WKE

SEPT 2016

PROJECT ID: 3200-02-73

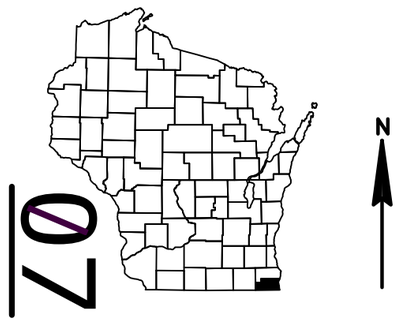
WITH: 3200-02-74

COUNTY: KENOSHA

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 = 762



07

N

DESIGN DESIGNATION			TRANSITIONAL STA 19+83 TO STA 34+00	RURAL STA 34+00 TO STA 249+65	URBAN STA 249+65 TO STA 281+00	TRANSITION STA 281+00 TO STA 302+78
A.A.D.T.	2014	=	7,700	8,700	9,000	9,000
A.A.D.T.	2037	=	9,300	11,000	10,900	10,900
D.H.V.		=	1,090	1,290	1,280	1,280
D.D.		=	59/41	59/41	59/41	59/41
T.		=	18.4%	18.4%	18.4%	18.4%
DESIGN SPEED		=	50 MPH	60 MPH	40 MPH	50 MPH
ESALS		=	2,900,000	2,900,000	3,900,000	3,900,000

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

STATE OF WISCONSIN

DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

ILLINOIS STATE LINE - MILWAUKEE ROAD

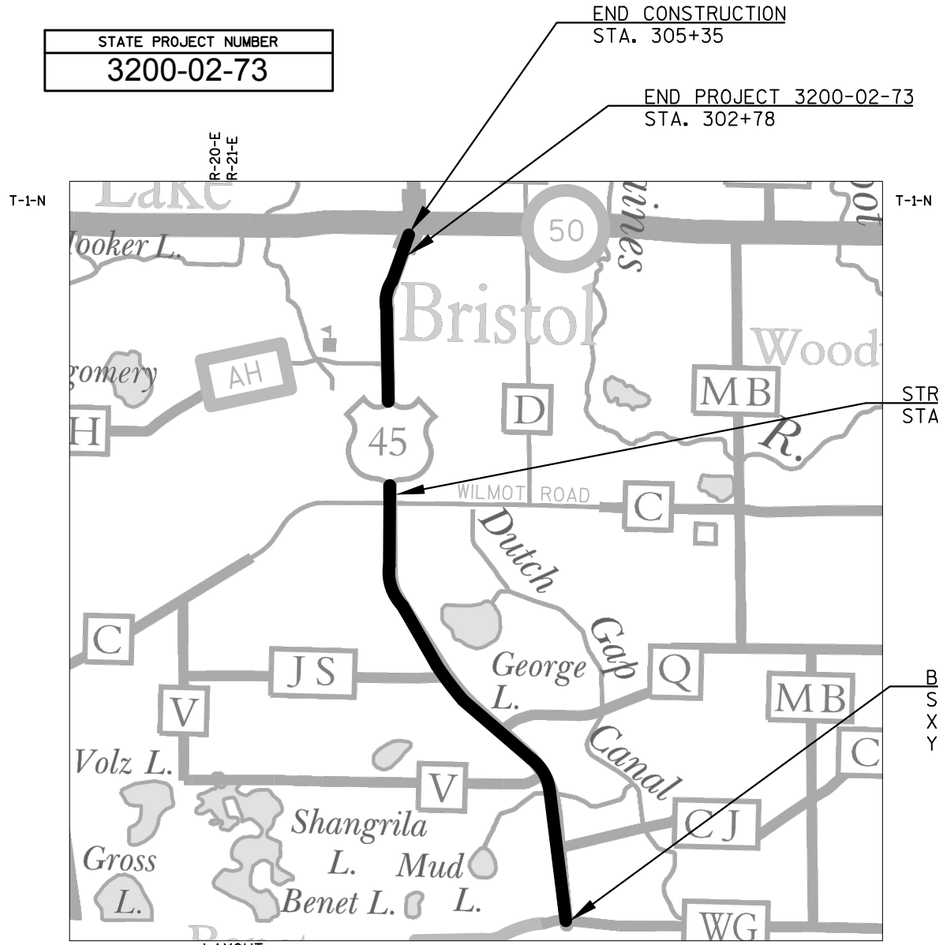
ILLINOIS STATE LINE - STH 50

USH 45

KENOSHA COUNTY

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
3200-02-73	WISC 2016308	1

STATE PROJECT NUMBER
3200-02-73



END CONSTRUCTION
STA. 305+35

END PROJECT 3200-02-73
STA. 302+78

STRUCTURE R-30-59
STA. 52+00 "CTH C"

BEGIN PROJECT 3200-02-73
STA. 19+83.00
X=574,767.15
Y=101,594.27

LAYOUT

SCALE 0 1 MILE

TOTAL NET LENGTH OF CENTERLINE = 5.359 MI.

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COUNTY COORDINATES, KENOSHA COUNTY, NAD83 (2007), IN U.S. SURVEY FEET. VALUES ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	R.A. SMITH NATIONAL
Designer	JOE MAAS
Project Manager	BRIAN PLUEMER
Regional Examiner	
Regional Supervisor	REEM SHAHIN

APPROVED FOR THE DEPARTMENT

DATE: MAY 1, 2016 Brian Pluemer (Signature)

E

STANDARD ABBREVIATIONS

AP	ACCESS POINT
AC	ACRE
ADJ	ADJUST
AECPRC	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE
AH	AHEAD
AC	ASPHALT CEMENT
ASPH	ASPHALTIC
ACP	ASPHALTIC CONCRETE PAVEMENT
AVG	AVERAGE
ADT	AVERAGE DAILY TRAFFIC
BK	BACK
BAD	BASE AGGREGATE DENSE
BM	BENCHMARK
CB	CATCH BASIN
C/L	CENTER LINE
C/L CONST	CENTER LINE CONSTRUCTION
Δ	CENTRAL ANGLE OR DELTA
CL	CLASS
CONC	CONCRETE
CONST	CONSTRUCTION
CMCP	CORRUGATED METAL CULVERT PIPE
CTH	COUNTY TRUNK HIGHWAY
CABC	CRUSHED AGGREGATE BASE COURSE
CFS	CUBIC FEET PER SECOND
CY	CUBIC YARD
CP	CULVERT PIPE
CPCS	CULVERT PIPE CORRUGATED STEEL
CPRC	CULVERT PIPE REINFORCED CONCRETE
CPRCHE	CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL
C & G	CURB AND GUTTER
D	DEGREE OF CURVE
DHV	DESIGN HOUR VOLUME
DIA	DIAMETER
DD	DIRECTIONAL DISTRIBUTION
DWY	DRIVEWAY
E	EAST
X	EAST GRID COORDINATE
EB	EASTBOUND
EL	ELEVATION
ESALS	EQUIVALENT SINGLE AXLE LOADS
EXC	EXCAVATION
EBS	EXCAVATION BELOW SUBGRADE
EXIST	EXISTING
FPS	FEET PER SECOND
FERT	FERTILIZE
FE	FIELD ENTRANCE
FL	FLOW LINE
FT	FOOT
GN	GRID NORTH
HES	HIGH EARLY STRENGTH
HP HW	HIGH POINT
HW	HIGH WATER
HMA	HOT MIX ASPHALT
CWT	HUNDREDWEIGHT
HWD	HYDRANT
INL	INLET
ID	INSIDE DIAMETER
I	INTERSECTION ANGLE
INV	INVERT
IP	IRON PIPE OR PIN
JT	JOINT
LT	LEFT
LT	LENGTH OF CURVE
LF	LINEAR FOOT
LP	LOW POINT
LS	LUMP SUM
MH	MANHOLE
MAX	MAXIMUM
Mgal	MEGAGALLON
MPH	MILES PER HOUR
MIN	MINIMUM
MON	MONUMENT
NOM	NOMINAL
NC	NORMAL CROWN
N	NORTH
Y	NORTH GRID COORDINATE
NB	NORTHBOUND
NO	NUMBER
OPT	OPTIONAL
OD	OUTSIDE DIAMETER
PAVT	PAVEMENT
PLE	PERMANENT LIMITED EASEMENT
PACS	PIPE ARCH CORRUGATED STEEL
PT	POINT
PC	POINT OF CURVATURE
PI	POINT OF INTERSECTION
PT	POINT OF TANGENCY
PVC	POINT OF VERTICAL CURVE
PVI	POINT OF VERTICAL INTERSECTION
PVT	POINT OF VERTICAL TANGENCY
PVC	POLYVINYL CHLORIDE
PCC	PORTLAND CEMENT CONCRETE
LB	POUND
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PE	PRIVATE ENTRANCE
PGL	PROFILE GRADE LINE
PL	PROPERTY LINE
Q100	100-YEAR FLOW RATE
R	RADIUS
RR	RAILROAD
R	RANGE
R/L	R/L
REINF	REINFORCING OR REINFORCEMENT
REQD	REQUIRED
RT	RIGHT
R/W	RIGHT-OF-WAY
RD	ROAD
RDWY	ROADWAY
SEC	SECTION
SHLDR	SHOULDER
S	SOUTH
SB	SOUTHBOUND
SQ	SQUARE
SF	SQUARE FEET
SW	SIDEWALK
SY	SQUARE YARD
SDD	STANDARD DETAIL DRAWINGS
STH	STATE TRUNK HIGHWAYS
STA	STATION
SS	STORM SEWER
SSPRC	STORM SEWER PIPE REINFORCED CONCRETE
ST	STREET
STR	STRUCTURE OR STRUCTURAL
SEC	SUPERELEVATION
T	TANGENT
TEMP	TEMPORARY
TI	TEMPORARY INTEREST
TLE	TEMPORARY LIMITED EASEMENT
t	TON
T	TOWN
T/L	TRANSIT LINE
T	TRUCKS (PERCENT OF)
TYP	TYPICAL
USH	UNITED STATES HIGHWAY
VAR	VARIABLE
V	VELOCITY OF DESIGN SPEED
VERT	VERTICAL
VC	VERTICAL CURVE
VOL	VOLUME
WM	WATERMAIN
WV	WATER VALVE
W	WEST
WB	WESTBOUND
YD	YARD

GENERAL NOTES

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

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

THE CONTRACTOR WILL COORDINATE CONSTRUCTION ACTIVITIES WITH A CALL TO DIGGERS HOTLINE AND/OR A CALL TO THE UTILITIES THAT HAVE INSTALLATIONS WITHIN THE PROJECT AREA.

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.

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.

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.

TRAFFIC CONTROL LOCATIONS AS SHOWN IN THE PLAN ARE SUGGESTED LOCATIONS. EXACT LOCATIONS WILL BE DETERMINED BY THE ENGINEER IN THE FIELD.

ALL SIGN LOCATIONS SHALL BE REVIEWED BY THE ENGINEER PRIOR TO INSTALLATION.

DISTURBED LOCATIONS WITHIN THE RIGHT-OF-WAY SHALL BE RESTORED AS DIRECTED BY THE ENGINEER.

ELEVATIONS ARE TO THE FLANGE LINE OF CURB & GUTTER

ALL RADII ARE MEASURED TO THE FLANGE LINE OF CURB AND GUTTER UNLESS OTHERWISE NOTED.

ALL CURB AND GUTTER ELEVATIONS TO BE VERIFIED BY THE ENGINEER DUE TO NO MAINLINE PROFILE IN THE MILL AND OVERLAY SEGMENTS.

STATIONS, OFFSETS, AND ELEVATIONS ARE TO THE END OF PIPE. FIELD VERIFY PIPE LOCATIONS AND ELEVATIONS PRIOR TO INSTALLATION.

PRIOR TO ORDERING DRAINAGE PIPE AND STRUCTURES THE CONTRACTOR SHALL FIELD VERIFY RELATED DRAINAGE INFORMATION IN THE PLANS AND PROVIDE DOCUMENTATION TO THE ENGINEER IN ACCORDANCE WITH THE SPECIFICATIONS.

A SAWED JOINT WILL BE REQUIRED WHERE NEW PAVEMENT IS TO MEET AN EXISTING PAVED SURFACE.

FERTILIZING, SEEDING, AND MULCHING SHALL BE APPLIED TO DISTURBED AREAS BEYOND THE SHOULDER POINTS.

CULVERT PIPE ELEVATIONS, LENGTH, AND LOCATIONS AS SHOWN ON THE PLANS MAY BE ADJUSTED BY THE ENGINEER IN THE FIELD TO FIT FIELD CONDITIONS.

THE LOW SIDE SHOULDER SLOPE ON SUPERELEVATED SECTIONS EQUALS SUPERELEVATION WHEN SUPERELEVATION IS GREATER THAN 4%. IF SUPERELEVATION IS LESS THAN OR EQUAL TO 4%, THEN LOW SIDE SHOULDER IS 4%. HIGH SIDE SHOULDER SLOPE ON SUPERELEVATED SECTIONS EQUALS SUPERELEVATION.

CONSTRUCTION LIMITS ON SIDE ROADS AND PRIVATE ENTRANCES SHALL BE DETERMINED BY THE ENGINEER AND SHALL BE RESTORED IN KIND.

SEE SUBSURFACE EXPLORATION REPORTS FOR SOIL BORING INFORMATION, REPORTS ARE AVAILABLE FROM THE WISDOT SOUTHEAST REGION PROJECTS SECTIONS, BRIAN PLUEMER PROJECT MANAGER, PHONE (262) 548-6721.

CONTRACTOR MUST CONTACT THE PROJECT ENGINEER AND THE KENOSHA COUNTY SURVEYOR JOHN WASHBURN, (262) 547-6722 EXT. 295, AT LEAST TWO WEEKS PRIOR TO WORK NEAR ANY PUBLIC SURVEY MONUMENT.

ALL FIXED MESSAGE SIGNS THAT ARE TO BE MOUNTED ON WOOD OR TUBULAR STEEL POSTS SHALL BE MASH OR NCHRP CRASH-COMPLIANT.

ORDER OF SECTION 2 SHEETS

PROJECT OVERVIEW
TYPICAL SECTIONS
CONSTRUCTION DETAILS
INTERSECTION DETAILS
GRADES
CURB RAMP DETAILS
EROSION CONTROL
STORM SEWER
VILLAGE OF BRISTOL UTILITIES
EXISTING/PERMANENT SIGNING
TRAFFIC SIGNALS
PAVEMENT MARKING
TRAFFIC CONTROL
DETOUR
ALIGNMENT

HMA Pavement Location	Asphalt Mix	Lower Layer	Upper Layer
USH 45 SIDE ROADS 4-INCH	3 MT 58-28 S	2 1/4-inch	x
	4 MT 58-28 S	x	1 3/4-inch
USH 45 RIGHT TURN LANES AND BYPASS LANES 7 1/4-INCH	3 MT 58-28 S	2 3/4-inch	x
	3 MT 58-28 S	2 3/4-inch	x
	4 MT 58-28 S	x	1 3/4-inch
USH 45 OVERLAY & CULVERT CROSSINGS 4 1/2-INCH	3 MT 58-28 S	2 3/4-inch	x
	4 MT 58-28 S	x	1 3/4-inch

2

UTILITY CONTACTS

WE ENERGIES – GAS
SEND ALL CORRESPONDENCE TO:
LaTROY BRUMFIELD
WE ENERGIES
333 W EVERETT ST A299
MILWAUKEE, WI 53203
PHONE: (414) 221-5617

CONSTRUCTION FIELD CONTACT:
CHRIS DeGRAVE
7815 NORTHWESTERN AVE
RACINE, WI 53406
PHONE: (262) 886-7018

WE ENERGIES – ELECTRIC
SEND ALL CORRESPONDENCE TO:
LaTROY BRUMFIELD
WE ENERGIES
333 W EVERETT ST A299
MILWAUKEE, WI 53203
PHONE: (414) 221-5617

CONSTRUCTION FIELD CONTACT:
PAM RAKAUSKAS
500 S 166TH STREET
WEST ALLIS, WI 53214
PHONE: (414) 944-5549

ATC MANAGEMENT, INC.
SEND ALL CORRESPONDENCE TO:
MIKE OLSEN
ATC MANAGEMENT, INC.
801 O'KEEFE RD
PO BOX 6113
DEPERE, WI 54115-6113
PHONE: (920) 338-6582

CONSTRUCTION FIELD CONTACT:
TONY MARCINIAK
5303 FEN OAK DRIVE
MADISON, WISCONSIN 53718
PHONE: (262) 506-6814

FRONTIER - WISCONSIN
SEND ALL CORRESPONDENCE TO:
ROBERT CHURCH
FRONTIER - WISCONSIN
2222 W WISCONSIN STREET
PORTAGE, WI 53591
PHONE: (608) 742-1817

CONSTRUCTION FIELD CONTACT:
ED STIEBER
100 COMMUNICATION DRIVE
SUN PRAIRIE, WI 53590
PHONE: (608) 837-1410

SANITARY/WATER
RANDALL KERKMAN
VILLAGE OF BRISTOL
19801 83RD STREET
BRISTOL, WI 53104
PHONE: (262) 857-2368

MIDWEST FIBER NETWORKS
RICHARD TRGOVEC
MIDWEST FIBER NETWORKS
6070 NORTH FLINT ROAD
GLENDALE, WI 53209
PHONE: (414) 459-3554

TIME WARNER CABLE
STEVE CRAMER
TIME WARNER CABLE
1320 N MARTIN LUTHER KING JR DR
MILWAUKEE, WI 53212
PHONE: (414) 277-4045

OTHER CONTACTS

WISDOT REGION CONTACT
BRIAN PLUEMER
WISDOT SOUTHEAST REGION
WAUKESHA OFFICE
141 NW BARSTOW ST
WAUKESHA, WI 53187
PHONE: (262) 548-6721

WISDOT SIGNALS
141 NW BARSTOW
PO BOX 798
WAUKESHA, WI 53187
PHONE: (414) 750-2605

WISDOT LIGHTING
ERIC PEREA
141 NW BARSTOW
PO BOX 798
WAUKESHA, WI 53187
PHONE: (262) 574-5422

WISDNR CONTACT
CRAIG WEBSTER
DNR LIAISON
141 NW BARSTOW ST
WAUKESHA, WI 53187
PHONE: (262) 574-2141

WISDOT ELECTRICAL FIELD UNIT
935 S 60TH ST
WEST ALLIS, WI 53214
PHONE: (414) 266-1170

ILLINOIS DOT
CORY JUCIUS
IDOT DISTRICT 1
201 CENTER CT
SCHAUMBURG, IL 60196-1096
PHONE: (847) 705-4411

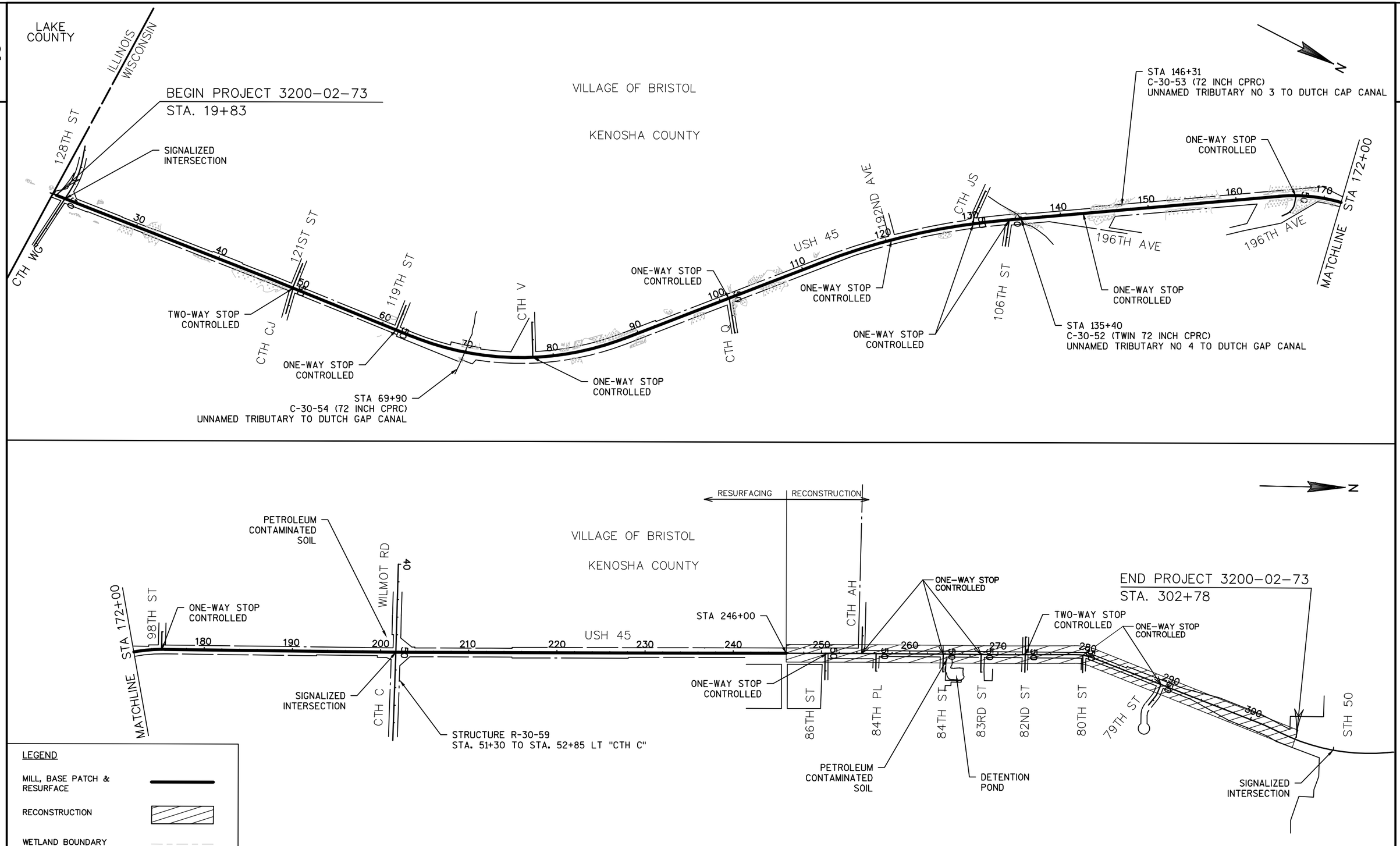
VILLAGE OF BRISTOL
RANDALL KERKMAN
VILLAGE OF BRISTOL
8101 195TH AVENUE
PO BOX 187
BRISTOL, WI 53104
PHONE: (262) 857-2368

KENOSHA COUNTY
CLEMENT ABONGWA
KENOSHA COUNTY
19600 75TH ST, SUITE 122-1
BRISTOL, WI 53104
PHONE: (262) 857-1872

SEWRPC
JOHN WASHBURN
SEWRPC (KENOSHA COUNTY SURVEYOR)
W239 N1812 ROCKWOOD DRIVE
WAUKESHA, WI 53187
PHONE: (262) 547-5722, EXT. 295

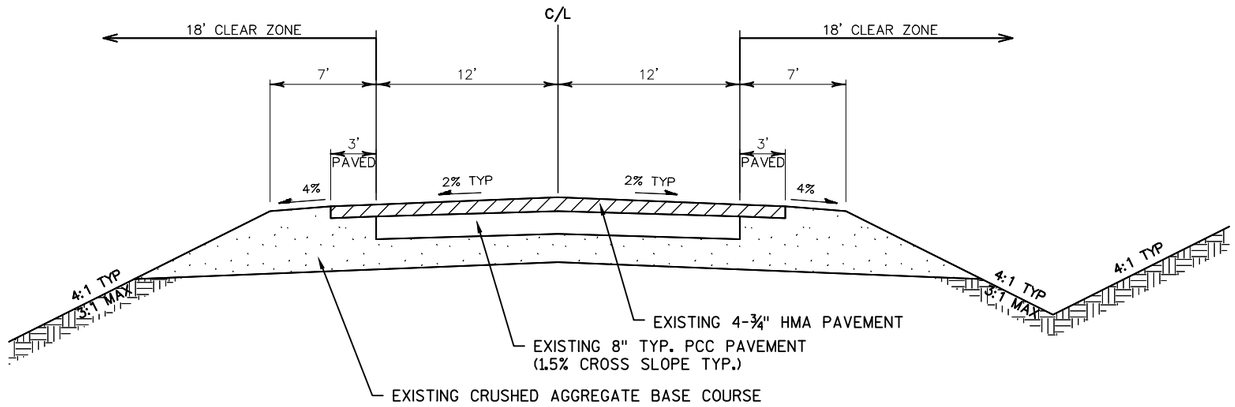
LAKE COUNTY (ILLINOIS)
THOMAS BENNECKE
LAKE COUNTY DIVISION OF TRANSPORTATION
600 W WINCHESTER ROAD
LIBERTYVILLE, IL 60048
PHONE: (847) 377-7476

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



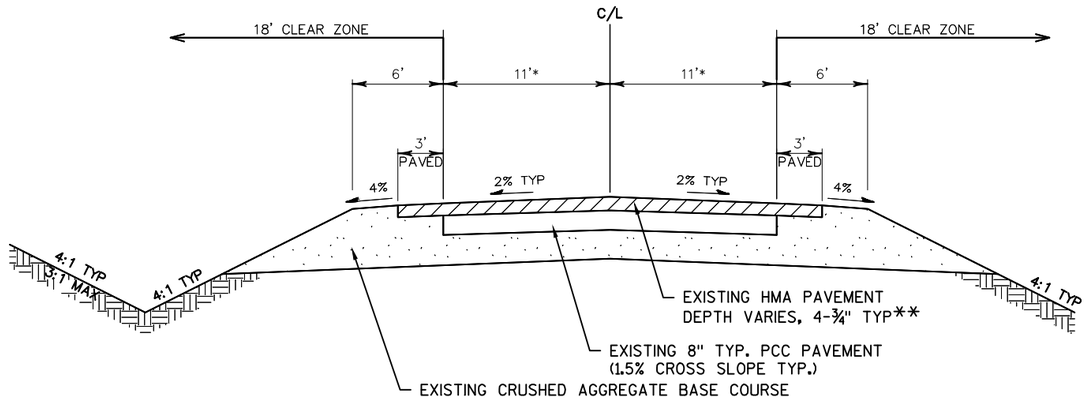
PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	PROJECT OVERVIEW	SHEET 4	E

2



TYPICAL EXISTING SECTION
USH 45

STA 19+83 – STA 200+46
STA 203+10 – STA 254+57



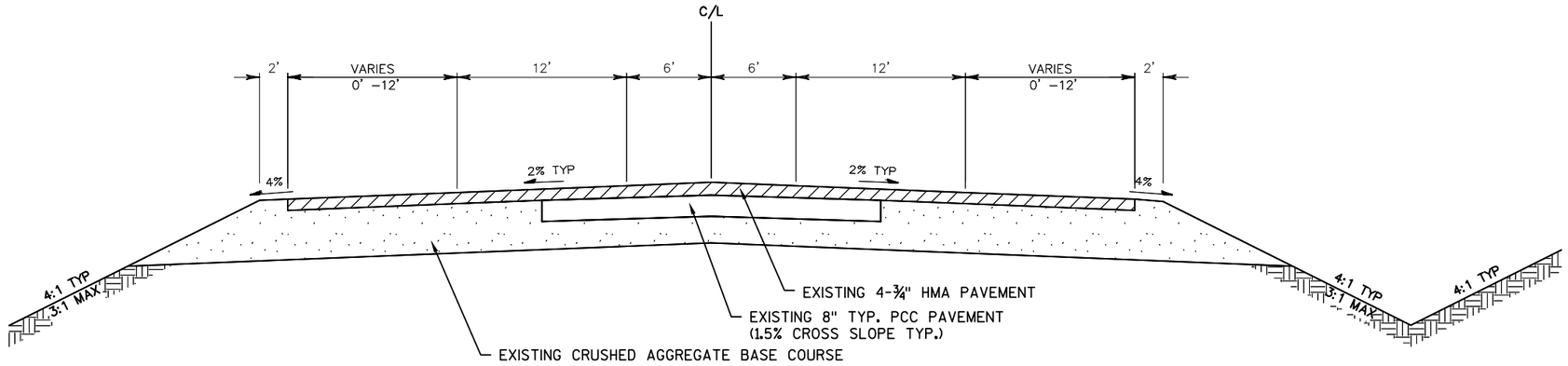
TYPICAL EXISTING SECTION
USH 45

STA 254+57 – STA 291+80

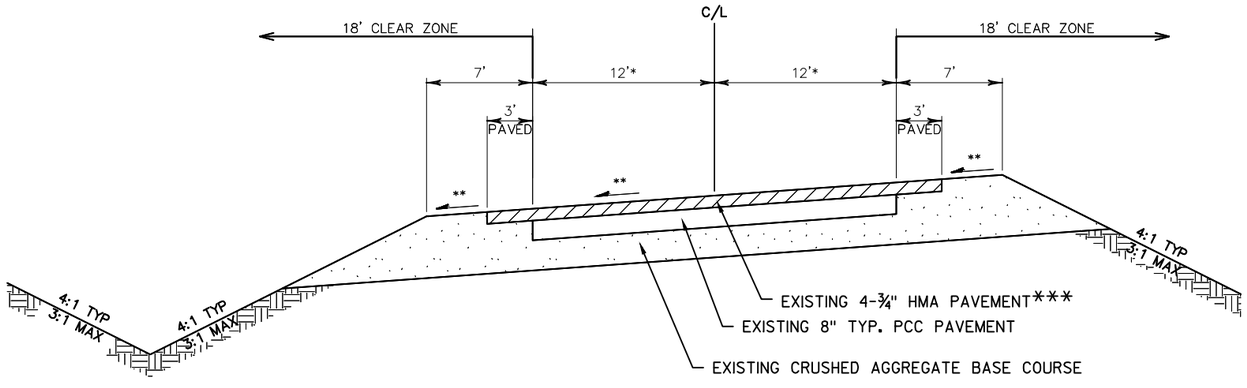
* STA 280+71 – STA 291+80 (12' LANE WIDTH, TYP)

** APPROXIMATE EXISTING PAVEMENT DEPTH
– STA 254+00 – STA 275+00 = 4.5"
– STA 275+00 – STA 291+80 = 10"

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	TYPICAL SECTIONS	SHEET 5	E



TYPICAL EXISTING SECTION
USH 45
STA 200+46 – STA 203+10



TYPICAL EXISTING SUPERELEVATED SECTION
USH 45
STA 63+68 – STA 88+35
STA 112+15 – STA 133+62
STA 164+88 – STA 175+55
STA 278+92 – STA 280+71

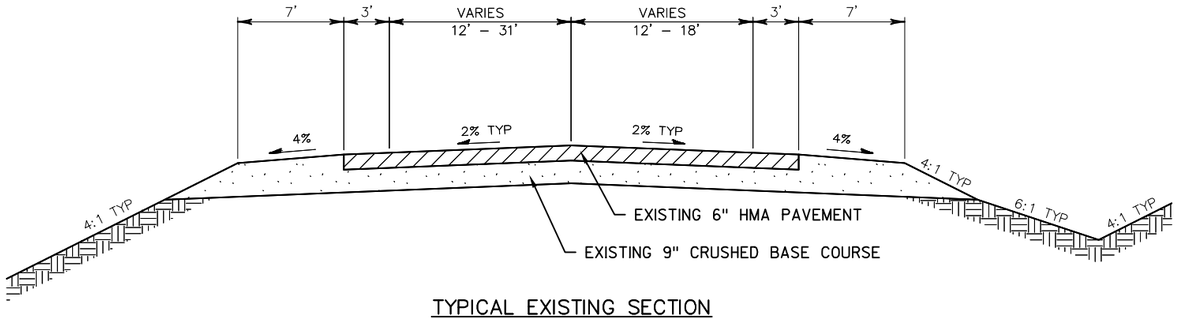
* 11' LANE WIDTH AND 6' SHOULDER WIDTH
FROM STA 278+92 – STA 280+71

** SE = 3.6% @ STA 63+68 – STA 88+35
SE = 3.2% @ STA 112+15 – STA 133+62
SE = 5.6% @ STA 164+88 – STA 175+55
SE = 3.8% @ STA 278+92 – STA 280+71

*** APPROXIMATE EXISTING PAVEMENT DEPTH
= 10" FROM STA 278+92 – STA 280+71

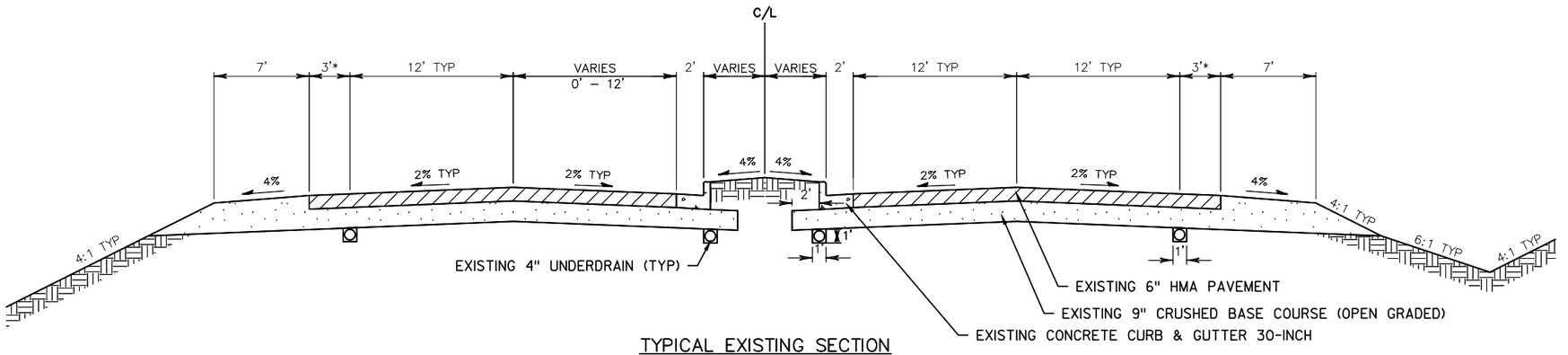
PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	TYPICAL SECTIONS	SHEET 6	E

2



TYPICAL EXISTING SECTION
USH 45

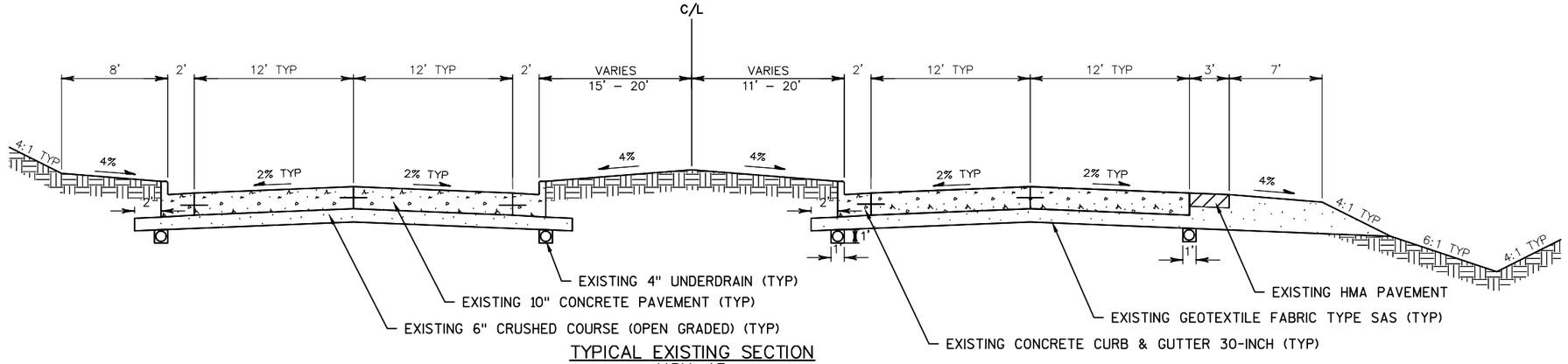
STA 291+80 – STA 299+60



TYPICAL EXISTING SECTION
USH 45

STA 299+60 – STA 302+80

* CURB & GUTTER FROM
STA 300+85 – STA 302+80 LT

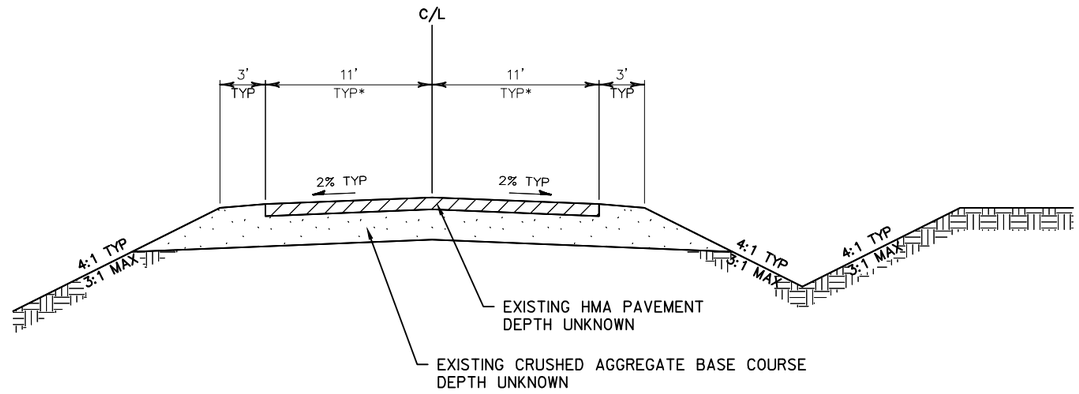


TYPICAL EXISTING SECTION
USH 45

STA 302+80 – STA 305+37

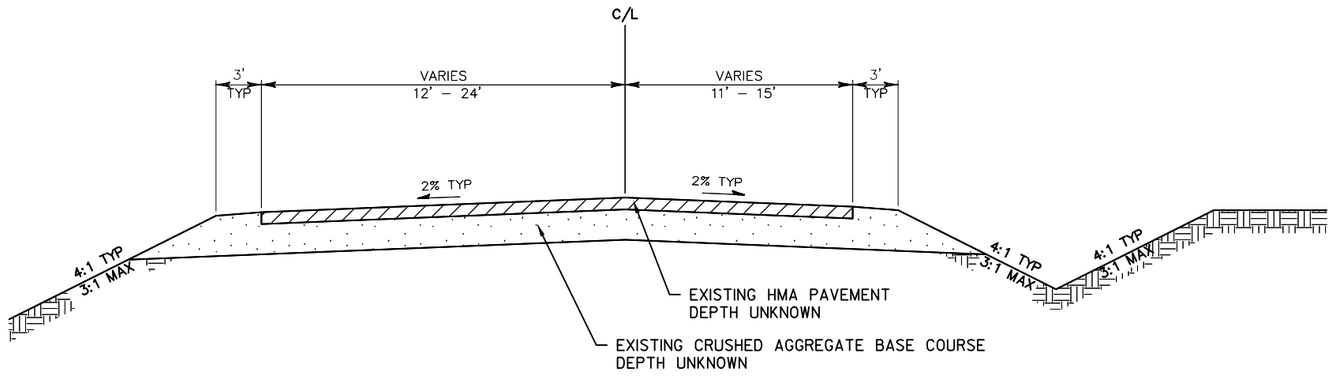
PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	TYPICAL SECTIONS	SHEET 7	E

2



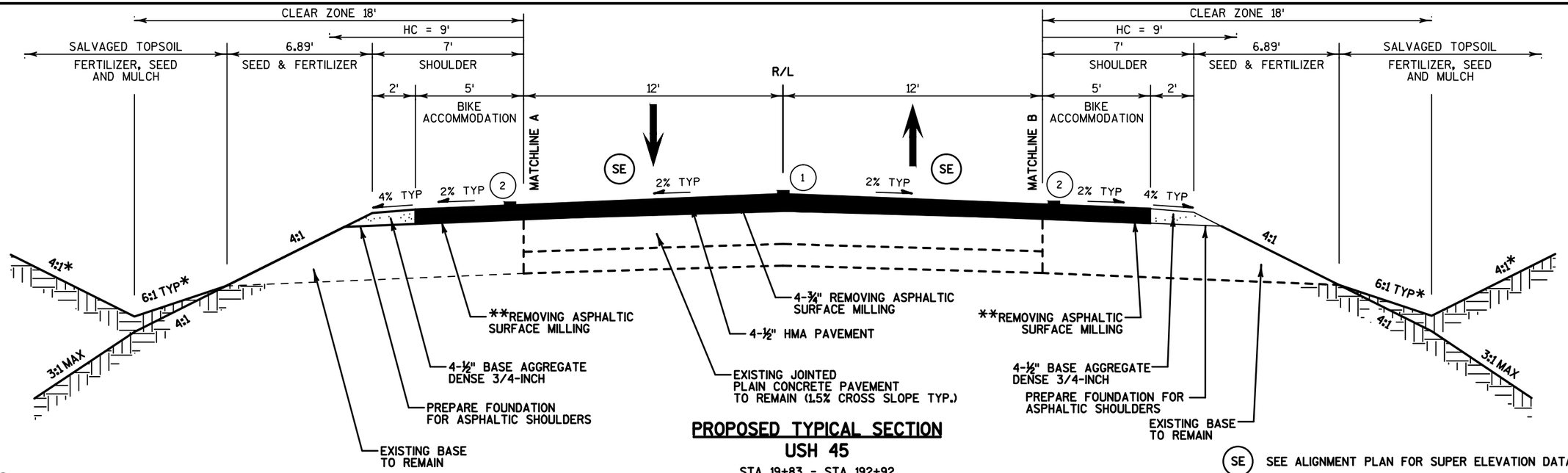
TYPICAL EXISTING SECTION
SIDEROADS

CTH WG:	STA 45+50 – STA 54+25	(*12' TYP)
121ST ST/CTH CJ:	STA 48+70 – STA 51+50	
119TH ST:	STA 48+60 – STA 50+00	
CTH V:	STA 48+30 – STA 50+00	
CTH Q:	STA 50+00 – STA 51+50	
192ND AVE:	STA 48+50 – STA 50+00	
CTH JS:	STA 47+65 – STA 50+00	
106TH ST:	STA 50+00 – STA 51+50	
196TH AVE (SOUTH):	STA 50+00 – STA 52+75	
196TH AVE (NORTH):	STA 50+00 – STA 51+75	
98TH ST:	STA 48+50 – STA 50+00	
86TH ST:	STA 50+00 – STA 51+60	
CTH AH:	STA 48+50 – STA 50+00	
84TH PL:	STA 50+00 – STA 51+25	
84TH ST:	STA 50+00 – STA 51+10	
83RD ST:	STA 50+00 – STA 51+15	
82ND ST:	STA 48+75 – STA 51+00	
80TH ST:	STA 50+00 – STA 51+00	
79TH ST:	STA 50+00 – STA 50+90	



TYPICAL EXISTING SECTION
CTH C: STA 42+40 – STA 59+10

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	TYPICAL SECTION	SHEET 8 E



PROPOSED TYPICAL SECTION
USH 45

STA 19+83 - STA 192+92
STA 210+16 - STA 246+00

DESIGN SPEED = 50 MPH STA 19+83 - STA 34+00
60 MPH STA 34+00 - STA 246+00

DESIGN CLASS = 3RA3

(1) ASPHALTIC CENTERLINE RUMBLE STRIPS 2-LANE RURAL

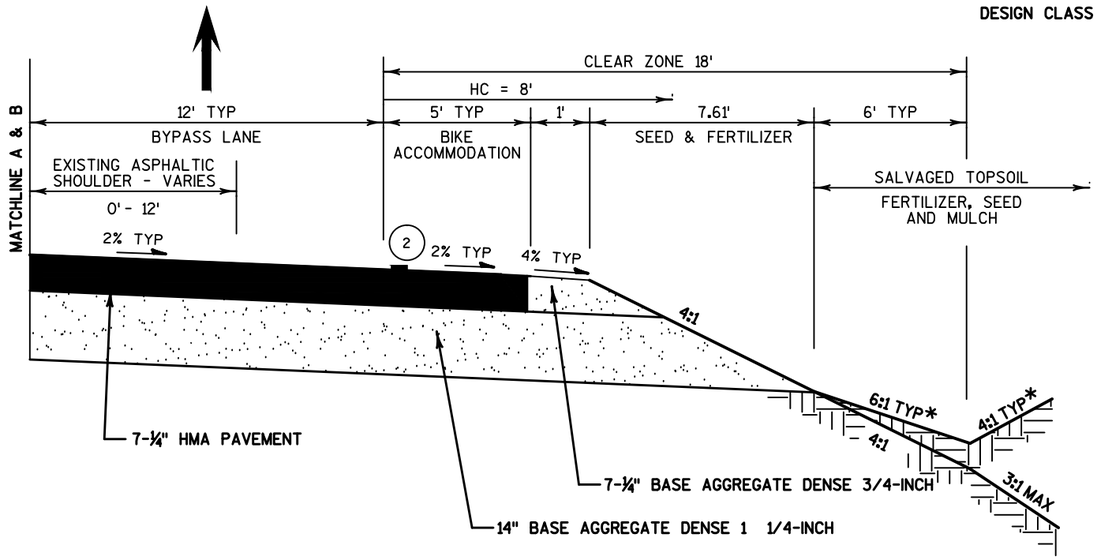
(2) ASPHALTIC SHOULDER RUMBLE STRIPS 2-LANE RURAL (TYPE 1)

(SE) SEE ALIGNMENT PLAN FOR SUPER ELEVATION DATA

HC = HORIZONTAL CLEARANCE

* 6:1 FORESLOPE, 4:1 BACKSLOPE IF DITCH IS WITHIN CLEAR ZONE
4:1/4:1 IF DITCH IS OUTSIDE CLEAR ZONE

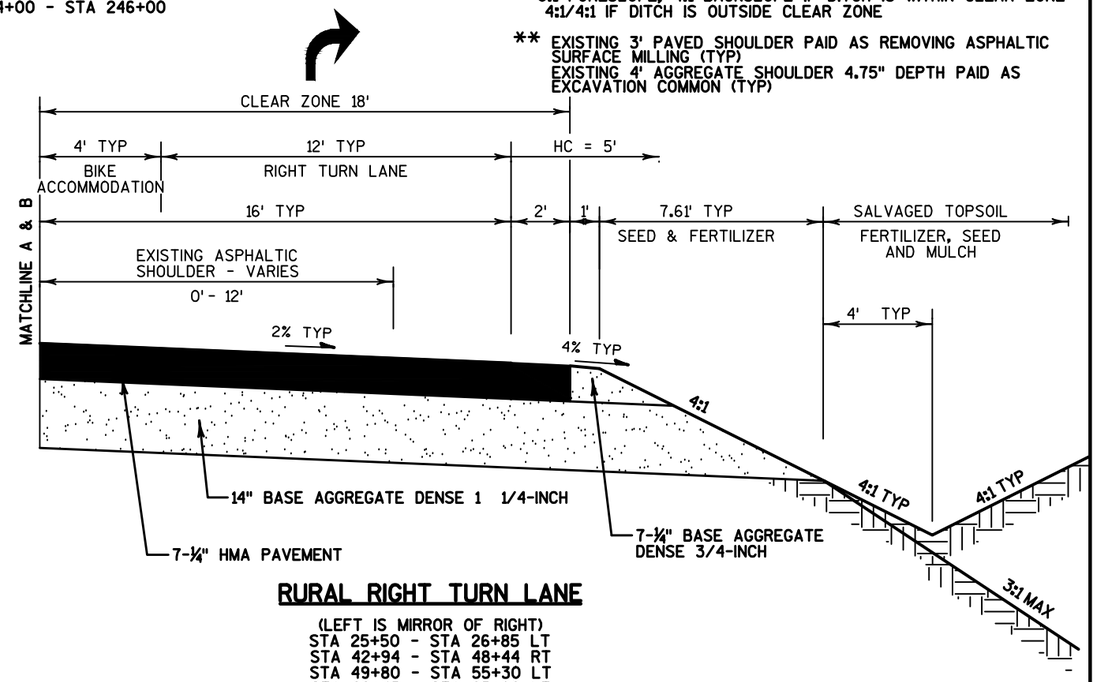
** EXISTING 3' PAVED SHOULDER PAID AS REMOVING ASPHALTIC SURFACE MILLING (TYP)
EXISTING 4' AGGREGATE SHOULDER 4.75" DEPTH PAID AS EXCAVATION COMMON (TYP)



RURAL BYPASS LANE

(LEFT IS MIRROR OF RIGHT)

STA 58+03 - STA 65+95 RT
STA 74+00 - STA 81+90 RT
STA 96+79 - STA 104+71 LT
STA 117+07 - STA 125+01 RT
STA 125+75 - STA 133+38 RT
STA 130+92 - STA 147+25 LT
STA 162+59 - STA 170+46 LT
STA 171+46 - STA 179+42 RT

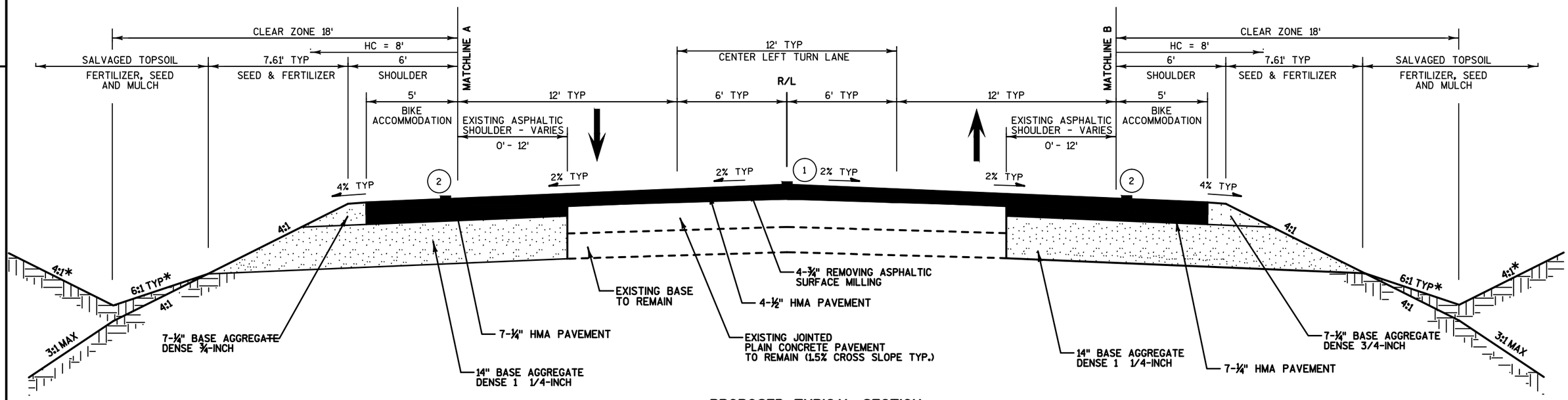


RURAL RIGHT TURN LANE

(LEFT IS MIRROR OF RIGHT)

STA 25+50 - STA 26+85 LT
STA 42+94 - STA 48+44 RT
STA 49+80 - STA 55+30 LT
STA 62+45 - STA 65+96 LT
STA 78+32 - STA 84+38 LT
STA 94+77 - STA 100+27 RT
STA 121+49 - STA 123+98 LT
STA 162+41 - STA 165+92 RT

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	TYPICAL SECTIONS	SHEET 9	E



PROPOSED TYPICAL SECTION
USH 45
STA 192+92 - STA 210+16

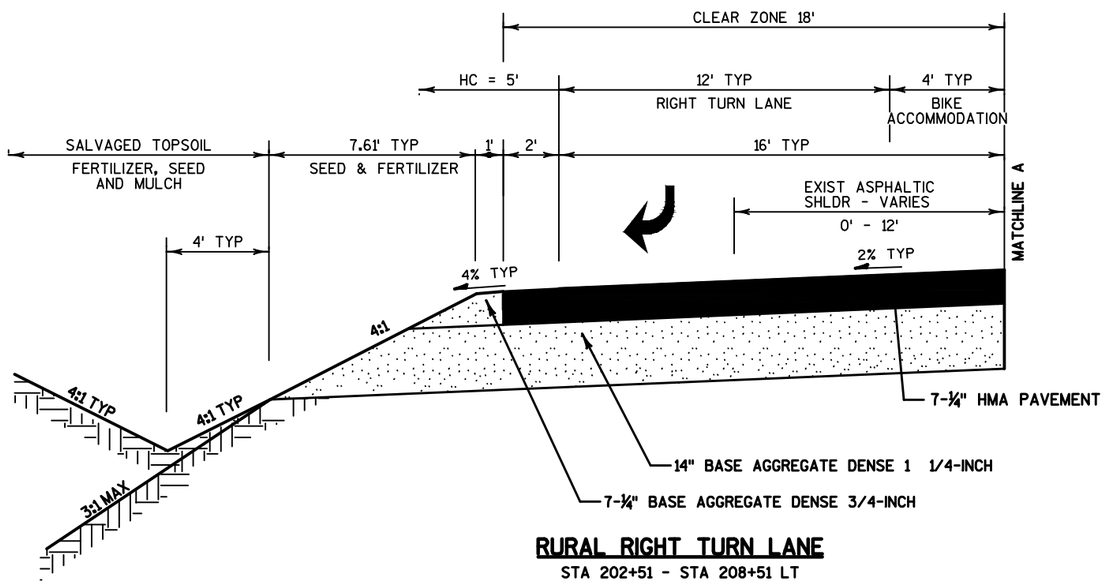
(1) ASPHALTIC CENTERLINE RUMBLE STRIPS 2-LANE RURAL

(2) ASPHALTIC SHOULDER RUMBLE STRIPS 2-LANE RURAL (TYPE 1)

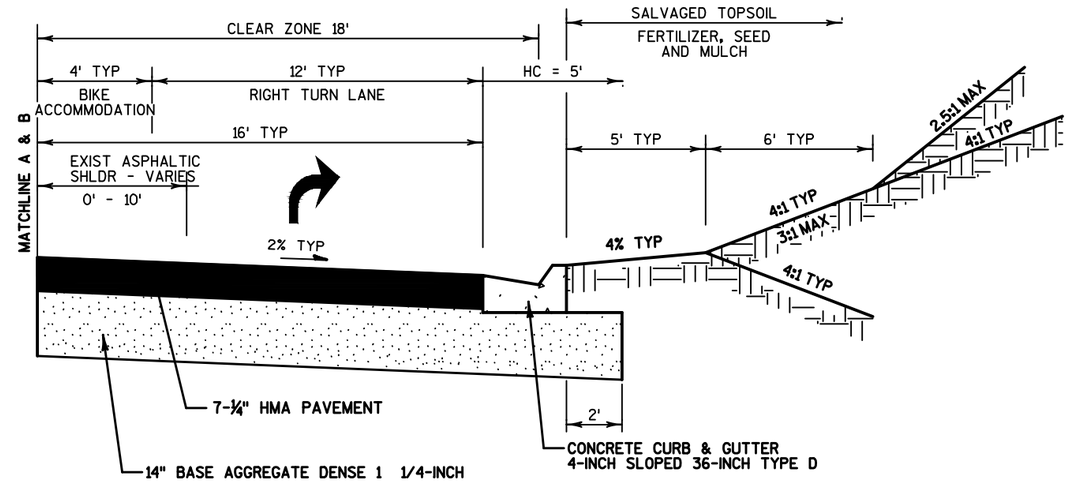
DESIGN SPEED = 60 MPH
DESIGN CLASS = 3RA3

HC = HORIZONTAL CLEARANCE

* 6:1 FORESLOPE, 4:1 BACKSLOPE IF DITCH IS WITHIN CLEAR ZONE
4:1 /4:1 IF DITCH IS OUTSIDE CLEAR ZONE



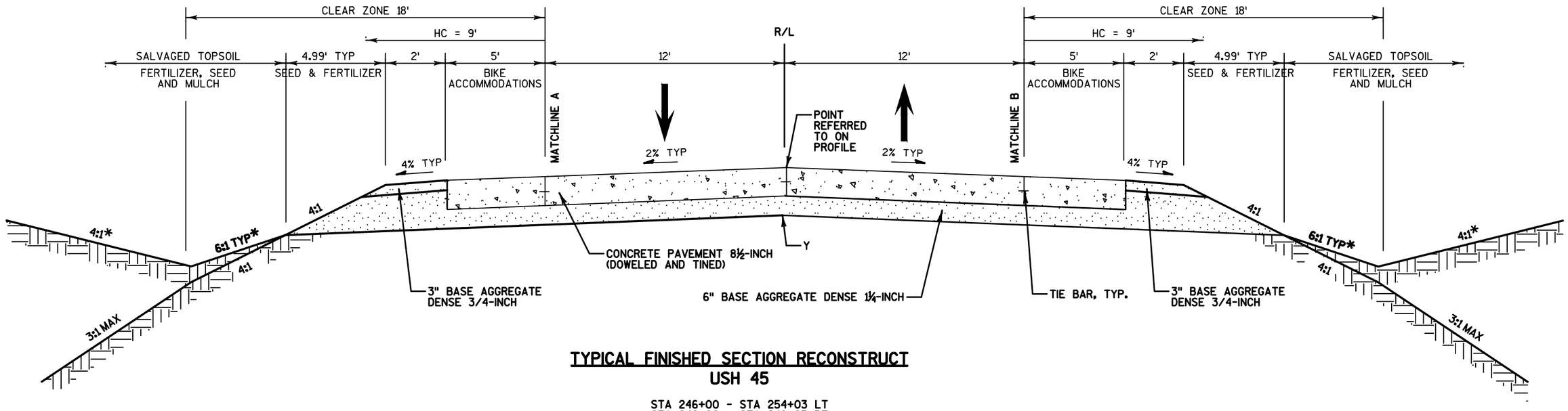
RURAL RIGHT TURN LANE
STA 202+51 - STA 208+51 LT



URBAN RIGHT TURN LANE
(LEFT IS A MIRROR OF RIGHT)
STA 22+12 - STA 25+50 LT
STA 194+57 - STA 201+08 RT

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	TYPICAL SECTIONS	SHEET 10	E

FILE NAME : N:\PDS\C3D\CAD\32000203\020401_TS.DWG
LAYOUT NAME - ****
PLOT DATE : 4/27/2016 3:16 PM PLOT BY : MAAS, JOSEPH A PLOT NAME : PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42



TYPICAL FINISHED SECTION RECONSTRUCT
USH 45

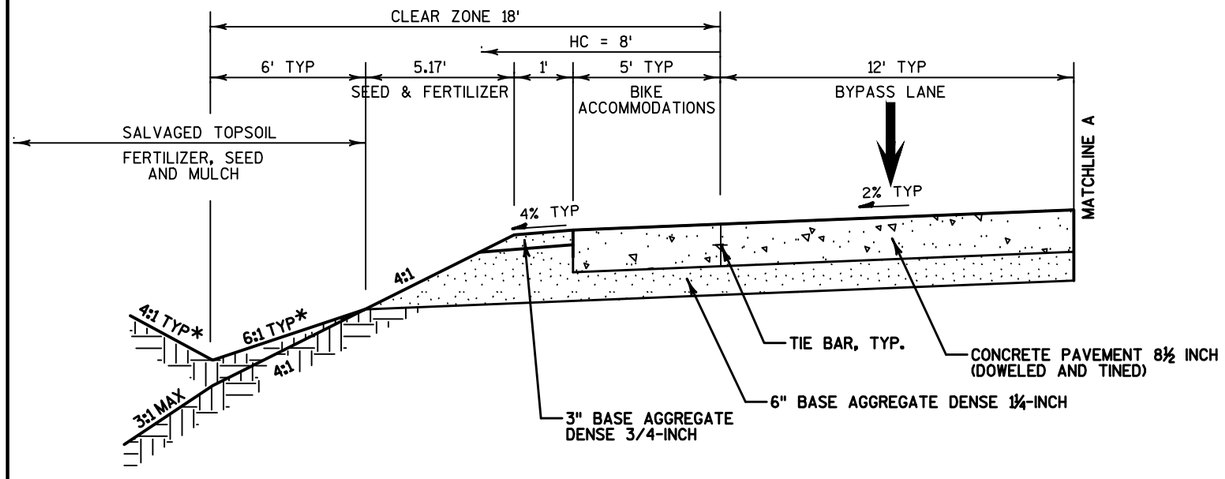
STA 246+00 - STA 254+03 LT
STA 246+00 - STA 249+65 RT

DESIGN SPEED = 60 MPH STA 246+00 TO STA 249+65
DESIGN SPEED = 40 MPH STA 249+65 TO STA 254+03

DESIGN CLASS = A2

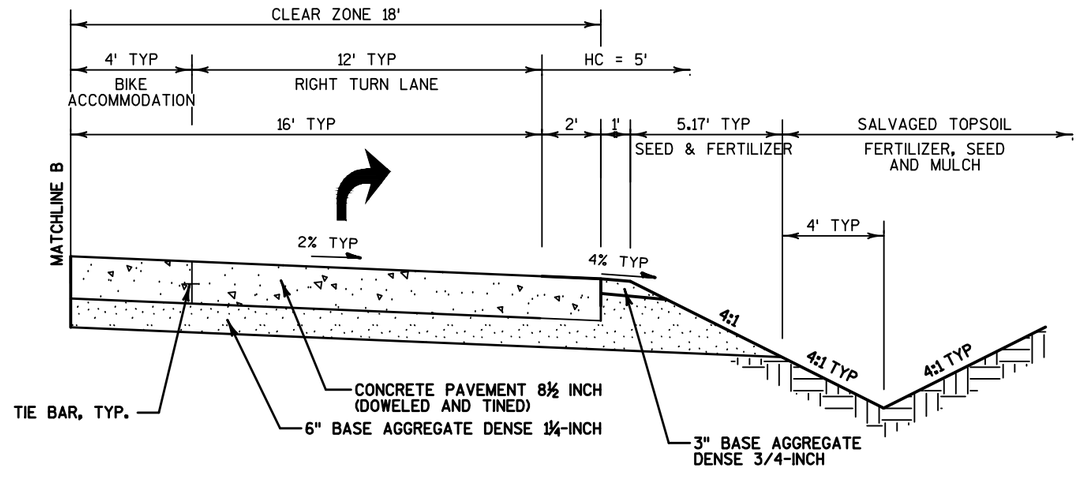
* 6:1 FORESLOPE, 4:1 BACKSLOPE IF DITCH IS WITHIN CLEAR ZONE
4:1/4:1 IF DITCH IS OUTSIDE CLEAR ZONE

"Y" - POINT REFERRED TO ON CROSS SECTION
HC = HORIZONTAL CLEARANCE



RURAL BYPASS LANE

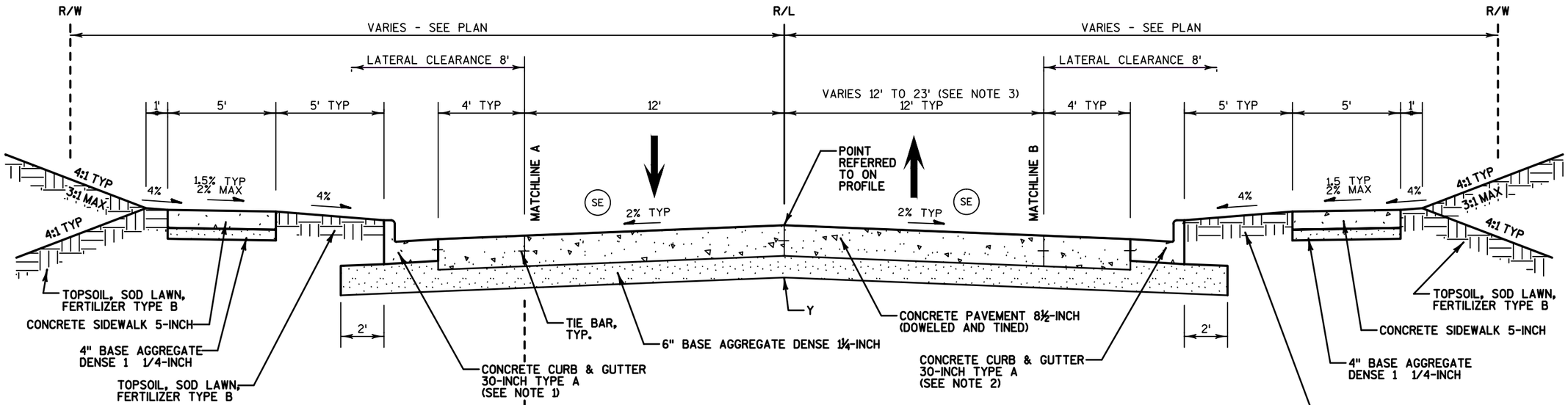
STA 246+16 - STA 253+36 LT



RURAL RIGHT TURN LANE

STA 246+15 - STA 249+65 RT

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	TYPICAL SECTIONS	SHEET 11	E



"Y" - POINT REFERRED TO ON CROSS SECTION

NOTE 1:
STA 280+70 TO STA 281+00, LT
TRANSITION TO CONCRETE CURB & GUTTER
6-INCH SLOPED 36-INCH TYPE A

NOTE 2:
STA 279+88 TO STA 305+35 RT
CONCRETE CURB & GUTTER 6-INCH
SLOPED 36-INCH TYPE A

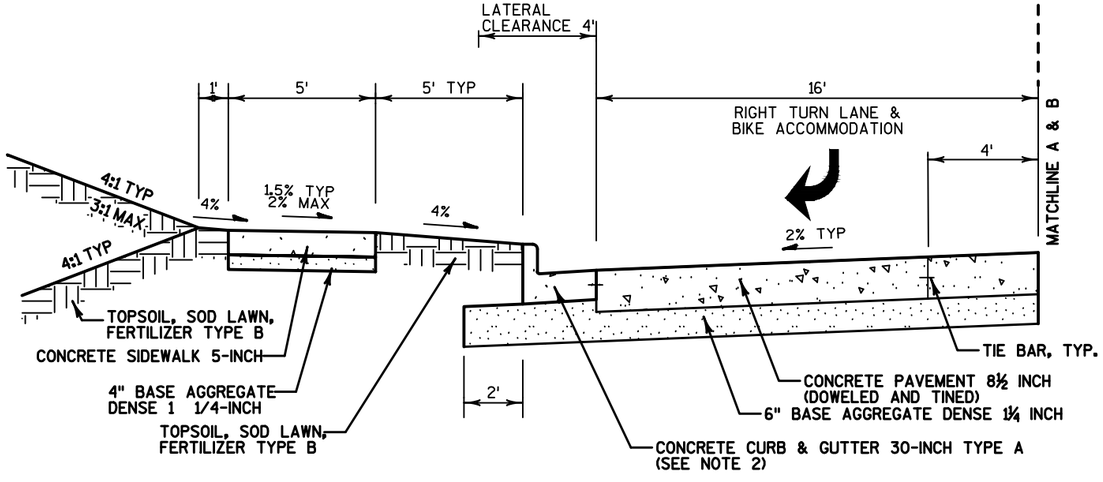
NOTE 3:
VARIES 12' TO 23'
STA 251+15 TO STA 253+40, RT
23' TYP FOR NB LEFT TURN LANE & MEDIAN
STA 253+40 TO STA 256+20' RT
VARIES 23' TO 12'
STA 256+20 TO STA 258+45' RT

TYPICAL FINISHED SECTION RECONSTRUCT
USH 45

STA 254+03 - STA 281+00 LT
STA 249+65 - STA 281+00 RT

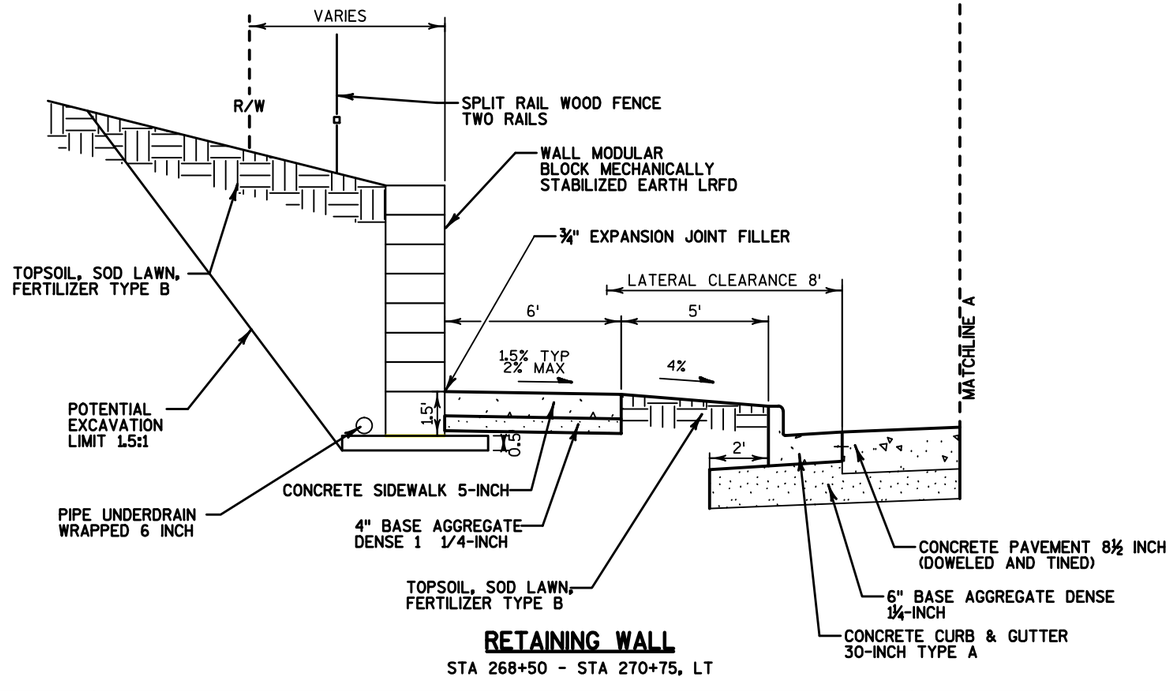
DESIGN SPEED = 40 MPH STA 249+65 - STA 281+00
DESIGN CLASS = U2B

(SE) SEE ALIGNMENT PLAN FOR SUPERELEVATION DATA



URBAN RIGHT TURN LANE
(RIGHT IS MIRROR OF LEFT)

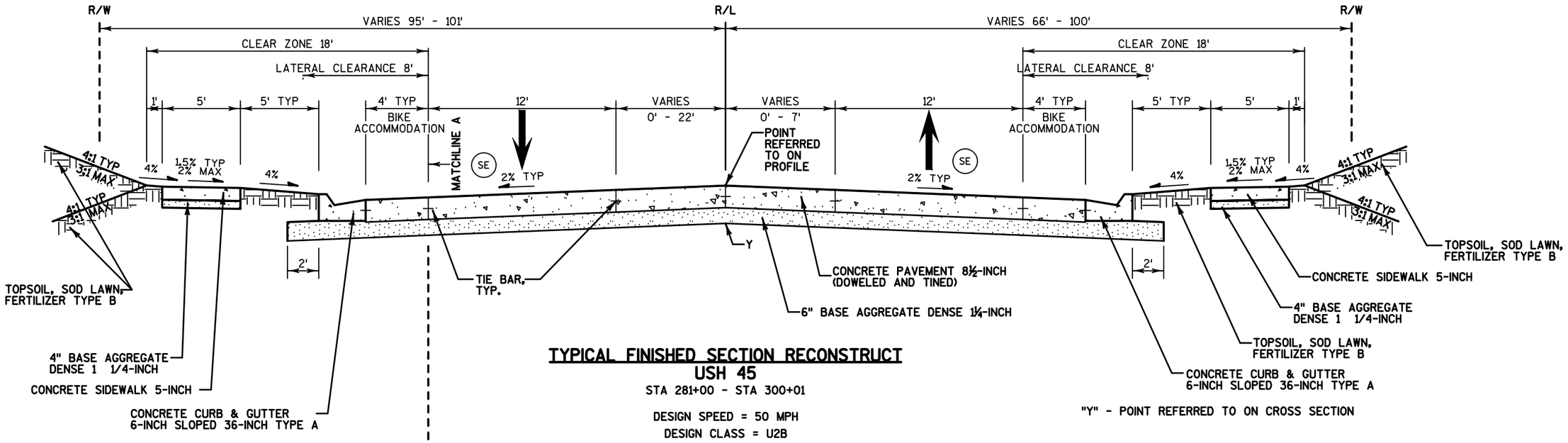
STA 255+33 - STA 258+83 LT
STA 284+89 - STA 288+22 RT



RETAINING WALL

STA 268+50 - STA 270+75, LT

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	TYPICAL SECTIONS	SHEET 12	E



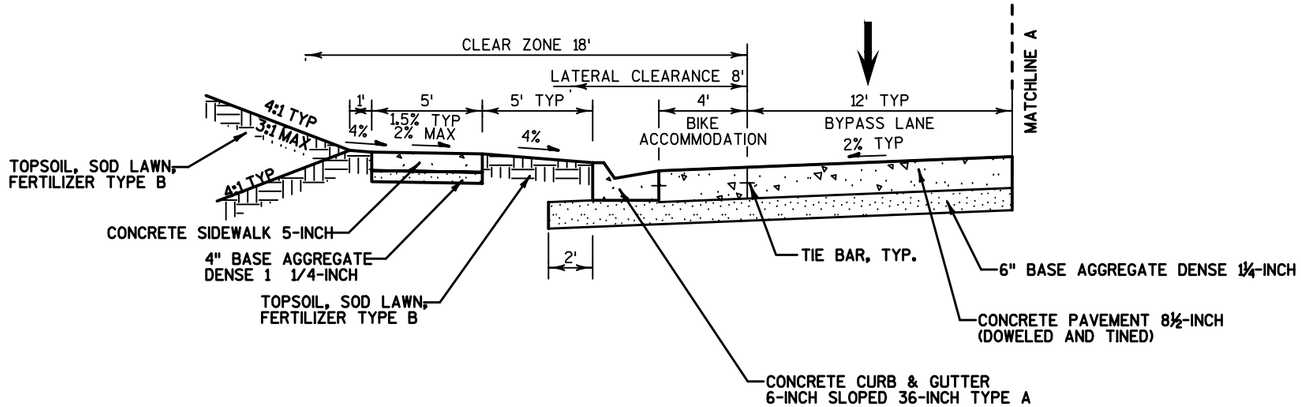
TYPICAL FINISHED SECTION RECONSTRUCT
USH 45
STA 281+00 - STA 300+01

DESIGN SPEED = 50 MPH
DESIGN CLASS = U2B

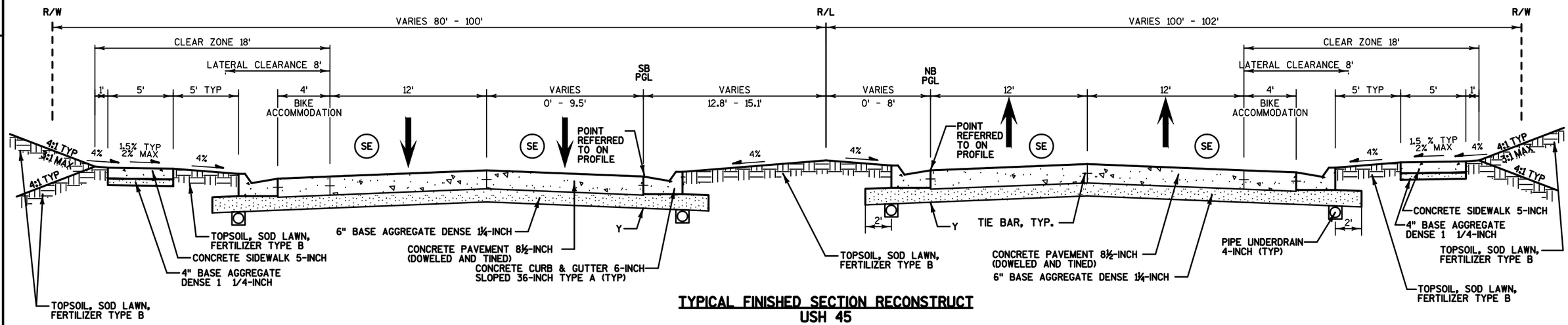
"Y" - POINT REFERRED TO ON CROSS SECTION

"Y" - POINT REFERRED TO ON CROSS SECTION

(SE) SEE ALIGNMENT PLAN FOR SUPERELEVATION DATA



URBAN BYPASS LANE
STA 284+85 - STA 292+77 LT

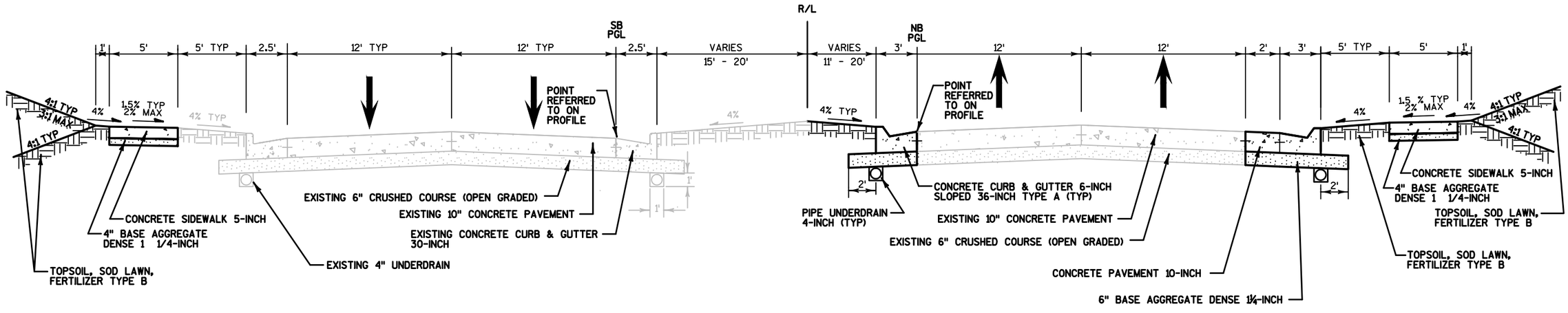


TYPICAL FINISHED SECTION RECONSTRUCT
USH 45

STA 300+01 - STA 302+78
DESIGN SPEED = 50 MPH
DESIGN CLASS = UA2

"Y" - POINT REFERRED TO ON CROSS SECTION

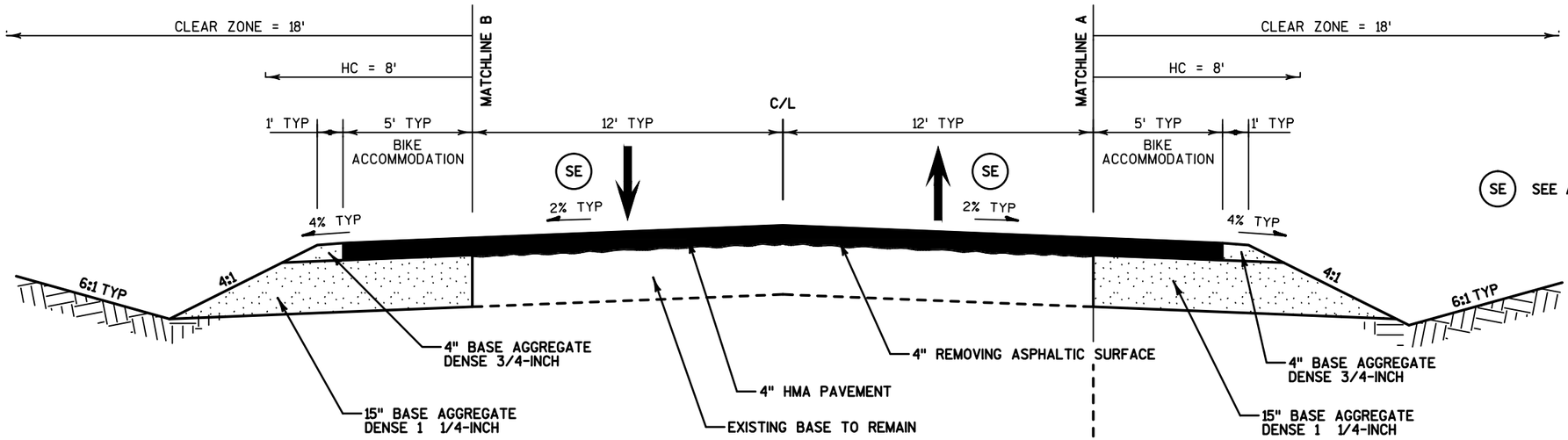
(SE) SEE ALIGNMENT PLAN FOR SUPERELEVATION DATA



TYPICAL FINISHED SECTION RECONSTRUCT
USH 45

STA 302+78 - STA 305+35
DESIGN SPEED = 50 MPH
DESIGN CLASS = UA2

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	TYPICAL SECTIONS	SHEET 14	E



SE SEE ALIGNMENT PLAN FOR SUPER ELEVATION DATA

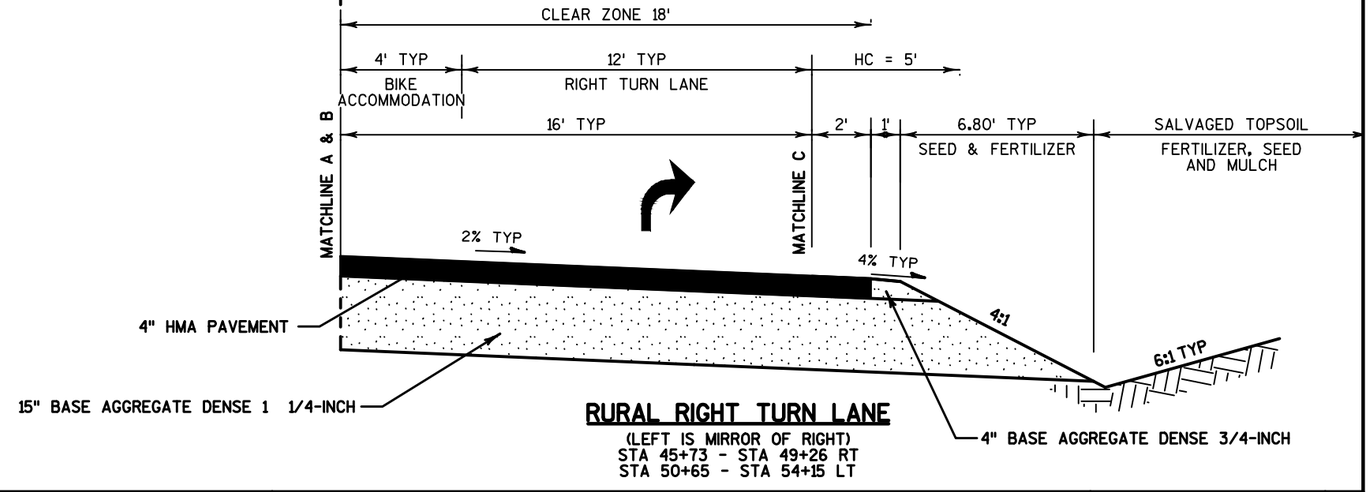
TYPICAL FINISHED SECTION

CTH WG

STA 45+50 - STA 54+25

DESIGN SPEED = 50 MPH

DESIGN CLASS = 3RC3



RURAL RIGHT TURN LANE

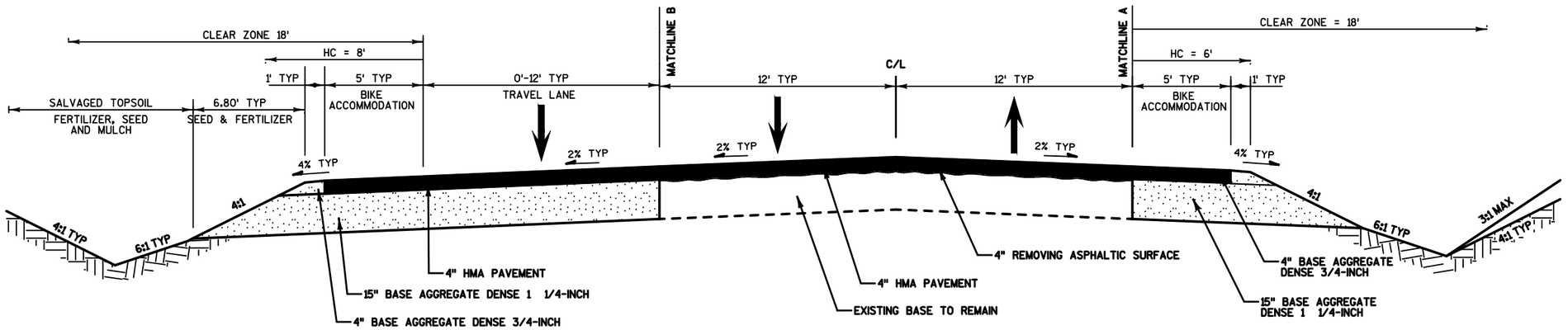
(LEFT IS MIRROR OF RIGHT)

STA 45+73 - STA 49+26 RT

STA 50+65 - STA 54+15 LT

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	TYPICAL SECTIONS	SHEET 15	E

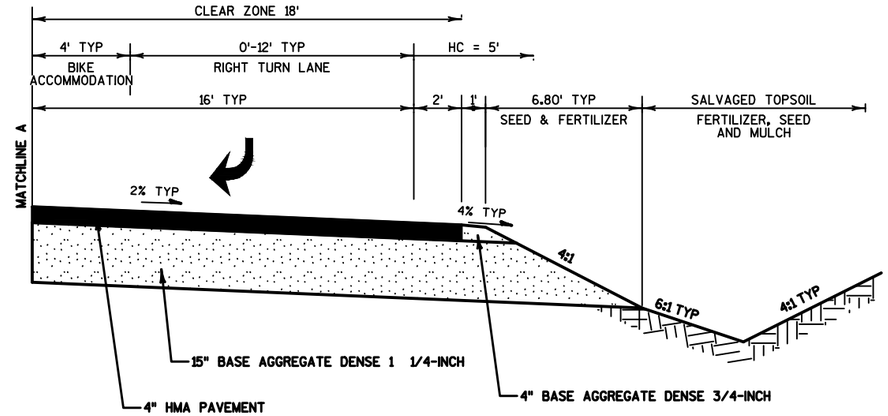
2



TYPICAL FINISHED SECTION

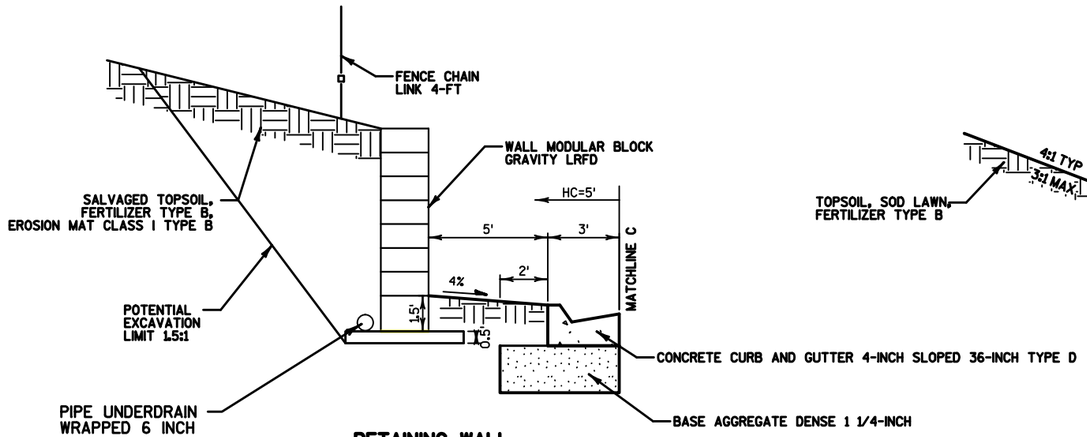
CTH C
STA 42+40 - STA 59+10

DESIGN SPEED = 55 MPH
DESIGN CLASS = 3RC3



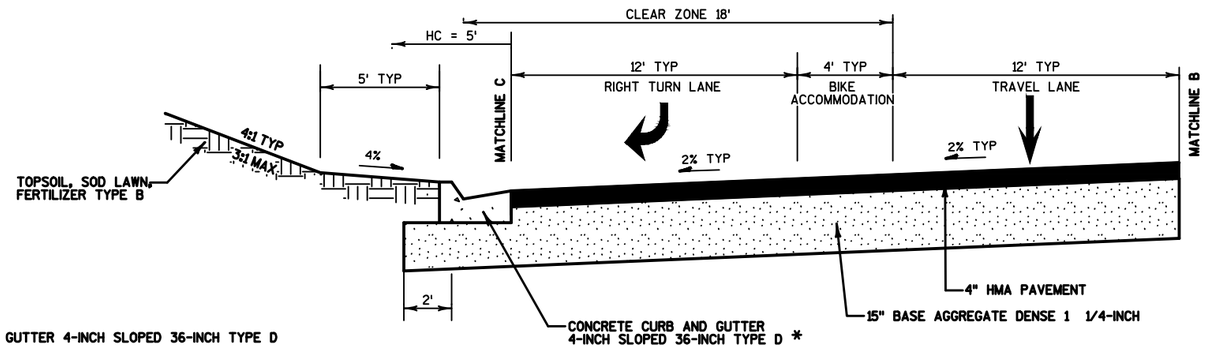
RURAL RIGHT TURN LANE

STA 42+40 TO STA 49+21 RT



RETAINING WALL

STA 51+30 - STA 52+85 LT

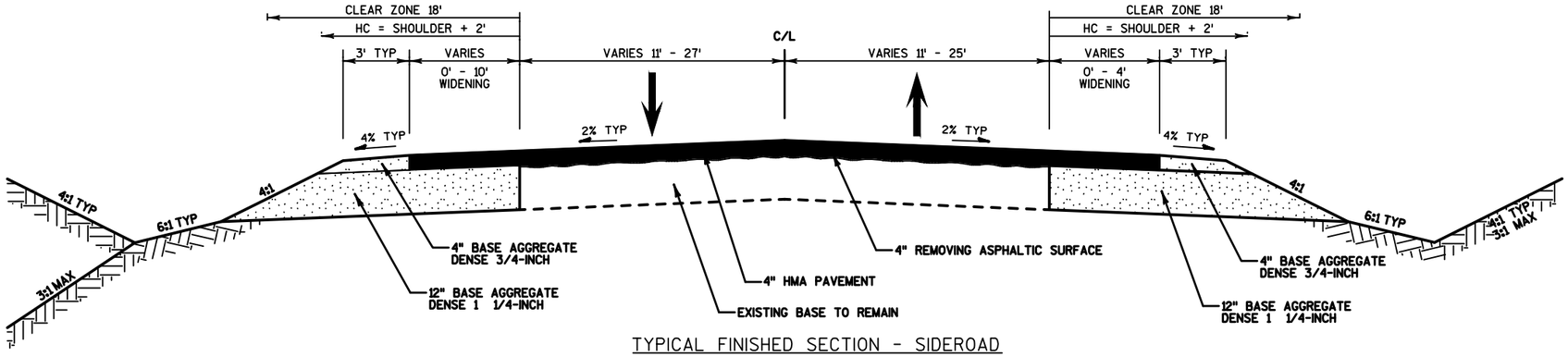


URBAN RIGHT TURN LANE

STA 50+77 - STA 59+10 LT

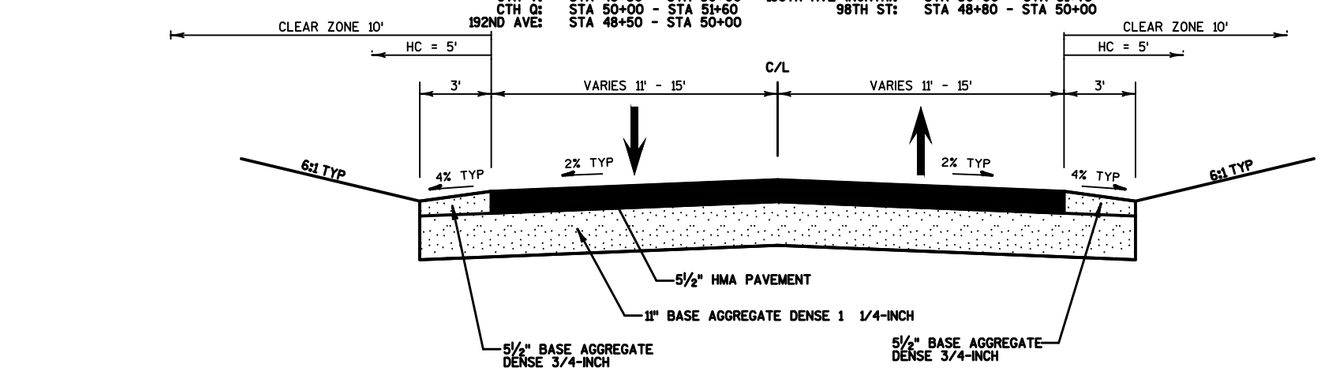
* RURAL SHOULDER FROM STA 54+73 - STA 59+10 LT

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	TYPICAL SECTIONS	SHEET 16	E



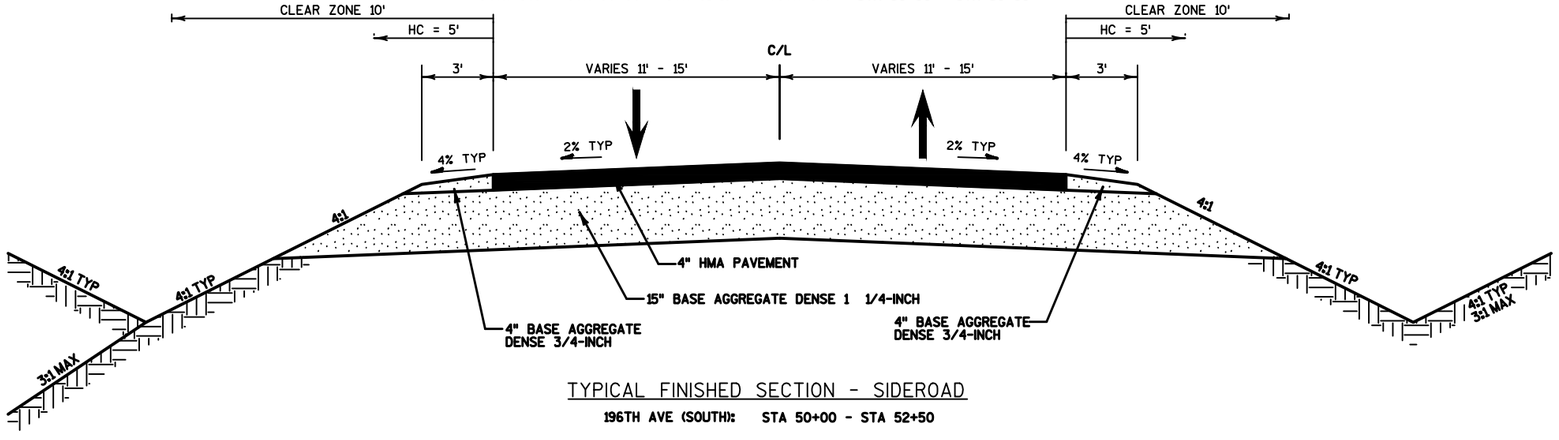
TYPICAL FINISHED SECTION - SIDEROAD

121ST ST/CTH CJ:	STA 48+70 - STA 51+50	CTH JS:	STA 47+65 - STA 50+00
119TH ST:	STA 48+60 - STA 50+00	106TH ST:	STA 50+00 - STA 51+60
CTH V:	STA 48+30 - STA 50+00	196TH AVE (NORTH):	STA 50+00 - STA 51+75
CTH Q:	STA 50+00 - STA 51+60	98TH ST:	STA 48+80 - STA 50+00
192ND AVE:	STA 48+50 - STA 50+00		



TYPICAL FINISHED SECTION - SIDEROAD

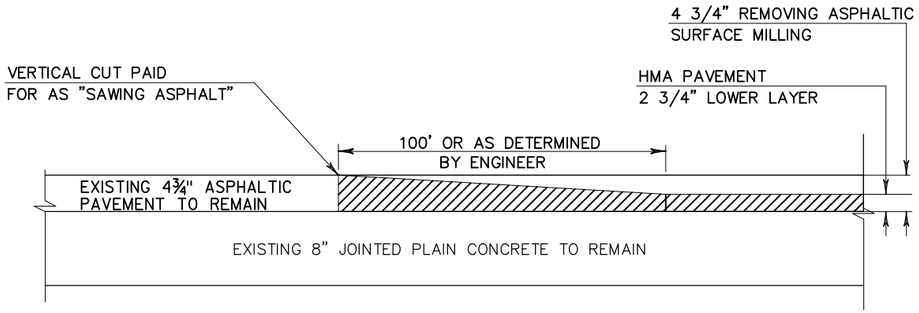
86TH ST:	STA 50+00 - STA 51+60	83RD ST:	STA 50+00 - STA 51+15
CTH AH:	STA 48+50 - STA 50+00	82ND ST:	STA 48+75 - STA 51+00
84TH PL:	STA 50+00 - STA 51+25	80TH ST:	STA 50+00 - STA 51+00
84TH ST:	STA 50+00 - STA 51+10	79TH ST:	STA 50+00 - STA 50+90



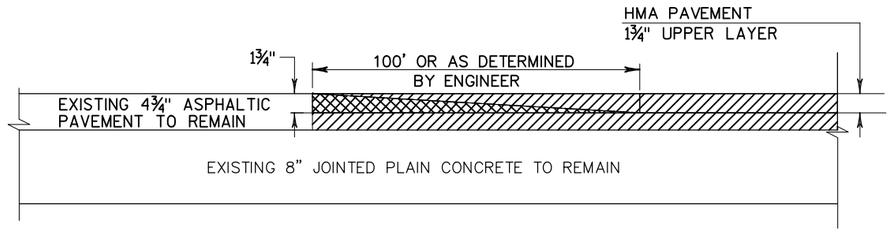
TYPICAL FINISHED SECTION - SIDEROAD

196TH AVE (SOUTH): STA 50+00 - STA 52+50

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	TYPICAL SECTIONS	SHEET 17	E



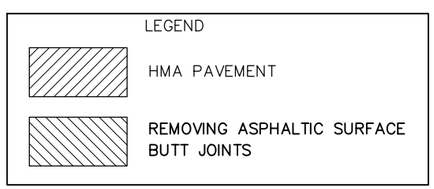
STEP 1

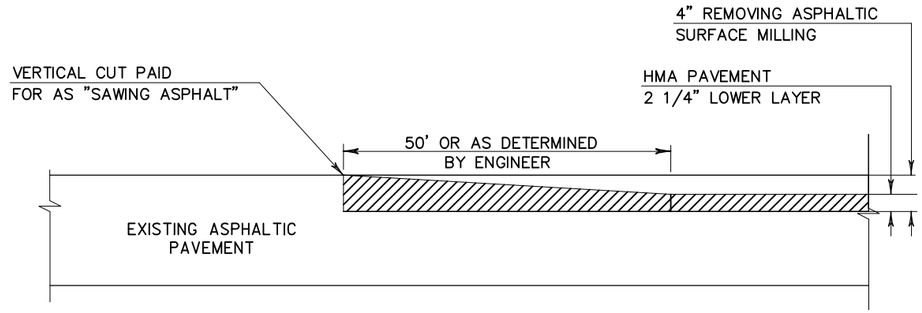


STEP 2

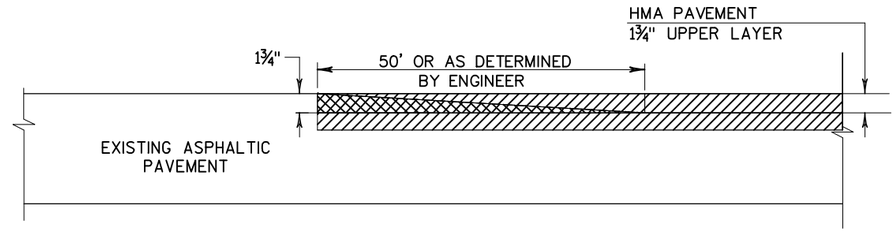
MILLING DETAIL – USH 45

STA 19+83 TO STA 20+83



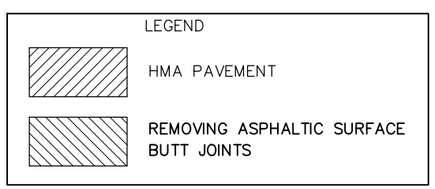


STEP 1

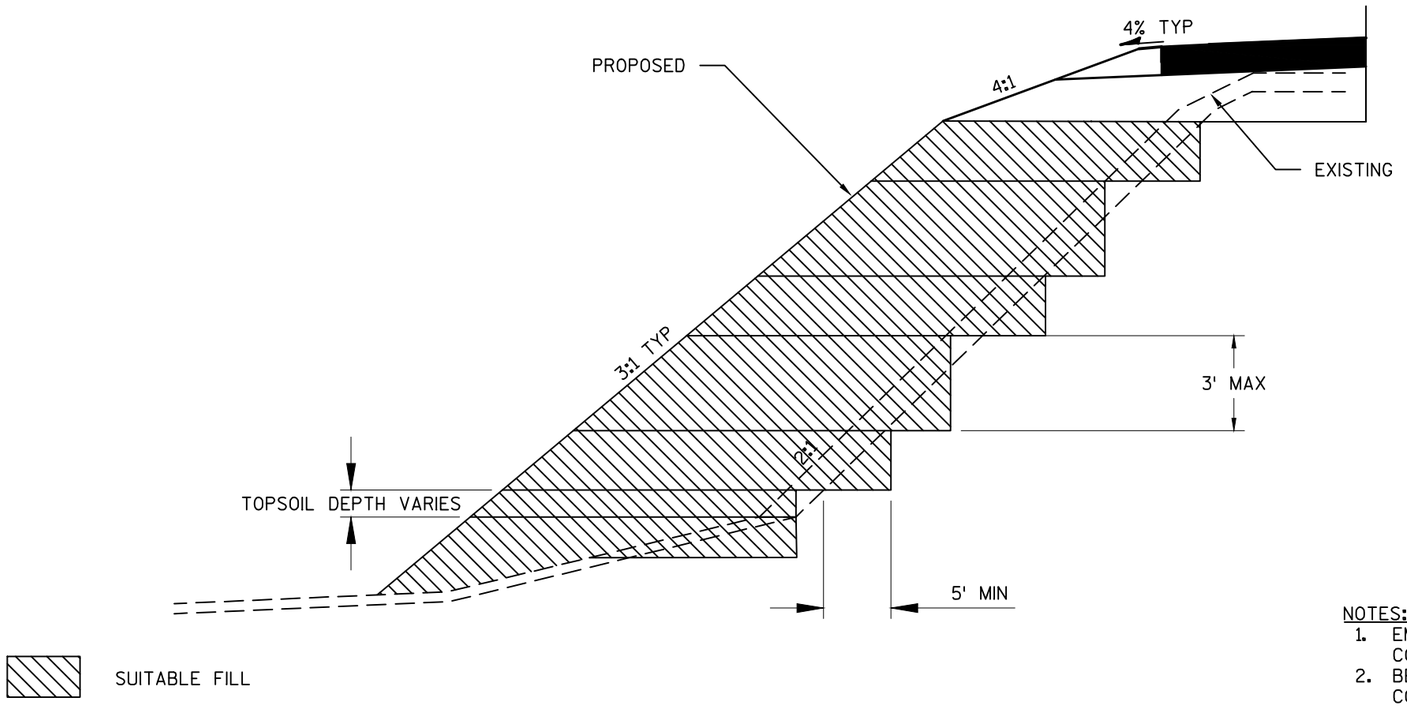


STEP 2

MILLING DETAIL – SIDEROADS

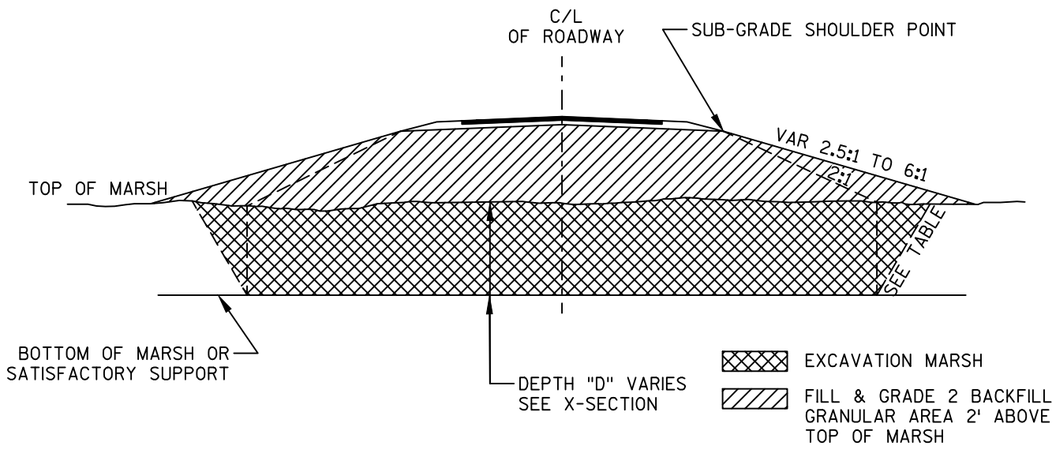


2



STEPPED EMBANKMENT DETAIL

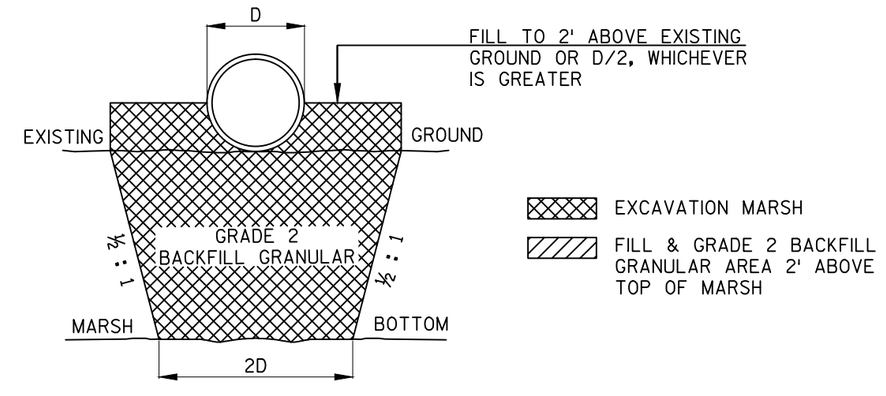
NOTES:
1. EMBANKMENT PLACED IN LAYERS AND COMPACTED PER SPECIFICATIONS.
2. BENCH AS REQUIRED TO FACILITATE CONSTRUCTION FILLING OPERATIONS (3' MAXIMUM BENCH DEPTH, INCIDENTAL)
3. EBS AS REQUIRED IN THE PLANS OR DIRECTED BY THE ENGINEER SHALL BE PAID UNDER THE ITEM "EXCAVATION COMMON".

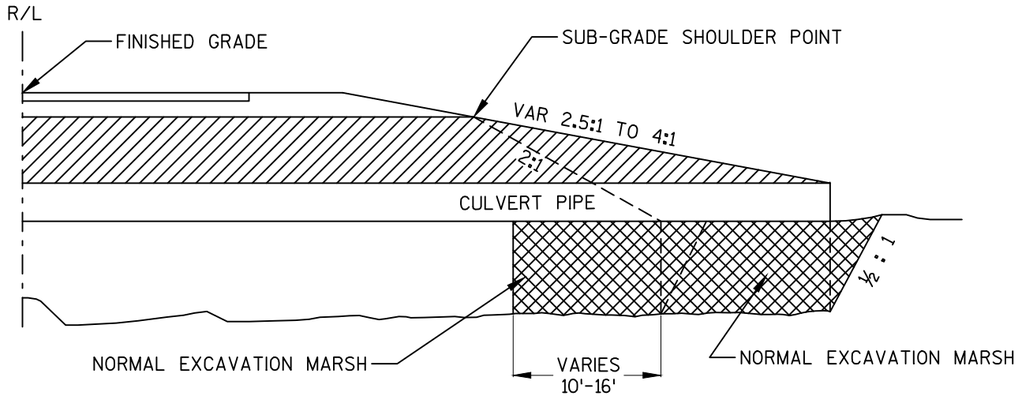


DEPTH OF MARSH "D" (FT)	VARIABLE BACKSLOPE (FT/FT)
0 TO 8	1 : 1
8 TO 12	1.5 : 1
12 +	2 : 1

EXCAVATION MARSH TYPICAL SECTION

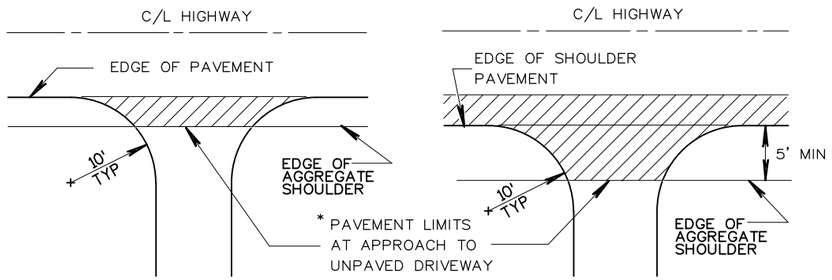
STA 43+50-48+50 RT
STA 96+50-97+50 RT
STA 144+00-147+00 LT
STA 164+50-167+50 LT
STA 204+50-207+00 LT





EXCAVATION MARSH AT CULVERTS

STA 165+86 LT
STA 205+77 LT

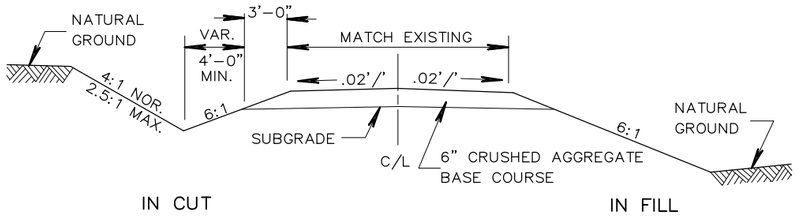


*WHERE DRIVEWAY IS PAVED, APPROACH PAVEMENT SHOULD BE EXTENDED TO MATCH DRIVEWAY PAVEMENT, SAWCUT REQUIRED.

PLAN VIEW
(NO PAVED SHOULDER ON HIGHWAY)

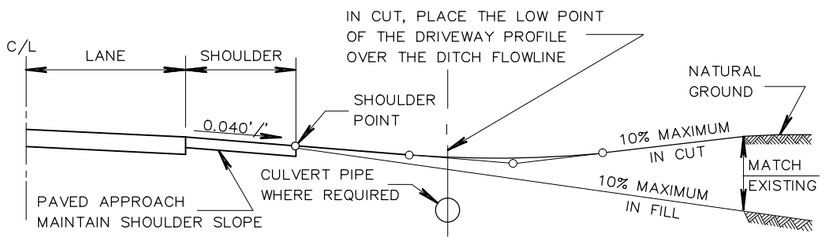
PLAN VIEW
(PAVED SHOULDER ON HIGHWAY)

RURAL DRIVEWAY INTERSECTION DETAIL

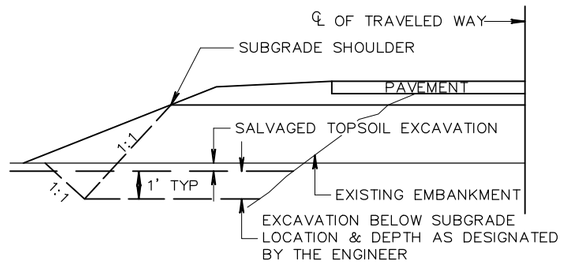


IN CUT IN FILL

TYPICAL CROSS SECTION FOR PRIVATE DRIVE OR FIELD ENTRANCE

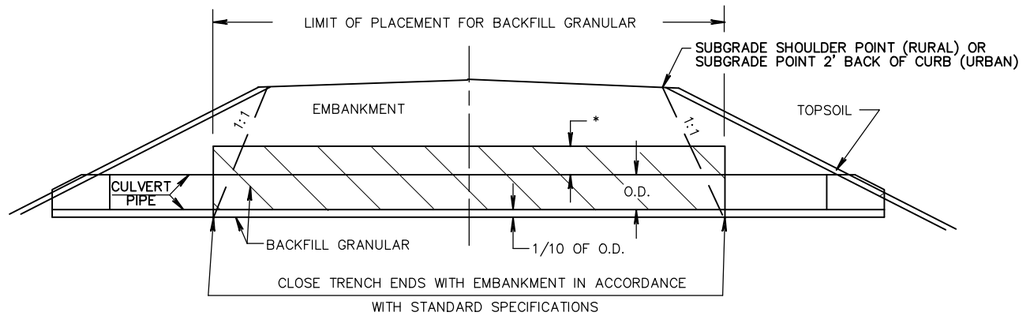


TYPICAL DRIVEWAY PROFILES



DETAIL FOR EXCAVATION BELOW SUBGRADE IN WIDENING AREAS

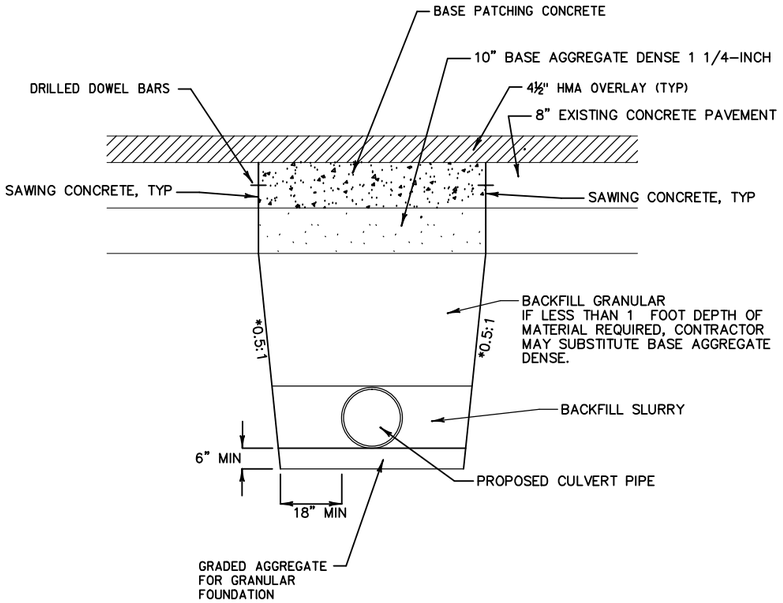
EXACT LOCATIONS TO BE DETERMINED BY THE ENGINEER IN THE FIELD



CULVERT BACKFILL DETAIL

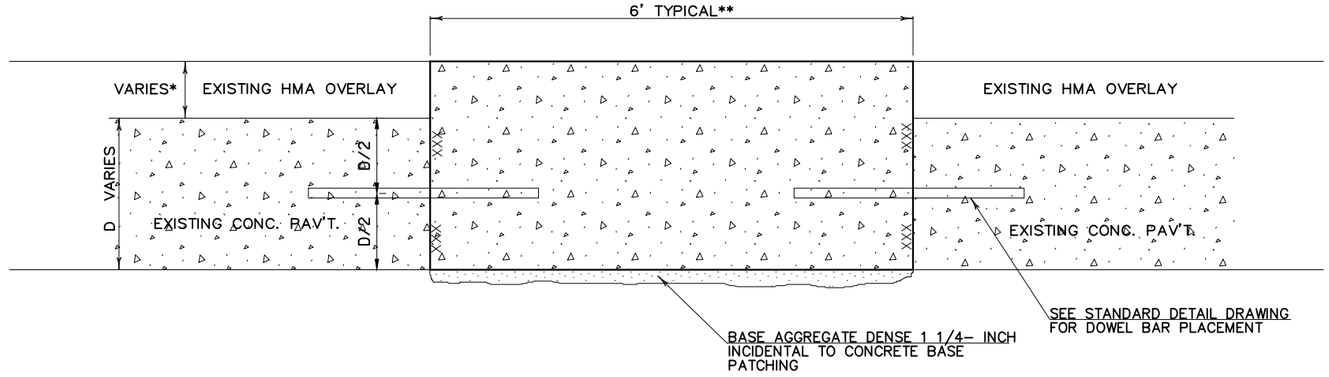
SEE PLAN DETAIL FOR CROSS CULVERT LOCATIONS

OD = OUTSIDE DIAMETER
* CULVERT PIPE IN NEW EMBANKMENT = 1' MIN
* CULVERT PIPE IN EXISTING EMBANKMENT = TO EXISTING GROUND ELEVATION

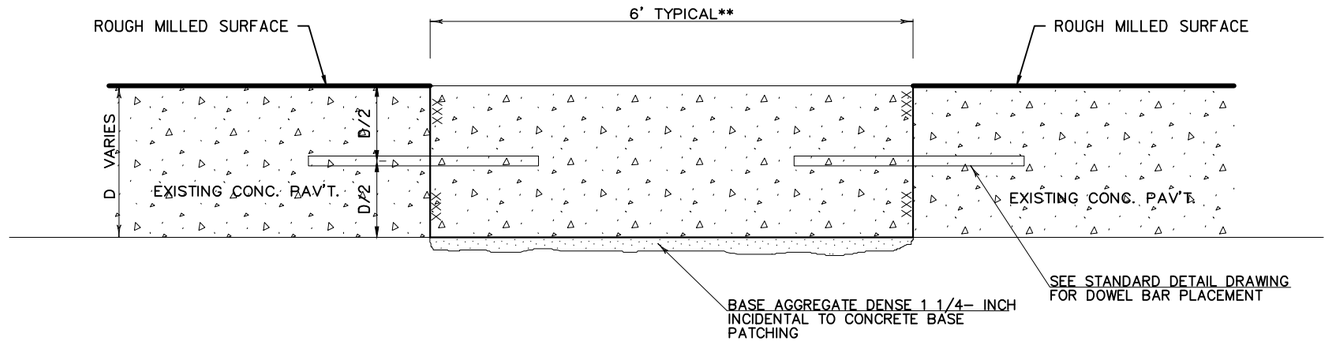


DETAIL FOR INSTALLATION OF CULVERT PIPES
USH 45 CULVERT CROSSING

* NOTE: ASSUME TRENCH BOX WILL BE USED AT STA. 209+40
1.5:1 SLOPES ARE REQUIRED FOR OPEN TRENCH.

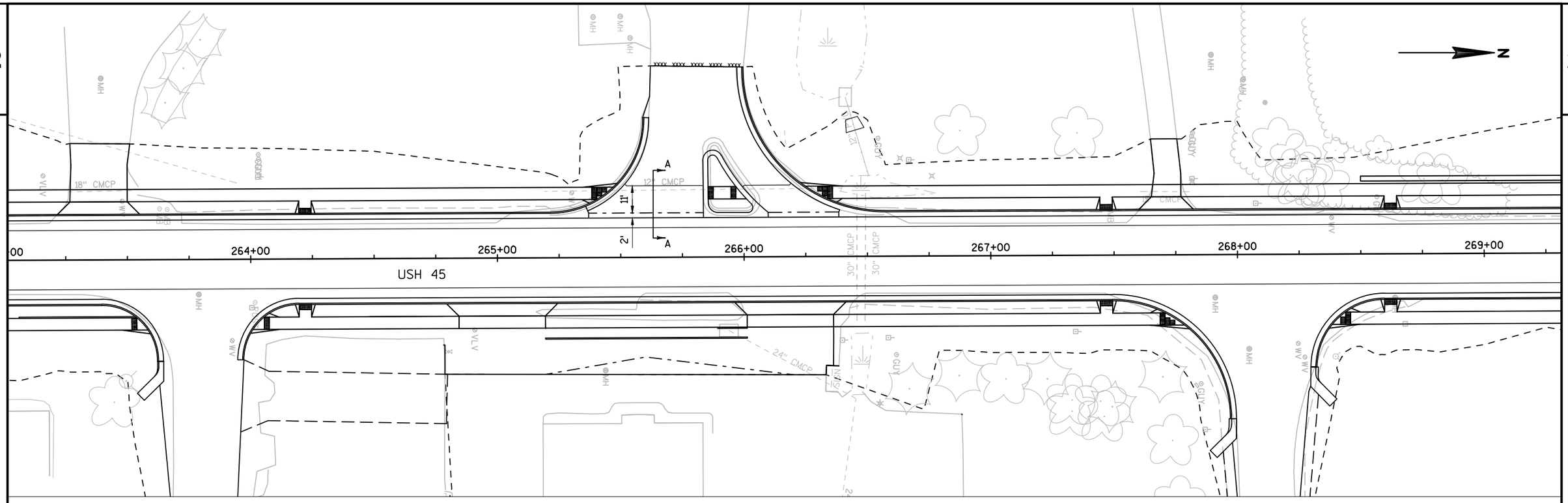


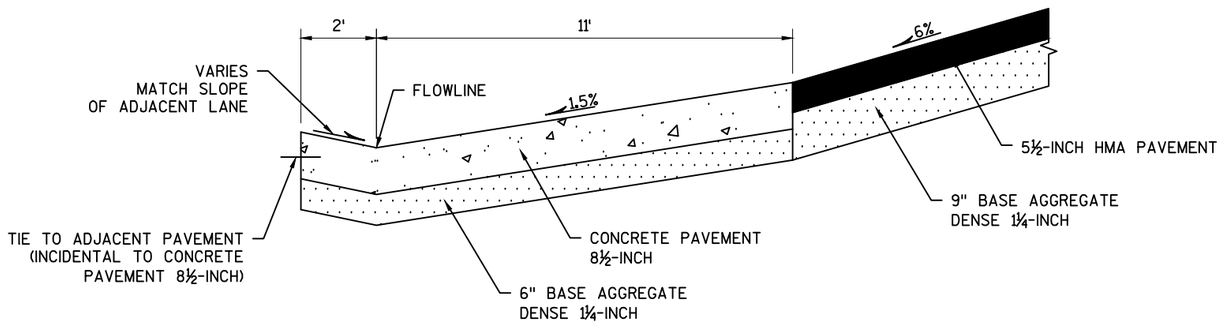
BASE PATCHING CONCRETE
BEFORE REMOVING OF EXISTING HMA PAVEMENT



BASE PATCHING CONCRETE
AFTER EXISTING HMA PAVEMENT WAS REMOVED

NOTE:
*EXISTING HMA OVERLAY 4 3/4" TYPICAL
**EXACT LOCATIONS AND DIMENSIONS TO BE MARKED BY THE FIELD ENGINEER
DEPTH OF BASE PATCHING CONCRETE IS EQUAL TO THICKNESS OF EXISTING CONCRETE PAVEMENT PLUS EXISTING ASPHALTIC OVERLAY IF INSTALLED PRIOR TO MILLING
DEPTH OF BASE PATCHING CONCRETE IS EQUAL TO THICKNESS OF EXISTING CONCRETE PAVEMENT IF INSTALLED AFTER MILLING





SECTION A-A

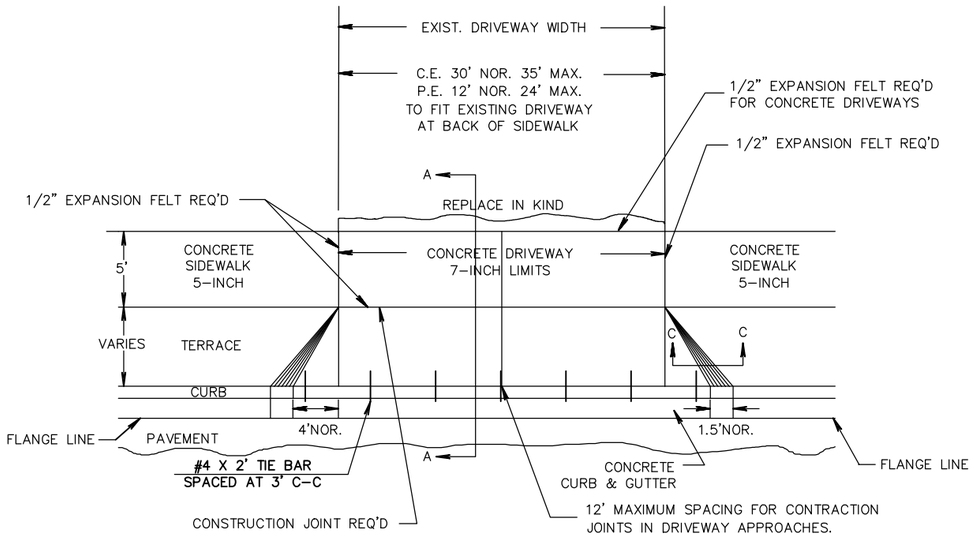
SCHOOL DRIVEWAY CONCRETE APRON

STA. 265+30 - STA. 266+30 LT

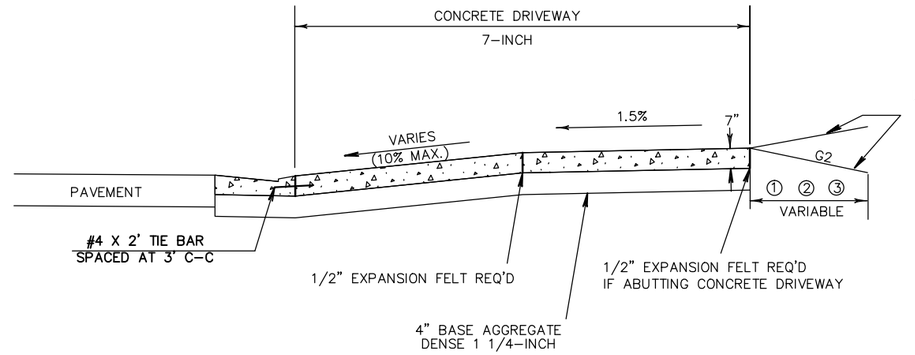
PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CONSTRUCTION DETAIL	SHEET 23	E

2

DRIVEWAY ENTRANCE DETAIL WITH SIDEWALK, CURB & GUTTER
SEE PLAN DETAIL FOR LOCATIONS



PLAN VIEW



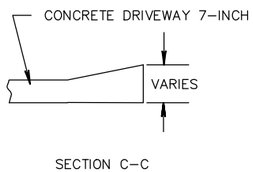
SECTION A-A

DRIVEWAY SLOPES (G1 OR G2)
8% DESIRABLE, 10% MAX
ALGEBRAIC DIFFERENCE G1 AND G2 ≤ 14%

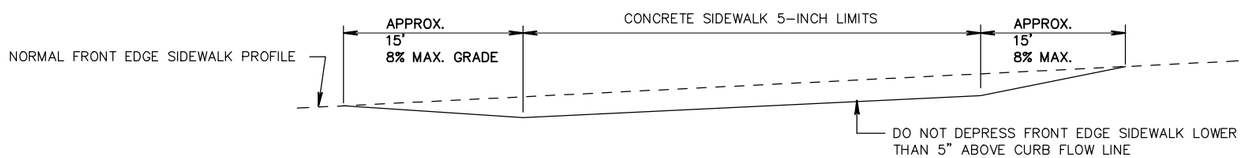
① - 7" CONCRETE DRIVEWAY OR
H.E.S. CONCRETE DRIVEWAY OVER 4"
BASE AGGREGATE

② - 6" BASE AGGREGATE DENSE 1 1/4-INCH

③ - 4" BASE AGGREGATE DENSE 1 1/4-INCH WITH 3"
ASPHALTIC SURFACE DRIVEWAY

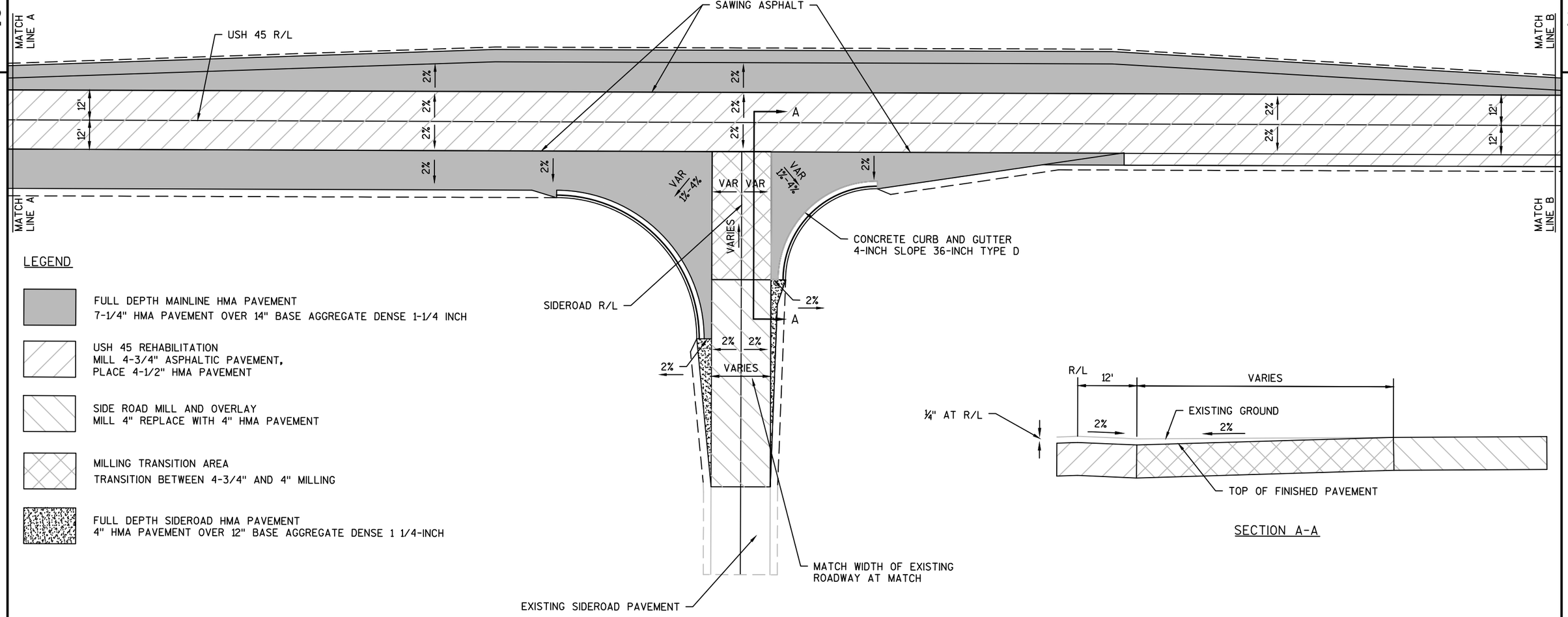


SECTION C-C



DEPRESSED SIDEWALK PROFILE DETAIL

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CONSTRUCTION DETAIL	SHEET 24	E



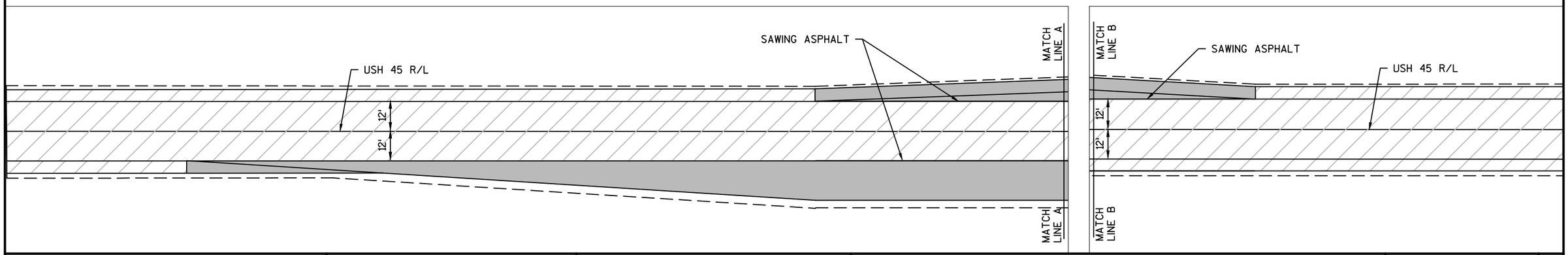
LEGEND

- FULL DEPTH MAINLINE HMA PAVEMENT
  7-1/4" HMA PAVEMENT OVER 14" BASE AGGREGATE DENSE 1-1/4 INCH
- USH 45 REHABILITATION
  MILL 4-3/4" ASPHALTIC PAVEMENT,
  PLACE 4-1/2" HMA PAVEMENT
- SIDE ROAD MILL AND OVERLAY
  MILL 4" REPLACE WITH 4" HMA PAVEMENT
- MILLING TRANSITION AREA
  TRANSITION BETWEEN 4-3/4" AND 4" MILLING
- FULL DEPTH SIDEROAD HMA PAVEMENT
  4" HMA PAVEMENT OVER 12" BASE AGGREGATE DENSE 1 1/4-INCH

SIDEROAD CONSTRUCTION DETAIL

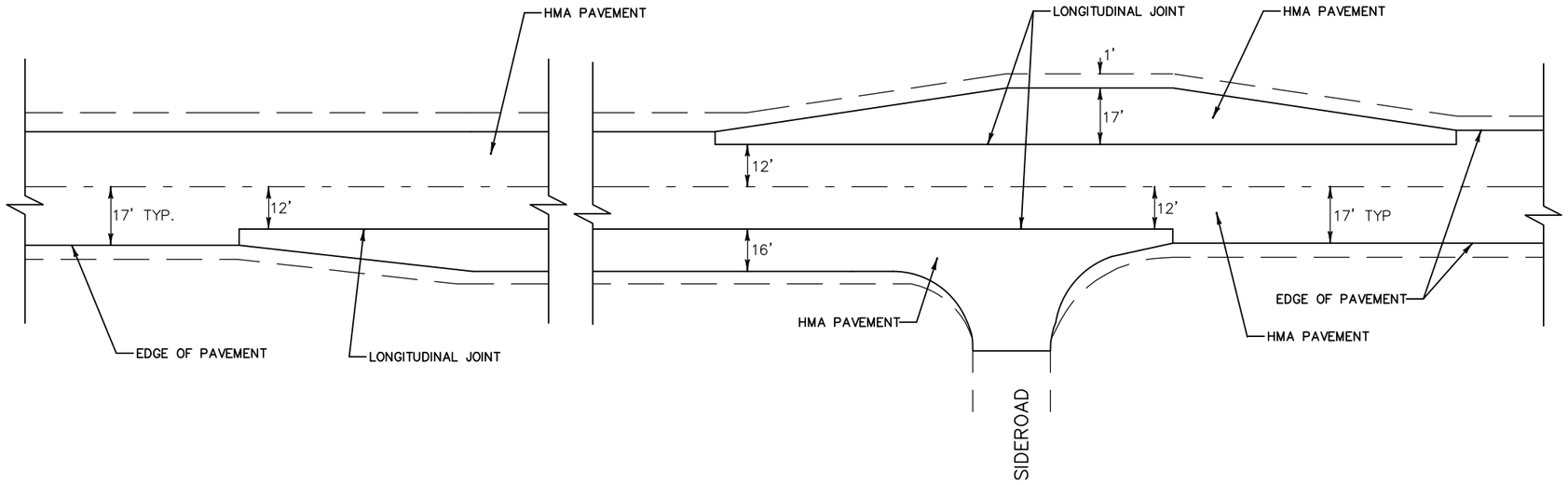
USE AT ALL RURAL RESURFACING INTERSECTIONS

SECTION A-A



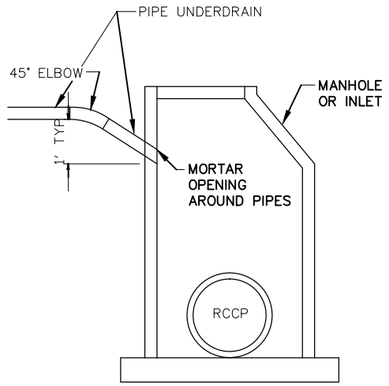
PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CONSTRUCTION DETAIL	SHEET 25	E

2



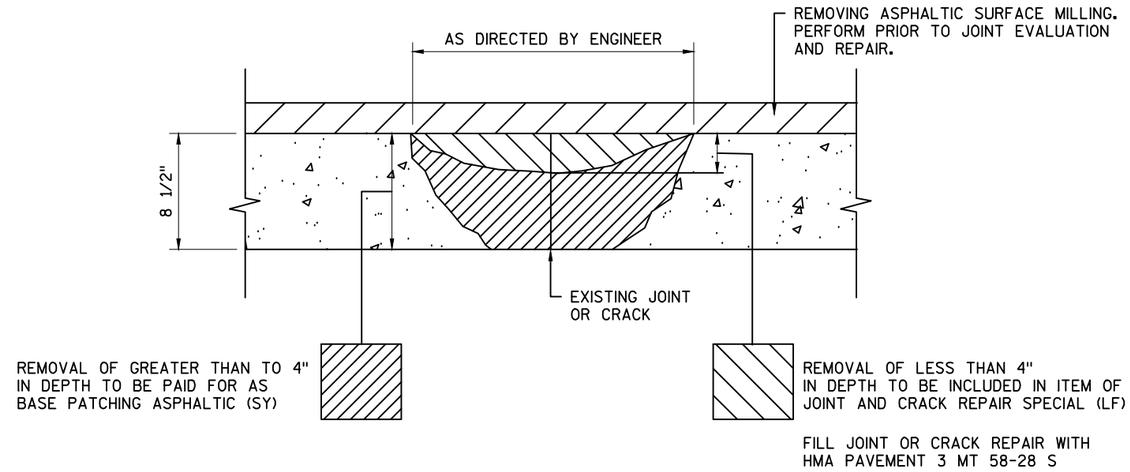
HMA LONGITUDINAL JOINT DETAIL
TO BE USED AT ALL INTERSECTIONS AND BYPASS

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CONSTRUCTION DETAIL	SHEET 26	E



PIPE UNDERDRAIN CONNECTION
TO MANHOLES AND INLETS

(UNDERDRAIN IN EBS AREAS)

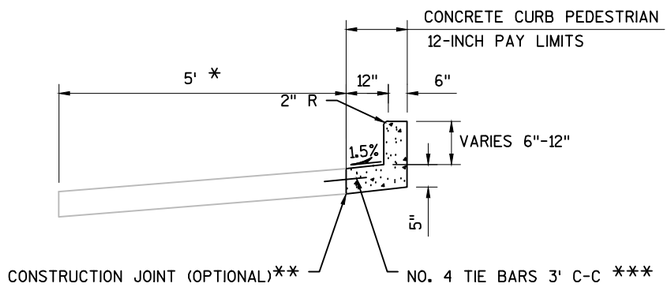


TRANSVERSE OR LONGITUDINAL JOINT OR CRACK REPAIR DETAIL

NOTES:

WHEN THE DEPTH OF DETERIORATED CONCRETE IS GREATER THAN 4" REMOVAL SHALL BE FULL DEPTH AND MEASURED AND PAID FOR AS BASE PATCHING ASPHALTIC (SY).

LOCATION AND EXTENT OF REPAIRS TO BE DETERMINED IN THE FIELD BY THE ENGINEER AFTER MILLING OF THE EXISTING ASPHALTIC PAVEMENT.

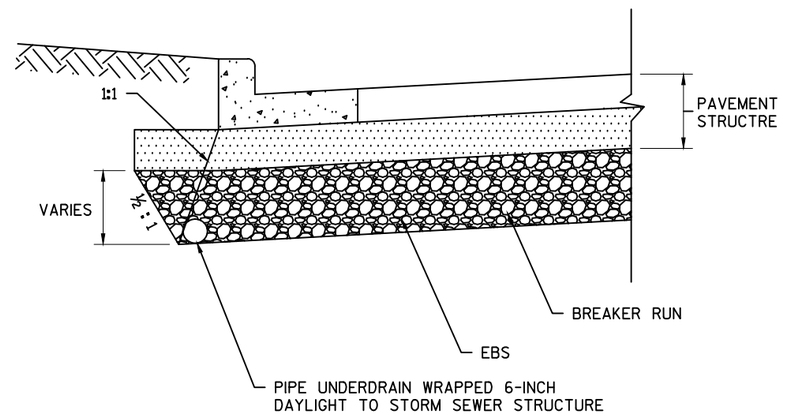


CONCRETE CURB PEDESTRIAN 12-INCH HEIGHT

STA. 272+04 - STA. 272+66 LT
STA. 280+10 - STA. 280+44 RT

NOTES:

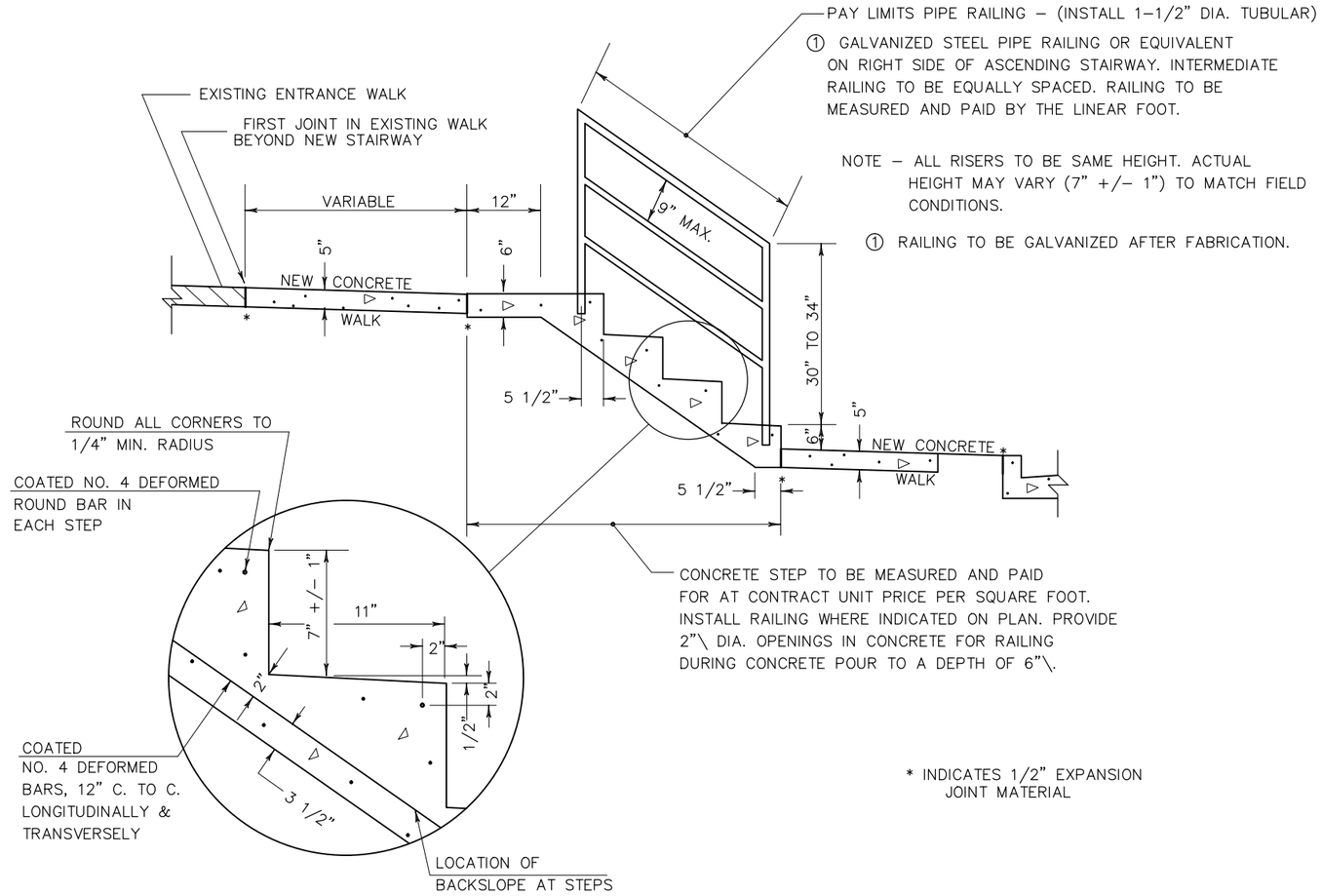
* CONCRETE SIDEWALK 5-INCH (PAY LIMITS)
** NO. 4 TIE BARS ARE NOT REQUIRED IF CONCRETE CURB PEDESTRIAN WAS INTERAL TO CONCRETE SIDEWALK.
*** NO. 4 TIE BARS ARE INCIDENTAL TO CONCRETE CURB PEDESTRIAN 12-INCH.



EXCAVATION BELOW SUBGRADE (EBS) - URBAN

NOTES: 1. USE AS DIRECTED BY ENGINEER FOR AREA OF UNSTABLE SUBGRADE.
2. EBS SHALL BE PAID AS EXCAVATION COMMON.
SEE MISC QUANTITY TABLES FOR BREAKER RUN.

2



CONCRETE STEP DETAIL

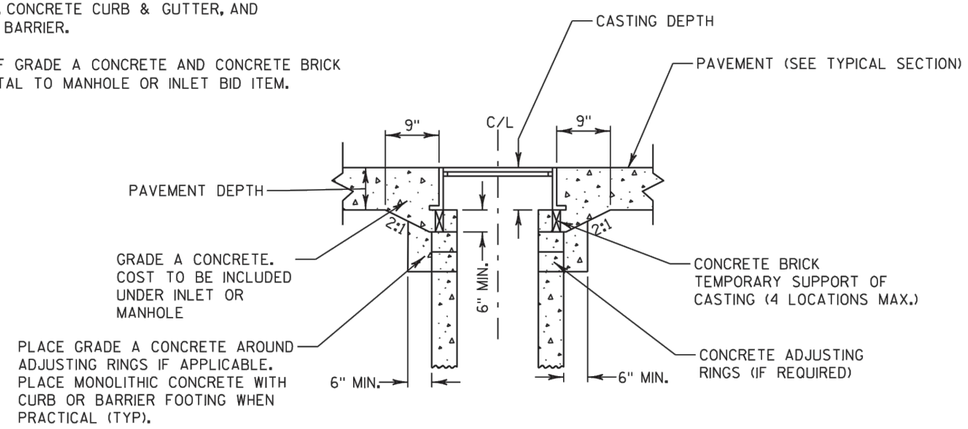
STA 270+30 RT
STA 271+40 LT
STA 279+75 LT

2

NOTE

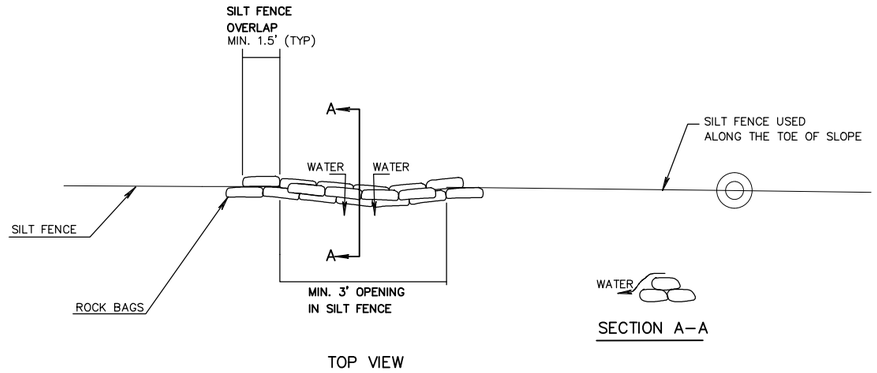
1) MONOLITHIC CONCRETE SHIMMING TO BE PROVIDED FOR ALL PROPOSED COVERS LOCATED IN CONCRETE PAVEMENT, CONCRETE CURB & GUTTER, AND CONCRETE BARRIER.

2) COST OF GRADE A CONCRETE AND CONCRETE BRICK IS INCIDENTAL TO MANHOLE OR INLET BID ITEM.



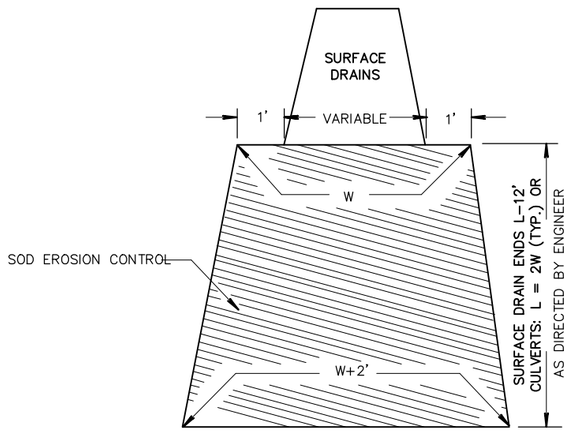
MONOLITHIC CONCRETE SHIMMING DETAIL

STA 246+00 TO STA 302+78



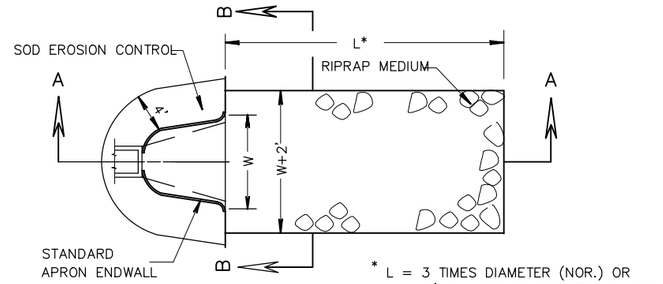
ROCK BAGS USED FOR SILT FENCE RELIEF DETAIL

SEE EROSION CONTROL PLAN FOR LOCATIONS

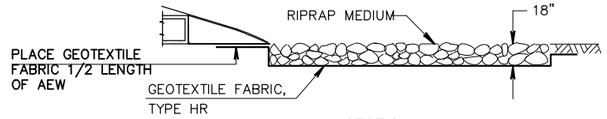


SOD EROSION CONTROL TREATMENT AT CULVERTS, AND CONCRETE SURFACE DRAINS

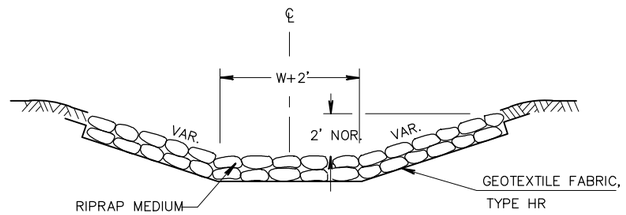
SEE EROSION CONTROL PLAN FOR LOCATIONS



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



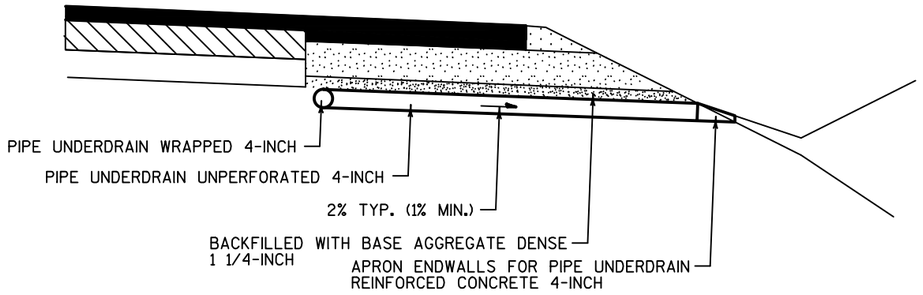
SECTION A–A



SECTION B–B

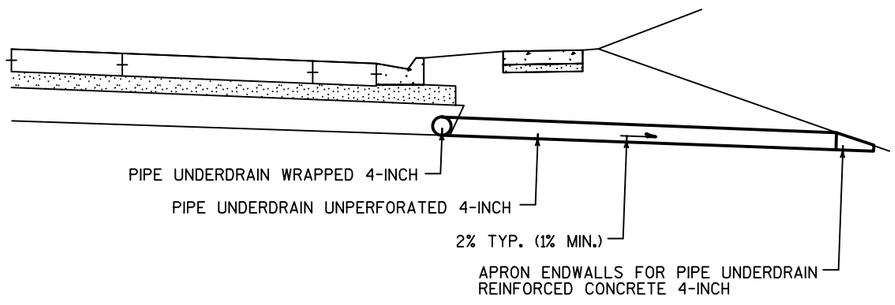
RIPRAP MEDIUM AND GEOTEXTILE FABRIC DETAIL AT APRON ENDWALLS

SEE EROSION CONTROL PLAN FOR LOCATIONS



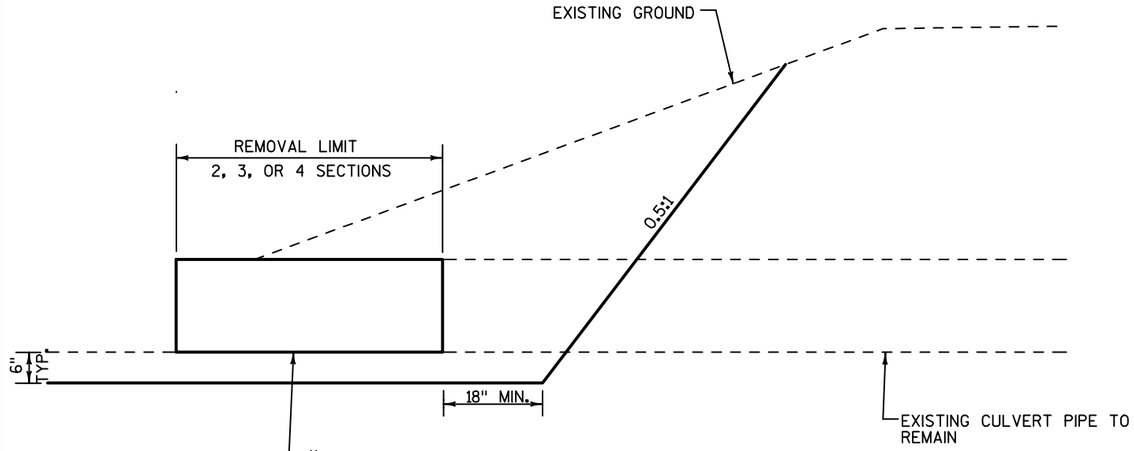
PIPE UNDERDRAIN OUTFALLS (RURAL)

STA 65+95 RT
STA 74+00 RT
STA 82+00 RT
STA 101+50 RT
STA 101+50 LT
STA 123+98 LT
STA 134+50 LT
STA 144+00 RT
STA 164+00 LT



PIPE UNDERDRAIN OUTFALLS (URBAN)

STA 285+00 LT
STA 285+00 RT

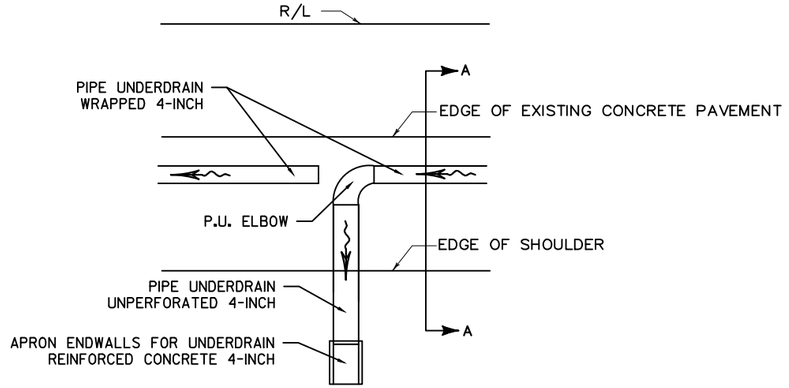


* ITEM 204.9060.S

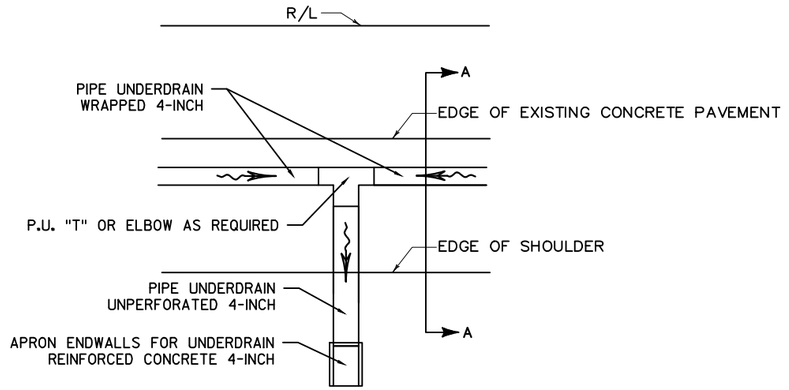
STATION	LOCATION
31+97	US 45 LT & RT
153+27	US 45 LT & RT
231+95	US 45 LT & RT
245+14	US 45 LT & RT

** ITEM NO.	STATION	LOCATION
204.9105.S.01	69+90	US 45 LT & RT
204.9105.S.02	135+35	US 45 LT & RT
204.9105.S.03	135+48	US 45 LT & RT
204.9105.S.04	146+31	US 45 LT & RT
204.9105.S.05	214+03	US 45 LT & RT

REMOVING PARTIAL CULVERT PIPES

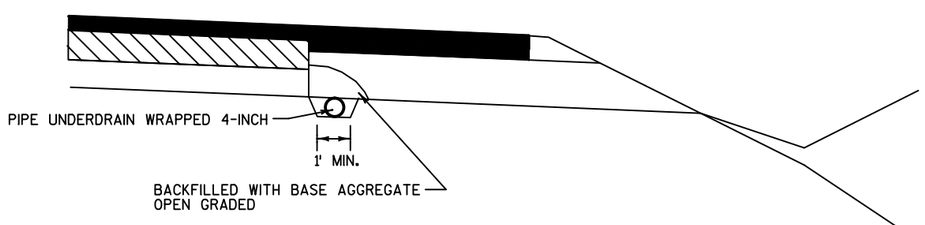


INTERMEDIATE LOCATIONS AT DITCH

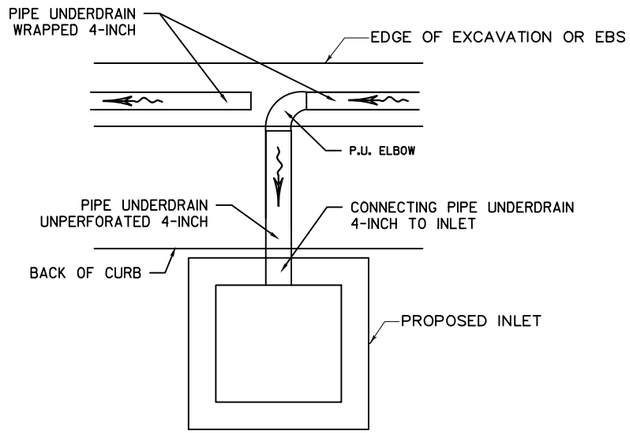


LOW POINT LOCATIONS

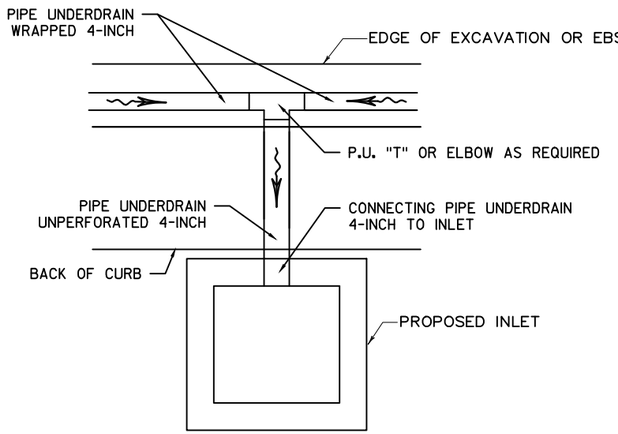
DETAIL FOR PIPE UNDERDRAIN OUTFALLS
RURAL SECTION
(SEE MISCELLANEOUS QUANTITIES FOR LOCATIONS)



SECTION A-A



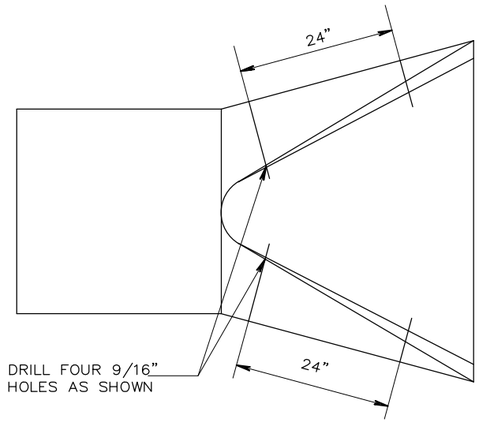
INTERMEDIATE LOCATIONS AT INLETS

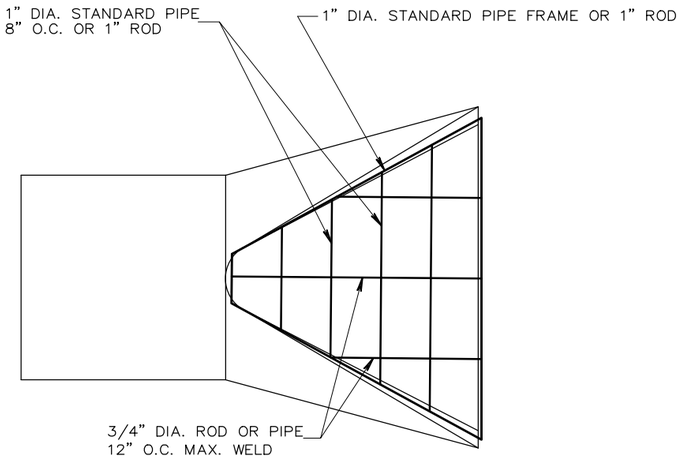


LOW POINT LOCATIONS

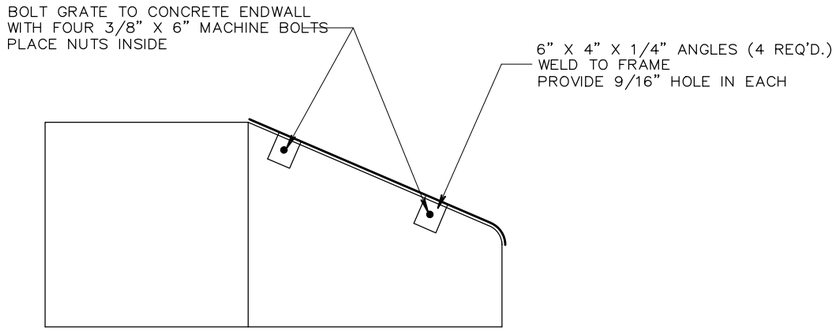
DETAIL FOR PIPE UNDERDRAIN OUTFALLS
URBAN SECTION
(SEE MISCELLANEOUS QUANTITIES FOR LOCATIONS)

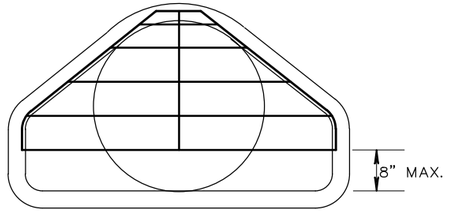
2





AT EACH PIPE

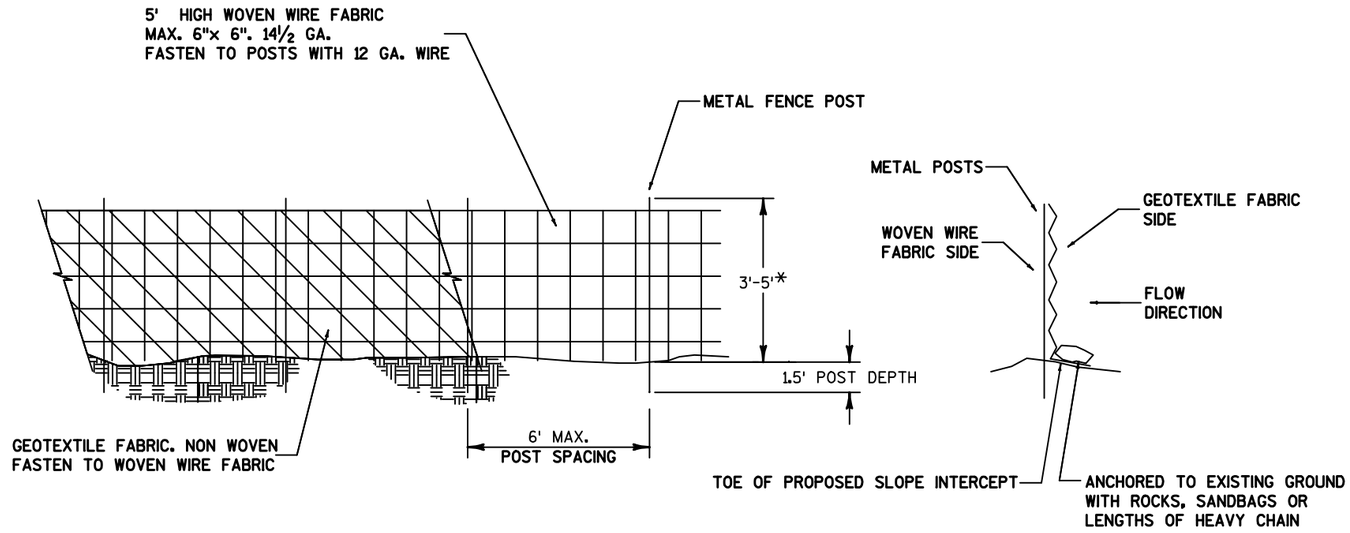




PIPE GRATE DETAIL
36" DIAM. OR GREATER

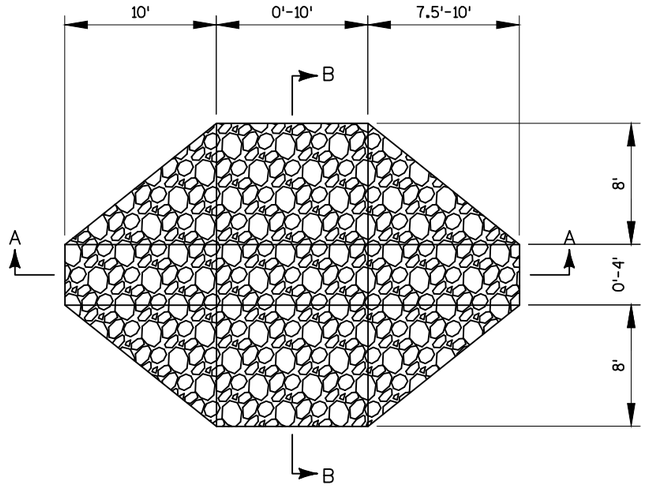
PROJECT NO:3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CONSTRUCTION DETAIL	SHEET 33	E

2

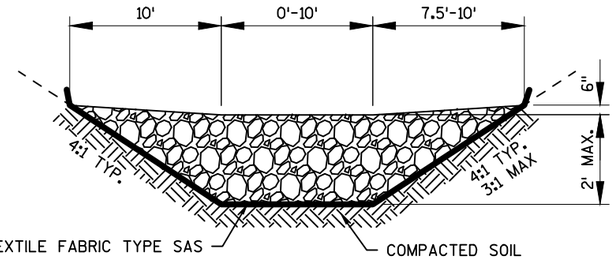


HEAVY DUTY SILT FENCE DETAIL

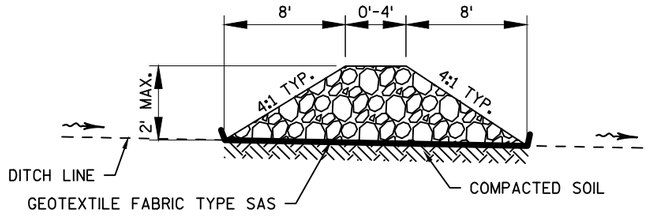
INSTALL AS NECESSARY AS SHOWN IN THE PLANS
AND DIRECTED BY THE ENGINEER



PLAN VIEW



SECTION A–A

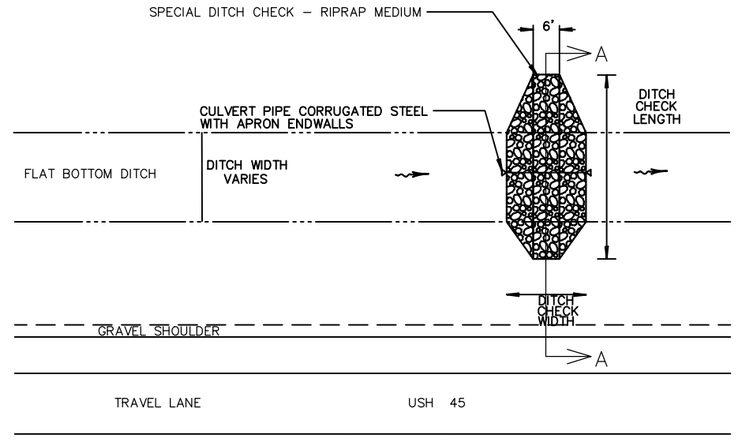


SECTION B–B

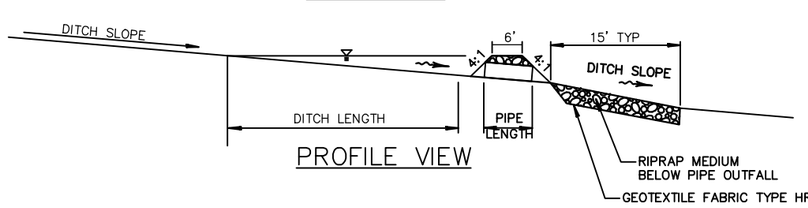
STONE OR ROCK DITCH CHECKS

WG STA 51+00, 35' RT	STA 141+50, 45' LT	STA 249+00, 47' LT
WG STA 52+00, 40' LT	STA 192+00, 30' RT	STA 250+00, 48' LT
WG STA 53+00, 34' LT	STA 198+00, 54' LT	STA 252+00, 43' LT
WG STA 53+00, 35' RT	STA 249+00, 47' LT	STA 284+00, 73' LT
WG STA 54+00, 23' LT	STA 250+00, 48' LT	STA 286+00, 59' LT
WG STA 54+00, 25' RT	STA 252+00, 43' LT	STA 287+50, 64' LT

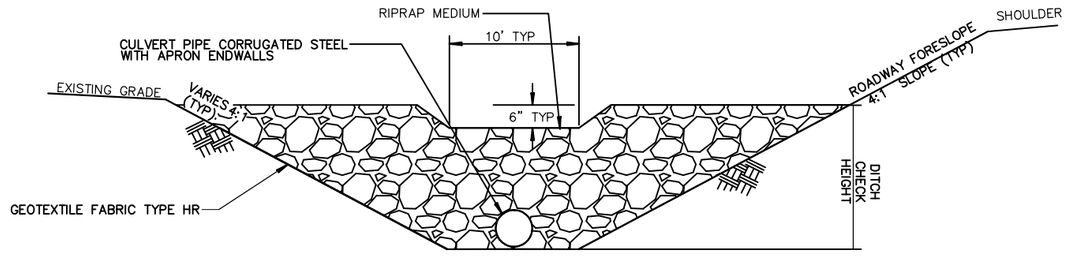
LOCATION (TO CENTER OF DITCH CHECK)	DITCH SLOPE	DITCH LENGTH	DITCH CHECK WIDTH	DITCH CHECK HEIGHT	DITCH CHECK LENGTH	PIPE SIZE X LENGTH
STA 248+75, 51.38' RT	1.00%	75'	22'	2'	VARIES	1 – 12" CPCS
STA 247+50, 58.04' RT	1.00%	125'	22'	2'	VARIES	1 – 12" CPCS
STA 246+50, 58.23' RT	2.00%	100'	22'	2'	VARIES	1 – 12" CPCS



PLAN VIEW



PROFILE VIEW

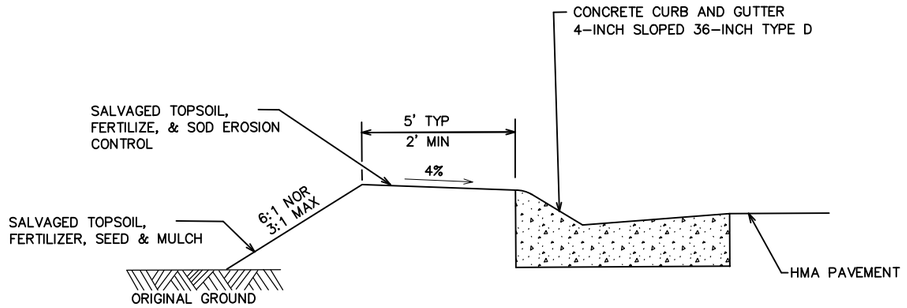


SECTION A–A

SPECIAL DITCH CHECK DETAILS (NTS)

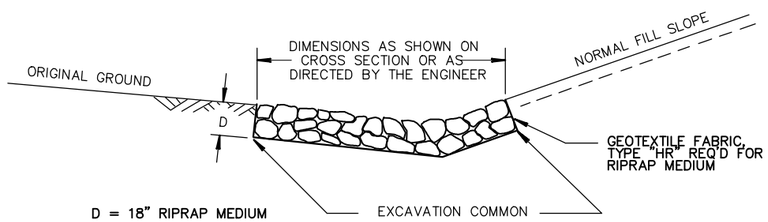
SEE TABLE FOR LOCATIONS AND DIMENSIONS.
SEE EROSION CONTROL PLAN AND CROSS SECTIONS FOR FURTHER INFORMATION.

2



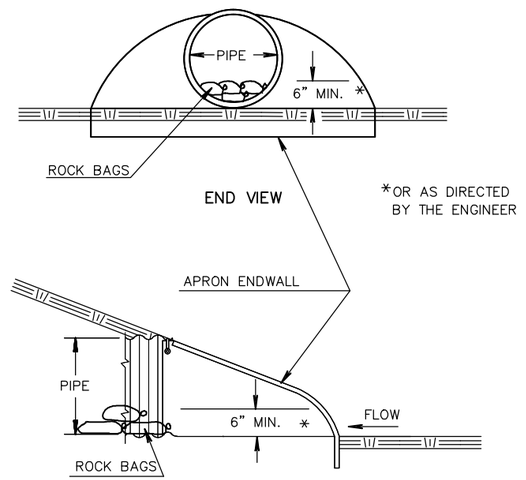
RURAL CONCRETE CURB AND GUTTER DETAIL

SEE INTERSECTION DETAILS FOR LOCATIONS



DETAIL FOR RIPRAP MEDIUM IN DITCHES

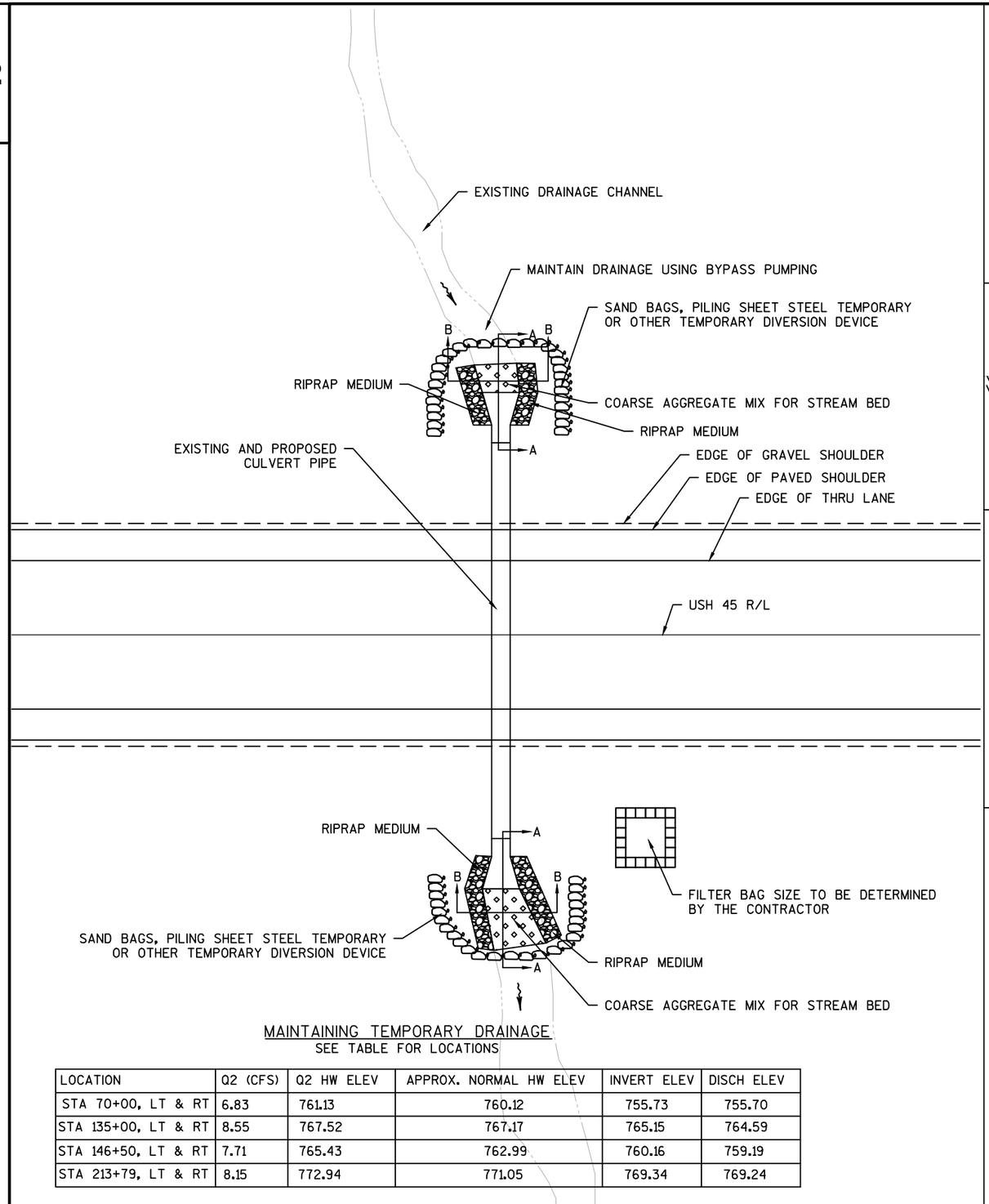
SEE EROSION CONTROL
PLAN FOR LOCATIONS



CULVERT PIPE CHECK

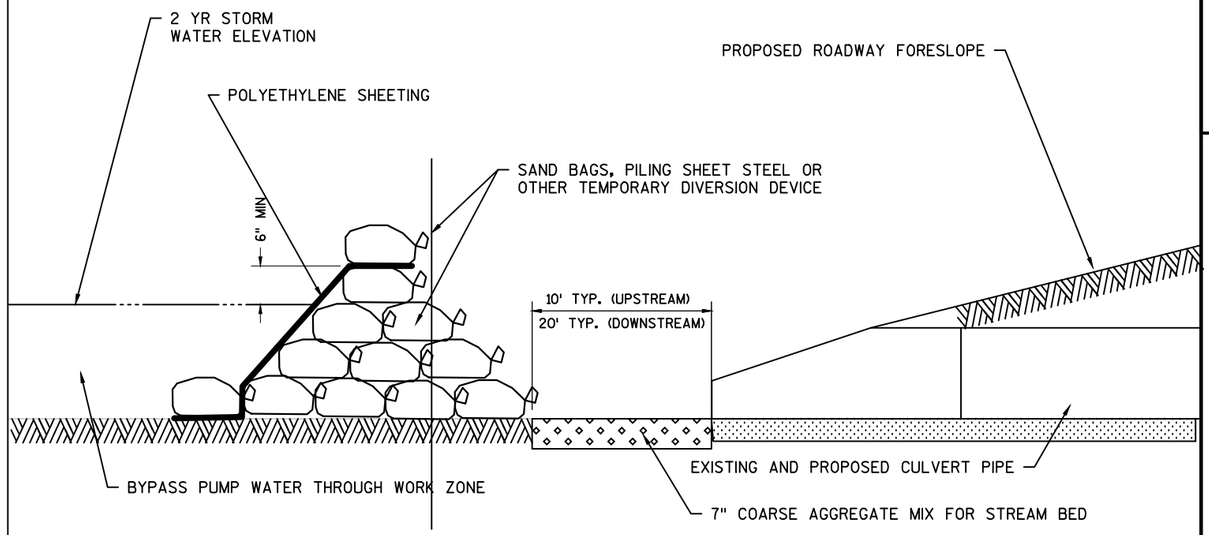
PLACE AT UPSTREAM
END OF CULVERTS

PROJECT NO:3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CONSTRUCTION DETAIL	SHEET 36	E

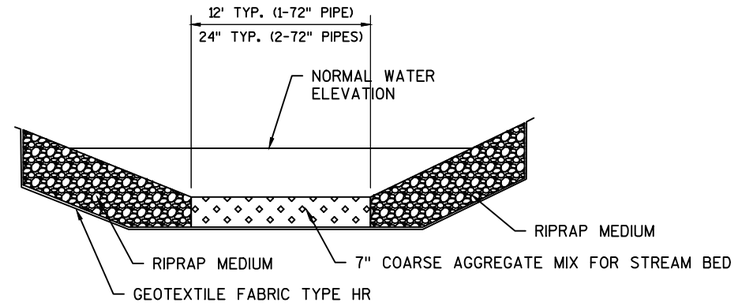


MAINTAINING TEMPORARY DRAINAGE
SEE TABLE FOR LOCATIONS

LOCATION	Q2 (CFS)	Q2 HW ELEV	APPROX. NORMAL HW ELEV	INVERT ELEV	DISCH ELEV
STA 70+00, LT & RT	6.83	761.13	760.12	755.73	755.70
STA 135+00, LT & RT	8.55	767.52	767.17	765.15	764.59
STA 146+50, LT & RT	7.71	765.43	762.99	760.16	759.19
STA 213+79, LT & RT	8.15	772.94	771.05	769.34	769.24



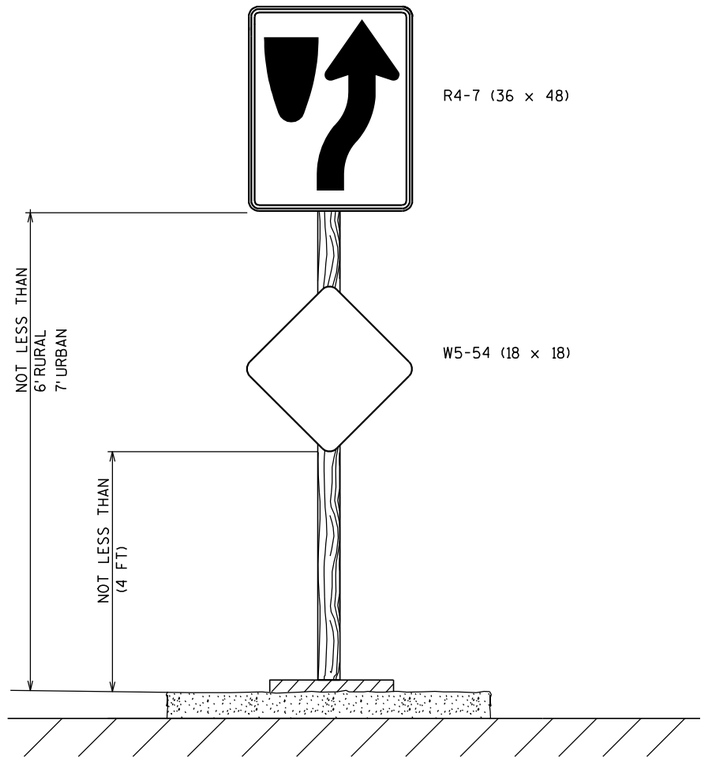
SECTION A-A



SECTION B-B

NOTES:
1. CONTRACTOR TO SUBMIT DESIGN FOR MAINTAINING TEMPORARY DRAINAGE DURING CONSTRUCTION AS PART OF THE EROSION CONTROL IMPLEMENTATION PLAN (ECIP).
2. PAYMENT SHALL BE THROUGH ITEMS SPV.0105.01, SPV.0105.02, SPV.0105.03, SPV.0105.04 - MAINTAINING TEMPORARY DRAINAGE.
3. DETAIL SHOWN ON THIS SHEET IS FOR REFERENCE ONLY TO SHOW ONE POTENTIAL METHOD OF MAINTAINING TEMPORARY DRAINAGE.
4. METHOD OF MAINTAINING TEMPORARY DRAINAGE SHALL BE DESIGNED FOR THE 2-YEAR 24-HOUR STORM.
5. METHOD OF MAINTAINING TEMPORARY DRAINAGE MAY INCLUDE PILING SHEET STEEL TEMPORARY TO BE DETERMINED BY THE CONTRACTOR.
6. IF BYPASS PUMPING IS USED A BACKUP PUMP SHALL BE ON-SITE AT ALL TIMES.
7. ANY WATER THAT IS PUMPED SHALL BE DISCHARGED INTO A SEDIMENT BASIN OR FILTER BAG. THE SIZE OF THAT BASIN OR BAG SHALL BE DESIGNED BY THE CONTRACTOR AS PART OF THE ECIP.
8. FILTER BAGS AND SAND BAGS ARE INCIDENTAL TO THE PROJECT.
9. MAINTAINING TEMPORARY DRAINAGE FOR CROSS CULVERT PIPES SMALLER THAN A 60" IN DIAMETER ARE INCIDENTAL TO THE PROJECT.
10. GEOTEXTILE FABRIC, RIPRAP MEDIUM, AND COARSE AGGREGATE FOR STREAM BED WILL BE PAID SEPARATELY.
11. DO NOT BLOCK THE FLOW OF WATER AT ANY LOCATION MORE THAN 3 DAYS (72 HOURS).
12. DO NOT DISTRURB WETLANDS BEYOND WHAT IS APPROVED IN THE 404 WETLAND PERMIT.

2

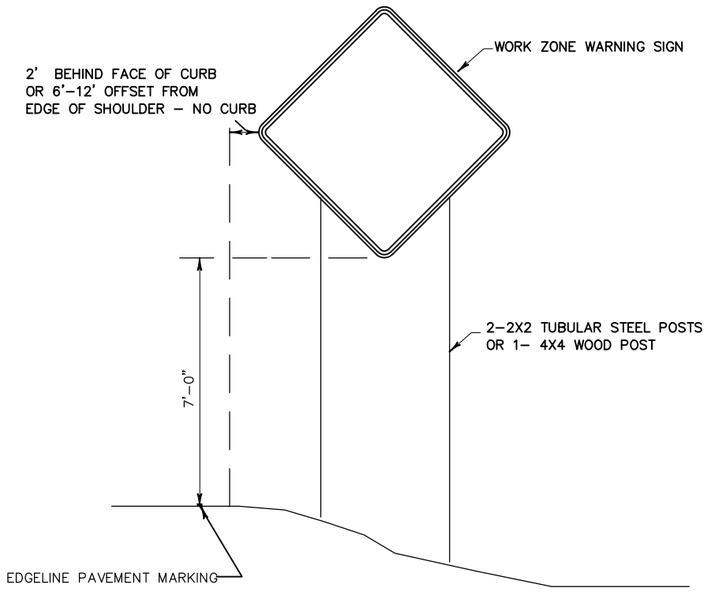


TYPICAL INSTALLATION FOR
TRANSITION TO DIVIDED HIGHWAY
OR OTHER SPECIAL NEEDS AREAS

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	TYPICAL DETAIL - SIGN ON MEDIAN NOSE	SHEET	E

FILE NAME : j:\projects\d2_32000245\SIGN\Sign_Detail.dgn PLOT DATE : 01-MAR-2011 15:16 PLOT BY : MSCMWB PLOT NAME : PLOT SCALE : 200:1
WISDOT/CADDS SHEET 42

2

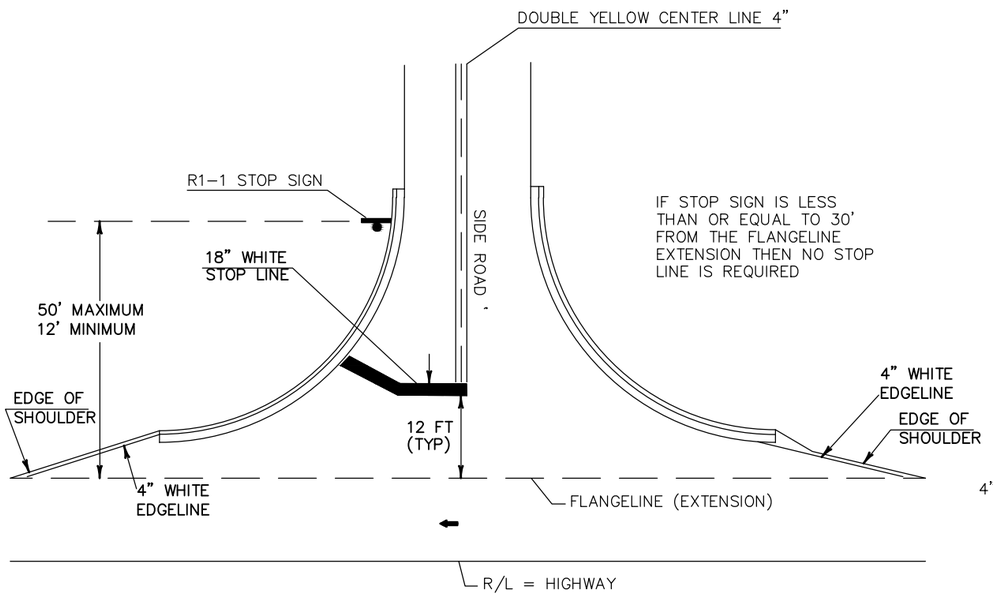


TYPICAL TEMPORARY TRAFFIC CONTROL DETAIL
MOUNTING ON FIXED SUPPORT

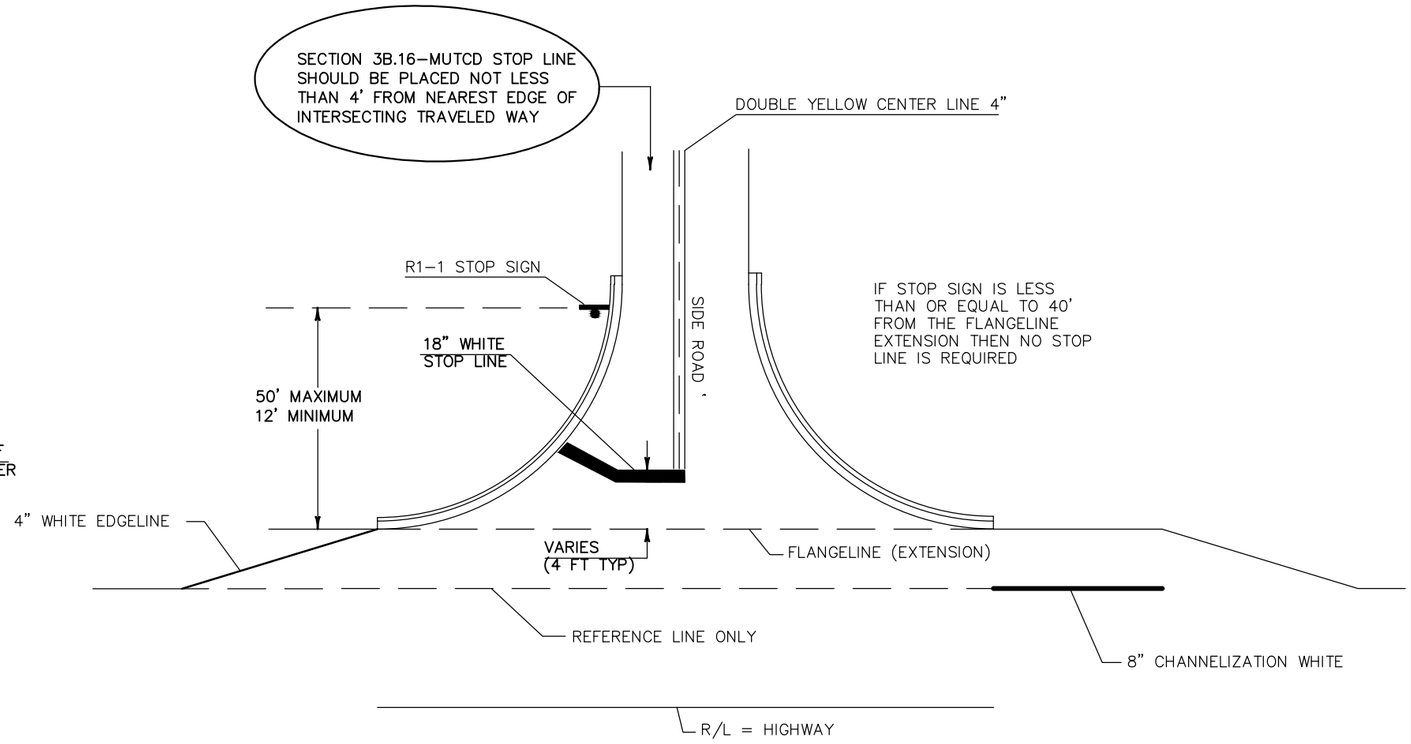
LONG TERM
7 DAYS OR MORE

GENERAL NOTES FOR TRAFFIC CONTROL

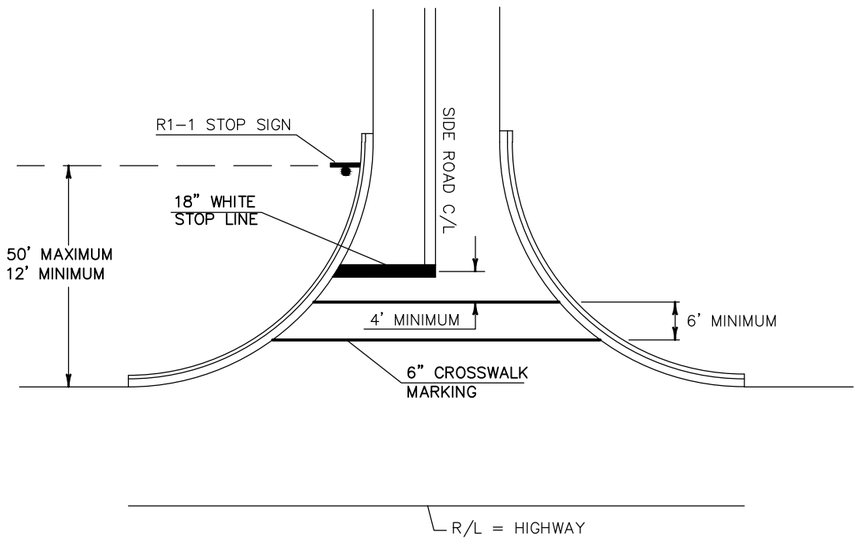
1. TRAFFIC CONTROL DRUMS IN TAPERS, SHALL BE EQUIPPED WITH WARNING LIGHTS, TYPE "C", ONE WAY LIGHTS IN TAPERS ONLY, UNLESS OTHERWISE SHOWN.
2. SIGN LOCATIONS ARE APPROXIMATE. THE ACTUAL LOCATION SPACING MAY BE ADJUSTED AS DIRECTED BY THE ENGINEER TO MEET FIELD CONDITIONS.
3. "WO" SIGNS ARE THE SAME AS "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.



TYPICAL PAVEMENT MARKING FOR SIDEROADS



TYPICAL PAVEMENT MARKING FOR SIDEROADS WITH RIGHT TURN LANE



TYPICAL PAVEMENT MARKING FOR SIDEROADS WITH CROSSWALK MARKING

NOTES:
18–INCH STOP LINES MAY BE DELETED OR ADDED BY THE PROJECT ENGINEER BASED ON VISIBILITY AND SIGHT LINES.

STOP LINES REQUIRED WHERE:

- CROSSWALK MARKINGS EXIST OR BEING PROVIDED
- LARGE RADII
- OFFSET LEFT TURNS WHERE STOP BAR FOR LEFT TURN IS SET BACK FROM THRU MOVEMENT.

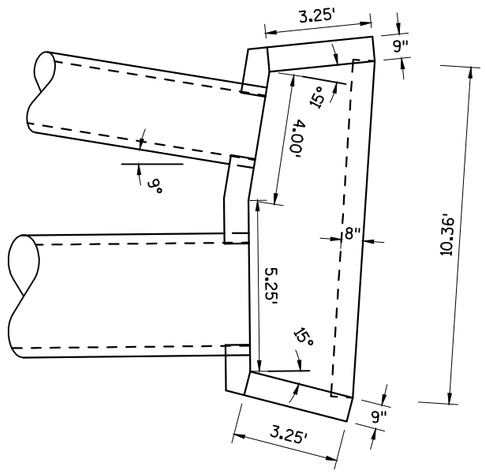
2

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.

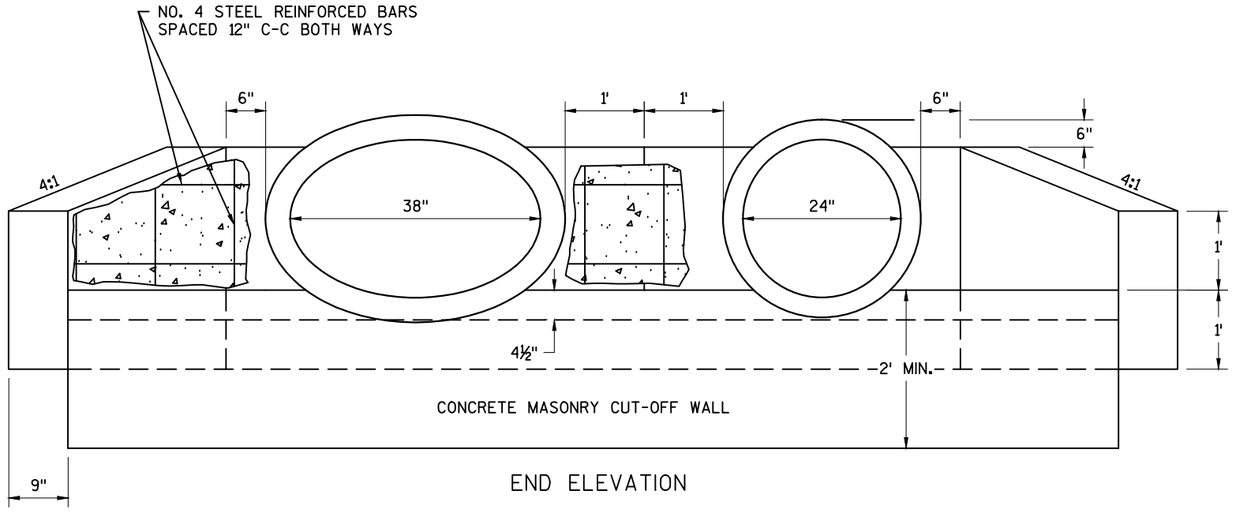
FILL SLOPES FLATTER THAN 4:1 SHALL BE WARPED TO MEET THE TOP OF THE WINGWALLS.

ALL STEEL REINFORCEMENT AND WELDED STEEL WIRE FABRIC SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE NOTED.

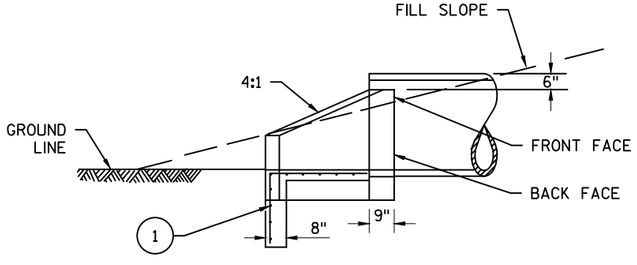
MINIMUM REINFORCEMENT SHALL BE 6" X 6" - W4.0 X W4.0 OR NO. 3 BARS SPACED 12" C-C IN BOTH DIRECTIONS.



