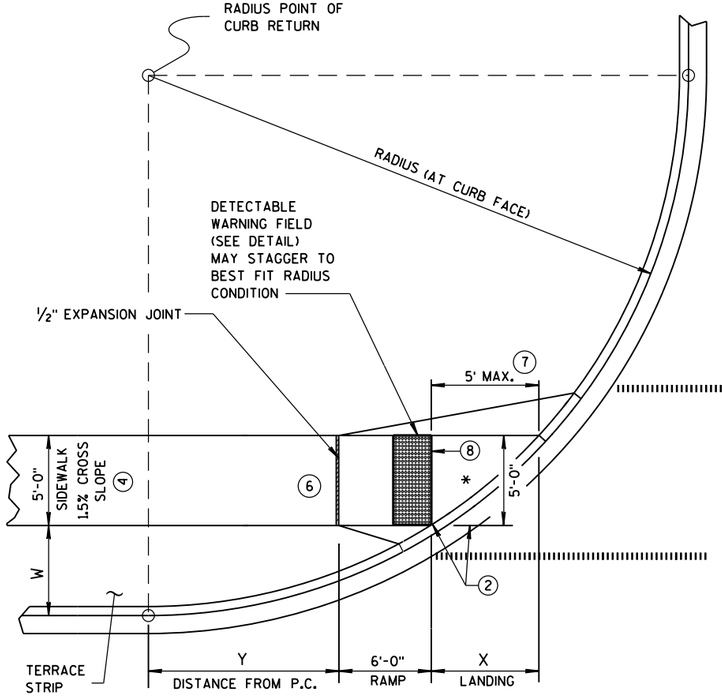
(10) INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.



ISOMETRIC VIEW FOR TYPE 4B



ISOMETRIC VIEW FOR TYPE 4B1



CURB RAMP TYPE 4B1
PLAN VIEW

CURB RAMPS
TYPE 4B AND 4B1

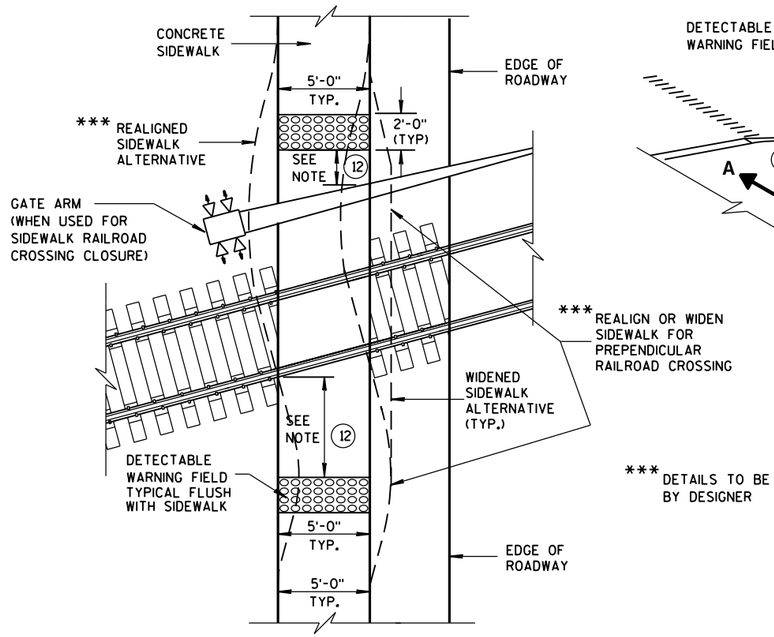
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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S.D.D. 8 D 5-18d

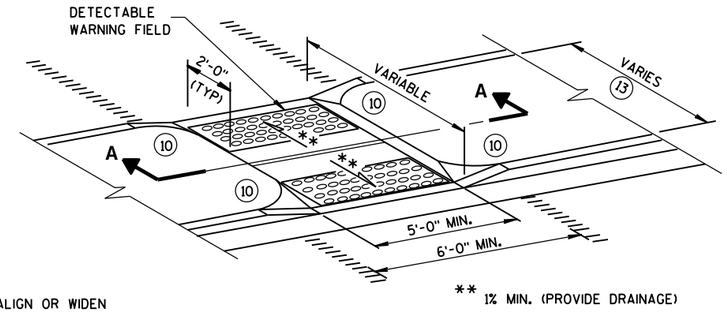
6

S.D.D. 8 D 5-18d



*** DETAILS TO BE DETERMINED BY DESIGNER

TYPE 8
DETECTABLE WARNINGS AT RAILROAD CROSSING



** 1% MIN. (PROVIDE DRAINAGE)

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.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/4-INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL NOT EXCEED 7%.

(3) ABSOLUTE MAXIMUM 12H:1V (8.33%) CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

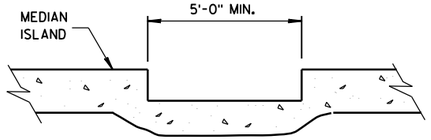
(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET.

(10) INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.

(11) SLOPE SIDEWALK TOWARD LANDING AS SHOWN WHERE THERE IS NO TERRACE OR WHERE THE TERRACE WIDTH IS LESS THAN 6 FEET WIDE.

(12) 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.

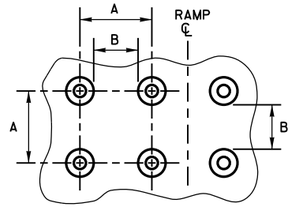
(13) DO NOT INSTALL DETECTABLE WARNING FIELDS IF MEDIAN WIDTH BETWEEN BACK OF CURBS IS LESS THAN 6 FEET.



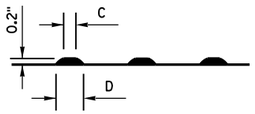
SECTION A-A

	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.

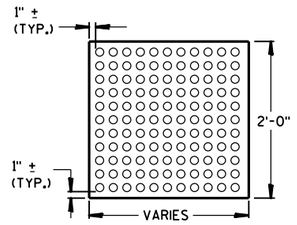


PLAN VIEW

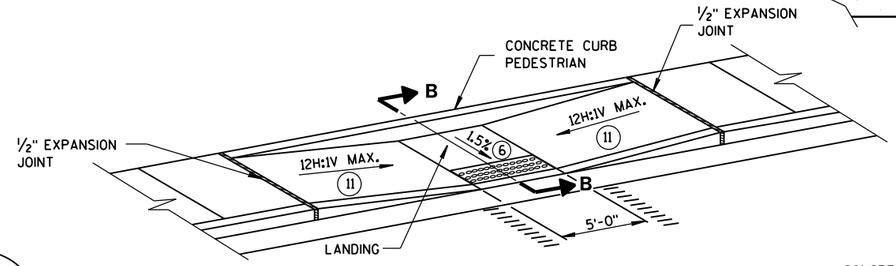


ELEVATION VIEW

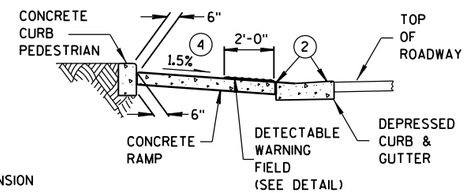
TRUNCATED DOMES
DETECTABLE WARNING PATTERN DETAIL



PLAN VIEW
DETECTABLE WARNING FIELD (TYPICAL)

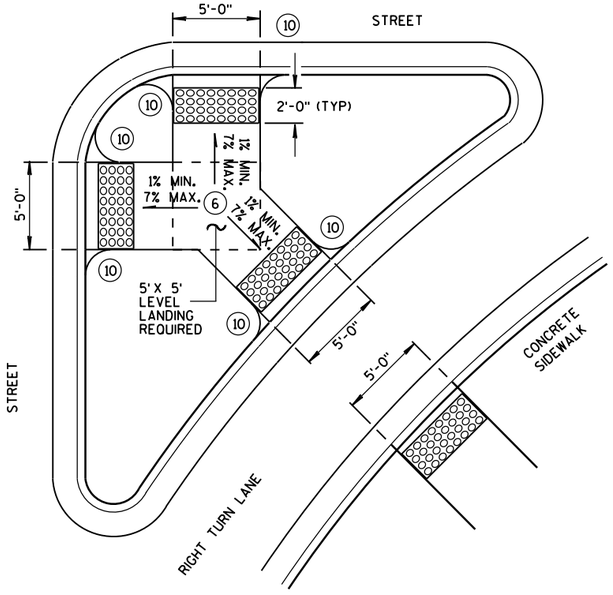


MID-BLOCK CROSSING
TYPE 7A

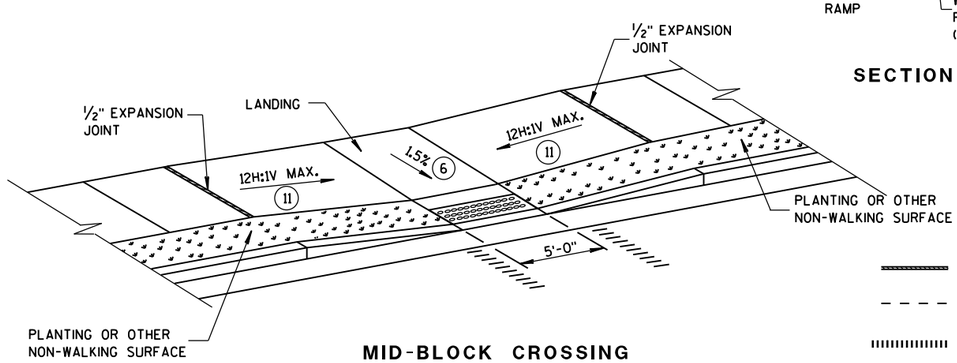


SECTION B-B

REFER TO GENERAL NOTES (2) AND (3) FOR ALL ISLAND CURB RAMPS



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

- 1/2" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)

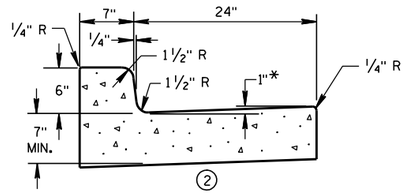
CURB RAMPS
TYPES 5, 6, 7A, 7B & 8

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

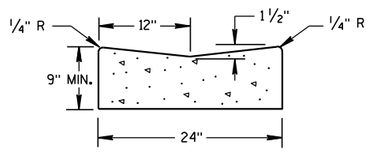
APPROVED
Sept., 2016
DATE
/S/ Rodney Taylor
ROADWAY STANDARDS UNIT SUPERV
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FHWA

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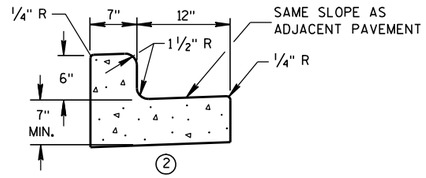
S.D.D. 8 D 5-18e



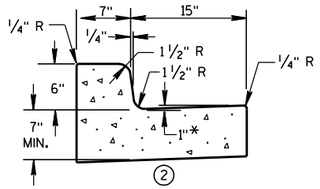
① CONCRETE CURB & GUTTER 31"



① CONCRETE GUTTER 24"

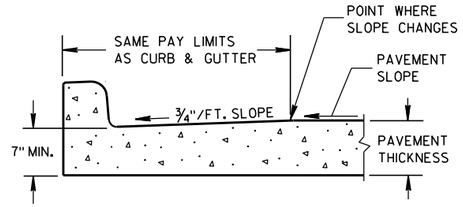


① CONCRETE CURB & GUTTER 19"



① CONCRETE CURB & GUTTER 22"

* TO BE MEASURED TO A MAXIMUM OF 3" WHERE DRAINAGE PROBLEMS EXIST.



PARTIAL SECTION OF PAVEMENT WITH INTEGRAL CURB & GUTTER

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.

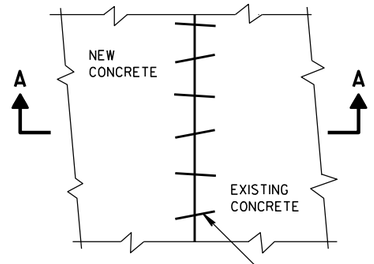
WHERE THE TRANSVERSE JOINTS IN THE PAVEMENT ARE REQUIRED TO BE SEALED, THE JOINTS IN THE INTEGRAL CURB AND GUTTER SHALL BE SEALED TO THE FACE OF CURB WITH THE SAME TYPE OF SEALANT. THE COST OF FURNISHING AND INSTALLING THIS SEALANT SHALL BE INCIDENTAL TO THE ITEM CONCRETE CURB AND GUTTER.

UNLESS OTHERWISE SHOWN ON THE TYPICAL CROSS SECTIONS, THE BASE COURSE AND UNCLASSIFIED EXCAVATION LIMITS ARE 2'-0" BEHIND THE BACK OF CURB.

① WHEN PLACED ADJACENT TO NEW CONCRETE, TIE BARS ARE REQUIRED FOR CURB AND GUTTER 31", 22", 19" AND CONCRETE GUTTER 24".

② THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE COURSE PROVIDED A 7" MIMIMUM GUTTER THICKNESS IS MAINTAINED.

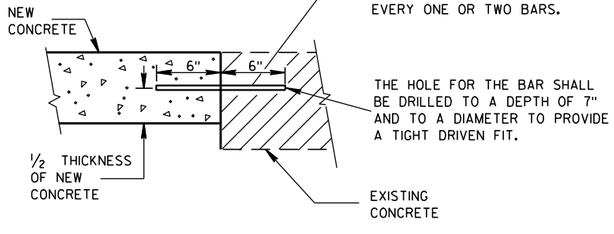
③ WHEN HIGH SIDE CURB SECTION IS REQUIRED, THE LOCATION(S) WILL BE NOTED ON THE PLAN.



PLAN VIEW

EXISTING AND NEW CONCRETE MAY BE CURB & GUTTER, SURFACE DRAIN, PAVEMENT OR OTHER CONCRETE STRUCTURE.

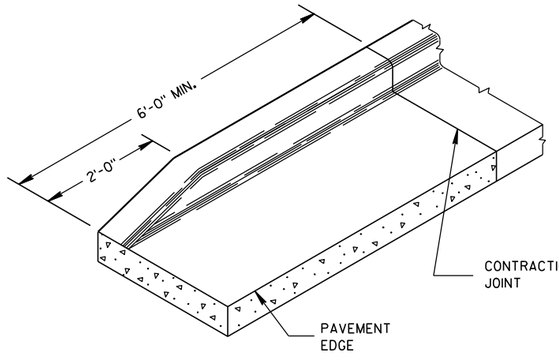
NO. 6 X 12" DEF. BARS SPACED 3'-0" C-C, INSTALLED ON 6:1 SKEW HORIZONTALLY. DIRECTION OF SKEW ALTERNATING AFTER EVERY ONE OR TWO BARS.



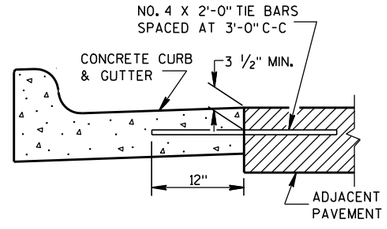
THE HOLE FOR THE BAR SHALL BE DRILLED TO A DEPTH OF 7" AND TO A DIAMETER TO PROVIDE A TIGHT DRIVEN FIT.

SECTION A-A

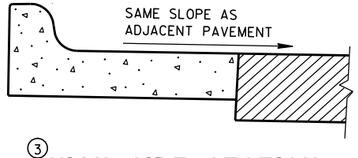
PAVEMENT TIES



END SECTION CURB & GUTTER



① TYPICAL TIE BAR LOCATION



③ HIGH SIDE SECTION

(TYPICAL FOR ALL CURB & GUTTER)

CONCRETE GUTTER, CURB AND GUTTER AND PAVEMENT TIES

(For Optional Use in Milwaukee Co. Only)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

11/2/2010 — DATE

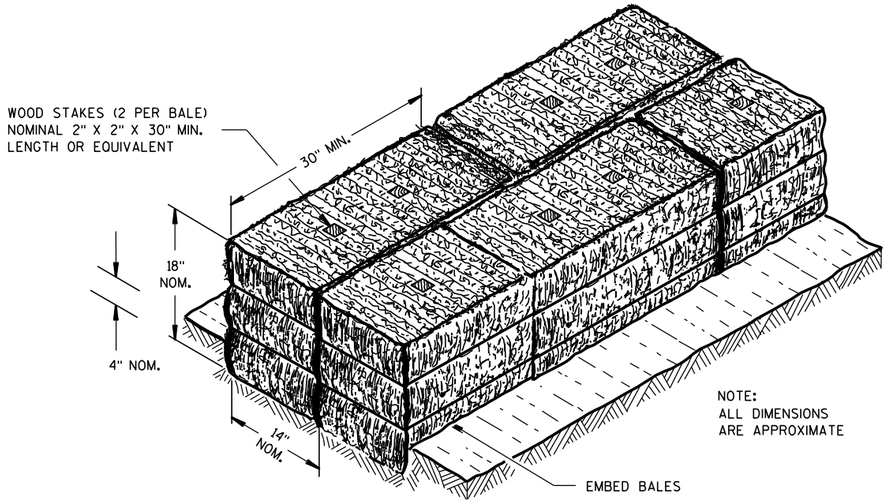
/S/ Jerry Zoch — ROADWAY STANDARDS ENGINEER

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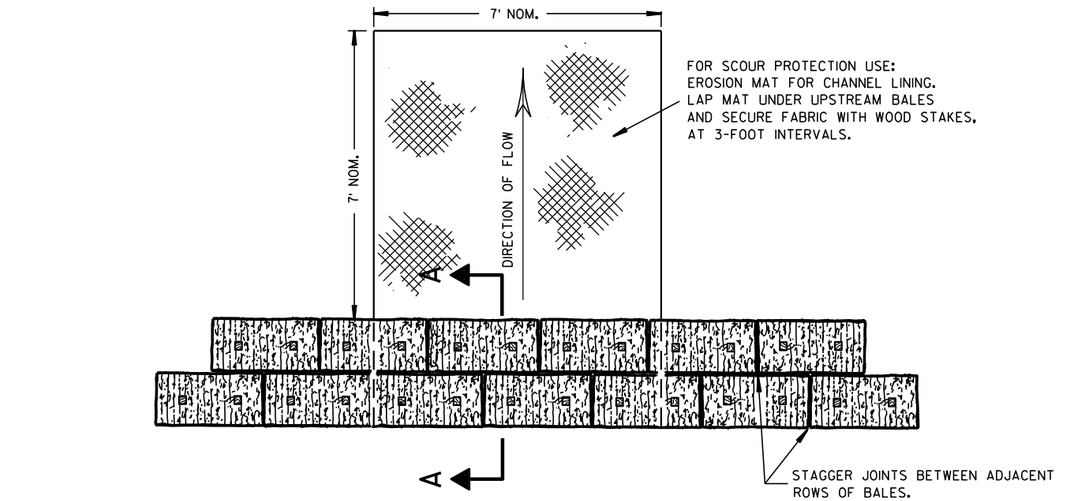
FHWA

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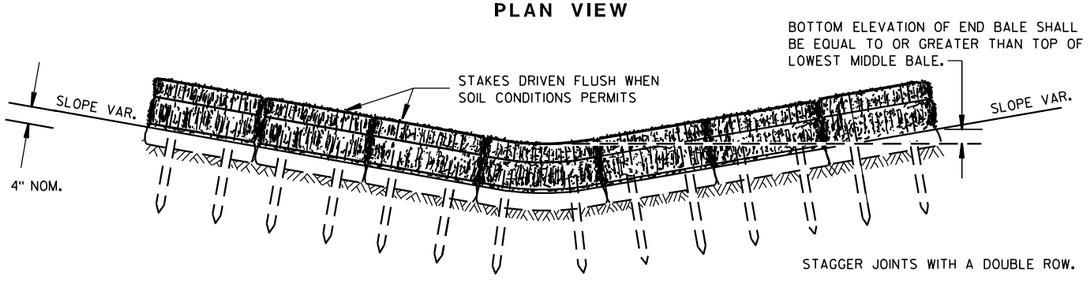
S.D.D. 8 D 16-10



SECTION A-A



PLAN VIEW



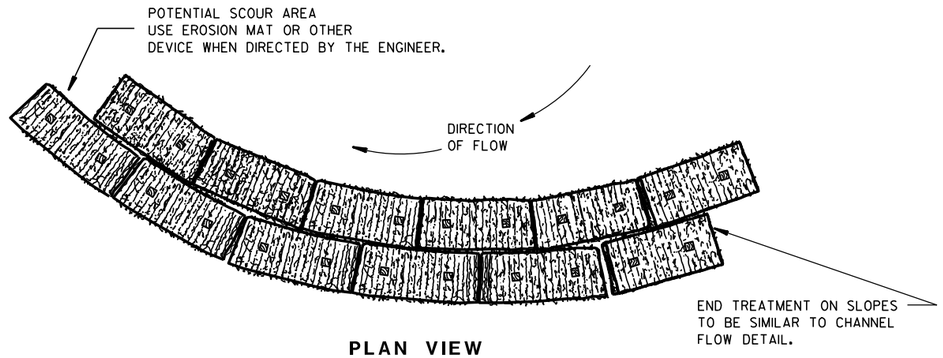
FRONT ELEVATION

TEMPORARY DITCH CHECK USING EROSION BALES (1)

GENERAL NOTES

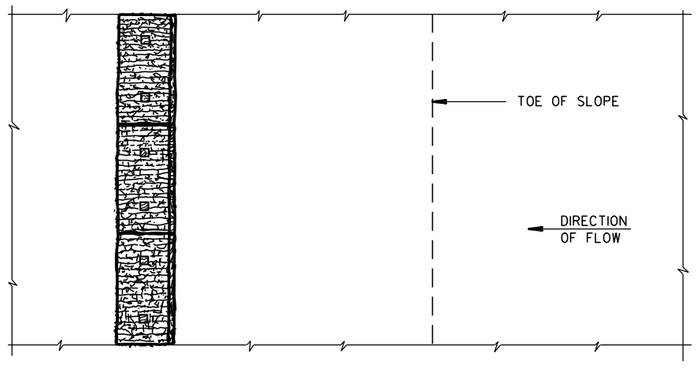
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

(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.

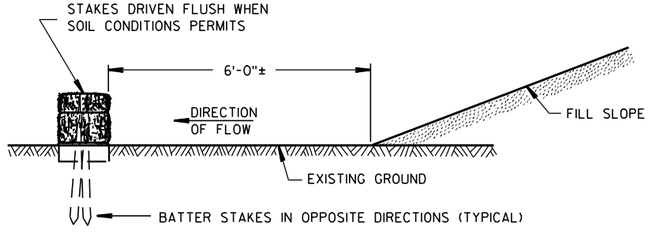


PLAN VIEW

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

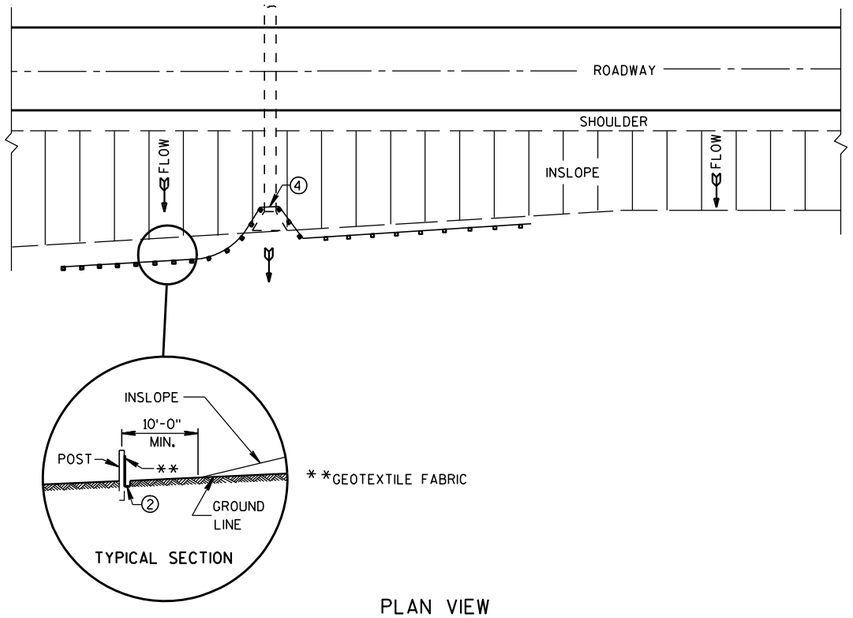
FHWA

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S.D.D. 8 E 8-3

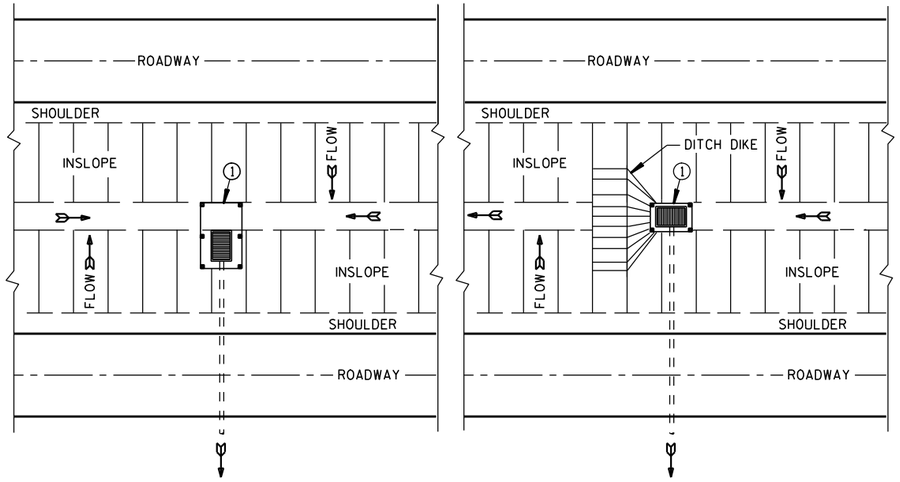
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S.D.D. 8 E 8-3



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.

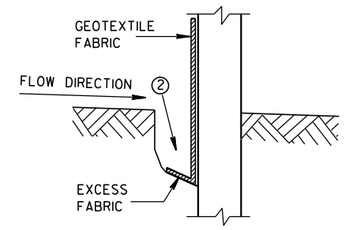
① HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.

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.

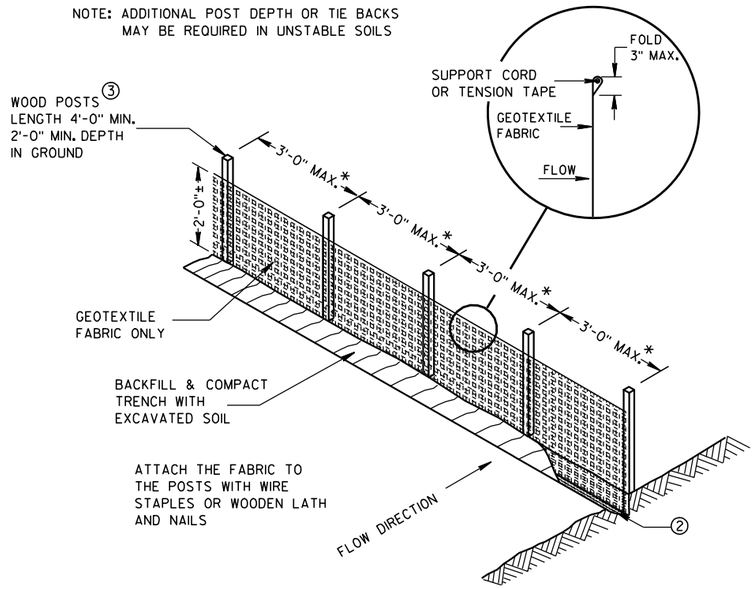
③ WOOD POSTS SHALL BE A MINIMUM SIZE OF 1⅛" X 1⅛" OF OAK OR HICKORY.

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.

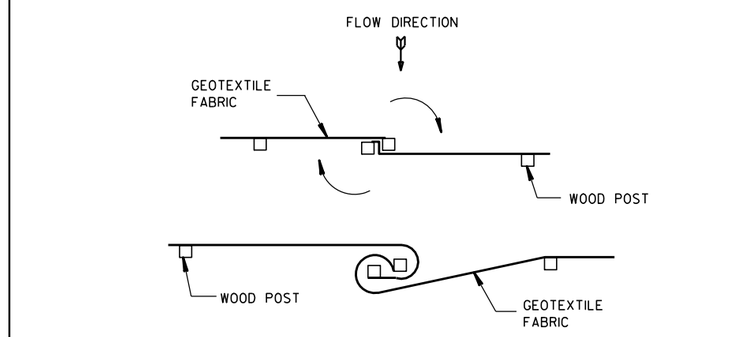


TRENCH DETAIL

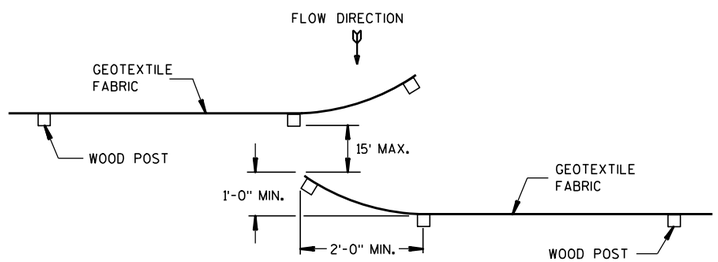


*NOTE: 8'-0" POST SPACING ALLOWED IF A WOVEN GEOTEXTILE FABRIC IS USED.

SILT FENCE

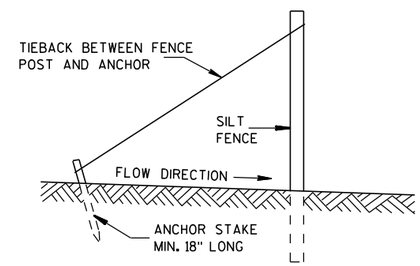


TWIST METHOD



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

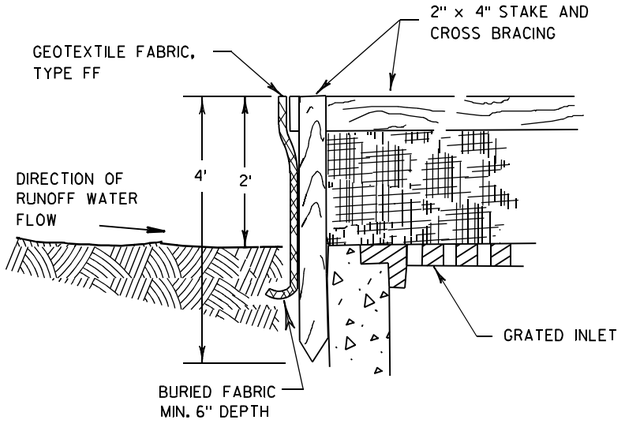
APPROVED
4-29-05 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

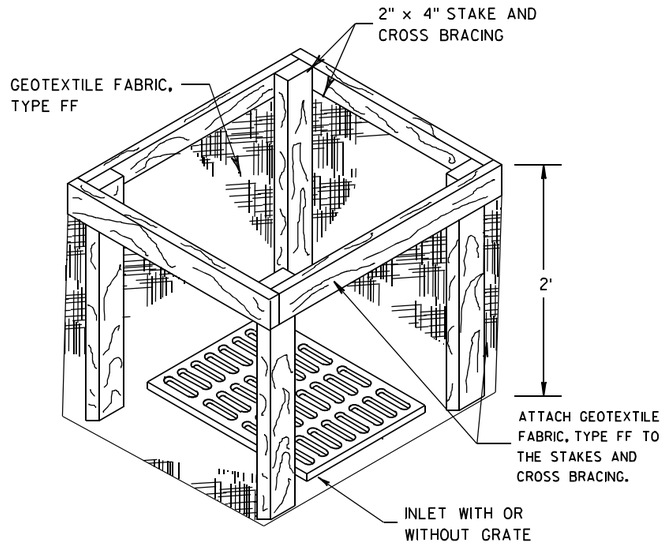
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S.D.D. 8 E 9-6

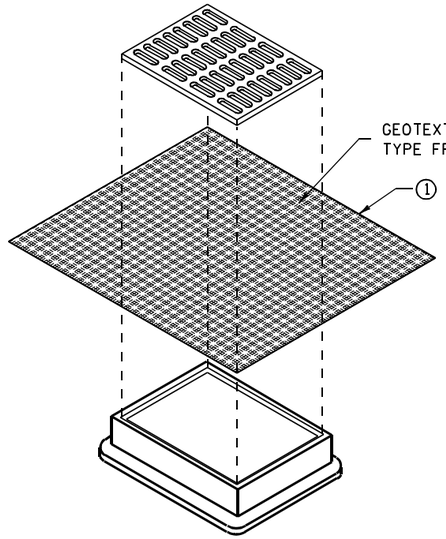
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S.D.D. 8 E 9-6



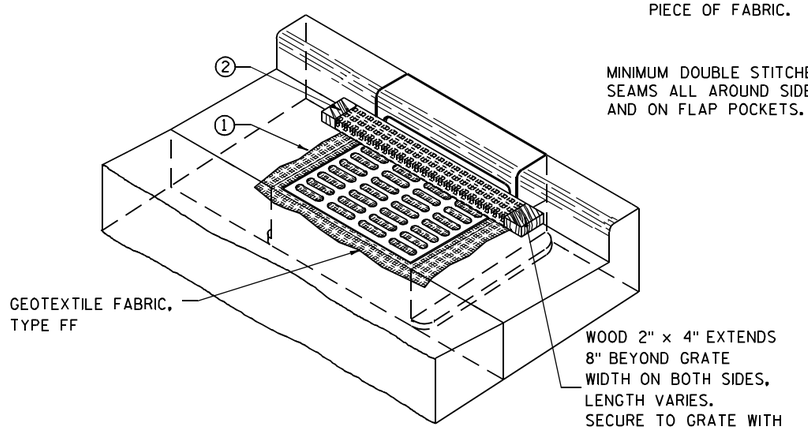


INLET PROTECTION, TYPE A

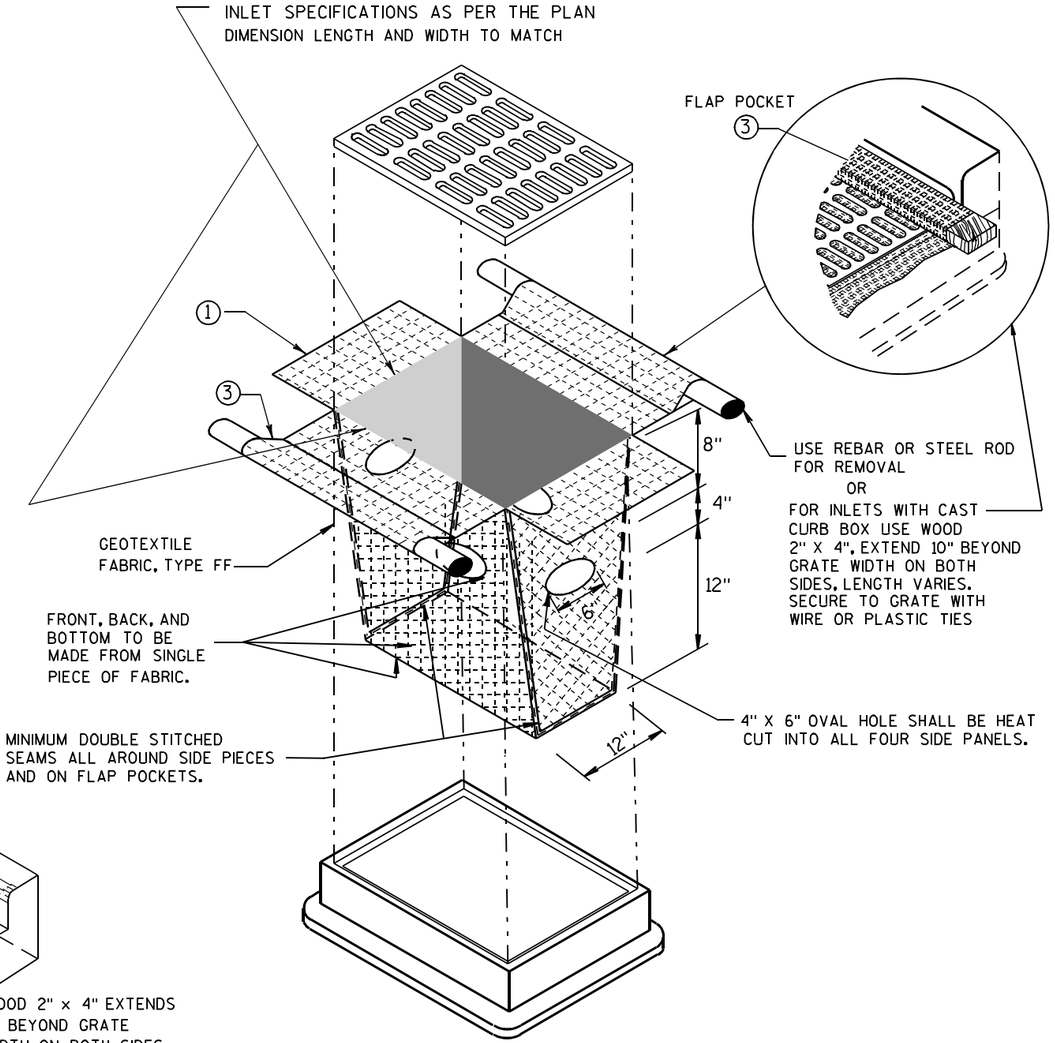


INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)

(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

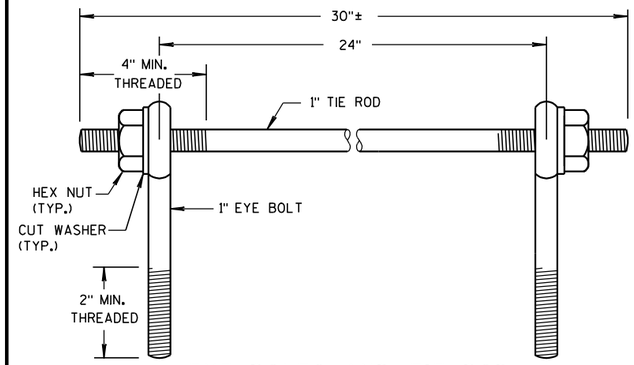
FHWA

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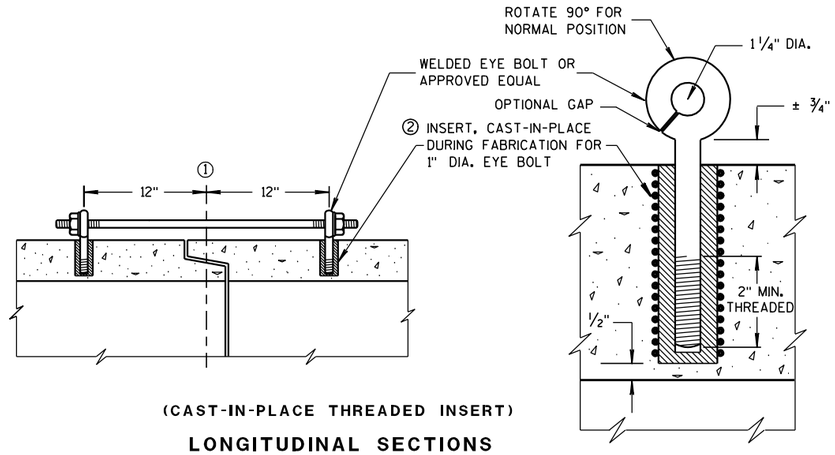
S.D.D. 8 E 10-2

6

S.D.D. 8 E 10-2



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.

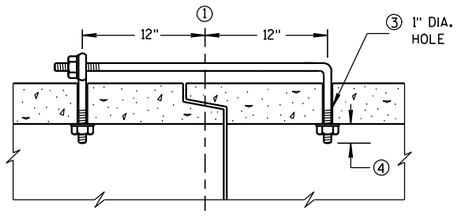
② THE INSIDE OF THE THREADED INSERTS SHALL BE CLEAN TO ALLOW THE INSERTION OF THREADED EYE BOLTS.

③ HOLES SHALL BE CAST-IN-PLACE OR DRILLED 12 INCHES FROM ℄ OF TONGUE AND GROOVE.

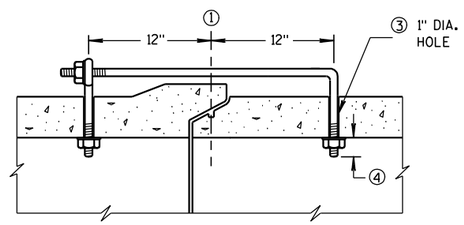
④ BOLT PROJECTION INSIDE OF PIPE SHALL NOT EXCEED 2 INCHES.

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)

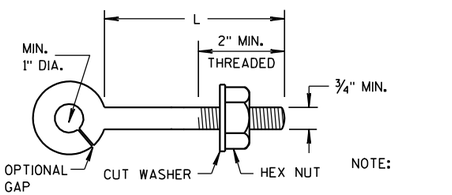


(MODIFIED BELL PIPE)

LONGITUDINAL SECTION

EYE BOLT DIMENSION TABLE

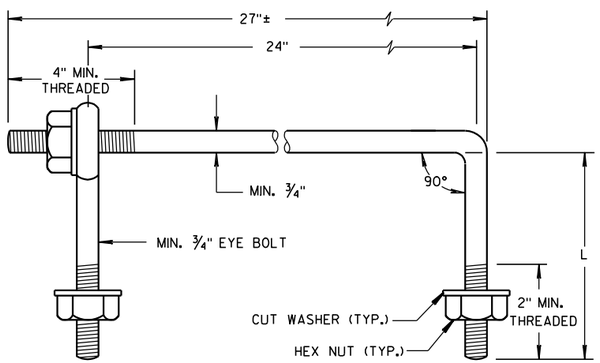
PIPE SIZE	L = LENGTH	
	TONGUE & GROOVE PIPE	MODIFIED BELL PIPE
18" TO 24"	4 1/2"	6 1/4"
30"	5"	7"
36"	5 1/2"	7"
42"	6"	
48"	6 1/2"	
60"	7 1/2"	
66"	8"	



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

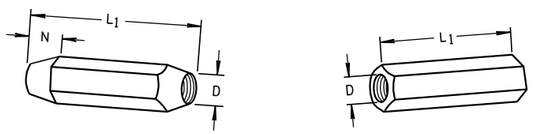
(JOINT TIES FOR 18" TO 66" DIA. CONCRETE PIPE)

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

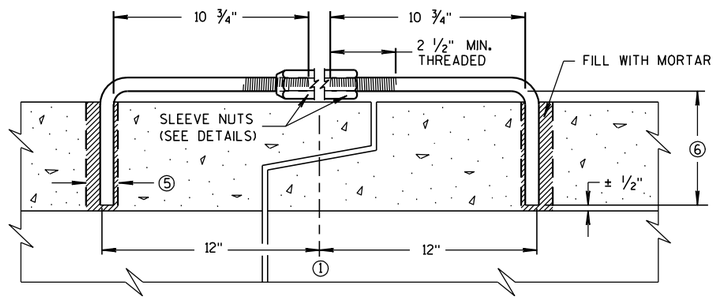
DIMENSIONS SHOWN ARE IN INCHES



TAPERED PLAIN

RIGHT AND LEFT THREADS

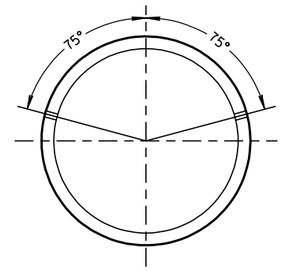
SLEEVE NUTS



LONGITUDINAL SECTION

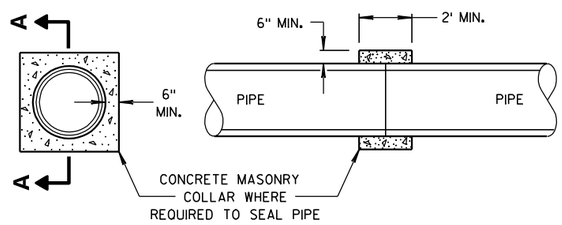
(JOINT TIES FOR 12" TO 108" DIA. CONCRETE PIPE)

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

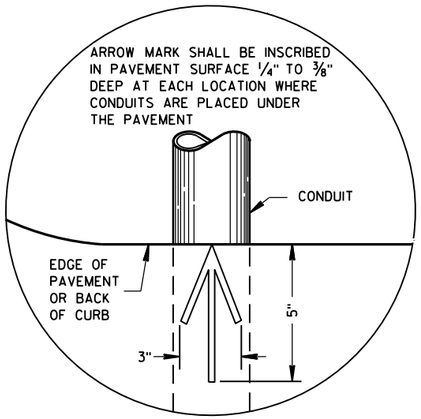
APPROVED
6/5/2012 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER
345
FHWA

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S.D.D. 8 F 4-7

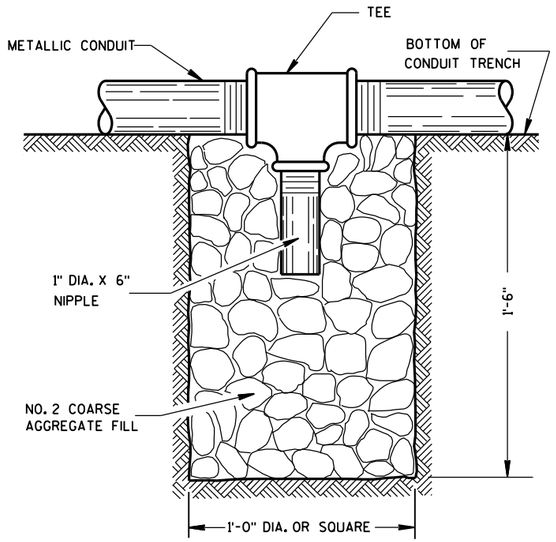
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S.D.D. 8 F 4-7



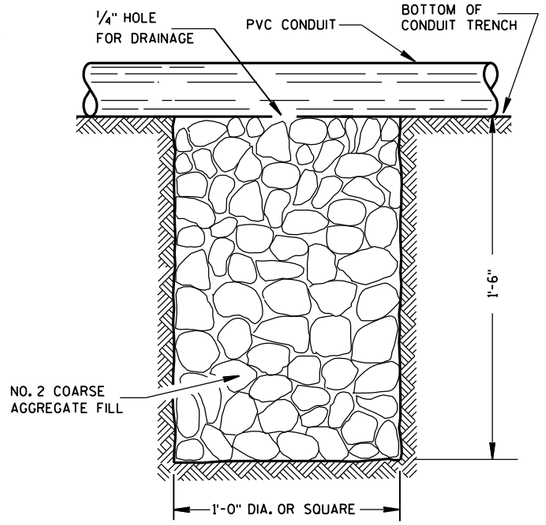
PLAN VIEW

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.

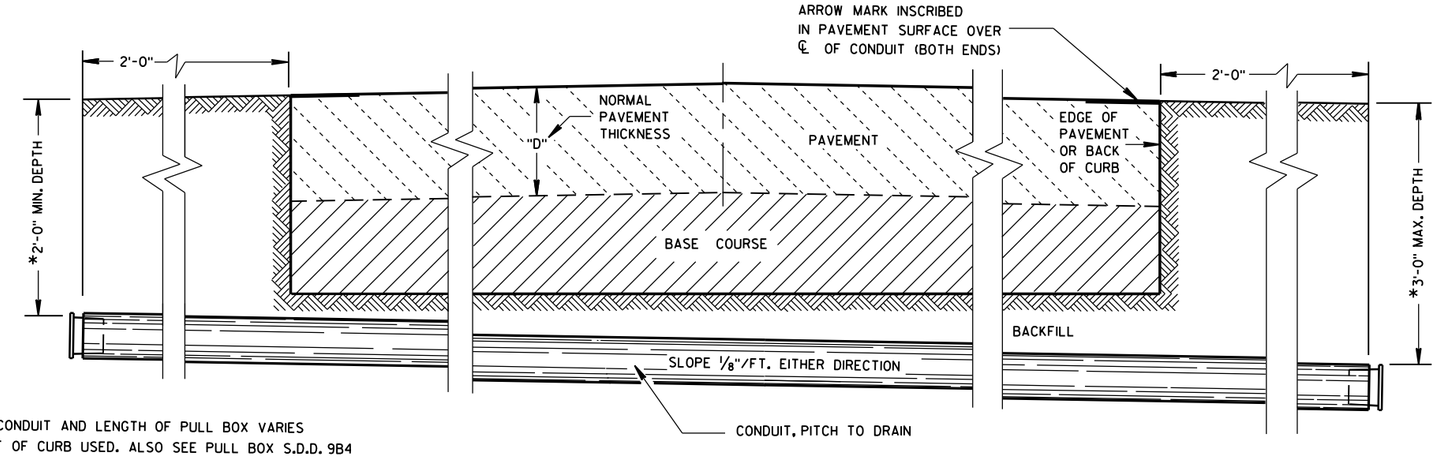
PRIOR TO CONDUIT ACCEPTANCE, CONDUIT CAPS OR PLUGS SHALL BE REMOVED, AND THE CAPS, PLUGS AND CONDUIT ENDS SHALL BE THOROUGHLY CLEANED AND THEN THE CAPS OR PLUGS REINSTALLED TO ENSURE THAT THE CAPS OR PLUGS CAN BE EASILY REMOVED IN THE FUTURE.

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.).

TRACER 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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2015 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

6

S.D.D. 9 B 2-9

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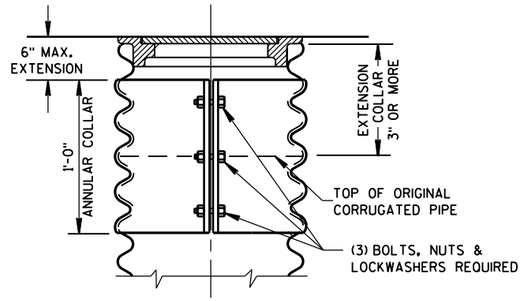
S.D.D. 9 B 2-9

TABLE OF NOMINAL DIMENSIONS AND WEIGHTS

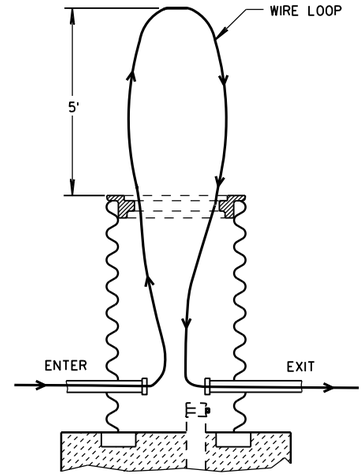
DIMENSION IN INCHES		CORRUGATED STEEL PIPE								
PIPE DIAMETER (INSIDE)	A	12	12	12	18	18	18	24	24	24
PIPE LENGTH **	B	24	30	36	24	30	36	36	42	48
WALL THICKNESS	C	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064
COVER	D	10 1/4	10 1/4	10 1/4	16 1/4	16 1/4	16 1/4	22 1/4	22 1/4	22 1/4
FRAME	E	14 1/2	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.

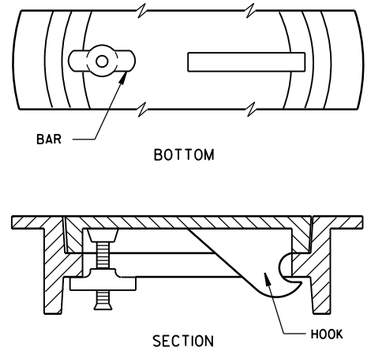
** NORMALLY USED LENGTHS. THE PROJECT ENGINEER SHALL DETERMINE IF PIPE LENGTHS, OTHER THAN THOSE SPECIFIED, SHALL BE USED, TO A MAXIMUM OF 48" (CONTINUOUS LENGTH, NON-SPLICED). THE ADDITIONAL LENGTH SHALL BE INCIDENTAL TO THE PULL BOX BID PRICE.



CORRUGATED PIPE EXTENDER

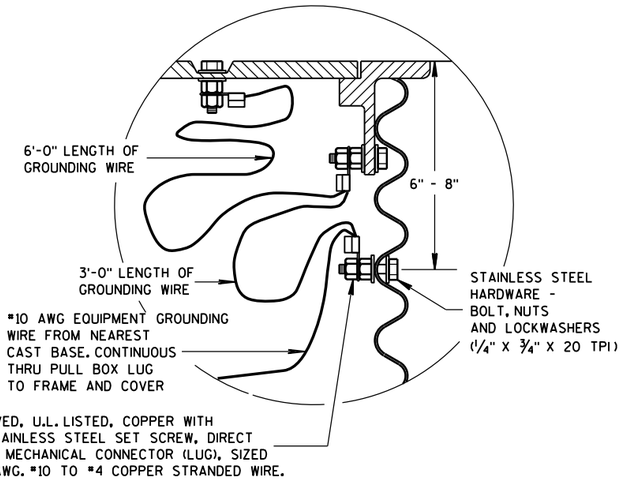


MEASUREMENT DETAIL FOR WIRE/CABLE IN THE PULL BOX

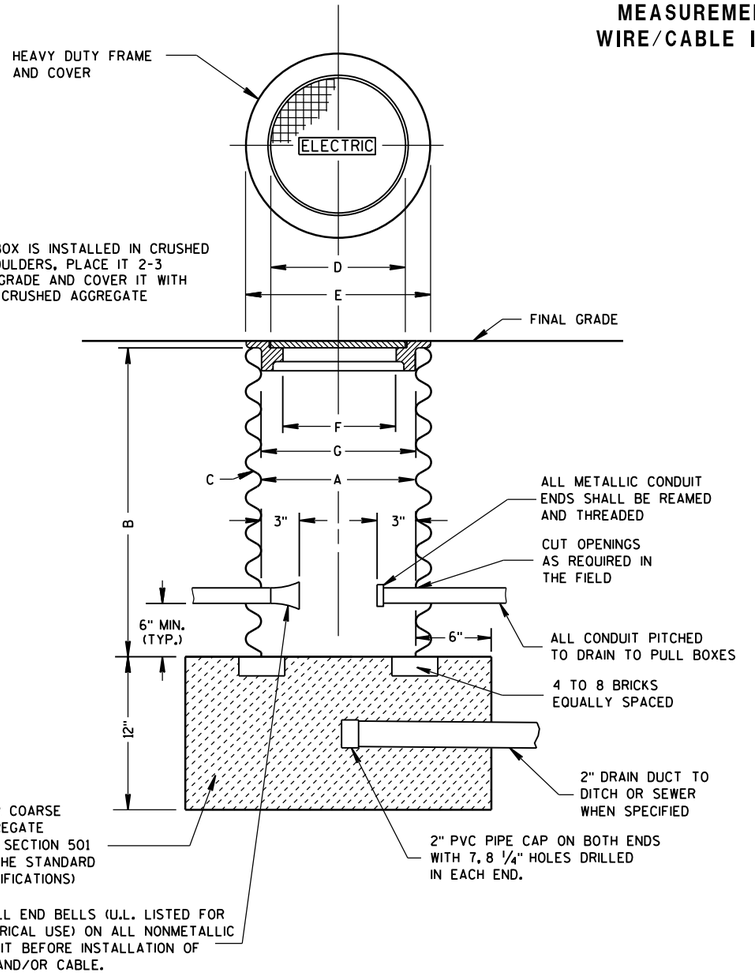


ALTERNATE COVER (LOCKING)

TIGHTENING BAR TYPE



EQUIPMENT GROUNDING LUG AND LOCATION IN STEEL PULL BOXES



PULL BOX

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.

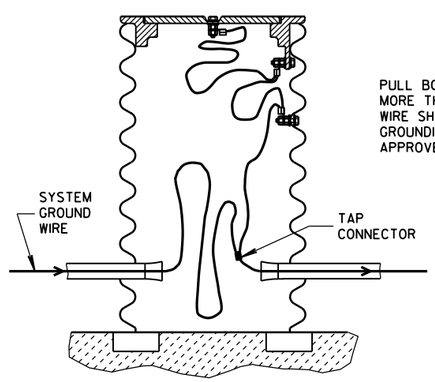
ENTRANCE HOLES INTO PULL BOXES SHALL BE CUT WITH A CIRCULAR HOLE SAW OR HYDRAULIC CONDUIT PUNCH. HOLE SIZE SHALL BE THE OUTSIDE DIAMETER OF THE CONDUIT THAT IS TO FIT IN THE OPENING PLUS NO MORE THAN 1/4".

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

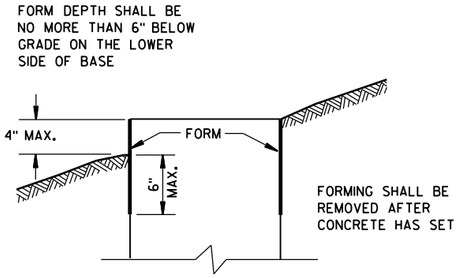
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FORMING DETAIL

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.

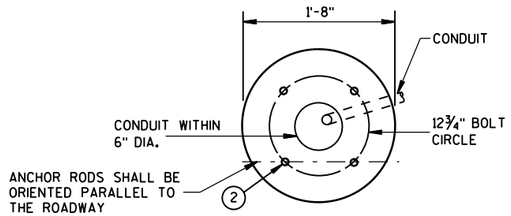
(4) (6) NO. 6 X 6'-8" BAR STEEL REINFORCEMENT.

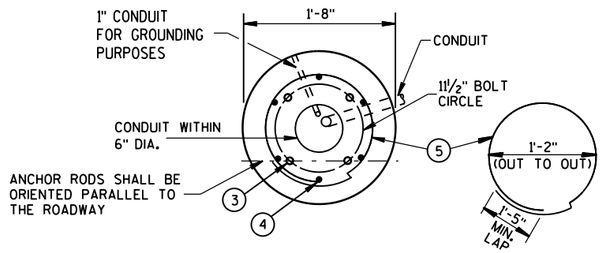
(5) (7) NO. 4 X 5'-1" BAR STEEL REINFORCEMENT @ 1'-0" C-C.

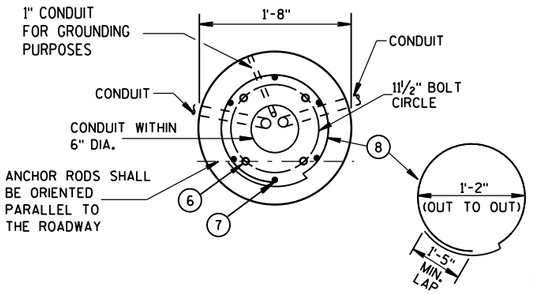
(6) (4) 1" DIA. X 3'-6" ANCHOR RODS.

(7) (6) NO.4 X 4'-8" BAR STEEL REINFORCEMENT.

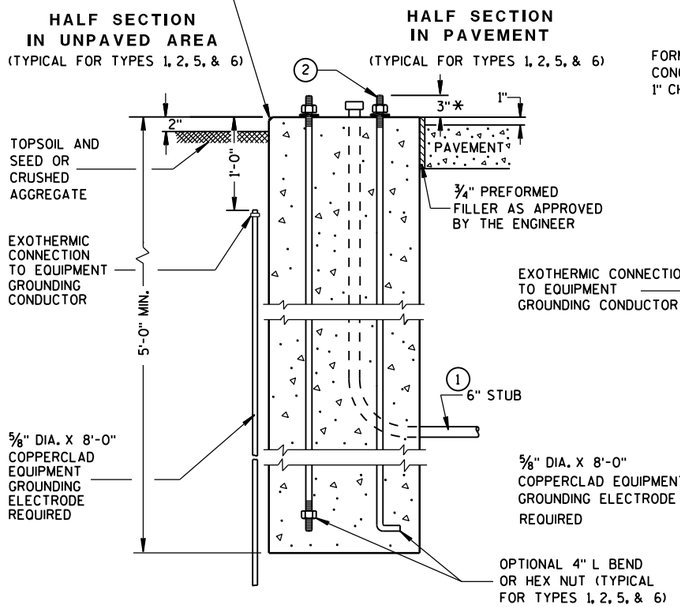
(8) (5) NO. 4 X 5'-1" BAR STEEL REINFORCEMENT @ 1'-0" C-C.



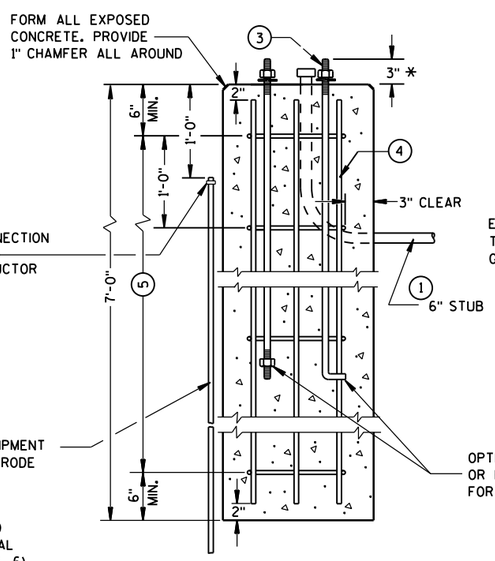




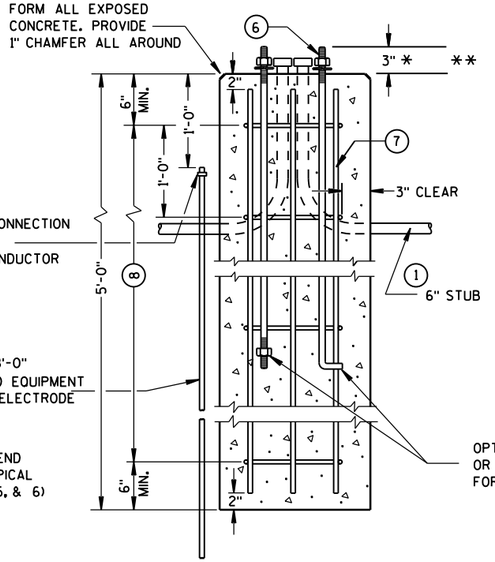
HALF SECTION IN UNPAVED AREA
(TYPICAL FOR TYPES 1, 2, 5, & 6)



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

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DEPARTMENT OF TRANSPORTATION

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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.

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.

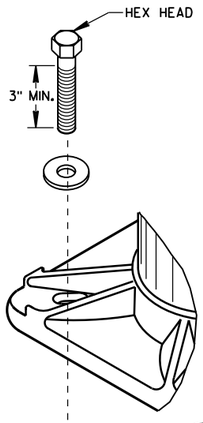
THE MECHANICAL CONNECTOR SHALL BE INSTALLED USING A 1/4" - 20 (TPI) STAINLESS STEEL HEX HEAD BOLT OF SUFFICIENT LENGTH TO FIRMLY ATTACH THE LUG TO THE BASE.

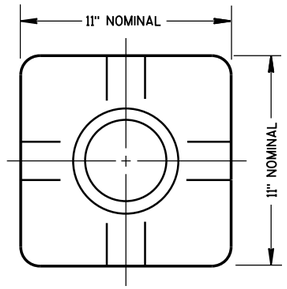
SHOULD THE MANNER OF ATTACHMENT OF THE LUG REQUIRE WASHERS, HEX NUTS, LOCK WASHER - THEY SHALL BE STAINLESS STEEL AS IS THE BOLT. THE MANNER OF ATTACHMENT SHALL NOT BLOCK ACCESSIBILITY TO WIRE PLACEMENT IN THE CONNECTOR.

PEDESTAL BASE COLLAR THREADING SHALL BE TAPERED AND IN ACCORDANCE WITH NATIONAL PIPE THREADING DIMENSIONS.

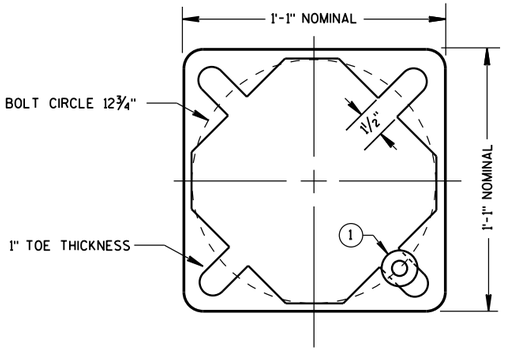
BASE COLLAR THREADING SHALL EXTEND INTO THE BASE COLLAR WITH SUFFICIENT DEPTH TO ACCEPT THE INSTALLATION OF TRAFFIC SIGNAL STANDARDS TO A DEPTH OF 1 1/2", THEN TIGHTENING TO A POINT OF BEING IMMOVABLE.

THE ACCESS DOOR SHALL BE OF THE SAME MATERIAL AS THE BASE.

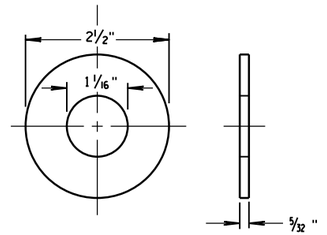




TOP VIEW
(PEDESTAL BASE)

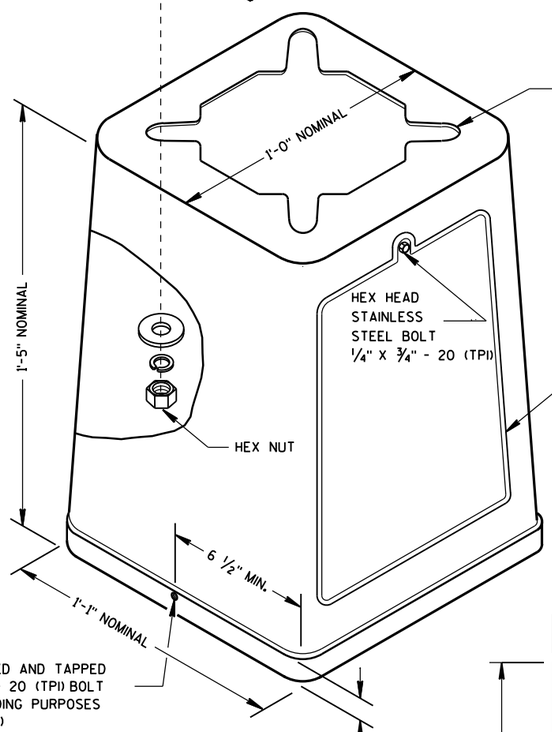


BOTTOM VIEW
(PEDESTAL BASE)

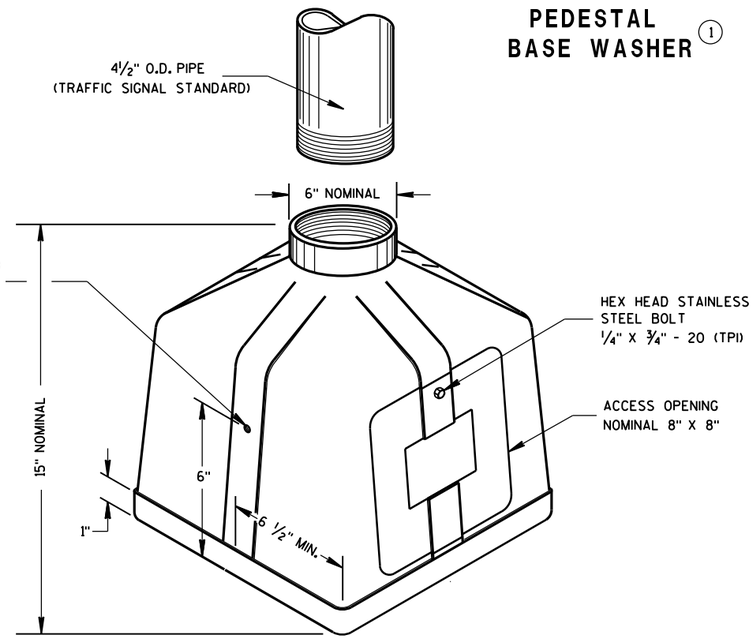


ZINC COATED STEEL WASHER
TO BE PROVIDED BY THE CONTRACTOR

PEDESTAL BASE WASHER (1)

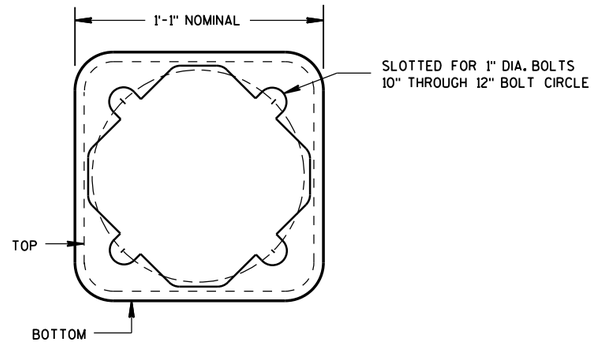


ISOMETRIC VIEW

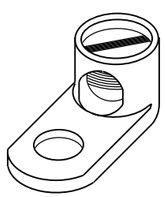


ISOMETRIC VIEW

PEDESTAL BASE



BOTTOM VIEW
(TRANSFORMER BASE)

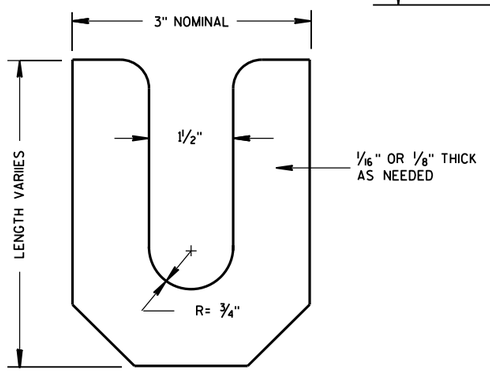


TYPICAL MECHANICAL CONNECTOR LUG

TO BE FURNISHED WITH EACH BASE

TRANSFORMER BASE

INTENDED FOR USE WITH TYPE 2, 3, 4, 5 & 6 POLES



LEVELING SHIM

TRANSFORMER/PEDESTAL BASES

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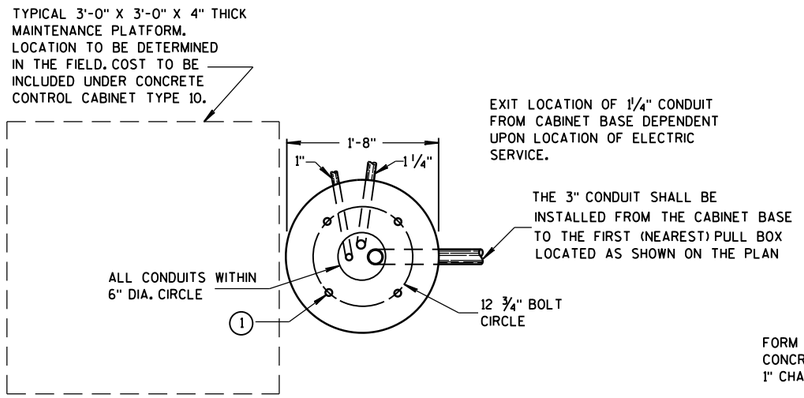
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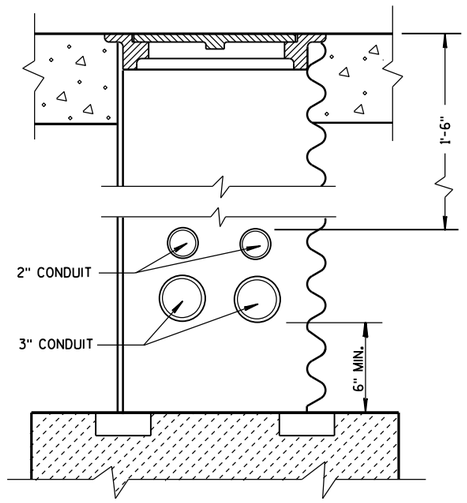
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S.D.D. 9 C 3-4

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)

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.

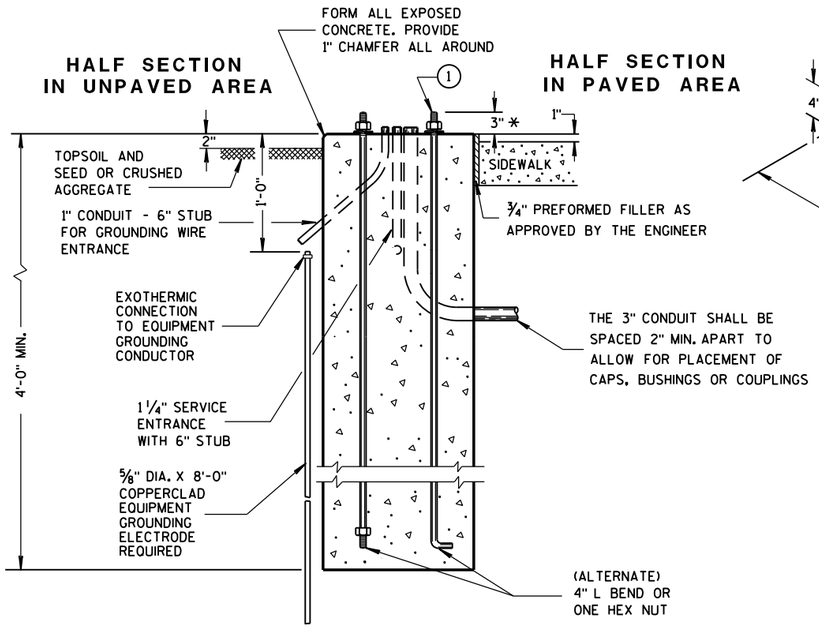
STRAIGHT ANCHOR RODS SHALL BE THREADED 12" IN LENGTH ON EACH END OF THE ROD.

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.

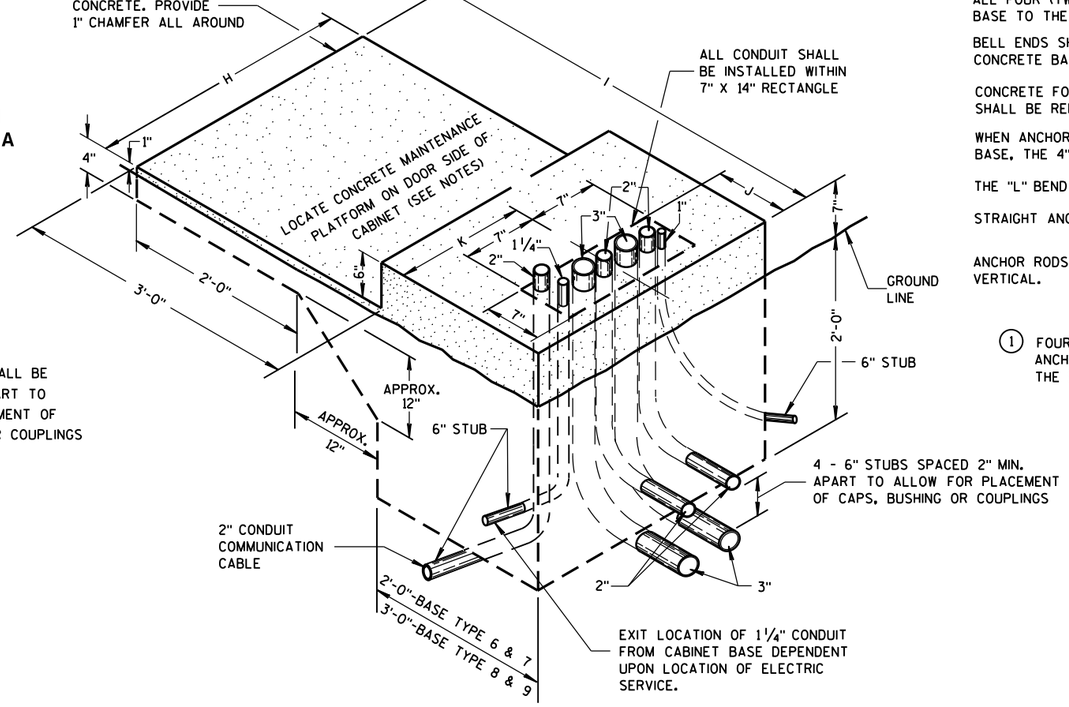
HALF SECTION IN UNPAVED AREA

HALF SECTION IN PAVED AREA



TYPE 10

* ANY ANCHOR ROD PROJECTION SHORTER THAN 2¾" OR LONGER THAN 3¼" SHALL REQUIRE THE BASE TO BE REMOVED AND REPLACED AT THE CONTRACTORS EXPENSE.



TYPE 6,7,8 AND 9
(ISOMETRIC VIEW)

CONCRETE CONTROL CABINET BASES

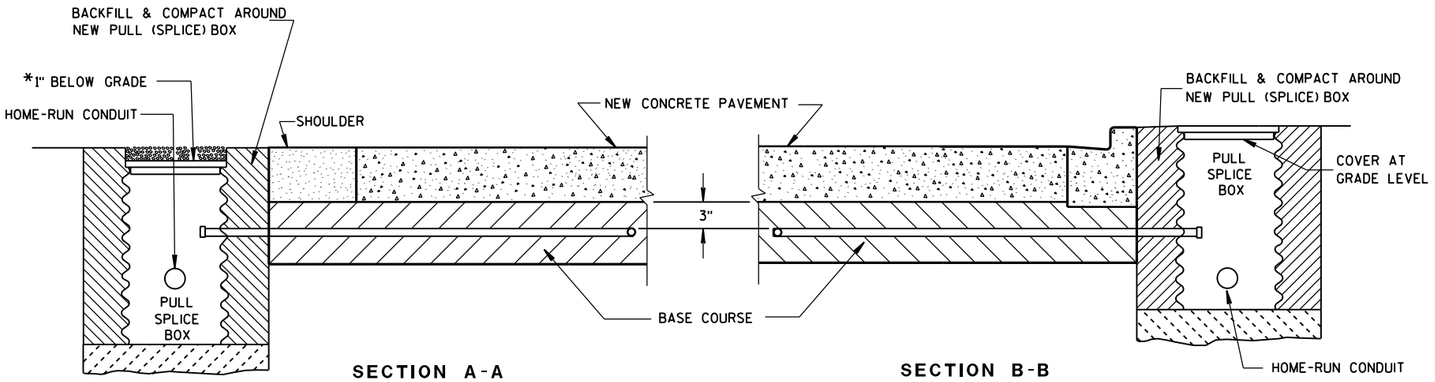
CONCRETE CONTROL CABINET BASES

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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.

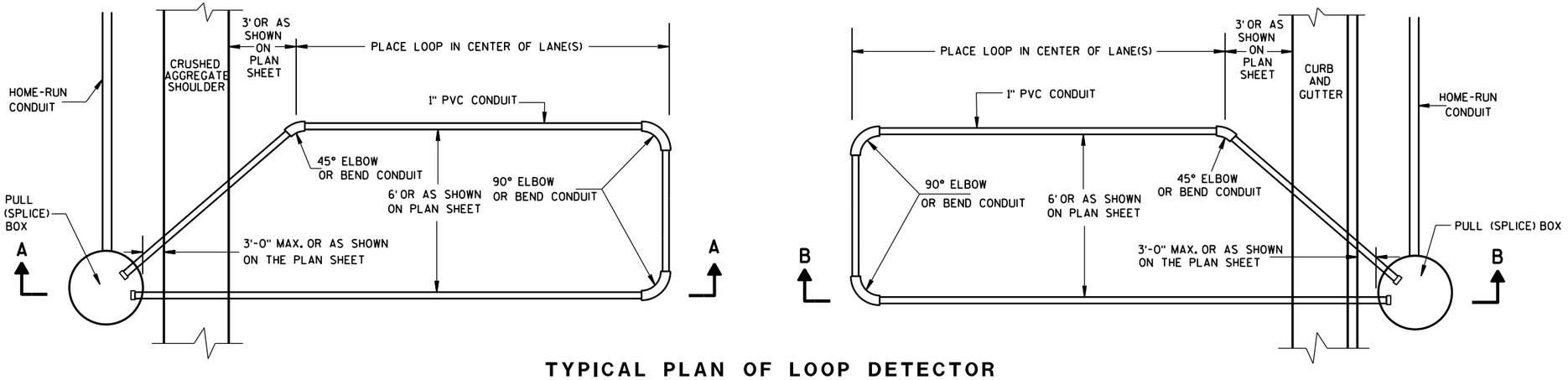
THE #12 AWG. LOOP WIRE IN THE PULL (SPLICE) BOX SHALL BE HAND TWISTED AT LEAST 3 TWISTS PER FOOT BEFORE BEING SPLICED TO THE LOOP LEAD-IN CABLE.

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

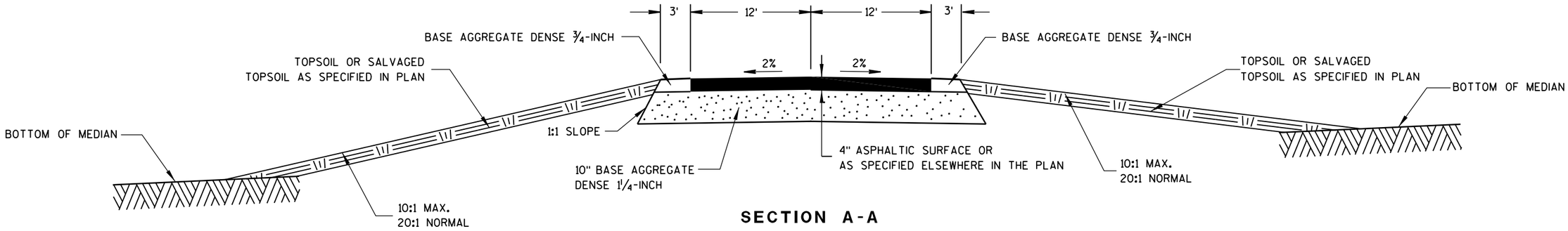
APPROVED
Sept. 2014
DATE
/S/ Ahmet Demirbilek
STATE ELECTRICAL 351
FHWA

6

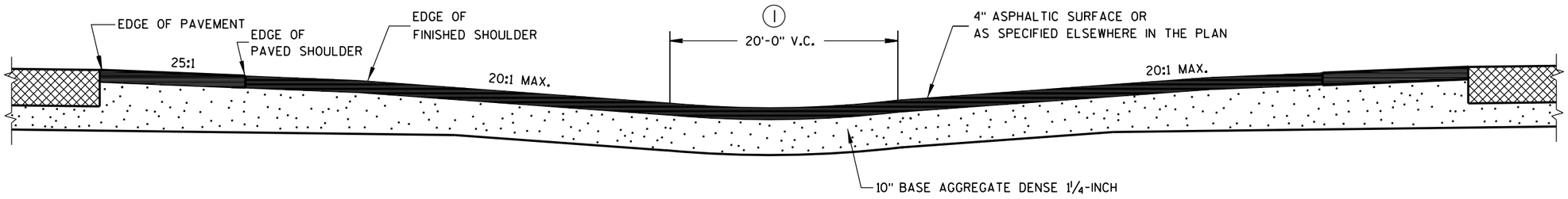
S.D.D. 9 F 15-4a

6

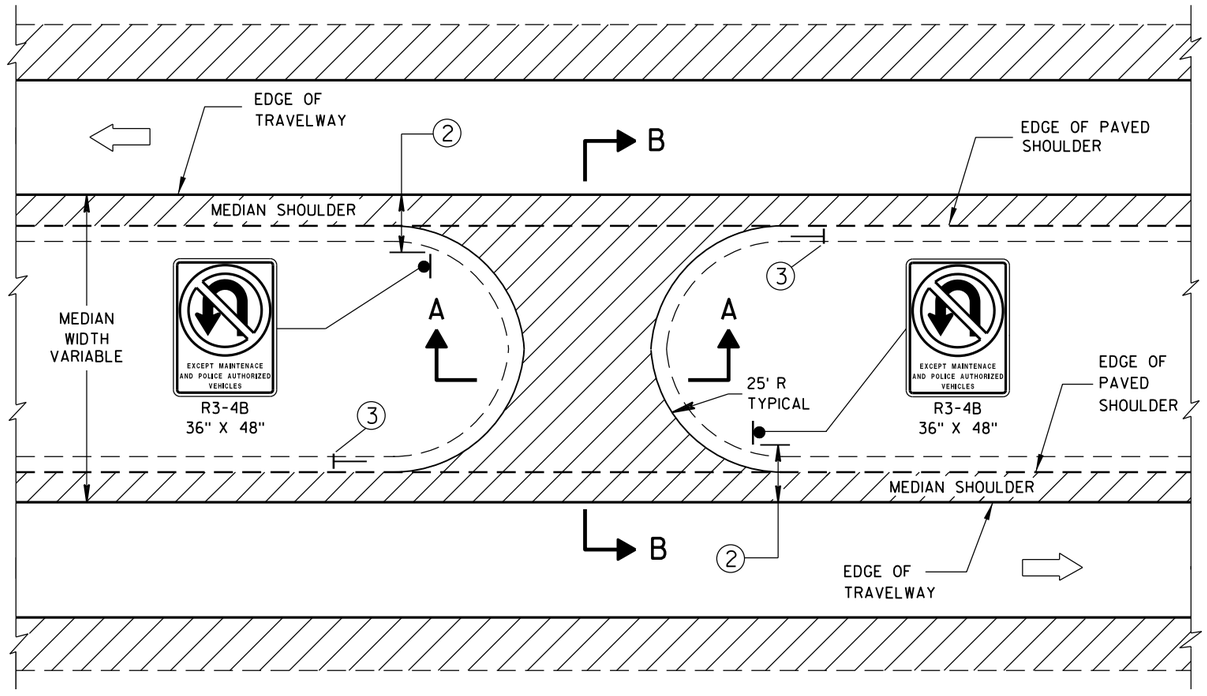
S.D.D. 9 F 15-4a



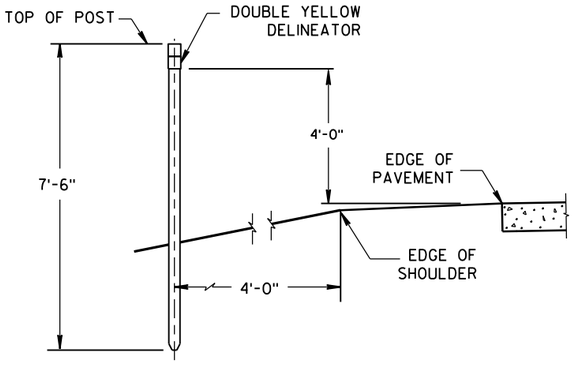
SECTION A-A



SECTION B-B



PLAN VIEW



DOUBLE YELLOW DELINEATOR INSTALLATION

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) ADJUST VERTICAL CURVE LOCATION LATERALLY TO MAINTAIN 20:1 MAX.

(2) SIGNING DETAILS AND SPECIFICATIONS ARE PROVIDED ELSEWHERE IN THE CONTRACT.

(3) INSTALL DOUBLE YELLOW DELINEATOR. SEE STANDARD DETAIL DRAWING 15A2.

MAINTENANCE CROSSOVER FOR FREEWAYS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

8/2013 — DATE

/S/ Jerry H. Zogg — ROADWAY STANDARDS DEVELOPMENT ENGINEER

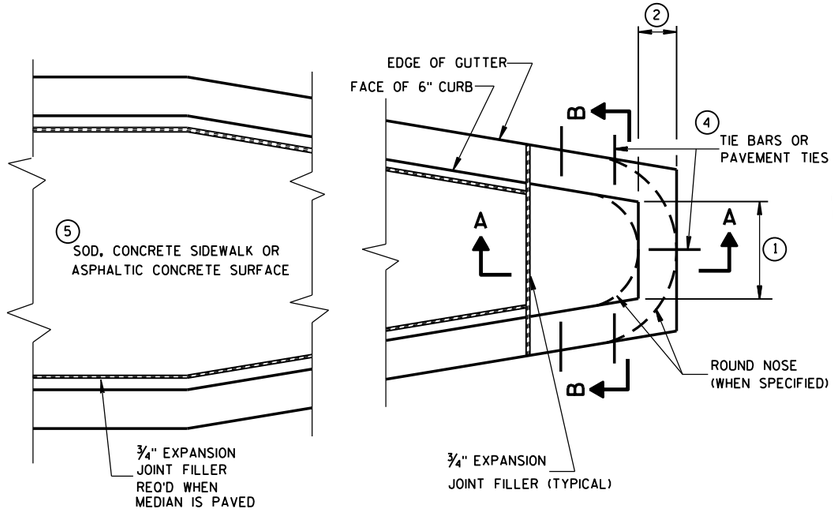
FHWA

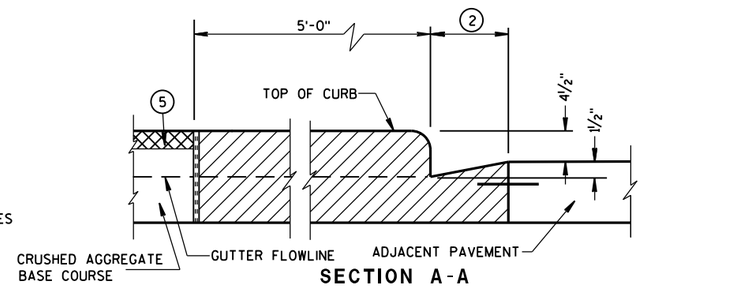
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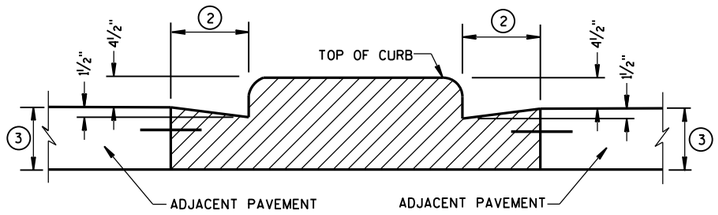
S.D.D. 11 A 1-5

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S.D.D. 11 A 1-5







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.

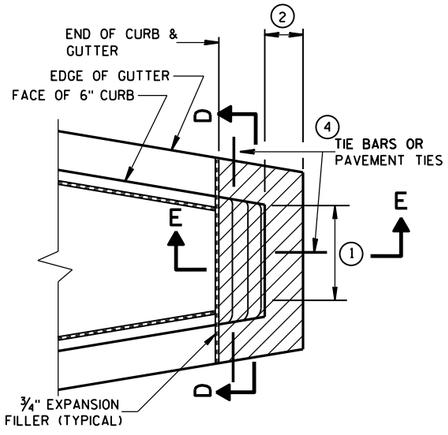
(2) ASPHALTIC CONCRETE PAVEMENT OVER NEW OR EXISTING CONCRETE BASE COURSE.

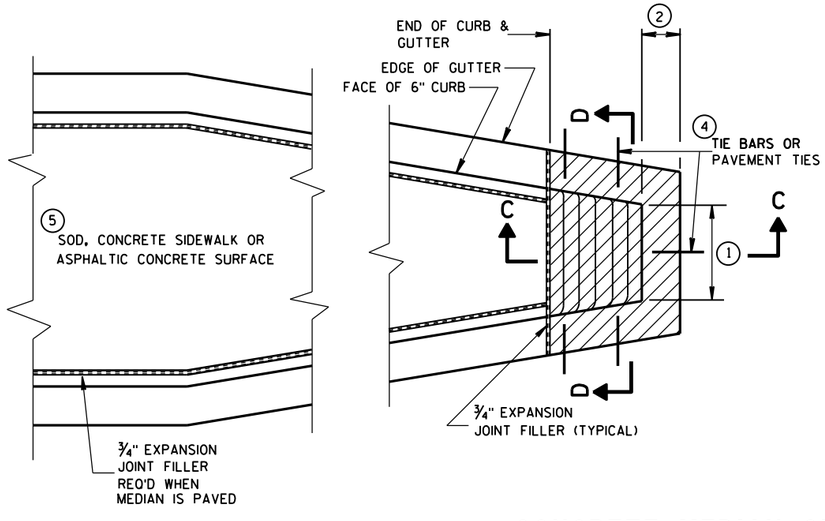
(3) ASPHALTIC CONCRETE PAVEMENT OVER CRUSHED AGGREGATE BASE COURSE.

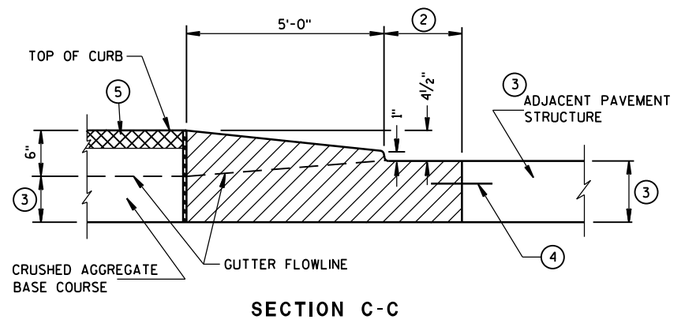
(4) TIE BARS OR PAVEMENT TIES REQUIRED IN NEW CONCRETE PAVEMENT OR CONCRETE BASE COURSE. TIE BARS SHALL BE NO. 4 X 2'-0" SPACED AT 2'-0" C-C.

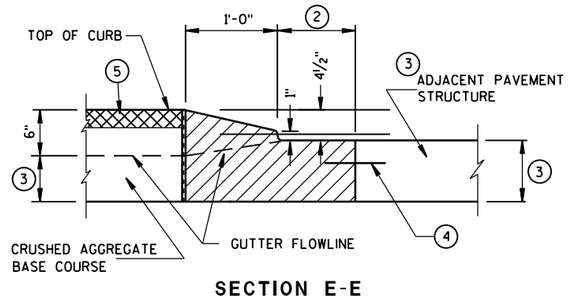
PAVEMENT TIES REQUIRED IN EXISTING CONCRETE BASE COURSE. PAVEMENT TIES SHALL BE NO. 6 X 1'-0" SPACED AT 3'-0" C-C INSTALLED ON A HORIZONTAL SKEW OF 6:1. THE DIRECTION OF SKEW SHALL ALTERNATE AFTER EVERY ONE OR TWO BARS.

(5) SURFACE TYPE AND DETAILS ARE SHOWN ELSEWHERE IN THE PLAN.



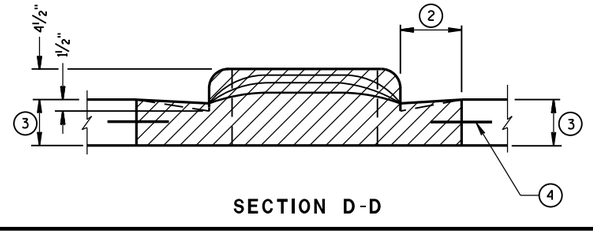






CONCRETE MEDIAN SLOPED NOSE TYPE 1

CONCRETE MEDIAN SLOPED NOSE TYPE 2



CONCRETE MEDIAN NOSE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

6/8/2006
DATE

/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER

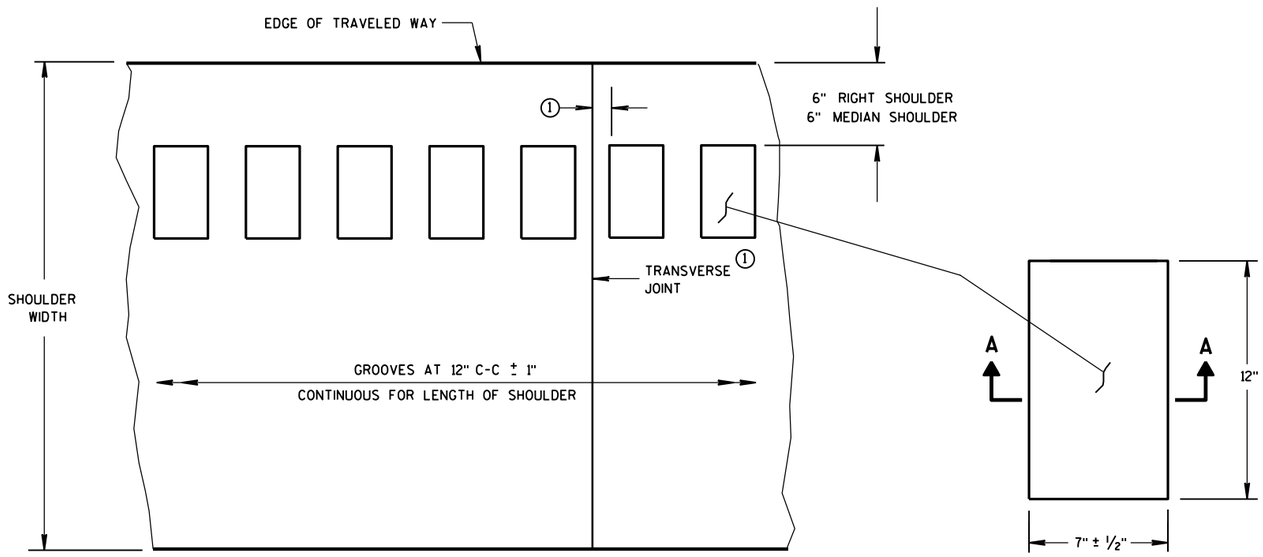
FHWA

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S.D.D. 11 B 2-2

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S.D.D. 11 B 2-2



PLAN VIEW
SHOULDER WITH GROOVES

PLAN VIEW
(SINGLE GROOVE)

PLACEMENT DETAIL FOR MILLED RUMBLE STRIP

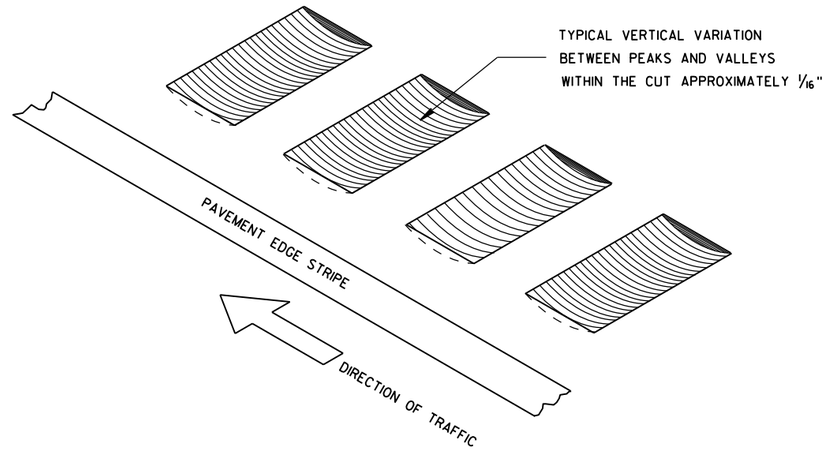
GENERAL NOTES

DETAILS OF CONSTRUCTION SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

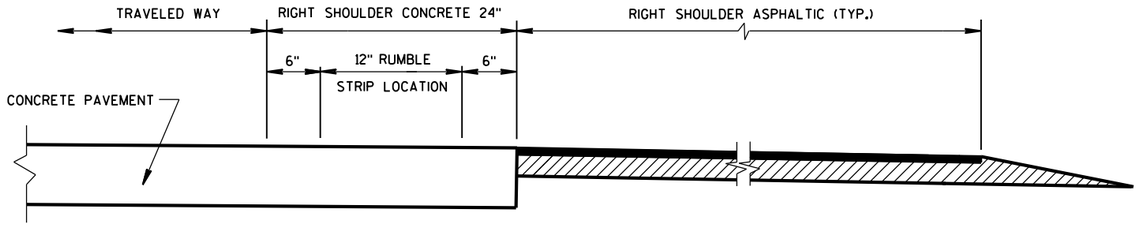
RUMBLE STRIPS ON EXPRESSWAYS

DO NOT INSTALL RUMBLE STRIPS ACROSS SIDE ROAD INTERSECTIONS, COMMERCIAL DRIVEWAYS, PRIVATE DRIVEWAYS OR ADJACENT TO RIGHT TURN LANES, LEFT TURN LANES, TURN LANE TAPERS, BRIDGE DECKS, BRIDGE APPROACHES, OR 100 FEET IN ADVANCE OF RAILROAD CROSSING. THE ATTACHED STANDARD DETAIL DRAWING SHOWS THE LOCATION OF THE RUMBLE STRIPS AT INTERCHANGE AREAS.

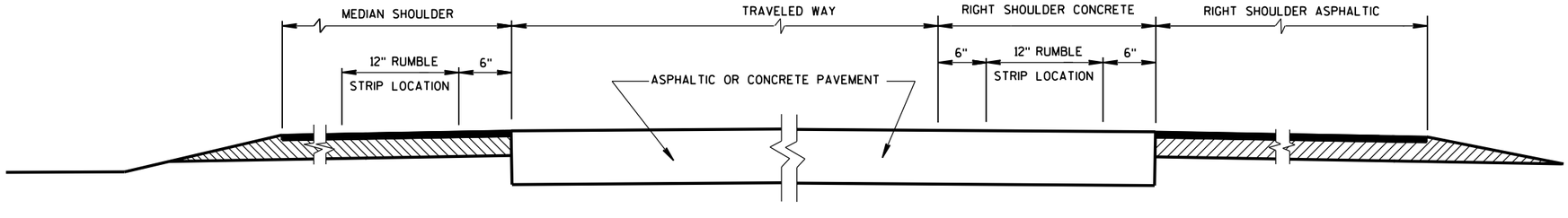
(1) CONCRETE PAVEMENT - RUMBLE STRIPS SHALL BE A MINIMUM OF 6" AWAY FROM TRANSVERSE JOINTS.



ISOMETRIC



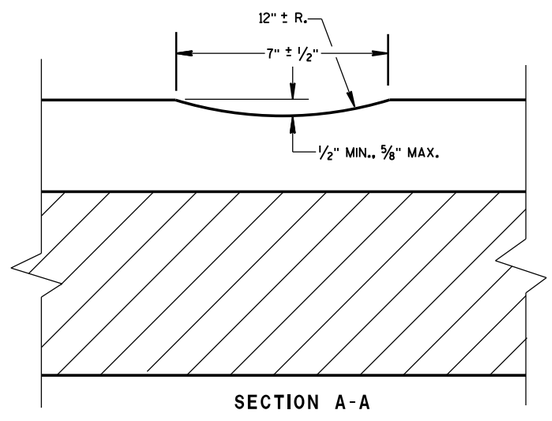
SECTION VIEW
CONCRETE PAVEMENT EXTENDS INTO RIGHT SHOULDER)



SECTION VIEW

TYPICAL LOCATIONS OF SHOULDER RUMBLE STRIPS IN RURAL DIVIDED HIGHWAYS

(ONE ROADWAY IS SHOWN)



SECTION A-A

SHOULDER RUMBLE STRIP, MILLING

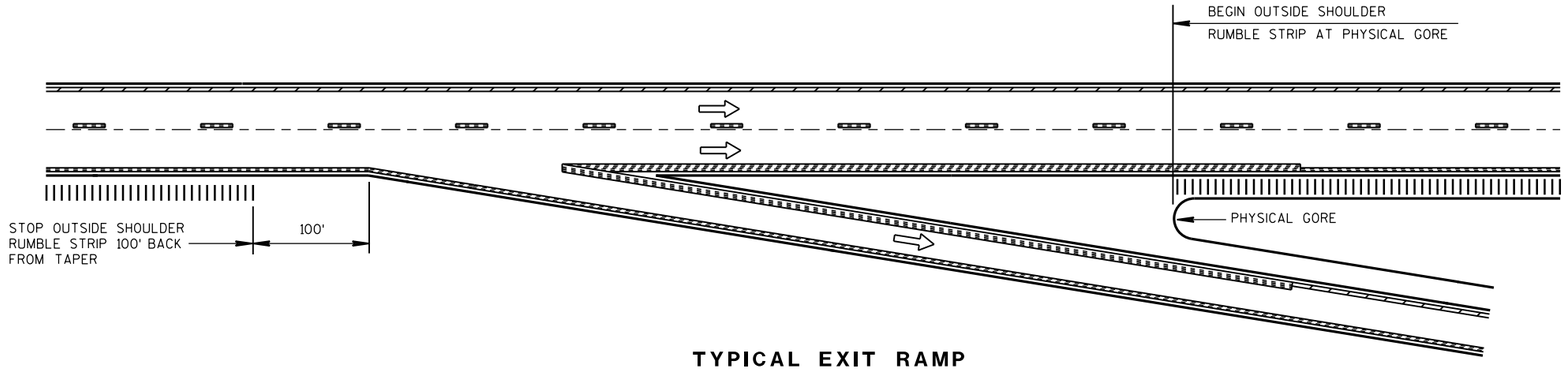
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

S.D.D. 13 A 5-5a

6

S.D.D. 13 A 5-5a



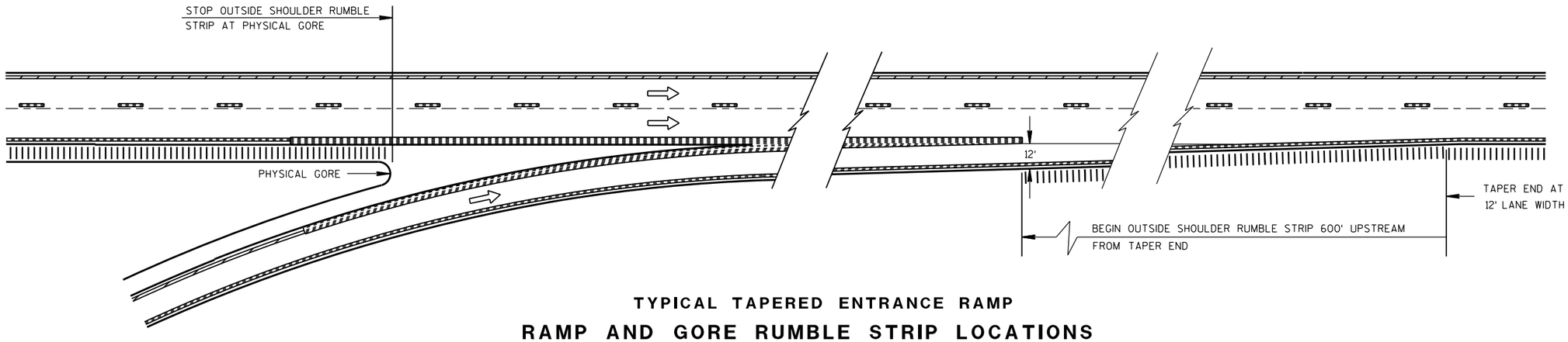
TYPICAL EXIT RAMP

NOTES:

NO RUMBLE STRIP ON EXIT, DIRECTIONAL, OR ENTRANCE RAMPS, EXCEPT NEAR THE ENTRANCE TAPER END AND ALONG THE PARALLEL RAMP AREA AS SHOWN.

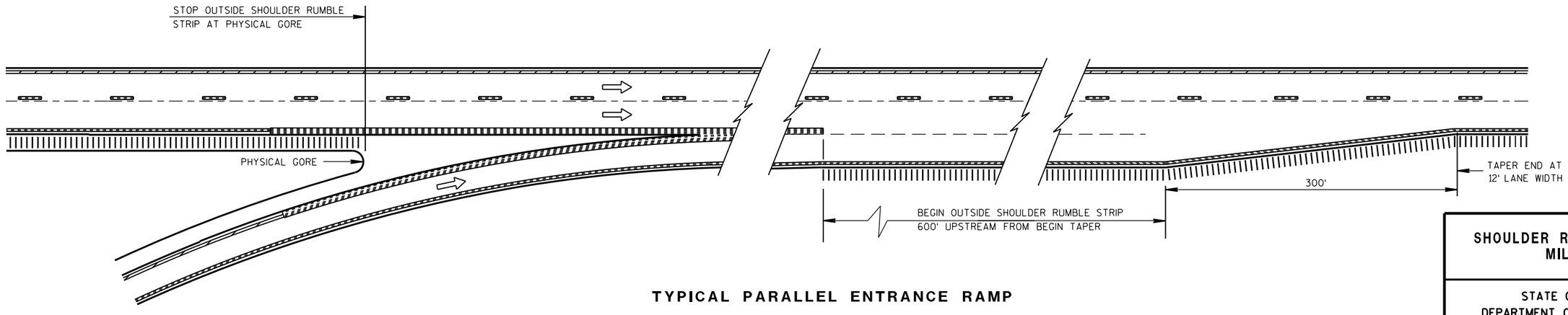
PAVEMENT MARKING DETAILS AND SPECIFICATIONS ARE PROVIDED ELSEWHERE IN THE CONTRACT.

NOTE:
ARROW SYMBOL (⇨)
SHOWS DIRECTION OF TRAVEL



TYPICAL TAPERED ENTRANCE RAMP

RAMP AND GORE RUMBLE STRIP LOCATIONS



TYPICAL PARALLEL ENTRANCE RAMP

RAMP AND GORE RUMBLE STRIP LOCATIONS

SHOULDER RUMBLE STRIP, MILLING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

12/17/2012
DATE

/S/ Jerry H. Zoga
ROADWAY STANDARDS ENGINEER

355

FHWA

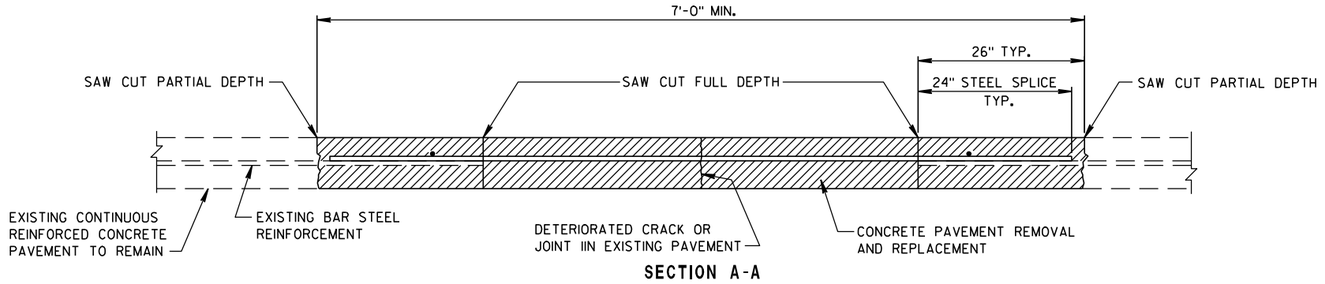
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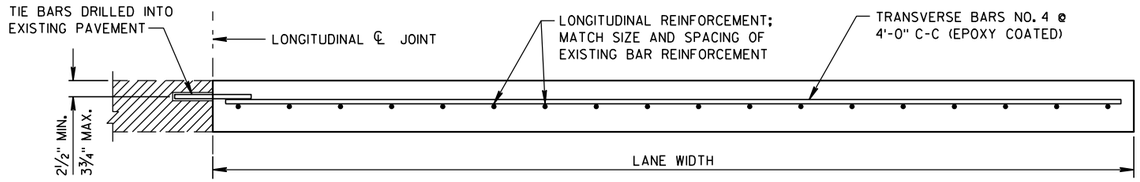
S.D.D. 13 A 5-5b

6

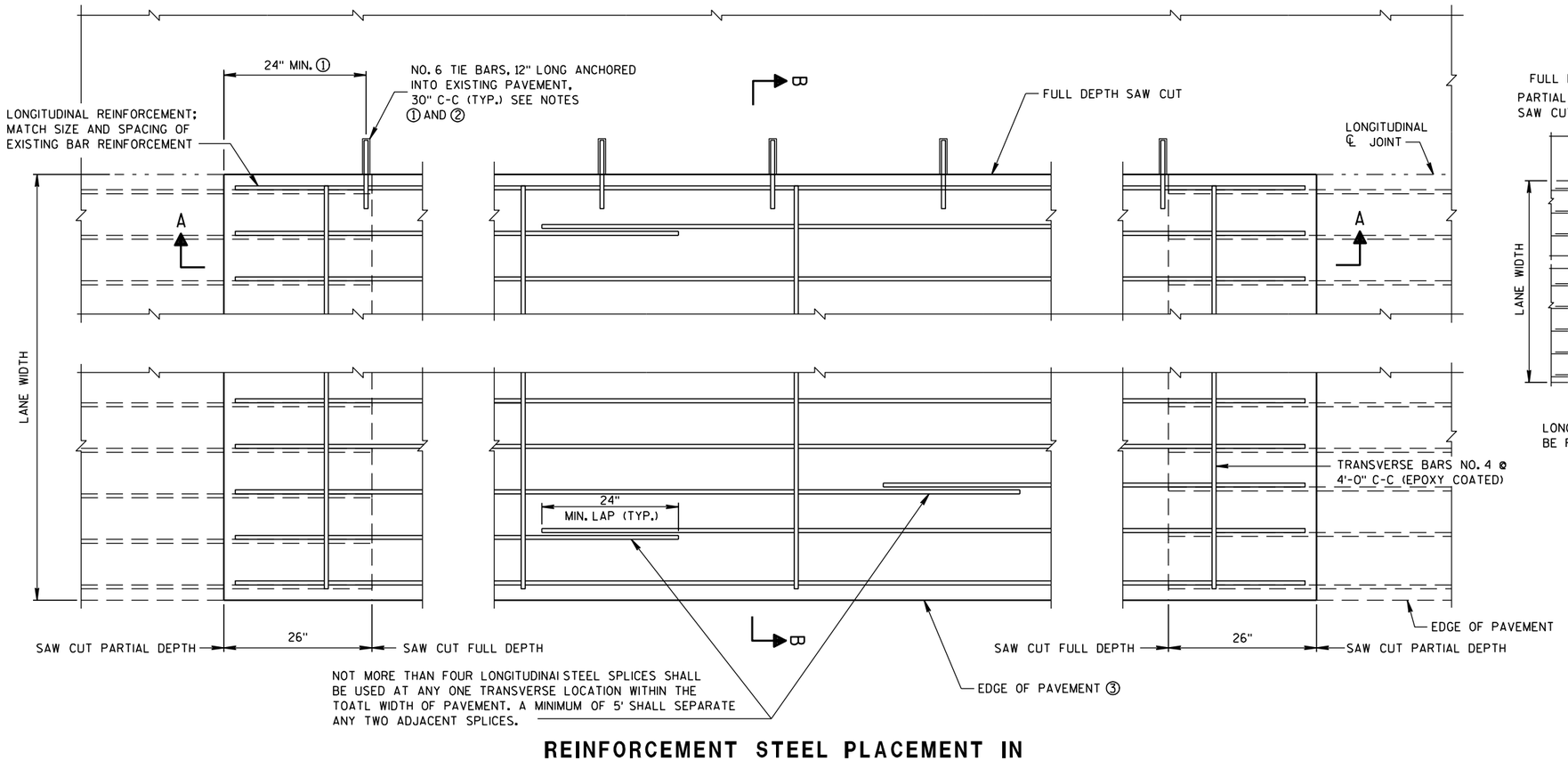
S.D.D. 13 A 5-5b



SECTION A-A



SECTION B-B



REINFORCEMENT STEEL PLACEMENT IN CONTINUOUSLY REINFORCED CONCRETE PAVEMENT REPLACEMENT

GENERAL NOTES

PLACE ALL BAR STEEL REINFORCEMENT AT MID PAVEMENT DEPTH UNLESS OTHERWISE NOTED.

PAY FOR THE TRANSVERSE AND LONGITUDINAL JOINT SAW CUT AS LINEAR FEET OF "SAWING CONCRETE".

WHEN THE PASSING AND TRAVELING LANES ARE TO BE REPLACED, REPLACE THE PASSING LANE FIRST.

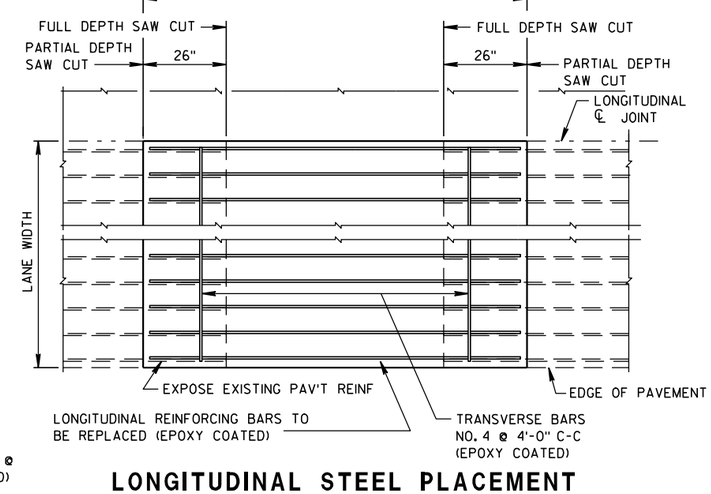
ADD TRANSVERSE STEEL BARS TO REPAIRS GREATER THAN 6'IN LENGTH, USE NO. 4 BARS PLACED TRANSVERSELY AND SPACED 4'C-C. PAYMENT SHALL BE INCIDENTAL TO "CONCRETE PAVEMENT CONTINUOUS REINFORCEMENT".

TIE ALL CONCRETE PAVEMENT REPAIRS WHICH ARE GREATER THAN 15'IN LENGTH, AND ARE ADJACENT TO EXISING CONCRETE PAVEMENT, TO THE EXISTING PAVEMENT USING TIE BARS. DETAILS FOR TIE BAR CONSTRUCTION SHALL CONFORM TO THE STANDARD SPECIFICATIONS AND STANDARD DETAIL DRAWINGS.

① PROVIDE A MINIMUM DISTANCE OF 24 INCHES FROM AN EXISTING TRANSVERSE JOINT OR THE EDGE OF REPLACEMENT TO THE CENTER OF THE TIE BAR NEAREST THAT JOINT OR EDGE.

② ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.

③ SAW CUT THE LONGITUDINAL EDGE JOINT IF THE ADJACENT SHOULDER IS CONCRETE.



LONGITUDINAL STEEL PLACEMENT IN CRCP REPAIRS

PLAN VIEW

CONTINUOUSLY REINFORCED CONCRETE PAVEMENT REPAIR AND REPLACEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

11/1/2011 — DATE

/S/ Deb Bischoff — PAVEMENT POLICY & DE356 NEER

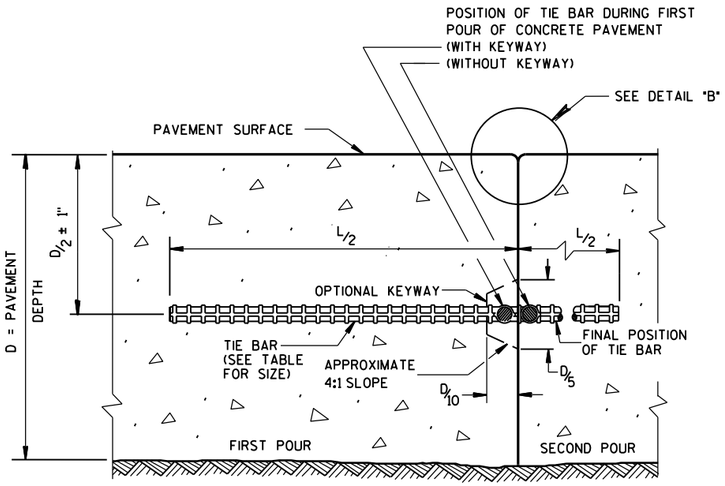
FHWA

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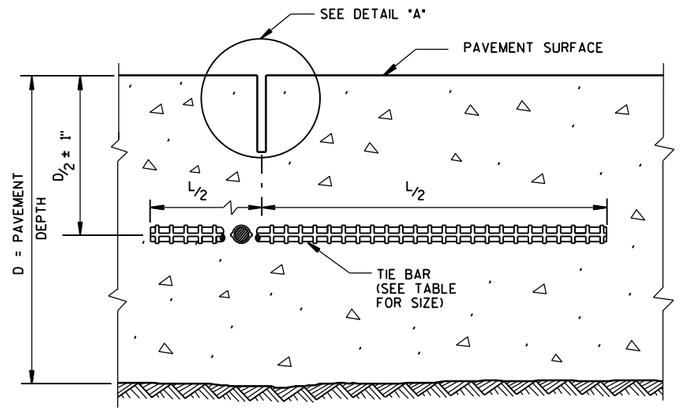
S.D.D. 13 A 7-2

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S.D.D. 13 A 7-2



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.

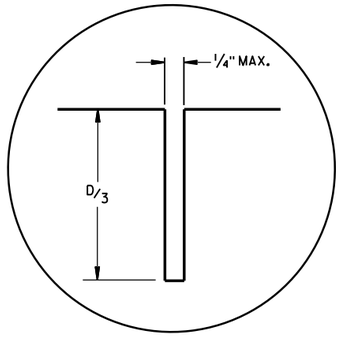
(1) ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.

(2) PAVEMENT THAT WAS IN PLACE PRIOR TO THE CONTRACT.

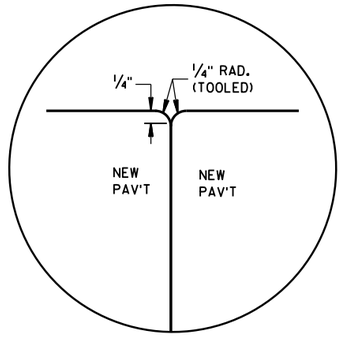
PLAN VIEW

SECTION A-A

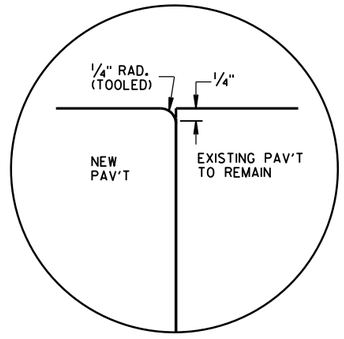
LONGITUDINAL CONSTRUCTION JOINT TIE BARS ANCHORED INTO EXISTING PAVEMENT



DETAIL "A"



DETAIL "B"



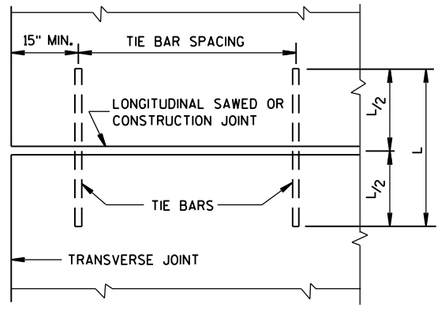
DETAIL "C"

TIE BAR TABLE

PAVEMENT DEPTH (D)	TIE BAR SIZE	TIE BAR LENGTH (L)	MAX. TIE BAR SPACING
< 10 1/2"	NO. 4	30"	36"
≥ 10 1/2"	NO. 5	36"	36"
	NO. 4 *	30"	24"**

* SUBSTITUTE BENT BARS AT LONGITUDINAL JOINTS WHEN EQUIPMENT LIMITATIONS DURING CONSTRUCTION WARRANT (e.g. AUXILIARY LANES OR TURN LANES)

** CONFORM TO 15" MINUMUM SPACING FROM TRANSVERSE JOINTS; SPACING BETWEEN TIE BARS WILL BE 30" AT TRANSVERSE JOINTS.



PLAN VIEW
SHOWING LOCATION OF TIE BARS

CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

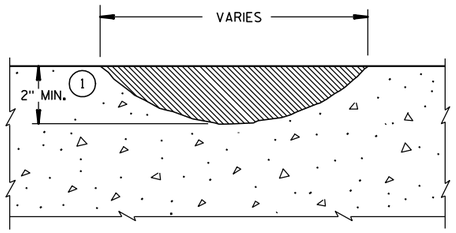
APPROVED
June, 2015
DATE

/S/ Peter Kemp, P.E.
PAVEMENT SUPER

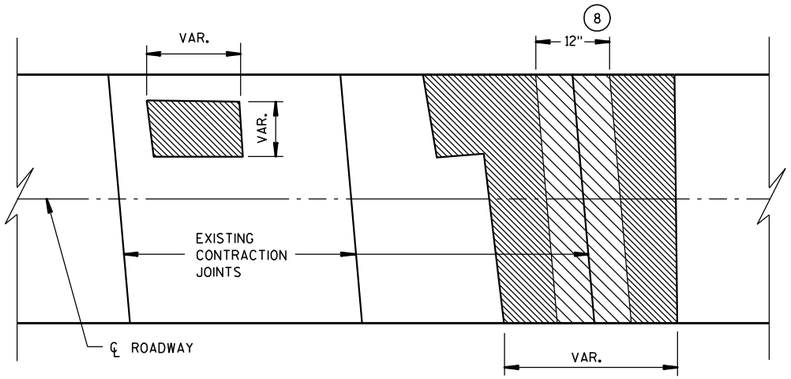
FHWA

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S.D.D. 13 C 1-18

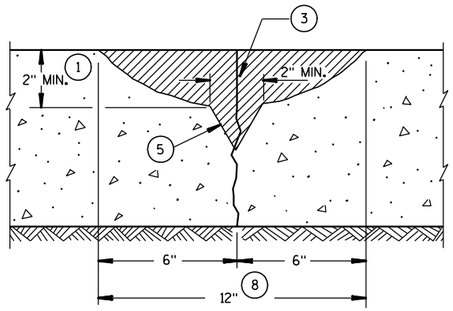


PROFILE VIEW

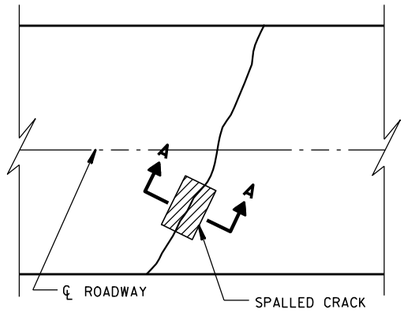


PLAN VIEW

SURFACE REPAIR



SECTION A-A

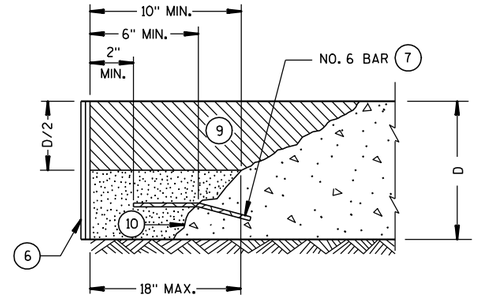


PLAN VIEW

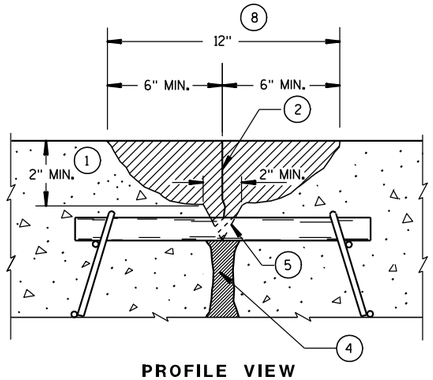
CRACK REPAIR

GENERAL NOTES

1. REMOVE ALL CONCRETE, TO LIMITS SHOWN, TO A MAXIMUM OF ½ THE PAVEMENT DEPTH OR TOP OF DOWELS.
2. IF REPAIR IS DEEPER THAN ANTICIPATED SAWCUT, COMPRESSION RELIEF MATERIAL MUST BE USED. THE THICKNESS OF COMPRESSION RELIEF MATERIAL MUST BE EQUAL TO OR GREATER THAN THE WIDTH OF THE JOINT OR CRACK (1/4"). THIS MATERIAL SHOULD EXTEND FULL DEPTH OF THE REPAIR.
3. COMPRESSION RELIEF MATERIAL MUST BE USED. THE THICKNESS OF COMPRESSION RELIEF MATERIAL MUST BE EQUAL TO OR GREATER THAN THE WIDTH OF THE JOINT OR CRACK (1/4"). THIS MATERIAL SHOULD EXTEND FULL DEPTH OF THE REPAIR.
4. CLEAN, DRY SAND WHEN NECESSARY.
5. REMOVE UNSOUND MATERIAL BY CHIPPING AT 1:1 SLOPE.
6. ¼" MINIMUM PREFORMED JOINT FILLER IF ADJACENT TO CONCRETE. EDGING REQUIRED. FULLY FORMED EDGE IF ADJACENT TO SHOULDER.
7. PAVEMENT TIES AS SHOWN. ALL EMBEDMENTS 6" MINIMUM AND INSTALLED WITH GROUT.
8. OVER 12" (NOMINAL WIDTH) WILL BE PAID AS SURFACE REPAIR.
9. PAID AS JOINT OR CRACK REPAIR.
10. FULL-DEPTH ADJUSTMENT SHALL BE CHIPPED TO BOTTOM OF PCC PAVEMENT AT 1:1 SLOPE.
11. BEYOND 18" WILL BE PAID AS SURFACE REPAIR.

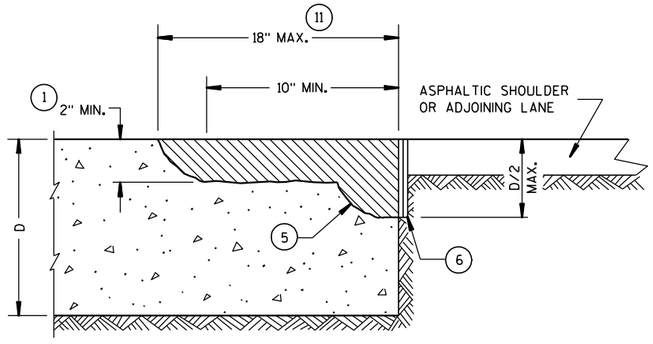


PROFILE VIEW

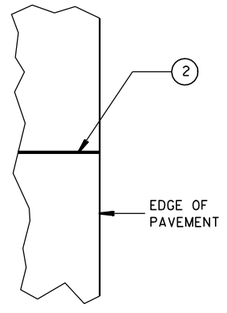


PROFILE VIEW

JOINT REPAIR

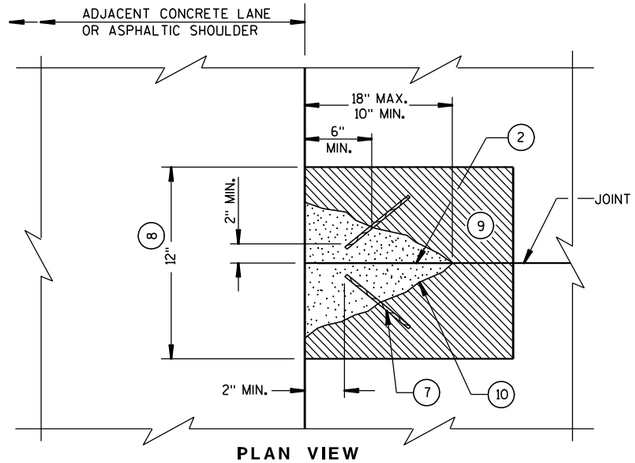


PROFILE VIEW



PLAN VIEW

EDGE REPAIR



PLAN VIEW

FULL DEPTH REPAIR ADJUSTMENT

CONCRETE PAVEMENT PARTIAL DEPTH REPAIR

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
3/21/03 DATE
/S/ Bill Ducker PAVEMENT ENGR

FHWA

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S.D.D. 13 C 8-2

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S.D.D. 13 C 8-2

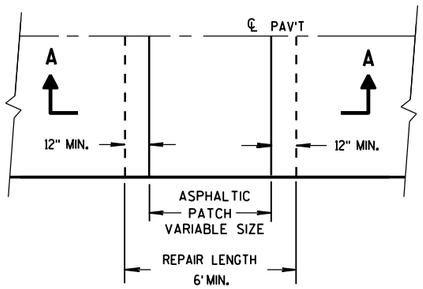
GENERAL NOTES

SAW CUT, DRILL, AND LIFT OUT EXISTING CONCRETE PAVEMENT WITHIN THE BOUNDARIES OF CONCRETE REPAIR AREAS. THE CONTRACTOR MAY MAKE ADDITIONAL SAW CUTS INSIDE THE REPAIR LIMITS TO REDUCE WEIGHT AND SIZE OF CONCRETE PIECES.

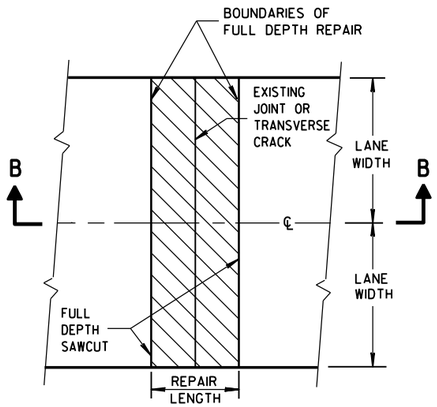
PROVIDE A 6-FOOT MINIMUM DISTANCE FROM BOUNDARIES OF CONCRETE REPAIR AREAS TO ADJACENT TRANSVERSE JOINT OR CRACK IN THE SAME LANE.

THE LENGTH OF THE REPAIRS MAY VARY FROM THE DIMENSIONS SHOWN IF THE EXISTING CONCRETE PAVEMENT IS NONDOWELED AND THE PAVEMENT IS TO BE OVERLAID AFTER REPAIRING.

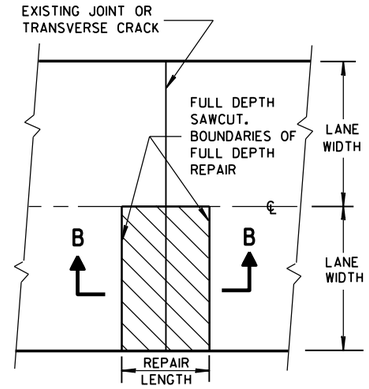
(1) DOWEL BARS MIGHT NOT EXIST.



PLAN VIEW

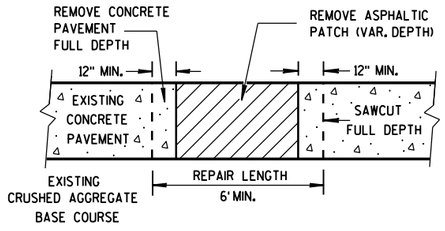


PLAN VIEW
(DOUBLE LANE REPAIR)



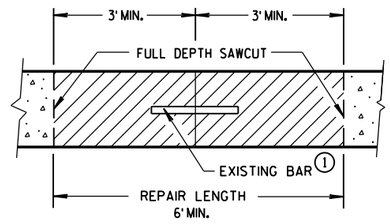
PLAN VIEW
(SINGLE LANE REPAIR)

FULL DEPTH CONCRETE PAVEMENT REMOVAL



SECTION A-A

HMA PATCH REMOVAL



SECTION B-B

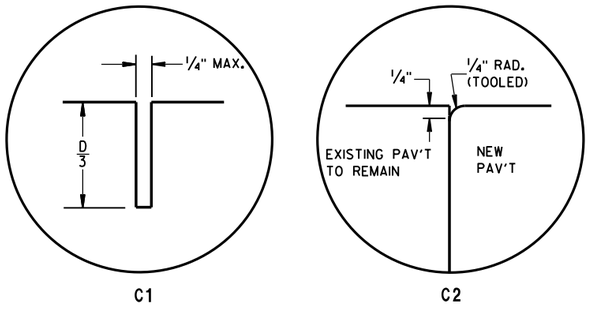
CONCRETE REMOVAL

CONCRETE PAVEMENT REPAIR AND REPLACEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPO

6

S.D.D. 13 C 9-13a



C1 C2

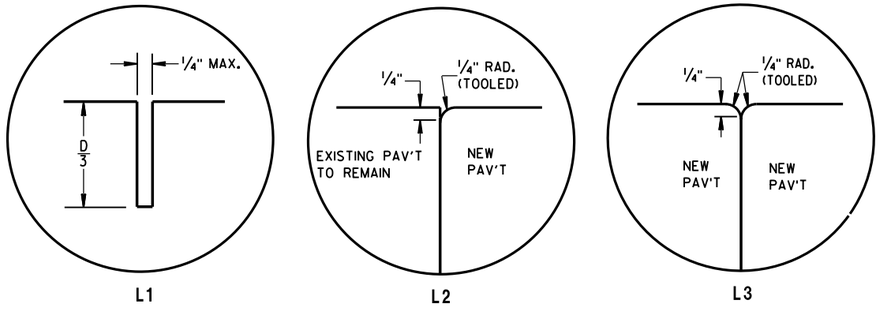
TRANSVERSE JOINTS

TIE BAR TABLE

PAVEMENT DEPTH (D)	TIE BAR SIZE	TIE BAR LENGTH (L)	MAX. TIE BAR SPACING
< 10 ½"	NO. 4	30"	36"
≥ 10 ½"	NO. 5	36"	36"
	NO. 4 *	30"	24"**

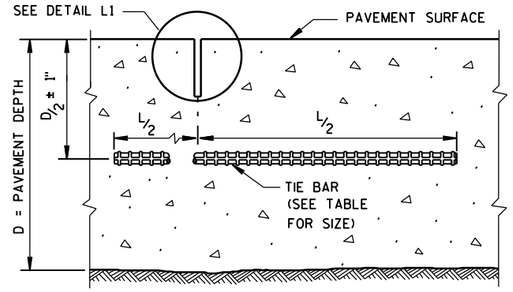
* SUBSTITUTE BENT BARS AT LONGITUDINAL JOINTS WHEN EQUIPMENT LIMITATIONS DURING CONSTRUCTION WARRANT (e.g. AUXILIARY LANES OR TURN LANES)

** CONFORM TO 15" MINUMUM SPACING FROM TRANSVERSE JOINTS; SPACING BETWEEN TIE BARS WILL BE 30" AT TRANSVERSE JOINTS.



L1 L2 L3

LONGITUDINAL JOINTS



SECTION C-C

SAWED LONGITUDINAL JOINT

GENERAL NOTES

INSTALL DOWEL BARS PARALLEL TO THE PAVEMENT CENTERLINE AND PAVEMENT SURFACE.

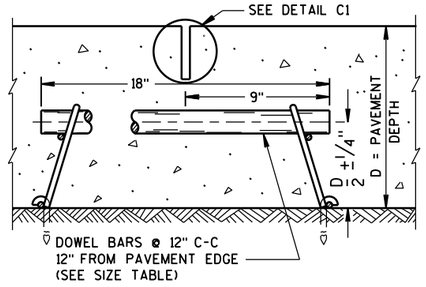
CONCRETE PAVEMENT REPAIRS OF EXISTING NONDOWELED CONCRETE PAVEMENTS DO NOT NEED TO BE DOWELED.

DO NOT SEAL OR FILL JOINTS.

ANCHOR DOWEL BARS AND TIE BARS INTO DRILLED HOLES WITH AN EPOXY.

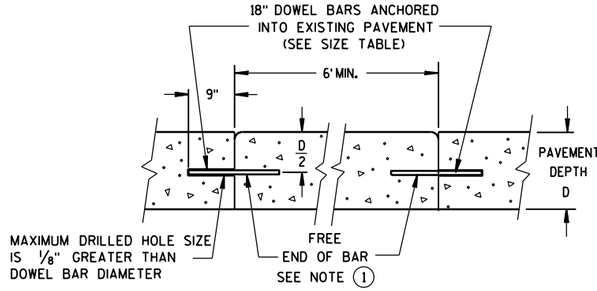
FOR MULTI-LANE CONCRETE PAVEMENT REPLACEMENTS, PROVIDE A MINIMUM DISTANCE OF 15 INCHES FROM ALL TRANSVERSE JOINTS OR EDGES OF REPLACEMENT TO THE CENTER OF THE TIE BAR NEAREST THAT JOINT OR EDGE.

(1) APPLY A THIN UNIFORM COATING OF SURFACE TREATMENT TO THE FREE END OF DOWEL BARS TO PREVENT BONDING.

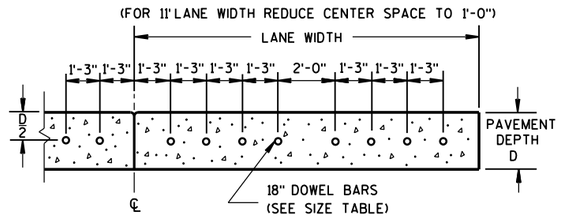


SECTION F-F

CONTRACTION JOINT



SECTION D-D

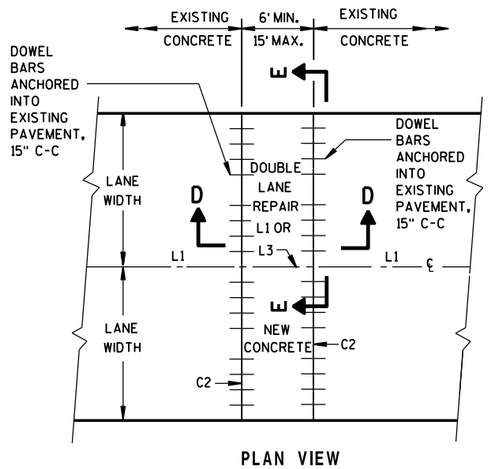


SECTION E-E

DRILLED DOWEL BAR CONSTRUCTION JOINT

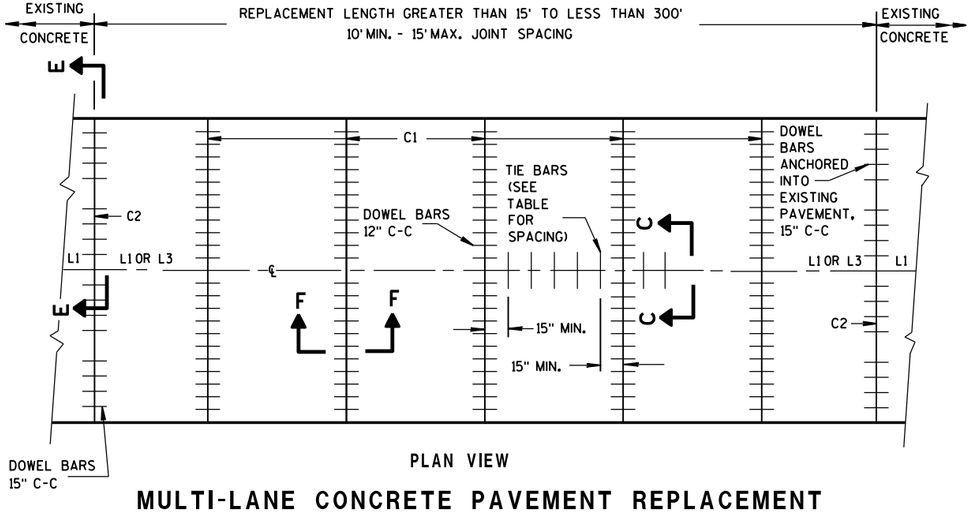
PAVEMENT DEPTH, DOWEL BAR SIZE AND JOINT SPACING TABLE

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'



PLAN VIEW

MULTI-LANE CONCRETE PAVEMENT REPAIR



PLAN VIEW

MULTI-LANE CONCRETE PAVEMENT REPLACEMENT

CONCRETE PAVEMENT REPAIR AND REPLACEMENT

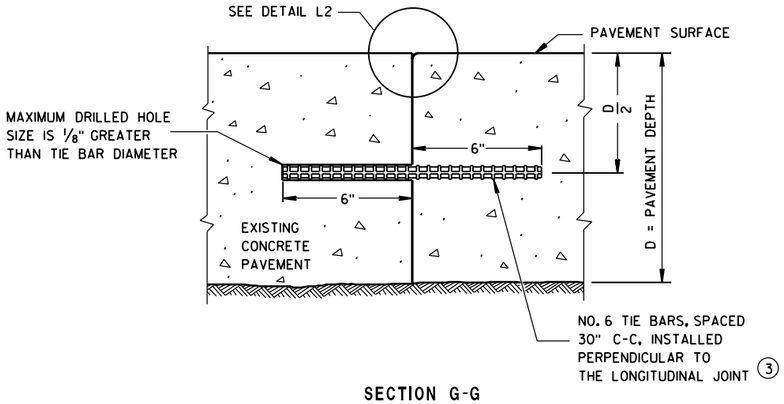
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR 360

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S.D.D. 13 C 9-13b

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S.D.D. 13 C 9-13b



SECTION G-G

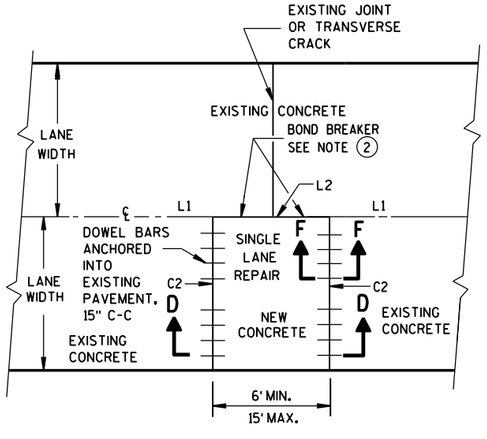
TIE BARS ANCHORED INTO EXISTING PAVEMENT

GENERAL NOTES

(1) WITH THE APPROVAL OF THE ENGINEER, FOR SINGLE LANE PAVEMENT REPLACEMENTS LESS THAN 30 FEET IN LENGTH, THE CONTRACTOR MAY INSTALL DRILLED TIE BARS ON 6:1 SKEW HORIZONTALLY, DIRECTION OF SKEW ALTERNATING WITH EACH SUCCESSIVE BAR. DRIVE SKEWED TIE BARS TO A DEPTH OF 6 INCHES IN A HOLE OF SUCH A DIAMETER AS TO PROVIDE A TIGHT DRIVEN FIT.

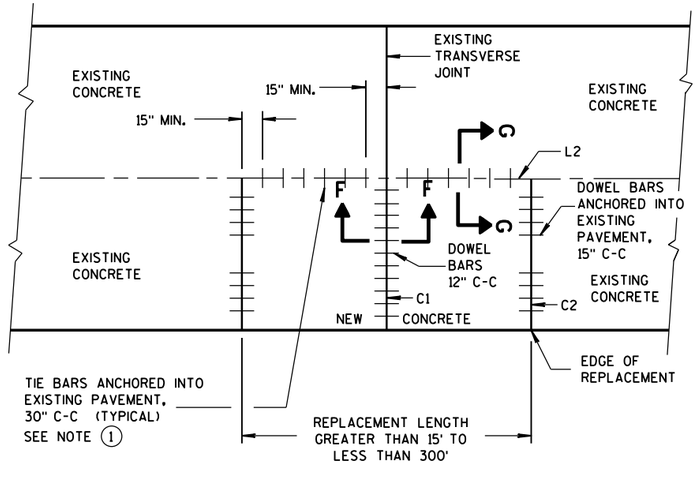
(2) USE AN ENGINEER-APPROVED BOND BREAKER (E.G. RELEASE AGENT, CURING COMPOUND) FOR SINGLE LANE REPAIRS UP TO 15 FEET IN LENGTH.

(3) ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.



PLAN VIEW

SINGLE LANE CONCRETE PAVEMENT REPAIR



PLAN VIEW

SINGLE LANE CONCRETE PAVEMENT REPLACEMENT

CONCRETE PAVEMENT REPAIR AND REPLACEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept., 2015 — DATE
/S/ Peter Kemp, P.E. — PAVEMENT SUPER
FHWA

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S.D.D. 13 C 9-13c

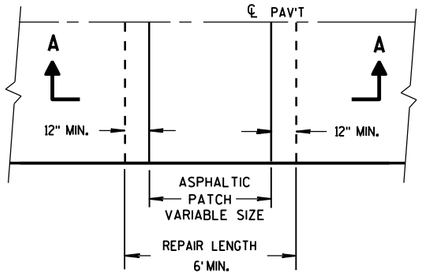
GENERAL NOTES

SAW CUT, DRILL, AND LIFT OUT EXISTING CONCRETE PAVEMENT WITHIN THE BOUNDARIES OF CONCRETE REPAIR AREAS. THE CONTRACTOR MAY MAKE ADDITIONAL SAW CUTS INSIDE THE REPAIR LIMITS TO REDUCE WEIGHT AND SIZE OF CONCRETE PIECES.

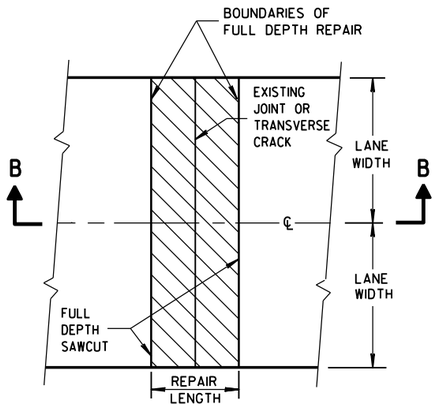
PROVIDE 6-FOOT MINIMUM DISTANCE FROM BOUNDARIES OF CONCRETE REPAIR AREAS TO ADJACENT TRANSVERSE JOINT OR CRACK.

THE LENGTH OF THE REPAIRS MAY VARY FROM THE DIMENSIONS SHOWN IF THE EXISTING CONCRETE PAVEMENT IS NONDOWELED AND THE PAVEMENT IS TO BE OVERLAID AFTER REPAIRING.

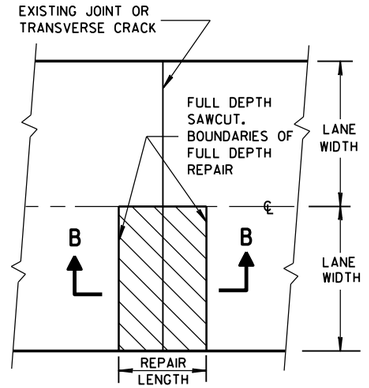
(1) DOWEL BARS MIGHT NOT EXIST.



PLAN VIEW

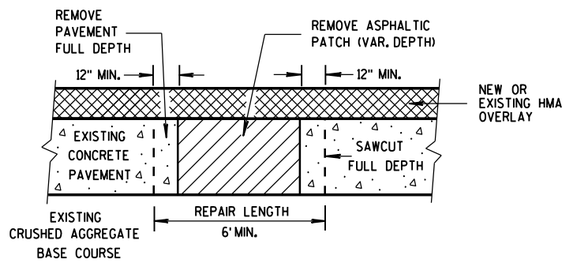


PLAN VIEW
(DOUBLE LANE REPAIR)



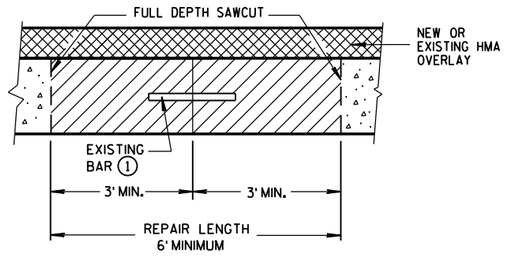
PLAN VIEW
(SINGLE LANE REPAIR)

FULL DEPTH CONCRETE PAVEMENT REMOVAL



SECTION A-A

HMA PATCH REMOVAL



SECTION B-B

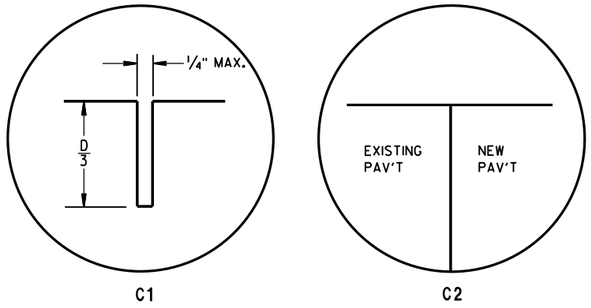
CONCRETE REMOVAL

BASE PATCHING CONCRETE

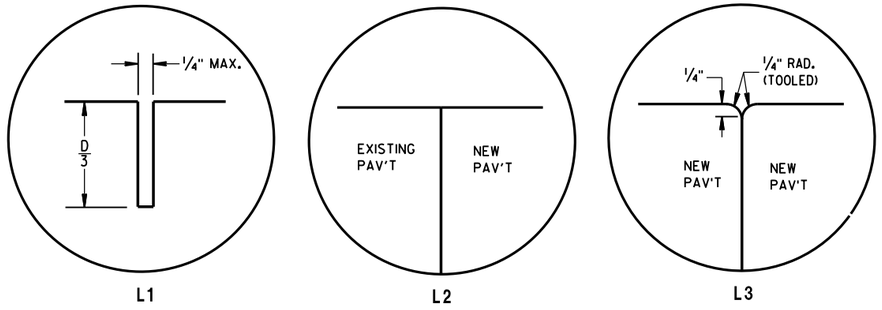
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

S.D.D. 13 C 14-6a

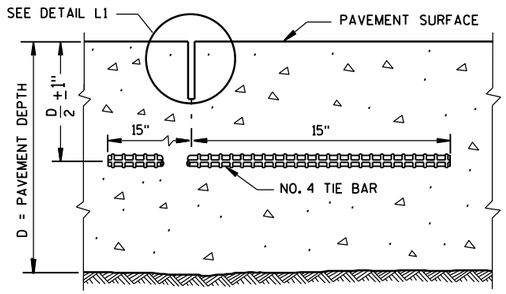
S.D.D. 13 C 14-6a



TRANSVERSE JOINTS

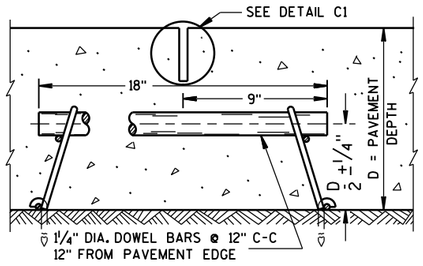


LONGITUDINAL JOINTS



SECTION C-C

SAWED LONGITUDINAL JOINT



SECTION F-F

CONTRACTION JOINT

GENERAL NOTES

INSTALL DOWEL BARS PARALLEL TO THE PAVEMENT CENTERLINE AND PAVEMENT SURFACE.

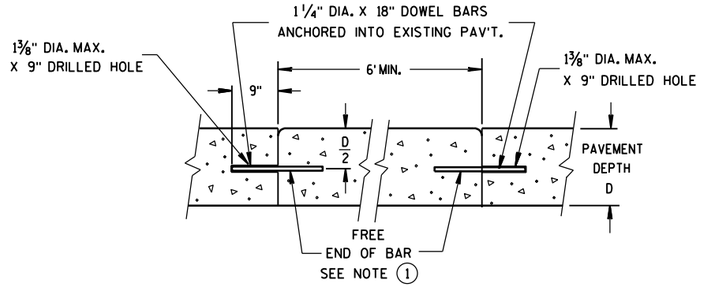
CONCRETE BASE PATCHES OF EXISTING NONDOWELED CONCRETE PAVEMENTS DO NOT NEED TO BE DOWELED.

DO NOT SEAL OR FILL JOINTS.

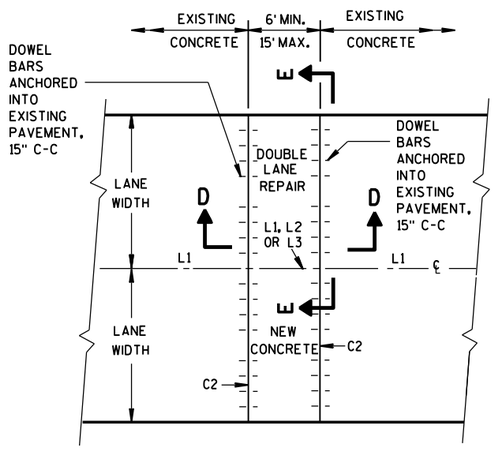
ANCHOR DOWEL BARS AND TIE BARS INTO DRILLED HOLES WITH AN EPOXY.

PROVIDE A MINIMUM DISTANCE OF 15 INCHES FROM AN EXISTING TRANSVERSE JOINT OR THE EDGE OF REPLACEMENT TO THE CENTER OF THE TIE BAR NEAREST THAT JOINT OR EDGE.

(1) APPLY A THIN UNIFORM COATING OF SURFACE TREATMENT TO THE FREE END OF DOWEL BARS TO PREVENT BONDING.

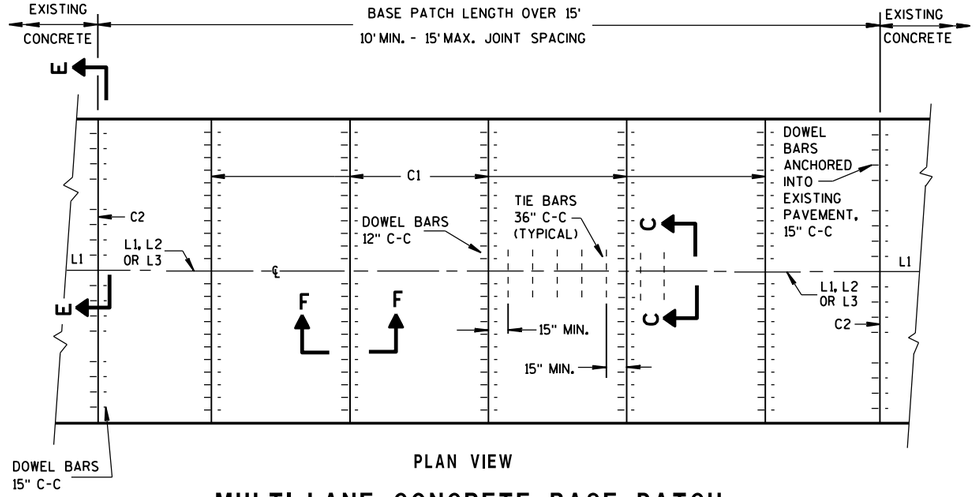


SECTION D-D



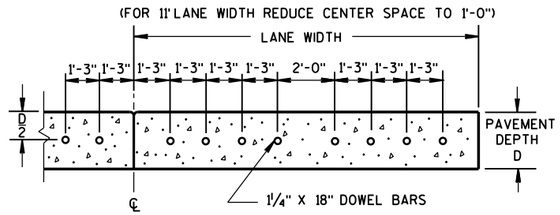
PLAN VIEW

MULTI-LANE CONCRETE BASE PATCH 15' MAXIMUM LENGTH



PLAN VIEW

MULTI-LANE CONCRETE BASE PATCH GREATER THAN 15' IN LENGTH



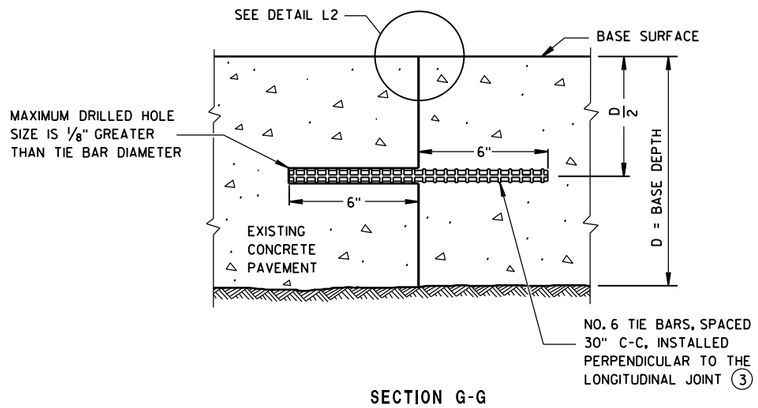
SECTION E-E

SPACING OF DOWEL BARS ANCHORED INTO EXISTING PAVEMENT

BASE PATCHING CONCRETE

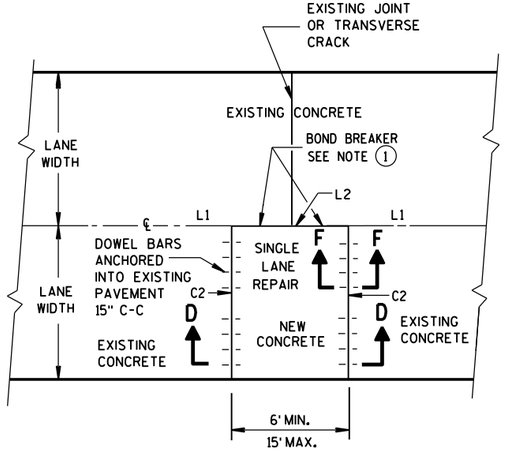
STATE OF WISCONSIN
DEPARTMENT OF TRANSPO

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S.D.D. 13 C 14-6b



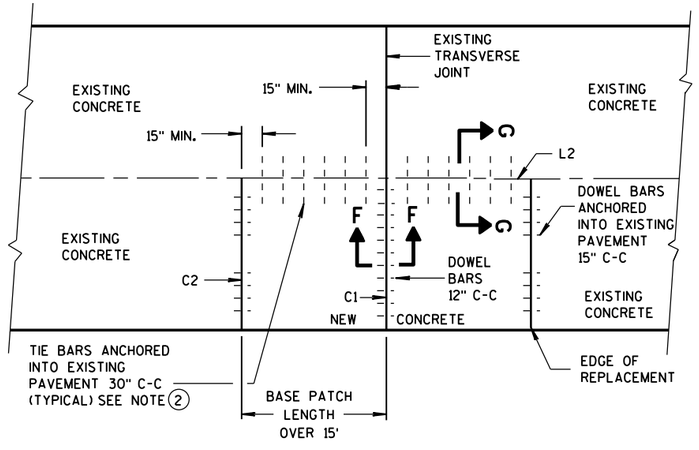
SECTION G-G

TIE BARS ANCHORED INTO EXISTING PAVEMENT



PLAN VIEW

SINGLE LANE CONCRETE BASE PATCH 15' MAXIMUM LENGTH



PLAN VIEW

SINGLE LANE CONCRETE BASE PATCH GREATER THAN 15' IN LENGTH

GENERAL NOTES

(1) USE AN ENGINEER-APPROVED BOND BREAKER (E.G. RELEASE AGENT, CURING COMPOUND) FOR SINGLE LANE BASE PATCHES UP TO 15 FEET IN LENGTH.

(2) WITH THE APPROVAL OF THE ENGINEER, FOR SINGLE LANE PAVEMENT REPLACEMENTS LESS THAN 30 FEET IN LENGTH, DRILLED TIE BARS MAY BE INSTALLED ON 6:1 SKEW HORIZONTALLY, DIRECTION OF SKEW ALTERNATING WITH EACH SUCCESSIVE BAR. DRIVE SKEWED TIE BARS TO A DEPTH OF 6 INCHES IN A HOLE OF SUCH A DIAMETER AS TO PROVIDE A TIGHT DRIVEN FIT.

(3) ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.

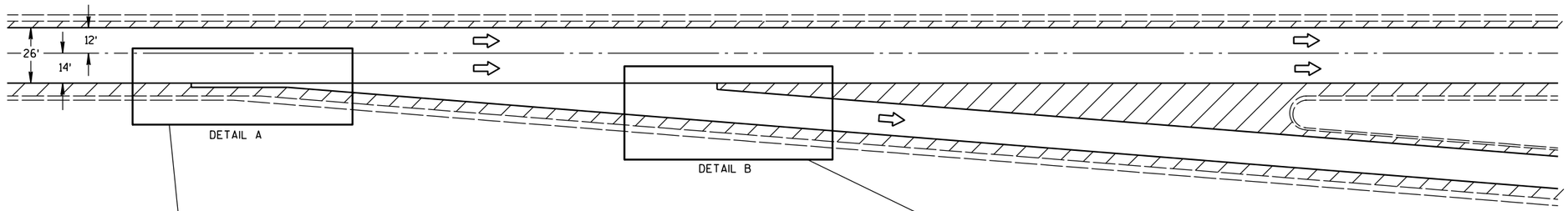
BASE PATCHING CONCRETE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

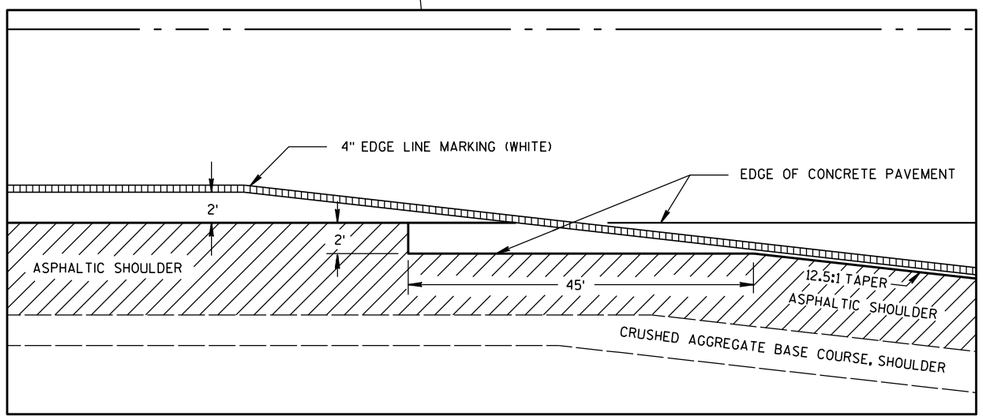
APPROVED
Sept., 2015 — DATE
/S/ Peter Kemp, P.E. — PAVEMENT SUPER
FHWA

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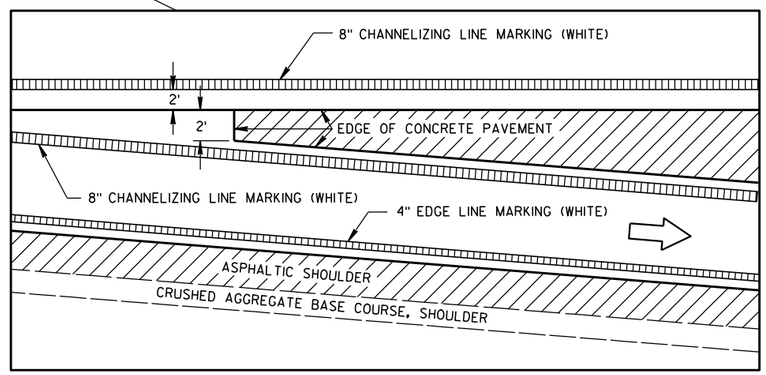
S.D.D. 13 C 14-6c



EXIT RAMP DETAIL



DETAIL A



DETAIL B

CONCRETE JOINT PAVING DETAILS

GENERAL NOTES

PAVEMENT MARKING DETAILS AND SPECIFICATIONS ARE PROVIDED ELSEWHERE IN THE CONTRACT.

SEE SDD 13 A 4-4c OR SDD 13 A 5-1b FOR RAMP AND GORE RUMBLE STRIP LOCATION.

CONCRETE JOINT DETAIL FOR EXIT RAMP TERMINI

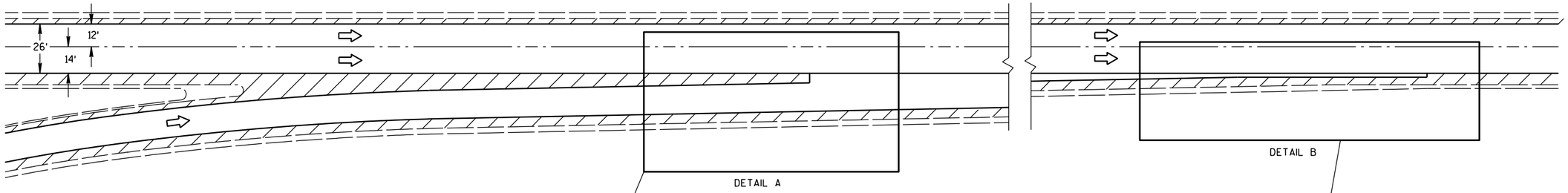
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

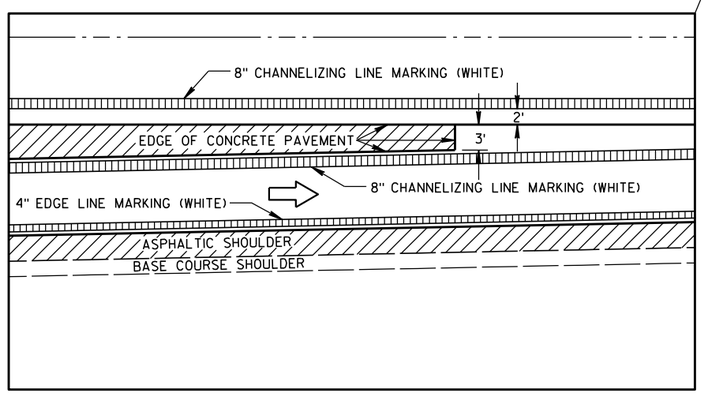
S.D.D. 13 C 17-1a

6

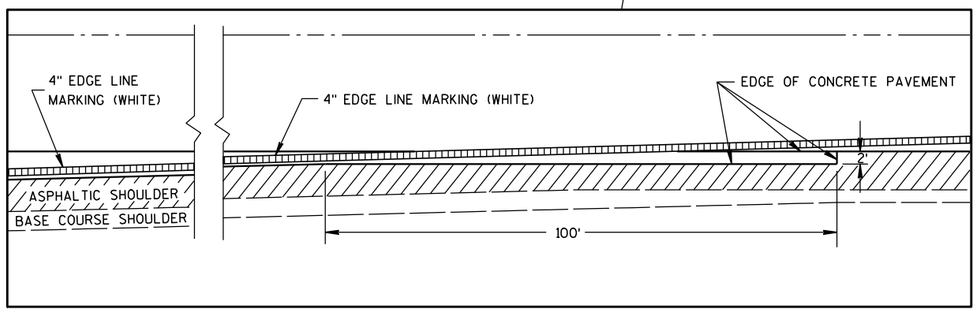
S.D.D. 13 C 17-1a



ENTRANCE RAMP DETAIL



DETAIL A



DETAIL B

CONCRETE JOINT PAVING DETAILS

GENERAL NOTES

PAVEMENT MARKING DETAILS AND SPECIFICATIONS ARE PROVIDED ELSEWHERE IN THE CONTRACT.

SEE SDD 13 A 4-4c OR SDD 13 A 5-1b FOR RAMP AND GORE RUMBLE STRIP LOCATION.

CONCRETE JOINT DETAIL FOR ENTRANCE RAMP TERMINI

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

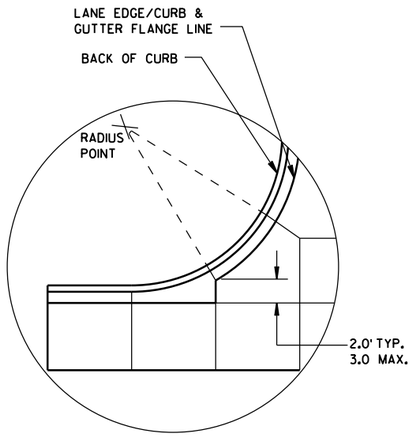
5/27/98
DATE

/S/ Rory L. Rhinesmith
CHIEF ROADWAY DEVELOPMENT ENGINEER

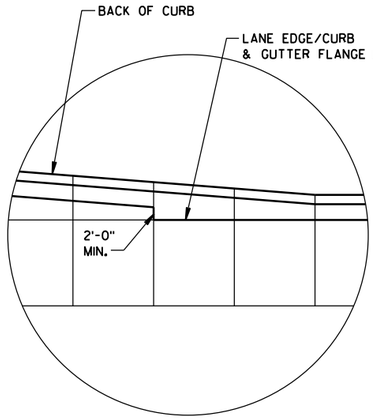
FHWA

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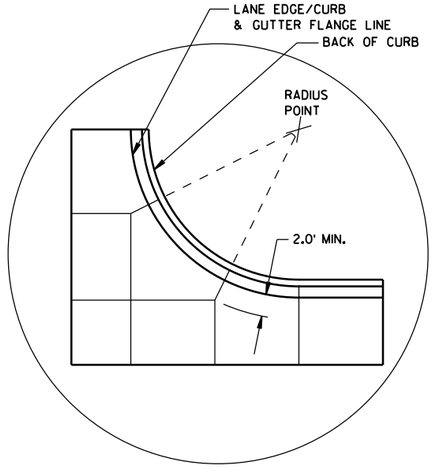
S.D.D. 13 C 17-1b



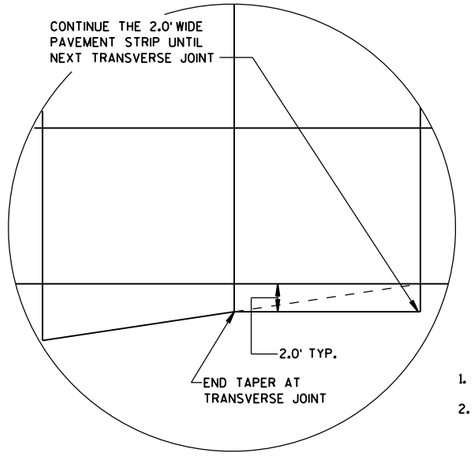
DETAIL "A"



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.

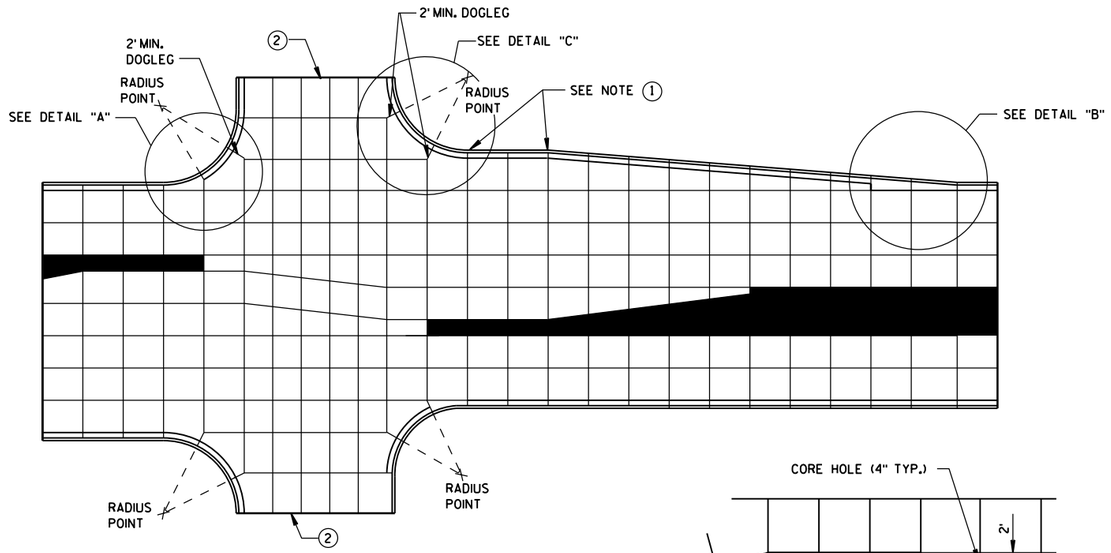
AVOID SLABS LESS THAN 2 FEET WIDE OR GREATER THAN 15 FEET WIDE.

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.

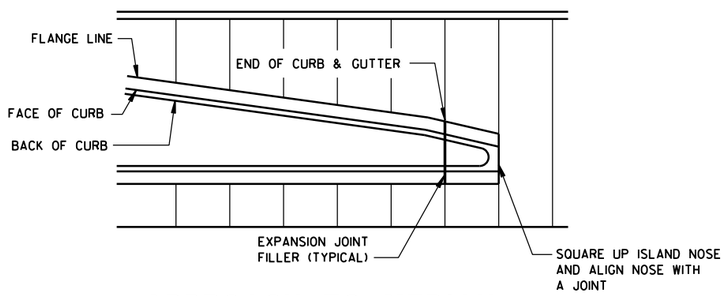
1. PROVIDE TRANSVERSE JOINTS AT ALL PAVEMENT WIDTH CHANGES.
2. CONSTRUCT DOWELED EXPANSION JOINT ON THE SIDE ROAD OF AN INTERSECTION IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH. ALIGN EXPANSION JOINT WITH EDGE OF RADIUS.
3. THE ENGINEER MAY APPROVE SLIGHT VARIATIONS FROM THESE JOINTING DETAILS.



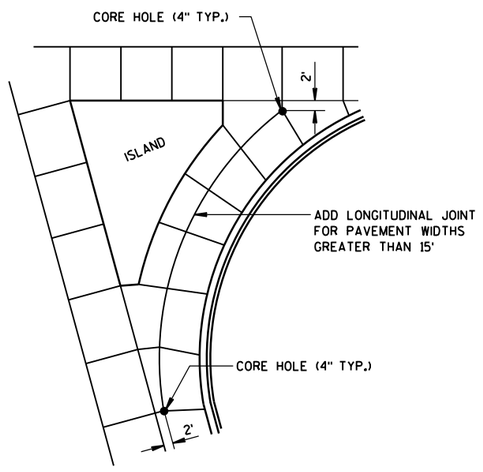
STANDARD INTERSECTION

PAVEMENT DEPTH AND JOINT SPACING TABLE

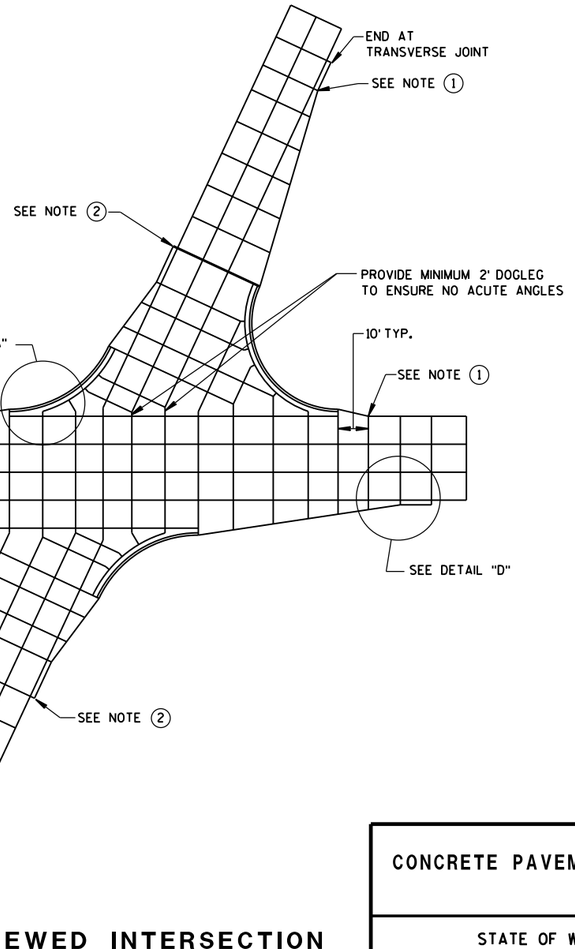
PAVEMENT DEPTH (D)	CONTRACTION JOINT SPACING
6", 6½"	12'
7", 7½"	14'
8" & ABOVE	15'



APPROACH TO MEDIAN



LARGE RIGHT TURN



SKEWED INTERSECTION

CONCRETE PAVEMENT JOINTING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR 367

6

S.D.D. 13 C 18-5a

6

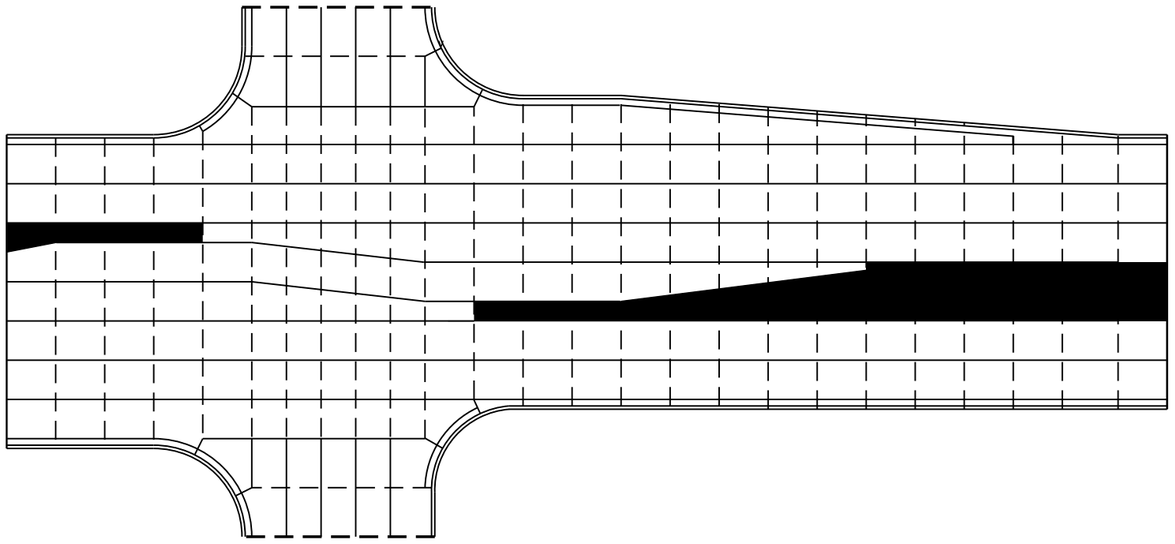
S.D.D. 13 C 18-5a

LEGEND

POTENTIAL DOWELED EXPANSION JOINT

DOWELED JOINT

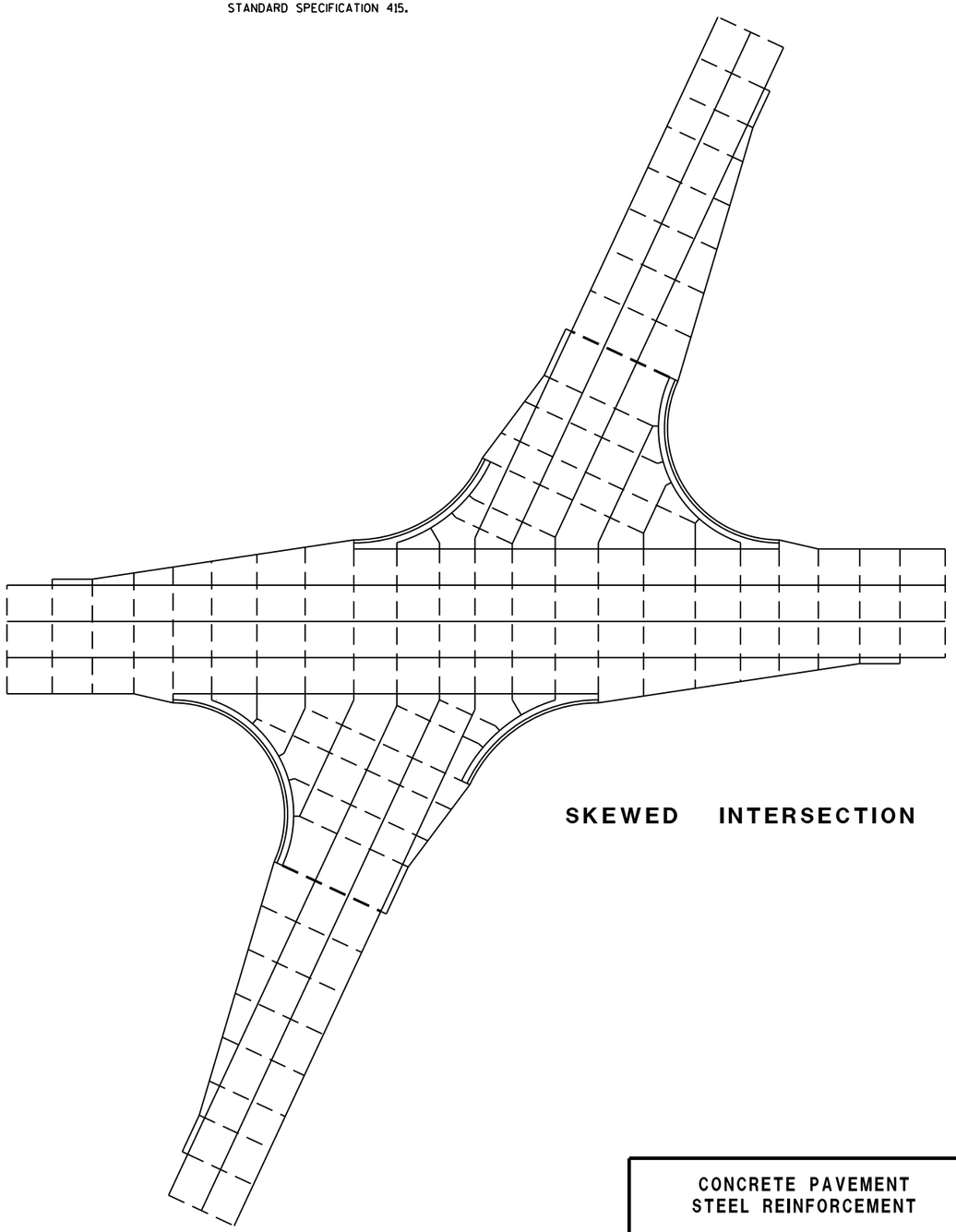
TIED JOINT



STANDARD INTERSECTION

GENERAL NOTES

USE AN EXPANSION JOINT FILLER MEETING THE REQUIREMENTS OF STANDARD SPECIFICATION 415.



SKEWED INTERSECTION

6

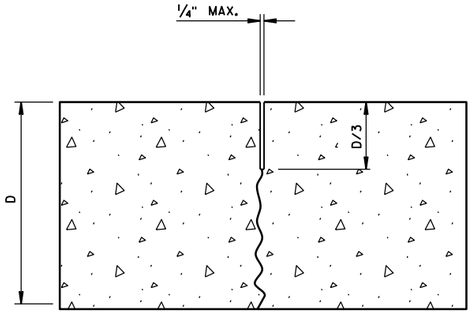
S.D.D. 13 C 18-5b

CONCRETE PAVEMENT
STEEL REINFORCEMENT

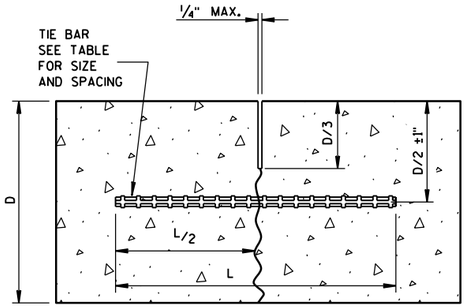
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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S.D.D. 13 C 18-5b



UNDOWELED-TRANSVERSE



TIED LONGITUDINAL

TIE BAR TABLE

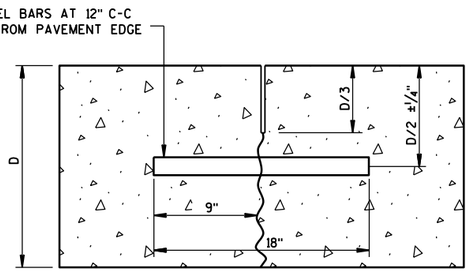
PAVEMENT DEPTH (D)	TIE BAR SIZE	TIE BAR LENGTH (L)	MAX. TIE BAR SPACING
< 10 1/2"	NO. 4	30"	36"
≥ 10 1/2"	NO. 5	36"	36"
	NO. 4*	30"	24"**

* SUBSTITUTE BENT BARS AT LONGITUDINAL JOINTS WHEN EQUIPMENT LIMITATIONS DURING CONSTRUCTION WARRANT (e.g. AUXILIARY LANES OR TURN LANES)

** CONFORM TO 15" MINUMUM SPACING FROM TRANSVERSE JOINTS; SPACING BETWEEN TIE BARS WILL BE 30" AT TRANSVERSE JOINTS.

GENERAL NOTES

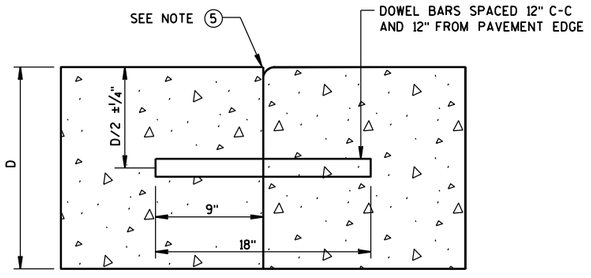
1. USE DOWELED EXPANSION JOINTS ON SIDE ROADS AT INTERSECTIONS (TO ISOLATE THE SIDE ROAD FROM THE THROUGH STREET) IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH.
2. SPACE CONTRACTION JOINTS IN ACCORDANCE WITH 13C4, 13C11 OR 13C13.
3. LOCATE CONSTRUCTION JOINTS A MINIMUM OF 6 FEET FROM THE NEAREST CONTRACTION JOINT AND ALIGN PARALLEL TO CONTRACTION JOINTS.
4. CONSTRUCTION JOINTS CAN BE FORMED OR SAWED.
5. IF JOINT IS FORMED, PROVIDE A 1/4-INCH RADIUS.
6. ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.



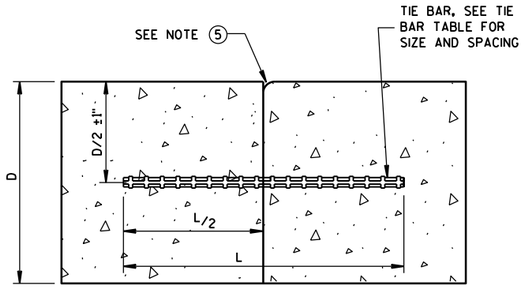
DOWELED-TRANSVERSE

CONTRACTION JOINTS

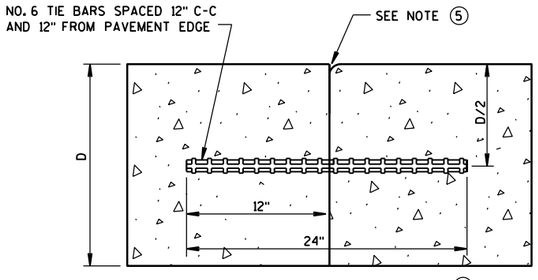
SEE NOTE (2)



DOWELED TRANSVERSE (3)

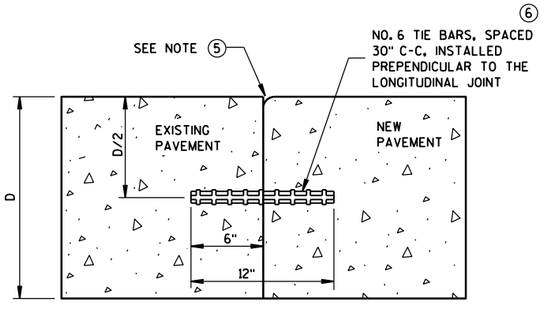


TIED LONGITUDINAL



TIED TRANSVERSE (3)

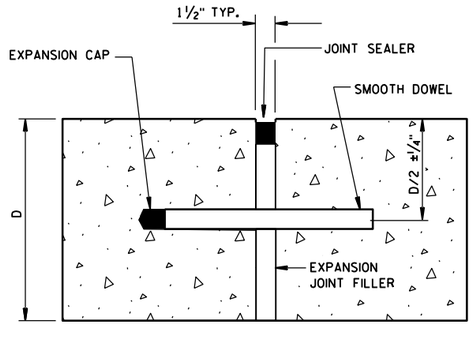
(FOR USE ON NON-DOWELED PAVEMENTS ONLY)



TIED LONGITUDINAL TO EXISTING

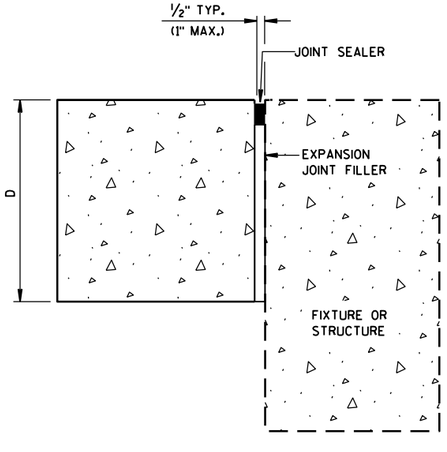
CONSTRUCTION JOINTS

SEE NOTE (4)



DOWELED-TRANSVERSE

SEE NOTE (1)



UNTIED-LONGITUDINAL

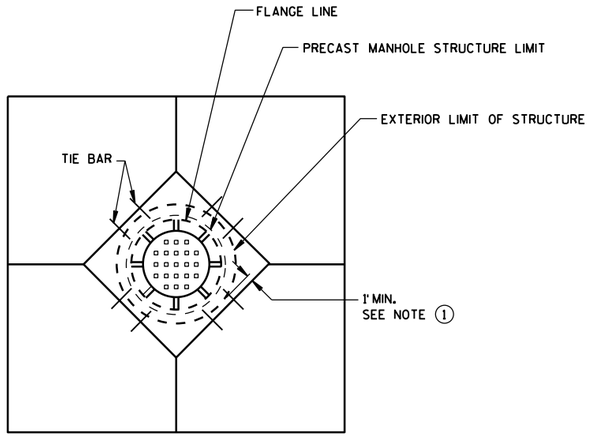
EXPANSION JOINTS

CONCRETE PAVEMENT
JOINT TYPES

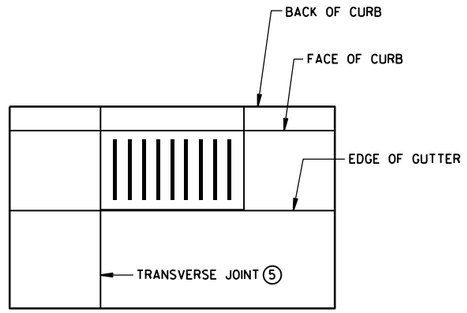
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

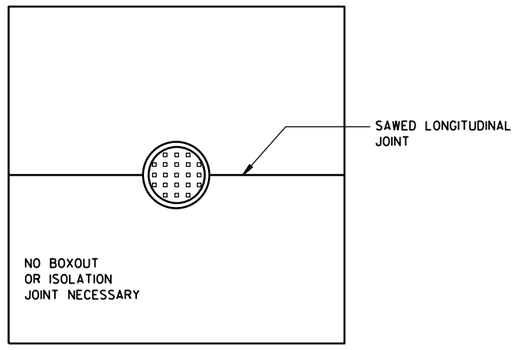
S.D.D. 13 C 18-5c



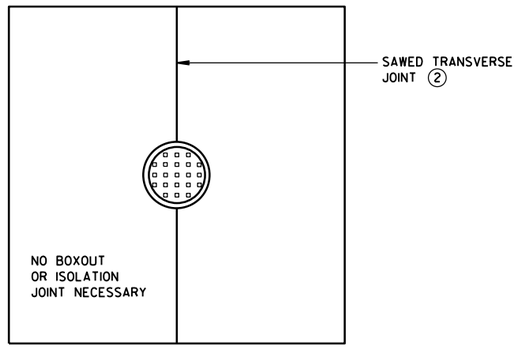
DIAGONAL MANHOLE BOXOUT FOR CONSTRUCTION JOINTS



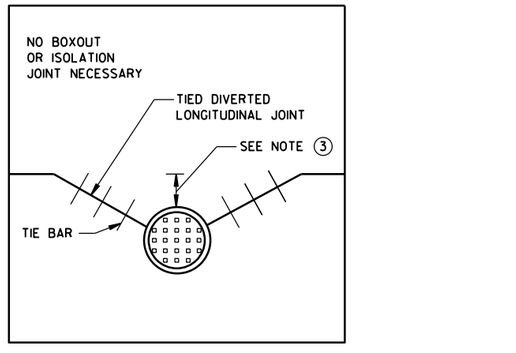
INLET WITH TRANSVERSE JOINT



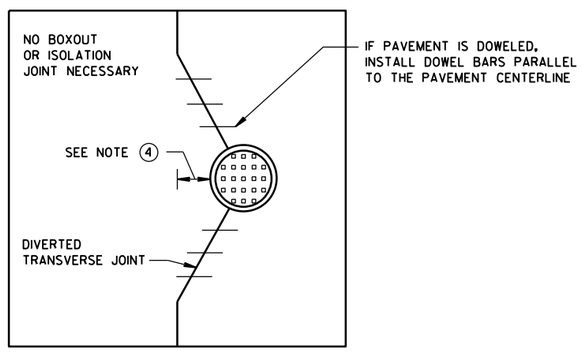
MANHOLE WITH LONGITUDINAL JOINT



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
December, 2016 /S/ Peter Kemp, P.E.
DATE PAVEMENT SUPEF
FHWA

6

S.D.D. 13 C 18-5d

GENERAL NOTES

(1) W6 X 9 OR W6 X 8.5 STEEL POSTS AND NOTCHED PLASTIC BLOCKOUTS ARE ACCEPTABLE ALTERNATIVES FOR 6" X 8" WOOD POSTS WITH WOOD OR PLASTIC BLOCKOUTS. USE APPROVED NOTCHED PLASTIC BLOCKOUTS WITH STEEL POSTS. APPROVED PLASTIC BLOCKOUT DESIGNS MAY VARY FROM THIS TYPICAL DETAIL WHEN USED IN CONJUNCTION WITH STEEL POSTS.

DO NOT MIX STEEL POSTS AND WOOD POSTS IN A SINGLE INSTALLATION.

(2) USE STRUCTURAL STEEL POSTS CONFORMING TO ASTM A 36. GALVANIZED POSTS ACCORDING TO AASHTO M 111. EITHER SET THE POSTS IN DRILLED HOLES OR DRIVE TO GRADE. REMOVE MUSHROOMING CAUSED BY DRIVING AND REPAIR DAMAGED SPELTER COATING ON GALVANIZED POSTS.

(3) INSTALL STEEL POSTS WITH HOLES ON APPROACHING TRAFFIC SIDE.

(4) USE EITHER WOOD OR APPROVED PLASTIC BLOCKOUTS ON WOOD POSTS.

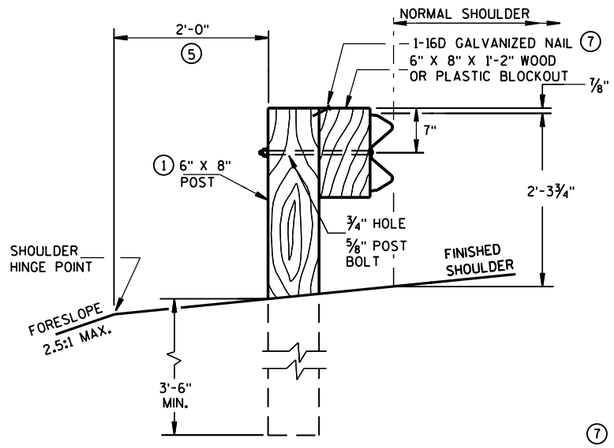
(5) IF THE DISTANCE FROM BACK OF POST TO SHOULDER HINGE POINT IS LESS THAN 2 FEET INSTALL LONGER POST AT HALF POST SPACING, W BEAM (LHW).

(6) IF ROCK IS ENCOUNTERED DURING EXCAVATION, THE ENGINEER MAY APPROVE USING A 12 INCH DIAMETER POST HOLE EXTENDING 20 INCHES DEEP INTO THE ROCK. PLACE GRANULAR MATERIAL IN THE BOTTOM OF THE HOLE APPROXIMATELY 2½ INCHES DEEP. CUT THE POSTS TO LENGTH AND PLACE IN YHE HOLE. BACKFILL WITH MATERIAL EXCAVATED FROM THE HOLE AND COMPACT ADEQUATEY.

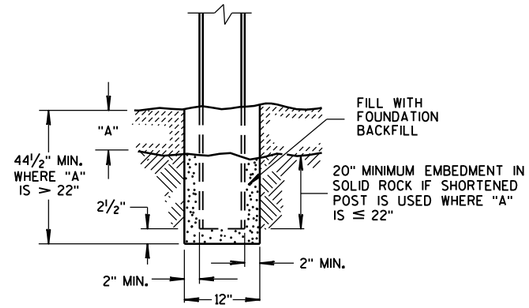
(7) WHEN USING STEEL POSTS AND WOOD BLOCKOUTS INSTALL FOUR 16D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.

INSTALL BEAM GUARD SECTIONS AND ALL NECESSARY HARDWARE ACCORDING TO THE APPLICABLE PLAN AND CURRENT STANDARD AND SUPPLEMENTAL SPECIFICATIONS.

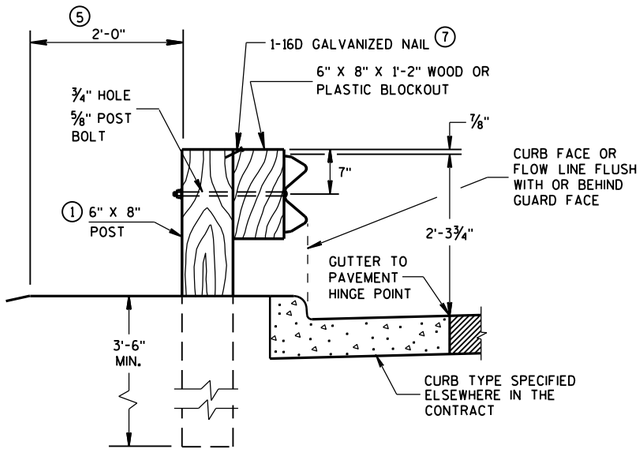
ALL DIMENSIONS ARE SUBJECT TO MANUFACTURER'S TOLERANCES EXCEPT WHERE ALLOWABLE TOLERANCES ARE SHOWN.



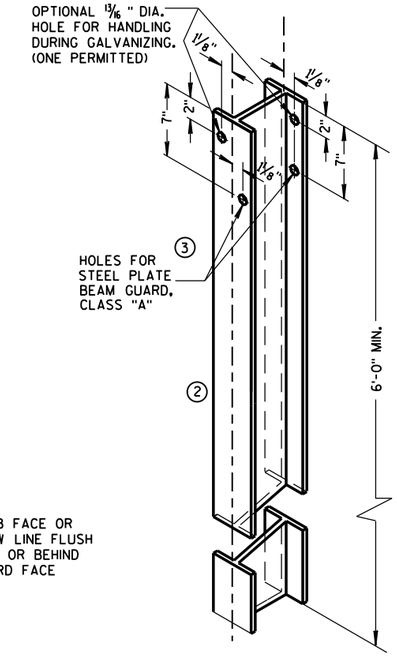
END VIEW
LOCATED ALONG A ROADWAY SHOULDER
STANDARD INSTALLATION



END VIEW
SETTING STEEL OR WOOD POST IN ROCK (6)

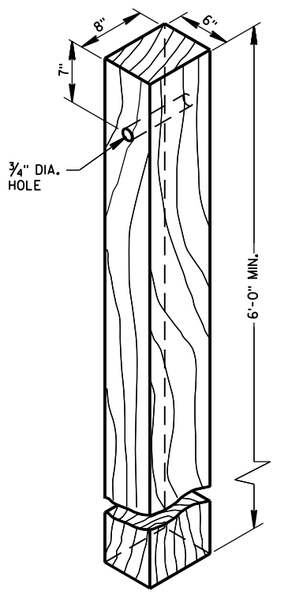


END VIEW
LOCATED ALONG A CURBED ROADWAY

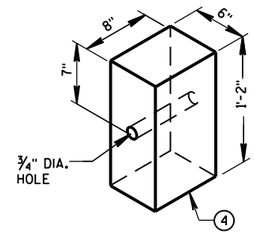


STEEL POST &
HOLE PUNCHING DETAIL
(W6 X 9) (1)

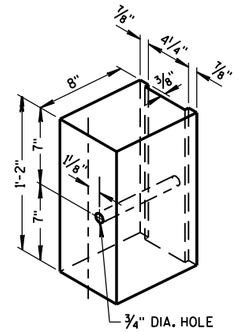
ALL HOLES 13/16" DIAMETER EXCEPT AS NOTED



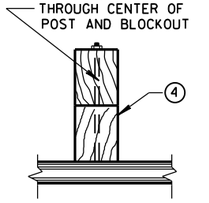
WOOD POST
(6"X8") NOMINAL



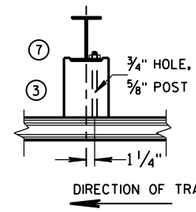
WOOD OR PLASTIC
BLOCKOUT FOR
WOOD POSTS



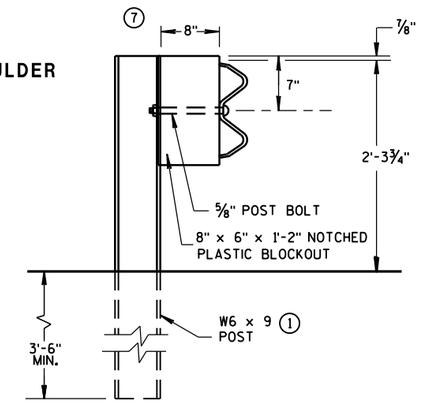
TYPICAL NOTCHED (1)
PLASTIC BLOCKOUT
FOR STEEL POSTS



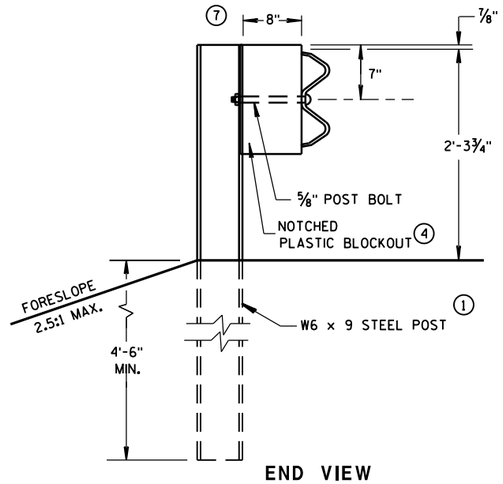
PLAN VIEW
WOOD POST, BLOCKOUT & BEAM



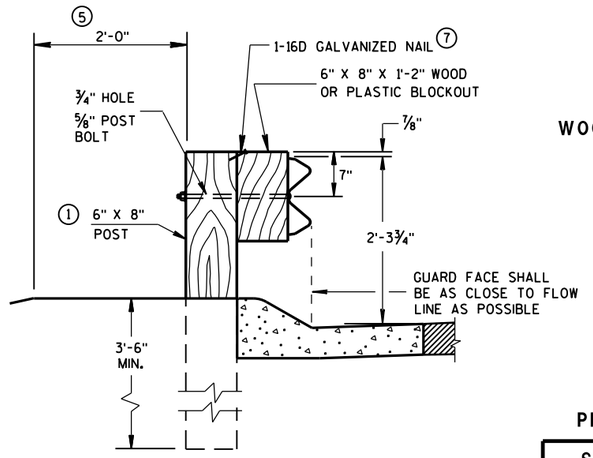
PLAN VIEW
STEEL POST, NOTCHED
PLASTIC BLOCKOUT & BEAM



END VIEW
STEEL POST & NOTCHED
PLASTIC BLOCKOUT ALTERNATIVE
STANDARD INSTALLATION



END VIEW
LONGER POST AT HALF
POST SPACING W BEAM
(LHW)



END VIEW
LOCATED ALONG A
MOUNTABLE CURBED ROADWAY

TYPICAL INSTALLATION OF STEEL PLATE BEAM GUARD

STEEL PLATE BEAM GUARD,
CLASS "A"
INSTALLATION & ELEMENTS

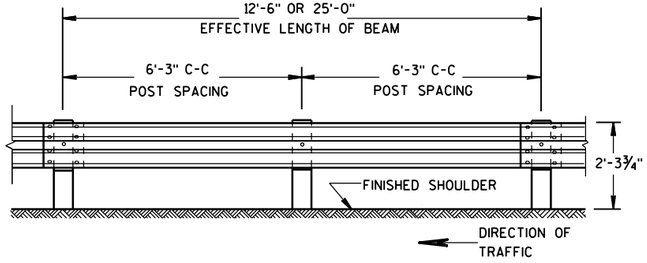
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR 371

6

S.D.D. 14 B 15-9a

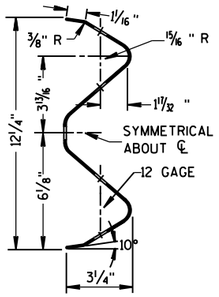
6

S.D.D. 14 B 15-9a

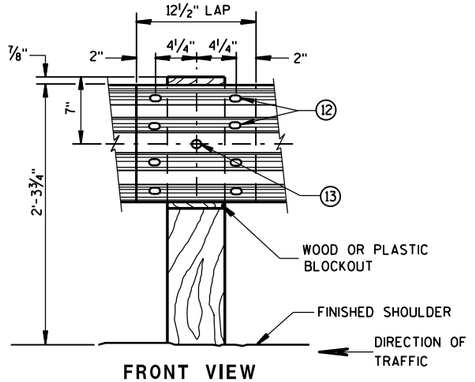


FRONT VIEW

POST SPACING STANDARD INSTALLATION



SECTION THRU W BEAM



FRONT VIEW

BEAM SPLICE AT WOOD POST AND POST MOUNTING DETAIL

GENERAL NOTES

(8) 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.

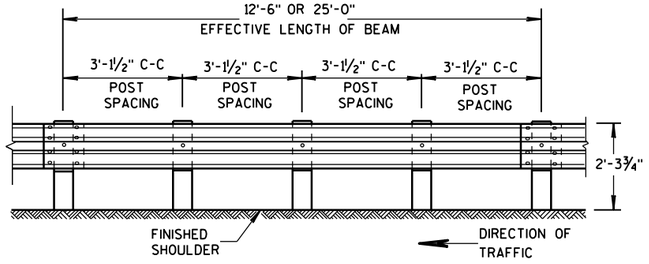
(9) DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

(10) REVERSE EVERY OTHER REFLECTOR FOR 2-WAY VISIBILITY. THE CONTRACTOR MAY FURNISH TWO-SIDED REFLECTORS IN LIEU OF ONE-SIDED REFLECTORS.

(11) PROVIDE AN ANGLE OF BEND OF 90° ± 1° FOR TWO-SIDED REFLECTORS.

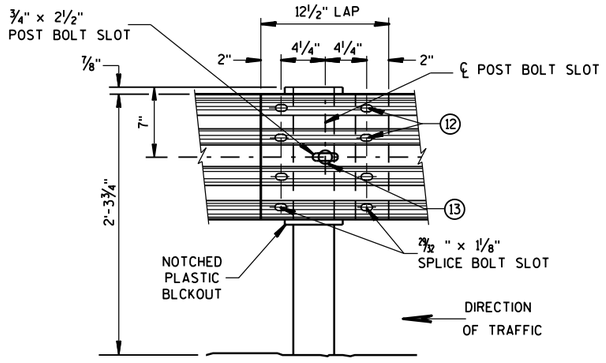
(12) 8 -⅝" ϕ X 2" BUTTON HEAD BOLTS WITH OVAL SHOULDERS & RECESS NUTS.

(13) ⅝" DIA. BUTTON HEAD BOLT AND RECESS NUT WITH ⅝" DIA. F844 FLAT WASHER UNDER NUT.



FRONT VIEW

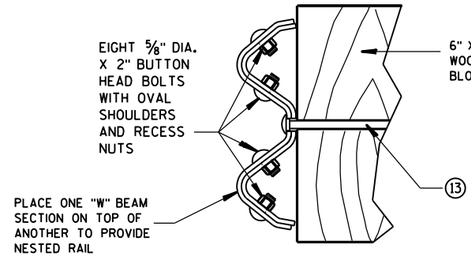
POST SPACING FOR LONGER POST AT HALF POST SPACING W BEAM (LHW)



FRONT VIEW

BEAM SPLICE AT STEEL POST

TYPICAL SPLICING DETAILS OF STEEL PLATE BEAM GUARD

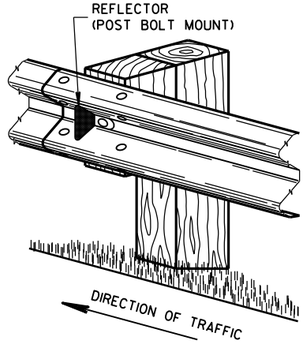


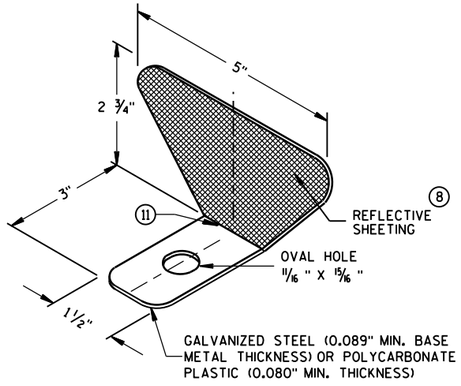
NESTED W BEAM (NW)

USE ALL OTHER STANDARD BEAM GUARD DETAILS FOR CONSTRUCTING NESTED W BEAM (NW)

REFLECTOR SPACING (9)

	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 (10)	6
	> 200'	50' C-C	1	
TWO WAY TRAFFIC	< 200'	50' C-C	2 (11)	3
	> 200'	100' C-C	2	



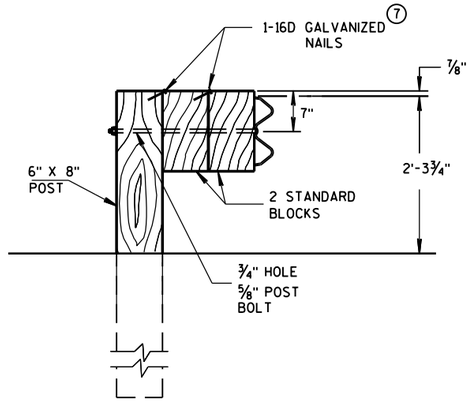


ONE SIDED REFLECTOR DETAIL AND TYPICAL INSTALLATION (8)

STEEL PLATE BEAM GUARD,
CLASS "A",
INSTALLATION & ELEMENTS

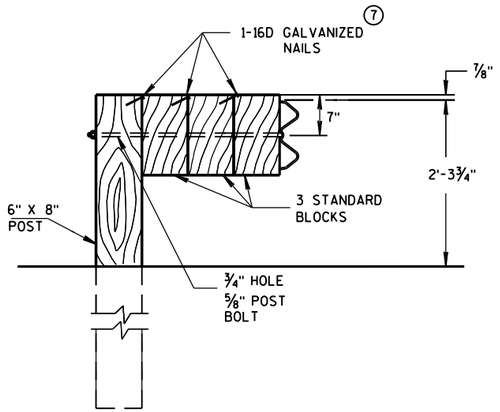
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6
S.D.D. 14 B 15-9b



DETAIL FOR DOUBLE BLOCKS

THE NUMBER OF DOUBLE BLOCK POSTS WITHIN A BARRIER RUN IS UNLIMITED

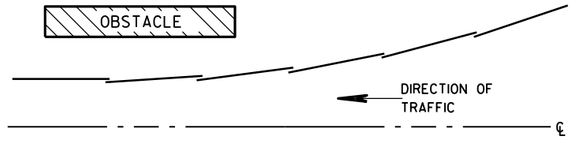


DETAIL FOR TRIPLE BLOCKS

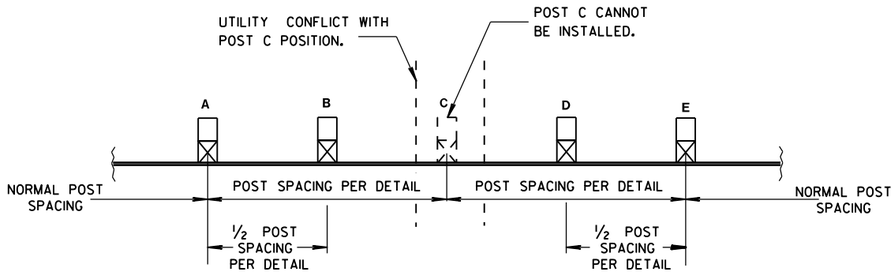
TRIPLE BLOCK DETAIL IS LIMITED TO ONE LOCATION WITHIN A BEAM GUARD RUN.