PLAN VIEW



END ELEVATION

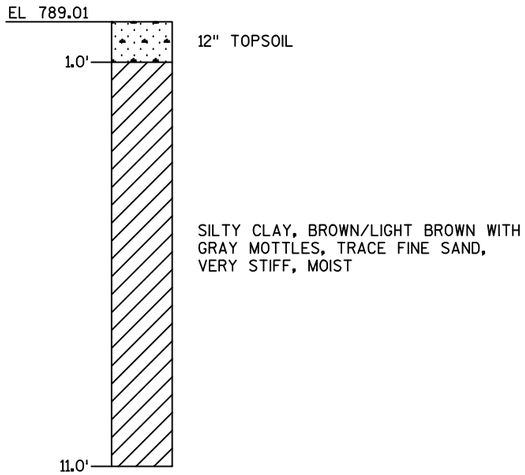


SIDE ELEVATION

CONCRETE MASONRY ENDWALLS SPECIAL

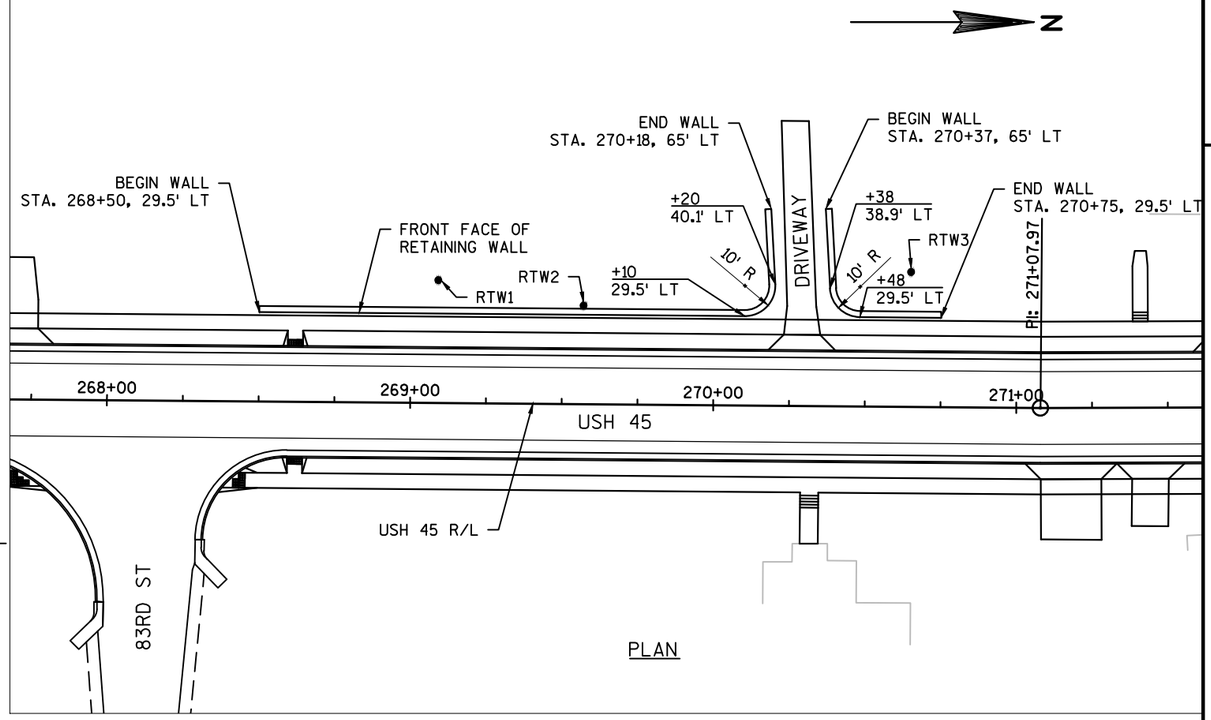
STA 266+47, 44' RT

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CONSTRUCTION DETAIL	SHEET 41	E

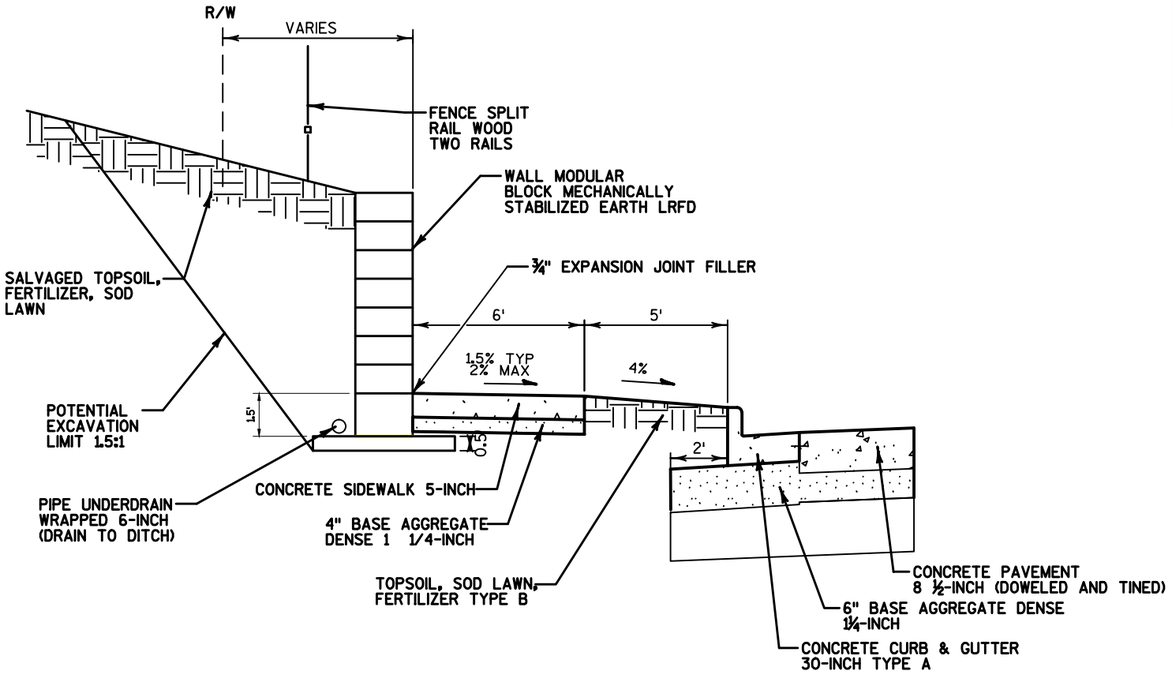


SOIL DESIGN PARAMETERS
UNIT WEIGHT OF BACKFILL: 130 PCF
ANGLE OF INTERNAL FRICTION OF BACKFILL: 32°
COHESIVE STRENGTH OF BACKFILL: 0 PSF
ALLOWABLE BEARING CAPACITY: 2,000 PSF

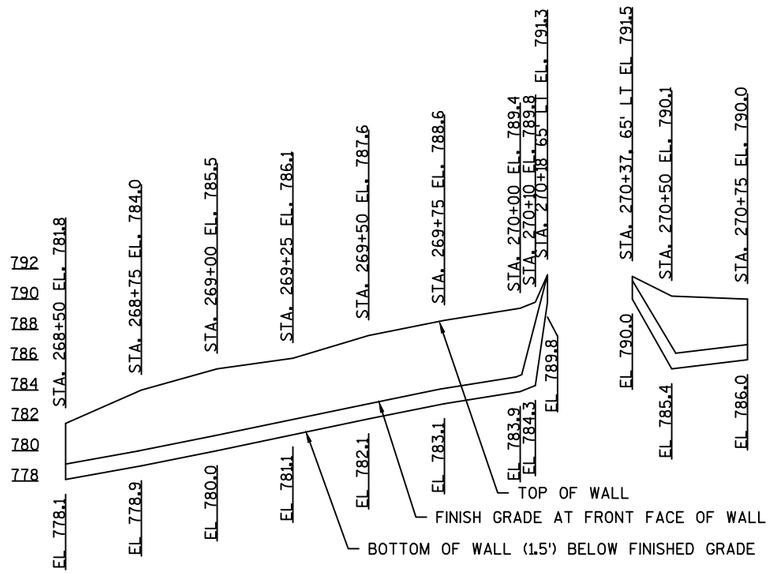
BORING RTW2
STA. 269+57, 32.5' LT



PLAN



WALL MODULAR BLOCK TYPICAL SECTION
MECHANICALLY STABILIZED EARTH LRFD
STA. 268+50 - STA. 270+75, LT
USH 45 LOOKING NORTH

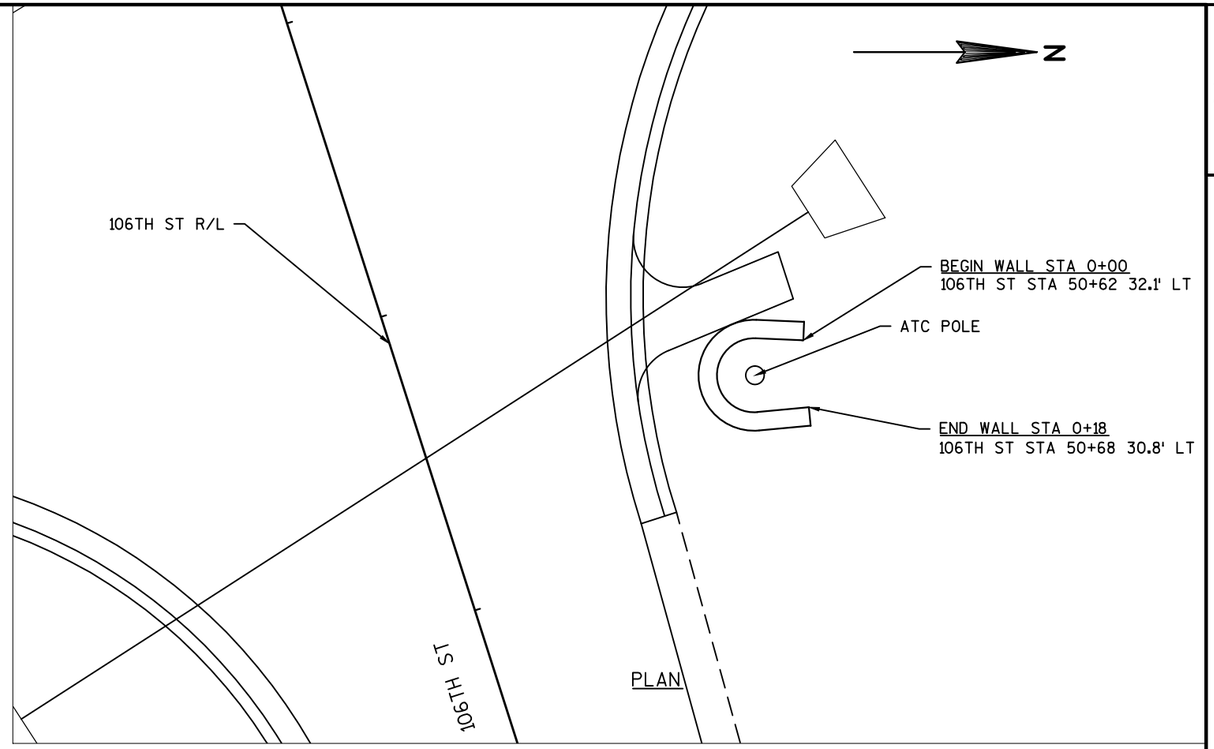


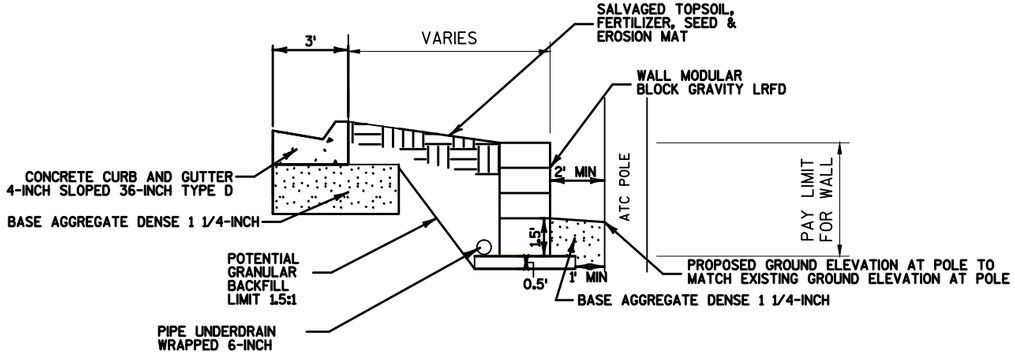
GENERAL NOTES
DRAWINGS SHALL NOT BE SCALED

WALL MODULAR BLOCK
MECHANICALLY STABILIZED EARTH LRFD
STA. 268+50 - STA. 270+75, 29.5' LT

ELEVATION
LOOKING WEST AT F.F. OF WALL

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CONSTRUCTION DETAILS	SHEET 42	E



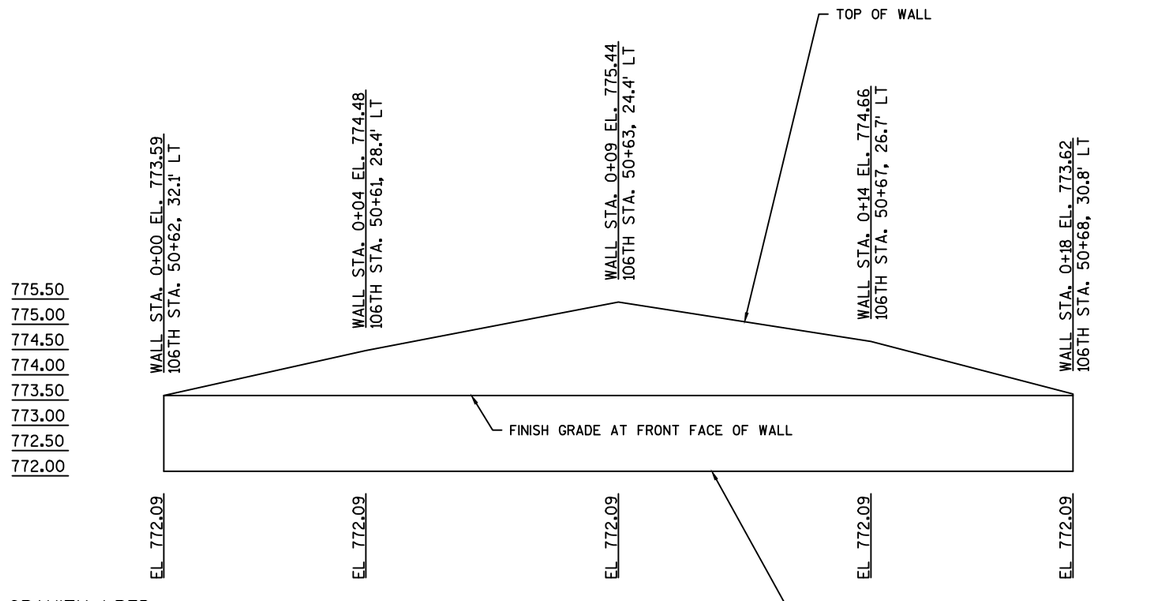


WALL MODULAR BLOCK GRAVITY LRFD

STA. 50+62 - STA. 50+68, LT
106TH ST LOOKING WEST

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED



WALL MODULAR BLOCK GRAVITY LRFD
106TH ST
STA. 50+62 - STA. 50+68, LT

ELEVATION
LOOKING SOUTH AT F.F. OF WALL

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CONSTRUCTION DETAILS	SHEET 43	E

2

263+00
264+00
265+00
266+00
267+00
268+00

USH 45 R/L

USH 45

84TH ST

83RD ST

51+00

52+00

52+25

R/W

TLE

PLE

PL

8403
WILLIAM &
CLAUDETTE
RAU

8335
WISDOT

22C (SEE STORM SEWER PLAN)

8321
NH
MANAGEMENT
LLC

4" SUMP DRAIN DISCHARGE

FENCE TO REMAIN

RIPRAP MEDIUM

RIPRAP MEDIUM

ELEV = 770.00

19811
VILLAGE OF BRISTOL

1-12" CPRC WITH
2 AEW REQUIRED
INVERT ELEV = 767.80
DISCH ELEV = 767.48

REMOVING SMALL PIPE CULVERTS
(12" CMCP)

SLOPE INTERCEPT

199TH AVE

DRY DETENTION POND

A
B
C

24" CMCP
30" CMCP
24x38" CMCP
12" CMCP
21" CMCP

N

LEGEND:
771 PROPOSED CONTOUR
771 EXISTING CONTOUR

SEE SHEET 2 OF 3 FOR SECTIONS A-A, B-B, AND C-C

SEE SHEET 3 OF 3 FOR POINT DATA

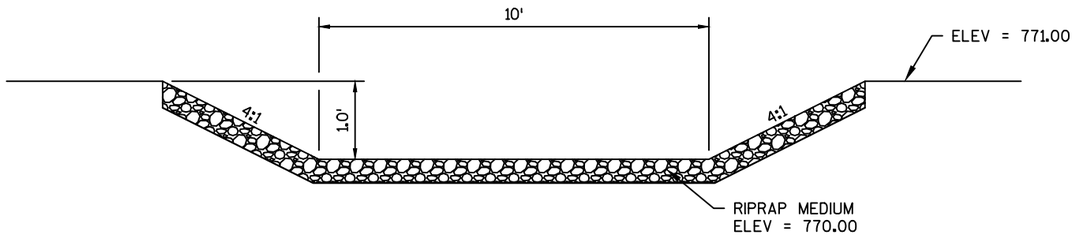
SHEET 1 OF 3

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	POND DETAIL	SCALE, FEET 0 20 40	SHEET 44	E

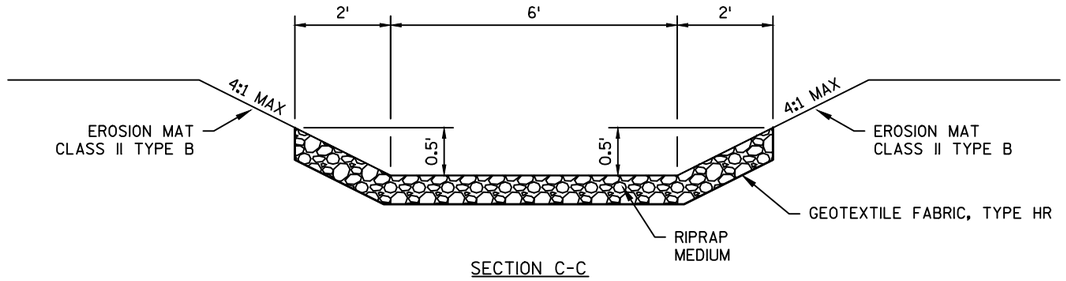
FILE NAME : N:\PDS\C3D\32000203\DESIGN\POND\021002_CD POND.DWG
LAYOUT NAME - ****

PLOT DATE : 4/28/2016 7:14 PM PLOT BY : MAAS, JOSEPH A PLOT NAME : PLOT SCALE : 1 IN:40 FT

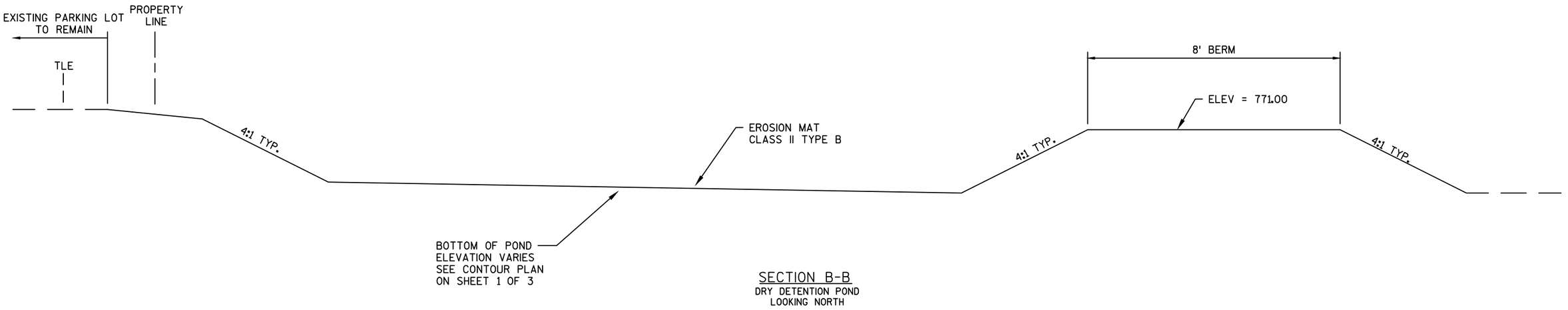
2



SECTION A-A



SECTION C-C



SECTION B-B
DRY DETENTION POND
LOOKING NORTH

SHEET 2 OF 3

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	POND DETAIL	SHEET 45	E

2

NUMBER	NORTHING	EASTING	ELEVATION
1	123973.37	568226.42	768.00
2	123968.17	568226.08	768.00
3	123970.97	568219.22	768.00
4	124017.97	568224.79	768.00
5	123999.92	568249.65	768.00
6	123922.41	568259.80	768.00
7	123976.86	568225.05	769.00
8	123918.91	568230.14	769.00
9	123936.53	568181.56	769.00
10	123979.76	568170.87	769.00
11	124005.79	568162.64	769.00
12	124004.09	568188.88	769.00
13	124002.94	568206.71	769.00
14	123993.45	568242.74	769.00
15	123894.79	568256.04	769.00
16	123853.97	568252.37	770.00
17	123997.71	568204.48	770.00
18	123985.09	568203.68	770.00
19	123860.29	568233.04	770.00
20	123842.36	568201.36	770.00
21	123847.38	568154.83	770.00
22	123905.28	568141.22	770.00

NUMBER	NORTHING	EASTING	ELEVATION
23	123977.92	568137.90	770.00
24	123987.03	568145.99	770.00
25	123985.95	568190.19	770.00
26	123998.53	568190.99	770.00
27	124004.88	568147.02	770.00
28	124023.18	568134.88	770.00
29	123856.17	568149.92	770.00
30	123848.50	568126.38	770.25
31	123854.47	568125.79	770.25
32	123849.03	568101.54	770.50
33	123855.03	568101.65	770.50
34	123849.03	568077.29	770.75
35	123855.03	568077.29	770.75
36	123850.28	568052.93	771.00
37	123826.76	568217.57	771.00
38	123850.97	568246.25	771.00
39	123988.06	568236.99	771.00
40	123994.54	568207.12	771.00
41	123987.73	568206.68	771.00
42	123982.49	568231.06	771.00
43	123854.96	568238.23	771.00
44	123828.95	568206.01	771.00

NUMBER	NORTHING	EASTING	ELEVATION
45	123844.63	568143.68	771.00
46	123844.81	568054.01	771.00
47	123856.15	568053.47	771.00
48	123863.67	568139.35	771.00
49	123987.60	568137.46	771.00
50	123988.96	568187.55	771.00
51	123995.77	568187.99	771.00
52	124001.49	568141.07	771.00
53	124021.12	568129.89	771.00
54	123805.37	568170.30	772.00
55	123810.43	568154.22	772.00
56	123814.63	568158.75	772.00
57	123836.93	568134.77	772.00
58	123839.10	568127.88	772.00
59	123863.32	568125.06	772.00
60	123868.41	568133.45	772.00
61	124021.21	568127.25	772.00
62	123803.59	568154.72	773.00
63	123808.73	568141.95	773.00
64	123814.26	568146.16	773.00
65	123867.54	568101.82	773.00
66	123869.46	568125.26	773.00

NUMBER	NORTHING	EASTING	ELEVATION
67	123905.43	568128.94	773.00
68	123975.13	568126.14	773.00
69	123800.00	568146.87	774.00
70	123807.14	568125.25	774.00
71	123814.54	568137.23	774.00
72	123827.25	568124.85	774.00
73	123832.50	568101.92	774.00
74	123832.75	568077.31	774.00
75	123863.98	568044.37	774.00
76	123871.31	568077.52	774.00
77	123883.66	568091.18	774.00
78	123803.09	568078.24	775.00
79	123816.63	568100.34	775.00
80	123826.77	568077.29	775.00
81	123869.47	568038.86	775.00
82	123886.35	568065.03	775.00
83	123810.28	568067.35	776.00
84	123883.40	568013.96	776.00
85	123812.68	568056.55	777.00
86	123828.19	568036.88	777.00
87	123853.17	568022.22	777.00
88	123854.87	568004.42	777.00

DRY DETENTION POND

CONSTRUCTION STAKING POINTS

SHEET 3 OF 3

2

N

128TH ST

128TH ST R/L

SLOPE INTERCEPT

TLE

R/W

CONCRETE SURFACE DRAIN

CONCRETE CURB AND GUTTER
4-INCH SLOPED 36-INCH TYPE D
USH 45, STA. 20+60.17, 90.5' LT
CTH WG, STA. 49+26.09, 88.0' RT

+26.09
28' RT

60' R

778.89

778.58

+59.71
30.52' LT

778.27

+93
14' LT

XXX

20+00

21+00

22+00

23+00

24+00

50+00

49+00

78°

+13.5
12' LT

779.90

+38
14' LT

780.24

780.13

+17.4
24.5' LT

40' R

CONCRETE CURB AND GUTTER
4-INCH SLOPED 36-INCH TYPE D
USH 45, STA. 22+12.01, 74.0' LT
CTH WG, STA. 49+00.50, 64.0' LT

10' X 30' CONCRETE
MAINTENANCE PAD
(PAY AS CONCRETE
SIDEWALK 7-INCH ON
4" BASE AGGREGATE
DENSE 1¼-INCH)

+72.02
28' LT

REMOVE ACCESS

779.83

+12.02
34' LT

779.53

779.40

779.24

779.13

778.83

778.42

325' RIGHT TURN LANE

USH 45

28'

USH 45 R/L

+74.50
24' RT

779.30

779.21

24'

778.91

+75
24' RT

778.75

778.71

779.13
85' TAPER

779.44

778.90

SOD
AGG

HMA
35'

CONC

+85.3
24' RT

HMA
XXX
CONC

XXX R/W XXX

779.06

+90.13
30' RT

50' R

+65.27
28' LT

CONCRETE SURFACE DRAIN

CONCRETE CURB AND GUTTER
4-INCH SLOPED 36-INCH TYPE D
USH 45, STA. 21+93.74, 80.0' RT
CTH WG, STA. 50+65.28, 78.0' LT

STA. 21+30.95 USH 45 R/L =
STA. 50+00.00 CTH WG R/L
TYPE A2 INTERSECTION MODIFIED

CTH WG R/L

1'

2'

28'

51+00

CTH WG

+01.85
12.08' RT

778.20

778.31

778.45

778.79

+58.28
29.34' RT

45' R

+88.57
24' RT

779.12

3'

+55.2
17' RT

+69
18' RT

1'

BEGIN PROJECT
STA. 19+83

CONCRETE CURB AND GUTTER
4-INCH SLOPED 36-INCH TYPE D
USH 45, STA. 20+45.10, 72.3' RT
CTH WG, STA. 50+88.57, 69.0' RT

NOTE: NO CONSTRUCTION INTO ILLINOIS.
INTERSECTION RADII SET UP TO
ACCOMMODATE FUTURE WIDENING
TO USH 45 TO THE SOUTH.

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	INTERSECTION DETAIL - CTH WG	SHEET 47	E

FILE NAME : N:\PDS\C3D\CAD\32000203\021101_ID.DWG
LAYOUT NAME - 021101_ID

PLOT DATE : 4/28/2016 10:44 AM PLOT BY : MAAS, JOSEPH A PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

N

128TH ST

+00

+13.5
12' LT

CONCRETE SURFACE DRAIN

R/W

TLE

+38
14' LT

779.90

SLOPE INTERCEPT

780.24

128TH ST R/L

49+00

CONCRETE CURB AND GUTTER
4-INCH SLOPED 36-INCH TYPE D
USH 45, STA. 22+12.01, 74.0' LT
CTH WG, STA. 49+00.50, 64.0' LT

780.13

+17.4
24.5' LT

40' R

R/W

10' X 30' CONCRETE
MAINTENANCE PAD
(PAY AS CONCRETE
SIDEWALK 7-INCH ON
4" BASE AGGREGATE
DENSE 1¼-INCH)

SLOPE INTERCEPT

+72.02
28' LT

CONCRETE CURB AND
GUTTER
4-INCH SLOPED 36-INCH
TYPE D

REMOVE ACCESS

+12.02
34' LT

779.83

779.53

779.40

779.24

779.13

325' RIGHT TURN LANE

778.83

778.42

777.89

777.27

776.78

776.60

+34.8
28' LT

+50
26.4' LT

TLE

+56.8
17' LT

78°

USH 45

22+00

23+00

24+00

25+00

26+00

27+00

50+00

28'

USH 45 R/L

+74.50
24' RT

779.30

779.21

24'

+75
24' RT

778.91

778.75

778.71

+26.7
24' RT

779.44

779.13
85' TAPER

778.90

SOD
AGG

HMA
35'

SOD
AGG

CONC

+85.3
24' RT

HMA
XXX XXX
CONC 27'

14'

3'

+01.4
17.0' RT

R/W

TLE

XXX XXX XXX XXX R/W XXX XXX XXX XXX XXX XXX XXX

TLE

779.06

+90.13
30' RT

50' R

+65.27
28' LT

SLOPE INTERCEPT

CONCRETE SURFACE DRAIN

CONCRETE CURB AND GUTTER
4-INCH SLOPED 36-INCH TYPE D
USH 45, STA. 21+93.74, 80.0' RT
CTH WG, STA. 50+65.28, 78.0' LT

STA 23+70, 25.5' RT
INL 2X3 HM
RIM ELEV. = 778.75
INVERT ELEV. = 774.95

101

TLE

101A STA 24+28.4, 38.9' RT
1-12" AECPRC
INVERT ELEV. = 774.65

P101 12" X 60.0' SSPRC
CL III @ 0.50%

R/W

TLE

1'

2'

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	INTERSECTION DETAIL - CTH WG	SHEET 48	E

2

REMOVE ACCESS

10' X 30' CONCRETE MAINTENANCE PAD (PAY AS CONCRETE SIDEWALK 7-INCH ON 4" BASE AGGREGATE DENSE 1-1/4 INCH

SLOPE INTERCEPT

CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE D

CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE D USH 45, STA. 22+12.01, 74.0' LT CTH WG, STA. 49+00.50, 64.0' LT

CONCRETE SURFACE DRAIN

WETLAND BOUNDARY

TLE

R/W

128TH ST

USH 45

CTH WG

40' R

60' R

78°

+72.02 28' LT

+74.5 24' RT

+12.02 34' LT

+09.13 30' RT

+65.27 28' LT

+17.4 24.5' LT

+25.8 171' LT

+38 14' LT

+75.00 17' LT

+50.00 MATCH

+88.4 16.7' RT

+22.8 30' RT

+26.09 28' RT

+59.71 30.52' LT

+58.28 29.34' RT

+88.57 24' RT

+01.85 12.08' RT

+93 14' LT

779.30

779.24

779.40

779.44

779.53

779.13

778.90

779.06

779.83

780.24

780.13

779.90

778.89

778.58

778.27

778.79

779.12

778.45

778.31

778.20

45+00

46+00

47+00

48+00

49+00

50+00

20+00

21+00

22+00

N

2

N

CONCRETE CURB AND GUTTER
4-INCH SLOPED 36-INCH TYPE D
USH 45, STA. 21+93.74, 80.0' RT
CTH WG, STA. 50+65.28, 78.0' LT

CONCRETE CURB AND GUTTER
4-INCH SLOPED 36-INCH TYPE D
USH 45, STA. 20+45.10, 72.3' RT
CTH WG, STA. 50+88.57, 69.0' RT

USH 45

CTH WG

CTH WG R/L

SLOPE INTERCEPT

TLE

R/W

85' TAPER

50' R

45' R

78°

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	INTERSECTION DETAIL - CTH WG	SHEET 50	E

2

2

N

121ST ST

R/W

TLE

MATCH +70

XXX XXX

121ST ST R/L

49+00

781.50

+12 15' LT

3'

STA. 49+04.75 USH 45 R/L =
STA. 50+00.00 121ST ST R/L
TYPE B1 INTERSECTION W/MODIFIED TURN LANE LENGTH

CONCRETE SURFACE DRAIN

CONCRETE CURB AND GUTTER
4-INCH SLOPED 36-INCH TYPE D
USH 45, STA. 49+79.75, 88.0' LT
121ST ST STA. 49+12.00, 75.0' LT

CONCRETE CURB AND GUTTER
4-INCH SLOPED 36-INCH TYPE D
USH 45, STA. 48+49.74, 64.0' LT
121ST ST STA. 49+36.00, 55.0' RT

40' R

+26 14' RT

781.29

+36 15' RT

CONCRETE SURFACE DRAIN

SLOPE INTERCEPT

TLE

R/W

5'

2'

+50 12' LT

+83 17' LT

+50 24' LT

780.73

780.57

100' TAPER

60' R

780.54

+78 28' LT

+83 30' LT

780.78

15" CMCP

400' RIGHT TURN LANE

USH 45

USH 45 R/L

46+00 47+00 48+00 49+00 50+00 51+00 52+00

28'

12'

1'

2'

90°

84°

400' RIGHT TURN LANE

780.48

+44 28' RT

780.70

780.85

100' TAPER

780.68

+72 24' RT

+39 17' RT

+46 19' RT

18" CMCP

R/W

TLE

SLOPE INTERCEPT

WETLAND BOUNDARY

CONCRETE SURFACE DRAIN

STA. 49+10.32 USH 45 R/L =
STA. 50+00.00 CTH CJ R/L
TYPE B1 INTERSECTION

CONCRETE CURB AND GUTTER
4-INCH SLOPED 36-INCH TYPE D
USH 45, STA. 48+44.15, 88.0' RT
CTH CJ, STA. 50+80.60, 75.0' RT

60' R

45' R

+81 15' RT

781.02

781.01

+70 15' LT

51+00

CTH CJ

3'

MATCH +50

XXX XXX

CONCRETE CURB AND GUTTER
4-INCH SLOPED 36-INCH TYPE D
USH 45, STA. 49+72.35, 64.0' RT
CTH CJ, STA. 50+70.13, 55.0' LT

CONCRETE SURFACE DRAIN

SLOPE INTERCEPT

CTH CJ R/L

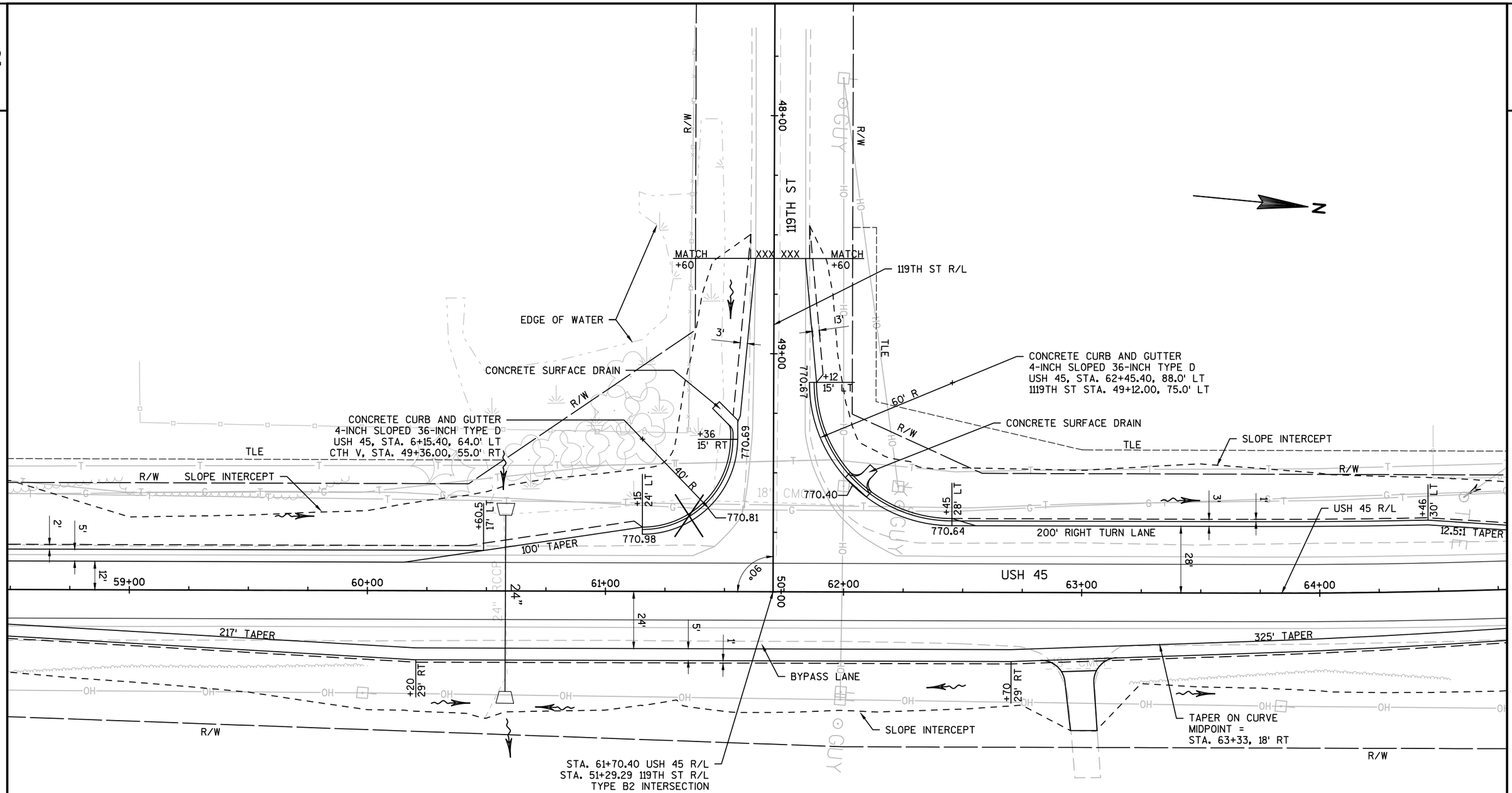
PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	INTERSECTION DETAIL - 121ST ST & CTH CJ	SHEET 51	E

FILE NAME : N:\PDS\C3D\CAD\32000203\021101_ID.DWG
LAYOUT NAME - 021102_ID

PLOT DATE : 4/28/2016 10:44 AM PLOT BY : MAAS, JOSEPH A PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2



PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	INTERSECTION DETAIL - 119TH ST	SHEET 52	E

2

CTH V

48+00

49+00

R/W

15" CMCP

MATCH +30

XXX XXX

MATCH +30

TLE

3'

CONCRETE SURFACE DRAIN

CONCRETE SURFACE DRAIN

CONCRETE CURB AND GUTTER
4-INCH SLOPED 36-INCH TYPE D
USH 45, STA. 76+97.56, 74.0' LT
CTH V, STA. 49+26.42, 68.0' LT

+26
18' RT

50' R

775.27

776.68

775.20

CONCRETE CURB AND GUTTER
4-INCH SLOPED 36-INCH TYPE D
USH 45, STA. 78+32.42, 68.0' LT
CTH V, STA. 49+30.26, 64.0' LT

+30
24' LT

776.44

776.86

+32
28' LT

WETLAND BOUNDARY

SLOPE INTERCEPT

SLOPE INTERCEPT

R/W

R/W

+28
17' LT

+98
24' LT

777.33

100' TAPER

400' RIGHT TURN LANE

2'

1'

2'

5'

3'

12'

28'

89°

75+00

76+00

77+00

78+00

USH 45

79+00

80+00

217' TAPER

24'

5'

1'

TAPER ON CURVE
MIDPOINT =
STA. 75+09, 18' RT

+17
29' RT

+65
29' RT

USH 45 R/L

TAPER ON CURVE
MIDPOINT =
STA. 80+28, 18' RT

18" CMCP

BYPASS LANE

TLE

REMOVE ACCESS

STA. 77+65.88 USH 45 R/L =
STA 50+00.00 CTH V R/L
TYPE B1 INTERSECTION
W/MODIFIED TURN LANE LENGTH

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	INTERSECTION DETAIL - CTH V	SHEET 53	E

2

N

WETLAND BOUNDARY

STA. 101+04.18, USH 45 R/L =
STA. 50+00.00 CTH Q R/L
TYPE B1 INTERSECTION W/
MODIFIED TURN LANE LENGTH

BYPASS LANE

WETLAND BOUNDARY

SLOPE INTERCEPT

R/W

+04
29' LT

18" CMCP

R/W

+54
29' LT

5'

1"

USH 45 R/L

325' TAPER

217' TAPER

USH 45 R/L

98+00 99+00 100+00 USH 45 101+00 102+00 103+00 104+

24'

42" RCCP

78"

28'

2'

5'

12'

770.95

+27
28' RT

770.02

770.87

100' TAPER

770.36

+63
24' RT

3'

+30
47' RT

SLOPE INTERCEPT

R/W

SLOPE INTERCEPT

R/W

45' R

R/W

+87
15' RT

769.32

CTH Q

769.32

+70
15' LT

60' R

CONCRETE CURB AND GUTTER
4-INCH SLOPED 36-INCH TYPE D
USH 45, STA. 100+27.47, 73.0' RT
CTH Q, STA. 50+87.25, 60.0' RT

51+00

CONCRETE SURFACE DRAIN

3'

3'

R/W

CONCRETE CURB AND GUTTER
4-INCH SLOPED 36-INCH TYPE D
USH 45, STA. 101+63.12, 84.0' RT
CTH Q, STA. 50+70.04, 75.0' LT

NO CUT/FILL AROUND THE ATC BASE

MATCH
+50

XXX XXX

MATCH
+50

CONCRETE SURFACE DRAIN

WETLAND BOUNDARY

CTH Q R/L

52

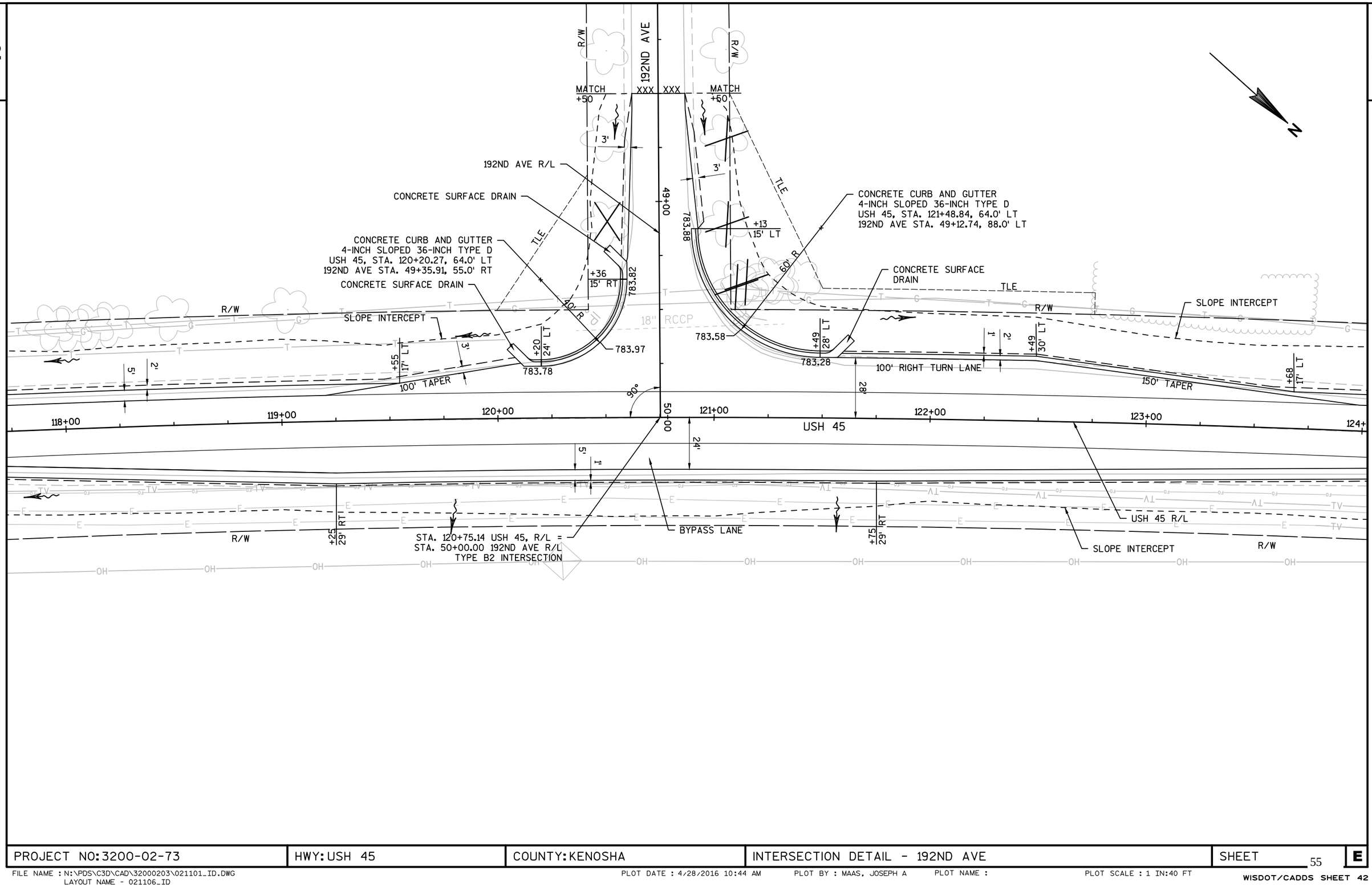
PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	INTERSECTION DETAIL - CTH Q	SHEET 54	E

FILE NAME : N:\PDS\C3D\CAD\32000203\021101_ID.DWG
LAYOUT NAME - 021105_ID

PLOT DATE : 4/28/2016 10:44 AM PLOT BY : MAAS, JOSEPH A PLOT NAME : PLOT SCALE : 1 IN:40 FT

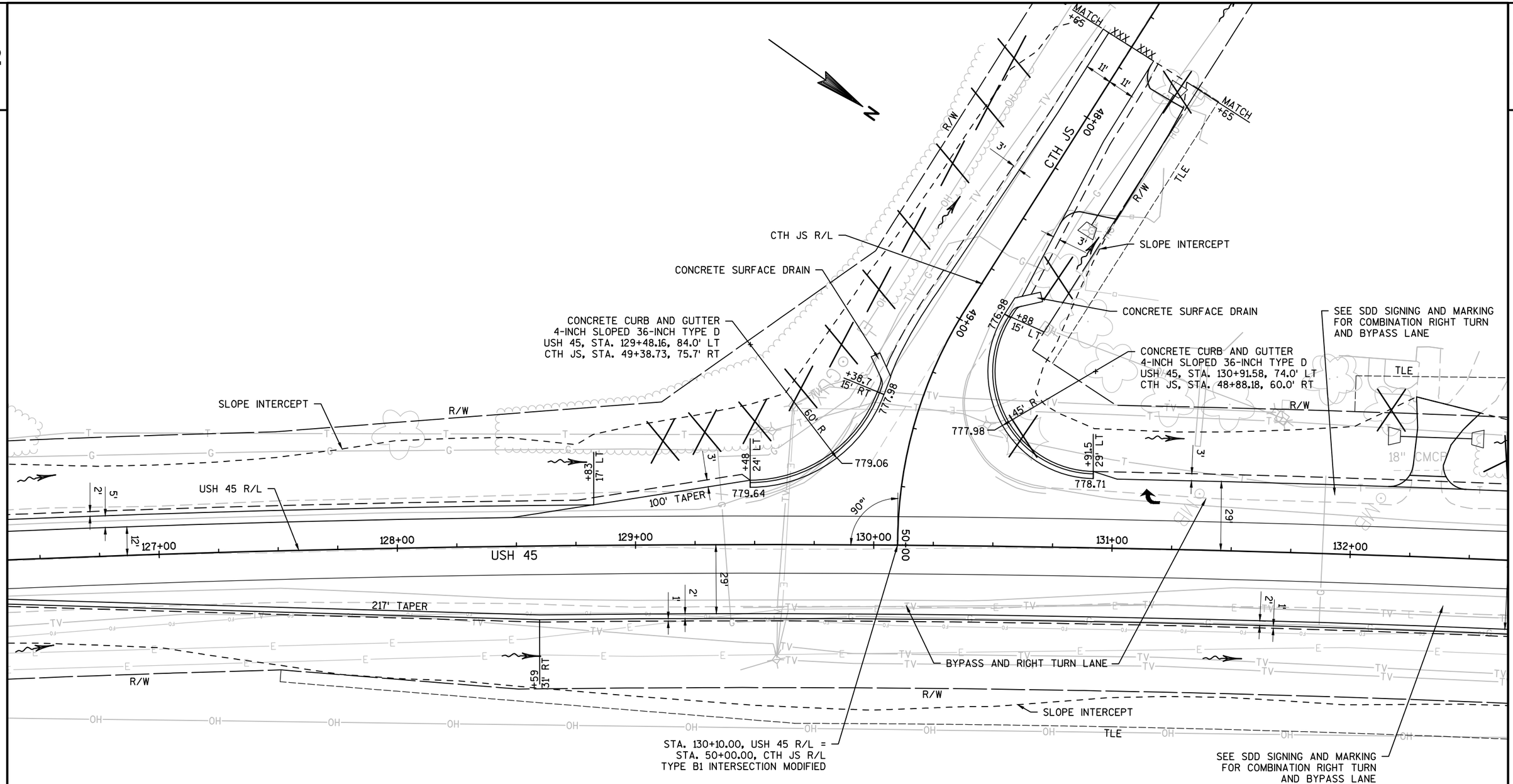
WISDOT/CADDS SHEET 42

2



PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	INTERSECTION DETAIL - 192ND AVE	SHEET 55	E

2



PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	INTERSECTION DETAIL - CTH JS	SHEET 56	E

2

N

WETLAND BOUNDARY

SEE SDD SIGNING AND MARKING FOR COMBINATION RIGHT TURN AND BYPASS LANE

TLE

STA. 134+18.09 USH 45 R/L =
STA. 50+00.00 106TH ST R/L
TYPE B1 INTERSECTION MODIFIED

R/W

SLOPE INTERCEPT

TLE

R/W

18" CMCP

3%

BYPASS LANE

29'

USH 45

132+00 133+00 134+00 135+00 136+00 137+00

76°

72" 72"

29'

28'

BYPASS AND RIGHT TURN LANE

2%

1%

776.67

+38
29' RT

775.79

USH 45 R/L

775.42

775.99

+74
28' RT

RIGHT TURN LANE

3%

24"

45' R

60' R

R/W

SLOPE INTERCEPT

TLE

CONCRETE CURB AND GUTTER
4-INCH SLOPED 36-INCH TYPE D
USH 45, STA. 133+38.25, 74.0' RT
106TH ST, STA. 50+90.66, 60.0' RT

+91
15' RT

775.58

775.48

+73.5
15' LT

3'

3'

CONCRETE SURFACE DRAIN

106TH ST

51+00

106TH ST R/L

MATCH
+60

XXX XXX

MATCH
+60

CONCRETE CURB AND GUTTER
4-INCH SLOPED 36-INCH TYPE D
USH 45, STA. 134+73.99, 88.0' RT
106TH ST, STA. 50+72.41, 75.0' LT

CONCRETE SURFACE DRAIN

WALL MODULAR BLOCK GRAVITY

R/W

SLOPE INTERCEPT

TLE

WETLAND BOUNDARY

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	INTERSECTION DETAIL - 106TH ST	SHEET 57	E

2

STA. 142+68.20 USH 45 R/L =
STA. 50+00.00 196TH AVE R/L
TYPE B1 INTERSECTION
MODIFIED

SEE SDD SIGNING AND MARKING
FOR COMBINATION RIGHT TURN LANE
AND BYPASS LANE

SLOPE INTERCEPT

TLE

R/W

WETLAND BOUNDARY

BYPASS LANE

USH 45 R/L

139+00 140+00 141+00 142+00 143+00 144+00 145+

USH 45

3'

29'

28'

12'

5'

2'

90°

772.46

+93
28' RT

HMA

771.30

60' R

+69
17.8' RT

769.73

2.5' TALL

3' TALL

BERM
(4:1 SIDESLOPES
WITH 2' FLAT TOP)

TLE

CONCRETE CURB AND GUTTER
4-INCH SLOPED 36-INCH TYPE D
USH 45, STA. 141+93.20, 88.0' RT
196TH AVE, STA. 50+77.43, 76.5' RT

24"

5+00

PARKING LOT TO REMAIN

CONCRETE SURFACE DRAIN

REALIGN & RECONSTRUCT
INTERSECTION

SLOPE INTERCEPT

771.90

100' TAPER

771.37

+23
24' RT

+90
17' RT

40' R

+64
15' LT

770.11

CONCRETE CURB AND GUTTER
4-INCH SLOPED 36-INCH TYPE D
USH 45, STA. 143+23.20, 64.0' RT
196TH AVE, STA. 50+64.00, 55.0' LT

CONCRETE SURFACE DRAIN

WETLAND
BOUNDARY

196TH AVE R/L

196TH AVE (SOUTH)

52+00

MATCH
+50

XXX

MATCH
+50

XXX

+18.2
29' LT

307' TAPER

REMOVING ASPHALTIC SURFACE

BERM (4:1 SIDESLOPES WITH 2' FLAT TOP)

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	INTERSECTION DETAIL - 196TH AVE (SOUTH)	SHEET 58 E

FILE NAME : N:\PDS\C3D\CAD\32000203\021101_ID.DWG
LAYOUT NAME - 021109_ID

PLOT DATE : 4/28/2016 10:45 AM PLOT BY : MAAS, JOSEPH A PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

N

R/W

WETLAND BOUNDARY

STA. 166+82.98 USH 45 R/L =
STA. 50+00.00 196TH AVE R/L
TYPE B1 INTERSECTION

PLE

USH 45 R/L

SLOPE INTERCEPT

TAPER ON CURVE
MIDPOINT =
STA. 169+38, 18' LT

+84
29' LT

+31
29' LT

1"

5'

325' TAPER

217' TAPER

24"

USH 45

165+00

166+00

167+00

168+00

169+00

170+00

80°

24" RCCP

4+00

28'

3'

200' RIGHT TURN LANE

774.23

+92
28' RT

HMA

774.65

775.66

100' TAPER

+37
24' RT

+08
17' RT

5'

12'

2'

773.98

24" MCP

55' R

50' R

773.60

+64
15' LT

SLOPE INTERCEPT

CONCRETE CURB AND GUTTER
4-INCH SLOPED 36-INCH TYPE D
USH 45, STA. 165+92.30, 83.0' RT
196TH AVE, STA. 51+00.07, 70.0' RT

+99
15' RT

773.05

196TH AVE (NORTH)

51+00

CONCRETE SURFACE DRAIN

CONCRETE CURB AND GUTTER
4-INCH SLOPED 36-INCH TYPE D
USH 45, STA. 167+37.52, 74.0' RT
196TH AVE, STA. 50+64.11, 65.0' RT

CONCRETE SURFACE DRAIN

3'

MATCH
+75

XXX XXX

52+00

196TH AVE R/L

WETLAND BOUNDARY

R/W

WETLAND BOUNDARY

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	INTERSECTION DETAIL - 196TH AVE (NORTH)	SHEET 59	E

FILE NAME : N:\PDS\C3D\CAD\32000203\021101_ID.DWG
LAYOUT NAME - 021110_ID

PLOT DATE : 4/28/2016 10:45 AM PLOT BY : MAAS, JOSEPH A PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

N

MATCH +80

XXX XXX

MATCH +80

R/W

R/W

98TH ST

49+00

3'

3'

15'

15'

24"

USH 45, STA. 174+64.78, 58.0' LT
98TH ST, STA. 49+43.83, 55.0' RT

98TH ST R/L

USH 45, STA. 175+92.07, 78.0' LT
98TH ST, 49+21.62, 75.0' LT

40' R

60' R

SLOPE INTERCEPT

R/W

USH 45 R/L

+56 17' LT

+65 18' LT

HMA

+90 18' LT

+07 17' LT

TLE

R/W

SLOPE INTERCEPT

2'

5'

60' TAPER

18'

89°

90' TAPER

5'

2'

12'

173+00

174+00

175+00

176+00

177+00

178+00

BYPASS LANE

USH 45

24'

5'

1'

5'

1'

+66 24' RT

+18 29' RT

R/W

SLOPE INTERCEPT

TLE

STA. 175+17.06, USH 45 R/L =
STA. 50+00.00, 98TH ST R/L
TYPE C INTERSECTION

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	INTERSECTION DETAIL - 98TH ST	SHEET 60	E

FILE NAME : N:\PDS\C3D\CAD\32000203\021101_ID.DWG
LAYOUT NAME - 021111_ID

PLOT DATE : 4/28/2016 10:45 AM PLOT BY : MAAS, JOSEPH A PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

N

WETLAND BOUNDARY

R/W

REMOVE ACCESS

R/W

SLOPE INTERCEPT

USH 45 R/L

WETLAND BOUNDARY

24" CMCP

22+47 LT

5'

1'

+07 18' LT

5'

1'

1'

USH 45

193+00

194+00

195+00

196+00

197+00

198+00

USH 45

5'

18'

12"

34'

365' TAPER

786.85

787.02

787.14

787.10

787.06

786.84

786.58

12"

786.22

+57 34' RT

786.16

12"

785.90

450' RIGHT TURN LANE

12"

785.51

785.02

784.49

+92 16' RT

R/W

TLE

+49 25' RT

R/W

TLE

CONCRETE SURFACE DRAIN

CONCRETE CURB AND GUTTER
4-INCH SLOPED 36-INCH TYPE D

SLOPE INTERCEPT

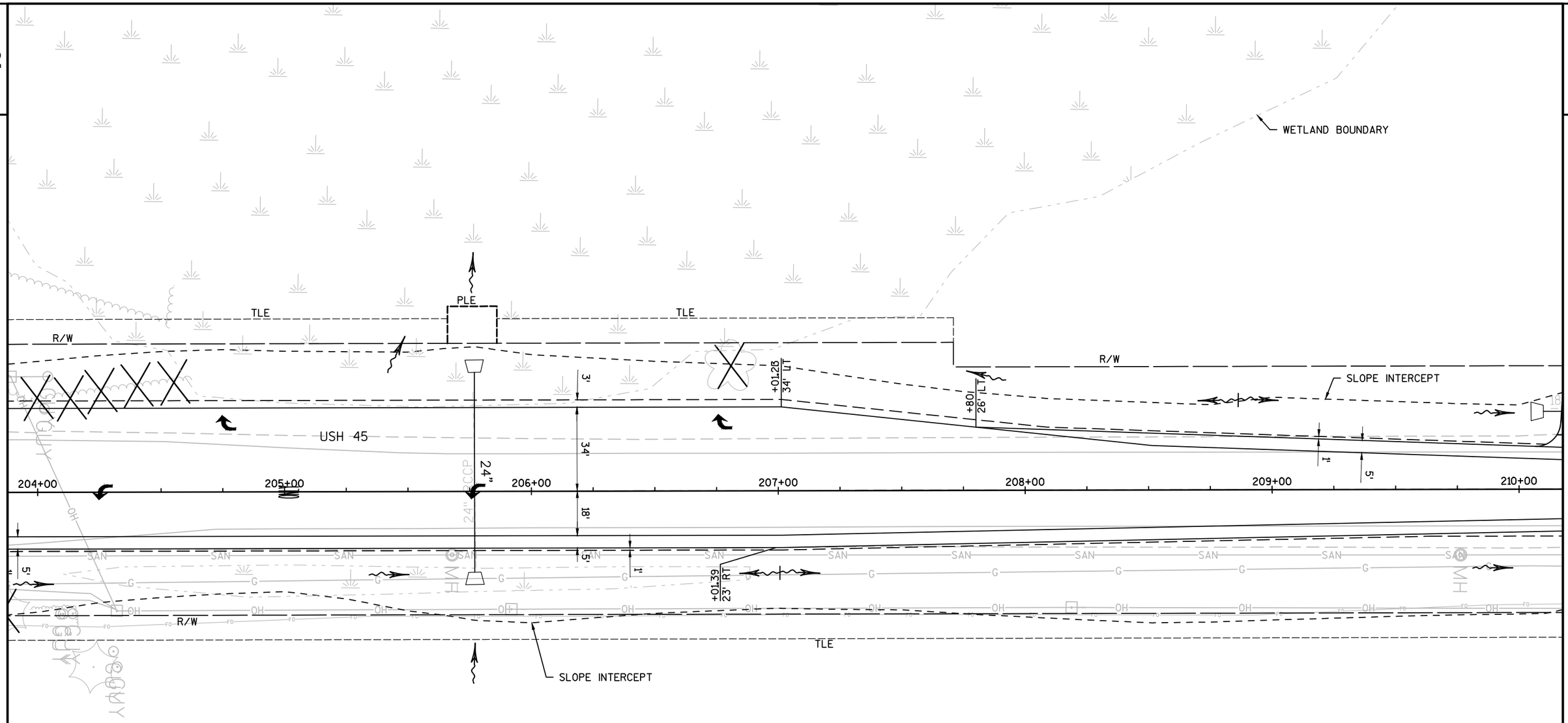
PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	INTERSECTION DETAIL - CTH C	SHEET 61	E

2

CTH C R/L
TLE
R/W
3'
28'
24'
5'
1'
CTH C
REMOVE ACCESS
+58
29' LT
3'
100' TAPER
WETLAND BOUNDARY
N
CONCRETE SURFACE DRAIN
CONCRETE CURB AND GUTTER
4-INCH SLOPED 36-INCH TYPE D
USH 45, STA. 200+94.71, 80.0' LT
CTH C, STA. 49+21.22, 80.0' RT
+21
30' RT
781.23
HMA
+00
50' R
781.18
+24
36' LT
40' R
CONCRETE CURB AND GUTTER
4-INCH SLOPED 36-INCH TYPE D
USH 45, STA. 202+51.38, 74.0' LT
CTH C, STA. 49+24.06, 76.0' LT
TLE
SLOPE INTERCEPT
WETLAND BOUNDARY
SLOPE INTERCEPT
R/W
TLE
R/W
12"
+28
23' LT
3'
+95
30' LT
100' TAPER
782.58
781.92
781.48
+51
34' LT
781.78
450' RIGHT TURN LANE
USH 45 R/L
1'
5'
18'
198+00
199+00
200+00
201+00
202+00
203+00
204+
34'
18'
89°
50+00
24" CMCP
18" CMCP
24" RCCP
12"
4" SUMP DRAIN DISCHARGE
785.02
784.49
783.42
783.38
782.87
782.63
782.54
782.51
782.22
781.57
781.38
+30
23' RT
100' TAPER
+63
30' RT
3'
1'
5'
R/W
TLE
450' RIGHT TURN LANE
+08
34' RT
40' R
+75.5
24' RT
782.06
781.76
50' R
+77
42' LT
SLOPE INTERCEPT
CONCRETE SURFACE DRAIN
CONCRETE CURB AND GUTTER
4-INCH SLOPED 36-INCH TYPE D
USH 45, STA. 201+07.80, 74.0' RT
CTH C, STA. 50+75.47, 64.0' RT
CONCRETE CURB AND GUTTER
4-INCH SLOPED 36-INCH TYPE D
USH 45, STA. 202+62.92, 80.0' RT
CTH C, STA. 50+77.04, 92.0' LT
+84
40' LT
781.67
STA. 201+73.48, USH 45 R/L =
STA. 50+00.00, CTH C R/L
TYPE A1 INTERSECTION W/
MODIFIED TURN LANE LENGTH
CONCRETE SURFACE DRAIN
3'
100' TAPER
R/W
+42
17' RT
10' X 30' CONCRETE
MAINTENANCE PAD
(PAY AS CONCRETE
SIDEWALK 7-INCH ON
4" BASE AGGREGATE
DENSE 1¼-INCH
781.71
WALL MODULAR BLOCK
GRAVITY LRFD
TLE
R/W
12'
40'

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	INTERSECTION DETAIL - CTH C	SHEET 62	E

2

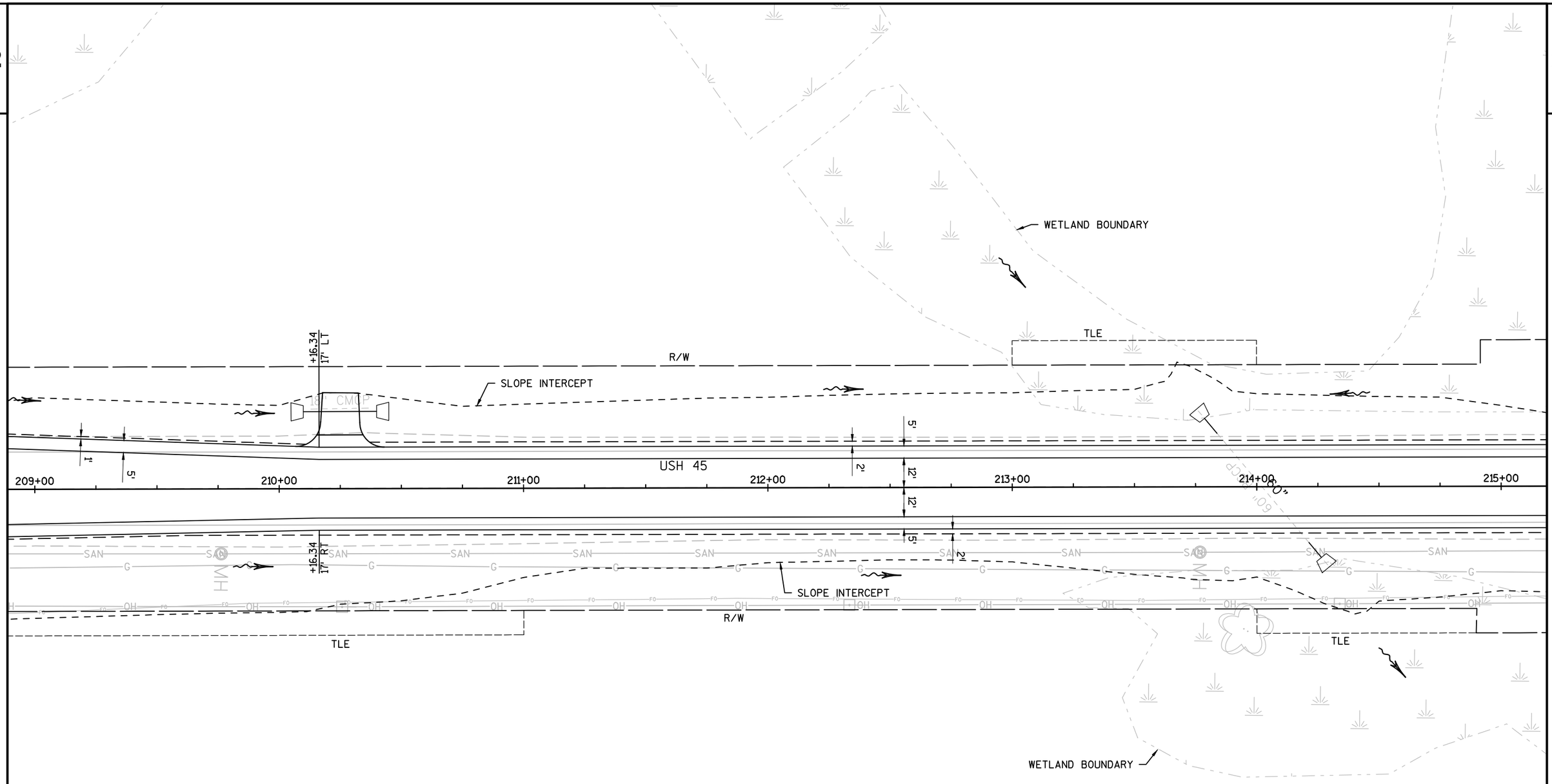


PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	INTERSECTION DETAIL - CTH C	SHEET 63	E

FILE NAME : N:\PDS\C3D\CAD\32000203\021101_ID.DWG
LAYOUT NAME - 021113_ID

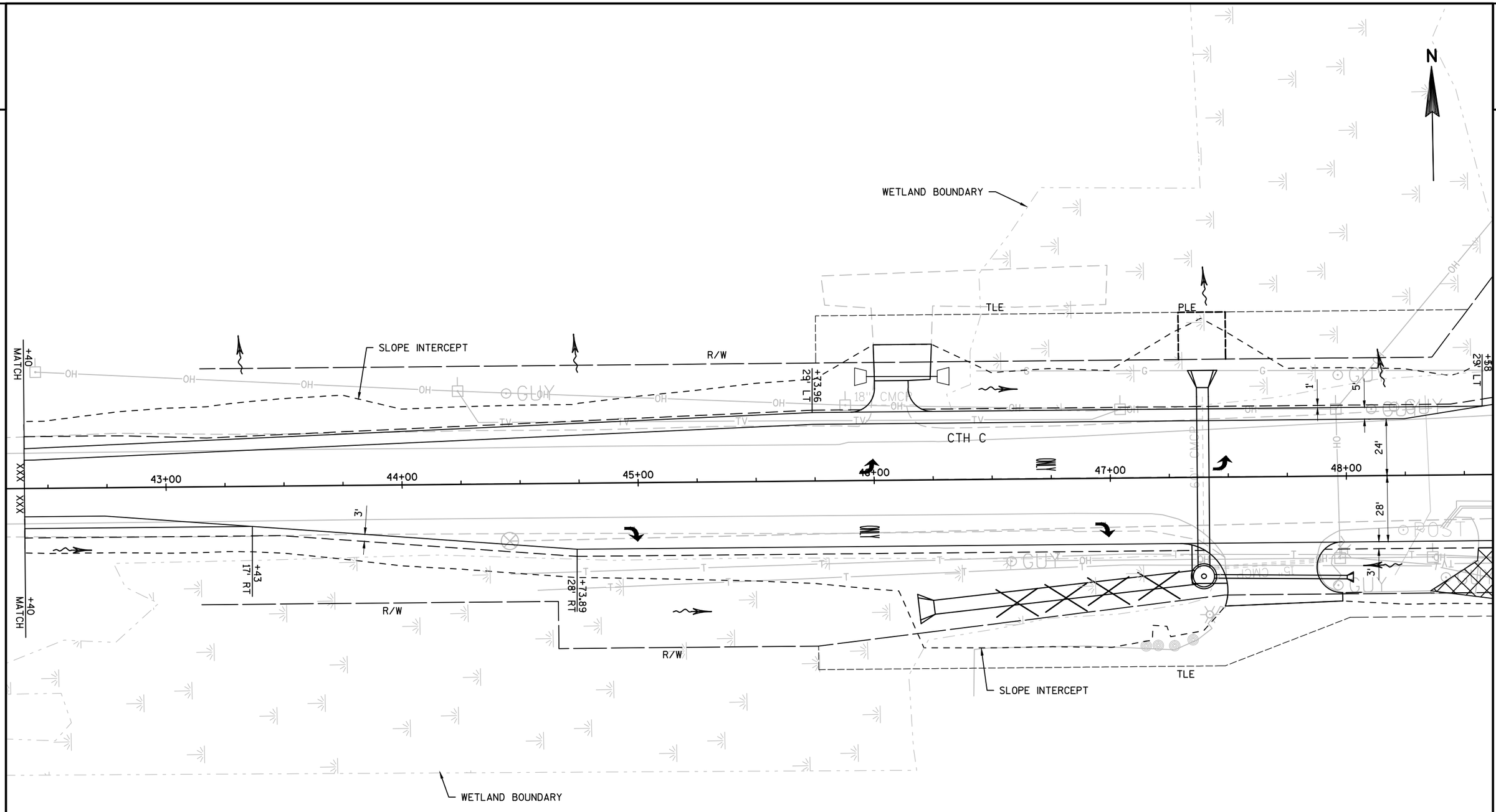
PLOT DATE : 4/28/2016 10:45 AM PLOT BY : MAAS, JOSEPH A PLOT NAME : PLOT SCALE : 1 IN:40 FT

2



PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	INTERSECTION DETAIL - CTH C	SHEET 64	E

2



PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	INTERSECTION DETAIL - CTH C	SHEET 65	E

2

N

4" SUMP DRAIN DISCHARGE

TLE

R/W

CONCRETE SURFACE DRAIN

+27.04 40' LT

R/W

SLOPE INTERCEPT

+40.27 31' LT

3'

1'

781.96 782.02 782.03 782.00 781.96 781.88 781.86

CTH C

40'

12'

52+00 53+00 54+00 55+00 56+00 57+00 58

15" CMCP

SAN OHU T FO

R/W

TLE

TLE

SLOPE INTERCEPT

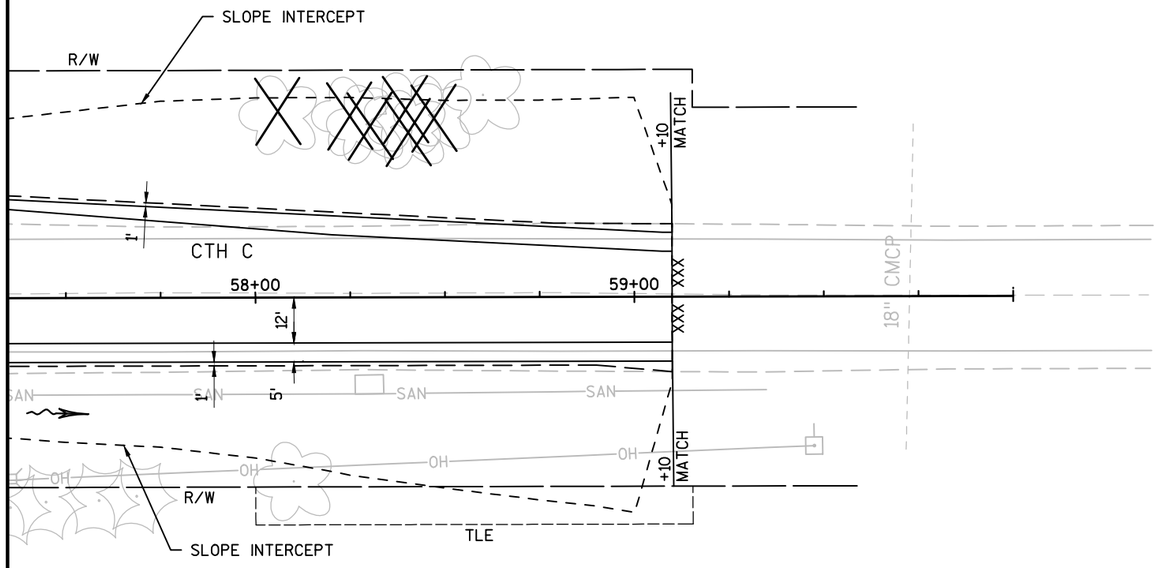
PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	INTERSECTION DETAIL - CTH C	SHEET 66	E

FILE NAME : N:\PDS\C3D\CAD\32000203\021101_ID.DWG
LAYOUT NAME - 021113_ID

PLOT DATE : 4/28/2016 10:45 AM PLOT BY : MAAS, JOSEPH A PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

N



PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	INTERSECTION DETAIL - CTH C	SHEET 67	E

2

N

LEGEND

4B1 TYPE 4B1 MODIFIED CURB RAMP

2 TYPE 2 CURB RAMP

R/W

WETLAND BOUNDARY

SLOPE INTERCEPT

CONCRETE SIDEWALK 7-INCH

BEGIN TAPER STA. 251+91, 29' LT

+16 17' LT

5'

1'

USH 45 R/L

+410 29' LT

STA. 250+40.98, USH 45 R/L =
STA. 50+00.00 86TH ST R/L
TYPE B1 INTERSECTION

10'

BYPASS LANE

2

325' TAPER

24"

246+00 247+00 248+00 249+00 250+00 251+00 252+00

XXX

USH 45

28'

2'

150' TAPER

200' RIGHT TURN LANE

225' TAPER

+43 17' RT

+65 28' RT

SAWCUT

CONCRETE SURFACE DRAIN

4B1

+15 16' RT

CONCRETE SIDEWALK 5-INCH

60' R

24"

+78 16' RT

CONC. HMA

+76 15' LT

R/W

CONCRETE CURB AND GUTTER 30-INCH TYPE A
USH 45, STA. 251+15.45, 76' RT
86TH ST, STA. 50+75.48, 75' LT

SLOPE INTERCEPT
WETLAND BOUNDARY

CONCRETE CURB AND GUTTER 30-INCH TYPE A
USH 45, STA. 249+65.37, 88.0' RT
86TH ST, STA. 50+88.53, 75.0' RT

74' TAPER

86TH STREET

15+00

CONCRETE SURFACE DRAIN

SPECIAL DITCH CHECK DETAIL, SEE CONSTRUCTION DETAILS, EROSION CONTROL PLAN AND CROSS SECTIONS FOR FURTHER INFORMATION

86TH ST R/L

R/W

3'

5'

TLE

MATCH +60

XXX XXX

MATCH +60

NOTES:

1) SEE GRADES & CURB RAMP DETAILS FOR ELEVATIONS

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	INTERSECTION DETAIL - 86TH ST	SHEET 68	E

FILE NAME : N:\PDS\C3D\CAD\32000203\021101_ID.DWG
LAYOUT NAME - 021114_ID

PLOT DATE : 4/28/2016 7:08 PM PLOT BY : MAAS, JOSEPH A PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

N

LEGEND

4B1 TYPE 4B1 MODIFIED CURB RAMP

7B TYPE 7B MODIFIED CURB RAMP

CTH AH R/L

MATCH +50 XXX XXX XXX MATCH +50

CTH AH

R/W

TLE

CONCRETE SURFACE DRAIN

CONCRETE SIDEWALK 7-INCH

CONCRETE CURB AND GUTTER 30-INCH TYPE A
USH 45, STA. 254+03.25, 63.0' LT
CTH AH, 49+38.27, 55.0' RT

49+00

HMA CONC 12" +11 15' LT

+38 15' RT

40' R

+03 23' LT

+61 19.6' LT

SLOPE INTERCEPT

CONCRETE SURFACE DRAIN

18" CMCP

15"

4B1

89°

60' R

CONCRETE CURB AND GUTTER 30-INCH TYPE A
USH 45, STA. 255+33.20, 88.0' LT
CTH AH, STA. 49+10.80, 75.0' LT

+33 28' LT

STA. 256+19.00 USH 45 R/L =
STA. 50+00.00 84TH PL R/L

CONCRETE SIDEWALK 5-INCH

+33 28' LT

5'

1:1

217' TAPER

USH 45

16'

12'

28'

200' RIGHT TURN LANE

150' TAPER

7B

252+00 253+00 254+00 255+00 256+00 257+00 258+00

24"

225' TAPER

11'

12"

27'

16'

24"

24"

+40 27' RT

+86.7 27' RT

+55.7 25.3' RT

225' TAPER

5'

5'

5'

R/W

SLOPE INTERCEPT

TLE

CONCRETE CURB AND GUTTER 30-INCH TYPE A
USH 45, STA. 256+56.67, 45.2' RT
84TH PL, STA. 50+44.84, 38.0' LT

CONCRETE SIDEWALK 5-INCH

CONCRETE SURFACE DRAIN

BEGIN TAPER
STA 256+20, 27' RT

USH 45 R/L

CONCRETE SIDEWALK 5-INCH

SLOPE INTERCEPT

CONCRETE CURB AND GUTTER 30-INCH TYPE A

STA. 254+56.80, USH 45 R/L =
STA. 50+00.00, CTH AH R/L
TYPE B1 INTERSECTION

SEE SDD SIGNING AND MARKING FOR COMBINATION RIGHT TURN AND BYPASS LANE

REMOVE ACCESS

CONCRETE CURB AND GUTTER 30-INCH TYPE A
USH 45, STA. 255+86.65, 47.0' RT
84TH PL, STA. 50+47.34, 32.0' RT

CONC HMA 12" +47 12' RT

+45 18' LT

20' R

84TH PL R/L

R/W

MATCH +38 XXX XXX XXX MATCH +38

51+00

84TH PL

NOTES:

1) SEE GRADES & CURB RAMP DETAILS FOR ELEVATIONS

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	INTERSECTION DETAIL - CTH AH & 84TH PL	SHEET	E

FILE NAME : N:\PDS\C3D\CAD\32000203\021101_ID.DWG
LAYOUT NAME - 021115_ID

PLOT DATE : 4/28/2016 10:45 AM PLOT BY : MAAS, JOSEPH A PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

N

4" SUMP DRAIN DISCHARGE

TLE

PLE

CONCRETE SIDEWALK 5-INCH

SLOPE INTERCEPT

CONCRETE CURB AND GUTTER 30-INCH TYPE A

R/W

150' TAPER

USH 45 R/L

USH 45

225' TAPER

END TAPER +45 16' RT

+83 16' LT

258+00

259+00

260+00

261+00

262+00

263+00

16'

5'

12"

24"

18" CMCP

15" CMCP

12" CMCP

SAN

OH

NOTES:

1) SEE GRADES & CURB RAMP DETAILS FOR ELEVATIONS

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	INTERSECTION DETAIL - USH 45	SHEET 70	E

FILE NAME : N:\PDS\C3D\CAD\32000203\021101_ID.DWG
LAYOUT NAME - 021116_ID

PLOT DATE : 4/28/2016 10:45 AM PLOT BY : MAAS, JOSEPH A PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

2

LEGEND

(4B1) TYPE 4B1 MODIFIED CURB RAMP

(SN) CONCRETE MEDIAN SLOPED NOSE

(6) TYPE 6 CURB RAMP

(7B) TYPE 7B MODIFIED CURB RAMP

N

STA. 263+80.00, USH 45 R/L =
STA. 50+00.00, 84TH ST R/L

SUMP DRAIN CHARGE

PLE

TLE

SLOPE INTERCEPT

USH 45 R/L

R/W

18" CMCP

12"

5'

24"

16'

263+00

264+00

265+00

266+00

267+00

268+00

269+00

CONCRETE CURB AND GUTTER
30-INCH TYPE D

CONCRETE CURB AND GUTTER
30-INCH TYPE A
USH 45, STA. 265+21.66, 56.0' LT

MATCH
78' LT

XXX XXX XXX

MATCH
77' LT

+61.7
56.6' LT

+97.4
77' LT

TLE

PLE

SN

2' R

4'R

6

HMA
CONC

4B1

15"

24"

+21.7
16' LT

+36.7
18.9' LT

+38.6
19.6' LT

+57.4
16' LT

CONCRETE
SIDEWALK
5-INCH

60' R

40' R

24x38"

CONCRETE CURB AND GUTTER
30-INCH TYPE D

CONCRETE CURB AND GUTTER
30-INCH TYPE A
USH 45, STA. 266+57.39, 76.0' LT

CONCRETE SIDEWALK
5-INCH

STA. 268+10.00, USH 45 R/L =
STA. 50+00.00, 83RD ST R/L

6" SUMP DRAIN DISCHARGE

WALL MODULAR
BLOCK MECHANICALLY
STABILIZED EARTH LRFD

USH 45

+59.6
16' RT

+19.6
16' RT

+49.3
16' RT

+25.5
16' RT

7B

89°

25' R

+41.5
15' RT

CONC
HMA

+40.5
15' LT

84TH ST

CONCRETE CURB AND GUTTER
30-INCH TYPE A
USH 45, STA. 264+19.58, 41.0' RT
84TH ST, STA. 50+40.59, 40.0' LT

CONCRETE SURFACE DRAIN

TEMPORARY ACCESS

84TH ST R/L

MATCH
+10

XXX

XXX

MATCH
+10'

15+00

CONCRETE CURB AND GUTTER
30-INCH TYPE A
USH 45, STA. 263+39.59, 41.0' RT
84TH ST, STA. 50+41.42, 40.0' RT

CONCRETE SIDEWALK
5-INCH

CONCRETE CURB AND GUTTER
30-INCH TYPE A

TLE

R/W

DETENTION POND
(SEE CONSTRUCTION
DETAIL)

SLOPE INTERCEPT

50' R

+66
10' RT

CONCRETE CURB AND GUTTER
30-INCH TYPE A
USH 45, STA. 267+49.31, 66.0' RT
83RD ST. STA. 50+66.63, 60.0' RT

STA. 50+45.49, 5' LT
TOP OF PAVEMENT 777.33

CONCRETE SURFACE DRAIN

STA. 50+66.63, 5' LT
TOP OF PAVEMENT 776.99

30' R

+45
20' LT

CONCRETE SURFACE
DRAIN

CONC
HMA

83RD ST

CONCRETE CURB AND GUTTER
30-INCH TYPE A
USH 45, STA. 268+59.52, 46.0' RT
83RD ST, STA. 50+45.48, 50.0' LT

MATCH
+15

MATCH
+15

83RD ST R/L

NOTES:

1) SEE GRADES & CURB RAMP DETAILS FOR ELEVATIONS

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	INTERSECTION DETAIL - 84TH ST & 83RD ST	SHEET	E

FILE NAME : N:\PDS\C3D\CAD\32000203\021101_ID.DWG
LAYOUT NAME - 021117_ID

PLOT DATE : 4/28/2016 10:46 AM PLOT BY : MAAS, JOSEPH A PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

LEGEND

(4B1) TYPE 4B1 MODIFIED CURB RAMP

(7B) TYPE 7B MODIFIED CURB RAMP

N

82ND ST R/L

MATCH XXX XXX
+75

MATCH
+75

49+00

3'

3'

STA. 273+10.00 USH 45 R/L =
STA. 50+00.00 82ND ST R/L

CONCRETE CURB AND GUTTER
30-INCH TYPE A
USH 45, STA. 273+56.40, 46.0' LT
82ND ST, STA. 49+53.02, 45.0' LT

CONCRETE CURB AND GUTTER
30-INCH TYPE A
USH 45, STA. 272+66.37, 46.0' LT
82ND ST, STA. 49+54.96, 45.0' RT

WALL MODULAR
BLOCK MECHANICALLY
STABILIZED EARTH LRFD

SLOPE INTERCEPT

WALL MODULAR
BLOCK MECHANICALLY
STABILIZED EARTH LRFD

TLE

PLE

CONCRETE CURB AND GUTTER
30-INCH TYPE A

CONCRETE SIDEWALK
5-INCH

R/W

5'

5'

12"

+55
15' LT

HMA
CONC

+53
15' RT

12"

24"

4B1

12"

16'

+66.4
16' LT

+56.4
16' LT

24"

12"

269+00

270+00

271+00

272+00

273+00

274+00

275+00

16'

USH 45 R/L

USH 45

+64.4
16' RT

+54.4
16' RT

7B

7B

89°

50+00

4B1

4B1

5'

5'

R/W

TLE

CONCRETE SIDEWALK
5-INCH

30' R

CONC
HMA

+45
15' LT

+47
15' RT

CONCRETE CURB AND GUTTER
30-INCH TYPE A
USH 45, STA. 272+64.38, 46.0' RT
82ND ST, STA. 50+46.98, 45.0' RT

82ND ST

4'

1'

CONCRETE CURB AND GUTTER
30-INCH TYPE A
USH 45, STA. 273+54.41, 46.0' RT
82ND ST, STA. 50+45.04, 45.0' LT

USH 45 R/L

R/W

TLE

SLOPE INTERCEPT

CONCRETE CURB AND GUTTER
30-INCH TYPE D

+87.4
11' RT

MATCH
+00

XXX

51+00

XXX

MATCH
+00

R/W

R/W

82ND ST R/L

NOTES:

1) SEE GRADES & CURB RAMP DETAILS FOR ELEVATIONS

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	INTERSECTION DETAIL - 82ND ST	SHEET 72	E

FILE NAME : N:\PDS\C3D\CAD\32000203\021101_ID.DWG
LAYOUT NAME - 021118_ID

PLOT DATE : 4/28/2016 10:46 AM PLOT BY : MAAS, JOSEPH A PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

LEGEND

4B1 TYPE 4B1 MODIFIED CURB RAMP

7B TYPE 7B MODIFIED CURB RAMP

HIGH SIDE GUTTER

N

CONCRETE SIDEWALK 5-INCH

SLOPE INTERCEPT

CONCRETE CURB AND GUTTER 30-INCH TYPE A

STA. 279+65.00 USH 45 R/L = STA. 50+00.00 80TH ST R/L

TRANSITION FROM CONCRETE CURB AND GUTTER 30-INCH TYPE A TO CONCRETE CURB AND GUTTER 6-INCH SLOPED 36-INCH TYPE A 280+70 - 281+00 LT

PLE

TLE

R/W

USH 45 R/L

USH 45

275+00

276+00

277+00

278+00

279+00

280+00

281+00

+38 16' RT

+14.9 16' RT

+37 15' RT

+49 15' LT

+70.6 10.8' RT

82°

25' R

24"

12"

16'

5'

4.5'

12:4.5

7B

4B1

CONCRETE CURB AND GUTTER 30-INCH TYPE A USH 45, STA. 279+28.02, 41.0' RT 80TH ST, STA. 50+36.90, 40.0' RT

CONCRETE CURB AND GUTTER 6-INCH SLOPED 36-INCH TYPE A USH 45, STA. 280+14.93, 41.0' RT 80TH ST, STA. 50+48.92, 40.0' LT

80TH ST

CONC HMA

MATCH +00

51+00

XXX XXX

80TH ST R/L

FLAG

LIBRARY

NOTES:

1) SEE GRADES & CURB RAMP DETAILS FOR ELEVATIONS

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	INTERSECTION DETAIL - 80TH ST	SHEET 73	E

FILE NAME : N:\PDS\C3D\CAD\32000203\021101_ID.DWG
LAYOUT NAME - 021119_ID

PLOT DATE : 4/28/2016 10:46 AM PLOT BY : MAAS, JOSEPH A PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

2

LEGEND

(4B1) TYPE 4B1 MODIFIED CURB RAMP

N

WETLAND BOUNDARY

R/W

SLOPE INTERCEPT

R/W

CONCRETE SIDEWALK
5-INCH

CONCRETE CURB AND GUTTER
6-INCH SLOPED 36-INCH TYPE A

+84
16' LT

USH 45 R/L

281+00 282+00 283+00 284+00 285+00 286+00 287+00

USH 45

150' TAPER

+89
16' RT

+39
28' RT

R/W

TLE

CONCRETE CURB AND GUTTER
6-INCH SLOPED 36-INCH TYPE A

SLOPE INTERCEPT

PLE

TLE

CONCRETE SIDEWALK
5-INCH

R/W

PLE

WETLAND BOUNDARY

TLE

NOTES:

1) SEE GRADES & CURB RAMP DETAILS FOR ELEVATIONS

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	INTERSECTION DETAIL - USH 45	SHEET 74	E

FILE NAME : N:\PDS\C3D\CAD\32000203\021101_ID.DWG
LAYOUT NAME - 021120_ID

PLOT DATE : 4/28/2016 10:46 AM PLOT BY : MAAS, JOSEPH A PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

LEGEND

4B1 TYPE 4B1 MODIFIED CURB RAMP

7B TYPE 7B MODIFIED CURB RAMP

N

WETLAND BOUNDARY

R/W

SLOPE INTERCEPT

TLE

CONCRETE CURB AND GUTTER
6-INCH SLOPED 36-INCH TYPE A

STA. 289+10.00 USH 45 R/L =
STA. 50+00.00 79TH ST R/L
TYPE B2 INTERSECTION

BYPASS LANE

CONCRETE SIDEWALK
5-INCH

287+00 288+00 289+00 290+00 291+00 292+00 293+00

325' TAPER

+09.4 28' LT

217' TAPER

+59.6 28' LT

USH 45 R/L

USH 45

+79.7 16' LT

183' RIGHT TURN LANE

100' TAPER

+76.7 24.3' RT

+76.7 16' RT

+22 28' RT

60' R

+88 27.5' RT

MATCH +90

27.5'

CONC HMA

30.5'

+63.5 30.5' LT

45' R

MATCH +90

CONCRETE CURB AND GUTTER
6-INCH SLOPED 36-INCH TYPE A
USH 45, STA. 288+21.96, 88.0' RT
79TH ST, STA. 50+88.00, 87.5' RT

CONCRETE CURB AND GUTTER
6-INCH SLOPED 36-INCH TYPE A
USH 45, STA. 289+79.96, 64.1' RT
79TH ST, STA. 50+64.13, 70.5' LT

CONCRETE SIDEWALK
5-INCH

REMOVE ACCESS

SLOPE INTERCEPT

79TH ST

79TH ST R/L

51+00

FIELD MARKED

NOTES:

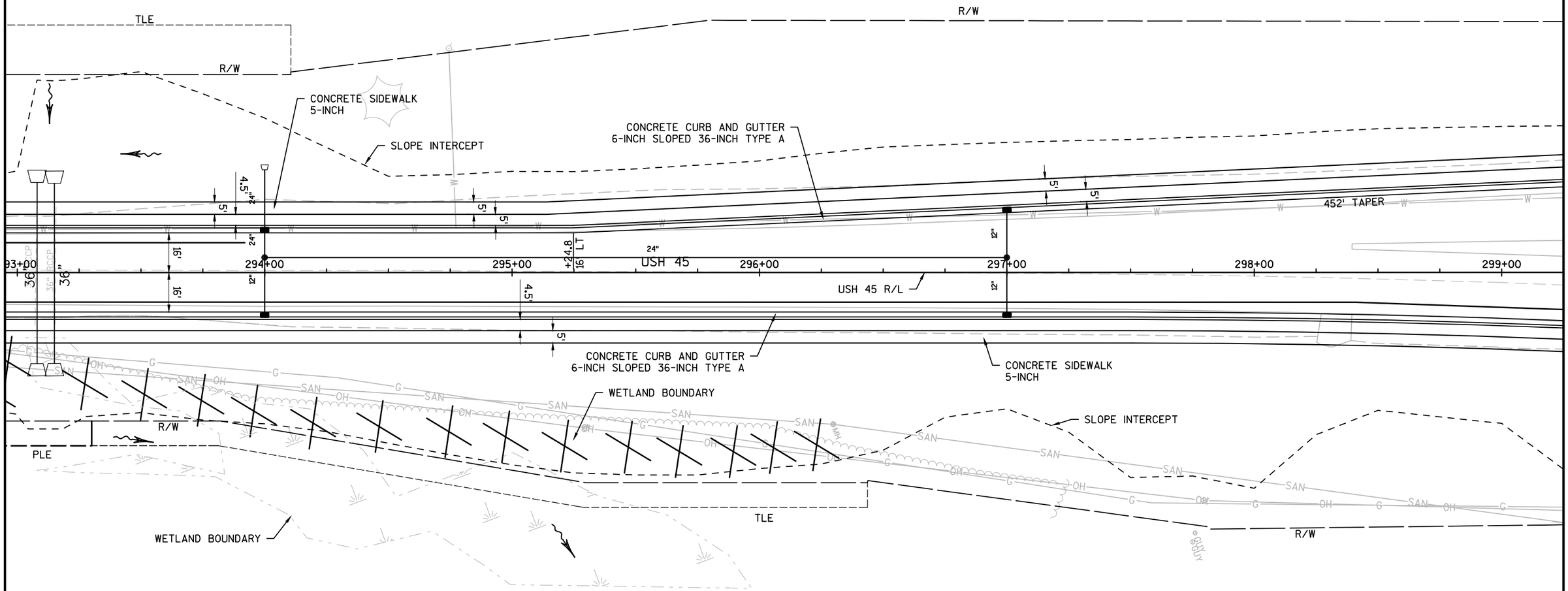
1) SEE GRADES & CURB RAMP DETAILS FOR ELEVATIONS

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	INTERSECTION DETAIL - 79TH ST	SHEET 75	E

FILE NAME : N:\PDS\C3D\CAD\32000203\021101_ID.DWG
LAYOUT NAME - 021121_ID

PLOT DATE : 4/28/2016 10:46 AM PLOT BY : MAAS, JOSEPH A PLOT NAME : PLOT SCALE : 1 IN:40 FT

2



NOTES:

1) SEE GRADES & CURB RAMP DETAILS FOR ELEVATIONS

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	INTERSECTION DETAIL - USH 45	SHEET 76	E

2

LEGEND

SN CONCRETE MEDIAN SLOPED NOSE

N

R/W

SLOPE INTERCEPT

CONCRETE CURB AND GUTTER
6-INCH SLOPED 36-INCH TYPE A

CONCRETE CORRUGATED
MEDIAN

CONCRETE SIDEWALK
5-INCH

5'

5'

12"

12"

USH 45

SN

STA. 300+04.90
8.8' LT

+17.5
13.5' LT

+72.9
40.5' LT

12"

GRASS MEDIAN

297+00

298+00

299+00

300+00

301+00

302+00

USH 45 R/L

12"

CONCRETE SIDEWALK
5-INCH

12"

2"

28'

4.5'

5'

12"

STA. 300+87.24 BK =
STA. 300+82.01 AH

R/W

SLOPE INTERCEPT

R/W

CONCRETE CURB AND GUTTER
6-INCH SLOPED 36-INCH TYPE A

CONCRETE SIDEWALK
5-INCH

NOTES:

1) SEE GRADES & CURB RAMP DETAILS FOR ELEVATIONS

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	INTERSECTION DETAIL - USH 45	SHEET 77	E

FILE NAME : N:\PDS\C3D\CAD\32000203\021101_ID.DWG
LAYOUT NAME - 021123_ID

PLOT DATE : 4/28/2016 10:46 AM PLOT BY : MAAS, JOSEPH A PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

END PROJECT
STA. 302+78

R/W

CONCRETE SIDEWALK
5-INCH

SLOPE INTERCEPT

+65
38.8' LT

+75
MATCH

5'

+84

VAULT

MH

R/W

+65
14.8' LT

XXX

+75
MATCH

+50
51.7' LT

303+00

304+00

USH 45

305+00

306+00

307+00

308+00

+75.3
15.6' RT

+88
MATCH

+20
41.9' RT

TRANSITION FROM CONCRETE CURB AND GUTTER
6-INCH SLOPED 36-INCH TYPE A TO CONCRETE
CURB AND GUTTER 30-INCH TYPE A

5'

+55
43.2' RT

+21

+35
MATCH

REMOVE ACCESS

SLOPE INTERCEPT

CONCRETE CURB AND GUTTER
30-INCH TYPE A

CONCRETE SIDEWALK
5-INCH

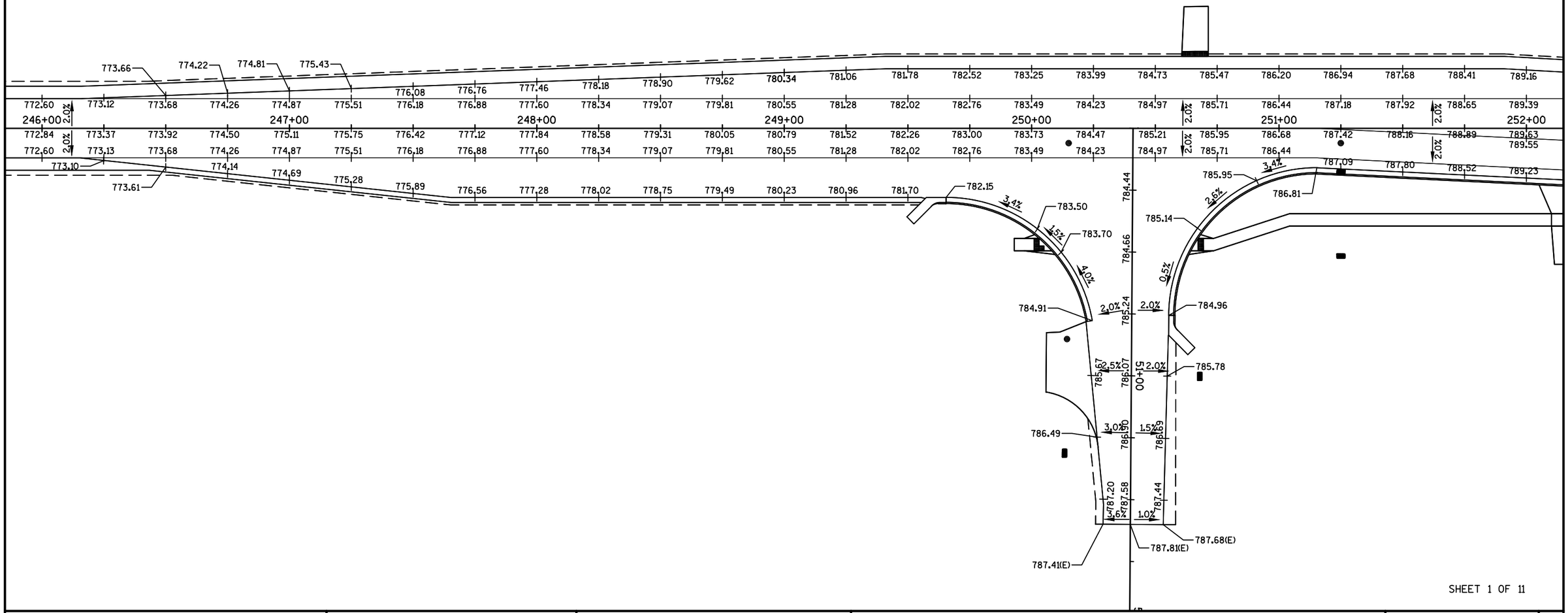
R/W

NOTES:

1) SEE GRADES & CURB RAMP DETAILS FOR ELEVATIONS

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	INTERSECTION DETAIL - USH 45	SHEET 78	E

NOTES:
1. SEE INTERSECTION DETAILS FOR ADDITIONAL INFORMATION
2. SEE CURB RAMP DETAILS FOR CURB RAMP LAYOUT INFORMATION
3. ALL GUTTER WARPING AT INTERSECTIONS SHOWN ON CURB RAMP DETAILS.



SHEET 1 OF 11

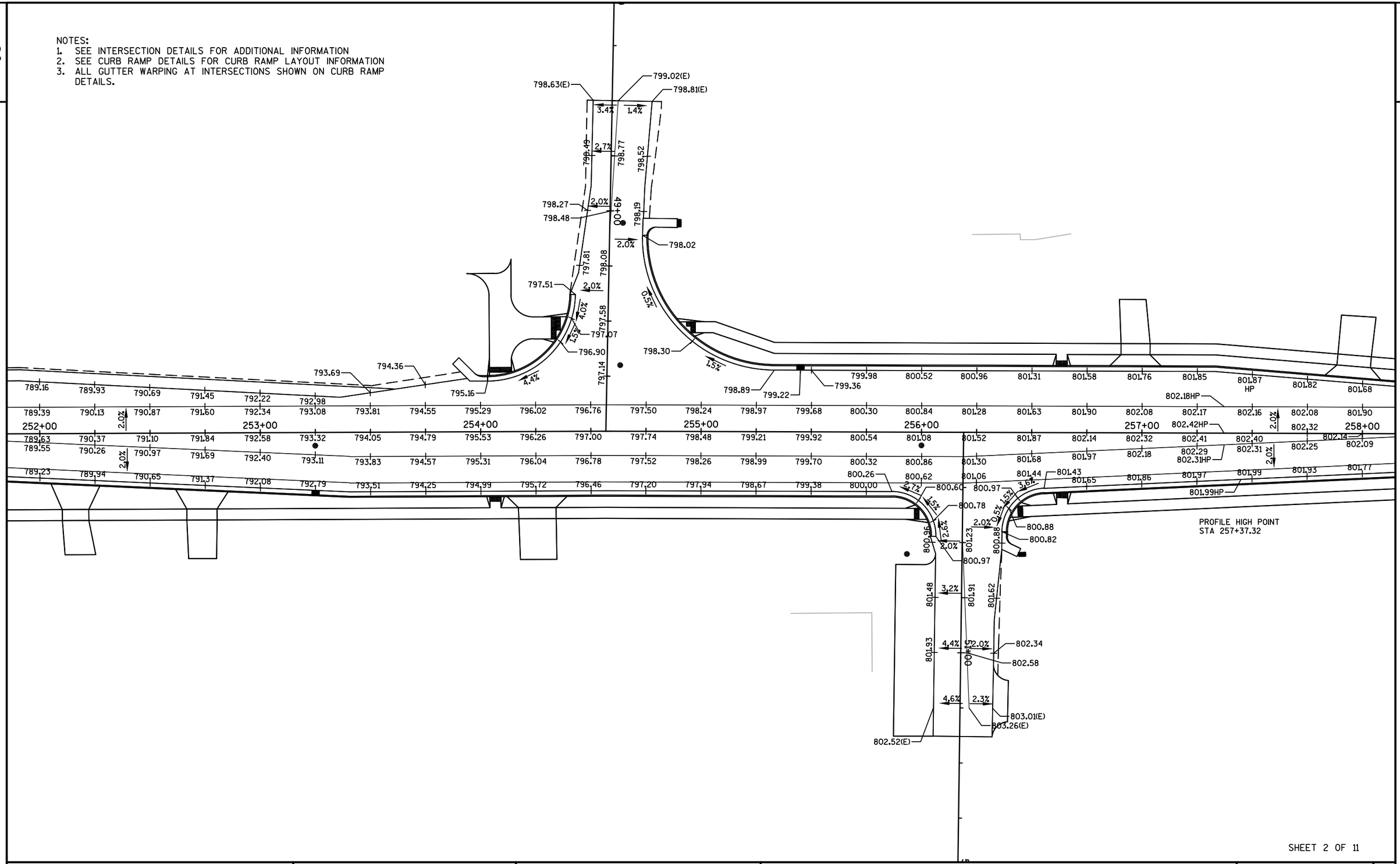
PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	GRADES	SHEET 79	E

FILE NAME : N:\PDS\C3D\CAD\32000203\021150_GR.DWG
LAYOUT NAME - 021163_GR

PLOT DATE : 4/28/2016 11:02 AM PLOT BY : MAAS, JOSEPH A PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

NOTES:
1. SEE INTERSECTION DETAILS FOR ADDITIONAL INFORMATION
2. SEE CURB RAMP DETAILS FOR CURB RAMP LAYOUT INFORMATION
3. ALL GUTTER WARPING AT INTERSECTIONS SHOWN ON CURB RAMP DETAILS.

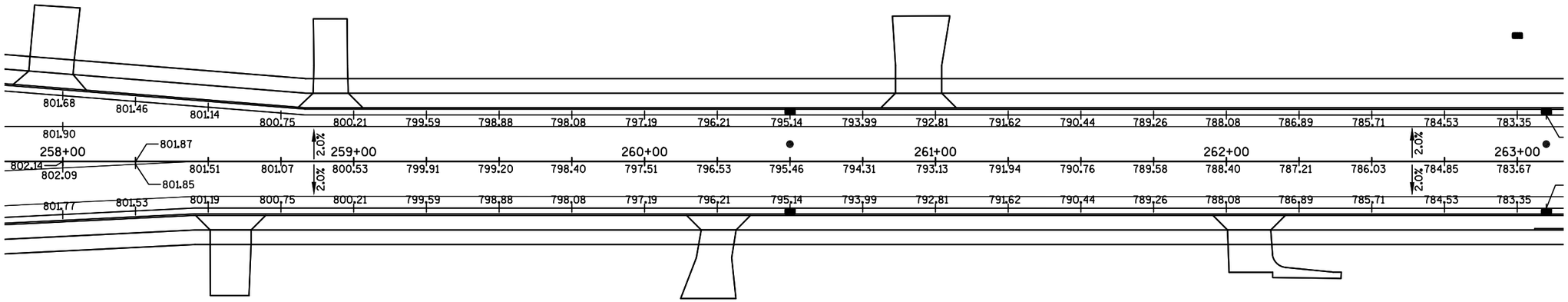


SHEET 2 OF 11

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	GRADES	SHEET 80	E

FILE NAME : N:\PDS\C3D\CAD\32000203\021150_GR.DWG
LAYOUT NAME - 021164_GR
PLOT DATE : 4/28/2016 11:02 AM PLOT BY : MAAS, JOSEPH A PLOT NAME : PLOT SCALE : 1 IN:40 FT

NOTES:
1. SEE INTERSECTION DETAILS FOR ADDITIONAL INFORMATION
2. SEE CURB RAMP DETAILS FOR CURB RAMP LAYOUT INFORMATION
3. ALL GUTTER WARPING AT INTERSECTIONS SHOWN ON CURB RAMP DETAILS.

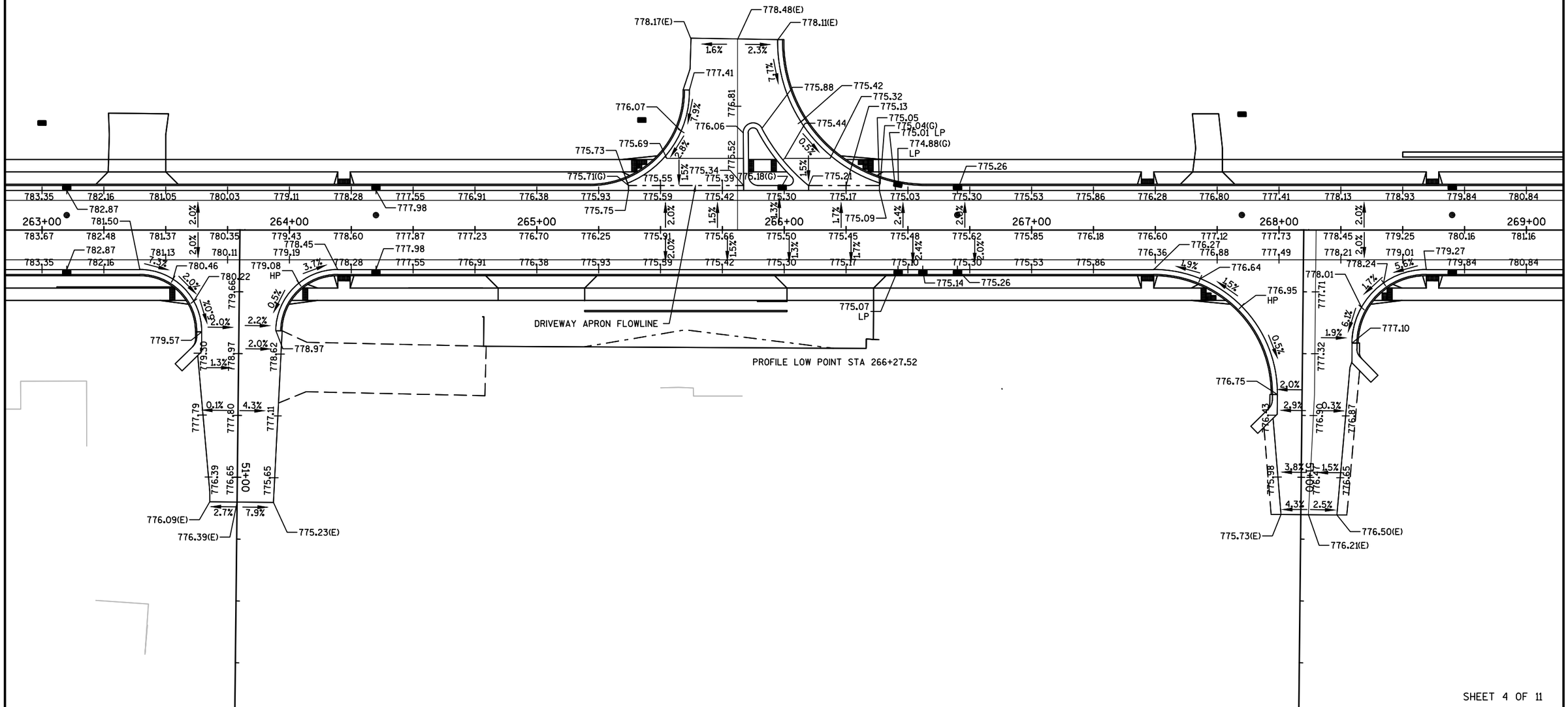


SHEET 3 OF 11

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	GRADES	SHEET 81	E

FILE NAME : N:\PDS\C3D\CAD\32000203\021150_GR.DWG
LAYOUT NAME - 021165_GR
PLOT DATE : 4/28/2016 11:02 AM PLOT BY : MAAS, JOSEPH A PLOT NAME : PLOT SCALE : 1 IN:40 FT

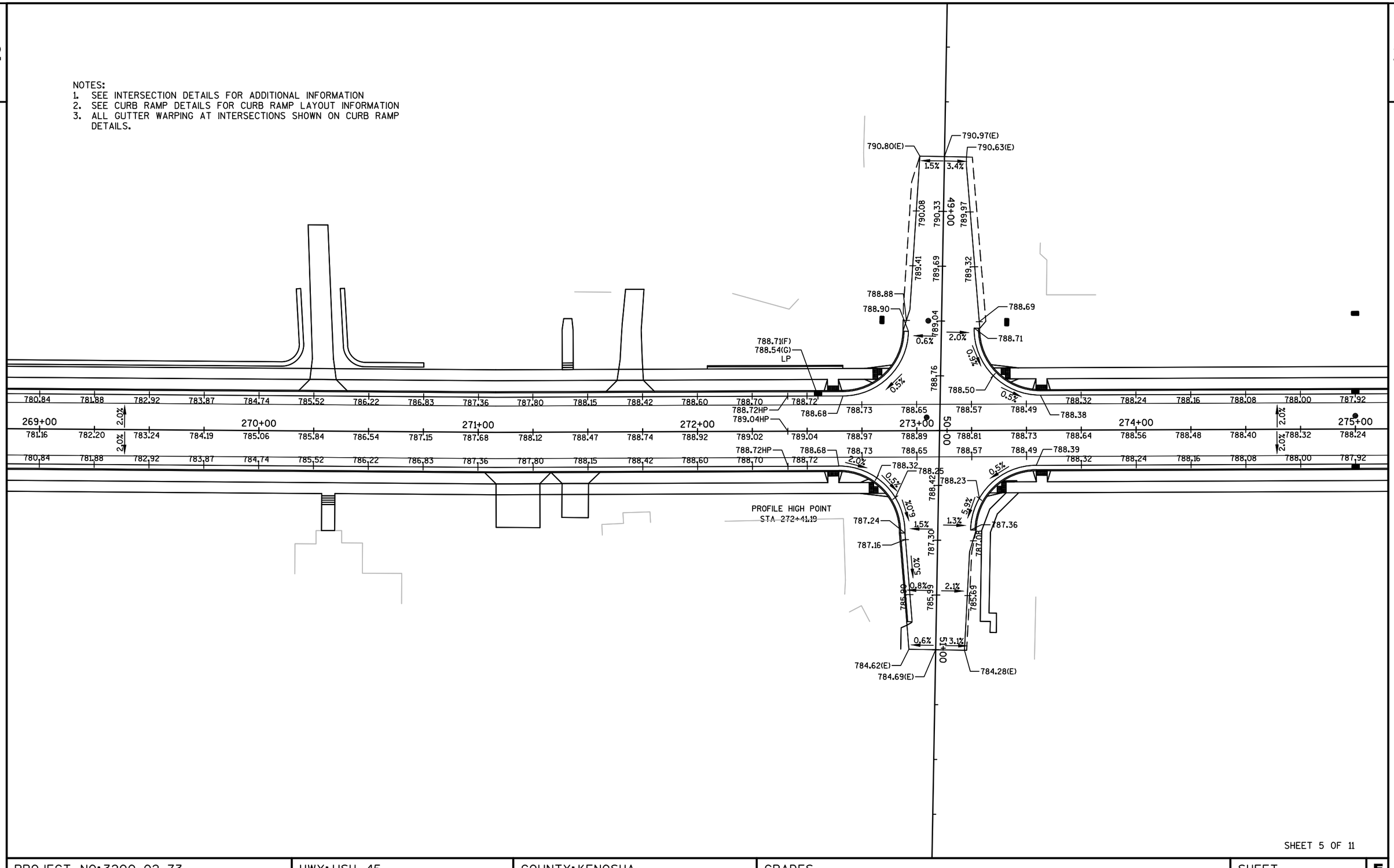
NOTES:
1. SEE INTERSECTION DETAILS FOR ADDITIONAL INFORMATION
2. SEE CURB RAMP DETAILS FOR CURB RAMP LAYOUT INFORMATION
3. ALL GUTTER WARPING AT INTERSECTIONS SHOWN ON CURB RAMP DETAILS.



SHEET 4 OF 11

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	GRADES	SHEET 82	E

NOTES:
1. SEE INTERSECTION DETAILS FOR ADDITIONAL INFORMATION
2. SEE CURB RAMP DETAILS FOR CURB RAMP LAYOUT INFORMATION
3. ALL GUTTER WARPING AT INTERSECTIONS SHOWN ON CURB RAMP DETAILS.



SHEET 5 OF 11

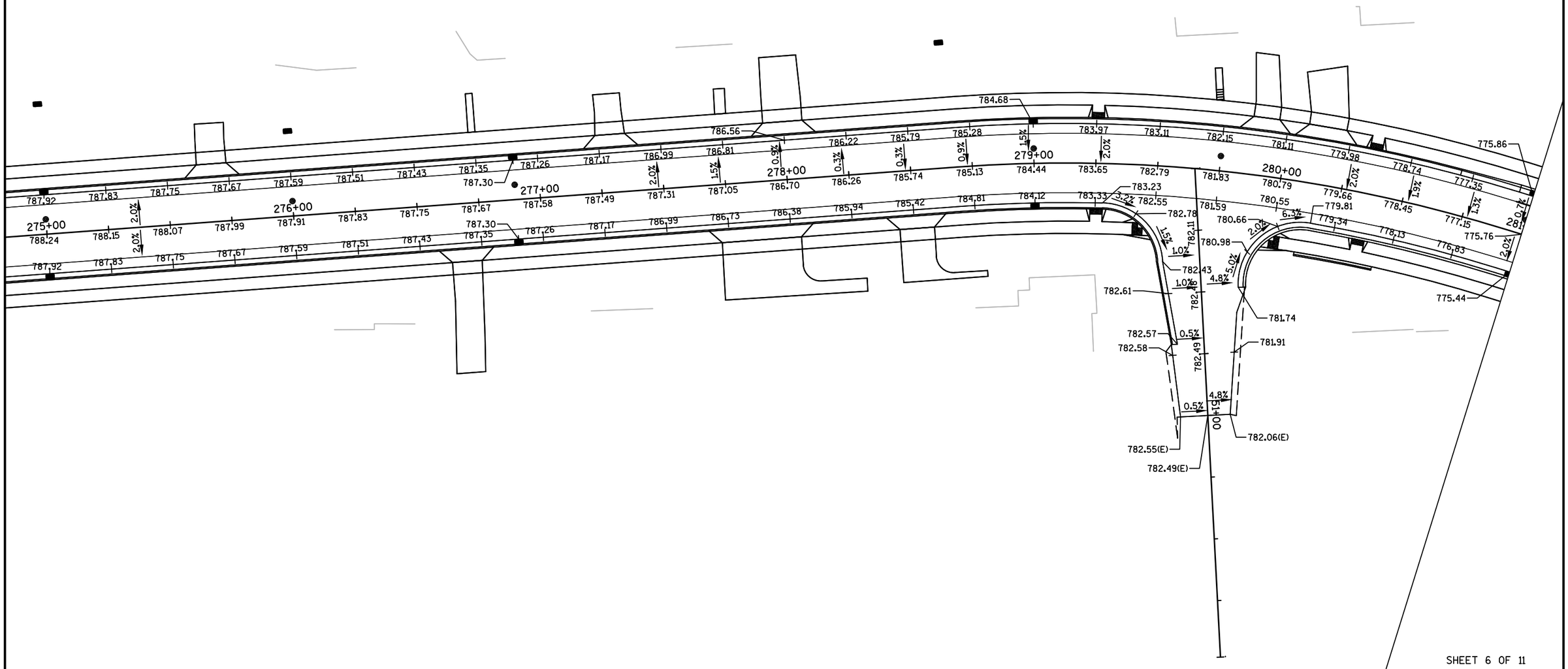
PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	GRADES	SHEET 83	E

FILE NAME : N:\PDS\C3D\CAD\32000203\021150_GR.DWG
LAYOUT NAME - 021167_GR

PLOT DATE : 4/28/2016 11:02 AM PLOT BY : MAAS, JOSEPH A PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

NOTES:
1. SEE INTERSECTION DETAILS FOR ADDITIONAL INFORMATION
2. SEE CURB RAMP DETAILS FOR CURB RAMP LAYOUT INFORMATION
3. ALL GUTTER WARPING AT INTERSECTIONS SHOWN ON CURB RAMP DETAILS.

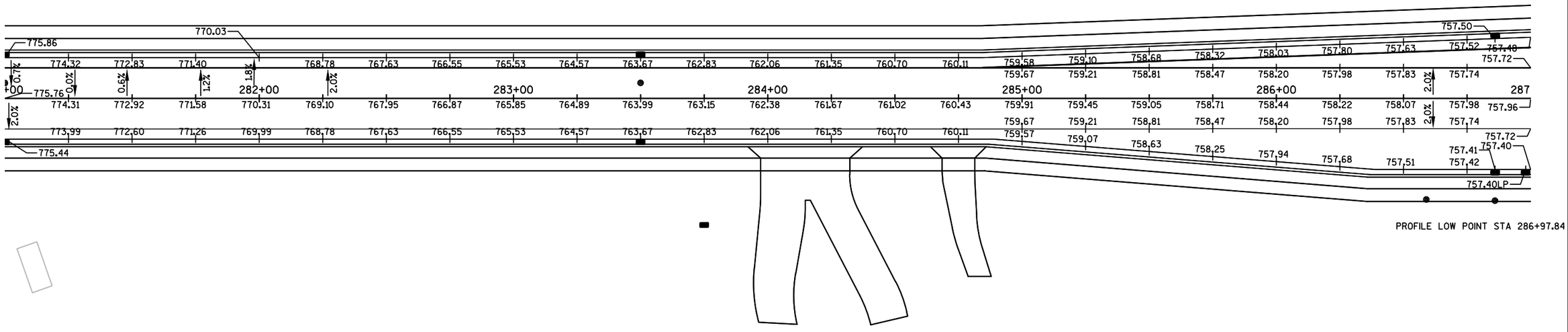


SHEET 6 OF 11

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	GRADES	SHEET 84	E

FILE NAME : N:\PDS\C3D\CAD\32000203\021150_GR.DWG
LAYOUT NAME - 021168_GR
PLOT DATE : 4/28/2016 11:02 AM PLOT BY : MAAS, JOSEPH A PLOT NAME : PLOT SCALE : 1 IN:40 FT

NOTES:
1. SEE INTERSECTION DETAILS FOR ADDITIONAL INFORMATION
2. SEE CURB RAMP DETAILS FOR CURB RAMP LAYOUT INFORMATION
3. ALL GUTTER WARPING AT INTERSECTIONS SHOWN ON CURB RAMP DETAILS.



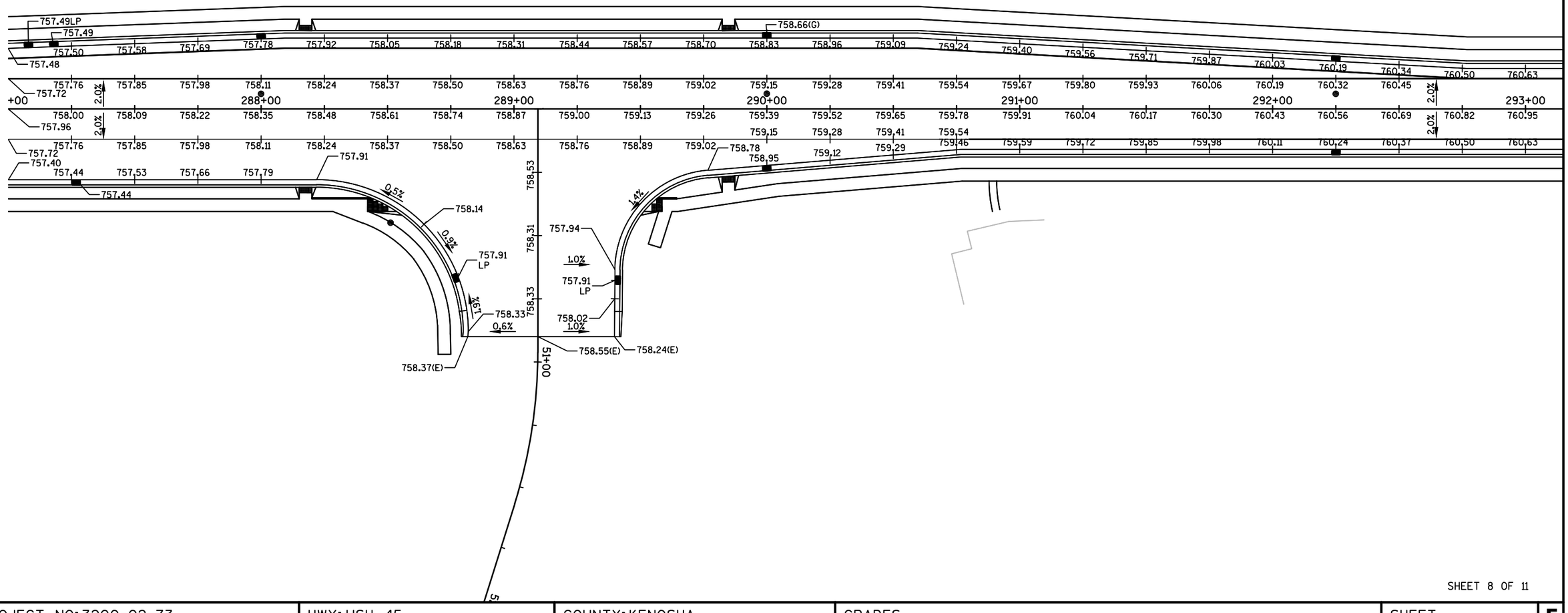
SHEET 7 OF 11

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	GRADES	SHEET 85	E

FILE NAME : N:\PDS\C3D\CAD\32000203\021150_GR.DWG
LAYOUT NAME - 021169_GR
PLOT DATE : 4/28/2016 11:02 AM PLOT BY : MAAS, JOSEPH A PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

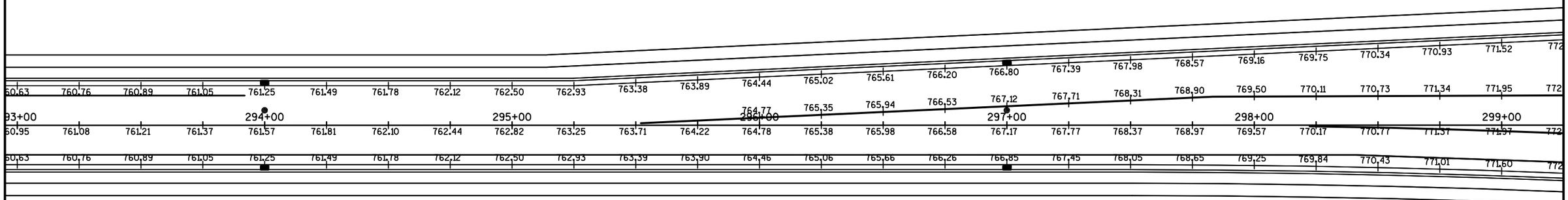
NOTES:
1. SEE INTERSECTION DETAILS FOR ADDITIONAL INFORMATION
2. SEE CURB RAMP DETAILS FOR CURB RAMP LAYOUT INFORMATION
3. ALL GUTTER WARPING AT INTERSECTIONS SHOWN ON CURB RAMP DETAILS.



SHEET 8 OF 11

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	GRADES	SHEET 86	E

2



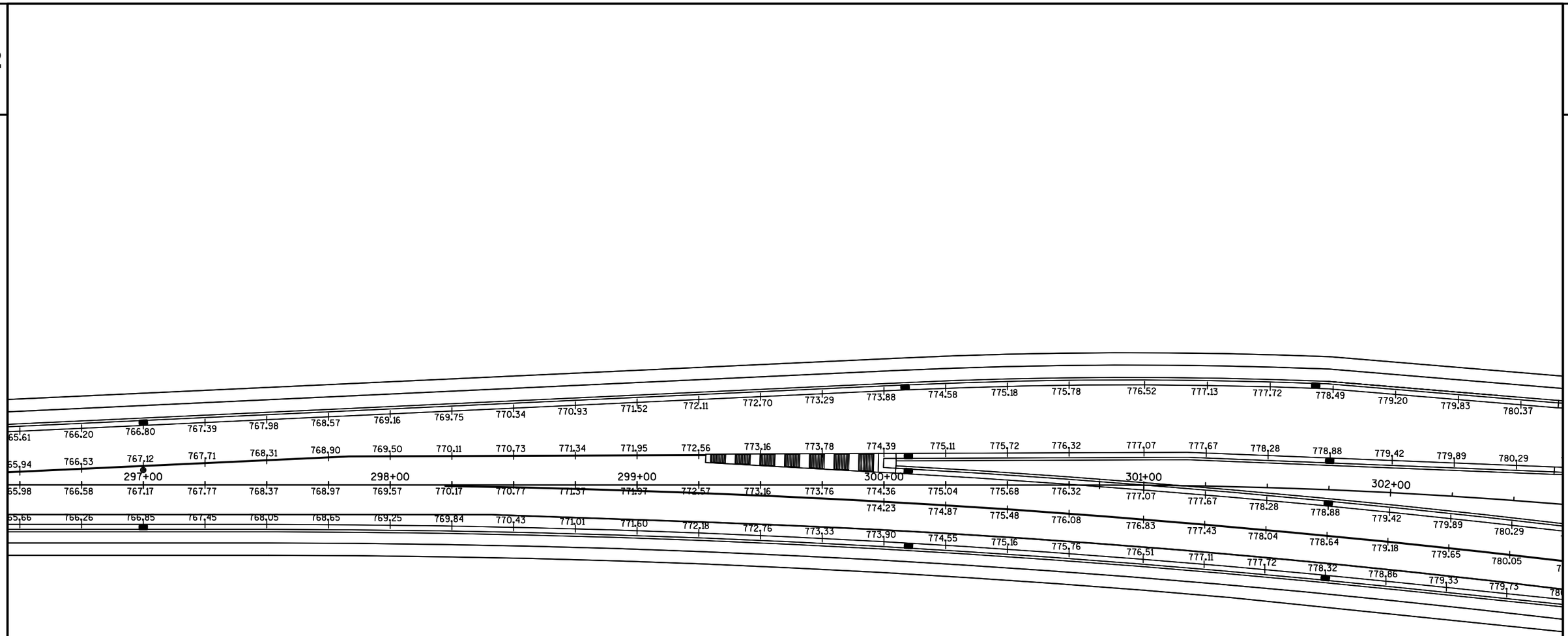
SHEET 9 OF 11

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	GRADES	SHEET 87	E

FILE NAME : N:\PDS\C3D\CAD\32000203\021150_GR.DWG
LAYOUT NAME - 021171_GR

PLOT DATE : 4/28/2016 11:02 AM PLOT BY : MAAS, JOSEPH A PLOT NAME : PLOT SCALE : 1 IN:40 FT

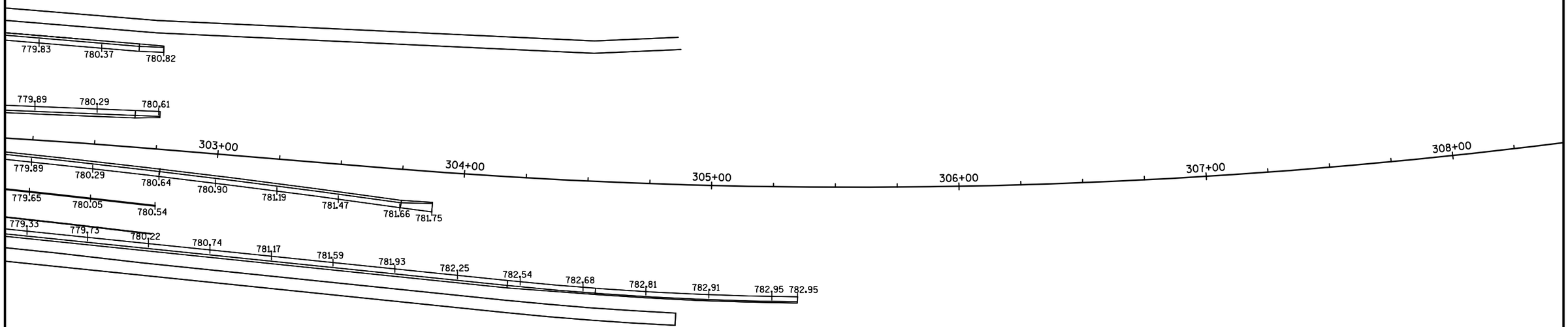
2



SHEET 10 OF 11

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	GRADES	SHEET 88	E

2



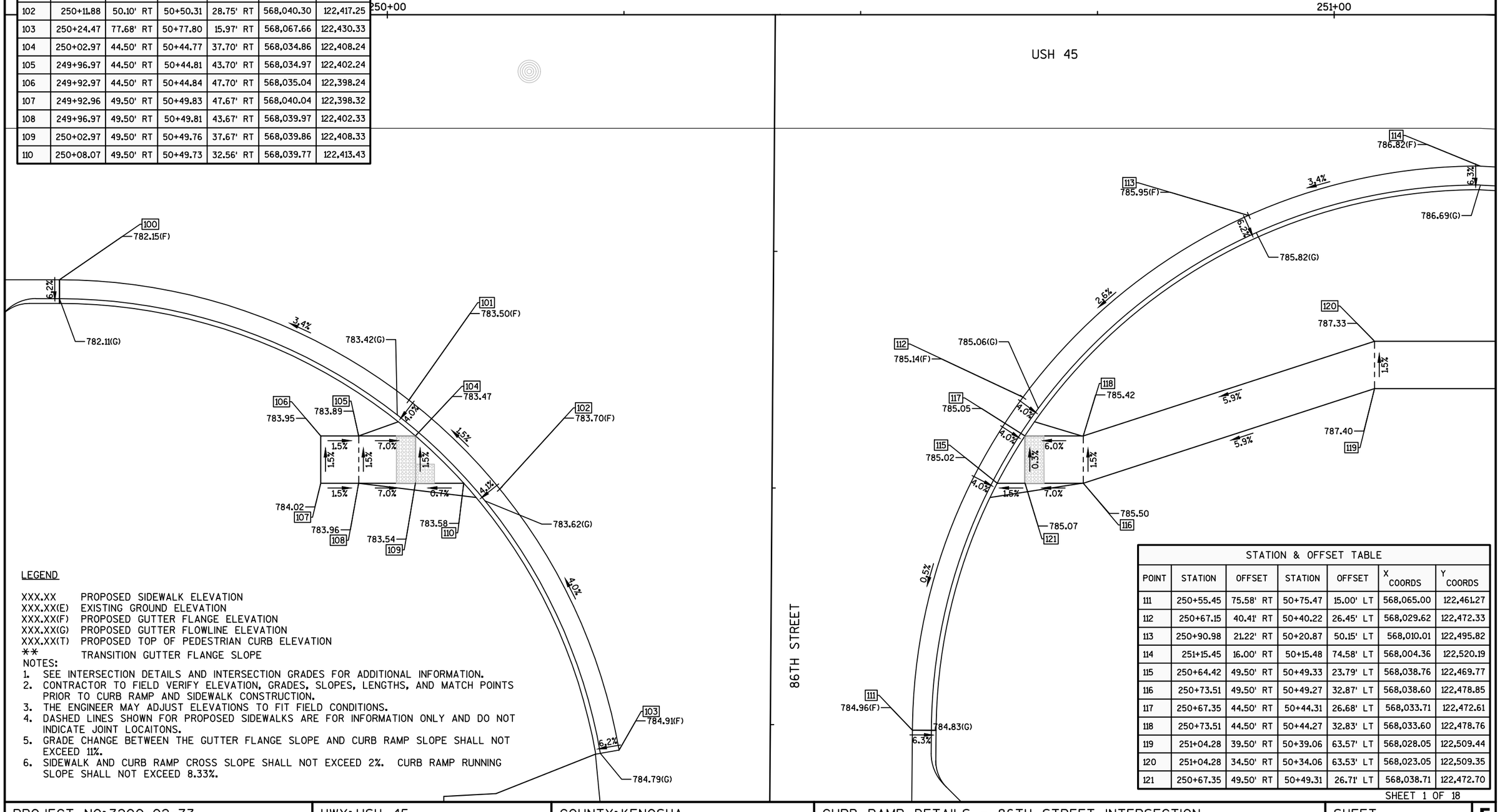
SHEET 11 OF 11

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	GRADES	SHEET 89	E

FILE NAME : N:\PDS\C3D\CAD\32000203\021150_GR.DWG
LAYOUT NAME - 021773_GR

PLOT DATE : 4/28/2016 11:02 AM PLOT BY : MAAS, JOSEPH A PLOT NAME : PLOT SCALE : 1 IN:40 FT

STATION & OFFSET TABLE						
POINT	STATION	OFFSET	STATION	OFFSET	X COORDS	Y COORDS
100	249+65.37	28.00' RT	50+28.53	75.42' RT	568,019.03	122,370.34
101	250+02.29	40.70' RT	50+40.97	38.41' RT	568,031.08	122,407.49
102	250+11.88	50.10' RT	50+50.31	28.75' RT	568,040.30	122,417.25
103	250+24.47	77.68' RT	50+77.80	15.97' RT	568,067.66	122,430.33
104	250+02.97	44.50' RT	50+44.77	37.70' RT	568,034.86	122,408.24
105	249+96.97	44.50' RT	50+44.81	43.70' RT	568,034.97	122,402.24
106	249+92.97	44.50' RT	50+44.84	47.70' RT	568,035.04	122,398.24
107	249+92.96	49.50' RT	50+49.83	47.67' RT	568,040.04	122,398.32
108	249+96.97	49.50' RT	50+49.81	43.67' RT	568,039.97	122,402.33
109	250+02.97	49.50' RT	50+49.76	37.67' RT	568,039.86	122,408.33
110	250+08.07	49.50' RT	50+49.73	32.56' RT	568,039.77	122,413.43



LEGEND

XXX.XX PROPOSED SIDEWALK ELEVATION
XXX.XX(E) EXISTING GROUND ELEVATION
XXX.XX(F) PROPOSED GUTTER FLANGE ELEVATION
XXX.XX(G) PROPOSED GUTTER FLOWLINE ELEVATION
XXX.XX(T) PROPOSED TOP OF PEDESTRIAN CURB ELEVATION
** TRANSITION GUTTER FLANGE SLOPE

NOTES:
1. SEE INTERSECTION DETAILS AND INTERSECTION GRADES FOR ADDITIONAL INFORMATION.
2. CONTRACTOR TO FIELD VERIFY ELEVATION, GRADES, SLOPES, LENGTHS, AND MATCH POINTS PRIOR TO CURB RAMP AND SIDEWALK CONSTRUCTION.
3. THE ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONDITIONS.
4. DASHED LINES SHOWN FOR PROPOSED SIDEWALKS ARE FOR INFORMATION ONLY AND DO NOT INDICATE JOINT LOCAITONS.
5. GRADE CHANGE BETWEEN THE GUTTER FLANGE SLOPE AND CURB RAMP SLOPE SHALL NOT EXCEED 11%.
6. SIDEWALK AND CURB RAMP CROSS SLOPE SHALL NOT EXCEED 2%. CURB RAMP RUNNING SLOPE SHALL NOT EXCEED 8.33%.

STATION & OFFSET TABLE						
POINT	STATION	OFFSET	STATION	OFFSET	X COORDS	Y COORDS
111	250+55.45	75.58' RT	50+75.47	15.00' LT	568,065.00	122,461.27
112	250+67.15	40.41' RT	50+40.22	26.45' LT	568,029.62	122,472.33
113	250+90.98	21.22' RT	50+20.87	50.15' LT	568,010.01	122,495.82
114	251+15.45	16.00' RT	50+15.48	74.58' LT	568,004.36	122,520.19
115	250+64.42	49.50' RT	50+49.33	23.79' LT	568,038.76	122,469.77
116	250+73.51	49.50' RT	50+49.27	32.87' LT	568,038.60	122,478.85
117	250+67.35	44.50' RT	50+44.31	26.68' LT	568,033.71	122,472.61
118	250+73.51	44.50' RT	50+44.27	32.83' LT	568,033.60	122,478.76
119	251+04.28	39.50' RT	50+39.06	63.57' LT	568,028.05	122,509.44
120	251+04.28	34.50' RT	50+34.06	63.53' LT	568,023.05	122,509.35
121	250+67.35	49.50' RT	50+49.31	26.71' LT	568,038.71	122,472.70

SHEET 1 OF 18

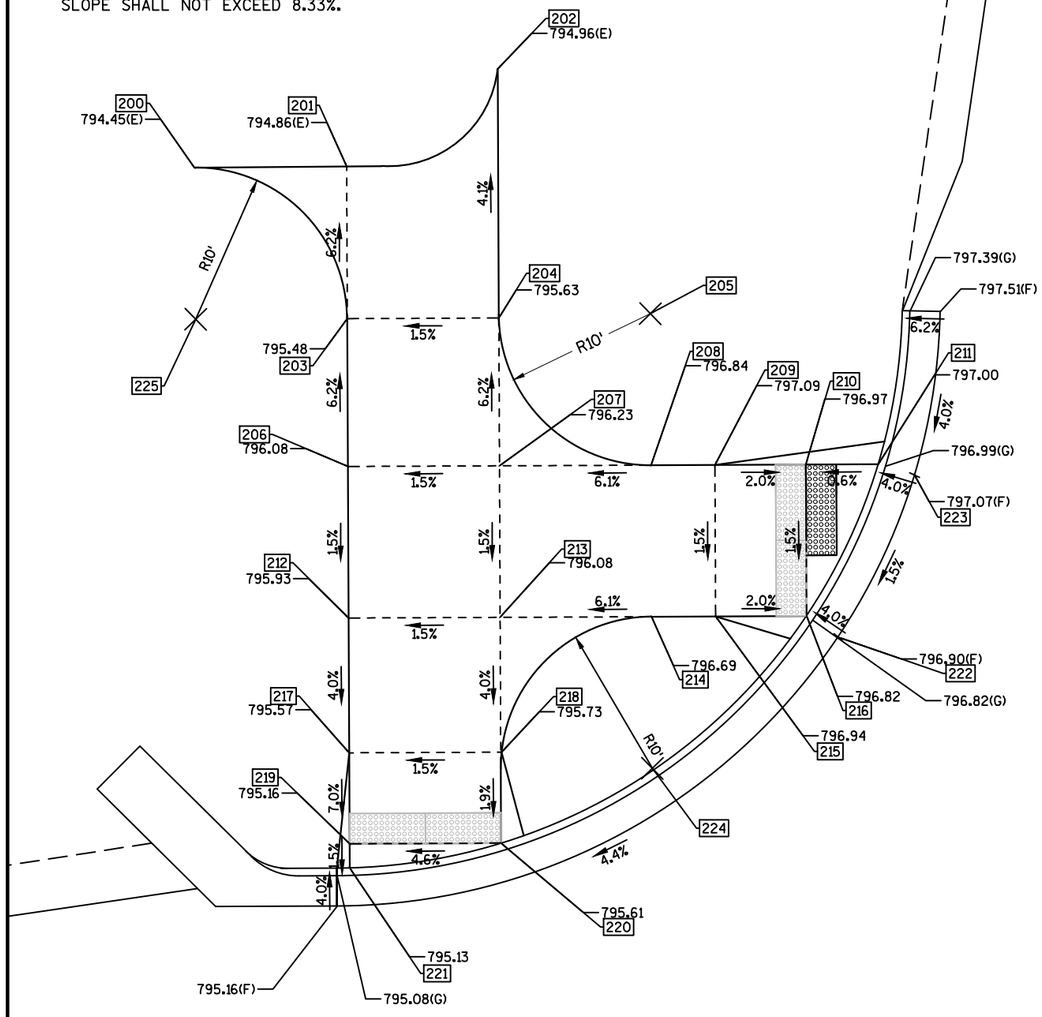
PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CURB RAMP DETAILS - 86TH STREET INTERSECTION	SHEET 90	E

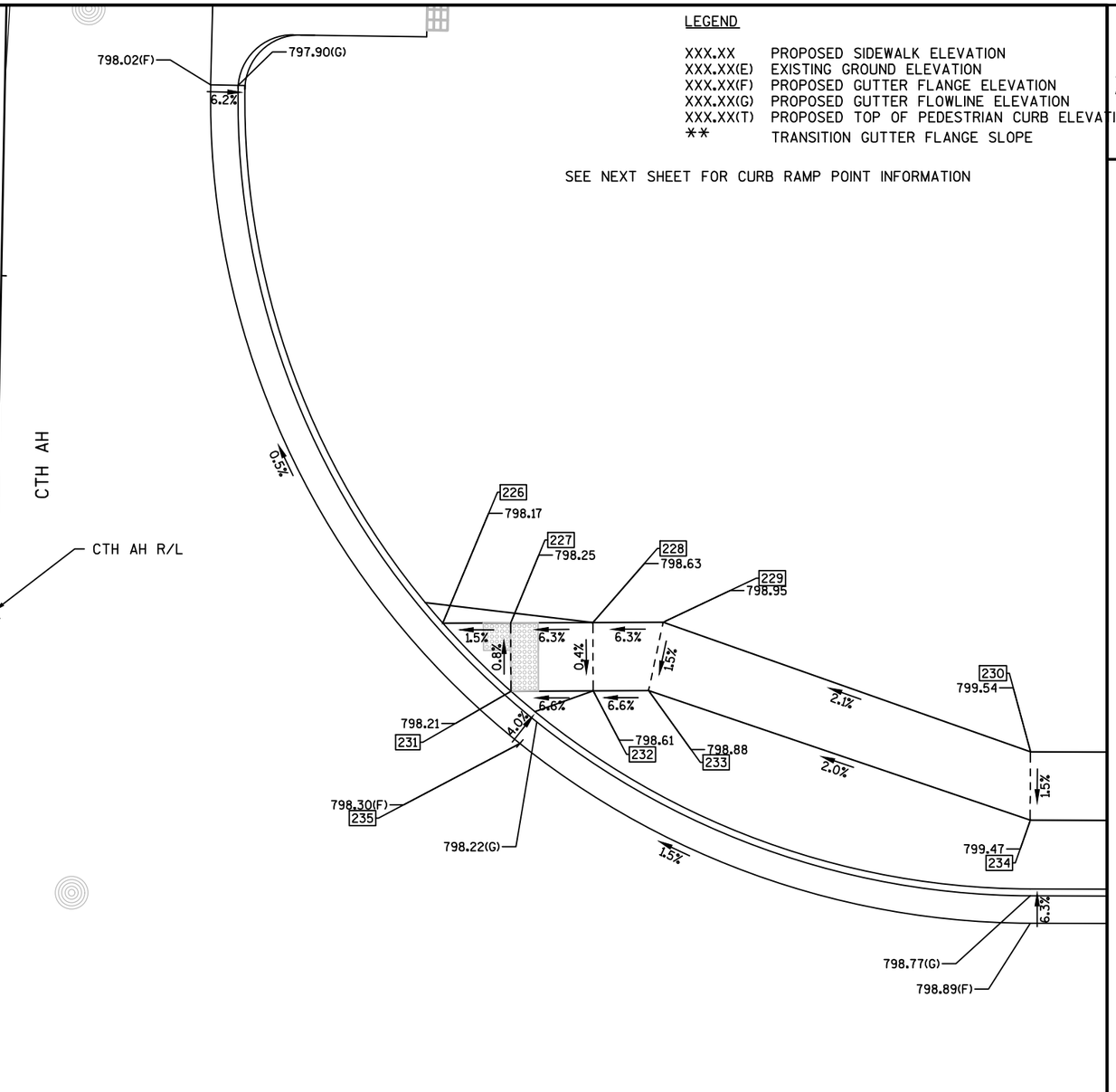
NOTES:
1. SEE INTERSECTION DETAILS AND INTERSECTION GRADES FOR ADDITIONAL INFORMATION.
2. CONTRACTOR TO FIELD VERIFY ELEVATION, GRADES, SLOPES, LENGTHS, AND MATCH POINTS PRIOR TO CURB RAMP AND SIDEWALK CONSTRUCTION.
3. THE ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONDITIONS.
4. DASHED LINES SHOWN FOR PROPOSED SIDEWALKS ARE FOR INFORMATION ONLY AND DO NOT INDICATE JOINT LOCAITONS.
5. GRADE CHANGE BETWEEN THE GUTTER FLANGE SLOPE AND CURB RAMP SLOPE SHALL NOT EXCEED 11%.
6. SIDEWALK AND CURB RAMP CROSS SLOPE SHALL NOT EXCEED 2%. CURB RAMP RUNNING SLOPE SHALL NOT EXCEED 8.33%.

LEGEND

XXX.XX	PROPOSED SIDEWALK ELEVATION
XXX.XX(E)	EXISTING GROUND ELEVATION
XXX.XX(F)	PROPOSED GUTTER FLANGE ELEVATION
XXX.XX(G)	PROPOSED GUTTER FLOWLINE ELEVATION
XXX.XX(T)	PROPOSED TOP OF PEDESTRIAN CURB ELEVATION
**	TRANSITION GUTTER FLANGE SLOPE

SEE NEXT SHEET FOR CURB RAMP POINT INFORMATION





SHEET 2 OF 18

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CURB RAMP GRADES - CTH AH INTERSECTION	SHEET 91 E

2

STATION & OFFSET TABLE						
POINT	STATION	OFFSET	STATION	OFFSET	X COORDS	Y COORDS
200	253+94.06	71.75' LT	49+29.73	64.40' RT	567,911.64	122,797.19
201	254+04.10	71.80' LT	49+29.45	54.36' RT	567,911.42	122,807.23
202	254+14.10	78.19' LT	49+22.83	44.51' RT	567,904.85	122,817.11
203	254+04.10	61.75' LT	49+39.49	54.12' RT	567,921.46	122,807.41
204	254+14.10	61.75' LT	49+39.26	44.12' RT	567,921.28	122,817.41
205	254+24.10	62.00' LT	49+38.78	34.13' RT	567,920.86	122,827.40
206	254+04.10	52.00' LT	49+49.24	53.89' RT	567,931.21	122,807.58
207	254+14.10	52.00' LT	49+49.01	43.90' RT	567,931.04	122,817.58
208	254+24.10	52.00' LT	49+48.78	33.90' RT	567,930.86	122,827.58
209	254+28.32	52.00' LT	49+48.68	29.68' RT	567,930.78	122,831.80
210	254+34.32	52.00' LT	49+48.54	23.68' RT	567,930.68	122,837.80
211	254+39.10	52.00' LT	49+48.43	18.90' RT	567,930.59	122,842.58
212	254+04.10	42.00' LT	49+59.24	53.66' RT	567,941.21	122,807.76
213	254+14.10	42.00' LT	49+59.01	43.66' RT	567,941.03	122,817.76
214	254+24.10	42.00' LT	49+58.77	33.66' RT	567,940.86	122,827.76
215	254+28.32	42.00' LT	49+58.68	29.45' RT	567,940.78	122,831.98
216	254+34.33	42.02' LT	49+58.51	23.44' RT	567,940.65	122,837.98
217	254+04.10	33.10' LT	49+68.13	53.45' RT	567,950.11	122,807.92
218	254+14.16	33.10' LT	49+67.90	43.39' RT	567,949.93	122,817.98
219	254+04.12	27.10' LT	49+74.14	53.29' RT	567,956.11	122,808.05
220	254+14.10	27.10' LT	49+73.90	43.31' RT	567,955.93	122,818.03
221	254+04.10	25.51' LT	49+75.73	53.27' RT	567,957.70	122,808.06
222	254+36.39	40.60' LT	49+59.88	21.35' RT	567,942.04	122,840.07
223	254+41.49	51.27' LT	49+49.10	16.49' RT	567,931.28	122,844.98
224	254+24.10	32.00' LT	49+68.77	33.43' RT	567,950.85	122,827.94
225	253+94.10	61.75' LT	49+39.72	64.12' RT	567,921.64	122,797.41
226	254+90.27	49.75' LT	49+49.72	32.68' LT	567,932.17	122,894.15
227	254+95.23	49.79' LT	49+49.61	37.64' LT	567,932.08	122,899.11
228	255+01.23	49.83' LT	49+49.47	43.64' LT	567,931.97	122,905.11
229	255+06.36	49.87' LT	49+49.35	48.77' LT	567,931.88	122,910.24
230	255+33.19	40.50' LT	49+58.29	75.74' LT	567,940.97	122,937.16
231	254+95.27	44.80' LT	49+54.60	37.76' LT	567,937.07	122,899.21
232	255+01.27	44.84' LT	49+54.46	43.76' LT	567,936.96	122,905.20
233	255+05.31	44.87' LT	49+54.36	47.80' LT	567,936.89	122,909.24
234	255+33.19	35.51' LT	49+63.28	75.82' LT	567,945.96	122,937.22
235	254+95.92	40.99' LT	49+58.39	38.47' LT	567,940.87	122,899.89

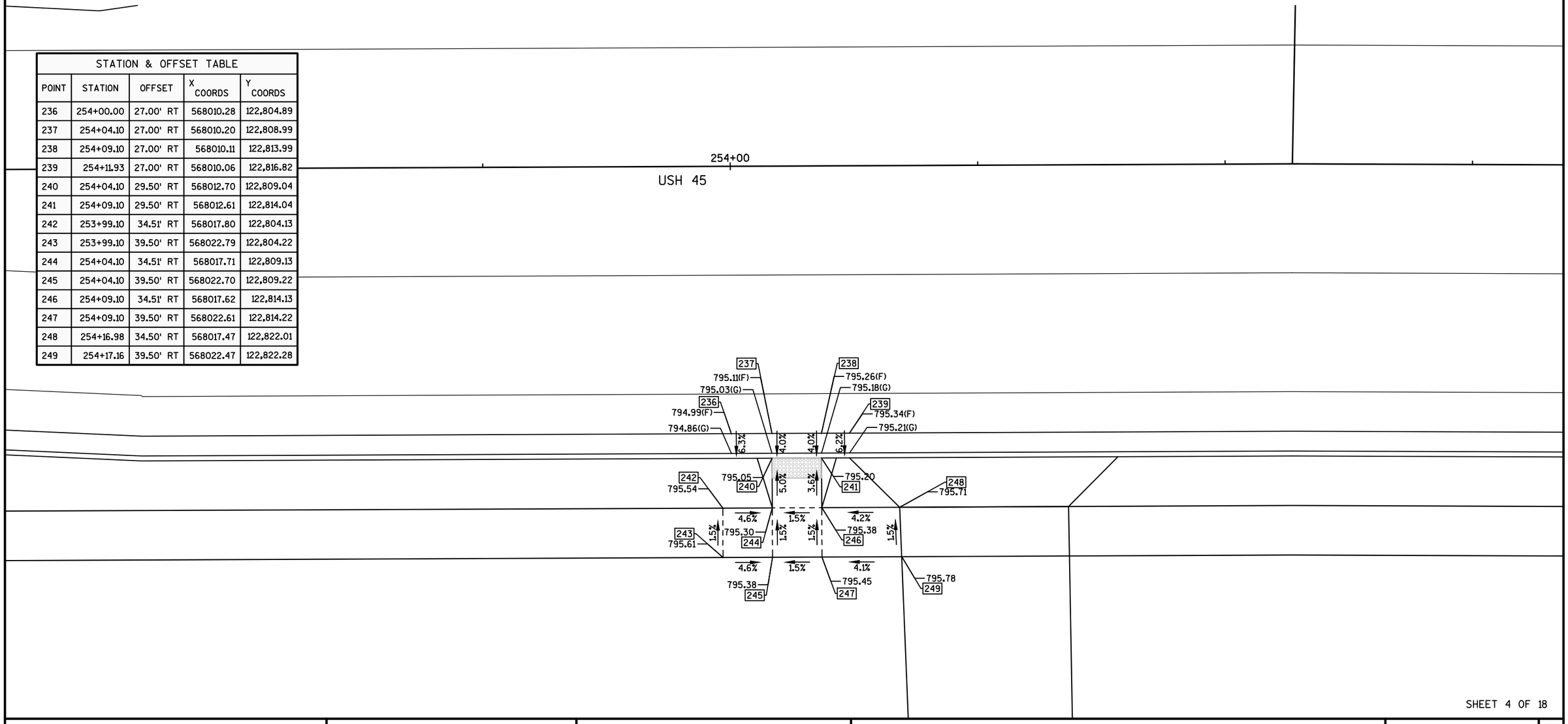
NOTES:
1. SEE INTERSECTION DETAILS AND INTERSECTION GRADES FOR ADDITIONAL INFORMATION.
2. CONTRACTOR TO FIELD VERIFY ELEVATION, GRADES, SLOPES, LENGTHS, AND MATCH POINTS PRIOR TO CURB RAMP AND SIDEWALK CONSTRUCTION.
3. THE ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONDITIONS.
4. DASHED LINES SHOWN FOR PROPOSED SIDEWALKS ARE FOR INFORMATION ONLY AND DO NOT INDICATE JOINT LOCAITONS.
5. GRADE CHANGE BETWEEN THE GUTTER FLANGE SLOPE AND CURB RAMP SLOPE SHALL NOT EXCEED 11%.
6. SIDEWALK AND CURB RAMP CROSS SLOPE SHALL NOT EXCEED 2%. CURB RAMP RUNNING SLOPE SHALL NOT EXCEED 8.33%.

LEGEND

XXX.XX	PROPOSED SIDEWALK ELEVATION
XXX.XX(E)	EXISTING GROUND ELEVATION
XXX.XX(F)	PROPOSED GUTTER FLANGE ELEVATION
XXX.XX(G)	PROPOSED GUTTER FLOWLINE ELEVATION
XXX.XX(T)	PROPOSED TOP OF PEDESTRIAN CURB ELEVATION
**	TRANSITION GUTTER FLANGE SLOPE

SEE NEXT SHEET FOR CURB RAMP POINT INFORMATION

STATION & OFFSET TABLE				
POINT	STATION	OFFSET	X COORDS	Y COORDS
236	254+00.00	27.00' RT	568010.28	122,804.89
237	254+04.10	27.00' RT	568010.20	122,808.99
238	254+09.10	27.00' RT	568010.11	122,813.99
239	254+11.93	27.00' RT	568010.06	122,816.82
240	254+04.10	29.50' RT	568012.70	122,809.04
241	254+09.10	29.50' RT	568012.61	122,814.04
242	253+99.10	34.51' RT	568017.80	122,804.13
243	253+99.10	39.50' RT	568022.79	122,804.22
244	254+04.10	34.51' RT	568017.71	122,809.13
245	254+04.10	39.50' RT	568022.70	122,809.22
246	254+09.10	34.51' RT	568017.62	122,814.13
247	254+09.10	39.50' RT	568022.61	122,814.22
248	254+16.98	34.50' RT	568017.47	122,822.01
249	254+17.16	39.50' RT	568022.47	122,822.28



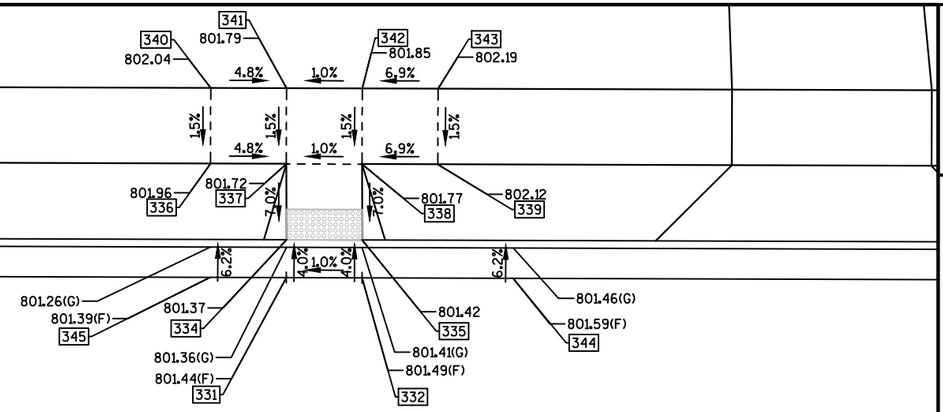
SHEET 4 OF 18

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CURB RAMP GRADES - CTH AH INTERSECTION	SHEET 93 E

STATION & OFFSET TABLE						
POINT	STATION	OFFSET	STATION	OFFSET	X COORDS	Y COORDS
300	255+86.65	39.50' RT	50+39.84	32.08' RT	568,020.41	122,991.45
301	255+92.90	39.50' RT	50+39.77	25.83' RT	568,020.35	122,997.70
302	255+98.90	39.50' RT	50+39.71	19.83' RT	568,020.29	123,003.70
303	256+02.46	39.50' RT	50+39.67	16.27' RT	568,020.25	123,007.26
304	255+86.65	34.51' RT	50+34.84	32.13' RT	568,015.42	122,991.40
305	255+92.90	34.51' RT	50+34.78	25.88' RT	568,015.36	122,997.65
306	255+98.89	34.51' RT	50+34.72	19.88' RT	568,015.30	123,003.65
307	255+98.66	31.01' RT	50+31.22	20.15' RT	568,011.80	123,003.38
308	256+05.44	40.15' RT	50+40.29	13.28' RT	568,020.86	123,010.25

STATION & OFFSET TABLE						
POINT	STATION	OFFSET	STATION	OFFSET	X COORDS	Y COORDS
309	256+40.51	38.52' RT	50+38.29	21.77' LT	568,018.87	123,045.30
310	256+44.07	38.34' RT	50+38.08	25.33' LT	568,018.66	123,048.86
311	256+43.83	33.36' RT	50+33.10	25.03' LT	568,013.68	123,048.56
312	256+49.82	33.07' RT	50+32.75	31.02' LT	568,013.32	123,054.55
313	256+50.06	38.05' RT	50+37.73	31.32' LT	568,018.31	123,054.85
314	256+55.06	37.81' RT	50+37.43	36.31' LT	568,018.01	123,059.84
315	256+54.81	32.82' RT	50+32.45	36.02' LT	568,013.03	123,059.54
316	256+61.43	32.49' RT	50+32.05	42.63' LT	568,012.63	123,066.16
317	256+61.67	37.48' RT	50+37.04	42.92' LT	568,017.62	123,066.45
318	256+66.67	37.24' RT	50+36.74	47.92' LT	568,017.32	123,071.45
319	256+66.43	32.25' RT	50+31.76	47.62' LT	568,012.34	123,071.15
320	256+61.40	27.48' RT	50+27.04	42.54' LT	568,007.62	123,066.07
321	256+66.39	27.49' RT	50+27.00	47.53' LT	568,007.57	123,071.06
322	256+66.39	27.24' RT	50+26.75	47.54' LT	568,007.33	123,071.07
323	256+74.39	24.35' RT	50+23.77	55.50' LT	568,004.35	123,079.03
324	256+61.27	24.99' RT	50+24.55	42.39' LT	568,005.13	123,065.92
325	256+66.27	24.74' RT	50+24.25	47.39' LT	568,004.83	123,070.92
327	256+43.89	29.85' RT	50+29.60	25.06' LT	568,010.17	123,048.59
328	256+39.81	34.48' RT	50+34.26	21.03' LT	568,014.84	123,044.56
329	256+74.76	31.85' RT	50+31.27	55.95' LT	568,011.85	123,079.48
330	256+75.00	36.84' RT	50+36.25	56.24' LT	568,016.83	123,079.77

STATION & OFFSET TABLE					
POINT	STATION	OFFSET	X COORDS	Y COORDS	
331	256+61.01	28.00' LT	567952.15	123,065.11	
332	256+66.00	28.00' LT	567952.09	123,070.10	
334	256+61.01	30.50' LT	567949.65	123,065.08	
335	256+66.00	30.50' LT	567949.60	123,070.07	
336	256+55.98	35.50' LT	567944.70	123,060.00	
337	256+60.98	35.50' LT	567944.65	123,065.00	
338	256+65.98	35.50' LT	567944.59	123,070.00	
339	256+70.98	35.50' LT	567944.54	123,075.00	
340	256+55.98	40.50' LT	567939.70	123,059.94	
341	256+60.98	40.50' LT	567939.65	123,064.94	
342	256+65.98	40.50' LT	567939.59	123,069.94	
343	256+70.98	40.50' LT	567939.54	123,074.94	
344	256+75.98	28.00' LT	567951.99	123,080.07	
345	256+55.98	28.00' LT	567952.20	123,060.07	



USH 45

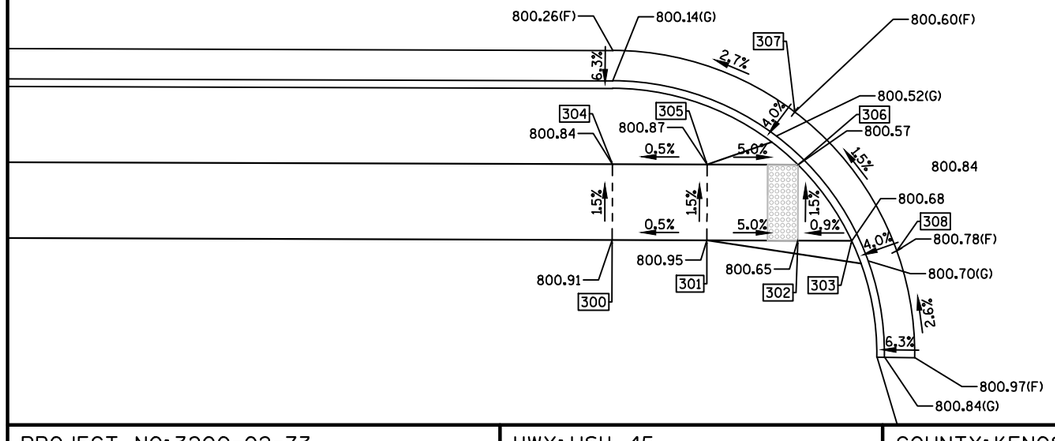
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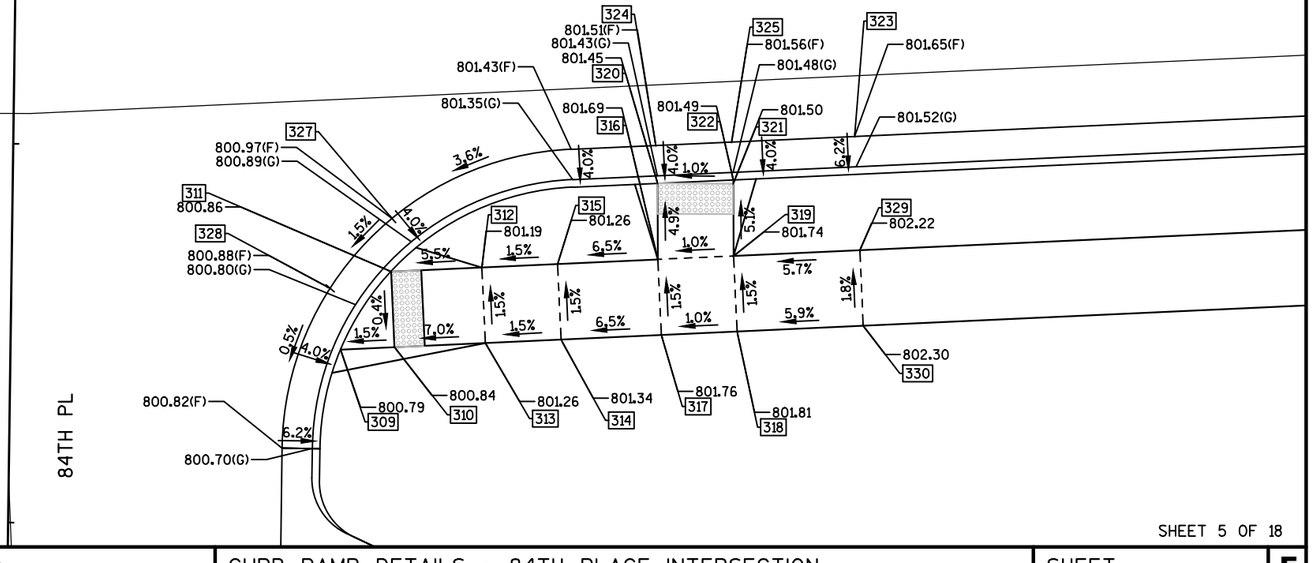
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NOTES:
1. SEE INTERSECTION DETAILS AND INTERSECTION GRADES FOR ADDITIONAL INFORMATION.
2. CONTRACTOR TO FIELD VERIFY ELEVATION, GRADES, SLOPES, LENGTHS, AND MATCH POINTS PRIOR TO CURB RAMP AND SIDEWALK CONSTRUCTION.
3. THE ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONDITIONS.
4. DASHED LINES SHOWN FOR PROPOSED SIDEWALKS ARE FOR INFORMATION ONLY AND DO NOT INDICATE JOINT LOCAITONS.
5. GRADE CHANGE BETWEEN THE GUTTER FLANGE SLOPE AND CURB RAMP SLOPE SHALL NOT EXCEED 11%.
6. SIDEWALK AND CURB RAMP CROSS SLOPE SHALL NOT EXCEED 2%. CURB RAMP RUNNING SLOPE SHALL NOT EXCEED 8.33%.

LEGEND

XXX.XX PROPOSED SIDEWALK ELEVATION
XXX.XX(E) EXISTING GROUND ELEVATION
XXX.XX(F) PROPOSED GUTTER FLANGE ELEVATION
XXX.XX(G) PROPOSED GUTTER FLOWLINE ELEVATION
XXX.XX(T) PROPOSED TOP OF PEDESTRIAN CURB ELEVATION
** TRANSITION GUTTER FLANGE SLOPE





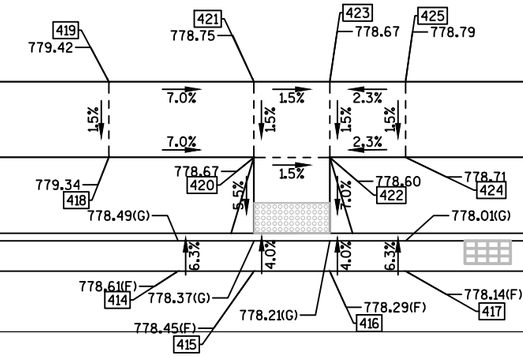
SHEET 5 OF 18

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CURB RAMP DETAILS - 84TH PLACE INTERSECTION	SHEET 94	E

STATION & OFFSET TABLE						
POINT	STATION	OFFSET	STATION	OFFSET	X COORDS	Y COORDS
400	263+98.79	27.11' RT	50+26.91	19.07' LT	567,999.59	123,803.43
401	264+03.86	21.56' RT	50+21.31	24.08' LT	567,993.98	123,808.43
402	264+24.58	16.00' RT	50+15.54	44.74' LT	567,988.21	123,829.10
403	264+29.59	16.00' RT	50+15.48	49.75' LT	567,988.15	123,834.11
404	264+05.44	28.50' RT	50+28.23	25.73' LT	568,000.91	123,810.08
405	264+05.44	23.51' RT	50+23.24	25.68' LT	567,995.92	123,810.03
406	264+11.44	28.50' RT	50+28.17	31.73' LT	568,000.84	123,816.08
407	264+11.44	23.51' RT	50+23.18	31.68' LT	567,995.85	123,816.03
408	264+19.58	28.50' RT	50+28.09	39.87' LT	568,000.76	123,824.23
409	264+19.58	23.50' RT	50+23.09	39.82' LT	567,995.76	123,824.17
410	264+24.58	28.50' RT	50+28.04	44.87' LT	568,000.71	123,829.23
411	264+24.58	23.51' RT	50+23.05	44.82' LT	567,995.72	123,829.17
412	264+29.58	28.50' RT	50+27.98	49.87' LT	568,000.65	123,834.23
413	264+29.58	23.51' RT	50+22.99	49.82' LT	567,995.66	123,834.17

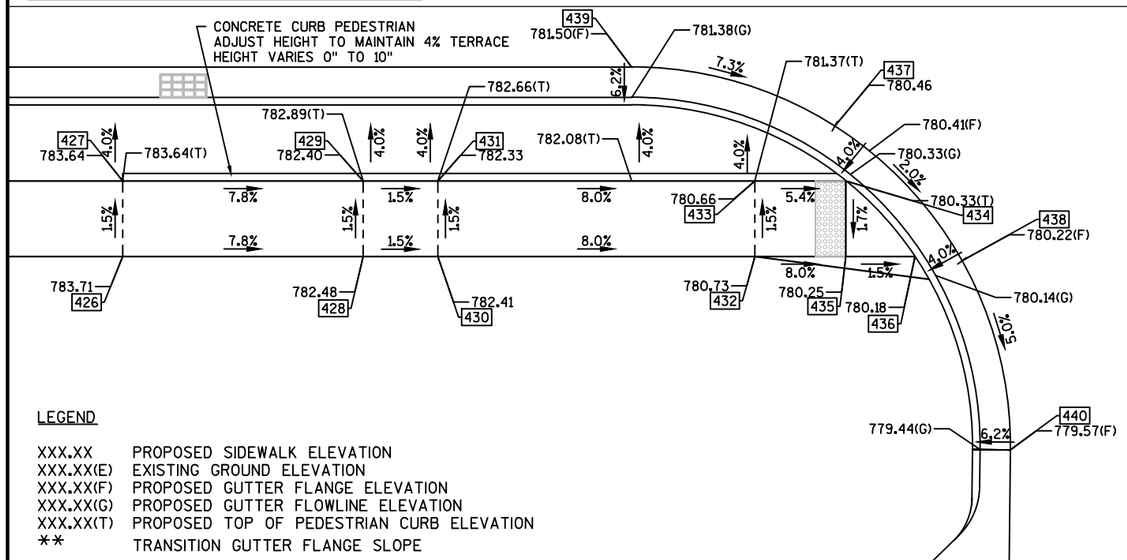
STATION & OFFSET TABLE						
POINT	STATION	OFFSET	STATION	OFFSET	X COORDS	Y COORDS
426	263+06.00	28.50' RT	50+29.27	73.70' RT	568,001.94	123,710.65
427	263+06.00	23.51' RT	50+24.28	73.76' RT	567,996.95	123,710.60
428	263+21.87	28.51' RT	50+29.11	57.83' RT	568,001.78	123,726.52
429	263+21.87	23.51' RT	50+24.11	57.89' RT	567,996.78	123,726.47
430	263+26.80	28.51' RT	50+29.06	52.91' RT	568,001.73	123,731.45
431	263+26.80	23.51' RT	50+24.06	52.96' RT	567,996.73	123,731.39
432	263+47.72	28.50' RT	50+28.83	31.99' RT	568,001.50	123,752.37
433	263+47.72	23.51' RT	50+23.84	32.04' RT	567,996.52	123,752.32
434	263+53.72	23.51' RT	50+23.78	26.04' RT	567,996.45	123,758.32
435	263+53.72	28.50' RT	50+28.77	25.99' RT	568,001.44	123,758.37
436	263+58.28	28.50' RT	50+28.72	21.42' RT	568,001.40	123,762.93
437	263+52.98	19.90' RT	50+20.18	26.81' RT	567,992.85	123,757.54
438	263+61.39	28.78' RT	50+28.97	18.32' RT	568,001.64	123,766.04
439	263+39.58	16.00' RT	50+16.42	40.26' RT	567,989.09	123,744.10
440	263+64.58	41.26' RT	50+41.42	15.00' RT	568,014.09	123,769.36

STATION & OFFSET TABLE				
POINT	STATION	OFFSET	X COORDS	Y COORDS
414	264+14.58	16.00' LT	567956.31	123,818.76
415	264+19.59	16.00' LT	567956.26	123,823.77
416	264+24.58	16.00' LT	567956.21	123,828.76
417	264+29.59	16.00' LT	567956.16	123,833.78
418	264+10.00	23.51' LT	567948.85	123,814.10
419	264+10.00	28.50' LT	567943.86	123,814.05
420	264+19.58	23.50' LT	567948.76	123,823.69
421	264+19.58	28.50' LT	567943.76	123,823.63
422	264+24.58	23.50' LT	567948.71	123,828.69
423	264+24.58	28.50' LT	567943.71	123,828.63
424	264+29.59	23.51' LT	567948.65	123,833.70
425	264+29.58	28.50' LT	567943.66	123,833.63



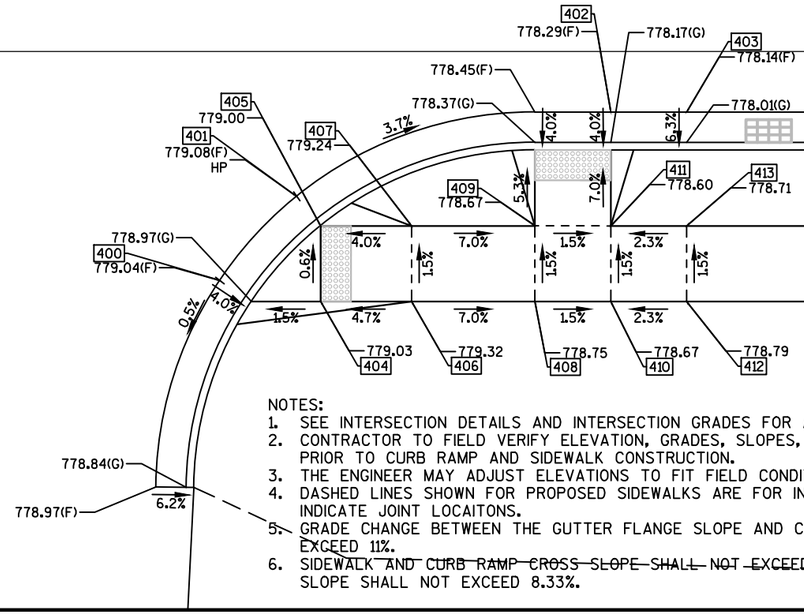
USH 45

263 264+00



LEGEND

XXX.XX PROPOSED SIDEWALK ELEVATION
XXX.XX(E) EXISTING GROUND ELEVATION
XXX.XX(F) PROPOSED GUTTER FLANGE ELEVATION
XXX.XX(G) PROPOSED GUTTER FLOWLINE ELEVATION
XXX.XX(T) PROPOSED TOP OF PEDESTRIAN CURB ELEVATION
** TRANSITION GUTTER FLANGE SLOPE



NOTES:
1. SEE INTERSECTION DETAILS AND INTERSECTION GRADES FOR ADDITIONAL INFORMATION.
2. CONTRACTOR TO FIELD VERIFY ELEVATION, GRADES, SLOPES, LENGTHS, AND MATCH POINTS PRIOR TO CURB RAMP AND SIDEWALK CONSTRUCTION.
3. THE ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONDITIONS.
4. DASHED LINES SHOWN FOR PROPOSED SIDEWALKS ARE FOR INFORMATION ONLY AND DO NOT INDICATE JOINT LOCAITONS.
5. GRADE CHANGE BETWEEN THE GUTTER FLANGE SLOPE AND CURB RAMP SLOPE SHALL NOT EXCEED 11%.
6. ~~SIDEWALK AND CURB RAMP CROSS SLOPE SHALL NOT EXCEED 2%.~~ CURB RAMP RUNNING SLOPE SHALL NOT EXCEED 8.33%.

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CURB RAMP DETAILS - 84TH STREET INTERSECTION	SHEET 95 E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\021160_GR.DWG
LAYOUT NAME - 021117_ID
PLOT DATE : 4/28/2016 11:06 AM PLOT BY : MAAS, JOSEPH A PLOT NAME : PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42

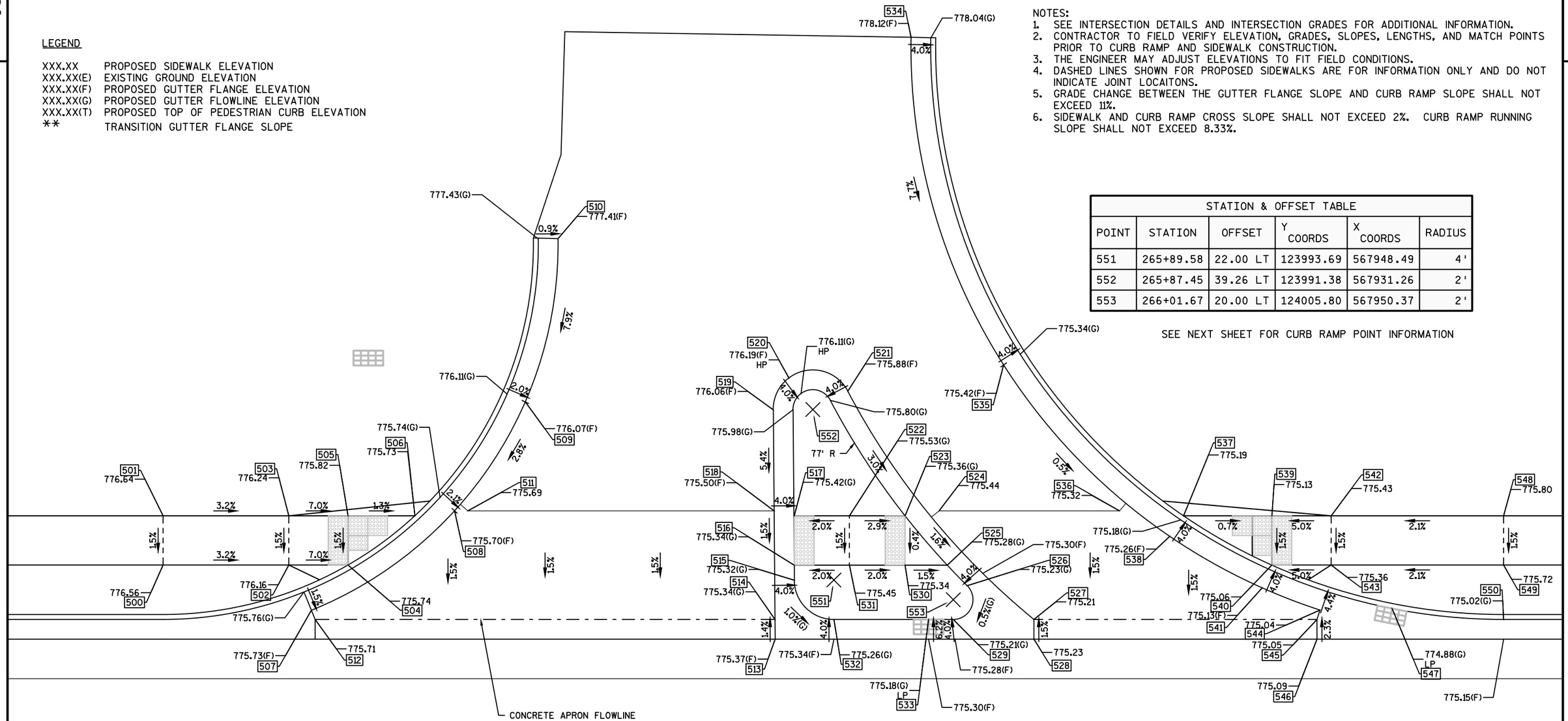
LEGEND

XXX.XX	PROPOSED SIDEWALK ELEVATION
XXX.XX(E)	EXISTING GROUND ELEVATION
XXX.XX(F)	PROPOSED GUTTER FLANGE ELEVATION
XXX.XX(G)	PROPOSED GUTTER FLOWLINE ELEVATION
XXX.XX(T)	PROPOSED TOP OF PEDESTRIAN CURB ELEVATION
**	TRANSITION GUTTER FLANGE SLOPE

NOTES:
1. SEE INTERSECTION DETAILS AND INTERSECTION GRADES FOR ADDITIONAL INFORMATION.
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4. DASHED LINES SHOWN FOR PROPOSED SIDEWALKS ARE FOR INFORMATION ONLY AND DO NOT INDICATE JOINT LOCAITONS.
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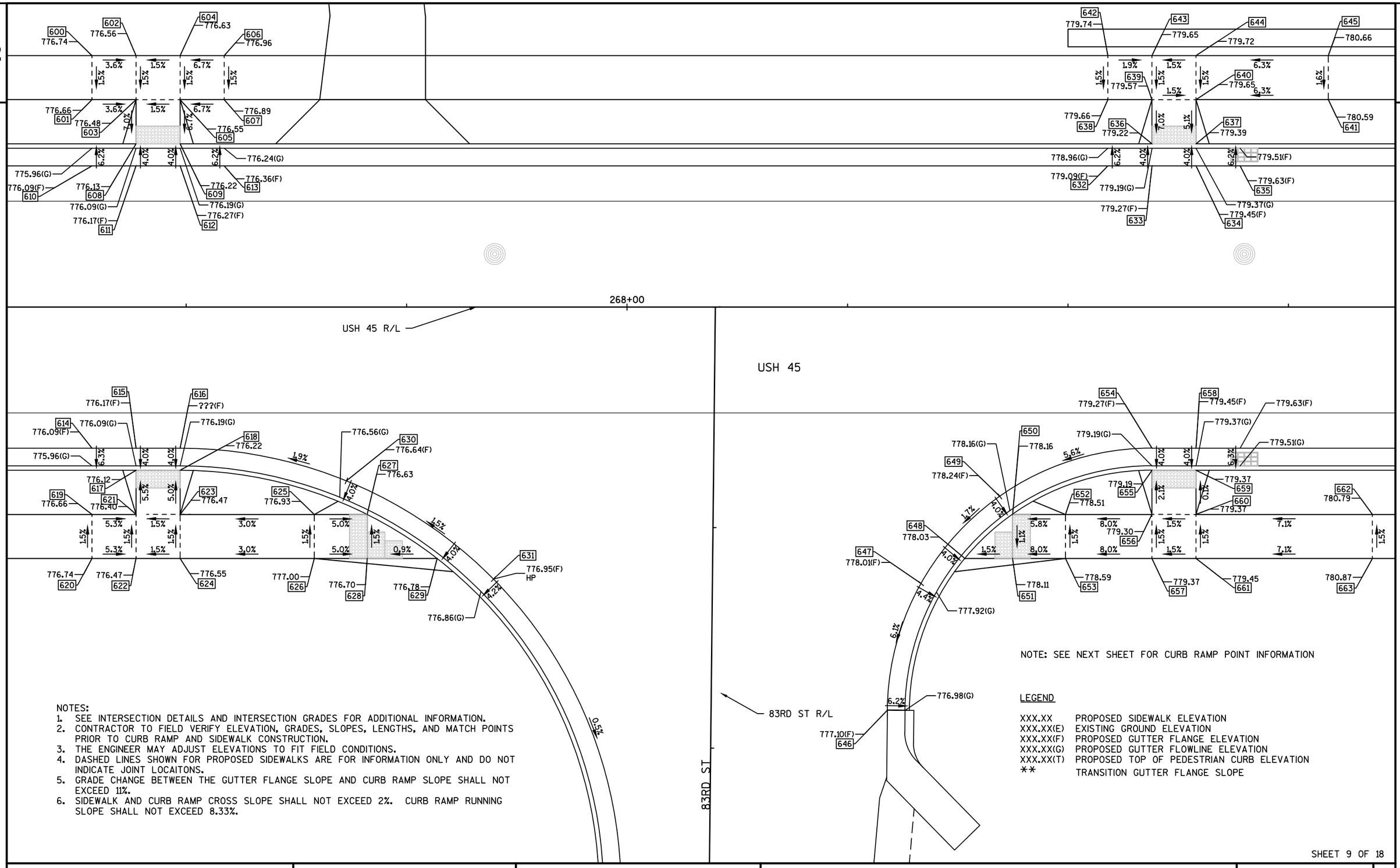
STATION & OFFSET TABLE					
POINT	STATION	OFFSET	Y COORDS	X COORDS	RADIUS
551	265+89.58	22.00 LT	123993.69	567948.49	4'
552	265+87.45	39.26 LT	123991.38	567931.26	2'
553	266+01.67	20.00 LT	124005.80	567950.37	2'

SEE NEXT SHEET FOR CURB RAMP POINT INFORMATION



STATION & OFFSET TABLE				
POINT	STATION	OFFSET	X COORDS	Y COORDS
500	265+21.66	23.51' LT	567947.69	123,925.76
501	265+21.66	28.50' LT	567942.70	123,925.71
502	265+34.39	23.51' LT	567947.56	123,938.49
503	265+34.39	28.50' LT	567942.57	123,938.43
504	265+40.39	23.51' LT	567947.50	123,944.49
505	265+40.39	28.50' LT	567942.51	123,944.43
506	265+47.16	28.50' LT	567942.44	123,951.20
507	265+36.68	18.93' LT	567952.12	123,940.83
508	265+51.18	29.01' LT	567941.89	123,955.22
509	265+58.34	40.04' LT	567930.78	123,962.26
510	265+61.66	56.58' LT	567914.21	123,965.41
511	265+52.52	29.00' LT	567941.88	123,956.56
512	265+37.06	18.00' LT	567953.04	123,941.21
513	265+83.63	16.00' LT	567954.56	123,987.80
514	265+83.61	18.00' LT	567952.56	123,987.77
515	265+85.58	21.97' LT	567948.57	123,989.70
516	265+85.57	23.50' LT	567947.04	123,989.67
517	265+85.57	28.49' LT	567942.05	123,989.62
518	265+83.53	29.00' LT	567941.56	123,987.57
519	265+83.45	39.23' LT	567931.33	123,987.38
520	265+85.04	42.45' LT	567928.09	123,988.94
521	265+90.99	41.12' LT	567929.36	123,994.90
522	265+91.16	28.50' LT	567941.98	123,995.20
523	265+96.79	28.50' LT	567941.92	124,000.83
524	266+00.23	29.00' LT	567941.38	124,004.27
525	266+01.06	23.50' LT	567946.87	124,005.16

STATION & OFFSET TABLE				
POINT	STATION	OFFSET	X COORDS	Y COORDS
526	266+03.08	21.42' LT	567948.94	124,007.19
527	266+09.84	18.00' LT	567952.28	124,013.99
528	266+09.84	16.00' LT	567954.28	124,014.01
529	266+01.67	18.00' LT	567952.37	124,005.82
530	265+96.79	23.51' LT	567946.91	124,000.88
531	265+91.16	23.50' LT	567946.98	123,995.26
532	265+89.58	18.00' LT	567952.49	123,993.74
533	265+99.17	18.00' LT	567952.39	124,003.32
534	265+97.40	76.98' LT	567893.44	124,000.94
535	266+06.77	43.79' LT	567926.53	124,010.65
536	266+18.50	29.00' LT	567941.19	124,022.54
537	266+24.99	28.50' LT	567941.63	124,029.03
538	266+23.59	26.42' LT	567943.72	124,027.66
539	266+33.94	28.50' LT	567941.53	124,037.98
540	266+33.94	23.51' LT	567946.52	124,038.03
541	266+32.95	21.20' LT	567948.84	124,037.07
542	266+39.94	28.50' LT	567941.47	124,043.98
543	266+39.94	23.51' LT	567946.46	124,044.03
544	266+38.80	18.95' LT	567951.03	124,042.94
545	266+38.49	18.00' LT	567951.99	124,042.64
546	266+38.49	16.00' LT	567953.99	124,042.67
547	266+46.10	19.11' LT	567950.80	124,050.24
548	266+57.39	28.50' LT	567941.29	124,061.43
549	266+57.39	23.51' LT	567946.28	124,061.48
550	266+57.39	18.00' LT	567951.79	124,061.54



NOTES:
1. SEE INTERSECTION DETAILS AND INTERSECTION GRADES FOR ADDITIONAL INFORMATION.
2. CONTRACTOR TO FIELD VERIFY ELEVATION, GRADES, SLOPES, LENGTHS, AND MATCH POINTS PRIOR TO CURB RAMP AND SIDEWALK CONSTRUCTION.
3. THE ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONDITIONS.
4. DASHED LINES SHOWN FOR PROPOSED SIDEWALKS ARE FOR INFORMATION ONLY AND DO NOT INDICATE JOINT LOCAITONS.
5. GRADE CHANGE BETWEEN THE GUTTER FLANGE SLOPE AND CURB RAMP SLOPE SHALL NOT EXCEED 11%.
6. SIDEWALK AND CURB RAMP CROSS SLOPE SHALL NOT EXCEED 2%. CURB RAMP RUNNING SLOPE SHALL NOT EXCEED 8.33%.

NOTE: SEE NEXT SHEET FOR CURB RAMP POINT INFORMATION

LEGEND

XXX.XX	PROPOSED SIDEWALK ELEVATION
XXX.XX(E)	EXISTING GROUND ELEVATION
XXX.XX(F)	PROPOSED GUTTER FLANGE ELEVATION
XXX.XX(G)	PROPOSED GUTTER FLOWLINE ELEVATION
XXX.XX(T)	PROPOSED TOP OF PEDESTRIAN CURB ELEVATION
**	TRANSITION GUTTER FLANGE SLOPE

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CURB RAMP DETAILS - 83RD STREET	SHEET 98	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\021160_GR.DWG
LAYOUT NAME - 021117_ID
PLOT DATE : 4/28/2016 11:07 AM PLOT BY : MAAS, JOSEPH A PLOT NAME : PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42

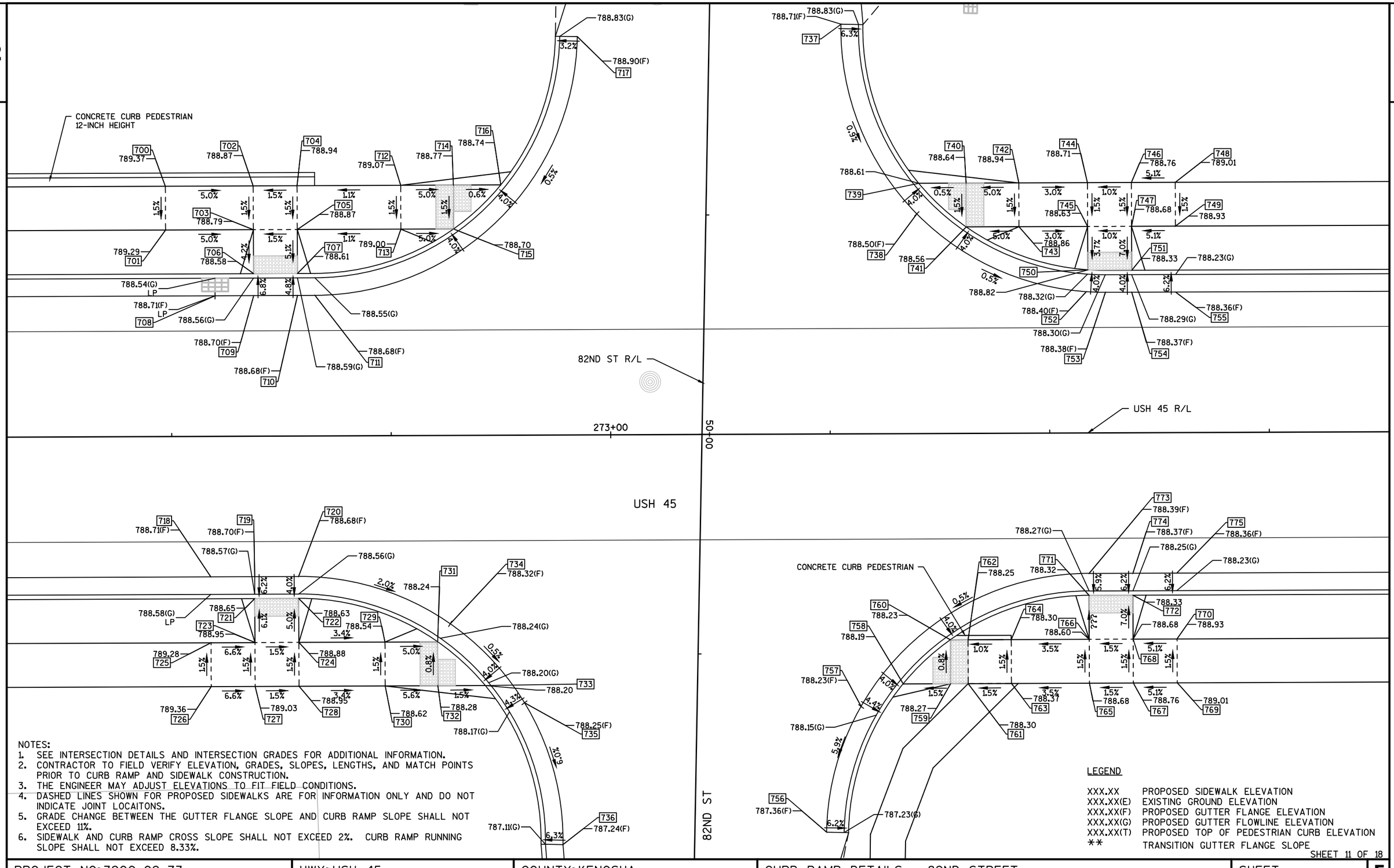
2

STATION & OFFSET TABLE				
POINT	STATION	OFFSET	X COORDS	Y COORDS
600	267+39.31	28.50' LT	567940.44	124,143.35
601	267+39.31	23.50' LT	567945.44	124,143.40
602	267+44.31	28.50' LT	567940.39	124,148.35
603	267+44.31	23.50' LT	567945.39	124,148.40
604	267+49.31	28.50' LT	567940.33	124,153.35
605	267+49.31	23.50' LT	567945.33	124,153.40
606	267+54.31	28.50' LT	567940.28	124,158.35
607	267+54.31	23.50' LT	567945.28	124,158.40
608	267+44.32	18.50' LT	567950.39	124,148.46
609	267+49.31	18.50' LT	567950.33	124,153.45
610	267+39.31	16.00' LT	567952.94	124,143.48
611	267+44.32	16.00' LT	567952.89	124,148.49
612	267+49.31	16.00' LT	567952.83	124,153.48
613	267+54.31	16.00' LT	567952.78	124,158.48

STATION & OFFSET TABLE						
POINT	STATION	OFFSET	STATION	OFFSET	X COORDS	Y COORDS
614	267+39.32	16.00' RT	50+16.73	70.51' RT	567,984.94	124,143.82
615	267+44.32	16.00' RT	50+16.68	65.51' RT	567,984.88	124,148.82
616	267+49.31	16.00' RT	50+16.63	60.52' RT	567,984.83	124,153.81
617	267+44.31	18.50' RT	50+19.18	65.49' RT	567,987.38	124,148.83
618	267+49.31	18.50' RT	50+19.13	60.49' RT	567,987.33	124,153.83
619	267+39.31	23.50' RT	50+24.23	70.44' RT	567,992.44	124,143.89
620	267+39.31	28.50' RT	50+29.23	70.39' RT	567,997.44	124,143.94
621	267+44.31	23.50' RT	50+24.18	65.44' RT	567,992.38	124,148.89
622	267+44.31	28.50' RT	50+29.18	65.39' RT	567,997.38	124,148.94
623	267+49.31	23.51' RT	50+24.14	60.44' RT	567,992.34	124,153.89
624	267+49.31	28.50' RT	50+29.13	60.39' RT	567,997.33	124,153.94
625	267+64.52	23.51' RT	50+23.98	45.23' RT	567,992.18	124,169.10
626	267+64.52	28.50' RT	50+28.97	45.18' RT	567,997.17	124,169.15
627	267+70.52	23.51' RT	50+23.92	39.23' RT	567,992.12	124,175.10
628	267+70.52	28.50' RT	50+28.91	39.18' RT	567,997.11	124,175.15
629	267+78.47	28.50' RT	50+28.83	31.24' RT	567,997.03	124,183.09
630	267+68.17	19.69' RT	50+20.13	41.62' RT	567,988.33	124,172.71
631	267+84.85	30.83' RT	50+31.09	24.83' RT	567,999.29	124,189.50

STATION & OFFSET TABLE				
POINT	STATION	OFFSET	X COORDS	Y COORDS
632	268+54.52	16.00' LT	567951.74	124,258.68
633	268+59.53	16.00' LT	567951.69	124,263.69
634	268+64.52	16.00' LT	567951.64	124,268.68
635	268+69.52	16.00' LT	567951.58	124,273.68
636	268+59.52	18.50' LT	567949.19	124,263.66
637	268+64.52	18.50' LT	567949.14	124,268.66
638	268+54.52	23.50' LT	567944.24	124,258.61
639	268+59.52	23.50' LT	567944.19	124,263.61
640	268+64.52	23.51' LT	567944.13	124,268.61
641	268+79.52	23.51' LT	567943.97	124,283.60
642	268+54.52	28.50' LT	567939.24	124,258.55
643	268+59.52	28.50' LT	567939.19	124,263.55
644	268+64.52	28.50' LT	567939.14	124,268.55
645	268+79.52	28.50' LT	567938.98	124,283.55

STATION & OFFSET TABLE						
POINT	STATION	OFFSET	STATION	OFFSET	X COORDS	Y COORDS
646	268+29.53	45.69' RT	50+45.48	20.00' LT	568,013.68	124,234.33
647	268+33.35	31.34' RT	50+31.10	23.67' LT	567,999.30	124,238.00
648	268+38.31	28.50' RT	50+28.20	28.61' LT	567,996.41	124,242.93
649	268+42.27	21.46' RT	50+21.12	32.49' LT	567,989.32	124,246.82
650	268+43.71	23.51' RT	50+23.16	33.96' LT	567,991.36	124,248.28
651	268+43.71	28.50' RT	50+28.15	34.01' LT	567,996.35	124,248.34
652	268+49.71	23.51' RT	50+23.10	39.96' LT	567,991.30	124,254.28
653	268+49.71	28.50' RT	50+28.09	40.01' LT	567,996.29	124,254.34
654	268+59.52	16.00' RT	50+15.48	49.69' LT	567,983.69	124,264.02
655	268+59.52	18.50' RT	50+17.98	49.71' LT	567,986.19	124,264.04
656	268+59.52	23.50' RT	50+22.98	49.77' LT	567,991.19	124,264.09
657	268+59.52	28.50' RT	50+27.98	49.82' LT	567,996.19	124,264.15
658	268+64.52	16.00' RT	50+15.43	54.69' LT	567,983.63	124,269.02
659	268+64.52	18.50' RT	50+17.93	54.71' LT	567,986.13	124,269.04
660	268+64.52	23.50' RT	50+22.93	54.77' LT	567,991.13	124,269.09
661	268+64.52	28.50' RT	50+27.93	54.82' LT	567,996.13	124,269.15
662	268+84.52	23.50' RT	50+22.72	74.76' LT	567,990.93	124,289.09
663	268+84.52	28.50' RT	50+27.72	74.82' LT	567,995.93	124,289.14



NOTES:
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6. SIDEWALK AND CURB RAMP CROSS SLOPE SHALL NOT EXCEED 2%. CURB RAMP RUNNING SLOPE SHALL NOT EXCEED 8.33%.

LEGEND

XXX.XX	PROPOSED SIDEWALK ELEVATION
XXX.XX(E)	EXISTING GROUND ELEVATION
XXX.XX(F)	PROPOSED GUTTER FLANGE ELEVATION
XXX.XX(G)	PROPOSED GUTTER FLOWLINE ELEVATION
XXX.XX(T)	PROPOSED TOP OF PEDESTRIAN CURB ELEVATION
**	TRANSITION GUTTER FLANGE SLOPE

SHEET 11 OF 18

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CURB RAMP DETAILS - 82ND STREET	SHEET 100 E

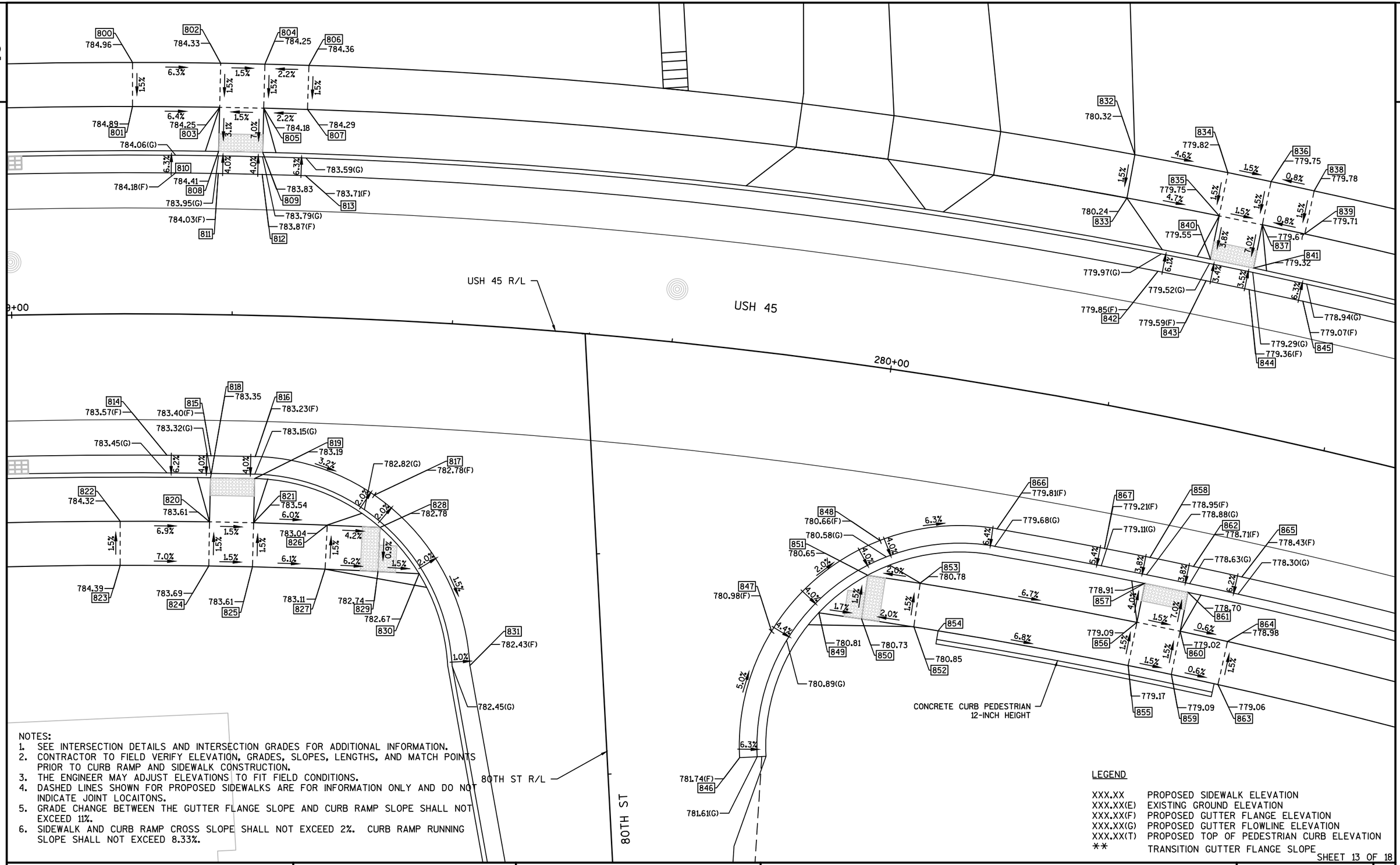
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STATION & OFFSET TABLE						
POINT	STATION	OFFSET	STATION	OFFSET	X COORDS	Y COORDS
700	272+49.38	28.50' LT	49+72.83	61.61' RT	567,933.55	124,653.05
701	272+49.38	23.51' LT	49+77.82	61.50' RT	567,938.54	124,653.15
702	272+59.38	28.50' LT	49+72.61	51.61' RT	567,933.34	124,663.04
703	272+59.38	23.51' LT	49+77.60	51.50' RT	567,938.33	124,663.15
704	272+64.38	28.50' LT	49+72.50	46.61' RT	567,933.23	124,668.04
705	272+64.38	23.51' LT	49+77.49	46.50' RT	567,938.22	124,668.15
706	272+59.40	18.51' LT	49+82.60	51.38' RT	567,943.32	124,663.27
707	272+64.38	18.51' LT	49+82.49	46.40' RT	567,943.22	124,668.26
708	272+55.00	16.00' LT	49+85.20	55.72' RT	567,945.93	124,658.93
709	272+59.40	16.00' LT	49+85.11	51.33' RT	567,945.83	124,663.33
710	272+64.38	16.00' LT	49+85.00	46.34' RT	567,945.73	124,668.31
711	272+66.38	16.00' LT	49+84.96	44.35' RT	567,945.68	124,670.30
712	272+76.19	28.50' LT	49+72.25	34.81' RT	567,932.97	124,679.84
713	272+76.19	23.51' LT	49+77.24	34.70' RT	567,937.96	124,679.95
714	272+82.19	28.50' LT	49+72.12	28.81' RT	567,932.84	124,685.84
715	272+82.18	23.51' LT	49+77.11	28.71' RT	567,937.83	124,685.94
716	272+87.59	28.50' LT	49+72.00	23.41' RT	567,932.73	124,691.24
717	272+96.37	45.35' LT	49+54.96	15.00' RT	567,915.69	124,699.65

STATION & OFFSET TABLE						
POINT	STATION	OFFSET	STATION	OFFSET	X COORDS	Y COORDS
718	272+54.38	16.00' RT	50+17.21	55.65' RT	567,977.93	124,659.01
719	272+59.38	16.00' RT	50+17.10	50.65' RT	567,977.83	124,664.01
720	272+64.38	16.00' RT	50+16.99	45.65' RT	567,977.72	124,669.01
721	272+59.38	18.50' RT	50+19.60	50.59' RT	567,980.33	124,664.06
722	272+64.38	18.50' RT	50+19.49	45.59' RT	567,980.22	124,669.06
723	272+59.38	23.50' RT	50+24.60	50.49' RT	567,985.32	124,664.17
724	272+64.38	23.51' RT	50+24.50	45.49' RT	567,985.23	124,669.17
725	272+54.38	23.50' RT	50+24.71	55.48' RT	567,985.43	124,659.17
726	272+54.38	28.50' RT	50+29.70	55.38' RT	567,990.43	124,659.28
727	272+59.38	28.50' RT	50+29.60	50.38' RT	567,990.32	124,664.28
728	272+64.38	28.50' RT	50+29.49	45.38' RT	567,990.21	124,669.28
729	272+74.20	23.51' RT	50+24.29	35.68' RT	567,985.01	124,678.98
730	272+74.20	28.50' RT	50+29.28	35.57' RT	567,990.00	124,679.09
731	272+80.20	23.51' RT	50+24.16	29.68' RT	567,984.88	124,684.98
732	272+80.19	28.50' RT	50+29.15	29.58' RT	567,989.87	124,685.08
733	272+85.60	28.50' RT	50+29.03	24.17' RT	567,989.76	124,690.48
734	272+81.64	21.46' RT	50+22.07	28.28' RT	567,982.80	124,686.37
735	272+90.06	30.48' RT	50+30.91	19.67' RT	567,991.64	124,694.99
736	272+94.38	46.65' RT	50+46.98	15.00' RT	568,007.71	124,699.65

STATION & OFFSET TABLE						
POINT	STATION	OFFSET	STATION	OFFSET	X COORDS	Y COORDS
737	273+26.40	46.65' LT	49+53.02	15.00' LT	567,913.74	124,729.65
738	273+34.95	25.02' LT	49+74.45	24.01' LT	567,935.18	124,738.67
739	273+35.18	28.50' LT	49+70.97	24.17' LT	567,931.70	124,738.83
740	273+40.59	28.50' LT	49+70.85	29.58' LT	567,931.58	124,744.23
741	273+40.59	23.51' LT	49+75.84	29.68' LT	567,936.57	124,744.33
742	273+46.59	28.50' LT	49+70.72	35.57' LT	567,931.45	124,750.22
743	273+46.59	23.51' LT	49+75.71	35.68' LT	567,936.44	124,750.33
744	273+54.41	28.50' LT	49+70.55	43.39' LT	567,931.28	124,758.04
745	273+54.41	23.51' LT	49+75.54	43.50' LT	567,936.27	124,758.15
746	273+59.41	28.50' LT	49+70.45	48.39' LT	567,931.17	124,763.04
747	273+59.41	23.51' LT	49+75.44	48.50' LT	567,936.16	124,763.15
748	273+64.41	28.50' LT	49+70.34	53.39' LT	567,931.06	124,768.04
749	273+64.41	23.51' LT	49+75.33	53.49' LT	567,936.05	124,768.15
750	273+54.41	18.57' LT	49+80.48	43.60' LT	567,941.21	124,758.26
751	273+59.41	18.50' LT	49+80.44	48.60' LT	567,941.17	124,763.26
752	273+54.23	16.08' LT	49+82.98	43.48' LT	567,943.70	124,758.13
753	273+56.40	16.00' LT	49+83.01	45.65' LT	567,943.74	124,760.30
754	273+59.40	16.00' LT	49+82.94	48.65' LT	567,943.67	124,763.30
755	273+64.40	16.00' LT	49+82.84	53.65' LT	567,943.56	124,768.30

STATION & OFFSET TABLE						
POINT	STATION	OFFSET	STATION	OFFSET	X COORDS	Y COORDS
756	273+24.41	45.35' RT	50+45.04	15.00' LT	568,005.76	124,729.65
757	273+28.40	31.05' RT	50+30.65	18.67' LT	567,991.38	124,733.33
758	273+33.19	28.50' RT	50+28.00	23.41' LT	567,988.73	124,738.07
759	273+38.59	28.50' RT	50+27.88	28.81' LT	567,988.61	124,743.47
760	273+38.60	23.51' RT	50+22.89	28.71' LT	567,983.62	124,743.37
761	273+40.59	28.50' RT	50+27.84	30.81' LT	567,988.57	124,745.47
762	273+40.60	23.51' RT	50+22.85	30.71' LT	567,983.58	124,745.36
763	273+45.52	28.50' RT	50+27.73	35.74' LT	567,988.46	124,750.40
764	273+45.52	23.51' RT	50+22.74	35.63' LT	567,983.47	124,750.29
765	273+54.41	28.50' RT	50+27.54	44.62' LT	567,988.27	124,759.28
766	273+54.41	23.50' RT	50+22.54	44.51' LT	567,983.27	124,759.17
767	273+59.41	28.50' RT	50+27.43	49.62' LT	567,988.16	124,764.28
768	273+59.41	23.50' RT	50+22.43	49.51' LT	567,983.16	124,764.17
769	273+64.41	28.50' RT	50+27.33	54.62' LT	567,988.05	124,769.27
770	273+64.41	23.50' RT	50+22.33	54.51' LT	567,983.05	124,769.17
771	273+54.41	18.50' RT	50+17.54	44.41' LT	567,978.27	124,759.06
772	273+59.41	18.50' RT	50+17.44	49.40' LT	567,978.16	124,764.06
773	273+54.41	16.00' RT	50+15.04	44.35' LT	567,975.77	124,759.01
774	273+59.41	16.00' RT	50+14.94	49.35' LT	567,975.66	124,764.00
775	273+64.41	16.00' RT	50+14.83	54.35' LT	567,975.55	124,769.00



NOTES:
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LEGEND

XXX.XX	PROPOSED SIDEWALK ELEVATION
XXX.XX(E)	EXISTING GROUND ELEVATION
XXX.XX(F)	PROPOSED GUTTER FLANGE ELEVATION
XXX.XX(G)	PROPOSED GUTTER FLOWLINE ELEVATION
XXX.XX(T)	PROPOSED TOP OF PEDESTRIAN CURB ELEVATION
**	TRANSITION GUTTER FLANGE SLOPE

SHEET 13 OF 18

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CURB RAMP DETAILS - 80TH STREET	SHEET 102 E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\021160_GR.DWG
LAYOUT NAME - 021119_ID
PLOT DATE : 4/28/2016 11:07 AM PLOT BY : MAAS, JOSEPH A PLOT NAME : PLOT SCALE : 1 IN:10 FT

STATION & OFFSET TABLE				
POINT	STATION	OFFSET	X COORDS	Y COORDS
800	279+13.68	28.50' LT	567920.88	125,319.31
801	279+13.68	23.51' LT	567925.86	125,319.04
802	279+23.23	28.50' LT	567921.49	125,329.29
803	279+23.21	23.50' LT	567926.47	125,328.92
804	279+28.02	28.50' LT	567921.85	125,334.29
805	279+28.02	23.50' LT	567926.84	125,333.91
806	279+32.79	28.50' LT	567922.26	125,339.27
807	279+32.79	23.51' LT	567927.23	125,338.85
808	279+23.17	18.50' LT	567931.46	125,328.54
809	279+28.02	18.50' LT	567931.82	125,333.52
810	279+18.46	16.00' LT	567933.64	125,323.54
811	279+23.17	16.00' LT	567933.95	125,328.36
812	279+28.02	16.00' LT	567934.32	125,333.33
813	279+32.79	16.00' LT	567934.71	125,338.22

STATION & OFFSET TABLE				
POINT	STATION	OFFSET	X COORDS	Y COORDS
832	280+22.81	28.50' LT	567937.24	125,432.28
833	280+22.81	23.50' LT	567942.10	125,431.12
834	280+33.06	28.50' LT	567939.83	125,442.70
835	280+33.07	23.50' LT	567944.67	125,441.47
836	280+37.84	28.50' LT	567941.09	125,447.55
837	280+37.88	23.51' LT	567945.92	125,446.31
838	280+42.62	28.50' LT	567942.40	125,452.38
839	280+42.62	23.51' LT	567947.21	125,451.06
840	280+33.07	18.50' LT	567949.51	125,440.22
841	280+37.92	18.50' LT	567950.78	125,445.06
842	280+27.66	16.00' LT	567950.57	125,434.22
843	280+33.07	16.00' LT	567951.93	125,439.60
844	280+37.92	16.00' LT	567953.19	125,444.42
845	280+44.00	16.00' LT	567954.83	125,450.44

STATION & OFFSET TABLE						
POINT	STATION	OFFSET	STATION	OFFSET	X COORDS	Y COORDS
814	279+17.72	16.00' RT	50+11.29	48.08' RT	567,965.54	125,320.88
815	279+22.86	16.00' RT	50+11.61	43.09' RT	567,965.86	125,325.87
816	279+28.02	16.00' RT	50+11.97	38.08' RT	567,966.22	125,330.88
817	279+42.10	19.87' RT	50+17.04	24.82' RT	567,971.29	125,344.15
818	279+22.86	18.50' RT	50+14.10	43.26' RT	567,968.35	125,325.70
819	279+28.01	18.50' RT	50+14.46	38.29' RT	567,968.71	125,330.68
820	279+22.81	23.50' RT	50+19.09	43.65' RT	567,973.34	125,325.32
821	279+28.02	23.50' RT	50+19.45	38.66' RT	567,973.70	125,330.30
822	279+12.27	23.51' RT	50+18.50	53.76' RT	567,972.75	125,315.20
823	279+12.27	28.50' RT	50+23.48	54.01' RT	567,977.73	125,314.95
824	279+22.81	28.50' RT	50+24.07	43.99' RT	567,978.33	125,324.98
825	279+28.02	28.50' RT	50+24.43	39.04' RT	567,978.69	125,329.92
826	279+36.72	23.51' RT	50+20.16	30.33' RT	567,974.41	125,338.63
827	279+36.67	28.50' RT	50+25.12	30.83' RT	567,979.38	125,338.13
828	279+42.96	23.51' RT	50+20.74	24.35' RT	567,974.99	125,344.61
829	279+42.96	28.50' RT	50+25.70	24.86' RT	567,979.95	125,344.10
830	279+47.88	28.50' RT	50+26.20	20.21' RT	567,980.45	125,348.75
831	279+54.66	38.53' RT	50+36.90	15.00' RT	567,991.15	125,353.96

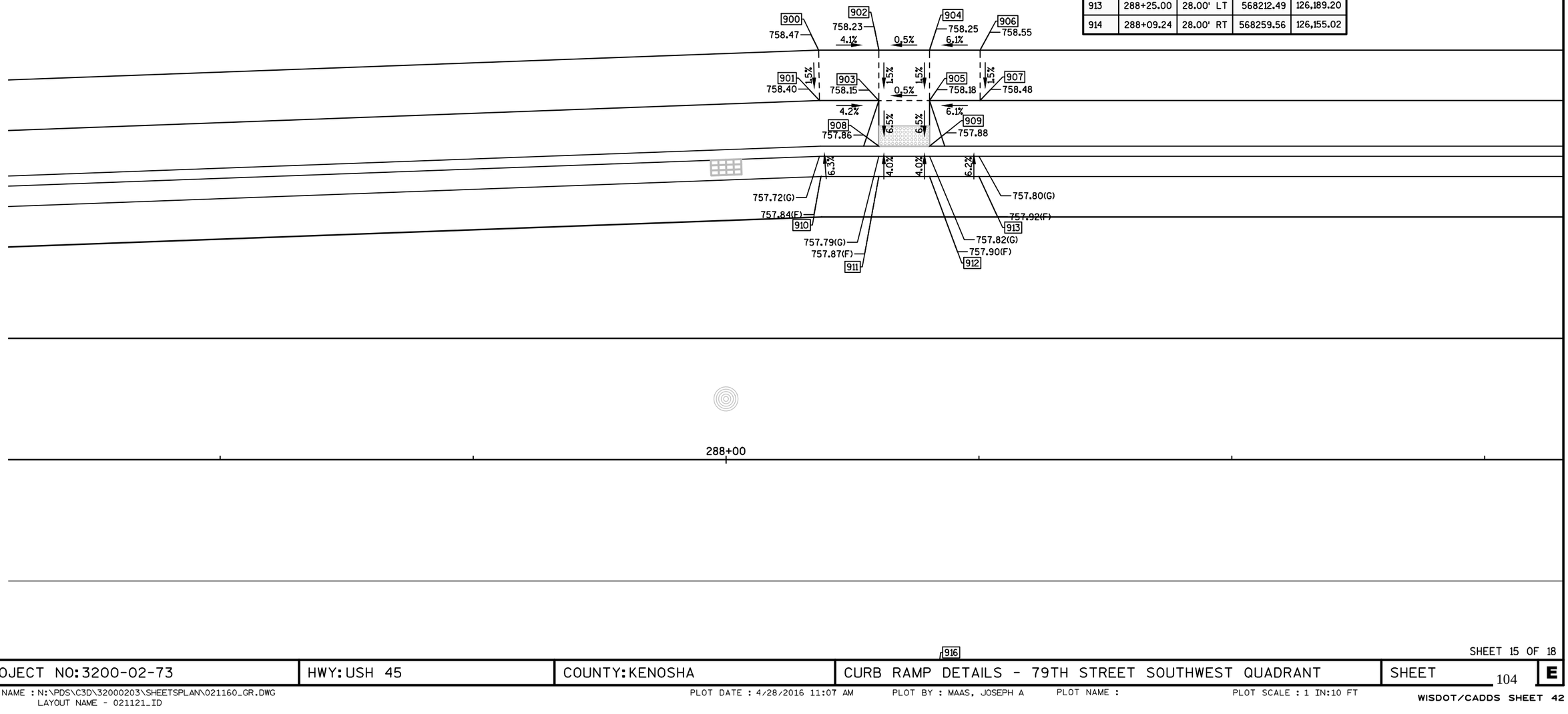
STATION & OFFSET TABLE						
POINT	STATION	OFFSET	STATION	OFFSET	X COORDS	Y COORDS
846	279+88.50	45.96' RT	50+48.92	15.00' LT	568,003.17	125,383.96
847	279+90.41	31.29' RT	50+34.80	19.37' LT	567,989.05	125,388.33
848	280+01.66	19.40' RT	50+25.17	32.19' LT	567,979.42	125,401.15
849	279+95.71	28.50' RT	50+32.99	24.83' LT	567,987.24	125,393.79
850	280+00.83	28.50' RT	50+33.93	29.62' LT	567,988.18	125,398.58
851	280+00.83	23.51' RT	50+29.04	30.60' LT	567,983.29	125,399.56
852	280+07.13	28.47' RT	50+35.11	35.50' LT	567,989.36	125,404.46
853	280+07.08	23.48' RT	50+30.22	36.48' LT	567,984.47	125,405.45
854	280+10.06	28.50' RT	50+35.72	38.22' LT	567,989.98	125,407.18
855	280+33.07	28.50' RT	50+40.78	59.55' LT	567,995.03	125,428.51
856	280+33.07	23.51' RT	50+35.95	60.79' LT	567,990.20	125,429.75
857	280+33.07	19.00' RT	50+31.58	61.91' LT	567,985.83	125,430.88
858	280+33.07	16.00' RT	50+28.67	62.66' LT	567,982.92	125,431.62
859	280+38.32	28.50' RT	50+42.04	64.39' LT	567,996.29	125,433.35
860	280+38.27	23.51' RT	50+37.21	65.63' LT	567,991.46	125,434.59
861	280+38.23	19.00' RT	50+32.84	66.75' LT	567,987.10	125,435.71
862	280+38.23	16.00' RT	50+29.95	67.52' LT	567,984.20	125,436.49
863	280+44.00	28.51' RT	50+43.47	69.60' LT	567,997.72	125,438.56
864	280+44.00	23.51' RT	50+38.65	70.94' LT	567,992.91	125,439.90
865	280+44.00	16.00' RT	50+31.42	72.94' LT	567,985.67	125,441.90
866	280+14.93	16.00' RT	50+24.53	45.49' LT	567,978.79	125,414.47
867	280+27.66	16.00' RT	50+27.38	57.56' LT	567,981.64	125,426.52

NOTES:
1. SEE INTERSECTION DETAILS AND INTERSECTION GRADES FOR ADDITIONAL INFORMATION.
2. CONTRACTOR TO FIELD VERIFY ELEVATION, GRADES, SLOPES, LENGTHS, AND MATCH POINTS PRIOR TO CURB RAMP AND SIDEWALK CONSTRUCTION.
3. THE ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONDITIONS.
4. DASHED LINES SHOWN FOR PROPOSED SIDEWALKS ARE FOR INFORMATION ONLY AND DO NOT INDICATE JOINT LOCAITONS.
5. GRADE CHANGE BETWEEN THE GUTTER FLANGE SLOPE AND CURB RAMP SLOPE SHALL NOT EXCEED 11%.
6. SIDEWALK AND CURB RAMP CROSS SLOPE SHALL NOT EXCEED 2%. CURB RAMP RUNNING SLOPE SHALL NOT EXCEED 8.33%.

LEGEND

XXX.XX	PROPOSED SIDEWALK ELEVATION
XXX.XX(E)	EXISTING GROUND ELEVATION
XXX.XX(F)	PROPOSED GUTTER FLANGE ELEVATION
XXX.XX(G)	PROPOSED GUTTER FLOWLINE ELEVATION
XXX.XX(T)	PROPOSED TOP OF PEDESTRIAN CURB ELEVATION
**	TRANSITION GUTTER FLANGE SLOPE

STATION & OFFSET TABLE				
POINT	STATION	OFFSET	X COORDS	Y COORDS
900	288+09.15	40.50' LT	568195.27	126,178.66
901	288+09.24	35.51' LT	568199.98	126,177.02
902	288+15.11	40.50' LT	568197.33	126,184.25
903	288+15.11	35.50' LT	568202.02	126,182.52
904	288+20.11	40.50' LT	568199.07	126,188.94
905	288+20.11	35.51' LT	568203.75	126,187.22
906	288+25.11	40.50' LT	568200.80	126,193.64
907	288+25.11	35.51' LT	568205.48	126,191.91
908	288+15.11	31.00' LT	568206.25	126,180.96
909	288+20.11	31.00' LT	568207.98	126,185.65
910	288+09.38	28.00' LT	568207.08	126,174.55
911	288+15.11	28.00' LT	568209.06	126,179.93
912	288+20.11	28.00' LT	568210.79	126,184.62
913	288+25.00	28.00' LT	568212.49	126,189.20
914	288+09.24	28.00' RT	568259.56	126,155.02

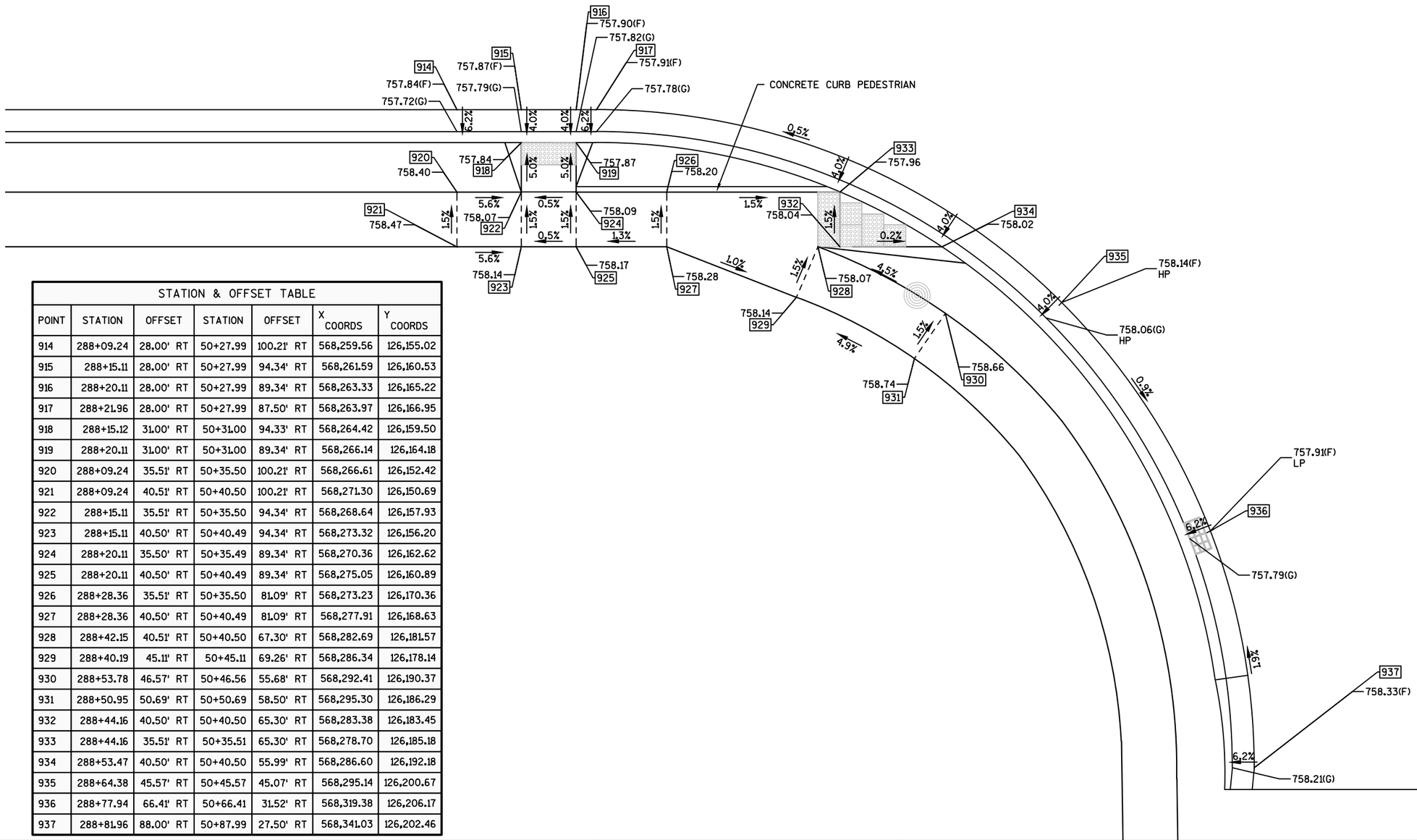


288+00 289+00

NOTES:
1. SEE INTERSECTION DETAILS AND INTERSECTION GRADES FOR ADDITIONAL INFORMATION.
2. CONTRACTOR TO FIELD VERIFY ELEVATION, GRADES, SLOPES, LENGTHS, AND MATCH POINTS PRIOR TO CURB RAMP AND SIDEWALK CONSTRUCTION.
3. THE ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONDITIONS.
4. DASHED LINES SHOWN FOR PROPOSED SIDEWALKS ARE FOR INFORMATION ONLY AND DO NOT INDICATE JOINT LOCAITONS.
5. GRADE CHANGE BETWEEN THE GUTTER FLANGE SLOPE AND CURB RAMP SLOPE SHALL NOT EXCEED 11%.
6. SIDEWALK AND CURB RAMP CROSS SLOPE SHALL NOT EXCEED 2%. CURB RAMP RUNNING SLOPE SHALL NOT EXCEED 8.33%.

LEGEND

XXX.XX	PROPOSED SIDEWALK ELEVATION
XXX.XX(E)	EXISTING GROUND ELEVATION
XXX.XX(F)	PROPOSED GUTTER FLANGE ELEVATION
XXX.XX(G)	PROPOSED GUTTER FLOWLINE ELEVATION
XXX.XX(T)	PROPOSED TOP OF PEDESTRIAN CURB ELEVATION
**	TRANSITION GUTTER FLANGE SLOPE



STATION & OFFSET TABLE

POINT	STATION	OFFSET	STATION	OFFSET	X COORDS	Y COORDS
914	288+09.24	28.00' RT	50+27.99	100.21' RT	568,259.56	126,155.02
915	288+15.11	28.00' RT	50+27.99	94.34' RT	568,261.59	126,160.53
916	288+20.11	28.00' RT	50+27.99	89.34' RT	568,263.33	126,165.22
917	288+21.96	28.00' RT	50+27.99	87.50' RT	568,263.97	126,166.95
918	288+15.12	31.00' RT	50+31.00	94.33' RT	568,264.42	126,159.50
919	288+20.11	31.00' RT	50+31.00	89.34' RT	568,266.14	126,164.18
920	288+09.24	35.51' RT	50+35.50	100.21' RT	568,266.61	126,152.42
921	288+09.24	40.51' RT	50+40.50	100.21' RT	568,271.30	126,150.69
922	288+15.11	35.51' RT	50+35.50	94.34' RT	568,268.64	126,157.93
923	288+15.11	40.50' RT	50+40.49	94.34' RT	568,273.32	126,156.20
924	288+20.11	35.50' RT	50+35.49	89.34' RT	568,270.36	126,162.62
925	288+20.11	40.50' RT	50+40.49	89.34' RT	568,275.05	126,160.89
926	288+28.36	35.51' RT	50+35.50	81.09' RT	568,273.23	126,170.36
927	288+28.36	40.50' RT	50+40.49	81.09' RT	568,277.91	126,168.63
928	288+42.15	40.51' RT	50+40.50	67.30' RT	568,282.69	126,181.57
929	288+40.19	45.11' RT	50+45.11	69.26' RT	568,286.34	126,178.14
930	288+53.78	46.57' RT	50+46.56	55.68' RT	568,292.41	126,190.37
931	288+50.95	50.69' RT	50+50.69	58.50' RT	568,295.30	126,186.29
932	288+44.16	40.50' RT	50+40.50	65.30' RT	568,283.38	126,183.45
933	288+44.16	35.51' RT	50+35.51	65.30' RT	568,278.70	126,185.18
934	288+53.47	40.50' RT	50+40.50	55.99' RT	568,286.60	126,192.18
935	288+64.38	45.57' RT	50+45.57	45.07' RT	568,295.14	126,200.67
936	288+77.94	66.41' RT	50+66.41	31.52' RT	568,319.38	126,206.17
937	288+81.96	88.00' RT	50+87.99	27.50' RT	568,341.03	126,202.46

SHEET 16 OF 18

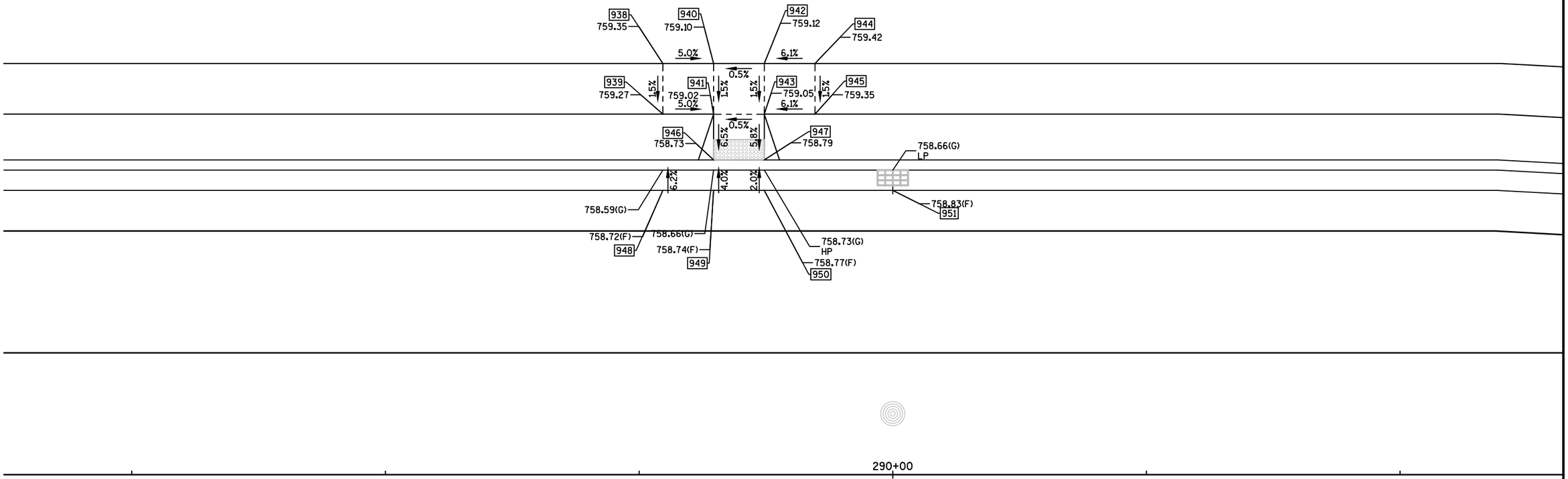
PROJECT NO:3200-02-73	HWY:USH 45	COUNTY:KENOSHA	CURB RAMP DETAILS - 79TH STREET SOUTHEAST QUADRANT	SHEET 105 E

NOTES:
1. SEE INTERSECTION DETAILS AND INTERSECTION GRADES FOR ADDITIONAL INFORMATION.
2. CONTRACTOR TO FIELD VERIFY ELEVATION, GRADES, SLOPES, LENGTHS, AND MATCH POINTS PRIOR TO CURB RAMP AND SIDEWALK CONSTRUCTION.
3. THE ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONDITIONS.
4. DASHED LINES SHOWN FOR PROPOSED SIDEWALKS ARE FOR INFORMATION ONLY AND DO NOT INDICATE JOINT LOCAITONS.
5. GRADE CHANGE BETWEEN THE GUTTER FLANGE SLOPE AND CURB RAMP SLOPE SHALL NOT EXCEED 11%.
6. SIDEWALK AND CURB RAMP CROSS SLOPE SHALL NOT EXCEED 2%. CURB RAMP RUNNING SLOPE SHALL NOT EXCEED 8.33%.

LEGEND

XXX.XX	PROPOSED SIDEWALK ELEVATION
XXX.XX(E)	EXISTING GROUND ELEVATION
XXX.XX(F)	PROPOSED GUTTER FLANGE ELEVATION
XXX.XX(G)	PROPOSED GUTTER FLOWLINE ELEVATION
XXX.XX(T)	PROPOSED TOP OF PEDESTRIAN CURB ELEVATION
**	TRANSITION GUTTER FLANGE SLOPE

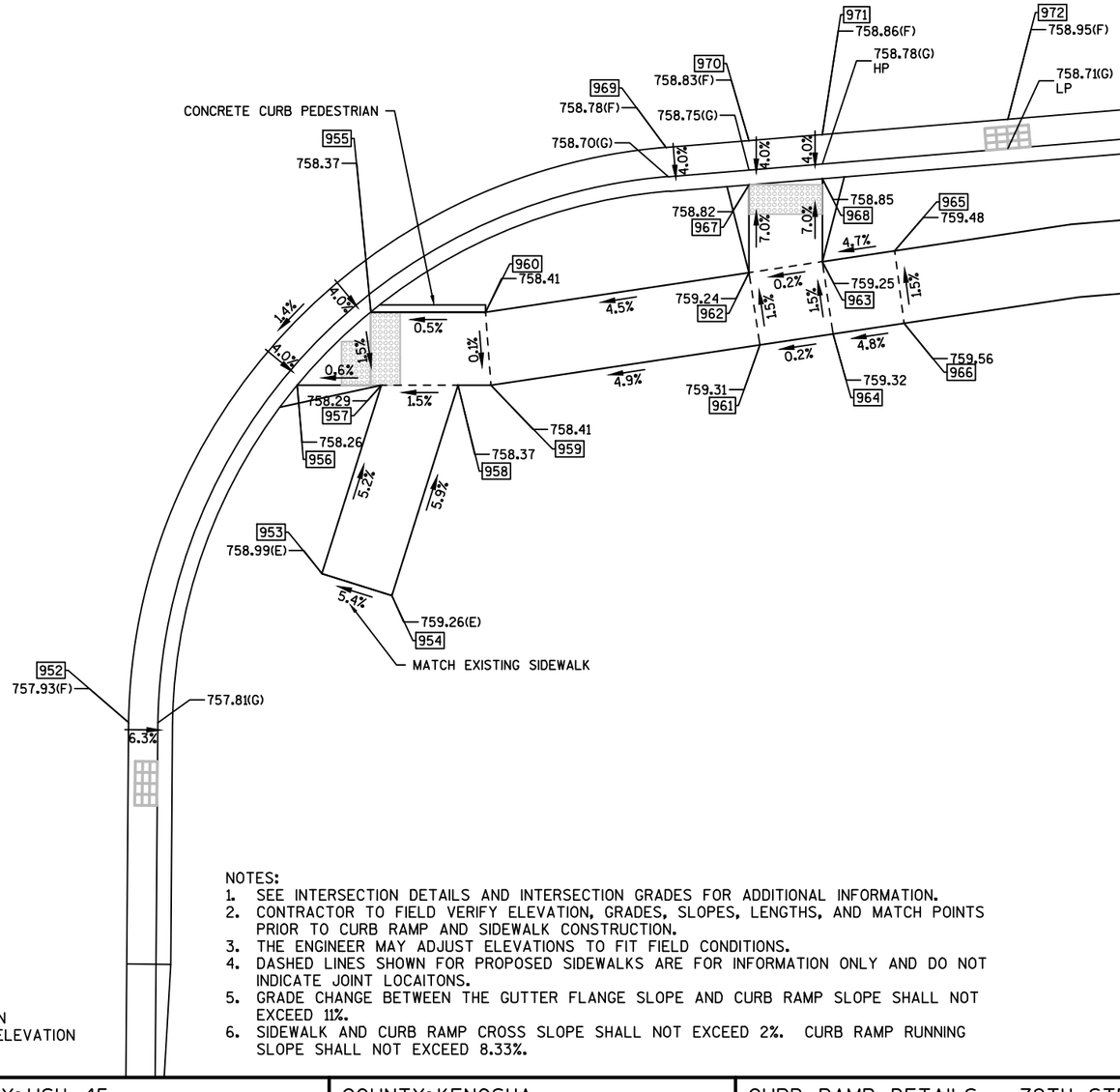
STATION & OFFSET TABLE				
POINT	STATION	OFFSET	X COORDS	Y COORDS
938	289+77.33	40.50' LT	568253.52	126,336.44
939	289+77.33	35.51' LT	568258.20	126,334.71
940	289+82.33	40.50' LT	568255.25	126,341.13
941	289+82.33	35.51' LT	568259.93	126,339.40
942	289+87.33	40.50' LT	568256.98	126,345.82
943	289+87.33	35.51' LT	56826166	126,344.09
944	289+92.33	40.50' LT	568258.71	126,350.51
945	289+92.33	35.51' LT	568263.39	126,348.78
946	289+82.33	31.00' LT	568264.16	126,337.84
947	289+87.33	31.00' LT	568265.89	126,342.53
948	289+77.33	28.00' LT	568265.24	126,332.11
949	289+82.33	28.00' LT	568266.98	126,336.80
950	289+87.33	28.00' LT	568268.71	126,341.49
951	290+00.00	28.00' LT	568273.09	126,353.37



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290+00



STATION & OFFSET TABLE						
POINT	STATION	OFFSET	STATION	OFFSET	X COORDS	Y COORDS
952	289+39.96	63.52' RT	50+63.52	30.51' LT	568,338.15	126,265.36
953	289+53.17	53.35' RT	50+53.36	43.71' LT	568,333.19	126,281.26
954	289+57.94	54.86' RT	50+54.86	48.48' LT	568,336.26	126,285.21
955	289+56.52	35.51' RT	50+35.51	47.06' LT	568,317.61	126,290.59
956	289+51.49	40.50' RT	50+40.50	42.03' LT	568,320.55	126,284.14
957	289+57.22	40.50' RT	50+40.50	47.77' LT	568,322.54	126,289.52
958	289+62.46	40.50' RT	50+40.50	53.01' LT	568,324.35	126,294.43
959	289+64.71	40.50' RT	50+40.50	55.25' LT	568,325.13	126,296.54
960	289+64.34	35.51' RT	50+35.51	54.88' LT	568,320.32	126,297.92
961	289+83.07	37.75' RT	50+37.75	73.62' LT	568,328.91	126,314.72
962	289+82.33	32.81' RT	50+32.82	72.88' LT	568,324.02	126,315.74
963	289+87.33	32.06' RT	50+32.07	77.88' LT	568,325.05	126,320.69
964	289+88.07	37.00' RT	50+37.00	78.62' LT	568,329.94	126,319.67
965	289+92.28	31.31' RT	50+31.32	82.82' LT	568,326.06	126,325.59
966	289+92.92	36.27' RT	50+36.28	83.46' LT	568,330.93	126,324.47
967	289+82.33	26.81' RT	50+26.81	72.88' LT	568,318.39	126,317.82
968	289+87.33	26.39' RT	50+26.40	77.88' LT	568,319.73	126,322.65
969	289+76.67	24.26' RT	50+24.27	67.21' LT	568,314.04	126,313.38
970	289+82.33	23.80' RT	50+23.80	72.88' LT	568,315.57	126,318.86
971	289+87.33	23.38' RT	50+23.39	77.88' LT	568,316.91	126,323.69
972	290+00.00	22.34' RT	50+22.34	90.55' LT	568,320.31	126,335.94

LEGEND

XXX.XX	PROPOSED SIDEWALK ELEVATION
XXX.XX(E)	EXISTING GROUND ELEVATION
XXX.XX(F)	PROPOSED GUTTER FLANGE ELEVATION
XXX.XX(G)	PROPOSED GUTTER FLOWLINE ELEVATION
XXX.XX(T)	PROPOSED TOP OF PEDESTRIAN CURB ELEVATION
**	TRANSITION GUTTER FLANGE SLOPE

NOTES:
1. SEE INTERSECTION DETAILS AND INTERSECTION GRADES FOR ADDITIONAL INFORMATION.
2. CONTRACTOR TO FIELD VERIFY ELEVATION, GRADES, SLOPES, LENGTHS, AND MATCH POINTS PRIOR TO CURB RAMP AND SIDEWALK CONSTRUCTION.
3. THE ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONDITIONS.
4. DASHED LINES SHOWN FOR PROPOSED SIDEWALKS ARE FOR INFORMATION ONLY AND DO NOT INDICATE JOINT LOCAITONS.
5. GRADE CHANGE BETWEEN THE GUTTER FLANGE SLOPE AND CURB RAMP SLOPE SHALL NOT EXCEED 11%.
6. SIDEWALK AND CURB RAMP CROSS SLOPE SHALL NOT EXCEED 2%. CURB RAMP RUNNING SLOPE SHALL NOT EXCEED 8.33%.

2

2

LEGEND

- EROSION MAT CLASS I, TYPE B
- EROSION MAT CLASS II, TYPE B
- SILT FENCE
- HEAVY DUTY SILT FENCE
- INLET PROTECTION TYPE A
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SURFACE WATER FLOW
- SEED & MULCH
- SOD EROSION CONTROL/SOD LAWN
- RIPRAP MEDIUM
- COARSE AGGREGATE MIX FOR STREAM BED
- PERMANENT STONE DITCH CHECK

N

BP: 19+50.00

20 22 24 26 28 30 32 34

USH 45

128TH ST

CTH WG

R/W

TLE

EXISTING R/W

PLE

WETLAND BOUNDARY

PERMANENT STONE DITCH CHECK

NOTES:

PLACE INLET PROTECTION AS FOLLOWS:
LOW POINT CURB AND GUTTER INLETS: TYPE A PRIOR TO PAVING AND TYPE C AFTER PAVING.
FIELD INLETS: TYPE A PRIOR TO INSTALLING GRATE AND TYPE B AFTER INSTALLING GRATE OR IF GRATE IS INSTALLED IMMEDIATELY.
ALL OTHER INLETS: TYPE C

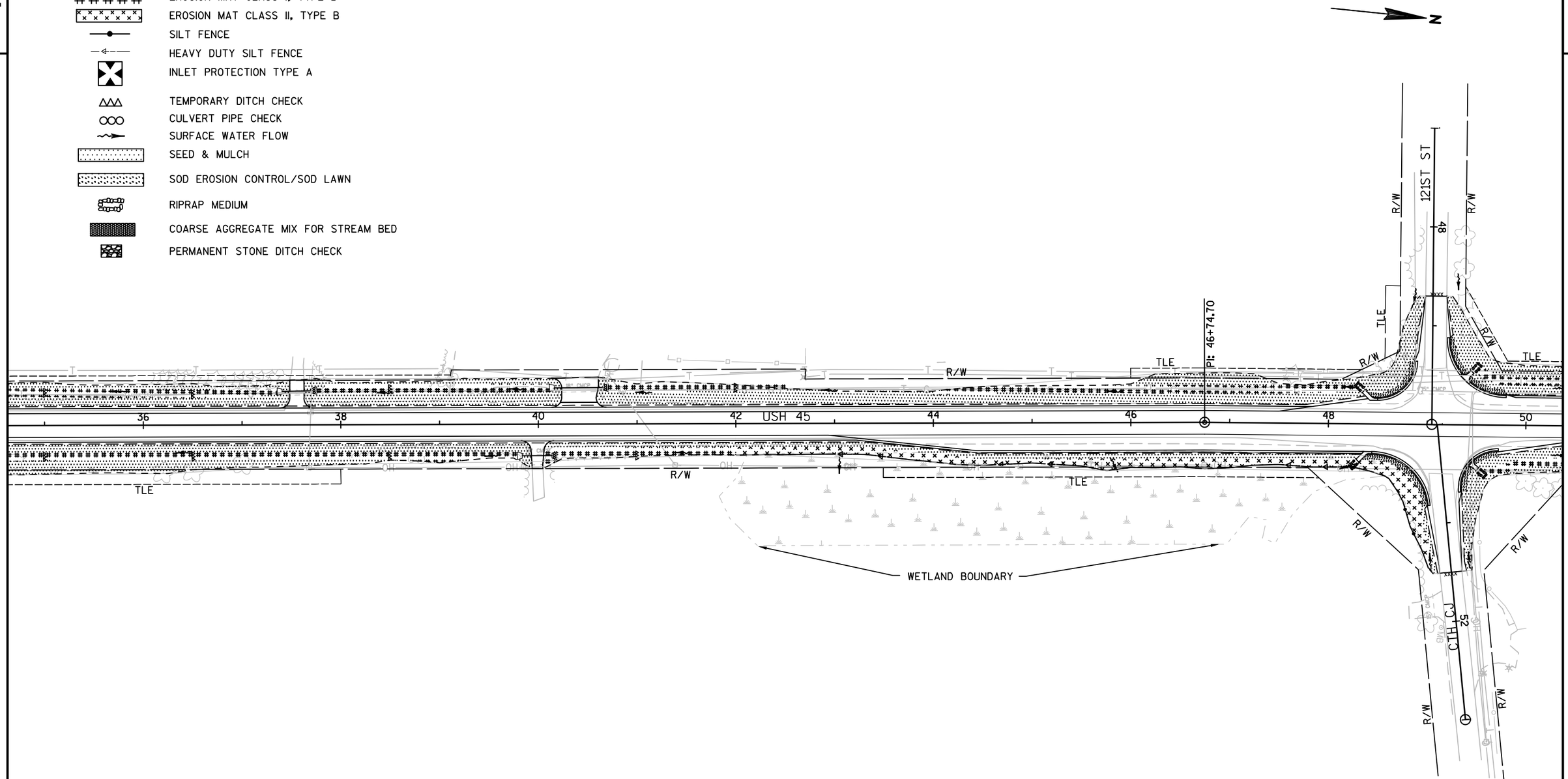
EROSION CONTROL FEATURES AS SHOWN ON THE PLAN ARE SUGGESTION LOCATIONS. EXACT LOCATIONS WILL BE DETERMINED BY THE ENGINEER IN THE FIELD.

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	EROSION CONTROL	SHEET 108	E

2

LEGEND

- EROSION MAT CLASS I, TYPE B
- EROSION MAT CLASS II, TYPE B
- SILT FENCE
- HEAVY DUTY SILT FENCE
- INLET PROTECTION TYPE A
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SURFACE WATER FLOW
- SEED & MULCH
- SOD EROSION CONTROL/SOD LAWN
- RIPRAP MEDIUM
- COARSE AGGREGATE MIX FOR STREAM BED
- PERMANENT STONE DITCH CHECK



WETLAND BOUNDARY

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	EROSION CONTROL	SHEET 109	E

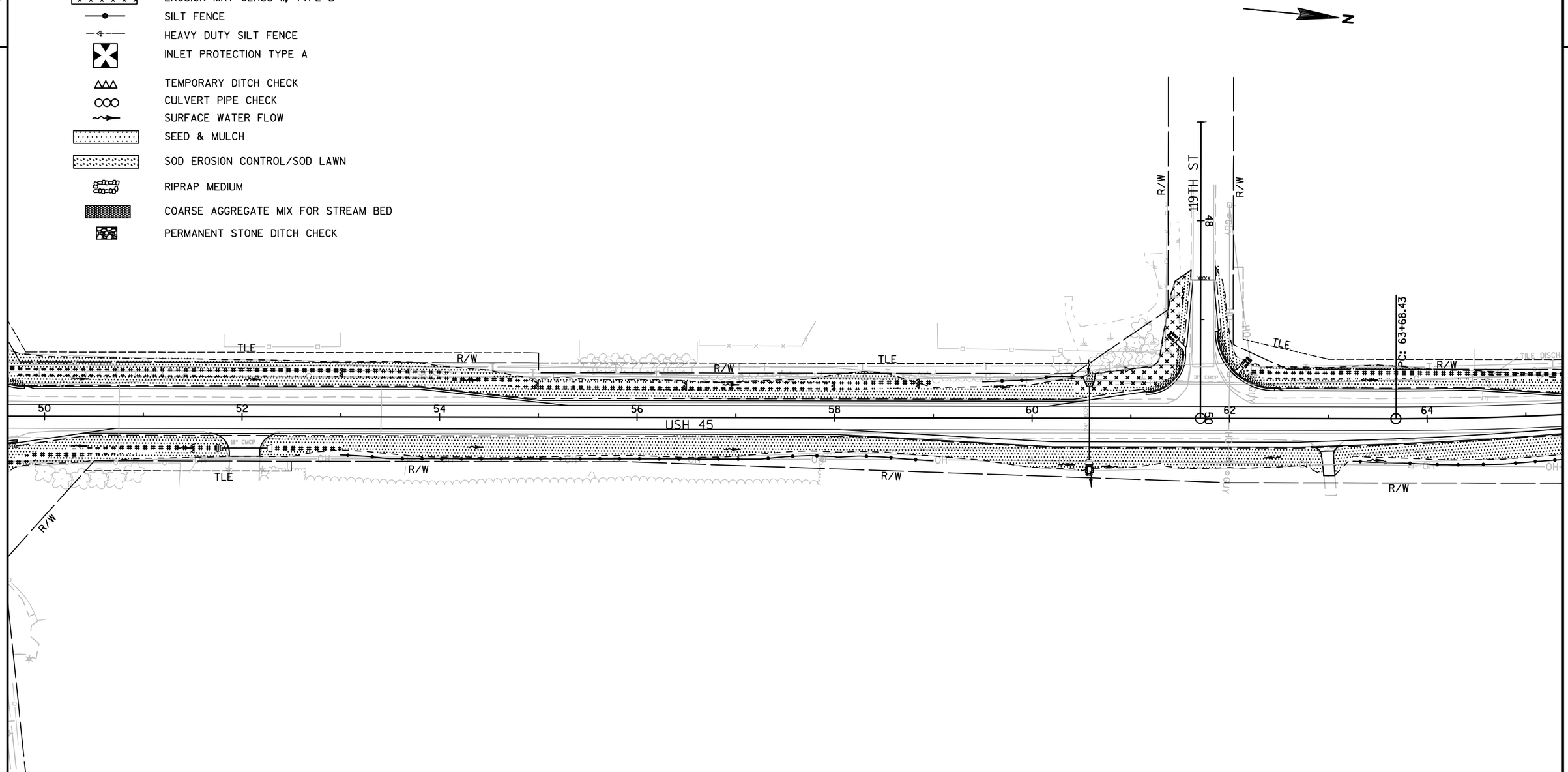
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PLOT DATE : 5/17/2016 2:57 PM PLOT BY : MAAS, JOSEPH A PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

LEGEND

- EROSION MAT CLASS I, TYPE B
- EROSION MAT CLASS II, TYPE B
- SILT FENCE
- HEAVY DUTY SILT FENCE
- INLET PROTECTION TYPE A
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SURFACE WATER FLOW
- SEED & MULCH
- SOD EROSION CONTROL/SOD LAWN
- RIPRAP MEDIUM
- COARSE AGGREGATE MIX FOR STREAM BED
- PERMANENT STONE DITCH CHECK



PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	EROSION CONTROL	SHEET 110	E

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PLOT DATE : 5/17/2016 2:57 PM PLOT BY : MAAS, JOSEPH A PLOT NAME : PLOT SCALE : 1 IN:100 FT

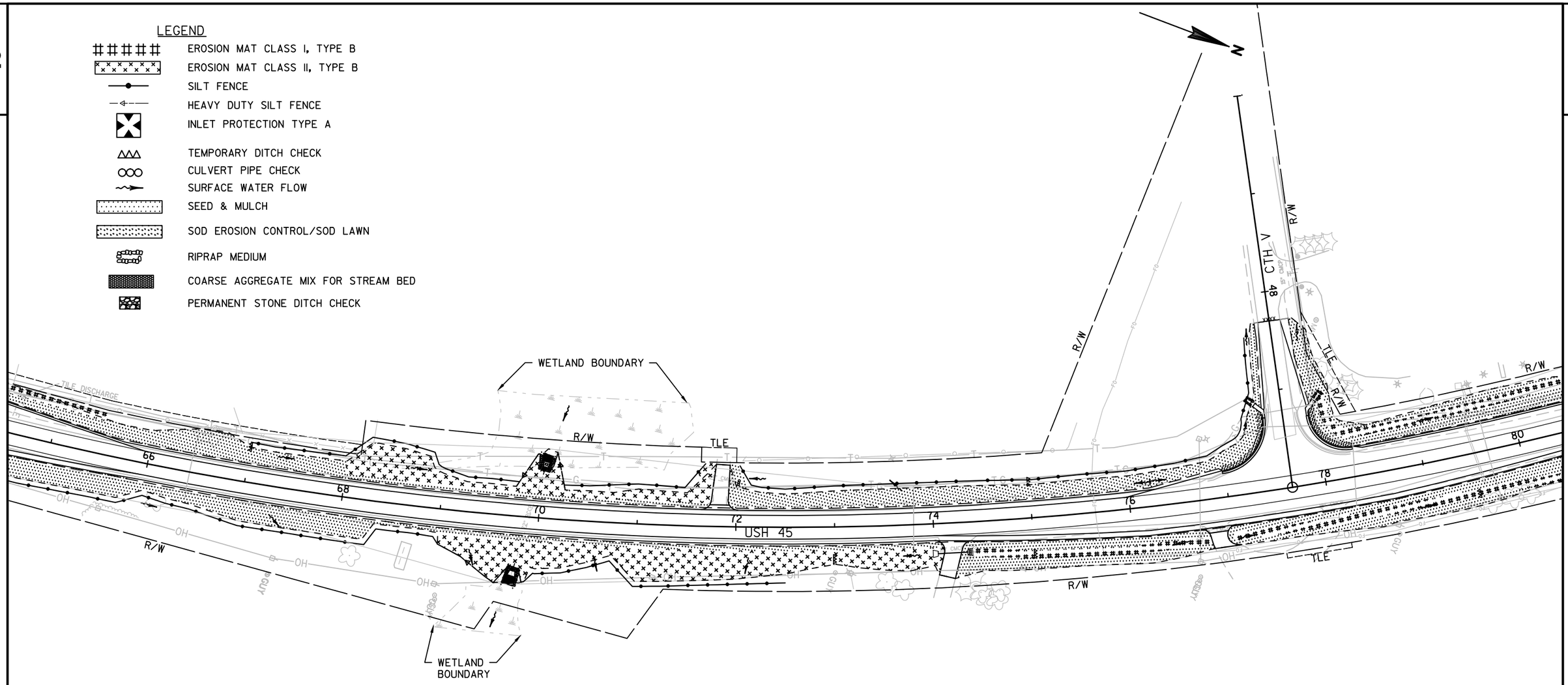
WISDOT/CADDS SHEET 42

2

2

LEGEND

- EROSION MAT CLASS I, TYPE B
- EROSION MAT CLASS II, TYPE B
- SILT FENCE
- HEAVY DUTY SILT FENCE
- INLET PROTECTION TYPE A
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SURFACE WATER FLOW
- SEED & MULCH
- SOD EROSION CONTROL/SOD LAWN
- RIPRAP MEDIUM
- COARSE AGGREGATE MIX FOR STREAM BED
- PERMANENT STONE DITCH CHECK



PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	EROSION CONTROL	SHEET 111	E

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LAYOUT NAME - 022004_EC

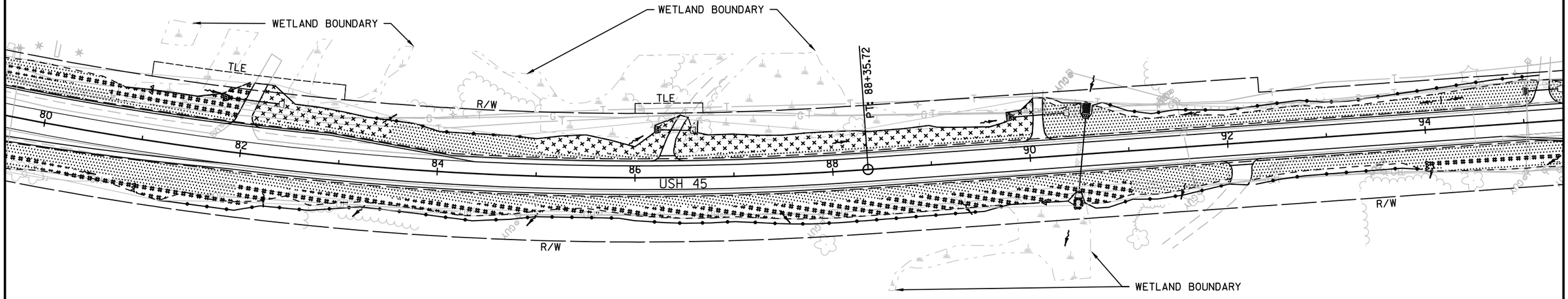
PLOT DATE : 5/17/2016 2:57 PM PLOT BY : MAAS, JOSEPH A PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

2

LEGEND

- EROSION MAT CLASS I, TYPE B
- EROSION MAT CLASS II, TYPE B
- SILT FENCE
- HEAVY DUTY SILT FENCE
- INLET PROTECTION TYPE A
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SURFACE WATER FLOW
- SEED & MULCH
- SOD EROSION CONTROL/SOD LAWN
- RIPRAP MEDIUM
- COARSE AGGREGATE MIX FOR STREAM BED
- PERMANENT STONE DITCH CHECK



PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	EROSION CONTROL	SHEET 112	E

FILE NAME : N:\PDS\C3D\CAD\32000203\022001_EC.DWG
LAYOUT NAME - 022005_EC

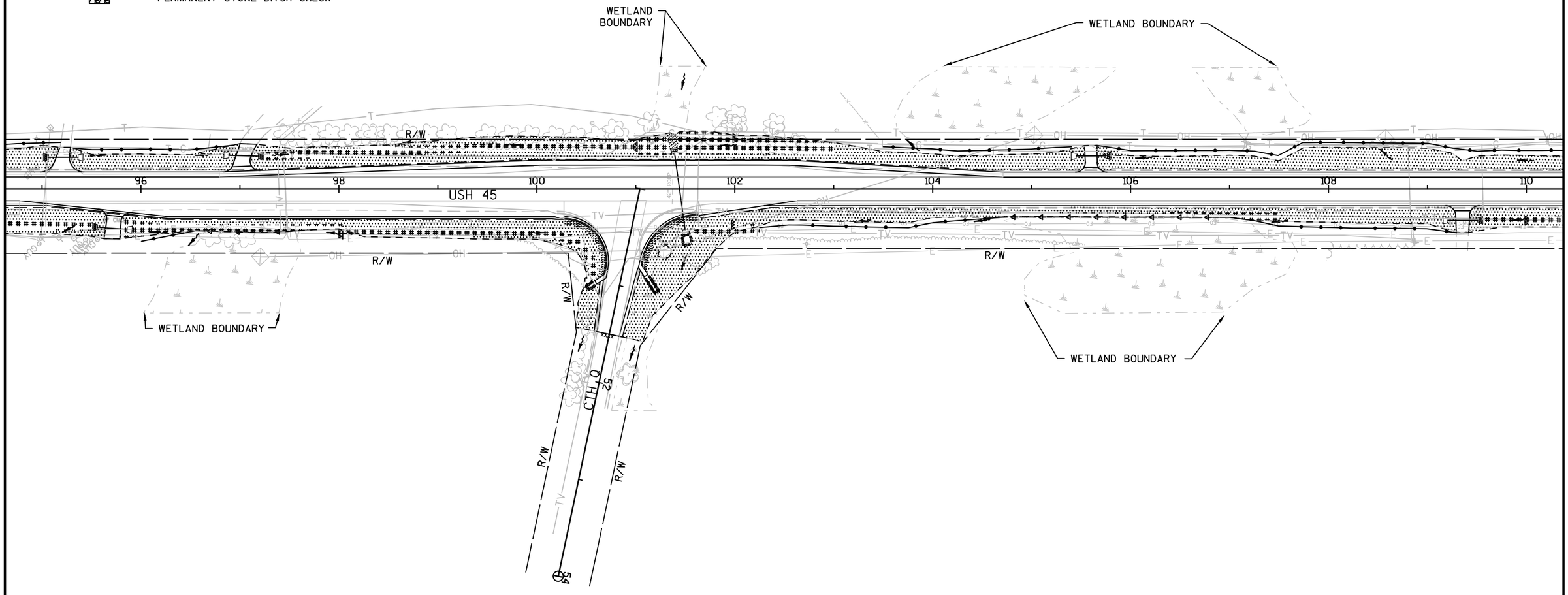
PLOT DATE : 5/17/2016 2:57 PM PLOT BY : MAAS, JOSEPH A PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

2

LEGEND

- EROSION MAT CLASS I, TYPE B
- EROSION MAT CLASS II, TYPE B
- SILT FENCE
- HEAVY DUTY SILT FENCE
- INLET PROTECTION TYPE A
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SURFACE WATER FLOW
- SEED & MULCH
- SOD EROSION CONTROL/SOD LAWN
- RIPRAP MEDIUM
- COARSE AGGREGATE MIX FOR STREAM BED
- PERMANENT STONE DITCH CHECK



PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	EROSION CONTROL	SHEET 113	E

FILE NAME : N:\PDS\C3D\CAD\32000203\022001_EC.DWG
LAYOUT NAME - 022006_EC

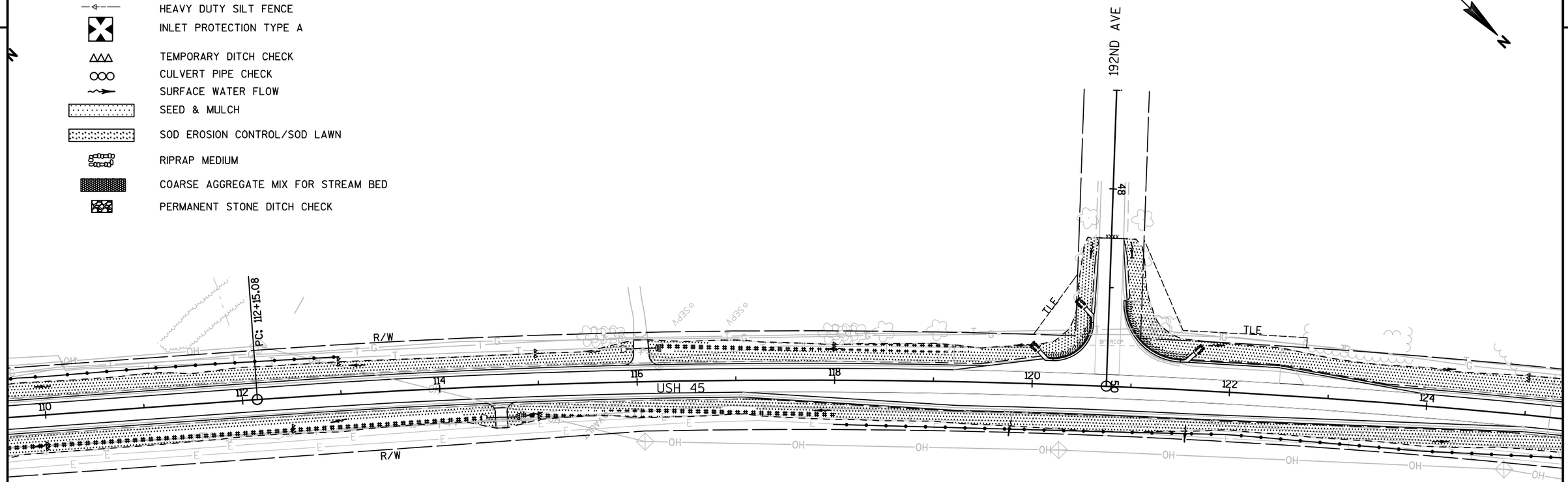
PLOT DATE : 5/17/2016 2:57 PM PLOT BY : MAAS, JOSEPH A PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

2

LEGEND

- EROSION MAT CLASS I, TYPE B
- EROSION MAT CLASS II, TYPE B
- SILT FENCE
- HEAVY DUTY SILT FENCE
- INLET PROTECTION TYPE A
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SURFACE WATER FLOW
- SEED & MULCH
- SOD EROSION CONTROL/SOD LAWN
- RIPRAP MEDIUM
- COARSE AGGREGATE MIX FOR STREAM BED
- PERMANENT STONE DITCH CHECK



PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	EROSION CONTROL	SHEET 114	E

FILE NAME : N:\PDS\C3D\CAD\32000203\022001_EC.DWG
LAYOUT NAME - 022007_EC

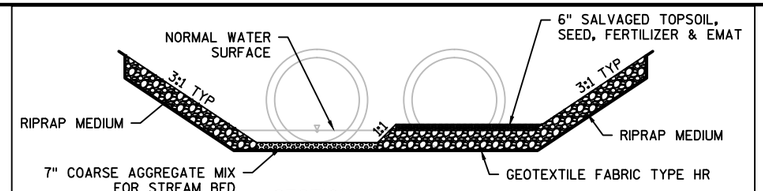
PLOT DATE : 5/17/2016 2:58 PM PLOT BY : MAAS, JOSEPH A PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

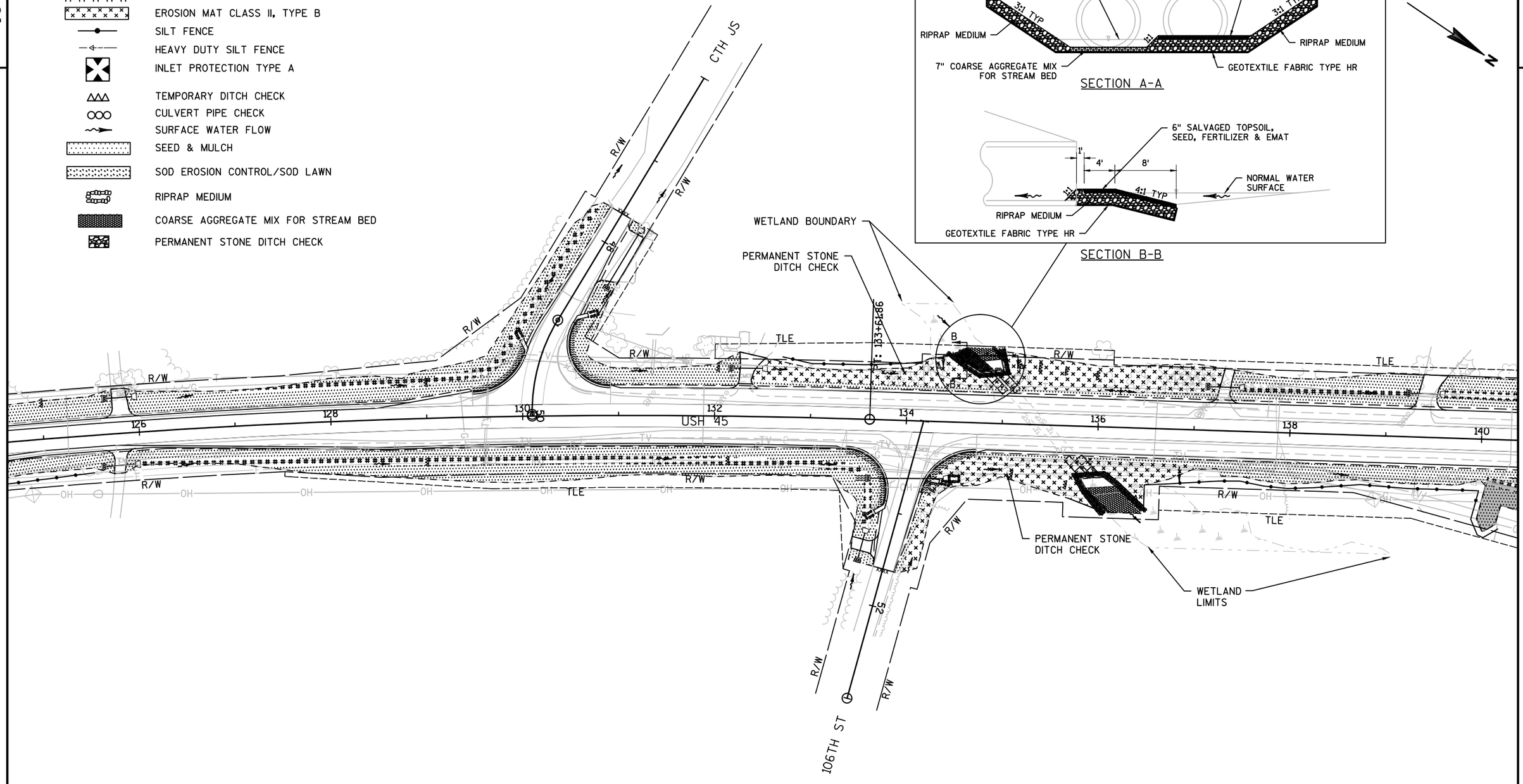
LEGEND

- EROSION MAT CLASS I, TYPE B
- EROSION MAT CLASS II, TYPE B
- SILT FENCE
- HEAVY DUTY SILT FENCE
- INLET PROTECTION TYPE A
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SURFACE WATER FLOW
- SEED & MULCH
- SOD EROSION CONTROL/SOD LAWN
- RIPRAP MEDIUM
- COARSE AGGREGATE MIX FOR STREAM BED
- PERMANENT STONE DITCH CHECK



SECTION A-A

SECTION B-B



PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	EROSION CONTROL	SHEET 115	E

FILE NAME : N:\PDS\C3D\CAD\32000203\022001_EC.DWG
LAYOUT NAME - 022008_EC

PLOT DATE : 5/17/2016 2:58 PM PLOT BY : MAAS, JOSEPH A PLOT NAME : PLOT SCALE : 1 IN:100 FT

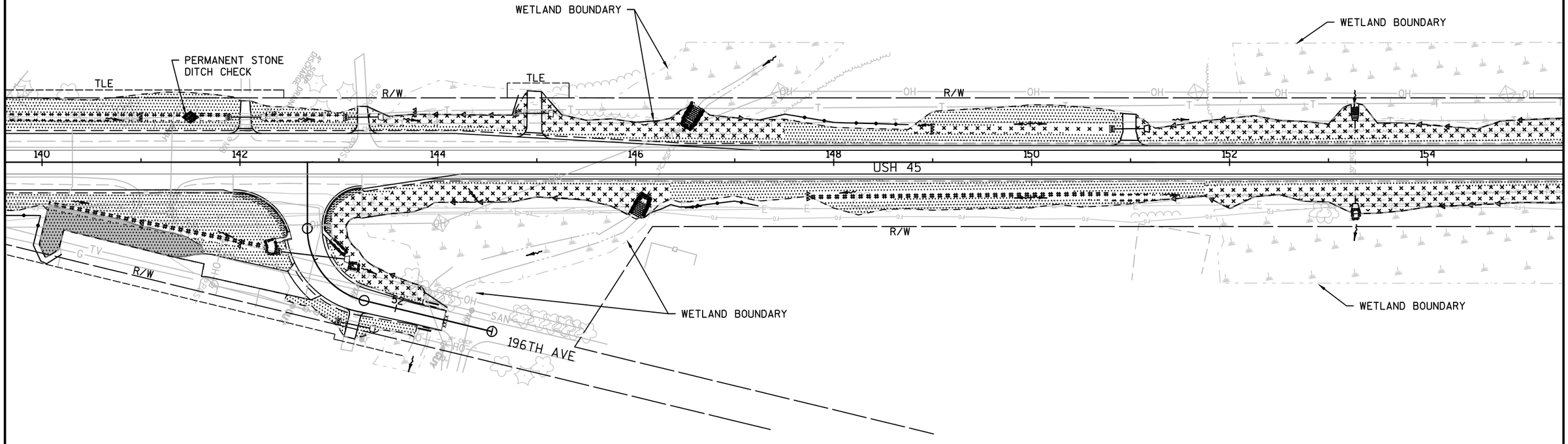
WISDOT/CADDS SHEET 42

2

2

LEGEND

- EROSION MAT CLASS I, TYPE B
- EROSION MAT CLASS II, TYPE B
- SILT FENCE
- HEAVY DUTY SILT FENCE
- INLET PROTECTION TYPE A
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SURFACE WATER FLOW
- SEED & MULCH
- SOD EROSION CONTROL/SOD LAWN
- RIPRAP MEDIUM
- COARSE AGGREGATE MIX FOR STREAM BED
- PERMANENT STONE DITCH CHECK



PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	EROSION CONTROL	SHEET 116	E

FILE NAME : N:\PDS\C3D\CAD\32000203\022001_EC.DWG
LAYOUT NAME - 022009_EC

PLOT DATE : 5/17/2016 2:58 PM PLOT BY : MAAS, JOSEPH A PLOT NAME : PLOT SCALE : 1 IN:100 FT

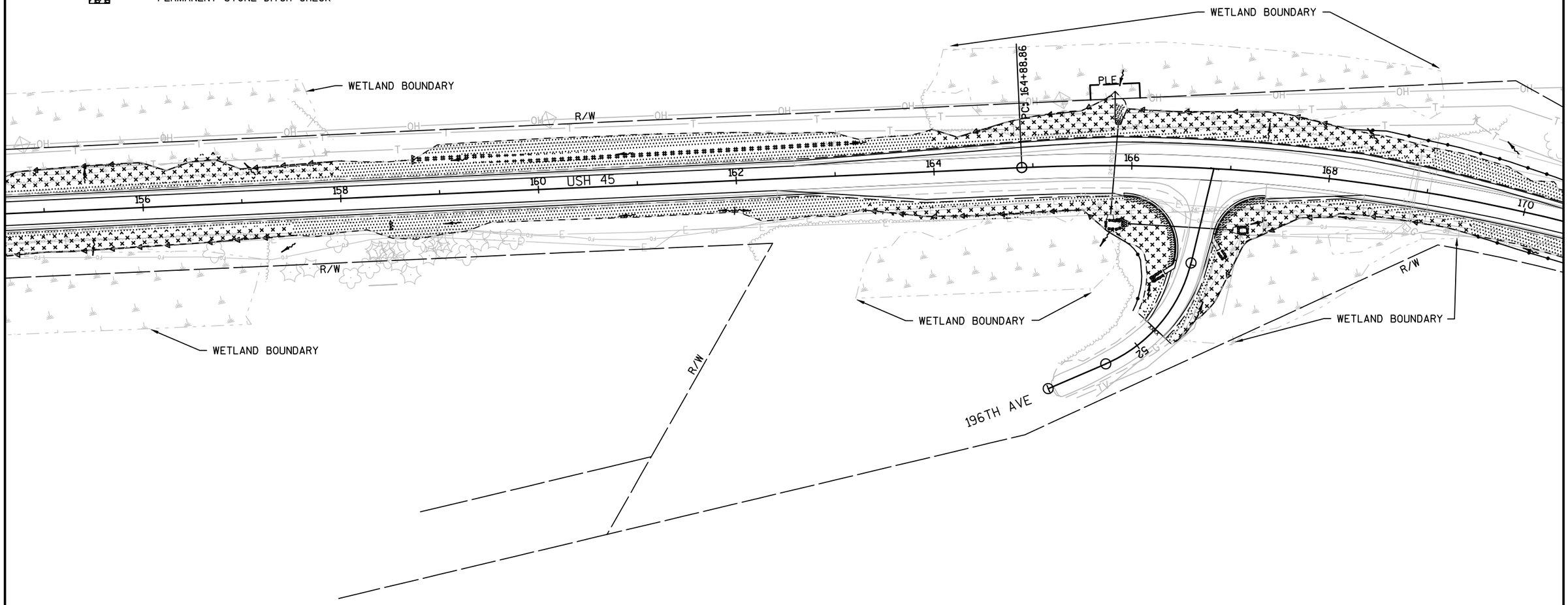
WISDOT/CADDS SHEET 42

2

2

LEGEND

- EROSION MAT CLASS I, TYPE B
- EROSION MAT CLASS II, TYPE B
- SILT FENCE
- HEAVY DUTY SILT FENCE
- INLET PROTECTION TYPE A
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SURFACE WATER FLOW
- SEED & MULCH
- SOD EROSION CONTROL/SOD LAWN
- RIPRAP MEDIUM
- COARSE AGGREGATE MIX FOR STREAM BED
- PERMANENT STONE DITCH CHECK



PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	EROSION CONTROL	SHEET 117	E

FILE NAME : N:\PDS\C3D\CAD\32000203\022001_EC.DWG
LAYOUT NAME - 022010_EC

PLOT DATE : 5/17/2016 2:58 PM PLOT BY : MAAS, JOSEPH A PLOT NAME : PLOT SCALE : 1 IN:100 FT

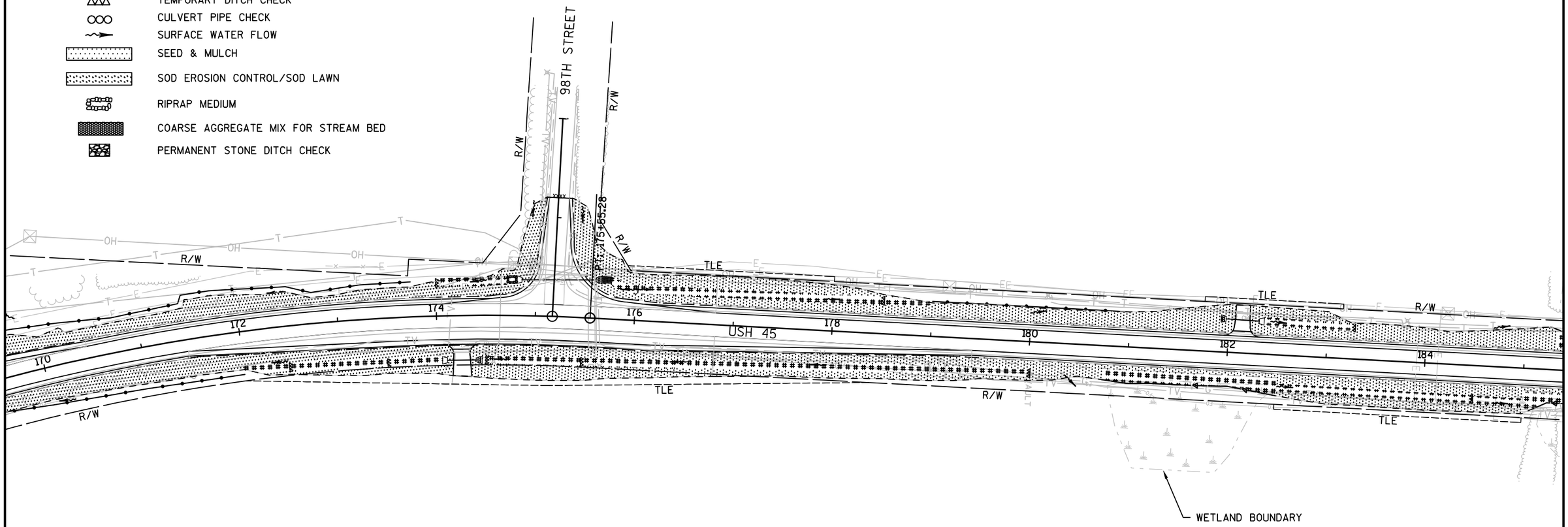
WISDOT/CADDS SHEET 42

2

2

LEGEND

- EROSION MAT CLASS I, TYPE B
- EROSION MAT CLASS II, TYPE B
- SILT FENCE
- HEAVY DUTY SILT FENCE
- INLET PROTECTION TYPE A
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SURFACE WATER FLOW
- SEED & MULCH
- SOD EROSION CONTROL/SOD LAWN
- RIPRAP MEDIUM
- COARSE AGGREGATE MIX FOR STREAM BED
- PERMANENT STONE DITCH CHECK



PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	EROSION CONTROL	SHEET 118	E

FILE NAME : N:\PDS\C3D\CAD\32000203\022001_EC.DWG
LAYOUT NAME - 022011_EC

PLOT DATE : 5/17/2016 2:58 PM PLOT BY : MAAS, JOSEPH A PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

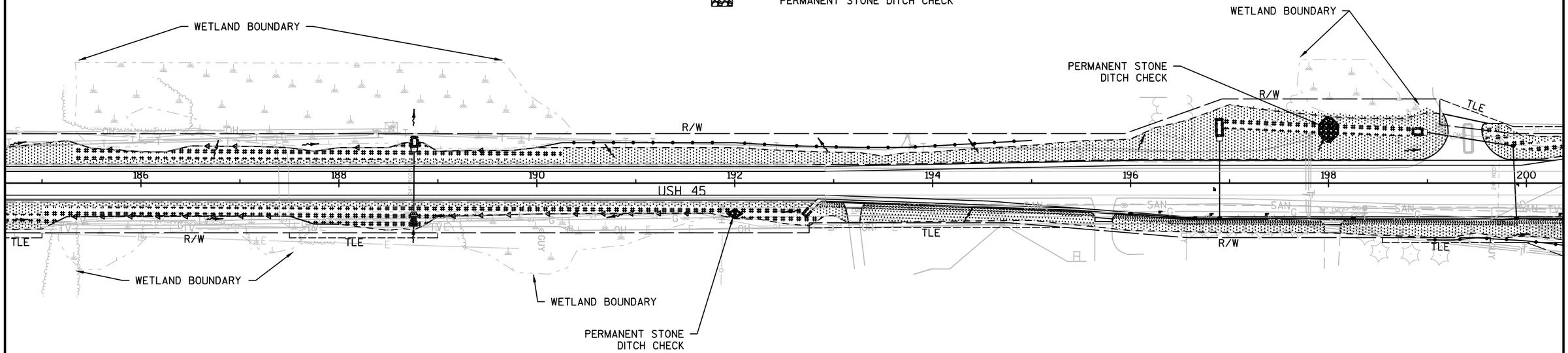
2

2

LEGEND

- EROSION MAT CLASS I, TYPE B
- EROSION MAT CLASS II, TYPE B
- SILT FENCE
- HEAVY DUTY SILT FENCE
- INLET PROTECTION TYPE A
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SURFACE WATER FLOW
- SEED & MULCH
- SOD EROSION CONTROL/SOD LAWN
- RIPRAP MEDIUM
- COARSE AGGREGATE MIX FOR STREAM BED
- PERMANENT STONE DITCH CHECK

N



PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	EROSION CONTROL	SHEET 119	E

FILE NAME : N:\PDS\C3D\CAD\32000203\022001_EC.DWG
LAYOUT NAME - 022012_EC

PLOT DATE : 5/17/2016 2:58 PM PLOT BY : MAAS, JOSEPH A PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

N

N

WETLAND BOUNDARY

CTH C

46

48

52

54

R/W

TLE

P.I. 201+73.48

WETLAND BOUNDARY

200 202 204 206 208 210 212 214

USH 45

WILMOT RD

WETLAND BOUNDARY

LEGEND

- EROSION MAT CLASS I, TYPE B
- EROSION MAT CLASS II, TYPE B
- SILT FENCE
- HEAVY DUTY SILT FENCE
- INLET PROTECTION TYPE A
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SURFACE WATER FLOW
- SEED & MULCH
- SOD EROSION CONTROL/SOD LAWN
- RIPRAP MEDIUM
- COARSE AGGREGATE MIX FOR STREAM BED
- PERMANENT STONE DITCH CHECK

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	EROSION CONTROL	SHEET 120	E

FILE NAME : N:\PDS\C3D\CAD\32000203\022001_EC.DWG
LAYOUT NAME - 022013_EC

PLOT DATE : 5/17/2016 2:58 PM PLOT BY : MAAS, JOSEPH A PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

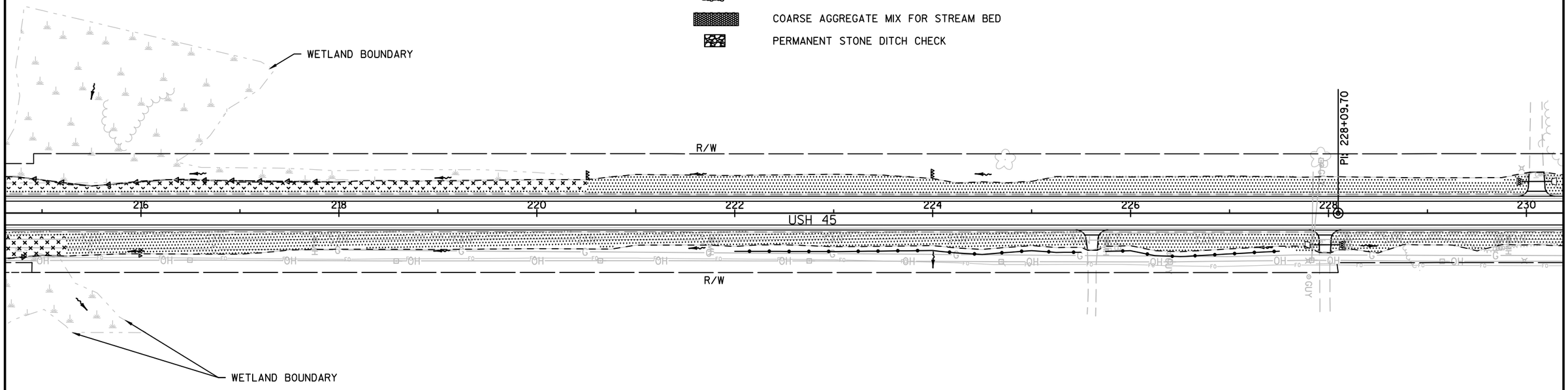
2

2

LEGEND

- EROSION MAT CLASS I, TYPE B
- EROSION MAT CLASS II, TYPE B
- SILT FENCE
- HEAVY DUTY SILT FENCE
- INLET PROTECTION TYPE A
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SURFACE WATER FLOW
- SEED & MULCH
- SOD EROSION CONTROL/SOD LAWN
- RIPRAP MEDIUM
- COARSE AGGREGATE MIX FOR STREAM BED
- PERMANENT STONE DITCH CHECK

N



PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	EROSION CONTROL	SHEET 121	E

FILE NAME : N:\PDS\C3D\CAD\32000203\022001_EC.DWG
LAYOUT NAME - 022014_EC

PLOT DATE : 5/17/2016 2:58 PM PLOT BY : MAAS, JOSEPH A PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

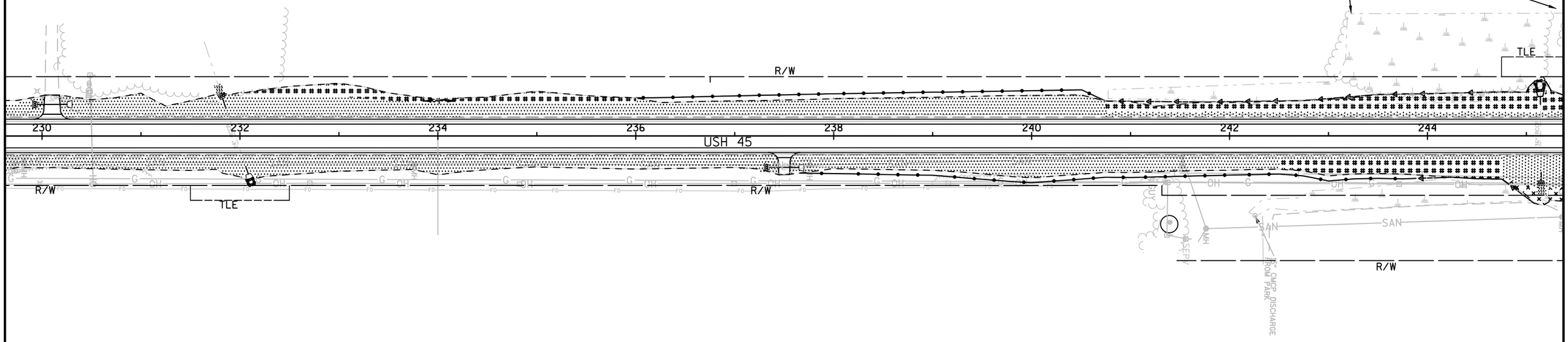
2

2

LEGEND

- EROSION MAT CLASS I, TYPE B
- EROSION MAT CLASS II, TYPE B
- SILT FENCE
- HEAVY DUTY SILT FENCE
- INLET PROTECTION TYPE A
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SURFACE WATER FLOW
- SEED & MULCH
- SOD EROSION CONTROL/SOD LAWN
- RIPRAP MEDIUM
- COARSE AGGREGATE MIX FOR STREAM BED
- PERMANENT STONE DITCH CHECK

N



PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	EROSION CONTROL	SHEET 122	E

FILE NAME : N:\PDS\C3D\CAD\32000203\022001_EC.DWG
LAYOUT NAME - 022015_EC

PLOT DATE : 5/17/2016 2:58 PM PLOT BY : MAAS, JOSEPH A PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

2

LEGEND

- EROSION MAT CLASS I, TYPE B
- EROSION MAT CLASS II, TYPE B
- SILT FENCE
- HEAVY DUTY SILT FENCE
- INLET PROTECTION TYPE A
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SURFACE WATER FLOW
- SEED & MULCH
- SOD EROSION CONTROL/SOD LAWN
- RIPRAP MEDIUM
- COARSE AGGREGATE MIX FOR STREAM BED
- PERMANENT STONE DITCH CHECK

N

WETLAND BOUNDARY

PERMANENT STONE DITCH CHECK

BEGIN SOD LAWN

SPECIAL DITCH CHECK REQUIRED
SEE CONSTRUCTION DETAIL
AND CROSS SECTIONS
FOR FURTHER INFORMATION

TLE

R/W

246 248 250 252 254 256 258 260

USH 45

CTH AH

PI: 254+56.80

88TH ST

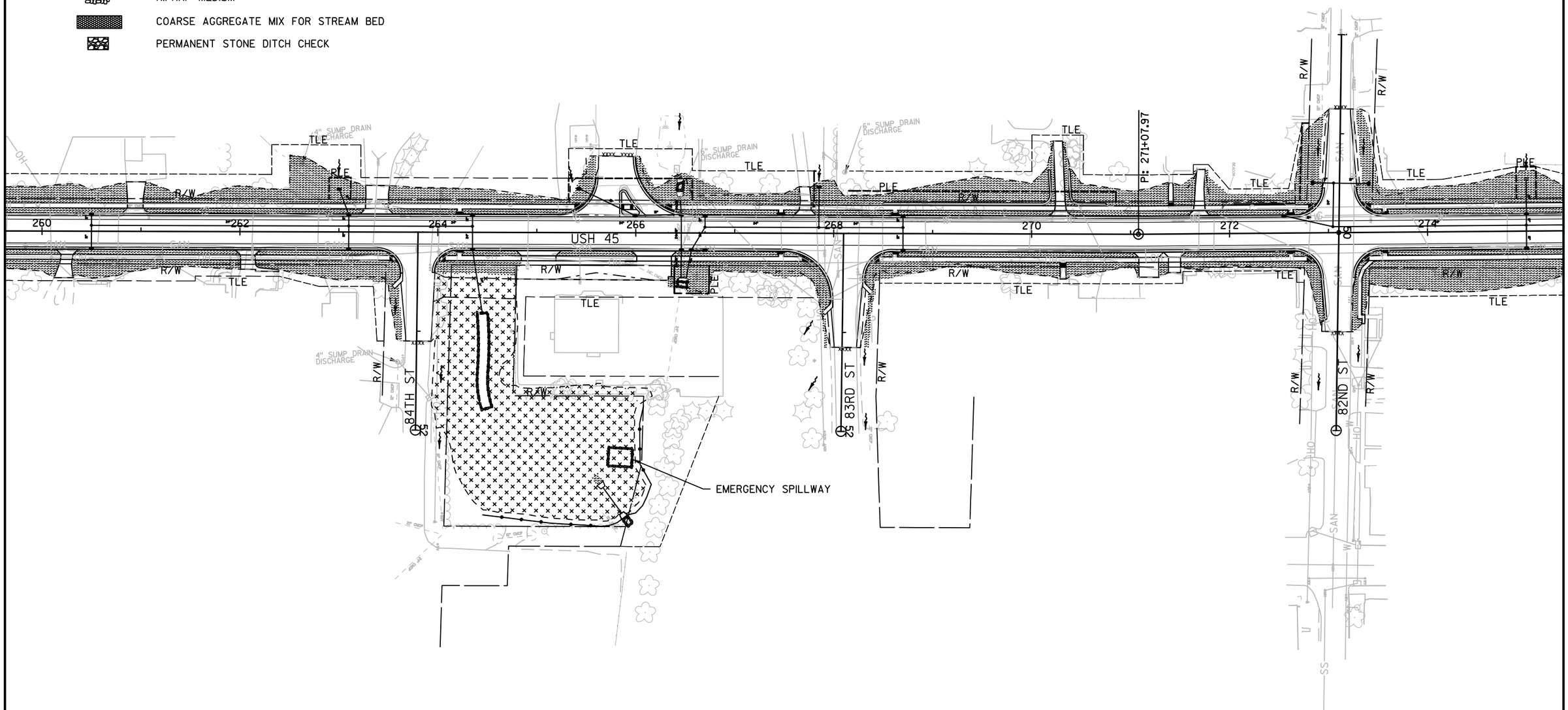
84TH PL

52

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	EROSION CONTROL	SHEET 123	E

LEGEND

- EROSION MAT CLASS I, TYPE B
- EROSION MAT CLASS II, TYPE B
- SILT FENCE
- HEAVY DUTY SILT FENCE
- INLET PROTECTION TYPE A
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SURFACE WATER FLOW
- SEED & MULCH
- SOD EROSION CONTROL/SOD LAWN
- RIPRAP MEDIUM
- COARSE AGGREGATE MIX FOR STREAM BED
- PERMANENT STONE DITCH CHECK



PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	EROSION CONTROL	SHEET 124	E

FILE NAME : N:\PDS\C3D\CAD\32000203\022001_EC.DWG
LAYOUT NAME - 022017_EC

PLOT DATE : 5/17/2016 2:58 PM PLOT BY : MAAS, JOSEPH A PLOT NAME : PLOT SCALE : 1 IN:100 FT

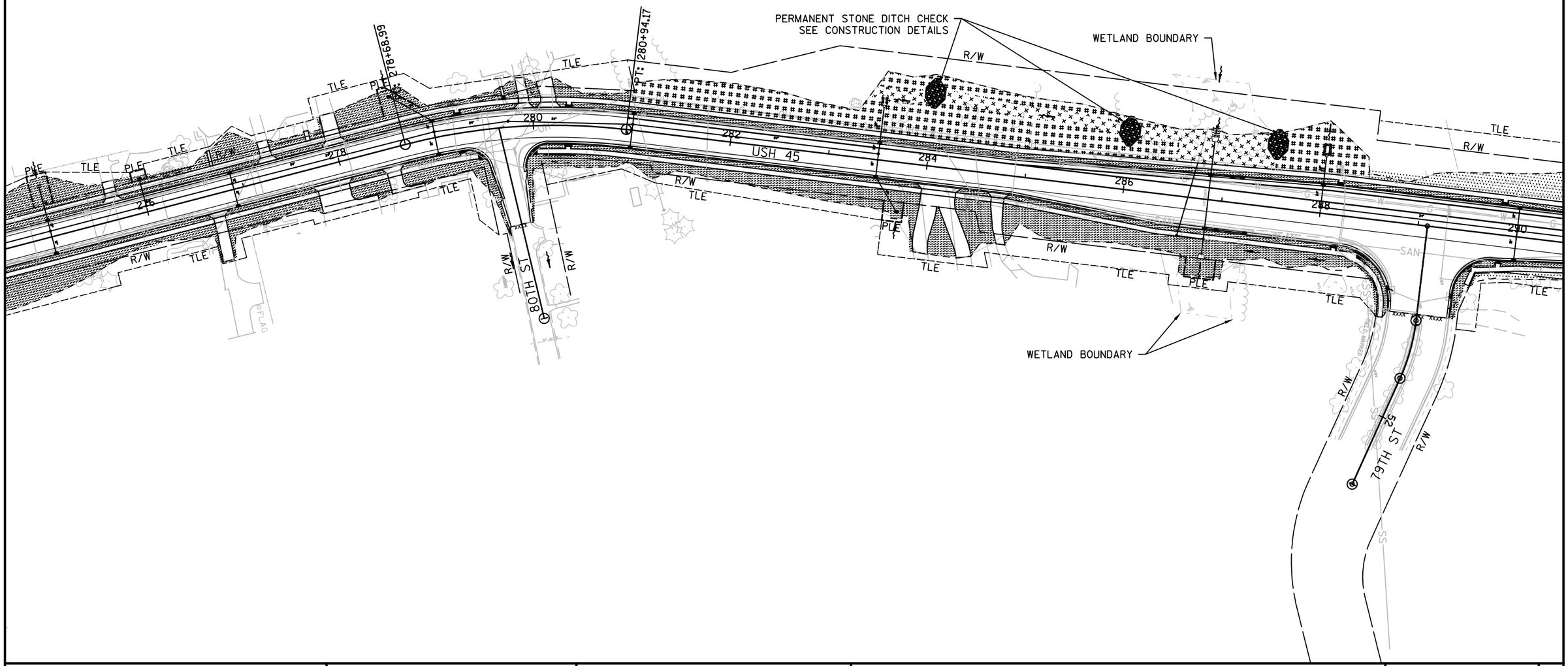
WISDOT/CADDS SHEET 42

2

2

LEGEND

- EROSION MAT CLASS I, TYPE B
- EROSION MAT CLASS II, TYPE B
- SILT FENCE
- HEAVY DUTY SILT FENCE
- INLET PROTECTION TYPE A
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SURFACE WATER FLOW
- SEED & MULCH
- SOD EROSION CONTROL/SOD LAWN
- RIPRAP MEDIUM
- COARSE AGGREGATE MIX FOR STREAM BED
- PERMANENT STONE DITCH CHECK



PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	EROSION CONTROL	SHEET 125	E

FILE NAME : N:\PDS\C3D\CAD\32000203\022001_EC.DWG
LAYOUT NAME - 022018_EC

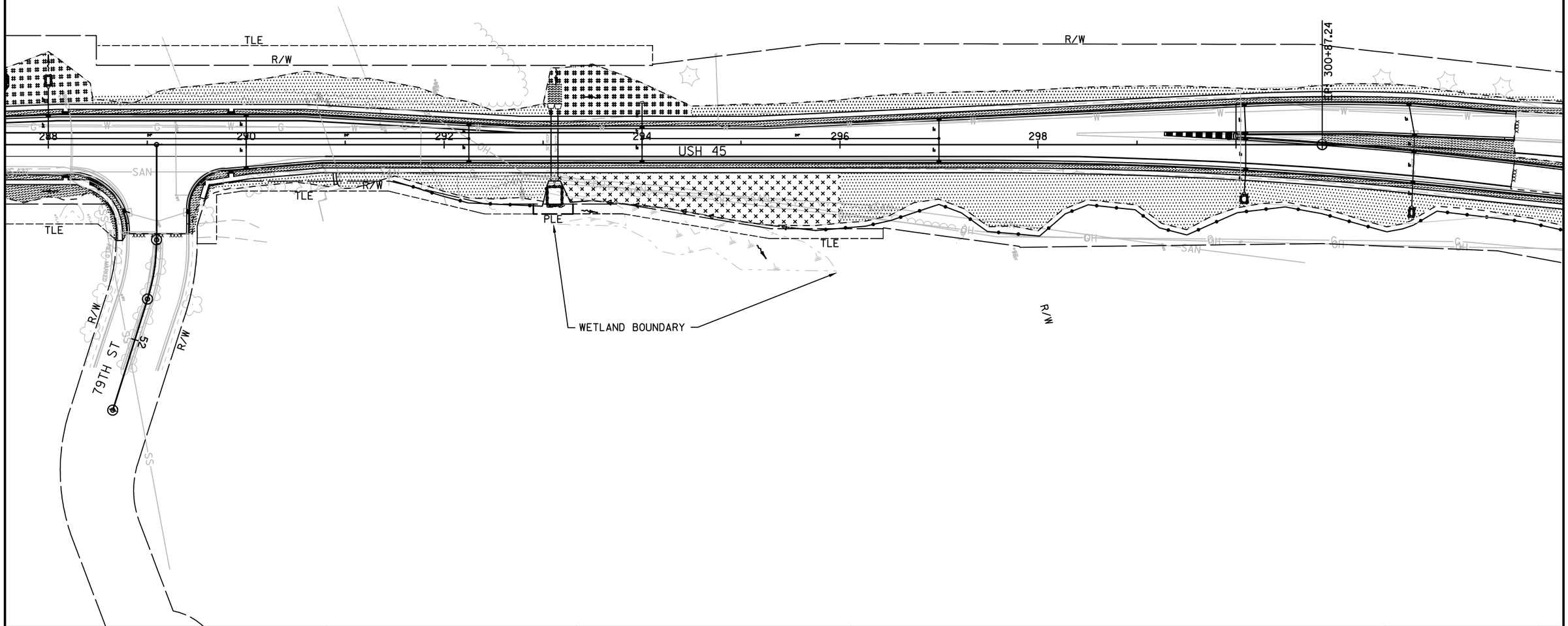
PLOT DATE : 5/17/2016 2:59 PM PLOT BY : MAAS, JOSEPH A PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

2

LEGEND

- EROSION MAT CLASS I, TYPE B
- EROSION MAT CLASS II, TYPE B
- SILT FENCE
- HEAVY DUTY SILT FENCE
- INLET PROTECTION TYPE A
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SURFACE WATER FLOW
- SEED & MULCH
- SOD EROSION CONTROL/SOD LAWN
- RIPRAP MEDIUM
- COARSE AGGREGATE MIX FOR STREAM BED
- PERMANENT STONE DITCH CHECK



PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	EROSION CONTROL	SHEET 126	E

FILE NAME : N:\PDS\C3D\CAD\32000203\022001_EC.DWG
LAYOUT NAME - 022019_EC

PLOT DATE : 5/17/2016 2:59 PM PLOT BY : MAAS, JOSEPH A PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

TLE

CHAUCER WOODS HOMEOWNERS ASSN

R/W

WETLAND BOUNDARY

WETLAND BOUNDARY

N

36"

246+00

USH 45

247+00

248+00

USH 45 R/L

249+00

250+00

251+00

STA 251+25, 6.0' RT
MH 4-FT DIA J
12

STA 250+15, 6.0' RT
MH 5-FT DIA J
13

STA 249+66.7, 46.8' RT
1-24" AECPRC
14

STA 249+67.8, 58.5' RT
1-24" AECPRC
15C

STA 250+14.4, 85.2' RT
MH 4-FT DIA J
15

STA 250+13.3, 131.2' RT
INLET 1G MS-A
15B

STA 251+25, 18.0' RT
INL 2X3 H
12B

STA 251+25, 51.2' RT
INL 1G MS-A
12A

STA 250+68, 100.2' RT
INLET 1G MS-A
15A

24"

18" CMCP

86TH ST

86TH ST R/L

15+00

R/W

BM 17

8511
JAMES &
JOSEPHINE
WIENKE

TLE

SPECIAL DITCH CHECK REQUIRED
SEE CONSTRUCTION DETAILS, EROSION CONTROL PLAN AND CROSS SECTIONS FOR FURTHER INFORMATION

CAUTION

R/W

8601
KOZIOL INC

LEGEND

- XX — DRAINAGE STRUCTURE
- RS — REMOVE EXISTING DRAINAGE STRUCTURE
- RP — REMOVE EXISTING STORM PIPE
- SLOPE INTERCEPT
- SURFACE WATER FLOW

15
784.86
779.60
779.10
778.03
P15 24" X 53.7' SSPRC CL III @ 2.00%

15A
783.22
780.72
779.10
P15A 18" X 56.0' SSPRC CL IV @ 2.00%

15
784.86
782.10
780.98
779.10

15B
783.94
781.44
P15B 18" X 46.0' SSPRC CL IV @ 1.00%

15C
778.03

12
787.30
781.63
782.13

12B
787.09
782.37
P12B 18" X 12.0' SSPRC CL IV @ 2.00%

12A
785.95
782.54
P12A 18" X 34.0' SSPRC CL IV @ 0.50%

86TH ST

12
787.30
782.63
781.63

13
784.06
778.62
P12 24" X 110' SSPRC CL IV @ 2.74%

14
777.99
P13 24" X 63.2' SSPRC CL IV @ 1.00%

786 784 782 780 778 776

245+25 245+50 245+75 246 246+25 246+50 246+75 247 247+25 247+50 247+75 248 248+25 248+50 248+75 249 249+25 249+50 249+75 250 250+25 250+50 250+75 251 251+25

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	STORM SEWER	SHEET 127	E

CHAUCER WOODS HOMEOWNERS ASSN

STA 254+64.3, 94.5' LT (16)
MH 3-FT DIA J

STA 253+93.8, 34.8' LT (18)
1-15" AECPRC

STA 253+25, 6.0' RT (11)
MH 4-FT DIA J
18" CMCP

STA 254+63.3, 30.0' LT (17)
MH 4-FT J

STA 254+89.8, 94.5' LT (16A)
INL 1-G MS-A

STA 255+45, 29.5' LT (17A)
INL 2X3 H

STA 256+00, 6.0' RT (10)
MH 5-FT DIA J

STA 255+93.6, 55.2' RT (10C)
INLET 4-FT DIA C

STA 253+25, 27.7' RT (11A)
INL 2X3 H

STA 255+98.7, 143.6' RT (10B)
1-18" AECPRC
1- PIPE GRATES 18-INCH

STA 256+45.8, 55.3' RT (10A)
INL 1G MS-A

PI: 254+56.80

CTH AH

CTH AH R/L

USH 45

USH 45 R/L

84TH PL

84TH PL R/L

8472 HORTON TRUST

8511 JAMES & JOSEPHINE WIENKE

8505 ARTHUR W WESINGER TRUST

8481 RICK J NETZEL

19960 SHERRY L ROMANO

BM 17

BM 18

CAUTION

TLE

R/W

12"

15"

18"

24"

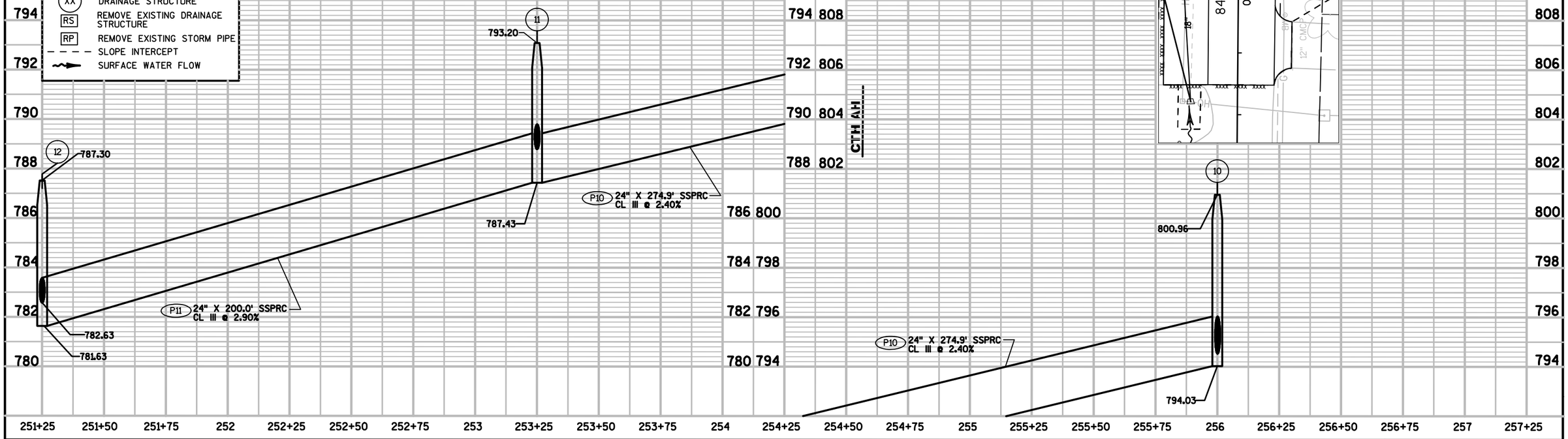
15" CMCP

18" CMCP

24" CMCP

LEGEND

- (XX) DRAINAGE STRUCTURE
- (RS) REMOVE EXISTING DRAINAGE STRUCTURE
- (RP) REMOVE EXISTING STORM PIPE
- SLOPE INTERCEPT
- SURFACE WATER FLOW

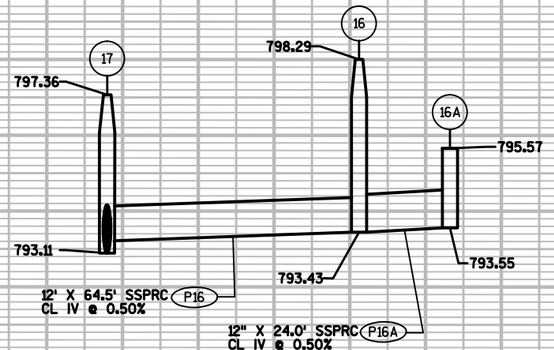


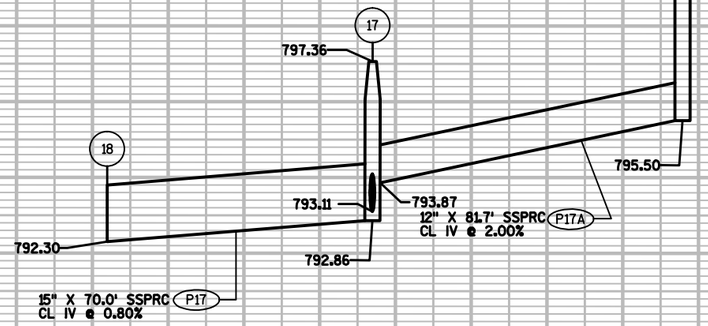
PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	STORM SEWER	SHEET 128	E

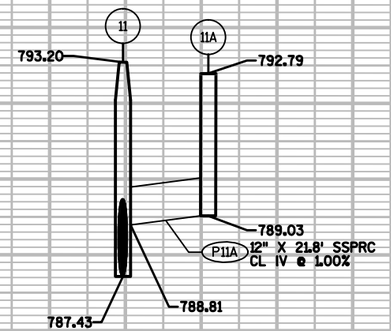
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LAYOUT NAME - ****

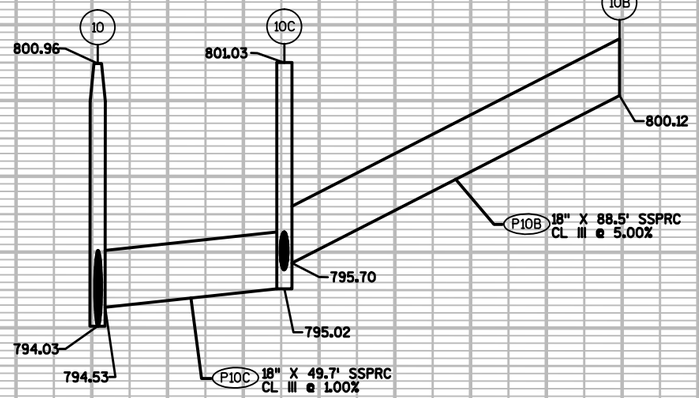
PLOT DATE : 4/28/2016 2:18 PM PLOT BY : MAAS, JOSEPH A PLOT NAME : PLOT SCALE : 1 IN:40 FT

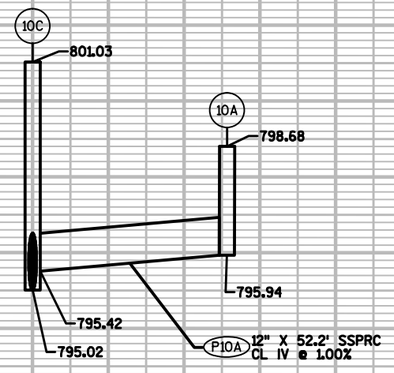
WISDOT/CADDS SHEET 41











PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	STORM SEWER	SHEET 129	E

FILE NAME : N:\PDS\C3D\CAD\32000203\022501_SS.DWG
LAYOUT NAME - ****

PLOT DATE : 4/28/2016 2:18 PM PLOT BY : MAAS, JOSEPH A PLOT NAME : PLOT SCALE : Custom

WISDOT/CADDS SHEET 41

LEGEND

- XX — DRAINAGE STRUCTURE
- RS — REMOVE EXISTING DRAINAGE STRUCTURE
- RP — REMOVE EXISTING STORM PIPE
- SLOPE INTERCEPT
- SURFACE WATER FLOW

8458 CHAD JURSZEWSKI

8444 NORMAN R ANDERSON

8430 SANDRA A MELESKY

8404 DANIEL B & JESSIE M TONYAN

4" SUMP DISCHARGE

19960 SHERRY L ROMANO

8447 JAMES D ZIRBEL

8429 DARREN D & CYNDI L PERSINO

8417 DANIEL J & PEGGY A LANGFORD

8403 WILLIAM & CLAUDETTE RAU

BM 18

USH 45 R/L

USH 45

CAUTION

TLE

R/W

OH

SAN

G

W

12" CMCP

15" CMCP

24"

12"

257+00 258+00 259+00 260+00 261+00 262+00 263+00

STA 260+50, 6.0' LT
MH 4-FT DIA J
20

STA 260+50, 17.5' LT
INL 2X3 H
20A

STA 260+50, 17.5' RT
INL 2X3 H
20B

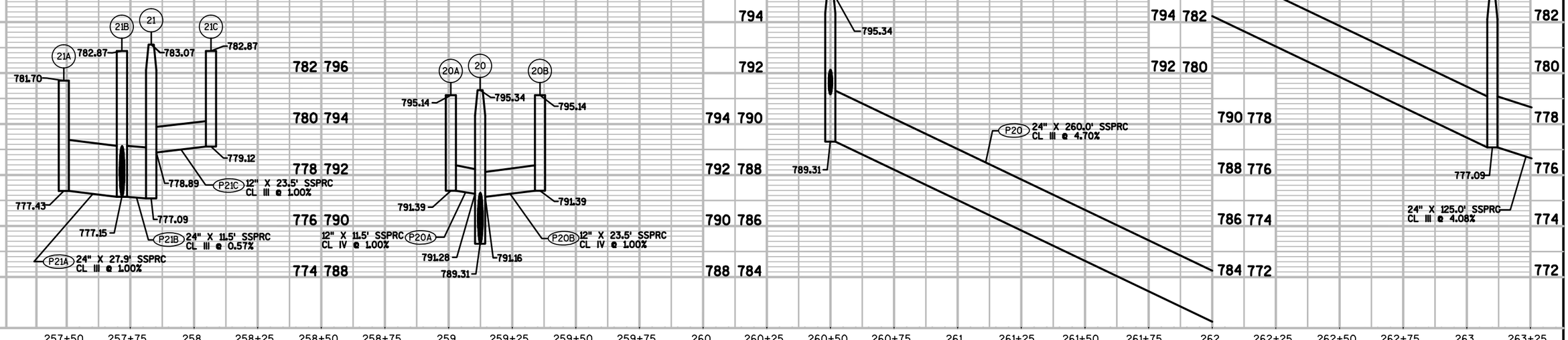
STA 263+00, 43.5' LT
INL 2G MS-A
21A

STA 263+10, 17.5' LT
INL 4-FT DIA H
21B

STA 263+10, 6.0' LT
MH 5-FT DIA J
21

STA 263+10, 17.5' RT
INL 2X3 H
21C

PLE



PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	STORM SEWER	SHEET 130	E

2

8320 VILLAGE OF BRISTOL BM 19

STA 266+46, 18.6' LT
MH 5-FT DIA H
23

CUT SUMP DISCHARGE BACK TO MATCH BACKSLOPE

8302 BRUCE & CONSTANCE JOHNSON

23C STA 266+44.8, 36.6' LT
1" 24"X38" AECPRCHE

CAUTION

31A STA 267+85, 47.0' LT
INL IG MS-A

8250 JOHN A DAVIDSON

30A STA 268+70, 17.5' LT
INL 2X3 H

30 STA 268+70, 6.0' LT
MH 4-FT DIA J

STA 265+42.5, 44.7' LT
INL IG MS-A
23A

8324 VALERIE J NELSON

32A STA 266+70, 17.5' LT
INL 2X3 H

32 STA 266+70, 6.0' LT
MH 5-FT DIA J

22A STA 264+35, 17.5' LT
INL 2X3 H

TLE PLE PLE TLE TLE TLE

R/W R/W R/W

19" CMCP 15" 12" CMCP 15" 12" 12"

22 STA 264+35, 6.0' LT
MH 4-FT DIA J

22B STA 264+35, 17.5' RT
INL 4-FT DIA H

STA 265+99, 17.5' LT
INL 4-FT DIA H
23B

RS RP RP 24"X38" 24"X38"

USH 45 84TH ST R/L USH 45 R/L 83RD ST R/L

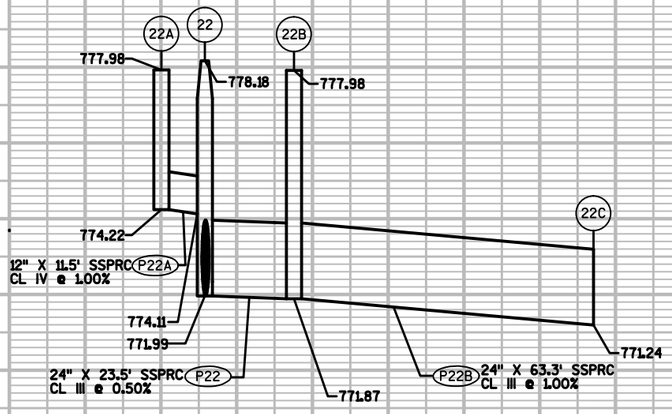
264+00 265+00 266+00 267+00 268+00 269+00

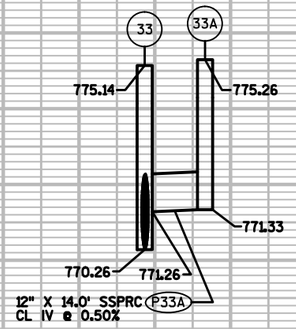
24" 24" 24" 24" 24" 12" 12" 12" 12" 12" 12"

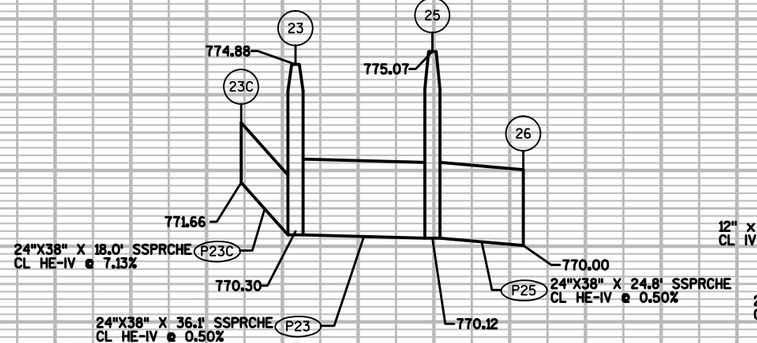
STA 267+85, 6.0' LT
MH 4-FT DIA J
31

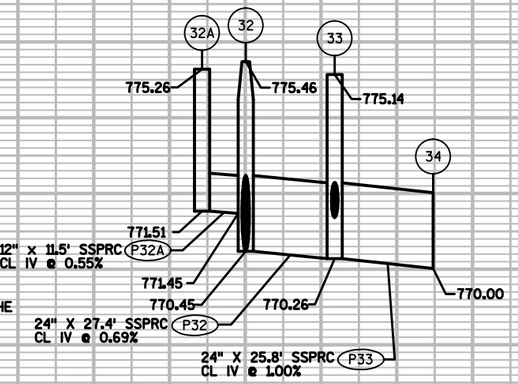
30B STA 268+70, 17.5' RT
INL 2X3 H

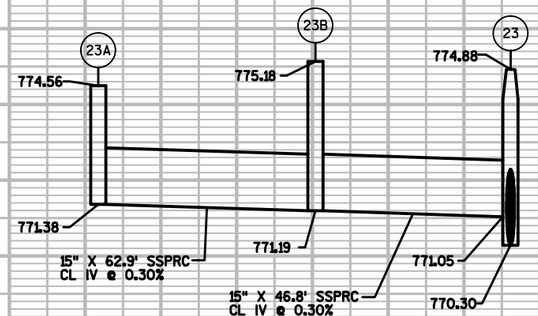
SAN SAN SAN

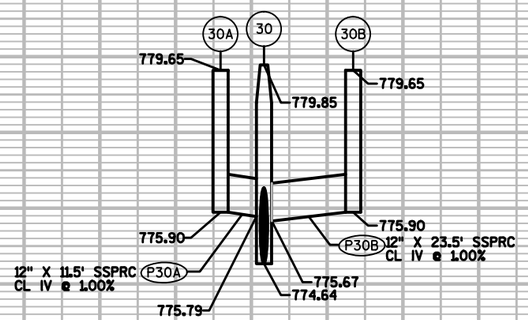


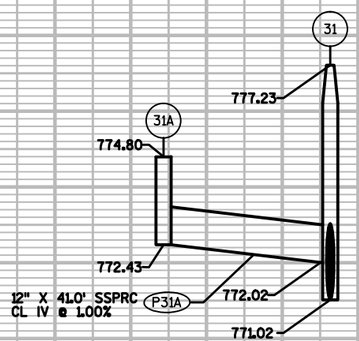












PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	STORM SEWER	SHEET 132	E

FILE NAME : N:\PDS\C3D\CAD\32000203\022501_SS.DWG
LAYOUT NAME - ****

PLOT DATE : 5/17/2016 3:08 PM PLOT BY : MAAS, JOSEPH A PLOT NAME : PLOT SCALE : Custom

WISDOT/CADDS SHEET 41

8250 DAVIDSON

8214 GURGUL

CAUTION

STA 272+84.3, 50.6' LT
INLET 2G MS-A
40A

STA 273+04.5, 6.0' LT
MH 5-FT DIA J
41

STA 272+55, 17.5' LT
INL 4-FT DIA H
41B

8206 HENNINGFIELD

82ND ST

20008 NEHRKORN

40
STA 273+05.5, 50.1' LT
MH 5-FT DIA J

STA 275+00, 53.0' LT
INL 2G MS-A
42A

40B
STA 273+41.2, 49.3' LT
INLET 1G MS-A

STA 275+00, 17.5' LT
INL 2X3 H
42B

8102 FRIEDRICH

N

TLE
PLE
R/W
18"
12"
24"
15"
15" CMCP
PI: 271+07.97
82ND ST R/L
USH 45
USH 45 R/L
270+00
271+00
272+00
273+00
274+00
275+00
50-00
SAN
OH
HO
W
G

STA 275+00, 6.0' LT
MH 5-FT DIA J
42

DRAIN TILE EXPLORATION

STA 275+00, 17.5' RT
INL 2X3 H
42C

8227 BOHR

8221 ARNDT

8205 LINGO

19940 KOZAK

19922 MATUSHEK

19916 SCHMITT

LEGEND

- (XX) DRAINAGE STRUCTURE
- [RS] REMOVE EXISTING DRAINAGE STRUCTURE
- [RP] REMOVE EXISTING STORM PIPE
- SLOPE INTERCEPT
- SURFACE WATER FLOW

82ND ST

40 — 789.00 — 782.01

41 — 788.75 — 781.79

42 — 788.12 — 780.81

24" X 44.1' SSPRC CL III @ 0.50% P40

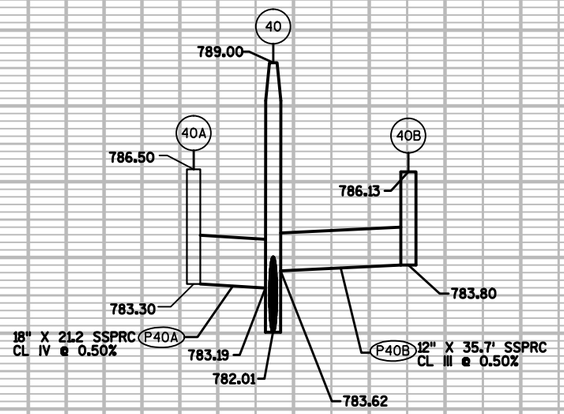
24" X 195.5' SSPRC CL III @ 0.50% P41

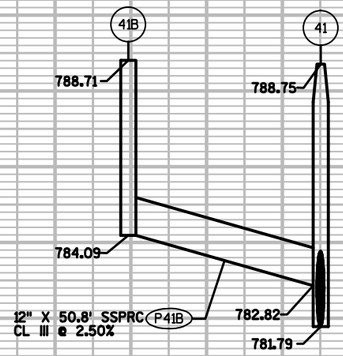
24" X 100.0' SSPRC CL III @ 0.50% P42

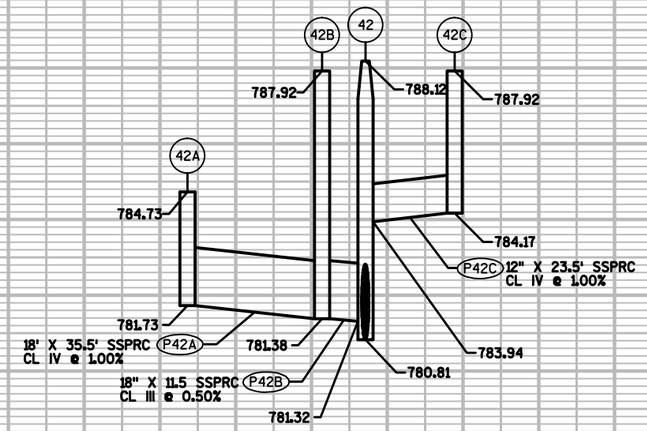
792 790 788 786 784 782 780

269+25 269+50 269+75 270 270+25 270+50 270+75 271 271+25 271+50 271+75 272 272+25 272+50 272+75 273 273+25 273+50 273+75 274 274+25 274+50 274+75 275 275+25

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	STORM SEWER	SHEET 133	E







790
788
786
784
782

2

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	STORM SEWER	SHEET 134	E

FILE NAME : N:\PDS\C3D\CAD\32000203\022501_SS.DWG
LAYOUT NAME - ****
PLOT DATE : 4/28/2016 2:19 PM
PLOT BY : MAAS, JOSEPH A
PLOT NAME :
PLOT SCALE : ******
WISDOT/CADDS SHEET 41

2

8102 FRIEDRICH

STA 276+90, 17.5' LT (43A)
INL 2X3 H

STA 276+90, 6.0' LT (43)
MH 5-FT DIA J

STA 276+00, 34.7' LT (42D)
INL 1G MS-A

8024 RASMUSSEN

CAUTION

8018 HEICK

STA 278+65, 51.0' LT (44A)
INL 2G MS-A

STA 279+00, 17.5' LT (44B)
INL 4FT DIA H

7950 KAISER

STA 279+75, 6.0' LT (45)
MH 4-FT DIA J

7946 KELLEY

STA 281+00, 17.5' LT (46A)
INL 2X3 HM

STA 281+00, 6.0' LT (46)
MH 5-FT DIA J

RLS ENTERPRISES LLC

N

TLE
PLE
R/W
15" CMCP
24"
12"
18"
USH 45
USH 45 R/L
276+00
277+00
278+00
279+00
280+00
281+00
PC: 278+68.99
PT: 280+36.17
STA 279+00, 6.0' LT (44)
MH 5-FT DIA J
STA 276+00, 6.0' LT (42E)
MH 5-FT DIA J
STA 276+90, 17.5' RT (43B)
INL 2X3 H
STA 279+00, 17.5' RT (44C)
INL 2X3 H
80TH ST
80TH ST R/L
19920 WALKER
STA 281+00, 17.5' RT (46B)
INL 2X3 HM

LEGEND

- (XX) DRAINAGE STRUCTURE
- [RS] REMOVE EXISTING DRAINAGE STRUCTURE
- [RP] REMOVE EXISTING STORM PIPE
- SLOPE INTERCEPT
- SURFACE WATER FLOW

8031 KRUEGER

8021 AKER

8020 BRISTOL UNITED METH CHURCH

8003 THOMAS

42E 787.79
43 787.50
44 784.53
45 781.95
46 775.80
780.31
779.86
778.81
776.23
770.18

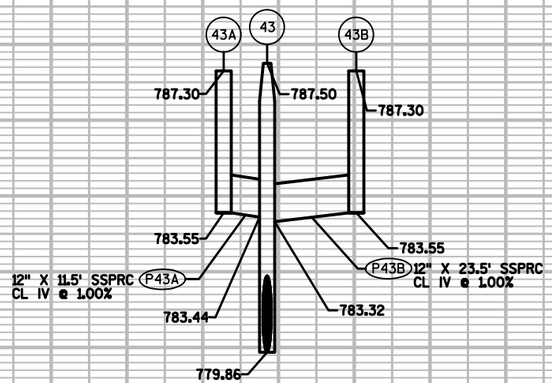
24" X 100.0' SSPRC CL III @ 0.50% (P42)
24" X 90.0' SSPRC CL III @ 0.50% (P42E)
24" X 210.3' SSPRC CL III @ 0.50% (P43)
24" X 75.7' SSPRC CL III @ 3.40% (P44)
24" X 126.0' SSPRC CL IV @ 4.80% (P45)
24" X 265.0' SSPRC CL IV @ 5.26% (P46)

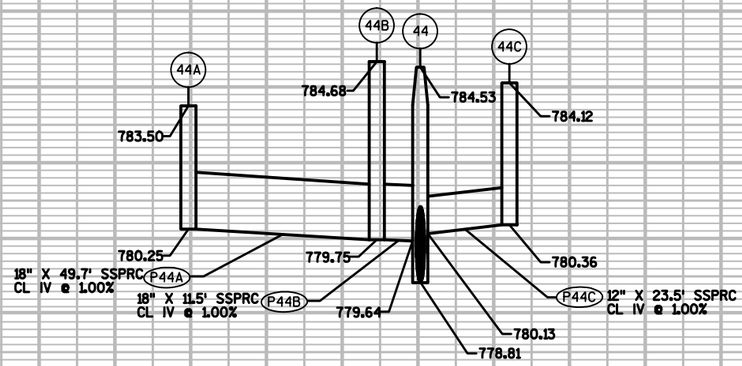
788 786 784 782 780 778 776 774

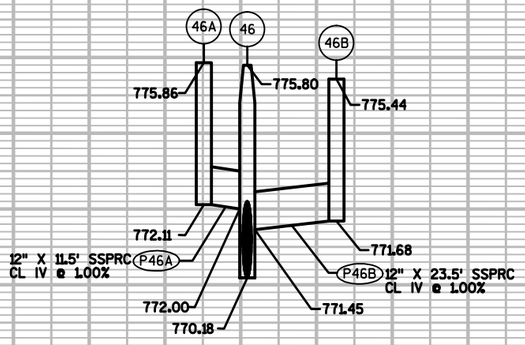
788 780 786 778 784 776 782 774 780 772 778 770 776 768 774 766

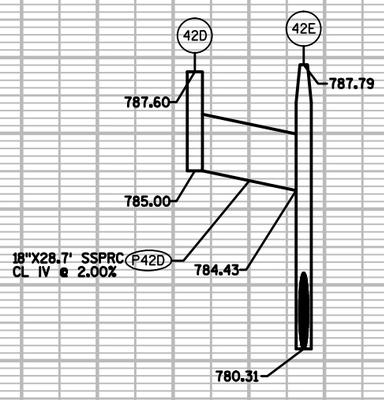
275+25 275+50 275+75 276 276+25 276+50 276+75 277 277+25 277+50 277+75 278 278+25 278+50 278+75 279 279+25 279+50 279+75 280 280+25 280+50 280+75 281 281+25

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	STORM SEWER	SHEET 135	E









PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	STORM SEWER	SHEET 136	E

FILE NAME : N:\PDS\C3D\CAD\32000203\022501_SS.DWG
LAYOUT NAME - ****

PLOT DATE : 4/28/2016 2:19 PM PLOT BY : MAAS, JOSEPH A PLOT NAME : PLOT SCALE : ******

WISDOT/CADDS SHEET 41

ILLS ENTERPRISES LLC

STA 283+50, 17.5' LT
MH 5-FT DIA HM
48A

STA 283+50, 6.0' LT
MH 6-FT DIA J
47

48
STA 283+50, 53.5' LT
1-30"AECPRC

R/W

30"

30"

CAUTION

50
STA 286+86 58.9' LT
1-24" AECPRC

SIA 287+18, 26.1' LT
INL 2X3 HM
51A

STA 286+86, 24.9 LT
MH 5-FT DIA HM
51

CLEAN OUT
TO REMAIN

24"

12"

12"

STA 287+08, 25.8' LT
INL 2X3 HM
51B

282+00 283+00 284+00 285+00 286+00 287+00

STA 283+50, 17.5' RT
INL 4-FT DIA HM
47B

18"

USH 45

USH 45 R/L

RP

PIPE UNDERDRAIN
UNPERFORATED 12-INCH

24"

12"

12"

STA 286+59, 39.8' RT
MH 4-FT DIA J
53A

STA 286+86, 29.5' RT
MH 5-FT DIA HM
52

RS

24"

RS

CONCRETE COLLARS
FOR PIPE

R/W

TLE

PLE

ZION EVAN
LUTHERAN CHURCH

STA 283+75, 50.0' RT
INL 2G MS-A
47A

R/W

TLE

STA 286+98, 29.5' RT
INL 2X3 HM
52B

7905 KRAHN

STA 286+86, 40.2' RT
MH 5-FT DIA J
53

STA 286+86, 55.5' RT
1-24" AECPRC
53B

PLE

BECKETT LLC

774 772 770 768 766 764 762 760

774 772 770 768 766 764 762 760

766 764 762 760 758 756 754 752

760 758 756 754 752 750 748 746

47

763.87

756.24

755.74

P46 24" X 265.0' SSPRC
CL IV @ 5.26%

24" X 265.0' SSPRC
CL IV @ 5.26%
P46

53A

53

758.10

758.04

EXISTING 24" SSPRC
TO REMAIN
P53

24" X 27.1' SSPRC
CL III @ 1.85%
P53A

746.20

745.70

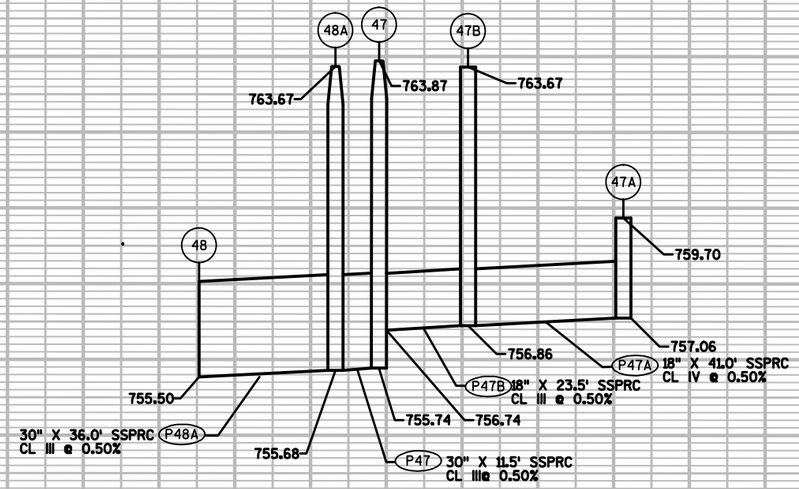
281+25 281+50 281+75 282 282+25 282+50 282+75 283 283+25 283+50 283+75 284 284+25 284+50 284+75 285 285+25 285+50 285+75 286 286+25 286+50 286+75 287 287+25

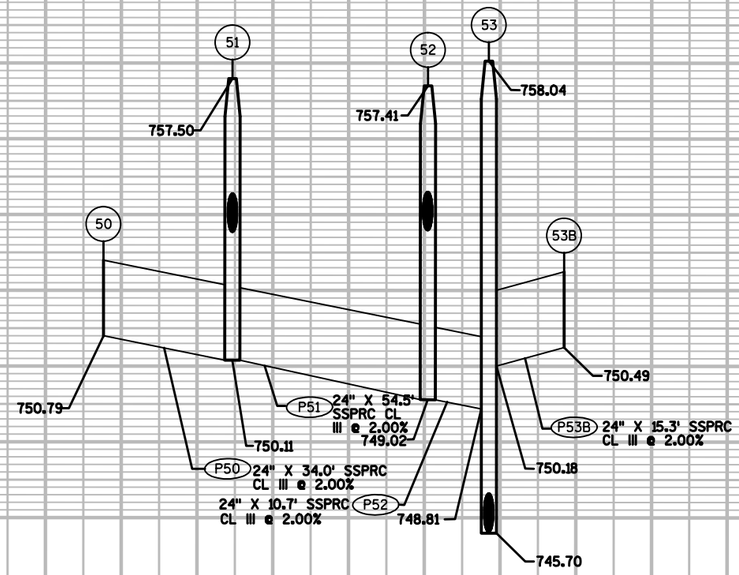
PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	STORM SEWER	SHEET 137 E

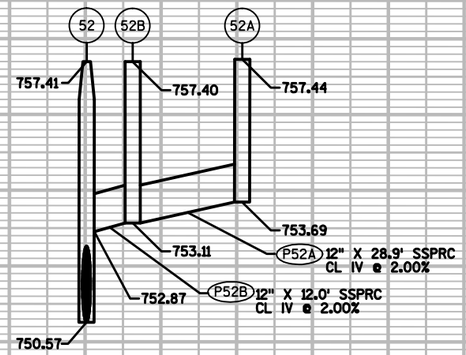
FILE NAME : N:\PDS\C3D\CAD\32000203\022501_SS.DWG
LAYOUT NAME - ****

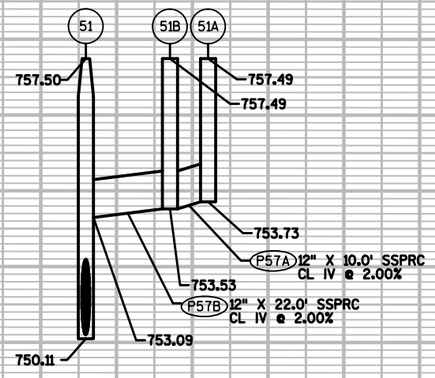
PLOT DATE : 4/28/2016 2:19 PM PLOT BY : MAAS, JOSEPH A PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 41









PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	STORM SEWER	SHEET 138	E

FILE NAME : N:\PDS\C3D\CAD\32000203\022501_SS.DWG
LAYOUT NAME - ****

PLOT DATE : 4/28/2016 2:19 PM PLOT BY : MAAS, JOSEPH A PLOT NAME : PLOT SCALE : ******

2

64 STA 288+00, 57.2' LT
1-24" AECPRC

CAUTION

R/W

ILLS ENTERPRISES LLC

63 STA 288+00, 29.1' LT
INL 4-FT DIA HM

62 STA 288+00, 6.0' LT
MH 5-FT DIA J

61A STA 290+00, 29.5' LT
INL 2X3 HM

61 STA 290+00, 6.0' LT
MH 4-FT DIA J

60A STA 292+25, 20.3' LT
INL 2X3 HM

60 STA 292+25, 6.0' LT
MH 4-FT DIA J

60B STA 292+25, 17.5' RT
INL 2X3 HM

24" 12" 24" 12" 12" 36" 36"

288+00 289+00 290+00 291+00 292+00 293+00

USH 45

USH 45 R/L

79TH ST R/L

52A STA 287+27, 29.5' RT
INL 2X3 HM

54 STA 288+51, 45.0' RT
RECONSTRUCT MANHOLE
MANHOLE COVER TYPE J

R/W

65A STA 288+77, 67.0' RT
INL 2X3 HM

12" RS 12" RS

79TH ST

61B STA 290+00, 23.8' RT
INL 2X3 HM

TLE

R/W

TLE PLE

TLE

BECKETT LLC

65 STA 288+82, 68.7' RT
CONC COLLAR

XXX XXX XXX XXX XXX

66A STA 289+41.4, 67.7' RT
INL 2X3 HM

66 STA 289+39.2, 68.3' RT
CONC COLLAR

7801 BRISTOL BAY DEVELOPMENT CORP

7868 TOWN OF BRISTOL

LEGEND

- XX DRAINAGE STRUCTURE
- RS REMOVE EXISTING DRAINAGE STRUCTURE
- RP REMOVE EXISTING STORM PIPE
- SLOPE INTERCEPT
- SURFACE WATER FLOW

79TH ST

766 764 762 760 758 756 754 752

62 758.23 752.58

61 759.27 753.88

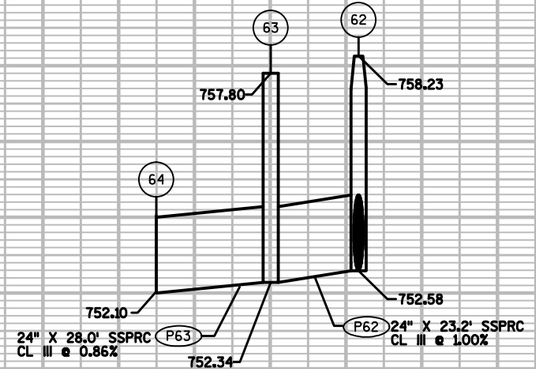
60 760.44 755.34

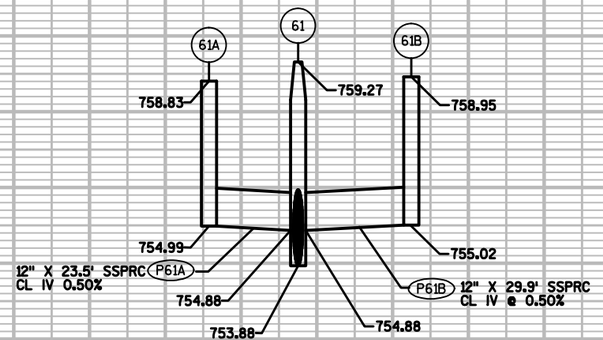
P61 24" X 200.0' SSPRC
CL IV @ 0.65%

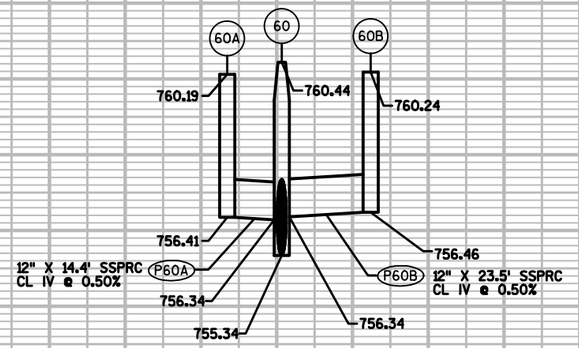
P60 24" X 225.0' SSPRC
CL IV @ 0.65%

287+25 287+50 287+75 288 288+25 288+50 288+75 289 289+25 289+50 289+75 290 290+25 290+50 290+75 291 291+25 291+50 291+75 292 292+25 292+50 292+75 293 293+25

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	STORM SEWER	SHEET 139 E







2

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	STORM SEWER	SHEET 140	E

2

2

R/W

RLS ENTERPRISES LLC

BERWICK PROPERTIES INC

73 STA 294+00, 41.5' LT
1-24" AECPRC

72 STA 294+00, 17.5' LT
INL 4-FT HM

71 STA 294+00, 6.0' LT
MH 5-FT DIA J

71A STA 294+00, 17.5' RT
INL 2X3 HM

70A STA 297+00, 25.6' LT
INL 2X3 HM

70 STA 297+00, 6.0' LT
MH 4-FT DIA J

70B STA 297+00, 17.5' RT
INL 2X3 HM

USH 45 R/L

24"

12"

294+00 295+00 296+00 297+00 298+00 299+00

USH 45

CAUTION

R/W

PLE

TLE

7868
VILLAGE OF
BRISTOL

WETLAND
BOUNDARY

BECKETT LLC

LEGEND

- XX DRAINAGE STRUCTURE
- RS REMOVE EXISTING DRAINAGE STRUCTURE
- RP REMOVE EXISTING STORM PIPE
- SLOPE INTERCEPT
- SURFACE WATER FLOW

762 760 758 756

761.25 761.45 761.25

757.62

757.50

P71A 12" X 23.5' SSPRC
CL IV @ 0.50%

756.50

756.32

24" X 24.0' SSPRC P72
CL IV @ 0.50%

756.44

24" X 11.5' SSPRC P71
CL IV @ 0.50%

761.45

756.50

P70 24" X 300.0' SSPRC
CL IV @ 1.65%

767.16

761.45

766.80 767.16 766.85

763.01 763.17

12" X 19.6' SSPRC P70A
CL IV @ 1.00%

P70B 12" X 23.5' SSPRC
CL IV @ 1.00%

762.81 762.94

761.45

772 770 768 766 764 762 760 758 756

293+25 293+50 293+75 294 294+25 294+50 294+75 295 295+25 295+50 295+75 296 296+25 296+50 296+75 297 297+25 297+50 297+75 298 298+25 298+50 298+75 299 299+25

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	STORM SEWER	SHEET 141	E

FILE NAME : N:\PDS\C3D\CAD\32000203\022501_SS.DWG
LAYOUT NAME - ****

PLOT DATE : 4/28/2016 2:19 PM PLOT BY : MAAS, JOSEPH A PLOT NAME : PLOT SCALE : 1 IN:40 FT

BERWICK PROPERTIES INC

R/W

7510
CHASE BANK

N

LEGEND

- XX — DRAINAGE STRUCTURE
- RS — REMOVE EXISTING DRAINAGE STRUCTURE
- RP — REMOVE EXISTING STORM PIPE
- SLOPE INTERCEPT
- SURFACE WATER FLOW

80A STA 300+08.5, 40.0' LT
INL 2X3 HM

90A STA 301+68, 42.3' LT
INL 2X3 HM

STA 300+10, 11.3' LT
INL 2X3 HM
80B

EP: 300+87.24

USH 45

90B STA 301+75, 11.2' LT
INL 2X3 HM

RP

300+00

301+00

302+00

303+00

304+00

305+00

USH 45 R/L

12"

80C STA 300+10, 6.0' LT
INL 2X3 HM

RS

90C STA 301+75, 5.1' RT
INL 2X3 HM

80D STA 300+10, 25.0' RT
INL 2X3 HM

RP

90D STA 301+75, 36.2' RT
INL 2X3 HM

80 STA 300+08, 48.0' RT
1-12" AECPRC

90 STA 301+75, 60.2' RT
1-12" AECPRC

CAUTION

XXX

OH G

BECKETT LLC

778
776
774
772
770
768
766
764

90A 90B 90C 90D

778.32
779.00
779.00
778.44

90

774.57
773.54

12" X 31.7' SSPRC
CL IV @ 1.00%
P90A

774.25
773.78

12" X 16.5' SSPRC
CL III @ 1.00%
P90B

774.09

P90C 12" X 31.1' SSPRC
CL III @ 1.00%

P90D 12" X 24.0' SSPRC
CL III @ 1.00%

80A 80B 80C 80D

774.20
774.76
774.85
774.29

80

770.45
770.16

12" X 28.7' SSPRC
CL III @ 1.00%
P80A

769.57

12" X 5.3' SSPRC
CL III @ 1.00%
P80B

769.80

P80D 12" X 23.0' SSPRC
CL IV @ 1.00%

770.11

P80C 12" X 31.0' SSPRC
CL IV @ 1.00%

299+25 299+50

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	STORM SEWER	SHEET 142 E

FILE NAME : N:\PDS\C3D\CAD\32000203\022501_SS.DWG
LAYOUT NAME - ****

PLOT DATE : 4/28/2016 2:19 PM PLOT BY : MAAS, JOSEPH A PLOT NAME : PLOT SCALE : 1 IN:40 FT

RICHARD MULDER

WETLAND BOUNDARY

20015 RONALD & CAROL SCHULER

R/W

TLE

USH 45

196+00 197+00 198+00 199+00 200+00 201+00

USH 45 R/L

CTH C R/L

PI: 201+73.48

50+00

51+00

1E STA 196+90, 42.5' LT
1-15" AECPRC

STA 199+00, 51.3' LT
1-12" AECPRC 2E

STA 199+86, 37.6' LT
INL 1G MS-A 2D

1A STA 196+00, 30.9' RT
INL 2X3 HM

1D STA 196+90, 35.5' RT
INL 2X3 HM

1C STA 198+25, 35.5' RT
INL 2X3 HM

STA 199+90, 35.5' RT
INL 4-FT DIA HM 2C

STA 201+03, 35.5' RT
INL 4-FT DIA HM 2B

STA 196+65, 35.5' RT
INL 2X3 HM 1B

STA 201+03, 54.3' RT
INL 1G MS-A 2A

RP

RS

15"

18"

24" CMCP

12"

4" SUMP DRAIN DISCHARGE

PIPE UNDERDRAIN UNPERFORATED 4-INCH

CAUTION

9411 SCOTT R & MARIE O HALL

9341 DOUGLAS & CHRISTINE MEEK

9339 DONALD & SANDRA RIGGS

9325 CAULK AND BULL TRUST

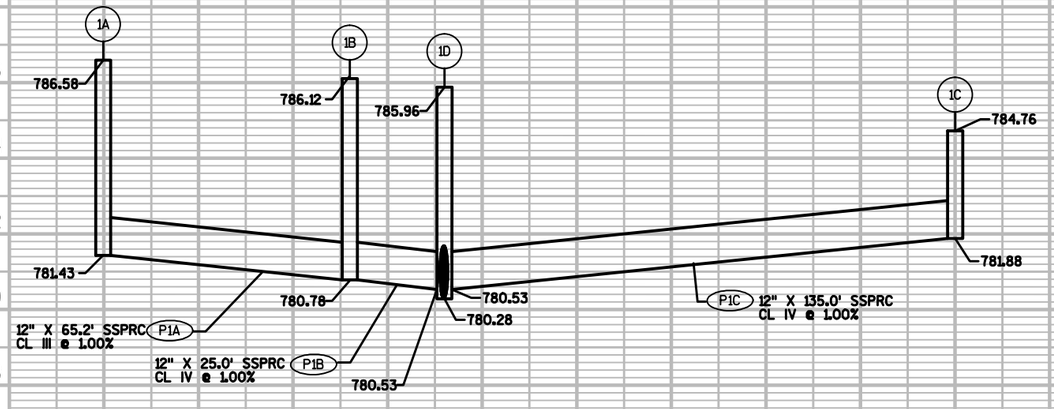
9301 SEQUOIT PROPERTIES LLC

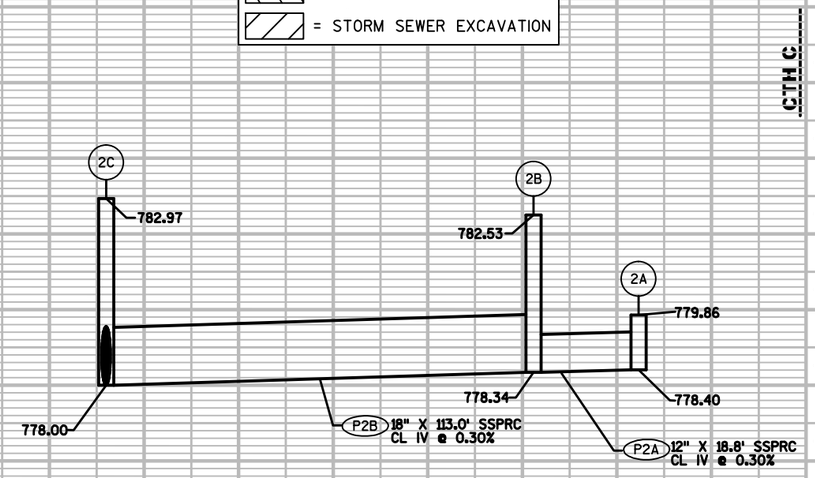
CTH C

LEGEND

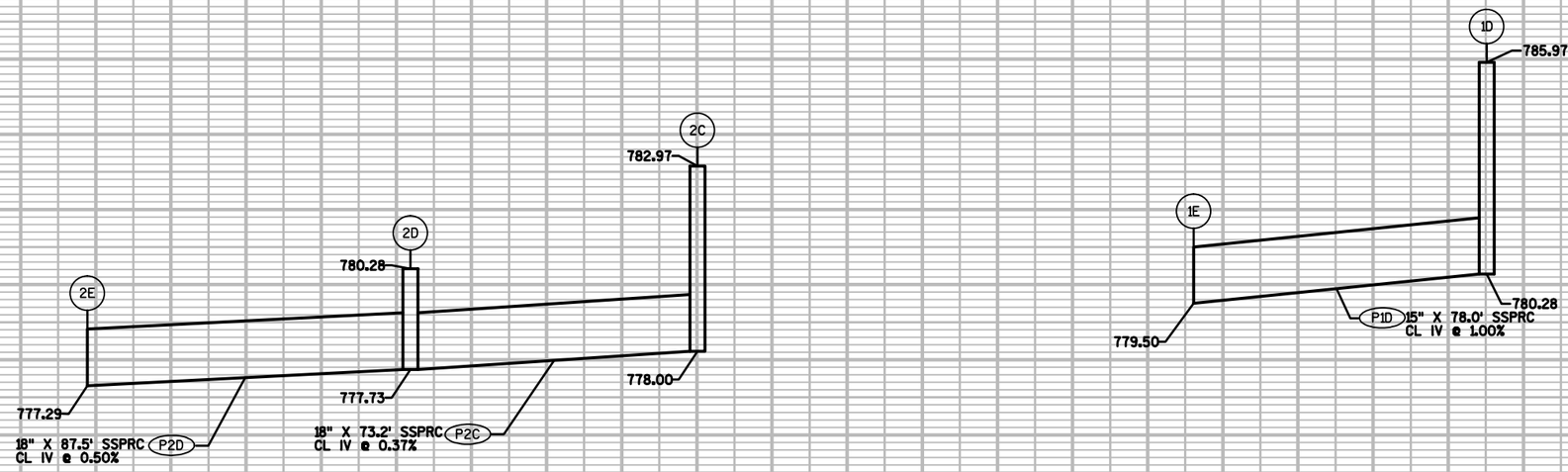
- XX — DRAINAGE STRUCTURE
- RS — REMOVE EXISTING DRAINAGE STRUCTURE
- RP — REMOVE EXISTING STORM PIPE
- SLOPE INTERCEPT
- SURFACE WATER FLOW

POTENTIAL PETROLEUM CONTAMINATED SOIL:
- = COMMON EXCAVATION
- = STORM SEWER EXCAVATION





PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	STORM SEWER	SHEET 143	E


2E
2D
2C
780.28
782.97
777.29
777.73
778.00
18" X 87.5' SSPRC
CL IV @ 0.50%
P2D
18" X 73.2' SSPRC
CL IV @ 0.37%
P2C

1D
1E
785.97
779.50
780.28
P1D
15" X 78.0' SSPRC
CL IV @ 1.00%

LEGEND

- XX — DRAINAGE STRUCTURE
- RS — REMOVE EXISTING DRAINAGE STRUCTURE
- RP — REMOVE EXISTING STORM PIPE
- SLOPE INTERCEPT
- SURFACE WATER FLOW

TLE
PLE
TLE
R/W
R/W
CAUTION
USH 45
N
18" CMCP
CTH C
CTH C R/L
60"
100C STA 47+39.4, 38.0' LT
1-60"AECPRC
+00
45+00
46+00
47+00
48+00
49+00
50+00
202+00
201+00
PI: 201+73.48
71" X 47"
R/W
18"
TLE
100A STA 46+25, 54' RT
1-71"X47" AEW PIPE ARCH STEEL
TLE
100 STA 47+39.4, 42.0' RT
MH 9-FT DIA J
100B STA 48+00, 42.9' RT
1-18" AEW FOR CULVERT PIPE STEEL

POTENTIAL PETROLEUM CONTAMINATED SOIL:
- = COMMON EXCAVATION
- = STORM SEWER EXCAVATION

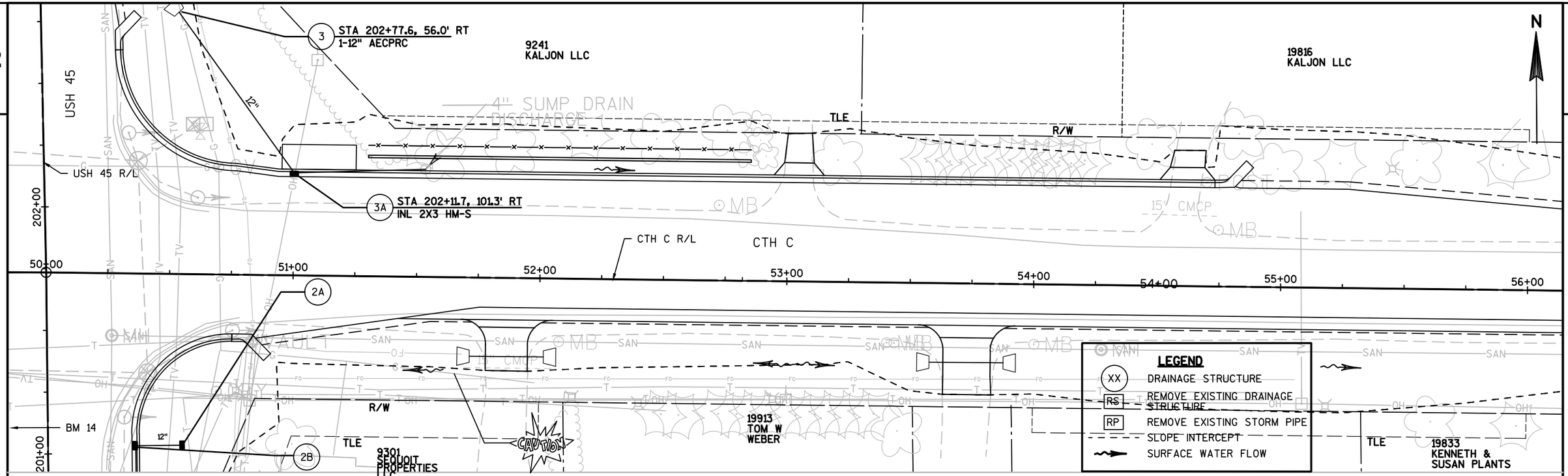
786
784
782
780
778
776
774
772

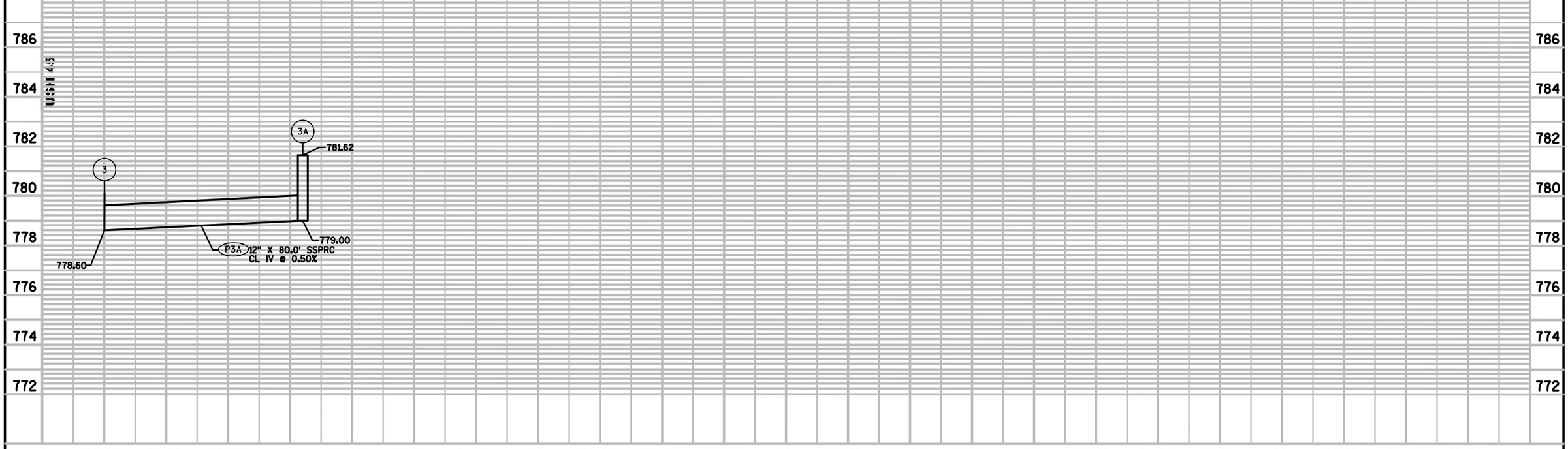
100C
100
780.23
772.46
P100 60" X 80.0' SSPRC CL IV @ 1.27%
773.48
100A
775.00
71"X47" X 115.0' PACS P100A @ 1.32%
100
780.23
773.48
100B
777.27
P100B 18" X 60.7' CPCS @ 2.27%
775.90

44
44+25
44+50
44+75
45
45+25
45+50
45+75
46
46+25
46+50
46+75
47
47+25
47+50
47+75
48
48+25
48+50
48+75
49
49+25
49+50
49+75
50

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	STORM SEWER - CTH C	SHEET 145 E

FILE NAME : N:\PDS\C3D\CAD\32000203\022501_SS.DWG
LAYOUT NAME - ****
PLOT DATE : 4/28/2016 2:19 PM
PLOT BY : MAAS, JOSEPH A
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 41





PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	STORM SEWER	SHEET 146	E

FILE NAME : N:\PDS\C3D\CAD\32000203\022501_SS.DWG
LAYOUT NAME - ****

PLOT DATE : 4/28/2016 2:20 PM PLOT BY : MAAS, JOSEPH A PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

2

19816
KALJON LLC

R/W

CTH C

CTH C R/L

56+00

57+00

58+00

59+00

18" CMCP

SAN

CMCP

OH

R/W

R/W

TLE

19833
KENNETH &
SUSAN PLANTS

BM 14

N

LEGEND

- XX — DRAINAGE STRUCTURE
- RS — REMOVE EXISTING DRAINAGE STRUCTURE
- RP — REMOVE EXISTING STORM PIPE
- SLOPE INTERCEPT
- SURFACE WATER FLOW

786 784 782 780 778 776 774 772

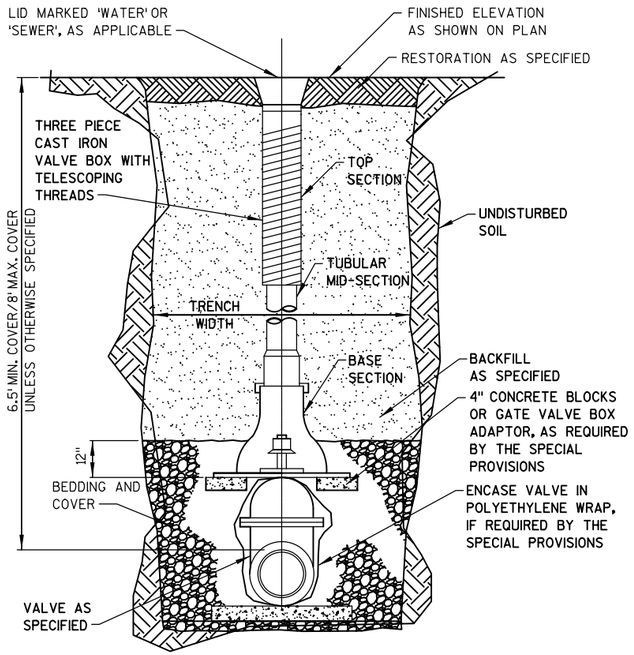
56 56+25 56+50 56+75 57 57+25 57+50 57+75 58 58+25 58+50 58+75 59 59+25 59+50 59+75

PROJECT NO:3200-02-73	HWY: USH 45	COUNTY:KENOSHA	STORM SEWER	SHEET 147	E

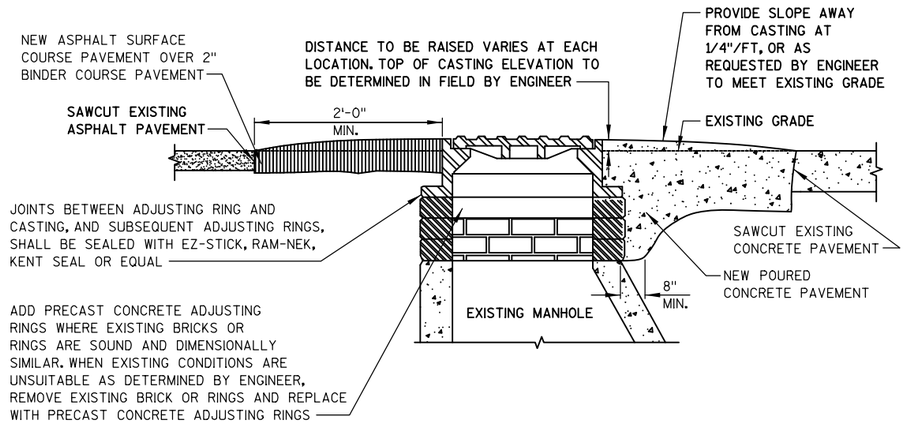
FILE NAME : N:\PDS\C3D\CAD\32000203\022501_SS.DWG
LAYOUT NAME - ****

PLOT DATE : 4/28/2016 2:20 PM PLOT BY : MAAS, JOSEPH A PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 41



GATE VALVE BOX SETTING



ADJUST MANHOLE CASTING

SHEET PREPARED BY STRAND ASSOCIATES FOR THE VILLAGE OF BRISTOL

CTH 'C'
(WILMOT RD)

PI: 201+73.48

USH 45

202+00
PI: 50+00.00
203+00
204+00
205+00
206+00
207+00

ADJUST SANITARY MANHOLE
PROP. RIM ELEV. = 780.6±
STA 201+48/25'RT

ADJUST SANITARY
SEWER MANHOLE
PROP. RIM ELEV. = 777.7±
STA 205+68/26'RT

18" CMCP
24" RCCP

MATCH LINE
SEE BOTTOM OF THIS SHEET
STA. 207+50

ADJUST SANITARY SEWER MANHOLE
PROP. RIM ELEV. = 783.0±
STA 198+37/27'RT

198+00

USH 45

24" CMCP

ADJUST SANITARY
SEWER MANHOLE
PROP. RIM ELEV. = 784.9±
STA 191+87/24'RT

192+00

USH 45

MATCH LINE
SEE TOP OF THIS SHEET
STA. 207+50

NOTES:
1. CONTRACTOR SHALL, AT A MINIMUM, NOTIFY THE VILLAGE OF BRISTOL36 HOURS PRIOR TO STARTING ANY WORK INCLUDED IN THIS PLAN.
2. A REPRESENTATIVE FOR THE VILLAGE OF BRISTOL SHALL BE PRESENT WHILE ANY WORK INCLUDED IN THIS IS BEING PERFORMED.
3. ALL WORK INCLUDED IN THIS PLAN SHALL BE DONE IN ACCORDANCE WITH THE VILLAGE OF BRISTOL STANDARD SPECIFICATIONS FOR DEVELOPMENT, LATEST EDITION.

WISCONSIN
THOMAS F HAGIE
E-43994
MADISON
WI
PROFESSIONAL ENGINEER

Thomas F. Hagie
4/19/16

NOTES:
1. CONTRACTOR SHALL, AT A MINIMUM, NOTIFY THE VILLAGE OF BRISTOL36 HOURS PRIOR TO STARTING ANY WORK INCLUDED IN THIS PLAN
2. A REPRESENTATIVE FOR THE VILLAGE OF BRISTOL SHALL BE PRESENT WHILE ANY WORK INCLUDED IN THIS IS BEING PERFORMED.
3. ALL WORK INCLUDED IN THIS PLAN SHALL BE DONE IN ACCORDANCE WITH THE VILLAGE OF BRISTOL STANDARD SPECIFICATIONS FOR DEVELOPMENT, LATEST EDITION.

N

0 FEET 50 100

18" CMCP

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

USH 45

ADJUST SANITARY
SEWER MANHOLE
PROP. RIM ELEV. = 776.5±
STA 209+76/27'RT

ADJUST SANITARY
SEWER MANHOLE
PROP. RIM ELEV. = 774.9±
STA 213+77/27'RT

MATCH LINE
SEE TOP OF SHEET 2
STA. 213+80

N

0 FEET 50 100

SHEET PREPARED BY STRAND ASSOCIATES FOR THE VILLAGE OF BRISTOL

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	VILLAGE OF BRISTOL 3200-02-73/74 PLAN	SHEET 1	E

FILE NAME : S:\MAD\1400--1499\1455\029\Micros\PLAN\Village of Bristol 3200-02-73 Plan.dgn
PLOT DATE : 4/20/2016
PLOT BY : _username_
PLOT NAME :
PLOT SCALE : $$.....plotscale.....$$
WISDOT/CADDS SHEET 42

2

MATCH LINE

SEE BOTTOM OF SHEET 1

STA. 2013+80

214+00

215+00

216+00

217+00

218+00

219+00

220+00

USH 45

60" CMP

NOTES:
1. CONTRACTOR SHALL, AT A MINIMUM, NOTIFY THE VILLAGE OF BRISTOL 36 HOURS PRIOR TO STARTING ANY WORK INCLUDED IN THIS PLAN.
2. A REPRESENTATIVE FOR THE VILLAGE OF BRISTOL SHALL BE PRESENT WHILE ANY WORK INCLUDED IN THIS IS BEING PERFORMED.
3. ALL WORK INCLUDED IN THIS PLAN SHALL BE DONE IN ACCORDANCE WITH THE VILLAGE OF BRISTOL STANDARD SPECIFICATIONS FOR DEVELOPMENT, LATEST EDITION.

ADJUST SANITARY SEWER MANHOLE
PROP. RIM ELEV. = 774.8±
STA 217+76/27'RT

N

0 FEET 50 100

2

MATCH LINE

SEE BOTTOM OF THIS SHEET

STA. 220+10

NOTES:
1. CONTRACTOR SHALL, AT A MINIMUM, NOTIFY THE VILLAGE OF BRISTOL 36 HOURS PRIOR TO STARTING ANY WORK INCLUDED IN THIS PLAN.
2. A REPRESENTATIVE FOR THE VILLAGE OF BRISTOL SHALL BE PRESENT WHILE ANY WORK INCLUDED IN THIS IS BEING PERFORMED.
3. ALL WORK INCLUDED IN THIS PLAN SHALL BE DONE IN ACCORDANCE WITH THE VILLAGE OF BRISTOL STANDARD SPECIFICATIONS FOR DEVELOPMENT, LATEST EDITION.

MATCH LINE

SEE TOP OF THIS SHEET

STA. 220+10

221+00

222+00

223+00

224+00

225+00

226+00

USH 45

ADJUST SANITARY SEWER MANHOLE
PROP. RIM ELEV. = 775.4±
STA 221+76/27'RT

ADJUST SANITARY SEWER MANHOLE
PROP. RIM ELEV. = 776.3±
STA 225+75/27'RT

N

0 FEET 50 100

SHEET PREPARED BY STRAND ASSOCIATES FOR THE VILLAGE OF BRISTOL

MATCH LINE

SEE TOP OF SHEET 3

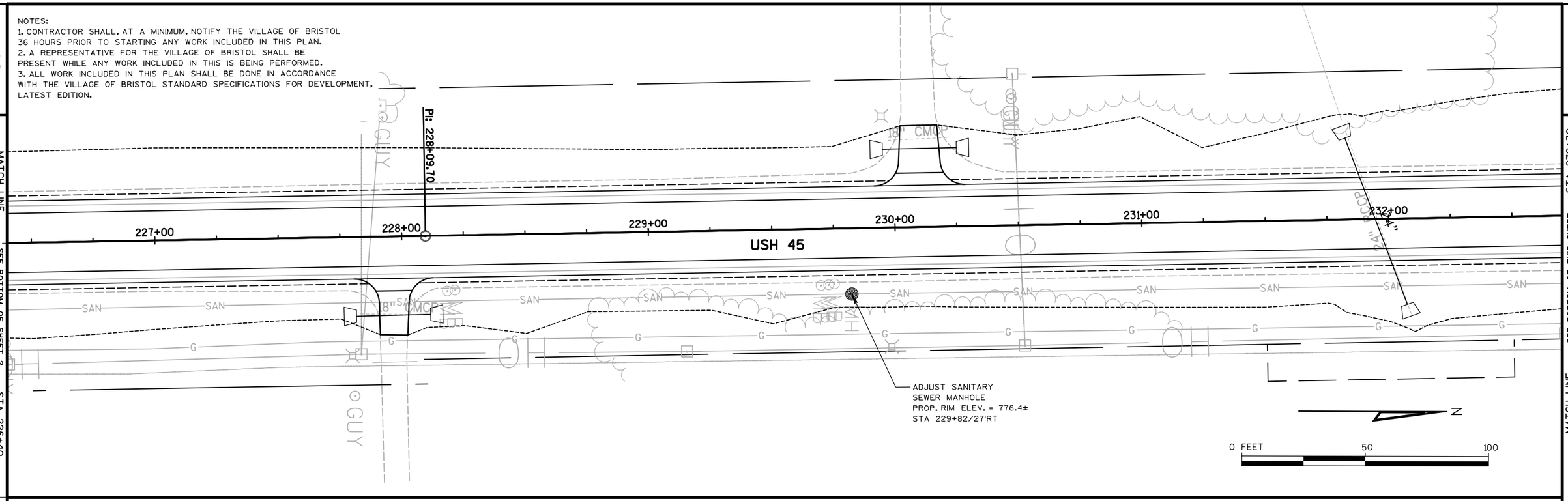
STA. 226+40

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	VILLAGE OF BRISTOL 3200-02-73/74 PLAN	SHEET 2	E

FILE NAME : S:\MAD\1400--1499\1455\029\Micros\PLAN\Village of Bristol 3200-02-73 Plan.dgn PLOT DATE : 4/20/2016 PLOT BY : _username_ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

2

NOTES:
1. CONTRACTOR SHALL, AT A MINIMUM, NOTIFY THE VILLAGE OF BRISTOL 36 HOURS PRIOR TO STARTING ANY WORK INCLUDED IN THIS PLAN.
2. A REPRESENTATIVE FOR THE VILLAGE OF BRISTOL SHALL BE PRESENT WHILE ANY WORK INCLUDED IN THIS IS BEING PERFORMED.
3. ALL WORK INCLUDED IN THIS PLAN SHALL BE DONE IN ACCORDANCE WITH THE VILLAGE OF BRISTOL STANDARD SPECIFICATIONS FOR DEVELOPMENT, LATEST EDITION.

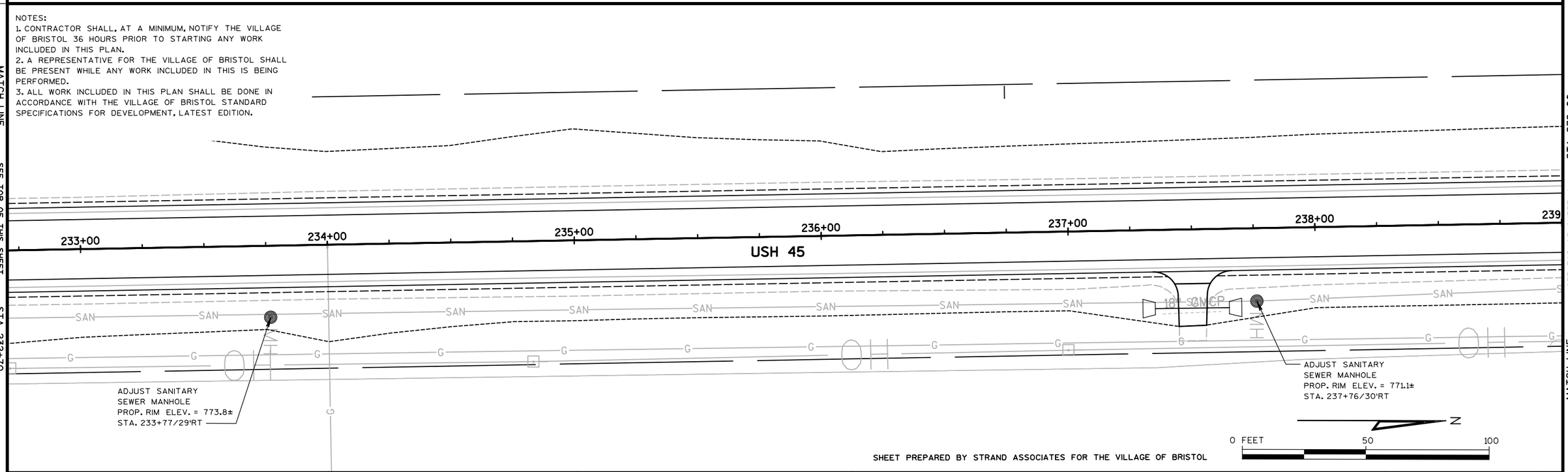


MATCH LINE
SEE BOTTOM OF SHEET 2
STA. 226+40

MATCH LINE
SEE BOTTOM OF THIS SHEET
STA. 232+70

2

NOTES:
1. CONTRACTOR SHALL, AT A MINIMUM, NOTIFY THE VILLAGE OF BRISTOL 36 HOURS PRIOR TO STARTING ANY WORK INCLUDED IN THIS PLAN.
2. A REPRESENTATIVE FOR THE VILLAGE OF BRISTOL SHALL BE PRESENT WHILE ANY WORK INCLUDED IN THIS IS BEING PERFORMED.
3. ALL WORK INCLUDED IN THIS PLAN SHALL BE DONE IN ACCORDANCE WITH THE VILLAGE OF BRISTOL STANDARD SPECIFICATIONS FOR DEVELOPMENT, LATEST EDITION.



MATCH LINE
SEE TOP OF THIS SHEET
STA. 232+70

MATCH LINE
SEE TOP OF SHEET 4
STA. 239+00

SHEET PREPARED BY STRAND ASSOCIATES FOR THE VILLAGE OF BRISTOL

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	VILLAGE OF BRISTOL 3200-02-73/74 PLAN	SHEET 3	E

FILE NAME : S:\MAD\1400--1499\1455\029\Micros\PLAN\Village of Bristol 3200-02-73 Plan.dgn PLOT DATE : 4/20/2016 PLOT BY : _username_ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$
WISDOT/CADDS SHEET 42

2

NOTES:
1. CONTRACTOR SHALL, AT A MINIMUM, NOTIFY THE VILLAGE OF BRISTOL 36 HOURS PRIOR TO STARTING ANY WORK INCLUDED IN THIS PLAN.
2. A REPRESENTATIVE FOR THE VILLAGE OF BRISTOL SHALL BE PRESENT WHILE ANY WORK INCLUDED IN THIS IS BEING PERFORMED.
3. ALL WORK INCLUDED IN THIS PLAN SHALL BE DONE IN ACCORDANCE WITH THE VILLAGE OF BRISTOL STANDARD SPECIFICATIONS FOR DEVELOPMENT, LATEST EDITION.

MATCH LINE
SEE BOTTOM OF SHEET 3
STA. 239+00

2
SEE BOTTOM OF THIS SHEET
STA. 245+30
MATCH LINE

240+00 241+00 242+00 243+00 244+00 245+00

USH 45

36" RCCP

ADJUST SANITARY SEWER MANHOLE
PROP. RIM ELEV. = 774.5±
STA. 241+53/21'RT

SAN SAN SAN

2

MATCH LINE
SEE BOTTOM OF SHEET 4
STA. 251+60

EXISTING HYDRANT TO REMAIN
ADJUST VALVE BOX PROP. ELEV. = 795.9± STA. 254+24/39'LT
ADJUST VALVE BOX RIM = 796.5± STA. 254+16/28'LT
ADJUST VALVE BOX MANHOLE PROP. RIM ELEV. = 800.8± STA. 255+84/38'LT
ADJUST VALVE BOX MANHOLE PROP. RIM ELEV. = 800.8± STA. 254+94/68'LT
ADJUST VALVE BOX PROP. ELEV. = 798.4± STA. 254+93/21'LT
WATER MAIN STA. 256+50 TO 260+25 TO BE LOWERED BY OTHERS DURING CONSTRUCTION
ADJUST VALVE BOX STA. 256+42/15'LT PROP. ELEV. = 801.7±
ADJUST VALVE BOX STA. 257+21/19'LT PROP. ELEV. = 802.5±

CTH 'AH'
84TH PL
USH 45
254+56.80
EP: 50+00.00
BP: 50+00.00
252+00 253+00 254+00 255+00 256+00 257+00
18" CMCP 15" CMCP 24" CMCP 12" 18" 24"

ADJUST SANITARY SEWER MANHOLE PROP. RIM ELEV. = 795.9± STA. 254+26/22'RT
ADJUST VALVE BOX STA. 256+42/33'RT PROP. ELEV. = 801.5±
ADJUST VALVE BOX STA. 256+43/48'RT PROP. ELEV. = 802.5±
ADJUST SANITARY SEWER MANHOLE PROP. RIM ELEV. = 801.6± STA. 256+15/34'RT
ADJUST SANITARY SEWER MANHOLE PROP. RIM ELEV. = 802.1± STA. 257+33/14'RT

NOTES:
1. CONTRACTOR SHALL, AT A MINIMUM, NOTIFY THE VILLAGE OF BRISTOL 36 HOURS PRIOR TO STARTING ANY WORK INCLUDED IN THIS PLAN.
2. A REPRESENTATIVE FOR THE VILLAGE OF BRISTOL SHALL BE PRESENT WHILE ANY WORK INCLUDED IN THIS IS BEING PERFORMED.
3. ALL WORK INCLUDED IN THIS PLAN SHALL BE DONE IN ACCORDANCE WITH THE VILLAGE OF BRISTOL STANDARD SPECIFICATIONS FOR DEVELOPMENT, LATEST EDITION.
4. WATER MAIN STA. 256+50 TO 260+25 TO BE LOWERED BY OTHERS DURING CONSTRUCTION.

N
0 FEET 50 100

MATCH LINE
SEE BOTTOM OF THIS SHEET
STA. 257+90

2

NOTES:
1. CONTRACTOR SHALL, AT A MINIMUM, NOTIFY THE VILLAGE OF BRISTOL 36 HOURS PRIOR TO STARTING ANY WORK INCLUDED IN THIS PLAN.
2. A REPRESENTATIVE FOR THE VILLAGE OF BRISTOL SHALL BE PRESENT WHILE ANY WORK INCLUDED IN THIS IS BEING PERFORMED.
3. ALL WORK INCLUDED IN THIS PLAN SHALL BE DONE IN ACCORDANCE WITH THE VILLAGE OF BRISTOL STANDARD SPECIFICATIONS FOR DEVELOPMENT, LATEST EDITION.
4. WATER MAIN STA. 256+50 TO 260+25 TO BE LOWERED BY OTHERS DURING CONSTRUCTION.

MATCH LINE
SEE TOP OF THIS SHEET
STA. 257+90

ADJUST VALVE BOX STA. 259+82/20'LT PROP. ELEV. = 798.3±
WATER MAIN STA. 256+50 TO 260+25 TO BE LOWERED BY OTHERS DURING CONSTRUCTION.
ADJUST SANITARY SEWER MANHOLE PROP. RIM ELEV. = 798.0± STA. 259+83/13'RT
ADJUST SANITARY SEWER MANHOLE PROP. RIM ELEV. = 779.9± STA. 263+79/14'RT
EXISTING HYDRANT TO REMAIN
ADJUST VALVE BOX PROP. ELEV. = 779.1± STA. 263+92/33'RT

USH 45
84TH ST
258+00 259+00 260+00 261+00 262+00 263+00 264+00
BP: 50+
15" CMCP 18" CMCP 24" 12"

N
0 FEET 50 100

SHEET PREPARED BY STRAND ASSOCIATES FOR THE VILLAGE OF BRISTOL

MATCH LINE
SEE TOP OF SHEET 6
STA. 264+20

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	VILLAGE OF BRISTOL 3200-02-73/74 PLAN	SHEET 5	E

FILE NAME : S:\MAD\1400--1499\1455\029\Micros\PLAN\Village of Bristol 3200-02-73 Plan.dgn PLOT DATE : 4/20/2016 PLOT BY : _username_ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

2

MATCH LINE

SEE BOTTOM OF SHEET 5

STA. 264+20

ADJUST VALVE BOX
PROP. ELEV. = 777.0±
STA. 265+30/26'LT

6" SUMP DRAIN DISCHARGE

ADJUST VALVE BOX
STA. 268+38/15'LT
PROP. ELEV. 778.6±

WATER MAIN STA. 269+29 TO 271+25 TO BE LOWERED BY OTHERS DURING CONSTRUCTION

265+00 266+00 267+00 268+00 269+00 270+00

BP: 50+00.00

USH 45

83RD ST

ADJUST SANITARY SEWER MANHOLE
PROP. RIM ELEV. = 777.5±
STA. 267+91/17'RT

ADJUST SANITARY SEWER MANHOLE
PROP. RIM ELE. = 779.5±
STA. 268+64/18'RT

ADJUST VALVE BOX
STA. 268+25/36'RT
PROP. ELEV. 777.3±

ADJUST VALVE BOX
STA. 268+27/42'RT
PROP. ELEV. 777.2±

ADJUST SANITARY SEWER MANHOLE
PROP. RIM ELEV = 777.1±
STA. 268+05/38'RT

0 FEET 50 100

NOTES:
1. CONTRACTOR SHALL, AT A MINIMUM, NOTIFY THE VILLAGE OF BRISTOL 36 HOURS PRIOR TO STARTING ANY WORK INCLUDED IN THIS PLAN.
2. A REPRESENTATIVE FOR THE VILLAGE OF BRISTOL SHALL BE PRESENT WHILE ANY WORK INCLUDED IN THIS IS BEING PERFORMED.
3. ALL WORK INCLUDED IN THIS PLAN SHALL BE DONE IN ACCORDANCEWITH THE VILLAGE OF BRISTOL STANDARD SPECIFICATIONS FOR DEVELOPMENT, LATEST EDITION.
4. WATER MAIN STA. 269+29 TO 271+25 TO BE LOWERED BY OTHERS DURING CONSTRUCTION.

MATCH LINE

SEE TOP OF THIS SHEET

STA. 270+50

WATER MAIN STA. 269+29 TO 271+25 TO BE LOWERED BY OTHERS DURING CONSTRUCTION

ADJUST VALVE BOX
STA. 272+77/15'LT
PROP. ELEV. = 788.7±

ADJUST VALVE BOX
STA. 273+43/16'LT
PROP. ELEV. = 788.5±

PI: 271+07.91

271+00 272+00 273+00 274+00 275+00 276+00

PI: 50+00.00

USH 45

82ND ST

ADJUST SANITARY SEWER MANHOLE
PROP. RIM ELEV. = 788.4±
STA. 271+69/16'RT

EXISTING HYDRANT TO REMAIN

ADJUST SANITARY SEWER MANHOLE
PROP. RIM ELEV. = 788.0±
STA. 273+10/34'RT

ADJUST SANITARY SEWER MANHOLE
PROP. RIM ELEV. = 788.0±
STA. 274+45/16'RT

0 FEET 50 100

NOTES:
1. CONTRACTOR SHALL, AT A MINIMUM, NOTIFY THE VILLAGE OF BRISTOL 36 HOURS PRIOR TO STARTING ANY WORK INCLUDED IN THIS PLAN.
2. A REPRESENTATIVE FOR THE VILLAGE OF BRISTOL SHALL BE PRESENT WHILE ANY WORK INCLUDED IN THIS IS BEING PERFORMED.
3. ALL WORK INCLUDED IN THIS PLAN SHALL BE DONE IN ACCORDANCE WITH THE VILLAGE OF BRISTOL STANDARD SPECIFICATIONS FOR DEVELOPMENT, LATEST EDITION.
4. WATER MAIN STA. 269+29 TO 271+25 TO BE LOWERED BY OTHERS DURING CONSTRUCTION.

2

MATCH LINE

SEE BOTTOM OF THIS SHEET

STA. 270+50

STA. 276+80

SEE TOP OF SHEET 7

MATCH LINE

SHEET PREPARED BY STRAND ASSOCIATES FOR THE VILLAGE OF BRISTOL

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	VILLAGE OF BRISTOL 3200-02-73/74 PLAN	SHEET 6	E

FILE NAME : S:\MAD\1400--1499\1455\029\Micros\PLAN\Village of Bristol 3200-02-73 Plan.dgn PLOT DATE : 4/20/2016 PLOT BY : _username_ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

2

MATCH LINE
SEE BOTTOM OF SHEET 6
STA. 276+80

PC: 278+68.99

277+00
278+00
279+00
280+00.00
281+00
282+00
283+00

BP: 280+00.00

PT: 280+94.17

USH 45

80TH ST

ADJUST SANITARY
SEWER MANHOLE
PROP. RIM ELEV. = 785.8±
STA. 278+37/16'RT

ADJUST VALVE BOX
STA. 279+44/16'LT
PROP. ELEV. = 783.1±

ADJUST VALVE BOX
STA. 279+53/42'RT
PROP. ELEV. = 783.0±

ADJUST EXISTING VALVE BOX
STA. 279+53/57'RT
PROP. ELEV. = 782.4±

ADJUST SANITARY
SEWER MANHOLE
PROP. RIM ELEV. = 782.1±
STA. 279+80/22'RT

NOTES:
1. CONTRACTOR SHALL, AT A MINIMUM, NOTIFY THE VILLAGE OF BRISTOL 36 HOURS PRIOR TO STARTING ANY WORK INCLUDED IN THIS PLAN.
2. A REPRESENTATIVE FOR THE VILLAGE OF BRISTOL SHALL BE PRESENT WHILE ANY WORK INCLUDED IN THIS IS BEING PERFORMED.
3. ALL WORK INCLUDED IN THIS PLAN SHALL BE DONE IN ACCORDANCE WITH THE VILLAGE OF BRISTOL STANDARD SPECIFICATIONS FOR DEVELOPMENT, LATEST EDITION.

0 FEET 50 100

N

2

MATCH LINE
SEE TOP OF THIS SHEET
STA. 283+21

NOTES:
1. CONTRACTOR SHALL, AT A MINIMUM, NOTIFY THE VILLAGE OF BRISTOL 36 HOURS PRIOR TO STARTING ANY WORK INCLUDED IN THIS PLAN.
2. A REPRESENTATIVE FOR THE VILLAGE OF BRISTOL SHALL BE PRESENT WHILE ANY WORK INCLUDED IN THIS IS BEING PERFORMED.
3. ALL WORK INCLUDED IN THIS PLAN SHALL BE DONE IN ACCORDANCE WITH THE VILLAGE OF BRISTOL STANDARD SPECIFICATIONS FOR DEVELOPMENT, LATEST EDITION.

EXISTING HYDRANT
TO REMAIN

ADJUST VALVE BOX
STA. 289+29/22'LT
PROP. ELEV. = 758.5±

ADJUST VALVE BOX
STA. 289+29/18'LT
PROP. ELEV. = 758.6±

ADJUST VALVE BOX
STA. 289+29/51'RT
PROP. ELEV. 758.1±

284+00
285+00
286+00
287+00
288+00
289+00

BP: 50+0

USH 45

24"MCP

79TH ST

ADJUST SANITARY
SEWER MANHOLE
PROP. RIM ELEV. = 761.3±
STA. 284+42/25'RT

ADJUST SANITARY
SEWER MANHOLE
PROP. RIM ELEV. = 757.6±
STA. 287+59/28'RT

0 FEET 50 100

N

SHEET PREPARED BY STRAND ASSOCIATES FOR THE VILLAGE OF BRISTOL

MATCH LINE
SEE TOP OF SHEET 8
STA. 289+51

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	VILLAGE OF BRISTOL 3200-02-73/74 PLAN	SHEET 7	E

FILE NAME : S:\MAD\1400--1499\1455\029\Micros\PLAN\Village of Bristol 3200-02-73 Plan.dgn PLOT DATE : 4/20/2016 PLOT BY : _username_ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

2

MATCH LINE
SEE BOTTOM OF SHEET 7
STA. 289+51

NOTES:
1. CONTRACTOR SHALL, AT A MINIMUM, NOTIFY THE VILLAGE OF BRISTOL 36 HOURS PRIOR TO STARTING ANY WORK INCLUDED IN THIS PLAN.
2. A REPRESENTATIVE FOR THE VILLAGE OF BRISTOL SHALL BE PRESENT WHILE ANY WORK INCLUDED IN THIS IS BEING PERFORMED.
3. ALL WORK INCLUDED IN THIS PLAN SHALL BE DONE IN ACCORDANCE WITH THE VILLAGE OF BRISTOL STANDARD SPECIFICATIONS FOR DEVELOPMENT, LATEST EDITION.

ADJUST VALVE BOX
STA. 291+36/21'LT
PROP. ELEV. = 759.9±

ADJUST VALVE BOX
STA. 291+40/17'LT
PROP. ELEV. = 760.0±

290+00 291+00 292+00 293+00 294+00 295+00

USH 45

36" RCCP

ADJUST SANITARY
SEWER MANHOLE
PROP. RIM ELEV. = 760.5±
STA. 291+44/28'RT

0 FEET 50 100

6.29

2

MATCH LINE
SEE BOTTOM OF THIS SHEET
STA. 295+81

NOTES:
1. CONTRACTOR SHALL, AT A MINIMUM, NOTIFY THE VILLAGE OF BRISTOL 36 HOURS PRIOR TO STARTING ANY WORK INCLUDED IN THIS PLAN.
2. A REPRESENTATIVE FOR THE VILLAGE OF BRISTOL SHALL BE PRESENT WHILE ANY WORK INCLUDED IN THIS IS BEING PERFORMED.
3. ALL WORK INCLUDED IN THIS PLAN SHALL BE DONE IN ACCORDANCE WITH THE VILLAGE OF BRISTOL STANDARD SPECIFICATIONS FOR DEVELOPMENT, LATEST EDITION.

BP: 300+82.04

296+00 297+00 298+00 299+00 300+00

USH 45

12" RCCP

ADJUST SANITARY
SEWER MANHOLE
PROP. RIM ELEV. = 755.2±
STA. 296+30/61'RT

0 FEET 50 100

SHEET PREPARED BY STRAND ASSOCIATES FOR THE VILLAGE OF BRISTOL

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	VILLAGE OF BRISTOL 3200-02-73/74 PLAN	SHEET 8	E

FILE NAME : S:\MAD\1400--1499\1455\029\Micros\PLAN\Village of Bristol 3200-02-73 Plan.dgn PLOT DATE : 4/20/2016 PLOT BY : _username_ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON SIGNAL POLE OR OVERHEAD SIGN SUPPORT
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON SIGNAL POLE OR SIGNAL MAST ARM
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

NOTES:
TYPE II ALUMINUM SIGNS UNDER THE CONTRACT SHALL BE DELIVERED TO THE REGIONAL TRAFFIC SIGN SHOP ON 60TH STREET IN WEST ALLIS. SIGNS SHALL BE CAREFULLY REMOVED FROM SIGN SUPPORTS. THE SIGNS SHALL BE PALLETIZED FOR HANDLING WITH A FORKLIFT (SEE SPECIAL PROVISION 638.3.4). THE REGIONAL SIGN SHOP (414-266-1165) SHALL BE NOTIFIED THREE WORKING DAYS PRIOR TO DELIVERY OF SIGNS.

WHEN AN EXISTING STOP SIGN SUPPORT IS TO BE REMOVED AND A NEW STOP SIGN ERECTED, THE WORK SHALL BE DONE CONCURRENTLY. FOR OTHER SIGNS AND SUPPORTS THAT ARE TO BE REMOVED AND NEW SIGNS AND SUPPORTS ERECTED, THE REMOVAL OF THE EXISTING SIGN/SUPPORT AND ERECTION OF THE NEW SIGN/SUPPORT SHOULD BE DONE AS CONCURRENTLY AS POSSIBLE. IN NO CASE SHALL A NEW SIGN/SUPPORT BE DOWN FOR MORE THAN 24 HOURS AND THERE SHALL NOT BE MORE THAN ONE SIGN OF THE SAME LEGEND MISSING IN A ROW.

WOOD POST SIZES, FOR TYPE II SIGNS ARE ESTIMATED LENGTHS AND THE ACTUAL LENGTH WILL BE DETERMINED IN THE FIELD.

STREET NAME SIGNS ARE THE PROPERTY OF THE MUNICIPALITY. THE MUNICIPALITY SHALL BE CONTACTED TO REMOVE THEIR STREET NAME SIGNS PRIOR TO CONSTRUCTION AND IT IS THEIR RESPONSIBILITY TO REINSTALL THE OLD SIGNS OR REPLACE THEM FOLLOWING CONSTRUCTION. WISDOT DOES NOT FURNISH OR INSTALL STREET NAME SIGNS. THE STREET NAME SIGNS SHALL NOT BE PLACED ON TOP OF STOP SIGNS

THE LOCATIONS OF NO PASSING PENNANTS SHOWN ON THE PLAN ARE APPROXIMATE. FINAL LOCATIONS DETERMINED BY THE LOCATING NO PASSING ZONES BID ITEM.

N

128TH ST
48
45
CTH WG
52
54
GUY
LOCAL STREET SIGNS
USH 45
20
22
24
26
28
30

02A R3-8(2S)
002 J3-2(2S)
003 R1-1F(2S) ON SIGNAL POLE
004 W1-4L(3)
005 R2-1(2S)
006 J13-1(2S)
007 R1-1F(2S) ON SIGNAL POLE
008 R7-1-D(3)
009 J13-1(2S)
010 R7-1-D(3)
011
11A R3-8(2S)
012 12A W3-3(2S)
029 R7-1-D(3)
001
021 J4-1(2S)
014 R1-1F(2S) ON SIGNAL POLE
015 J13-1(2S)
016 R2-1(2S)
16A R3-8(2S)
166 J4-1(2S)
017 R1-1F(2S) ON SIGNAL POLE
022 J3-2(2S) ON SIGNAL POLE R7-1-D(3)
018
019 J1-1(2S)
020 W3-3(2S)
023 I2-1(2)
023A I2-2(2)
024 R2-1(2S)
025
026
I2-3(2S)
202
027 R59-51
028 W14-3(2S)
038
038A

REMOVE
MOVE
ADOPT-A-HIGHWAY LITTER CONTROL NEXT 2 MILES
Bristol POPULATION 4,867
Kenosha Co
Wisconsin
NO PASSING ZONE
FINES DOUBLE IN WORK ZONES
Give 'em a BRAKE SLOW DOWN
STA 55-80

SHEET 1 OF 26

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	PERMANENT SIGNING	SHEET 157	E

2

N

030
REMOVE

013
R7-1-L(3)

031
JCT
COUNTY
WG
J1-1(2S)

032
SPEED LIMIT 45
R2-1(2S)
SPEED LIMIT 45
REMOVE

033
SPEED LIMIT 45
W3-5(2S)
SPEED LIMIT 45
REMOVE

30 32 34 36 38 40 42 44

USH 45

FINES DOUBLE IN WORK ZONES
W21-61(2S)
045

GIVE YOURSELF
A HUG - BUCKLE UP
IT'S OUR LAW
REMOVE
034

SPEED LIMIT 55
R2-1(2S)
SPEED LIMIT 55
REMOVE
035

JCT
COUNTY
CJ
J1-1(2S)
JCT
COUNTY
CJ
REMOVE
036

RIDESHARE
INFORMATION
www.rideshare.wi.gov
D12-2B(2S)
RIDESHARE
INFO CALL
1-800-455-POOL
REMOVE
037

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON SIGNAL POLE OR OVERHEAD SIGN SUPPORT
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON SIGNAL POLE OR SIGNAL MAST ARM
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

SHEET 2 OF 26

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	PERMANENT SIGNING	SHEET 158	E

NOTES:
LOCATIONS OF NO PASSING PENNANTS ARE APPROXIMATE. ULTIMATE LOCATIONS ARE DETERMINED BY LOCATION NO PASSING ZONES ITEM.

STREET SIGNS SHALL BE MOVED BY LOCAL MUNICIPALITY AND SHALL NOT BE PLACED ON TOP OF STOP SIGNS.

N

041 STOP R1-1(2S)

040 NORTH 45 / SOUTH 45 J3-2(2S)

039 SOUTH 45 J4-1(2S)

042 ENTIRE SUBDIVISION MOVE

043 COUNTY CJ J3-2(2S) — COUNTY CJ REMOVE

046 JCT COUNTY CJ J1-1(2S) — JCT COUNTY CJ REMOVE

047 NO PASSING ZONE W14-3(2S) — NO PASSING ZONE REMOVE

121ST ST.