NOTES: USE DOUBLE OR TRIPLE BLOCKS WHEN UNDERGROUND OBSTACLES PREVENT THE POST FROM BEING INSTALLED.

DO NOT USE EXTRA 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.



PLAN VIEW
BEAM LAPPING DETAIL



POST DRIVING FOR CONTINUOUS UNDERGROUND OBSTRUCTION

STEEL PLATE BEAM GUARD, CLASS "A", INSTALLATION & ELEMENTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

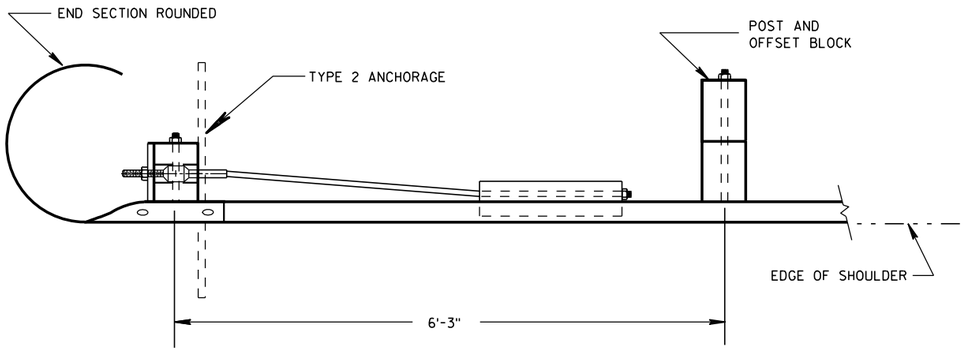
APPROVED
June 2016 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

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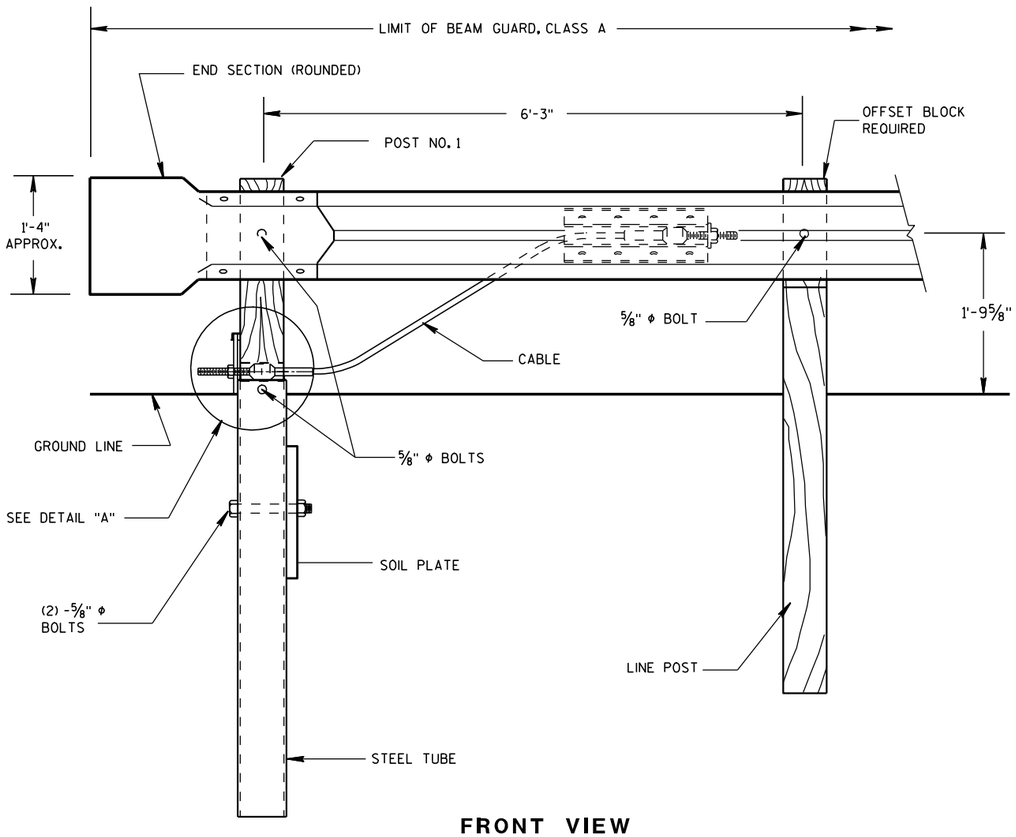
S.D.D. 14 B 15-9c

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S.D.D. 14 B 15-9c



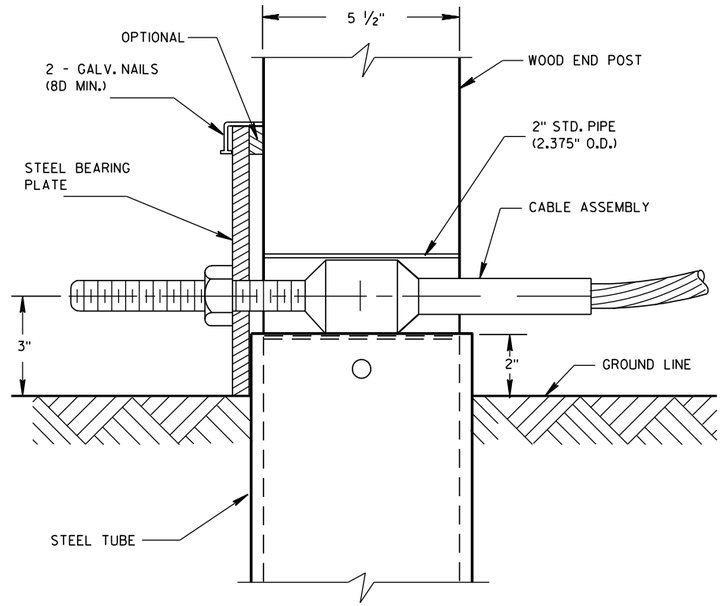
PLAN VIEW



FRONT VIEW

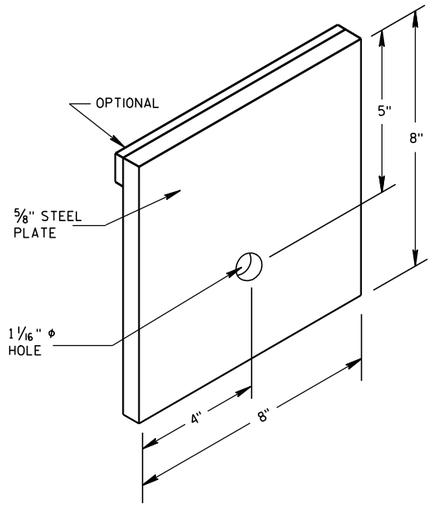
END TREATMENT WITH TYPE 2 ANCHORAGE

(USE ON ONE-WAY ROADWAYS ONLY - DEPARTING END)



DETAIL "A"

POST NO. 1



STEEL BEARING PLATE

ANCHORAGE FOR STEEL
PLATE BEAM GUARD
TYPE 2

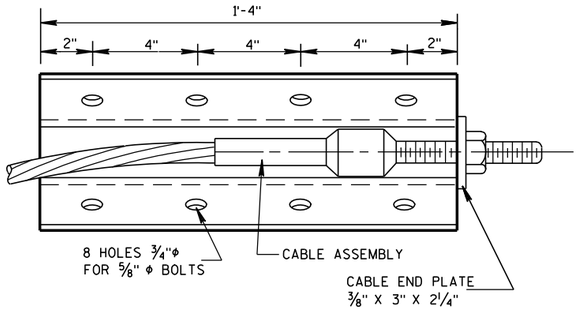
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

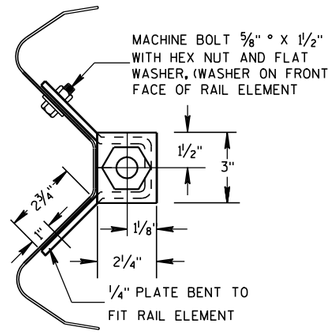
S.D.D. 14 B 16-4a

6

S.D.D. 14 B 16-4a

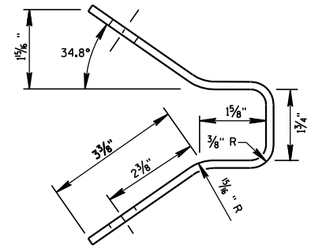


FRONT VIEW

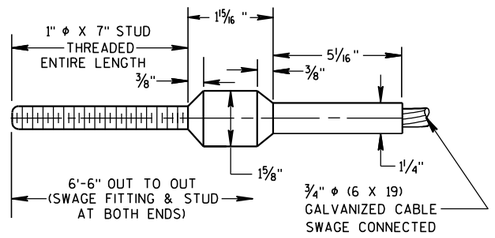


END VIEW

ANCHOR PLATE DETAIL



END VIEW OF BRACKET



CABLE ASSEMBLY

CABLE, SWAGE FITTING, STUD AND NUT SHALL DEVELOP
A MINIMUM BREAKING STRENGTH OF 40,000 LB
(TIGHTEN UNTIL TAUT)

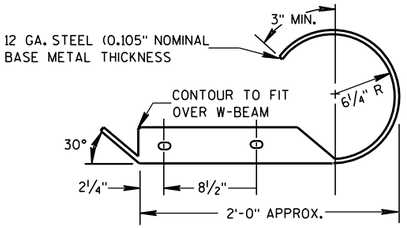
GENERAL NOTES

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

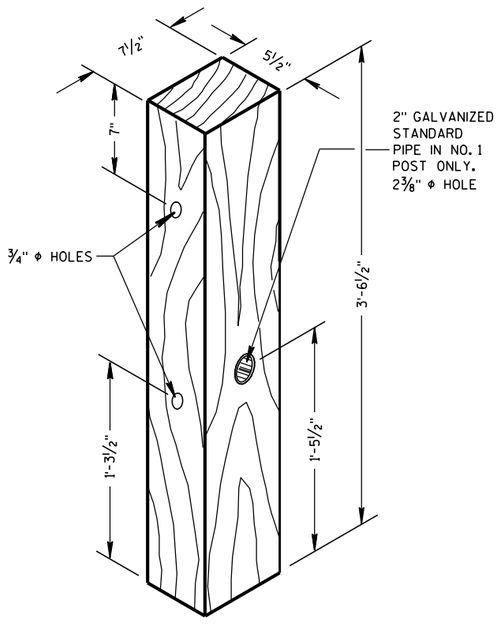
STRUCTURAL TUBING SHALL CONFORM TO THE REQUIREMENTS OF ASTM A-500 GRADE B OR ASTM A-501.

POST NO. 1 SHALL BE WOOD BREAKAWAY POST INSERTED AND BOLTED INTO STEEL TUBE.

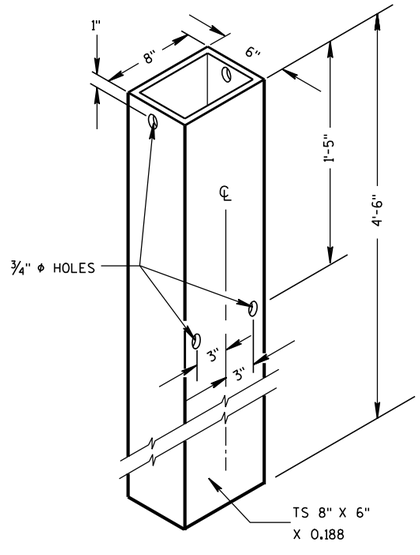
TYPE 2 ANCHORAGE SHALL CONSIST OF A STEEL TUBE, SOIL PLATE WOOD BREAKAWAY POST, BEARING PLATE, ANCHOR PLATE, CABLE ASSEMBLY AND ALL ASSOCIATED HARDWARE, ALL STEEL PARTS SHALL BE GALVANIZED.



PLAN VIEW

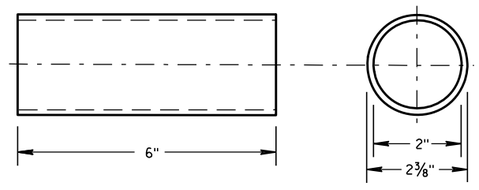


WOOD BREAKAWAY POST



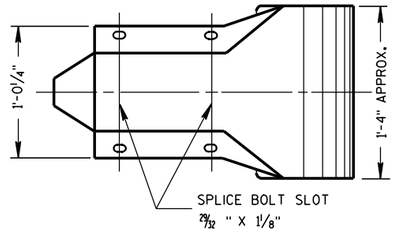
STEEL TUBE

STEEL TUBE SHALL CONFORM TO
REQUIREMENTS OF ASTM A500

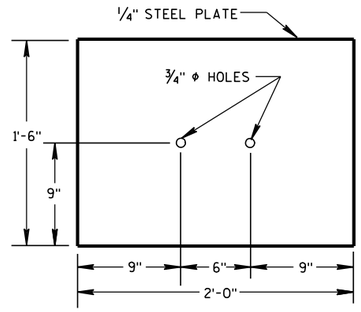


BREAKAWAY TERMINAL POST SLEEVE

GALVANIZED STANDARD STRENGTH STEEL PIPE, ASTM 53 GRADE "B"



FRONT VIEW
W BEAM END SECTION ROUNDED



SOIL PLATE

ANCHORAGE FOR STEEL PLATE BEAM GUARD TYPE 2

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

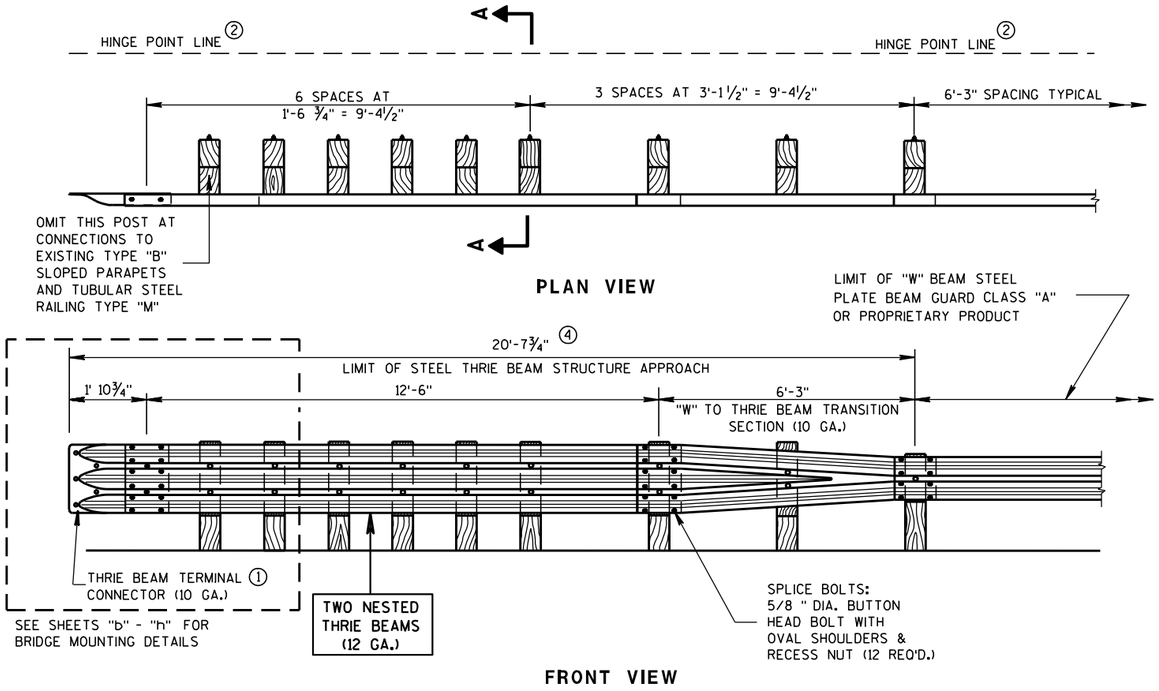
APPROVED
8/21/2007 DATE
/S/ Jerry H. [illegible] ROADWAY STANDARDS ENGINEER
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ENT
FHWA

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S.D.D. 14 B 16-4b

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S.D.D. 14 B 16-4b



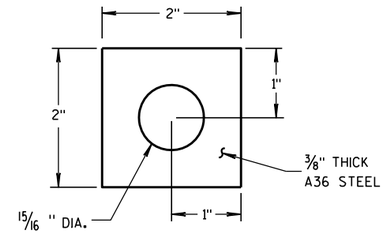


PLATE WASHER DETAIL

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".

DO NOT USE STEEL POSTS AND NOTCHED PLASTIC BLOCKOUTS IN THE STEEL THRIE BEAM STRUCTURAL APPROACH AND THE TRANSITION SECTION OF STEEL PLATE BEAM GUARD, CLASS "A" INSTALLATIONS.

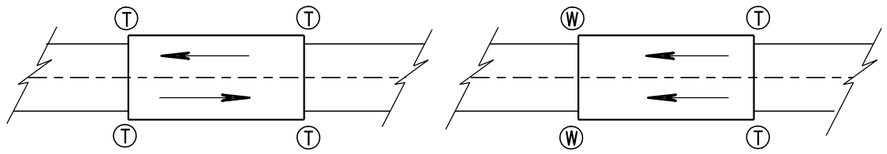
IF ROCK IS ENCOUNTERED, REMOVE ROCK TO FULL DEPTH OF POST PLUS 2 1/2" , AND 12" DIAMETER AROUND POST. SEE 14B15 FOR MORE DETAILS.

① BRIDGE RAILING TYPE "W" DOES NOT REQUIRE A TERMINAL CONNECTOR.

② MINIMUM EMBEDMENT SHALL BE 4'-0". WHERE EXISTING CONDITIONS DO NOT PERMIT THE APPROPRIATE EARTHWORK SHOWN ON THE PLAN TYPICAL SECTIONS OR DETAILS, THE ENGINEER MAY ALLOW THE REDUCTION OR ELIMINATION OF THE 2 FOOT DISTANCE TO THE HINGE POINT. OTHERWISE BUILD AS THE PLAN SHOWS OR AS THE ENGINEER DIRECTS. IF THE 2 FOOT DISTANCE TO THE HINGE POINT IS REDUCED OR ELIMINATED, INCREASE THE POST EMBEDMENT DEPTH TO 4'-6" OR MORE.

③ POST BOLTS ARE 5/8" DIAMETER ASTM A307 BUTTON HEAD BOLT. A POST BOLT REQUIRES A 5/8" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX AND A 5/8" DIAMETER F844 FLAT WASHER. LENGTH OF POST BOLT MAY VARY.

④ ALL WOOD POSTS MUST BE 6" X 8" AND AT LEAST 7'-0" LONG.



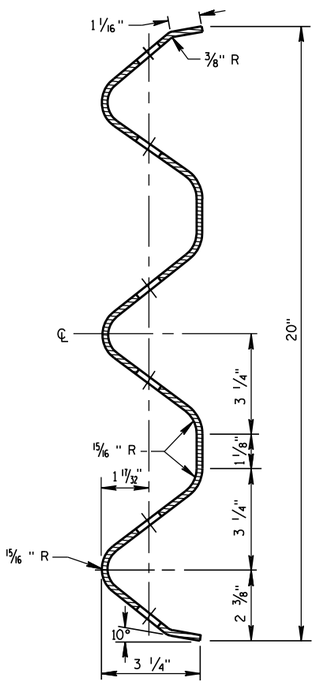
TWO WAY TRAFFIC

ONE WAY TRAFFIC

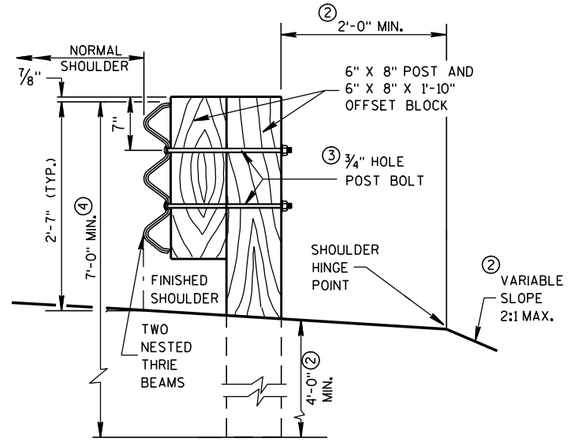
T THRIE BEAM CONNECTION

W W-BEAM CONNECTION WHEN REQUIRED

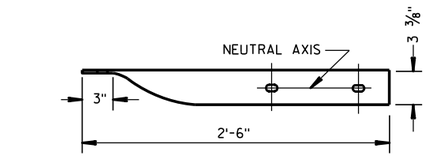
TYPICAL LOCATIONS OF THRIE BEAM AND W-BEAM CONNECTIONS TO BRIDGE

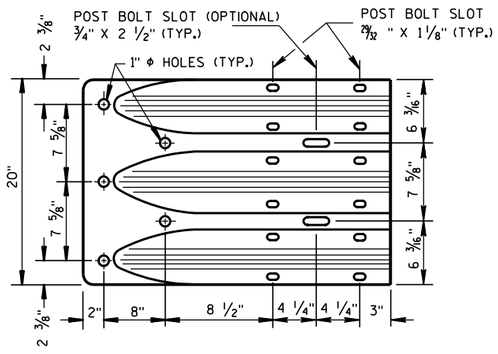


SECTION THRU THRIE BEAM RAIL ELEMENT

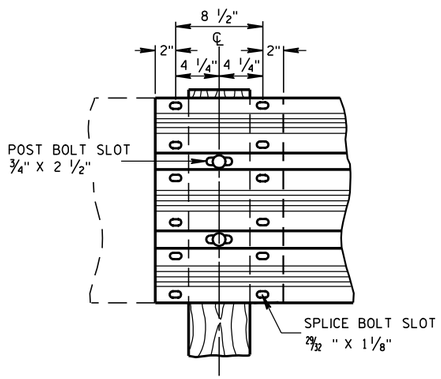


SECTION A-A





THRIE BEAM TERMINAL CONNECTOR



THRIE BEAM SPLICE

STEEL THRIE BEAM STRUCTURE APPROACH

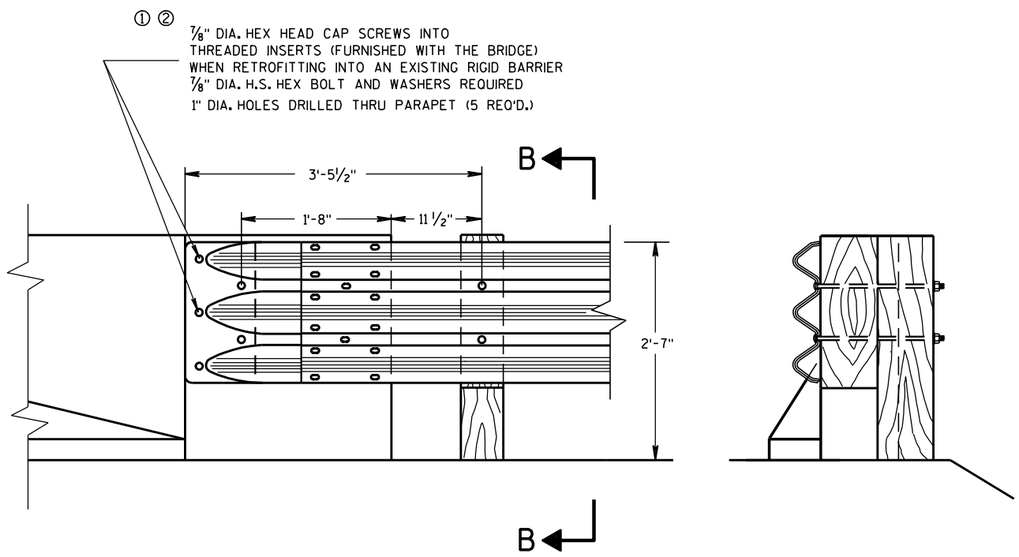
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

8/31/2012 — DATE

/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER

FHWA



FRONT VIEW

SECTION B-B

THRIE BEAM CONNECTION TO BRIDGE PARAPET WITH SQUARE ENDS

GENERAL NOTES

THESE ARE TYPICAL CONNECTION DETAILS. ADJUST THE POSTION OF CONNECTIONS TO EXISTING BRIDGES TO FIT THE ACTUAL BRIDGE AND SITE DIMENSIONS.

BOLTS, NUTS AND WASHERS SHALL CONFORM TO ASTM A325, A449 AND GALVANIZED PER STANDARD SPECIFICATIONS 614.

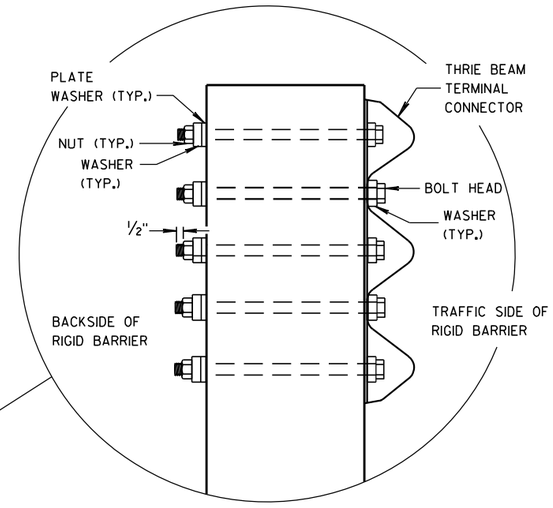
① DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

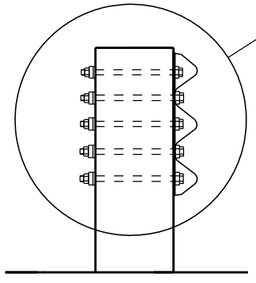
② BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM TERMINAL CONNECTOR. BOLTS THAT EXTEND THROUGH THE PARAPET AND OUT THE BACK FACE REQUIRE A HARDENED ROUND STEEL WASHER THAT IS 2" O.D. X ⅝" 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 ½".

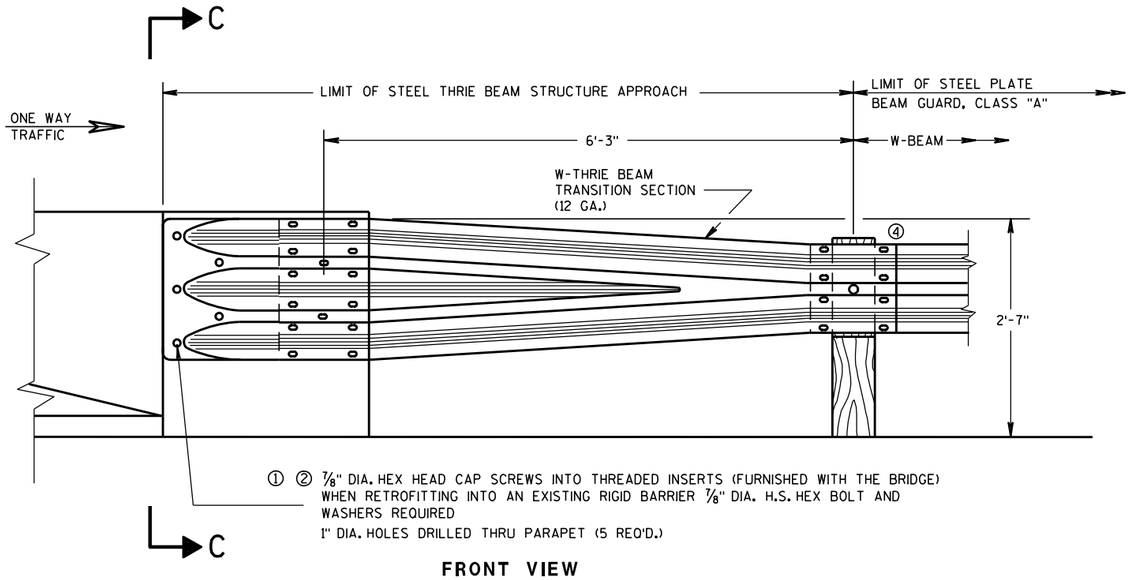
④ W6 X 9 OR W6 X 8.5 STEEL POSTS AND NOTCHED PLASTIC BLOCKOUTS ARE ACCEPTABLE ALTERNATIVES FOR 6" X 8" WOOD POST WITH WOOD OR PLASTIC BLOCKOUTS. USE APPROVED NOTCHED PLASTIC BLOCKOUTS WITH STEEL POSTS.

DO NOT USE STEEL POSTS AND NOTCHED PLASTIC BLOCKOUTS IN THE STEEL THRIE BEAM STRUCTURAL APPROACH AND THE TRANSITION SECTION OF STEEL PLATE BEAM GUARD, CLASS "A" INSTALLATIONS.





SECTION C-C



① ② ⅞" DIA. HEX HEAD CAP SCREWS INTO THREADED INSERTS (FURNISHED WITH THE BRIDGE) WHEN RETROFITTING INTO AN EXISTING RIGID BARRIER ⅞" DIA. H.S. HEX BOLT AND WASHERS REQUIRED
1" DIA. HOLES DRILLED THRU PARAPET (5 REQ'D.)

FRONT VIEW

W BEAM TRANSITION AND CONNECTION TO BRIDGE PARAPETS WITH SQUARE ENDS

(USE ONLY ON THE TRAFFIC EXIT END OF ONE WAY BRIDGES)

STEEL THRIE BEAM STRUCTURE APPROACH, CONNECTION TO SQUARE END PARAPETS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

8/31/2012
DATE

/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER

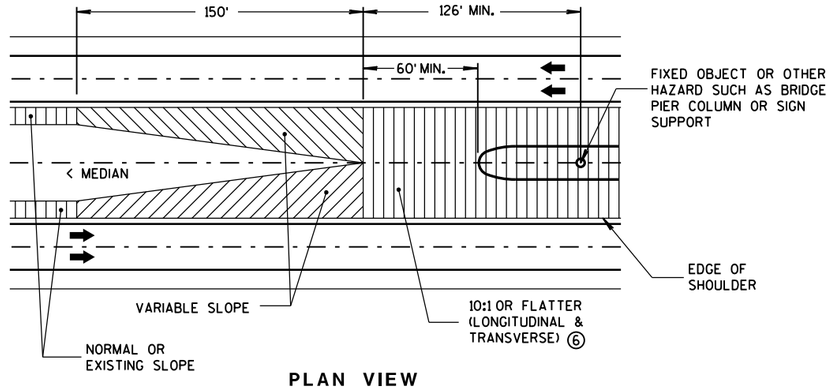
FHWA

6

S.D.D. 14 B 20-11b

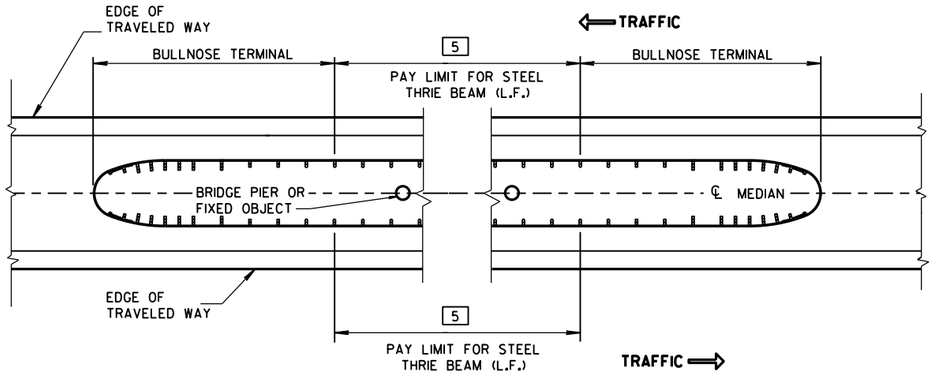
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S.D.D. 14 B 20-11b

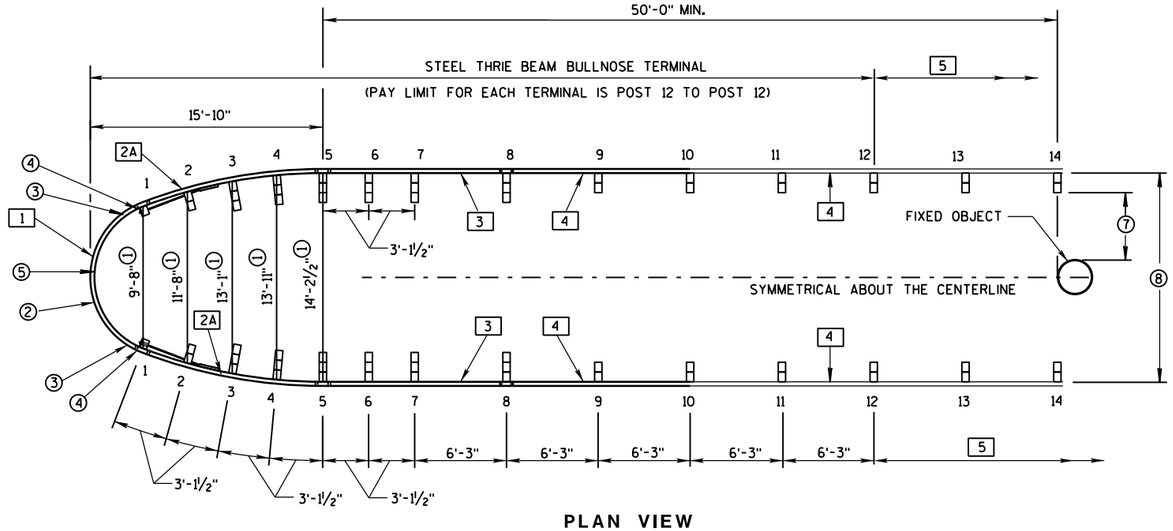


PLAN VIEW

GRADING AT BULLNOSE
(ALL INSTALLATIONS)

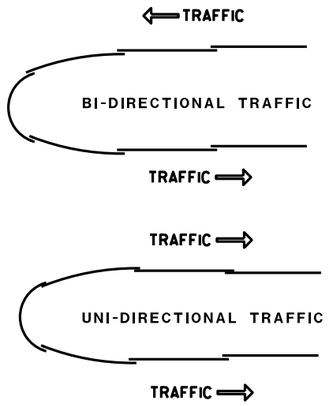


MEDIAN HAZARD PROTECTION PAY LIMITS



PLAN VIEW

TYPICAL BULLNOSE LAYOUT



LAPPING DETAIL
(ALL INSTALLATIONS)

GENERAL NOTES

SEE STANDARD DETAIL DRAWINGS 14 B 26a-e.

PUNCHING, DRILLING, CUTTING OR WELDING IS NOT PERMITTED ON ANY GALVANIZED THRIE BEAM ACCESSORY OR TERMINAL ACCESSORY.

OTHER ANCHOR CABLE ASSEMBLIES HAVING 40,000 LBS. MIN. BREAKING STRENGTH MAY BE USED.

FOR POSTS 2 THROUGH 14, IF POST CANNOT BE INSTALLED AT SPECIFIED LOCATION 1 EXTRA STANDARD WOOD BLOCK MAY BE ADDED.

THE USE OF STEEL POSTS ON THE BULLNOSE IS NOT ALLOWED.

BOLTS AND ALL NECESSARY HARDWARE SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A 153.

ALL THRIE BEAM SHALL BE 12-GAUGE.

IF ROCK IS ENCOUNTERED, REMOVE ROCK TO FULL DEPTH OF POST PLUS 2½" AND 12" DIAMETER AROUND POST. SEE SDD 14B15 OR SDD 14B42 FOR MORE INFORMATION.

[1] SLOTTED THRIE BEAM RAIL NO. 1. (POST 1 TO POST 1)

[2A] SLOTTED THRIE BEAM RAIL NO. 2A. (POST 1 TO POST 5)

[3] SLOTTED THRIE BEAM RAIL NO. 3. (POST 5 TO POST 8)

[4] UNBENT STANDARD THRIE-BEAM RAIL NO.4. (POST 8 TO POST 10 & POST 10 TO POST 12)

[5] BEYOND POST 12: CONSTRUCT STEEL THRIE BEAM - USE UNBENT STANDARD THRIE BEAM RAIL NO. 5.

① DIMENSIONS ARE FROM BACK OF RAIL TO BACK OF RAIL WHERE RAIL IS BOLTED TO POST OR BLOCK.

② U-BOLT CABLE CLIPS (3 PER CABLE) SPACED OUT ON NOSE, TO HOLD CABLE TO BACKSIDE OF THE RAIL.

③ NOSE CABLE W/SWAGGED END BUTTONS.

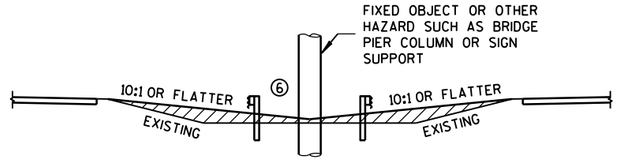
④ NOSE CABLE ANCHOR PLATE (BACKSIDE OF SPLICE).

⑤ THE SLACK IN THE NOSE CABLES SHALL BE EVENLY DISTRIBUTED BETWEEN THE CABLE CLIP FASTENERS AND POST NO. 1 ON EITHER SIDE OF THE NOSE.

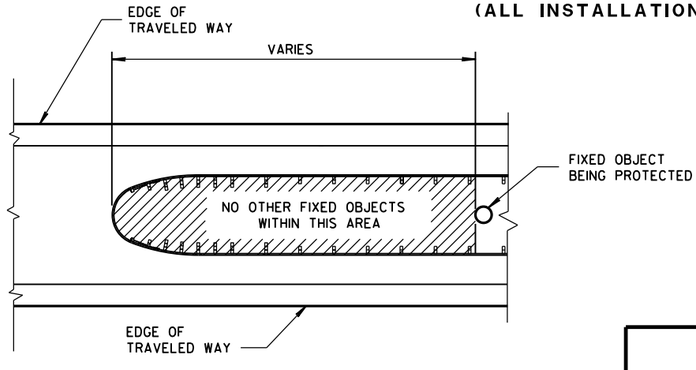
⑥ PROVIDE SUITABLE DRAINAGE WHEN MEDIAN GRADING IMPEDES NORMAL FLOW.

⑦ 2'-6" MINIMUM LATERAL DISTANCE BETWEEN BACK OF POST AND FACE OF FIXED OBJECT.

⑧ MAXIMUM WIDTH OF SYSTEM IS 14'-2½" MEASURED FROM BACK OF RAIL TO BACK OF RAIL WHERE RAIL IS BOLTED TO A POST OR BLOCK.



MEDIAN GRADING SECTION
(ALL INSTALLATIONS)

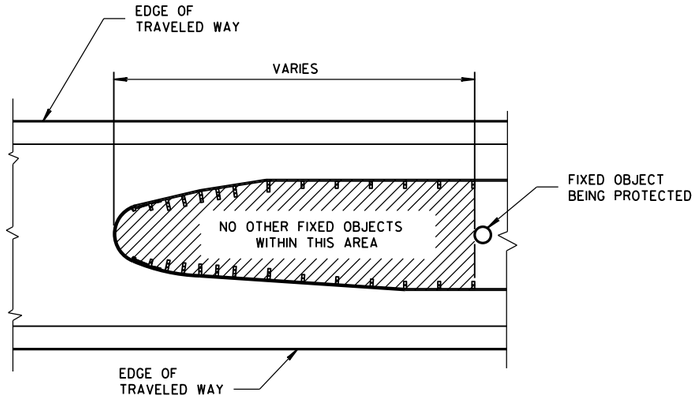


HAZARD FREE AREA INSIDE BULLNOSE

STEEL THRIE BEAM BULLNOSE TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPO

6
S.D.D. 14 B 26-3a



HAZARD FREE
AREA INSIDE BULLNOSE

GENERAL NOTES

SEE STANDARD DETAIL DRAWINGS 14 B 26a-e.

FOR POSTS 2 THROUGH 14, IF POST CANNOT BE INSTALLED AT SPECIFIED LOCATION 1 EXTRA STANDARD WOOD BLOCK MAY BE ADDED.

[1] SLOTTED THRIE BEAM RAIL NO. 1. (POST 1 TO POST 1)

[2A] SLOTTED THRIE BEAM RAIL NO. 2A, (POST 1 TO POST 5)

[2B] SLOTTED THRIE BEAM RAIL NO. 2B, (POST 1 TO POST 5)

[3] SLOTTED THRIE BEAM RAIL NO. 3. (POST 5 TO POST 8)

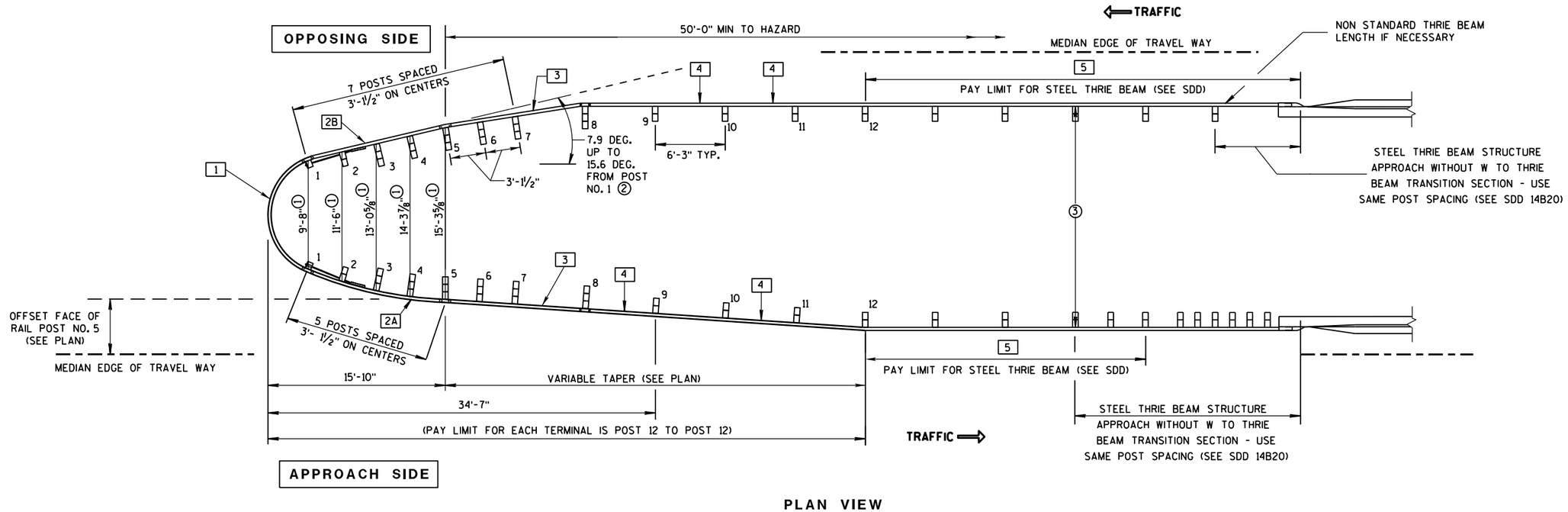
[4] UNBENT STANDARD THRIE-BEAM RAIL NO. 4, (POST 8 TO POST 10 & POST 10 TO POST 12)

[5] BEYOND POST 12: CONSTRUCT STEEL THRIE BEAM - USE UNBENT STANDARD THRIE BEAM RAIL NO. 5.

① DIMENSIONS ARE FROM BACK OF RAIL TO BACK OF RAIL WHERE RAIL IS BOLTED TO POST.

② TAPER BEGINNING AT POST NO. 1 MUST CONTINUE TO POST NO. 5. PAST POST NO. 5 TAPER MAY END OR BE EXTENDED UP TO 15.6 DEGREES TO FIT VARIABLE MEDIAN WIDTHS. (SEE PLAN)

③ FOR MEDIANS WIDER THAN 14'-2½" MEASURED FROM BACK OF RAIL TO BACK OF RAIL WHERE RAIL IS BOLTED TO A POST OR BLOCK.



PLAN VIEW

WIDENED BULLNOSE DESIGN

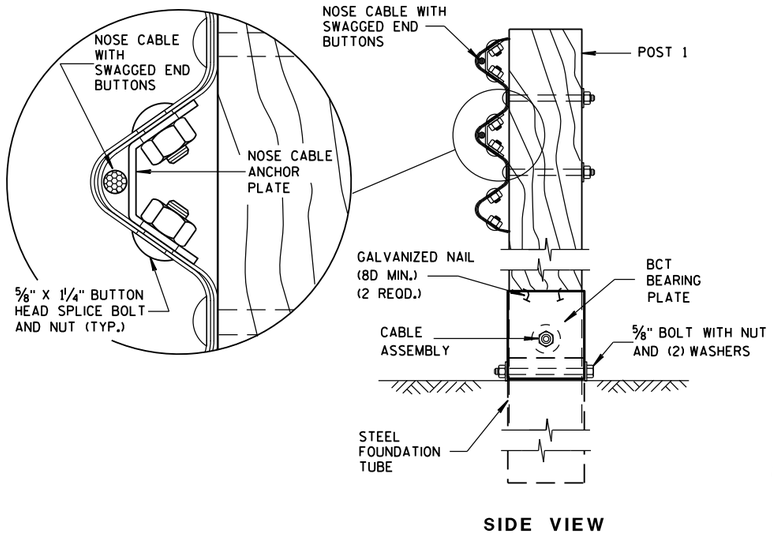
(INSTALLATION AT TWIN BRIDGES WITH BI-DIRECTIONAL TRAFFIC SHOWN)

STEEL THRIE BEAM
BULLNOSE TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

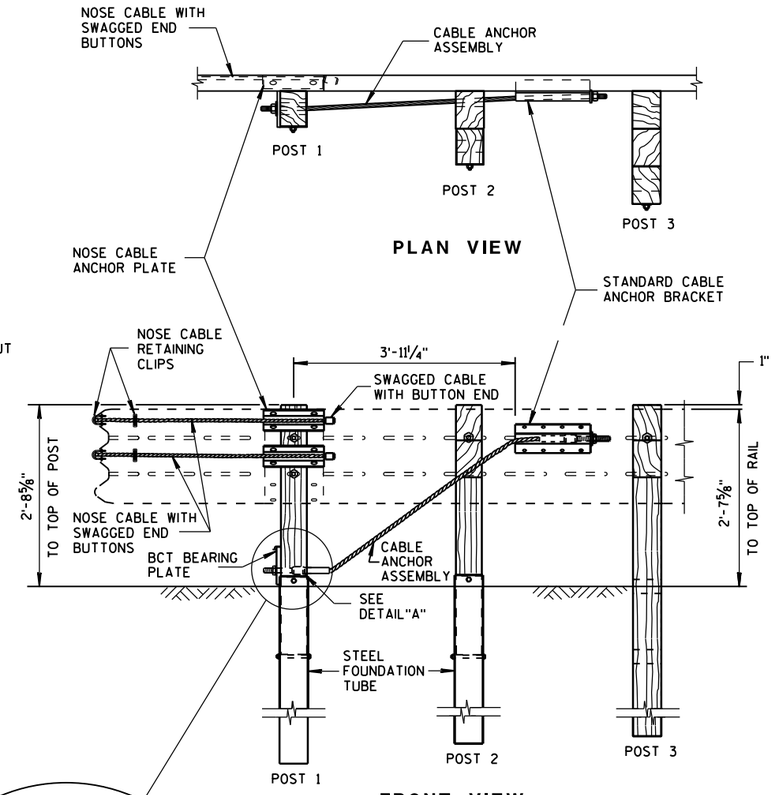
6

S.D.D. 14 B 26-3b



SIDE VIEW

NOSE CABLE ASSEMBLY AT POST NO. 1



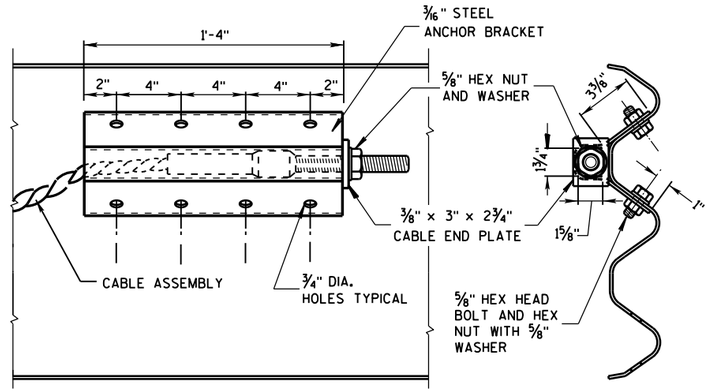
PLAN VIEW

FRONT VIEW

NOSE CABLE ANCHOR AND STANDARD BRACKET ASSEMBLY

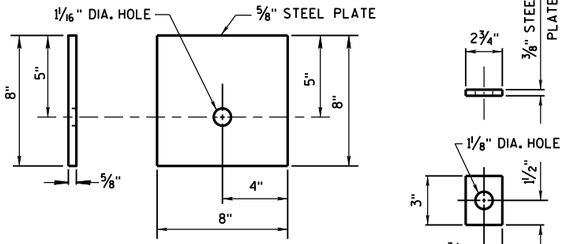
GENERAL NOTES

SEE STANDARD DETAIL DRAWINGS 14 B 26a-e.



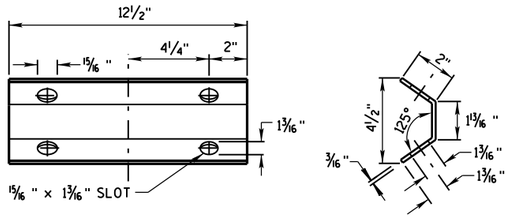
FRONT VIEW END VIEW

DETAILS OF CABLE ANCHOR BRACKET



BCT BEARING PLATE

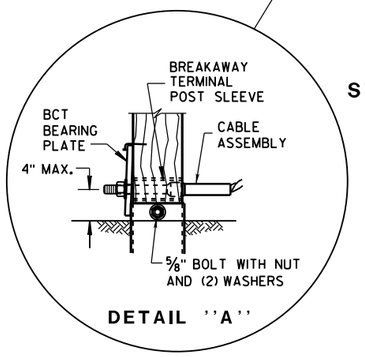
CABLE END PLATE



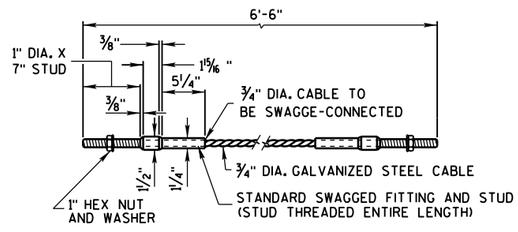
ELEVATION VIEW END VIEW

NOSE CABLE ANCHOR PLATE

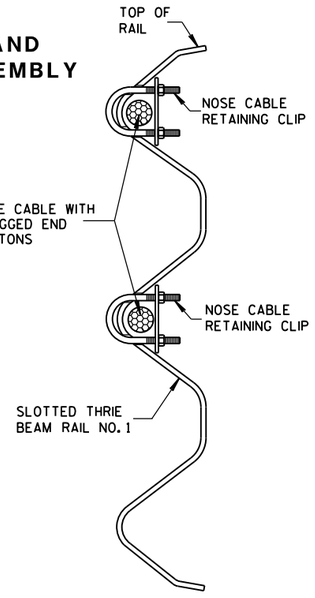
NOTE: 12 1/2" x 5 13/16" x 3/16" STEEL PLATE (A306)



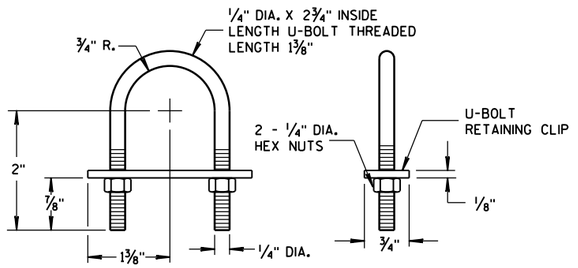
DETAIL ''A''



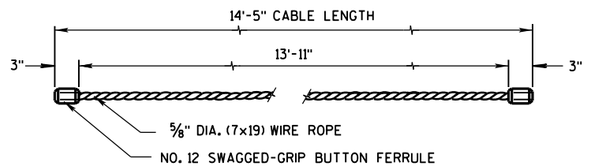
DETAILS OF CABLE ANCHOR ASSEMBLY



PLACEMENT OF NOSE CABLE RETAINING CLIP



NOSE CABLE RETAINING CLIP



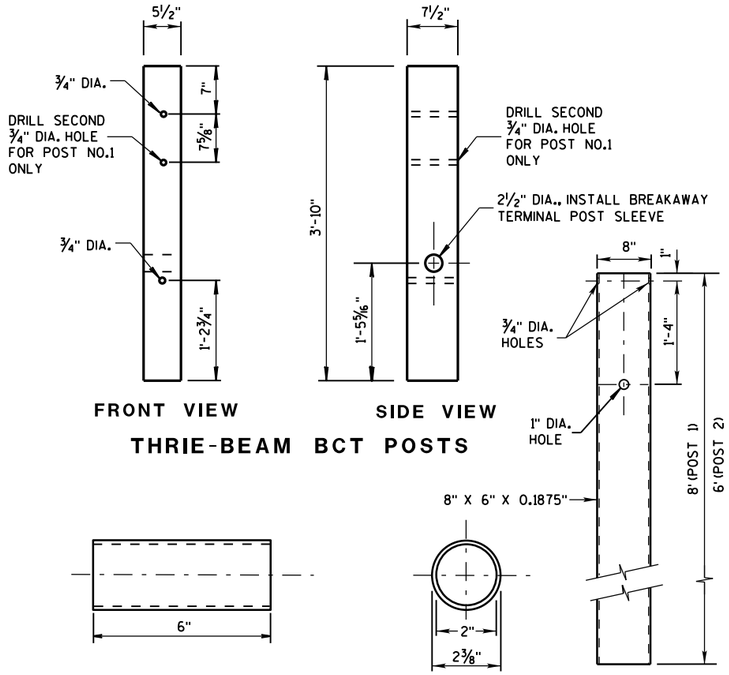
NOSE CABLE WITH SWAGGED END BUTTONS

TO PULL OFF SWAGGED GRIP BUTTON FERRULE FROM WIRE ROPE REQUIRES A FORCE EQUAL TO 98% OF THE WIRE ROPE'S BREAKING STRENGHT.

STEEL THRIE BEAM BULLNOSE TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI 380

6
S.D.D. 14 B 26-3c

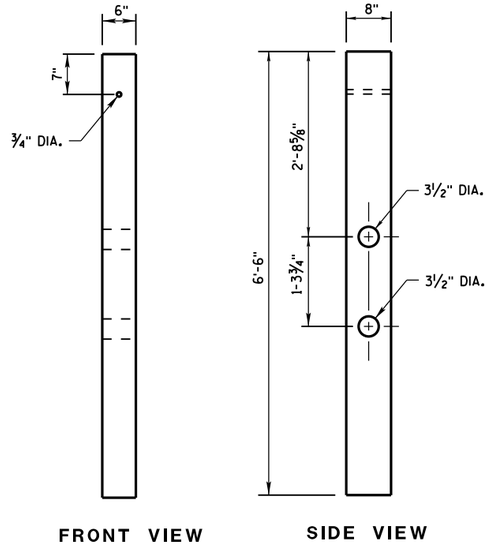


FRONT VIEW SIDE VIEW

THRIE-BEAM BCT POSTS

BREAKAWAY TERMINAL POST SLEEVE

STEEL FOUNDATION TUBE

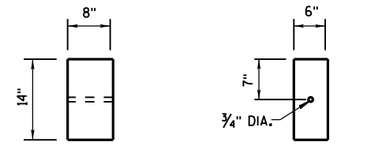


FRONT VIEW SIDE VIEW

THRIE-BEAM CRT WOOD POSTS

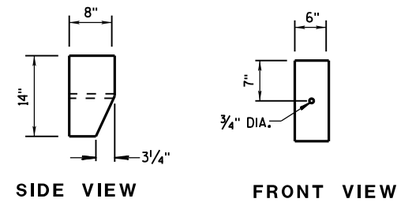
GENERAL NOTES

SEE STANDARD DETAIL DRAWINGS 14 B 26a-e.



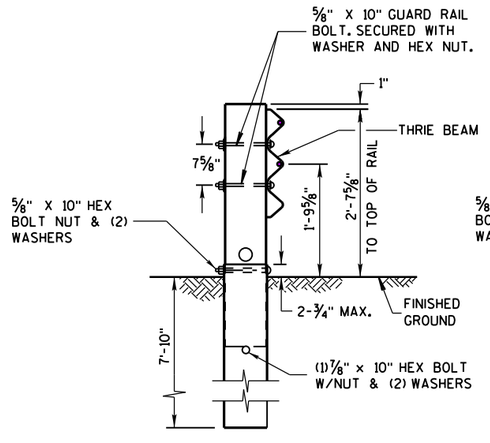
SIDE VIEW FRONT VIEW

STANDARD WOOD BLOCK



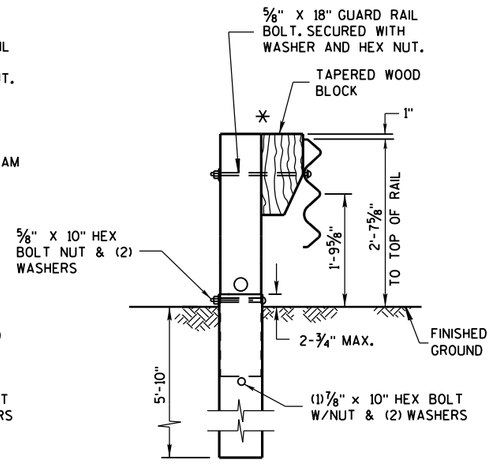
SIDE VIEW FRONT VIEW

TAPERED WOOD BLOCK



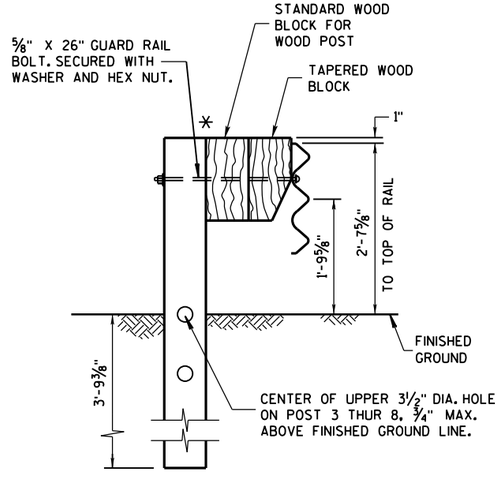
THRIE-BEAM BCT POST
(WITH 8'-0" FOUNDATION TUBE)

POST NO. 1



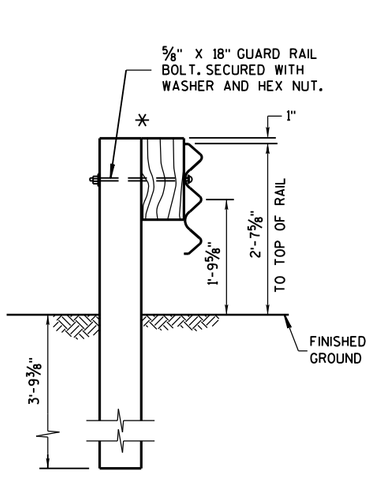
THRIE-BEAM BCT POST
(WITH 6'-0" FOUNDATION TUBE AND 1'-2" TAPERED BLOCK)

POST NO. 2



THRIE-BEAM CRT POST
(6'-6" LONG POST WITH 1'-2" BLOCK AND 1'-2" TAPERED BLOCK)

POST NO. 3,4,5,6,7, & 8



THRIE-BEAM POST
(6'-6" LONG POST WITH 1'-2" BLOCK)

POST NO. 9,10,11,& 12

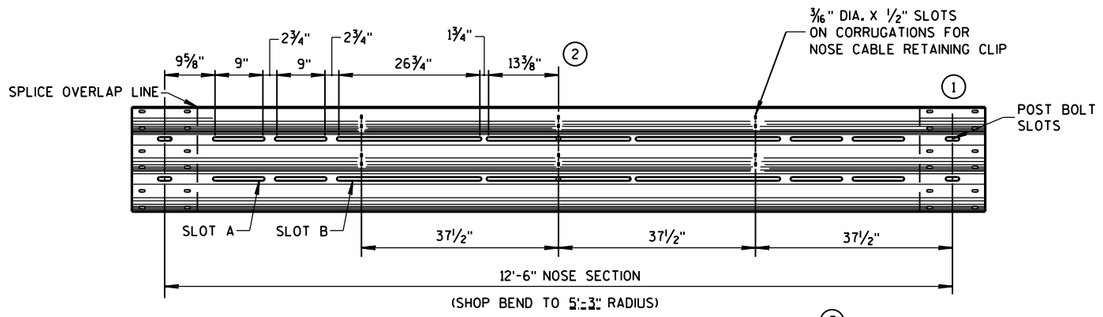
(ALSO USE FOR STEEL THRIE BEAM BEYOND POST 12)

* IF NEEDED DUE TO AN UNDERGROUND OBSTACLE ADD 1 ADDITIONAL STANDARD BLOCKOUT TO POST.

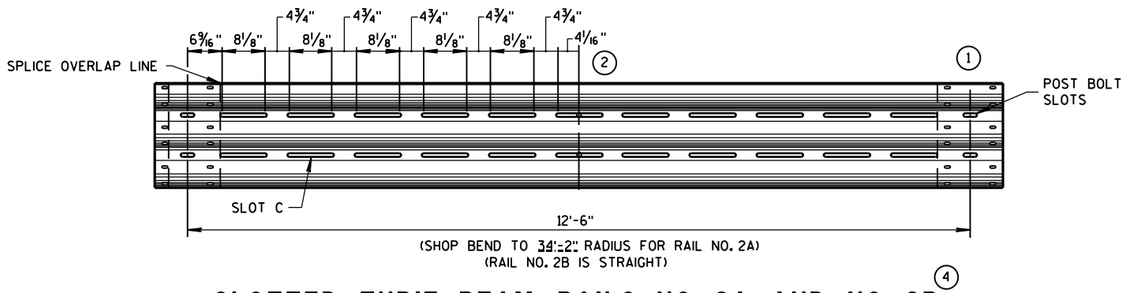
STEEL THRIE BEAM BULLNOSE TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

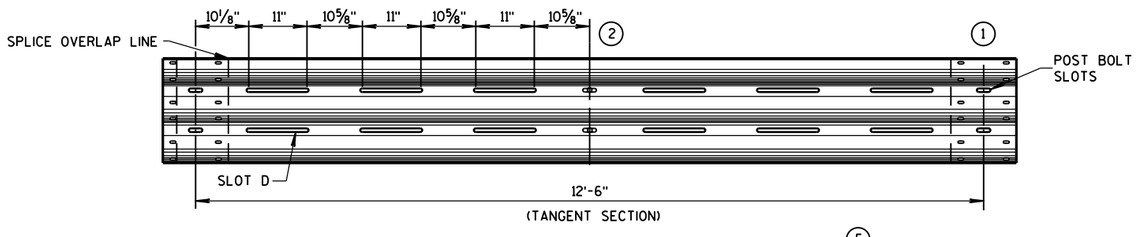
6
S.D.D. 14 B 26-3d



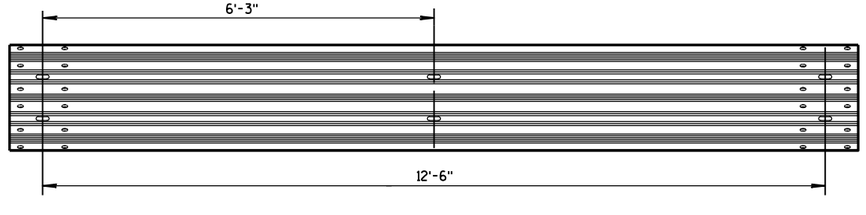
SLOTTED THRIE BEAM RAIL NO. 1 (3)



SLOTTED THRIE BEAM RAILS NO. 2A AND NO. 2B (4)



SLOTTED THRIE BEAM RAIL NO. 3 (5)



UNBENT STANDARD THRIE BEAM RAIL NO. 4 AND NO. 5

GENERAL NOTES

SEE STANADRD DETAIL DRAWINGS 14 B 26a-e.

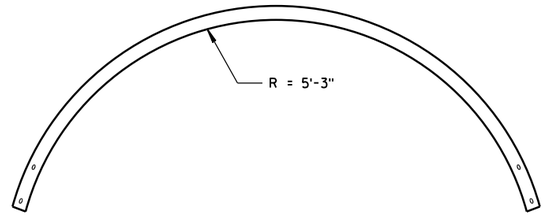
(1) SLOTTED THRIE BEAM RAIL DIMENSIONS SHOWN ARE BEFORE BENDING TO THE RADIUS SHOWN.

(2) SLOT SIZE AND SPACING SYMMETRIC.

(3) SLOTTED THRIE BEAM RAIL NO. 1, 12'-6", SHOP BEND TO R=5'-3".

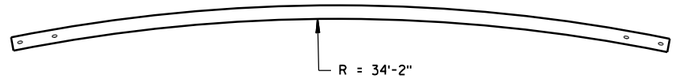
(4) SLOTTED THRIE BEAM RAIL NO. 2A, 12'-6", SHOP BEND TO R=34'-2".
SLOTTED THRIE BEAM RAIL NO. 2B, 12'-6", RAIL IS STRAIGHT.

(5) SLOTTED THRIE BEAM RAIL NO. 3, 12'-6", TANGENT.



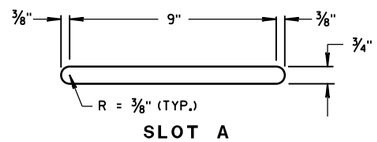
PLAN VIEW

SLOTTED THRIE BEAM RAIL NO. 1

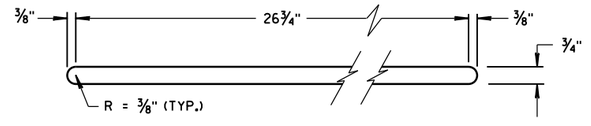


PLAN VIEW

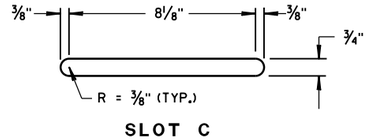
SLOTTED THRIE BEAM RAIL NO. 2A



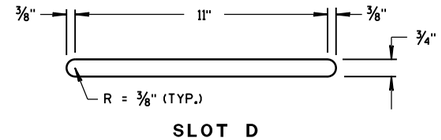
SLOT A



SLOT B



SLOT C



SLOT D

SLOT DETAILS

STEEL THRIE BEAM
BULLNOSE TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

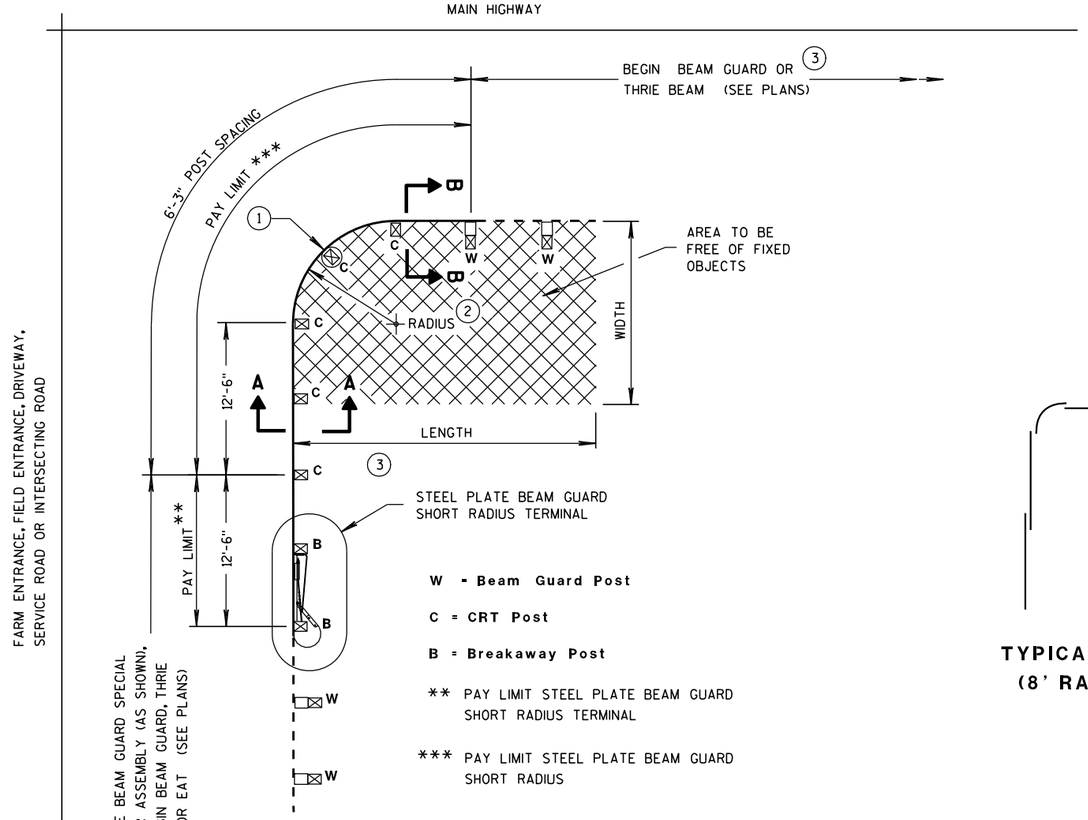
APPROVED
June 2014 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS DEVELOPMENT ENGINEER
NT
FHWA

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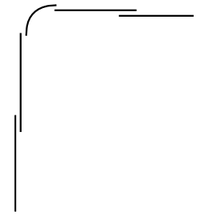
S.D.D. 14 B 26-3e

6

S.D.D. 14 B 26-3e



TYPICAL LAYOUT
(8' RADIUS SHOWN)



TYPICAL LAP SPLICES
(8' RADIUS SHOWN)

GENERAL NOTES

ALL ANGLES, CHANNELS, AND PLATES SHALL CONFORM TO THE REQUIREMENTS OF ASTM A36 AND THE STRUCTURAL TUBING SHALL CONFORM TO ASTM A 500. WELDING SHALL MEET THE CURRENT REQUIREMENTS OF THE AMERICAN WELDING SOCIETY STRUCTURAL WELDING CODE ANSI/AWS D1.1. ALL STRUCTURAL STEEL SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A 123. PUNCHING, DRILLING, CUTTING, OR WELDING WILL NOT BE PERMITTED AFTER GALVANIZING. FURNISH AND INSTALL HARDWARE PER STANDARD SPECIFICATION 614.2. UNLESS NOTED OTHERWISE.

SHOP BEND CURVED RAIL SECTIONS.

SEE STANDARD DETAIL DRAWING 14 B 15 FOR OTHER DETAIL.

(1) ON THE 8 FOOT RADIUS INSTALLATION, DO NOT INSTALL BUTTON HEAD BOLT AT CENTER CRT POST.

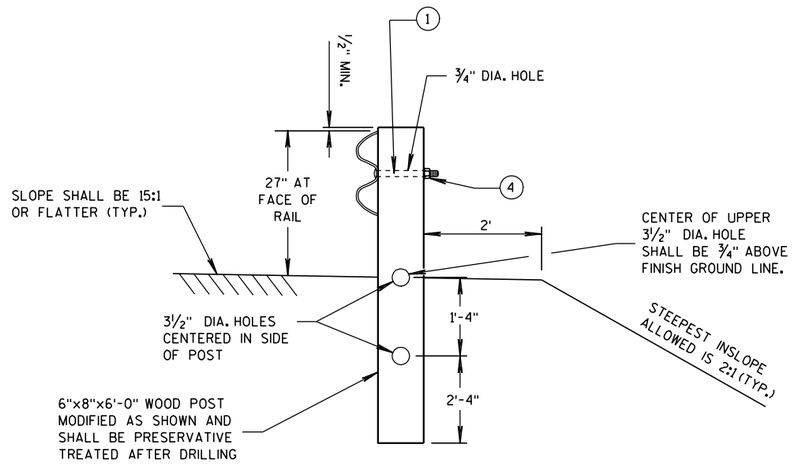
(2) RADIUS FROM 8' - 36'. SEE PLAN.

(3) HEIGHT TRANSITION MAY BE REQUIRED. SEE PLAN OR PROJECT ENGINEER.

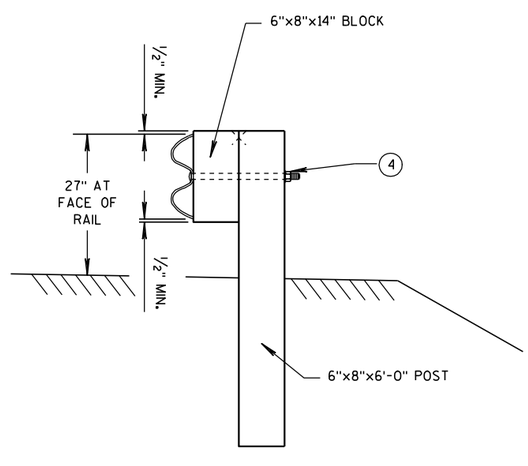
(4) 5/8" ø X 1'-6" BUTTON HEAD BOLT AND RECESS NUT WITH ROUND WASHER UNDER NUT.

RADIUS	NUMBER OF CRT POSTS	*NUMBER AND LENGTH OF CURVED RAILS	REQUIRED AREA FREE OF FIXED OBJECTS (LENGTH x WIDTH)
8'	5	1 at 12.5'	25' x 15'
16'	7	1 at 25'	30' x 15'
24'	9	1 at 25' and 1 at 12.5'	40' x 20'
32'	11	2 at 25'	50' x 20'

* THE NUMBER OF RAILS IS BASED ON A 90° INTERSECTION. SEE PLAN FOR NON 90° INSTALLATIONS.



SECTION A-A
(CRT POST)



SECTION B-B
(BEAM GUARD POST)

STEEL PLATE BEAM GUARD SHORT RADIUS TERMINAL

STEEL PLATE BEAM GUARD SHORT RADIUS TERMINAL

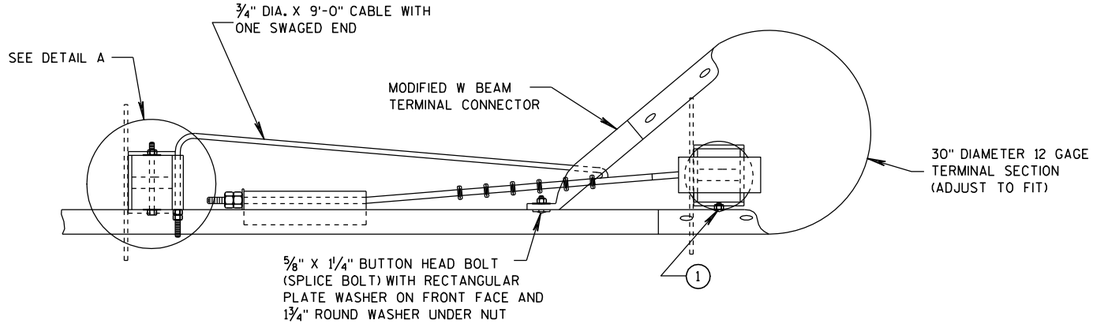
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

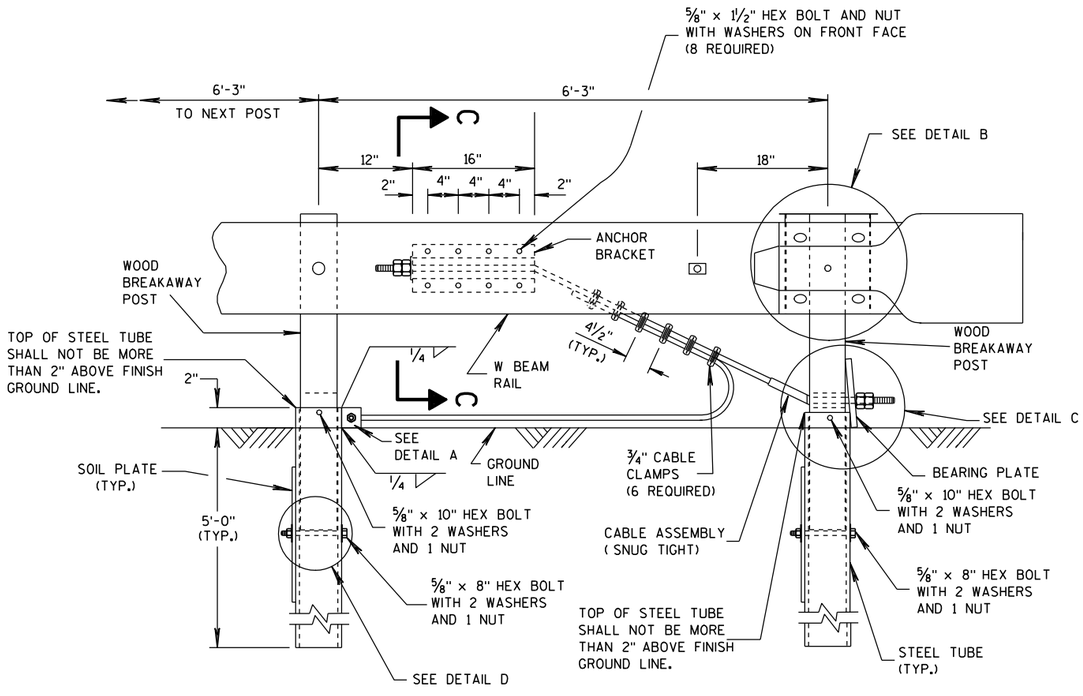
S.D.D. 14 B 27-1a

6

S.D.D. 14 B 27-1a



PLAN VIEW



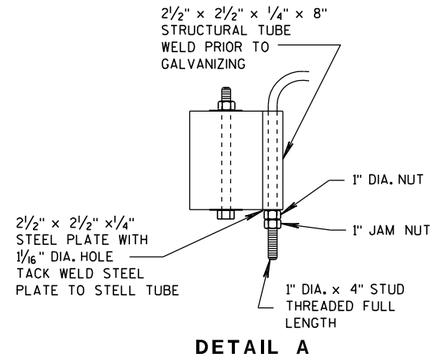
ELEVATION VIEW

STEEL PLATE BEAM GUARD SHORT RADIUS TERMINAL

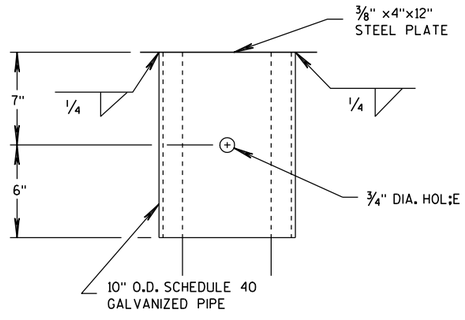
GENERAL NOTES

(1) ATTACH W BEAM RAIL TO THE STEEL PIPE WITH A ⅝" X 2" BUTTON HEAD BOLT WITH NO WASHER. CONNECTION TO THE POST IS NOT REQUIRED.

INSTALL GALVANIZED ¾" (6X19) PREFORMED WIRE OR INDEPENDENT WIRE ROPE CORE CONFORMING TO AASHTO M 30. MANUFACTURE WIRE ROPE OUT OF IMPROVED PLOW STEEL WITH A MINIMUM BREAKING STRENGTH OF 42,800 PSI.



DETAIL A



DETAIL B

(BEAM GUARD AND TERMINAL SECTION NOT SHOWN)

STEEL PLATE BEAM GUARD SHORT RADIUS TERMINAL

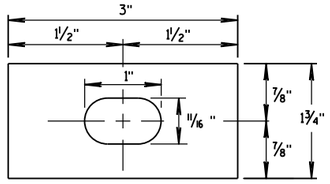
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

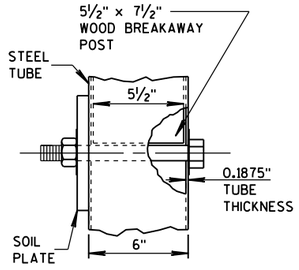
S.D.D. 14 B 27-1b

6

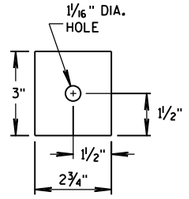
S.D.D. 14 B 27-1b



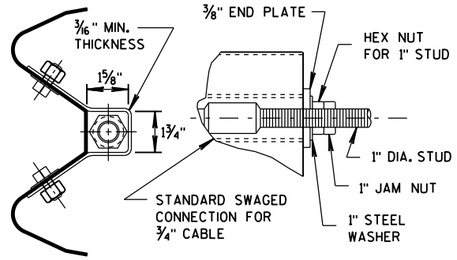
RECTANGULAR PLATE WASHER



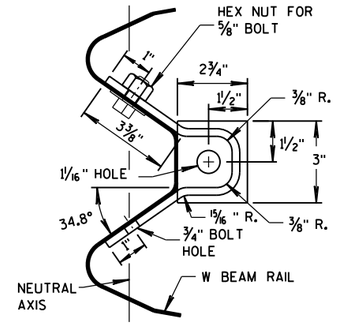
DETAIL D



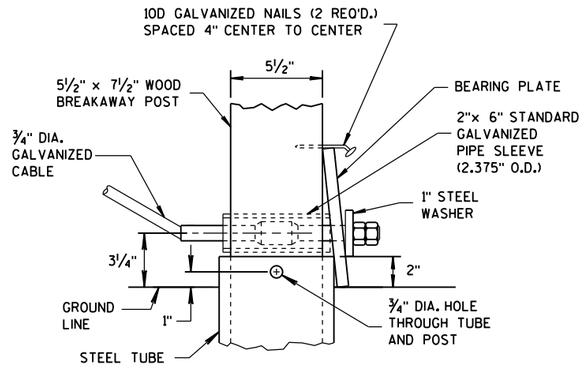
END PLATE



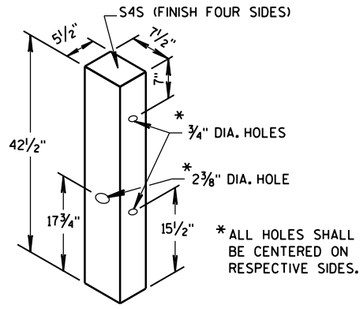
SECTION C-C
(END PLATE REMOVED)



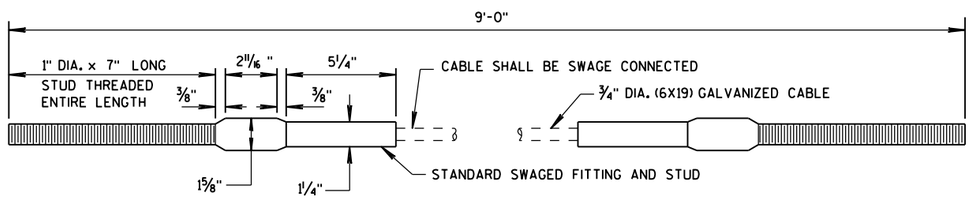
ANCHOR BRACKET



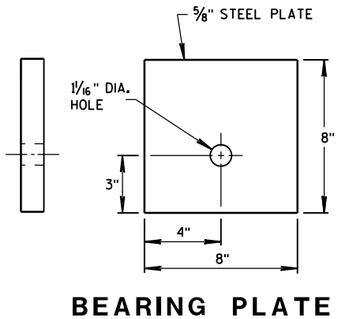
DETAIL C



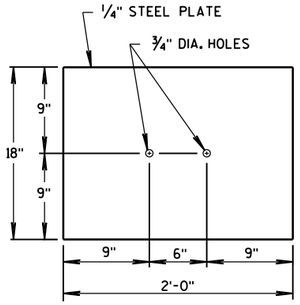
WOOD BREAKAWAY POST



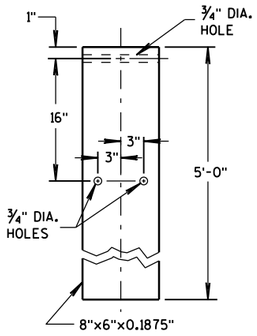
CABLE ASSEMBLY



BEARING PLATE



SOIL PLATE



STEEL TUBE

STEEL PLATE BEAM GUARD SHORT RADIUS TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

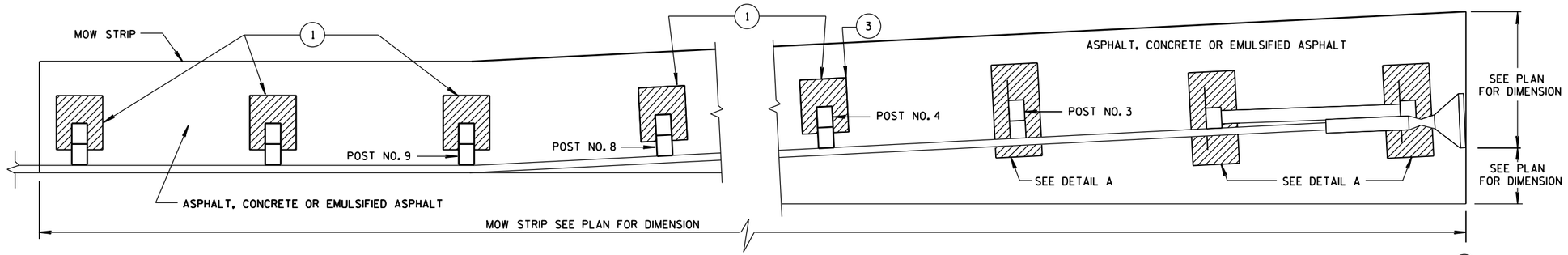
APPROVED
12/18/08 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

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S.D.D. 14 B 27-1c

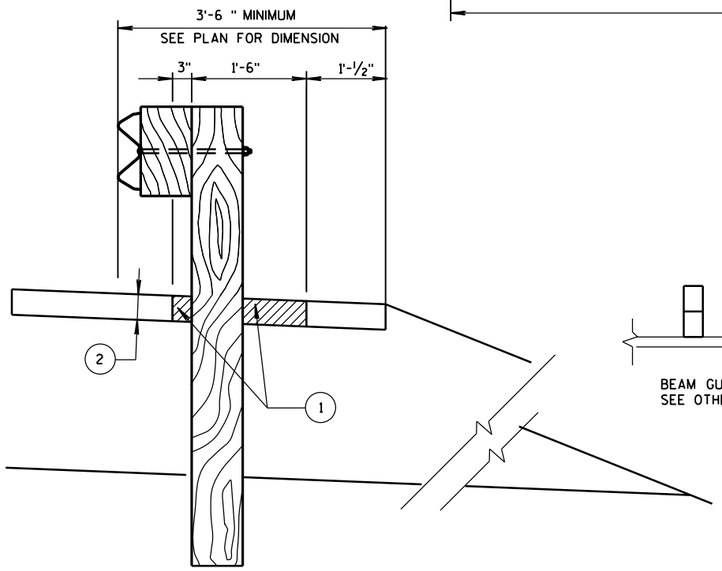
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S.D.D. 14 B 27-1c

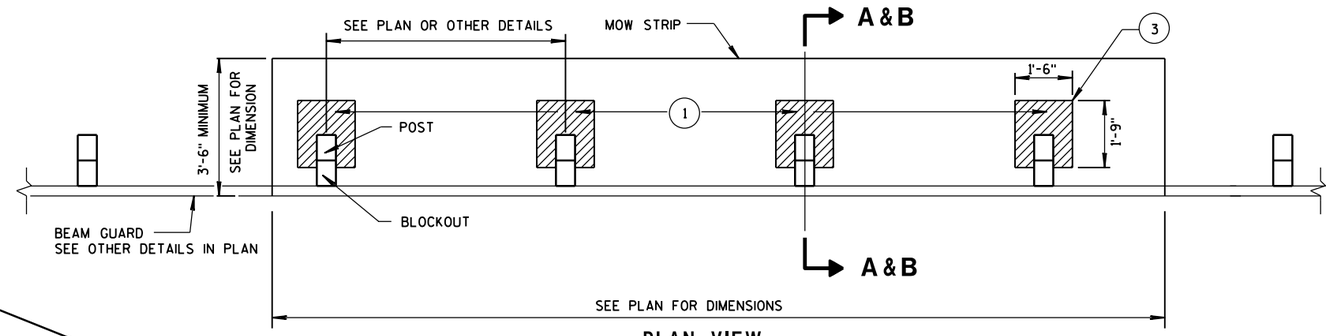


PLAN VIEW

MOW STRIP LAYOUT FOR ENERGY ABORBING TERMINAL

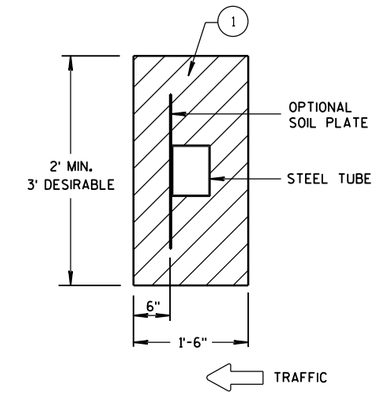


SECTION A-A

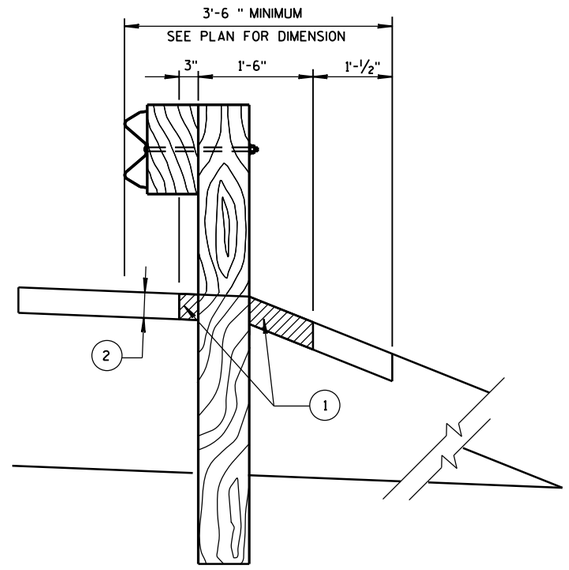


PLAN VIEW

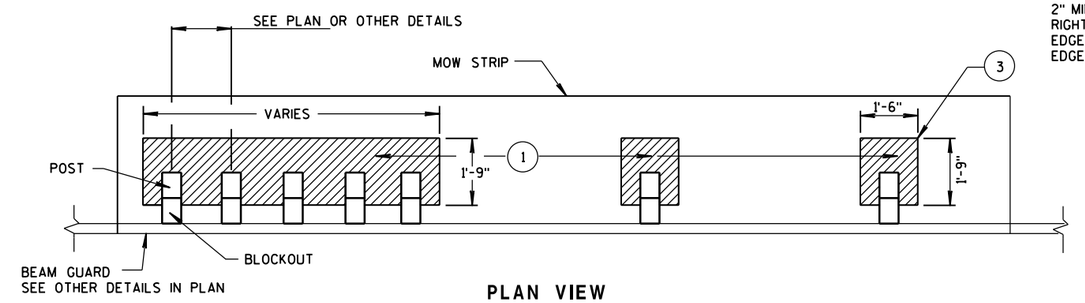
MOW STRIP FOR TYPICAL BLOCKOUT LAYOUT



DETAIL A

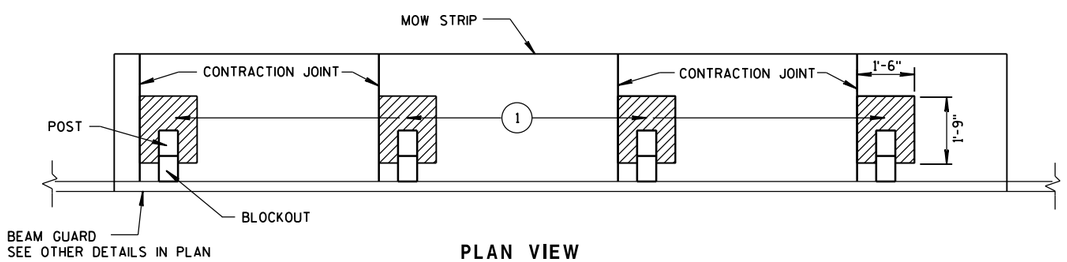


SECTION B-B



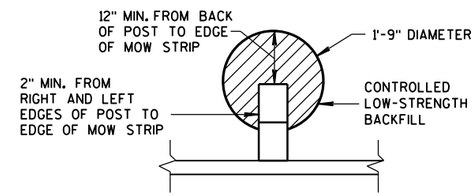
PLAN VIEW

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
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6

S.D.D. 14 B 28-3

6

S.D.D. 14 B 28-3

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.

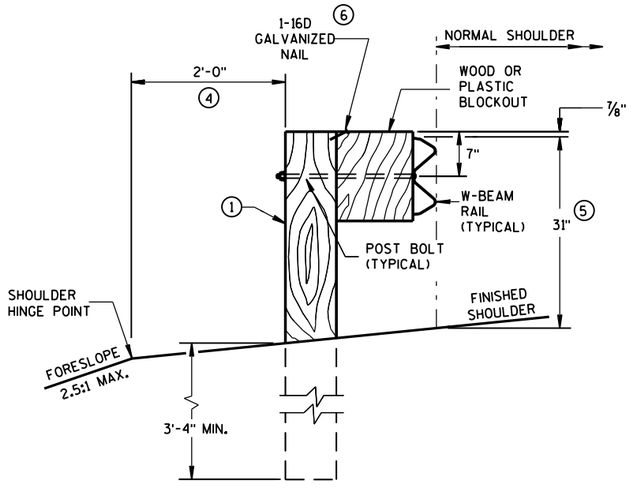
② USE WOOD OR APPROVED PLASTIC BLOCKOUTS. WOOD BLOCKOUTS MAY BE CONSTRUCTED OUT OF TWO OR MORE WOOD BLOCKOUTS. SEE ALTERNATE WOOD BLOCKOUT DETAIL. DIMENSIONS OF APPROVED PLASTIC BLOCKOUTS MAY VARY.

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).

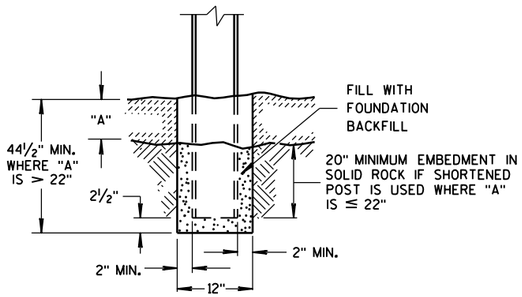
⑤ FOR NEW MGS INSTALLATION TOP OF W-BEAM RAIL TOLERANCE IS ± 1". FOR EXISTING MGS INSTALLATION TOP OF W-BEAM IS BETWEEN 27¾" TO 32".

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.



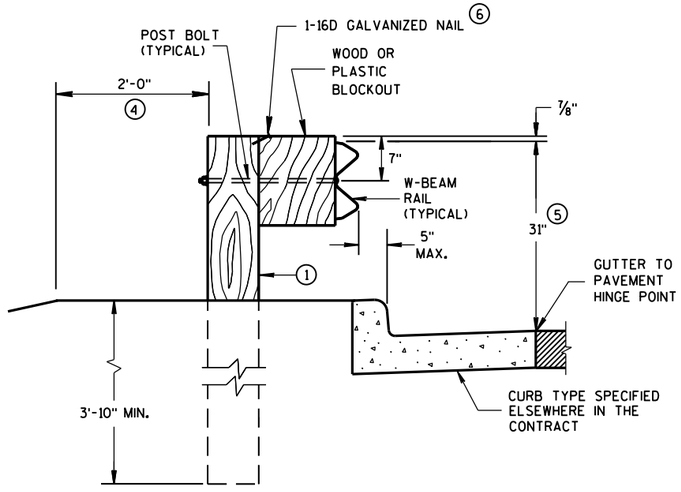
END VIEW

LOCATED ALONG A ROADWAY SHOULDER
STANDARD INSTALLATION



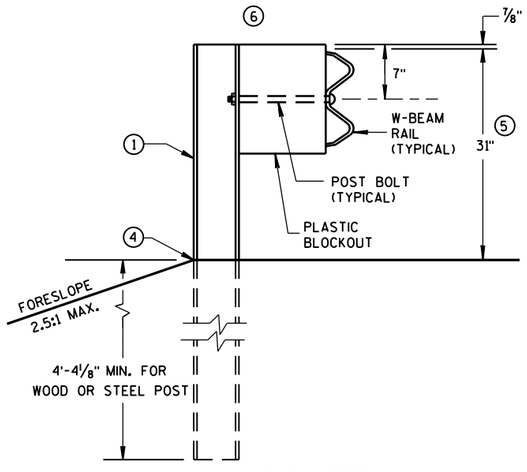
END VIEW

SETTING STEEL OR WOOD POST IN ROCK ③



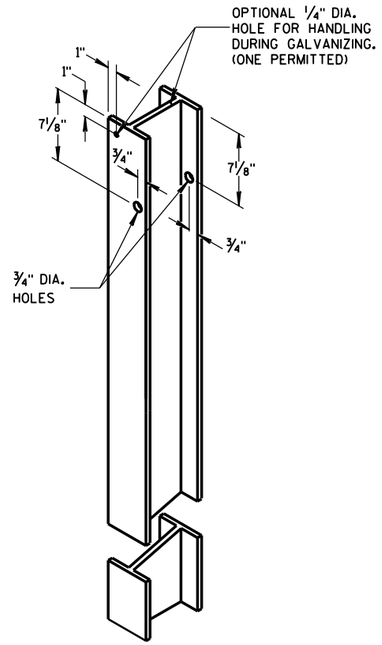
END VIEW

LOCATED ALONG A CURBED ROADWAY

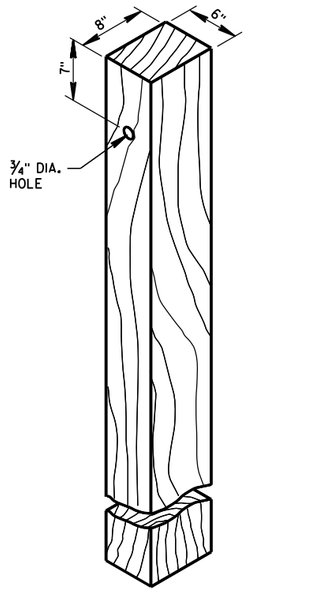


END VIEW

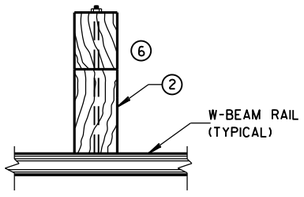
MGS LONGER POST AT HALFPOST SPACING W BEAM (K)



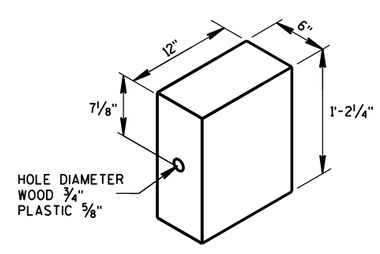
STEEL POST &
HOLE PUNCHING DETAIL
(w6X9) ①



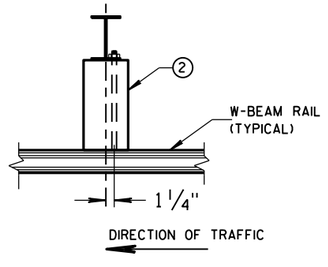
WOOD POST
(6" X 8") NOMINAL ①



PLAN VIEW
WOOD POST,
BLOCKOUT & BEAM



WOOD OR
PLASTIC BLOCKOUT ②



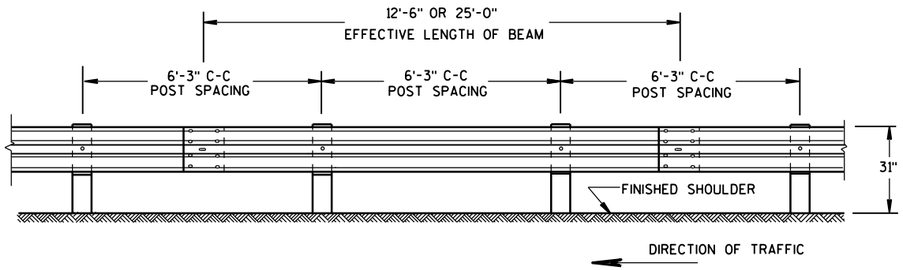
PLAN VIEW
STEEL POST,
PLASTIC BLOCKOUT & BEAM

MIDWEST GUARDRAIL SYSTEM
(MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

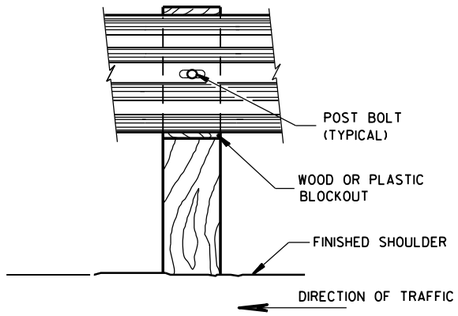
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S.D.D. 14 B 42-4a



FRONT VIEW

POST SPACING STANDARD INSTALLATION



FRONT VIEW AT WOOD POST

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.

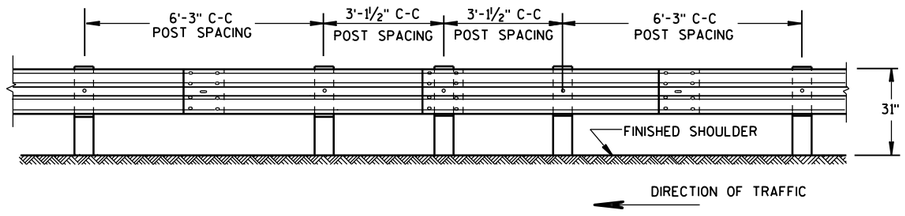
9. REVERSE EVERY OTHER REFLECTOR FOR 2-WAY VISIBILITY. THE CONTRACTOR MAY FURNISH TWO-SIDED REFLECTORS IN LIEU OF ONE-SIDED REFLECTORS.

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.

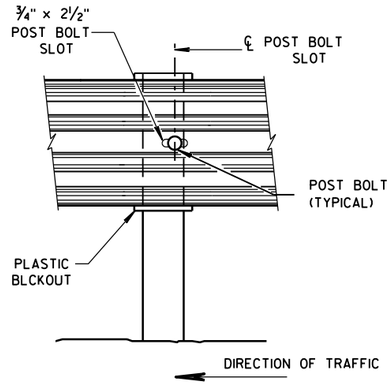
POST BOLTS ARE A 5/8" DIAMETER ASTM A307 GUARDRAIL BOLT. A POST BOLT REQUIRES 5/8" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT AND 5/8" DIAMETER F844 FLAT WASHER. POST BOLTS MAY BE LONGER IF MULTIPLE BLOCKOUTS ARE BEING USED.

GUARD RAIL SPLICE BOLTS ARE A 5/8" DIAMETER ASTM A307 GUARDRAIL HEAD BOLT. A GUARDRAIL SPLICE BOLT REQUIRES 5/8" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT.

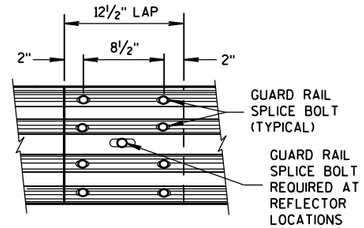


FRONT VIEW

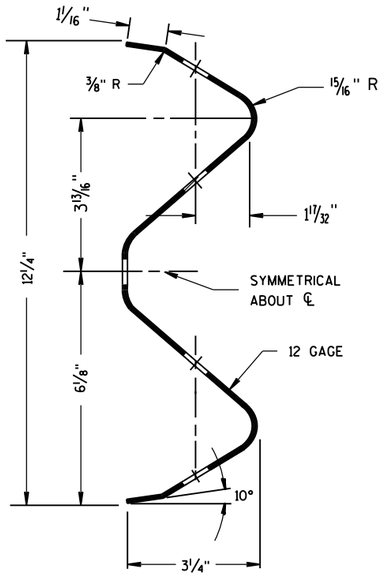
HALF POST SPACING (HS) AND HALF POST SPACING WITH LONGER POSTS (K)



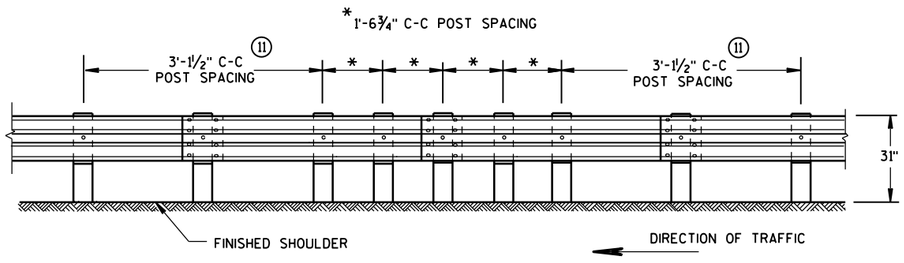
FRONT VIEW AT STEEL POST



FRONT VIEW
MID-SPAN BEAM SPLICE

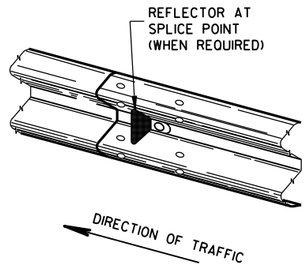


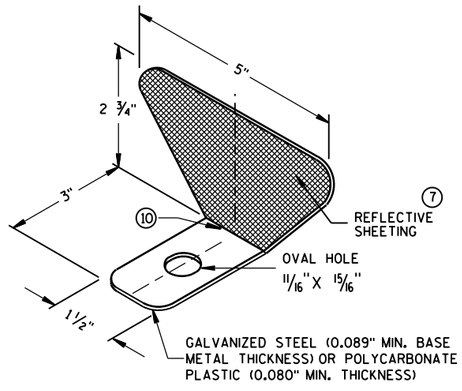
SECTION THRU W-BEAM RAIL



FRONT VIEW

QUARTER POST SPACING (QS)





ONE SIDED REFLECTOR DETAIL AND TYPICAL INSTALLATION 7

REFLECTOR SPACING 8

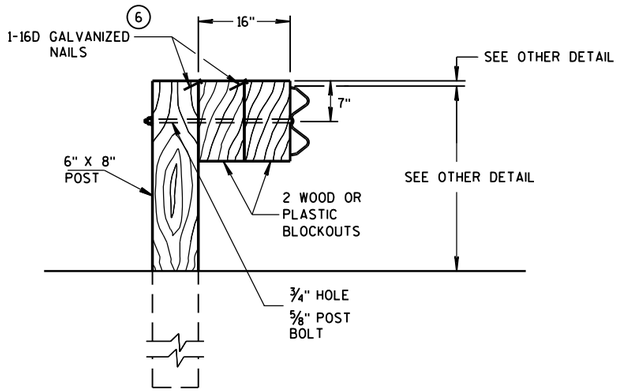
	BEAM GUARD LENGTH	REFLECTOR SPACING	NO. SURFACES REFLECTORIZED	MIN. NO. REFLECTORS
ONE WAY TRAFFIC	< 200'	50' C-C	1	3
	> 200'	100' C-C	1	
TWO WAY TRAFFIC	< 200'	25' C-C	1 9	6
	> 200'	50' C-C	1	
TWO WAY TRAFFIC	< 200'	50' C-C	2	3
	> 200'	100' C-C	2 10	

MIDWEST GUARDRAIL SYSTEM
(MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPO

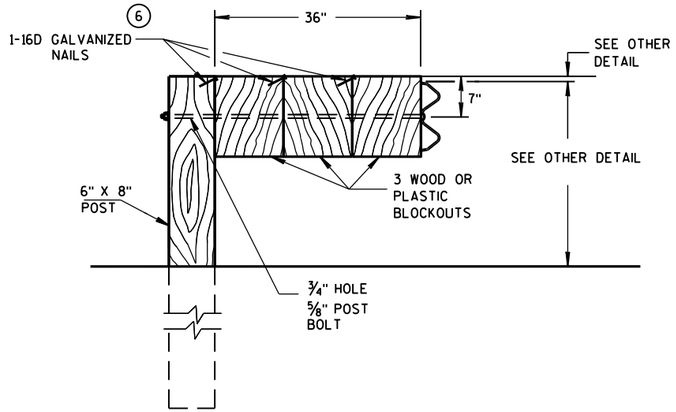
6

S.D.D. 14 B 42-4b



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.

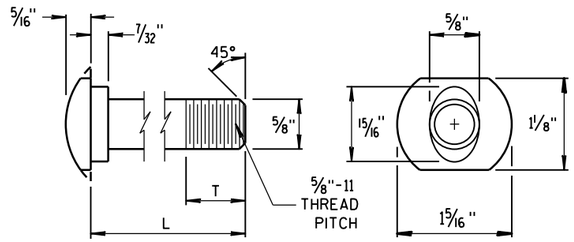


DETAIL FOR 36" BLOCKOUT DEPTH

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.

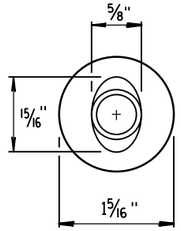
DO NOT USE 16" OR 36" BLOCKOUTS IF IT CAUSES THE POST TO BE DRIVEN BEYOND SHOULDER HINGE POINT OR CAUSES A FIXED OBJECT TO BE WITHIN THE DEFLECTION DISTANCE OF THE BARRIER.

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.

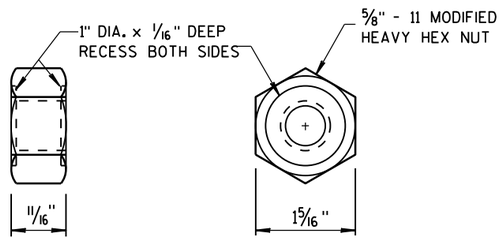


POST BOLT TABLE

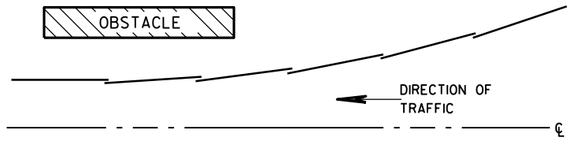
L	T (MIN.)
1¼"	1⅛"
2"	1¾"
10"	4"
14"	4 1/16"
18"	4"
21"	4 1/16"
25"	4"



ALTERNATE BOLT HEAD

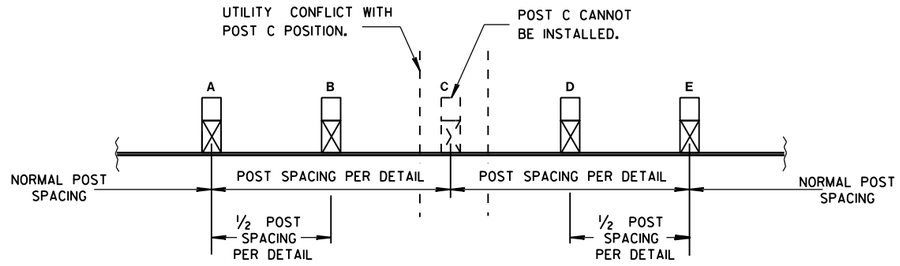


POST BOLT, SPLICE BOLT AND RECESS NUT

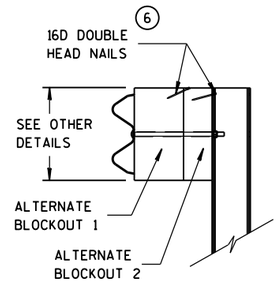


PLAN VIEW

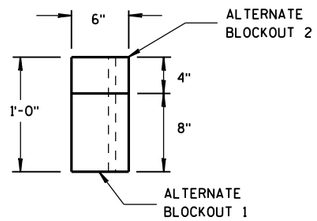
BEAM LAPPING DETAIL



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 2016 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER
FHWA

6
S.D.D. 14 B 42-4c

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.

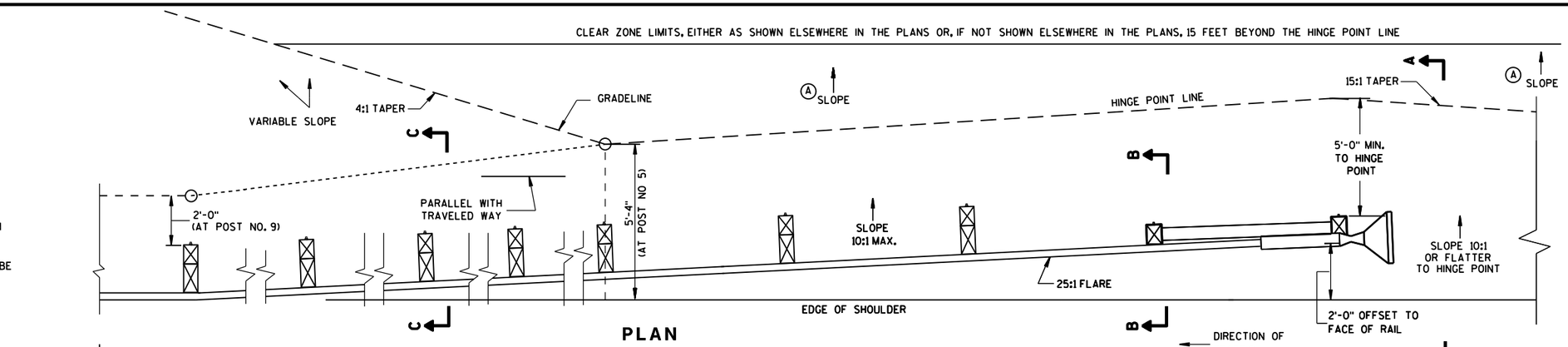
SEE SDD 14B42 FOR MORE INFORMATION.

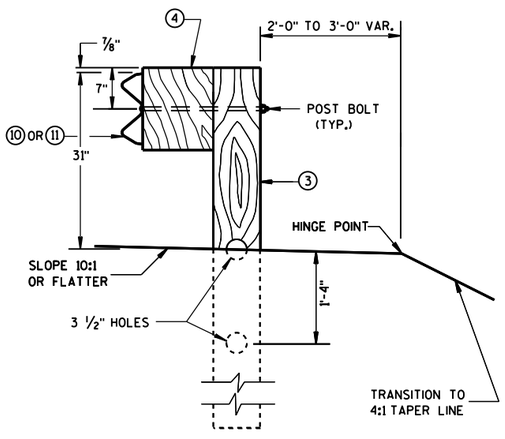
* DO NOT ATTACH BLOCKOUTS TO POSTS 1 AND 2.

DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

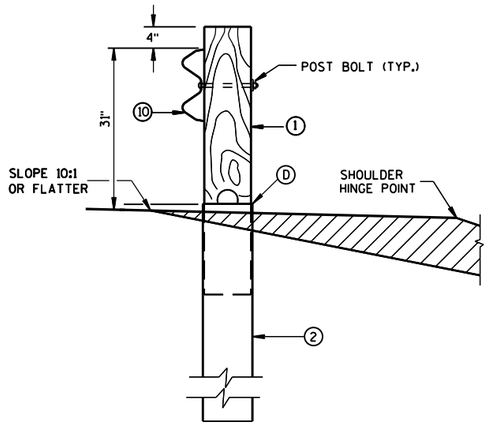
W-BEAM RAIL SPLICES ARE LOCATED AT POST NUMBER 3, AND BETWEEN POST 5 AND 6, BETWEEN POSTS 7 AND 8, AND MIDDLE OF THE SPAN AFTER POST 9.

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.

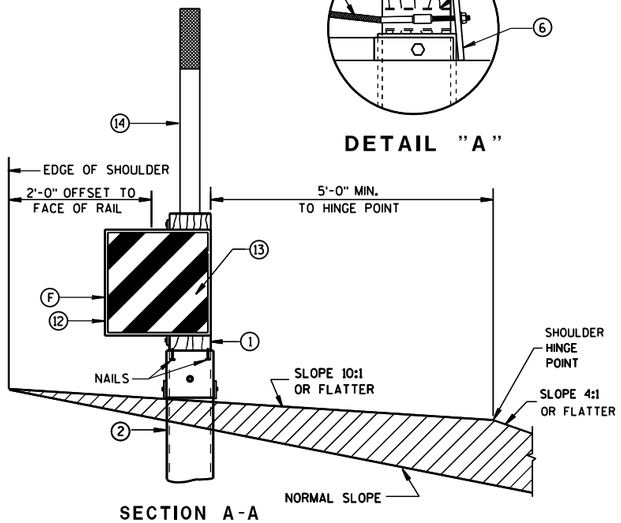




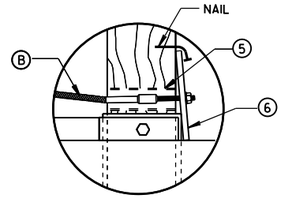
SECTION C-C
TYPICAL AT POST NOS. 3-9



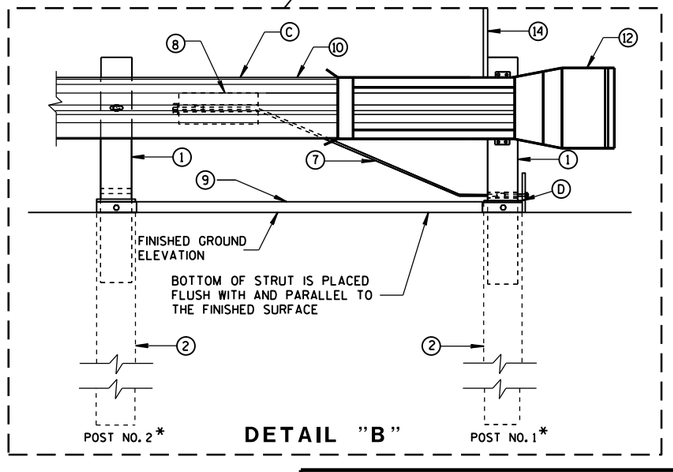
SECTION B-B
TYPICAL AT POST NO. 2*



SECTION A-A
TYPICAL AT POST NO. 1*



DETAIL "A"



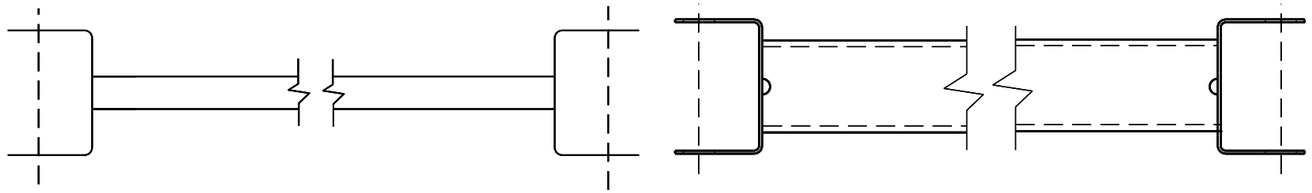
DETAIL "B"

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR 390

S.D.D. 14 B 44-2a

S.D.D. 14 B 44-2a

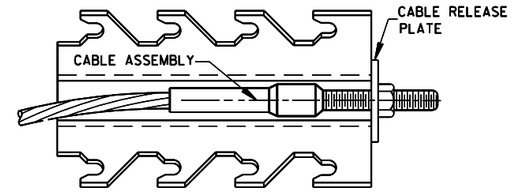


(9) (H)

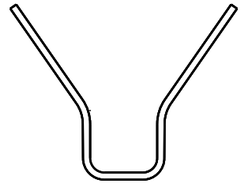
GENERIC GROUND STRUT

BILL OF MATERIALS

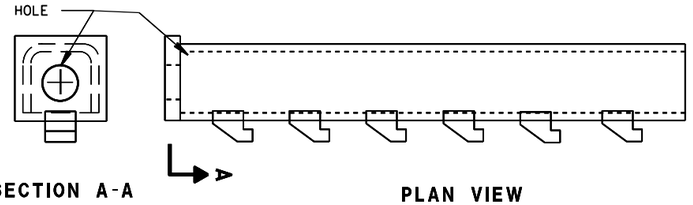
PART NO.	DESCRIPTION MATERIALS PROVIDED BY MGS EAT MANUFACTURER. SEE MANUFACTURER'S DETAILS FOR MORE INFORMATION.
(1)	WOOD BREAKAWAY POST
(2)	6" X 8" X 0.188", 6'-0" LONG FOUNDATION TUBE AT POSTS 1 AND 2
(3)	WOOD CRT
(4)	WOOD BLOCKOUT
(5)	PIPE SLEEVE
(6)	BEARING PLATE
(7)	BCT CABLE ASSEMBLY
(8)	ANCHOR 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



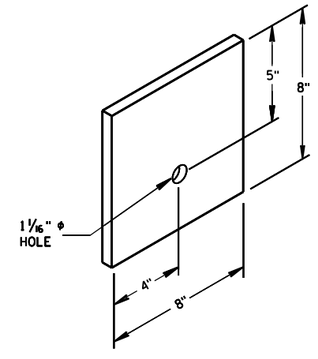
SECTION B-B



SECTION A-A

PLAN VIEW

GENERIC ANCHOR CABLE BOX (8) (H)



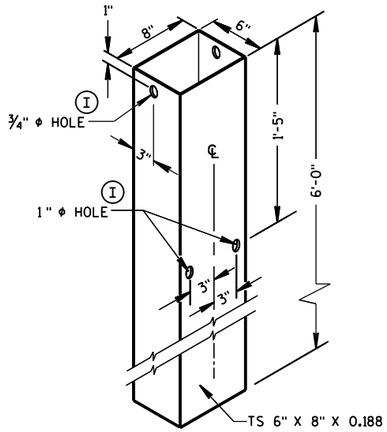
BEARING PLATE (6)

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL
(MGS)

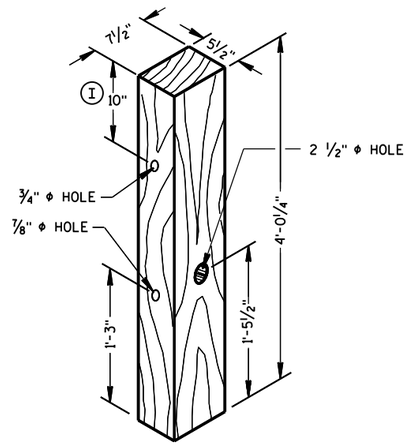
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

S.D.D. 14 B 44-2b

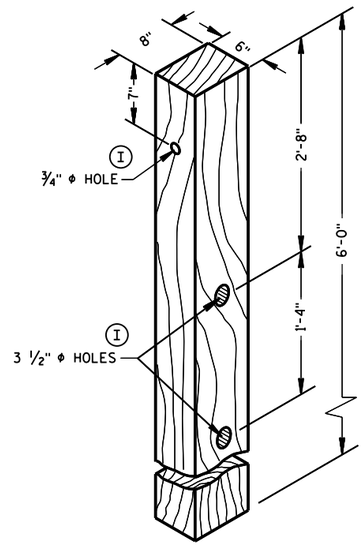


FOUNDATION TUBE (2)



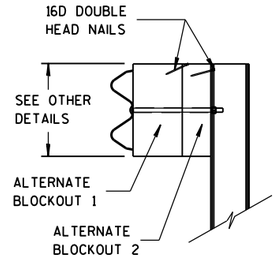
POSTS NUMBER 1 AND 2

WOOD BREAKAWAY POST (1)

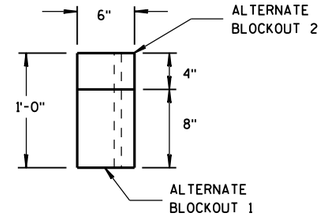


POSTS NUMBER 3-9

WOOD CRT POST (3)

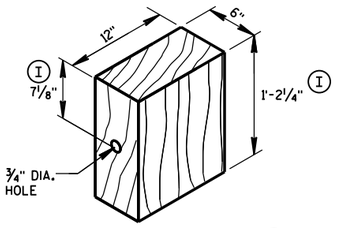


SIDE VIEW



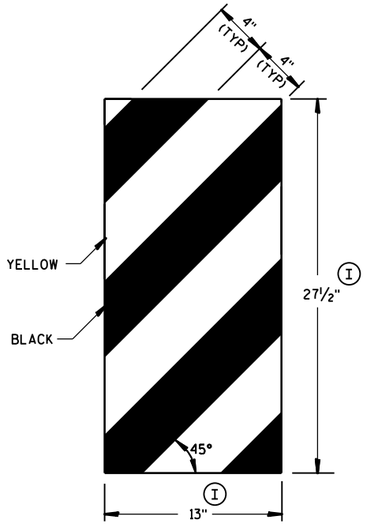
TOP VIEW

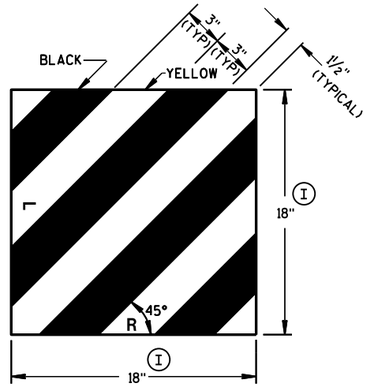
ALTERNATE WOOD BLOCKOUT DETAIL



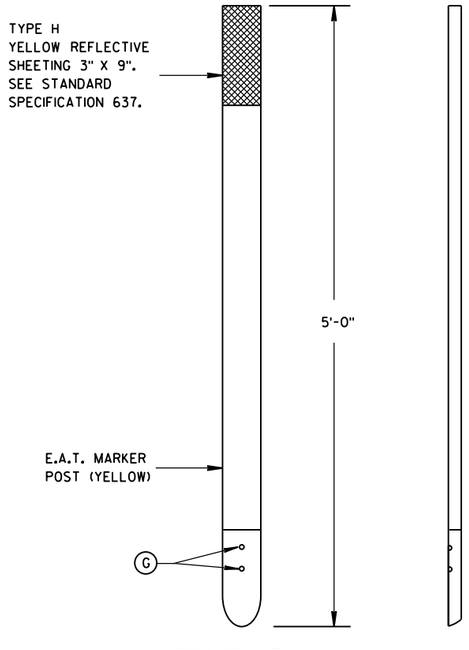
WOOD BLOCKOUT (4)

REQ'D. AT ALL POSTS EXCEPT POST NO'S 1 & 2





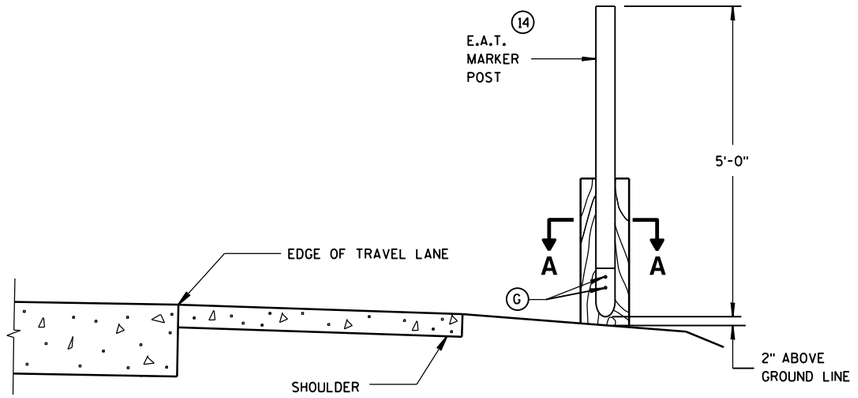
GENERIC REFLECTIVE SHEETING (13) (H)



FRONT VIEW

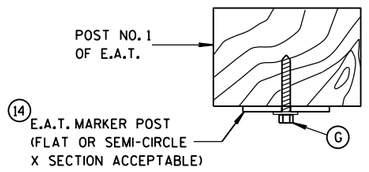
SIDE VIEW

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

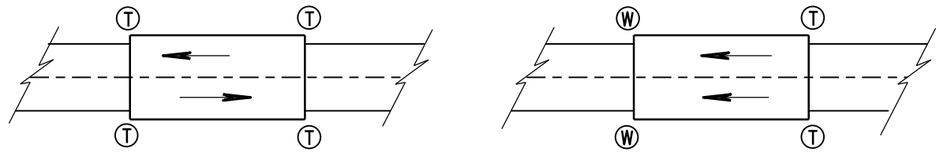
MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2014 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER
FHWA

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

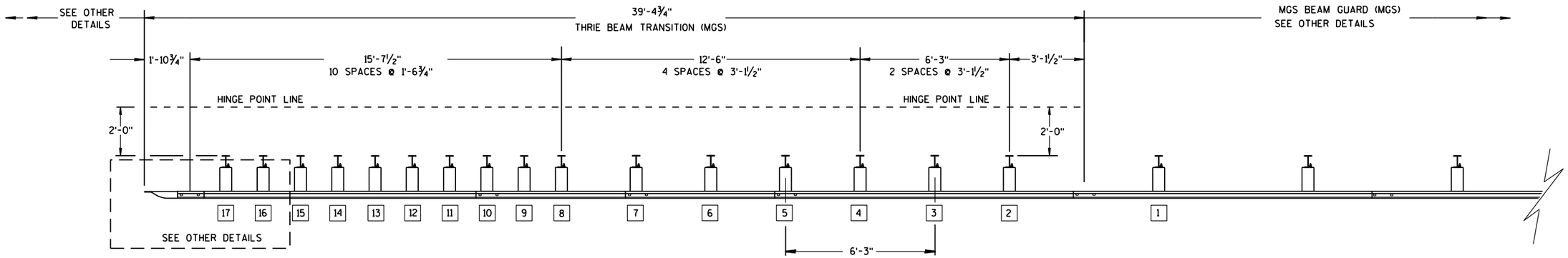
IF ROCK IS ENCOUNTERED, REMOVE ROCK TO FULL DEPTH OF POST PLUS 2½", AND 12" DIAMETER AROUND POST. SEE 14B42 FOR MORE DETAILS.

TRANSITION USES STEEL POSTS ONLY.

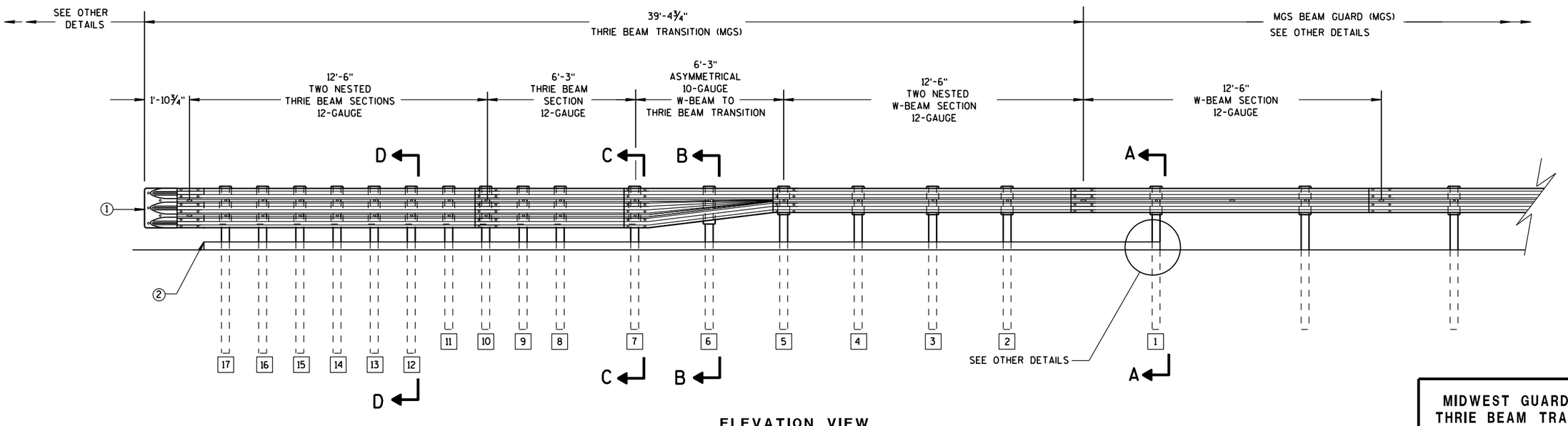
SEE STANDARD DETAIL DRAWING 14 B 42 FOR MORE INFORMATION.

① BRIDGE RAILING TYPE "W" DOES NOT REQUIRE A TERMINAL CONNECTOR.

② OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.



PLAN VIEW



ELEVATION VIEW

MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

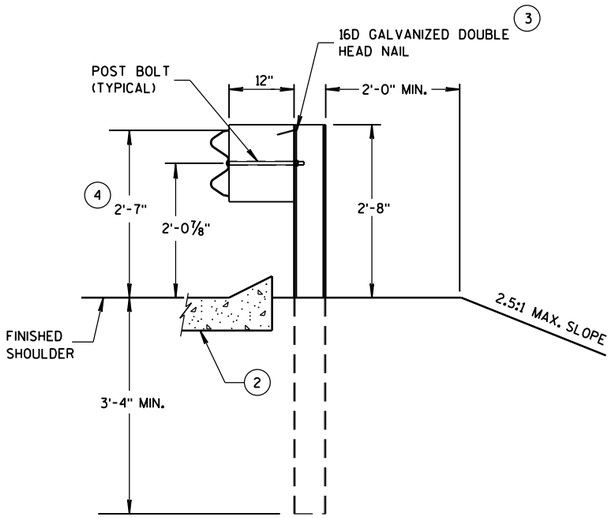
S.D.D. 14 B 45-4a

GENERAL NOTES

(2) OPTIONAL CURB AND GUTTER OR DRAINAGE_FEATURE SEE PLAN FOR INFORMATION.

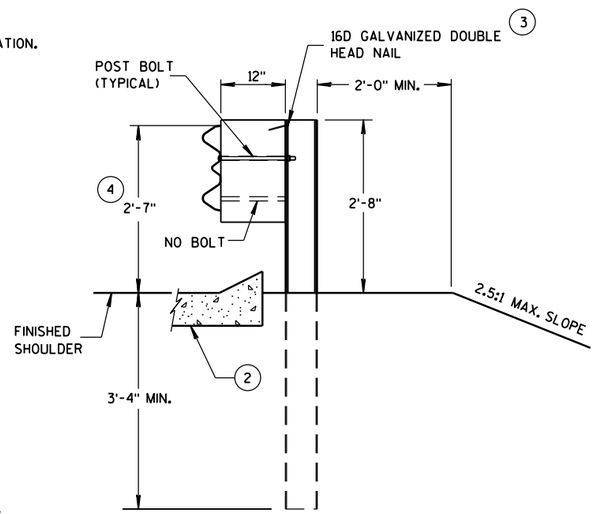
(3) WHEN USING STEEL POSTS AND WOOD BLOCKOUTS INSTALL FOUR 10D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.

(4) TOLERANCE FOR TOP OF W-BEAM RAIL IS ± 1".



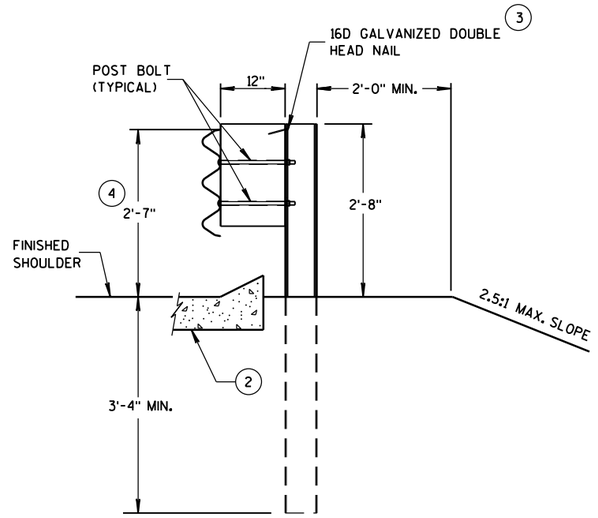
SECTION A-A

POSTS 1-5



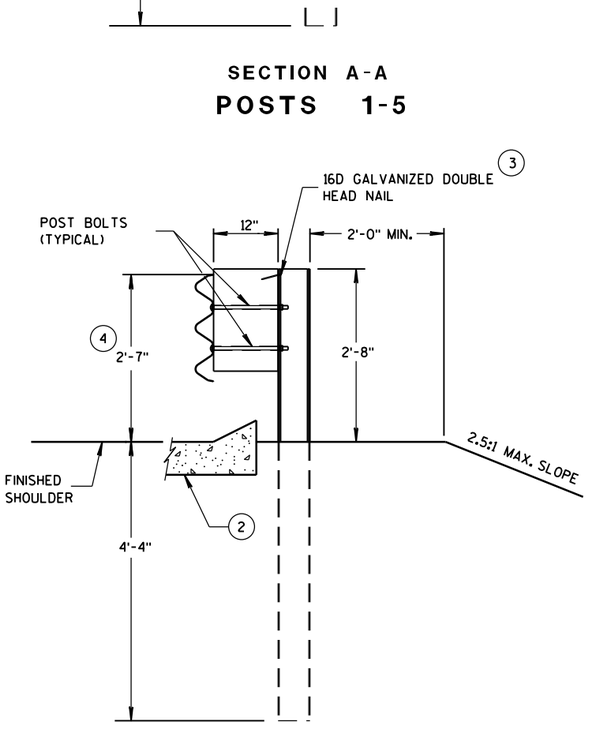
SECTION B-B

POST 6



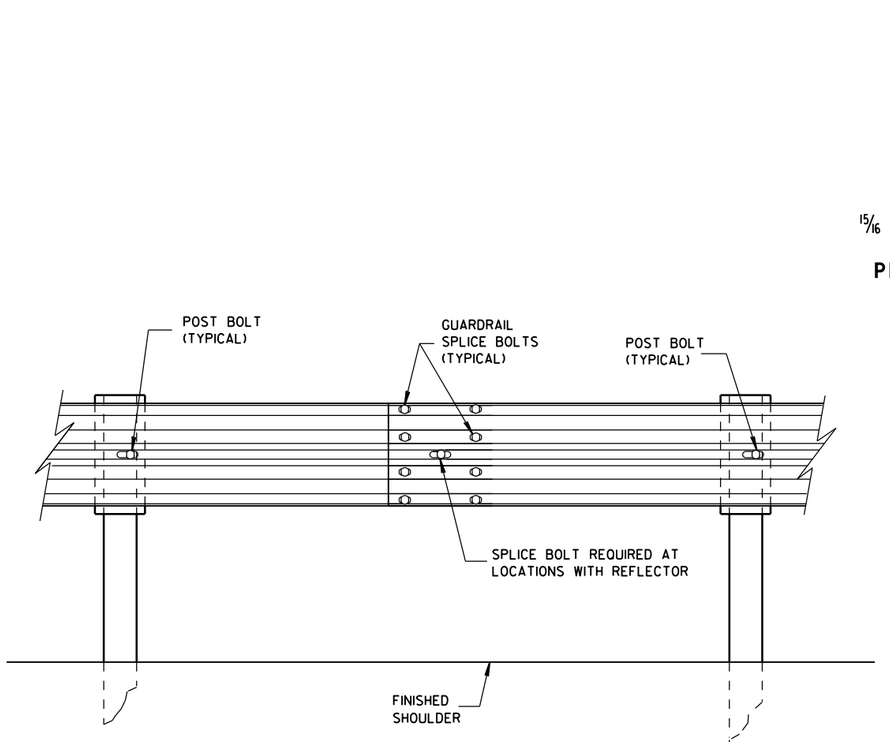
SECTION C-C

POSTS 7-11



SECTION D-D

POSTS 12-17



SPLICE DETAIL

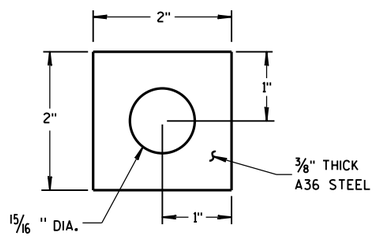
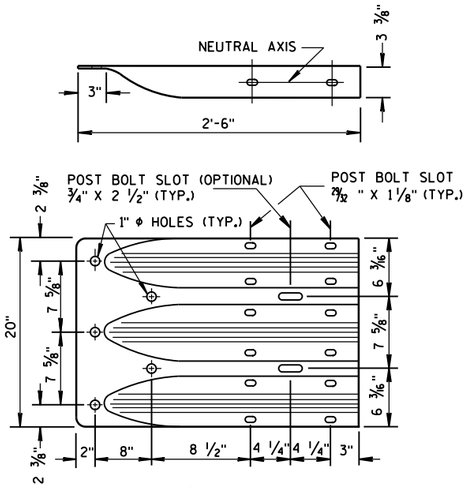
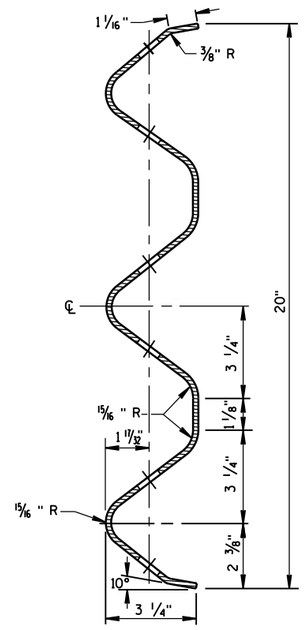


PLATE WASHER DETAIL



THRIE BEAM TERMINAL CONNECTOR



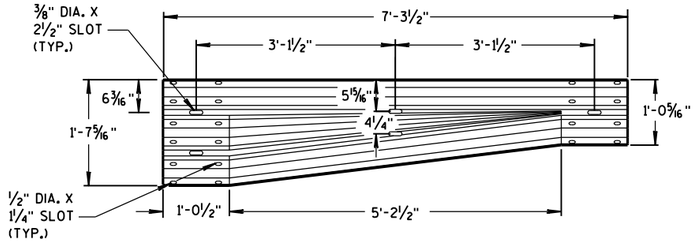
SECTION THRU THRIE BEAM RAIL ELEMENT

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

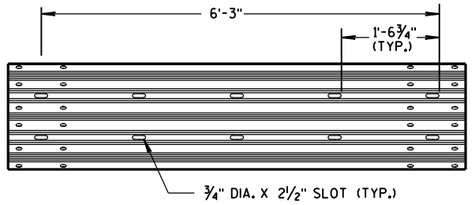
STATE OF WISCONSIN
DEPARTMENT OF TRANSPO

6

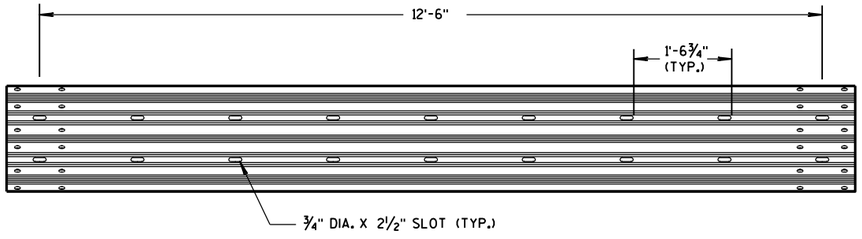
S.D.D. 14 B 45-4b



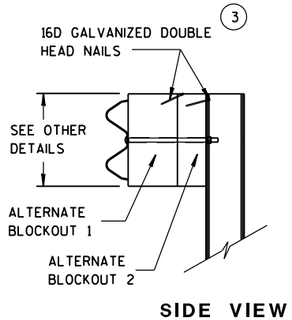
W-BEAM TO THRIE BEAM TRANSITION SECTION



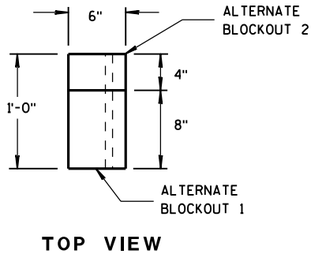
6'-3" THRIE BEAM SECTION



12'-6" THRIE BEAM SECTION

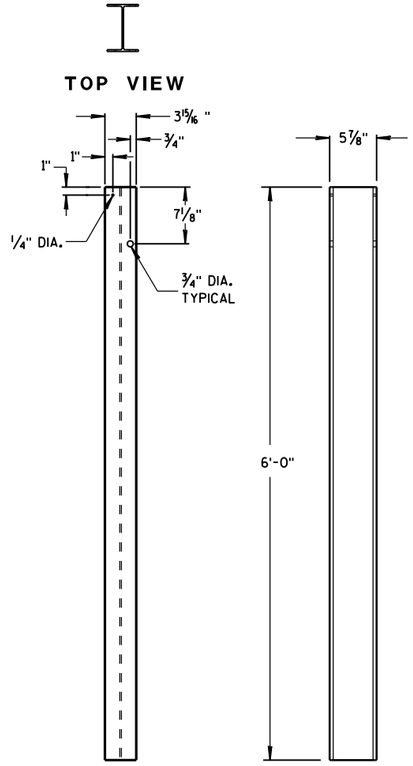


SIDE VIEW



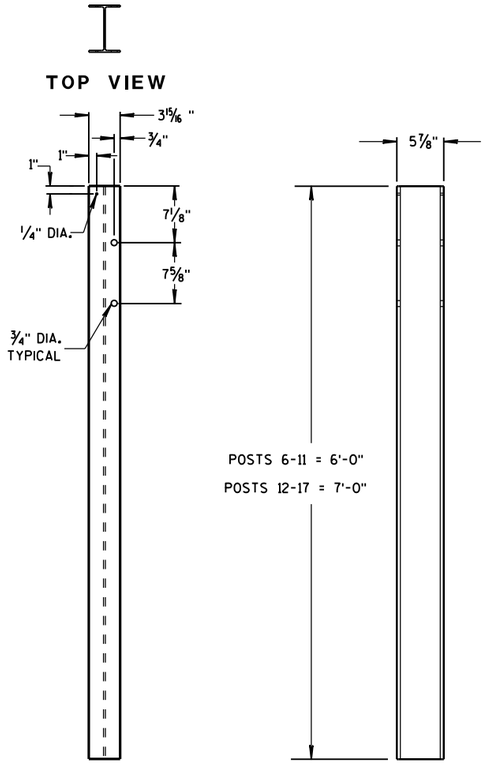
TOP VIEW

ALTERNATE WOOD BLOCKOUT DETAIL



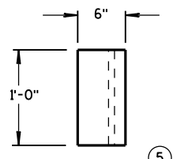
FRONT VIEW SIDE VIEW

STEEL POSTS 1-5

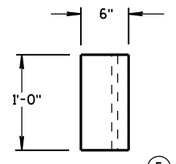


FRONT VIEW SIDE VIEW

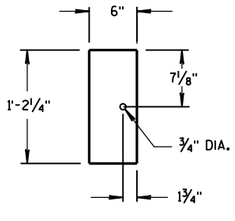
STEEL POSTS 6-17



TOP VIEW

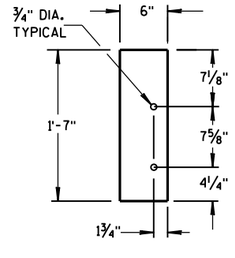


TOP VIEW



FRONT VIEW

BLOCKOUT POSTS 1-5



FRONT VIEW

BLOCKOUT POSTS 6-17

GENERAL NOTES

STEEL POSTS ARE W6X9 OR W6X8.5.

BOLT HOLES FOR POST ARE ON FRONT AND OF SIDE OF POST.

(3) WHEN USING STEEL POSTS 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.

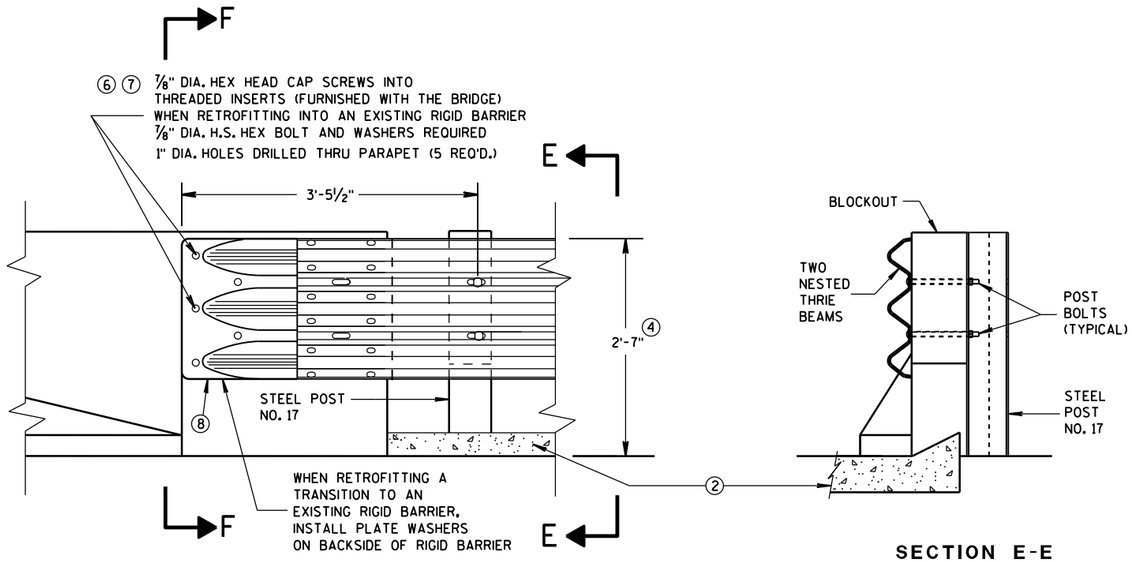
(5) WOOD BLOCKS MAY BE CONSTRUCTED OUT OF 2 WOOD BLOCKS. SEE ALTERNATE WOOD BLOCK DETAIL.

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

S.D.D. 14 B 45-4c
S.D.D. 14 B 45-4c



FRONT VIEW

SECTION E-E

THRIE BEAM CONNECTION TO BRIDGE PARAPET WITH SQUARE ENDS

GENERAL NOTES

THESE ARE TYPICAL CONNECTION DETAILS. ADJUST THE POSTION OF CONNECTIONS TO EXISTING BRIDGES TO FIT THE ACTUAL BRIDGE AND SITE DIMENSIONS.

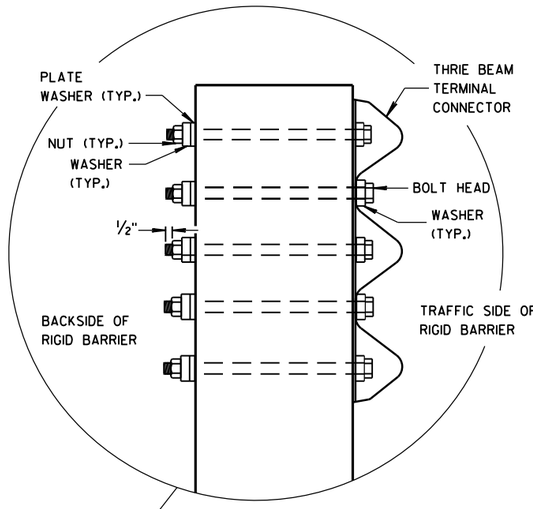
② OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.

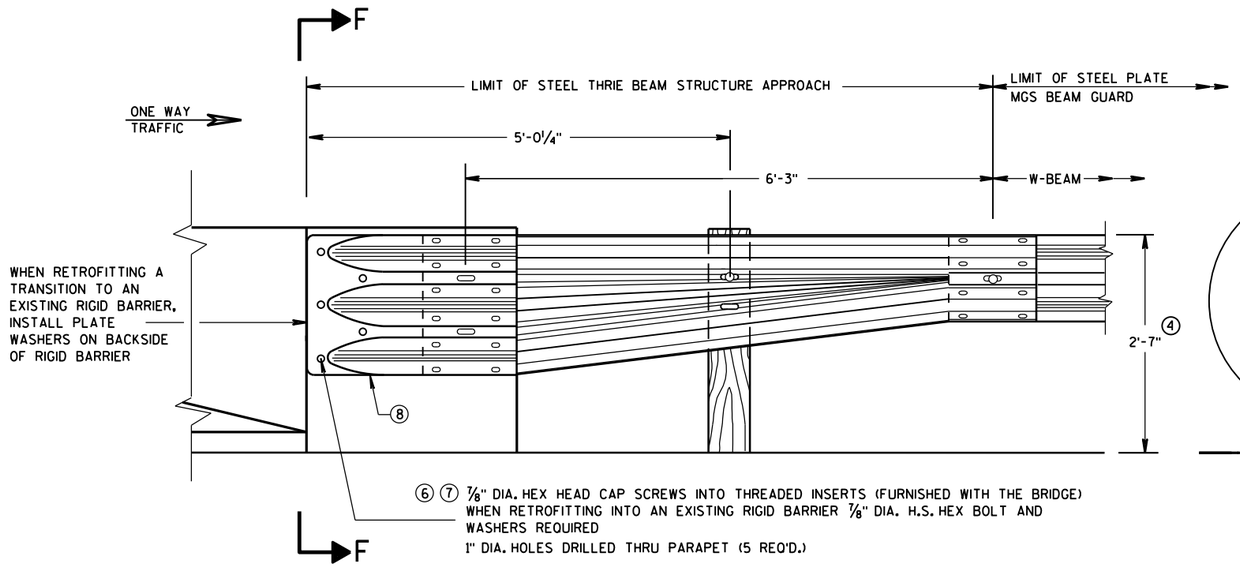
④ TOLERANCE FOR TOP OF BEAM IS ± 1".

⑥ DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

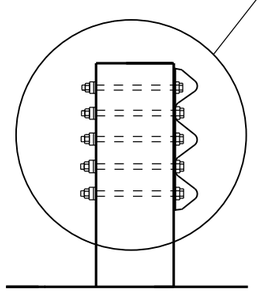
⑦ BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE. 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.

⑧ 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".

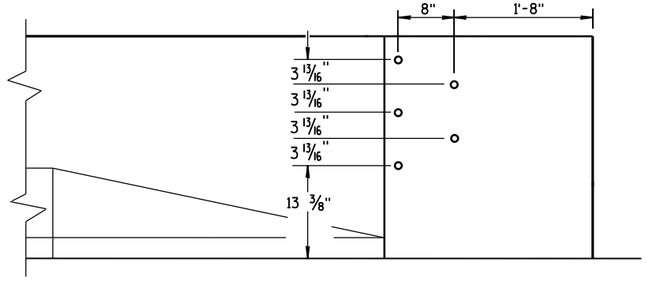




FRONT VIEW



SECTION F-F



DRILL HOLE LOCATION

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
June, 2015
DATE
FHWA

/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER

NT

6

S.D.D. 14 B 45-4d

6

S.D.D. 14 B 45-4d

GENERAL NOTES

THESE ARE TYPICAL CONNECTION DETAILS. ADJUST THE POSTION OF CONNECTIONS TO EXISTING BRIDGES TO FIT THE ACTUAL BRIDGE AND SITE DIMENSIONS.

(2) OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.

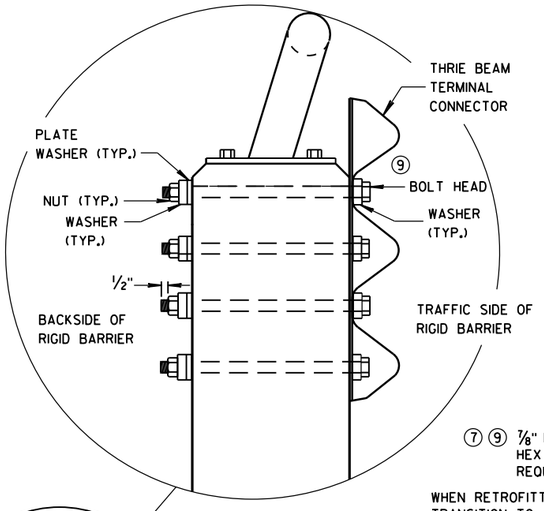
(4) TOLERANCE FOR TOP OF BEAM IS ± 1".

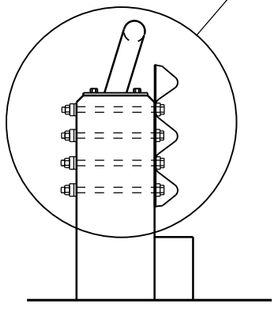
(6) DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

(7) 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.

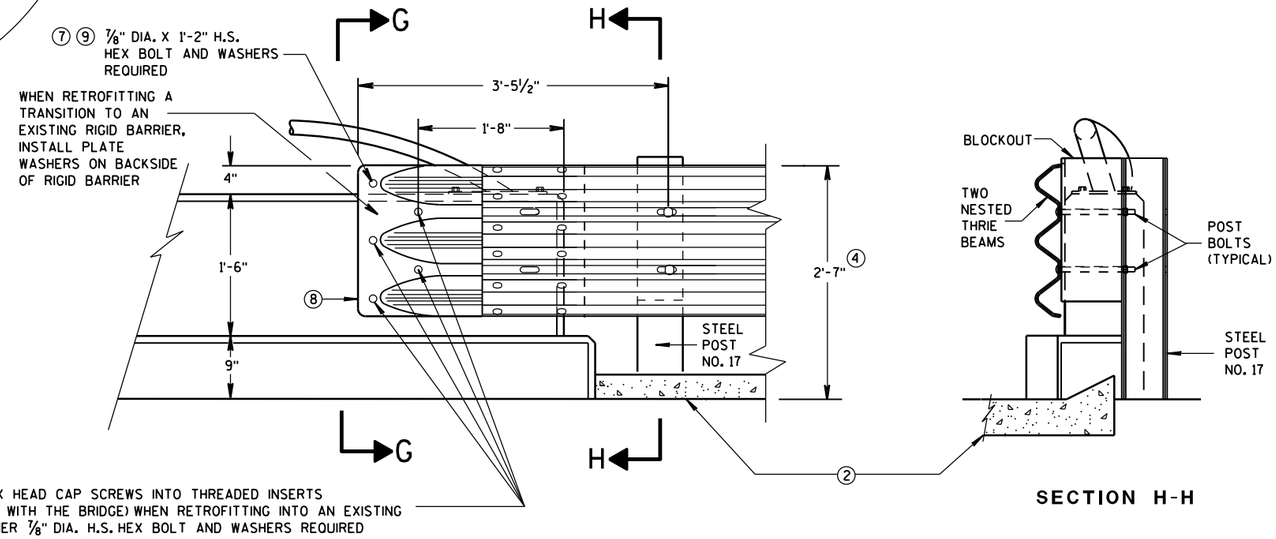
(8) THE RECESS FOR A W-BEAM CONNECTION, WHICH EXISTS ON SOME PARAPETS OF THIS TYPE, SHALL BE FILLED WITH A TREATED TIMBER BLOCKOUT. BLOCKOUT SIZE IS 1'-6" X 2'-0" X 3 1/2".

(9) 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.





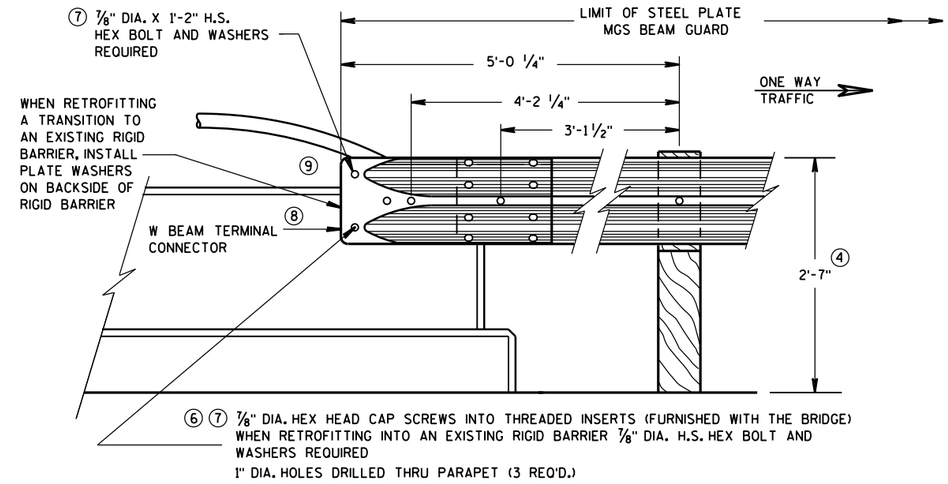
SECTION G-G



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

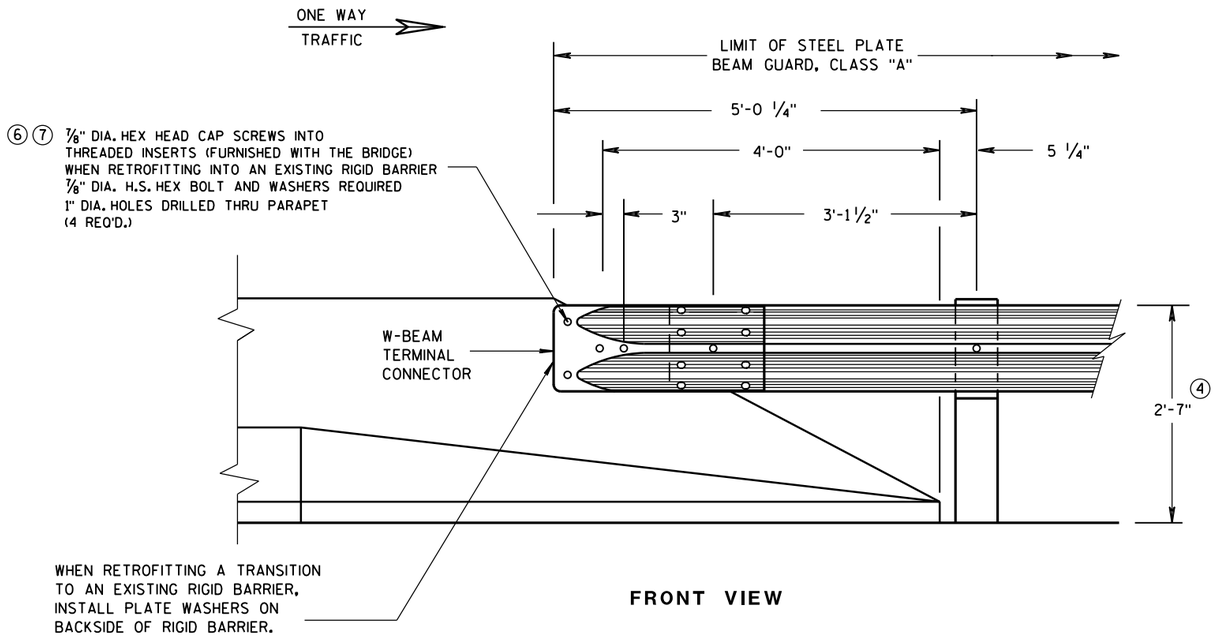
APPROVED
June, 2015 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

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S.D.D. 14 B 45-4e

6

S.D.D. 14 B 45-4e



FRONT VIEW

W BEAM CONNECTION TO PARAPETS WITH SLOPED ENDS

(USE ONLY AT TRAFFIC EXIT END OF ONE WAY BRIDGE)

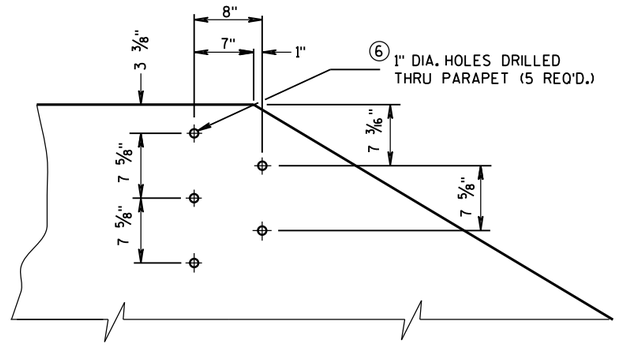
GENERAL NOTES

② OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.

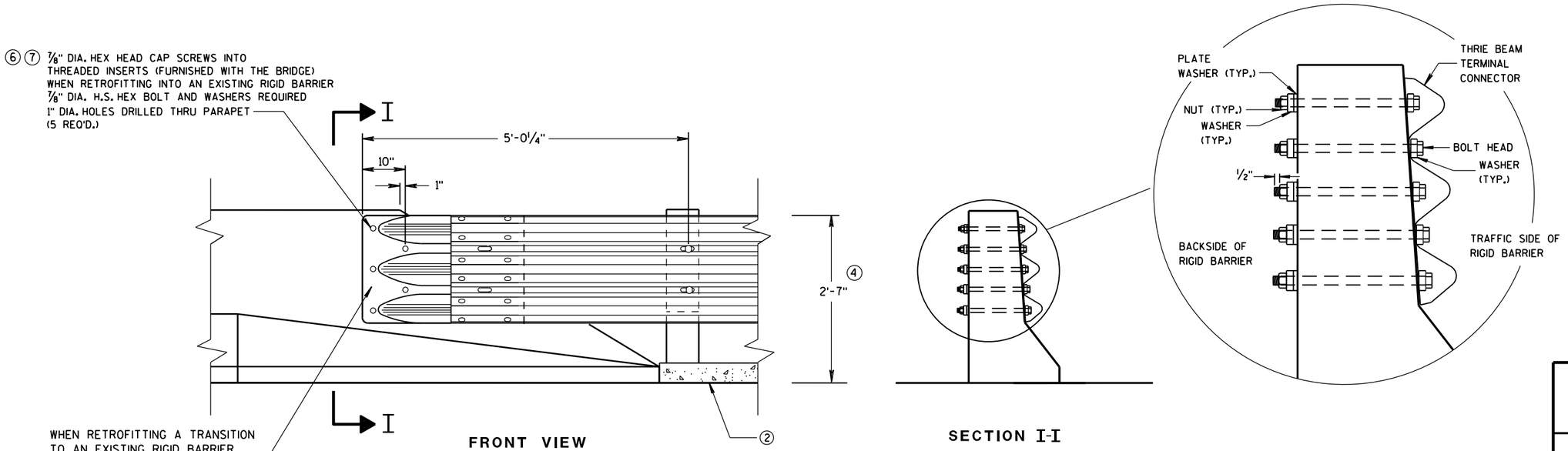
④ TOLERANCE FOR TOP OF BEAM IS ± 1".

⑥ DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

⑦ 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.



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

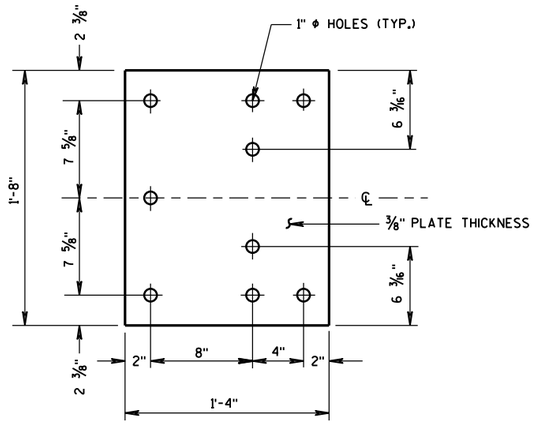
APPROVED
June, 2015 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

6

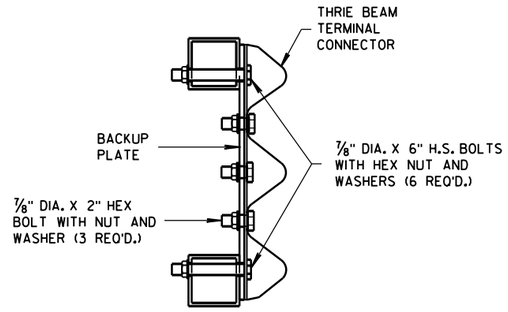
S.D.D. 14 B 45-4f

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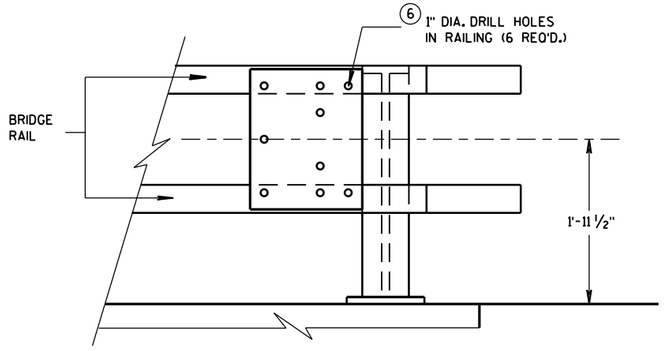
S.D.D. 14 B 45-4f



BACK-UP PLATE DETAIL



SECTION J-J

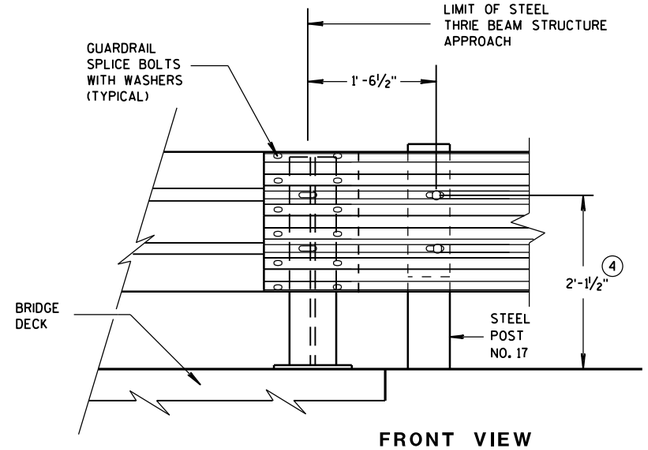


BACK-UP PLATE MOUNTING ONTO BRIDGE RAILING

GENERAL NOTES

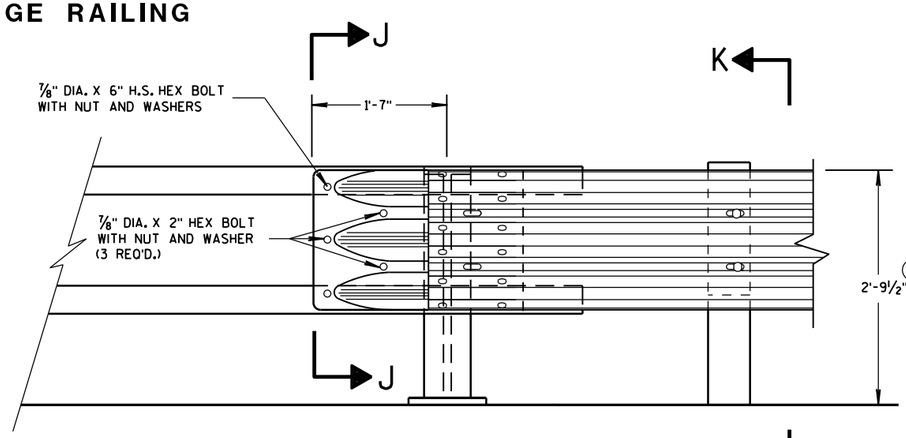
4 TOLERANCE FOR TOP OF BEAM IS ± 1".

6 DRILLING HOLES THROUGH THE PAPRPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

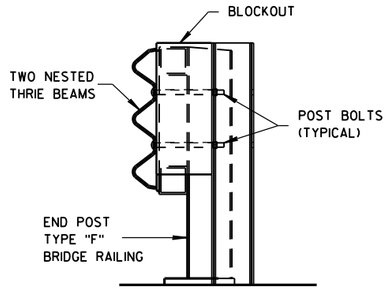


FRONT VIEW

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
June, 2015 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS DEVELOPMENT ENGINEER
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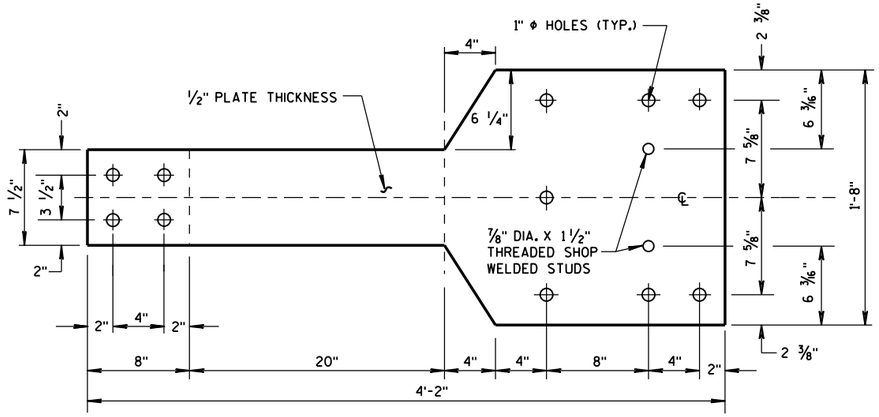
S.D.D. 14 B 45-4g

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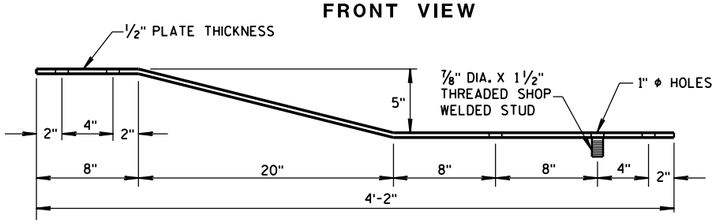
S.D.D. 14 B 45-4g

GENERAL NOTES

(4) TOLERANCE FOR TOP OF W-BEAM RAIL IS ± 1".

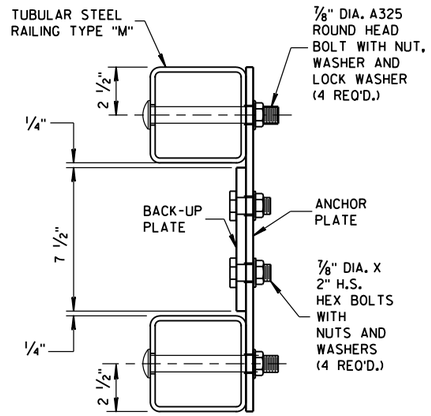


FRONT VIEW

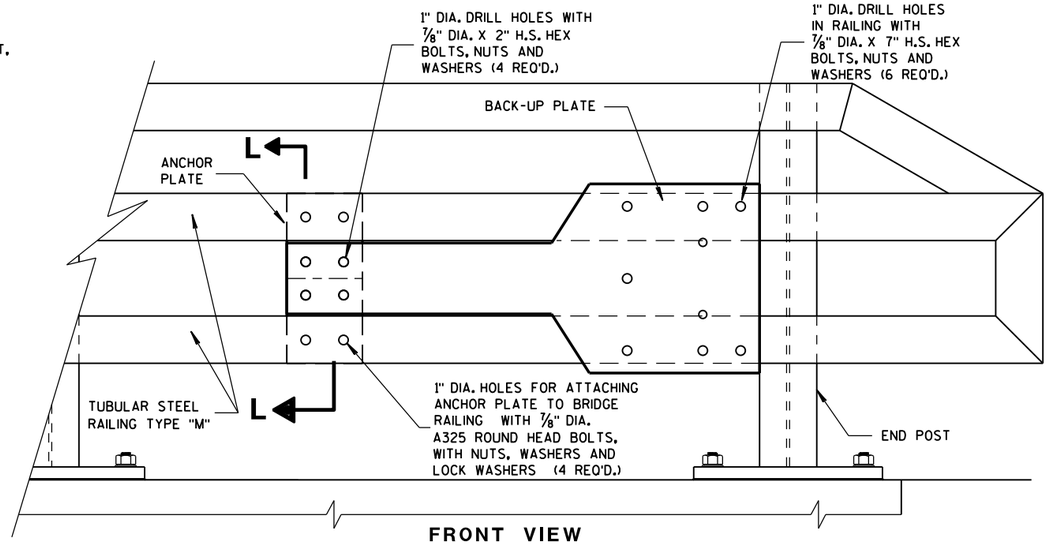


PLAN VIEW

BACK-UP PLATE DETAIL, TYPE "M"

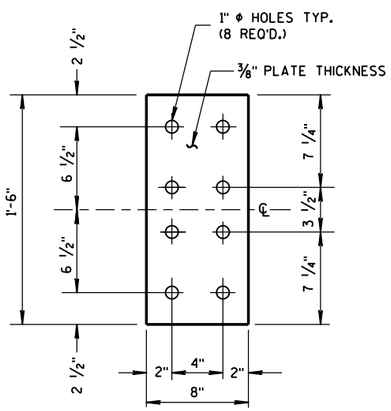


SECTION L-L



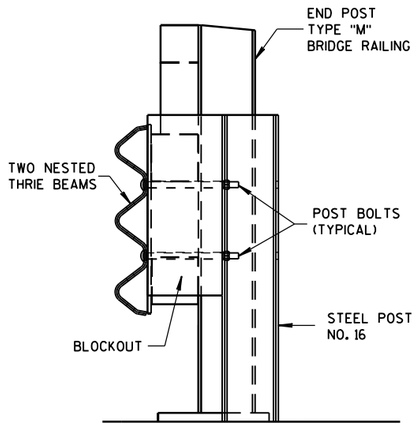
FRONT VIEW

ANCHOR AND BACK-UP PLATE MOUNTING TO BRIDGE RAILING, TYPE "M"

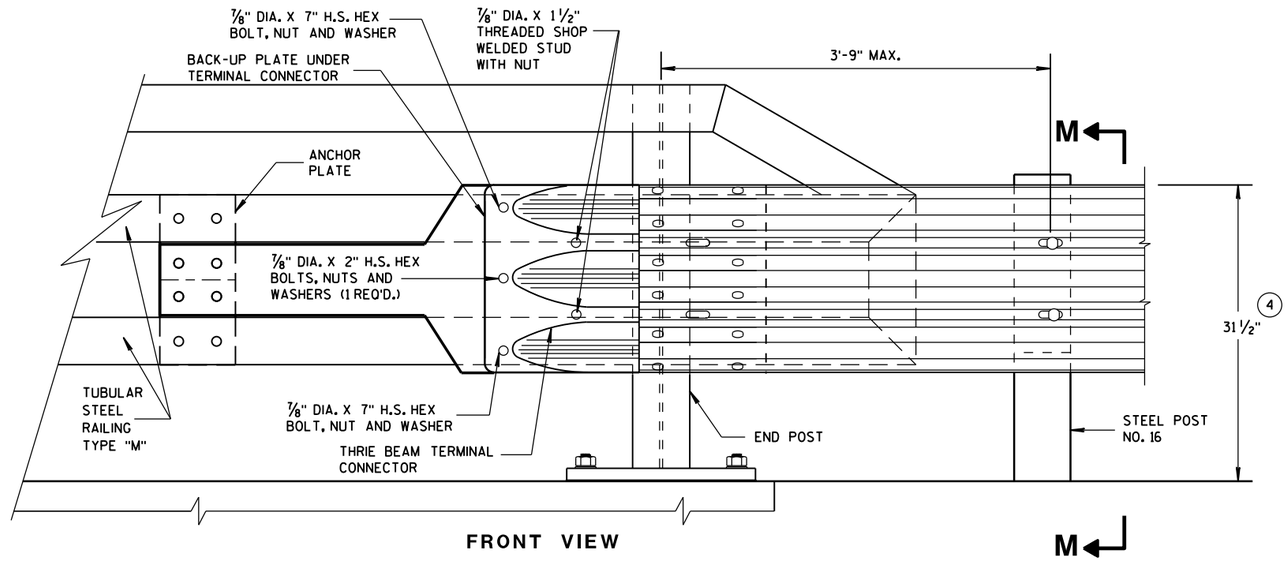


FRONT VIEW

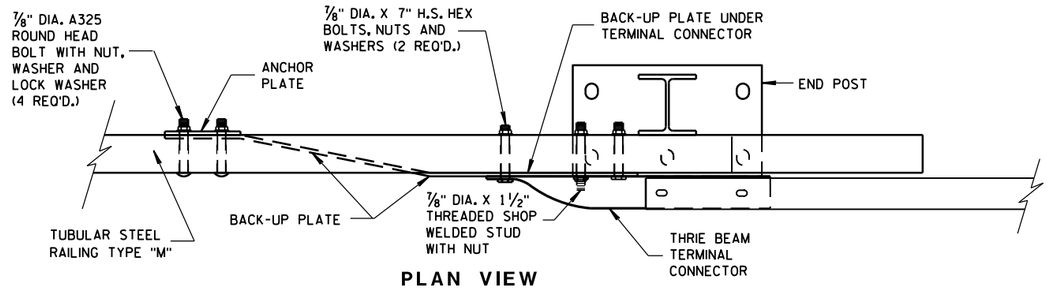
ANCHOR PLATE DETAIL, TYPE "M"



SECTION M-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

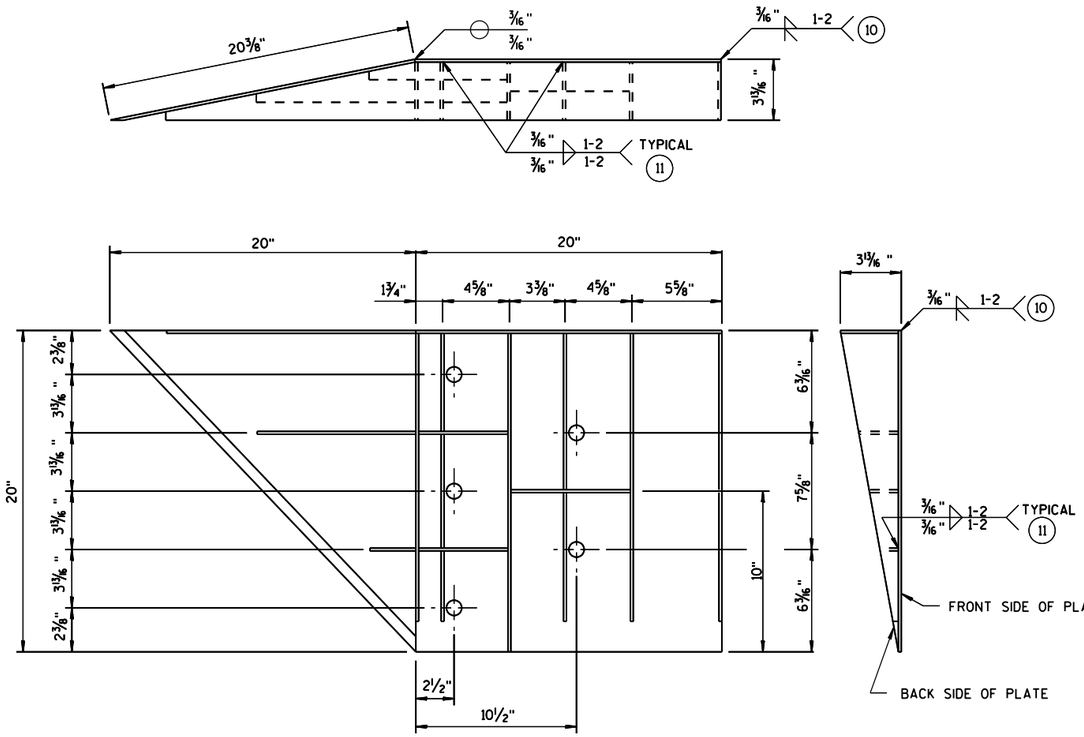
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June, 2015 — DATE
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WELDING INSTRUCTION

(VIEWED FROM BACK SIDE OF PLATE)

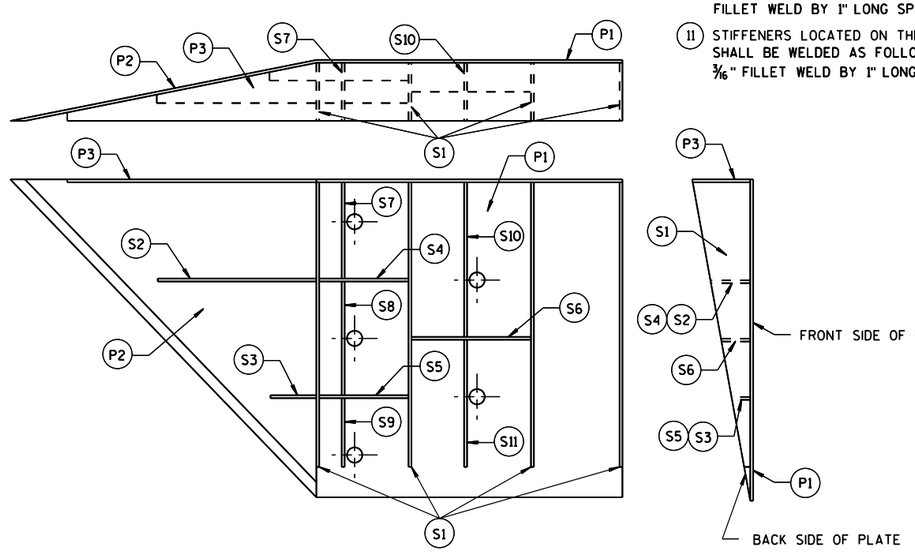


PLATE AND STIFFENER IDENTIFICATION

(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.

(10) 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.

(11) 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 19⁵⁄₁₆"	⅜"
S1	4		18⁷⁄₁₆" x 3⅜" x 18¾"	¼"
S2	1		10¼" x 2⁷⁄₁₆" x 10⅜" x ½"	¼"
S3	1		3" x 1¹⁄₁₆" x 3⅛" x ½"	¼"
S4	1		6⅛" x 2⁷⁄₁₆"	¼"
S5	1		6⅛" x 1¹⁄₁₆"	¼"
S6	1		7¾" x 1¾"	¼"
S7	1		2⁹⁄₁₆" x 6" x 3⅝" x 5⅞"	¼"
S8	1		1³²⁄₃₂" x 7½" x 2½" x 7⅜"	¼"
S9	1		6¹⁄₁₆" x 6³⁄₁₆" x 1³²⁄₃₂"	¼"
S10	1		1⅛" x 9⅞" x 3⅝" x 9¹¹⁄₁₆"	¼"
S11	1		8½" x 8¾" x 1¹³⁄₁₆"	¼"

SINGLE SLOPE CONNECTION PLATE

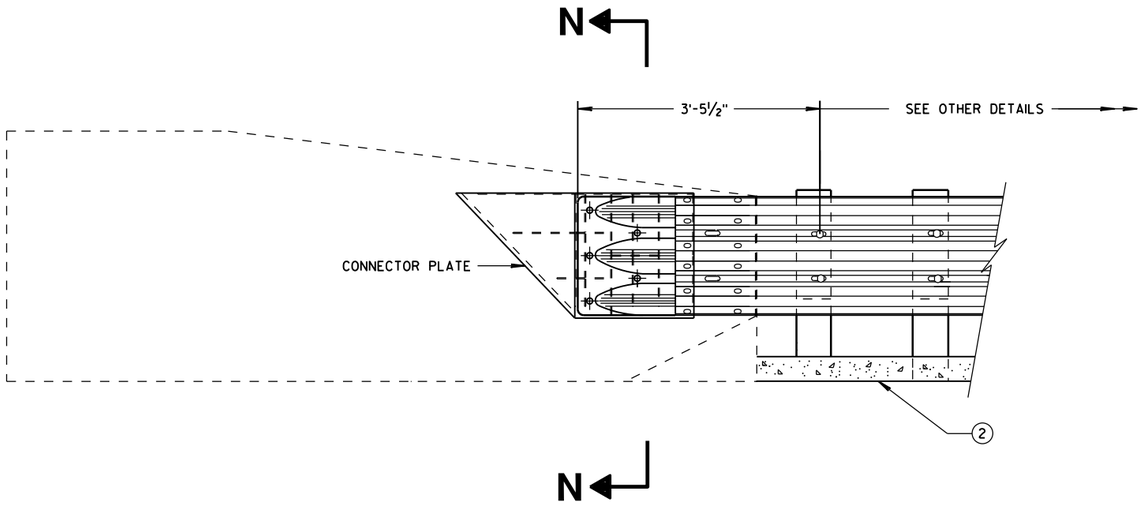
MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

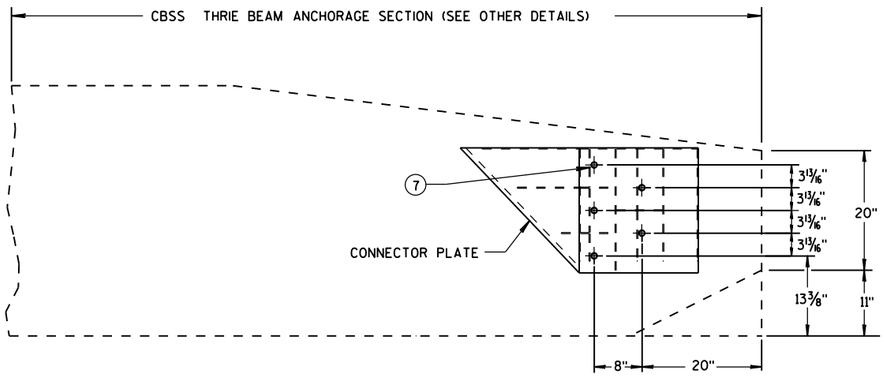
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THRIE BEAM CONNECTION TO SINGLE SLOPE BARRIER



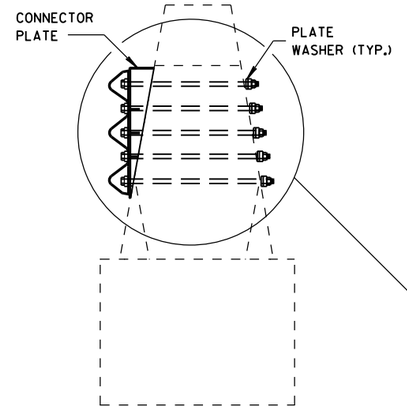
SINGLE SLOPE CONNECTION PLATE PLACEMENT

GENERAL NOTES

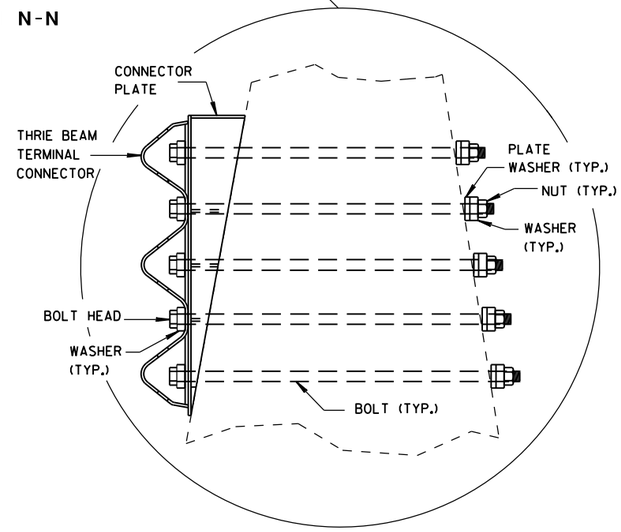
CONNECTOR PLATE, DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

(2) OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.

(7) 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

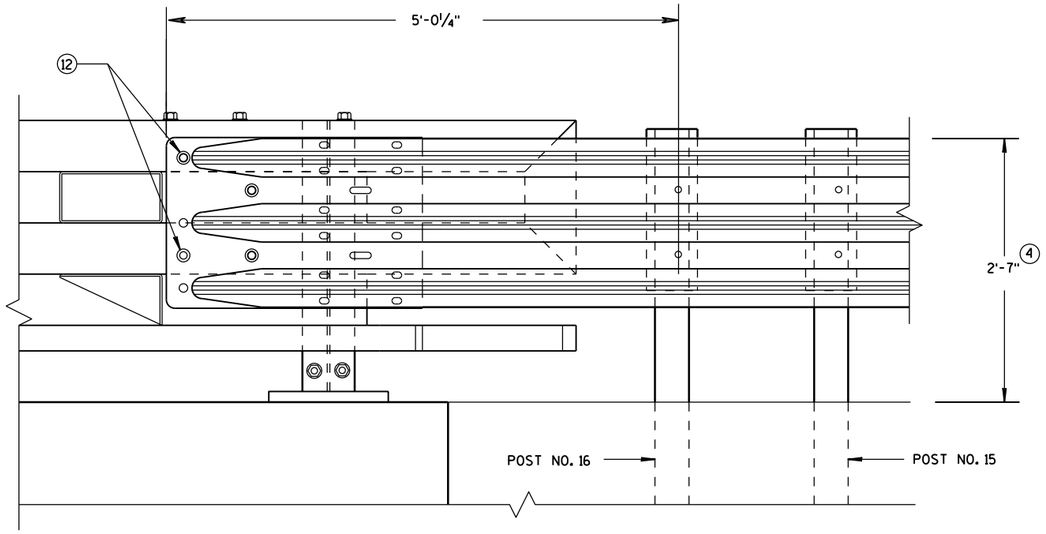
APPROVED
June, 2015 — DATE
/S/ Jerry H. Zoga — ROADWAY STANDARDS DEVELOPMENT ENGINEER
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FHWA

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S.D.D. 14 B 45-4j

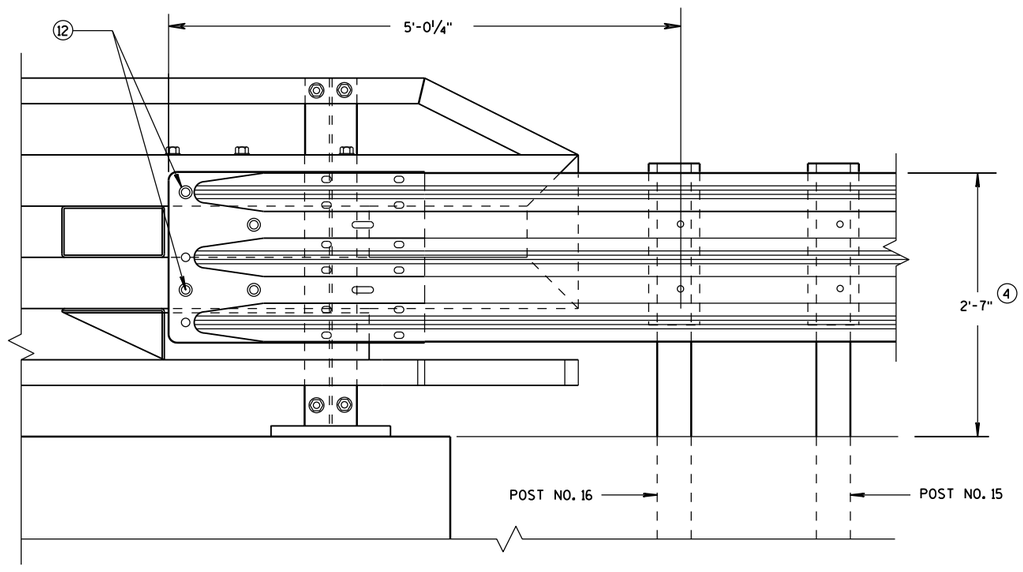
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S.D.D. 14 B 45-4j



ELEVATION OF DETAIL AT NY3 END POST

THRIE BEAM RAIL ATTACHMENT



ELEVATION OF DETAIL AT NY4 END POST

THRIE BEAM RAIL ATTACHMENT

GENERAL NOTES

(4) TOLERANCE FOR TOP OF BEAM IS ± 1".

(12) 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. ON BACKSIDE OF PARAPET ONE ROUND WASHER, AND NUT REQUIRED. BOLT THREAD IS TO EXTEND ½-INCH BEYOND NUT.

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2015
DATE

/S/ Jerry H. Zogg
ROADWAY STANDARDS D 403 NT
ENGINEER

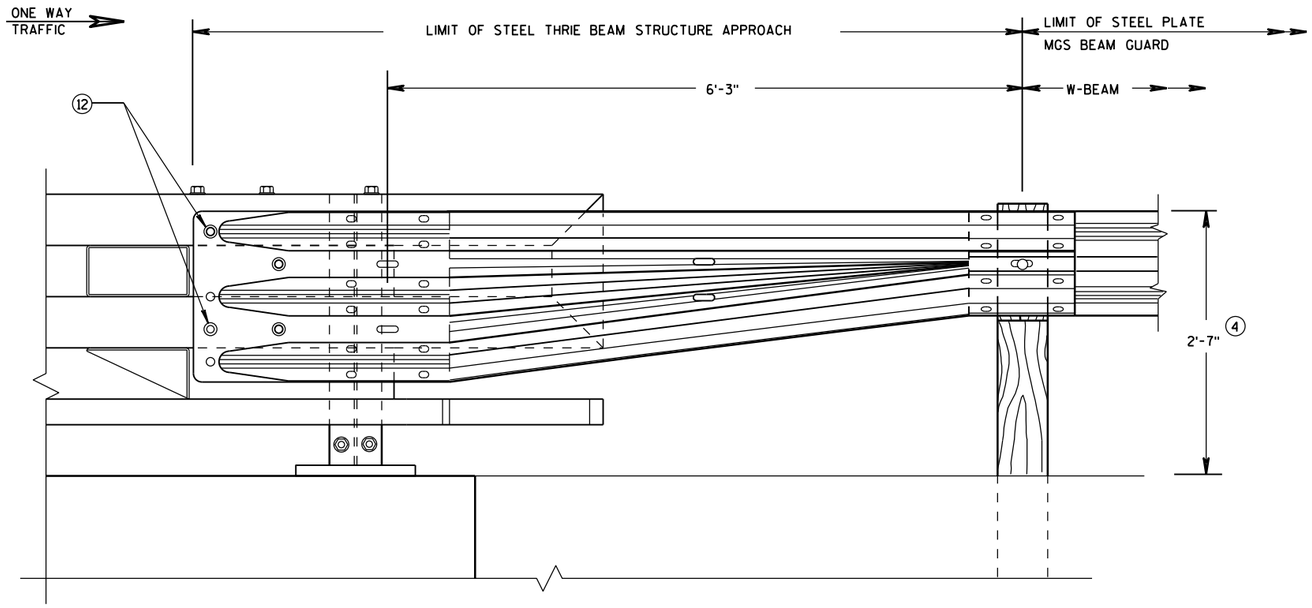
FHWA

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S.D.D. 14 B 45-4k

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S.D.D. 14 B 45-4k



FRONT VIEW

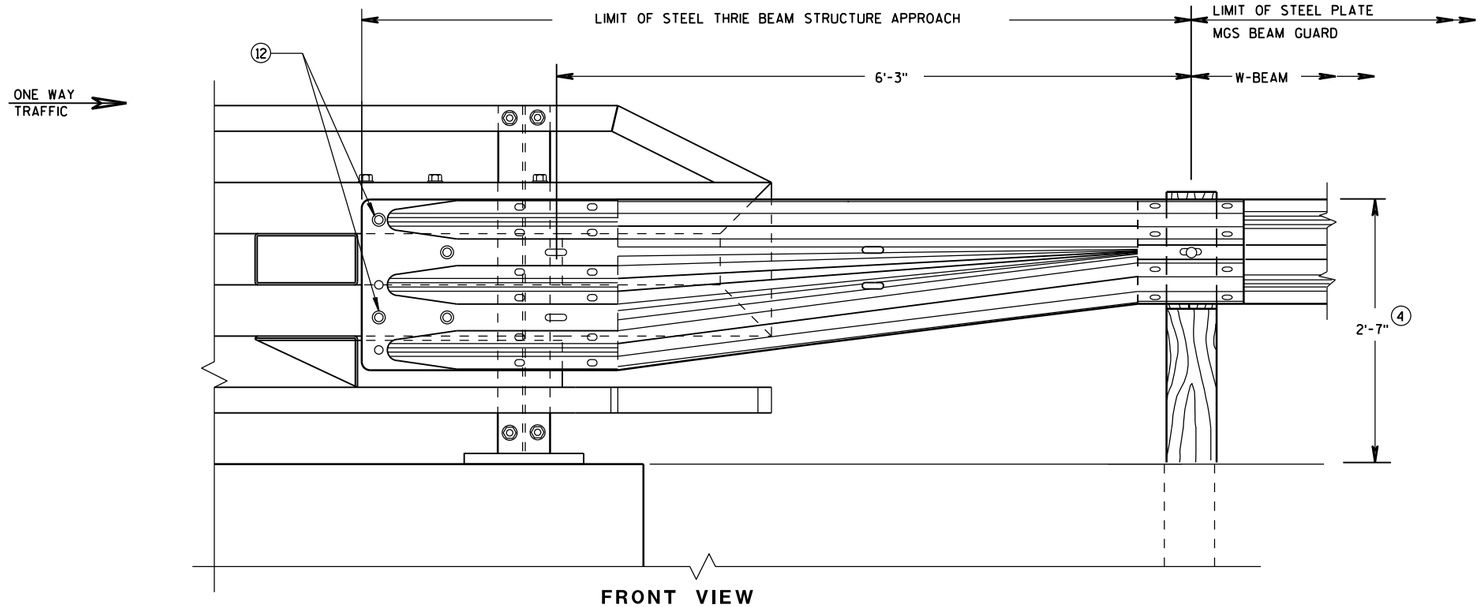
W BEAM TRANSITION AND CONNECTION TO BRIDGE RAILING TYPE "NY3"

(USE ONLY ON THE TRAFFIC EXIT END OF ONE WAY BRIDGES)

GENERAL NOTES

(4) TOLERANCE FOR TOP OF BEAM IS ± 1".

(12) 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. ON BACKSIDE OF PARAPET ONE ROUND WASHER, AND NUT REQUIRED. BOLT THREAD IS TO EXTEND ½-INCH BEYOND NUT.



FRONT VIEW

W BEAM TRANSITION AND CONNECTION TO BRIDGE RAILING TYPE "NY4"

(USE ONLY ON THE TRAFFIC EXIT END OF ONE WAY BRIDGES)

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

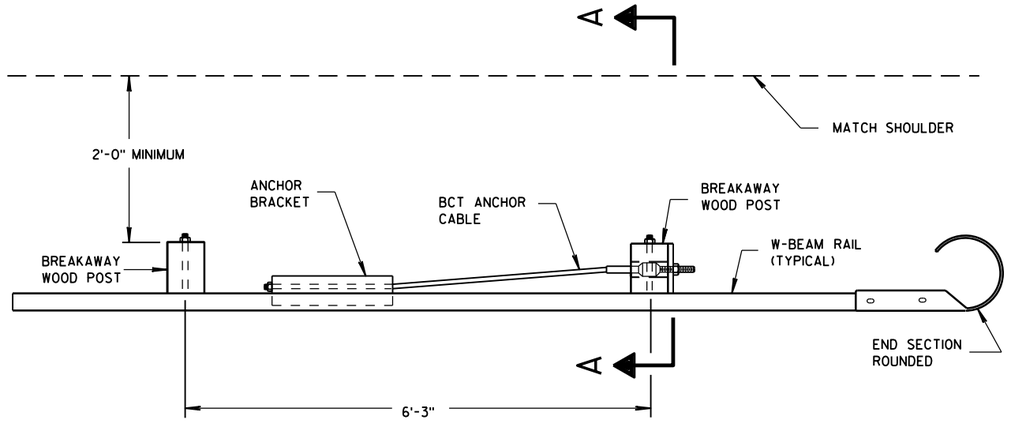
APPROVED
June, 2015
DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS D 404 NT
ENGINEER
FHWA

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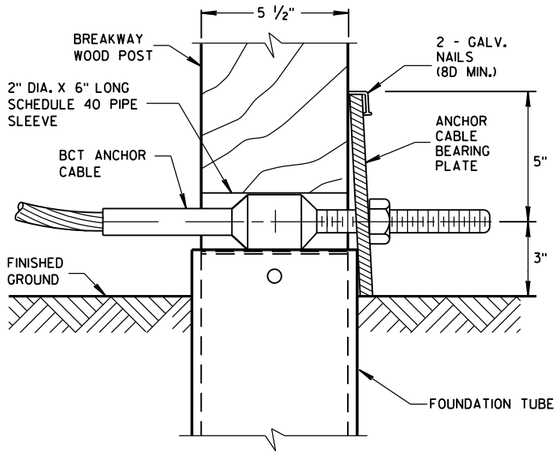
S.D.D. 14 B 45-4L

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S.D.D. 14 B 45-4L



PLAN VIEW



DETAIL A

POST NO. 1
GROUNG STRUT NOT SHOWN FOR CLARITY.

GENERAL NOTES

SEE SDD 14 B 42 FOR MORE INFORMATION.

END SECTION BOLTS AND NUTS HAVE THE SAME MATERIAL REQUIREMENTS AS SPLICE BOLTS.

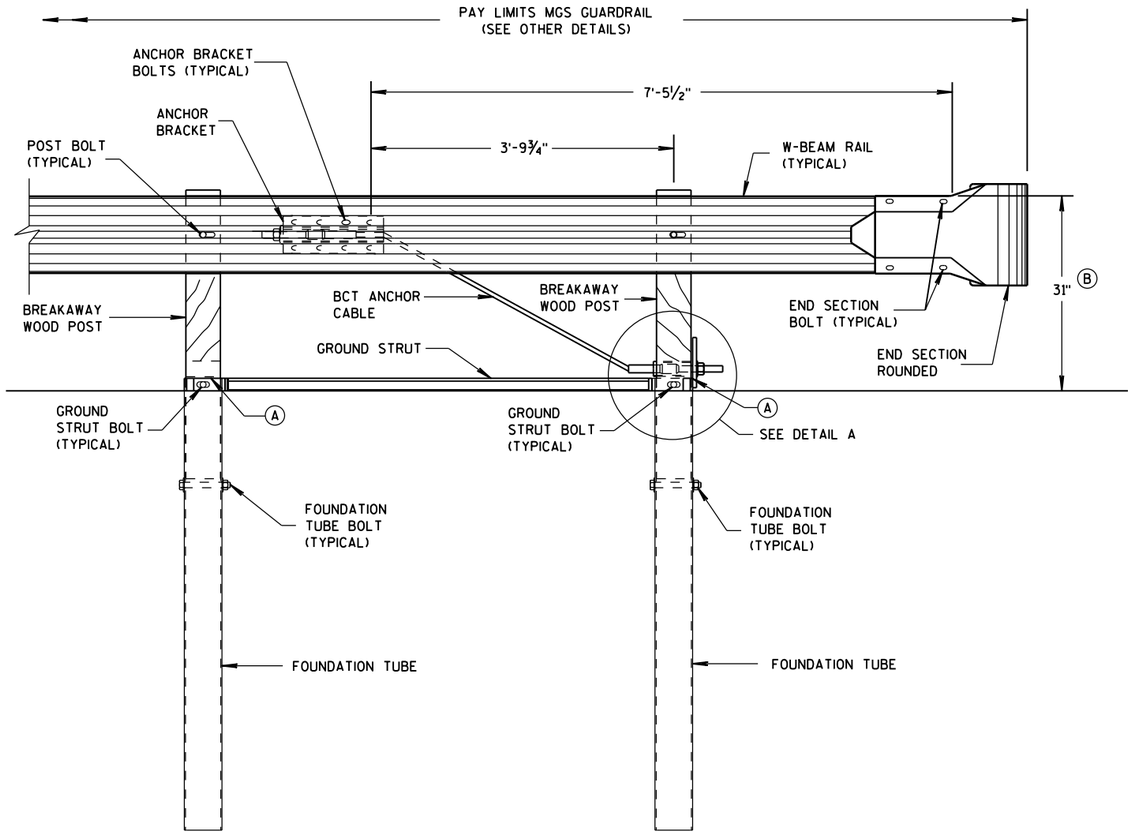
FOUNDATION TUBE BOLTS ARE ⅞" DIAMETER ASTM A307 HEX HEAD BOLT. FOUNDATION TUBE BOLTS REQUIRE ASTM A563 A NUT AND TWO ASTM F844 ⅞" DIAMETER FLAT WASHERS. INSTALL ONE WASHER UNDER BOLT HEAD AND ONE WASHER UNDER NUT.

ANCHOR BRACKET AND GROUND STRUT BOLTS ARE A ⅝" DIAMETER ASTM A307 HEX HEAD BOLT. ANCHOR BRACKET BOLTS REQUIRE ASTM A563 A NUT AND TWO ASTM F844 ⅝" DIAMETER FLAT WASHERS. INSTALL ONE WASHER UNDER BOLT HEAD AND ONE WASHER UNDER NUT.

W-BEAM END SECTION ROUNDED HAS THE SAME MATERIAL PROPERTIES AS STANDARD STEEL RAIL.

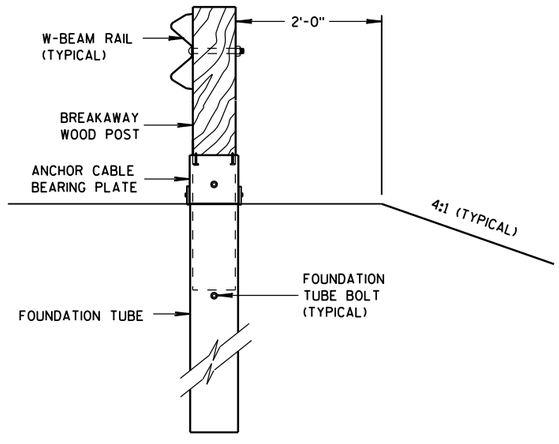
(A) TOP OF FOUNDATION TUBE SHALL BE NO MORE THAN 3" ABOVE FINISHED GROUND.

(B) FOR NEW CONSTRUCTION TOP OF RAIL IS 31" ± 1".
FOR EXISTING INSTALLATIONS TOP OF RAIL IS BETWEEN 27¾" TO 32" ± 1".

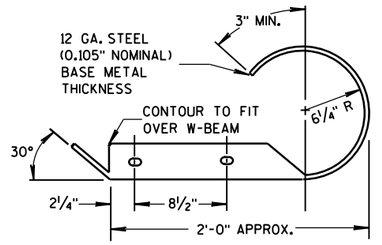


FRONT VIEW

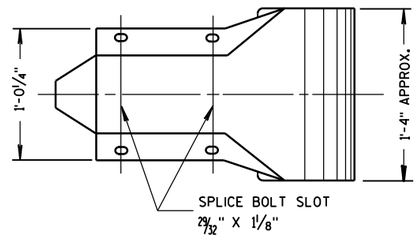
END RAIL DETAIL



SECTION A-A



PLAN VIEW



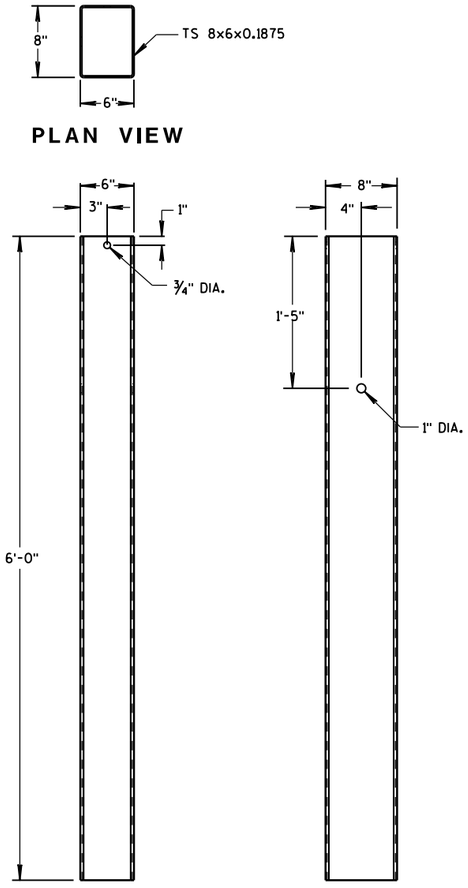
FRONT VIEW

W BEAM END SECTION ROUNDED

MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPO

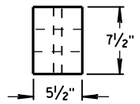
6
S.D.D. 14 B 47-2a



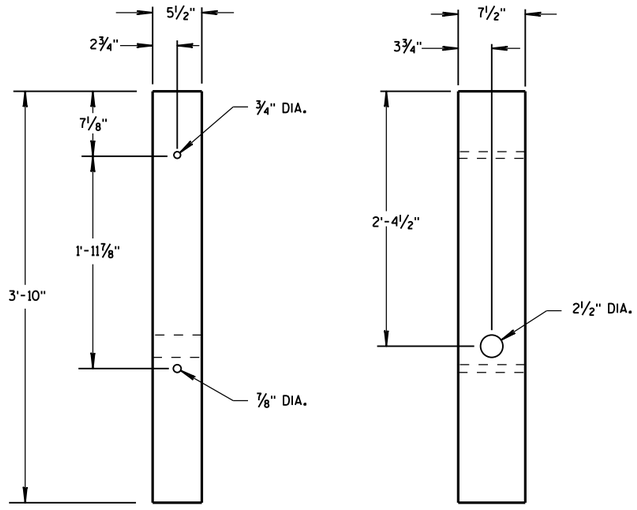
PLAN VIEW

FRONT VIEW SIDE VIEW

FOUNDATION TUBE



PLAN VIEW

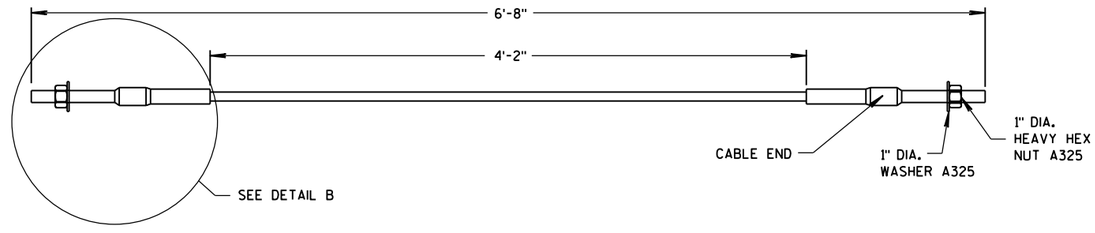


FRONT VIEW SIDE VIEW

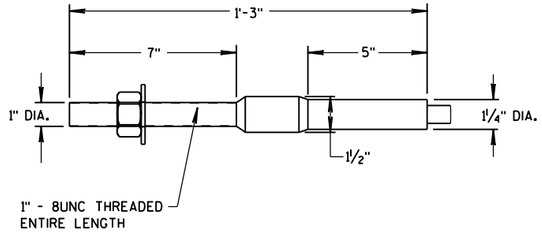
BREAKAWAY WOOD POST

GENERAL NOTES

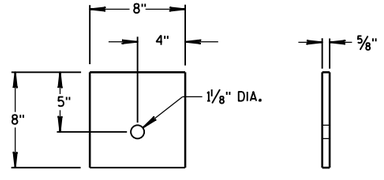
BCT ANCHOR CABLE IS A ¾" DIAMETER 6X19 IWRC IPS GALVANIZED WIRE ROPE. THE SWAGED FITTINGS AND STUD ARE REQUIRED. END FITTING SHALL BE MACHINED FROM HOT-ROLLED CARBON STEEL CONFORMING TO ASTM A576 GRADE 1035 AND GALVANIZED ACCORDING TO ASTM A123. TREADED STUD SHALL CONFORM TO ASTM A325 OR SAE GRADE 5. MINIMUM BREAKING STRENGTH OF WIRE ROPE IS 43,000 LB. WIRE ROPE IS TO BE TAUT.