52 CTH CJ

LOCAL STREET SIGNS

46 48 50 52 54 56 58 60

USH 45

NORTH 45 J4-1(2S) 044

COUNTY CJ J13-1(2S) — COUNTY CJ REMOVE 048

STOP R1-1(3) 182

STOP R1-1(3) — STOP REMOVE 049

SOUTH 45 / NORTH 45 J3-2(2S) 050

W2-2(2S) — REMOVE 196

SPEED LIMIT 55 R2-1(2S) — SPEED LIMIT 55 REMOVE 196A

W1-2L(2S) 053

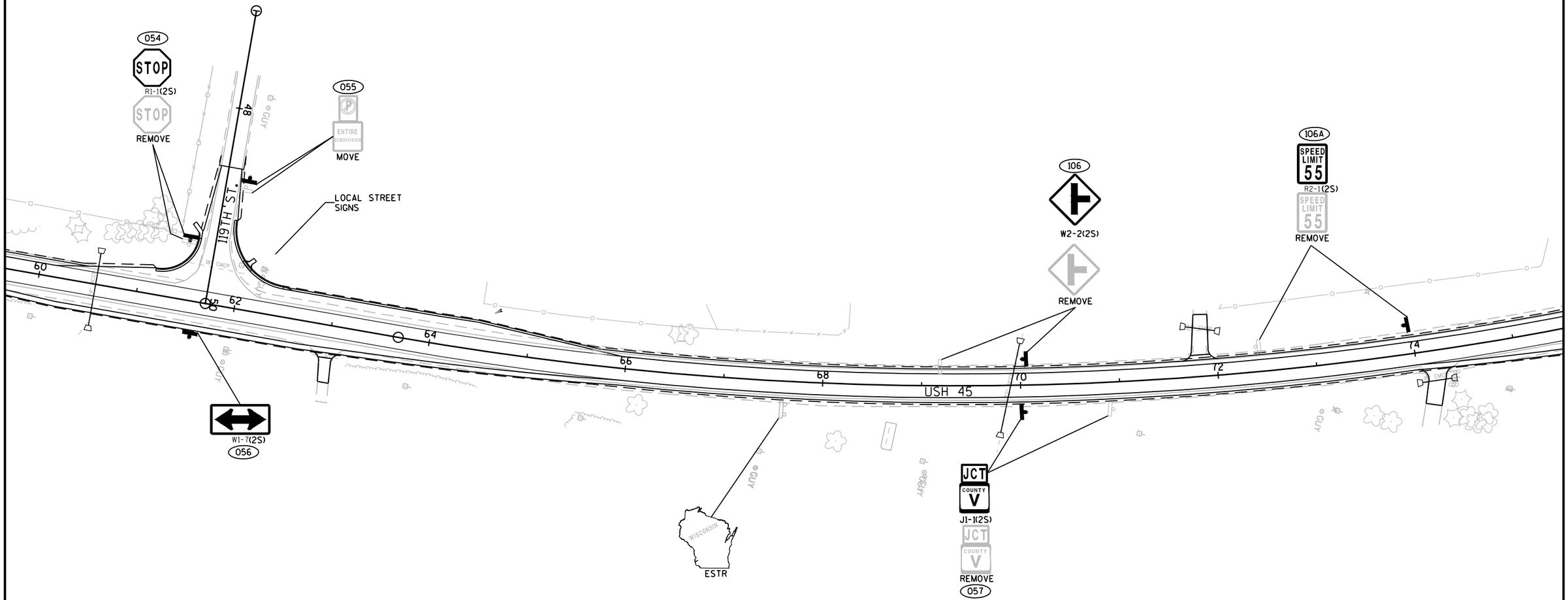
JCT 45 END COUNTY CJ J1-2(2S) — JCT 45 END COUNTY CJ REMOVE 051

STOP AHEAD — REMOVE — W3-1(2S) 052 179

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON SIGNAL POLE OR OVERHEAD SIGN SUPPORT
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON SIGNAL POLE OR SIGNAL MAST ARM
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

NOTE:
STREET SIGNS SHALL BE MOVED BY LOCAL MUNICIPALITY AND SHALL NOT BE PLACED ON TOP OF STOP SIGNS.



LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON SIGNAL POLE OR OVERHEAD SIGN SUPPORT
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON SIGNAL POLE OR SIGNAL MAST ARM
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

SHEET 4 OF 26

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	PERMANENT SIGNING	SHEET 160	E

FILE NAME : N:\PDS\C3D\CAD\32000203\SIGN\023201_PS.DWG
LAYOUT NAME - 023204_PS

PLOT DATE : 3/8/2016 1:45 PM PLOT BY : DODGE, BRIAN M PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

NOTE:
STREET SIGNS SHALL BE MOVED BY LOCAL MUNICIPALITY AND SHALL NOT BE PLACED ON TOP OF STOP SIGNS.

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON SIGNAL POLE OR OVERHEAD SIGN SUPPORT
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON SIGNAL POLE OR SIGNAL MAST ARM
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

061 STOP AHEAD W3-1(2S) REMOVE

062 JCT 45 END COUNTY V J1-2(2S) REMOVE

060 NORTH 45 SOUTH 45 J3-2(2S) REMOVE

059 SOUTH 45 J4-1(2S) REMOVE

063 STOP R1-1(2S) REMOVE

064 SPEED LIMIT 45 R2-1(2S) REMOVE

065 COUNTY V J13-1(2S) REMOVE

LOCAL STREET SIGNS

067 JCT COUNTY V J1-1(2S) REMOVE

COUNTY V J13-1(2S) REMOVE 068

W1-7(2S) REMOVE 069

NORTH 45 J4-1(2S) 070

CTH V

USH 45

76 78 80 82 84 86 88 90

N

SHEET 5 OF 26

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	PERMANENT SIGNING	SHEET 161	E

NOTES:
LOCATIONS OF NO PASSING PENNANTS ARE APPROXIMATE. ULTIMATE LOCATIONS ARE DETERMINED BY LOCATION NO PASSING ZONES ITEM.

STREET SIGNS SHALL BE MOVED BY LOCAL MUNICIPALITY AND SHALL NOT BE PLACED ON TOP OF STOP SIGNS.

N

071
W1-2R(2S)

072
SOUTH 45
J4-1(2S)

073
W1-7(2S)
REMOVE

074
COUNTY Q
J13-1(2S)
REMOVE

LOCAL STREET SIGNS

90 92 94 96 98 100 102 104

USH 45

CTH Q

JCT COUNTY Q
J1-1(2S)
REMOVE
075

NO PASSING ZONE
W14-3(2S)
REMOVE
076

COUNTY Q
J13-1(2S)
REMOVE
078

STOP
R1-1(2S)
REMOVE
079

SOUTH 45 NORTH 45
J3-2(2S)
45
REMOVE
082

NORTH 45
J4-1(2S)
083

JCT 45 END COUNTY Q
J1-2(2S)
REMOVE
081

STOP AHEAD
REMOVE
W3-1(2S)
080

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON SIGNAL POLE OR OVERHEAD SIGN SUPPORT
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON SIGNAL POLE OR SIGNAL MAST ARM
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

SHEET 6 OF 26

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	PERMANENT SIGNING	SHEET 162 E

NOTE:
LOCATIONS OF NO PASSING PENNANTS ARE APPROXIMATE. ULTIMATE LOCATIONS ARE DETERMINED BY LOCATION NO PASSING ZONES ITEM.

N

085
JCT
COUNTY Q
J1-1(2S)
JCT
COUNTY Q
REMOVE

106 108 110 112 USH 45 114 116 118

NO PASSING ZONE
W14-3(2S)
NO PASSING ZONE
REMOVE
086

W2-2(2S)
217

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON SIGNAL POLE OR OVERHEAD SIGN SUPPORT
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON SIGNAL POLE OR SIGNAL MAST ARM
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- XXX DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

SHEET 7 OF 26

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	PERMANENT SIGNING	SHEET 163	E

FILE NAME : N:\PDS\C3D\CAD\32000203\SIGN\023201_PS.DWG
LAYOUT NAME - 023207_PS

PLOT DATE : 3/8/2016 1:45 PM PLOT BY : DODGE, BRIAN M PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON SIGNAL POLE OR OVERHEAD SIGN SUPPORT
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON SIGNAL POLE OR SIGNAL MAST ARM
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- XXX DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

NOTE:
STREET SIGNS SHALL BE MOVED BY LOCAL MUNICIPALITY AND SHALL NOT BE PLACED ON TOP OF STOP SIGNS.

N

087
STOP
R1-1(2S)
STOP
REMOVE

088
ADOPT-A-HIGHWAY
LITTER CONTROL
NEXT 2 MILES
SPONSOR
SPONSOR1
SPONSOR2
SPONSOR3
MOVE

089
SOUTH
45
J4-1(2S)

090
NORTH SOUTH
45 45
J3-2(2S)
45
REMOVE

091
STOP
R1-1(2S)
STOP
REMOVE

092
JCT END
45 COUNTY JS
J1-2(2S)
JCT END
45 COUNTY JS
REMOVE

093
STOP
AHEAD
REMOVE
W3-1(2S)

094
COUNTY
JS
J13-1(2S)
COUNTY
JS
REMOVE

095
RIGHT LANE
MUST
TURN RIGHT
R3-7-R(3)

CTH JS

LOCAL STREET SIGNS

LOCAL STREET SIGNS

LOCAL STREET SIGNS

LOCAL STREET SIGNS

LOCAL STREET SIGNS

18" RCCP

120 122 124 126 128 130 132 134

USH 45

JCT
COUNTY
JS
J1-1(2S)
JCT
COUNTY
JS
REMOVE
096

COUNTY
JS
J13-1(2S)
COUNTY
JS
REMOVE
098

W1-7(2S)
212

SPONSOR
SPONSOR1
SPONSOR2
SPONSOR3
MOVE
099

NORTH
45
J4-1(2S)
100

106TH ST.

52

STOP
R1-1(2S)
STOP
REMOVE
101

SHEET 8 OF 26

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	PERMANENT SIGNING	SHEET	E

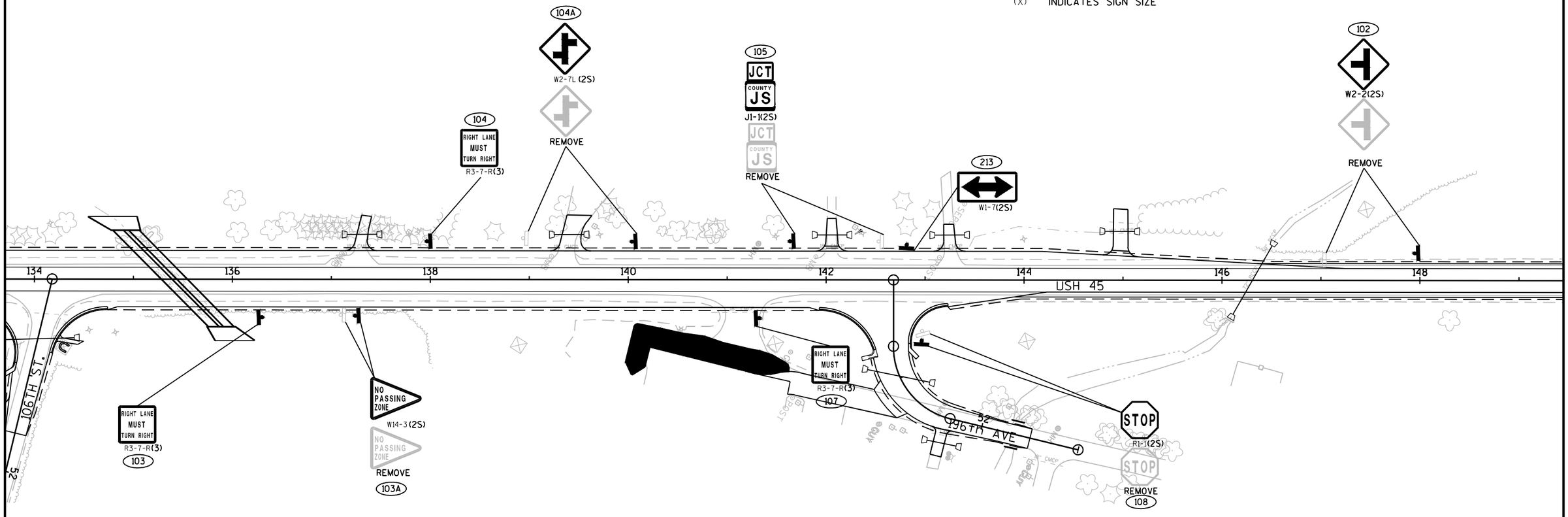
FILE NAME : N:\PDS\C3D\CAD\32000203\SIGN\023201_PS.DWG
LAYOUT NAME - 023208_PS

PLOT DATE : 3/8/2016 1:45 PM PLOT BY : DODGE, BRIAN M PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON SIGNAL POLE OR OVERHEAD SIGN SUPPORT
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON SIGNAL POLE OR SIGNAL MAST ARM
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- XXX DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE



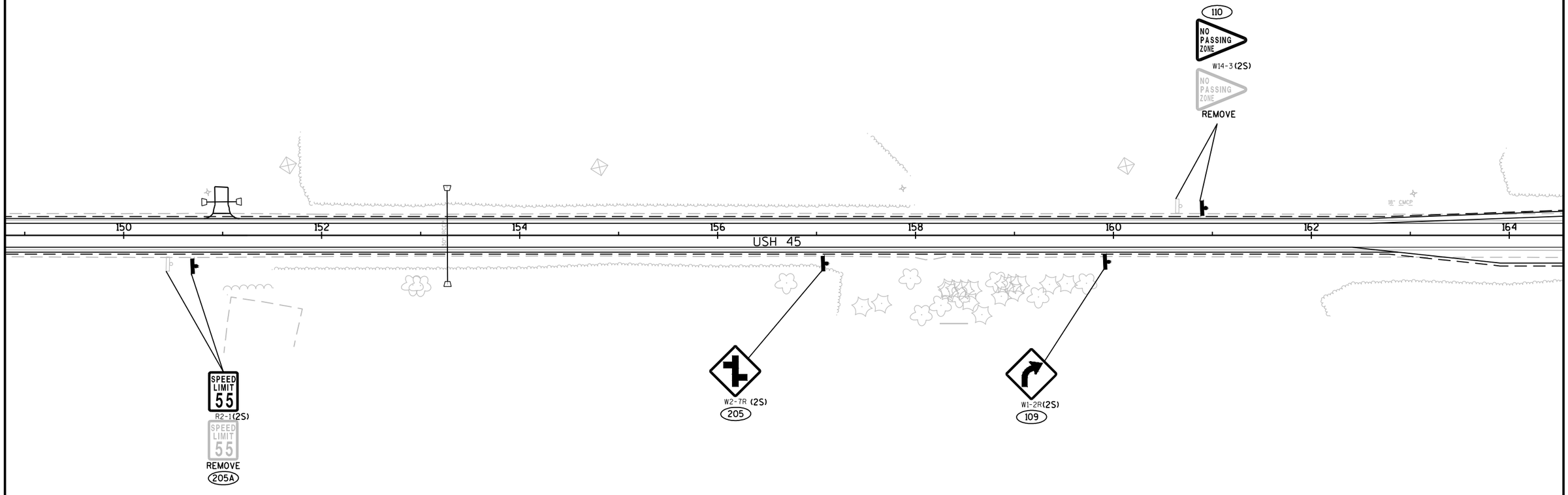
SHEET 9 OF 26

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	PERMANENT SIGNING	SHEET 165	E

FILE NAME : N:\PDS\C3D\CAD\32000203\SIGN\023201_PS.DWG
LAYOUT NAME - 023209_PS

PLOT DATE : 3/8/2016 1:45 PM PLOT BY : DODGE, BRIAN M PLOT NAME : PLOT SCALE : 1 IN:100 FT

NOTE:
LOCATIONS OF NO PASSING PENNANTS ARE APPROXIMATE. ULTIMATE LOCATIONS ARE DETERMINED BY LOCATION NO PASSING ZONES ITEM.



LEGEND

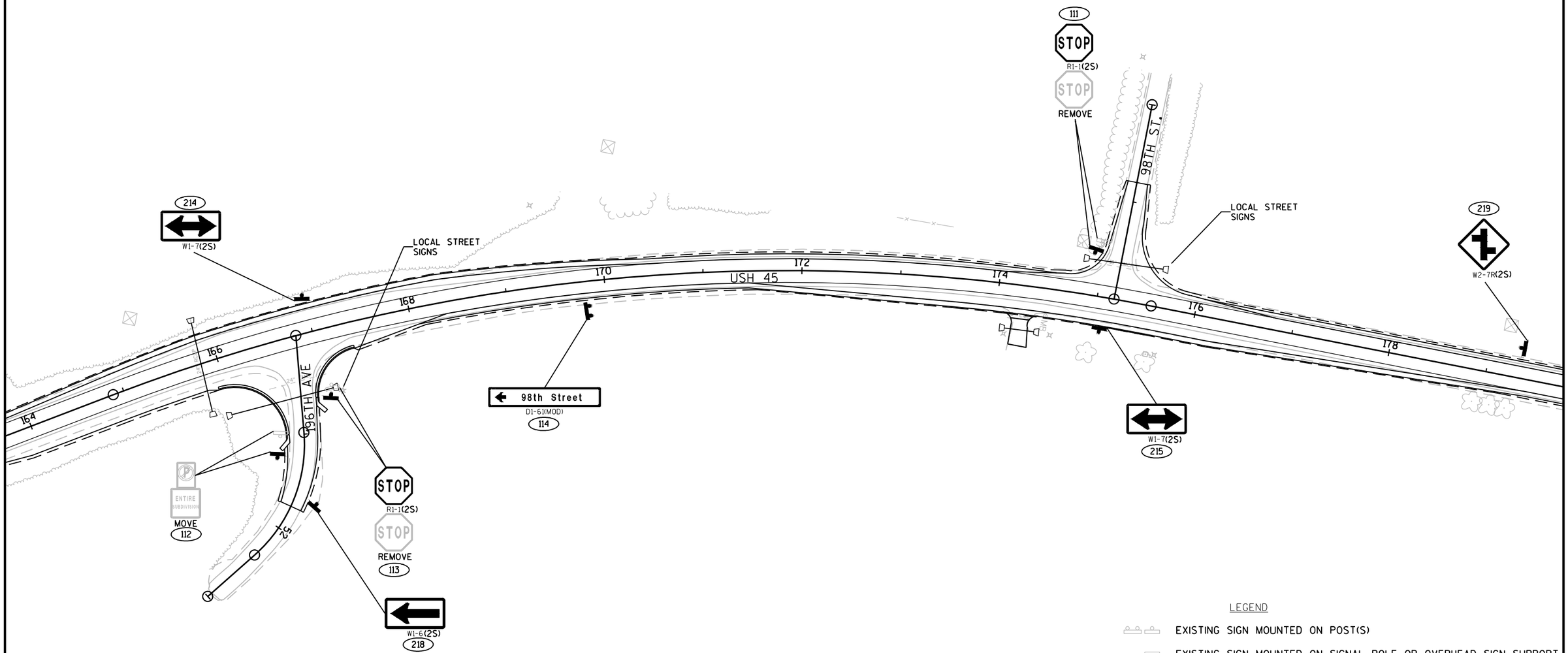
- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON SIGNAL POLE OR OVERHEAD SIGN SUPPORT
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON SIGNAL POLE OR SIGNAL MAST ARM
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

SHEET 10 OF 26

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	PERMANENT SIGNING	SHEET 166	E

NOTE:
STREET SIGNS SHALL BE MOVED BY LOCAL MUNICIPALITY AND SHALL NOT BE PLACED ON TOP OF STOP SIGNS.

N



LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON SIGNAL POLE OR OVERHEAD SIGN SUPPORT
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON SIGNAL POLE OR SIGNAL MAST ARM
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

SHEET 11 OF 26

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	PERMANENT SIGNING	SHEET 167	E

FILE NAME : N:\PDS\C3D\CAD\32000203\SIGN\023201_PS.DWG
LAYOUT NAME - 023211_PS

PLOT DATE : 3/8/2016 1:45 PM PLOT BY : DODGE, BRIAN M PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

NOTE:
LOCATIONS OF NO PASSING PENNANTS ARE APPROXIMATE. ULTIMATE LOCATIONS ARE DETERMINED BY LOCATION NO PASSING ZONES ITEM.

N

115
98th Street
D1-6(MOD)

116
W1-2L(2S)

117
NO PASSING ZONE
W14-3(2S)
NO PASSING ZONE
REMOVE

220A
SPEED LIMIT 55
R2-1(2S)
SPEED LIMIT 55
REMOVE

120
220
W3-3(2S)

180 182 184 186 188 190 192 194

USH 45

VAULT
GUY
MH
WEST

JCT
COUNTY C
J1-1(2S)
JCT
COUNTY C
REMOVE
118

NO PASSING ZONE
W14-3(2S)
NO PASSING ZONE
REMOVE
119

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON SIGNAL POLE OR OVERHEAD SIGN SUPPORT
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON SIGNAL POLE OR SIGNAL MAST ARM
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

SHEET 12 OF 26

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	PERMANENT SIGNING	SHEET 168 E

FILE NAME : N:\PDS\C3D\CAD\32000203\SIGN\023201_PS.DWG
LAYOUT NAME - 023212_PS

PLOT DATE : 3/8/2016 1:45 PM PLOT BY : DODGE, BRIAN M PLOT NAME : PLOT SCALE : 1 IN:100 FT

NOTE:
STREET SIGNS SHALL BE MOVED BY LOCAL MUNICIPALITY AND SHALL NOT BE PLACED ON TOP OF STOP SIGNS.

N

123 ONLY ONLY ONLY R3-8-W(2S)

126 SPEED LIMIT 55 R2-1(2S)
SPEED LIMIT 55 REMOVE

121 SOUTH 45 J4-1(2S)
SOUTH 45 REMOVE

122 NORTH SOUTH 45 45 J3-2(2S)
45 REMOVE

124 STOP R1-1F(2S) ON SIGNAL POLE
STOP REMOVE

127 EAST WEST COUNTY C COUNTY C J3-2(2S)
COUNTY C REMOVE

125 STOP R1-1F(2S) ON SIGNAL POLE
STOP REMOVE

128 REMOVE

129 ONLY ONLY ONLY R3-8-W(2S)

130 EAST WEST COUNTY C COUNTY C J2-2(2S)

244 245 246 247 LEFT TURN YIELD ON FLASHING YELLOW ARROW R10-50(2S) ON SIGNAL ARM NEXT TO SIGNAL

LOCAL STREET SIGNS

194 196 198 200 202 204 206 208

USH 45

46 48 52 CTH C 54

WEST EAST COUNTY C COUNTY C J2-2(2S) 131

REMOVE 132

ONLY ONLY ONLY R3-8-W(2S) 133

STOP R1-1F(2S) ON SIGNAL POLE
STOP REMOVE 134

WEST EAST COUNTY C COUNTY C J3-2(2S)
COUNTY C REMOVE 135

SPEED LIMIT 55 R2-1(2S)
SPEED LIMIT 55 REMOVE 137

STOP R1-1F(2S) ON SIGNAL POLE
STOP REMOVE 136

SOUTH NORTH 45 45 J3-2(2S)
45 REMOVE 138

ONLY ONLY ONLY R3-8-W(2S) 139

NORTH 45 J4-1(2S)
NORTH 45 REMOVE 140

LEGEND

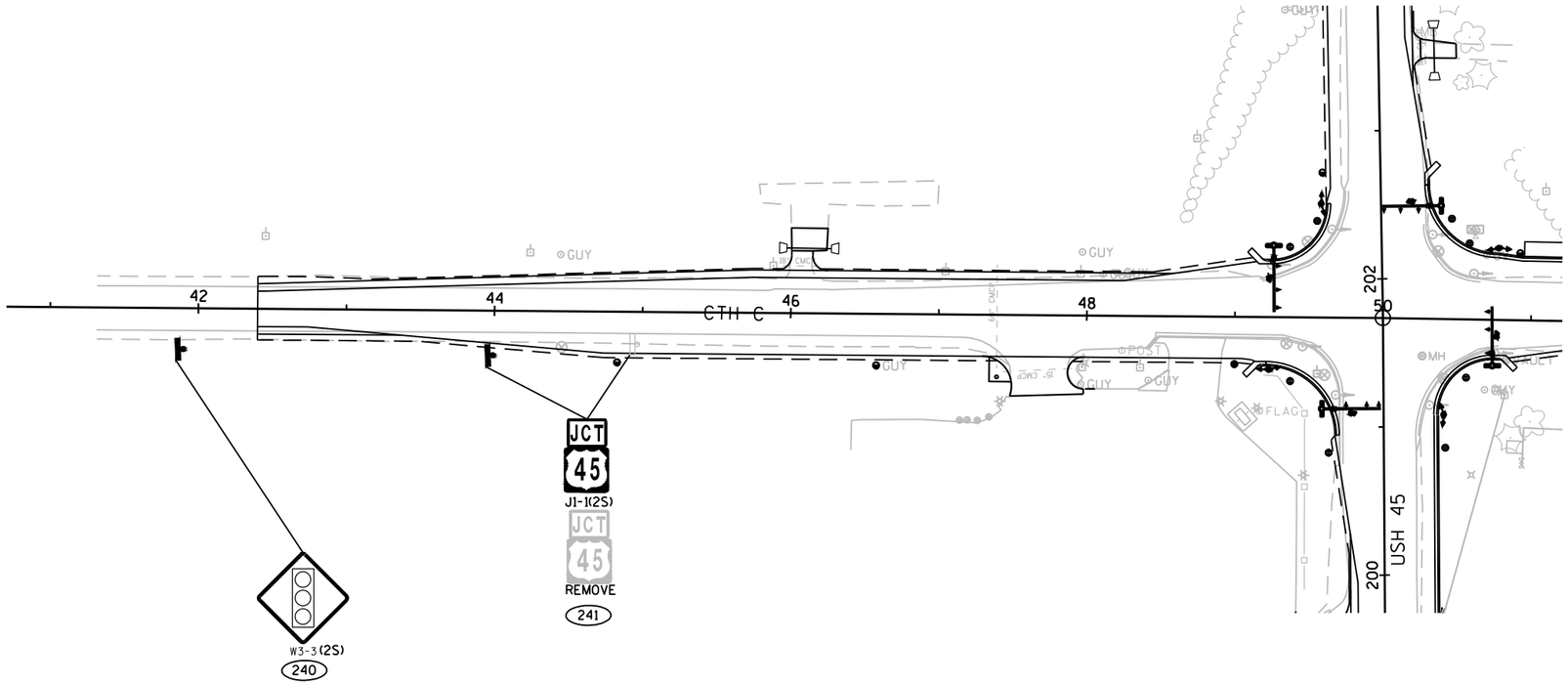
- EXISTING SIGN MOUNTED ON POST(S)
- (2S) EXISTING SIGN MOUNTED ON SIGNAL POLE OR OVERHEAD SIGN SUPPORT
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON SIGNAL POLE OR SIGNAL MAST ARM
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- XXX DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

SHEET 13 OF 26

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	PERMANENT SIGNING	SHEET 169 E

NOTE:
STREET SIGNS SHALL BE MOVED BY LOCAL MUNICIPALITY AND SHALL NOT BE PLACED ON TOP OF STOP SIGNS.

N



LEGEND

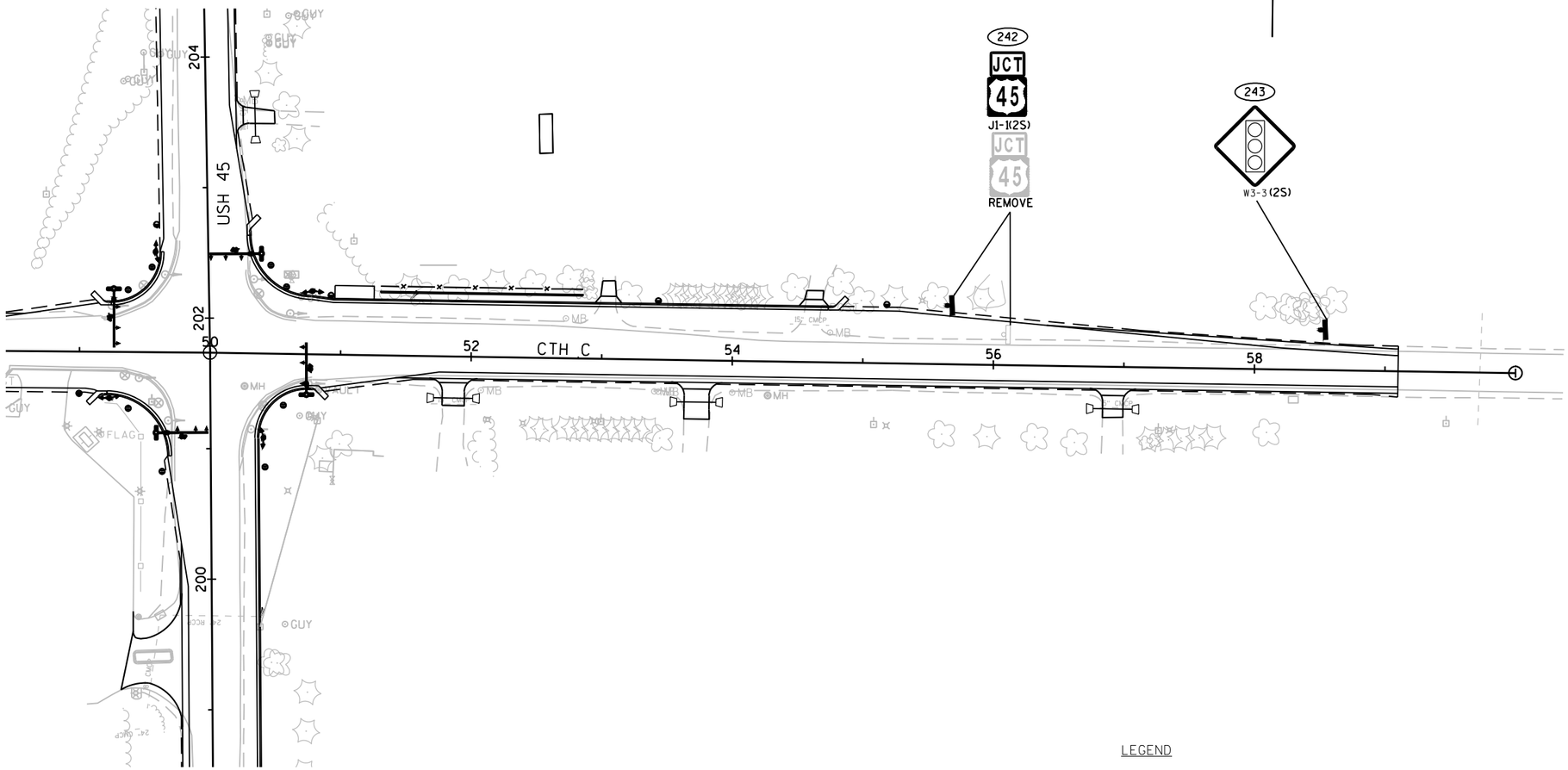
- EXISTING SIGN MOUNTED ON POST(S)
- (2S) EXISTING SIGN MOUNTED ON SIGNAL POLE OR OVERHEAD SIGN SUPPORT
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON SIGNAL POLE OR SIGNAL MAST ARM
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

SHEET 13a OF 26

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	PERMANENT SIGNING	SHEET 170	E

2

NOTE:
STREET SIGNS SHALL BE MOVED BY LOCAL MUNICIPALITY AND SHALL NOT BE PLACED ON TOP OF STOP SIGNS.



LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- (2S) EXISTING SIGN MOUNTED ON SIGNAL POLE OR OVERHEAD SIGN SUPPORT
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON SIGNAL POLE OR SIGNAL MAST ARM
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- XXX DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

SHEET 13b OF 26

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	PERMANENT SIGNING	SHEET 171	E

2

N

141
221
W3-3 (2S)
REMOVE

142
JCT
COUNTY
C
J1-1(2S)
JCT
COUNTY
C
REMOVE

210 212 214 216 218 220 222 224

USH 45

MH MH MH MH

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON SIGNAL POLE OR OVERHEAD SIGN SUPPORT
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON SIGNAL POLE OR SIGNAL MAST ARM
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- XXX DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

SHEET 14 OF 26

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	PERMANENT SIGNING	SHEET 172	E

FILE NAME : N:\PDS\C3D\CAD\32000203\SIGN\023201_PS.DWG
LAYOUT NAME - 023214_PS

PLOT DATE : 3/8/2016 1:46 PM PLOT BY : DODGE, BRIAN M PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

N

224 226 228 230 232 234 236 238

USH 45

144
SPEED LIMIT 55
R2-1
SPEED LIMIT 55
REMOVE (2S)

143
NO PARKING ANY TIME
R7-1-R(3)
NO PARKING ANY TIME
REMOVE

NO PARKING ANY TIME
R7-1-L(2S)
NO PARKING ANY TIME
REMOVE
146

SPEED LIMIT 35
R2-1(3)
SPEED LIMIT 35
REMOVE
147

SPEED LIMIT 35
W3-5
SPEED LIMIT 35
REMOVE
145

LEGEND

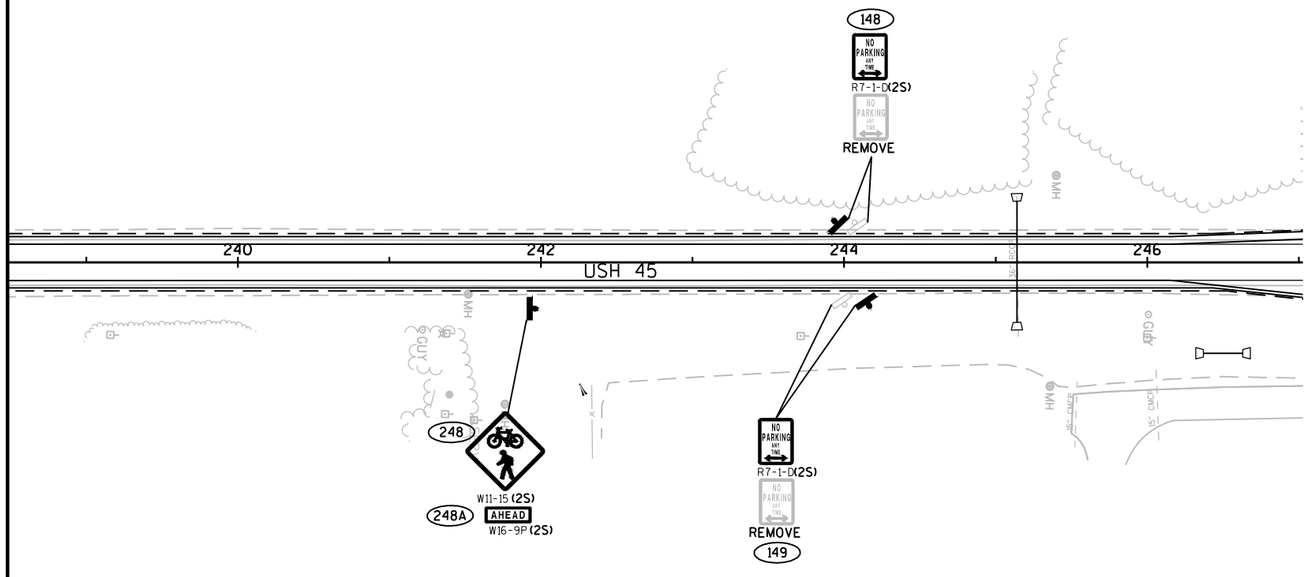
- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON SIGNAL POLE OR OVERHEAD SIGN SUPPORT
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON SIGNAL POLE OR SIGNAL MAST ARM
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

SHEET 15 OF 26

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	PERMANENT SIGNING	SHEET 173	E

2

N



LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON SIGNAL POLE OR OVERHEAD SIGN SUPPORT
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON SIGNAL POLE OR SIGNAL MAST ARM
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

SHEET 16 OF 26

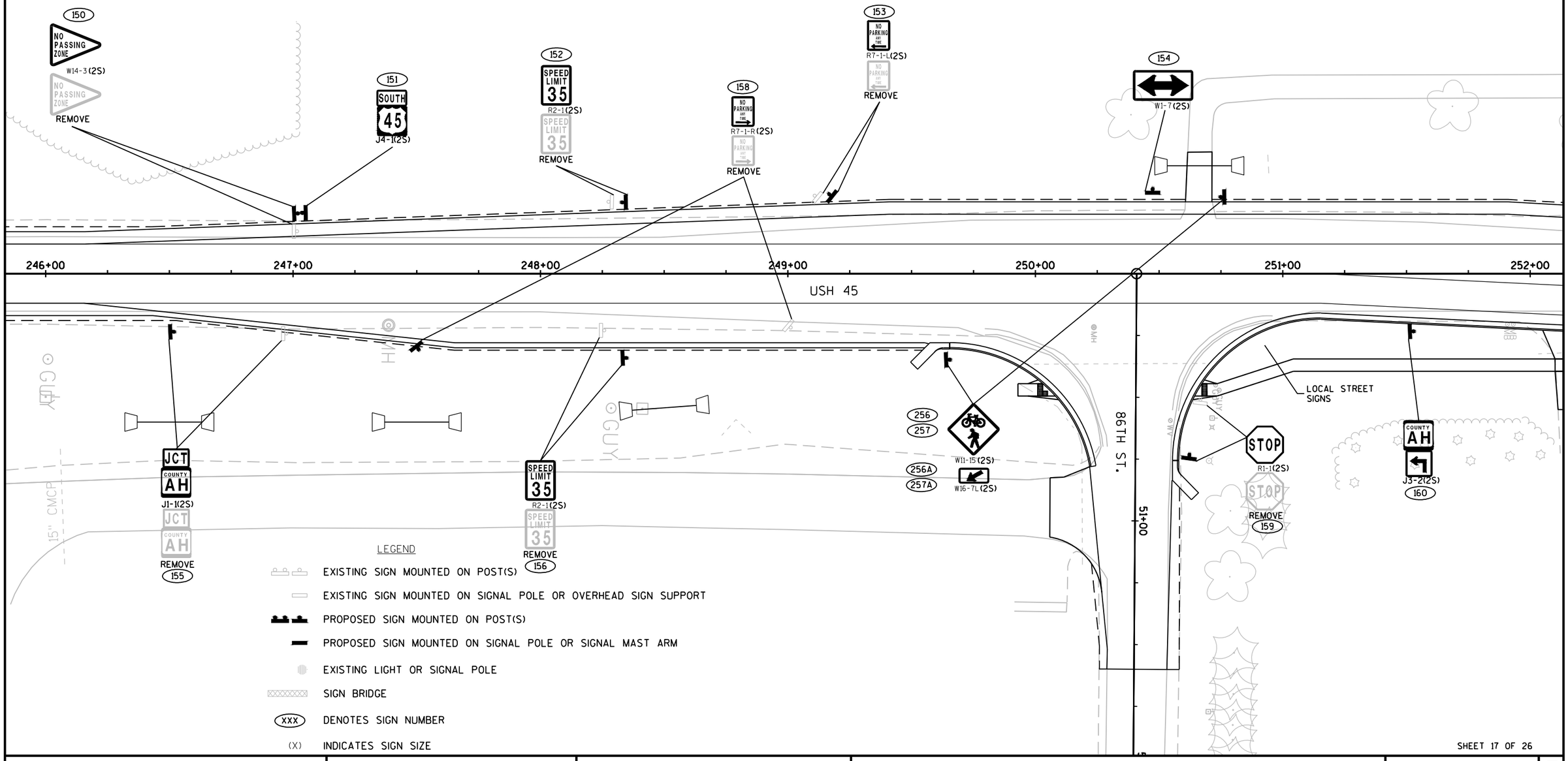
PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	PERMANENT SIGNING	SHEET 174	E

2

N

NOTES:
LOCATIONS OF NO PASSING PENNANTS ARE APPROXIMATE. ULTIMATE LOCATIONS ARE DETERMINED BY LOCATION NO PASSING ZONES ITEM.

STREET SIGNS SHALL BE MOVED BY LOCAL MUNICIPALITY AND SHALL NOT BE PLACED ON TOP OF STOP SIGNS.



SHEET 17 OF 26

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	PERMANENT SIGNING	SHEET	E

FILE NAME : N:\PDS\C3D\CAD\32000203\SIGN\023201_PS.DWG
LAYOUT NAME - 023217_PS

PLOT DATE : 3/8/2016 1:46 PM PLOT BY : DODGE, BRIAN M PLOT NAME : PLOT SCALE : 1 IN:40 FT

NOTE:
STREET SIGNS SHALL BE MOVED BY LOCAL MUNICIPALITY AND SHALL NOT BE PLACED ON TOP OF STOP SIGNS.

N

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON SIGNAL POLE OR OVERHEAD SIGN SUPPORT
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON SIGNAL POLE OR SIGNAL MAST ARM
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- XXX DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

STA 44+37
STA 46+75
231 STOP AHEAD REMOVE
W3-1(2S)
48+00
230 JCT 45 END COUNTY AH J1-2(2S)
REMOVE
CTH AH
49+00
163 STOP R1-1(2S) REMOVE
161 MOVE
230A NORTH 45 SOUTH 45 J3-2(2S)
162 162A SPEED LIMIT 35 REMOVE
45 REMOVE
165 COUNTY AH J13-1(2S)
REMOVE
LOCAL STREET SIGNS
24" RCCP
252+00
253+00
254+00
255+00
256+00
257+00
258+00
USH 45
18" CMCP
LOCAL STREET SIGNS
24" CMCP
84TH PL.
51+00
12" CMCP
ONLY ONLY R3-8-E(2S) 172
COUNTY AH J13-1(2S)
REMOVE 167
W1-7(2S)
REMOVE 164
SPEED LIMIT 25 R2-1(2S)
R5-2(2S)
REMOVE 157 157A
SPEED LIMIT 25 REMOVE 168
STOP R1-1(2S) REMOVE 169
NORTH 45 J4-1(2S) 170

SHEET 18 OF 26

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	PERMANENT SIGNING	SHEET	E

FILE NAME : N:\PDS\C3D\CAD\32000203\SIGN\023201_PS.DWG
LAYOUT NAME - 023218_PS
PLOT DATE : 3/8/2016 1:46 PM PLOT BY : DODGE, BRIAN M PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON SIGNAL POLE OR OVERHEAD SIGN SUPPORT
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON SIGNAL POLE OR SIGNAL MAST ARM
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- XXX — DENOTES SIGN NUMBER
- (X) — INDICATES SIGN SIZE

N

171
REMOVE

258
W11-15 (2S)
AHEAD
W16-9P (2S)
258A

173
W2-7L (2S)

174
222
SPEED LIMIT 35
R2-1 (2S)
END SCHOOL ZONE
S5-2 (2S)
SPEED LIMIT 35
REMOVE

175
JCT
COUNTY AH
J1-1 (2S)
JCT
COUNTY AH
REMOVE

258+00 259+00 260+00 261+00 262+00 263+00 264+0

USH 45

84TH ST.

51+00

SPEED LIMIT 35
R2-1 (2S)
177

S1-1 (2S)
AHEAD
S16-9P (2S)
FINES HIGHER
R2-6P (2S)
AHEAD
REMOVE
178
178A
178B

W11-8 (2S)
REMOVE
176

SHEET 19 OF 26

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	PERMANENT SIGNING	SHEET 177	E

FILE NAME : N:\PDS\C3D\CAD\32000203\SIGN\023201_PS.DWG
LAYOUT NAME - 023219_PS

PLOT DATE : 3/8/2016 1:46 PM PLOT BY : DODGE, BRIAN M PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON SIGNAL POLE OR OVERHEAD SIGN SUPPORT
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON SIGNAL POLE OR SIGNAL MAST ARM
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- XXX DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

NOTE:
STREET SIGNS SHALL BE MOVED BY LOCAL MUNICIPALITY AND SHALL NOT BE PLACED ON TOP OF STOP SIGNS.

N

180 STOP R1-1(2S)
180A STOP R1-1(2S) REMOVE
216 ONE WAY R6-2-R(2S)
225 2' MOUNTING HEIGHT W12-1D(2S)
255 W11-2(2S)
255A AHEAD W16-9P(2S)
181 SPEED LIMIT 35 R2-1(2S)
252 S1-1(2S)
252A S16-7R(2S)
LOCAL STREET SIGNS
181A POST OFFICE MOVE
185 DO NOT ENTER R5-1(2S)
LOCAL STREET SIGNS

264+00 265+00 266+00 267+00 268+00 269+00 27

USH 45

30" CMCP 30" CMCP 24" CMCP

84TH ST. 51+00

STOP R1-1(2S) REMOVE 183
NO PARKING R7-1-L(2S) REMOVE 184
DO NOT ENTER R5-1(2S) REMOVE 224
R3-2(2S) REMOVE 223
249 250 249A 250A S1-1(2S) S16-7L(2S)
251 251A S1-1(2S) S16-7R(2S)

83RD ST. 51+00

STOP R1-1(2S) REMOVE 186
SPEED LIMIT 35 R2-1(2S) REMOVE 193
NO PARKING R7-1-R 194
SEE SHEET 21 FOR NEW SIGN AT STA. 272+00

SHEET 20 OF 26

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	PERMANENT SIGNING	SHEET 178 E

FILE NAME : N:\PDS\C3D\CAD\32000203\SIGN\023201_PS.DWG
LAYOUT NAME - 023220_PS

PLOT DATE : 3/8/2016 1:46 PM PLOT BY : DODGE, BRIAN M PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

NOTE:
STREET SIGNS SHALL BE MOVED BY LOCAL MUNICIPALITY AND SHALL NOT BE PLACED ON TOP OF STOP SIGNS.

N

187
187A
187B
S1-1 (2S)
AHEAD
S16-9P (2S)
FINES HIGHER
R2-6P (2S)
AHEAD
REMOVE

188
W11-8 (2S)
REMOVE

189
SPEED LIMIT 35
REMOVE

190
STOP
R1-1 (3)
STOP
REMOVE

190A
SPEED LIMIT 25
R2-1 (2S)
SPEED LIMIT 25
REMOVE

82ND ST.

49+00

270+00 271+00 272+00 273+00 50+00 274+00 275+00 276+00

LOCAL STREET SIGNS

USH 45

253
W11-2 (2S)
253A AHEAD
W16-9P (2S)

193
SPEED LIMIT 35
R2-1 (2S)
226
END SCHOOL ZONE
S5-2 (2S)

51+00

STOP
R1-1 (3)
STOP
REMOVE
191

W1-2R (3)
30 M.P.H.
W13-1 (3)
30 M.P.H.
REMOVE
192
192A

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON SIGNAL POLE OR OVERHEAD SIGN SUPPORT
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON SIGNAL POLE OR SIGNAL MAST ARM
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- XXX DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

SHEET 21 OF 26

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	PERMANENT SIGNING	SHEET 179 E

FILE NAME : N:\PDS\C3D\CAD\32000203\SIGN\023201_PS.DWG
LAYOUT NAME - 023221_PS

PLOT DATE : 3/8/2016 1:46 PM PLOT BY : DODGE, BRIAN M PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

NOTE:
STREET SIGNS SHALL BE MOVED BY LOCAL MUNICIPALITY AND SHALL NOT BE PLACED ON TOP OF STOP SIGNS.

N

195
W1-6(2S)
REMOVE

197
SPEED LIMIT 35
R2-1(3)
SPEED LIMIT 35
REMOVE

LOCAL STREET SIGNS

200
NO PARKING ANY TIME
R7-1-D(2S)
NO PARKING ANY TIME
REMOVE

277+00
278+00
279+00
280+00
281+00
282+00
276+00
USH 45
80TH ST.
51+00

30 M.P.H.
REMOVE
198

NO PARKING ANY TIME
R7-1-R (2S)
NO PARKING ANY TIME
REMOVE
198A

LOCAL STREET SIGNS

STOP
R1-1(2S)
STOP
REMOVE
199

NO PARKING ANY TIME
R7-1-L (2S)
NO PARKING ANY TIME
REMOVE
199A

SPEED LIMIT 45
R2-1(2S)
SPEED LIMIT 45
REMOVE
201

FLAG

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON SIGNAL POLE OR OVERHEAD SIGN SUPPORT
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON SIGNAL POLE OR SIGNAL MAST ARM
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

SHEET 22 OF 26

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	PERMANENT SIGNING	SHEET 180	E

FILE NAME : N:\PDS\C3D\CAD\32000203\SIGN\023201_PS.DWG
LAYOUT NAME - 023222_PS

PLOT DATE : 3/8/2016 1:46 PM PLOT BY : DODGE, BRIAN M PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON SIGNAL POLE OR OVERHEAD SIGN SUPPORT
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON SIGNAL POLE OR SIGNAL MAST ARM
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- XXX DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

N

204
204A
W1-1L (2S)
30 M.P.H.
W13-1 (3)

254
W11-2 (2S)
254A AHEAD
W16-9P (2S)

203
SPEED LIMIT 35
W3-5 (2S)

REMOVE

282+00 283+00 284+00 285+00 286+00 287+00 288+00

USH 45

18" CMCP 18" CMCP 18" CMCP 24" CMCP

4 TON WEIGHT LIMIT
MOVE PRIVATE SIGN
227

SHEET 23 OF 26

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	PERMANENT SIGNING	SHEET 181	E

FILE NAME : N:\PDS\C3D\CAD\32000203\SIGN\023201_PS.DWG
LAYOUT NAME - 023223_PS

PLOT DATE : 3/8/2016 1:46 PM PLOT BY : DODGE, BRIAN M PLOT NAME : PLOT SCALE : 1 IN:40 FT

NOTE:
STREET SIGNS SHALL BE MOVED BY LOCAL MUNICIPALITY AND SHALL NOT BE PLACED ON TOP OF STOP SIGNS.

LOCAL STREET SIGNS

206
SPEED LIMIT 45
R2-1(2S)
SPEED LIMIT 45
REMOVE

288+00 289+00 290+00 291+00 292+00 293+00 294+00

USH 45

79TH ST.

51+00

STOP
R1-1(2S)
STOP
REMOVE
207

W6-1(2S)
REMOVE
208

SPEED LIMIT 45
R2-1(2S)
SPEED LIMIT 45
REMOVE
209

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON SIGNAL POLE OR OVERHEAD SIGN SUPPORT
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON SIGNAL POLE OR SIGNAL MAST ARM
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- XXX DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

SHEET 24 OF 26

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	PERMANENT SIGNING	SHEET 182 E

FILE NAME : N:\PDS\C3D\CAD\32000203\SIGN\023201_PS.DWG
LAYOUT NAME - 023224_PS

PLOT DATE : 3/8/2016 1:46 PM PLOT BY : DODGE, BRIAN M PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

2

N

228

W6-3(2S)

210

DO NOT ENTER

R5-1(2M)

DO NOT ENTER

REMOVE

294+00 295+00 296+00 297+00 298+00 299+00 300+00

USH 45

R4-7(3)

W5-54S(2M)

REMOVE

211

229

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON SIGNAL POLE OR OVERHEAD SIGN SUPPORT
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON SIGNAL POLE OR SIGNAL MAST ARM
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- XXX DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

SHEET 25 OF 26

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	PERMANENT SIGNING	SHEET 183	E

FILE NAME : N:\PDS\C3D\CAD\32000203\SIGN\023201_PS.DWG
LAYOUT NAME - 023225_PS

PLOT DATE : 3/8/2016 1:46 PM PLOT BY : DODGE, BRIAN M PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

2

LEGEND

EXISTING SIGN MOUNTED ON POST(S)

EXISTING SIGN MOUNTED ON SIGNAL POLE OR OVERHEAD SIGN SUPPORT

PROPOSED SIGN MOUNTED ON POST(S)

PROPOSED SIGN MOUNTED ON SIGNAL POLE OR SIGNAL MAST ARM

EXISTING LIGHT OR SIGNAL POLE

SIGN BRIDGE

XXX DENOTES SIGN NUMBER

(X) INDICATES SIGN SIZE

N

232
W6-2 (2S)
REMOVE

233
WRONG WAY
R5-1A (2S)
WRONG WAY
REMOVE

234
W4-2R (2S)
REMOVE

239
RIGHT LANE ENDS
W9-1R (2S)

USH 45

300 302 304 306

12" RCCP

VAULT

MH VENT

JCT 50
J1-1 (2S)
JCT 50
REMOVE
235

W3-3 (2S)
REMOVE
236
237

ONE WAY
R6-2-L (2M)
ONE WAY
REMOVE
238

SHEET 26 OF 26

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	PERMANENT SIGNING	SHEET 184	E

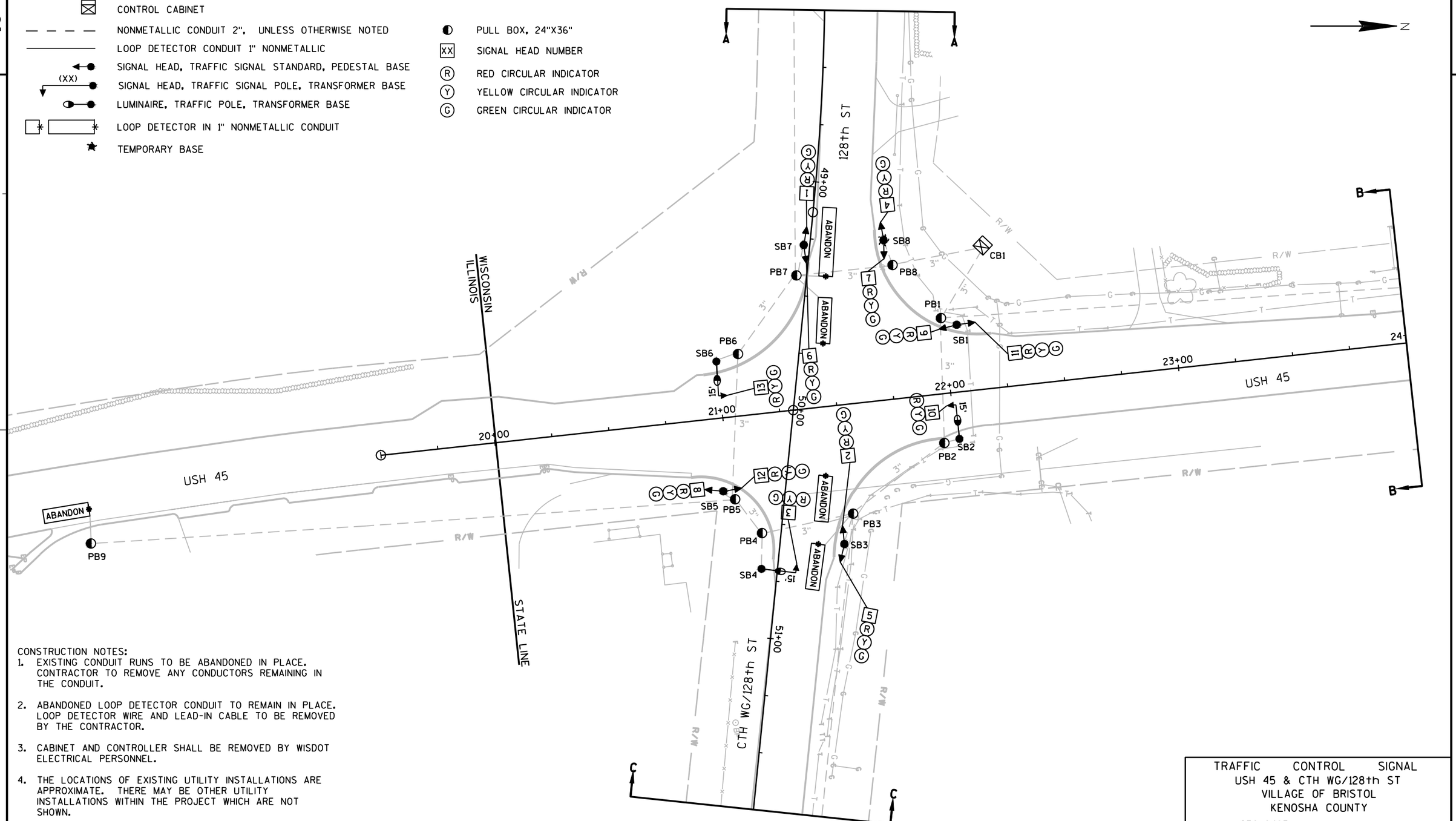
FILE NAME : N:\PDS\C3D\CAD\32000203\SIGN\023201_PS.DWG
LAYOUT NAME - 023226_PS

PLOT DATE : 3/8/2016 1:47 PM PLOT BY : DODGE, BRIAN M PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

LEGEND

- CONTROL CABINET
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- LOOP DETECTOR CONDUIT 1" NONMETALLIC
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
- (XX) SIGNAL HEAD, TRAFFIC SIGNAL POLE, TRANSFORMER BASE
- LUMINAIRE, TRAFFIC POLE, TRANSFORMER BASE
- LOOP DETECTOR IN 1" NONMETALLIC CONDUIT
- TEMPORARY BASE
- PULL BOX, 24"X36"
- XX SIGNAL HEAD NUMBER
- (R) RED CIRCULAR INDICATOR
- (Y) YELLOW CIRCULAR INDICATOR
- (G) GREEN CIRCULAR INDICATOR



CONSTRUCTION NOTES:

1. EXISTING CONDUIT RUNS TO BE ABANDONED IN PLACE. CONTRACTOR TO REMOVE ANY CONDUCTORS REMAINING IN THE CONDUIT.
2. ABANDONED LOOP DETECTOR CONDUIT TO REMAIN IN PLACE. LOOP DETECTOR WIRE AND LEAD-IN CABLE TO BE REMOVED BY THE CONTRACTOR.
3. CABINET AND CONTROLLER SHALL BE REMOVED BY WISDOT ELECTRICAL PERSONNEL.
4. THE LOCATIONS OF EXISTING UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.
5. GRAYSHADE REPRESENTS EXISTING. BOLD REPRESENTS ITEMS TO BE REMOVED.

TRAFFIC CONTROL SIGNAL
USH 45 & CTH WG/128th ST
VILLAGE OF BRISTOL
KENOSHA COUNTY

SIGNAL NO. S30-0483

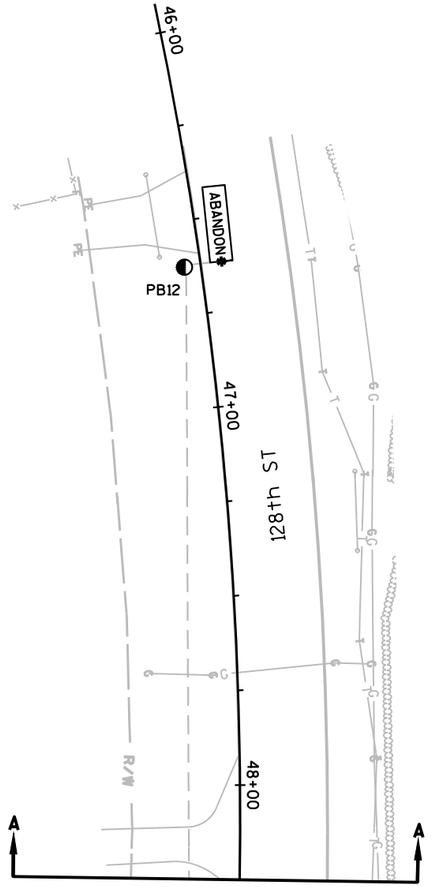
REGION CONTACT: S. SWARD
DESIGNED BY: R. LAROSA
REVISED BY:

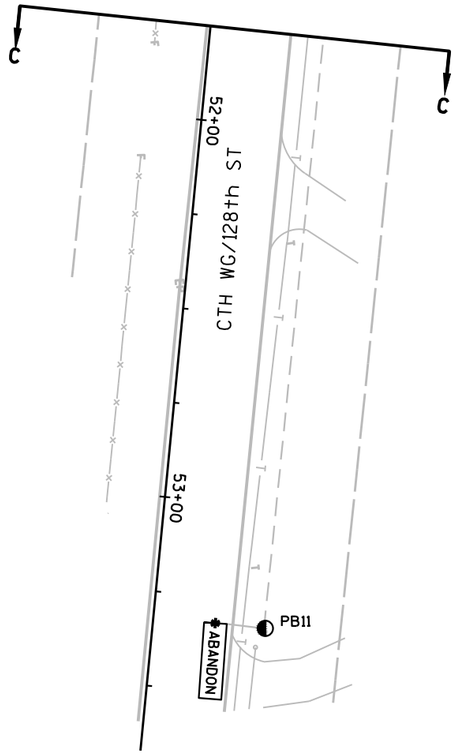
PAGE 1 OF 2

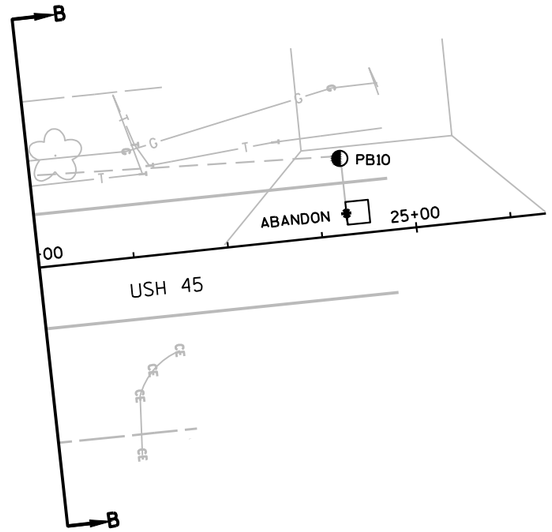
PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	TRAFFIC SIGNAL REMOVAL PLAN	SHEET 185	E

2

N







TRAFFIC CONTROL SIGNAL
USH 45 & CTH WG/128th ST
VILLAGE OF BRISTOL
KENOSHA COUNTY

SIGNAL NO. S30-0483

REGION CONTACT: S. SWARD
DESIGNED BY: R. LAROSA
REVISED BY:

PAGE 2 OF 2

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	TRAFFIC SIGNAL REMOVAL PLAN	SHEET 186	E

LEGEND

- CONTROL CABINET
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- LOOP DETECTOR CONDUIT 1" NONMETALLIC
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
- (XX) MONOTUBE BASE, POLE, 15'-30' ARM
- (XX) MONOTUBE BASE, POLE, 35'-55' ARM
- LUMINAIRE, TRAFFIC POLE, TRANSFORMER BASE
- LOOP DETECTOR IN 1" NONMETALLIC CONDUIT
- RADAR DETECTION AREA
- RADAR DETECTOR

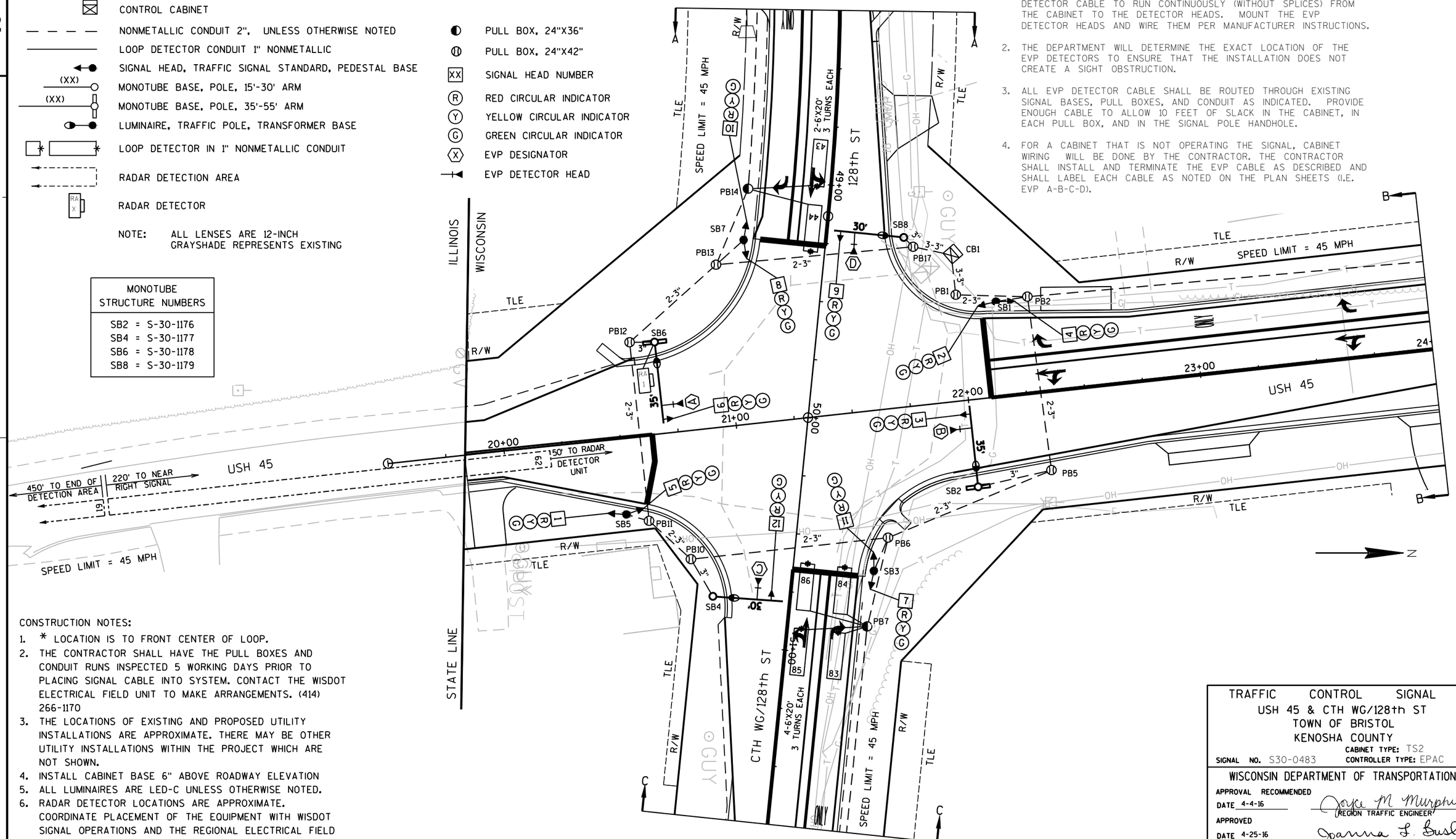
NOTE: ALL LENSES ARE 12-INCH
GRAYSHADE REPRESENTS EXISTING

- PULL BOX, 24"X36"
- PULL BOX, 24"X42"
- XX SIGNAL HEAD NUMBER
- (R) RED CIRCULAR INDICATOR
- (Y) YELLOW CIRCULAR INDICATOR
- (G) GREEN CIRCULAR INDICATOR
- (X) EVP DESIGNATOR
- EVP DETECTOR HEAD

MONOTUBE STRUCTURE NUMBERS
SB2 = S-30-1176
SB4 = S-30-1177
SB6 = S-30-1178
SB8 = S-30-1179

EVP CONSTRUCTION NOTES:

1. INSTALL THE TRAFFIC SIGNAL EMERGENCY VEHICLE PRE-EMPTION DETECTOR CABLE TO RUN CONTINUOUSLY (WITHOUT SPLICES) FROM THE CABINET TO THE DETECTOR HEADS. MOUNT THE EVP DETECTOR HEADS AND WIRE THEM PER MANUFACTURER INSTRUCTIONS.
2. THE DEPARTMENT WILL DETERMINE THE EXACT LOCATION OF THE EVP DETECTORS TO ENSURE THAT THE INSTALLATION DOES NOT CREATE A SIGHT OBSTRUCTION.
3. ALL EVP DETECTOR CABLE SHALL BE ROUTED THROUGH EXISTING SIGNAL BASES, PULL BOXES, AND CONDUIT AS INDICATED. PROVIDE ENOUGH CABLE TO ALLOW 10 FEET OF SLACK IN THE CABINET, IN EACH PULL BOX, AND IN THE SIGNAL POLE HANDHOLE.
4. FOR A CABINET THAT IS NOT OPERATING THE SIGNAL, CABINET WIRING WILL BE DONE BY THE CONTRACTOR. THE CONTRACTOR SHALL INSTALL AND TERMINATE THE EVP CABLE AS DESCRIBED AND SHALL LABEL EACH CABLE AS NOTED ON THE PLAN SHEETS (I.E. EVP A-B-C-D).



CONSTRUCTION NOTES:

1. * LOCATION IS TO FRONT CENTER OF 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. INSTALL CABINET BASE 6" ABOVE ROADWAY ELEVATION
5. ALL LUMINAIRES ARE LED-C UNLESS OTHERWISE NOTED.
6. RADAR DETECTOR LOCATIONS ARE APPROXIMATE. COORDINATE PLACEMENT OF THE EQUIPMENT WITH WISDOT SIGNAL OPERATIONS AND THE REGIONAL ELECTRICAL FIELD UNIT. NOTIFY THE REGIONAL ELECTRICAL FIELD UNIT AT (414) 266-1170 A MINIMUM OF 5 DAYS PRIOR TO PLACING THE EQUIPMENT.

TRAFFIC CONTROL SIGNAL
USH 45 & CTH WG/128th ST
TOWN OF BRISTOL
KENOSHA COUNTY
CABINET TYPE: TS2
SIGNAL NO. S30-0483 CONTROLLER TYPE: EPAC

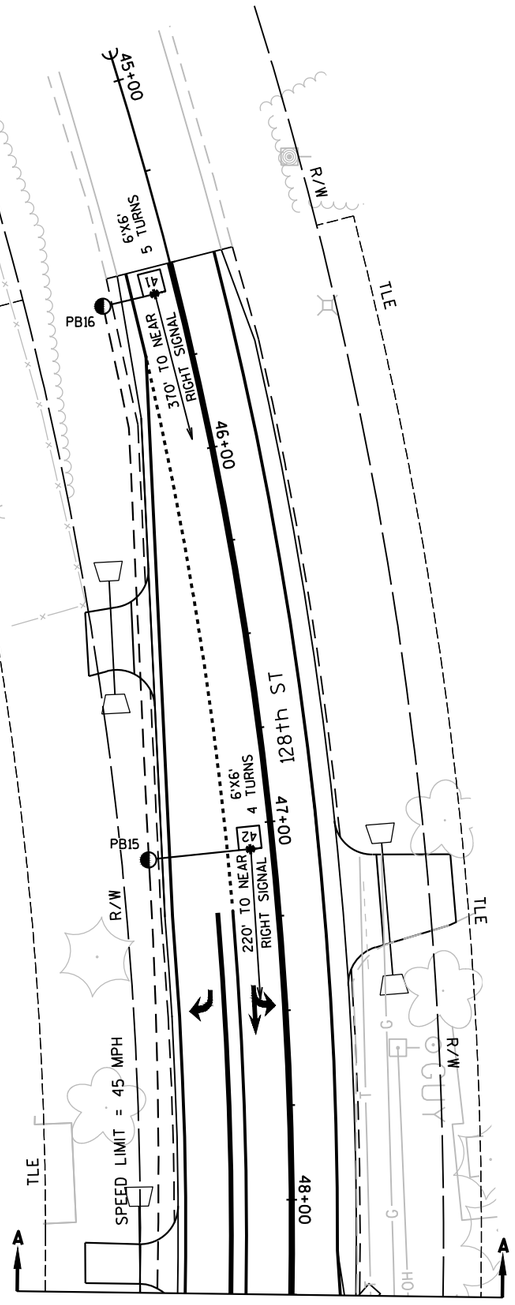
WISCONSIN DEPARTMENT OF TRANSPORTATION
APPROVAL RECOMMENDED
DATE 4-4-16 Joyce M Murphy REGION TRAFFIC ENGINEER
APPROVED
DATE 4-25-16 Joanna L Bush STATE TRAFFIC ENGINEER

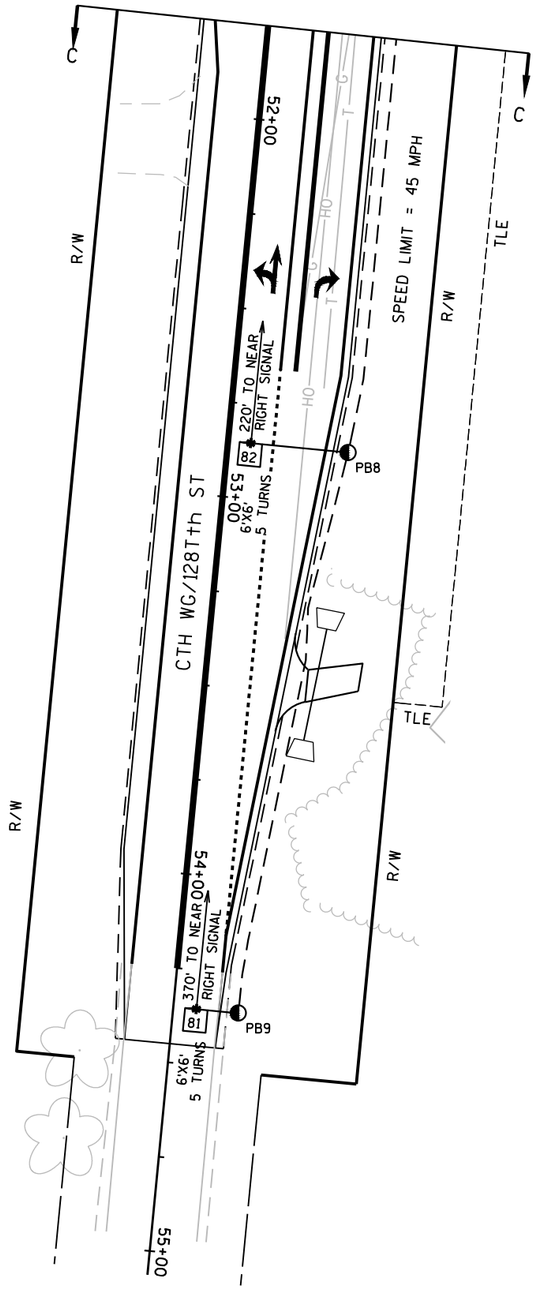
REGION CONTACT: STEPHANIE SWARD
DESIGNED BY: PHILIP LAROSA
REVISED BY:

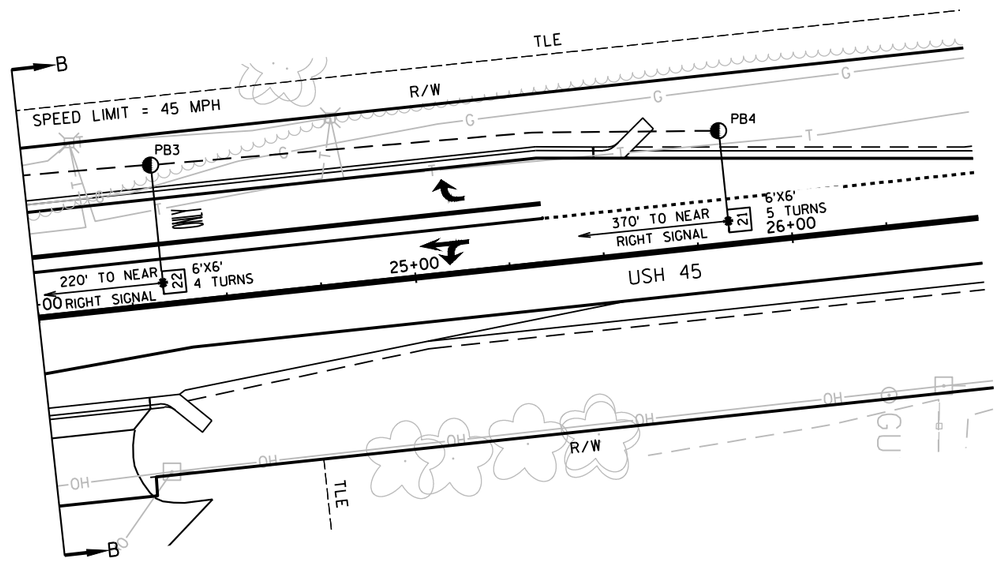
PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	TRAFFIC SIGNAL PLAN	SHEET 187 E

FILE NAME : N:\PDS\C3D\CAD\32000203\SIG\S30-0483\S30-0483.DWG PLOT DATE : 4/25/2016 2:37 PM PLOT BY : VANDE LEEST, CYNTHIA PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2







N

TRAFFIC CONTROL SIGNAL
USH 45 & CTH WG/128th ST
TOWN OF BRISTOL
KENOSHA COUNTY

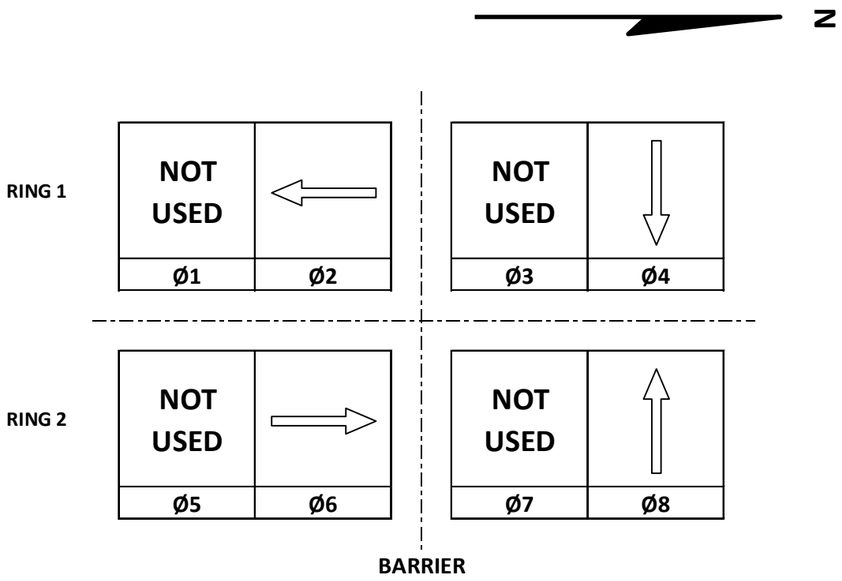
SIGNAL NO. S30-0483

REGION CONTACT: STEPHANIE SWARD
DESIGNED BY: PHILIP LAROSA
REVISED BY:

PAGE 2 OF 3

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	TRAFFIC SIGNAL PLAN	SHEET 188	E

	HEAD NUMBERS	FLASH
Ø1		
Ø2	4, 5, 6	R
Ø3		
Ø4	10, 11, 12	R
Ø5		
Ø6	1, 2, 3	R
Ø7		
Ø8	7, 8, 9	R
Ø2P		
Ø4P		
Ø6P		
Ø8P		
OLA		
OLB		
OLC		
OLD		



CONTROLLER LOGIC

PHASE NUMBER	PHASE LOCKING	DUAL ENTRY W / Ø	PHASE RECALL	PHASE ACTIVE
1				
2	X	6	MIN	X
3				
4		8		X
5				
6	X	2	MIN	X
7				
8		4		X

EMERGENCY VEHICLE PREEMPTION SEQUENCE

EMERGENCY VEHICLE PREEMPTOR	A	B	C	D
MOVEMENT	← →	← →	↓ ↑	↓ ↑
PHASE	2+6	2+6	4+8	4+8

AFTER PREEMPTION SEQUENCE 2+6, CONTROLLER SHALL RETURN TO PHASES 2+6.
AFTER PREEMPTION SEQUENCE 4+8, CONTROLLER SHALL RETURN TO PHASES 4+8.

TYPE OF INTERCONNECT/COMMUNICATION	
NONE	
CLOSED LOOP	
TWISTED PAIR	
FIBER OPTIC*	
FIBER OPTIC (ETHERNET)	
RADIO	
CELL MODEM	X

TYPE OF COORDINATION	
NONE	X
TBC	
TRAFFIC RESPONSIVE	
ADAPTIVE	
*LOCATION OF MASTER CONTROLLER NO:	S-
SIGNAL SYSTEM NO:	SS-

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	X
TOMAR	
HARDWIRE	
OTHER	
LIFT BRIDGE	
QUEUE DETECTION	

DETECTOR LOGIC

DETECTOR INPUT	3	1	7	5	11	9	15	13
PLAN LOOP DETECTOR*(S)	21	41	43	81	83	85		
ASSIGNED PHASE	2	4	4	8	8	8		
OPERATION MODE	VEH	VEH	VEH	VEH	VEH	VEH		
SWITCH								
EXTEND		X		X				
DELAY			X		X	X		

19	17	23	21	27	25	31	29	DETECTOR INPUT
61								PLAN LOOP DETECTOR*(S)
6								ASSIGNED PHASE
VEH								OPERATION MODE
								SWITCH
X								EXTEND
								DELAY

DETECTOR INPUT	4	2	8	6	12	10	16	14
PLAN LOOP DETECTOR*(S)	22	42	44	82	84	86		
ASSIGNED PHASE	2	4	4	8	8	8		
OPERATION MODE	VEH	VEH	VEH	VEH	VEH	VEH		
SWITCH								
EXTEND		X		X				
DELAY			X		X	X		

20	18	24	22	28	26	32	30	DETECTOR INPUT
62								PLAN LOOP DETECTOR*(S)
6								ASSIGNED PHASE
VEH								OPERATION MODE
								SWITCH
								EXTEND
								DELAY

USH 45 & CTH WG/128TH ST
TOWN OF BRISTOL
KENOSHA COUNTY COUNTY

SIGNAL NO: S30-0483 CABINET TYPE: TS2
CONTROLLER TYPE: EPAC
DATE: MARCH 2016 PAGE NO. 3 OF 3

FILE NAME : \\Wke31fp1\n3public\SPO\Operations\Signals\Databases\Signal Intersection Files\S30-0483\PLANS\EPAC SEQ.PPTM PLOT DATE : 03/31/2016 9:50AM PLOT BY : STEPHANIE SWARD PLOT NAME : _____ PLOT SCALE : 1:1

PROJECT ID:	3200-02-73
INTERSECTION:	USH 45 & CTH WG/128th ST

Signal Wire Color Coding	BLK - black	RED - red	GRN - green
	WHT - white	BLU - blue	ORG - orange

CB1 TO	AWG14 # OF CONDUCTORS	HEAD NO.	SIGNAL INDICATION WIRE COLOR								PED BUTTON	OTHER
			RED	YELLOW	GREEN	<RED>	<YELLOW>	<GREEN>	D/WALK	WALK		
SB1	12	2	RED	ORG	GRN							
		4	RED/BLK	ORG/BLK	GRN/BLK							
SB2	7	3	RED	ORG	GRN							
SB3	12	11	RED	ORG	GRN							
		7	RED/BLK	ORG/BLK	GRN/BLK							
SB4	7	12	RED	ORG	GRN							
SB5	12	1	RED	ORG	GRN							
		5	RED/BLK	ORG/BLK	GRN/BLK							
SB6	7	6	RED	ORG	GRN							
SB7	12	10	RED	ORG	GRN							
		8	RED/BLK	ORG/BLK	GRN/BLK							
SB8	7	9	RED	ORG	GRN							

Equipment grounding conductor 10 AWG Green XLP	
From	To
CB1	SB1
SB1	SB2
SB2	SB3
SB3	SB4
SB4	SB5
SB5	SB6
SB6	SB7
SB7	SB8
SB8	CB1

Pull Box Bonding Jumper 10 AWG Green XLP	
From	To
PB1	CB1
PB2	SB1
PB5	SB2
PB6	SB3
PB10	SB4
PB11	SB5
PB12	SB6
PB13	SB7
PB17	SB8

Lighting UF #10 w/ ground	
From	To
CB1	SB2
SB2	SB4
CB1	SB8
SB8	SB6

Radar Detection Cable	
From	To
CB1	SB6

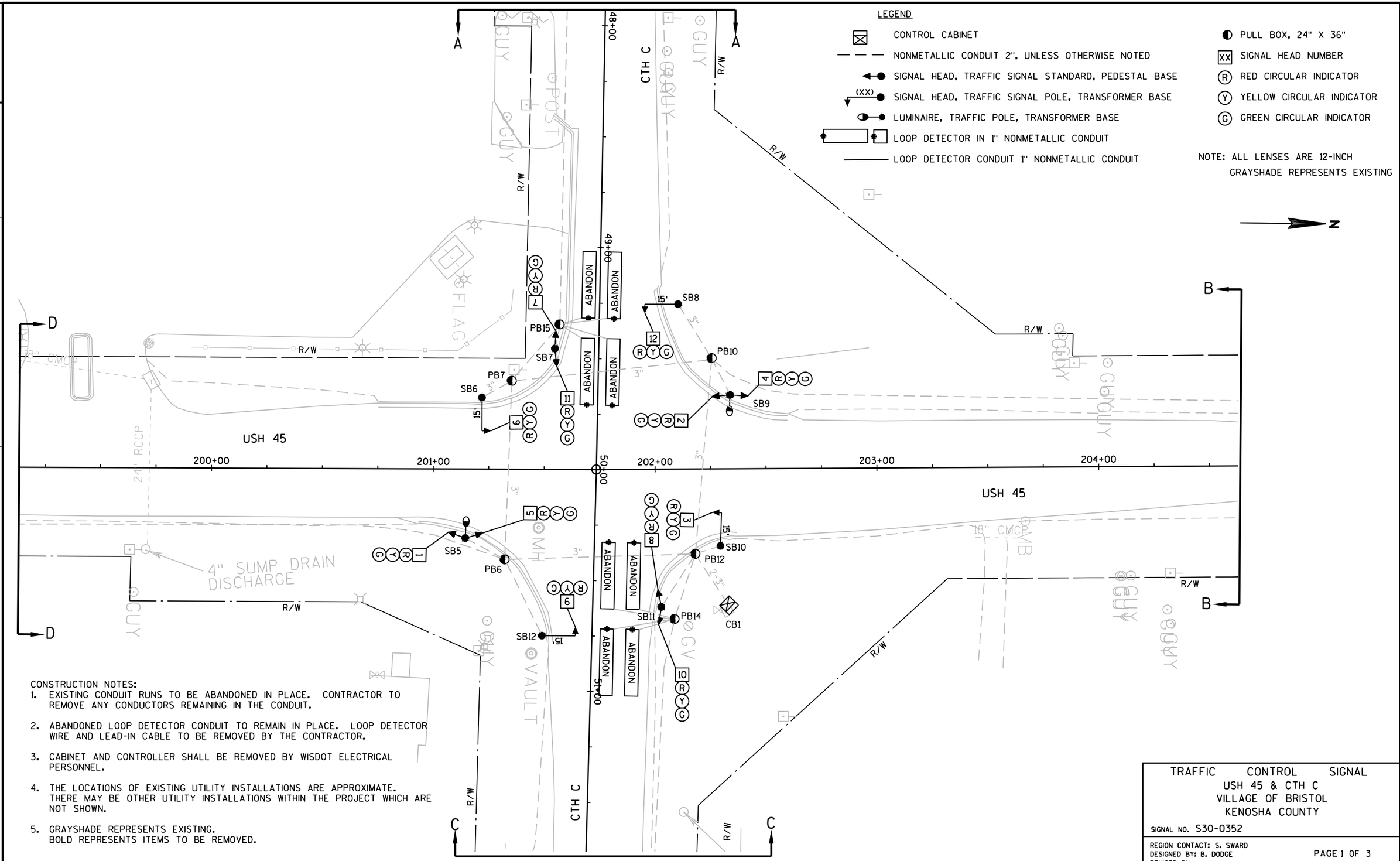
EVP Cable	
From	To
CB1	SB6 (Head A)
CB1	SB2 (Head B)
CB1	SB4 (Head C)
CB1	SB8 (Head D)

*Use the white conductor in the cable assembly as the grounded conductor for all traffic signal indications

*Ensure the grounded conductor in the feeder cable and the pole cables are both 18" longer than the ungrounded conductors.

*At the signal bases, connect one terminal from the pedestrian push buttons to the color indicated in the chart. Connect the other terminal to the grounded conductor.

*Reconnect the grounding conductors wherever the circuit has been interrupted to ensure the grounding circuit is complete.



CONSTRUCTION NOTES:

1. EXISTING CONDUIT RUNS TO BE ABANDONED IN PLACE. CONTRACTOR TO REMOVE ANY CONDUCTORS REMAINING IN THE CONDUIT.
2. ABANDONED LOOP DETECTOR CONDUIT TO REMAIN IN PLACE. LOOP DETECTOR WIRE AND LEAD-IN CABLE TO BE REMOVED BY THE CONTRACTOR.
3. CABINET AND CONTROLLER SHALL BE REMOVED BY WISDOT ELECTRICAL PERSONNEL.
4. THE LOCATIONS OF EXISTING UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.
5. GRAYSHADE REPRESENTS EXISTING. BOLD REPRESENTS ITEMS TO BE REMOVED.

TRAFFIC CONTROL SIGNAL
USH 45 & CTH C
VILLAGE OF BRISTOL
KENOSHA COUNTY

SIGNAL NO. S30-0352

REGION CONTACT: S. SWARD
DESIGNED BY: B. DODGE
REVISED BY:

PAGE 1 OF 3

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	TRAFFIC SIGNAL REMOVAL PLAN	SHEET 191	E

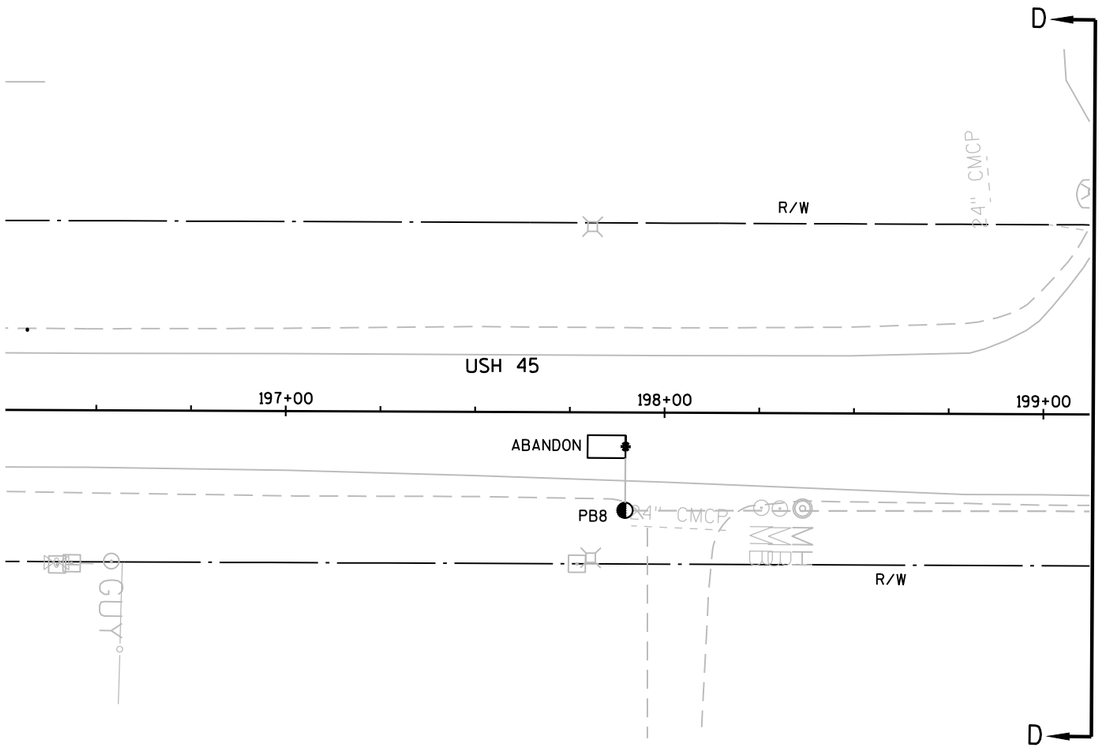
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LAYOUT NAME - 024001_REM

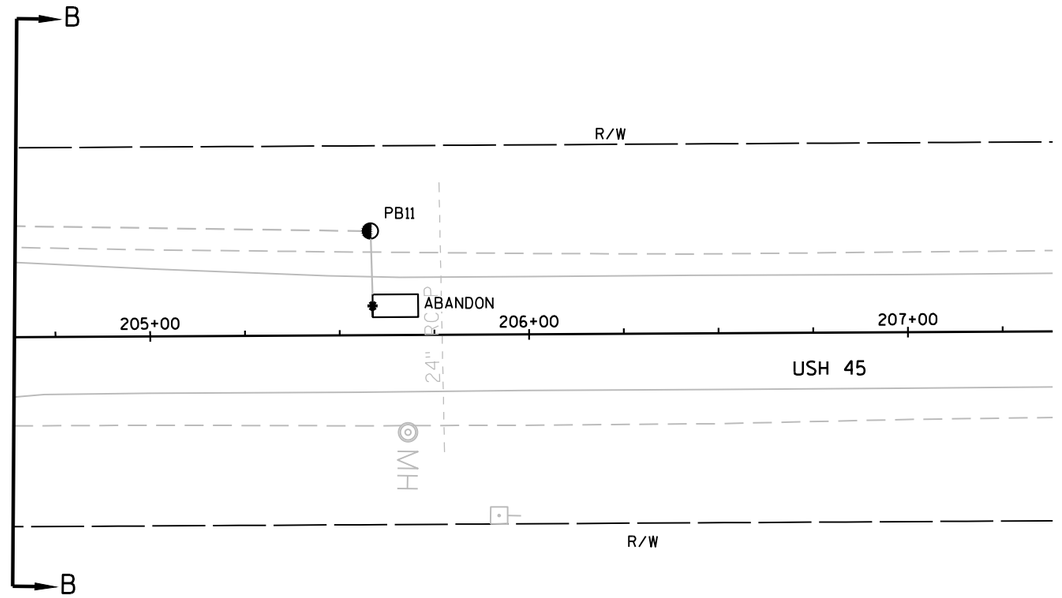
PLOT DATE : 3/31/2016 11:22 AM PLOT BY : DODGE, BRIAN M PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

N





TRAFFIC CONTROL SIGNAL
USH 45 & CTH C
VILLAGE OF BRISTOL
KENOSHA COUNTY

SIGNAL NO. S30-0352

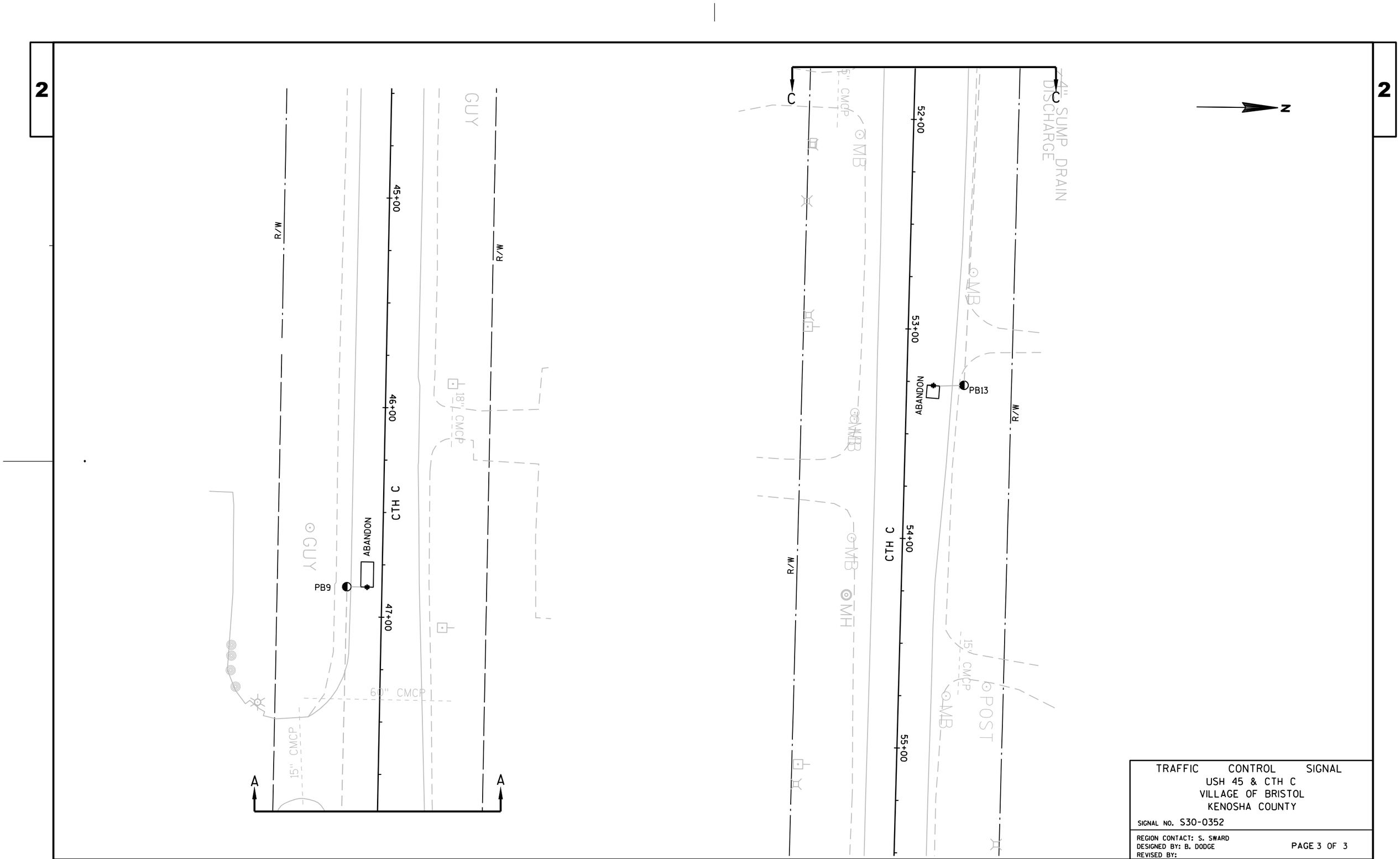
REGION CONTACT: S. SWARD
DESIGNED BY: B. DODGE
REVISED BY:

PAGE 2 OF 3

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	TRAFFIC SIGNAL REMOVAL PLAN	SHEET 192	E

FILE NAME : N:\PDS\C3D\CAD\32000203\SIG\S30-0352\S30-0352_REM.DWG
LAYOUT NAME - 024001_REM (2)

PLOT DATE : 3/31/2016 11:22 AM PLOT BY : DODGE, BRIAN M PLOT NAME : PLOT SCALE : 1 IN:40 FT



TRAFFIC CONTROL SIGNAL
USH 45 & CTH C
VILLAGE OF BRISTOL
KENOSHA COUNTY

SIGNAL NO. S30-0352

REGION CONTACT: S. SWARD
DESIGNED BY: B. DODGE
REVISED BY:

PAGE 3 OF 3

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	TRAFFIC SIGNAL REMOVAL PLAN	SHEET 193	E

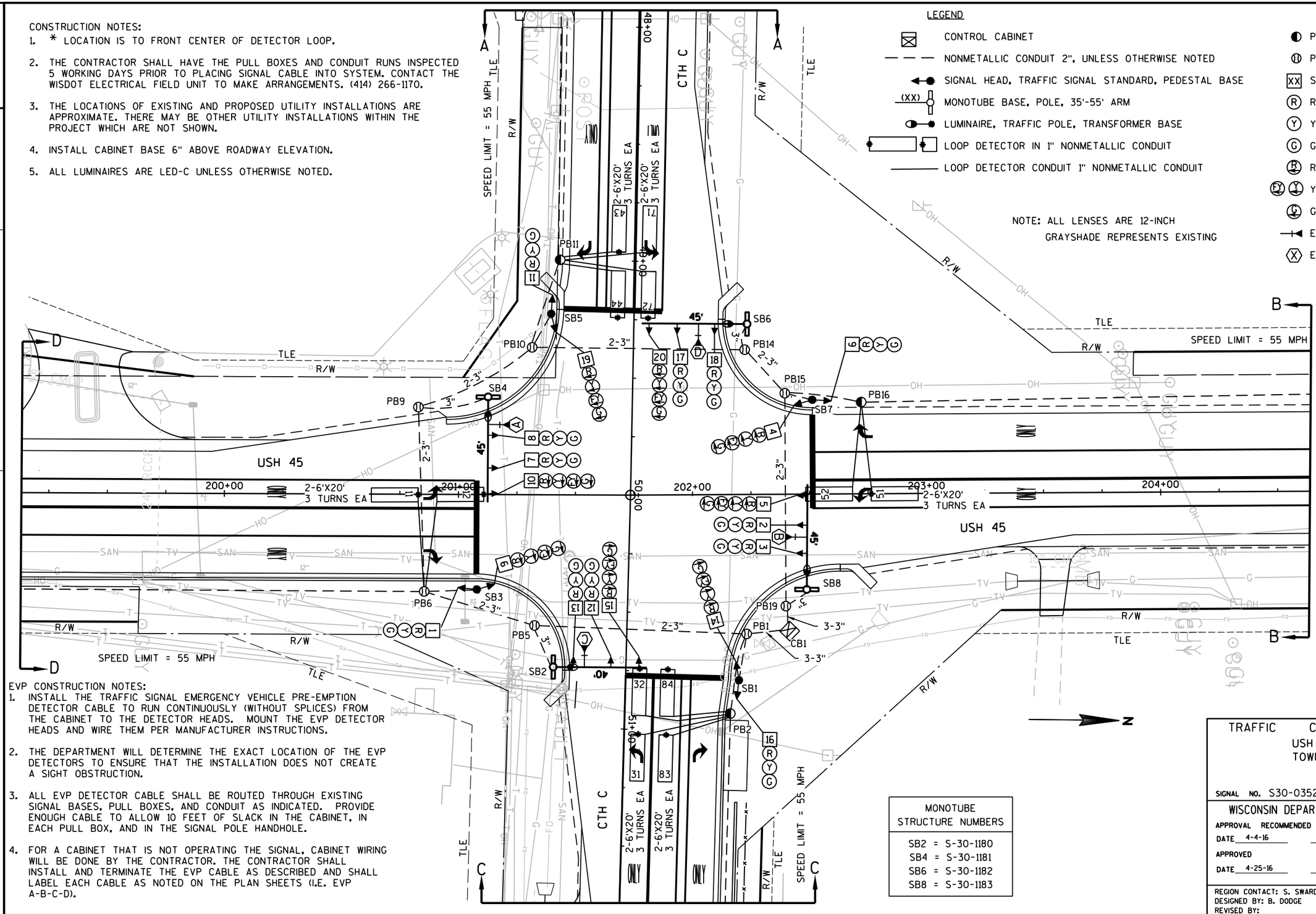
CONSTRUCTION NOTES:

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. INSTALL CABINET BASE 6" ABOVE ROADWAY ELEVATION.
5. ALL LUMINAIRES ARE LED-C UNLESS OTHERWISE NOTED.

LEGEND

- CONTROL CABINET
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
- (XX) MONOTUBE BASE, POLE, 35'-55' ARM
- LUMINAIRE, TRAFFIC POLE, TRANSFORMER BASE
- LOOP DETECTOR IN 1" NONMETALLIC CONDUIT
- LOOP DETECTOR CONDUIT 1" NONMETALLIC CONDUIT
- 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
- R RED ARROW
- EY YELLOW ARROW
- G GREEN ARROW
- EVP DETECTOR HEAD
- X EVP DESIGNATOR

NOTE: ALL LENSES ARE 12-INCH
GRAYSHADE REPRESENTS EXISTING



EVP CONSTRUCTION NOTES:

1. INSTALL THE TRAFFIC SIGNAL EMERGENCY VEHICLE PRE-EMPTION DETECTOR CABLE TO RUN CONTINUOUSLY (WITHOUT SPLICES) FROM THE CABINET TO THE DETECTOR HEADS. MOUNT THE EVP DETECTOR HEADS AND WIRE THEM PER MANUFACTURER INSTRUCTIONS.
2. THE DEPARTMENT WILL DETERMINE THE EXACT LOCATION OF THE EVP DETECTORS TO ENSURE THAT THE INSTALLATION DOES NOT CREATE A SIGHT OBSTRUCTION.
3. ALL EVP DETECTOR CABLE SHALL BE ROUTED THROUGH EXISTING SIGNAL BASES, PULL BOXES, AND CONDUIT AS INDICATED. PROVIDE ENOUGH CABLE TO ALLOW 10 FEET OF SLACK IN THE CABINET, IN EACH PULL BOX, AND IN THE SIGNAL POLE HANDHOLE.
4. FOR A CABINET THAT IS NOT OPERATING THE SIGNAL, CABINET WIRING WILL BE DONE BY THE CONTRACTOR. THE CONTRACTOR SHALL INSTALL AND TERMINATE THE EVP CABLE AS DESCRIBED AND SHALL LABEL EACH CABLE AS NOTED ON THE PLAN SHEETS (I.E. EVP A-B-C-D).

MONOTUBE STRUCTURE NUMBERS
SB2 = S-30-1180
SB4 = S-30-1181
SB6 = S-30-1182
SB8 = S-30-1183

TRAFFIC CONTROL SIGNAL
USH 45 & CTH C
TOWN OF BRISTOL
KENOSHA
CABINET TYPE: TS2
SIGNAL NO. S30-0352 CONTROLLER TYPE: EPAC

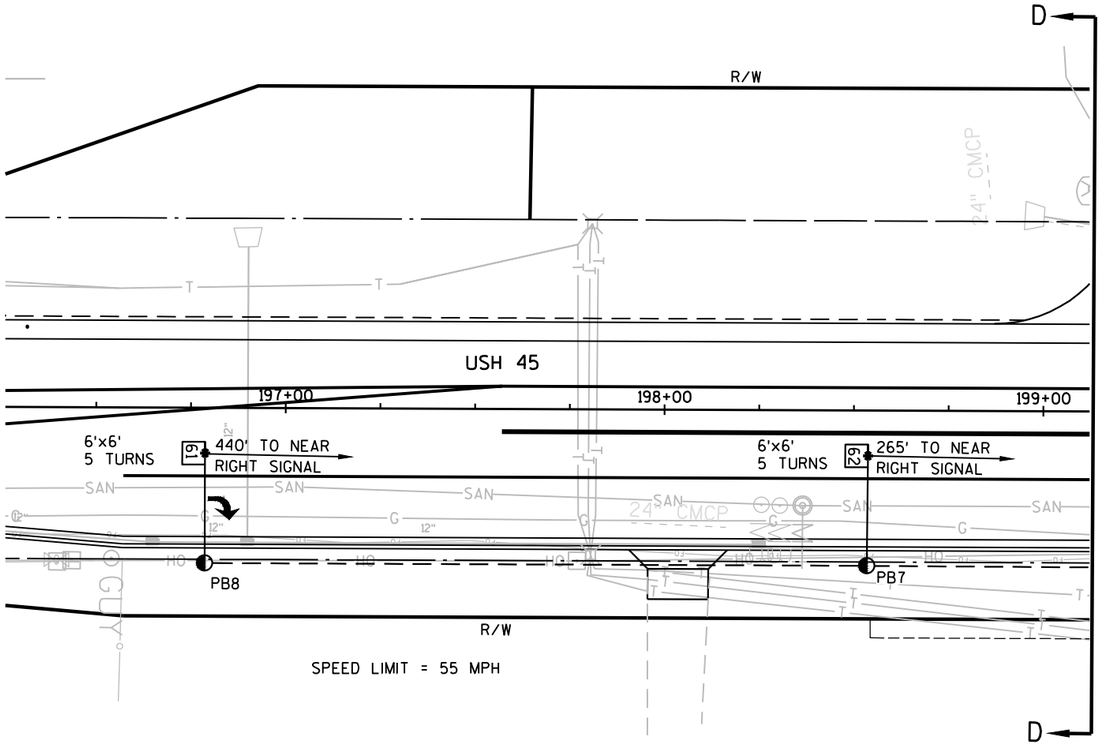
WISCONSIN DEPARTMENT OF TRANSPORTATION
APPROVAL RECOMMENDED
DATE 4-4-16 Joyce M Murphy REGION TRAFFIC ENGINEER
APPROVED
DATE 4-25-16 Joanna L. Bush STATE TRAFFIC ENGINEER

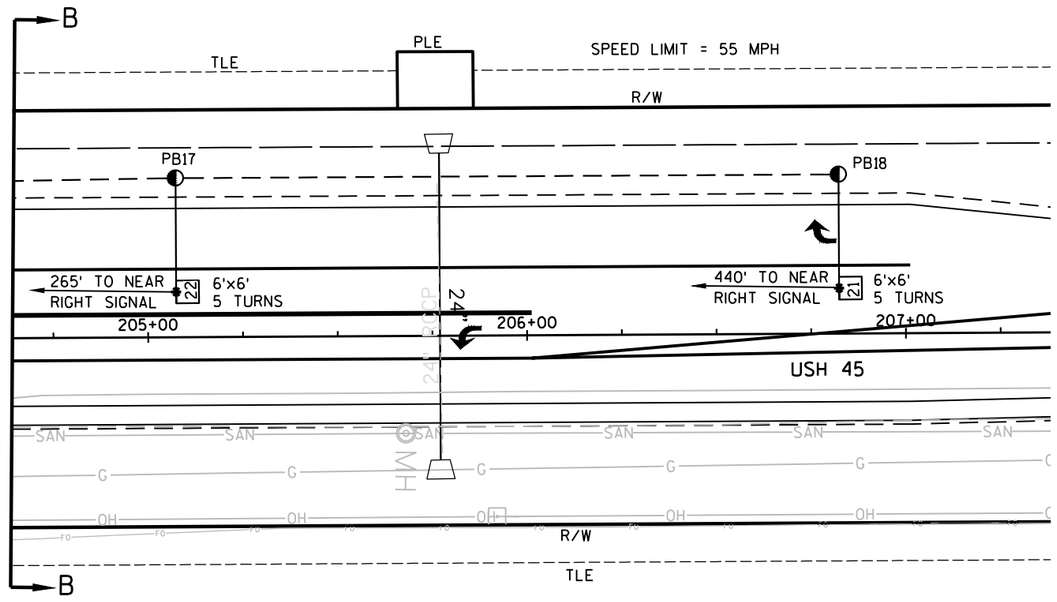
REGION CONTACT: S. SWARD
DESIGNED BY: B. DODGE
REVISED BY:
PAGE 1 OF 4

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	TRAFFIC SIGNAL PLAN	SHEET 194 E

2

N





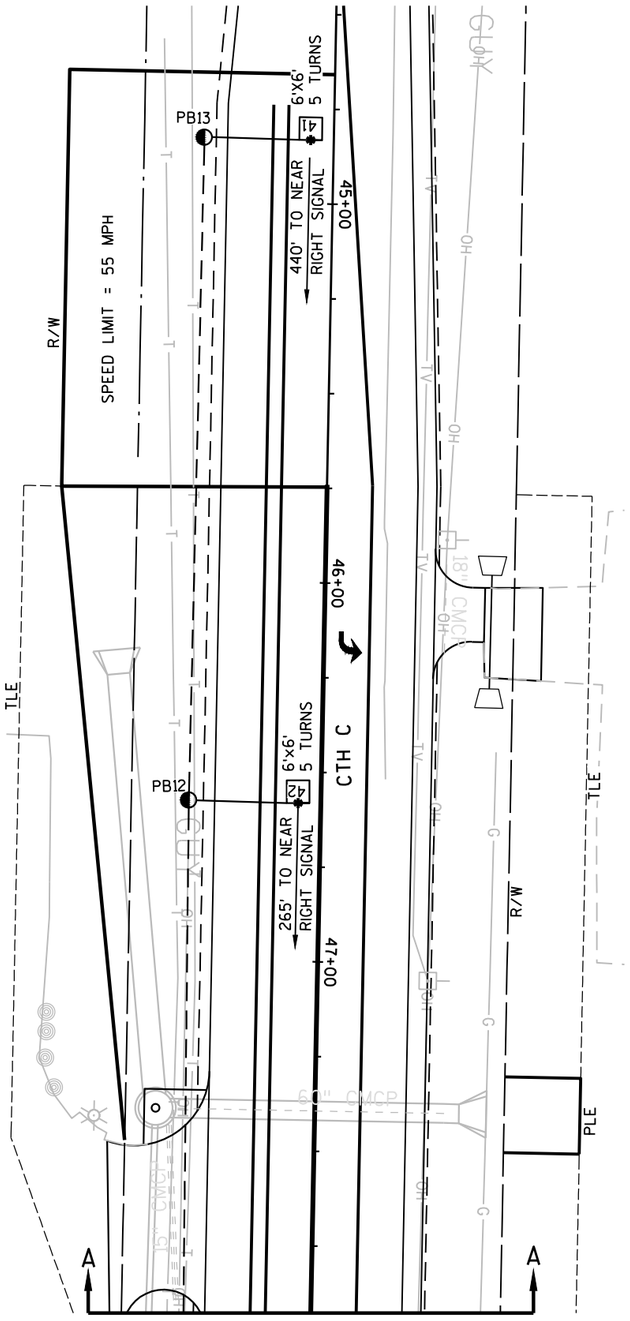
TRAFFIC CONTROL SIGNAL
USH 45 & CTH C
VILLAGE OF BRISTOL
KENOSHA COUNTY

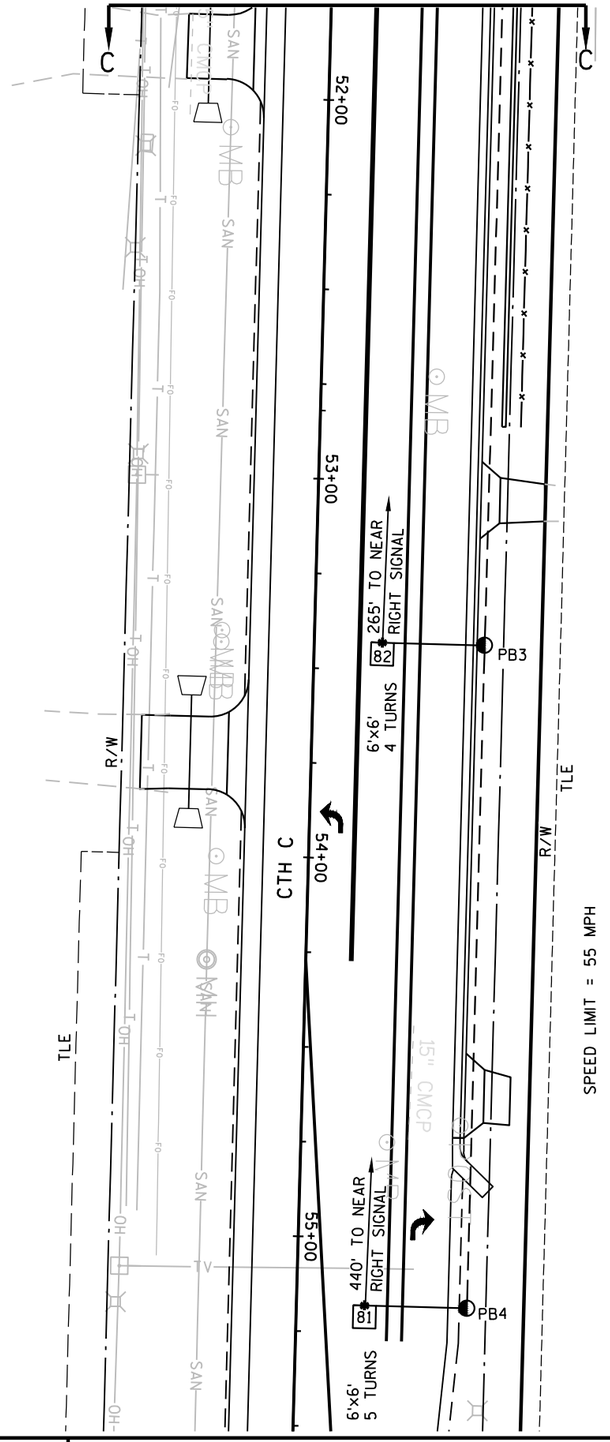
SIGNAL NO. S30-0352

REGION CONTACT: S. SWARD
DESIGNED BY: B. DODGE
REVISED BY:

PAGE 2 OF 4

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	TRAFFIC SIGNAL PLAN	SHEET 195	E





N

TRAFFIC CONTROL SIGNAL
USH 45 & CTH C
VILLAGE OF BRISTOL
KENOSHA COUNTY

SIGNAL NO. S30-0352

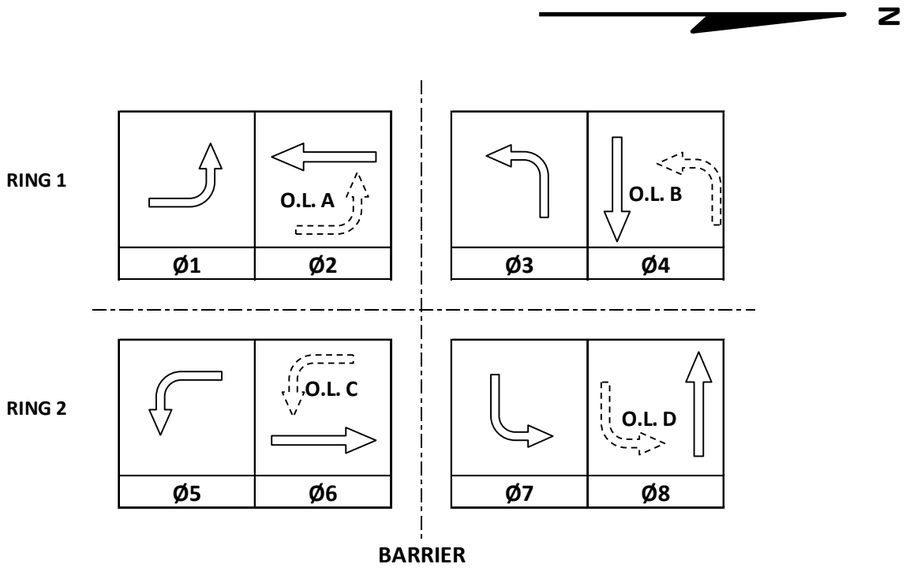
REGION CONTACT: S. SWARD
DESIGNED BY: B. DODGE
REVISED BY:

PAGE 3 OF 4

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	TRAFFIC SIGNAL PLAN	SHEET	E

FILE NAME : N:\PDS\C3D\CAD\32000203\SIG\S30-0352\S30-0352.DWG
LAYOUT NAME - 024001_SP (3)
PLOT DATE : 4/26/2016 8:41 AM PLOT BY : VANDE LEEST, CYNTHIA PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

	HEAD NUMBERS	FLASH
Ø1	4, 5	-
Ø2	6, 7, 8	R
Ø3	19, 20	-
Ø4	11, 12, 13	R
Ø5	9, 10	-
Ø6	1, 2, 3	R
Ø7	14, 15	-
Ø8	16, 17, 18	R
Ø2P		
Ø4P		
Ø6P		
Ø8P		
OLA	4, 5	R ←
OLB	19, 20	R ←
OLC	9, 10	R ←
OLD	14, 15	R ←



CONTROLLER LOGIC

PHASE NUMBER	PHASE LOCKING	DUAL ENTRY W / Ø	PHASE RECALL	PHASE ACTIVE
1				X
2	X	6	MIN	X
3				X
4		8		X
5				X
6	X	2	MIN	X
7				X
8		4		X

EMERGENCY VEHICLE PREEMPTION SEQUENCE

EMERGENCY VEHICLE PREEMPTOR	A	B	C	D
MOVEMENT				
PHASE	2+5	6+1	4+7	8+3

AFTER PREEMPTION SEQUENCE 2+5 OR 6+1, CONTROLLER SHALL RETURN TO PHASES 2+6.
AFTER PREEMPTION SEQUENCE 4+7 OR 8+3, CONTROLLER SHALL RETURN TO PHASES 4+8.

TYPE OF INTERCONNECT/COMMUNICATION	
NONE	
CLOSED LOOP	
TWISTED PAIR	
FIBER OPTIC*	
FIBER OPTIC (ETHERNET)	
RADIO	
CELL MODEM	X

TYPE OF COORDINATION	
NONE	X
TBC	
TRAFFIC RESPONSIVE	
ADAPTIVE	
*LOCATION OF MASTER CONTROLLER NO:	S-
SIGNAL SYSTEM NO:	SS-

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	X
TOMAR	
HARDWIRE	
OTHER	
LIFT BRIDGE	
QUEUE DETECTION	

DETECTOR LOGIC

DETECTOR INPUT	3	1	7	5	11	9	15	13	19	17	23	21	27	25	31	29	DETECTOR INPUT
PLAN LOOP DETECTOR*(S)	11	21	31	41	43	51	61	71	81	83							PLAN LOOP DETECTOR*(S)
ASSIGNED PHASE	1	2	3	4	4	5	6	7	8	8							ASSIGNED PHASE
OPERATION MODE	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH							OPERATION MODE
SWITCH	2		4			6		8									SWITCH
EXTEND				X					X								EXTEND
DELAY	X		X			X		X									DELAY

DETECTOR INPUT	4	2	8	6	12	10	16	14	20	18	24	22	28	26	32	30	DETECTOR INPUT
PLAN LOOP DETECTOR*(S)	12	22	32	42	44	52	62	72	82	84							PLAN LOOP DETECTOR*(S)
ASSIGNED PHASE	1	2	3	4	4	5	6	7	8	8							ASSIGNED PHASE
OPERATION MODE	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH							OPERATION MODE
SWITCH	2		4			6		8									SWITCH
EXTEND				X					X								EXTEND
DELAY	X		X			X		X									DELAY

USH 45 & CTH C
TOWN OF BRISTOL
KENOSHA COUNTY COUNTY

SIGNAL NO: S30-0352 CABINET TYPE: TS2
CONTROLLER TYPE: EPAC
DATE: MARCH 2016 PAGE NO. 4 OF 4

PROJECT ID:	3200-02-73
INTERSECTION:	USH 45 & CTH C

Signal Wire Color Coding	BLK - black	RED - red	GRN - green
	WHT - white	BLU - blue	ORG - orange

CB1 TO	AWG14 # OF CONDUCTORS	HEAD NO.	SIGNAL INDICATION WIRE COLOR									PED BUTTON	OTHER
			RED	YELLOW	GREEN	<RED>	<YELLOW>	<GREEN>	<FLASHING YELLOW>	D/WALK	WALK		
SB1	12	14				RED	ORG	GRN	BLK/WHT				
		16	RED/BLK	ORG/BLK	GRN/BLK								
SB2	12	12	RED	ORG	GRN								
		13	RED	ORG	GRN								
		15				RED/BLK	ORG/BLK	GRN/BLK	BLK/WHT				
SB3	12	1	RED	ORG	GRN								
		9				RED/BLK	ORG/BLK	GRN/BLK	BLK/WHT				
SB4	12	7	RED	ORG	GRN								
		8	RED	ORG	GRN								
		10				RED/BLK	ORG/BLK	GRN/BLK	BLK/WHT				
SB5	12	11	RED	ORG	GRN								
		19				RED/BLK	ORG/BLK	GRN/BLK	BLK/WHT				
SB6	12	17	RED	ORG	GRN								
		18	RED	ORG	GRN								
		20				RED/BLK	ORG/BLK	GRN/BLK	BLK/WHT				
SB7	12	4				RED	ORG	GRN	BLK/WHT				
		6	RED/BLK	ORG/BLK	GRN/BLK								
SB8	12	2	RED	ORG	GRN								
		3	RED	ORG	GRN								
		5				RED/BLK	ORG/BLK	GRN/BLK	BLK/WHT				

Equipment Grounding Conductor 10 AWG Green XLP	
From	To
CB1	SB1
SB1	SB2
SB2	SB3
SB3	SB4
SB4	SB5
SB5	SB6
SB6	SB7
SB7	SB8
SB8	CB1

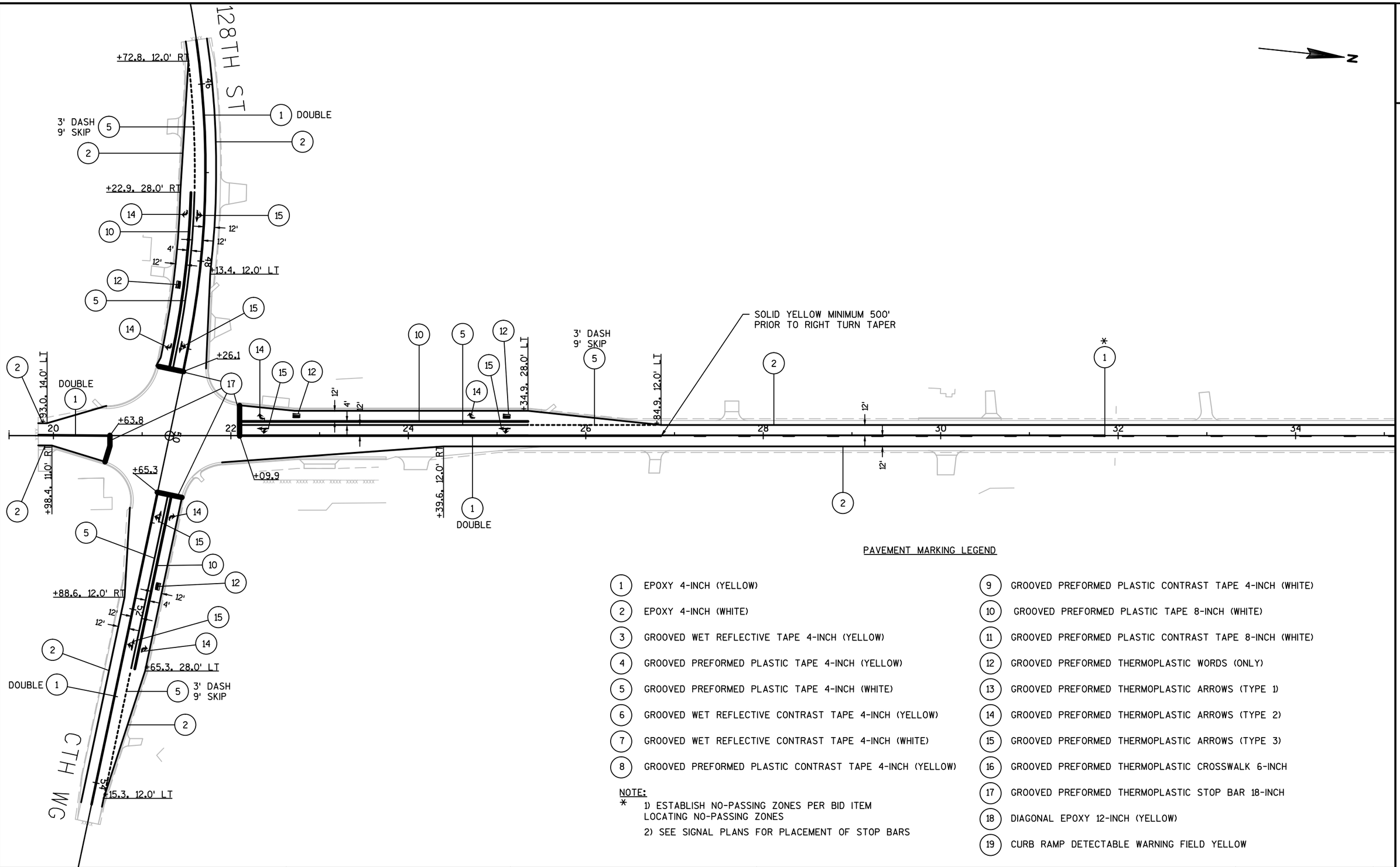
Pull Box Bonding Jumper 10 AWG Green XLP	
From	To
PB1	CB1
PB5	SB2
PB6	SB3
PB9	SB4
PB10	SB5
PB14	SB6
PB15	SB7
PB19	SB8

Lighting UF #10 w/Ground	
From	To
CB1	SB2
SB2	SB4
CB1	SB8
SB8	SB6

EVP Cable	
From	To
CB1	SB4 (Head A)
CB1	SB8 (Head B)
CB1	SB2 (Head C)
CB1	SB6 (Head D)

*Use the white conductor in the cable assembly as the grounded conductor for all traffic signal indications
*Ensure the grounded conductor in the feeder cable and the pole cables are both 18" longer than the ungrounded conductors.
*At the signal bases, connect one terminal from the pedestrian push buttons to the color indicated in the chart. Connect the other terminal to the grounded co
*Reconnect the grounding conductors wherever the circuit has been interrupted to ensure the grounding circuit is complete.

2



PAVEMENT MARKING LEGEND

1	EPOXY 4-INCH (YELLOW)
2	EPOXY 4-INCH (WHITE)
3	GROOVED WET REFLECTIVE TAPE 4-INCH (YELLOW)
4	GROOVED PREFORMED PLASTIC TAPE 4-INCH (YELLOW)
5	GROOVED PREFORMED PLASTIC TAPE 4-INCH (WHITE)
6	GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH (YELLOW)
7	GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH (WHITE)
8	GROOVED PREFORMED PLASTIC CONTRAST TAPE 4-INCH (YELLOW)
9	GROOVED PREFORMED PLASTIC CONTRAST TAPE 4-INCH (WHITE)
10	GROOVED PREFORMED PLASTIC TAPE 8-INCH (WHITE)
11	GROOVED PREFORMED PLASTIC CONTRAST TAPE 8-INCH (WHITE)
12	GROOVED PREFORMED THERMOPLASTIC WORDS (ONLY)
13	GROOVED PREFORMED THERMOPLASTIC ARROWS (TYPE 1)
14	GROOVED PREFORMED THERMOPLASTIC ARROWS (TYPE 2)
15	GROOVED PREFORMED THERMOPLASTIC ARROWS (TYPE 3)
16	GROOVED PREFORMED THERMOPLASTIC CROSSWALK 6-INCH
17	GROOVED PREFORMED THERMOPLASTIC STOP BAR 18-INCH
18	DIAGONAL EPOXY 12-INCH (YELLOW)
19	CURB RAMP DETECTABLE WARNING FIELD YELLOW

NOTE:

* 1) ESTABLISH NO-PASSING ZONES PER BID ITEM LOCATING NO-PASSING ZONES

2) SEE SIGNAL PLANS FOR PLACEMENT OF STOP BARS

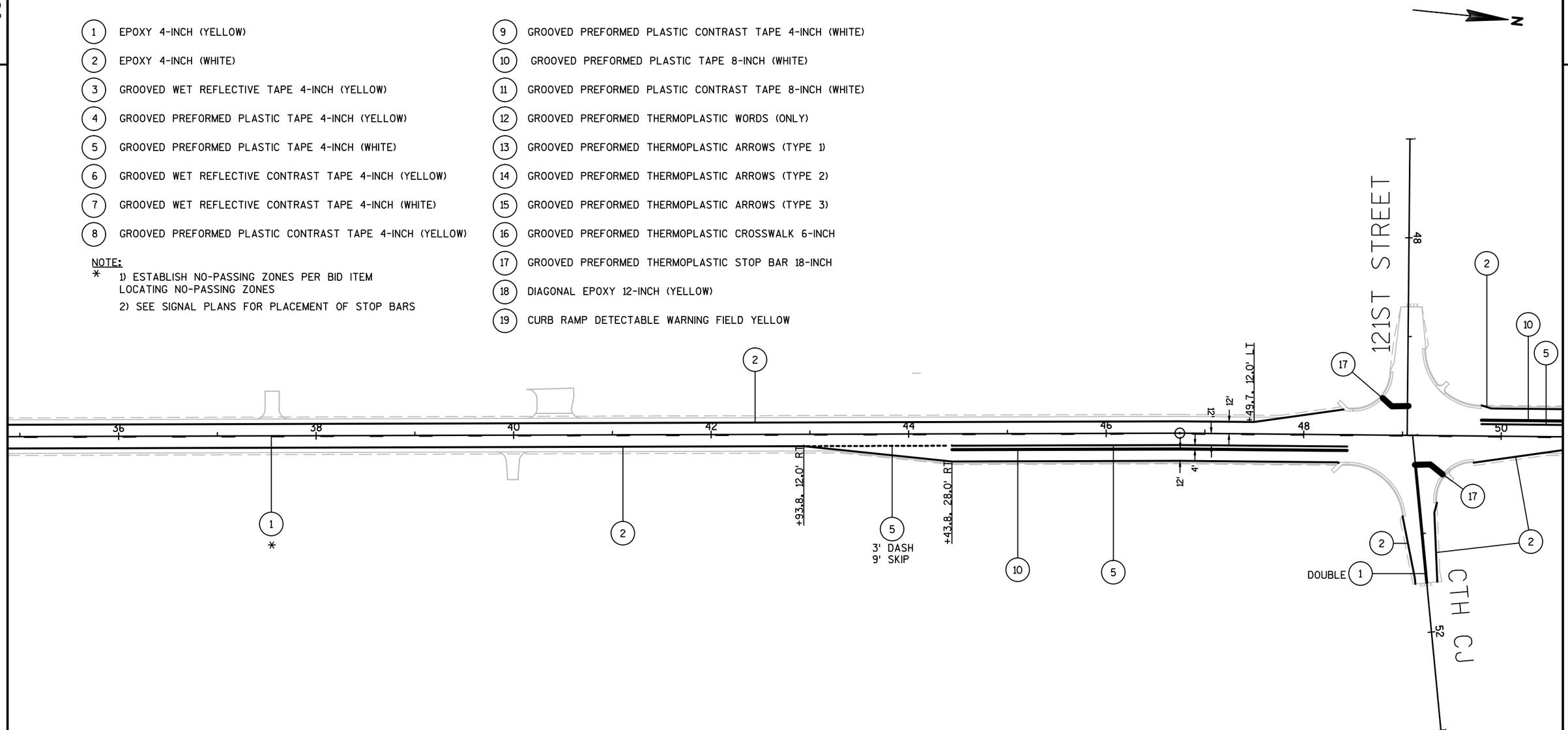
PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	PAVEMENT MARKING	SHEET 199	E

2

PAVEMENT MARKING LEGEND

1. EPOXY 4-INCH (YELLOW)
2. EPOXY 4-INCH (WHITE)
3. GROOVED WET REFLECTIVE TAPE 4-INCH (YELLOW)
4. GROOVED PREFORMED PLASTIC TAPE 4-INCH (YELLOW)
5. GROOVED PREFORMED PLASTIC TAPE 4-INCH (WHITE)
6. GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH (YELLOW)
7. GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH (WHITE)
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15. GROOVED PREFORMED THERMOPLASTIC ARROWS (TYPE 3)
16. GROOVED PREFORMED THERMOPLASTIC CROSSWALK 6-INCH
17. GROOVED PREFORMED THERMOPLASTIC STOP BAR 18-INCH
18. DIAGONAL EPOXY 12-INCH (YELLOW)
19. CURB RAMP DETECTABLE WARNING FIELD YELLOW

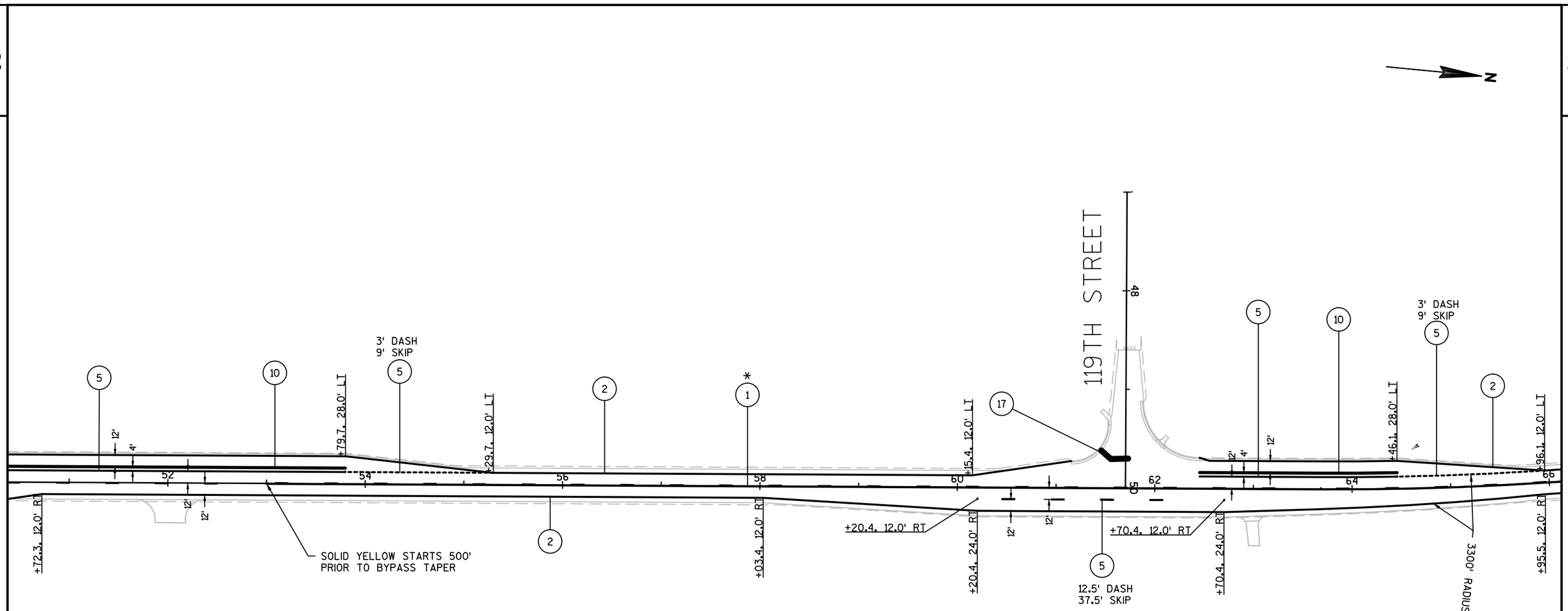
NOTE:
* 1) ESTABLISH NO-PASSING ZONES PER BID ITEM LOCATING NO-PASSING ZONES
2) SEE SIGNAL PLANS FOR PLACEMENT OF STOP BARS



PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	PAVEMENT MARKING	SHEET 200	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\PAVEMENT MARKING\024501-PM.DWG
LAYOUT NAME - 024502-PM
PLOT DATE : 4/28/2016 2:43 PM PLOT BY : MAAS, JOSEPH A PLOT NAME : PLOT SCALE : 1 IN:100 FT

2



PAVEMENT MARKING LEGEND

1. EPOXY 4-INCH (YELLOW)
2. EPOXY 4-INCH (WHITE)
3. GROOVED WET REFLECTIVE TAPE 4-INCH (YELLOW)
4. GROOVED PREFORMED PLASTIC TAPE 4-INCH (YELLOW)
5. GROOVED PREFORMED PLASTIC TAPE 4-INCH (WHITE)
6. GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH (YELLOW)
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18. DIAGONAL EPOXY 12-INCH (YELLOW)
19. CURB RAMP DETECTABLE WARNING FIELD YELLOW

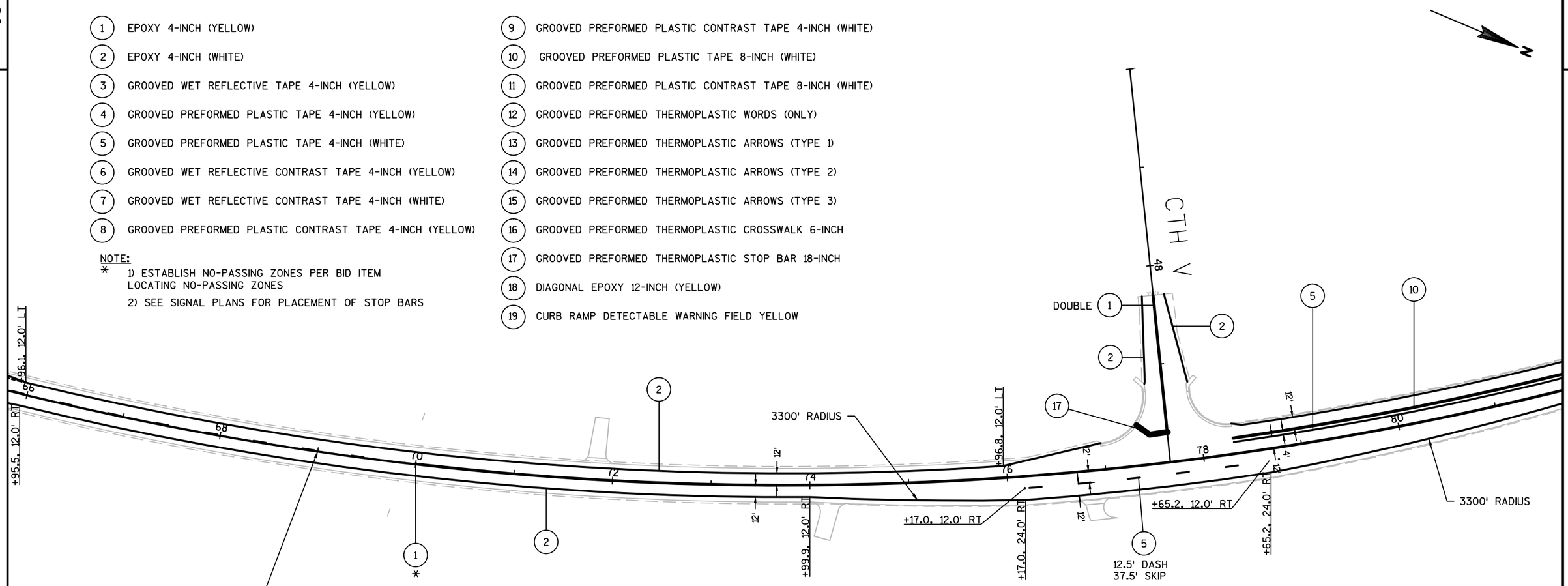
NOTE:
* 1) ESTABLISH NO-PASSING ZONES PER BID ITEM LOCATING NO-PASSING ZONES
2) SEE SIGNAL PLANS FOR PLACEMENT OF STOP BARS

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	PAVEMENT MARKING	SHEET 201	E

PAVEMENT MARKING LEGEND

1. EPOXY 4-INCH (YELLOW)
2. EPOXY 4-INCH (WHITE)
3. GROOVED WET REFLECTIVE TAPE 4-INCH (YELLOW)
4. GROOVED PREFORMED PLASTIC TAPE 4-INCH (YELLOW)
5. GROOVED PREFORMED PLASTIC TAPE 4-INCH (WHITE)
6. GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH (YELLOW)
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10. GROOVED PREFORMED PLASTIC TAPE 8-INCH (WHITE)
11. GROOVED PREFORMED PLASTIC CONTRAST TAPE 8-INCH (WHITE)
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16. GROOVED PREFORMED THERMOPLASTIC CROSSWALK 6-INCH
17. GROOVED PREFORMED THERMOPLASTIC STOP BAR 18-INCH
18. DIAGONAL EPOXY 12-INCH (YELLOW)
19. CURB RAMP DETECTABLE WARNING FIELD YELLOW

NOTE:
* 1) ESTABLISH NO-PASSING ZONES PER BID ITEM LOCATING NO-PASSING ZONES
2) SEE SIGNAL PLANS FOR PLACEMENT OF STOP BARS



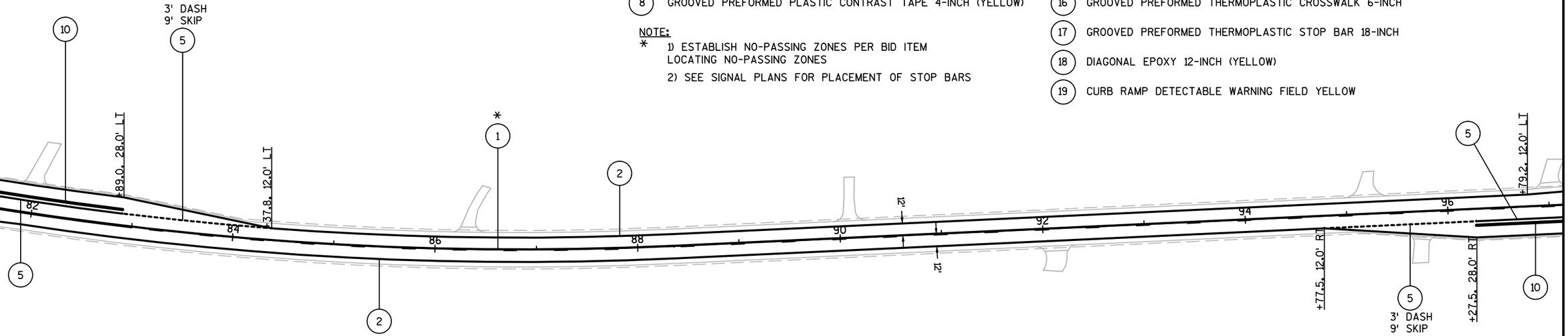
PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	PAVEMENT MARKING	SHEET 202	E

2

PAVEMENT MARKING LEGEND

1. EPOXY 4-INCH (YELLOW)
2. EPOXY 4-INCH (WHITE)
3. GROOVED WET REFLECTIVE TAPE 4-INCH (YELLOW)
4. GROOVED PREFORMED PLASTIC TAPE 4-INCH (YELLOW)
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6. GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH (YELLOW)
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10. GROOVED PREFORMED PLASTIC TAPE 8-INCH (WHITE)
11. GROOVED PREFORMED PLASTIC CONTRAST TAPE 8-INCH (WHITE)
12. GROOVED PREFORMED THERMOPLASTIC WORDS (ONLY)
13. GROOVED PREFORMED THERMOPLASTIC ARROWS (TYPE 1)
14. GROOVED PREFORMED THERMOPLASTIC ARROWS (TYPE 2)
15. GROOVED PREFORMED THERMOPLASTIC ARROWS (TYPE 3)
16. GROOVED PREFORMED THERMOPLASTIC CROSSWALK 6-INCH
17. GROOVED PREFORMED THERMOPLASTIC STOP BAR 18-INCH
18. DIAGONAL EPOXY 12-INCH (YELLOW)
19. CURB RAMP DETECTABLE WARNING FIELD YELLOW

NOTE:
* 1) ESTABLISH NO-PASSING ZONES PER BID ITEM LOCATING NO-PASSING ZONES
2) SEE SIGNAL PLANS FOR PLACEMENT OF STOP BARS



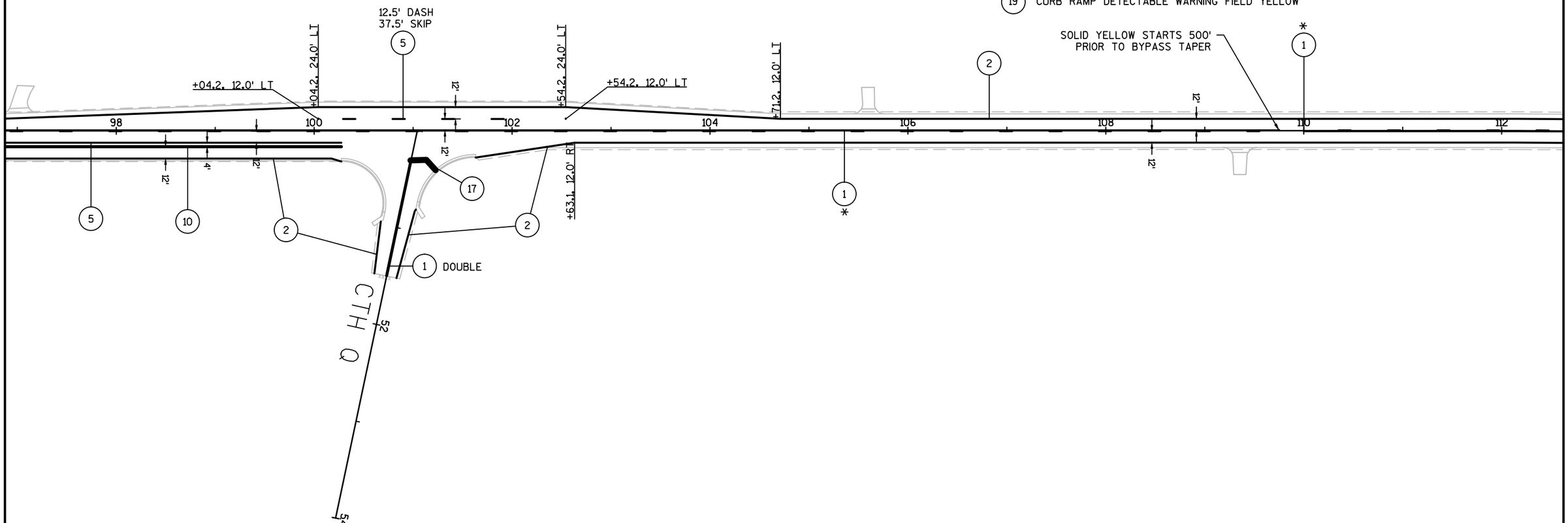
PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	PAVEMENT MARKING	SHEET 203	E

2

PAVEMENT MARKING LEGEND

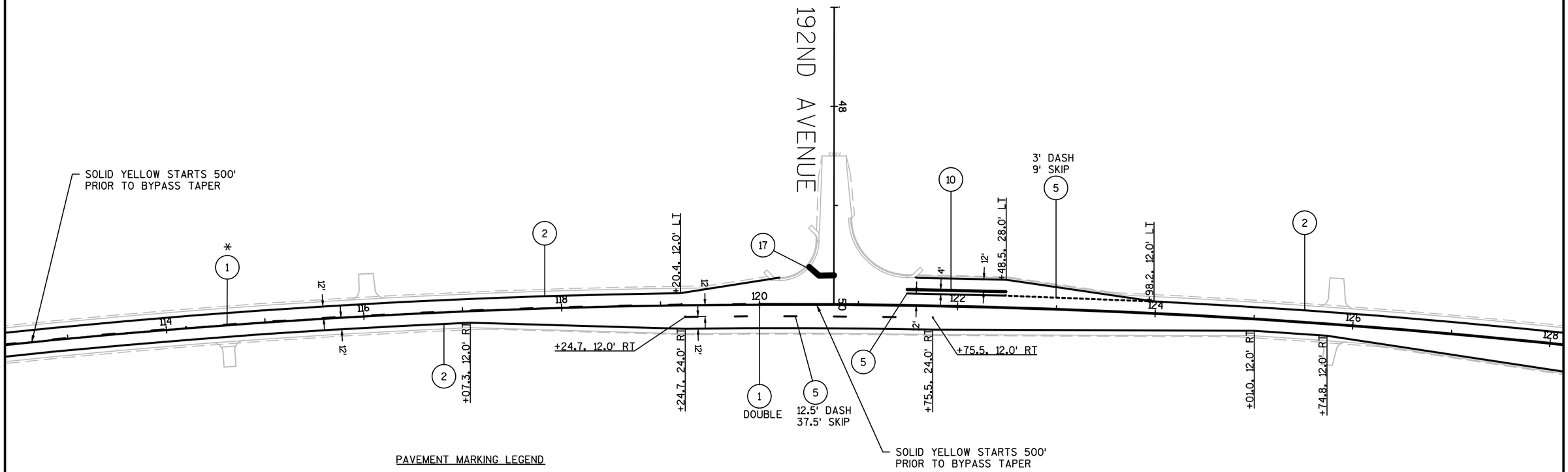
1. EPOXY 4-INCH (YELLOW)
2. EPOXY 4-INCH (WHITE)
3. GROOVED WET REFLECTIVE TAPE 4-INCH (YELLOW)
4. GROOVED PREFORMED PLASTIC TAPE 4-INCH (YELLOW)
5. GROOVED PREFORMED PLASTIC TAPE 4-INCH (WHITE)
6. GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH (YELLOW)
7. GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH (WHITE)
8. GROOVED PREFORMED PLASTIC CONTRAST TAPE 4-INCH (YELLOW)
9. GROOVED PREFORMED PLASTIC CONTRAST TAPE 4-INCH (WHITE)
10. GROOVED PREFORMED PLASTIC TAPE 8-INCH (WHITE)
11. GROOVED PREFORMED PLASTIC CONTRAST TAPE 8-INCH (WHITE)
12. GROOVED PREFORMED THERMOPLASTIC WORDS (ONLY)
13. GROOVED PREFORMED THERMOPLASTIC ARROWS (TYPE 1)
14. GROOVED PREFORMED THERMOPLASTIC ARROWS (TYPE 2)
15. GROOVED PREFORMED THERMOPLASTIC ARROWS (TYPE 3)
16. GROOVED PREFORMED THERMOPLASTIC CROSSWALK 6-INCH
17. GROOVED PREFORMED THERMOPLASTIC STOP BAR 18-INCH
18. DIAGONAL EPOXY 12-INCH (YELLOW)
19. CURB RAMP DETECTABLE WARNING FIELD YELLOW

NOTE:
* 1) ESTABLISH NO-PASSING ZONES PER BID ITEM LOCATING NO-PASSING ZONES
2) SEE SIGNAL PLANS FOR PLACEMENT OF STOP BARS



PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	PAVEMENT MARKING	SHEET 204	E

2



PAVEMENT MARKING LEGEND

1. EPOXY 4-INCH (YELLOW)
2. EPOXY 4-INCH (WHITE)
3. GROOVED WET REFLECTIVE TAPE 4-INCH (YELLOW)
4. GROOVED PREFORMED PLASTIC TAPE 4-INCH (YELLOW)
5. GROOVED PREFORMED PLASTIC TAPE 4-INCH (WHITE)
6. GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH (YELLOW)
7. GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH (WHITE)
8. GROOVED PREFORMED PLASTIC CONTRAST TAPE 4-INCH (YELLOW)
9. GROOVED PREFORMED PLASTIC CONTRAST TAPE 4-INCH (WHITE)
10. GROOVED PREFORMED PLASTIC TAPE 8-INCH (WHITE)
11. GROOVED PREFORMED PLASTIC CONTRAST TAPE 8-INCH (WHITE)
12. GROOVED PREFORMED THERMOPLASTIC WORDS (ONLY)
13. GROOVED PREFORMED THERMOPLASTIC ARROWS (TYPE 1)
14. GROOVED PREFORMED THERMOPLASTIC ARROWS (TYPE 2)
15. GROOVED PREFORMED THERMOPLASTIC ARROWS (TYPE 3)
16. GROOVED PREFORMED THERMOPLASTIC CROSSWALK 6-INCH
17. GROOVED PREFORMED THERMOPLASTIC STOP BAR 18-INCH
18. DIAGONAL EPOXY 12-INCH (YELLOW)
19. CURB RAMP DETECTABLE WARNING FIELD YELLOW

NOTE:
* 1) ESTABLISH NO-PASSING ZONES PER BID ITEM LOCATING NO-PASSING ZONES
2) SEE SIGNAL PLANS FOR PLACEMENT OF STOP BARS

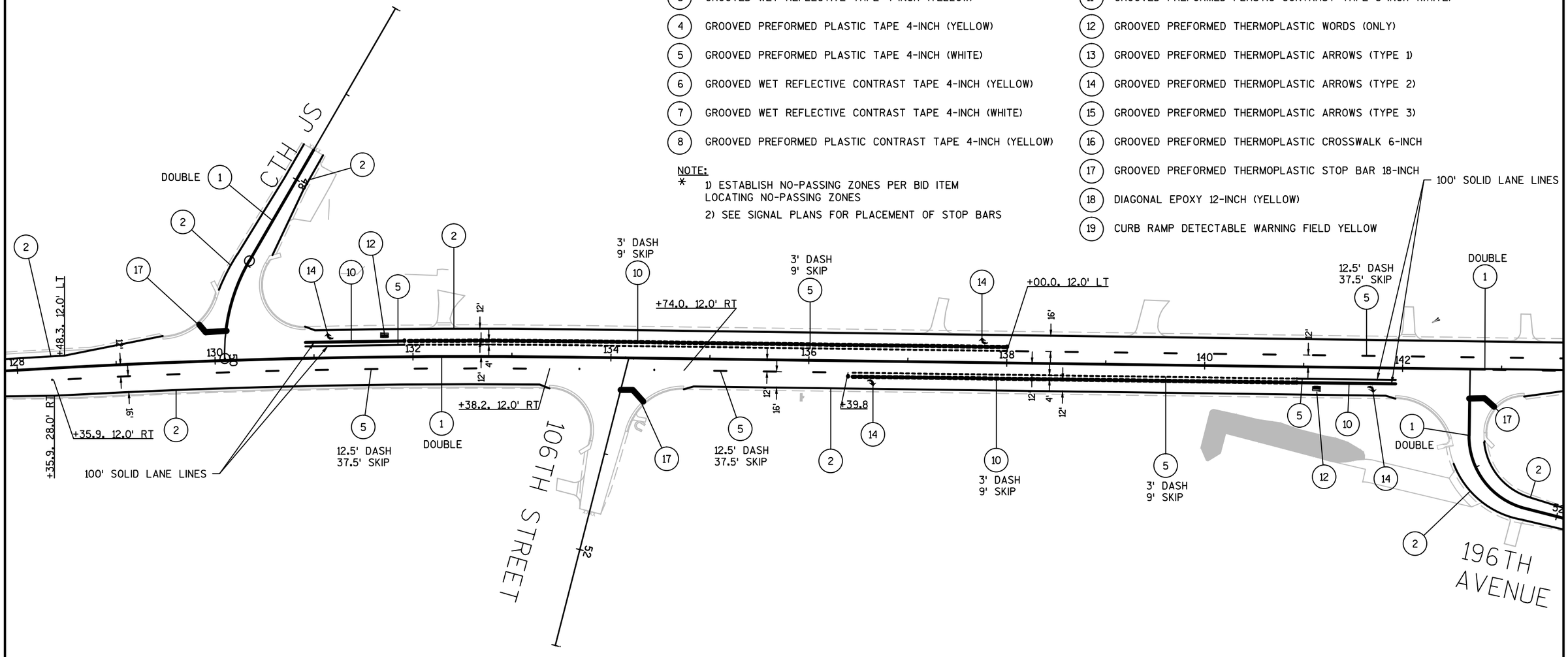
PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	PAVEMENT MARKING	SHEET 205	E

2

PAVEMENT MARKING LEGEND

1. EPOXY 4-INCH (YELLOW)
2. EPOXY 4-INCH (WHITE)
3. GROOVED WET REFLECTIVE TAPE 4-INCH (YELLOW)
4. GROOVED PREFORMED PLASTIC TAPE 4-INCH (YELLOW)
5. GROOVED PREFORMED PLASTIC TAPE 4-INCH (WHITE)
6. GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH (YELLOW)
7. GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH (WHITE)
8. GROOVED PREFORMED PLASTIC CONTRAST TAPE 4-INCH (YELLOW)
9. GROOVED PREFORMED PLASTIC CONTRAST TAPE 4-INCH (WHITE)
10. GROOVED PREFORMED PLASTIC TAPE 8-INCH (WHITE)
11. GROOVED PREFORMED PLASTIC CONTRAST TAPE 8-INCH (WHITE)
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14. GROOVED PREFORMED THERMOPLASTIC ARROWS (TYPE 2)
15. GROOVED PREFORMED THERMOPLASTIC ARROWS (TYPE 3)
16. GROOVED PREFORMED THERMOPLASTIC CROSSWALK 6-INCH
17. GROOVED PREFORMED THERMOPLASTIC STOP BAR 18-INCH
18. DIAGONAL EPOXY 12-INCH (YELLOW)
19. CURB RAMP DETECTABLE WARNING FIELD YELLOW

NOTE:
* 1) ESTABLISH NO-PASSING ZONES PER BID ITEM LOCATING NO-PASSING ZONES
2) SEE SIGNAL PLANS FOR PLACEMENT OF STOP BARS



PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	PAVEMENT MARKING	SHEET 206	E

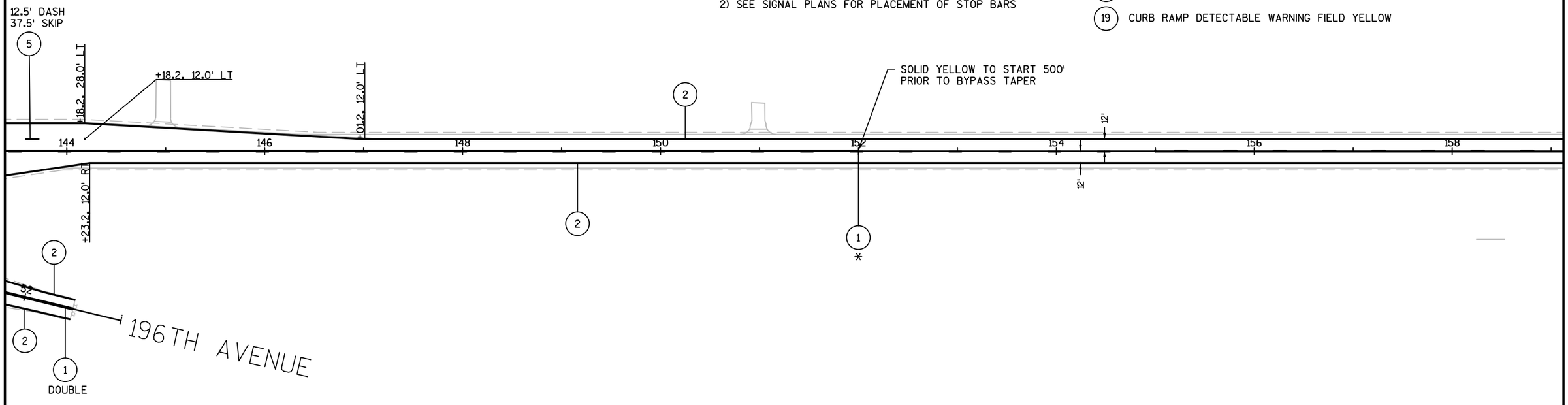
2

2

PAVEMENT MARKING LEGEND

1. EPOXY 4-INCH (YELLOW)
2. EPOXY 4-INCH (WHITE)
3. GROOVED WET REFLECTIVE TAPE 4-INCH (YELLOW)
4. GROOVED PREFORMED PLASTIC TAPE 4-INCH (YELLOW)
5. GROOVED PREFORMED PLASTIC TAPE 4-INCH (WHITE)
6. GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH (YELLOW)
7. GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH (WHITE)
8. GROOVED PREFORMED PLASTIC CONTRAST TAPE 4-INCH (YELLOW)
9. GROOVED PREFORMED PLASTIC CONTRAST TAPE 4-INCH (WHITE)
10. GROOVED PREFORMED PLASTIC TAPE 8-INCH (WHITE)
11. GROOVED PREFORMED PLASTIC CONTRAST TAPE 8-INCH (WHITE)
12. GROOVED PREFORMED THERMOPLASTIC WORDS (ONLY)
13. GROOVED PREFORMED THERMOPLASTIC ARROWS (TYPE 1)
14. GROOVED PREFORMED THERMOPLASTIC ARROWS (TYPE 2)
15. GROOVED PREFORMED THERMOPLASTIC ARROWS (TYPE 3)
16. GROOVED PREFORMED THERMOPLASTIC CROSSWALK 6-INCH
17. GROOVED PREFORMED THERMOPLASTIC STOP BAR 18-INCH
18. DIAGONAL EPOXY 12-INCH (YELLOW)
19. CURB RAMP DETECTABLE WARNING FIELD YELLOW

NOTE:
* 1) ESTABLISH NO-PASSING ZONES PER BID ITEM LOCATING NO-PASSING ZONES
2) SEE SIGNAL PLANS FOR PLACEMENT OF STOP BARS

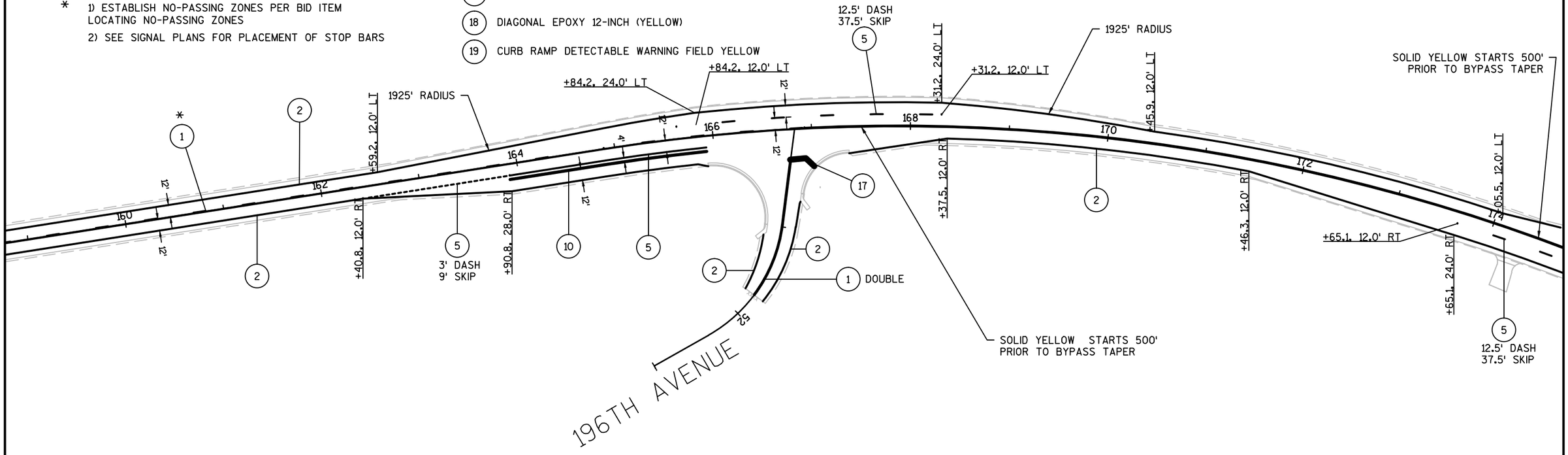


PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	PAVEMENT MARKING	SHEET 207	E

PAVEMENT MARKING LEGEND

1. EPOXY 4-INCH (YELLOW)
2. EPOXY 4-INCH (WHITE)
3. GROOVED WET REFLECTIVE TAPE 4-INCH (YELLOW)
4. GROOVED PREFORMED PLASTIC TAPE 4-INCH (YELLOW)
5. GROOVED PREFORMED PLASTIC TAPE 4-INCH (WHITE)
6. GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH (YELLOW)
7. GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH (WHITE)
8. GROOVED PREFORMED PLASTIC CONTRAST TAPE 4-INCH (YELLOW)
9. GROOVED PREFORMED PLASTIC CONTRAST TAPE 4-INCH (WHITE)
10. GROOVED PREFORMED PLASTIC TAPE 8-INCH (WHITE)
11. GROOVED PREFORMED PLASTIC CONTRAST TAPE 8-INCH (WHITE)
12. GROOVED PREFORMED THERMOPLASTIC WORDS (ONLY)
13. GROOVED PREFORMED THERMOPLASTIC ARROWS (TYPE 1)
14. GROOVED PREFORMED THERMOPLASTIC ARROWS (TYPE 2)
15. GROOVED PREFORMED THERMOPLASTIC ARROWS (TYPE 3)
16. GROOVED PREFORMED THERMOPLASTIC CROSSWALK 6-INCH
17. GROOVED PREFORMED THERMOPLASTIC STOP BAR 18-INCH
18. DIAGONAL EPOXY 12-INCH (YELLOW)
19. CURB RAMP DETECTABLE WARNING FIELD YELLOW

NOTE:
* 1) ESTABLISH NO-PASSING ZONES PER BID ITEM LOCATING NO-PASSING ZONES
2) SEE SIGNAL PLANS FOR PLACEMENT OF STOP BARS



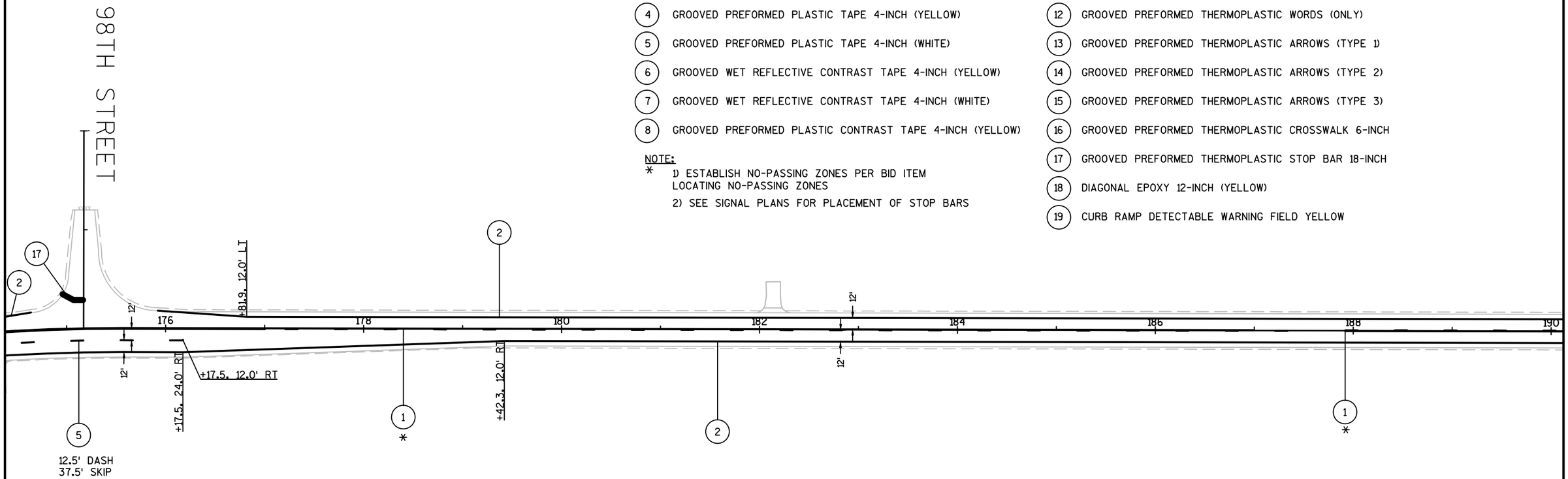
PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	PAVEMENT MARKING	SHEET 208	E

PAVEMENT MARKING LEGEND

N

1. EPOXY 4-INCH (YELLOW)
2. EPOXY 4-INCH (WHITE)
3. GROOVED WET REFLECTIVE TAPE 4-INCH (YELLOW)
4. GROOVED PREFORMED PLASTIC TAPE 4-INCH (YELLOW)
5. GROOVED PREFORMED PLASTIC TAPE 4-INCH (WHITE)
6. GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH (YELLOW)
7. GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH (WHITE)
8. GROOVED PREFORMED PLASTIC CONTRAST TAPE 4-INCH (YELLOW)
9. GROOVED PREFORMED PLASTIC CONTRAST TAPE 4-INCH (WHITE)
10. GROOVED PREFORMED PLASTIC TAPE 8-INCH (WHITE)
11. GROOVED PREFORMED PLASTIC CONTRAST TAPE 8-INCH (WHITE)
12. GROOVED PREFORMED THERMOPLASTIC WORDS (ONLY)
13. GROOVED PREFORMED THERMOPLASTIC ARROWS (TYPE 1)
14. GROOVED PREFORMED THERMOPLASTIC ARROWS (TYPE 2)
15. GROOVED PREFORMED THERMOPLASTIC ARROWS (TYPE 3)
16. GROOVED PREFORMED THERMOPLASTIC CROSSWALK 6-INCH
17. GROOVED PREFORMED THERMOPLASTIC STOP BAR 18-INCH
18. DIAGONAL EPOXY 12-INCH (YELLOW)
19. CURB RAMP DETECTABLE WARNING FIELD YELLOW

NOTE:
* 1) ESTABLISH NO-PASSING ZONES PER BID ITEM LOCATING NO-PASSING ZONES
2) SEE SIGNAL PLANS FOR PLACEMENT OF STOP BARS

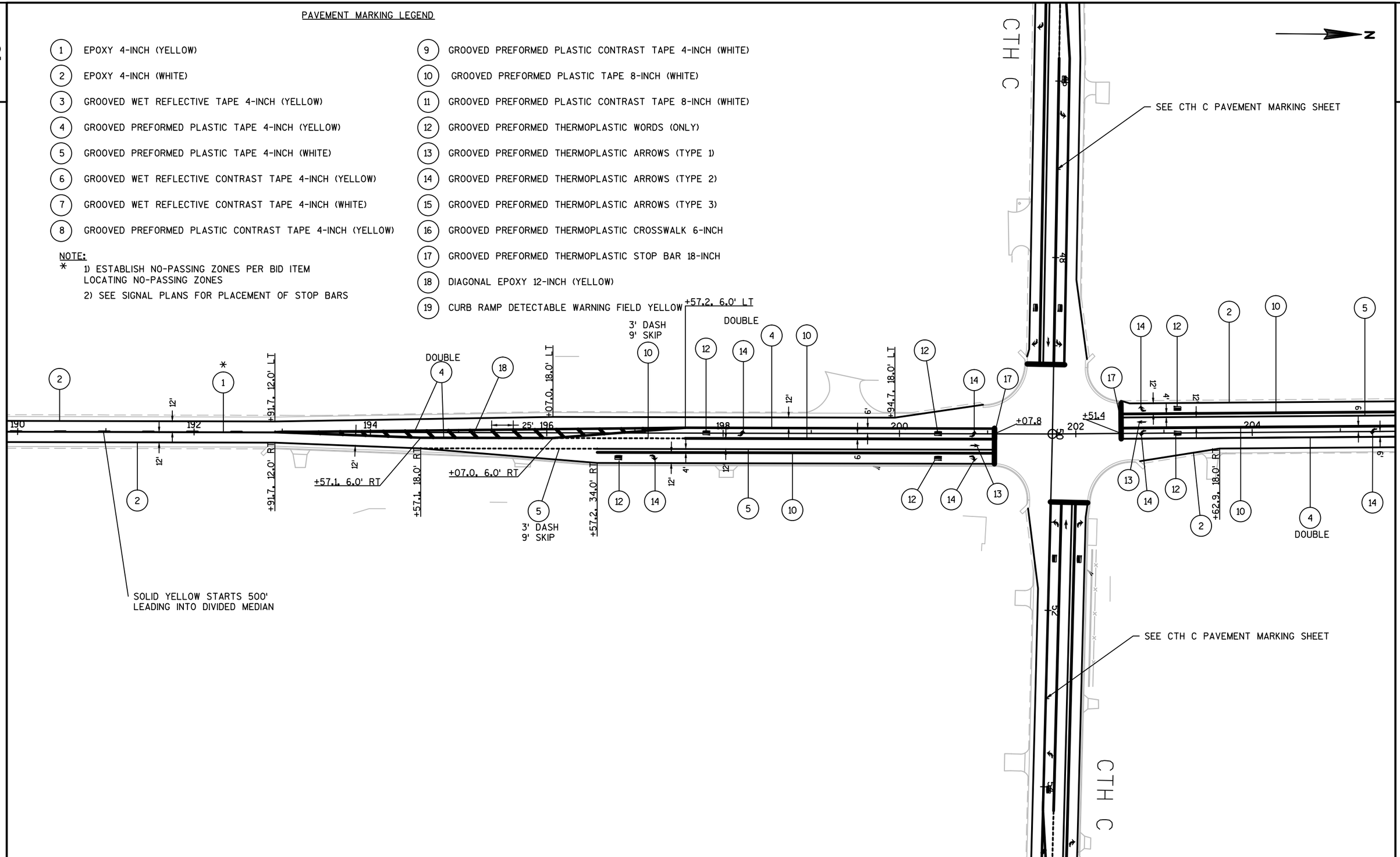


PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	PAVEMENT MARKING	SHEET 209	E

PAVEMENT MARKING LEGEND

1. EPOXY 4-INCH (YELLOW)
2. EPOXY 4-INCH (WHITE)
3. GROOVED WET REFLECTIVE TAPE 4-INCH (YELLOW)
4. GROOVED PREFORMED PLASTIC TAPE 4-INCH (YELLOW)
5. GROOVED PREFORMED PLASTIC TAPE 4-INCH (WHITE)
6. GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH (YELLOW)
7. GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH (WHITE)
8. GROOVED PREFORMED PLASTIC CONTRAST TAPE 4-INCH (YELLOW)
9. GROOVED PREFORMED PLASTIC CONTRAST TAPE 4-INCH (WHITE)
10. GROOVED PREFORMED PLASTIC TAPE 8-INCH (WHITE)
11. GROOVED PREFORMED PLASTIC CONTRAST TAPE 8-INCH (WHITE)
12. GROOVED PREFORMED THERMOPLASTIC WORDS (ONLY)
13. GROOVED PREFORMED THERMOPLASTIC ARROWS (TYPE 1)
14. GROOVED PREFORMED THERMOPLASTIC ARROWS (TYPE 2)
15. GROOVED PREFORMED THERMOPLASTIC ARROWS (TYPE 3)
16. GROOVED PREFORMED THERMOPLASTIC CROSSWALK 6-INCH
17. GROOVED PREFORMED THERMOPLASTIC STOP BAR 18-INCH
18. DIAGONAL EPOXY 12-INCH (YELLOW)
19. CURB RAMP DETECTABLE WARNING FIELD YELLOW

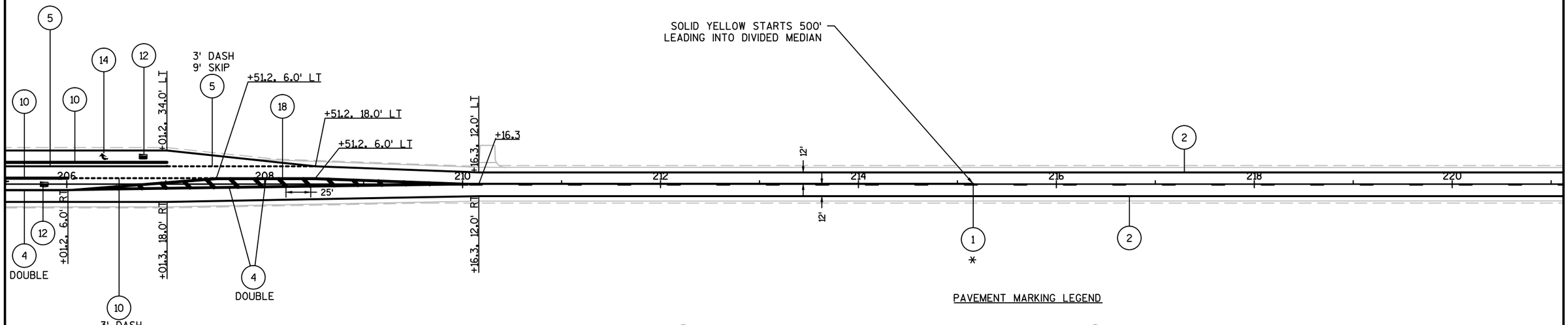
NOTE:
* 1) ESTABLISH NO-PASSING ZONES PER BID ITEM LOCATING NO-PASSING ZONES
2) SEE SIGNAL PLANS FOR PLACEMENT OF STOP BARS



PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	PAVEMENT MARKING	SHEET 210	E

2

N



PAVEMENT MARKING LEGEND

1	EPOXY 4-INCH (YELLOW)
2	EPOXY 4-INCH (WHITE)
3	GROOVED WET REFLECTIVE TAPE 4-INCH (YELLOW)
4	GROOVED PREFORMED PLASTIC TAPE 4-INCH (YELLOW)
5	GROOVED PREFORMED PLASTIC TAPE 4-INCH (WHITE)
6	GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH (YELLOW)
7	GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH (WHITE)
8	GROOVED PREFORMED PLASTIC CONTRAST TAPE 4-INCH (YELLOW)
9	GROOVED PREFORMED PLASTIC CONTRAST TAPE 4-INCH (WHITE)
10	GROOVED PREFORMED PLASTIC TAPE 8-INCH (WHITE)
11	GROOVED PREFORMED PLASTIC CONTRAST TAPE 8-INCH (WHITE)
12	GROOVED PREFORMED THERMOPLASTIC WORDS (ONLY)
13	GROOVED PREFORMED THERMOPLASTIC ARROWS (TYPE 1)
14	GROOVED PREFORMED THERMOPLASTIC ARROWS (TYPE 2)
15	GROOVED PREFORMED THERMOPLASTIC ARROWS (TYPE 3)
16	GROOVED PREFORMED THERMOPLASTIC CROSSWALK 6-INCH
17	GROOVED PREFORMED THERMOPLASTIC STOP BAR 18-INCH
18	DIAGONAL EPOXY 12-INCH (YELLOW)
19	CURB RAMP DETECTABLE WARNING FIELD YELLOW

NOTE:

* 1) ESTABLISH NO-PASSING ZONES PER BID ITEM
LOCATING NO-PASSING ZONES

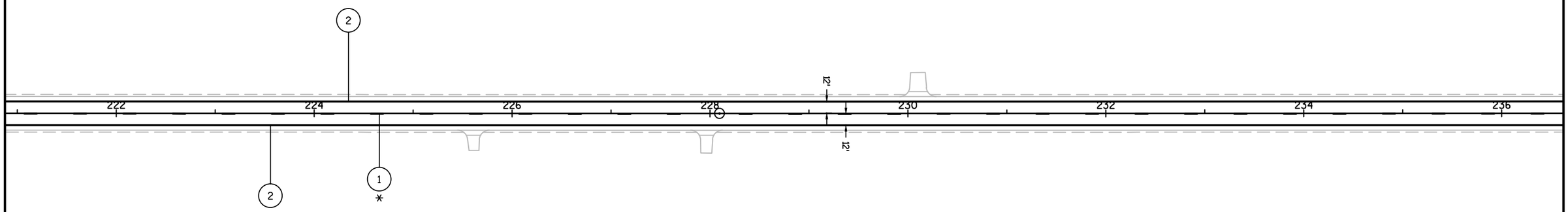
2) SEE SIGNAL PLANS FOR PLACEMENT OF STOP BARS

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	PAVEMENT MARKING	SHEET 211	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\PAVEMENT MARKING\024501-PM.DWG
LAYOUT NAME - 024513-PM
PLOT DATE : 4/28/2016 2:43 PM PLOT BY : MAAS, JOSEPH A PLOT NAME : PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2

N



PAVEMENT MARKING LEGEND

1. EPOXY 4-INCH (YELLOW)
2. EPOXY 4-INCH (WHITE)
3. GROOVED WET REFLECTIVE TAPE 4-INCH (YELLOW)
4. GROOVED PREFORMED PLASTIC TAPE 4-INCH (YELLOW)
5. GROOVED PREFORMED PLASTIC TAPE 4-INCH (WHITE)
6. GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH (YELLOW)
7. GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH (WHITE)
8. GROOVED PREFORMED PLASTIC CONTRAST TAPE 4-INCH (YELLOW)
9. GROOVED PREFORMED PLASTIC CONTRAST TAPE 4-INCH (WHITE)
10. GROOVED PREFORMED PLASTIC TAPE 8-INCH (WHITE)
11. GROOVED PREFORMED PLASTIC CONTRAST TAPE 8-INCH (WHITE)
12. GROOVED PREFORMED THERMOPLASTIC WORDS (ONLY)
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15. GROOVED PREFORMED THERMOPLASTIC ARROWS (TYPE 3)
16. GROOVED PREFORMED THERMOPLASTIC CROSSWALK 6-INCH
17. GROOVED PREFORMED THERMOPLASTIC STOP BAR 18-INCH
18. DIAGONAL EPOXY 12-INCH (YELLOW)
19. CURB RAMP DETECTABLE WARNING FIELD YELLOW

NOTE:

* 1) ESTABLISH NO-PASSING ZONES PER BID ITEM LOCATING NO-PASSING ZONES

2) SEE SIGNAL PLANS FOR PLACEMENT OF STOP BARS

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	PAVEMENT MARKING	SHEET 212	E

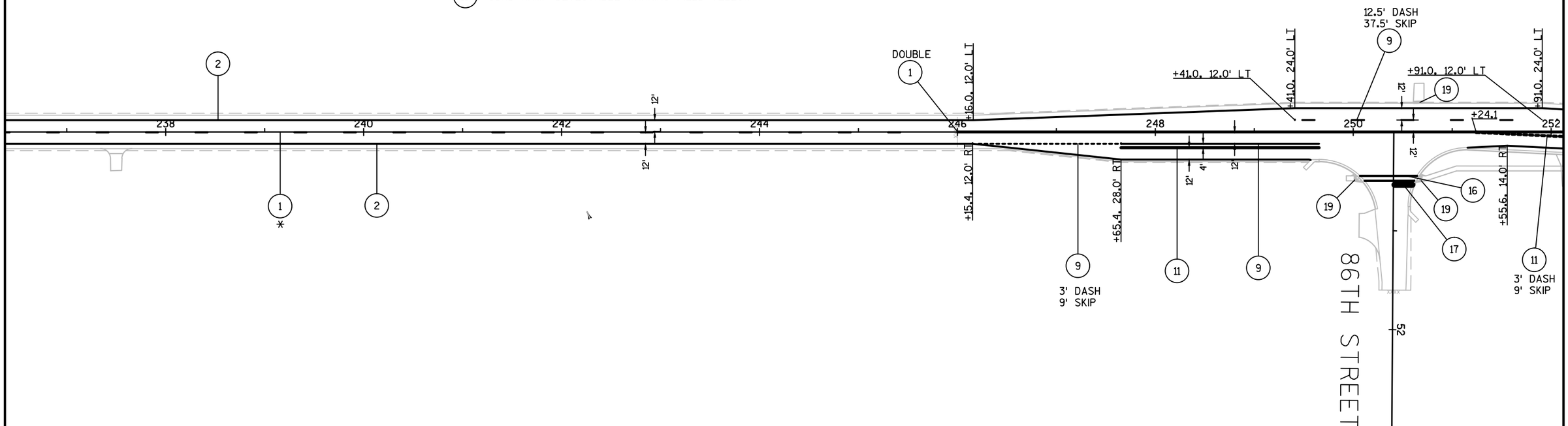
2

PAVEMENT MARKING LEGEND

1. EPOXY 4-INCH (YELLOW)
2. EPOXY 4-INCH (WHITE)
3. GROOVED WET REFLECTIVE TAPE 4-INCH (YELLOW)
4. GROOVED PREFORMED PLASTIC TAPE 4-INCH (YELLOW)
5. GROOVED PREFORMED PLASTIC TAPE 4-INCH (WHITE)
6. GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH (YELLOW)
7. GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH (WHITE)
8. GROOVED PREFORMED PLASTIC CONTRAST TAPE 4-INCH (YELLOW)
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15. GROOVED PREFORMED THERMOPLASTIC ARROWS (TYPE 3)
16. GROOVED PREFORMED THERMOPLASTIC CROSSWALK 6-INCH
17. GROOVED PREFORMED THERMOPLASTIC STOP BAR 18-INCH
18. DIAGONAL EPOXY 12-INCH (YELLOW)
19. CURB RAMP DETECTABLE WARNING FIELD YELLOW

NOTE:
* 1) ESTABLISH NO-PASSING ZONES PER BID ITEM LOCATING NO-PASSING ZONES
2) SEE SIGNAL PLANS FOR PLACEMENT OF STOP BARS

N



PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	PAVEMENT MARKING	SHEET 213	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\PAVEMENT MARKING\024501-PM.DWG
LAYOUT NAME - 024515-PM
PLOT DATE : 4/28/2016 2:43 PM PLOT BY : MAAS, JOSEPH A PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

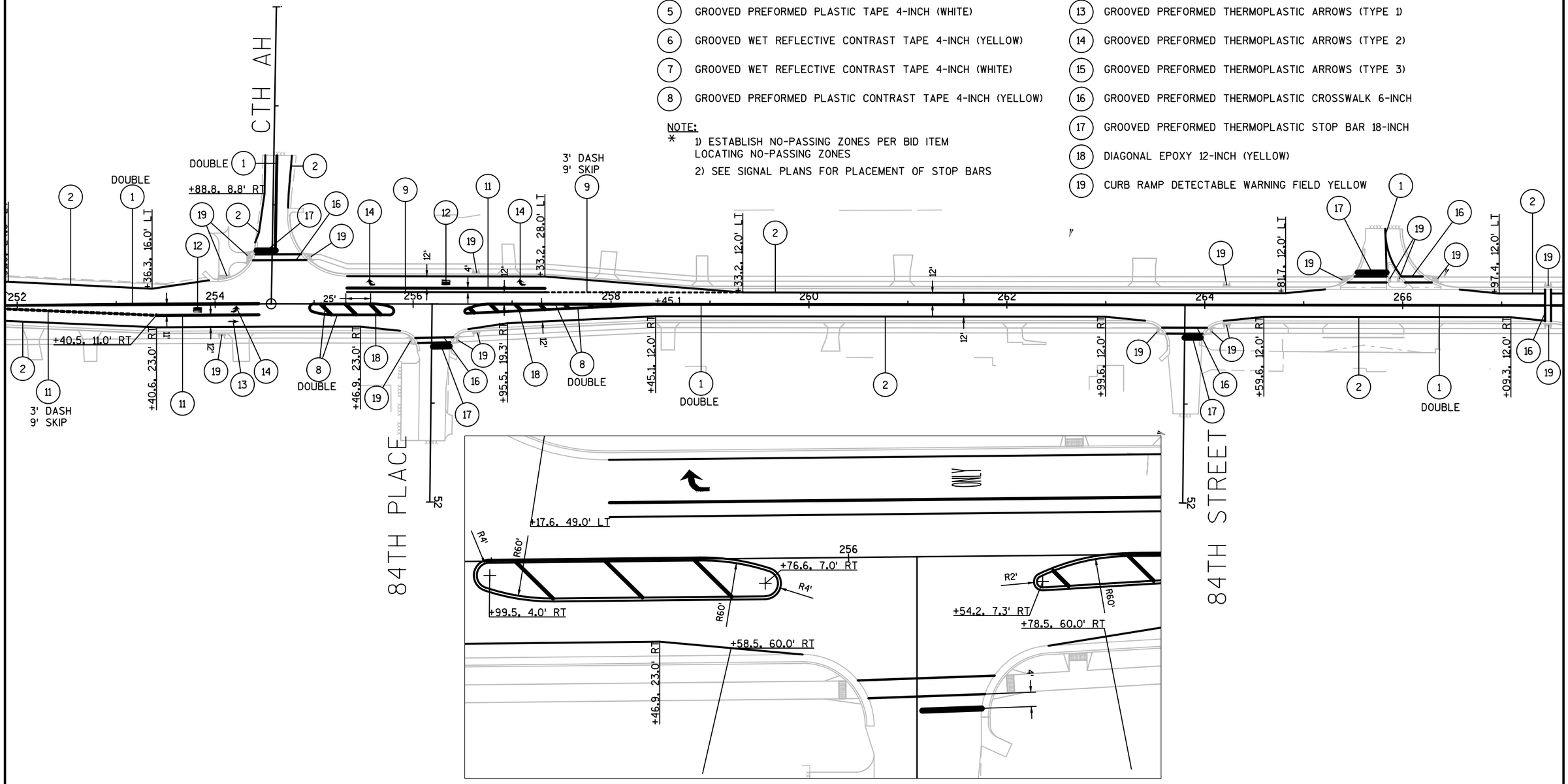
2

PAVEMENT MARKING LEGEND

N

1. EPOXY 4-INCH (YELLOW)
2. EPOXY 4-INCH (WHITE)
3. GROOVED WET REFLECTIVE TAPE 4-INCH (YELLOW)
4. GROOVED PREFORMED PLASTIC TAPE 4-INCH (YELLOW)
5. GROOVED PREFORMED PLASTIC TAPE 4-INCH (WHITE)
6. GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH (YELLOW)
7. GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH (WHITE)
8. GROOVED PREFORMED PLASTIC CONTRAST TAPE 4-INCH (YELLOW)
9. GROOVED PREFORMED PLASTIC CONTRAST TAPE 4-INCH (WHITE)
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17. GROOVED PREFORMED THERMOPLASTIC STOP BAR 18-INCH
18. DIAGONAL EPOXY 12-INCH (YELLOW)
19. CURB RAMP DETECTABLE WARNING FIELD YELLOW

NOTE:
* 1) ESTABLISH NO-PASSING ZONES PER BID ITEM LOCATING NO-PASSING ZONES
2) SEE SIGNAL PLANS FOR PLACEMENT OF STOP BARS



PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	PAVEMENT MARKING	SHEET 214	E

2

PAVEMENT MARKING LEGEND

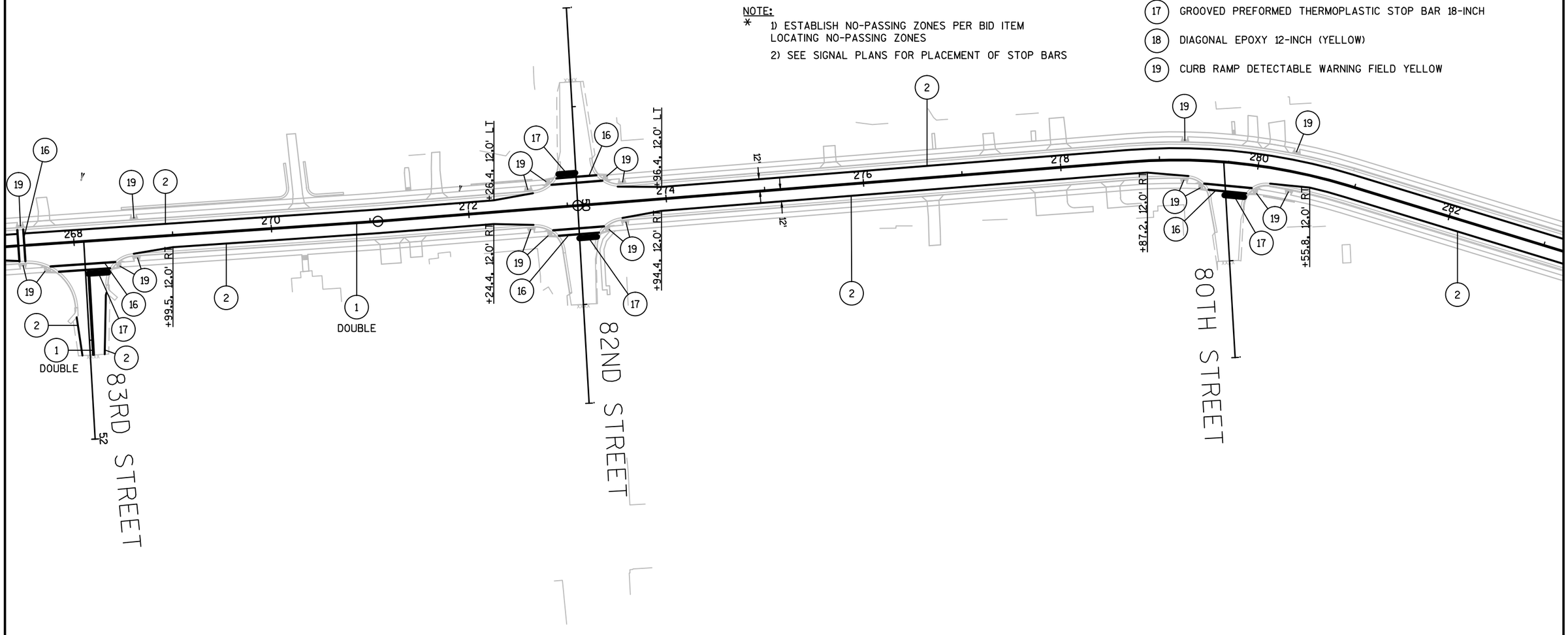
N

1. EPOXY 4-INCH (YELLOW)
2. EPOXY 4-INCH (WHITE)
3. GROOVED WET REFLECTIVE TAPE 4-INCH (YELLOW)
4. GROOVED PREFORMED PLASTIC TAPE 4-INCH (YELLOW)
5. GROOVED PREFORMED PLASTIC TAPE 4-INCH (WHITE)
6. GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH (YELLOW)
7. GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH (WHITE)
8. GROOVED PREFORMED PLASTIC CONTRAST TAPE 4-INCH (YELLOW)
9. GROOVED PREFORMED PLASTIC CONTRAST TAPE 4-INCH (WHITE)
10. GROOVED PREFORMED PLASTIC TAPE 8-INCH (WHITE)
11. GROOVED PREFORMED PLASTIC CONTRAST TAPE 8-INCH (WHITE)
12. GROOVED PREFORMED THERMOPLASTIC WORDS (ONLY)
13. GROOVED PREFORMED THERMOPLASTIC ARROWS (TYPE 1)
14. GROOVED PREFORMED THERMOPLASTIC ARROWS (TYPE 2)
15. GROOVED PREFORMED THERMOPLASTIC ARROWS (TYPE 3)
16. GROOVED PREFORMED THERMOPLASTIC CROSSWALK 6-INCH
17. GROOVED PREFORMED THERMOPLASTIC STOP BAR 18-INCH
18. DIAGONAL EPOXY 12-INCH (YELLOW)
19. CURB RAMP DETECTABLE WARNING FIELD YELLOW

NOTE:

* 1) ESTABLISH NO-PASSING ZONES PER BID ITEM LOCATING NO-PASSING ZONES

2) SEE SIGNAL PLANS FOR PLACEMENT OF STOP BARS



PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	PAVEMENT MARKING	SHEET 215	E

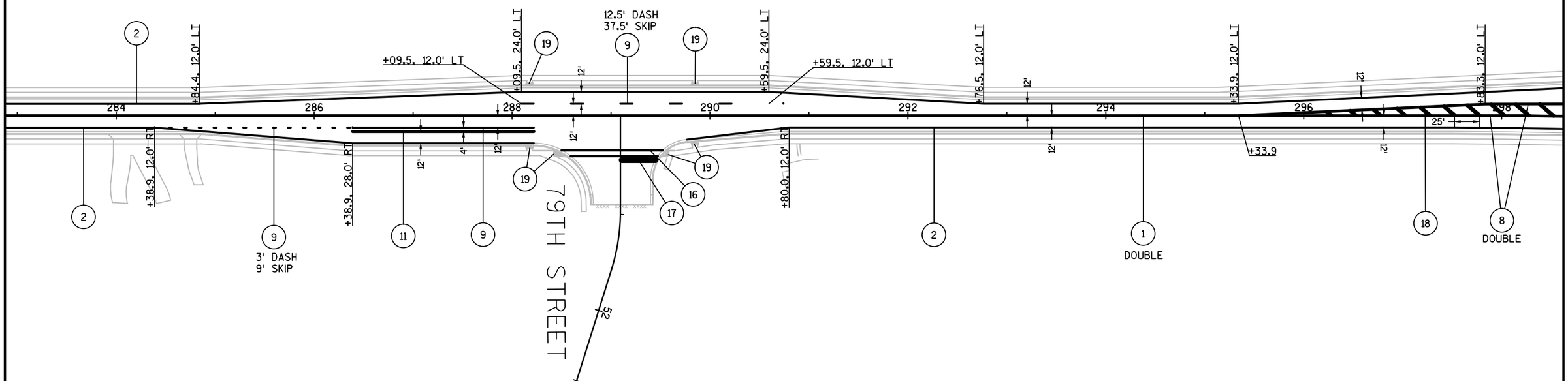
2

2

PAVEMENT MARKING LEGEND

1. EPOXY 4-INCH (YELLOW)
2. EPOXY 4-INCH (WHITE)
3. GROOVED WET REFLECTIVE TAPE 4-INCH (YELLOW)
4. GROOVED PREFORMED PLASTIC TAPE 4-INCH (YELLOW)
5. GROOVED PREFORMED PLASTIC TAPE 4-INCH (WHITE)
6. GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH (YELLOW)
7. GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH (WHITE)
8. GROOVED PREFORMED PLASTIC CONTRAST TAPE 4-INCH (YELLOW)
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10. GROOVED PREFORMED PLASTIC TAPE 8-INCH (WHITE)
11. GROOVED PREFORMED PLASTIC CONTRAST TAPE 8-INCH (WHITE)
12. GROOVED PREFORMED THERMOPLASTIC WORDS (ONLY)
13. GROOVED PREFORMED THERMOPLASTIC ARROWS (TYPE 1)
14. GROOVED PREFORMED THERMOPLASTIC ARROWS (TYPE 2)
15. GROOVED PREFORMED THERMOPLASTIC ARROWS (TYPE 3)
16. GROOVED PREFORMED THERMOPLASTIC CROSSWALK 6-INCH
17. GROOVED PREFORMED THERMOPLASTIC STOP BAR 18-INCH
18. DIAGONAL EPOXY 12-INCH (YELLOW)
19. CURB RAMP DETECTABLE WARNING FIELD YELLOW

NOTE:
* 1) ESTABLISH NO-PASSING ZONES PER BID ITEM LOCATING NO-PASSING ZONES
2) SEE SIGNAL PLANS FOR PLACEMENT OF STOP BARS



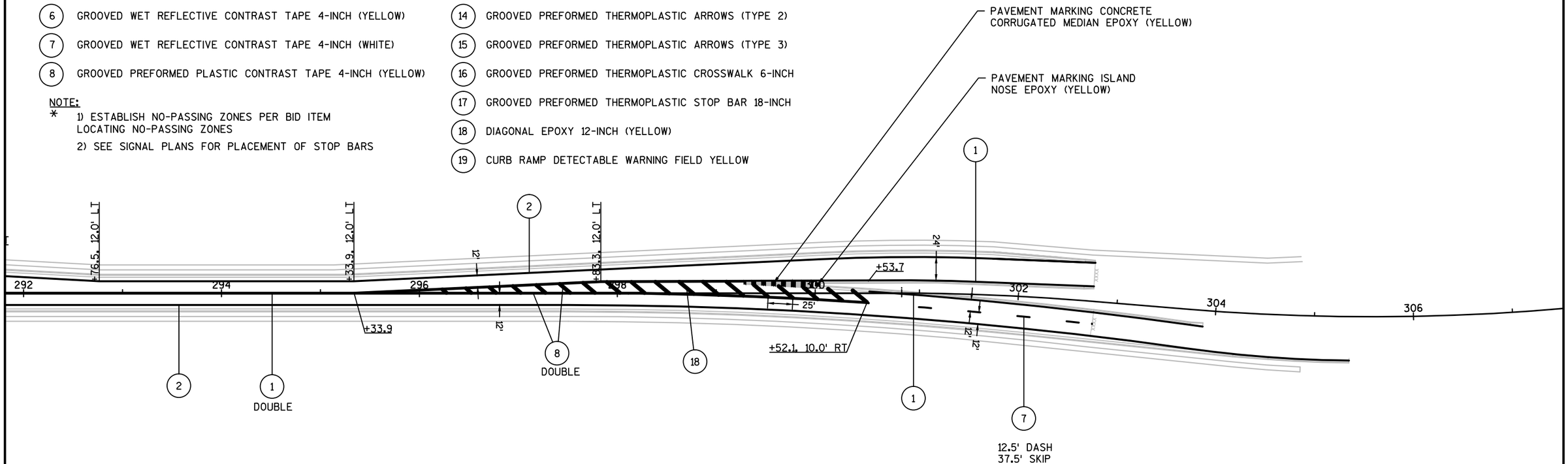
PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	PAVEMENT MARKING	SHEET 216	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\PAVEMENT MARKING\024501-PM.DWG
LAYOUT NAME - 024518-PM
PLOT DATE : 4/28/2016 2:43 PM PLOT BY : MAAS, JOSEPH A PLOT NAME : PLOT SCALE : 1 IN:100 FT

PAVEMENT MARKING LEGEND

1. EPOXY 4-INCH (YELLOW)
2. EPOXY 4-INCH (WHITE)
3. GROOVED WET REFLECTIVE TAPE 4-INCH (YELLOW)
4. GROOVED PREFORMED PLASTIC TAPE 4-INCH (YELLOW)
5. GROOVED PREFORMED PLASTIC TAPE 4-INCH (WHITE)
6. GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH (YELLOW)
7. GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH (WHITE)
8. GROOVED PREFORMED PLASTIC CONTRAST TAPE 4-INCH (YELLOW)
9. GROOVED PREFORMED PLASTIC CONTRAST TAPE 4-INCH (WHITE)
10. GROOVED PREFORMED PLASTIC TAPE 8-INCH (WHITE)
11. GROOVED PREFORMED PLASTIC CONTRAST TAPE 8-INCH (WHITE)
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14. GROOVED PREFORMED THERMOPLASTIC ARROWS (TYPE 2)
15. GROOVED PREFORMED THERMOPLASTIC ARROWS (TYPE 3)
16. GROOVED PREFORMED THERMOPLASTIC CROSSWALK 6-INCH
17. GROOVED PREFORMED THERMOPLASTIC STOP BAR 18-INCH
18. DIAGONAL EPOXY 12-INCH (YELLOW)
19. CURB RAMP DETECTABLE WARNING FIELD YELLOW

NOTE:
* 1) ESTABLISH NO-PASSING ZONES PER BID ITEM LOCATING NO-PASSING ZONES
2) SEE SIGNAL PLANS FOR PLACEMENT OF STOP BARS



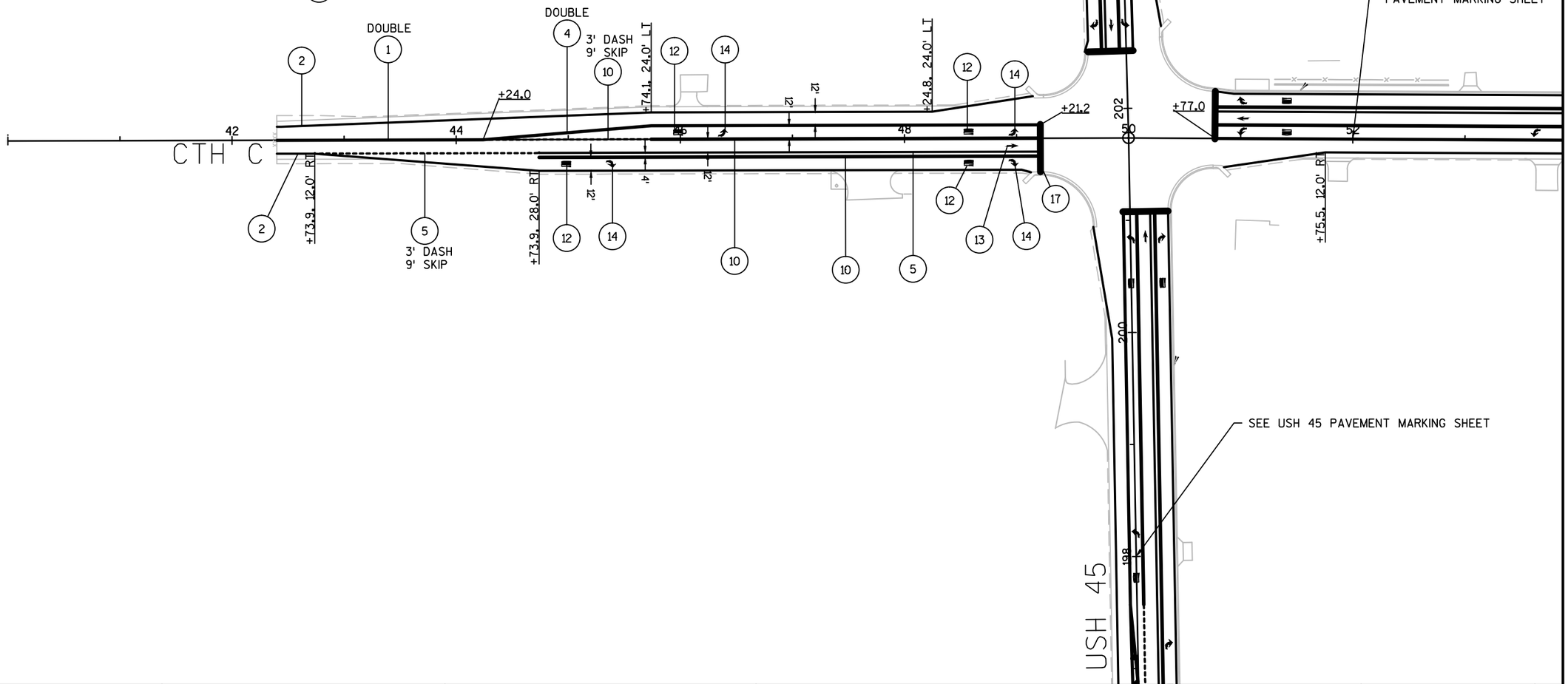
PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	PAVEMENT MARKING	SHEET 217	E

2

PAVEMENT MARKING LEGEND

1. EPOXY 4-INCH (YELLOW)
2. EPOXY 4-INCH (WHITE)
3. GROOVED WET REFLECTIVE TAPE 4-INCH (YELLOW)
4. GROOVED PREFORMED PLASTIC TAPE 4-INCH (YELLOW)
5. GROOVED PREFORMED PLASTIC TAPE 4-INCH (WHITE)
6. GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH (YELLOW)
7. GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH (WHITE)
8. GROOVED PREFORMED PLASTIC CONTRAST TAPE 4-INCH (YELLOW)
9. GROOVED PREFORMED PLASTIC CONTRAST TAPE 4-INCH (WHITE)
10. GROOVED PREFORMED PLASTIC TAPE 8-INCH (WHITE)
11. GROOVED PREFORMED PLASTIC CONTRAST TAPE 8-INCH (WHITE)
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13. GROOVED PREFORMED THERMOPLASTIC ARROWS (TYPE 1)
14. GROOVED PREFORMED THERMOPLASTIC ARROWS (TYPE 2)
15. GROOVED PREFORMED THERMOPLASTIC ARROWS (TYPE 3)
16. GROOVED PREFORMED THERMOPLASTIC CROSSWALK 6-INCH
17. GROOVED PREFORMED THERMOPLASTIC STOP BAR 18-INCH
18. DIAGONAL EPOXY 12-INCH (YELLOW)
19. CURB RAMP DETECTABLE WARNING FIELD YELLOW

NOTE:
* 1) ESTABLISH NO-PASSING ZONES PER BID ITEM LOCATING NO-PASSING ZONES
2) SEE SIGNAL PLANS FOR PLACEMENT OF STOP BARS



PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	PAVEMENT MARKING (CTH C - WEST LEG)	SHEET 218	E

2

2

PAVEMENT MARKING LEGEND

1. EPOXY 4-INCH (YELLOW)
2. EPOXY 4-INCH (WHITE)
3. GROOVED WET REFLECTIVE TAPE 4-INCH (YELLOW)
4. GROOVED PREFORMED PLASTIC TAPE 4-INCH (YELLOW)
5. GROOVED PREFORMED PLASTIC TAPE 4-INCH (WHITE)
6. GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH (YELLOW)
7. GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH (WHITE)
8. GROOVED PREFORMED PLASTIC CONTRAST TAPE 4-INCH (YELLOW)
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15. GROOVED PREFORMED THERMOPLASTIC ARROWS (TYPE 3)
16. GROOVED PREFORMED THERMOPLASTIC CROSSWALK 6-INCH
17. GROOVED PREFORMED THERMOPLASTIC STOP BAR 18-INCH
18. DIAGONAL EPOXY 12-INCH (YELLOW)
19. CURB RAMP DETECTABLE WARNING FIELD YELLOW

NOTE:
* 1) ESTABLISH NO-PASSING ZONES PER BID ITEM LOCATING NO-PASSING ZONES
2) SEE SIGNAL PLANS FOR PLACEMENT OF STOP BARS

N

SEE USH 45 PAVEMENT MARKING PLAN

SEE CTH C WEST LEG PAVEMENT MARKING PLAN

SEE USH 45 PAVEMENT MARKING PLAN

+24.8, 24.0' LT

+21.2

+77.0

+27.0, 40.0' LT

3' DASH
9' SKIP

+77.0, 12.0' LT

+77.0, 24.0' LT

+77.0, 12.0' LT

+20.2, 16.5' LT

+10.0

+75.5, 12.0' RT

+27.0

4 DOUBLE

3' DASH
9' SKIP

4 DOUBLE

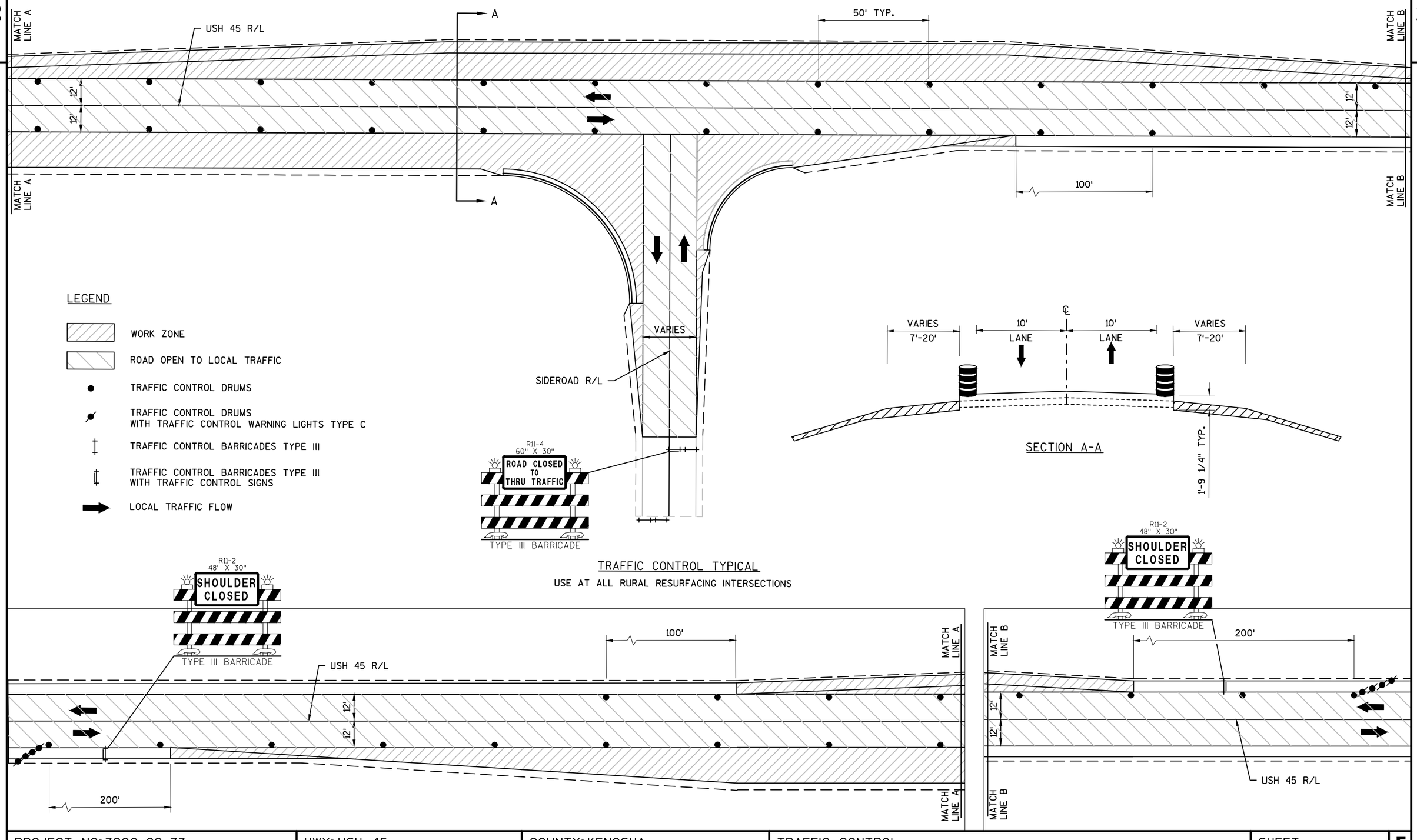
CTH C

USH 45

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	PAVEMENT MARKING (CTH C - EAST LEG)	SHEET 219	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\PAVEMENT MARKING\024501-PM.DWG
LAYOUT NAME - 024521-PM

PLOT DATE : 4/28/2016 2:44 PM PLOT BY : MAAS, JOSEPH A PLOT NAME : PLOT SCALE : 1 IN:100 FT



TRAFFIC CONTROL TYPICAL

USE AT ALL RURAL RESURFACING INTERSECTIONS

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	TRAFFIC CONTROL	SHEET 220	E

TRAFFIC CONTROL 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'. (500' DESIRABLE) DISTANCE TO EXISTING SIGNS.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL IN USE SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

ALL TYPE III BARRICADES SHALL BE 8' IN LENGTH AND HAVE 2 TYPE "A" WARNING LIGHTS.

ANY "STOP" SIGNS THAT ARE REMOVED FOR A CONSTRUCTION OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED.

LEGEND





SIGN ON PERMANENT SUPPORT

WORK ZONE

(1) SEE S.D.D. BARRICADE AND SIGNS FOR SIDE ROAD CLOSURES. (NO ACCESS TO PROJECT)

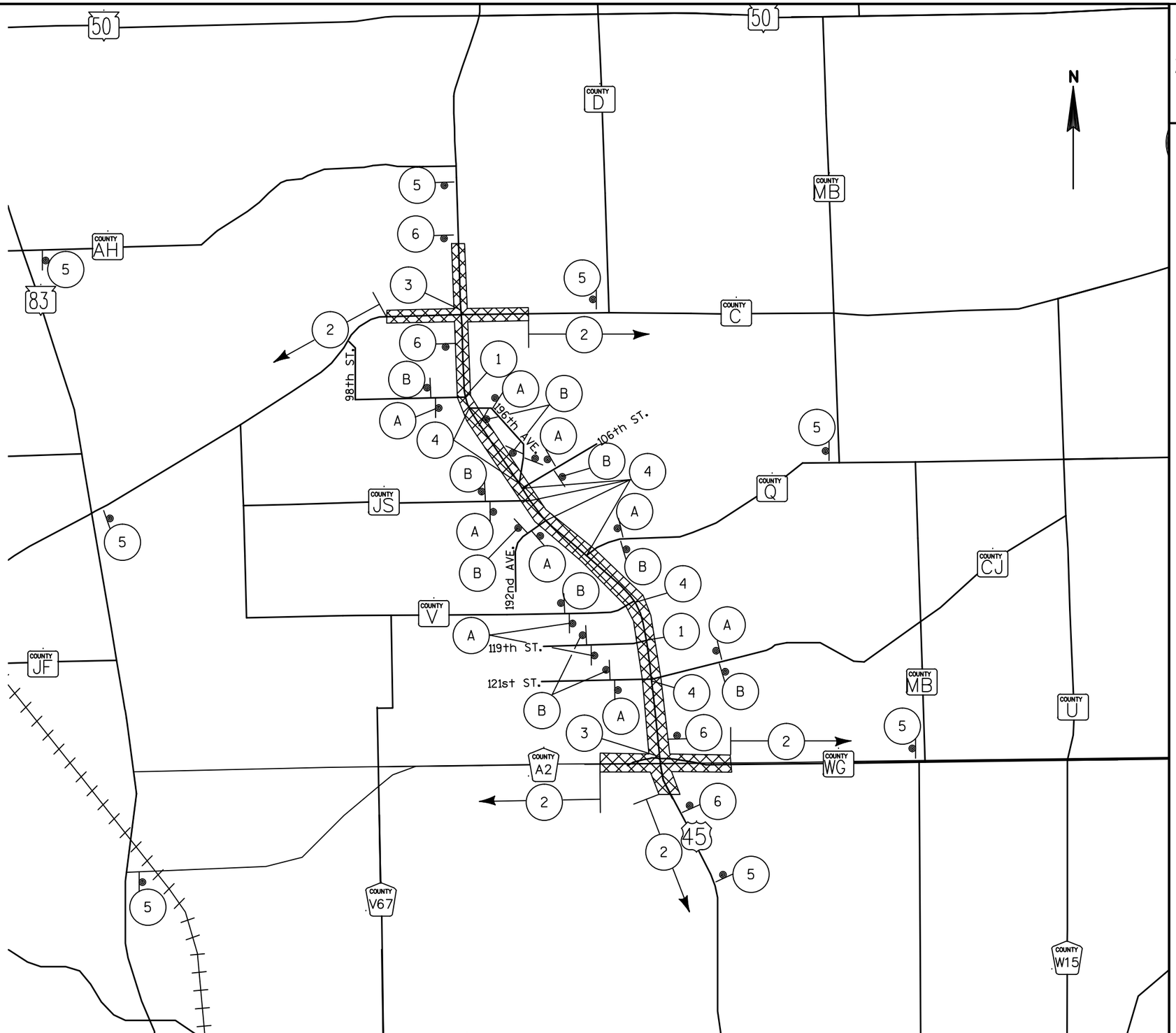
(2) SEE S.D.D. TRAFFIC CONTROL, ADVANCED WARNING SIGNS 45 MPH OR GREATER, TWO WAY UNDIVIDED ROAD OPEN TO TRAFFIC.

(3) SEE S.D.D. BARRICADES AND SIGNS FOR SIDE ROAD CLOSURES. DETAIL 3 - PUBLIC CROSS-TRAFFIC MAINTAINED, CONTRACTOR, LOCAL BUSINESS AND RESIDENT ACCESS

(4) SEE S.D.D. BARRICADES AND SIGNS FOR SIDE ROAD CLOSURES. DETAIL 4 - CONTRACTOR, LOCAL BUSINESS, AND RESIDENT ACCESS TO PROJECT

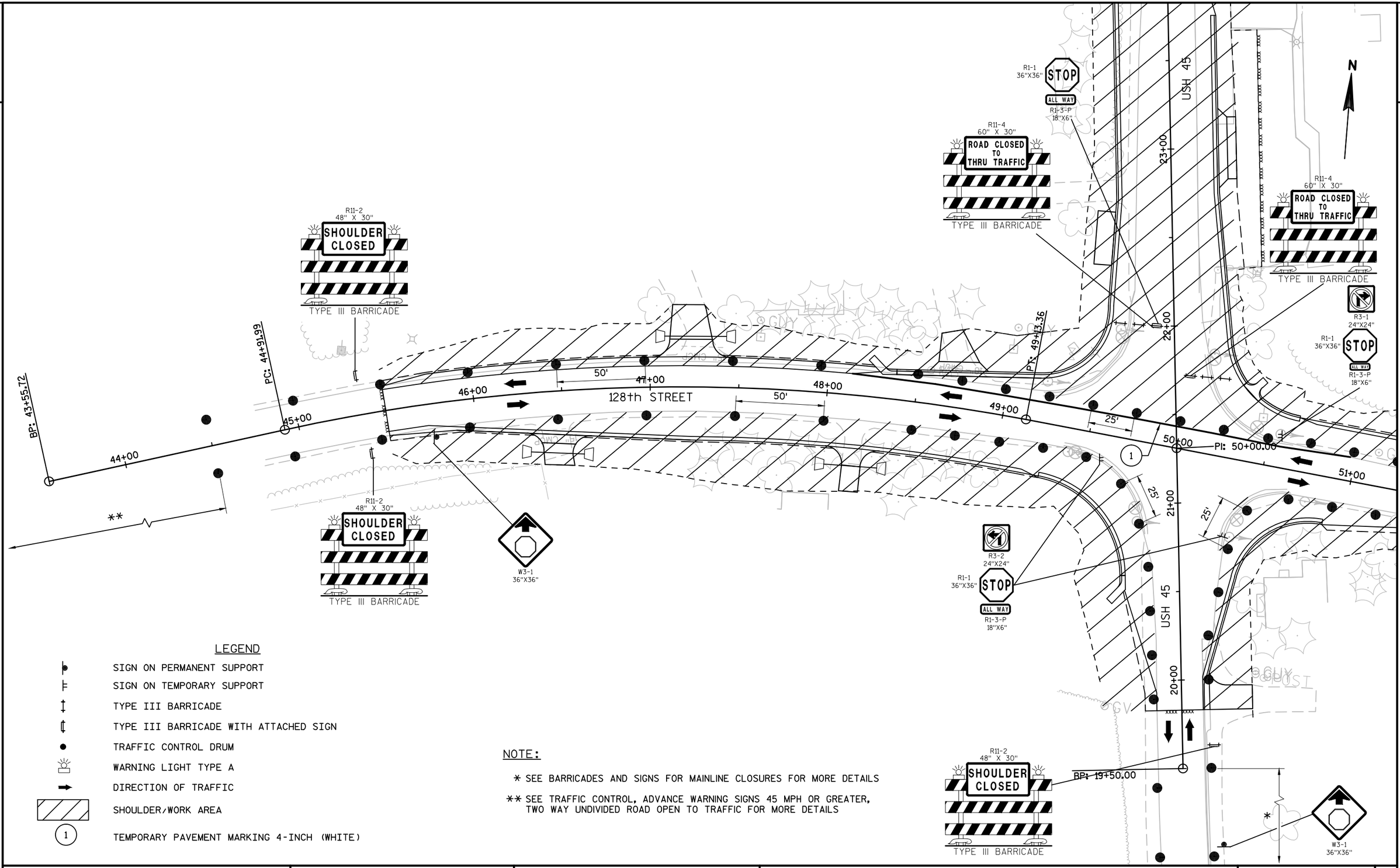
(5) SEE TRAFFIC CONTROL SIGNS FIXED MESSAGE #5

(6) SEE TRAFFIC CONTROL SIGNS FIXED MESSAGE #6



PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	TRAFFIC CONTROL STAGE 1	SHEET 221 E

2



LEGEND

- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- WARNING LIGHT TYPE A
- DIRECTION OF TRAFFIC
- SHOULDER/WORK AREA
- (1) TEMPORARY PAVEMENT MARKING 4-INCH (WHITE)

NOTE:

* SEE BARRICADES AND SIGNS FOR MAINLINE CLOSURES FOR MORE DETAILS

** SEE TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 MPH OR GREATER, TWO WAY UNDIVIDED ROAD OPEN TO TRAFFIC FOR MORE DETAILS

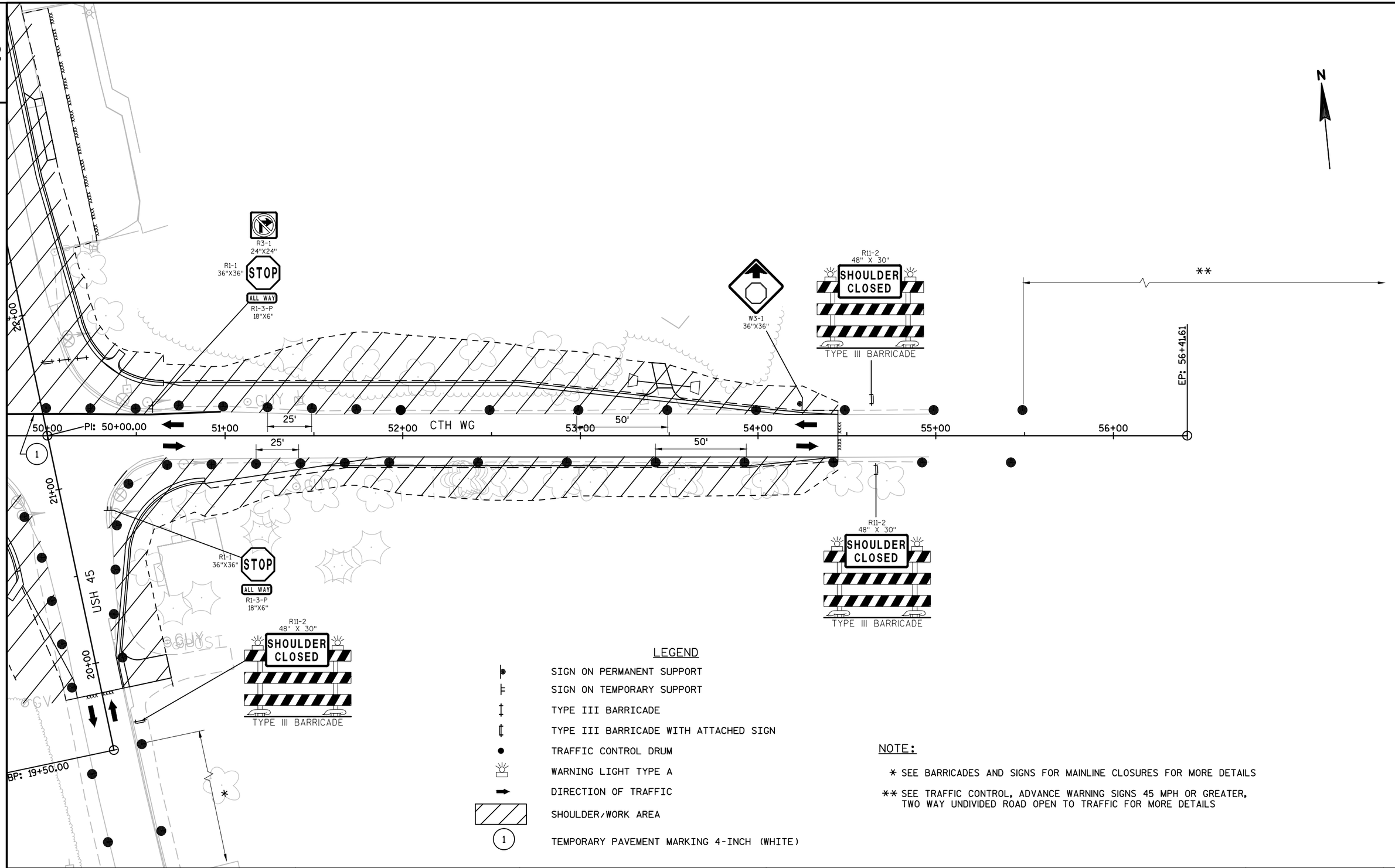
PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	TRAFFIC CONTROL STAGE 1	SHEET 222	E

FILE NAME : N:\PDS\C3D\CAD\32000203\026001_S1.DWG
LAYOUT NAME - 026001_S1

PLOT DATE : 4/28/2016 2:42 PM PLOT BY : SCHMIDT, JUDENE M PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

2



LEGEND

- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- WARNING LIGHT TYPE A
- DIRECTION OF TRAFFIC
- SHOULDER/WORK AREA
- (1) TEMPORARY PAVEMENT MARKING 4-INCH (WHITE)

NOTE:

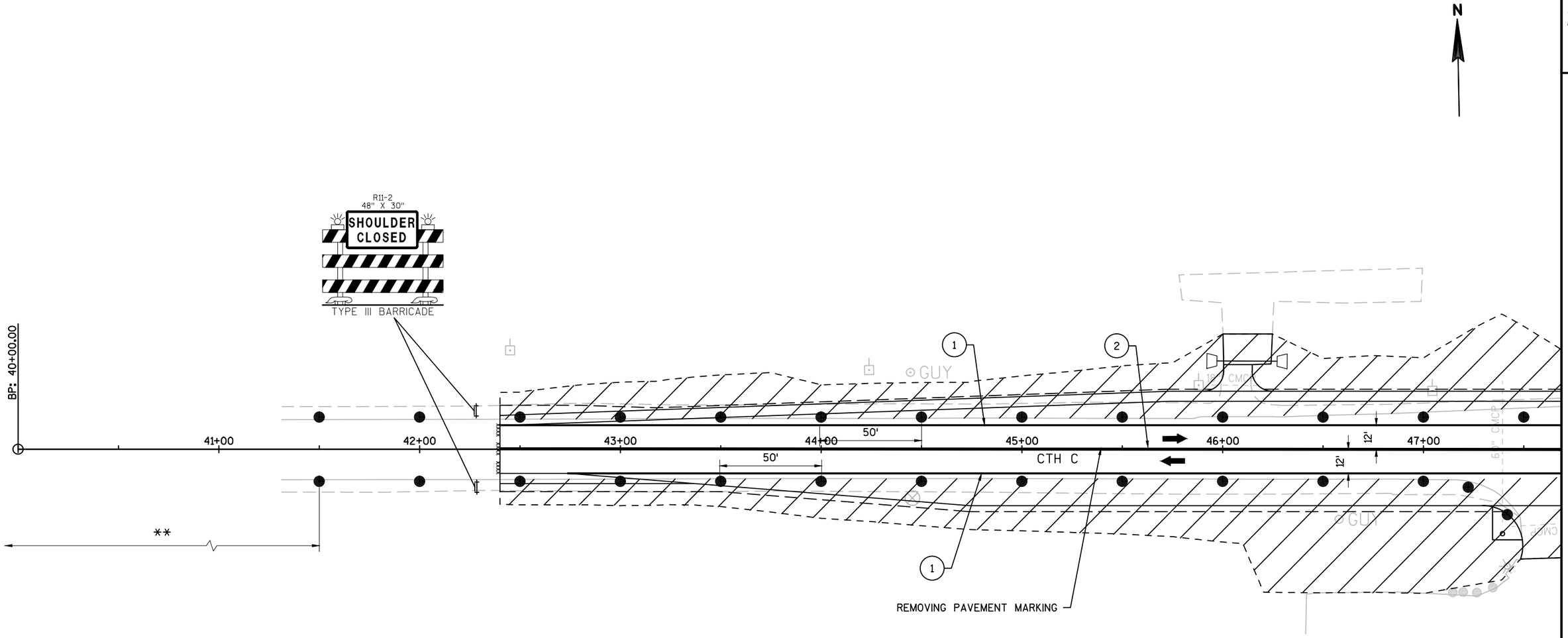
* SEE BARRICADES AND SIGNS FOR MAINLINE CLOSURES FOR MORE DETAILS

** SEE TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 MPH OR GREATER, TWO WAY UNDIVIDED ROAD OPEN TO TRAFFIC FOR MORE DETAILS

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	TRAFFIC CONTROL - STAGE 1	SHEET 223	E

FILE NAME : N:\PDS\C3D\CAD\32000203\026001_S1.DWG
LAYOUT NAME - 026002_S1
PLOT DATE : 4/28/2016 2:42 PM PLOT BY : SCHMIDT, JUDENE M PLOT NAME : PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 42

2



LEGEND

- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- WARNING LIGHT TYPE A
- DIRECTION OF TRAFFIC
- SHOULDER/WORK AREA
- (1) TEMPORARY PAVEMENT MARKING 4-INCH (WHITE)
- (2) TEMPORARY PAVEMENT MARKING 4-INCH (DOUBLE YELLOW)

NOTE:

* SEE BARRICADES AND SIGNS FOR MAINLINE CLOSURES FOR MORE DETAILS

** SEE TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 MPH OR GREATER, TWO WAY UNDIVIDED ROAD OPEN TO TRAFFIC FOR MORE DETAILS

PROJECT NO:3200-02-73	HWY:USH 45	COUNTY:KENOSHA	TRAFFIC CONTROL - STAGE 1	SHEET 224	E

2

N

USH 45

204+00

203+00

202+00

201+00

200+00

50+00

R11-4
60" X 30"
ROAD CLOSED TO THRU TRAFFIC
TYPE III BARRICADE

R11-2
48" X 30"
SHOULDER CLOSED
TYPE III BARRICADE

R1-1
36"X36"
STOP
ALL WAY
R1-3-P
18"X6"

R3-2
24"X24"

R3-1
24"X24"

REMOVING PAVEMENT MARKING ARROWS

REMOVING PAVEMENT MARKING

REMOVING PAVEMENT MARKING WORDS

4" SUMP DRAIN DISCHARGE

CTH C

WILMOT RD

50'

12'

48+00 49+00 50+00 51+00 52+00 53+00 54+00 55+00

PI: 201+73.48

F

1

2

NOTE:

* SEE BARRICADES AND SIGNS FOR MAINLINE CLOSURES FOR MORE DETAILS

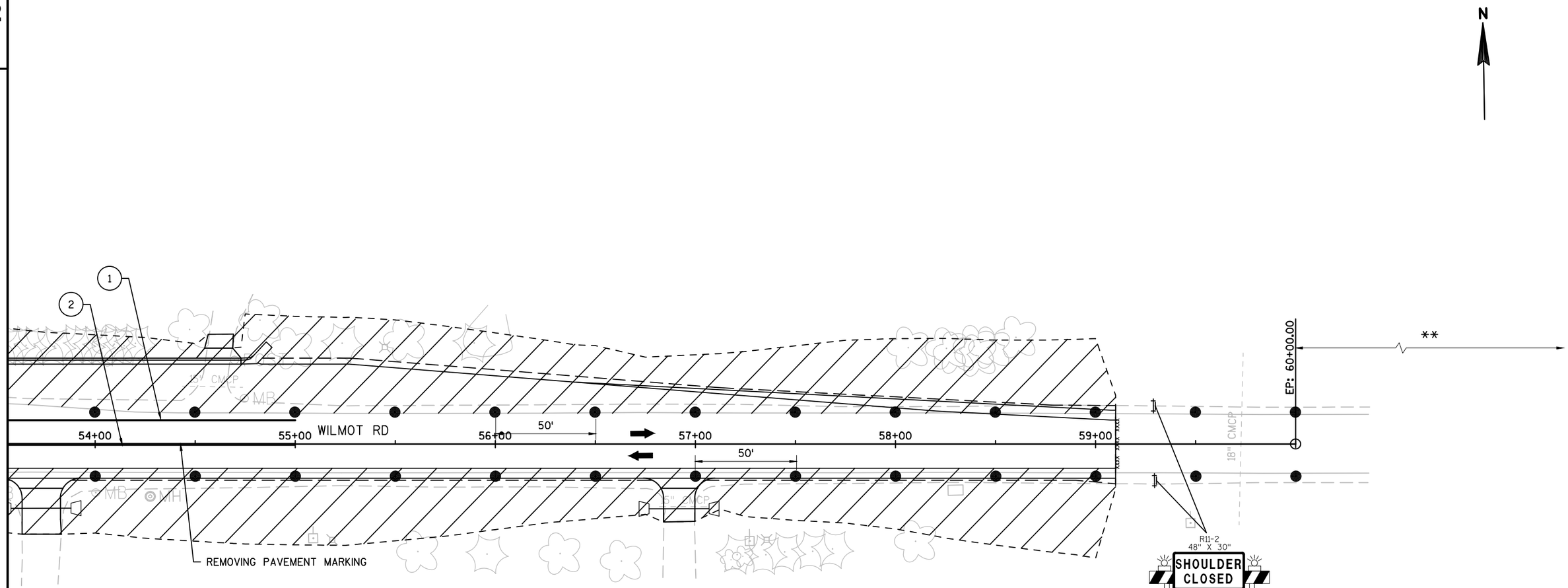
** SEE TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 MPH OR GREATER, TWO WAY UNDIVIDED ROAD OPEN TO TRAFFIC FOR MORE DETAILS

LEGEND

- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- WARNING LIGHT TYPE A
- DIRECTION OF TRAFFIC
- SHOULDER/WORK AREA
- 1 TEMPORARY PAVEMENT MARKING 4-INCH (WHITE)
- 2 TEMPORARY PAVEMENT MARKING 4-INCH (DOUBLE YELLOW)

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	TRAFFIC CONTROL - STAGE 1	SHEET 225	E

2



LEGEND

- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- WARNING LIGHT TYPE A
- DIRECTION OF TRAFFIC
- SHOULDER/WORK AREA
- (1) TEMPORARY PAVEMENT MARKING 4-INCH (WHITE)
- (2) TEMPORARY PAVEMENT MARKING 4-INCH (DOUBLE YELLOW)

NOTE:

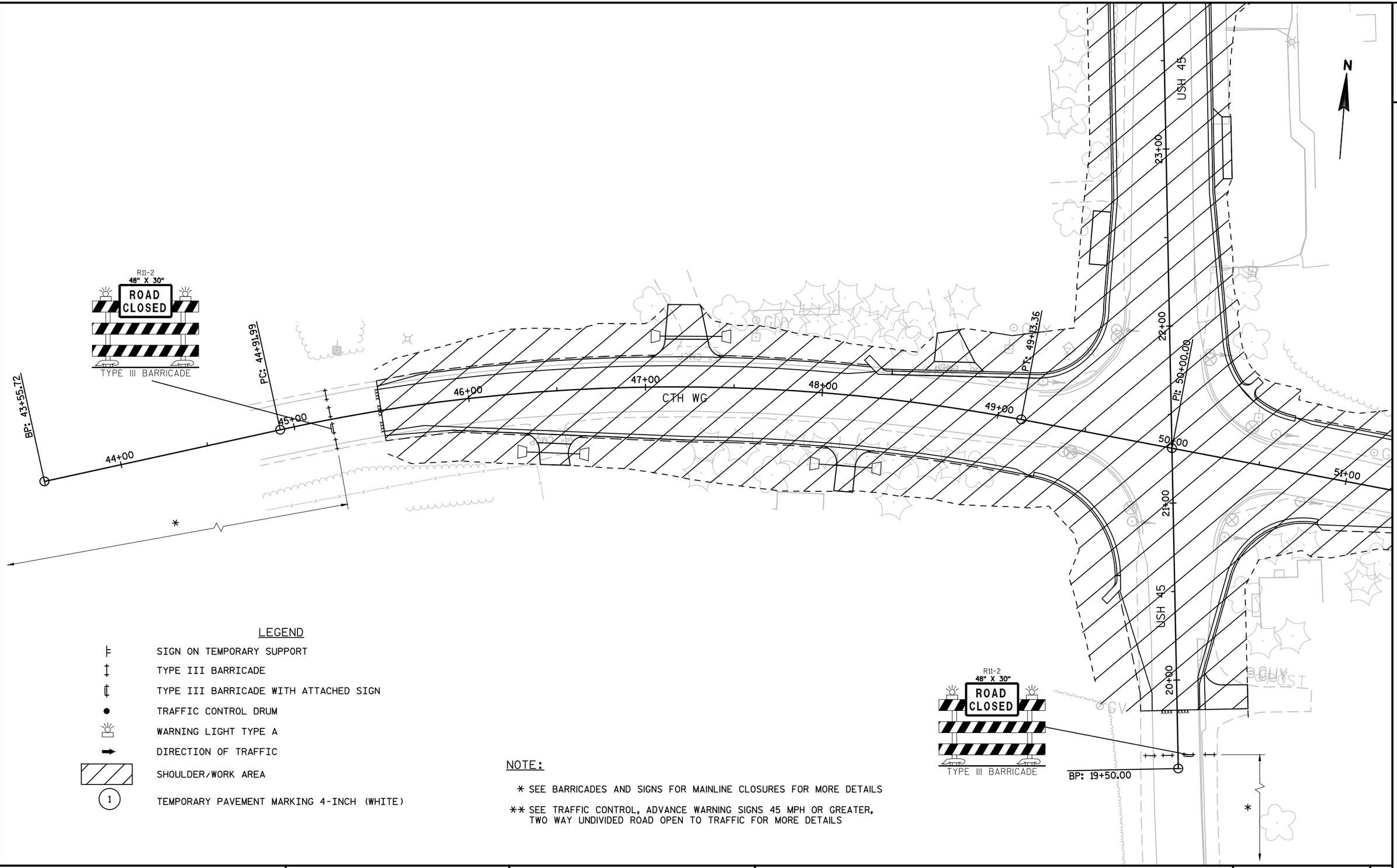
* SEE BARRICADES AND SIGNS FOR MAINLINE CLOSURES FOR MORE DETAILS

** SEE TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 MPH OR GREATER, TWO WAY UNDIVIDED ROAD OPEN TO TRAFFIC FOR MORE DETAILS

PROJECT NO:3200-02-73	HWY:USH 45	COUNTY:KENOSHA	TRAFFIC CONTROL - STAGE 1	SHEET 226	E

FILE NAME : N:\PDS\C3D\CAD\32000203\026001_S1.DWG
LAYOUT NAME - 026005_S1
PLOT DATE : 4/28/2016 2:43 PM PLOT BY : SCHMIDT, JUDENE M PLOT NAME : PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 42

2



LEGEND

- SIGN ON TEMPORARY SUPPORT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- WARNING LIGHT TYPE A
- DIRECTION OF TRAFFIC
- SHOULDER/WORK AREA
- (1) TEMPORARY PAVEMENT MARKING 4-INCH (WHITE)

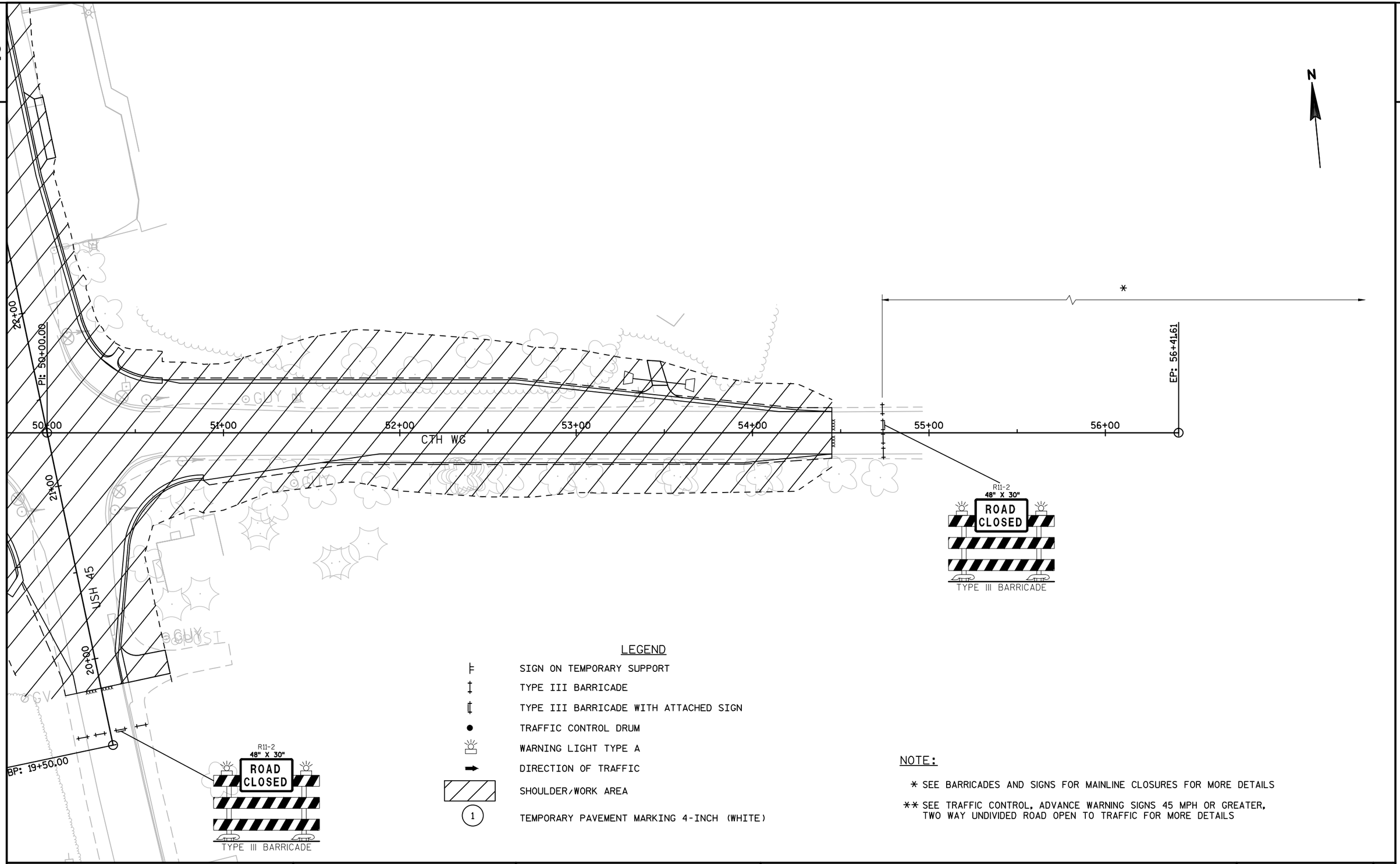
NOTE:

* SEE BARRICADES AND SIGNS FOR MAINLINE CLOSURES FOR MORE DETAILS

** SEE TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 MPH OR GREATER, TWO WAY UNDIVIDED ROAD OPEN TO TRAFFIC FOR MORE DETAILS

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	TRAFFIC CONTROL - STAGE 1A	SHEET 227	E

2



LEGEND

- SIGN ON TEMPORARY SUPPORT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- WARNING LIGHT TYPE A
- DIRECTION OF TRAFFIC
- SHOULDER/WORK AREA
- (1) TEMPORARY PAVEMENT MARKING 4-INCH (WHITE)

NOTE:

* SEE BARRICADES AND SIGNS FOR MAINLINE CLOSURES FOR MORE DETAILS

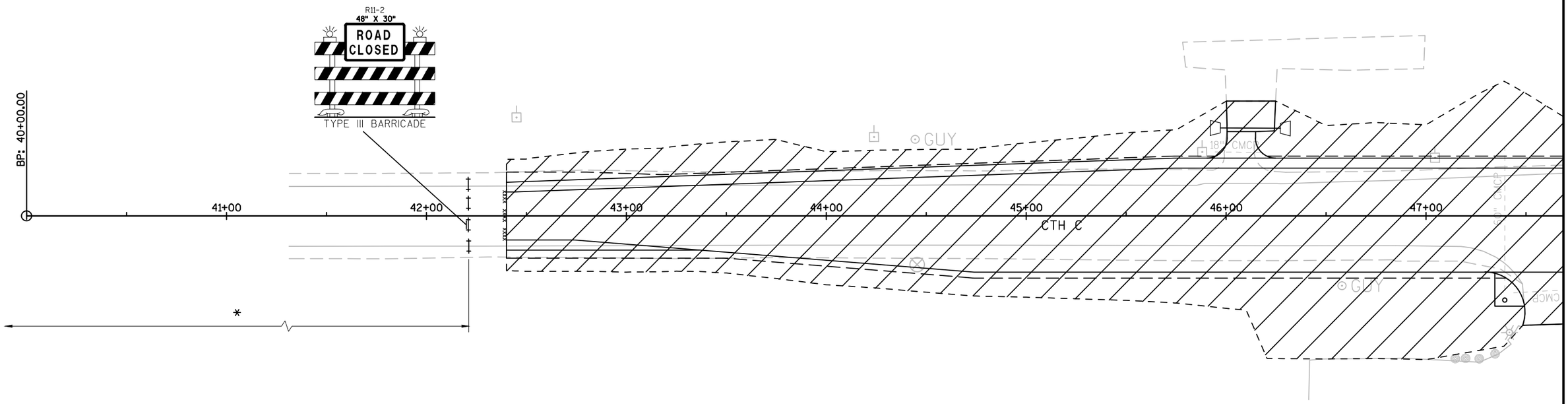
** SEE TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 MPH OR GREATER, TWO WAY UNDIVIDED ROAD OPEN TO TRAFFIC FOR MORE DETAILS

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	TRAFFIC CONTROL - STAGE 1A	SHEET 228	E

FILE NAME : N:\PDS\C3D\CAD\32000203\026101A_S1A.DWG
LAYOUT NAME - 026101_S2
PLOT DATE : 4/19/2016 9:05 AM PLOT BY : SCHMIDT, JUDENE M PLOT NAME : PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 42

2

N



LEGEND

⊨	SIGN ON TEMPORARY SUPPORT
‡	TYPE III BARRICADE
‡	TYPE III BARRICADE WITH ATTACHED SIGN
●	TRAFFIC CONTROL DRUM
	WARNING LIGHT TYPE A
➡	DIRECTION OF TRAFFIC
	SHOULDER/WORK AREA
(1)	TEMPORARY PAVEMENT MARKING 4-INCH (WHITE)

NOTE:

* SEE BARRICADES AND SIGNS FOR MAINLINE CLOSURES FOR MORE DETAILS

** SEE TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 MPH OR GREATER, TWO WAY UNDIVIDED ROAD OPEN TO TRAFFIC FOR MORE DETAILS

PROJECT NO:3200-02-73	HWY:USH 45	COUNTY:KENOSHA	TRAFFIC CONTROL - STAGE 1B	SHEET 229	E

FILE NAME : N:\PDS\C3D\CAD\32000203\026201B_S1B.DWG
LAYOUT NAME - 026103_S2
PLOT DATE : 4/19/2016 9:07 AM PLOT BY : SCHMIDT, JUDENE M PLOT NAME : PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 42

2

N

USH 45

204+00

203+00

202+00

201+00

200+00

CTH C

WILMOT RD

4" SUMP DRAIN DISCHARGE

48+00 49+00 PI: 201+73.48 50+00 51+00 52+00 53+00 54+00 55+00

LEGEND

- SIGN ON TEMPORARY SUPPORT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- WARNING LIGHT TYPE A
- DIRECTION OF TRAFFIC
- SHOULDER/WORK AREA
- (1) TEMPORARY PAVEMENT MARKING 4-INCH (WHITE)

NOTE:

* SEE BARRICADES AND SIGNS FOR MAINLINE CLOSURES FOR MORE DETAILS

** SEE TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 MPH OR GREATER, TWO WAY UNDIVIDED ROAD OPEN TO TRAFFIC FOR MORE DETAILS

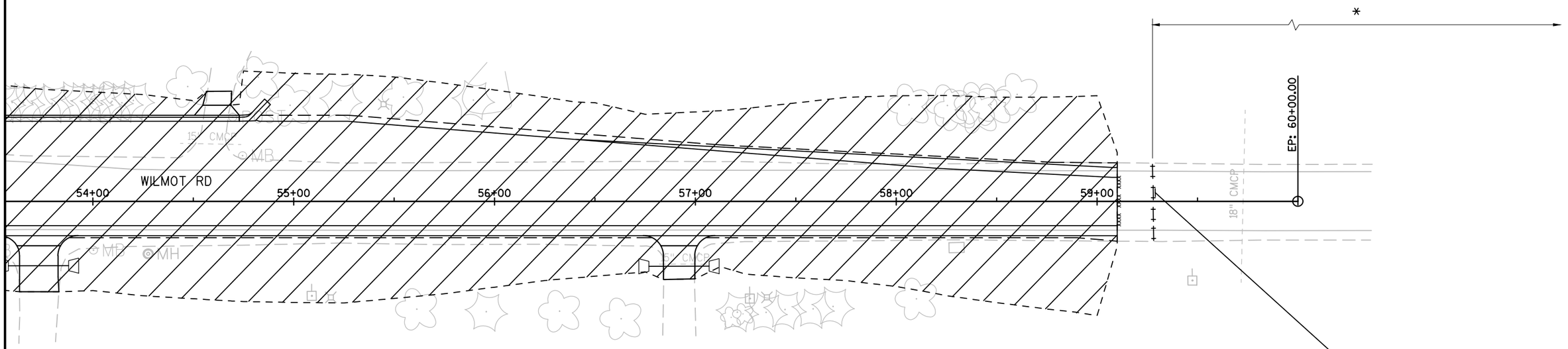
PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	TRAFFIC CONTROL - STAGE 1B	SHEET 230	E

FILE NAME : N:\PDS\C3D\CAD\32000203\026201B_S1B.DWG
LAYOUT NAME - 026104_S2

PLOT DATE : 4/19/2016 9:07 AM PLOT BY : SCHMIDT, JUDENE M PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

2



LEGEND

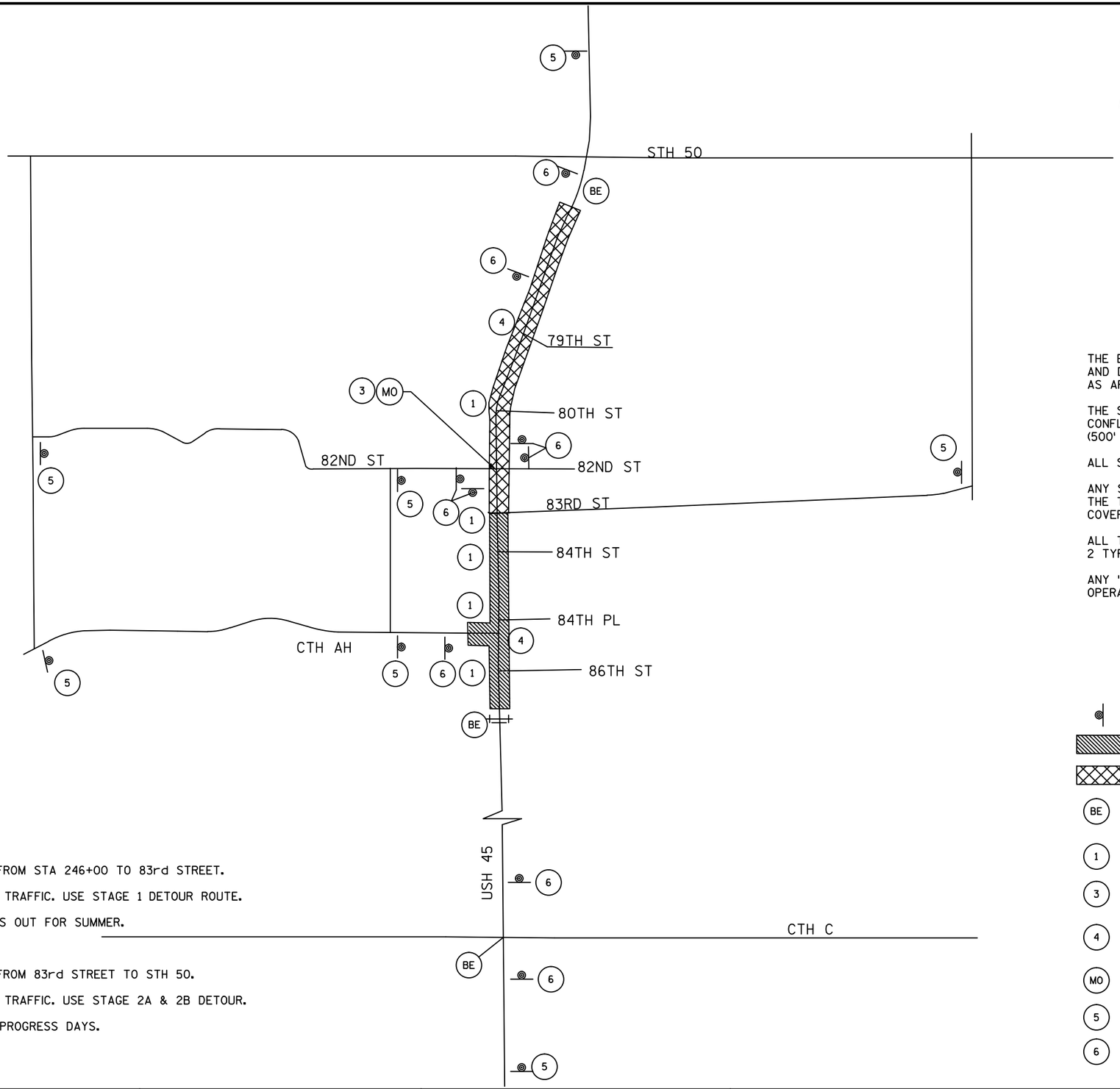
⊨	SIGN ON TEMPORARY SUPPORT
‡	TYPE III BARRICADE
‡	TYPE III BARRICADE WITH ATTACHED SIGN
●	TRAFFIC CONTROL DRUM
	WARNING LIGHT TYPE A
➡	DIRECTION OF TRAFFIC
	SHOULDER/WORK AREA
(1)	TEMPORARY PAVEMENT MARKING 4-INCH (WHITE)

NOTE:

* SEE BARRICADES AND SIGNS FOR MAINLINE CLOSURES FOR MORE DETAILS

** SEE TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 MPH OR GREATER, TWO WAY UNDIVIDED ROAD OPEN TO TRAFFIC FOR MORE DETAILS

PROJECT NO:3200-02-73	HWY:USH 45	COUNTY:KENOSHA	TRAFFIC CONTROL - STAGE 1B	SHEET 231	E



STAGE 2A

- RECONSTRUCT USH 45 FROM STA 246+00 TO 83rd STREET.
- ROAD CLOSED TO THRU TRAFFIC. USE STAGE 1 DETOUR ROUTE.
- START AFTER SCHOOL IS OUT FOR SUMMER.

STAGE 2B

- RECONSTRUCT USH 45 FROM 83rd STREET TO STH 50.
- ROAD CLOSED TO THRU TRAFFIC. USE STAGE 2A & 2B DETOUR.
- START AFTER BRISTOL PROGRESS DAYS.

TRAFFIC CONTROL 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'. (500' DESIRABLE) DISTANCE TO EXISTING SIGNS.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL IN USE SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

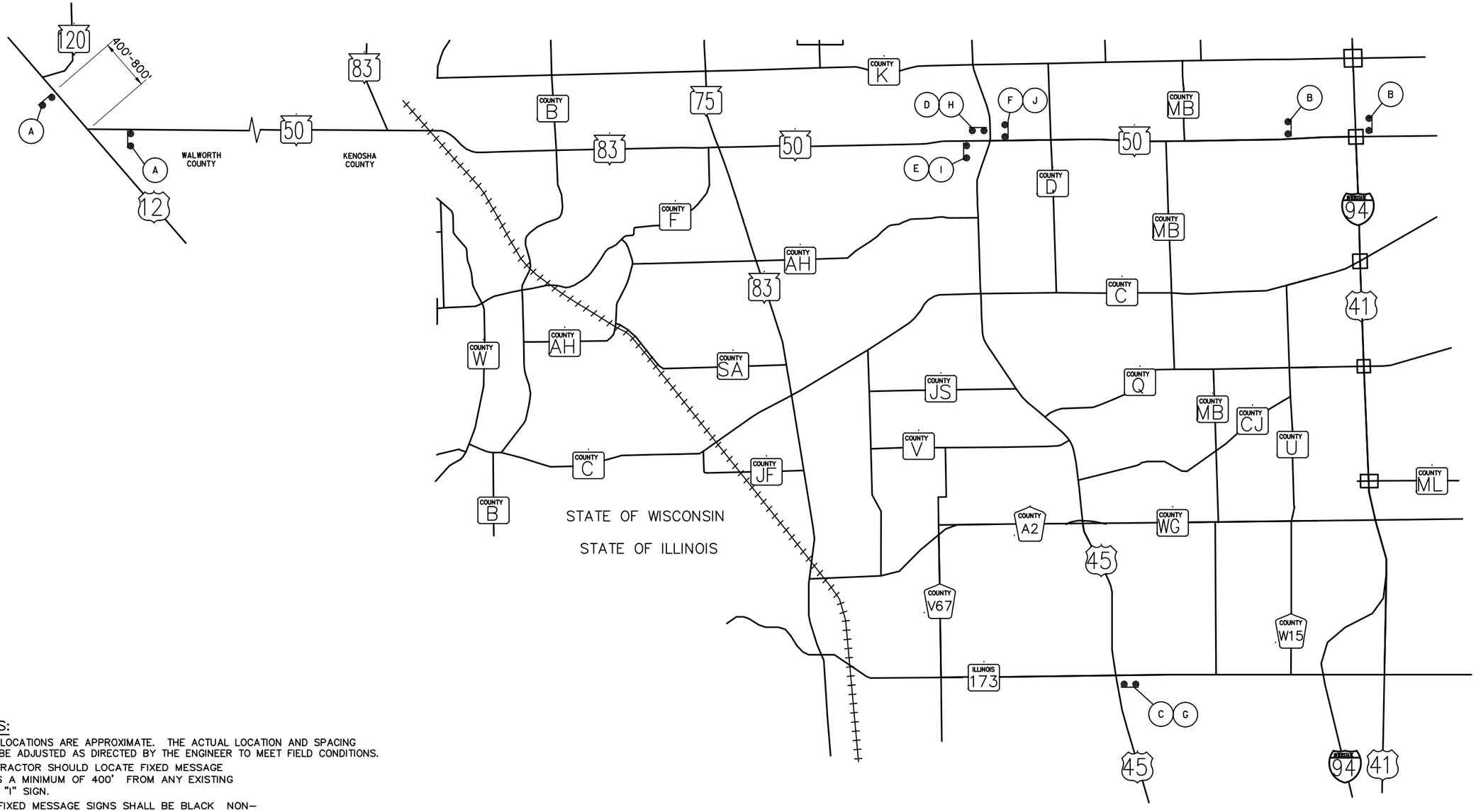
ALL TYPE III BARRICADES SHALL BE 8' IN LENGTH AND HAVE 2 TYPE "A" WARNING LIGHTS.

ANY "STOP" SIGNS THAT ARE REMOVED FOR A CONSTRUCTION OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED.

LEGEND

- SIGN ON PERMANENT SUPPORT
- STAGE 2A WORK ZONE
- STAGE 2B WORK ZONE
- (BE) SEE S.D.D. BARRICADES AND SIGNS FOR MAINLINE CLOSURES. DETAIL B - MAINLINE CLOSURE WITH POSTED DETOUR. DETAIL E - LANE CLOSURE BARRICADE DETAIL
- (1) SEE S.D.D. BARRICADES AND SIGNS FOR SIDE ROAD CLOSURES. (NO ACCESS TO PROJECT)
- (3) SEE S.D.D. BARRICADES AND SIGNS FOR SIDE ROAD CLOSURES. DETAIL 3 - PUBLIC CROSS-TRAFFIC MAINTAINED, CONTRACTOR, LOCAL BUSINESS AND RESIDENT ACCESS
- (4) SEE S.D.D. BARRICADES AND SIGNS FOR SIDE ROAD CLOSURES. DETAIL 4 - CONTRACTOR, LOCAL BUSINESS, AND RESIDENT ACCESS TO PROJECT
- (MO) SEE S.D.D. TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)
- (5) SEE TRAFFIC CONTROL SIGNS FIXED MESSAGE #5
- (6) SEE TRAFFIC CONTROL SIGNS FIXED MESSAGE #6

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	TRAFFIC CONTROL STAGE 2A & 2B	SHEET 232	E



NOTES:

1. SIGN LOCATIONS ARE APPROXIMATE. THE ACTUAL LOCATION AND SPACING MAY BE ADJUSTED AS DIRECTED BY THE ENGINEER TO MEET FIELD CONDITIONS.
2. CONTRACTOR SHOULD LOCATE FIXED MESSAGE SIGNS A MINIMUM OF 400' FROM ANY EXISTING TYPE "I" SIGN.
3. ALL FIXED MESSAGE SIGNS SHALL BE BLACK NON-REFLECTIVE MESSAGE ON ORANGE FLORESCENT REFLECTIVE BACKGROUND PER SPEC 643 & 637, UNLESS OTHERWISE NOTED IN THE SIGN DETAILS.
4. SEE FIXED MESSAGE SIGNS AND SPECIAL MESSAGE SIGNS LAYOUT SHEETS FOR MORE INFORMATION.
5. ALL SIGNS, TEMPORARY OR EXISTING, IN CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE COVERED. THE COVERING OF WOOD POST MOUNTED SIGNS IS INCLUDED UNDER ITEM 643.2000 TRAFFIC CONTROL DETOUR (ID 3200-02-73). IN LIEU OF COVERING WOOD POST MOUNTED SIGNS, THE CONTRACTOR MAY CHOOSE TO REMOVE AND REPLACE THEM.
6. SIGNS TO BE PLACED 10 DAYS PRIOR TO CONSTRUCTION.
7. ANY "STOP" SIGNS THAT ARE REMOVED FOR A CONSTRUCTION OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED.
8. SEE TRAFFIC CONTROL/STAGING PLAN FOR ADDITIONAL TRAFFIC CONTROL DETOUR SIGNS.
9. ALL DETOUR SIGNS ON IH-94 SHALL BE SIZE 3 SIGNS.

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

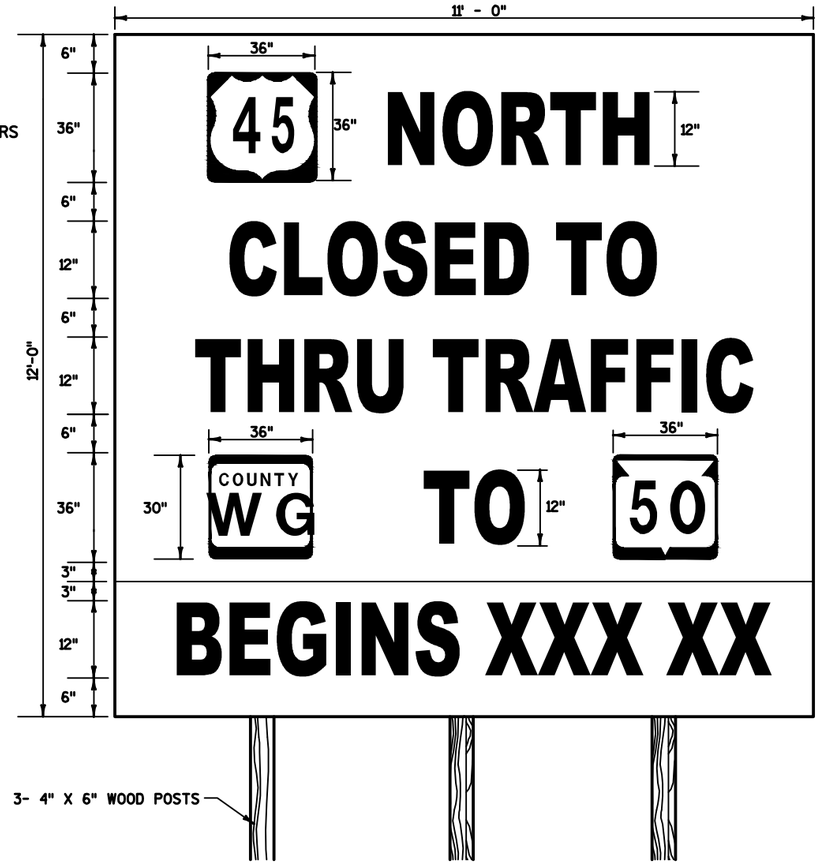
A	B	C	D	E	F	G	H	I	J
FMS #7	FMS #8	FMS #9	FMS #10	FMS #11	FMS #12	FMS #9a	FMS #10a	FMS #11a	FMS #12a

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	FIXED MESSAGE SIGN - OVERSIZE SIGN LOCATION PLAN	SHEET 233	E

FMS #1

12" CAPS
SERIES D LETTERS

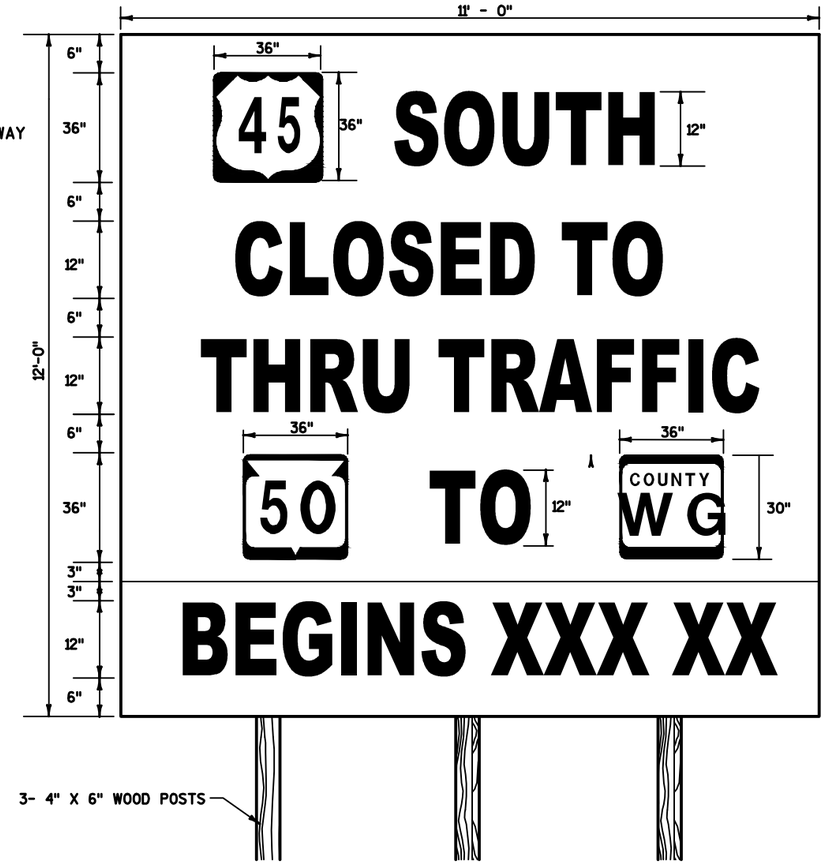
2" BORDERS
12" RADIUS



FMS #2

12" CAPS
SERIES D FREEWAY

2" BORDERS
12" RADIUS



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 POSTS 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.

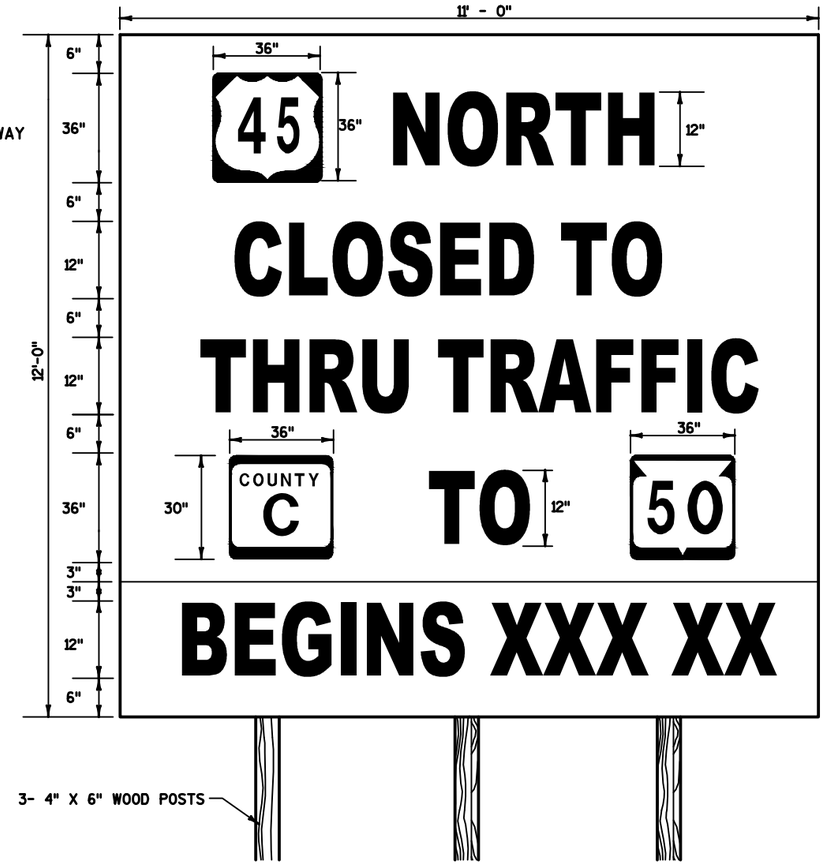
(X)= SIGN NUMBER

PROJECT NO:3200-02-73	HWY:USH 45	COUNTY:KENOSHA	FIXED MESSAGE SIGN DETAIL	SHEET 234	E

FMS #3

12" CAPS
SERIES D FREEWAY

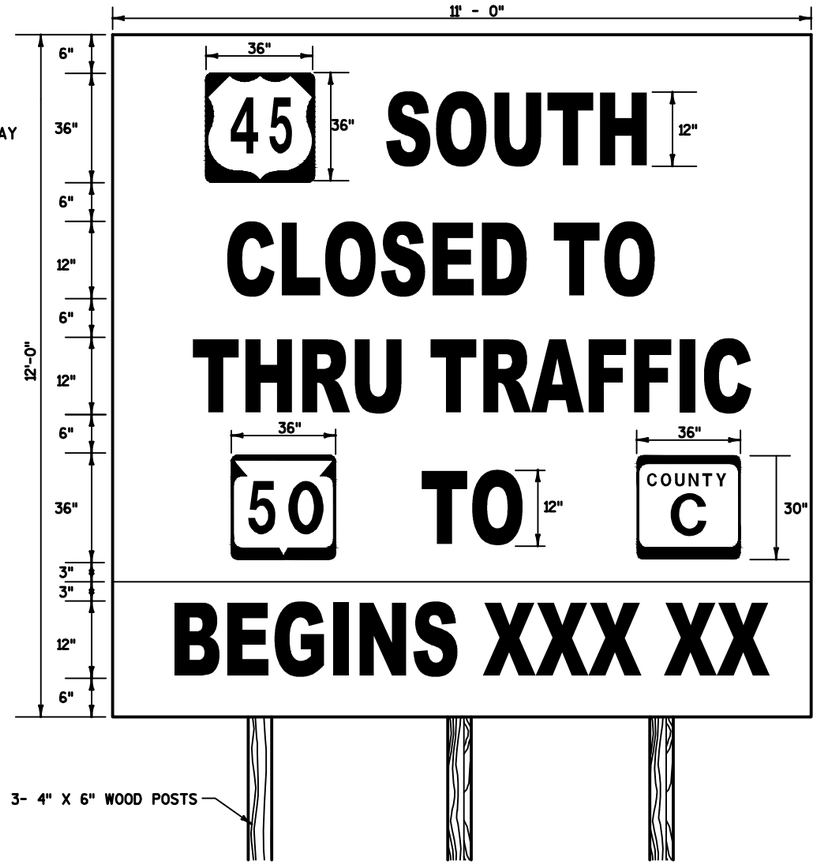
2" BORDERS
12" RADIUS



FMS #4

12" CAPS
SERIES D FREEWAY

2" BORDERS
12" RADIUS



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 POSTS 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"

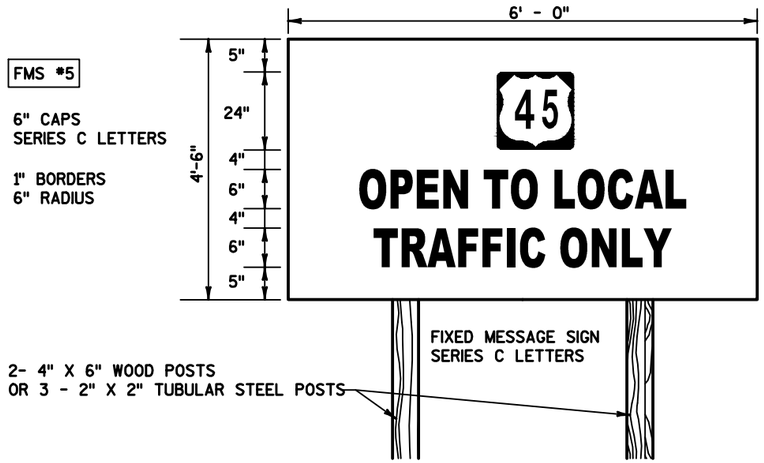
RADIUS SMALLEST OUTSIDE DIMENSION	CORNER RADIUS
> 8 FT	12"
> 6 FT	9"
> 4 FT	6"
LESS THAN 4 FT	3"

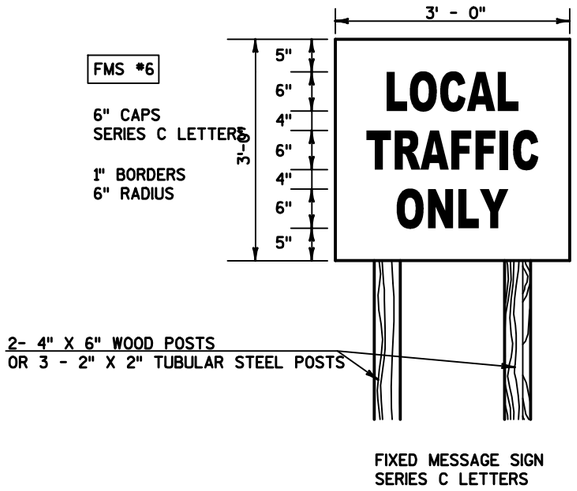
8. BEGIN XXX XX SIGNS SHALL BE SEPARATE PANELS, BUT SHALL BE CONSIDERED AS PART OF THE SIGN AND SHOULD BE REMOVED OR COVERED AFTER THEIR EFFECTIVE DATE. THE MONTH AND DAY SHALL BE AS DIRECTED BY THE ENGINEER IN THE FIELD.
9. SIGN BASE MATERIAL SHALL BE ACCORDING TO SECTION 643 & 637.
10. SIGNS TO BE IN PLACE 10 DAYS PRIOR TO CONSTRUCTION.

(X)= SIGN NUMBER

PROJECT NO:3200-02-73	HWY:USH 45	COUNTY:KENOSHA	FIXED MESSAGE SIGN DETAIL	SHEET 235	E

2





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 POSTS 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.

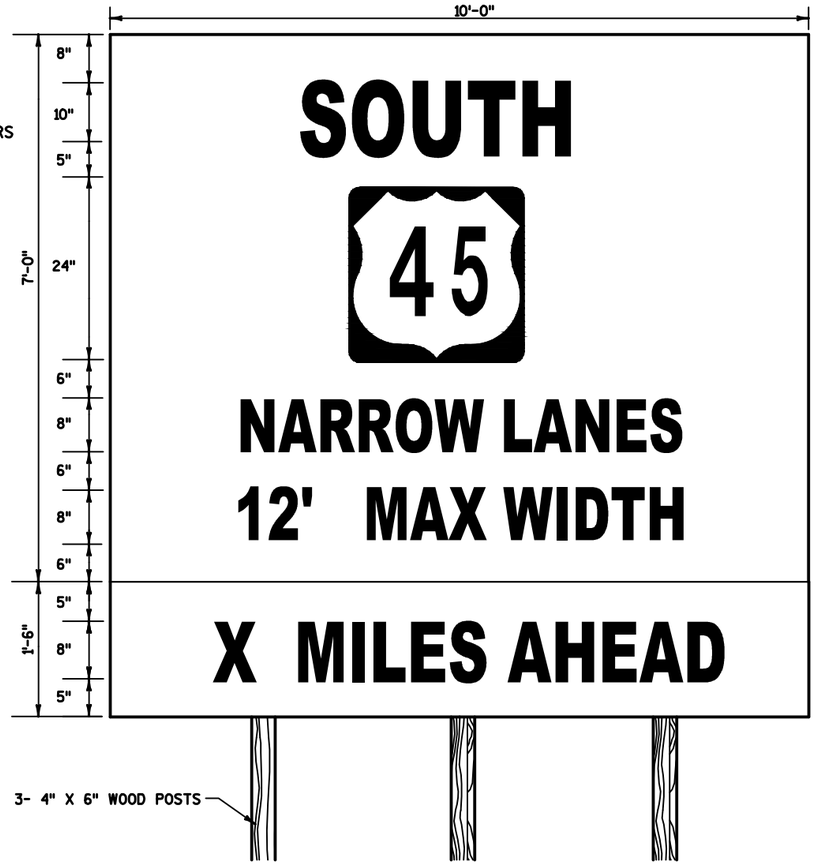
(X)= SIGN NUMBER

PROJECT NO:3200-02-73	HWY:USH 45	COUNTY:KENOSHA	FIXED MESSAGE SIGN DETAIL	SHEET 236	E

FMS *7 & *8

8" CAPS
SERIES D LETTERS

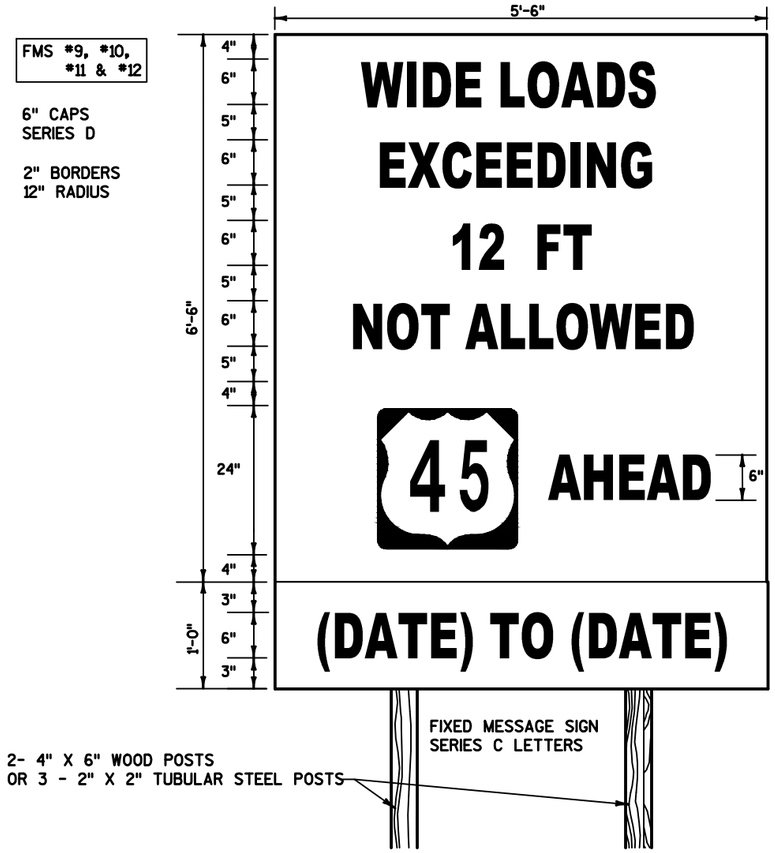
2" BORDER
12" RADIUS



FMS *9, *10, *11 & *12

6" CAPS
SERIES D

2" BORDERS
12" RADIUS



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 POSTS 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 WHITE FLUORESCENT REFLECTIVE
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.

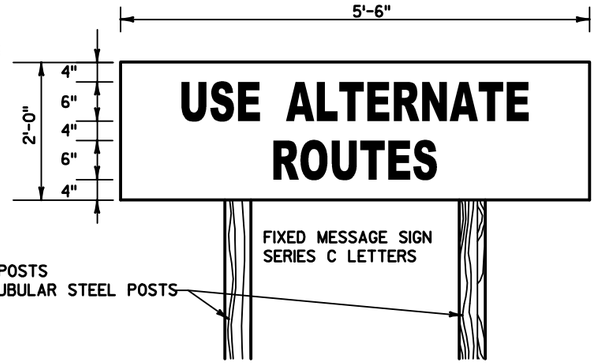
(X)= SIGN NUMBER

PROJECT NO:3200-02-73	HWY: USH 45	COUNTY: KENOSHA	FIXED MESSAGE SIGN DETAIL	SHEET 237	E

FMS *9a, *10a, *11a & *12a

6" CAPS
SERIES C LETTERS

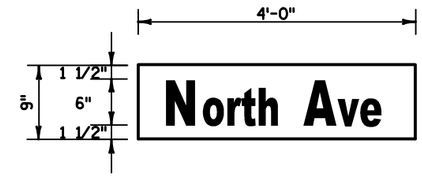
1" BORDERS
6" RADIUS



FMS *13

6" UPPER CASE
5" LOWER CASE
SERIES C LETTERS

1/2" BORDERS
2 1/4" RADIUS



IDOT STANDARD
FIXED MESSAGE SIGN
ORANGE/BLACK

FMS *13
ROAD NAME PLATE (SPECIAL)
9 IN. X VARIABLE, BLACK LEGEND ON FLOURESCENT ORANGE SHEETING.
THE SIGN SHALL USE DESIGN SERIES C LETTERS.
THE CAPITAL LETTERS SHALL BE 6 IN. WITH 5 IN. LOWER CASE LETTERS.
THE ROAD NAME PLATE SHALL HAVE A STANDARD BLACK BORDER.
THE ROAD NAME SIGN SHALL BE MOUNTED AS THE SECOND SIGN
IN ALL DETOUR ASSEMBLY SIGNS (M4-9).
THIS SIGN SHALL ALSO BE MOUNTED AS THE SECOND SIGN ON ALL
DETOUR SIGNS (W-20-2) AND ROAD CLOSED 1000 FT (W-20-3) SIGNS,
UNLESS DIRECTED OTHERWISE BY THE ENGINEER.

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 POSTS 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 WHITE FLUORESCENT REFLECTIVE
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"

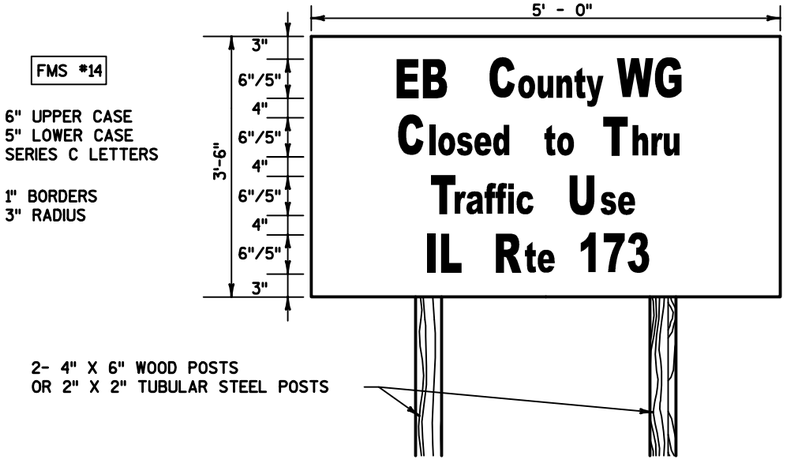
8. BEGIN XXX XX SIGNS SHALL BE SEPARATE PANELS, BUT SHALL BE CONSIDERED AS PART OF THE SIGN AND SHOULD BE REMOVED OR COVERED AFTER THEIR EFFECTIVE DATE. THE MONTH AND DAY SHALL BE AS DIRECTED BY THE ENGINEER IN THE FIELD.
9. SIGN BASE MATERIAL SHALL BE ACCORDING TO SECTION 643 & 637.
10. SIGNS TO BE IN PLACE 10 DAYS PRIOR TO CONSTRUCTION.

(X)= SIGN NUMBER

FMS *14

6" UPPER CASE
5" LOWER CASE
SERIES C LETTERS

1" BORDERS
3" RADIUS



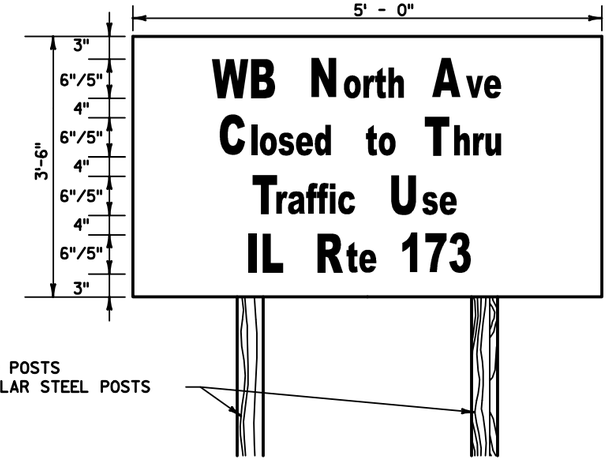
ILLINOIS FIXED MESSAGE SIGN

ORANGE/BLACK SIGN

FMS *15

6" UPPER CASE
5" LOWER CASE
SERIES C LETTERS

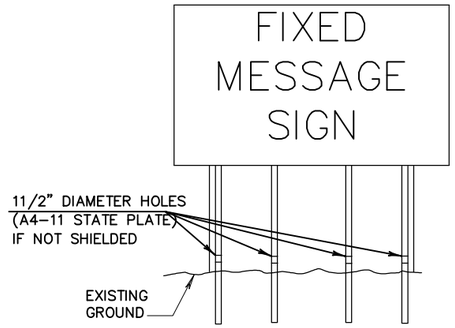
1" BORDERS
3" RADIUS



ILLINOIS FIXED MESSAGE SIGN

ORANGE/BLACK SIGN

PROJECT NO:3200-02-73	HWY:USH 45	COUNTY:KENOSHA	FIXED MESSAGE SIGN DETAIL	SHEET 239	E



FRONT VIEW

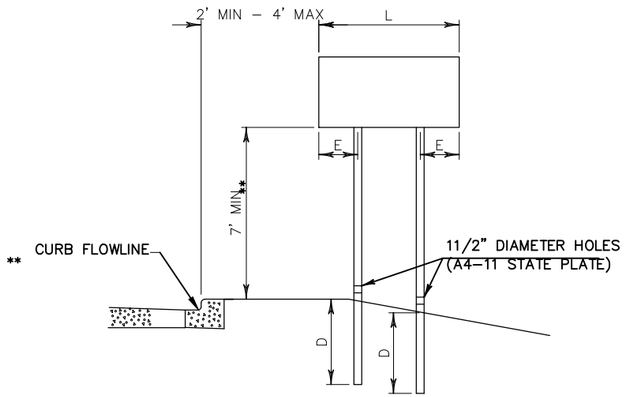
NOTES

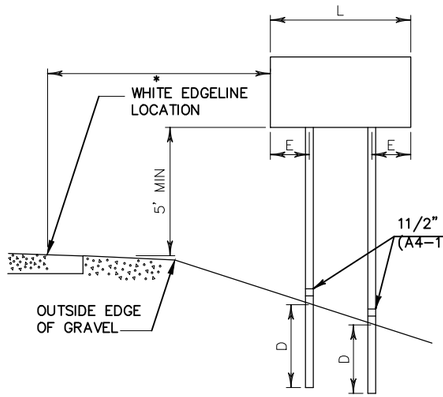
1. SEE TRAFFIC CONTROL SHEETS FOR SIGN LOCATIONS.
2. SEE TABLES BELOW FOR REQUIRED NUMBER OF POSTS.

* 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.

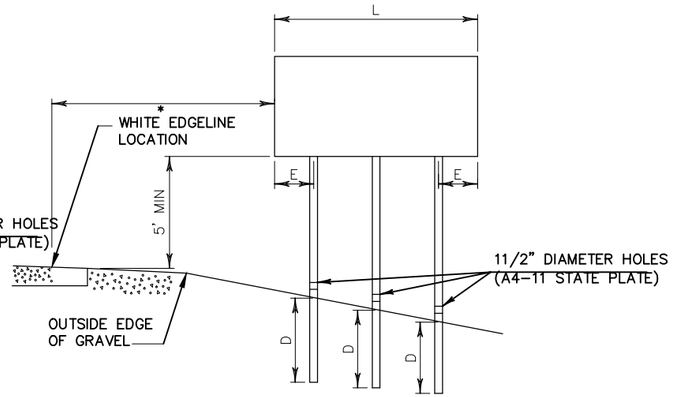
** THE EXISTENCE OF CURB AND GUTTER DOES NOT IN ITSELF MANDATE THE VERTICAL CLEARANCE ILLUSTRATED. THAT HEIGHT IS TYPICALLY MEASURED WHERE THERE IS SIDEWALK ADJACENT TO THE ROADWAY OR PARKING IS PERMITTED. IN THE ABSENCE OF SIDEWALK, VERTICAL CLEARANCE IS MEASURED FROM THE TOP OF THE CURB. IF NO SIDEWALK 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

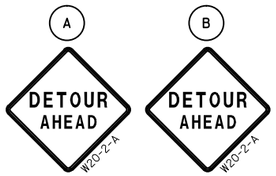
SIGN SHAPE OTHER THAN DIAMOND (THREE POSTS REQUIRED)	
L	E
GREATER THAN 120" LESS THAN 168"	12"

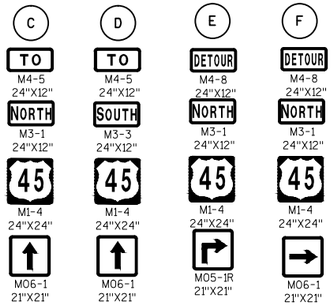
SIGN SHAPE OTHER THAN DIAMOND (FOUR POSTS REQUIRED)	
L	E
168" AND GREATER	12"

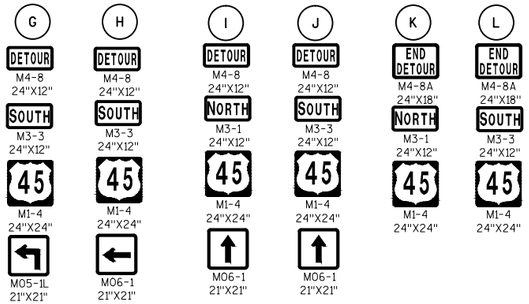
POST EMBEDMENT DEPTH

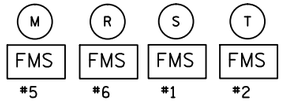
AREA OF SIGN INSTALLATION (SQ. FT.)	D (MIN)
20 OR LESS	4'
GREATER THAN 20	5'

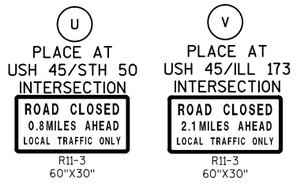
POST MOUNTING DETAIL FOR TRAFFIC CONTROL FIXED MESSAGE SIGNS

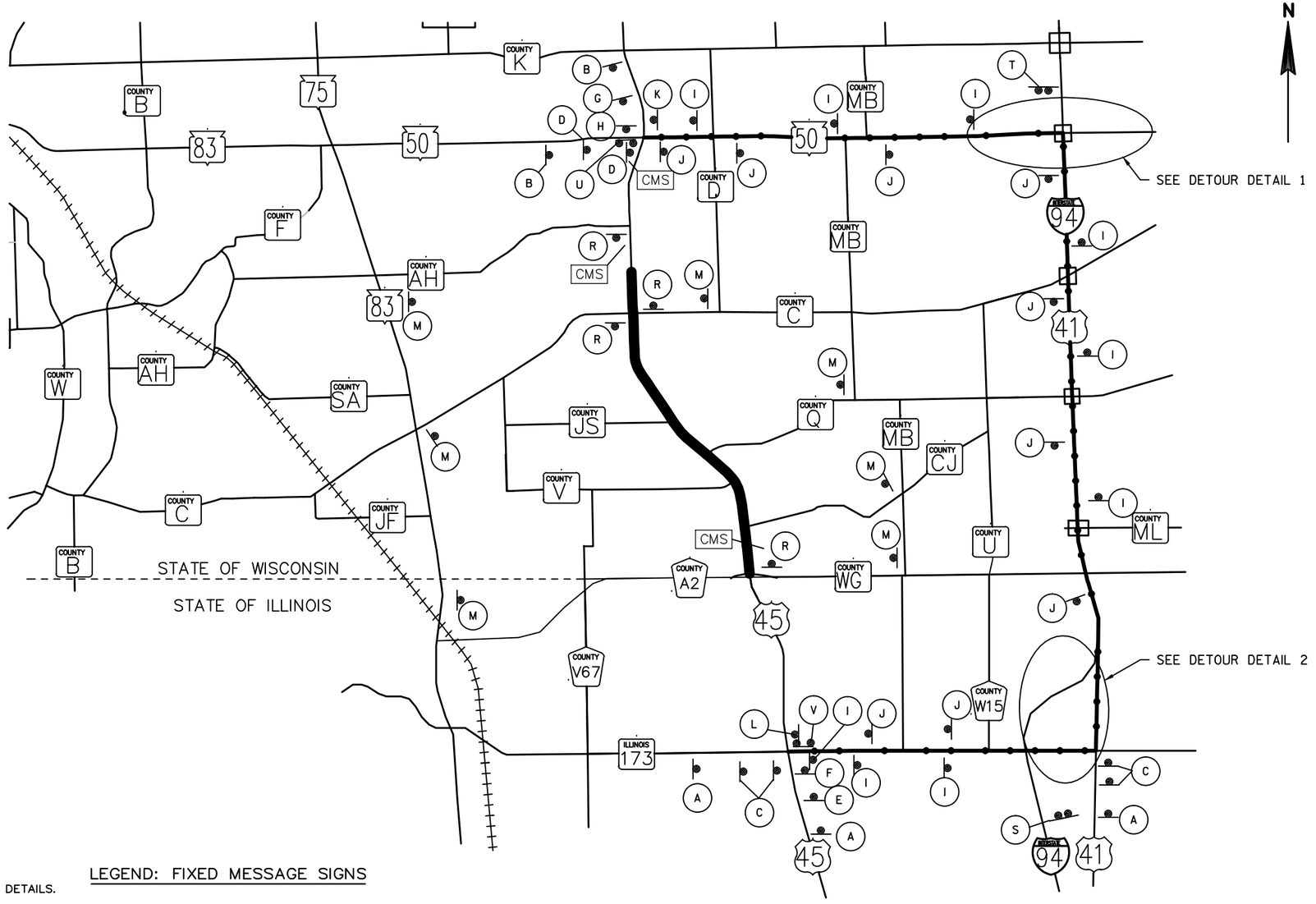












NOTES:

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2. CONTRACTOR SHOULD LOCATE FIXED MESSAGE SIGNS A MINIMUM OF 400' FROM ANY EXISTING TYPE "I" SIGN.
3. ALL FIXED MESSAGE SIGNS SHALL BE BLACK NON-REFLECTIVE MESSAGE ON ORANGE FLORESCENT REFLECTIVE BACKGROUND PER SPEC 643 & 637, UNLESS OTHERWISE NOTED IN THE SIGN DETAILS.
4. SEE FIXED MESSAGE SIGNS AND SPECIAL MESSAGE SIGNS LAYOUT SHEETS FOR MORE INFORMATION.
5. ALL SIGNS, TEMPORARY OR EXISTING, IN CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE COVERED. THE COVERING OF WOOD POST MOUNTED SIGNS IS INCLUDED UNDER ITEM 643.2000 TRAFFIC CONTROL DETOUR (ID 3200-02-73). IN LIEU OF COVERING WOOD POST MOUNTED SIGNS, THE CONTRACTOR MAY CHOOSE TO REMOVE AND REPLACE THEM.
6. SIGNS TO BE PLACED 10 DAYS PRIOR TO CONSTRUCTION.
7. ANY "STOP" SIGNS THAT ARE REMOVED FOR A CONSTRUCTION OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED.
8. SEE TRAFFIC CONTROL/STAGING PLAN FOR ADDITIONAL TRAFFIC CONTROL DETOUR SIGNS.
9. ALL DETOUR SIGNS ON IH-94 SHALL BE SIZE 3 SIGNS.

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

APPROXIMATE DURATION: MARCH TO JULY 2017

LEGEND

- STAGE 1 CONSTRUCTION LIMITS
- DETOUR ROUTE

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	DETOUR PLAN - STAGE 1	SHEET 241	E

2

A



B



C



D



E



F



G



H



I



J



K



L



M



N



P



Q



S



NOTES:

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9. ALL DETOUR SIGNS ON IH-94 SHALL BE SIZE 3 SIGNS.

T

PLACE AT CTH A2/V67 INTERSECTION



U

PLACE AT CTH WG/MB INTERSECTION



V

PLACE AT CTH WG/U INTERSECTION



X

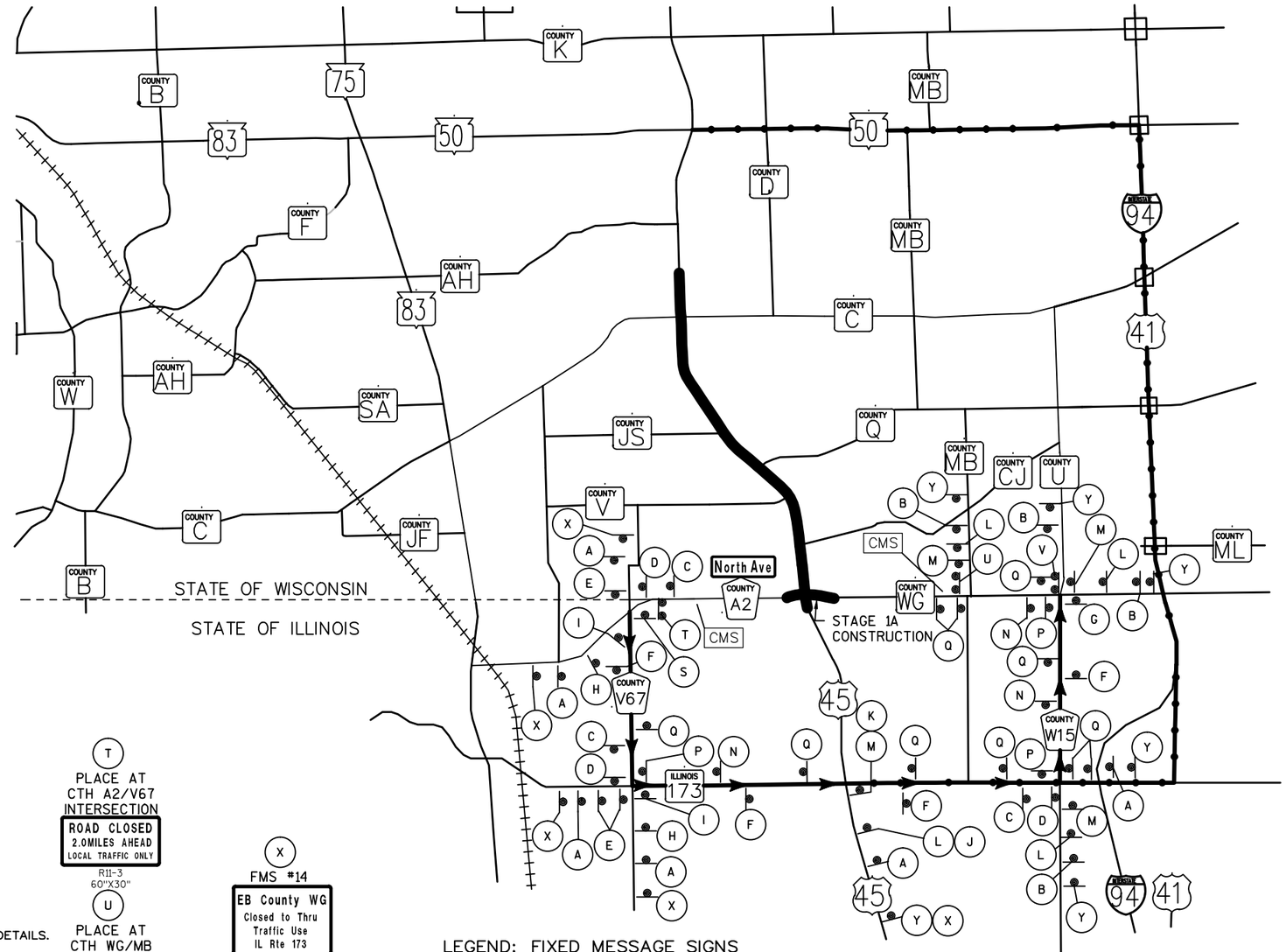
FMS #14



Y

FMS #15





LEGEND: FIXED MESSAGE SIGNS

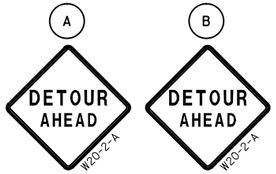
- EXISTING GUIDE SIGN TO BE COVERED
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- CMS CHANGEABLE MESSAGE SIGN

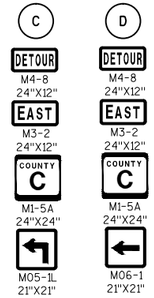
APPROXIMATE DURATION: MID MAY TO EARLY JUNE 2017

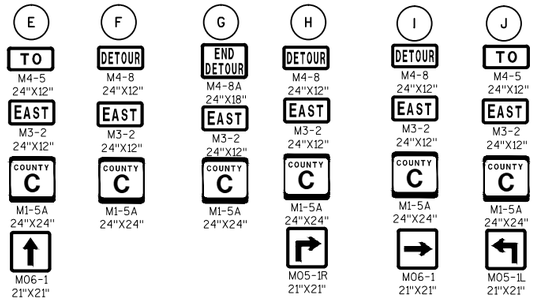
LEGEND

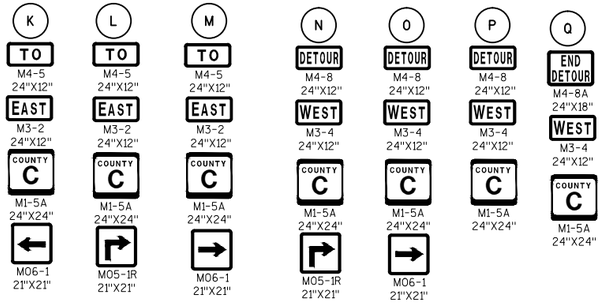
- STAGE 1 CONSTRUCTION LIMITS
- DETOUR ROUTE 45
- DETOUR ROUTE COUNTY WG

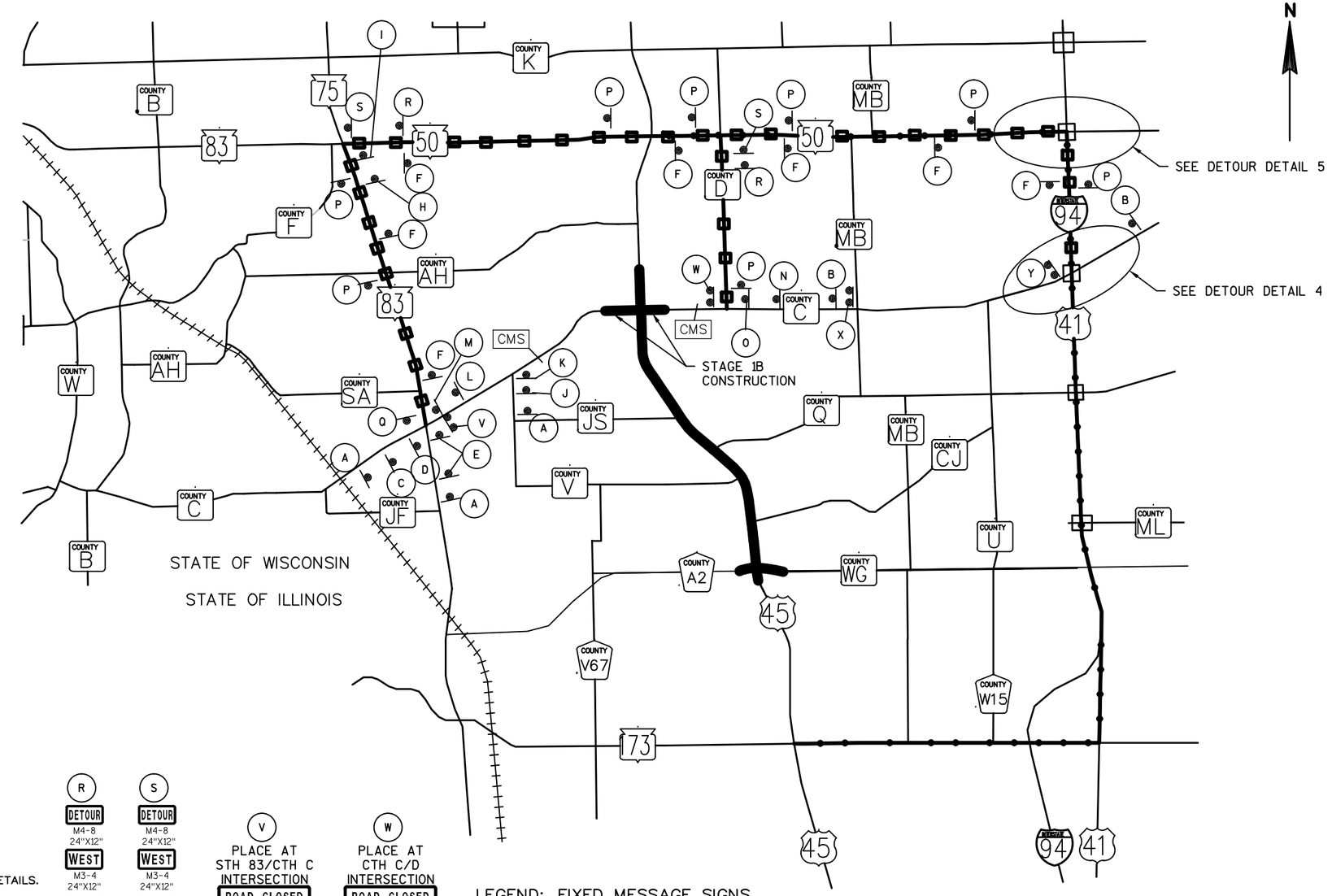
PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	DETOUR PLAN - STAGE 1A	SHEET 242	E

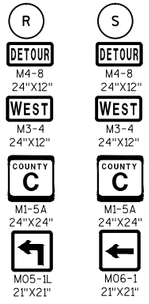


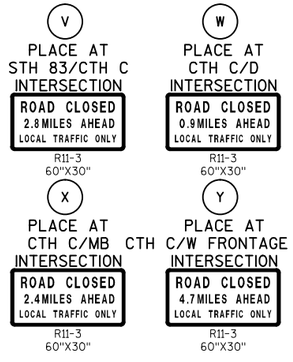












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LEGEND: FIXED MESSAGE SIGNS

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APPROXIMATE DURATION: EARLY JUNE TO MID JUNE 2017

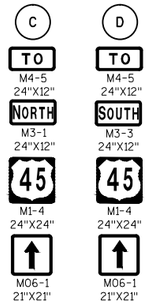
LEGEND

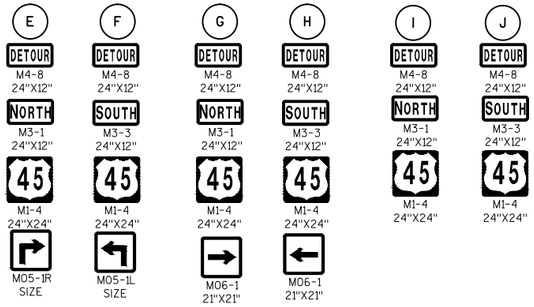
- STAGE 1 CONSTRUCTION LIMITS
- DETOUR ROUTE 45
- DETOUR ROUTE COUNTY C

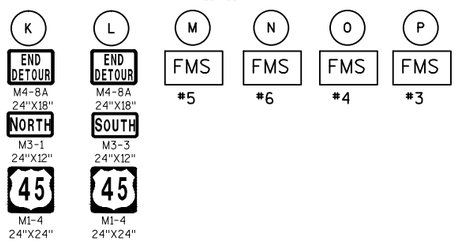
PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	DETOUR PLAN - STAGE 1B	SHEET 243	E

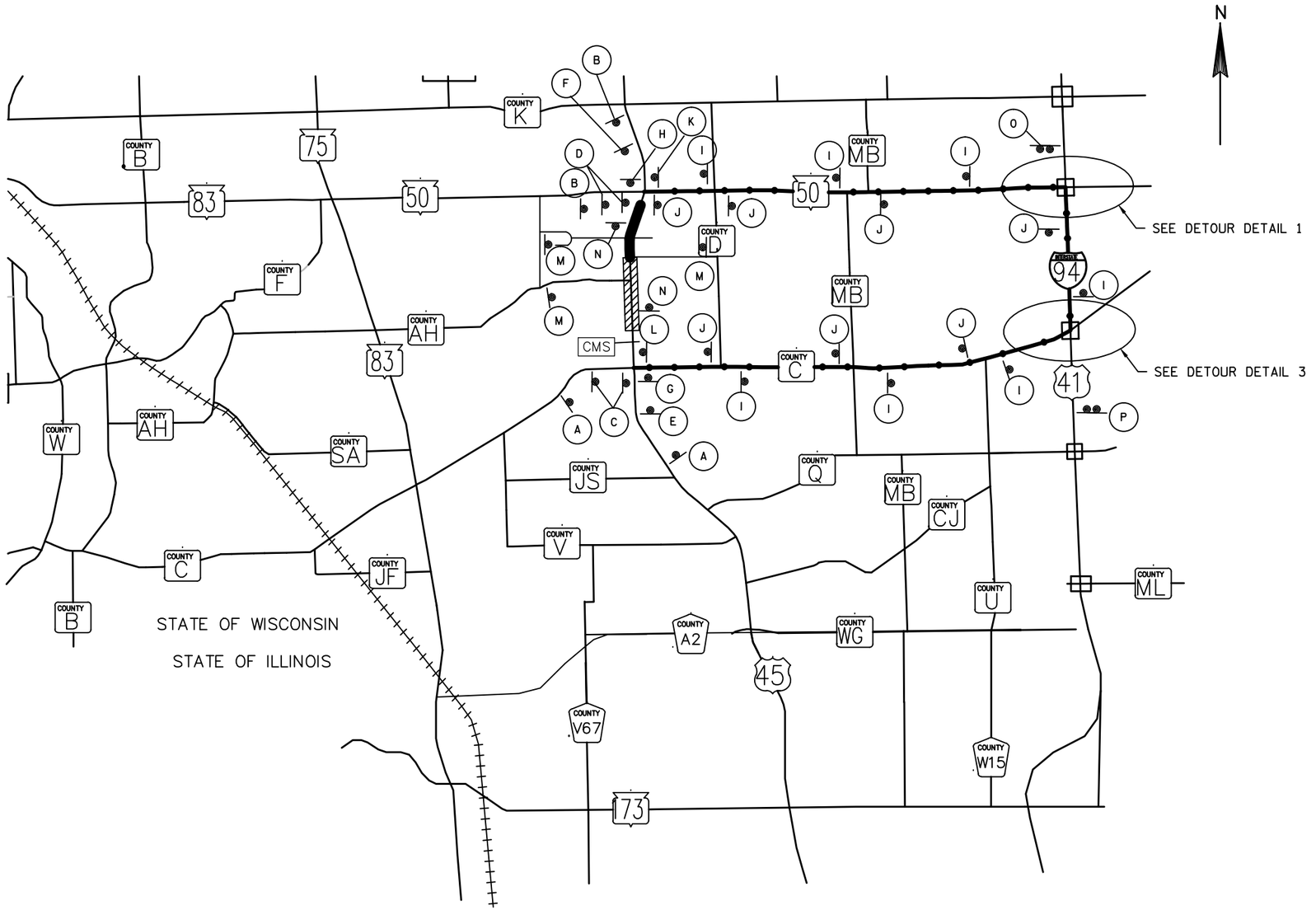












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LEGEND: FIXED MESSAGE SIGNS

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APPROXIMATE DURATION: JULY TO NOVEMBER 2017

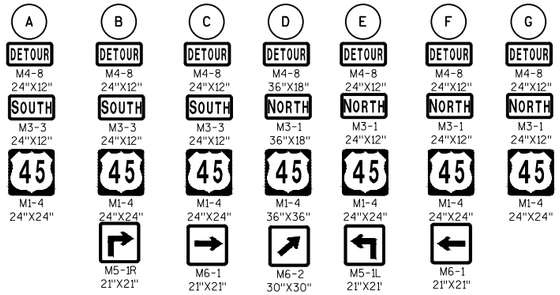
STAGE 2A:
START CONSTRUCTION OPERATIONS ON JUNE 12, 2017
WHILE STAGE 1 DETOUR IS STILL BEING USED.

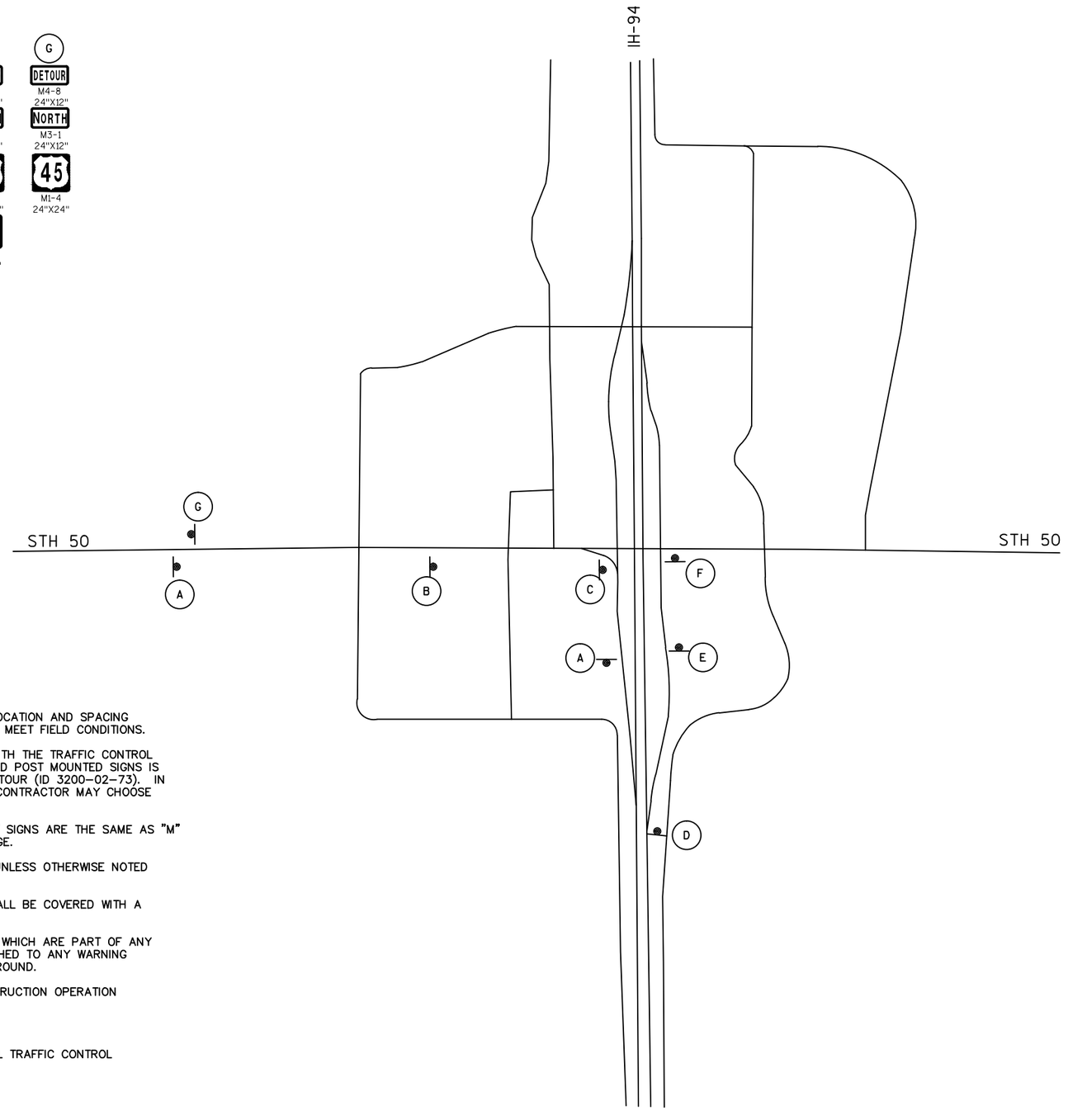
LEGEND

- STAGE 2A CONSTRUCTION LIMITS
- STAGE 2B CONSTRUCTION LIMITS
- DETOUR ROUTE 45

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	DETOUR PLAN - STAGE 2A & 2B	SHEET 244	E

2





NOTES

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3. "WO" SIGNS ARE THE SAME AS "W" SIGNS AND "MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS REFLECTIVE ORANGE.

4. ALL TRAFFIC CONTROL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED IN THE PLANS.

5. ALL EXISTING SIGNS THAT NEED TO BE COVERED SHALL BE COVERED WITH A BLANK ORANGE PANEL.

6. ALL M3 SERIES SIGNS (NORTH, EAST, SOUTH, WEST) WHICH ARE PART OF ANY DETOUR ROUTE MARKER SIGNING ASSEMBLY OR ATTACHED TO ANY WARNING SIGN SHALL BE BLACK LETTERING ON A WHITE BACKGROUND.

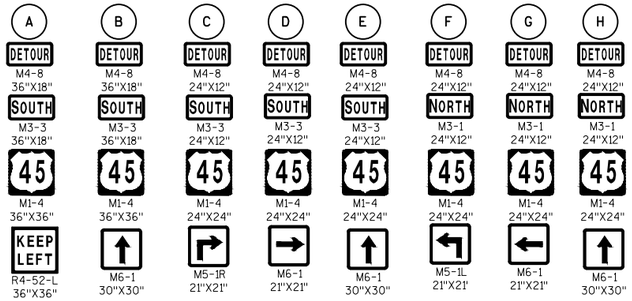
7. ANY "STOP" SIGNS THAT ARE REMOVED FOR A CONSTRUCTION OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED.

8. GRAYSCALE REPRESENTS EXISTING SIGNS.

9. SEE TRAFFIC CONTROL/STAGING PLAN FOR ADDITIONAL TRAFFIC CONTROL DETOUR SIGNS.

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	DETOUR PLAN - DETAIL 1 (STAGE 1, 1A, 1B, 2A & 2B)	SHEET 245	E

2



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4. ALL TRAFFIC CONTROL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED IN THE PLANS.

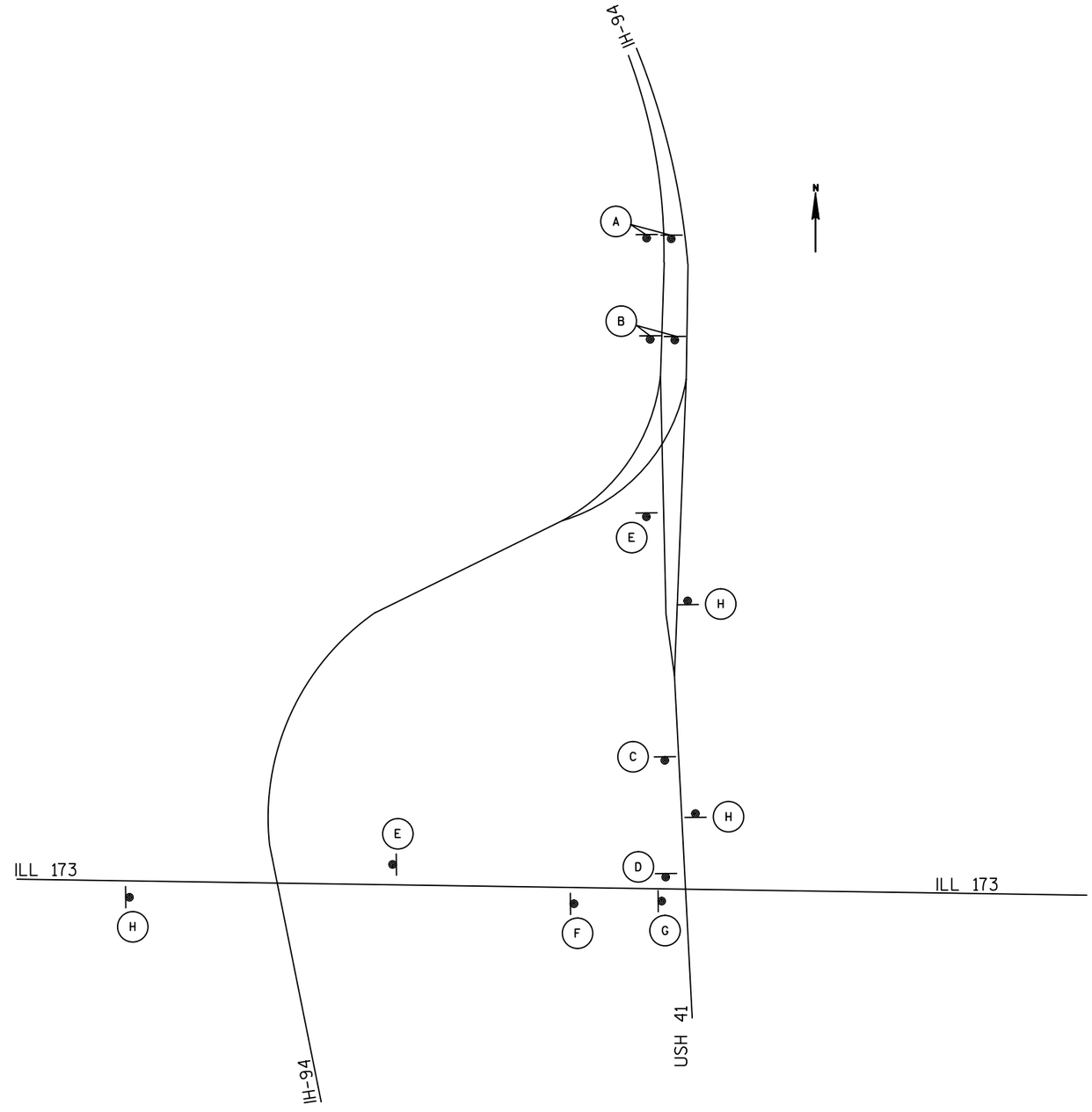
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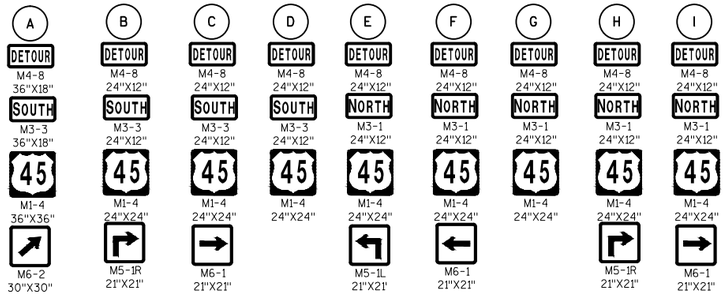
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8. GRAYSCALE REPRESENTS EXISTING SIGNS.

9. SEE TRAFFIC CONTROL/STAGING PLAN FOR ADDITIONAL TRAFFIC CONTROL DETOUR SIGNS.



PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	DETOUR PLAN - DETAIL 2 (STAGE 1, 1A & 1B)	SHEET 246	E



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4. ALL TRAFFIC CONTROL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED IN THE PLANS.

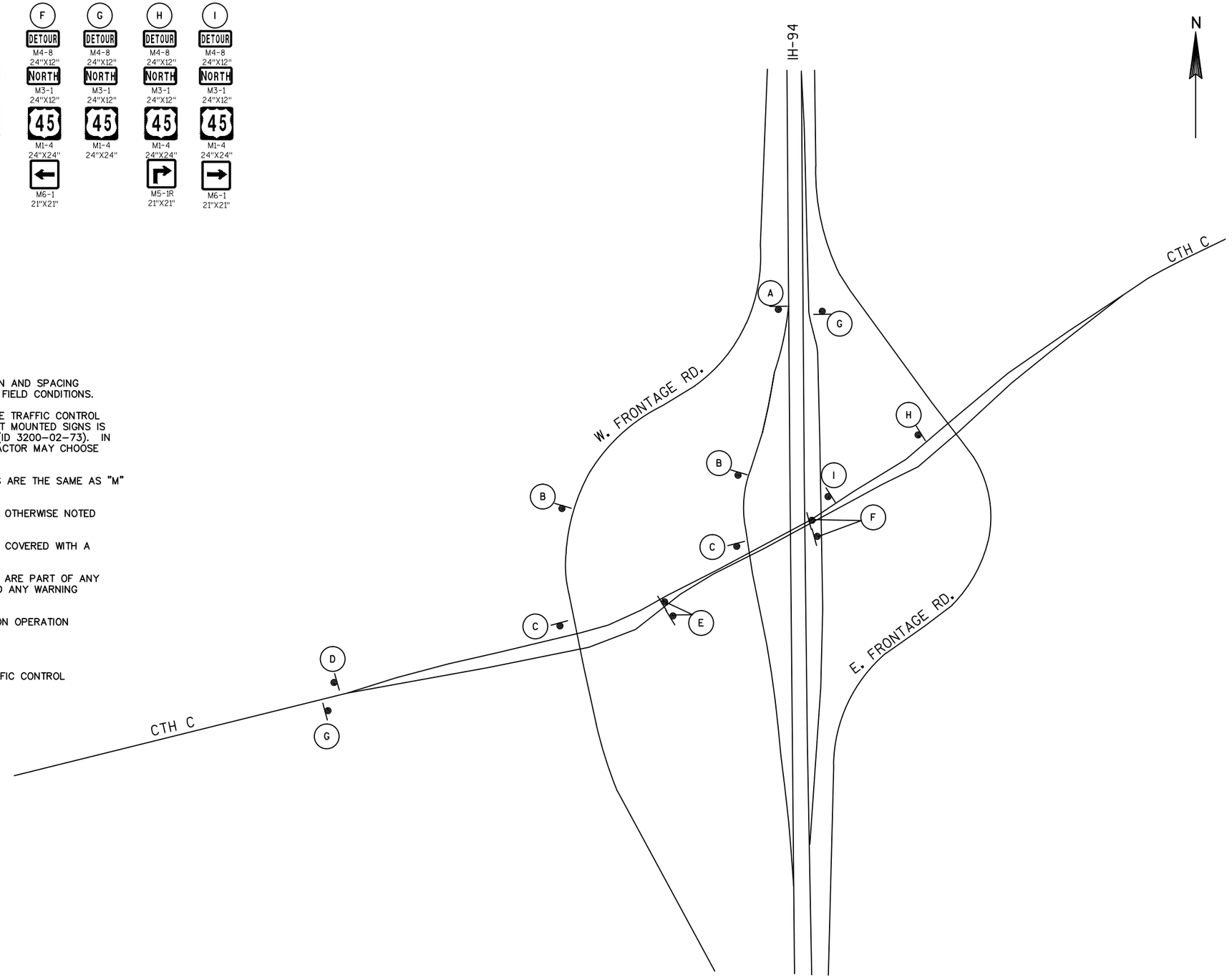
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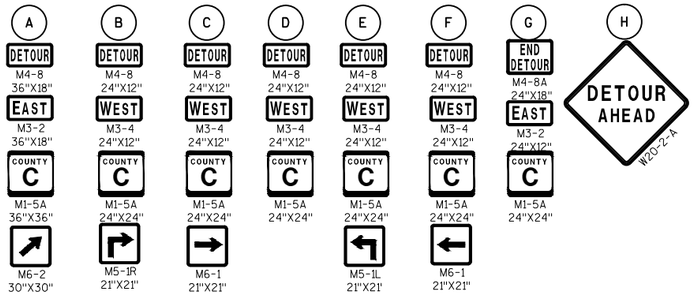
9. SEE TRAFFIC CONTROL/STAGING PLAN FOR ADDITIONAL TRAFFIC CONTROL DETOUR SIGNS.



2

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	DETOUR PLAN - DETAIL 3 (STAGE 2A & 2B)	SHEET 247	E

2



NOTES

1. SIGN LOCATIONS ARE APPROXIMATE. THE ACTUAL LOCATION AND SPACING MAY BE ADJUSTED AS DIRECTED BY THE ENGINEER TO MEET FIELD CONDITIONS.

2. ALL SIGNS, TEMPORARY OR EXISTING, IN CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE COVERED. THE COVERING OF WOOD POST MOUNTED SIGNS IS INCLUDED UNDER ITEM 643.2000 TRAFFIC CONTROL DETOUR (ID 3200-02-73). IN LIEU OF COVERING WOOD POST MOUNTED SIGNS, THE CONTRACTOR MAY CHOOSE TO REMOVE AND REPLACE THEM.

3. "WO" SIGNS ARE THE SAME AS "W" SIGNS AND "MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS REFLECTIVE ORANGE.

4. ALL TRAFFIC CONTROL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED IN THE PLANS.

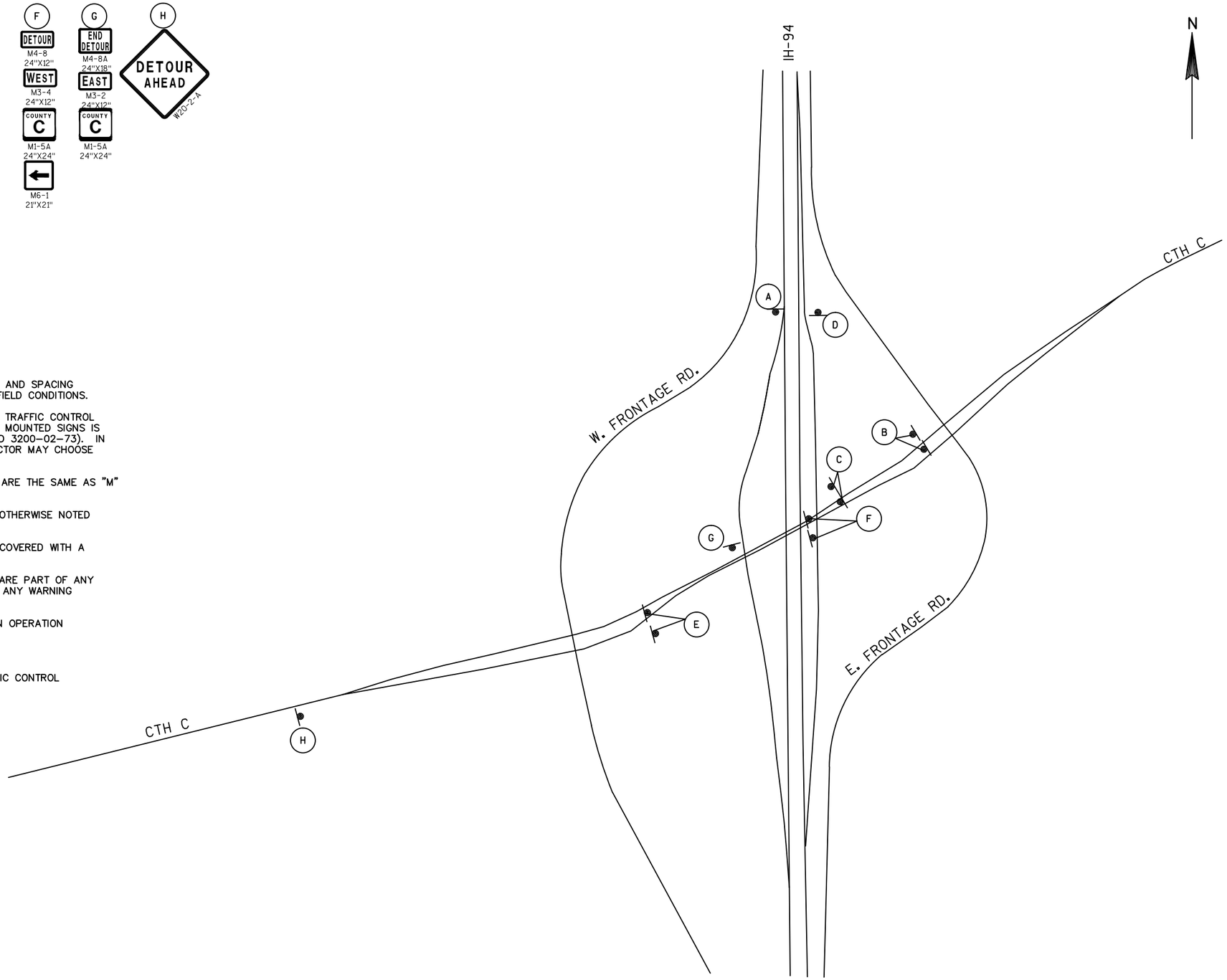
5. ALL EXISTING SIGNS THAT NEED TO BE COVERED SHALL BE COVERED WITH A BLANK ORANGE PANEL.

6. ALL M3 SERIES SIGNS (NORTH, EAST, SOUTH, WEST) WHICH ARE PART OF ANY DETOUR ROUTE MARKER SIGNING ASSEMBLY OR ATTACHED TO ANY WARNING SIGN SHALL BE BLACK LETTERING ON A WHITE BACKGROUND.

7. ANY "STOP" SIGNS THAT ARE REMOVED FOR A CONSTRUCTION OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED.

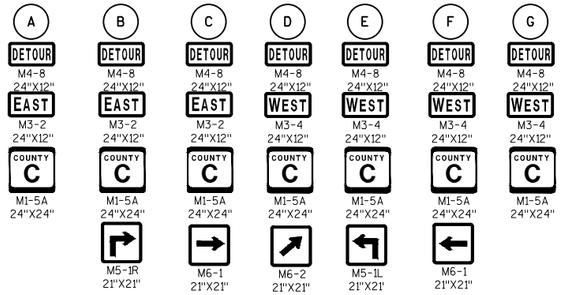
8. GRAYSCALE REPRESENTS EXISTING SIGNS.

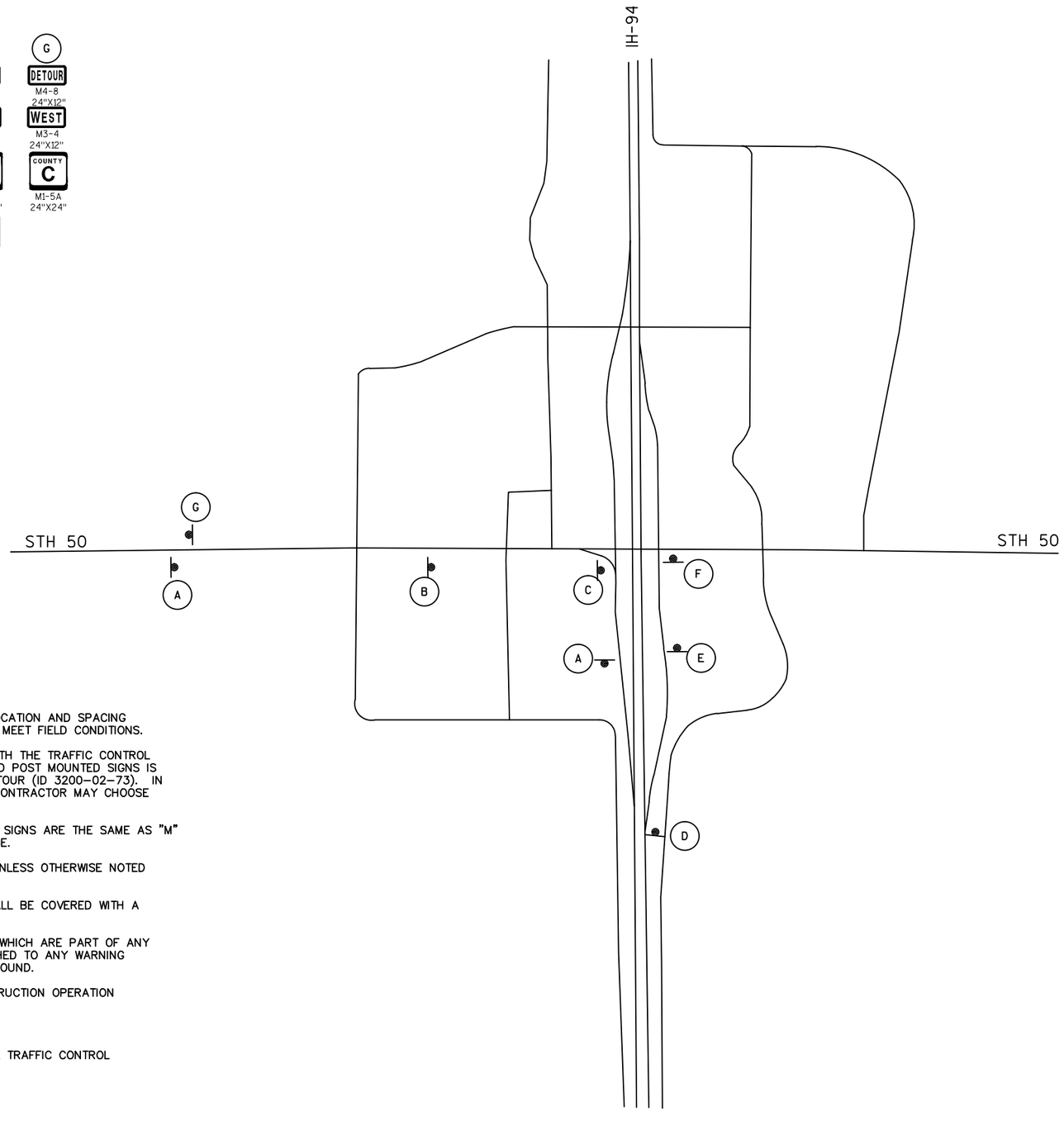
9. SEE TRAFFIC CONTROL/STAGING PLAN FOR ADDITIONAL TRAFFIC CONTROL DETOUR SIGNS.



PROJECT NO:3200-02-73	HWY:USH 45	COUNTY:KENOSHA	DETOUR PLAN - DETAIL 4 (STAGE 1B)	SHEET 248	E

2





NOTES

1. SIGN LOCATIONS ARE APPROXIMATE. THE ACTUAL LOCATION AND SPACING MAY BE ADJUSTED AS DIRECTED BY THE ENGINEER TO MEET FIELD CONDITIONS.

2. ALL SIGNS, TEMPORARY OR EXISTING, IN CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE COVERED. THE COVERING OF WOOD POST MOUNTED SIGNS IS INCLUDED UNDER ITEM 643.2000 TRAFFIC CONTROL DETOUR (ID 3200-02-73). IN LIEU OF COVERING WOOD POST MOUNTED SIGNS, THE CONTRACTOR MAY CHOOSE TO REMOVE AND REPLACE THEM.

3. "WO" SIGNS ARE THE SAME AS "W" SIGNS AND "MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS REFLECTIVE ORANGE.

4. ALL TRAFFIC CONTROL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED IN THE PLANS.

5. ALL EXISTING SIGNS THAT NEED TO BE COVERED SHALL BE COVERED WITH A BLANK ORANGE PANEL.

6. ALL M3 SERIES SIGNS (NORTH, EAST, SOUTH, WEST) WHICH ARE PART OF ANY DETOUR ROUTE MARKER SIGNING ASSEMBLY OR ATTACHED TO ANY WARNING SIGN SHALL BE BLACK LETTERING ON A WHITE BACKGROUND.

7. ANY "STOP" SIGNS THAT ARE REMOVED FOR A CONSTRUCTION OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED.

8. GRAYSCALE REPRESENTS EXISTING SIGNS.

9. SEE TRAFFIC CONTROL/STAGING PLAN FOR ADDITIONAL TRAFFIC CONTROL DETOUR SIGNS.

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	DETOUR PLAN - DETAIL 5	SHEET 249	E

CONTROL POINTS

POINT NUMBER	N	E	STATION	OFFSET	ELEV
CP 301	101805.207	574700.795	21+99.74	43.81 LT	780.24
CP 302	102687.012	574689.993	30+77.80	38.15 RT	769.12
CP 303	103799.246	574487.117	42+05.19	46.68 LT	777.49
CP 304	104854.390	574471.544	52+56.69	41.56 RT	779.12
CP 305	106446.481	574280.647	68+56.10	35.88 RT	770.45
CP 306	107352.163	573794.838	78+87.57	60.69 LT	776.40

NOTE: SEE SHEET 6 OF 7 FOR CURVE DATA

N

T 1 N R 21 E ILLINOIS 32 33

0.5" REBAR
Y=101,617.83
X=573,520.33

T 1 N R 21 E 29 28 32 33

CONC. MON. W/BRASS CAP
Y=106,912.04
X=573,474.95

MATCHLINE STA 80+00 SEE SHEET 2 OF 6

BEGIN CTH WG C/L
STA 43+55.72
Y=101,668.46
X=574,118.83

N72°43'59.9"E
136.27'

PC CTH WG1

PI CTH WG1

CURVE
CTH WG1

BEGIN PROJECT 3200-02-73
STA. 19+83.00
BEGIN USH 45 R/L
STA 19+50.00
Y=101,592.53
X=574,767.34

PT CTH WG1

S84°05'28.3"E
86.64'

CP 301

N06°02'04.0"W 2724.70'

CP 302

CP 303

USH 45

USH 45 R/L

STA 46+74.70 USH 45 R/L =
STA 50+00.00 121ST ST C/L
Y=104,500.11
X=574,462.83

PI 1
STA 46+74.70
Y=104,271.06
X=574,484.18

121ST ST

BEGIN 121ST ST C/L
STA 47+00.00
Y=104,472.27
X=574,164.12

N84°40'30.7"E
300.00'

CP 304

N05°19'29.2"W 1693.73'

119TH ST

BEGIN 119TH ST C/L
STA 47+00.00
Y=105,732.46
X=574,046.67

N84°40'30.7"E
300.00'

PC 7

CP 305

BEGIN CTH V C/L
STA 46+00.00
Y=107,086.92
X=573,558.31

N61°10'30.1"E
400.00'
CURVE 7

V HLC

CP 306

STA 77+65.88 USH 45 =
STA 50+00.00 CTH V
Y=107,279.77
X=573,908.75

PI 7

CTH WG

641.61'
S84°05'28.3"E

STA 21+30.95 USH 45 R/L =
STA 50+00.00 CTH WG C/L
Y=101,741.40
X=574,751.59

BEGIN USH 45 R/L
STA 19+50.00
Y=101,561.45
X=574,770.62

END CTH WG C/L
STA 56+41.61
Y=101,675.35
X=575,389.79

CTH CJ

STA 49+10.32 USH 45 R/L =
STA 50+00.00 CTH CJ C/L
Y=104,505.66
X=574,462.31

N78°40'41.6"E
300.00'

END CTH CJ C/L
STA 53+00.00
Y=104,564.55
X=574,756.47

STA 61+70.40 USH 45 R/L =
STA 50+00.00 119TH ST C/L
Y=105,760.30
X=574,345.37

T 1 N R 21 E 33 ILLINOIS

CONC. MON. W/BRASS CAP
Y=101,568.28
X=576,166.00

T 1 N R 21 E 33

CONC. MON. W/BRASS CAP
Y=104,217.09
X=576,143.68

T 1 N R 21 E 28 33 28 33

CONC. MON. W/BRASS CAP
Y=106,851.20
X=576,120.90

SHEET 1 OF 7

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	ALIGNMENT PLAN	SHEET 250 E

NOTE: SEE SHEET 6 OF 7 FOR CURVE DATA

N

CONC. MON. W/BRASS CAP
Y=109,584.60
X=570,787.84

T 1 N
R 21 E
29

SEE SHEET 1 OF 6
MATCHLINE
STA 80+00

80
CURVE 7
PT 7
90
N48°30'08.1"W 2379.36'
CP 307
100
STA 101+04.18 USH 45 R/L=
STA 50+00.00 CTH Q C/L
Y=108,946.31
X=572,286.38
CP 308
USH 45 R/L
110
PC 8
CP 309
USH 45
120
192ND AVE
BEGIN 192ND AVE C/L
STA 47+00.00
Y=110,085.18
X=570,621.85
N47°39'08.7"E
300.00'
PI 8
CURVE CTH JS1
PI CTH JS1
CTH JS
BEGIN CTH JS C/L
STA 46+00.00
Y=110,967.63
X=569,869.36
N86°53'13.8"E
294.73'
PC CTH JS1
CURVE 8
130
N54°56'11.0"E
1.97'
CP 310
PT CTH JS1
STA 130+10.00 USH 45 R/L=
STA 50+00.00 CTH JS C/L
Y=111,017.98
X=570,261.38
STA 134+18.09 USH 45 R/L=
STA 50+00.00 106TH ST C/L
Y=111,358.09
X=570,035.93
PT 8
N32°24'04.9"W 3127.00'
140
STA 140+00
MATCHLINE
SEE SHEET 3 OF 6
CP 311
106TH ST
N71°10'57.2"E
300.00'
END 106TH ST C/L
STA 53+00.00
Y=111,454.86
X=570,319.89

CTH Q
N53°24'02.3"E
400.00'
END CTH Q C/L
STA 54+00.00
Y=109,184.80
X=572,607.51

STA 120+75.14 USH 45 R/L=
STA 50+00.00 192ND AVE C/L
Y=110,287.27
X=570,843.57

T 1 N
R 21 E
28 29
29 28

CONC. MON. W/BRASS CAP
Y=109,555.24
X=573,445.75

T 1 N
R 21 E
29 29
20 20

CONC. MON. W/BRASS CAP
Y=112,253.16
X=570,763.05

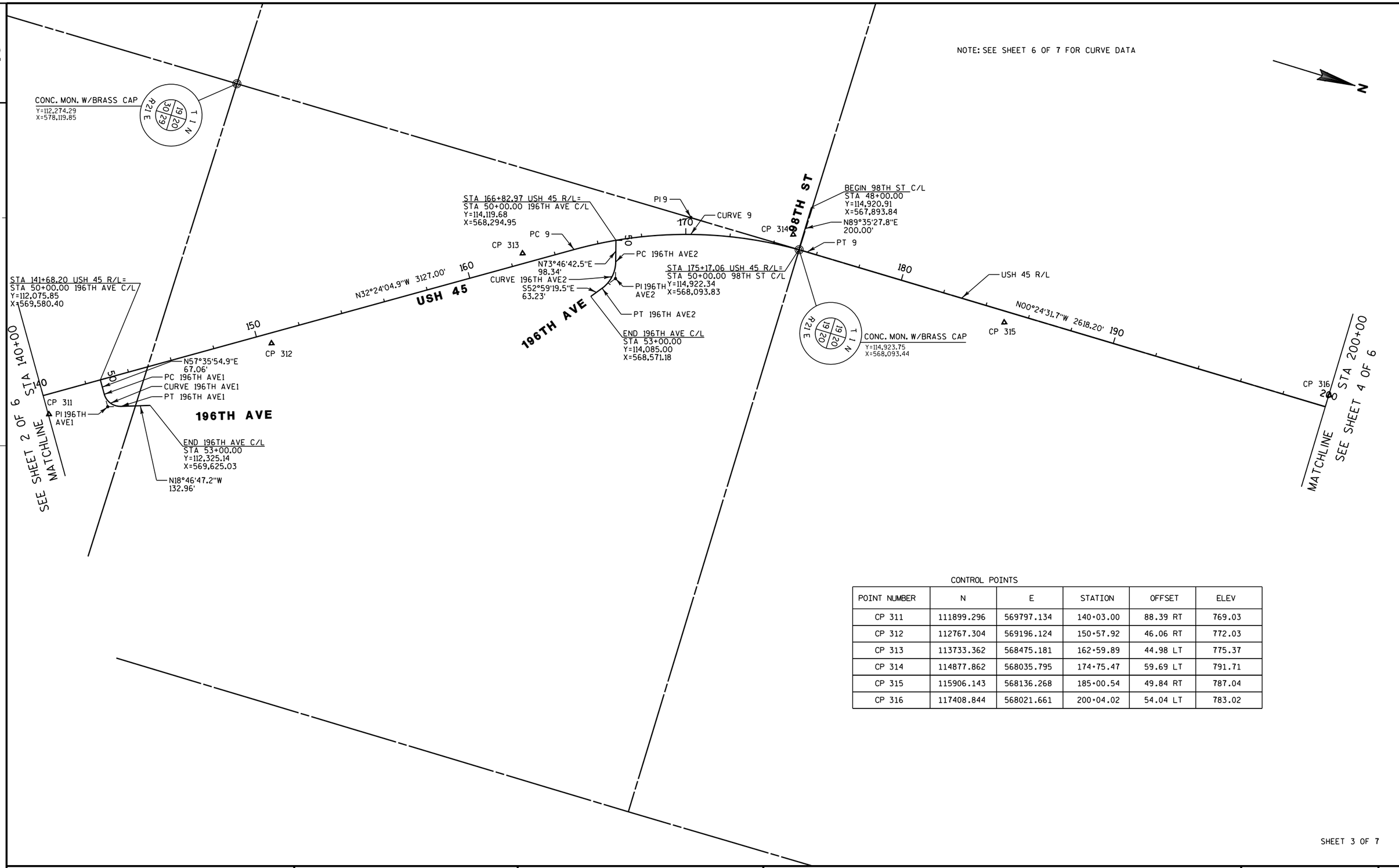
CONTROL POINTS

POINT NUMBER	N	E	STATION	OFFSET	ELEV
CP 307	108407.464	572957.883	92+44.19	41.34 RT	767.70
CP 308	109192.157	571936.383	105+29.21	47.77 LT	770.17
CP 309	109909.941	571277.234	115+00.35	47.80 RT	780.60
CP 310	110841.863	570447.896	127+57.10	47.43 RT	779.21
CP 311	111899.296	569797.134	140+03.00	88.39 RT	769.03

SHEET 2 OF 7

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	ALIGNMENT PLAN	SHEET 251	E

NOTE: SEE SHEET 6 OF 7 FOR CURVE DATA



CONTROL POINTS

POINT NUMBER	N	E	STATION	OFFSET	ELEV
CP 311	111899.296	569797.134	140+03.00	88.39 RT	769.03
CP 312	112767.304	569196.124	150+57.92	46.06 RT	772.03
CP 313	113733.362	568475.181	162+59.89	44.98 LT	775.37
CP 314	114877.862	568035.795	174+75.47	59.69 LT	791.71
CP 315	115906.143	568136.268	185+00.54	49.84 RT	787.04
CP 316	117408.844	568021.661	200+04.02	54.04 LT	783.02

SHEET 3 OF 7

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	ALIGNMENT PLAN	SHEET 252	E

NOTE: SEE SHEET 6 OF 7 FOR CURVE DATA

N

CONC. MON. W/BRASS CAP
Y=117,600.76
X=565,404.87

BEGIN CTH C C/L
STA 40+00.00
Y=117,586.96
X=567,074.53

CTH C C/L

S89°31'34.8"E 1000.00'

N00°24'31.7"W
2618.20'

CAST IRON PLATE IN CONCRETE W/ IRON COLLAR
PI5 USH 45 = PI CTH C1
STA 201+73.48 USH 45 R/L=
STA 50+00.00 CTH C C/L
Y=117,578.69
X=568,074.49

CAST IRON PLATE IN CONCRETE W/ 4" IRON COLLAR
PI6
STA 228+09.70
Y=120,214.52
X=568,029.52

CAST IRON PLATE IN CONCRETE W/ IRON COLLAR
PI7 USH 45 = END CTH AH C/L
STA 254+56.80 USH 45 R/L =
STA 50+00.00 CTH AH C/L
Y=122,861.20
X=567,982.27

STA 250+40.98 USH 45 R/L=
STA 50+00.00 86TH ST C/L
Y=122,445.45
X=567,989.69

BEGIN CTH AH C/L
STA 47+00.00
Y=122,862.85
X=567,682.27

CTH AH C/L

S89°41'05.6"E
300.00'

NO0°35'43.8"W 1651.17'

CP 317

CP 318
N00°58'39.3"W 2636.21'

CP 319

USH 45 R/L

CP 320

NO1°01'22.0"W 2647.10'

CP 321

CP 322

86TH ST C/L

N89°22'42.4"E
300.00'

END 86TH ST C/L
STA 53+00.00
Y=122,448.71
X=568,289.67

STA 256+19.14 USH 45 R/L =
STA 50+00.00 86TH PL C/L
Y=123,023.53
X=567,980.58

84TH PL C/L

S90°00'00.0"E
200.00'

END 84TH PL C/L
STA 52+00.00
Y=123,023.53
X=568,180.58

CTH C / WILMOT RD
S89°06'21.0"W 1000.00'

END CTH C C/L
STA 60+00.00
Y=117,563.08
X=569,074.37

CONC. MON. W/BRASS CAP
Y=117,537.40
X=570,720.09

CONTROL POINTS

POINT NUMBER	N	E	STATION	OFFSET	ELEV
CP 317	117650.819	568154.708	202+44.23	81.43 RT	782.03
CP 318	118659.784	568006.709	212+55.58	49.33 LT	774.13
CP 319	119896.996	568083.552	224+91.30	48.61 RT	774.46
CP 320	121058.208	568060.283	236+52.70	45.82 RT	772.92
CP 321	122327.177	567943.441	249+23.55	48.35 LT	777.98
CP 322	122914.020	568034.274	255+09.08	52.55 RT	799.56

SEE SHEET 3 OF 6
MATCHLINE · STA 200+00

MATCHLINE · STA 260+00
SEE SHEET 5 OF 6

SHEET 4 OF 7

NOTE: SEE SHEET 6 OF 7 FOR CURVE DATA

N

SEE SHEET 4 OF 6
STA 260+00
MATCHLINE

PI 8
STA 271+07.97
Y=124,512.28
X=567,965.10

STA 268+10.00 USH 45 R/L =
STA 50+00.00 83RD ST C/L
Y=124,214.33
X=567,968.20

STA 263+80.00 USH 45 R/L=
STA 50+00.00 84TH ST C/L
Y=123,784.36
X=567,972.67

N00°35'43.8"W
1651.17'

260

270

84TH ST

84TH ST C/L

S90°00'00.0"E
200.00'

CP 323

83RD ST

83RD ST C/L

S90°00'00.0"E
200.00'

82ND ST

BEGIN 82ND ST C/L
STA 48+00.00
Y=124,714.65
X=567,760.73

S90°00'00.0"E
200.00'

CP 324

USH 45

CP 134
N01°14'22.0"W 761.02'

PI 19

280

PI 82ND ST1
STA 273+10.38 USH 45 R/L
STA 50+00.00 82ND ST C/L
Y=124,714.65
X=567,960.73

PC 19

CP 325

S90°00'00.0"E
200.00'

80TH ST

80TH ST C/L

PT 19

CURVE 19

STA 279+65.09 USH 45 R/L =
STA 50+00.00 80TH ST C/L
Y=125,368.96
X=567,954.25

S90°00'00.0"E
197.85'

290

PC 79TH ST1

CP 326

CURVE 79TH ST1

S69°44'25.0"E
96.29'

PI 79TH ST1

79TH ST C/L

PT 79TH ST1

S52°21'07.0"E
117.50'

79TH ST

END 79TH ST C/L
STA 52+74.49
Y=126,124.35
X=568,504.27

END 84TH ST C/L
STA 52+00.00
Y=123,784.36
X=568,172.67

END 83RD ST C/L
STA 52+00.00
Y=124,214.33
X=568,168.20

END 82ND ST C/L
STA 52+00.00
Y=124,714.65
X=568,160.73

END 80TH ST C/L
STA 51+97.85
Y=125,368.96
X=568,152.10

EQUATION

STATION EQUATION
STA 300+87.24 STH 50 BK =
STA 300+82.01 STH 50 AH
Y=127,363.63
X=568,675.92

T 11 N
R 21 E
7 8

CONC. MON. W/BRASS CAP
Y=125,511.11
X=567,954.72

STA 289+09.45 USH 45 R/L =
STA 50+00.00 79TH ST C/L
Y=126,258.73
X=568,268.00

N20°15'48.8"E 1993.07'

USH 45 R/L

CP 327

300

PI 20

PC 20

CURVE 20

PT 20

PC 21

CURVE 21

CP 328

N24°59'32.2"E
100.94'

310

320

PT 21

N06°09'26.8"W

PI 21

END USH 45 R/L
STA 316+14.18
Y=128,840.15
X=568,991.22

T 11 N
R 21 E
7 8 9 5

CONC. MON. W/ALUM CAP
Y=128,152.90
X=567,935.93

END PROJECT 3200-02-73
STA. 302+78
Y=127,544.30
X=568,751.70

CONTROL POINTS

POINT NUMBER	N	E	STATION	OFFSET	ELEV
CP 323	123770.753	568102.449	263+65.05	129.63 RT	775.18
CP 324	124698.362	567780.682	272+98.00	180.35 LT	791.66
CP 325	125353.835	568144.173	279+81.83	192.23 RT	780.91
CP 326	126275.068	568335.531	289+48.71	57.69 RT	758.58
CP 327	127141.819	568503.138	298+19.87	85.26 LT	769.87
CP 328	127698.769	568816.074	APPROXIMATELY 500' SOUTH OF STH 50		782.99

SHEET 5 OF 7

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	ALIGNMENT PLAN	SHEET 254 E

2

USH 45

No.	PI (STA)	PI (Y,X)		DELTA	DEGREE	TANGENT	LENGTH	EXTERNAL	RADIUS	PC (STA)	PC (Y,X)		PT (STA)	PT (Y,X)	
7	76+63.97	107247.43	574206.76	43°10'38.9" LT	1°45'00.0"	1295.54	2467.28	247.01	3274.04	63+68.43	105957.48	574327.00	88+35.72	108105.85	573236.43
8	122+95.59	110398.32	570645.04	16°06'03.1" RT	0°45'00.0"	1080.51	2146.78	76.03	7639.44	112+15.08	109682.39	571454.33	133+61.86	111310.62	570066.06
9	170+36.37	114413.06	568097.08	31°59'33.2" RT	3°00'00.0"	547.51	1066.42	76.93	1909.86	164+88.86	113950.79	568390.46	175+55.28	114960.56	568093.18
19	279+82.92	125387.03	567946.18	21°30'10.8" RT	9°32'57.5"	113.93	225.18	10.72	600.00	278+68.99	125273.13	567948.64	280+94.17	125493.91	567985.64
20	301+74.77	127450.64	568708.04	4°43'43.4" RT	2°33'01.5"	92.76	185.41	1.91	2246.53	300+82.01	127363.62	568675.92	302+67.42	127534.71	568747.23
21	310+07.08	128205.12	569059.73	31°08'59.0" LT	2°30'01.2"	638.72	1245.82	87.35	2291.52	303+68.36	127626.20	568789.88	316+14.18	128840.15	568991.22

CTH WG

No.	PI (STA)	PI (Y,X)		DELTA	DEGREE	TANGENT	LENGTH	EXTERNAL	RADIUS	PC (STA)	PC (Y,X)		PT (STA)	PT (Y,X)	
CTH WG1	47+05.60	101772.31	574452.94	23°10'31.7" RT	5°30'0.0"	213.61	421.37	21.67	1041.74	44+91.99	101708.91	574248.96	49+13.36	101750.32	574665.41

CTH JS

No.	PI (STA)	PI (Y,X)		DELTA	DEGREE	TANGENT	LENGTH	EXTERNAL	RADIUS	PC (STA)	PC (Y,X)		PT (STA)	PT (Y,X)	
CTH JS1	49+47.69	110986.50	570216.53	31°57'02.8" LT	30°58'14.4"	52.96	103.16	7.43	185.00	48+94.73	110983.63	570163.65	49+97.89	111016.93	570259.89

196TH AVE (SOUTH)

No.	PI (STA)	PI (Y,X)		DELTA	DEGREE	TANGENT	LENGTH	EXTERNAL	RADIUS	PC (STA)	PC (Y,X)		PT (STA)	PT (Y,X)	
196TH AVE1	51+26.06	112143.40	569686.83	76°22'42.1" LT	76°23'39.7"	59.00	99.98	20.42	75.00	50+67.06	112111.787	569637.02	51+67.04	112199.26	569667.84

196TH AVE (NORTH)

No.	PI (STA)	PI (Y,X)		DELTA	DEGREE	TANGENT	LENGTH	EXTERNAL	RADIUS	PC (STA)	PC (Y,X)		PT (STA)	PT (Y,X)	
196TH AVE2	51+73.01	114168.00	568461.06	53°13'57.8" RT	38°27'12.7"	74.67	138.43	17.66	149.00	50+98.34	114147.15	568389.37	52+36.77	114123.06	568520.69

79TH ST

No.	PI (STA)	PI (Y,X)		DELTA	DEGREE	TANGENT	LENGTH	EXTERNAL	RADIUS	PC (STA)	PC (Y,X)		PT (STA)	PT (Y,X)	
79TH ST1	51+26.87	126214.80	568387.03	17°23'18.0" RT	28°38'52.4"	30.58	60.70	2.32	200.00	50+96.29	126225.39	568358.34	51+56.99	126196.12	568411.24

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\027206_AD.DWG
LAYOUT NAME - ****
PLOT DATE : 4/5/2016 5:12 PM PLOT BY : MAAS, JOSEPH A PLOT NAME : PLOT SCALE :
WISDOT/CADDS SHEET 42

USH 45

SUPERELEVATION DESCRIPTION	STATION	SLOPE LT OF CROWN	SLOPE RT OF CROWN
MATCH EXISTING	19+83	-0.50%	-1.25%
BEGIN REDUCED CROWN AT CTH WG SIGNAL	21+00	-1.00%	-1.00%
END REDUCED CROWN AT CTH WG SIGNAL	21+75	-1.00%	-1.00%
BEGIN NORMAL CROWN	22+25	-2.00%	-2.00%
END NORMAL CROWN	62+42	-2.00%	-2.00%
REMOVE CROWN	62+96	-2.00%	0.00%
BEGIN FULL SUPER	64+05	-4.08%	4.08%
END FULL SUPER	87+99	-4.08%	4.08%
REMOVE CROWN	89+08	-2.00%	0.00%
BEGIN NORMAL CROWN	89+62	-2.00%	-2.00%
END NORMAL CROWN	111+25	-2.00%	-2.00%
REMOVE CROWN	111+78	0.00%	-2.00%
BEGIN FULL SUPER	112+34	2.11%	-2.11%
END FULL SUPER	133+43	2.11%	-2.11%
REMOVE CROWN	133+99	0.00%	-2.00%
BEGIN NORMAL CROWN	134+52	-2.00%	-2.00%
END NORMAL CROWN	163+38	-2.00%	-2.00%
REMOVE CROWN	163+91	0.00%	-2.00%
BEGIN FULL SUPER	165+38	5.49%	-5.49%
END FULL SUPER	175+06	5.49%	-5.49%
REMOVE CROWN	176+53	0.00%	-2.00%
BEGIN NORMAL CROWN	177+06	-2.00%	-2.00%
END NORMAL CROWN	200+00	-2.00%	-2.00%
BEGIN REDUCED CROWN AT CTH C SIGNAL	201+00	-1.00%	-1.00%
END REDUCED CROWN AT CTH C SIGNAL	202+50	-1.00%	-1.00%
BEGIN NORMAL CROWN	203+50	-2.00%	-2.00%
END NORMAL CROWN	277+54	-2.00%	-2.00%
REMOVE CROWN	278+37	0.00%	-2.00%
BEGIN FULL SUPER	279+20	2.00%	-2.00%
END FULL SUPER	280+44	2.00%	-2.00%
REMOVE CROWN	281+27	0.00%	-2.00%
BEGIN NORMAL CROWN	282+10	-2.00%	-2.00%

CTH WG

SUPERELEVATION DESCRIPTION	STATION	SLOPE LT OF CROWN	SLOPE RT OF CROWN
MATCH EXISTING	45+50	-0.50%	-4.20%
BEGIN FULL SUPER	46+75	4.20%	-4.20%
END FULL SUPER	48+81	4.20%	-4.20%
BEGIN NORMAL CROWN	50+50	-2.00%	-2.00%

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SHEET 7 OF 7

DATE 13JUL16 E S T I M A T E O F Q U A N T I T I E S

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	3200-02-73 QUANTITY
0010	201.0105	Clearing	STA	98.000	98.000
0020	201.0205	Grubbing	STA	98.000	98.000
0030	202.0105	Roadside Clearing	STA	5.000	5.000
0040	203.0100	Removing Small Pipe Culverts	EACH	92.000	92.000
0050	203.0200	Removing Old Structure (station) 01. 69+92	LS	1.000	1.000
0060	203.0200	Removing Old Structure (station) 02. 135+35	LS	1.000	1.000
0070	203.0200	Removing Old Structure (station) 03. 135+48	LS	1.000	1.000
0080	203.0200	Removing Old Structure (station) 04. 146+31	LS	1.000	1.000
0090	203.0200	Removing Old Structure (station) 05. 214+03	LS	1.000	1.000
0100	203.0200	Removing Old Structure (station) 06. 47+39 CTH C	LS	1.000	1.000
0110	204.0100	Removing Pavement	SY	11,850.000	11,850.000
0120	204.0110	Removing Asphaltic Surface	SY	12,644.000	12,644.000
0130	204.0115	Removing Asphaltic Surface Butt Joints	SY	2,262.000	2,262.000
0140	204.0120	Removing Asphaltic Surface Milling	SY	69,841.000	69,841.000
0150	204.0150	Removing Curb & Gutter	LF	5,560.000	5,560.000
0160	204.0155	Removing Concrete Sidewalk	SY	53.000	53.000
0170	204.0165	Removing Guardrail	LF	430.000	430.000
0180	204.0180	Removing Delineators and Markers	EACH	34.000	34.000
0190	204.0195	Removing Concrete Bases	EACH	20.000	20.000
0200	204.0220	Removing Inlets	EACH	8.000	8.000
0210	204.0245	Removing Storm Sewer (size) 02. 18-Inch	LF	174.000	174.000
0220	204.0245	Removing Storm Sewer (size) 02. 18-Inch	LF	72.000	72.000
0230	204.0245	Removing Storm Sewer (size) 03. 24-Inch	LF	212.000	212.000
0240	204.9060.S	Removing (item description) 01. Partial Small Pipe Culverts	EACH	4.000	4.000
0250	204.9090.S	Removing (item description) 02. Partial Pipe Underdrain 12-Inch	LF	108.000	108.000
0260	205.0100	Excavation Common	CY	69,708.000	69,708.000
0270	205.0400	Excavation Marsh	CY	3,100.000	3,100.000
0280	205.0501.S	Excavation, Hauling, and Disposal of Petroleum Contaminated Soil	TON	1,946.000	1,946.000
0290	209.0100	Backfill Granular	CY	5,401.000	5,401.000
0300	211.0100	Prepare Foundation for Asphaltic Paving (project) 01. 3200-02-73	LS	1.000	1.000
0310	213.0100	Finishing Roadway (project) 01. 3200-02-73	EACH	1.000	1.000
0320	305.0110	Base Aggregate Dense 3/4-Inch	TON	5,166.000	5,166.000
0330	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	65,036.000	65,036.000
0340	305.0410	Aggregate Detours	TON	100.000	100.000
0350	311.0110	Breaker Run	TON	8,600.000	8,600.000
0360	390.0203	Base Patching Asphaltic	SY	300.000	300.000
0370	390.0303	Base Patching Concrete	SY	2,470.000	2,470.000
0380	415.0085	Concrete Pavement 8 1/2-Inch	SY	27,670.000	27,670.000
0390	415.0210	Concrete Pavement Gaps	EACH	3.000	3.000
0400	416.0170	Concrete Driveway 7-Inch	SY	685.000	685.000
0410	416.0610	Drilled Tie Bars	EACH	430.000	430.000
0420	416.0620	Drilled Dowel Bars	EACH	4,292.000	4,292.000
0430	416.1010	Concrete Surface Drains	CY	93.700	93.700
0440	440.4410	Incentive IRI Ride	DOL	10,000.000	10,000.000
0450	450.4000	HMA Cold Weather Paving	TON	6,687.000	6,687.000

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LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	3200-02-73 QUANTITY
0460	455.0605	Tack Coat	GAL	4,210.000	4,210.000
0470	460.2000	Incentive Density HMA Pavement	DOL	26,470.000	26,470.000
0480	465.0115	Asphaltic Surface Detours	TON	50.000	50.000
0490	465.0120	Asphaltic Surface Driveways and Field Entrances	TON	940.000	940.000
0500	465.0425	Asphaltic Shoulder Rumble Strips 2-Lane Rural	LF	23,521.000	23,521.000
0510	465.0475	Asphalt Center Line Rumble Strips 2-Lane Rural	LF	17,856.000	17,856.000
0520	504.0900	Concrete Masonry Endwalls	CY	36.000	36.000
0530	513.2050.S	Railing Pipe	LF	18.000	18.000
0540	520.8000	Concrete Collars for Pipe	EACH	21.000	21.000
0550	521.0112	Culvert Pipe Corrugated Steel 12-Inch	LF	48.000	48.000
0560	521.0115	Culvert Pipe Corrugated Steel 15-Inch	LF	264.000	264.000
0570	521.0118	Culvert Pipe Corrugated Steel 18-Inch	LF	1,107.000	1,107.000
0580	521.0121	Culvert Pipe Corrugated Steel 21-Inch	LF	50.000	50.000
0590	521.0124	Culvert Pipe Corrugated Steel 24-Inch	LF	62.000	62.000
0600	521.0771	Pipe Arch Corrugated Steel 71x47-Inch	LF	115.000	115.000
0610	521.1012	Apron Endwalls for Culvert Pipe Steel 12-Inch	EACH	6.000	6.000
0620	521.1015	Apron Endwalls for Culvert Pipe Steel 15-Inch	EACH	4.000	4.000
0630	521.1018	Apron Endwalls for Culvert Pipe Steel 18-Inch	EACH	46.000	46.000
0640	521.1021	Apron Endwalls for Culvert Pipe Steel 21-Inch	EACH	4.000	4.000
0650	521.1024	Apron Endwalls for Culvert Pipe Steel 24-Inch	EACH	4.000	4.000
0660	521.1271	Apron Endwalls for Pipe Arch Steel 71x47-Inch	EACH	1.000	1.000
0670	521.1502	Apron Endwalls for Culvert Pipe Sloped Side Drains Steel 15-Inch 4 to 1	EACH	10.000	10.000
0680	521.1503	Apron Endwalls for Culvert Pipe Sloped Side Drains Steel 18-Inch 4 to 1	EACH	12.000	12.000
0690	521.1515	Apron Endwalls for Culvert Pipe Sloped Side Drains Steel 15-Inch 6 to 1	EACH	4.000	4.000
0700	521.1518	Apron Endwalls for Culvert Pipe Sloped Side Drains Steel 18-Inch 6 to 1	EACH	11.000	11.000
0710	522.0124	Culvert Pipe Reinforced Concrete Class III 24-Inch	LF	270.000	270.000
0720	522.0130	Culvert Pipe Reinforced Concrete Class III 30-Inch	LF	92.000	92.000
0730	522.0172	Culvert Pipe Reinforced Concrete Class III 72-Inch	LF	160.000	160.000
0740	522.0324	Culvert Pipe Reinforced Concrete Class IV 24-Inch	LF	156.000	156.000
0750	522.0336	Culvert Pipe Reinforced Concrete Class IV 36-Inch	LF	192.000	192.000
0760	522.0342	Culvert Pipe Reinforced Concrete Class IV 42-Inch	LF	78.000	78.000
0770	522.0360	Culvert Pipe Reinforced Concrete Class IV 60-Inch	LF	16.000	16.000
0780	522.1012	Apron Endwalls for Culvert Pipe Reinforced Concrete 12-Inch	EACH	6.000	6.000
0790	522.1015	Apron Endwalls for Culvert Pipe Reinforced Concrete 15-Inch	EACH	1.000	1.000

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DATE 13JUL16 E S T I M A T E O F Q U A N T I T I E S

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	3200-02-73 QUANTITY
0800	522.1018	Apron Endwalls for Culvert Pipe Reinforced Concrete 18-Inch	EACH	1.000	1.000
0810	522.1024	Apron Endwalls for Culvert Pipe Reinforced Concrete 24-Inch	EACH	19.000	19.000
0820	522.1030	Apron Endwalls for Culvert Pipe Reinforced Concrete 30-Inch	EACH	5.000	5.000
0830	522.1036	Apron Endwalls for Culvert Pipe Reinforced Concrete 36-Inch	EACH	8.000	8.000
0840	522.1042	Apron Endwalls for Culvert Pipe Reinforced Concrete 42-Inch	EACH	2.000	2.000
0850	522.1060	Apron Endwalls for Culvert Pipe Reinforced Concrete 60-Inch	EACH	3.000	3.000
0860	522.1072	Apron Endwalls for Culvert Pipe Reinforced Concrete 72-Inch	EACH	4.000	4.000
0870	523.0419	Culvert Pipe Reinforced Concrete Horizontal Elliptical Class HE-IV 19x30-Inch	LF	224.000	224.000
0880	523.0519	Apron Endwalls for Culvert Pipe Reinforced Concrete Horizontal Elliptical 19x30-Inch	EACH	6.000	6.000
0890	523.0524	Apron Endwalls for Culvert Pipe Reinforced Concrete Horizontal Elliptical 24x38-Inch	EACH	1.000	1.000
0900	601.0409	Concrete Curb & Gutter 30-Inch Type A	LF	5,857.000	5,857.000
0910	601.0411	Concrete Curb & Gutter 30-Inch Type D	LF	40.000	40.000
0920	601.0553	Concrete Curb & Gutter 4-Inch Sloped 36-Inch Type D	LF	4,050.000	4,050.000
0930	601.0555	Concrete Curb & Gutter 6-Inch Sloped 36-Inch Type A	LF	5,368.000	5,368.000
0940	601.0557	Concrete Curb & Gutter 6-Inch Sloped 36-Inch Type D	LF	20.000	20.000
0950	601.0600	Concrete Curb Pedestrian	LF	151.000	151.000
0960	602.0410	Concrete Sidewalk 5-Inch	SF	48,995.000	48,995.000
0970	602.0420	Concrete Sidewalk 7-Inch	SF	838.000	838.000
0980	602.0505	Curb Ramp Detectable Warning Field Yellow	SF	578.000	578.000
0990	602.1500	Concrete Steps	SF	93.000	93.000
1000	606.0200	Riprap Medium	CY	428.100	428.100
1010	608.0312	Storm Sewer Pipe Reinforced Concrete Class III 12-Inch	LF	278.000	278.000
1020	608.0318	Storm Sewer Pipe Reinforced Concrete Class III 18-Inch	LF	173.000	173.000
1030	608.0324	Storm Sewer Pipe Reinforced Concrete Class III 24-Inch	LF	1,905.000	1,905.000
1040	608.0330	Storm Sewer Pipe Reinforced Concrete Class III 30-Inch	LF	48.000	48.000
1050	608.0412	Storm Sewer Pipe Reinforced Concrete Class IV 12-Inch	LF	1,162.000	1,162.000
1060	608.0415	Storm Sewer Pipe Reinforced Concrete Class IV 15-Inch	LF	226.000	226.000
1070	608.0418	Storm Sewer Pipe Reinforced Concrete Class IV 18-Inch	LF	563.000	563.000
1080	608.0424	Storm Sewer Pipe Reinforced Concrete Class IV 24-Inch	LF	1,629.000	1,629.000
1090	608.0460	Storm Sewer Pipe Reinforced Concrete Class IV 60-Inch	LF	80.000	80.000

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LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	3200-02-73 QUANTITY
1100	610.0424	Storm Sewer Pipe Reinforced Concrete Horizontal Elliptical Class HE-IV 24x38-Inch	LF	80.000	80.000
1110	611.0420	Reconstructing Manholes	EACH	1.000	1.000
1120	611.0530	Manhole Covers Type J	EACH	30.000	30.000
1130	611.0612	Inlet Covers Type C	EACH	1.000	1.000
1140	611.0624	Inlet Covers Type H	EACH	26.000	26.000
1150	611.0627	Inlet Covers Type HM	EACH	38.000	38.000
1160	611.0645	Inlet Covers Type MS-A	EACH	20.000	20.000
1170	611.2003	Manholes 3-FT Diameter	EACH	1.000	1.000
1180	611.2004	Manholes 4-FT Diameter	EACH	13.000	13.000
1190	611.2005	Manholes 5-FT Diameter	EACH	19.000	19.000
1200	611.2006	Manholes 6-FT Diameter	EACH	1.000	1.000
1210	611.3004	Inlets 4-FT Diameter	EACH	12.000	12.000
1220	611.3230	Inlets 2x3-FT	EACH	47.000	47.000
1230	611.3901	Inlets Median 1 Grate	EACH	10.000	10.000
1240	611.3902	Inlets Median 2 Grate	EACH	5.000	5.000
1250	611.9800.S	Pipe Grates	EACH	10.000	10.000
1260	612.0204	Pipe Underdrain Unperforated 4-Inch	LF	274.000	274.000
1270	612.0212	Pipe Underdrain Unperforated 12-Inch	LF	77.000	77.000
1280	612.0404	Pipe Underdrain Wrapped 4-Inch	LF	6,842.000	6,842.000
1290	612.0406	Pipe Underdrain Wrapped 6-Inch	LF	451.000	451.000
1300	612.0700	Drain Tile Exploration	LF	100.000	100.000
1310	612.0804	Apron Endwalls for Underdrain Reinforced Concrete 4-Inch	EACH	12.000	12.000
1320	616.0204	Fence Chain Link 4-FT	LF	155.000	155.000
1330	618.0100	Maintenance And Repair of Haul Roads (project) 01. 3200-02-73	EACH	1.000	1.000
1340	619.1000	Mobilization	EACH	0.990	0.990
1350	620.0100	Concrete Corrugated Median	SF	381.000	381.000
1360	620.0300	Concrete Median Sloped Nose	SF	55.000	55.000
1370	624.0100	Water	MGAL	713.000	713.000
1380	625.0100	Topsoil	SY	17,737.000	17,737.000
1390	625.0500	Salvaged Topsoil	SY	126,086.000	126,086.000
1400	627.0200	Mulching	SY	69,986.000	69,986.000
1410	628.1504	Silt Fence	LF	16,727.000	16,727.000
1420	628.1520	Silt Fence Maintenance	LF	16,727.000	16,727.000
1430	628.1905	Mobilizations Erosion Control	EACH	15.000	15.000
1440	628.1910	Mobilizations Emergency Erosion Control	EACH	30.000	30.000
1450	628.2004	Erosion Mat Class I Type B	SY	30,208.000	30,208.000
1460	628.2023	Erosion Mat Class II Type B	SY	23,474.000	23,474.000
1470	628.7005	Inlet Protection Type A	EACH	73.000	73.000
1480	628.7010	Inlet Protection Type B	EACH	57.000	57.000
1490	628.7015	Inlet Protection Type C	EACH	16.000	16.000
1500	628.7020	Inlet Protection Type D	EACH	4.000	4.000
1510	628.7504	Temporary Ditch Checks	LF	750.000	750.000
1520	628.7515.S	Stone or Rock Ditch Checks	CY	170.000	170.000
1530	628.7555	Culvert Pipe Checks	EACH	146.000	146.000
1540	628.7560	Tracking Pads	EACH	7.000	7.000
1550	629.0210	Fertilizer Type B	CWT	113.000	113.000
1560	630.0120	Seeding Mixture No. 20	LB	423.000	423.000
1570	630.0130	Seeding Mixture No. 30	LB	2,405.000	2,405.000
1580	630.0200	Seeding Temporary	LB	4,500.000	4,500.000
1590	630.0300	Seeding Borrow Pit	LB	500.000	500.000

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LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	3200-02-73 QUANTITY
1600	631.0300	Sod Water	MGAL	524.000	524.000
1610	631.1000	Sod Lawn	SY	17,737.000	17,737.000
1620	631.1100	Sod Erosion Control	SY	2,315.000	2,315.000
1840	633.5200	Markers Culvert End	EACH	52.000	52.000
1850	634.0616	Posts Wood 4x6-Inch X 16-FT	EACH	149.000	149.000
1860	634.0618	Posts Wood 4x6-Inch X 18-FT	EACH	96.000	96.000
1870	637.2210	Signs Type II Reflective H	SF	1,232.260	1,232.260
1880	637.2215	Signs Type II Reflective H Folding	SF	41.440	41.440
1890	637.2230	Signs Type II Reflective F	SF	615.250	615.250
1900	638.2102	Moving Signs Type II	EACH	12.000	12.000
1910	638.2602	Removing Signs Type II	EACH	168.000	168.000
1920	638.3000	Removing Small Sign Supports	EACH	164.000	164.000
1930	642.5401	Field Office Type D	EACH	1.000	1.000
1940	643.0100	Traffic Control (project) 01. 3200-02-73	EACH	1.000	1.000
1950	643.0300	Traffic Control Drums	DAY	29,382.000	29,382.000
1960	643.0410	Traffic Control Barricades Type II	DAY	512.000	512.000
1970	643.0420	Traffic Control Barricades Type III	DAY	15,076.000	15,076.000
1980	643.0705	Traffic Control Warning Lights Type A	DAY	20,608.000	20,608.000
1990	643.0715	Traffic Control Warning Lights Type C	DAY	7,960.000	7,960.000
2000	643.0800	Traffic Control Arrow Boards	DAY	135.000	135.000
2010	643.0900	Traffic Control Signs	DAY	19,560.000	19,560.000
2020	643.0920	Traffic Control Covering Signs Type II	EACH	40.000	40.000
2030	643.1000	Traffic Control Signs Fixed Message	SF	2,250.500	2,250.500
2040	643.1050	Traffic Control Signs PCMS	DAY	112.000	112.000
2050	643.2000	Traffic Control Detour (project) 01. 3200-02-73	EACH	1.000	1.000
2060	643.3000	Traffic Control Detour Signs	DAY	53,310.000	53,310.000
2070	645.0120	Geotextile Type HR	SY	2,013.000	2,013.000
2080	645.0140	Geotextile Type SAS	SY	689.000	689.000
2090	646.0106	Pavement Marking Epoxy 4-Inch	LF	101,838.000	101,838.000
2100	646.0600	Removing Pavement Markings	LF	2,383.000	2,383.000
2110	646.0841.S	Pavement Marking Grooved Wet Reflective Contrast Tape 4-Inch	LF	1,167.000	1,167.000
2120	646.0881.S	Pavement Marking Grooved Wet Reflective Tape 4-Inch	LF	5,232.000	5,232.000
2130	647.0606	Pavement Marking Island Nose Epoxy	EACH	1.000	1.000
2140	647.0726	Pavement Marking Diagonal Epoxy 12-Inch	LF	768.000	768.000
2150	647.0856	Pavement Marking Concrete Corrugated Median Epoxy	SF	155.000	155.000
2160	647.0955	Removing Pavement Markings Arrows	EACH	2.000	2.000
2170	647.0965	Removing Pavement Markings Words	EACH	1.000	1.000
2180	648.0100	Locating No-Passing Zones	MI	5.360	5.360
2190	649.0403	Temporary Pavement Marking Epoxy 4-Inch	LF	2,898.000	2,898.000
2200	650.4000	Construction Staking Storm Sewer	EACH	133.000	133.000
2210	650.4500	Construction Staking Subgrade	LF	21,080.000	21,080.000
2220	650.5000	Construction Staking Base	LF	14,587.000	14,587.000
2230	650.5500	Construction Staking Curb Gutter and Curb & Gutter	LF	4,050.000	4,050.000
2240	650.6000	Construction Staking Pipe Culverts	EACH	21.000	21.000
2250	650.6500	Construction Staking Structure Layout (structure) 01. Retaining Wall STA 134+25	LS	1.000	1.000
2260	650.6500	Construction Staking Structure Layout (structure) 02. Retaining Wall STA 268+50	LS	1.000	1.000

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LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	3200-02-73 QUANTITY
2270	650.6500	Construction Staking Structure Layout (structure) 03. Retaining Wall STA 270+37	LS	1.000	1.000
2280	650.6500	Construction Staking Structure Layout (structure) 04. R-30-59	LS	1.000	1.000
2290	650.7000	Construction Staking Concrete Pavement	LF	6,451.000	6,451.000
2300	650.8500	Construction Staking Electrical Installations (project) 01. 3200-02-73	LS	1.000	1.000
2310	650.9910	Construction Staking Supplemental Control (project) 01. 3200-02-73	LS	1.000	1.000
2320	650.9920	Construction Staking Slope Stakes	LF	33,305.000	33,305.000
2330	652.0225	Conduit Rigid Nonmetallic Schedule 40 2-Inch	LF	3,019.000	3,019.000
2340	652.0235	Conduit Rigid Nonmetallic Schedule 40 3-Inch	LF	2,309.000	2,309.000
2350	652.0800	Conduit Loop Detector	LF	2,940.000	2,940.000
2360	653.0135	Pull Boxes Steel 24x36-Inch	EACH	19.000	19.000
2370	653.0140	Pull Boxes Steel 24x42-Inch	EACH	17.000	17.000
2380	653.0905	Removing Pull Boxes	EACH	22.000	22.000
2390	654.0101	Concrete Bases Type 1	EACH	8.000	8.000
2400	654.0110	Concrete Bases Type 10	EACH	2.000	2.000
2410	654.0113	Concrete Bases Type 13	EACH	6.000	6.000
2420	654.0217	Concrete Control Cabinet Bases Type 9 Special	EACH	2.000	2.000
2430	655.0230	Cable Traffic Signal 5-14 AWG	LF	811.000	811.000
2440	655.0240	Cable Traffic Signal 7-14 AWG	LF	1,206.000	1,206.000
2450	655.0260	Cable Traffic Signal 12-14 AWG	LF	2,402.000	2,402.000
2460	655.0315	Cable Type UF 2-10 AWG	LF	1,391.000	1,391.000
2470	655.0515	Electrical Wire Traffic Signals 10 AWG	LF	2,904.000	2,904.000
2480	655.0610	Electrical Wire Lighting 12 AWG	LF	1,152.000	1,152.000
2490	655.0700	Loop Detector Lead In Cable	LF	9,797.000	9,797.000
2500	655.0800	Loop Detector Wire	LF	10,546.000	10,546.000
2510	655.0900	Traffic Signal EVP Detector Cable	LF	2,146.000	2,146.000
2520	656.0200	Electrical Service Meter Breaker Pedestal (location) 01. USH 45 & CTH WG	LS	1.000	1.000
2530	656.0200	Electrical Service Meter Breaker Pedestal (location) 02. USH 45 & CTH C	LS	1.000	1.000
2540	657.0100	Pedestal Bases	EACH	8.000	8.000
2550	657.0420	Traffic Signal Standards Aluminum 13-FT	EACH	4.000	4.000
2560	657.0425	Traffic Signal Standards Aluminum 15-FT	EACH	4.000	4.000
2570	657.1350	Install Poles Type 10	EACH	2.000	2.000
2580	657.1360	Install Poles Type 13	EACH	6.000	6.000
2590	657.1530	Install Monotube Arms 30-FT	EACH	2.000	2.000
2600	657.1535	Install Monotube Arms 35-FT	EACH	2.000	2.000
2610	657.1540	Install Monotube Arms 40-FT	EACH	1.000	1.000
2620	657.1545	Install Monotube Arms 45-FT	EACH	3.000	3.000
2630	657.1815	Install Luminaire Arms Steel 15-FT	EACH	8.000	8.000
2640	658.0110	Traffic Signal Face 3-12 Inch Vertical	EACH	24.000	24.000
2650	658.0115	Traffic Signal Face 4-12 Inch Vertical	EACH	8.000	8.000
2660	658.0215	Backplates Signal Face 3 Section 12-Inch	EACH	24.000	24.000
2670	658.0220	Backplates Signal Face 4 Section 12-Inch	EACH	8.000	8.000
2680	658.0600	Led Modules 12-Inch Red Ball	EACH	24.000	24.000
2690	658.0605	Led Modules 12-Inch Yellow Ball	EACH	24.000	24.000
2700	658.0610	Led Modules 12-Inch Green Ball	EACH	24.000	24.000
2710	658.0615	Led Modules 12-Inch Red Arrow	EACH	8.000	8.000

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DATE 13JUL16 E S T I M A T E O F Q U A N T I T I E S

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	3200-02-73 QUANTITY
2720	658.0620	Led Modules 12-Inch Yellow Arrow	EACH	16.000	16.000
2730	658.0625	Led Modules 12-Inch Green Arrow	EACH	8.000	8.000
2740	658.5069	Signal Mounting Hardware (location) 01. USH 45 & CTH WG	LS	1.000	1.000
2750	658.5069	Signal Mounting Hardware (location) 02. USH 45 & CTH C	LS	1.000	1.000
2760	659.1125	Luminaires Utility LED C	EACH	8.000	8.000
2770	690.0150	Sawing Asphalt	LF	20,553.000	20,553.000
2780	690.0250	Sawing Concrete	LF	123.000	123.000
2790	715.0415	Incentive Strength Concrete Pavement	DOL	27,670.000	27,670.000
2800	ASP.1T0A	On-the-Job Training Apprentice at $5. 00/HR	HRS	1,500.000	1,500.000
2810	ASP.1T0G	On-the-Job Training Graduate at $5.00/HR	HRS	4,000.000	4,000.000
2820	SPV.0035	Special 01. Backfill Slurry	CY	490.000	490.000
2830	SPV.0035	Special 02. Concrete Masonry Endwalls Special	CY	1.720	1.720
2840	SPV.0060	Special 01. Manholes 9-FT Diameter	EACH	1.000	1.000
2850	SPV.0060	Special 02. Construction Staking Curb Ramps	EACH	43.000	43.000
2860	SPV.0060	Special 03. Pavt Mrkg Grooved Preformed Thermoplastic Arrows Type 1	EACH	5.000	5.000
2870	SPV.0060	Special 04. Pavt Mrkg Grooved Preformed Thermoplastic Arrows Type 2	EACH	37.000	37.000
2880	SPV.0060	Special 05. Pavt Mrkg Grooved Preformed Thermoplastic Arrows Type 3	EACH	6.000	6.000
2890	SPV.0060	Special 06. Pavt Mrkg Grooved Preformed Thermoplastic Words	EACH	24.000	24.000
2900	SPV.0060	Special 07. Section Corner Monuments Special	EACH	5.000	5.000
2910	SPV.0060	Special 08. Sanitary Manhole Chimney Seal	EACH	32.000	32.000
2920	SPV.0060	Special 09. Adjusting Sanitary Sewer Manholes	EACH	32.000	32.000
2930	SPV.0060	Special 10. Adjusting Water Valve Box	EACH	24.000	24.000
2940	SPV.0060	Special 11. Adjusting Water Valve Manhole	EACH	2.000	2.000
2950	SPV.0090	Special 01. Heavy Duty Silt Fence 3-FT	LF	9,013.000	9,013.000
2960	SPV.0090	Special 02. Heavy Duty Silt Fence 5-FT	LF	2,027.000	2,027.000
2970	SPV.0090	Special 03. Pavt Mrkg Grooved Preformed Plastic Contrast Tape 4-Inch	LF	2,641.000	2,641.000
2980	SPV.0090	Special 04. Pavt Mrkg Grooved Preformed Plastic Tape 4-Inch	LF	9,589.000	9,589.000
2990	SPV.0090	Special 05. Pavt Mrkg Grooved Preformed Plastic Contrast Tape 8-Inch	LF	742.000	742.000
3000	SPV.0090	Special 06. Pavt Mrkg Grooved Preformed Plastic Tape 8-Inch	LF	6,693.000	6,693.000
3010	SPV.0090	Special 07. Pavt Mrkg Grooved Preformed Thermoplastic Crosswalk 6-Inch	LF	1,124.000	1,124.000
3020	SPV.0090	Special 08. Pavt Mrkg Grooved Preformed Thermoplastic Stop Bars 18-Inch	LF	833.000	833.000
3030	SPV.0090	Special 09. Concrete Pedestrian Curb 12-Inch	LF	151.000	151.000
3040	SPV.0090	Special 10. Sawing Tree Roots	LF	100.000	100.000
3050	SPV.0090	Special 11. Joint and Crack Repair	LF	10,000.000	10,000.000
3060	SPV.0090	Special 12. Split Rail Fence Two Rails	LF	206.000	206.000

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DATE 13JUL16 E S T I M A T E O F Q U A N T I T I E S

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	3200-02-73 QUANTITY
3070	SPV.0105	Special 01. Maintaining Temporary Drainage STA 70+00	LS	1.000	1.000
3080	SPV.0105	Special 02. Maintaining Temporary Drainage STA 135+00	LS	1.000	1.000
3090	SPV.0105	Special 03. Maintaining Temporary Drainage STA 146+50	LS	1.000	1.000
3100	SPV.0105	Special 04. Maintaining Temporary Drainage STA 213+79	LS	1.000	1.000
3110	SPV.0105	Special 05. Removing Flashing Beacon and Pole	LS	1.000	1.000
3120	SPV.0105	Special 06. Install State Furnished Traffic Signal Cabinet USH 45 & CTH WG	LS	1.000	1.000
3130	SPV.0105	Special 07. Install State Furnished Traffic Signal Cabinet USH 45 & CTH C	LS	1.000	1.000
3140	SPV.0105	Special 08. Transport Traffic Signal & Lighting Materials USH 45 & CTH WG	LS	1.000	1.000
3150	SPV.0105	Special 09. Transport Traffic Signal & Lighting Materials USH 45 & CTH C	LS	1.000	1.000
3160	SPV.0105	Special 10. Remove Loop Detector Wire & Lead-in Cable USH 45 & CTH WG	LS	1.000	1.000
3170	SPV.0105	Special 11. Remove Loop Detector Wire & Lead-in Cable USH 45 & CTH C	LS	1.000	1.000
3180	SPV.0105	Special 12. Remove Traffic Signals USH 45 & CTH WG	LS	1.000	1.000
3190	SPV.0105	Special 13. Remove Traffic Signals USH 45 & CTH C	LS	1.000	1.000
3200	SPV.0105	Special 14. EVP Detector Head Installation USH 45 & CTH WG	LS	1.000	1.000
3210	SPV.0105	Special 15. EVP Detector Head Installation USH 45 & CTH C	LS	1.000	1.000
3220	SPV.0105	Special 16. Transport & Install State Furnished Radar Detection System USH 45 & CTH WG	LS	1.000	1.000
3230	SPV.0105	Special 17. Concrete Pavement Joints Layout	LS	1.000	1.000
3240	SPV.0105	Special 18. Maintaining Temporary Drainage STA 47+39 CTH C	LS	1.000	1.000
3250	SPV.0165	Special 01. Wall Modular Block Gravity LRFD	SF	1,013.000	1,013.000
3260	SPV.0165	Special 02. Wall Modular Block Mechanically Stabilized Earth LRFD/QMP	SF	1,240.000	1,240.000
3270	SPV.0170	Special 01. Proof-Rolling Existing Subbase	STA	57.000	57.000
3280	SPV.0195	Special 01. Coarse Aggegate Mix for Stream Bed	TON	96.000	96.000
3290	SPV.0195	Special 02. Asphaltic Millings for Driveways	TON	67.000	67.000
3300	SPV.0195	Special 03. HMA Pavement 3 MT 58-28 S 3% Va Regression	TON	27,700.000	27,700.000
3310	SPV.0195	Special 04. HMA Pavement 4 MT 58-28 S 3% Va Regression	TON	13,660.000	13,660.000

CLEARING & GRUBBING

STATION	TO	STATION	LOCATION	201.0105 CLEARING STA	201.0205 GRUBBING STA	REMARKS
20+00	-	25+00	USH 45	5	5	SEE PLAN DETAIL
30+00	-	35+00	USH 45	5	5	SEE PLAN DETAIL
36+00	-	39+00	USH 45	3	3	SEE PLAN DETAIL
47+00	-	48+00	USH 45	1	1	SEE PLAN DETAIL
50+00	-	51+00	USH 45	1	1	SEE PLAN DETAIL
66+00	-	67+00	USH 45	1	1	SEE PLAN DETAIL
79+00	-	80+00	USH 45	1	1	SEE PLAN DETAIL
86+00	-	87+00	USH 45	1	1	SEE PLAN DETAIL
90+00	-	91+00	USH 45	1	1	SEE PLAN DETAIL
96+00	-	98+00	USH 45	2	2	SEE PLAN DETAIL
99+00	-	103+00	USH 45	4	4	SEE PLAN DETAIL
132+00	-	142+00	USH 45	10	10	SEE PLAN DETAIL
145+00	-	146+00	USH 45	1	1	SEE PLAN DETAIL
148+00	-	149+00	USH 45	1	1	SEE PLAN DETAIL
158+00	-	159+00	USH 45	1	1	SEE PLAN DETAIL
178+00	-	180+00	USH 45	2	2	SEE PLAN DETAIL
196+00	-	198+00	USH 45	2	2	SEE PLAN DETAIL
199+00	-	200+00	USH 45	1	1	SEE PLAN DETAIL
204+00	-	205+00	USH 45	1	1	SEE PLAN DETAIL
206+00	-	207+00	USH 45	1	1	SEE PLAN DETAIL
252+00	-	253+00	USH 45	1	1	SEE PLAN DETAIL
257+00	-	263+00	USH 45	6	6	SEE PLAN & PROFILE
266+00	-	267+00	USH 45	1	1	SEE PLAN & PROFILE
268+00	-	273+00	USH 45	5	5	SEE PLAN & PROFILE
274+00	-	279+00	USH 45	5	5	SEE PLAN & PROFILE
280+00	-	285+00	USH 45	5	5	SEE PLAN & PROFILE
286+00	-	288+00	USH 45	2	2	SEE PLAN & PROFILE
289+00	-	297+00	USH 45	8	8	SEE PLAN & PROFILE
47+00	-	49+00	CTH WG	2	2	SEE PLAN DETAIL
50+00	-	55+00	CTH WG	5	5	SEE PLAN DETAIL
48+00	-	50+00	121ST ST	2	2	SEE PLAN DETAIL
48+00	-	49+00	CTH V	1	1	SEE PLAN DETAIL
51+00	-	52+00	CTH Q	1	1	SEE PLAN DETAIL
49+00	-	50+00	192ND AVE	1	1	SEE PLAN DETAIL
47+00	-	50+00	CTH JS	3	3	SEE PLAN DETAIL
51+00	-	55+00	WILMOT RD	4	4	SEE PLAN DETAIL
50+00	-	51+00	80TH ST	1	1	SEE PLAN DETAIL
			TOTAL 0010	98	98	

ROADSIDE CLEARING & SAWING TREE ROOTS

STATION	TO	STATION	LOCATION	202.0105 ROADSIDE CLEARING STA	SPV.0090.10 SAWING TREE ROOTS LF	REMARKS
270+00	-	271+00	USH 45 LT	--	20	SEE PLAN & PROFILE
272+00	-	273+00	USH 45 LT	1	50	SEE PLAN & PROFILE
290+00	-	292+00	USH 45 RT	2	--	
			UNDISTRIBUTED	2	30	AS DIRECTED BY THE ENGINEER
			TOTAL 0010	5	100	

REMOVING SMALL PIPE CULVERTS & REMOVING DELINEATORS AND MARKERS

STATION	LOCATION	203.0100 REMOVING SMALL PIPE CULVERTS EACH	204.0180 REMOVING DELINEATORS AND MARKERS EACH	REMARKS
27+65	USH 45, 36' LT	1	--	18"X26' CMCP DWY
30+10	USH 45, 35' RT	1	--	18"X32' CMCP DWY
30+55	USH 45, 33 LT	1	--	18"X25' CMCP DWY
33+00	USH 45, 31' LT	1	--	24"X24' CMCP DWY
37+55	USH 45, 30' LT	1	--	24"X24' CMCP DWY
39+25	USH 45, 32' LT	1	2	15"X38' CMCP DWY
40+00	USH 45, 31' RT	1	2	18"X22' CMCP DWY
40+41	USH 45, 32' LT	1	--	18"X50' CMCP DWY
49+09	USH 45, 31' LT	1	--	15"X58' CMCP 121ST ST
52+00	USH 45, 31' RT	1	--	18"X42' CMCP DWY
60+58	USH 45 R/L	1	--	24"X88' CPRC
61+75	USH 45, 37' LT	1	--	18"X58' CMCP 119TH ST
63+00	USH 45, 32' RT	1	--	18"X28' CMCP DWY
71+80	USH 45, 46' LT	--	--	EXISTING PIPE TO REMAIN
74+15	USH 45, 31' RT	1	--	18"X26' CMCP DWY
76+85	USH 45, 28' RT	1	--	18"X30' CMCP DWY
78+00	USH 45, 28' RT	1	--	18"X30' CMCP DWY
82+00	USH 45, 49' LT	1	--	24"X44' CMCP DWY
86+30	USH 45, 46' LT	1	--	15"X34 CMCP DWY
90+10	USH 45, 43' LT	1	2	15"X32 CMCP DWY
90+53	USH 45 R/L	1	2	30"X78' CPRC
95+25	USH 45, 35' LT	1	--	12"X30' CMCP DWY
95+75	USH 45, 30' RT	1	--	18"X24' CMCP DWY
97+00	USH 45, 35' LT	1	--	18"X26' CMCP DWY
101+17	USH 45, 40' LT	1	--	18"X44' CMCP DWY
101+37	USH 45 R/L	1	--	42"X80' CPRC
109+35	USH 45, 31' RT	1	--	18"X31' CMCP DWY
114+60	USH 45, 30' RT	1	--	24"X24' CMCP DWY
116+00	USH 45, 30' LT	1	--	18"X24' CMCP DWY
120+75	USH 45, 41' LT	1	--	18"X96' CPRC 192ND AVE
125+80	USH 45, 35' LT	1	--	18"X33' CMCP DWY
125+80	USH 45, 33' RT	1	2	15"X26' CMCP DWY
132+30	USH 45, 36' LT	1	--	18"X24' CMCP DWY
134+10	US 45, 35' RT	1	--	24"X44' CMCP 106TH ST
137+30	USH 45, 31' LT	1	--	18"X24' CMCP DWY
139+40	USH 45, 29' LT	1	--	18"X25' CMCP DWY
141+13	USH 45, 33' RT	1	7	18"X57' CMCP 196TH AVE
142+05	USH 45, 31' LT	1	--	18"X24' CMCP DWY
143+25	USH 45, 31' LT	1	--	18"X24' CMCP DWY
145+00	USH 45, 48' & 57' LT	1	--	18"X20' CMCP DWY
162+90	USH 45, 30' LT	1	--	18"X23' CMCP DWY
165+83	USH 45 R/L	1	--	24"X88' CPRC
166+75	USH 45, 45' RT	1	--	24"X60' CMCP 196TH AVE
174+20	USH 45, 34' RT	1	--	18"X24' CMCP DWY
175+17	USH 45, 33' LT	1	--	18"X42' CMCP 98TH ST
182+15	USH 45, 33' LT	1	--	18"X24' CMCP DWY
188+76	USH 45 R/L	1	2	24"X68' CPRC

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REMOVING SMALL PIPE CULVERTS & REMOVING DELINEATORS AND MARKERS

STATION	LOCATION	203.0100 REMOVING SMALL PIPE CULVERTS EACH	204.0180 REMOVING DELINEATORS AND MARKERS EACH	REMARKS
193+20	USH 45, 31' RT	1	--	18"X24' CMCP DWY
198+00	USH 45, 30' RT	1	--	24"X25' CMCP DWY
203+55	USH 45, 32' RT	1	--	18"X20' CMCP DWY
205+77	USH 45 R/L	1	--	24"X72' CPRC
210+25	USH 45, 33' LT	1	--	18"X24' CMCP DWY
228+00	USH 45, 32' RT	1	--	18"X24' CMCP DWY
230+10	USH 45, 36' LT	1	--	18"X24' CMCP DWY
231+95	USH 45 R/L	--	2	24"X78' CPRC
237+50	USH 45, 34' RT	1	--	18"X24' CMCP DWY
250+19	USH 45, 94' RT	1	--	12"X48' CMCP DWY
250+50	USH 45, 37' RT	1	--	18"X72' CMCP 86TH ST
252+15	USH 45, 32' RT	1	--	15"X21' CMCP DWY
252+75	USH 45, 31' RT	1	--	18"X21' CMCP DWY
252+75	USH 45, 32' LT	1	--	18"X24' CMCP DWY
254+25	USH 45, 32' RT	1	--	18"X25' CMCP DWY
254+50	USH 45, 44' LT	1	1	24"X55' CPRC CTH AH
255+25	USH 45, 29' RT	1	--	18"X75' CMCP DWY
256+00	USH 45, 26'-139' RT	1	--	18"X113' CMCP DWY
256+19	USH 45, 19' RT	1	--	24" X36'CMCP 84TH ST
257+95	USH 45, 23' LT	1	--	12"X25' CMCP DWY
260+25	USH 45, 20' RT	1	--	15"X20' CMCP DWY
260+90	USH 45, 21' LT	1	--	15"X24' CMCP DWY
262+10	USH 45, 20' RT	1	--	15"X25' CMCP DWY
263+40	USH 45, 28' LT	1	--	18"X26' CMCP DWY
263+40	USH 45, 50' LT	1	--	4"X136' SUMP DRAIN PIPE
266+00	USH 45, 28' LT	1	--	12"X120' CMCP SCHOOL DWY
266+46	USH 45 R/L	1	2	30"X51' CMCP
266+50	USH 45 R/L	1	2	30"X51' CMCP
267+70	USH 45, 26' LT	1	--	15"X20' CMCP DWY
270+30	USH 45, 20' LT	1	--	15"X24' CMCP DWY
271+70	USH 45, 20' LT	1	--	15"X26' CMCP DWY
275+65	USH 45, 23' LT	1	--	15"X27' CMCP DWY
283+90	USH 45, 23' RT	1	2	18"X30' CMCP DWY
284+33	USH 45, 23' RT	1	2	18"X41' CMCP DWY
284+76	USH 45, 24' RT	1	--	18"X25' CMCP DWY
286+86	USH 45 R/L	1	--	24"X80' CMCP
293+07	USH 45 R/L	1	2	36"X48' CPRC
293+15	USH 45 R/L	1	--	36"X48' CPRC
46+45	CTH WG, 22' RT	1	--	15"X24' CMCP DWY
47+25	CTH WG, 23' LT	1	--	15"X23' CMCP DWY
48+70	CTH WG, 22' LT	1	--	18"X26' CMCP DWY
51+70	196TH ST, 17' RT	1	--	12"X20' CMCP DWY
46+06	CTH C, 32' LT	1	--	18"X24' CMCP DWY
47+39	CTH C R/L	--	2	SEE ITEM 203.0200.06
47+67	CTH C, 38' LT	1	--	15"X46' CMCP DWY
51+87	CTH C, 36' RT	1	--	15"X35' CMCP DWY
54+60	CTH C, 29' LT	1	--	15"X30' CMCP DWY
56+95	CTH C, 31' RT	1	--	15"X24' CMCP DWY
	TOTAL 0010	92	34	

REMOVING ASPHALTIC SURFACE & SAWING ASPHALT

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	690.0150 SAWING ASPHALT LF	REMARKS
19+83	-	49+05	USH 45 R/L	--	83	9,059	2,070	MILL ALL HMA SURFACE
49+05	-	61+70	USH 45 R/L	--	--	3,788	1,313	MILL ALL HMA SURFACE
61+70	-	77+66	USH 45 R/L	--	--	4,858	1,387	MILL ALL HMA SURFACE
77+66	-	101+04	USH 45 R/L	--	--	7,077	2,048	MILL ALL HMA SURFACE
101+04	-	120+75	USH 45 R/L	--	--	6,220	1,048	MILL ALL HMA SURFACE
120+75	-	130+10	USH 45 R/L	--	--	2,668	1,345	MILL ALL HMA SURFACE
130+10	-	142+68	USH 45 R/L	--	--	3,355	2,516	MILL ALL HMA SURFACE
142+68	-	166+83	USH 45 R/L	--	--	7,557	1,477	MILL ALL HMA SURFACE
166+83	-	175+17	USH 45 R/L	--	--	2,446	1,001	MILL ALL HMA SURFACE
175+17	-	201+73	USH 45 R/L	--	--	8,414	2,291	MILL ALL HMA SURFACE
201+73	-	246+00	USH 45 R/L	--	--	14,399	1,686	MILL ALL HMA SURFACE
45+50	-	49+88	CTH WG R/L	1,315	78	--	28	PAVT REPLACEMENT/SHLD WIDENING
50+12	-	54+25	CTH WG R/L	1,101	67	--	24	PAVT REPLACEMENT/SHLD WIDENING
50+12	-	51+40	121ST ST R/L	313	61	--	22	PAVT REPLACEMENT/SHLD WIDENING
48+70	-	49+88	CTH CJ R/L	288	61	--	22	PAVT REPLACEMENT/SHLD WIDENING
48+60	-	49+88	119TH ST R/L	300	58	--	21	PAVT REPLACEMENT/SHLD WIDENING
48+30	-	49+88	CTH V R/L	404	64	--	23	PAVT REPLACEMENT/SHLD WIDENING
50+12	-	51+50	CTH Q R/L	353	64	--	23	PAVT REPLACEMENT/SHLD WIDENING
48+60	-	49+88	192ND AVE R/L	356	69	--	25	PAVT REPLACEMENT/SHLD WIDENING
47+65	-	49+88	CTH JS R/L	545	61	--	22	PAVT REPLACEMENT/SHLD WIDENING
50+12	-	51+60	106TH ST R/L	358	61	--	22	PAVT REPLACEMENT/SHLD WIDENING
50+12	-	52+50	S 196TH AVE R/L	529	56	--	20	PAVT REPLACEMENT/SHLD WIDENING
50+12	-	51+75	N 196TH AVE R/L	--	61	--	22	RECONSTRUCTION
48+55	-	49+88	98TH ST R/L	296	56	--	20	PAVT REPLACEMENT/SHLD WIDENING
42+40	-	49+88	CTH C R/L	2,493	83	--	30	PAVT REPLACEMENT/SHLD WIDENING
50+12	-	59+10	CTH C R/L	2,993	83	--	30	PAVT REPLACEMENT/SHLD WIDENING
51+35	-	51+60	86TH ST R/L	--	67	--	24	RECONSTRUCTION
48+50	-	48+75	CTH AH R/L	--	75	--	27	RECONSTRUCTION
51+00	-	51+25	84TH PL R/L	--	75	--	27	RECONSTRUCTION
50+85	-	51+10	84TH ST R/L	--	72	--	26	RECONSTRUCTION
50+90	-	51+15	83RD ST R/L	--	61	--	22	RECONSTRUCTION
48+75	-	49+00	82ND ST R/L	--	58	--	21	RECONSTRUCTION
50+75	-	51+00	82ND ST R/L	--	69	--	25	RECONSTRUCTION
50+75	-	51+00	80TH ST R/L	--	56	--	20	RECONSTRUCTION
50+65	-	50+90	79TH ST R/L	--	161	--	58	RECONSTRUCTION
30+50	-	199+76	USH 45 LT & RT	--	100	--	226	RECONSTRUCTION DRIVEWAYS
256+67	-	284+55	USH 45 LT & RT	--	202	--	541	RECONSTRUCTION DRIVEWAYS
19+83	-	302+75	UNDISTRIBUTED	1,000	200	--	1,000	
			TOTAL 0010	12,644	2,262	69,841	20,553	

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REMOVING PAVEMENT & SAWING CONCRETE

STATION	TO	STATION	LOCATION	204.0100 REMOVING PAVEMENT SY	690.0250 SAWING CONCRETE LF	REMARKS
246+00	-	254+57	USH 45 R/L	2,285	24	8" PCC PAVEMENT
254+57	-	280+71	USH 45 R/L	6,390	--	8" PCC PAVEMENT
280+71	-	291+80	USH 45 R/L	2,975	--	8" PCC PAVEMENT
23+95	-	24+21	USH 45, 36' RT	9	26	PRIVATE CONCRETE DWY
193+16	-	193+27	USH 45, 44' RT	5	11	PRIVATE CONCRETE DWY
254+18	-	254+35	USH 45, 58' RT	8	17	PRIVATE CONCRETE DWY
270+10	-	270+31	USH 45, 94' LT	68	21	PRIVATE CONCRETE DWY
275+62	-	275+74	USH 45, 40' LT	13	12	PRIVATE CONCRETE DWY
276+61	-	276+73	USH 45, 68' RT	63	12	PRIVATE CONCRETE DWY
304+87	-	305+21	USH 45, 55' RT	34	--	PRIVATE CONCRETE FE
			TOTAL 0010	11,850	123	

REMOVING CONCRETE SIDEWALK

STATION	TO	STATION	LOCATION	204.0155 REMOVING CONCRETE SIDEWALK SY	REMARKS
273+34	-	273+37	USH 45, 37' - 50' RT	5	SAW AT JOINT - NE QUADRANT
288+22	-	288+82	USH 45 & 79TH ST	34	SAW AT JOINT - SE QUADRANT
289+40	-	289+78	USH 45 & 79TH ST	14	SAW AT JOINT - NE QUADRANT
			TOTAL 0010	53	

REMOVING CURB & GUTTER

STATION	TO	STATION	LOCATION	204.0150 REMOVING CURB & GUTTER LF	REMARKS
20+73	-	21+07	USH 45 & CTH WG	60	SE QUADRAND
20+83	-	21+35	USH 45 & CTH WG	74	SW QUADRANT
21+30	-	21+83	USH 45 & CTH WG	78	NE QUADRANT
21+62	-	22+09	USH 45 & CTH WG	78	NW QUADRANT
48+56	-	49+03	USH 45 & CTH CJ	72	SE QUADRAND
49+34	-	49+73	USH 45 & CTH CJ	61	NE QUADRANT
76+82	-	77+54	USH 45 & CTH V	108	SE QUADRAND
77+80	-	78+29	USH 45 & CTH V	78	NE QUADRANT
100+21	-	100+71	USH 45 & CTH Q	90	SE QUADRAND
101+03	-	101+50	USH 45 & CTH Q	68	NE QUADRANT
120+20	-	120+59	USH 45 & 192ND AVE	59	SW QUADRANT
120+89	-	121+48	USH 45 & 192ND AVE	90	NW QUADRANT
129+46	-	129+93	USH 45 & CTH JS	59	SW QUADRANT
130+37	-	130+72	USH 45 & CTH JS	71	NW QUADRANT
200+75	-	201+65	USH 45 & CTH C	204	SW QUADRANT/SURFACE DRAIN
200+93	-	201+54	USH 45 & CTH C	90	SE QUADRAND
201+97	-	202+37	USH 45 & CTH C	59	NE QUADRANT
202+00	-	202+60	USH 45 & CTH C	93	NW QUADRANT
249+79	-	250+29	USH 45 & 86TH ST	74	SE QUADRAND
250+55	-	250+96	USH 45 & 86TH ST	59	NE QUADRANT
254+09	-	254+50	USH 45 & CTH AH	60	SW QUADRANT
254+72	-	255+06	USH 45 & CTH AH	51	NW QUADRANT
265+21	-	265+62	USH 45 & BRISTOL SCHOOL DWY	60	SW QUADRANT
265+84	-	266+07	USH 45 & BRISTOL SCHOOL DWY	81	SPLIT ISLAND
265+97	-	266+57	USH 45 & BRISTOL SCHOOL DWY	92	NW QUADRANT
288+22	-	288+82	USH 45 & 79TH ST	101	SE QUADRAND
289+40	-	289+78	USH 45 & 79TH ST	86	NE QUADRANT
288+85	-	291+91	USH 45 LT	306	OUTSIDE SHOULDER
289+60	-	302+75	USH 45 SB LANES	1,315	MEDIAN
289+60	-	303+88	USH 45 SB LANES	1,428	MEDIAN
300+30	-	302+75	USH 45 NB LANES	245	OUTSIDE SHOULDER
302+78	-	303+88	USH 45 NB LANES	110	9" PCC PAVEMENT
			TOTAL 0010	5,560	

REMOVING PARTIAL SMALL PIPE CULVERTS

STATION	LOCATION	204.9060.S REMOVING PARTIAL SMALL PIPE CULVERTS EACH	REMARKS
31+97	USH 45, LT & RT	1	36" X 24' CPRC (3 SECTIONS LT & 3 SECTIONS RT)
153+27	USH 45, LT & RT	1	30" X 32' CPRC (4 SECTIONS LT & 4 SECTIONS RT)
231+95	USH 45, LT & RT	1	24" X 16' CPRC (2 SECTIONS LT & 2 SECTIONS RT)
245+14	USH 45, LT & RT	1	36" X 24' CPRC (3 SECTIONS LT & 3 SECTIONS RT)
	TOTAL 0010	4	

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REMOVING OLD STRUCTURE

		203.0200.01	203.0200.02	203.0200.03	203.0200.04	203.0200.05	203.0200.06	
		REMOVING OLD STRUCTURE (STATION)						
		69+92	135+35	135+48	146+31	214+03	47+39 CTH C	
STATION	LOCATION	LS	LS	LS	LS	LS	LS	REMARKS
69+92	USH 45 LT & RT	1	--	--	--	--	--	72" CPRC (16' LT, 16' RT)
135+35	USH 45 LT & RT	--	1	--	--	--	--	72" CPRC (8' LT, 8' RT)
135+48	USH 45 LT & RT	--	--	1	--	--	--	72" CPRC (8' LT, 8' RT)
146+31	USH 45 LT & RT	--	--	--	1	--	--	72" CPRC (12' LT, 12' RT)
214+03	USH 45 LT & RT	--	--	--	--	1	--	60" CPRC (12' LT, 12' RT)
47+39	CTH C R/L	--	--	--	--	--	1	60" CMCP (70')
	TOTAL 0010	1	1	1	1	1	1	

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REMOVING INLETS & REMOVING STORM SEWER PIPES

		204.0220	204.0245.01	204.0245.02	204.0245.03	209.0100	
		REMOVING	REMOVING STORM SEWER (SIZE)			BACKFILL	
		INLETS	12-INCH	18-INCH	24-INCH	GRANULAR*	
STATION	LOCATION	EACH	LF	LF	LF	CY	REMARKS
199+72	USH 45, 40' LT	1	--	72	--	12	18" METAL PIPE
199+72	USH 45, 40' LT	1	--	--	74	17	24" CONCRETE PIPE
265+94	USH 45, 30' RT	1	--	--	58	13	24" METAL PIPE
286+61	USH 45, 39' RT	1	114	--	--	13	12" PIPE UNDERDRAIN UNPERFORATED
286+86	USH 45, 39' RT	1	--	--	80	18	24" METAL PIPE
288+81	USH 45, 68' RT	1	--	--	--	--	EXISTING SS PIPE TO REMAIN
289+39	USH 45, 67' RT	1	--	--	--	--	EXISTING SS PIPE TO REMAIN
301+00	USH 45, LT & RT	1	60	--	--	7	12" CONCRETE PIPE
	TOTAL 0010	8	174	72	212	80	

NOTE:

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE IN PLANS. SEE **CROSS CULVERT PIPES & CROSS CULVERT ELLIPTICAL** MISCELLANEOUS SCHEDULES.