BCT ANCHOR CABLE



DETAIL B



SIDE VIEW FRONT VIEW

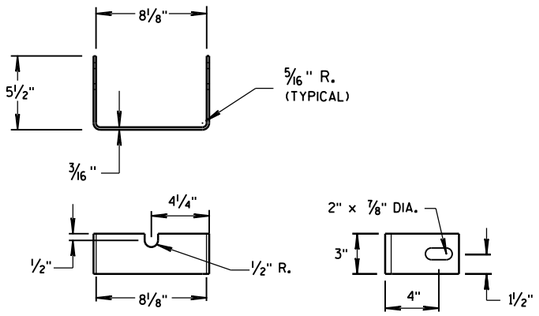
ANCHOR CABLE
BEARING PLATE

MIDWEST GUARDRAIL
SYSTEM (MGS) TYPE 2 TERMINAL

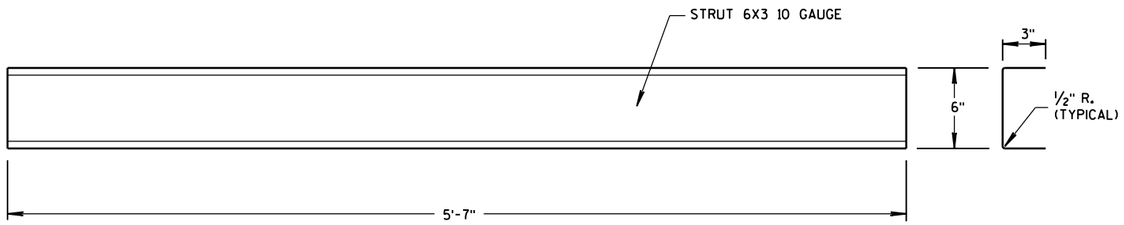
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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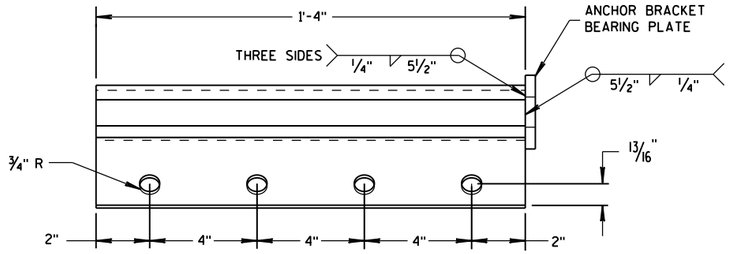
S.D.D. 14 B 47-2b

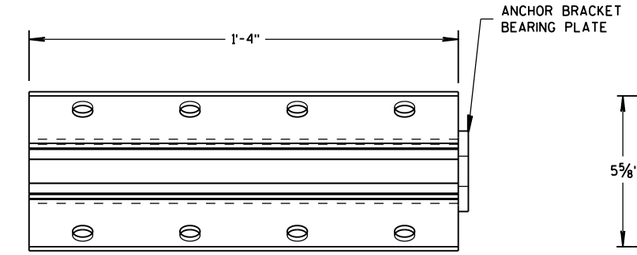


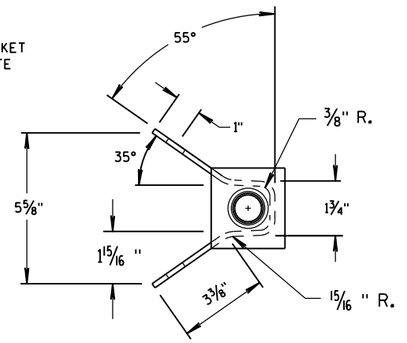
YOKE DETAIL



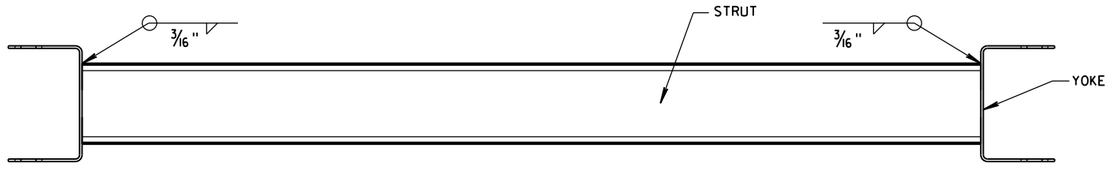
STRUT DETAIL



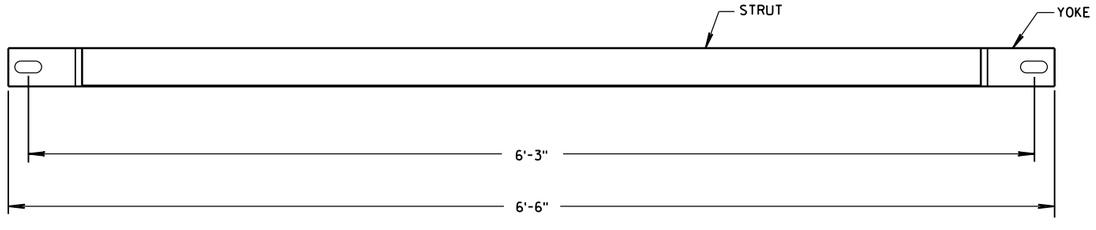




ANCHOR BRACKET

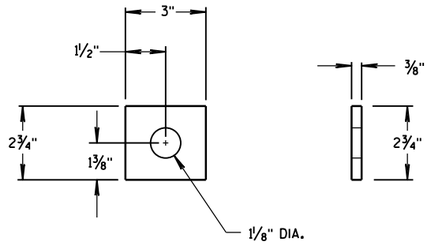


PLAN VIEW



FRONT VIEW

GROUND STRUT DETAIL



ANCHOR BRACKET BEARING PLATE

MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2014
DATE

/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER

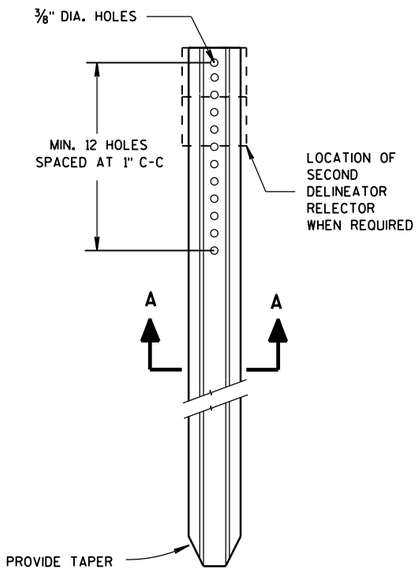
FHWA

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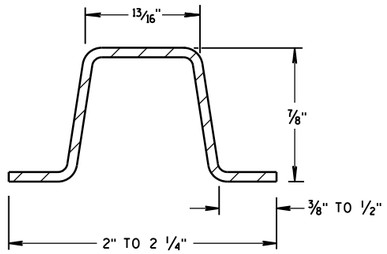
S.D.D. 14 B 47-2c

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S.D.D. 14 B 47-2c

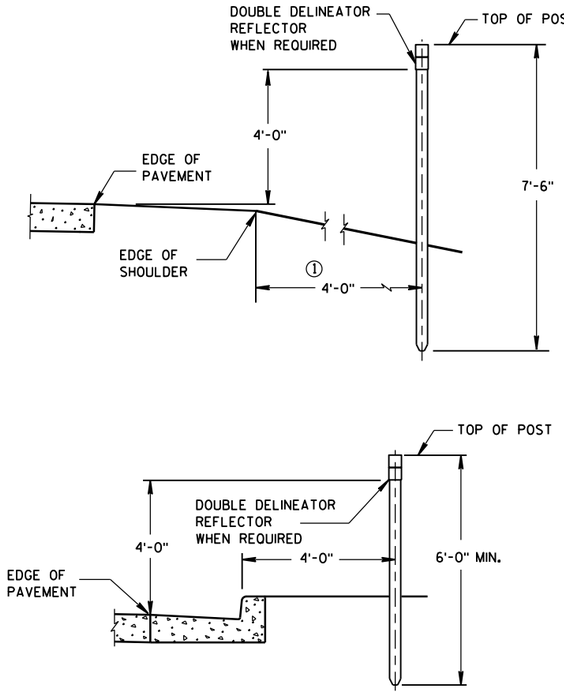


DELINEATOR POST



SECTION A-A

WEIGHT 1.12 LBS PER FT. ± 0.1 LB.

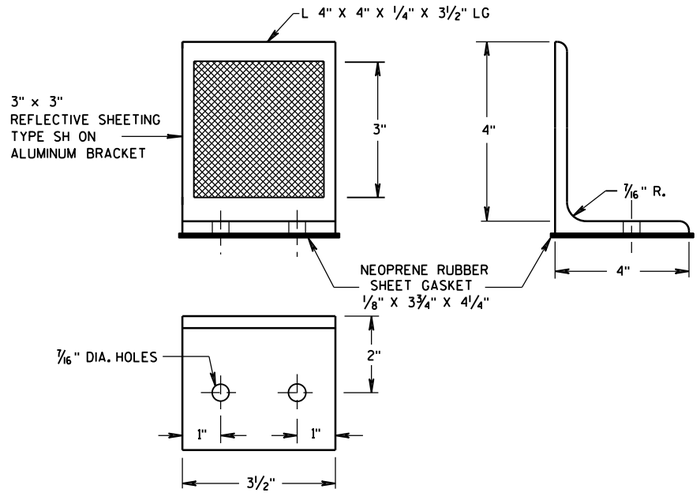


TYPICAL INSTALLATIONS OF DELINEATOR POSTS

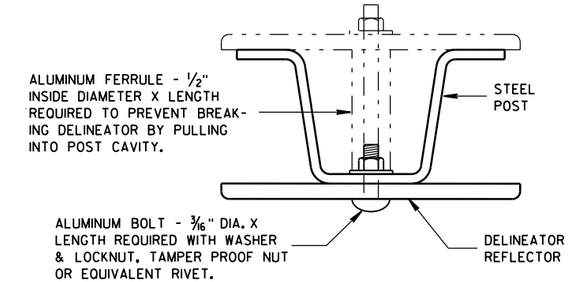
GENERAL NOTES

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

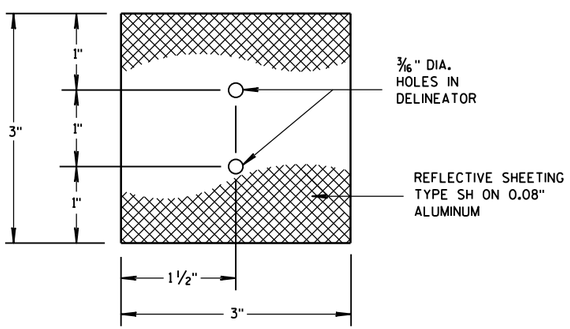
① DELINEATORS SHALL BE PLACED AT A CONSTANT DISTANCE FROM THE EDGE OF THE SHOULDER FOR THE LENGTH OF THE INSTALLATION.



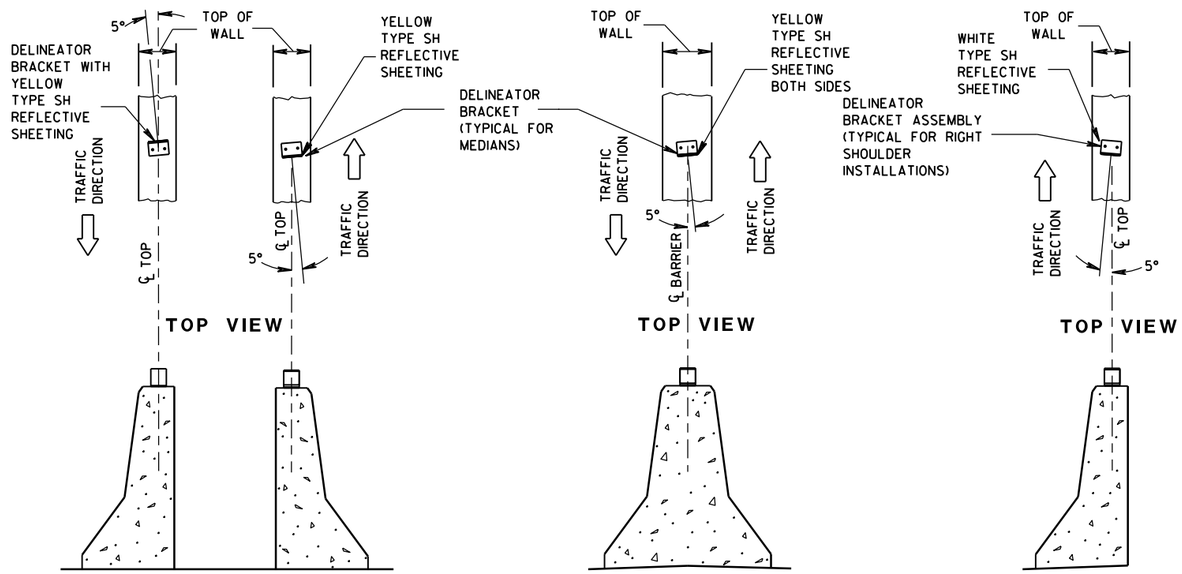
DELINEATOR BRACKET



MOUNTING DETAIL FOR DELINEATOR REFLECTOR

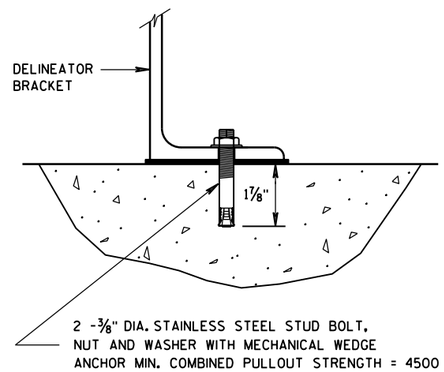


3"x 3" DELINEATOR REFLECTOR



DOUBLE BARRIERS IN MEDIAN | MEDIAN BARRIER | BARRIER LOCATED TO RT. OF TRAFFIC FLOW

LOCATION AND AIMING DETAILS FOR DELINEATOR BRACKETS MOUNTED ON CONCRETE BARRIERS



DELINEATOR BRACKET MOUNTING DETAIL

DELINEATOR POST, DELINEATOR REFLECTOR AND DELINEATOR BRACKET WITH REFLECTIVE SHEETING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
4-18-16 DATE
/S/ Matthew R. Rauch
STATE SIGNING AND MAR 408 GINEER
FHWA

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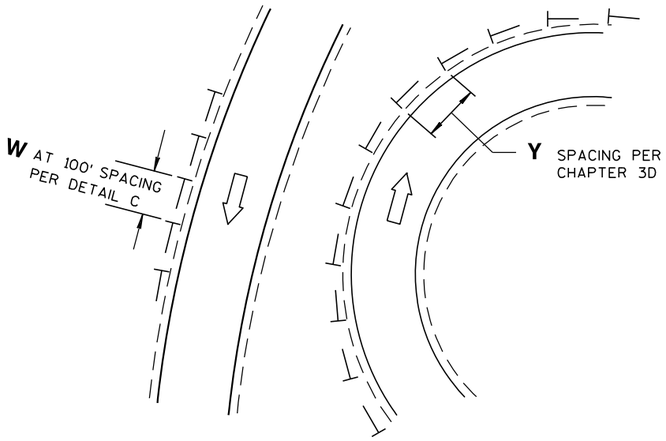
S.D.D. 15 A 2-9

6

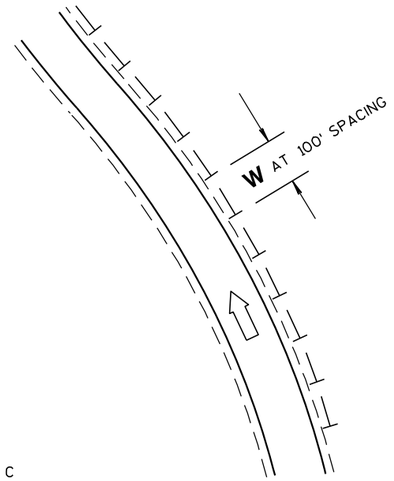
S.D.D. 15 A 2-9

GENERAL NOTES

* USE DOUBLE DELINEATOR ALONG ACCELERATION-DECELERATION LANES AND TAPERS. USE SINGLE DELINEATOR WHEN RAMP PAVEMENT IS FULL WIDTH.



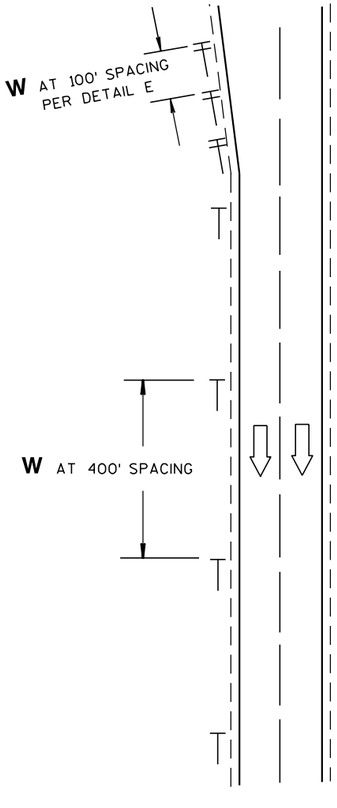
DETAIL A
DELINEATOR LAYOUT AT CURVED RAMP



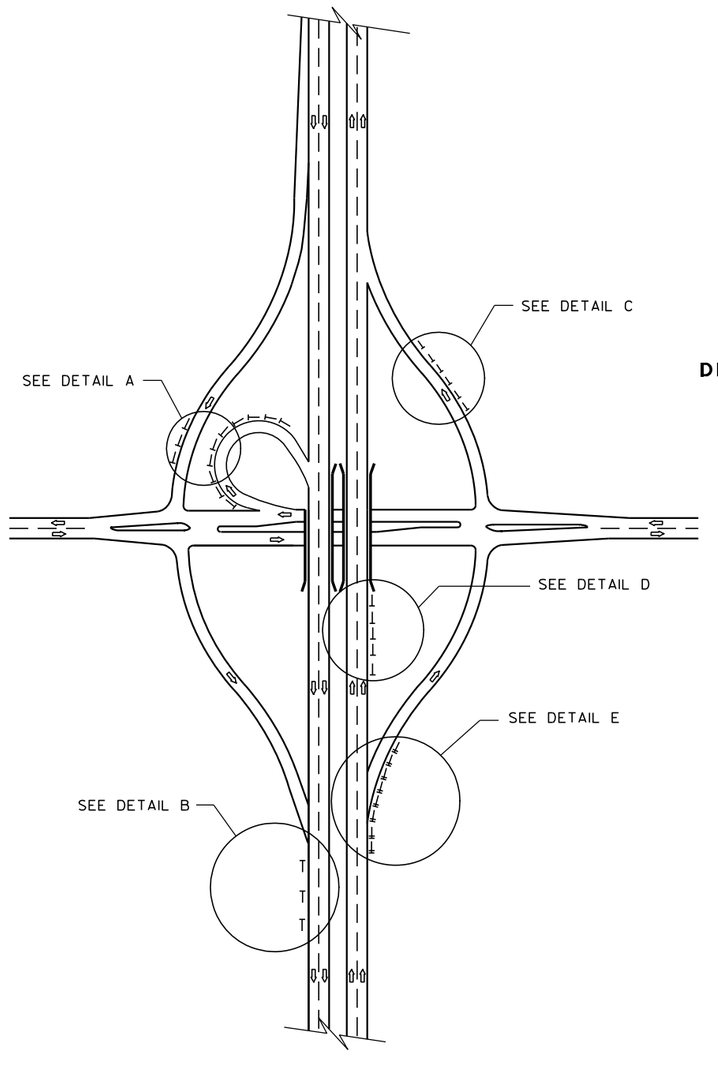
DETAIL C
DELINEATOR LAYOUT ALONG RAMP

LEGEND

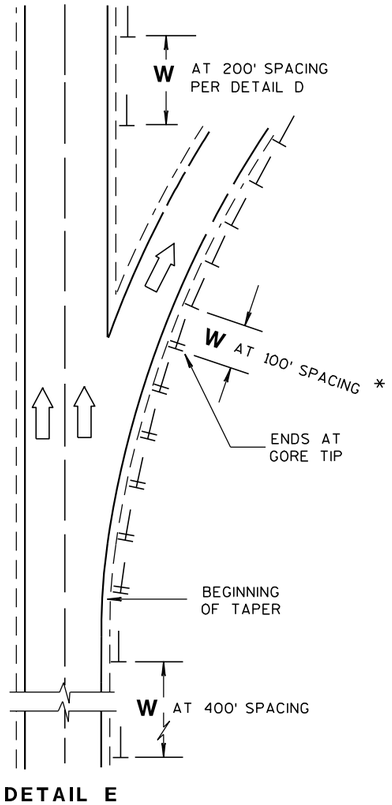
- DIRECTION OF TRAFFIC FLOW
- SINGLE DELINEATOR
- DOUBLE DELINEATOR
- W — WHITE
- Y — YELLOW



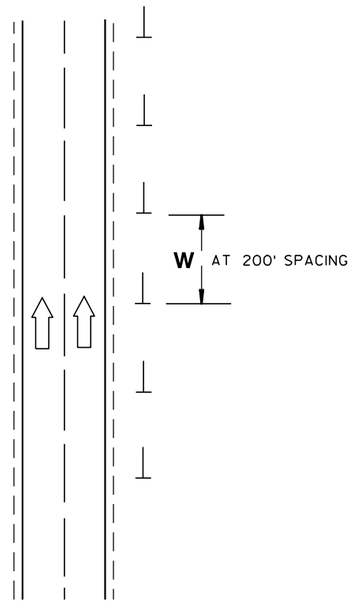
DETAIL B
DELINEATOR LAYOUT ALONG MAINLINE



DELINEATOR LAYOUT



DETAIL E
DELINEATOR LAYOUT FOR ACCELERATION - DECELERATION LANES AND TAPERS AT RAMPS



DETAIL D
DELINEATOR LAYOUT BETWEEN INTERCHANGE RAMPS

DELINEATOR LAYOUT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
2/5/09 DATE
/S/ Thomas N. Nothdurft STATE TRAFFIC ENGINEER
FHWA

6

S.D.D. 15 A 6-2

6

S.D.D. 15 A 6-2

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.

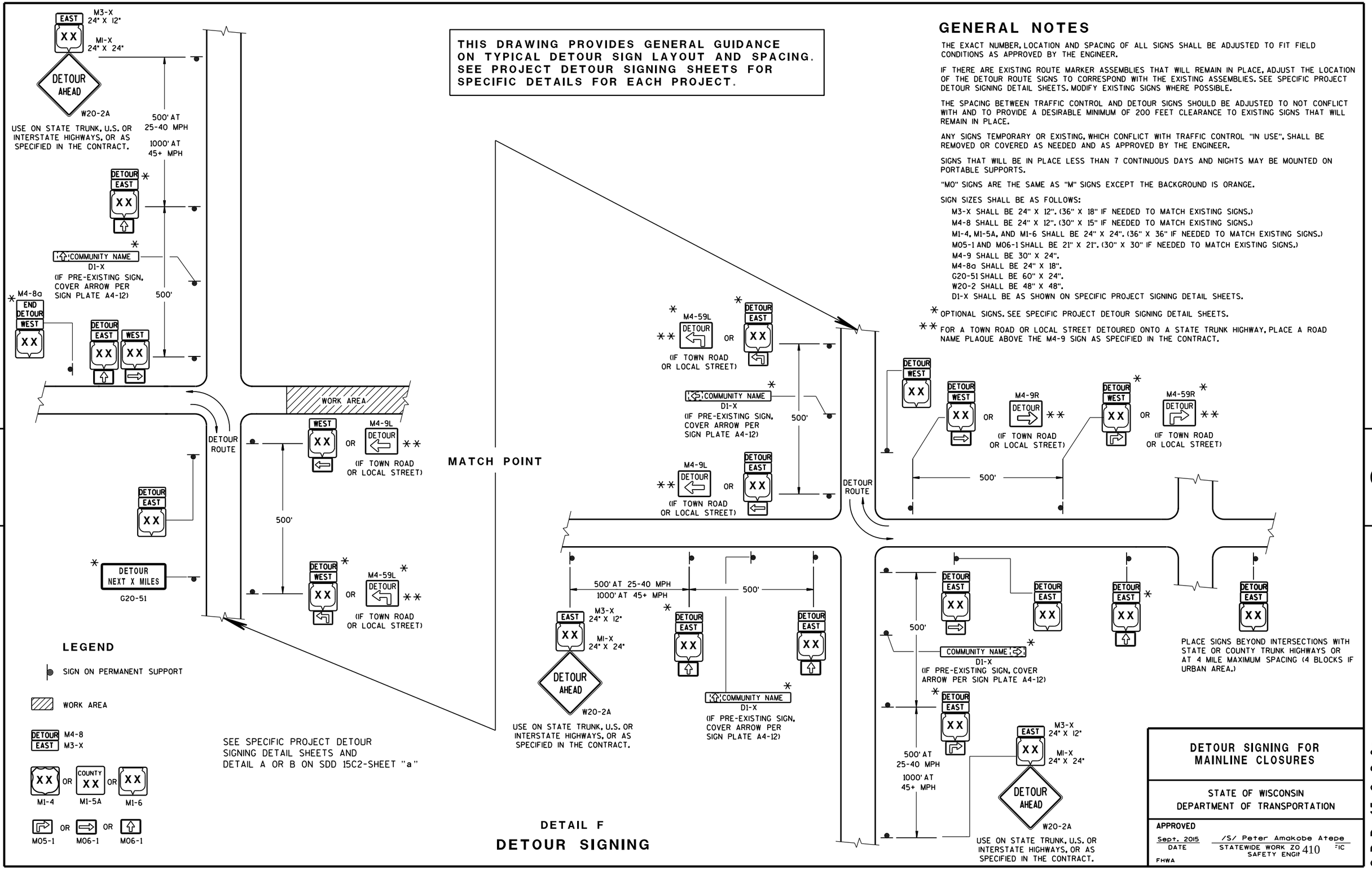
"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

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.)
- MO5-1 AND MO6-1 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.



DETAIL F

DETOUR SIGNING

DETOUR SIGNING FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

Sept. 2015 — DATE

/S/ Peter Amakobe Atepe
STATEWIDE WORK ZO... SAFETY ENGI...

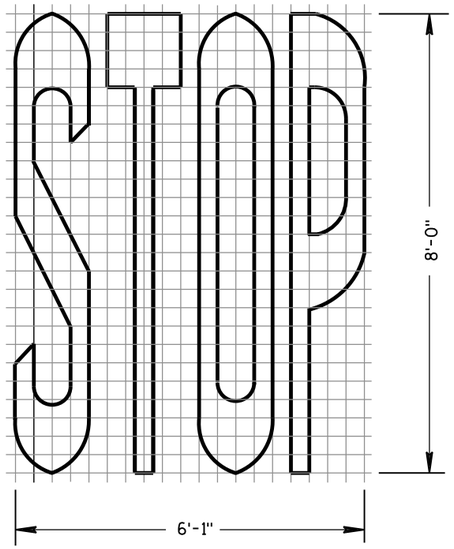
FHWA

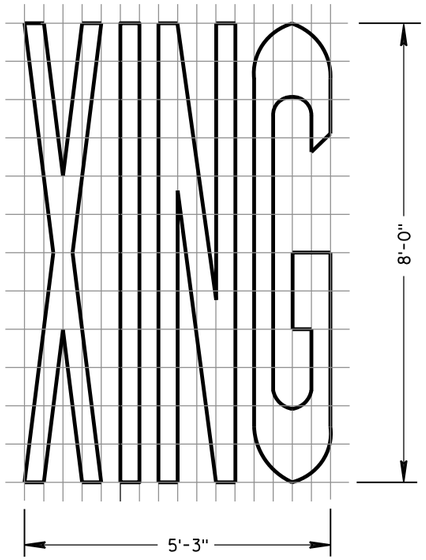
S.D.D. 15 C 2-6c

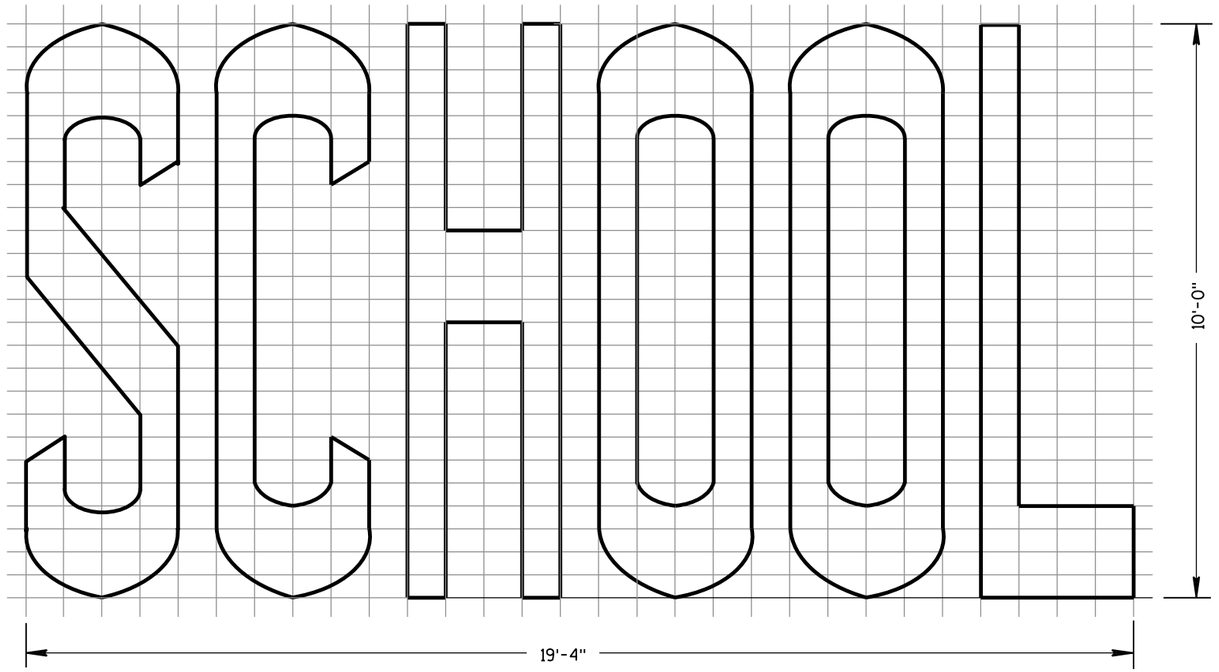
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GENERAL NOTES

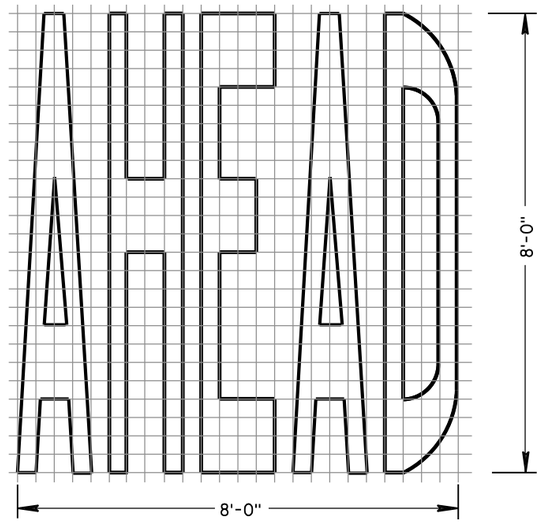
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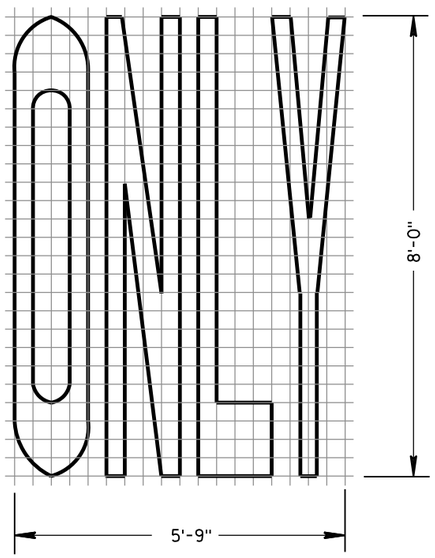


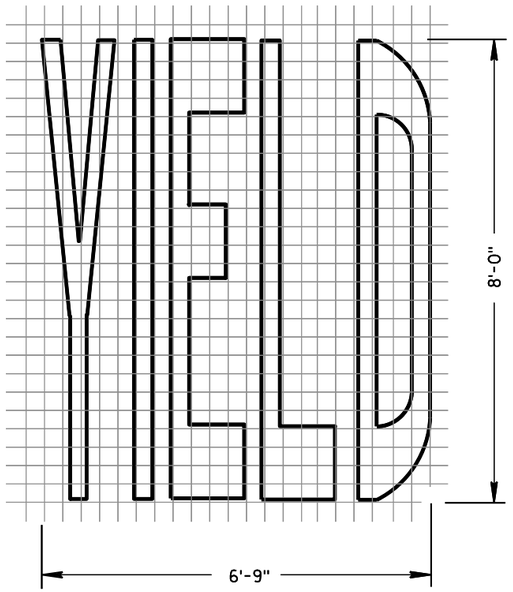


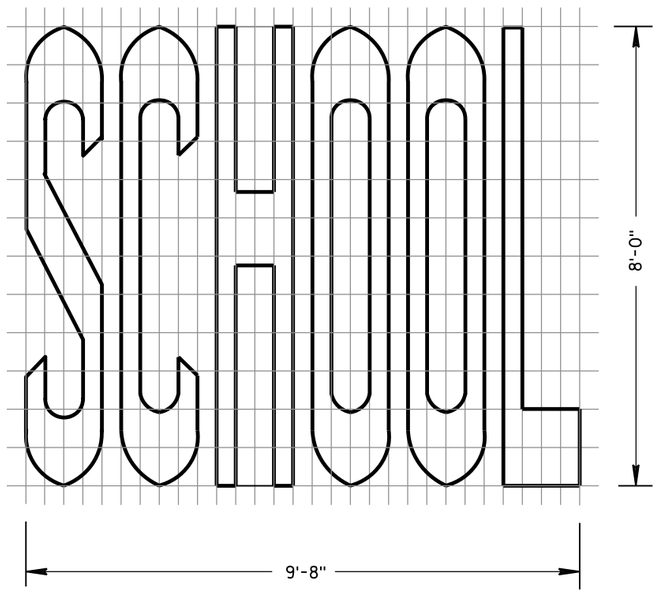


TWO-LANE









SINGLE-LANE

PAVEMENT MARKING WORDS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

4-18-16	/S/ Matthew R. Rauch	
DATE	STATE SIGNING AND MARK	EER

FHWA

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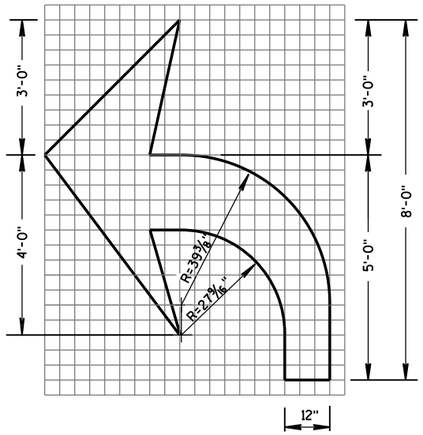
S.D.D. 15 C 7-13b

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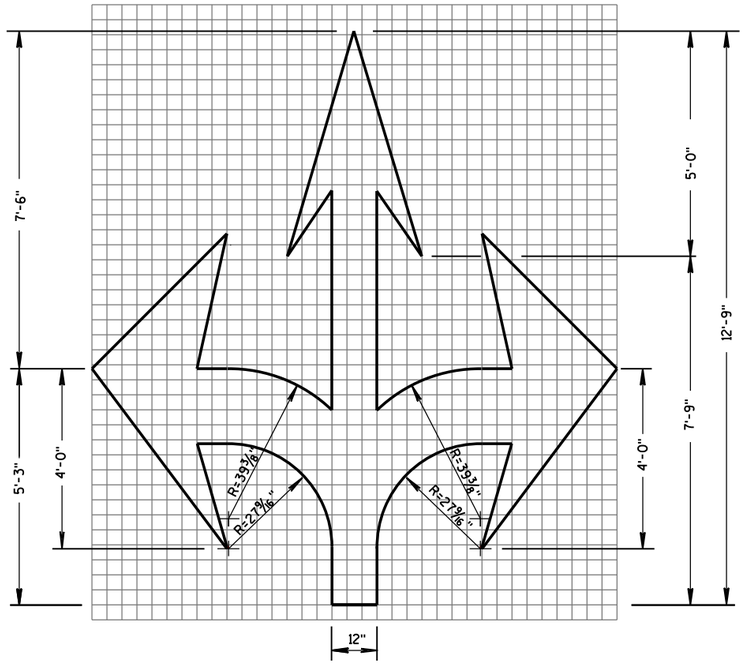
S.D.D. 15 C 7-13b

GENERAL NOTES

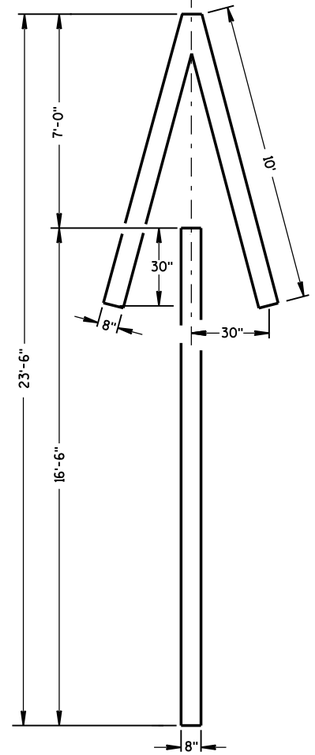
DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.



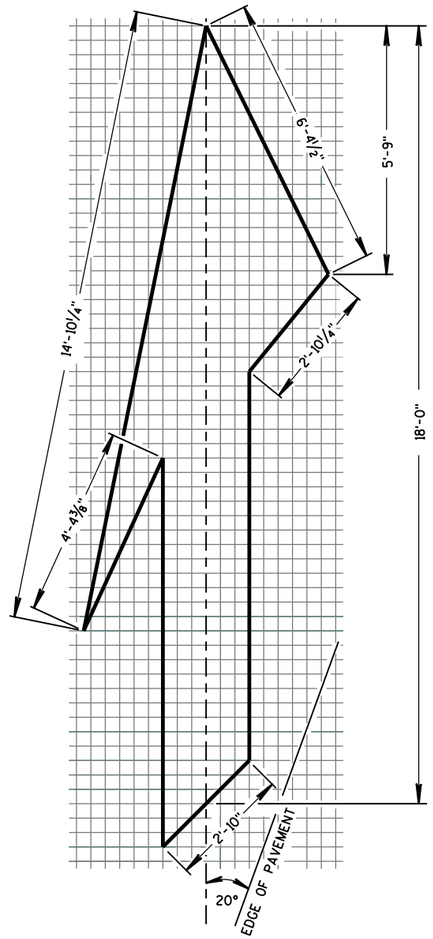
TYPE 2



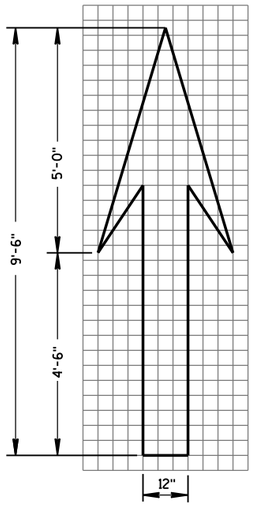
TYPE 6



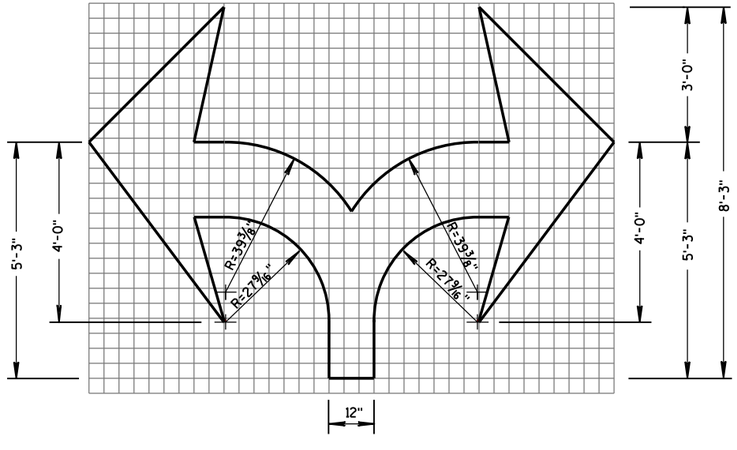
TYPE 4



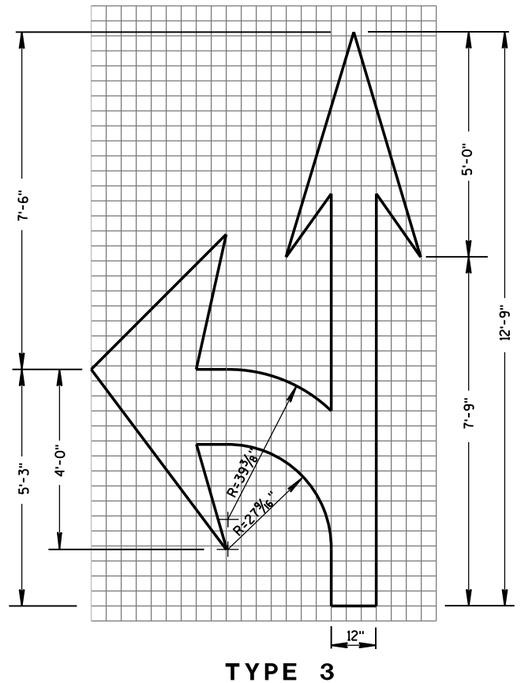
TYPE 5 LANE DROP ARROW



TYPE 1



TYPE 7



TYPE 3

PAVEMENT MARKING ARROWS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

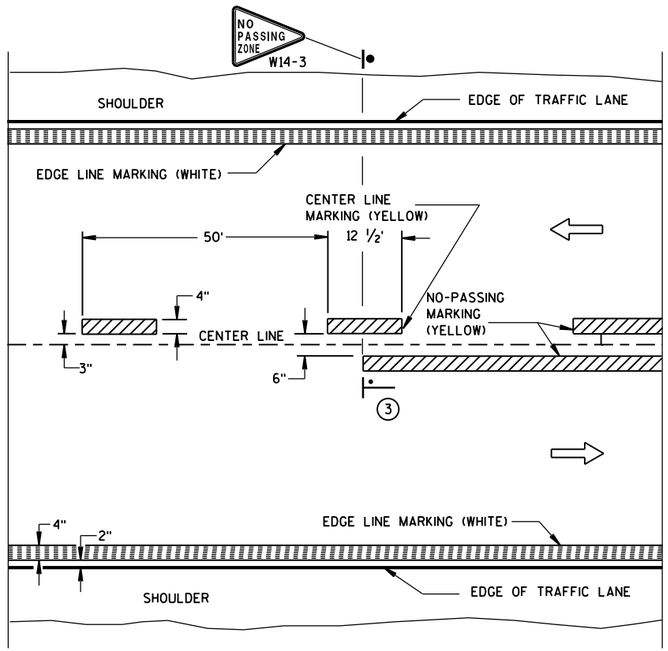
APPROVED
4-18-16 DATE
/S/ Matthew R. Rauch
STATE SIGNING AND MAR ENGINEER
FHWA

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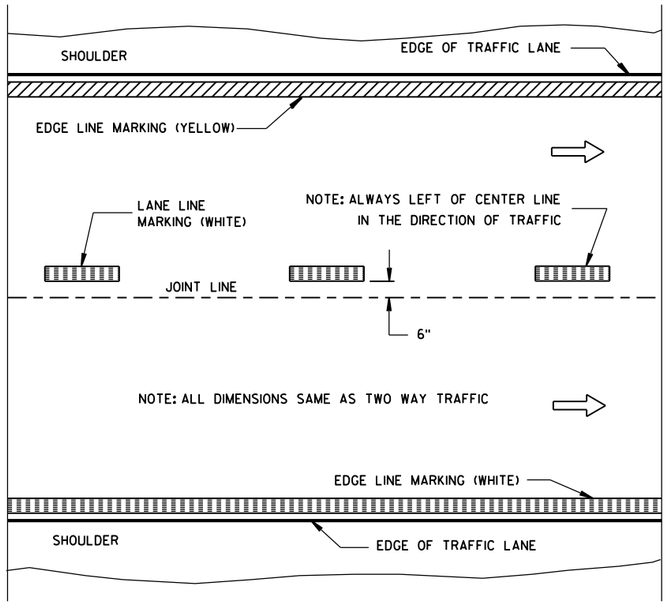
S.D.D. 15 C 7-13c

6

S.D.D. 15 C 7-13c

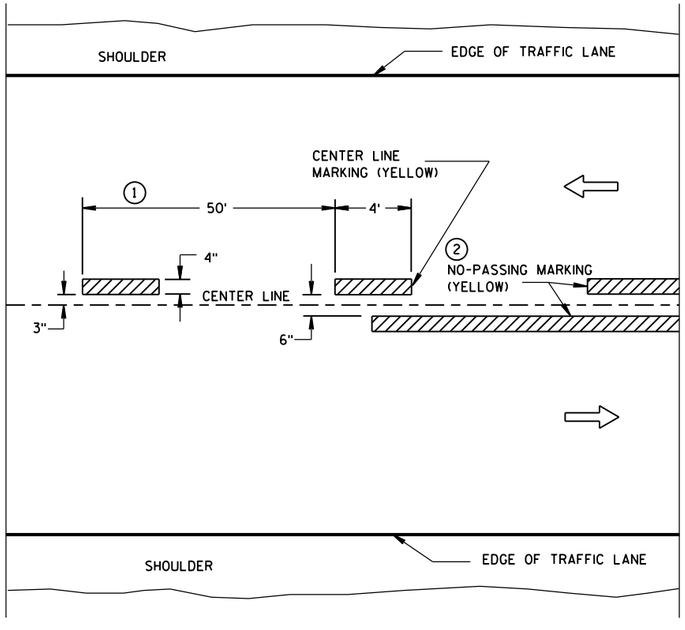


TWO WAY TRAFFIC

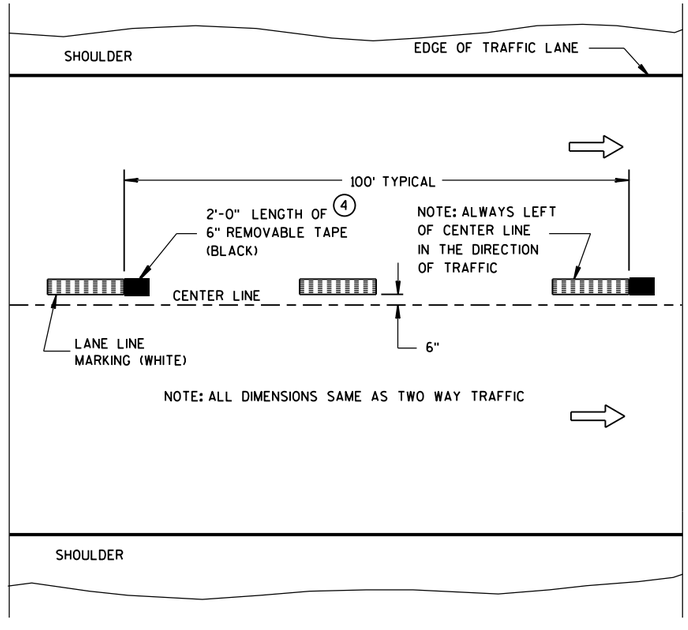


ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY (INTERMEDIATE) PAVEMENT MARKING

(SHOWS CYCLE FOR TEMPORARY CENTER LINE OR TEMPORARY LANE LINE MARKING)

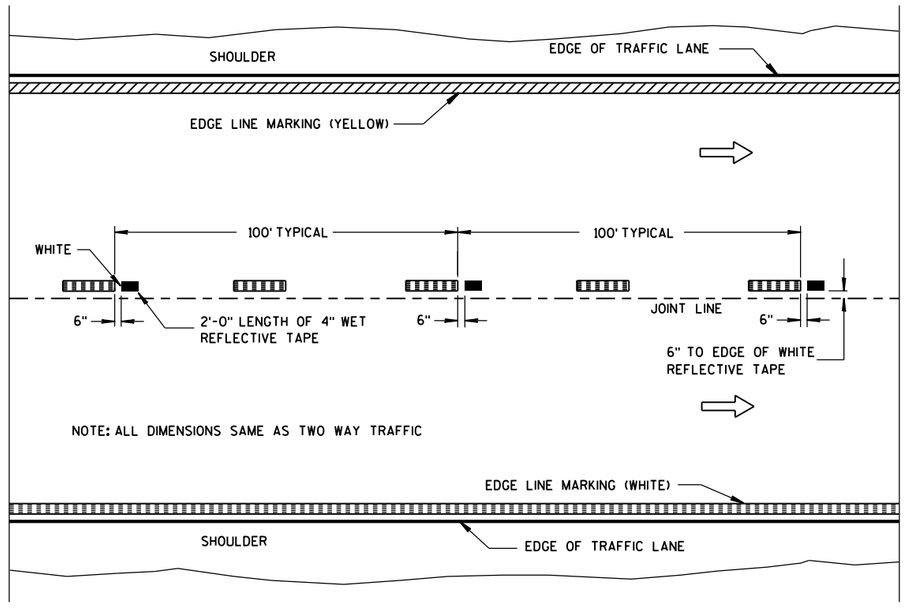
GENERAL NOTES

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

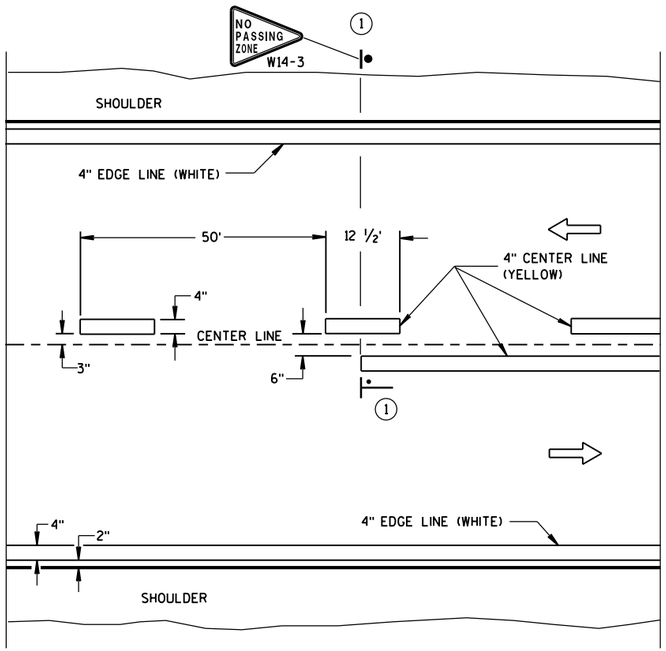
FHWA

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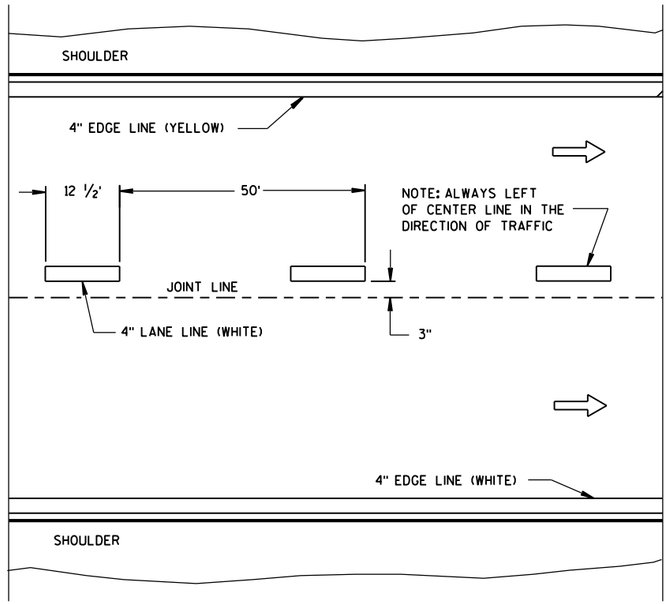
S.D.D. 15 C 8-16a

6

S.D.D. 15 C 8-16a



TWO WAY TRAFFIC



ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING

GENERAL NOTES

DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.

(1) NO PASSING ZONE W14-3 SIGN SHALL BE LOCATED WITHIN 50 FEET OF THE "T" MARKING.

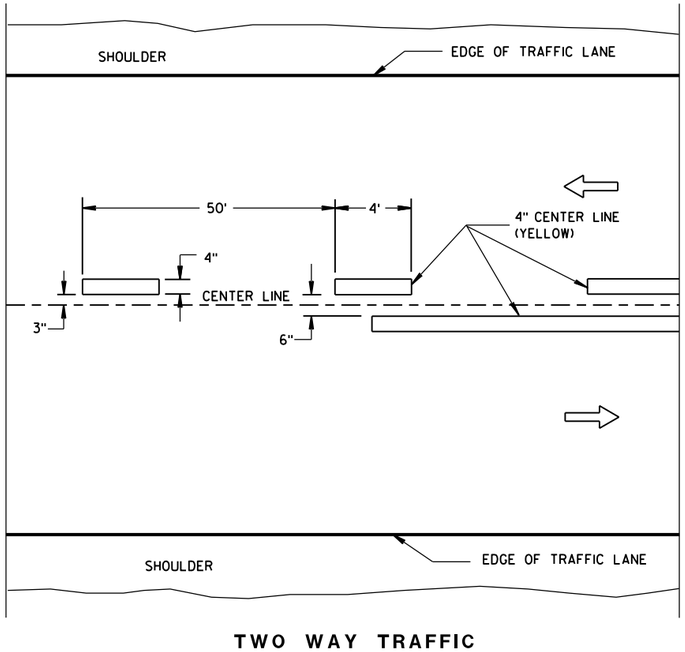
NOTE

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL

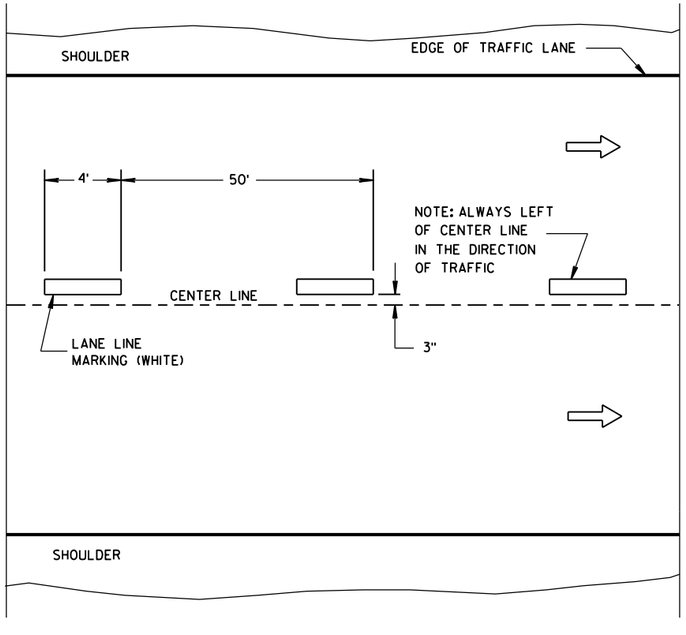
LEGEND

"T" MARKING

POST MOUNTED SIGN



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY PAVEMENT MARKING

LONGITUDINAL MARKING (MAINLINE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

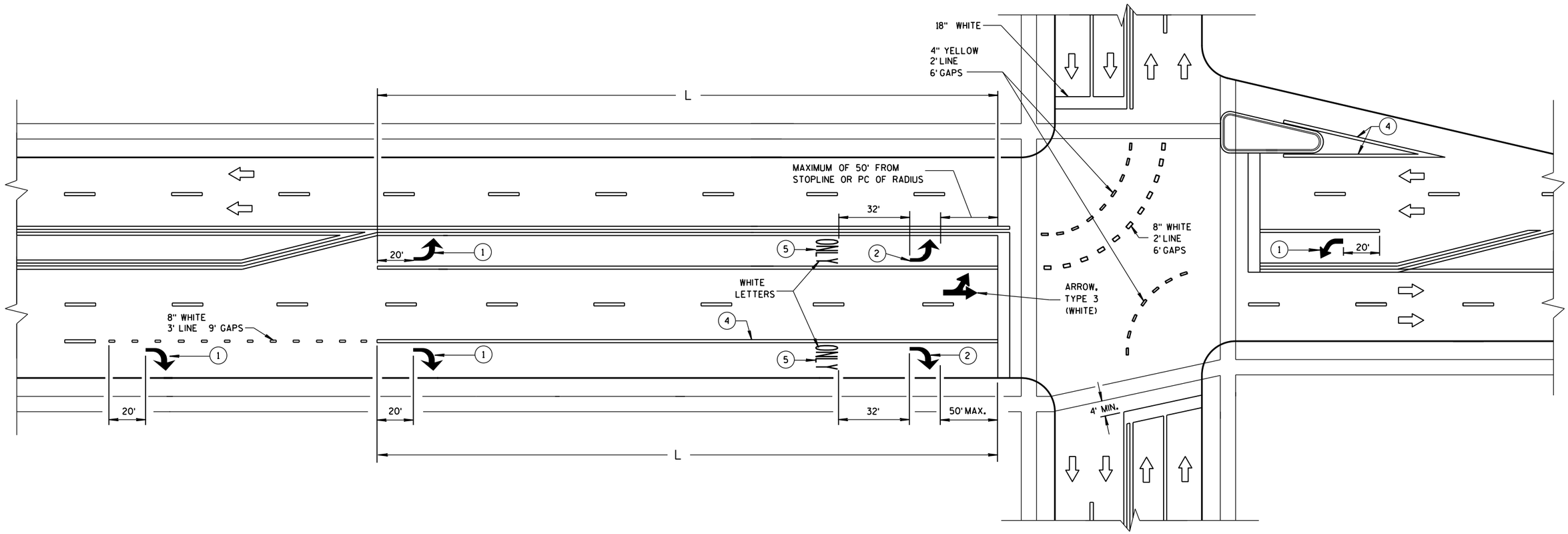
APPROVED
Sept., 2016 — DATE
/S/ Matthew R. Rauch — STATE SIGNING AND MAR[illegible]INEER
FHWA

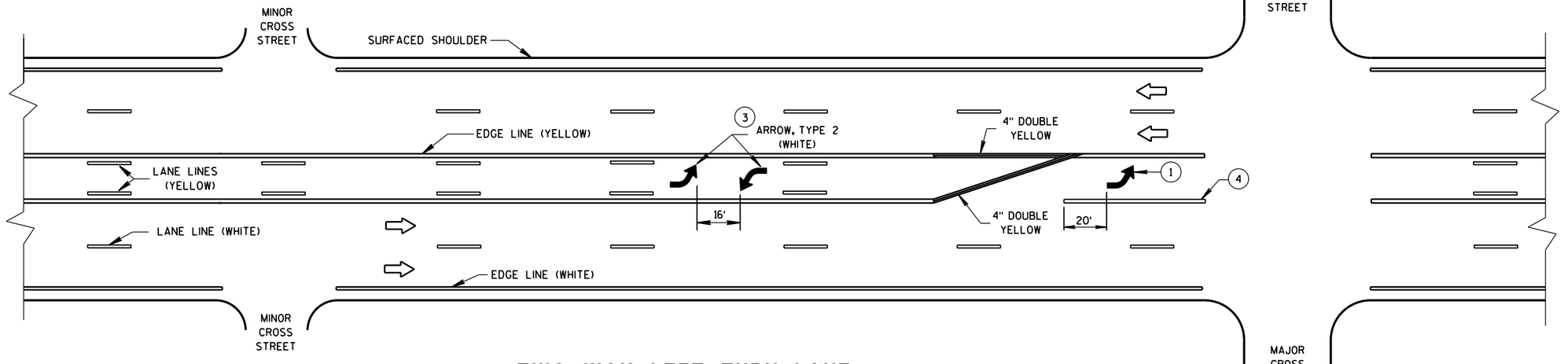
6

S.D.D. 15 C 8-17a

6

S.D.D. 15 C 8-17a





GENERAL NOTES

(1) REQUIRED ARROW, TYPE 2 (WHITE).

(2) REQUIRED ARROW, TYPE 2 (WHITE) WHEN L IS GREATER THAN 78 FEET AND LESS THAN OR EQUAL TO 166 FEET.

(3) A SET OF ARROWS IS REQUIRED EVERY 400 FEET OR NEAR INTERSECTIONS OR DRIVEWAYS WITH TURNING TRAFFIC.

(4) 8" WHITE

(5) REQUIRED WORD ONLY WHEN L IS GREATER THAN 166 FEET.

NOTE:
ARROW SYMBOL (⇨)
SHOWS DIRECTION OF TRAVEL

L = LENGTH OF TURN BAY

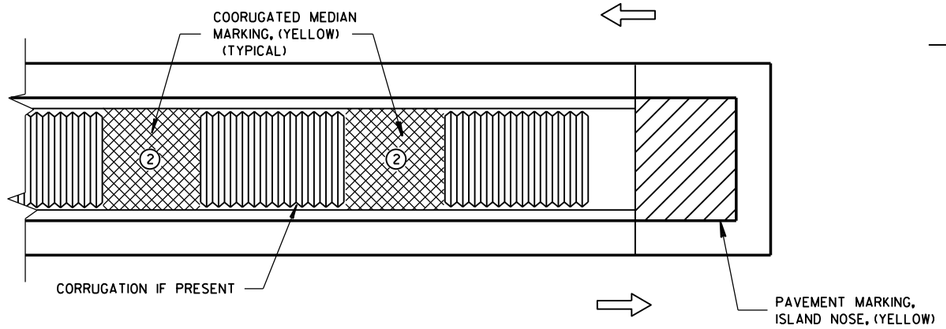
TWO WAY LEFT TURN LANE

PAVEMENT MARKING (TURN LANES)

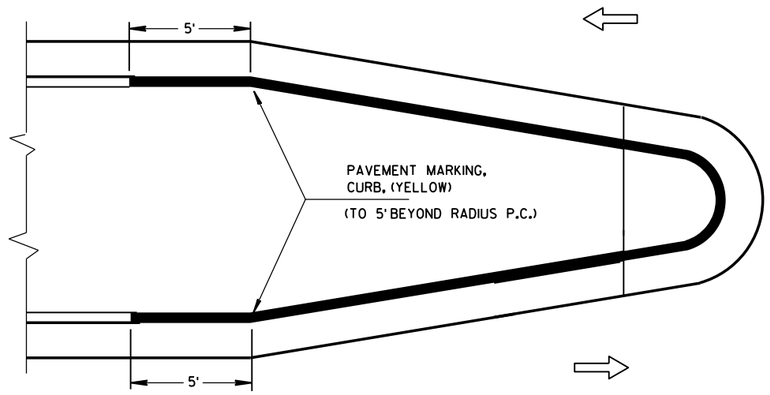
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

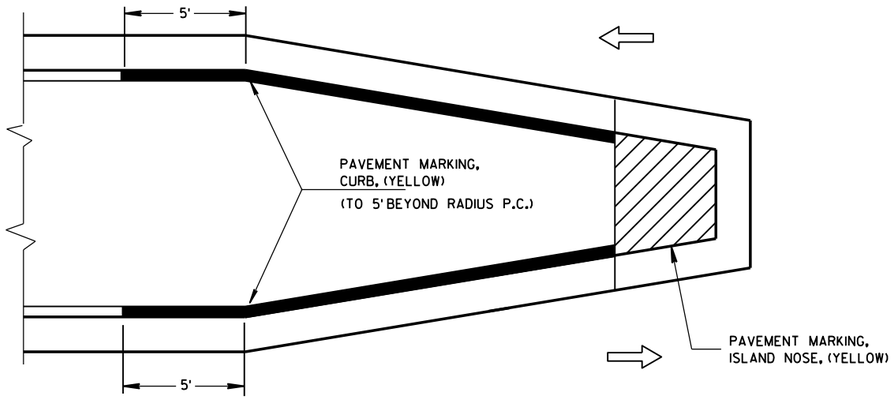
S.D.D. 15 C 8-17b



MEDIAN ISLAND WITH SQUARE BLUNT NOSE

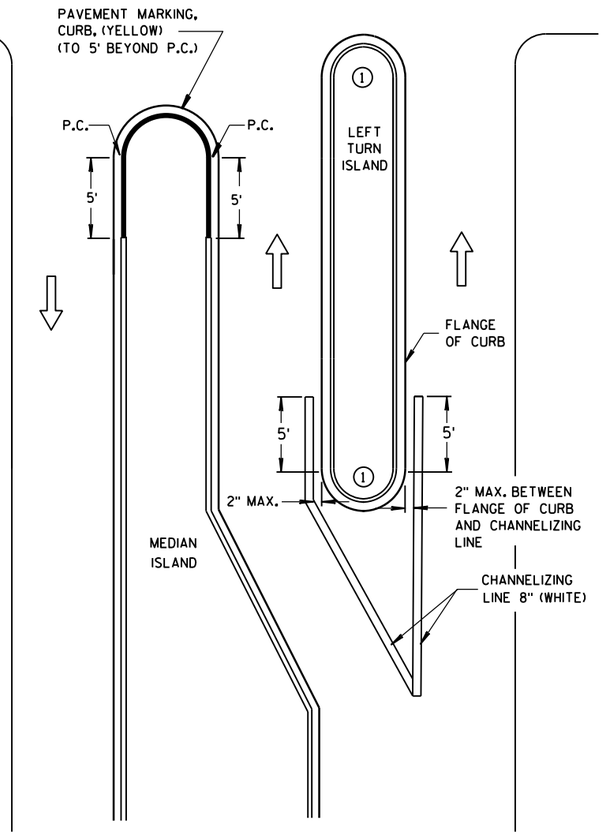


MEDIAN ISLAND WITH ROUND BLUNT NOSE



MEDIAN ISLAND WITH SLOPED NOSE

TYPICAL PLACEMENT OF PAVEMENT MARKING ON MEDIAN ISLANDS

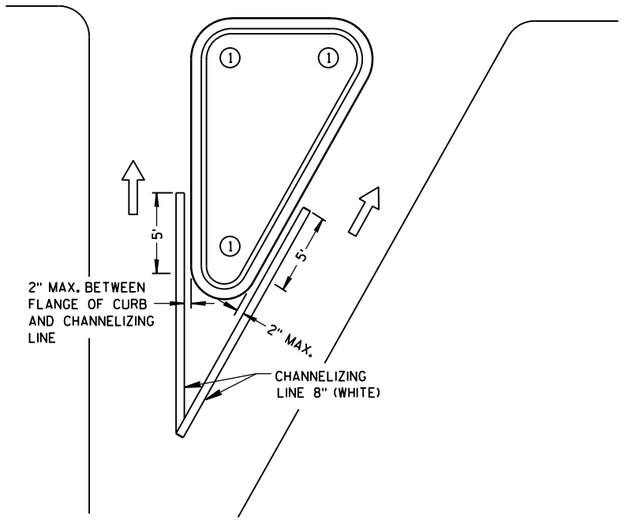


LEFT TURN & MEDIAN ISLAND

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)

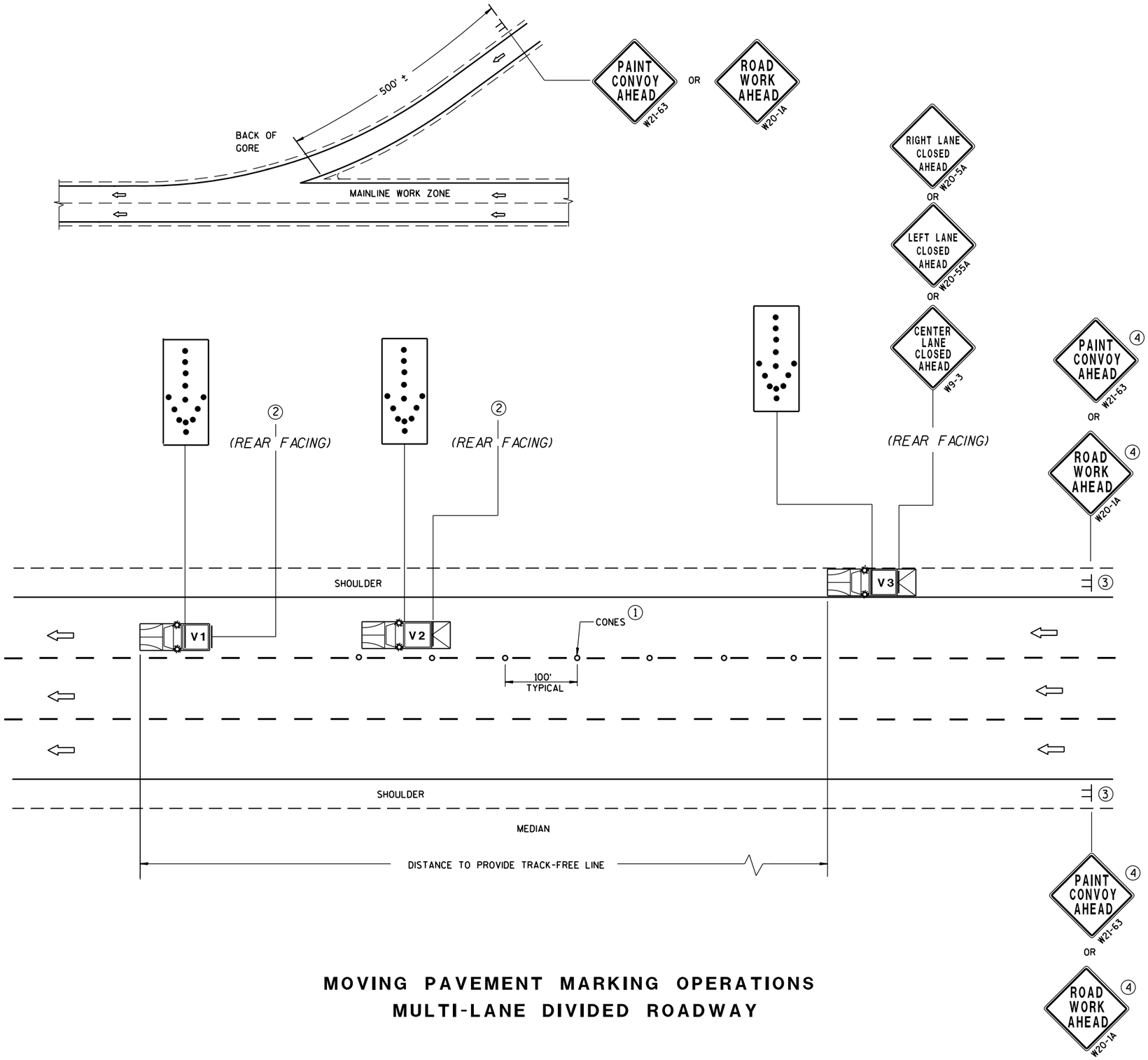
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

S.D.D. 15 C 8-17c

6

S.D.D. 15 C 8-17c



MOVING PAVEMENT MARKING OPERATIONS
MULTI-LANE DIVIDED ROADWAY

GENERAL NOTES

ALL VEHICLES SHALL BE EQUIPPED WITH TWO 360 DEGREE HIGH INTENSITY YELLOW FLASHING LIGHTS OR STROBE LIGHTS AND OPERATED WITH HEADLIGHTS TURNED ON.

ALL VEHICLES SHALL BE EQUIPPED WITH REAR FACING TYPE B OR C FLASHING ARROW PANEL. SIGNS PLACED ON VEHICLES MUST NOT OBSCURE THE ARROW PANEL.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE SPECIFIED.

IF SPEED LIMIT IS 40 MPH OR LESS STATIONARY SIGNS MAY BE OMITTED IF CONES ARE USED.

ALTERNATE SIGN MESSAGES, SUCH AS "PAINT CREW AHEAD" OR "ROAD PAINTING AHEAD" MAY BE USED.

DISTANCE BETWEEN VEHICLES MAY VARY ACCORDING TO TERRAIN, SIGHT DISTANCE, PAINT DRYING TIME, AND OTHER FACTORS. WHENEVER ADEQUATE STOPPING SIGHT DISTANCE EXISTS TO THE REAR, SHADOW VEHICLES SHOULD MAINTAIN THE MINIMUM DISTANCE FROM THE WORK VEHICLE AND PROCEED AT THE SAME SPEED AS THE WORK VEHICLE. SHADOW VEHICLES SHOULD SLOW DOWN IN ADVANCE OF VERTICAL OR HORIZONTAL CURVES THAT RESTRICT SIGHT DISTANCE.

WHEN WORK ACTIVITY BLOCKS THE LEFT LANE, REVERSE TRAFFIC CONTROL.

WHEN A RAMP INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, PROVIDE ADDITIONAL TRAFFIC CONTROLS AS SPECIFIED IN THE CONTRACT OR AS APPROVED BY THE ENGINEER.

USE AN ATTENUATOR ON THE REARMOST VEHICLE THAT BLOCKS ALL OR PART OF THE TRAFFIC LANE.

FOR EDGELINE MARKING OR IF CONES ARE NOT USED, POSITION THE REARMOST SHADOW VEHICLE ON THE SHOULDER AS SHOWN IN THE MUTCD IF THE SHOULDER HAS ADEQUATE WIDTH. USE DOUBLE ARROWS WHEN CONVOY IS IN CENTER LANE ONLY.

WHEN NO WORK ACTIVITY IS TAKING PLACE, REMOVE OR TURN THE STATIONARY WARNING SIGNS AWAY FROM TRAFFIC.

THIS DRAWING SHALL BE USED FOR EDGELINE OR LANELINE MARKING FOR MULTILANE DIVIDED ROADWAYS.

(1) CONES MAY BE OMITTED ON PAINTED LINE IF APPROVED BY THE ENGINEER. CONSIDER PAVEMENT MARKING DRY OR CURE TIMES AND TRAFFIC VOLUME.

(2) USE STANDARD SIGN W21-64 WITH APPROPRIATE ARROW.

WET PAINT W21-64 OR WET PAINT W21-64

(3) SIGNS SHALL BE REPEATED AFTER EVERY ON RAMP OR EVERY THREE MILES.

(4) IF CONSTRUCTION WORK ZONE SIGNS ARE IN PLACE, W20-1 OR W21-63 ARE NOT REQUIRED.

LEGEND

V1	LEAD VEHICLE
V2	SHADOW VEHICLE
V3	TRAIL VEHICLE WITH TMA
TMA	TRUCK-MOUNTED ATTENUATOR
	SIGN ON TEMPORARY SUPPORT
	DIRECTION OF TRAFFIC
	CONES
	FLASHING ARROW PANEL (MERGE)

MOVING PAVEMENT MARKING OPERATION
MULTI-LANE DIVIDED ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2016 — DATE
/S/ Peter Amakobe Atepe — STATEWIDE WORK ZON SAFETY ENGINI
FHWA

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S.D.D. 15 C 19-4c

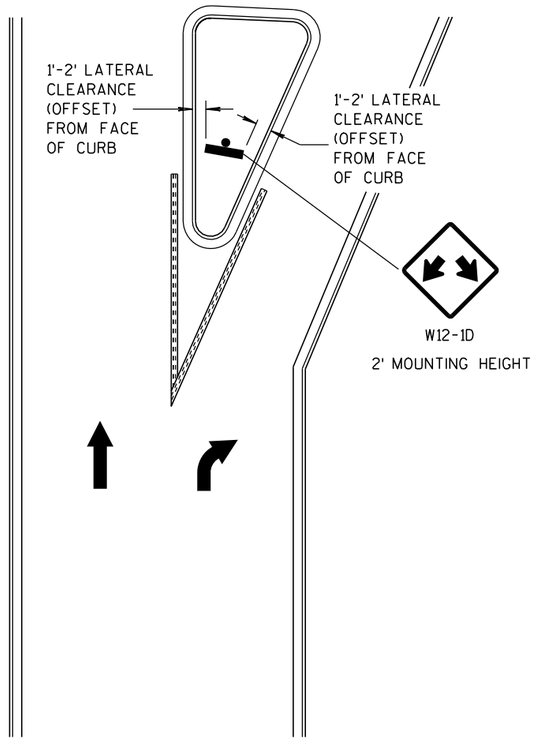
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S.D.D. 15 C 19-4c

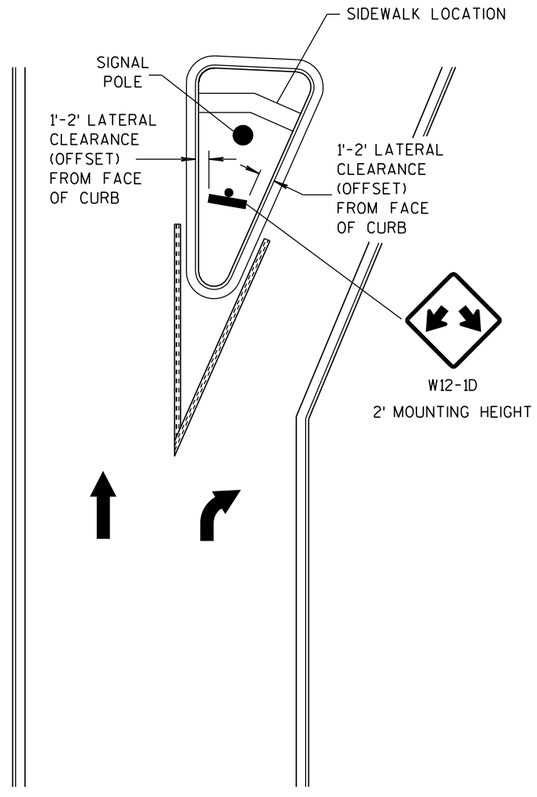
GENERAL NOTE

APPLIES TO ISLANDS AT LEFT TURNS AT ONE WAY ROADWAYS AS WELL.

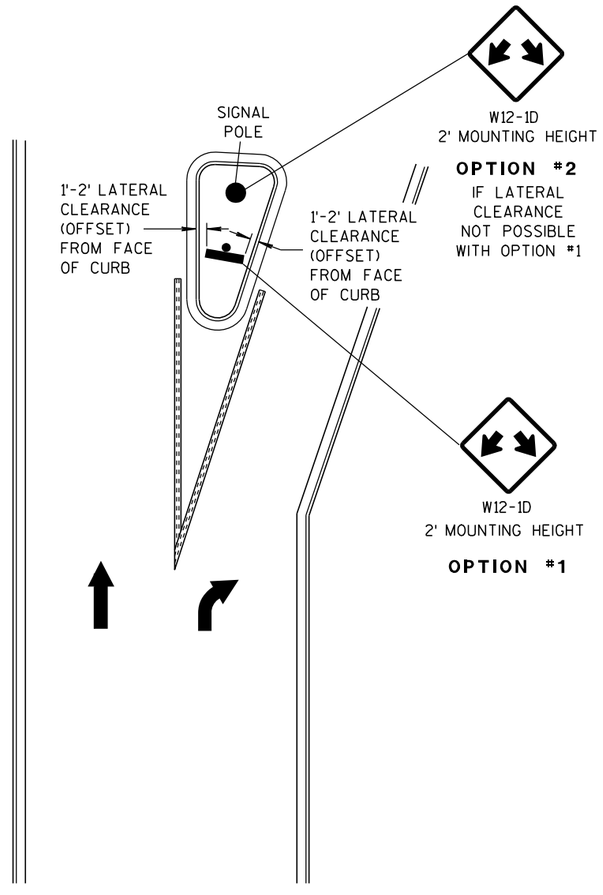
SEE MISCELLANEOUS QUANTITIES FOR SIGN SIZE.



LARGE RIGHT TURN ISLAND



LARGE RIGHT TURN ISLAND
WITH SIGNAL POLE



SMALL RIGHT TURN ISLAND

DOUBLE ARROW WARNING SIGN PLACEMENT

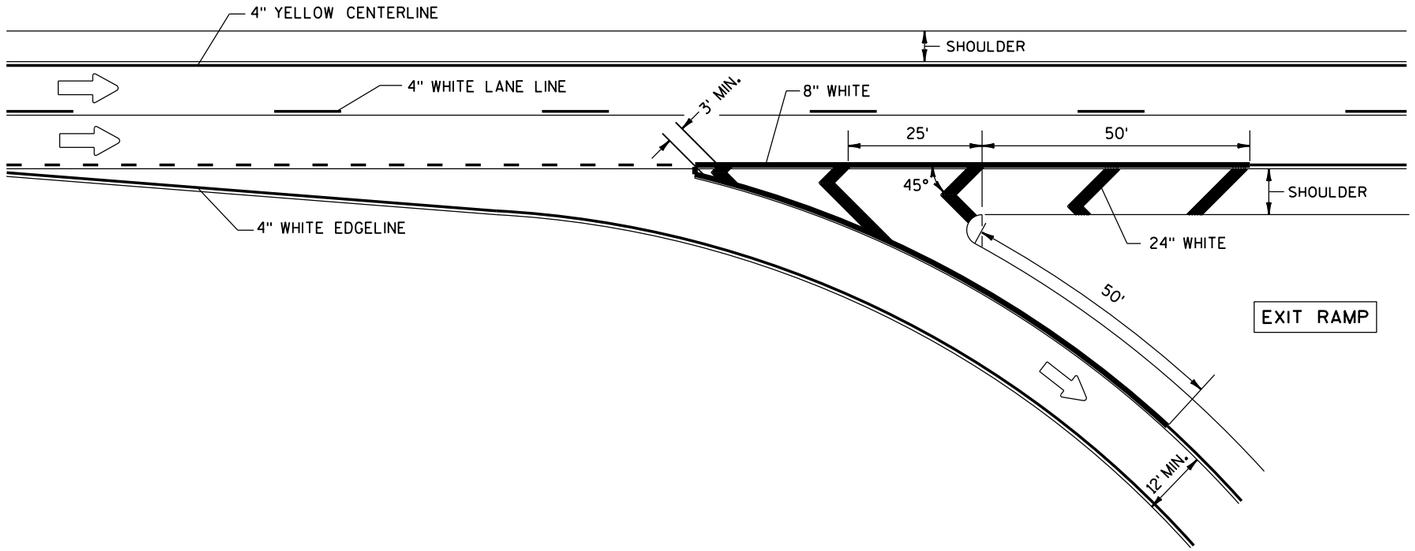
DOUBLE ARROW WARNING SIGN PLACEMENT	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED	
10-22-08 DATE	/S/ Thomas N. Nothdurft STATE TRAFFIC ENGINEER
FHWA	418 IGN

6

S.D.D. 15 C 27-1

6

S.D.D. 15 C 27-1



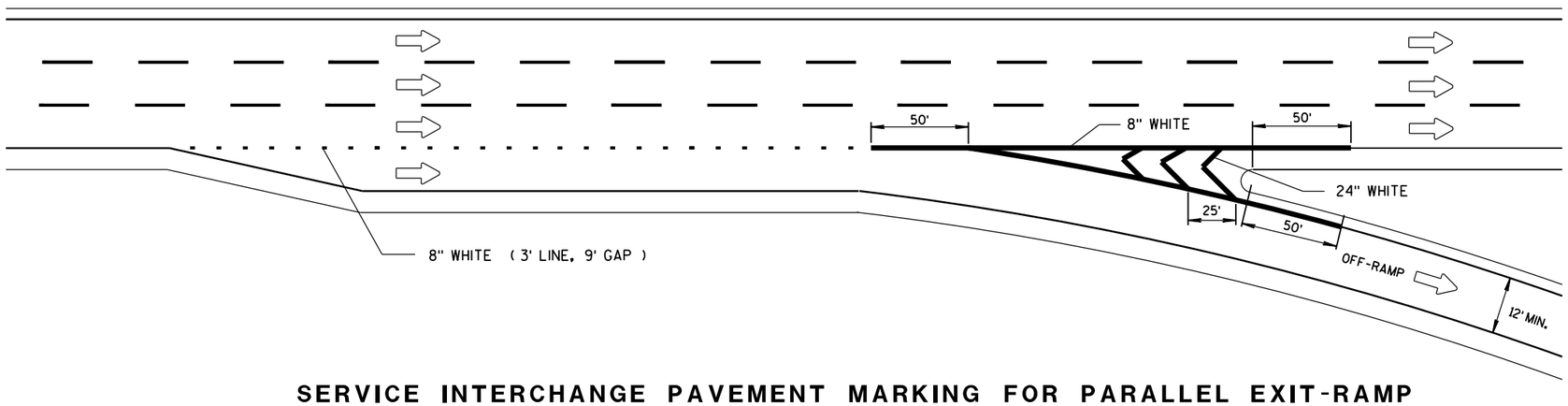
PAVEMENT MARKING FOR EXIT RAMP

GENERAL NOTES

PLACE GROOVE 3 INCHES LEFT OF JOINT.

LEGEND

DIRECTION OF TRAVEL



SERVICE INTERCHANGE PAVEMENT MARKING FOR PARALLEL EXIT-RAMP

6

S.D.D. 15 C 31-2a

PAVEMENT MARKING
(RAMPS AND GORES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

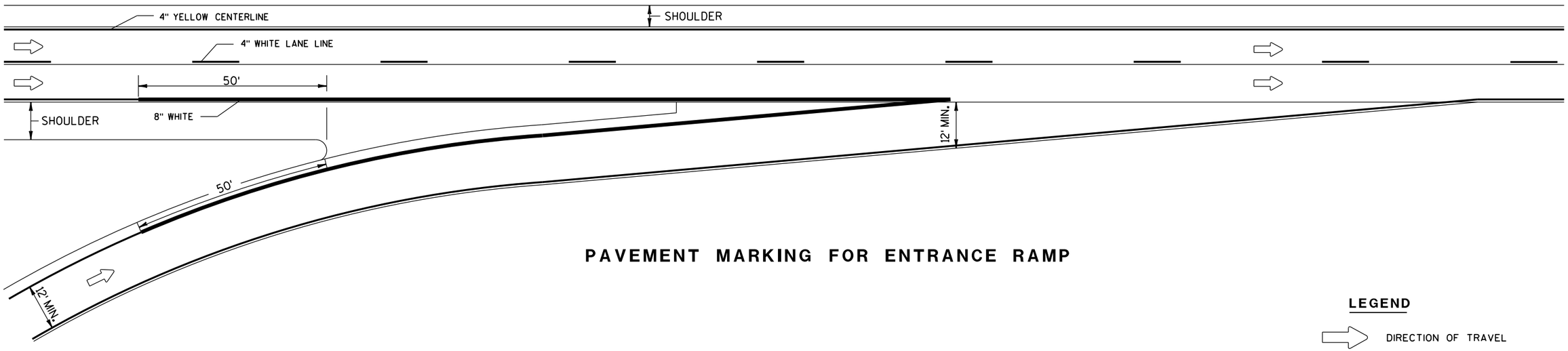
6

S.D.D. 15 C 31-2a

GENERAL NOTES

PLACE GROOVE 3 INCHES LEFT OF JOINT.

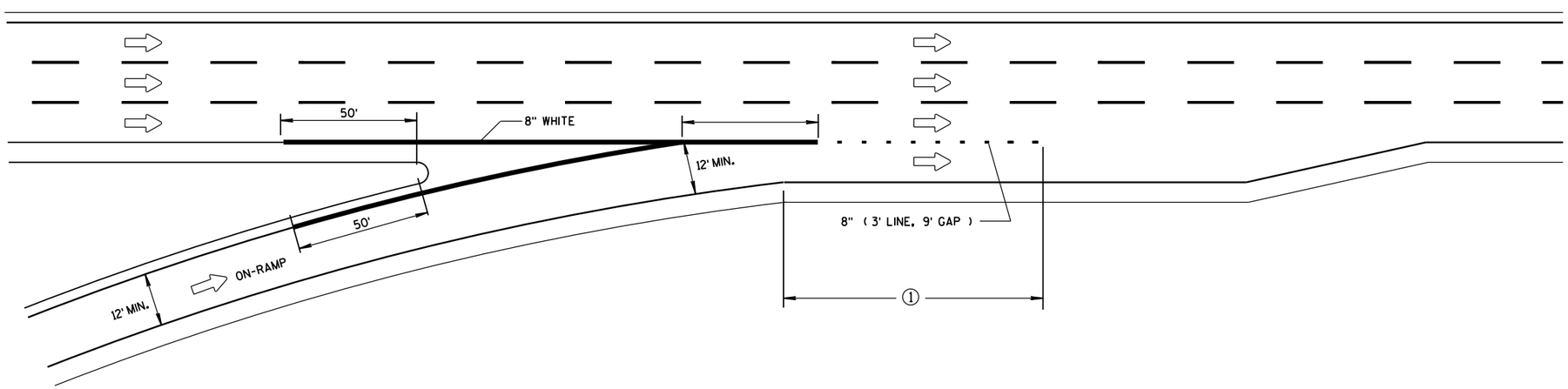
① ½ LENGTH OF FULL WIDTH ACCELERATION LANE.



PAVEMENT MARKING FOR ENTRANCE RAMP

LEGEND

DIRECTION OF TRAVEL



SERVICE INTERCHANGE PAVEMENT MARKING FOR PARALLEL ENTRANCE-RAMP

PAVEMENT MARKING FOR PARALLEL ON-RAMP AND PARALLEL OFF-RAMP

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

Sept., 2016
DATE

/S/ Matthew R. Rauch
STATE SIGNING AND MAR 420 NEER

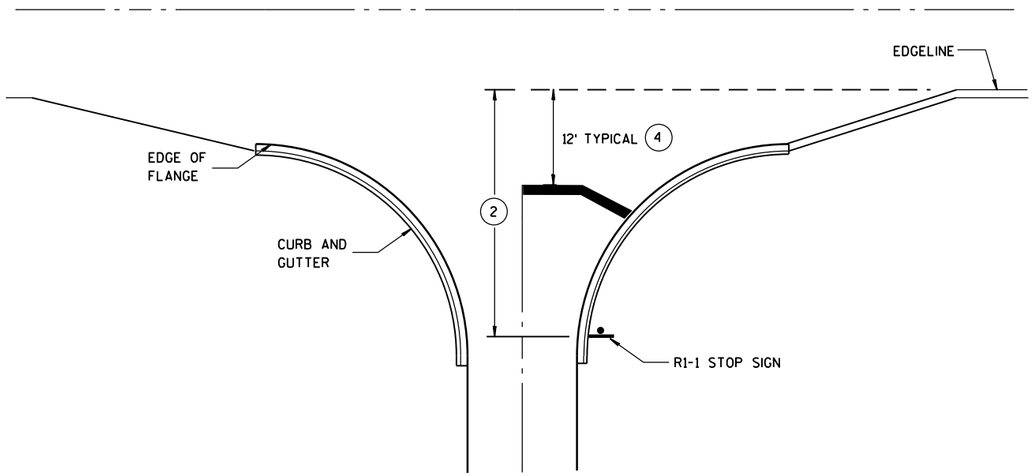
FHWA

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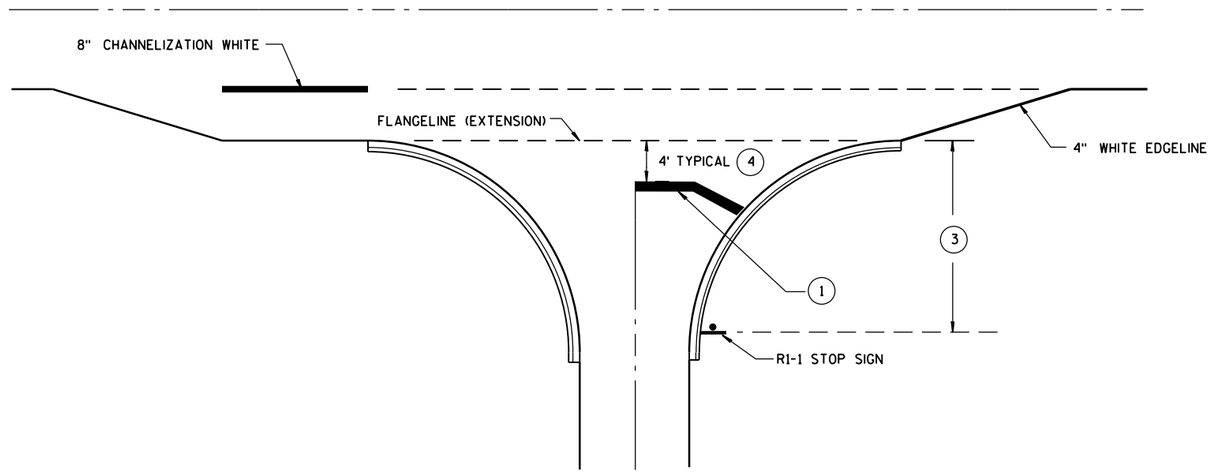
S.D.D. 15 C 31-2c

6

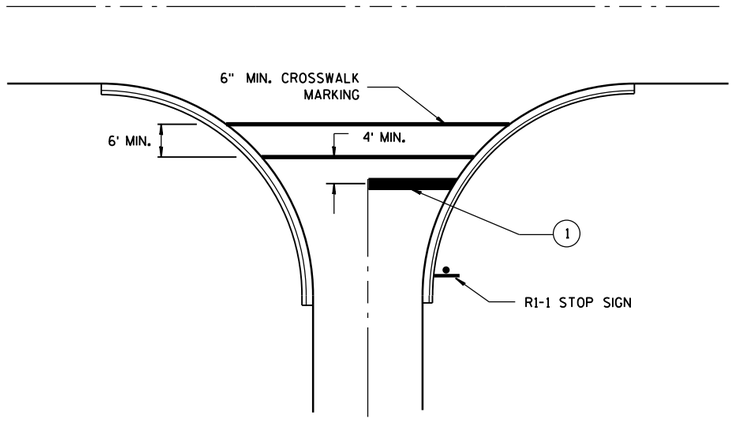
S.D.D. 15 C 31-2c



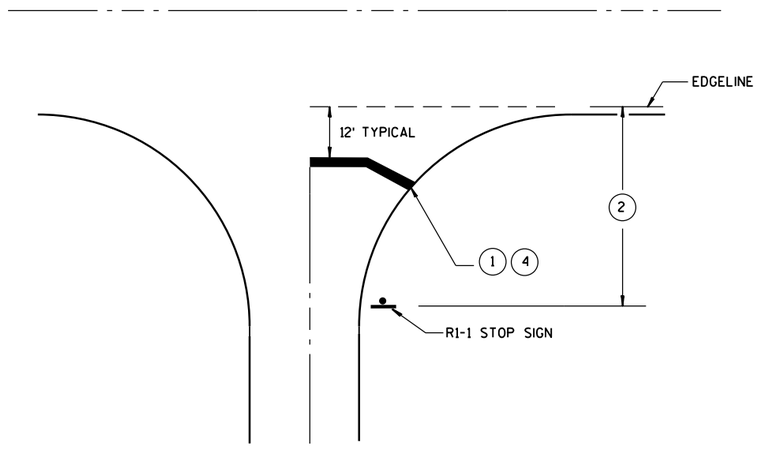
TYPICAL STOP LINE PAVEMENT MARKING WITH CURB AND GUTTER



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. (NO CLOSER THAN 4 FEET).

STOP LINE AND CROSSWALK PAVEMENT MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

4-18-2016
DATE

/S/ Matthew R. Rauch
STATE SIGNING AND MAR 421 NEER

FHWA

6
S.D.D. 15 C 33-2

LEGEND

- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL DRUM
- FLASHING ARROW BOARD
- REMOVING PAVEMENT MARKING
- CONCRETE BARRIER TEMPORARY PRECAST
- DIRECTION OF TRAFFIC
- WORK AREA

L, TAPER LENGTH (MPH)							
SPEED (MPH)	W, LATERAL OFFSET (FT)						
	10	11	12	13	14	15	16
45	450	495	540	585	630	675	720
50	500	550	600	650	700	750	800
55	550	605	660	715	770	825	880
60	600	660	720	780	840	900	960
65	650	715	780	845	910	975	1040
70	700	770	840	910	980	1050	1120



INSTALL ON EACH APPROACH AT THE CLOSEST INTERSECTION WITH A STATE OR COUNTY TRUNK HIGHWAY, OR AS DIRECTED BY THE ENGINEER. WIDTH ON SIGN TO BE APPROX. 1 FOOT LESS THAN AVAILABLE WIDTH (OMIT IF AVAILABLE WIDTH IS MORE THAN 16 FEET).



OR



LOCATED 2600 FEET IN ADVANCE OF R2-1 SIGN AND 500 FEET BEYOND THE "ROAD WORK 1 MILE" SIGN.



OR



R2-1
48"x60"
(BLACK AND WHITE)
LOCATED 500 FEET BEYOND W20-5G SIGN.

IF THE REGULATORY SPEED HAS BEEN REDUCED, A SPEED LIMIT SIGN SHALL BE LOCATED 1500 FEET BEYOND THE END OF THE ACCELERATION LANE OF EACH ENTRANCE RAMP. THERE SHOULD BE A SPEED LIMIT SIGN INCORPORATED A MINIMUM OF EVERY 2 OR 3 MILES.

* INCLUDE RESUME SPEED LIMIT SIGN A MINIMUM OF 200 FEET (500 FEET DESIRABLE) AFTER END ROAD WORK SIGNS.

GENERAL NOTES

THIS LANE CLOSURE IS TYPICAL FOR CLOSING RIGHT LANE - REVERSE FOR CLOSING LEFT LANE.

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) CLEARANCE TO EXISTING SIGNS.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

"WO" IS THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED OR AS APPROVED BY THE ENGINEER.

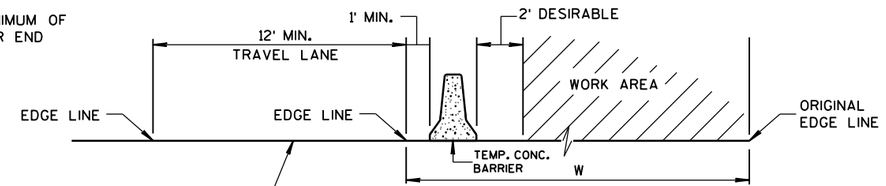
(1) CONSIDER ROADWAY GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARD SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARD AND LANE CLOSURE DRUMS FOR A MINIMUM 1500 FEET IN FRONT OF DRUM TAPER.

FOR A LANE CLOSURE THAT IS IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, THE ADVANCED WARNING SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS.

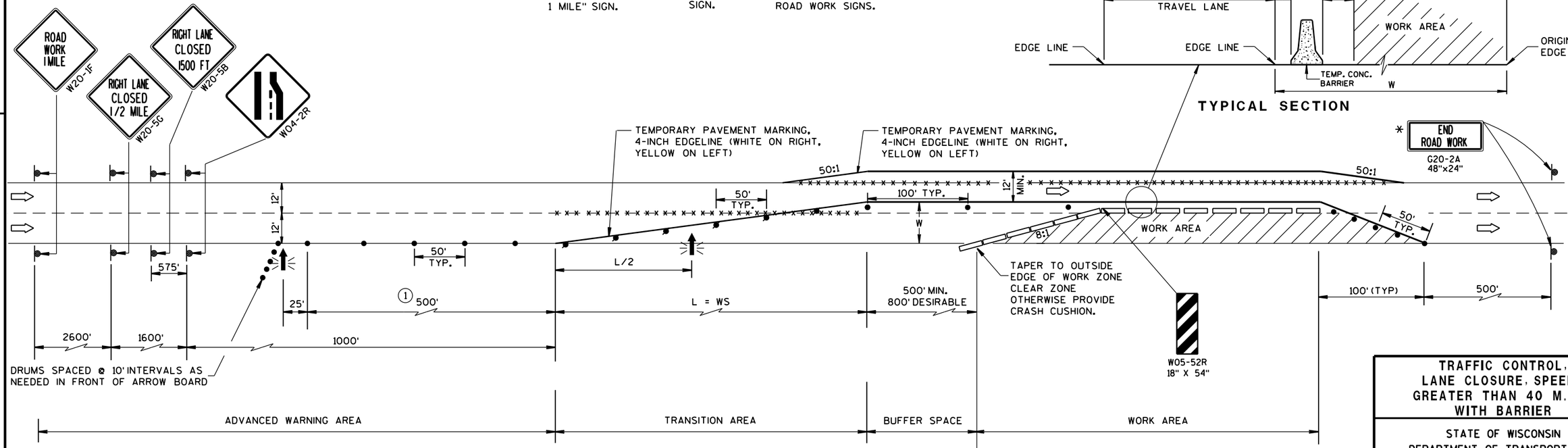
REMOVE PAVEMENT MARKINGS IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

IF THE HORIZONTAL ALIGNMENT IS SUCH THAT A CURVE MAY REQUIRE ADDITIONAL DELINEATION, THE DEVICE SPACING MAY BE DECREASED TO 50 FEET.

ADJUSTMENTS IN BUFFER SPACE NEED TO BE INCORPORATED WHEN THE LANE CLOSURE OCCURS NEAR AN INTERCHANGE EXIT OR ENTRANCE RAMP OR INTERSECTION. THE LANE CLOSURE MUST TAKE PLACE FAR ENOUGH IN ADVANCE OF AN EXIT OR ENTRANCE RAMP TO STILL ALLOW FOR ADEQUATE BUFFER SPACE. THE MINIMUM LENGTH OF THE BUFFER SPACE BEFORE AN EXIT RAMP SHOULD BE 1/2 THE LENGTH OF THE TRANSITION AREA. THE ENTRANCE RAMP SHOULD BE FOLLOWED BY THE ORIGINAL BUFFER SPACE LENGTH OF 800 FEET DESIRABLE PRIOR TO ANOTHER TRAFFIC CONTROL CHANGE SUCH AS A CROSSOVER MANEUVER.



TYPICAL SECTION



TRAFFIC CONTROL, LANE CLOSURE, SPEEDS GREATER THAN 40 M.P.H. WITH BARRIER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept., 2016 — DATE
/S/ Peter Amakobe Atepe
STATEWIDE WORK ZOI SAFETY ENGIN IC
FHWA

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S.D.D. 15 D 3-4

6

S.D.D. 15 D 3-4

LEGEND

- TYPE III BARRICADE WITH ATTACHED SIGN
- SIGN ON PERMENENT SUPPORT
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL DRUM
- FLASHING ARROW BOARD
- (A) TYPE "A" WARNING LIGHT (FLASHING)
- REMOVING PAVEMENT MARKING
- DIRECTION OF TRAFFIC
- WORK AREA

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 TO PROVIDE A MINIMUM OF 200 FEET, (500 FEET DESIREABLE) DISTANCE TO EXISTING SIGNS.

THIS LANE CLOSURE IS TYPICAL FOR CLOSING RIGHT LANE - REVERSE FOR CLOSING LEFT LANE.

ALL SIGNS ARE 48"×48" UNLESS OTHERWISE NOTED.

"WO" IS THE SAME AS "W" 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. NO WARNING LIGHTS SHALL BE WORKING ON "COVERED" OR "DOWNED" SIGNS.

CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARD SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARD AND LANE CLOSURE DRUMS FOR A MINIMUM 1500 FEET IN FRONT OF DRUMS.

FOR A LANE CLOSURE THAT IS IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, THE ADVANCED WARNING SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS.

REMOVE PAVEMENT MARKINGS IF LANE CLOSURE IS TO BE IN PLACE FOR LONGER THAN 4 OR MORE DAYS AND NIGHTS.

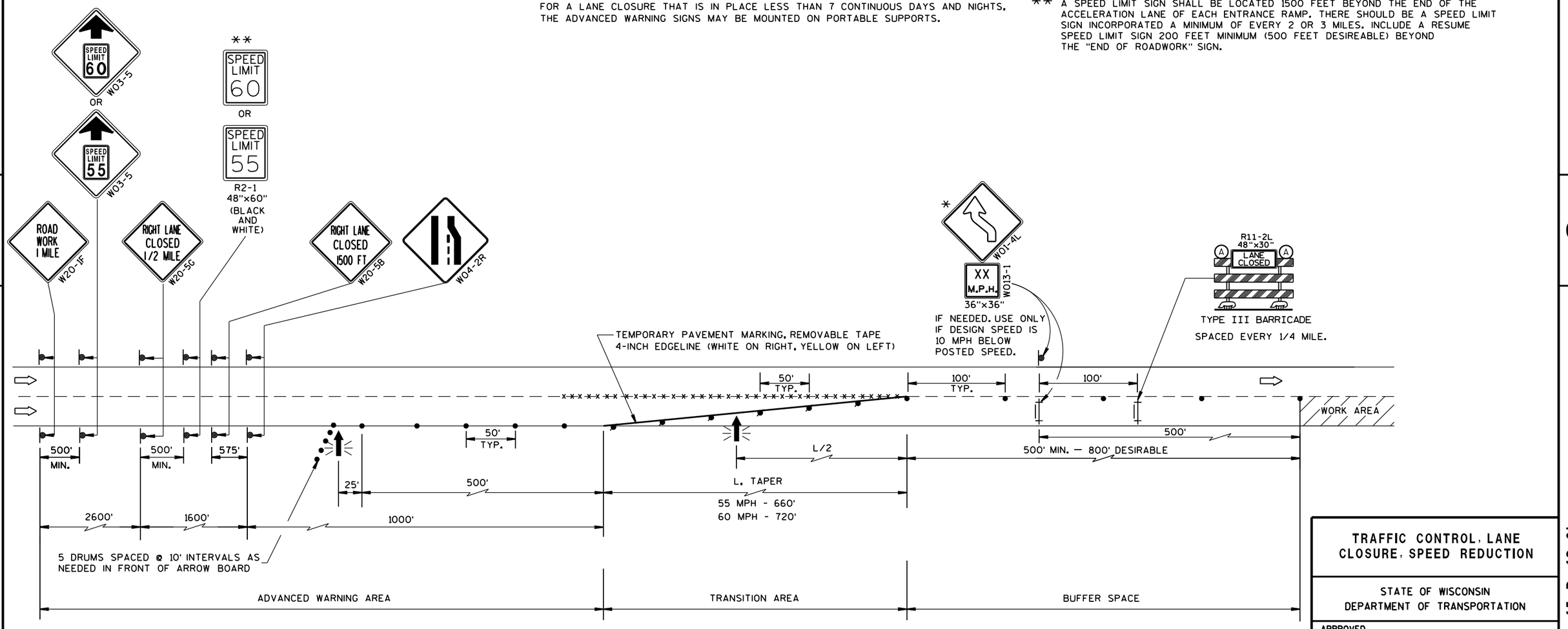
WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

IF THE HORIZONTAL ALIGNMENT IS SUCH THAT A CURVE MAY REQUIRE ADDITIONAL DELINEATION, THE DEVICE SPACING MAY BE DECREASED TO 50 FEET.

ADJUSTMENTS IN BUFFER SPACE NEED TO BE INCORPORATED WHEN THE LANE CLOSURE OCCURS NEAR AN INTERCHANGE EXIT OR ENTRANCE RAMP. THE LANE CLOSURE MUST MUST TAKE PLACE FAR ENOUGH IN ADVANCE OF AN EXIT OR ENTRANCE RAMP TO STILL ALLOW FOR ADEQUATE BUFFER SPACE. THE MINIMUM LENGTH OF THE BUFFER SPACE BEFORE AN EXIT RAMP SHOULD BE 1/2 THE LENGTH OF THE TRANSITION AREA. THE ENTRANCE RAMP SHOULD BE FOLLOWED BY THE ORIGINAL BUFFER SPACE LENGTH OF 800 FEET DESIRABLE PRIOR TO ANOTHER TRAFFIC CONTROL CHANGE SUCH AS A CROSSOVER MANEUVER.

* THE LEFT REVERSE CURVE SIGN (W01-4L) IS ONLY REQUIRED WHEN THIS DETAIL IS USED IN COMBINATION WITH "SINGLE LANE CROSSOVER" DETAIL.

** A SPEED LIMIT SIGN SHALL BE LOCATED 1500 FEET BEYOND THE END OF THE ACCELERATION LANE OF EACH ENTRANCE RAMP. THERE SHOULD BE A SPEED LIMIT SIGN INCORPORATED A MINIMUM OF EVERY 2 OR 3 MILES. INCLUDE A RESUME SPEED LIMIT SIGN 200 FEET MINIMUM (500 FEET DESIREABLE) BEYOND THE "END OF ROADWORK" SIGN.



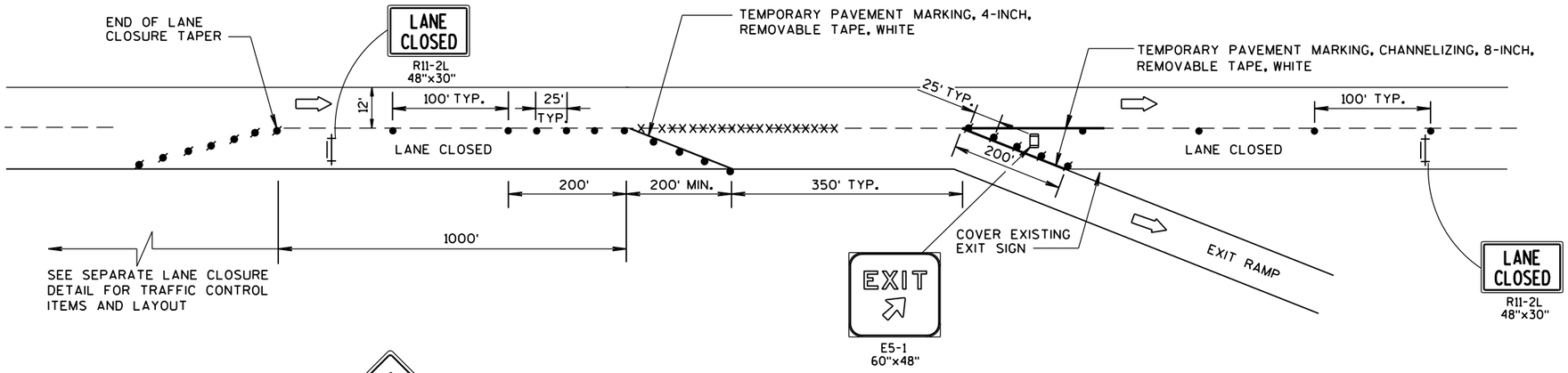
TRAFFIC CONTROL, LANE CLOSURE, SPEED REDUCTION

STATE OF WISCONSIN
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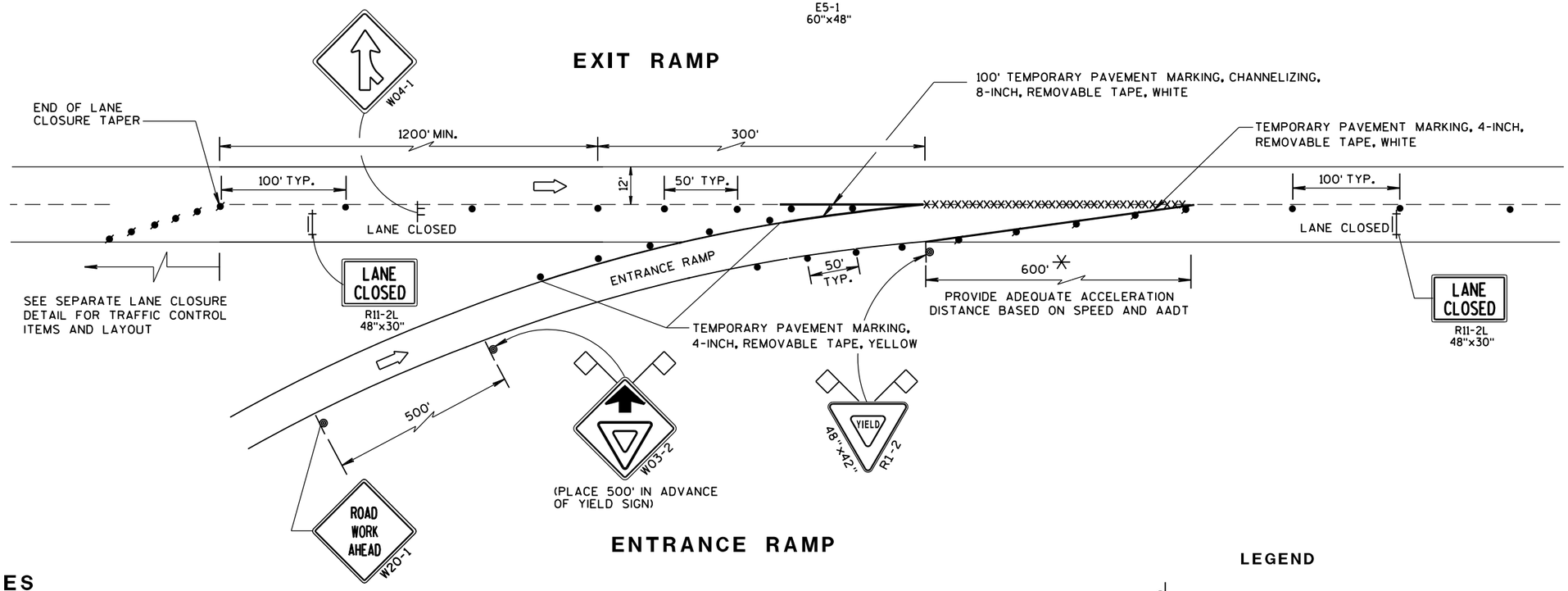
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March 2016 — DATE
/S/ Peter Amakobe Atepe
STATEWIDE WORK ZONE TRAFFIC ENGINEER
FHWA

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EXIT RAMP



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 R11-2L "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

- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- REMOVING PAVEMENT MARKING (SEE GENERAL NOTES)
- TYPE III BARRICADE WITH ATTACHED SIGN
- FLAGS, 16" x 16" MIN., (ORANGE)
- DIRECTION OF TRAFFIC

TRAFFIC CONTROL, EXIT AND ENTRANCE RAMP WITHIN LANE CLOSURE

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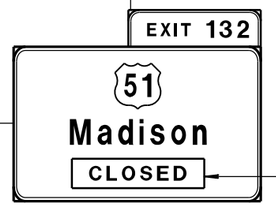
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G20-60
108"x24"

OR



G20-60
108"x24"

PLACE SIGN G20-60 OVER MILEAGE
ON EXISTING E1-1A SIGN



COVER ARROW ON
EXISTING E4-1A
SIGN (COVERING
SIGNS TYPE I)

G20-61
120"x30"

TEMPORARY PAVEMENT MARKING
4" REMOVABLE TAPE, WHITE
(ACROSS THE RAMP OPENING)

END
ROAD WORK
*G20-2A
48"x24"

25' TYP.

100' MIN.

200'

EDGE OF SHOULDER

COVER EXISTING
EXIT SIGN

ROAD
WORK
AHEAD
*W20-1A

RAMP
CLOSED
AHEAD
W20-53A

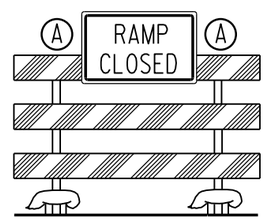
RAMP
CLOSED
1000 FT
W20-53C

1500'

1500'

1000'

R11-2R
48" X 30"
MOUNTED ON
TYPE III BARRICADE



RAMP WILL
BE CLOSED
(TIME)
BEGINNING
(DATE)

**R11-51
48"X48"
(OR SPECIAL SIGN IF INDICATED IN PLAN)

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 7 CALENDAR DAYS PRIOR TO CLOSURE OR AS DIRECTED BY THE ENGINEER. SEE WISCONSIN STANDARD SIGN PLATES FOR SIGN LAYOUT.

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- SIGN ON PERMANENT SUPPORT
- (A) TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC

TRAFFIC CONTROL, EXIT RAMP CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2015 — DATE
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STATEWIDE WORK ZO SAFETY ENGI — FIC
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LEGEND

- TRAFFIC CONTROL DRUM
- SIGN ON PERMANENT SUPPORT
- DIRECTION OF TRAFFIC
- FLASHING ARROW BOARD
- WORK AREA

GENERAL NOTES

THIS DETAIL IS TYPICAL FOR CLOSING THE RIGHT SHOULDER. FOR CLOSING THE LEFT SHOULDER, REVERSE THE TRAFFIC CONTROL.

THIS DETAIL MAY BE USED FOR DIVIDED ROADWAYS WITH ANY NUMBER OF TRAVEL LANES.

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE FHWA'S MANUAL OF STANDARD HIGHWAY SIGNS OR THE WISCONSIN STANDARD SIGN PLATES.

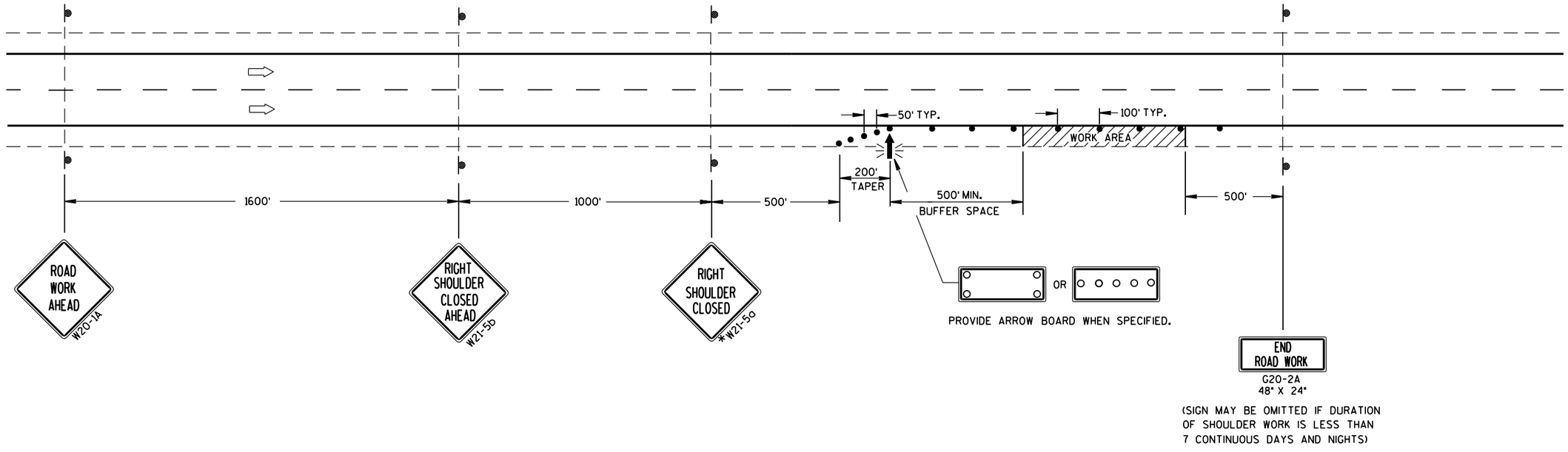
SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

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 THE WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

WHEN A 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.

*FOR SHORT DURATION SHOULDER WORK OF LESS THAN ONE HOUR, THE W21-5a SIGN MAY BE OMITTED.



TRAFFIC CONTROL SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 MPH

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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June 2016 — DATE

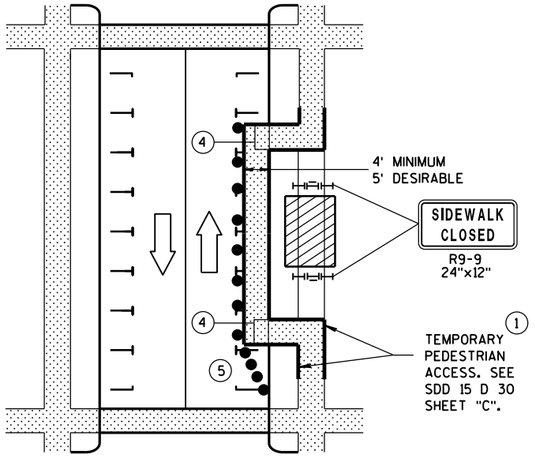
/S/ Peter Amakobe Atepe
STATEWIDE WORK ZO[illegible] SAFETY ENGI[illegible]

FHWA

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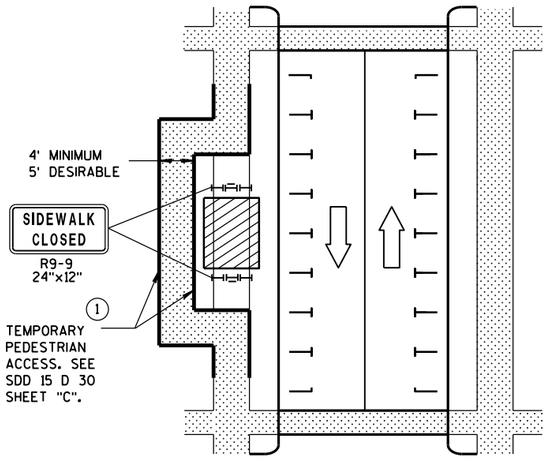
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NOTE: MAY BE USED ON ROADWAY WITH POSTED SPEED OF LESS THAN 40 MPH.

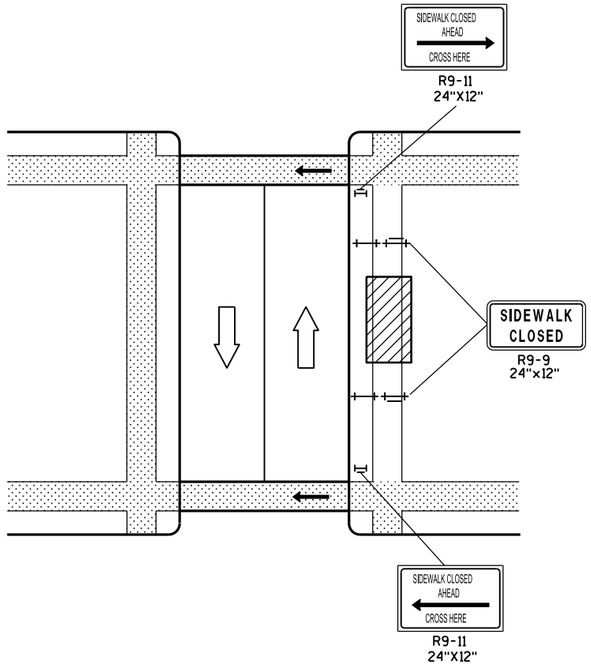


MID-BLOCK SIDEWALK CLOSURE IN PARKING LANE

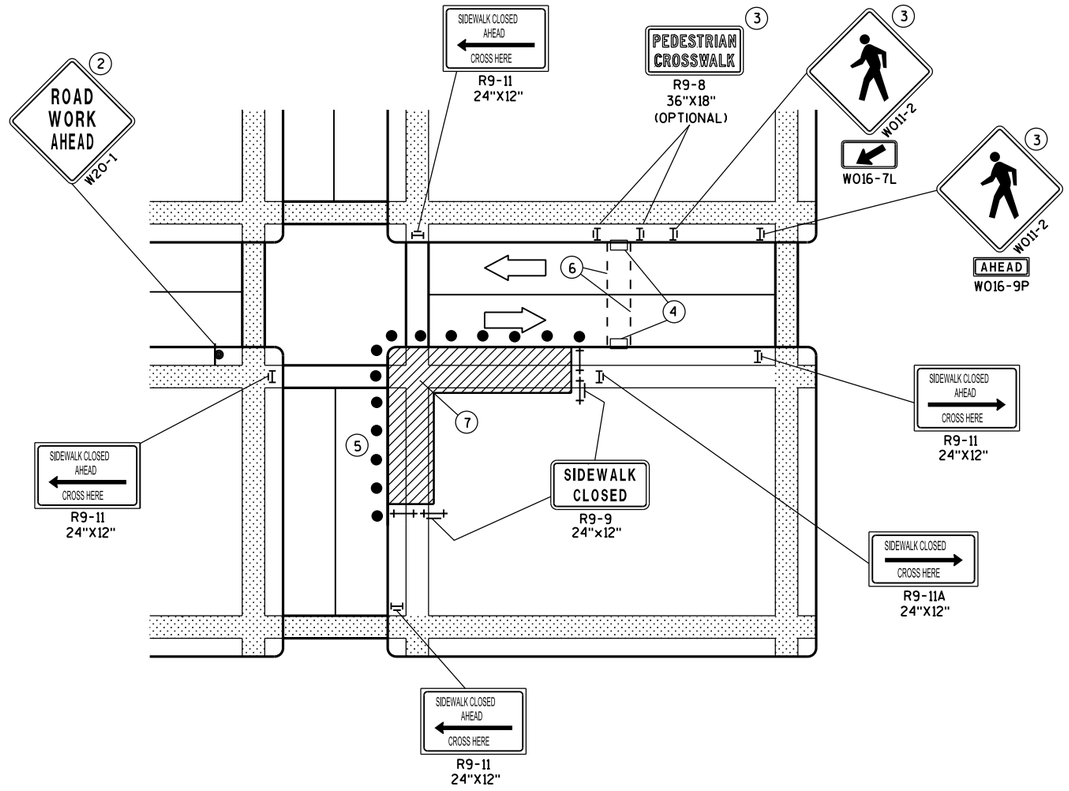
NOTE: LAYOUT SAME AS ABOVE.



SIDEWALK DIVERSION



MID-BLOCK SIDEWALK CLOSURE



CORNER SIDEWALK CLOSURE WITH TEMPORARY CROSSWALK

GENERAL NOTES

WHEN CLOSING OR RELOCATING CROSSWALKS OR SIDEWALKS, PROVIDE DETECABLE TEMPORARY FACILITIES AND INCLUDE ACCESSIBILITY FEATURES CONSISTENT WITH EXISTING PEDESTRIAN FACILITIES.

TEMPORARY TRAFFIC CONTROL DEVICES FOR PEDESTRIANS ARE SHOWN. OTHER DEVICES MAY BE NECESSARY TO CONTROL VEHICULAR TRAFFIC. STAGE WORK, AS NECESSARY, TO PROVIDE A TEMPORARY PEDESTRIAN ACCESS ROUTE AT ALL TIMES. FOR ROADWAYS WITH NO AVAILABLE DETOURS, MAINTAIN ONE OPEN SIDEWALK AT ALL TIMES.

"WO" SIGN IS THE SAME AS "W" SIGN EXCEPT THE BACKGROUND IS ORANGE.

FOR NIGHTTIME CLOSURE USE TYPE "A" FLASHING WARNING LIGHTS ON BARRICADES, SUPPORTING SIGNS AND CLOSING SIDEWALK. USE TYPE "C" STEADY BURN LIGHTS ON CHANNELIZING DEVICES SEPARATING THE WORK AREA FROM VEHICULAR TRAFFIC.

PEDESTRIAN TRAFFIC SIGNAL DISPLAY CONTROLLING CLOSED CROSSWALK SHALL BE COVERED OR DEACTIVATED.

POST MOUNTED SIGNS LOCATED ADJACENT TO A SIDEWALK SHALL HAVE A 7 FOOT MINIMUM CLEARANCE FROM THE BOTTOM OF THE SIGN TO THE SIDEWALK SURFACE.

ALTERNATE SIDEWALK WORK BETWEEN LEFT AND RIGHT SIDE OF ROADWAY TO MAINTAIN PEDESTRIAN ACCESS.

(1) IF SIDEWALK CLOSURE AFFECTS AN ACCESSIBLE AND DETECTABLE FACILITY, MAINTAIN ACCESSIBILITY AND DETECTABILITY ALONG THE ALTERNATE PEDESTRIAN ROUTE.

(2) "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.

(3) IF TEMPORARY PEDESTRIAN CROSSWALK IS NOT PROVIDED, OMIT R9-8 AND W011-2 SIGN ASSEMBLIES. IF PROVIDED INCLUDE ON BOTH SIDES OF THE CROSSWALK.

(4) TEMPORARY CURB RAMPS. SEE SDD 15 D 30 SHEET "B".

(5) DRUMS OR BARRICADES AT 25 FOOT SPACING. STREET PARKING SHALL BE PROHIBITED FOR AT LEAST 50 FEET IN ADVANCE OF THE MID-BLOCK CROSSWALK.

(6) TEMPORARY PAVEMENT MARKING FOR CROSSWALK LINES.

(7) LIMIT WORK TO ONE QUADRANT AT A TIME TO MINIMIZE PEDESTRIAN DISRUPTION.

LEGEND

- SIGN ON PERMANENT SUPPORT
- UNDER PEDESTRIAN TRAFFIC
- WORK AREA
- PEDESTRIAN CHANNELIZATION DEVICE
- TYPE II BARRICADE WITH/WITHOUT SIGN (ALL WITH ONE WARNING LIGHT, TYPE A, LOW-INTENSITY FLASHING)
- TYPE III BARRICADE WITH/WITHOUT SIGN (ALL WITH ONE WARNING LIGHT, TYPE A, LOW-INTENSITY FLASHING)
- DIRECTION OF TRAFFIC
- TRAFFIC CONTOL DRUM

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

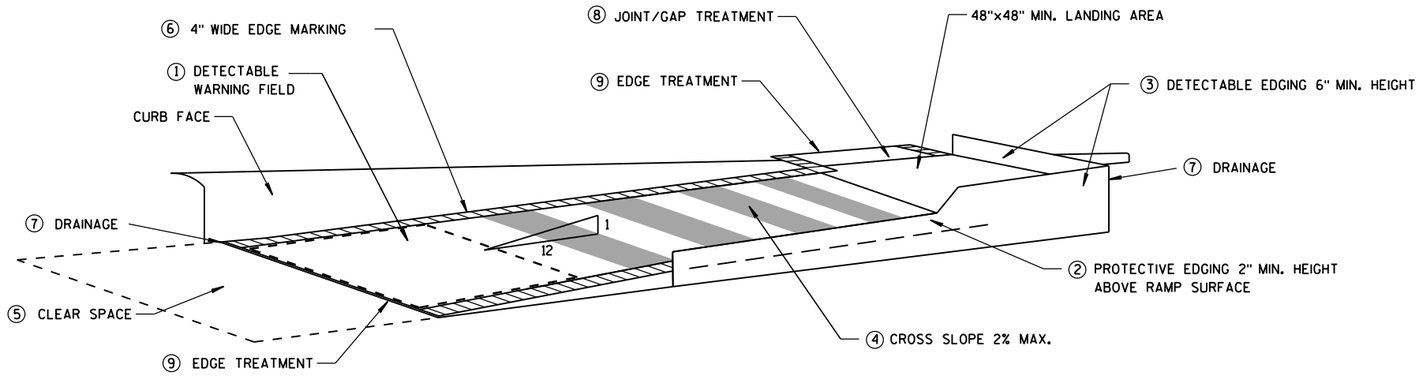
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DEPARTMENT OF TRANSPOI

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S.D.D. 15 D 30-3a

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S.D.D. 15 D 30-3a



TEMPORARY CURB RAMP PARALLEL TO CURB

GENERAL NOTES

NOTIFY THE BUS COMPANY 7 DAYS IN ADVANCE OF THE BUS STOP RELOCATION.

ALTERNATE SIDEWALK WORK BETWEEN LEFT AND RIGHT SIDE OF ROADWAY TO MAINTAIN PEDESTRIAN ACCESS.

① CURB RAMPS SHALL BE 48" MIN. WIDTH WITH A FIRM, STABLE AND SLIP RESISTANT SURFACE. INSTALL CONTRASTING DETECTABLE WARNING FIELD AT PEDESTRIAN STREET CROSSINGS. REFER TO SDD 8D5 SHEET "E".

② PROTECTIVE EDGING WITH A 2" MIN. HEIGHT SHALL BE INSTALLED WHEN A CURB RAMP OR LANDING PLATFORM HAS A VERTICAL DROP OF 6" OR GREATER OR HAS A SIDE APRON SLOPE STEEPER THAN 1:3 (33%). PROTECTIVE EDGING SHOULD BE CONSIDERED WHEN CURB RAMPS OR LANDING PLATFORMS HAVE A VERTICAL DROP OF 3" OR MORE.

③ DETECTABLE EDGING WITH 6" MIN. HEIGHT AND CONTRASTING COLOR SHALL BE INSTALLED ON ALL CURB RAMP LANDINGS WHERE THE WALKWAY CHANGES DIRECTION (TURNS).

④ CURB RAMPS AND LANDINGS SHALL HAVE A 1:50 (2%) MAX. CROSS-SLOPE.

⑤ CLEAR SPACE OF 48"X48" MIN. SHALL BE PROVIDED ABOVE AND BELOW THE CURB RAMP.

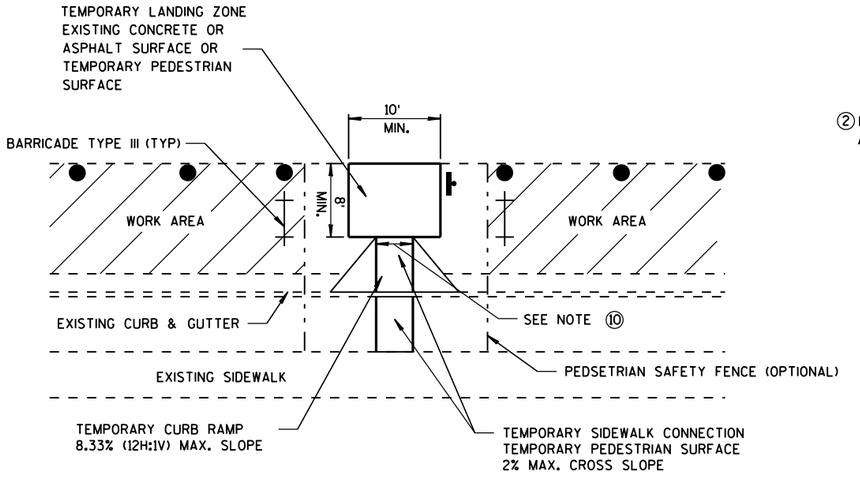
⑥ THE CURB RAMP WALKWAY EDGE SHALL BE MARKED WITH A YELLOW COLOR, 4" WIDE MARKING, UNLESS A CONTRASTING DETECTABLE WARNING FIELD IS PROVIDED.

⑦ DO NOT RESTRICT WATER FLOW IN THE GUTTER SYSTEM.

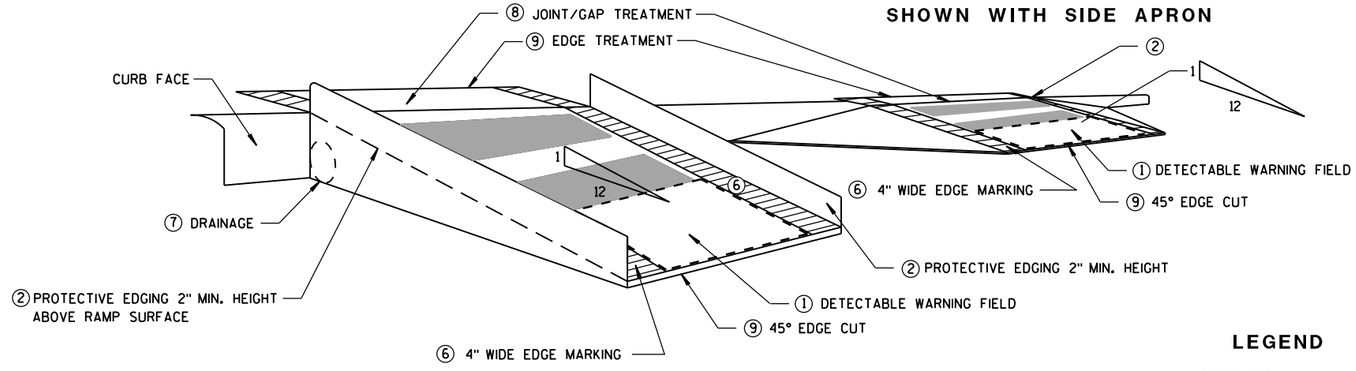
⑧ LATERAL JOINTS OR GAPS BETWEEN SURFACES SHALL BE LESS THAN 1/2" WIDTH.

⑨ CHANGES BETWEEN SURFACE HEIGHTS SHALL NOT EXCEED 1/2". LATERAL EDGES SHALL BE VERTICAL UP TO 1/4" HIGH, AND BEVELED AT 1:2 BETWEEN 1/4" AND 1/2".

⑩ 5' WIDE MIN. WITH PEDSETRIAN SAFETY FENCE, 10' WIDE MIN. WITHOUT PEDESTRIAN SAFETY FENCE.



TEMPORARY BUS STOP PAD



SHOWN WITH PROTECTIVE EDGE

TEMPORARY CURB RAMP PERPENDICULAR TO CURB

LEGEND

WORK AREA

TYPE III BARRICADE

TRAFFIC CONTOL DRUM

TRAFFIC CONTROL, TEMPORARY ADA COMPLIANT PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

June 2016 — DATE

/S/ Peter Amakobe Atepe — STATEWIDE WORK ZONE TRAFFIC SAFETY ENGINEER

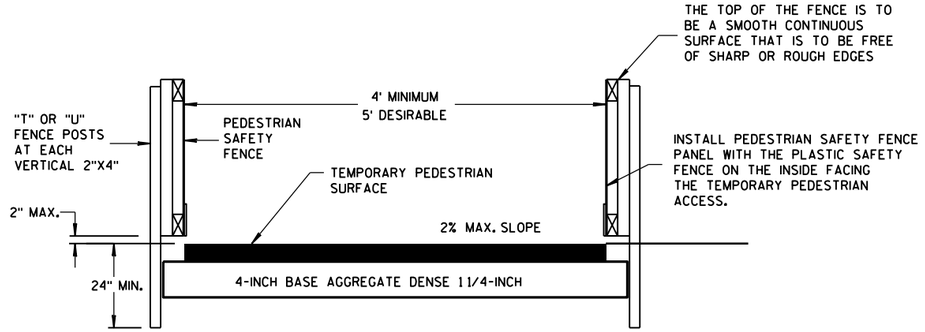
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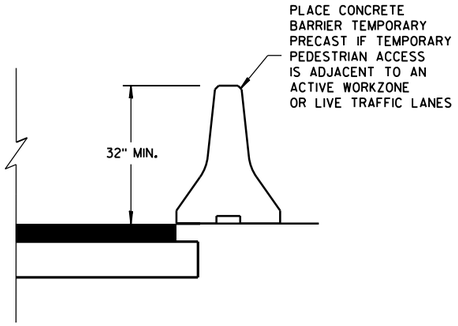
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S.D.D. 15 D 30-3b

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S.D.D. 15 D 30-3b

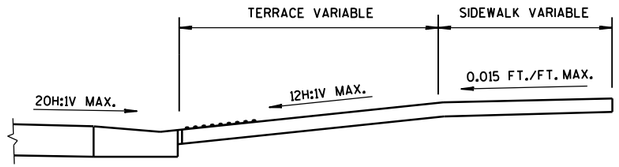




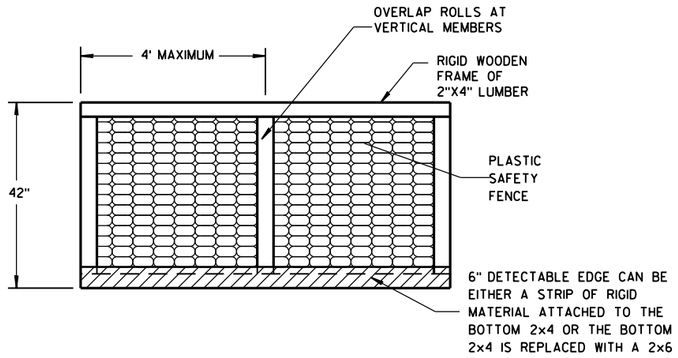
TEMPORARY PEDESTRIAN ACCESS

GENERAL NOTES

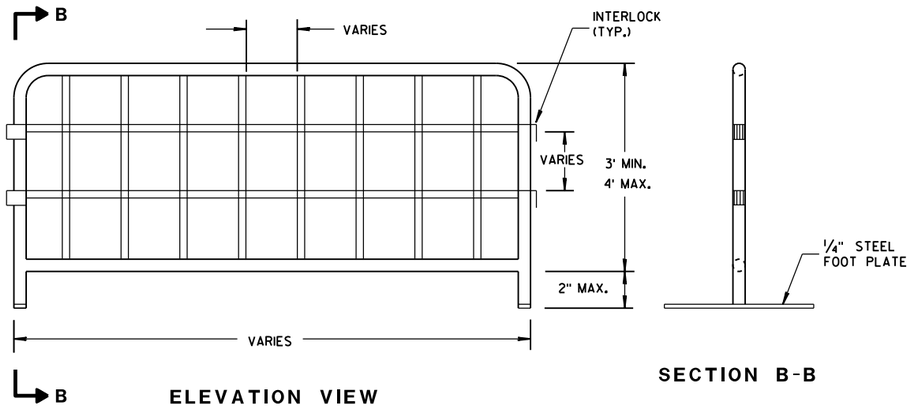
(1) INTERCHANGEABLE WITH THE PEDESTRIAN SAFETY FENCE.



SECTION A-A



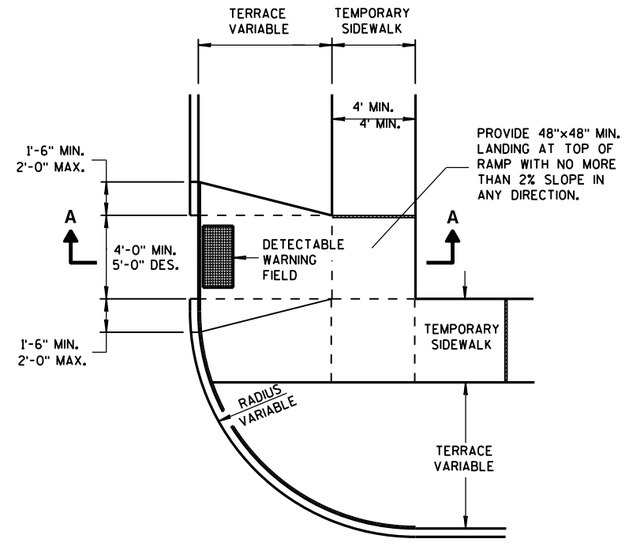
PEDESTRIAN SAFETY FENCE



ELEVATION VIEW

SECTION B-B

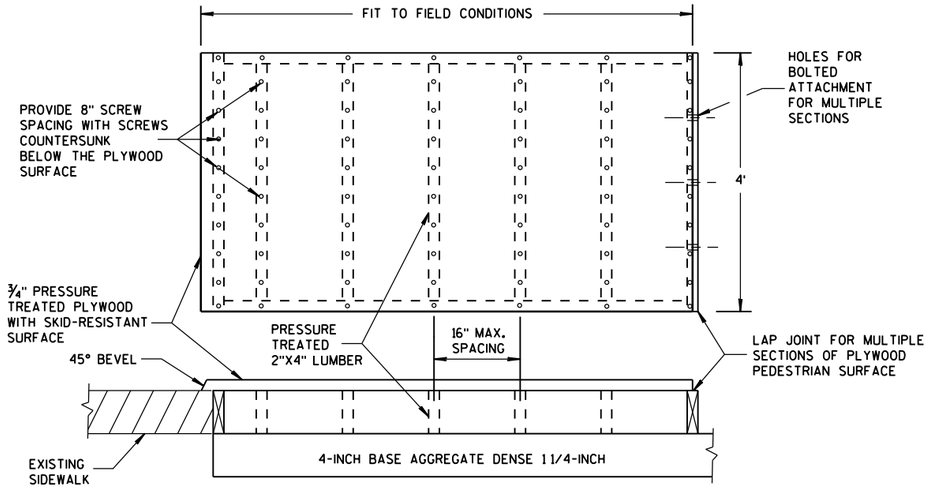
TEMPORARY PEDESTRIAN STEEL BARRICADE (1)



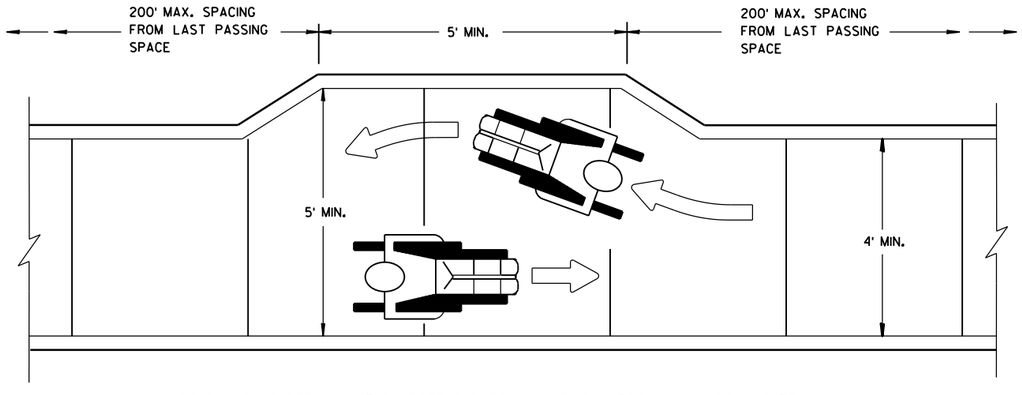
PLAN VIEW

TEMPORARY TYPE 3 RAMP

(OUTSIDE OF CROSSWALK AREA)



TEMPORARY PEDESTRIAN SURFACE PLYWOOD



NARROW SIDEWALK PASSING DETAIL

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

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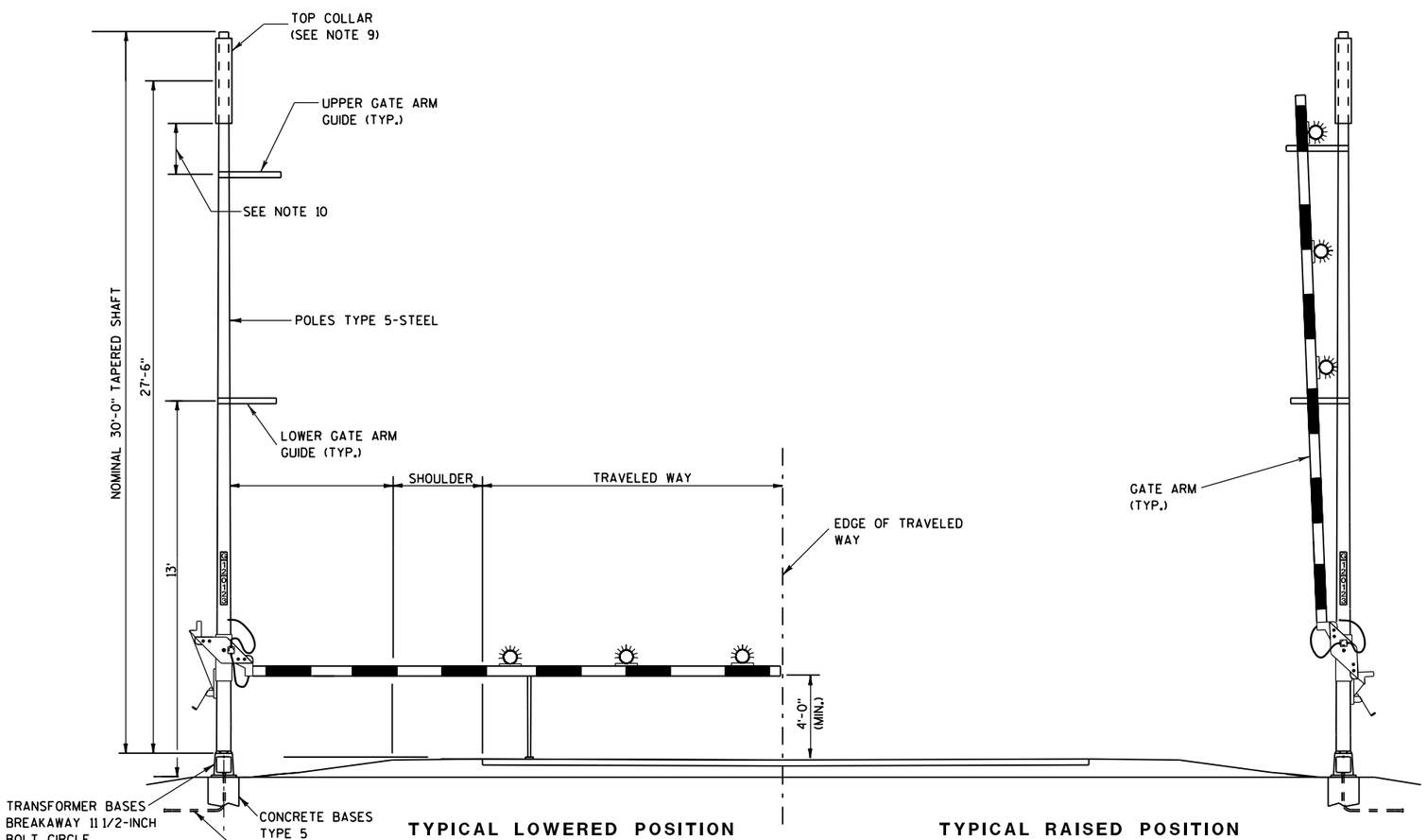
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S.D.D. 15 D 30-3c

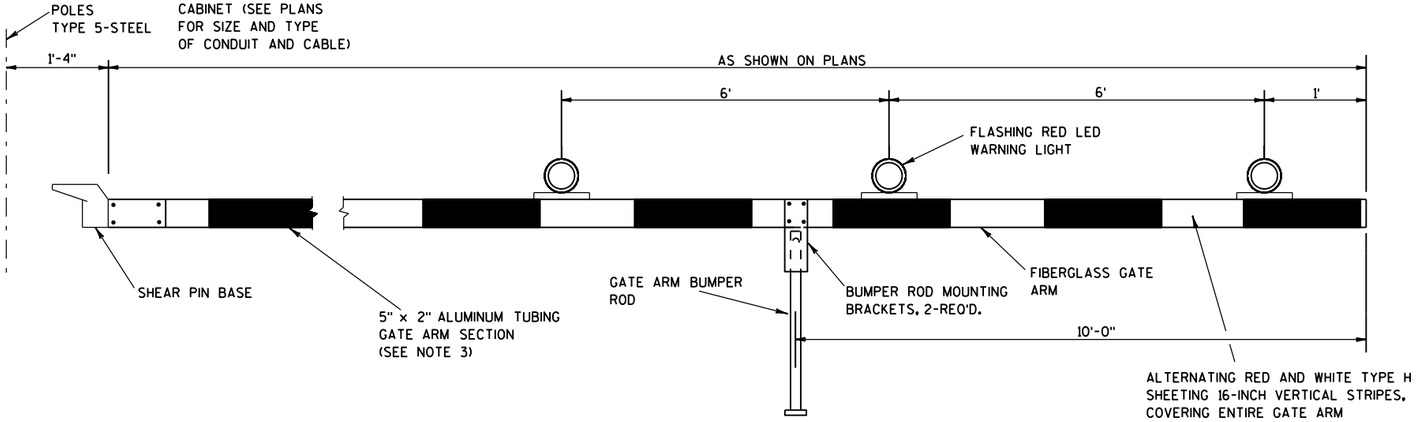
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S.D.D. 15 D 30-3c



TYPICAL LOWERED POSITION

TYPICAL RAISED POSITION

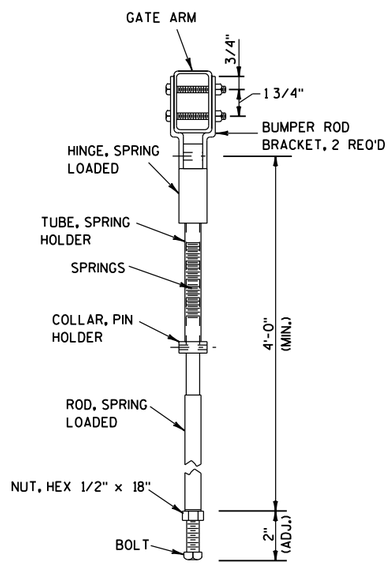


GATE DETAIL

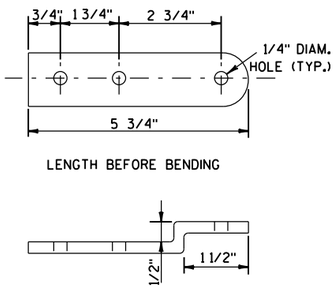
(SOLAR POWER OPTION)

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

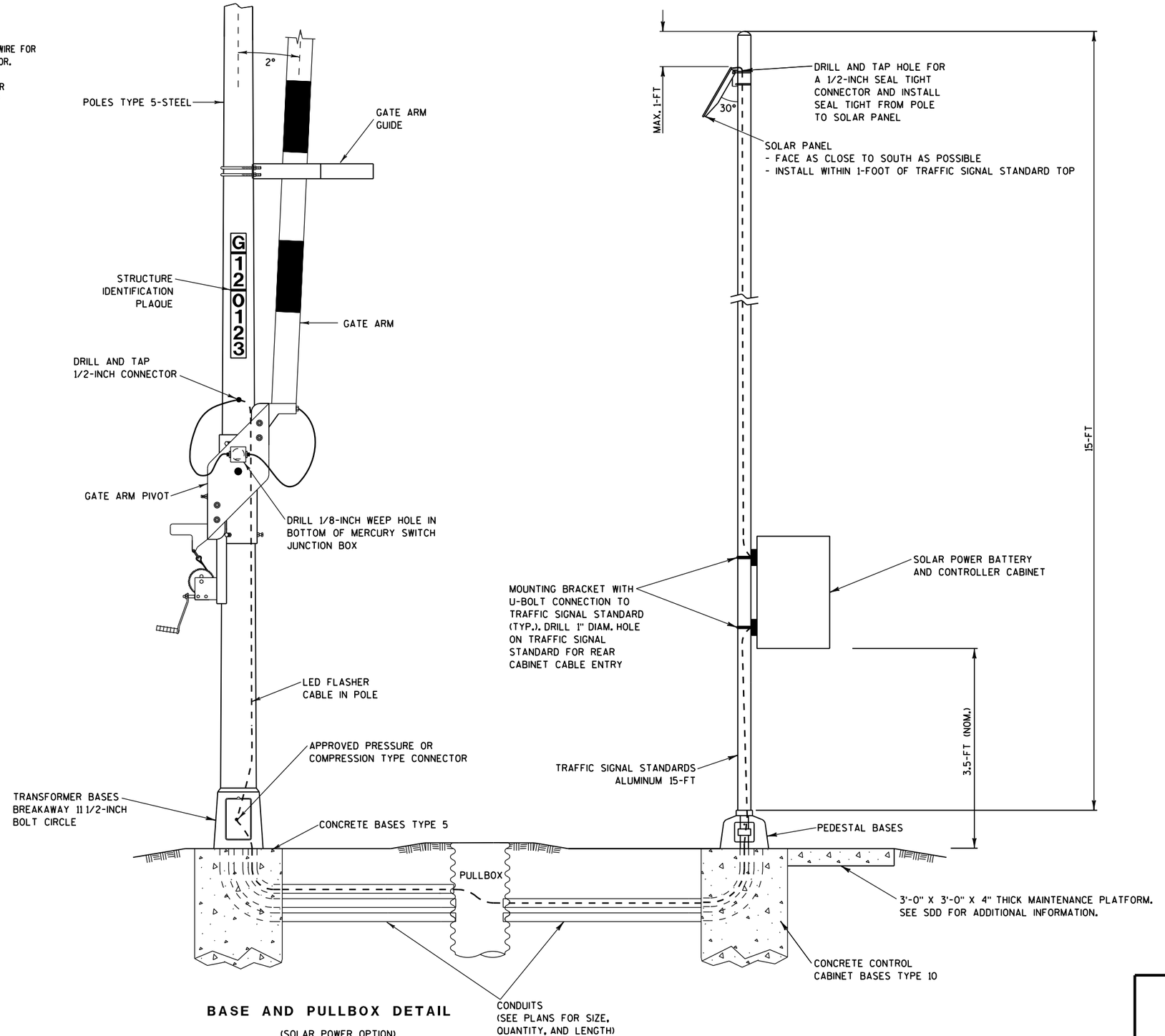
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6
S.D.D. 15 D 34-2a

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

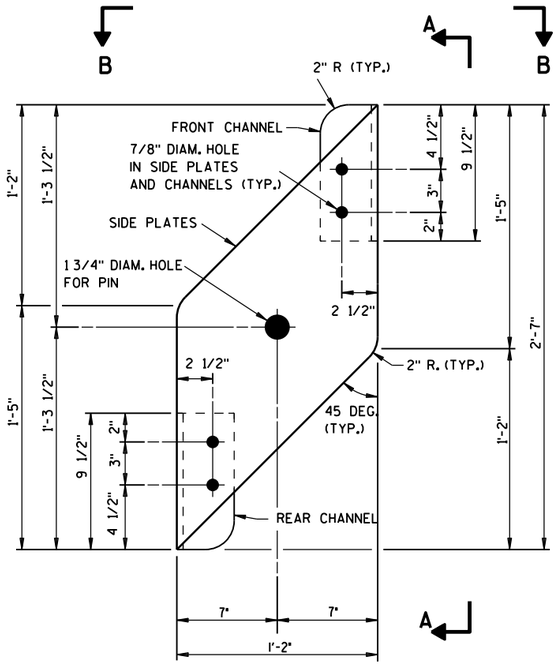
(SOLAR POWER OPTION)

RAMP GATE
SOLAR POWER

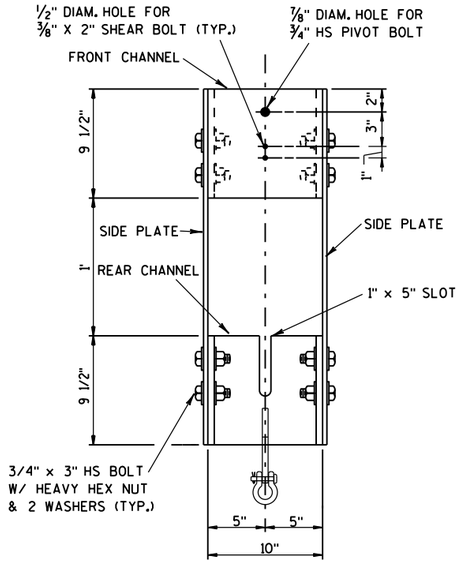
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

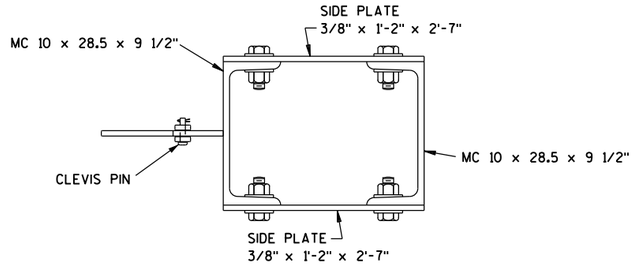
S.D.D. 15 D 34-2b



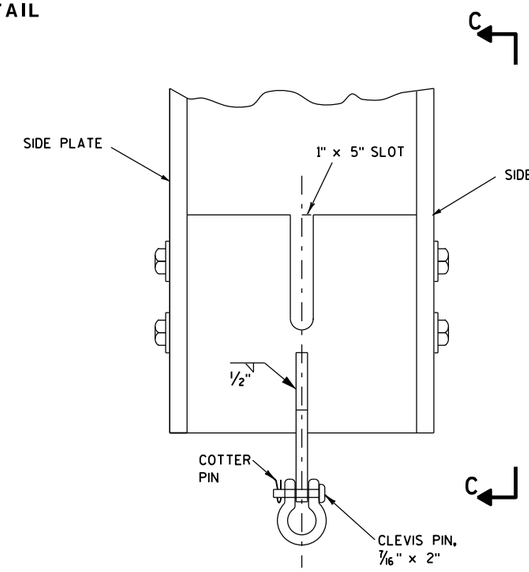
SIDE PLATE DETAIL



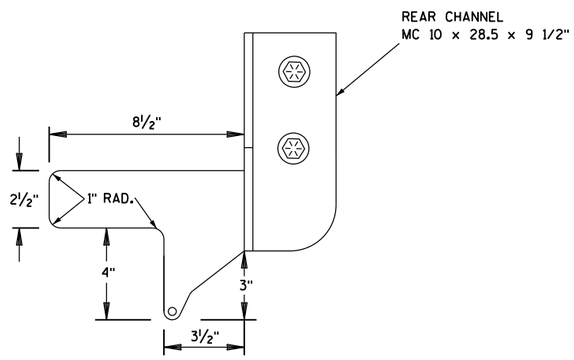
SECTION A-A



SECTION B-B



YOKE ASSEMBLY DETAIL



SECTION C-C

RAMP GATE
SOLAR POWER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR 432

6

S.D.D. 15 D 34-2c

6

S.D.D. 15 D 34-2c

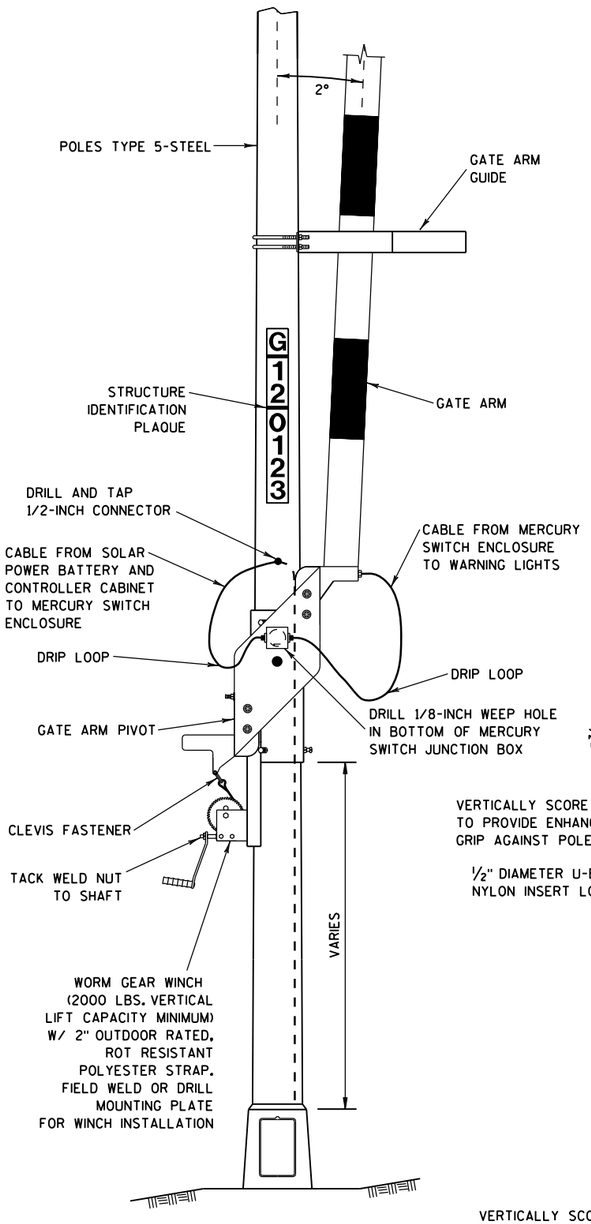
GENERAL NOTES

1. WHEN THE GATE IS FULLY RAISED, THE NUT AND WASHER SHALL BE PLACED SNUGLY AGAINST THE OUTSIDE OF THE REAR CHANNEL.

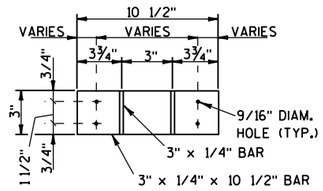
2. WHEN THE GATE IS FULLY LOWERED, THE NUT AND WASHER SHALL BE PLACED SNUGLY AGAINST THE INSIDE OF THE REAR CHANNEL.

3. ANTI-SEIZE LUBRICATING MATERIAL SHALL BE USED ON ALL BOLT THREADS BEFORE INSTALLATION.

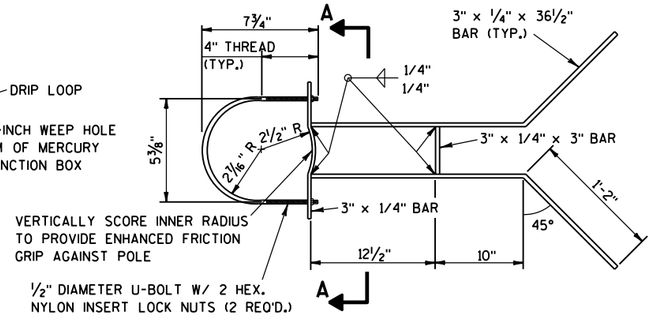
4. ALL BOLTS SHALL BE GALVANIZED AND CONFORM TO ASTM A307, GRADE A, UNLESS DESIGNATED AS HS (HIGH STRENGTH), WHICH SHALL CONFORM TO ASTM A325. BOLTS OF 1/2" NOMINAL DIAMTER OR LESS MAY BE STAINLESS STEEL.



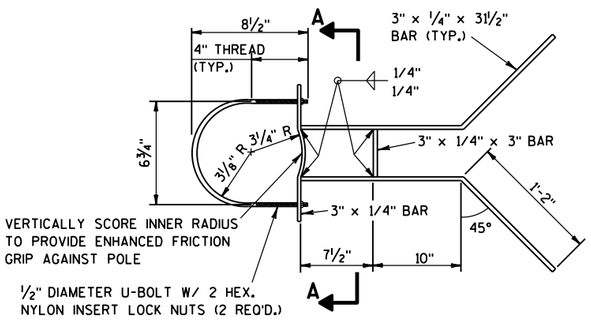
GATE PIVOT ASSEMBLY



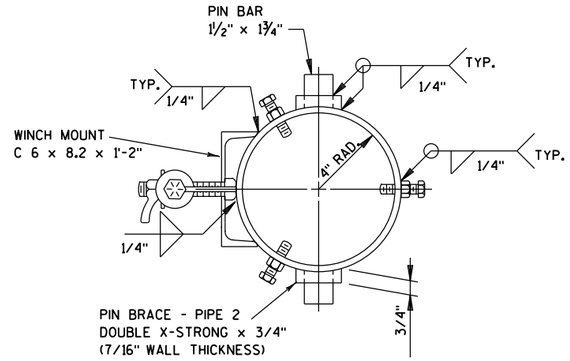
SECTION A-A
U-BOLTS NOT SHOWN



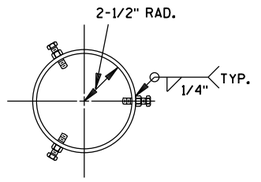
UPPER GATE ARM GUIDE DETAIL



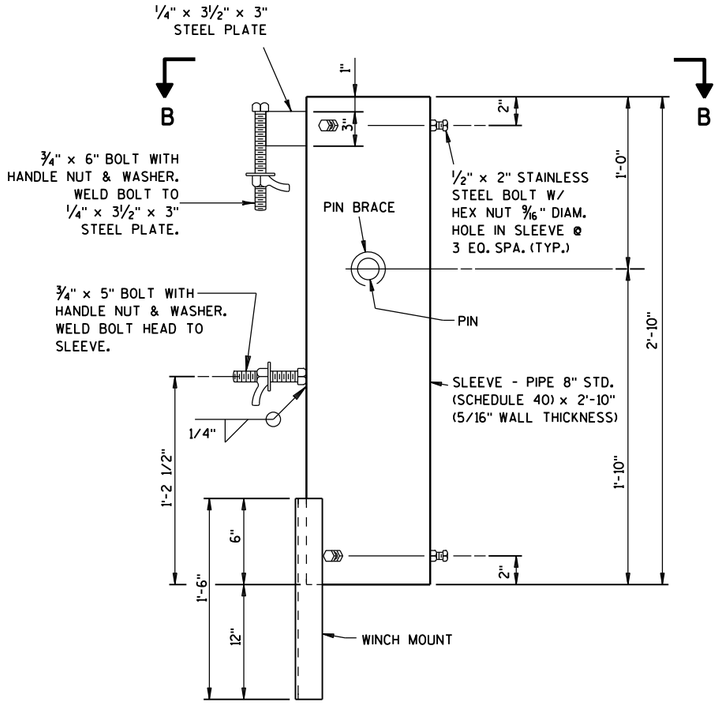
LOWER GATE ARM GUIDE DETAIL



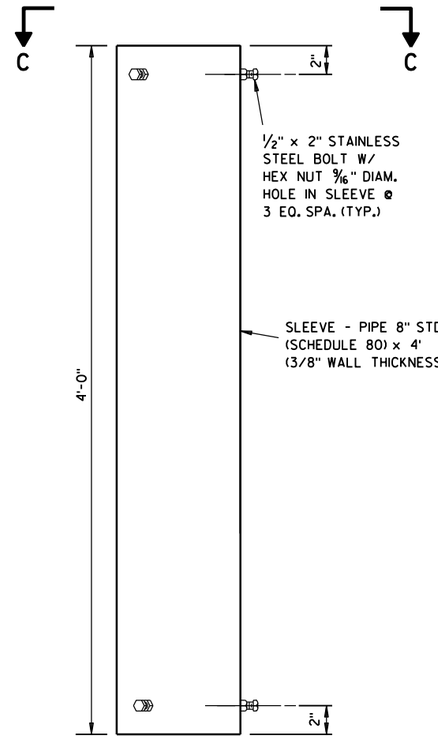
SECTION B-B



SECTION C-C



PIVOT SLEEVE DETAIL



TOP COLLAR

RAMP GATE
SOLAR POWER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

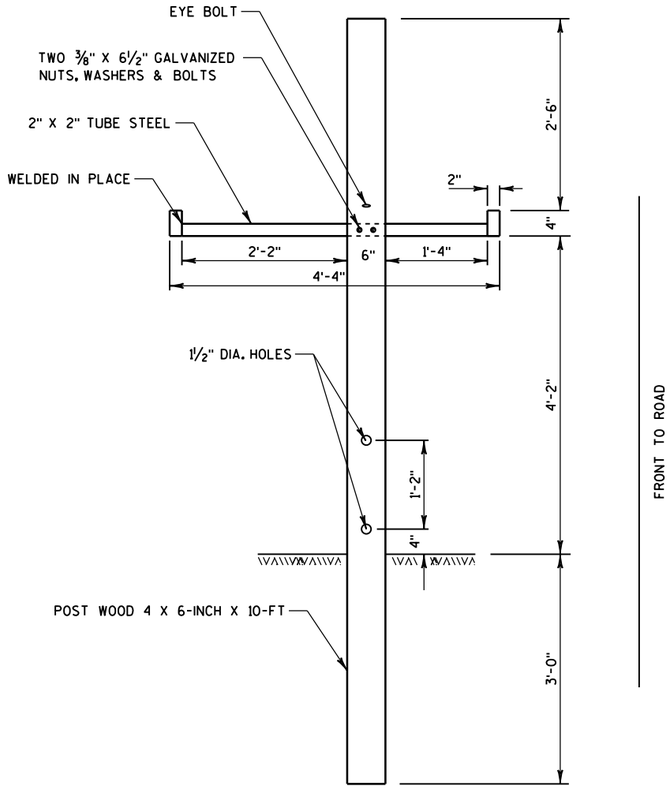
APPROVED
11/2015 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRCIAL
FHWA

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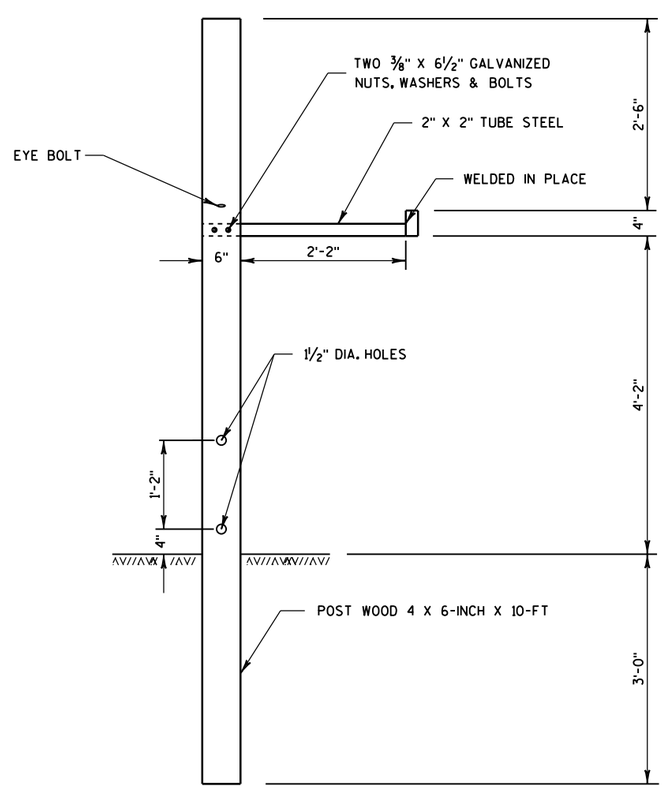
S.D.D. 15 D 34-2d

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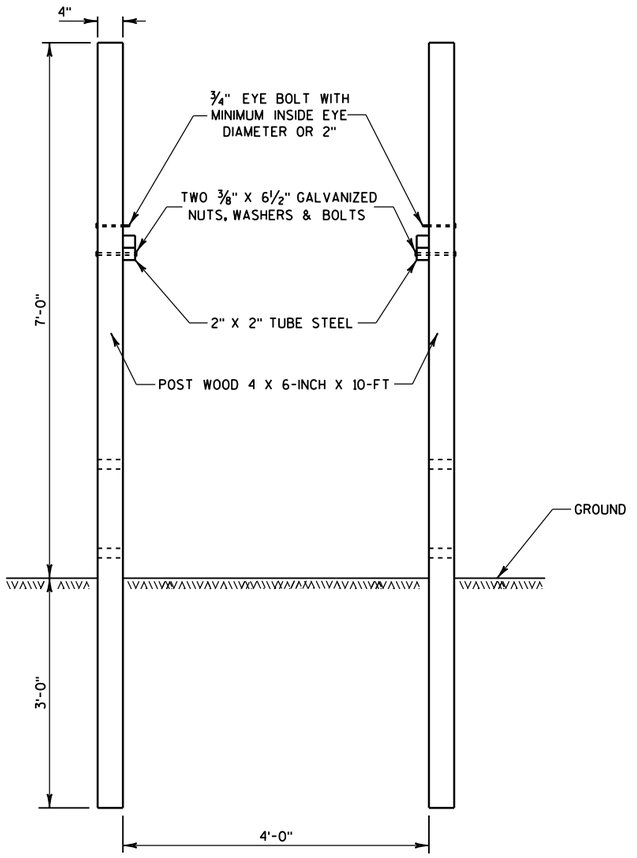
S.D.D. 15 D 34-2d



SIDE VIEW
(3 BARRICADE SYSTEM)



SIDE VIEW
(2 BARRICADE SYSTEM)



FRONT VIEW

BARRICADE RACK

* LOCATE OUTSIDE CLEAR ZONE AS DIRECTED BY ENGINEER

BARRICADE RACK

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

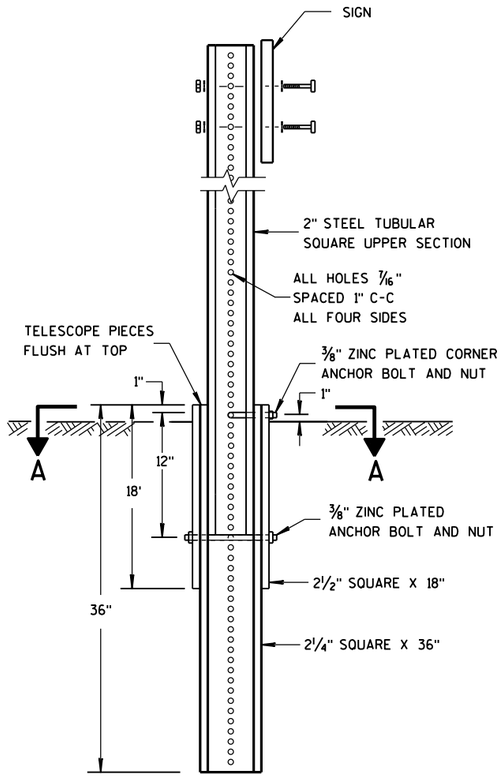
APPROVED
4-30-2013 DATE
/S/ Bill Wondrachek
STATE TRAFFIC I MANAGEMENT EN
FHWA

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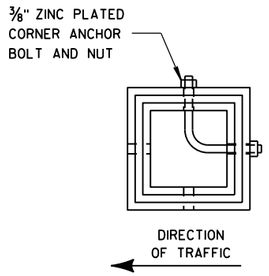
S.D.D. 15 D 36-1

6

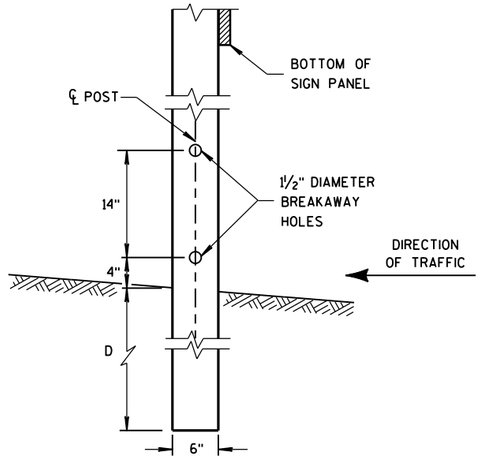
S.D.D. 15 D 36-1



DETAIL OF TUBULAR STEEL SIGN POST



SECTION A-A



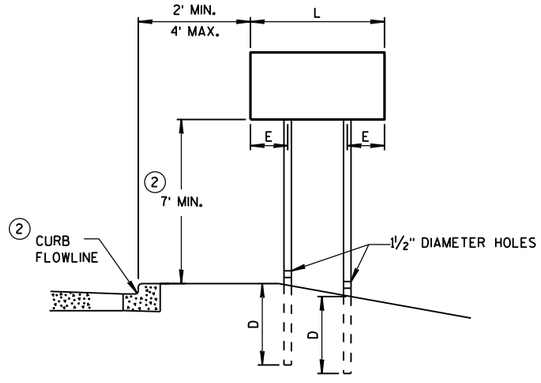
4"x6" WOOD POST MODIFICATION

GENERAL NOTES

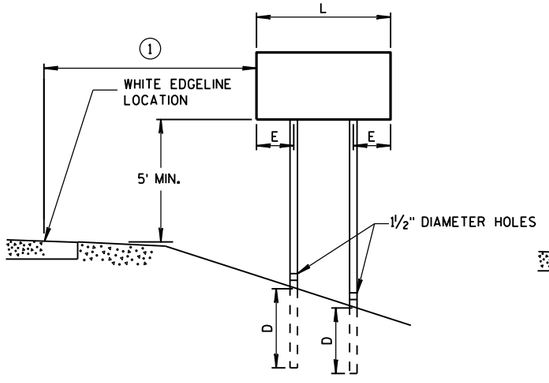
(1) 6 FEET FROM THE EDGE OF PAVEMENT (EDGE LINE LOCATION) UNLESS OTHERWISE DIRECTED BY THE PROJECT ENGINEER. LATERAL OFFSET SHOULD BE ADJUSTED TO AVOID THE DITCH FLOWLINE.

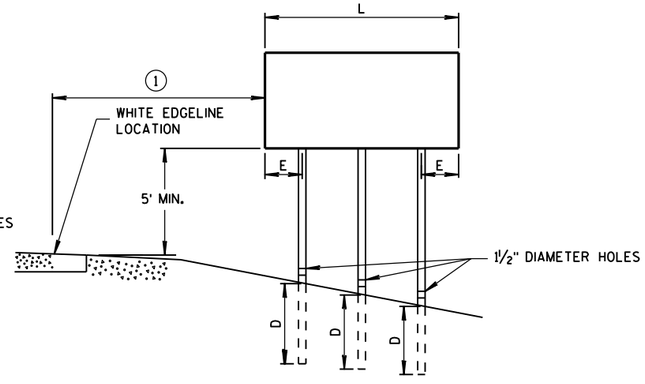
(2) THE EXISTENCE OF CURB AND GUTTER DOES NOT IN ITSELF MANDATE THE VERTICAL CLEARANCE ILLUSTRATED. THAT HEIGHT IS TYPICALLY MEASURED WHERE THERE IS SIDEWALK ADJACENT TO THE ROADWAY OR PARKING IS PERMITTED. IN THE ABSENCE OF SIDEWALK, VERTICAL CLEARANCE IS MEASURED FROM THE TOP OF THE CURB. IF NO SIDEWALK AND NO PARKING, VERTICAL CLEARANCE MAY BE REDUCED TO 5 FOOT MINIMUM. OFFSET OF SIGNS IS MEASURED FROM THE CURB FLOWLINE.

(3) FOR SIGNS REQUIRING 4 POSTS, SPACE INTERMEDIATE POSTS EVENLY.



URBAN AREA





RURAL AREA

POST MOUNTING DETAIL FOR TEMPORARY TRAFFIC CONTROL FIXED MESSAGE SIGNS

TUBULAR STEEL POSTS

AREA OF SIGN INSTALLATION (SQ. FT.)	NUMBER OF REQUIRED TUBULAR STEEL POSTS
9 OR LESS	1
GREATER THAN 9 LESS THAN OR EQUAL TO 18	2
GREATER THAN 18 LESS THAN OR EQUAL TO 27	3

SIGNS WIDER THAN 3 FEET OR LARGER THAN 9 SQ. FT. SHALL BE MOUNTED ON MULTIPLE POSTS (SEE ABOVE TABLE).

SIGNS LARGER THAN 27 SQ. FT. SHALL NOT BE MOUNTED ON TUBULAR STEEL POSTS.

WOOD POST EMBEDMENT DEPTH

AREA OF SIGN INSTALLATION (SQ. FT.)	D (MIN)
20 OR LESS	4'
GREATER THAN 20	5'

4" X 6" WOOD POST

POST SPACING REQUIREMENTS		NUMBER OF WOOD POSTS REQUIRED
L	E	
48" OR LESS AND LESS THAN 20 SQ. FT.	-	1
LESS THAN 60"	12"	2
60" TO 120"	L/5	2
GREATER THAN 120" LESS THAN 168"	12"	3
168" AND GREATER	12"	4

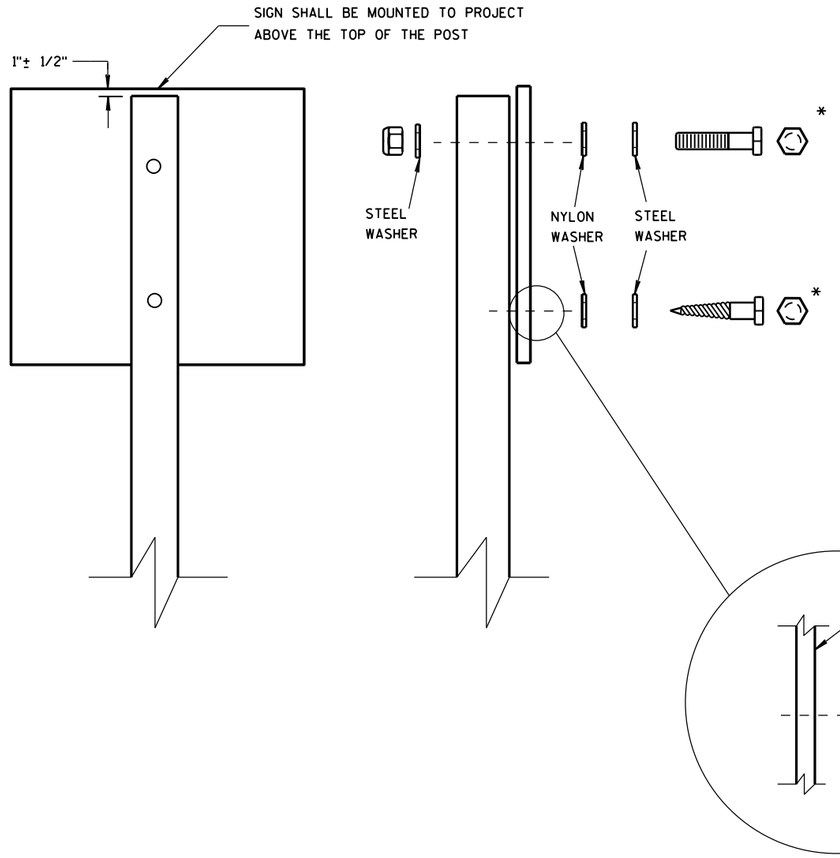
SEE NOTE (3)

TEMPORARY TRAFFIC CONTROL FIXED MESSAGE SIGNS

STATE OF WISCONSIN DEPARTMENT OF TRANSPO

6

S.D.D. 15 D 38-1a



WASHER PLACEMENT WHEN SIGN HAS OTHER THAN TYPE H OR TYPE F FACE

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

* 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. FOR A SINGLE POST INSTALLATION, ALL SIGNS GREATER THAN 9 SQ. FT. REQUIRE THE USE OF 3 FASTENERS.