REMOVING GUARDRAIL

				204.0165
				REMOVING
				GUARDRAIL
STATION	TO	STATION	LOCATION	LF
285+07	-	287+37	USH 45, 19' - 26' RT	230
292+16	-	294+16	USH 45, 17' - 22' RT	200
			TOTAL 0010	430

EXCAVATION, HAULING, AND DISPOSAL OF PETROLEUM CONTAMINATED SOIL

				205.0501.S	
				EXCAVATION, HAULING, AND DISPOSAL OF PETROLEUM CONTAMINATED SOIL	
STATION	TO	STATION	LOCATION	TON	REMARKS
47+85	-	48+25	CTH C, RT	45	MARSH EXC & STORM SEWER
119+40	-	200+50	USH 45, LT	12	DITCH CUT
263+10	-	264+80	USH 45, 20' LT - 65' RT	1,485	COMMON EXC & STORM SEWER
263+10	-	264+45	USH 45, 20' LT - 45' LT	15	STORM SEWER
263+10	-	264+80	UNDISTRIBUTED	389	AS DIRECTED BY THE ENGINEER
			TOTAL 0010	1,946	

EARTHWORK SUMMARY			A	B	C	D	E	F	G	H	I	J	K	L	M	
			ITEM #205.0100		*	*	ITEM #205.0400	*	*	*	*	*	*	ITEM #209.0100	ITEM #311.0110	
Division	From / To Station	Location	Excavation Common (1) Cut (2) (CY)	EBS Excavation (3) & (11) (CY)	Salvaged / Unusable Pavement Material (2) (CY)	Available Material (4) (CY)	Excavation Marsh (5) (CY)	Expanded Marsh Backfill (6) (CY) Factor 1.40	Expanded EBS Backfill (7) (CY) Factor 1.00	Unexpanded Fill (CY)	Expanded Fill (8) (CY) Factor 1.20	Mass Ordinate + / - (9) (CY)	Waste (CY)	Backfill Granular (CY)	Breaker Run (TON)	Comment:
1	19+83 - 245+00	USH 45	30,965		854	30,111	3,100	4,400		9,378	11,253	18,858		4,400		
	45+50 - 54+45	CTH WG	2,377			2,377				199	238	2,139				
	48+70 - 49+25	121ST ST	65			65				3	4	62				
	50+75 - 51+50	CTH CJ	55			55				16	20	35				
	48+60 - 49+25	119TH ST	38			38				31	37	1				
	48+30 - 49+25	CTH V	123			123				3	4	119				
	50+75 - 51+50	CTH Q	186			186				29	34	152				
	48+50 - 49+25	192ND AVE	101			101				0	0	101				
	47+65 - 49+25	CTH JS	356			356				13	15	340				
	50+75 - 51+60	106TH ST	194			194				3	4	190				
	50+75 - 52+50	196TH AVE (S)	224			224				119	143	81				
	50+75 - 51+75	196TH AVE (N)	157			157				15	18	139				
	48+80 - 49+25	98TH ST	98			98				0	0	98				
	42+40 - 59+10	CTH C	4,403		182	4,221				1,028	1,233	2,987				
	Shoulders btwn Intersection Widening		1,035			1,035				0	0	1,035				
		UNDISTRIBUTED		1,800		0			1,800			0			3,600	
Division 1 Subtotal			40,375	1,800	1,036	39,339	3,100	4,400	1,800	10,836	13,004	26,336	31,236	4,400	3,600	
2	246+00-305+25	USH 45	22,724		6,032	16,692				9,544	11,453	5,240				
	50+75 - 51+60	86TH ST	234		72	162				1	1	161				
	48+50 - 49+50	CTH AH	328		57	271				0	0	271				
	50+50 - 51+25	84TH PL	274		39	235				0	0	235				
	50+50 - 51+10	84TH ST	73		41	33				15	18	15				
	264+00-266+00	DETENTION POND	540			540				674	809	-269				
	50+50 - 51+15	83RD ST	86		49	37				1	2	35				
	48+75 - 51+00	82ND ST	522		75	446				18	22	425				
	50+50 - 51+00	80TH ST	103		27	76				0	0	76				
	50+50 - 50+90	79TH ST	150		83	67				0	0	67				
		UNDISTRIBUTED		2,500		0			2,500			0			5,000	
Division 2 Subtotal			25,033	2,500	6,474	18,558	0	0	2,500	10,253	12,304	6,255	8,755		5,000	
Grand Total			65,408	4,300	7,510	57,898	3,100	4,400	4,300	21,090	25,308	32,590	39,990	4,400	8,600	
		Total Excavation Common		69,708	CY											

1) Common Excavation is the sum of the Cut (A) and EBS Excavation (B) columns. Item number 205.0100
2) Salvaged/Unsuable Pavement Material (C) is included in Cut (A). This assumes the existing pavement is salvaged or wasted by the contractor. The existing pavement structure is not shown in the cross sections.
3) EBS Excavation (B) to be backfilled with Breaker Run (M)
4) Available Material (D) = Cut (A) - Salvaged/Unusuable Pavement Material [C]
5) Marsh Excavation (E - Item number 205.0400) - to be backfilled with Backfill Granular - Grade 2 (L)
6) Expanded Marsh Backfill (F) - This is to be filled with Backfill Granular - Grade 2 (L - Item number 209.0100). Marsh Backfill Factor = 1.4
7) Expanded EBS Backfill (G) - This is to be filled with Breaker Run (M - Item number 311.0110). EBS Backfill Factor = 1.0
8) Expanded Fill (I) = (Unexpanded Fill (H)) * Expanded Fill Factor. Expanded Fill Factor = 1.20
9) The Mass Ordinate (J=D-I) + 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.
10) Waste (K) = EBS Excavation (B) + Excavation Marsh (E) + Mass Ordinate (J)
11) 1675 ft for widenings, and 1200 ft in the urban reconstruction were estimated for undistributed EBS.
12) It is assumed that all EBS Excavation (B) will be wasted because this is a waste project.

*FOR INFORMATION ONLY

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REMOVING CONCRETE BASES

STATION	LOCATION	204.0195 REMOVING CONCRETE BASES EACH	REMARKS
255+70	USH 45, RT	1	PRIVATE SIGN BASE
255+70	USH 45, RT	1	PRIVATE SIGN BASE
	TOTAL 0010	2	

REMOVING PARTIAL PIPE UNDERDRAIN 12-INCH

STATION	LOCATION	204.9090.S REMOVING PARTIAL PIPE UNDERDRAIN 12-INCH LF	REMARKS
266+51	USH 45, 33' LT	24	12" PVC (CUT TO MATCH)
286+66	USH 45, R/L	84	12" UNDERDRAIN (CLEAN CUT)
	TOTAL 0010	108	

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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	624.0100 WATER MGAL	SPV.0170.01 PROOF-ROLLING EXISTING SUBBASE STA	REMARKS
19+83	-	49+05	USH 45 LT & RT	434	3,516	40	--	BYPASS LANES & TURN LANES
49+05	-	61+70	USH 45 LT & RT	231	2,689	30	--	BYPASS LANES & TURN LANES
61+70	-	77+66	USH 45 LT & RT	300	2,789	31	--	BYPASS LANES & TURN LANES
77+66	-	102+63	USH 45 LT & RT	449	4,564	51	--	BYPASS LANES & TURN LANES
102+63	-	120+75	USH 45 LT & RT	382	2,021	25	--	BYPASS LANES & TURN LANES
120+75	-	130+10	USH 45 LT & RT	181	2,659	29	--	BYPASS LANES & TURN LANES
130+10	-	142+68	USH 45 LT & RT	253	6,311	66	--	BYPASS LANES & TURN LANES
142+68	-	166+83	USH 45 LT & RT	444	2,959	35	--	BYPASS LANES & TURN LANES
166+83	-	175+17	USH 45 LT & RT	169	1,837	21	--	BYPASS LANES & TURN LANES
175+17	-	201+73	USH 45 LT & RT	387	3,110	35	--	BYPASS LANES & TURN LANES
201+73	-	246+00	USH 45 LT & RT	785	2,720	36	--	BYPASS LANES & TURN LANES
246+00	-	302+78	USH 45 R/L	37	11,048	111	57	RECONSTRUCTION
45+50	-	54+25	CTH WG LT & RT	64	1,560	17	--	TURN LANES
49+00	-	246+00	VARIOUS SIDEROADS	325	1,701	21	--	RURAL SIDEROADS
42+40	-	59+10	CTH C LT & RT	125	5,323	55	--	TURN LANES
250+00	-	290+00	URBAN SIDEROADS	100	1,416	15	--	URBAN SIDEROADS
19+83	-	202+63	VARIOUS LOCATIONS	--	4,092	41	--	14" UNDER 36" CURB & GUTTER
249+65	-	304+55	VARIOUS LOCATIONS	--	1,393	14	--	8.5" UNDER 30" CURB & GUTTER
249+96	-	304+87	VARIOUS LOCATIONS	--	1,849	19	--	6" UNDER SIDEWALK
252+10	-	308+81	VARIOUS LOCATIONS	--	229	3	--	6" UNDER DRIVEWAYS
19+83	-	302+75	VARIOUS LOCATIONS	--	250	3	--	6" UNDER ASPHALTIC DRIVEWAYS
19+83	-	305+35	UNDISTRIBUTED	500	1,000	15	--	
			TOTAL 0010	5,166	65,036	713	57	

PREPARE FOUNDATION FOR ASPHALTIC PAVING (PROJECT) 3200-02-73

STATION	TO	STATION	LOCATION	211.0100 PREPARE FOUNDATION FOR ASPHALTIC PAVING (PROJECT) 3200-02-73 LS
19+83	-	246+00	PROJECT LIMITS	1
			TOTAL 0010	1

AGGREGATE DETOURS & ASPHALTIC SURFACE DETOURS

STATION	LOCATION	305.0410 AGGREGATE DETOURS TON	465.0115 ASPHALTIC SURFACE DETOURS TON	REMARKS
PROJECT LIMITS	UNDISTRIBUTED	100	50	AS DIRECTED BY THE ENGINEER
	TOTAL 0010	100	50	

BASE PATCHING CONCRETE, DRILLED TIE BARS, & DRILLED DOWEL BARS

STATION	TO	STATION	LOCATION	390.0303 BASE PATCHING CONCRETE SY	416.0610 DRILLED TIE BARS* EACH	416.0620 DRILLED DOWEL BARS* EACH	390.0203 BASE PATCHING ASPHALTIC SY	SPV.0090.11 JOINT AND CRACK REPAIR LF	REMARKS
60+46	-	60+70	USH 45	64	8	32	--	--	24" CULVERT PIPE REPLACEMENT
90+37	-	90+69	USH 45	85	10	32	--	--	30" CULVERT PIPE REPLACEMENT
101+30	-	101+58	USH 45	75	9	32	--	--	42" CULVERT PIPE REPLACEMENT
165+65	-	166+01	USH 45	96	12	32	--	--	24" CULVERT PIPE REPLACEMENT
188+64	-	188+88	USH 45	64	8	32	--	--	24" CULVERT PIPE REPLACEMENT
196+82	-	196+98	USH 45	43	5	32	--	--	PROPOSED 18" STORM SEWER PIPE
199+80	-	199+96	USH 45	43	5	32	--	--	PROPOSED 18" STORM SEWER PIPE
19+83	-	246+00	UNDISTRIBUTED	2,000	250	4,000	300	10,000	TO BE DETERMINED BY THE FIELD ENGINEER
			TOTAL 0010	2,470	307	4,224	300	10,000	

NOTE:
* ADDITIONAL QUANTITIES SHOWN ELSEWHERE IN PLANS. SEE **CONCRETE PAVEMENT** MISCELLANEOUS QUANTITIES SCHEDULE.

CONCRETE PAVEMENT

STATION	TO	STATION	LOCATION	415.0085 CONCRETE PAVEMENT 8 1/2-INCH SY	415.0210 CONCRETE PAVEMENT GAPS EACH	416.0610 DRILLED TIE BARS* EACH	416.0620 DRILLED DOWEL BARS* EACH	650.7000 CONSTRUCTION STAKING CONCRETE PAVEMENT LF	REMARKS
246+00	-	250+41	USH 45 R/L	2,351	--	--	23	441	
250+41	-	254+57	USH 45 R/L	2,104	1	--	--	416	GAP AT 86TH STREET
254+57	-	256+19	USH 45 R/L	843	--	--	--	162	
256+19	-	263+80	USH 45 R/L	3,063	--	--	--	761	
263+80	-	268+10	USH 45 R/L	1,424	--	--	--	430	
268+10	-	273+10	USH 45 R/L	1,717	1	--	--	500	GAP AT 82ND STREET
273+10	-	279+65	USH 45 R/L	2,271	--	--	--	655	
279+65	-	289+10	USH 45 R/L	3,992	1	--	--	945	GAP AT 79TH STREET
289+10	-	300+00	USH 45 R/L	4,887	--	--	--	1,090	
300+00	-	302+75	USH 45 SB LANES	837	--	--	24	275	
300+00	-	302+78	USH 45 NB LANES	871	--	--	21	278	
302+78	-	305+35	USH 45 NB SHOULDER	32	--	123	--	--	
50+12	-	50+78	86TH STREET	521	--	--	--	66	OPEN TO LOCAL TRAFFIC
49+11	-	49+88	CTH AH	537	--	--	--	77	ROAD HARD CLOSED
50+23	-	50+46	84TH PL	112	--	--	--	23	ROAD HARD CLOSED
50+12	-	50+42	84TH STREET	149	--	--	--	30	ROAD HARD CLOSED
265+22	-	266+57	USH 45 12' - 77' LT	391	--	--	--	65	BRISTOL SCHOOL DWY
50+12	-	50+66	83RD STREET	300	--	--	--	54	ROAD HARD CLOSED
49+53	-	49+88	W 82ND STREET	183	--	--	--	35	OPEN TO LOCAL TRAFFIC
50+12	-	50+45	E 82ND STREET	183	--	--	--	33	OPEN TO LOCAL TRAFFIC
50+12	-	50+49	80TH STREET	185	--	--	--	37	ROAD HARD CLOSED
50+12	-	50+90	79TH STREET	717	--	--	--	78	OPEN TO LOCAL TRAFFIC
			TOTAL 0010	27,670	3	123	68	6,451	

NOTE:
* ADDITIONAL QUANTITIES SHOWN ELSEWHERE IN PLANS. SEE **BASE PATCHING CONCRETE** MISCELLANEOUS QUANTITIES SCHEDULE.

CONCRETE DRIVEWAY 7-INCH

STATION	TO	STATION	LOCATION	416.0170 CONCRETE DRIVEWAY 7-INCH SY
252+10.10	-	252+22.10	34.5' RT	28
252+66.61	-	252+80.29	34.5' RT	25
254+16.98	-	254+34.04	34.5' RT	22
256+90.38	-	257+03.56	35.5' LT	17
257+88.36	-	258+03.55	31.1'-29.9' LT	20
258+86.10	-	258+98.15	23.5' LT	16
260+86.26	-	261+02.10	23.5' LT	20
263+26.80	-	263+50.03	23.5' LT	28
258+50.49	-	258+64.74	23.5' RT	18
260+18.57	-	260+31.44	23.5' RT	16
262+00.39	-	262+15.25	23.5' RT	19
264+84.37	-	265+19.57	23.5' RT	42
266+01.14	-	266+36.14	23.5' RT	42
267+65.14	-	267+77.14	23.5' LT	16
270+75.00	-	270+35.12	23.5' LT	84
271+63.42	-	271+75.42	23.5' LT	16
271+07.97	-	271+28.03	23.5' RT	25
271+38.16	-	271+50.23	23.5' LT	16
275+62.25	-	275+74.25	23.5' LT	16
277+23.79	-	277+35.79	23.5' LT	16
277+91.79	-	278+07.70	23.5' LT	20
279+84.84	-	279+96.39	23.5' LT	16
280+08.06	-	280+22.81	23.5' LT	20
276+62.66	-	276+74.69	23.5' RT	16
277+72.00	-	278+04.09	23.5' RT	38
278+43.96	-	278+57.96	23.5' RT	18
283+97.23	-	284+32.23	23.0' RT	39
284+68.50	-	284+81.32	23.0' RT	16
			TOTAL 0010	685

ASPHALTIC MILLINGS FOR DRIVEWAYS

STATION	LOCATION	SPV.0195.02 ASPHALTIC MILLINGS FOR DRIVEWAYS TON	REMARKS
47+30	CTH WG, 22' LT	13	
48+75	CTH WG, 29' LT	9	
40+40	USH 45, 22' LT	35	
	UNDISTRIBUTED	10	AS DIRECTED BY THE ENGINEER
		67	

ASPHALT

STATION	TO	STATION	LOCATION	455.0605 TACK COAT GAL	SPV.0195.03 HMA PAVEMENT 3 MT 58-28 S 3.0% VA REGRESSION TON	SPV.0195.04 HMA PAVEMENT 4 MT 58-28 S 3.0% VA REGRESSION TON	465.0120 ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES TON	450.4000 HMA COLD WEATHER PAVING TON
19+83	-	49+05	USH 45	406	2,890	1,369	82	723
49+05	-	61+70	USH 45	210	1,472	653	25	368
61+70	-	77+65	USH 45	241	1,703	782	26	426
77+65	-	101+04	USH 45	371	2,613	1,180	54	653
101+04	-	120+75	USH 45	250	1,795	884	20	449
120+75	-	130+10	USH 45	174	1,211	515	22	303
130+10	-	142+68	USH 45	353	2,404	918	37	601
142+68	-	166+83	USH 45	323	2,311	1,114	15	578
166+83	-	175+17	USH 45	136	955	422	4	239
175+17	-	201+73	USH 45	390	2,778	1,315	63	695
201+73	-	246+00	USH 45	530	3,855	1,976	17	964
246+00	-	268+10	USH 45	--	--	--	182	--
268+10	-	305+35	USH 45	--	--	--	88	--
45+50	-	49+88	CTH WG	49	262	204	15	66
50+12	-	54+25	CTH WG	46	251	195	2	63
48+70	-	49+88	121ST ST	8	44	34	--	11
50+12	-	51+50	CTH CJ	10	53	41	--	13
48+60	-	49+88	119TH ST	9	49	38	--	12
48+30	-	49+88	CTH V	13	72	56	--	18
50+12	-	51+50	CTH Q	10	55	42	--	14
48+50	-	49+88	192ND AVE	11	57	45	--	14
47+65	-	49+88	CTH JS	18	95	74	33	24
50+12	-	51+60	106TH ST	11	57	44	3	14
50+69	-	52+50	S 196TH AVE	14	73	57	76	18
50+12	-	51+75	N 196TH AVE	12	62	48	--	16
48+80	-	49+88	98TH ST	6	33	26	--	8
42+40	-	49+88	CTH C	103	555	432	33	139
50+12	-	59+10	CTH C	124	668	520	14	167
50+76	-	51+60	86TH ST	7	59	28	15	15
48+50	-	49+11	CTH AH	4	39	18	4	10
50+46	-	51+25	84TH PL	6	55	26	24	14
50+41	-	51+10	84TH ST	6	52	24	--	13
50+66	-	51+15	83RD ST	4	33	15	--	8
48+75	-	49+54	W 82ND ST	6	53	25	--	13
50+46	-	51+00	E 82ND ST	4	37	17	--	9
50+49	-	51+00	80TH ST	4	33	16	--	8
50+90	-	50+95	79TH ST	2	15	7	--	4
19+83	-	246+00	UNDISTRIBUTED	339	951	500	86	--
			TOTAL 0010	4,210	27,700	13,660	940	6,687

3

ASPHALTIC RUMBLE STRIPS

STATION	TO	STATION	LOCATION	465.0425 ASPHALTIC SHOULDER RUMBLE STRIPS 2-LANE RURAL LF	465.0475 ASPHALT CENTER LINE RUMBLE STRIPS 2-LANE RURAL LF	REMARKS
23+31	-	47+10	USH 45, R/L	--	2,379	SEE STANDARD DETAIL DRAWING
25+55	-	42+94	USH 45, RT	1,252	--	SEE STANDARD DETAIL DRAWING
26+85	-	46+87	USH 45, LT	1,310	--	SEE STANDARD DETAIL DRAWING
51+10	-	59+70	USH 45, R/L	--	860	SEE STANDARD DETAIL DRAWING
51+22	-	62+51	USH 45, RT	856	--	SEE STANDARD DETAIL DRAWING
55+30	-	59+65	USH 45, LT	352	--	SEE STANDARD DETAIL DRAWING
63+70	-	75+66	USH 45, R/L	--	1,196	SEE STANDARD DETAIL DRAWING
63+30	-	76+33	USH 45, RT	1,000	--	SEE STANDARD DETAIL DRAWING
65+96	-	75+47	USH 45, LT	675	--	SEE STANDARD DETAIL DRAWING
79+66	-	99+00	USH 45, R/L	--	1,934	SEE STANDARD DETAIL DRAWING
77+21	-	94+77	USH 45, RT	1,365	--	SEE STANDARD DETAIL DRAWING
84+38	-	118+65	USH 45, LT	2,515	--	SEE STANDARD DETAIL DRAWING
103+00	-	118+75	USH 45, R/L	--	1,575	SEE STANDARD DETAIL DRAWING
102+63	-	125+48	USH 45, RT	1,783	--	SEE STANDARD DETAIL DRAWING
122+75	-	128+10	USH 45, R/L	--	535	SEE STANDARD DETAIL DRAWING
125+98	-	127+99	USH 45, LT	271	--	SEE STANDARD DETAIL DRAWING
136+18	-	140+68	USH 45, R/L	--	450	SEE STANDARD DETAIL DRAWING
144+68	-	164+90	USH 45, R/L	--	2,022	SEE STANDARD DETAIL DRAWING
144+73	-	162+41	USH 45, RT	1,420	--	SEE STANDARD DETAIL DRAWING
147+25	-	173+43	USH 45, LT	2,112	--	SEE STANDARD DETAIL DRAWING
168+90	-	173+17	USH 45, R/L	--	427	SEE STANDARD DETAIL DRAWING
168+88	-	192+49	USH 45, RT	1,842	--	SEE STANDARD DETAIL DRAWING
176+94	-	192+42	USH 45, LT	1,248	--	SEE STANDARD DETAIL DRAWING
177+17	-	199+73	USH 45, R/L	--	2,256	SEE STANDARD DETAIL DRAWING
203+73	-	245+95	USH 45, R/L	--	4,222	SEE STANDARD DETAIL DRAWING
210+66	-	245+95	USH 45, RT	2,736	--	SEE STANDARD DETAIL DRAWING
210+68	-	245+95	USH 45, LT	2,784	--	SEE STANDARD DETAIL DRAWING
			TOTAL 0010	23,521	17,856	

RAILING PIPE & CONCRETE STEPS

STATION	LOCATION	513.2050.S RAILING PIPE LF	602.1500 CONCRETE STEPS LF	REMARKS
270+30	USH 45, 28.5' RT	5.6	30	SEE CONSTRUCTION DETAIL
271+40	USH 45, 28.5' LT	9.0	45	SEE CONSTRUCTION DETAIL
279+75	USH 45, 28.5' LT	3.4	18	SEE CONSTRUCTION DETAIL
	TOTAL 0010	18.0	93	

CONCRETE COLLARS FOR PIPE

STATION	LOCATION	520.8000 CONCRETE COLLARS FOR PIPE* EACH	REMARKS
31+96	USH 45, 25' RT	1	36" CPRC
31+98	USH 45, 25' LT	1	36" CPRC
69+80	USH 45, 48' RT	1	72" CPRC
70+02	USH 45, 44' LT	1	72" CPRC
135+02	USH 45, 33' LT	1	72" CPRC
135+15	USH 45, 35' LT	1	72" CPRC
135+68	USH 45, 34' RT	1	72" CPRC
135+81	USH 45, 33' RT	1	72" CPRC
146+13	USH 45, 30' RT	1	72" CPRC
146+49	USH 45, 31' LT	1	72" CPRC
153+27	USH 45, 34' LT	1	30" CPRC
153+27	USH 45, 34' RT	1	30" CPRC
213+84	USH 45, 22' LT	1	60" CPRC
214+21	USH 45, 23' RT	1	60" CPRC
231+85	USH 45, 27' LT	1	24" CPRC
232+05	USH 45, 31' RT	1	24" CPRC
245+14	USH 45, 32' LT	1	36" CPRC
245+15	USH 45, 37' RT	1	36" CPRC
	TOTAL 0010	18	

NOTE:

* ADDITIONAL QUANTITY SHOWN ELSEWHERE IN PLANS.

SEE **STORM SEWER - SHEET 3 OF 6 (STRUCTURES & COVERS)** MISCELLANEOUS QUANTITIES SCHEDULES.

DRIVEWAY PIPES

LOCATION				521.0112	521.0115	521.0118	521.0121	521.0124	521.1012	521.1015	521.1018	521.1021	521.1024	521.1502	521.1503	521.1515	521.1518	
				CULVERT PIPE CORRUGATED STEEL					APRON ENDWALLS FOR CULVERT PIPE STEEL					APRON ENDWALLS FOR CULVERT PIPE SLOPED SIDE DRAINS STEEL				PIPE
				12-INCH	15-INCH	18-INCH *	21-INCH	24-INCH	12-INCH	15-INCH	18-INCH *	21-INCH	24-INCH	15-INCH 4 TO 1	18-INCH 4 TO 1	15-INCH 6 TO 1	18-INCH 6 TO 1	MINIMUM THICKNESS
STATION	OFFSET	LT/RT	SLOPE	LF	LF	LF	LF	LF	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	INCH
27+65	31.9'	LT	1.00%	--	--	26	--	--	--	--	--	--	--	--	1	--	1	0.064
30+10	31.6'	RT	1.80%	--	--	30	--	--	--	--	--	--	--	--	1	--	1	0.640
30+55	34.2'	LT	1.50%	--	--	96	--	--	--	--	1	--	--	--	1	--	--	0.064
33+00	37.8'	LT	3.00%	--	--	--	--	24	--	--	--	--	2	--	--	--	--	0.064
37+55	32.0'	LT	0.50%	--	--	--	24	--	--	--	--	2	--	--	--	--	--	0.064
40+00	31.9'	RT	0.50%	--	--	22	--	--	--	--	--	--	--	--	1	--	1	0.064
40+41	37.0'	LT	0.50%	--	--	48	--	--	--	--	2	--	--	--	--	--	--	0.064
52+00	31.8'	RT	0.31%	--	--	42	--	--	--	--	--	--	--	--	1	--	1	0.064
71+80	49.4'	LT	9.00%	--	--	24	--	--	--	--	2	--	--	--	--	--	--	0.064
74+15	30.3'	RT	1.00%	--	--	30	--	--	--	--	--	--	--	--	1	--	1	0.064
82+00	53.1'	LT	1.20%	--	--	--	--	38	--	--	--	--	2	--	--	--	--	0.064
86+40	43.5'	LT	0.77%	--	--	30	--	--	--	--	2	--	--	--	--	--	--	0.064
90+10	42.8'	LT	0.62%	--	--	32	--	--	--	--	2	--	--	--	--	--	--	0.064
95+25	31.9'	LT	0.30%	--	--	30	--	--	--	--	--	--	--	--	1	--	1	0.064
95+75	40.1'	RT	0.50%	--	--	30	--	--	--	--	2	--	--	--	--	--	--	0.064
97+00	33.7'	LT	0.30%	--	--	20	--	--	--	--	2	--	--	--	--	--	--	0.064
105+60	33.3'	LT	0.50%	--	--	30	--	--	--	--	2	--	--	--	--	--	--	0.064
109+35	31.9'	RT	0.82%	--	--	28	--	--	--	--	--	--	--	--	1	--	1	0.064
114+60	31.9'	RT	0.83%	--	--	24	--	--	--	--	--	--	--	--	1	--	1	0.064
116+00	33.7'	LT	0.60%	--	--	30	--	--	--	--	2	--	--	--	--	--	--	0.064
125+80	33.5'	RT	0.50%	--	--	26	--	--	--	--	2	--	--	--	--	--	--	0.064
125+80	37.3'	LT	0.50%	--	--	28	--	--	--	--	2	--	--	--	--	--	--	0.064
132+30	50.2'	LT	3.50%	--	--	30	--	--	--	--	2	--	--	--	--	--	--	0.064
137+30	45.4'	LT	0.45%	--	--	30	--	--	--	--	2	--	--	--	--	--	--	0.064
139+40	45.4'	LT	1.42%	--	--	30	--	--	--	--	2	--	--	--	--	--	--	0.064
142+05	45.4'	LT	0.60%	--	--	28	--	--	--	--	2	--	--	--	--	--	--	0.064
143+25	45.4'	LT	0.50%	--	--	20	--	--	--	--	2	--	--	--	--	--	--	0.064
145+00	46.7'	LT	1.50%	--	--	32	--	--	--	--	2	--	--	--	--	--	--	0.064
151+00	36.3'	LT	0.60%	--	--	30	--	--	--	--	2	--	--	--	--	--	--	0.064
174+20	45.1'	RT	1.20%	--	--	34	--	--	--	--	2	--	--	--	--	--	--	0.064
182+15	33.4'	LT	0.50%	--	--	32	--	--	--	--	2	--	--	--	--	--	--	0.064
203+55	37.6'	RT	0.24%	--	--	--	26	--	--	--	--	2	--	--	--	--	--	0.064
210+25	32.9'	LT	0.71%	--	--	24	--	--	--	--	2	--	--	--	--	--	--	0.064
227+95	31.9'	RT	0.29%	--	--	24	--	--	--	--	--	--	--	--	1	--	1	0.064
230+10	31.9'	LT	0.50%	--	--	30	--	--	--	--	--	--	--	--	1	--	1	0.064
237+50	31.9'	RT	0.70%	--	--	20	--	--	--	--	--	--	--	--	1	--	1	0.064
246+58	51.4'	RT	2.00%	16	--	--	--	--	2	--	--	--	--	--	--	--	--	0.064
247+58	58.0'	RT	1.00%	16	--	--	--	--	2	--	--	--	--	--	--	--	--	0.064
248+58	58.3'	RT	1.00%	16	--	--	--	--	2	--	--	--	--	--	--	--	--	0.064
CTH WG:																		0.064
46+50	35.4'	RT	0.29%	--	--	24	--	--	--	--	2	--	--	--	--	--	--	0.064
47+25	28.6'	LT	0.48%	--	32	--	--	--	--	--	--	--	--	1	--	1	--	0.064
48+13	39.3'	RT	0.32%	--	22	--	--	--	--	2	--	--	--	--	--	--	--	0.064
53+45	29.3'	RT	1.00%	--	18	--	--	--	--	--	--	--	--	1	--	1	--	0.064
CTH JS:																		0.064
48+00	25.7'	LT	1.00%	--	66	--	--	--	--	--	--	--	--	2	--	--	--	0.064
106TH ST:																		0.064
51+40	26.5'	RT	1.00%	--	22	--	--	--	--	--	--	--	--	2	--	--	--	0.064
S 196TH AVE:																		0.064
51+53	30.9'	RT	1.00%	--	26	--	--	--	--	--	--	--	--	2	--	--	--	0.064
CTH C:																		0.064
46+10	44.0'	RT	1.00%	--	--	32	--	--	--	--	2	--	--	--	--	--	--	0.064
51+85	27.7'	RT	0.30%	--	26	--	--	--	--	--	--	--	--	1	--	1	--	0.064
53+75	31.8'	RT	0.50%	--	28	--	--	--	--	--	--	--	--	1	--	1	--	0.064
56+90	31.4'	RT	0.50%	--	24	--	--	--	--	2	--	--	--	--	--	--	--	0.064
			TOTAL 0010	48	264	1,046	50	62	6	4	45	4	4	10	12	4	11	

NOTES:

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE IN PLANS. SEE **STORM SEWER - CORRUGATED STEEL PIPES** MISCELLANEOUS QUANTITIES SCHEDULE.

3

CROSS CULVERT PIPES

INLET INVERT LOCATION				DISCHARGE INVERT LOCATION			209.0100 BACKFILL GRANULAR ****	504.0900 CONCRETE MASONRY ENDWALLS	522.0124 522.0130 522.0172 COVERT PIPE REINFORCED CONCRETE CLASS III			522.0324 522.0336 522.0342 522.0360 CULVERT PIPE REINFORCED CONCRETE CLASS IV				522.1024 522.1030 522.1036 522.1042 522.1060 522.1072 APRON ENDWALLS FOR CULVERT PIPE REINFOCED CONCRETE*						SPV.0035.01 BACKFILL SLURRY	650.6000 CONSTRUCTION STAKING PIPE CULVERTS***
									24-INCH	30-INCH	72-INCH	24-INCH	36-INCH	42-INCH	60-INCH	24-INCH **	30-INCH **	36-INCH	42-INCH	60-INCH **	72-INCH		
STATION	OFFSET	ELEV.	TO	STATION	OFFSET	ELEV.	CY	CY	LF	LF	LF	LF	LF	LF	LF	EACH	EACH	EACH	EACH	EACH	EACH	CY	EACH
31+97	33.4'RT	765.08	-	31+97	33.1'LT	764.73	--	--	--	--	--	--	16	--	--	--	--	2	--	--	--	--	1
60+58	31.9'LT	765.55	-	60+58	42.1'RT	765.13	45	--	74	--	--	--	--	--	--	2	--	--	--	--	--	31	1
70+04	52.1'LT	756.74	-	69+78	55.7'RT	756.72	--	--	--	--	16	--	--	--	--	--	--	--	--	--	2	--	1
90+59	36.3'LT	761.18	-	90+46	38.5'RT	760.28	97	--	--	76	--	--	--	--	--	--	2	--	--	--	--	36	1
101+39	36.3'LT	764.51	-	101+50	40.9'RT	764.38	33	--	--	--	--	--	--	78	--	--	--	--	2	--	--	74	1
134+81	53.9'LT	765.33	-	135+89	54.2'RT	765.09	25	16	--	--	64	--	--	--	--	--	--	--	--	--	--	92	1
134+94	55.6'LT	765.33	-	136+02	53.1'RT	765.09	25	14	--	--	64	--	--	--	--	--	--	--	--	--	--	93	1
146+53	38.3'LT	760.77	-	146+10	36.8'RT	760.52	53	--	--	--	16	--	--	--	--	--	--	--	--	--	2	64	1
153+27	42.4'LT	761.74	-	153+27	41.9'RT	761.55	--	--	--	16	--	--	--	--	--	--	2	--	--	--	--	--	1
165+86	42.0'LT	766.63	-	165+78	49.6'RT	766.27	40	--	92	--	--	--	--	--	--	2	--	--	--	--	--	40	1
167+06	60.8'RT	769.17	-	166+01	58.8'RT	766.67	18	--	104	--	--	--	--	--	--	2	--	--	--	--	--	--	1
188+76	28.4'RT	780.67	-	188+76	31.5'LT	779.70	25	--	--	--	--	60	--	--	--	2	--	--	--	--	--	--	1
205+77	32.3'RT	775.11	-	205+77	47.6'LT	773.77	36	--	--	--	--	80	--	--	--	2	--	--	--	--	--	25	1
213+79	28.0'LT	769.29	-	214+26	29.0'RT	768.58	18	--	--	--	--	--	--	--	16	--	--	--	--	2	--	35	1
231+83	35.4'LT	770.80	-	232+08	38.6'RT	769.94	--	--	--	--	--	16	--	--	--	2	--	--	--	--	--	--	1
245+14	45.1'RT	761.11	-	245+14	39.8'LT	760.86	--	--	--	--	--	--	16	--	--	--	--	2	--	--	--	--	1
293+09	38.0'LT	755.63	-	293+09	42.0'RT	754.37	75	3	--	--	--	--	80	--	--	--	--	2	--	--	--	--	1
293+15	38.0'LT	755.63	-	293+15	42.0'RT	754.37	75	3	--	--	--	--	80	--	--	--	--	2	--	--	--	--	1
						TOTAL 0010	565	36	270	92	160	156	192	78	16	12	4	8	2	2	4	490	18

NOTES:

INSTALL TIES PRIOR TO CONCRETE COLLARS FOR PIPES (SEE JOINT TIES FOR CONCRETE PIPE S.D.D.)

*STATION, OFFSET, & ELEVATION ARE TO FLOWLINE AT THE END OF EACH PIPE.

ADDITIONAL QUANTITIES SHOWN ELSEWHERE IN PLANS. SEE **STORM SEWER & CROSS CULVERT ELLIPTICAL MISCELLANEOUS QUANTITIES SCHEDULES.

***ADDITIONAL QUANTITIES SHOWN ELSEWHERE IN PLANS. SEE **CROSS CULVERT ELLIPTICAL** MISCELLANEOUS QUANTITIES SCHEDULES.

****ADDITIONAL QUANTITIES SHOWN ELSEWHERE IN PLANS. SEE **REMOVING STORM SEWER PIPES & CROSS CULVERT ELLIPTICAL** MISCELLANEOUS QUANTITIES SCHEDULES.

STORM SEWER - CORRUGATED STEEL PIPES

STR. NO.	STATION	OFFSET	RIM ELEV.	PIPE NO.	FROM STR. NO.	TO STR. NO.	INLET ELEV.	DISCH ELEV.	PIPE SLOPE	521.0118 CULVERT PIPE CORRUGATED STEEL 18-INCH* LF	521.1018 APRON ENDWALLS FOR CULVERT PIPE STEEL 18-INCH* EACH	521.0771 PIPE ARCH CORRUGATED STEEL 71X47-INCH LF	521.1271 APRON ENDWALLS FOR PIPE ARCH STEEL 71X47-INCH EACH	MINIMUM PIPE THICKNESS INCH
100A	42+25.0	54.0	--	100A	100A	100	775.00	773.48	1.32%	--	--	115	--	0.109
100B	48+00.0	42.9	--	100B	100B	100	777.27	775.89	2.27%	61	1	--	--	0.064
100	47+39.4	42.0	780.23	100	100	100C	773.48	772.46	1.27%	--	--	--	--	--
100C	47+39.4	-38.0	--	--	--	--	--	--	--	--	--	--	1	--
									TOTAL 0010	61	1	115	1	

NOTES:
*ADDITIONAL QUANTITIES SHOWN ELSEWHERE IN PLANS. SEE **DRIVEWAY PIPES** MISCELLANEOUS QUANTITIES SCHEDULES.

CROSS CULVERT ELLIPTICAL

INLET INVERT LOCATIONS* STATION	OFFSET	ELEV.	TO	DISCHARGE INVERT LOCATIONS* STATION	OFFSET	ELEV.	209.0100 BACKFILL GRANULAR ** CY	523.0419 CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL CLASS HE-IV 19X30-INCH LF	523.0519 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL 19X30-INCH EACH	650.6000 CONSTRUCTION STAKING PIPE CULVERTS *** EACH
UNDISTRIBUTED QUANTITIES FOR REMOVAL ITEMS							300			
133+62	61.30' RT	771.44	-	134+42	59.37' RT	771.10	17	80	2	1
142+41.4	90.50' RT	764.75	-	143+06	97.95' RT	763.45	18	64	2	1
175+62	38.98' LT	787.96	-	174+84	36.13' LT	787.69	21	80	2	1
						TOTAL 0010	356	224	6	3

NOTES:
*STATION, OFFSET, & ELEVATION ARE TO FLOWLINE AT THE END OF EACH PIPE.
ADDITIONAL QUANTITIES SHOWN ELSEWHERE IN PLANS. SEE **REMOVING STORM SEWER PIPES & CROSS CULVERT PIPES MISCELLANEOUS QUANTITIES SCHEDULES.
***ADDITIONAL QUANTITIES SHOWN ELSEWHERE IN PLANS. SEE **CROSS CULVERT PIPES & DRIVEWAY PIPES** MISCELLANEOUS QUANTITIES SCHEDULES.

CONCRETE CURB & GUTTER - SHEET 1 OF 2

STATION	OFFSET	TO	STATION	OFFSET	416.1010 CONCRETE SURFACE DRAINS CY	601.0409 CONCRETE CURB & GUTTER 30-INCH TYPE A LF	601.0411 CONCRETE CURB & GUTTER 30-INCH TYPE D LF	601.0553 CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE D LF	601.0555 CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE A LF	601.0557 CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE D LF	606.0200 RIPRAP MEDIUM* CY	645.0120 GEOTEXTILE FABRIC TYPE HR* SY	650.5500 CONSTRUCTION STAKING CURB GUTTER AND CURB & GUTTER LF	REMARKS
19+83.00	USH 45, 12.08' RT	-	50+88.57	CTH WG, 24.00' RT	--	--	--	142	--	--	--	--	142	CTH WG, SE QUADRANT
20+59.71	USH 45, 30.52' LT	-	49+26.09	CTH WG, 28.00' RT	2.4	--	--	80	--	--	3.3	13	80	CTH WG, SW QUADRANT
48+38.00	CTH WG, 14.00' LT	-	22+12.02	USH 45, 34.00' LT	2.4	--	--	145	--	--	3.3	13	145	CTH WG, NW QUADRANT
22+12.02	USH 45, 34.00' LT	-	25+50.00	USH 45, 26.44' LT	--	--	--	338	--	--	--	--	338	CONTINUES FROM NW QUAD
50+65.27	CTH WG, 28.00' LT	-	21+90.13	USH 45, 30.13' RT	2.9	--	--	62	--	--	3.3	13	62	CTH WG, NE QUADRANT
21+90.13	USH 45, 30.13' RT	-	23+75.00	USH 45, 24.00' RT	--	--	--	185	--	--	--	--	185	CONTINUES FROM NE QUAD
29+75.00	USH 45, 17.00' LT	-	30+68.00	USH 45, 17.00' LT	--	--	--	93	--	--	--	--	93	ALONG LEFT SHOULDER
48+44.15	USH 45, 28.00' RT	-	50+80.60	CTH CJ, 15.00' RT	2.4	--	--	86	--	--	3.3	13	86	CTH CJ, SE QUADRANT
48+49.75	USH 45, 24.00' LT	-	49+36.00	121ST ST, 15.00' RT	2.4	--	--	60	--	--	3.3	13	60	121ST ST, SW QUADRANT
49+12.00	121ST ST, 15.00' LT	-	49+79.75	USH 45, 28.00' LT	2.9	--	--	92	--	--	3.3	13	92	121ST ST, NW QUADRANT
50+70.13	CTH CJ, 15.00' LT	-	49+72.34	USH 45, 24.00' RT	2.9	--	--	65	--	--	3.3	13	65	CTH CJ, NE QUADRANT
61+15.40	USH 45, 24.00' LT	-	49+36.00	119TH ST, 15.00' RT	2.4	--	--	61	--	--	3.3	13	61	119TH ST, SW QUADRANT
49+12.00	119TH ST, 15.00' LT	-	62+45.40	USH 45, 28.00' LT	2.9	--	--	92	--	--	3.3	13	92	119TH ST, NW QUADRANT
76+97.56	USH 45, 24.00' LT	-	49+26.43	CTH V, 18.00' RT	2.4	--	--	76	--	--	3.3	13	76	CTH V, SW QUADRANT
49+30.26	CTH V, 24.00' LT	-	78+32.42	USH 45, 28.00' LT	2.4	--	--	62	--	--	3.3	13	62	CTH V, NW QUADRANT
100+27.47	USH 45, 28.00' RT	-	50+87.25	CTH Q, 15.00' RT	2.4	--	--	77	--	--	3.3	13	77	CTH Q, SE QUADRANT
50+70.04	CTH Q, 15.00' LT	-	101+63.12	USH 45, 24.00' RT	2.4	--	--	80	--	--	3.3	13	80	CTH Q, NE QUADRANT
120+20.27	USH 45, 24.00' LT	-	49+35.91	192ND AVE, 15.00' RT	4.8	--	--	60	--	--	3.3	13	60	192ND AV, SW QUADRANT
49+12.74	192ND AVE, 15.00' LT	-	121+48.84	USH 45, 28.00' LT	2.4	--	--	91	--	--	3.3	13	91	192ND AV, NW QUADRANT
129+48.16	USH 45, 24.00' LT	-	49+40.40	CTH JS, 15.73' RT	2.4	--	--	71	--	--	3.3	13	71	CTH JS, SW QUADRANT
48+88.18	CTH JS, 15.00' LT	-	130+91.58	USH 45, 29.00' LT	2.4	--	--	92	--	--	3.3	13	92	CTH JS, NW QUADRANT
133+38.25	USH 45, 29.00' RT	-	50+90.67	106TH ST, 15.00' LT	2.4	--	--	79	--	--	3.3	13	79	106TH ST, SE QUADRANT
50+72.41	106TH ST, 15.00' RT	-	134+73.99	USH 45, 28.00' RT	2.9	--	--	78	--	--	3.3	13	78	106TH ST, NE QUADRANT
141+93.00	USH 45, 28.00' RT	-	50+69.46	S 196TH AVE, 17.83' RT	2.4	--	--	74	--	--	3.3	13	74	S 196TH AV, SE QUADRANT
50+64.00	S 196TH AVE, 15.00' L	-	143+23.20	USH 45, 24.00' RT	2.4	--	--	60	--	--	3.3	13	60	S 196TH AV, NE QUADRANT
165+92.30	USH 45, 28.00' RT	-	50+99.36	N 196TH AVE, 15.00' LT	2.4	--	--	96	--	--	3.3	13	96	N 196TH AV, SE QUADRANT
50+64.11	N 196TH AVE, 15.00' R	-	167+37.52	USH 45, 24.00' RT	2.4	--	--	69	--	--	3.3	13	69	N 196TH AV, NE QUADRANT
192+91.71	USH 45, 16.00' RT	-	201+07.80	USH 45, 34.00' RT	2.4	--	--	816	--	--	3.3	13	816	ALONG NB RT TURN LANE
201+07.80	USH 45, 34.00' RT	-	50+75.47	CTH C, 24.00' RT	2.4	--	--	61	--	--	3.3	13	61	CTH C, SE QUADRANT
200+94.71	USH 45, 30.00' LT	-	49+21.22	CTH C, 30.00' RT	2.4	--	--	75	--	--	3.3	13	75	CTH C, SW QUADRANT
49+24.06	CTH C, 36.00' LT	-	202+51.38	USH 45, 34.00' LT	2.4	--	--	61	--	--	3.3	13	61	CTH C, NW QUADRANT
54+72.93	CTH C, 40.00' LT	-	50+77.04	CTH C, 42.00' LT	2.4	--	--	396	--	--	3.3	13	396	ALONG WB RT TURN LANE
50+77.04	CTH C, 42.00' LT	-	202+62.92	USH 45, 30.00' RT	2.4	--	--	75	--	--	3.3	13	75	CTH C, NE QUADRANT
249+65.37	USH 45, 28.00' RT	-	50+77.80	86TH ST, 16.00' RT	2.4	82	--	--	--	--	3.3	13	--	86TH ST, SE QUADRANT
50+75.48	86TH ST, 15.00' LT	-	251+15.45	USH 45, 16.00' RT	2.4	91	--	--	--	--	3.3	13	--	86TH ST, NE QUADRANT
251+15.45	USH 45, 16.00' RT	-	255+86.65	USH 45, 27.00' RT	--	471	--	--	--	--	--	--	--	ALONG NB RT TURN LANE

NOTE:
*ADDITIONAL QUANTITIES SHOWN ELSEWHERE IN PLANS. SEE **RIPRAP MEDIUM, CULVERT PIPE CHECKS** MISCELLANEOUS QUANTITIES SCHEDULES.

CONCRETE CURB & GUTTER - SHEET 2 OF 2

STATION	OFFSET	TO	STATION	OFSSET	416.1010 CONCRETE SURFACE DRAINS	601.0409 CONCRETE CURB & GUTTER 30-INCH TYPE A	601.0411 CONCRETE CURB & GUTTER 30-INCH TYPE D	601.0553 CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE D	601.0555 CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE A	601.0557 CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE D	606.0200 RIPRAP MEDIUM*	645.0120 GEOTEXTILE FABRIC TYPE HR*	650.5500 CONSTRUCTION STAKING CURB GUTTER AND CURB & GUTTER	REMARKS
					CY	LF	LF	LF	LF	LF	CY	SY	LF	
255+86.65	USH 45, 27.00' RT	-	50+47.34	84TH PL, 12.00' RT	--	29	--	--	--	--	--	--	--	84TH PL, SE QUADRANT
254+03.25	USH 45, 23.00' LT	-	49+38.27	CTH AH, 15.00' RT	2.4	60	--	--	--	--	3.3	13	--	CTH AH, SW QUADRANT
49+10.80	CTH AH, 15.00' LT	-	255+33.21	USH 45, 28.00' LT	2.4	93	--	--	--	--	3.3	13	--	CTH AH, NW QUADRANT
255+33.21	USH 45, 28.00' LT	-	265+21.65	USH 45, 16.00' LT	--	988	--	--	--	--	--	--	--	ALONG SB RT TURN LANE
265+21.65	USH 45, 16.00' LT	-	265+61.65	USH 45, 56.58' LT	--	61	--	--	--	--	--	--	--	SCHOOL DWY, SW QUADRANT
50+45.25	84TH PL, 18.00' LT	-	256+55.69	USH 45, 25.26' RT	2.4	28	--	--	--	--	3.3	13	--	84TH PL, NE QUADRANT
256+55.69	USH 45, 25.26' RT	-	263+39.59	USH 45, 16.00' RT	--	684	--	--	--	--	--	--	--	ALONG RIGHT SHOULDER
263+59.39	USH 45, 16.00' RT	-	50+41.42	84TH ST, 15.00' RT	2.4	37	--	--	--	--	3.3	13	--	84TH ST, SE QUADRANT
265+83.45	USH 45, 19' - 41' LT	-	266+02.32	USH 45, 19' - 41' LT	--	45	--	--	--	--	--	--	--	SAFETY ISLAND
50+40.59	84TH ST, 15.00' LT	-	264+19.58	USH 45, 16.00' RT	--	77	--	--	--	--	--	--	--	84TH ST, NE QUADRANT
264+19.58	USH 45, 16.00' RT	-	267+49.31	USH 45, 16.00' RT	--	330	--	--	--	--	--	--	--	ALONG RIGHT SHOULDER
267+49.31	USH 45, 16.00' RT	-	50+66.63	83RD ST, 10.00' RT	2.4	44	--	--	--	--	3.3	13	--	83RD ST, SE QUADRANT
265+97.40	USH 45, 76.98' LT	-	266+57.39	USH 45, 16.00' LT	--	93	--	--	--	--	--	--	--	SCHOOL DWY, NW QUADRANT
266+57.39	USH 45, 16.00' LT	-	272+66.37	USH 45, 16.00' LT	--	609	--	--	--	--	--	--	--	ALONG LEFT SHOULDER
272+66.37	USH 45, 16.00' LT	-	49+54.96	82ND ST, 15.15' LT	--	44	--	--	--	--	--	--	--	82ND ST, SW QUADRANT
50+45.48	83RD ST, 20.00' LT	-	268+59.52	USH 45, 16.00' RT	2.4	44	--	--	--	--	3.3	13	--	83RD ST, NE QUADRANT
268+59.52	USH 45, 16.00' RT	-	272+64.38	USH 45, 16.00' RT	--	405	--	--	--	--	--	--	--	ALONG RIGHT SHOULDER
272+64.38	USH 45, 16.00' RT	-	50+46.98	82ND ST, 15.00' RT	--	45	--	--	--	--	--	--	--	82ND ST, SE QUADRANT
50+46.98	82ND ST, 15.00' RT	-	50+87.37	82ND ST, 10.96' RT	--	--	40	--	--	--	--	--	--	ALONG 82ND ST RT SHOULDER
49+53.02	82ND ST, 15.00' RT	-	273+56.40	USH 45, 16.00' LT	--	45	--	--	--	--	--	--	--	82ND ST, NW QUADRANT
273+56.40	USH 45, 16.00' LT	-	280+70.00	USH 45, 16.00' LT	--	719	--	--	--	--	--	--	--	ALONG LEFT SHOULDER
50+45.04	82ND ST, 15.00' LT	-	273+54.41	USH 45, 16.00' RT	--	44	--	--	--	--	--	--	--	82ND ST, NE QUADRANT
273+54.41	USH 45, 16.00' RT	-	279+28.02	USH 45, 16.00' RT	--	572	--	--	--	--	--	--	--	ALONG RIGHT SHOULDER
279+28.02	USH 45, 16.00' RT	-	50+36.90	80TH ST, 15.00' RT	--	35	--	--	--	--	--	--	--	80TH ST, SE QUADRANT
50+48.92	80TH ST, 15.00' RT	-	280+14.93	USH 45, 16.00' RT	--	--	--	--	42	--	--	--	--	80TH ST, NE QUADRANT
280+14.93	USH 45, 16.00' RT	-	288+21.96	USH 45, 28.00' RT	--	--	--	--	805	--	--	--	--	ALONG RIGHT SHOULDER
288+21.96	USH 45, 28.00' RT	-	50+79.79	79TH ST, 28.10' RT	--	--	--	--	84	--	--	--	--	79TH ST, SE QUADRANT
50+79.79	79TH ST, 28.10' RT	-	50+90.00	79TH ST, 27.71' RT	--	--	--	--	--	10	--	--	--	MATCH TO EXITNING C/G
280+70.00	USH 45, 16.00' LT	-	302+75.00	USH 45, 39.1' LT	--	--	--	--	2215		--	--	--	ALONG LEFT SHOULDER
50+90.00	79TH ST, 30.31' LT	-	50+80.00	79TH ST, 30.4' LT	--	--	--	--	--	10	--	--	--	MATCH TO EXITNING C/G
50+79.79	79TH ST, 30.38' LT	-	289+76.67	USH 45, 24.26' RT	--	--	--	--	73	--	--	--	--	79TH ST, NE QUADRANT
289+77.00	USH 45, 24.00' RT	-	304+55.00	USH 45, 43.19' RT	--	--	--	--	1483	--	--	--	--	ALONG RIGHT SHOULDER
300+05.00	USH 45, 12.80' LT	-	302+75.00	USH 45, 15.23' LT	--	--	--	--	277	--	--	--	--	MEDIAN ISLAND
300+05.00	USH 45, 4.80' LT	-	302+78.00	USH 45, 10.98' RT	--	--	--	--	278	--	--	--	--	MEDIAN ISLAND
302+78.00	USH 45, 10.98' RT	-	303+87.99	USH 45, 16.29' RT	--	--	--	--	111	--	--	--	--	MEDIAN ISLAND
304+55.00	USH 45, 43.19' RT	-	305+35.21	USH 45, 44.43' RT	--	82	--	--	--	--	--	--	--	ALONG RIGHT SHOULDER
				TOTAL 0010	93.7	5,857	40	4,050	5,368	20	122.1	1126	4,050	

NOTE:

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE IN PLANS. SEE **RIPRAP MEDIUM, CULVERT PIPE CHECKS** MISCELLANEOUS QUANTITIES SCHEDULES.

CONCRETE SIDEWALK & CURB RAMPS - SHEET 1 OF 2

STATION	TO	STATION	LOCATION	602.0410 CONCRETE SIDEWALK 5-INCH SF	602.0420 CONCRETE SIDEWALK 7-INCH SF	602.0505 CURB RAMP DETECTABLE WARNING FIELD YELLOW SF	SPV.0060.02 CONSTRUCTION STAKING CURB RAMPS EACH	REMARKS
249+92.97	-	250+08.07	44.50' RT	63	--	10	1	ENDS AT SE CORNER OF 86TH ST
250+60.67	-	250+71.48	29.0' LT	--	208	20	--	MULTI-USE PATH (STAKING NOT REQD)
250+64.42	-	252+10.00	44.5'-34.5' RT	721	--	10	1	BIGINS AT NE CORNER OF 86TH ST
252+22.10	-	252+66.61	34.5' RT	223	--	--	--	
252+80.29	-	254+16.98	34.5' RT	684	--	--	--	
254+06.93	-	254+11.93	30.0' RT	25	--	10	1	TYPE 7B CURB RAMP
254+34.04	-	256+02.46	34.5' RT	832	--	10	1	ENDS AT SE CORNER OF 84TH PL
254+04.10	-	254+39.10	25.5' - 52.0' LT	--	630	50	2	MULTI-USE PATH AT CTH AH
254+89.48	-	256+90.38	44.75' - 35.5' LT	992	--	15	1	BEGINS AT NW CORNER OF CTH AH
256+61.01	-	256+66.01	30.5' LT	25	--	10	1	TYPE 7B CURB RAMP AT 84TH PL
257+03.56	-	257+88.36	35.5' - 31.1' LT	425	--	--	--	
258+03.55	-	258+86.10	29.9' - 23.5' LT	413	--	--	--	
258+98.15	-	260.86.26	23.5' LT	941	--	--	--	
261+02.10	-	263+26.80	23.5' LT	1,124	--	--	--	
263+50.03	-	265+47.81	23.5' LT	970	--	23	1	ENDS AT SW CORNER OF SCHOOL DWY
264+19.58	-	264+24.58	18.5' LT	25	--	10	1	TYPE 7B CURB RAMP AT 84TH ST
256+40.51	-	258+50.69	33.1' - 23.5' RT	1,043	--	10	1	BGINS AT NE CORNER OF 84TH PL
256+61.43	-	256+66.43	27.5' RT	25	--	10	1	TYPE 7B CURB RAMP AT 84TH PL
258+64.74	-	260+18.57	23.5' RT	771	--	--	--	
260+31.44	-	262+00.39	23.5' RT	847	--	--	--	
262+15.25	-	263+58.28	23.5' RT	704	--	10	1	ENDS AT SE CORNER OF 84TH ST
264+00.87	-	264+84.37	23.5' RT	411	--	10	1	BEGINS AT NE CORNER OF 84TH ST
264+19.59	-	264+24.58	18.5' RT	25	--	10	1	TYPE 7B CURB RAMP AT 84TH ST
265+19.37	-	266+01.14	23.5' RT	409	--	--	--	
266+36.14	-	267+78.47	23.5' RT	693	--	23	1	ENDS AT SE CORNER OF 83RD ST
267+44.31	-	267+49.31	18.5' RT	25	--	10	1	TYPE 7B CURB RAMP AT 83RD ST
265+85.57	-	266+00.32	23.5' LT	66	--	20	2	SCHOOL DWY SAFETY ISLAND
266+24.99	-	267+65.14	23.5' LT	682	--	23	1	BEGINS AT NW CORNER OF SCHOOL DWY
267+44.31	-	267+49.31	18.5' LT	25	--	10	1	TYPE 7B CURB RAMP AT 83RD ST
267+77.14	-	270+23.12	23.5' LT	1231	--	--	--	
268+59.53	-	268+54.53	18.5' LT	25	--	10	1	TYPE 7B CURAB RAMP AT 83RD ST
268+50.00	-	270+75.00	28.5' LT	160	--	--	--	ALONG FACE OF RET WALL
270+35.12	-	271+63.42	23.5' LT	644	--	--	--	
271+38.47	-	278+43.47	28.5' LT	93	--	--	--	PRIVATE WALK & STEPS
271+38.47	-	278+43.47	18.5' LT	25	--	--	--	TERRACE (5.0' X 5.0')
271+75.42	-	272+78.59	23.5' LT	549	--	15	1	ENDS AT SW CORNER OF 82ND ST
272+04.61	-	272+62.17	28.5' LT	58	--	--	--	ALONG FACE OF SIDEWALK CURB
272+61.38	-	272+66.38	18.5' LT	25	--	10	1	TYPE 7B CURB RAMP AT 82ND ST
268+38.31	-	271+07.97	23.5' RT	1338	--	15	1	BEGINS AT NE CORNER OF 83RD ST
268+59.52	-	268+64.52	18.5' RT	25	--	10	1	TYPE 7B CURB RAMP AT 83RD ST
270+28.91	-	270+34.91	28.5' RT	65	--	--	--	PRIVATE WALK & STEPS
270+28.91	-	270+34.91	18.5' RT	30	--	--	--	TERRACE (6.0' X 5.0')
271+28.03	-	271+38.16	23.5' RT	51	--	--	--	
271+50.23	-	272+58.60	23.5' RT	665	--	10	1	
272+59.39	-	272+64.39	18.5' RT	25	--	10	1	TYPE 7B CURB RAMP AT 82ND ST
273+34.57	-	275+62.25	23.5' LT	1123	--	15	1	BEGINS AT NW CORNER OF 82ND ST
273+56.40	-	273+61.40	18.5' LT	25	--	10	1	TYPE 7B CURB RAMP AT 82ND ST
275+74.25	-	277+23.79	23.5' LT	749	--	--	--	
276+72.45	-	276+75.54	28.5' LT	62	--	--	--	PRIVATE WALK
276+72.45	-	276+75.54	18.5' LT	15	--	--	--	TERRACE (3.0' X 5.0')

CONCRETE SIDEWALK & CURB RAMPS - SHEET 2 OF 2

STATION	TO	STATION	LOCATION	602.0410 CONCRETE SIDEWALK 5-INCH SF	602.0420 CONCRETE SIDEWALK 7-INCH SF	602.0505 CURB RAMP DETECTABLE WARNING FIELD YELLOW SF	SPV.0060.02 CONSTRUCTION STAKING CURB RAMPS EACH	REMARKS
277+35.79	-	277+91.79	23.5' LT	281	--	--	--	
277+72.72	-	277+77.08	28.5' LT	29	--	--	--	PRIVATE WALK
277+72.72	-	277+77.08	18.5' LT	22	--	--	--	TERRACE (4.4' X 5.0')
278+07.70	-	279+84.84	23.5' LT	911	--	--	--	OUTSIDE OF CURVE
279+23.02	-	279+28.02	18.5' LT	25	--	10	1	TYPE 7B CURB RAMP
279+71.24	-	279+73.96	28.5' LT	25	--	--	--	PRIVATE WALK & STEPS
279+71.24	-	279+73.96	28.5' LT	15	--	--	--	TERRACE (3.0'X 5.0')
279+96.39	-	280+08.06	23.5' LT	60	--	--	--	BETWEEN DRIVEWAYS
280+22.81	-	288+15.11	23.5' - 35.5' LT	3978	--	--	--	
288+15.11	-	288+20.11	31.0' LT	25	--	10	1	TYPE 7B CURB RAMP
288+15.11	-	289+82.34	35.5' LT	836	--	--	--	
289+82.34	-	289+87.34	31.0' LT	25	--	10	1	TYPE 7B CURB RAMP
289+82.34	-	300+00.25	35.5' - 46.4' LT	5,123	--	--	--	OUTSIDE OF CURVE
300+00.25	-	304+85.97	46.4' - 54.6' LT	2,431	--	--	1	MATCH TO ASPHALTIC DRIVEWAY
273+33.19	-	276+62.66	23.5' RT	1,635	--	16	1	BEGINS AT NE CORNER OF 82ND ST
273+34.27	-	273+37.27	28.5' - 37.3' RT	26	--	--	--	CONNECT TO EXISTING WALK
273+54.41	-	273+59.41	18.5' RT	25	--	10	1	TYPE 7B CURB RAMP
276+74.69	-	277+72.00	23.5' RT	487	--	--	--	
278+04.09	-	278+43.96	23.5' RT	199	--	--	--	
278+57.96	-	279+47.88	23.5' RT	422	--	15	1	ENDS AT SE CORNER OF 80TH ST
279+23.02	-	279+28.02	18.5' RT	25	--	10	1	TYPE 7B CURB RAMP
279+95.71	-	283+97.23	23.0' RT	1,975	--	15	1	BEGINS AT NE CORNER OF 80TH ST
280+33.07	-	280+38.07	18.0' RT	25	--	10	--	TYPE 7B CURB RAMP
284+32.23	-	284+68.50	23.0' RT	181	--	--	--	
284+81.32	-	288+75.00	23.0' - 97.0' RT	2,199	--	28	1	MATCH TO EXISTING SIDEWALK AT 79TH ST
288+15.11	-	288+20.11	18.0' RT	25	--	10	1	TYPE 7B CURB RAMP AT 79TH ST
289+51.48	-	304+87.03	23.0' - 51.9' RT	7,692	--	15	1	BEGINS AT NE CORNER OF 79TH ST
289+54.67	-	289+62.46	40.5' RT	46	--	--	--	MATCH TO EXISTING SIDEWALK AT 79TH ST
289+82.34	-	289+87.34	18.0' RT	25	--	10	1	TYPE 7B CURB RAMP AT 79TH ST
290+87.89	-	290+90.89	28.0' RT	35	--	--	--	PRIVATE WALK
290+87.89	-	290+90.89	18.0' RT	15	--	--	--	TERRACE (3.0' X 5')
			TOTAL 0010	48,995	838	578	43	

CONCRETE CURB PEDESTRIAN

STATION	TO	STATION	LOCATION	601.0600 CONCRETE CURB PEDESTRIAN LF	SPV.0090.09 CONCRETE CURB PEDESTRIAN 12-INCH LF	REMARKS
263+06	-	263+53	USH 45, 23.8' RT	--	47	SEE CONSTRUCTION DETAIL
265+19	-	266+00	USH 45, 32.5' RT	81	--	
272+05	-	272+67	USH 45, 29.5' LT	--	72	SEE CONSTRUCTION DETAIL
273+39	-	273+46	USH 45, 23.5' RT	7		
280+10	-	280+42	USH 45, 29.5' RT	--	32	SEE CONSTRUCTION DETAIL
288+21	-	288+44	USH 45, 35.0' RT	23	--	
289+57	-	289+64	USH 45, 36.7' RT	7	--	
250+00	-	290+00	UNDISTRIBUTED	33	--	AS DIRECTED BY THE ENGINEER
			TOTAL 0010	151	151	

STORM SEWER - SHEET 1 OF 6 (STRUCTURES & COVERS)

			611.2003	611.2004	611.2005	611.2006	SPV.0060.01	611.3004	611.3230	611.3901	611.3902	611.0420	611.0530	611.0612	611.0624	611.0627	611.0645	520.8000		
			MANHOLES							INLETS MEDIAN	INLETS MEDIAN							CONCRETE COLLARS		
STRUCTURE NUMBER	STATION	OFFSET	3-FT DIA EACH	4-FT DIA EACH	5-FT DIA EACH	6-FT DIA EACH	9-FT DIA EACH	INLETS 4-FT DIA EACH	INLETS 2X3-FT EACH	1 GRATE EACH	2 GRATE EACH	RECONST. MANHOLES EACH	MANHOLE COVERS TYPE J EACH	INLET COVERS TYPE C EACH	INLET COVERS TYPE H EACH	INLET COVERS TYPE HM EACH	INLET COVERS TYPE MS-A EACH	FOR PIPE* EACH	RIM OR FLANGE ELEV	STR DEPTH FEET
1A	196+00.0	30.9'; RT	---	---	---	---	---	---	1	---	---	---	---	---	---	1	---	---	786.59	4.3
1B	196+65.0	35.5' RT	---	---	---	---	---	---	1	---	---	---	---	---	---	1	---	---	786.12	4.5
1C	198+25.0	35.5' RT	---	---	---	---	---	---	1	---	---	---	---	---	---	1	---	---	784.76	2.0
1D	196+90.0	35.5' RT	---	---	---	---	---	---	1	---	---	---	---	---	---	1	---	---	785.97	4.9
1E	196+90.0	42.5' LT	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	783.39	783.1
2A	201+03.0	58.0' RT	---	---	---	---	---	---	---	1	---	---	---	---	---	---	1	---	779.86	1.8
2B	201+03.0	35.5' RT	---	---	---	---	---	1	---	---	---	---	---	---	---	1	---	---	782.53	3.4
2C	199+90.0	35.5' RT	---	---	---	---	---	1	---	---	---	---	---	---	---	1	---	---	782.97	4.1
2D	199+86.0	40.8' LT	---	---	---	---	---	---	---	1	---	---	---	---	---	---	1	---	780.28	2.9
2E	199+00.0	51.3' LT	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---		
3A	202+11.7	101.3' RT	---	---	---	---	---	---	1	---	---	---	---	---	---	1	---	---	781.62	1.8
3	202+77.6	56.0' RT	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---		
10A	256+49.6	55.3' RT	---	---	---	---	---	---	---	1	---	---	---	---	---	---	1	---	798.60	3.0
10B	255+98.7	143.6' RT	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---		
10C	255+93.6	55.2' RT	---	---	---	---	---	1	---	---	---	---	---	1	---	---	---	---	800.70	5.7
10	256+00.0	6.0' RT	---	---	1	---	---	---	---	---	---	---	1	---	---	---	---	---	800.96	5.8
11A	253+25.0	27.7' RT	---	---	---	---	---	---	1	---	---	---	---	---	1	---	---	---	792.78	2.9
11	253+25.0	6.0' RT	---	1	---	---	---	---	---	---	---	---	1	---	---	---	---	---	793.20	4.7
12A	251+25.0	51.2' RT	---	---	---	---	---	---	---	1	---	---	---	---	---	---	1	---	785.95	3.4
12B	251+25.0	18.0' RT	---	---	---	---	---	---	1	---	---	---	---	---	1	---	---	---	787.09	3.9
12	251+25.0	6.0' RT	---	1	---	---	---	---	---	---	---	---	1	---	---	---	---	---	787.30	4.6
13	250+15.0	6.0' RT	---	---	1	---	---	---	---	---	---	---	1	---	---	---	---	---	784.06	4.4
14	249+66.7	46.8' RT	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---		
15A	250+68.0	100.2' RT	---	---	---	---	---	---	---	1	---	---	---	---	---	---	1	---	783.22	2.5
15B	250+13.3	131.2' RT	---	---	---	---	---	---	---	1	---	---	---	---	---	---	1	---	783.94	2.5
15	250+14.4	85.2' RT	---	1	---	---	---	---	---	---	---	---	1	---	---	---	---	---	784.86	4.7
15C	249+67.8	58.5' RT	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---		
16A	254+89.8	94.5' LT	---	---	---	---	---	---	---	1	---	---	---	---	---	---	1	---	795.61	2.4
16	254+64.3	94.5' LT	1	---	---	---	---	---	---	---	---	---	1	---	---	---	---	---	798.01	3.5
17A	255+45.0	29.5' LT	---	---	---	---	---	---	1	---	---	---	---	---	1	---	---	---	799.23	2.9
17	254+63.3	30.0' LT	---	1	---	---	---	---	---	---	---	---	1	---	---	---	---	---	797.03	3.1
18	253+93.8	34.8' LT	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---		
20A	260+50.0	17.5' LT	---	---	---	---	---	---	1	---	---	---	---	---	1	---	---	---	795.14	2.9
20B	260+50.0	17.5' RT	---	---	---	---	---	---	1	---	---	---	---	---	1	---	---	---	795.14	2.9
20	260+50.0	6.0' LT	---	1	---	---	---	---	---	---	---	---	1	---	---	---	---	---	795.34	5.0
21A	263+00.0	46.0' LT	---	---	---	---	---	---	---	---	1	---	---	---	---	---	2	---	781.70	4.6
21B	263+10.0	17.5' LT	---	---	---	---	---	1	---	---	---	---	---	---	1	---	---	---	782.87	4.9
21C	263+10.0	17.5' RT	---	---	---	---	---	---	1	---	---	---	---	---	1	---	---	---	782.87	2.9
21	263+10.0	6.0' LT	---	1	---	---	---	---	---	---	---	---	1	---	---	---	---	---	783.07	4.9
22A	264+35.0	17.5' LT	---	---	---	---	---	---	1	---	---	---	---	---	1	---	---	---	777.98	2.9
22	264+35.0	6.0' LT	---	1	---	---	---	---	---	---	---	---	1	---	---	---	---	---	777.98	4.9
22B	264+35.0	17.5' RT	---	---	---	---	---	1	---	---	---	---	---	---	1	---	---	---	778.18	5.5
22C	264+45.0	80.0' RT	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---		

GENERAL NOTES:

1. RIM ELEVATIONS ARE GIVEN AT THE FLANGE LINE FOR INLET GRATES OR THE CENTER OF THE MANHOLE STRUCTURE FOR MANHOLES.
2. STATIONS AND OFFSETS ARE TO THE CENTER OF STRUCTURES OR TO THE END OF PIPE WHERE THERE IS AN ENDWALL.
3. PIPE LENGTHS ARE MEASURED TO THE CENTER OF STRUCTURES.
4. STR DEPTH = RIM ELEV - INV - CASTING HEIGHT - ADJUSTMENT
   CASTING HEIGHT = 9" FOR TYPE C AND J COVERS; AND 6" FOR TYPE H, HM, AND H COVERS
   ADJUSTMENT = 4" TYPICAL (NO ADJUSTMENT FOR INLETS MEDIAN 1 GRATE AND INLETS MEDIAN 2 GRATE)
5. JOINT TIES FOR CONCRETE PIPE SHALL BE PROVIDED AT ALL REINFORCED CONCRETE APRON ENDWALL LOCATIONS. APRON ENDWALLS SHALL BE TIED FOR THE LAST THREE JOINTS AT PIPE ENDS. THE COST OF THESE TIES SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR THE REINFORCED CONCRETE STORM SEWER PIPE.

* ADDITIONAL QUANTITIES SHOWN ESLEWHERE IN PLANS. SEE **CONCRETE COLLARS FOR PIPE** MISCELLANEOUS QUANTITIES SCHEDULE.

STORM SEWER - SHEET 2 OF 6 (STRUCTURES & COVERS)

STRUCTURE NUMBER	STATION	OFFSET	611.2003 MANHOLES 3-FT DIA EACH	611.2004 MANHOLES 4-FT DIA EACH	611.2005 MANHOLES 5-FT DIA EACH	611.2006 MANHOLES 6-FT DIA EACH	SPV.0060.01 MANHOLES 9-FT DIA EACH	611.3004 INLETS 4-FT DIA EACH	611.3230 INLETS 2X3-FT EACH	611.3901 INLETS MEDIAN 1 GRATE EACH	611.3902 INLETS MEDIAN 2 GRATE EACH	611.0420 RECONST. MANHOLES EACH	611.0530 MANHOLE COVERS TYPE J EACH	611.0612 INLET COVERS TYPE C EACH	611.0624 INLET COVERS TYPE H EACH	611.0627 INLET COVERS TYPE HM EACH	611.0645 INLET COVERS TYPE MS-A EACH	520.8000 CONCRETE COLLARS FOR PIPE* EACH	RIM OR FLANGE ELEV	STR DEPTH FEET
23A	265+42.5	44.7' LT	---	---	---	---	---	---	---	1	---	---	---	---	---	---	1	---	774.56	3.5
23B	265+99.0	17.5' LT	---	---	---	---	---	1	---	---	---	---	---	---	1	---	---	---	775.18	3.2
23C	266+44.3	37.6' LT	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---		
23	266+46.0	18.6' LT	---	---	1	---	---	---	---	---	---	---	---	---	1	---	---	---	774.88	3.7
25	266+46.0	17.5' RT	---	---	1	---	---	---	---	---	---	---	---	---	1	---	---	---	775.15	4.2
26	266+46.0	45.3' RT	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---		
30A	268+70.0	17.5' LT	---	---	---	---	---	---	1	---	---	---	---	---	1	---	---	---	779.65	2.9
30B	268+70.0	17.5' RT	---	---	---	---	---	---	1	---	---	---	---	---	1	---	---	---	779.65	2.9
30	268+70.0	6.0' LT	---	1	---	---	---	---	---	---	---	---	1	---	---	---	---	---	779.85	4.2
31A	267+85.0	50.0' LT	---	---	---	---	---	---	---	1	---	---	---	---	---	---	1	---	774.80	2.4
31	267+85.0	6.0' LT	---	1	---	---	---	---	---	---	---	---	1	---	---	---	---	---	777.23	5.1
32A	266+70.0	17.5' LT	---	---	---	---	---	---	1	---	---	---	---	---	1	---	---	---	775.26	2.9
32	266+70.0	6.0' LT	---	---	1	---	---	---	---	---	---	---	1	---	---	---	---	---	775.46	3.9
33A	266+70.0	17.5' RT	---	---	---	---	---	---	1	---	---	---	---	---	1	---	---	---	775.26	3.1
33	266+56.0	17.5' RT	---	---	---	---	---	1	---	---	---	---	---	---	1	---	---	---	775.14	4.1
34	266+51.0	45.7' RT	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---		
40A	272+84.3	50.6' LT	---	---	---	---	---	---	---	---	1	---	---	---	---	---	2	---	786.50	3.5
40B	273+41.2	49.3' LT	---	---	---	---	---	---	---	1	---	---	---	---	---	---	1	---	786.13	2.0
40	273+05.5	50.1' LT	---	---	1	---	---	---	---	---	---	---	1	---	---	---	---	---	789.00	5.9
41B	272+55.0	17.5' LT	---	---	---	---	---	1	---	---	---	---	---	---	1	---	---	---	788.71	3.8
41	273+04.5	6.0' LT	---	---	1	---	---	---	---	---	---	---	1	---	---	---	---	---	788.75	5.9
42A	275+00.0	53.0 'LT	---	---	---	---	---	---	---	---	1	---	---	---	---	---	2	---	784.73	3.3
42B	275+00.0	17.5' LT	---	---	---	---	---	---	1	---	---	---	---	---	1	---	---	---	787.92	5.7
42C	275+00.0	17.5' RT	---	---	---	---	---	---	1	---	---	---	---	---	1	---	---	---	787.92	2.9
42	275+00.0	6.0' LT	---	---	---	---	---	---	1	---	---	---	---	---	1	---	---	---	788.12	6.5
42D	276+00.0	6.0' LT	---	---	---	---	---	---	1	---	---	---	---	---	1	---	---	---	787.61	1.8
42E	275+00.0	6.0' LT	---	---	1	---	---	---	---	---	---	---	1	---	---	---	---	---	787.81	6.4
43A	276+90.0	17.5' LT	---	---	---	---	---	---	1	---	---	---	---	---	1	---	---	---	787.30	2.9
43B	276+90.0	17.5' RT	---	---	---	---	---	---	1	---	---	---	---	---	1	---	---	---	787.30	2.9
43	276+90.0	6.0' LT	---	---	1	---	---	---	---	---	---	---	1	---	---	---	---	---	787.50	6.6
44A	278+65.0	51.0' LT	---	---	---	---	---	---	---	---	1	---	---	---	---	---	2	---	783.50	3.6
44B	279+00.0	17.5' LT	---	---	---	---	---	1	---	---	---	---	---	---	1	---	---	---	784.67	4.1
44C	279+00.0	17.5' RT	---	---	---	---	---	---	1	---	---	---	---	---	1	---	---	---	784.11	2.9
44	279+00.0	6.0' LT	---	---	1	---	---	---	---	---	---	---	1	---	---	---	---	---	784.52	4.6
45	279+75.0	6.0' LT	---	1	---	---	---	---	---	---	---	---	1	---	---	---	---	---	781.95	4.6
46A	281+00.0	17.5' LT	---	---	---	---	---	---	1	---	---	---	---	---	---	1	---	---	775.86	2.9
46B	281+00.0	17.5' RT	---	---	---	---	---	---	1	---	---	---	---	---	---	1	---	---	775.44	2.9
46	281+00.0	6.0' LT	---	---	1	---	---	---	---	---	---	---	1	---	---	---	---	---	775.80	4.5
47A	283+75.0	50.0' RT	---	---	---	---	---	---	---	---	1	---	---	---	---	1	2	---	759.70	2.5
47B	283+50.0	17.5' RT	---	---	---	---	---	1	---	---	---	---	---	---	---	1	---	---	763.66	6.0
47	283+50.0	6.0' LT	---	---	---	1	---	---	---	---	---	---	1	---	---	---	---	---	763.86	7.0
48A	283+50.0	17.5' LT	---	---	1	---	---	---	---	---	---	---	---	---	---	1	---	---	763.66	7.1
48	283+50.0	53.5' LT	---	---	1	---	---	---	---	---	---	---	1	---	---	---	---	---		
50	286+86.0	58.9' LT	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---		
51A	287+18.0	26.1' LT	---	---	---	---	---	---	1	---	---	---	---	---	---	1	---	---	757.48	2.9
51B	287+08.0	25.8' LT	---	---	---	---	---	---	1	---	---	---	---	---	---	1	---	---	757.48	3.1
51	286+86.0	24.9' LT	---	---	1	---	---	---	---	---	---	---	---	---	---	1	---	---	757.49	6.5

GENERAL NOTES:

1. RIM ELEVATIONS ARE GIVEN AT THE FLANGE LINE FOR INLET GRATES OR THE CENTER OF THE MANHOLE STRUCTURE FOR MANHOLES.
2. STATIONS AND OFFSETS ARE TO THE CENTER OF STRUCTURES OR TO THE END OF PIPE WHERE THERE IS AN ENDWALL.
3. PIPE LENGTHS ARE MEASURED TO THE CENTER OF STRUCTURES.
4. STR DEPTH = RIM ELEV - INV - CASTING HEIGHT - ADJUSTMENT
   CASTING HEIGHT = 9" FOR TYPE C AND J COVERS; AND 6" FOR TYPE H, HM, AND H COVERS
   ADJUSTMENT = 4" TYPICAL (NO ADJUSTMENT FOR INLETS MEDIAN 1 GRATE AND INLETS MEDIAN 2 GRATE)
5. JOINT TIES FOR CONCRETE PIPE SHALL BE PROVIDED AT ALL REINFORCED CONCRETE APRON ENDWALL LOCATIONS. APRON ENDWALLS SHALL BE TIED FOR THE LAST THREE JOINTS AT PIPE ENDS. THE COST OF THESE TIES SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR THE REINFORCED CONCRETE STORM SEWER PIPE.

* ADDITIONAL QUANTITIES SHOWN ESLEWHERE IN PLANS. SEE **CONCRETE COLLARS FOR PIPE** MISCELLANEOUS QUANTITIES SCHEDULE.

STORM SEWER - SHEET 3 OF 6 (STRUCTURES & COVERS)

STRUCTURE NUMBER	STATION	OFFSET	611.2003 MANHOLES 3-FT DIA EACH	611.2004 MANHOLES 4-FT DIA EACH	611.2005 MANHOLES 5-FT DIA EACH	611.2006 MANHOLES 6-FT DIA EACH	SPV.0060.01 MANHOLES 9-FT DIA EACH	611.3004 INLETS 4-FT DIA EACH	611.3230 INLETS 2X3-FT EACH	611.3901 INLETS MEDIAN 1 GRATE EACH	611.3902 INLETS MEDIAN 2 GRATE EACH	611.0420 RECONST. MANHOLES EACH	611.0530 MANHOLE COVERS TYPE J EACH	611.0612 INLET COVERS TYPE C EACH	611.0624 INLET COVERS TYPE H EACH	611.0627 INLET COVERS TYPE HM EACH	611.0645 INLET COVERS TYPE MS-A EACH	520.8000 CONCRETE COLLARS FOR PIPE* EACH	RIM OR FLANGE ELEV	STR DEPTH FEET
52A	287+26.9	29.5' RT	---	---	---	---	---	---	1	---	---	---	---	---	---	1	---	---	757.44	2.9
52B	286+98.0	29.5' RT	---	---	---	---	---	---	1	---	---	---	---	---	---	1	---	---	757.40	3.5
52	286+86.0	29.5' RT	---	---	1	---	---	---	---	---	---	---	---	---	---	1	---	---	757.40	7.5
53A	286+59.0	39.8' RT	---	---	1	---	---	---	---	---	---	---	1	---	---	---	---	---	758.09	10.8
53B	286+86.0	55.5' RT	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	758.02	7.2
53	286+86.0	40.2' RT	---	---	1	---	---	---	---	---	---	---	1	---	---	---	---	1	758.02	11.2
54	288+51.0	45.0' RT	---	---	---	---	---	---	---	---	---	1	---	---	---	---	---	---		
60A	292+25.0	20.3' LT	---	---	---	---	---	---	1	---	---	---	---	---	---	1	---	---	760.18	2.9
60B	292+25.0	17.5' RT	---	---	---	---	---	---	1	---	---	---	---	---	---	1	---	---	760.24	3.0
60	292+25.0	6.0' LT	---	1	---	---	---	---	---	---	---	---	1	---	---	---	---	---	760.44	4.0
61A	290+00.0	29.5' LT	---	---	---	---	---	---	1	---	---	---	---	---	---	1	---	---	758.82	3.0
61B	290+00.0	23.8' RT	---	---	---	---	---	---	1	---	---	---	---	---	---	1	---	---	758.93	3.1
61	290+00.0	6.0' LT	---	1	---	---	---	---	---	---	---	---	1	---	---	---	---	---	759.26	4.3
62	288+00.0	6.0' LT	---	---	1	---	---	---	---	---	---	---	1	---	---	---	---	---	758.23	4.6
63	288+00.0	29.1' LT	---	---	---	---	---	1	---	---	---	---	---	---	---	1	---	---	757.80	4.6
64	288+00.0	57.2' LT	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---		
65A	288+76.5	67.0' RT	---	---	---	---	---	---	1	---	---	---	---	---	---	1	---	---	757.91	2.5
65	288+82.4	68.7' RT	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1		
66A	289+41.4	67.7' RT	---	---	---	---	---	---	1	---	---	---	---	---	---	1	---	---	757.92	2.7
66	289+39.2	68.3' RT	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1		
70A	297+00.0	25.6' LT	---	---	---	---	---	---	1	---	---	---	---	---	---	1	---	---	766.76	2.9
70B	297+00.0	17.5' RT	---	---	---	---	---	---	1	---	---	---	---	---	---	1	---	---	766.92	2.9
70	297+00.0	6.0' LT	---	1	---	---	---	---	---	---	---	---	1	---	---	---	---	---	767.12	4.6
71A	294+00.0	17.5' RT	---	---	---	---	---	---	1	---	---	---	---	---	---	1	---	---	761.25	2.8
71	294+00.0	6.0' LT	---	---	1	---	---	---	---	---	---	---	1	---	---	---	---	---	761.45	3.9
72	294+00.0	17.5' LT	---	---	---	---	---	1	---	---	---	---	---	---	---	1	---	---	761.25	4.0
73	294+00.0	41.5' LT	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---		
80A	300+08.5	40.0' LT	---	---	---	---	---	---	1	---	---	---	---	---	---	1	---	---	774.20	2.9
80B	300+10.0	11.3' LT	---	---	---	---	---	---	1	---	---	---	---	---	---	1	---	---	774.76	3.8
80C	300+10.0	6.0' LT	---	---	---	---	---	---	1	---	---	---	---	---	---	1	---	---	774.85	3.9
80D	300+10.0	25.0' RT	---	---	---	---	---	---	1	---	---	---	---	---	---	1	---	---	774.29	3.7
80	300+08.0	48.0' RT	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---		
90A	301+68.0	42.3' LT	---	---	---	---	---	---	1	---	---	---	---	---	---	1	---	---	778.32	2.9
90B	301+75.0	11.3' LT	---	---	---	---	---	---	1	---	---	---	---	---	---	1	---	---	779.00	3.9
90C	301+75.0	5.1' RT	---	---	---	---	---	---	1	---	---	---	---	---	---	1	---	---	779.00	4.1
90D	301+75.0	36.2' RT	---	---	---	---	---	---	1	---	---	---	---	---	---	1	---	---	778.44	3.8
90	301+75.0	60.2' RT	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---		
100A	46+25.0	54.0' RT	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---		
100B	48+00.0	42.9' RT	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---		
100	47+39.4	28.0' RT	---	---	---	---	1	---	---	---	---	---	1	---	---	---	---	---	780.23	5.7
100C	47+39.4	38.0' LT	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---		
101	23+70.0	25.5' RT	---	---	---	---	---	---	1	---	---	---	---	---	---	1	---	---	778.75	3.0
101A	24+28.4	38.9' RT	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---		
		TOTALS	1	13	19	1	1	12	47	10	5	1	30	1	26	38	20	3		

GENERAL NOTES:

1. RIM ELEVATIONS ARE GIVEN AT THE FLANGE LINE FOR INLET GRATES OR THE CENTER OF THE MANHOLE STRUCTURE FOR MANHOLES.
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4. STR DEPTH = RIM ELEV - INV - CASTING HEIGHT - ADJUSTMENT
   CASTING HEIGHT = 9" FOR TYPE C AND J COVERS; AND 6" FOR TYPE H, HM, AND H COVERS
   ADJUSTMENT = 4" TYPICAL (NO ADJUSTMENT FOR INLETS MEDIAN 1 GRATE AND INLETS MEDIAN 2 GRATE)
5. JOINT TIES FOR CONCRETE PIPE SHALL BE PROVIDED AT ALL REINFORCED CONCRETE APRON ENDWALL LOCATIONS. APRON ENDWALLS SHALL BE TIED FOR THE LAST THREE JOINTS AT PIPE ENDS. THE COST OF THESE TIES SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR THE REINFORCED CONCRETE STORM SEWER PIPE.

* ADDITIONAL QUANTITIES SHOWN ESLEWHERE IN PLANS. SEE **CONCRETE COLLARS FOR PIPE** MISCELLANEOUS QUANTITIES SCHEDULE.

STORM SEWER - SHEET 4 OF 6 (PIPES AND ENDWALLS)

					608.0312	608.0318	608.0324	608.0330	608.0412	608.0415	608.0418	608.0424	608.0460	610.0424	522.1012 AEW	522.1015 AEW	522.1018 AEW	522.1024 *AEW	522.1030 *AEW	522.1060 *AEW	523.0524 AEW	611.9800.S	
					STORM SEWER PIPE REINFORCED CONCRETE										FOR	FOR	FOR	FOR	FOR	FOR	FOR		
					CLASS III				CLASS IV					SSPRC	CPRC	CPRC	CPRC	CPRC	CPRC	CPRC	CPRC HE	PIPE	** JOINT
FROM STR	TO STR	INLET ELEV	DISCH ELEV	SLOPE (FT/FT)	12-INCH (LF)	18-INCH (LF)	24-INCH (LF)	30-INCH (LF)	12-NCH (LF)	15-INCH (LF)	18-INCH (LF)	24-INCH (LF)	60-INCH (LF)	CLASS HE-IV 24X38-INCH (LF)	12-INCH EACH	15-INCH EACH	18-INCH EACH	24-INCH EACH	30-INCH EACH	60-INCH EACH	24X38-INCH EACH	GRATES EACH	TIES EACH
1A	1B	781.43	780.78	0.0100	65.2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
1B	1D	780.78	780.53	0.0100	25.0	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
1C	1D	781.88	780.53	0.0100	---	---	---	---	135.0	---	---	---	---	---	---	---	---	---	---	---	---	---	---
1D	1E	780.28	779.50	0.0100	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
1E	AEW				---	---	---	---	---	---	---	---	---	---	1	---	---	---	---	---	---	---	6
2A	2B	778.40	778.34	0.0030	---	---	---	---	18.8	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2B	2C	778.34	778.00	0.0030	---	---	---	---	---	---	113.0	---	---	---	---	---	---	---	---	---	---	---	---
2C	2D	778.00	777.73	0.0037	---	---	---	---	---	---	73.2	---	---	---	---	---	---	---	---	---	---	---	---
2D	2E	777.73	777.29	0.0050	---	---	---	---	---	---	87.5	---	---	---	---	---	---	---	---	---	---	---	---
2E	AEW				---	---	---	---	---	---	---	---	---	---	1	---	---	---	---	---	---	---	6
3A	3	779.00	778.60	0.0050	---	---	---	---	80.0	---	---	---	---	---	---	---	---	---	---	---	---	---	
3	AEW				---	---	---	---	---	---	---	---	---	---	1	---	---	---	---	---	---	---	6
10A	10C	795.94	795.42	0.0100	---	---	---	---	52.2	---	---	---	---	---	---	---	---	---	---	---	---	---	---
10B	10C	800.12	795.70	0.0500	---	88.4	---	---	---	---	---	---	---	---	---	---	1	---	---	---	---	1	6
10C	10	795.03	794.53	0.0100	---	49.3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
10	11	794.03	787.44	0.0240	---	---	274.9	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
11A	11	789.03	788.81	0.0100	---	---	---	---	21.8	---	---	---	---	---	---	---	---	---	---	---	---	---	---
11	12	787.44	781.64	0.0290	---	---	200.0	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
12A	12B	782.55	782.38	0.0050	---	---	---	---	---	---	34.0	---	---	---	---	---	---	---	---	---	---	---	---
12B	12	782.38	782.14	0.0200	---	---	---	---	---	---	12.0	---	---	---	---	---	---	---	---	---	---	---	---
12	13	781.64	778.62	0.0274	---	---	---	---	---	---	---	110.0	---	---	---	---	---	---	---	---	---	---	---
13	14	778.62	777.99	0.0100	---	---	---	---	---	---	---	63.2	---	---	---	---	---	---	---	---	---	---	---
14	AEW				---	---	---	---	---	---	---	---	---	---	---	---	---	1	---	---	---	1	---
15A	15	780.72	779.60	0.0200	---	---	---	---	---	---	56.0	---	---	---	---	---	---	---	---	---	---	---	---
15B	15	781.44	780.98	0.0100	---	---	---	---	---	46.0	---	---	---	---	---	---	---	---	---	---	---	---	---
15	15C	779.10	778.03	0.0200	---	---	53.7	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
15C	AEW				---	---	---	---	---	---	---	---	---	---	---	---	---	1	---	---	---	1	6
16A	16	793.55	793.43	0.0050	---	---	---	---	24.0	---	---	---	---	---	---	---	---	---	---	---	---	---	---
16	17	793.43	793.11	0.0050	---	---	---	---	64.5	---	---	---	---	---	---	---	---	---	---	---	---	---	---
17A	17	795.50	793.87	0.0200	---	---	---	---	81.7	---	---	---	---	---	---	---	---	---	---	---	---	---	---
17	18	792.86	792.30	0.0080	---	---	---	---	---	70.0	---	---	---	---	---	---	---	---	---	---	---	---	---
18	AEW				---	---	---	---	---	---	---	---	---	---	---	1	---	---	---	---	---	---	6
20A	20	791.39	791.28	0.0100	---	---	---	---	11.5	---	---	---	---	---	---	---	---	---	---	---	---	---	---
20B	20	791.39	791.16	0.0100	---	---	---	---	23.5	---	---	---	---	---	---	---	---	---	---	---	---	---	---
20	21	789.31	777.09	0.0470	---	---	260.0	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
21A	21B	777.43	777.15	0.0100	---	---	27.9	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
21B	21	777.15	777.09	0.0057	---	---	11.5	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
21C	21	779.12	778.89	0.0100	---	---	---	---	23.5	---	---	---	---	---	---	---	---	---	---	---	---	---	---
21	22	777.09	771.99	0.0408	---	---	125.0	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
22A	22	774.22	774.11	0.010	---	---	---	---	11.5	---	---	---	---	---	---	---	---	---	---	---	---	---	---
22	22B	771.99	771.87	0.005	---	---	23.5	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
22B	22C	771.87	771.24	0.010	---	---	63.3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
22C	AEW				---	---	---	---	---	---	---	---	---	---	---	---	---	1	---	---	---	1	---

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3. PIPE LENGTHS ARE MEASURED TO THE CENTER OF STRUCTURES.
4. STR DEPTH = RIM ELEV - INV - CASTING HEIGHT - ADJUSTMENT
   CASTING HEIGHT = 9" FOR TYPE C AND J COVERS; AND 6" FOR TYPE H, HM, AND H COVERS
   ADJUSTMENT = 4" TYPICAL (NO ADJUSTMENT FOR INLETS MEDIAN 1 GRATE AND INLETS MEDIAN 2 GRATE)
5. JOINT TIES FOR CONCRETE PIPE SHALL BE PROVIDED AT ALL REINFORCED CONCRETE APRON ENDWALL LOCATIONS. APRON ENDWALLS SHALL BE TIED FOR THE LAST THREE JOINTS AT PIPE ENDS. THE COST OF THESE TIES SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR THE REINFORCED CONCRETE STORM SEWER PIPE.

* ADDITIONAL QUANTITIES SHOWN ESLEWHERE IN PLANS. SEE **CROSS CULVERT PIPES** MISCELLANEOUS QUANTITIES SCHEDULE.

** NOT A BID ITEM. FOR INFORMATION PURPOSES ONLY.

STORM SEWER - SHEET 5 OF 6 (PIPES AND ENDWALLS)

					608.0312	608.0318	608.0324	608.0330	608.0412	608.0415	608.0418	608.0424	608.0460	610.0424	522.1012	522.1015	522.1018	522.1024	522.1030	522.1060	523.0524	611.9800.S	
					STORM SEWER PIPE REINFORCED CONCRETE																		
					CLASS III				CLASS IV					SSPRC	AEW	AEW	AEW	*AEW	*AEW	*AEW	AEW		
FROM	TO	INLET	DISCH	SLOPE	12-INCH	18-INCH	24-INCH	30-INCH	12-NCH	15-INCH	18-INCH	24-INCH	60-INCH	CLASS HE-IV	FOR	FOR	FOR	FOR	FOR	FOR	FOR	PIPE	**
STR	STR	ELEV	ELEV	(FT/FT)	(LF)	(LF)	(LF)	(LF)	(LF)	(LF)	(LF)	(LF)	(LF)	24X38-INCH	CPRC	CPRC	CPRC	CPRC	CPRC	CPRC	CPRC HE	GRATES	JOINT
														(LF)	12-INCH	15-INCH	18-INCH	24-INCH	30-INCH	60-INCH	24X38-INCH		TIES
															EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH
23A	23B	771.38	771.19	0.003	---	---	---	---	---	62.9	---	---	---	---	---	---	---	---	---	---		---	---
23B	23	771.19	771.05	0.003	---	---	---	---	---	46.8	---	---	---	---	---	---	---	---	---	---		---	---
23C	23	771.66	770.30	0.071	---	---	---	---	---	---	---	---	---	19.0	---	---	---	---	---	---	1	1	6
23	25	770.30	770.12	0.005	---	---	---	---	---	---	---	---	---	36.1	---	---	---	---	---	---	---	---	---
25	26	770.12	770.00	0.005	---	---	---	---	---	---	---	---	---	24.8	---	---	---	---	---	---	---	---	---
26	AEW				---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
30A	30	775.90	775.79	0.010	---	---	---	---	11.5	---	---	---	---	---	---	---	---	---	---	---	---	---	---
30B	30	775.90	775.67	0.010	---	---	---	---	23.5	---	---	---	---	---	---	---	---	---	---	---	---	---	---
30	31	774.62	771.00	0.043	---	---	---	---	---	---	---	85.0	---	---	---	---	---	---	---	---	---	---	---
31A	31	772.41	772.00	0.010	---	---	---	---	41.0	---	---	---	---	---	---	---	---	---	---	---	---	---	---
31	32	771.00	770.43	0.005	---	---	---	---	---	---	---	115.0	---	---	---	---	---	---	---	---	---	---	---
32A	32	771.49	771.43	0.006	---	---	---	---	11.5	---	---	---	---	---	---	---	---	---	---	---	---	---	---
32	33	770.43	770.21	0.008	---	---	---	---	---	---	---	27.4	---	---	---	---	---	---	---	---	---	---	---
33A	33	771.33	771.26	0.005	---	---	---	---	14.0	---	---	---	---	---	---	---	---	---	---	---	---	---	---
33	34	770.21	770.00	0.008	---	---	---	---	---	---	---	25.8	---	---	---	---	---	---	---	---	---	---	---
34	AEW				---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
40A	40	783.30	783.19	0.005	---	---	---	---	---	---	21.2	---	---	---	---	---	---	---	---	---	---	---	---
40B	40	783.80	783.62	0.005	---	---	---	---	35.7	---	---	---	---	---	---	---	---	---	---	---	---	---	---
40	41	782.01	781.79	0.005	---	---	44.1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
41B	41	784.09	782.82	0.025	50.8	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
41	42	781.79	780.81	0.005	---	---	195.5	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
42A	42B	781.73	781.38	0.010	---	---	---	---	---	---	35.5	---	---	---	---	---	---	---	---	---	---	---	---
42B	42	781.38	781.32	0.005	---	11.5	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
42C	42	784.17	783.94	0.010	---	---	---	---	23.5	---	---	---	---	---	---	---	---	---	---	---	---	---	---
42	42E	780.81	780.31	0.005	---	---	100.0	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
42D	42E	785.00	784.43	0.020	---	---	---	---	---	---	28.7	---	---	---	---	---	---	---	---	---	---	---	---
42E	43	780.31	779.86	0.005	---	---	90.0	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
43A	43	783.55	783.44	0.010	---	---	---	---	11.5	---	---	---	---	---	---	---	---	---	---	---	---	---	---
43B	43	783.55	783.32	0.010	---	---	---	---	23.5	---	---	---	---	---	---	---	---	---	---	---	---	---	---
43	44	779.86	778.81	0.005	---	---	210.3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
44A	44B	780.25	779.75	0.010	---	---	---	---	---	---	49.7	---	---	---	---	---	---	---	---	---	---	---	---
44B	44	779.75	779.64	0.010	---	---	---	---	---	---	11.5	---	---	---	---	---	---	---	---	---	---	---	---
44C	44	780.36	780.13	0.010	---	---	---	---	23.5	---	---	---	---	---	---	---	---	---	---	---	---	---	---
44	45	778.81	776.23	0.034	---	---	75.7	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
45	46	776.23	770.18	0.048	---	---	---	---	---	---	---	126.0	---	---	---	---	---	---	---	---	---	---	---
46A	46	772.11	772.00	0.010	---	---	---	---	11.5	---	---	---	---	---	---	---	---	---	---	---	---	---	---
46B	46	771.68	771.45	0.010	---	---	---	---	23.5	---	---	---	---	---	---	---	---	---	---	---	---	---	---
46	47	770.18	756.24	0.053	---	---	---	---	---	---	---	265.0	---	---	---	---	---	---	---	---	---	---	---
47A	47B	757.06	756.86	0.005	---	---	---	---	---	---	41.0	---	---	---	---	---	---	---	---	---	---	---	---
47B	47	756.86	756.74	0.005	---	23.5	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
47	48A	755.74	755.68	0.005	---	---	---	11.5	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
48A	48	755.68	755.50	0.005	---	---	---	36.0	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
48	AEW				---	---	---	---	---	---	---	---	---	---	---	---	---	---	1	---	---	1	6
50	51	750.79	750.11	0.020	---	---	34.0	---	---	---	---	---	---	---	---	---	---	1	---	---	---	1	6
51A	51B	753.73	753.53	0.020	---	---	---	---	10.0	---	---	---	---	---	---	---	---	---	---	---	---	---	---
51B	51	753.53	753.09	0.020	---	---	---	---	22.0	---	---	---	---	---	---	---	---	---	---	---	---	---	---
51	52	750.11	749.02	0.020	---	---	54.5	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

GENERAL NOTES:

1. RIM ELEVATIONS ARE GIVEN AT THE FLANGE LINE FOR INLET GRATES OR THE CENTER OF THE MANHOLE STRUCTURE FOR MANHOLES.
2. STATIONS AND OFFSETS ARE TO THE CENTER OF STRUCTURES OR TO THE END OF PIPE WHERE THERE IS AN ENDWALL.
3. PIPE LENGTHS ARE MEASURED TO THE CENTER OF STRUCTURES.
4. STR DEPTH = RIM ELEV - INV - CASTING HEIGHT - ADJUSTMENT
   CASTING HEIGHT = 9" FOR TYPE C AND J COVERS; AND 6" FOR TYPE H, HM, AND H COVERS
   ADJUSTMENT = 4" TYPICAL (NO ADJUSTMENT FOR INLETS MEDIAN 1 GRATE AND INLETS MEDIAN 2 GRATE)
5. JOINT TIES FOR CONCRETE PIPE SHALL BE PROVIDED AT ALL REINFORCED CONCRETE APRON ENDWALL LOCATIONS. APRON ENDWALLS SHALL BE TIED FOR THE LAST THREE JOINTS AT PIPE ENDS. THE COST OF THESE TIES SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR THE REINFORCED CONCRETE STORM SEWER PIPE.

* ADDITIONAL QUANTITIES SHOWN ESLEWHERE IN PLANS. SEE **CROSS CULVERT PIPES** MISCELLANEOUS QUANTITIES SCHEDULE.

** NOT A BID ITEM. FOR INFORMATION PURPOSES ONLY.

STORM SEWER - SHEET 6 OF 6 (PIPES AND ENDWALLS)

FROM STR	TO STR	INLET ELEV	DISCH ELEV	SLOPE (FT/FT)	608.0312 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 12-INCH (LF)	608.0318 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 18-INCH (LF)	608.0324 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 24-INCH (LF)	608.0330 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 30-INCH (LF)	608.0412 STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 12-NCH (LF)	608.0415 STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 15-INCH (LF)	608.0418 STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 18-INCH (LF)	608.0424 STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 24-INCH (LF)	608.0460 STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 60-INCH (LF)	610.0424 SSPRC CLASS HE-IV 24X38-INCH (LF)	522.1012 AEW FOR CPRC 12-INCH EACH	522.1015 AEW FOR CPRC 15-INCH EACH	522.1018 AEW FOR CPRC 18-INCH EACH	522.1024 *AEW FOR CPRC 24-INCH EACH	522.1030 *AEW FOR CPRC 30-INCH EACH	522.1060 *AEW FOR CPRC 60-INCH EACH	523.0524 AEW FOR CPRC HE 24X38-INCH EACH	611.9800.S PIPE GRATES EACH	** JOINT TIES EACH
52A	52B	753.69	753.11	0.020	---	---	---	---	28.9	---	---	---	---	---	---	---	---	---	---	---	---	---
52B	52B	753.11	752.87	0.020	---	---	---	---	12.0	---	---	---	---	---	---	---	---	---	---	---	---	---
52	53	749.02	748.81	0.020	---	---	10.7	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
53A	53	746.20	745.70	0.019	---	---	27.1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
53B	53	750.49	750.18	0.020	---	---	15.3	---	---	---	---	---	---	---	---	---	---	1	---	---	1	6
53	NC COLL	745.70			---	---	8.0	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
54					---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
60A	60	756.41	756.34	0.005	---	---	---	---	14.4	---	---	---	---	---	---	---	---	---	---	---	---	---
60B	60	756.46	756.34	0.005	---	---	---	---	23.5	---	---	---	---	---	---	---	---	---	---	---	---	---
60	61	755.34	753.88	0.007	---	---	---	---	---	---	---	225.0	---	---	---	---	---	---	---	---	---	---
61A	61	754.99	754.88	0.005	---	---	---	---	23.5	---	---	---	---	---	---	---	---	---	---	---	---	---
61B	61	755.02	754.88	0.005	---	---	---	---	29.9	---	---	---	---	---	---	---	---	---	---	---	---	---
61	62	753.88	752.58	0.007	---	---	---	---	---	---	---	200.0	---	---	---	---	---	---	---	---	---	---
62	63	752.58	752.34	0.010	---	---	---	---	---	---	---	23.2	---	---	---	---	---	---	---	---	---	---
63	64	752.34	752.10	0.009	---	---	---	---	---	---	---	28.0	---	---	---	---	---	---	---	---	---	---
64	AEW				---	---	---	---	---	---	---	---	---	---	---	---	---	1	---	---	1	6
65A	65	754.54	754.48	0.010	---	---	---	---	6.1	---	---	---	---	---	---	---	---	---	---	---	---	---
65	NC COLL				---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
66A	66	754.39	754.37	0.010	---	---	---	---	2.2	---	---	---	---	---	---	---	---	---	---	---	---	---
66	NC COLL				---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
70A	70	763.01	762.81	0.010	---	---	---	---	19.6	---	---	---	---	---	---	---	---	---	---	---	---	---
70B	70	763.17	762.94	0.010	---	---	---	---	23.5	---	---	---	---	---	---	---	---	---	---	---	---	---
70	71	761.45	756.50	0.017	---	---	---	---	---	---	---	300.0	---	---	---	---	---	---	---	---	---	---
71A	71	757.62	757.50	0.005	---	---	---	---	23.5	---	---	---	---	---	---	---	---	---	---	---	---	---
71	72	756.50	756.44	0.005	---	---	---	---	---	---	---	11.5	---	---	---	---	---	---	---	---	---	---
72	73	756.44	756.32	0.005	---	---	---	---	---	---	---	24.0	---	---	---	---	---	---	---	---	---	---
73	AEW				---	---	---	---	---	---	---	---	---	---	---	---	---	1	---	---	1	6
80A	80B	770.45	770.16	0.010	---	---	---	---	28.7	---	---	---	---	---	---	---	---	---	---	---	---	---
80B	80C	770.16	770.11	0.010	5.3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
80C	80D	770.11	769.80	0.010	---	---	---	---	31.0	---	---	---	---	---	---	---	---	---	---	---	---	---
80D	80	769.80	769.57	0.010	---	---	---	---	23.0	---	---	---	---	---	---	---	---	---	---	---	---	---
80	AEW				---	---	---	---	---	---	---	---	---	---	---	---	---	1	---	---	---	6
90A	90B	774.57	774.25	0.010	---	---	---	---	31.7	---	---	---	---	---	---	---	---	---	---	---	---	---
90B	90C	774.25	774.09	0.010	16.5	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
90C	90D	774.09	773.78	0.010	31.1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
90D	90	773.78	773.54	0.010	24.0	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
90	AEW				---	---	---	---	---	---	---	---	---	---	---	---	---	1	---	---	---	6
100A	100	775.00	773.48	0.013	---	---	---	---	6.0	---	---	---	---	---	---	---	---	---	---	---	---	---
100B	100	777.27	775.90	0.023	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
100	100C	773.48	772.46	0.013	---	---	---	---	---	---	---	---	80.0	---	---	---	---	---	---	1	---	---
100C	AEW				---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
101	101	774.95	774.65	0.005	60.0	---	---	---	---	---	---	---	---	---	1	---	---	---	---	---	---	---
101A	AEW				---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
																						*
		TOTALS			278	173	1,905	48	1,162	226	563	1,629	80	80	6	1	1	7	1	1	1	10	84

GENERAL NOTES:

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3. PIPE LENGTHS ARE MEASURED TO THE CENTER OF STRUCTURES.
4. STR DEPTH = RIM ELEV - INV - CASTING HEIGHT - ADJUSTMENT
   CASTING HEIGHT = 9" FOR TYPE C AND J COVERS; AND 6" FOR TYPE H, HM, AND H COVERS
   ADJUSTMENT = 4" TYPICAL (NO ADJUSTMENT FOR INLETS MEDIAN 1 GRATE AND INLETS MEDIAN 2 GRATE)
5. JOINT TIES FOR CONCRETE PIPE SHALL BE PROVIDED AT ALL REINFORCED CONCRETE APRON ENDWALL LOCATIONS. APRON ENDWALLS SHALL BE TIED FOR THE LAST THREE JOINTS AT PIPE ENDS. THE COST OF THESE TIES SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR THE REINFORCED CONCRETE STORM SEWER PIPE.

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PIPE UNDERDRAIN

STATION	TO	STATION	LOCATION	612.0204 PIPE UNDERDRAIN UNPERFORATED 4-INCH LF	612.0212 PIPE UNDERDRAIN UNPERFORATED 12-INCH LF	612.0404 PIPE UNDERDRAIN WRAPPED 4-INCH LF	612.0804 APRON ENDWALLS FOR UNDERDRAIN REINFORCED CONCRETE 4-INCH EACH	REMARKS
64+00	-	65+95	12.5' RT	17	--	195	1	1 P.U. ELBOW REQUIRED
74+00	-	82+00	12.5' RT	33	--	800	2	2 P.U. ELBOW REQUIRED
100+00	-	102+50	12.5' RT	30	--	250	1	1 P.U. "T" JOINT REQUIRED
100+00	-	102+50	12.5' LT	25	--	250	1	1 P.U. "T" JOINT REQUIRED
119+50	-	123+98	12.5' LT	16	--	448	1	1 P.U. ELBOW REQUIRED
129+00	-	134+50	12.5' LT	28	--	550	1	1 P.U. ELBOW REQUIRED
142+00	-	144+00	12.5' RT	14	--	200	1	1 P.U. "T" JOINT REQUIRED
143+00	-	145+00	12.5' LT	27	--	200	1	1 P.U. "T" JOINT REQUIRED
164+50	-	170+00	12.5' LT	22	--	550	1	1 P.U. ELBOW REQUIRED
265+00	-	266+46	20.5' LT	--	--	146	--	DRAIN TO STR. NO. 23B
266+02	-	266+46	20.5' LT	--	--	44	--	DRAIN TO STR. NO. 23
266+46	-	268+00	20.5' LT	3	--	154	--	1 P.U. "T" JOINT REQUIRED
265+00	-	266+46	20.5' RT	--	--	146	--	DRAIN TO STR. NO. 25
266+46	-	268+00	20.5' RT	3	--	154	--	1 P.U. "T" JOINT REQUIRED
273+00	-	275+00	20.5' LT	--	--	200	--	DRAIN TO STR. NO. 42A
273+00	-	275+00	20.5' RT	--	--	200	--	DRAIN TO STR. NO. 42C
275+05	-	276+90	20.5' LT	--	--	185	--	DRAIN TO STR. NO. 43A
275+05	-	276+90	20.5' RT	--	--	185	--	DRAIN TO STR. NO. 43B
276+95	-	279+00	20.5' LT	--	--	205	--	DRAIN TO STR. NO. 44B
276+95	-	279+00	20.5' RT	--	--	205	--	DRAIN TO STR. NO. 44C
279+05	-	281+00	20.5' LT	--	--	--	--	HIGH SIDE. UNDERDRAIN IS NOT REQUIRED
279+05	-	281+00	20.5' RT	--	--	195	--	DRAIN TO STR. NO. 46B
281+05	-	283+50	20.5' LT	--	--	245	--	DRAIN TO STR. NO. 48A
281+05	-	283+50	20.5' RT	--	--	245	--	DRAIN TO STR. NO. 47B
283+55	-	285+00	20.5' LT	25	--	145	1	90° P.U ELBOW REQUIRED
283+55	-	285+00	20.5' RT	25	--	145	1	90° P.U. ELBOW REQUIRED
285+36	-	287+08	23'-28' LT	--	--	172	--	DRAIN TO STR. NO. 51B
287+08	-	288+36	28' -33' LT	3	--	128	--	P.U. "T" JOINT REQUIRED
285+36	-	286+98	25'-32' RT	--	--	162	--	DRAIN TO STR. NO. 52B
286+98	-	288+36	32' LT	3	--	138	--	P.U. "T" JOINT REQUIRED
286+72	-	286+59	36.3' LT-39.8' RT	--	77	--	--	DRAIN TO STR. NO. 53A
			TOTAL 0010	274	77	6,842	12	

DRAIN TILE EXPLORATION

STATION	TO	STATION	LOCATION	612.0700 DRAIN TILE EXPLORATION LF	REMARKS
19+83	-	302+75	UNDISTRIBUTED	100	AS DIRECTED BY THE ENGINEER
			TOTAL 0010	100	

3

FENCE CHAIN LINK 4-FT

STATION	TO	STATION	LOCATION	616.0204 FENCE CHAIN LINK 4-FT LF	REMARKS
51+30	-	52+85	CTH C 53' LT	155	SEE TYPICAL FINISHED SECTION & STRUCTURE R-30-59
			TOTAL 0010	155	

CONCRETE CORRUGATED MEDIAN & CONCRETE SLOPED NOSE

STATION	TO	STATION	LOCATION	620.0100 CONCRETE CORRUGATED MEDIAN SF	620.0300 CONCRETE MEDIAN SLOPED NOSE SF	647.0606 PAVEMENT MARKING ISLAND NOSE EPOXY EACH	647.0856 PAVEMENT MARKING CONCRETE CORRUGATED MEDIAN EPOXY SF
299+00	-	300+00	USH 45	381	--	--	155
300+00	-	300+06	USH 45	--	55	1	--
			TOTAL 0010	381	55	1	155

TEMPORARY AND PERMANENT DITCH CHECKS

STATION	TO	STATION	LOCATION	628.7504 TEMPORARY DITCH CHECKS LF	628.7515.S STONE OR ROCK DITCH CHECKS CY	628.7560 TRACKING PADS EACH	645.0140 GEOTEXTILE FABRIC TYPE SAS SY	REMARKS
STAGE 1:								
19+80	-	21+31	USH 45, LT	10	--	--	--	
21+31	-	49+10	USH 45, LT & RT	160	--	--	--	
49+10	-	61+70	USH 45, LT & RT	60	--	--	--	
61+70	-	77+66	USH 45, LT & RT	40	--	1	--	
77+66	-	101+04	USH 45, LT & RT	60	--	--	--	
101+04	-	120+75	USH 45, LT & RT	80	--	--	--	
120+75	-	130+10	USH 45, LT & RT	30	--	--	--	
130+10	-	134+18	USH 45, LT & RT	20	10	--	44	SEE CONSTRUCTION DETAILS
134+18	-	142+68	USH 45, LT & RT	90	20	1	89	SEE CONSTRUCTION DETAILS
142+68	-	166+83	USH 45, LT & RT	50	--	1	--	
166+83	-	175+17	USH 45, LT & RT	40	--	--	--	
175+17	-	201+74	USH 45, LT & RT	50	20	--	89	SEE CONSTRUCTION DETAILS
201+74	-	250+41	USH 45, LT & RT	60	--	1	--	
51+00		54+00	CTH WG, LT & RT	--	30	--	133	SEE CONSTRUCTION DETAILS
STAGE 2:								
250+41	-	279+65	USH 45, LT & RT	--	30	1	133	
283+90	-	284+10	USH 45, 58' - 88' LT	--	20	--	67	SEE CONSTRUCTION DETAILS
285+90	-	286+10	USH 45, 47' - 73' LT	--	20	--	67	SEE CONSTRUCTION DETAILS
287+50	-	287+70	USH 45, 51' - 76' LT	--	20	--	67	SEE CONSTRUCTION DETAILS
279+65	-	289+09	USH 45, LT & RT	--	--	1	--	
289+09	-	305+35	USH 45, LT & RT	--	--	1	--	
			TOTAL 0010	750	170	7	689	

EROSION CONTROL - SHEET 1 OF 3

STATION	TO	STATION	LOCATION	625.0500 SALVAGED TOPSOIL SY	627.0200 MULCHING SY	628.2004 EROSION MAT CLASS I TYPE B SY	628.2023 EROSION MAT CLASS II TYPE B SY	629.0210 FERTILIZER TYPE B* CWT	630.0120 SEEDING MIXTURE NO. 20 LB	630.0130 SEEDING MIXTURE NO. 30 LB	631.0300 SOD WATER* MGAL	631.1100 SOD EROSION CONTROL SY
STAGE 1:												
45+50	-	47+13	CTH WG LT	197	--	197	--	0.2	--	6	--	--
45+50	-	46+38	CTH WG RT	95	--	95	--	0.1	--	3	--	--
46+54	-	48+12	CTH WG RT	269	--	269	--	0.3	--	7	--	--
47+31	-	48+60	CTH WG LT	149	--	133	--	0.2	--	4	1	17
48+23	-	50+10	CTH WG RT	466	--	420	--	0.4	--	10	2	47
48+71	-	49+57	CTH WG LT	249	--	187	--	0.2	--	5	2	62
50+41	-	53+43	CTH WG LT	534	--	520	--	0.4	--	12	1	15
53+48	-	54+25	CTH WG LT	95	--	95	--	0.1	--	3	--	--
50+42	-	54+25	CTH WG RT	579	--	514	--	0.5	--	14	2	65
21+68	-	22+82	USH 45 RT	106	--	--	--	0.1	--	2	3	106
22+65	-	27+57	USH 45 LT	731	568	--	--	0.6	--	15	4	163
23+18	-	24+05	USH 45 RT	79	--	--	--	0.1	--	2	2	79
24+21	-	26+72	USH 45 RT	344	344	--	--	0.3	--	8	--	--
26+83	-	29+96	USH 45 RT	280	280	--	--	0.3	--	6	--	--
27+72	-	30+51	USH 45 LT	420	420	--	--	0.3	--	9	--	--
30+15	-	31+10	USH 45 RT	204	99	105	--	0.2	--	4	--	--
30+61	-	32+93	USH 45 LT	550	99	--	450	0.4	9	11	--	--
31+10	-	33+50	USH 45 RT	327	66	--	251	0.3	5	7	1	11
33+00	-	37+48	USH 45 LT	1,017	649	369	--	0.7	--	20	--	--
33+03	-	39+94	USH 45 RT	1,778	1,172	606	--	1.2	--	35	--	--
37+63	-	40+24	USH 45 LT	696	487	209	--	0.5	--	14	--	--
40+04	-	42+00	USH 45 RT	281	74	206	--	0.2	--	6	--	--
40+59	-	48+97	USH 45 LT	1,833	1,274	524	--	1.3	--	37	1	36
42+00	-	49+12	USH 45 RT	819	36	--	734	0.8	14	22	2	50
49+19	-	60+42	USH 45 LT	2,531	1,626	860	--	1.9	--	53	2	45
49+36	-	51+87	USH 45 RT	631	413	190	0	0.5	--	14	1	29
52+18	-	62+95	USH 45 RT	1,894	1,836	58	--	1.5	--	41	--	--
60+42	-	61+61	USH 45 LT	364	--	--	321	0.3	6	9	1	43
61+85	-	68+00	USH 45 LT	1,095	756	295	--	0.9	--	25	2	45
63+05	-	69+00	USH 45 RT	851	851	--	--	0.7	--	20	--	--
68+00	-	71+79	USH 45 LT	854	143	--	711	0.6	13	17	--	--
69+00	-	74+10	USH 45 RT	1,599	199	--	1,400	1.1	26	31	--	--
71+92	-	77+53	USH 45 LT	905	862	--	--	0.7	--	20	1	44
74+19	-	76+81	USH 45 RT	646	422	225	--	0.5	--	15	--	--
76+94	-	92+03	USH 45 RT	3,638	1,936	1,702	--	2.6	--	74	--	--
77+89	-	82+06	USH 45 LT	1,030	477	518	--	0.9	--	23	1	36
82+08	-	86+46	USH 45 LT	909	344	--	566	0.7	11	20	--	--
86+40	-	90+06	USH 45 LT	820	139	--	681	0.6	13	16	--	--
90+16	-	95+18	USH 45 LT	856	847	--	--	0.6	--	17	1	9

NOTES:
*ADDITIONAL QUANTITIES SHOWN ELSEWHERE IN PLANS. SEE **TOPSOIL & SOD LAWN** MISCELLANEOUS QUANTITIES SCHEDULES.

EROSION CONTROL - SHEET 2 OF 3

STATION	TO	STATION	LOCATION	625.0500 SALVAGED TOPSOIL SY	627.0200 MULCHING SY	628.2004 EROSION MAT CLASS I TYPE B SY	628.2023 EROSION MAT CLASS II TYPE B SY	629.0210 FERTILIZER TYPE B* CWT	630.0120 SEEDING MIXTURE NO. 20 LB	630.0130 SEEDING MIXTURE NO. 30 LB	631.0300 SOD WATER* MGAL	631.1100 SOD EROSION CONTROL SY
92+17	-	95+66	USH 45 RT	657	530	127	--	0.5	--	14	--	--
95+28	-	97+00	USH 45 LT	290	290	--	--	0.3	--	6	--	--
95+79	-	100+69	USH 45 RT	788	301	443	--	0.7	--	20	1	44
97+10	-	105+54	USH 45 LT	1,405	663	726	--	1.2	--	34	1	16
100+87	-	109+29	USH 45 RT	1,276	1,231	0	--	1.0	--	27	2	46
105+66	-	115+97	USH 45 LT	1,573	1,573	--	--	1.1	--	32	--	--
109+42	-	114+55	USH 45 RT	958	533	425	--	0.7	--	19	--	--
114+67	-	125+73	USH 45 RT	1,286	1,041	245	--	1.2	--	33	--	--
116+12	-	120+62	USH 45 LT	743	427	277	--	0.6	--	16	1	39
120+86	-	125+74	USH 45 LT	1,000	948	--	--	0.8	--	22	2	52
125+82	-	133+80	USH 45 RT	2,240	1,489	707	--	1.7	--	49	2	45
125+88	-	130+92	USH 45 LT	1,418	975	399	--	1.0	--	29	2	45
130+50	-	132+26	USH 45 LT	461	410	--	--	0.4	--	10	2	51
132+38	-	137+31	USH 45 LT	1,271	--	--	1,271	1.0	23	28	--	--
133+92	-	137+00	USH 45 RT	896	--	--	856	0.7	16	20		40
137+00	-	142+53	USH 45 RT	1,842	1,604	198	--	1.4	--	39	1	40
137+37	-	139+38	USH 45 LT	512	371	141	--	0.4	--	12	--	--
139+52	-	142+01	USH 45 LT	791	607	184	--	0.6	--	17	--	--
142+10	-	143+19	USH 45 LT	201	134	67	--	0.2	--	5	--	--
51+13	-	51+60	196TH AV RT	64	64	--	--	0.1	--	2	--	--
51+67	-	52+25	196TH AV RT	58	58	--	--	0.1	--	2	--	--
142+86	-	146+35	USH 45 RT	1,020	88	--	898	0.8	17	21	1	35
143+29	-	144+90	USH 45 LT	229	--	--	229	0.2	5	6	--	--
145+05	-	150+92	USH 45 LT	1,512	836	--	675	1.1	13	31	--	--
146+35	-	151+75	USH 45 RT	1,340	1,021	319	--	1.0	--	26	--	--
151+05	-	158+00	USH 45 LT	1,993	268	384	1,340	1.4	25	38	--	--
151+75	-	157+50	USH 45 RT	1,617	223	319	1,075	1.1	20	31	--	--
157+50	-	163+25	USH 45 RT	954	954	--	--	0.7	--	19	--	--
158+00	-	164+00	USH 45 LT	1,646	1,247	398	--	1.1	--	32	--	--
163+25	-	166+47	USH 45 RT	742	--	--	688	0.6	13	17	2	54
164+00	-	169+00	USH 45 LT	1,837	741	--	1,084	1.4	20	39	--	--
166+40	-	169+50	USH 45 RT	645	43	--	563	0.5	11	15	--	--
169+00	-	175+11	USH 45 LT	961	898	--	--	0.8	--	21	--	--
169+50	-	174+17	USH 45 RT	856	677	179	--	0.7	--	19	--	--
174+34	-	193+15	USH 45 RT	3,807	1,882	1,902	--	2.8	--	78	1	23
175+31	-	182+07	USH 45 LT	1,726	1,432	294	--	1.2	--	34	--	--
182+21	-	199+21	USH 45 LT	3,869	2,973	896	--	2.7	--	75	--	--
193+26	-	195+64	USH 45 RT	379	250	--	--	0.3	--	7	3	130
195+81	-	197+96	USH 45 RT	313	197	--	--	0.2	--	6	3	117
198+12	-	201+45	USH 45 RT	828	630	--	--	0.6	--	15	5	198

NOTES:
*ADDITIONAL QUANTITIES SHOWN ELSEWHERE IN PLANS. SEE **TOPSOIL & SOD LAWN** MISCELLANEOUS QUANTITIES SCHEDULES.

EROSION CONTROL - SHEET 3 OF 3

STATION	TO	STATION	LOCATION	625.0500 SALVAGED TOPSOIL SY	627.0200 MULCHING SY	628.2004 EROSION MAT CLASS I TYPE B SY	628.2023 EROSION MAT CLASS II TYPE B SY	629.0210 FERTILIZER TYPE B* CWT	630.0120 SEEDING MIXTURE NO. 20 LB	630.0130 SEEDING MIXTURE NO. 30 LB	631.0300 SOD WATER* MGAL	631.1100 SOD EROSION CONTROL SY
199+55	-	200+95	USH 45 LT	264	144	121	--	0.3	--	7	--	--
42+40	-	46+00	CTH C LT	251	--	251	--	0.3	--	9	--	--
42+40	-	47+50	CTH C RT	667	--	667	--	0.6	--	17	--	--
46+15	-	49+61	CTH C LT	506	--	472	--	0.5	--	13	1	35
47+87	-	49+68	CTH C RT	394	--	351	--	0.3	--	9	1	43
50+30	-	53+00	CTH C LT	656	--	509	--	0.5	--	12	4	148
50+88	-	51+78	CTH C RT	87	--	87	--	0.1	--	3	--	--
51+95	-	53+64	CTH C RT	240	--	240	--	0.3	--	6	--	--
53+10	-	54+57	CTH C LT	209	--	131	--	0.2	--	4	2	78
53+83	-	56+84	CTH C RT	739	--	739	--	0.6	--	17	--	--
54+69	-	59+10	CTH C LT	831	--	831	--	0.7	--	20	--	--
57+00	-	59+10	CTH C RT	487	--	487	--	0.4	--	11	--	--
202+51	-	210+18	USH 45 LT	935	518	417	--	0.9	--	25	--	--
202+76	-	203+49	USH 45 RT	173	137	36	--	0.2	--	4	--	--
203+58	-	225+56	USH 45 RT	4,110	3,460	642	--	2.9	--	81	--	--
210+32	-	220+50	USH 45 LT	1,502	764	--	738	1.1	--	31	--	--
220+50	-	230+03	USH 45 LT	1,664	1,664	--	--	1.2	--	33	--	--
225+66	-	227+91	USH 45 RT	384	384	--	--	0.3	--	8	--	--
228+02	-	237+44	USH 45 RT	1,470	1,470	--	--	1.1	--	30	--	--
230+18	-	250+62	USH 45 LT	3,516	3,122	387	--	2.5	--	71	1	9
237+56	-	244+75	USH 45 RT	1,339	954	384	--	1.0	--	27	--	--
244+75	-	250+22	USH 45 RT	2,214	1,000	--	1,159	1.5	21	43	2	56
51+07	-	51+68	86TH ST RT	73	73	--	--	0.1	--	2	--	--
STAGE 2:												
250+71	-	254+04	USH 45 LT	758	171	588	--	0.6	--	16	--	--
254+14	-	254+46	USH 45 LT	133	--	116	--	0.1	--	3	1	18
263+95	-	266+11	USH 45 RT	3,603	--	--	3,595	2.3	65	65	1	9
280+94	-	288+45	USH 45 LT	3,293	--	2,497	788	2.1	15	60	1	9
288+45	-	293+00	USH 45 LT	987	987	--		0.7	--	18	--	--
293+00	-	300+00	USH 45 LT	1,400	785	582	--	0.9	--	26	1	33
300+00	-	308+84	USH 45 LT	341	341	--	--	0.3	--	7	--	--
289+67	-	290+89	USH 45 RT	114	114	--	--	0.1	--	3	--	--
290+91	-	293+00	USH 45 RT	432	432	--	--	0.3	--	8	--	--
293+00	-	296+00	USH 45 RT	1,301	--	--	1,301	0.9	24	24	--	--
296+00	-	305+35	USH 45 RT	3,077	3,077	--	--	2.0	--	56	--	--
19+83	-	305+35	UNDISTRIBUTED	11,209	6,363	2,746	2,100	7.1	38	13	--	--
			TOTAL 0010	126,086	69,986	30,208	23,474	94	423	2,405	74	2,315

NOTES:

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE IN PLANS. SEE **TOPSOIL & SOD LAWN** MISCELLANEOUS QUANTITIES SCHEDULES.

SILT FENCE - SHEET 1 OF 2

STATION	TO	STATION	LOCATION	628.1504 SILT FENCE LF	628.1520 SILT FENCE MAINTENANCE LF	SPV.0090.01 HEAVY DUTY SILT FENCE 3-FT LF	SPV.0090.02 HEAVY DUTY SILT FENCE 5-FT LF	REMARKS
STAGE 1:								
45+50	-	46+63	CTH WG, 27' - 37' LT	--	--	117	--	WETLAND #W2
24+50	-	26+68	USH 45, 29' - 49' RT	225	225	--	--	
26+87	-	29+75	USH 45, 27' - 41' RT	290	290	--	--	
30+75	-	32+91	USH 45, 39' - 48' LT	--	--	236	--	WETLAND #W5
31+00	-	32+91	USH 45, 31' - 48' RT	--	--	213	--	WETLAND #W6
42+00	-	48+58	USH 45, 32' - 53' RT	--	--	660	--	WETLAND #W7
48+58	-	49+02	USH 45, 53' - 145' RT	104	104	--	--	
53+00	-	61+50	USH 45, 34' - 53' RT	868	868	--	--	
59+50	-	60+50	USH 45, 32' - 42' LT	102	102			
60+50	-	61+59	USH 45, 42' - 150' LT	--	--	199	--	WETLAND #W8
63+25	-	69+00	USH 45, 36' - 43' RT	606	606	--	--	
67+00	-	69+75	USH 45, 30' - 59' LT	290	290	--	--	
69+75	-	70+25	USH 45, 31' - 67' LT	--	--	--	128	WETLAND #10
69+00	-	69+89	USH 45, 36' - 69' RT	--	--	--	119	WETLAND #9
69+89	-	72+50	USH 45, 33' - 66' RT	288	288	--	--	
70+25	-	71+69	USH 45, 31' - 64' LT	160	160	--	--	
72+08	-	77+36	USH 45, 34' - 157' LT	639	639	--	--	
80+75	-	82+00	USH 45, 50' - 72' LT	--	--	129	--	WETLAND #W12
81+25	-	89+75	USH 45, 36' - 59' RT	865	865	--	--	
82+27	-	83+25	USH 45, 50' - 72' LT	--	--	102	--	WETLAND #W13
83+25	-	85+00	USH 45, 35' - 58' LT	173	173	--	--	
85+00	-	86+41	USH 45, 32' - 61' LT	--	--	155	--	WETLAND #W13
86+56	-	90+06	USH 45, 41' - 58' LT	--	--	368	--	WETLAND #W14
89+75	-	90+55	USH 45, 38' - 50' RT	--	--	90	--	WETLAND #W16
90+20	-	95+15	USH 45, 36' - 58' LT	529	529	--	--	
90+55	-	91+99	USH 45, 35' - 50' RT	145	145	--	--	
92+25	-	93+94	USH 45, 32' - 40' RT	171	171	--	--	
95+32	-	96+93	USH 45, 35' - 45' LT	164	164	--	--	
96+00	-	96+55	USH 45, 43' - 48' RT	55	55	--	--	
96+55	-	97+75	USH 45, 43' - 44' RT	--	--	120	--	WETLAND #W17
102+25	-	104+71	USH 45, 29' - 38' RT	248	248	--	--	
103+50	-	105+42	USH 45, 34' - 41' LT	192	192	--	--	
104+71	-	107+50	USH 45, 29' - 33' RT	--	--	279	--	WETLAND #21
105+66	-	113+00	USH 45, 33' - 45' LT	738	738	--	--	
107+50	-	109+20	USH 45, 33' - 45' RT	180	180	--	--	
118+00	-	125+50	USH 45, 34' - 46' RT	748	748	--	--	
132+69	-	134+23	USH 45, 59' - 67' LT	147	147	--	--	
123+23	-	135+07	USH 45, 47' - 79' LT	--	--	--	118	WETLAND #W22
135+50	-	136+75	USH 45, 47' - 85' RT	--	--	--	206	WETLAND #W23
136+75	-	140+17	USH 45, 40' - 97' RT	404	404	--	--	
50+65	-	52+50	S 196TH, 13' - 46' LT	--	--	138	--	WETLAND #W24
143+08	-	146+15	USH 45, 32' - 65' RT	--	--	362	--	WETLAND #W24
143+29	-	144+81	USH 45, 48' - 68' LT	--	--	170	--	WETLAND #W25
145+11	-	147+50	USH 45, 33' - 64' LT	--	--	--	292	WETLAND #W25

NOTES:
INSTALL SILT FENCE AT 5' (TYP.) FROM THE PROPOSED SLOPE INTERCEPT AND INSIDE THE ROW OR TLE.
INSTALL HEAVY DUTY SILT FENCE ALONG THE PROPOSED SLOPE INTERCEPT IN WETLAND IMPACT AREA AND INSIDE THE ROW OR TLE.

SILT FENCE - SHEET 2 OF 2:

STATION	TO	STATION	LOCATION	628.1504 SILT FENCE LF	628.1520 SILT FENCE MAINTENANCE LF	SPV.0090.01 HEAVY DUTY SILT FENCE 3-FT LF	SPV.0090.02 HEAVY DUTY SILT FENCE 5-FT LF	REMARKS
STAGE 1 CONTINUES:								
146+15	-	147+25	USH 45, 35' - 51' RT	115	115	--	--	
147+50	-	148+75	USH 45, 33' - 46' LT	126	126	--	--	
151+25	-	158+00	USH 45, 35' - 59' LT	--	--	730	--	WETLAND #W26
151+25	-	157+50	USH 45, 33' - 52' RT	--	--	650	--	WETLAND #W27
163+25	-	165+96	USH 45, 43' - 81' RT	--	--	280	--	WETLAND #W29
164+00	-	168+15	USH 45, 34' - 75' LT	--	--	577	--	WETLAND #W28
50+94	-	51+75	N 196TH, 25' - 68' RT	83	83	--	--	
166+50	-	168+50	USH 45, 31' - 178' RT	--	--	361	--	WETLAND #W30
168+15	-	173+75	USH 45, 27' - 52' LT	583	583	--	--	
168+50	-	172+00	USH 45, 34' - 39' RT	245	245	--	--	
179+00	-	181+00	USH 45, 36' LT	200	200	--	--	
180+75	-	182+50	USH 45, 35' - 42' RT	--	--	176	--	WETLAND #W31
185+14	-	188+00	USH 45, 34' - 42' RT	--	--	288	--	WETLAND #W33
185+25	-	190+25	USH 45, 32' - 43' LT	--	--	522	--	WETLAND #W32
188+85	-	191+75	USH 45, 31' - 43' RT	--	--	293	--	WETLAND #W33
190+25	-	195+00	USH 45, 32' - 38' RT	476	476	--	--	
199+00	-	200+50	USH 45, 50' - 59' RT	151	151	--	--	
42+80	-	45+98	CTH C, 33' - 58' LT	323	323	--	--	
42+75	-	46+25	CTH C, 28' - 57' RT	--	--	375	--	WETLAND #W34
46+31	-	48+75	CTH C, 42' - 61' LT	--	--	--	288	WETLAND #W37
56+75	-	59+00	CTH C, 44' - 53' LT	226	226	--	--	
57+00	-	59+00	CTH C, 37' - 57' RT	201	201	--	--	
200+23	-	204+31	USH 45, 50' - 124' LT	257	257	--	--	
204+31	-	207+25	USH 45, 48' - 58' LT	--	--	308	--	WETLAND #W37
207+25	-	208+75	USH 45, 35' - 47' LT	151	151	--	--	
211+00	-	213+00	USH 45, 35' - 39' LT	200	200	--	--	
213+00	-	218+00	USH 45, 24' - 42' LT	--	--	--	514	WETLAND #W40
213+00	-	215+25	USH 45, 27' - 48' RT	--	--	--	262	WETLAND #W39
222+00	-	225+50	USH 45, 34' - 37' RT	351	351	--	--	
225+75	-	227+50	USH 45, 33' - 39' RT	176	176	--	--	
236+00	-	240+75	USH 45, 34' - 42' LT	476	476	--	--	
237+65	-	243+75	USH 45, 37' - 46' RT	611	611	--	--	
240+75	-	246+25	USH 45, 35' - 55' LT	--	--	589	--	WETLAND #W42
243+75	-	245+06	USH 45, 39' - 68' RT	--	--	141	--	WETLAND #W41
246+25	-	250+60	USH 45, 30' - 53' LT	443	443	--	--	
250+72	-	253+75	USH 45, 50' - 54' LT	304	304	--	--	
48+50	-	49+22	CTH AH, 17' - 39' RT	80	80	--	--	
19+80	-	246+00	UNDISTRIBUTED	1000	1000	100	100	
STAGE 2A & 2B:								
264+46	-	266+11	USH 45, 173' - 292' RT	270	270	--	--	AROUND DETENTION POND
291+50	-	293+05	USH 45, 38' - 58' RT	274	274	--	--	
293+05	-	295+75	USH 45, 37' - 89' RT	--	--	285	--	WETLAND #W47
295+75	-	304+91	USH 45, 65' - 100' RT	974	974	--	--	
246+00	-	305+35	UNDISTRIBUTED	100	100	--	--	
			TOTAL 0010	16,727	16,727	9,013	2027	

NOTES:

INSTALL SILT FENCE AT 5' (TYP.) FROM THE PROPOSED SLOPE INTERCEPT AND INSIDE THE ROW OR TLE.

INSTALL HEAVY DUTY SILT FENCE ALONG THE PROPOSED SLOPE INTERCEPT IN WETLAND IMPACT AREA AND INSIDE THE ROW OR TLE.

INLET PROTECTION

STATION	OFFSET	LT/RT	628.7005 INLET PROTECTION TYPE A EACH	628.7010 INLET PROTECTION TYPE B EACH	628.7015 INLET PROTECTION TYPE C EACH	628.7020 INLET PROTECTION TYPE D EACH	REMARKS
24+28	39.00	RT	1	1	--	--	INLETS 2X3-FT
196+00	30.93	RT	1	1	--	--	INLETS 2X3-FT
196+65	35.50	RT	1	1	--	--	INLETS 2X3-FT
196+90	35.50	RT	1	1	--	--	INLETS 4-FT DIAMETER
198+25	35.50	RT	1	1	--	--	INLETS 2X3-FT
199+86	40.80	LT	1	--	1	--	INLETS MEDIAN 1 GRATE
199+90	35.50	RT	1	1	--	--	INLETS 4-FT DIAMETER
201+03	58.00	RT	1	--	1	--	INLETS MEDIAN 1 GRATE
201+03	35.50	RT	1	1	--	--	INLETS 4-FT DIAMETER
202+12	101.30	RT	1	1	--	--	INLETS 2X3-FT
250+13	131.20	RT	1	--	1	--	INLETS MEDIAN 1 GRATE
250+68	100.20	RT	1	--	1	--	INLETS MEDIAN 1 GRATE
251+25	51.20	RT	1	--	1	--	INLETS MEDIAN 1 GRATE
251+25	17.97	RT	1	1	--	--	INLETS 2X3-FT
253+25	27.74	RT	1	1	--	--	INLETS 2X3-FT
254+88	94.50	LT	1	--	1	--	INLETS MEDIAN 1 GRATE
255+45	29.50	LT	1	1	--	--	INLETS 2X3-FT
256+50	55.30	RT	1	--	1	--	INLETS MEDIAN 1 GRATE
260+50	17.50	LT	1	1	--	--	INLETS 2X3-FT
260+50	17.50	RT	1	1	--	--	INLETS 2X3-FT
263+00	46.00	LT	1	--	1	--	INLETS MEDIAN 2 GRATE
263+10	17.50	LT	1	1	--	--	INLETS 4-FT DIAMETER
263+10	17.50	RT	1	1	--	--	INLETS 2X3-FT
264+35	17.50	LT	1	1	--	--	INLETS 2X3-FT
264+35	17.50	RT	1	1	--	--	INLETS 4-FT DIAMETER
265+94	20.71	LT	1	1	--	--	INLETS 2X3-FT
265+43	44.70	LT	1	--	1	--	INLETS MEDIAN 1 GRATE
266+46	18.59	LT	1	1	--	1	MANHOLES 5-DIAMETER
266+46	17.50	RT	1	1	--	1	MANHOLES 5-DIAMETER
266+70	17.50	LT	1	1	--	--	INLETS 2X3-FT
266+70	17.50	RT	1	1	--	--	INLETS 2X3-FT
267+85	50.00	LT	1	--	1	--	INLETS MEDIAN 1 GRATE
268+70	17.50	LT	1	1	--	--	INLETS 2X3-FT
268+70	17.50	RT	1	1	--	--	INLETS 2X3-FT
272+77	19.50	LT	1	1	--	--	INLETS 2X3-FT
272+84	50.60	LT	1	--	1	--	INLETS MEDIAN 2 GRATE
273+41	49.30	LT	1	--	1	--	INLETS MEDIAN 1 GRATE
275+00	53.00	LT	1	--	1	--	INLETS MEDIAN 2 GRATE
275+00	17.50	RT	1	1	--	--	INLETS 2X3-FT
275+00	17.50	LT	1	1	--	--	INLETS 2X3-FT
276+00	34.70	LT	1	--	1	--	INLETS MEDIAN 1 GRATE

INLET PROTECTION - CONTINUES

STATION	OFFSET	LT/RT	628.7005 INLET PROTECTION TYPE A EACH	628.7010 INLET PROTECTION TYPE B EACH	628.7015 INLET PROTECTION TYPE C EACH	628.7020 INLET PROTECTION TYPE D EACH	REMARKS
276+90	17.50	LT	1	1	--	--	INLETS 2X3-FT
276+90	17.50	RT	1	1	--	--	INLETS 2X3-FT
278+65	51.00	LT	1	--	1	--	INLETS MEDIAN 2 GRATE
279+00	17.50	LT	1	1	--	--	INLETS 2X3-FT
279+00	17.50	RT	1	1	--	--	INLETS 2X3-FT
281+00	17.50	LT	1	1	--	--	INLETS 2X3-FT
281+00	17.50	RT	1	1	--	--	INLETS 2X3-FT
283+50	17.50	RT	1	1	--	--	INLETS 4-FT DIAMETER
283+50	17.50	LT	1	1	--	--	MANHOLES 5-FT DIAMETER
283+75	50.00	RT	1	--	1	--	INLETS MEDIAN 2 GRATE
286+86	24.95	LT	1	1	--	1	MANHOLES 5-FT DIAMETER
286+86	29.50	RT	1	1	--	1	MANHOLES 5-FT DIAMETER
286+96	29.50	RT	1	1	--	--	INLETS 2X3-FT
287+08	25.76	RT	1	1	--	--	INLETS 2X3-FT
287+18	26.13	RT	1	1	--	--	INLETS 2X3-FT
287+27	29.50	RT	1	1	--	--	INLETS 2X3-FT
288+00	29.15	LT	1	1	--	--	INLETS 4-FT DIAMETER
288+77	67.00	RT	1	1	--	--	INLETS 2X3-FT
289+41	67.70	RT	1	1	--	--	INLETS 2X3-FT
291+00	17.50	RT	1	1	--	--	INLETS 2X3-FT
291+00	17.50	LT	1	1	--	--	INLETS 2X3-FT
292+25	20.35	LT	1	1	--	--	INLETS 2X3-FT
292+25	17.50	RT	1	1	--	--	INLETS 2X3-FT
297+00	25.65	LT	1	1	--	--	INLETS 2X3-FT
300+09	39.99	LT	1	1	--	--	INLETS 2X3-FT
300+10	11.31	LT	1	1	--	--	INLETS 2X3-FT
300+10	6.00	LT	1	1	--	--	INLETS 2X3-FT
300+10	25.05	RT	1	1	--	--	INLETS 2X3-FT
301+68	42.33	LT	1	1	--	--	INLETS 2X3-FT
301+75	11.34	LT	1	1	--	--	INLETS 2X3-FT
301+75	5.12	RT	1	1	--	--	INLETS 2X3-FT
301+75	36.16	RT	1	1	--	--	INLETS 2X3-FT
	TOTAL 0010		73	57	16	4	

RIPRAP MEDIUM, CULVERT PIPE CHECKS, MARKER CULVERT END, & GEOTEXTILE FABRIC TYPE HR

STATION	LOCATION	606.0200 RIPRAP MEDIUM* CY	628.7555 CULVERT PIPE CHECKS EACH	633.5200 MARKERS CULVERT END EACH	645.0120 GEOTEXTILE FABRIC TYPE HR* SY	REMARKS
46+25.0	CTH C 54.0' RT	--	7	1	--	47X71-INC PIPE ARC STEEL
47+39.0	CTH C 38.0' LT	9.6	--	1	29.0	60-INCH CPCS
48+00.0	CTH C 42.9' RT	--	1	1	--	18-INCH CPCS
24+29.0	39.00' RT	2.2	--	--	10.1	12" SSPRC
31+97.0	29.54' RT	--	3	1	--	36-INCH CPRC
31+97.0	30.46' LT	4.4	--	1	15.9	36-INCH CPRC
60+58.0	31.89' LT	--	3	1	--	24-INCH CPRC
60+58.0	42.11' RT	3.3	--	1	13.0	24-INCH CPRC
69+97.0	47.38' RT	14.0	--	1	1.0	72-INCH CPRC
70+00.0	40.30' LT	14.0	7	1	40.0	72-INCH CPRC
90+46.0	38.55' RT	3.9	--	1	1.0	30-INCH CPRC
90+59.0	36.33' LT	--	3	1	--	30-INCH CPRC
101+39.0	36.31' LT	--	5	1	--	42-INCH CPRC
101+50.0	40.91' RT	5.0	--	1	1.0	42-INCH CPRC
133+62.0	61.30' RT	--	3	1	--	19X30-INCH CPRCHE
134+42.0	59.37' RT	3.9	--	1	14.4	19X30-INCH CPRCHE
134+86.0	49.75' LT	14.0	7	1	40.0	72-INCH CPRC
135+00.0	49.75' LT	14.0	7	--	40.0	72-INCH CPRC
135+83.0	48.39' RT	14.0	--	1	40.0	72-INCH CPRC
135+97.0	48.39' RT	14.0	--	--	40.0	72-INCH CPRC
142+42.0	90.50' RT	--	3	1	--	19X30-INCH CPRCHE
143+05.0	97.95' RT	3.9	--	1	14.4	19X30-INCH CPRCHE
146+11.0	34.85' RT	14.0	--	1	40.0	72-INCH CPRC
146+50.0	35.00' LT	14.0	7	1	40.0	72-INCH CPRC
153+27.0	44.00' LT	--	3	1	--	30-INCH CPRC
153+27.0	44.00' RT	3.9	--	1	14.4	30-INCH CPRC
165+78.0	49.61' RT	3.3	--	1	13.0	24-INCH CPRC
165+86.0	42.04' LT	--	3	1	--	24-INCH CPRC
166+01.0	58.79' RT	3.3	--	1	13.0	24-INCH CPRC
167+06.0	60.77' RT	--	3	1	--	24-INCH CPRC
174+84.0	36.13' LT	3.9	--	1	14.4	19X30-INCH CPRCHE
175+62.0	39.98' LT	--	3	1	--	19X30-INCH CPRCHE
188+76.0	28.45' RT	--	3	1	--	24-INCH CPRC
188+76.0	31.55' LT	3.3	--	1	13.0	24-INCH CPRC

RIPRAP MEDIUM, CULVERT PIPE CHECKS, MARKER CULVERT END, & GEOTEXTILE FABRIC TYPE HR

STATION	LOCATION	606.0200 RIPRAP MEDIUM* CY	628.7555 CULVERT PIPE CHECKS EACH	633.5200 MARKERS CULVERT END EACH	645.0120 GEOTEXTILE FABRIC TYPE HR* SY	REMARKS
196+90.0	42.50' LT	2.5	--	1	10.8	15-INCH SSPRC
199+00.0	51.30' LT	2.8	--	--	11.6	18-INCH SSPRC
202+77.5	56.00' RT	2.2	--	--	10.1	12-INCH SSPRRC
205+77.0	32.35' RT	--	3	1	--	24-INCH CPRC
205+77.0	47.65' LT	3.3	--	1	13.0	24-INCH CPRC
213+79.0	28.47' LT	--	5	1	--	60-INCH CPRC
214+26.0	28.69' RT		--	1		60-INCH CPRC
231+82.0	32.68' LT	--	3	1	--	24-INCH CPRC
232+08.0	34.802' RT	3.3	--	1	13.0	24-INCH CPRC
245+14.0	69.67' RT	--	3	1	--	36-INCH CPRC
245+14.0	40.33' LT	4.4	--	1	15.9	36-INCH CPRC
249+65.8	57.30' RT	4.7	--	1	16.6	24-INCH SSPRC
249+66.1	47.30' RT	4.7	--	--	16.6	24-INCH SSPRC
253+93.8	34.80' LT	2.5	--	--	10.8	15-INCH SSPRC
255+98.7	143.60' RT	--	1	--	--	18-INCH SSPRC
264+45.0	80.00' RT	55.6	--	--	148.8	24-INCH SSPRC
265+85.0	227.00' RT	24.0	1	--	63.0	EMERGENCY SPILLWAY
266+46.0	36.50' LT	--	3	1	--	24X38-INCH SSPRCHE
266+45.0	42.30' RT	8.3	--	1	22.5	24X38-INCH SSPRCHE
266+51.0	43.20' RT	--	--	--	--	24-INCH SSPRC
283+50.0	53.50' LT	3.9		1	14.4	30-INCH SSCPR
286+86.0	58.90' LT	--	3	1	--	24-INCH SSPRC
286+86.0	55.50' RT	--	3	1	--	24-INCH SSPRC
288+00.0	57.20' LT	3.3	--	1	13.0	24-INCH SSPRC
293+08.0	38.00' LT	--	3	1	--	36-INCH CPRC
293+08.0	42.00' RT	4.4	--	1	15.9	36-INCH CPRC
293+15.0	38.00' LT	--	3	--	--	36-INCH CPRC
293+15.0	42.00' RT	4.4	--	--	15.9	36-INCH CPRC
294+00.0	41.50' LT	3.3	--	1	13.0	24-INCH SSPRC
300+08.0	48.00' RT	1.1	--	1	7.2	12-INCH SSPRRC
301+75.0	60.20' RT	1.1	--	1	7.2	12-INCH SSPRRC
	UNDISTRIBUTED	--	44	--	--	DRIVEWAY PIPES
	TOTAL 0010	306	146	52	887	

NOTE:
*ADDITIONAL QUANTITIES SHOWN ELSEHERE IN PLANS. SEE **CONCRETE CURB & GUTTER** MISCELLANEOUS SCHEDULES.

MOBOLIZATION EROSION CONTROL

STATION	TO	STATION	LOCATION	628.1905 MOBILIZATIONS EROSION CONTROL EACH	628.1910 MOBILIZATIONS EMERGENCY EROSION CONTROL EACH	630.0200 SEEDING TEMPORARY LB	630.0300 SEEDING BORROW PIT* LB
19+83	-	246+00	USH 45	5	10	--	--
246+00	-	305+35	USH 45	5	10	--	--
19+83		305+35	UNDISTRIBUTED	5	10	4500	500
			TOTAL 0010	15	30	4500	500

TOPSOIL & SOD LAWN - SHEET 1 0F 3

STATION	TO	STATION	LOCATION	625.0100 TOPSOIL SY	629.0210 FERTILIZER TYPE B* CWT	631.0300 SOD WATER* MGAL	631.1000 SOD LAWN SY	REMARKS
250+58	-	252+11	USH 45, 39.5' RT	386	0.3	9	386	BACK OF SIDEWALK
250+68	-	252+10	USH 45, 18.5' RT	209	0.2	5	209	TERRACE AREA
252+22	-	252+66	USH 45, 24.0' RT	43	0.1	1	43	TERRACE AREA
252+22	-	252+67	USH 45, 39.5' RT	87	0.1	2	87	BACK OF SIDEWALK
252+80	-	254+04	USH 45, 26.8' RT	76	0.1	2	76	TERRACE AREA
252+80	-	254+18	USH 45, 39.5' RT	305	0.2	7	305	BACK OF SIDEWALK
254+34	-	255+97	USH 45, 29.5' RT	87	0.1	2	87	TERRACE AREA
254+34	-	256+07	USH 45, 39.5' RT	357	0.3	8	357	BACK OF SIDEWALK
48+50	-	49+48	CTH AH, 17.5' LT	176	0.2	4	176	
254+89	-	256+90	USH 45, 40.5' LT	121	0.1	3	121	BACK OF SIDEWALK
254+97	-	256+61	USH 45, 30.5' LT	97	0.1	3	97	TERRACE AREA
256+39	-	257+90	USH 45, 28.5' RT	357	0.3	8	357	BACK OF SIDEWALK
256+45	-	256+61	USH 45, 27.5' RT	7	0.1	1	7	TERRACE AREA
256+66	-	256+90	USH 45, 30.5' LT	12	0.1	1	12	TERRACE AREA
256+66	-	258+51	USH 45, 18.5' RT	101	0.1	3	101	TERRACE AREA
257+02	-	257+90	USH 45, 36.1' LT	139	0.1	4	139	BACK OF SIDEWALK
257+04	-	257+88	USH 45, 26.5' LT	44	0.1	1	44	TERRACE AREA
258+04	-	258+86	USH 45, 18.7' LT	43	0.1	1	43	TERRACE AREA
258+04	-	258+86	USH 45, 28.5' LT	80	0.1	2	80	BACK OF SIDEWALK
258+65	-	260+19	USH 45, 18.5' RT	83	0.1	2	83	TERRACE AREA
258+65	-	260+19	USH 45, 28.5' RT	169	0.2	4	169	BACK OF SIDEWALK
258+98	-	260+86	USH 45, 18.5' LT	102	0.1	3	102	TERRACE AREA
258+98	-	260+86	USH 45, 28.5' LT	332	0.3	8	332	BACK OF SIDEWALK
260+30	-	262+01	USH 45, 28.5' RT	213	0.2	5	213	BACK OF SIDEWALK
260+32	-	262+00	USH 45, 18.5' RT	91	0.1	3	91	TERRACE AREA
261+02	-	263+27	USH 45, 18.5' LT	122	0.1	3	122	TERRACE AREA
261+02	-	263+27	USH 45, 28.5' LT	527	0.4	12	527	BACK OF SIDEWALK
262+15	-	263+53	USH 45, 18.5' RT	73	0.1	2	73	TERRACE AREA
262+16	-	263+62	USH 45, 28.5' RT	317	0.2	8	317	BACK OF SIDEWALK
263+50	-	264+20	USH 45, 18.5' LT	37	0.1	1	37	TERRACE AREA
263+50	-	265+59	USH 45, 28.5' LT	339	0.3	8	339	BACK OF SIDEWALK
263+97	-	264+84	USH 45, 28.5' RT	122	0.1	3	122	BACK OF SIDEWALK
264+07	-	264+20	USH 45, 18.5' RT	4	0.1	1	4	TERRACE AREA
264+25	-	265+38	USH 45, 18.5' LT	60	0.1	2	60	TERRACE AREA
264+25	-	264+84	USH 45, 18.5' RT	31	0.1	1	31	TERRACE AREA
265+20	-	266+01	USH 45, 18.5' RT	43	0.1	1	43	TERRACE AREA
266+00	-	267+66	USH 45, 28.5' LT	316	0.2	8	316	BACK OF SIDEWALK
266+33	-	267+97	USH 45, 28.5' RT	342	0.3	8	342	BACK OF SIDEWALK
266+36	-	267+44	USH 45, 18.5' RT	58	0.1	2	58	TERRACE AREA
266+38	-	267+44	USH 45, 18.5' LT	56	0.1	2	56	TERRACE AREA

NOTES:
*ADDITIONAL QUANTITIES SHOWN ELSEWHERE IN PLANS. SEE **EROSION CONTROL** MISCELLANEOUS QUANTITIES SCHEDULES.

TOPSOIL & SOD LAWN - SHEE 2 OF 3

STATION	TO	STATION	LOCATION	625.0100 TOPSOIL SY	629.0210 FERTILIZER TYPE B* CWT	631.0300 SOD WATER* MGAL	631.1000 SOD LAWN SY	REMARKS
267+49	-	267+65	USH 45, 18.5' LT	7	0.1	1	7	TERRACE AREA
267+49	-	267+67	USH 45, 18.5' RT	7	0.1	1	7	TERRACE AREA
267+76	-	270+24	USH 45, 28.5' LT	540	0.4	13	540	BACK OF SIDEWALK
267+77	-	268+60	USH 45, 18.5' LT	44	0.1	1	44	TERRACE AREA
268+32	-	270+28	USH 45, 28.5' RT	279	0.2	7	279	BACK OF SIDEWALK
268+46	-	268+60	USH 45, 18.5' RT	5	0.1	1	5	TERRACE AREA
268+64	-	270+23	USH 45, 18.5' LT	86	0.1	2	86	TERRACE AREA
268+64	-	271+08	USH 45, 18.5' RT	134	0.1	3	134	TERRACE AREA
270+31	-	271+38	USH 45, 28.5' LT	239	0.2	6	239	BACK OF SIDEWALK
270+35	-	271+63	USH 45, 18.5' LT	69	0.1	2	69	TERRACE AREA
270+35	-	271+08	USH 45, 28.5' RT	79	0.1	2	79	BACK OF SIDEWALK
271+28	-	271+38	USH 45, 28.5' RT	14	0.1	1	14	BACK OF SIDEWALK
271+43	-	271+67	USH 45, 28.5' LT	62	0.1	2	62	BACK OF SIDEWALK
271+50	-	272+59	USH 45, 18.5' RT	59	0.1	2	59	TERRACE AREA
271+50	-	272+95	USH 45, 28.5' RT	144	0.1	4	144	BACK OF SIDEWALK
271+74	-	273+00	USH 45, 28.5' LT	349	0.3	8	349	BACK OF SIDEWALK
271+75	-	272+59	USH 45, 18.5' LT	46	0.1	2	46	TERRACE AREA
272+64	-	272+80	USH 45, 18.5' LT	6	0.1	1	6	TERRACE AREA
272+64	-	272+77	USH 45, 18.5' RT	5	0.1	1	5	TERRACE AREA
273+24	-	273+41	USH 45, 28.5' RT	36	0.1	1	36	TERRACE AREA
273+29	-	275+62	USH 45, 28.5' LT	635	0.5	15	635	BACK OF SIDEWALK
273+37	-	276+63	USH 45, 28.5' RT	751	0.5	17	751	BACK OF SIDEWALK
273+39	-	273+54	USH 45, 18.5' RT	5	0.1	1	5	TERRACE AREA
273+43	-	273+54	USH 45, 18.5' LT	4	0.1	1	4	TERRACE AREA
273+59	-	275+62	USH 45, 18.5' LT	111	0.1	3	111	TERRACE AREA
273+59	-	276+63	USH 45, 18.5' RT	167	0.2	4	167	TERRACE AREA
275+74	-	277+24	USH 45, 18.5' LT	80	0.1	2	80	TERRACE AREA
275+74	-	276+73	USH 45, 28.5' LT	93	0.1	3	93	BACK OF SIDEWALK
276+75	-	277+72	USH 45, 18.5' RT	51	0.1	2	51	TERRACE AREA
276+75	-	277+72	USH 45, 28.5' RT	152	0.1	4	152	BACK OF SIDEWALK
276+76	-	277+24	USH 45, 28.5' LT	115	0.1	3	115	BACK OF SIDEWALK
277+35	-	277+73	USH 45, 28.5' LT	36	0.1	1	36	BACK OF SIDEWALK
277+36	-	277+92	USH 45, 18.5' LT	28	0.1	1	28	TERRACE AREA
277+77	-	277+92	USH 45, 28.5' LT	18	0.1	1	18	BACK OF SIDEWALK
278+04	-	278+44	USH 45, 18.5' RT	19	0.1	1	19	TERRACE AREA
278+04	-	278+44	USH 45, 28.5' RT	65	0.1	2	65	BACK OF SIDEWALK
278+07	-	279+71	USH 45, 28.5' LT	309	0.2	7	309	BACK OF SIDEWALK
278+08	-	279+23	USH 45, 18.5' LT	64	0.1	2	64	TERRACE AREA
278+58	-	279+23	USH 45, 18.5' RT	33	0.1	1	33	TERRACE AREA
278+58	-	279+65	USH 45, 28.5' RT	173	0.2	4	173	BACK OF SIDEWALK

NOTES:

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE IN PLANS. SEE **EROSION CONTROL** MISCELLANEOUS QUANTITIES SCHEDULES.

3

TOPSOIL & SOD LAWN - SHEET 3 OF 3

STATION	TO	STATION	LOCATION	625.0100 TOPSOIL SY	629.0210 FERTILIZER TYPE B* CWT	631.0300 SOD WATER* MGAL	631.1000 SOD LAWN SY	REMARKS
279+28	-	279+86	USH 45, 18.5' LT	32	0.1	1	32	TERRACE AREA
279+28	-	279+41	USH 45, 18.5' RT	5	0.1	1	5	TERRACE AREA
279+72	-	279+86	USH 45, 28.5' LT	25	0.1	1	25	BACK OF SIDEWALK
279+92	-	283+97	USH 45, 28.5' RT	694	0.5	16	694	BACK OF SIDEWALK
279+93	-	280+08	USH 45, 28.5' LT	24	0.1	1	24	BACK OF SIDEWALK
279+96	-	280+08	USH 45, 18.5' LT	4	0.1	1	4	TERRACE AREA
280+03	-	280+33	USH 45, 18.5' RT	13	0.1	1	13	TERRACE AREA
280+19	-	280+94	USH 45, 28.5' LT	74	0.1	2	74	BACK OF SIDEWALK
280+23	-	280+33	USH 45, 18.5' LT	4	0.1	1	4	TERRACE AREA
280+38	-	284+84	USH 45, 18.5' LT	227	0.2	6	227	TERRACE AREA
280+38	-	283+97	USH 45, 18.5' RT	177	0.2	4	177	TERRACE AREA
284+10	-	284+40	USH 45, 40' RT	93	0.1	3	93	BETWEEN DRIVEWAYS
284+32	-	284+69	USH 45, 18.5' RT	16	0.1	1	16	TERRACE AREA
284+32	-	284+79	USH 45, 28.5' RT	168	0.2	4	168	BACK OF SIDEWALK
284+81	-	288+15	USH 45, 18.5' RT	166	0.2	4	166	TERRACE AREA
284+81	-	288+70	USH 45, 28.5' RT	834	0.6	19	834	BACK OF SIDEWALK
284+84	-	288+15	USH 45, 18.5' LT	166	0.2	4	166	TERRACE AREA
288+20	-	289+82	USH 45, 18.5' LT	80	0.1	2	80	TERRACE AREA
288+20	-	288+43	USH 45, 18.5' RT	7	0.1	1	7	TERRACE AREA
288+43	-	288+79	USH 45, 40.5' RT	29	0.1	1	29	TERRACE AREA
289+42	-	289+57	USH 45, 40.5' RT	42	0.1	1	42	BACK OF SIDEWALK
289+57	-	289+82	USH 45, 26.9' RT	14	0.1	1	14	TERRACE AREA
289+57	-	289+67	USH 45, 40.5' RT	7	0.1	1	7	BACK OF SIDEWALK
289+87	-	293+08	USH 45, 18.5' LT	160	0.2	4	160	TERRACE AREA
289+87	-	293+08	USH 45, 18.5' RT	161	0.2	4	161	TERRACE AREA
293+08	-	300+00	USH 45, 18.5' LT	374	0.3	9	374	TERRACE AREA
293+08	-	301+75	USH 45, 18.5' RT	411	0.3	10	411	TERRACE AREA
300+00	-	304+86	USH 45, 41.1' LT	283	0.2	7	283	TERRACE AREA
300+87	-	303+88	USH 45 R/L	349	0.3	8	349	ISLAND
301+75	-	305+35	USH 45, 37.7' RT	214	0.2	5	214	TERRACE AREA
250+58	-	305+35	UNDISTRIBUTED	1,600	1.1	36	1,600	
			TOTAL 0010	17,737	19	450	17,737	

NOTES:

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE IN PLANS. SEE **EROSION CONTROL** MISCELLANEOUS QUANTITIES SCHEDULES.

TRAFFIC CONTROL

STATION	TO	STATION	LOCATION	643.0300 TRAFFIC CONTROL DRUMS DAY	643.0410 TRAFFIC CONTROL BARRICADES TYPE II DAY	643.0420 TRAFFIC CONTROL BARRICADES TYPE III DAY	643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A DAY	643.0715 TRAFFIC CONTROL WARNING LIGHTS TYPE C DAY	643.0800 TRAFFIC CONTROL ARROW BOARDS DAY	643.0900 TRAFFIC CONTROL SIGNS DAY	643.1000 TRAFFIC CONTROL SIGNS FIXED MESSAGE** SF	REMARKS
	STAGE 1											
NELSON RD	-	CTH U	CTH WG	1,020	--	60	120	120	15	60	--	EB SHOULDER CLOSED
NELSON RD	-	CTH U	CTH WG	900	--	90	180	120	15	60	--	WB SHOULDER CLOSED
USH 45	-	CTH U	CTH WG	1,196	--	46	92	184	--	368	--	WB RIGHT TURN LANE CLOSED
ILL 173	-	CTH WG	USH 45	2,040	--	240	480	600	30	600	36	SHOULDERS CLOSED
CTH WG	-	86TH ST	USH 45	6,000	--	1,140	1,140	2,160	--	6,480	54	*OPEN TO LOCAL TRAFFIC ONLY
86TH ST	-	STH 50	USH 45	--	--	480	960	--	--	600	9	OPEN TO LOCAL TRAFFIC ONLY
182ND AVE	-	USH 45	121ST ST	--	--	480	960	--	--	360	--	OPEN TO LOCAL TRAFFIC ONLY
USH 45	-	152ND AVE	CTH CJ	--	--	480	960	--	--	360	--	OPEN TO LOCAL TRAFFIC ONLY
182ND AVE	-	USH 45	119TH ST	--	--	480	960	--	--	360	27	OPEN TO LOCAL TRAFFIC ONLY
CTH V	-	USH 45	CTH V	--	--	480	960	--	--	360	27	OPEN TO LOCAL TRAFFIC ONLY
USH 45	-	CTH MB	CTH Q	--	--	480	960	--	--	360	27	OPEN TO LOCAL TRAFFIC ONLY
500' EAST	-	USH 45	192ND AVE	--	--	--	--	--	--	360	--	DEAD END ROAD OPEN TO TRAFFIC
CTH V	-	USH 45	CTH JS	--	--	240	240	--	--	360	27	OPEN TO LOCAL TRAFFIC ONLY
USH 45	-	500' WEST	106TH ST	--	--	--	--	--	--	360	--	DEAD END ROAD OPEN TO TRAFFIC
USH 45	-	104TH ST	S 196TH AVE	--	--	480	960	--	--	360	--	OPEN TO LOCAL TRAFFIC ONLY
USH 45	-	101ST ST	N 196TH AVE	--	--	480	960	--	--	360	--	OPEN TO LOCAL TRAFFIC ONLY
CTH C	-	USH 45	98TH ST	--	--	240	480	--	--	360	27	OPEN TO LOCAL TRAFFIC ONLY
STH 83	-	CTH MB	CTH C	1,560	--	60	120	120	15	120	27	EB SHOULDER CLOSED
STH 83	-	CTH MB	CTH C	1,500	--	60	120	120	15	120	27	WB SHOULDER CLOSED
USH 45	-	CTH MB	CTH C	1,150	--	460	460	184	30	368	--	WB RIGHT TURN LANE CLOSED
STH 83	-	USH 45	STH 50	1,440	--	--	--	--	--	--	27	RIGHT TURN-LANE CLOSED
USH 45	-	IH 94	STH 50	1,440	--	--	--	--	--	--	27	LEFT TURN-LANE CLOSED
	STAGE 1A:											
NELSON RD	-	CTH U	CTH WG	--	--	140	140	--	--	56	--	ROAD CLOSED
	STAGE 1B:											
STH 83	-	CTH MB	CTH C	--	--	140	140	--	--	112	--	ROAD CLOSED
	STAGE 2:											
STH 83	-	USH 45	CTH C	--	--	--	--	--	--	512	27	EB LELT TURN-LANE CLOSED
USH 45	-	CTH MB	CTH C	2,944	--	128	256	512	--	512	27	WB RIGHT TURN-LANE CLOSED
CTH C	-	86TH ST	USH 45	--	--	1,024	1,024	--	--	640	9	ROAD CLOSED
86TH ST	-	79TH ST	USH 45	--	128	1,024	1,024	--	--	512	27	ROAD CLOSED
79TH ST	-	STH 50	USH 45	--	--	1,280	1,280	--	15	640	18	ROAD CLOSED
USH 45	-	198TH ST	86TH ST	--	--	512	512	--	--	384	27	ROAD CLOSED
86TH PL	-	86TH ST	86TH PL	--	--	512	512	--	--	256	--	ROAD CLOSED
216TH AVE	-	USH 45	CTH AH	1,280	--	512	512	--	--	384	27	OPEN TO LOCAL TRAFFIC
USH 45	-	199TH ST	84TH PL	--	--	512	512	--	--	384	--	ROAD CLOSED
USH 45	-	199TH ST	84TH ST	--	--	512	512	640	--	384	--	ROAD CLOSED
201ST AVE	-	USH 45	BRISTOL SCHOOL DWY	--	--	512	512	--	--	384	--	ROAD CLOSED
USH 45	-	199TH ST	83RD ST	--	--	512	512	--	--	384	27	ROAD CLOSED
203ST AVE	-	USH 45	82ND ST	1,280	--	--	--	640	--	384	27	OPEN TO THRU TRAFFIC
USH 45	-	199TH ST	82ND ST	1,280	128	--	--	640	--	384	--	OPEN TO THRU TRAFFIC
USH 45	-	199TH ST	80TH ST	--	--	512	512	--	--	384	--	ROAD CLOSED
USH 45	-	WILLIAMSBURG CT	79TH ST	1,280	256	256	512	640	--	128	--	OPEN TO LOCAL TRAFFIC
STH 83	-	USH 45	STH 50	1,536	--	256	512	640	--	--	27	RIGHT TURN-LANE CLOSED
USH 45	-	IH 94	STH 50	1,536	--	256	512	640	--	--	27	LEFT TURN-LANE CLOSED
			TOTAL 0010	29,382	512	15,076	20,608	7,960	135	19,560	612	

NOTES:

*TRAFFIC CONTROL DRUMS ARE REQUIRED ALONG USH 45 WITHIN THE CONSTRUCTION ZONE TO PROTECT LOCAL TRAFFIC AT SHOULDER DROP-OFF AND BASE PATCHING LOCATIONS.

*"SLOW" AND "SPEED LIMIT 25 MPH" ADVISORY TRAFFIC CONTROL SIGNS MOUNTED ON TEMPORARY SUPPORTS ARE REQUIRED ALONG USH 45 AT EVERY QUARTER OF MILE FROM CTH WG TO 86TH.

ADDITIONAL QUANTITIES SHOWN ELSEWHERE IN PLANS. SEE **TRAFFIC CONTROL DETOUR MISCELLANEOUS QUANTITIES SCHEDULE.

TRAFFIC CONTROL DETOUR

FROM	-	TO	LOCATION	643.0920 TRAFFIC CONTROL COVERING SIGNS TYPE II EACH	NO. OF CYCLES	NO. OF SIGNS	643.1000 TRAFFIC CONTROL SIGNS FIXED MESSAGE* SF	643.1050 TRAFFIC CONTROL SIGNS PCMS DAY	643.3000 TRAFFIC CONTROL DETOUR SIGNS DAY	REMARKS
STAGE 1 - DETOUR USH 45 TRAFFIC:										
2100' SOUTH OF ILL 173	-	ILL 173	USH 45 NB	2	1	2	52.25	--	1,080	FMS AT USH 45, SOUTH OF ILL 173
ILL 173	-	STH 50	USH 45	--	--	--	36.00	14	240	PCMS BETWEEN IL 173 & CTH WG
1500' WEST OF USH 45	-	USH 45	ILL 173	1	1	1	--	--	1,080	
USH 45	-	USH 41	ILL 173	1	1	1	--	--	4,680	
1500' SOUTH OF ILL 173	-	IH 94	USH 41	--	--	--	--	--	5,400	
USH 41	-	STH 50	IH 94	--	--	--	264.00	--	5,160	
IH 94	-	USH 45	STH 50	12	1	12	274.50	--	4,920	FMS ALONG STH 50
1500' WEST OF USH 45	-	USH 45	STH 50	9	1	9	170.00	--	1,080	FMS AT USH 12 & STH 50
STH 50	-	2100' NORTH OF STH 50	USH 45 SB	3	1	3	52.25	--	1,080	FMS AT USH 45, NORTH OF STH 50
86TH ST	-	86TTH ST	USH 45	--	--	--	--	14	--	PCMS JUST SOUTH OF 86TH STREET
		CTHs A2,C,AH,Q,CJ,WG	UNDISTRIBUTED				189.00			SEE DETOUR PLANS FOR LOCATIONS
79TH ST	-	STH 50	USH 45	--	--	--	--	14	--	PCMS BETWEEN 79TH ST & STH 50
STAGE 1A - DETOUR CTH A2/WG TRAFFIC **:										
2100' WEST OF CTH V67	-	CTH V67	CTH A2	--	--	--	17.50	--	126	
CTH V67	-	USH 45	CTH A2	--	--	--	--	10	126	PCMS @ 100' EAST OF CTH V67
1500' NORTH OF CTH A2	-	CTH A2	CTH V67	1	1	1	17.50	--	70	
CTH A2	-	ILL 173	CTH V67	--	--	--	3.00	--	266	
1500' SOUTH OF ILL 173	-	ILL 173	CTH V67	--	--	--	17.50	--	126	
WEST OF CTH V67	-	EAST OF CTH W15	ILL 173	1	1	1	47.00	--	728	
1500' SOUTH OF ILL 173	-	ILL 173	USH 45	--	--	--	44.00	--	210	
ILL 173	-	CTH WG	CTH W15	1	1	1	23.50	--	238	
1500' NORTH OF CTH WG	-	CTH WG	CTH U	--	--	--	23.50	--	70	
1500' EAST OF CTH U/W15	-	CTH U/W15	CTH WG	--	--	--	26.50	--	98	
NORTH OF CTH WG	-	CTH WG	CTH MB	--	--	--	17.50	--	98	
SOUTH OF ILL 173	-	ILL 173	CTH W15	--	--	--	--	--	98	
CTH U	-	USH 45	CTH WG	--	--	--	--	10	224	PCMS @ 100' WEST OF CTH MB
STAGE 1B - DETOUR CTH C TRAFFIC **:										
2100' WEST OF STH 83	-	STH 83	CTH C	--	--	--	--	--	126	
STH 83	-	CTH V	CTH C	--	--	--	--	--	126	
CTH V	-	USH 45	CTH C	--	--	--	--	10	--	PCMS @ 100' EAST OF CTH V
USH 45	-	CTH D	CTH C	--	--	--	--	10	14	PCMS @ 100' WEST OF CTH D
CTH D	-	CTH MB	CTH C	--	--	--	--	--	140	
1500' SOUTH OF CTH C	-	CTH C	STH 83	6	1	6	--	--	126	
1500' SOUTH OF CTH C	-	CTH C	CTH V	1	1	1	--	--	126	
CTH C	-	STH 50	STH 83	--	--	--	--	--	322	
STH 83	-	IH 94	STH 50	--	--	--	--	--	644	
STH 50	-	CTH C	CTH D	--	--	--	--	--	154	
STH 50	-	CTH C	IH 94	--	--	--	--	--	434	
1500' WEST OF IH 94	-	1500' EAST OF IH 94	CTH C	--	--	--	--	--	490	
STAGE 2 - DETOUR USH 45 TRAFFIC:										
2100' SOUTH OF CTH C	-	CTH C	USH 45 NB	--	--	--	--	--	1,215	
CTH C	-	86TH ST	USH 45 NB	--	--	--	--	14	--	PCMS @ 100' NORTH OF CTH C
1500' WEST OF USH 45	-	USH 45	CTH C	1	1	1	--	--	1,215	
USH 45	-	1500' EAST OF IH 94	CTH C	1	1	1	--	--	6,885	
1500 NORTH OF CTH C	-	CTH C	W FRONTAGE RD	--	--	--	--	--	1,080	
CTH C	-	STH 50	IH 94	--	--	--	264.00	--	4,860	
IH 94	-	USH 45	STH 50	**	**	**	--	--	4,725	
1500' WEST OF USH 45	-	USH 45	STH 50	**	**	**	--	--	1,215	
USH 45	-	2100' NORTH OF STH 50	USH 45 SB	**	**	**	--		1,215	
		UNDISTRIBUTED		--	--	--	99.00	16	1,000	***PCMS REQUIRED FOR BRISTOL DAYS
			TOTAL 0010	40			1638.50	112	53,310	

NOTE:

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE IN PLANS. SEE **TRAFFIC CONTROL** MISCELLANEOUS QUANTITIES SCHEDULE.

**COVERING SIGNS TYPE II WERE DONE IN STAGE 1.

***CONTRACTOR SHALL COORDINATE WITH RANDALL KERTMAN FROM THE VILLAGE OF BRISTOL AND THE PROJECT ENGINEER FOR LOCATIONS AND MESSAGES ON THE SIGNS.