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6

S.D.D. 15 D 38-1b

S.D.D. 15 D 38-1b

ATTACHMENT OF SIGNS TO POSTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

Feb. 2015 — DATE

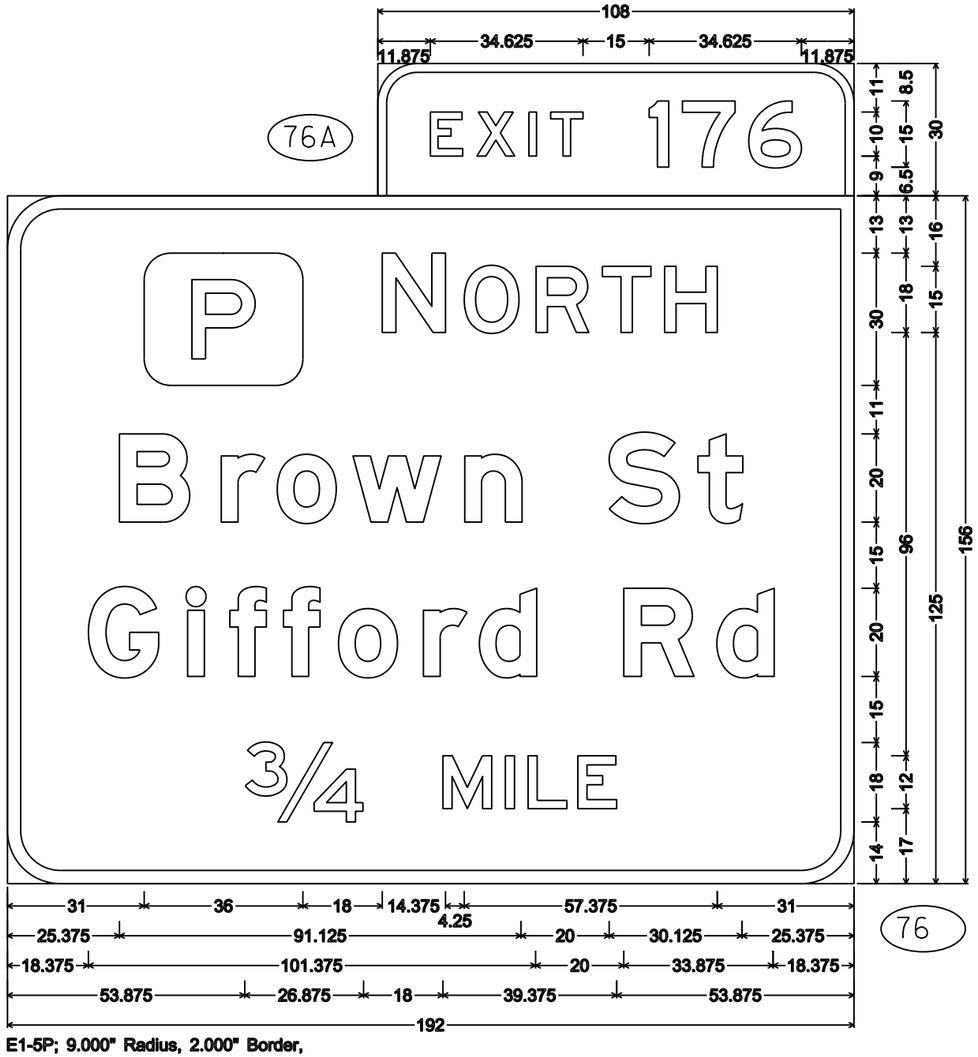
/S/ Travis Feltes — STATE TRAFFIC ENGINEER

FHWA

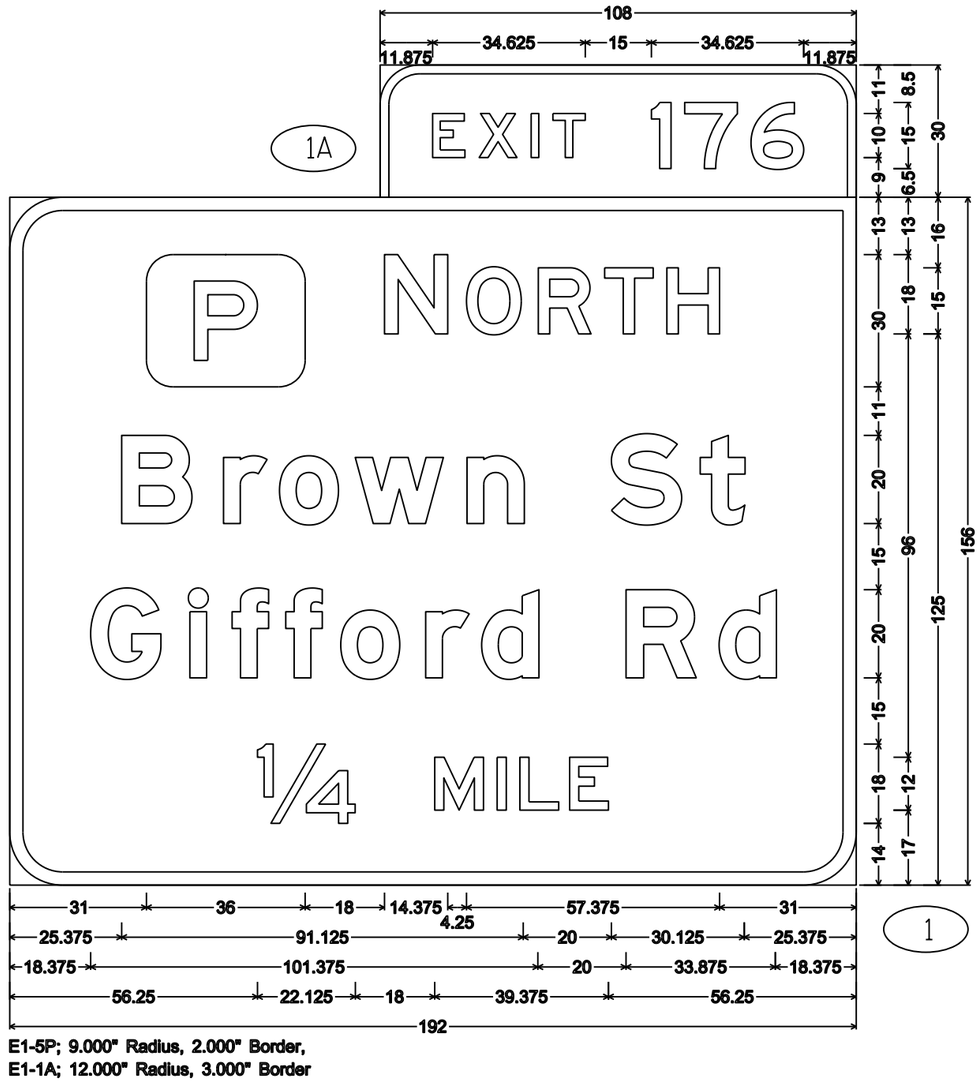
SIGN

NOTES

1. All Signs Type I - Type SH Reflective
2. Color:
   Background - Green
   Message - White
3. Message Series - E Modified except all CAP words Series E



E1-5P; 9.000" Radius, 2.000" Border,
E1-1A; 12.000" Radius, 3.000" Border



E1-5P; 9.000" Radius, 2.000" Border,
E1-1A; 12.000" Radius, 3.000" Border

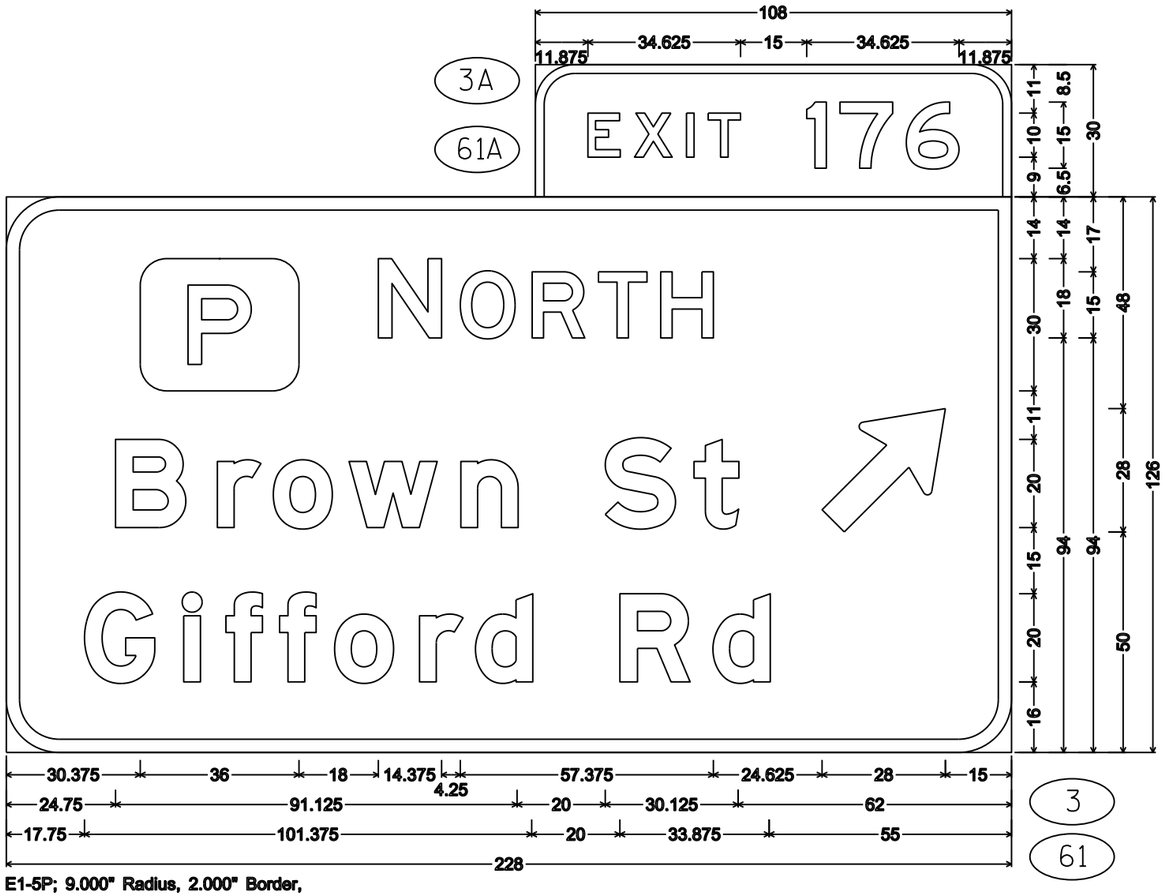
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7

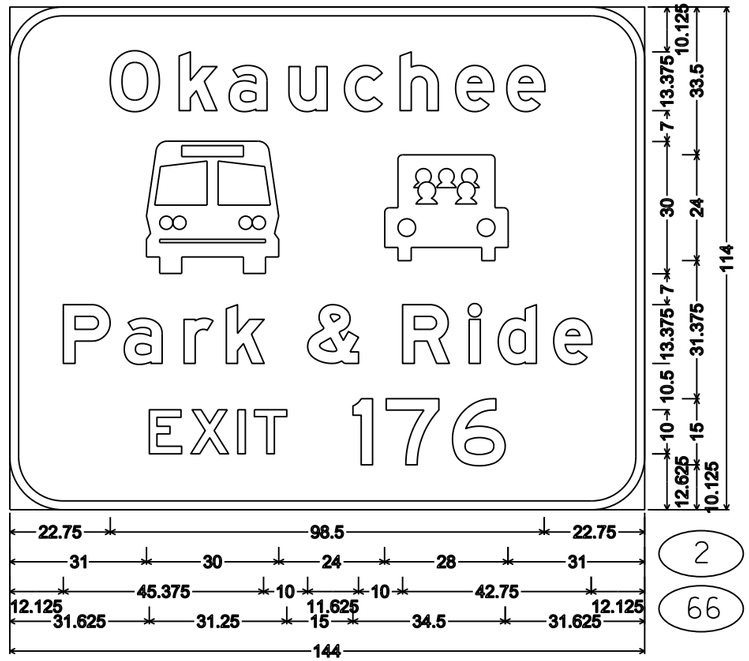
PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PERMANENT SIGNING	SHEET NO: 437	E

NOTES

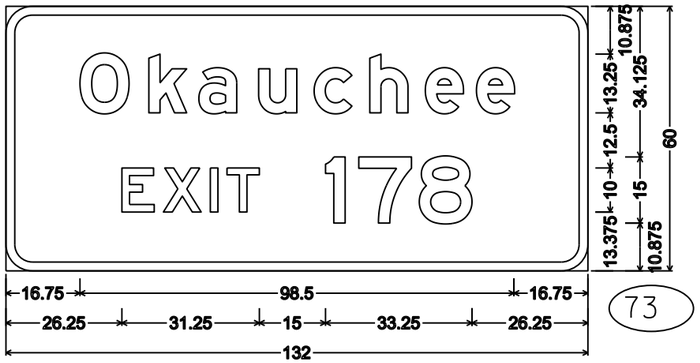
1. All Signs Type I - Type SH Reflective
2. Color:
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3. Message Series - E Modified except all CAP words Series E



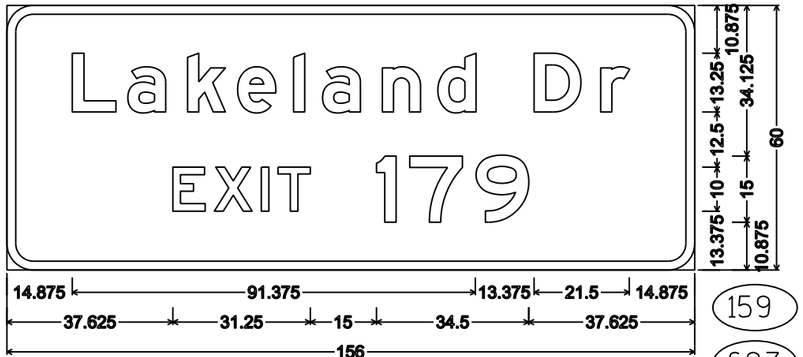
E1-5P; 9.000" Radius, 2.000" Border,
E4-1A; 12.000" Radius, 3.000" Border



D4-3; 12.000" Radius, 2.000" Border



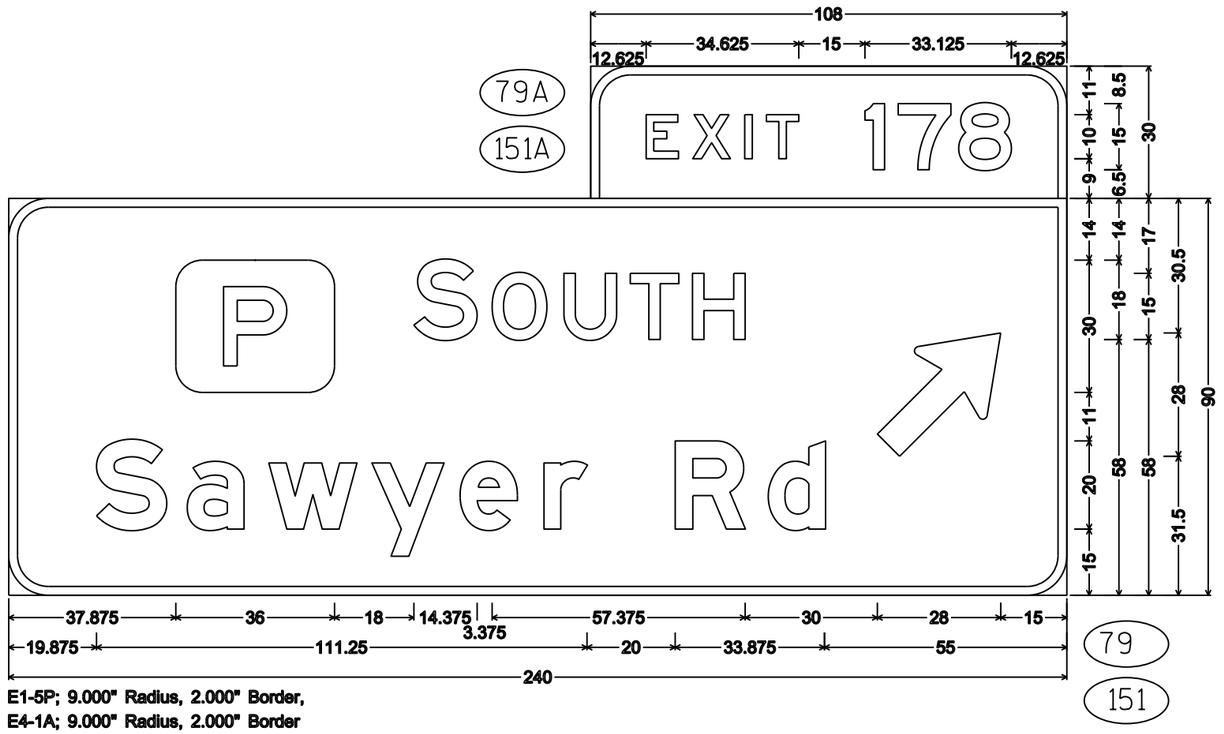
E3-1; 6.000" Radius, 2.000" Border



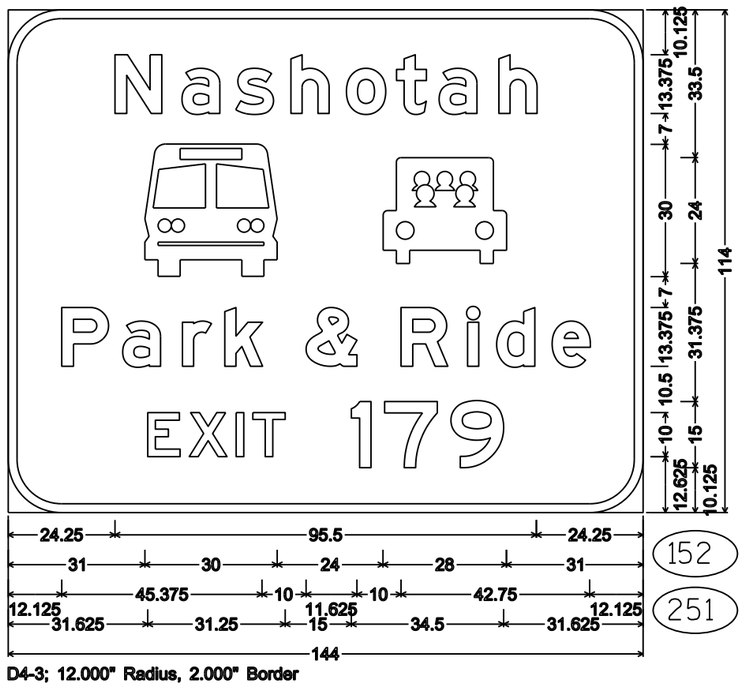
E3-1; 6.000" Radius, 2.000" Border

NOTES

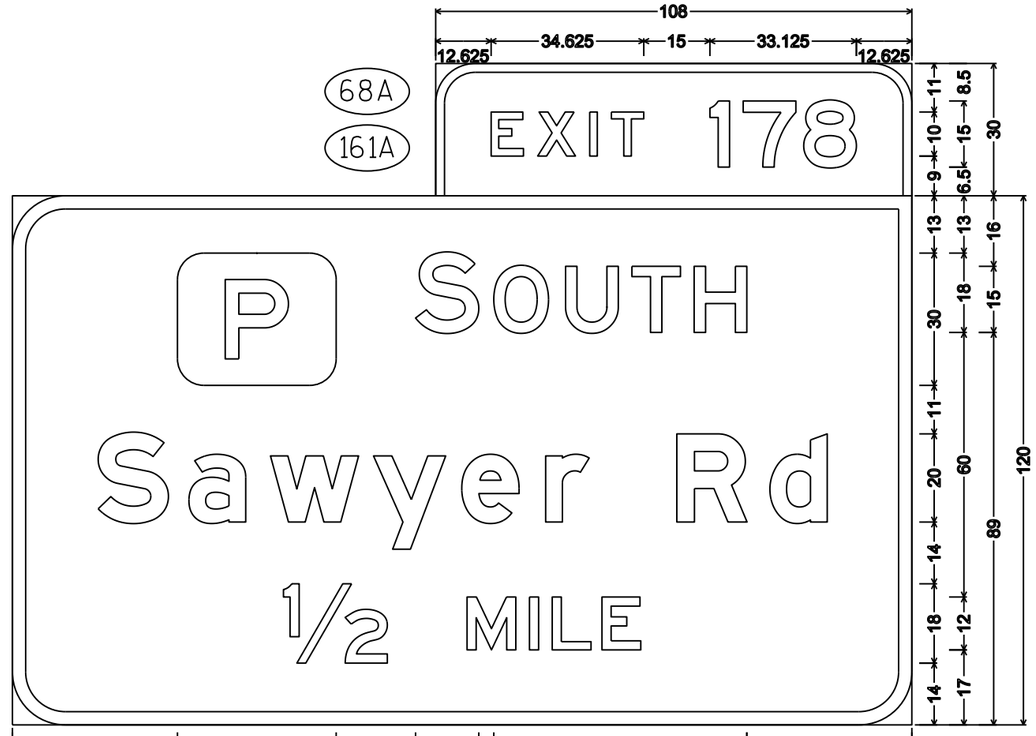
1. All Signs Type I - Type SH Reflective
2. Color:
   Background - Green
   Message - White
3. Message Series - E Modified except all CAP words Series E



E1-5P; 9.000" Radius, 2.000" Border,
E4-1A; 9.000" Radius, 2.000" Border



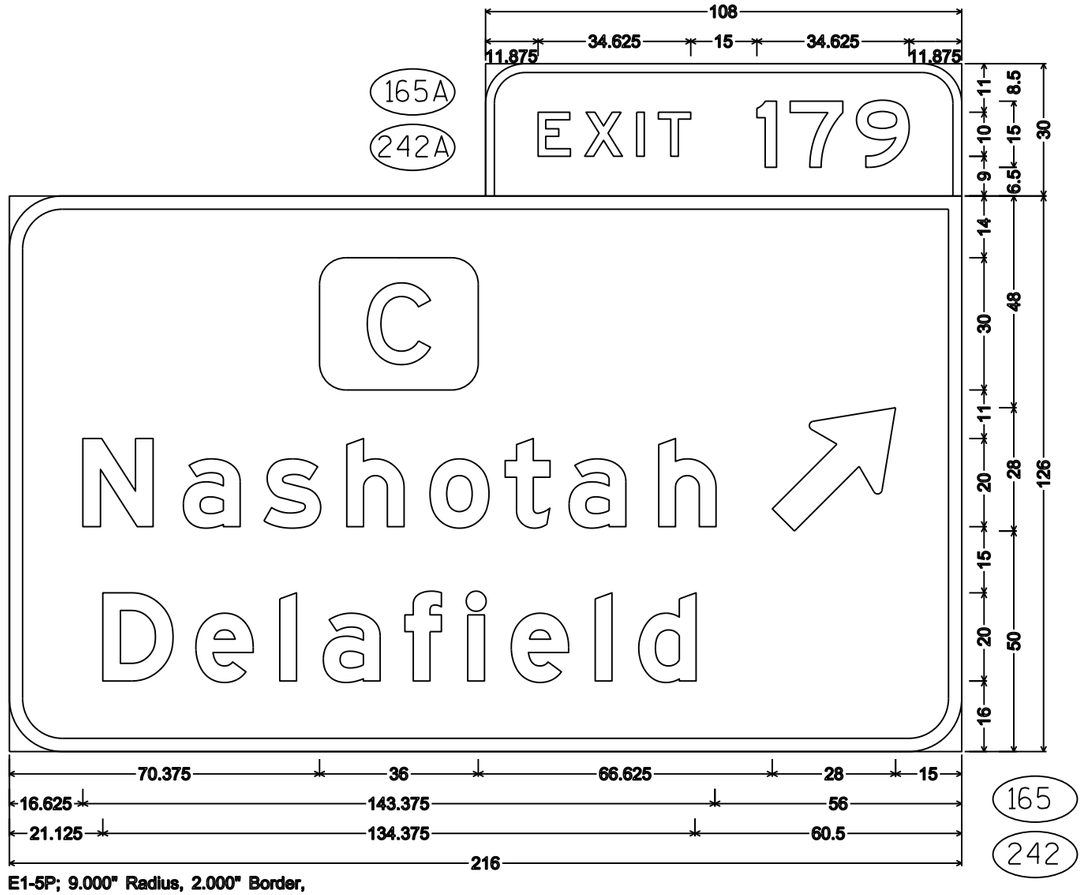
D4-3; 12.000" Radius, 2.000" Border



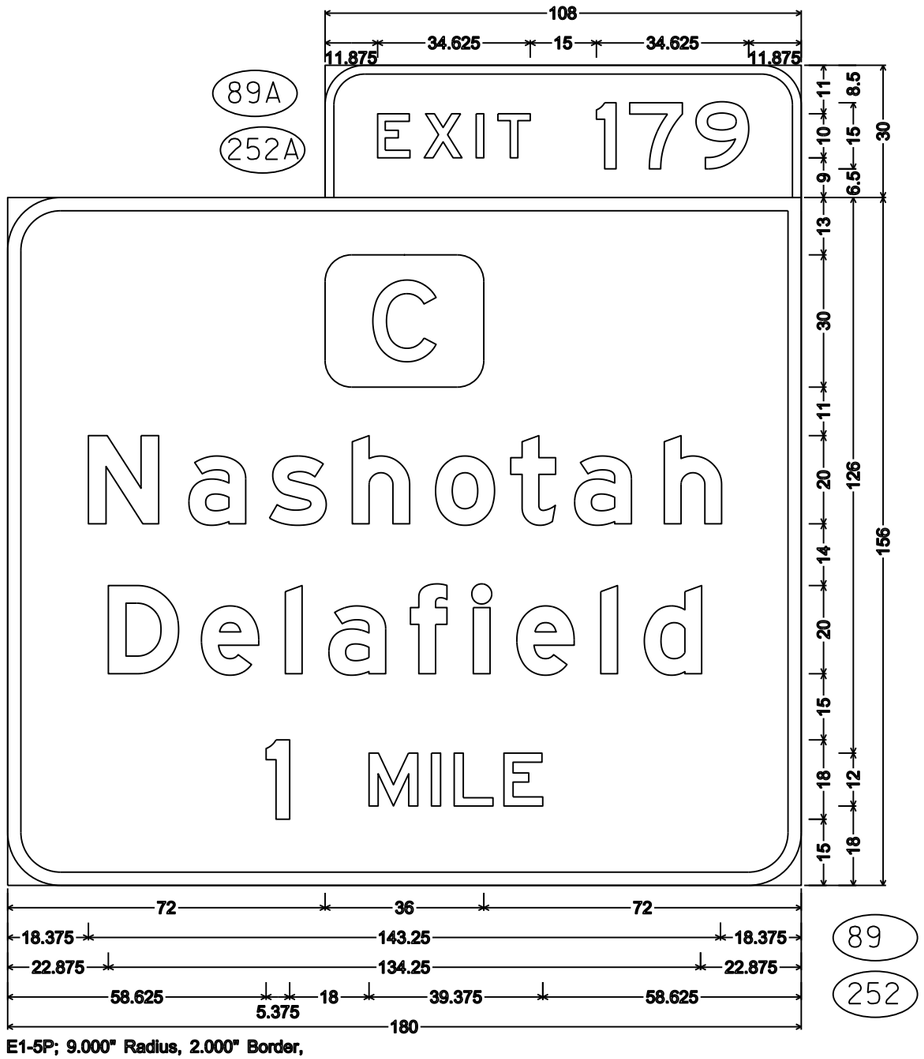
E1-5P; 9.000" Radius, 2.000" Border,
E1-1A; 12.000" Radius, 3.000" Border

NOTES

1. All Signs Type I - Type SH Reflective
2. Color:
   Background - Green
   Message - White
3. Message Series - E Modified except all CAP words Series E



E1-5P; 9.000" Radius, 2.000" Border,
E4-1A; 12.000" Radius, 3.000" Border



E1-5P; 9.000" Radius, 2.000" Border,
E1-1A; 12.000" Radius, 3.000" Border

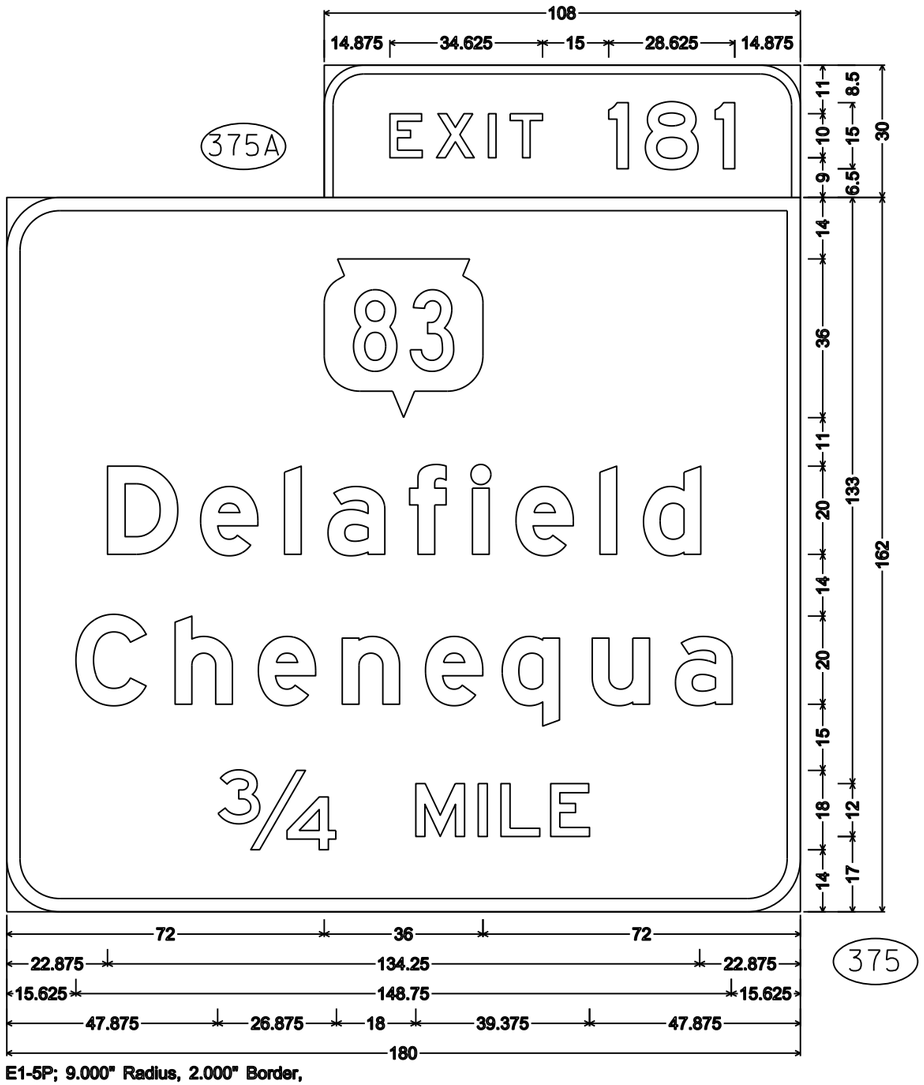
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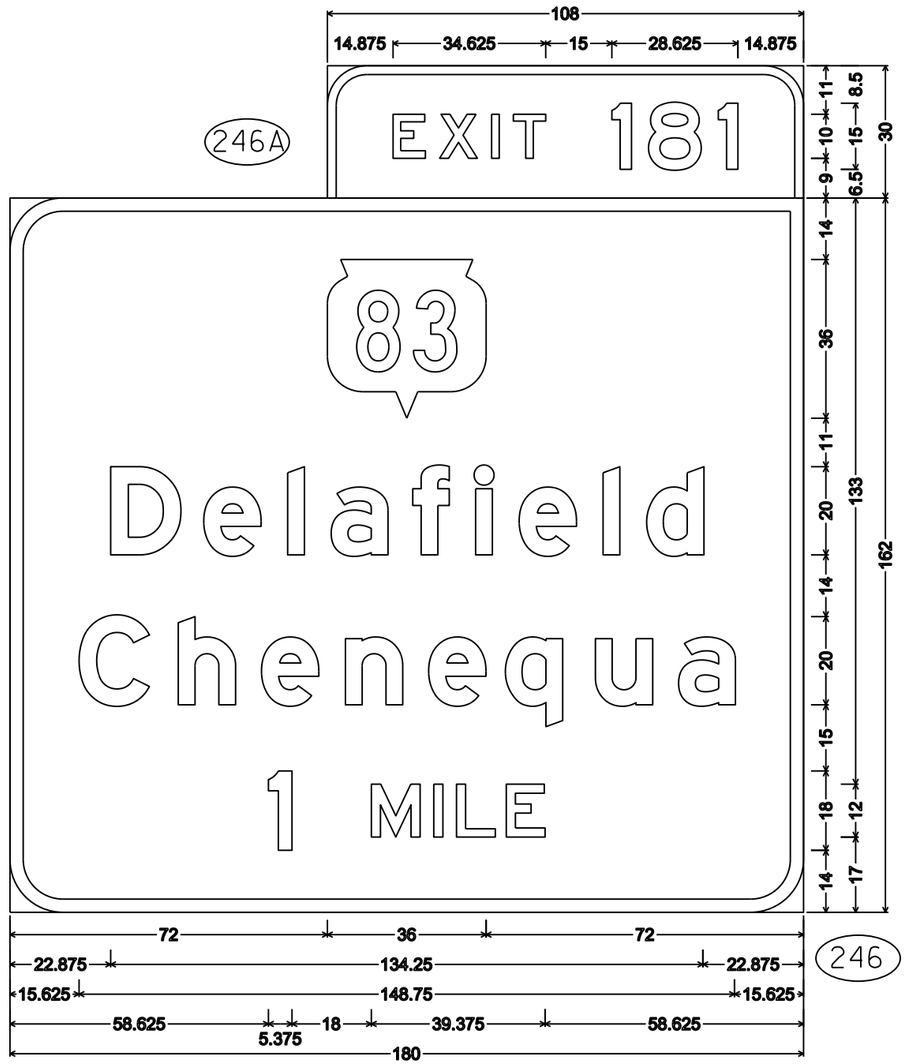
PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PERMANENT SIGNING	SHEET NO: 440	E

NOTES

1. All Signs Type I - Type SH Reflective
2. Color:
   Background - Green
   Message - White
3. Message Series - E Modified except all CAP words Series E



E1-5P; 9.000" Radius, 2.000" Border,
E1-1A; 12.000" Radius, 3.000" Border



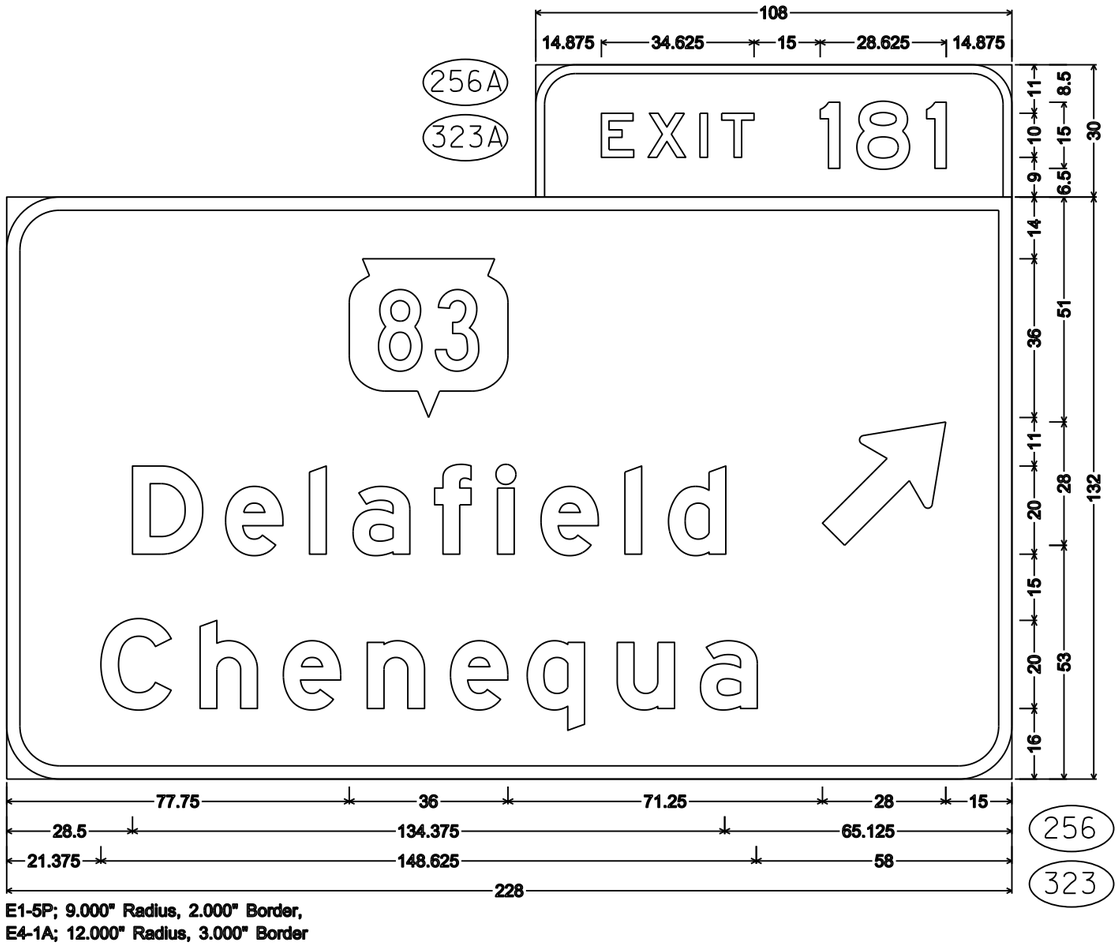
E1-5P; 9.000" Radius, 2.000" Border,
E1-1A; 12.000" Radius, 3.000" Border

7

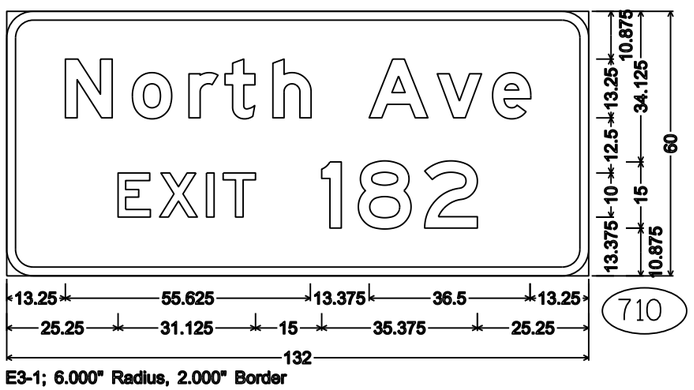
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NOTES

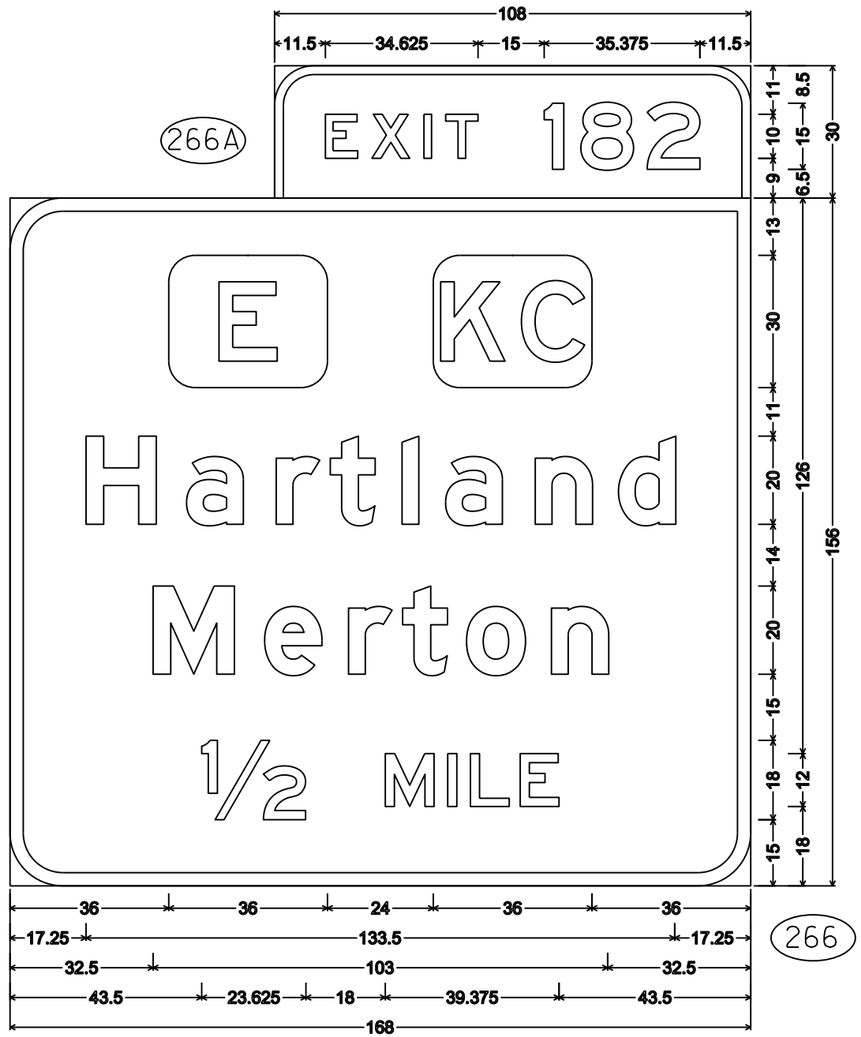
1. All Signs Type I - Type SH Reflective
2. Color:
   Background - Green
   Message - White
3. Message Series - E Modified except all CAP words Series E



E1-5P; 9.000" Radius, 2.000" Border,
E4-1A; 12.000" Radius, 3.000" Border



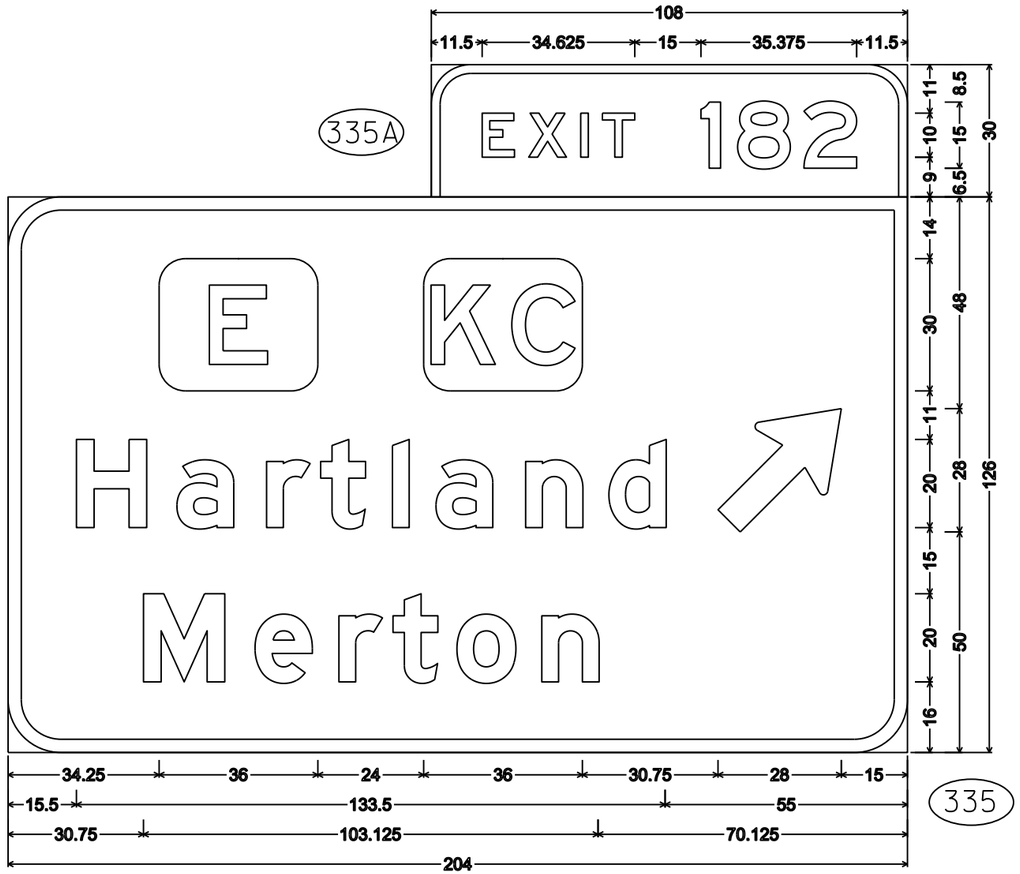
E3-1; 6.000" Radius, 2.000" Border



E1-5P; 9.000" Radius, 2.000" Border,
E1-1A; 12.000" Radius, 3.000" Border

7

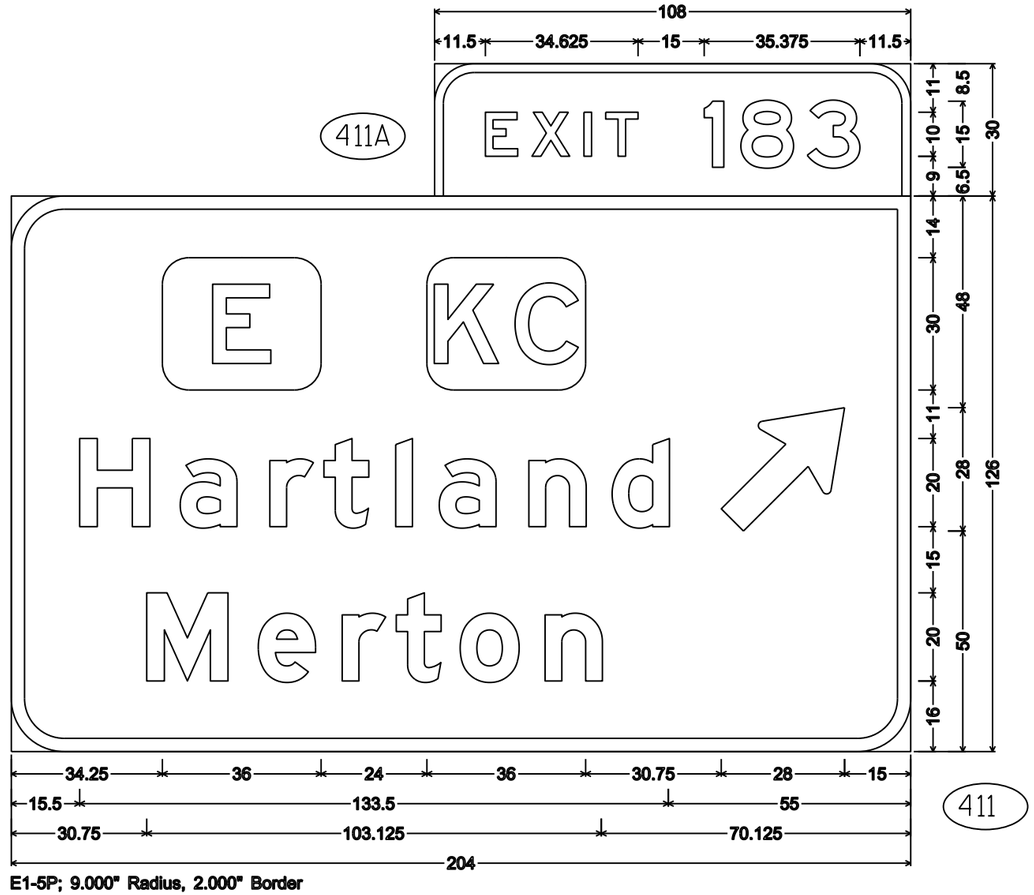
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E1-5P; 9.000" Radius, 2.000" Border,
E4-1A; 12.000" Radius, 3.000" Border

NOTES

1. All Signs Type I - Type SH Reflective
2. Color:
   Background - Green
   Message - White
3. Message Series - E Modified except all CAP words Series E



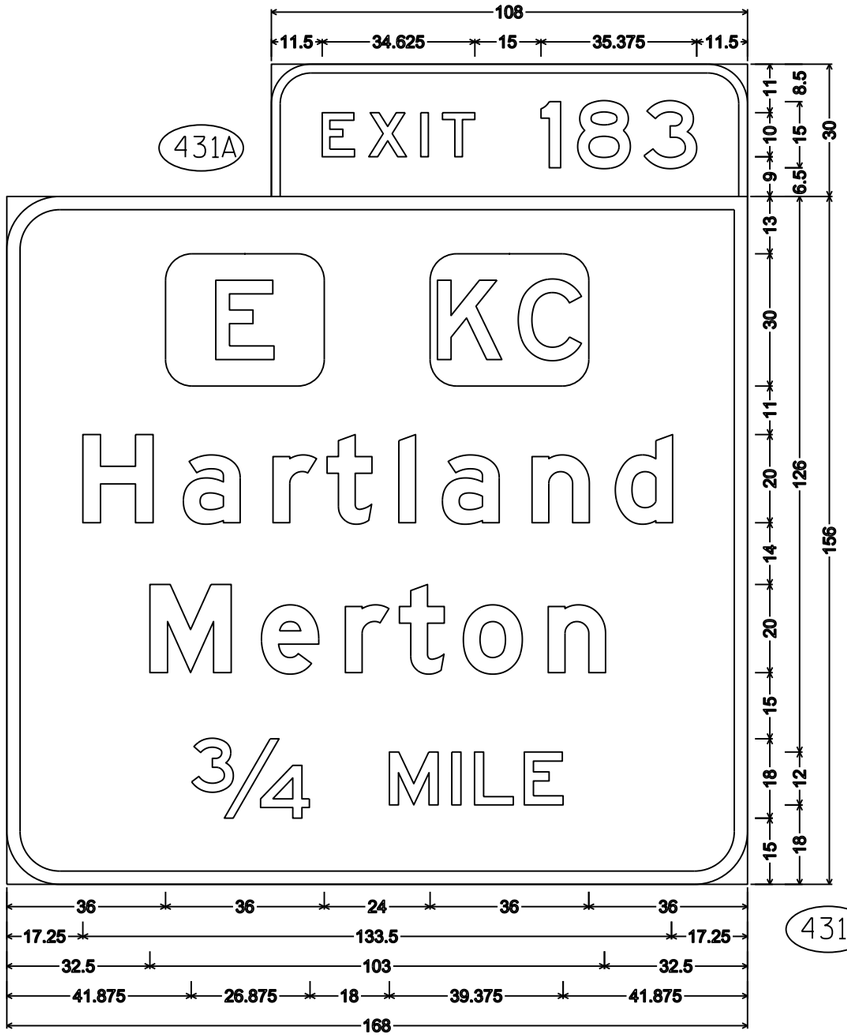
E1-5P; 9.000" Radius, 2.000" Border
E4-1A; 12.000" Radius, 3.000" Border

7

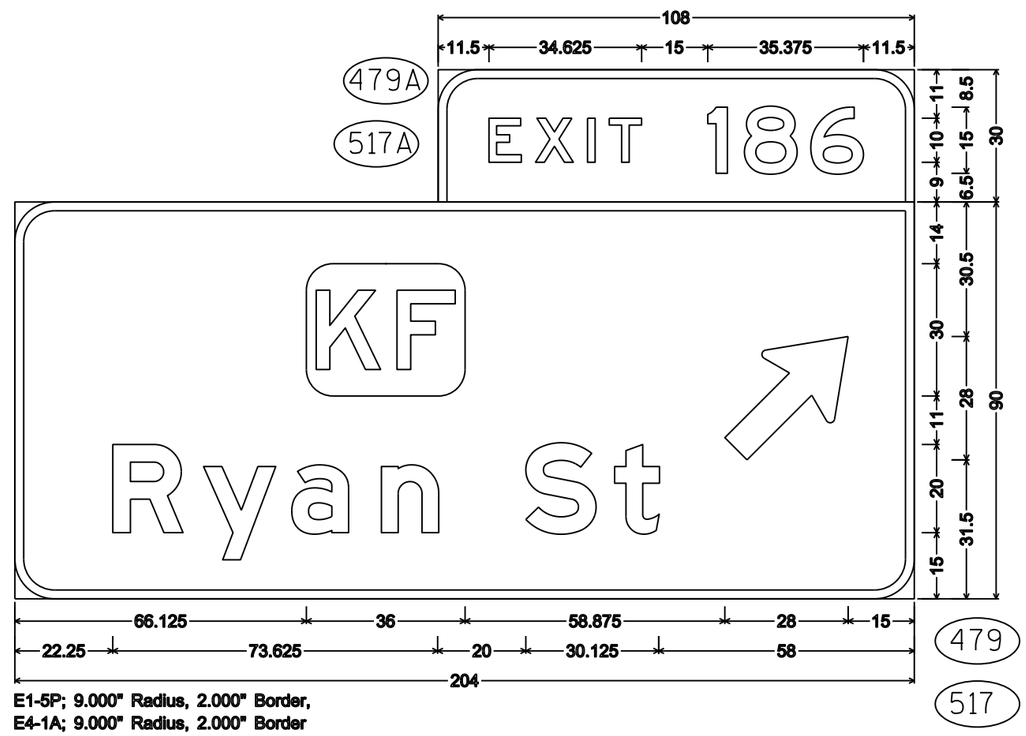
7

NOTES

1. All Signs Type I - Type SH Reflective
2. Color:
   Background - Green
   Message - White
3. Message Series - E Modified except all CAP words Series E



E1-5P; 9.000" Radius, 2.000" Border
E1-1A; 12.000" Radius, 3.000" Border



E1-5P; 9.000" Radius, 2.000" Border,
E4-1A; 9.000" Radius, 2.000" Border

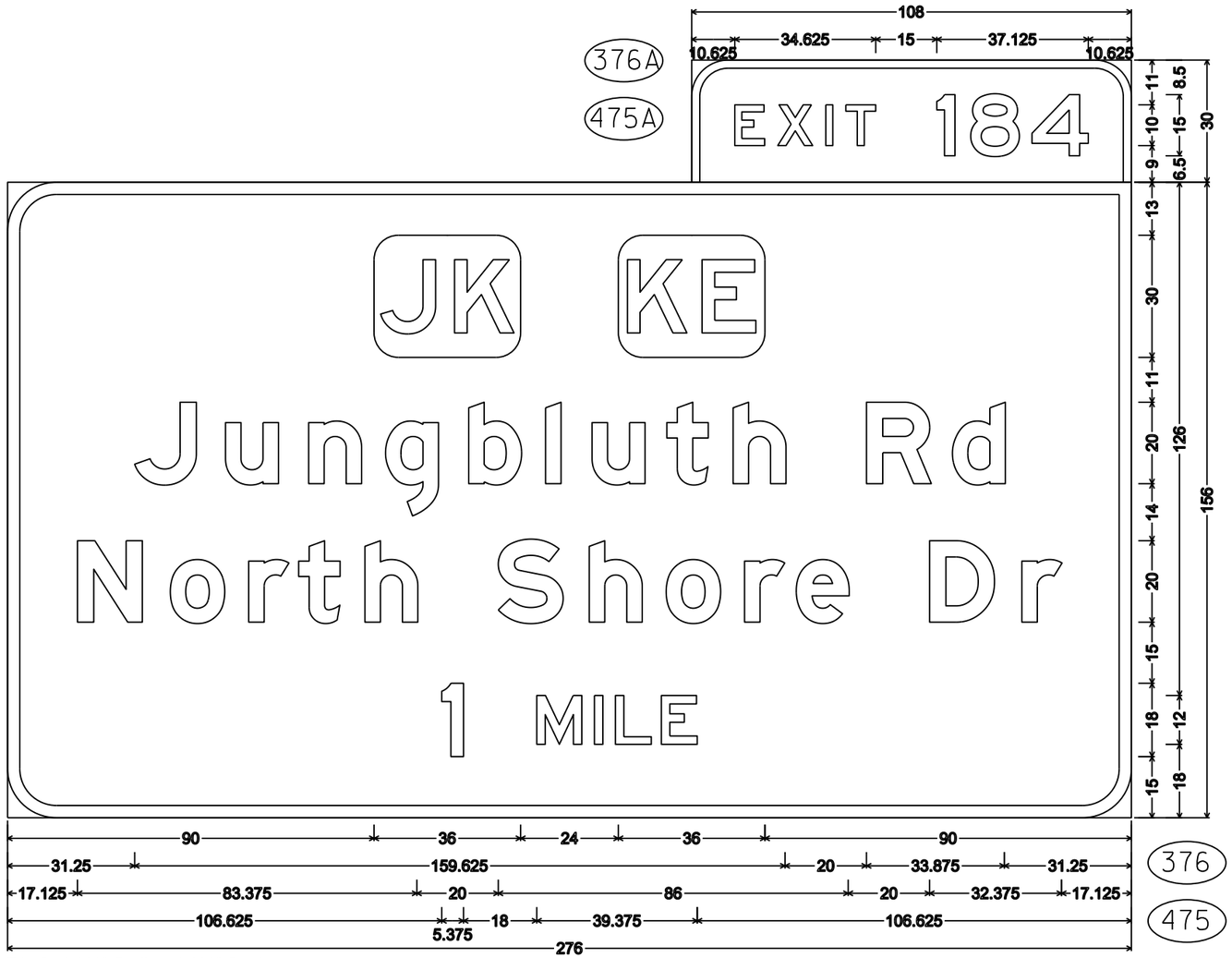
7

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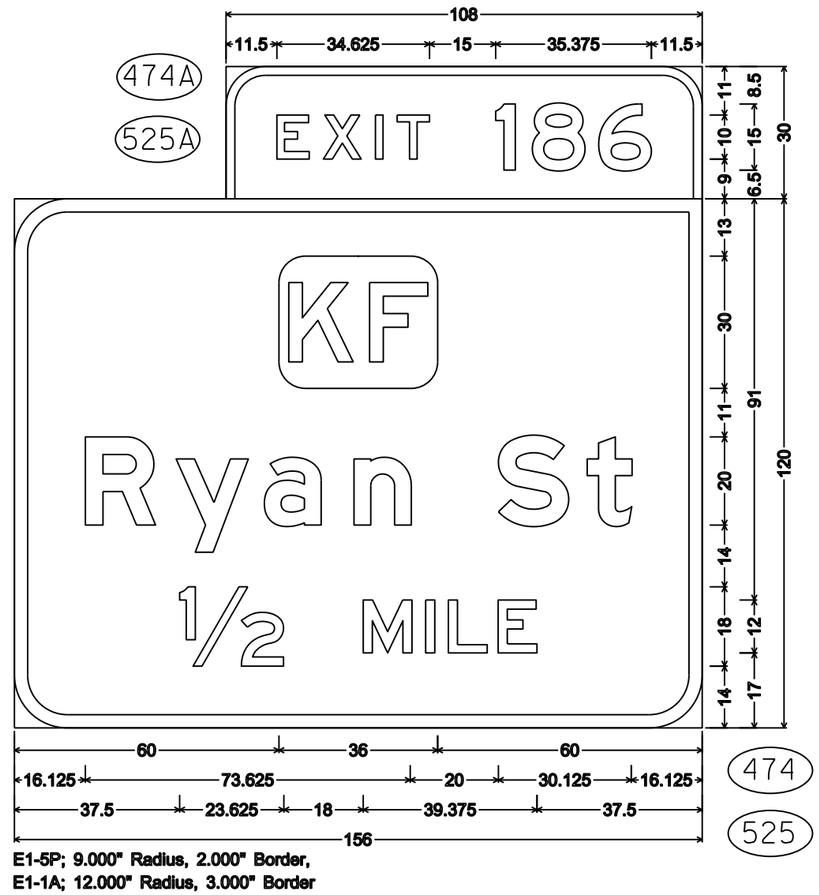
PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PERMANENT SIGNING	SHEET NO: 444	E

NOTES

1. All Signs Type I - Type SH Reflective
2. Color:
   Background - Green
   Message - White
3. Message Series - E Modified except all CAP words Series E



E1-5P; 9.000" Radius, 2.000" Border,
E1-1A; 12.000" Radius, 3.000" Border



E1-5P; 9.000" Radius, 2.000" Border,
E1-1A; 12.000" Radius, 3.000" Border

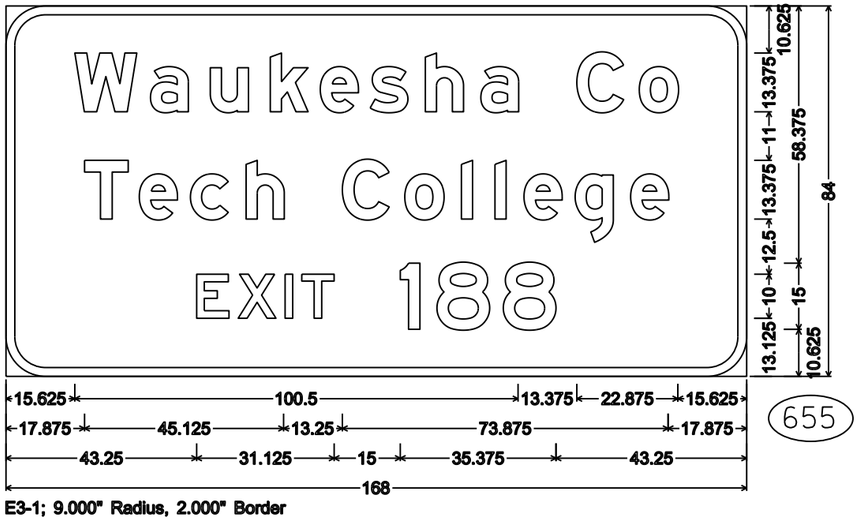
7

7

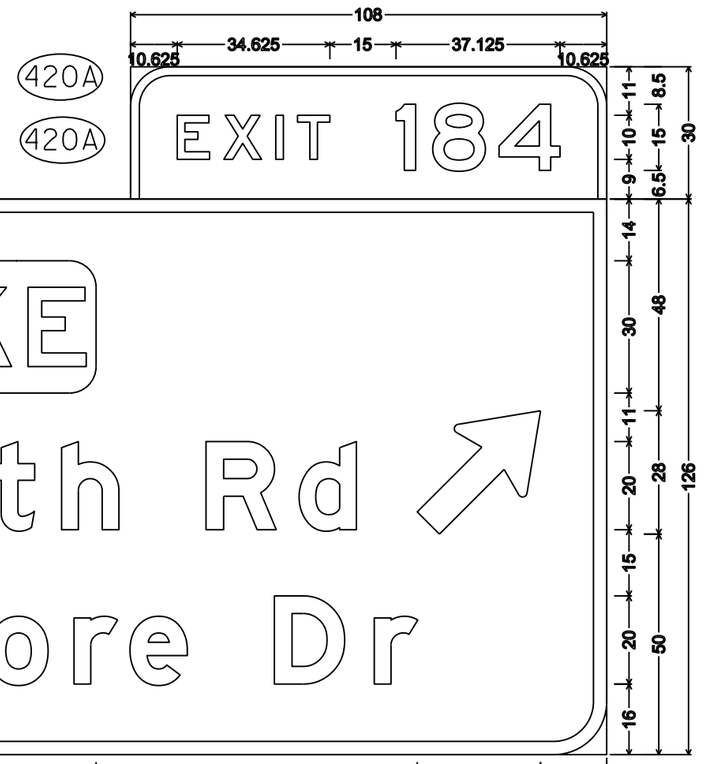
PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PERMANENT SIGNING	SHEET NO: 445	E

NOTES

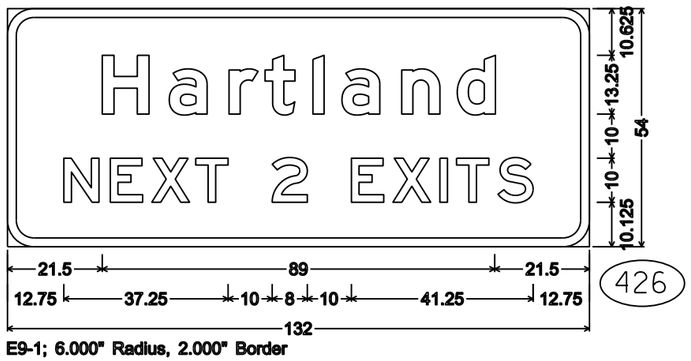
1. All Signs Type I - Type SH Reflective
2. Color:
   Background - Green
   Message - White
3. Message Series - E Modified except all CAP words Series E
4. EXIT ONLY Panel on Yellow Type F Reflective Sheeting with Black Non-Reflective Message



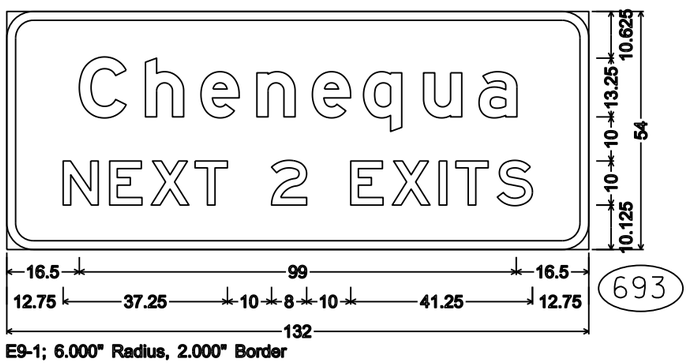
E3-1; 9.000" Radius, 2.000" Border



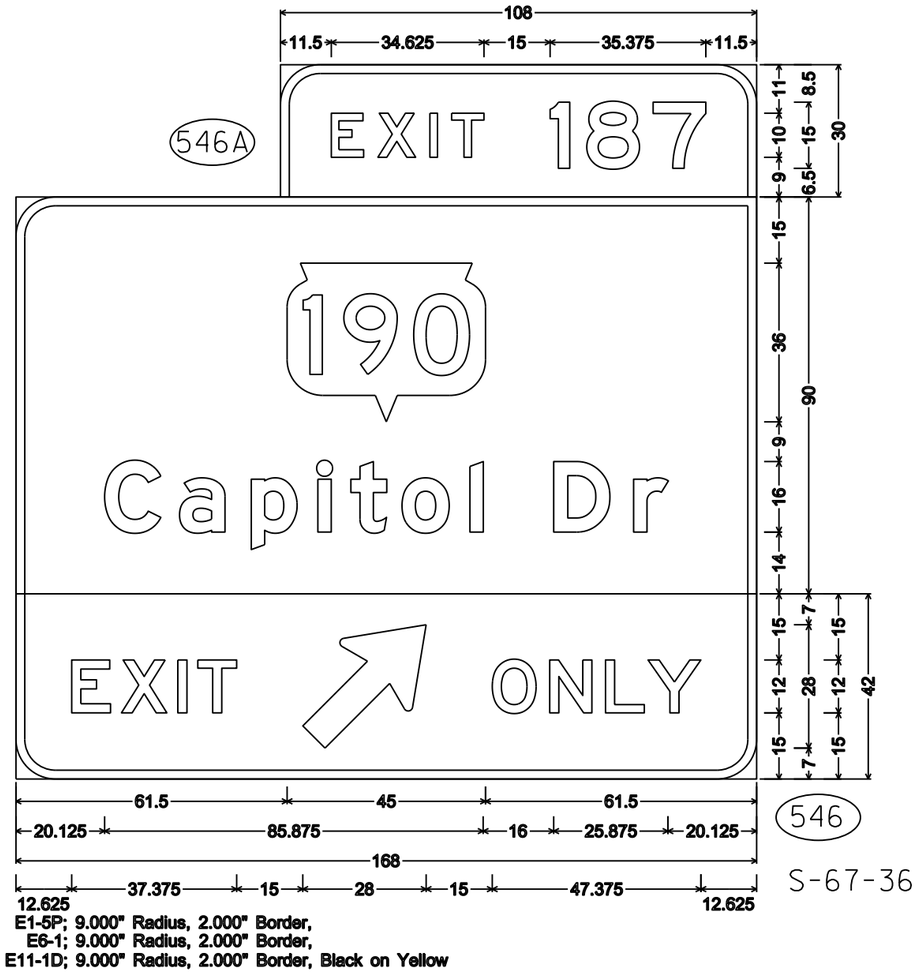
E1-5P; 9.000" Radius, 2.000" Border,
E4-1A; 12.000" Radius, 3.000" Border



E9-1; 6.000" Radius, 2.000" Border



E9-1; 6.000" Radius, 2.000" Border

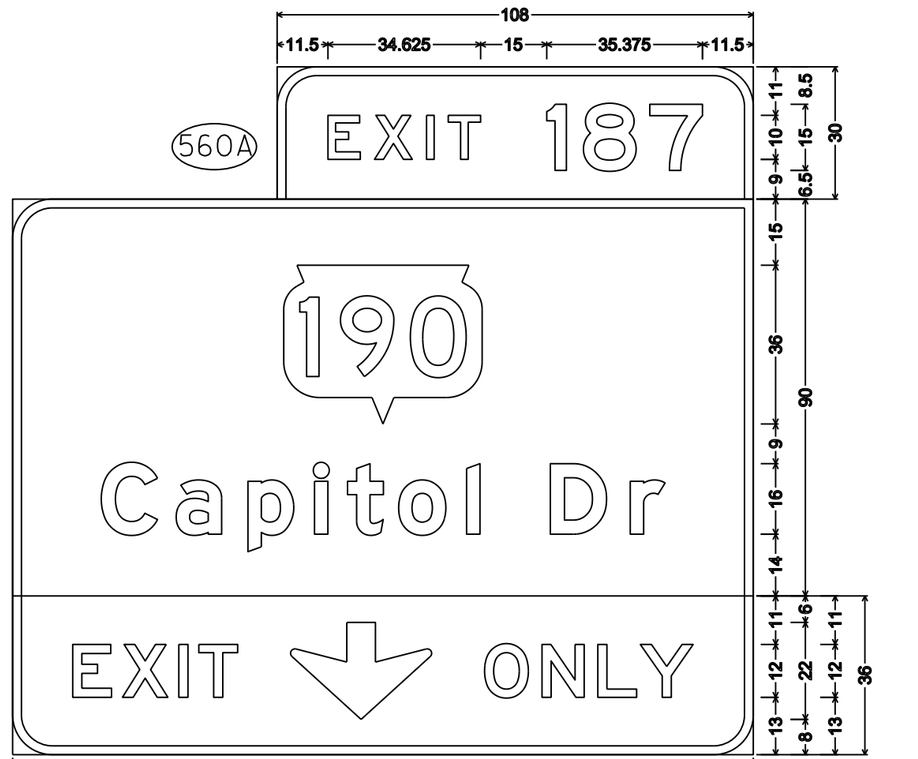


S-67-36

E1-5P; 9.000" Radius, 2.000" Border,
E6-1; 9.000" Radius, 2.000" Border,
E11-1D; 9.000" Radius, 2.000" Border, Black on Yellow

NOTES

1. All Signs Type I - Type SH Reflective
2. Color:
   Background - Green
   Message - White
3. Message Series - E Modified except all CAP words Series E
4. EXIT ONLY Panel on Yellow Type F Reflective Sheeting with Black Non-Reflective Message



S-67-35

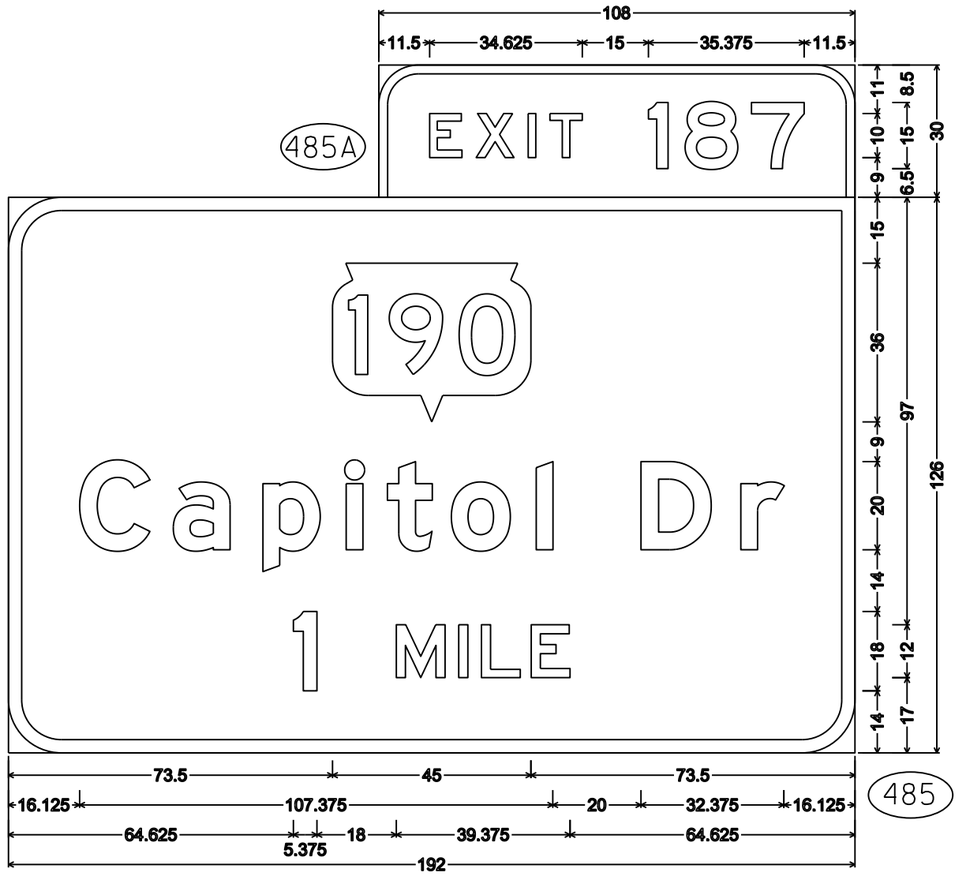
E1-5P; 9.000" Radius, 2.000" Border,
E6-1; 9.000" Radius, 2.000" Border,
E11-1; 9.000" Radius, 2.000" Border, Black on Yellow

7

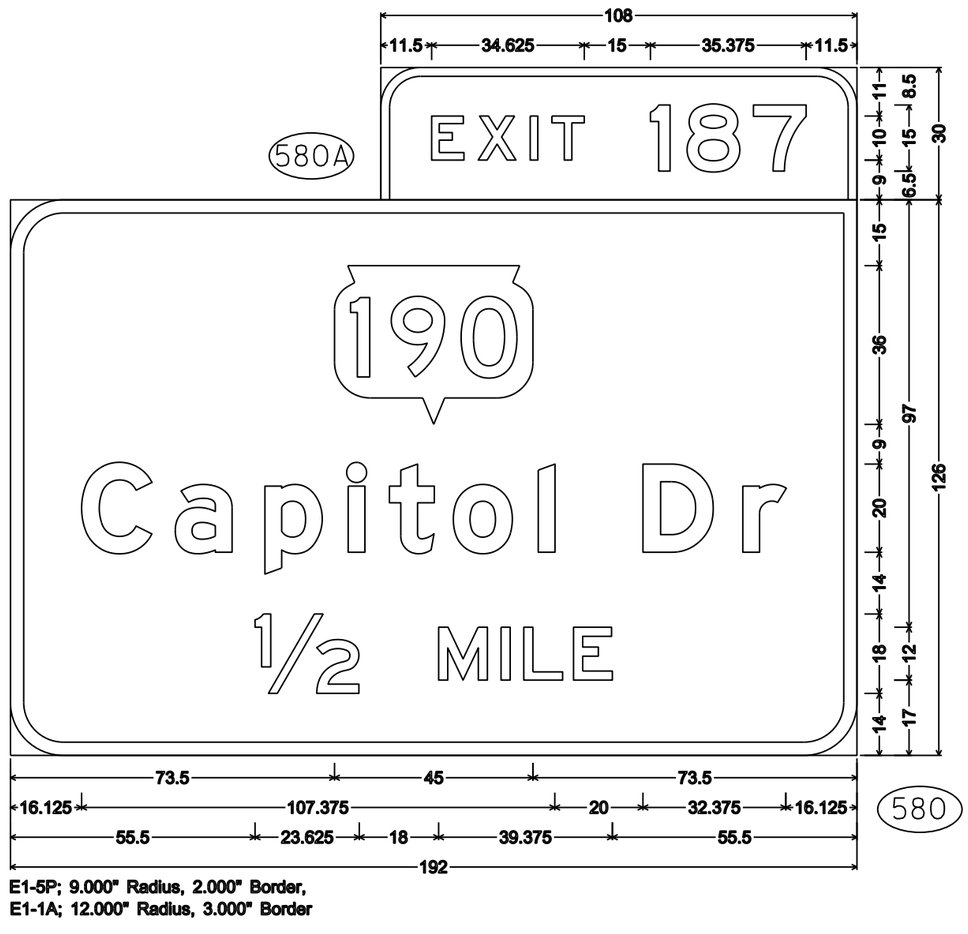
7

NOTES

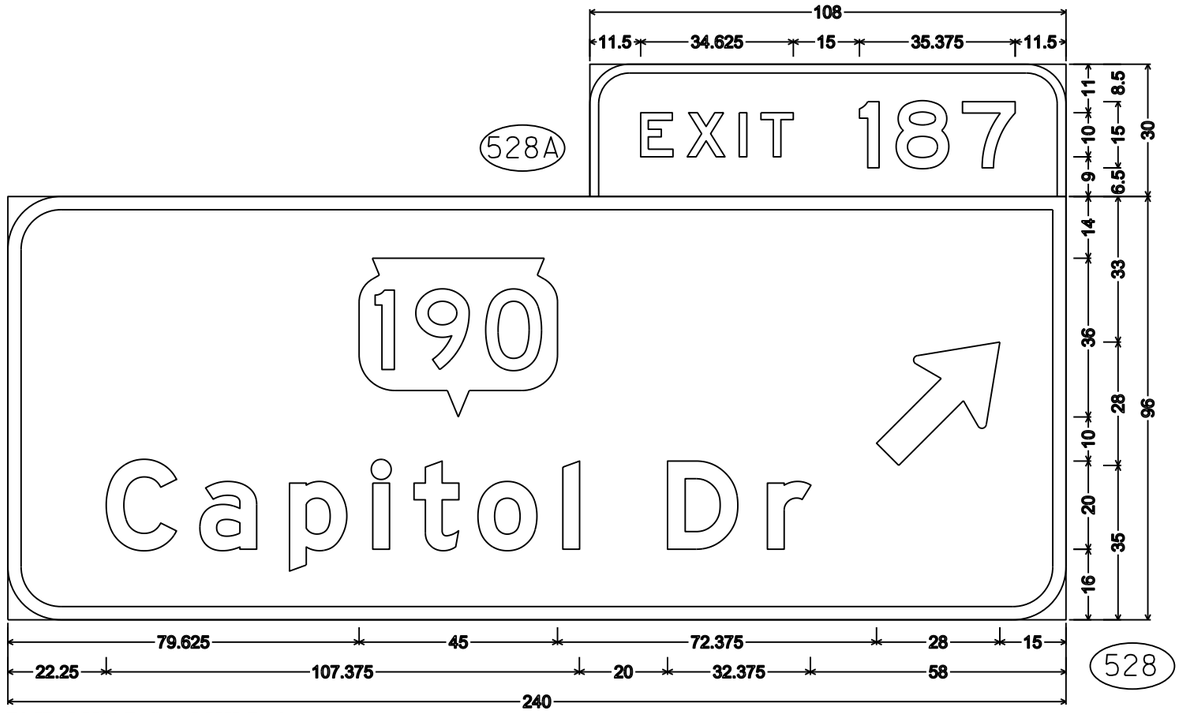
1. All Signs Type I - Type SH Reflective
2. Color:
   Background - Green
   Message - White
3. Message Series - E Modified except all CAP words Series E



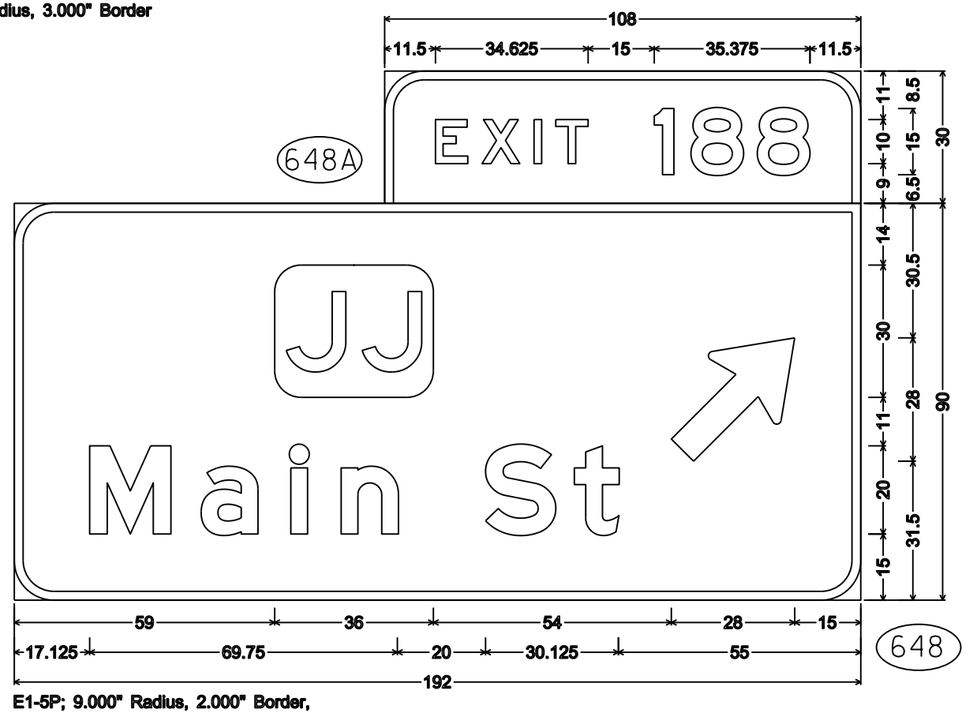
E1-5P; 9.000" Radius, 2.000" Border,
E1-1A; 12.000" Radius, 3.000" Border



E1-5P; 9.000" Radius, 2.000" Border,
E1-1A; 12.000" Radius, 3.000" Border



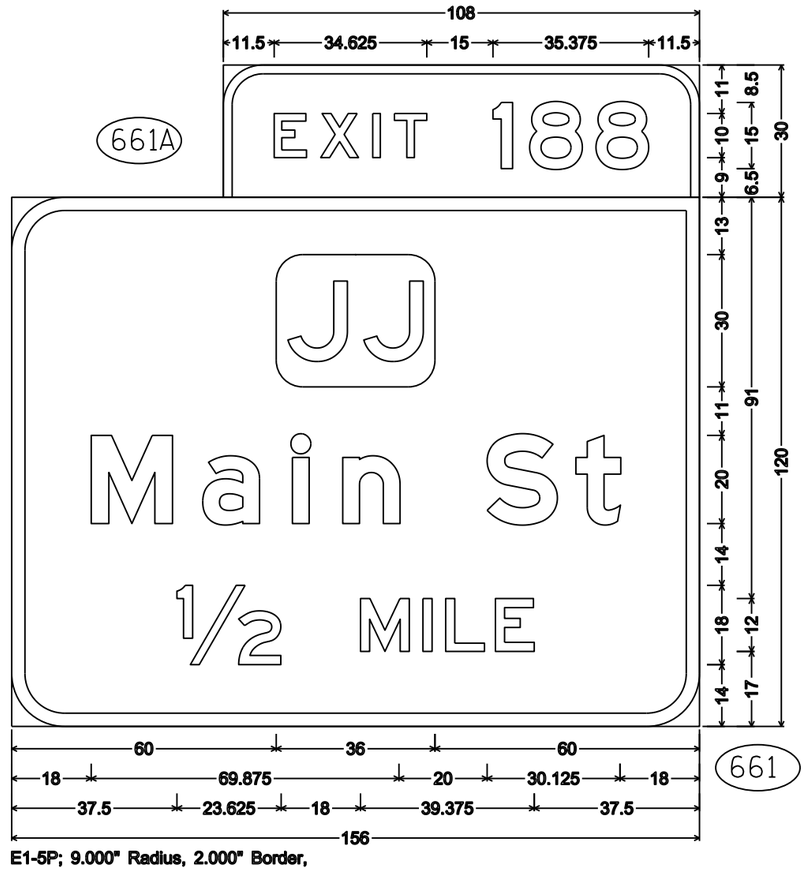
E1-5P; 9.000" Radius, 2.000" Border,
E4-1A; 12.000" Radius, 3.000" Border



E1-5P; 9.000" Radius, 2.000" Border,
E4-1A; 9.000" Radius, 2.000" Border

NOTES

1. All Signs Type I - Type SH Reflective
2. Color:
   Background - Green
   Message - White
3. Message Series - E Modified except all CAP words Series E

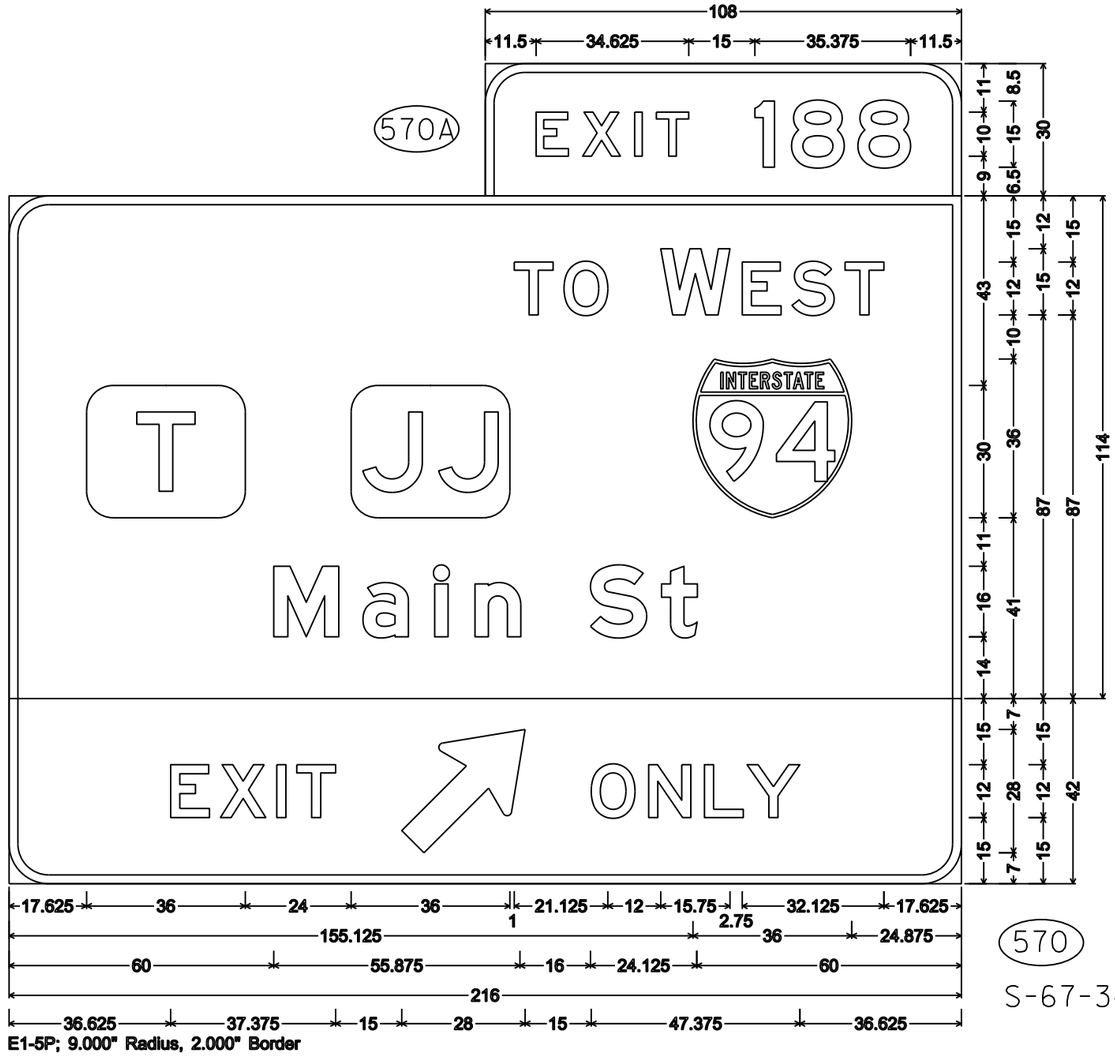


E1-5P; 9.000" Radius, 2.000" Border,
E1-1A; 12.000" Radius, 3.000" Border

7

7

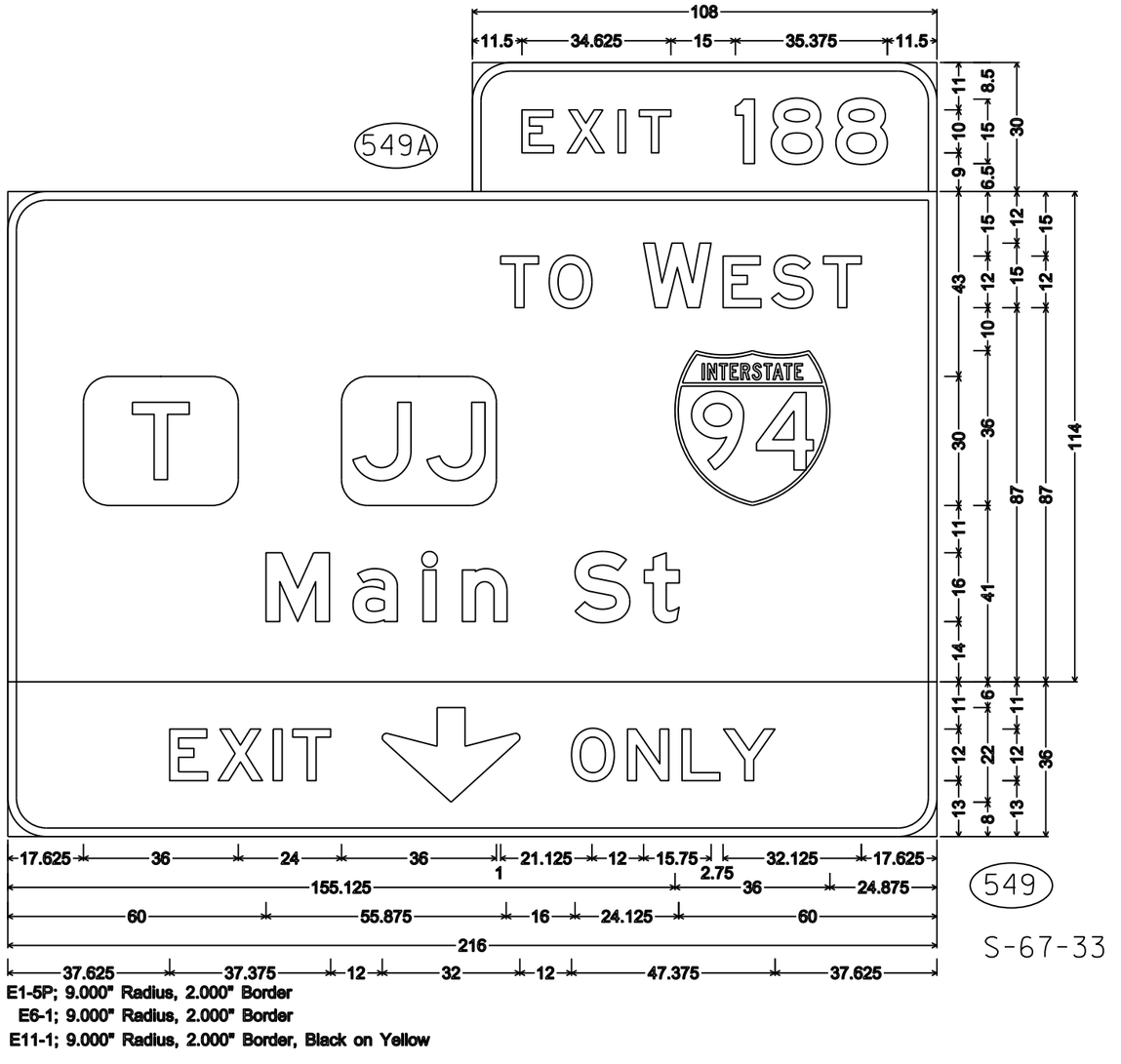
PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PERMANENT SIGNING	SHEET NO: 449	E



E1-5P; 9.000" Radius, 2.000" Border
E6-1; 9.000" Radius, 2.000" Border
E11-1D; 9.000" Radius, 2.000" Border, Black on Yellow

NOTES

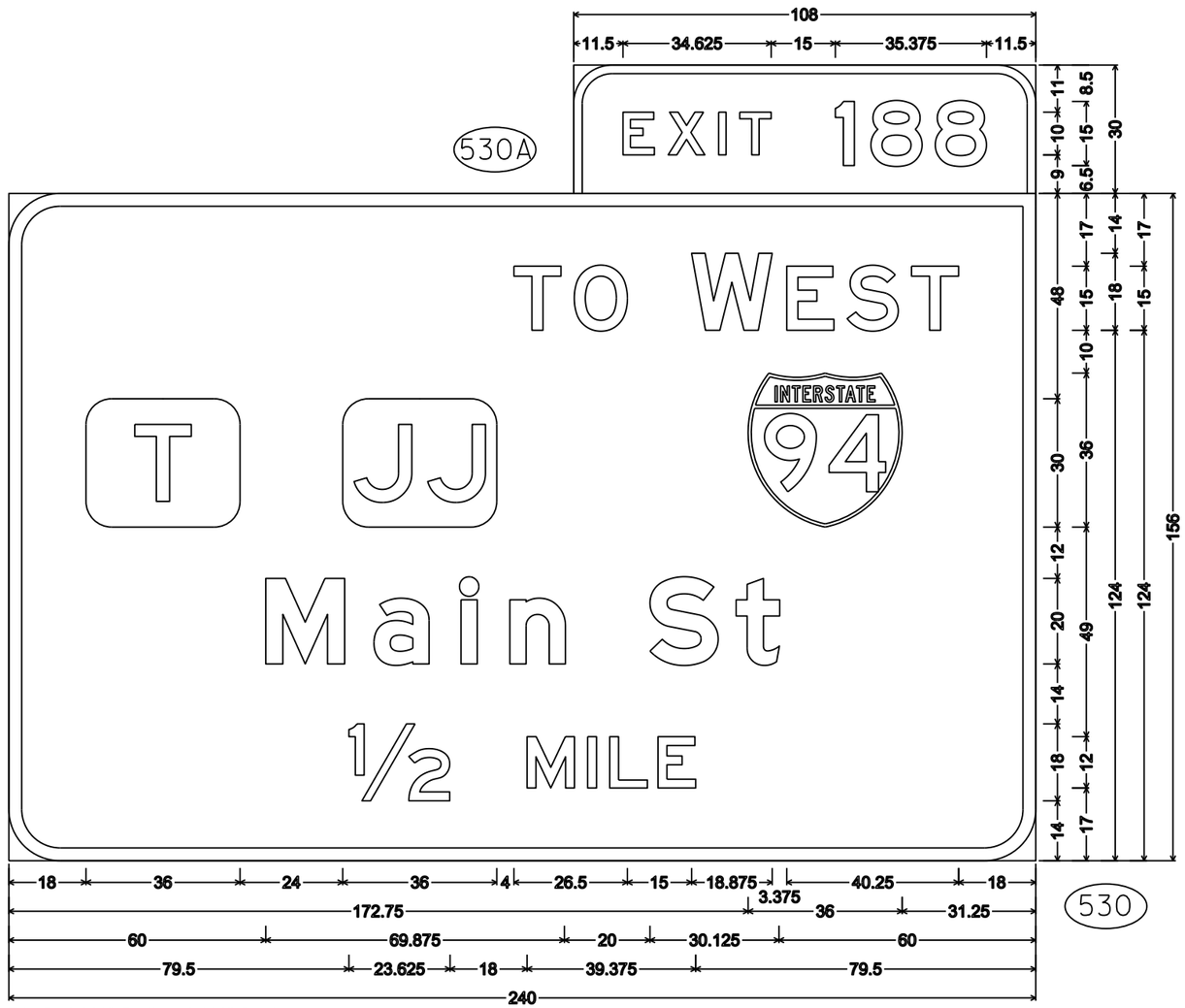
1. All Signs Type I - Type SH Reflective
2. Color:
   Background - Green
   Message - White
3. Message Series - E Modified except all CAP words Series E
4. EXIT ONLY Panel on Yellow Type F Reflective Sheeting with Black Non-Reflective Message



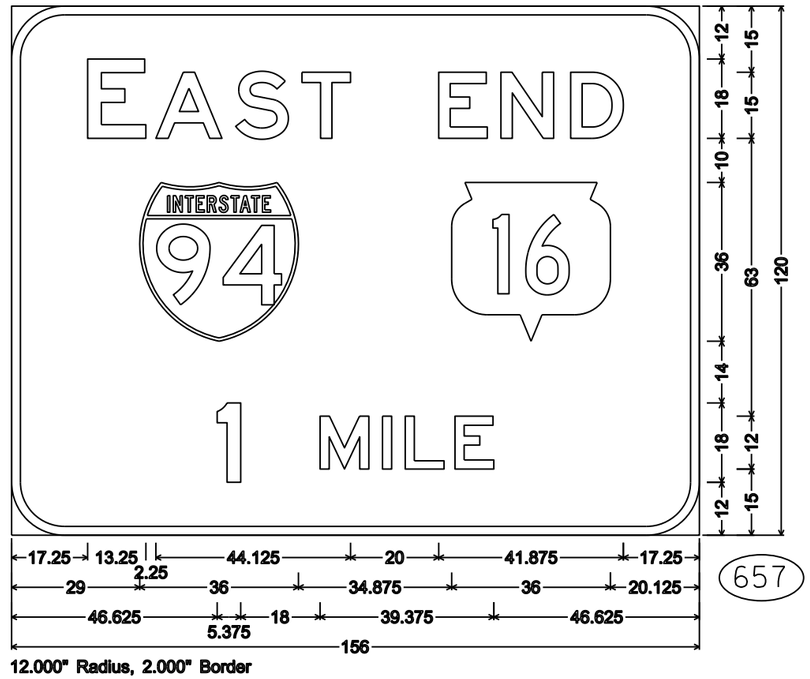
E1-5P; 9.000" Radius, 2.000" Border
E6-1; 9.000" Radius, 2.000" Border
E11-1; 9.000" Radius, 2.000" Border, Black on Yellow

NOTES

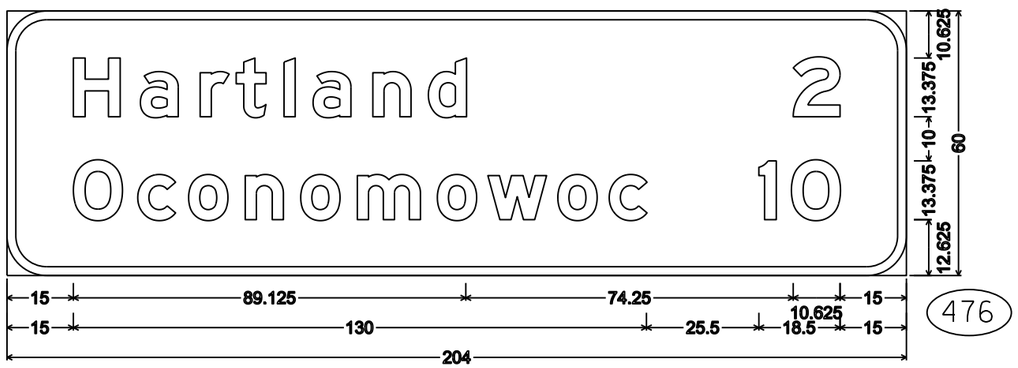
1. All Signs Type I - Type SH Reflective
2. Color:
   Background - Green
   Message - White
3. Message Series - E Modified except all CAP words Series E



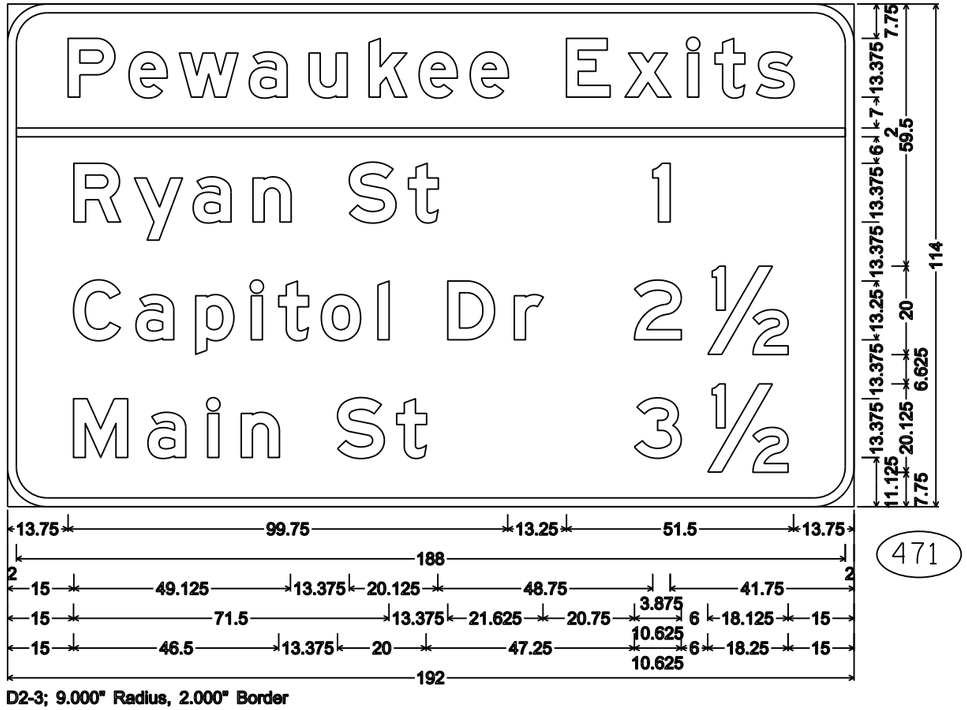
E1-5P; 9.000" Radius, 2.000" Border
E1-1A; 12.000" Radius, 3.000" Border



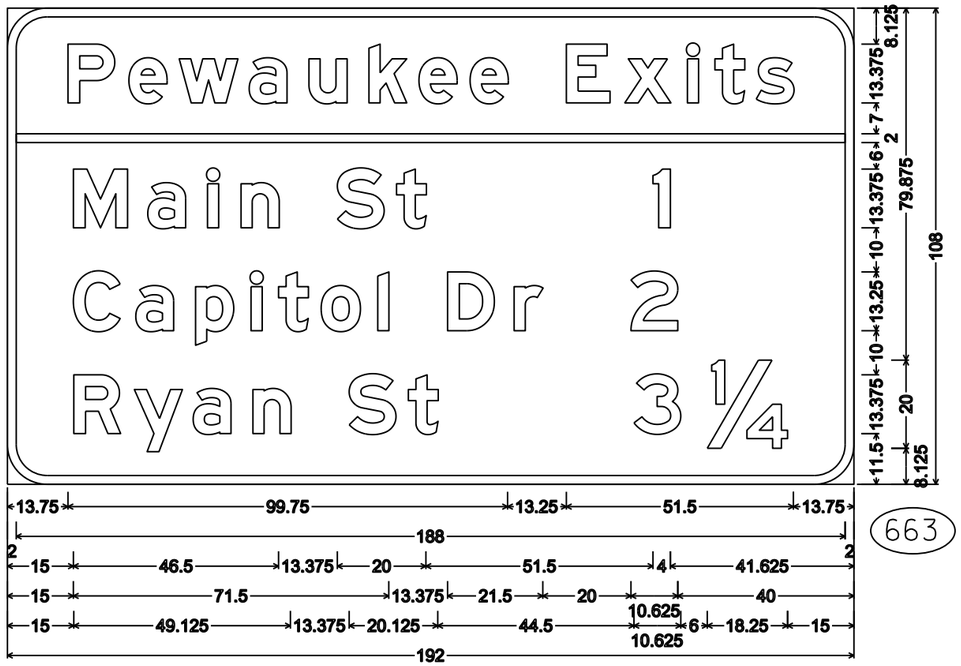
12.000" Radius, 2.000" Border



D2-2; 9.000" Radius, 2.000" Border



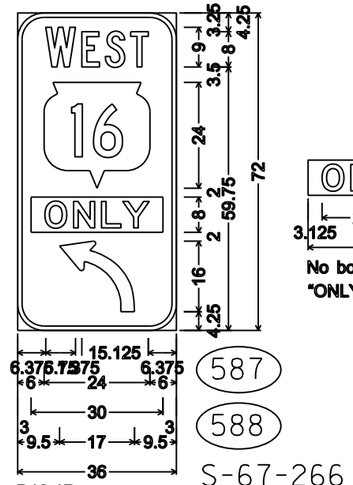
D2-3; 9.000" Radius, 2.000" Border



D2-3; 9.000" Radius, 2.000" Border

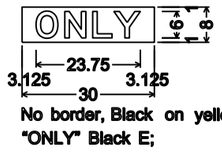
NOTES

1. All Signs Type I - Type SH Reflective
2. Color:
   Background - Green
   Message - White
3. Message Series - E Modified except all CAP words Series E
4. ONLY Panel on Yellow Type F Reflective Sheeting with Black Non-Reflective Message

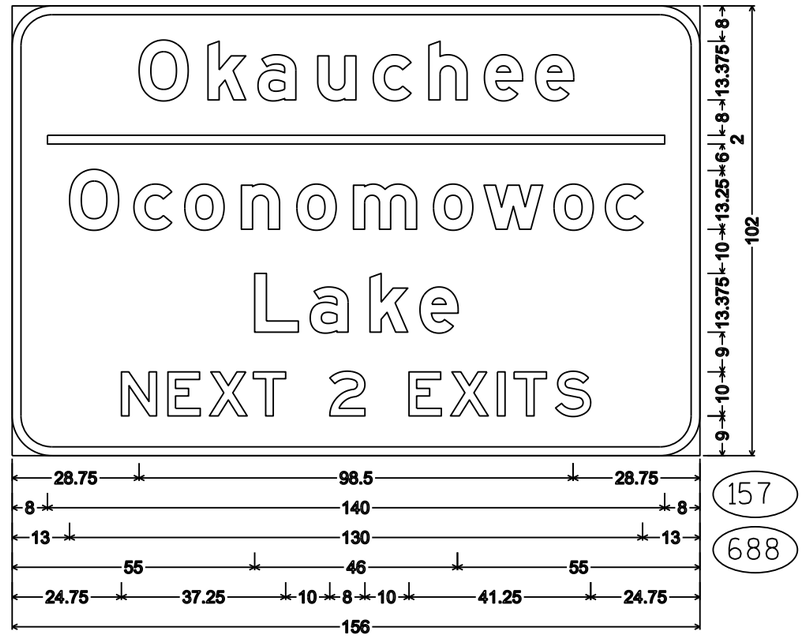


D16-1R;
6.000" Radius, 1.000" Border,
"WEST" C

S-67-266



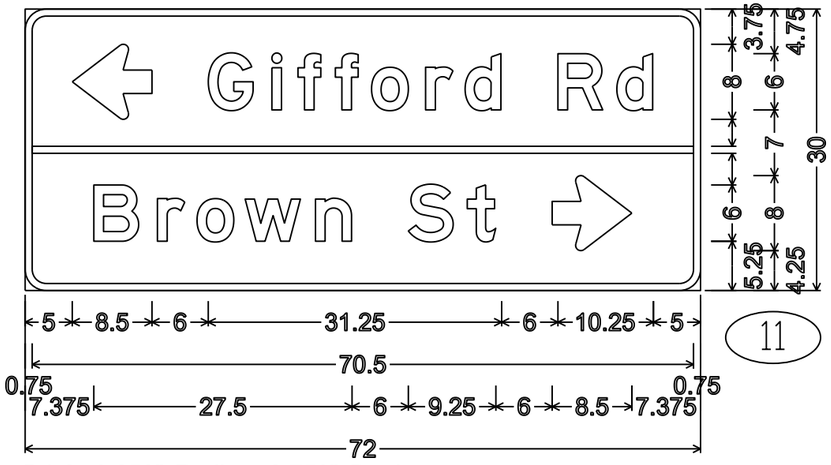
No border, Black on yellow;
"ONLY" Black E;



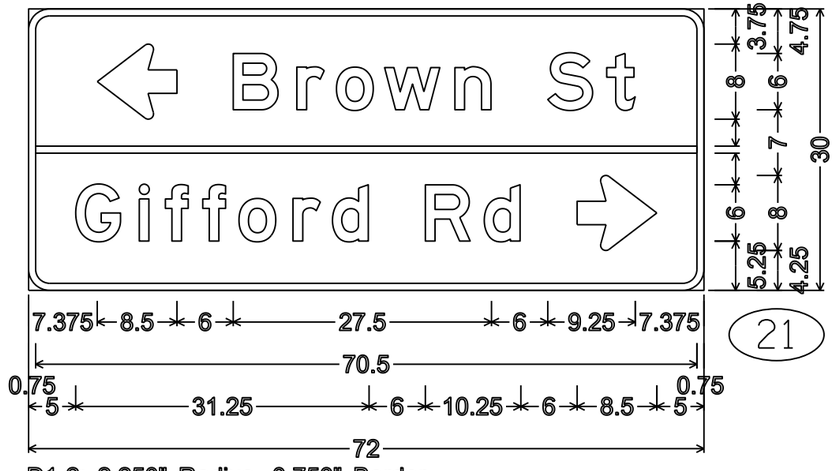
E9-1; 9.000" Radius, 2.000" Border

NOTES

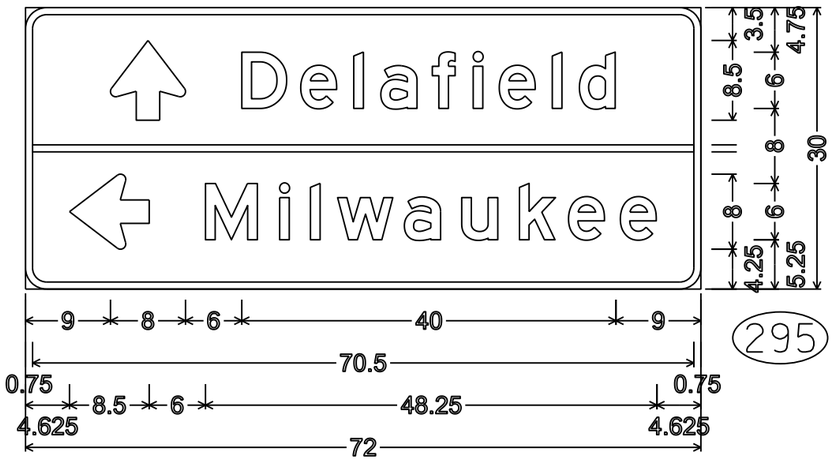
1. All Signs Type II - Type H Reflective
2. Color:
   Background - Green
   Message - White
3. Message Series - E



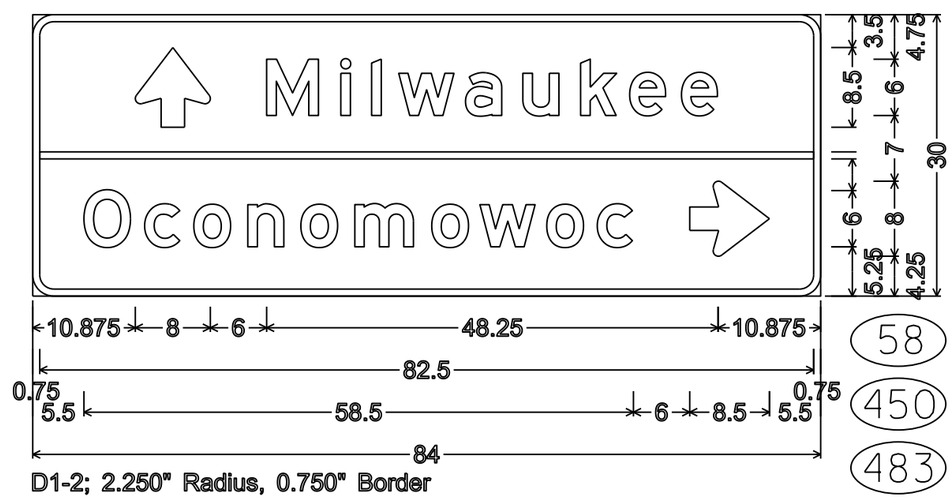
D1-2; 2.250" Radius, 0.750" Border



D1-2; 2.250" Radius, 0.750" Border



D1-2; 2.250" Radius, 0.750" Border



D1-2; 2.250" Radius, 0.750" Border



D1-1; 2.250" Radius, 0.750" Border

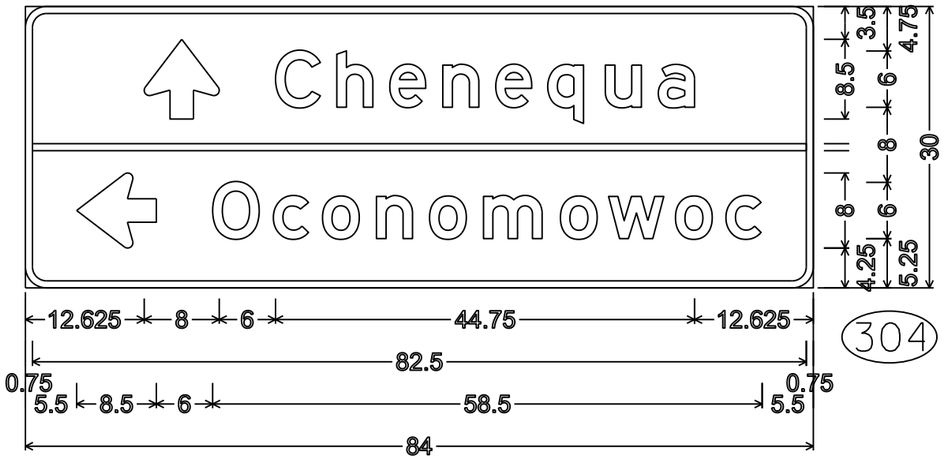


D1-1; 2.250" Radius, 0.750" Border

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PERMANENT SIGNING	SHEET NO: 453	E

NOTES

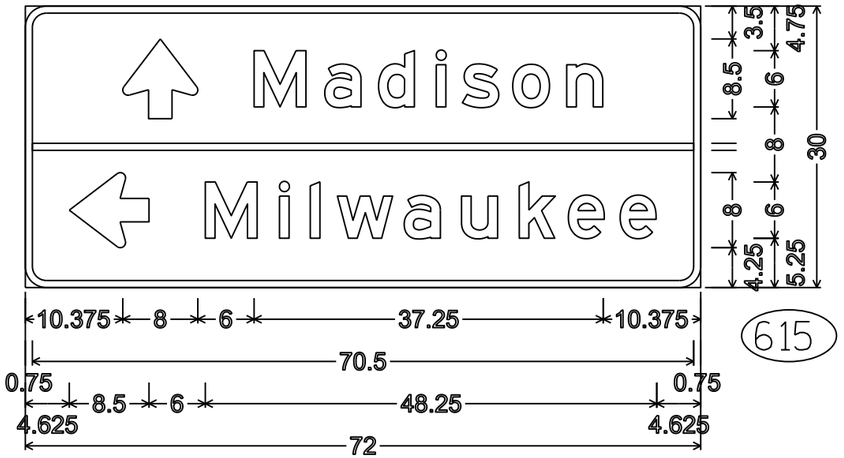
1. All Signs Type II - Type H Reflective
2. Color:
   Background - Green
   Message - White
3. Message Series - E



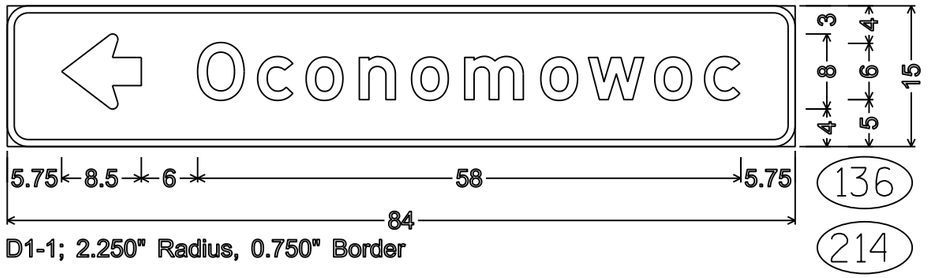
D1-2; 2.250" Radius, 0.750" Border



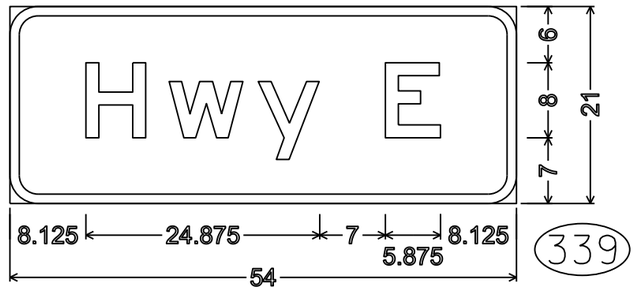
D1-2; 2.250" Radius, 0.750" Border



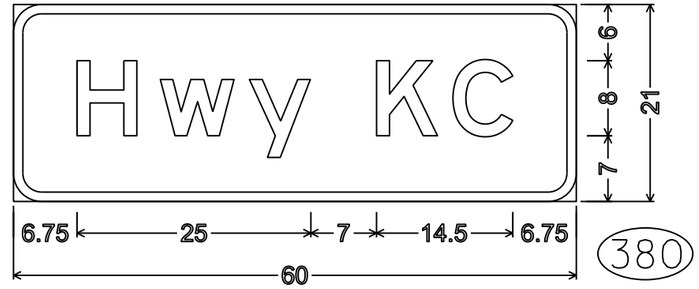
D1-2; 2.250" Radius, 0.750" Border



D1-1; 2.250" Radius, 0.750" Border



M1-94;
3.000" Radius, 1.000" Border



M1-94;
3.000" Radius, 1.000" Border

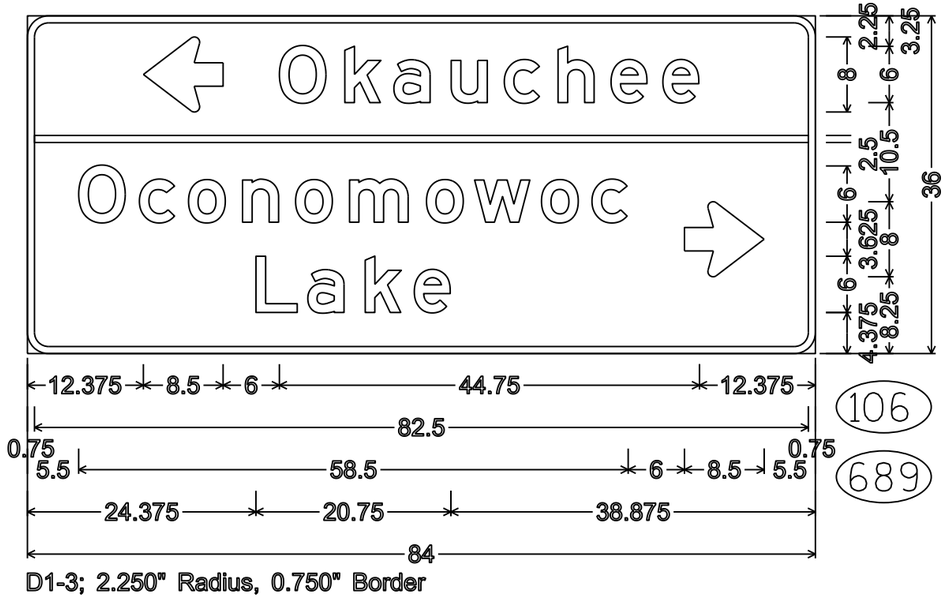
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7

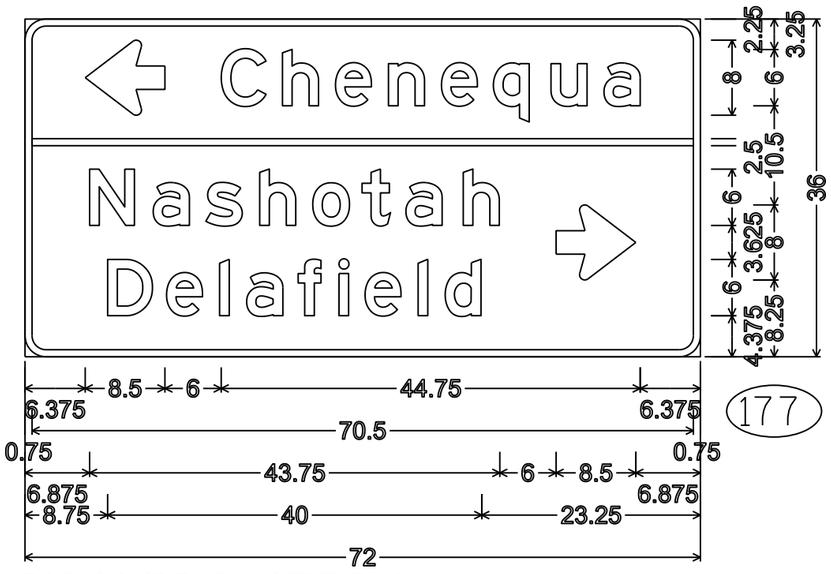
PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PERMANENT SIGNING	SHEET NO: 454	E

NOTES

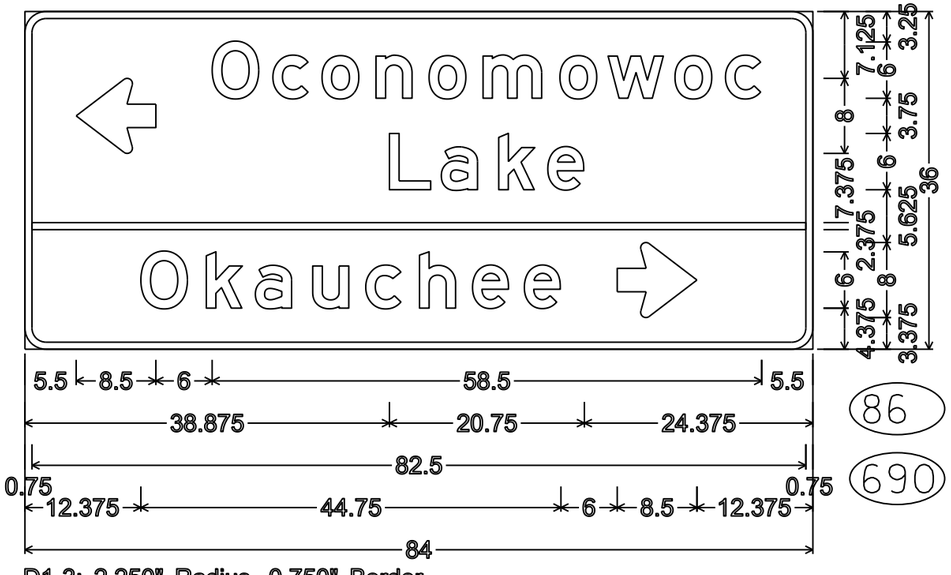
1. All Signs Type II - Type H Reflective
2. Color:
   Background - Green
   Message - White
3. Message Series - E



D1-3; 2.250" Radius, 0.750" Border



D1-3; 2.250" Radius, 0.750" Border



D1-3; 2.250" Radius, 0.750" Border

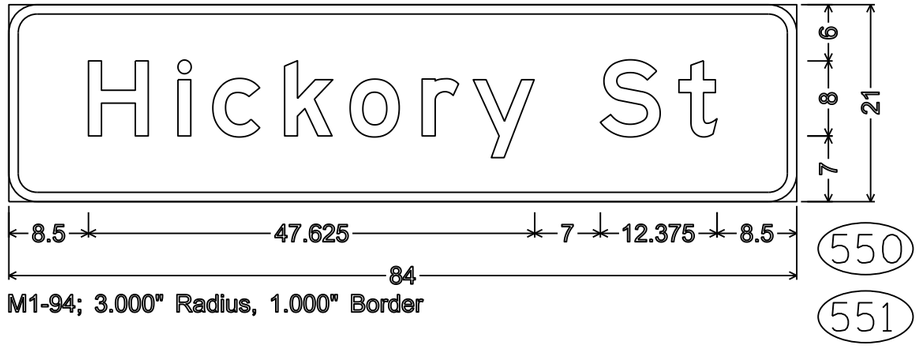


M1-94; 3.000" Radius, 1.000" Border

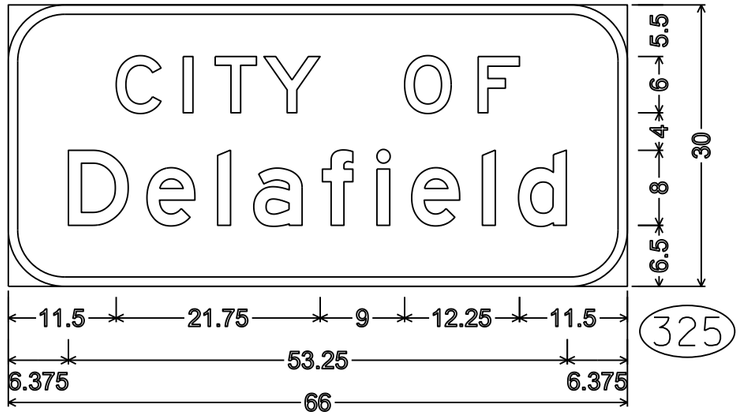
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7

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PERMANENT SIGNING	SHEET NO: 455	E



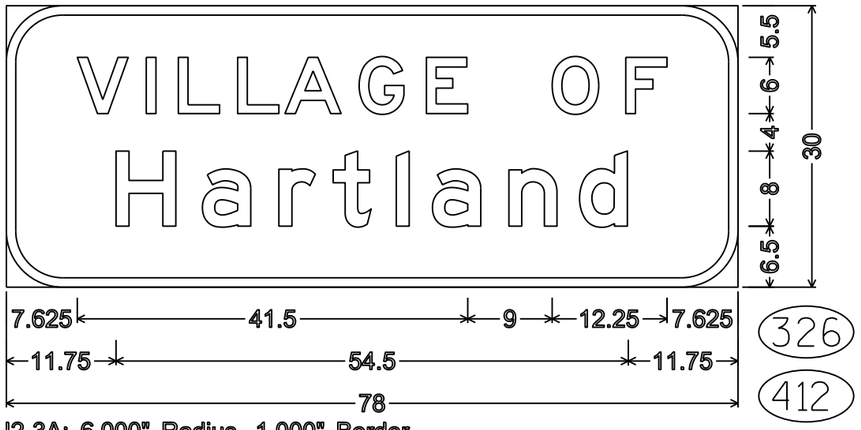
M1-94; 3.000" Radius, 1.000" Border



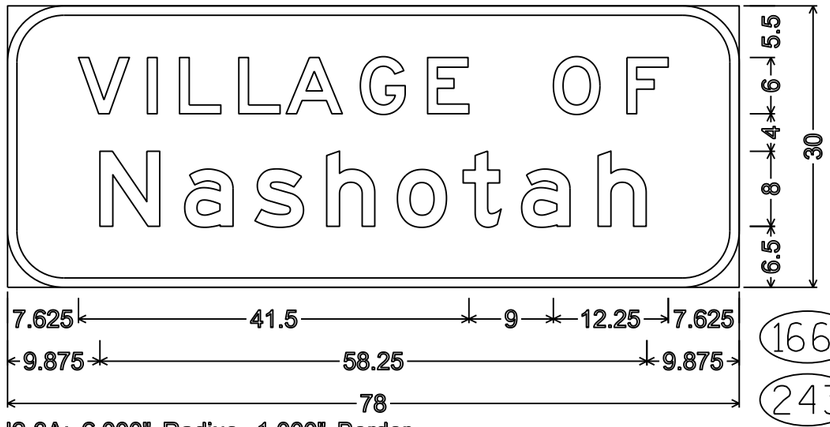
I2-3A; 6.000" Radius, 1.000" Border

NOTES

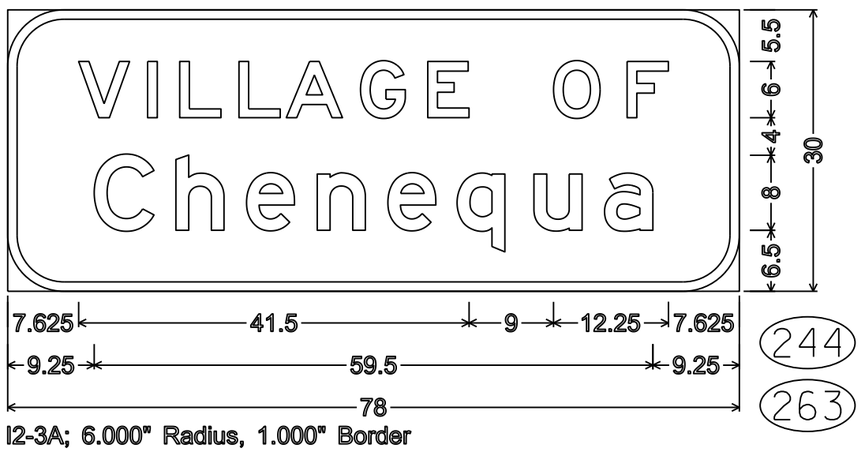
1. All Signs Type II - Type H Reflective
2. Color:
   Background - Green
   Message - White
3. Message Series - E



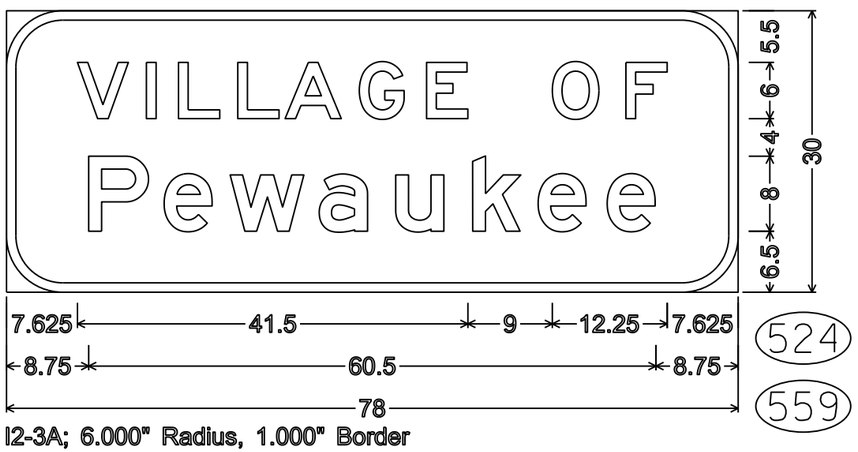
I2-3A; 6.000" Radius, 1.000" Border



I2-3A; 6.000" Radius, 1.000" Border



I2-3A; 6.000" Radius, 1.000" Border



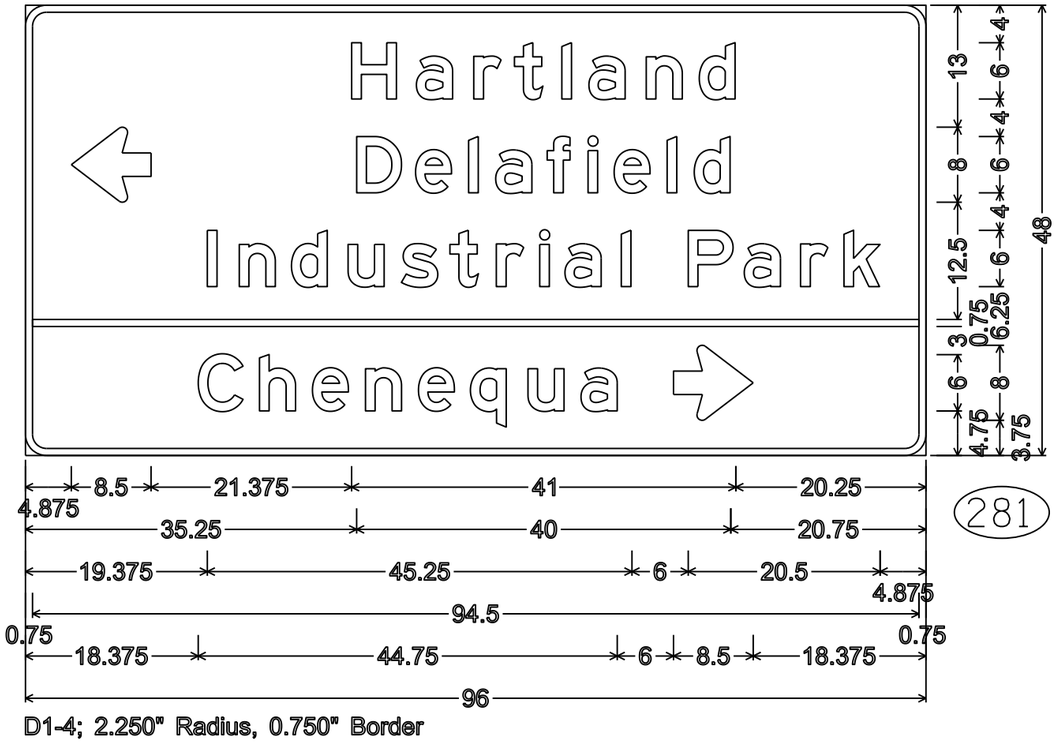
I2-3A; 6.000" Radius, 1.000" Border

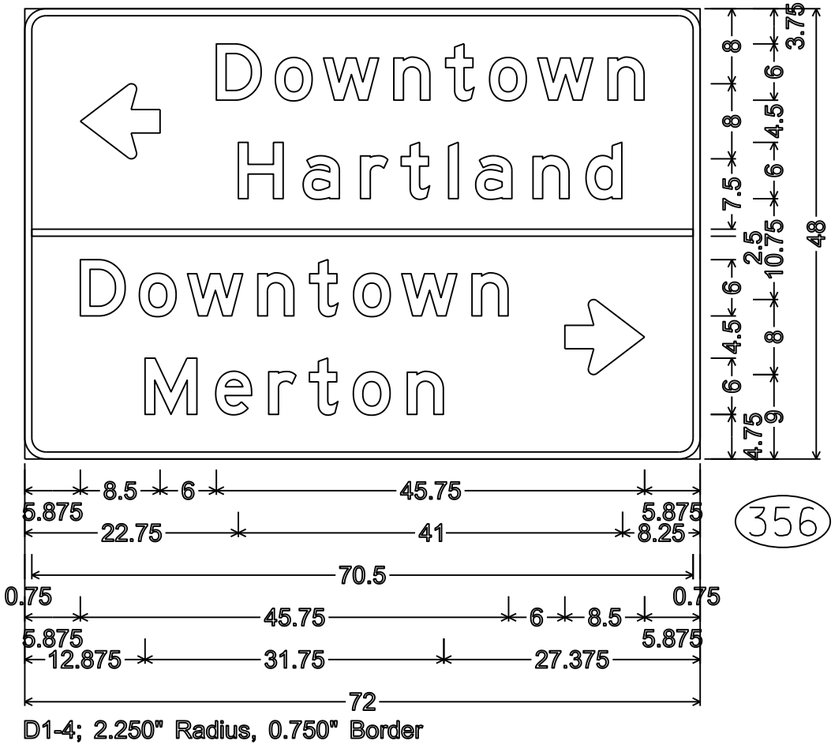
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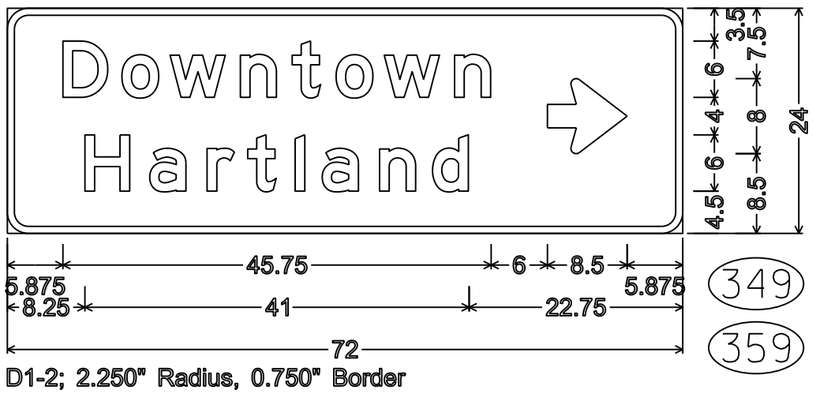
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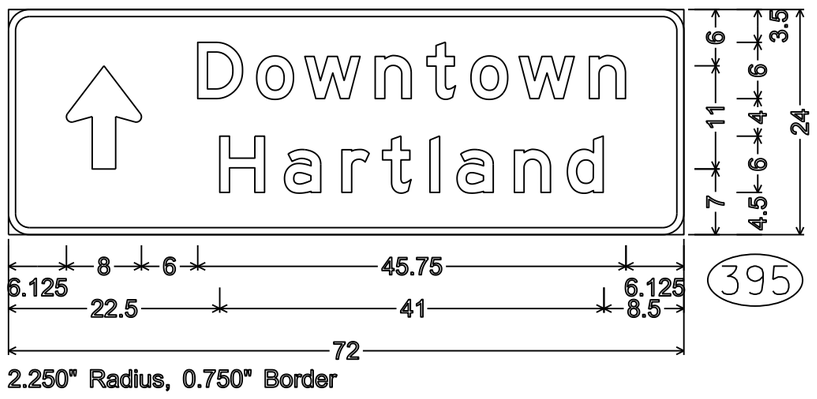
NOTES

1. All Signs Type II - Type H Reflective
2. Color:
   Background - Green
   Message - White
3. Message Series - E









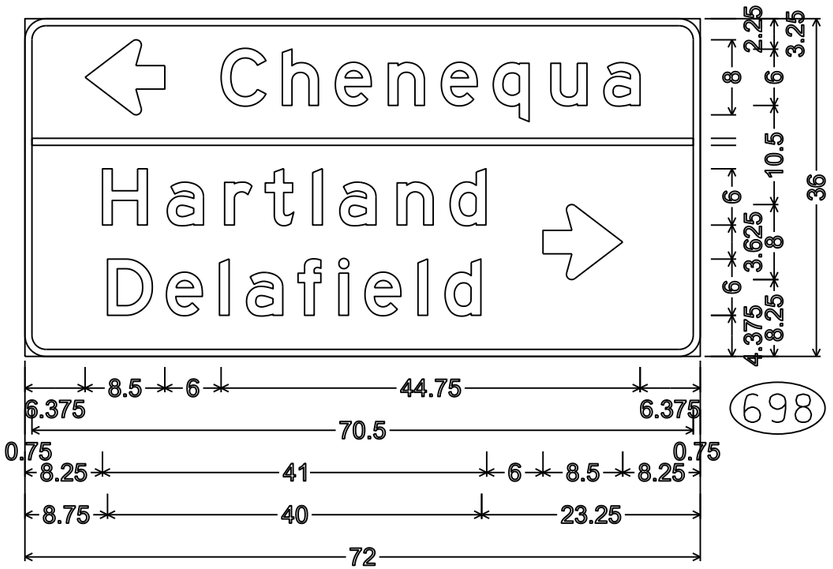
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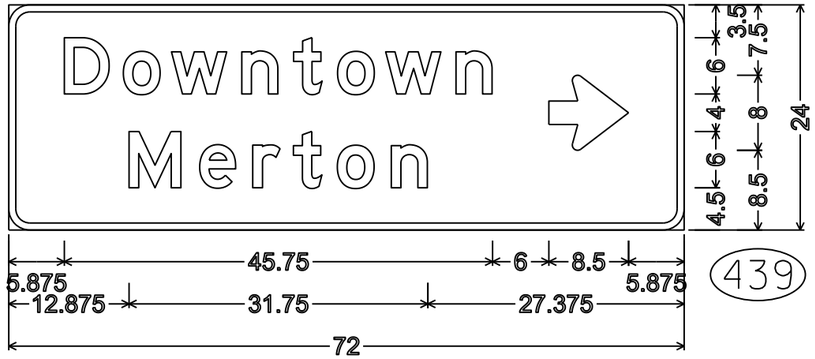
PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	PERMANENT SIGNING	SHEET NO: 457	E

NOTES

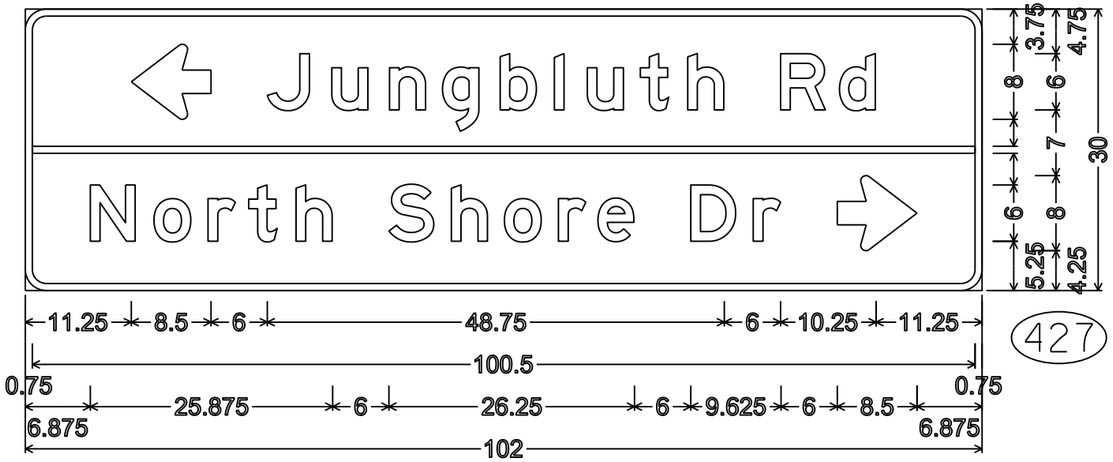
1. All Signs Type II - Type H Reflective
2. Color:
   Background - Green
   Message - White
3. Message Series - E



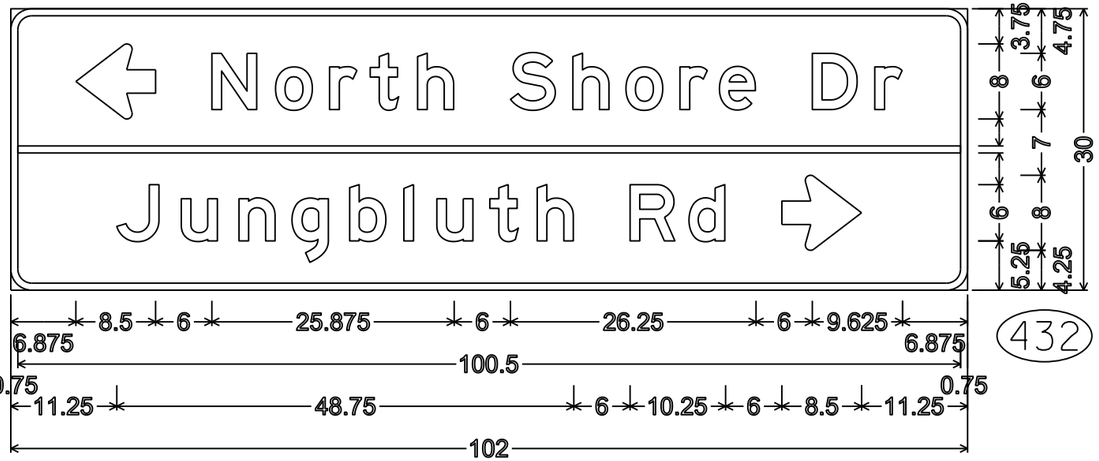
D1-3; 2.250" Radius, 0.750" Border



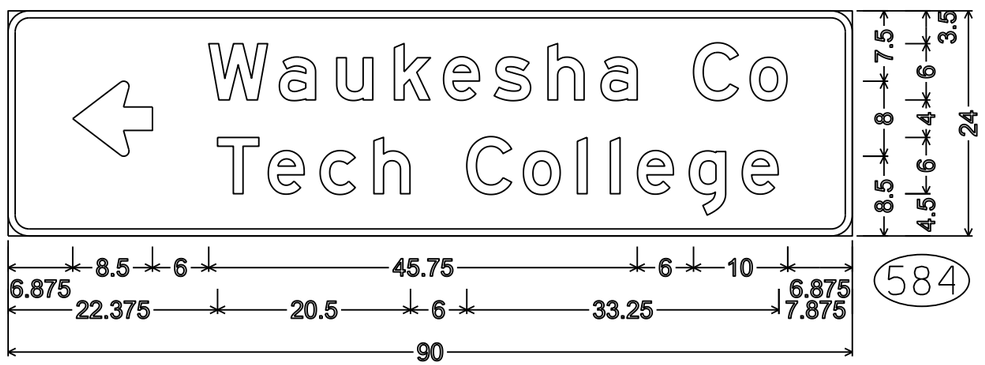
D1-2; 2.250" Radius, 0.750" Border



D1-2; 2.250" Radius, 0.750" Border



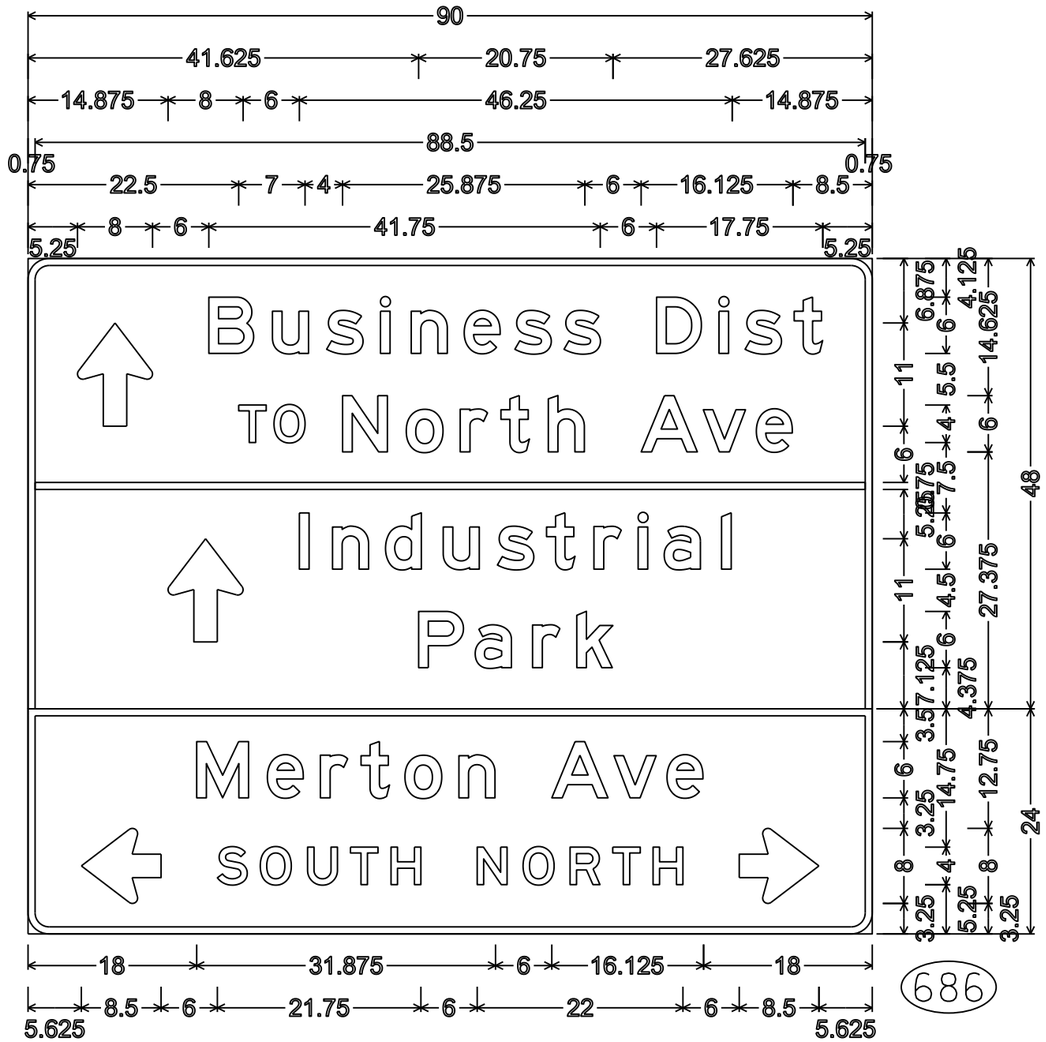
D1-2; 2.250" Radius, 0.750" Border



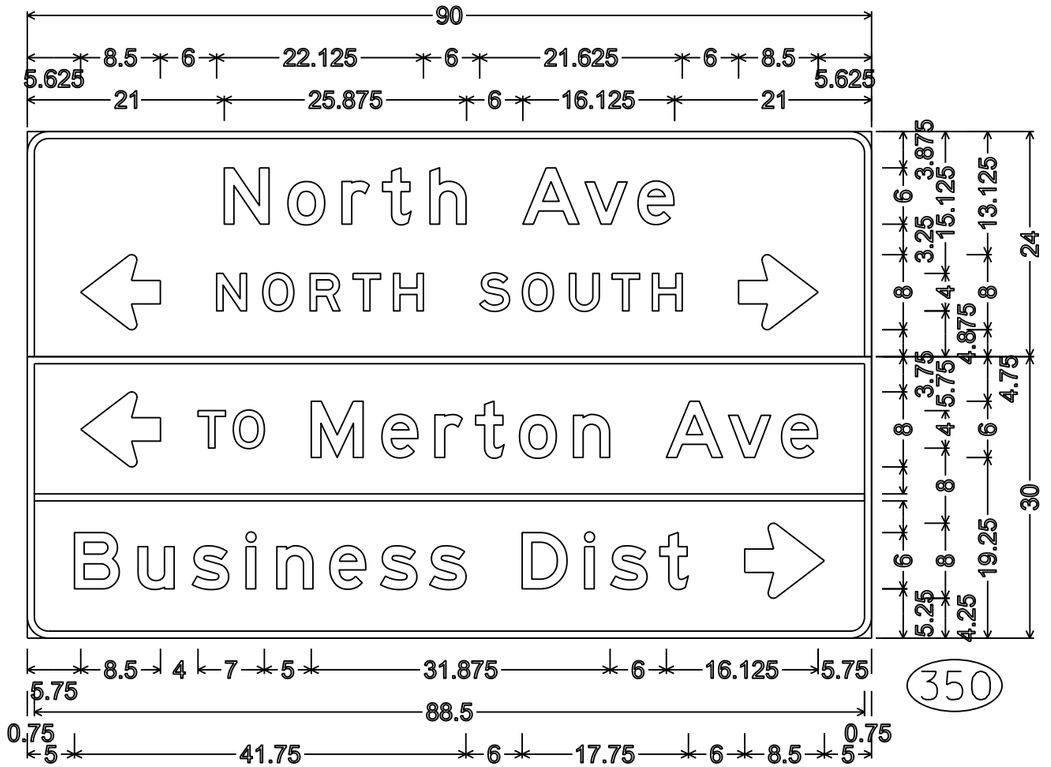
D1-2; 2.250" Radius, 0.750" Border

NOTES

1. All Signs Type II - Type H Reflective
2. Color:
   Background - Green
   Message - White
3. Message Series - E



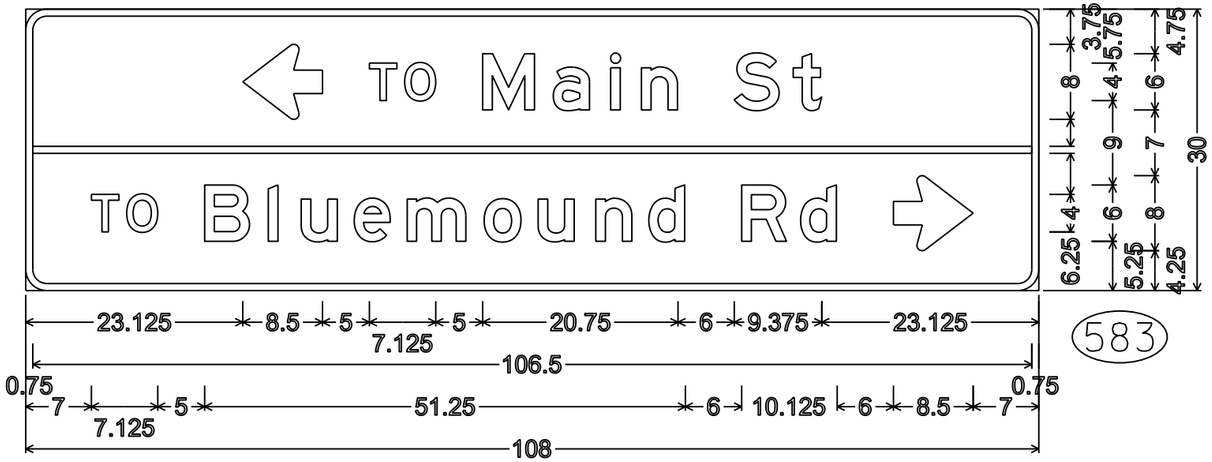
2.250" Radius, 0.750" Border



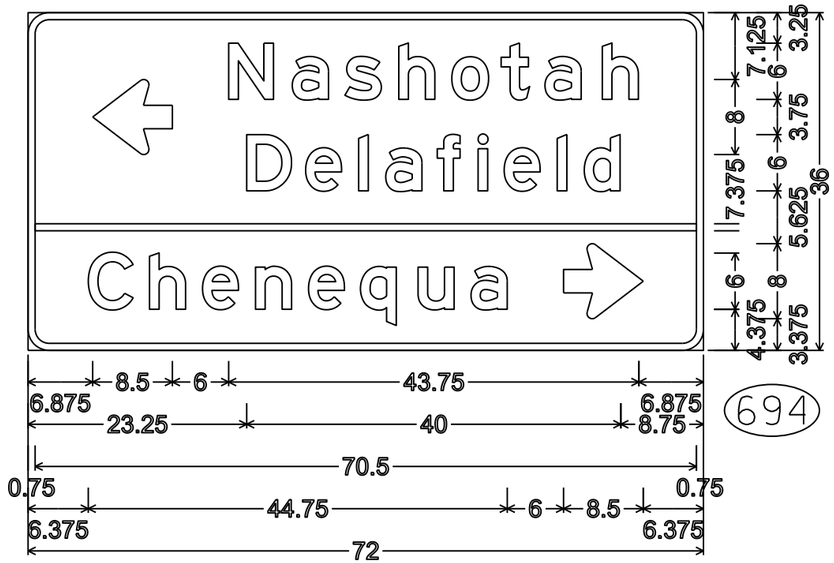
D1-4; 2.250" Radius, 0.750" Border

NOTES

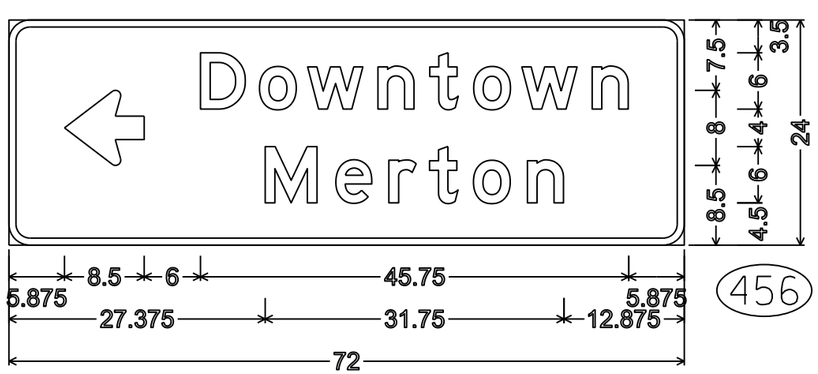
1. All Signs Type II - Type H Reflective
2. Color:
   Background - Green
   Message - White
3. Message Series - E



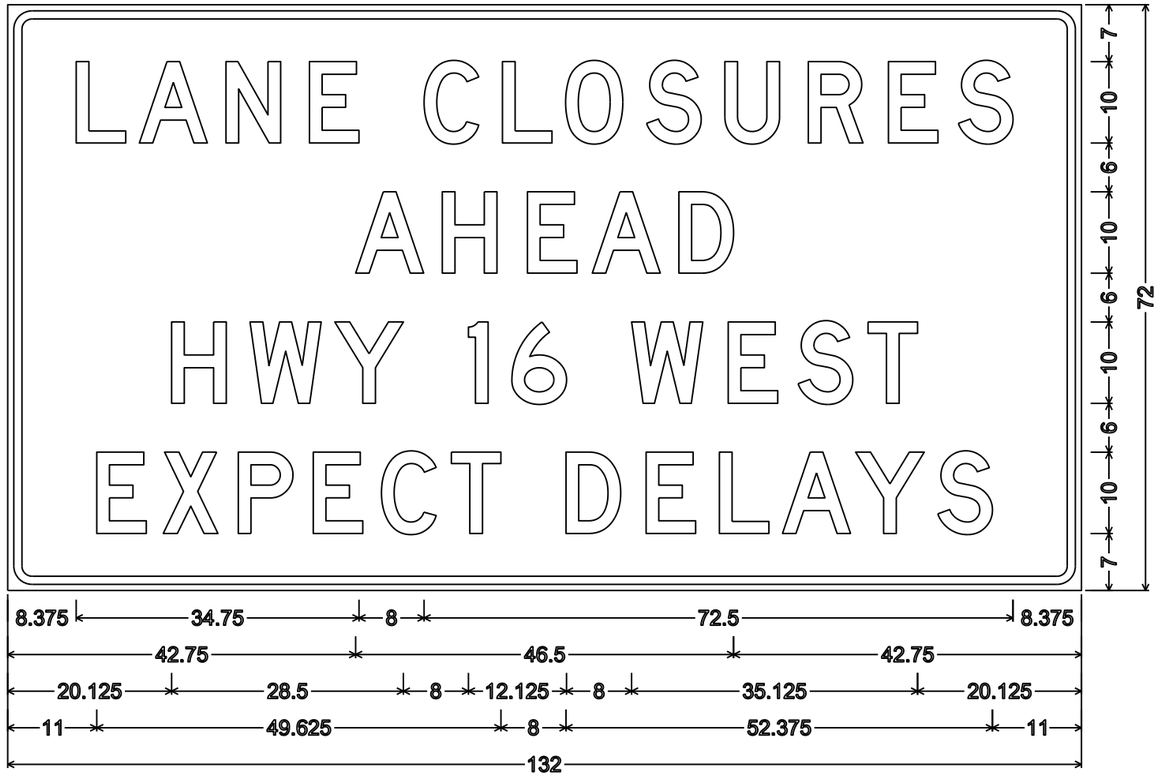
D1-2; 2.250" Radius, 0.750" Border



D1-3; 2.250" Radius, 0.750" Border



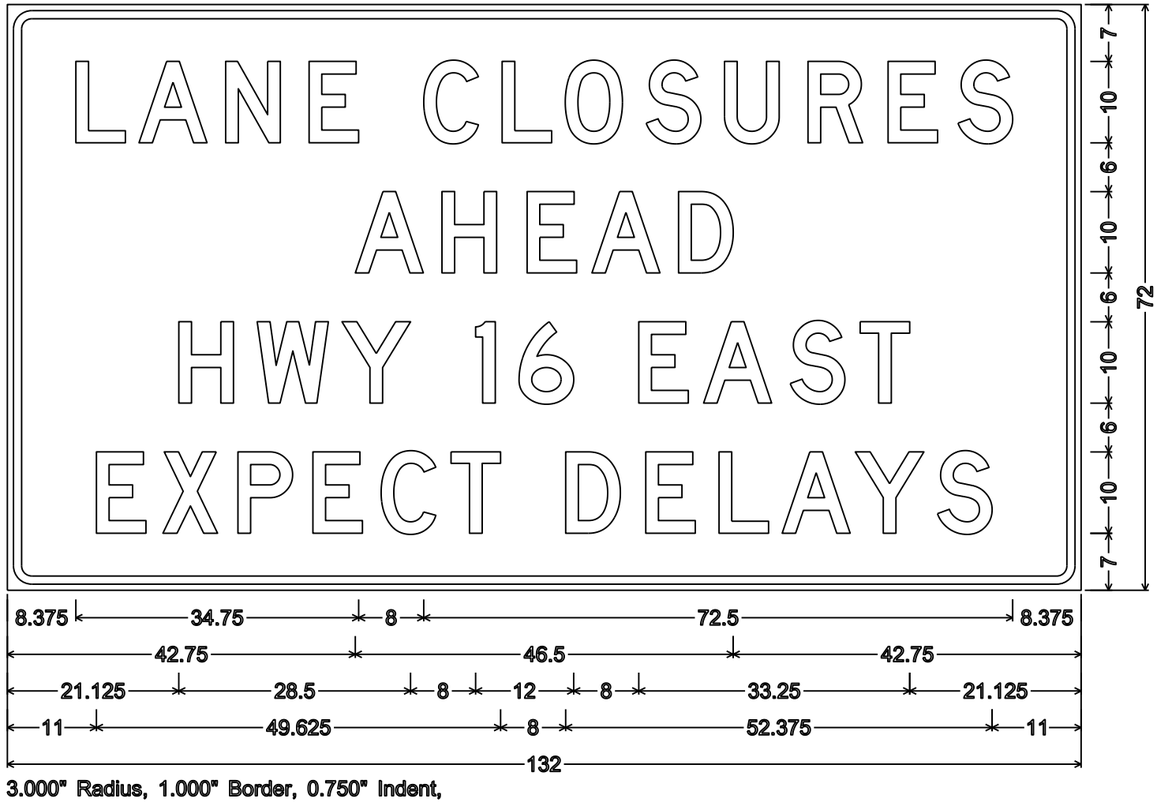
D1-2; 2.250" Radius, 0.750" Border



3.000" Radius, 1.000" Border, 0.750" Indent

NOTES

1. Fixed Message Type II Signs - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - D



3.000" Radius, 1.000" Border, 0.750" Indent,

7

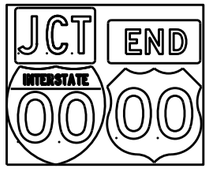
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PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	TEMPORARY SIGNING	SHEET NO: 461	E

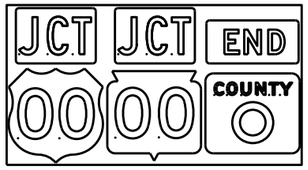
TYPICAL ASSEMBLIES



J1-1



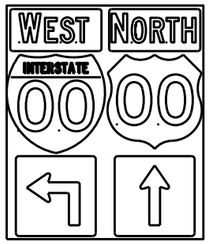
J1-2



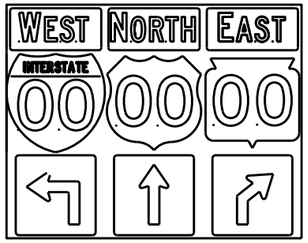
J1-3



J2-1



J2-2

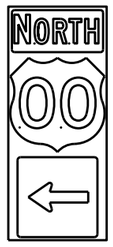


J2-3

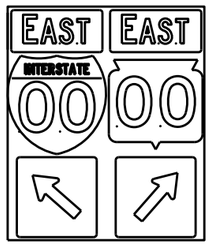


JV

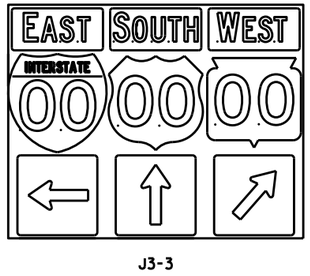
(Typical Vertical J-Assembly
See Note 10 and 11)



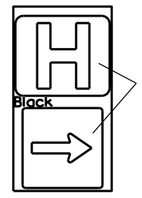
J3-1



J3-2



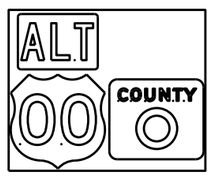
J3-3



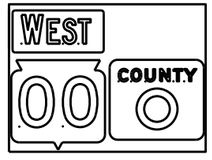
JH-1



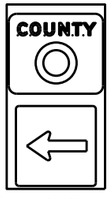
J4-1



J4-2



J4-2



J13-1



J12-1



J32-1



J33-1

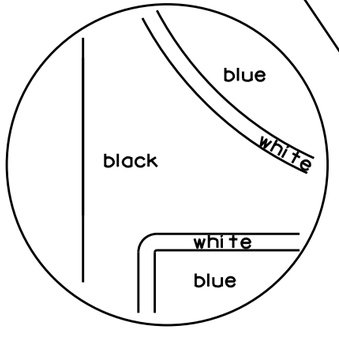


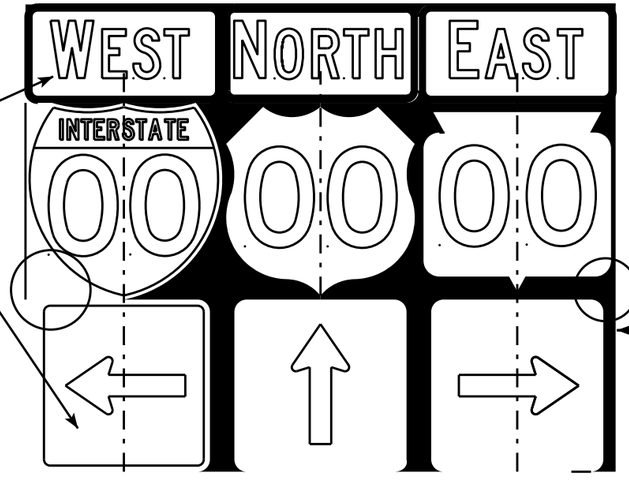
J23-1

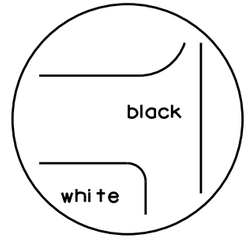


J22-1

[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

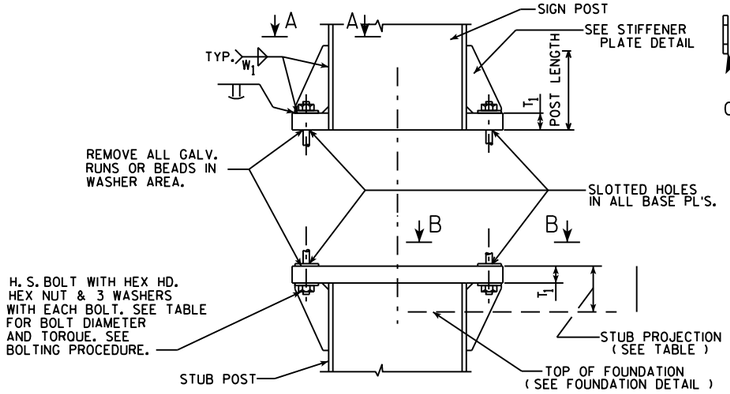
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

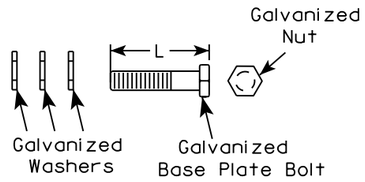
DATE 2/06/14 PL... A2-1S.8

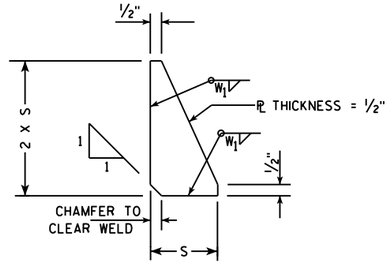
PROJECT NO:

SHEET NO: E



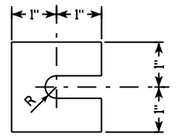
SIGN POST AND STUB POST ELEVATION





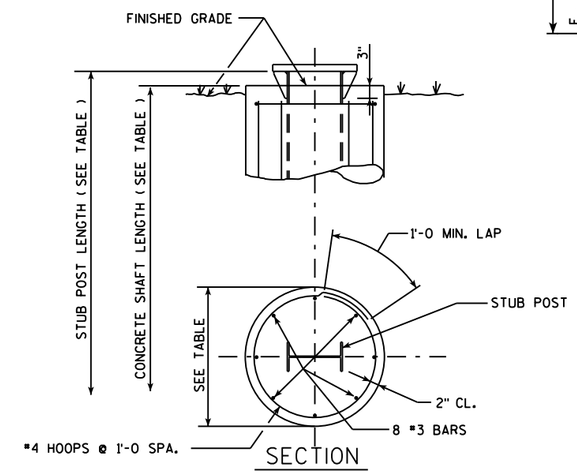
STIFFENER PLATE DETAIL

(SEE TABLE FOR DIMENSIONS)

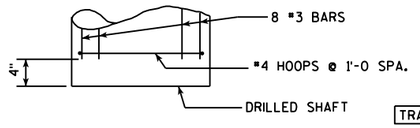


FURNISH 2 @ .012" ± THICK AND 2 @ .032" ± THICK SHIMS PER POST. SHIMS SHALL BE FABRICATED FROM BRASS SHIM STOCK OR STRIP CONFORMING TO A.S.T.M.- B36.

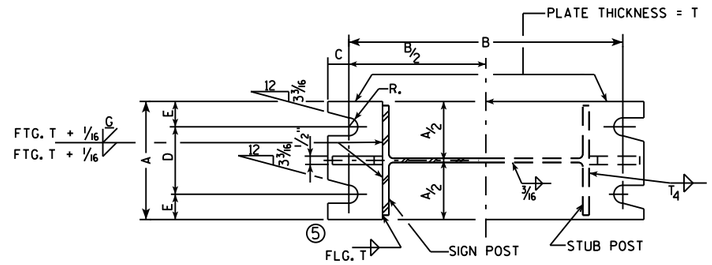
SHIM DETAIL



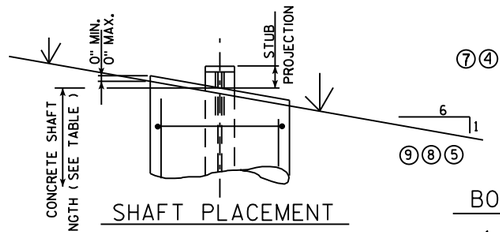
SECTION



FOUNDATION DETAIL



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.

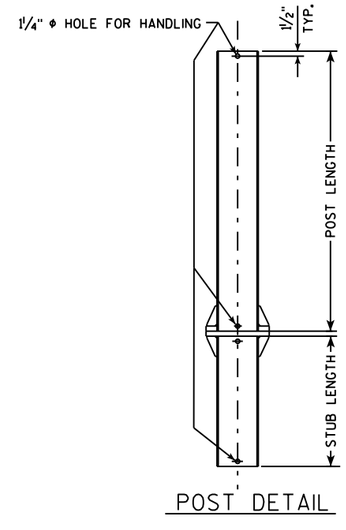
GENERAL NOTES

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, GALVANIZED IN ACCORDANCE WITH ASTM A123. (9)
THE POST, BASE PLATES, UPPER SIX INCHES OF STUB POST FLANGE SPLICE PLATE AND FUSE PLATE SHALL BE GALVANIZED AFTER FABRICATION.
FURNISH STEEL BOLTS, NUTS, AND WASHERS IN ACCORDANCE WITH SECTION 635 OF THE STANDARD SPECIFICATIONS.

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.



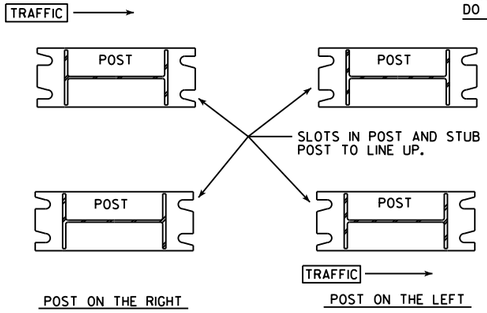
POST DETAIL

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)



POST SLOT ORIENTATION (7)

	BASE CONNECTION DATA TABLE													FOUNDATION DATA				
L	X	TYPE	DIMENSION / POST SIZE	BOLT SIZE & TORQUE	A	B	C	D	E	T_1	T_4	W_1	R	S	STUB LENGTH	STUB PROJECTION	SHAFT DIAMETER	SHAFT LENGTH
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
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
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
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
5	(3)	E	W12"X26.0 #/FT.	1" ϕ @ 90#-FT.	7"	1'-4¼	1¼"	4"	1½"	1½"	⅜"	5/16"	17/32"	3"	7'-0	3"	2'-0 ϕ	8'-6

(1) (6) (1)

K	(2)
76.0#	(4)
146.5#	(4)
182.1#	
210.5#	
293.0#	(3)

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 11/12/15 PLATE NO. A3-1.16

(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.

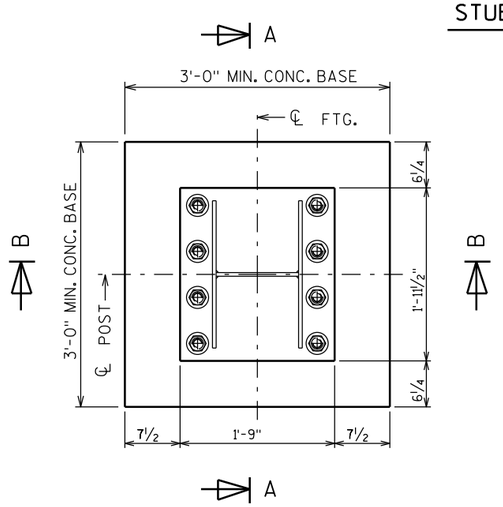
FTG. & SIGN SUPPORT DETAILS GROUND MOUNT BREAK-AWAY SIGNS

SHEET 463

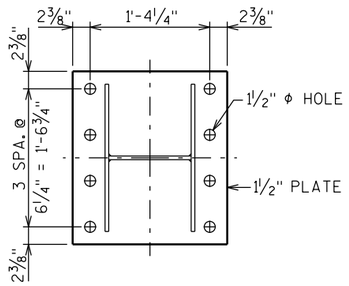
PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

7

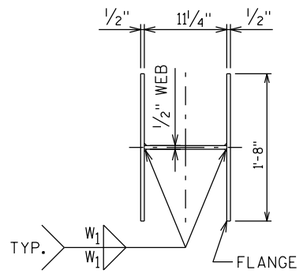
STUB AND MASONRY ANCHOR DETAILS



STUB SECTION



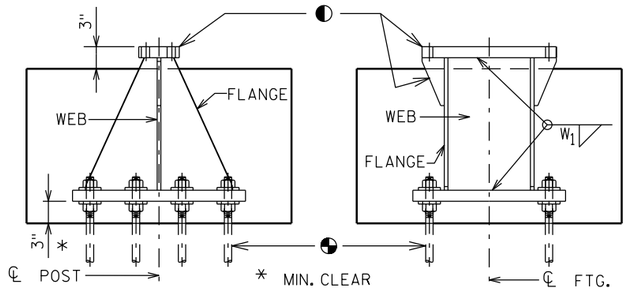
BASE PLATE



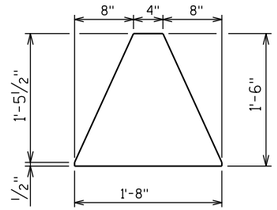
STUB

◐ 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



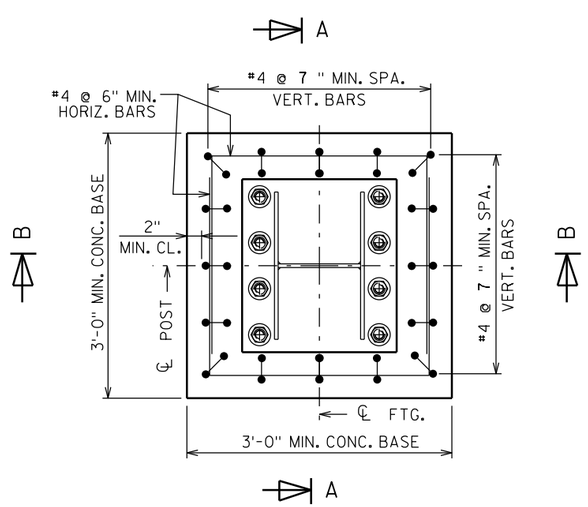
FLANGE

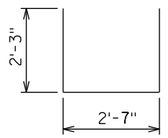
GENERAL NOTES

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

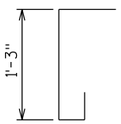
CONCRETE BASE SECTION





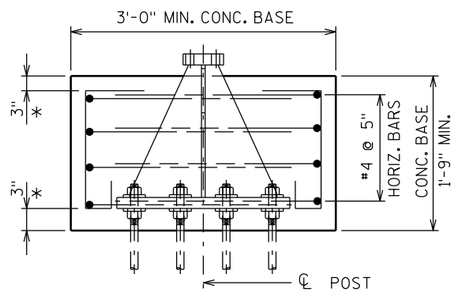
HORIZONTAL BAR

8 BARS @ 6'-11" LENGTH



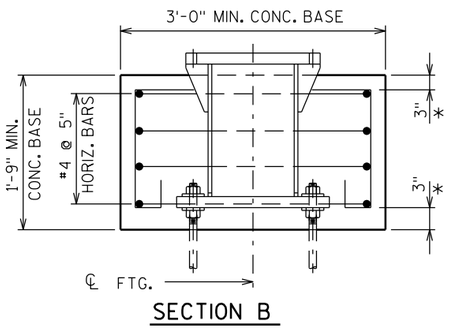
VERTICAL BARS

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

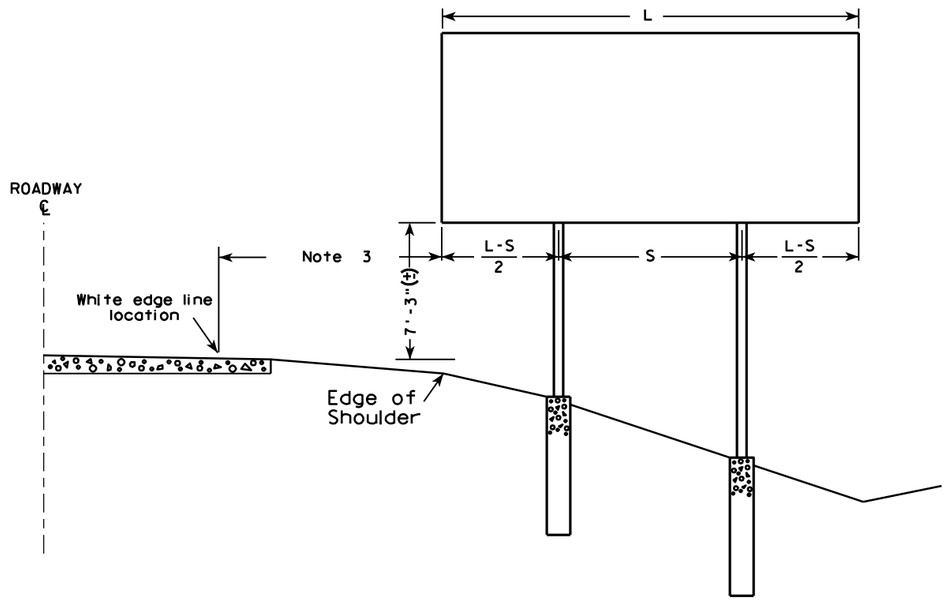
APPROVED Matthew R Rauch
for State Traffic Engineer

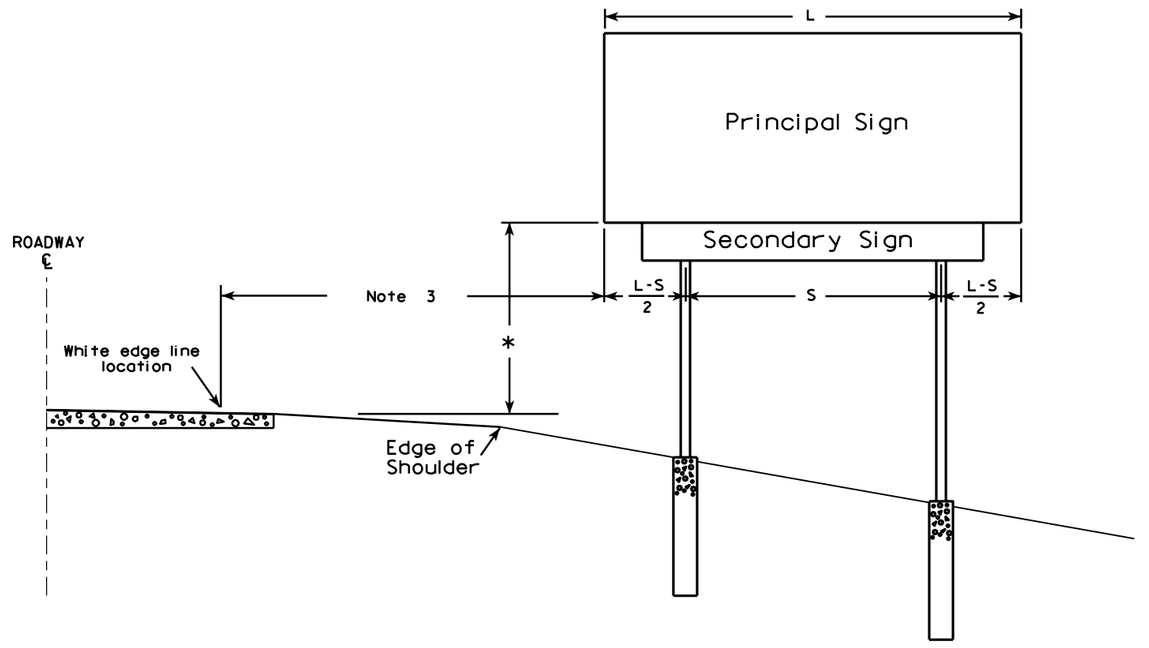
DATE 2/06/2014 PLAN NO. A3-1M.1

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"(±).

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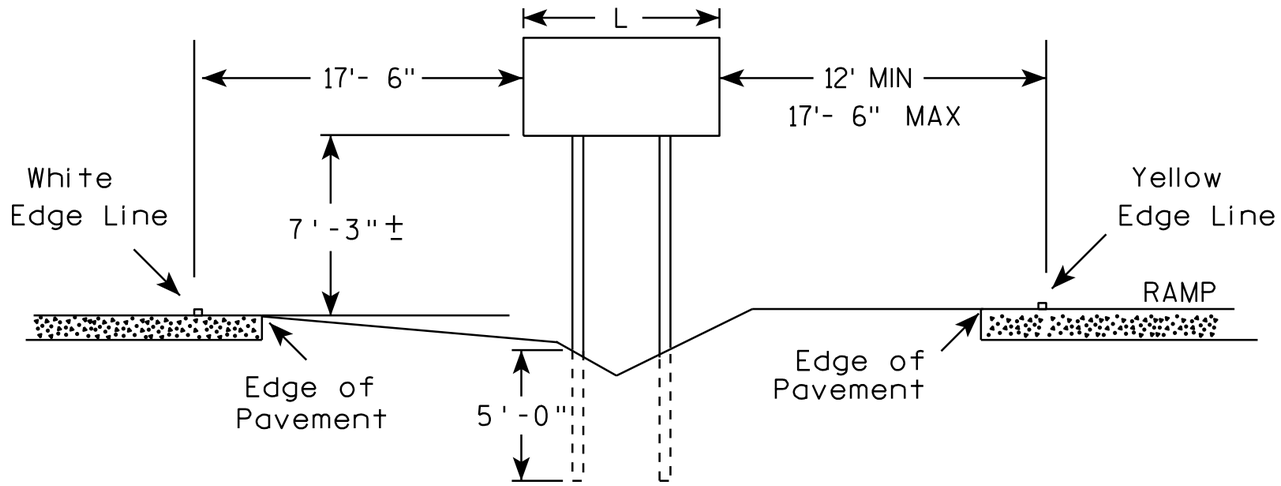
TYPICAL INSTALLATION
OF TYPE I SIGNS

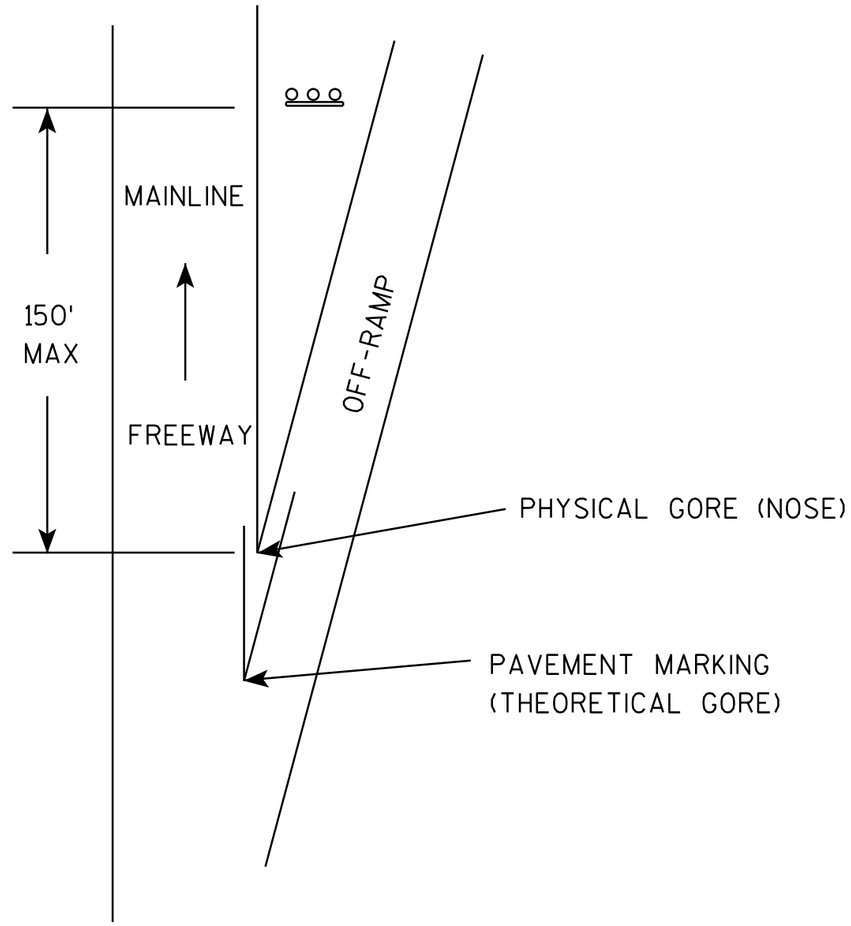
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/02/08 PLATE NO. A4-1.9

PROJECT NO:				SHEET NO: 465	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.

7

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TYPICAL INSTALLATION
OF TYPE II SIGNS ON
WOOD POSTS IN GORE

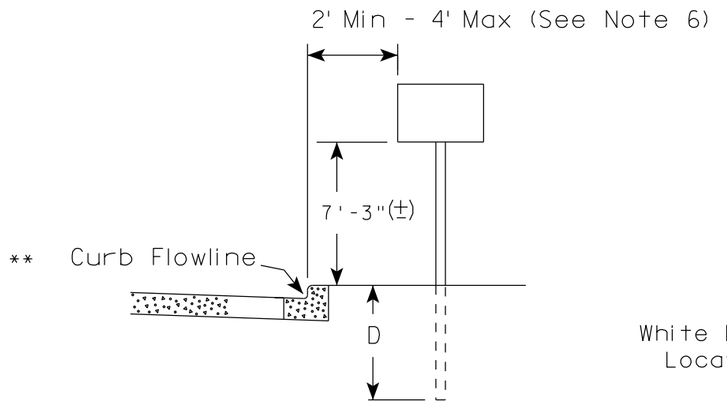
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

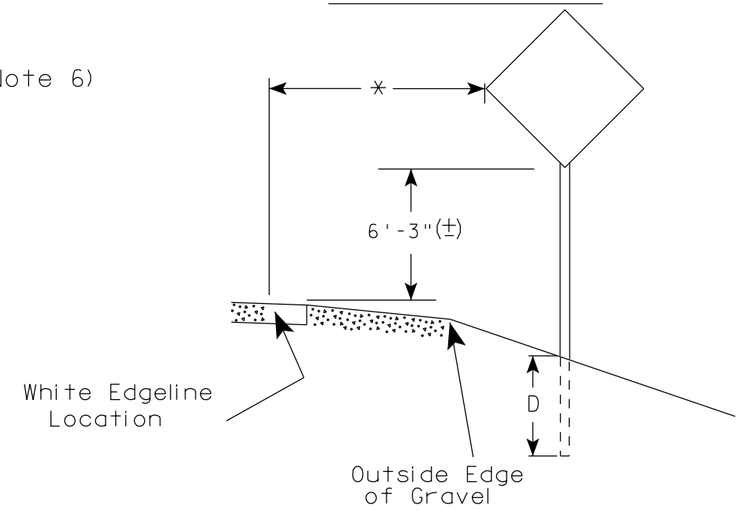
DATE 2/06/14 PLA 466 A4-2.3

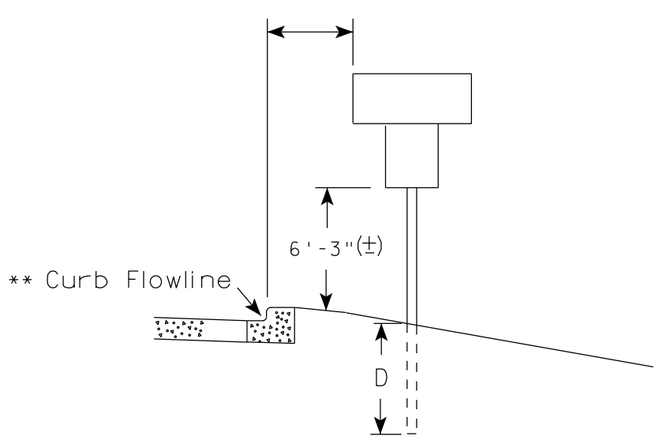
PROJECT NO: | SHEET NO: E

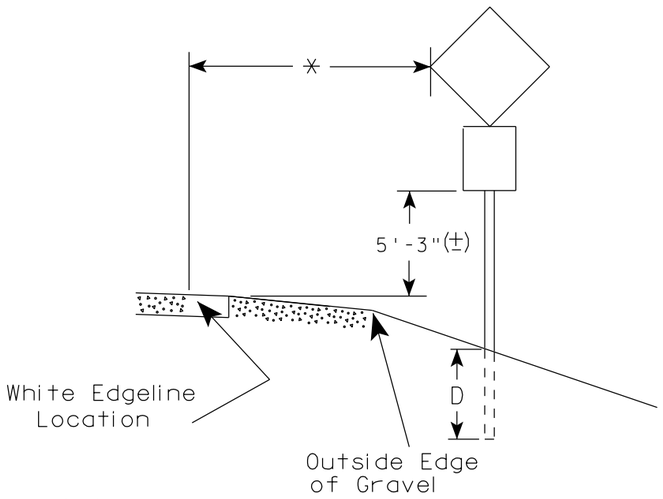
URBAN AREA



RURAL AREA (See Note 2)







** 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.

POST EMBEDMENT DEPTH

Area of Sign Installation (Sq. Ft.)	D (Min)
20 or Less	4'
Greater than 20	5'

GENERAL NOTES

1. Signs wider than 4 feet or 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" (±).

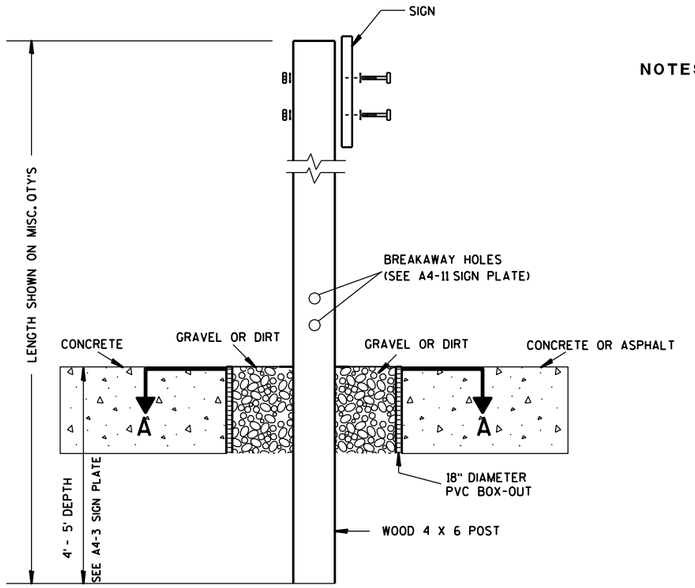
TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 7/23/15 PLATE NO. A4-3.20

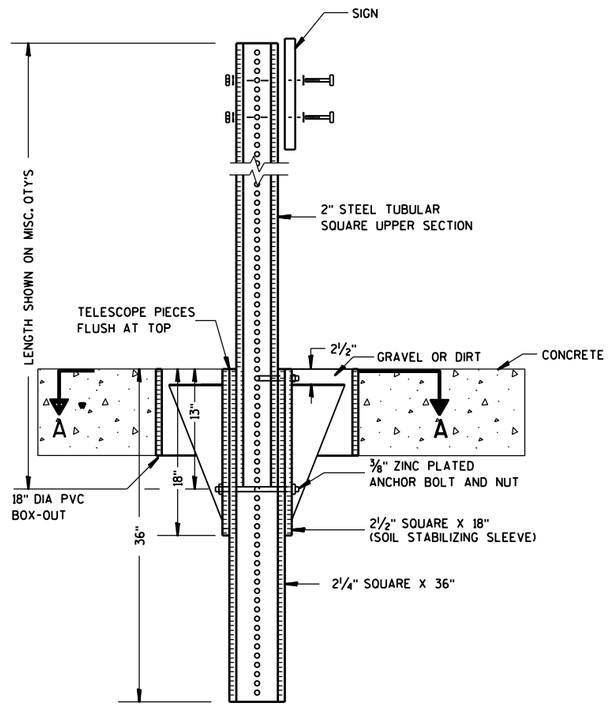
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



ELEVATION VIEW

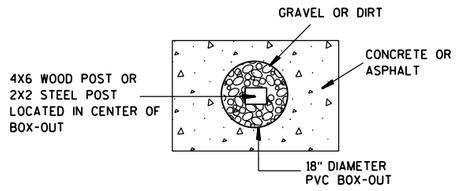
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

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

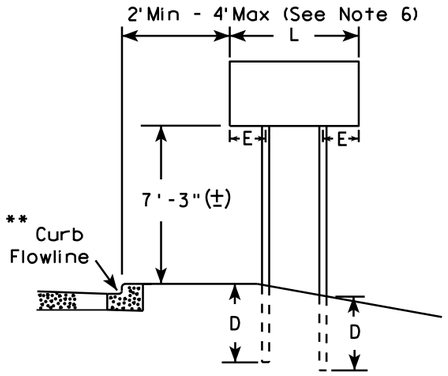
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/27/14 PLATE NO. A4-3B.1

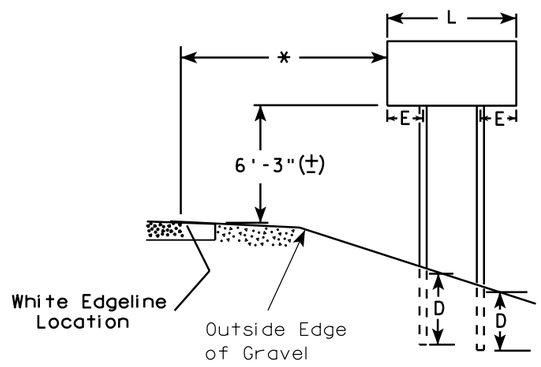
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

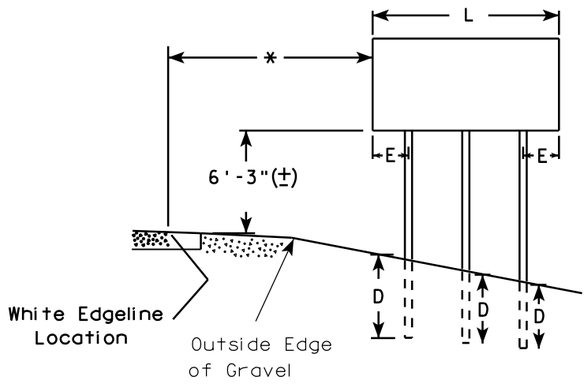
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A43B.DGN PLOT DATE : 27-JAN-2014 09:48 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 13.659812:1.000000 WISDOT/CADDS SHEET 42

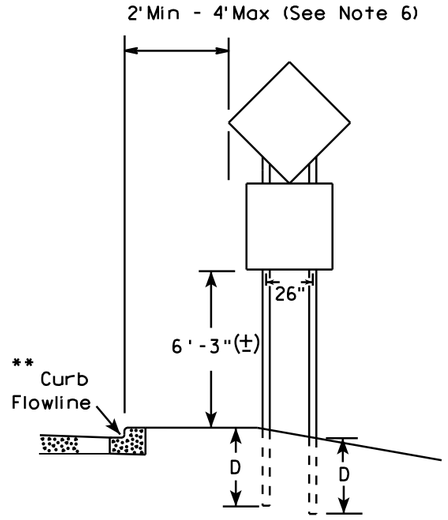
URBAN AREA



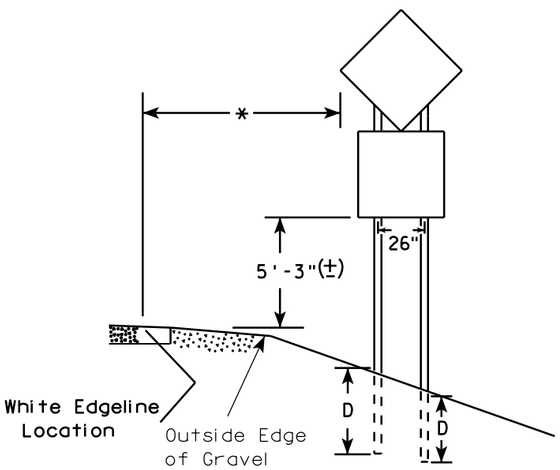
RURAL AREA (See Note 3)







48" DIAMOND WARNING SIGN



48" DIAMOND WARNING SIGN

***	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"

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 and less than 20 S.F. in area.

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

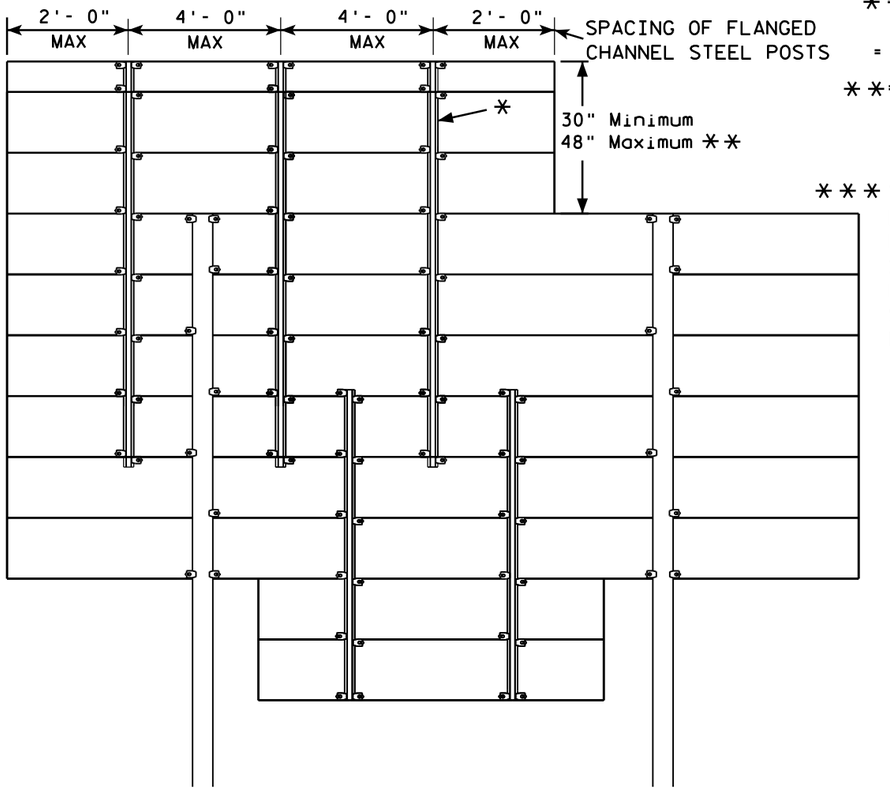
DATE 7/23/15 PLATE NO. A4-4 469 14

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\A44.DGN PLOT DATE : 23-JUL-2015 15:23 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 107.021305:1.000000

WISDOT/CADDS SHEET 42

GROUND MOUNTED SIGN

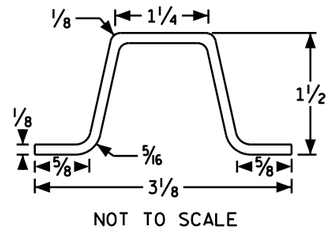


* =2.00 lb/ft FLANGED CHANNEL, MIN. YIELD STRENGTH = 60,000 PSI (GRADE 60) GALVANIZED

** =FOR 48" HEIGHT PANELS ON OVERHEAD STRUCTURES, ENTIRE SIGN SHALL BE CENTERED VERTICALLY ABOUT THE DEPTH OF THE TRUSS.

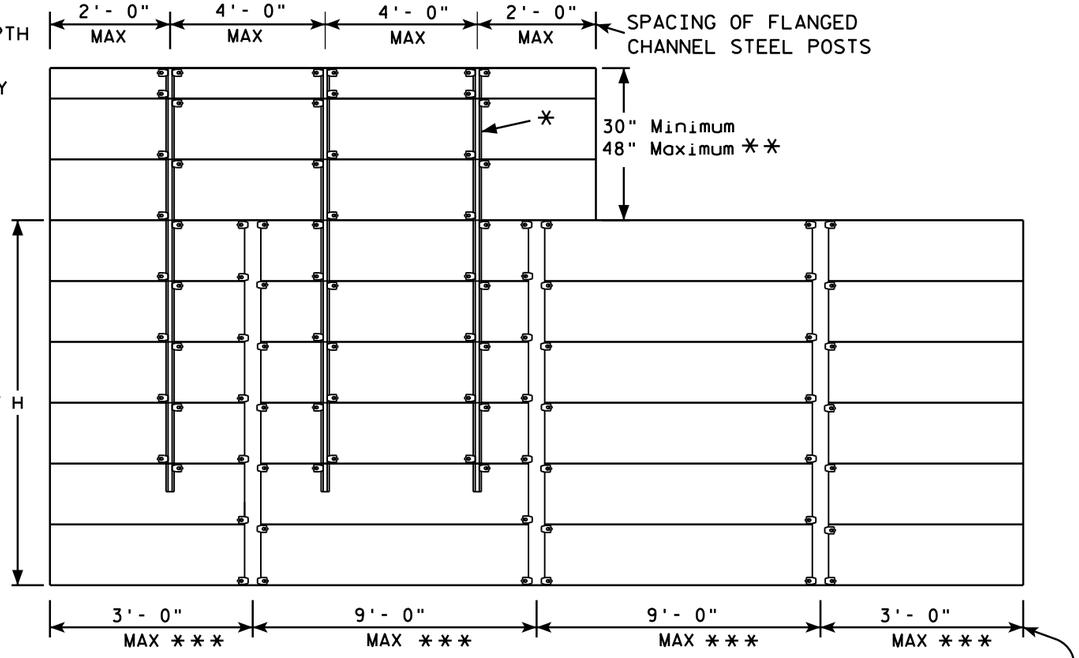
*** THESE SPACING DISTANCES SHALL ONLY BE USED WHEN THE MAIN SIGN HAS A MAXIMUM HEIGHT (DIMENSION H) OF 16 FT OR LESS. FOR SIGNS WITH A HEIGHT OF GREATER THAN 16 FT, STRUCTURAL CALCULATIONS SHALL BE PERFORMED.

FLANGE CHANNEL DETAIL



NOT TO SCALE

SIGN BRIDGE MOUNTED SIGN



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.

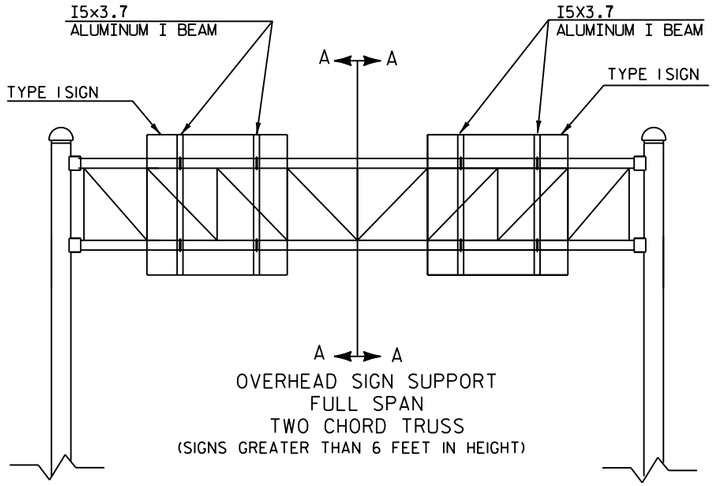
ATTACHMENT OF GUIDE SIGNS TO SUPPORTS

WISCONSIN DEPT OF TRANSPORTATION

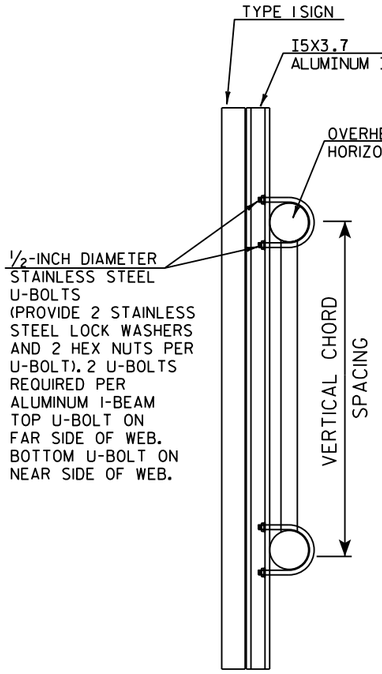
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/05/13 PLAT 470 A4-6.12

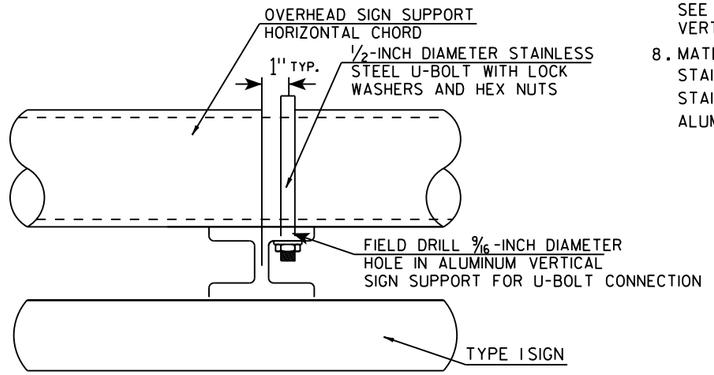
PROJECT NO:				SHEET NO:	E



OVERHEAD SIGN SUPPORT
FULL SPAN
TWO CHORD TRUSS
(SIGNS GREATER THAN 6 FEET IN HEIGHT)



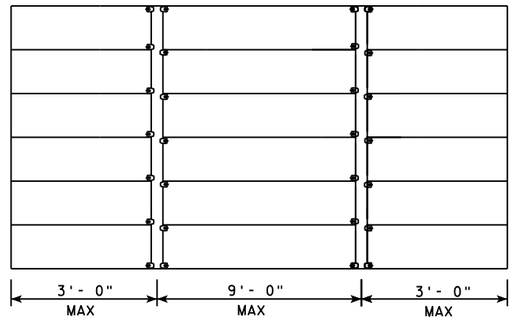
CUT SECTION A-A



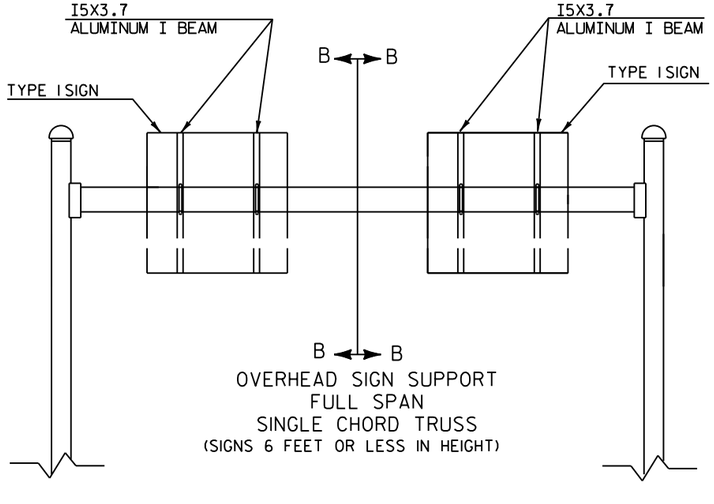
TYPICAL SIGN CONNECTION FOR
TWO CHORD TRUSS
PLAN VIEW

GENERAL NOTES

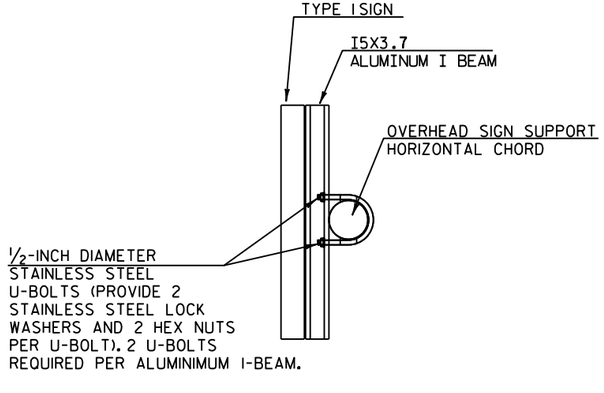
1. USE STAINLESS STEEL U-BOLTS, WASHERS, AND NUTS.
2. USE CLIPS ON EVERY EXTRUDED PANEL JOINT PER SIGN PLATE A4-6.
3. USE ALUMINUM VERTICAL SIGN SUPPORT BEAMS HAVING A 5 INCH BEAM DEPTH AND WEIGHT OF 3.7 LBS PER FOOT.
4. U-BOLTS SHALL BE STAINLESS STEEL AND MANUFACTURED TO THE PROPER SIZE TO FIT THE CHORDS OF THE OVERHEAD SIGN STRUCTURE.
5. DIAMETER OF U-BOLTS SHALL BE AS SHOWN.
6. THE LENGTH OF THE ALUMINUM VERTICAL SIGN SUPPORT BEAMS SHALL BE THE SAME AS THE HEIGHT OF THE SIGN THEY ARE SUPPORTING. BEAM LENGTHS MAY BE LONGER FOR PROPER ATTACHMENT TO CHORDS.
7. MINIMUM NUMBER OF BRACKETS PER SIGN IS TWO. SEE DETAIL BELOW FOR SPACING OF ALUMINUM VERTICAL SIGN SUPPORTS
8. MATERIAL NOTES:
   STAINLESS STEEL U-BOLTS AND LOCKWASHERS ASTM 304.
   STAINLESS STEEL HEX NUTS ASTM A276.
   ALUMINUM I-BEAMS ARE 6061-T6.



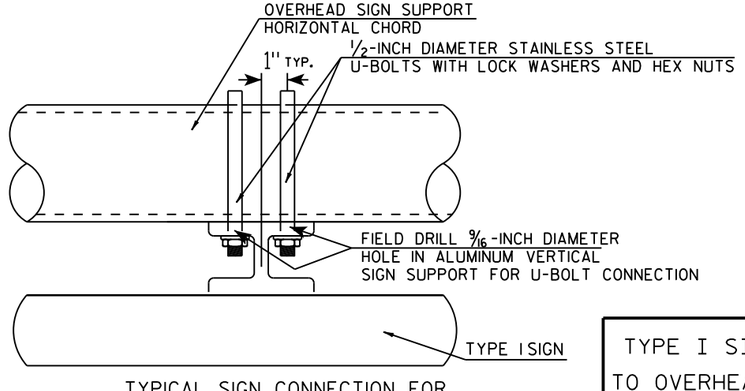
SPACING OF I5X3.7 ALUMINUM
VERTICAL SIGN SUPPORT



OVERHEAD SIGN SUPPORT
FULL SPAN
SINGLE CHORD TRUSS
(SIGNS 6 FEET OR LESS IN HEIGHT)



CUT SECTION B-B



TYPICAL SIGN CONNECTION FOR
SINGLE CHORD TRUSS
PLAN VIEW

TYPE I SIGN CONNECTION TO OVERHEAD SIGN SUPPORT

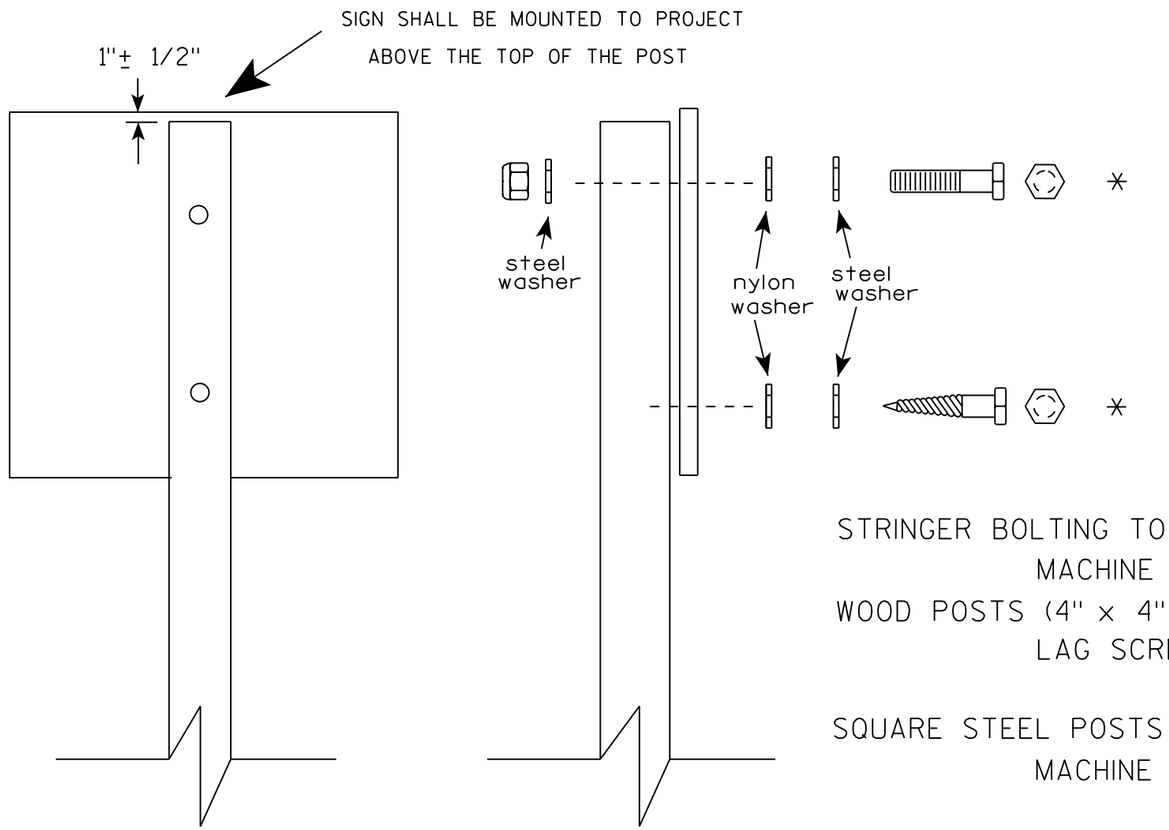
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/10/15 PLATE NO. A4-7,4

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\A47.DGN PLOT DATE : 01-DEC-2015 17:42 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 38.916838:1.000000



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.

STRINGER BOLTING TO ALUMINUM SIGNS (SEE SIGN PLATE A4-18)

MACHINE BOLTS - 5/16" X 1-3/4" Length w/ lock nuts

WOOD POSTS (4" x 4" or 4" x 6")

LAG SCREWS - 3/8" X 3" (NO STRINGERS ON BACK OF SIGN)

3/8" X 4" (STRINGERS ON BACK OF SIGN)

SQUARE STEEL POSTS (2" x 2")

MACHINE BOLTS - 3/8" X 3-1/4" Length w/ nuts (NO STRINGER ON BACK OF SIGN)

3/8" X 5" Length w/ nuts (STRINGERS ON BACK OF SIGN)

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

* 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 8/11/16 PLATE NO. A4-8.8

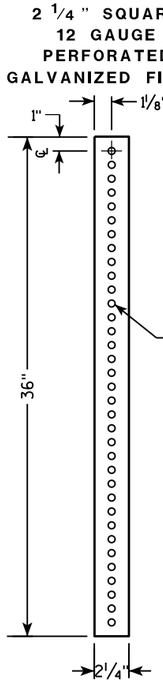
PROJECT NO:

SHEET NO: E

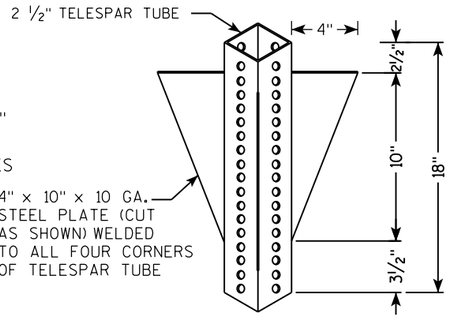
FILE NAME : C:\CADfiles\Projects\tr_stdplate\A48.DGN PLOT DATE : 11-AUG-2016 11:35 PLOT BY : $$ plotuser $$

TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM

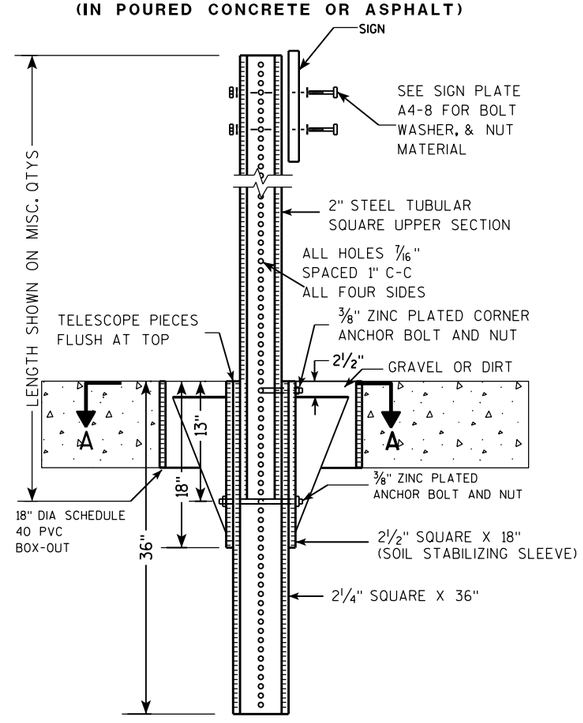
2 ¼ " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH



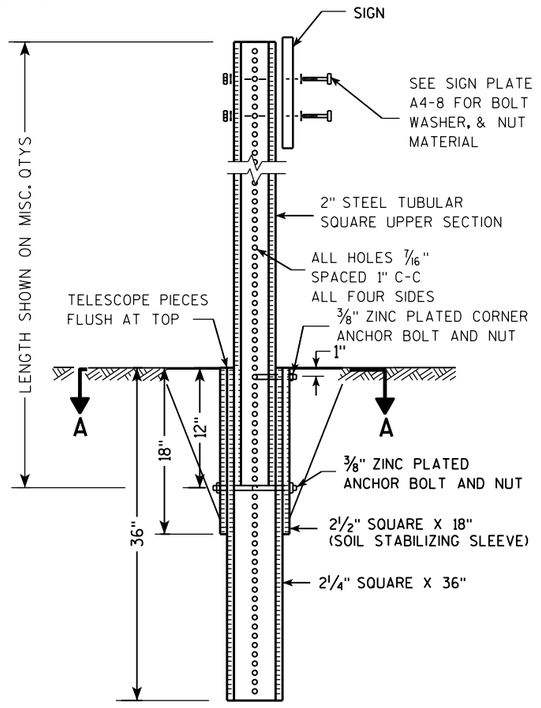
2 ½ " SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH

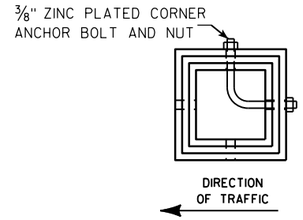


DETAIL OF TUBULAR STEEL SIGN POST
(IN POURED CONCRETE OR ASPHALT)



DETAIL OF TUBULAR STEEL SIGN POST
(IN LOCATIONS OTHER THAN POURED CONCRETE OR ASPHALT)





SECTION A-A

Area of Sign Installation (Sq. Ft.)	Number of Required Posts
9 or less	1
Greater than 9 less than or equal to 18	2
Greater than 18 less than or equal to 27	3

Signs wider than 3 feet or larger than 9 sq. ft shall be mounted on multiple posts (see above table).

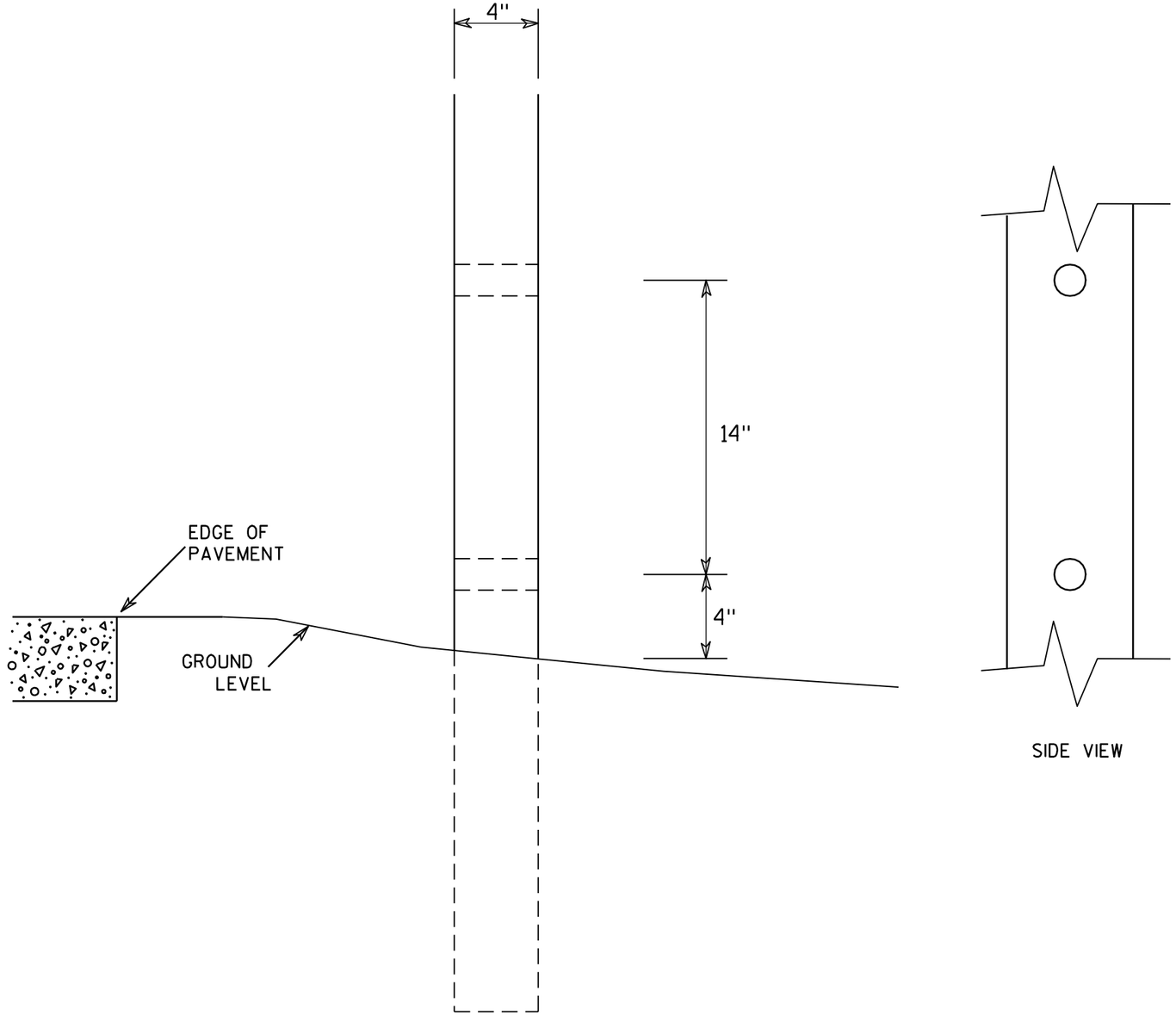
TUBULAR STEEL
SIGN POST
A4-9

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/05/15 PLATE 473 A4-9.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	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.

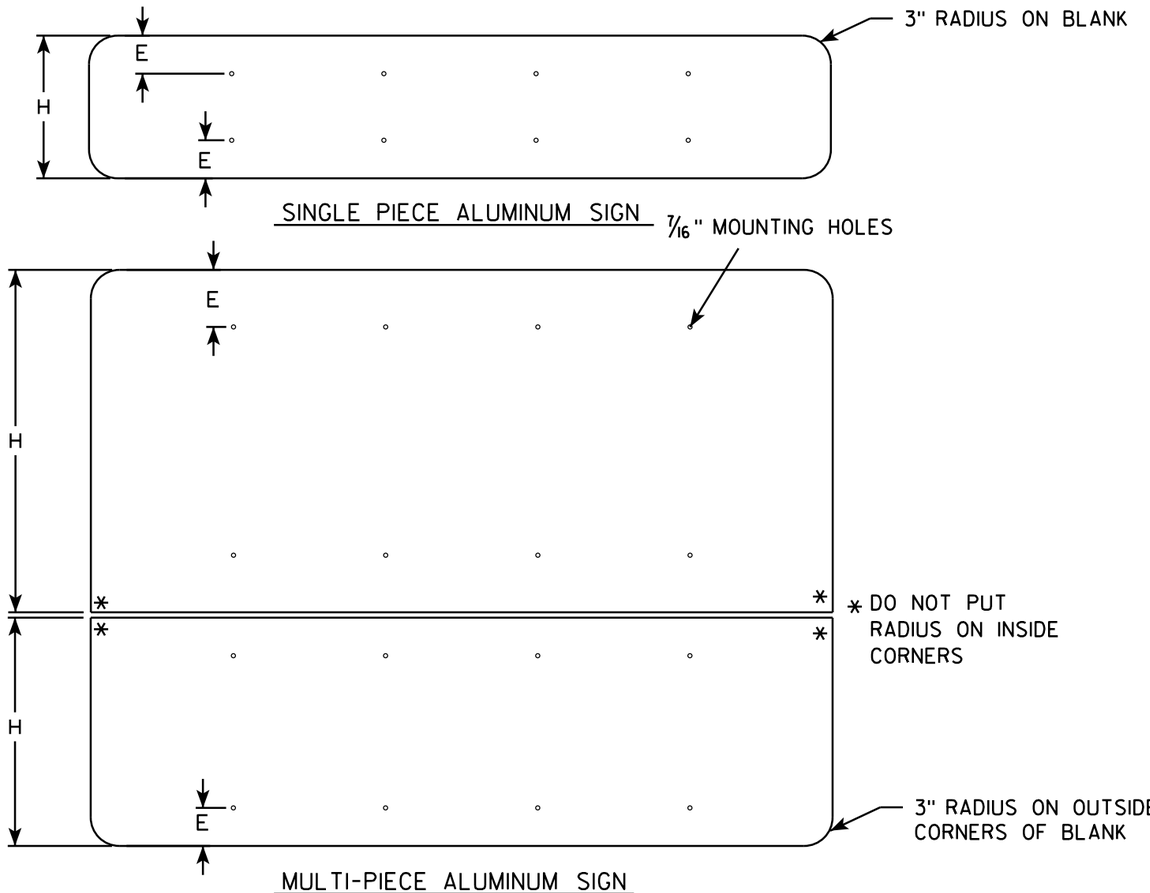
4 X 6 WOOD POST MODIFICATIONS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spang for State Traffic Engineer

DATE 3/27/97 PLATE NO. A4-11.2

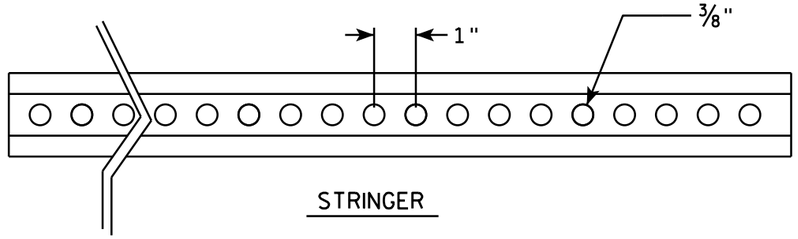
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 474	E



GENERAL NOTES

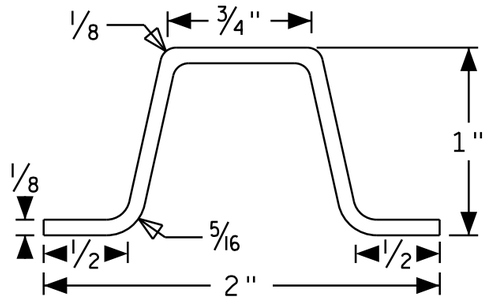
- ALL SIGNS OVER 60" IN WIDTH SHALL HAVE A 3" RADIUS ON THE OUTSIDE CORNERS OF THE ALUMINUM BLANK.
- MOUNTING HOLES SHALL BE 7/16" DIAMETER.
- SEE CHART FOR HOLE SPACING REQUIREMENTS
- FOR SIGN PANELS WITH DIMENSION (H) 36" AND OVER, DIMENSION E SHALL BE 6"
- FOR SIGN PANELS WITH DIMENSION (H) UNDER 36", DIMENSION E SHALL BE 4"
- SIGN STRINGER MATERIAL SHALL CONSIST OF STEEL CHANNEL POST SECTIONS, WEIGHING 1.12 LBS/FT IN ACCORDANCE WITH SECTION 633.2.1 OF THE STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION.
- SEE SIGN PLATE A4-8 FOR SIGN STRINGER BOLTING REQUIREMENTS.

SIGN WIDTH	STRINGER WIDTH	POSTS	HOLE SPACING	MOUNTING HOLES
78"	72"	2	16"	15" 31" 47" 63"
84"	72"	2	17"	16½" 33½" 50½" 67½"
90"	72"	2	18"	18" 36" 54" 72"
96"	90"	2	19"	19½" 38½" 57½" 76½"
102"	90"	2	20"	21" 41" 61" 81"
108"	90"	2	21"	22½" 43½" 64½" 85½"
114"	108"	3	15"	12" 27" 42" 57" 72" 87" 102"
120"	108"	3	16"	12" 28" 44" 60" 76" 92" 108"
126"	108"	3	17"	12" 29" 46" 63" 80" 97" 114"
132"	126"	3	18"	12" 30" 48" 66" 84" 102" 120"
138"	126"	3	19"	12" 31" 50" 69" 88" 107" 126"
144"	126"	3	20"	12" 32" 52" 72" 92" 112" 132"

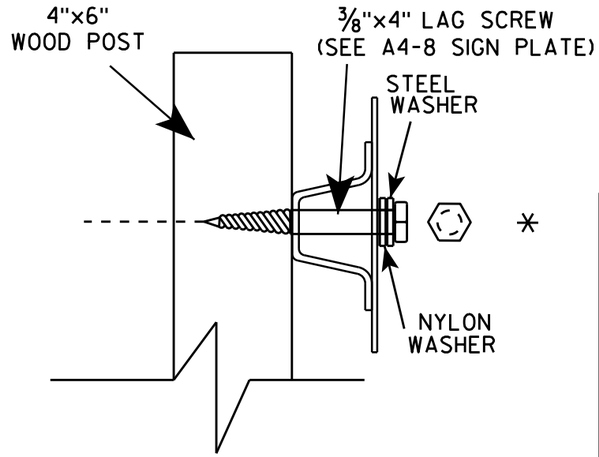


STRINGER

CROSS SECTION VIEW OF CHANNEL



POST MOUNTING



SIGN STRINGER MOUNTING REQUIREMENTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch

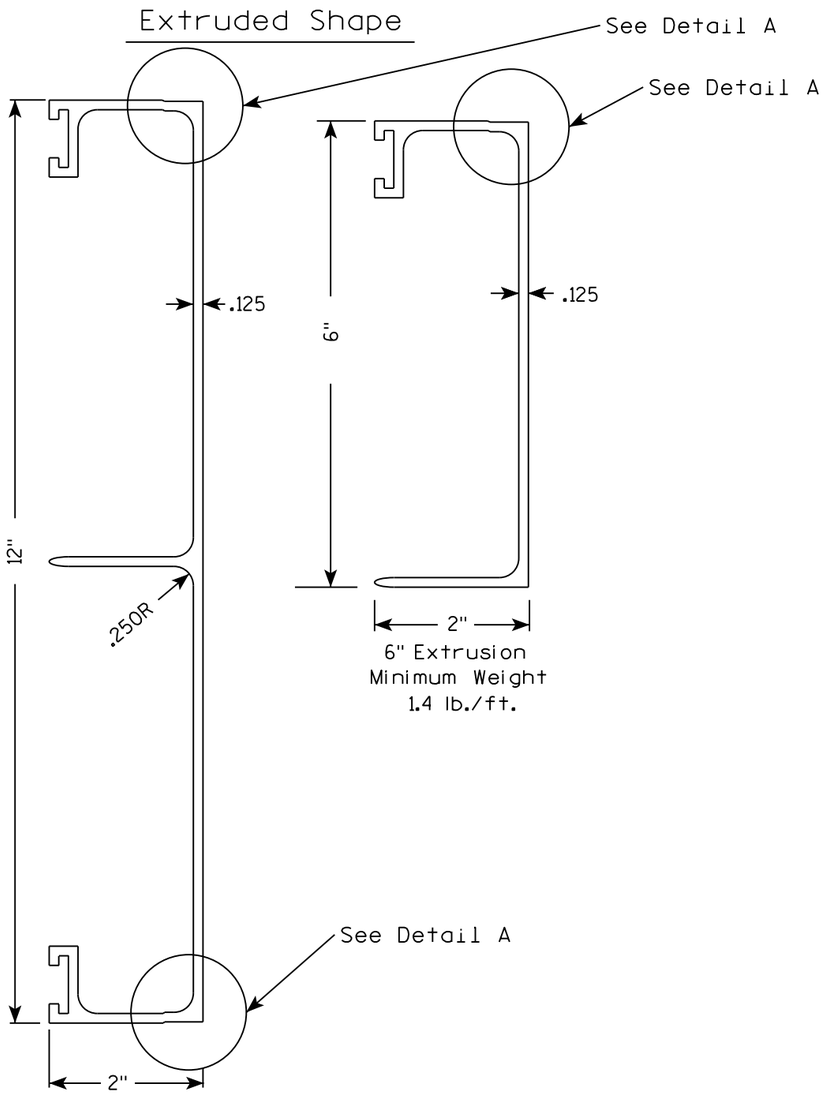
for State Traffic Engineer

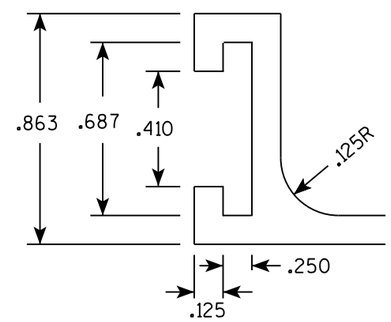
DATE 4/26/16 PLATE NO A4-18.1

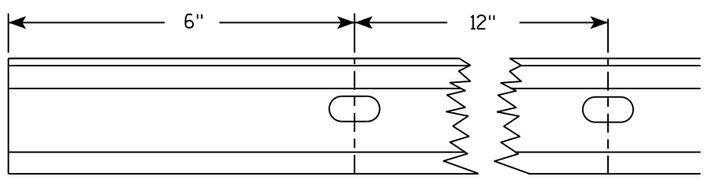
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\A418.dgn PLOT DATE : 27-APR-2016 13:56 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 41.805205:1.000000 WISDOT/CADDS SHEET 42

Extruded Shape







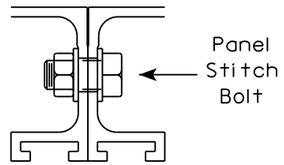
Punch 7/16" x 7/8" oval holes beginning 6" in from end of extrusion 12" CC on both edges of 6" and 12" panels.

Hardware

STITCH BOLT, WASHER & NUT

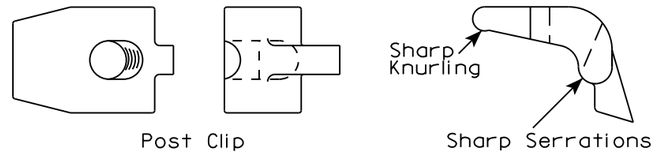
The hardware includes:

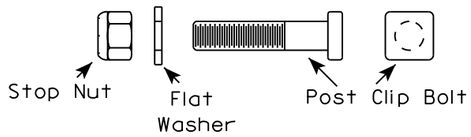
3/8 " - 16 X 3/4 " Economy Bolt 2024-T4 alloy
3/8 " - Stainless steel stop nut
3/8" X .064 Flat Washers, Alclad 2024-T4 alloy



POST CLIP, POST CLIP BOLT, WASHER & NUT

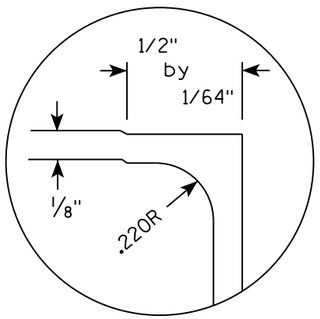
Post Clip shall be Alum. Alloy 356-T6
Post Clip Bolt shall be Stainless Steel.
Flat washer shall be 3/8" X .091, Stainless Steel.
Stop nut shall be stainless steel.





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.
4. Edge wrapping of sign sheeting required on all extrusions joints shown in Detail A.



DETAIL A (EDGE WRAP JOINT)

ALUMINUM EXTRUSIONS FOR TYPE I SIGNS

WISCONSIN DEPT OF TRANSPORTATION

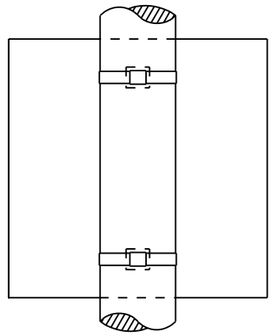
APPROVED Matthew R Rauch
for State Traffic Engineer

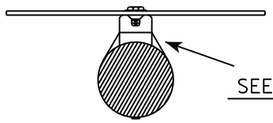
DATE 11/30/16 PLATE NO. A5-2.10

PROJECT NO:				SHEET NO: 476	E

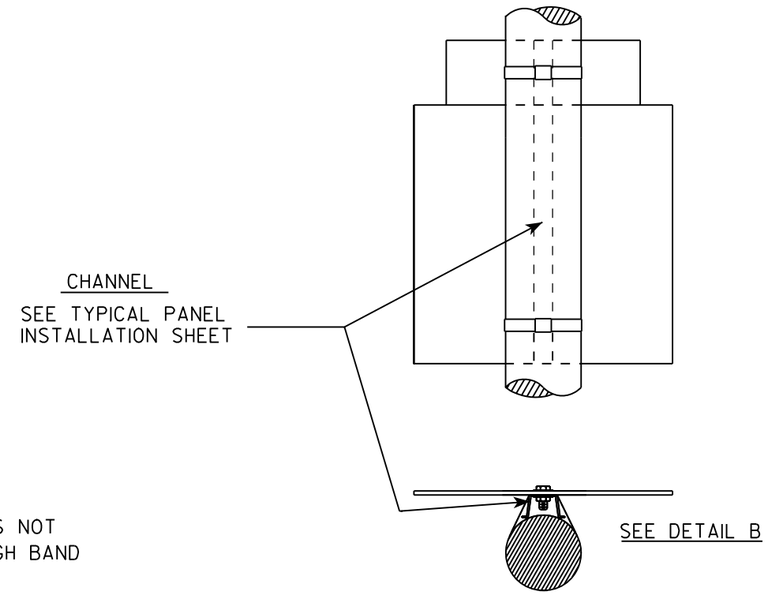
BANDING

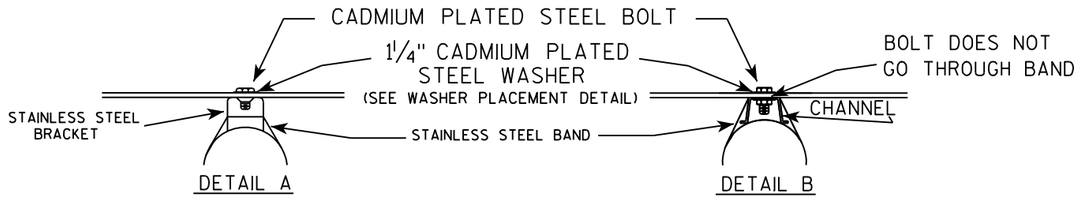
SINGLE SIGN



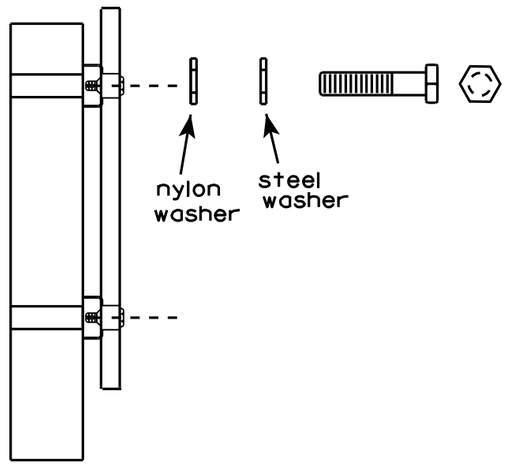


"J" ASSEMBLY





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 3/4" in width and 0.025" thickness.