REMOVING PAVEMENT MARKING & TEMPORARY PAVEMENT MARKING

STATION	TO	STATION	LOCATION	646.0600 REMOVING PAVEMENT MARKINGS LF	647.0955 REMOVING PAVEMENT MARKINGS ARROWS EACH	647.0965 REMOVING PAVEMENT MARKINGS WORDS EACH	649.0403 TEMPORARY PAVEMENT MARKING EPOXY 4-INCH LF	REMARKS
48+00	-	51+50	CTH WG, 12' LT	--	--	--	350	WHITE EDGELINE
45+85	-	49+65	CTH C, 0'-12' LT	760	--	--	760	REMOVE & REPLACE DOUBLE YELLOW
48+05	-	49+33	CTH C, R/L	128	--	--	--	REMOVE CHANNELIZED MARKING
50+65	-	52+60	CTH C, 12' LT	195	2	1	--	REMOVE CHANNELIZED MARKING
50+65	-	51+75	CTH C, R/L	220	--	--	220	REMOVE & REPLACE DOUBLE YELLOW
51+75	-	54+20	CTH C, 0'-10' LT	980	--	--	490	REMOVE & REPLACE DOUBLE YELLOW
51+75	-	54+20	CTH C, 0'-10' LT	100	--	--	--	REMOVE 12" DIAGONAL
45+85	-	54+20	CTH C, 12' LT	--	--	--	835	WHITE EDGELINE
49+32	-	51+75	CTH C, 12' RT	--	--	--	243	WHITE EDGELINE
			TOTAL 0010	2,383	2	1	2,898	

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PAVEMENT MARKING - SHEET 1 OF 2

STATION	TO	STATION	LOCATION	646.0106 PAVEMENT MARKING EPOXY 4-INCH (WHITE) 12.5' LINE W/37.5' GAP LF	646.0106 (YELLOW) LF	646.0106 (YELLOW) LF	646.0841.S PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH (WHITE) 12.5' LINE W/ 37.5' GAP LF	646.0841.S (YELLOW) LF	646.0881.S PAVEMENT MARKING GROOVED WET REFLECTIVE TYPE 4-INCH (YELLOW) LF	647.0726 PAVEMENT MARKING DIAGONAL EPOXY 12-INCH (YELLOW) LF	SPV.0060.03 PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC ARROWS TYPE 1 (WHITE) EACH	SPV.0060.04 ARROWS TYPE 2 (WHITE) EACH	SPV.0060.05 ARROWS TYPE 3 (WHITE) EACH	SPV.0060.06 WORDS (ONLY) (WHITE) EACH
RURAL ASPHALT SECTION														
19+50	-	56+00	USH 45	6,839	738	2,152	--	--	--	--	--	2	2	2
56+00	-	94+00	USH 45	7,523	625	5,380	--	--	--	--	--	--	--	--
94+00	-	125+00	USH 45	6,060	663	3,815	--	--	--	--	--	--	--	--
125+00	-	148+00	USH 45	4,816	138	4,937	--	--	--	--	--	4	--	2
148+00	-	192+00	USH 45	8,702	875	5,304	--	--	--	--	--	--	--	--
192+00	-	211+00	USH 45	3,484	50	188	--	--	3,332	232	2	12	--	8
211+00	-	246+00	USH 45	7,000	875	416	--	--	--	--	--	--	--	--
URBAN CONCRETE SECTION														
246+00		260+00	USH 45	2,580	--	2,192	--	1,104	--	83	1	3	--	2
260+00		305+00	USH 45	8,184	--	8,013	63	--	--	280	--	--	--	--
CTH WG														
45+50	-	49+50	CTH WG	742	--	752	--	--	--	--	--	2	2	1
50+50	-	54+25	CTH WG	699	--	720	--	--	--	--	--	2	2	1
CTH C														
42+25	-	49+25	CTH C	1,350	--	368	--	--	--	--	1	6	--	4
50+50	-	59+25	CTH C	1,658	--	--	--	--	1,900	173	1	6	--	4
			UNDISTRIBUTED	2,000	--	2,000	--	--	--	--	--	--	--	--
			TOTAL 0010		101,838			1,167	5,232	768	5	37	6	24

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PAVEMENT MARKING - SHEET 2 OF 2

STATION	TO	STATION	LOCATION	SPV.0090.03 PAVEMENT MARKING PREFORMED PLASTIC CONTRAST TAPE 4-INCH (WHITE) LF	SPV.0090.03 (WHITE) 12.5' LINE W/ 37.5' GAP LF	SPV.0090.03 (WHITE) 3' LINE W/9' GAP LF	SPV.0090.03 (YELLOW) FL	SPV.0090.04 PAVEMENT MARKING GROOVED PREFORMED PLASTIC TAPE 4-INCH (WHITE) LF	SPV.0090.04 (WHITE) 12.5' LINE W/37.5' GAP LF	SPV.0090.04 (WHITE) 3' LINE W/9' GAP LF	SPV.0090.04 (YELLOW) LF	SPV.0090.05 PAVEMENT MARKING GROOVED PREFORMED PLASTIC CONTRAST TAPE 8-INCH (WHITE) LF	SPV.0090.05 (WHITE) 3' LINE W/9' GAP LF	SPV.0090.06 PAVEMENT MARKING GROOVED PREFORMED PLASTIC TAPE 8-INCH (WHITE) 3' LINE W/9' GAP LF	SPV.0090.06 (WHITE) LF	SPV.0090.07 PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC CROSSWALK 6-INCH (WHITE) LF	SPV.0090.08 STOP BAR 18-INCH (WHITE) LF
RURAL ASPHALT SECTION																	
19+50	-	56+00	USH 45	--	--	--	--	1,125	--	117	--	--	--	1,125	--	--	128
56+00	-	94+00	USH 45	--	--	--	--	655	126	78	--	--	--	655	--	--	66
94+00	-	125+00	USH 45	--	--	--	--	500	126	78	--	--	--	500	--	--	59
125+00	-	148+00	USH 45	--	--	--	--	200	338	267	--	--	--	200	267	--	89
148+00	-	192+00	USH 45	--	--	--	--	201	126	39	--	--	--	201	--	--	51
192+00	-	211+00	USH 45	--	--	--	--	901	--	90	1,402	--	--	1,602	75	--	80
211+00	-	246+00	USH 45	--	--	--	--		--	--	--	--	--	--	--	--	--
URBAN CONCRETE SECTION																	
246+00		260+00	USH 45	400	63	90	--	--	--	--	--	504	54	--	--	279	60
260+00		305+00	USH 45	184	63	51	1,790	--	--	--	--	184	--	--	--	845	156
CTH WG																	
45+50	-	49+50	CTH WG	--	--	--	--	201	--	39	--	--	--	200	--	--	29
50+50	-	54+25	CTH WG	--	--	--	--	200	--	39	--	--	--	200	--	--	29
CTH C																	
42+25	-	49+25	CTH C	--	--	--	--	448	--	51	996	--	--	796	36	--	43
50+50	-	59+25	CTH C	--	--	--	--	450	--	96	700	--	--	800	36	--	43
			UNDISTRIBUTED	--	--	--	--	--	--	--	--	--	--	--	--	--	--
			TOTAL 0010		2,641				9,589				742		6,693	1,124	833

CONSTRUCTION STAKING

STATION	TO	STATION	LOCATION	650.4500 CONSTRUCTION STAKING SUBGRADE LF	650.5000 CONSTRUCTION STAKING BASE LF	650.9920 CONSTRUCTION STAKING SLOPE STAKES LF	REMARKS
19+83	-	26+75	USH 45 LT & RT	692	692	692	LANE WIDENING
26+75	-	43+00	USH 45 LT & RT	--	--	1,625	RESURFACING
43+00	-	55+00	USH 45 LT & RT	1,200	1,200	1,200	LANE WIDENING
55+00	-	59+00	USH 45 LT & RT	--	--	400	RESURFACING
59+00	-	65+00	USH 45 LT & RT	600	600	600	LANE WIDENING
65+00	-	74+00	USH 45 LT & RT	--	--	900	RESURFACING
74+00	-	84+00	USH 45 LT & RT	1,000	1,000	1,000	LANE WIDENING
84+00	-	95+00	USH 45 LT & RT	--	--	1,100	RESURFACING
95+00	-	104+00	USH 45 LT & RT	900	900	900	LANE WIDENING
104+00	-	118+00	USH 45 LT & RT	--	--	1,400	RESURFACING
118+00	-	147+00	USH 45 LT & RT	2,900	2,900	2,900	LANE WIDENING
147+00	-	163+00	USH 45 LT & RT	--	--	1,600	RESURFACING
163+00	-	170+00	USH 45 LT & RT	700	700	700	LANE WIDENING
170+00	-	172+00	USH 45 LT & RT	--	--	200	RESURFACING
172+00	-	179+00	USH 45 LT & RT	700	700	700	LANE WIDENING
179+00	-	193+00	USH 45 LT & RT	--	--	1,400	RESURFACING
193+00	-	210+00	USH 45 LT & RT	1,700	1,700	1,700	LANE WIDENING
210+00	-	246+00	USH 45 LT & RT	--	--	3,600	RESURFACING
246+00	-	302+78	USH 45 LT & RT	5,678	--	5,678	RECONSTRUCTION
45+50	-	49+88	CTH WG	438	438	438	LANE WIDENING
50+12	-	54+25	CTH WG	413	413	413	LANE WIDENING
48+70	-	49+88	121ST ST	118	118	118	WIDENING
50+12	-	51+50	CTH CJ	138	138	138	WIDENING
48+60	-	49+88	119TH ST	128	128	128	WIDENING
48+30	-	49+88	CTH V	158	158	158	WIDENING
50+12	-	51+50	CTH Q	138	138	138	WIDENING
48+50	-	49+88	192ND AVE	138	138	138	WIDENING
47+65	-	49+88	CTH JS	223	223	223	WIDENING
50+12	-	51+60	106TH ST	148	148	148	WIDENING
50+12	-	52+50	S 196TH AVE	238	238	238	RECONSTRUCTION
50+12	-	51+75	N 196TH AVE	163	163	163	WIDENING
48+80	-	49+88	98TH ST	108	108	108	WIDENING
42+40	-	49+88	CTH CJ	748	748	748	WIDENING
50+12	-	59+10	WILMOT RD	898	898	898	WIDENING
50+20	-	50+52	86TH ST	32	--	32	RECONSTRUCTION
48+50	-	49+72	CTH AH	122	--	122	RECONSTRUCTION
50+27	-	51+25	84TH PL	98	--	98	RECONSTRUCTION
50+20	-	51+10	84TH ST	90	--	90	RECONSTRUCTION
265+60	-	266+10	BRISTOL SCHOOL DWY	50	--	50	RECONSTRUCTION
50+20	-	51+15	83RD ST	95	--	95	RECONSTRUCTION
48+75	-	49+80	82ND ST	105	--	105	RECONSTRUCTION
50+20	-	51+00	82ND ST	80	--	80	RECONSTRUCTION
50+20	-	51+00	80TH ST	80	--	80	RECONSTRUCTION
50+27	-	50+90	79TH ST	63	--	63	RECONSTRUCTION
			TOTAL 0010	21,080	14,587	33,305	

CONSTRUCTION STAKING STORM SEWER

STRUCTURE NUMBER	LOCATION* STATION	LOCATION* OFFSET	650.4000 CONSTRUCTION STAKING STORM SEWER EACH
1A	196+00.0	30.93	1
1B	196+65.0	35.50	1
1C	198+25.0	35.50	1
1D	196+90.0	35.50	1
1E	196+90.0	-42.50	1
2A	201+03.0	58.00	1
2B	201+03.0	35.50	1
2C	199+90.0	35.50	1
2D	199+86.0	-40.80	1
2E	199+00.0	-51.30	1
3A	202+11.7	101.30	1
3	202+77.5	56.00	1
4A	265+67.6	257.40	1
4	265+88.4	283.20	1
15B	250+13.3	131.20	1
15A	250+68.0	100.20	1
15	250+14.4	85.20	1
15C	249+67.8	58.50	1
10A	256+49.6	55.30	1
10B	255+98.7	143.60	1
10C	256+01.0	55.20	1
10	256+00.0	6.00	1
11A	253+25.0	27.74	1
11	253+25.0	6.00	1
12A	251+25.0	51.20	1
12B	251+25.0	17.97	1
12	251+25.0	6.00	1
13	250+15.0	6.00	1
14	249+66.7	46.77	1
16A	254+88.3	-94.50	1
16	254+64.3	-94.50	1
17A	255+45.0	-29.50	1
17	254+63.3	-30.00	1
18	253.93.8	-34.80	1
20A	260+50.0	-17.50	1
20B	260+50.0	17.50	1
20	260+50.0	-6.00	1
21A	263+00.0	-46.00	1
21B	263+10.0	-17.50	1
21C	263+10.0	17.50	1
21	263+10.0	-6.00	1
22A	264+35.0	-17.50	1
22	264+35.0	-6.00	1
22B	264+35.0	17.50	1
22C	264+45.0	80.00	1

CONSTRUCTION STAKING STORM SEWER

STRUCTURE NUMBER	LOCATION* STATION	LOCATION* OFFSET	650.4000 CONSTRUCTION STAKING STORM SEWER EACH
23A	266+46.0	-44.70	1
23B	265+99.0	-17.50	1
23C	266+46.0	-36.50	1
23	266+46.0	-18.59	1
25	266+46.0	17.50	1
26	266+46.0	45.30	1
30A	268+70.0	-17.50	1
30B	268+70.0	17.50	1
30	268+70.0	-6.00	1
31A	267+85.0	-50.00	1
31	267+85.0	-6.00	1
32A	266+70.0	-17.50	1
32	266+70.0	-6.00	1
33A	266+70.0	17.50	1
33	266+56.0	17.50	1
34	266+51.0	45.70	1
40A	272+84.3	-50.60	1
40B	273+41.2	-49.30	1
40	273+05.5	-50.10	1
41B	272+77.0	-19.50	1
41	273+04.5	-6.00	1
42C	275+00.0	17.50	1
42A	275+00.0	-53.00	1
42B	275+00.0	-17.50	1
42	275+00.0	-6.00	1
42D	276+00.0	-34.70	1
42E	276+00.0	-6.00	1
43A	276+90.0	-17.50	1
43B	276+90.0	17.50	1
43	276+90.0	6.00	1
44A	278+65.0	-51.00	1
44B	279+00.0	-17.50	1
44C	279+00.0	17.50	1
44	279+00.0	-6.00	1
45	279+75.0	-6.00	1
46A	281+00.0	-17.50	1
46B	281+00.0	17.50	1
46	281+00.0	-6.00	1
47A	283+75.0	50.00	1
47B	283+50.0	17.50	1
47	283+50.0	-6.00	1
48A	283+50.0	-17.50	1
48	283+50.0	-53.50	1
51A	287+18	26.13	1
51B	287+08	25.76	1

CONSTRUCTION STAKING STORM SEWER

STRUCTURE NUMBER	LOCATION* STATION	LOCATION* OFFSET	650.4000 CONSTRUCTION STAKING STORM SEWER EACH
51	286+86	24.95	1
52A	287+27	29.5	1
52B	286+96	29.5	1
52	286+86	29.5	1
53A	286+59	39.8	1
53B	286+86	55.5	1
53	286+86	40.2	1
54	288+51	45.0	1
65A	288+77	67.0	1
65	288+82	68.7	1
66A	289+41.4	67.7	1
66	289+39.2	68.3	1
60A	292+25	-20.4	1
60B	292+25	17.5	1
60	292+25	-6.0	1
61A	290+00	-29.5	1
61B	290+00	-6.0	1
61	290+00	23.8	1
62	288+00	-6.0	1
63	288+00	-29.2	1
64	288+00	57.2	1
70A	297+00	-25.7	1
70B	297+00	-6.0	1
70	297+00	17.5	1
71A	291+00	17.5	1
71	291+00	-6.0	1
72	291+00	-17.5	1
73	291+00	-41.5	1
80A	300+08.5	-40.0	1
80B	300+10	-11.3	1
80C	300+10	-6.0	1
80D	300+10	25.1	1
80	300+08.5	48.0	1
90A	301+68	-42.3	1
90B	301+75	-11.3	1
90C	301+75	5.1	1
90D	301+75	36.2	1
100A	42+25	54.0	1
100B	48+00	42.9	1
100	47+39.4	42.0	1
100C	47+39.4	-38.0	1
101	23+70	25.5	1
101A	24+28.4	38.9	1
		TOTAL 0010	133

NOTE:
*SEE **STORM SEWER** MISCELANEOUS QUANTITIES SCHEDULES FOR ADDITIONAL INFORMATION

3

CONCRETE MASONRY ENDWALLS SPECIAL

STORM SEWER STRUCTURE NO	STATION	LOCATION	SPV.0035.02 CONCRETE MASONRY ENDWALLS SPECIAL CY	REMARKS
26	266+46	USH 45, 42.3' RT	1.72	SEE CONSTRUCTION DETAIL
		TOTAL 0010	1.72	

SECTION CORNER MONUMENTS SPECIAL

NORTHING Y =	EASTING X =	STATION & OFFSET	SPV.0060.07 SECTION CORNER MONUMENTS SPECIAL EACH
114,923.75	568,093.44	STA 175+17, R/L	1
177,578.69	568,074.49	STA 201+73, R/L	1
210,214.52	568,029.52	STA 228+10, R/L	1
122,861.20	567,982.27	STA 254+57, R/L	1
125,511.11	567,954.72	STA 281+00, 35' LT	1
		TOTAL 0010	5

3

MAINTAINING TEMPORARY DRAINAGE

STATION	TO	STATION	LOCATION	SPV.0105.01 MAINTAINING TEMPORARY DRAINAGE STA 70+00 LS	SPV.0105.02 MAINTAINING TEMPORARY DRAINAGE STA 135+00 LS	SPV.0105.03 MAINTAINING TEMPORARY DRAINAGE STA 146+50 LS	SPV.0105.04 MAINTAINING TEMPORARY DRAINAGE STA 213+79 LS	SPV.0105.18 MAINTAINING TEMPORARY DRAINAGE STA 47+39 CTH C LS	SPV.0195.01 COARSE AGGREGATE MIX FOR STREAM BED TON	REMARKS
69+79	-	70+00	USH 45 LT & RT	1	--	--	--	--	15	
134+86	-	135+97	USH 45 LT & RT	--	1	--	--	--	66	
146+11	-	146+50	USH 45 LT & RT	--	--	1	--	--	15	
213+79	-	214+26	USH 45 LT & RT	--	--	--	1	--	--	SEE RIPRAP
46+25	-	47+39	CTH C LT & RT	--	--	--	--	1	--	SEE RIPRAP
			TOTAL 0010	1	1	1	1	1	96	

RETAINING WALL

STATION	TO	STATION	LOCATION	612.0406 PIPE UNDERDRAIN WRAPPED 6-INCH LF	650.6500.01 CONSTRUCTION STAKING STRUCTURE LAYOUT (STRUCTURE) RETAINING WALL STA 134+25 LS	650.6500.02 CONSTRUCTION STAKING STRUCTURE LAYOUT (STRUCTURE) RETAINING WALL STA 268+50 LS	650.6500.03 CONSTRUCTION STAKING STRUCTURE LAYOUT (STRUCTURE) RETAINING WALL STA 270+37 LS	SPV.0090.12 SPLIT RAIL FENCE TWO RAILS LF	SPV.0165.01 WALL MODULAR BLOCK GRAVITY LRFD SF	SPV.0165.02 WALL MODULAR BLOCK MECHANICALLY STABILIZED EARTH LRFD/QMP SF
134+25	-	134+35	63.7' - 74.3' RT	--	1	--	--	--	50	--
268+50	-	270+18	29.5' - 65.0' LT	203	--	1	--	168	--	995
270+37	-	270+75	65.0' - 29.5' LT	73	--	--	1	38	--	245
			TOTAL 0010	276	1	1	1	206	50	1,240

TYPE I & II PERMANENT SIGNING

CATEGORY CODE 0010

SIGN NO.	SIGN CODE	SIGN MESSAGE	TYPE II SIGN SIZE W [IN.]	x	H [IN.]	637.2210 SIGNS TYPE II REFLECTIVE H [SF]	637.2215 SIGNS TYPE II REFLECTIVE H FOLDING [SF]	637.2230 SIGNS TYPE II REFLECTIVE F [SF]	634.0616 POSTS WOOD 4X6-INCH X 16-FT [EA]	634.0618 POSTS WOOD 4X6-INCH X 18-FT [EA]	638.2602 REMOVING SIGNS TYPE II [EA]	638.3000 REMOVING SMALL SIGN SUPPORTS [EA]	638.2102 MOVING SIGNS TYPE II [EA]	MOUNT ON SAME POST AS SIGN #	REMARKS NEW SIGN LOCATION
001	R7-1D	--	--	x	--	--	--	--	--	--	1	--	--	--	--
002	J3-2(2S)	--	48	x	57	19.00	--	--	--	1	1	1	--	--	--
	M3-1	--	24	x	12	--	--	--	--	--	--	--	--	--	--
	M1-4	USH 45	24	x	24	--	--	--	--	--	--	--	--	--	--
	M6-1	--	21	x	21	--	--	--	--	--	--	--	--	--	--
	M3-3	--	24	x	12	--	--	--	--	--	--	--	--	--	--
	M1-4	USH 45	24	x	24	--	--	--	--	--	--	--	--	--	--
	M6-1	--	21	x	21	--	--	--	--	--	--	--	--	--	--
02A	R3-8(2S)	--	30	x	36	7.50	--	--	1	--	--	--	--	--	--
003	R1-1F(2S)	--	30	x	30	--	5.18	--	--	--	1	--	--	--	ON SIGNAL POLE
004	W1-4L(3)	--	36	x	36	--	--	9.00	1	--	1	1	--	--	--
005	R2-1(2S)	45 MPH	24	x	30	5.00	--	--	1	--	1	1	--	--	--
006	J13-1(2S)	--	24	x	45	7.50	--	--	--	1	1	1	--	--	--
	M1-5A	CTH WG	24	x	24	--	--	--	--	--	--	--	--	--	--
	M6-1	--	21	x	21	--	--	--	--	--	--	--	--	--	--
007	R1-1F(2S)	--	30	x	30	--	5.18	--	--	--	1	--	--	--	ON SIGNAL POLE
008	R7-1D(3)	--	24	x	30	5.00	--	--	1	--	--	--	--	--	--
009	J13-1(2S)	--	24	x	45	7.50	--	--	--	1	--	--	--	--	--
	M1-5A	CTH WG	24	x	24	--	--	--	--	--	--	--	--	--	--
	M5-1L	--	21	x	21	--	--	--	--	--	--	--	--	--	--
010	R7-1D(3)	--	24	x	30	5.00	--	--	1	--	1	1	--	--	--
011	J4-1, R7-1D	--	--	x	--	--	--	--	--	--	1	1	--	--	--
11A	R3-8(2S)	--	30	x	36	7.50	--	--	1	--	--	--	--	--	--
012	W3-3(2S)	--	36	x	36	--	--	9.00	1	--	--	--	--	--	--
12A	W3-3(2S)	--	36	x	36	--	--	9.00	1	--	--	--	--	--	--
013	R7-1L(3)	--	24	x	30	5.00	--	--	1	--	--	--	--	--	SHEET 2
014	R1-1F(2S)	--	30	x	30	--	5.18	--	--	--	1	--	--	--	ON SIGNAL POLE
015	J13-1(2S)	--	24	x	45	7.50	--	--	--	1	1	1	--	--	--
	M1-5A	CTH WG	24	x	24	--	--	--	--	--	--	--	--	--	--
	M6-1	--	21	x	21	--	--	--	--	--	--	--	--	--	--
016	R2-1(2S)	45 MPH	24	x	30	5.00	--	--	1	--	1	1	--	--	--
16A	R3-8(2S)	--	30	x	36	7.50	--	--	1	--	--	--	--	--	--
017	R1-1F(2S)	--	30	x	30	--	5.18	--	--	--	1	--	--	--	ON SIGNAL POLE
018	J3-2(2S)	--	48	x	57	19.00	--	--	--	1	1	1	--	--	--
	M3-3	--	24	x	12	--	--	--	--	--	--	--	--	--	--
	M1-4	USH 45	24	x	24	--	--	--	--	--	--	--	--	--	--
	M6-1	--	21	x	21	--	--	--	--	--	--	--	--	--	--
	M3-1	--	24	x	12	--	--	--	--	--	--	--	--	--	--
	M1-4	USH 45	24	x	24	--	--	--	--	--	--	--	--	--	--
	M6-1	--	21	x	21	--	--	--	--	--	--	--	--	--	--

TYPE I & II PERMANENT SIGNING

CATEGORY CODE 0010

SIGN NO.	SIGN CODE	SIGN MESSAGE	TYPE II SIGN SIZE W [IN.]	x	H [IN.]	637.2210 SIGNS TYPE II REFLECTIVE H [SF]	637.2215 SIGNS TYPE II REFLECTIVE H FOLDING [SF]	637.2230 SIGNS TYPE II REFLECTIVE F [SF]	634.0616 POSTS WOOD 4X6-INCH X 16-FT [EA]	634.0618 POSTS WOOD 4X6-INCH X 18-FT [EA]	638.2602 REMOVING SIGNS TYPE II [EA]	638.3000 REMOVING SMALL SIGN SUPPORTS [EA]	638.2102 MOVING SIGNS TYPE II [EA]	MOUNT ON SAME POST AS SIGN #	REMARKS NEW SIGN LOCATION
019	J1-1(2S)	--	24	x	39	6.50	--	--	--	1	1	1	--	--	--
	M2-1	--	21	x	15	--	--	--	--	--	--	--	--	--	--
	M1-4	USH 45	24	x	24	--	--	--	--	--	--	--	--	--	--
020	W3-3(2S)	--	36	x	36	--	--	9.00	1	--	1	1	--	--	--
021	J4-1(2S)	--	24	x	36	6.00	--	--	--	1	--	--	--	--	--
	M3-1	--	24	x	12	--	--	--	--	--	--	--	--	--	--
	M1-4	USH 45	24	x	24	--	--	--	--	--	--	--	--	--	--
022	R7-1D(3)	--	24	x	30	5.00	--	--	--	--	--	--	--	--	ON SIGNAL POLE
023	I2-1	WISCONSIN	78	x	21	11.38	--	--	2	--	1	1	--	23A	--
23A	I2-2	KENOSHA CO	66	x	15	6.88	--	--	--	--	--	--	--	23	--
024	R2-1(2S)	45 MPH	24	x	30	5.00	--	--	1	--	1	1	--	--	--
025	R7-D	--	--	x	--	--	--	--	--	--	1	1	--	--	--
026	ADOPT	--	--	x	--	--	--	--	2	--	--	2	1	--	--
027	R59-51(3)	--	48	x	48	16.00	--	--	--	1	1	1	--	--	--
028	W14-3(2S)	--	48	x	36	--	--	6.00	1	--	--	--	--	--	--
029	R7-1D(3)	--	24	x	30	5.00	--	--	1	--	--	--	--	--	--
030	W3-3	--	--	x	--	--	--	--	--	--	1	1	--	--	--
031	J1-1(2S)	--	24	x	39	6.50	--	--	--	1	--	--	--	--	--
	M2-1	--	21	x	15	--	--	--	--	--	--	--	--	--	--
	M1-5A	CTH WG	24	x	24	--	--	--	--	--	--	--	--	--	--
032	R2-1(2S)	45 MPH	24	x	30	5.00	--	--	1	--	1	1	--	--	--
033	W3-5(2S)	45 MPH	36	x	36	--	--	9.00	1	--	1	1	--	--	--
034	BUCKLE UP	--	--	x	--	--	--	--	--	--	--	1	1	--	--
035	R2-1(2S)	55 MPH	24	x	30	5.00	--	--	1	--	1	1	--	--	--
036	J1-1(2S)	--	24	x	39	6.50	--	--	--	1	1	1	--	--	--
	M2-1	--	21	x	15	--	--	--	--	--	--	--	--	--	--
	M1-5A	CTH CJ	24	x	24	--	--	--	--	--	--	--	--	--	--
037	D12-2B(2)	--	84	x	36	21.00	--	--	--	2	1	2	--	--	--
038	W21-61	--	--	x	--	--	--	--	--	--	1	2	--	--	SHEET 1. REMOVE W21-60 ALSO.
38A	NOT USED	--	--	x	--	--	--	--	--	--	--	--	--	--	--
039	J4-1(2S)	--	24	x	36	6.00	--	--	--	1	--	--	--	--	--
	M3-3	--	24	x	12	--	--	--	--	--	--	--	--	--	--
	M1-4	USH 45	24	x	24	--	--	--	--	--	--	--	--	--	--
040	J3-2(2S)	--	48	x	57	19.00	--	--	--	1	--	--	--	--	--
	M3-1	--	24	x	12	--	--	--	--	--	--	--	--	--	--
	M1-4	USH 45	24	x	24	--	--	--	--	--	--	--	--	--	--
	M6-1	--	21	x	21	--	--	--	--	--	--	--	--	--	--
	M3-3	--	24	x	12	--	--	--	--	--	--	--	--	--	--
	M1-4	USH 45	24	x	24	--	--	--	--	--	--	--	--	--	--
	M6-1	--	21	x	21	--	--	--	--	--	--	--	--	--	--

TYPE I & II PERMANENT SIGNING

CATEGORY CODE 0010

SIGN NO.	SIGN CODE	SIGN MESSAGE	TYPE II SIGN SIZE W [IN.]	x	H [IN.]	637.2210 SIGNS TYPE II REFLECTIVE H [SF]	637.2215 SIGNS TYPE II REFLECTIVE H FOLDING [SF]	637.2230 SIGNS TYPE II REFLECTIVE F [SF]	634.0616 POSTS WOOD 4X6-INCH X 16-FT [EA]	634.0618 POSTS WOOD 4X6-INCH X 18-FT [EA]	638.2602 REMOVING SIGNS TYPE II [EA]	638.3000 REMOVING SMALL SIGN SUPPORTS [EA]	638.2102 MOVING SIGNS TYPE II [EA]	MOUNT ON SAME POST AS SIGN #	REMARKS NEW SIGN LOCATION
041	R1-1(2S)	--	30	x	30	5.18	--	--	1	--	--	--	--	--	--
042	PARKING REG	--	--	x	--	--	--	--	1	--	--	1	1	--	--
043	J13-1(2S)	--	24	x	45	7.50	--	--	--	1	1	1	--	--	--
	M1-5A	CTH CJ	24	x	24	--	--	--	--	--	--	--	--	--	--
	M6-1	--	21	x	21	--	--	--	--	--	--	--	--	--	--
044	J4-1(2S)	--	24	x	36	6.00	--	--	--	1	--	--	--	--	--
	M3-1	--	24	x	12	--	--	--	--	--	--	--	--	--	--
	M1-4	USH 45	24	x	24	--	--	--	--	--	--	--	--	--	--
045	W21-61(2S)	--	36	x	36	9.00	--	--	1	--	--	--	--	--	SHEET 2
046	J1-1(2S)	--	24	x	39	6.50	--	--	--	1	1	1	--	--	--
	M2-1	--	21	x	15	--	--	--	--	--	--	--	--	--	--
	M1-5A	CTH CJ	24	x	24	--	--	--	--	--	--	--	--	--	--
047	W14-3(2S)	--	48	x	36	--	--	6.00	1	--	1	1	--	--	--
048	J13-1(2S)	--	24	x	45	7.50	--	--	--	1	1	1	--	--	--
	M1-5A	CTH CJ	24	x	24	--	--	--	--	--	--	--	--	--	--
	M6-1	--	21	x	21	--	--	--	--	--	--	--	--	--	--
049	R1-1(3)	--	36	x	36	7.46	--	--	1	--	1	1	--	--	--
050	J3-2(2S)	--	48	x	57	19.00	--	--	--	1	--	--	--	--	--
	M3-3	--	24	x	12	--	--	--	--	--	--	--	--	--	--
	M1-4	USH 45	24	x	24	--	--	--	--	--	--	--	--	--	--
	M6-1	--	21	x	21	--	--	--	--	--	--	--	--	--	--
	M3-1	--	24	x	12	--	--	--	--	--	--	--	--	--	--
	M1-4	USH 45	24	x	24	--	--	--	--	--	--	--	--	--	--
	M6-1	--	21	x	21	--	--	--	--	--	--	--	--	--	--
051	J1-2(2S)	--	48	x	39	13.00	--	--	--	1	1	1	--	--	--
	M2-1	--	21	x	15	--	--	--	--	--	--	--	--	--	--
	M1-4	USH 45	24	x	24	--	--	--	--	--	--	--	--	--	--
	M4-6	--	24	x	12	--	--	--	--	--	--	--	--	--	--
	M1-5A	CTH CJ	24	x	24	--	--	--	--	--	--	--	--	--	--
052	W3-1(2S)	--	36	x	36	--	--	9.00	1	1	1	--	--	--	--
053	W1-2L(3)	--	36	x	36	--	--	9.00	1	--	--	--	--	--	--
054	R1-1(2S)	--	30	x	30	5.18	--	--	1	--	1	1	--	--	--
055	PARKING REG	--	--	x	--	--	--	--	1	--	--	1	1	--	--
056	W1-7(2S)	--	48	x	24	--	--	8.00	1	--	--	--	--	--	--
057	J1-1(2S)	--	24	x	39	6.50	--	--	--	1	1	1	--	--	--
	M2-1	--	21	x	15	--	--	--	--	--	--	--	--	--	--
	M1-5A	CTH V	24	x	24	--	--	--	--	--	--	--	--	--	--
058	NOT USED	--	--	x	--	--	--	--	--	--	--	--	--	--	--
059	J4-1(2S)	--	24	x	36	6.00	--	--	--	1	1	1	--	--	--
	M3-3	--	24	x	12	--	--	--	--	--	--	--	--	--	--

TYPE I & II PERMANENT SIGNING

CATEGORY CODE 0010

SIGN NO.	SIGN CODE	SIGN MESSAGE	TYPE II SIGN SIZE W [IN.]	x	H [IN.]	637.2210 SIGNS TYPE II REFLECTIVE H [SF]	637.2215 SIGNS TYPE II REFLECTIVE H FOLDING [SF]	637.2230 SIGNS TYPE II REFLECTIVE F [SF]	634.0616 POSTS WOOD 4X6-INCH X 16-FT [EA]	634.0618 POSTS WOOD 4X6-INCH X 18-FT [EA]	638.2602 REMOVING SIGNS TYPE II [EA]	638.3000 REMOVING SMALL SIGN SUPPORTS [EA]	638.2102 MOVING SIGNS TYPE II [EA]	MOUNT ON SAME POST AS SIGN #	REMARKS NEW SIGN LOCATION
	M1-4	USH 45	24	x	24	--	--	--	--	--	--	--	--	--	--
060	J3-2(2S)	--	24	x	57	9.50	--	--	--	1	1	1	--	--	--
	M3-1	--	24	x	12	--	--	--	--	--	--	--	--	--	--
	M1-4	USH 45	24	x	24	--	--	--	--	--	--	--	--	--	--
	M6-1	--	21	x	21	--	--	--	--	--	--	--	--	--	--
	M3-3	--	24	x	12	--	--	--	--	--	--	--	--	--	--
	M1-4	USH 45	24	x	24	--	--	--	--	--	--	--	--	--	--
	M6-1	--	21	x	21	--	--	--	--	--	--	--	--	--	--
061	W3-1(2S)	--	36	x	36	--	--	9.00	--	1	1	1	--	--	--
062	J1-2(2S)	--	48	x	39	13.00	--	--	--	1	1	1	--	--	--
	M2-1	--	21	x	15	--	--	--	--	--	--	--	--	--	--
	M1-4	USH 45	24	x	24	--	--	--	--	--	--	--	--	--	--
	M4-6	--	24	x	12	--	--	--	--	--	--	--	--	--	--
	M1-5A	CTH V	24	x	24	--	--	--	--	--	--	--	--	--	--
063	R1-1(2S)	--	30	x	30	5.18	--	--	1	--	1	1	--	--	--
064	R2-1(2S)	45 MPH	24	x	30	5.00	--	--	1	--	1	1	--	--	--
065	J13-1(2S)	--	24	x	45	7.50	--	--	--	1	1	1	--	--	--
	M1-5A	CTH V	24	x	24	--	--	--	--	--	--	--	--	--	--
	M6-1	--	21	x	21	--	--	--	--	--	--	--	--	--	--
066	NOT USED	--	--	x	--	--	--	--	--	--	--	--	--	--	--
067	J1-1(2S)	--	24	x	39	6.50	--	--	--	1	1	1	--	--	--
	M2-1	--	21	x	15	--	--	--	--	--	--	--	--	--	--
	M1-5A	CTH V	24	x	24	--	--	--	--	--	--	--	--	--	--
068	J13-1(2S)	--	24	x	45	7.50	--	--	--	1	1	1	--	--	--
	M1-5A	CTH V	24	x	24	--	--	--	--	--	--	--	--	--	--
	M6-1	--	21	x	21	--	--	--	--	--	--	--	--	--	--
069	W1-7(2S)	--	48	x	24	--	--	8.00	1	--	--	--	--	--	--
070	J4-1(2S)	--	24	x	36	6.00	--	--	--	1	--	--	--	--	--
	M3-1	--	24	x	12	--	--	--	--	--	--	--	--	--	--
	M1-4	USH 45	24	x	24	--	--	--	--	--	--	--	--	--	--
071	W1-2R(2S)	--	30	x	30	--	--	6.25	--	1	--	--	--	--	--
072	J4-1(2S)	--	24	x	36	6.00	--	--	--	1	--	--	--	--	--
	M3-3	--	24	x	12	--	--	--	--	--	--	--	--	--	--
	M1-4	USH 45	24	x	24	--	--	--	--	--	--	--	--	--	--
073	W1-7(2S)	--	48	x	24	--	--	8.00	1	--	1	1	--	--	--
074	J13-1(2S)	--	24	x	45	7.50	--	--	--	1	1	1	--	--	--
	M1-5A	CTH Q	24	x	24	--	--	--	--	--	--	--	--	--	--
	M6-1	--	21	x	21	--	--	--	--	--	--	--	--	--	--
075	J1-1(2S)	--	24	x	39	6.50	--	--	--	1	1	1	--	--	--
	M2-1	--	21	x	15	--	--	--	--	--	--	--	--	--	--

TYPE I & II PERMANENT SIGNING

CATEGORY CODE 0010

SIGN NO.	SIGN CODE	SIGN MESSAGE	TYPE II SIGN SIZE W [IN.]	x	H [IN.]	**637.2210** SIGNS TYPE II REFLECTIVE H [SF]	**637.2215** SIGNS TYPE II REFLECTIVE H FOLDING [SF]	**637.2230** SIGNS TYPE II REFLECTIVE F [SF]	**634.0616** POSTS WOOD 4X6-INCH X 16-FT [EA]	**634.0618** POSTS WOOD 4X6-INCH X 18-FT [EA]	**638.2602** REMOVING SIGNS TYPE II [EA]	**638.3000** REMOVING SMALL SIGN SUPPORTS [EA]	**638.2102** MOVING SIGNS TYPE II [EA]	MOUNT ON SAME POST AS SIGN #	REMARKS NEW SIGN LOCATION
	M1-5A	CTH Q	24	x	24	--	--	--	--	--	--	--	--	--	--
076	W14-3(2S)	--	48	x	36	--	--	6.00	1	--	1	1	--	--	--
077	NOT USED	--	--	x	--	--	--	--	--	--	--	--	--	--	--
078	J13-1(2S)	--	24	x	45	7.50	--	--	--	1	1	1	--	--	--
	M1-5A	CTH Q	24	x	24	--	--	--	--	--	--	--	--	--	--
	M6-1	--	21	x	21	--	--	--	--	--	--	--	--	--	--
079	R1-1(2S)	--	30	x	30	5.18	--	--	1	--	1	1	--	--	--
080	W3-1(2S)	--	36	x	36	--	--	9.00	1	1	1	--	--	--	--
081	J1-2(2S)	--	48	x	39	13.00	--	--	--	1	1	1	--	--	--
	M2-1	--	21	x	15	--	--	--	--	--	--	--	--	--	--
	M1-4	USH 45	24	x	24	--	--	--	--	--	--	--	--	--	--
	M4-6	--	24	x	12	--	--	--	--	--	--	--	--	--	--
	M1-5A	CTH Q	24	x	24	--	--	--	--	--	--	--	--	--	--
082	J3-2(2S)	--	48	x	57	19.00	--	--	--	1	1	1	--	--	--
	M3-3	--	24	x	12	--	--	--	--	--	--	--	--	--	--
	M1-4	USH 45	24	x	24	--	--	--	--	--	--	--	--	--	--
	M6-1	--	21	x	21	--	--	--	--	--	--	--	--	--	--
	M3-1	--	24	x	12	--	--	--	--	--	--	--	--	--	--
	M1-4	USH 45	24	x	24	--	--	--	--	--	--	--	--	--	--
	M6-1	--	21	x	21	--	--	--	--	--	--	--	--	--	--
083	J4-1(2S)	--	24	x	36	6.00	--	--	--	1	--	--	--	--	--
	M3-1	--	24	x	12	--	--	--	--	--	--	--	--	--	--
	M1-4	USH 45	24	x	24	--	--	--	--	--	--	--	--	--	--
084	NOT USED	--	--	x	--	--	--	--	--	--	--	--	--	--	--
085	J1-1(2S)	--	24	x	39	6.50	--	--	--	1	1	1	--	--	--
	M2-1	--	21	x	15	--	--	--	--	--	--	--	--	--	--
	M1-5A	CTH Q	24	x	24	--	--	--	--	--	--	--	--	--	--
086	W14-3(2S)	--	48	x	36	--	--	6.00	1	--	1	1	--	--	--
087	R1-1(2S)	--	30	x	30	5.18	--	--	1	--	--	1	1	--	--
088	ADOPT	--	--	x	--	--	--	--	2	--	--	1	1	--	--
089	J4-1(2S)	--	24	x	36	6.00	--	--	--	1	--	--	--	--	--
	M3-3	--	24	x	12	--	--	--	--	--	--	--	--	--	--
	M1-4	USH 45	24	x	24	--	--	--	--	--	--	--	--	--	--
090	J3-2(2S)	--	48	x	57	19.00	--	--	--	1	1	1	--	--	--
	M3-1	--	24	x	12	--	--	--	--	--	--	--	--	--	--
	M1-4	USH 45	24	x	24	--	--	--	--	--	--	--	--	--	--
	M6-1	--	21	x	21	--	--	--	--	--	--	--	--	--	--
	M3-3	--	24	x	12	--	--	--	--	--	--	--	--	--	--
	M1-4	USH 45	24	x	24	--	--	--	--	--	--	--	--	--	--
	M6-1	--	21	x	21	--	--	--	--	--	--	--	--	--	--

TYPE I & II PERMANENT SIGNING

CATEGORY CODE 0010

SIGN NO.	SIGN CODE	SIGN MESSAGE	TYPE II SIGN SIZE W [IN.]	x	H [IN.]	637.2210 SIGNS TYPE II REFLECTIVE H [SF]	637.2215 SIGNS TYPE II REFLECTIVE H FOLDING [SF]	637.2230 SIGNS TYPE II REFLECTIVE F [SF]	634.0616 POSTS WOOD 4X6-INCH X 16-FT [EA]	634.0618 POSTS WOOD 4X6-INCH X 18-FT [EA]	638.2602 REMOVING SIGNS TYPE II [EA]	638.3000 REMOVING SMALL SIGN SUPPORTS [EA]	638.2102 MOVING SIGNS TYPE II [EA]	MOUNT ON SAME POST AS SIGN #	REMARKS NEW SIGN LOCATION
091	R1-1(2S)	--	30	x	30	5.18	--	--	1	--	1	1	--	--	--
092	J1-2(2S)	--	48	x	39	13.00	--	--	--	1	1	1	--	--	--
	M2-1	--	21	x	15	--	--	--	--	--	--	--	--	--	--
	M1-4	USH 45	24	x	24	--	--	--	--	--	--	--	--	--	--
	M4-6	--	24	x	12	--	--	--	--	--	--	--	--	--	--
	M1-5A	CTH JS	24	x	24	--	--	--	--	--	--	--	--	--	--
093	W3-1(2S)	--	36	x	36	--	--	9.00	1	1	1	--	--	--	--
094	J13-1(2S)	--	24	x	45	7.50	--	--	--	1	1	1	--	--	--
	M1-5A	CTH JS	24	x	24	--	--	--	--	--	--	--	--	--	--
	M6-1	--	21	x	21	--	--	--	--	--	--	--	--	--	--
095	R3-7R(3)	--	36	x	36	9.00	--	--	1	--	--	--	--	--	--
096	J1-1(2S)	--	24	x	39	6.50	--	--	--	1	1	1	--	--	--
	M2-1	--	21	x	15	--	--	--	--	--	--	--	--	--	--
	M1-5A	CTH JS	24	x	24	--	--	--	--	--	--	--	--	--	--
097	NOT USED	--	--	x	--	--	--	--	--	--	--	--	--	--	--
098	J13-1(2S)	--	24	x	45	7.50	--	--	--	1	1	1	--	--	--
	M1-5A	CTH JS	24	x	24	--	--	--	--	--	--	--	--	--	--
	M6-1	--	21	x	21	--	--	--	--	--	--	--	--	--	--
099	ADOPT	--	--	x	--	--	--	--	1	--	--	1	1	--	--
100	J4-1(2S)	--	24	x	36	6.00	--	--	--	1	--	--	--	--	--
	M3-1	--	24	x	12	--	--	--	--	--	--	--	--	--	--
	M1-4	USH 45	24	x	24	--	--	--	--	--	--	--	--	--	--
101	R1-1(2S)	--	30	x	30	5.18	--	--	1	--	1	1	--	--	--
102	W2-2(2S)	--	30	x	30	--	--	6.25	--	1	1	1	--	--	--
103	R3-7R(3)	--	36	x	36	9.00	--	--	1	--	--	--	--	--	--
103A	W14-3(2S)	--	48	x	36	--	--	6.00	1	--	1	1	--	--	--
104	R3-7R(3)	--	36	x	36	9.00	--	--	1	--	--	--	--	--	--
104A	W2-7L(2S)		30	x	30	--	--	6.25	1	--	1	1	--	--	--
105	J1-1(2S)	--	24	x	39	6.50	--	--	--	1	1	1	--	--	--
	M2-1	--	21	x	15	--	--	--	--	--	--	--	--	--	--
	M1-5A	CTH JS	24	x	24	--	--	--	--	--	--	--	--	--	--
106	W2-2(2S)	--	30	x	30	--	--	6.25	1	--	1	1	--	--	SHEET 4
106A	R2-1(2S)	55 MPH	24	x	30	5.00	--	--	1	--	1	1	--	--	SHEET 4
107	R3-7R(3)	--	36	x	36	9.00	--	--	1	--	--	--	--	--	--
108	R1-1(2S)	--	30	x	30	5.18	--	--	1	--	1	1	--	--	--
109	W1-2R(2S)	--	30	x	30	--	--	6.25	1	--	--	--	--	--	--
110	W14-3(2S)	--	48	x	36	--	--	6.00	1	--	1	1	--	--	--
111	R1-1(2S)	--	30	x	30	5.18	--	--	1	--	1	1	--	--	--
112	PARKING REG	--	--	x	--	--	--	--	1	--	--	1	1	--	--
113	R1-1(2S)	--	30	x	30	5.18	--	--	1	--	1	1	--	--	--

SHEET: 6 OF 13

TYPE I & II PERMANENT SIGNING

CATEGORY CODE 0010

SIGN NO.	SIGN CODE	SIGN MESSAGE	TYPE II SIGN SIZE W [IN.]	x	H [IN.]	637.2210 SIGNS TYPE II REFLECTIVE H [SF]	637.2215 SIGNS TYPE II REFLECTIVE H FOLDING [SF]	637.2230 SIGNS TYPE II REFLECTIVE F [SF]	634.0616 POSTS WOOD 4X6-INCH X 16-FT [EA]	634.0618 POSTS WOOD 4X6-INCH X 18-FT [EA]	638.2602 REMOVING SIGNS TYPE II [EA]	638.3000 REMOVING SMALL SIGN SUPPORTS [EA]	638.2102 MOVING SIGNS TYPE II [EA]	MOUNT ON SAME POST AS SIGN #	REMARKS NEW SIGN LOCATION
114	D1-61MOD	LA, 98TH STREET	66	x	15	6.88	--	--	2	--	--	--	--	--	--
115	D1-61MOD	98TH STREET, RA	66	x	15	6.88	--	--	2	--	--	--	--	--	--
116	W1-2L(2s)	--	30	x	30	--	--	6.25	1	--	--	--	--	--	--
117	W14-3(2S)	--	48	x	36	--	--	6.00	1	--	1	1	--	--	--
118	J1-1(2S)	--	24	x	39	6.50	--	--	--	1	1	--	--	--	--
	M2-1	--	21	x	15	--	--	--	--	--	--	--	--	--	--
	M1-5A	CTH C	24	x	24	--	--	--	--	--	--	--	--	--	--
119	W14-3(2S)	--	48	x	36	--	--	6.00	1	--	1	1	--	--	--
120	W3-3(2S)	--	36	x	36	--	--	9.00	1	--	--	--	--	--	--
121	J4-1(2S)	--	24	x	36	6.00	--	--	--	1	1	--	--	--	--
	M3-3	--	24	x	12	--	--	--	--	--	--	--	--	--	--
	M1-4	USH 45	24	x	24	--	--	--	--	--	--	--	--	--	--
122	J3-2(2S)	--	48	x	57	19.00	--	--	--	1	1	1	--	--	--
	M3-1	--	24	x	12	--	--	--	--	--	--	--	--	--	--
	M1-4	USH 45	24	x	24	--	--	--	--	--	--	--	--	--	--
	M6-1	--	21	x	21	--	--	--	--	--	--	--	--	--	--
	M3-3	--	24	x	12	--	--	--	--	--	--	--	--	--	--
	M1-4	USH 45	24	x	24	--	--	--	--	--	--	--	--	--	--
	M6-1	--	21	x	21	--	--	--	--	--	--	--	--	--	--
123	R3-8W(2S)	--	54	x	30	11.25	--	--	1	--	--	--	--	--	--
124	R1-1F(2S)	--	30	x	30	--	5.18	--	--	--	1	--	--	--	ON SIGNAL POLE
125	R1-1F(2S)	--	30	x	30	--	5.18	--	--	--	1	--	--	--	ON SIGNAL POLE
126	R2-1(2S)	55 MPH	24	x	30	5.00	--	--	1	--	1	1	--	--	--
127	J3-2(2S)	--	24	x	57	9.50	--	--	--	1	1	1	--	--	--
	M3-2	--	24	x	12	--	--	--	--	--	--	--	--	--	--
	M1-5A	CTH C	24	x	24	--	--	--	--	--	--	--	--	--	--
	M6-1	--	21	x	21	--	--	--	--	--	--	--	--	--	--
	M3-4	--	24	x	12	--	--	--	--	--	--	--	--	--	--
	M1-5A	CTH C	24	x	24	--	--	--	--	--	--	--	--	--	--
	M6-1	--	21	x	21	--	--	--	--	--	--	--	--	--	--
128	W3-3	--	--	x	--	--	--	--	--	--	2	2	--	--	--
129	R3-8W(2S)	--	54	x	30	11.25	--	--	1	--	--	--	--	--	--
130	J2-2(2S)	--	48	x	57	19.00	--	--	--	1	--	--	--	--	--
	M3-2	--	24	x	12	--	--	--	--	--	--	--	--	--	--
	M1-5A	CTH C	24	x	24	--	--	--	--	--	--	--	--	--	--
	M5-1L	--	21	x	21	--	--	--	--	--	--	--	--	--	--
	M3-4	--	24	x	12	--	--	--	--	--	--	--	--	--	--
	M1-5A	CTH C	24	x	24	--	--	--	--	--	--	--	--	--	--
	M5-1R	--	21	x	21	--	--	--	--	--	--	--	--	--	--
131	J3-2(2S)	--	48	x	57	19.00	--	--	--	1	--	--	--	--	--

TYPE I & II PERMANENT SIGNING

CATEGORY CODE 0010

SIGN NO.	SIGN CODE	SIGN MESSAGE	TYPE II SIGN SIZE W [IN.]	x	H [IN.]	637.2210 SIGNS TYPE II REFLECTIVE H [SF]	637.2215 SIGNS TYPE II REFLECTIVE H FOLDING [SF]	637.2230 SIGNS TYPE II REFLECTIVE F [SF]	634.0616 POSTS WOOD 4X6-INCH X 16-FT [EA]	634.0618 POSTS WOOD 4X6-INCH X 18-FT [EA]	638.2602 REMOVING SIGNS TYPE II [EA]	638.3000 REMOVING SMALL SIGN SUPPORTS [EA]	638.2102 MOVING SIGNS TYPE II [EA]	MOUNT ON SAME POST AS SIGN #	REMARKS NEW SIGN LOCATION
	M3-4	--	24	x	12	--	--	--	--	--	--	--	--	--	--
	M1-5A	CTH C	24	x	24	--	--	--	--	--	--	--	--	--	--
	M5-1L	--	21	x	21	--	--	--	--	--	--	--	--	--	--
	M3-2	--	24	x	12	--	--	--	--	--	--	--	--	--	--
	M1-5A	CTH C	24	x	24	--	--	--	--	--	--	--	--	--	--
	M5-1R	--	21	x	21	--	--	--	--	--	--	--	--	--	--
132	W3-3	--	--	x	--	--	--	--	--	--	2	2	--	--	--
133	R3-8W(2S)	--	54	x	30	11.25	--	--	1	--	--	--	--	--	--
134	R1-1F(2S)	--	30	x	30	--	5.18	--	--	--	1	--	--	--	ON SIGNAL POLE
135	J3-2(2S)	--	48	x	57	19.00	--	--	--	1	1	1	--	--	--
	M3-4	--	24	x	12	--	--	--	--	--	--	--	--	--	--
	M1-5A	CTH C	24	x	24	--	--	--	--	--	--	--	--	--	--
	M6-1	--	21	x	21	--	--	--	--	--	--	--	--	--	--
	M3-2	--	24	x	12	--	--	--	--	--	--	--	--	--	--
	M1-5A	CTH C	24	x	24	--	--	--	--	--	--	--	--	--	--
	M6-1	--	21	x	21	--	--	--	--	--	--	--	--	--	ON SIGNAL POLE
136	R1-1F(2S)	--	30	x	30	--	5.18	--	--	--	1	--	--	--	ON SIGNAL POLE
137	R2-1(2S)	55 MPH	24	x	30	5.00	--	--	1	--	1	1	--	--	--
138	J3-2(2S)	--	48	x	57	19.00	--	--	--	1	1	1	--	--	--
	M3-3	--	24	x	12	--	--	--	--	--	--	--	--	--	--
	M1-4	USH 45	24	x	24	--	--	--	--	--	--	--	--	--	--
	M6-1	--	21	x	21	--	--	--	--	--	--	--	--	--	--
	M3-1	--	24	x	12	--	--	--	--	--	--	--	--	--	--
	M1-4	USH 45	24	x	24	--	--	--	--	--	--	--	--	--	--
	M6-1	--	21	x	21	--	--	--	--	--	--	--	--	--	--
139	R3-8W(2S)	--	54	x	30	11.25	--	--	1	--	--	--	--	--	--
140	J4-1(2S)	--	24	x	36	6.00	--	--	--	1	1	1	--	--	--
	M3-1	--	24	x	12	--	--	--	--	--	--	--	--	--	--
	M1-4	USH 45	24	x	24	--	--	--	--	--	--	--	--	--	--
141	W3-3(2S)	--	36	x	36	--	--	9.00	1	--	1	1	--	--	--
142	J1-1(2S)	--	24	x	39	6.50	--	--	--	1	1	1	--	--	--
	M2-1	--	21	x	15	--	--	--	--	--	--	--	--	--	--
	M1-5A	CTH C	24	x	24	--	--	--	--	--	--	--	--	--	--
143	R7-1R(3)	--	24	x	30	5.00	--	--	1	--	1	--	--	--	--
144	R2-1(2S)	55 MPH	24	x	30	5.00	--	--	1	--	1	1	--	--	--
145	W3-5(2S)	35 MPH	24	x	30	5.00	--	5.00	1	--	1	1	--	--	--
146	R7-1R(2S)	--	18	x	24	3.00	--	--	1	--	1	--	--	147	--
147	R2-1(3)	35 MPH	36	x	48	12.00	--	--	--	--	1	1	--	146	--
148	R7-1D(2S)	--	18	x	24	3.00	--	--	1	--	1	1	--	--	--
149	R7-1D(2S)	--	18	x	24	3.00	--	--	1	--	1	1	--	--	--

TYPE I & II PERMANENT SIGNING

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SIGN NO.	SIGN CODE	SIGN MESSAGE	TYPE II SIGN SIZE W [IN.]	x	H [IN.]	637.2210 SIGNS TYPE II REFLECTIVE H [SF]	637.2215 SIGNS TYPE II REFLECTIVE H FOLDING [SF]	637.2230 SIGNS TYPE II REFLECTIVE F [SF]	634.0616 POSTS WOOD 4X6-INCH X 16-FT [EA]	634.0618 POSTS WOOD 4X6-INCH X 18-FT [EA]	638.2602 REMOVING SIGNS TYPE II [EA]	638.3000 REMOVING SMALL SIGN SUPPORTS [EA]	638.2102 MOVING SIGNS TYPE II [EA]	MOUNT ON SAME POST AS SIGN #	REMARKS NEW SIGN LOCATION
150	W14-3(2S)	--	48	x	36	--	--	6.00	1	--	1	1	--	--	--
151	J4-1(2S)	--	24	x	36	6.00	--	--	--	1	--	--	--	--	--
	M3-3	--	24	x	12	--	--	--	--	--	--	--	--	--	--
	M1-4	USH 45	24	x	24	--	--	--	--	--	--	--	--	--	--
152	R2-1(2S)	35 MPH	24	x	30	5.00	--	--	1	--	1	1	--	--	--
153	R7-1L(2S)	--	18	x	24	3.00	--	--	1	--	1	1	--	--	--
154	W1-7(2S)	--	48	x	24	--	--	8.00	1	--	--	--	--	--	--
155	J1-1(2S)	--	24	x	39	6.50	--	--	--	1	1	1	--	--	--
	M2-1	--	21	x	15	--	--	--	--	--	--	--	--	--	--
	M1-5A	CTH AH	24	x	24	--	--	--	--	--	--	--	--	--	--
156	R2-1(2S)	35 MPH	24	x	30	--	--	--	1	--	1	1	--	--	--
157	R2-1(2S)	25 MPH	24	x	30	5.00	--	--	--	1	--	--	--	157A	SHEET 18
157A	R5-2(2S)	--	24	x	24	4.00	--	--	--	--	1	1	--	157	SHEET 18
158	R7-1R(2S)	--	18	x	24	3.00	--	--	1	--	1	--	--	--	--
159	R1-1(2S)	--	30	x	30	5.18	--	--	1	--	1	1	--	--	--
160	J13-1(2S)	--	24	x	45	7.50	--	--	--	1	--	--	--	--	--
	M1-5A	CTH AH	24	x	24	--	--	--	--	--	--	--	--	--	--
	M5-1L	--	21	x	21	--	--	--	--	--	--	--	--	--	--
161	ADOPT	--	--	x	--	--	--	--	1	--	--	1	1	--	--
162	R2-1	35 MPH	--	x	--	--	--	--	--	--	1	1	--	--	--
162A	R2-1	35 MPH	--	x	--	--	--	--	--	--	1	1	--	--	--
163	R1-1(2S)	--	30	x	30	5.18	--	--	1	--	1	1	--	--	--
164	W1-7(2S)	--	48	x	24	--	--	8.00	1	--	1	1	--	--	--
165	J13-1(2S)	--	24	x	45	7.50	--	--	--	1	1	1	--	--	--
	M1-5A	CTH AH	24	x	24	--	--	--	--	--	--	--	--	--	--
	M6-1	--	21	x	21	--	--	--	--	--	--	--	--	--	--
166	J4-1(2S)	--	24	x	36	6.00	--	--	--	1	--	--	--	--	SHEET 1
	M3-2	--	24	x	12	--	--	--	--	--	--	--	--	--	--
	M1-5A	CTH WG	24	x	24	--	--	--	--	--	--	--	--	--	--
167	J13-1(2S)	--	24	x	45	7.50	--	--	--	1	1	1	--	--	--
	M1-5A	CTH AH	24	x	24	--	--	--	--	--	--	--	--	--	--
	M6-1	--	21	x	21	--	--	--	--	--	--	--	--	--	--
168	R2-1	--	--	x	--	--	--	--	--	--	1	1	--	--	--
169	R1-1(2S)	--	30	x	30	5.18	--	--	1	--	1	1	--	--	--
170	J4-1(2S)	--	24	x	36	6.00	--	--	--	1	--	--	--	--	--
	M3-1	--	24	x	12	--	--	--	--	--	--	--	--	--	--
	M1-4	USH 45	24	x	24	--	--	--	--	--	--	--	--	--	--
171	W2-2	--	--	x	--	--	--	--	--	--	1	1	--	--	--
172	R3-8E(2S)	--	30	x	36	7.50	--	--	--	1	--	--	--	--	SHEET 18
173	W2-7L(2S)	--	30	x	30	--	--	6.25	1	--	--	--	--	--	--

TYPE I & II PERMANENT SIGNING CATEGORY CODE 0010

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SIGN NO.	SIGN CODE	SIGN MESSAGE	TYPE II SIGN SIZE W [IN.]	x	H [IN.]	637.2210 SIGNS TYPE II REFLECTIVE H [SF]	637.2215 SIGNS TYPE II REFLECTIVE H FOLDING [SF]	637.2230 SIGNS TYPE II REFLECTIVE F [SF]	634.0616 POSTS WOOD 4X6-INCH X 16-FT [EA]	634.0618 POSTS WOOD 4X6-INCH X 18-FT [EA]	638.2602 REMOVING SIGNS TYPE II [EA]	638.3000 REMOVING SMALL SIGN SUPPORTS [EA]	638.2102 MOVING SIGNS TYPE II [EA]	MOUNT ON SAME POST AS SIGN #	REMARKS NEW SIGN LOCATION
174	R2-1(2S)	35 MPH	24	x	30	5.00	--	--	1	--	1	1	--	222	--
175	J1-1(2S)	--	24	x	39	6.50	--	--	--	1	1	1	--	--	--
	M2-1	--	21	x	15	--	--	--	--	--	--	--	--	--	--
	M1-5A	CTH AH	24	x	24	--	--	--	--	--	--	--	--	--	--
176	W11-8(2S)	--	30	x	30	--	--	6.25	1	--	1	--	--	--	SHEET 19
177	R2-1(2S)	35 MPH	24	x	30	5.00	--	--	1	--	--	--	--	--	--
178	S1-1(2S)	--	36	x	36	--	--	6.75	--	1	1	1	--	--	--
178A	S16-9P(2S)	--	30	x	18	--	--	3.75	--	1		1	--	--	REMOVAL PART OF 178
178B	R2-6P(2S)	--	24	x	18	3.00	--	--	--	--	--	--	--	--	--
179	W3-1(2S)	--	36	x	36	--	--	9.00	1	--	--	--	--	--	SHEET 3
180	R1-1(2S)	--	30	x	30	5.18	--	--	1	--	1	1	--	185	--
180A	R1-1(2S)	--	30	x	30	5.18	--	--	1	--	1	1	--	216	--
181	R2-1(2S)	35 MPH	24	x	30	5.00	--	--	1	--	--	--	--	--	--
181A	POST OFFICE	--	--	x	--	--	--	--	1	--	--	--	1	--	--
182	R1-1(3)	--	36	x	36	7.46	--	--	1	--	--	--	--	--	SHEET 3
183	R1-1(2S)	--	30	x	30	5.18	--	--	1	--	1	1	--	--	--
184	R7-1L(2S)	--	18	x	24	3.00	--	--	1	--	1	--	--	--	--
185	R5-1(2S)	--	30	x	30	6.25	--	--	--	1	--	--	--	--	DO NOT PUT ON BACK OF STOP SIGN
186	R1-1(2S)	--	30	x	30	5.18	--	--	1	--	1	1	--	--	--
187	S1-1(2S)	--	36	x	36	--	--	6.75	--	1	1	1	--	--	SHEET 21
187A	S16-9P	--	30	x	18	--	--	3.75	--	--	--	--	--	--	--
187B	R2-6P(2S)	--	24	x	18	3.00	--	--	--	--	--	--	--	--	--
188	W11-8(2S)	--	30	x	30	--	--	6.25	1	--	1	1	--	--	--
189	R2-1	35 MPH	--	x	--	--	--	--	--	--	1	1	--	--	--
190	R1-1(3)	--	36	x	36	7.46	--	--	1	--	1	1	--	--	--
190A	R2-1(2S)	25 MPH	24	x	30	5.00	--	--	1	--	1	1	--	--	--
191	R1-1(3)	--	36	x	36	7.46	--	--	1	--	1	1	--	--	--
192	W1-2R(3)	--	36	x	36	--	--	9.00	--	1	--	--	--	--	--
192A	W13-1(3)	30 MPH	24	x	24	--	--	4.00	--	--	--	--	--	--	--
193	R2-1(2S)	35 MPH	24	x	30	5.00	--	--	1	--	1	1	--	--	SHEET 21. STATION 242+00.
194	R7-1R(2S)	--	18	x	24	3.00	--	--	1	--	--	--	--	--	SHEET 20
195	W1-6(2S)	--	48	x	24	--	--	8.00	1	--	--	1	1	--	SHEET 22
196	W2-2(2S)	--	30	x	30	--	--	6.25	1	--	1	1	--	--	SHEET 3
196A	R2-1(2S)	55 MPH	24	x	30	5.00	--	--	1	--	1	1	--	--	SHEET 3
197	R2-1(2S)	35 MPH	24	x	30	5.00	--	--	1	--	1	1	--	--	--
198	W2-1, W13-1	--	--	x	--	--	--	--	--	--	1	1	--	--	--
198A	R7-1R(2S)	--	18	x	24	3.00	--	--	1	--	1	1	--	--	--
199	R1-1(2S)	--	30	x	30	5.18	--	--	1	--	1	1	--	--	--
199A	R7-1L(2S)	--	18	x	24	3.00	--	--	1	--	1	1	--	--	--
200	R7-1D(2S)	--	18	x	24	3.00	--	--	1	--	1	1	--	--	--

SHEET: 10 OF 13

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	MISCELLANEOUS QUANTITIES – PERMANENT SIGNING	SHEET:	E

TYPE I & II PERMANENT SIGNING

CATEGORY CODE 0010

SIGN NO.	SIGN CODE	SIGN MESSAGE	TYPE II SIGN SIZE W [IN.]	x	H [IN.]	637.2210 SIGNS TYPE II REFLECTIVE H [SF]	637.2215 SIGNS TYPE II REFLECTIVE H FOLDING [SF]	637.2230 SIGNS TYPE II REFLECTIVE F [SF]	634.0616 POSTS WOOD 4X6-INCH X 16-FT [EA]	634.0618 POSTS WOOD 4X6-INCH X 18-FT [EA]	638.2602 REMOVING SIGNS TYPE II [EA]	638.3000 REMOVING SMALL SIGN SUPPORTS [EA]	638.2102 MOVING SIGNS TYPE II [EA]	MOUNT ON SAME POST AS SIGN #	REMARKS NEW SIGN LOCATION
201	R2-1(2S)	45 MPH	24	x	30	5.00	--	--	1	--	1	--	--	--	--
202	12-3(2S)	BRISTOL	60	x	24	10.00	--	--	2	--	1	2	--	--	SHEET 1
203	W3-5(2S)	35 MPH	36	x	36	--	--	9.00	1	--	--	--	--	--	--
204	W1-1L(2S)	--	36	x	36	--	--	9.00	1	--	1	1	--	--	--
204A	W13-1(3)	30 MPH	24	x	24	--	--	4.00	--	--	--	--	--	--	--
205	W2-7R(2S)	--	30	x	30	--	--	6.25	1	--	--	--	--	--	SHEET 10
205A	R2-1(2S)	55 MPH	24	x	30	5.00	--	--	1	--	1	1	--	--	SHEET 10
206	R2-1(2S)	45 MPH	24	x	30	5.00	--	--	1	--	1	1	--	--	--
207	R1-1(2S)	--	30	x	30	5.18	--	--	1	--	1	1	--	--	--
208	W6-1(2S)	--	36	x	36	--	--	9.00	1	--	1	1	--	--	--
209	R2-1(2S)	45 MPH	24	x	30	5.00	--	--	1	--	1	1	--	--	--
210	R5-1(2M)	--	36	x	36	9.00	--	--	1	--	1	1	--	--	--
211	R4-7(3)	--	36	x	48	12.00	--	--	--	1	1	1	--	229	--
212	W1-7(2S)	--	48	x	24	--	--	8.00	1	--	--	--	--	--	SHEET 8
213	W1-7(2S)	--	48	x	24	--	--	8.00	1	--	--	--	--	--	SHEET 9
213A	NOT USED	--	--	x	--	--	--	--	--	--	--	--	--	--	--
214	W1-7(2S)	--	48	x	24	--	--	8.00	1	--	--	--	--	--	SHEET 11
215	W1-7(2S)	--	48	x	24	--	--	8.00	1	--	--	--	--	--	SHEET 11
216	R6-2R(2S)	--	24	x	30	5.00	--	--	--	--	--	--	--	180	SHEET 20
217	W2-2(2S)	--	30	x	30	--	--	6.25	1	--	--	--	--	--	SHEET 7
218	W1-6(2S)	--	48	x	24	--	--	8.00	1	--	--	--	--	--	SHEET 11
219	W2-7R(2S)	--	30	x	30	--	--	6.25	1	--	--	--	--	--	SHEET 11
220	W3-3(2S)	--	36	x	36	--	--	9.00	1	--	--	--	--	--	SHEET 12
220A	R2-1(2S)	55 MPH	24	x	30	5.00	--	--	1	--	1	1	--	--	SHEET 12
221	W3-3(2S)	--	36	x	36	--	--	9.00	1	--	1	1	--	--	SHEET 14
222	S5-2(2S)	--	24	x	30	5.00	--	--	--	--	--	--	--	174	SHEET 19
223	R3-2(2S)	--	24	x	24	4.00	--	--	1	--	1	1	--	--	SHEET 20
224	R5-1(2S)	--	30	x	30	6.25	--	--	1	--	1	1	--	--	SHEET 20
225	W12-1D(2S)	--	24	x	24	--	--	4.00	1	--	--	--	--	--	2' MOUNTING HEIGHT, SHEET 20
226	S5-2(2S)	--	24	x	30	5.00	--	--	1	--	--	--	--	193	SHEET 21
227	PRIVATE SIGN	--	--	x	--	--	--	--	1	--	--	1	1	--	SHEET 23
228	W6-3(2S)	--	36	x	36	--	--	9.00	1	--	--	--	--	--	SHEET 25
229	W5-54S(2S)	--	18	x	18	--	--	2.25	--	--	--	--	--	211	SHEET 25
230	J1-2(2S)	--	48	x	39	13.00	--	--	--	1	1	1	--	--	SHEET 18
	M2-1	--	21	x	15	--	--	--	--	--	--	--	--	--	--
	M1-4	USH 45	24	x	24	--	--	--	--	--	--	--	--	--	--
	M4-6	--	24	x	12	--	--	--	--	--	--	--	--	--	--
	M1-5A	CTH AH	24	x	24	--	--	--	--	--	--	--	--	--	--
230A	J3-2(2S)	--	24	x	57	9.50	--	--	--	1	1	1	--	--	SHEET 18
	M3-1	--	24	x	12	--	--	--	--	--	--	--	--	--	--

TYPE I & II PERMANENT SIGNING

CATEGORY CODE 0010

SIGN NO.	SIGN CODE	SIGN MESSAGE	TYPE II SIGN SIZE W [IN.]	x	H [IN.]	637.2210 SIGNS TYPE II REFLECTIVE H [SF]	637.2215 SIGNS TYPE II REFLECTIVE H FOLDING [SF]	637.2230 SIGNS TYPE II REFLECTIVE F [SF]	634.0616 POSTS WOOD 4X6-INCH X 16-FT [EA]	634.0618 POSTS WOOD 4X6-INCH X 18-FT [EA]	638.2602 REMOVING SIGNS TYPE II [EA]	638.3000 REMOVING SMALL SIGN SUPPORTS [EA]	638.2102 MOVING SIGNS TYPE II [EA]	MOUNT ON SAME POST AS SIGN #	REMARKS NEW SIGN LOCATION
	M1-4	USH 45	24	x	24	--	--	--	--	--	--	--	--	--	--
	M6-1	--	21	x	21	--	--	--	--	--	--	--	--	--	--
	M3-3	--	24	x	12	--	--	--	--	--	--	--	--	--	--
	M1-4	USH 45	24	x	24	--	--	--	--	--	--	--	--	--	--
	M6-1	--	21	x	21	--	--	--	--	--	--	--	--	--	--
231	W3-1(2S)	--	36	x	36	--	--	9.00	--	1	1	1	--	--	SHEET 18
232	W6-2(2S)	--	36	x	36	--	--	9.00	--	1	1	1	--	--	SHEET 26
233	R5-1A(2S)	--	36	x	24	6.00	--	--	--	--	1	1	--	--	SHEET 26
234	W4-2R(2S)	--	36	x	36	--	--	9.00	--	1	--	--	--	--	SHEET 26
235	J1-1(2S)	--	24	x	39	6.50	--	--	--	1	1	1	--	--	SHEET 26
	M2-1	--	21	x	15	--	--	--	--	--	--	--	--	--	--
	M1-6	STH 50	24	x	24	--	--	--	--	--	--	--	--	--	--
236	W3-3(2S)	--	36	x	36	--	--	9.00	--	1	1	1	--	--	SHEET 26
237	W3-3(2S)	--	36	x	36	--	--	9.00	--	1	1	1	--	--	SHEET 26
238	R6-2L(2M)	--	30	x	36	7.50	--	--	1	--	1	1	--	--	SHEET 26
239	W9-1R(2S)	RIGHT LANE ENDS	36	x	36	--	--	9.00	--	1	--	--	--	--	SHEET 26
240	W3-3(2S)	--	36	x	36	--	--	9.00	--	1	--	--	--	--	SHEET 13A
241	J1-1(2S)	--	24	x	39	6.50	--	--	--	1	1	1	--	--	SHEET 18
	M2-1	--	21	x	15	--	--	--	--	--	--	--	--	--	--
	M1-4	USH 45	24	x	24	--	--	--	--	--	--	--	--	--	--
242	J1-1(2S)	--	24	x	39	6.50	--	--	--	1	1	1	--	--	SHEET 18
	M2-1	--	21	x	15	--	--	--	--	--	--	--	--	--	--
	M1-4	USH 45	24	x	24	--	--	--	--	--	--	--	--	--	--
243	W3-3(2S)	--	36	x	36	--	--	9.00	--	1	--	--	--	--	SHEET 13A
--	--	--		x		--	--	--	--	--	--	--	--	--	--
244	R10-50(2S)	--	30	x	36	7.50	--	--	--	--	--	--	--	--	SHEET 13. ON SIGNAL ARM NEXT TO SIGNAL.
245	W6-2(2S)	--	30	x	36	7.50	--	--	--	--	--	--	--	--	SHEET 13. ON SIGNAL ARM NEXT TO SIGNAL.
246	R5-1A(2S)	--	30	x	36	7.50	--	--	--	--	--	--	--	--	SHEET 13. ON SIGNAL ARM NEXT TO SIGNAL.
247	W4-2R(2S)	--	30	x	36	7.50	--	--	--	--	--	--	--	--	SHEET 13. ON SIGNAL ARM NEXT TO SIGNAL.
248	W11-15(2S)	--	30	x	30	--	--	6.25	--	1	--	--	--	--	SHEET 16
248A	W16-9P(2S)	--	24	x	12	--	--	2.00	--	--	--	--	--	248	SHEET 16
249	S1-1(2S)	--	36	x	36	--	--	6.75	--	1	--	--	--	--	SHEET 20
249A	S16-7L(2S)	--	30	x	18	--	--	3.75	--	--	--	--	--	249	SHEET 20
250	S1-1(2S)	--	36	x	36	--	--	6.75	--	1	--	--	--	--	SHEET 20
250A	S16-7L(2S)	--	30	x	18	--	--	3.75	--	--	--	--	--	250	SHEET 20
251	S1-1(2S)	--	36	x	36	--	--	6.75	--	--	--	--	--	249	SHEET 20
251A	S16-7R(2S)	--	30	x	18	--	--	3.75	--	--	--	--	--	251	SHEET 20
252	S1-1(2S)	--	36	x	36	--	--	6.75	--	--	--	--	--	250	SHEET 20
252A	S16-7R(2S)	--	30	x	18	--	--	3.75	--	--	--	--	--	252	SHEET 20
253	W11-2(2S)	--	30	x	30	--	--	6.25	--	1	--	--	--	--	SHEET 21

TYPE I & II PERMANENT SIGNING CATEGORY CODE 0010

SIGN NO.	SIGN CODE	SIGN MESSAGE	TYPE II SIGN SIZE W [IN.]	x	H [IN.]	**637.2210** SIGNS TYPE II REFLECTIVE H [SF]	**637.2215** SIGNS TYPE II REFLECTIVE H FOLDING [SF]	**637.2230** SIGNS TYPE II REFLECTIVE F [SF]	**634.0616** POSTS WOOD 4X6-INCH X 16-FT [EA]	**634.0618** POSTS WOOD 4X6-INCH X 18-FT [EA]	**638.2602** REMOVING SIGNS TYPE II [EA]	**638.3000** REMOVING SMALL SIGN SUPPORTS [EA]	**638.2102** MOVING SIGNS TYPE II [EA]	MOUNT ON SAME POST AS SIGN #	REMARKS NEW SIGN LOCATION
253A	W16-9P(2S)	--	24	x	12	--	--	2.00	--	--	--	--	--	253	SHEET 21
254	W11-2(2S)	--	30	x	30	--	--	6.25	--	1	--	--	--	--	SHEET 23
254A	W16-9P(2S)	--	24	x	12	--	--	2.00	--	--	--	--	--	254	SHEET 23
255	W11-2(2S)	--	30	x	30	--	--	6.25	--	1	--	--	--	--	SHEET 20
255A	W16-9P(2S)	--	24	x	12	--	--	2.00	--	--	--	--	--	255	SHEET 20
256	W11-15(2S)	--	30	x	30	--	--	6.25	--	1	--	--	--	--	SHEET 17
256A	W16-7L(2S)	--	24	x	12	--	--	2.00	--	--	--	--	--	256	SHEET 17
257	W11-15(2S)	--	30	x	30	--	--	6.25	--	1	--	--	--	--	SHEET 17
257A	W16-7L(2S)	--	24	x	12	--	--	2.00	--	--	--	--	--	257	SHEET 17
258	W11-15(2S)	--	30	x	30	--	--	6.25	--	1	--	--	--	--	SHEET 19
258A	W16-9P(2S)	--	24	x	12	--	--	2.00	--	--	--	--	--	258	SHEET 19
	TOTALS					1232.26	41.44	615.25	149.00	98.00	168.00	164.00	12.00	--	--

Removing Flashing Beacon and Pole 3200-02-73 USH 45 CATEGORY CODE 0010

LOCATION	Removing Flashing Beacon and Pole L.S SPV.0105.05
USH 45 SB at 82nd Street	1
TOTAL	1

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STATE FURNISHED MATERIALS SUMMARY

EACH	DESCRIPTION
1	TRAFFIC SIGNAL CONTROLLER, FULLY ACTUATED, 8 PHASE
1	TRAFFIC SIGNAL CABINET
2	POLES, TYPE 10
2	POLES, TYPE 13
4	LUMINAIRE ARMS, STEEL, 15-FT
2	30-FT MONOTUBE ARM
2	35-FT MONOTUBE ARM
4	EVP DETECTOR HEADS
1	RADAR DETECTOR
1	CELL MODEM

REMOVING CONCRETE BASES

SIGNAL BASE NO.	204.0195 REMOVING CONCRETE BASES EACH
CB1	1
SB1	1
SB2	1
SB3	1
SB4	1
SB5	1
SB6	1
SB7	1
SB8	1
***TOTAL	9

CONDUIT

FROM	TO	652.0225 CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH L.F.	652.0235 CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH L.F.
CB1	PB1		54
PB1	PB2		62
PB2	PB3	204	
PB3	PB4	151	
PB2	SB1	14	
PB2	PB5		152
PB5	SB2		33
PB5	PB6		152
PB6	PB7	40	
PB7	PB8	200	
PB8	PB9	152	
PB6	SB3	16	
PB6	PB10		170
PB10	SB4		19
PB10	PB11		50
PB11	SB5	11	
PB11	PB12		154
PB12	SB6		11
PB12	PB13		100
PB13	SB7	16	
PB13	PB14	36	
PB14	PB15	192	
PB15	PB16	148	
PB13	PB17		170
PB17	SB8		6
PB17	CB1		51
	***TOTAL	1180	1184

STATE FURNISHED FOR INFORMATION ONLY

SIGNAL BASE NO.	POLE TYPE 10 EACH	POLE TYPE 13 EACH	MONO 30' ARM EACH	MONO 35' ARM EACH	LUMINAIRE ARMS, STEEL, 15-FT EACH	EVP DETECTOR HEADS EACH	RADAR DETECTOR EACH
SB2		1		1	1	1	
SB4	1		1		1	1	
SB6		1		1	1	1	1
SB8	1		1		1	1	
***TOTAL	2	2	2	2	4	4	1

*** QUANTITIES SHOWN ELSEWHERE ON PLAN

SHEET: 1 OF 6

USH 45 & CTH WG/128th ST
KENOSHA COUNTY
CATEGORY 0020
S30-0483

TRAFFIC DETECTOR LOOPS

LOOP NO.	HOME RUN PB	LOCATION*	SIZE (FT)x(FT)	NO. OF TURNS	SDD INSTALLATION REFERENCE	652.0800 CONDUIT LOOP DETECTOR L.F.	655.0700 LOOP DETECTOR LEAD IN CABLE L.F.	655.0800 LOOP DETECTOR WIRE L.F.
21	PB4	25+83.6, 6.2' LT	6'x6'	5	9F15-4B - LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	66	416	330
22	PB3	24+33.5, 5.7' LT	6'x6'	4	9F15-4B - LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	82	266	328
41	PB16	45+57.1WG, 5.9' RT	6'x6'	5	9F15-4A - LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 1)	46	489	230
42	PB15	47+06.7WG, 6.0' RT	6'x6'	4	9F15-4B - LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	72	342	288
43	PB14	49+01.0WG, 6.0' RT	6'x20'	3	9F15-4B - LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	106	151	318
44	PB14	49+29.1WG, 6.1' RT	6'x20'	3	9F15-4B - LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	106	151	318
81	PB9	54+35.3, 6.1' LT	6'x6'	5	9F15-4A - LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 1)	42	602	210
82	PB8	52+85.2, 6.0' LT	6'x6'	5	9F15-4B - LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	70	451	350
83	PB7	50+90.3, 22.0' LT	6'x20'	3	9F15-4B - LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 1)	72	252	216
84	PB7	50+62.3, 22.0' LT	6'x20'	3	9F15-4B - LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 1)	72	252	216
85	PB7	50+90.3, 6.1' LT	6'x20'	3	9F15-4B - LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	104	252	312
86	PB7	50+62.3, 6.1' LT	6'x20'	3	9F15-4B - LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	104	252	312
					***TOTAL	942	3876	3428

*** QUANTITIES SHOWN ELSEWHERE ON PLAN

SHEET: 2 OF 6

USH 45 & CTH WG/128th ST
KENOSHA COUNTY
CATEGORY 0020
S30-0483

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PULL BOXES

PULL BOX NO.	LOCATION*	653.0135 PULL BOXES STEEL 24x36-INCH EACH	653.0140 PULL BOXES STEEL 24x42-INCH EACH
PB1	21+99.5, 45.4' LT		1
PB2	22+29.9, 41.3' LT		1
PB3	24+33.6, 37.0' LT	1	
PB4	25+83.6, 30.1' LT	1	
PB5	22+32.1, 33.7' RT		1
PB6	50+47.7WG, 39.2' LT		1
PB7	50+86.5WG, 34.1' LT	1	
PB8	52+85.3WG, 31.8' LT	1	
PB9	54+35.3WG, 17.3' LT	1	
PB10	50+65.3WG, 43.8' RT		1
PB11	50+50.7WG, 63.3' RT		1
PB12	49+75.5WG, 79.3' RT		1
PB13	49+38.8WG, 45.7' RT		1
PB14	49+04.8WG, 35.2' RT	1	
PB15	47+06.9WG, 32.9' RT	1	
PB16	45+57.0WG, 19.9' RT	1	
PB17	49+22.7WG, 37.5' RT		1
	***TOTAL	8	9

* FINAL LOCATION TO BE DETERMINED BY THE ENGINEER IN THE FIELD.

CONCRETE BASES

SIGNAL BASE NO.	LOCATION*	654.0101 CONCRETE BASES TYPE 1 EACH	654.0110 CONCRETE BASES TYPE 10 EACH	654.0113 CONCRETE BASES TYPE 13 EACH	654.0217 CONCRETE CONTROL CABINET BASES TYPE 9 SPECIAL EACH
CB1	49+24.8WG, 54.1' LT				1
SB1	49+42.6WG, 75.1' LT	1			
SB2	50+22.3WG, 75.4' LT			1	
SB3	50+62.5WG, 34.6' LT	1			
SB4	50+80.2WG, 33.0' RT		1		
SB5	50+49.0WG, 73.3' RT	1			
SB6	49+74.3WG, 68.6' RT			1	
SB7	49+27.1WG, 35.0' RT	1			
SB8	49+19.2WG, 33.1' LT		1		
	***TOTAL	4	2	2	1

* FINAL LOCATION TO BE DETERMINED BY THE ENGINEER IN THE FIELD.

REMOVE PULL BOXES

PULL BOX NO.	653.0905 REMOVING PULL BOXES EACH
PB1	1
PB2	1
PB3	1
PB4	1
PB5	1
PB6	1
PB7	1
PB8	1
PB9	1
PB10	1
PB11	1
PB12	1
***TOTAL	12

TRAFFIC SIGNAL CABLE AND WIRE

FROM	TO	655.0240 CABLE TRAFFIC SIGNAL 7-14 AWG L.F.	655.0260 CABLE TRAFFIC SIGNAL 12-14 AWG L.F.	655.0320 CABLE TYPE UF 2-10 AWG GROUNDED L.F.
CB1	SB1		106	
CB1	SB2	217		
CB1	SB3		292	
CB1	SB4	364		
CB1	SB5		315	
CB1	SB6	222		
CB1	SB7		161	
CB1	SB8	50		
CB1	SB2			217
SB2	SB4			269
CB1	SB8			50
SB8	SB6			208
	***TOTAL	853	874	744

*** QUANTITIES SHOWN ELSEWHERE ON PLAN

SHEET: 3 OF 6

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TRAFFIC SIGNAL CABLE AND WIRE

FROM	TO	655.0515 ELECTRICAL WIRE TRAFFIC SIGNALS 10 AWG L.F.
CB1	SB1	106
SB1	SB2	163
SB2	SB3	165
SB3	SB4	160
SB4	SB5	95
SB5	SB6	139
SB6	SB7	117
SB7	SB8	147
SB8	CB1	50
PB1	CB1	41
PB2	SB1	34
PB5	SB2	53
PB6	SB3	36
PB10	SB4	39
PB11	SB5	31
PB12	SB6	31
PB13	SB7	36
PB17	SB8	26
	***TOTAL	1469

TRAFFIC SIGNAL CABLE AND WIRE

FROM	TO	655.0230 CABLE TRAFFIC SIGNAL 5-14 AWG L.F.
SB1	HEAD 2	19
SB1	HEAD 4	19
SB2	HEAD 3	56
SB3	HEAD 7	19
SB3	HEAD 11	19
SB4	HEAD 12	50
SB5	HEAD 1	19
SB5	HEAD 5	19
SB6	HEAD 6	59
SB7	HEAD 8	19
SB7	HEAD 10	19
SB8	HEAD 9	51
	***TOTAL	368

TRAFFIC SIGNAL CABLE AND WIRE

FROM	TO	655.0610 ELECTRICAL WIRE LIGHTING 12 AWG L.F.
SB2	LUMIN.	144
SB4	LUMIN.	144
SB6	LUMIN.	144
SB8	LUMIN.	144
	***TOTAL	576

TRAFFIC SIGNAL EVP DETECTOR CABLE

FROM	TO	655.0900 TRAFFIC SIGNAL EVP DETECTOR CABLE L.F.
CB1	SB6 (HEAD A)	424
CB1	SB2 (HEAD B)	282
CB1	SB4 (HEAD C)	287
CB1	SB8 (HEAD D)	110
	***TOTAL	1103

ELECTRICAL SERVICE METER BREAKER PEDESTAL

LOCATION*	656.0200.01 ELECTRICAL SERVICE METER BREAKER PEDESTAL L.S.
USH 45 & CTH WG/128th ST	1
TOTAL	1

* FINAL LOCATION TO BE DETERMINED BY THE ENGINEER IN THE FIELD

*** QUANTITIES SHOWN ELSEWHERE ON PLAN

SHEET: 4 OF 6

3

USH 45 & CTH WG/128th ST
KENOSHA COUNTY
CATEGORY 0020
S30-0483

POLES

SIGNAL BASE NO.	657.0100 PEDESTAL BASES EACH	657.0420 TRAFFIC SIGNAL STANDARDS ALUMINUM 13-FT EACH	657.1350 INSTALL POLES TYPE 10 EACH	657.1360 INSTALL POLES TYPE 13 EACH	657.1530 INSTALL MONOTUBE ARMS 30-FT EACH	657.1535 INSTALL MONOTUBE ARMS 35-FT EACH	657.1815 INSTALL LUMINAIRE ARMS STEEL 15-FT EACH	659.1125 LUMINAIRES UTILITY LED C EACH
SB1	1	1						
SB2				1		1	1	1
SB3	1	1						
SB4			1		1		1	1
SB5	1	1						
SB6				1		1	1	1
SB7	1	1						
SB8			1		1		1	1
***TOTAL	4	4	2	2	2	2	4	4

FACES

SIGNAL HEAD NO.	SIGNAL BASE NO.	658.0110 TRAFFIC SIGNAL FACE 3-12 INCH VERTICAL EACH	658.0215 BACKPLATES SIGNAL FACE 3 SECTION 12-INCH EACH	658.0600 LED MODULES 12-INCH RED BALL EACH	658.0605 LED MODULES 12-INCH YELLOW BALL EACH	658.0610 LED MODULES 12-INCH GREEN BALL EACH
HEAD 1	SB5	1	1	1	1	1
HEAD 2	SB1	1	1	1	1	1
HEAD 3	SB2	1	1	1	1	1
HEAD 4	SB1	1	1	1	1	1
HEAD 5	SB5	1	1	1	1	1
HEAD 6	SB6	1	1	1	1	1
HEAD 7	SB3	1	1	1	1	1
HEAD 8	SB7	1	1	1	1	1
HEAD 9	SB8	1	1	1	1	1
HEAD 10	SB7	1	1	1	1	1
HEAD 11	SB3	1	1	1	1	1
HEAD 12	SB4	1	1	1	1	1
***TOTAL		12	12	12	12	12

*** QUANTITIES SHOWN ELSEWHERE ON PLAN

3

TRAFFIC SIGNAL MOUNTING HARDWARE

LOCATION	658.5069.01 SIGNAL MOUNTING HARDWARE L.S.
USH 45 & CTH WG/128th ST	1
TOTAL	1

REMOVE LOOP DETECTOR WIRE AND LEAD-IN CABLE

LOCATION	SPV.0105.10 REMOVE LOOP DETECTOR WIRE & LEAD-IN CABLE L.S.
USH 45 & CTH WG/128th ST	1
TOTAL	1

TRANSPORT AND INSTALL STATE FURNISHED RADAR DETECTION SYSTEM

LOCATION	SPV.0105.16 TRANSPORT AND INSTALL STATE FURNISHED RADAR DETECTION SYSTEM L.S.
USH 45 & CTH WG/128th ST	1
TOTAL	1

INSTALL STATE FURNISHED TRAFFIC SIGNAL CABINET

LOCATION	SPV.0105.06 INSTALL STATE FURNISHED TRAFFIC SIGNAL CABINET L.S.
USH 45 & CTH WG/128th ST	1
TOTAL	1

REMOVE TRAFFIC SIGNALS

LOCATION	SPV.0105.12 REMOVE TRAFFIC SIGNALS L.S.
USH 45 & CTH WG/128th ST	1
TOTAL	1

TRANSPORT TRAFFIC SIGNAL AND LIGHTING MATERIALS

LOCATION	SPV.0105.08 TRANSPORT TRAFFIC SIGNAL AND LIGHTING MATERIALS L.S.
USH 45 & CTH WG/128th ST	1
TOTAL	1

EMERGENCY VEHICLE PREEMPTION (EVP) DETECTOR HEAD INSTALLATION

LOCATION	SPV.0105.14 EVP DETECTOR HEAD INSTALLATION L.S.
USH 45 & CTH WG/128th ST	1
TOTAL	1

*** QUANTITIES SHOWN ELSEWHERE ON PLAN

3

STATE FURNISHED MATERIALS SUMMARY

EACH	DESCRIPTION
1	TRAFFIC SIGNAL CONTROLLER, FULLY ACTUATED, 8 PHASE
1	TRAFFIC SIGNAL CABINET
4	POLES, TYPE 13
4	LUMINAIRE ARMS, STEEL, 15-FT
3	40-FT MONOTUBE ARM
1	45-FT MONOTUBE ARM
4	EVP DETECTOR HEADS
1	CELLULAR MODEM

STATE FURNISHED FOR INFORMATION ONLY

SIGNAL BASE NO.	POLE TYPE 13 EACH	MONO 40' ARM EACH	MONO 45' ARM EACH	LUMINAIRE ARMS, STEEL, 15-FT EACH	EVP DETECTOR HEADS EACH
SB2	1	1		1	1
SB4	1		1	1	1
SB6	1		1	1	1
SB8	1		1	1	1
***TOTAL	4	1	3	4	4

REMOVING CONCRETE BASES

SIGNAL BASE NO.	204.0195 REMOVING CONCRETE BASES EACH
CB1	1
SB5	1
SB6	1
SB7	1
SB8	1
SB9	1
SB10	1
SB11	1
SB12	1
***TOTAL	9

CONDUIT

FROM	TO	652.0225 CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH L.F.	652.0235 CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH L.F.
CB1	PB1		54
PB1	SB1	20	
PB1	PB2	35	
PB2	PB3	251	
PB3	PB4	175	
PB1	PB5		182
PB5	SB2		20
PB5	PB6		100
PB6	SB3	23	
PB6	PB7	232	
PB7	PB8	175	
PB6	PB9		158
PB9	SB4		31
PB9	PB10		112
PB10	SB5	17	
PB10	PB11	39	
PB11	PB12	242	
PB12	PB13	175	
PB10	PB14		182
PB14	SB6		12
PB14	PB15		50
PB15	SB7	12	
PB15	PB16	33	
PB16	PB17	235	
PB17	PB18	175	
PB15	PB19		182
PB19	SB8		12
PB19	CB1		30
	***TOTAL	1839	1125

*** QUANTITY SHOWN ELSEWHERE ON PLAN

3

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.
11	PB6	200+82.8, 0.2'RT	6'X20'	3	9F15-4B - LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	128	172	384
12	PB6	201+10.9, 0.0'RT	6'X20'	3	9F15-4B - LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	130	172	390
21	PB18	206+82.4, 12.0'LT	6'X6'	5	9F15-4B - LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	78	558	390
22	PB17	205+07.4, 12'LT	6'X6'	5	9F15-4B - LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	78	383	390
31	PB2	51+02.0, 6.0'LT	6'X20'	3	9F15-4B - LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	128	67	384
32	PB2	50+74.1, 6.0'LT	6'X20'	3	9F15-4B - LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	126	67	378
41	PB13	44+83.2, 9.0'RT	6'X6'	5	9F15-4B - LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	70	686	350
42	PB12	46+58.2, 6.0'RT	6'X6'	5	9F15-4B - LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	76	512	380
43	PB11	48+96.2,7.0'RT	6'X20'	3	9F15-4B - LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	96	270	288
44	PB11	49+24.2, 7.0'RT	6'X20'	3	9F15-4B - LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	96	270	288

*** **QUANTITY SHOWN ELSEWHERE ON PLAN**

3

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.
51	PB16	202+76.4, 0.0'RT	6'X20'	3	9F15-4B - LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	124	148	372
52	PB16	202+48.4, 0.0'RT	6'X20'	3	9F15-4B - LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	124	148	372
61	PB8	196+78.7, 12.0'RT	6'X6'	5	9F15-4B - LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	76	579	380
62	PB7	198+53.8, 12.0'RT	6'X6'	5	9F15-4B - LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	76	404	380
71	PB11	48+96.2, 6.0'LT	6'X20'	3	9F15-4B - LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	122	270	366
72	PB11	49+24.2, 6.0'LT	6'X20'	3	9F15-4B - LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	122	270	366
81	PB4	55+17.8, 18.0'LT	6'X6'	5	9F15-4B - LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	72	493	360
82	PB3	53+42.8, 18.0'LT	6'X6'	4	9F15-4B - LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	72	318	288
83	PB2	51+02.0, 18.0'LT	6'X20'	3	9F15-4B - LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	104	67	312
84	PB2	50+74.0,18.0'LT	6'X20'	3	9F15-4B - LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	100	67	300
					***TOTAL	1998	5921	7118

* LOCATION IS TO FRONT CENTER OF DETECTOR LOOP
* * FINAL LOCATION TO BE DETERMINED BY THE ENGINEER IN THE FIELD.

*** QUANTITY SHOWN ELSEWHERE ON PLAN

3

PULL BOXES

PULL BOX NO.	LOCATION*	653.0135 PULL BOXES STEEL 24x36-INCH EACH	653.0140 PULL BOXES STEEL 24x42-INCH EACH
PB1	202+22.8, 59.6'RT		1
PB2	50+92.2, 45.2'LT	1	
PB3	53+42.8, 45.0'LT	1	
PB4	55+17.8, 45.0'LT	1	
PB5	201+32.7, 55.9'RT		1
PB6	200+85.5, 41.6'RT		1
PB7	198+53.6, 41.0'RT	1	
PB8	196+78.7, 41.0'RT	1	
PB9	200+82.8, 37.2'LT		1
PB10	201+31.3, 63.0'LT		1
PB11	49+00.0, 31.9'RT	1	
PB12	46+58.0, 35.0'RT	1	
PB13	44+83.0, 34.2'RT	1	
PB14	202+22.7, 61.9'LT		1
PB15	202+39.7, 43.2'LT		1
PB16	202+72.3, 39.2' LT	1	
PB17	205+07.5, 42.0'LT	1	
PB18	206+82.4, 42.0'LT	1	
PB19	202+39.6, 47.8'RT		1
	***TOTAL	11	8

* FINAL LOCATION TO BE DETERMINED BY THE ENGINEER IN THE FIELD.

REMOVE PULL BOXES

PULL BOX NO.	653.0905 REMOVING PULL BOXES EACH
PB6	1
PB7	1
PB8	1
PB9	1
PB10	1
PB11	1
PB12	1
PB13	1
PB14	1
PB15	1
***TOTAL	10

*** QUANTITY SHOWN ELSEWHERE ON PLAN

CONCRETE BASES

SIGNAL BASE NO.	LOCATION*	654.0101 CONCRETE BASES TYPE 1 EACH	654.0113 CONCRETE BASES TYPE 13 EACH	654.0217 CONCRETE CONTROL CABINET BASES TYPE 9 SPECIAL EACH
CB1	202+40.5, 57.8'RT			1
SB1	202+19.3, 79.3'RT	1		
SB2	201+40.8, 73.6'RT		1	
SB3	201+07.8, 40.6'RT	1		
SB4	201+12.5, 41.7'LT		1	
SB5	201+39.3, 77.4'LT	1		
SB6	202+23.7, 72.9'LT		1	
SB7	202+51.4, 40.3'LT	1		
SB8	202+48.6, 40.7'RT		1	
	***TOTAL	4	4	1

* FINAL LOCATION TO BE DETERMINED BY THE ENGINEER IN THE FIELD.

TRAFFIC SIGNAL CABLE AND WIRE

FROM	TO	655.0260 CABLE TRAFFIC SIGNAL 12-14 AWG L.F.	655.0320 CABLE TYPE UF 2-10 AWG GROUNDED L.F.
CB1	SB1	65	
CB1	SB2	172	
CB1	SB3	240	
CB1	SB4	342	
CB1	SB5	308	
CB1	SB6	197	
CB1	SB7	156	
CB1	SB8	48	
CB1	SB2		172
SB2	SB4		232
CB1	SB8		48
SB8	SB6		195
	***TOTAL	1528	647

TRAFFIC SIGNAL CABLE AND WIRE

FROM	TO	655.0515 ELECTRICAL WIRE TRAFFIC SIGNALS 10 AWG L.F.
CB1	SB1	65
SB1	SB2	171
SB2	SB3	132
SB3	SB4	172
SB4	SB5	141
SB5	SB6	159
SB6	SB7	89
SB7	SB8	154
SB8	CB1	48
PB1	CB1	41
PB5	SB2	40
PB6	SB3	42
PB9	SB4	50
PB10	SB5	36
PB14	SB6	32
PB15	SB7	32
PB19	SB8	31
	***TOTAL	1435

3

3

TRAFFIC SIGNAL CABLE AND WIRE

FROM	TO	655.0230 CABLE TRAFFIC SIGNAL 5-14 AWG L.F.	655.0240 CABLE TRAFFIC SIGNAL 7-14 AWG L.F.
SB1	HEAD 14		22
SB1	HEAD 16	19	
SB2	HEAD 12	50	
SB2	HEAD 13	34	
SB2	HEAD 15		63
SB3	HEAD 1	19	
SB3	HEAD 9		22
SB4	HEAD 7	55	
SB4	HEAD 8	41	
SB4	HEAD 10		68
SB5	HEAD 11	19	
SB5	HEAD 19		22
SB6	HEAD 17	55	
SB6	HEAD 18	39	
SB6	HEAD 20		67
SB7	HEAD 4		22
SB7	HEAD 6	19	
SB8	HEAD 2	53	
SB8	HEAD 3	40	
SB8	HEAD 5		67
	***TOTAL	443	353

TRAFFIC SIGNAL CABLE AND WIRE

FROM	TO	655.0610 ELECTRICAL WIRE LIGHTING 12 AWG L.F.
SB2	LUMIN.	144
SB4	LUMIN.	144
SB6	LUMIN.	144
SB8	LUMIN.	144
	***TOTAL	576

TRAFFIC SIGNAL EVP DETECTOR CABLE

FROM	TO	655.0900 TRAFFIC SIGNAL EVP DETECTOR CABLE L.F.
CB1	SB4 (HEAD A)	412
CB1	SB8 (HEAD B)	119
CB1	SB2 (HEAD C)	242
CB1	SB6 (HEAD D)	270
	***TOTAL	1043

ELECTRICAL SERVICE METER BREAKER PEDESTAL

LOCATION*	656.0200.02 ELECTRICAL SERVICE METER BREAKER PEDESTAL L.S.
USH 45 & CTH C	1
TOTAL	1

* FINAL LOCATION TO BE DETERMINED BY THE ENGINEER IN THE FIELD

POLES

SIGNAL BASE NO.	657.0100 PEDESTAL BASES EACH	657.0425 TRAFFIC SIGNAL STANDARDS ALUMINUM 15-FT EACH	657.1360 INSTALL POLES TYPE 13 EACH	657.1540 INSTALL MONOTUBE ARMS 40-FT EACH	657.1545 INSTALL MONOTUBE ARMS 45-FT EACH	657.1815 INSTALL LUMINAIRE ARMS STEEL 15-FT EACH	659.1125 LUMINAIRES UTILITY LED C EACH
SB1	1	1					
SB2			1	1		1	1
SB3	1	1					
SB4			1		1	1	1
SB5	1	1					
SB6			1		1	1	1
SB7	1	1					
SB8			1		1	1	1
***TOTAL	4	4	4	1	3	4	4

*** QUANTITY SHOWN ELSEWHERE ON PLAN

SHEET: 5 OF 7

USH 45 & CTH C
KENOSHA COUNTY
CATEGORY 0020
S30-0352

		FACES									
SIGNAL HEAD NO.	SIGNAL BASE NO.	658.0110 TRAFFIC SIGNAL FACE 3-12 INCH VERTICAL EACH	658.0115 TRAFFIC SIGNAL FACE 4-12 INCH VERTICAL EACH	658.0215 BACKPLATES SIGNAL FACE 3 SECTION 12-INCH EACH	658.0220 BACKPLATES SIGNAL FACE 4 SECTION 12-INCH EACH	658.0600 LED MODULES 12-INCH RED BALL EACH	658.0605 LED MODULES 12-INCH YELLOW BALL EACH	658.0610 LED MODULES 12-INCH GREEN BALL EACH	658.0615 LED MODULES 12-INCH RED ARROW EACH	658.0620 LED MODULES 12-INCH YELLOW ARROW EACH	658.0625 LED MODULES 12-INCH GREEN ARROW EACH
1	SB3	1		1		1	1	1			
2	SB8	1		1		1	1	1			
3	SB8	1		1		1	1	1			
4	SB7		1		1				1	2	1
5	SB8		1		1				1	2	1
6	SB7	1		1		1	1	1			
7	SB4	1		1		1	1	1			
8	SB4	1		1		1	1	1			
9	SB3		1		1				1	2	1
10	SB4		1		1				1	2	1
11	SB5	1		1		1	1	1			
12	SB2	1		1		1	1	1			
13	SB2	1		1		1	1	1			
14	SB1		1		1				1	2	1
15	SB2		1		1				1	2	1
16	SB1	1		1		1	1	1			
17	SB6	1		1		1	1	1			
18	SB6	1		1		1	1	1			
19	SB5		1		1				1	2	1
20	SB6		1		1				1	2	1
	***TOTAL	12	8	12	8	12	12	12	8	16	8

TRAFFIC SIGNAL MOUNTING HARDWARE

LOCATION	658.5069.02 SIGNAL MOUNTING HARDWARE L.S.
USH 45 & CTH C	1
TOTAL	1

*** QUANTITY SHOWN ELSEWHERE ON PLAN

SHEET: 6 OF 7

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	MISCELLANEOUS QUANTITIES	SHEET:	E

FILE NAME : N:\PDS\C3D\CAD\32000203\SIG\S30-0352\S30-0352_mq.pptx PLOT DATE : 3/30/2016 PLOT BY : DOTBMD PLOT NAME : S30-0352_mq PLOT SCALE : 1:1

3

3

INSTALL STATE FURNISHED TRAFFIC SIGNAL CABINET

LOCATION	SPV.0105.07 INSTALL STATE FURNISHED TRAFFIC SIGNAL CABINET L.S.
USH 45 & CTH C	1
TOTAL	1

REMOVE TRAFFIC SIGNALS

LOCATION	SPV.0105.13 REMOVE TRAFFIC SIGNALS L.S.
USH 45 & CTH C	1
TOTAL	1

TRANSPORT TRAFFIC SIGNAL AND LIGHTING MATERIALS

LOCATION	SPV.0105.09 TRANSPORT TRAFFIC SIGNAL AND LIGHTING MATERIALS L.S.
USH 45 & CTH C	1
TOTAL	1

EVP DETECTOR HEAD INSTALLATION

LOCATION	SPV.0105.15 EVP DETECTOR HEAD INSTALLATION L.S.
USH 45 & CTH C	1
TOTAL	1

REMOVE LOOP DETECTOR WIRE AND LEAD-IN CABLE

LOCATION	SPV.0105.11 REMOVE LOOP DETECTOR WIRE & LEAD-IN CABLE L.S.
USH 45 & CTH C	1
TOTAL	1

*** **QUANTITY SHOWN ELSEWHERE ON PLAN**

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	MISCELLANEOUS QUANTITIES	SHEET:	E

CATEGORY	LOCATION		STATION	OFFSET	SPV.0060.08 SANITARY MANHOLE CHIMNEY SEAL EA	SPV.0060.09 ADJUSTING SANITARY SEWER MANHOLES EA
0040	98TH STREET TO HWY 50	USH 45	191+87	24'RT	1	1
		USH 45	198+37	27'RT	1	1
		USH 45	201+48	25'RT	1	1
		USH 45	205+68	26'RT	1	1
		USH 45	209+76	27'RT	1	1
		USH 45	213+77	27'RT	1	1
		USH 45	217+76	27'RT	1	1
		USH 45	221+77	27'RT	1	1
		USH 45	225+75	27'RT	1	1
		USH 45	229+82	27'RT	1	1
		USH 45	233+77	29'RT	1	1
		USH 45	237+76	30'RT	1	1
		USH 45	241+53	21'RT	1	1
		USH 45	247+39	21'RT	1	1
		USH 45	250+25	21'RT	1	1
		USH 45	254+26	22'RT	1	1
		USH 45	256+15	34'RT	1	1
		USH 45	257+33	14'RT	1	1
		USH 45	259+83	18'RT	1	1
		USH 45	263+79	14'RT	1	1
		USH 45	267+91	17'RT	1	1
		USH 45	268+04	38'RT	1	1
		USH 45	268+64	18'RT	1	1
		USH 45	271+69	16'RT	1	1
		USH 45	273+10	34'RT	1	1
		USH 45	274+45	16'RT	1	1
		USH 45	278+37	16'RT	1	1
		USH 45	279+80	22'RT	1	1
		USH 45	284+41	26'RT	1	1
		USH 45	287+59	28'RT	1	1
		USH 45	291+44	27'RT	1	1
		USH 45	296+30	61'RT	1	1
CATEGORY '0040 TOTALS					32	32

CATEGORY	LOCATION		STATION	OFFSET	SPV.0060.10 ADJUSTING WATER VALVE BOX EA
0040	98TH STREET TO HWY 50	USH 45	250+56	59'RT	1
		USH 45	254+16	28'LT	1
		USH 45	254+24	39'LT	1
		USH 45	254+93	21'LT	1
		USH 45	256+42	15'LT	1
		USH 45	256+42	33'RT	1
		USH 45	256+43	48'RT	1
		USH 45	257+21	19'LT	1
		USH 45	259+82	20'LT	1
		USH 45	263+92	33'RT	1
		USH 45	265+30	26'LT	1
		USH 45	268+25	36'RT	1
		USH 45	268+27	42'RT	1
		USH 45	268+38	15'LT	1
		USH 45	272+77	15'LT	1
		USH 45	273+43	16'LT	1
		USH 45	279+44	16'LT	1
		USH 45	279+53	42'RT	1
		USH 45	279+53	42'RT	1
		USH 45	289+29	18'LT	1
		USH 45	289+29	22'LT	1
		USH 45	289+29	51'RT	1
		USH 45	291+36	21'LT	1
		USH 45	291+40	17'LT	1
CATEGORY '0040 TOTALS					24

CATEGORY	LOCATION		STATION	OFFSET	SPV.0060.11 ADJUSTING WATER VALVE MANHOLE EA
0040	98TH STREET TO HWY 50	USH 45	254+94	68'LT	1
		USH 45	255+84	38'LT	1
CATEGORY 0040 TOTALS					2

SHEET PREPARED BY STRAND ASSOCIATES FOR THE VILLAGE OF BRISTOL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

TRANSPORTATION PROJECT PLAT TITLE SHEET

PROJECT NO. 3200-02-23

ILLINOIS STATE LINE TO STH 50

USH 45

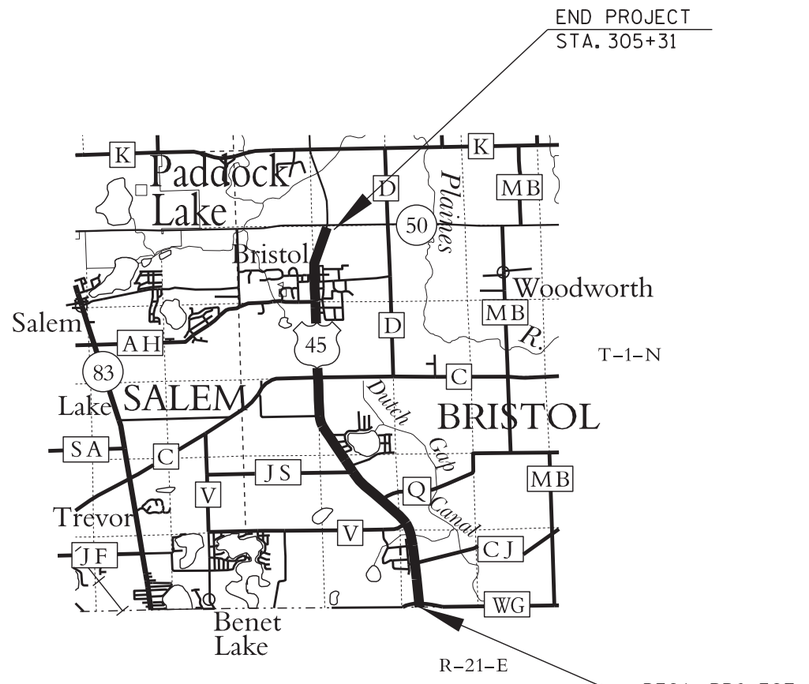
KENOSHA COUNTY

20124

DOCUMENT
1724571
RECORDED
At Kenosha County, Kenosha WI 53140
JoAllyn M. Stortz, Register of Deeds
April 15, 2014 2:52 PM
$25.00
Pages 1

Pg. 2





CONVENTIONAL ABBREVIATIONS

ACCESS POINT/ DRIVEWAY CONNECTION	AP	REFERENCE LINE	R/L
ACCESS RIGHTS	AR	RELEASE OF RIGHTS	ROR
ACRES	AC.	REMAINING	REM.
AND OTHERS	ET.AL.	RIGHT-OF-WAY	R/W
CENTERLINE	C/L	SECTION	SEC.
CERTIFIED SURVEY MAP	CSM	STATION	STA.
CORNER	COR.	TEMPORARY LIMITED EASEMENT	TLE
DOCUMENT	DOC.	VOLUME	V.
EASEMENT	EASE.	**CURVE DATA**	
HIGHWAY EASEMENT	H.E.	LONG CHORD	LCH
LAND CONTRACT	LC	LONG CHORD BEARING	LCB
MONUMENT	MON.	RADIUS	R
PAGE	P.	DEGREE OF CURVE	D
PERMANENT LIMITED EASEMENT	PLE	CENTRAL ANGLE OR DELTA	DELTA
PROPERTY LINE	PL	LENGTH OF CURVE	L
RECORDED AS	(100')	TANGENT	TAN

CONVENTIONAL SYMBOLS

FOUND IRON PIPE/PIN	LF (1" UNLESS NOTED)	PROPOSED R/W LINE
		EXISTING H.E. LINE
R/W MONUMENT	•(SET)	PROPERTY LINE
R/W STANDARD	▲(SET)	LOT & TIE LINES
SIGN	ISIGN	SLOPE INTERCEPTS
SECTION CORNER MONUMENT		CORPORATE LIMITS
SECTION CORNER SYMBOL		NO ACCESS (BY PREVIOUS ACQUISITION/CONTROL)
FEE (HATCH VARIES)		NO ACCESS (BY ACQUISITION)
TEMPORARY LIMITED EASEMENT		NO ACCESS (BY STATUTORY AUTHORITY)
PERMANENT LIMITED EASEMENT		SECTION LINE
R/W BOUNDARY POINT	RWB20	QUARTER LINE
PARCEL NUMBER	102	SIXTEENTH LINE
UTILITY PARCEL NUMBER	92	EXISTING CENTERLINE
SIGN NUMBER (OFF PREMISE)	21-1	PROPOSED REFERENCE LINE
BUILDING		PARALLEL OFFSET

CONVENTIONAL UTILITY SYMBOLS

WATER	W	
GAS	G	
TELEPHONE	T	
OVERHEAD	OH	
TRANSMISSION LINES ELECTRIC	E	
CABLE TELEVISION	TV	
FIBER OPTIC	FO	
SANITARY SEWER	SAN	
STORM SEWER	SS	
	NON COMPENSABLE	COMPENSABLE
POWER POLE		
TELEPHONE POLE		
TELEPHONE PEDESTAL		
ELECTRIC TOWER		

NOTES:

COORDINATES AND BEARINGS SHOWN ON THIS PLAT ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM, KENOSHA COUNTY ZONE, NAD83 (2007) ADJUSTMENT USING THE WISCORS NETWORK.

RIGHT-OF-WAY MONUMENTS ARE TYPE 2 AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT BY SOUTHEAST REGION SURVEY.

RIGHT-OF-WAY BOUNDARIES ARE DEFINED WITH COURSES OF THE PERIMETER OF THE HIGHWAY LANDS REFERENCED TO THE U.S. PUBLIC LAND SURVEY SYSTEM OR OTHER "SURVEYS OF PUBLIC RECORD".

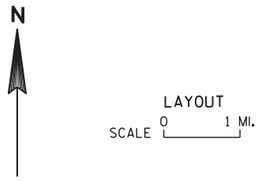
PROPERTY LINES SHOWN ON THIS PLAT ARE DRAWN FROM DATA DERIVED FROM MAPS AND DOCUMENTS OF PUBLIC RECORD AND/OR EXISTING OCCUPATIONAL LINES. THIS PLAT MAY NOT BE A TRUE REPRESENTATION OF EXISTING PROPERTY LINES, EXCLUDING RIGHT-OF-WAY LINES, AND SHOULD NOT BE USED AS A SUBSTITUTE FOR AN ACCURATE FIELD SURVEY.

A **TEMPORARY LIMITED EASEMENT** (TLE) IS A RIGHT FOR CONSTRUCTION PURPOSES, AS DEFINED HEREIN, INCLUDING THE RIGHT TO OPERATE NECESSARY EQUIPMENT THEREON AND THE RIGHT OF INGRESS AND EGRESS, AS LONG AS REQUIRED FOR SUCH PUBLIC PURPOSE, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE, OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM NECESSARY OR DESIRABLE. ALL TLES EXPIRE AT THE COMPLETION OF THE CONSTRUCTION PROJECT FOR WHICH THIS INSTRUMENT IS GIVEN.

A **PERMANENT LIMITED EASEMENT** (PLE) IS A RIGHT FOR CONSTRUCTION AND MAINTENANCE PURPOSES, AS DEFINED HEREIN, INCLUDING THE RIGHT TO OPERATE NECESSARY EQUIPMENT THEREON AND THE RIGHT OF INGRESS AND EGRESS, AS LONG AS REQUIRED FOR SUCH PUBLIC PURPOSE, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE, OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM NECESSARY OR DESIRABLE. BUT WITHOUT PREJUDICE TO THE OWNER'S RIGHT TO MAKE OR CONSTRUCT IMPROVEMENT ON SAID LANDS OR TO FLATTEN THE SLOPES, PROVIDING SAID ACTIVITIES WILL NOT IMPAIR OR OTHERWISE ADVERSELY AFFECT THE HIGHWAY FACILITIES.

A **HIGHWAY EASEMENT** (HE) IS AN EASEMENT FOR HIGHWAY PURPOSES, AS LONG AS SO USED, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM NECESSARY OR DESIRABLE.

DIMENSIONING FOR THE NEW RIGHT-OF-WAY IS MEASURED ALONG AND PERPENDICULAR TO NEW REFERENCE LINES.



THIS IS A COPY. ORIGINAL DOCUMENT IS AT THE KENOSHA COUNTY REGISTER OF DEEDS.

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 3200-02-23 - 4.01
SHEET 2 OF 2
AMENDMENT NO:

FILE NAME : J:\projects\d2_r_32000245\23\040400_ts.dgn PLOT DATE : 14-APR-2014 17:11 PLOT BY : dotsls PLOT NAME : PLOT SCALE : 100.000000:1.000000

CONST. 3200-02-73 R/W 3200-02-23 4.01

TRANSPORTATION PROJECT PLAT NO: 3200-02-23 - 4.01
AMENDMENT NO. 1

AMENDS TRANSPORTATION PROJECT PLAT 3200-02-23-4.01 RECORDED AS DOCUMENT 1724571 BY REVISING PARCEL 74.

THAT PART OF LOTS 66 & 67, CHERRI VISTA DELLS SUBDIVISION, AND ALSO THAT PART OF THE NW1/4-SW1/4, SW1/4-SW1/4, AND THE SE1/4-SW1/4, SECTION 33, TOWN 1 NORTH, RANGE 21 EAST, VILLAGE OF BRISTOL, KENOSHA COUNTY, WISCONSIN.

RELOCATION ORDER USH 45 ILLINIOIS STATE LINE TO STH 50 KENOSHA COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3) AND 84.09, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 3200-02-23-4.01
AMENDMENT NO: 1

20124 Pg 3
DOCUMENT
1761185
RECORDED
At Kenosha County, Kenosha WI 53140
Jolliene M. Stark, Register of Deeds
November 13, 2015 2:20 PM
$25.00
Pages: 1

SCHEDULE OF LANDS & INTERESTS REQUIRED		OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY, AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTEREST TO THE DEPARTMENT.						
PARCEL NUMBER	OWNER CALCULATED *	INTEREST REQUIRED	R/W REQUIRED (ACRES) NEW	EXISTING	TOTAL	T.L.E. TEMP. ACRES	P.L.E. PERM. ACRES
1	STEVEN H. & BARBARA J. GUNDERSON	FEE,TLE	0.15	0.37	0.52	0.03	
2	SERBIAN ORTHODOX METROPOLITAN	FEE,TLE	0.27	0.35	0.62	0.08	
3	MABEL ALEXANDRIA CEISEL	FEE,TLE	0.00	0.74	0.74	0.19	
4	AVRAM & MARIA BOGOJEL	FEE,PLE,TLE	0.00	0.37	0.37	0.13	0.01
5	SERBIAN ORTHODOX METROPOLITAN	FEE,TLE	0.00	0.69	0.69	0.07	
74	ELFERING FARMS, LLC	FEE,TLE	0.08	0.59	0.67	0.13	
75	JOYCE WEBBER	FEE,TLE	0.00	0.07	0.07	0.02	
76	LONE HORN, LLC	FEE,TLE	0.00	0.45	0.45	0.15	
77	JAN RADON LC TO LARRY HOLST	FEE,PLE,TLE	0.02	1.07	1.09	0.20	0.01
78	DAVID W JR & LAURA A GREENWELL	FEE,TLE	0.00	0.42	0.42	0.05	
79	TIMOTHY J & DEBORAH VOJTECH	FEE,TLE	0.00	0.30	0.30	0.03	
80	CHADWICK & APRIL TONEY, ET AL	TLE				0.01	
124	EUGENE J WAGNER JR	FEE,TLE	0.00	0.30	0.30	0.01	

UTILITY SCHEDULE & INTERESTS REQUIRED		
UTILITY NUMBER	OWNER	INTEREST REQUIRED
200	WE-ENERGIES - ELECTRIC	RELEASE OF RIGHTS
200	WE-ENERGIES - GAS	RELEASE OF RIGHTS
202	FRONTIER COMMUNICATIONS	RELEASE OF RIGHTS

WE-ENERGIES - ELECTRIC (200)
PARCELS 2,76,124 V.194, P.470, DOC.224556
PARCEL 76 V.342, P.471, DOC.322947
PARCELS 77,79 NO RECORDED EASEMENT
PARCEL 80 V.914, P.905, DOC.571185

WE-ENERGIES - GAS (201)
PARCELS 2,76,124 V.194, P.470, DOC.224556

VERIZON NORTH, INC. (202)
PARCEL 4 V.873, P.238, DOC.543662
PARCEL 75 V.873, P.241, DOC.543665
PARCEL 78 V.879, P.305, DOC.547664
PARCEL 79 V.879, P.312, DOC.547670
PARCEL 80 V.876, P.317, DOC.545684

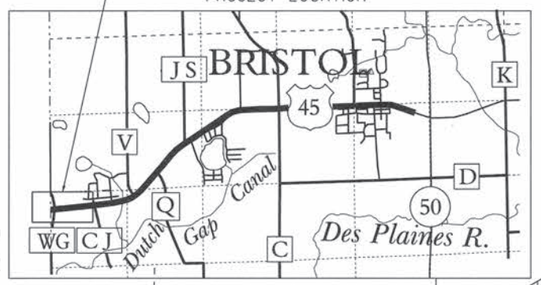
CURVE INFORMATION	
128th St. ℄ CUR5	
PI	47+05.60
Y	101772.31
X	574452.94
DELTA	23°10'32"
D	5°30'00"
T	213.61'
L	421.37'
R	1041.74'
LCH	418.51'
CB	N 84°19'16" E
CURVE 128th St. PL	SCUR1
L	335.12'
R	1041.74'
LCH	333.68'
CB	N85°08'28"E

CURVE PRW99 Parcel 174	
L	333.78'
R	991.74'
LCH	332.21'
CB	N85°33'50"E

CURVE RW1 PARCEL 74		CURVE RW2 PARCEL 3	
L	327.19'	L	343.03'
R	1001.74'	R	1081.74'
LCH	325.74'	LCH	341.59'
CB	S85°16'51"W	CB	N85°00'30"E

SCALE, FEET
0 100 200

SHEET LOCATION
PROJECT LOCATION



NOTES:
COORDINATES AND BEARINGS SHOWN ON THIS PLAT ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM, KENOSHA COUNTY, NAD 83 (2007) ADJUSTMENT, USING THE WISCORS NETWORK.
RIGHT-OF-WAY MONUMENTS ARE TYPE 2 (TYPICAL ¾" REBAR) AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT BY SOUTHEAST REGION SURVEY.
FOR THE LATEST ACCESS / DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN WAUKESHA.

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET, RECORDED AS PAGE 2 OF 2 OF DOCUMENT 1724571.

USH 45 IS CONTROLLED ACCESS PER PROJECT 3200-10-29 RECORDED AS DOCUMENT NO. 1683608 IN KENOSHA COUNTY.

HWY	BASIS OF EXISTING R/W	WIDTH	YEAR
CTH WG/128TH ST	TOWN RECORDS V.1, P.28	3 RODS	1848
CTH WG/128TH ST	PIKEVILLE ROAD PROJECT	80'	1956
USH 45	PROJECT DJ 2478	VARIES	1941
USH 45	CHERRI VISTA DELLS SUB.	45'	1965
USH 45	CSM 2508 Doc.1465265	55'	xxxx

THIS IS A COPY. ORIGINAL DOCUMENT IS AT THE KENOSHA COUNTY REGISTER OF DEEDS.

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

I STEVEN L. SCHMIDT PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT OF TRANSPORTATION, I HAVE MAPPED THIS TRANSPORTATION PROJECT PLAT AND SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN STEVEN L. SCHMIDT S-2813 ELKHORN WI LAND SURVEYOR

SIGNATURE: Steven L. Schmidt DATE: 11/09/15
PRINTED NAME: STEVEN L. SCHMIDT PLS
REGISTRATION NUMBER: S-2813
THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION SOUTHEAST REGION.
SIGNATURE: Robert L. Duffeck DATE: 11/09/15
PRINTED NAME: ROBERT L. DUFFECK PE

PLOT DATE : 06-NOV-2015 11:23 PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : 100.000000:1.000000
CONST. 3200-02-73 R/W 3200-02-23 4.01 AMENDMENT NO. 1

TRANSPORTATION PROJECT PLAT NO: 3200-02-23 - 4.02

THAT PART OF LOTS 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 67, & 68 OF CHERRI VISTA DELLS SUBDIVISION, AND ALSO THAT PART OF THE NW1/4-NW1/4 AND THE SW1/4-NW1/4, SECTION 33, TOWN 1 NORTH, RANGE 21 EAST, VILLAGE OF BRISTOL, KENOSHA COUNTY, WISCONSIN.

RELOCATION ORDER USH 45 ILLINOIS STATE LINE TO STH 50 KENOSHA COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3) AND 84.09, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 3200-02-23-4.02
AMENDMENT NO:

DOCUMENT
1730001
RECORDED
At Kenosha County, Kenosha WI 53140
Jolilyn K. Starz, Register of Deeds
July 11, 2014 10:46 AM
$25.00
Pages 1
20125

SCHEDULE OF LANDS & INTERESTS REQUIRED — OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY, AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTEREST TO THE DEPARTMENT.

PARCEL NUMBER	OWNER CALCULATED *	INTEREST REQUIRED	R/W REQUIRED (ACRES) NEW	EXISTING	TOTAL	T.L.E. TEMP. ACRES	P.L.E. PERM. ACRES
6	JAMES J. & LINDA D. SIWEK	FEE,TLE	0.12	0.51	0.63	0.03	
7	WDM ENTERPRISES, LLC	FEE,TLE	0.12	0.95	1.07	0.05	
8	DANIEL R. REEVES	FEE,TLE	0.02	0.00	0.02	0.04	
9	ROBIN GESINSKI	FEE,TLE	0.06	0.00	0.06	0.04	
10	ANITA PALAZZOLO	FEE,TLE	0.03	0.00	0.03	0.03	
11	RONALD C. & DARLENE L. KAUFFMAN	FEE,TLE	0.03	0.00	0.03	0.03	
12	DAVID W. & HEATHER L. POWERS	FEE,TLE	0.03	0.00	0.03	0.03	
13	PAUL C. PERKINS	FEE,TLE	0.07	0.00	0.07	0.01	
14	DANIEL C. & TAMMY L. BOCKRATH	FEE,TLE	0.04	0.00	0.04	0.08	
15	WILLIAM D & DIANE M MAYER	FEE	0.14	0.62	0.76		
80	CHADWICK & APRIL TONEY	TLE				0.02	
81	JIM & CAROL WINDER	FEE,TLE	0.02	0.00	0.02	0.02	
82	CHARLES A & TINA M SWAN	TLE				0.03	
83	ROBERT G & TRACY R CUBA	TLE				0.03	
84	MARJORIE H SINKOVEC	TLE				0.03	
85	ALAN H AICHER	FEE,TLE	0.01	0.00	0.01	0.05	
86	MICHAEL A & GAYLE S WILLKOMM	TLE				0.03	
87	JAMES A BUTTERBRODT	TLE				0.01	
88	UNITED CEMETERY ASSOCIATION	TLE				0.01	

CTL QUARTER SEC. COR. "CALCULATED FROM SOUTH WITNESS CORNER" CORNER NOT SET
Y=104271.86
X=573492.92

SEC. LINE

WEST QUARTER LINE S88°49'04"E (2651.26')
SEE TPP 3200-02-23-4.01

CTL QUARTER SEC. COR. "CALCULATED FROM SOUTH WITNESS CORNER" CORNER NOT SET
Y=104271.78
X=573492.98

STA 46+54.82 R

CHERRI VISTA DELLS SUBDIVISION

TLE FOR SLOPES ALL PARCELS

NO ACCESS TO USH 45 PER SUBDIVISION

182ND AVE.

119th ST

121st ST

BUILDING

BARN

VILLAGE

BRISTOL CEMETERY

STA 46+74.70
Y=104271.06
X=574484.18

SEC LINE S88°40'59"E (2646.65')

SEC 1135 SECTION CORNER CONC. MON. W/BRASS CAP
Y=106912.04
X=573474.95

SEE TPP 3200-02-23-4.03

STA 73+40.35 R

SEC 1136 QUARTER SEC. COR. CONC. MON. W/BRASS CAP
Y=106851.20
X=576120.90

SEC 1149 CENTER OF SEC. CONC. MON. W/BRASS CAP
Y=104217.09
X=576143.68

1612.40'

STA 49+10.32 USH 45 ℄ =
STA 50+00.00 CTH CJ ℄

SW-NW 33-1-21

T-1-N

R-21-E

1/16TH LINE

NW-NW 33-1-21

NO ACCESS PER PROJECT T058-1 (22) V.514, P.394, DOC.404289

OF

WE-ENERGIES - ELECTRIC (200)

PARCELS 6,7	NO RECORDED EASEMENT
PARCELS 8-14	V.914, P.905, DOC.571185
PARCELS 80-86	V.914, P.905, DOC.571185

VERIZON NORTH, INC. (202)

PARCELS 8-14	V.876, P.317, DOC.545684
PARCELS 80-87	V.876, P.317, DOC.545684
PARCEL 88	NO RECORDED EASEMENT

CURVE INFORMATION

USH 45 ℞ CUR1207	
PI	76+63.97
Y	107247.43
X	574206.77
DELTA	-43°10'39"
D	1°45'00"
T	1295.54'
L	2467.28'
R	3274.04'
LCH	2409.32'
CB	N 26°54'49" E

CURVE	SCUR1207
USH 45	
L	971.92'
R	3274.04'
LCH	968.36'
CB	N13°49'45"W

CURVE	PL1
PARCELS	85 & 86
L	259.16'
R	3229.04'
LCH	259.09'
CB	N10°48'47"W

CURVE	PL2
PARCELS	86 & 87
L	341.45'
R	3194.04'
LCH	341.29'
CB	N16°10'29"W

CURVE	PL3
PARCEL	88
L	201.93'
R	3209.04'
LCH	201.90'
CB	N21°02'24"W

SCALE, FEET
0 50 100

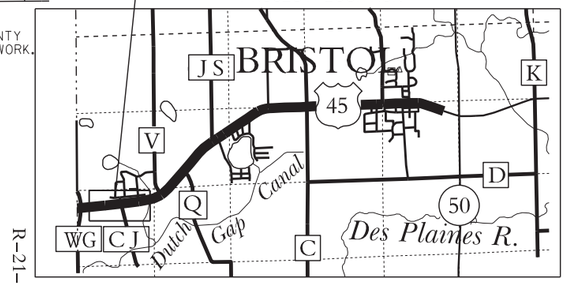
FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET, RECORDED AS SHEET 2 OF 2 OF DOCUMENT 1724571, OF TRANSPORTATION PROJECT PLATS IN THE KENOSHA COUNTY REGISTER OF DEEDS.

NOTES:
COORDINATES AND BEARINGS SHOWN ON THIS PLAT ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM, KENOSHA COUNTY, NAD 83 (2007) ADJUSTMENT, USING THE WISCORS NETWORK.
RIGHT-OF-WAY MONUMENTS ARE TYPE 2 (TYPICAL ¾" REBAR) AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT BY SOUTHEAST REGION SURVEY.
FOR THE LATEST ACCESS / DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN WAUKESHA.

UTILITY SCHEDULE & INTERESTS REQUIRED

UTILITY NUMBER	OWNER	INTEREST REQUIRED
200	WE-ENERGIES - ELECTRIC	RELEASE OF RIGHTS
202	FRONTIER COMMUNICATIONS	RELEASE OF RIGHTS

SHEET LOCATION / PROJECT LOCATION



USH 45 IS CONTROLLED ACCESS PER PROJECT 3200-10-29 RECORDED AS DOCUMENT NO. 1683608 IN KENOSHA COUNTY.

HWY	BASIS OF EXISTING R/W	WIDTH	YEAR
CTH CJ	STATUTE 82.31(2)	66'	
USH 45	PROJECT DJ 2478	VARIES	1941
USH 45	PROJECT T058-1(22)	VARIES	1958
USH 45	CHERRI VISTA DELLS SUB.	45'	1965
119th ST, 121st ST	CHERRI VISTA DELLS SUB.	66'	1965

THIS IS A COPY. ORIGINAL DOCUMENT IS AT THE KENOSHA COUNTY REGISTER OF DEEDS.

I HEREBY CERTIFY THAT THIS PLAT MEETS ALL REQUIREMENTS OF SECTION 84.095, WISCONSIN STATUTES. THIS PLAT WAS PREPARED BY OR UNDER THE DIRECTION OF

STEVEN L SCHMIDT PLS — 6/30/2014
PRINTED NAME — SIGNATURE — DATE

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION

ROBERT L DUFFECK PLS — 6/30/2014
PRINTED NAME — SIGNATURE — DATE

FILE NAME : J:\projects\d2_r_32000245\23\040402_rp.dgn
PLOT DATE : 30-JUN-2014 13:20
PLOT BY : dotsls
PLOT NAME :
PLOT SCALE : 100.000000:1.000000
CONST. 3200-02-73 R/W 3200-02-23 4.02

TRANSPORTATION PROJECT PLAT NO: 3200-02-23 - 4.03
AMENDMENT NO. 1

AMENDS TRANSPORTATION PROJECT PLAT 3200-02-23-4.03 RECORDED AS DOCUMENT 1730002 BY REVISING UTILITY NUMBER 203.

THAT PART OF LOT 1, CSM 542, LOT 1, CSM 861, AND ALSO THAT PART OF THE SW1/4-SW1/4, SECTION 28, TOWN 1 NORTH, RANGE 21 EAST, AND ALSO THAT PART OF THE NE1/4-SE1/4, SECTION 29, TOWN 1 NORTH, RANGE 21 EAST, VILLAGE OF BRISTOL, KENOSHA COUNTY, WISCONSIN.

RELOCATION ORDER USH 45 ILLINOIS STATE LINE TO STH 50 KENOSHA COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3) AND 84.09, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 3200-02-23-4.03
AMENDMENT NO: 1

DOCUMENT
1770583
RECORDED
At Kenosha County, Kenosha WI 53140
Jolliya M. Storz, Register of Deeds
April 26, 2016 12:28 PM
$25.00
Pages 1

#201216(Amd1) B2

USH 45 ℄ CUR1207	
PI	76+63.97
Y	107247.43
X	574206.77
DELTA	-43°10'39"
D	1°45'00"
T	1295.54'
L	2467.28'
R	3274.04'
LCH	2409.32'
CB	N 26°54'49" E

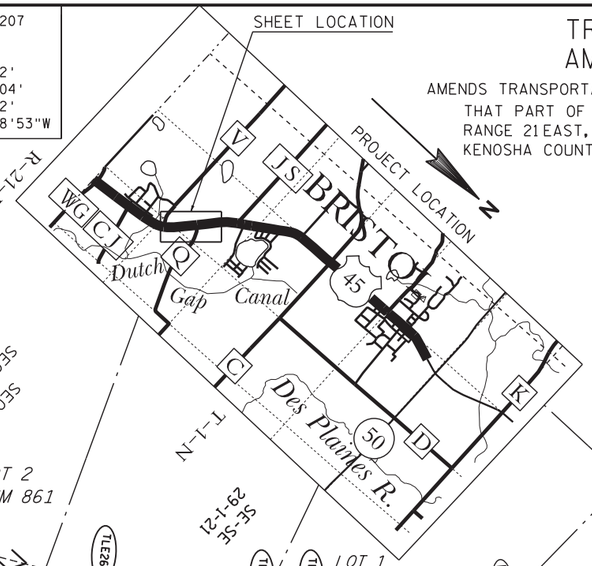
CURVE TCUR1207 USH 45	
L	425.52'
R	3274.04'
LCH	425.22'
CB	N26°03'24"W

CURVE UCUR1207 USH 45	
L	534.12'
R	3274.04'
LCH	533.55'
CB	N34°27'13"W

CURVE VCUR1207 USH 45	
L	535.72'
R	3274.04'
LCH	535.12'
CB	N43°48'53"W

CURVE INFORMATION

SHEET LOCATION



CURVE RW4 PARCELS 18 & 19	
L	464.42'
R	3209.04'
LCH	464.02'
CB	N34°58'52"W

CURVE RW5	
L	525.08'
R	3209.04'
LCH	524.50'
CB	N43°48'53"W

CURVE RW3	
L	1553.46'
R	3339.04'
LCH	1539.49'
CB	N35°10'27"W

SCALE, FEET
0 100 200

VILLAGE OF BRISTOL

SEE TPP 3200-02-23-4.02

SEC LINE (2646.65') N88°40'59"W
STA 73+40.35 ℞

SEC 1135 CONC. MON. W/BRASS CAP Y=1069312.04 X=573474.95

CEMETERY

CTH V S61°10'30"W

N28°49'30"W 33'

LOT 1 CSM 861 V.1100,P.641 DOC.683108

LOT 2 CSM 861

18 TLE FOR SLOPES

RWB539 78+03.80 174.13'
RWB540 78+02.54 131.15'
RWB541 78+26.17 65'

TLE282 78+42.33 65'
TLE284 TLE283 81+00 80'65'

620.75'
71.80'
65'
75'
43'
N40°15'27"E 70.00'

TCUR1207 425.52'
UCUR1207 534.12'
CUR1207 535.72'
RW4 464.42'
RW3 1553.46'

19

TLE265 RWB542 83+00 80'65'
N5°05'22"E 97'

TLE FOR D/W

TLE285 TLE287 TLE286 86+00 75'65'
TLE288 TLE289 86+70 75'65'

89 TLE FOR D/W

LOT 1 CSM 542 V.1021,P.222 DOC.696793

EXRW1002 88+35.72 65'
N41°29'52"E 65.00'

PT 88+35.72

OF 1/6 TH LINE

RW2

USH 45 ℄ ℞ N48°30'08"W

956.81'

65' 65' 65' 50' 95' 90' 85'

1/6 TH LINE N00°40'26"W
STA 103+23.08 ℞

STA 101+04.18 USH 45 ℞ =
STA 50+00.00 CTH Q ℞

NO ACCESS WISDOT TO MAINTAIN SLOPES V.1360,P.961 DOC.825720

LOT B CSM 741

LOT A CSM 741 V.1063,P.633 DOC.661440

SEE TPP 3200-02-23-4.04

530.55'
313.02'
883.02'
195.52'

N89°52'33"W

N37°18'48"W 125'
N35°35'44"E 158.19'
N79°43'48"W 125'
N53°24'02"E
66.00' N36°35'58"W
C-TH-Q

100+31.75 144.58'
100+39.90
101+04.56
101+81.91
103+77.43

RWB543 RWB544 RWB545 RWB546 RWB547 RWB548

20

BRISTOL

16 TLE TO REMOVE (1) D/W

TLE288 TLE289 TLE290 TLE291 77+50 65'70' 78+15

STA 77+65.88 USH 45 ℞ =
STA 50+00.00 CTH V ℞

EXRW1001 88+35.72 65'

SEC. LINE (2643.37') N00°37'58"W
STA 85+17.42 ℞

SEC 1136 QUARTER SEC. COR. W/BRASS CAP CONC. MON. Y=1068651.20 X=571620.90

SEC 1122 QUARTER SEC. COR. W/BRASS CAP CONC. MON. Y=1095555.24 X=571445.75

SW-SW 28-1-21
NE-SE 29-1-21
SE-SE 29-1-21

73+12.49 65'
N88°40'59"W 70.83'
USH 45 ℞
PI 76+63.97

UTILITY SCHEDULE & INTERESTS REQUIRED		
UTILITY NUMBER	OWNER	INTEREST REQUIRED
200	WE-ENERGIES - ELECTRIC	RELEASE OF RIGHTS
202	FRONTIER COMMUNICATIONS	RELEASE OF RIGHTS
203	AMERICAN TRANSMISSION CO. LLC	RELEASE OF RIGHTS

WE-ENERGIES - ELECTRIC (200)

PARCELS 16,19,89	V.305, P.333, DOC.297114
PARCELS 18,89	V.305, P.332, DOC.297113
PARCEL 20	V.305, P.327, DOC.297108
PARCEL 20	V., P., DOC.226087

VERIZON NORTH, INC. (202)
PARCELS 18,19,89 V.873, P.240, DOC.543664

AMERICAN TRANSMISSION CO., LLC (203)
PARCEL 20 DOC.1187718, 1207209

USH 45 IS CONTROLLED ACCESS PER PROJECT 3200-10-29 RECORDED AS DOCUMENT NO. 1683608 IN KENOSHA COUNTY.

HWY	BASIS OF EXISTING R/W	WIDTH	YEAR
CTH Q	STATUTE 82.31(2)	66'	
CTH V	STATUTE 82.31(2)	66'	
USH 45	PROJECT DJ 2478	VARIES	1941
USH 45	PROJECT LSF058-1(1)	VARIES	1958
USH 45	CSM 741 V1063,P633,DOC661440	50'	1979
USH 45	DEED V1360,P961, DOC825720	VARIES	1989

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY, AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTEREST TO THE DEPARTMENT.

PARCEL NUMBER	OWNER CALCULATED *	INTEREST REQUIRED	R/W REQUIRED (ACRES) NEW	EXISTING	TOTAL	T.L.E. TEMP. ACRES	P.L.E. PERM. ACRES
16	DAVID & LITA PRICE	TLE				0.01	
18	MAW, LLC	FEE,TLE	0.02	0.07	0.09	0.05	
19	LINDA KELLY	FEE,TLE	0.00	0.02	0.02	0.05	
20	BERNADINE S KURYLO LIFE ESTATE	FEE	0.09	1.00	1.09		
89	LINDA M SLACK	TLE				0.02	

NOTES:

COORDINATES AND BEARINGS SHOWN ON THIS PLAT ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM, KENOSHA COUNTY, NAD 83 (2007) ADJUSTMENT, USING THE WISCORS NETWORK.

RIGHT-OF-WAY MONUMENTS ARE TYPE 2 (TYPICAL ¾" REBAR) AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT BY SOUTHEAST REGION SURVEY.

FOR THE LATEST ACCESS / DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN WAUKESHA.

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET, RECORDED AS SHEET 2 OF 2 OF DOCUMENT 1724571, OF TRANSPORTATION PROJECT PLATS IN THE KENOSHA COUNTY REGISTER OF DEEDS.

THIS IS A COPY. ORIGINAL DOCUMENT IS AT THE KENOSHA COUNTY REGISTER OF DEEDS.

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

I STEVEN L. SCHMIDT PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT OF TRANSPORTATION, I HAVE MAPPED THIS TRANSPORTATION PROJECT PLAT AND SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN STEVEN L. SCHMIDT S-2813 ELKHORN WI LAND SURVEYOR

SIGNATURE: Steven Schmidt DATE: 4/22/16
PRINTED NAME: STEVEN L. SCHMIDT PLS
REGISTRATION NUMBER: S-2813

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION SOUTHEAST REGION.

SIGNATURE: Robert L Duffeck DATE: 4/22/16
PRINTED NAME: ROBERT L. DUFFECK

FILE NAME : J:\projects\d2_r_32000245\23\040403A1_rp.dgn PLOT DATE : 21-APR-2016 10:12 PLOT BY : dotsls PLOT NAME : PLOT SCALE : 100.000000:1.000000

CONST. 3200-02-73 R/W 3200-02-23 4.03 AMENDMENT NO. 1

TRANSPORTATION PROJECT PLAT NO: 3200-02-23 - 4.04
AMENDMENT NO. 1

AMENDS TRANSPORTATION PROJECT PLAT 3200-02-23-4.04 RECORDED AS DOCUMENT 1730003 BY REVISING UTILITY NUMBER 203.
THAT PART OF LOTS 16, 17, 18, 19, 20, 21, HILLCREST SUBDIVISION FIRST ADDITION, AND ALSO THAT PART OF LOT 1, CSM 2312, AND ALSO THAT PART OF THE SW1/4-NE1/4, THE SE1/4-NW1/4, THE NE1/4-NW1/4, AND THE NW1/4-NW1/4, SECTION 29, TOWN 1 NORTH, RANGE 21 EAST, VILLAGE OF BRISTOL, KENOSHA COUNTY, WISCONSIN.

RELOCATION ORDER USH 45 ILLINOIS STATE LINE TO STH 50 KENOSHA COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3) AND 84.09, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 3200-02-23-4.04
AMENDMENT NO: 1

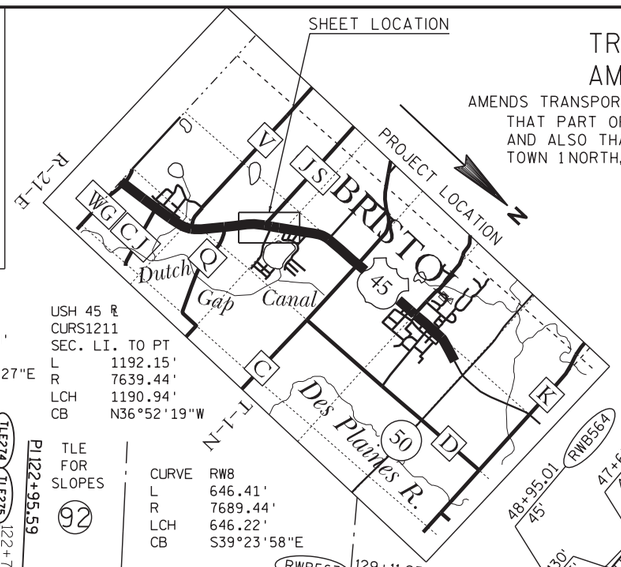
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1770584
RECORDED
At Kenosha County, Kenosha WI 53140
JoEllyn K. Storz, Register of Deeds
April 26, 2016 12:28 PM
$25.00
Pages 1

2012(AMD1) Pg.2

USH 45 ℄ CUR1211		CTH JS ℄ CURJS2	
PI	122+95.59	PI	49+47.98
Y	110398.32	Y	110986.51
X	570645.05	X	570216.54
DELTA	16°06'03"	DELTA	31°57'01" (LT)
D	00°45'00"	D	30°58'14"
T	1080.51'	T	52.96'
L	2146.78'	L	103.16'
R	7639.44'	R	185.00'
LCH	2139.73'	LCH	101.83'
CB	N 40°27'07" E	CB	N 70°54'42" E

SEC 1121 QUARTER SEC. COR. W/BRASS CAP CONC. MON. Y=10958 4.60 X=5107 87.84

SHEET LOCATION



VILLAGE

FRONTIER COMMUNICATIONS
PARCELS 21, 22, 29, 30
PARCELS 91, 92
NO RECORDED EASEMENT
NO RECORDED EASEMENT

202

SW-NE 29-1-21

SE-NW 29-1-21

CURVE RW6
PARCEL 91
L 42.37'
R 7689.44'
LCH 42.37'
CB S42°27'27"E

USH 45 ℄
CURS1211
SEC. LI. TO PT
L 1192.15'
R 7639.44'
LCH 1190.94'
CB N36°52'19"W

192nd Ave

TLE FOR SLOPES 91

TLE FOR SLOPES 92

TLE271 120+42.05 112.95'

TLE270 120+00 50'

STA 120+75.14 USH 45 ℄ = STA 50+00.00 192ND AVE ℄

SEE TPP 3200-02-23-4.03

N47°23'05"E 773.33'

602.16'

121+06.75 150'

121+50 60'

122+75 60.50'

PI 122+95.59

TLE272 TLE273 TLE274 TLE275

RW6 RW8

CURS1211 CURI211

USH 45 IS CONTROLLED ACCESS PER PROJECT 3200-10-29 RECORDED AS DOCUMENT NO. 1683608 IN KENOSHA COUNTY.

HWY	BASIS OF EXISTING R/W	WIDTH	YEAR
CTH JS	TOWN RECORDS V2,P378	4 RODS	1928
USH 45	PROJECT DJ 2478	VARIES	1941
106th St	STATUTE 82.31(2)	66'	
192nd Ave	STATUTE 82.31(2)	66'	
196th Ave	HILLCREST SUBDIVISION	66'	1927

121+07.67 50' EXRW1004

120+42.10 50' EXRW1003

LOT 1 CSM 2312 DOC. 1314962

ACCESS PER DOC. 1313408

RWB549 127+49.88 50'55'

TLE276

CURVE RW7
L 744.97'
R 7589.44'
LCH 744.67'
CB N39°48'12"W

SEE DETAIL

RWB550 128+50.10

RWB551 133+23.82 60'

TLE278 133+32.13 75'

RWB552 133+50.64 108.18'

RWB553 133+38.58 156.76'

N18°49'03"W 80.00'

CURVE PRW1
PARCEL 29
L 470.00'
R 7579.44'
LCH 469.92'
CB N34°27'47"W

470' PRW1

TLE277

RWB554 RWB555 RWB556

PT 133+61.86

S71°10'57"W 134+96.82

134+28.56 126.98'

134+65.88 80'

RWB557 RWB558 RWB559 RWB560

135+65.88 80',95'

136+65.88 60',85',95'

TLE279

TLE280

TLE FOR CULVERT CONSTRUCTION PARCEL 30

TLE FOR SLOPES 120

RWB561 138+68.23 60'

139+28.94

TLE TO REMOVE ROAD PARCELS 30 & 93

SEE TPP 3200-02-23-4.05

1302.83'

SB 216.99'

143+72.80 182.27' AM

PROP1009

143+64.18 195.61'

142+95.99 173.95'

142+94.81 178.81'

TLE283 TLE281 TLE282

TLE FOR D/W PARCEL 94

TLE FOR D/W PARCEL 44

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET, RECORDED AS SHEET 2 OF 2 OF DOCUMENT 1724571, OF TRANSPORTATION PROJECT PLATS IN THE KENOSHA COUNTY REGISTER OF DEEDS.

DETAIL N.T.S.
N54°56'11"E 1.82'
CUR JS1
PT 49+98.18

WE-ENERGIES - GAS
PARCELS 91, 92
NO RECORDED EASEMENT

201

SE-NW 29-1-21

SW-NW 29-1-21

1/16TH LINE

CURVE PRW2
PARCELS 22 & 23
L 263.37'
R 7699.44'
LCH 263.36'
CB S33°22'53"E

N.T.S.

TLE FOR SLOPES PARCELS 22,23,24,25,26,27,28,29

RWB562 127+49.88 50'

RWB563 129+11.23 60'

162.81' N39°54'26"W

N70°43'56"W PI 110'

47+65.11 45'.33'

N86°53'14"E CTH JS

48+95.01 45'

RWB564 RWB565 RWB566 RWB567 RWB568 RWB569 RWB570 RWB571 RWB572 RWB573 RWB574

TLE284 TLE285 TLE286 TLE287 TLE288 TLE289 TLE290

133+00 55',60'

133+61.86 80',60'

134+14.46 70',60'

136+14.46 80',72',70',55'

PRW2 263.37'

PT 48+95.01

RC 48+95.01

N02°07'34"W

PI 110'

52.60'

N30°52'35"W 100'

N83°56'19"W 60.00'

USH 45 ℄ = STA 130+10.00 USH 45 ℄ = STA 50+00.00 CTH JS ℄

N32°24'05"W

918.05'

65'

TLE TO REMOVE ROAD PARCELS 30 & 93

1128.67'

SB 216.99'

1302.83'

SEE TPP 3200-02-23-4.05

73.65'

142+44.46 144'470 80',65'

145+32.51 80',65'

RWB575

TLE292 TLE293 TLE294

VACATED STREET

HILL CREST SUBDIVISION FIRST ADDITION

BRISTOL

STA 144+90.53 ℄ SECTION LINE N89°32'32"W (2643.28')

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY, AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTEREST TO THE DEPARTMENT.

PARCEL NUMBER	OWNER CALCULATED *	INTEREST REQUIRED	R/W REQUIRED (ACRES) NEW	EXISTING	TOTAL	T.L.E. TEMP. ACRES	P.L.E. PERM. ACRES
21	MICHAEL A. & IRENE C. GROSS TRUST	FEE	0.11	0.44	0.55		
22	CHARLES WEINHOLTZ	FEE,TLE	0.01	0.39	0.40	0.03	
23	DONALD ROY & CAROLE JORDAN	FEE,TLE	0.02	0.38	0.40	0.10	
24	PETER T. NELSON SR	FEE,TLE	0.12	0.45	0.57	0.07	
25	JEFFREY A VOS	FEE,TLE	0.11	0.38	0.49	0.06	
26	GLENN & BEVERLY GIESEKE	FEE,TLE	0.04	0.10	0.14	0.02	
27	GLENN E & TRICIA NELSON	FEE	0.04	0.12	0.16	0.00	
28	GLENN D. & JANE KURYLO	FEE,TLE	0.01	0.14	0.15	0.01	
29	ROBERT A. CHUDY TRUST	FEE,TLE	0.15	0.67	0.82	0.17	
30	ROBERT A. CHUDY TRUST	FEE,TLE	0.17	0.99	1.16	0.16	
44	VILLAGE OF BRISTOL	TLE				0.02	
91	JOEL & MICHELE KENNEDY	TLE				0.03	
92	MILICA, PETAR, & MILAN TRBOVIC	TLE				0.08	
93	GARY C WIER	TLE				0.07	
94	BRISTOL FARM INC	FEE,TLE	0.00	0.25	0.25	0.02	
120	CYNTHIA A CRAVENS	TLE				35 SF	

SCALE, FEET
0 100 200

AMERICAN TRANSMISSION CO., LLC

PARCEL 28	DOC.1187718, 1207209
PARCEL 29	DOC.1078031
PARCEL 30	DOC.1082651
PARCEL 94	DOC.1083554

WE-ENERGIES - ELECTRIC

PARCELS 22,23	V.208, P.145, DOC.234077
PARCELS 25-27	V.208, P.146, DOC.234079
PARCELS 25-26	V.330, P.325, DOC.314245
PARCELS 28-30	V.196, P.573, DOC.226087
PARCELS 29-30	DOC.1078031, 1082651
PARCELS 29-30	V.305, P.327, DOC.297108
PARCELS 29-30	V.348, P.130, DOC.326804
PARCELS 29-30	V.348, P.130, DOC.326804
PARCEL 94	V.285, P.9, DOC.285347

200

QUARTER LINE N00°31'56"W (2668.68') STA 121+69.72 ℄

106th St

SEC 1108 QUARTER SEC. COR. W/BRASS CAP CONC. MON. Y=112253.16 X=510763.05

UTILITY SCHEDULE & INTERESTS REQUIRED

UTILITY NUMBER	OWNER	INTEREST REQUIRED
200	WE-ENERGIES - ELECTRIC	RELEASE OF RIGHTS
201	WE-ENERGIES - GAS	RELEASE OF RIGHTS
202	FRONTIER COMMUNICATIONS	RELEASE OF RIGHTS
203	AMERICAN TRANSMISSION CO, LLC	RELEASE OF RIGHTS

THIS IS A COPY. ORIGINAL DOCUMENT IS AT THE KENOSHA COUNTY REGISTER OF DEEDS.

IDENTICAL POINTS

NOTES:
COORDINATES AND BEARINGS SHOWN ON THIS PLAT ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM, KENOSHA COUNTY, NAD 83 (2007) ADJUSTMENT, USING THE WISCORS NETWORK.
RIGHT-OF-WAY MONUMENTS ARE TYPE 2 (TYPICAL 3/4" REBAR) AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT BY SOUTHEAST REGION SURVEY.
FOR THE LATEST ACCESS / DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN WAUKESHA.

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

I STEVEN L. SCHMIDT PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT OF TRANSPORTATION, I HAVE MAPPED THIS TRANSPORTATION PROJECT PLAT AND SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN STEVEN L. SCHMIDT S-2813 ELKHORN WI LAND SURVEYOR

SIGNATURE: Steven Schmidt DATE: 4/22/16
PRINTED NAME: STEVEN L. SCHMIDT PLS
REGISTRATION NUMBER: S-2813

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION SOUTHEAST REGION.
SIGNATURE: Robert L Duffeck DATE: 4/22/16
PRINTED NAME: ROBERT L. DUFFECK

FILE NAME : J:\projects\d2_r_32000245\23\040404A1_rp.dgn PLOT DATE : 21-APR-2016 10:13 PLOT BY : dotsls PLOT NAME : PLOT SCALE : 100.000000:1.000000

CONST. 3200-02-73 R/W 3200-02-23 4.04 AMENDMENT NO. 1

TRANSPORTATION PROJECT PLAT NO: 3200-02-23 - 4.05

THAT PART OF SE1/4-NE1/4 AND THE NE1/4-SE1/4, SECTION 19, TOWN 1 NORTH, RANGE 21 EAST, AND ALSO THAT PART OF SW1/4-NW1/4 AND THE NW1/4-SW1/4, SECTION 20, TOWN 1 NORTH, RANGE 21 EAST, VILLAGE OF BRISTOL, KENOSHA COUNTY, WISCONSIN.

RELOCATION ORDER USH 45 ILLINOIS STATE LINE TO STH 50 KENOSHA COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3) AND 84.09, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

DOCUMENT
1730004
RECORDED
At Kenosha County, Kenosha WI 53140
JoAllyn K. Storz, Register of Deeds
July 11, 2014 10:46 AM
$25.00
Pages 1
#20128

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 3200-02-23-4.05
AMENDMENT NO:

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY, AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTEREST TO THE DEPARTMENT.

PARCEL NUMBER	OWNER CALCULATED *	INTEREST REQUIRED	R/W REQUIRED (ACRES) NEW	EXISTING	TOTAL	T.L.E. TEMP. ACRES	P.L.E. PERM. ACRES
94	BRISTOL FARM INC	FEE,PLE	0.00	5.01	5.01		0.02
95	BRISTOL FARM INC	FEE	0.02	0.58	0.60		
96	PEARL L NELSON	FEE,TLE	0.02	1.57	1.59	0.04	
97	WASYL & NATALIE SZCZERBAK-MIRUTENKO	FEE,TLE	0.00	2.86	2.86	0.20	
98	LLOYD A NELSON	FEE,TLE	0.00	0.38	0.38	0.01	

UTILITY SCHEDULE & INTERESTS REQUIRED

UTILITY NUMBER	OWNER	INTEREST REQUIRED
200	WE-ENERGIES - ELECTRIC	RELEASE OF RIGHTS
202	FRONTIER COMMUNICATIONS	RELEASE OF RIGHTS
203	AMERICAN TRANSMISSION CO, LLC	RELEASE OF RIGHTS

CURVE INFORMATION

USH 45 ℄
CUR1215

PI	170+36.37
Y	114413.06
X	568097.08
DELTA	31°59'33"
D	03°00'00"
T	547.51'
L	1066.42'
R	1909.86'
LCH	1052.62'
CB	N 16°24'18" W

CURVE PRW97
PARCEL 97

L	618.56'
R	1859.86'
LCH	615.72'
CB	N09°56'12"W

WE-ENERGIES - ELECTRIC (200)
PARCEL98 DOC.1136659

FRONTIER COMMUNICATIONS (202)
PARCEL 95 V.695, P.425, DOC.472453
PARCEL 96 V.695, P.424, DOC.472452

AMERICAN TRANSMISSION CO., LLC (203)
PARCEL 94 DOC.1083554
PARCEL 95 DOC.1083553
PARCEL 96 DOC.1073193

SEC 1107 QUARTER SEC. COR. CONC. MON. W/BRASS CAP Y=112274.29 X=568119.85

SEC 1093 QUARTER SEC. COR. CONC. MON. W/BRASS CAP Y=114935.07 X=565444.90

SEC 1094 QUARTER SEC. COR. CONC. MON. W/BRASS CAP Y=114923.75 X=568093.44

SEC 1081 SECTION CORNER CAST IRON PLATE IN CONCRETE W/ IRON COLLAR Y=117578.69 X=568074.49

SEC 1045 QUARTER SEC. COR. CONC. MON. W/BRASS CAP Y=114929.21 X=570748.55

NE-SE 19-1-21 | SE-NE 19-1-21 | NW-SW 20-1-21 | SW-NW 20-1-21

E. QUARTER LINE S89°45'18"E | 98TH ST | 1/16TH LINE S89°38'25"E STA 188+45.98 ℞ | 1/16TH LINE S89°36'46"E | WEST QUARTER LINE S89°52'56"E STA 175+18.48 ℞ | T-1-N | R-21-E

SEC. LINE N00°34'16"W (2649.59') | SEC. LINE N00°24'32"W (2655.01') | USH 45 ℄=℞

RWB577 169+64.84 127.96' | RWB578 173+72.52 41.50' | RWB579 173+74.29 58.41' | RWB580 174+46.97 52.94' | RWB581 174+83.45 102.33' | RWB582 175+59.62 100' | TLE296 175+90.61 55' | RWB583 175+94.05 50' | TLE297 TLE298 178+00 55',50' | TLE299 TLE300 181+75 55',50' | TLE301 TLE302 183+15 55',50' | RWB584 188+46.65 50' | RWB590 188+45.29 50' | RWB589 175+55.28 50' | TLE303 172+00 50' | TLE304 175+16.70 70' | TLE305 178+40 50' | TLE306 TLE307 182+50 50',55' | TLE308 TLE309 185+00 50',55' | TLE310 TLE311 187+50 50',55' | RWB588 169+20.09 50' | RWB587 164+79.65 270.05' | RWB586 160+53.29 351.54' | RWB585 162+33.86 65' | RWB576 161+11.97 65' | PLE9 165+59+00 66.33' | PLE10 165+58.47 81.32' | PLE12 166+07.23 68.80' | PLE11 166+06.34 83.77'

433.57' | 502.2' PL | 307.05' | 322.53' | 1290.00' | 95.22' | 1252.60' | 37.06' | 581.50' TO SEC. LI. PRW97 RWB588-589 | 449.44' | 459.35' | 204.94' | 434.08' | 317.50' | 62.57' | 77.13' | 77.13'

N55°33'48"W 122.29' | N55°02'19"E 60.10' | N00°14'42"E | N57°35'55"E 50.00' | N32°24'05"W 50.00' | N32°24'05"W | N54°30'16"W | N43°13'16"W | N89°49'06"E | N57°35'55"E

15'X50' PLE FOR DRAINAGE

TLE FOR SLOPES AND A D/W (97)

TLE FOR SLOPES (96)

TLE FOR SLOPES (98)

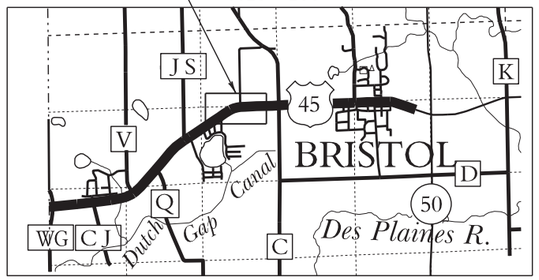
STA 175+55.28 USH 45 ℞ = SECTION LINE

USH 45 IS CONTROLLED ACCESS PER PROJECT 3200-10-29 RECORDED AS DOCUMENT NO. 1683608 IN KENOSHA COUNTY.

HWY	BASIS OF EXISTING R/W	WIDTH	YEAR
USH 45	PROJECT DJ 2478	VARIES	1941
98th ST	PROJECT DJ 2478	80'	1941
196th AVE (OLD USH 45)	PROJECT DJ 2478	VARIES	1941

NOTES:
COORDINATES AND BEARINGS SHOWN ON THIS PLAT ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM, KENOSHA COUNTY, NAD 83 (2007) ADJUSTMENT, USING THE WISCORS NETWORK.
RIGHT-OF-WAY MONUMENTS ARE TYPE 2 (TYPICAL ¾" REBAR) AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT BY SOUTHEAST REGION SURVEY.
FOR THE LATEST ACCESS / DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN WAUKESHA.

SHEET LOCATION
PROJECT LOCATION



SCALE, FEET
0 100 200

THIS IS A COPY. ORIGINAL DOCUMENT IS AT THE KENOSHA COUNTY REGISTER OF DEEDS.

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET, RECORDED AS SHEET 2 OF 2 OF DOCUMENT 1724571, OF TRANSPORTATION PROJECT PLATS IN THE KENOSHA COUNTY REGISTER OF DEEDS.

I HEREBY CERTIFY THAT THIS PLAT MEETS ALL REQUIREMENTS OF SECTION 84.095, WISCONSIN STATUTES. THIS PLAT WAS PREPARED BY OR UNDER THE DIRECTION OF

STEVEN L SCHMIDT PLS — PRINTED NAME — SIGNATURE — 6/30/2014 DATE

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION

ROBERT L DUFFECK PLS — PRINTED NAME — SIGNATURE — 6/30/2014 DATE

SEE TPP 3200-02-23-4.04 | SEE TPP 3200-02-23-4.06

LOT 1 CSM 2377 V. ,P. DOC. ,

1/16 TH LINE S89°49'50"E STA 160+70.45 ℞

FILE NAME : J:\projects\d2_r_32000245\23\040405_rp.dgn PLOT DATE : 30-JUN-2014 13:46 PLOT BY : dotsls PLOT NAME : PLOT SCALE : 100.000000:1.000000

CONST. 3200-02-73 R/W 3200-02-23 4.05

TRANSPORTATION PROJECT PLAT NO: 3200-02-23 - 4.06

THAT PART OF LOT A-1, CSM 548, LOT C-1, CSM 1102, LOTS D-1 & D-2, CSM 1194, LOT B-2, CSM 1219, LOTS A-1 AND A-2, CSM 1286, LOT 2, CSM 2352, AND ALSO SW1/4-SW1/4, SECTION 17, AND ALSO SE1/4-SE1/4, SECTION 18, AND ALSO NE1/4-NE1/4, SECTION 19, AND ALSO NW1/4-NW1/4, SECTION 20, ALL IN TOWN 1 NORTH, RANGE 21 EAST, VILLAGE OF BRISTOL, KENOSHA COUNTY, WISCONSIN.

RELOCATION ORDER USH 45 ILLINOIS STATE LINE TO STH 50 KENOSHA COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3) AND 84.09, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 3200-02-23-4.06
AMENDMENT NO:

DOCUMENT
1730005
RECORDED
At Kenosha County, Kenosha WI 53140
JoAllyn K. Stork, Register of Deeds
July 11, 2014 10:46 AM
$25.00
Pages 1
#20129

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY, AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTEREST TO THE DEPARTMENT.

PARCEL NUMBER	OWNER CALCULATED *	INTEREST REQUIRED	R/W REQUIRED (ACRES) NEW	EXISTING	TOTAL	T.L.E. TEMP. ACRES	P.L.E. PERM. ACRES
31	DOUGLAS W & CHRISTINE J MEEK	FEE	0.04	0.00	0.04		
32	DONALD & SANDRA RIGGS	FEE	0.01	0.00	0.01		
33	CAULK AND BULL TRUST	FEE,TLE	0.05	0.00	0.05	0.01	
34	RONALD & CAROL SCHULER FAM. LTD	HE,TLE	0.23	0.00	0.23	0.18	
35	JAMES & SUZANNE ROGER L.C.	FEE,PLE,TLE	0.09	1.27	1.36	0.12	0.01
36	KALJON, LLC	FEE,TLE	0.06	1.22	1.28	0.20	
98	LLOYD A NELSON	FEE,TLE	0.00	0.39	0.39	0.01	
99	OLENE E WIENKE	FEE,TLE	0.00	0.29	0.29	0.02	
100	SCOTT R & MARIE O HALL	FEE,TLE	0.03	0.17	0.20	0.01	
101	RICHARD MULDER	FEE	0.15	0.00	0.15		
102	KENNETH & SUSAN PLANTS	TLE				0.03	
103	PATRICK J & MARY RING	TLE				0.02	
104	PHILLIP J & AMELIA B D'ASCENZO	TLE				0.01	
105	GARY NELSON FARMS INC	TLE				0.01	
106	KALJON, LLC	FEE,TLE	0.12	0.00	0.12	0.03	
107	KALJON, LLC	FEE,TLE	0.00	0.12	0.12	0.02	
108	WISCONSIN ELECTRIC POWER CO	PLE,TLE				0.09	0.01
121	SEQUOIT PROPERTIES LLC	TLE				0.08	

UTILITY SCHEDULE & INTERESTS REQUIRED

UTILITY NUMBER	OWNER	INTEREST REQUIRED
200	WE-ENERGIES - ELECTRIC	RELEASE OF RIGHTS
202	FRONTIER COMMUNICATIONS	RELEASE OF RIGHTS
205	WEST SHORE PIPELINE CO.	RELEASE OF RIGHTS

FRONTIER COMMUNICATIONS

PARCELS 31,32,102,103	V.695, P.423, DOC.472451
PARCEL 31-33	V.1319, P.784, DOC.804935
PARCELS 34,101,104	V.695, P.422, DOC.472450
PARCELS 102,103,104,105	V.873, P.239, DOC.543663
PARCELS 103,104	V.1306, P.96, DOC.798016
PARCELS 106,107	V.695, P.421, DOC.472449

WE-ENERGIES - ELECTRIC

PARCEL 31-33	V.1319, P.784, DOC.804935
PARCEL 98	DOC.1136659
PARCEL 99	DOC.1126159
PARCELS 103,104	V.1306, P.96, DOC.798016
PARCELS 106,107	V.106, P.561, DOC.144410

WEST SHORE PIPELINE CO. (205)
PARCELS 34,101 V.580, P.78, DOC.427652

SEC 1080 QUARTER SEC. COR. CONC. MON. W/BRASS CAP X=565404.87 Y=117600.76

SEC 1094 QUARTER SEC. COR. CONC. MON. W/BRASS CAP X=568093.44 Y=114923.75

SEC 1108 QUARTER SEC. COR. CAST IRON PLUG IN CONCRETE W/4" IRON COLLAR X=568029.52 Y=120214.52

SEC 1082 QUARTER SEC. COR. CONC. MON. W/BRASS CAP X=570720.09 Y=117537.40

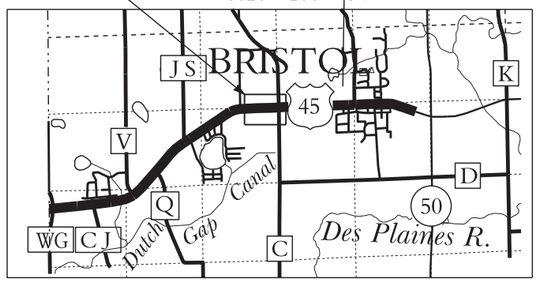
SEC 1081 QUARTER SEC. COR. CAST IRON PLATE IN CONCRETE W/ IRON COLLAR X=568074.49 Y=117578.69

SEE TPP 3200-02-23-4.05

SEE TPP 3200-02-23-4.07

SHEET LOCATION

PROJECT LOCATION



NOTES:
COORDINATES AND BEARINGS SHOWN ON THIS PLAT ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM, KENOSHA COUNTY, NAD 83 (2007) ADJUSTMENT, USING THE WISCORS NETWORK.
RIGHT-OF-WAY MONUMENTS ARE TYPE 2 (TYPICAL ¾" REBAR) AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT BY SOUTHEAST REGION SURVEY.
FOR THE LATEST ACCESS / DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN WAUKESHA.

SCALE, FEET 0 100 200

BRISTOL

THIS IS A COPY. ORIGINAL DOCUMENT IS AT THE KENOSHA COUNTY REGISTER OF DEEDS.

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET, RECORDED AS SHEET 2 OF 2 OF DOCUMENT 1724571, OF TRANSPORTATION PROJECT PLATS IN THE KENOSHA COUNTY REGISTER OF DEEDS.

USH 45 IS CONTROLLED ACCESS PER PROJECT 3200-10-29 RECORDED AS DOCUMENT NO. 1683608 IN KENOSHA COUNTY.

HWY	BASIS OF EXISTING R/W	WIDTH	YEAR
CTH C / 93RD ST	STATUTE 82.31(2)	4 RODS	
USH 45	PROJECT DJ 2478	VARIES	1941
USH 45/CTH C	PROJECT T058-1(38)	VARIES	1964

I HEREBY CERTIFY THAT THIS PLAT MEETS ALL REQUIREMENTS OF SECTION 84.095, WISCONSIN STATUTES. THIS PLAT WAS PREPARED BY OR UNDER THE DIRECTION OF
STEVEN L SCHMIDT PLS (PRINTED NAME) (SIGNATURE) 6/30/2014 (DATE)
THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION
ROBERT L DUFFECK PLS (PRINTED NAME) (SIGNATURE) 6/30/2014 (ATE)

FILE NAME : J:\projects\d2_r_32000245\23\040406_rp.dgn PLOT DATE : 01-JUL-2014 14:45 PLOT BY : dotsls PLOT NAME : PLOT SCALE : 100.000000:1.000000

CONST. 3200-02-73 R/W 3200-02-23 4.06

TRANSPORTATION PROJECT PLAT NO: 3200-02-23 - 4.07

THAT PART OF OUTLOT 2, CHAUCER WOODS SUBDIVISION, LOTS 1,2,3,4,5,6,7,8&9, LACEY'S ADDITION TO BRISTOL, BLOCK 1, LOTS 1 & 2, BLOCK 2, LOT 1, BRISTOL HIGHLANDS, LOTS 1 & 2, CSM 2412, AND ALSO THAT PART OF THE SE1/4-SE1/4 AND THE NE1/4-SE1/4, SECTION 7, AND ALSO THAT PART OF THE SW1/4-SW1/4, SECTION 8, AND ALSO THAT PART OF THE NW1/4-NW1/4, SECTION 17, AND ALSO THAT PART OF NE1/4-NE1/4, SECTION 18, ALL IN TOWN 1 NORTH, RANGE 21 EAST, VILLAGE OF BRISTOL, KENOSHA COUNTY, WISCONSIN.

RELOCATION ORDER USH 45 ILLINOIS STATE LINE TO STH 50 KENOSHA COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3) AND 84.09, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 3200-02-23-4.07
AMENDMENT NO:

DOCUMENT #20130
1730006
RECORDED
At Kenosha County, Kenosha WI 53140
JoEllyn M. Storz, Register of Deeds
July 11, 2014 10:46 AM
$25.00
Pages 1

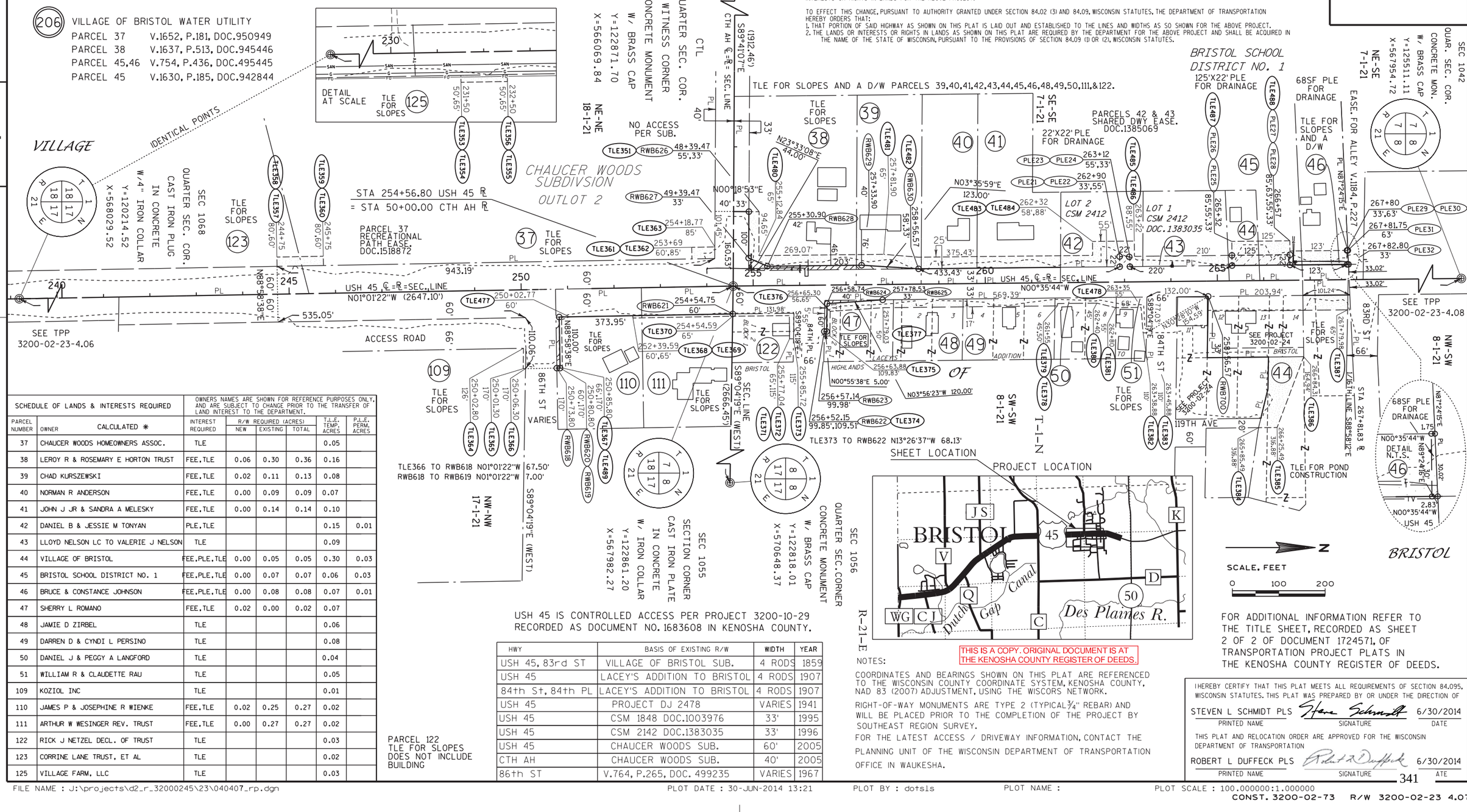
200 WE-ENERGIES - ELECTRIC
PARCEL 49 V.106, P.554, DOC.144395

202 FRONTIER COMMUNICATIONS
PARCEL 38-46 V.204, P.607, DOC.231782

205 WEST SHORE PIPELINE CO.
PARCEL 38-45 V.580, P.101, DOC.427663

206 VILLAGE OF BRISTOL WATER UTILITY
PARCEL 37 V.1652, P.181, DOC.950949
PARCEL 38 V.1637, P.513, DOC.945446
PARCEL 45,46 V.754, P.436, DOC.495445
PARCEL 45 V.1630, P.185, DOC.942844

UTILITY SCHEDULE & INTERESTS REQUIRED		
UTILITY NUMBER	OWNER	INTEREST REQUIRED
200	WE-ENERGIES - ELECTRIC	RELEASE OF RIGHTS
202	FRONTIER COMMUNICATIONS	RELEASE OF RIGHTS
205	WEST SHORE PIPELINE CO	RELEASE OF RIGHTS
206	VILL. OF BRISTOL WATER UTILITY	RELEASE OF RIGHTS


SEC 1068 QUARTER SEC. COR. CAST IRON PLUG IN CONCRETE W/ 4" IRON COLLAR Y=120214.52 X=568029.52
SEC 1042 QUAR. SEC. COR. W/ BRASS CAP CONCRETE MON. Y=125511.11 X=567954.72
NE-SE 7-1-21
SEC 1055 SECTION CORNER CAST IRON PLATE IN CONCRETE W/ IRON COLLAR Y=122861.20 X=567982.27
NW-NW 17-1-21
SEC 1056 QUARTER SEC. CORNER CONCRETE MONUMENT W/ BRASS CAP Y=122818.01 X=570648.37
NE-NE 18-1-21
CTL QUARTER SEC. COR. WITNESS CORNER CONCRETE MONUMENT W/ BRASS CAP Y=122871.70 X=566069.84
IDENTICAL POINTS
VILLAGE
CHAUCER WOODS SUBDIVSION OUTLOT 2
BRISTOL SCHOOL DISTRICT NO. 1
125'X22' PLE FOR DRAINAGE
68SF PLE FOR DRAINAGE
TLE FOR SLOPES AND A D/W
EASE. FOR ALLEY V.1184, P.227
22'X22' PLE FOR DRAINAGE
PARCELS 42 & 43 SHARED DWY EASE. DOC.1385069
LOT 1 CSM 2412 DOC.1383035
LOT 2 CSM 2412
TLE FOR SLOPES AND D/W
TLE FOR SLOPES
TLE FOR POND CONSTRUCTION
PARCEL 37 RECREATIONAL PATH EASE. DOC.1518872
STA 254+56.80 USH 45 ℄ = STA 50+00.00 CTH AH ℄
USH 45 ℄=℄=SEC.,LINE
N01°01'22"W (2647.10')
N88°58'38"E
ACCESS ROAD
86TH ST VARIES
83RD ST
84TH PL
119TH AVE
BRISTOL
OF
ADDITION
HIGHLANDS
LACEYS
BLOCK 1
BLOCK 2
SEE TPP 3200-02-23-4.06
SEE TPP 3200-02-23-4.08
SEE PROJECT 3200-02-24
CTH AH ℄=℄= SEC. LINE
S89°41'07"E (912.46')
S89°04'19"E (WEST) (2666.45')
N00°18'53"E
N00°35'44"W
N00°35'59"E
N03°35'59"E
N23°33'08"E 44.00'
N03°56'23"W 120.00'
S00°28'10"W 54.59'
S89°04'19"E 84.00'
N89°24'15"E
N87°24'15"E
TLE366 TO RWB618 N01°01'22"W 67.50'
RWB618 TO RWB619 N01°01'22"W 7.00'
TLE373 TO RWB622 N13°26'37"W 68.13'
DETAIL AT SCALE
TLE FOR SLOPES 125
TLE FOR SLOPES 123
TLE FOR SLOPES 109
TLE FOR SLOPES 110
TLE FOR SLOPES 111
TLE FOR SLOPES 122
TLE FOR SLOPES 38
TLE FOR SLOPES 39
TLE FOR SLOPES 37
TLE FOR SLOPES 46
TLE FOR SLOPES 50
TLE FOR SLOPES 51
TLE FOR SLOPES 44
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TLE FOR SLOPES 44
TLE FOR SLOPES 50
TLE FOR SLOPES 51
TLE FOR SLOPES 44
TLE FOR SLOPES 46
TLE FOR SLOPES 44
TLE FOR SLOPES 46
TLE FOR SLOPES 44
TLE FOR SLOPES 46

TRANSPORTATION PROJECT PLAT NO: 3200-02-23 - 4.08 AMENDMENT NO. 1

AMENDS TRANSPORTATION PROJECT PLAT 3200-02-23-4.08 RECORDED AS DOCUMENT 1731051 BY REVISING UTILITY NUMBER 200.

THAT PART OF LOTS 2, 3, 6, 7, 10, 11, VILLAGE OF BRISTOL SUBDIVISION, LOT 1, CSM 1848, AND ALSO THE NE1/4-SE1/4, SECTION 7, AND ALSO THE NW1/4-SW1/4, SECTION 8, ALL IN TOWN 1 NORTH, RANGE 21 EAST, VILLAGE OF BRISTOL, KENOSHA COUNTY, WISCONSIN.

RELOCATION ORDER USH 45 ILLINOIS STATE LINE TO STH 50 KENOSHA COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3) AND 84.09, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 3200-02-23-4.08
AMENDMENT NO: 1

20131 02

DOCUMENT
1776085
RECORDED
At Kenosha County, Kenosha WI 53140
JoEllyn M. Storz, Register of Deeds
July 14, 2016 12:10 PM
$25.00
Pages 2

CURVE INFORMATION

USH 45 PROPOSED ℄ CUR9		USH 45 EXISTING ℄ CUR4	
PI	279+82.92	PI	279+82.92
Y	125387.03	Y	125387.03
X	567946.18	X	567946.18
DELTA	21°30'11"	DELTA	21°30'11"
D	9°32'57"	D	12°00'00"
T	113.93'	T	90.66'
L	225.18'	L	179.19'
R	600.00'	R	477.46'
LCH	223.86'	LCH	178.14'
CB	N 9°30'43" E	CB	N 9°30'43" E

CURVE PRW64 PARCELS 63 & 64		CURVE PRW67 PARCEL 67		CURVE PRW64A PARCEL 64	
L	111.50'	L	82.66'	L	87.77'
R	633.00'	R	567.00'	R	633.00'
LCH	111.36'	LCH	82.58'	LCH	87.69'
CB	N03°48'24"E	CB	N16°05'15"E	CB	N04°52'52"E

UTILITY SCHEDULE & INTERESTS REQUIRED

UTILITY NUMBER	OWNER	INTEREST REQUIRED
200	WE-ENERGIES - ELECTRIC	RELEASE OF RIGHTS
201	WE-ENERGIES - GAS	RELEASE OF RIGHTS

(200) WE-ENERGIES - ELECTRIC
PARCELS 57,61,62,65 NO RECORDED EASEMENT

(201) WE-ENERGIES - GAS
PARCELS 63,64 NO RECORDED EASEMENT

10'X 15' PLE FOR DRAINAGE
20'X 32' PLE FOR DRAINAGE
TLE FOR SLOPES AND A D/W PARCELS 55,56,57,58,61,62,63,64,65,114,&116.
TLE FOR SLOPES PARCELS 54,59,60,66,67,112,113,115,&117.
TLE'S DO NOT INCLUDE BUILDINGS ON PARCELS 55,56,58,60,62,63,64,67,114,115,&117.

SEC 1041 QUARTER SEC. COR. CONC. MON. W/BRASS CAP Y=125517.65 X=565320.81

SEC 1042 QUAR. SEC. COR. CONCRETE MON. W/ BRASS CAP Y=125511.11 X=567954.72

SEC 1055 SECTION CORNER CAST IRON PLATE IN CONCRETE W/ IRON COLLAR Y=122861.20 X=567982.27

SEC 1043 CENTER OF SECTION CONCRETE MON. W/ BRASS CAP Y=125458.52 X=570615.47

DETAIL NOT TO SCALE

SEE TPP 3200-02-23-4.07

SEE TPP 3200-02-23-4.09

PARCELS 63 & 64 PLE FOR DRAINAGE

Y=124512.28
X=567965.10

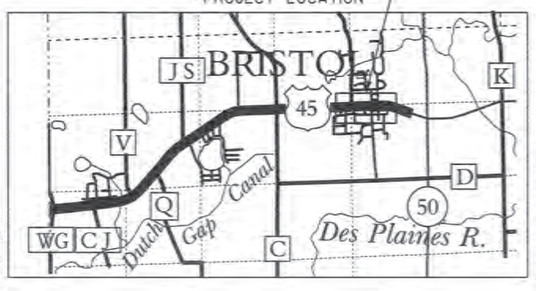
TLE393 TO TLE394 N11°40'01"E 67.16'

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET, RECORDED AS SHEET 2 OF 2 OF DOCUMENT 1724571, OF TRANSPORTATION PROJECT PLATS IN THE KENOSHA COUNTY REGISTER OF DEEDS.

SCALE, FEET
0 100 200

PROJECT LOCATION

SHEET LOCATION



T-1-N
R-21-E

NOTES:

COORDINATES AND BEARINGS SHOWN ON THIS PLAT ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM, KENOSHA COUNTY, NAD 83 (2007) ADJUSTMENT, USING THE WISCORS NETWORK.

RIGHT-OF-WAY MONUMENTS ARE TYPE 2 (TYPICAL 3/4" REBAR) AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT BY SOUTHEAST REGION SURVEY.

FOR THE LATEST ACCESS / DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN WAUKESHA.

THIS A COPY. ORIGINAL DOCUMENT IS AT THE KENOSHA COUNTY REGISTER OF

USH 45 IS CONTROLLED ACCESS PER PROJECT 3200-10-29 RECORDED AS DOCUMENT NO. 1683608 IN KENOSHA COUNTY.

HWY	BASIS OF EXISTING R/W	WIDTH	YEAR
USH 45	VILLAGE OF BRISTOL SUB.	4 RODS	1859
USH 45	PROJECT DJ 2478	VARIES	1941
USH 45	CSM 1848 DOC.1003976	33'	1995
82nd ST, 83rd ST	VILLAGE OF BRISTOL SUB.	4 RODS	1859
82nd ST	DEED DOC. 1029992	4 RODS	1996
80th ST	DEED	49.5'	

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY, AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTEREST TO THE DEPARTMENT.

PARCEL NUMBER	OWNER CALCULATED *	INTEREST REQUIRED	R/W REQUIRED (ACRES) NEW	EXISTING	TOTAL	T.L.E. TEMP. ACRES	P.L.E. PERM. ACRES
54	JOSEPH L & MICHELLE M KOZAK	TLE				0.05	
55	STEVE J JR & RHONDA D BOHR	TLE				0.06	
56	EDWARD J & DEBRA A ARNDT	TLE				0.01	
57	JOHN A DAVIDSON	PLE,TLE				0.15	0.05
58	BRUNO J GURGUL	FEE,PLE,TLE	28 SF	0.10	0.10	0.08	0.01
59	SCOTT J & JACQUELIN B HENNINGFIELD	FEE,PLE,TLE	134 SF	0.08	0.08	0.04	0.01
60	KENNETH W & AMY R NEHRKORN	FEE,TLE	0.01	0.27	0.28	0.07	
61	YVON L & NANCY A FRIEDRICH	FEE,PLE,TLE	0.02	0.13	0.15	0.06	0.02
62	GERALD S RASMUSSEN	FEE,TLE	0.02	0.07	0.09	0.04	
63	ERIC FARDOUX	FEE,PLE,TLE	0.02	0.08	0.10	0.08	0.01
64	THE TIMOTHY SCHWELLENBACH TRUST	FEE,PLE,TLE	0.01	0.10	0.11	0.06	0.01
65	LARRY L & JULIE A KELLEY	FEE,TLE	0.01	0.04	0.05	0.05	
66	PAUL & CARRIE MATUSHEK	FEE,TLE	0.00	0.05	0.05	0.04	
67	CYNTHIA WALKER	FEE,TLE	0.01	0.19	0.20	0.04	
112	BETTY M LINGO LC TO K & H THURS	TLE				0.01	
113	CECIL L & BARBARA J SCHMITT	FEE,TLE	0.00	0.10	0.10	0.08	
114	EUGENE A & SUSAN A KRUEGER	FEE,TLE	0.00	0.12	0.12	0.06	
115	SHAWN D AKER	FEE,TLE	0.00	0.06	0.06	0.02	
116	BRISTOL UNITED METHODIST CHURCH	FEE,TLE	0.00	0.05	0.05	0.02	
117	ROBERT C JR & KARA T THOMAS	FEE,TLE	0.01	0.14	0.15	0.04	

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

I STEVEN L. SCHMIDT PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT OF TRANSPORTATION, I HAVE MAPPED THIS TRANSPORTATION PROJECT PLAT AND SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN LAND SURVEYOR — STEVEN L. SCHMIDT S-2813 ELKHORN WI

SIGNATURE: Steven Schmidt DATE: 7/08/16
PRINTED NAME: STEVEN L. SCHMIDT PLS
REGISTRATION NUMBER: S-2813

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION SOUTHEAST REGION
SIGNATURE: Robert L Duffeck DATE: 7/08/16
PRINTED NAME: ROBERT L. DUFFECK

FILE NAME : J:\projects\d2_r_32000245\23\040408A1_rp.dgn PLOT DATE : 07-JUL-2016 13:45 PLOT BY : dotsis PLOT NAME : PLOT SCALE :
CONST. 3200-02-73 R/W 3200-02-23 4.08 AMENDMENT NO. 1

TRANSPORTATION PROJECT PLAT NO: 3200-02-23 - 4.09

THAT PART OF LOT 3 AND OUTLOT 2, BRISTOL BAY SUBDIVISION, LOT B, CSM 264, LOT 1, CSM 2440, AND ALSO THE SW1/4-NW1/4, N/W1/4-N/W1/4, SECTION 8, TOWN 1 NORTH, RANGE 21 EAST, VILLAGE OF BRISTOL, KENOSHA COUNTY, WISCONSIN.

RELOCATION ORDER USH 45 ILLINOIS STATE LINE TO STH 50 KENOSHA COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3) AND 84.09, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

USH 45 IS CONTROLLED ACCESS PER PROJECT 3200-10-29 RECORDED AS DOCUMENT NO. 1683608 IN KENOSHA COUNTY.

HWY	BASIS OF EXISTING R/W	WIDTH	YEAR
USH 45	STATUTE 82.05	66'	
USH 45	PROJECT 1315-00-24	VARIES	1986
USH 45	DEED DOC. 1402828	50'	2004
USH 45	BRISTOL BAY SUBDIVISION	33'	2004
79TH ST	BRISTOL BAY SUBDIVISION	82'	2004

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 3200-02-23-4.09
AMENDMENT NO:

DOCUMENT
1731032
RECORDED
at Kenosha County, Kenosha WI 53140
Jocelyn K. Stern, Register of Deeds
July 29, 2014 2:25 PM
RCD.00
Pages 1

20132

SEC 1041 QUARTER SEC. COR. CONC. MON. W/BRASS CAP Y=125517.65 X=565320.81

SEC 1042 QUARTER SEC. CORNER CONCRETE MON. W/ BRASS CAP Y=125511.11 X=567954.72

SEC 1029 SECTION CORNER CONCRETE MON. W/ ALLUM. CAP Y=128152.90 X=567935.93

SEE TPP 3200-02-23-4.08

EAST QUARTER LINE S89°51'28"E (2633.92')

WEST QUARTER LINE S88°52'04"E (2661.27') STA 281+11.73 ℄

SECTION LINE N00°24'27"W (2641.86')

SW-NW 8-1-21

1/16TH LINE

SEC 1043 CENTER OF SECTION CONCRETE MON. W/ BRASS CAP Y=125458.52 X=570615.47

VILLAGE OF BRISTOL

BRISTOL BAY SUBDIVISION

USH 45 R

79TH ST

STH 50

RWB646 TO RWB647 S88°52'05"E 21.17'

RWB649 TO TLE443 S69°44'11"E 14.63'

TLE443 TO TLE444 N22°51'07"E 82.08'

RWB650 TO TLE444 S69°44'11"E 18.21'

PROP1021 TO TLE433 N20°21'24"E 69.57'

DETAIL NOT TO SCALE

TLE FOR SLOPES AND TWO D/W'S

TLE FOR SLOPES AND A D/W

TLE FOR SLOPES

PLE FOR DRAINAGE

ACCESS PER SUB.

DRIVEWAY EASEMENT PARCEL 72 OVER PARCEL71 N/S 79TH STREET DOC. 1385970

10'X40' PLE FOR DRAINAGE

LOT 1 CSM 2440 DOC.1407588

LOT B CSM 264 V.946, P.962 DOC.590994

CURVE	PRW70
PARCEL	70
L	23.64'
R	46.93'
LCH	23.39'
CB	N88°03'58"E

CURVE	SCUR21
L	162.64'
R	2291.52'
LCH	162.61'
CB	N22°57'32"E

USH 45 PROPOSED ℄ CUR20	
PI	301+74.77
Y	127450.64
X	568708.04
DELTA	4°43'43"
D	2°33'01"
T	92.76'
L	185.41'
R	2246.59'
LCH	185.36'
CB	N 22°37'40" E

UTILITY SCHEDULE & INTERESTS REQUIRED

UTILITY NUMBER	OWNER	INTEREST REQUIRED
200	WE-ENERGIES - ELECTRIC	RELEASE OF RIGHTS
201	WE-ENERGIES - GAS	RELEASE OF RIGHTS
202	FRONTIER COMMUNICATIONS	RELEASE OF RIGHTS
204	TIME WARNER ENT. CO.,LLP	RELEASE OF RIGHTS
206	VILL. OF BRISTOL WATER UTILITY	RELEASE OF RIGHTS

(200) WE-ENERGIES - ELECTRIC
PARCEL 70,71 DOC.1502302
PARCEL 71,72 DOC.1500841
PARCEL 73 NO RECORDED EASEMENT

(201) WE-ENERGIES - GAS
PARCELS 70,73 NO RECORDED EASEMENT

(202) FRONTIER COMMUNICATIONS
PARCEL 70,71 V.866, P.40, DOC.540177
PARCEL 70,71 DOC.1502302
PARCEL 71,72 DOC.1500841

(204) TIME WARNER ENTERTAINMENT CO., LP
PARCEL 70,71 DOC.1502302
PARCEL 71,72 DOC.1500841

(206) VILLAGE OF BRISTOL UTILITY DISTRICT #1
PARCEL 68 V.1319, P.633, DOC.804864
PARCEL 119 V.1141, P.197, DOC.707719

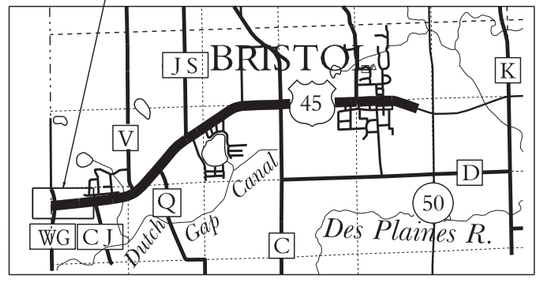
SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY, AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTEREST TO THE DEPARTMENT.

PARCEL NUMBER	OWNER CALCULATED *	INTEREST REQUIRED	R/W REQUIRED (ACRES) NEW	EXISTING	TOTAL	T.L.E. TEMP. ACRES	P.L.E. PERM. ACRES
44	VILLAGE OF BRISTOL	FEE,TLE	0.06	0.00	0.06	0.02	0.01
68	ZION EVANGELICAL LUTHERAN CHURCH	FEE,TLE	0.06	0.25	0.31	0.21	
69	SCOTT B. KRAHN	FEE,TLE	0.11	0.31	0.42	0.08	
70	BECKETT, LLC	FEE,PLE,TLE	0.14	0.00	0.14	0.10	0.01
71	BECKETT, LLC	FEE,TLE	0.01	0.00	0.01	0.02	
72	BRISTOL BAY DEVELPMENT CORP.	FEE,TLE	0.07	0.22	0.29	0.07	
73	SMMFLP LIMITED PARTNERSHIP	FEE,TLE	1.24	0.28	1.52	0.12	
118	BECKETT, LLC	FEE,TLE	0.06	0.00	0.06	0.05	
119	BERWICK PROPERTIES INC	FEE,TLE	0.12	0.00	0.12	0.14	
126	CHASE BANK	TLE				0.01	

SCALE, FEET
0 100 200

SHEET LOCATION
PROJECT LOCATION



NOTES:
COORDINATES AND BEARINGS SHOWN ON THIS PLAT ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM, KENOSHA COUNTY, NAD 83 (2007) ADJUSTMENT, USING THE WISCORS NETWORK.
RIGHT-OF-WAY MONUMENTS ARE TYPE 2 (TYPICAL ¾" REBAR) AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT BY SOUTHEAST REGION SURVEY.
FOR THE LATEST ACCESS / DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN WAUKESHA.

THIS IS A COPY. ORIGINAL DOCUMENT IS AT THE KENOSHA COUNTY REGISTER OF DEEDS.

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET, RECORDED AS SHEET 2 OF 2 OF DOCUMENT 1724571, OF TRANSPORTATION PROJECT PLATS IN THE KENOSHA COUNTY REGISTER OF DEEDS.

I HEREBY CERTIFY THAT THIS PLAT MEETS ALL REQUIREMENTS OF SECTION 84.095, WISCONSIN STATUTES. THIS PLAT WAS PREPARED BY OR UNDER THE DIRECTION OF

STEVEN L SCHMIDT PLS — SIGNATURE — 7/21/2014 DATE
PRINTED NAME

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION

ROBERT L DUFFECK PLS — SIGNATURE — 7/21/2014 DATE
PRINTED NAME

FILE NAME : J:\projects\d2_r_32000245\23\040409_rp.dgn PLOT DATE : 18-JUL-2014 11:38 PLOT BY : dotsls PLOT NAME : PLOT SCALE : 100.000000:1.000000

CONST. 3200-02-73 R/W 3200-02-23 4.09

R/W PROJECT NUMBER	SHEET NUMBER	TOTAL SHEETS
3200-02-24		
FEDERAL PROJECT NUMBER	4.1	1

PLAT OF RIGHT-OF-WAY REQUIRED FOR

USH 45

BRISTOL GARAGE RELOCATION PARCEL

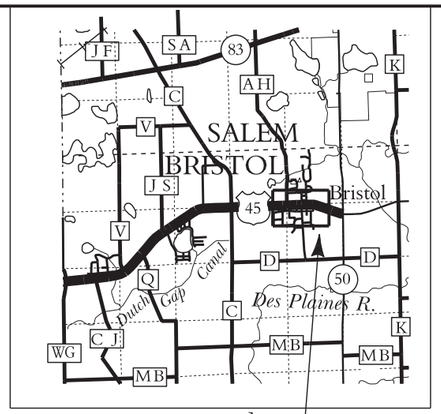
KENOSHA CO.

CONSTRUCTION PROJECT NUMBER
3200-02-73

SCHEDULE OF LANDS & INTERESTS REQUIRED

AREAS SHOWN IN THE TOTAL ACRES COLUMN MAY BE APPROXIMATE AND ARE DERIVED FROM TAX ROLLS OR OTHER AVAILABLE SOURCES AND MAY NOT INCLUDE LANDS OF THE OWNER WHICH ARE NOT CONTIGUOUS TO THE AREA TO BE ACQUIRED.