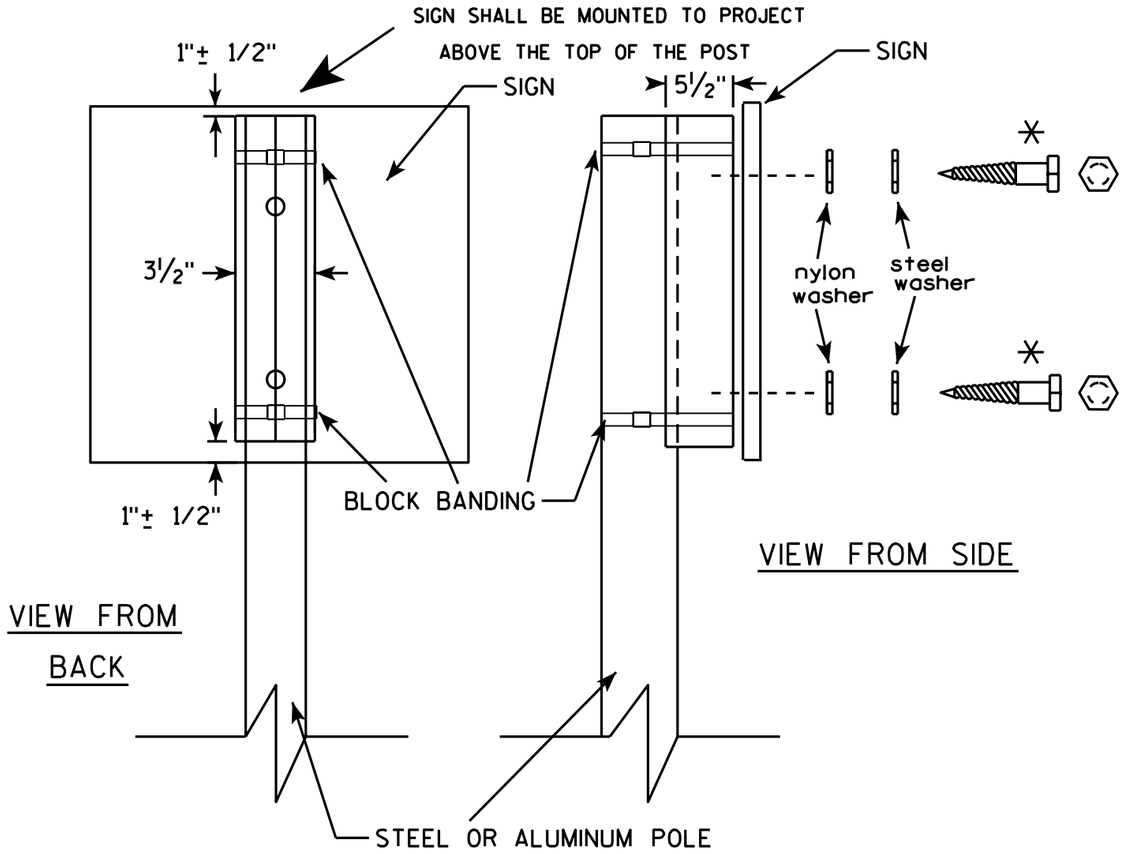
STANDARD SIGN
SIGN BANDING DETAILS

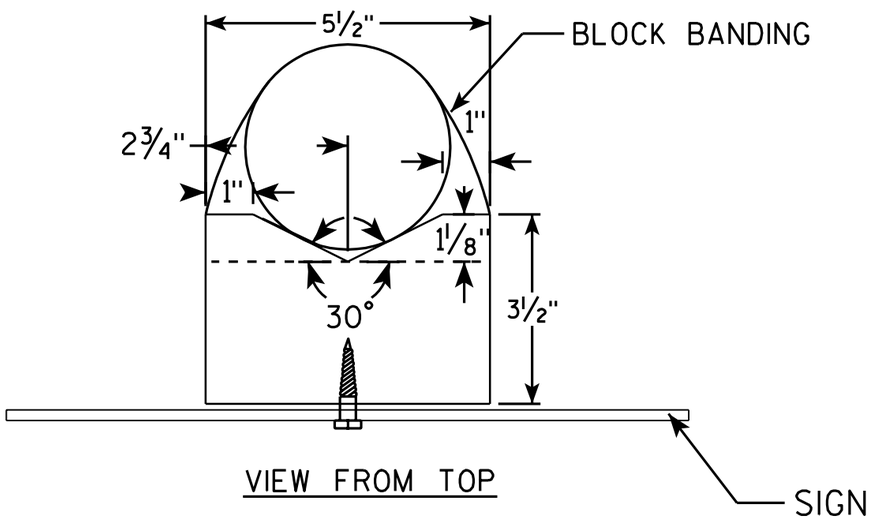
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 8/16/13 PLATE NO. A5-9.3

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 477	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"

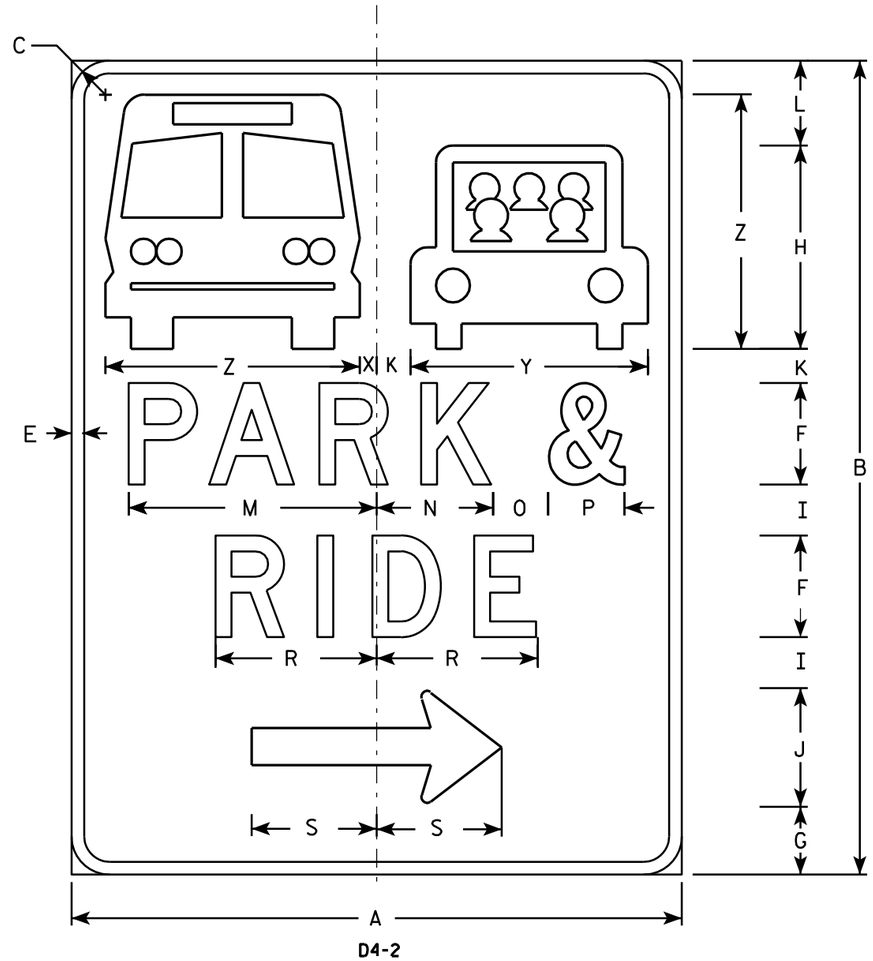
BLOCK BANDING DETAIL (V-BLOCK OPTION)

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 7/12/07 PLATE NO. A5-10.1

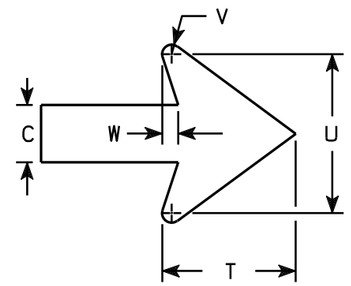
PROJECT NO:				SHEET NO: 478	E



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:

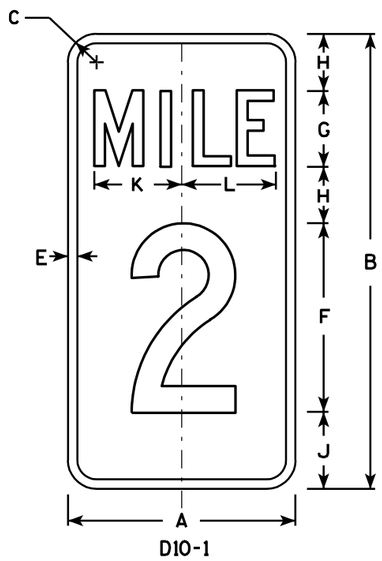
SHEET NO: 479 E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\D42.dgn PLOT DATE : 10-FEB-2011 14:21 PLOT BY : mscsja

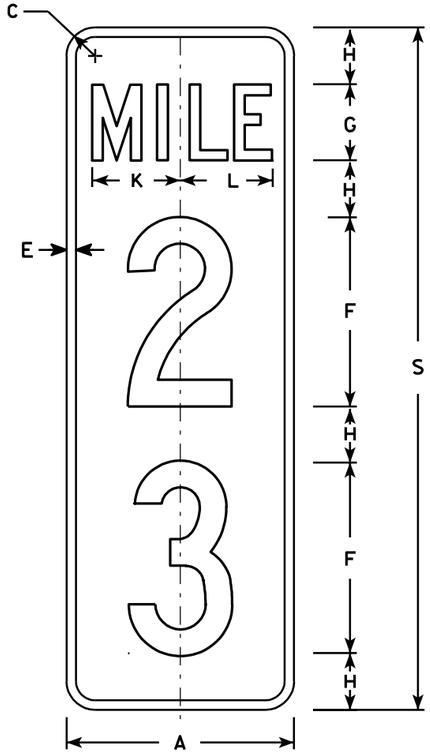
WISDOT/CADDS SHEET 42

7

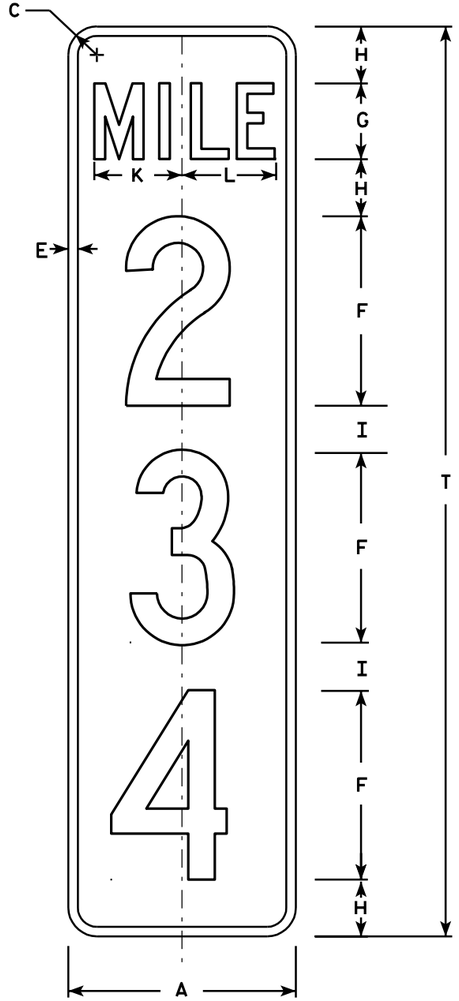
7



D10-1



D10-2



D10-3

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 - Type H Reflective
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. Optically adjust numerals about the centerline of the sign to achieve proper balance.

Metric equivalent for this sign is:

PHY. SIZE	
12 X 24	300 mm X 600 mm
12 X 36	300 mm X 900 mm
12 X 48	300 mm X 1200 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
1																										
2																										
3																										
4	12	24	1 ½		½	10	4	3	2 ½	4	4 ⅝	4 ⅞							36	48						
5	12	24	1 ½		½	10	4	3	2 ½	4	4 ⅝	4 ⅞							36	48						

D10-1	D10-2	D10-3
Area sq. ft.	Area sq. ft.	Area sq. ft.
2.0	3.0	4.0
Area m2	Area m2	Area m2
.19	.28	.38

STANDARD SIGN
D10-1 , D10-2 & D10-3

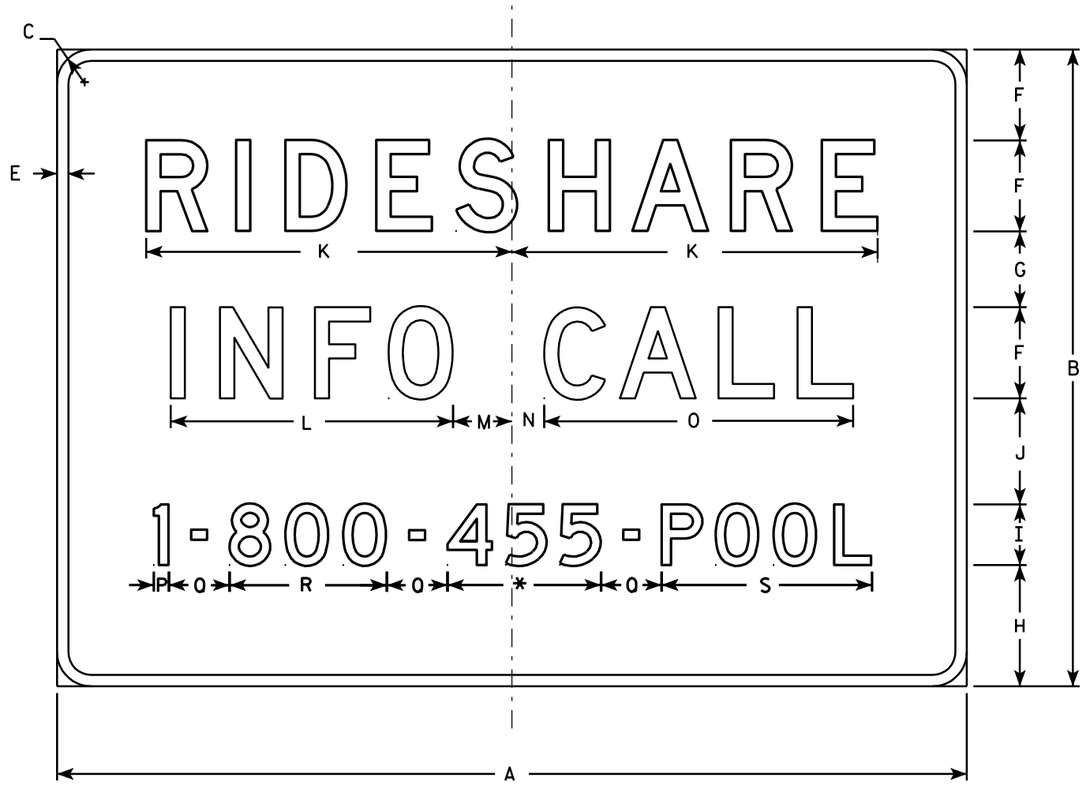
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spang for Director, Office of Traffic

DATE 1/16/02 PLATE NO. D10-3.2

PROJECT NO:

SHEET NO: 480 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.

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

* Variable (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.	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 1/8	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 1/8	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 1/8	23 5/8	4 1/8	2 1/8	26 3/8	1 1/2	5	15 1/2	21 1/4								29.25	2.63

STANDARD SIGN
D12-2A

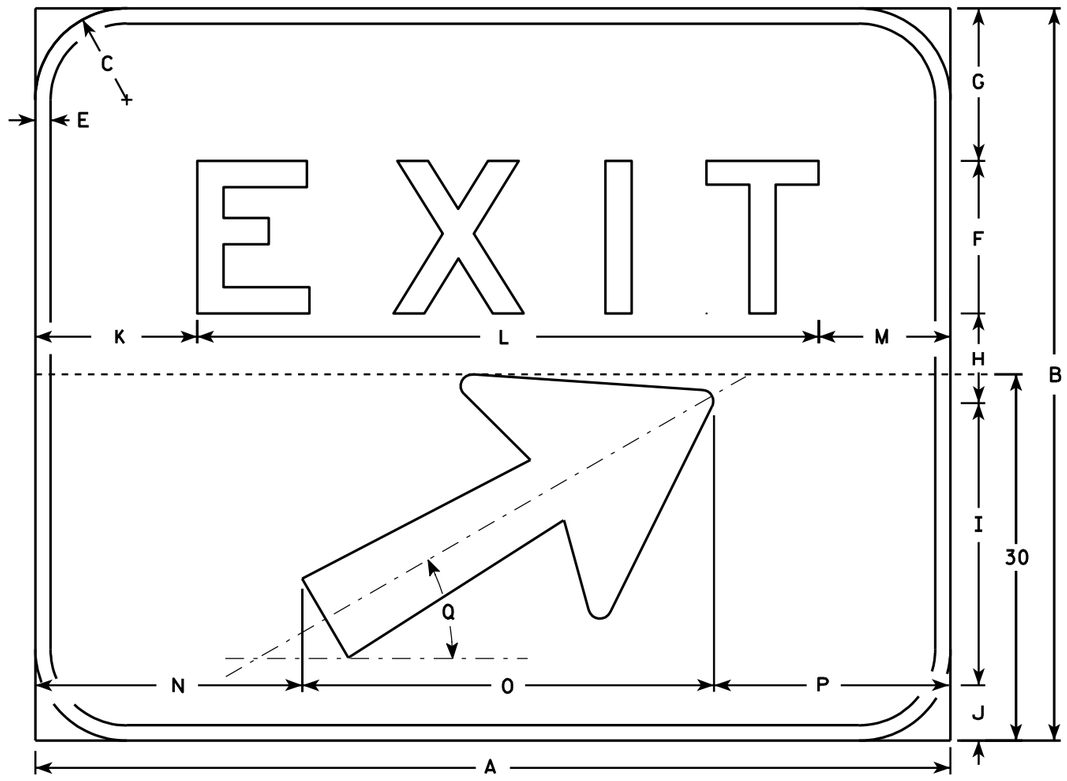
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spay for State Traffic Engineer

DATE 1/16/02 PLATE NO. D12-2A.3

PROJECT NO:

SHEET NO: 481 E



E5-1

NOTES

1. Sign is Type II - Type H reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Green
   Message - White (Type H reflective)
3. Message Series - E
4. Corners may be square or rounded but borders shall be rounded as shown.
5. Base material for this sign shall be plywood and shall be split into two seperate pieces for the 72 x 60 size as shown on the detail by the dashed line (----------).
6. Arrow is Type "A" from sign plate A1-1.
7. As per the Standard Spec's, this sign shall not have a vertical joint.

Metric equivalent for this sign is:

SIZE	
1	
2	
3	
4	1500 mm X 1200 mm
5	1800 mm X 1500 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																												
3																												
4	60	48	6		1	10	10	5 7/8	18 1/2	3 5/8	10 5/8	40 3/4	8 5/8	17 1/2	27	15 1/2	30°										20.0	1.80
5	72	60	6		1	12	12	10	18 1/2	7 1/2	13 1/4	48 1/2	10 1/4	23 1/2	27	21 1/2	30°										30.0	2.70

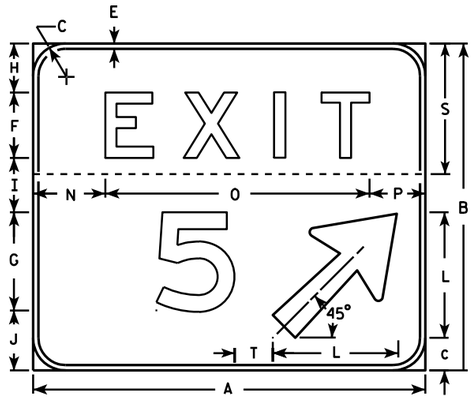
STANDARD SIGN
E5 - 1

WISCONSIN DEPT OF TRANSPORTATION

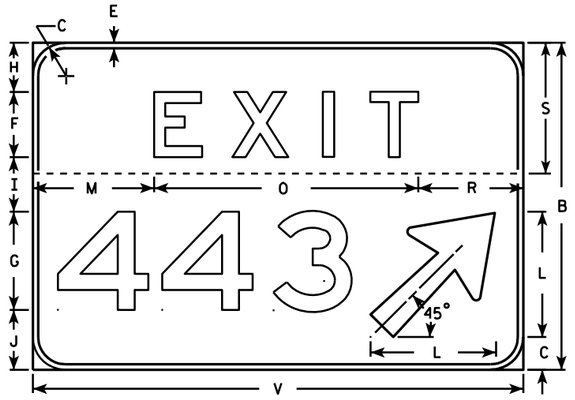
APPROVED Chester J Spang for State Traffic Engineer

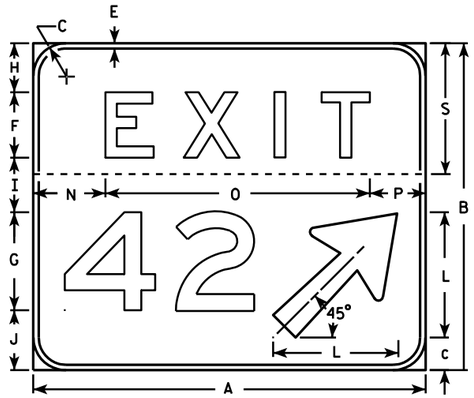
DATE 6/22/00 PLATE NO. E5-1.8

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 482	E



NOTE: T diminision shall be measured from the back of the number to the front of the arrow





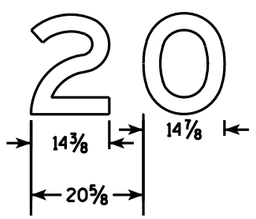
NOTES

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. 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			
1	5 7/8	14	14	14	13 1/8	12 1/8	14	14	12 1/4	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			
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			
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			
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			
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			
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			
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			
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			
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

EXAMPLE FOR USING SPACING CHART



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	72	60	6		1	12	18	9	10	11	8 7/8	23	22 1/4	13 1/4	48 1/2	10 1/4		19 1/4	24	7		90		96	7 1/2	

1-2 Digit Bid Area	3 Digit Bid Area
Sq. Ft.	
30	37.5

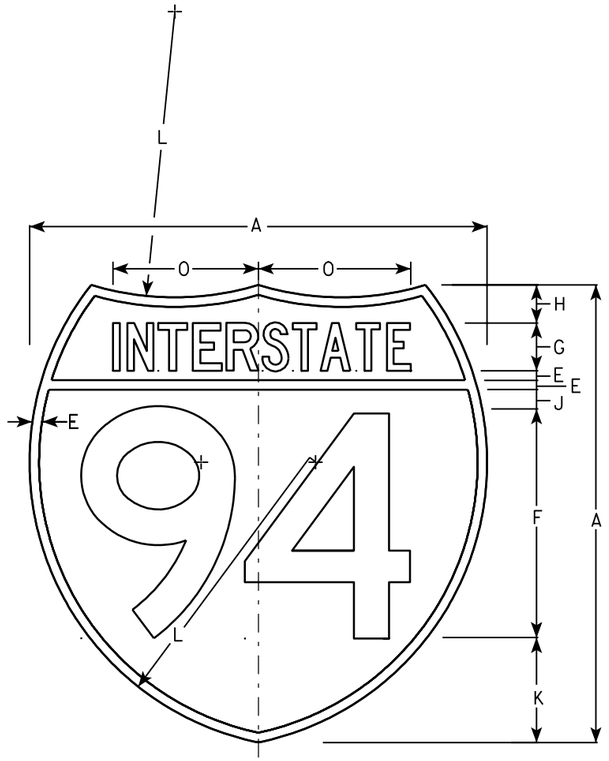
STANDARD SIGN E5-1A

WISCONSIN DEPT OF TRANSPORTATION

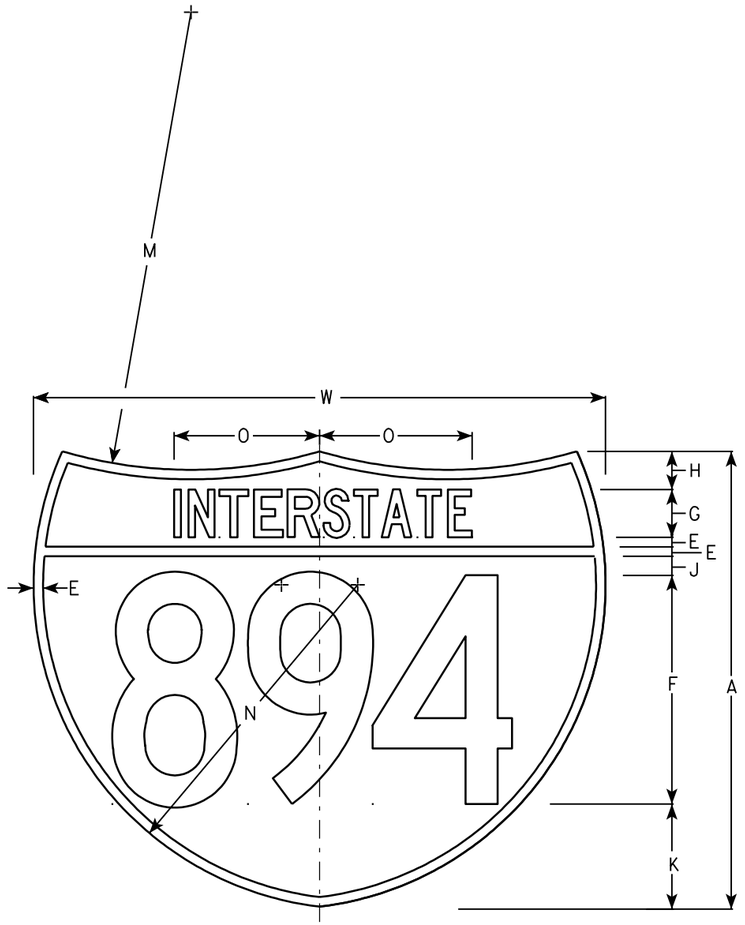
APPROVED Matthew R Rauch for State Traffic Engineer

DATE 5/11/10 PLATE NO. E5-1A.12

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 483 | 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

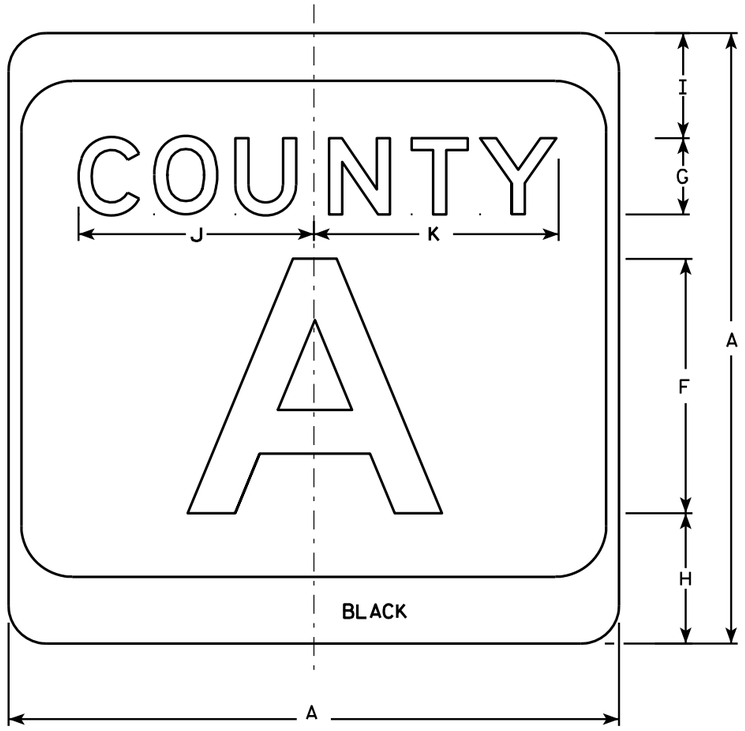
INTERSTATE ROUTE MARKER
M1-1 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

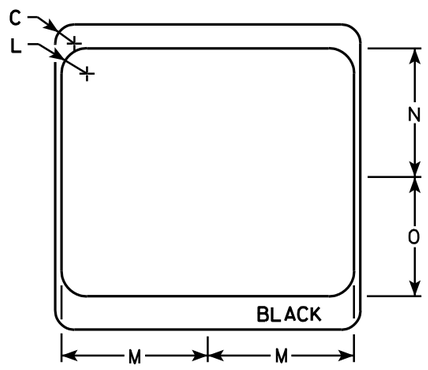
APPROVED Matthew R Rauch
for State Traffic Engineer

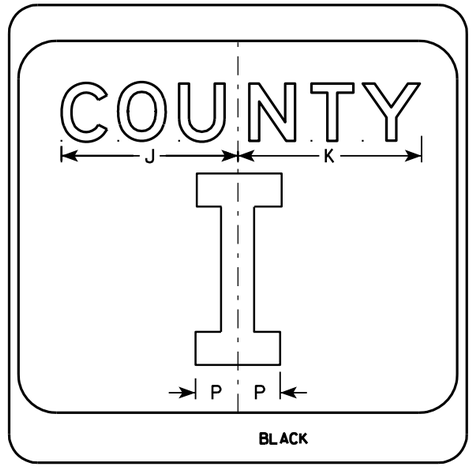
DATE 08/23/05 PLATE NO. M1-1.8

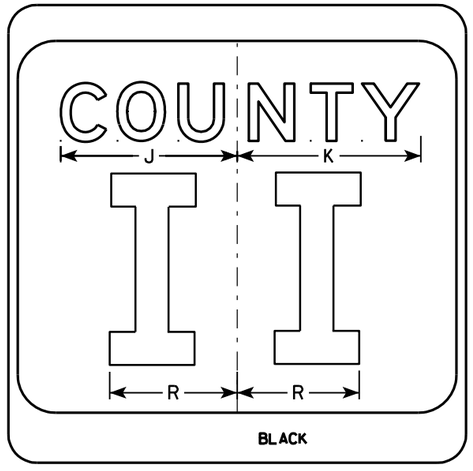
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 484	E



M1-5A







NOTES

1. Sign is Type II - see Note 7 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White & Black - See Note 7
   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. Message Series E for 1 letter.
   Message Series D for 2 letters unless message is too big then Series C.
   Message Series C for 3 letters unless message is too big then Series B.
6. Substitute appropriate letters & optically center to achieve proper balance.
7. Permanent Signs
   Background - Type H Reflective
   Detour or temporary Signs
   Background - Reflective

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		1 1/2			10	3	5 1/8	4 1/8	9 1/4	9 5/8	2	11 1/2	10 1/8	9 3/8	2 1/4		6 5/8									4.0
3	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0
4	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0
5	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0

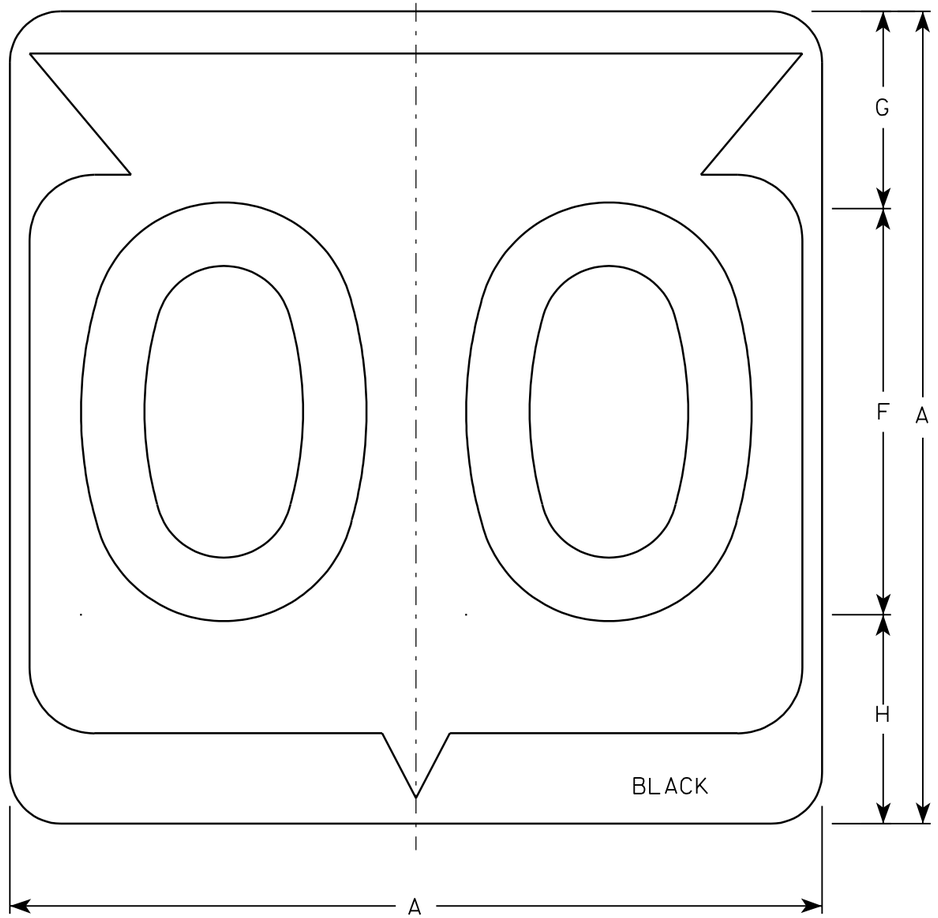
CTH MARKER
M1-5A FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 9/27/11 PLATE NO. M1-5A.8

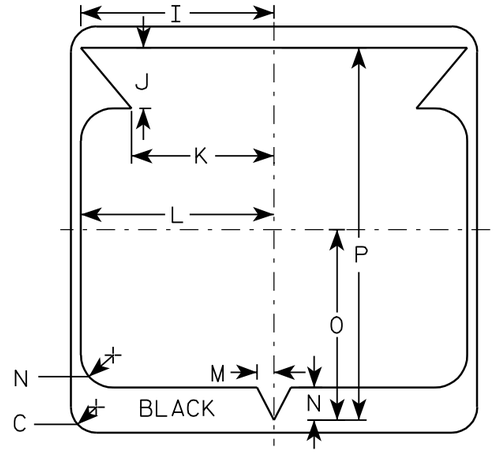
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 485	E



M1-6

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 Series numerals and adjust spacing as per plate A10-1.
6. Permanent Signs
   Background - Type H Reflective
   Detour or temporary Signs
   Background - Reflective



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		1 1/2			12	5 1/2	6 1/2	10 1/4	2 1/2	8 7/8	11 1/2	1	1 7/8	11 1/4	21 7/8											4.0	.36
3	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0	.81
4	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0	.81
5	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0	.81

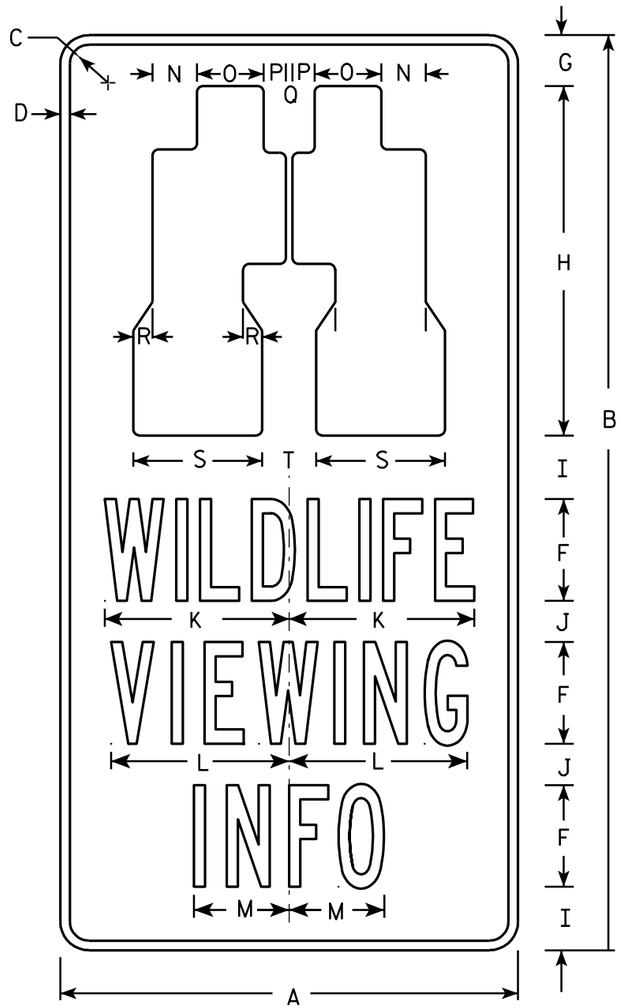
STATE ROUTE MARKER
M1-6 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spang for State Traffic Engineer

DATE 3/20/02 PLATE NO. M1-6.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 486	E



M1-87

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Brown
   Message - White - Type H Reflective
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.

Metric equivalent for this sign is:

SIZE	
1	
2	450 mm X 900 mm
3	
4	
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.	Area m2
1																												
2	18	36	1 1/8	3/8		4	2	13 3/4	2 1/2	1 5/8	7 1/4	7	3 3/4	1 3/4	2 5/8	7/8	1/4	3/4	5 1/8	2 1/8							4.5	.41
3																												
4																												
5																												

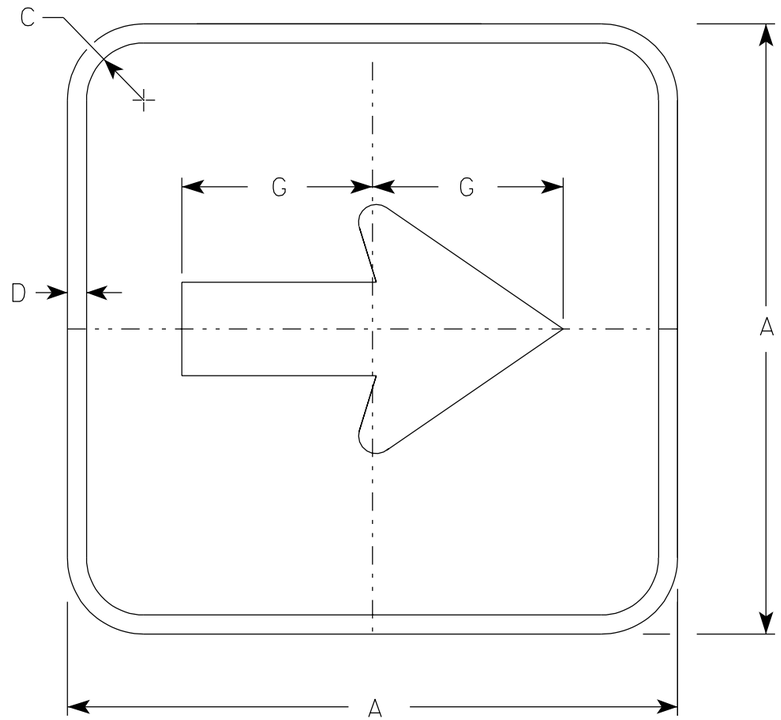
STANDARD SIGN
M1-87

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spang
for State Traffic Engineer

DATE 1/30/02 PLATE NO. M1-87.3

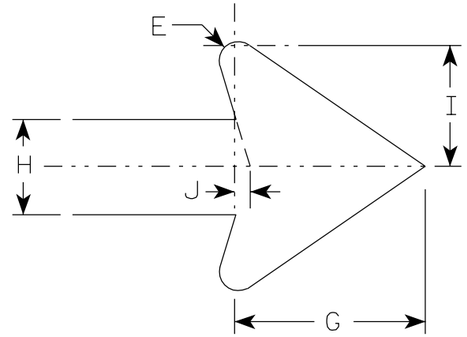
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 487 | E



M1-88A

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Brown
   Message - White - Type H Reflective
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.



Metric equivalent for this sign is:

SIZE	
1	
2	300 mm X 300 mm
3	
4	
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.	Area m2
1																												
2	12		1 1/8				3 3/4	1 7/8	2 3/8	5/16																	1.0	.09
3																												
4																												
5																												

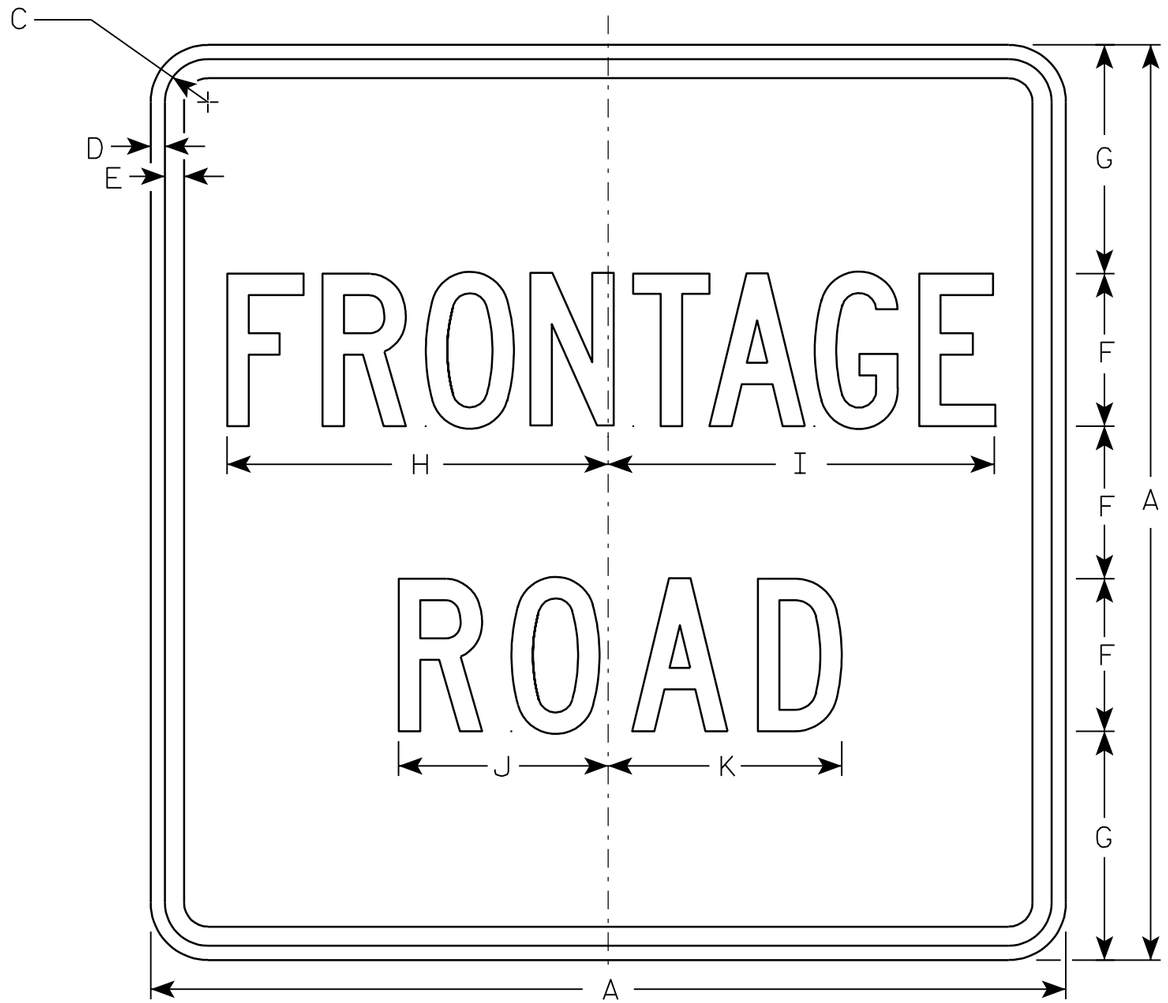
STANDARD SIGN
M1-88A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spang for State Traffic Engineer

DATE 1/30/02 PLATE NO. M1-88A.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 488	E



M1-95

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.

Metric equivalent for this sign is:

SIZE	
1	600 mm X 600 mm
2	600 mm X 600 mm
3	
4	900 mm X 900 mm
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.	Area m2
1	24		1 1/8	3/8	1/2	4	6	10	10 1/8	5 1/2	6 1/8																4.0	0.36
2	24		1 1/8	3/8	1/2	4	6	10	10 1/8	5 1/2	6 1/8																4.0	0.36
3																												
4	36		1 3/8	1/2	5/8	6	9	15	15 1/4	8 1/4	9 1/8																9.0	0.81
5																												

STANDARD SIGN
M1-95

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spange for State Traffic Engineer

DATE 1/30/02 PLATE NO. M1-95.6

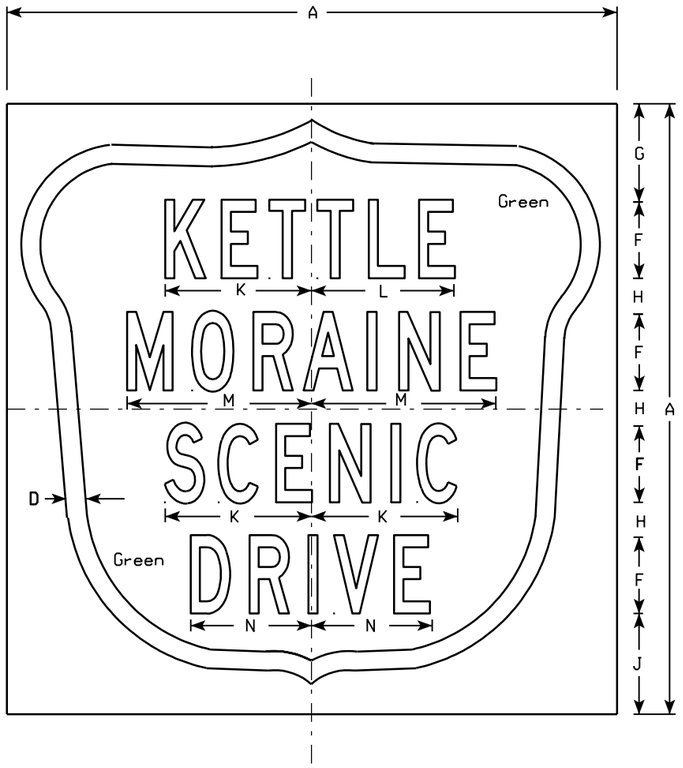
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 489	E

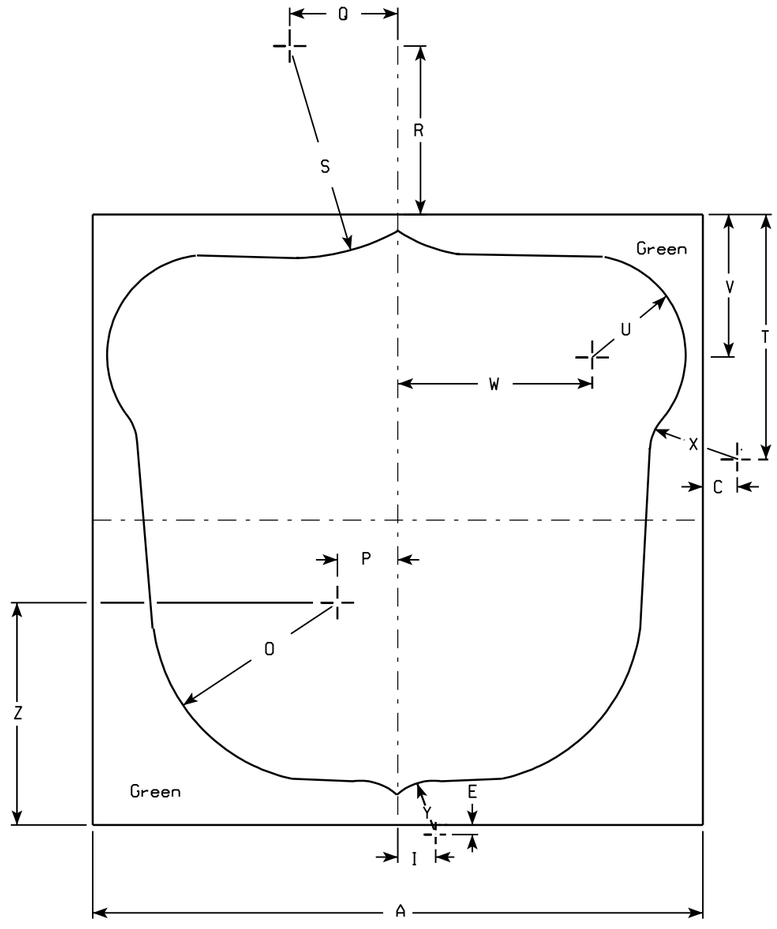
FILE NAME : C:\Users\Projects\tr_stdplate\M195.DGN PLOT DATE : 14-OCT-2005 09:14 PLOT BY : DITJPH PLOT NAME : PLOT SCALE : 3.973889:1.000000

WISDOT/CADDS SHEET 42

7

7





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 - B
4. Corners may be square or rounded when base material is plywood. When base material is metal, the corners shall be rounded.

7

7

Metric equivalent for this sign is:

SIZE	
1	
2	600 mm X 600 mm
3	
4	900 mm X 900 mm
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.	Area m2
1																												
2	24		1 3/8	3/4	3/8	3	3 7/8	1 3/8	1 1/2	4	5 3/4	5 5/8	7 1/4	4 3/4	7 1/4	2 3/8	4 1/4	6 5/8	8 1/2	9 5/8	3 7/8	5 5/8	7 5/8	3 1/2	2 1/8	8 3/4	4.00	0.36
3																												
4	36		1 1/2	1 1/8	3/4	5	5 1/4	1 5/8	2 1/4	5 7/8	9 1/8	9	11 3/4	7 3/8	10 3/4	3 5/8	6 3/8	9 7/8	14 1/8	14 3/8	5 3/4	8 3/8	11 3/8	5 1/8	3 1/2	13 1/8	9.00	0.81
5																												

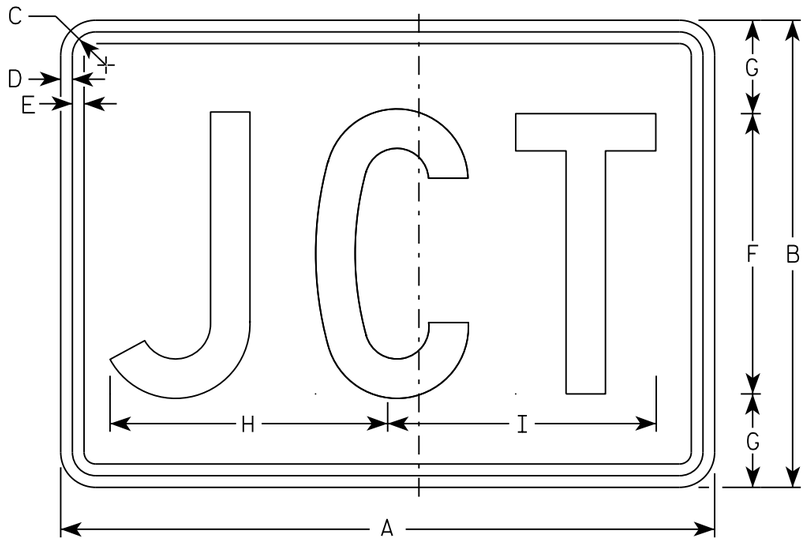
STANDARD SIGN
M1-97

WISCONSIN DEPT OF TRANSPORTATION

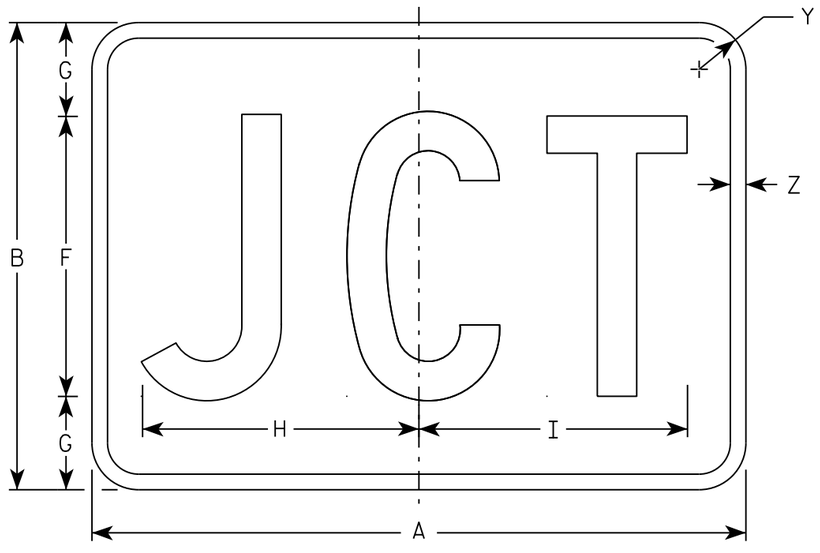
APPROVED Chester J Spang for State Traffic Engineer

DATE 1/30/02 PLATE NO. M1-97.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 490	E



M2-1
MM2-1
MP2-1



MB2-1
MK2-1
MN2-1
MR2-1

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
   MP2-1 Background - White
   Message - Blue
   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

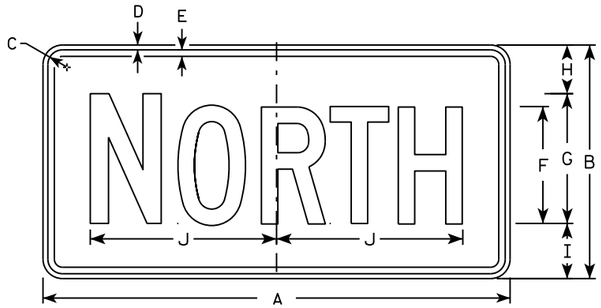
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

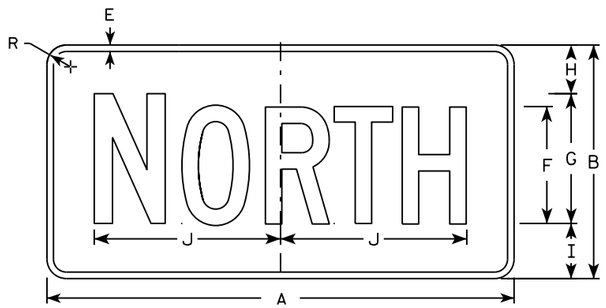
DATE 10/15/15 PLATE 491 12-1.12

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M21.DGN PLOT DATE : 01-DEC-2015 17:54 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 4.864603:1.000000



M3-1
MM3-1
MP3-1



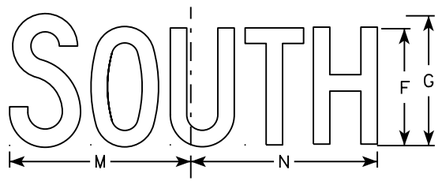
MB3-1
MK3-1
MN3-1



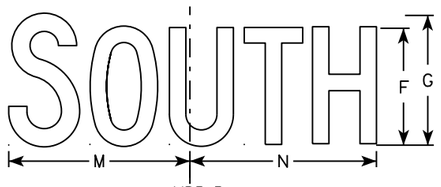
M3-2
MM3-2
MP3-2



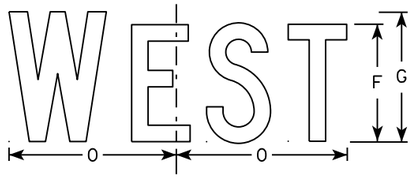
MB3-2
MK3-2
MN3-2



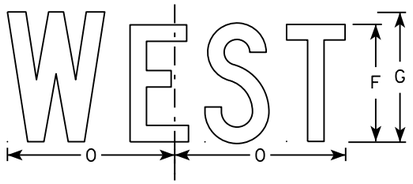
M3-3
MM3-3
MP3-3



MB3-3
MK3-3
MN3-3



M3-4
MM3-4
MP3-4



MB3-4
MK3-4
MN3-4

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
   MP3-1 thru MP3-4 Background - White
   Message - Blue
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

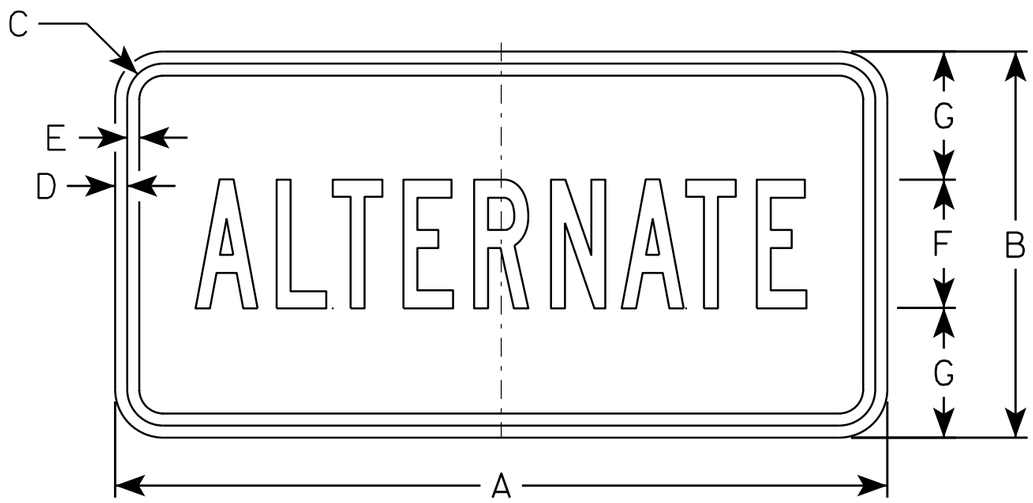
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew P Rauch for State Traffic Engineer

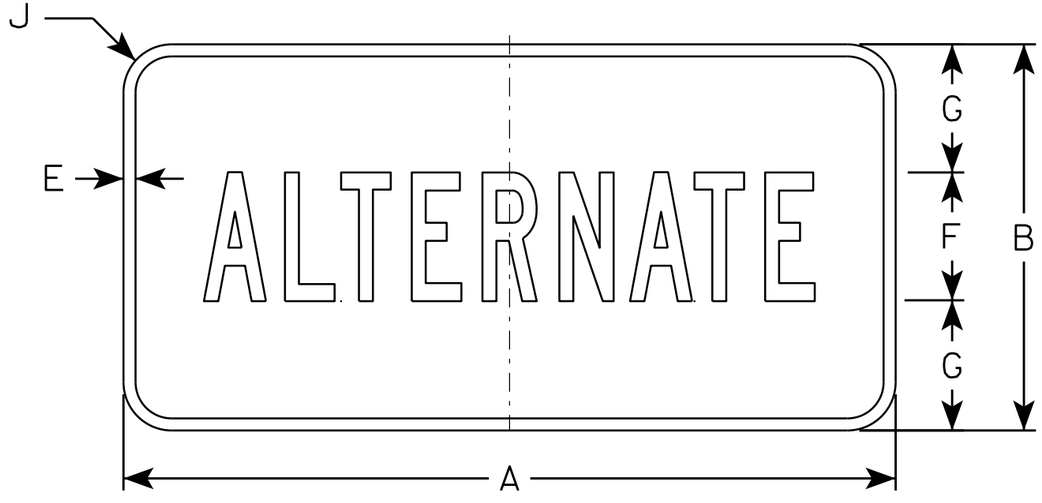
DATE 10/15/15 PLATE NO M3-1.14

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M31.DGN PLOT DATE : 01-DEC-2015 17:54 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 11.675051:1.000000



M4-1
MO4-1



MB4-1

NOTES

1. Sign is Type II - Type H except as Shown
2. Color:
   Background - See Note 5
   Message - See note 5
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.
5. M4-1 Background - White
   Message - Black

   MB4-1 Background - Blue
   Message - White

   MO4-1 Background - Orange - Type F
   Message - 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																											
2	24	12	1 1/8	3/8	3/8	4	4	9 3/4	9 1/2	1 1/2																	2.00
3	36	18	1 1/8	3/8	1/2	7	5 1/2	16 3/8	16 1/2	1 1/2																	4.5
4	36	18	1 1/8	3/8	1/2	7	5 1/2	16 3/8	16 1/2	1 1/2																	4.5
5	36	18	1 1/8	3/8	1/2	7	5 1/2	16 3/8	16 1/2	1 1/2																	4.5

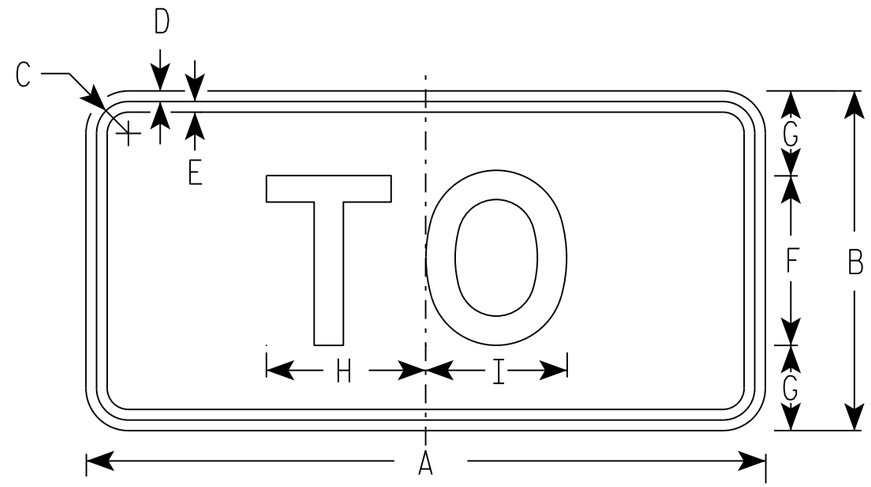
STANDARD SIGN
M4-1

WISCONSIN DEPT OF TRANSPORTATION

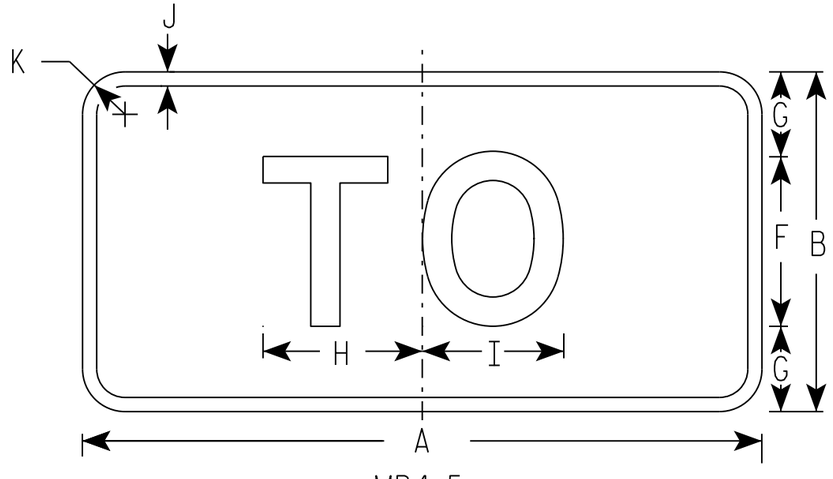
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/30/14 PLATE 493 14-1.8

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E



M4-5
MM4-5
MP4-5



MB4-5
MK4-5
MN4-5

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

   MP4-5 Background - White
   Message - Blue

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

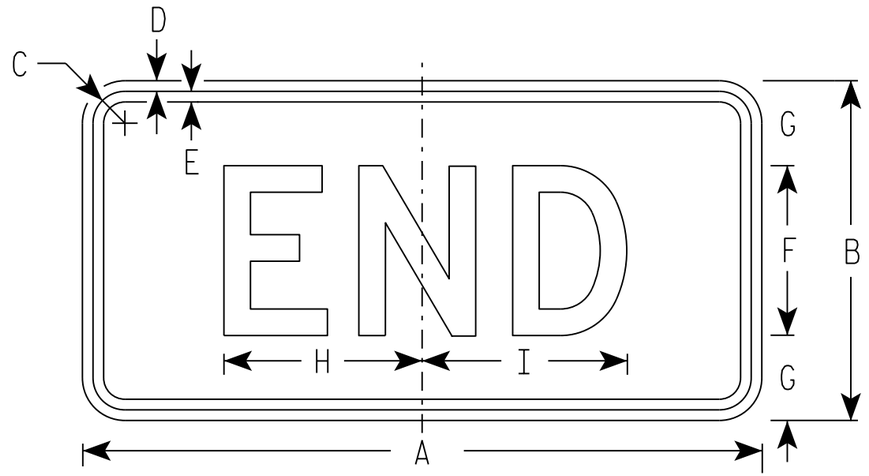
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

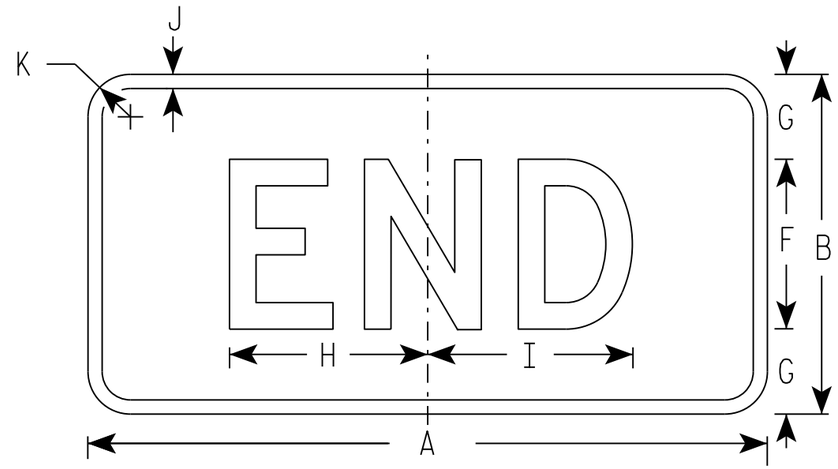
DATE 10/15/15 PLATE 494 M4-5.8

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M45.DGN PLOT DATE : 01-DEC-2015 17:55 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 5.351066:1.000000



M4-6
MM4-6
MP4-6



MB4-6
MK4-6
MN4-6
MR4-6

NOTES

1. Sign is Type II - Type H
2. Color:
   Background - See note 5
   Message - See note 5
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. M4-6 Background - White
   Message - Black

   MB4-6 Background - Blue
   Message - White

   MK4-6 Background - Green
   Message - White

   MM4-6 Background - White
   Message - Green

   MN4-6 Background - Brown
   Message - White

   MP4-6 Background - White
   Message - Blue

   MR4-6 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	24	12	1 1/8	3/8	3/8	6	3	7	7 1/4	1/2	1 1/2																2.00
3	36	18	1 1/8	3/8	1/2	9	4 1/2	12	11 7/8	1/2	1 1/2																4.5
4	36	18	1 1/8	3/8	1/2	9	4 1/2	12	11 7/8	1/2	1 1/2																4.5
5	36	18	1 1/8	3/8	1/2	9	4 1/2	12	11 7/8	1/2	1 1/2																4.5

STANDARD SIGN
M4-6

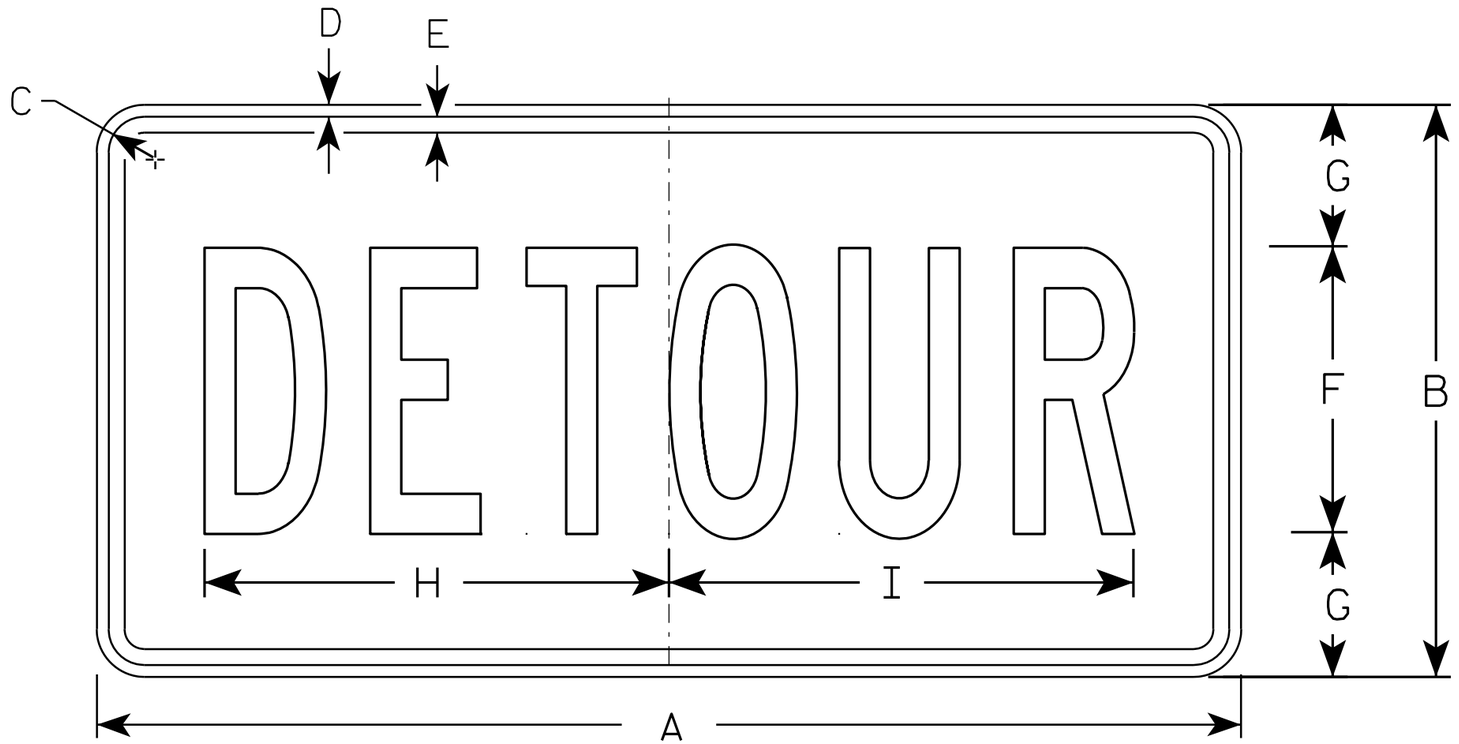
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/15/15 PLATE 495 '14-7.9

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M46.DGN PLOT DATE : 01-DEC-2015 17:55 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 5.351066:1.000000



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																											

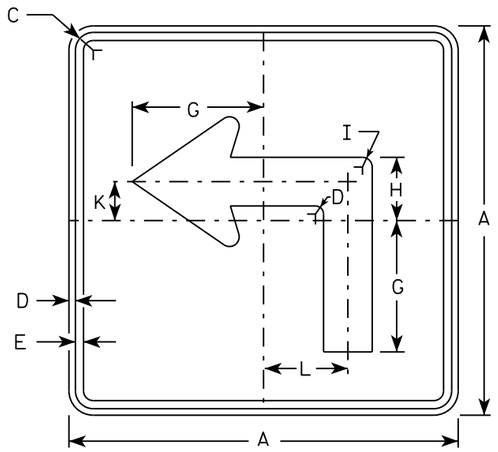
STANDARD SIGN
M4-8

WISCONSIN DEPT OF TRANSPORTATION

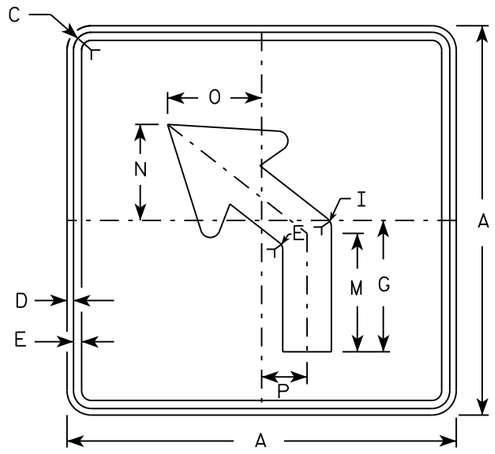
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/10/10 PLATE NO. M4-8.2

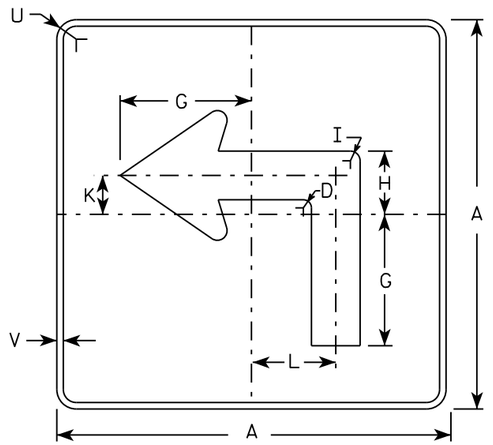
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 496	E



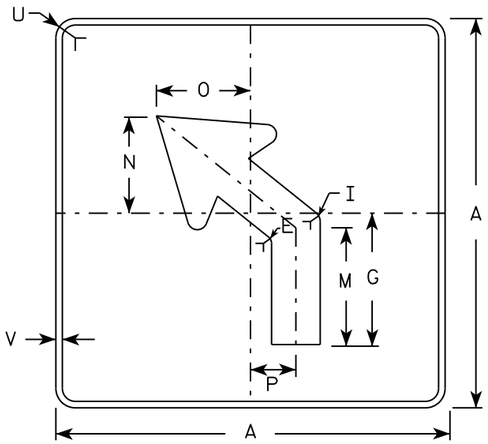
M5-1L
MM5-1L
MO5-1L
MP5-1L



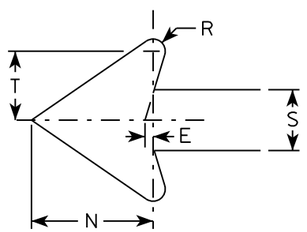
M5-2L
MM5-2L
MO5-2L
MP5-2L



MB5-1L
MK5-1L
MN5-1L
MR5-1L



MB5-2L
MK5-2L
MN5-2L
MR5-2L



NOTES

1. Signs are Type II - Type H reflective 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. M5-1 and M5-2 Background - White
   Message - Black
   MB5-1 and MB5-2 Background - Blue
   Message - White
   MK5-1 and MK5-2 Background - Green
   Message - White
   MM5-1 and MM5-2 Background - White
   Message - Green
   MN5-1 and MN5-2 Background - Brown
   Message - White
   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
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 7/8	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 7/8	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 7/8	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

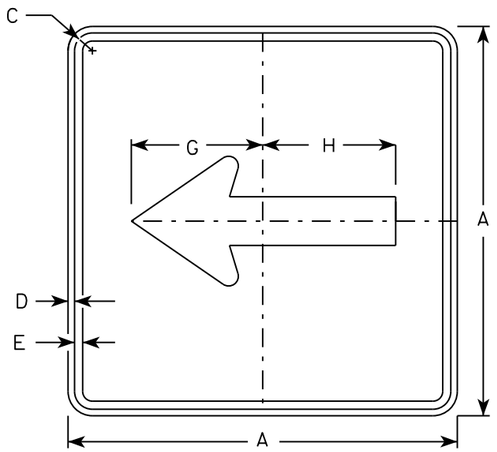
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

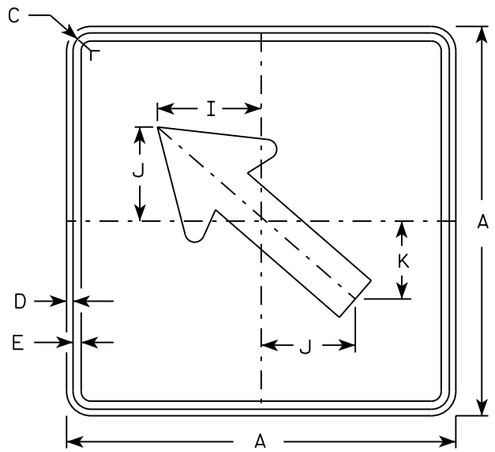
DATE 10/15/15 PLATE NO. M5-1.13

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M51.DGN PLOT DATE : 01-DEC-2015 18:07 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 11.675051:1.000000



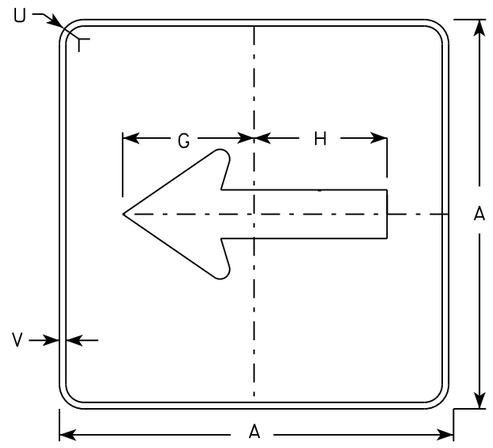
M6-1
MM6-1
MO6-1
MP6-1



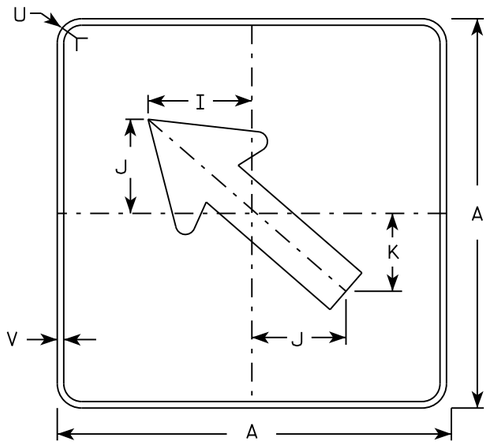
M6-2
MM6-2
MO6-2
MP6-2

NOTES

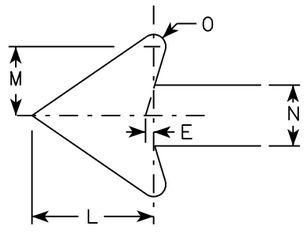
1. Signs are Type II - Type H except as Shown
2. Color:
   Background - See note 4
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M6-1 and M6-2 Background - White
   Message - Black
   MB6-1 and MB6-2 Background - Blue
   Message - White
   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
MK6-1
MN6-1
MR6-1



MB6-2
MK6-2
MN6-2
MR6-2



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

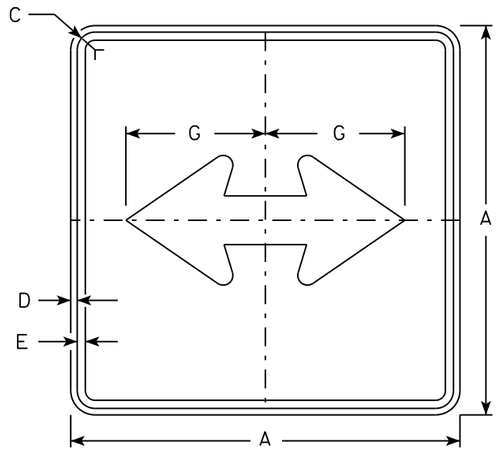
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

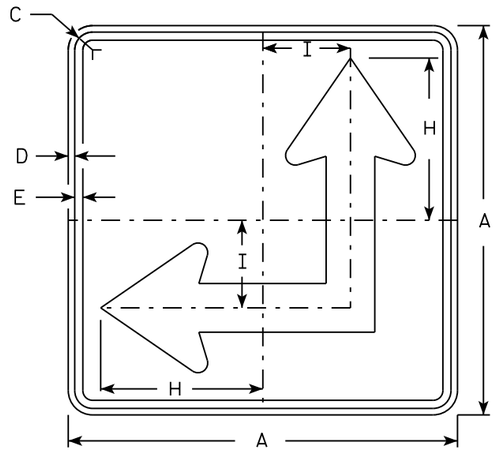
DATE 10/15/15 PLATE 498 M6-1.15

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M61.DGN PLOT DATE : 01-DEC-2015 17:57 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 11.675051:1.000000



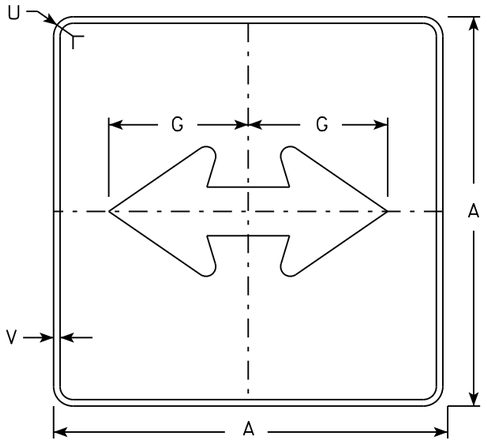
M6-4
MM6-4
MO6-4
MP6-4



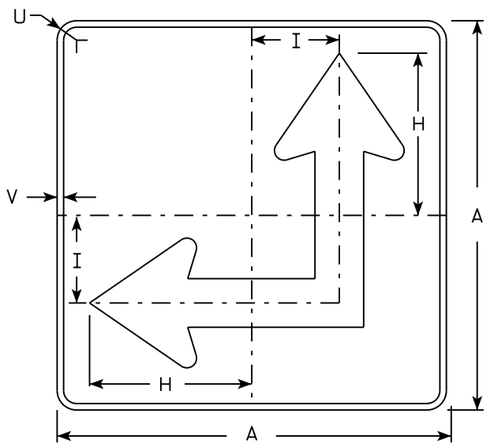
M6-6
MM6-6
MO6-6
MP6-6

NOTES

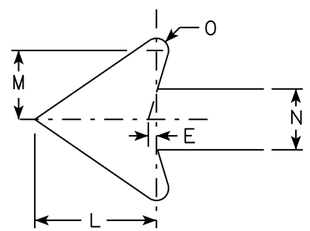
1. Signs are Type II - Type H except as Shown
2. Color:
   Background - See Note 4
   Message - See Note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M6-4 and M6-6 Background - White
   Message - Black
   MB6-4 and MB6-6 Background - Blue
   Message - White
   MK6-4 and MK6-6 Background - Green
   Message - White
   MM6-4 and MM6-6 Background - White
   Message - Green
   MN6-4 and MN6-6 Background - Brown
   Message - White
   MO6-4 and MO6-6 Background - Orange - Type F Reflective
   Message - Black
   MP6-4 and MP6-6 Background - White
   Message - Blue
   MR6-4 and MR6-6 Background - Brown
   Message - Yellow
5. M6-6R same as M6-6L except arrow points ahead and right.



MB6-4
MK6-4
MN6-4
MR6-4



MB6-6
MK6-6
MN6-6
MR6-6



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	8 3/4	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	12 1/2	6 3/4			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	12 1/2	6 3/4			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	12 1/2	6 3/4			7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25

STANDARD SIGN
M6-4 & M6-6
SERIES

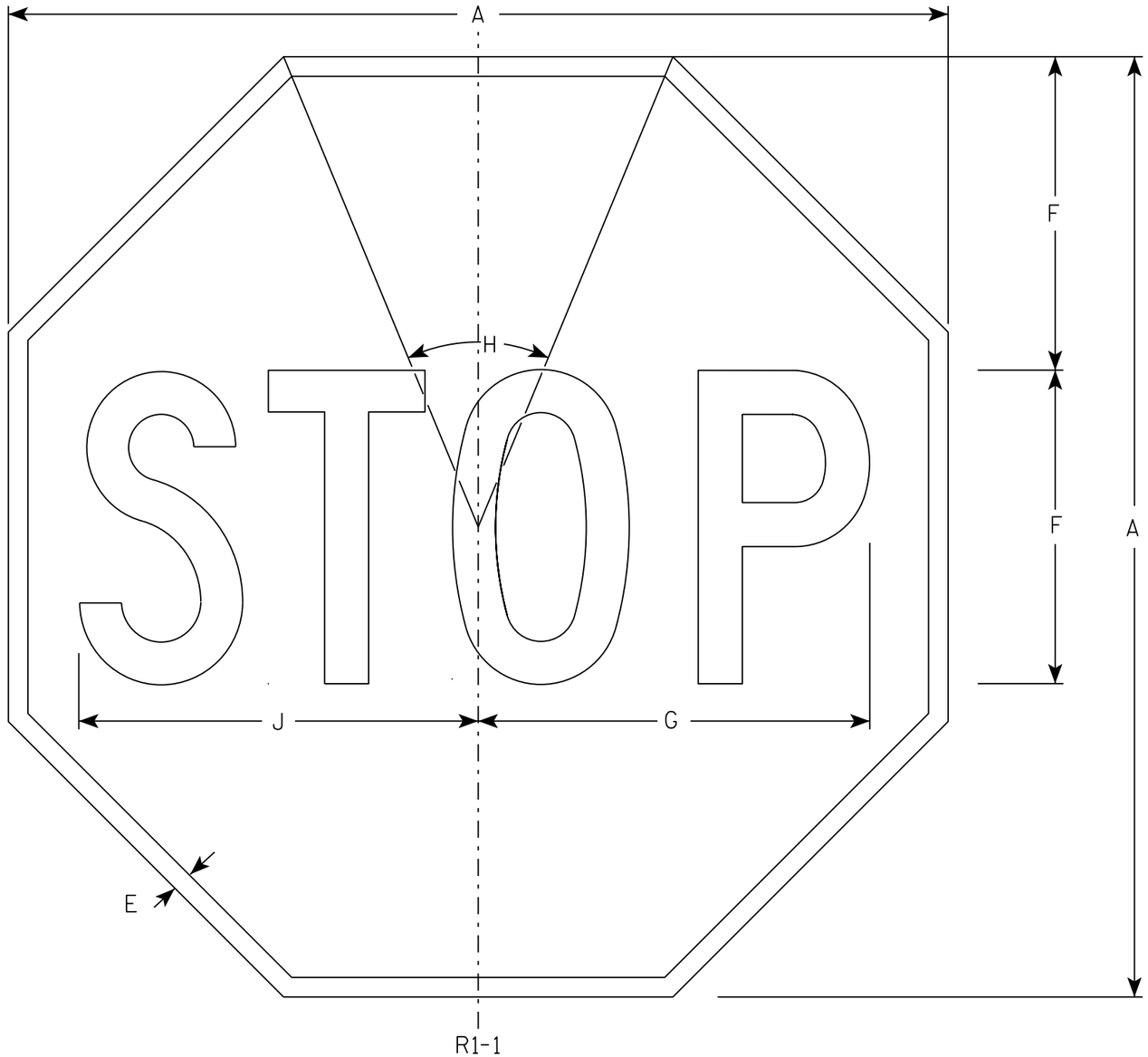
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/15/15 PLATE 499 M6-4.10

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M64.DGN PLOT DATE : 01-DEC-2015 17:58 PLOT BY : $$ platuser $$ PLOT NAME : PLOT SCALE : 11.675051:1.000000



R1-1

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - 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	30				5/8	10	12 1/2	45°		12 3/4																	5.18
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

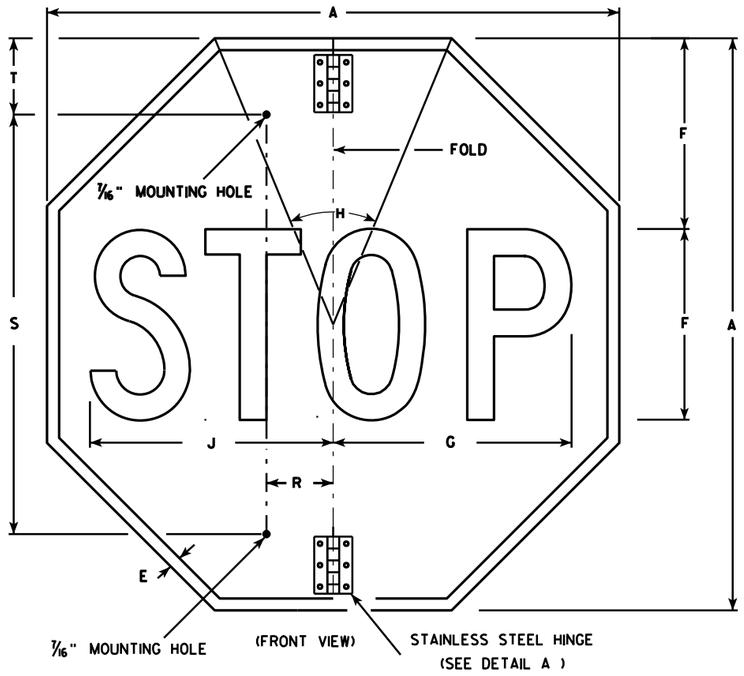
WISCONSIN DEPT OF TRANSPORTATION

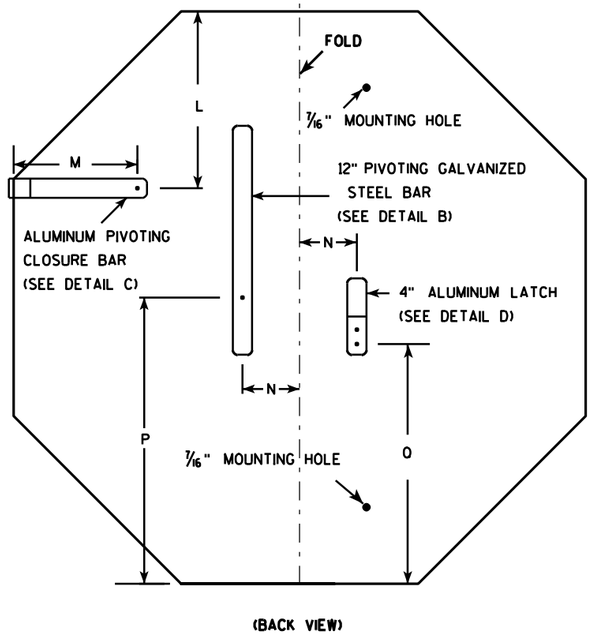
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/12/15 PLATE 500 R1-1.13

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

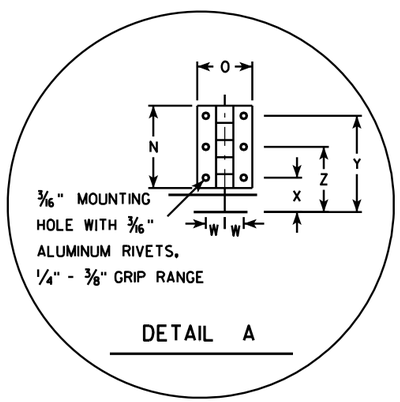
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\R11.DGN PLOT DATE : 01-DEC-2015 18:07 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 4.378143:1.000000



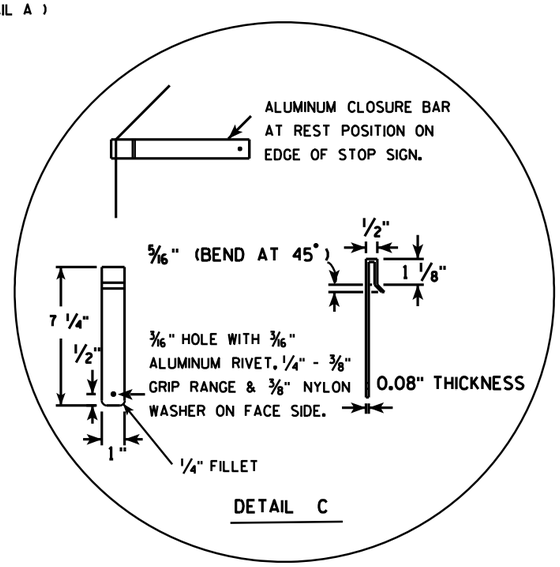


NOTES

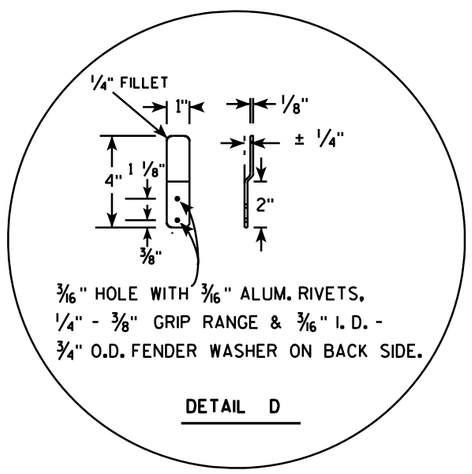
1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Red
   Message - White
3. Message Series - C
4. All hardware used on the folding STOP sign installation shall conform to 637.2.4 of the WIS DOT Standard Specification.



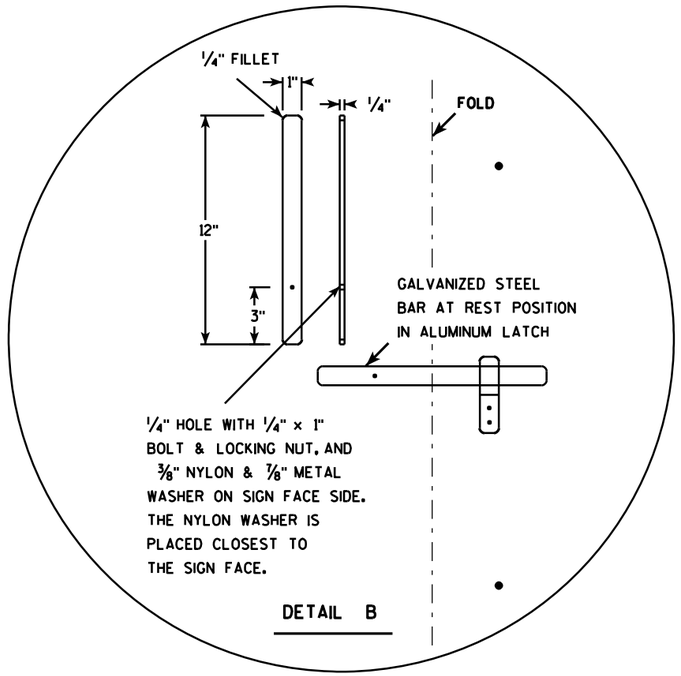
DETAIL A



DETAIL C



DETAIL D



DETAIL B

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																											

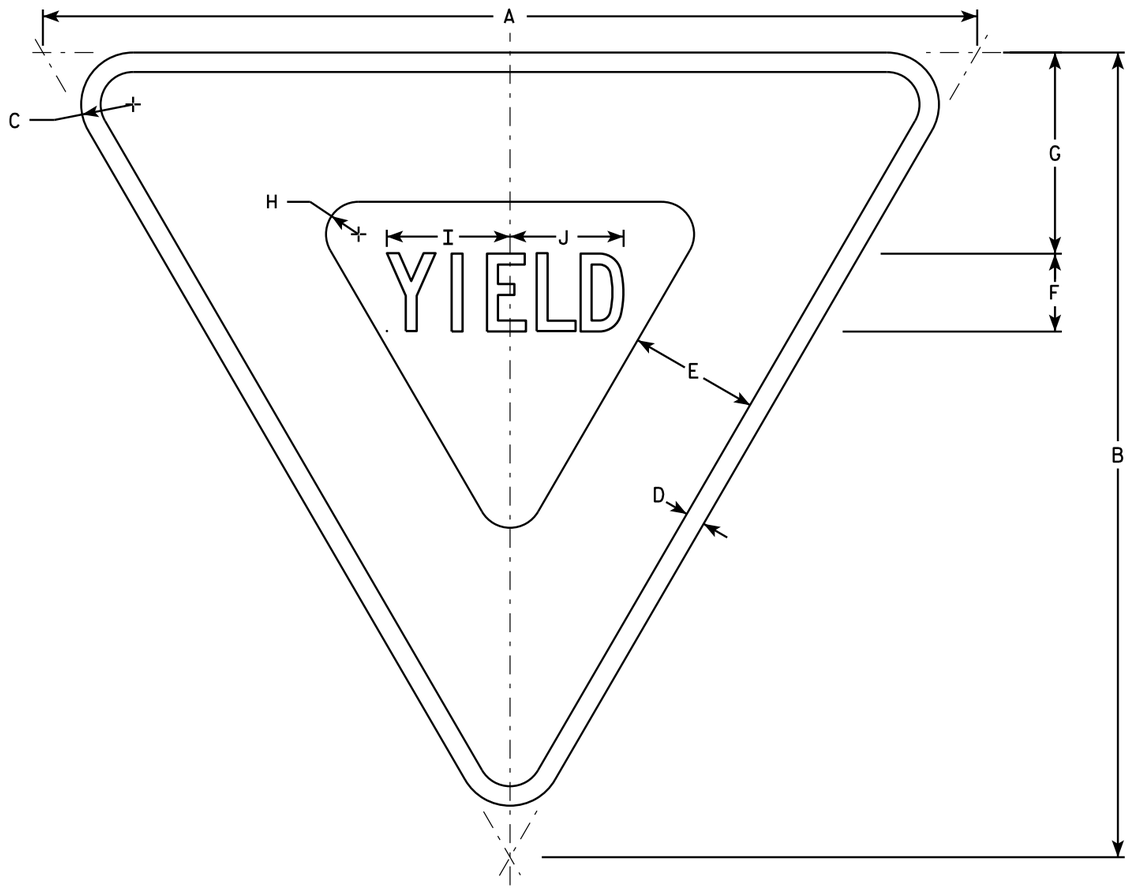
STANDARD SIGN
R1-1F

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: 501	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

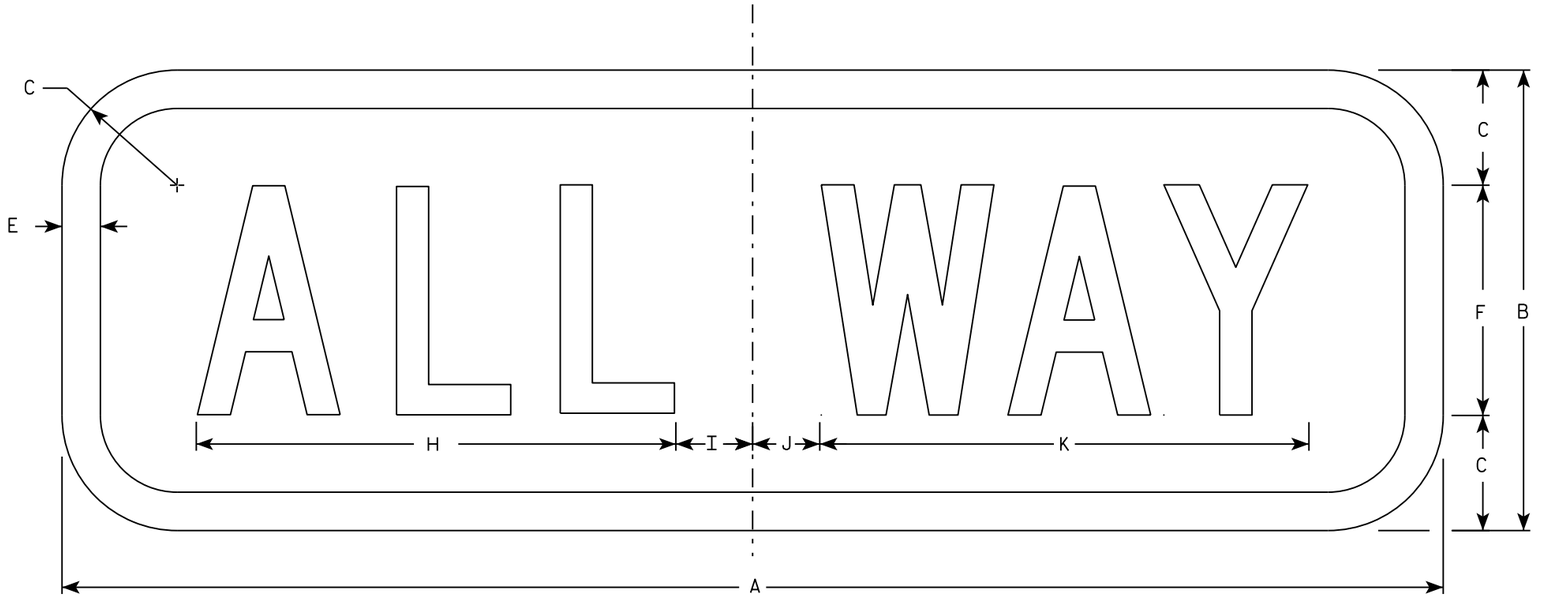
DATE 10/13/14 PLATE R1-2.12

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\R12.DGN PLOT DATE : 13-OCT-2014 15:12 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 5.837526:1.000000
WISDOT/CADDS SHEET 42

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - Red
   Message - White
3. Message Series - C
4. For 30"x30" R1-1 use 18"x6" R1-3P sign
   For 36"x36" R1-1 use 24"x9" R1-3P sign
   For 48"x48" R1-1 use 30"x12" R1-3P sign



R1-3P

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	6	1 1/2		1/2	3		6 1/4	1 1/4	7/8	6 3/8																0.75
2S	18	6	1 1/2		1/2	3		6 1/4	1 1/4	7/8	6 3/8																1.5
2M	24	9	1 1/2		1/2	5		9 1/4	1 1/4	3/4	9 3/4																1.5
3	24	9	1 1/2		1/2	5		9 1/4	1 1/4	3/4	9 3/4																1.5
4	30	12	2 1/4		5/8	6		11	2 1/4	1 1/2	11 3/4																2.5
5	30	12	2 1/4		5/8	6		11	2 1/4	1 1/2	11 3/4																2.5

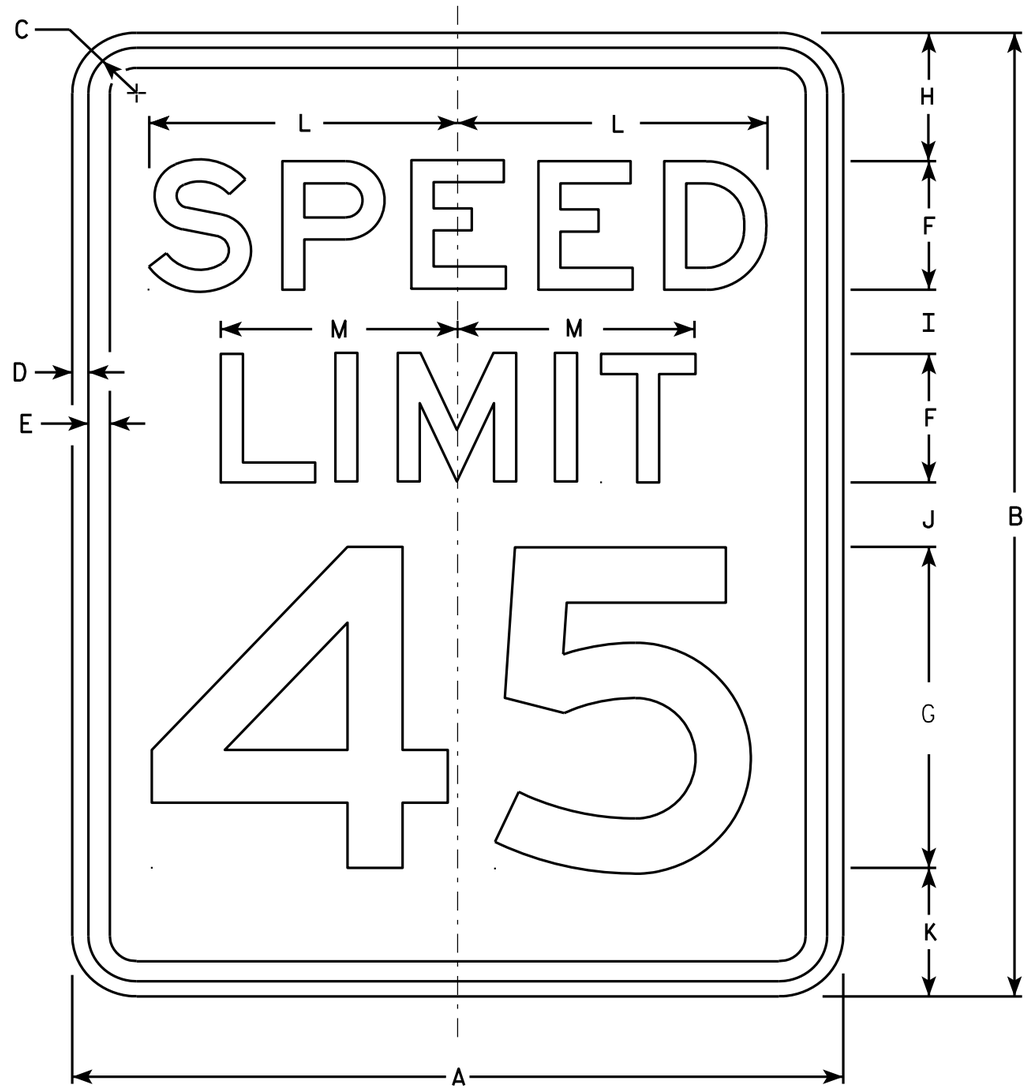
STANDARD SIGN
R1-3P

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/29/16 PLATE NO. R1-3P.3

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 503 | 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

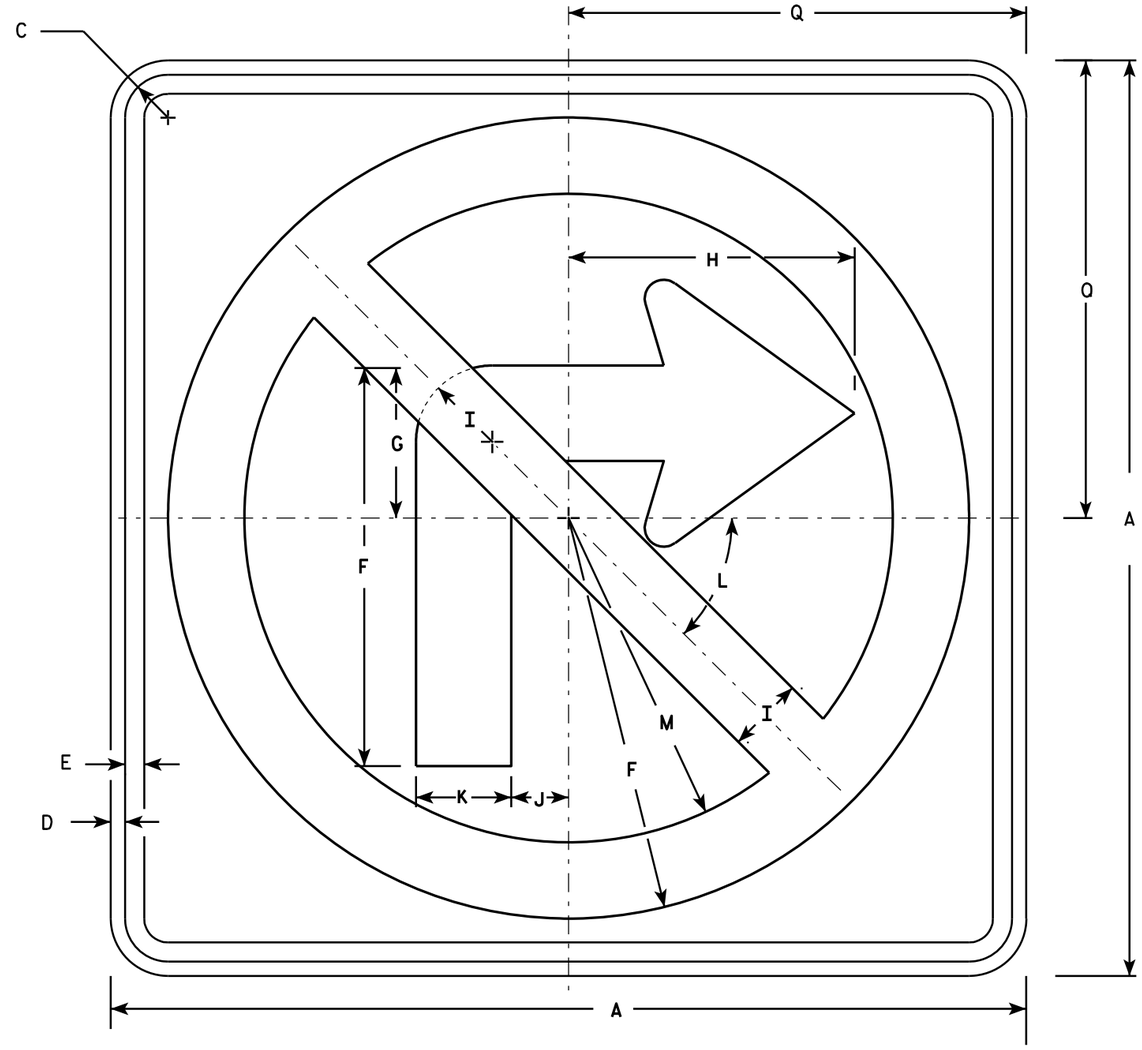
STANDARD SIGN
R2-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/26/10 PLATE NO. R2-1.13

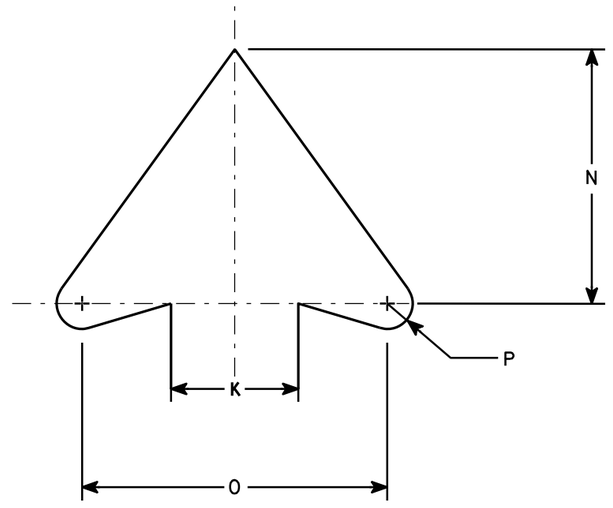
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 504	E



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

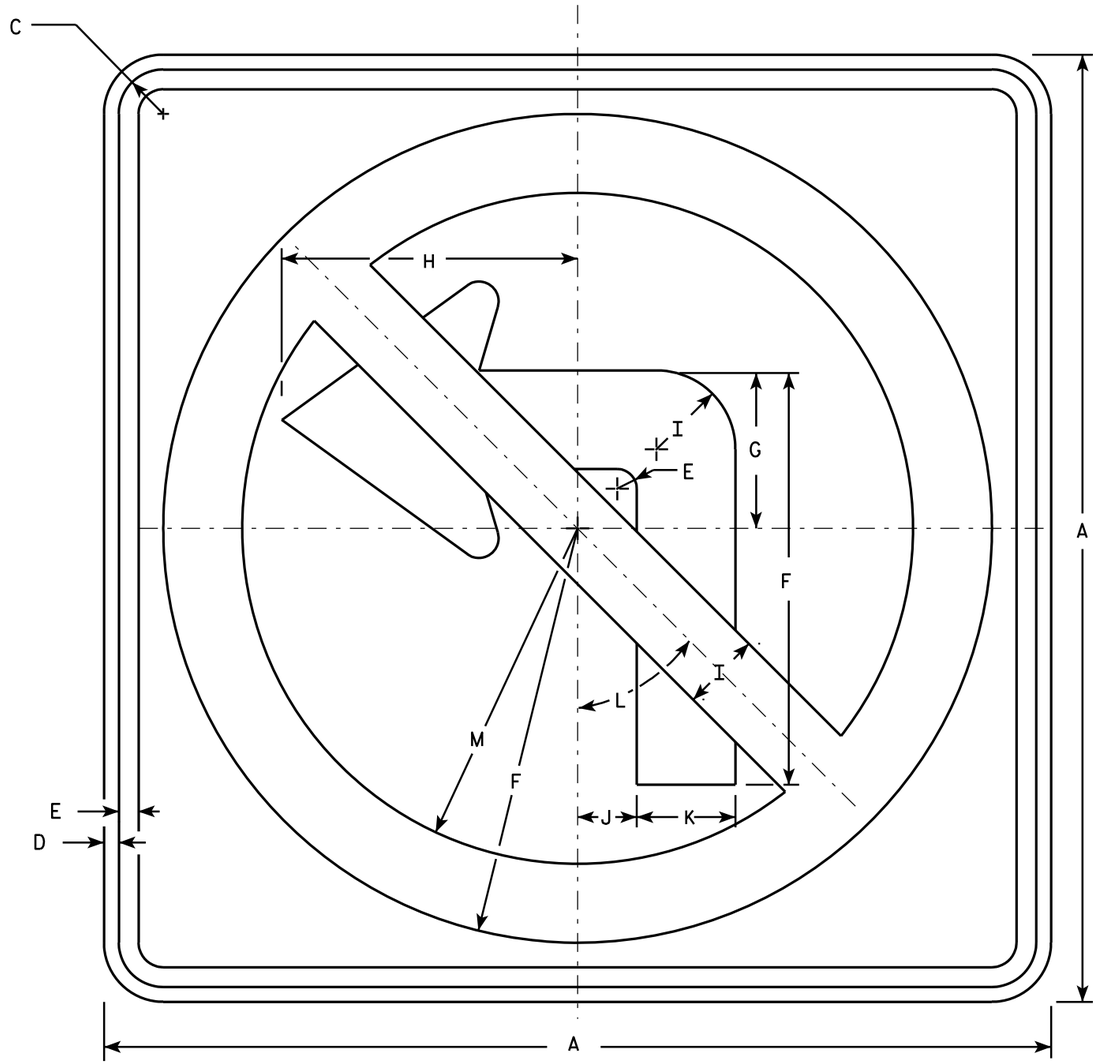
STANDARD SIGN
R3-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/08/10 PLATE NO. R3-1.5

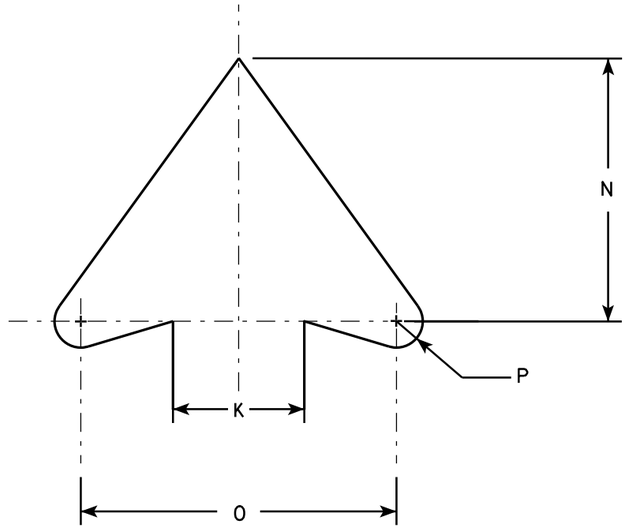
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 505	E



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

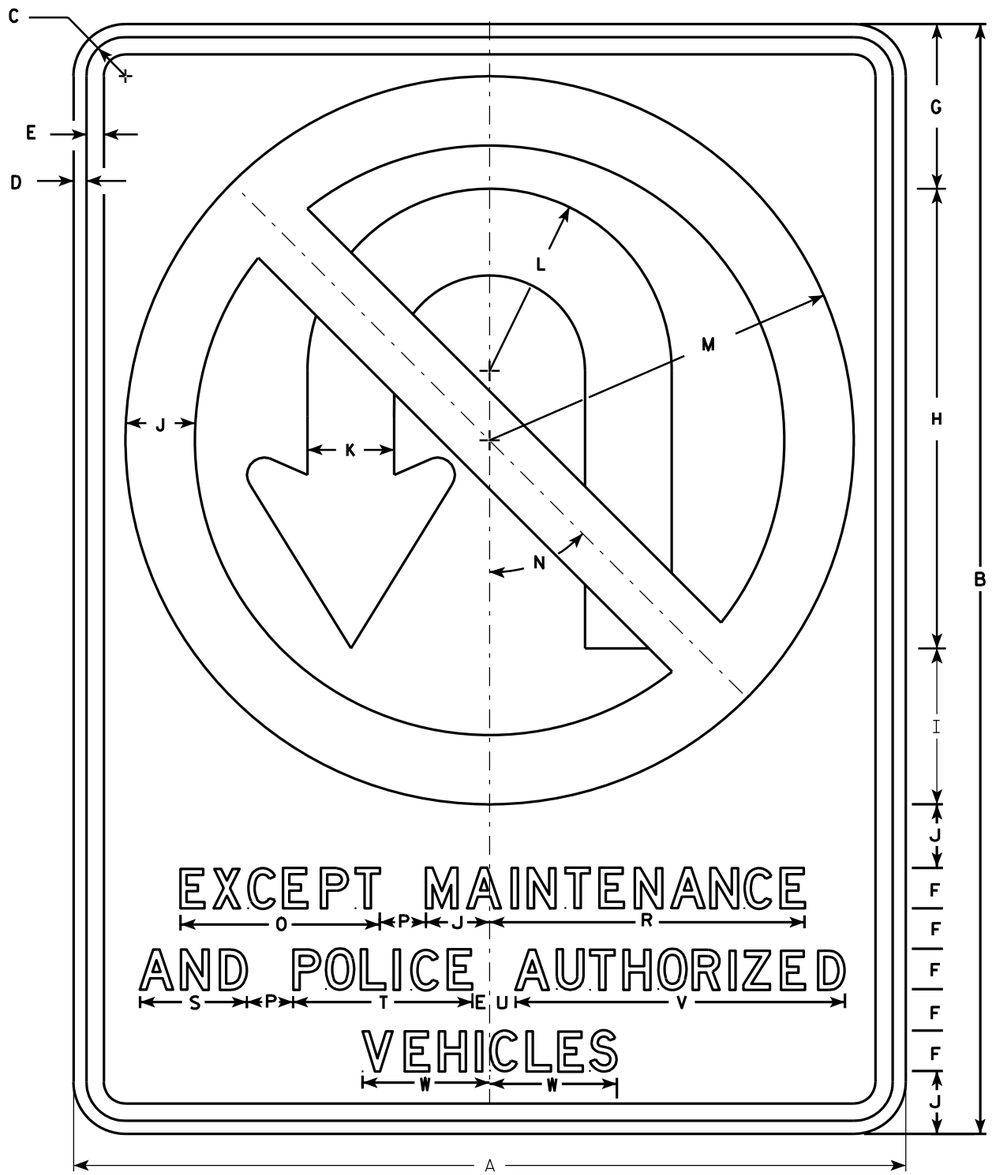
STANDARD SIGN
R3-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/08/10 PLATE NO. R3-2.10

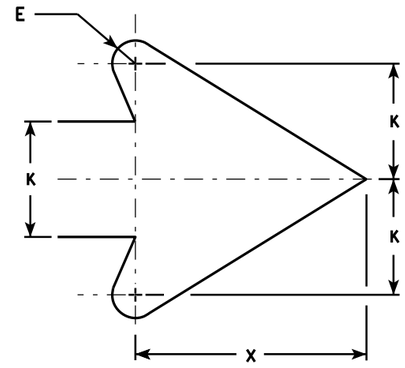
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 506	E



R3-4B

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																											
2S																											
2M																											
3																											
4	36	48	1 5/8	5/8	3/4	1 3/4	7 1/8	19 7/8	6 3/4	2 3/4	3 3/4	7 7/8	15 3/4	45°	8 5/8	2		13 5/8	4 5/8	7 3/4	1 1/8	14 1/4	5 1/2	7 5/8			12.0
5	36	48	1 5/8	5/8	3/4	1 3/4	7 1/8	19 7/8	6 3/4	2 3/4	3 3/4	7 7/8	15 3/4	45°	8 5/8	2		13 5/8	4 5/8	7 3/4	1 1/8	14 1/4	5 1/2	7 5/8			12.0

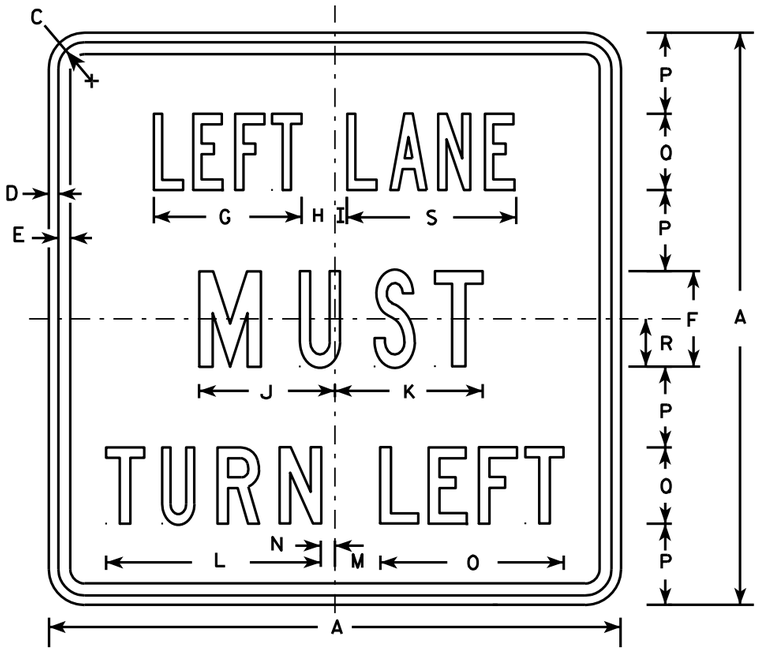
STANDARD SIGN
R3-4B

WISCONSIN DEPT OF TRANSPORTATION

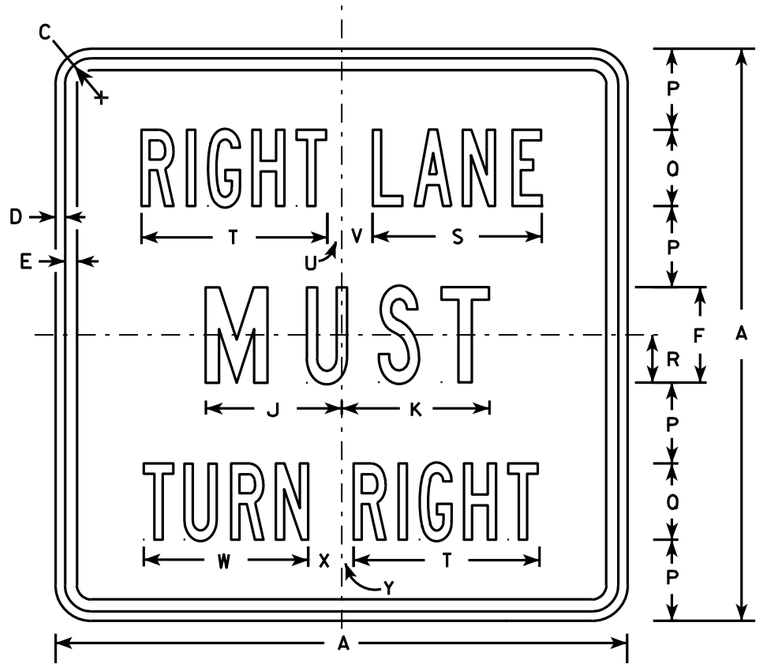
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/17/2011 PLATE NO. R3-4B.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 507	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																											

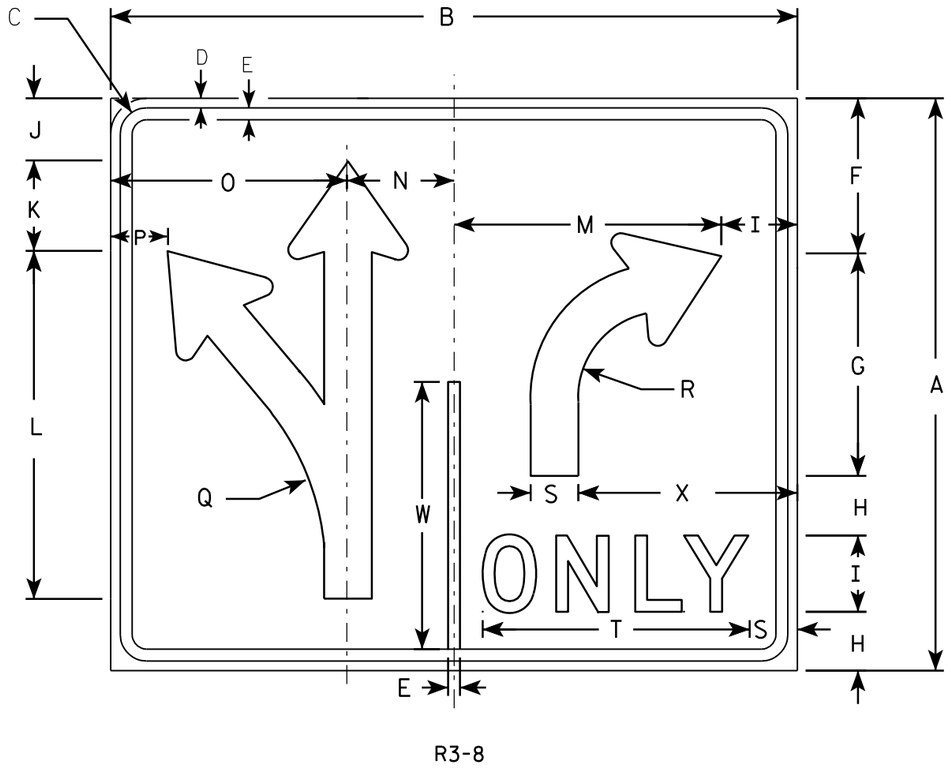
STANDARD SIGN
R3-7L & R3-7R

WISCONSIN DEPT OF TRANSPORTATION

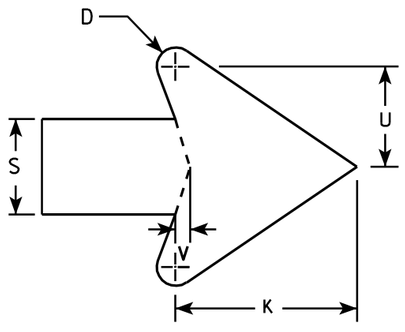
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/18/2011 PLATE NO. R3-7.3

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 508 | E



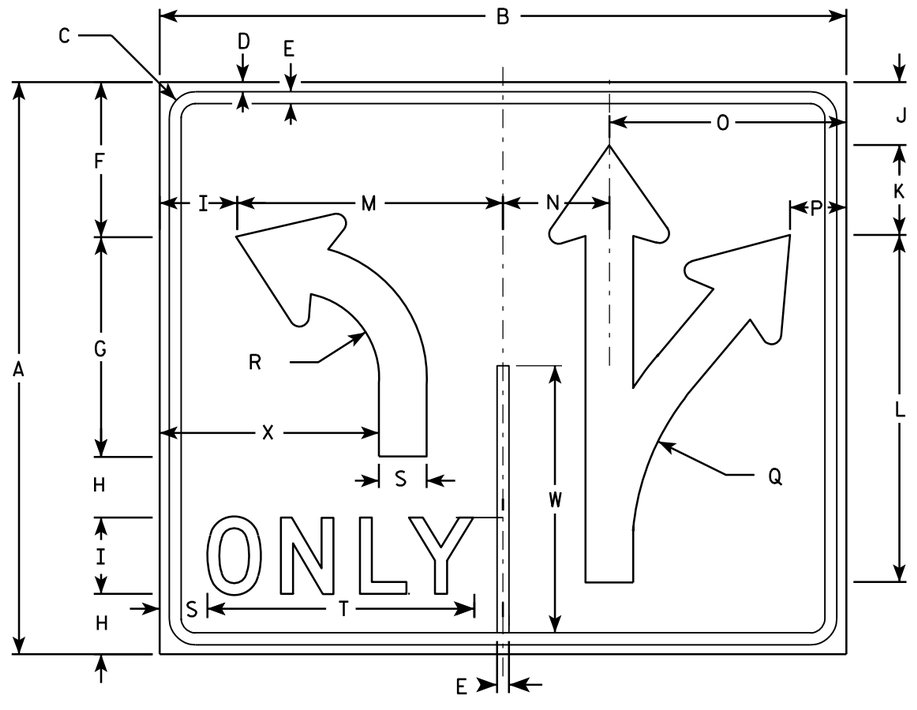
R3-8



ARROW DETAIL

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.



R3-8A

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	8 1/8	11 5/8	3 1/8	4	3 1/4	4 3/4	18 1/4	14	5 5/8	12 3/8	3	13 1/4	4 1/2	2 1/2	14	2 5/8	3/8	14	11 1/2			7.5
2M	30	36	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	14	5 5/8	12 3/8	3	13 1/4	4 1/2	2 1/2	14	2 5/8	3/8	14	11 1/2			7.5
3																											
4	48	54	2 1/4	3/4	1	13 1/4	18 1/2	5 1/8	6	5 1/4	7 1/8	29 1/8	21	8 3/8	18 5/8	4 3/8	21 7/8	7 1/4	3 3/4	20 5/8	4	5/8	22 3/8	17 1/4			18.0
5	48	54	2 1/4	3/4	1	13 1/4	18 1/2	5 1/8	6	5 1/4	7 1/8	29 1/8	21	8 3/8	18 5/8	4 3/8	21 7/8	7 1/4	3 3/4	20 5/8	4	5/8	22 3/8	17 1/4			18.0

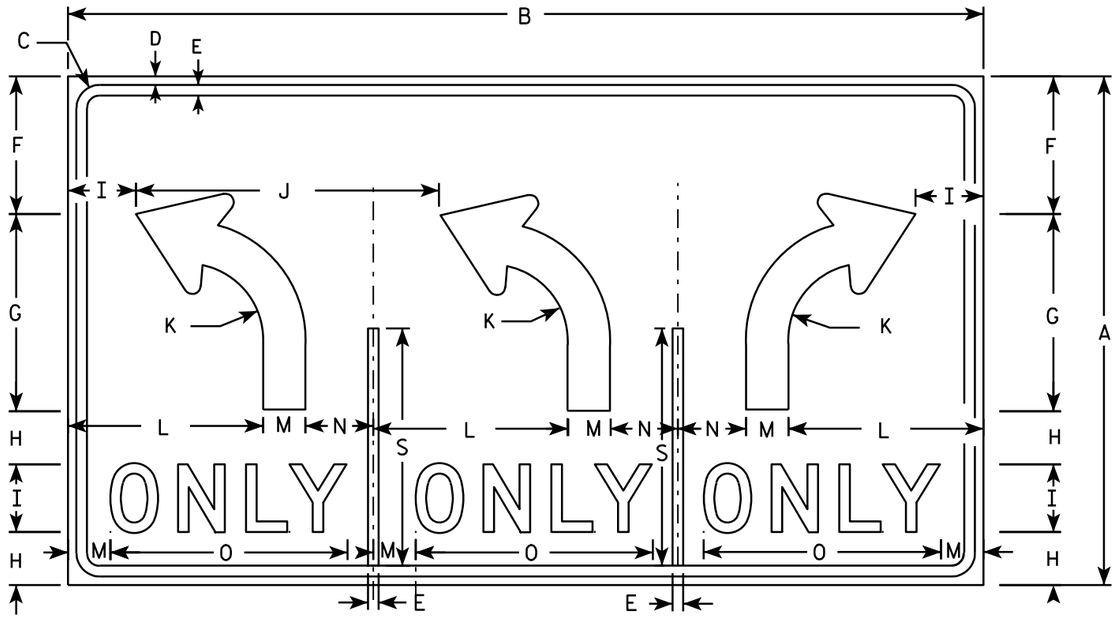
STANDARD SIGN
R3-8 & R3-8A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/18/2011 PLATE NO. R3-8.5

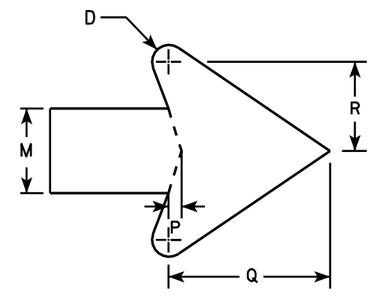
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 509	E



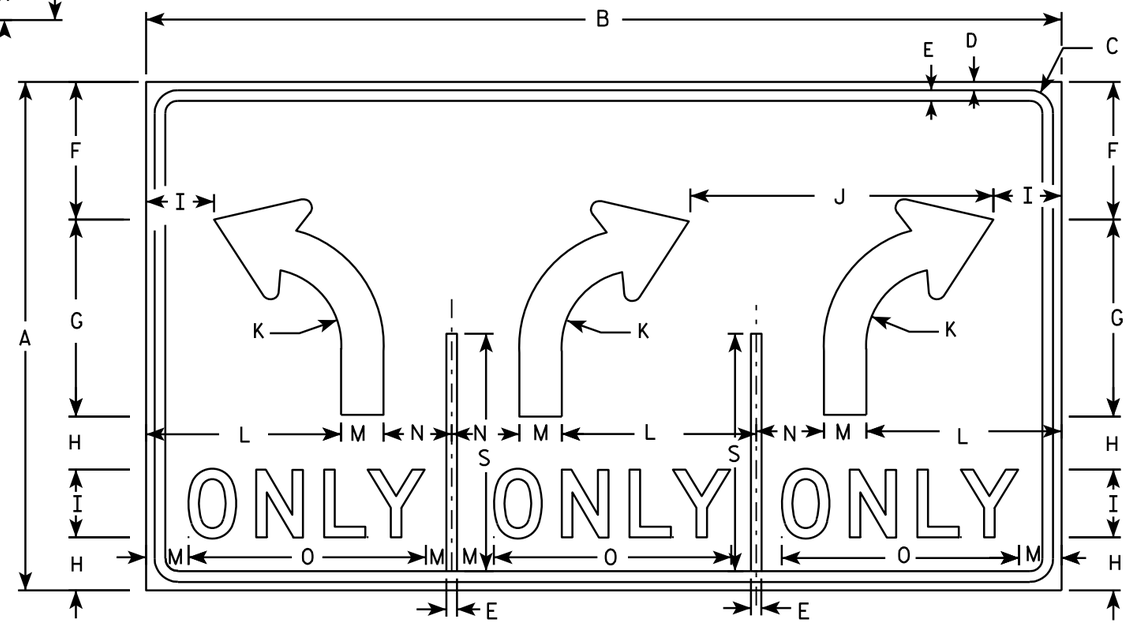
R3-8R

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



R3-8S

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	17 7/8	4 1/2	11 1/2	2 1/2	4	14	3/8	4 3/4	2 5/8	14								11.25
2M	30	54	1 3/8	1/2	5/8	8 1/8	11 5/8	3 1/8	4	17 7/8	4 1/2	11 1/2	2 1/2	4	14	3/8	4 3/4	2 5/8	14								11.25
3																											
4	48	84	2 1/4	3/4	1	13 1/4	18 1/2	5 1/8	6		7 1/4	17 1/4	3 3/4	7	20 5/8	5/8	7 1/8	4	22 3/8								28.0
5	48	84	2 1/4	3/4	1	13 1/4	18 1/2	5 1/8	6		7 1/4	17 1/4	3 3/4	7	20 5/8	5/8	7 1/8	4	22 3/8								28.0

STANDARD SIGN
R3-8R & R3-8S

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

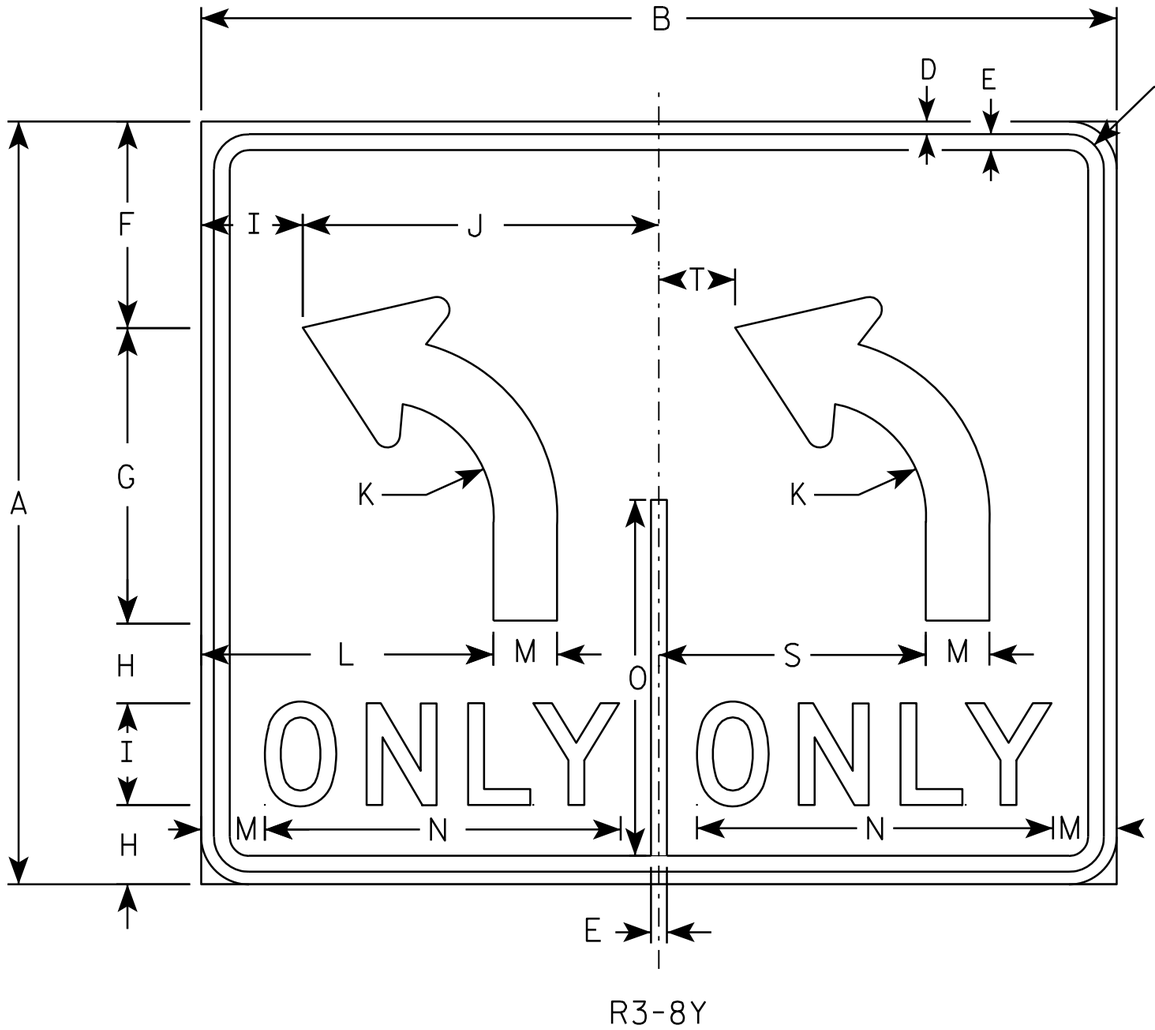
DATE 3/24/2011 PLATE NO. R3-8R.2

PROJECT NO:

SHEET NO: 510 E

7

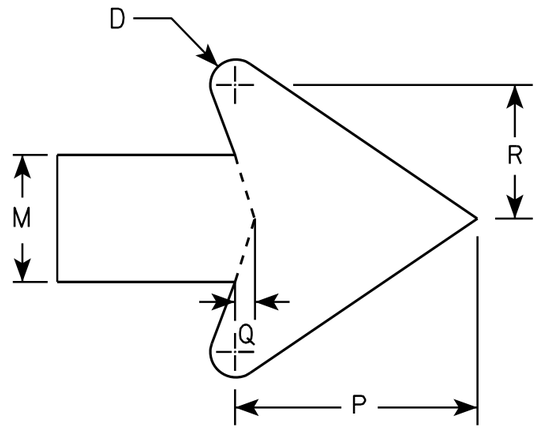
FILE NAME : C:\Users\PROJECTS\tr_stdplate\R38R.DGN PLOT DATE : 24-MAR-2011 09:49 PLOT BY : mscsja PLOT NAME :



R3-8Y

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	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	36	1 3/8	1/2	5/8	8 1/8	11 5/8	3 1/8	4	14	4 1/2	11 1/2	2 1/2	14	14	4 3/4	3/8	2 5/8	10 1/2	3							7.5
2M	30	36	1 3/8	1/2	5/8	8 1/8	11 5/8	3 1/8	4	14	4 1/2	11 1/2	2 1/2	14	14	4 3/4	3/8	2 5/8	10 1/2	3							7.5
3																											
4	48	54	2 1/4	3/4	1	13 1/4	18 1/2	5 1/8	6	21	7 1/4	17 1/4	3 3/4	20 5/8	22 3/8	7 1/8	5/8	4	15 3/4	4 1/2							18.0
5	48	54	2 1/4	3/4	1	13 1/4	18 1/2	5 1/8	6	21	7 1/4	17 1/4	3 3/4	20 5/8	22 3/8	7 1/8	5/8	4	15 3/4	4 1/2							18.0

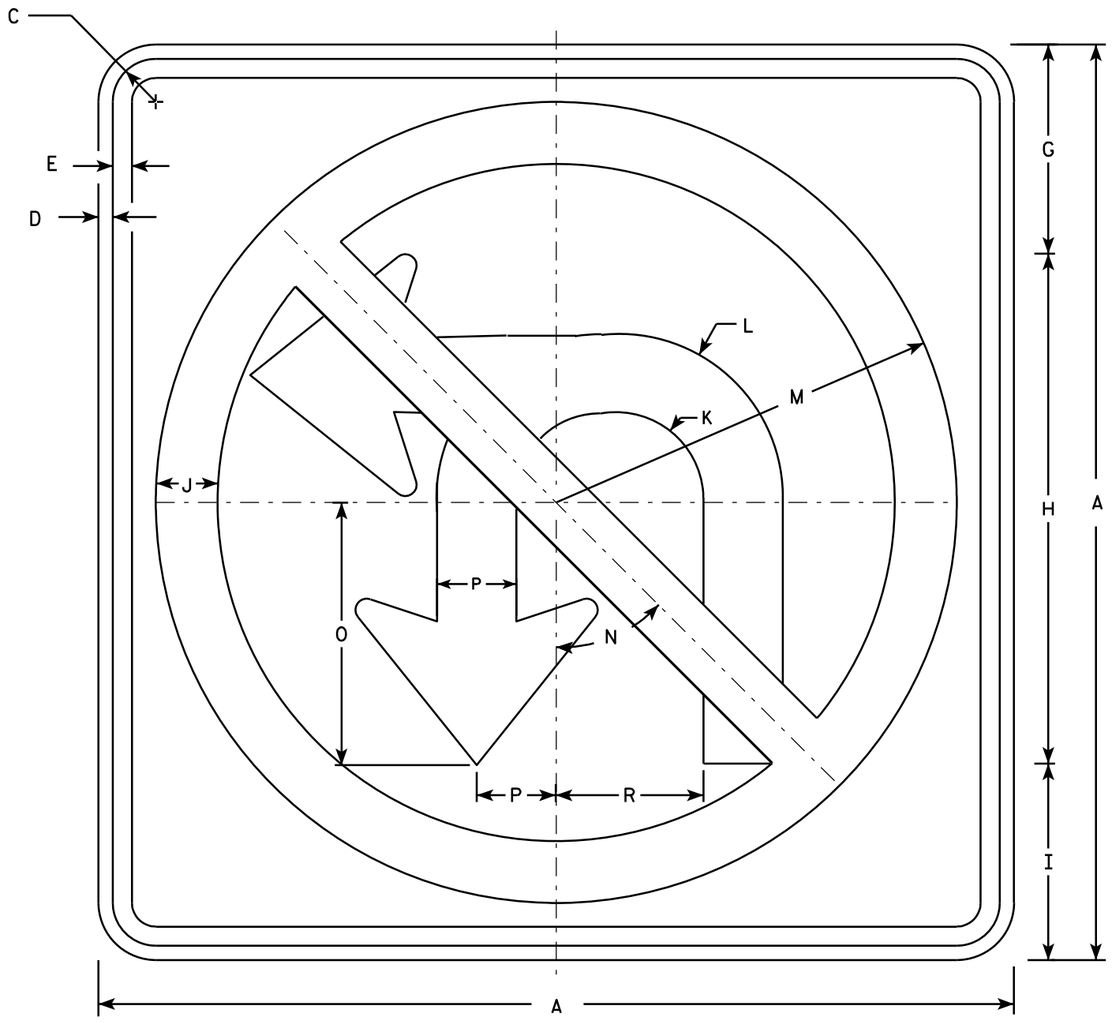
STANDARD SIGN
R3-8Y

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/24/2011 PLATE NO. R3-8Y.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 511	E



R3-18

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.

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		5 1/2	13 3/8	5 1/8	1 5/8	2 1/4	4 1/4	10 1/2	45°	6 7/8	2 1/8		3 7/8									4.0
2M	36		1 5/8	5/8	3/4		8 1/4	20	7 3/4	2 1/2	3 3/8	6 1/2	15 3/4	45°	10 3/8	3 1/8		5 3/4									9.0
3	36		1 5/8	5/8	3/4		8 1/4	20	7 3/4	2 1/2	3 3/8	6 1/2	15 3/4	45	10 3/8	3 1/8		5 3/4									9.0
4	36		1 5/8	5/8	3/4		8 1/4	20	7 3/4	2 1/2	3 3/8	6 1/2	15 3/4	45	10 3/8	3 1/8		5 3/4									9.0
5	48		2 1/4	3/4	1		11	26 3/4	10 1/4	3 1/4	4 5/8	8 5/8	21	45°	13 3/4	4 1/8		7 3/4									16.0

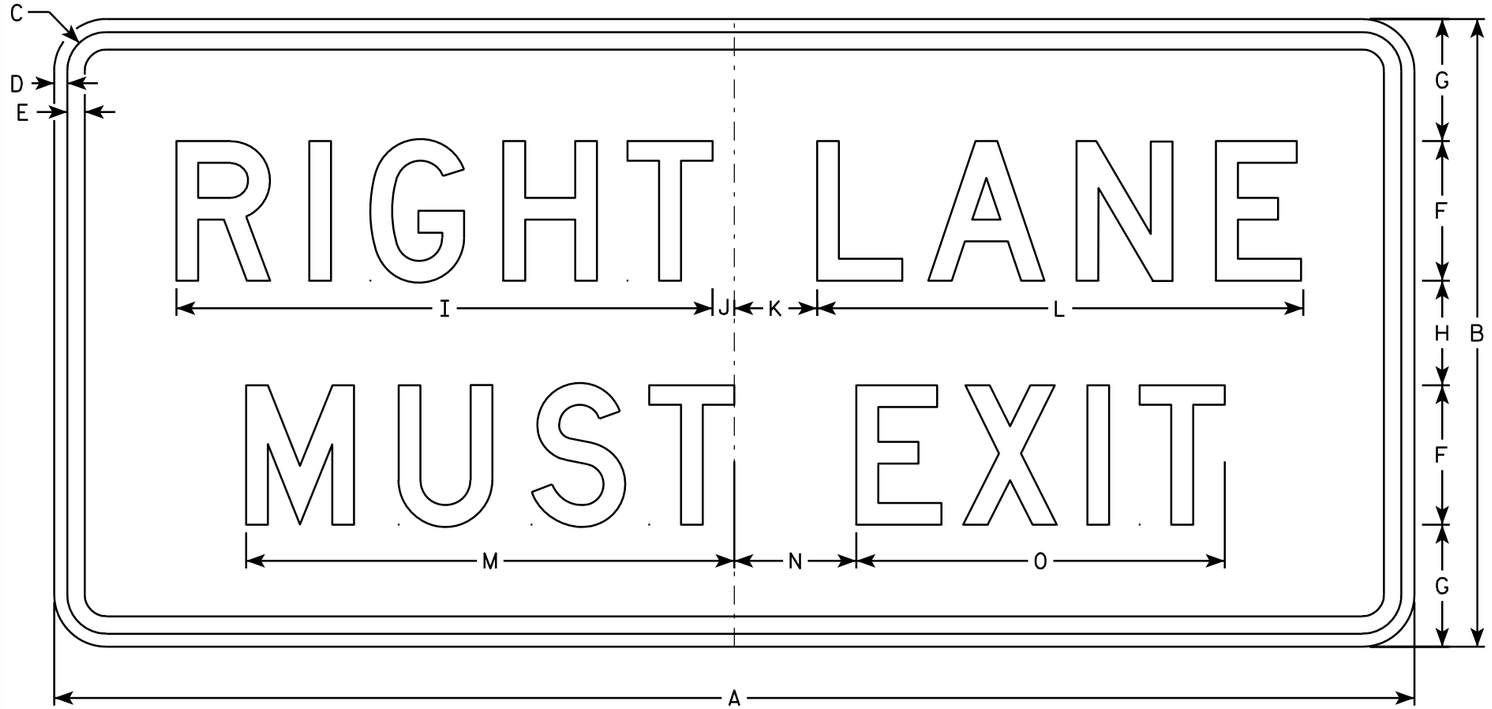
STANDARD SIGN
R3-18

WISCONSIN DEPT OF TRANSPORTATION

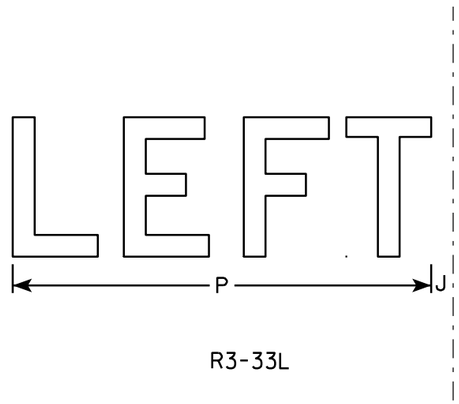
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/21/10 PLATE NO. R3-18.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 512	E



R3-33R



R3-33L

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																											
2M																											
3																											
4	78	36	2 1/4	3/4	1	8	7	6	30 3/4	1 1/4	4 3/4	27 7/8	28	7	21 1/8	24											19.5
5	78	36	2 1/4	3/4	1	8	7	6	30 3/4	1 1/4	4 3/4	27 7/8	28	7	21 1/8	24											19.5

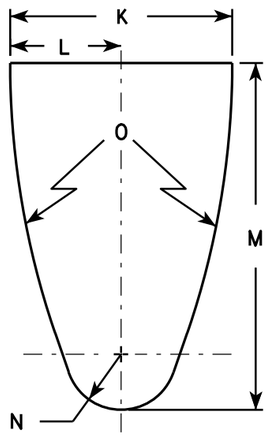
STANDARD SIGN
R3-33

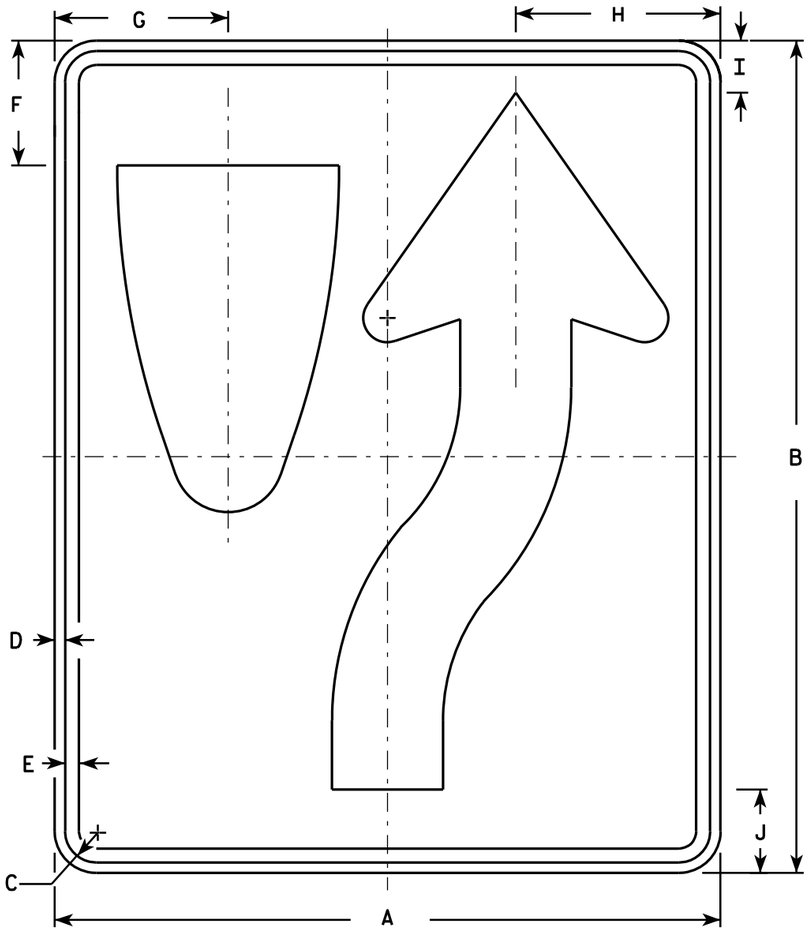
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/7/10 PLATE NO. R3-33.1

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 513 | E

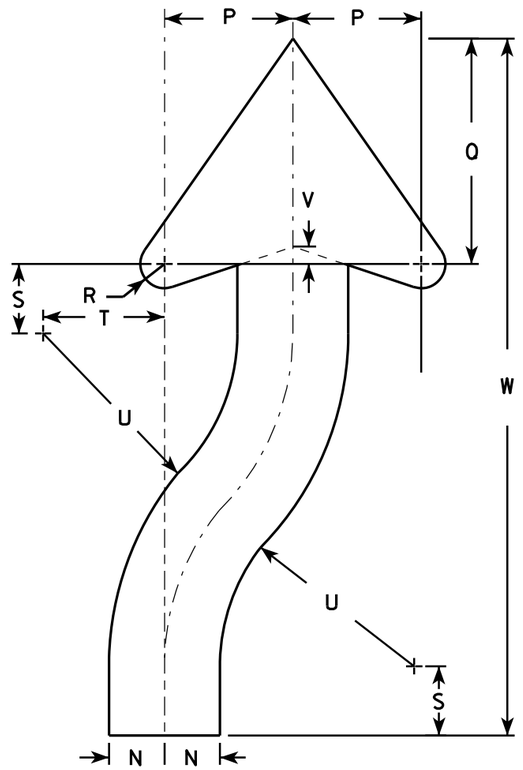




R4-7

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

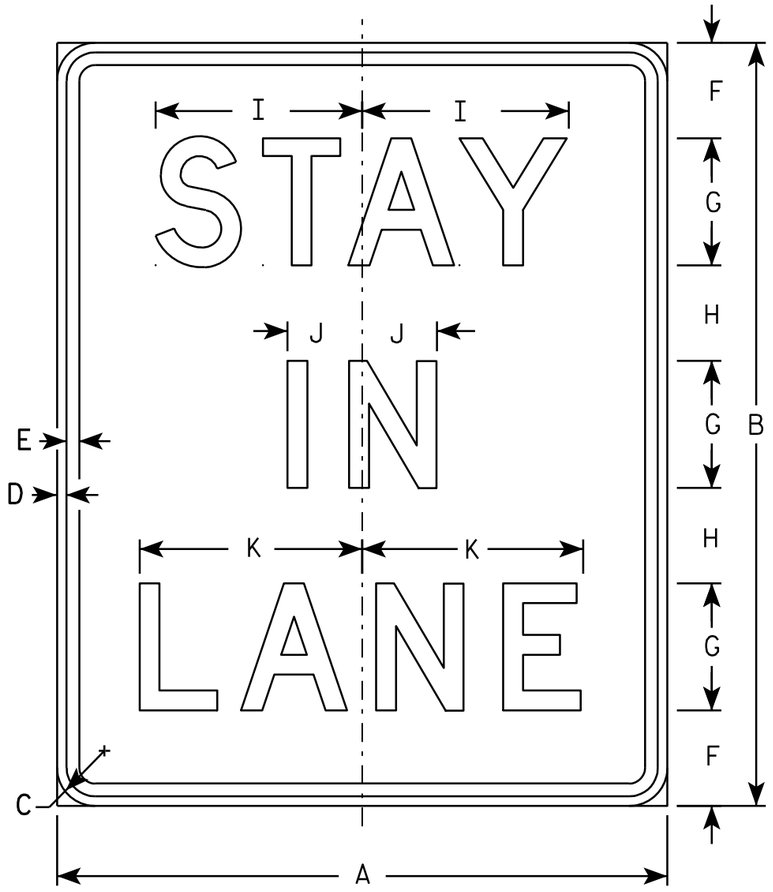
STANDARD SIGN
R4-7 & R4-8

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: 514	E



R4-9

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 - 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	3/8	3	4	3	6 1/2	2 3/8	7																3.0
2S	24	30	1 1/8	3/8	1/2	3 5/8	5	3 7/8	8 1/8	3	8 3/4																5.0
2M	24	30	1 1/8	3/8	1/2	3 5/8	5	3 7/8	8 1/8	3	8 3/4																5.0
3	36	48	1 3/8	1/2	5/8	8 1/4	7	5 1/4	11 3/8	4 1/8	12 1/4																12.0
4	36	48	1 3/8	1/2	5/8	8 1/4	7	5 1/4	11 3/8	4 1/8	12 1/4																12.0
5	48	60	2 1/4	3/4	1	7 1/2	10	7 1/2	16 1/4	5 7/8	17 1/2																20.0

STANDARD SIGN
R4-9

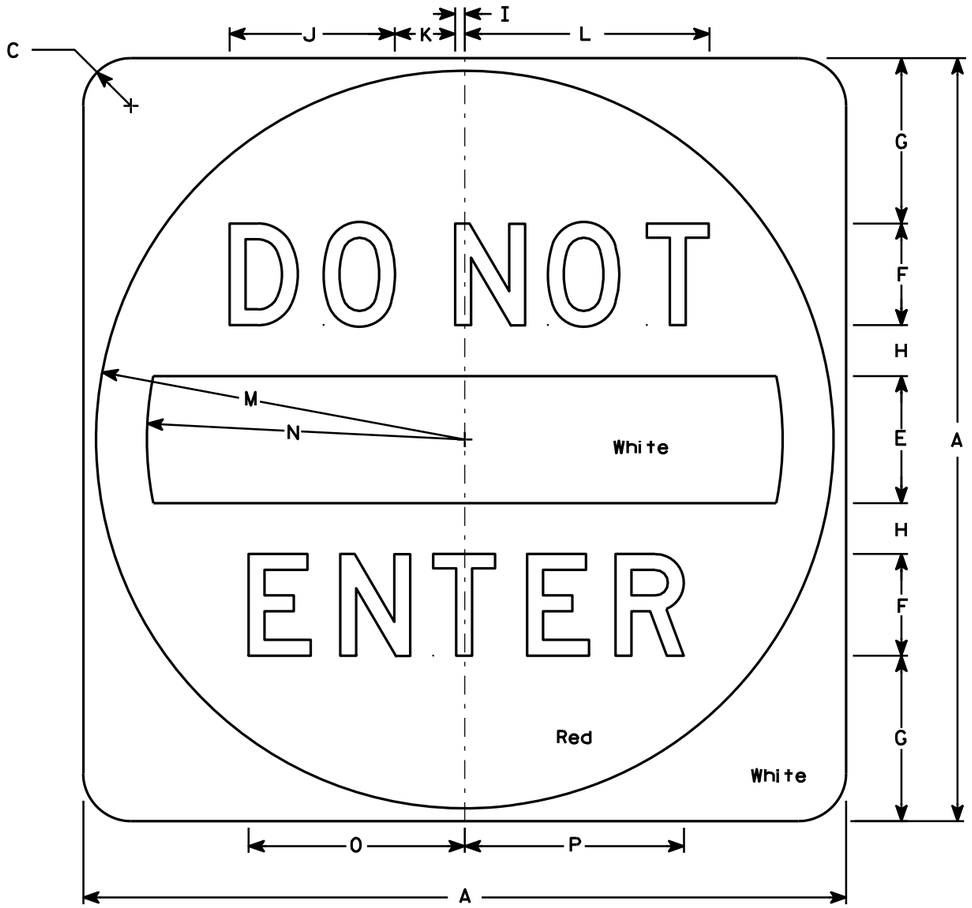
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/25/2011 PLATE NO. R4-9.2

PROJECT NO:

SHEET NO: 515 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

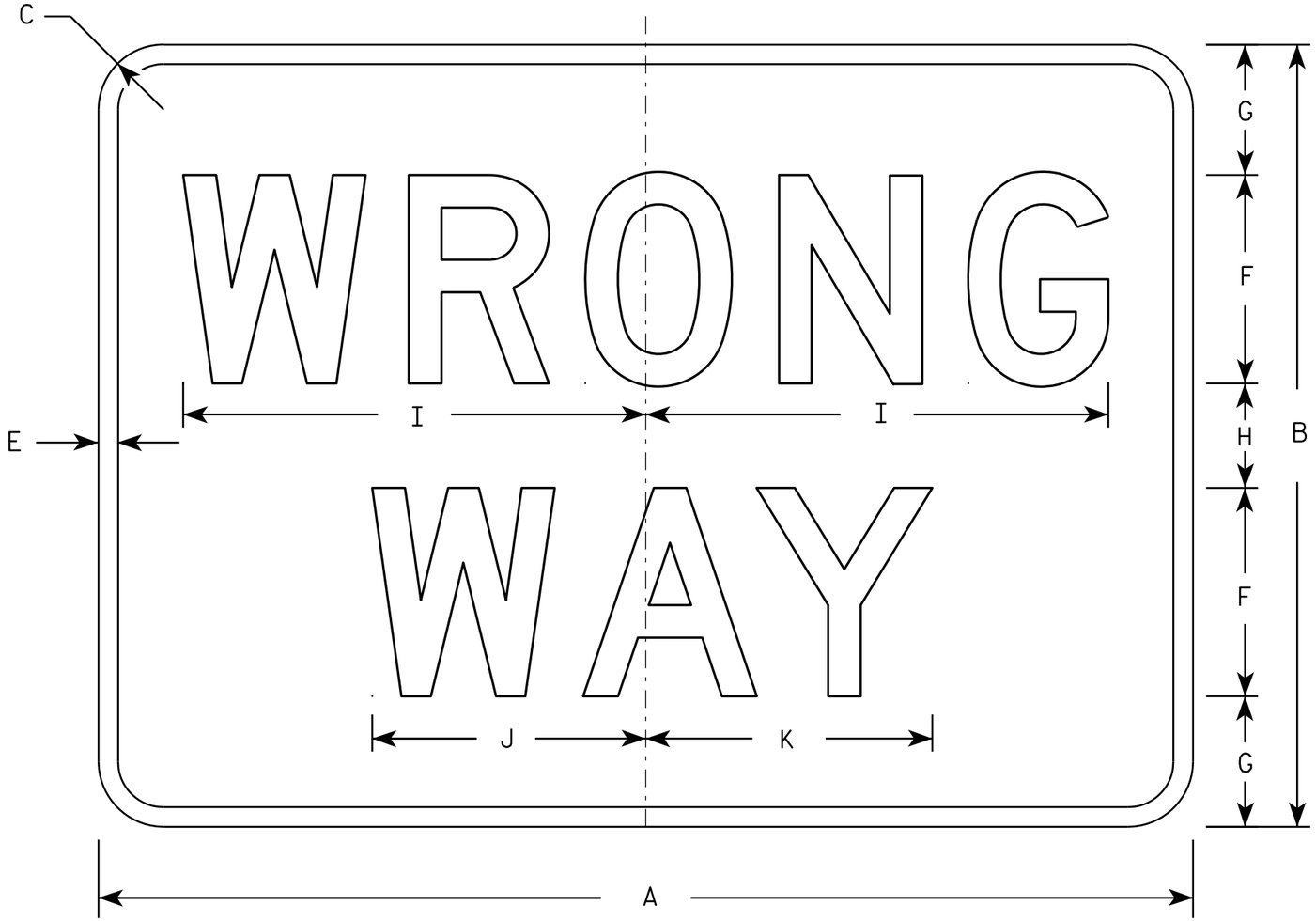
STANDARD SIGN
R5-1

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: 516 | 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

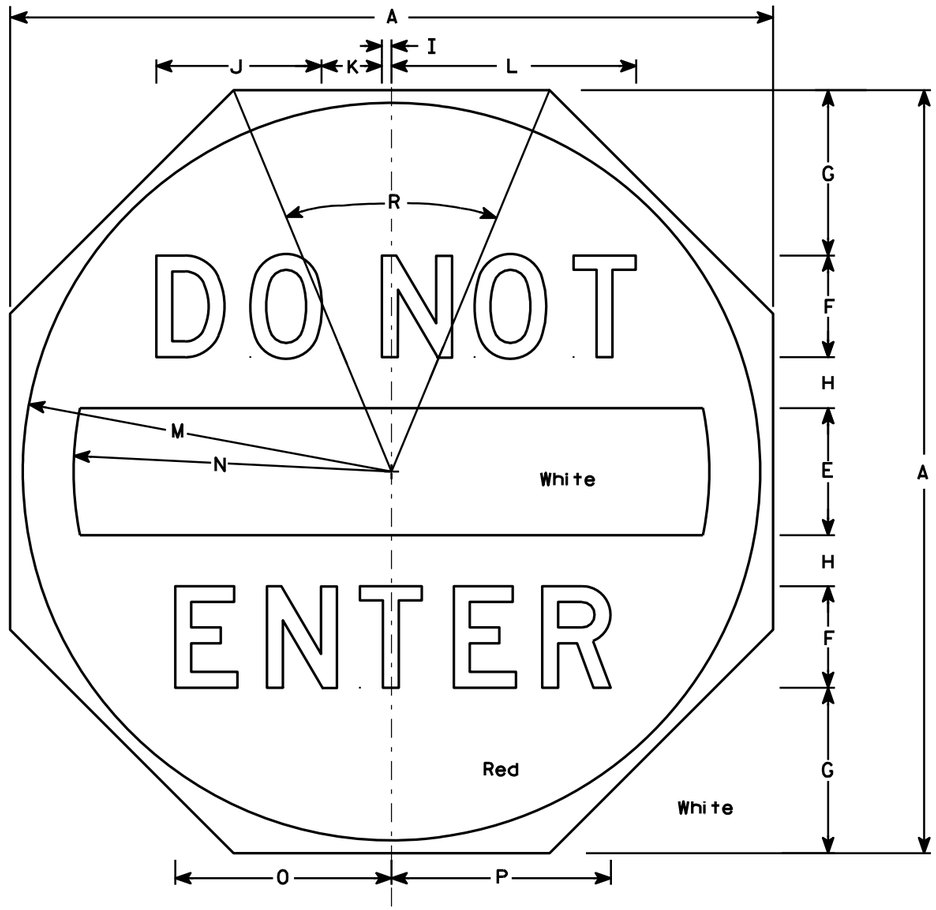
STANDARD SIGN
R5-1A

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: 517	E



R5-1C

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		45°									5.18
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		45°									7.46
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		45°									7.46
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		45°									13.25
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		45°									13.25

STANDARD SIGN
R5-1C

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

State Traffic Engineer

DATE 3/23/11 PLATE NO. R5-1C.1

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 518 | 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

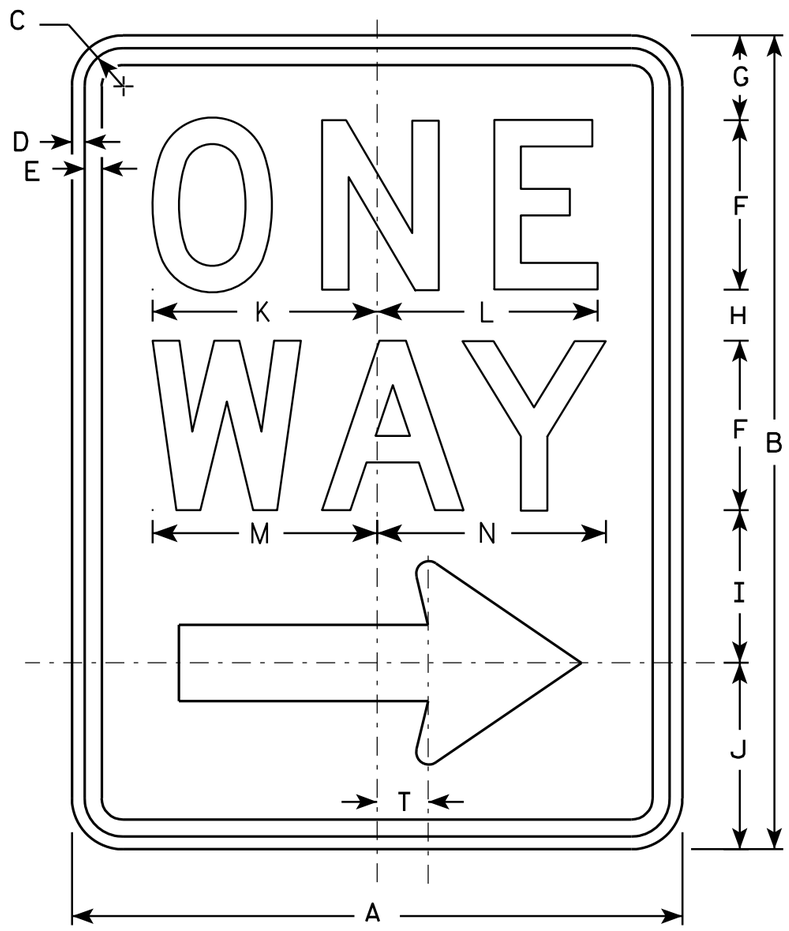
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 519 | E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\R557.DGN PLOT DATE : 29-MAR-2011 14:38 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 5.959043:1.000000

WISDOT/CADDS SHEET 42

7

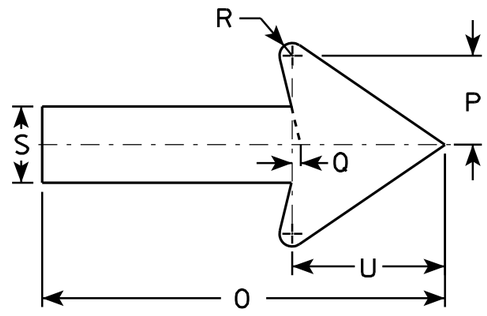
7



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																										

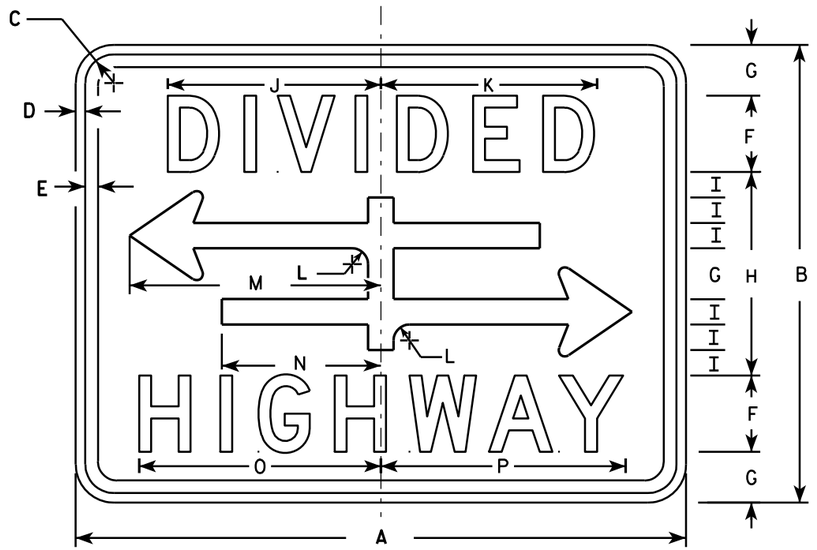
STANDARD SIGN
R6-2 R&L

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/2/10 PLATE NO. R6-2.8

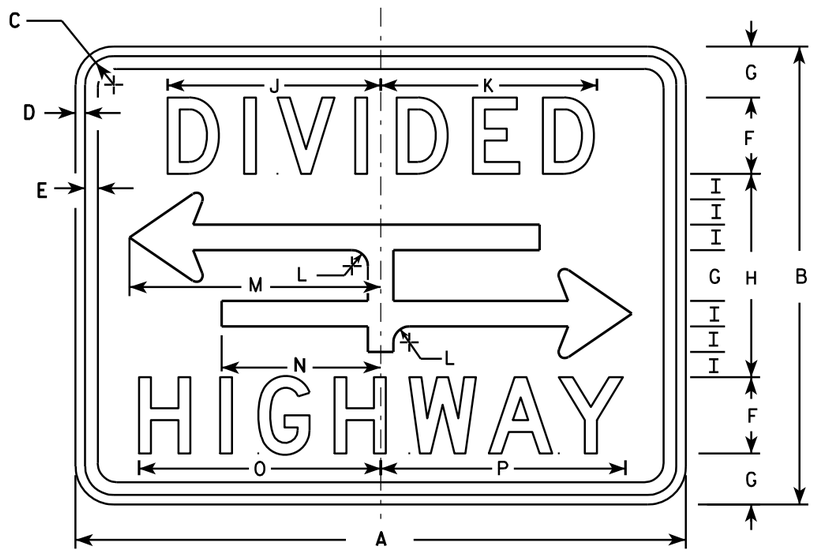
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 520	E



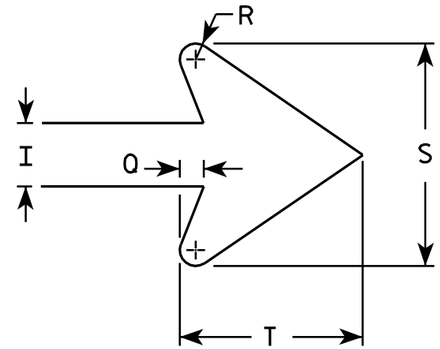
R6-3

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 - 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.



R6-3A



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	18	1 1/8	3/8	3/8	3	2	8	1	8 3/8	8 1/2	5/8	9 7/8	6 1/4	9 1/2	9 5/8	3/8	1/4	3 1/2	2 3/4							3.0
2S	30	24	1 1/8	3/8	1/2	4	2 5/8	10 3/4	1 3/8	10 1/2	10 5/8	7/8	12 1/2	7 7/8	12 1/4	12 3/8	1/2	3/8	4 5/8	3 5/8							5.0
2M	30	24	1 1/8	3/8	1/2	4	2 5/8	10 3/4	1 3/8	10 1/2	10 5/8	7/8	12 1/2	7 7/8	12 1/4	12 3/8	1/2	3/8	4 5/8	3 5/8							5.0
3																											
4																											
5																											

STANDARD SIGN
R6-3 & R6-3A

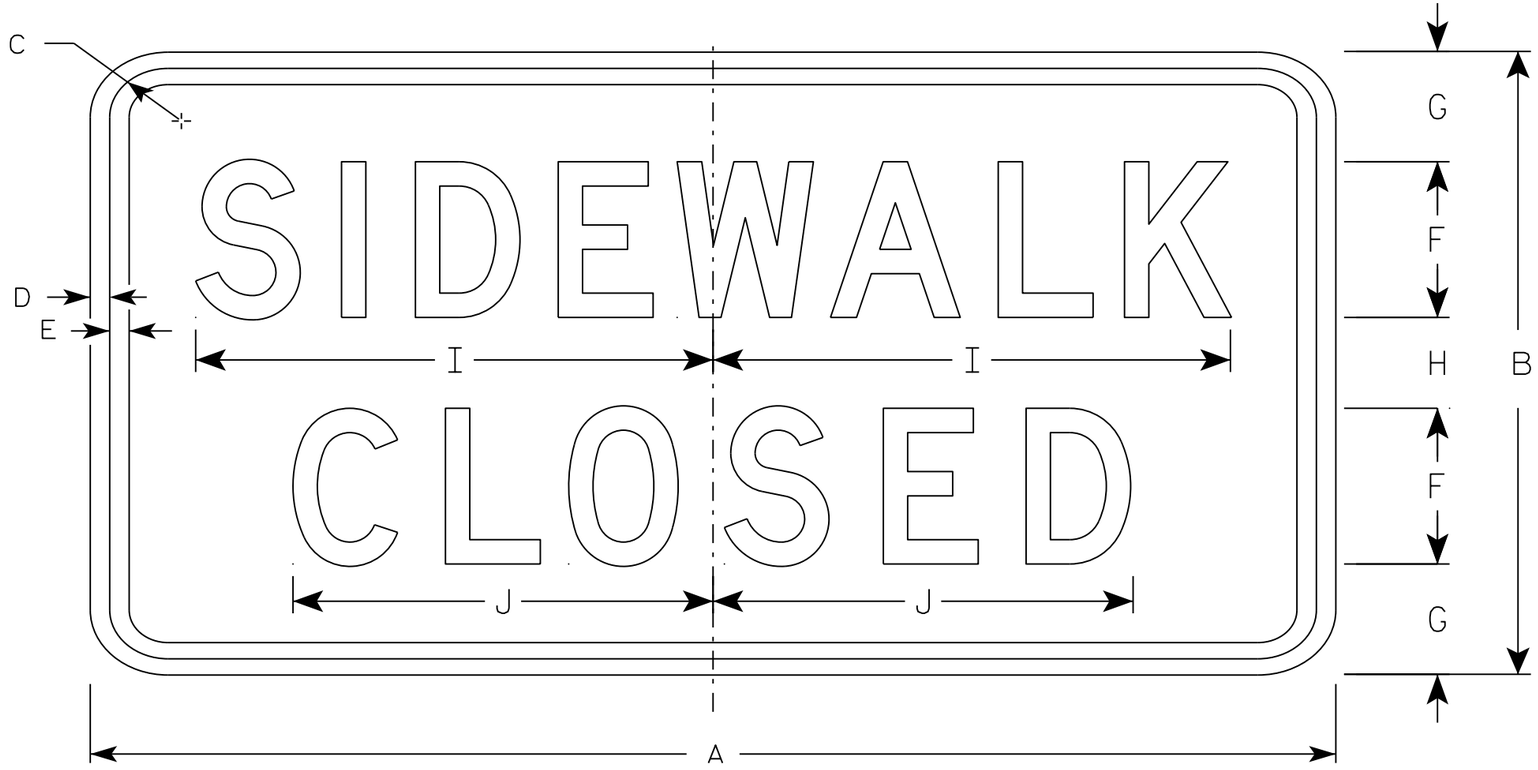
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/31/2011 PLATE NO. R6-3.5

PROJECT NO:

SHEET NO: 521 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.
5. Use Size 2 for Sidewalks. Use Size 3 for Paths and Trails.

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	12	1 3/4	1/2	1/2	3	2 1/8	1 3/4	10	8 1/8																	2.0
2M	24	12	1 3/4	1/2	1/2	3	2 1/8	1 3/4	10	8 1/8																	2.0
3	30	18	1 3/4	1/2	1/2	4	3 1/2	3	12 1/2	10 1/4																	3.75
4																											
5																											

STANDARD SIGN
R9-9

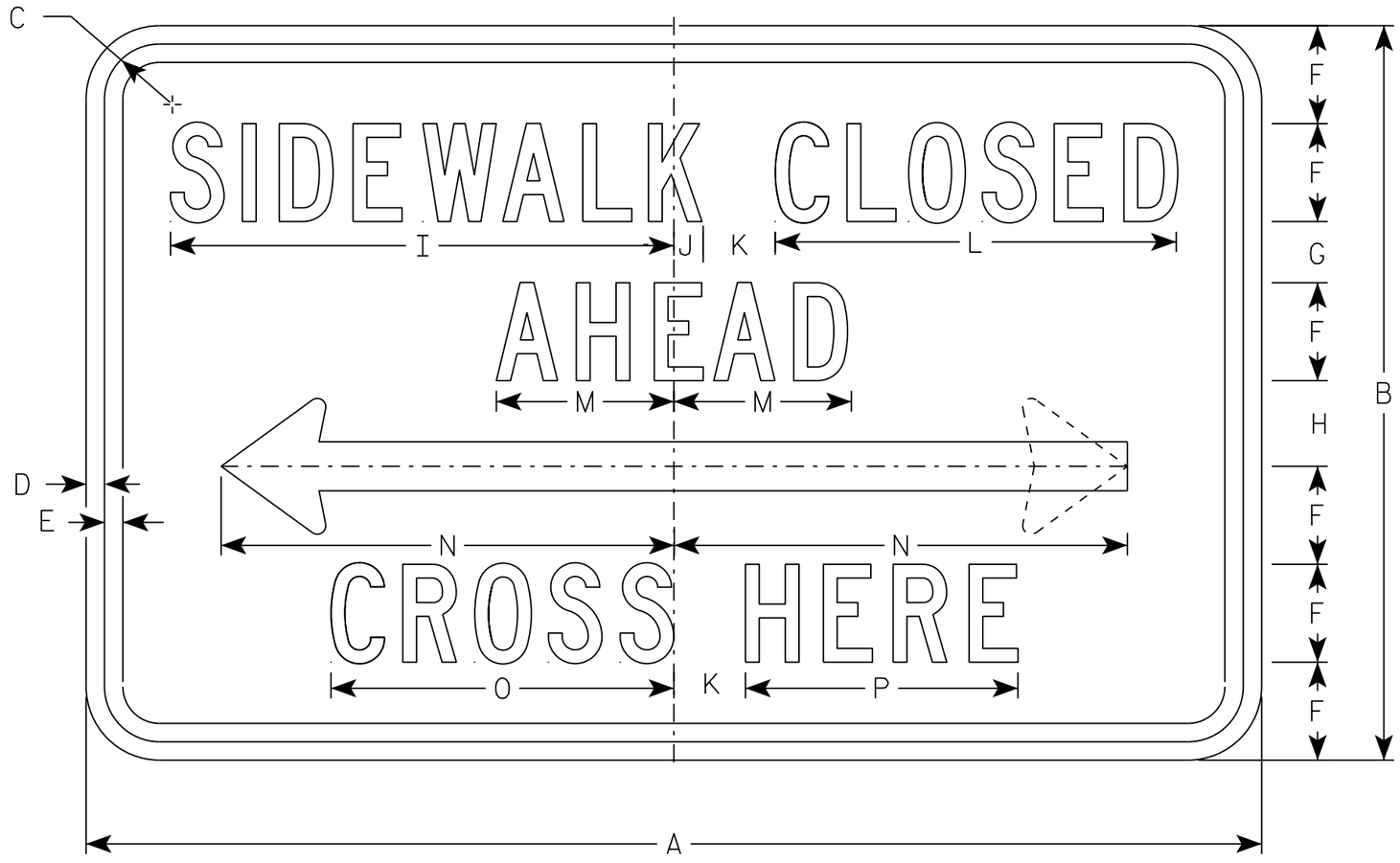
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

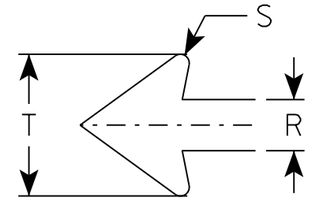
DATE 8/11/16 PLATE 522 R9-9.6

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\R99.DGN PLOT DATE : 11-AUG-2016 11:33 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 2.918761:1.000000



R9-11



NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - C except Size 1 is 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. Use Size 2 for Sidewalks. Use Size 3 for Paths and Trails.

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	12	1 1/8	3/8	3/8	1 1/2	1 1/2	1 1/2	9 3/4	5/8	1 1/2	7 5/8	3 1/2	9 1/4	6 5/8	5 1/8		1	1/8	2 3/4							2.0
2M	24	12	1 1/8	3/8	3/8	1 1/2	1 1/2	1 1/2	9 3/4	5/8	1 1/2	7 5/8	3 1/2	9 1/4	6 5/8	5 1/8		1	1/8	2 3/4							2.0
3	30	15	1 1/8	3/8	1/2	2	1 1/2	1 1/2	13	3/4	2	10 1/4	4 5/8	12 3/8	8 7/8	6 7/8		1 1/4	1/4	3 5/8							3.125
4																											
5																											

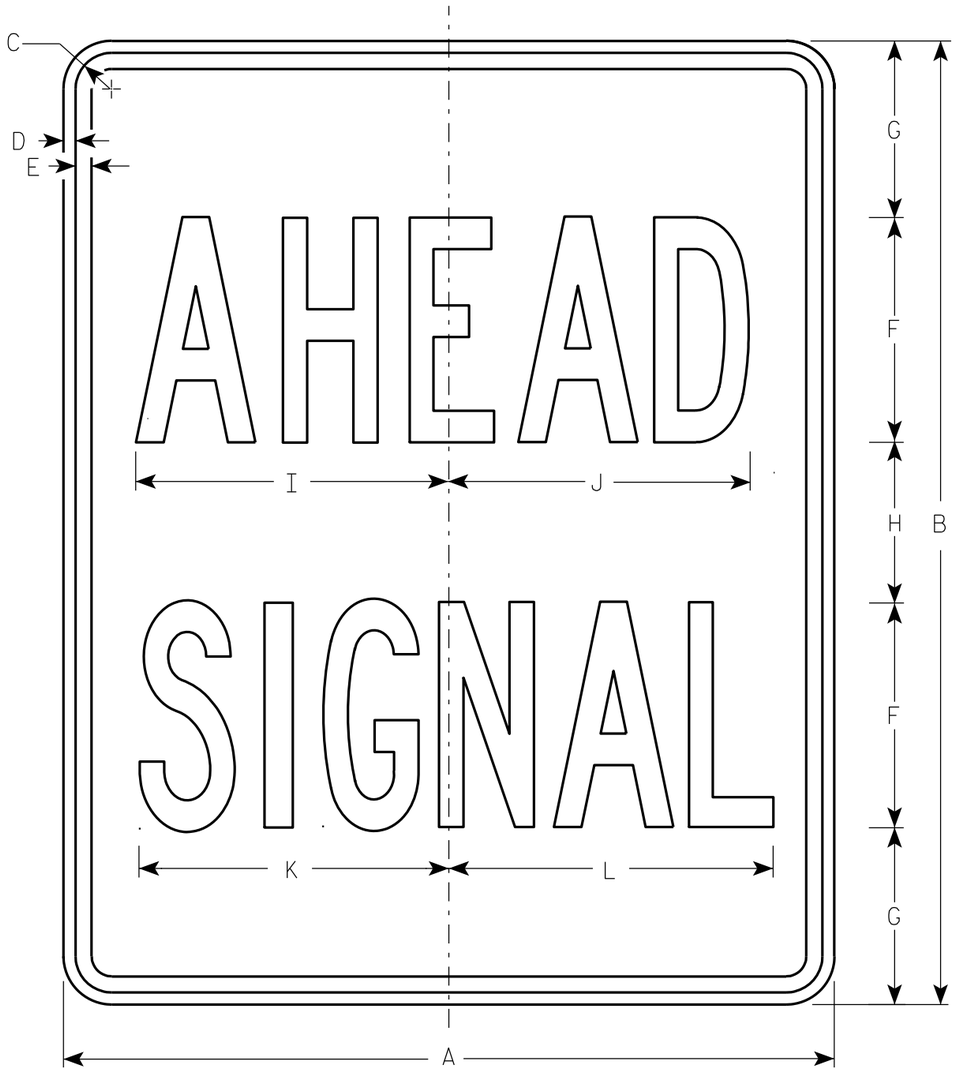
STANDARD SIGN
R9-11

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/29/16 PLATE NO. R9-11.3

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 523	E



R10-10A

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																											
2S	24	30	1 1/8	3/8	1/2	7	5 1/2	5	9 3/4	9 3/8	9 5/8	10 1/8															5.0
2M	24	30	1 1/8	3/8	1/2	7	5 1/2	5	9 3/4	9 3/8	9 5/8	10 1/8															5.0
3																											
4																											
5																											

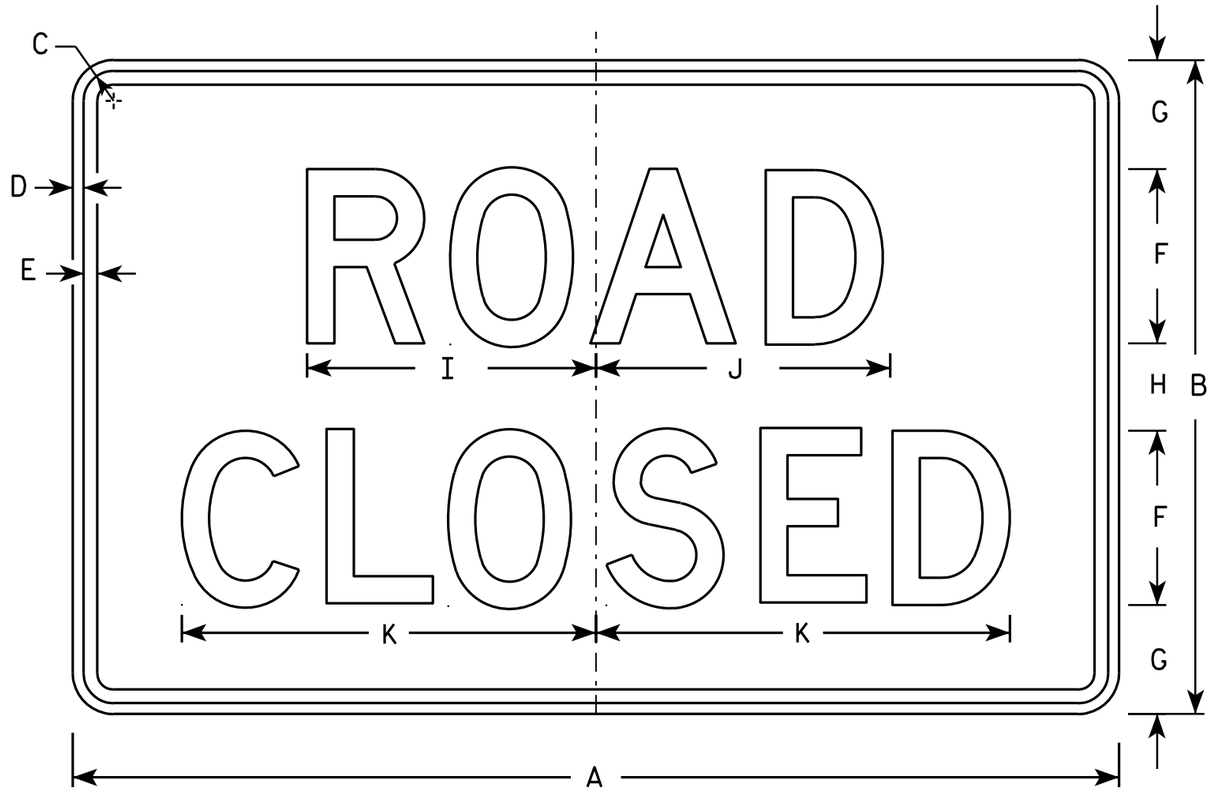
STANDARD SIGN
R10-10A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 4/5/11 PLATE NO. R10-10A.5

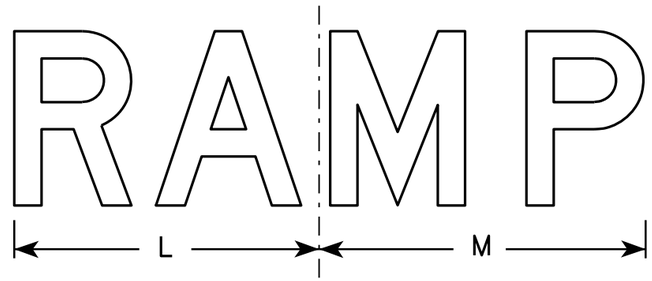
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 524	E



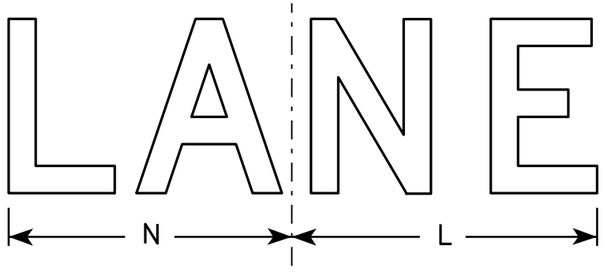
R11-2

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

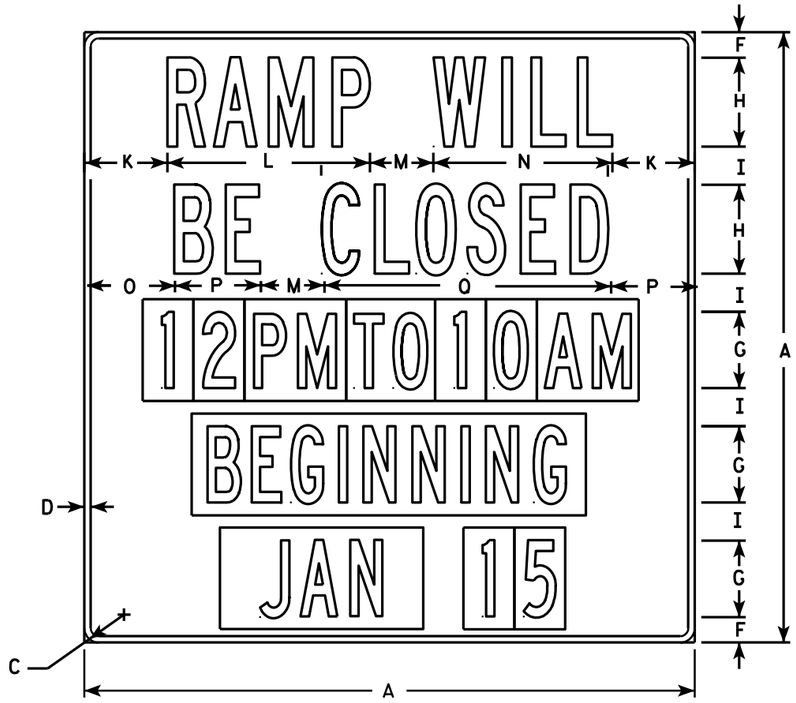
STANDARD SIGN
R11-2

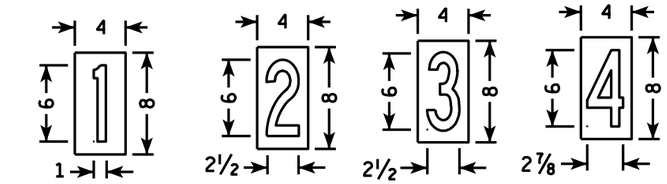
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/1/11 PLATE NO. R11-2.10

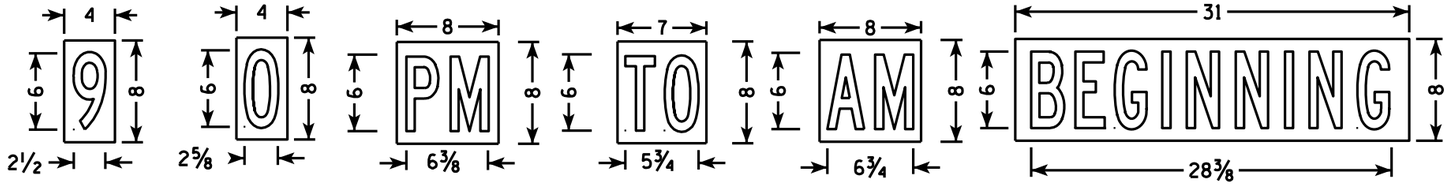
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 525	E

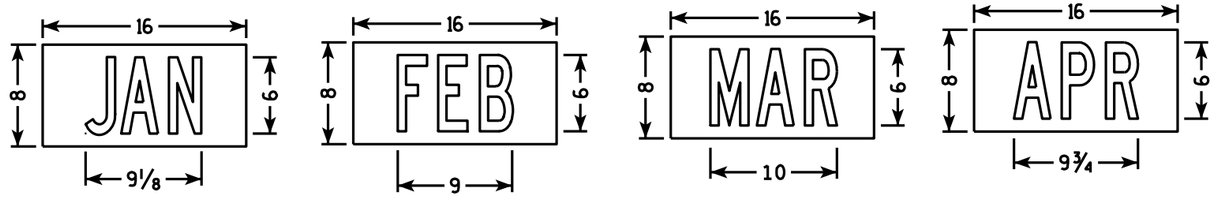


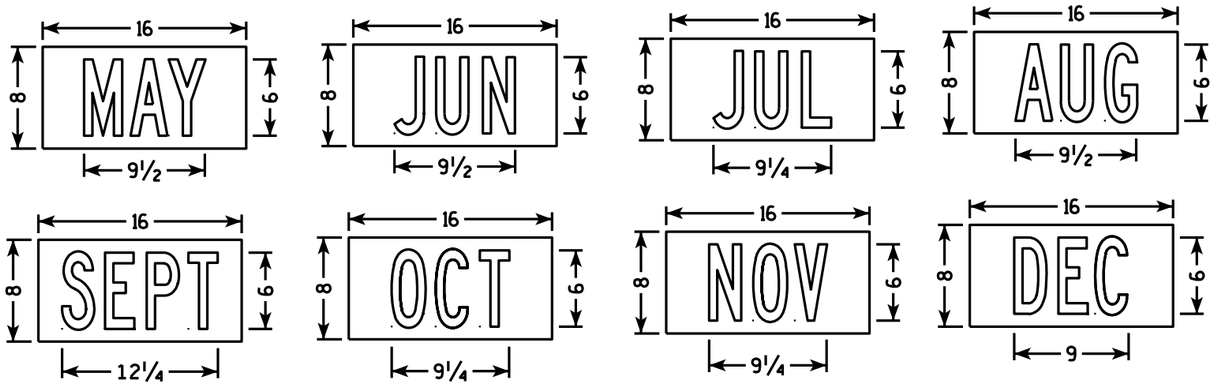


NOTES

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																											

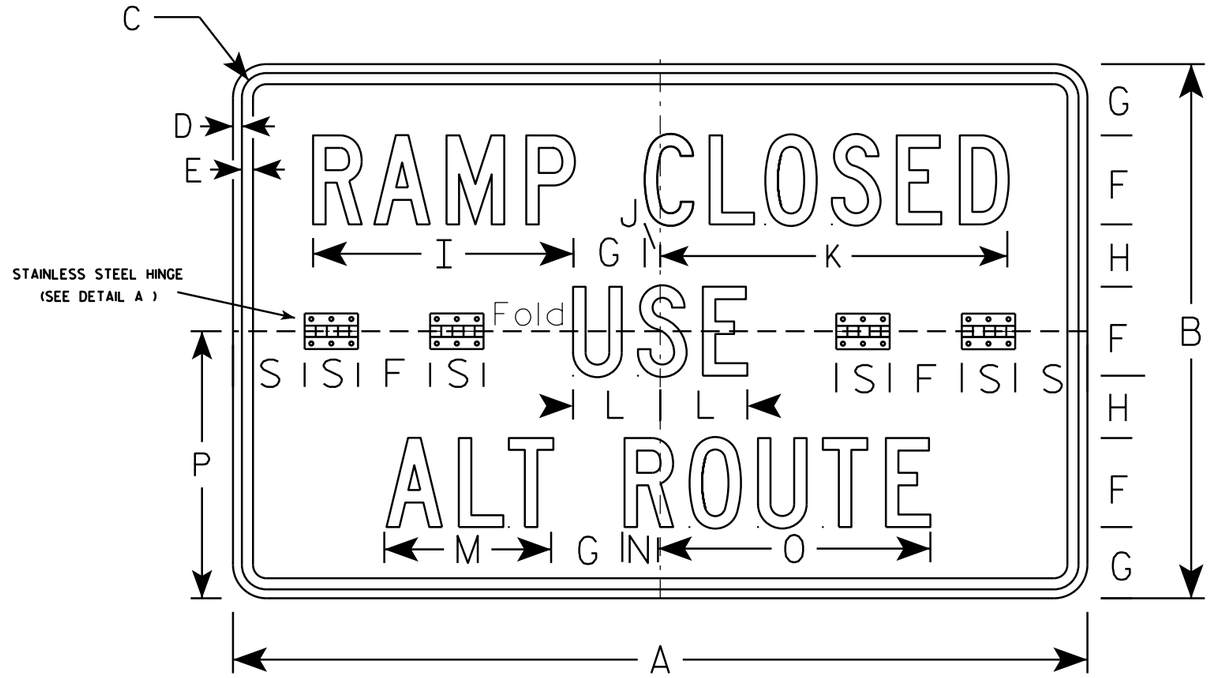
STANDARD SIGN
R11-51

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

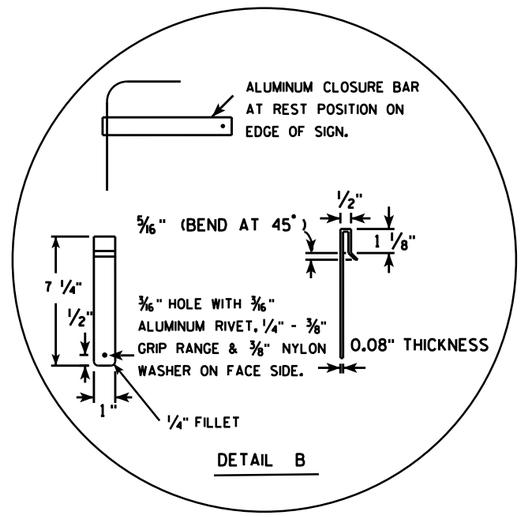
DATE 4/1/11 PLATE NO. R11-51.4

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 526	E



R11-54F

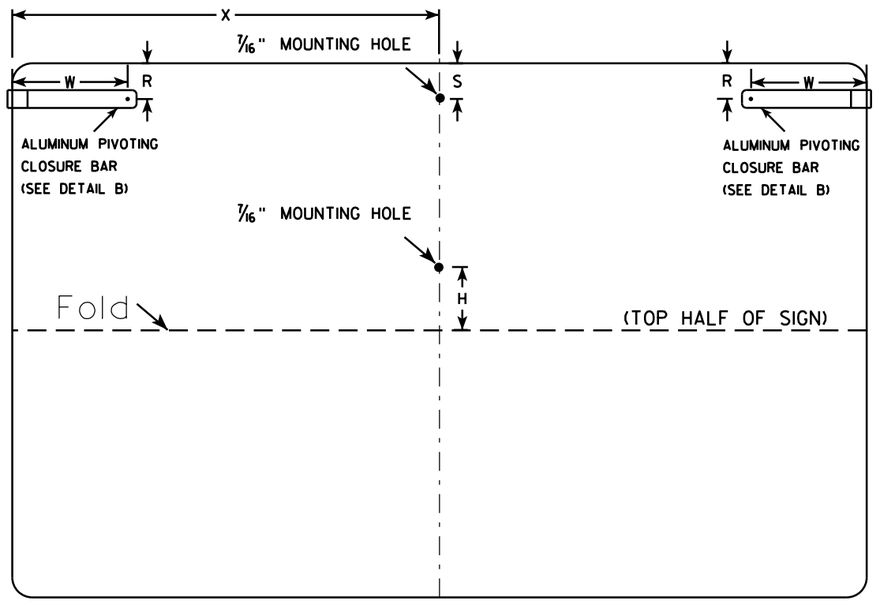
DETAIL A



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

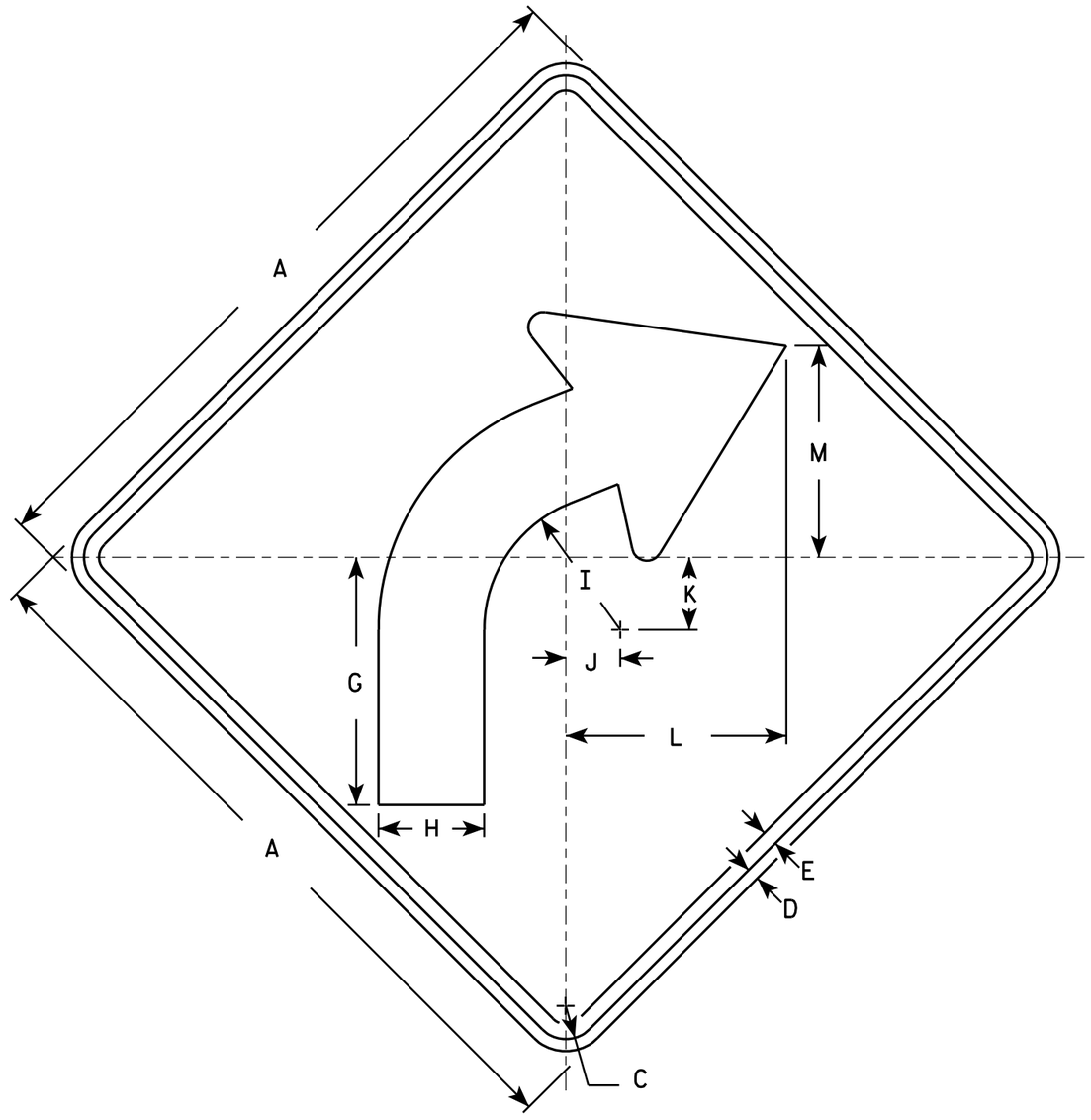
DATE 5/28/14 PLATE NO. R11-54F.3

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

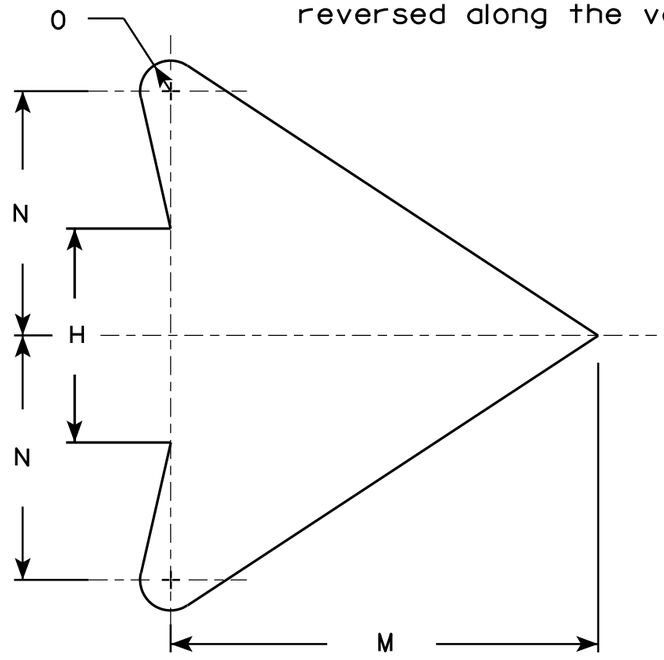
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\R1154F.DGN PLOT DATE : 28-MAY-2014 14:15 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 8.511110:1.000000
WISDOT/CADDS SHEET 42

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   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. W1-2L is the same as W1-2R except the arrow is reversed along the vertical centerline.



W1-2R



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		8 1/4	3 1/2	4 1/2	1 3/4	2 3/8	7 1/4	7	4	1/2												4.0
2S	30		1 3/8	1/2	5/8		10 1/4	4 3/8	5 5/8	2 1/4	3	9 1/8	8 3/4	5	5/8												6.25
2M	36		1 5/8	5/8	3/4		12 3/8	5 1/4	6 3/4	2 5/8	3 1/2	10 7/8	10 1/2	6	3/4												9.0
3	36		1 5/8	5/8	3/4		12 3/8	5 1/4	6 3/4	2 5/8	3 1/2	10 7/8	10 1/2	6	3/4												9.0
4	36		1 5/8	5/8	3/4		12 3/8	5 1/4	6 3/4	2 5/8	3 1/2	10 7/8	10 1/2	6	3/4												9.0
5	48		2 1/4	3/4	1		16 1/2	7	9	3 1/2	4 5/8	14 1/2	14	8	1												16.0

STANDARD SIGN
W1-2

WISCONSIN DEPT OF TRANSPORTATION

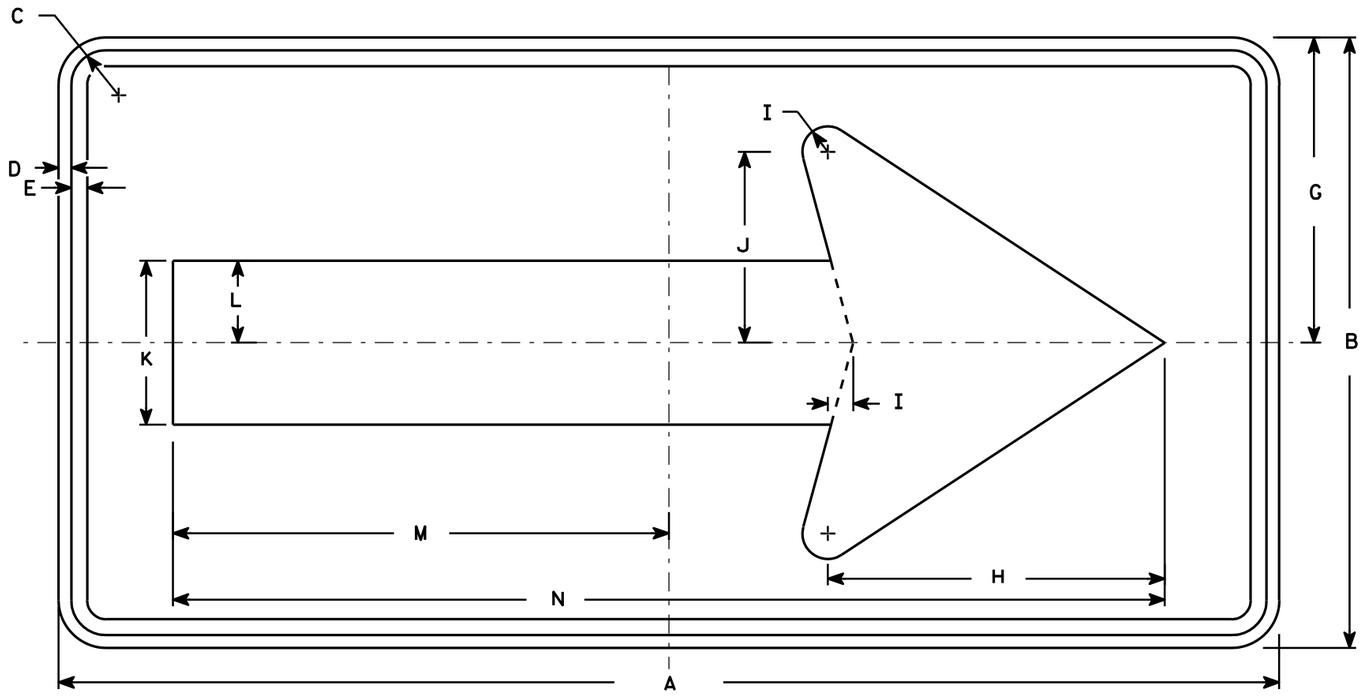
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/15/12 PLATE NO. W1-2.10

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 528	E

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   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.



W1-6

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 1/8	3/8	3/8		9	10	3/4	5 5/8	4 3/4	2 3/8	14 5/8	29 1/4													4.5
2S	48	24	1 3/8	1/2	5/8		12	13 1/4	1	7 1/2	6 1/2	3 1/4	19 1/2	39													8.0
2M	48	24	1 3/8	1/2	5/8		12	13 1/4	1	7 1/2	6 1/2	3 1/4	19 1/2	39													8.0
3	60	30	1 3/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5
4	60	30	1 3/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5
5	96	48	2 1/4	3/4	1		24	26 1/2	2	15	13	6 1/2	39	78													32.0

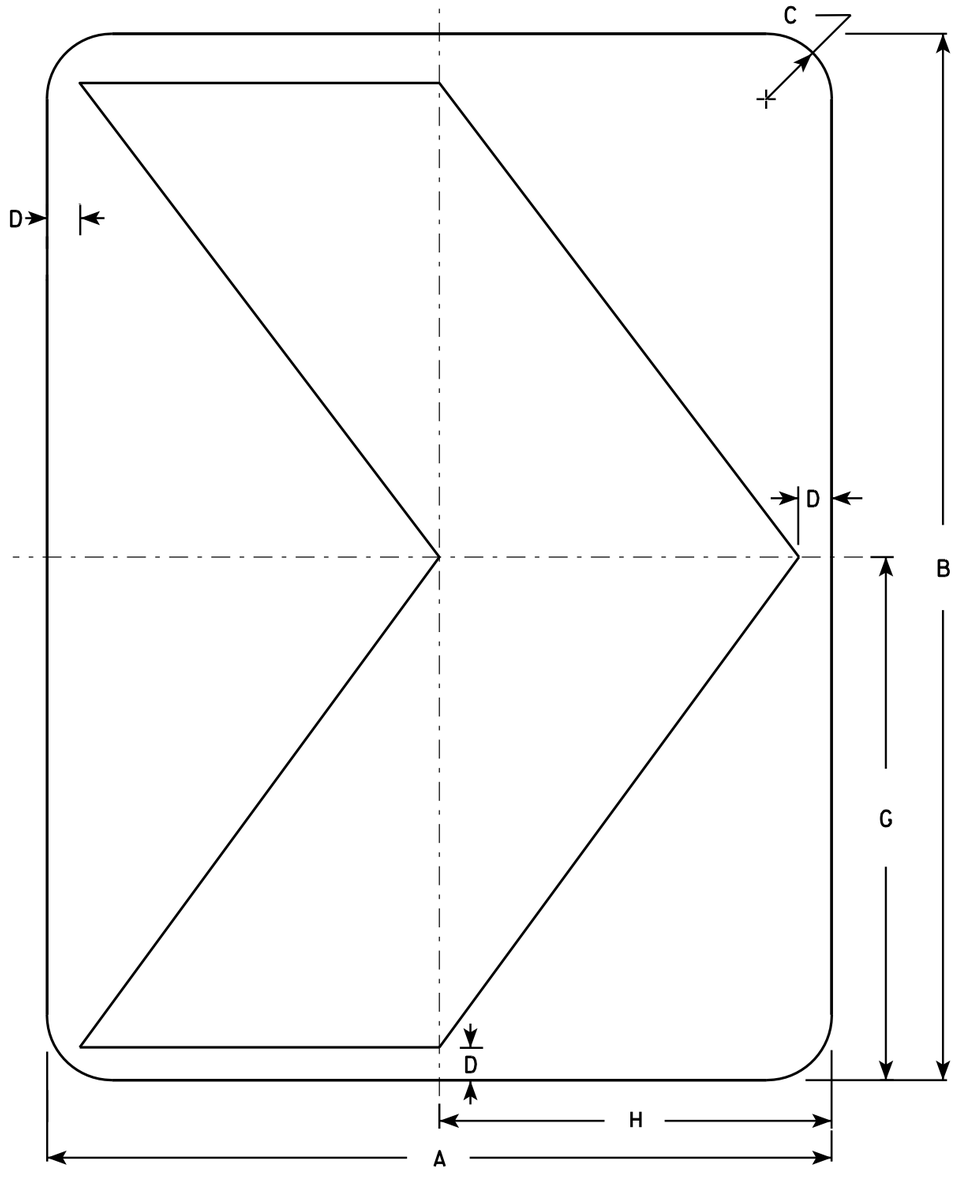
STANDARD SIGN
W1-6

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/7/10 PLATE NO. W1-6.8

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 529



NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   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.

W1-8

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 ½	½			9	6																			1.5
2S	18	24	1 ½	¾			12	9																			3.0
2M	18	24	1 ½	¾			12	9																			3.0
3	24	30	1 ½	1			15	12																			5.0
4	30	36	1 ⅞	1 ¼			18	15																			7.5
5	36	48	2 ¼	1 ½			24	18																			12.0

STANDARD SIGN
W1-8

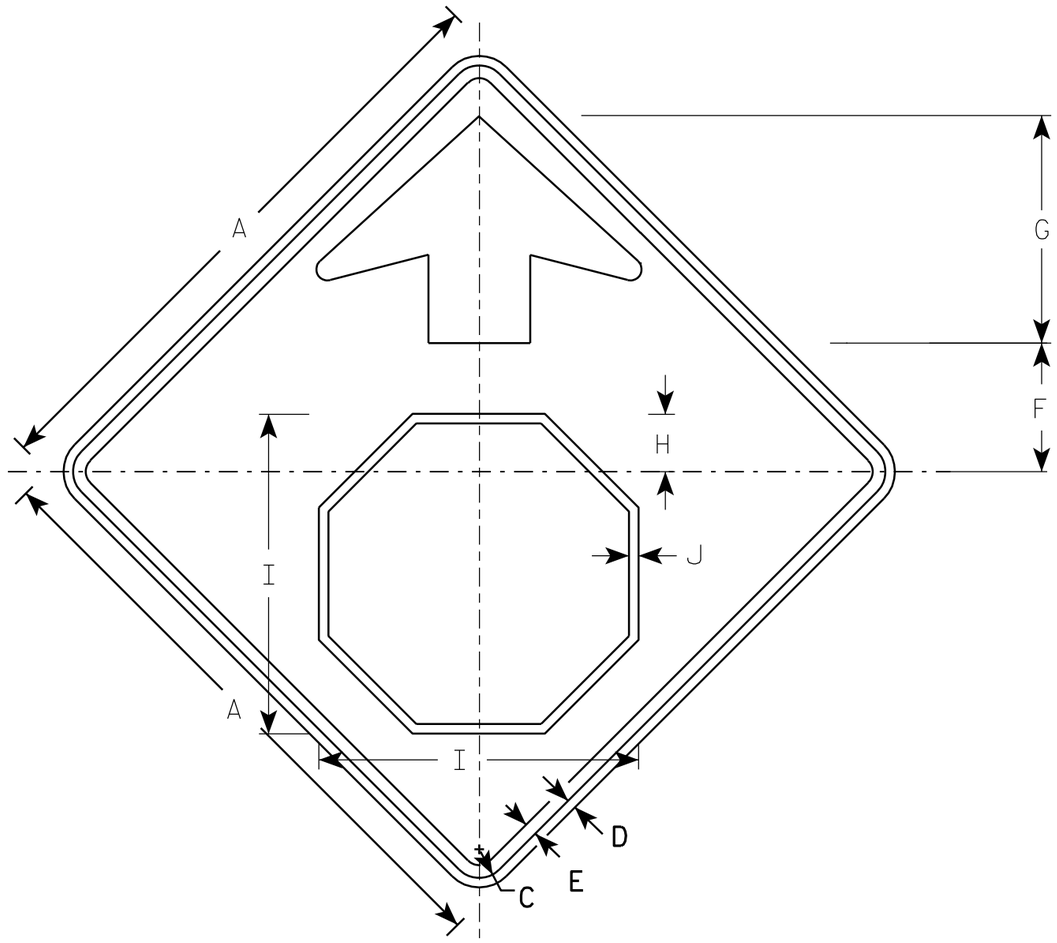
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/7/10 PLATE NO. W1-8.6

PROJECT NO:

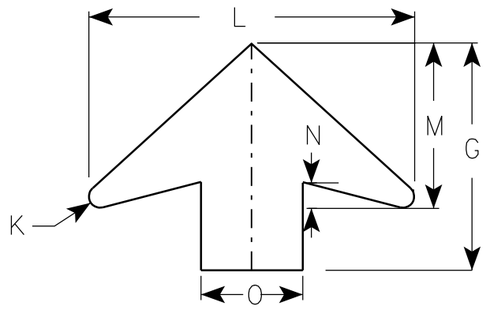
SHEET NO: 530 E



W3-1

NOTES

1. All Signs Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - YELLOW
   Arrow & Border - BLACK
   Stop Symbol - WHITE BORDER ON RED BACKGROUND



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	30		1 3/8	1/2	5/8	6 1/4	11 1/4	2 7/8	15 3/4	1/2	1/2	16	8	1 1/4	5												6.25
2S	36		1 5/8	5/8	3/4	7 1/2	13 1/2	3 1/2	19	5/8	5/8	19 1/4	9 3/4	1 5/8	6												9.0
2M	36		1 5/8	5/8	3/4	7 1/2	13 1/2	3 1/2	19	5/8	5/8	19 1/4	9 3/4	1 5/8	6												9.0
3	36		1 5/8	5/8	3/4	7 1/2	13 1/2	3 1/2	19	5/8	5/8	19 1/4	9 3/4	1 5/8	6												9.0
4	48		2 1/4	3/4	1	10	17 7/8	4 1/2	25 1/8	3/4	7/8	25 5/8	13	2	8												16.0
5	48		2 1/4	3/4	1	10	17 7/8	4 1/2	25 1/8	3/4	7/8	25 5/8	13	2	8												16.0

STANDARD SIGN
W3-1

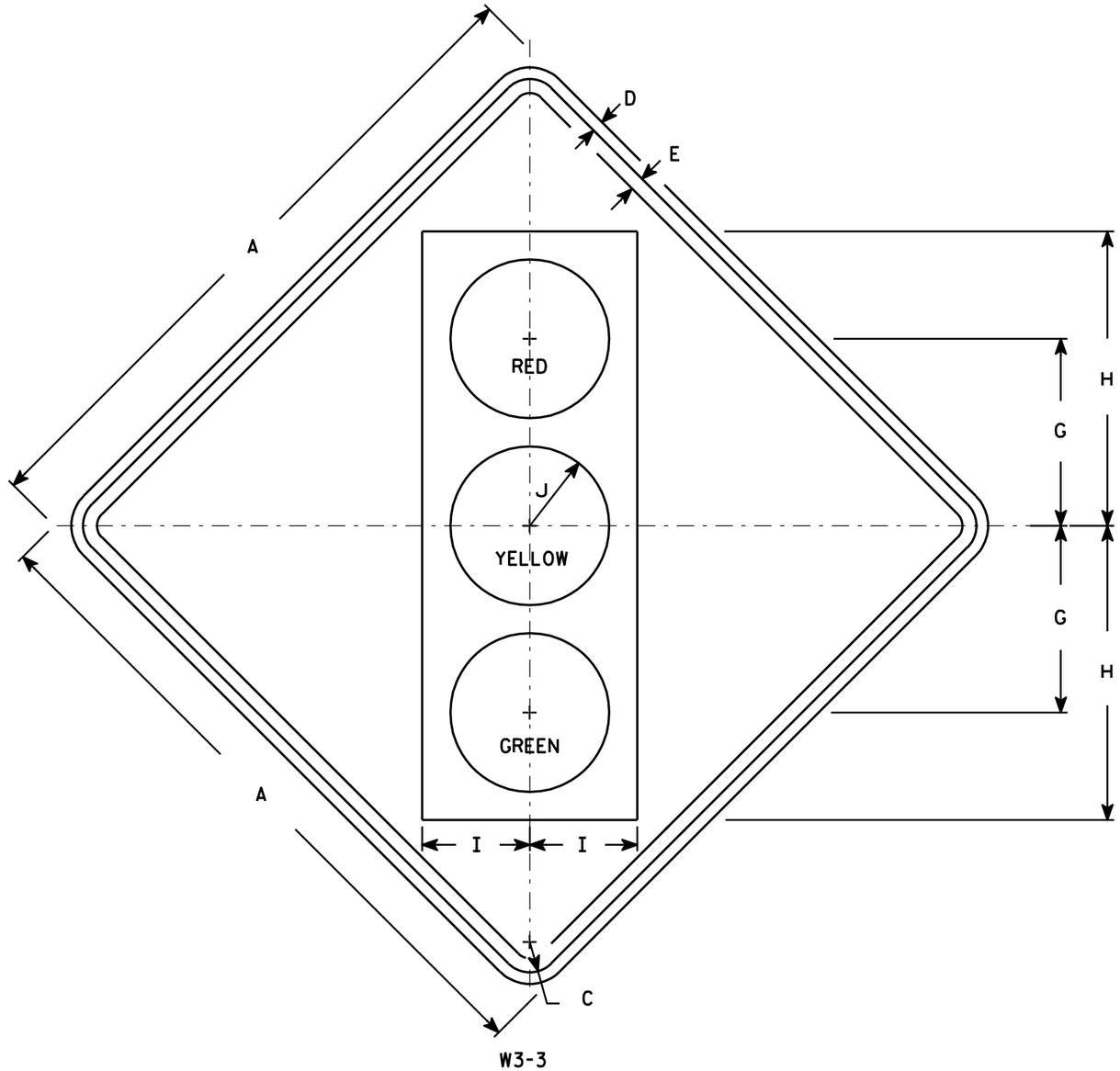
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/7/10 PLATE NO. W3-1.12

PROJECT NO:

SHEET NO: 531 E



NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   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. Symbol and border are non-reflective black.
   Top circle - Type H Reflectorized Red
   Center circle - Same as background
   Bottom circle - Type H Reflectorized Green

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		8 3/4	13 3/4	5	3 3/4																	6.25
2S	36		1 5/8	5/8	3/4		10	15 3/4	5 3/4	4 1/4																	9.0
2M	36		1 5/8	5/8	3/4		10	15 3/4	5 3/4	4 1/4																	9.0
3	36		1 5/8	5/8	3/4		10	15 3/4	5 3/4	4 1/4																	9.0
4	48		2 1/4	3/4	1		12 1/2	20	7 1/2	5																	16.0
5	48		2 1/4	3/4	1		12 1/2	20	7 1/2	5																	16.0

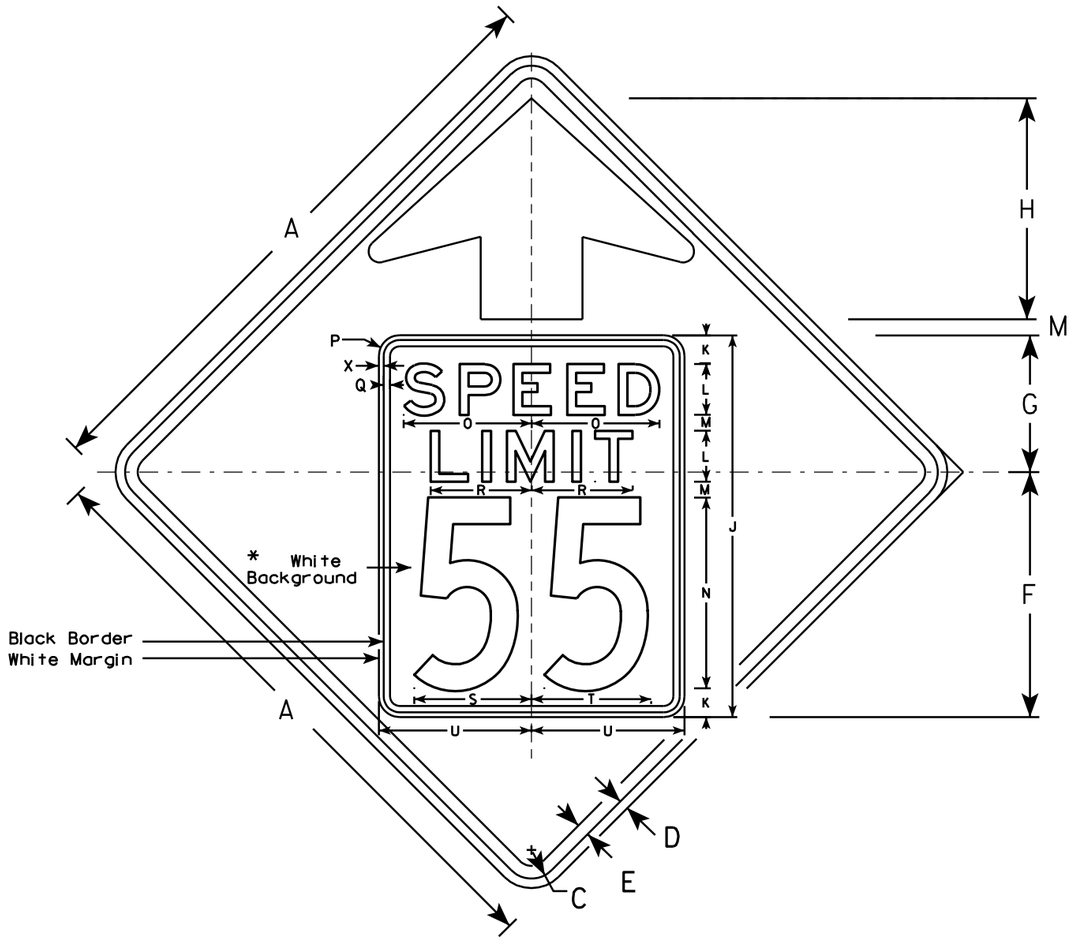
STANDARD SIGN
W3-3

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/7/10 PLATE NO. W3-3.11

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 532 | E

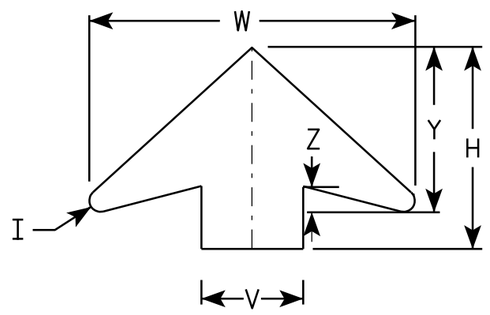


W3-5

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color: *
   Background - YELLOW*
   Message - BLACK
3. Message Series - C for numbers Series E for wording
4. Substitute appropriate numerals and optically adjust spacing to achieve proper balance

*Speed Limit Sign shall have a White Background



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	36		1 5/8	5/8	3/4	14 1/2	9 1/2	11 1/2	5/8	24	2	3	1	12	7 1/8	1 1/2	3/8	5 3/4	7 1/4	7 1/8	9	6	19 1/4	3/8	9 3/4	1 5/8	9.0
2M	36		1 5/8	5/8	3/4	14 1/2	9 1/2	11 1/2	5/8	24	2	3	1	12	7 1/8	1 1/2	3/8	5 3/4	7 1/4	7 1/8	9	6	19 1/4	3/8	9 3/4	1 5/8	9.0
3	36		1 5/8	5/8	3/4	14 1/2	9 1/2	11 1/2	5/8	24	2	3	1	12	7 1/8	1 1/2	3/8	5 3/4	7 1/4	7 1/8	9	6	19 1/4	3/8	9 3/4	1 5/8	9.0
4	48		2 1/4	3/4	1	19 1/4	10 3/4	17 3/8	7/8	30	2 1/4	4	1 1/4	15	10	1 5/8	1/2	8	9 1/4	9 3/8	12	8	25 5/8	3/8	13	2	16.0
5	48		2 1/4	3/4	1	19 1/4	10 3/4	17 3/8	7/8	30	2 1/4	4	1 1/4	15	10	1 5/8	1/2	8	9 1/4	9 3/8	12	8	25 5/8	3/8	13	2	16.0

STANDARD SIGN
W3-5

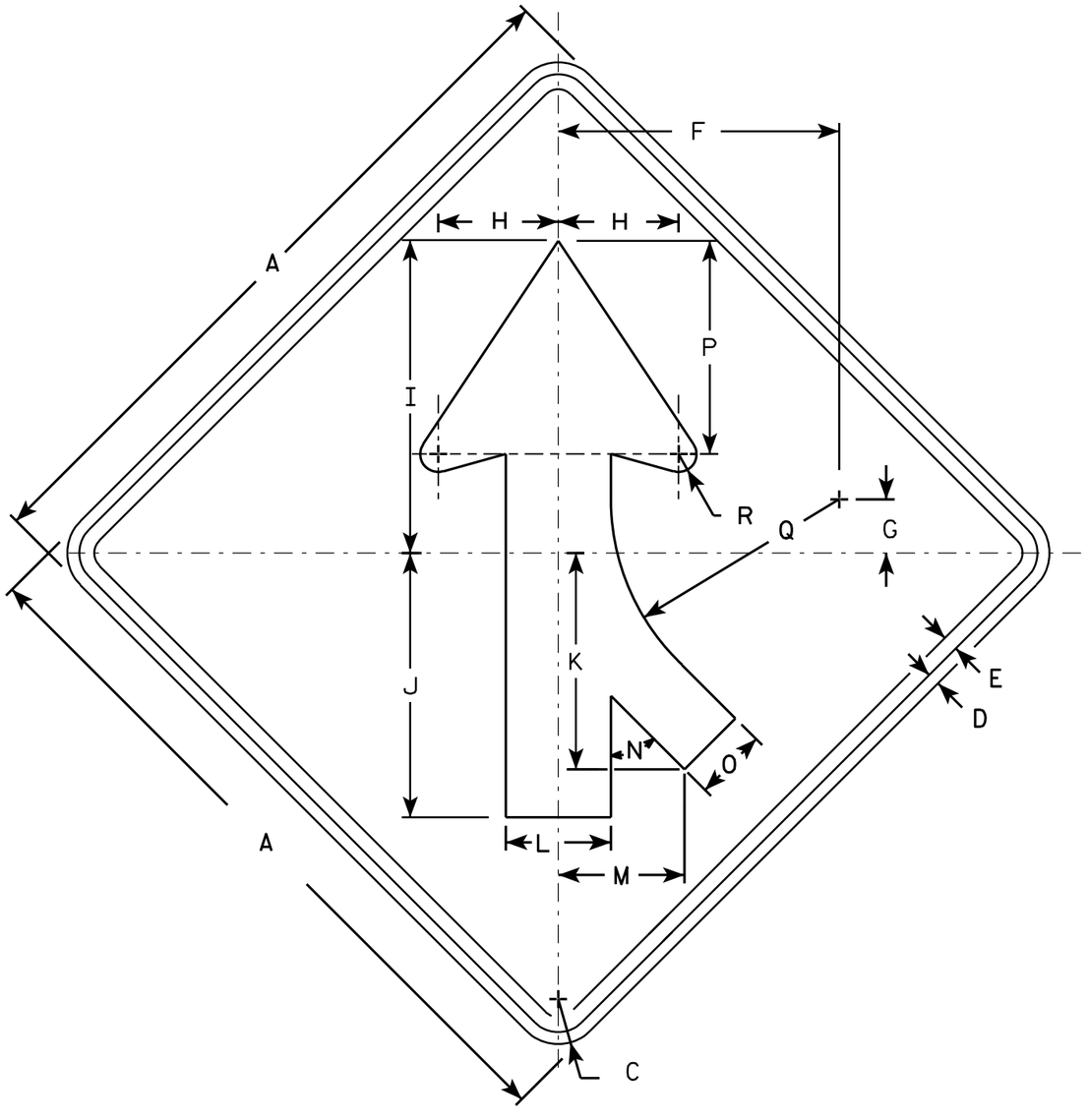
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/29/12 PLATE NO. W3-5.5

PROJECT NO:

SHEET NO: 533 E



W4-1 R

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   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. W4-1L is the same as W4-1R 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	30		1 3/8	1/2	5/8	11 5/8	2 1/2	5	13	11	9	4 3/8	5 1/4	45°	3	8 7/8	9 1/2	3/4									6.25
2S	36		1 5/8	5/8	3/4	14	2 3/4	6	15 3/4	13 1/4	10 1/4	5 1/4	6 3/8	45°	3 5/8	10 5/8	11 3/8	7/8									9.0
2M	36		1 5/8	5/8	3/4	14	2 3/4	6	15 3/4	13 1/4	10 1/4	5 1/4	6 3/8	45°	3 5/8	10 5/8	11 3/8	7/8									9.0
3	36		1 5/8	5/8	3/4	14	2 3/4	6	15 3/4	13 1/4	10 1/4	5 1/4	6 3/8	45°	3 5/8	10 5/8	11 3/8	7/8									9.0
4	48		2 1/4	3/4	1	18 3/4	3 5/8	8	20 1/2	17 1/2	14 3/8	7	8 3/8	45°	4 3/4	14 1/4	15 1/4	1 1/4									16.0
5	48		2 1/4	3/4	1	18 3/4	3 5/8	8	20 1/2	17 1/2	14 3/8	7	8 3/8	45°	4 3/4	14 1/4	15 1/4	1 1/4									16.0

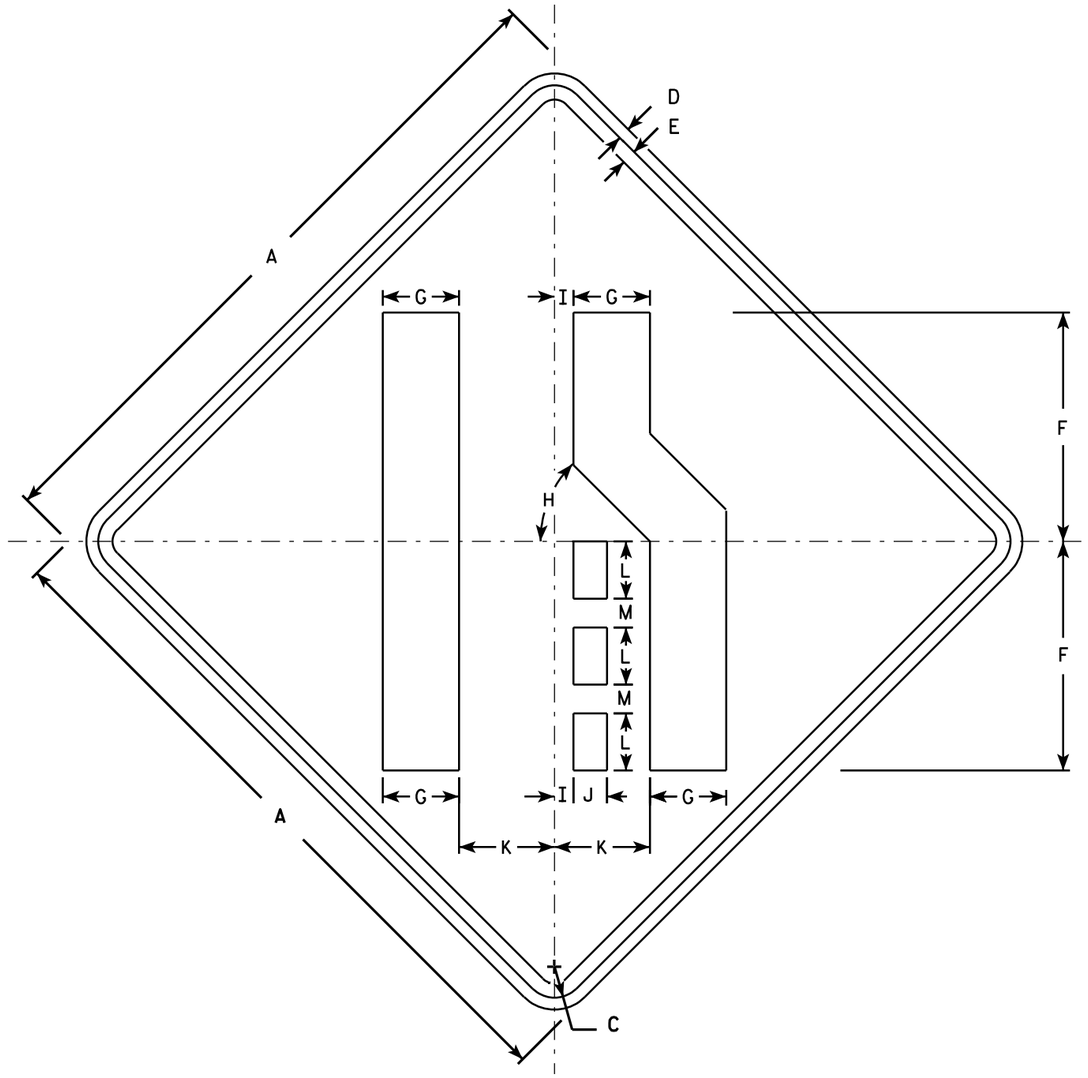
STANDARD SIGN
W4-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rausch for State Traffic Engineer

DATE 03/12/13 PLATE NO. W4-1.14

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 534	E



W4-2R

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   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. W4-2L is the same as W4-2R 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	30		1 3/8	1/2	5/8	10	3 3/8	45°	7/8	1 1/2	4 1/4	2 1/2	1 1/4														6.25
2S	36		1 5/8	5/8	3/4	12	4	45°	1	1 3/4	5	3	1 1/2														9.0
2M	36		1 5/8	5/8	3/4	12	4	45°	1	1 3/4	5	3	1 1/2														9.0
3	36		1 5/8	5/8	3/4	12	4	45°	1	1 3/4	5	3	1 1/2														9.0
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
W4-2

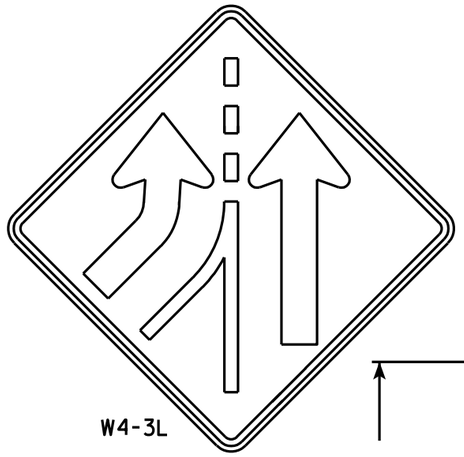
WISCONSIN DEPT OF TRANSPORTATION

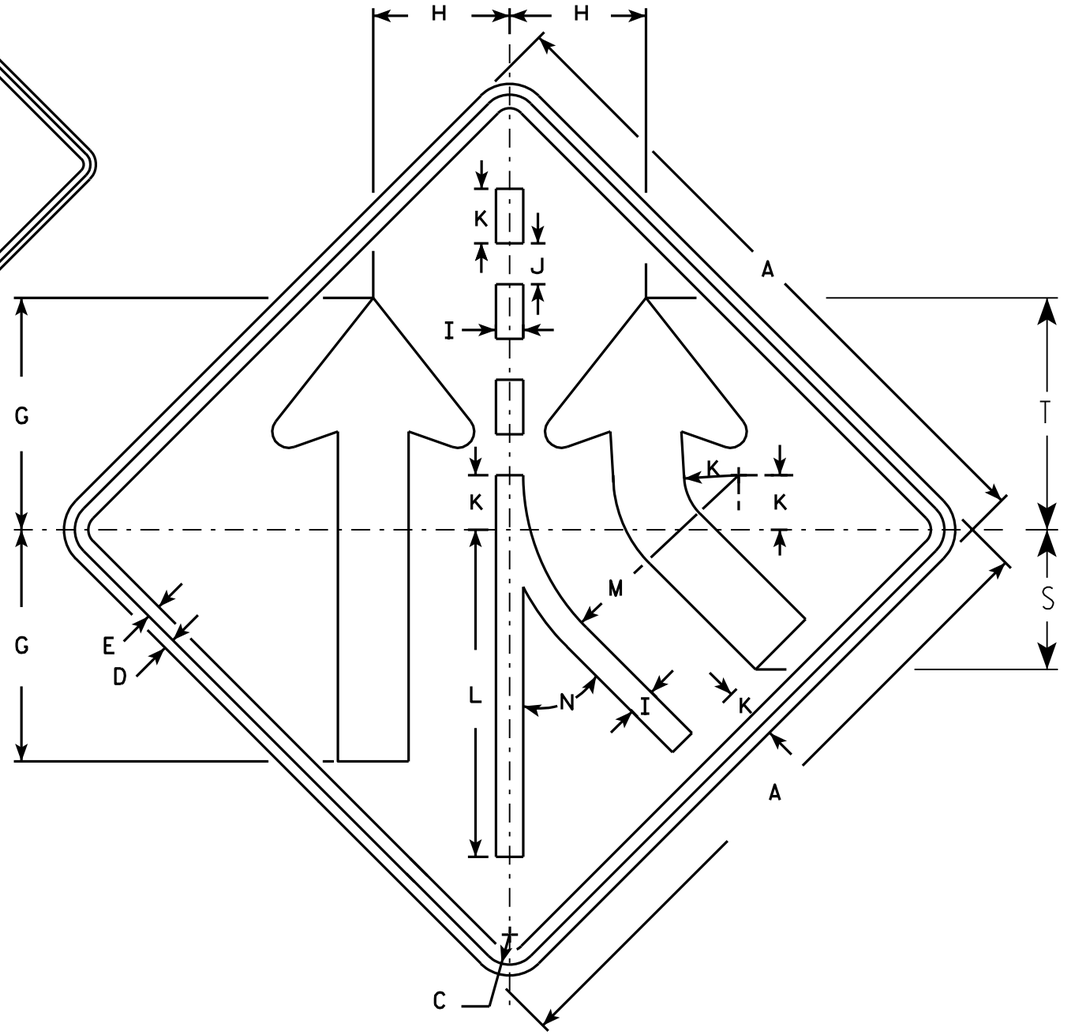
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/12/13 PLATE NO. W4-2.14

PROJECT NO:

SHEET NO: 535 E

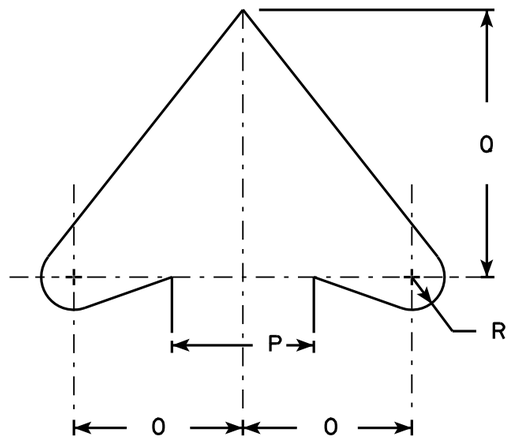




W4-3R

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   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. W4-3 L is the same as W4-3 R except the arrow is reversed along the vertical centerline.



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	30		1 3/8	1/2	5/8		10 5/8	6 1/4	1 1/4	1 7/8	2 1/2	15	9 7/8	45°	3 7/8	3 1/4	6 1/8	3/4	6 3/8	10 5/8							6.25
2S	36		1 5/8	5/8	3/4		12 3/4	7 1/2	1 1/2	2 1/4	3	18	11 7/8	45°	4 5/8	4	7 3/8	7/8	7 3/4	12 3/4							9.0
2M	36		1 5/8	5/8	3/4		12 3/4	7 1/2	1 1/2	2 1/4	3	18	11 7/8	45°	4 5/8	4	7 3/8	7/8	7 3/4	12 3/4							9.0
3																											
4	48		2 1/4	3/4	1		17	10	2	3	4	24	15 3/4	45°	6 1/4	5 1/2	9 7/8	1 1/4	10 1/4	17							16.0
5	48		2 1/4	3/4	1		17	10	2	3	4	24	15 3/4	45°	6 1/4	5 1/2	9 7/8	1 1/4	10 1/4	17							16.0

STANDARD SIGN
W4-3

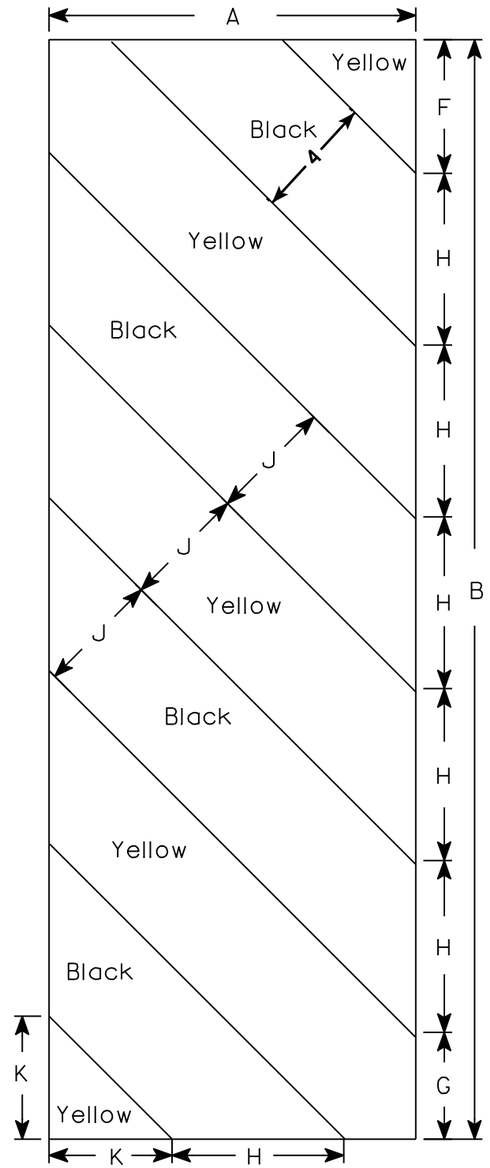
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

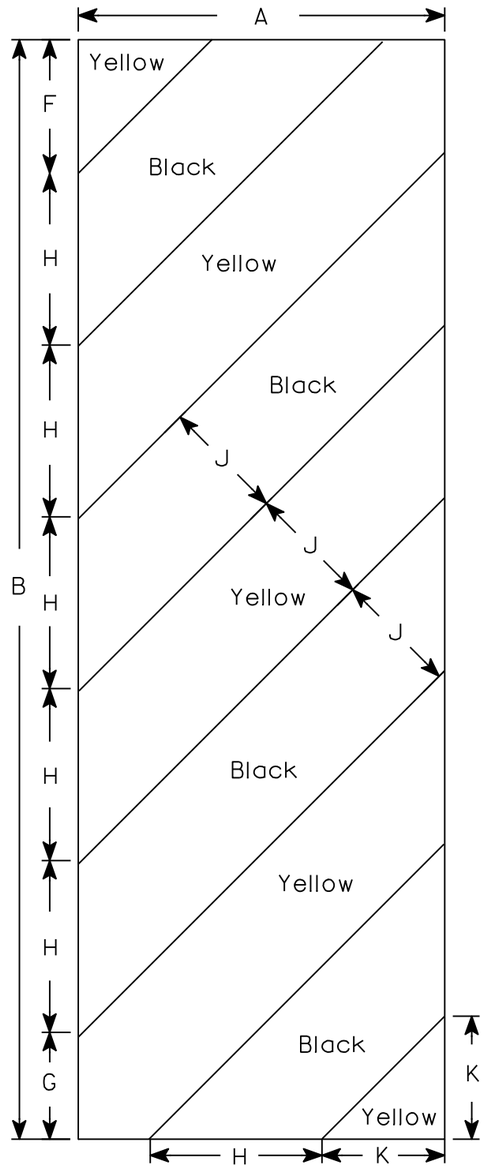
DATE 03/12/13 PLATE NO. W4-3.8

PROJECT NO:

SHEET NO: 536 E



W5-52L



W5-52R

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   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. Alternate colors of stripes as shown.

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	36				4 3/8	3 1/2	5 5/8	45°	4	4																3.0
2M	12	36				4 3/8	3 1/2	5 5/8	45°	4	4																3.0
3	18	54				6	5 1/2	8 1/2	45°	6	6 9/16																6.75
4																											
5																											

STANDARD SIGN

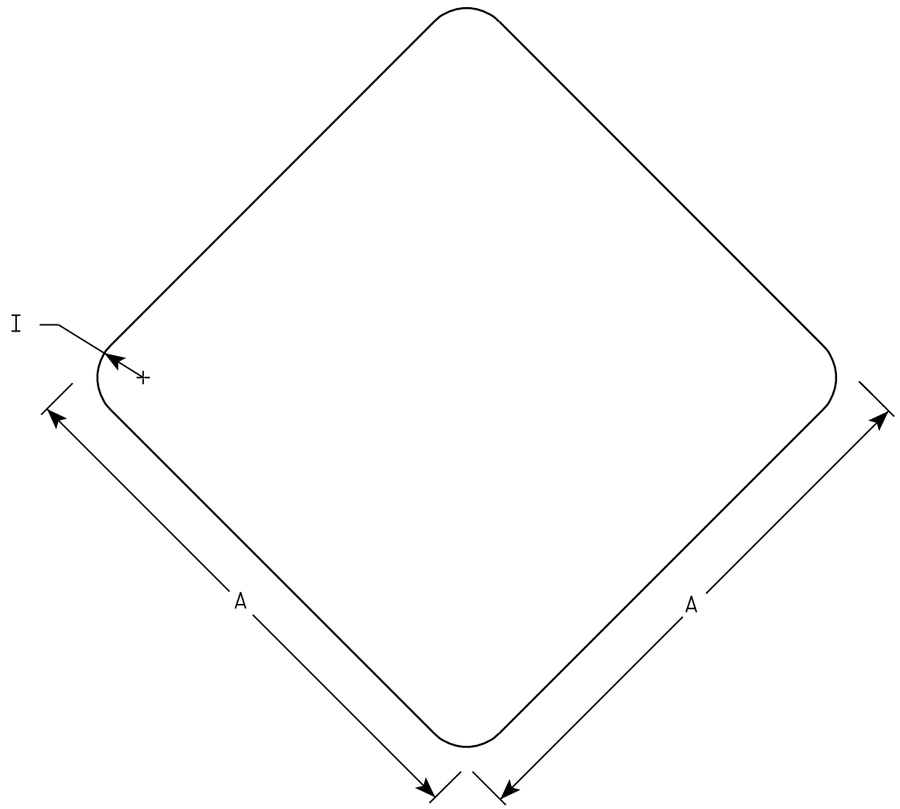
W5-52L & W5-52R

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/29/12 PLATE NO. W5-52.9

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 537 | E



W5-54

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
3. Corners may be square or rounded when base material is plywood. When base material is metal the corners 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	12								1																		1.0
2S	18								1 ½																		2.25
2M	18								1 ½																		2.25
3																											
4																											
5																											

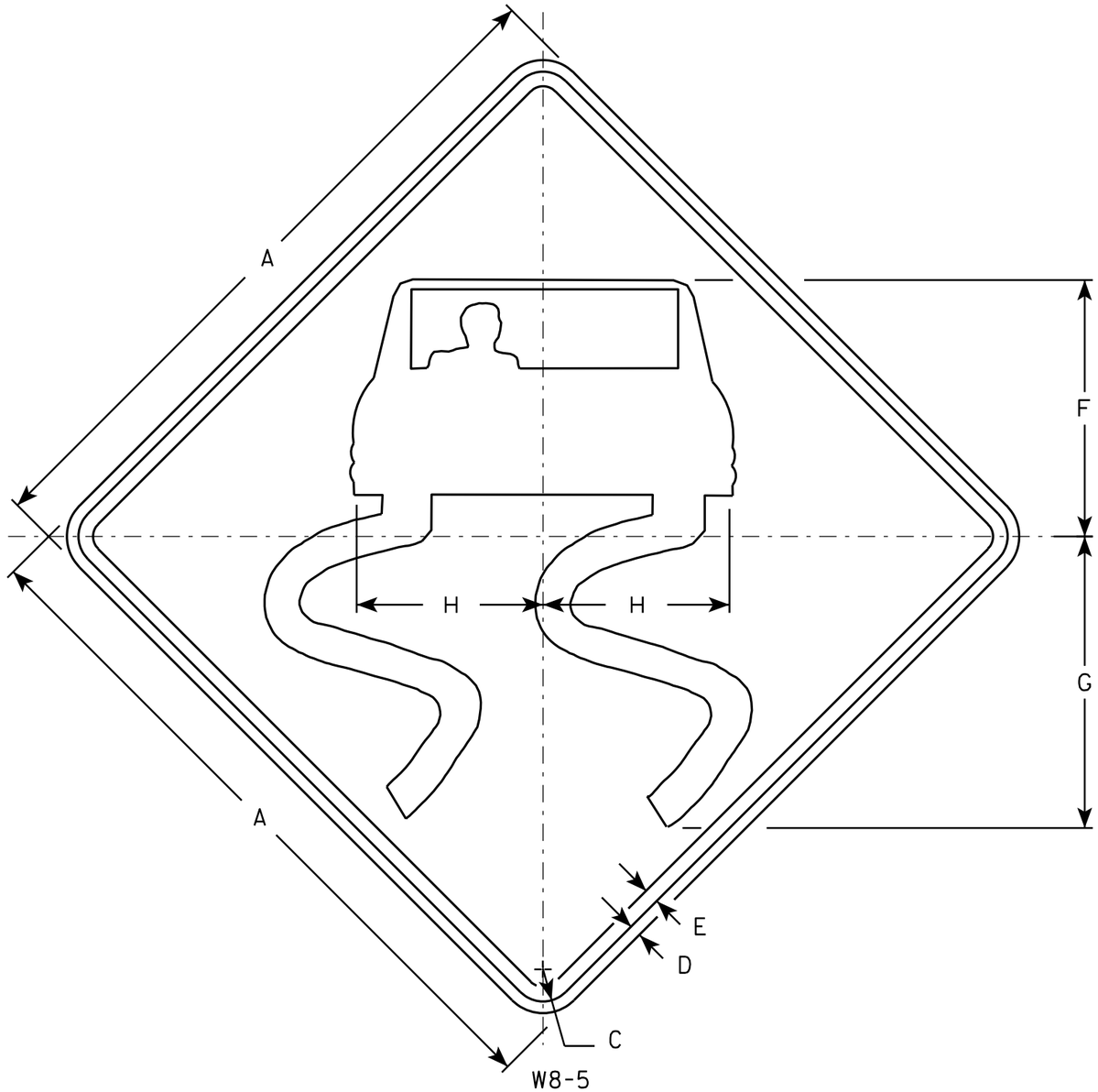
STANDARD SIGN
W5-54

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/3/10 PLATE NO. W5-54.8

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 538 | E



NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   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.

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	8 3/4	9 7/8	6 3/8																			4.0
2S	30		1 3/8	1/2	5/8	11	12 1/2	8																			6.25
2M	36		1 5/8	5/8	3/4	13	14 7/8	9 1/2																			9.0
3	36		1 5/8	5/8	3/4	13	14 7/8	9 1/2																			9.0
4	36		1 5/8	5/8	3/4	13	14 7/8	9 1/2																			9.0
5	48		2 1/4	3/4	1	17 3/8	19 3/4	12 5/8																			16.0

STANDARD SIGN
W8-5

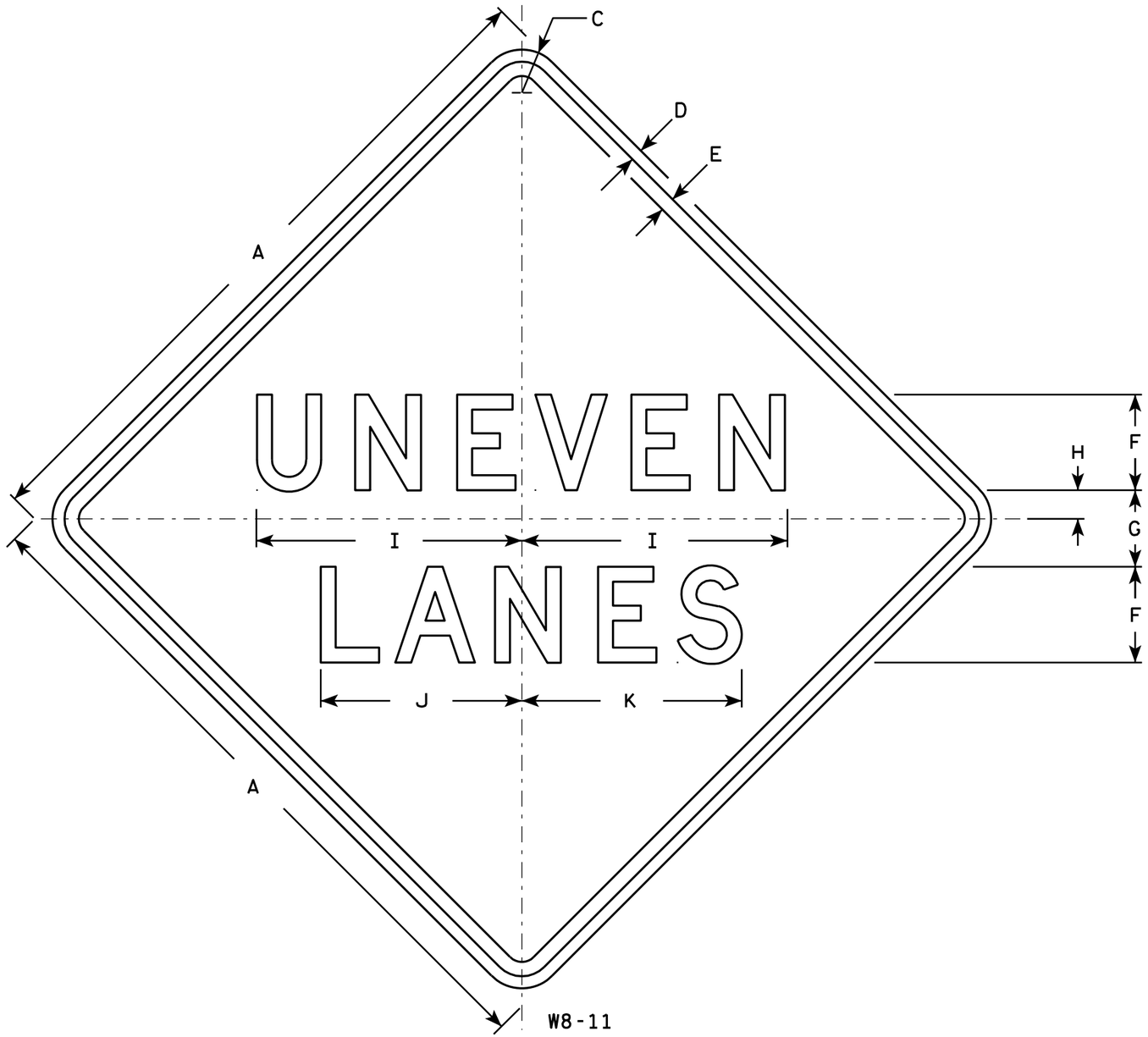
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 03/14/13 PLATE NO. W8-5.12

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 539 | E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W85.DGN PLOT DATE : 14-MAR-2013 09:42 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 5.954400:1.000000
WISDOT/CADDS SHEET 42



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 - 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	36		1 5/8	5/8	3/4	5	4	1 1/2	13 7/8	10 1/2	11 1/2																9.0
2M	36		1 5/8	5/8	3/4	5	4	1 1/2	13 7/8	10 1/2	11 1/2																9.0
3																											
4	36		1 5/8	5/8	3/4	5	4	1 1/2	13 7/8	10 1/2	11 1/2																9.0
5	48		2 1/4	3/4	1	7	5	2	18 1/2	14	15 3/8																16.0

STANDARD SIGN
W8-11

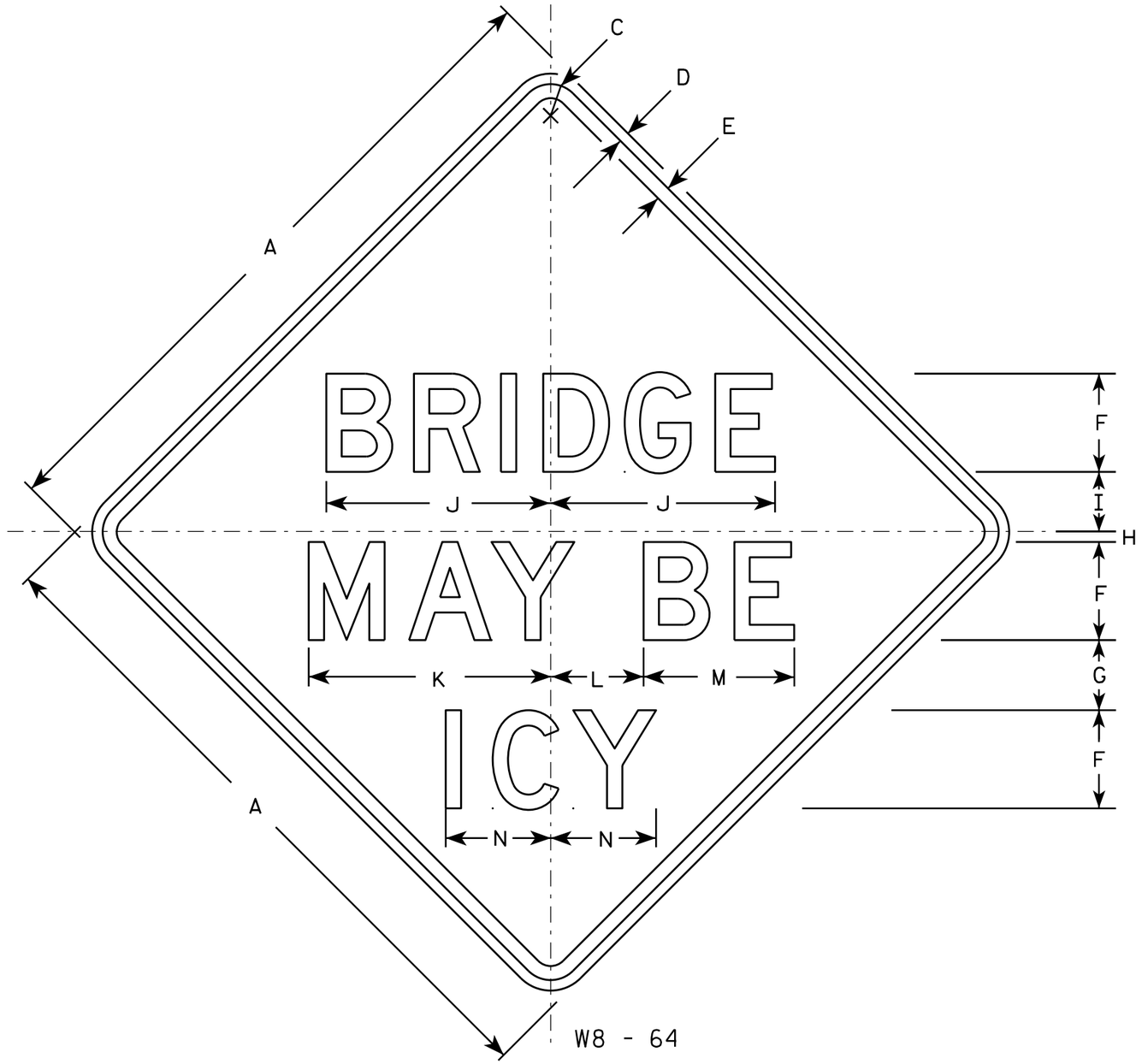
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/22/11 PLATE NO. W8-11.4

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 540 | E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\W811.DGN PLOT DATE : 22-MAR-2011 14:12 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 6.703924:1.000000
WISDOT/CADDS SHEET 42



NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   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	36		1 5/8	5/8	3/4	5	3 3/4	5/8	3 1/8	12	13	5	8	5 5/8													9.0
2M	36		1 5/8	5/8	3/4	5	3 3/4	5/8	3 1/8	12	13	5	8	5 5/8													9.0
3																											
4	48		2 1/4	3/4	1	7	5	3/4	4 1/4	16	17 1/4	6 5/8	10 3/4	7 1/2													16.0
5	48		2 1/4	3/4	1	7	5	3/4	4 1/4	16	17 1/4	6 5/8	10 3/4	7 1/2													16.0

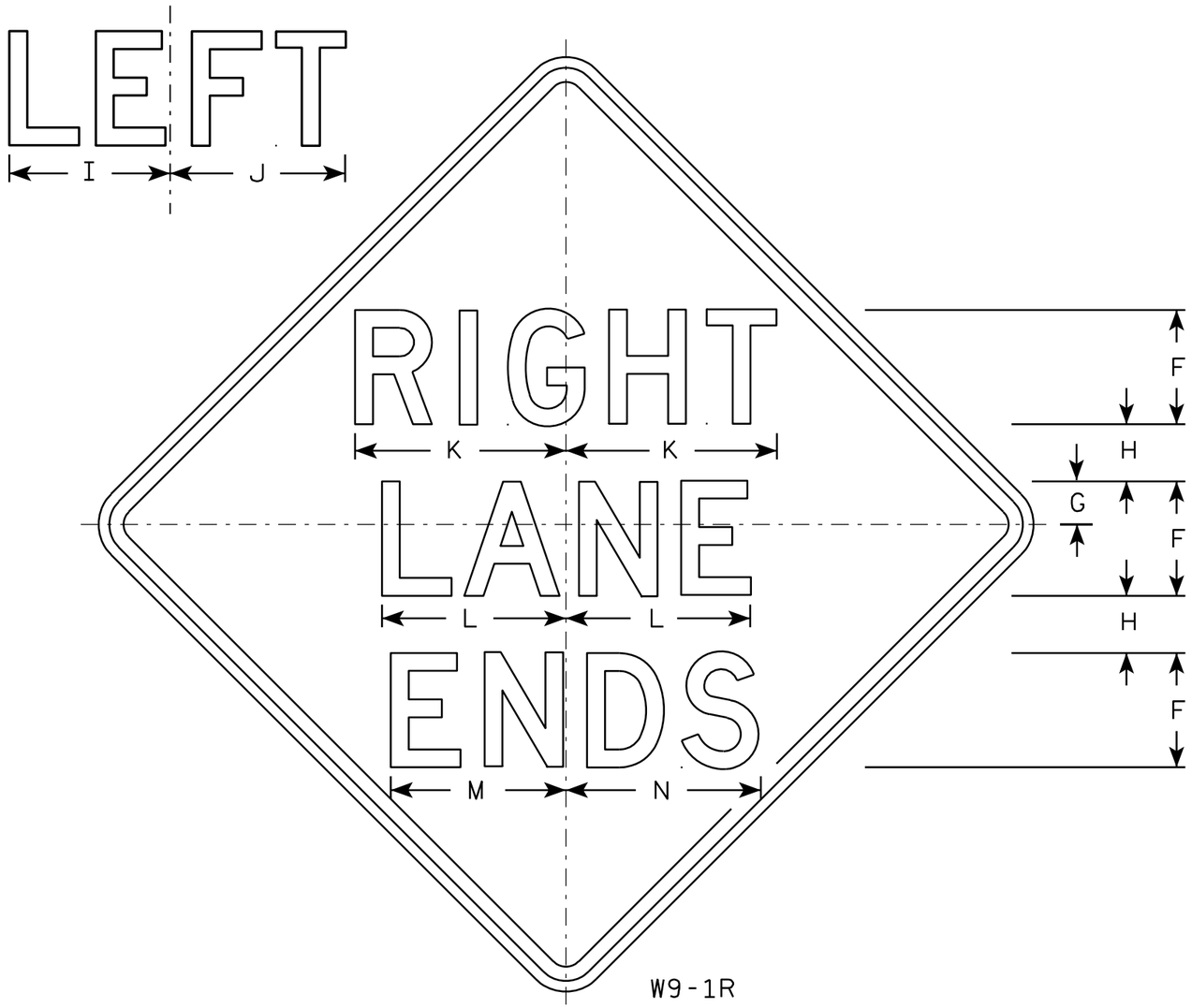
STANDARD SIGN
W8-64

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 03/14/13 PLATE 541 W8-64.6

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



W9-1R

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   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. W9-1L same as W9-1R except the word Left replaces 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	30		1 3/8	1/2	5/8	5	1 1/2	2 1/2	7 1/8	7 5/8	9 1/4	8 1/8	7 5/8	8 5/8													6.25
2S	36		1 5/8	5/8	3/4	6	2	3	8 1/2	9 1/8	11	9 3/4	9	10 3/8													9.0
2M	36		1 5/8	5/8	3/4	6	2	3	8 1/2	9 1/8	11	9 3/4	9	10 3/8													9.0
3	36		1 5/8	5/8	3/4	6	2	3	8 1/2	9 1/8	11	9 3/4	9	10 3/8													9.0
4	36		1 5/8	5/8	3/4	6	2	3	8 1/2	9 1/8	11	9 3/4	9	10 3/8													9.0
5	48		2 1/4	3/4	1	8	3	4	11 1/4	12 1/4	14 3/4	12 7/8	12 1/4	13 5/8													16.0

STANDARD SIGN
W9-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 03/18/13 PLATE NO. W9-1.8

PROJECT NO:

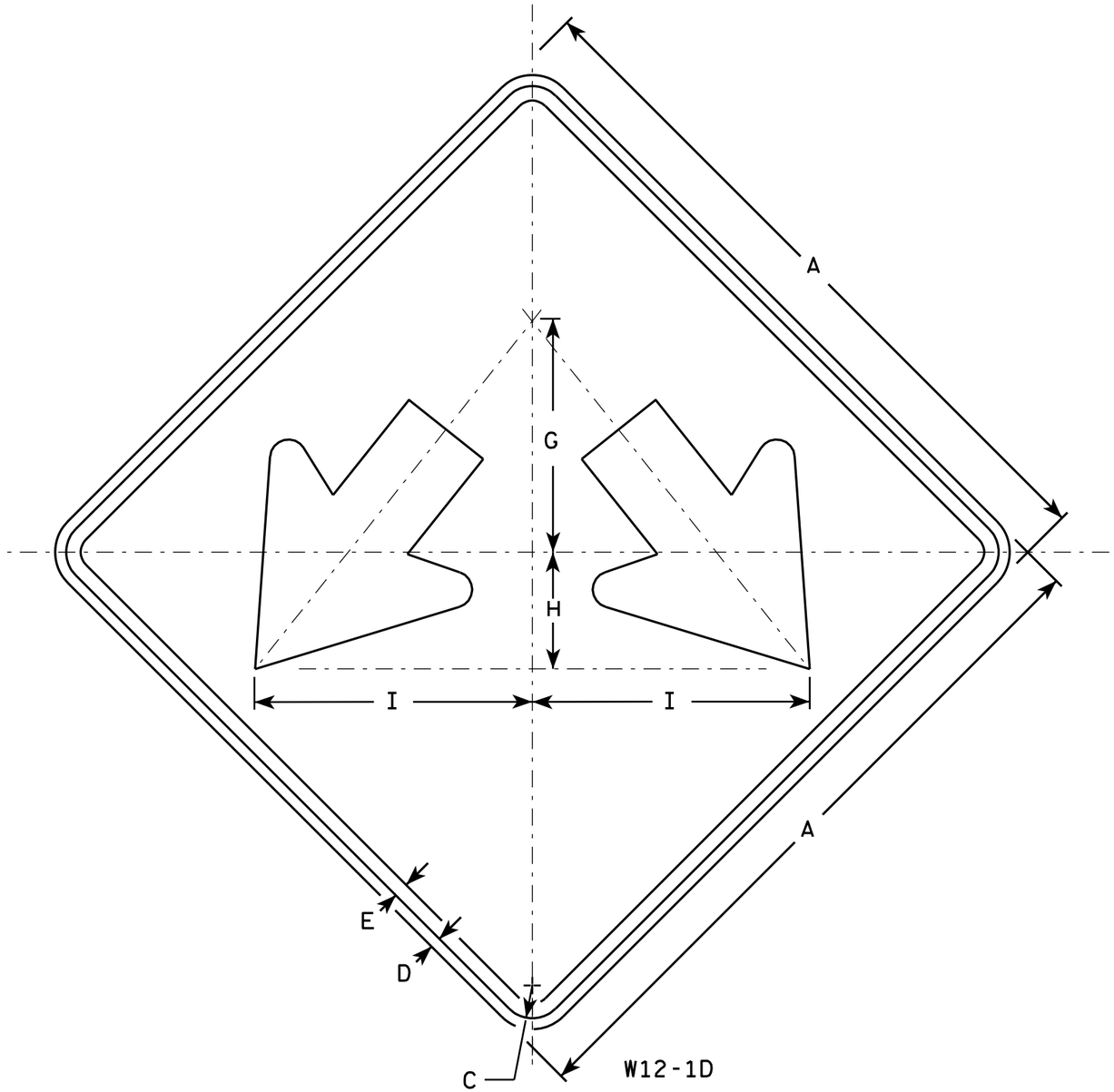
SHEET NO: 542 E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W91.DGN PLOT DATE : 18-MAR-2013 11:42 PLOT BY : mscsja

WISDOT/CADDS SHEET 42

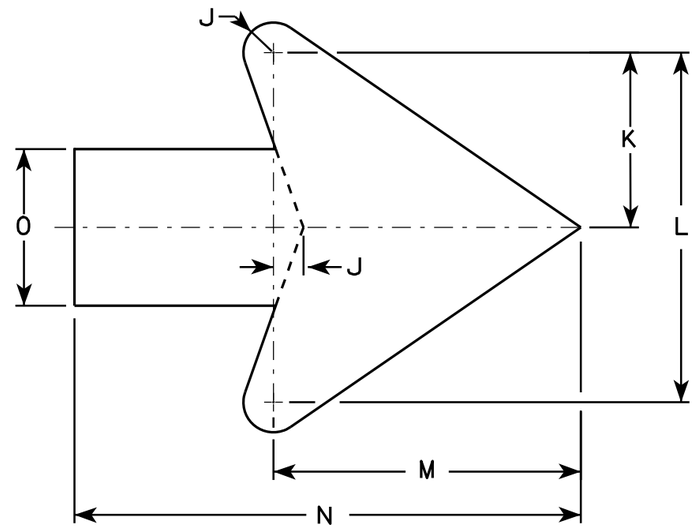
7

7



NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   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																											
2S	24		1 1/8	1/2	3/8		8	4	9 1/2	3/8	3 3/8	7 1/4	6 3/8	10 3/8	3 1/4												4.0
2M	24		1 1/8	1/2	3/8		8	4	9 1/2	3/8	3 3/8	7 1/4	6 3/8	10 3/8	3 1/4												4.0
3	30		1 3/8	1/2	5/8		10	5	11 7/8	3/4	4 1/2	9	7 7/8	13	4												6.25
4	36		1 3/8	1/2	5/8		12	6	14 1/4	1	5 1/2	10 7/8	9 5/8	15 3/4	4 3/4												9.0
5	48		2 1/4	3/4	1		16	8	19	1 1/4	7 1/4	14 1/2	12 3/4	21	6 1/4												16.0

STANDARD SIGN
W12-1D

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/13/13 PLATE NO. W12-1D.15

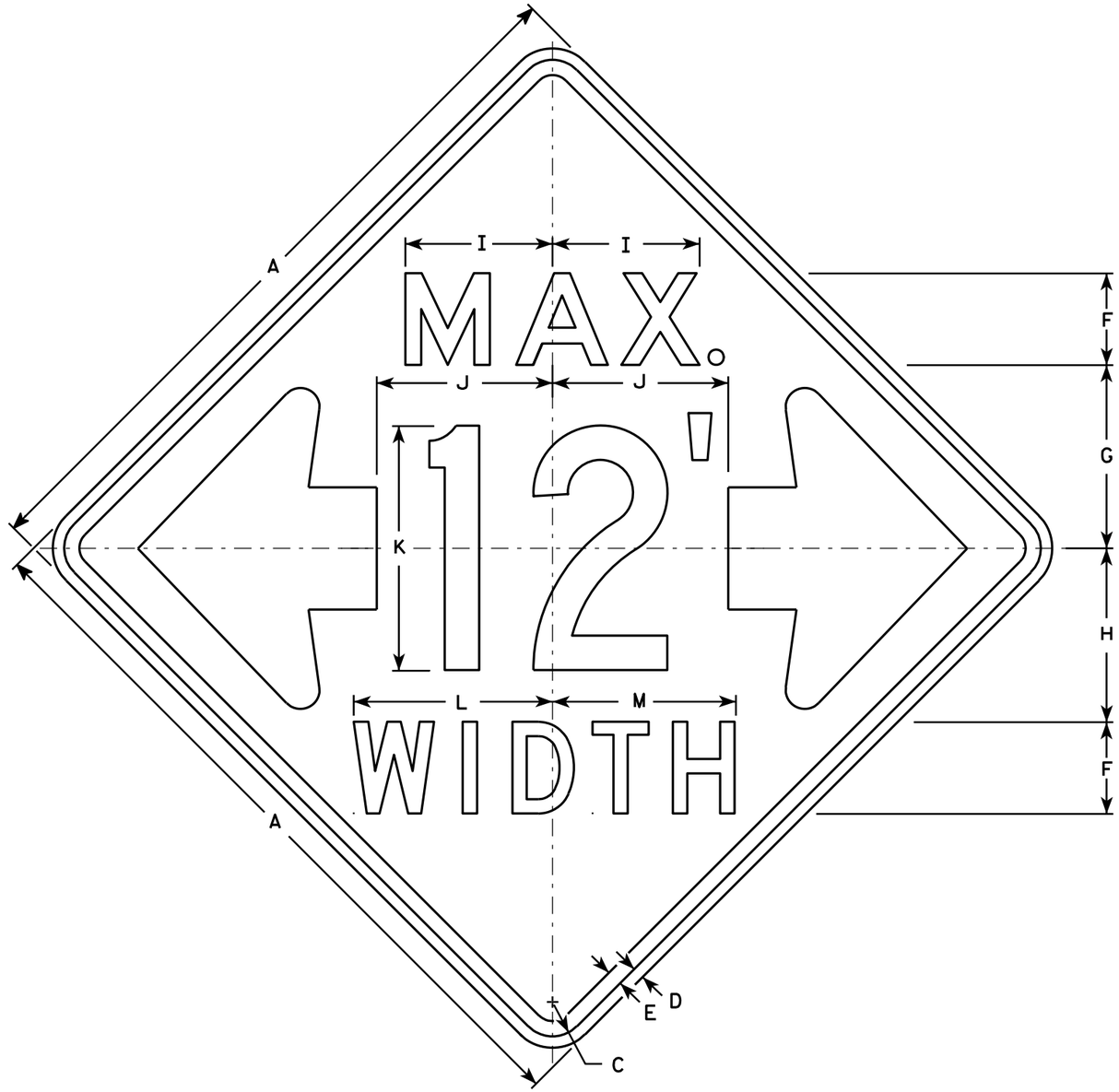
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 543	E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W121D.DGN PLOT DATE : 13-MAR-2013 13:26 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 4.713802:1.000000

WISDOT/CADDS SHEET 42

7

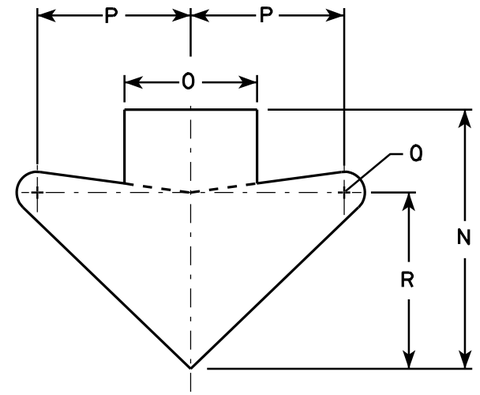
7



W12-52

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. The top line is series E, the numerals are series C, and the bottom line is series D.
6. Substitute appropriate numerals and adjust spacing as required.



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	48		2 1/4	3/4	1	6	12	11 3/8	9 5/8	11 1/2	16	13	12	15 5/8	8	9 1/4	1 1/4	10 5/8									16.0
2M	48		2 1/4	3/4	1	6	12	11 3/8	9 5/8	11 1/2	16	13	12	15 5/8	8	9 1/4	1 1/4	10 5/8									16.0
3																											
4																											
5																											

STANDARD SIGN
W12-52

WISCONSIN DEPT OF TRANSPORTATION

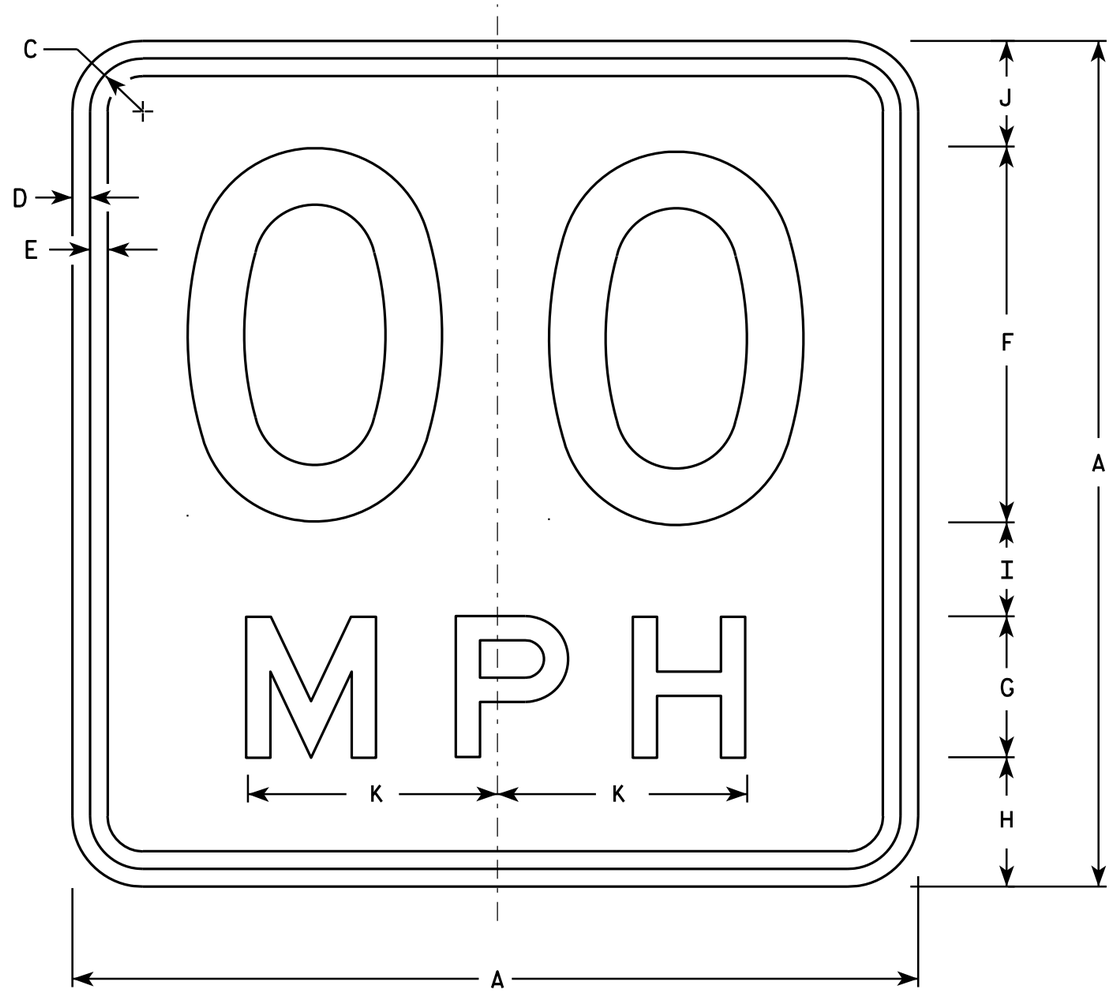
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/16/11 PLATE NO. W12-52.7

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 544 | E

7

FILE NAME : C:\Users\PROJECTS\tr_stdplate\W1252.DGN PLOT DATE : 16-MAR-2011 14:45 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 9.137199:1.000000
WISDOT/CADDS SHEET 42



W13-1

* For 30" x 30" Warning Signs, use 18" x 18" W13-1 signs.
For 36" x 36" Warning Signs, use 24" x 24" W13-1 signs.

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
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. Substitute appropriate numerals and optically space about centerline to achieve proper balance.
6. Line 1 is Series D
   Line 2 is Series E

	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	3/8	3/8	8	3	2 3/4	2	2 1/4	5 3/8																2.25
*	2S	18		1 1/8	3/8	3/8	8	3	2 3/4	2	2 1/4	5 3/8																2.25
*	2M	18		1 1/8	3/8	3/8	8	3	2 3/4	2	2 1/4	5 3/8																2.25
	3	24		1 1/8	3/8	1/2	10	4	4	2 3/4	3 1/4	6 5/8																4.00
	4	36		1 5/8	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00
	5	36		1 5/8	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00

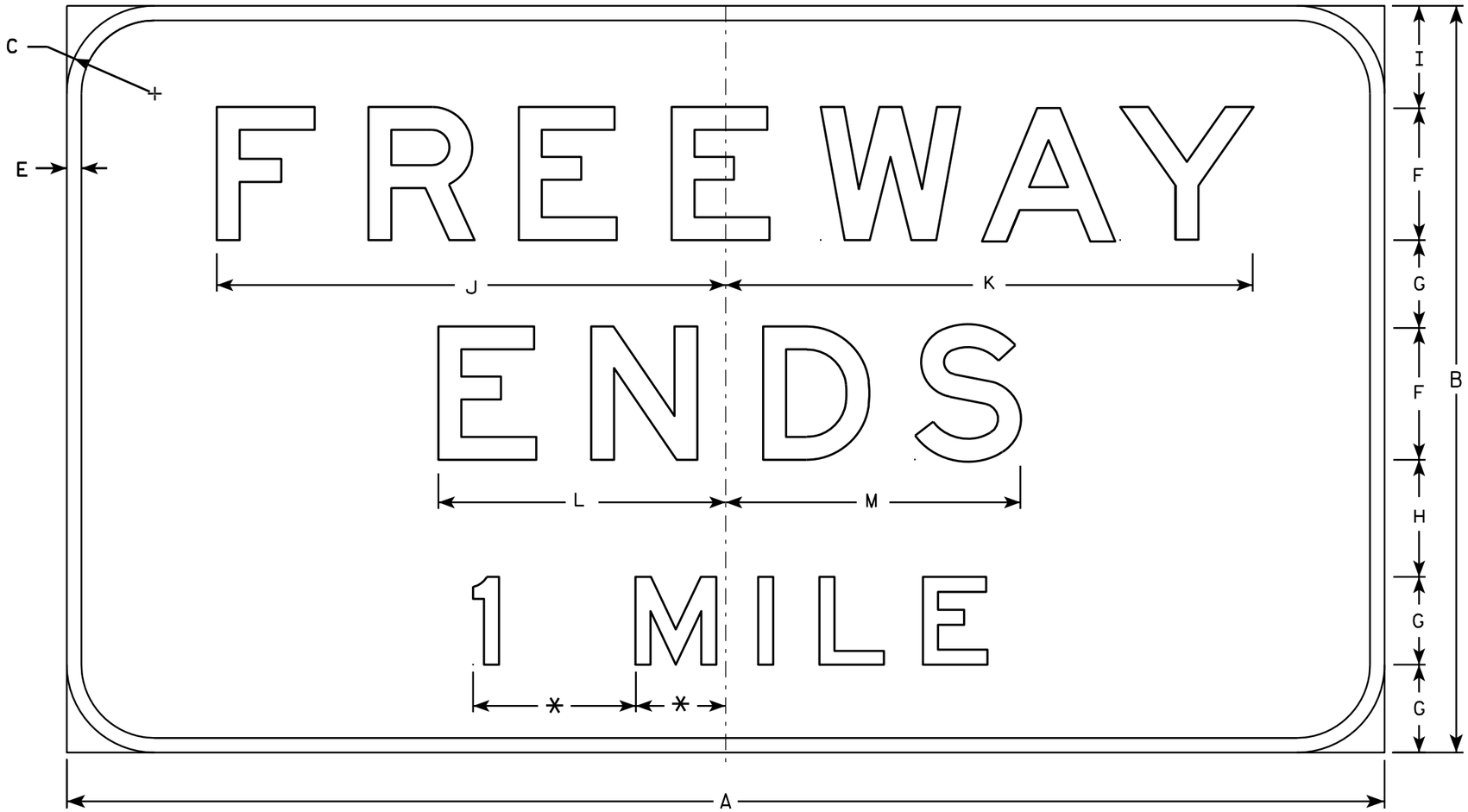
STANDARD SIGN
W13-1

WISCONSIN DEPT OF TRANSPORTATION

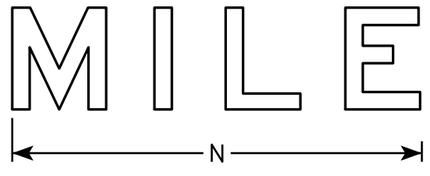
APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 5/31/12 PLATE NO. W13-1.16

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 545 | E



W19-1



* Varies

NOTES

1. Sign is Type I - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black - Non Reflective
3. Message Series - E
4. 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																											
2																											
3																											
4	180	102	12	2		18	12	16	14	69 ½	72	39 ¼	40 ¼	48 ¼													127.5
5	180	102	12	2		18	12	16	14	69 ½	72	39 ¼	40 ¼	48 ¼													127.5

STANDARD SIGN
W19-1

WISCONSIN DEPT OF TRANSPORTATION

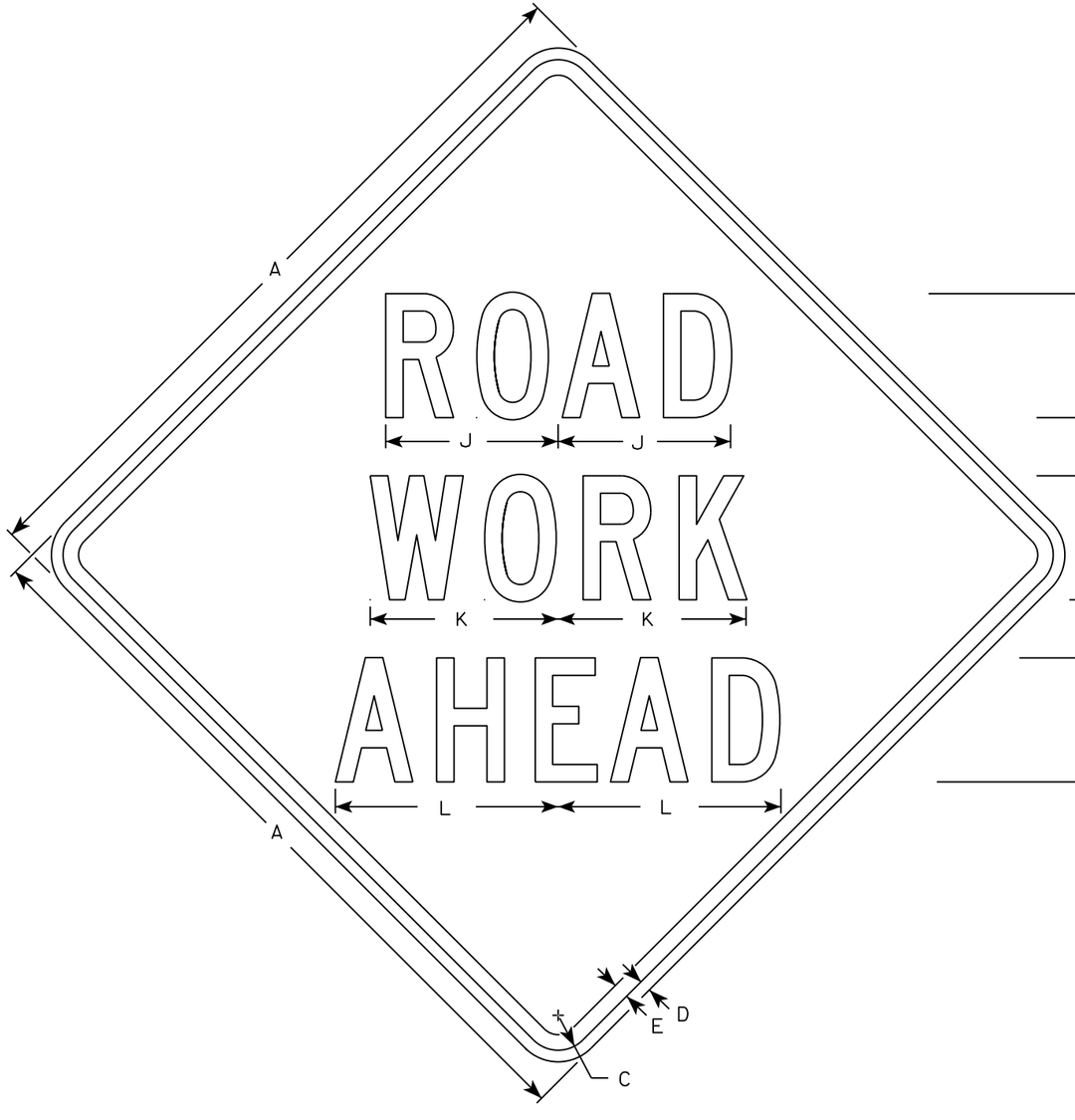
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/13/13 PLATE NO. W19-1.2

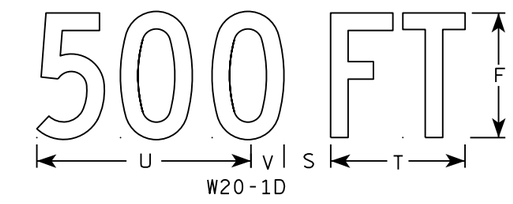
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 546 | E

7

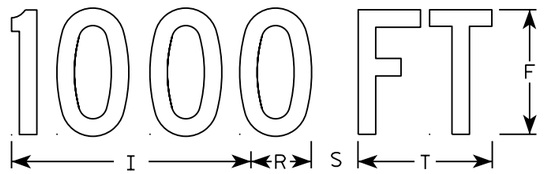
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W191.DGN PLOT DATE : 13-MAR-2013 13:33 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 17.862829:1.000000
WISDOT/CADDS SHEET 42



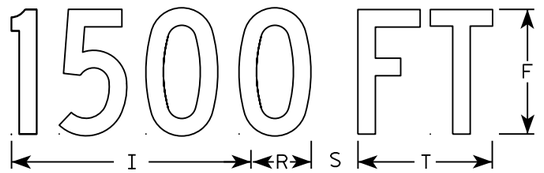
W20-1A



W20-1D



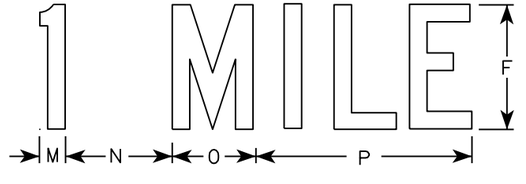
W20-1C



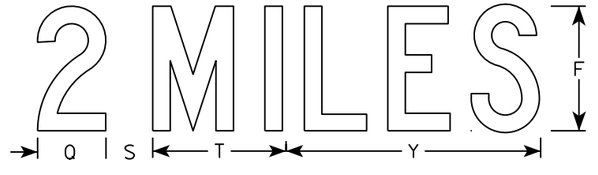
W20-1B



W20-1G



W20-1F



W20-1E

NOTES

1. Sign is Type II - Type F Reflective
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	2 1/4	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	4 3/8	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	4 3/8	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	4 3/8	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	4 3/8	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	4 3/8	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

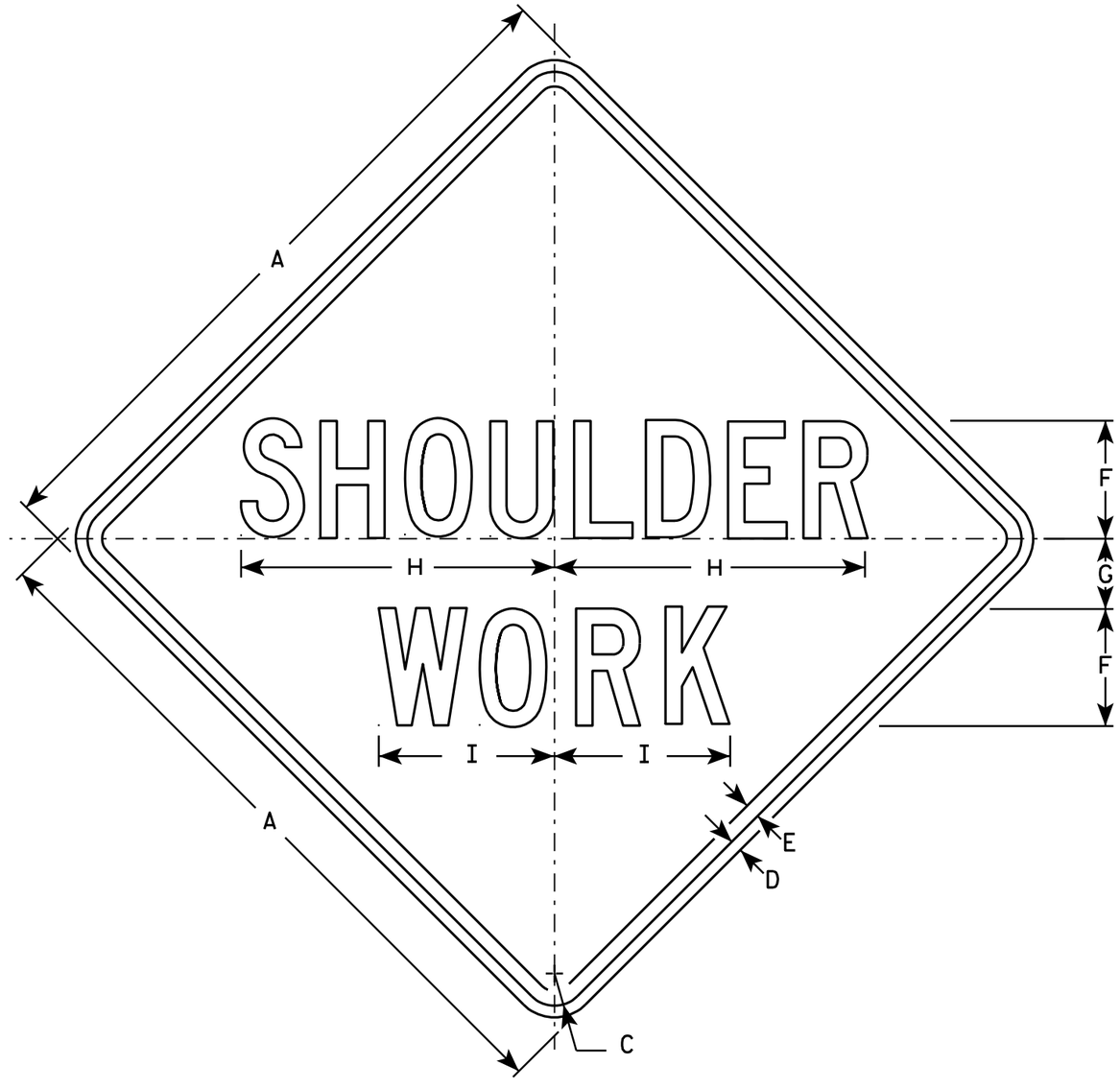
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/07/15 PLATE NO. W20-1.10

PROJECT NO:

SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W201.DGN PLOT DATE : 01-DEC-2015 18:24 PLOT BY : $$ plotuser $$



W21-5

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	24		1 1/8	3/8	1/2	4	2 1/2	10 3/4	6																		4.0
2S	30		1 3/8	1/2	5/8	5	3	13 3/8	7 1/2																		6.25
2M	30		1 3/8	1/2	5/8	5	3	13 3/8	7 1/2																		6.25
3	36		1 5/8	5/8	3/4	6	3 1/2	16	9																		9.0
4	48		2 1/4	3/4	1	8	5	21 3/8	11 1/4																		16.0
5	48		2 1/4	3/4	1	8	5	21 3/8	11 1/4																		16.0

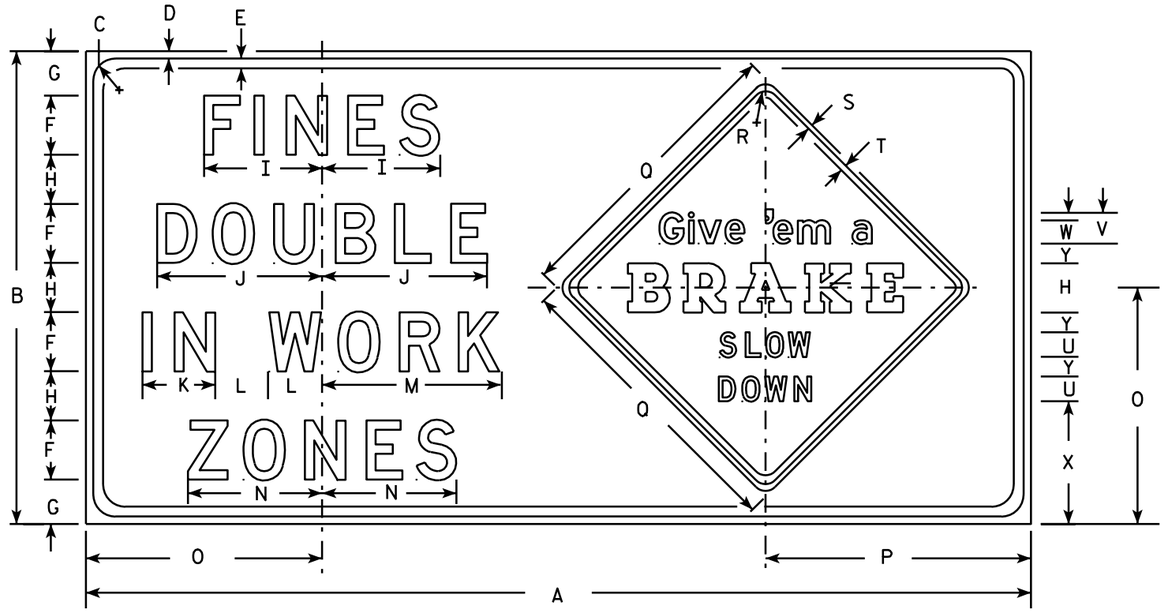
STANDARD SIGN
W21-5

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/21/11 PLATE NO. W21-5.5

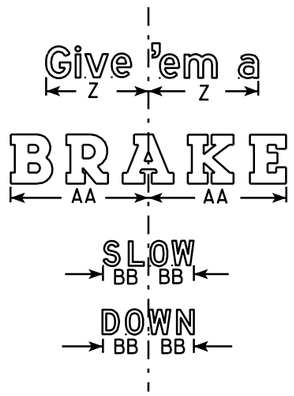
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 548	E

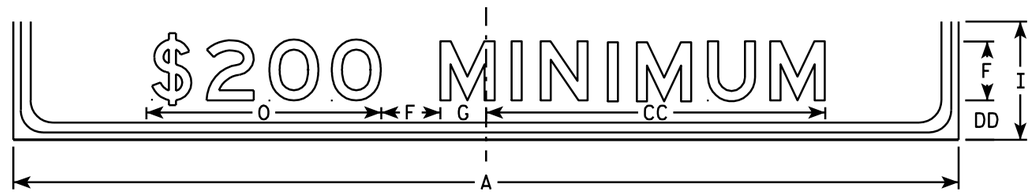


W21-62

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 - (See Note 5)
   Message - Black
3. Message Series -
   Fines Double Message - All lines are Series D
   Give 'em a Brake -
   Line one is Series E, line two is a Special Graphic Series and lines three and four are Series D.
4. The base material shall be plywood. Corners may be square or rounded, but borders shall be rounded as shown. The base material for Give 'em a Brake sign can be a seperate sheet of aluminum with the corners and borders rounded as shown. This seperate panel shall then be attached to the plywood with aluminum or stainless steel sheet metal screws.
5. Background for the Give 'em a Brake sign shall be Type F reflective orange.





W21-62P

Metric equivalent for this sign is:

SIZE	
1	
2	
3	2400 mm X 1200 mm
4	
5	

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	AA	BB	CC	DD	Area sq. ft.	Area m2
1																																
2																																
3	96	48	2 1/4	3/4	1	6	4 1/2	5	12	16 3/4	7 3/8	5 1/2	18 1/4	13 5/8	24	27	30	1 3/8	1/2	5/8	2 1/2	3 1/8	2 3/8	12 1/2	2	10 3/4	14	4 5/8	34 1/2	4	32.0	2.88
4																																
5																																

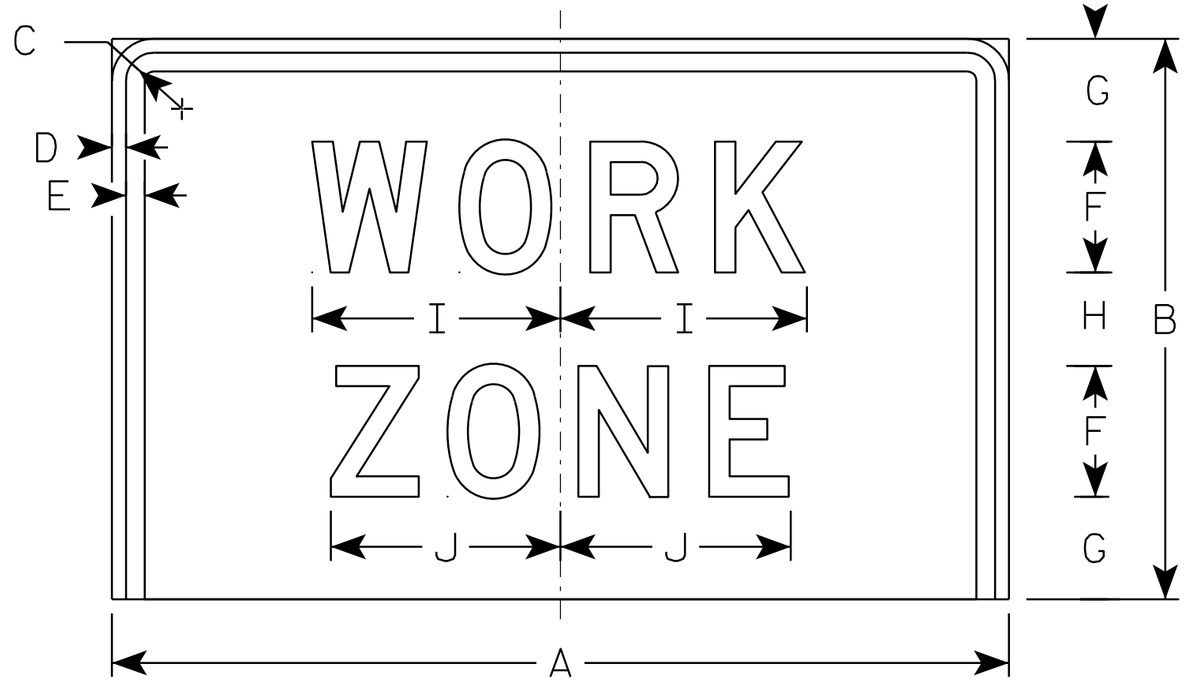
STANDARD SIGN
W21-62

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/16/07 PLATE NO. W21-62.4

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 549	E



W21-620

NOTES

1. Sign is Type II - Type F - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - D

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	2 1/4	3/4	1	7	5 1/2	5	13 1/4	12 1/4																	10.0
2M	48	30	2 1/4	3/4	1	7	5 1/2	5	13 1/4	12 1/4																	10.0
3																											
4																											
5																											

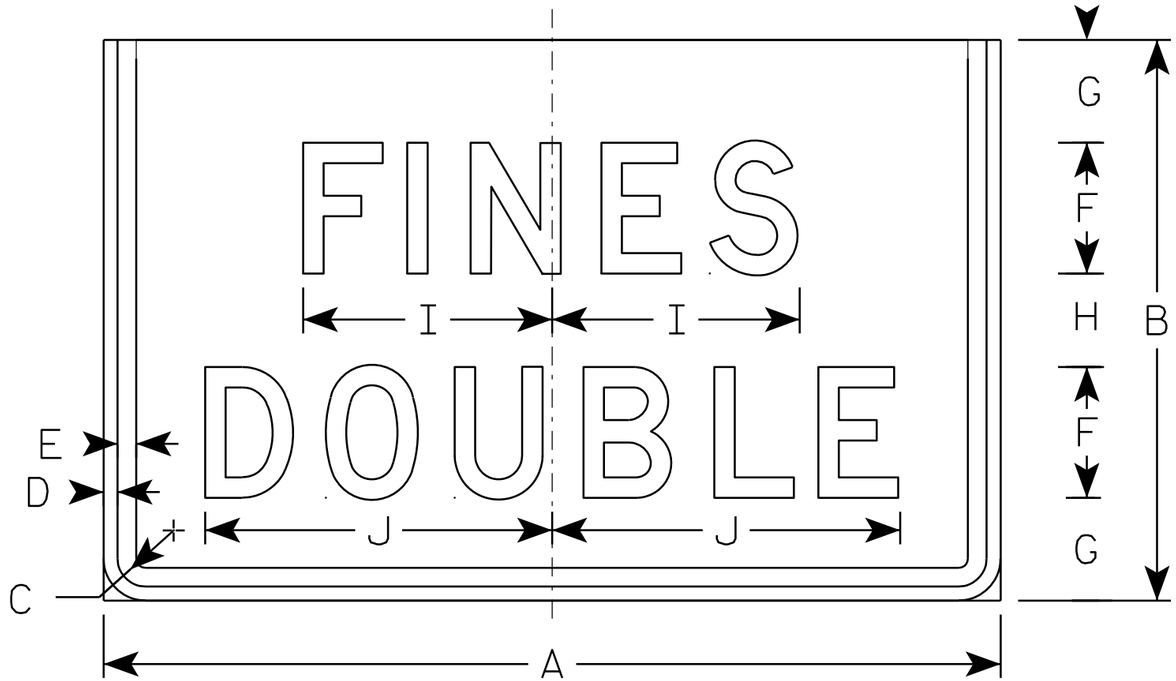
STANDARD SIGN
W21-620

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/21/11 PLATE NO. W21-620.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 550	E



W21-62R

NOTES

1. Sign is Type II - Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - D

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	2 1/4	3/4	1	7	5 1/2	5	13 1/4	18 5/8																	10.0
2M	48	30	2 1/4	3/4	1	7	5 1/2	5	13 1/4	18 5/8																	10.0
3																											
4																											
5																											

STANDARD SIGN
W21-62R

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/21/11 PLATE NO. W21-62R.2

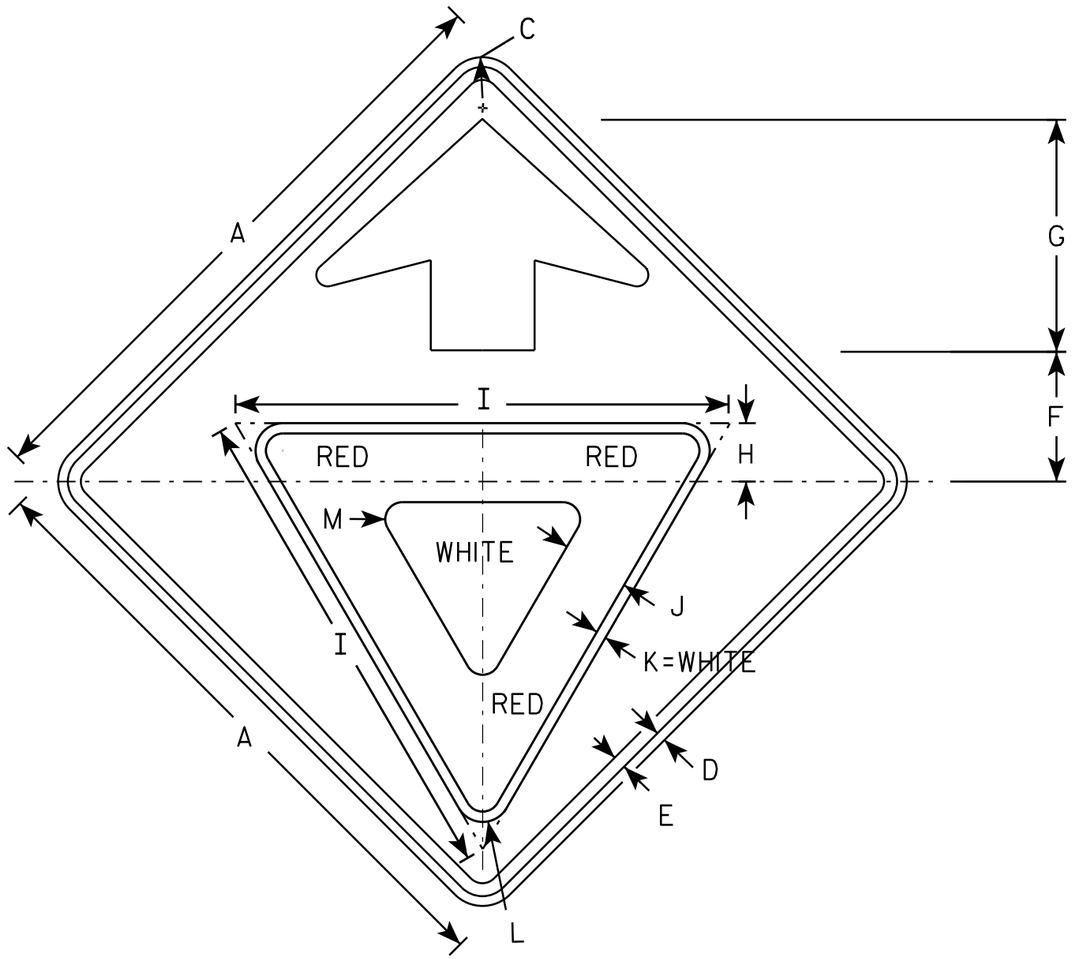
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 551	E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\W2162R.DGN PLOT DATE : 21-MAR-2011 10:51 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 8.108332:1.000000

WISDOT/CADDS SHEET 42

7

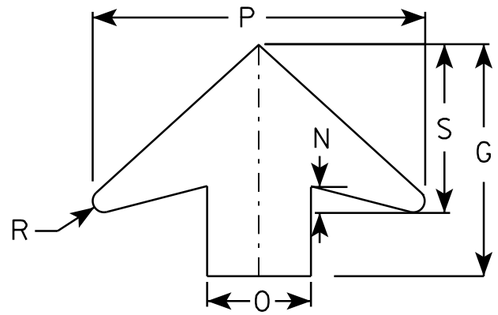
7



W03-2

NOTES

1. All Signs Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - ORANGE
   Arrow & Border - BLACK
   Yield Symbol - WHITE BORDER ON RED BACKGROUND



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	7 1/2	13 1/2	3 3/8	28	3 3/4	5/8	1 1/2	1	1 5/8	6	19 1/4		5/8	9 3/4								9.0
2S	48		2 1/4	3/4	1	10	17 7/8	4 1/2	38	5	3/4	2 1/8	1 3/8	2	8	25 5/8		7/8	13								16.0
2M	48		2 1/4	3/4	1	10	17 7/8	4 1/2	38	5	3/4	2 1/8	1 3/8	2	8	25 5/8		7/8	13								16.0
3	48		2 1/4	3/4	1	10	17 7/8	4 1/2	38	5	3/4	2 1/8	1 3/8	2	8	25 5/8		7/8	13								16.0
4	48		2 1/4	3/4	1	10	17 7/8	4 1/2	38	5	3/4	2 1/8	1 3/8	2	8	25 5/8		7/8	13								16.0
5	48		2 1/4	3/4	1	10	17 7/8	4 1/2	38	5	3/4	2 1/8	1 3/8	2	8	25 5/8		7/8	13								16.0

STANDARD SIGN
W03-2

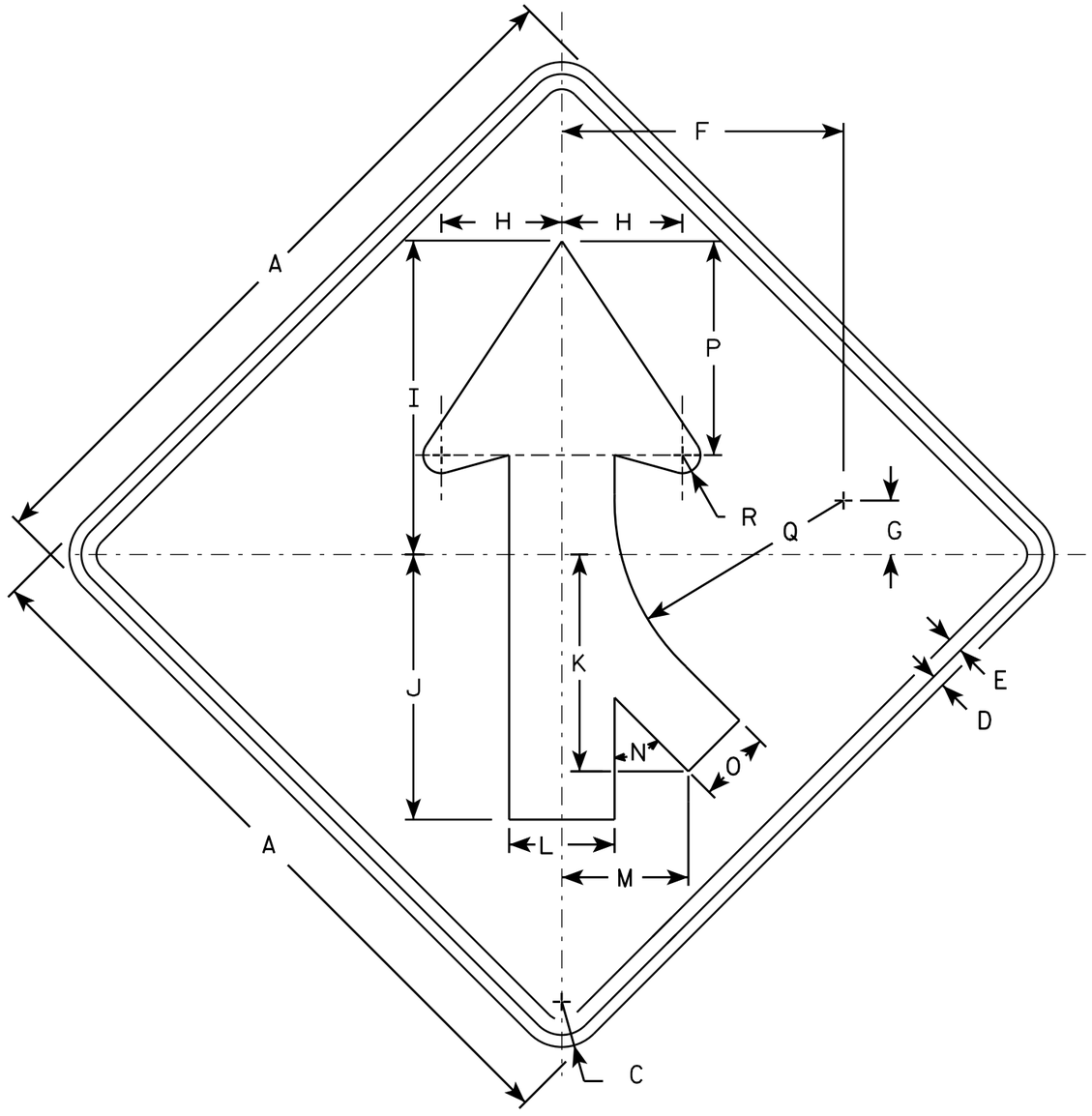
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/20/13 PLATE W03-2.1

PROJECT NO:

SHEET NO: E



W04-1R

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. W4-1L is the same as W4-1R 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	14	2 3/4	6	15 3/4	13 1/4	10 1/4	5 1/4	6 3/8	45°	3 5/8	10 5/8	11 3/8	7/8									9.0
2S	48		2 1/4	3/4	1	18 3/4	3 5/8	8	20 1/2	17 1/2	14 3/8	7	8 3/8	45°	4 3/4	14 1/4	15 1/4	1 1/4									16.0
2M	48		2 1/4	3/4	1	18 3/4	3 5/8	8	20 1/2	17 1/2	14 3/8	7	8 3/8	45°	4 3/4	14 1/4	15 1/4	1 1/4									16.0
3	48		2 1/4	3/4	1	18 3/4	3 5/8	8	20 1/2	17 1/2	14 3/8	7	8 3/8	45°	4 3/4	14 1/4	15 1/4	1 1/4									16.0
4	48		2 1/4	3/4	1	18 3/4	3 5/8	8	20 1/2	17 1/2	14 3/8	7	8 3/8	45°	4 3/4	14 1/4	15 1/4	1 1/4									16.0
5	48		2 1/4	3/4	1	18 3/4	3 5/8	8	20 1/2	17 1/2	14 3/8	7	8 3/8	45°	4 3/4	14 1/4	15 1/4	1 1/4									16.0

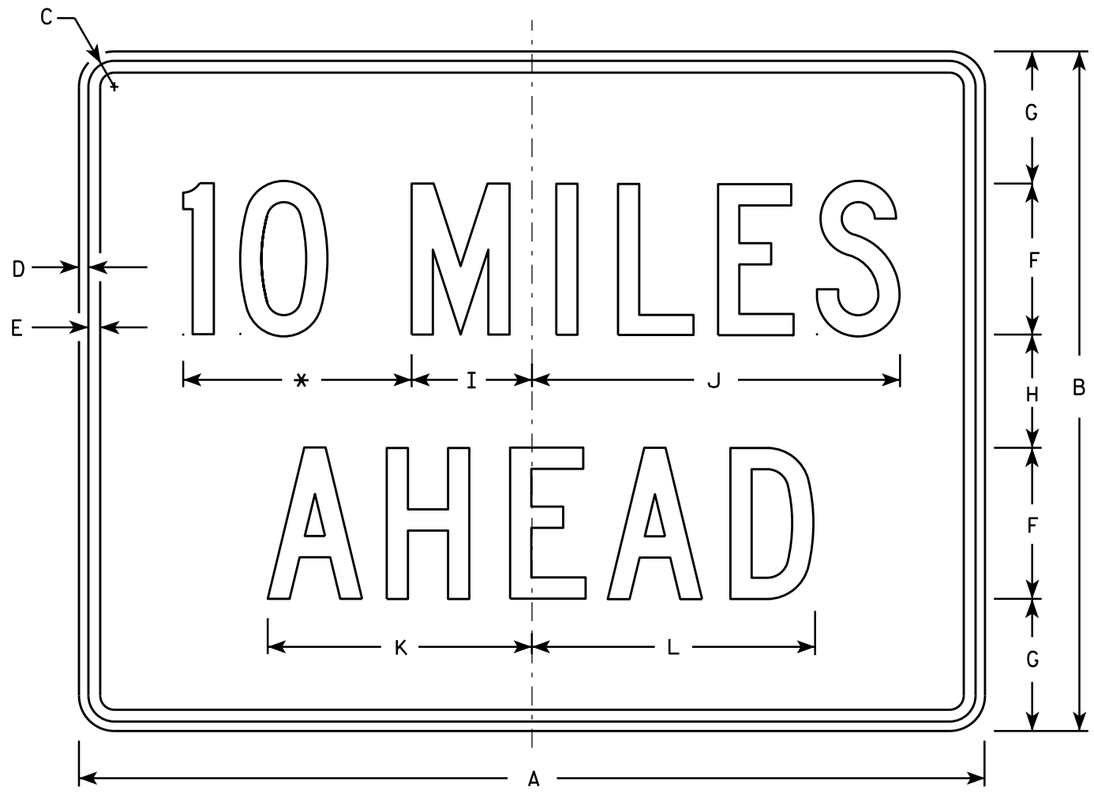
STANDARD SIGN
W04-1

WISCONSIN DEPT OF TRANSPORTATION

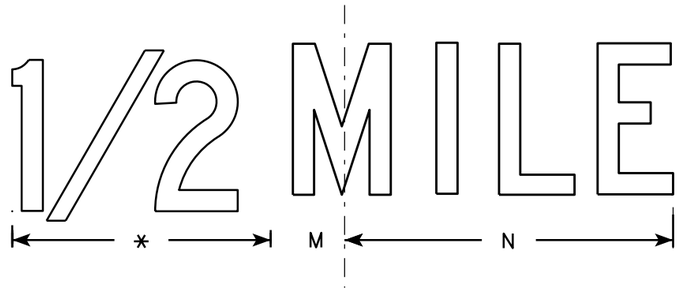
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/20/13 PLATE NO. W04-1.1

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E



W057-52



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.
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	24	1 1/8	3/8	1/2	6	4 1/2	3	4 3/4	14 5/8	10 5/8	11 3/8	2	13													6.0
2S	48	36	1 3/8	1/2	5/8	8	7	6	6 3/8	19 1/2	14	15	2 3/4	17 3/8													12.0
2M	48	36	1 3/8	1/2	5/8	8	7	6	6 3/8	19 1/2	14	15	2 3/4	17 3/8													12.0
3	48	36	1 3/8	1/2	5/8	8	7	6	6 3/8	19 1/2	14	15	2 3/4	17 3/8													12.0
4	48	36	1 3/8	1/2	5/8	8	7	6	6 3/8	19 1/2	14	15	2 3/4	17 3/8													12.0
5	48	36	1 3/8	1/2	5/8	8	7	6	6 3/8	19 1/2	14	15	2 3/4	17 3/8													12.0

STANDARD SIGN
W057-52

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/20/13 PLATE W057-52.1

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W05752.DGN PLOT DATE : 28-FEB-2014 11:42 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 8.026599:1.000000 WISDOT/CADDS SHEET 42

CTH C WB OFF		AREA (SF)				Incremental Vol (CY) (Unadjusted)				Cumulative Vol (CY)				
Station	Distance	Cut	Salvaged / Unusable Pavement Material	Fill	EBS	Cut Note 1	Salvaged / Unusable Pavement Material Note 2	Fill Note 3	EBS	Cut 1.00 Note 1	Expanded Fill 1.25	Expanded EBS Backfill 1.30 Note 5	Reduced EBS In Fill 0.80 Note 7	Mass Ordinate Note 8
234+22		103.6	45.1	1.0	115.5	0	0	0	0	0	0	0	0	0
235+00	78	68.7	29.7	3.2	82.5	249	108	6	286	249	-278	372	229	419
236+00	100	63.3	29.7	6.2	82.5	244	110	17	306	493	-562	769	473	837
237+00	100	65.2	29.7	2.4	82.5	238	110	16	306	731	-848	1166	718	1251
238+00	100	67.8	29.7	4.2	82.5	246	110	12	306	978	-1138	1563	962	1678
239+00	100	64.0	29.7	2.7	84.5	244	110	13	309	1222	-1431	1966	1210	2105
239+50	50	29.7	29.7	0.2	0.0	87	55	3	78	1308	-1506	2067	1272	2212
240+00	50	31.0	29.7	0.0	0.0	56	55	0	0	1365	-1506	2067	1272	2213
241+00	100	30.8	29.7	0.0	0.0	114	110	0	0	1479	-1506	2067	1272	2217
242+00	100	29.7	29.7	0.3	0.0	112	110	1	0	1591	-1505	2067	1272	2218
243+00	100	29.7	29.7	0.3	0.0	110	110	1	0	1701	-1504	2067	1272	2217
244+00	100	29.7	29.7	0.0	0.0	110	110	1	0	1811	-1503	2067	1272	2216
245+00	100	29.7	29.7	0.0	0.0	110	110	0	0	1921	-1503	2067	1272	2216
246+00	100	33.4	29.7	0.0	0.0	117	110	0	0	2038	-1503	2067	1272	2223
246+75	75	29.7	29.7	0.0	0.0	88	83	0	0	2126	-1503	2067	1272	2228
				Column totals		2126	1401	69	1590					

CTH C WB ON		AREA (SF)				Incremental Vol (CY) (Unadjusted)				Cumulative Vol (CY)					
Station	Distance	Cut	Salvaged / Unusable Pavement Material	Fill	EBS	Cut Note 1	Salvaged / Unusable Pavement Material Note 2	Fill Note 3	EBS	Cut 1.00 Note 1	Expanded Fill 1.25	Expanded Rock 1.10	Expanded EBS Backfill 1.30 Note 5	Reduced EBS In Fill 0.80 Note 7	Mass Ordinate Note 8
221+51		65.0	45.1	1.0	115.5	0	0	0	0	0	0	0	0	0	0
222+00	49	68.7	29.7	3.2	82.5	121	68	4	180	121	-175	0	234	144	228
223+00	100	63.3	29.7	6.2	82.5	244	110	17	306	366	-459	0	631	388	647
224+00	100	65.2	29.7	2.4	82.5	238	110	16	306	604	-744	0	1028	633	1060
225+00	100	67.8	29.7	4.2	82.5	246	110	12	306	850	-1035	0	1425	877	1487
226+00	100	64.0	29.7	2.7	84.5	244	110	13	309	1094	-1328	0	1827	1124	1914
227+00	100	32.2	29.7	0.2	0.0	178	110	5	156	1272	-1478	0	2031	1250	2132
228+00	100	29.7	29.7	0.0	0.0	115	110	0	0	1387	-1477	0	2031	1250	2136
229+00	100	31.8	29.7	0.0	0.0	114	110	0	0	1501	-1477	0	2031	1250	2140
230+00	100	31.9	29.7	0.0	0.0	118	110	0	0	1619	-1477	0	2031	1250	2148
231+00	100	30.7	29.7	0.0	0.0	116	110	0	0	1735	-1477	0	2031	1250	2154
232+00	100	29.7	29.7	0.0	0.0	112	110	0	0	1847	-1477	0	2031	1250	2156
233+00	100	32.0	29.7	0.0	0.0	114	110	0	0	1961	-1477	0	2031	1250	2160
233+20	20	29.7	29.7	0.0	0.0	23	22	0	0	1984	-1477	0	2031	1250	2161
				Column totals		1984	1300	68	1562						

STH 83 WB ON		AREA (SF)				Incremental Vol (CY) (Unadjusted)				Cumulative Vol (CY)			
STATION	Distance	Cut	Salvaged/Unusable Pavement Material	Fill	EBS	Cut	Salvaged/Unusable Pavement Material	Fill	EBS	Cut 1.00	Expanded Fill 1.25	Reduced EBS in Fill 0.80	Mass Ordinate
						Note 1	Note 2	Note 3		Note 1		Note 7	Note 8
328+00	0.00	0.00	0.00	0	0.00	0	0	0	0	0	0	0	0
329+00	100.00	12.47	0.00	0	0.00	23	0	0	0	23	0	0	23
330+00	100.00	11.94	0.00	0	0.00	45	0	0	0	68	1	0	67
331+00	100.00	12.48	0.00	0	0.00	45	0	1	0	114	2	0	112
332+00	100.00	13.47	0.00	0	0.00	48	0	1	0	162	2	0	159
333+00	100.00	88.28	0.00	0	82.50	188	0	1	153	350	3	122	225
334+00	100.00	92.73	0.00	0	82.50	335	0	0	306	685	3	367	315
335+00	100.00	86.97	0.00	0	82.50	333	0	0	306	1,018	3	611	403
336+00	100.00	85.13	0.00	0	82.50	319	0	0	306	1,337	4	856	478
337+00	100.00	87.19	0.00	1	82.50	319	0	2	306	1,656	7	1,100	549
338+00	100.00	87.44	0.00	0	82.50	323	0	3	306	1,979	11	1,344	624
339+00	100.00	84.50	0.00	1	82.50	318	0	3	306	2,298	15	1,589	694
340+00	100.00	0.00	0.00	0	82.50	156	0	3	306	2,454	18	1,833	603
			Column totals			2,454	0	15	2,292				

STH 83 EB OFF		AREA (SF)			Incremental Vol (CY) (Unadjusted)			Cumulative Vol (CY)		
STATION	Distance	Cut	Salvaged/Unusable Pavement Material	Fill	Cut	Salvaged/Unusable Pavement Material	Fill	Cut 1.00	Expanded Fill 1.25	Mass Ordinate
					Note 1	Note 2	Note 3	Note 1		Note 8
331+63.49	0.00	0.00	0.00	0.00	0	0	0	0	0	0
332+00	36.51	14.30	0.00	0.00	10	0	0	10	0	10
333+00	100.00	14.98	0.00	0.00	54	0	0	64	0	64
334+00	100.00	14.70	0.00	0.00	55	0	0	119	0	119
335+00	100.00	14.72	0.00	0.00	54	0	0	173	0	173
336+00	100.00	13.00	0.00	0.00	51	0	0	225	0	225
337+00	100.00	12.68	0.00	0.00	48	0	0	272	0	272
338+00	100.00	11.41	0.00	0.00	45	0	0	317	0	317
339+00	100.00	11.74	0.00	0.00	43	0	0	360	0	360
340+00	100.00	14.43	0.00	0.00	48	0	0	408	0	408
340+71.68	71.68	0.00	0.00	0.00	19	0	0	427	0	427
			COLUMN TOTALS		427	0	0			

STH 83 EB ON		AREA (SF)			Incremental Vol (CY) (Unadjusted)			Cumulative Vol (CY)		
STATION	Distance	Cut	Salvaged/Unusable Pavement Material	Fill	Cut	Salvaged/Unusable Pavement Material	Fill	Cut 1.00	Expanded Fill 1.25	Mass Ordinate
					Note 1	Note 2	Note 3	Note 1		Note 8
346+12.72	0.00	0.00	0.00	0.00	0	0	0	0	0	0
347+00	87.28	20.78	0.00	0.12	34	0	0	34	0	33
348+00	100.00	12.04	0.00	0.40	61	0	1	94	1	93
349+00	100.00	16.86	0.00	0.03	54	0	1	148	2	145
350+00	100.00	0.00	0.00	0.00	31	0	0	179	2	177
350+55.14	55.14	0.00	0.00	0.00	0	0	0	179	2	177
			Column Totals		179	0	2			

CTH KC EB On		Distance	AREA (SF)				Incremental Vol (CY) (Unadjusted)				Cumulative Vol (CY)				Mass Ordinate
STATION	Real Station		Cut	Salvaged / Unusable Pavement Material	Fill	EBS	Cut	Salvaged / Unusable Pavement Material	Fill	EBS	Cut	Expanded Fill	Expanded EBS Backfill	Reduced EBS In Fill	
							Note 1	Note 2	Note 3		1.00 Note 1	1.25	1.30 Note 5	0.80 Note 7	Note 8
424+50	42450		76.1	76.1	0.0	0.0	0	0	0	0	0	0	0	0	0
425+00	42500	50	44.2	44.2	0.0	0.0	111	111	0	0	111	0	0	0	0
426+00	42600	100	31.7	29.7	0.0	0.0	141	137	0	0	252	0	0	0	4
427+00	42700	100	31.7	29.7	0.0	0.0	117	110	0	0	369	0	0	0	11
428+00	42800	100	35.1	29.7	0.0	0.0	124	110	0	0	493	0	0	0	25
429+00	42900	100	33.2	29.7	0.0	0.0	126	110	0	0	620	0	0	0	41
430+00	43000	100	31.1	29.7	0.0	0.0	119	110	0	0	739	0	0	0	50
431+00	43100	100	36.7	29.7	0.0	0.0	126	110	0	0	864	0	0	0	66
432+00	43200	100	35.4	29.7	0.0	0.0	134	110	0	0	998	0	0	0	89
433+00	43300	100	31.9	29.7	0.0	0.0	125	110	0	0	1122	0	0	0	104
434+00	43400	100	32.2	29.7	0.0	0.0	119	110	0	0	1241	0	0	0	113
435+00	43500	100	31.5	29.7	0.0	0.0	118	110	0	0	1359	0	0	0	121
436+00	43600	100	29.7	29.7	0.0	0.0	113	110	0	0	1472	0	0	0	124
436+50	43650	50	30.2	29.7	0.3	0.0	55	55	0	0	1528	0	0	0	124
						Column totals	1528	1403	0	0					

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PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	EARTHWORK	SHEET: 557	E

FILE NAME : _____ PLOT DATE : _____ PLOT BY : _____ PLOT NAME : _____ PLOT SCALE : 1:1

STH 190 EB OFF			AREA (SF)				Incremental Vol (CY) (Unadjusted)				Cumulative Vol (CY)				
STATION	Real Station	Distance	Cut	Salvaged / Unusable Pavement Material	Fill	EBS	Cut	Salvaged / Unusable Pavement Material	Fill	EBS	Cut	Expanded Fill	Expanded EBS Backfill	Reduced EBS In Fill	Mass Ordinate
							Note 1	Note 2	Note 3		1.00 Note 1	1.25	1.30 Note 5	0.80 Note 7	Note 8
668+00	66800		24.7	24.7	13.6	0.0	0	0	0	0	0	0	0	0	0
669+00	66900	100	24.7	24.7	6.1	0.0	91	91	36	0	91	46	0	0	-46
670+00	67000	100	24.7	24.7	6.2	0.0	91	91	23	0	183	74	0	0	-74
671+00	67100	100	24.7	24.7	14.2	0.0	91	91	38	0	274	121	0	0	-121
672+00	67200	100	24.7	24.7	18.5	0.0	91	91	61	0	366	197	0	0	-197
673+00	67300	100	60.1	24.7	4.2	88.6	157	91	42	164	523	85	213	131	-20
674+00	67400	100	60.1	24.7	0.9	88.6	223	91	9	328	746	-231	640	394	428
675+00	67500	100	60.1	24.7	1.8	88.6	223	91	5	328	968	-553	1066	656	881
676+00	67600	100	60.1	24.7	1.7	88.6	223	91	6	328	1191	-873	1493	919	1332
677+00	67700	100	69.0	24.7	1.0	88.6	239	91	5	328	1430	-1195	1920	1181	1801
678+00	67800	100	75.4	30.2	0.7	90.5	267	102	3	332	1697	-1522	2351	1447	2295
679+00	67900	100	86.6	35.4	0.8	91.8	300	121	3	338	1997	-1857	2790	1717	2807
680+00	68000	100	86.6	24.7	0.5	91.8	321	111	2	340	2318	-2194	3232	1989	3354
681+00	68100	100	86.6	24.7	0.3	91.8	321	91	1	340	2639	-2532	3232	1989	3921
682+00	68200	100	86.6	24.7	0.3	91.8	321	91	1	340	2959	-2870	3232	1989	4489
683+00	68300	100	86.6	24.7	0.3	91.8	321	91	1	340	3280	-3209	3232	1989	5057
684+00	68400	100	86.6	24.7	0.3	91.8	321	91	1	340	3601	-3548	3232	1989	5625
684+60	68460	60	86.6	24.7	0.1	91.8	192	55	0	204	3793	-3751	3055	1880	5966
					Column totals		3793	1579	239	4050					

STH 190 EB ON			AREA (SF)				Incremental Vol (CY) (Unadjusted)				Cumulative Vol (CY)				
STATION	Real Station	Distance	Cut	Salvaged / Unusable Pavement Material	Fill	EBS	Cut	Salvaged / Unusable Pavement Material	Fill	EBS	Cut	Expanded Fill	Expanded EBS Backfill	Reduced EBS In Fill	Mass Ordinate
							Note 1	Note 2	Note 3		1.00 Note 1	1.25	1.30 Note 5	0.80 Note 7	Note 8
685+33	68533		72.9	29.7	0.0	82.7	0	0	0	0	0	0	0	0	0
686+00	68600	67	72.9	29.7	1.2	82.7	181	74	1	205	181	-203	267	164	311
687+00	68700	100	72.9	29.7	1.7	82.7	270	110	5	306	451	-503	665	409	770
688+00	68800	100	72.9	29.7	0.3	82.7	270	110	4	306	721	-805	1063	654	1232
689+00	68900	100	72.9	29.7	0.0	82.7	270	110	1	306	991	-1110	1461	899	1697
689+80	68980	80	72.9	29.7	0.0	82.7	216	88	0	245	1207	-1355	1780	1095	2070
					Column totals		1207	492	11	1369					

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PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	EARTHWORK	SHEET: 558	E

FILE NAME : _____ PLOT DATE : _____ PLOT BY : _____ PLOT NAME : _____ PLOT SCALE : 1:1

STH 190 WB On			AREA (SF)					Incremental Vol (CY) (Unadjusted)				Cumulative Vol (CY)				
														Expanded EBS	Reduced EBS	
STATION	Real Station	Distance	Cut	Salvaged / Unusable Pavement Material	Fill		EBS	Cut	Salvaged / Unusable Pavement Material	Fill	EBS	Cut	Expanded Fill	Backfill	In Fill	Mass Ordinate
								Note 1	Note 2	Note 3		1.00 Note 1	1.25	1.30 Note 5	0.80 Note 7	Note 8
671+00	67100		29.3	29.3	0.2		82.9	0	0	0	0	0	0	0	0	0
672+00	67200	100	29.3	29.3	3.9		82.9	109	109	8	307	109	-298	399	246	298
673+00	67300	100	29.3	29.3	6.7		82.9	109	109	20	307	217	-580	798	491	580
674+00	67400	100	29.3	29.3	5.3		82.9	109	109	22	307	326	-859	1197	737	859
675+00	67500	100	29.3	29.3	6.2		82.9	109	109	21	307	434	-1140	1597	983	1140
676+00	67600	100	29.3	29.3	4.1		82.9	109	109	19	307	543	-1423	1996	1228	1423
677+00	67700	100	29.3	29.3	2.1		82.9	109	109	11	307	651	-1716	2395	1474	1716
678+00	67800	100	29.3	29.3	0.5		82.9	109	109	5	307	760	-2017	2794	1719	2017
679+00	67900	100	29.3	29.3	0.6		82.9	109	109	2	307	868	-2321	3193	1965	2321
680+00	68000	100	29.3	29.3	10.2		82.9	109	109	20	307	977	-2603	3592	2211	2603
681+00	68100	100	36.2	36.2	1.7		95.7	121	121	22	331	1098	-2906	4022	2475	2906
682+00	68200	100	36.2	36.2	0.7		95.7	134	134	4	354	1232	-3255	4483	2759	3255
683+00	68300	100	23.7	23.7	0.4		61.1	111	111	2	290	1343	-3543	4861	2991	3543
684+00	68400	100	23.7	23.7	0.3		61.1	88	88	1	226	1431	-3768	5155	3172	3768
684+35	68435	35	23.7	23.7	0.1		61.1	31	31	0	79	1461	-3847	5258	3236	3847
						Column totals		1461	1461	158	4044					

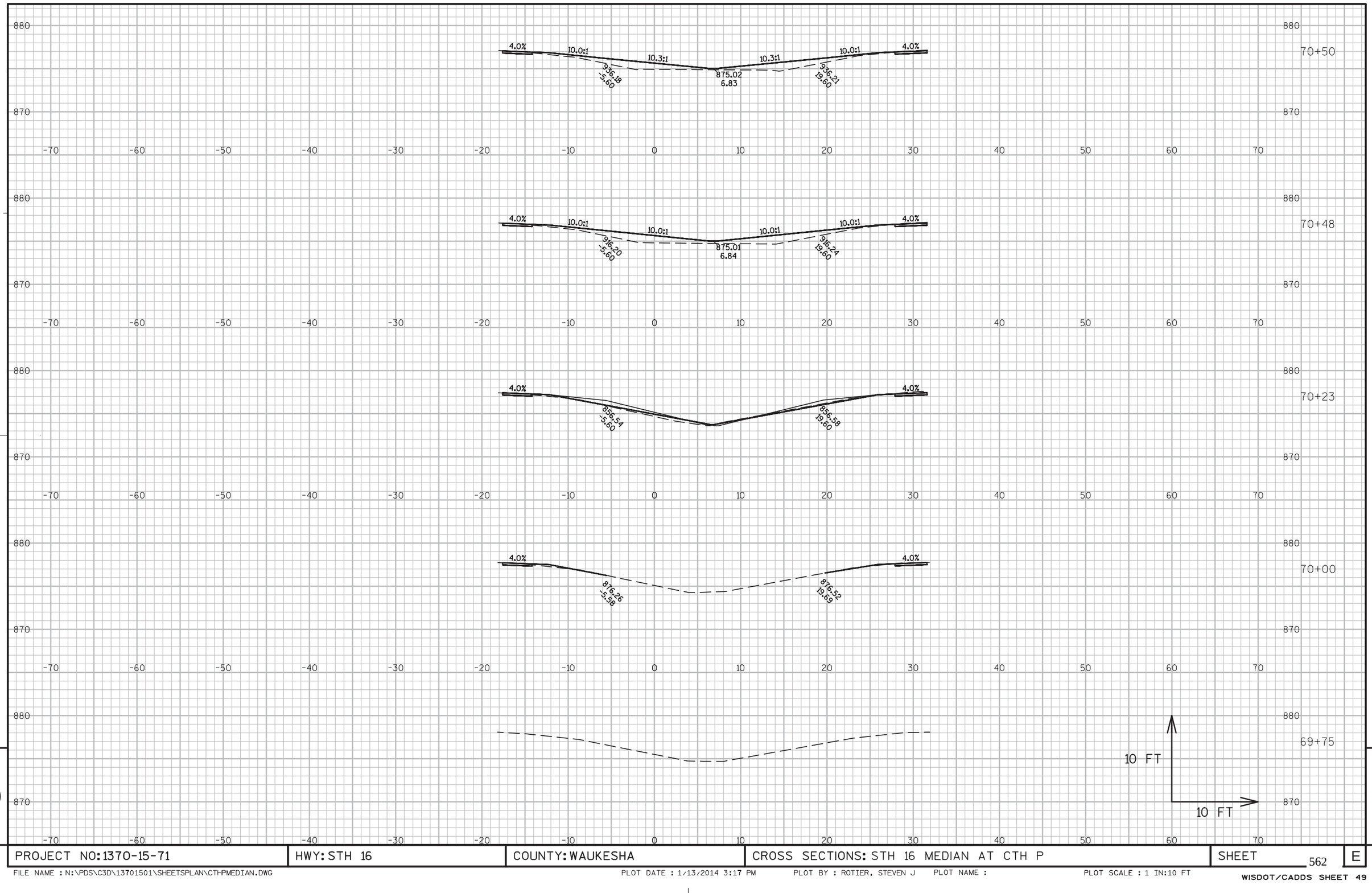
STH 190 WB Off			AREA (SF)						Incremental Vol (CY) (Unadjusted)				Cumulative Vol (CY)				
															Expanded EBS	Reduced EBS	
STATION	Real Station	Distance	Cut	Salvaged / Unusable Pavement Material	Fill	Rock Exc	EBS	Cut	Salvaged / Unusable Pavement Material	Fill	EBS	Cut	Expanded Fill	Backfill	In Fill	Mass Ordinate
								Note 1	Note 2	Note 3		1.00 Note 1	1.25	1.30 Note 5	0.80 Note 7	Note 8
686+05	68605		20.1	20.1	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0
687+00	68700	95	20.1	20.1	0.0	0.0	0.0	71	71	0	0	71	0	0	0	0
688+00	68800	100	29.7	29.7	0.2	0.0	0.0	92	92	0	0	163	0	0	0	0
689+00	68900	100	29.7	29.7	0.2	0.0	0.0	110	110	1	0	273	1	0	0	-1
690+00	69000	100	29.7	29.7	0.2	0.0	0.0	110	110	1	0	383	2	0	0	-2
691+00	69100	100	29.7	29.7	0.1	0.0	0.0	110	110	1	0	493	3	0	0	-3
692+00	69200	100	29.7	29.7	0.1	0.0	0.0	110	110	0	0	603	3	0	0	-3
692+06	69206	6	30.0	29.7	0.1	0.0	0.0	7	7	0	0	610	4	0	0	-3
							Column totals	610	610	3	0					

CTH JJ EB Off			AREA (SF)				Incremental Vol (CY) (Unadjusted)				Cumulative Vol (CY)				
STATION	Real Station	Distance	Cut	Salvaged / Unusable Pavement Material	Fill	EBS	Cut Note 1	Salvaged / Unusable Pavement Material Note 2	Fill Note 3	EBS	Cut 1.00 Note 1	Expanded Fill 1.25	Expanded EBS Backfill 1.30 Note 5	Reduced EBS In Fill 0.80 Note 7	Mass Ordinate Note 8
710+00	71000		29.5	29.5	0.0	30.7	0	0	0	0	0	0	0	0	0
711+00	71100	100	29.5	29.5	0.0	30.7	109	109	0	114	109	-114	148	91	114
712+00	71200	100	29.5	29.5	0.0	30.7	109	109	0	114	219	-227	296	182	227
713+00	71300	100	29.5	29.5	0.1	30.7	109	109	0	114	328	-341	443	273	341
714+00	71400	100	29.5	29.5	0.2	30.7	109	109	1	114	437	-454	591	364	454
715+00	71500	100	29.5	29.5	0.1	30.7	109	109	1	114	546	-567	739	455	567
716+00	71600	100	29.5	29.5	0.1	30.7	109	109	0	114	656	-680	887	546	680
717+00	71700	100	29.5	29.5	0.1	30.7	109	109	0	114	765	-793	1035	637	793
718+00	71800	100	29.5	29.5	0.1	30.7	109	109	0	114	874	-907	1183	728	907
719+00	71900	100	13.5	13.5	0.0	0.0	80	80	0	57	954	-963	1256	773	963
720+00	72000	100	13.8	13.8	0.0	0.0	51	51	0	0	1004	-963	1256	773	963
721+00	72100	100	14.9	14.9	0.0	0.0	53	53	0	0	1057	-963	1256	773	963
722+00	72200	100	16.3	16.3	0.0	0.0	58	58	0	0	1115	-963	1256	773	963
723+00	72300	100	18.0	18.0	0.0	0.0	64	64	0	0	1179	-963	1256	773	963
724+00	72400	100	21.0	21.0	0.0	0.0	72	72	0	0	1251	-963	1256	773	963
724+45	72445	45	21.0	21.0	0.0	0.0	35	35	0	0	1286	-963	1256	773	963
					Column totals		1286	1286	3	966					

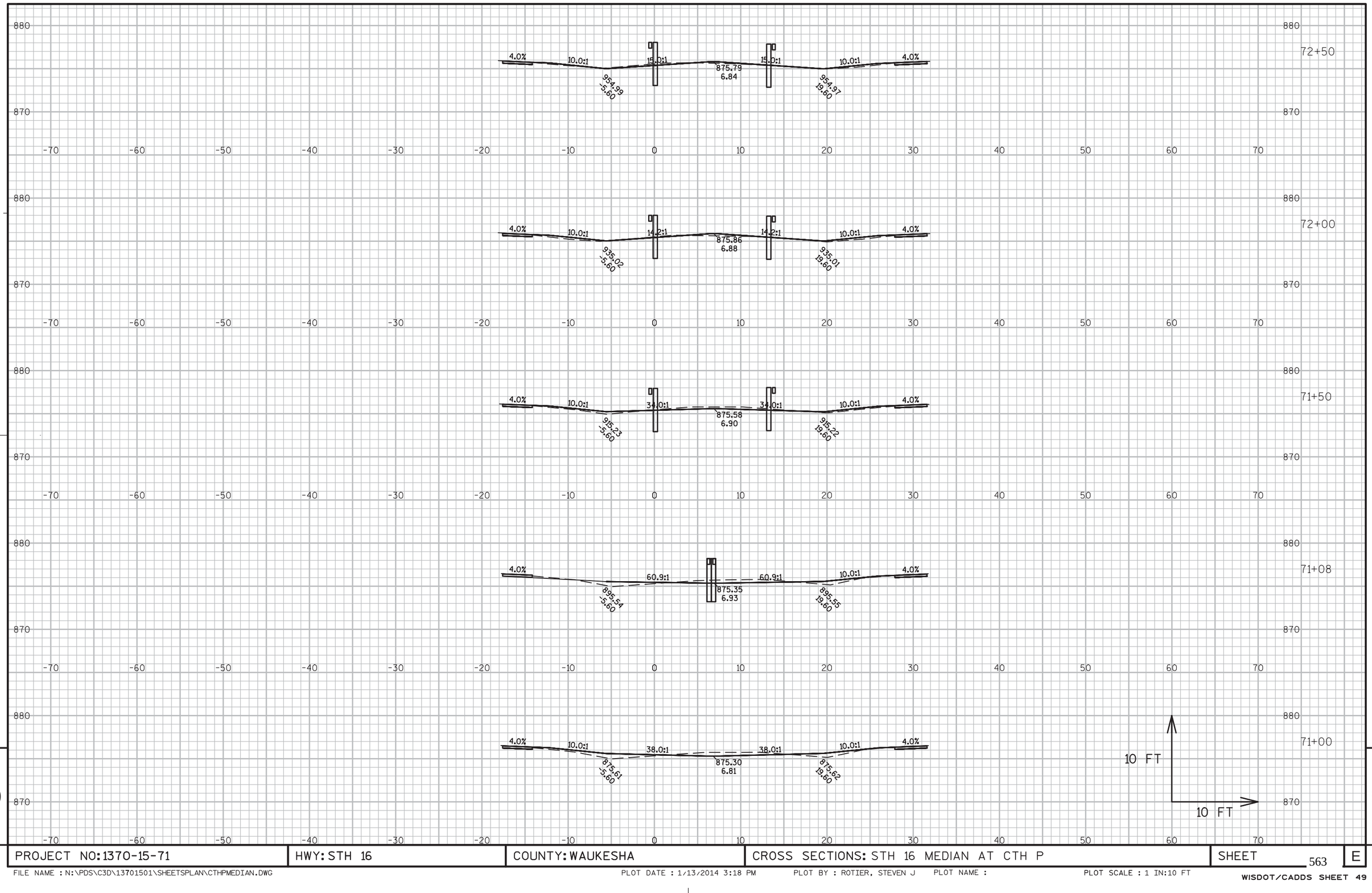
CTH JJ EB On			AREA (SF)				Incremental Vol (CY) (Unadjusted)				Cumulative Vol (CY)				
STATION	Real Station	Distance	Cut	Salvaged / Unusable Pavement Material	Fill	EBS	Cut Note 1	Salvaged / Unusable Pavement Material Note 2	Fill Note 3	EBS	Cut 1.00 Note 1	Expanded Fill 1.25	Expanded EBS Backfill 1.30 Note 5	Reduced EBS In Fill 0.80 Note 7	Mass Ordinate Note 8
734+50	73450		111.0	111.0	0.0	0.0	0	0	0	0	0	0	0	0	0
735+00	73500	50	72.7	72.7	0.0	0.0	170	170	0	0	170	0	0	0	0
736+00	73600	100	74.5	74.5	0.0	0.0	273	273	0	0	443	0	0	0	0
737+00	73700	100	72.7	28.7	0.2	83.1	273	191	0	154	715	-153	200	123	235
737+50	73750	50	72.7	28.7	1.4	83.1	135	53	1	154	850	-305	400	246	468
738+00	73800	50	72.7	28.7	1.0	83.1	135	53	2	154	985	-457	600	369	701
739+00	73900	100	72.7	28.7	0.6	83.1	269	106	3	308	1254	-761	1000	616	1168
740+00	74000	100	72.7	28.7	0.8	83.1	269	106	3	308	1523	-1065	1400	862	1636
741+00	74100	100	72.7	28.7	0.6	83.1	269	106	3	308	1792	-1370	1801	1108	2103
742+00	74200	100	72.7	28.7	0.3	83.1	269	106	2	308	2062	-1675	2201	1354	2572
743+00	74300	100	49.4	24.2	0.4	61.3	226	98	1	267	2288	-1941	2548	1568	2966
744+00	74400	100	49.4	24.2	1.4	61.3	183	90	3	227	2471	-2164	2843	1750	3282
745+00	74500	100	49.4	24.2	3.4	61.3	183	90	9	227	2654	-2380	3139	1931	3591
746+00	74600	100	49.4	24.2	2.1	61.3	183	90	10	227	2837	-2594	3434	2113	3899
747+00	74700	100	49.4	24.2	1.8	61.3	183	90	7	227	3020	-2812	3729	2295	4210
					Column totals		3020	1622	45	2868					

CTH JJ WB Off			AREA (SF)				Incremental Vol (CY) (Unadjusted)				Cumulative Vol (CY)				
STATION	Real Station	Distance	Cut	Salvaged / Unusable Pavement Material	Fill	EBS	Cut Note 1	Salvaged / Unusable Pavement Material Note 2	Fill Note 3	EBS	Cut 1.00 Note 1	Expanded Fill 1.25	Expanded EBS Backfill 1.30 Note 5	Reduced EBS In Fill 0.80 Note 7	Mass Ordinate Note 8
730+40	73040		45.2	35.6	0.0	0.0	0	0	0	0	0	0	0	0	0
731+00	73100	60	28.4	28.4	0.0	0.0	82	71	0	0	82	0	0	0	11
732+00	73200	100	28.4	28.4	1.1	0.0	105	105	2	0	187	3	0	0	8
733+00	73300	100	28.4	28.4	0.9	0.0	105	105	4	0	292	7	0	0	3
734+00	73400	100	28.4	28.4	2.8	0.0	105	105	7	0	397	16	0	0	-5
734+50	73450	50	60.0	28.4	4.3	82.6	82	53	7	76	479	-53	99	61	92
735+00	73500	50	60.0	28.4	2.8	82.6	111	53	7	153	590	-197	298	184	296
736+00	73600	100	60.0	28.4	1.7	82.6	222	105	8	306	813	-493	696	428	708
737+00	73700	100	60.0	28.4	1.5	82.6	222	105	6	306	1035	-791	1094	673	1124
738+00	73800	100	60.0	28.4	1.5	82.6	222	105	6	306	1257	-1090	1491	918	1540
739+00	73900	100	60.0	28.4	1.7	82.6	222	105	6	306	1479	-1389	1889	1163	1955
740+00	74000	100	60.0	28.4	0.9	82.6	222	105	5	306	1701	-1689	2287	1407	2372
					Column totals		1701	1018	56	1759					

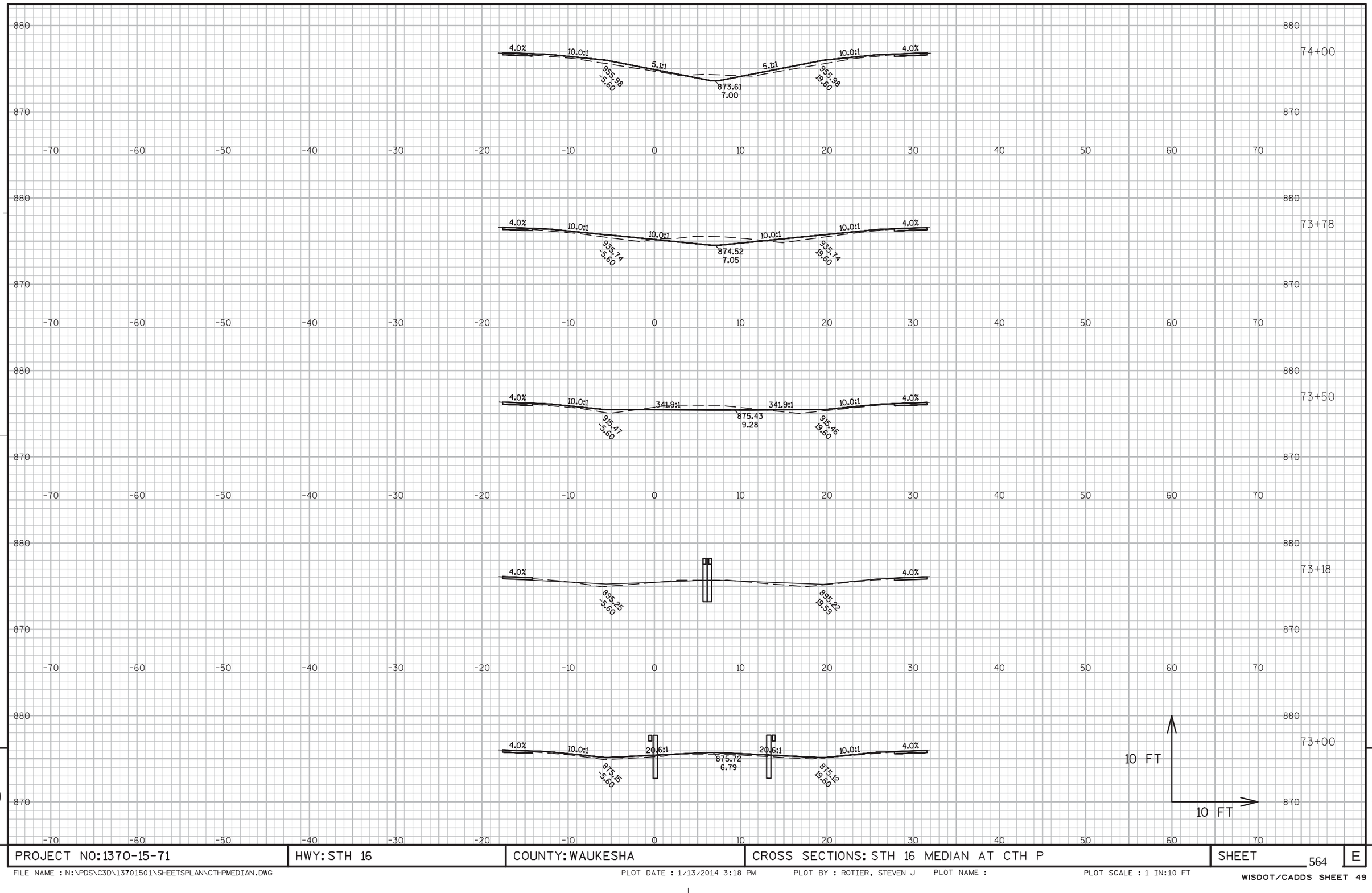
CTH JJ WB On			AREA (SF)				Incremental Vol (CY) (Unadjusted)				Cumulative Vol (CY)				
STATION	Real Station	Distance	Cut	Salvaged / Unusable Pavement Material	Fill	EBS	Cut Note 1	Salvaged / Unusable Pavement Material Note 2	Fill Note 3	EBS	Cut 1.00 Note 1	Expanded Fill 1.25	Expanded EBS Backfill 1.30 Note 5	Reduced EBS In Fill 0.80 Note 7	Mass Ordinate Note 8
713+40	71340		65.4	28.2	0.0	74.7	0	0	0	0	0	0	0	0	0
714+00	71400	60	65.4	28.2	0.0	74.7	145	63	0	166	145	-166	216	133	249
715+00	71500	100	65.4	28.2	0.0	74.7	242	104	0	277	388	-443	575	354	663
716+00	71600	100	65.4	28.2	0.0	74.7	242	104	0	277	630	-719	935	575	1078
717+00	71700	100	65.4	28.2	4.1	74.7	242	104	8	277	872	-987	1295	797	1483
718+00	71800	100	65.4	28.2	7.1	74.7	242	104	21	277	1114	-1237	1654	1018	1871
719+00	71900	100	78.8	34.7	19.9	98.2	267	116	50	320	1381	-1495	2071	1274	2279
720+00	72000	100	86.6	34.7	8.0	98.2	306	129	52	364	1688	-1794	2544	1565	2756
721+00	72100	100	86.6	36.3	1.7	74.7	321	131	18	320	2008	-2092	2960	1821	3243
722+00	72200	100	88.7	39.1	0.2	103.7	325	140	4	330	2333	-2418	3389	2086	3754
723+00	72300	100	51.9	24.1	0.1	61.1	260	117	1	305	2593	-2722	3786	2330	4202
724+00	72400	100	51.9	24.1	1.6	61.1	192	89	3	226	2786	-2945	4080	2511	4527
725+00	72500	100	51.9	24.1	2.0	61.1	192	89	7	226	2978	-3163	4374	2692	4848
726+00	72600	100	51.9	24.1	1.9	61.1	192	89	7	226	3170	-3380	4669	2873	5168
726+60	72660	60	51.9	24.1	1.3	61.1	115	54	4	136	3285	-3511	4845	2982	5362
					Column totals		3285	1435	173	3727					



PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	CROSS SECTIONS: STH 16 MEDIAN AT CTH P	SHEET 562	E

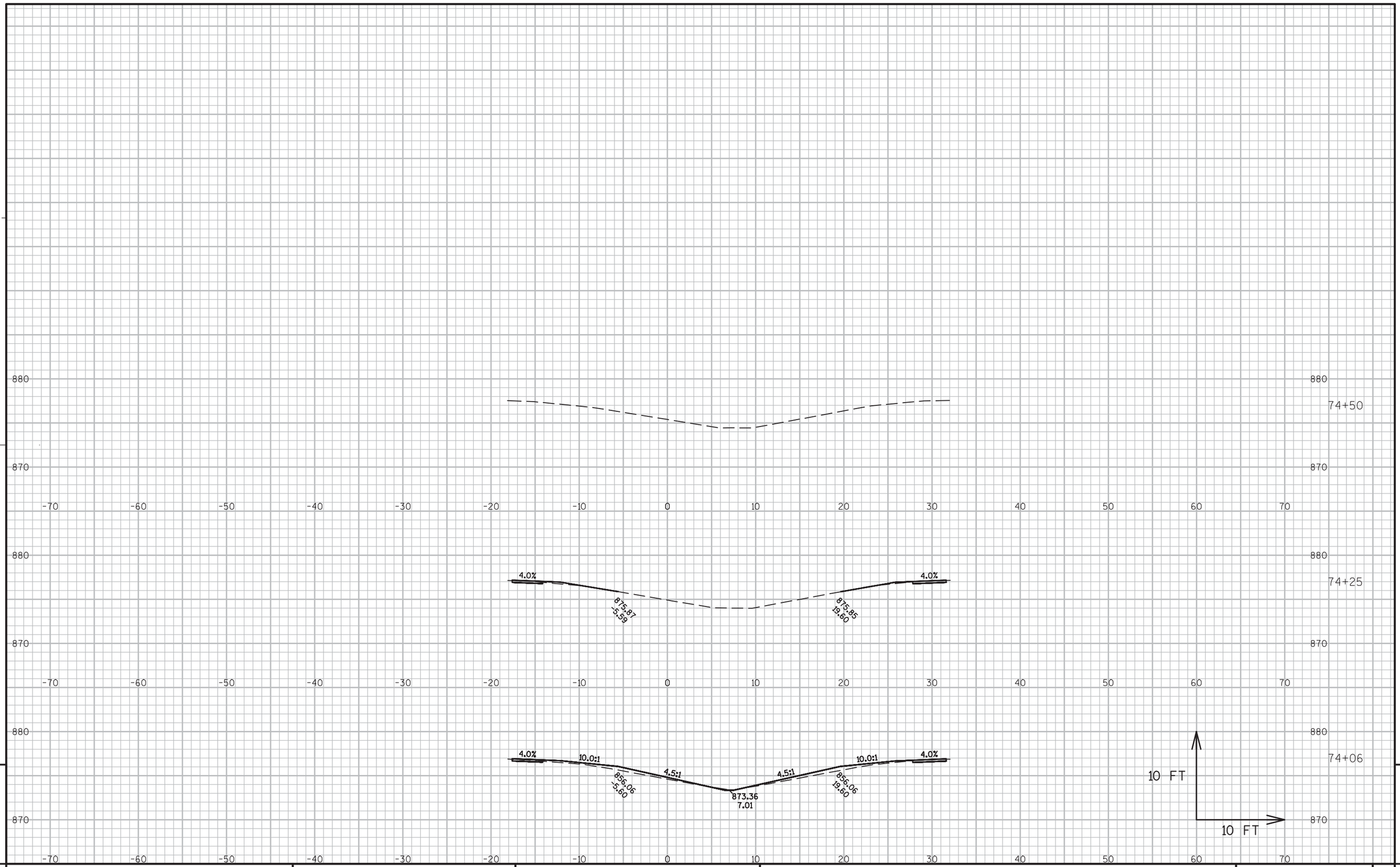


PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	CROSS SECTIONS: STH 16 MEDIAN AT CTH P	SHEET 563	E



PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	CROSS SECTIONS: STH 16 MEDIAN AT CTH P	SHEET 564	E

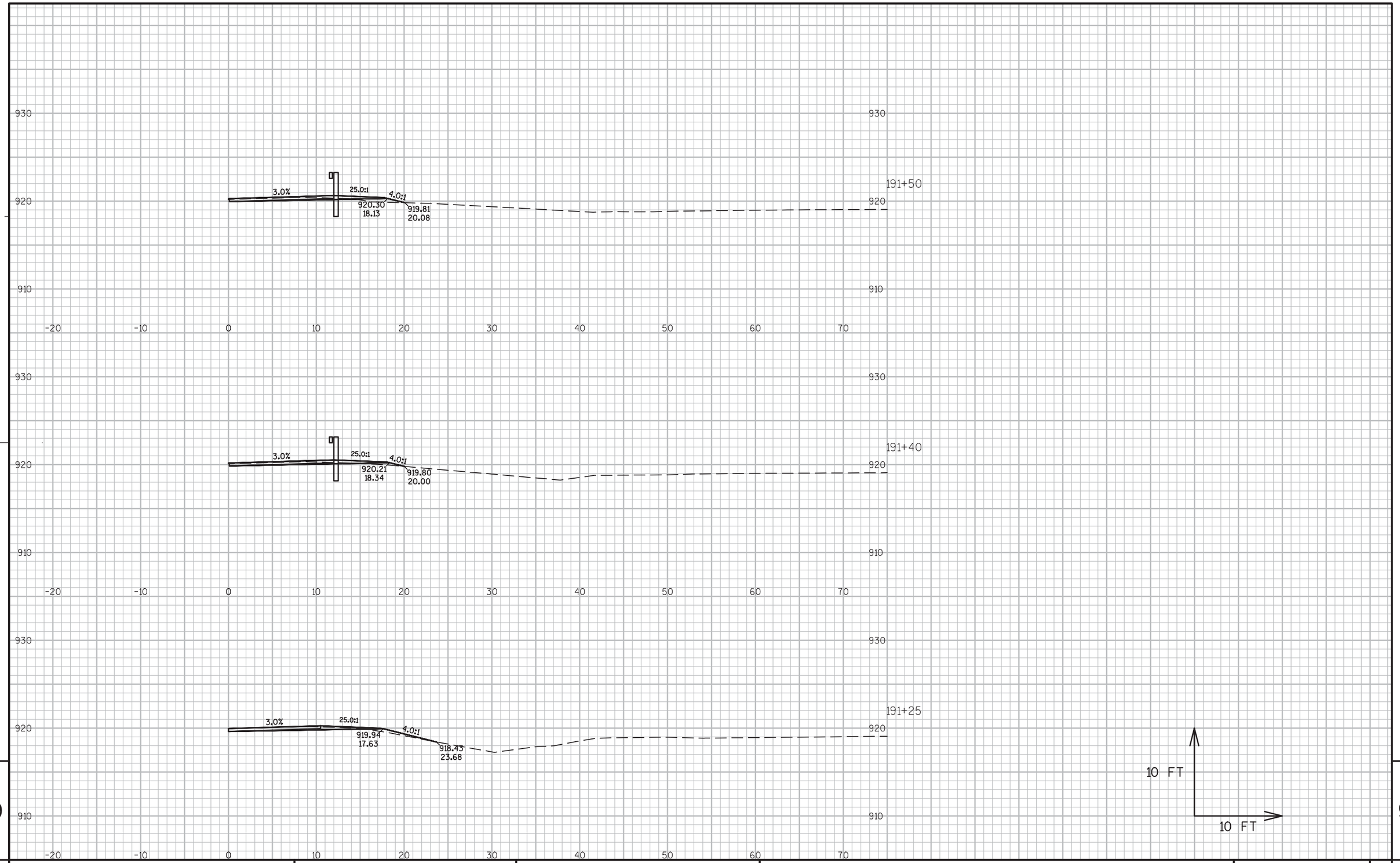
FILE NAME : N:\PDS\C3D\13701501\SHEETSPLAN\CTHPMEDIAN.DWG PLOT DATE : 1/13/2014 3:18 PM PLOT BY : ROTIER, STEVEN J PLOT NAME : PLOT SCALE : 1 IN:10 FT



9

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PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	CROSS SECTIONS: STH 16 MEDIAN AT CTH P	SHEET 565	E

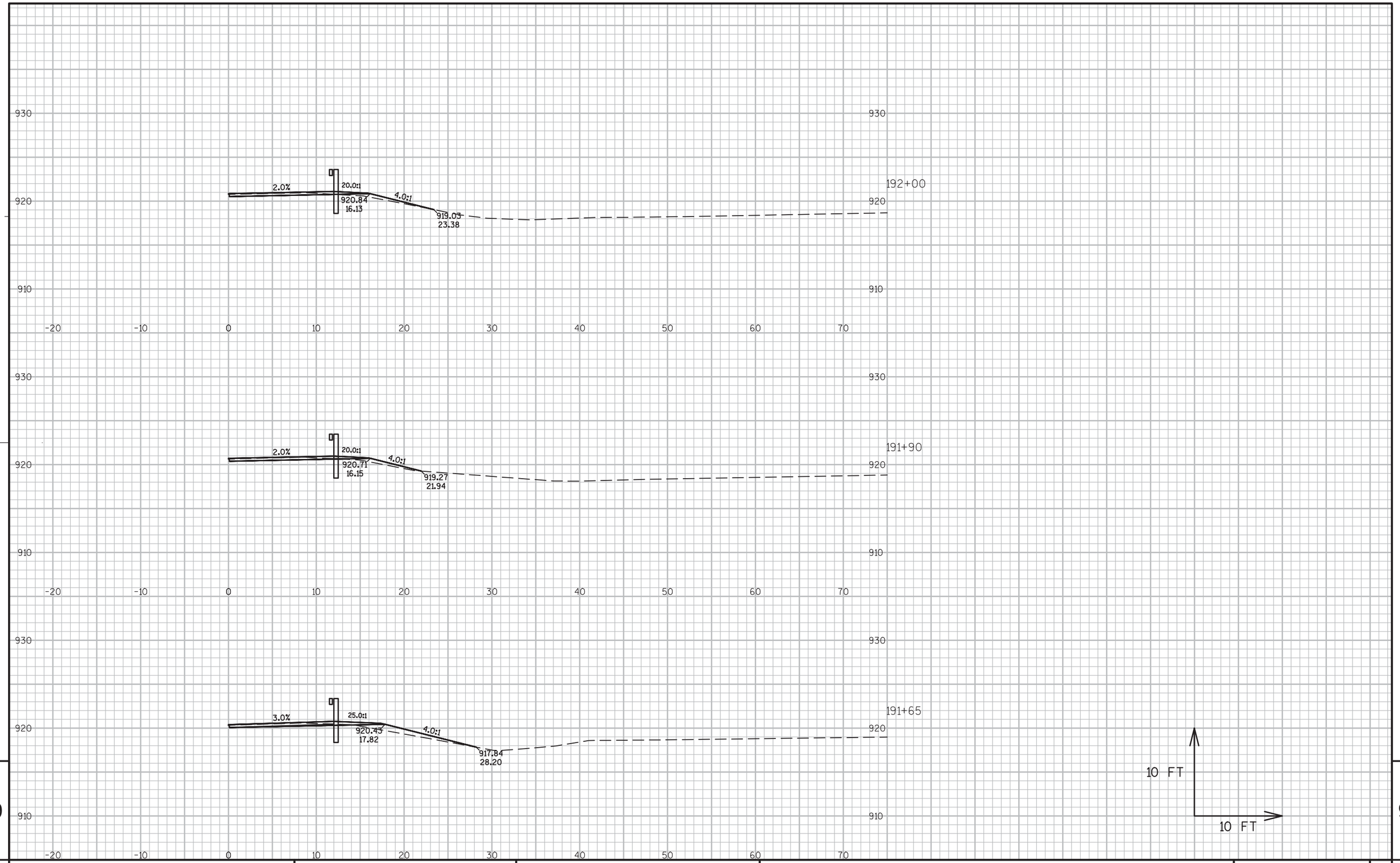


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PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	CROSS SECTIONS: BARRIER WALL REPLACEMENT	SHEET	E

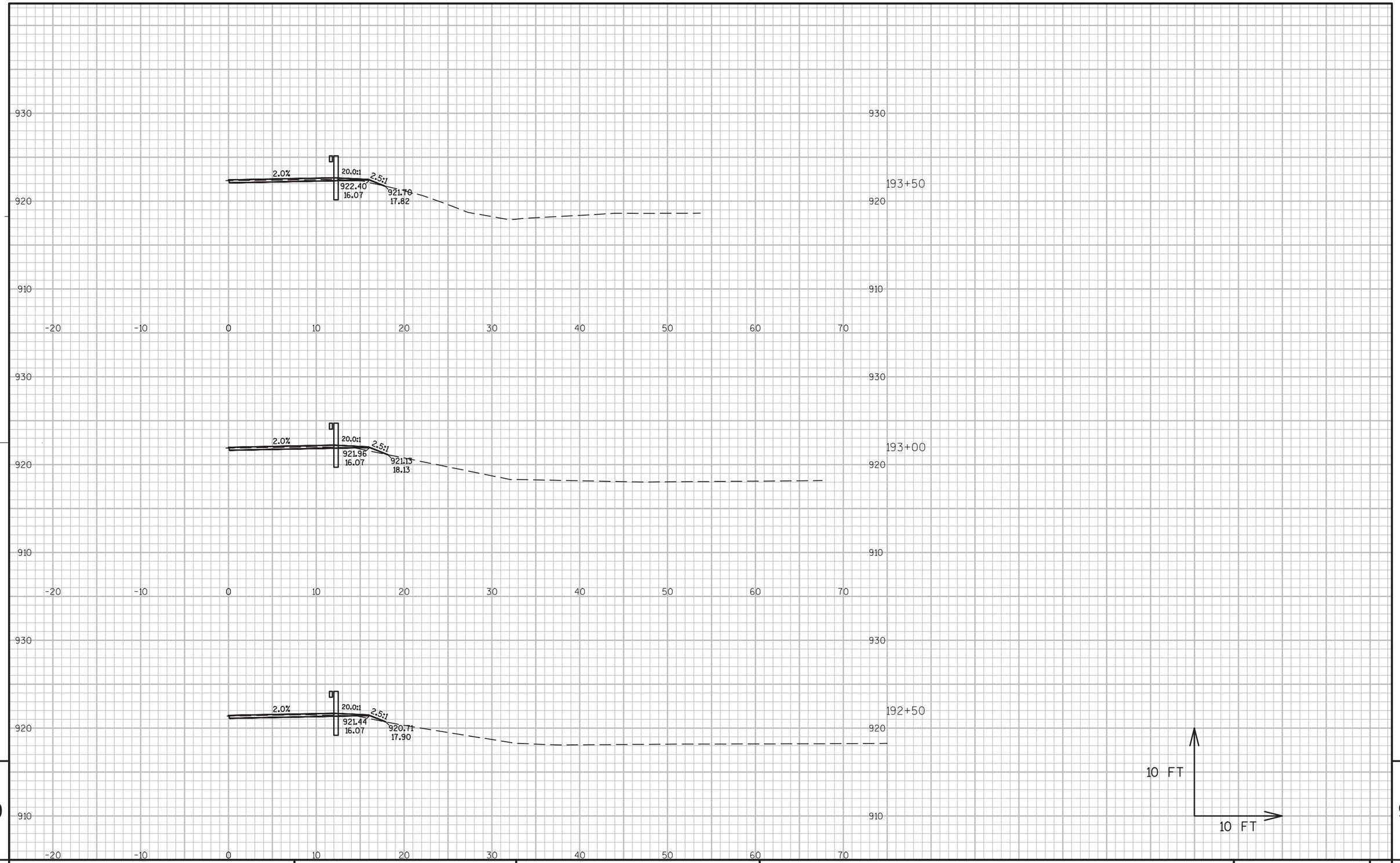
FILE NAME : N:\PDS\C3D\13701501\SHEETSPLAN\STA191+00BEAMGUARD.DWG PLOT DATE : 1/15/2014 7:42 AM PLOT BY : ROTIER, STEVEN J PLOT NAME : PLOT SCALE : 1 IN:10 FT



PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	CROSS SECTIONS: BARRIER WALL REPLACEMENT	SHEET 567	E

FILE NAME : N:\PDS\C3D\13701501\SHEETSPLAN\STA191+00BEAMGUARD.DWG PLOT DATE : 1/15/2014 7:42 AM PLOT BY : ROTIER, STEVEN J PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49



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PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	CROSS SECTIONS: BARRIER WALL REPLACEMENT	SHEET 568	E

FILE NAME : N:\PDS\C3D\13701501\SHEETSPLAN\STA191+00BEAMGUARD.DWG PLOT DATE : 1/15/2014 7:42 AM PLOT BY : ROTIER, STEVEN J PLOT NAME : PLOT SCALE : 1 IN:10 FT

194+00

193+96

930
920
910
-20
-10
0
10
20
30
40
50
60
70

922.31
15.08
2.5:1
922.15
16.91

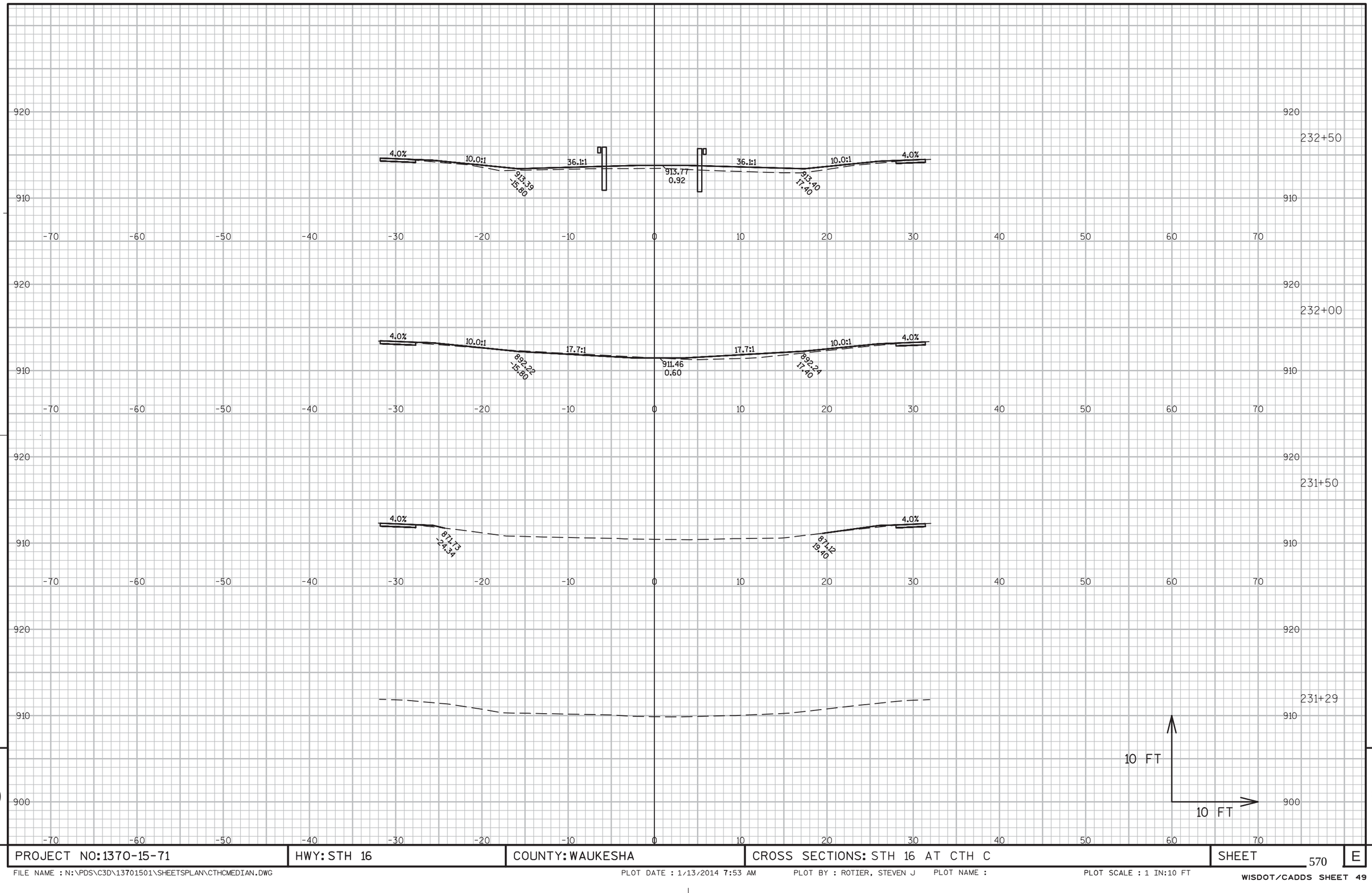
10 FT
10 FT

9

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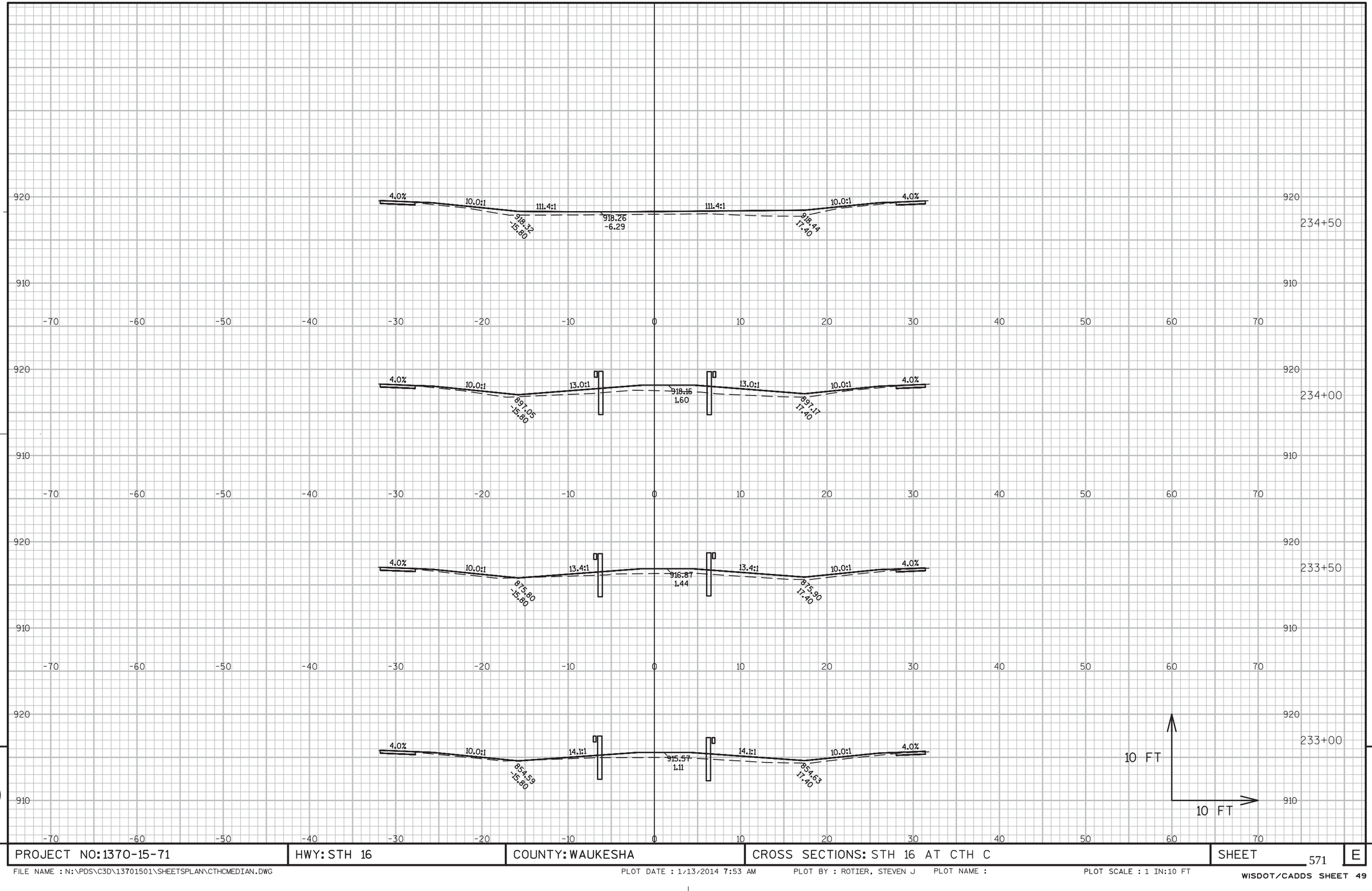
PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	CROSS SECTIONS: BARRIER WALL REPLACEMENT	SHEET 569	E

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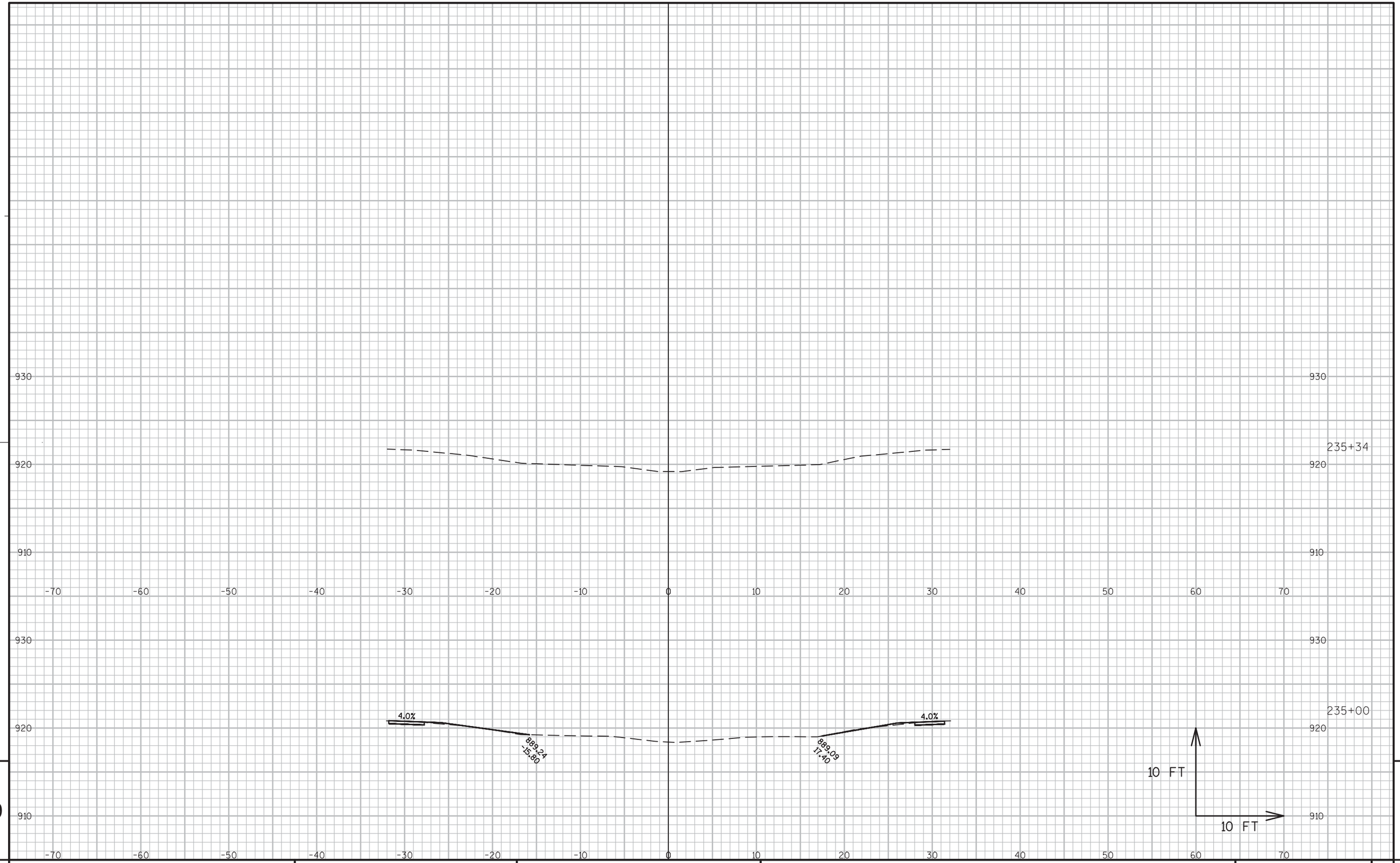
PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	CROSS SECTIONS: STH 16 AT CTH C	SHEET 570	E

FILE NAME : N:\PDS\C3D\13701501\SHEETSPLAN\CTHCMEDIAN.DWG PLOT DATE : 1/13/2014 7:53 AM PLOT BY : ROTIER, STEVEN J PLOT NAME : PLOT SCALE : 1 IN:10 FT



PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	CROSS SECTIONS: STH 16 AT CTH C	SHEET 571	E

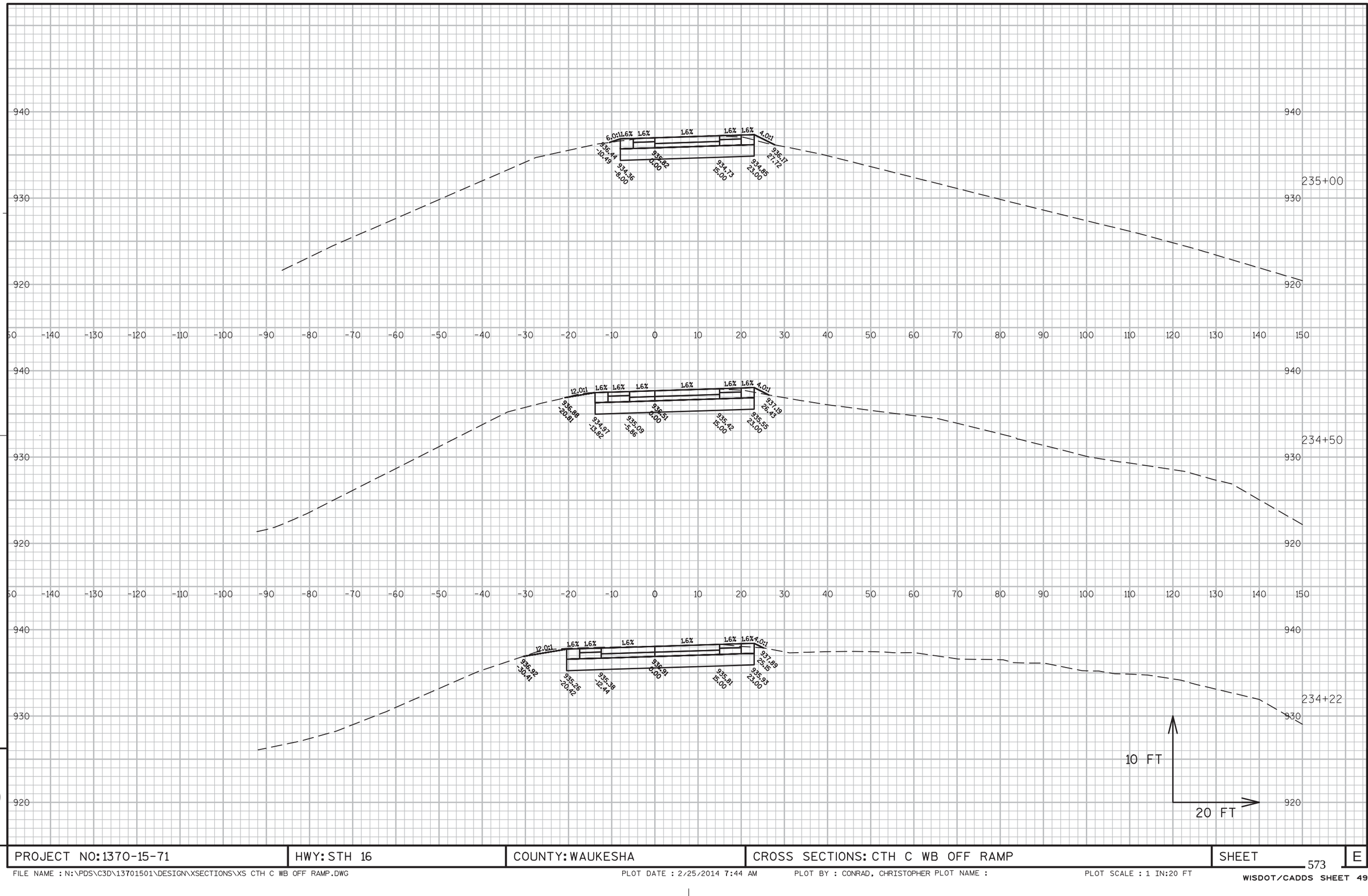
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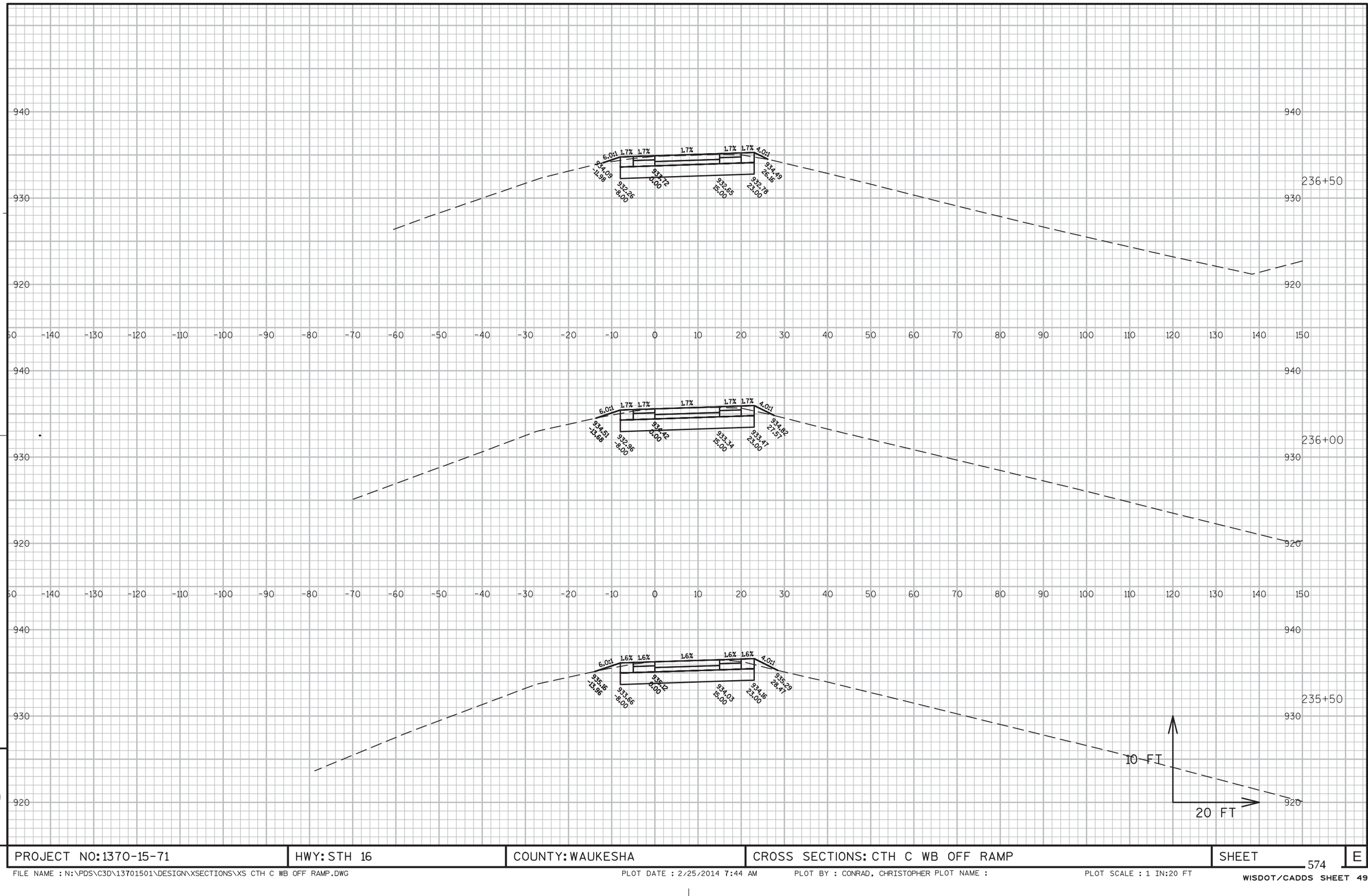
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PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	CROSS SECTIONS: STH 16 AT CTH C	SHEET 572	E

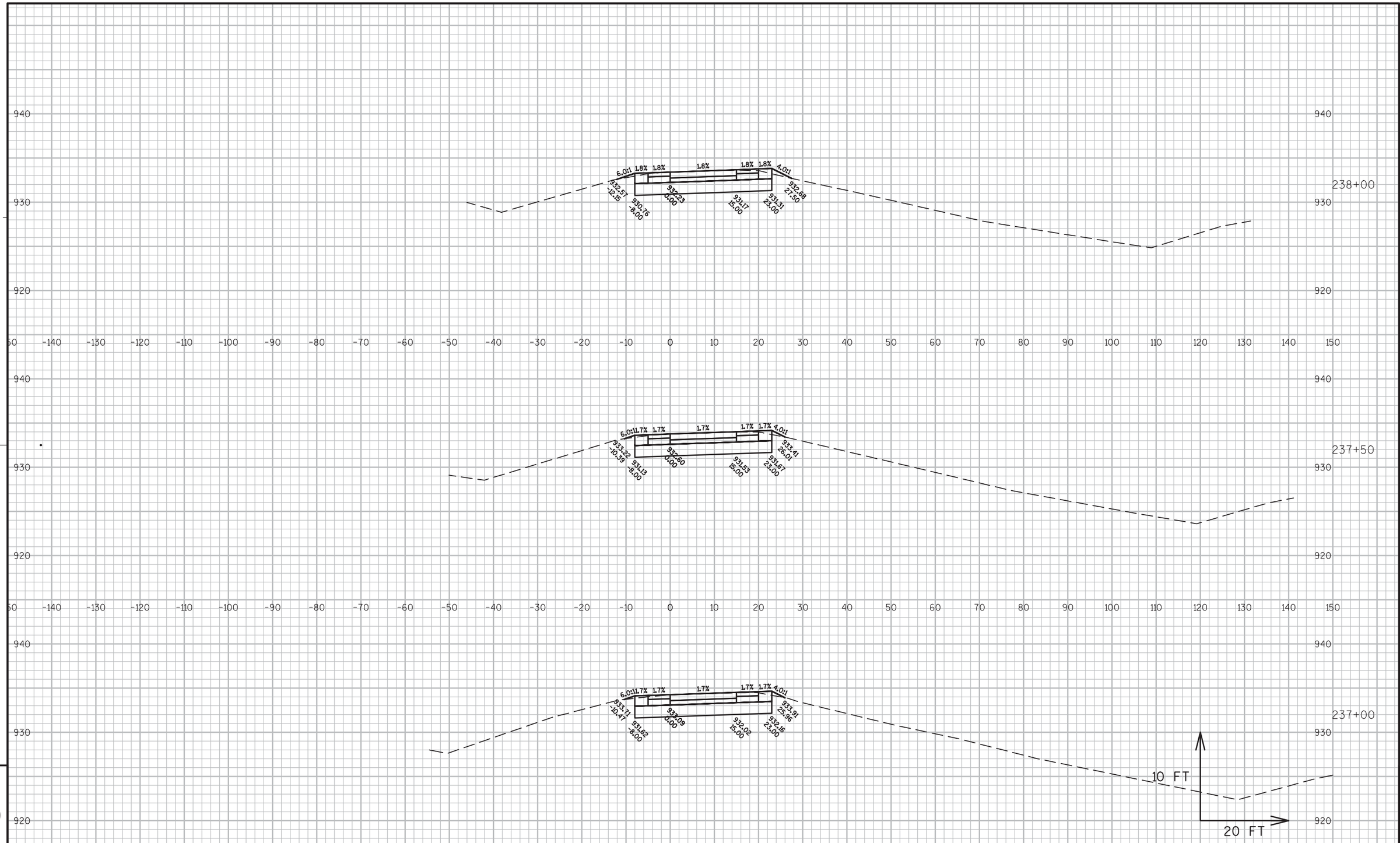


PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	CROSS SECTIONS: CTH C WB OFF RAMP	SHEET	E

FILE NAME : N:\PDS\C3D\13701501\DESIGN\XSECTIONS\XS CTH C WB OFF RAMP.DWG PLOT DATE : 2/25/2014 7:44 AM PLOT BY : CONRAD, CHRISTOPHER PLOT NAME : PLOT SCALE : 1 IN:20 FT



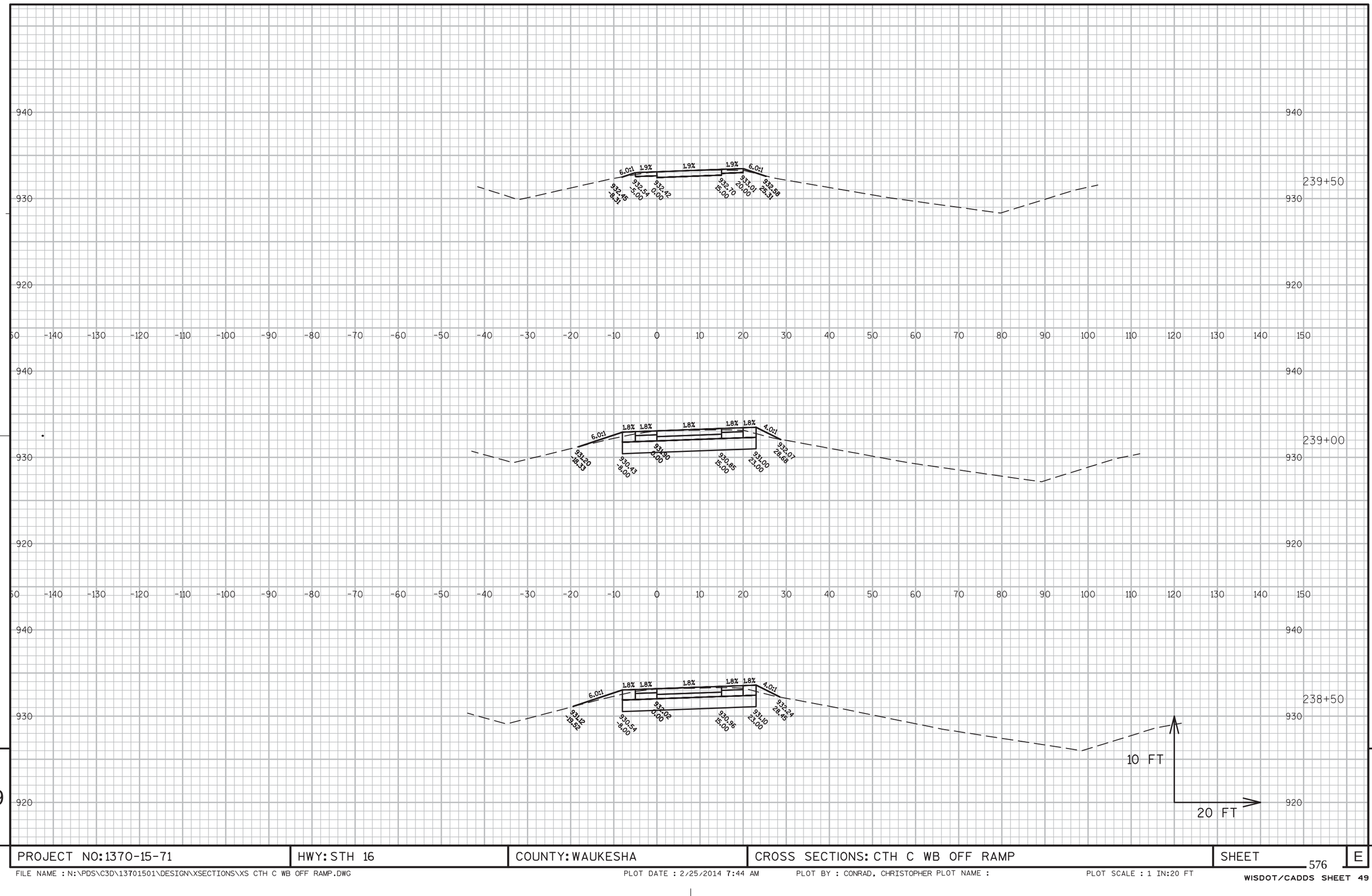
9	PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	CROSS SECTIONS: CTH C WB OFF RAMP	SHEET 574 E



PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	CROSS SECTIONS: CTH C WB OFF RAMP	SHEET	E

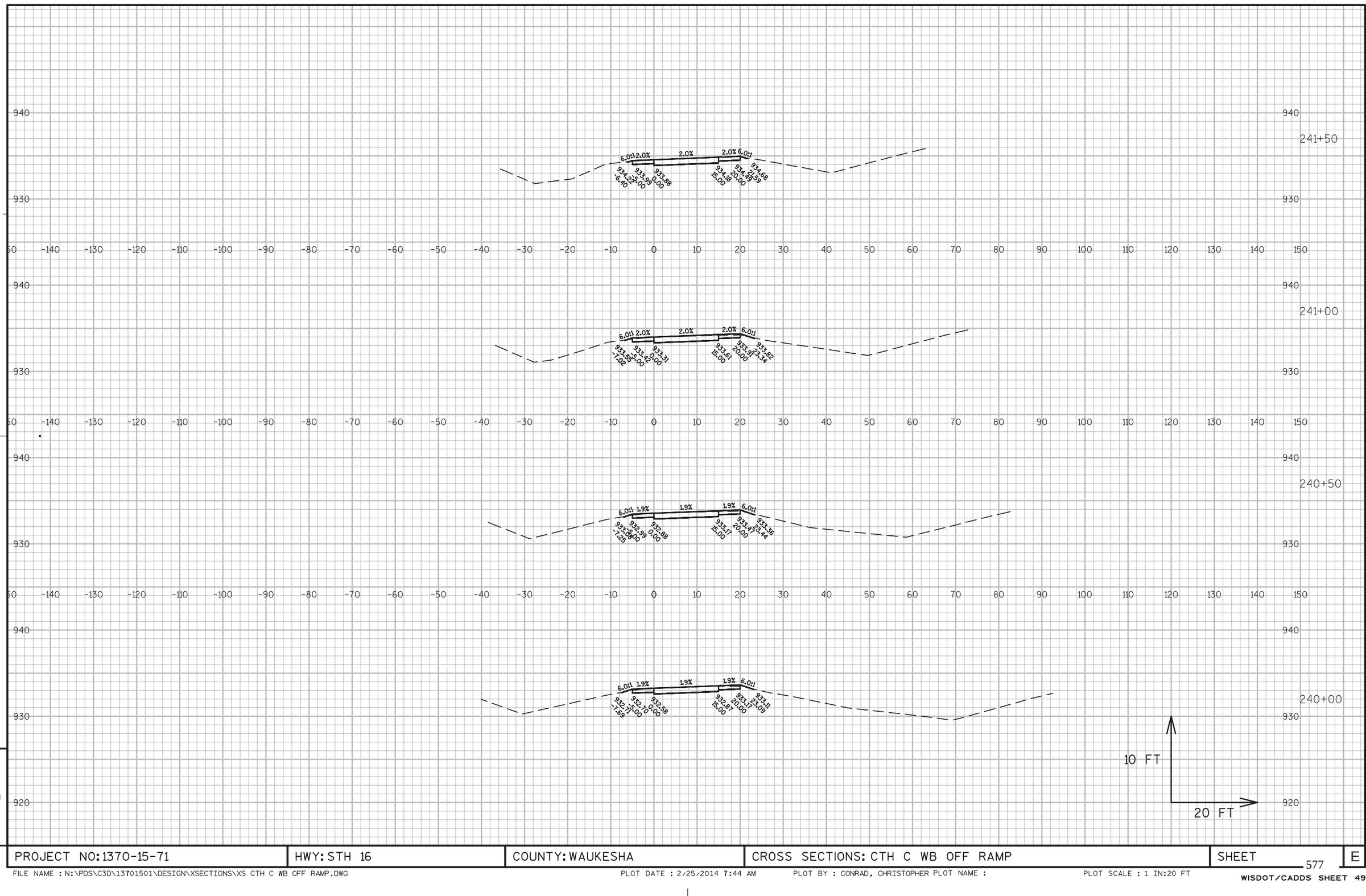
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WISDOT/CADDS SHEET 49



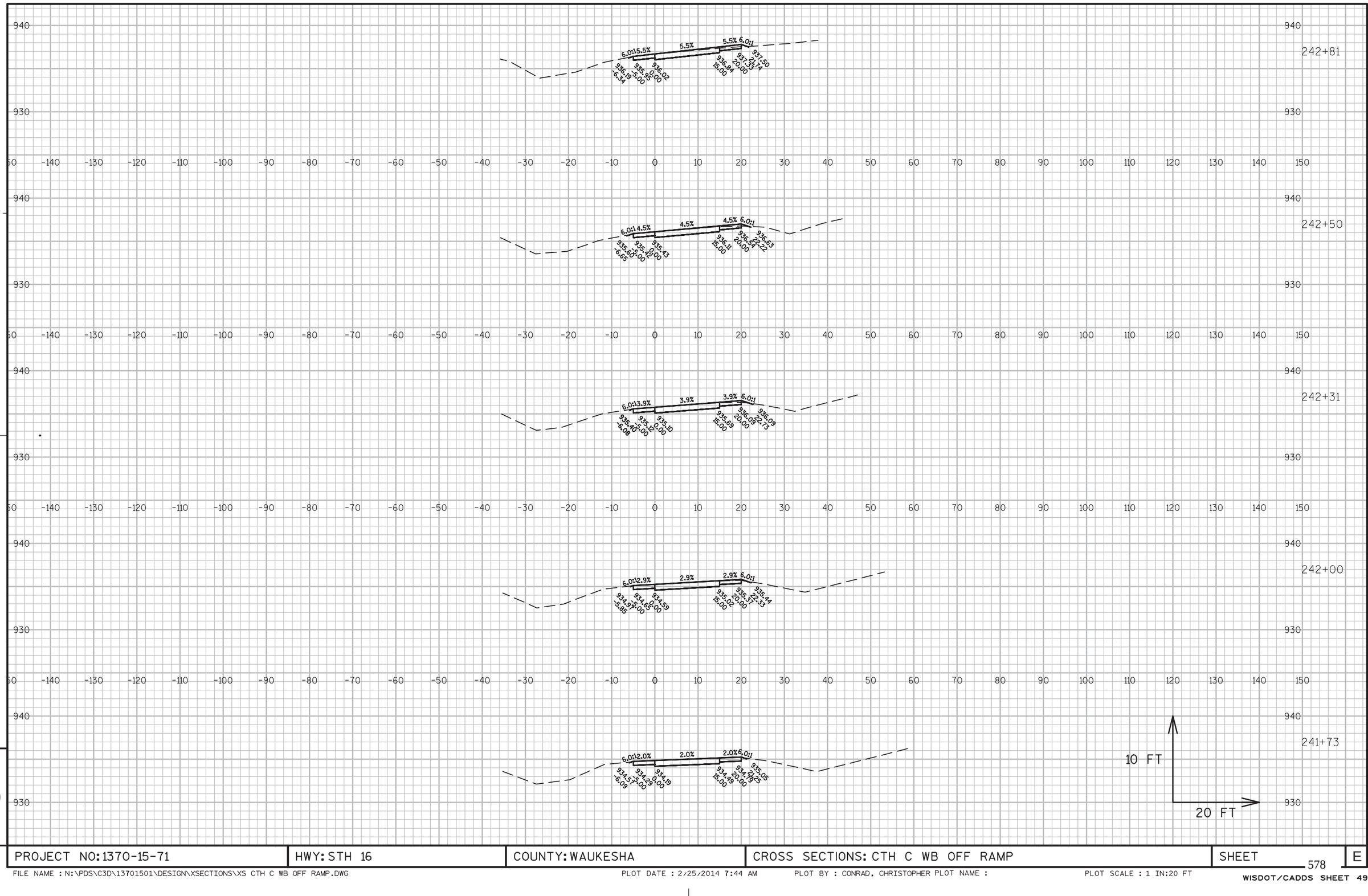
PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	CROSS SECTIONS: CTH C WB OFF RAMP	SHEET	E

FILE NAME : N:\PDS\C3D\13701501\DESIGN\XSECTIONS\XS CTH C WB OFF RAMP.DWG PLOT DATE : 2/25/2014 7:44 AM PLOT BY : CONRAD, CHRISTOPHER PLOT NAME : PLOT SCALE : 1 IN:20 FT



9	PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	CROSS SECTIONS: CTH C WB OFF RAMP	SHEET 577 E

FILE NAME : N:\PDS\C3D\13701501\DESIGN\XSECTIONS\XS CTH C WB OFF RAMP.DWG PLOT DATE : 2/25/2014 7:44 AM PLOT BY : CONRAD, CHRISTOPHER PLOT NAME : PLOT SCALE : 1 IN:20 FT

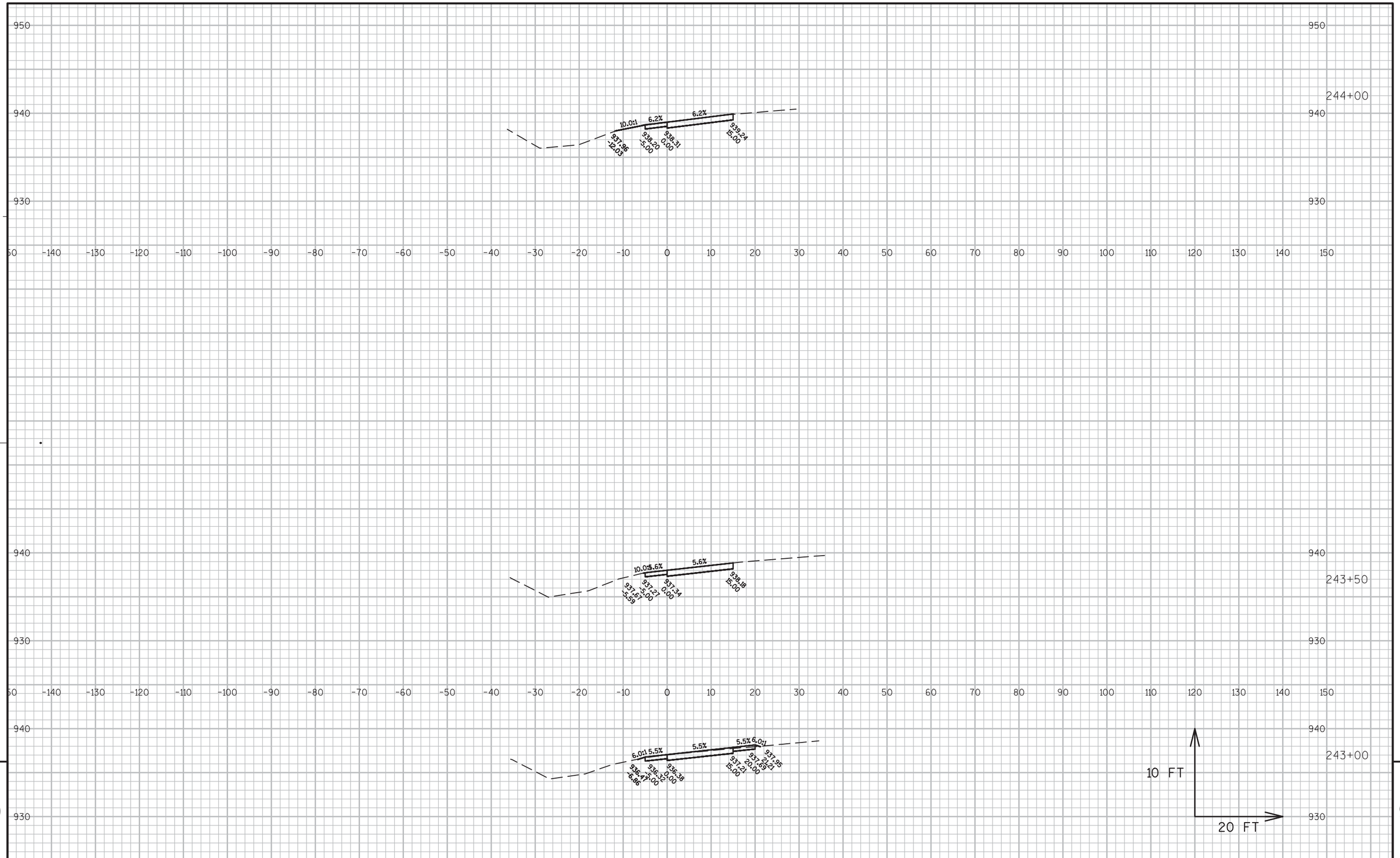


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PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	CROSS SECTIONS: CTH C WB OFF RAMP	SHEET 578	E

FILE NAME : N:\PDS\C3D\13701501\DESIGN\XSECTIONS\XS CTH C WB OFF RAMP.DWG PLOT DATE : 2/25/2014 7:44 AM PLOT BY : CONRAD, CHRISTOPHER PLOT NAME : PLOT SCALE : 1 IN:20 FT



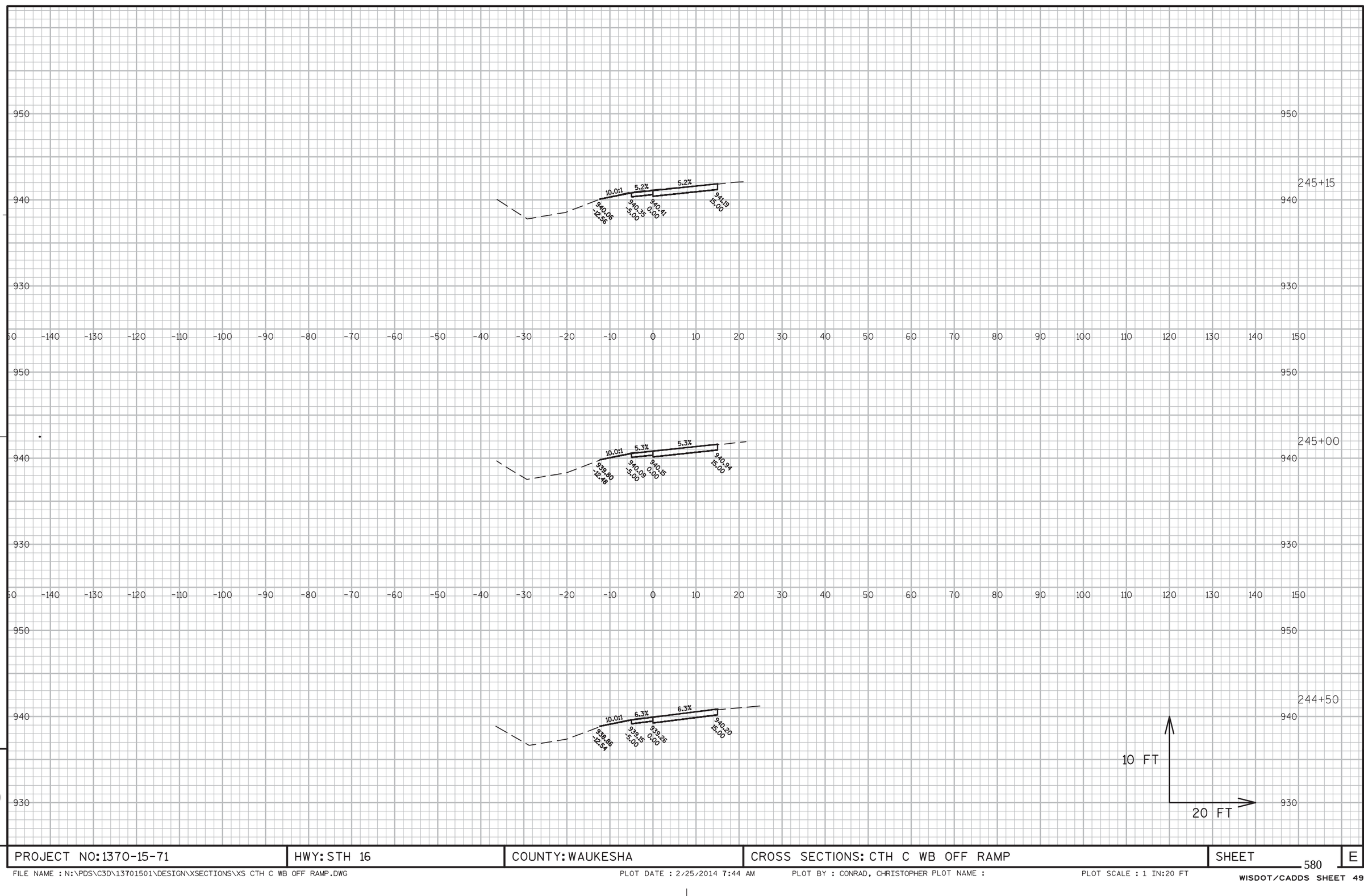
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PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	CROSS SECTIONS: CTH C WB OFF RAMP	SHEET 579	E

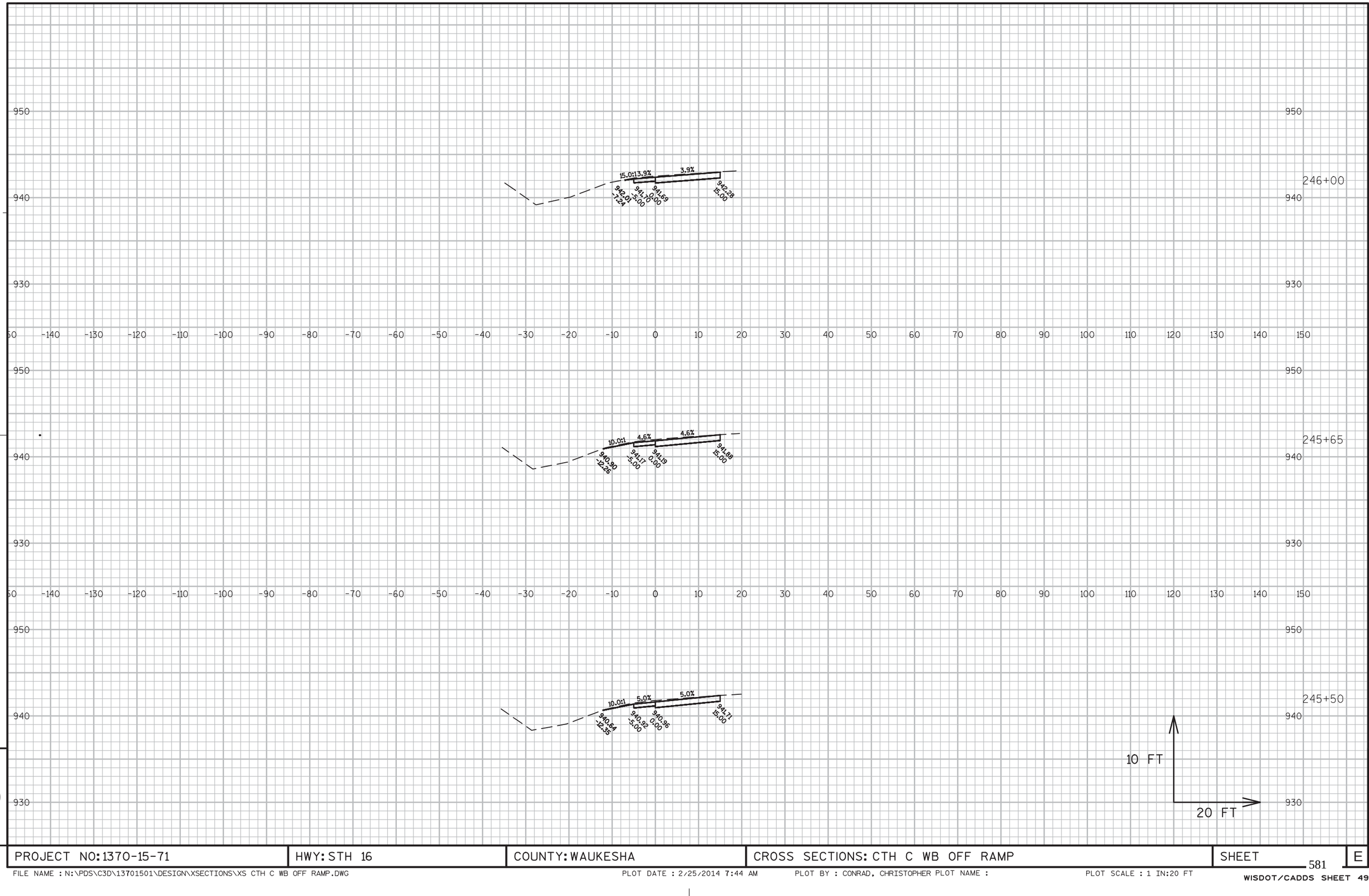
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WISDOT/CADDS SHEET 49



PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	CROSS SECTIONS: CTH C WB OFF RAMP	SHEET	E

FILE NAME : N:\PDS\C3D\13701501\DESIGN\XSECTIONS\XS CTH C WB OFF RAMP.DWG PLOT DATE : 2/25/2014 7:44 AM PLOT BY : CONRAD, CHRISTOPHER PLOT NAME : PLOT SCALE : 1 IN:20 FT



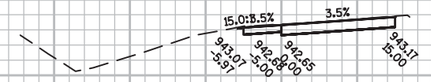
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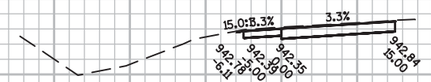
PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	CROSS SECTIONS: CTH C WB OFF RAMP	SHEET	E

FILE NAME : N:\PDS\C3D\13701501\DESIGN\XSECTIONS\XS CTH C WB OFF RAMP.DWG PLOT DATE : 2/25/2014 7:44 AM PLOT BY : CONRAD, CHRISTOPHER PLOT NAME : PLOT SCALE : 1 IN:20 FT

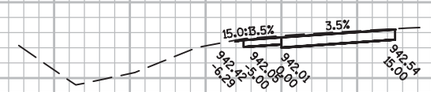
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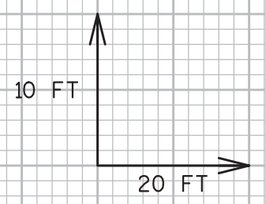


246+50



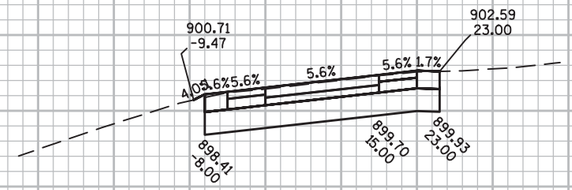
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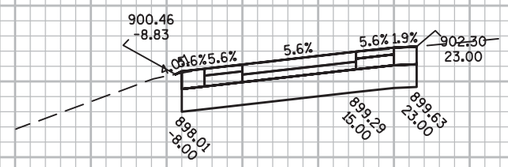


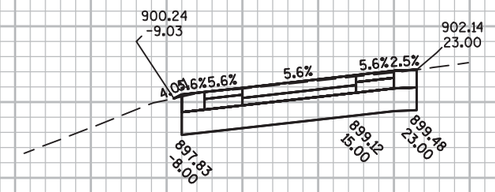


PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	CROSS SECTIONS: CTH C WB OFF RAMP	SHEET	E

FILE NAME : N:\PDS\C3D\13701501\DESIGN\XSECTIONS\XS CTH C WB OFF RAMP.DWG PLOT DATE : 2/25/2014 7:44 AM PLOT BY : CONRAD, CHRISTOPHER PLOT NAME : PLOT SCALE : 1 IN:20 FT







222+50

222+00

221+50

10 FT

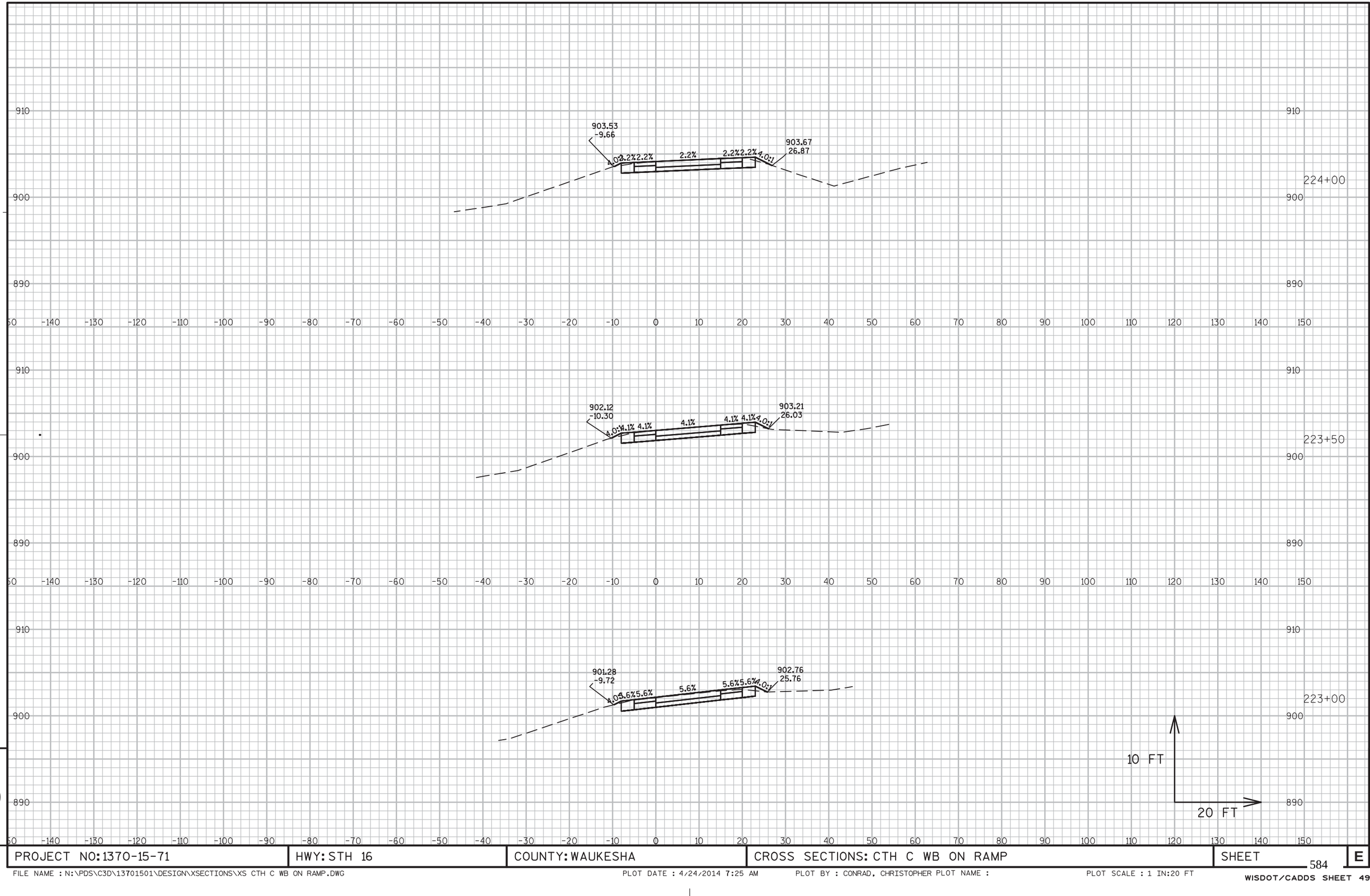
20 FT

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PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	CROSS SECTIONS: CTH C WB ON RAMP	SHEET	E

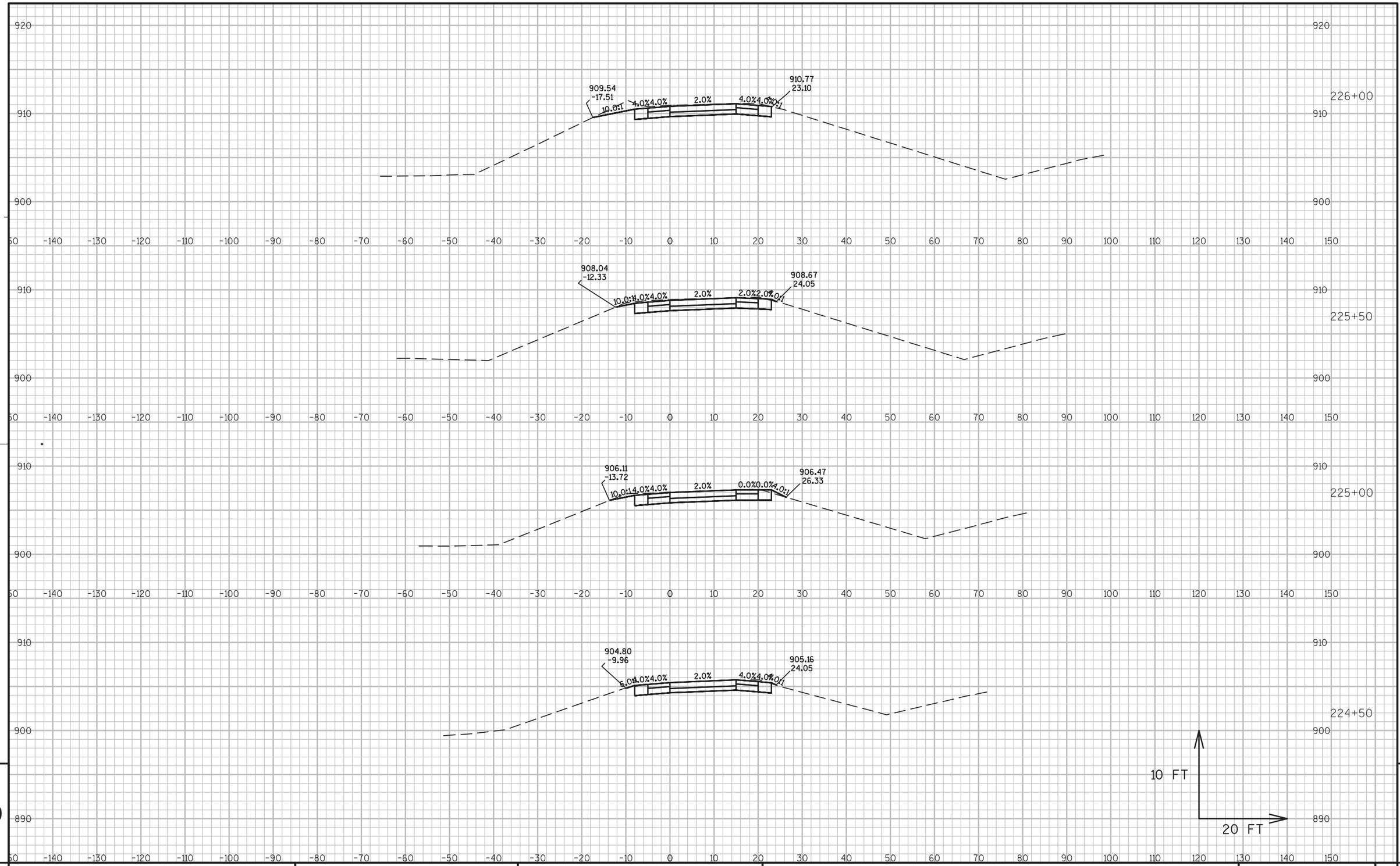
FILE NAME : N:\PDS\C3D\13701501\DESIGN\XSECTIONS\XS CTH C WB ON RAMP.DWG PLOT DATE : 4/24/2014 7:25 AM PLOT BY : CONRAD, CHRISTOPHER PLOT NAME : PLOT SCALE : 1 IN:20 FT



PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	CROSS SECTIONS: CTH C WB ON RAMP	SHEET 584	E

FILE NAME : N:\PDS\C3D\13701501\DESIGN\XSECTIONS\XS CTH C WB ON RAMP.DWG PLOT DATE : 4/24/2014 7:25 AM PLOT BY : CONRAD, CHRISTOPHER PLOT NAME : PLOT SCALE : 1 IN:20 FT

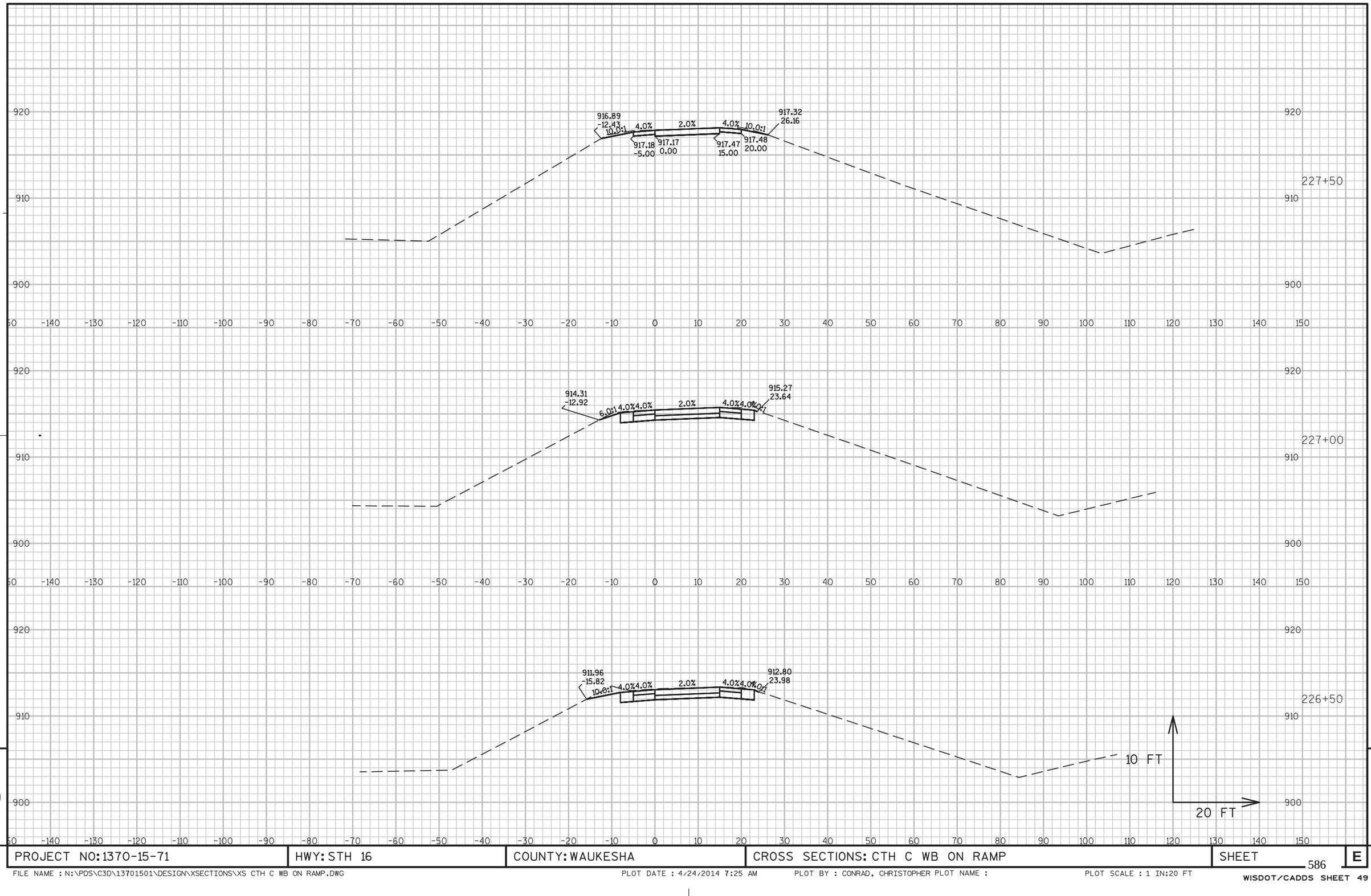
WISDOT/CADDS SHEET 49



PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	CROSS SECTIONS: CTH C WB ON RAMP	SHEET 585	E

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WISDOT/CADDS SHEET 49



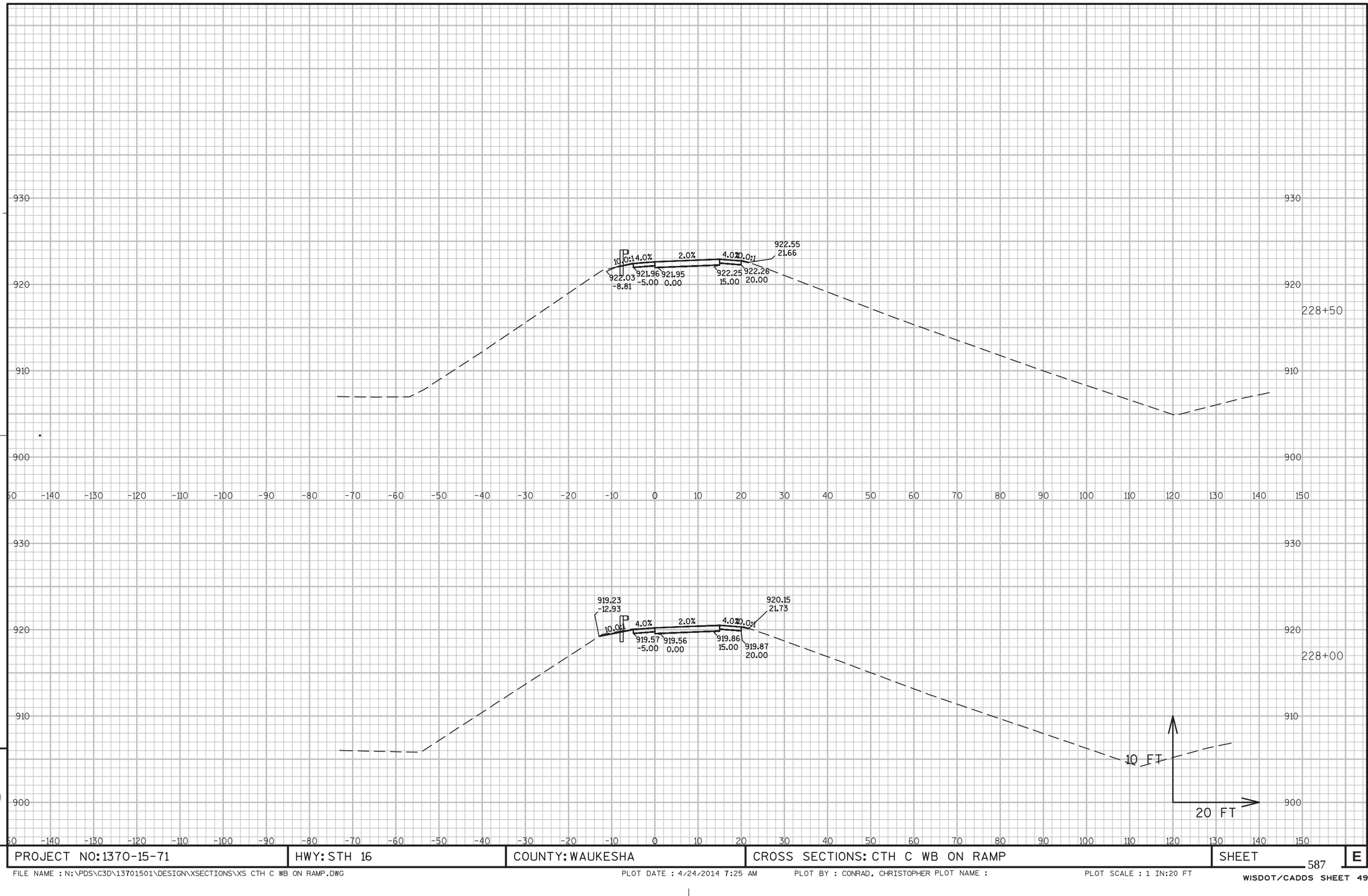
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PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	CROSS SECTIONS: CTH C WB ON RAMP	SHEET	E

FILE NAME : N:\PDS\C3D\13701501\DESIGN\XSECTIONS\XS CTH C WB ON RAMP.DWG PLOT DATE : 4/24/2014 7:25 AM PLOT BY : CONRAD, CHRISTOPHER PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49

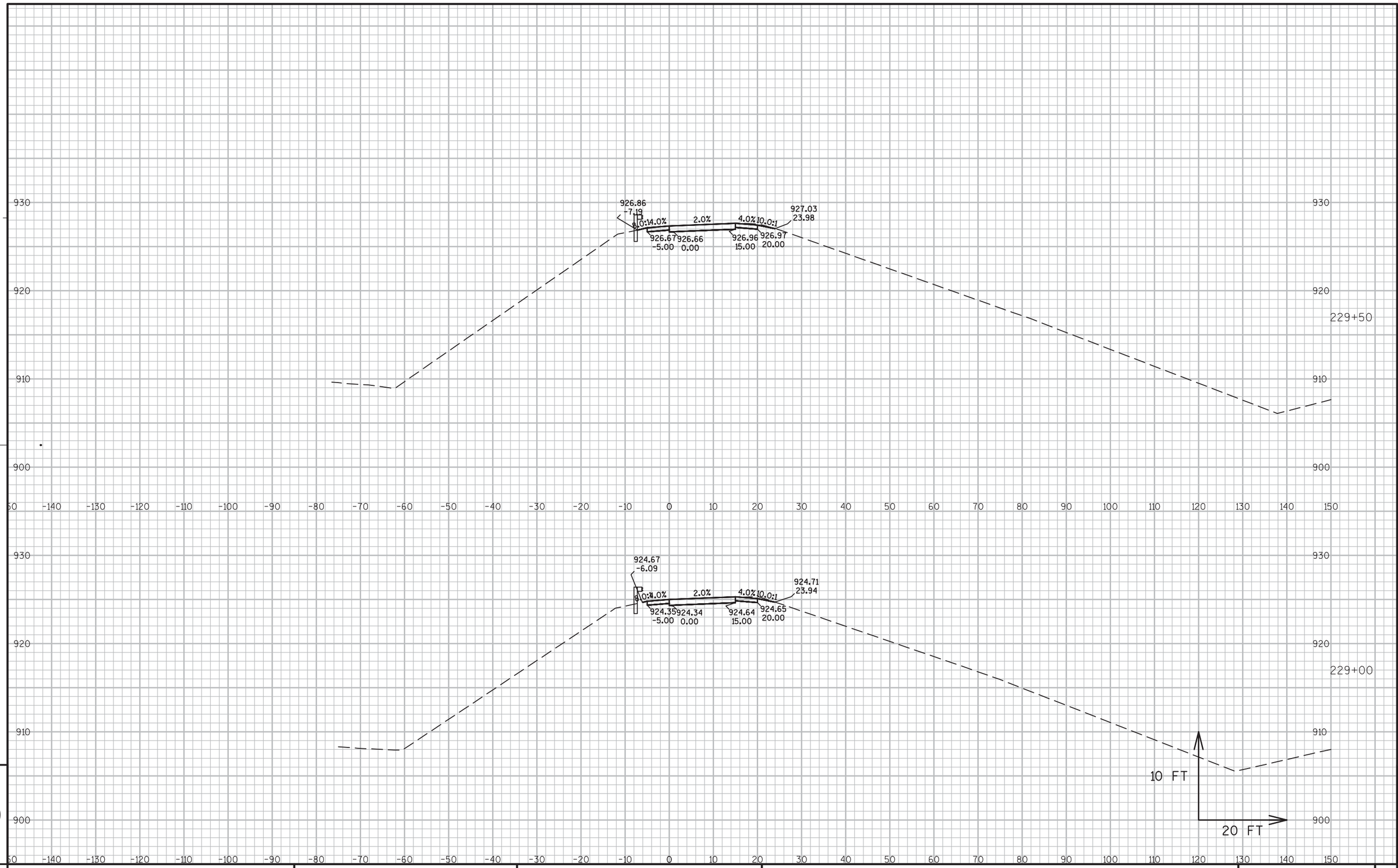


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PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	CROSS SECTIONS: CTH C WB ON RAMP	SHEET 587	E

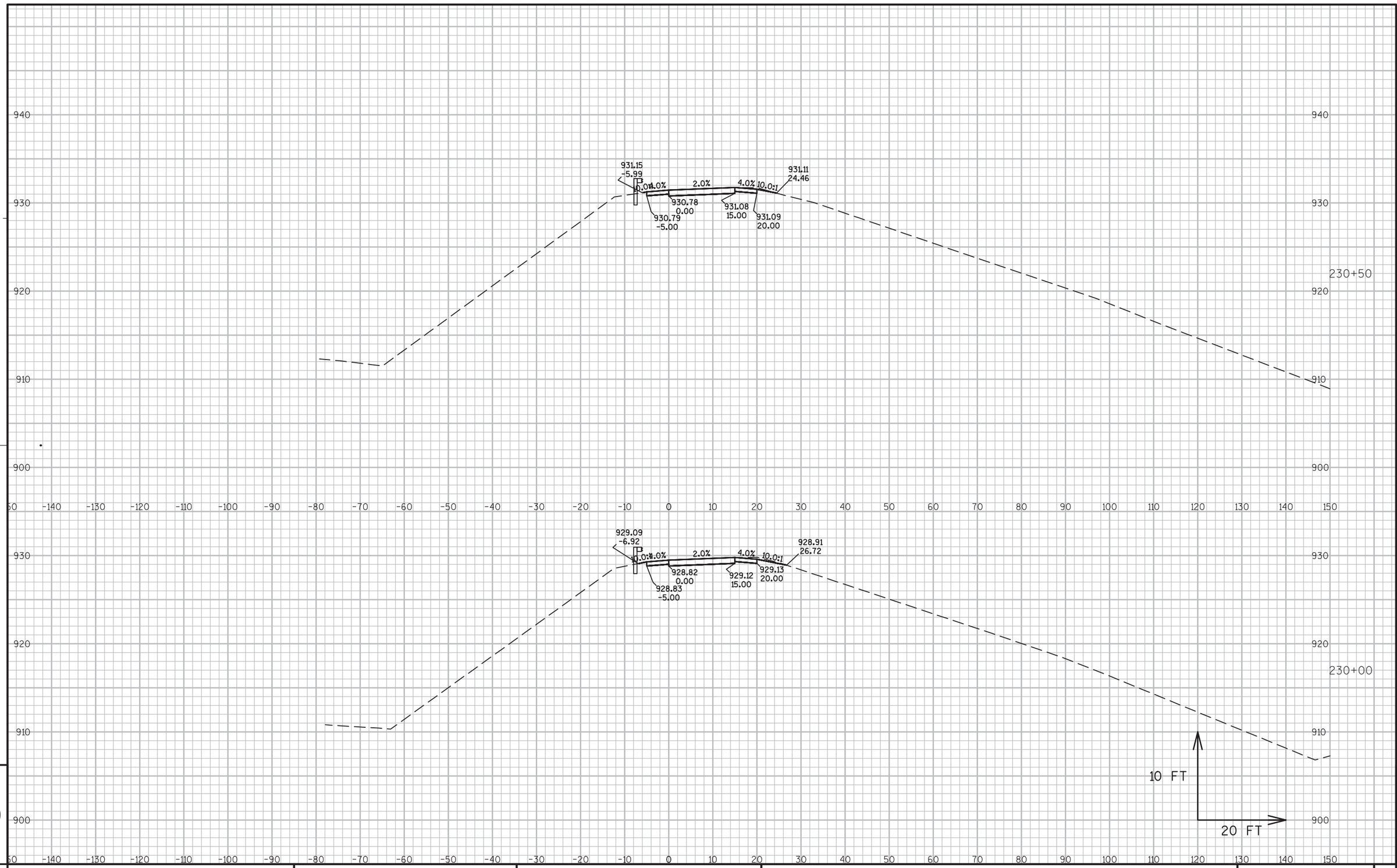
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PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	CROSS SECTIONS: CTH C WB ON RAMP	SHEET	E

FILE NAME : N:\PDS\C3D\13701501\DESIGN\XSECTIONS\XS CTH C WB ON RAMP.DWG PLOT DATE : 4/24/2014 7:25 AM PLOT BY : CONRAD, CHRISTOPHER PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49



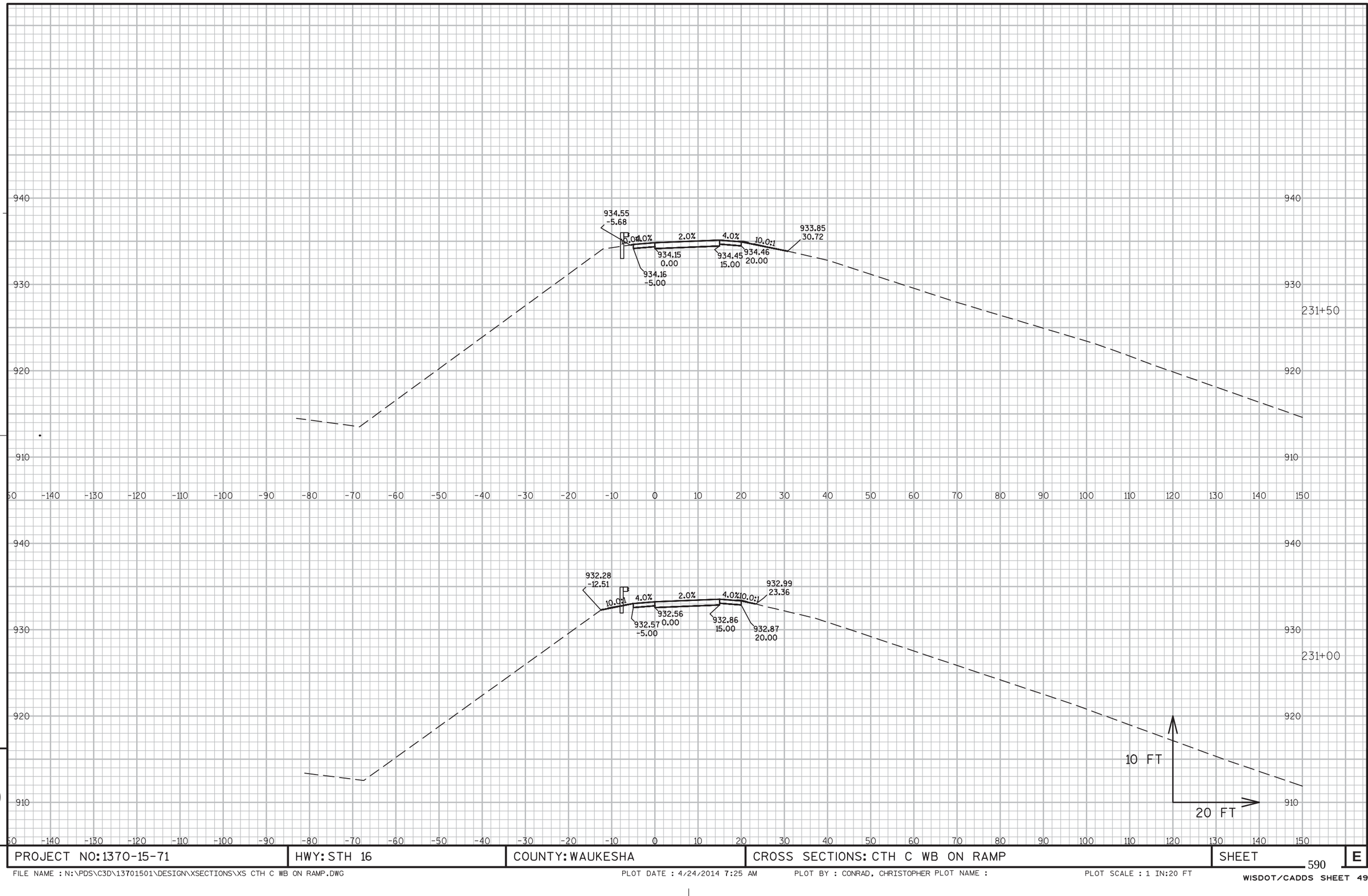
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PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	CROSS SECTIONS: CTH C WB ON RAMP	SHEET	E

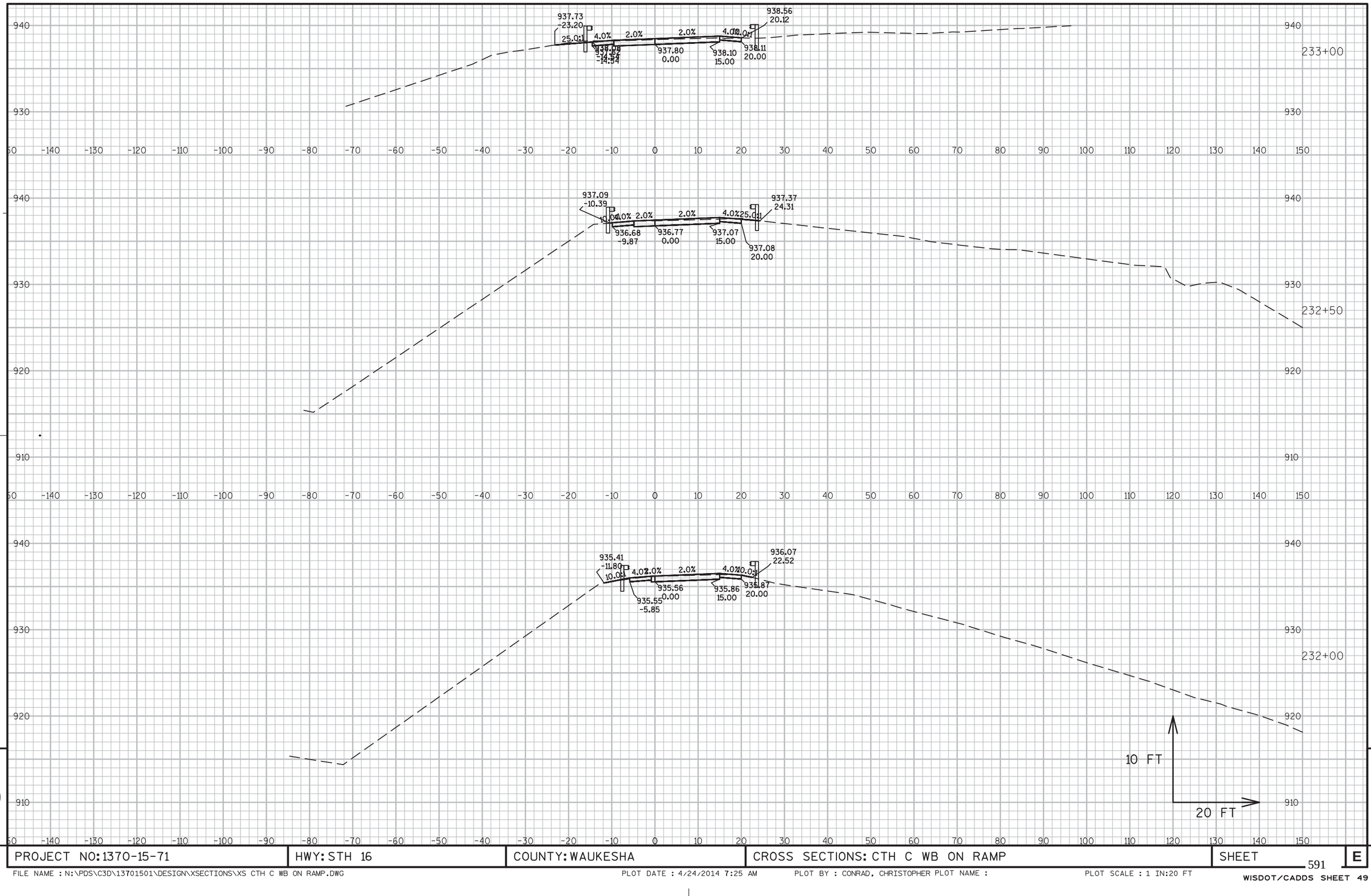
FILE NAME : N:\PDS\C3D\13701501\DESIGN\XSECTIONS\XS CTH C WB ON RAMP.DWG PLOT DATE : 4/24/2014 7:25 AM PLOT BY : CONRAD, CHRISTOPHER PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49



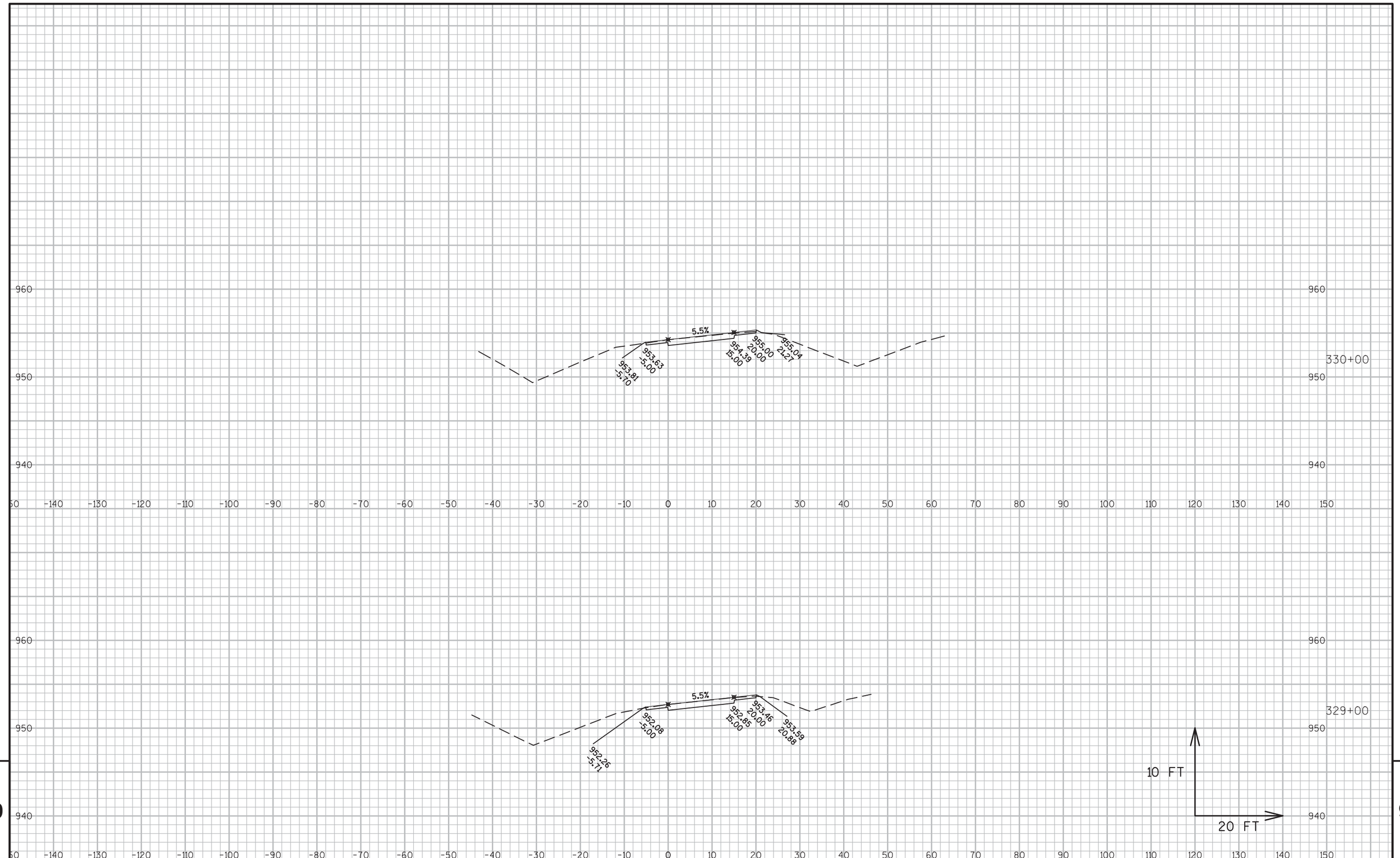
PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	CROSS SECTIONS: CTH C WB ON RAMP	SHEET	E

FILE NAME : N:\PDS\C3D\13701501\DESIGN\XSECTIONS\XS CTH C WB ON RAMP.DWG PLOT DATE : 4/24/2014 7:25 AM PLOT BY : CONRAD, CHRISTOPHER PLOT NAME : PLOT SCALE : 1 IN:20 FT



PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	CROSS SECTIONS: CTH C WB ON RAMP	SHEET	E

FILE NAME : N:\PDS\C3D\13701501\DESIGN\XSECTIONS\XS CTH C WB ON RAMP.DWG PLOT DATE : 4/24/2014 7:25 AM PLOT BY : CONRAD, CHRISTOPHER PLOT NAME : PLOT SCALE : 1 IN:20 FT

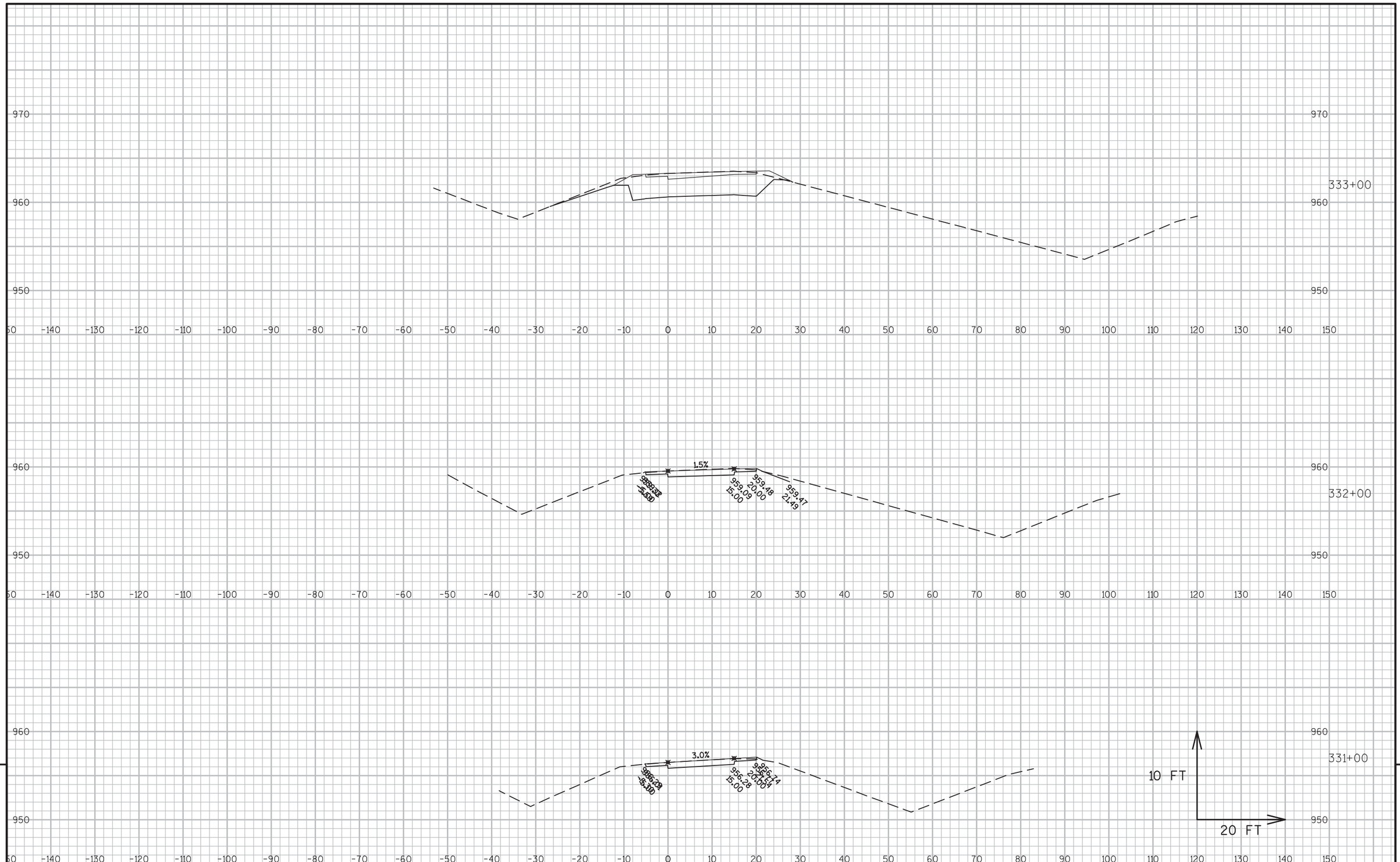


PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	CROSS SECTIONS: STH 83 NW ON RAMP	SHEET 592	E

FILE NAME : N:\PDS\C3D\13701501\SHEETSPLAN\13701571_90201.DWG
LAYOUT NAME - SECTION SHEET - (23)

PLOT DATE : 1/26/2017 2:52 PM PLOT BY : ROTIER, STEVEN J PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49



9

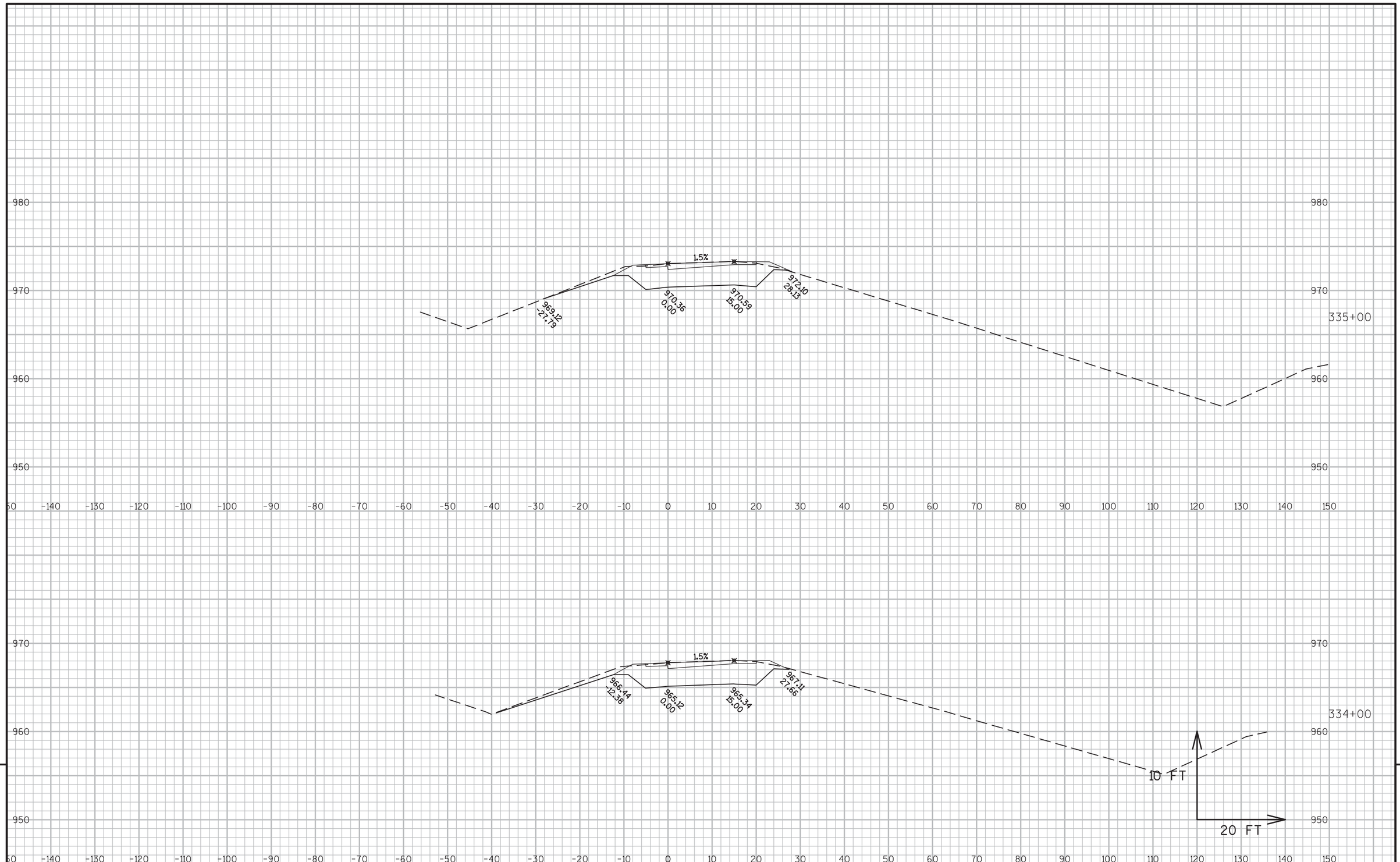
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PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	CROSS SECTIONS: STH 83 NW ON RAMP	SHEET 593	E

FILE NAME : N:\PDS\C3D\13701501\SHEETSPLAN\13701571_90201.DWG
LAYOUT NAME - SECTION SHEET - (24)

PLOT DATE : 1/26/2017 2:52 PM PLOT BY : ROTIER, STEVEN J PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49



9

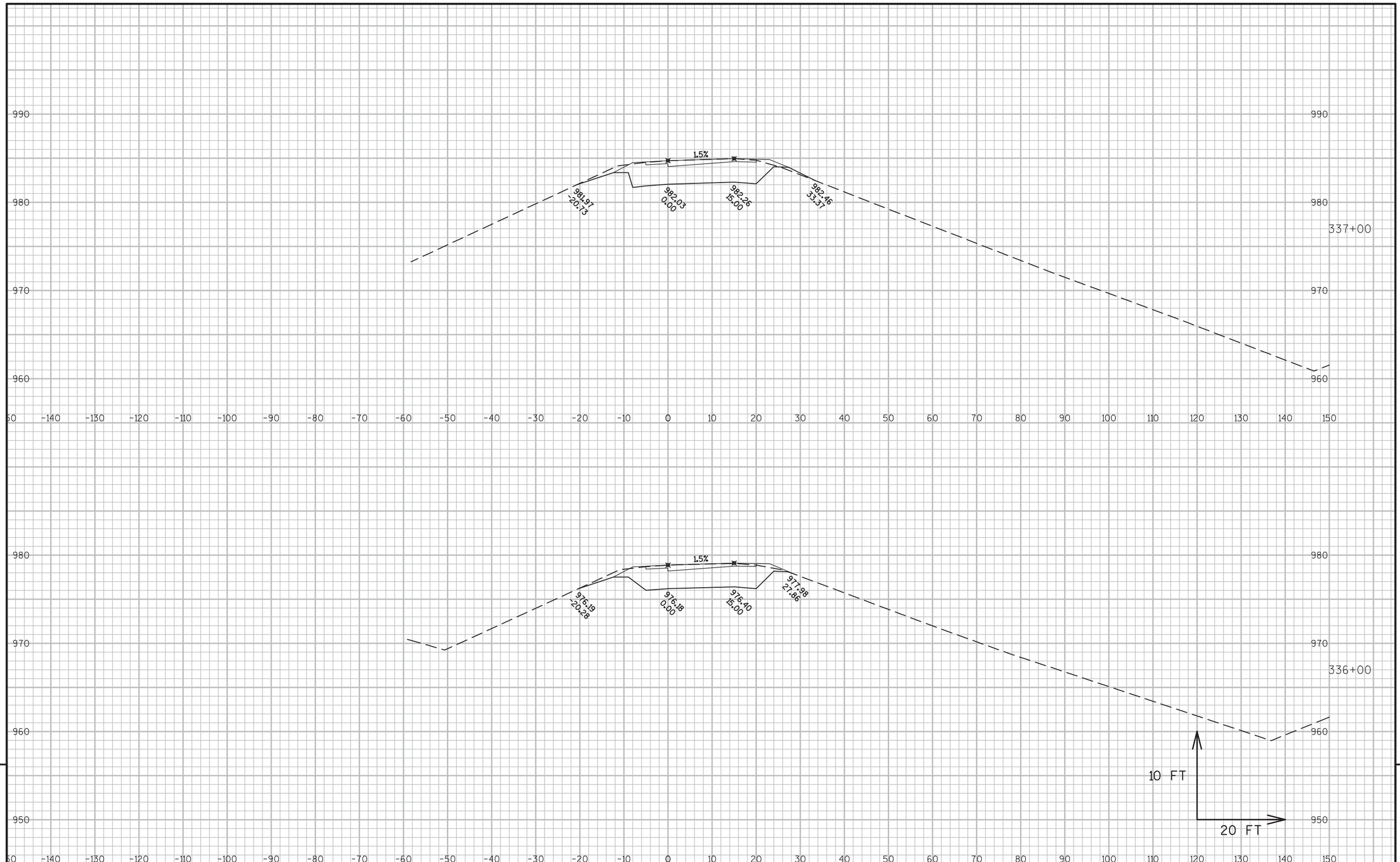
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PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	CROSS SECTIONS: STH 83 NW ON RAMP	SHEET 594 E

FILE NAME : N:\PDS\C3D\13701501\SHEETSPLAN\13701571_90201.DWG
LAYOUT NAME - SECTION SHEET - (25)

PLOT DATE : 1/26/2017 2:52 PM PLOT BY : ROTIER, STEVEN J PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49



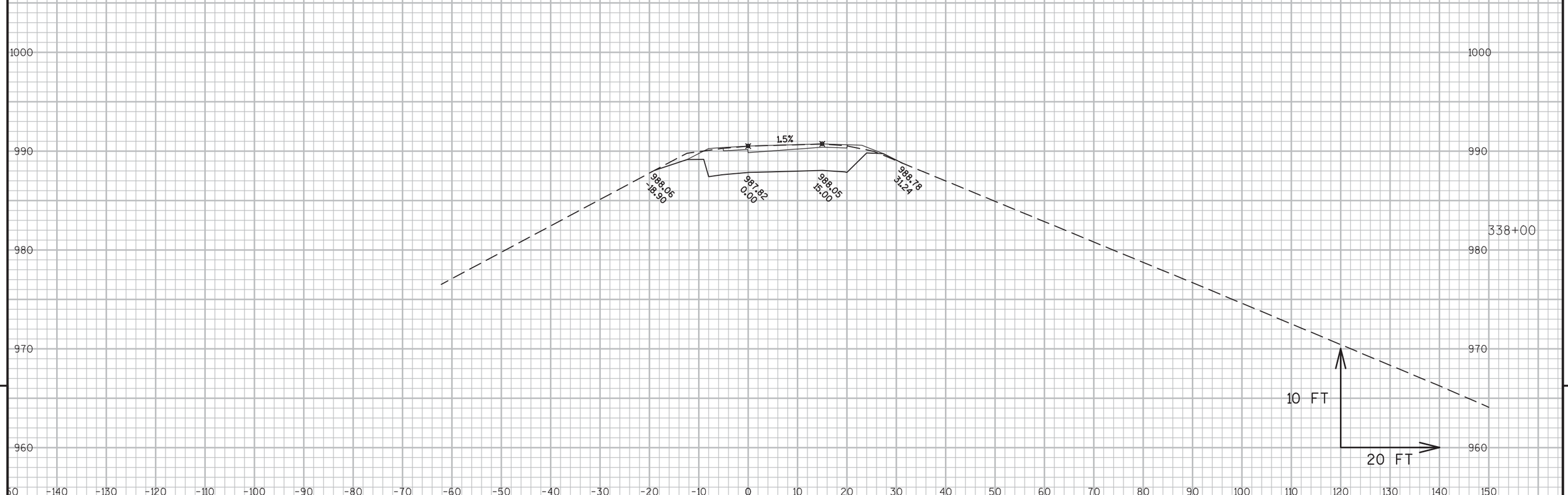
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PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	CROSS SECTIONS: STH 83 NW ON RAMP	SHEET 595	E

FILE NAME : N:\PDS\C3D\13701501\SHEETSPLAN\13701571_90201.DWG
LAYOUT NAME - SECTION SHEET - (26)

PLOT DATE : 1/26/2017 2:52 PM PLOT BY : ROTIER, STEVEN J PLOT NAME : PLOT SCALE : 1 IN:20 FT

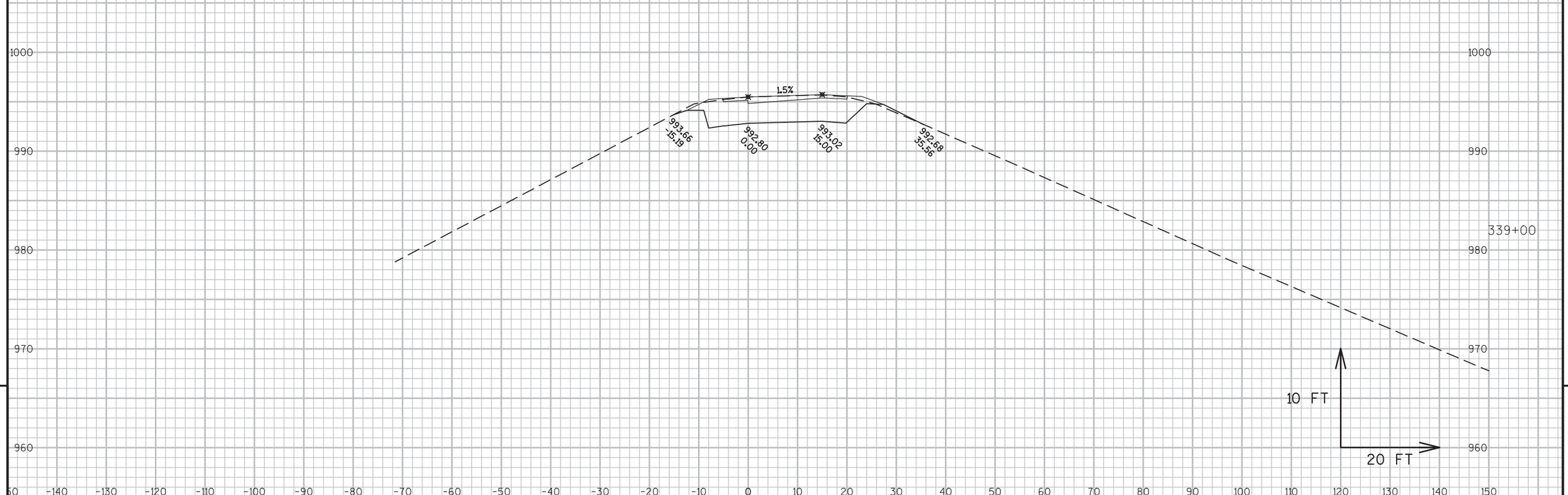


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PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	CROSS SECTIONS: STH 83 NW ON RAMP	SHEET 596	E

FILE NAME : N:\PDS\C3D\13701501\SHEETSPLAN\13701571_90201.DWG
LAYOUT NAME - SECTION SHEET - (27)
PLOT DATE : 1/26/2017 2:52 PM PLOT BY : ROTIER, STEVEN J PLOT NAME : PLOT SCALE : 1 IN:20 FT
WISDOT/CADDS SHEET 49



9

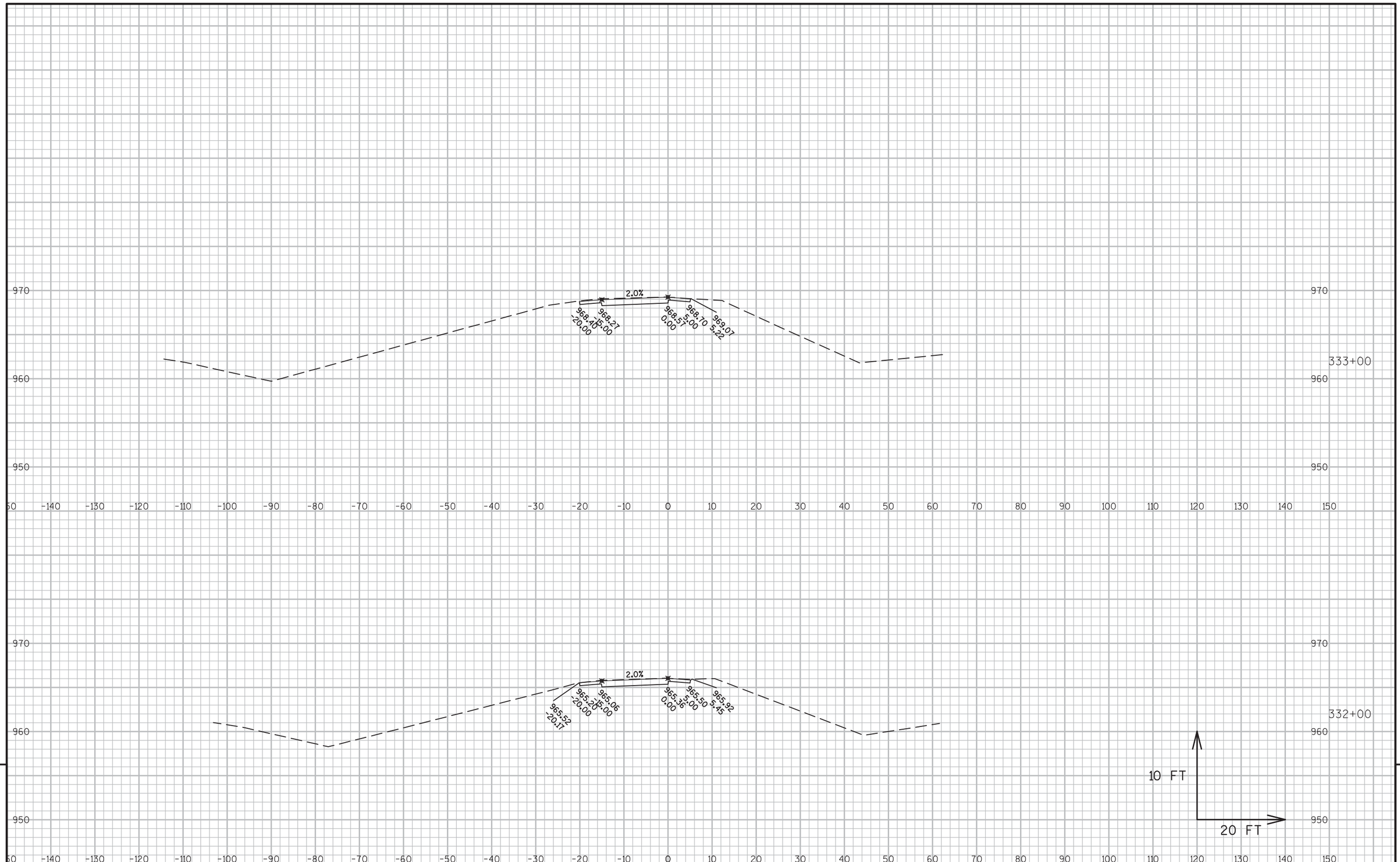
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PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	CROSS SECTIONS: STH 83 NW ON RAMP	SHEET 597	E

FILE NAME : N:\PDS\C3D\13701501\SHEETSPLAN\13701571_90201.DWG
LAYOUT NAME - SECTION SHEET - (28)

PLOT DATE : 1/26/2017 2:52 PM PLOT BY : ROTIER, STEVEN J PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49



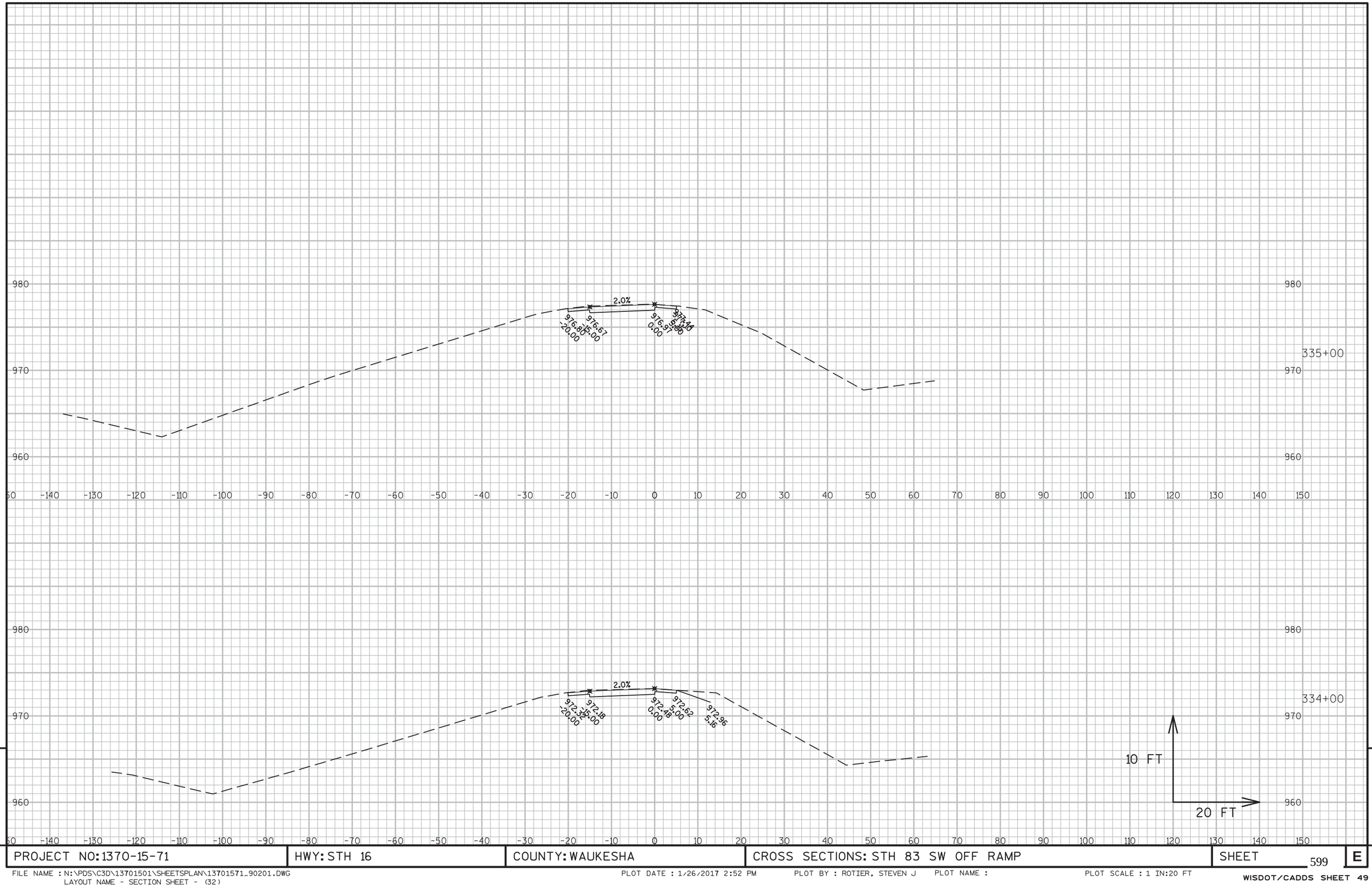
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PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	CROSS SECTIONS: STH 83 SW OFF RAMP	SHEET 598 E

FILE NAME : N:\PDS\C3D\13701501\SHEETSPLAN\13701571_90201.DWG
LAYOUT NAME - SECTION SHEET - (31)

PLOT DATE : 1/26/2017 2:52 PM PLOT BY : ROTIER, STEVEN J PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49



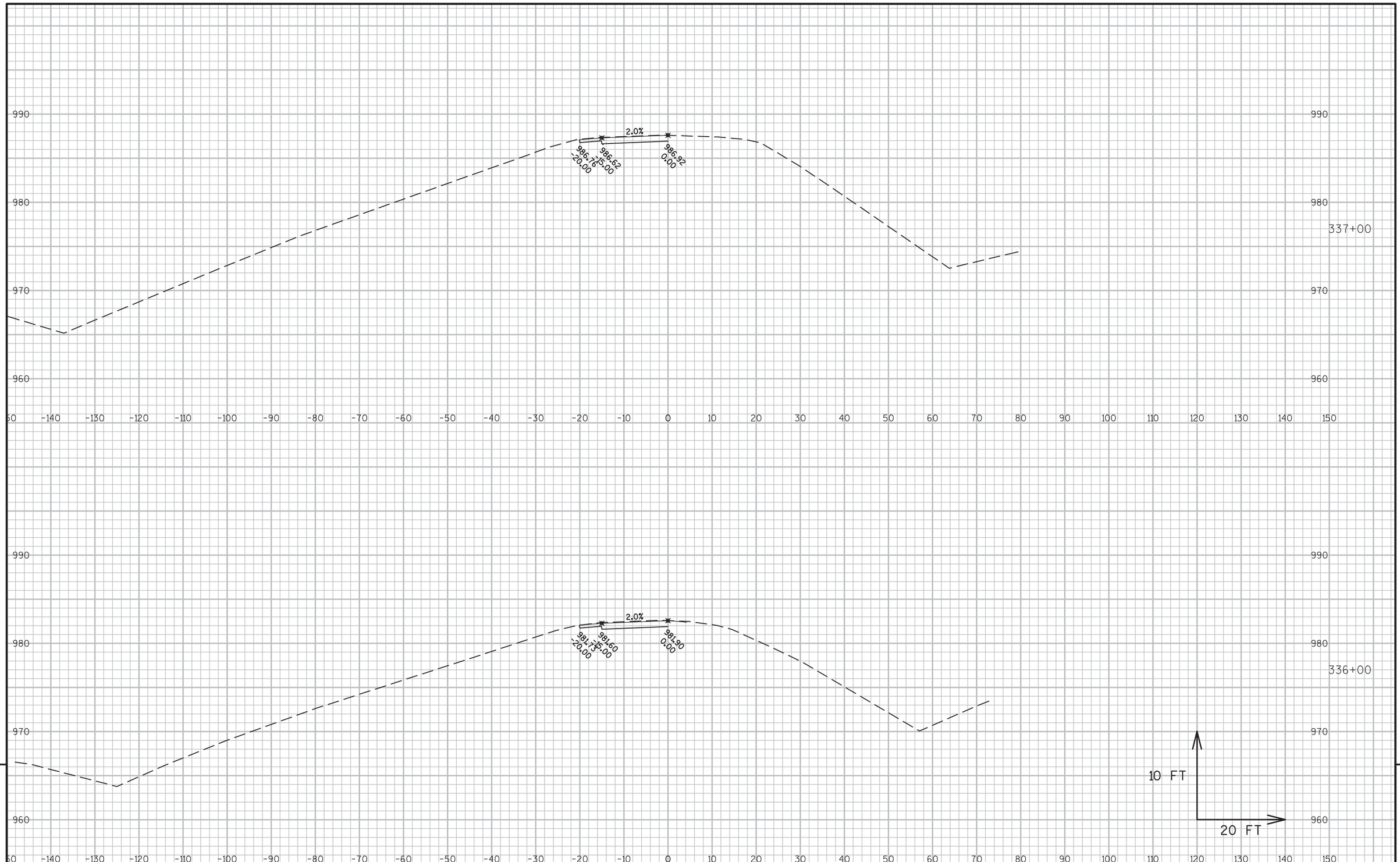
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PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	CROSS SECTIONS: STH 83 SW OFF RAMP	SHEET 599	E

FILE NAME : N:\PDS\C3D\13701501\SHEETSPLAN\13701571_90201.DWG
LAYOUT NAME - SECTION SHEET - (32)

PLOT DATE : 1/26/2017 2:52 PM PLOT BY : ROTIER, STEVEN J PLOT NAME : PLOT SCALE : 1 IN:20 FT



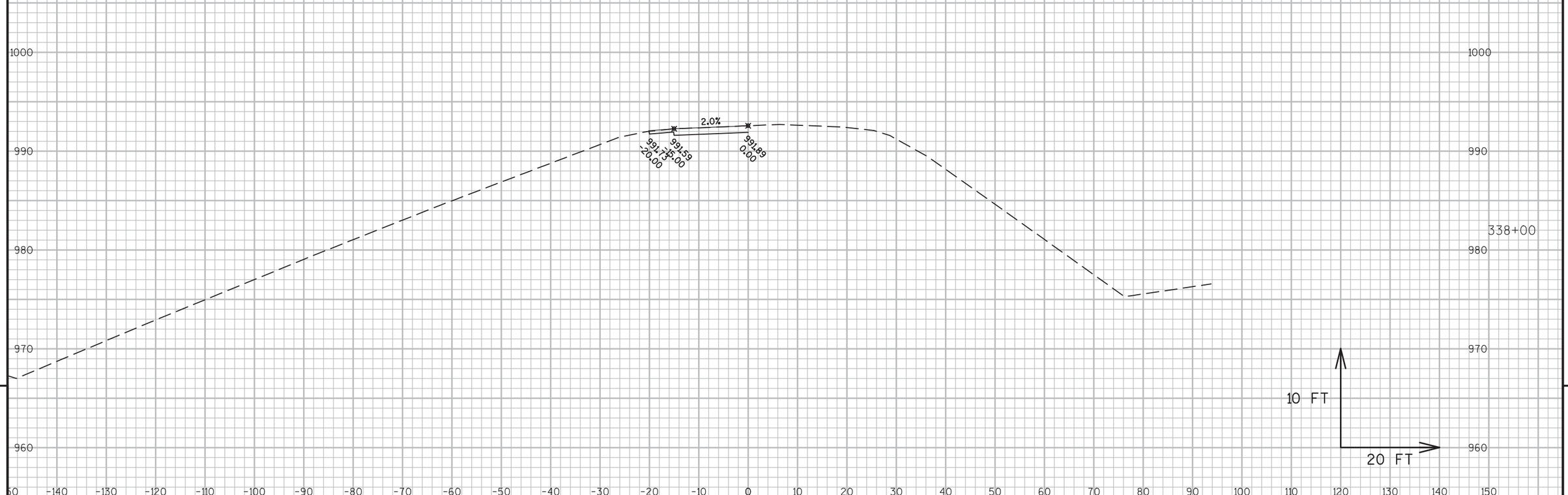
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PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	CROSS SECTIONS: STH 83 SW OFF RAMP	SHEET 600	E

FILE NAME : N:\PDS\C3D\13701501\SHEETSPLAN\13701571_90201.DWG
LAYOUT NAME - SECTION SHEET - (33)

PLOT DATE : 1/26/2017 2:52 PM PLOT BY : ROTIER, STEVEN J PLOT NAME : PLOT SCALE : 1 IN:20 FT



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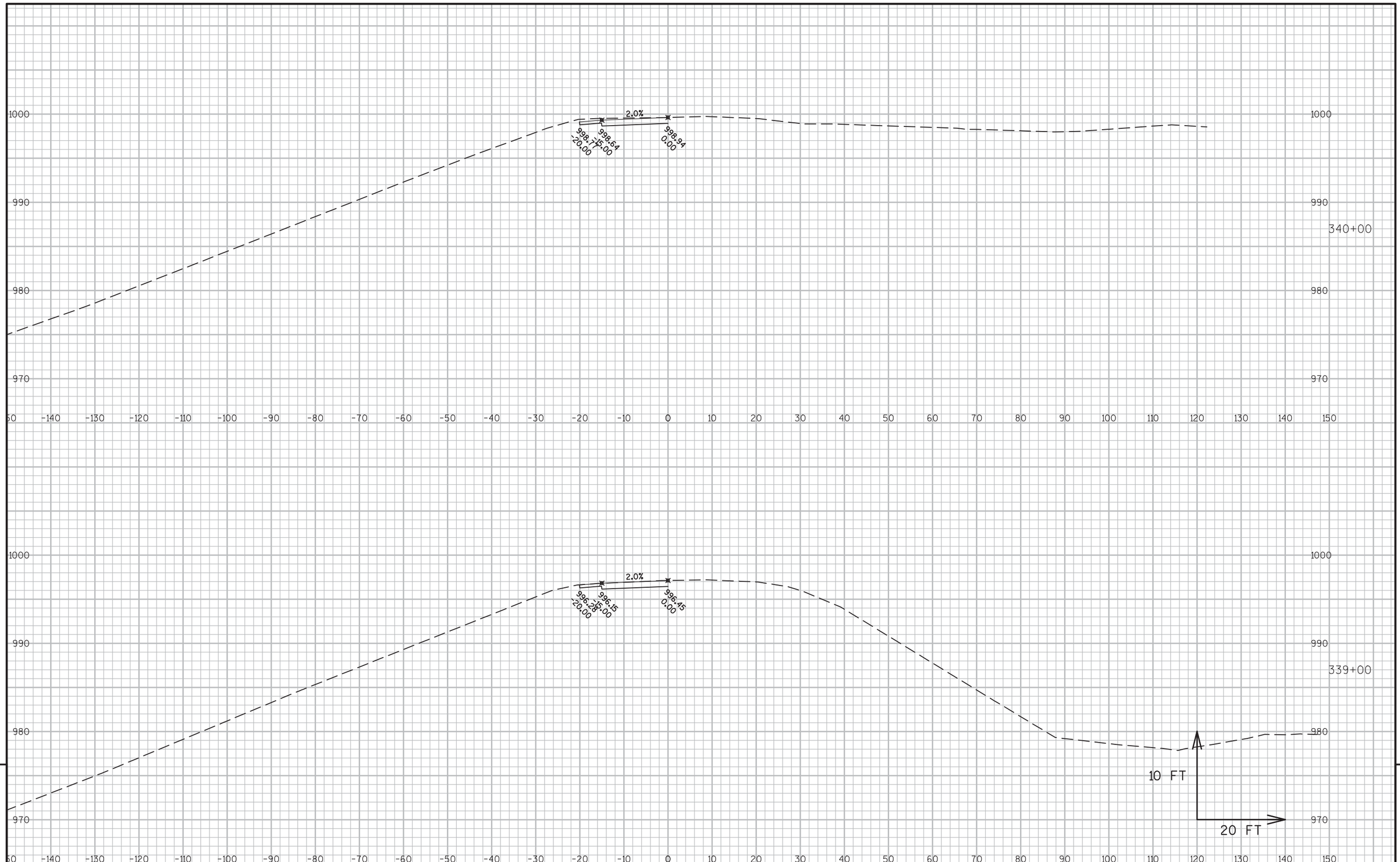
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PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	CROSS SECTIONS: STH 83 SW OFF RAMP	SHEET 601	E

FILE NAME : N:\PDS\C3D\13701501\SHEETSPLAN\13701571_90201.DWG
LAYOUT NAME - SECTION SHEET - (34)

PLOT DATE : 1/26/2017 2:52 PM PLOT BY : ROTIER, STEVEN J PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49



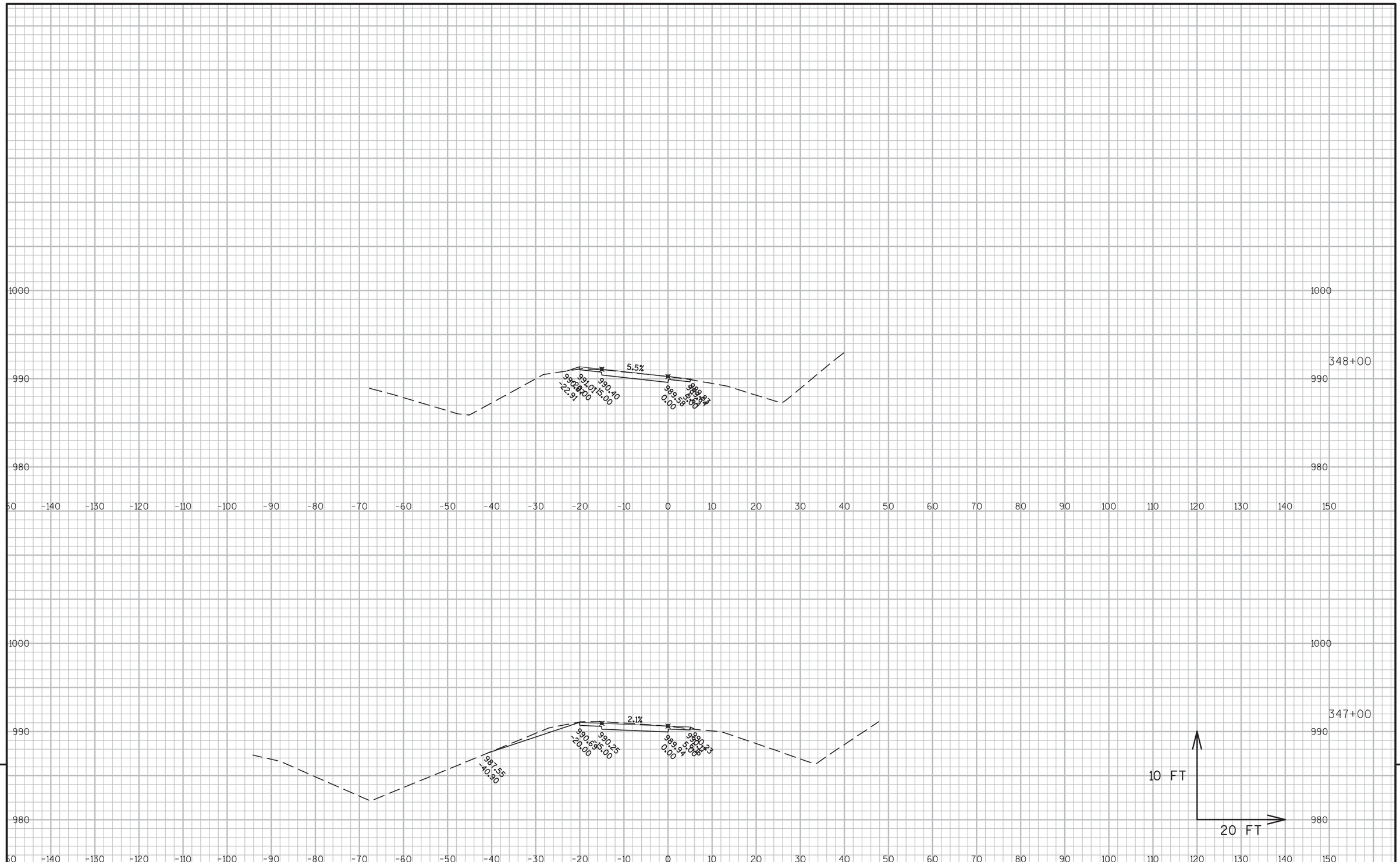
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PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	CROSS SECTIONS: STH 83 SW OFF RAMP	SHEET 602 E

FILE NAME : N:\PDS\C3D\13701501\SHEETSPLAN\13701571_90201.DWG
LAYOUT NAME - SECTION SHEET - (35)

PLOT DATE : 1/26/2017 2:52 PM PLOT BY : ROTIER, STEVEN J PLOT NAME : PLOT SCALE : 1 IN:20 FT



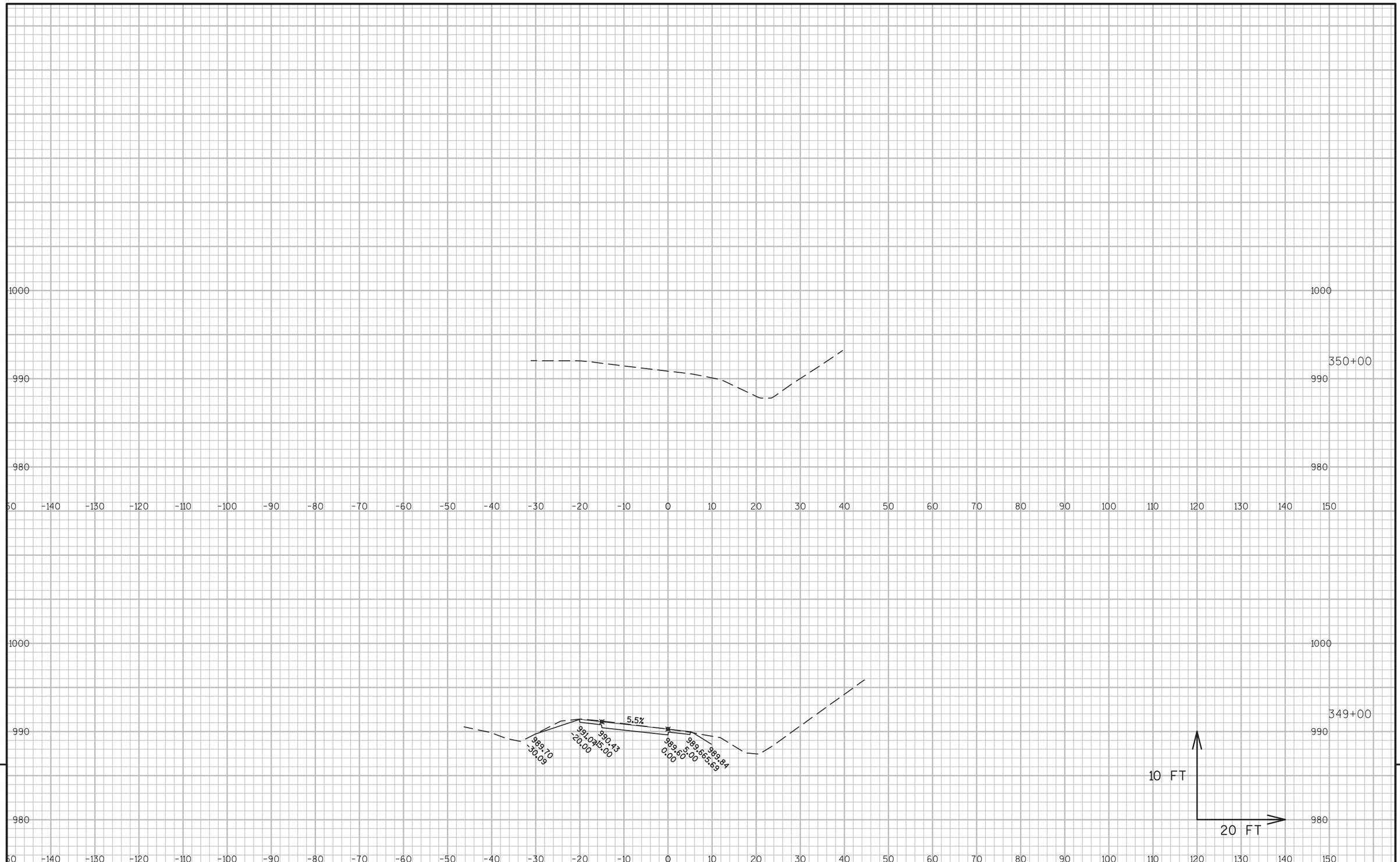
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PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	CROSS SECTIONS: STH 83 SE ON RAMP	SHEET 603	E

FILE NAME : N:\PDS\C3D\13701501\SHEETSPLAN\13701571_90201.DWG
LAYOUT NAME - SECTION SHEET - (46)

PLOT DATE : 1/26/2017 2:52 PM PLOT BY : ROTIER, STEVEN J PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49



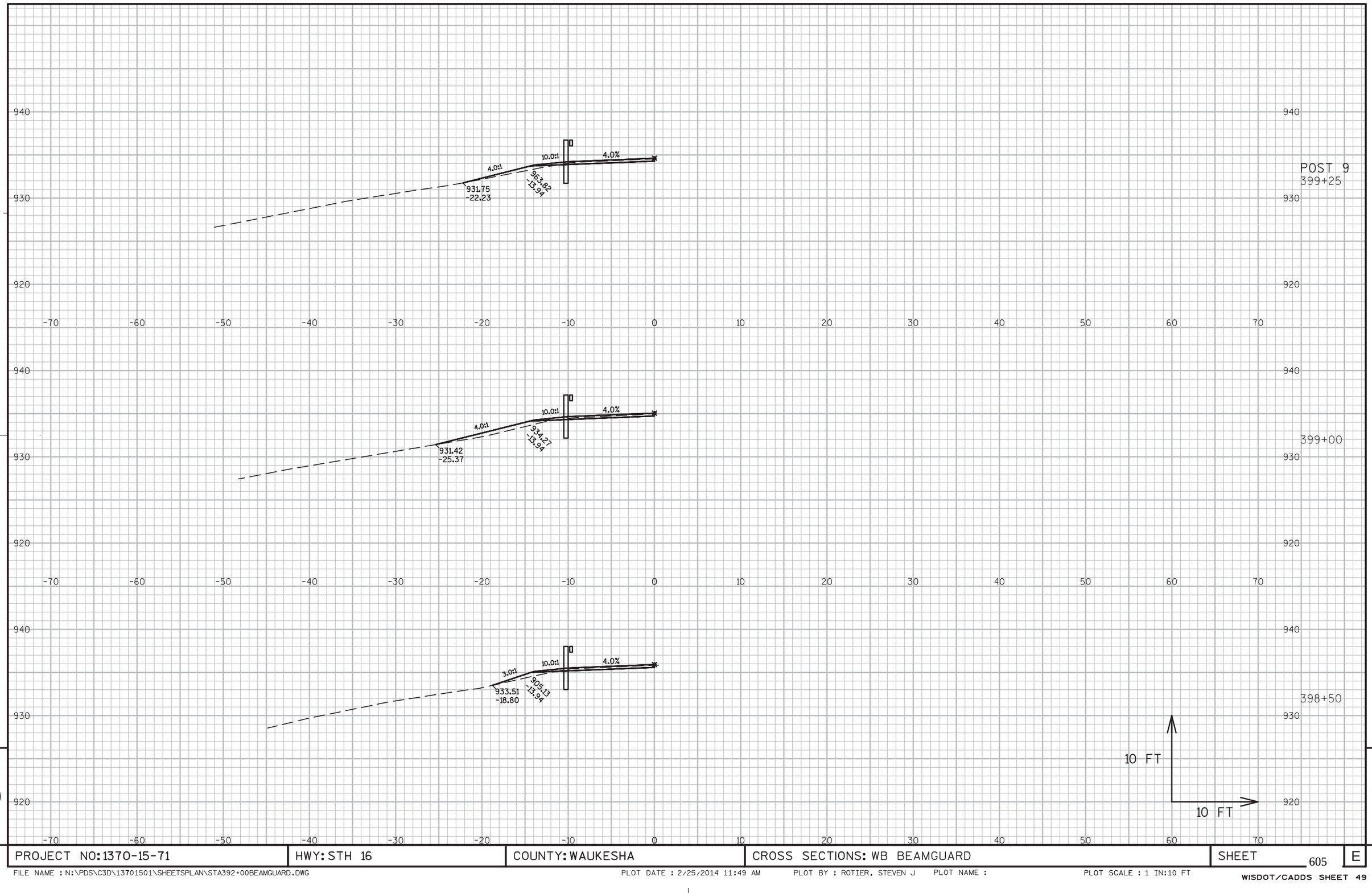
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PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	CROSS SECTIONS: STH 83 SE ON RAMP	SHEET 604	E

FILE NAME : N:\PDS\C3D\13701501\SHEETSPLAN\13701571_90201.DWG
LAYOUT NAME - SECTION SHEET - (47)

PLOT DATE : 1/26/2017 2:52 PM PLOT BY : ROTIER, STEVEN J PLOT NAME : PLOT SCALE : 1 IN:20 FT



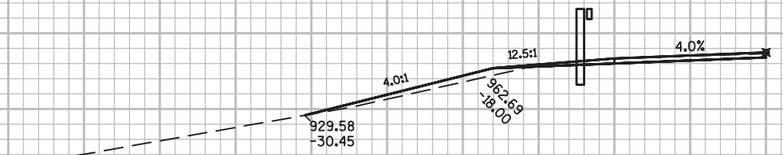
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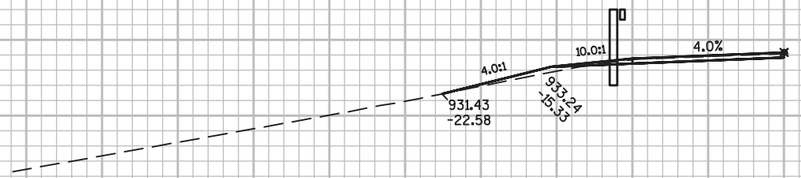
PROJECT NO:1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	CROSS SECTIONS: WB BEAMGUARD	SHEET 605	E

FILE NAME : N:\PDS\C3D\13701501\SHEETSPLAN\STA392+00BEAMGUARD.DWG PLOT DATE : 2/25/2014 11:49 AM PLOT BY : ROTIER, STEVEN J PLOT NAME : PLOT SCALE : 1 IN:10 FT

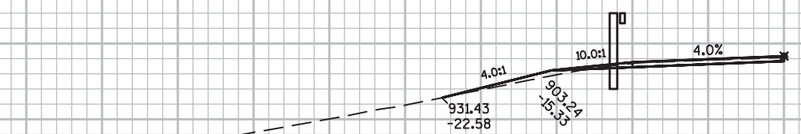
POST 1 (EAT TERMINAL)
399+75

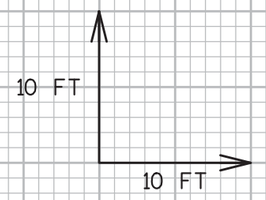


POST 5
399+50



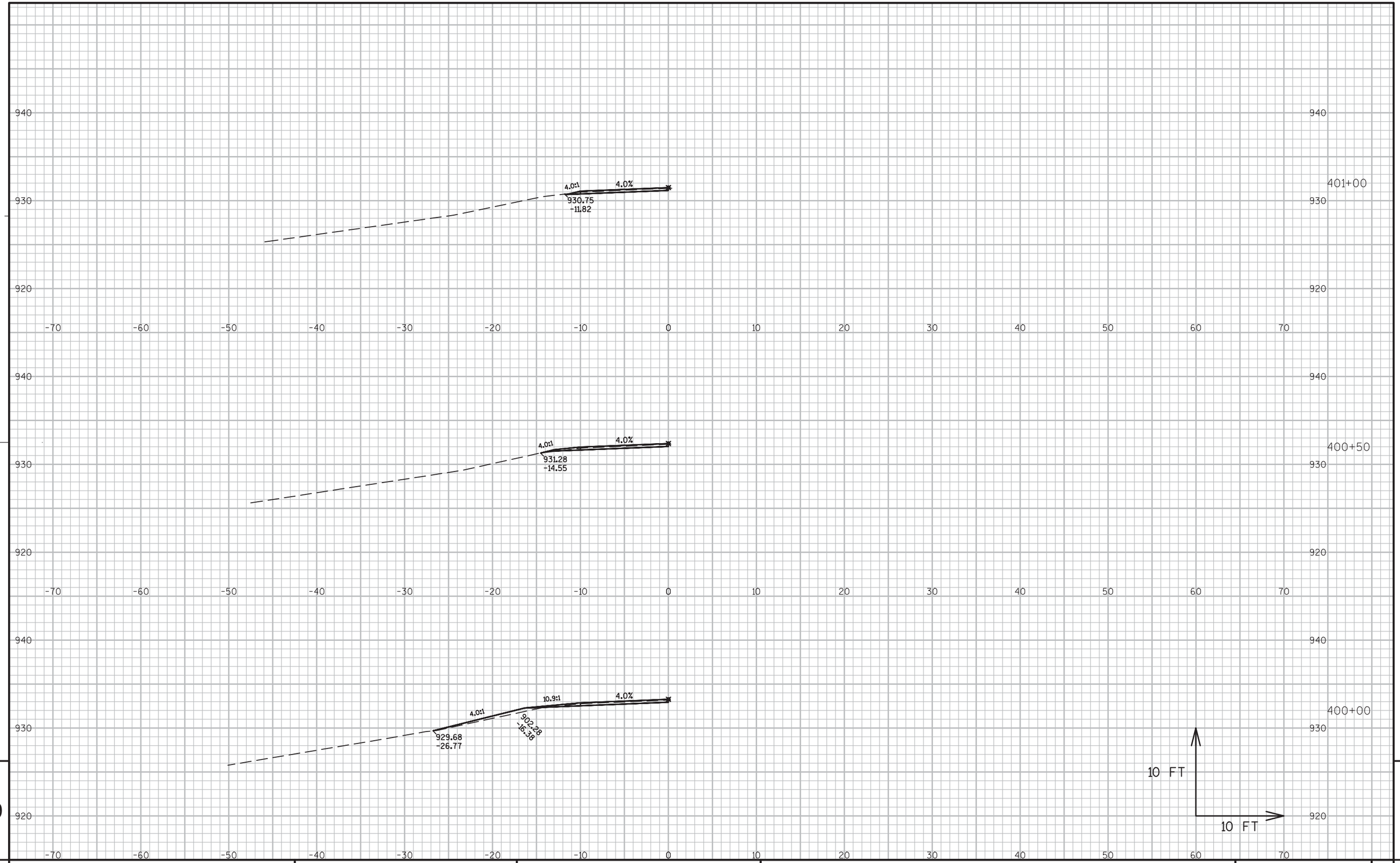
399+50





PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	CROSS SECTIONS: WB BEAMGUARD	SHEET 606	E

FILE NAME : N:\PDS\C3D\13701501\SHEETSPLAN\STA392+00BEAMGUARD.DWG PLOT DATE : 2/25/2014 11:49 AM PLOT BY : ROTIER, STEVEN J PLOT NAME : PLOT SCALE : 1 IN:10 FT

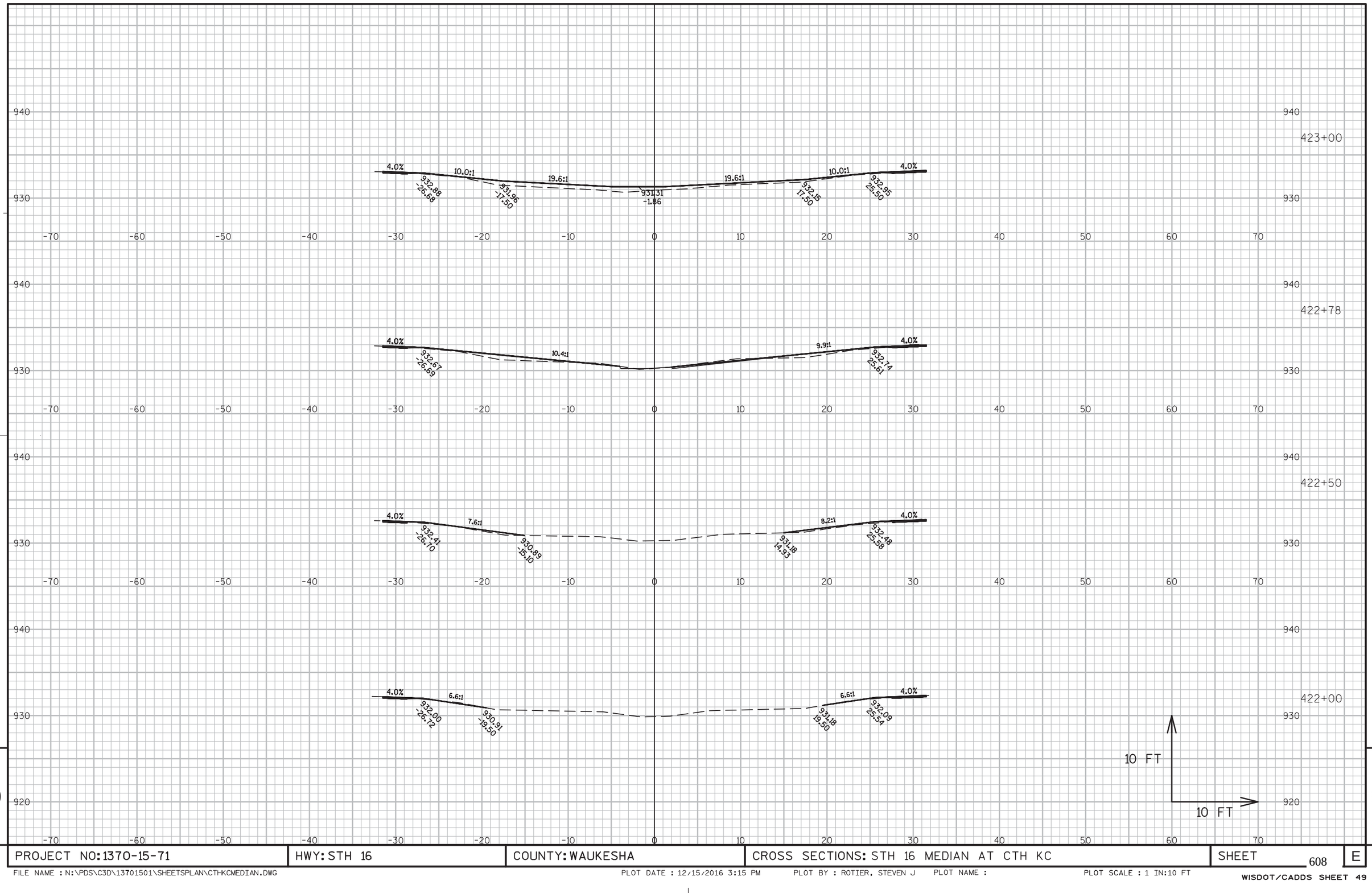


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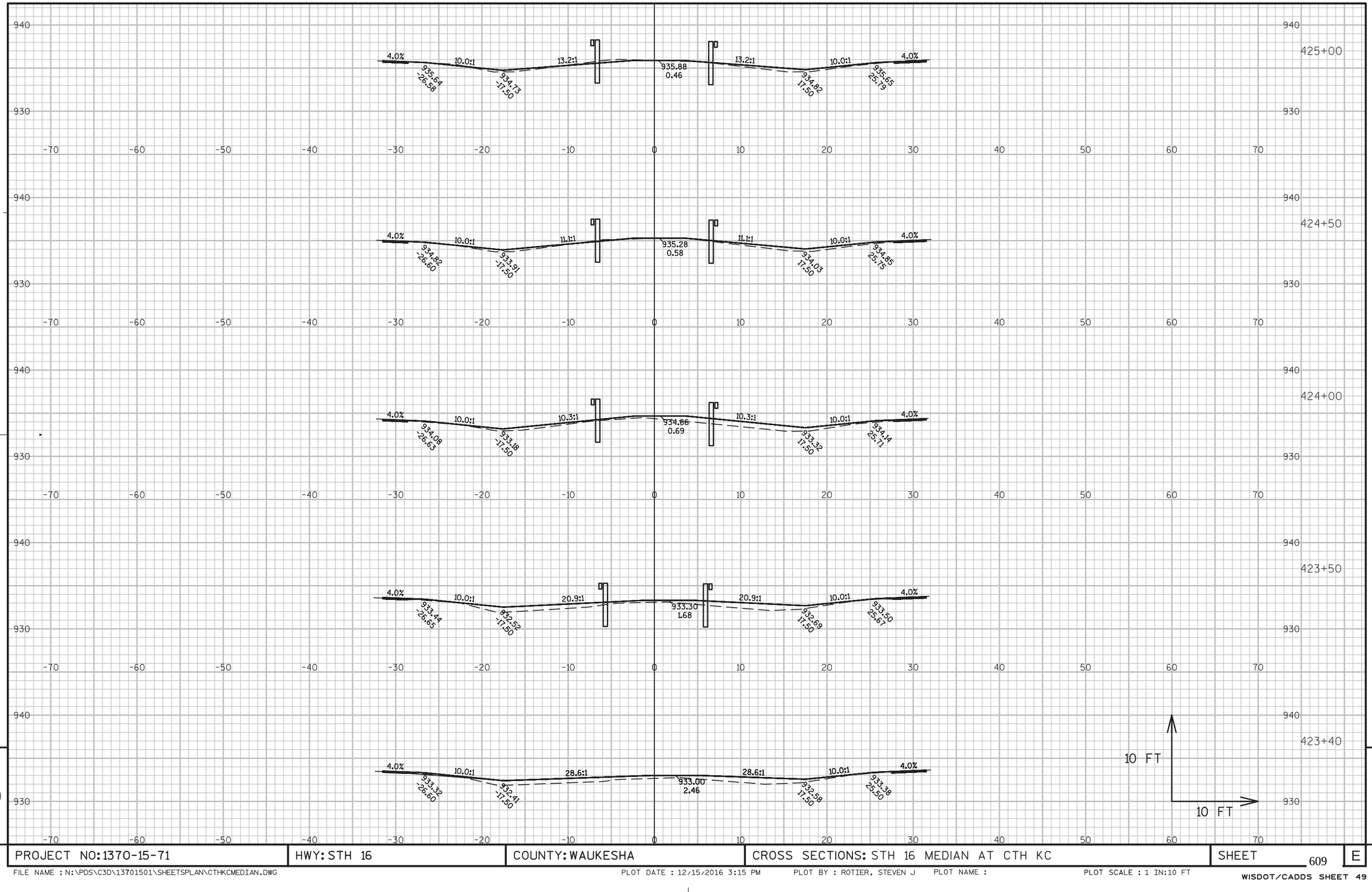
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PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	CROSS SECTIONS: WB BEAMGUARD	SHEET 607	E

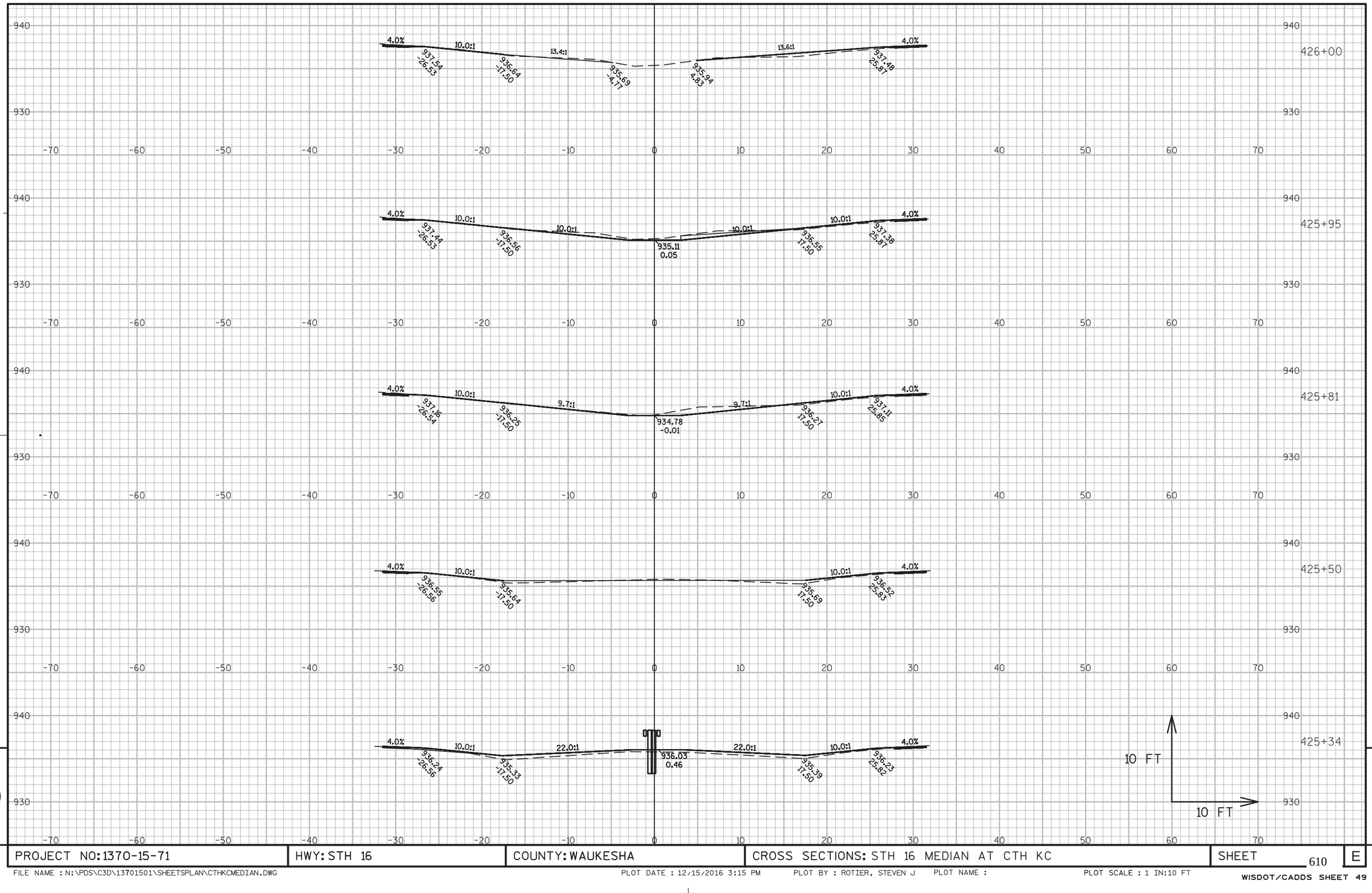
FILE NAME : N:\PDS\C3D\13701501\SHEETSPLAN\STA392+00BEAMGUARD.DWG PLOT DATE : 2/25/2014 11:49 AM PLOT BY : ROTIER, STEVEN J PLOT NAME : PLOT SCALE : 1 IN:10 FT



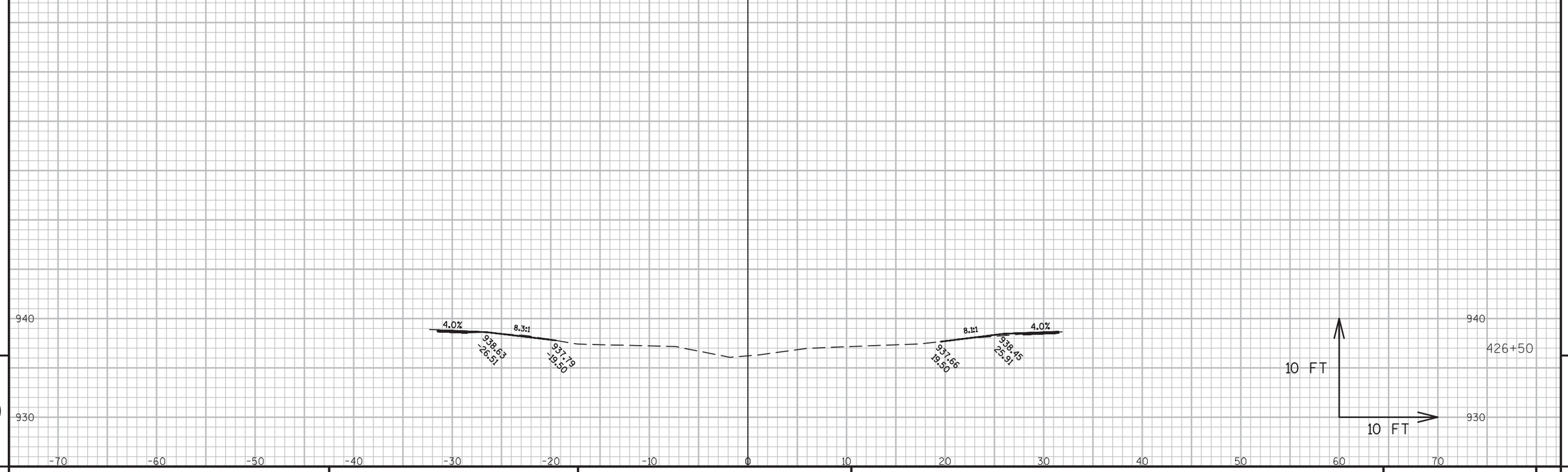
PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	CROSS SECTIONS: STH 16 MEDIAN AT CTH KC	SHEET 608	E



PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	CROSS SECTIONS: STH 16 MEDIAN AT CTH KC	SHEET 609	E



PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	CROSS SECTIONS: STH 16 MEDIAN AT CTH KC	SHEET 610	E



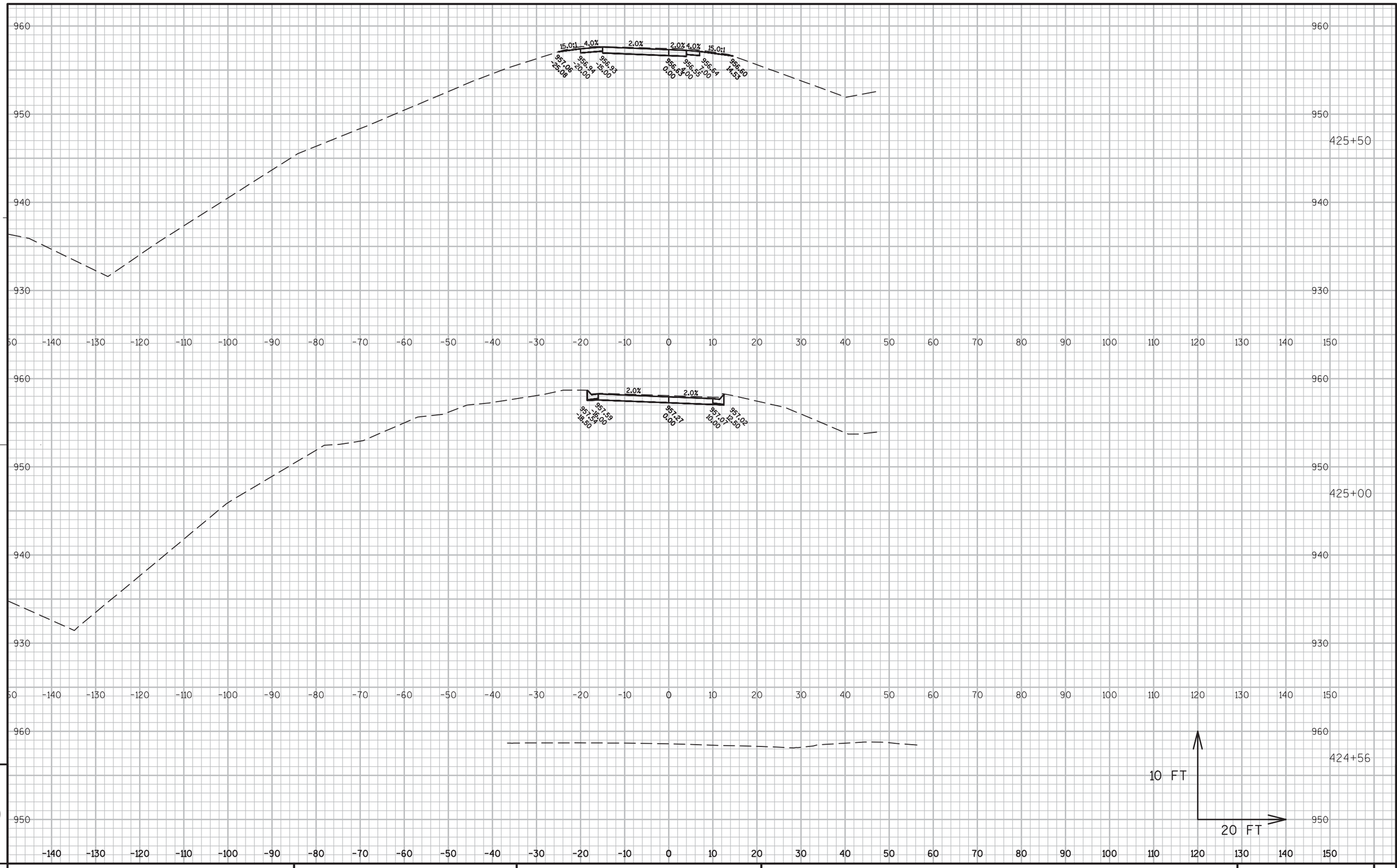
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PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	CROSS SECTIONS: STH 16 MEDIAN AT CTH KC	SHEET 611	E

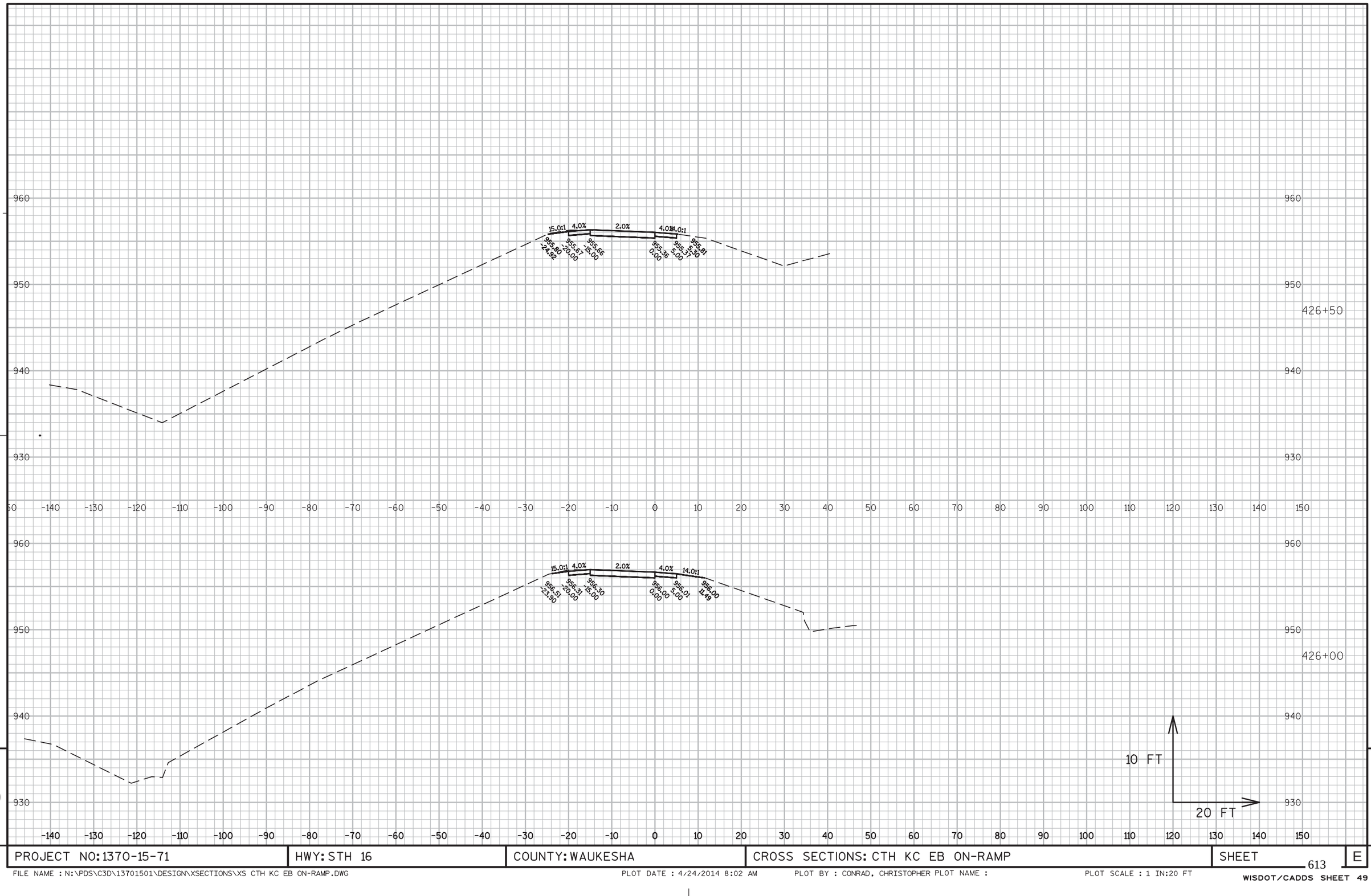
FILE NAME : N:\PDS\C3D\13701501\SHEETSPLAN\CTHKCMEDIAN.DWG PLOT DATE : 12/15/2016 3:15 PM PLOT BY : ROTIER, STEVEN J PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49



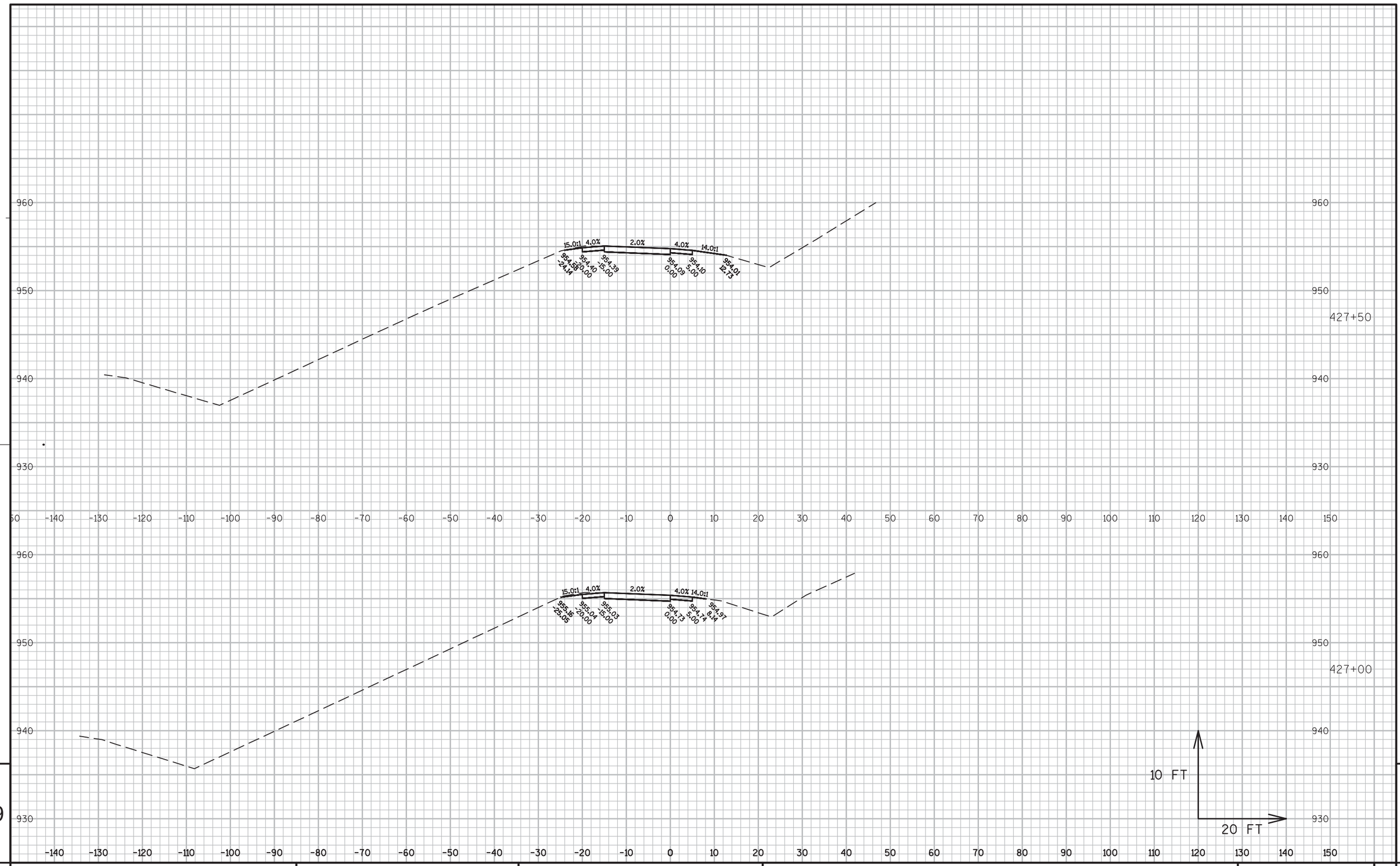
PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	CROSS SECTIONS: CTH KC EB ON-RAMP	SHEET	E

FILE NAME : N:\PDS\C3D\13701501\DESIGN\XSECTIONS\XS CTH KC EB ON-RAMP.DWG PLOT DATE : 4/24/2014 8:02 AM PLOT BY : CONRAD, CHRISTOPHER PLOT NAME : PLOT SCALE : 1 IN:20 FT



PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	CROSS SECTIONS: CTH KC EB ON-RAMP	SHEET	E

FILE NAME : N:\PDS\C3D\13701501\DESIGN\XSECTIONS\XS CTH KC EB ON-RAMP.DWG PLOT DATE : 4/24/2014 8:02 AM PLOT BY : CONRAD, CHRISTOPHER PLOT NAME : PLOT SCALE : 1 IN:20 FT

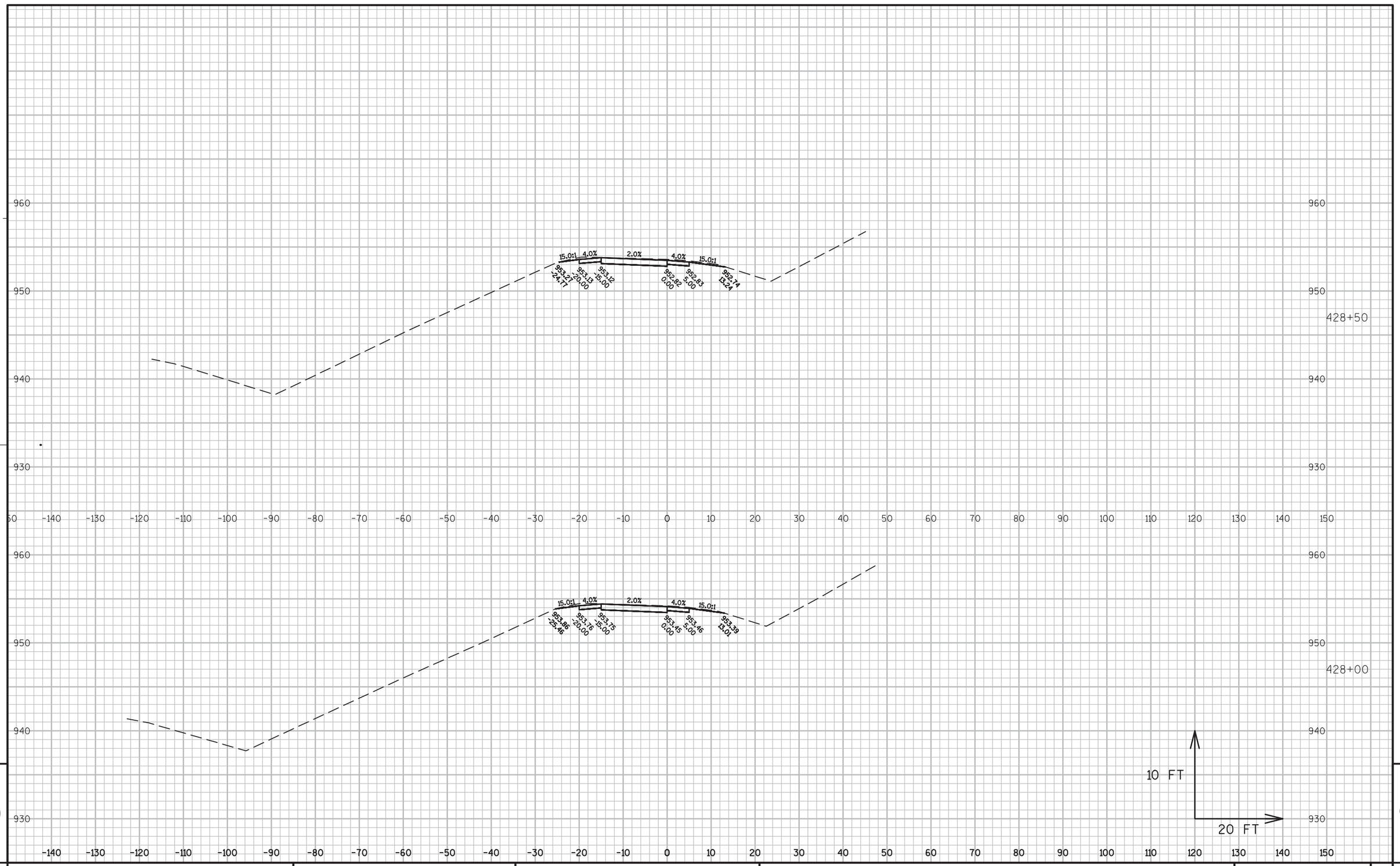


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PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	CROSS SECTIONS: CTH KC EB ON-RAMP	SHEET 614	E

FILE NAME : N:\PDS\C3D\13701501\DESIGN\XSECTIONS\XS CTH KC EB ON-RAMP.DWG PLOT DATE : 4/24/2014 8:02 AM PLOT BY : CONRAD, CHRISTOPHER PLOT NAME : PLOT SCALE : 1 IN:20 FT

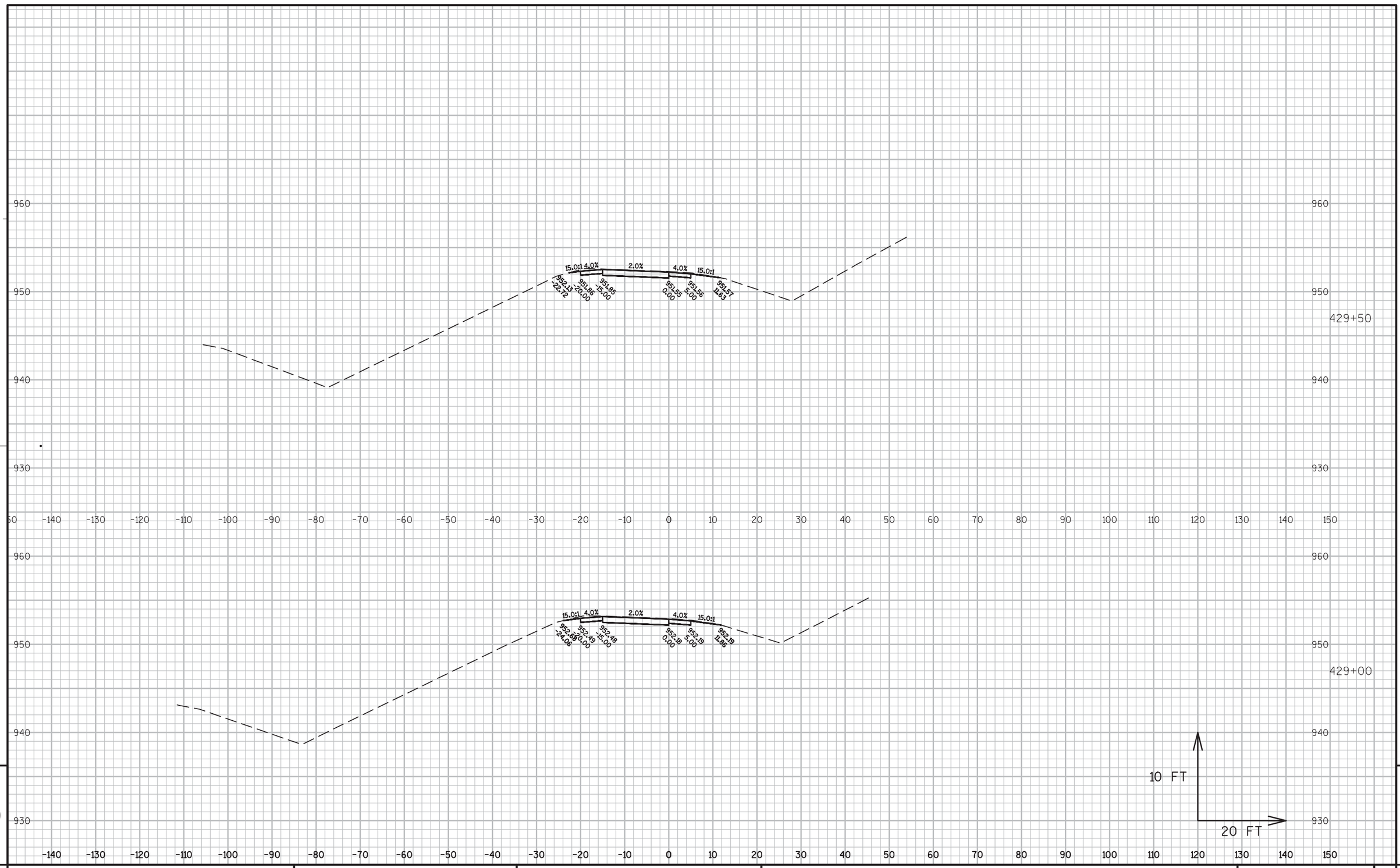
WISDOT/CADDS SHEET 49



PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	CROSS SECTIONS: CTH KC EB ON-RAMP	SHEET 615	E

FILE NAME : N:\PDS\C3D\13701501\DESIGN\XSECTIONS\XS CTH KC EB ON-RAMP.DWG PLOT DATE : 4/24/2014 8:02 AM PLOT BY : CONRAD, CHRISTOPHER PLOT NAME : PLOT SCALE : 1 IN:20 FT

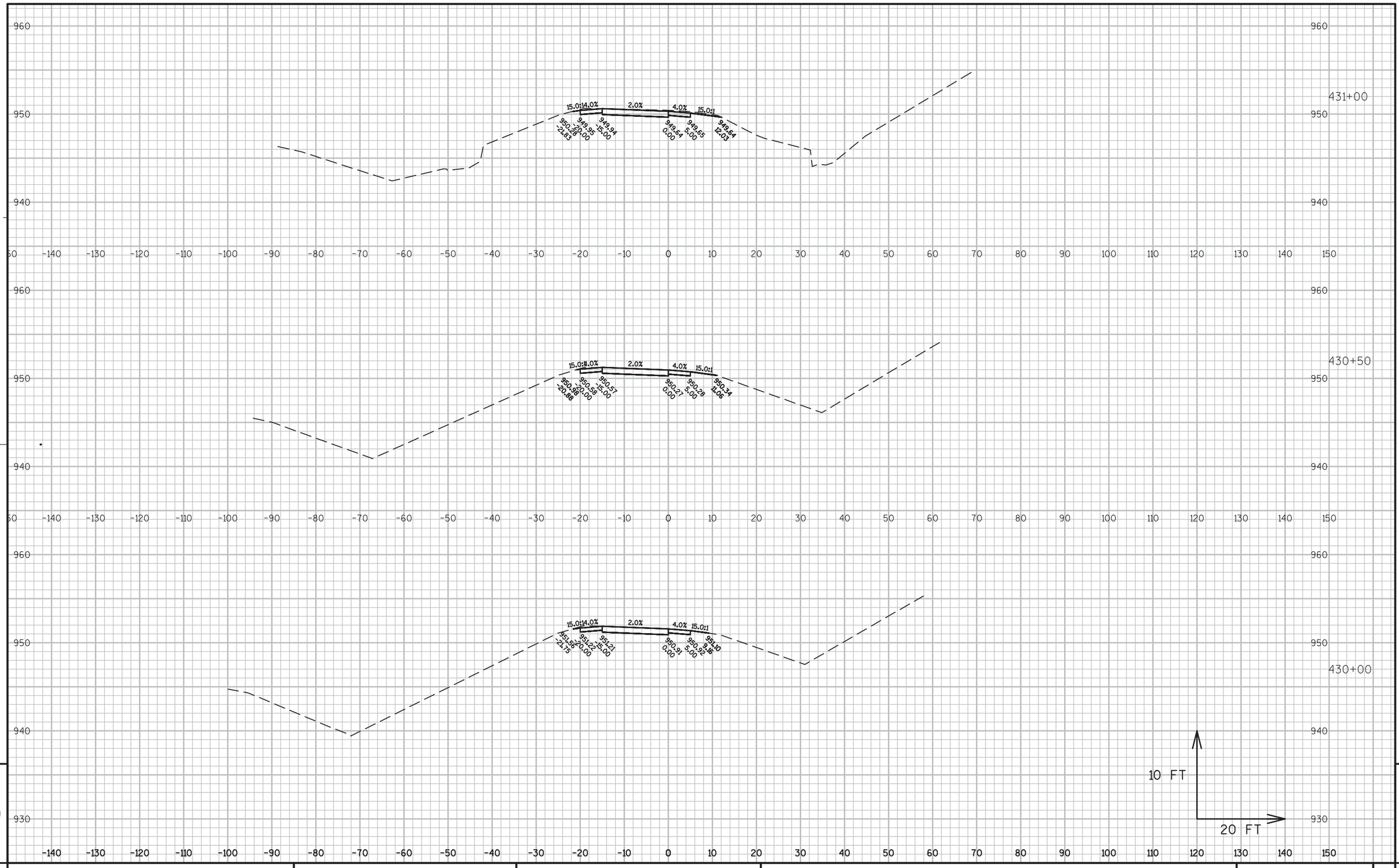
WISDOT/CADDS SHEET 49



PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	CROSS SECTIONS: CTH KC EB ON-RAMP	SHEET 616	E

FILE NAME : N:\PDS\C3D\13701501\DESIGN\XSECTIONS\XS CTH KC EB ON-RAMP.DWG PLOT DATE : 4/24/2014 8:02 AM PLOT BY : CONRAD, CHRISTOPHER PLOT NAME : PLOT SCALE : 1 IN:20 FT

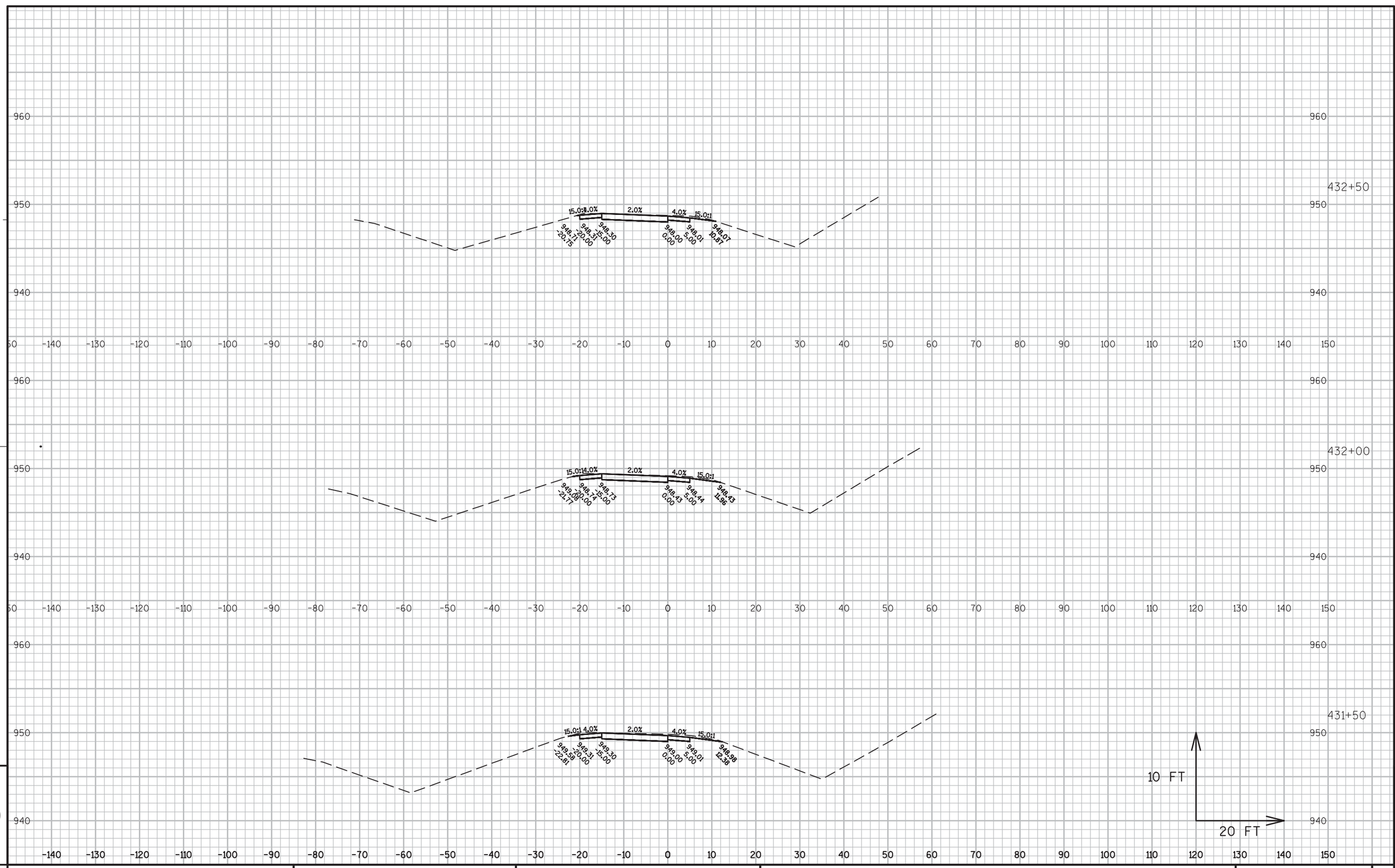
WISDOT/CADDS SHEET 49



PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	CROSS SECTIONS: CTH KC EB ON-RAMP	SHEET	E

FILE NAME : N:\PDS\C3D\13701501\DESIGN\XSECTIONS\XS CTH KC EB ON-RAMP.DWG PLOT DATE : 4/24/2014 8:02 AM PLOT BY : CONRAD, CHRISTOPHER PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	CROSS SECTIONS: CTH KC EB ON-RAMP	SHEET	E

618

FILE NAME : N:\PDS\C3D\13701501\DESIGN\XSECTIONS\XS CTH KC EB ON-RAMP.DWG PLOT DATE : 4/24/2014 8:02 AM PLOT BY : CONRAD, CHRISTOPHER PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49

960
950
940
-150 -140 -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

434+00

15.0:1 4.0% 2.0% 4.0% 15.0:1
948.35 -20.48
947.91 -5.00
947.90 -15.00
947.60 0.00
947.61 5.00
947.59 12.09

433+50

15.0:1 4.0% 2.0% 4.0% 15.0:1
948.35 -20.35
947.88 -5.00
947.88 -15.00
947.59 0.00
947.59 5.00
947.64 11.49

433+00

15.0:1 4.0% 2.0% 4.0% 15.0:1
948.35 -20.50
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948.02 -15.00
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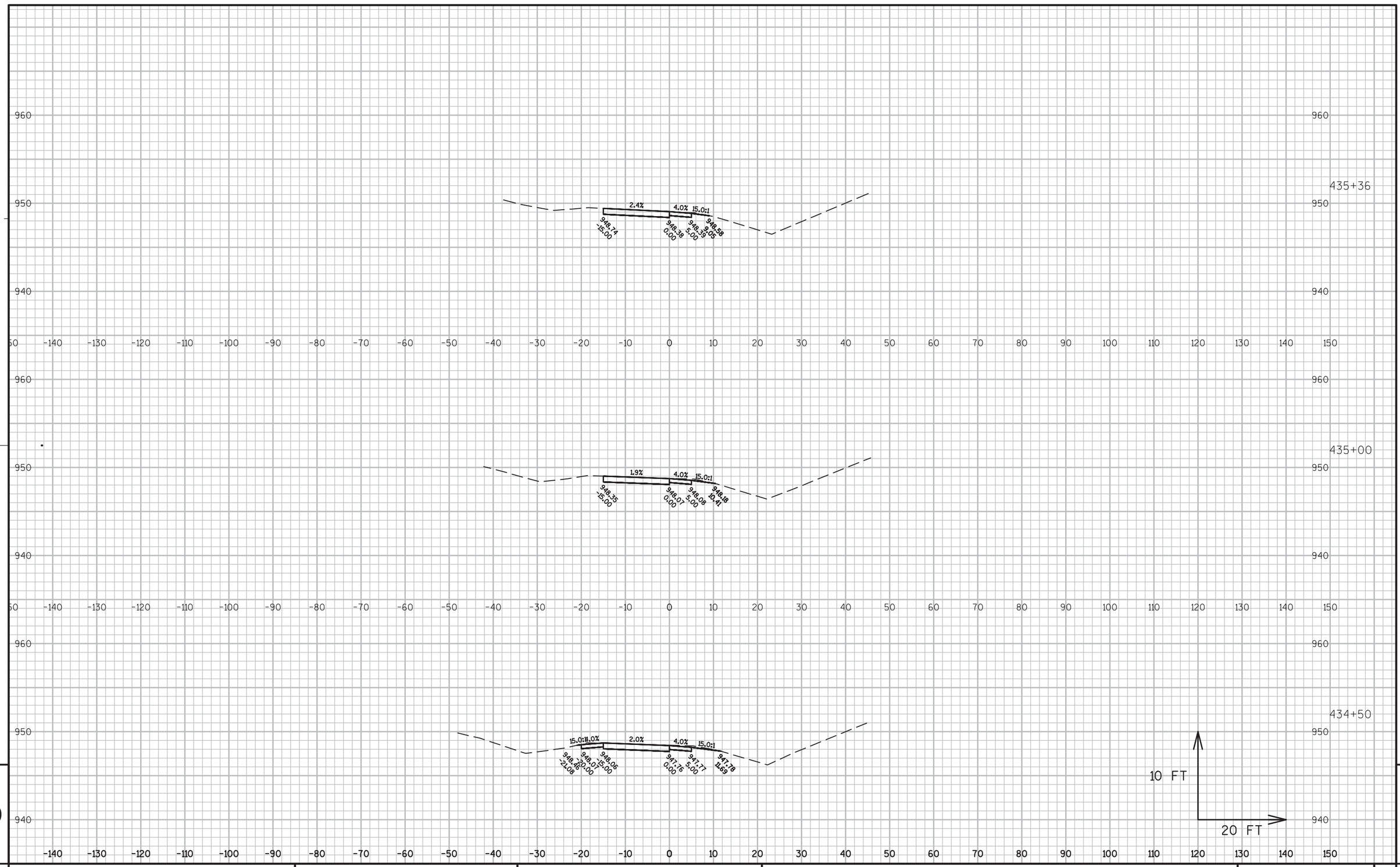
10 FT
20 FT

9

9

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	CROSS SECTIONS: CTH KC EB ON-RAMP	SHEET	E

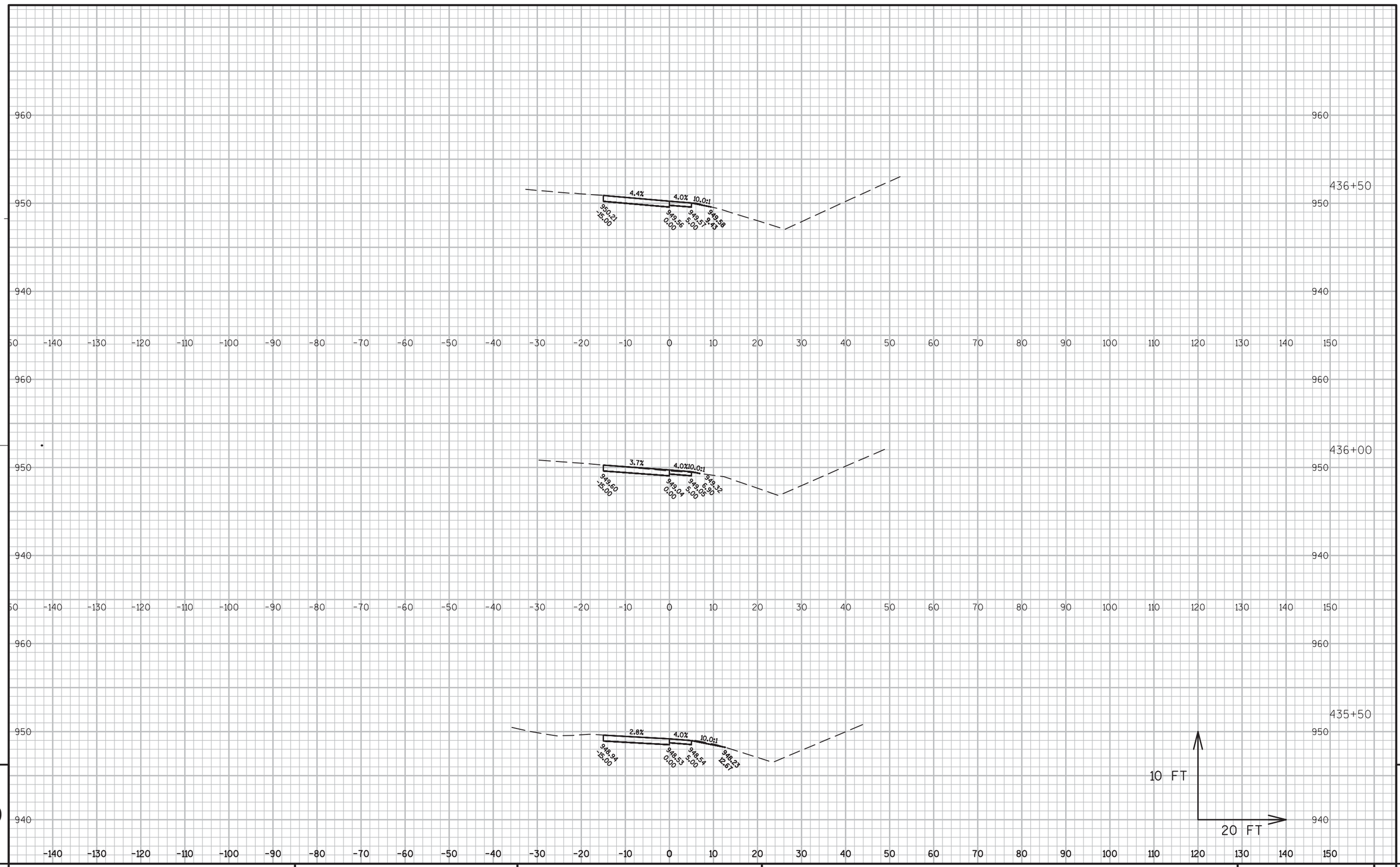
FILE NAME : N:\PDS\C3D\13701501\DESIGN\XSECTIONS\XS CTH KC EB ON-RAMP.DWG PLOT DATE : 4/24/2014 8:02 AM PLOT BY : CONRAD, CHRISTOPHER PLOT NAME : PLOT SCALE : 1 IN:20 FT



PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	CROSS SECTIONS: CTH KC EB ON-RAMP	SHEET 620	E

FILE NAME : N:\PDS\C3D\13701501\DESIGN\XSECTIONS\XS CTH KC EB ON-RAMP.DWG PLOT DATE : 4/24/2014 8:02 AM PLOT BY : CONRAD, CHRISTOPHER PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49



9

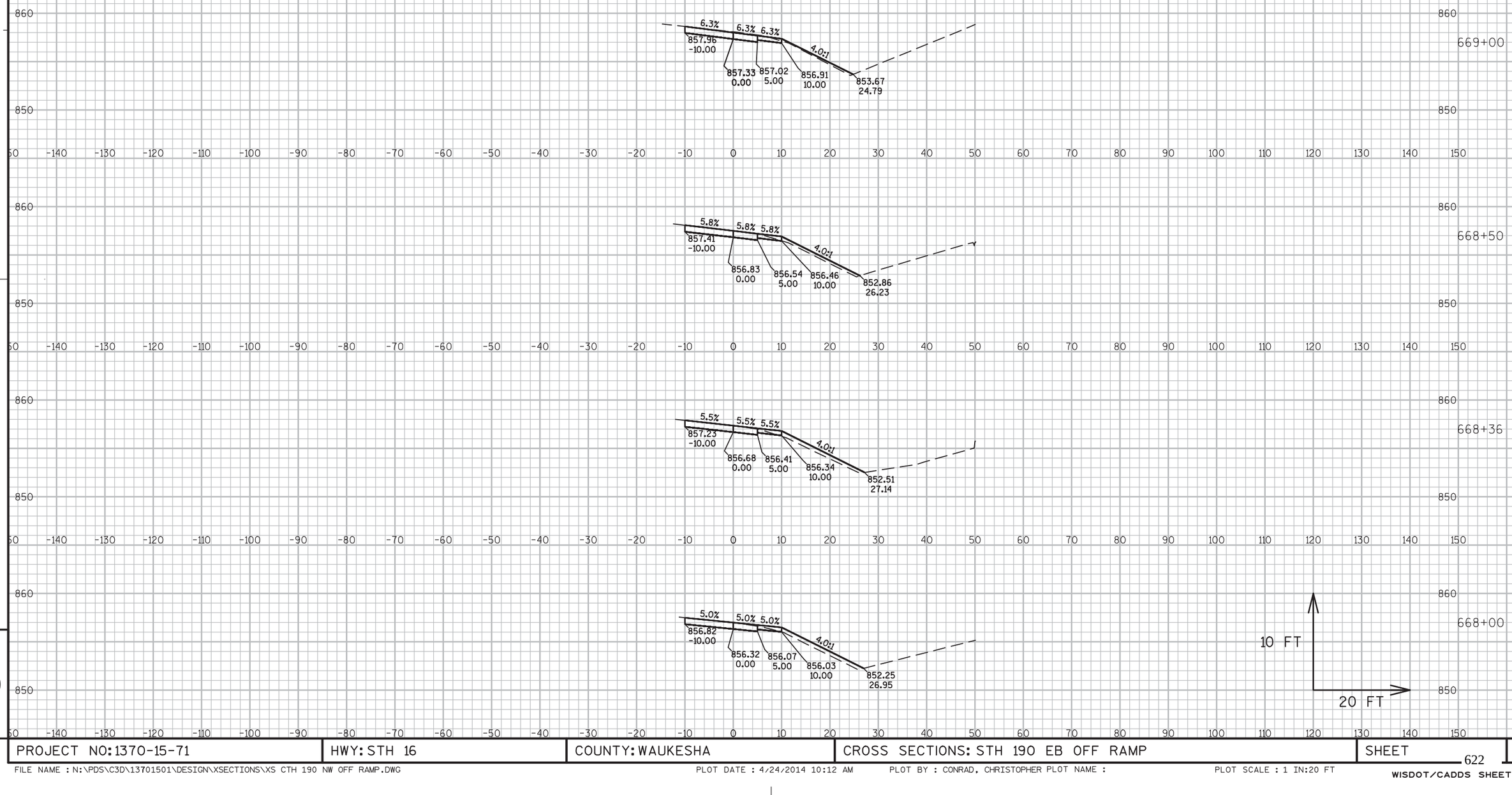
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PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	CROSS SECTIONS: CTH KC EB ON-RAMP	SHEET	E

621

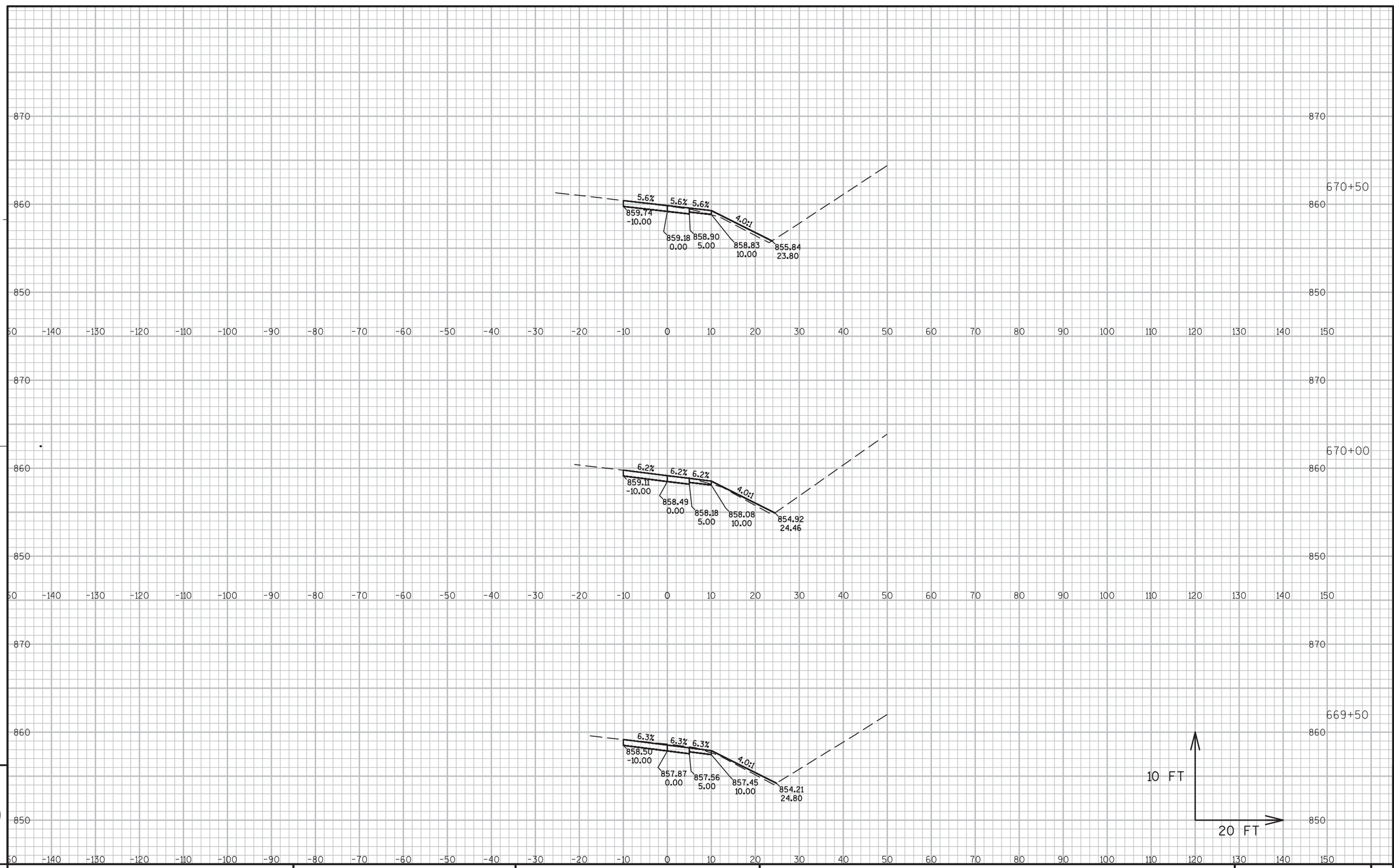
FILE NAME : N:\PDS\C3D\13701501\DESIGN\XSECTIONS\XS CTH KC EB ON-RAMP.DWG PLOT DATE : 4/24/2014 8:02 AM PLOT BY : CONRAD, CHRISTOPHER PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49



PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	CROSS SECTIONS: STH 190 EB OFF RAMP	SHEET	E

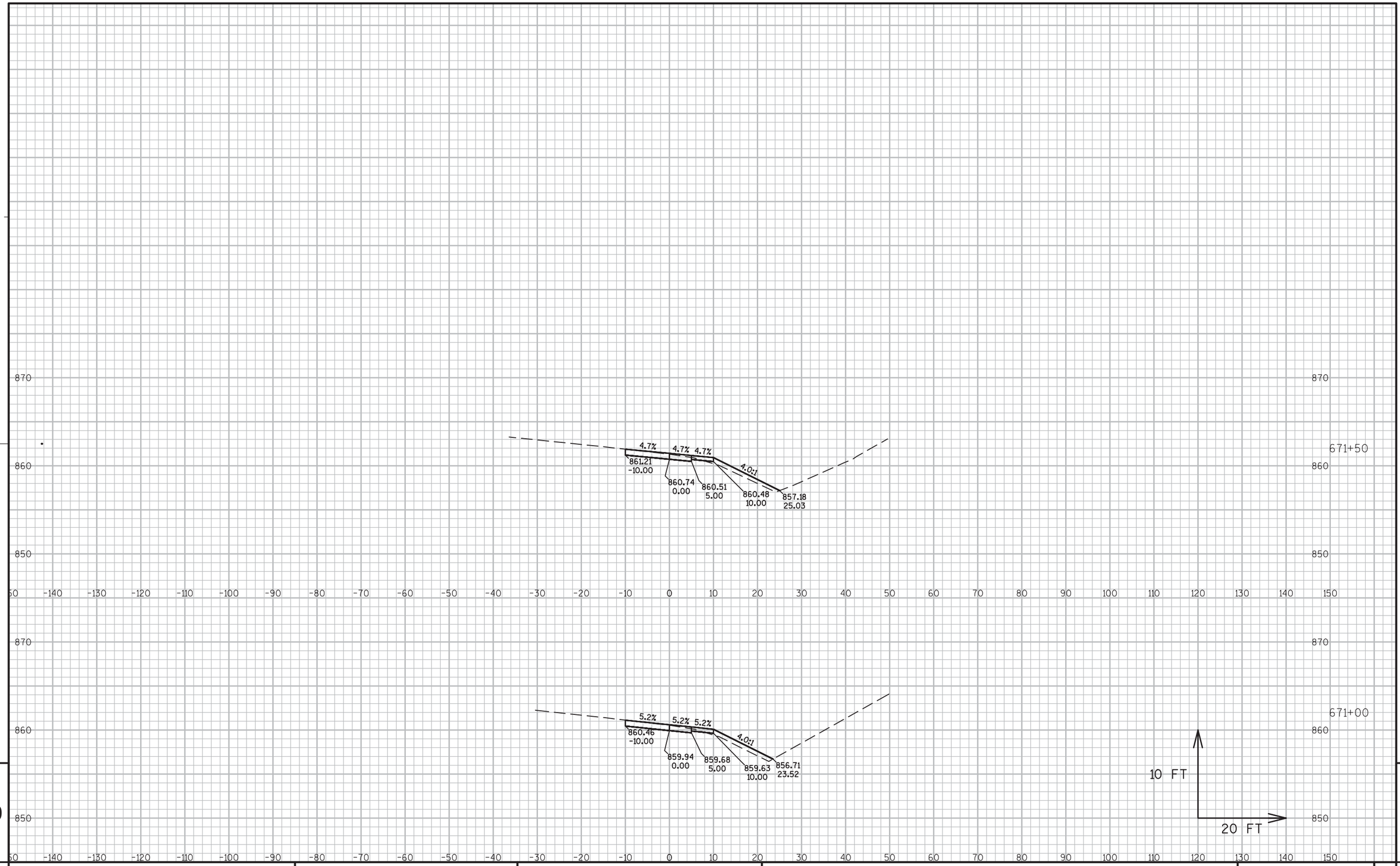
FILE NAME : N:\PDS\C3D\13701501\DESIGN\XSECTIONS\XS CTH 190 NW OFF RAMP.DWG PLOT DATE : 4/24/2014 10:12 AM PLOT BY : CONRAD, CHRISTOPHER PLOT NAME : PLOT SCALE : 1 IN:20 FT



PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	CROSS SECTIONS: STH 190 EB OFF RAMP	SHEET 623	E

FILE NAME : N:\PDS\C3D\13701501\DESIGN\XSECTIONS\XS CTH 190 NW OFF RAMP.DWG PLOT DATE : 4/24/2014 10:12 AM PLOT BY : CONRAD, CHRISTOPHER PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49



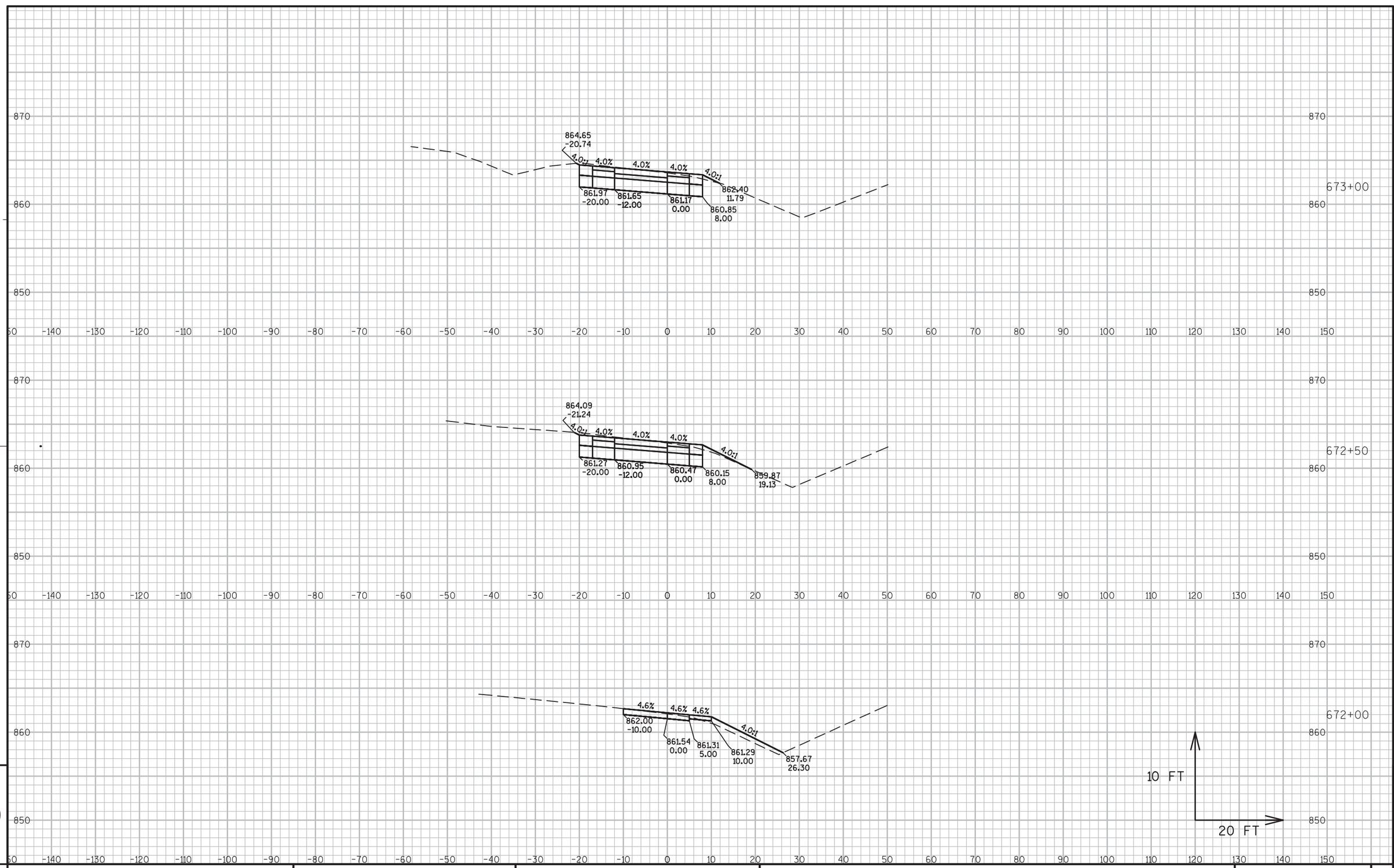
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PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	CROSS SECTIONS: STH 190 EB OFF RAMP	SHEET 624	E

FILE NAME : N:\PDS\C3D\13701501\DESIGN\XSECTIONS\XS CTH 190 NW OFF RAMP.DWG PLOT DATE : 4/24/2014 10:12 AM PLOT BY : CONRAD, CHRISTOPHER PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49



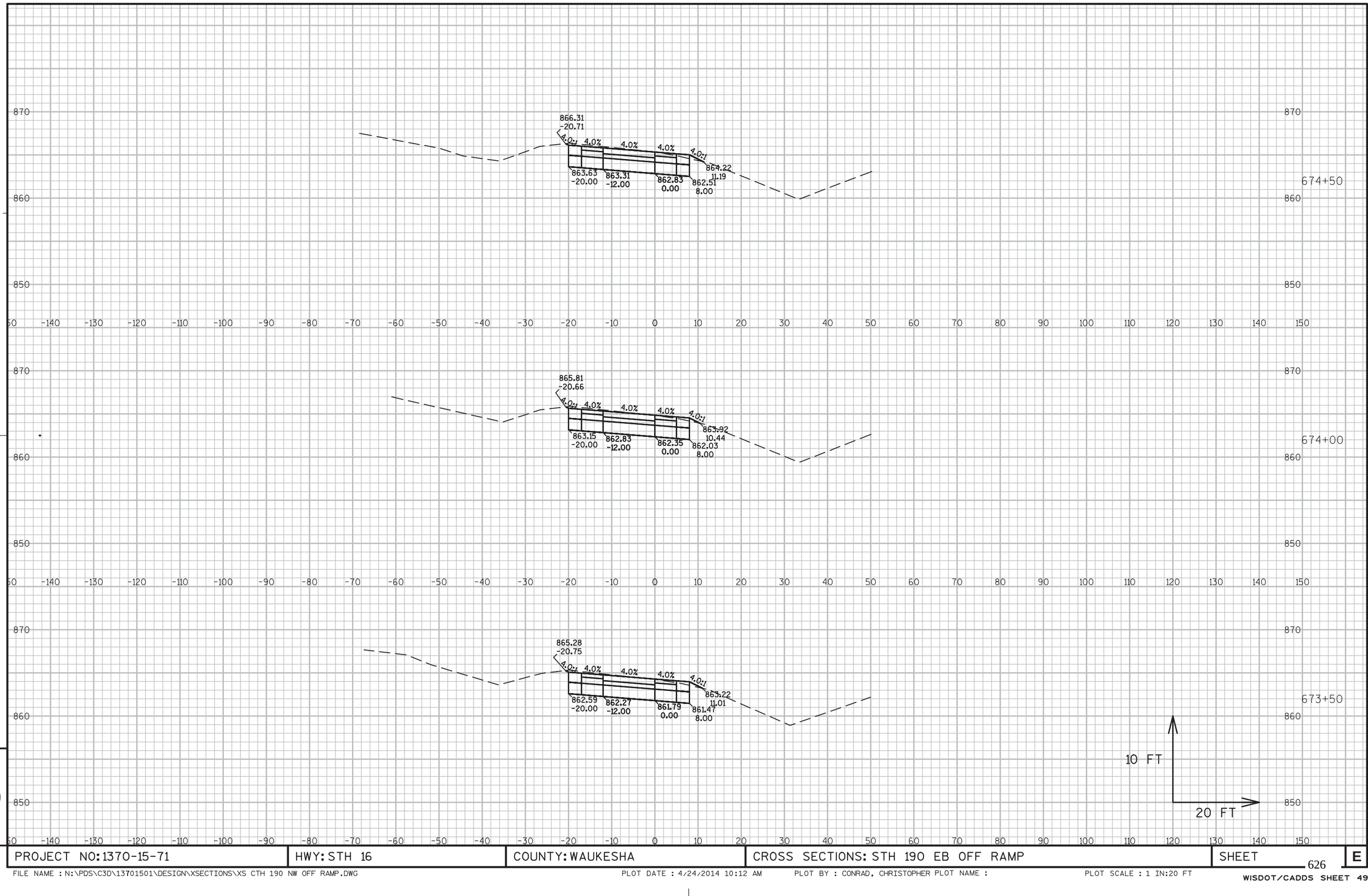
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PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	CROSS SECTIONS: STH 190 EB OFF RAMP	SHEET 625	E

FILE NAME : N:\PDS\C3D\13701501\DESIGN\XSECTIONS\XS CTH 190 NW OFF RAMP.DWG PLOT DATE : 4/24/2014 10:12 AM PLOT BY : CONRAD, CHRISTOPHER PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49



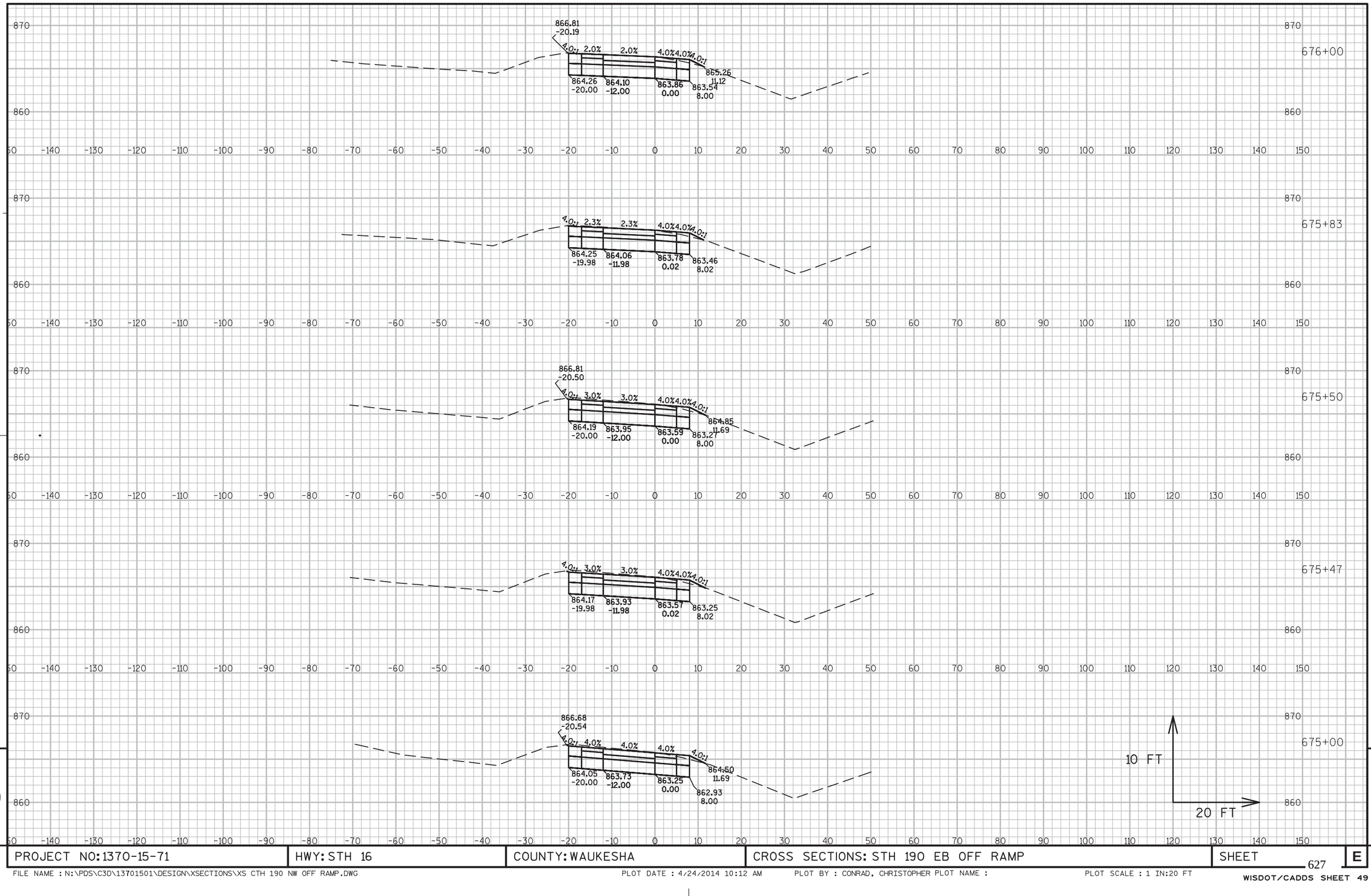
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PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	CROSS SECTIONS: STH 190 EB OFF RAMP	SHEET	E

626

FILE NAME : N:\PDS\C3D\13701501\DESIGN\XSECTIONS\XS CTH 190 NW OFF RAMP.DWG PLOT DATE : 4/24/2014 10:12 AM PLOT BY : CONRAD, CHRISTOPHER PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49



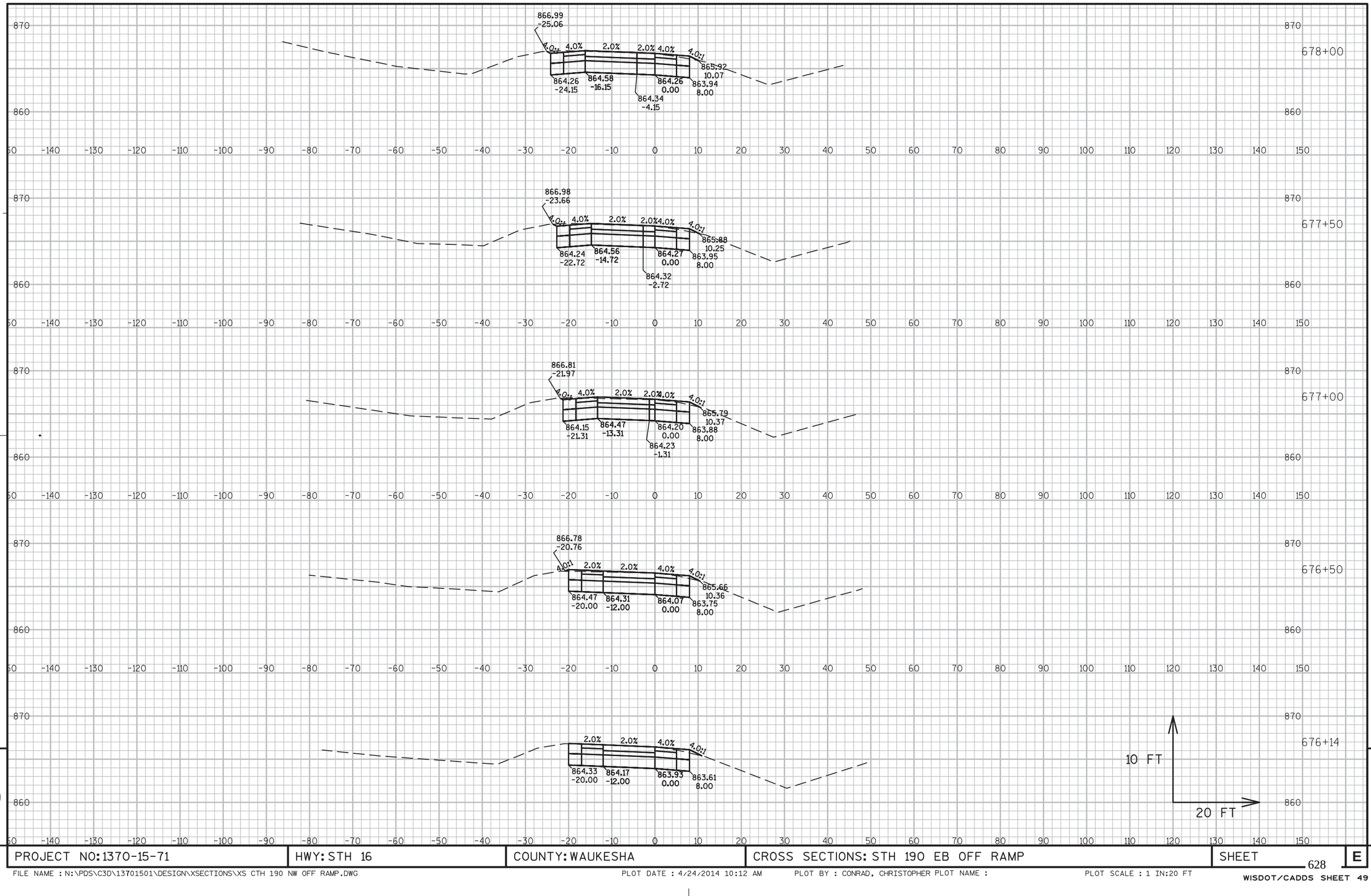
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PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	CROSS SECTIONS: STH 190 EB OFF RAMP	SHEET 627	E

FILE NAME : N:\PDS\C3D\13701501\DESIGN\XSECTIONS\XS CTH 190 NW OFF RAMP.DWG PLOT DATE : 4/24/2014 10:12 AM PLOT BY : CONRAD, CHRISTOPHER PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49



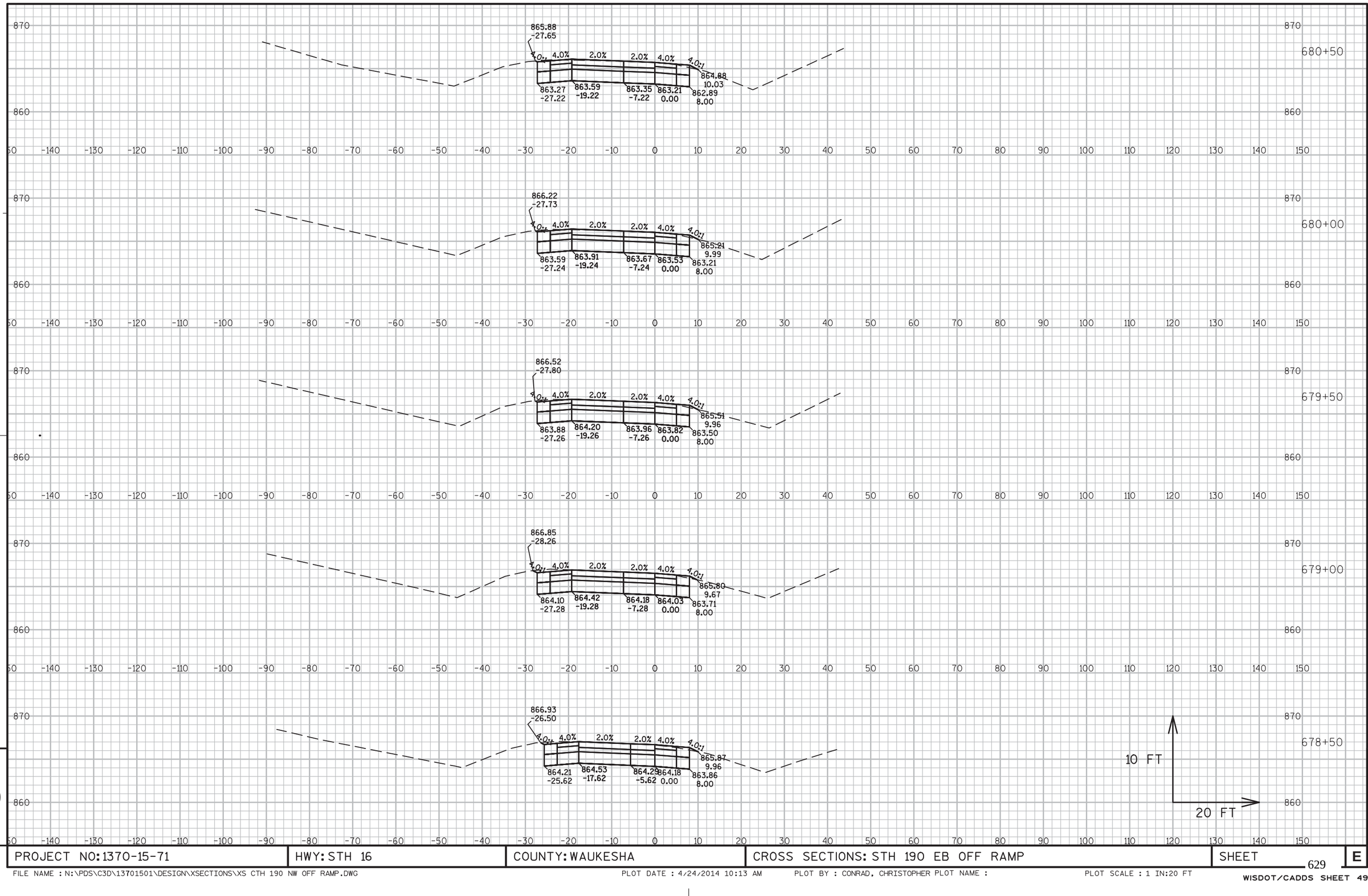
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PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	CROSS SECTIONS: STH 190 EB OFF RAMP	SHEET	E

FILE NAME : N:\PDS\C3D\13701501\DESIGN\XSECTIONS\XS CTH 190 NW OFF RAMP.DWG PLOT DATE : 4/24/2014 10:12 AM PLOT BY : CONRAD, CHRISTOPHER PLOT NAME : PLOT SCALE : 1 IN:20 FT

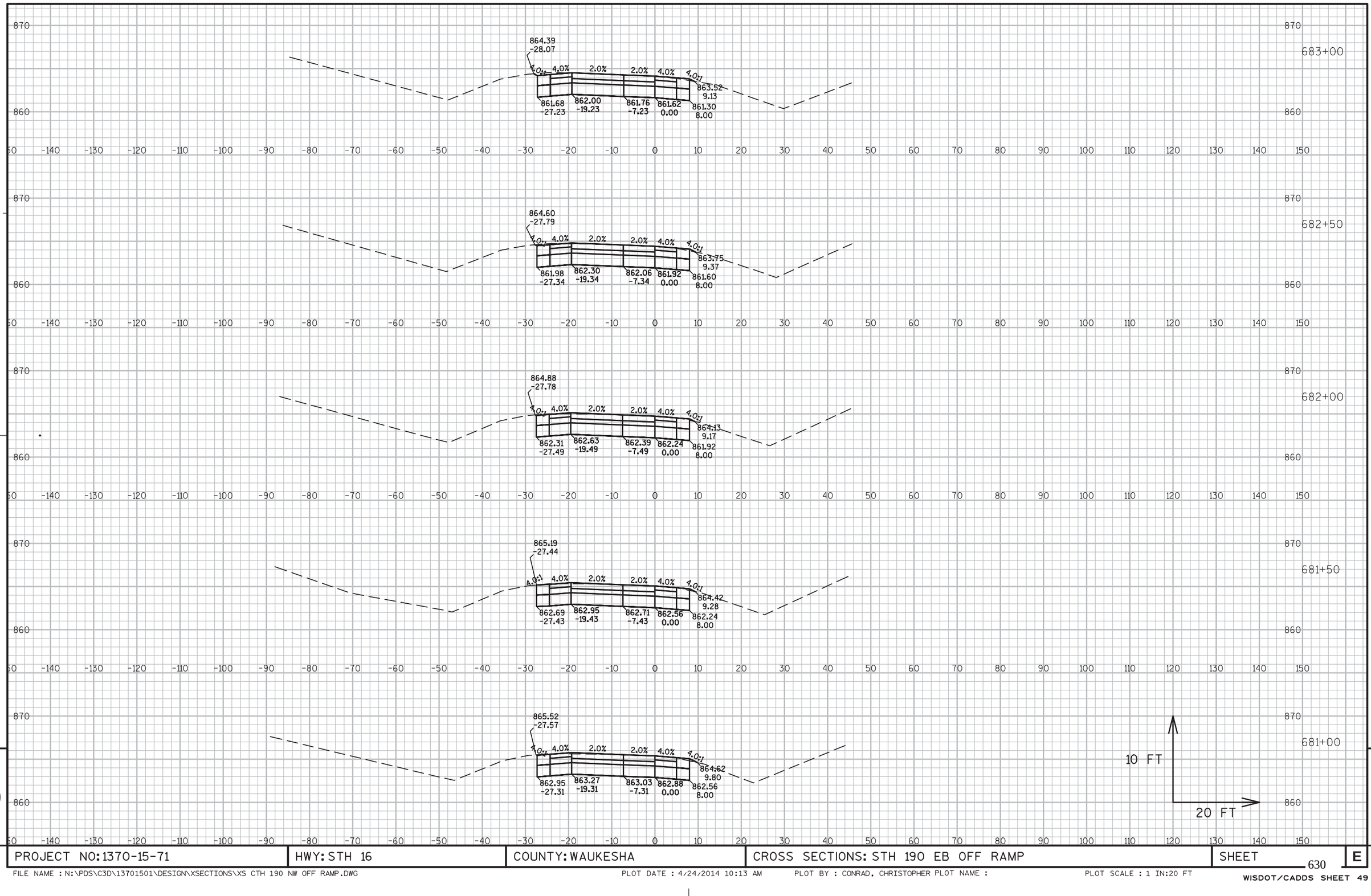
WISDOT/CADDS SHEET 49



PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	CROSS SECTIONS: STH 190 EB OFF RAMP	SHEET 629	E

FILE NAME : N:\PDS\C3D\13701501\DESIGN\XSECTIONS\XS CTH 190 NW OFF RAMP.DWG PLOT DATE : 4/24/2014 10:13 AM PLOT BY : CONRAD, CHRISTOPHER PLOT NAME : PLOT SCALE : 1 IN:20 FT

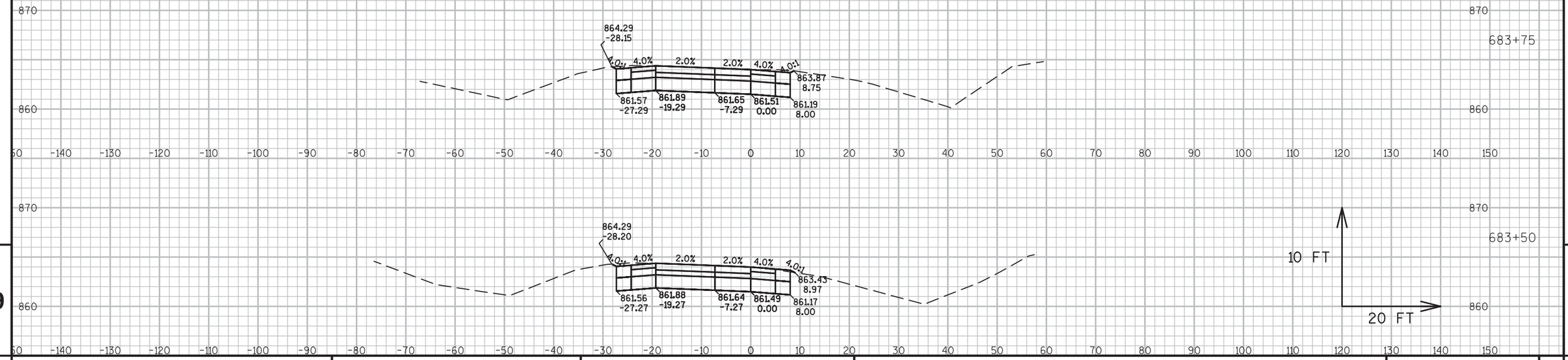
WISDOT/CADDS SHEET 49



PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	CROSS SECTIONS: STH 190 EB OFF RAMP	SHEET 630	E

FILE NAME : N:\PDS\C3D\13701501\DESIGN\XSECTIONS\XS CTH 190 NW OFF RAMP.DWG PLOT DATE : 4/24/2014 10:13 AM PLOT BY : CONRAD, CHRISTOPHER PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49



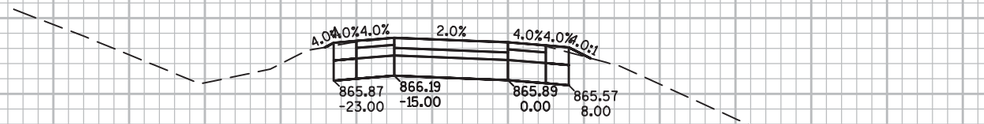
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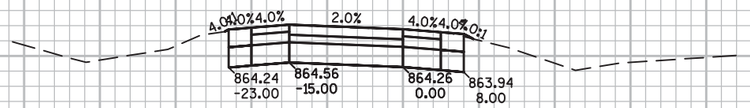
PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	CROSS SECTIONS: STH 190 EB OFF RAMP	SHEET 631	E

FILE NAME : N:\PDS\C3D\13701501\DESIGN\XSECTIONS\XS CTH 190 NW OFF RAMP.DWG PLOT DATE : 4/24/2014 10:13 AM PLOT BY : CONRAD, CHRISTOPHER PLOT NAME : PLOT SCALE : 1 IN:20 FT

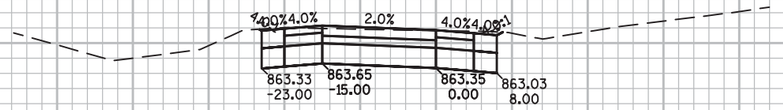
WISDOT/CADDS SHEET 49



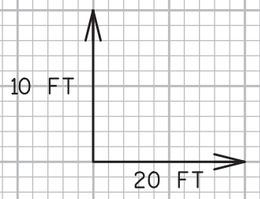
687+00



686+50



686+00

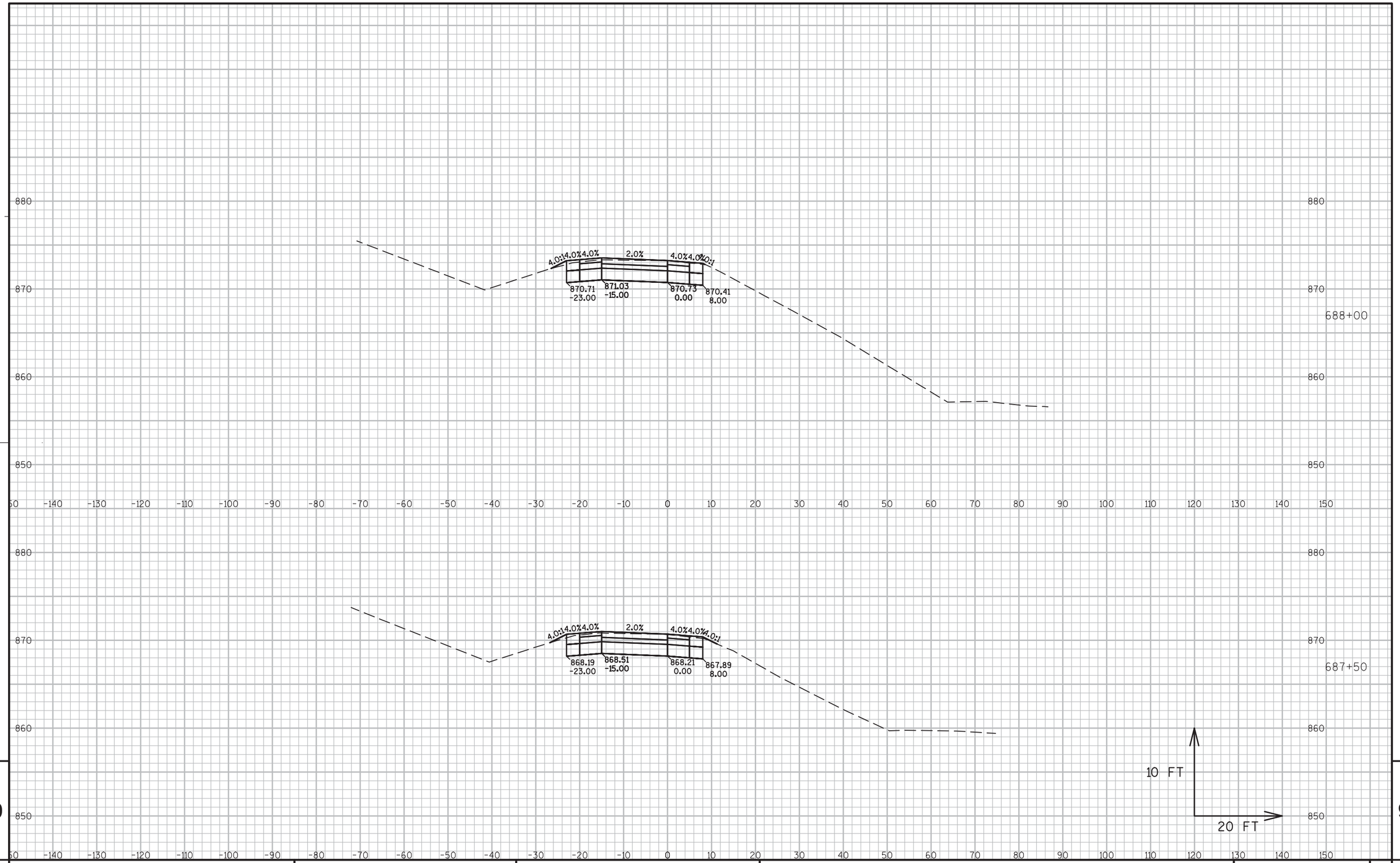


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PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	CROSS SECTIONS: STH 190 EB ON RAMP	SHEET 632	E

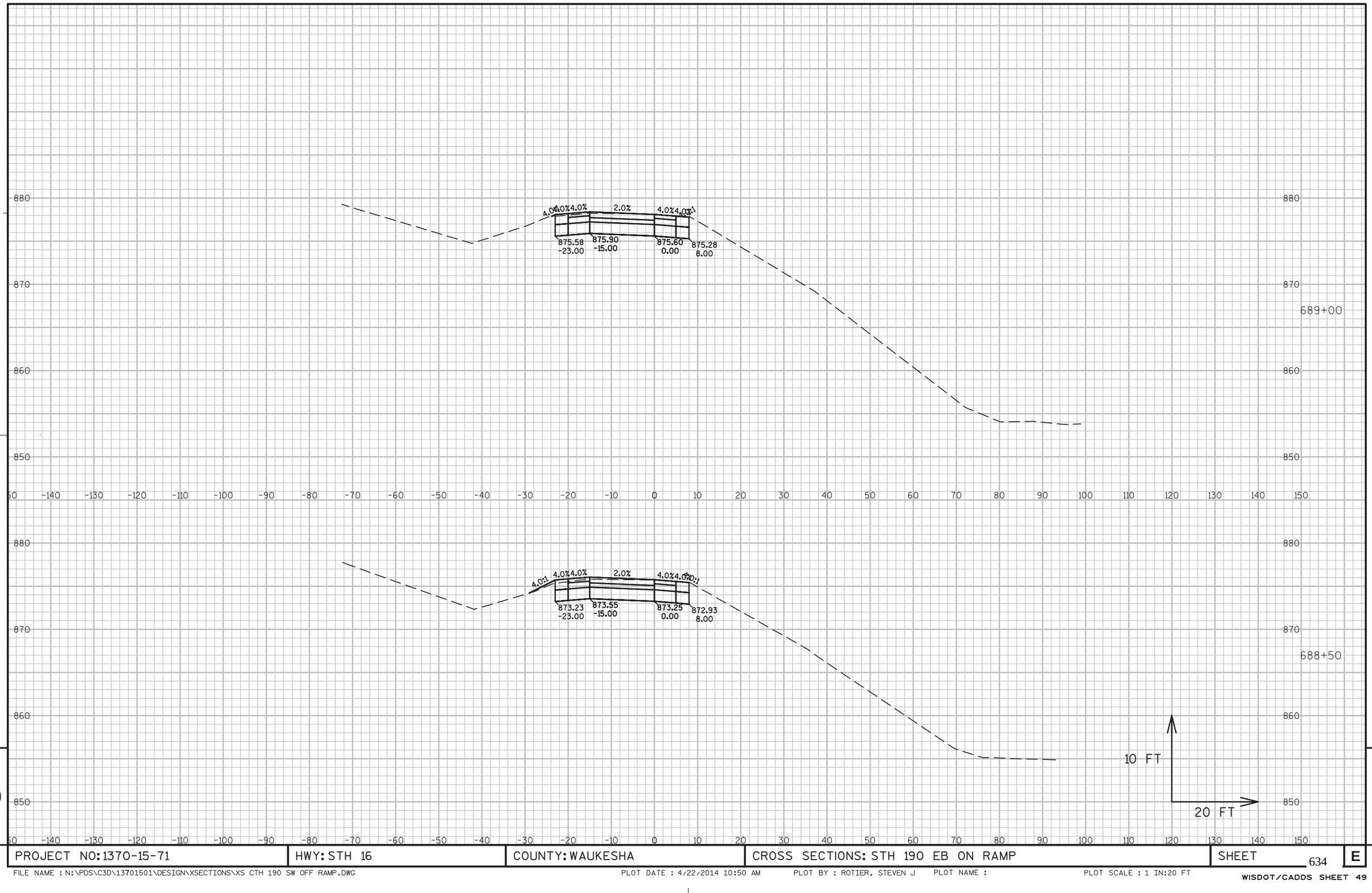
FILE NAME : N:\PDS\C3D\13701501\DESIGN\XSECTIONS\XS CTH 190 SW OFF RAMP.DWG PLOT DATE : 4/22/2014 10:50 AM PLOT BY : ROTIER, STEVEN J PLOT NAME : PLOT SCALE : 1 IN:20 FT



PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	CROSS SECTIONS: STH 190 EB ON RAMP	SHEET 633	E

FILE NAME : N:\PDS\C3D\13701501\DESIGN\XSECTIONS\XS CTH 190 SW OFF RAMP.DWG PLOT DATE : 4/22/2014 10:50 AM PLOT BY : ROTIER, STEVEN J PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49

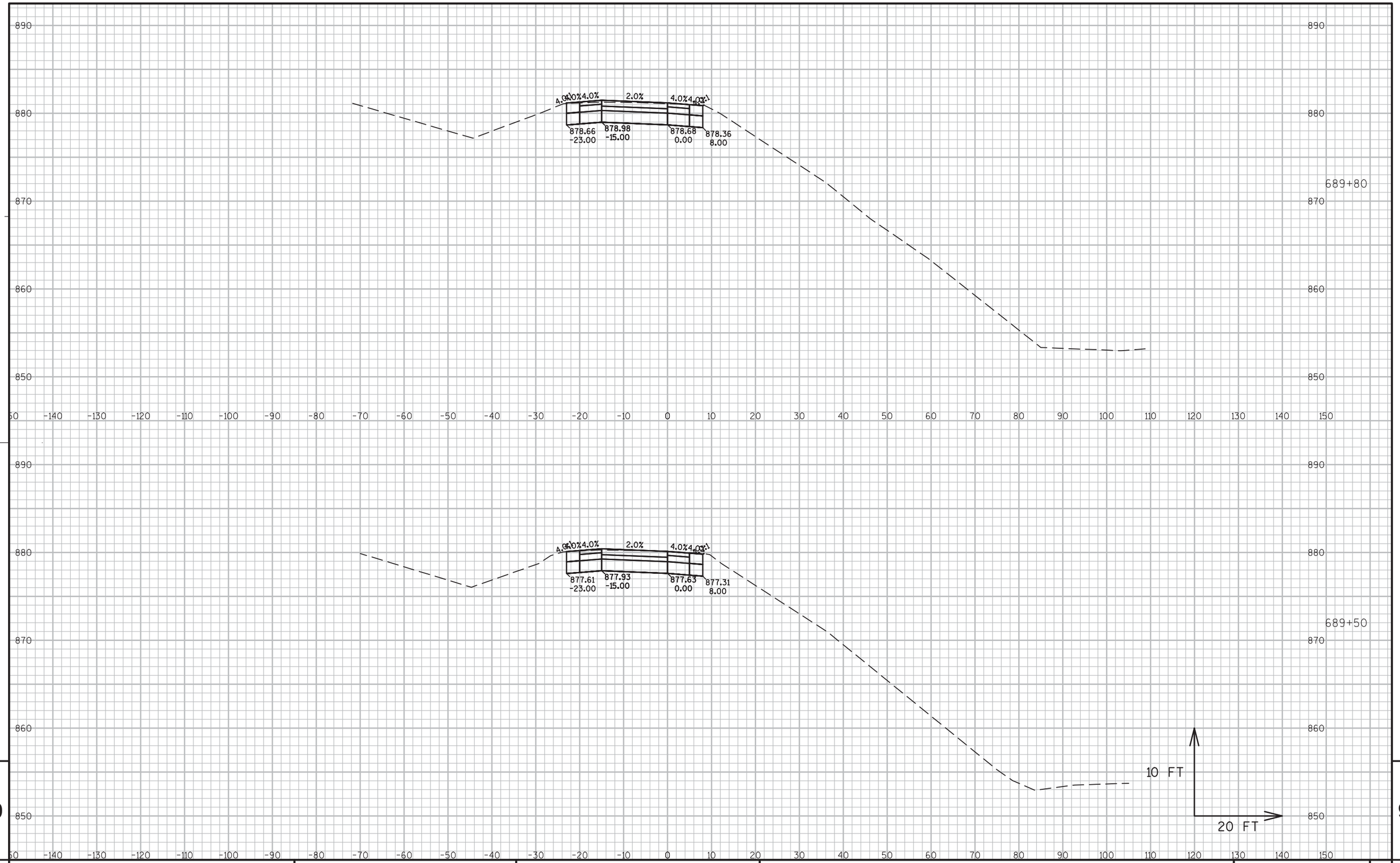


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PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	CROSS SECTIONS: STH 190 EB ON RAMP	SHEET 634	E

FILE NAME : N:\PDS\C3D\13701501\DESIGN\XSECTIONS\XS CTH 190 SW OFF RAMP.DWG PLOT DATE : 4/22/2014 10:50 AM PLOT BY : ROTIER, STEVEN J PLOT NAME : PLOT SCALE : 1 IN:20 FT

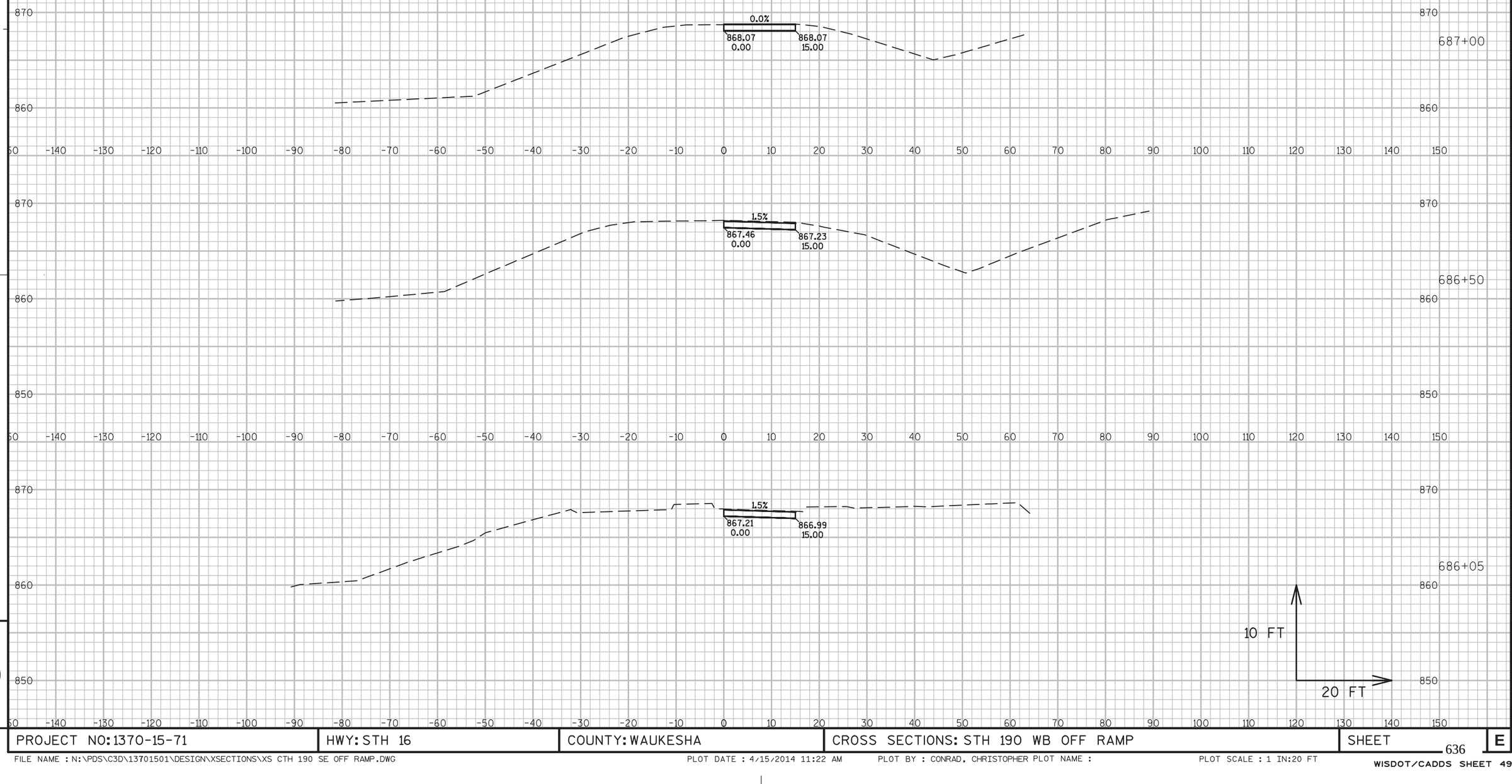


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PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	CROSS SECTIONS: STH 190 EB ON RAMP	SHEET 635	E

FILE NAME : N:\PDS\C3D\13701501\DESIGN\XSECTIONS\XS CTH 190 SW OFF RAMP.DWG PLOT DATE : 4/22/2014 10:50 AM PLOT BY : ROTIER, STEVEN J PLOT NAME : PLOT SCALE : 1 IN:20 FT



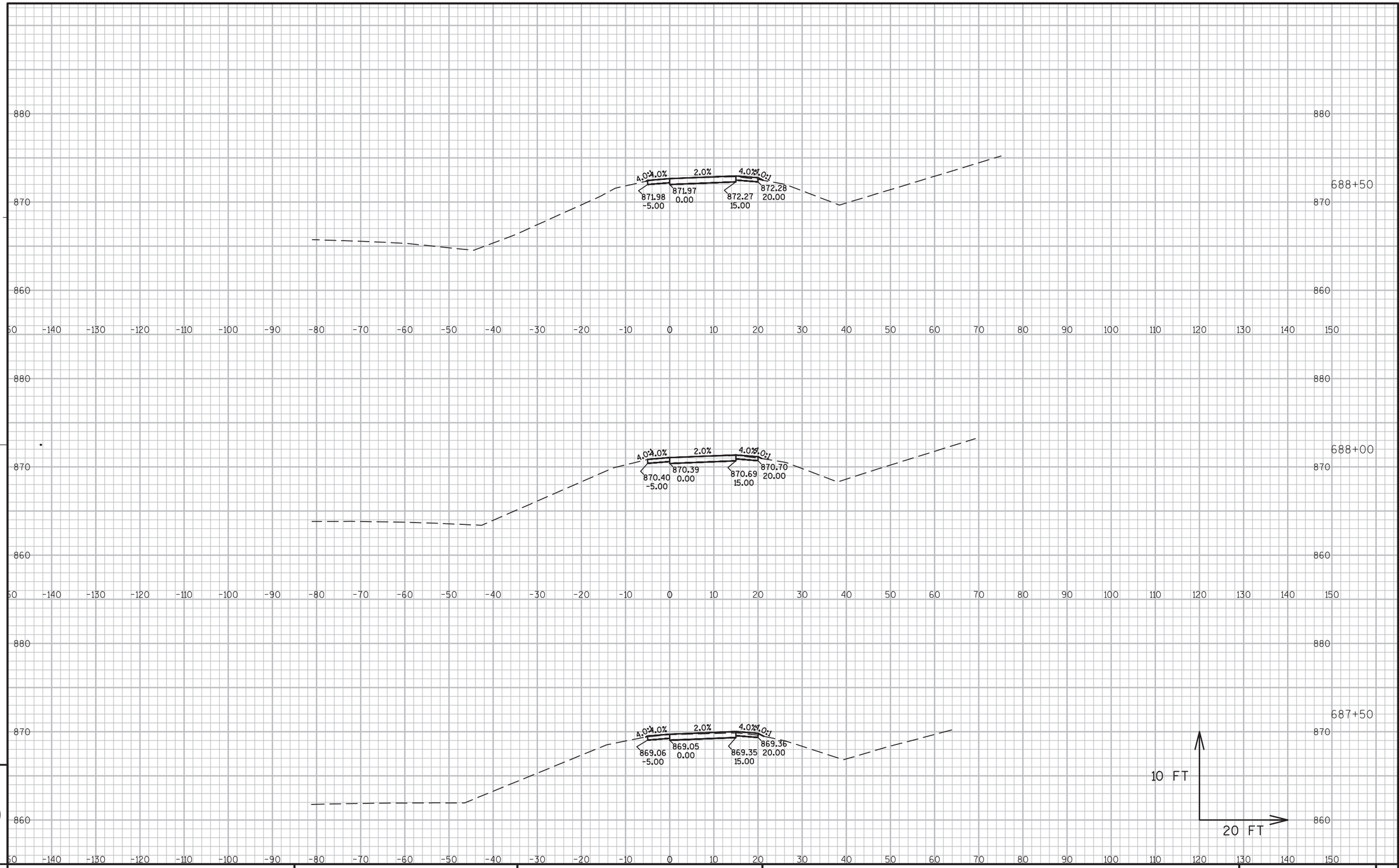
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PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	CROSS SECTIONS: STH 190 WB OFF RAMP	SHEET 636	E

FILE NAME : N:\PDS\C3D\13701501\DESIGN\XSECTIONS\XS CTH 190 SE OFF RAMP.DWG PLOT DATE : 4/15/2014 11:22 AM PLOT BY : CONRAD, CHRISTOPHER PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49

9



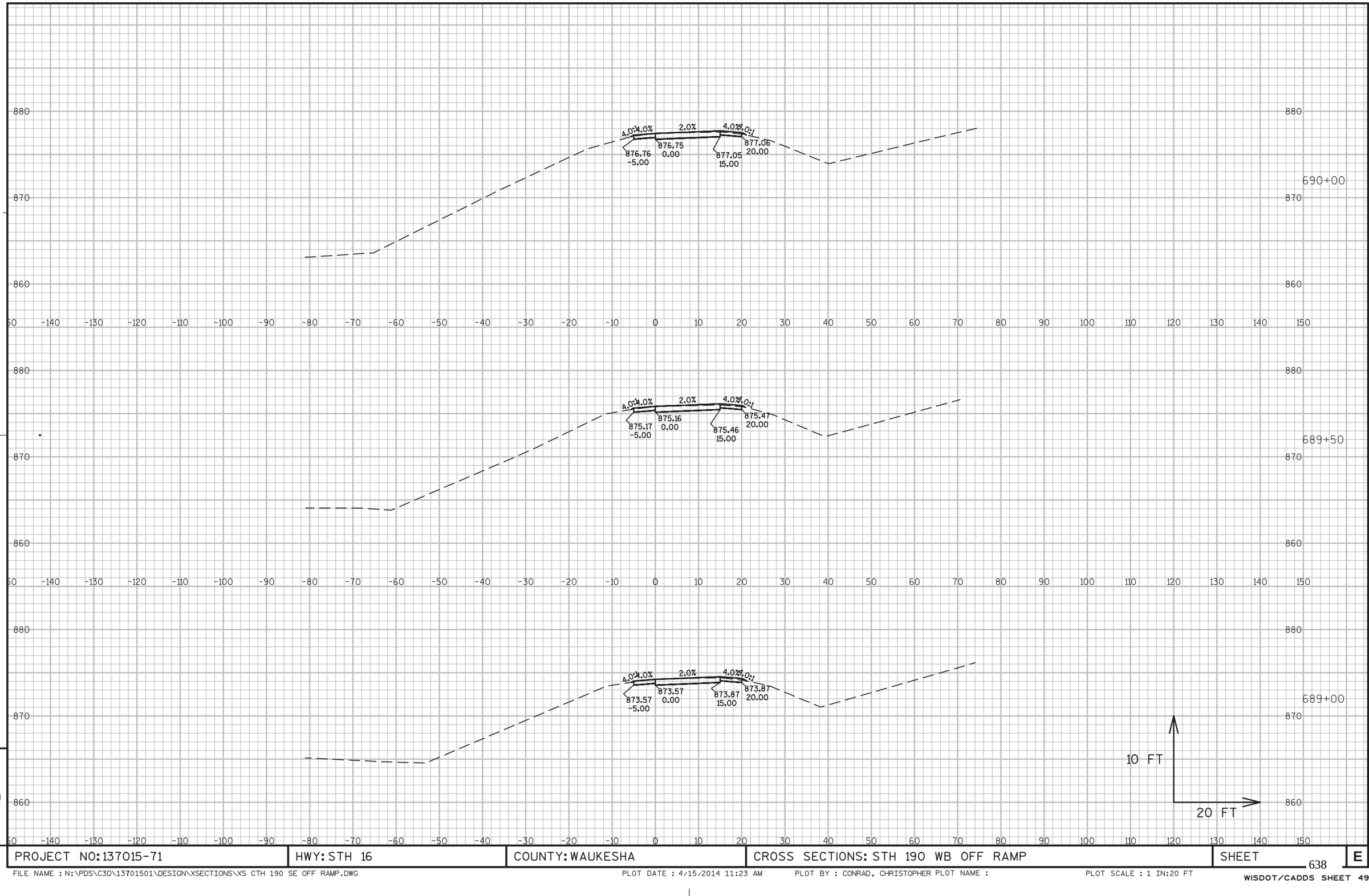
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PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	CROSS SECTIONS: STH 190 WB OFF RAMP	SHEET 637	E

FILE NAME : N:\PDS\C3D\13701501\DESIGN\XSECTIONS\XS CTH 190 SE OFF RAMP.DWG PLOT DATE : 4/15/2014 11:22 AM PLOT BY : CONRAD, CHRISTOPHER PLOT NAME : PLOT SCALE : 1 IN:20 FT

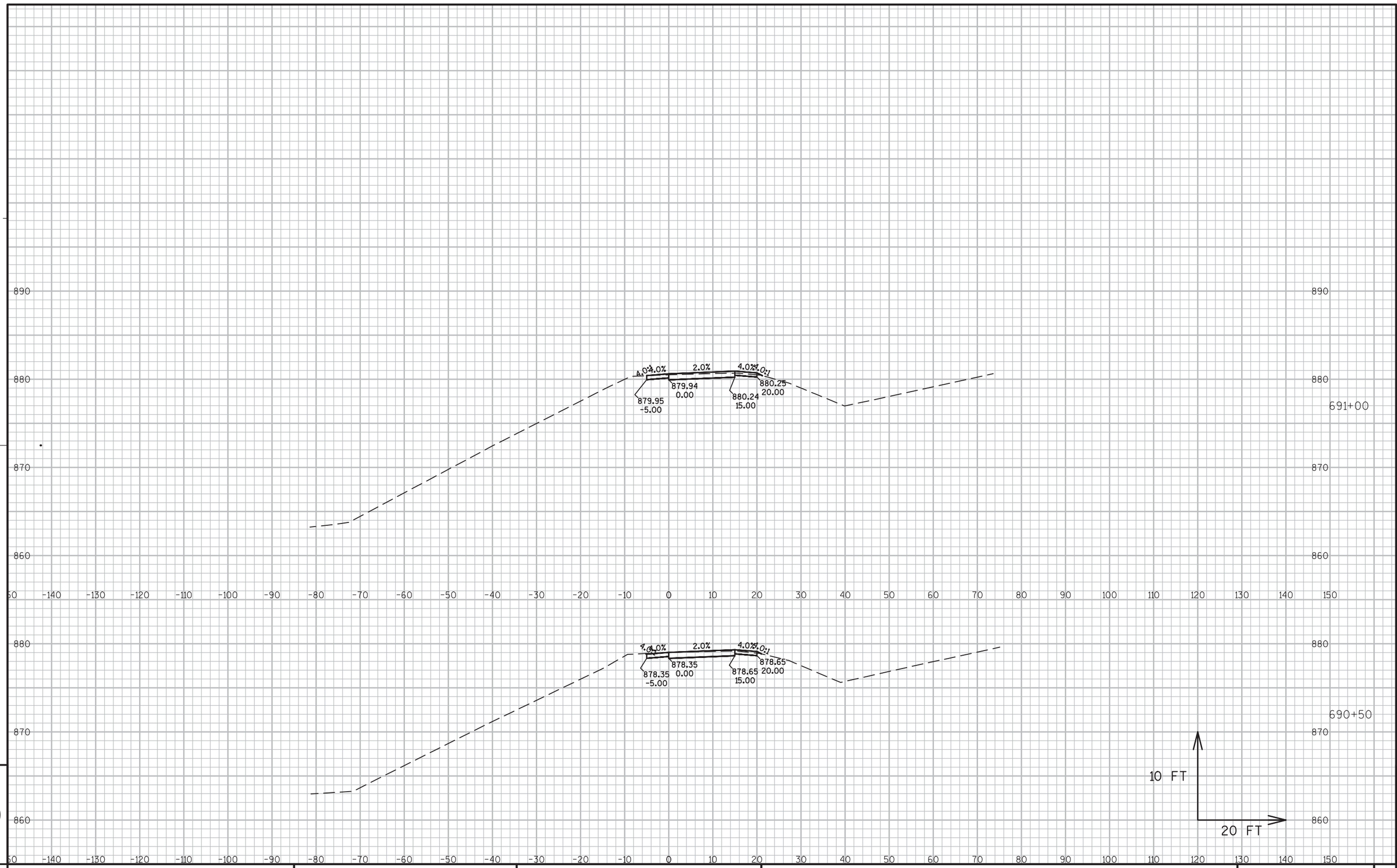
WISDOT/CADDS SHEET 49



PROJECT NO: 137015-71	HWY: STH 16	COUNTY: WAUKESHA	CROSS SECTIONS: STH 190 WB OFF RAMP	SHEET 638	E

FILE NAME : N:\PDS\C3D\13701501\DESIGN\XSECTIONS\XS CTH 190 SE OFF RAMP.DWG PLOT DATE : 4/15/2014 11:23 AM PLOT BY : CONRAD, CHRISTOPHER PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49



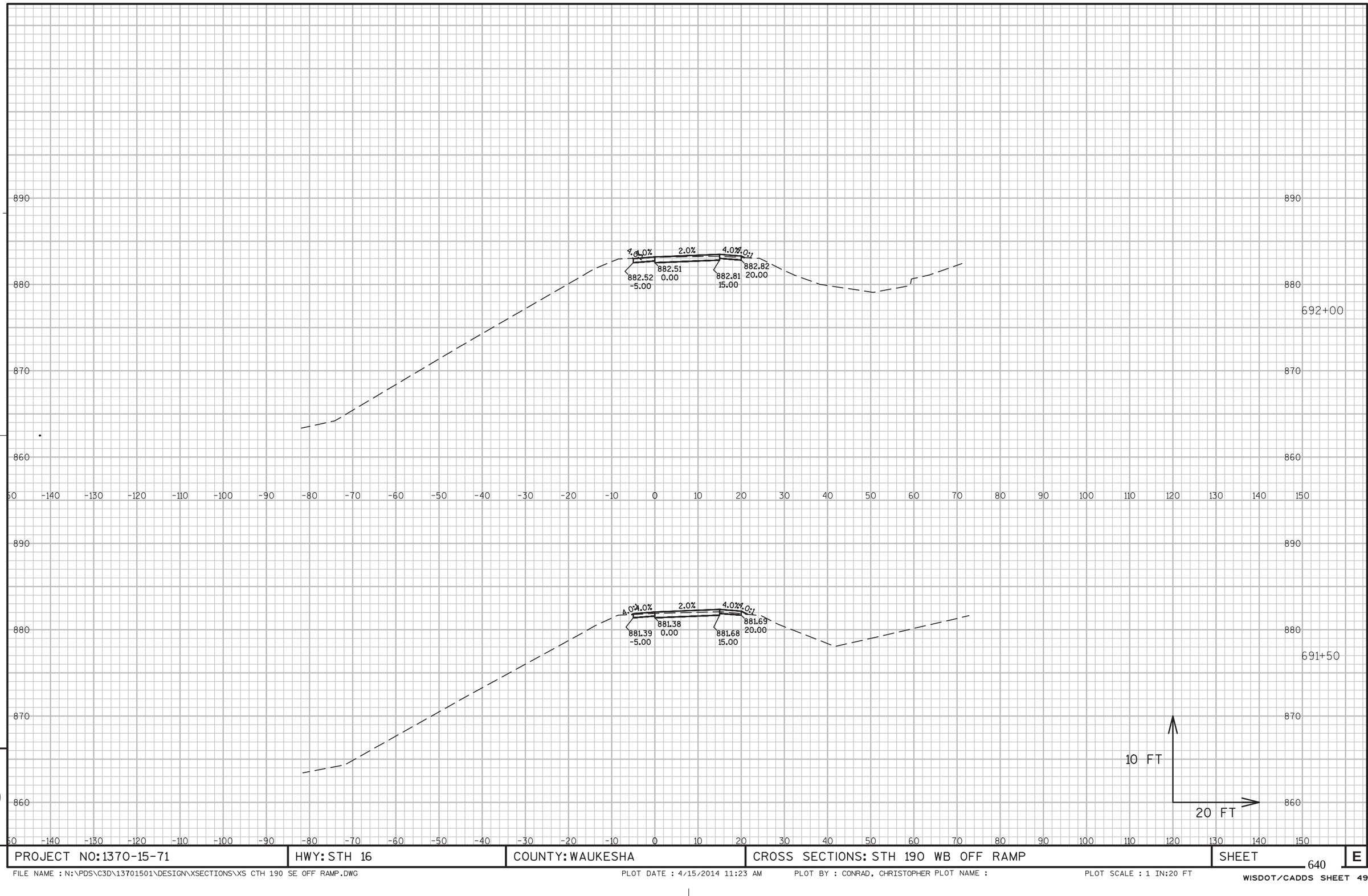
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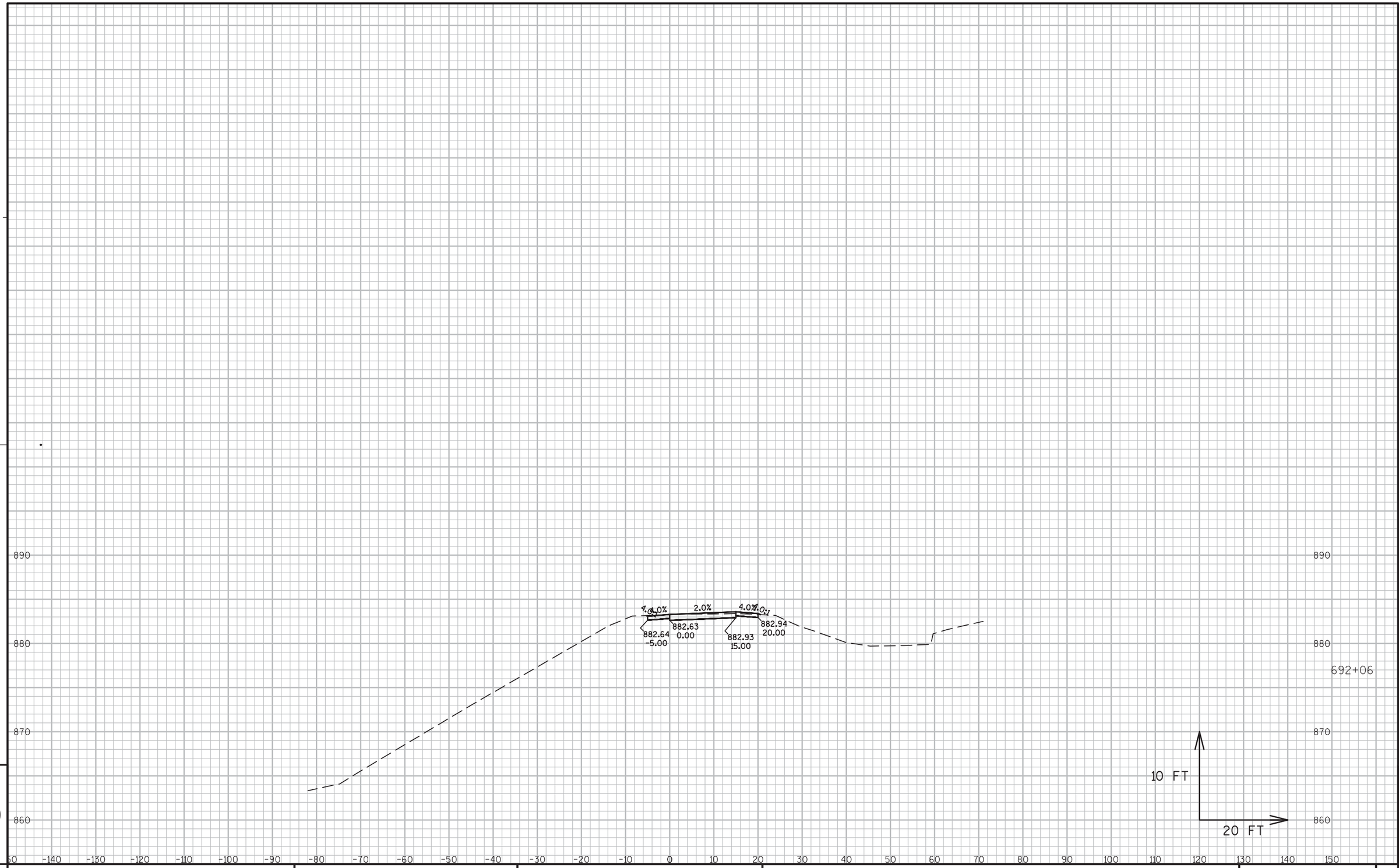
PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	CROSS SECTIONS: STH 190 WB OFF RAMP	SHEET 639	E

FILE NAME : N:\PDS\C3D\13701501\DESIGN\XSECTIONS\XS CTH 190 SE OFF RAMP.DWG PLOT DATE : 4/15/2014 11:23 AM PLOT BY : CONRAD, CHRISTOPHER PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49



PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	CROSS SECTIONS: STH 190 WB OFF RAMP	SHEET 640	E

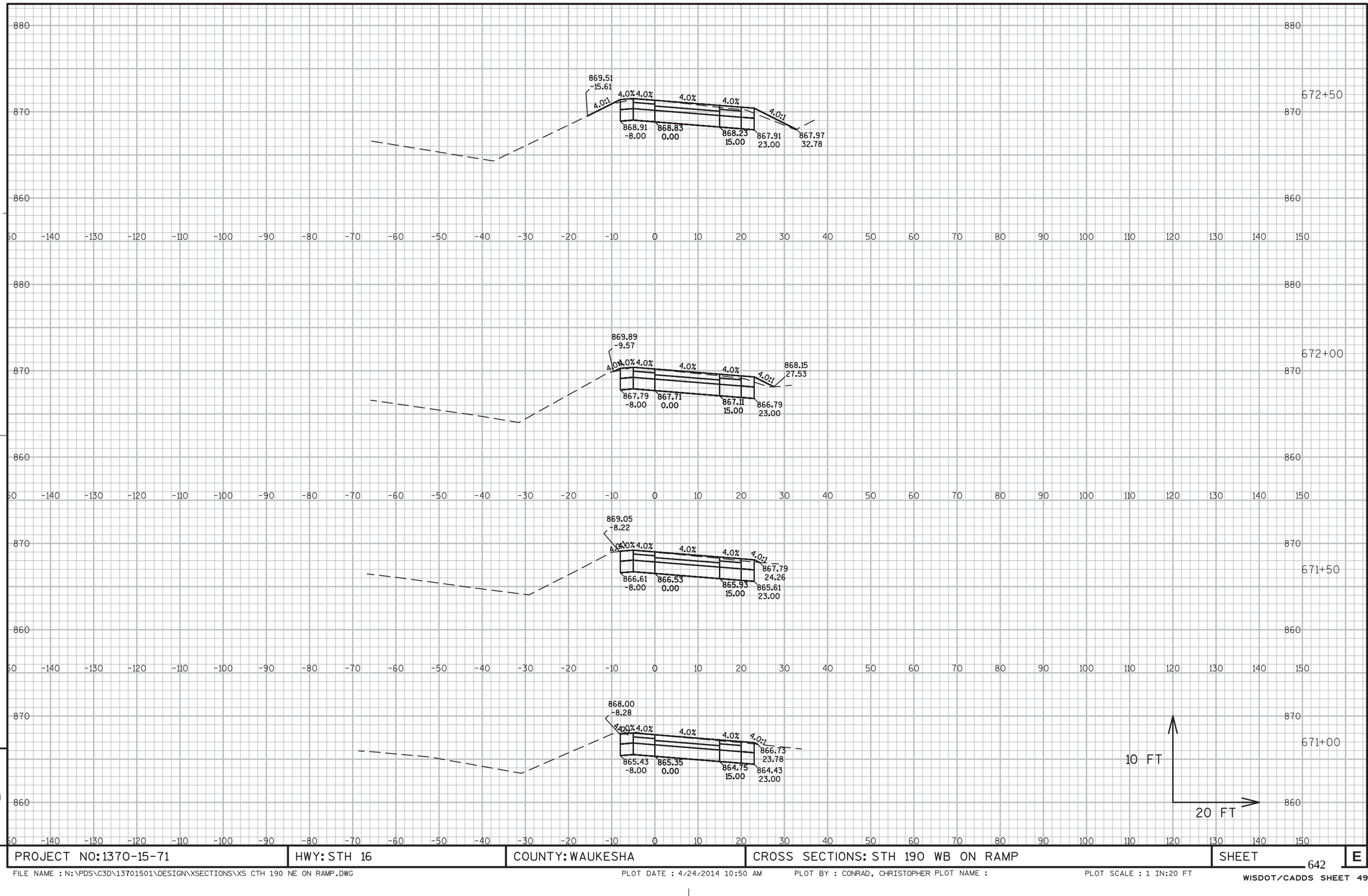


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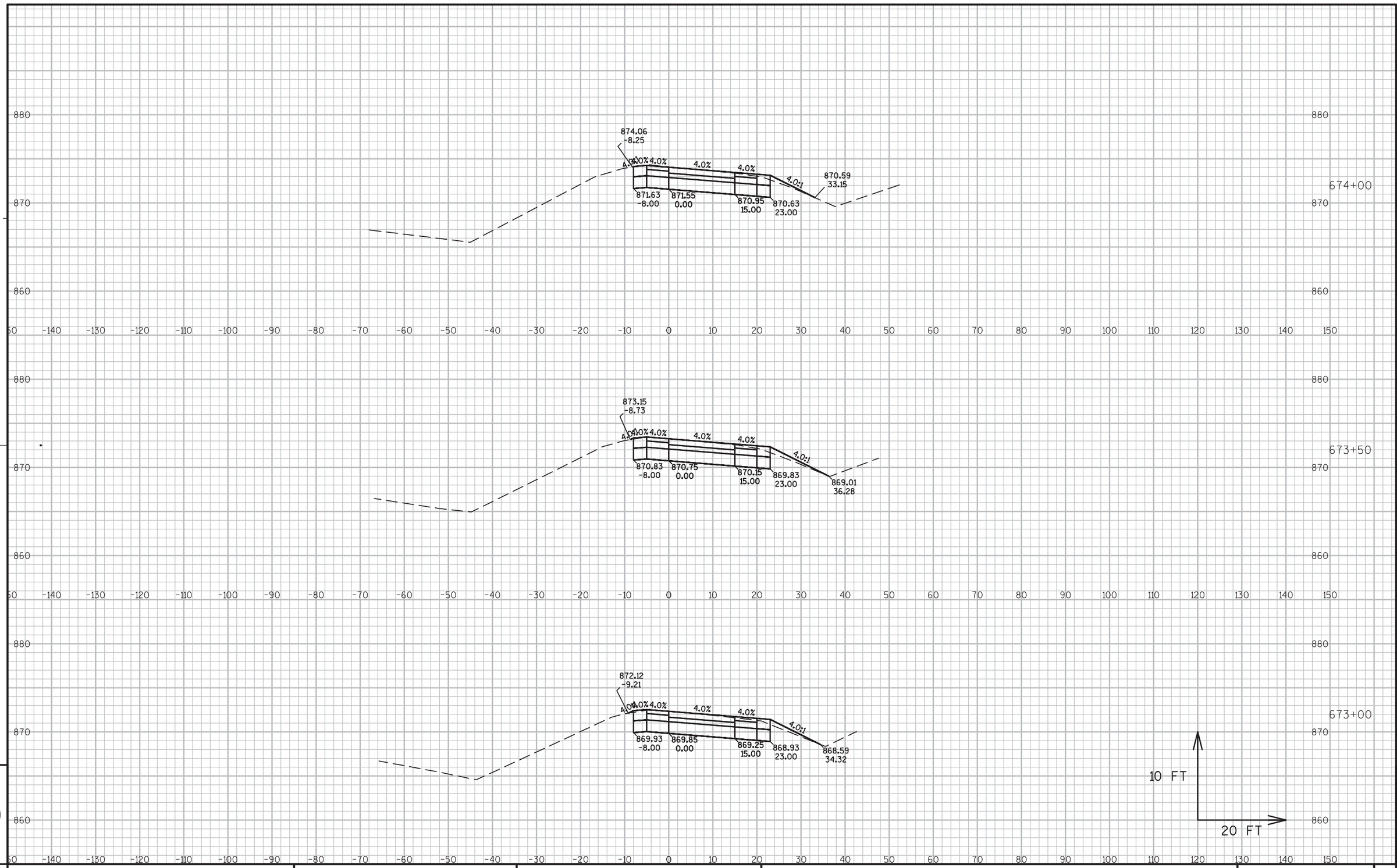
PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	CROSS SECTIONS: STH 190 WB OFF RAMP	SHEET 641	E

FILE NAME : N:\PDS\C3D\13701501\DESIGN\XSECTIONS\XS CTH 190 SE OFF RAMP.DWG PLOT DATE : 4/15/2014 11:23 AM PLOT BY : CONRAD, CHRISTOPHER PLOT NAME : PLOT SCALE : 1 IN:20 FT



PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	CROSS SECTIONS: STH 190 WB ON RAMP	SHEET 642	E

FILE NAME : N:\PDS\C3D\13701501\DESIGN\XSECTIONS\XS CTH 190 NE ON RAMP.DWG PLOT DATE : 4/24/2014 10:50 AM PLOT BY : CONRAD, CHRISTOPHER PLOT NAME : PLOT SCALE : 1 IN:20 FT

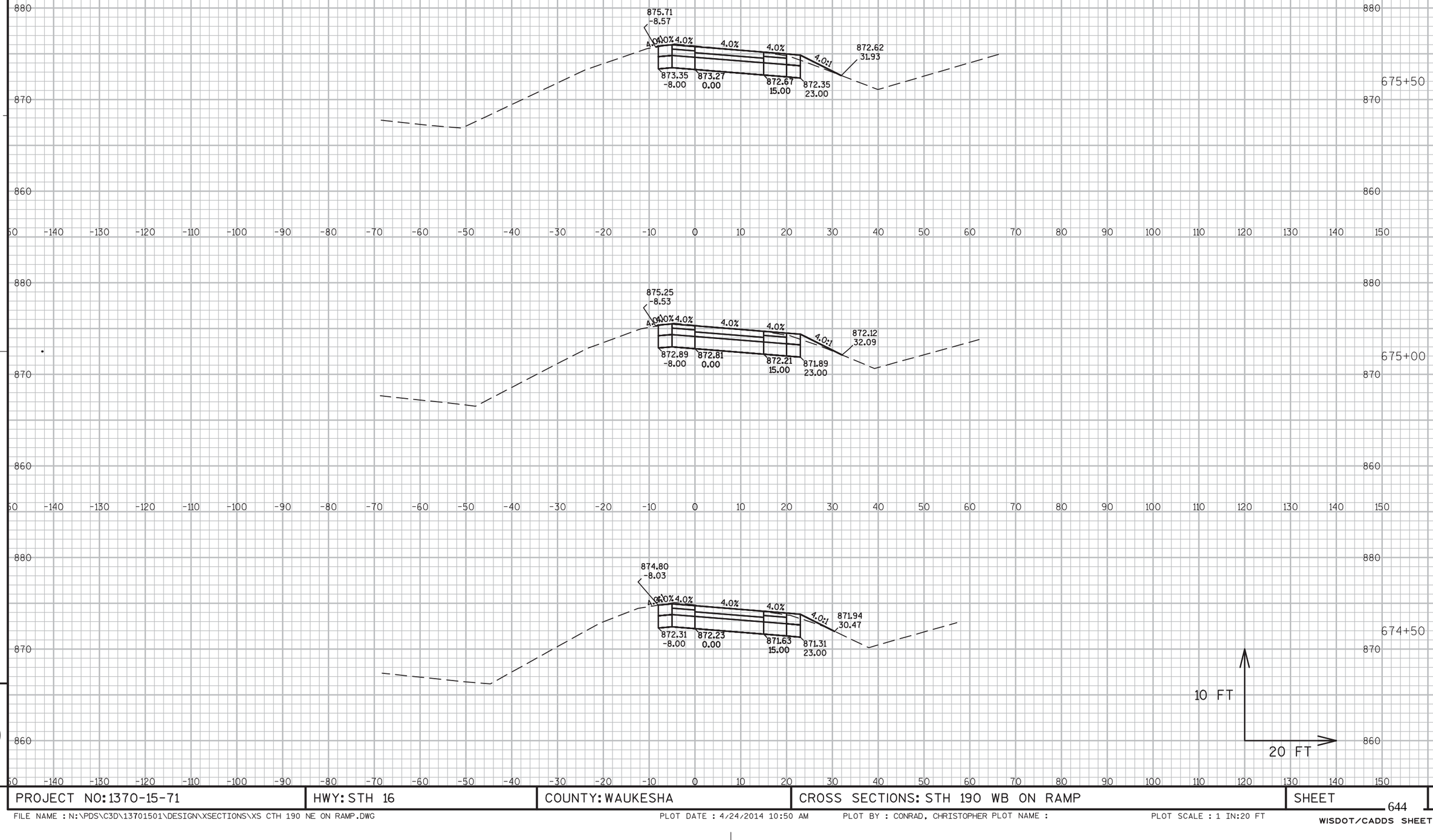


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9

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	CROSS SECTIONS: STH 190 WB ON RAMP	SHEET 643	E

FILE NAME : N:\PDS\C3D\13701501\DESIGN\XSECTIONS\XS CTH 190 NE ON RAMP.DWG PLOT DATE : 4/24/2014 10:50 AM PLOT BY : CONRAD, CHRISTOPHER PLOT NAME : PLOT SCALE : 1 IN:20 FT

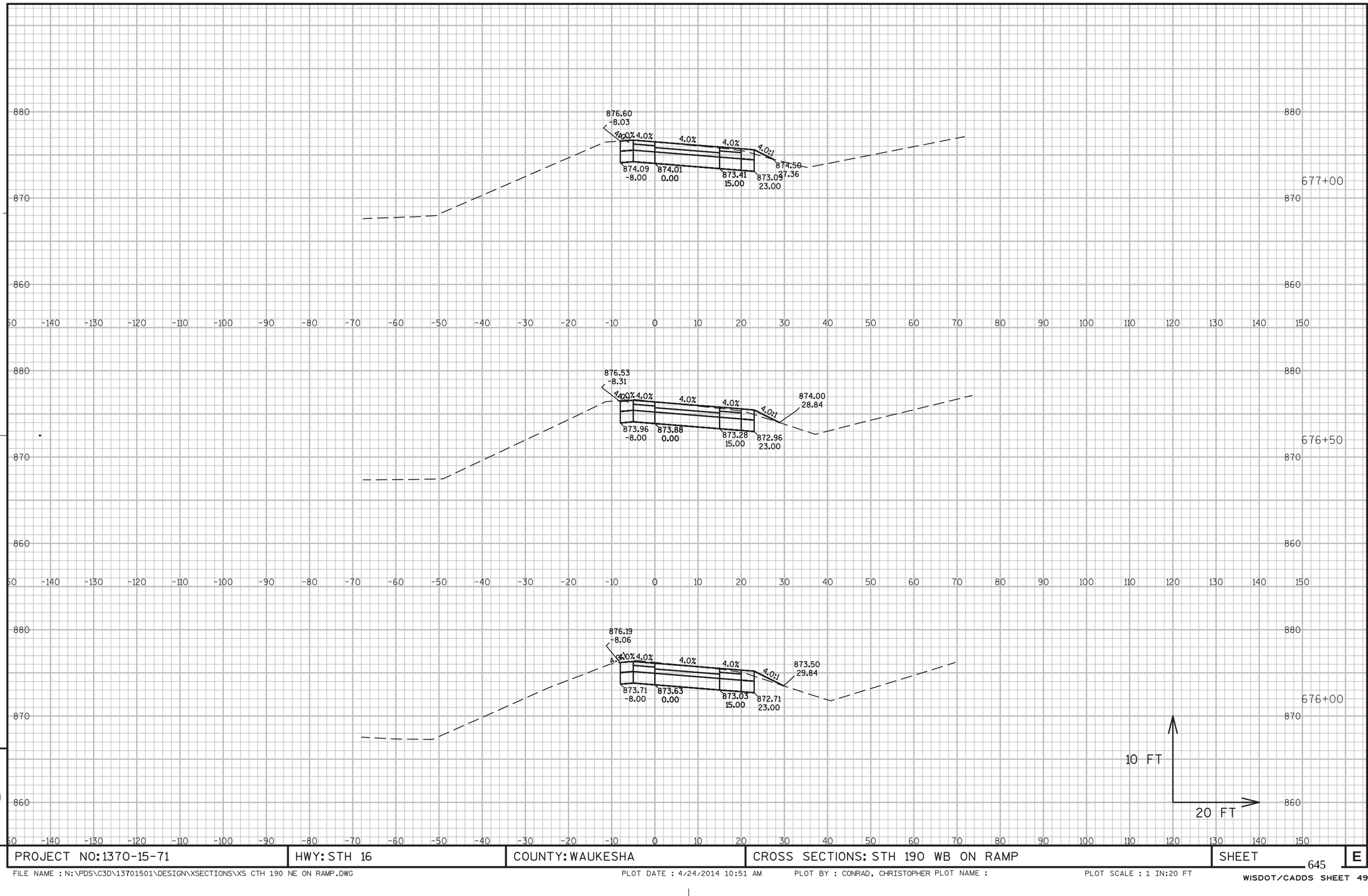


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9

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	CROSS SECTIONS: STH 190 WB ON RAMP	SHEET 644	E

FILE NAME : N:\PDS\C3D\13701501\DESIGN\XSECTIONS\XS CTH 190 NE ON RAMP.DWG PLOT DATE : 4/24/2014 10:50 AM PLOT BY : CONRAD, CHRISTOPHER PLOT NAME : PLOT SCALE : 1 IN:20 FT

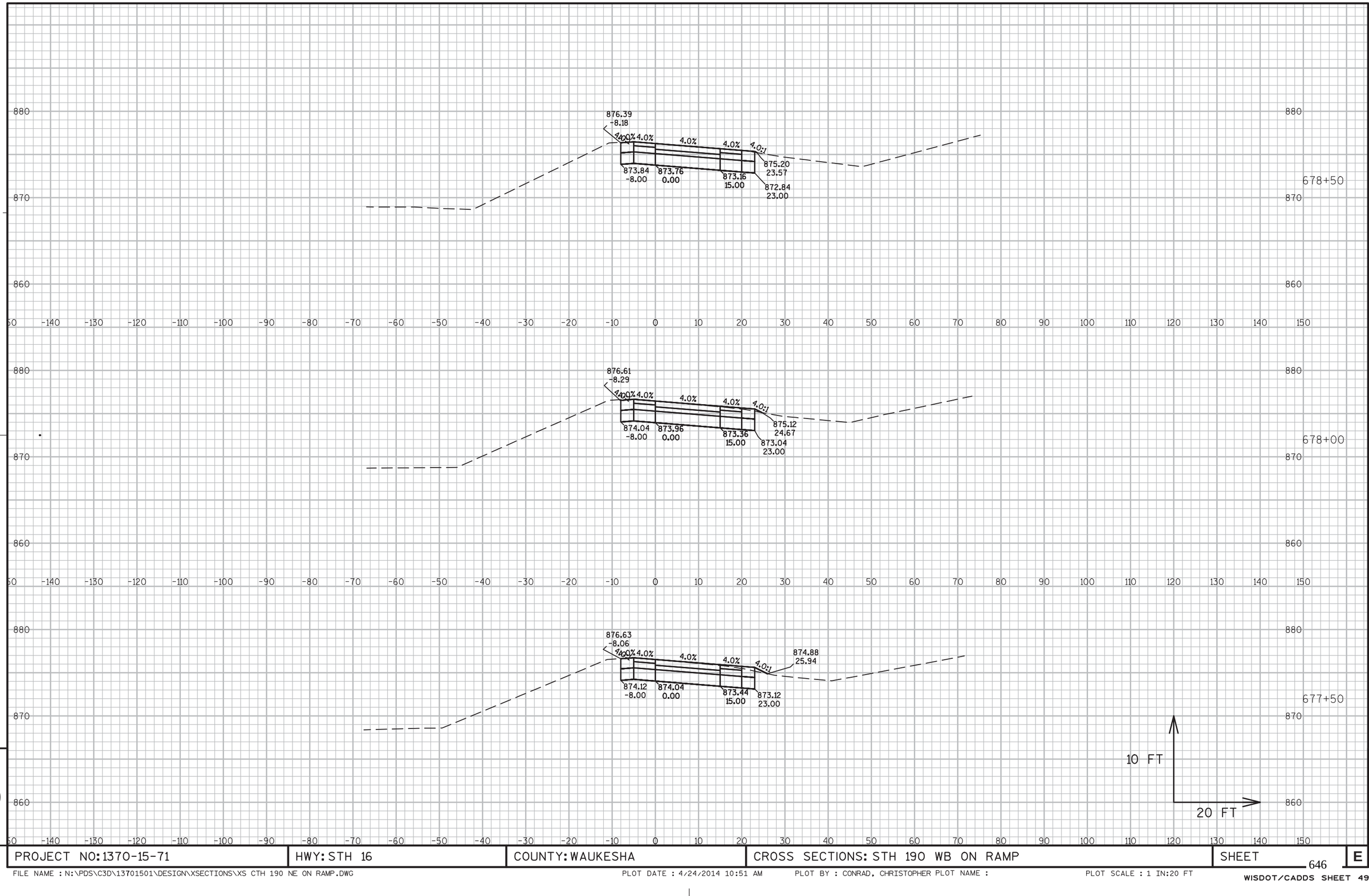


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PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	CROSS SECTIONS: STH 190 WB ON RAMP	SHEET 645	E

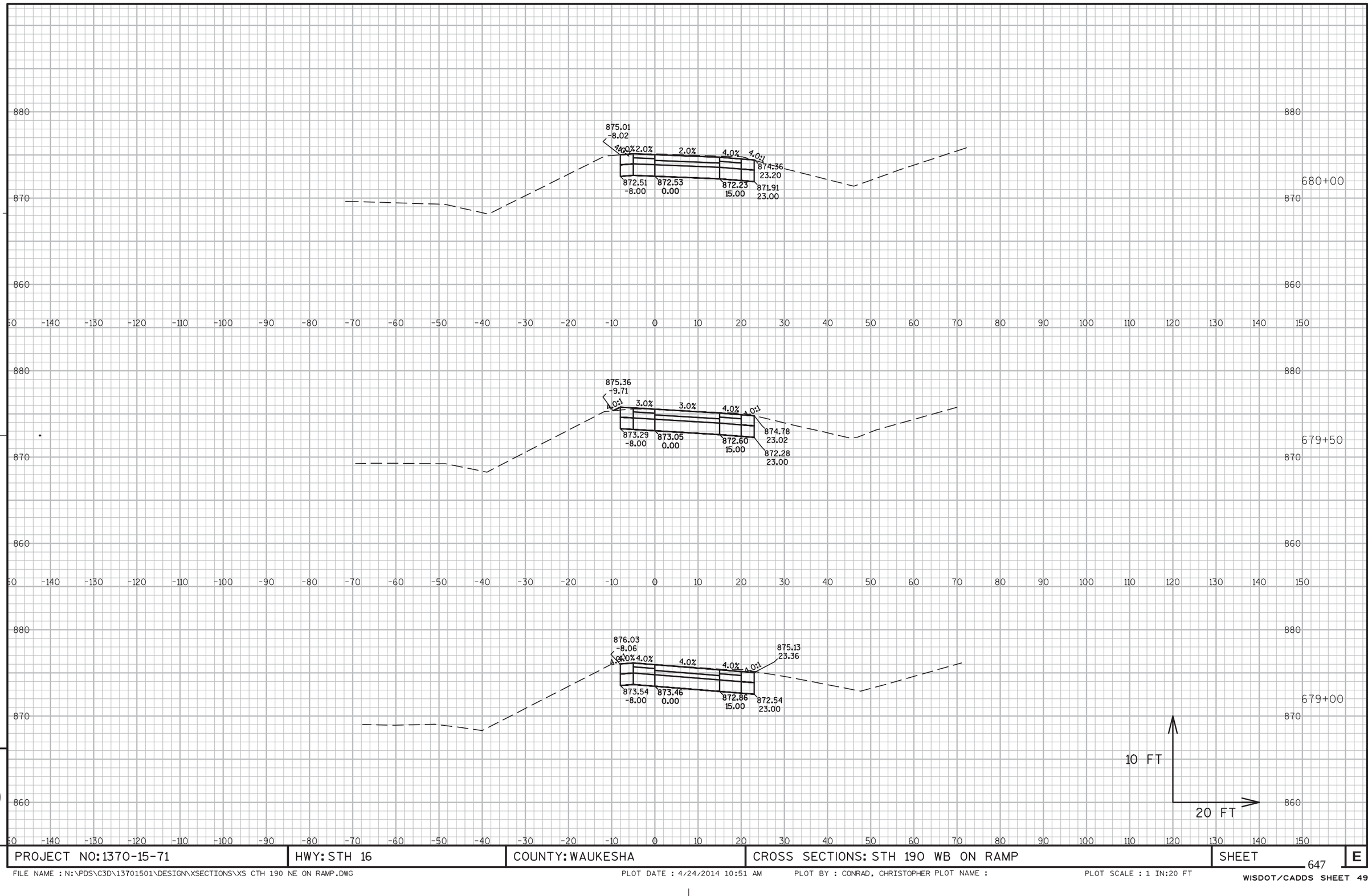
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FILE NAME : N:\PDS\C3D\13701501\DESIGN\XSECTIONS\XS CTH 190 NE ON RAMP.DWG PLOT DATE : 4/24/2014 10:51 AM PLOT BY : CONRAD, CHRISTOPHER PLOT NAME : PLOT SCALE : 1 IN:20 FT

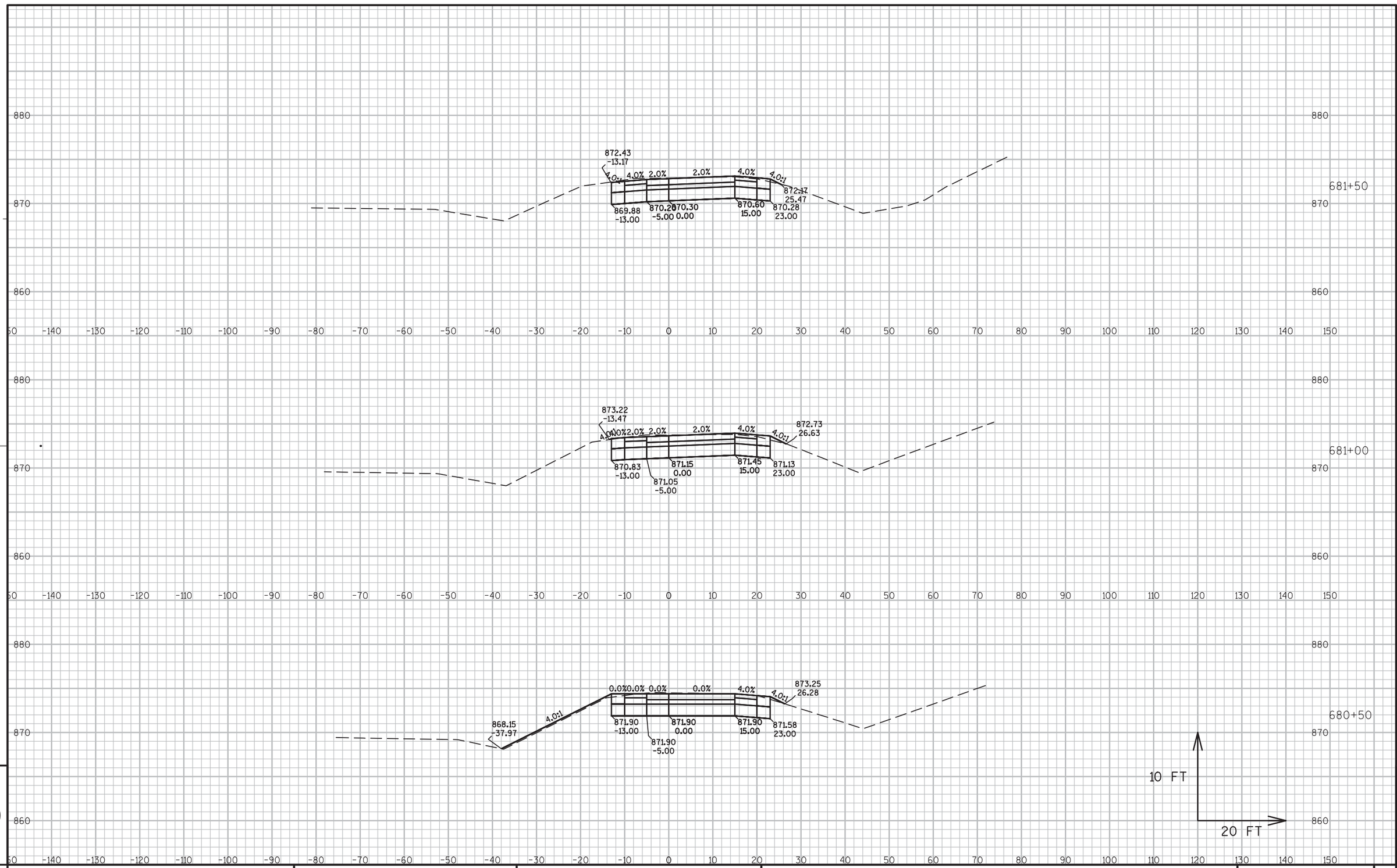


PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	CROSS SECTIONS: STH 190 WB ON RAMP	SHEET 646	E

FILE NAME : N:\PDS\C3D\13701501\DESIGN\XSECTIONS\XS CTH 190 NE ON RAMP.DWG PLOT DATE : 4/24/2014 10:51 AM PLOT BY : CONRAD, CHRISTOPHER PLOT NAME : PLOT SCALE : 1 IN:20 FT



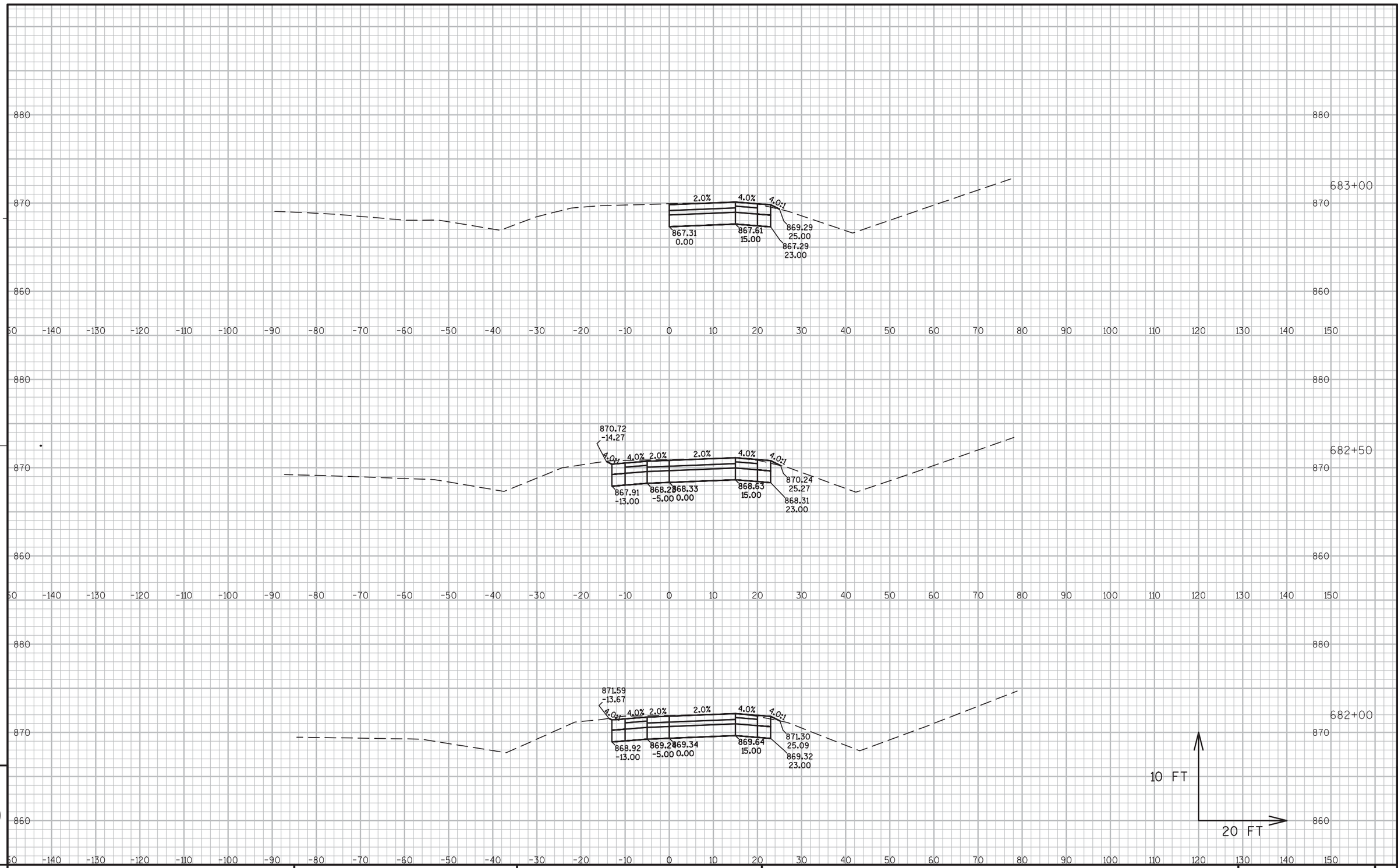
PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	CROSS SECTIONS: STH 190 WB ON RAMP	SHEET 647	E



PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	CROSS SECTIONS: STH 190 WB ON RAMP	SHEET 648	E

FILE NAME : N:\PDS\C3D\13701501\DESIGN\XSECTIONS\XS CTH 190 NE ON RAMP.DWG PLOT DATE : 4/24/2014 10:51 AM PLOT BY : CONRAD, CHRISTOPHER PLOT NAME : PLOT SCALE : 1 IN:20 FT

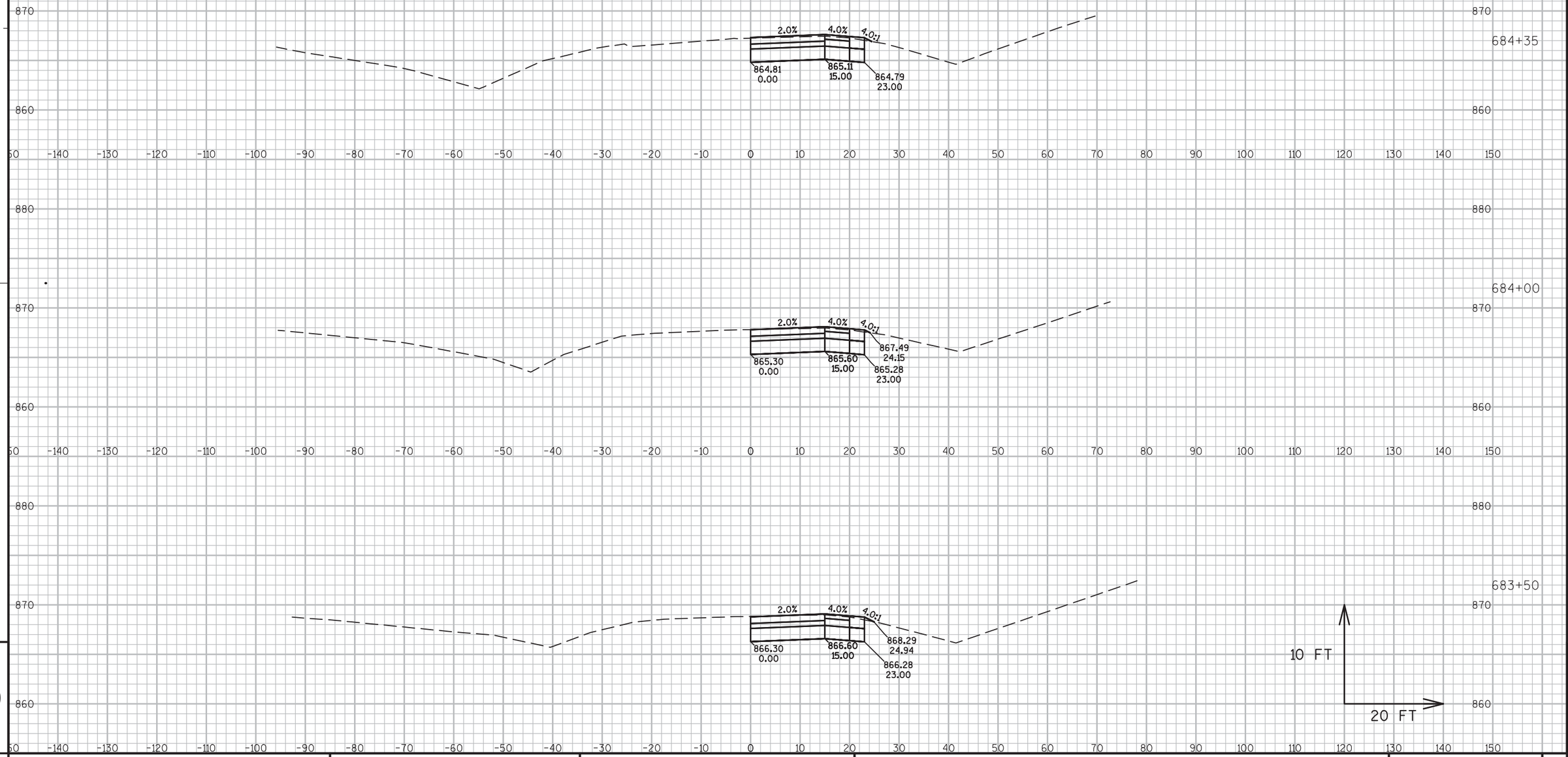
WISDOT/CADDS SHEET 49



PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	CROSS SECTIONS: STH 190 WB ON RAMP	SHEET 649	E

FILE NAME : N:\PDS\C3D\13701501\DESIGN\XSECTIONS\XS CTH 190 NE ON RAMP.DWG PLOT DATE : 4/24/2014 10:51 AM PLOT BY : CONRAD, CHRISTOPHER PLOT NAME : PLOT SCALE : 1 IN:20 FT

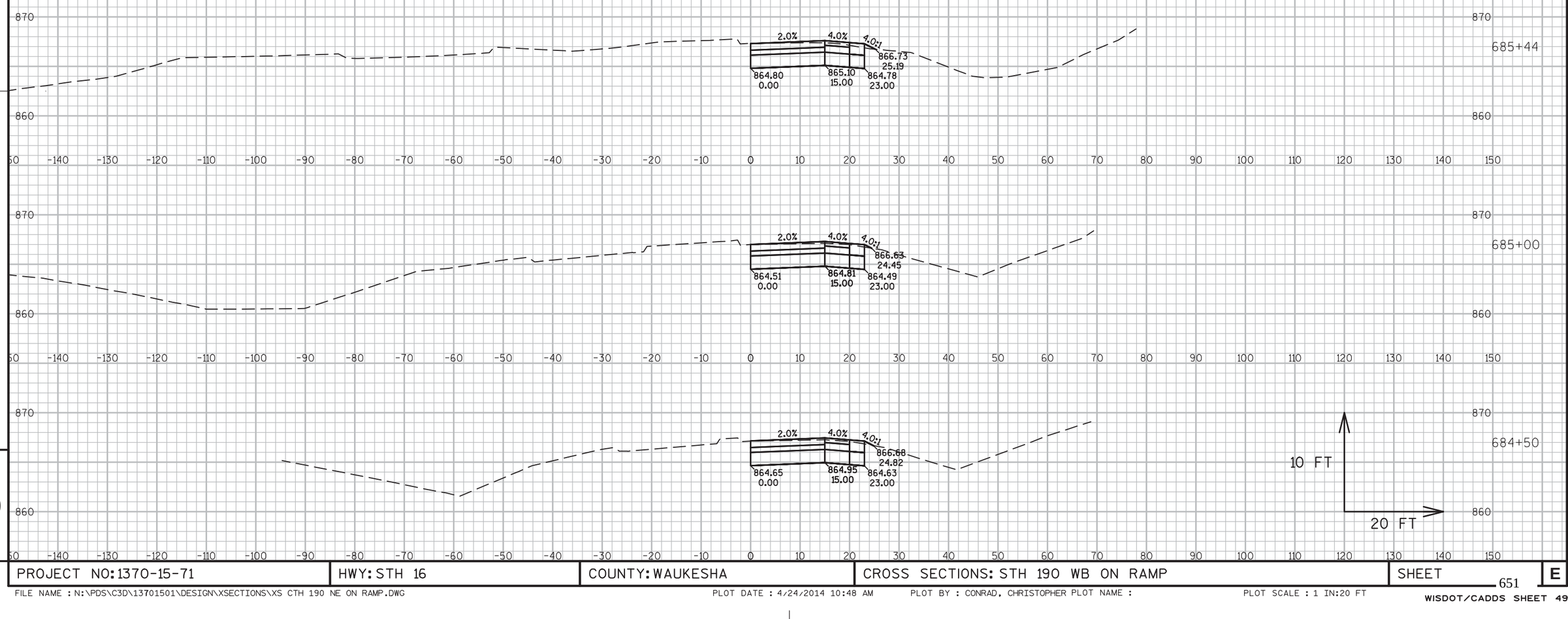
WISDOT/CADDS SHEET 49



PROJECT NO: 1371-15-71	HWY: STH 16	COUNTY: WAUKESHA	CROSS SECTIONS: STH 190 WB ON RAMP	SHEET 650	E

FILE NAME : N:\PDS\C3D\13701501\DESIGN\XSECTIONS\XS CTH 190 NE ON RAMP.DWG PLOT DATE : 4/24/2014 10:51 AM PLOT BY : CONRAD, CHRISTOPHER PLOT NAME : PLOT SCALE : 1 IN:20 FT

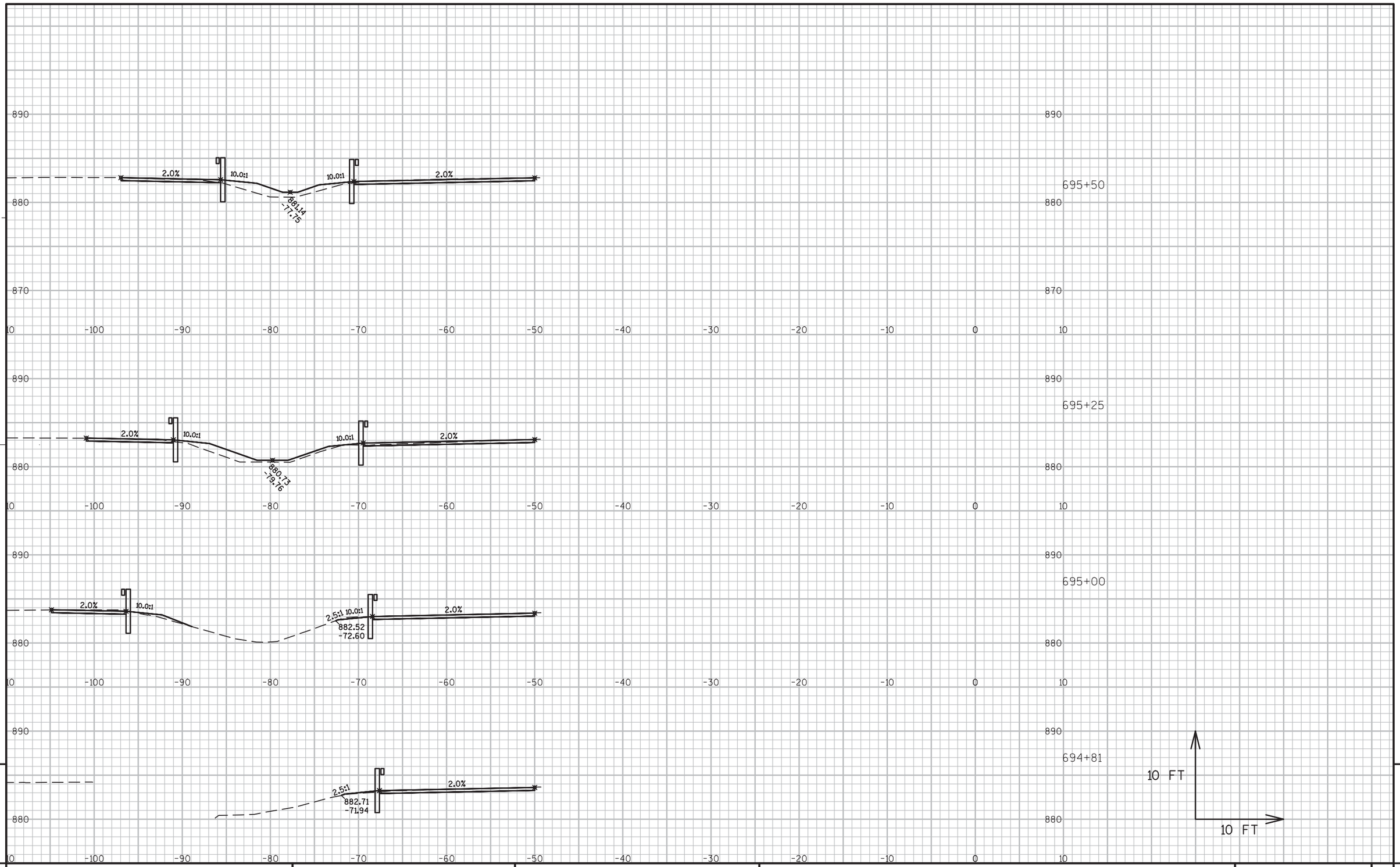
WISDOT/CADDS SHEET 49



PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	CROSS SECTIONS: STH 190 WB ON RAMP	SHEET 651	E

FILE NAME : N:\PDS\C3D\13701501\DESIGN\XSECTIONS\XS CTH 190 NE ON RAMP.DWG PLOT DATE : 4/24/2014 10:48 AM PLOT BY : CONRAD, CHRISTOPHER PLOT NAME : PLOT SCALE : 1 IN:20 FT

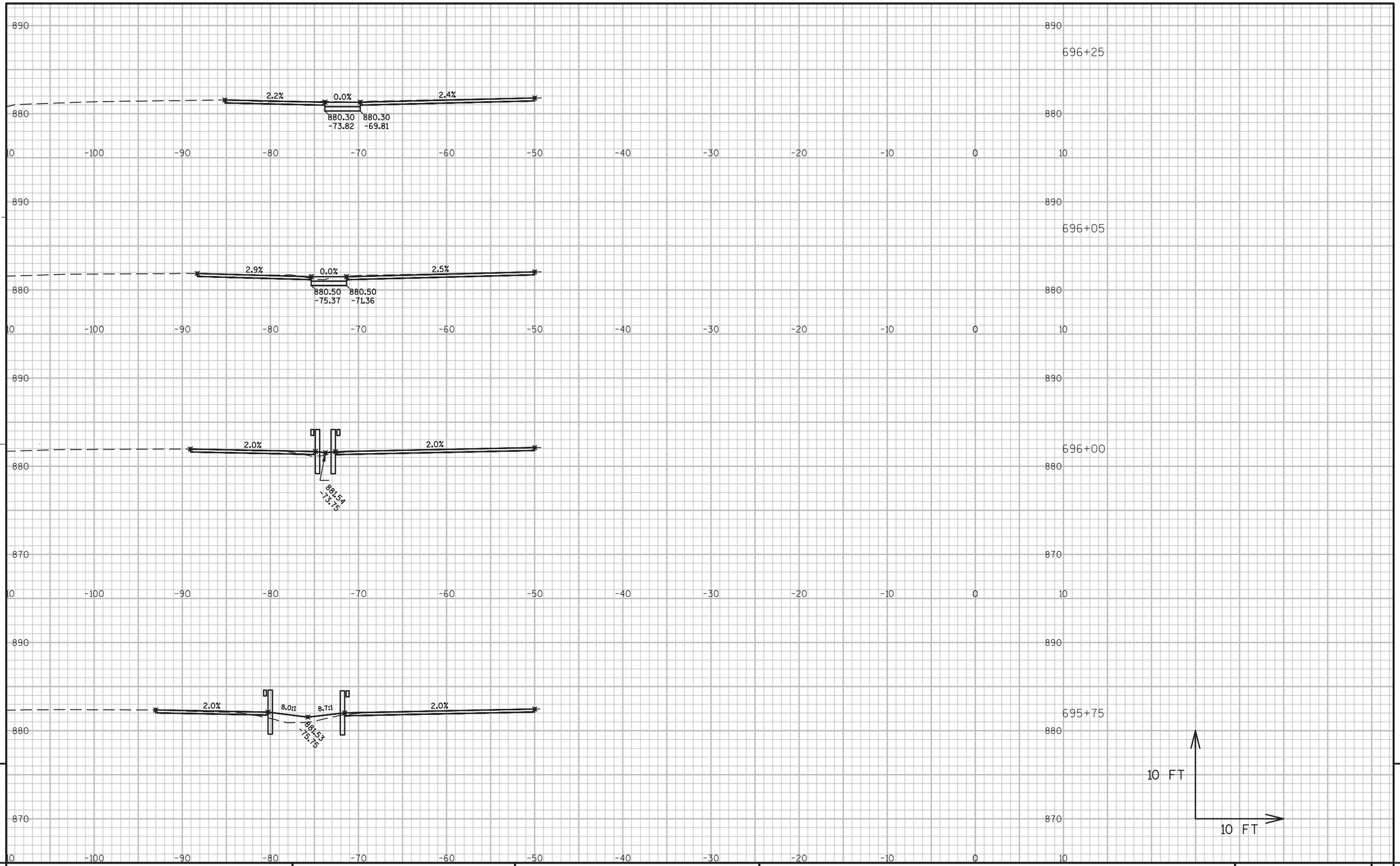
WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	CROSS SECTIONS: STA 696+25WB CRASH CUSHION	SHEET 652	E



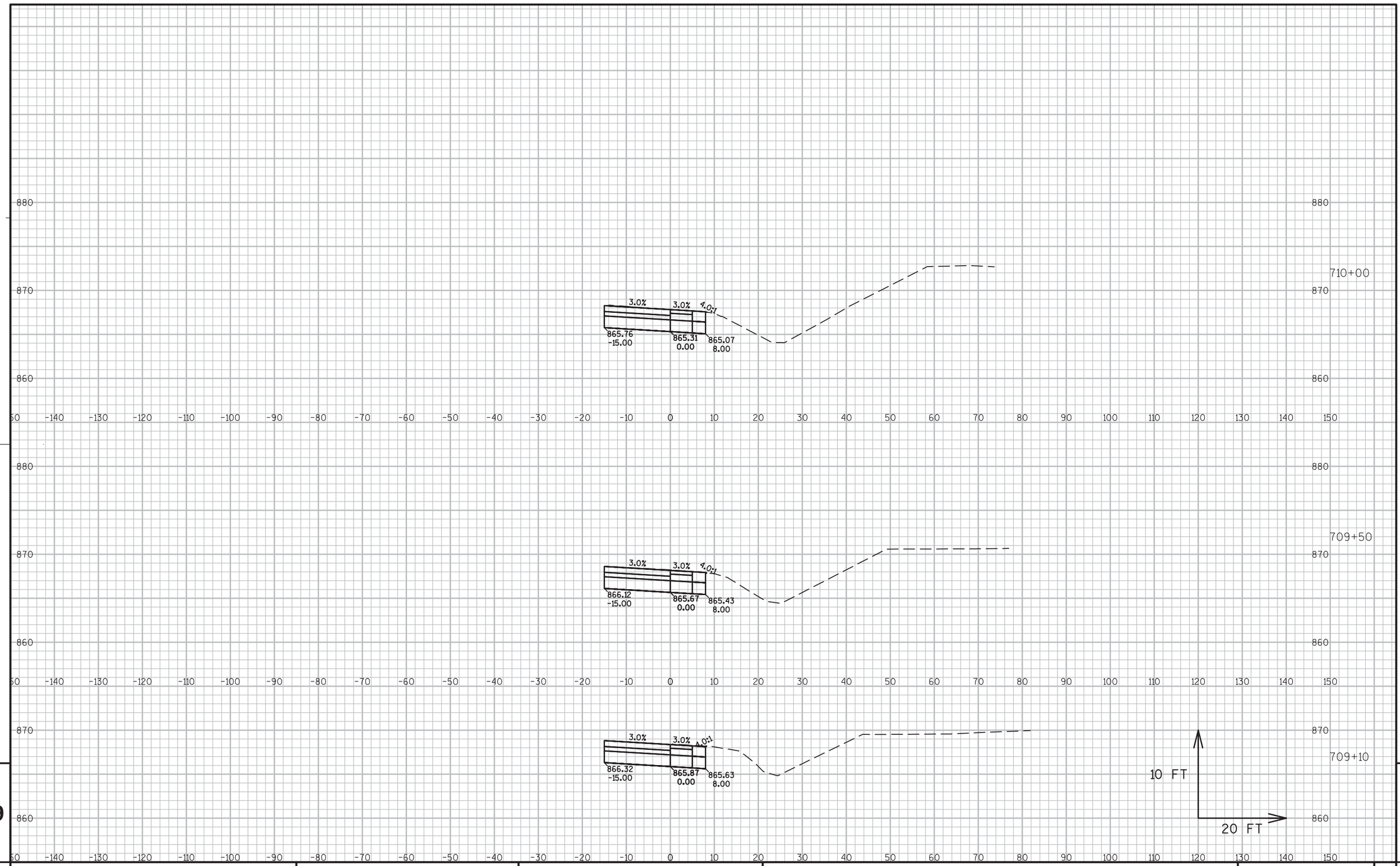
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PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	CROSS SECTIONS: STA 696+25WB CRASH CUSHION	SHEET 653	E

FILE NAME : N:\PDS\C3D\13701501\SHEETSPLAN\STA696+25CRASHCUSHION.DWG PLOT DATE : 2/5/2014 2:06 PM PLOT BY : ROTIER, STEVEN J PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49



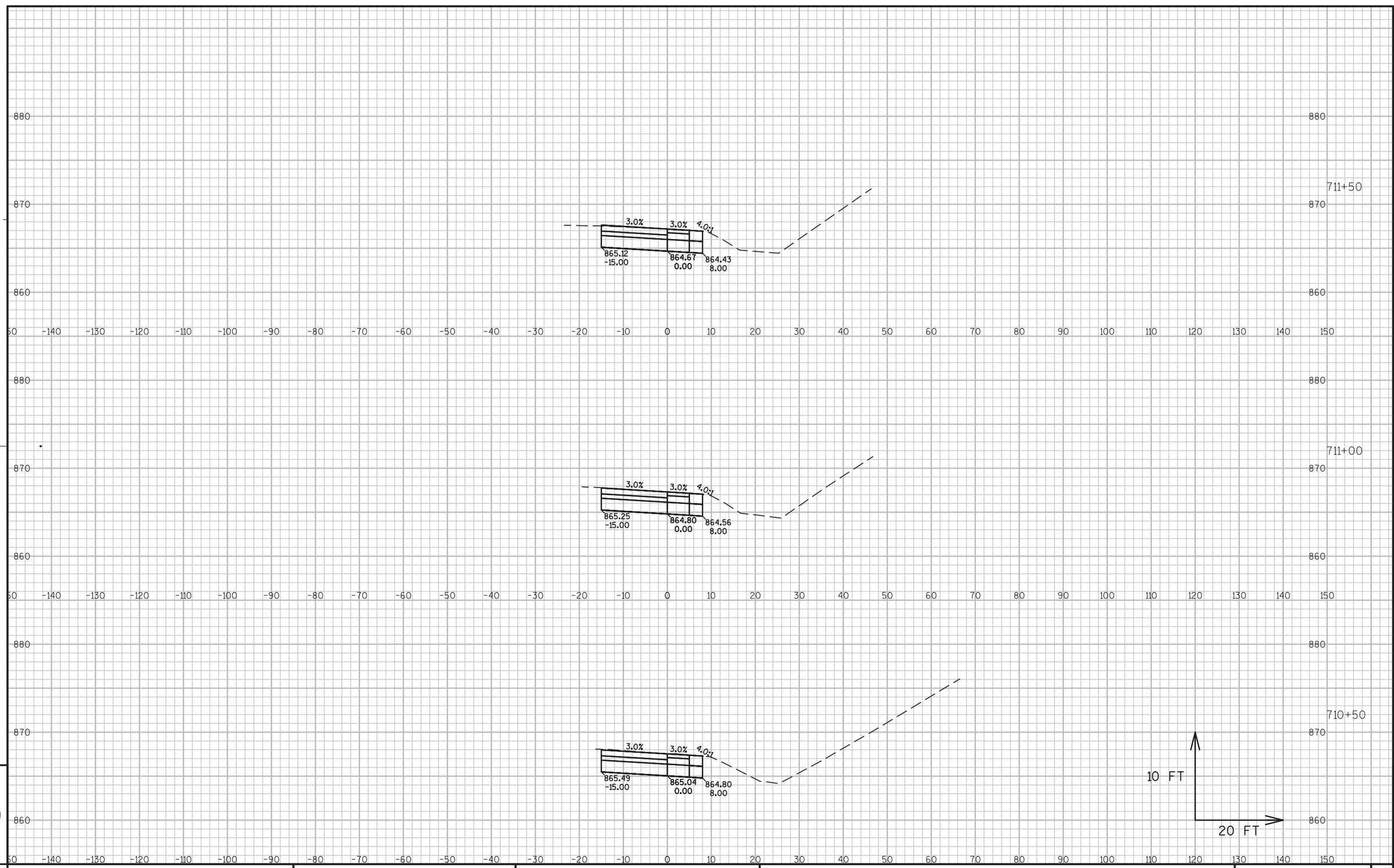
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PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	CROSS SECTIONS: CTH JJ EB OFF RAMP	SHEET 654	E

FILE NAME : N:\PDS\C3D\13701501\DESIGN\XSECTIONS\XS CTH JJ NW OFF RAMP.DWG PLOT DATE : 4/24/2014 1:04 PM PLOT BY : CONRAD, CHRISTOPHER PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49

9

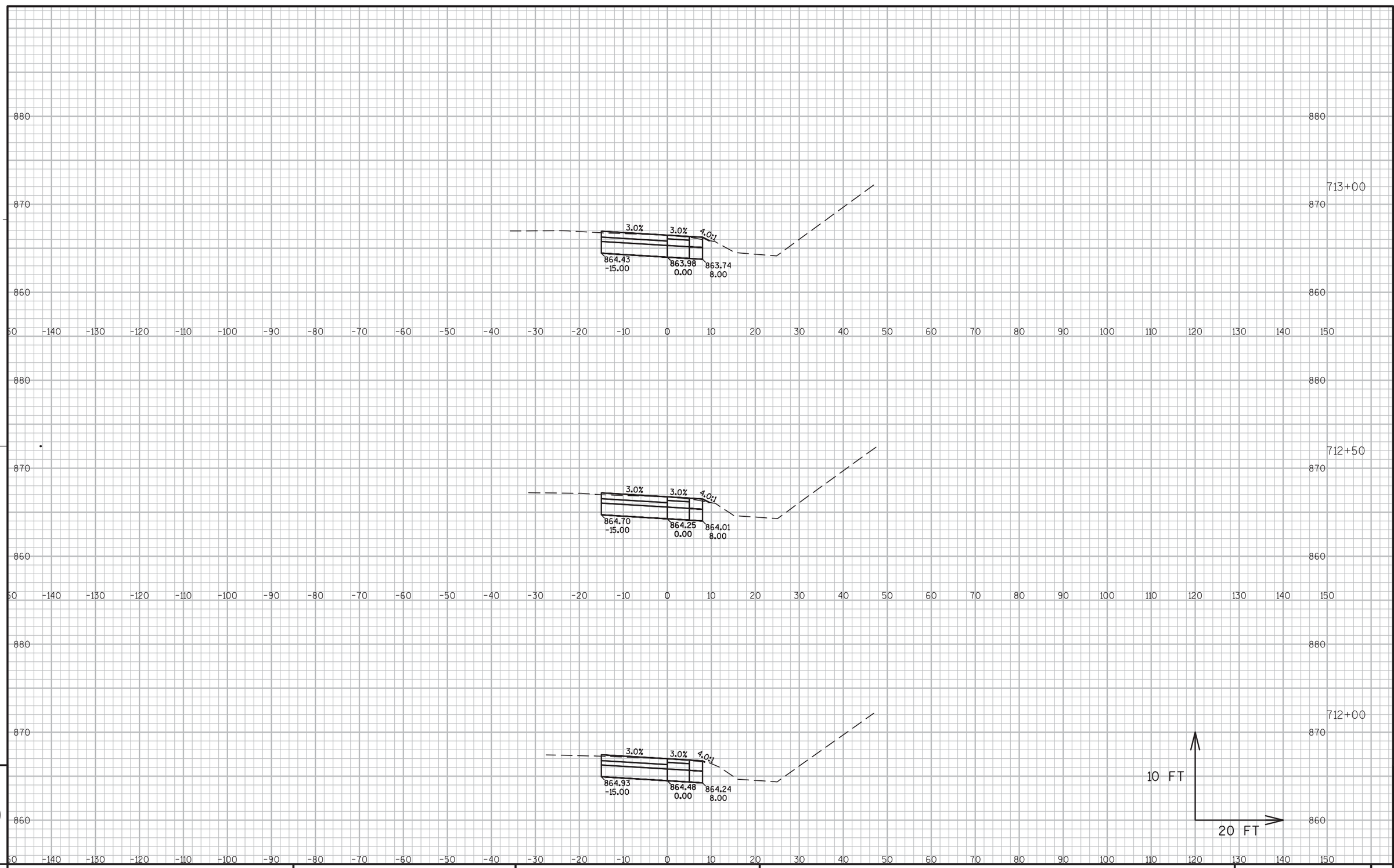


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PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	CROSS SECTIONS: CTH JJ EB OFF RAMP	SHEET 655	E

FILE NAME : N:\PDS\C3D\13701501\DESIGN\XSECTIONS\XS CTH JJ NW OFF RAMP.DWG PLOT DATE : 4/24/2014 1:04 PM PLOT BY : CONRAD, CHRISTOPHER PLOT NAME : PLOT SCALE : 1 IN:20 FT

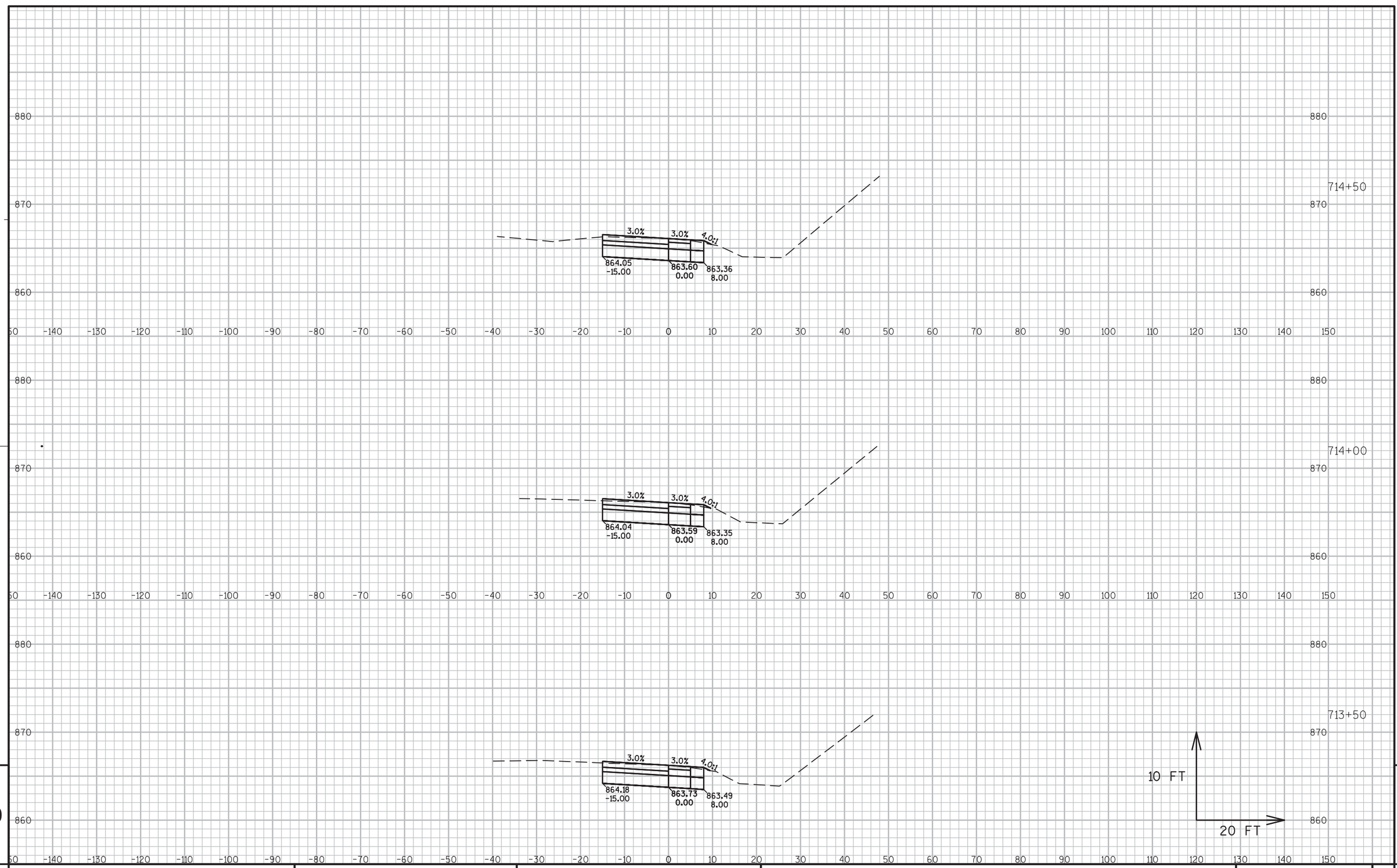


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PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	CROSS SECTIONS: CTH JJ EB OFF RAMP	SHEET	E

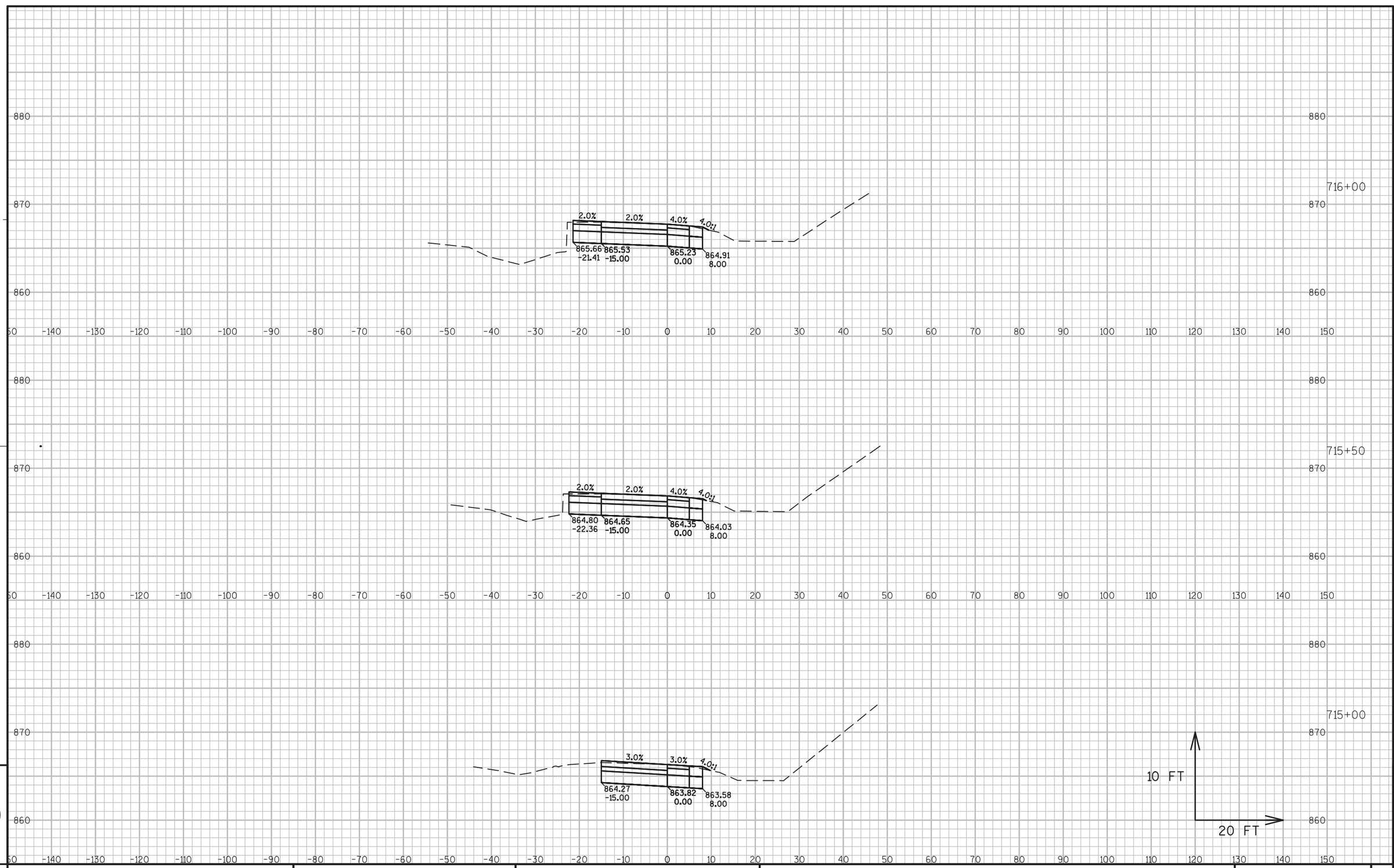
FILE NAME : N:\PDS\C3D\13701501\DESIGN\XSECTIONS\XS CTH JJ NW OFF RAMP.DWG PLOT DATE : 4/24/2014 1:04 PM PLOT BY : CONRAD, CHRISTOPHER PLOT NAME : PLOT SCALE : 1 IN:20 FT



PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	CROSS SECTIONS: CTH JJ EB OFF RAMP	SHEET 657	E

FILE NAME : N:\PDS\C3D\13701501\DESIGN\XSECTIONS\XS CTH JJ NW OFF RAMP.DWG PLOT DATE : 4/24/2014 1:04 PM PLOT BY : CONRAD, CHRISTOPHER PLOT NAME : PLOT SCALE : 1 IN:20 FT

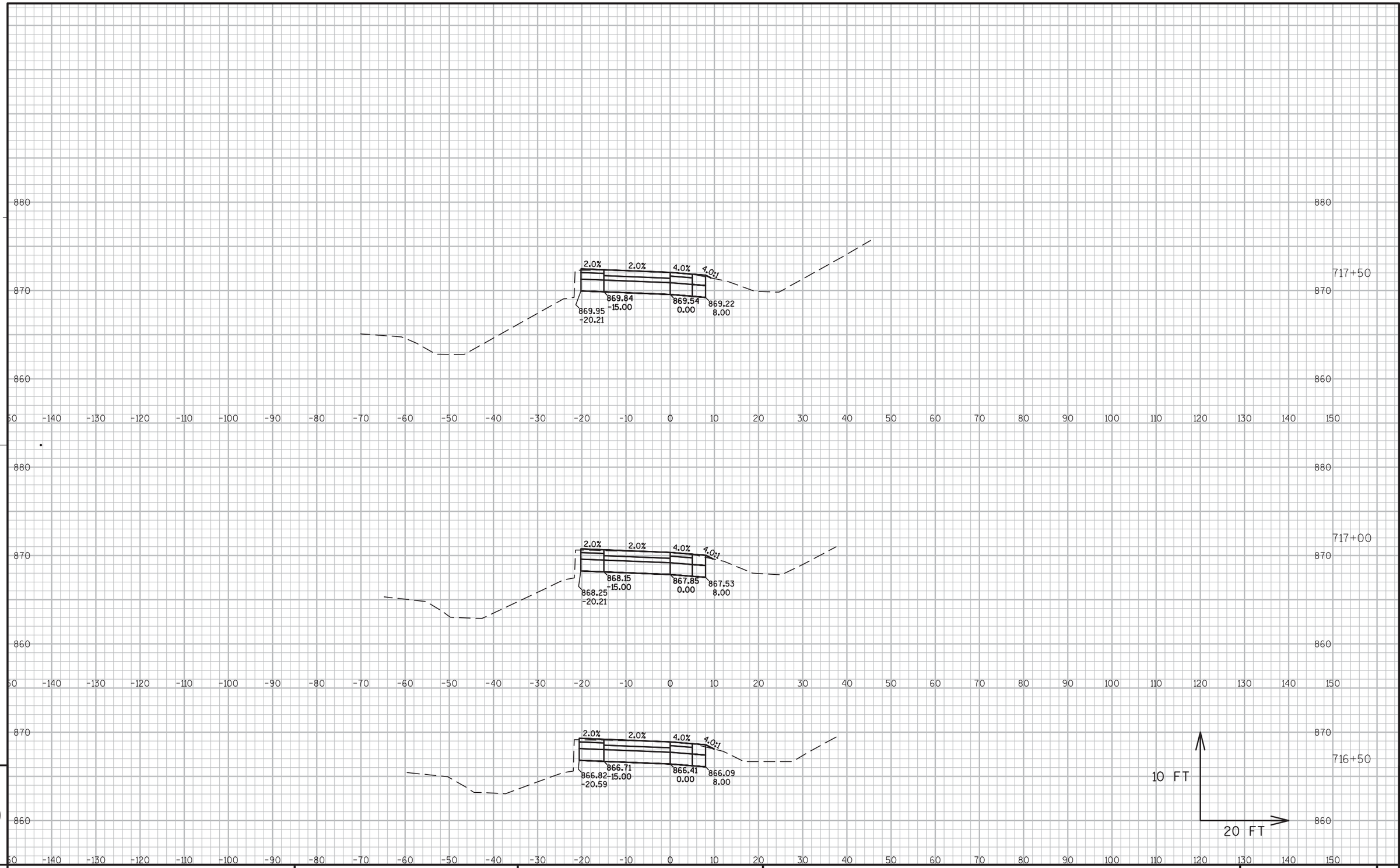
WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	CROSS SECTIONS: CTH JJ EB OFF RAMP	SHEET 658	E



9

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	CROSS SECTIONS: CTH JJ EB OFF RAMP	SHEET 659	E

FILE NAME : N:\PDS\C3D\13701501\DESIGN\XSECTIONS\XS CTH JJ NW OFF RAMP.DWG PLOT DATE : 4/24/2014 1:04 PM PLOT BY : CONRAD, CHRISTOPHER PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49

719+00

718+50

718+00

2.0% 2.0%
878.14
877.84
878.25 -15.00 0.00
-20.26

2.0% 2.0%
875.87
875.57
875.98 -15.00 0.00
-20.28

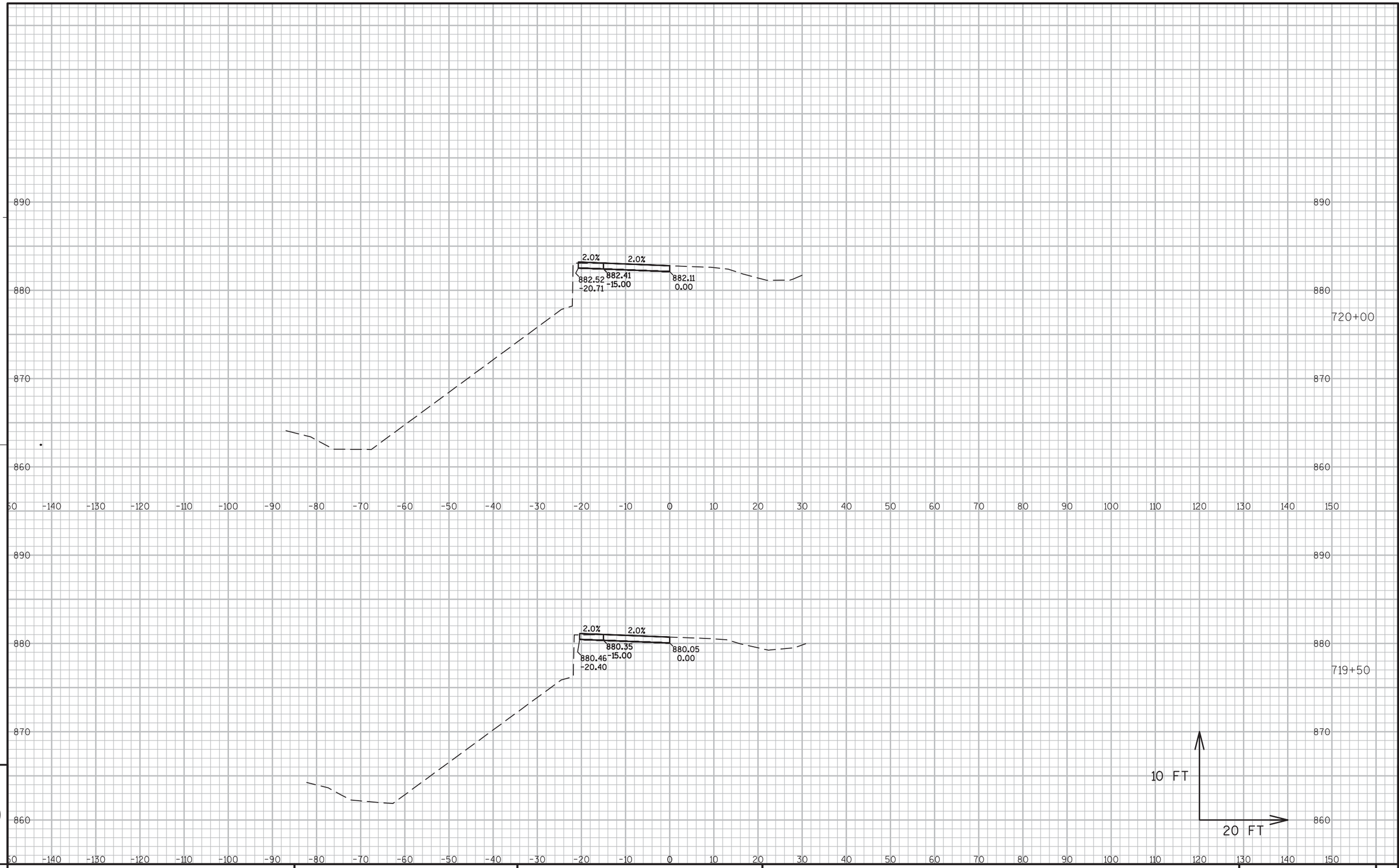
2.0% 2.0% 2.0% 4.0%
871.82
871.52 871.36
871.92 -15.00 0.00 8.00
-20.29

10 FT
20 FT

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	CROSS SECTIONS: CTH JJ EB OFF RAMP	SHEET 660 E

FILE NAME : N:\PDS\C3D\13701501\DESIGN\XSECTIONS\XS CTH JJ NW OFF RAMP.DWG PLOT DATE : 4/24/2014 1:04 PM PLOT BY : CONRAD, CHRISTOPHER PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49



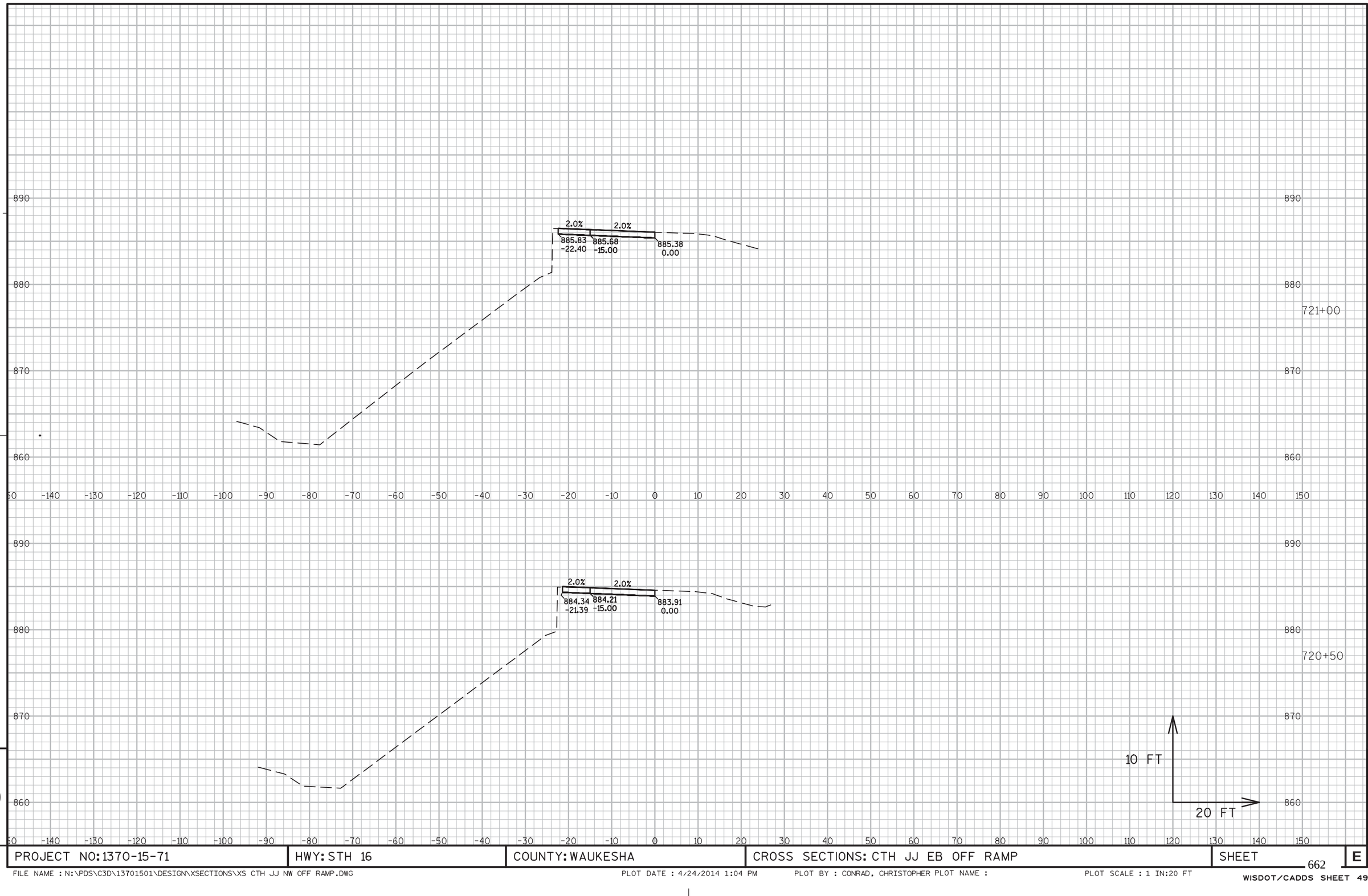
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PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	CROSS SECTIONS: CTH JJ EB OFF RAMP	SHEET 661	E

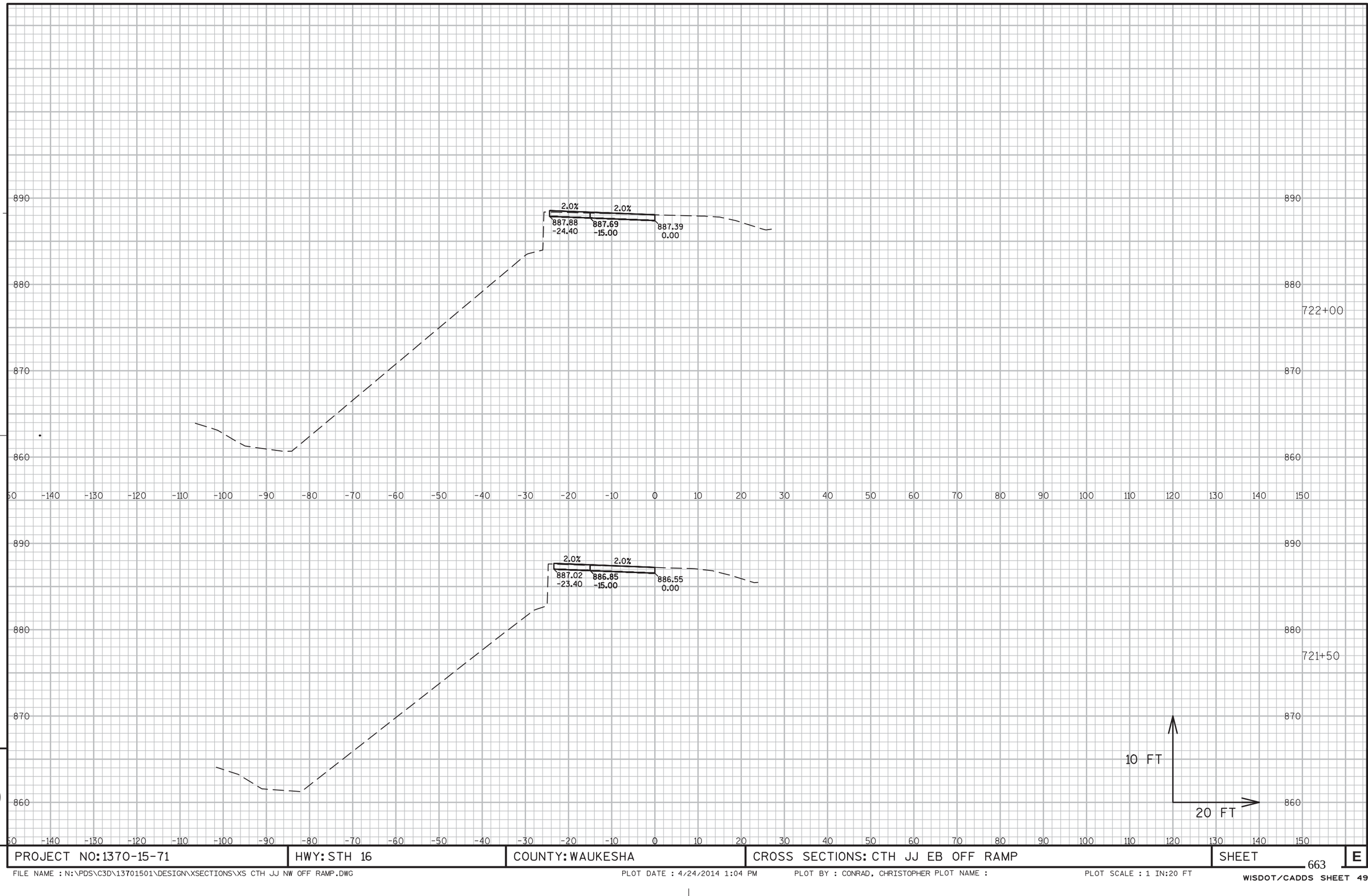
FILE NAME : N:\PDS\C3D\13701501\DESIGN\XSECTIONS\XS CTH JJ NW OFF RAMP.DWG PLOT DATE : 4/24/2014 1:04 PM PLOT BY : CONRAD, CHRISTOPHER PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49



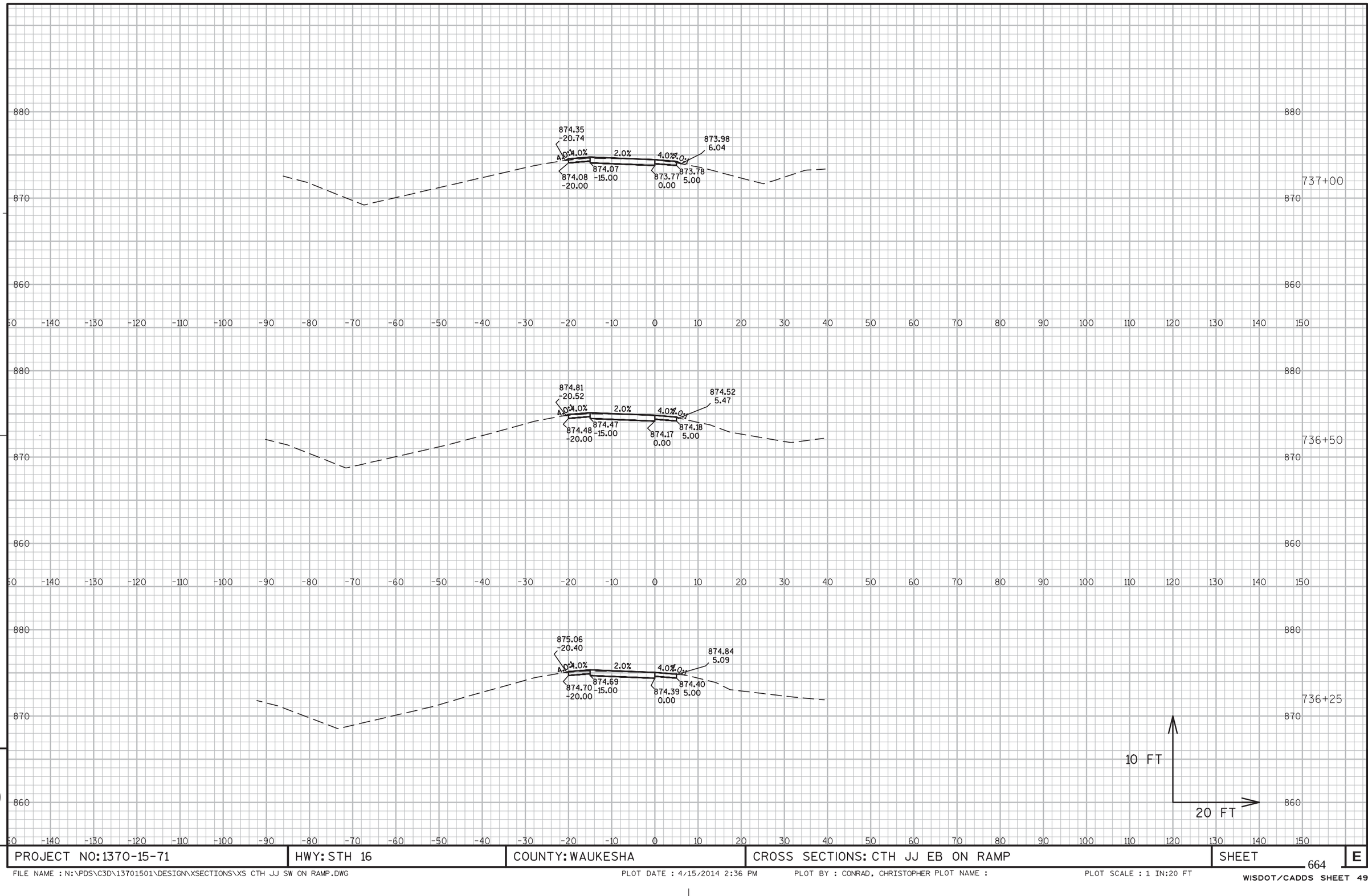
PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	CROSS SECTIONS: CTH JJ EB OFF RAMP	SHEET	E

FILE NAME : N:\PDS\C3D\13701501\DESIGN\XSECTIONS\XS CTH JJ NW OFF RAMP.DWG PLOT DATE : 4/24/2014 1:04 PM PLOT BY : CONRAD, CHRISTOPHER PLOT NAME : PLOT SCALE : 1 IN:20 FT



PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	CROSS SECTIONS: CTH JJ EB OFF RAMP	SHEET	E

FILE NAME : N:\PDS\C3D\13701501\DESIGN\XSECTIONS\XS CTH JJ NW OFF RAMP.DWG PLOT DATE : 4/24/2014 1:04 PM PLOT BY : CONRAD, CHRISTOPHER PLOT NAME : PLOT SCALE : 1 IN:20 FT



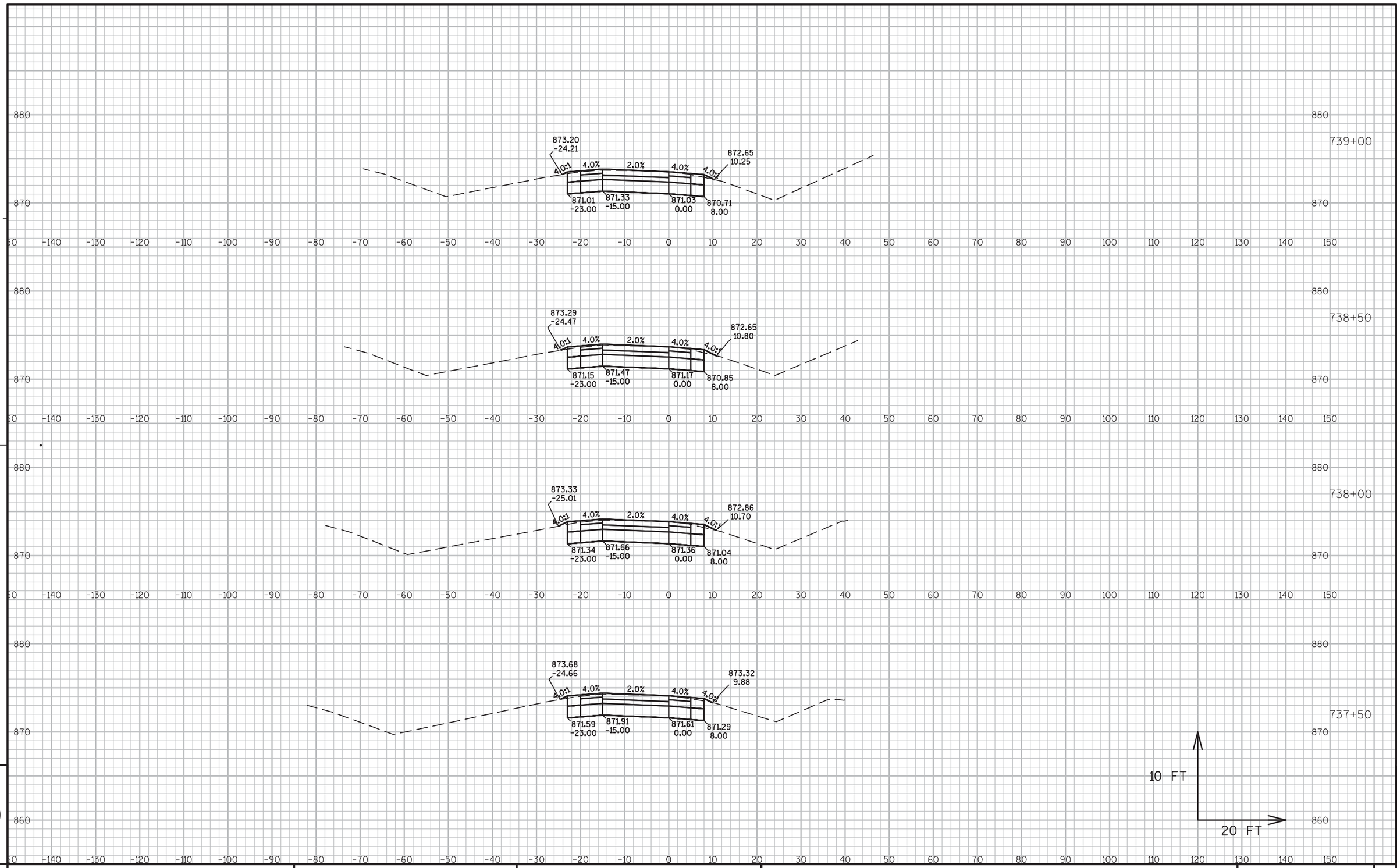
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PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	CROSS SECTIONS: CTH JJ EB ON RAMP	SHEET 664	E

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FILE NAME : N:\PDS\C3D\13701501\DESIGN\XSECTIONS\XS CTH JJ SW ON RAMP.DWG PLOT DATE : 4/15/2014 2:36 PM PLOT BY : CONRAD, CHRISTOPHER PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49

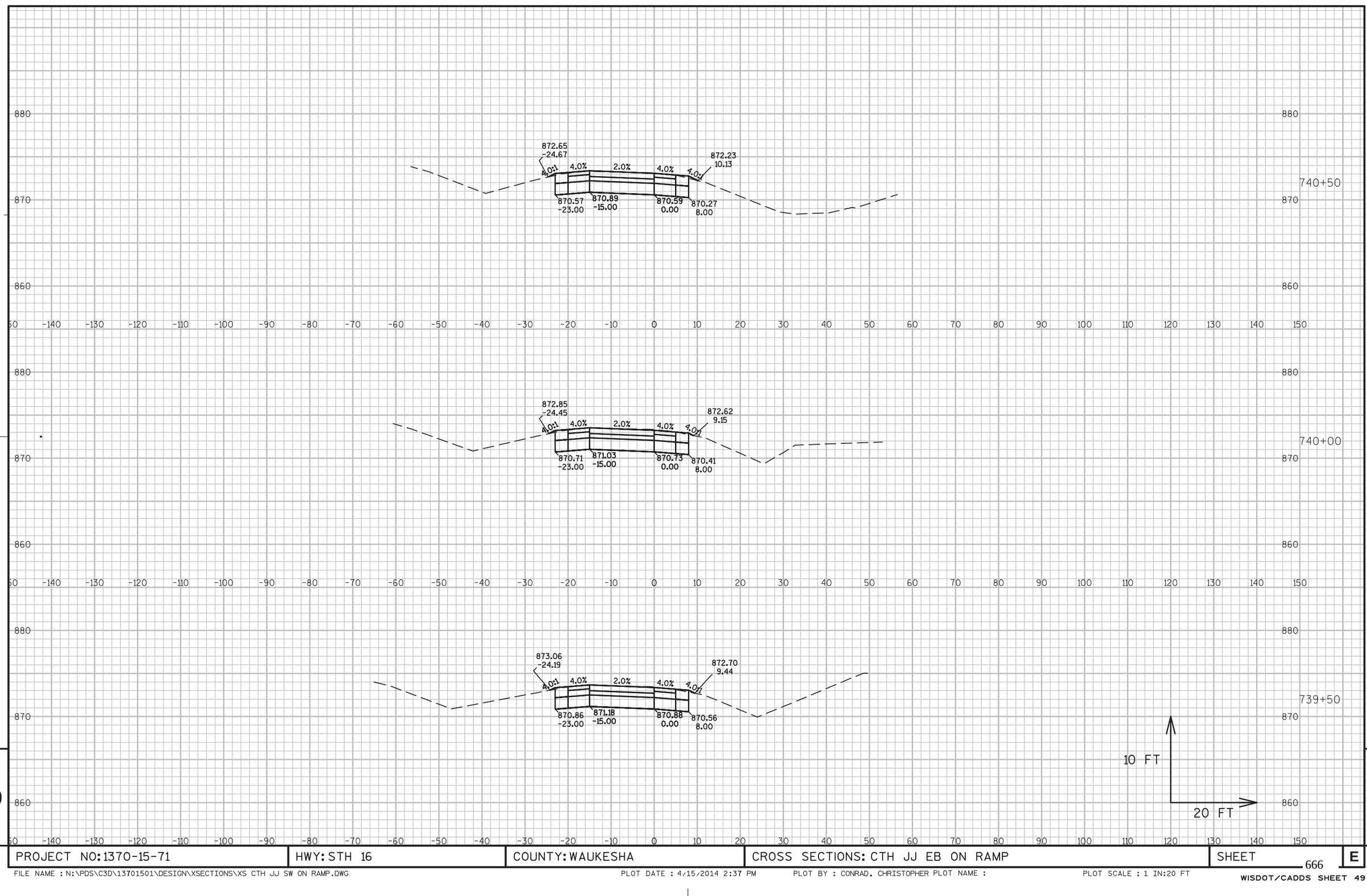


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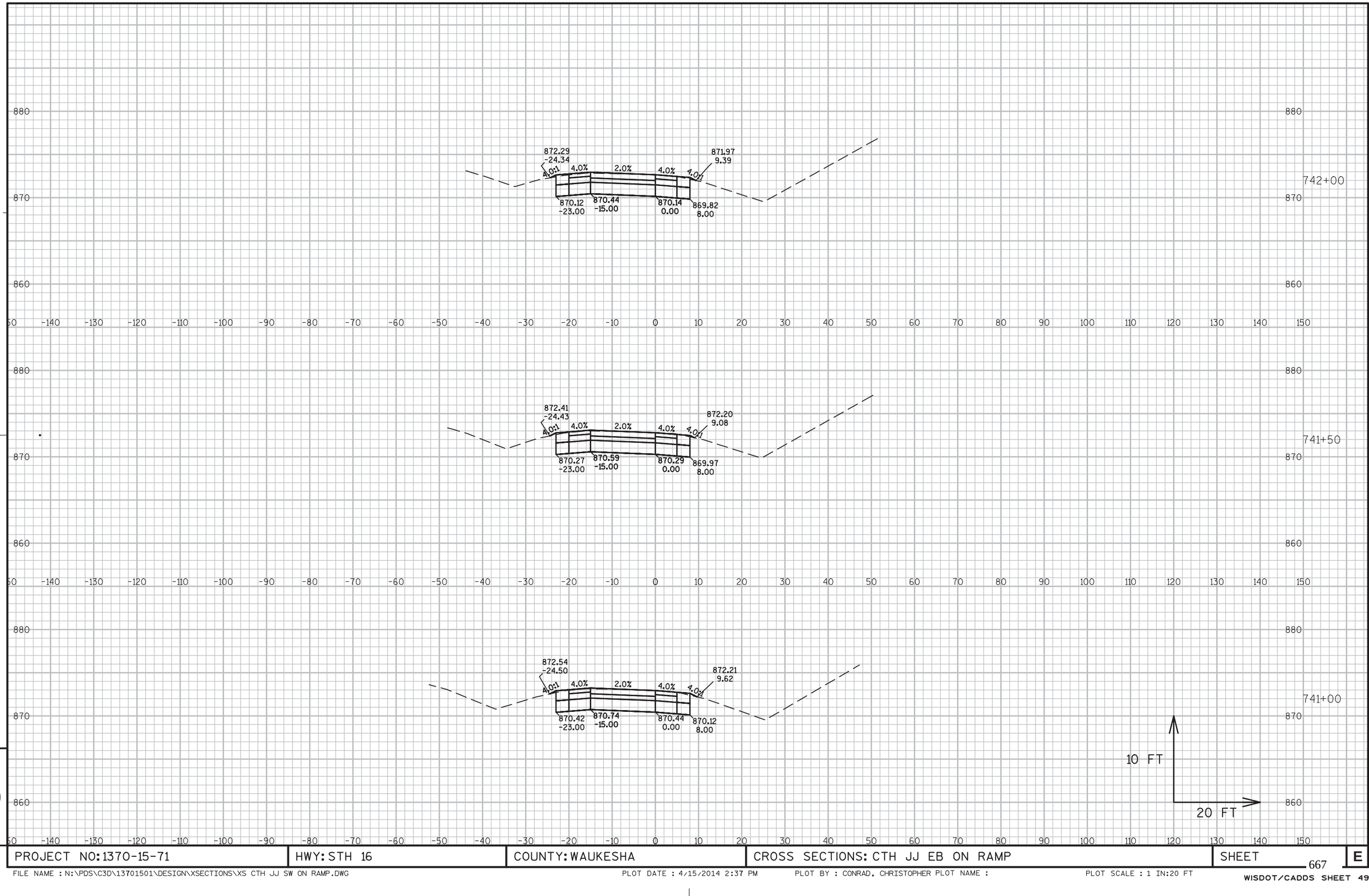
PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	CROSS SECTIONS: CTH JJ EB ON RAMP	SHEET	E

FILE NAME : N:\PDS\C3D\13701501\DESIGN\XSECTIONS\XS CTH JJ SW ON RAMP.DWG PLOT DATE : 4/15/2014 2:36 PM PLOT BY : CONRAD, CHRISTOPHER PLOT NAME : PLOT SCALE : 1 IN:20 FT



PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	CROSS SECTIONS: CTH JJ EB ON RAMP	SHEET	E

FILE NAME : N:\PDS\C3D\13701501\DESIGN\XSECTIONS\XS CTH JJ SW ON RAMP.DWG PLOT DATE : 4/15/2014 2:37 PM PLOT BY : CONRAD, CHRISTOPHER PLOT NAME : PLOT SCALE : 1 IN:20 FT

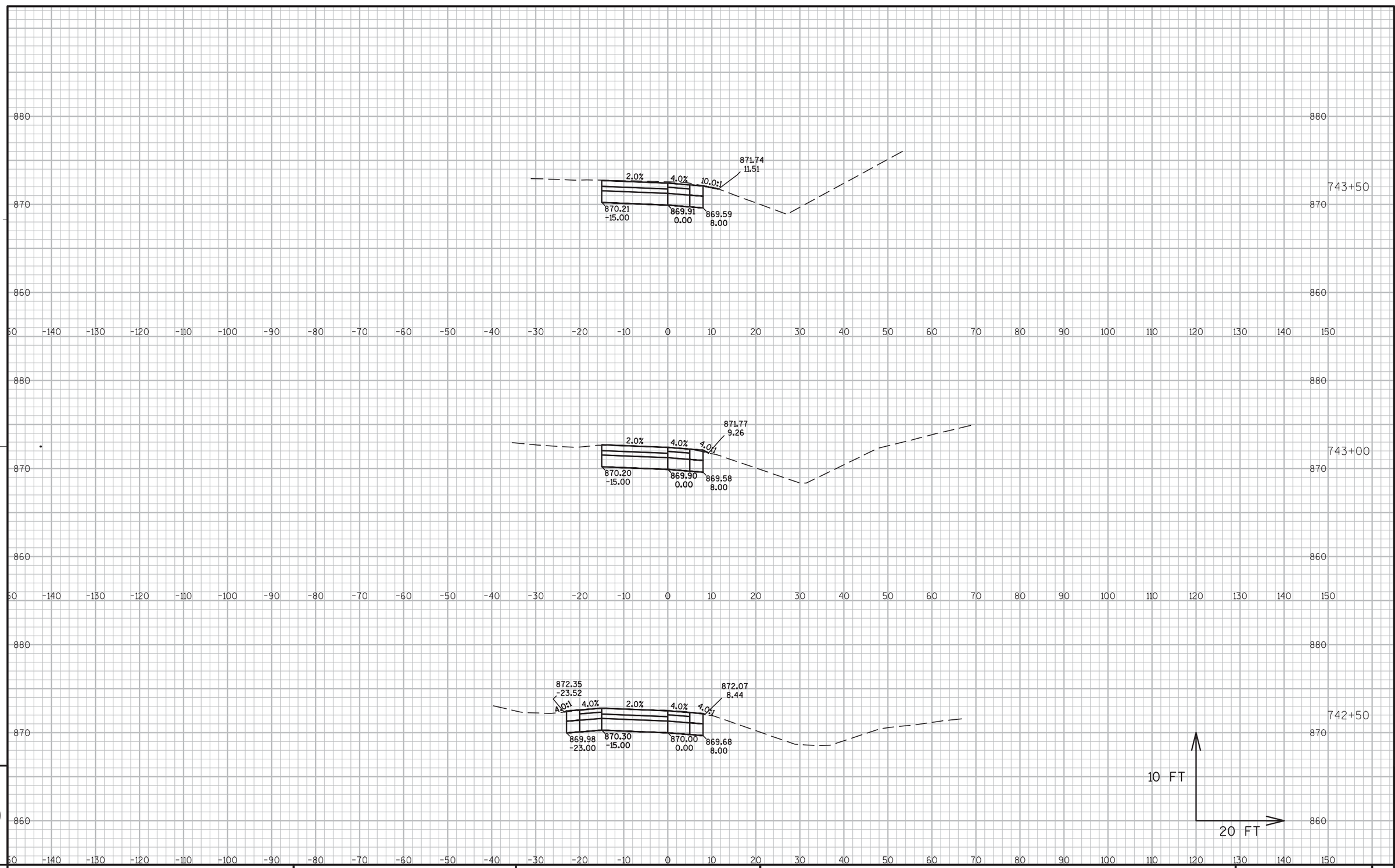


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PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	CROSS SECTIONS: CTH JJ EB ON RAMP	SHEET 667	E

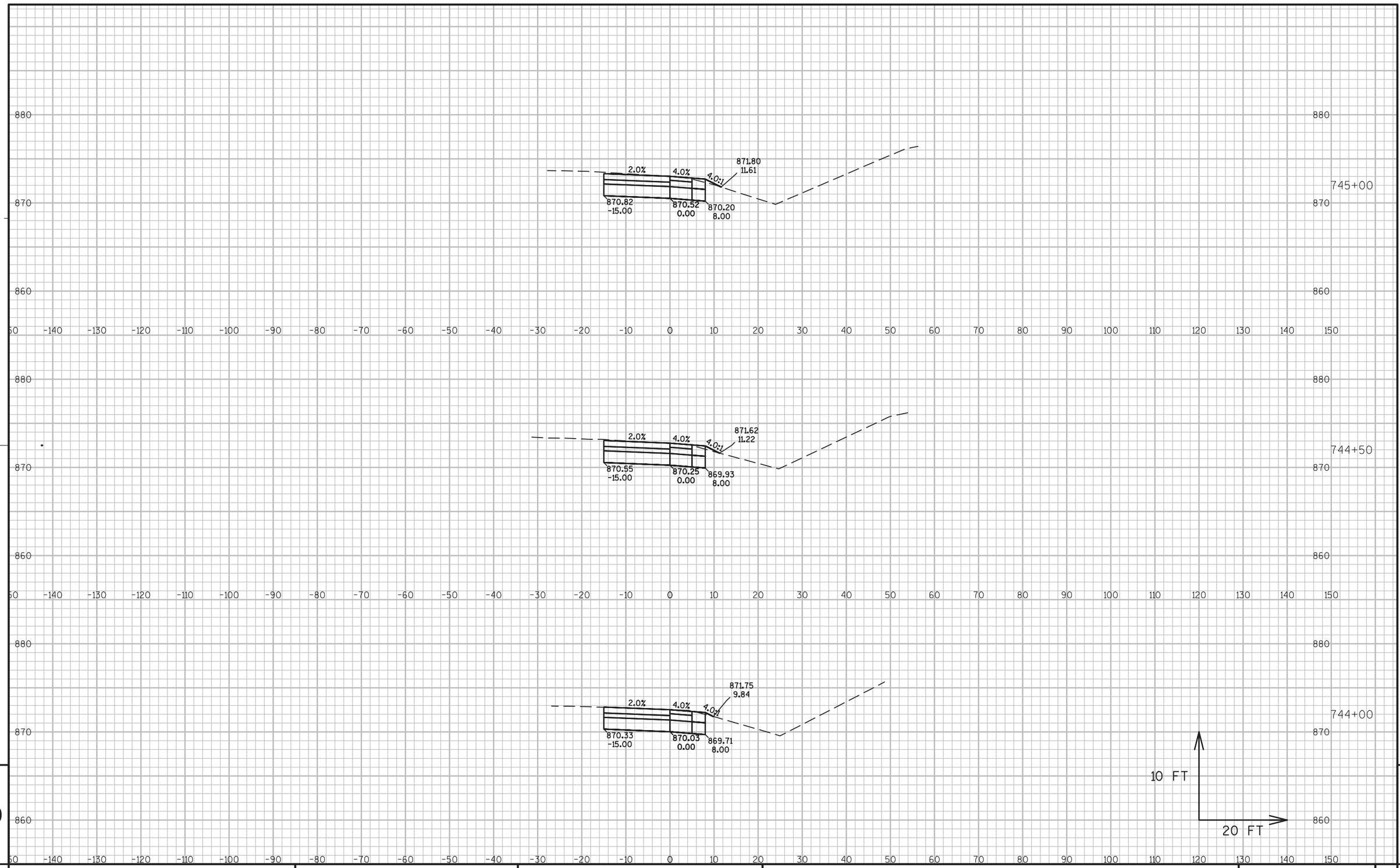
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PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	CROSS SECTIONS: CTH JJ EB ON RAMP	SHEET 668	E

FILE NAME : N:\PDS\C3D\13701501\DESIGN\XSECTIONS\XS CTH JJ SW ON RAMP.DWG PLOT DATE : 4/15/2014 2:37 PM PLOT BY : CONRAD, CHRISTOPHER PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49

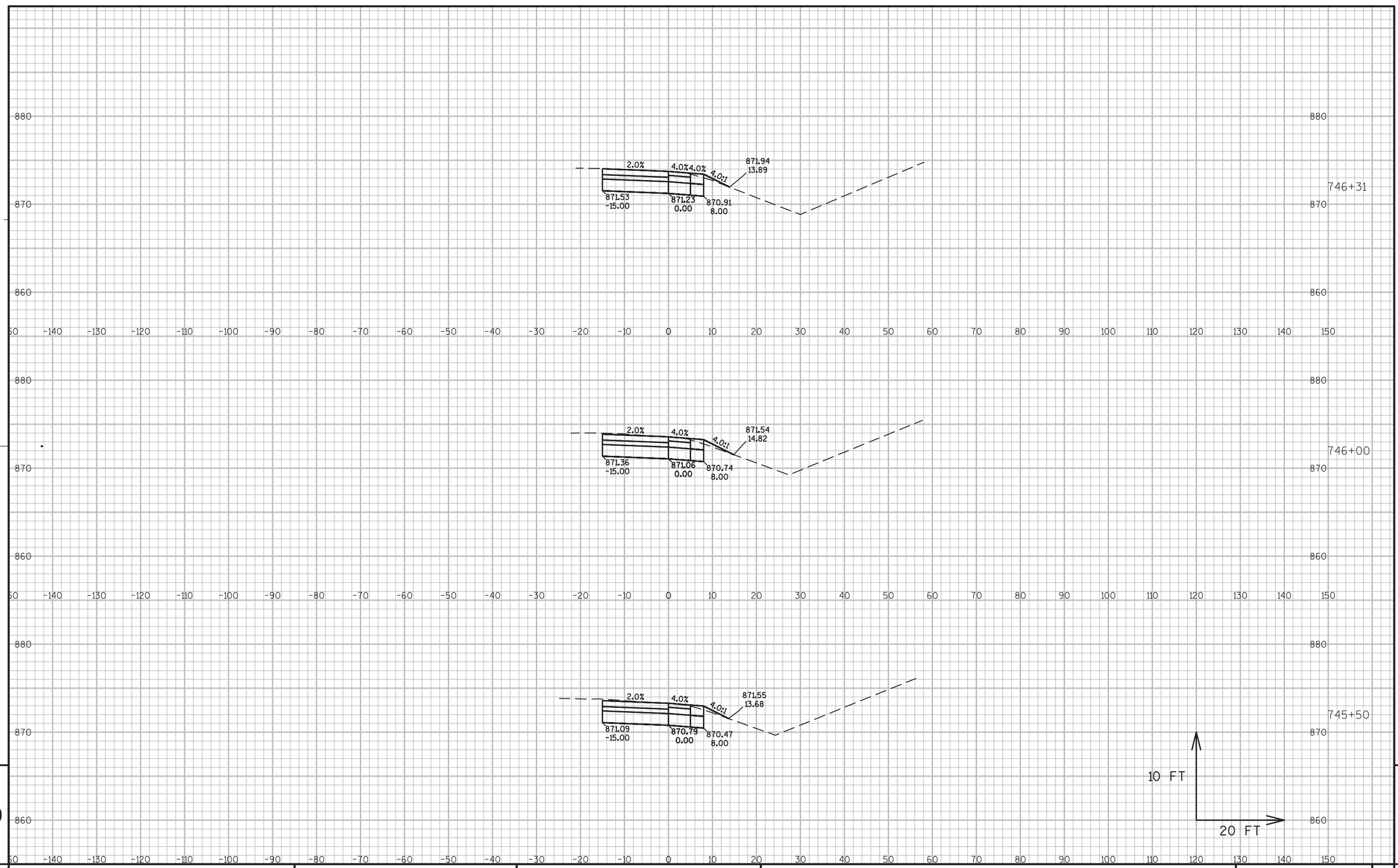


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PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	CROSS SECTIONS: CTH JJ EB ON RAMP	SHEET 669	E

FILE NAME : N:\PDS\C3D\13701501\DESIGN\XSECTIONS\XS CTH JJ SW ON RAMP.DWG PLOT DATE : 4/15/2014 2:37 PM PLOT BY : CONRAD, CHRISTOPHER PLOT NAME : PLOT SCALE : 1 IN:20 FT



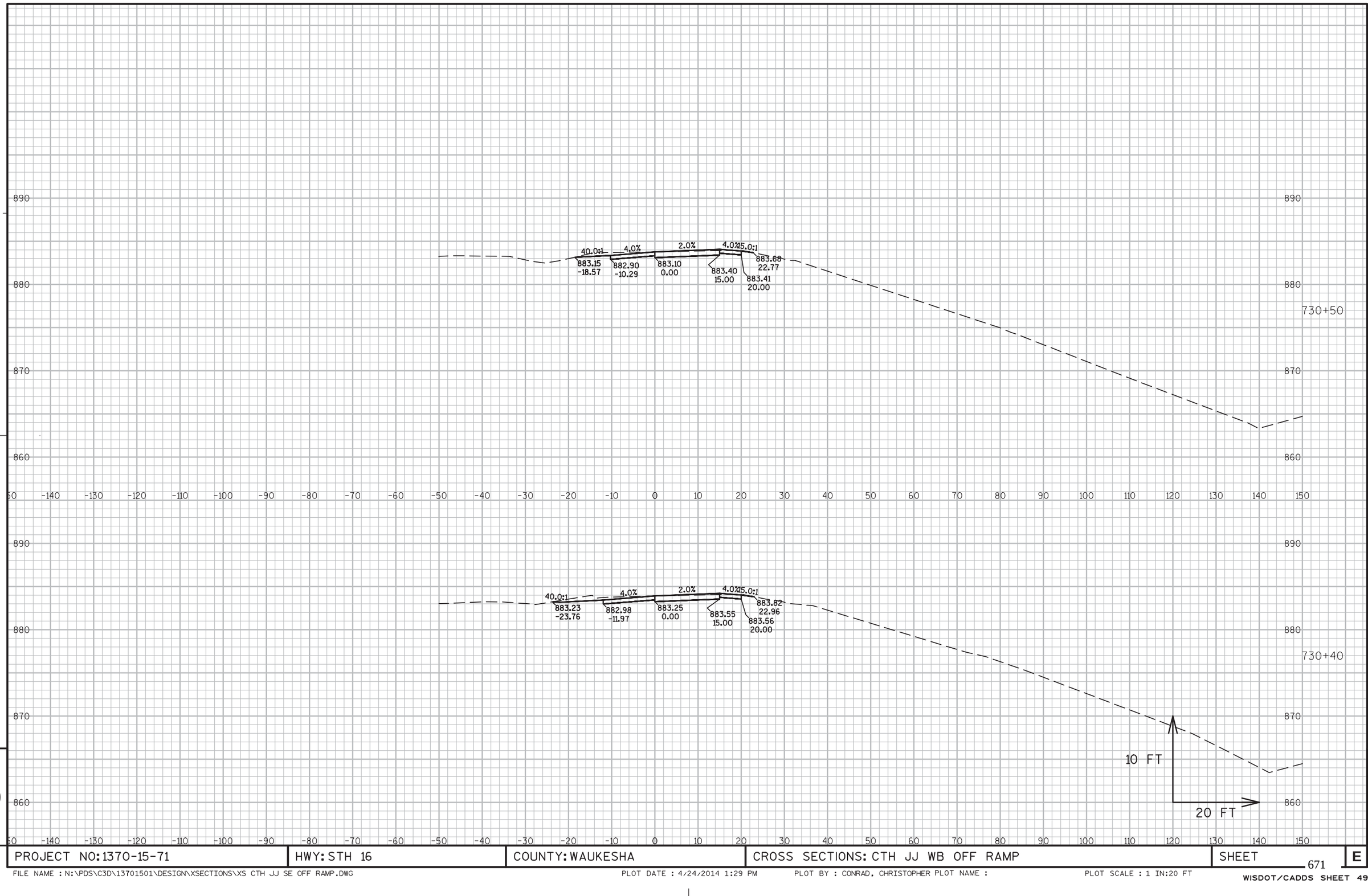
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PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	CROSS SECTIONS: CTH JJ EB ON RAMP	SHEET 670	E

FILE NAME : N:\PDS\C3D\13701501\DESIGN\XSECTIONS\XS CTH JJ SW ON RAMP.DWG PLOT DATE : 4/15/2014 2:37 PM PLOT BY : CONRAD, CHRISTOPHER PLOT NAME : PLOT SCALE : 1 IN:20 FT

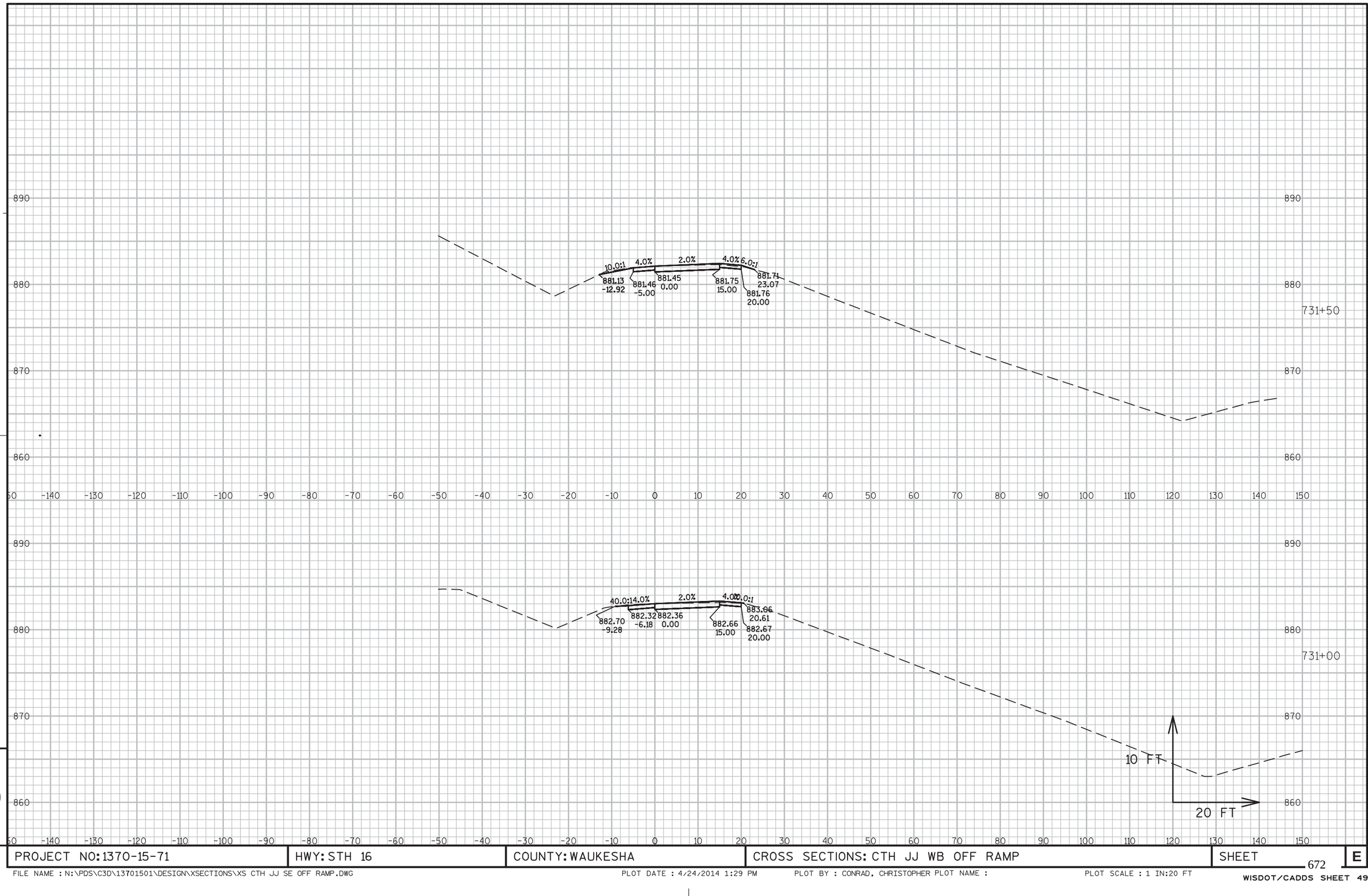
WISDOT/CADDS SHEET 49



PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	CROSS SECTIONS: CTH JJ WB OFF RAMP	SHEET 671	E

FILE NAME : N:\PDS\C3D\13701501\DESIGN\XSECTIONS\XS CTH JJ SE OFF RAMP.DWG PLOT DATE : 4/24/2014 1:29 PM PLOT BY : CONRAD, CHRISTOPHER PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49

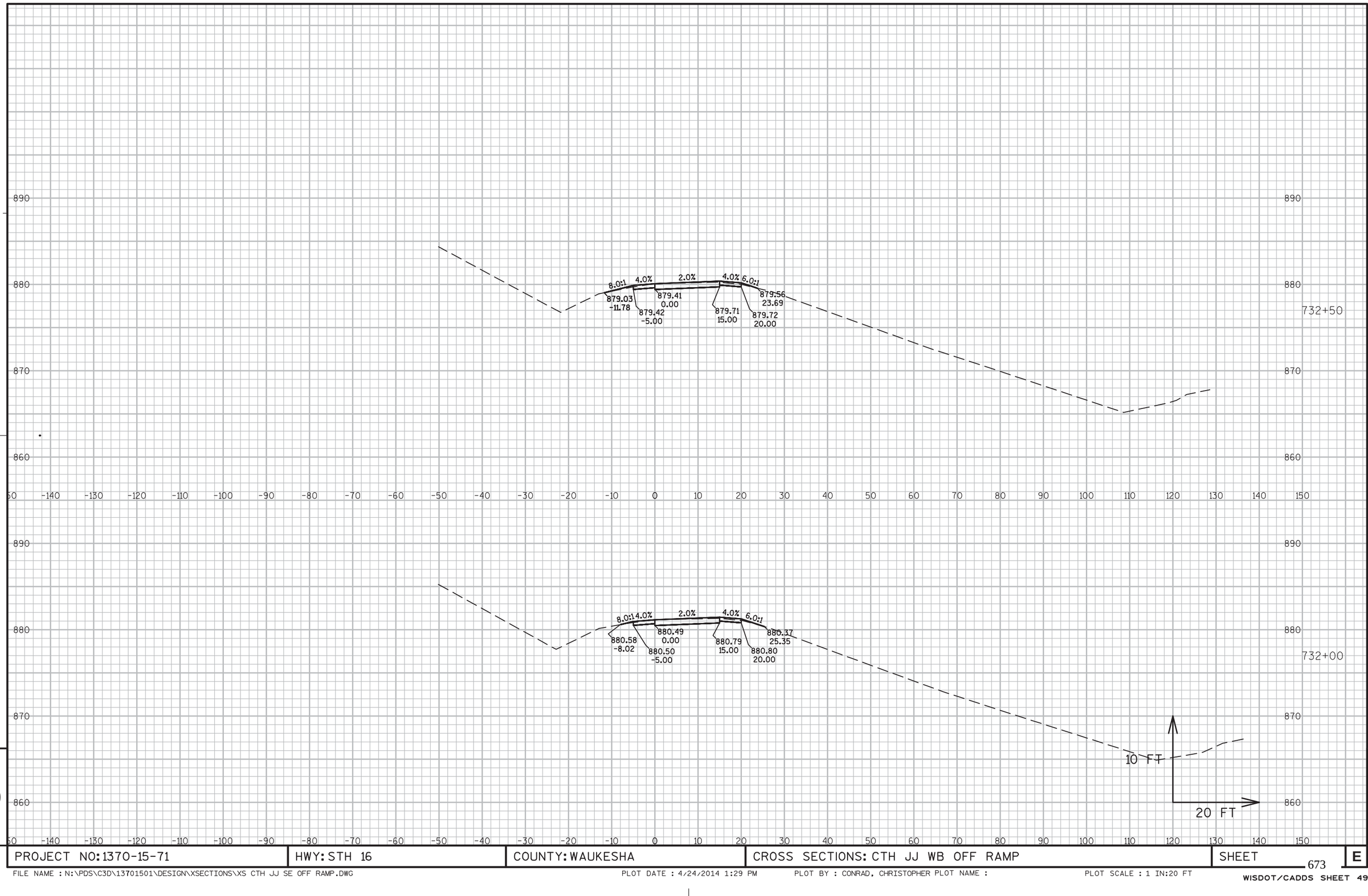


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PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	CROSS SECTIONS: CTH JJ WB OFF RAMP	SHEET 672	E

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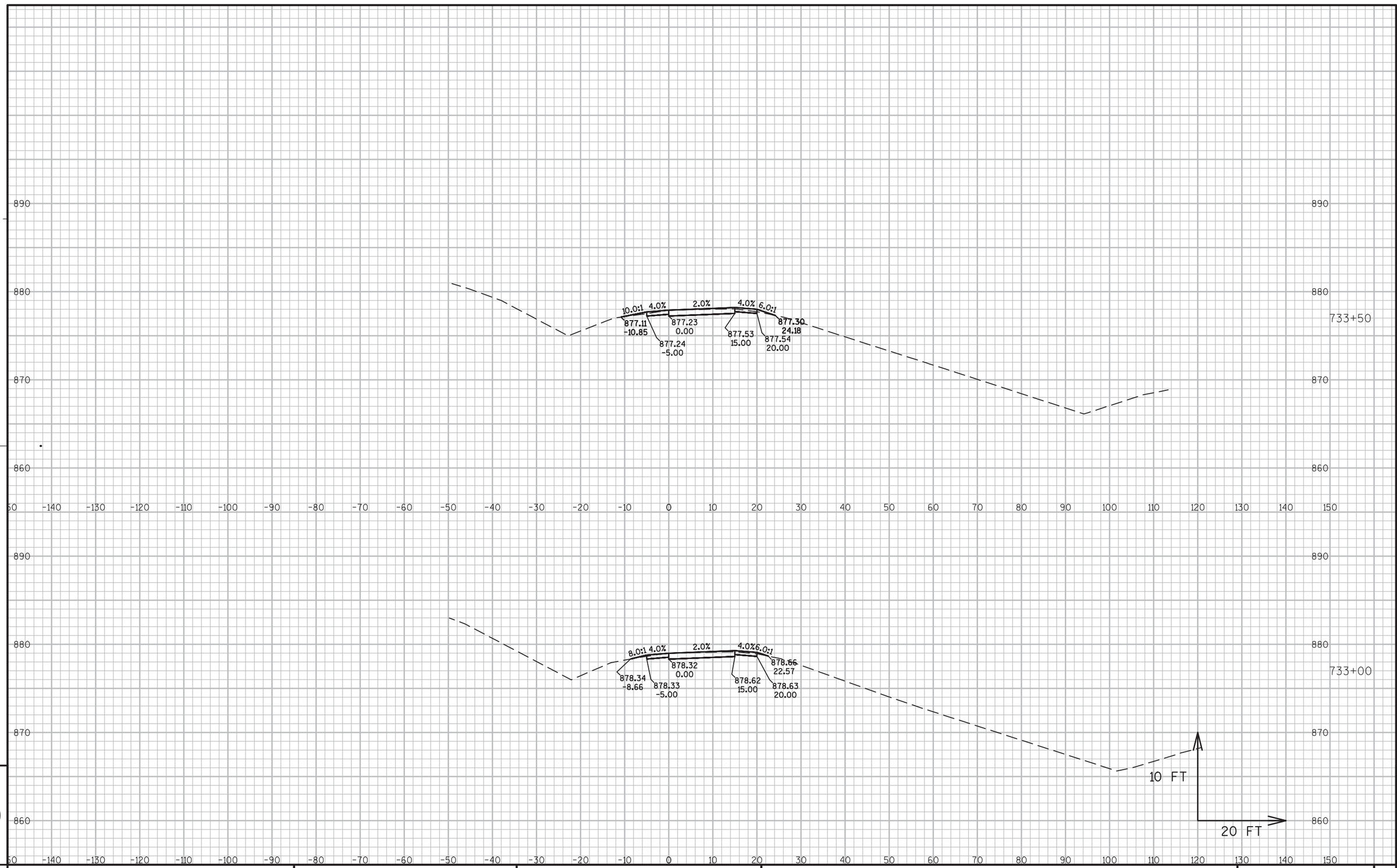
FILE NAME : N:\PDS\C3D\13701501\DESIGN\XSECTIONS\XS CTH JJ SE OFF RAMP.DWG PLOT DATE : 4/24/2014 1:29 PM PLOT BY : CONRAD, CHRISTOPHER PLOT NAME : PLOT SCALE : 1 IN:20 FT



PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	CROSS SECTIONS: CTH JJ WB OFF RAMP	SHEET 673	E

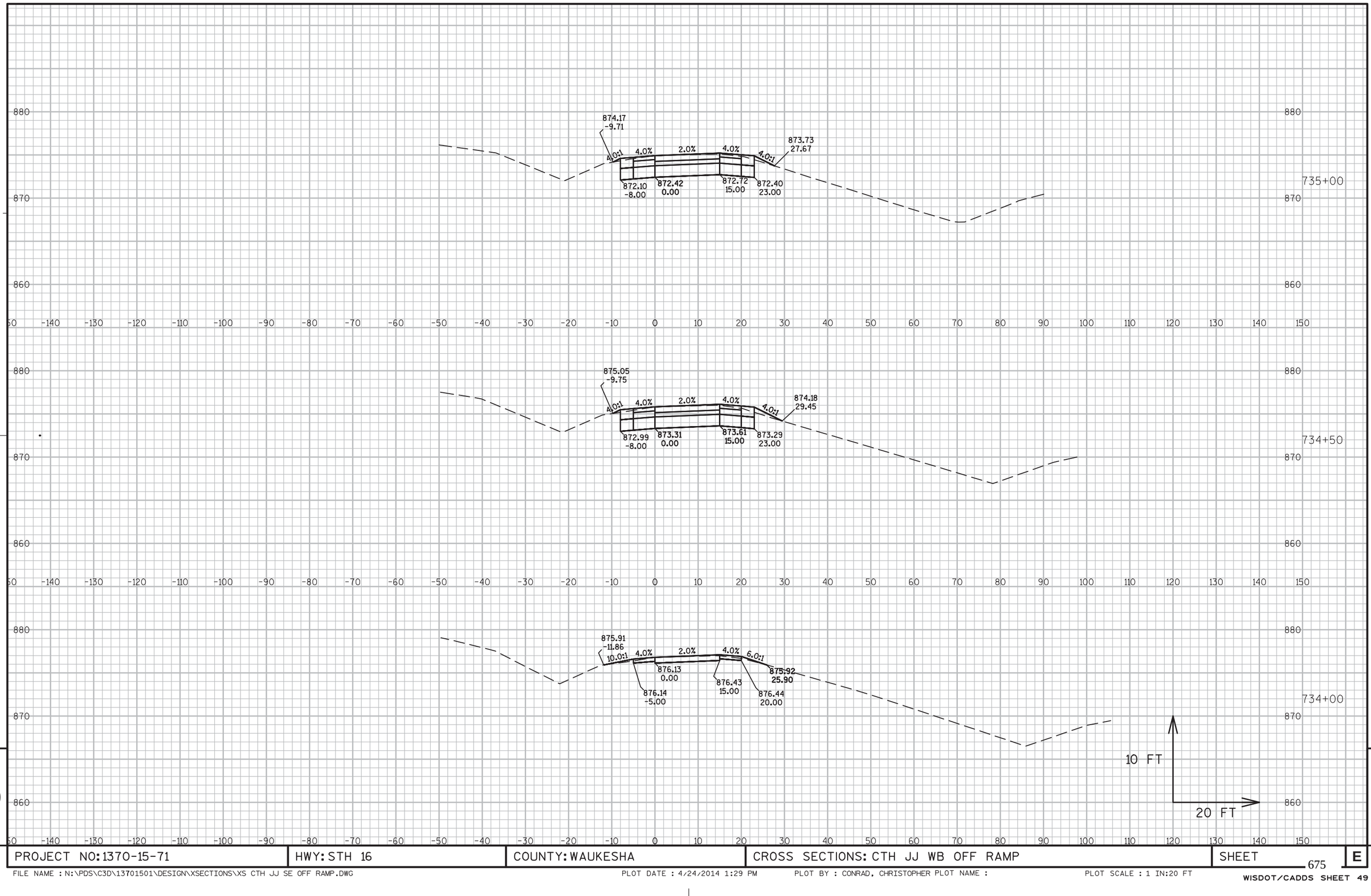
FILE NAME : N:\PDS\C3D\13701501\DESIGN\XSECTIONS\XS CTH JJ SE OFF RAMP.DWG PLOT DATE : 4/24/2014 1:29 PM PLOT BY : CONRAD, CHRISTOPHER PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49



PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	CROSS SECTIONS: CTH JJ WB OFF RAMP	SHEET 674	E

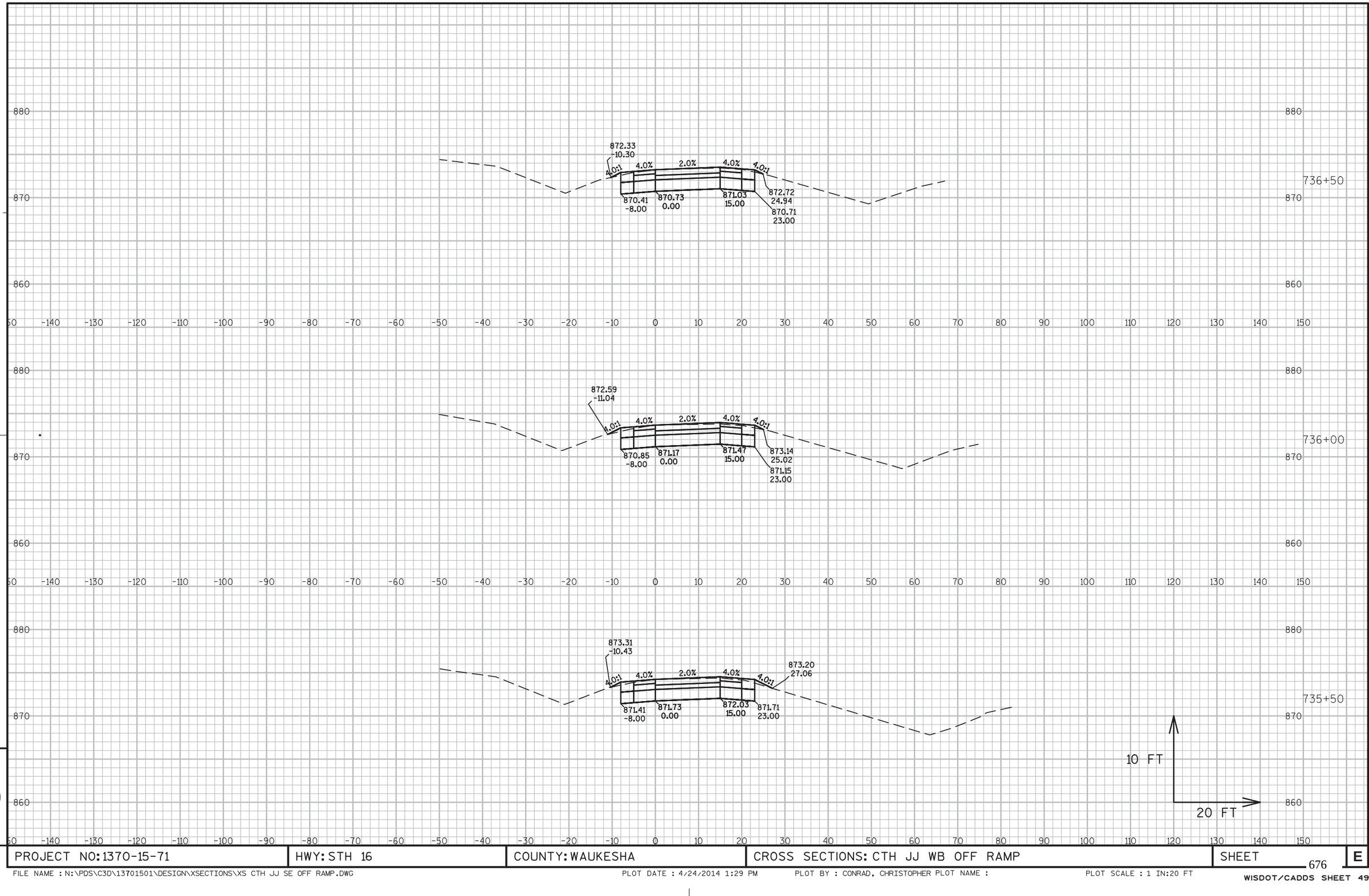
FILE NAME : N:\PDS\C3D\13701501\DESIGN\XSECTIONS\XS CTH JJ SE OFF RAMP.DWG PLOT DATE : 4/24/2014 1:29 PM PLOT BY : CONRAD, CHRISTOPHER PLOT NAME : PLOT SCALE : 1 IN:20 FT



PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	CROSS SECTIONS: CTH JJ WB OFF RAMP	SHEET 675	E

FILE NAME : N:\PDS\C3D\13701501\DESIGN\XSECTIONS\XS CTH JJ SE OFF RAMP.DWG PLOT DATE : 4/24/2014 1:29 PM PLOT BY : CONRAD, CHRISTOPHER PLOT NAME : PLOT SCALE : 1 IN:20 FT

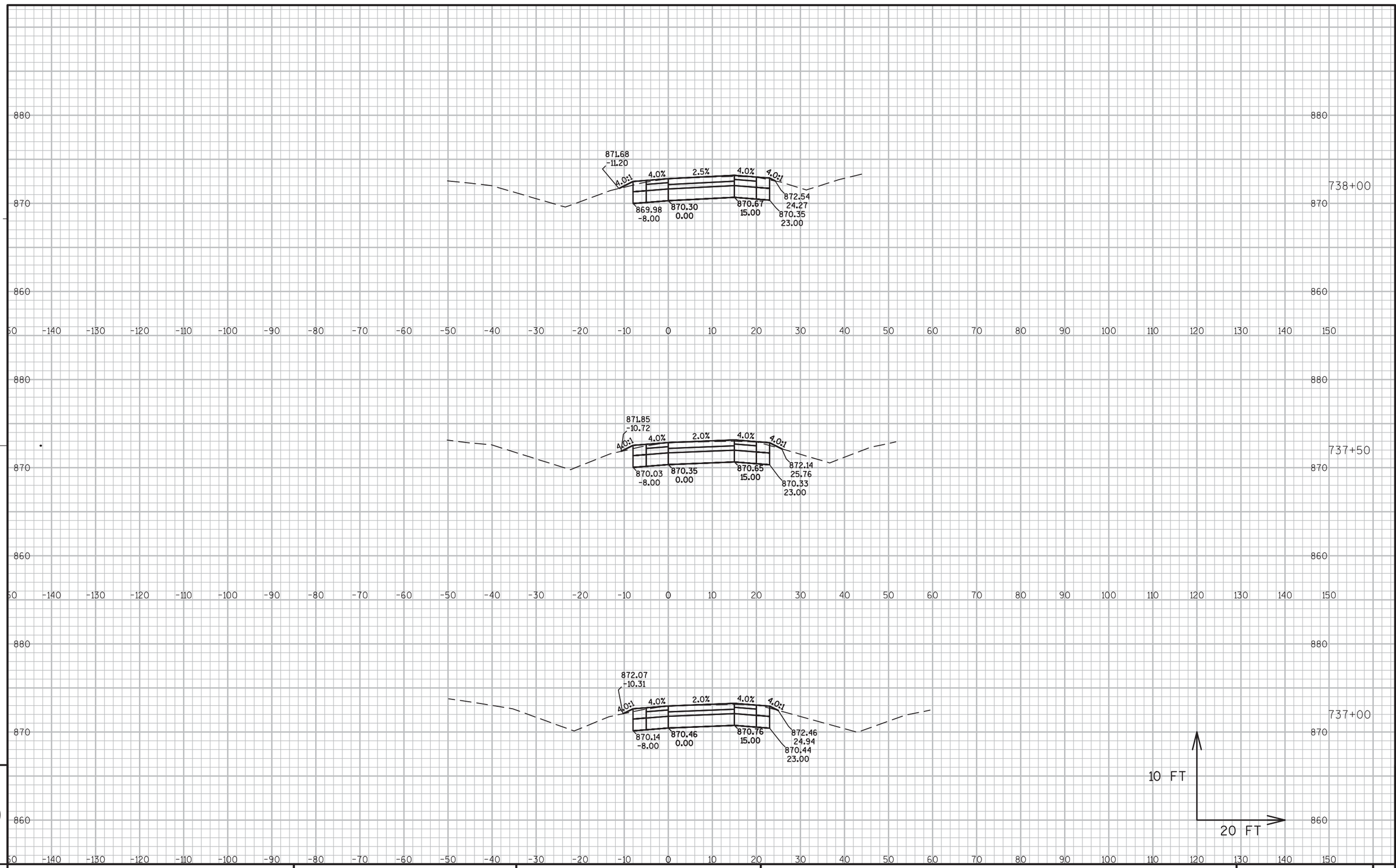
WISDOT/CADDS SHEET 49



PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	CROSS SECTIONS: CTH JJ WB OFF RAMP	SHEET 676	E

FILE NAME : N:\PDS\C3D\13701501\DESIGN\XSECTIONS\XS CTH JJ SE OFF RAMP.DWG PLOT DATE : 4/24/2014 1:29 PM PLOT BY : CONRAD, CHRISTOPHER PLOT NAME : PLOT SCALE : 1 IN:20 FT

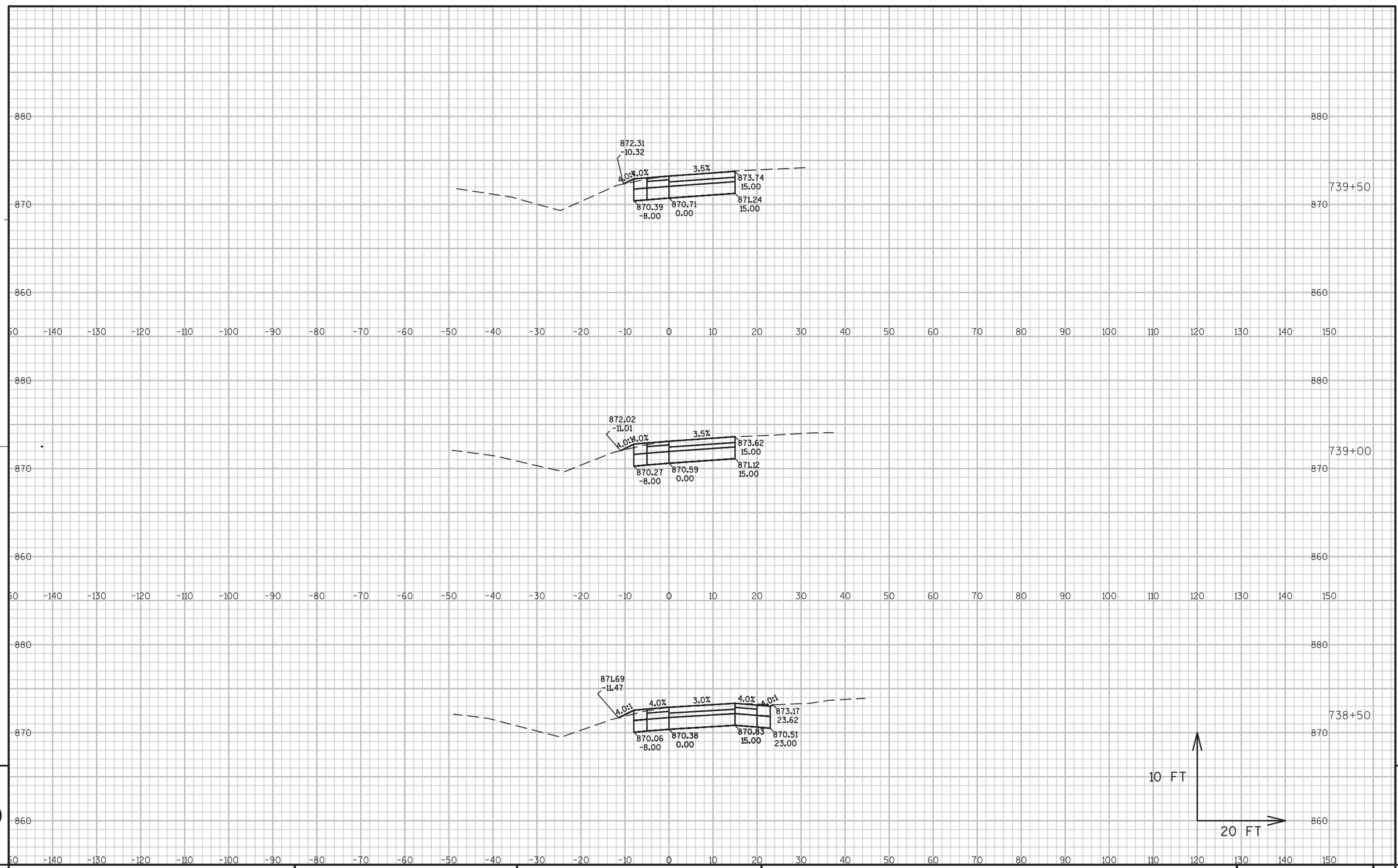
WISDOT/CADDS SHEET 49



PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	CROSS SECTIONS: CTH JJ WB OFF RAMP	SHEET 677	E

FILE NAME : N:\PDS\C3D\13701501\DESIGN\XSECTIONS\XS CTH JJ SE OFF RAMP.DWG PLOT DATE : 4/24/2014 1:29 PM PLOT BY : CONRAD, CHRISTOPHER PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49



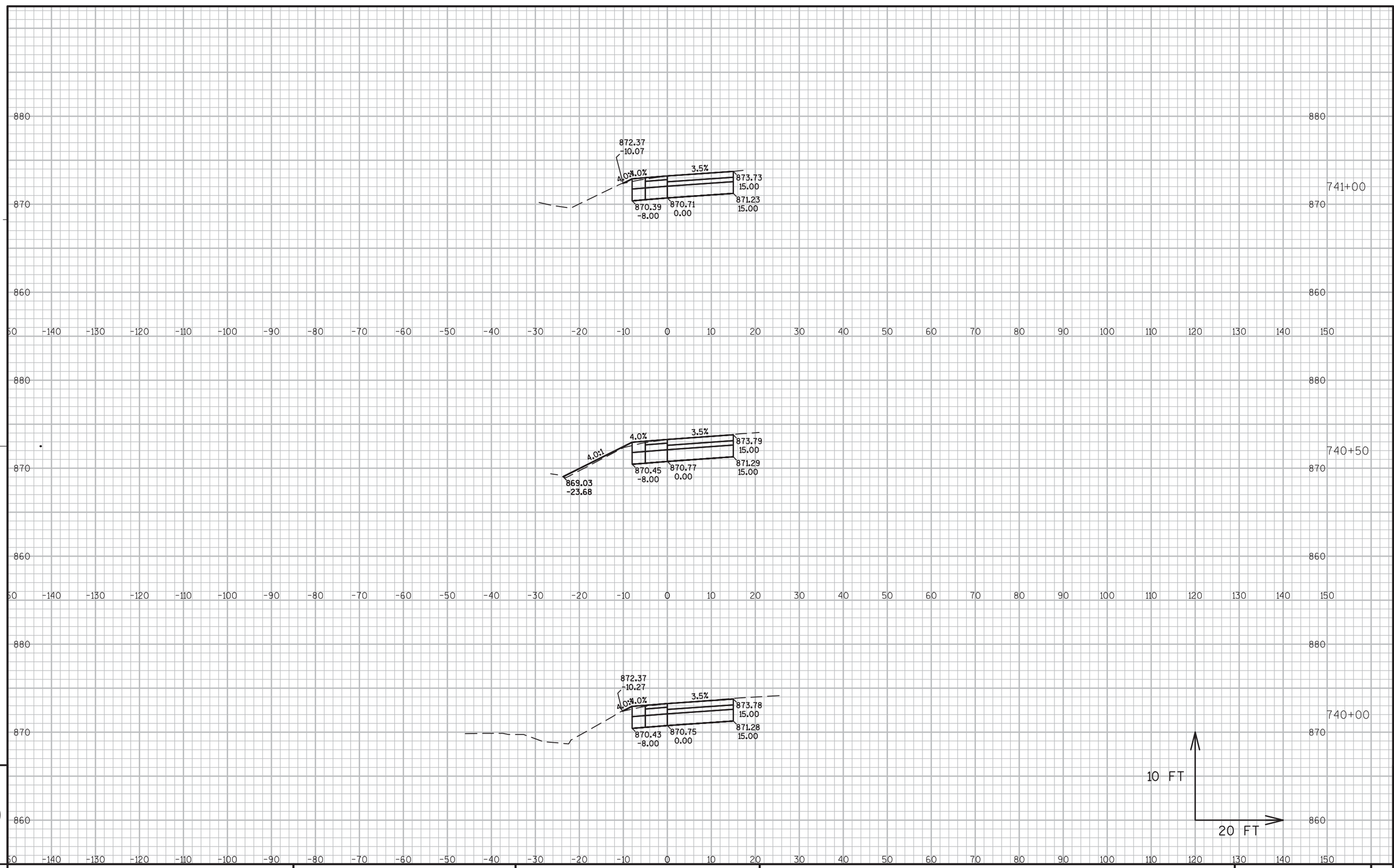
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9

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	CROSS SECTIONS: CTH JJ WB OFF RAMP	SHEET 678	E

FILE NAME : N:\PDS\C3D\13701501\DESIGN\XSECTIONS\XS CTH JJ SE OFF RAMP.DWG PLOT DATE : 4/24/2014 1:29 PM PLOT BY : CONRAD, CHRISTOPHER PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49

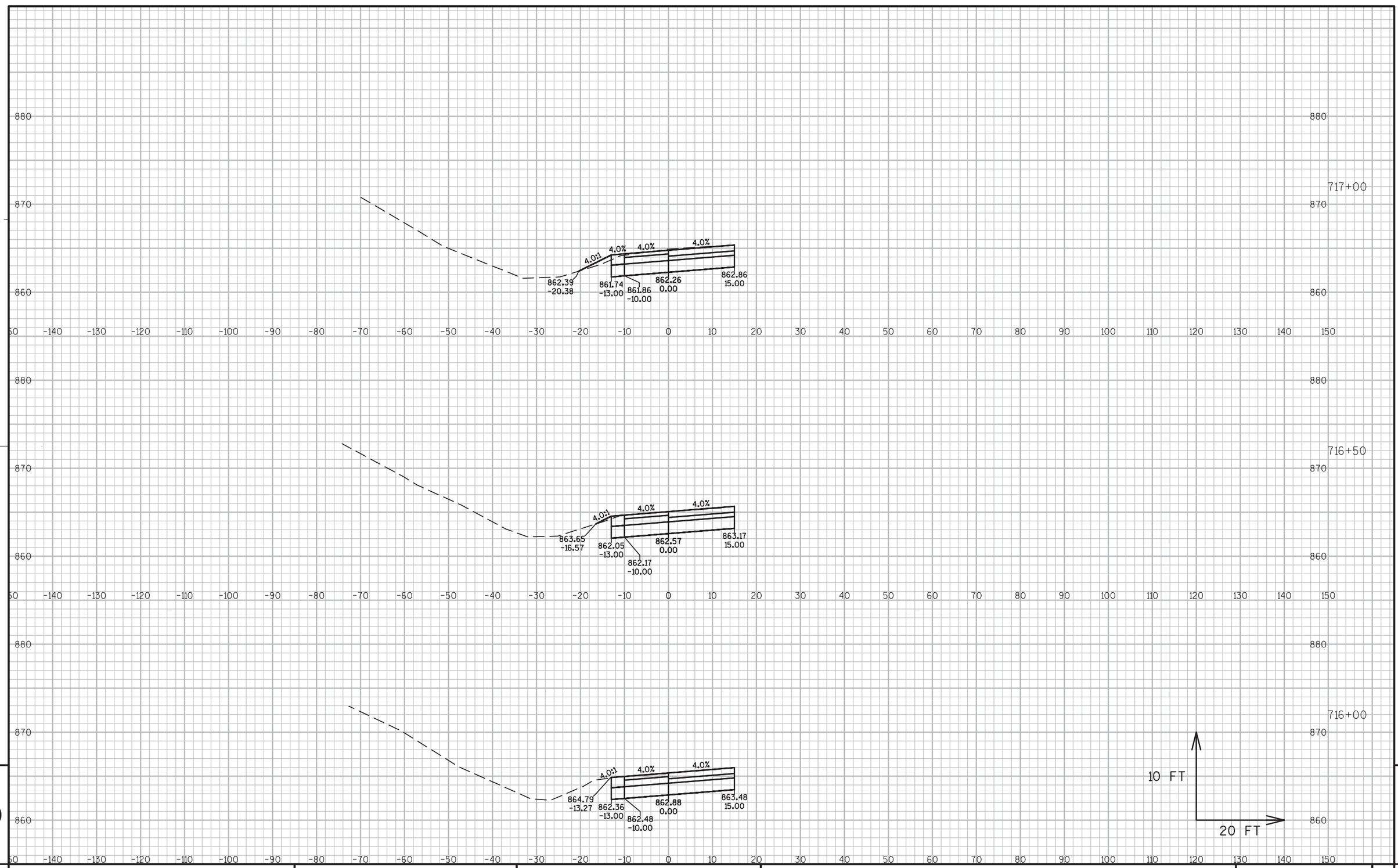


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PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	CROSS SECTIONS: CTH JJ WB OFF RAMP	SHEET 679	E

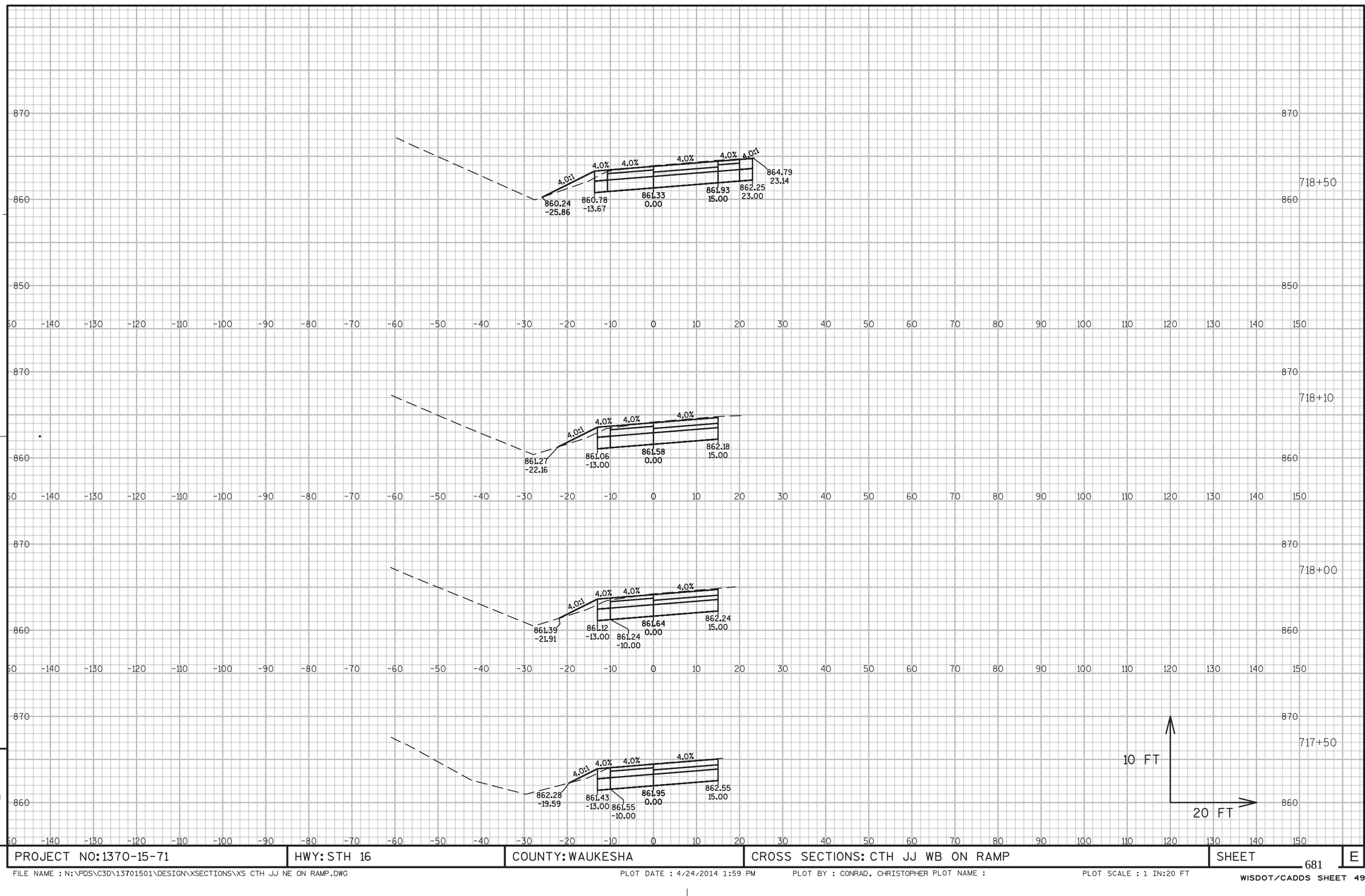
FILE NAME : N:\PDS\C3D\13701501\DESIGN\XSECTIONS\XS CTH JJ SE OFF RAMP.DWG PLOT DATE : 4/24/2014 1:29 PM PLOT BY : CONRAD, CHRISTOPHER PLOT NAME : PLOT SCALE : 1 IN:20 FT



PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	CROSS SECTIONS: CTH JJ WB ON RAMP	SHEET 680	E

FILE NAME : N:\PDS\C3D\13701501\DESIGN\XSECTIONS\XS CTH JJ NE ON RAMP.DWG PLOT DATE : 4/24/2014 1:59 PM PLOT BY : CONRAD, CHRISTOPHER PLOT NAME : PLOT SCALE : 1 IN:20 FT

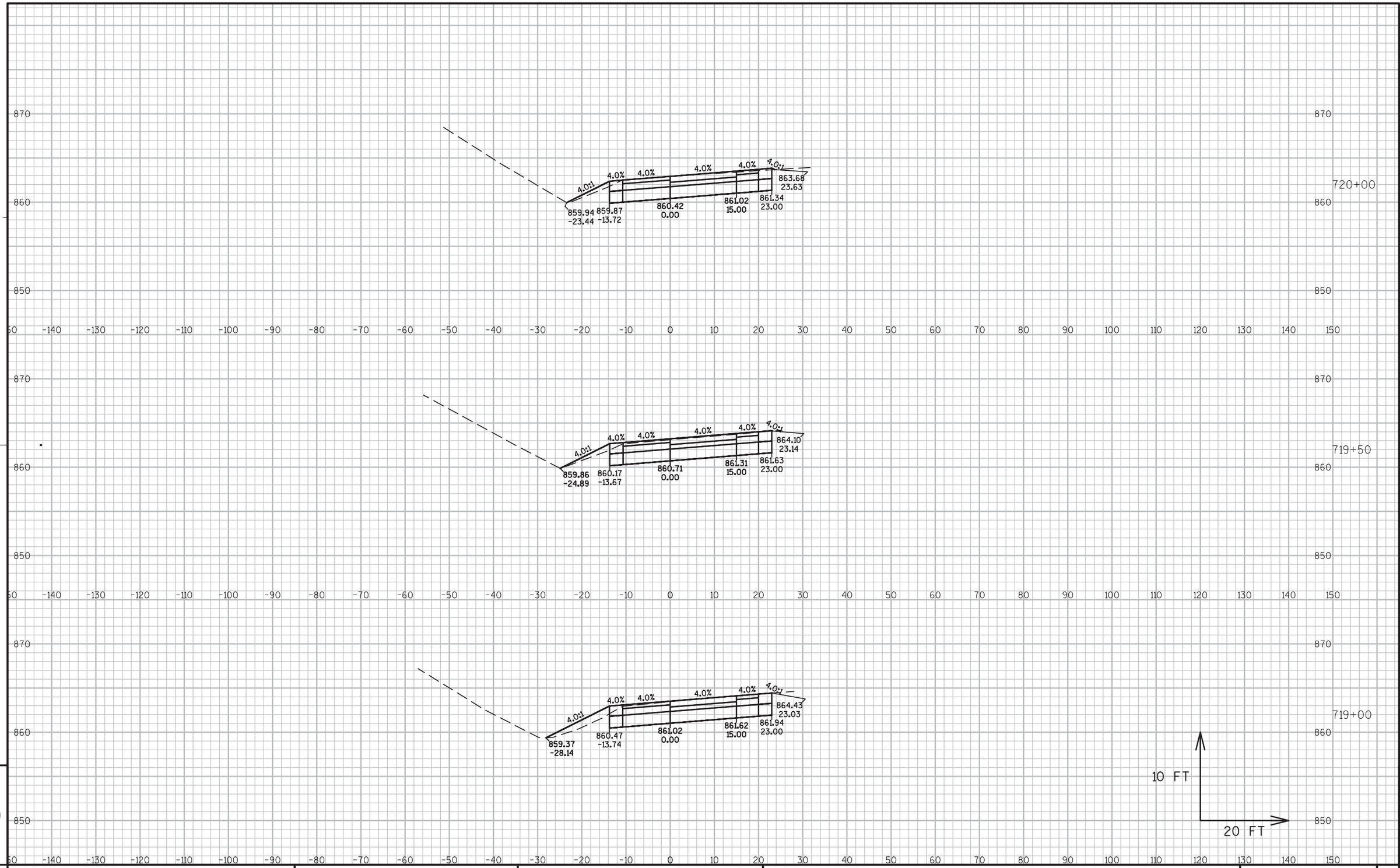
WISDOT/CADDS SHEET 49



PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	CROSS SECTIONS: CTH JJ WB ON RAMP	SHEET 681	E

FILE NAME : N:\PDS\C3D\13701501\DESIGN\XSECTIONS\XS CTH JJ NE ON RAMP.DWG PLOT DATE : 4/24/2014 1:59 PM PLOT BY : CONRAD, CHRISTOPHER PLOT NAME : PLOT SCALE : 1 IN:20 FT

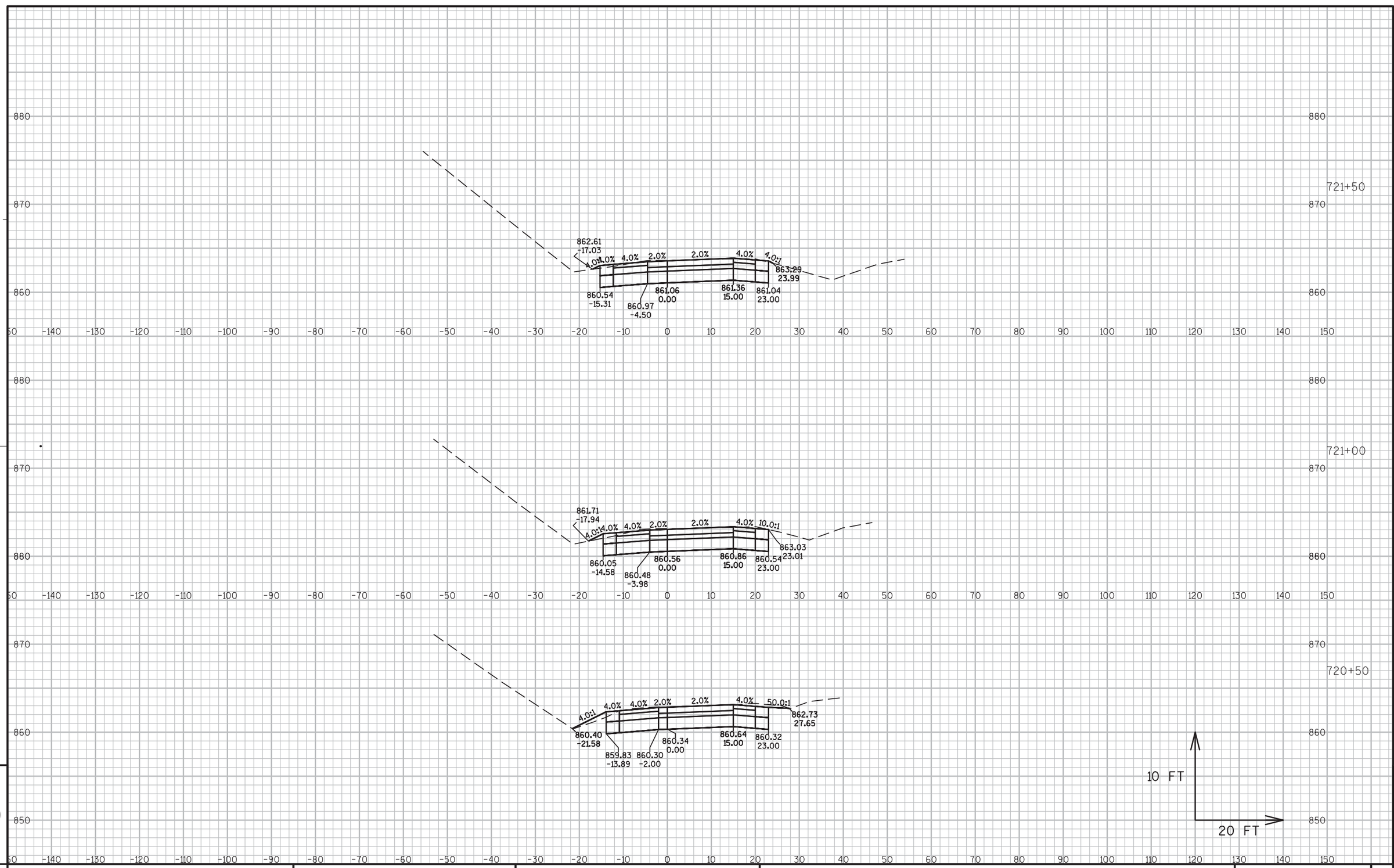
WISDOT/CADDS SHEET 49



PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	CROSS SECTIONS: CTH JJ WB ON RAMP	SHEET 682	E

FILE NAME : N:\PDS\C3D\13701501\DESIGN\XSECTIONS\XS CTH JJ NE ON RAMP.DWG PLOT DATE : 4/24/2014 1:59 PM PLOT BY : CONRAD, CHRISTOPHER PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49

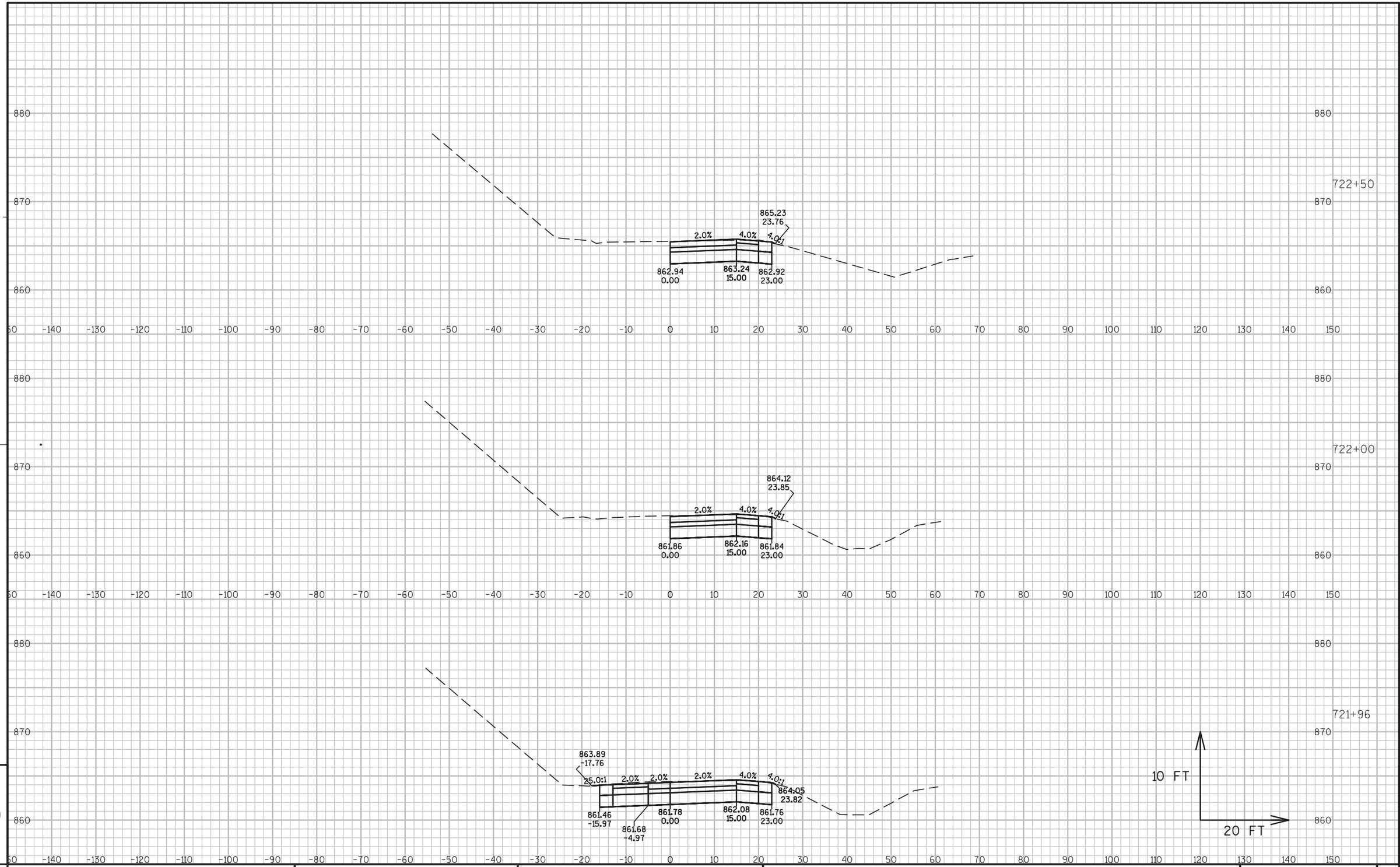


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PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	CROSS SECTIONS: CTH JJ WB ON RAMP	SHEET 683	E

FILE NAME : N:\PDS\C3D\13701501\DESIGN\XSECTIONS\XS CTH JJ NE ON RAMP.DWG PLOT DATE : 4/24/2014 1:59 PM PLOT BY : CONRAD, CHRISTOPHER PLOT NAME : PLOT SCALE : 1 IN:20 FT



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PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	CROSS SECTIONS: CTH JJ WB ON RAMP	SHEET 684	E

FILE NAME : N:\PDS\C3D\13701501\DESIGN\XSECTIONS\XS CTH JJ NE ON RAMP.DWG PLOT DATE : 4/24/2014 1:59 PM PLOT BY : CONRAD, CHRISTOPHER PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49

9

724+00

869.28
26.61
2.0%
4.0%
4.0%
867.70
0.00
868.00
15.00
867.68
23.00

723+50

867.92
25.13
2.0%
4.0%
4.0%
865.97
0.00
866.27
15.00
865.95
23.00

723+00

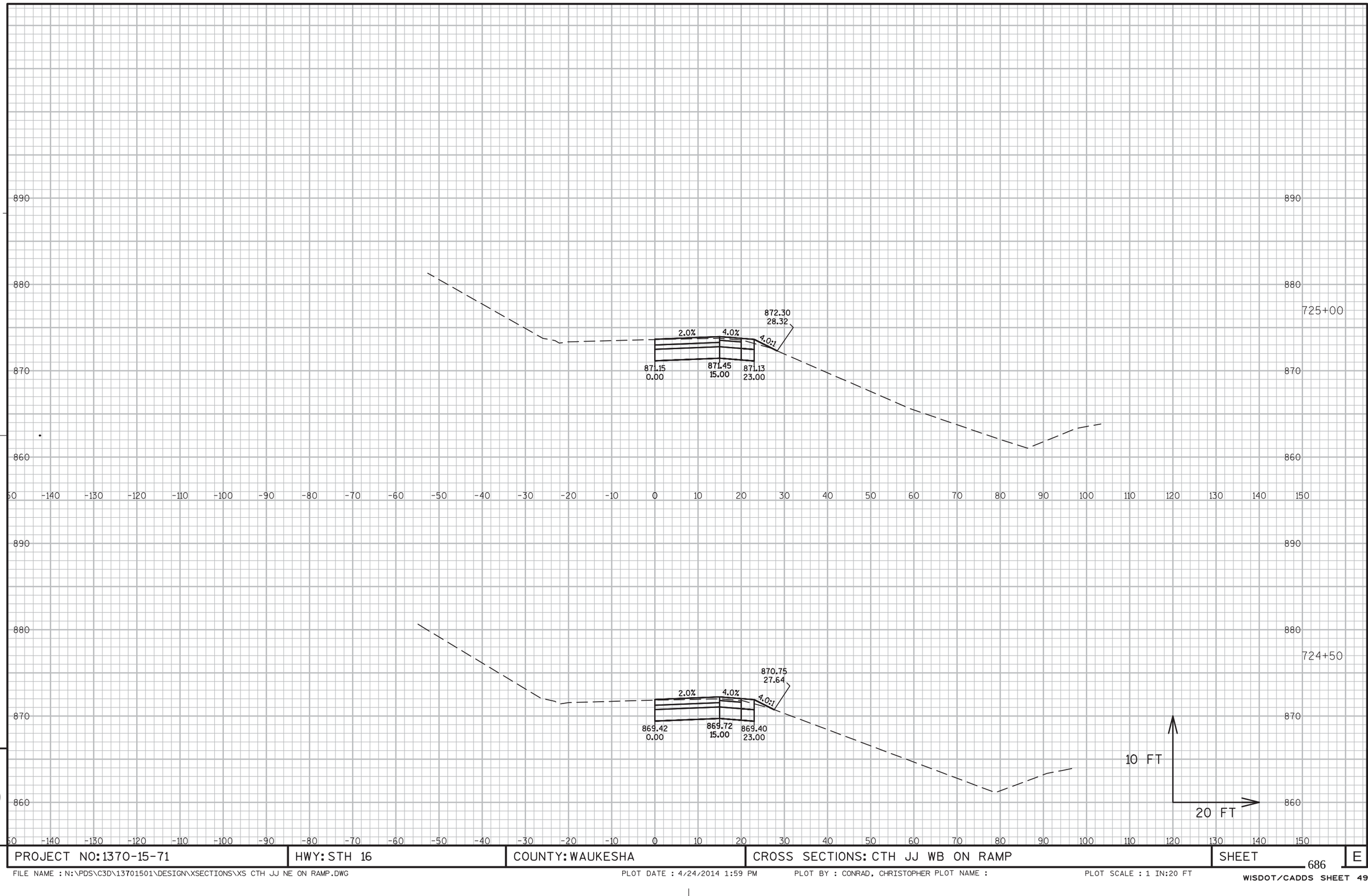
866.56
23.96
2.0%
4.0%
4.0%
864.32
0.00
864.62
15.00
864.30
23.00

10 FT
20 FT

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	CROSS SECTIONS: CTH JJ WB ON RAMP	SHEET 685	E

FILE NAME : N:\PDS\C3D\13701501\DESIGN\XSECTIONS\XS CTH JJ NE ON RAMP.DWG PLOT DATE : 4/24/2014 1:59 PM PLOT BY : CONRAD, CHRISTOPHER PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49

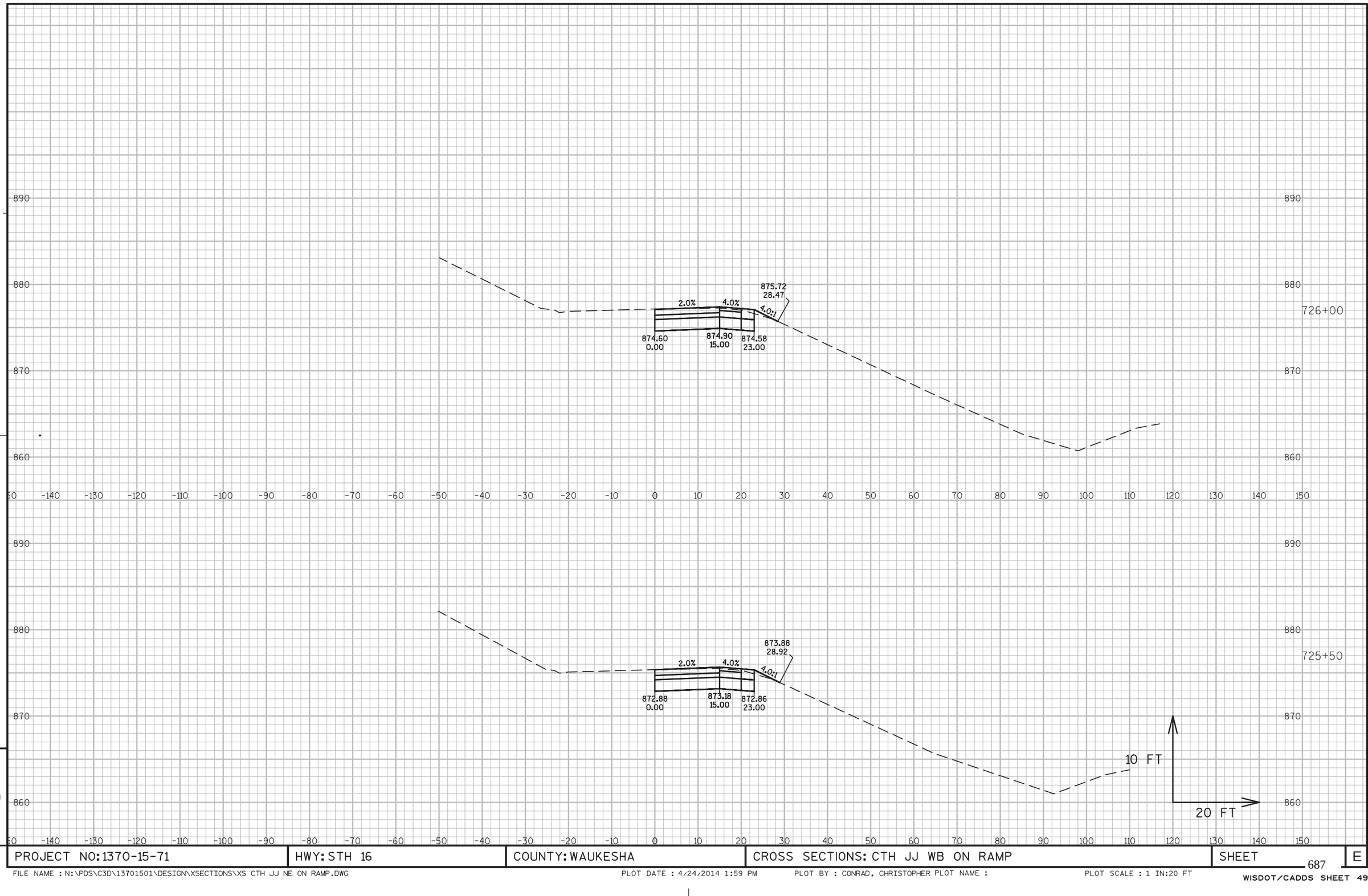


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PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	CROSS SECTIONS: CTH JJ WB ON RAMP	SHEET	E

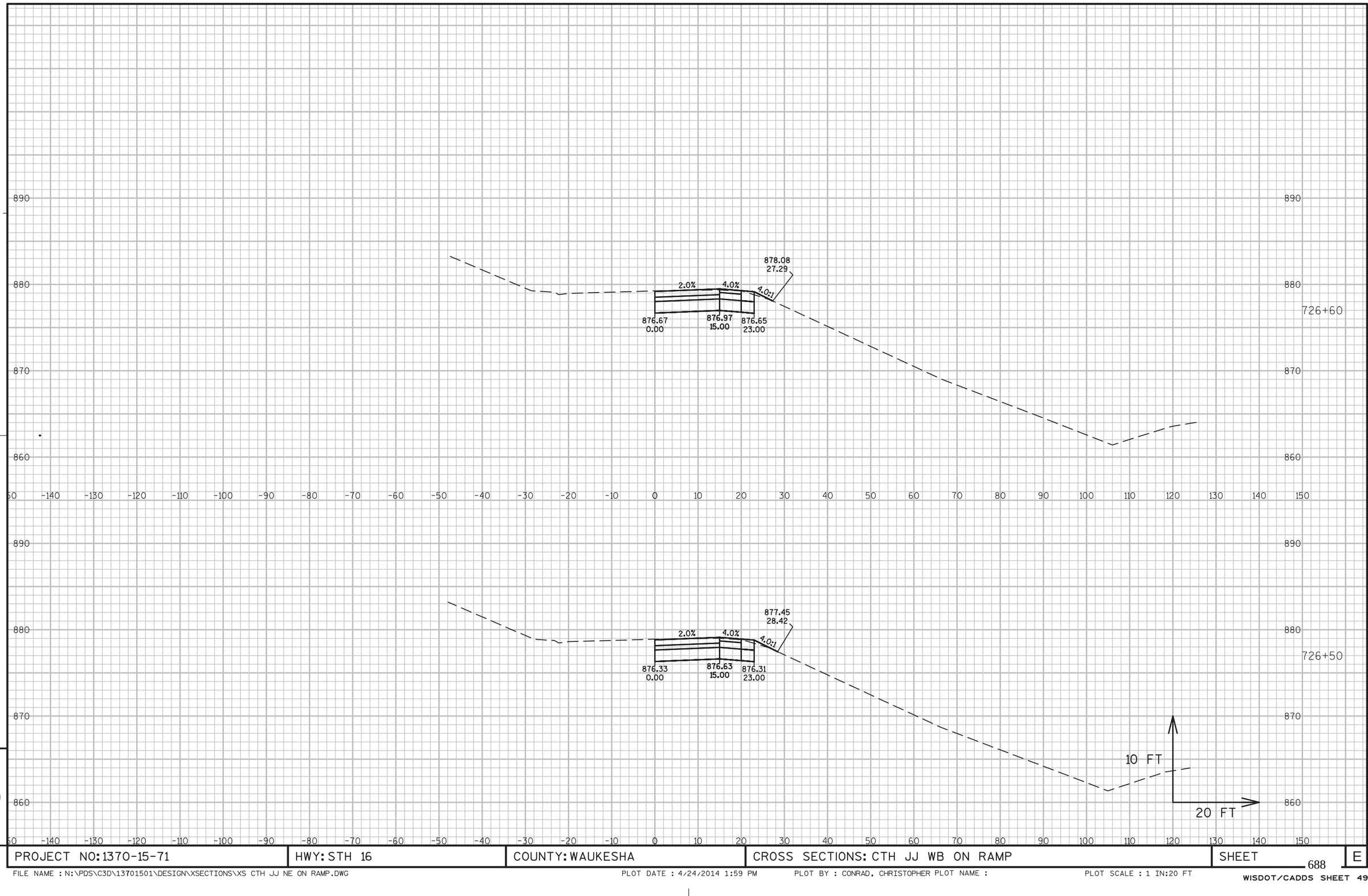
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FILE NAME : N:\PDS\C3D\13701501\DESIGN\XSECTIONS\XS CTH JJ NE ON RAMP.DWG PLOT DATE : 4/24/2014 1:59 PM PLOT BY : CONRAD, CHRISTOPHER PLOT NAME : PLOT SCALE : 1 IN:20 FT



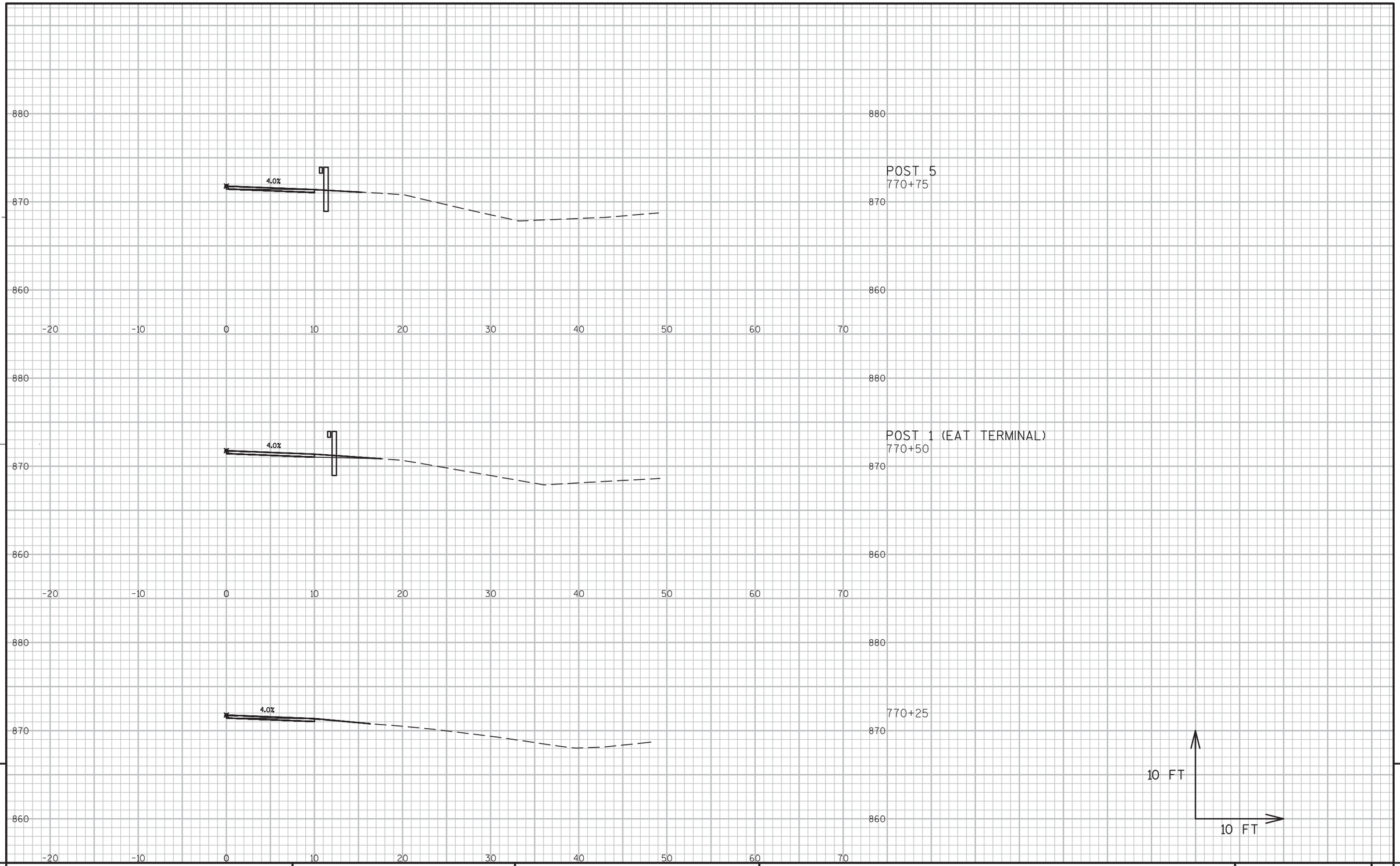
PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	CROSS SECTIONS: CTH JJ WB ON RAMP	SHEET 687	E

FILE NAME : N:\PDS\C3D\13701501\DESIGN\XSECTIONS\XS CTH JJ NE ON RAMP.DWG PLOT DATE : 4/24/2014 1:59 PM PLOT BY : CONRAD, CHRISTOPHER PLOT NAME : PLOT SCALE : 1 IN:20 FT



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PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	CROSS SECTIONS: CTH JJ WB ON RAMP	SHEET 688	E



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PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	CROSS SECTIONS: EB BEAMGUARD	SHEET 689	E

880

870

860

880

870

860

-20 -10 0 10 20 30 40 50 60 70

4.0%

4.0%

771+50

POST 9
771+00

10 FT

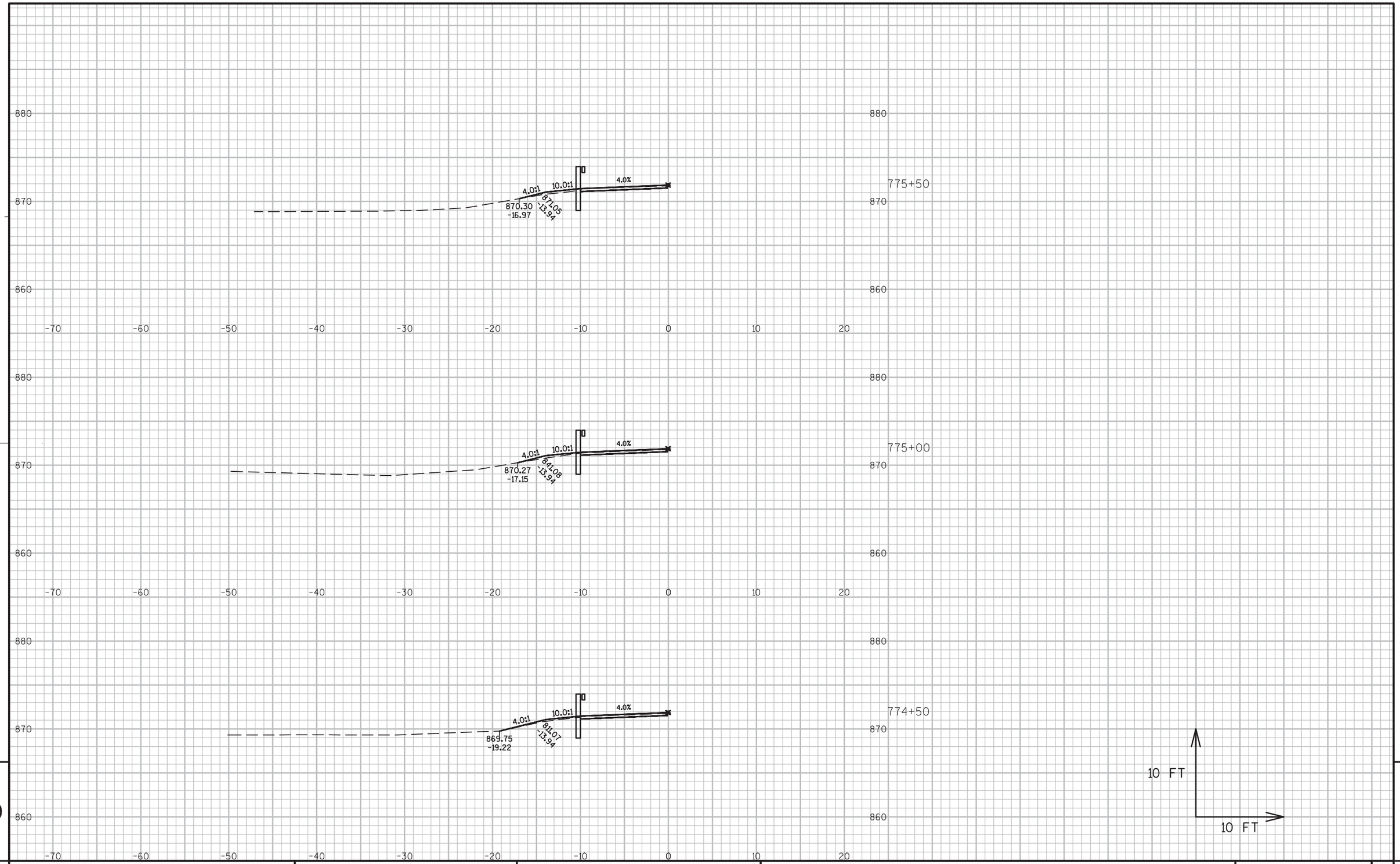
10 FT

9

9

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	CROSS SECTIONS: EB BEAMGUARD	SHEET 690	E

FILE NAME : N:\PDS\C3D\13701501\SHEETSPLAN\STA770+00BEAMGUARDEB.DWG PLOT DATE : 1/16/2014 10:22 AM PLOT BY : ROTIER, STEVEN J PLOT NAME : PLOT SCALE : 1 IN:10 FT

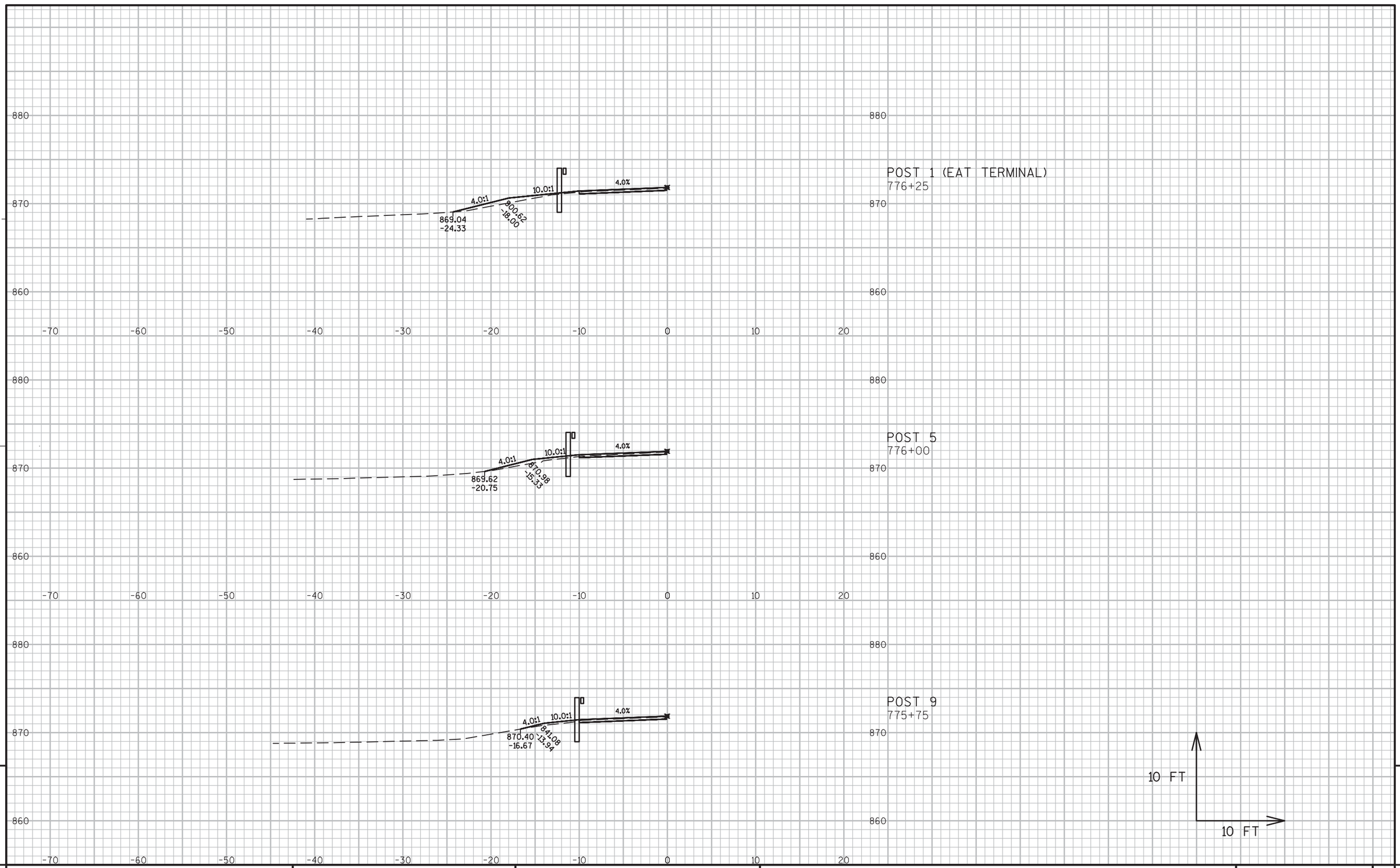


9

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	CROSS SECTIONS: WB BEAMGUARD	SHEET 691	E

9

FILE NAME : N:\PDS\C3D\13701501\SHEETSPLAN\STA770+00BEAMGUARDWB.DWG PLOT DATE : 1/16/2014 8:37 AM PLOT BY : ROTIER, STEVEN J PLOT NAME : PLOT SCALE : 1 IN:10 FT

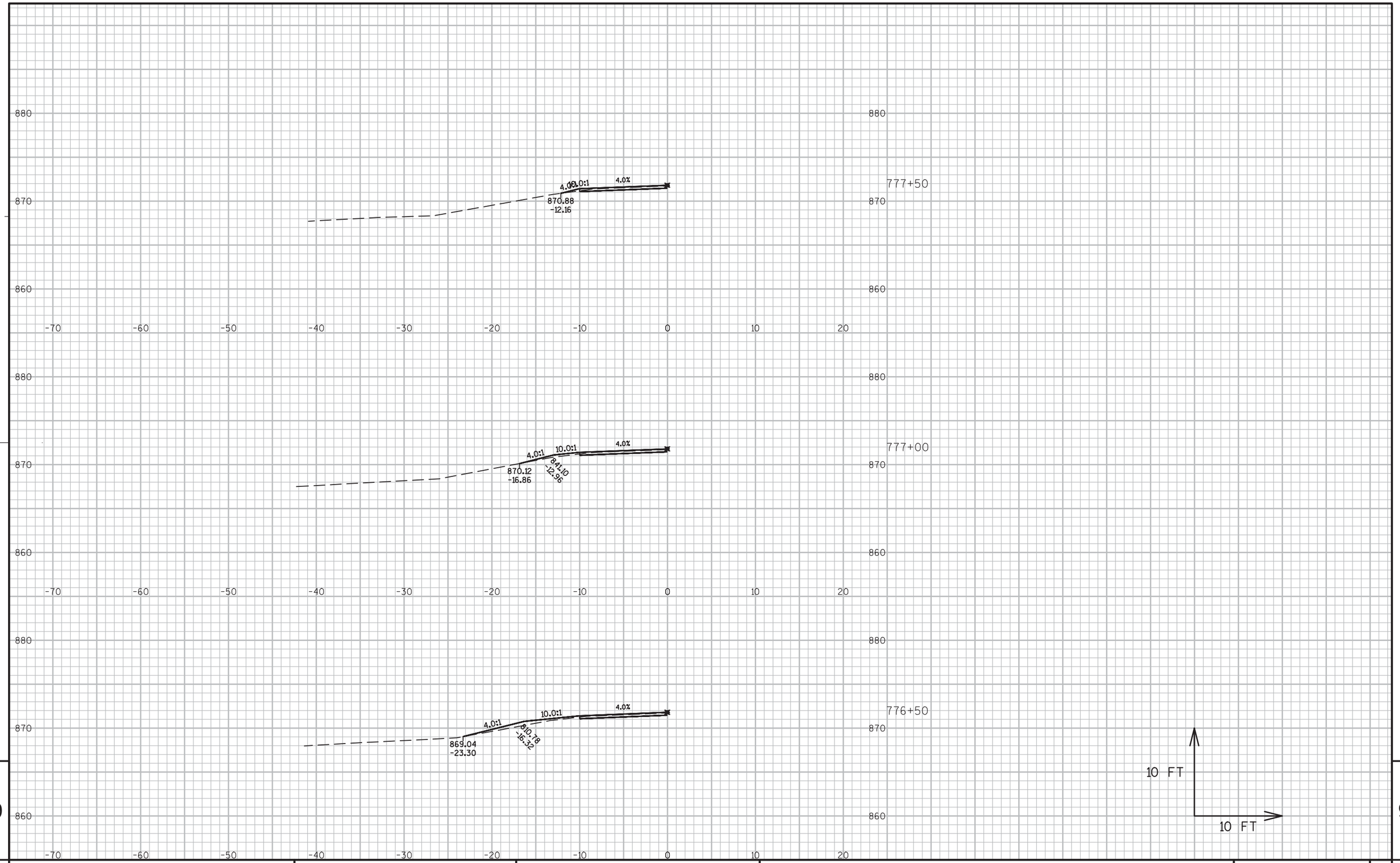


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9

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	CROSS SECTIONS: WB BEAMGUARD	SHEET 692	E

FILE NAME : N:\PDS\C3D\13701501\SHEETSPLAN\STA770+00BEAMGUARDWB.DWG PLOT DATE : 1/16/2014 9:01 AM PLOT BY : ROTIER, STEVEN J PLOT NAME : PLOT SCALE : 1 IN:10 FT



9

9

PROJECT NO: 1370-15-71	HWY: STH 16	COUNTY: WAUKESHA	CROSS SECTIONS: WB BEAMGUARD	SHEET 693	E

FILE NAME : N:\PDS\C3D\13701501\SHEETSPLAN\STA770+00BEAMGUARDWB.DWG PLOT DATE : 1/16/2014 8:37 AM PLOT BY : ROTIER, STEVEN J PLOT NAME : PLOT SCALE : 1 IN:10 FT

Wisconsin Department of Transportation

Dedicated people creating transportation solutions
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