PARCEL NUMBER	OWNER	CALCULATED *	INTEREST REQUIRED	TOTAL ACRES	R/W REQUIRED (ACRES) NEW	R/W REQUIRED (ACRES) EXISTING	R/W REQUIRED (ACRES) TOTAL	TOTAL REMAINING ACRES	T.L.E. TEMP. ACRES	P.L.E. ACRES
52	BRISTOL GARAGE, LLC		FEE	* 0.79	0.79	0.00	0.79	0.00		
53	NH MANAGEMENT, LLC		PLE,TLE						0.24	0.02



CONVENTIONAL UTILITY SYMBOLS

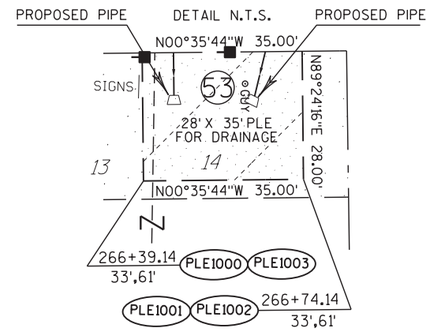
WATER	W
GAS	G
TELEPHONE	T
OVERHEAD TRANSMISSION LINES	OH
ELECTRIC	E
CABLE TELEVISION	TV
FIBER OPTIC	FO
SANITARY SEWER	SAN
STORM SEWER	SS
	NON COMPENSABLE COMPENSABLE
POWER POLE	
TELEPHONE POLE	
TELEPHONE PEDESTAL	
ELECTRIC TOWER	

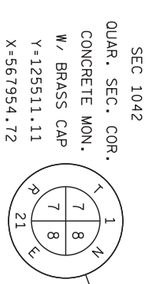
CONVENTIONAL ABBREVIATIONS

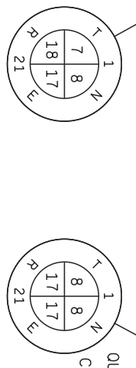
ACCESS POINT, DRIVEWAY CONNECTION	AP	REFERENCE LINE	R/L
ACCESS RIGHTS	AR	RELEASE OF RIGHTS	ROR
ACRES	AC.	REMAINING	REM.
AND OTHERS	ET.AL.	RIGHT-OF-WAY	R/W
CENTERLINE	C/L	SECTION	SEC.
CERTIFIED SURVEY MAP	CSM	STATION	STA.
CORNER	COR.	TEMPORARY LIMITED EASEMENT	TLE
DOCUMENT	DOC.	VOLUME	V.
EASEMENT	EASE.	**CURVE DATA**	
HIGHWAY EASEMENT	H.E.	LONG CHORD	LCH
LAND CONTRACT	LC	LONG CHORD BEARING	LCB
MONUMENT	MON.	RADIUS	R
PAGE	P.	DEGREE OF CURVE	D
PERMANENT LIMITED EASEMENT	PLE	CENTRAL ANGLE OR DELTA	DELTA
PROPERTY LINE	PL	LENGTH OF CURVE	L
RECORDED AS	(100')	TANGENT	TAN

CONVENTIONAL SYMBOLS

FOUND IRON PIPE/PIN (1" UNLESS NOTED)	PROPOSED R/W LINE
R/W MONUMENT	•(SET) EXISTING H.E. LINE
R/W STANDARD	▲(SET) PROPERTY LINE
SIGN	ISIGN LOT & TIE LINES
SECTION CORNER MONUMENT	SLOPE INTERCEPTS
SECTION CORNER SYMBOL	CORPORATE LIMITS
	ACCESS RESTRICTED (BY PREVIOUS ACQUISITION/CONTROL)
FEE (HATCH VARIES)	ACCESS RESTRICTED (BY ACQUISITION)
TEMPORARY LIMITED EASEMENT	NO ACCESS (BY STATUTORY AUTHORITY)
PERMANENT LIMITED EASEMENT	SECTION LINE
R/W BOUNDARY POINT	QUARTER LINE
PARCEL NUMBER	SIXTEENTH LINE
UTILITY PARCEL NUMBER	EXISTING CENTERLINE
SIGN NUMBER (OFF PREMISE)	PROPOSED REFERENCE LINE
BUILDING	PARALLEL OFFSET







SEC 1055
SECTION CORNER
CAST IRON PLATE
IN CONCRETE
W/ IRON COLLAR
Y=122861.20
X=567982.27

SEC 1056
QUARTER SEC.CORNER
CONCRETE MONUMENT
W/ BRASS CAP
Y=122818.01
X=570648.37

VILLAGE

SE-SE
7-1-21

255 260 265

USH 45 ℄=R=SEC. LINE
N00°35'44"W (2650.05')

232' (NORTH)

S89°04'19"E (2666.45') (WEST)

STA 254+56.80
SECTION LINE

60'

66' 84th PL

1 2 3 4 5 6 7 8 9

BLOCK 2 OF LACEY'S ADDITION TO BRISTOL HIGHLANDS

(WEST) 165'

(NORTH)

TLE FOR SLOPES AND A D/W (DOES NOT INCLUDE BUILDING)

33' PL 66' 66' 66' 30'

41.94'

SEE DETAIL

1182.34'

28' X 35' PLE FOR DRAINAGE

1/16TH LINE

SIGNS

BRISTOL GARAGE

12 13 14

53

RESTAURANT

10' 36' 32'

TLE200 264+89.07 65'

TLE203 266+83.97 65'

PL 132'

11 52

84th ST (WEST)

BRISTOL

1" IP

20'

PL 66' PL 66' 924'

30' 45.9'

266+84.24 145'

TLE202

TLE FOR BUILDING DEMOLITION

1 2 3

PL 68.3' (WEST)

TLE201 264+86.95 145'

BRISTOL HIGHLANDS BLOCK 5 (NORTH)

PL 65.66' (S75°50'E)

VILLAGE OF BRISTOL LANDS

TLE FOR SLOPES

PL 66' PL 66' 51.85'

199TH AVE

IP

SW-SW
8-1-21

BRISTOL

UTILITY SCHEDULE & INTERESTS REQUIRED		
UTILITY NUMBER	OWNER	INTEREST REQUIRED
200	WE-ENERGIES - ELECTRIC	RELEASE OF RIGHTS
201	FRONTIER COMMUNICATIONS	RELEASE OF RIGHTS
202	TIME WARNER CABLE	RELEASE OF RIGHTS

200	WE ENERGIES-ELECTRIC	PARCEL 53	DOC. 1540857
201	FRONTIER COMMUNICATIONS	PARCEL 53	DOC. 1540857
202	TIME WARNER CABLE	PARCEL 53	DOC. 1540857

HWY	BASIS OF EXISTING R/W	WIDTH	YEAR
USH 45	VILLAGE OF BRISTOL SUB.	4 RODS	1859
USH 45	LACEY'S ADDITION TO BRISTOL	4 RODS	1907
USH 45	PROJECT DJ 2478	VARIES	1941
84TH ST	LACEY'S ADDITION TO BRISTOL	4 RODS	1907
84TH ST	VILLAGE OF BRISTOL SUB.	4 RODS	1859
199TH AVE	VILLAGE OF BRISTOL SUB.	VARIES	1859

NOTES

COORDINATES AND BEARINGS ON THIS PLAT ARE ORIENTED TO THE WISCONSIN COUNTY COORDINATE SYSTEM, KENOSHA COUNTY ZONE, NAD 83 (2007) ADJUSTMENT. THE COORDINATES SHOWN ARE GRID COORDINATES AND ARE TO BE USED AS GRID OR GROUND VALUES ON THIS PLAT.

RIGHT-OF-WAY MONUMENTS WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

RIGHT-OF-WAY BOUNDARIES ARE DEFINED WITH COURSES OF THE PERIMETER OF THE HIGHWAY LANDS REFERENCED TO THE U.S. PUBLIC LAND SURVEY SYSTEM OR OTHER SURVEYS OF PUBLIC RECORD.

N

SCALE, FEET
0 50 100

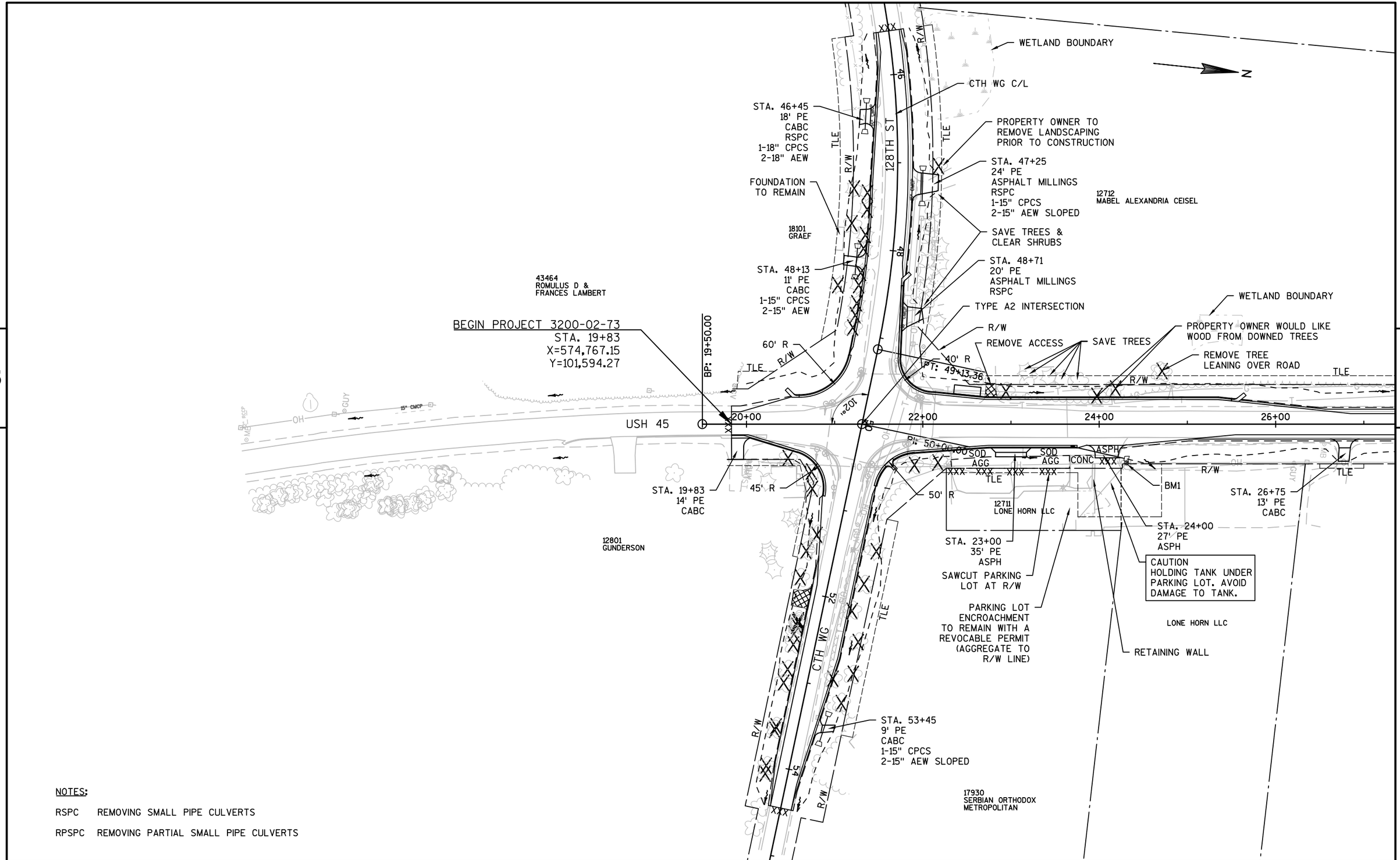
REVISION DATE
MARCH 24, 2016

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED FOR THE DEPARTMENT

DATE: JUNE 3, 2013 (Signature)

344 E

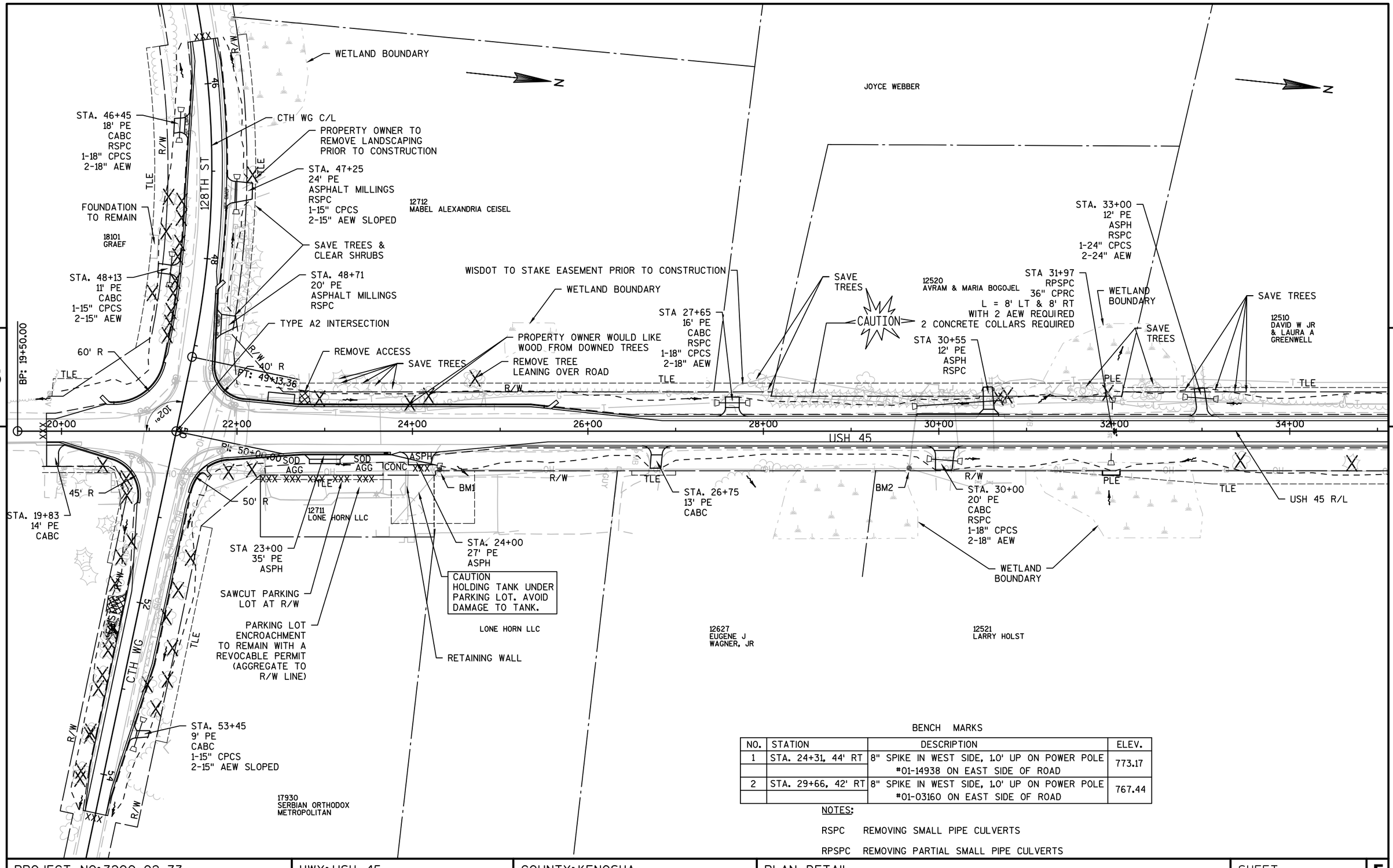


NOTES:

RSPC REMOVING SMALL PIPE CULVERTS

RPSPC REMOVING PARTIAL SMALL PIPE CULVERTS

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	PLAN DETAIL	SHEET 345	E



BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
1	STA. 24+31, 44' RT	8" SPIKE IN WEST SIDE, 1.0' UP ON POWER POLE #01-14938 ON EAST SIDE OF ROAD	773.17
2	STA. 29+66, 42' RT	8" SPIKE IN WEST SIDE, 1.0' UP ON POWER POLE #01-03160 ON EAST SIDE OF ROAD	767.44

NOTES:

RSPC REMOVING SMALL PIPE CULVERTS

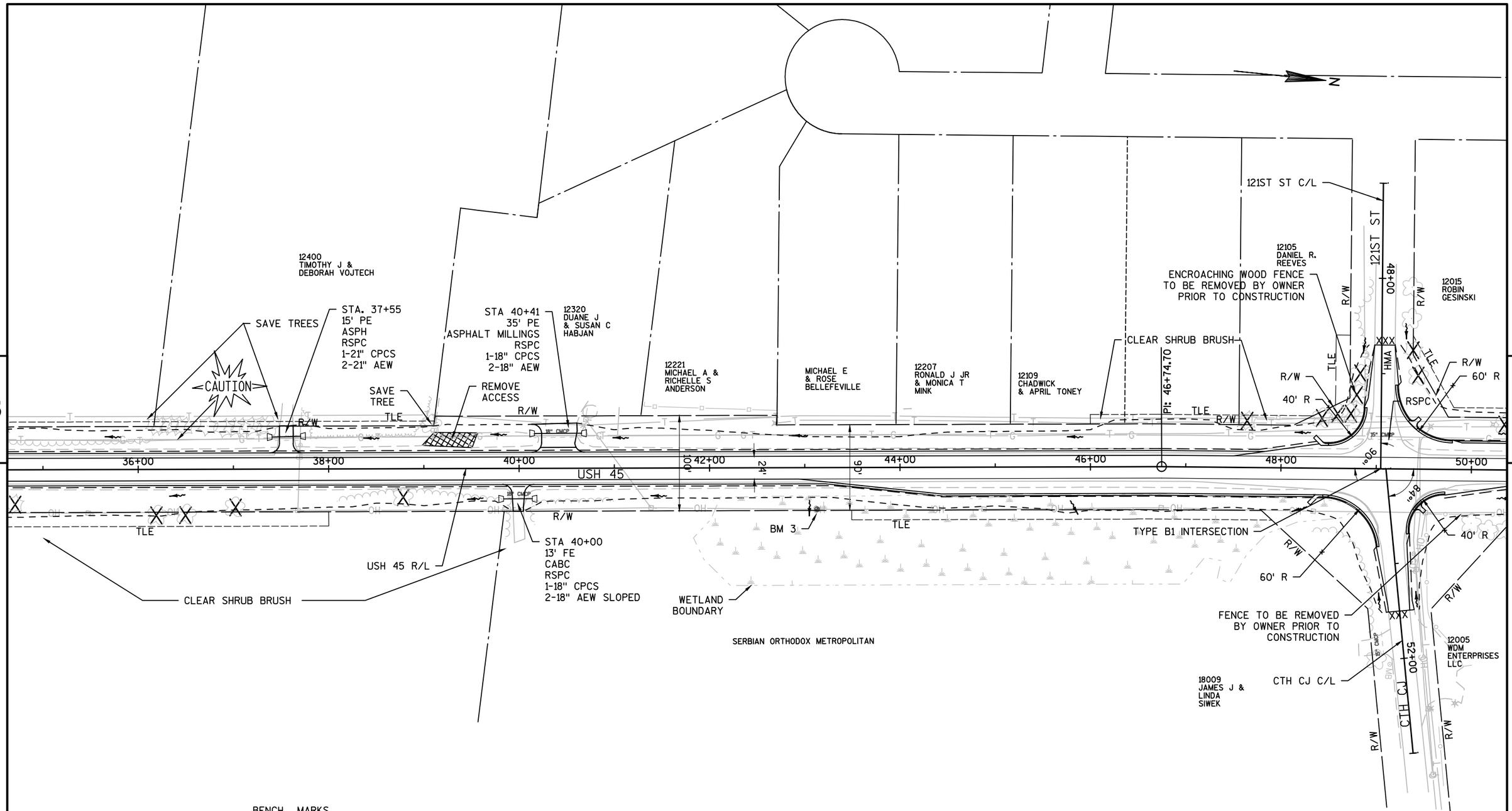
RPSPC REMOVING PARTIAL SMALL PIPE CULVERTS

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	PLAN DETAIL	SHEET 346	E

FILE NAME : N:\PDS\C3D\CAD\32000203\050101_PD.DWG
LAYOUT NAME - 050101_PD

PLOT DATE : 4/28/2016 5:57 PM PLOT BY : MAAS, JOSEPH A PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44



5

5

BENCH MARKS

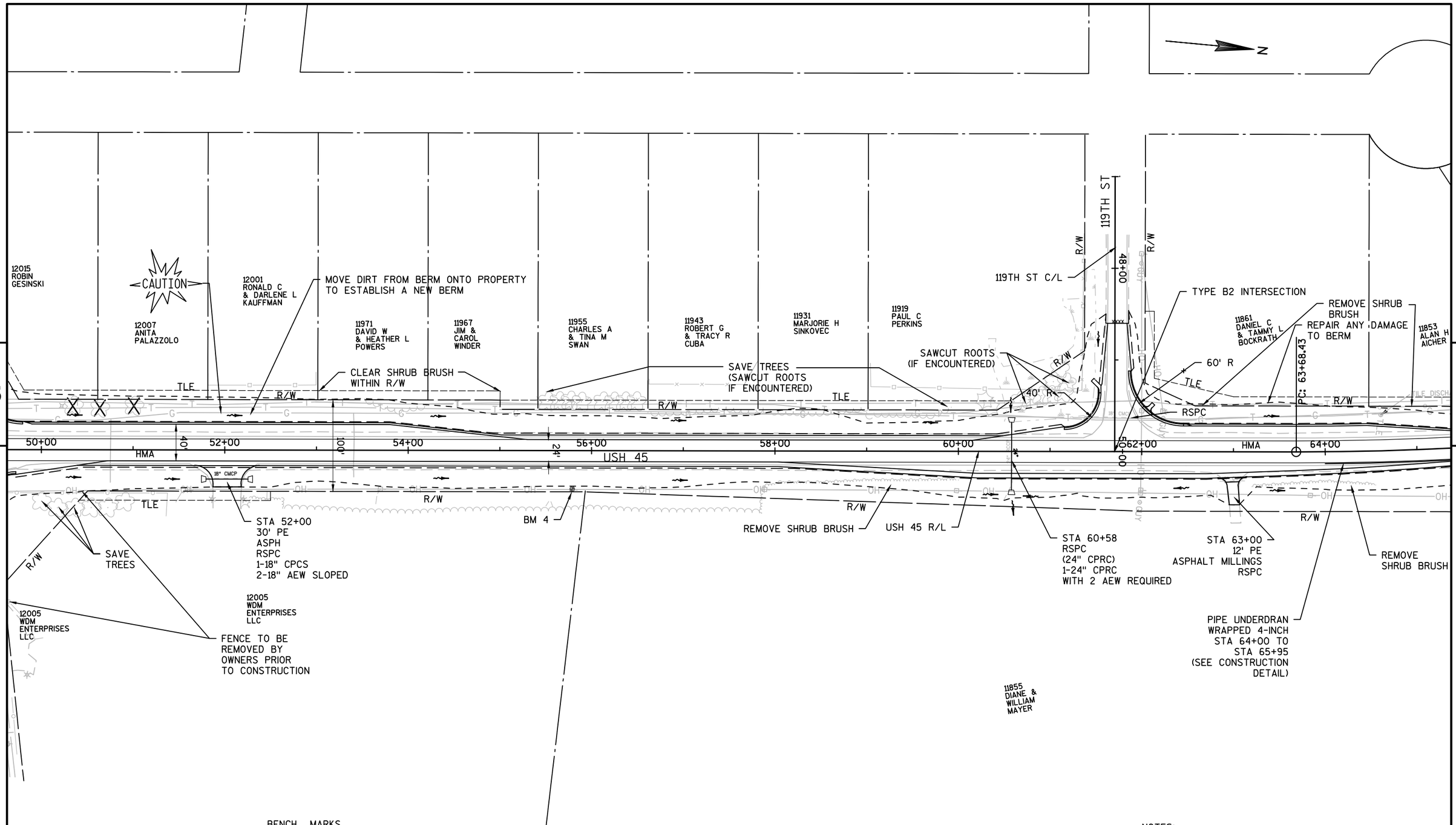
NO.	STATION	DESCRIPTION	ELEV.
3	STA. 43.13, 44' RT	8" SPIKE IN WEST SIDE, 1.0' UP ON POWER POLE *98-07184 ON EAST SIDE OF ROAD	778.05

NOTES:

RSPC REMOVING SMALL PIPE CULVERTS

RPSPC REMOVING PARTIAL SMALL PIPE CULVERTS

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	PLAN DETAIL	SHEET 347	E



5 5

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
4	STA. 55+79, 42' RT	8" SPIKE IN WEST SIDE, 1.0' UP ON POWER POLE #79-11286 ON EAST SIDE OF ROAD	773.41

NOTES:

RSPC REMOVING SMALL PIPE CULVERTS

RPSPC REMOVING PARTIAL SMALL PIPE CULVERTS

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	PLAN DETAIL	SHEET 348	E

5

5

N

STA 69+92
72" CPRC
L = 8' LT & 8' RT
WITH 2 AEW REQUIRED
2 CONCRETE COLLARS REQUIRED

BONES OR OTHER ARCHAEOLOGICAL MATERIAL(S) ENCOUNTERED MUST BE RETURNED TO DAN JOYCE AT THE KENOSHA PUBLIC MUSEUM.

NOTIFY OWNER OF FENCE REMOVAL IN TLE LIMITS

REMOVE CHAIN LINK FENCE AND INSTALL TEMPORARY FENCE

ENCROACHING FENCE TO BE REMOVED BY OWNER PRIOR TO CONSTRUCTION

11853 ALAN H AICHER

11855 MICHAEL A & GAYLE S WILLKOMM

CAUTION

SAVE CEDAR TREE

REMOVE BOX ELDER TREE

TLE DISCHARGE

REMOVE SHRUB BRUSH AND TREE LEANING OVER SHOULDER INSIDE SLOPE INTERCEPT

WETLAND BOUNDARY

JAMES A BUTTERBRODT

STA 71+80
17' PE
CABC
EXISTING PIPE
TO REMAIN

UNITED CEMETERY ASSOCIATION

ENCROACHING FENCE TO BE REMAIN WITH REVOCABLE PERMIT

R/W

TLE

CTH V

CTH V C/L

TYPE A1 INTERSECTION

SAVE PLANTER

SAVE TREES

18224 MAW, LLC

BM 6

40' R

50' R

HMA

66+00

68+00

70+00

72+00

74+00

76+00

78+00

80+00

USH 45 R/L

USH 45

24'

132'

90°

SAVE TREE

BM 5

SAVE TREE

11855 DIANE & WILLIAM MAYER

STATE OF WISCONSIN SIGN TO REMAIN

PIPE UNDERDRAN WRAPPED 4-INCH STA 64+00 TO STA 65+95 (SEE CONSTRUCTION DETAIL)

REMOVING OLD STRUCTURE STA 69+92

WETLAND BOUNDARY

ENCROACHING CHURCH SIGN TO BE REMOVED BY OWNER PRIOR TO CONSTRUCTION

11635 RICHARD J & ARLENE GUST

STA 74+15
17' PE
ASPH
RSPC
1-18" CPCS
2-18" AEW SLOPED

STA 76+85
20' PE
CABC
RSPC

SAVE TREES

JNJ FAMILY FARMS LLC

11601 DAVID & LITA PRICE

RSPC

REMOVE ACCESS

REMOVE TREES UNDER POWER LINE

PIPE UNDERDRAN WRAPPED 4-INCH STA 74+00 TO STA 82+00 (SEE CONSTRUCTION DETAIL)

11303 JNJ FAMILY FARMS LLC

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
5	STA. 68+69, 40' LT	CHISEL BOX NW CORNER OF "WELCOME TO WISCONSIN" SIGN	772.17
6	STA. 80+02, 68' LT	CHISEL BOX NE CORNER OF SIGN ON WEST SIDE OF ROAD 175' NORTH OF 116TH AVE	776.71

NOTES:

RSPC REMOVING SMALL PIPE CULVERTS

RPSPC REMOVING PARTIAL SMALL PIPE CULVERTS

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	PLAN DETAIL	SHEET 349	E

FILE NAME : N:\PDS\C3D\CAD\32000203\050101_PD.DWG
LAYOUT NAME - 050104_PD
PLOT DATE : 7/12/2016 10:08 AM PLOT BY : MAAS, JOSEPH A PLOT NAME : PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

ENCROACHING CHURCH SIGN TO BE REMOVED BY OWNER PRIOR TO CONSTRUCTION

18224 MAW, LLC

BM 6

WETLAND BOUNDARY

11424 LINDA KELLY

STA 82+00
15' PE
CABC
RSPC
1-24" CPCS
2-24" AEW

TLE

R/W

80+00

82+00

84+00

86+00

USH 45 R/L

USH 45

R/W

CAUTION

STA 86+30
13' PE
CABC
RSPC
1-18" CPCS
2-18" AEW

WETLAND BOUNDARY

11334 LINDA M SLACK

TLE

SAVE TREE

PT 88+35.72

88+00

STA 90+10
12' PE
ASPH
RSPC
1-18" CPCS
2-18" AEW

11314 KATHLEEN A JAKUBISIN

ENCROACHING GATE TO BE REMOVED BY OWNER PRIOR TO CONSTRUCTION

CAUTION

90+00

92+00

94+00

R/W

11300 JAMES E & SHARON J CAREW

STA 95+25
16' PE
ASPH
RSPC
1-18" CPCS
2-18" AEW SLOPED

BM 7

11241 GERALD J SR & DARLEEN F SAAM

SAVE TREES

SAVE TREE

STA 92+15
20' PE
CABC

WETLAND BOUNDARY

STA 90+52
RSPC
(30" CPRC)
1-30" CPRC
WITH 2 AEW REQUIRED)

11303 JNJ FAMILY FARMS LLC

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
6	STA. 80+02, 68' LT	CHISEL BOX NE CORNER OF SIGN ON WEST SIDE OF ROAD 175' NORTH OF 116TH AVE	776.71
7	STA. 93+55, 39' RT	FOUND RR SPIKE WEST SIDE 0.5' UP ON POLE POLE #76-7244	769.96

NOTES:

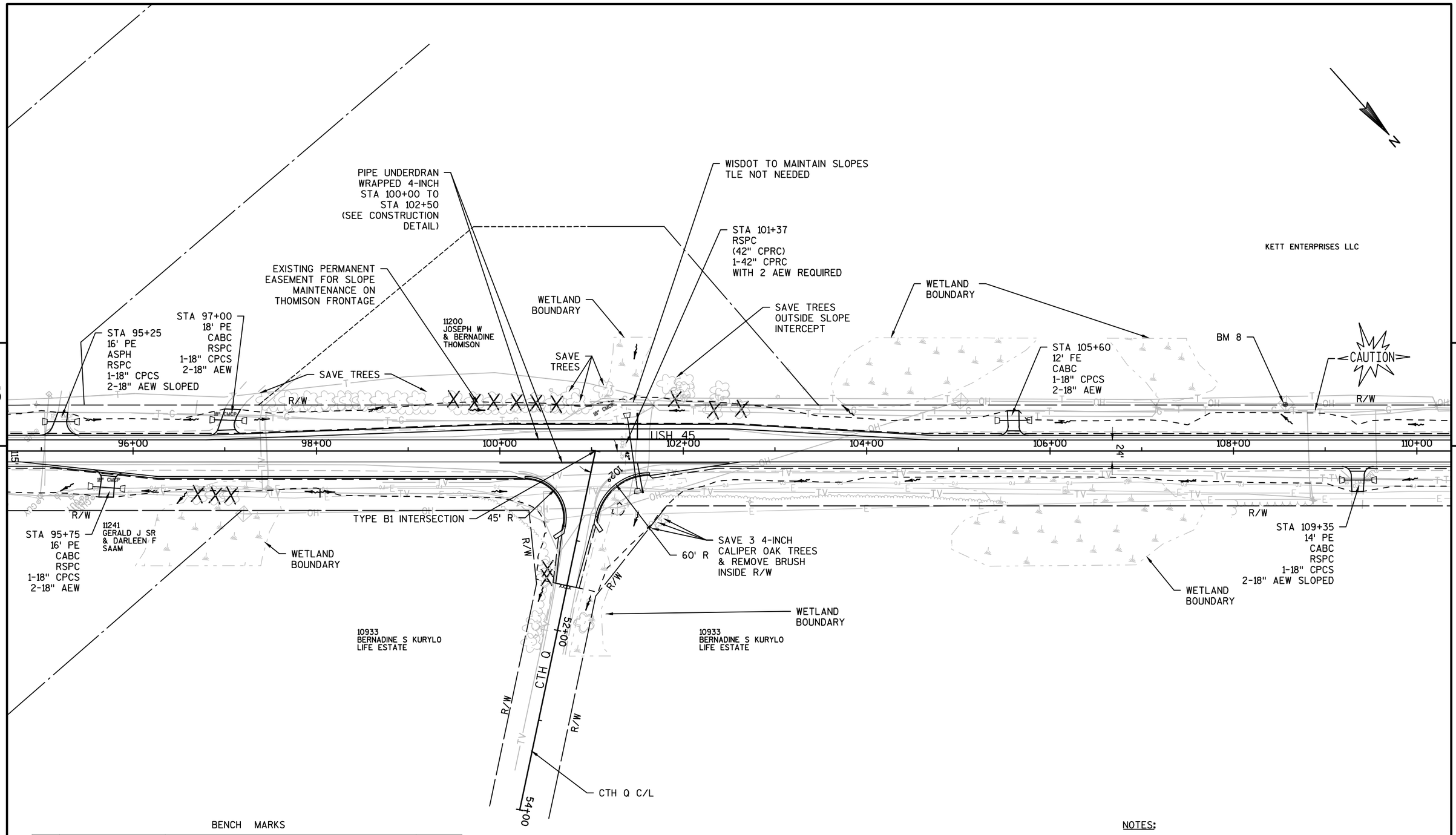
RSPC REMOVING SMALL PIPE CULVERTS

RPSPC REMOVING PARTIAL SMALL PIPE CULVERTS

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	PLAN DETAIL	SHEET 350	E

FILE NAME : N:\PDS\C3D\CAD\32000203\050101_PD.DWG
LAYOUT NAME - 050105_PD

PLOT DATE : 4/28/2016 5:57 PM PLOT BY : MAAS, JOSEPH A PLOT NAME : PLOT SCALE : 1 IN:100 FT



5

5

BENCH MARKS

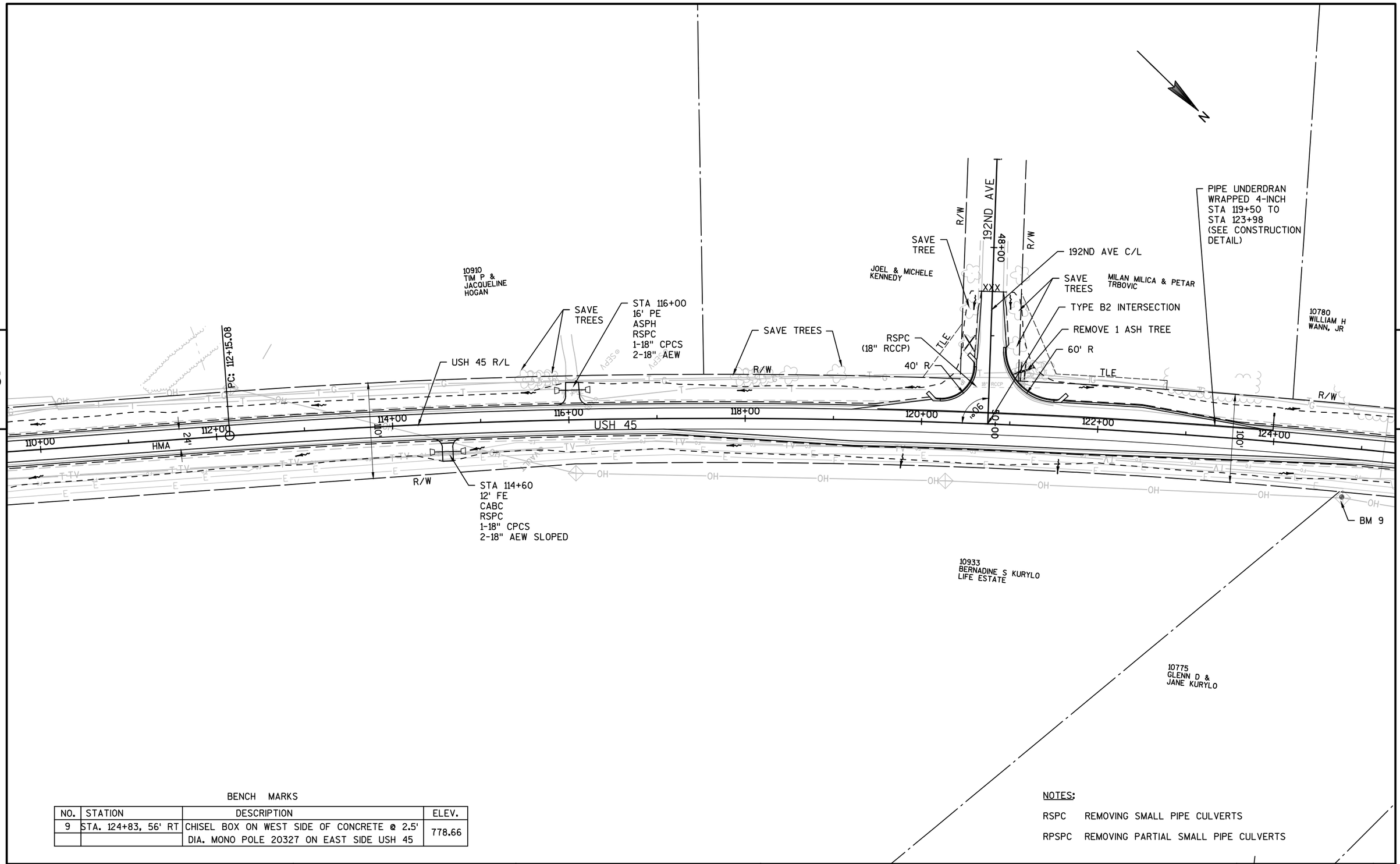
NO.	STATION	DESCRIPTION	ELEV.
8	STA. 108+57, 51' LT	TOP OF LOWER WELD SIDE OF STEEL MONO POLE *LD3100-020223	771.31

NOTES:

RSPC REMOVING SMALL PIPE CULVERTS

RPSPC REMOVING PARTIAL SMALL PIPE CULVERTS

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	PLAN DETAIL	SHEET 351	E



BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
9	STA. 124+83, 56' RT	CHISEL BOX ON WEST SIDE OF CONCRETE @ 2.5' DIA. MONO POLE 20327 ON EAST SIDE USH 45	778.66

NOTES:

RSPC REMOVING SMALL PIPE CULVERTS

RPSPC REMOVING PARTIAL SMALL PIPE CULVERTS

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	PLAN DETAIL	SHEET 352	E

SURVEY PROPERTY WHEN PROJECT IS COMPLETE

OWNER WOULD LIKE TO SAVE TREE

ENCROACHING WOOD FENCE TO BE REMOVED BY OWNER PRIOR TO CONSTRUCTION

PIPE UNDERDRAN WRAPPED 4-INCH STA 129+00 TO STA 134+50 (SEE CONSTRUCTION DETAIL)

STA 125+80
17' PE
ASPH
RSPC
1-18" CPCS
2-18"AEW

CAUTION

10780 WILLIAM H WANN, JR

SAVE TREES

SAVE TREE

MICHAEL A & IRENE C GROSS

REMOVE SHRUB BRUSH INSIDE SLOPE INTERCEPT

60' R

CTH JS C/L

CTH JS

R/W

FMA

STA 48+00
60' PE
ASPH
1-15" CPCS
2-15" AEW SLOPED

10620 CHARLES WEINHOLTZ

SAVE TREES

45' R

10612 DONALD ROY & CAROLE JORDAN

STA 132+30
13' PE CABC
RSPC
1-18" CPCS
2-18" AEW

PI: 133+61.86

TLE

19500 CYNTHIA A CRAVENS

WETLAND BOUNDARY

TYPE B1 INTERSECTION

CONTACT PROPERTY OWNER BEFORE MAKING ALTERATIONS TO FENCE

REMOVING OLD STRUCTURE STA 135+35

REMOVING OLD STRUCTURE STA 135+48

SLOPE INTERCEPT

10514 PETER T NELSON, SR

BM 10

STA 137+30
12' PE
ASPH
RSPC
1-18" CPCS
2-18" AEW

STA 139+40
21' PE
ASPH
RSPC
1-18" CPCS
2-18" AEW

10434 JEFFREY A VOS

USH 45 R/L

USH 45

126+00 128+00 130+00 132+00 134+00 136+00 138+00 140+00

5

5

R/W

BM 9

STA 125+80
12' PE
ASPH
RSPC
1-18" CPCS
2-18" AEW

10755 GLENN D & JANE KURYLO

TYPE B1 INTERSECTION

ROBERT A CHUDY TRUST

TLE

45' R

STA 134+00
RSPC
(24" CMCP)
1-19"X30" CPRCHE
WITH 2 AEW REQUIRED

RSPC

STA 51+40
12' FE
CABC
1-15" CPCS
2-15" AEW

106TH ST

106TH ST R/L

60' R

REMOVE SHRUB BRUSH

WALL MODULAR BLOCK GRAVITY LRFD

19200 ROBERT A CHUDY TRUST

STA 135+37
2-72" CPRC
L = 24' LT & 24' RT
WITH MASONRY ENDWALLS
4 CONCRETE COLLARS REQUIRED

TLE

SLOPE INTERCEPT

REMOVE ASPHALTIC SURFACE

WETLAND BOUNDARY

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
9	STA. 124+83, 56' LT	CHISEL BOX ON WEST SIDE OF CONCRETE Ø 2.5' DIA. MONO POLE 20327 ON EAST SIDE USH 45	778.66
10	STA. 137+79, 48' LT	FOUND RR SPIKE NE SIDE 4.0' UP OF PP #54-1708	788.99

NOTES:

RSPC REMOVING SMALL PIPE CULVERTS

RPSPC REMOVING PARTIAL SMALL PIPE CULVERTS

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	PLAN DETAIL	SHEET 353	E

10434
JEFFREY A
VOS

ENCROACHING CAR TO BE
REMOVED BY OWNER
PRIOR TO CONSTRUCTION

STA 141+13
RSPC
(18" CMCP)

SLOPE
INTERCEPT

STA 142+05
12' PE ASPH
RSPC
1-18" CPCS
2-18" AEW

SAVE TREE

10416
GLENN &
BEVERLY
GIESEKE

STA 143+25
12' PE ASPH
RSPC
1-18" CPCS
2-18" AEW

10400
GLEN E &
TRICIA
NELSON

PIPE UNDERDRAN
WRAPPED 4-INCH
STA 143+00 TO
STA 145+00
(SEE CONSTRUCTION
DETAIL)

STA 145+00
15' FE
CABC
RSPC
1-18" CPCS
2-18" AEW

REMOVE WILLOW TREES
AS REQUESTED BY
WILFRED MEIER

REMOVING
OLD STRUCTURE
STA 146+31
72" CPRC
L = 8' LT & 8' RT
2 AEW REQUIRED
2 CONCRETE COLLARS REQUIRED

BRISTOL FARM INC

WETLAND
BOUNDARY

STA 151+00
13' FE
CABC
1-18" CPCS
2-18" AEW

STA 153+27
RPSPC
30" CPRC
L = 8' LT & 8' RT
2 AEW REQUIRED
2 CONCRETE COLLARS REQUIRED

WETLAND
BOUNDARY

TLE
R/W
R/W
USH 45 R/L
140+00
142+00
144+00
146+00
148+00
150+00
152+00
154+00
24'
130'
USH 45

℄ USH 45 R/L
8°

TYPE B1 INTERSECTION
40' R
196TH AVE S C/L
SAVE
TREES
BM 11
WETLAND
BOUNDARY
PIPE UNDERDRAN
WRAPPED 4-INCH
STA 142+00 TO
STA 144+00
(SEE CONSTRUCTION
DETAIL)

R/W
SAVE TREES &
REMOVE BRUSH
WETLAND
BOUNDARY
10312
DOUGLAS M &
PATRICIA M
COLEMAN
10102
TONY C
SEGER

TLE
R/W
60' R
CAUTION
STA 51+00
23' PE
ASPH
32'
HMA
196TH AVE S
STA 51+65
12' PE
ASPH
RSPC
1-15" CPCS
2-15" AEW
CULVERT REPLACED IN 2013
BY VILLAGE
10433
GARY L
WER
VILLAGE
OF BRISTOL
SEE BERM DETAIL
IN INTERSECTION DETAILS
PARKING LOT TO REMAIN
WITH REVOCABLE PERMIT
STA 142+75
1-19"X30" CPRCHE WITH
2 AEW REQUIRED
REMOVE ASPHALTIC SURFACE

NOTES:

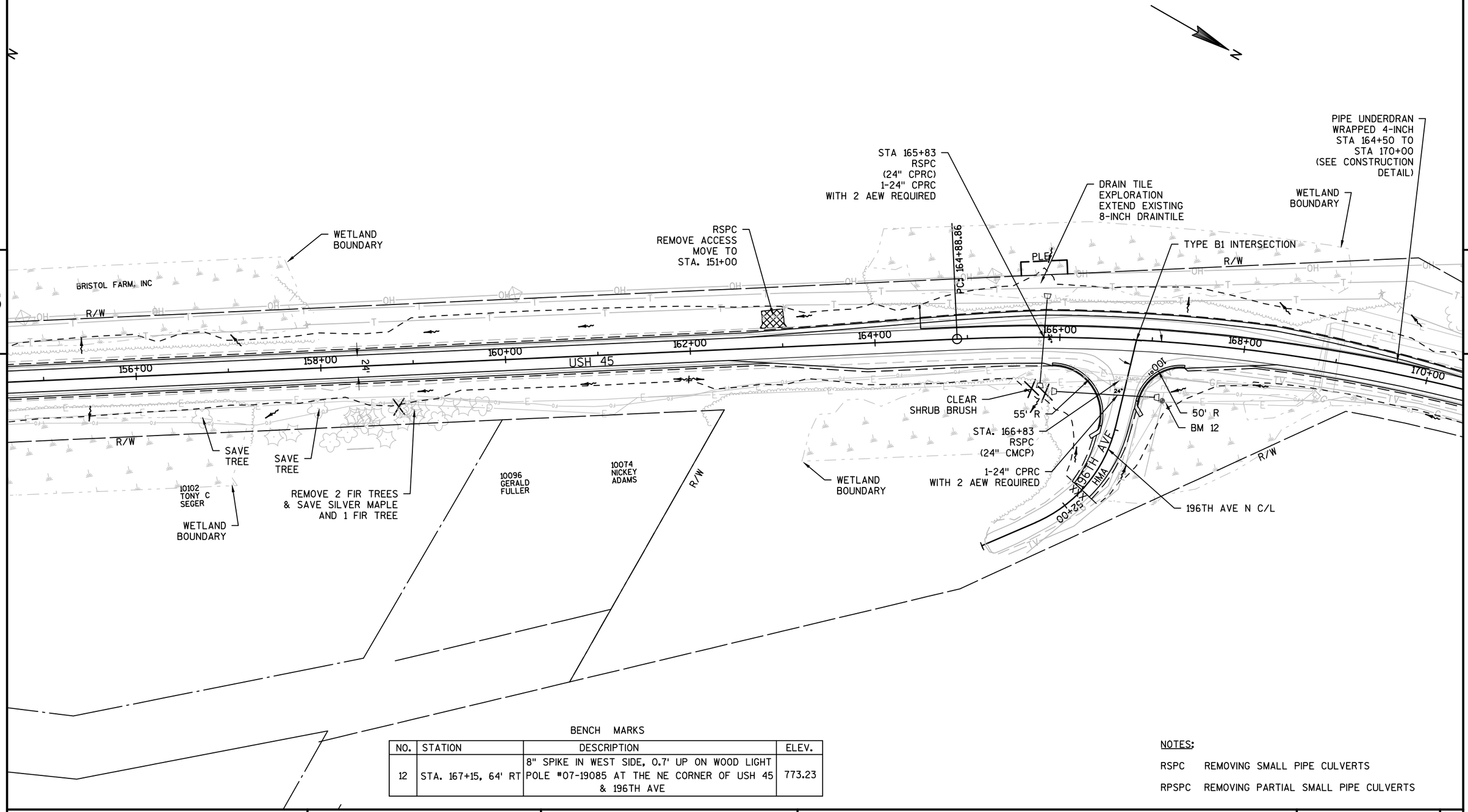
RSPC REMOVING SMALL PIPE CULVERTS

RPSPC REMOVING PARTIAL SMALL PIPE CULVERTS

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
11	STA. 146+42, 87' RT	CHISEL BOX ON NW CORNER OF CONCRETE PAD (146+50) ON EAST SIDE OF USH 45	768.67

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	PLAN DETAIL	SHEET 354	E



BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
12	STA. 167+15, 64' RT	8" SPIKE IN WEST SIDE, 0.7' UP ON WOOD LIGHT POLE #07-19085 AT THE NE CORNER OF USH 45 & 196TH AVE	773.23

NOTES:

RSPC REMOVING SMALL PIPE CULVERTS

RPSPC REMOVING PARTIAL SMALL PIPE CULVERTS

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	PLAN DETAIL	SHEET 355	E

FILE NAME : N:\PDS\C3D\CAD\32000203\050101_PD.DWG
LAYOUT NAME - 050110_PD

PLOT DATE : 4/28/2016 5:57 PM PLOT BY : MAAS, JOSEPH A PLOT NAME : PLOT SCALE : 1 IN:100 FT

5

N

20811
BRISTOL FARM, INC

98TH ST

R/W

R/W

98TH ST C/L

XXX

R/W

60' R

40' R

HMA

24"

RT: 175+85.28

TLE

PEARL L NELSON

STA 182+15
15' FE
CABC
RSPC
1-18" CPCS
2-18" AEW

TLE

R/W

HMA

USH 45

XXX

R/W

TLE

R/W

USH 45 R/L

CAUTION

STA 174+20
16' PE
CABC
RSPC
1-18" CPCS
2-18" AEW

STA. 175+17
RSPC
(18" CMCP)
1-19"X30" CPRCHE WITH
2 AEW REQUIRED

TYPE C INTERSECTION

PROPERTY OWNER WOULD LIKE
WOOD FROM DOWNED TREES

WETLAND
BOUNDARY

9801
WASYL
MIRUTENKO

170+00 172+00 174+00 176+00 178+00 180+00 182+00 184+00

24" 24" 100'

NOTES:

RSPC REMOVING SMALL PIPE CULVERTS

RPSPC REMOVING PARTIAL SMALL PIPE CULVERTS

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	PLAN DETAIL	SHEET 356	E

POTENTIAL PETROLEUM CONTAMINATED SOIL:

= COMMON EXCAVATION

= STORM SEWER EXCAVATION

N

5

5

RICHARD MULDER

20015
RONALD &
CAROL SCHULER

REMOVE ENCROACHING ISLAND WITH PROJECT

REMOVE LIGHT POLE

WETLAND BOUNDARY

SAVE POPLAR TREE

STA 199+40
35' PE
ASPH

REMOVE PAVEMENT

TLE

WETLAND BOUNDARY

USH 45 R/L

BM 13

R/W

REMOVE ACCESS

R/W

186+00 188+00 190+00 192+00 194+00 196+00 198+00 200+00

USH 45

HMA

R/W

XXXX

TLE

REMOVE SHRUB BRUSH

WETLAND BOUNDARY

STA 188+76
RSPC
(24" CPRC)
1-24" CPRC
WITH 2 AEW REQUIRED

LLOYD A NELSON

CAUTION

9421
OLENE E
WIENKE

TLE

STA 193+20
16' PE
CONC
RSPC

STA 195+70
18' PE
ASPH

9411
SCOTT R &
MARIE O HALL

R/W

CAUTION

9341
DOUGLAS W &
CHRISTINE J
MEEK

STA 198+00
16' PE
CABC
RSPC

TLE

SAVE TREE

9325
CAULK AND
BULL TRUST

DECORATIVE FENCE TO BE REMOVED BY OWNER PRIOR TO CONSTRUCTION

9339
DONALD &
SANDRA RIGGS

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
13	STA. 188+53, 51' LT	SOUTH BOLT OF EAST SET OF FOUR 4' +/- DIA STEEL MONO POLE #20342	781.77

NOTES:

RSPC REMOVING SMALL PIPE CULVERTS

RPSPC REMOVING PARTIAL SMALL PIPE CULVERTS

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	PLAN DETAIL	SHEET 357	E

POTENTIAL PETROLEUM CONTAMINATED SOIL:

= COMMON EXCAVATION

= STORM SEWER EXCAVATION

N

WETLAND BOUNDARY

STA 46+10
14' PE
CABC
RSPC
1-18" CPCS
2-18" AEW

20002
WISCONSIN ELECTRIC POWER CO.

REMOVING OLD STRUCTURE STA 47+39, CTH C

STA 47+50
40' PE
ASPH
RSPC

CTH C

REMOVE ACCESS

CTH C C/L

BM 14

R/W

50' R

PI: 201+73.48

40' R

WETLAND BOUNDARY

JAMES & SUZANNE ROGER L.C.

WETLAND BOUNDARY

REMOVING OLD STRUCTURE STA 214+03

CONTACT PROPERTY OWNER WHEN SETTING CULVERT

WETLAND BOUNDARY

STA 210+25
16' FE
CABC
RSPC
1-18" CPCS
2-18" AEW

USH 45

200+00 202+00 204+00 206+00 208+00 210+00 212+00 214+00

PI: 50+00.00

52'

100'

24'

HMA

STA 205+77
RSPC
(24" RCCP)
1-24" RCCP
WITH 2 AEW REQUIRED

STA 214+03
60" CPRC
L = 8' LT & 8' RT
2 AEW REQUIRED
2 CONCRETE COLLARS REQUIRED

19920
KALJON LLC

WETLAND BOUNDARY

40' R

STA 51+85
17' PE
CABC
RSPC
1-15" CPCS
2-15" AEW SLOPED

9301
SEQUOIT PROPERTIES LLC

50' R

TYPE A1 INTERSECTION

9241
KALJON LLC

STA 208+55
14' PE CABC
RSPC
1-21" CPCS
2-21" AEW

CHAIN LINK FENCE 4-FT

WALL MODULAR BLOCK GRAVITY LRFD

SAVE TREES

19913
TOM W WEBER

WILMOT RD

STA 53+00
12' PE
CABC

19816
KALJON LLC

STA 53+75
20' PE
ASPH
1-18" CPCS
2-15" AEW SLOPED

19833
KENNETH & SUSAN PLANTS

STA 54+60
13' PE
CABC
RSPC

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
14	STA. 201+12, 92' LT	CROSS ON N BOLT OF NE LOG OF SIGN "COUNTRYSIDE MARKET" IN THE SW QUADRANT OF CTH C INTERSECTION	782.91

NOTES:

RSPC REMOVING SMALL PIPE CULVERTS

RPSPC REMOVING PARTIAL SMALL PIPE CULVERTS

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	PLAN DETAIL	SHEET 358	E

FILE NAME : N:\PDS\C3D\CAD\32000203\050101_PD.DWG
LAYOUT NAME - 050113_PD

PLOT DATE : 7/12/2016 10:08 AM PLOT BY : MAAS, JOSEPH A PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

N

N

WETLAND BOUNDARY

8820 CORINNE LANE TRUST

SAVE TREE

SAVE TREE

PI 228+09.70

STA 230+10
17' PE
CABC
RSPC
1-18" CPCS
2-18" AEW

R/W

R/W

5

5

216+00 218+00 220+00 222+00 224+00 226+00 228+00 230+00

24'

120'

24'

USH 45

R/W

BM 15

WETLAND BOUNDARY

USH 45 R/L

CAUTION

STA 225+60
12' PE
CABC

STA 228+00
12' PE
CABC
RSPC
1-18" CPCS
2-18" AEW SLOPED

R/W

CAUTION

CLEAR SHRUB BRUSH

MOORE FAMILY LIMITED PARTNERSHIP II

VILLAGE OF BRISTOL

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
15	STA. 218+57, 48' RT	8" SPIKE 0.7' UP ON WEST SIDE OF PP #78-5943	775.57

NOTES:

RSPC REMOVING SMALL PIPE CULVERTS

RPSPC REMOVING PARTIAL SMALL PIPE CULVERTS

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	PLAN DETAIL	SHEET 359	E

N

8820
CORINNE
LANE TRUST

STA 230+10
17' PE
CABC
RSPC
1-18" CPCS
2-18" AEW

REMOVE
12" BOX ELDER TREE

STA 231+95
RPSPC
24" CPRC
L = 8' LT & 8' RT
2 AEW REQUIRED
2 CONCRETE COLLARS REQUIRED

WETLAND
BOUNDARY

R/W

USH 45 R/L

R/W

5

5

230+00 232+00 234+00 236+00 238+00 240+00 242+00 244+00

24'

10'

USH 45

R/W

TLE

CLEAR
SHRUB BRUSH

BM 16

STA 237+50
12' FE
CABC
RSPC
1-18" CPCS
2-18" AEW SLOPED

CLEAR
SHRUB BRUSH

WETLAND BOUNDARY

R/W

6" CMCP DISCHARGE FROM PARK

VILLAGE OF BRISTOL

VILLAGE OF BRISTOL

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
16	STA. 237+00, 47' RT	8" SPIKE 0.7' UP ON WEST SIDE OF PP #78-5684	773.01

NOTES:

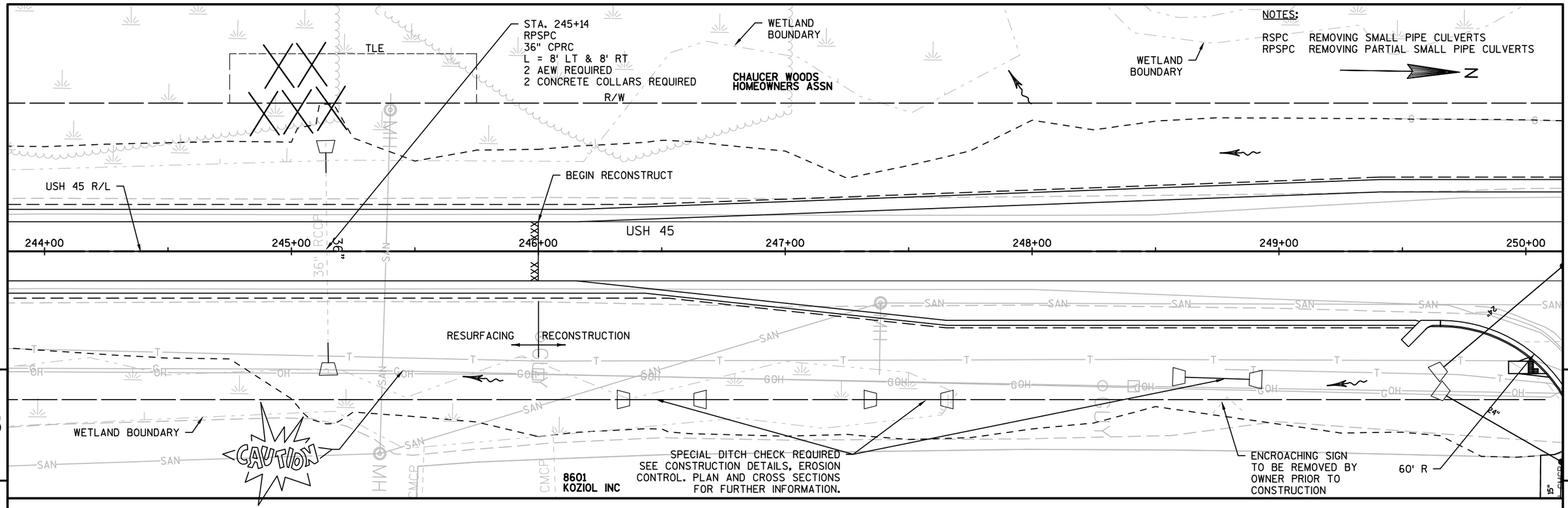
RSPC REMOVING SMALL PIPE CULVERTS

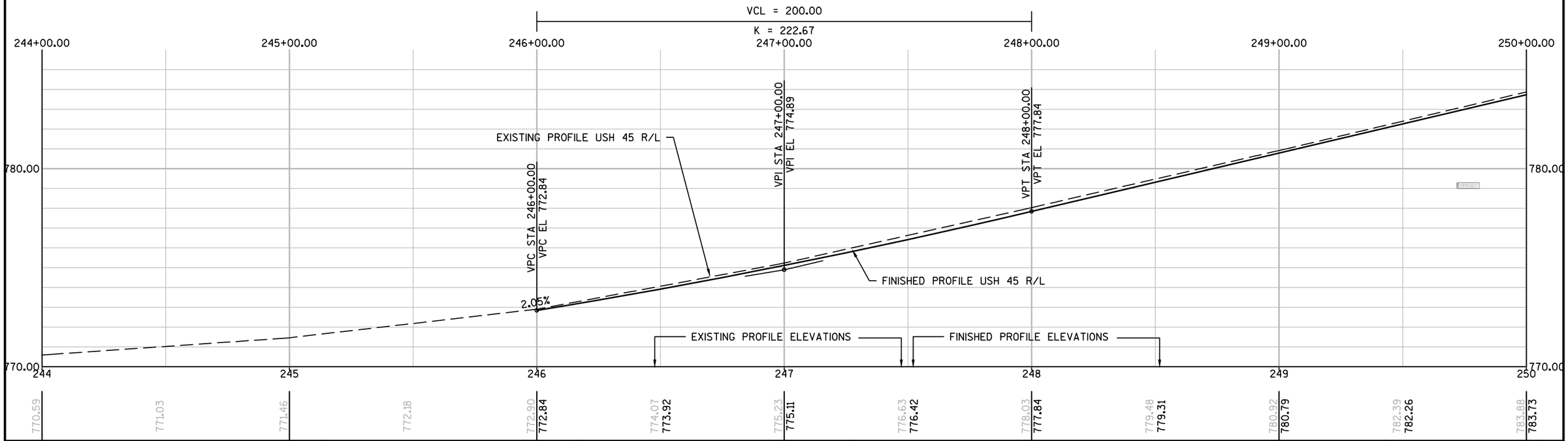
RPSPC REMOVING PARTIAL SMALL PIPE CULVERTS

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	PLAN DETAIL	SHEET 360	E

NOTES:

RSPC REMOVING SMALL PIPE CULVERTS
RPSPC REMOVING PARTIAL SMALL PIPE CULVERTS





PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	PLAN AND PROFILE: PLAN AND PROFILE	SHEET 361 E

FILE NAME : N:\PDS\C3D\CAD\32000203\050120_PP.DWG
LAYOUT NAME - 050120_PP

PLOT DATE : 4/28/2016 7:32 PM PLOT BY : MAAS, JOSEPH A PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 44

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
17	STA. 250+74, 61' RT	8" SPIKE 0.7' UP ON THE WEST SIDE OF PP #07-17236	785.24

SAVE TREE
SAVE TREE
R/W
REMOVE DEAD TREE
SAVE TREES
CHAUCER WOODS HOMEOWNERS ASSN
CTH AH C/L
TLE
40' R
RSPC
12"
CTH AH
60' R
8472 HORTON TRUST
TLE
SAVE TREE
R/W
PI 254+56.80
ENCROACHING SIGN TO BE REMOVED BY OWNER PRIOR TO CONSTRUCTION
TYPE B1 INTERSECTION
18" CMCP
RSPC
15"
12"
120'
USH 45
91°
MODIFIED TYPE B1 INTERSECTION
250+00
251+00
252+00
253+00
254+00
255+00
256+00
90°
24"
18"
12"
SAN
OH
G
W
18" CMCP
15" CMCP
RSPC
CAUTION
STA 254+25
17' PE
ASPH
REMOVE ACCESS
XXX XXX XXX XXX XXX
R/W
ASPHALT DRIVEWAY (WATER TO RUN OVER)
STA 252+15
12' PE
ASPH
STA 252+25
13' PE
ASPH
TLE
SAVE TREE
REMOVE ENCROACHING PARKING
REMOVE CONCRETE BASES STA 51+00
78' PE
ASPH
RSPC
86TH ST
BM 17
60' R
R/W
SAVE TREES
8511 JAMES & JOSEPHINE WIENKE
SAVE TREES
8505 ARTHUR W WESINGER TRUST
ENCROACHING FENCE TO BE REMOVED BY OWNER PRIOR TO CONSTRUCTION
8481 RICK J NETZEL
15" CMCP
18" CMCP
5

NOTES:
RSPC REMOVING SMALL PIPE CULVERTS

800.00
790.00
783.00
EXISTING PROFILE USH 45 R/L
FINISHED PROFILE USH 45 R/L
2.95%
VCL = 540.00
K = 70.32
EXISTING PROFILE ELEVATIONS
FINISHED PROFILE ELEVATIONS
250
251
252
253
254
255
256

783.88	785.30	786.79	788.26	789.74	791.21	792.69	794.17	795.65	797.25	798.85	800.39	801.92
783.73	785.21	786.68	788.16	789.63	791.10	792.58	794.05	795.53	797.00	798.48	799.92	801.08

PROJECT NO: 3200-02-73 | HWY: USH 45 | COUNTY: KENOSHA | PLAN AND PROFILE: PLAN AND PROFILE | SHEET 362 E

FILE NAME : N:\PDS\C3D\CAD\32000203\050120_PP.DWG
LAYOUT NAME - 050121_PP
PLOT DATE : 4/28/2016 6:34 PM PLOT BY : MAAS, JOSEPH A PLOT NAME : PLOT SCALE : 1 IN:40 FT

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
18	STA. 257+05, 109' RT	SW CORNER OF STOOP @ 18960 84TH PLACE	805.30

8472 HORTON TRUST

8458 CHAD JURSZEWSKI

8444 NORMAN R ANDERSON

8430 SANDRA A MELESKY

8404 DANIEL B & JESSIE M TONYAN

STA 256+95 13' PE CABC

STA 257+95 16' PE CONC RSPC

STA 258+90 12' PE ASPH

STA 260+90 16' PE CONC RSPC

SAVE TREES

SAVE TREE

SAVE TREE ENCROACHING FENCE TO BE REMOVED BY OWNER PRIOR TO CONSTRUCTION

*PROPERTY OWNER INTERESTED IN FILL MATERIAL AND WOOD FROM OAK TREE (NORM ANDERSON)

NOTIFY PROPERTY OWNER BEFORE TREE AND LAMP REMOVALS

LAMP POST

TLE

R/W

42" CMCP

15" CMCP

24"

12"

256+00 257+00 258+00 259+00 260+00 261+00 262+00

USH 45

USH 45 R/L

5

RSPC

20' R

18" CMCP

18"

12"

84TH PL

84TH PL C/L

BM 18

19960 SHERRY L ROMANO

8447 JAMES D ZIRBEL

STA 258+55 14' PE CABC

STA 260+25 13' PE CABC RSPC

SAVE TREES

8429 DARREN D & CYNDI L PERSINO

ENCROACHING WALL LANDSCAPE STONE TO BE REMOVED BY OWNER PRIOR TO CONSTRUCTION

8417 DANIEL J & PEGGY A LANGFORD

NOTES:

RSPC REMOVING SMALL PIPE CULVERTS

256+00.00 257+00.00 258+00.00 259+00.00 260+00.00 261+00.00 262+00.00

800.00

790.00

788.00

EXISTING PROFILE USH 45 R/L

FINISHED PROFILE USH 45 R/L

VPT STA 260+70.00
VPT EL 794.55

VCL = 540.00

K = 70.32

4.7%

EXISTING PROFILE ELEVATIONS

FINISHED PROFILE ELEVATIONS

256 257 258 259 260 261 262

801.92 801.08 | 803.11 801.87 | 804.11 802.32 | 804.56 802.40 | 804.45 802.14 | 803.74 801.51 | 802.44 800.53 | 801.07 799.20 | 799.09 797.51 | 796.69 795.46 | 794.05 793.13 | 791.39 790.76 | 788.87 788.40

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	PLAN AND PROFILE: PLAN AND PROFILE	SHEET 363	E

FILE NAME : N:\PDS\C3D\CAD\32000203\050120_PP.DWG
LAYOUT NAME - 050122_PP

PLOT DATE : 4/28/2016 6:34 PM PLOT BY : MAAS, JOSEPH A PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 44

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
18	STA. 265+33, 86' LT	SE CORNER OF CONCRETE PAD OF LIFT STATION ON WEST SIDE OF USH 45	779.00

8404 DANIEL B & JESSIE M TONYAN

8324 VALERIE J NELSON

8302 BRUCE & CONSTANCE JOHNSON

8250 JOHN A DAVIDSON

8417 DANIEL J & PEGGY A LANGFORD

8403 WILLIAM & CLAUDETTE RAU

8335 WISDOT

8321 NH MANAGEMENT LLC

19811 VILLAGE OF BRISTOL

USH 45

84TH ST

83RD ST

84TH ST C/L

83RD ST C/L

SHARED DRIVEWAY

STA 263+40
23' PE
ASPH
RSPC

STA 262+05
15' PE
CABC
RSPC

STA 265+00
35' PE
ASPH

STA 266+20
35' PE
ASPH

STA 267+70
12' PE
ASPH
RSPC

ENCROACHING LANDSCAPE BOULDER TO BE REMOVED BY OWNER PRIOR TO CONSTRUCTION

ENCROACHING WALL LANDSCAPE STONE TO BE REMOVED BY OWNER PRIOR TO CONSTRUCTION

ENCROACHING PARKING LOT TO BE REMOVED WITH PROJECT

CONCRETE CURB PEDESTRIAN (6-INCH)

DINER 45 TEMPORARY ACCESS BASE AGGREGATE DENSE 1-1/4 INCH

SIGN TO REMAIN

SAVE TREE

SAVE TREES

TLE

PLE

R/W

RSPC

ASPH

CONC

BM 19

60' R

40' R

25' R

50' R

20'

A1 = PIPE UNDERDRAIN WRAPPED 4-INCH

NOTES:
RSPC = REMOVING SMALL PIPE CULVERTS

VCL = 580.00
K = 65.00

EXISTING PROFILE USH 45 R/L

FINISHED PROFILE USH 45 R/L

VPC STA 263+20.00
VPC EL 782.72

VPI STA 266+10.00
VPI EL 769.00

266+27.52
EL 775.45

EXISTING PROFILE ELEVATIONS

FINISHED PROFILE ELEVATIONS

POTENTIAL PETROLEUM CONTAMINATED SOIL:
= COMMON EXCAVATION
= STORM SEWER EXCAVATION

780.00
770.00
769.00

262 263 264 265 266 267 268

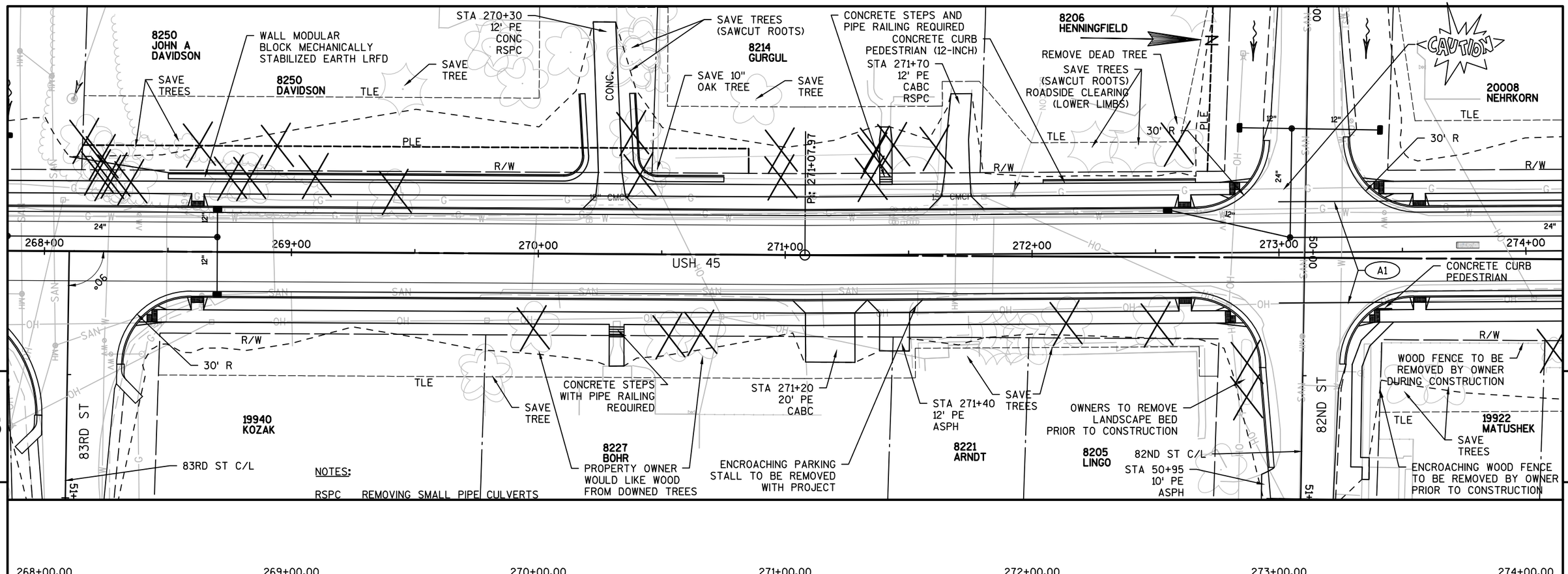
788.87	788.40	786.35	786.03	784.09	783.67	781.97	781.37	780.06	779.43	778.36	777.87	777.13	776.70	776.29	775.91	775.85	775.50	775.42	775.48	775.26	775.85	775.54	776.60	776.85	777.73

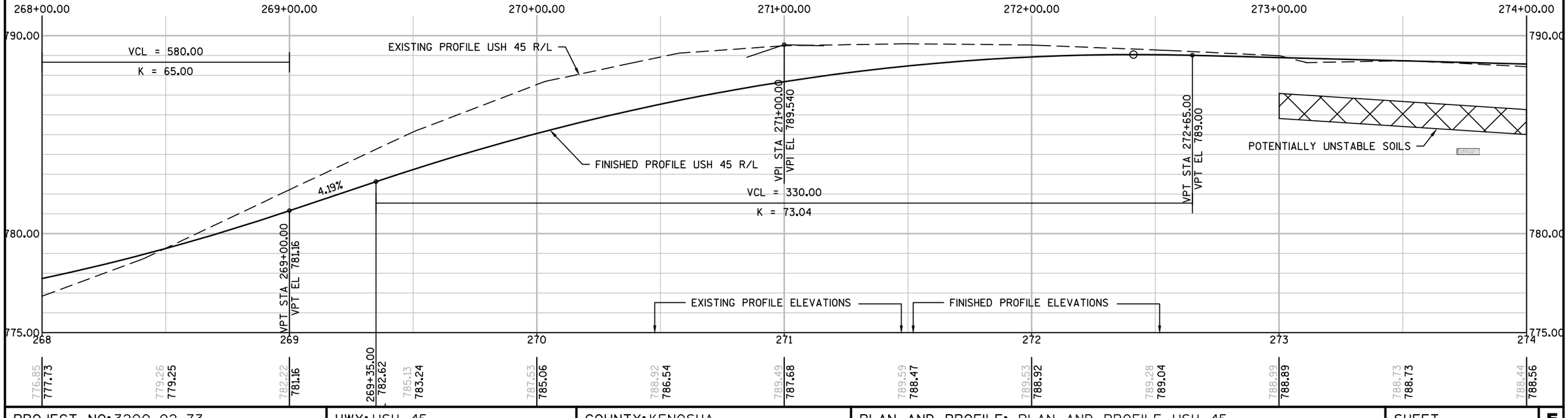
PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	PLAN AND PROFILE: PLAN AND PROFILE	SHEET 364 E

FILE NAME : N:\PDS\C3D\CAD\32000203\050120_PP.DWG
LAYOUT NAME - 050123_PP

PLOT DATE : 4/28/2016 6:34 PM PLOT BY : MAAS, JOSEPH A PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 44





PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	PLAN AND PROFILE: PLAN AND PROFILE USH 45	SHEET 365	E

NOTES:

RSPC REMOVING SMALL PIPE CULVERTS

20008 NEHRKORN

8102 FRIEDRICH

8024 RASMUSSEN

8018 HEICK

*PROPERTY OWNER INTERESTED IN FILL MATERIAL (ERIC FARDOUX)

7950 KAISER

N

SAVE TREE

STA 275+65 12" PE CONC RSPC

SAVE TULIP TREE

STA 277+30 12" PE ASPH

USH 45 R/L

CAUTION

SAVE TREES (SAWCUT ROOTS)

STA 277+95 15" PE CABC

CONCRETE STEPS WITH PIPE RAILING REQUIRED

SAVE TREES

STA 279+90 12" PE ASPH

PC 278+68.89

PVE

PLE

TLE

R/W

15" CMCP

HMA

USH 45

274+00

275+00

276+00

277+00

278+00

279+00

280+00

A1

SAN

OH

SAVE TREE

DRAIN TILE EXPLORATION

19916 SCHMITT

8031 KRUEGER

STA 276+67 12" PE CONC

8021 AKER

REMOVE STUMP

STA 277+90 32" PE ASPH

REMOVE ENCROACHING PARKING

8020 BRISTOL UNITED METH CHURCH

STA 278+50 14" PE CABC

8003 THOMAS

80TH ST C/L

80TH ST

19920 WALKER

5

-0.33%

EXISTING PROFILE USH 45 R/L

FINISHED PROFILE USH 45 R/L

POTENTIALLY UNSTABLE SOILS

VPC STA 277+10.00
VPC EL 787.55

VPI STA 279+10.00
VPI EL 786.900

VCL = 400.00

K = 72.28

EXISTING PROFILE ELEVATIONS

FINISHED PROFILE ELEVATIONS

780.00

770.00

274 275 276 277 278 279 280

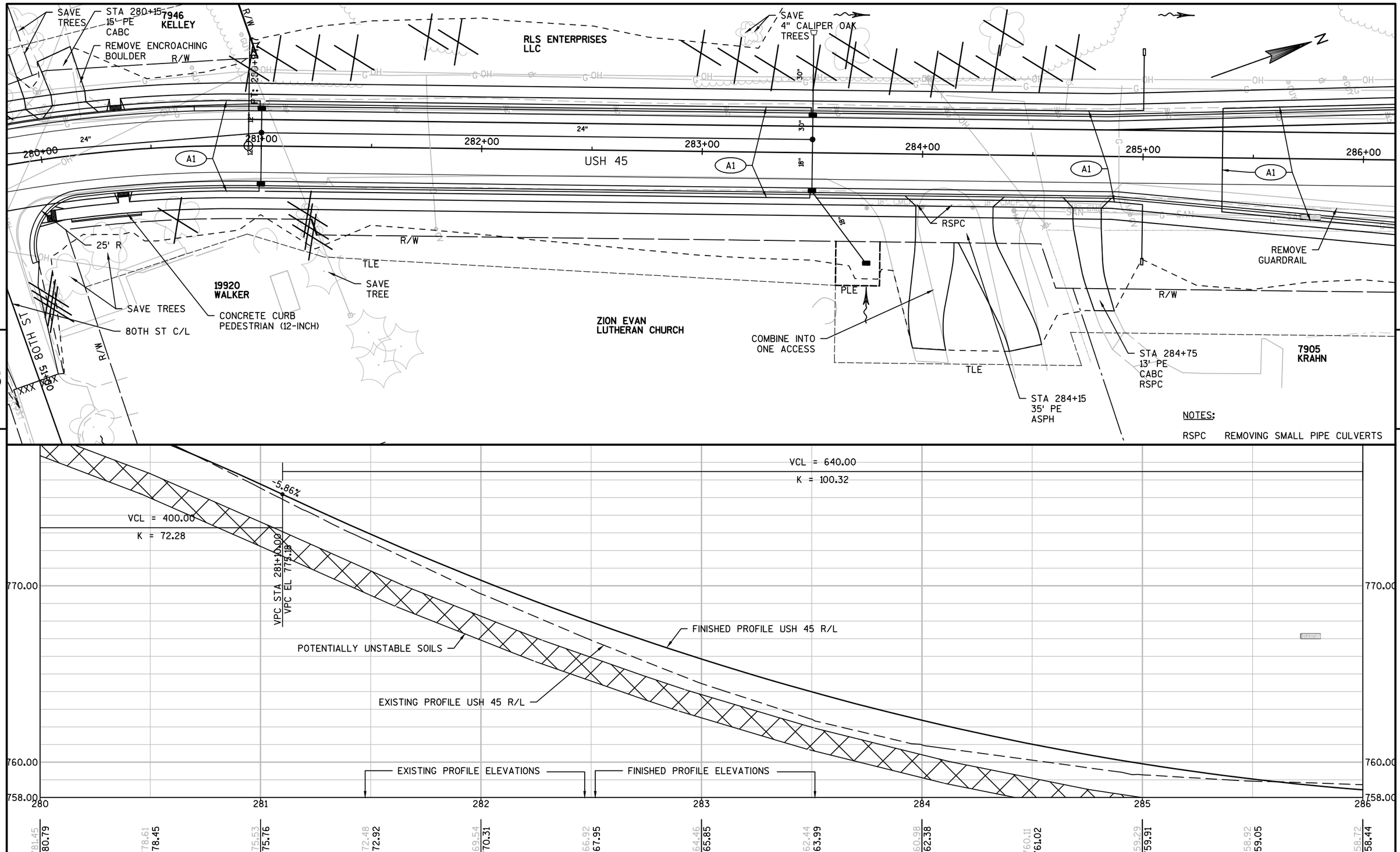
788.44 788.56 | 788.24 788.40 | 788.05 788.24 | 787.91 788.07 | 787.81 787.91 | 787.75 787.75 | 787.69 787.58 | 787.52 787.31 | 787.45 786.70 | 786.60 785.74 | 785.57 784.44 | 783.91 782.79 | 781.45 780.79

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	PLAN AND PROFILE: PLAN AND PROFILE USH 45	SHEET	E

FILE NAME : N:\PDS\C3D\CAD\32000203\050120_PP.DWG
LAYOUT NAME - 050125_PP

PLOT DATE : 4/28/2016 6:35 PM PLOT BY : MAAS, JOSEPH A PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 44



5 5

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	PLAN AND PROFILE: PLAN AND PROFILE USH 45	SHEET 367 E

FILE NAME : N:\PDS\C3D\CAD\32000203\050120_PP.DWG
LAYOUT NAME - 050126_PP
PLOT DATE : 4/28/2016 6:35 PM PLOT BY : MAAS, JOSEPH A PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 44

ILLS ENTERPRISES LLC

DRAINTILE CLEANOUT TO REMAIN
RIM = 754.3
INV = 747.3

WETLAND BOUNDARY

PIPE UNDERDRAIN UNPERFORATED 12-INCH

TYPE B2 INTERSECTION

CLEAR & GRUB 5' PAST SLOPES

R/W

CAUTION

24"

12"

286+00 287+00 288+00 289+00 290+00 291+00 292+00

A1

USH 45

90°

CONCRETE CURB PEDESTRIAN

79TH ST C/L

79TH ST

ENCROACHING CHAIN LINK FENCE TO BE REMOVED BY OWNER PRIOR TO CONSTRUCTION

RSPC

R/W

BECKETT LLC

PLE

TLE

SAVE TREES OUTSIDE SLOPE INTERCEPT

WETLAND BOUNDARY

SIGN FLAG & LANDSCAPING TO REMAIN

60' R

SAVE TREE

XXX XXX XXX XXX XXX

40' R

SAVE TREES

SAVE TREE (ROADSIDE CLEARING)

SAVE TREE (ROADSIDE CLEARING)

REMOVE ACCESS

7801 BRISTOL BAY DEVELOPMENT CORP

NOTES:

RSPC REMOVING SMALL PIPE CULVERTS

5

5

286+00.00 287+00.00 288+00.00 289+00.00 290+00.00 291+00.00 292+00.00

VCL = 640.00

K = 100.32

286+97.84
EL 757.96

VPT STA 287+50.00
VPT EL 758.09

EXISTING PROFILE USH 45 R/L

0.52%

FINISHED PROFILE USH 45 R/L

760.00

750.00

EXISTING PROFILE ELEVATIONS

FINISHED PROFILE ELEVATIONS

286 287 288 289 290 291 292

758.72	758.53	758.63	758.91	759.10	759.34	759.67
758.44	758.07	757.96	758.09	758.35	758.61	758.87
760.00	760.39	760.66	760.82	761.00	761.12	
759.13	759.39	759.65	759.91	760.17	760.43	

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	PLAN AND PROFILE: PLAN AND PROFILE USH 45	SHEET 368	E

FILE NAME : N:\PDS\C3D\CAD\32000203\050120_PP.DWG
LAYOUT NAME - 050127_PP

PLOT DATE : 4/28/2016 6:35 PM PLOT BY : MAAS, JOSEPH A PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 44

ILLS ENTERPRISES LLC

R/W

SAVE TREE

R/W

BERWICK PROPERTIES INC

NOTES:

RSPC REMOVING SMALL PIPE CULVERTS

N

STA 293+08
RSPC
(36" CPRC)
2-36" CPRC
2 AEW REQUIRED

USH 45 R/L

24"

12"

292+00 293+00 294+00 295+00 296+00 297+00 298+00

36" CPCP 36" RCCP 36"

USH 45

REMOVE GUARDRAIL

CAUTION

TLE PLE TLE

R/W

7868
TOWN OF
BRISTOL

WETLAND BOUNDARY

TLE

R/W

BECKETT LLC

5 5

292+00.00 293+00.00 294+00.00 295+00.00 296+00.00 297+00.00 298+00.00

VCL = 260.00

K = 136.43

770.00

VPC STA 293+50.00
VPC EL 761.21

VPI STA 294+80.00
VPI EL 761.89

VPT STA 296+10.00
VPT EL 765.04

FINISHED PROFILE USH 45 R/L

EXISTING PROFILE USH 45 R/L

EXISTING PROFILE ELEVATIONS

FINISHED PROFILE ELEVATIONS

760.00

292 293 294 295 296 297 298

761.12	761.15	761.13	761.17	761.23	761.45	762.10	763.27	764.43	765.64	766.88	768.12	769.34
760.43	760.69	760.95	761.21	761.57	762.10	762.82	763.72	764.80	766.01	767.23	768.44	769.65

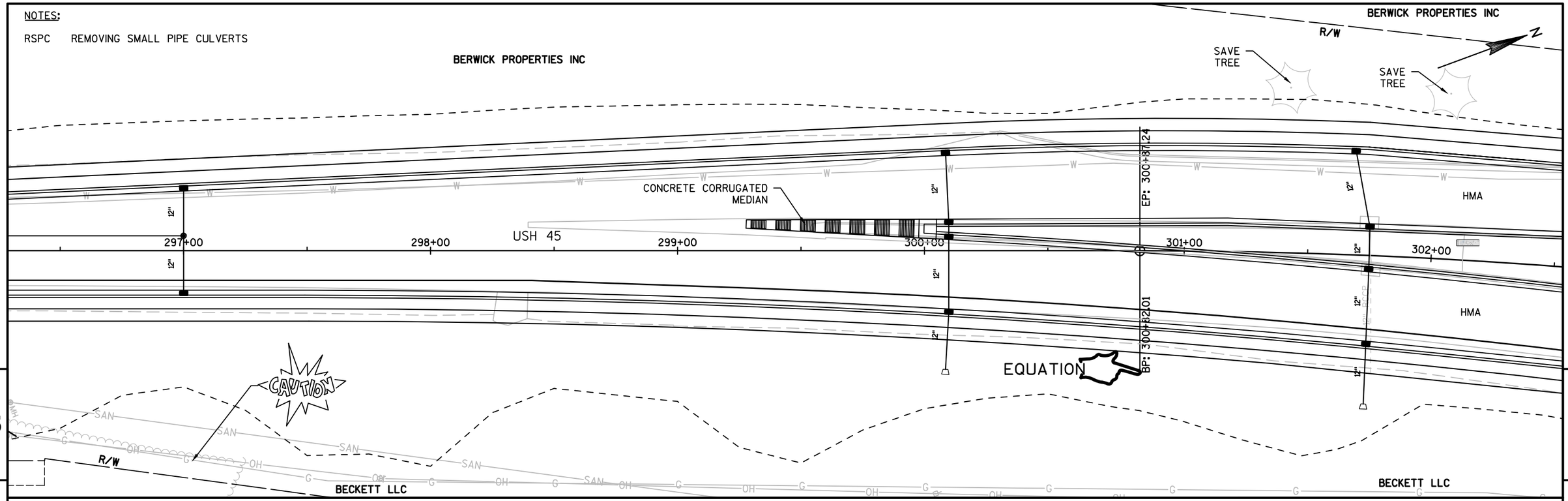
PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	PLAN AND PROFILE: PLAN AND PROFILE USH 45	SHEET 369	E

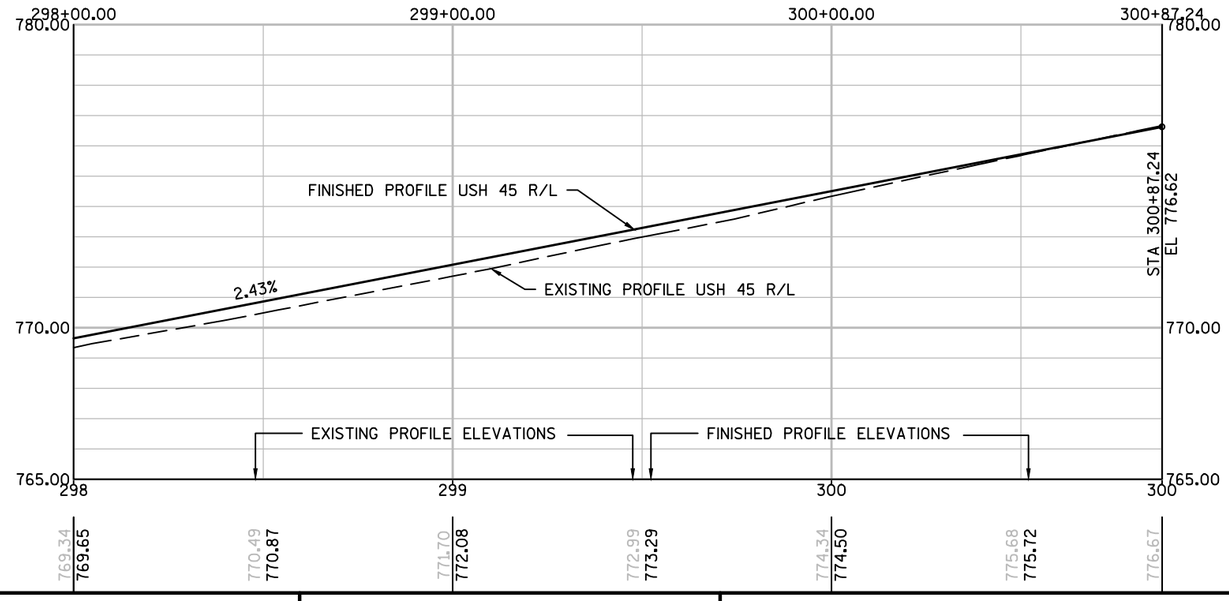
FILE NAME : N:\PDS\C3D\CAD\32000203\050120_PP.DWG
LAYOUT NAME - 050128_PP

PLOT DATE : 4/28/2016 6:35 PM PLOT BY : MAAS, JOSEPH A PLOT NAME : PLOT SCALE : 1 IN:40 FT

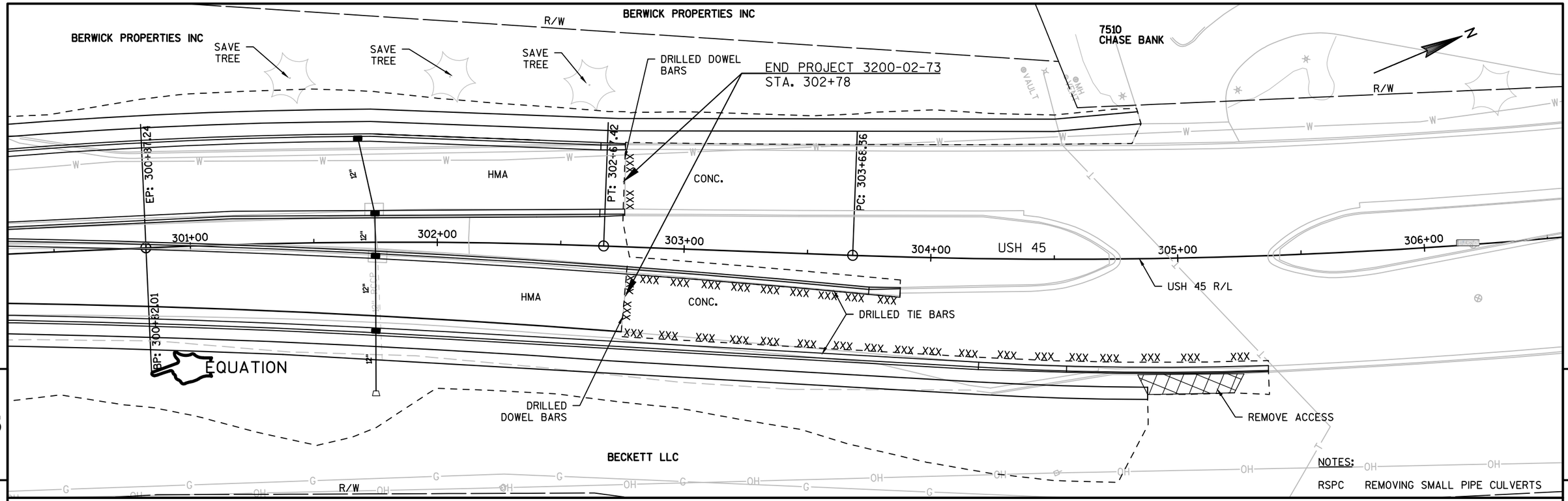
NOTES:

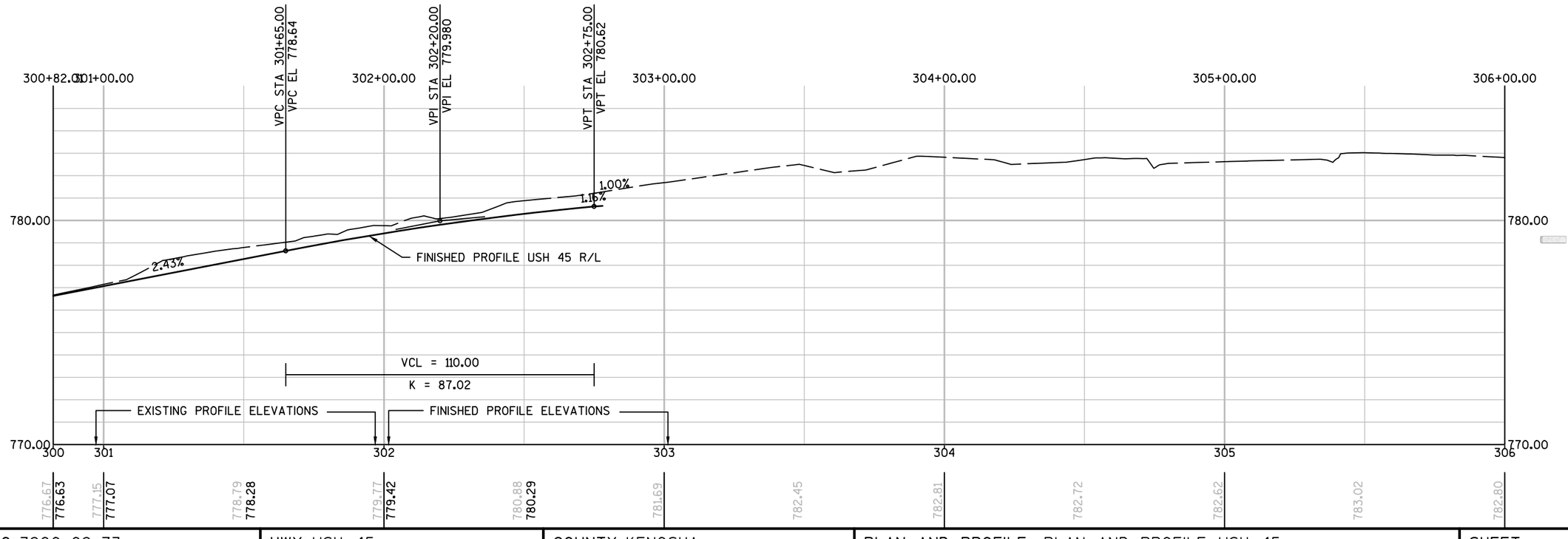
RSPC REMOVING SMALL PIPE CULVERTS





PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	PLAN AND PROFILE: PLAN AND PROFILE USH 45	SHEET 370	E

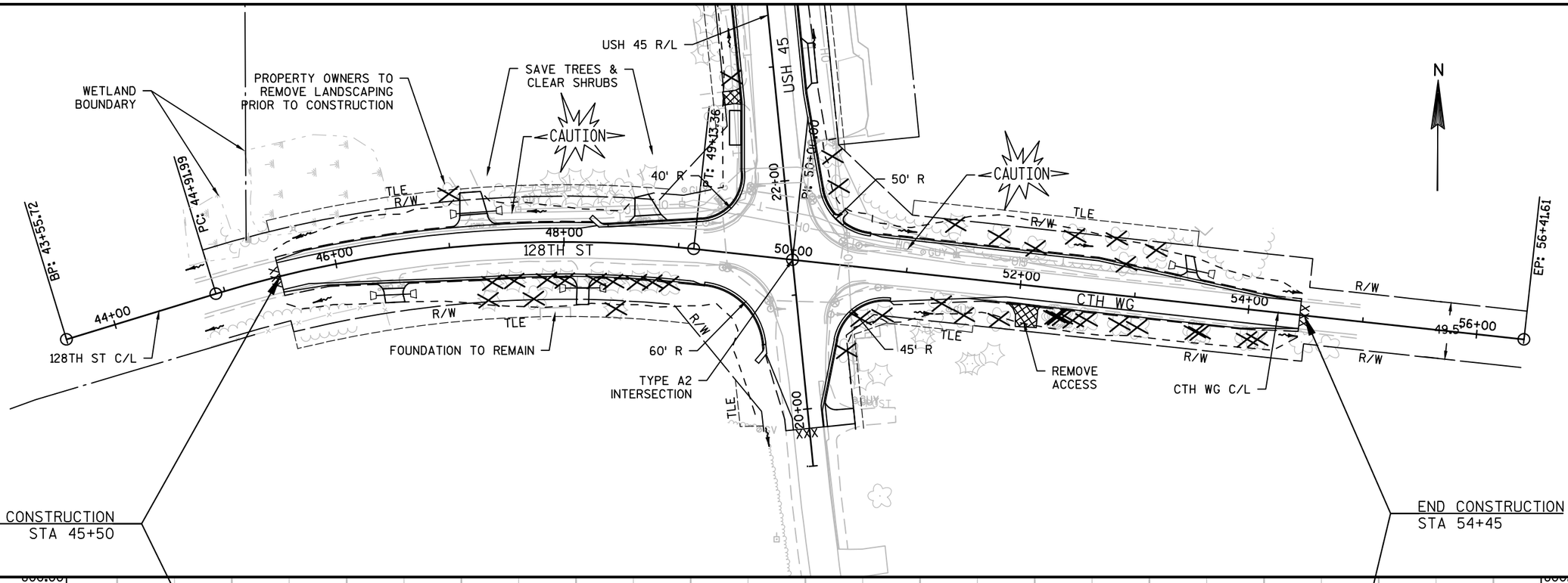




PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	PLAN AND PROFILE: PLAN AND PROFILE USH 45	SHEET 371	E

FILE NAME : N:\PDS\C3D\CAD\32000203\050120_PP.DWG
LAYOUT NAME - 050130_PP

PLOT DATE : 4/28/2016 6:35 PM PLOT BY : MAAS, JOSEPH A PLOT NAME : PLOT SCALE : 1 IN:40 FT

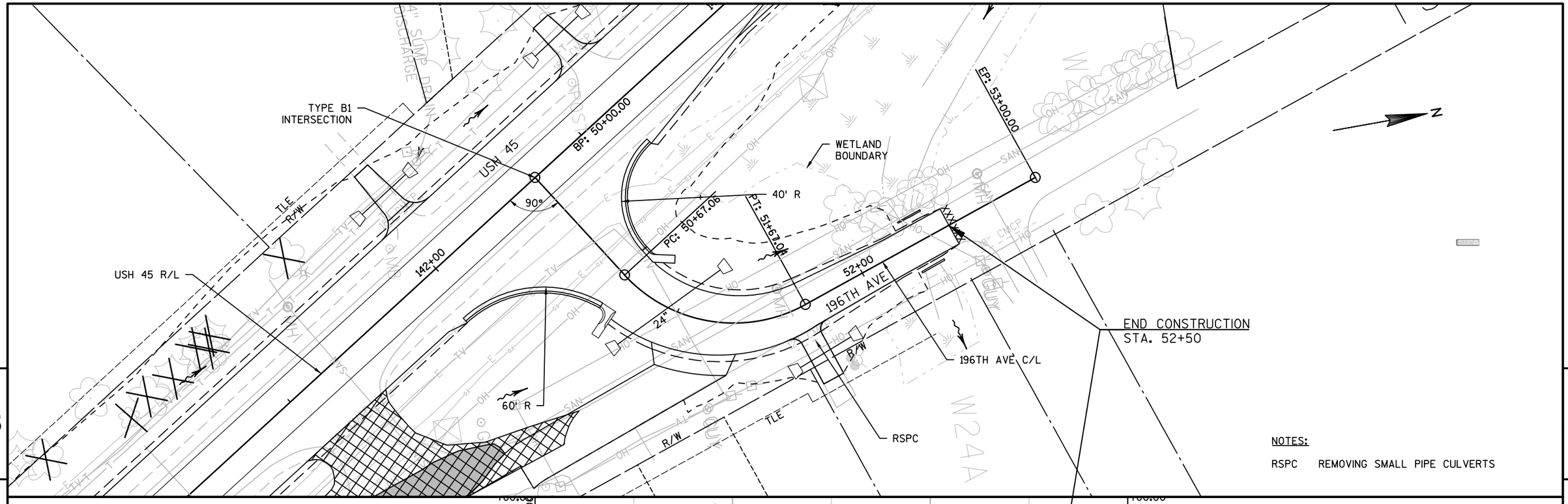


PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	PLAN AND PROFILE: CTH WG	SHEET 372 E

FILE NAME : N:\PDS\C3D\CAD\32000203\050124_PP.DWG
LAYOUT NAME - 050124_PP

PLOT DATE : 4/28/2016 7:37 PM PLOT BY : MAAS, JOSEPH A PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44



PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	PLAN AND PROFILE: 196TH AVE (SOUTH)	SHEET 373 E

FILE NAME : N:\PDS\C3D\CAD\32000203\050124_PP.DWG
LAYOUT NAME - 050126_PP

PLOT DATE : 4/28/2016 7:37 PM PLOT BY : MAAS, JOSEPH A PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 44

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
14	STA. 201+12, 92' LT	CROSS ON N BOLT OF NE LOG OF SIGN "COUNTRYSIDE MARKET" IN THE SW QUADRANT OF CTH C INTERSECTION	782.91

BEGIN CONSTRUCTION
STA 42+40

WETLAND BOUNDARY

CAUTION

WETLAND BOUNDARY

BP: 40+00.00

PIE

TLE

40' R

R/W

USH 45

PI: 50+00.00

204+00

202+00

200+00

50' R

WALL MODUALR BLOCK GRAVITY LRFD

CHAIN LINK FENCE 4-FT

TLE

CTH C

CTH C C/L

42+00

44+00

46+00

48+00

50+00

52+00

54+00

BM 14

REMOVE ACCESS

SAVE TREES

N

EXISTING PROFILE CTH C C/L

EXISTING PROFILE ELEVATIONS

790.00
780.00
770.00
760.00

40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55

782.42 782.42 | 781.99 781.99 | 781.64 781.64 | 781.36 781.36 | 781.07 781.07 | 780.81 780.81 | 780.74 780.74 | 780.84 780.84 | 780.83 780.83 | 780.76 780.76 | 780.77 780.77 | 780.87 780.87 | 780.83 780.83 | 780.92 780.92 | 781.14 781.14 | 781.35 781.35 | 781.82 781.82 | 782.59 782.59 | 782.38 782.38 | 782.22 782.22 | 782.51 782.51 | 782.76 782.76 | 782.82 782.82 | 782.83 782.83 | 782.80 782.80 | 782.76 782.76 | 782.68 782.68 | 782.48 782.48

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	PLAN AND PROFILE: CTH C	SHEET 374	E

FILE NAME : N:\PDS\C3D\CAD\32000203\050124_PP.DWG
LAYOUT NAME - 050127_PP

PLOT DATE : 4/28/2016 7:37 PM PLOT BY : MAAS, JOSEPH A PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

USH 45

PI: 50+00.00

EP: 60+00.00

50+00 52+00 54+00 56+00 58+00

CTH C

CTH C C/L

HMA

WALL MODUALR BLOCK GRAVITY LRFD

CHAIN LINK FENCE 4-FT

50' R

40' R

R/W

TLE

SAVE TREES

RSPC

INLET TO REMAIN

END CONSTRUCTION STA 59+10

N

NOTES:

RSPC REMOVING SMALL PIPE CULVERTS

EXISTING PROFILE CTH C C/L

EXISTING PROFILE ELEVATIONS

800.00 790.00 780.00 770.00 760.00

55 56 57 58 59 60

782.48 782.17 781.81 781.45 781.08 780.62 780.01 779.33 778.61 777.94

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	PLAN AND PROFILE: CTH C	SHEET 375	E

FILE NAME : N:\PDS\C3D\CAD\32000203\050124_PP.DWG
LAYOUT NAME - 050128_PP

PLOT DATE : 4/28/2016 7:37 PM PLOT BY : MAAS, JOSEPH A PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

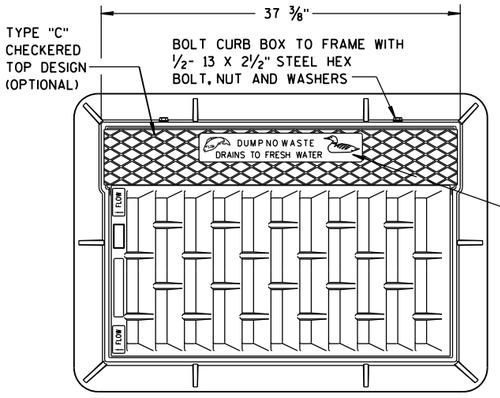
Standard Detail Drawing List

08A05-19A	INLET COVERS TYPE A, H, A-S, H-S & Z
08A05-19B	INLET COVERS TYPE B, B-A, C, MS, MS-A, & WM
08A05-19C	INLET COVERS TYPE F, HM, HM-S, S, T, V, HM-GJ, & HM-GJ-S
08A05-19D	INLET COVER TYPE BW, MANHOLE COVERS, TYPE K, J, J-S, L & M
08B09-01	MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT AND 8-FT DIAMETER
08C06-01	INLETS 3-FT AND 4-FT DIAMETER
08C07-01	INLETS 2X2-FT, 2X2.5-FT, 2X3-FT AND 2.5X3-FT
08C08-01	INLETS MEDIAN 1 AND 2 GRATE
08D01-18	CONCRETE CURB, CONCRETE CURB AND GUTTER AND TIES
08D04-05	CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES
08D05-16A	CURB RAMPS TYPES 1 AND 1-A
08D05-16B	CURB RAMPS TYPES 2 AND 3
08D05-16C	CURB RAMPS TYPES 4A AND 4A1
08D05-16D	CURB RAMPS TYPE 4B AND 4B1
08D05-16E	CURB RAMPS TYPES 5, 6, 7A, 7B & 8
08E08-03	TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS
08E09-06	SILT FENCE
08E10-02	INLET PROTECTION TYPE A, B, C AND D
08E14-01	TRACKING PAD
08F01-11	APRON ENDWALLS FOR CULVERT PIPE
08F02-01	APRON ENDWALLS FOR PIPE ARCH AND ELLIPTICAL PIPE
08F04-07	JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL
08F06-04	REINFORCED CONCRETE APRON ENDWALL FOR PIPE UNDERDRAIN
08F07-05	STEEL APRON ENDWALLS FOR CULVERT PIPE AND PIPE ARCH SLOPED SIDE FRAINS
08F08-02	STEEL APRON ENDWALLS FOR CULVERT PIPE AND PIPE ARCH SLOPED CROSS DRAINS
08F09-01	MORTAR RUBBLE MASONRY ENDWALLS FOR CULVERT PIPE AND PIPE ARCH
08F10-01	CONCRETE MASONRY ENDWALLS FOR CULVERT PIPE AND PIPE ARCH
09A01-13A	AT-GRADE SIDE ROAD INTERSECTION, TYPES "B1", "B2", "C" AND D AND TEE INTERSECTION BYPASS LANE
09A01-13B	AT-GRADE SIDE ROAD INTERSECTION, TYPE "A1" & "A2"
09B02-09	CONDUIT
09B04-11	PULL BOX
09C02-07	CONCRETE BASES, TYPES 1, 2, 5, & 6
09C03-04	TRANSFORMER/PEDESTAL BASES
09C06-07	CONCRETE CONTROL CABINET BASE, TYPE 9, SPECIAL
09C11-08	CONCRETE BASE TYPE 10
09C12-07A	CONCRETE BASE TYPE 13
09C12-07B	CONCRETE BASE TYPE 13
09D01-05	CABINET SERVICE INSTALLATION (METER BREAKER PEDESTAL)
09D02-03	SIGNAL CONTROL CABINET
09E01-14G	HARDWARE DETAILS FOR POLE MOUNTINGS
09E06-05	TRAFFIC SIGNAL STANDARD POLY BRACKET MOUNTINGS (TYPICAL) 13 FT. OR 15 FT.
09E08-07B	TYPE 10 POLE 15'-30' MONOTUBE ARM
09E08-07D	TYPE 13 POLE 35'-55' MONOTBE ARM
09E08-07E	GENERAL NOTES AND HARDWARE DETAILS FOR TYPE 9, 10, 12 & 13 POLES WITH MONOTUBE ARMS
09F15-04A	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 1)
09F15-04B	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)
11B01-05	CONCRETE CORRUGATED MEDIAN
11B02-02	CONCRETE MEDIAN NOSE
13A10-01A	2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING
13A10-01B	2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING
13A10-01C	2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING
13A10-01D	2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING
13A11-02A	2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING
13A11-02B	2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING
13C01-18	CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES
13C13-08	URBAN DOWELED CONCRETE PAVEMENT
13C14-06A	BASE PATCHING CONCRETE
13C14-06B	BASE PATCHING CONCRETE
13C14-06C	BASE PATCHING CONCRETE
13C16-02A	DETAIL FOR RIGHT TURN LANE/TEE INTERSECTION BYPASS LANE ON A CONRETE ROADWAY
13C16-02B	DETAIL FOR RIGHT TURN LANE/TEE INTERSECTION BYPASS LANE ON A CONRETE ROADWAY
13C18-03A	CONCRETE PAVEMENT JOINTING
13C18-03B	CONCRETE PAVEMENT STEEL REINFORCEMENT
13C18-03C	CONCRETE PAVEMENT JOINT TIES
13C18-03D	CONCRETE PAVEMENT JOINTING AT UTILITY FIXTURES
15A03-02A	FLEXIBLE MARKER POST FOR CULVERT END
15A03-02B	FLEXIBLE MARKER POST FOR CULVERT END

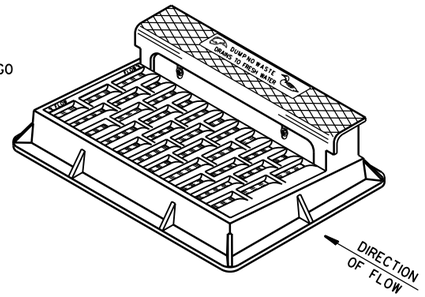
6

Standard Detail Drawing List

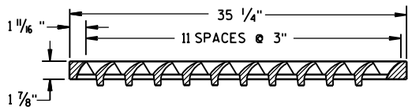
15B03-15A	FENCE CHAIN LINK
15B03-15B	FENCE CHAIN LINK
15C02-06A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-06B	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-06C	DETOUR SIGNING FOR MAINLINE CLOSURES
15C03-03	BARRICADES AND SIGNS FOR SIDEROAD CLOSURES
15C04-03	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC
15C05-03	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS
15C07-12B	PAVEMENT MARKING WORDS
15C07-12C	PAVEMENT MARKING ARROWS
15C08-16A	PAVEMENT MARKING (MAINLINE)
15C08-16E	PAVEMENT MARKING (LEFT TURN LANE)
15C08-16F	PAVEMENT MARKING (ISLANDS)
15C12-04	TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)
15C18-03	MEDIAN ISLAND MARKING
15C19-03A	MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY
15C21-06	SIGNING AND MARKING FOR TWO LANE TO FOUR LANE DIVIDED TRANSITIONS
15C28-02	SIGNING AND MARKING FOR COMBINATION RIGHT TURN AND BYPASS LANE
15C33-01	STOP LINE AND CROSSWALK PAVEMENT MARKING
15D28-03	TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY
15D38-01A	TEMPORARY TRAFFIC CONTROL FIXED MESSAGE SIGNS
15D38-01B	ATTACHMENT OF SIGNS TO POSTS

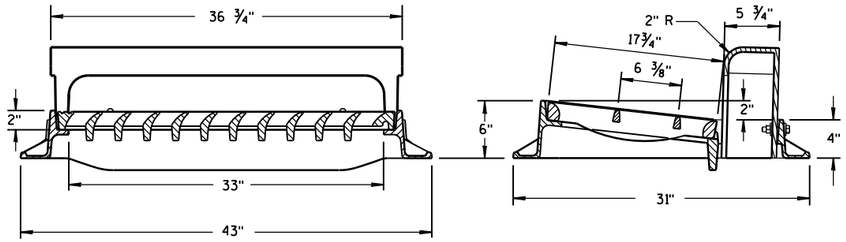


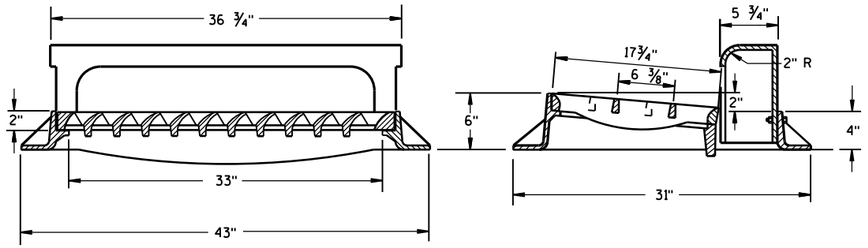
NOTE:
GRATE IS REVERSIBLE.



NOTE: CURB BOX HEIGHT ADJUSTABLE 6" TO 9"

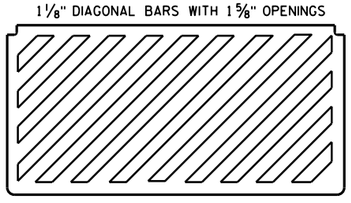






TYPE "H"

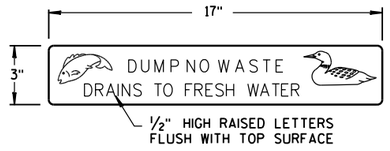
NOTE: EITHER CASTING IS ACCEPTABLE



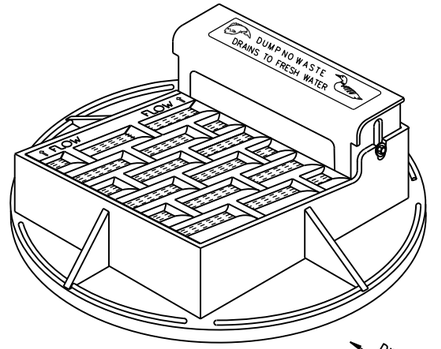
SPECIAL GRATE FOR TYPE "H" COVER

(MEASURES 35 1/4" X 17 3/4" X 2")

(NOTED AS TYPE H-S ON DRAINAGE TABLE)



LOGO DETAIL



NOTE: CURB BOX ADJUSTABLE 4" TO 9"

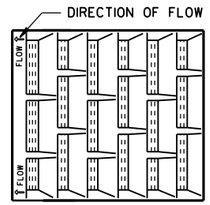
NOTE:
GRATE IS REVERSIBLE.

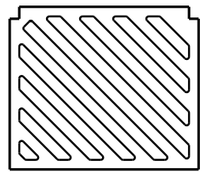
GENERAL NOTES

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

DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR CATCH BASIN, MANHOLE AND INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.

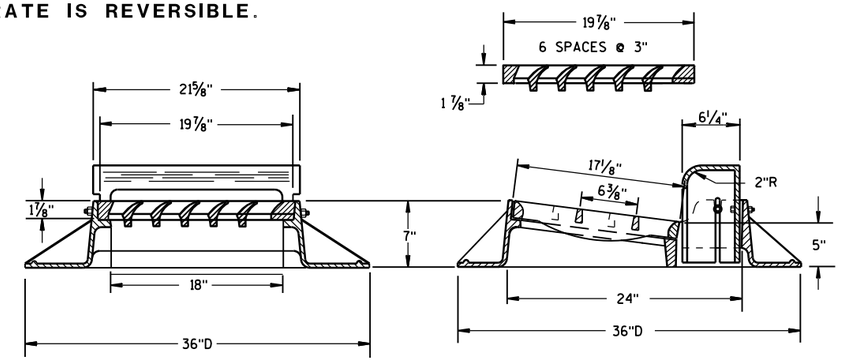




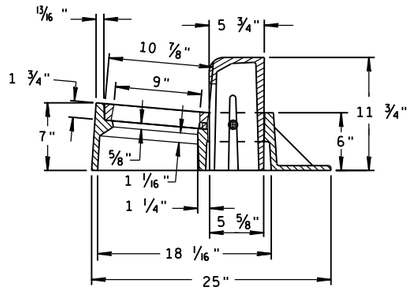
SPECIAL GRATE FOR TYPE "A" COVER

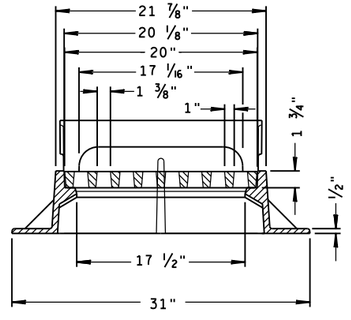
(MEASURES 19 3/4" X 17" X 1 7/8")

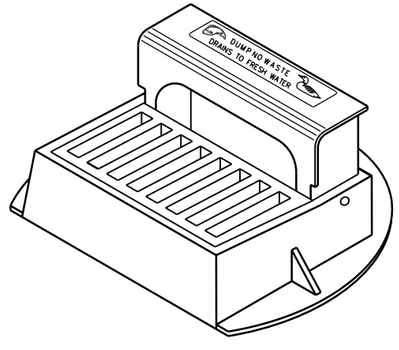
(NOTED AS TYPE A-S ON DRAINAGE TABLE)



TYPE "A"







TYPE "Z"

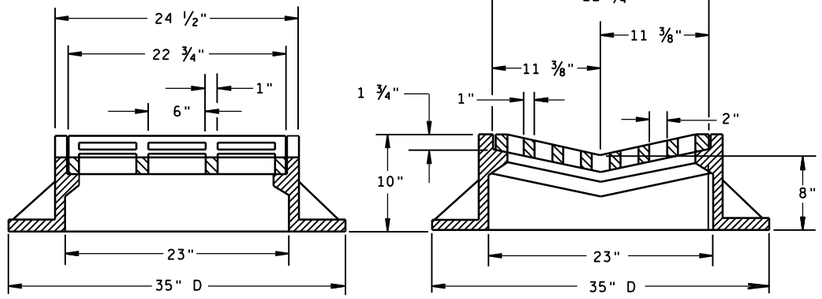
INLET COVERS
TYPE A, H, A-S, H-S & Z

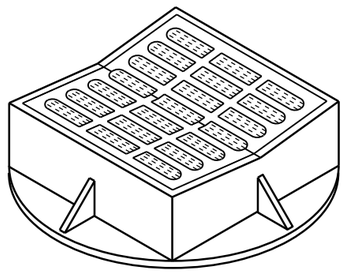
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11-27-13 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER
FHWA

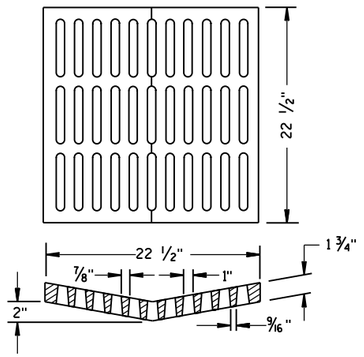
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S.D.D. 8 A 5-19a



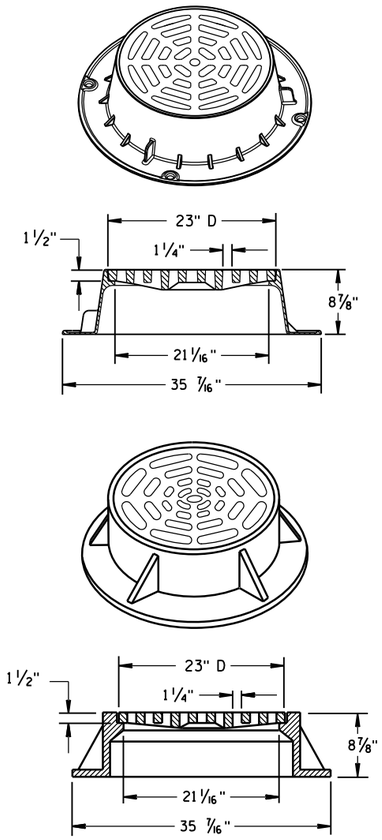


TYPE "B"



ALTERNATIVE GRATE FOR TYPE "B" COVER

USE WHERE PEDESTRIAN OR BICYCLE TRAFFIC IS POSSIBLE.
NOTED AS TYPE B-A ON THE DRAINAGE TABLE



TYPE "C"

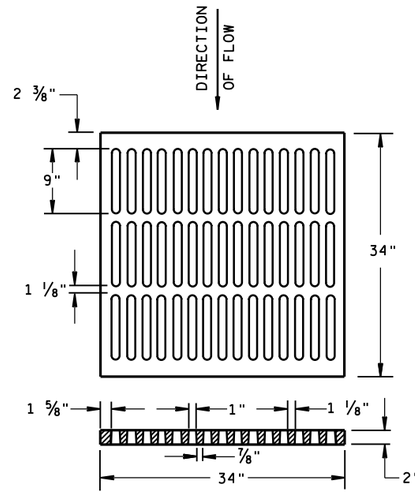
NOTE: EITHER CASTING IS ACCEPTABLE

GENERAL NOTES

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

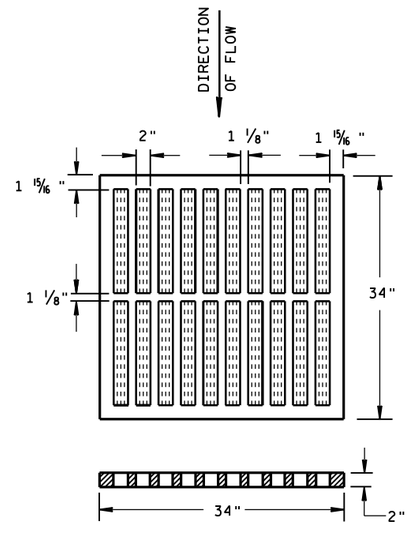
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR CATCH BASIN, MANHOLE AND INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.



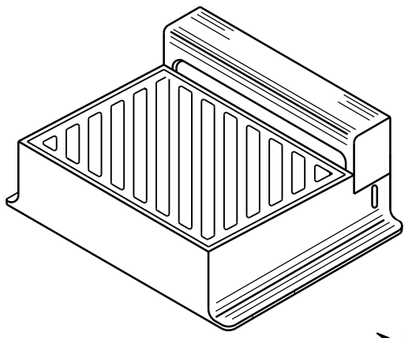
ALTERNATIVE TYPE "MS"

USE WHERE PEDESTRIAN OR BICYCLE TRAFFIC IS PERMITTED
NOTED AS TYPE MS-A ON THE DRAINAGE TABLE

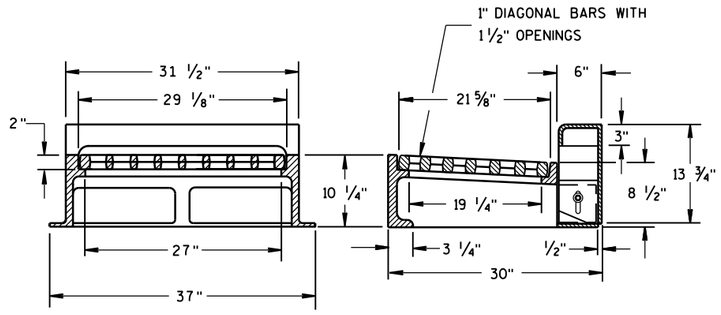


TYPE "MS"

USE ON FREEWAYS AND EXPRESSWAYS
NOTED AS TYPE MS ON DRAINAGE TABLE



DIAGONAL SLOTS, SHALL BE ORIENTED TO THE DIRECTION OF FLOW AS ILLUSTRATED. GRATES ARE MANUFACTURED TO BE REVERSIBLE.



NOTE: CURB BOX HEIGHT ADJUSTABLE 6" TO 9"

TYPE "WM"

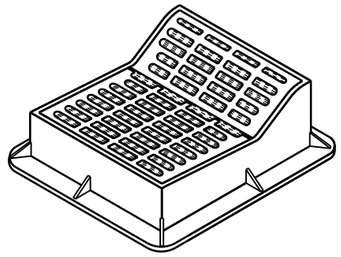
INLET COVERS
TYPE B, B-A, C, MS, MS-A, & WM

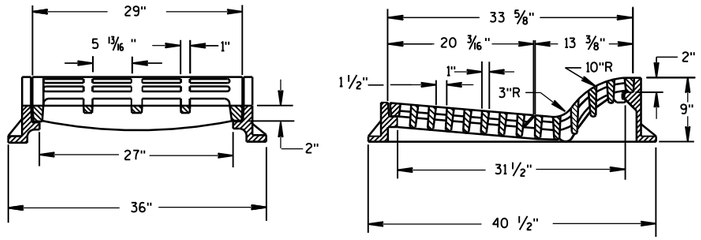
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11/27/2013 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER
FHWA

6

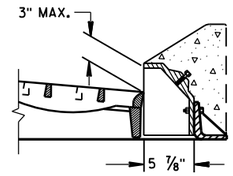
S.D.D. 8 A 5-19b





TYPE "F"

USE WITH TYPES A & D CONCRETE CURB & GUTTER, 36 INCH.



ALTERNATIVE CURB BOX FOR TYPE "HM" COVER

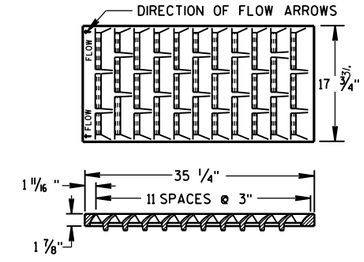
USE WITH TYPES G & J CONCRETE CURB & GUTTER, 30 INCH
NOTED AS TYPE HM-GJ ON DRAINAGE TABLE

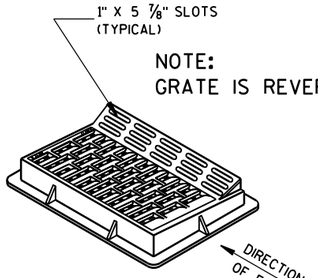
NOTE:
SPECIAL GRATE FOR THE
TYPE "H" COVER MAY ALSO BE
USED FOR THE TYPE "HM-GJ" COVER
NOTED AS TYPE HM-GJ-S ON DRAINAGE TABLE

GENERAL NOTES

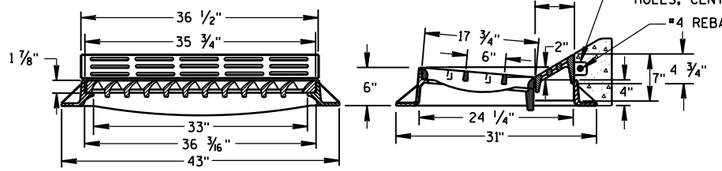
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.





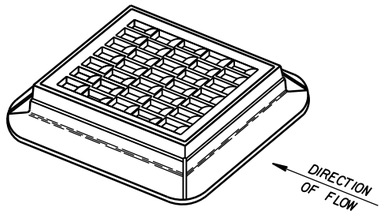
NOTE:
GRATE IS REVERSIBLE.

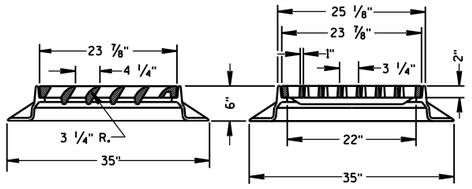


TYPE "HM"

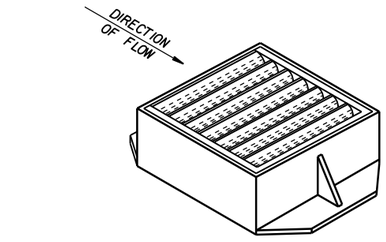
USE WITH TYPES A & D CONCRETE CURB & GUTTER, 36 INCH.

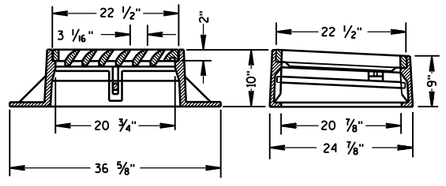
NOTE:
SPECIAL GRATE FOR THE
TYPE "H" COVER MAY ALSO BE
USED FOR THE TYPE "HM" COVER
NOTED AS TYPE HM-S ON DRAINAGE TABLE



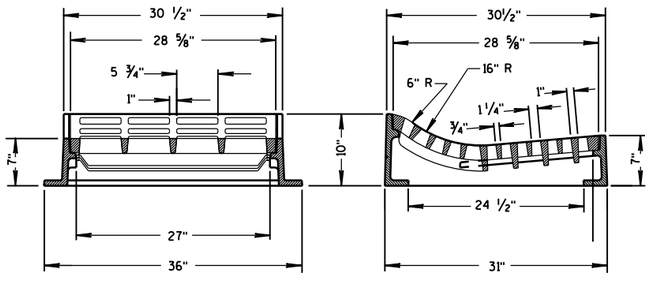


TYPE "S"



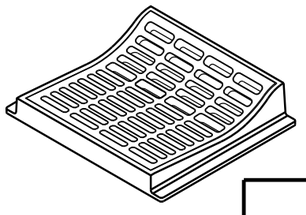


TYPE "V"



TYPE "T"

USE WITH TYPES R & T CONCRETE CURB & GUTTER, 36 INCH.



INLET COVERS
TYPE F, HM, HM-S, S, T, V, HM-GJ, & HM-GJ-S

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11/27/2013
DATE

/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER

380

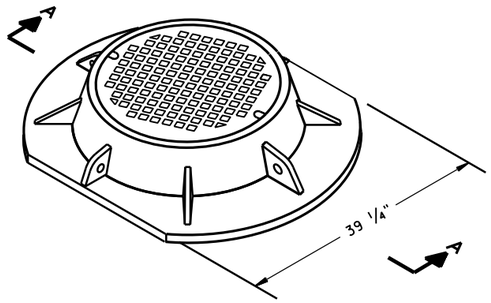
FHWA

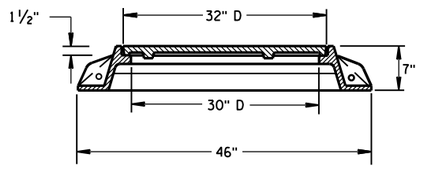
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S.D.D. 8 A 5-19c

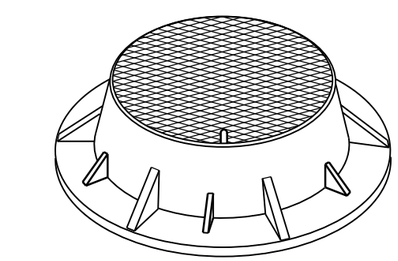
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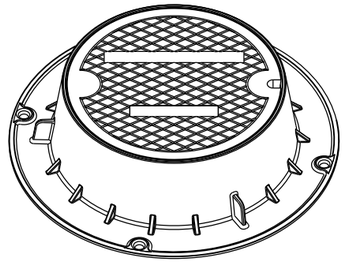
S.D.D. 8 A 5-19c

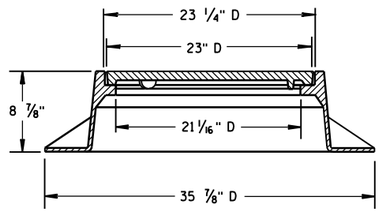


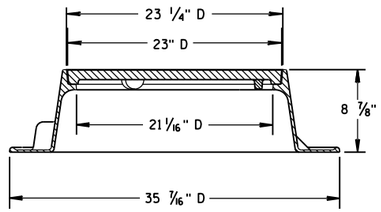


SECTION A-A
TYPE "K"









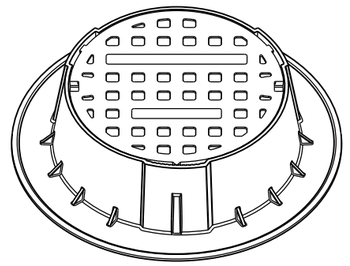
TYPE "J"
NOTE: EITHER CASTING IS ACCEPTABLE

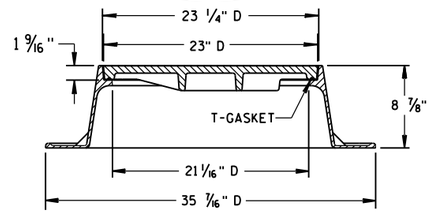
GENERAL NOTES

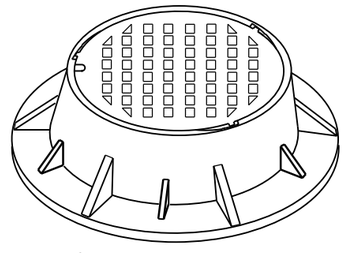
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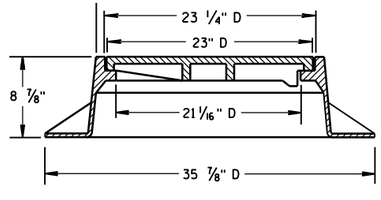
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR MANHOLE COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.

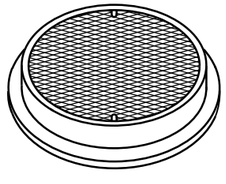


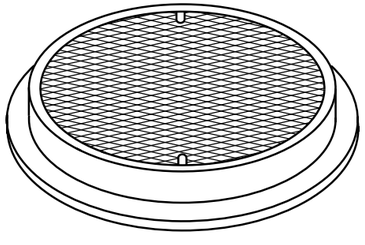


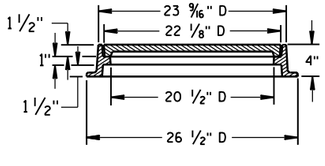




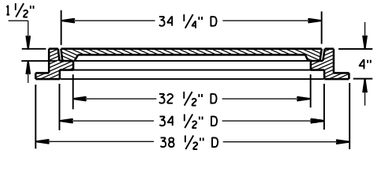
TYPE "J" SPECIAL
TYPE "B" NON-ROCKING SELF-SEAL LID
(NOTED AS TYPE J-S ON THE DRAINAGE TABLE)
NOTE: EITHER CASTING IS ACCEPTABLE



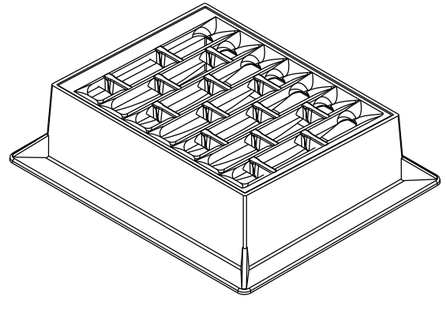


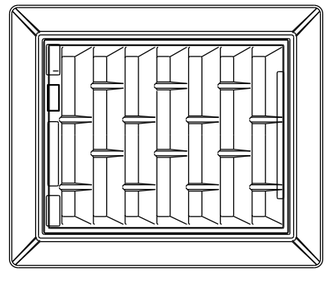


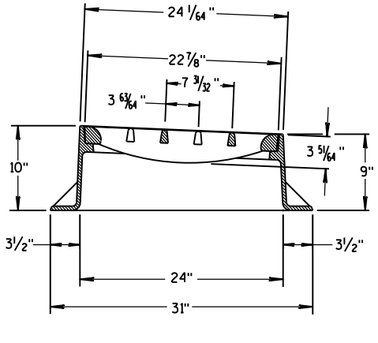
TYPE "L"

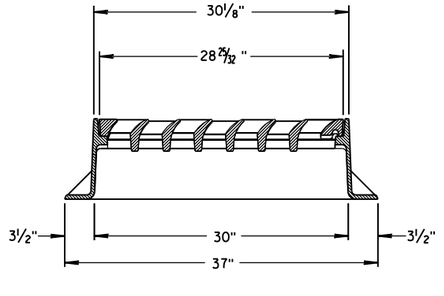


TYPE "M"









INLET COVER TYPE "BW"

INLET COVER TYPE BW
MANHOLE COVERS, TYPE K, J, J-S, L & M

STATE OF WISCONSIN
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APPROVED
11/27/2013
DATE
FHWA

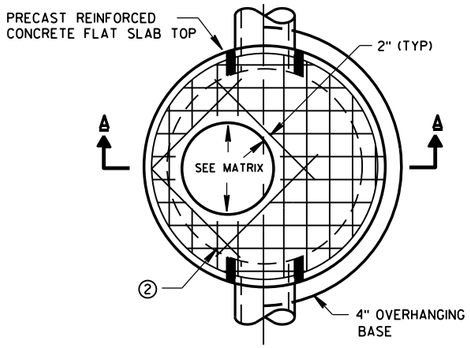
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER

6

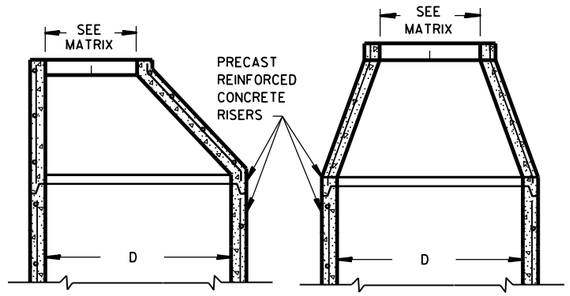
S.D.D. 8 A 5-19d

6

S.D.D. 8 A 5-19d

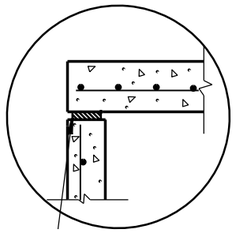


PLAN VIEW CIRCULAR OPENING

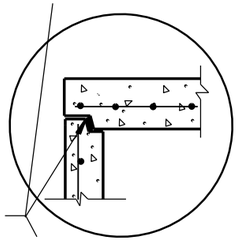


OPTIONAL PRECAST REINFORCED CONCRETE ECCENTRIC TOP

OPTIONAL PRECAST REINFORCED CONCRETE CONCENTRIC TOP

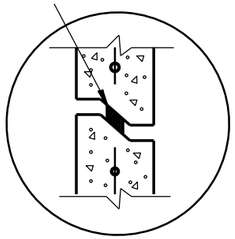


TOP WITH PLAIN END JOINT



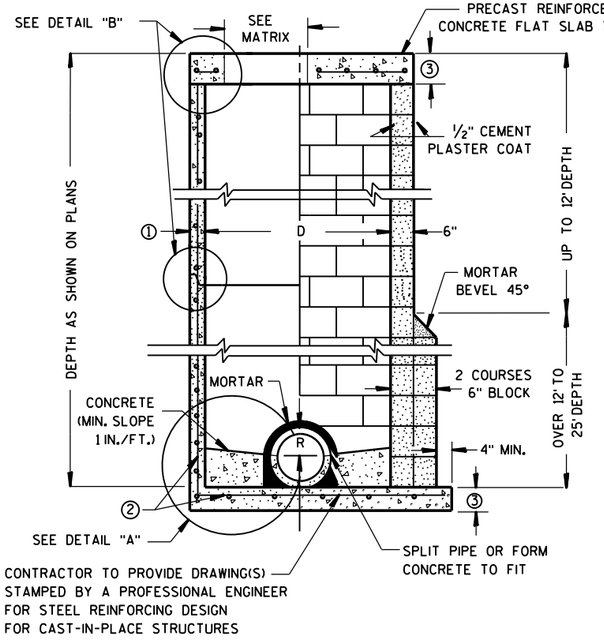
JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C990 (TYP)

TOP WITH TONGUE AND GROOVE JOINT



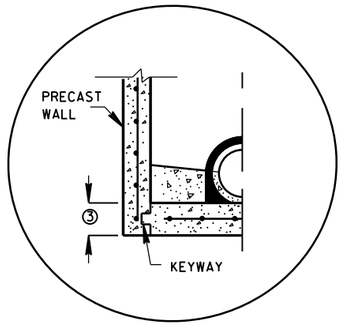
RISER WITH TONGUE AND GROOVE JOINT

DETAIL "B"

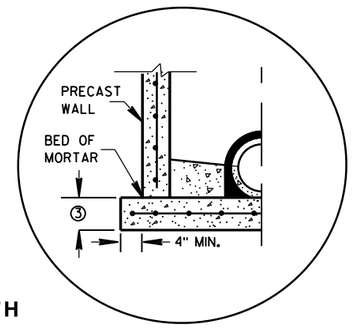


PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

CONCRETE BLOCK WITH CAST-IN-PLACE OR PRECAST REINFORCED CONCRETE BASE ②

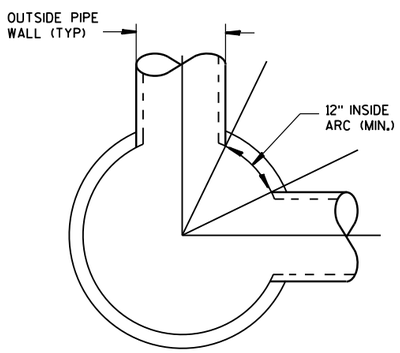


PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

DETAIL "A"



DETAIL "C"

GENERAL NOTES

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

UNLESS OTHERWISE AUTHORIZED IN WRITING BY THE ENGINEER, THE CONTRACTOR SHALL NOT ORDER AND DELIVER PRECAST MANHOLE UNITS REQUIRED FOR THE PROJECT UNTIL A LIST OF SIZES IS FURNISHED BY THE ENGINEER.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR UNDERGROUND DRAINAGE STRUCTURES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ALL DRAINAGE STRUCTURES ARE DESIGNATED ON THE PLANS AS "MANHOLES 3X3-L", "CATCH BASINS 4-B", "INLETS 2X3-H", ETC. THE FIRST NUMBERS DESIGNATE THE SIZE OF THE STRUCTURE, AND THE FOLLOWING LETTER DESIGNATES THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6 INCHES IN DEPTH, WHICH MEETS THE REQUIREMENTS OF GRANULAR BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.

PRECAST REINFORCED CONE TOPS (ECCENTRIC OR CONCENTRIC) OR PRECAST REINFORCED FLAT SLAB TOPS MAY BE USED ON CONCRETE BLOCK STRUCTURES. THE CONE TOPS SHALL BE INSTALLED ON A BED OF MORTAR.

ECCENTRIC CONE TOPS MAY BE USED ON ALL STRUCTURES, AND CONCENTRIC CONE TOPS SHALL BE USED ONLY ON STRUCTURES 5 FEET OR LESS IN DEPTH, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

STEPS MEETING AASHTO M199 AND THE FOLLOWING REQUIREMENTS SHALL BE INSTALLED IN ALL STRUCTURES OVER 5 FEET IN DEPTH: 16 INCH C-C MAXIMUM SPACING; PROJECT A MINIMUM CLEAR DISTANCE OF 4 INCHES FROM THE WALL AT THE POINT OF EMBEDMENT; MINIMUM LENGTH OF 10 INCHES; MINIMUM WALL EMBEDMENT OF 3 INCHES. FERROUS METAL STEPS NOT PAINTED OR TREATED TO RESIST CORROSION SHALL HAVE A MINIMUM CROSS SECTIONAL DIMENSION OF 1 INCH.

STEPS OF APPROVED POLYPROPYLENE PLASTIC COATED REINFORCEMENT BAR ARE ACCEPTABLE. REINFORCING BAR MUST BE A MINIMUM OF ½" AND MEET THE REQUIREMENTS OF ASTM A615.

CERTIFICATION SHALL BE PROVIDED THAT INSTALLED STEPS WHEN TESTED IN ACCORDANCE WITH SECTION 10 OF AASHTO T280 CAN WITHSTAND A VERTICAL LOAD OF 800 LBS. AND A HORIZONTAL LOAD OF 400 LBS.

ALL BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

CONCRETE BLOCK WILL NOT BE PERMITED FOR STRUCTURES GREATER THAN 4 FEET IN DIAMETER.

PRECAST REINFORCED RISERS SHALL HAVE A TONGUE AND GROOVE JOINT WITH TONGUE UP OR DOWN.

ALL PRECAST MANHOLE UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M 199.

4" OVERHANGING BASES ARE REQUIRED FOR ALL CONCRETE BLOCK INSTALLATIONS. 4" OVERHANG IS REQUIRED WHEN SEPARATE PRECAST BASE IS PROVIDED. OVERHANG IS NOT REQUIRED ON PRECAST STRUCTURES WITH AN INTEGRAL OR MONOLITHIC BASE.

FOR ADDITIONAL CONFIGURATIONS, MAINTAIN A MINIMUM OF 12 INCHES AS MEASURED FROM THE INSIDE OF THE STRUCTURE WALL BETWEEN THE OUTSIDE PIPE WALLS OF ADJACENT PIPES. SEE DETAIL "C".

① MINIMUM WALL THICKNESS SHALL BE 4 INCHES FOR 3-FT, 5 INCHES FOR 4-FT, 6 INCHES FOR 5-FT, 7 INCHES FOR 6-FT, 8 INCHES FOR 7-FT AND 9 INCHES FOR 8-FT DIAMETER PRECAST MANHOLES.

② FOR PRECAST MANHOLES PROVIDE REINFORCING STEEL IN ACCORDANCE TO AASHTO M199.

③ PRECAST FLAT SLAB TOPS AND BASES WITH A DIAMETER OF 48" AND LESS SHALL HAVE A MINIMUM THICKNESS OF 6". PRECAST FLAT SLAB TOPS AND BASES WITH A DIAMETER LARGER THAN 48" SHALL HAVE A MINIMUM THICKNESS OF 8".

MANHOLE COVER OPENING MATRIX

MANHOLE COVER TYPE	C	ALL J'S	K	L	M
OPENING SIZE (FT)					
2 DIA.	X	X		X	
3 DIA.			X		X

PIPE MATRIX

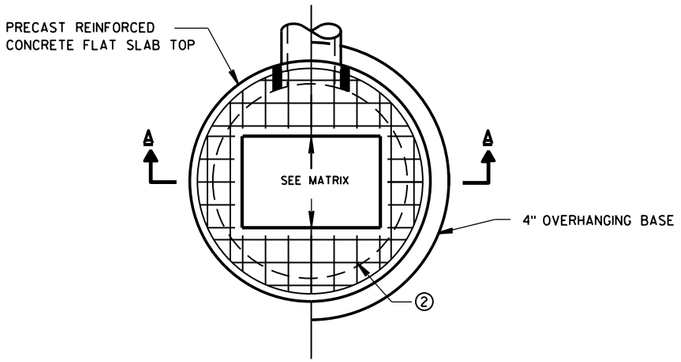
MANHOLE SIZE	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES	
	180° SEPARATION (IN)	90° SEPARATION (IN)
3-FT	15	12
4-FT	24	18
5-FT	36	24
6-FT	42	36
7-FT	48	36
8-FT	60	42

MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT AND 8-FT DIAMETER

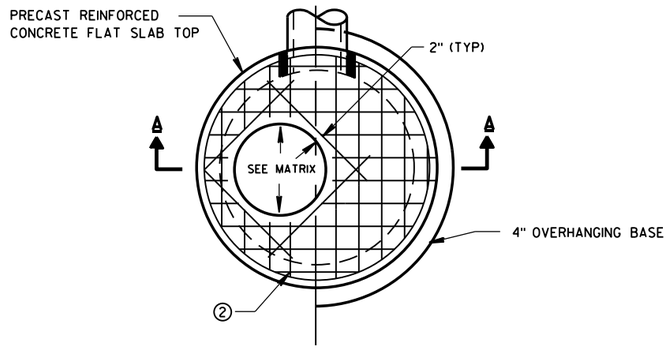
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
6/5/2012 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

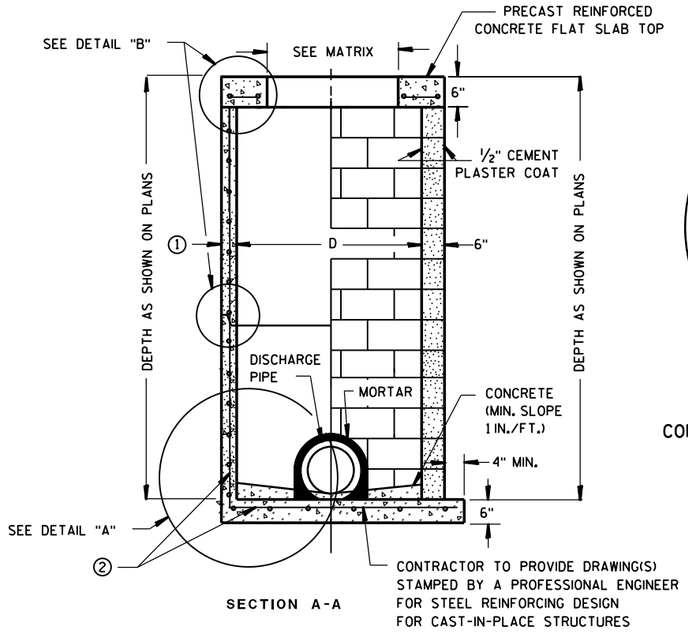
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S.D.D. 8 B 9-1



PLAN VIEW RECTANGULAR OPENING



PLAN VIEW CIRCULAR OPENING

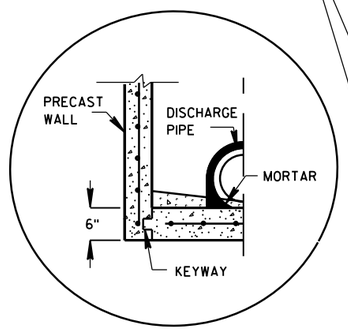


SECTION A-A

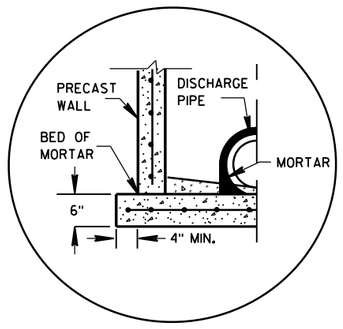
PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

CONCRETE BLOCK WITH CAST-IN-PLACE OR PRECAST REINFORCED CONCRETE BASE ②

CIRCULAR INLETS W/ FLAT TOP

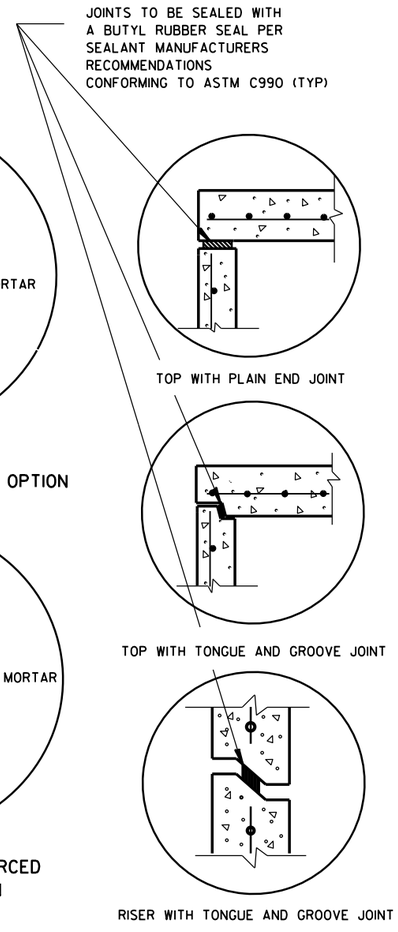


PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

DETAIL "A"



DETAIL "B"

GENERAL NOTES

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

UNLESS OTHERWISE AUTHORIZED IN WRITING BY THE ENGINEER, THE CONTRACTOR SHALL NOT ORDER AND DELIVER PRECAST INLET UNITS REQUIRED FOR THE PROJECT UNTIL A LIST OF SIZES IS FURNISHED BY THE ENGINEER.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR UNDERGROUND DRAINAGE STRUCTURES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ALL DRAINAGE STRUCTURES ARE DESIGNATED ON THE PLANS AS "MANHOLES 3X3-L", "CATCH BASINS 4-B", "INLETS 2X3-H", ETC. THE FIRST NUMBERS DESIGNATE THE SIZE OF THE STRUCTURE, AND THE FOLLOWING LETTER DESIGNATES THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6 INCHES IN DEPTH, WHICH MEETS THE REQUIREMENTS OF GRANULAR BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.

ALL BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

ALL PRECAST INLET UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M199.

PRECAST REINFORCED RISERS SHALL HAVE A TONGUE AND GROOVE JOINT WITH TONGUE UP OR DOWN.

4" OVERHANGING BASES ARE REQUIRED FOR ALL CONCRETE BLOCK INSTALLATIONS. 4" OVERHANG IS REQUIRED WHEN SEPARATE PRECAST BASE IS PROVIDED. OVERHANG IS NOT REQUIRED ON PRECAST STRUCTURES WITH AN INTEGRAL OR MONOLITHIC BASE.

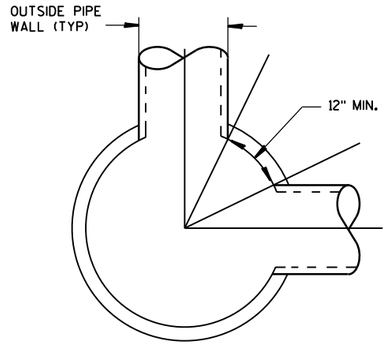
FOR ADDITIONAL CONFIGURATIONS, MAINTAIN A MINIMUM OF 12 INCHES AS MEASURED FROM THE INSIDE OF THE STRUCTURE WALL BETWEEN THE OUTSIDE PIPE WALLS OF ADJACENT PIPES. SEE DETAIL "C".

① MINIMUM WALL THICKNESS SHALL BE 4-IN FOR 3-FT DIAMETER AND 5-IN FOR 4-FT DIAMETER PRECAST INLETS.

② FOR PRECAST CATCH BASINS PROVIDE REINFORCING STEEL IN ACCORDANCE TO AASHTO M199.

INLET COVER OPENING MATRIX

	INLET COVER TYPE	ALL A'S	ALL B'S	BW	C	F	ALL H'S	S	T	V	WM	Z
INLET SIZE	OPENING SIZE (FT)											
3-FT	2 DIA.				X							X
	2X2	X	X					X		X		
4-FT	2 DIA.				X							X
	2X2	X	X					X		X		
	2X2.5			X				X	X	X	X	
	2X3						X					
	2.5X3					X						



DETAIL "C"

PIPE MATRIX

INLET SIZE	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES	
	180° SEPARATION (IN)	90° SEPARATION (IN)
3-FT	15	12
4-FT	24	18

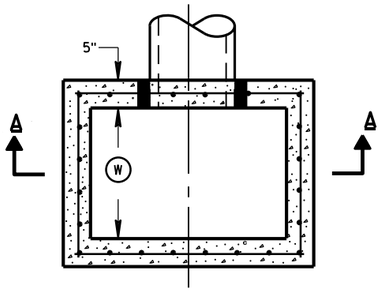
INLETS 3-FT AND 4-FT DIAMETER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

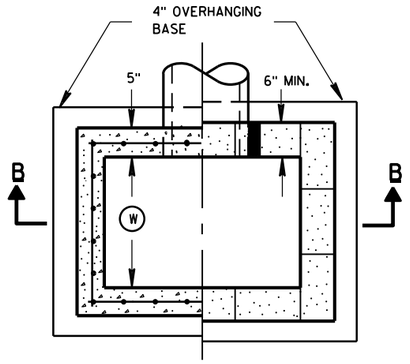
APPROVED
6/5/2012 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

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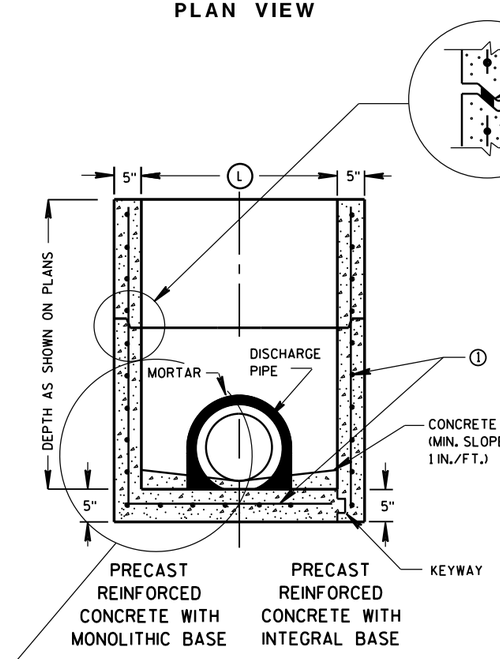
S.D.D. 8 C 6-1



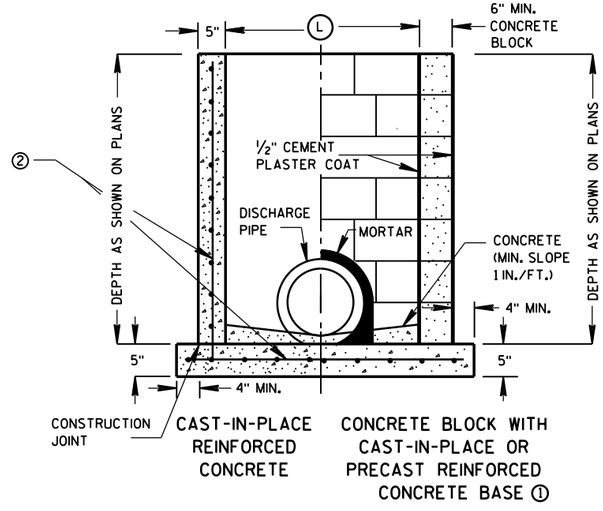
PLAN VIEW



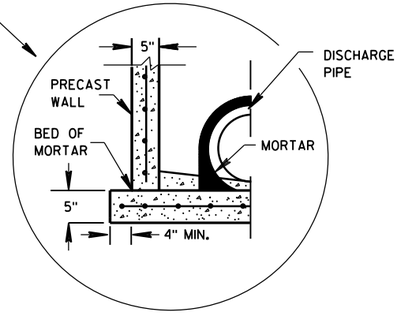
PLAN VIEW



SECTION A-A



SECTION B-B



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

GENERAL NOTES

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

UNLESS OTHERWISE AUTHORIZED IN WRITING BY THE ENGINEER, THE CONTRACTOR SHALL NOT ORDER AND DELIVER PRECAST INLET UNITS REQUIRED FOR THE PROJECT UNTIL A LIST OF SIZES IS FURNISHED BY THE ENGINEER.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR UNDERGROUND DRAINAGE STRUCTURES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ALL PRECAST INLET UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF ASTM C 913.

ALL DRAINAGE STRUCTURES ARE DESIGNATED ON THE PLANS AS "MANHOLES 3X3-L", "CATCH BASINS 4-B", "INLETS 2X3-H", ETC. THE FIRST NUMBERS DESIGNATES THE SIZE OF THE STRUCTURE, AND THE FOLLOWING LETTER DESIGNATES THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6 INCHES IN DEPTH, WHICH MEETS THE REQUIREMENTS OF GRANULAR BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.

ALL BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

PRECAST REINFORCED RISERS SHALL HAVE A TONGUE AND GROOVE JOINT WITH TONGUE UP OR DOWN.

4" OVERHANGING BASES ARE REQUIRED FOR CAST-IN-PLACE REINFORCED CONCRETE AND CONCRETE BLOCK INSTALLATIONS.
4" OVERHANG IS REQUIRED WHEN SEPARATE PRECAST BASE IS PROVIDED.
OVERHANG IS NOT REQUIRED ON PRECAST STRUCTURES WITH AN INTEGRAL OR MONOLITHIC BASE.

MAXIMUM INSIDE PIPE DIAMETER DETERMINED BY 3 INCH CLEARANCE ON EACH SIDE OF THE OUTSIDE WALL OF THE PIPE. SEE DETAIL "A". ASSUMES PIPE ENTERS PERPENDICULAR TO THE STRUCTURE.

① FOR PRECAST INLETS PROVIDE REINFORCING STEEL IN ACCORDANCE TO ASTM C 913.

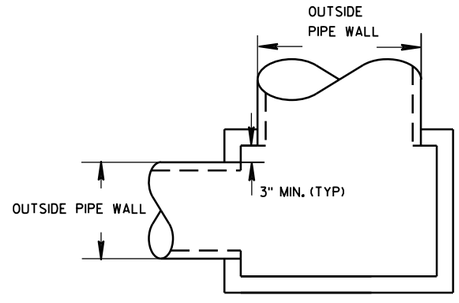
② CONTRACTOR TO PROVIDE DRAWING(S) STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCING DESIGN FOR CAST-IN-PLACE STRUCTURES.

INLET COVER MATRIX

INLET SIZE		INLET COVER TYPE	ALL A'S	ALL B'S	BW	F	ALL H'S	S	T	V	WM
	WIDTH (W) (FT)	LENGTH (L) (FT)									
2X2-FT	2	2	X	X				X		X	
2X2.5-FT	2	2.5			X			X	X	X	X
2X3-FT	2	3					X				
2.5X3-FT	2.5	3				X					

PIPE MATRIX

INLET SIZE	MAXIMUM INSIDE PIPE DIAMETER	
	WIDTH (IN)	LENGTH (IN)
2X2-FT	12	12
2X2.5-FT	12	18
2X3-FT	12	24
2.5X3-FT	18	24



DETAIL "A"

INLETS 2X2-FT, 2X2.5-FT, 2X3-FT AND 2.5X3-FT

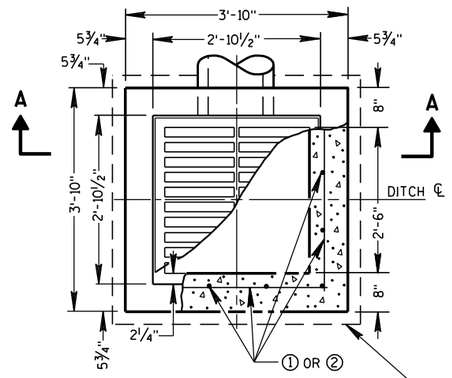
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
6/5/2012
DATE
FHWA

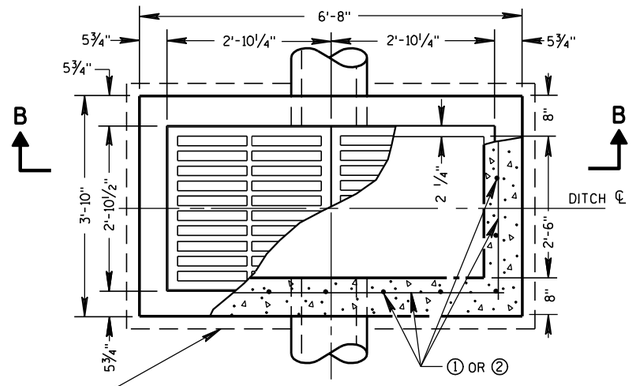
/S/ Jerry H. Zogg
ROADWAY STANDARDS DE
ENGINEER

6

S.D.D. 8 C 7-1

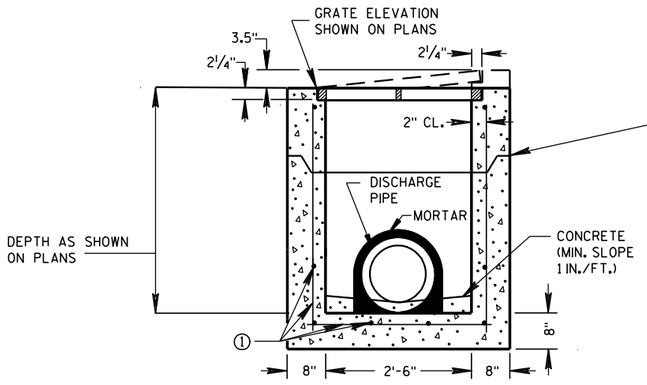


PLAN VIEW

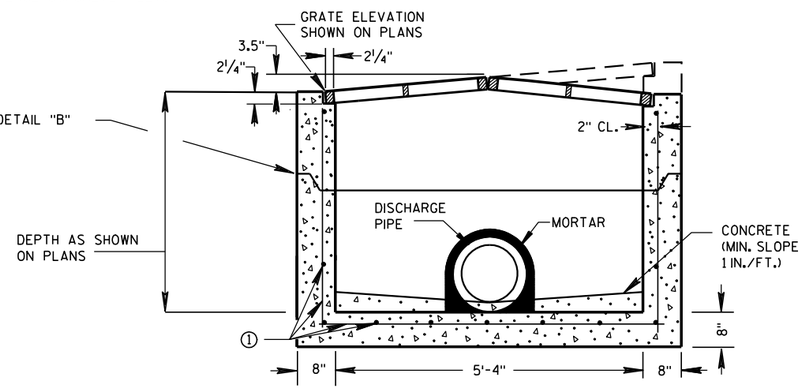


PLAN VIEW

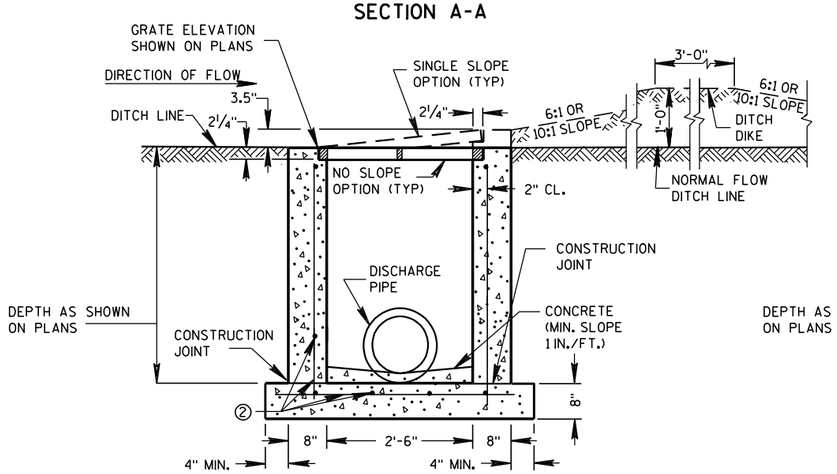
4" OVERHANGING BASE ON REINFORCED CAST-IN-PLACE CONCRETE INLETS



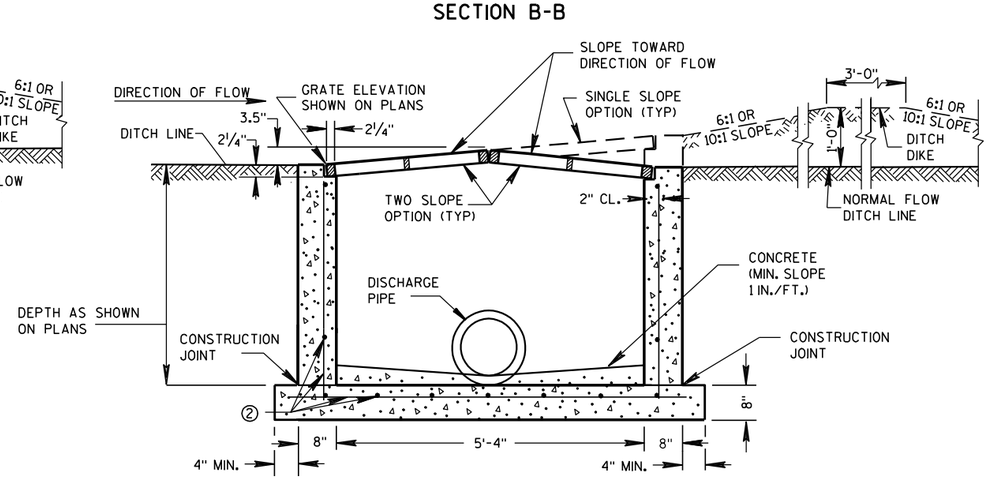
PRECAST REINFORCED CONCRETE SECTION A-A



PRECAST REINFORCED CONCRETE SECTION B-B



REINFORCED CAST-IN-PLACE CONCRETE SECTION A-A



REINFORCED CAST-IN-PLACE CONCRETE SECTION B-B

INLETS MEDIAN 1 GRATE

INLETS MEDIAN 2 GRATE

GENERAL NOTES

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

UNLESS OTHERWISE AUTHORIZED IN WRITING BY THE ENGINEER, THE CONTRACTOR SHALL NOT ORDER AND DELIVER PRECAST INLET UNITS REQUIRED FOR THE PROJECT UNTIL A LIST OF SIZES IS FURNISHED BY THE ENGINEER.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR INLETS WHICH MAY INCLUDE PRECAST REINFORCED CONCRETE INLETS, SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ALL MEDIAN INLETS ARE DESIGNATED ON THE PLANS AS "INLETS, 1G-MS", ETC. THE FIRST NUMBER AND LETTER DESIGNATE THE TYPE OF STRUCTURE, AND THE FOLLOWING LETTERS DESIGNATE THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

ALL BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

PRECAST REINFORCED RISERS SHALL HAVE A TONGUE AND GROOVE JOINT WITH TONGUE UP OR DOWN.

ALL PRECAST INLET UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF ASTM C 913.

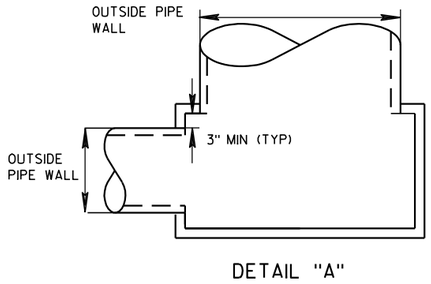
MAXIMUM INSIDE PIPE DIAMETER DETERMINED BY 3" CLEARANCE ON EACH SIDE OF THE OUTSIDE WALL OF THE PIPE. SEE DETAIL "A". ASSUMES PIPE ENTERS PERPENDICULAR TO THE STRUCTURE.

① FOR PRECAST INLETS PROVIDE REINFORCING STEEL IN ACCORDANCE TO ASTM C 913.

② CONTRACTOR TO PROVIDE DRAWING(S) STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCING DESIGN FOR CAST-IN-PLACE STRUCTURES.

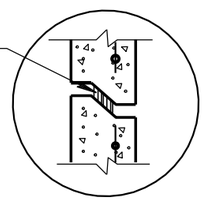
PIPE MATRIX

	MAXIMUM INSIDE PIPE DIAMETER	
INLET SIZE	WIDTH (IN)	LENGTH (IN)
1 GRATE	18	18
2 GRATE	18	42



DETAIL "A"

JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C 990 (TYP)



DETAIL "B"

INLETS MEDIAN 1 AND 2 GRATE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

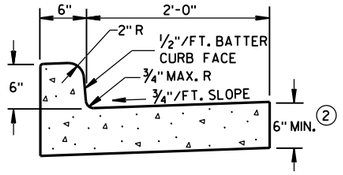
APPROVED

6/5/2012
DATE

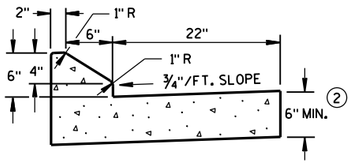
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER

FHWA

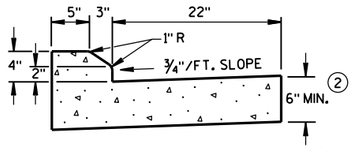
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S.D.D. 8 C 8-1



TYPES A & D ①

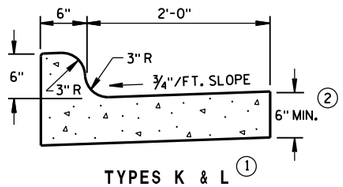


6" SLOPED CURB TYPES G & J ①

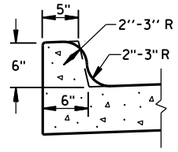


4" SLOPED CURB TYPES G & J ①

CONCRETE CURB & GUTTER 30"

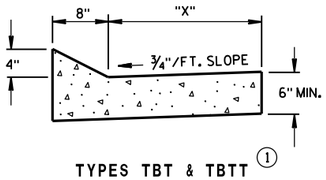


TYPES K & L ①



OPTIONAL CURB SHAPE FOR TYPES K & L ①

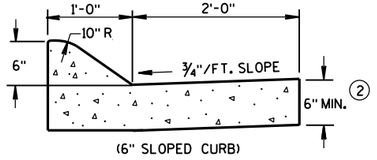
CONCRETE CURB & GUTTER 30"



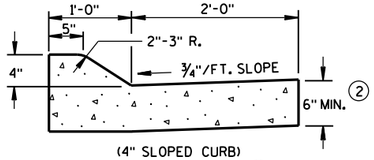
TYPES TBT & TBTT ①

CONCRETE CURB & GUTTER

TBT & TBTT	"X"
30"	22"
36"	28"

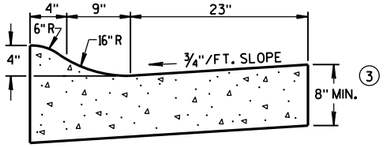


(6" SLOPED CURB)



(4" SLOPED CURB)

TYPES A & D ①



4" SLOPED CURB TYPES R & T ① ④

CONCRETE CURB & GUTTER 36"

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

INTEGRAL CURB & GUTTER SHALL CONFORM TO THE DETAILS SHOWN FOR CONCRETE CURB & GUTTER INCLUDING THE TRANSVERSE GUTTER SLOPE. A LONGITUDINAL CONSTRUCTION JOINT IS NOT REQUIRED WITH INTEGRAL CURB AND GUTTER.

WHERE THE TRANSVERSE JOINTS IN THE PAVEMENT ARE REQUIRED TO BE SEALED, THE JOINTS IN THE INTEGRAL CURB AND GUTTER SHALL BE SEALED TO THE FACE OF CURB WITH THE SAME TYPE OF SEALANT. THE COST OF FURNISHING AND INSTALLING THIS SEALANT SHALL BE INCIDENTAL TO THE ITEM CONCRETE CURB AND GUTTER.

UNLESS OTHERWISE SHOWN ON THE TYPICAL CROSS SECTIONS, THE BASE AGGREGATE AND COMMON EXCAVATION LIMITS ARE 2'-0" BEHIND THE BACK OF CURBS.

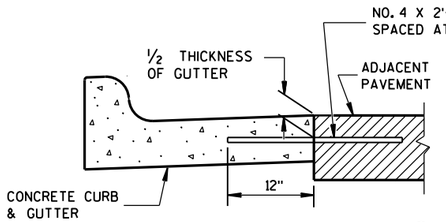
① TIE BARS ARE REQUIRED FOR CURB AND GUTTER TYPES A, G, K, R AND TBTT.

② THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.

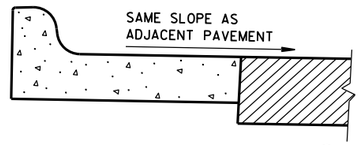
③ THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 8" MINIMUM GUTTER THICKNESS IS MAINTAINED.

④ THE FACE OF CURB IS 6" FROM THE BACK OF CURB.

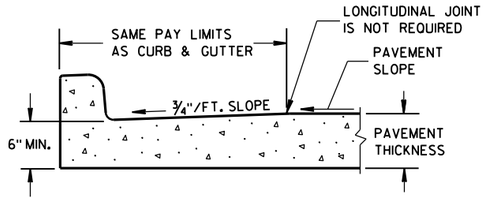
⑤ WHEN REVERSE SLOPE GUTTER IS REQUIRED, THE LOCATION(S) WILL BE SHOWN ELSEWHERE IN THE PLAN.



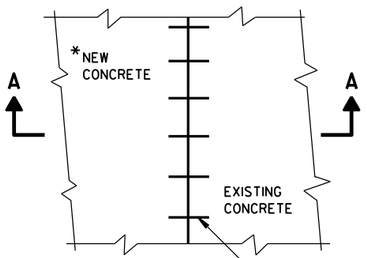
TYPICAL TIE BAR LOCATION ①



REVERSE SLOPE GUTTER ⑤
(TYPICAL FOR ALL CURB & GUTTER TYPES)

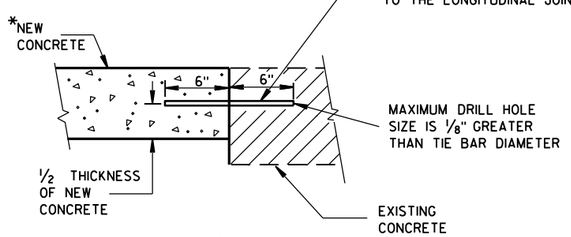


PARTIAL SECTION OF PAVEMENT
WITH INTEGRAL CURB & GUTTER



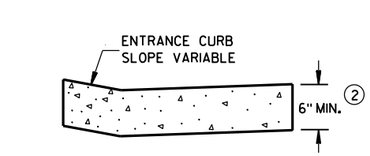
PLAN VIEW

*NEW CURB & GUTTER, SURFACE DRAINS, CONCRETE PAVEMENT OR OTHER NEW CONCRETE.

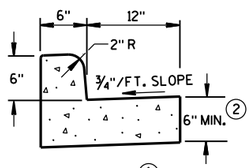


SECTION A-A

TIE BARS DRILLED
INTO EXISTING PAVEMENT

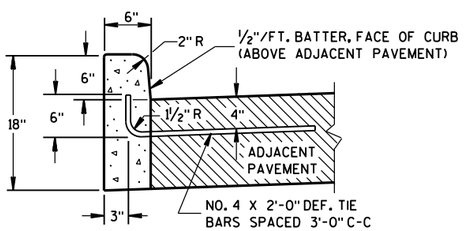


DRIVEWAY ENTRANCE CURB
(WHEN DIRECTED BY THE ENGINEER)

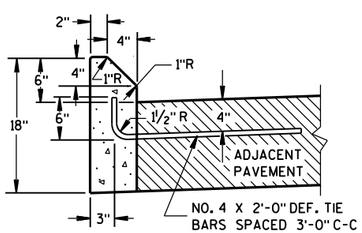


① TYPES A & D

CONCRETE CURB & GUTTER 18"

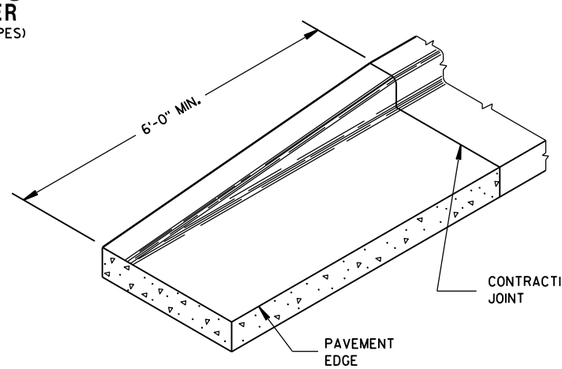


① TYPES A & D



① TYPES G & J

CONCRETE CURB



END SECTION CURB & GUTTER

CONCRETE CURB, CONCRETE CURB & GUTTER AND TIES

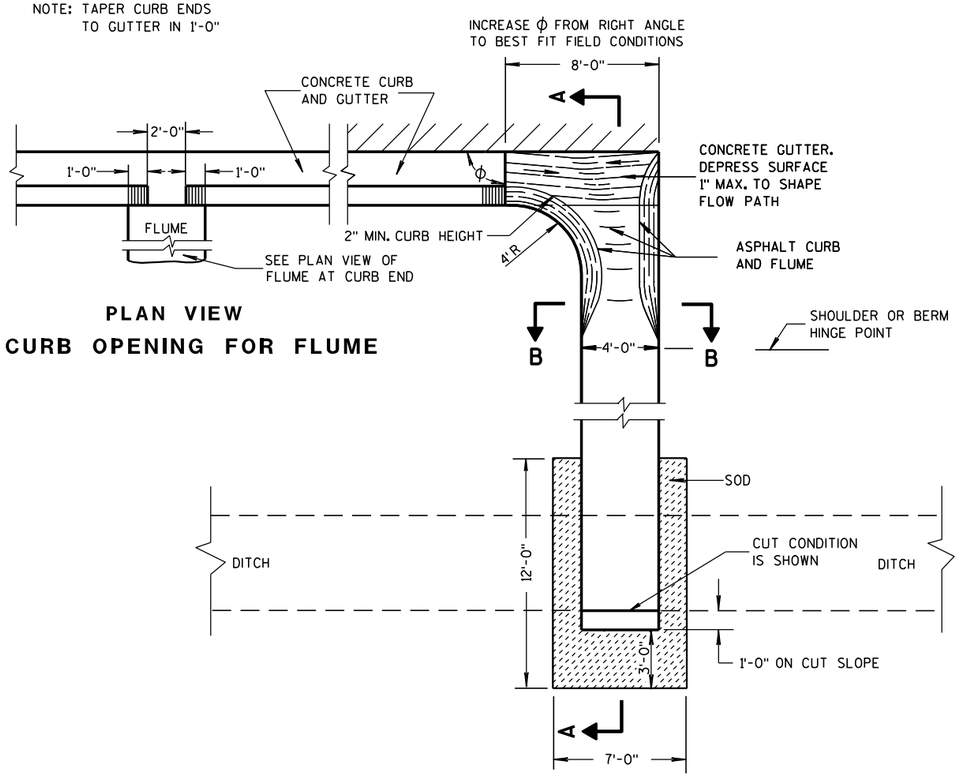
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2015 — DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

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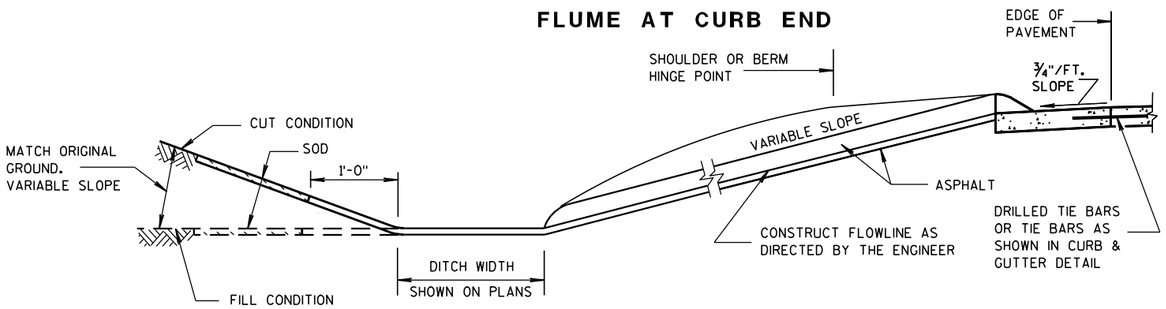
S.D.D. 8 D 1-18

ASPHALTIC FLUME

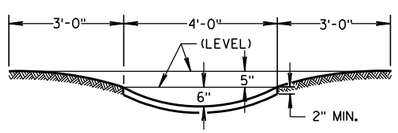


PLAN VIEW
CURB OPENING FOR FLUME

PLAN VIEW
FLUME AT CURB END



SECTION A-A



SECTION B-B

GENERAL NOTES

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

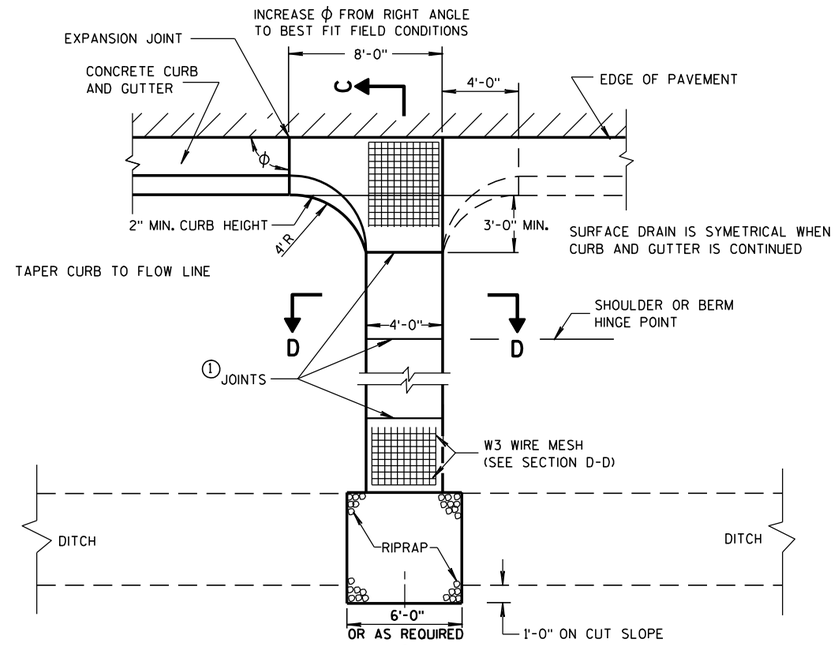
WELDED STEEL WIRE FABRIC SHALL BE IN ACCORDANCE WITH AASHTO SPECIFICATION M55.

① JOINTS SHALL BE ⅛ TO ¼ INCH WIDE BY 1½ INCHES DEEP AND SPACED AT UNIFORM INTERVALS OF APPROXIMATELY 4 FEET.

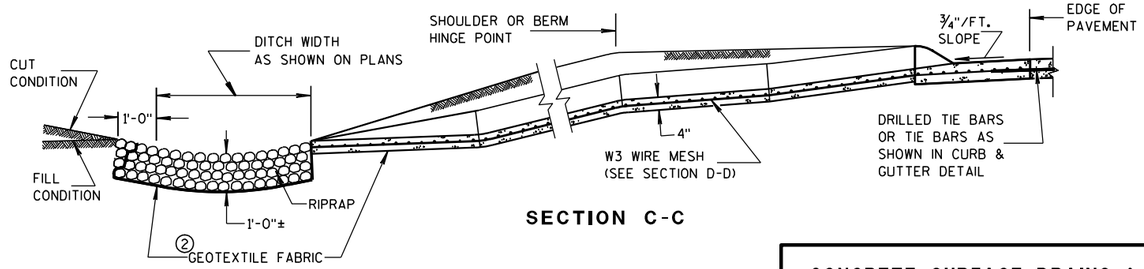
② GEOTEXTILE FABRIC TYPE "R" SHALL UNDERLAY THE FULL LENGTH AND WIDTH OF THE CONCRETE SURFACE DRAIN AND RIPRAP.

③ CONCRETE SURFACE DRAIN WITHOUT CURB AND GUTTER MAY BE USED ON BACKSLOPES WHEN SPECIFIED

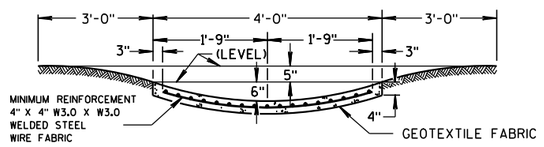
③ CONCRETE SURFACE DRAIN



PLAN VIEW



SECTION C-C



SECTION D-D

CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

9-4-08 DATE — /S/ Jerry H. Zogg ROADWAY STANDARDS ENGINEER — MENT

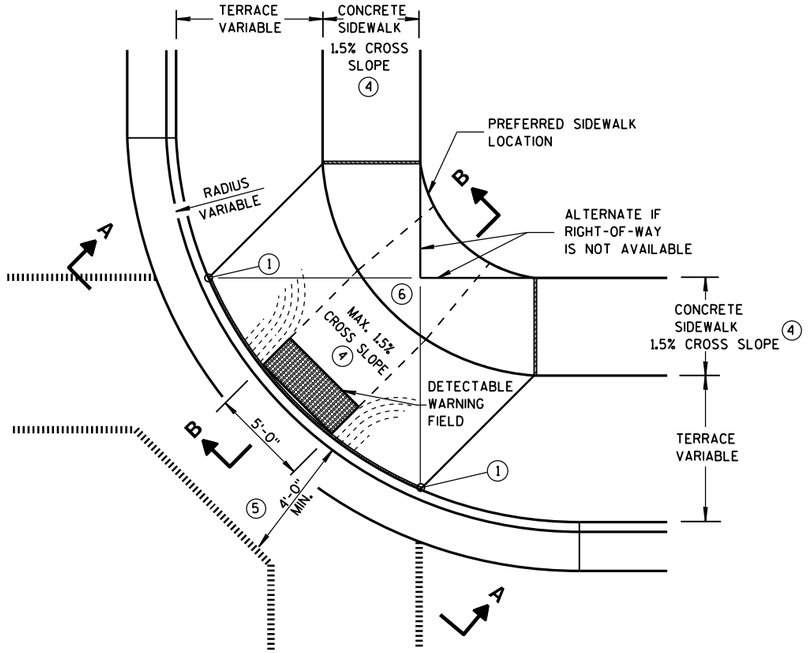
FHWA

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S.D.D. 8 D 4-5

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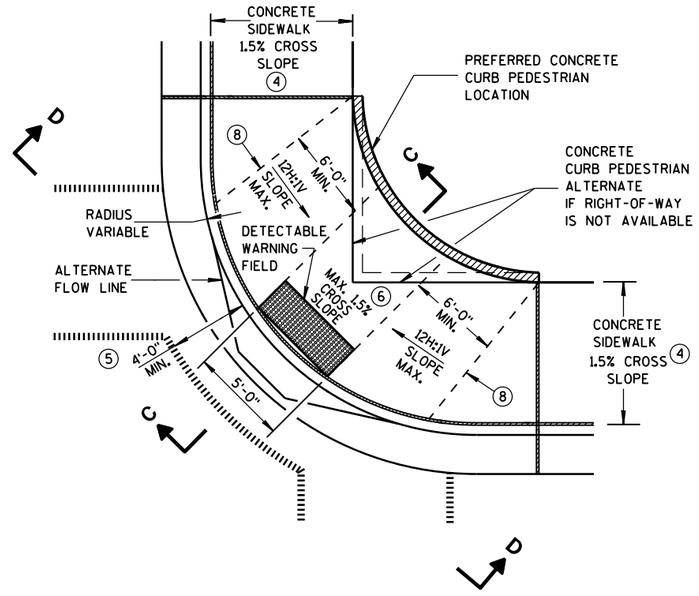
S.D.D. 8 D 4-5



PLAN VIEW

TYPE 1 RAMP

(CENTER OF CORNER RADIUS)



PLAN VIEW

TYPE 1-A RAMP

(NO TERRACE)

GENERAL NOTES

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

WHEN NECESSARY, THE SIDEWALK ELEVATION MAY BE LOWERED TO MEET THE HIGH POINT ON THE RAMP.

TYPE 1 RAMPS SHALL HAVE A NORMAL SIDEWALK APRON AND CURB ON BOTH SIDES OF RAMP.

DETECTABLE WARNING FIELD SHALL BE MEASURED AND PAID BY THE SQUARE FOOT AS "CURB RAMP DETECTABLE WARNING FIELD". THE CONCRETE PEDESTRIAN CURB, IF NEEDED, SHALL BE MEASURED AND PAID BY THE LINEAL FOOT AS "CONCRETE CURB PEDESTRIAN". CONCRETE SIDEWALK IN THE CURB RAMP AREA SHALL BE MEASURED AND PAID BY THE SQUARE FOOT AS CONCRETE SIDEWALK, INCLUDING THE AREA UNDER THE DETECTABLE WARNING FIELD.

SELECT CURB RAMP DETECTABLE WARNING FIELD MATERIALS AND DEVICES FROM THE DEPARTMENT'S APPROVED MATERIALS LIST. THE COLOR OF THE DETECTABLE WARNING FIELD IS SPECIFIED ELSEWHERE AND IS INCIDENTAL TO THE BID ITEM OF "CURB RAMP DETECTABLE WARNING FIELD".

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

SURFACE TEXTURE OF THE RAMP SHALL BE OBTAINED BY COARSE BROOMING TRANSVERSE TO THE SLOPE OF THE RAMP.

(1) THIS POINT IS AN EXTENSION OF OUTSIDE EDGE OF APPROACHING SIDEWALK WHERE IT MEETS THE BACK OF CONCRETE CURB.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE DRAINAGE AWAY FROM CURB RAMP AT GUTTER FLAG INTERFACE. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/4-INCH ARE ALLOWED.

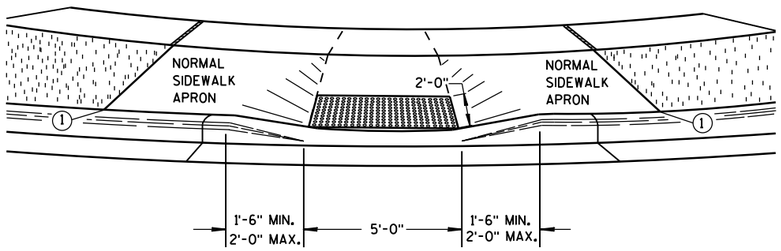
(3) ABSOLUTE MAXIMUM 12H:1V (8.33%) CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

(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.

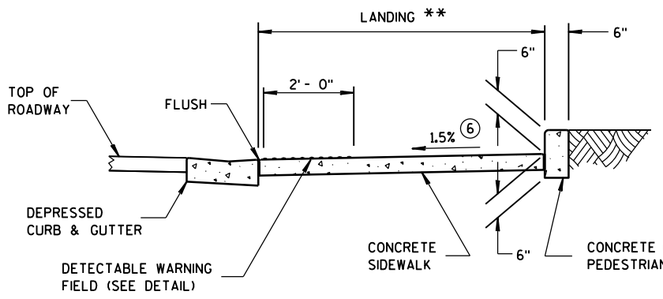
(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET (MINIMUM 4 FEET X 4 FEET).

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.



VIEW A-A

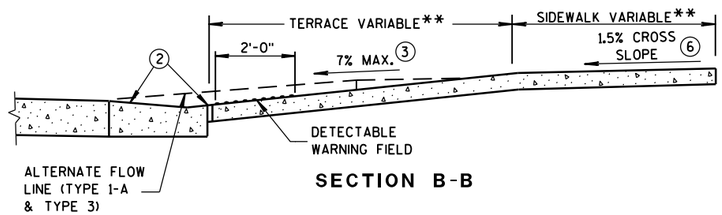
** WIDTH SHOWN ELSEWHERE IN THE PLANS



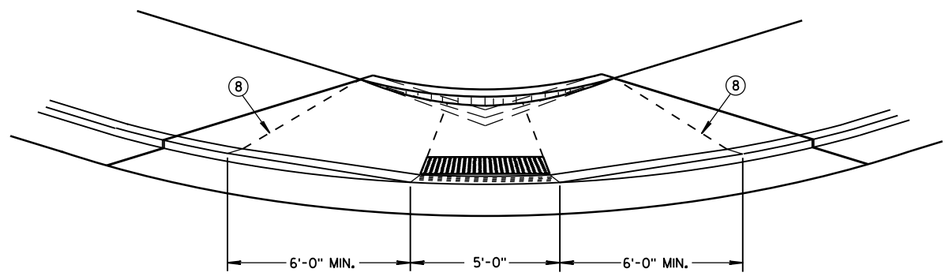
SECTION C-C

LEGEND

- ½" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)
- ALTERNATIVE LAYOUT



SECTION B-B



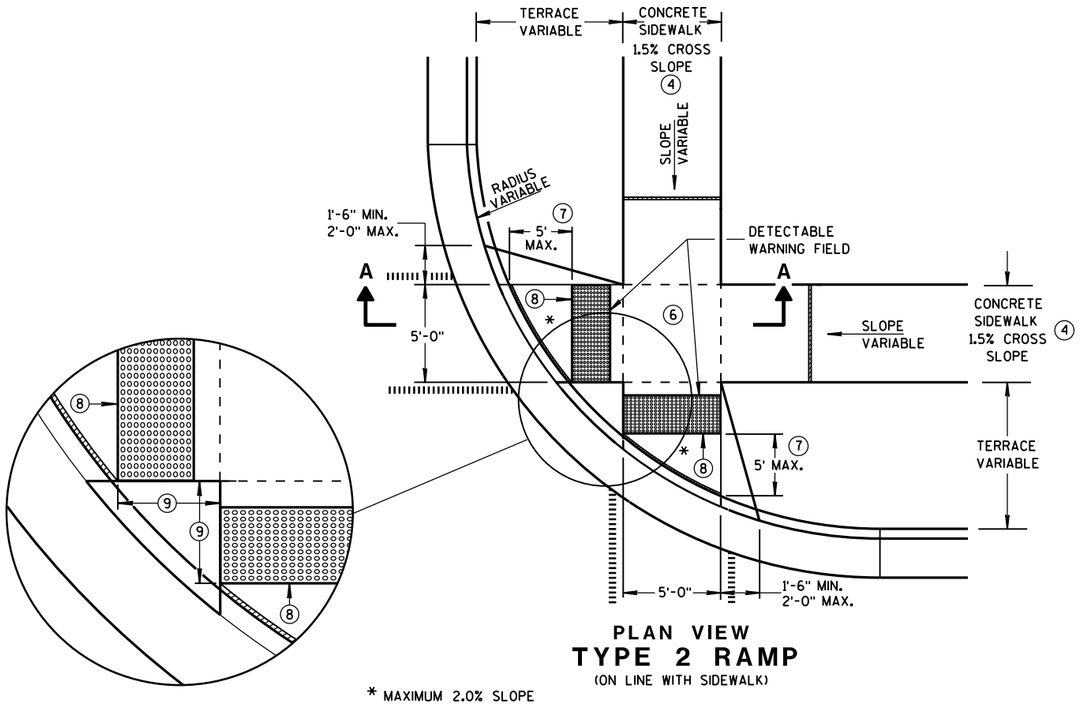
VIEW D-D

CURB RAMPS TYPES 1 AND 1-A

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

S.D.D. 8 D 5-16a

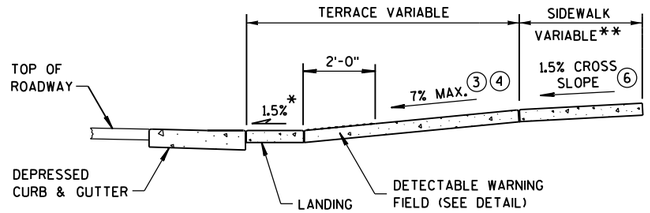


PLAN VIEW

TYPE 2 RAMP

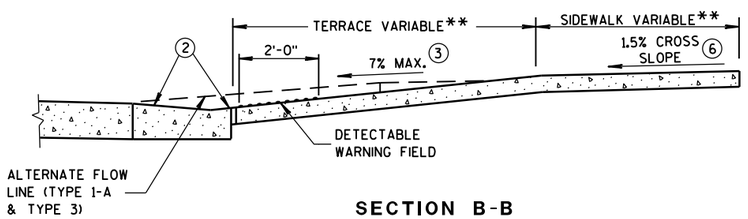
(ON LINE WITH SIDEWALK)

* 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

USE THE TYPE 3 RAMP ONLY WHEN A TYPE 1 OR TYPE 2 CANNOT BE ACHIEVED BECAUSE OF FIELD CONDITIONS.

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE DRAINAGE AWAY FROM CURB RAMP AT GUTTER FLAG INTERFACE. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/4-INCH ARE ALLOWED.

(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 (MINIMUM 4 FEET X 4 FEET).

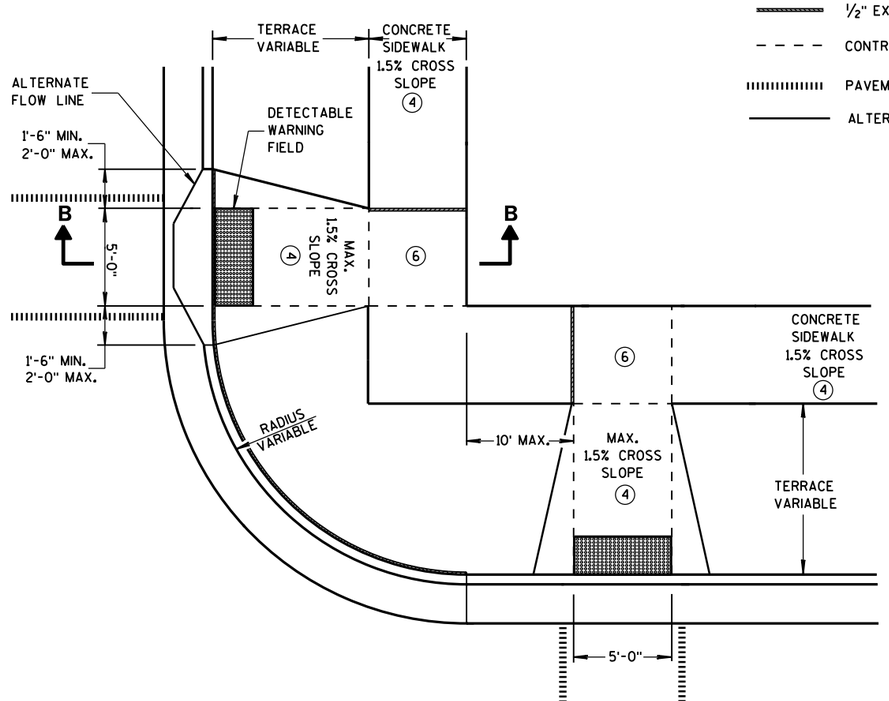
(7) WHEN THIS DISTANCE EXCEEDS 5 FEET, USE MULTIPLE DETECTABLE WARNING PANELS ACROSS THE RAMP AND STAGGER ADDITIONAL DETECTABLE WARNING PANEL(S) FORWARD TO REDUCE THIS DISTANCE.

(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. 2" MINIMUM CURB HEIGHT.

LEGEND

- ½" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)
- ALTERNATIVE LAYOUT



PLAN VIEW

TYPE 3 RAMP

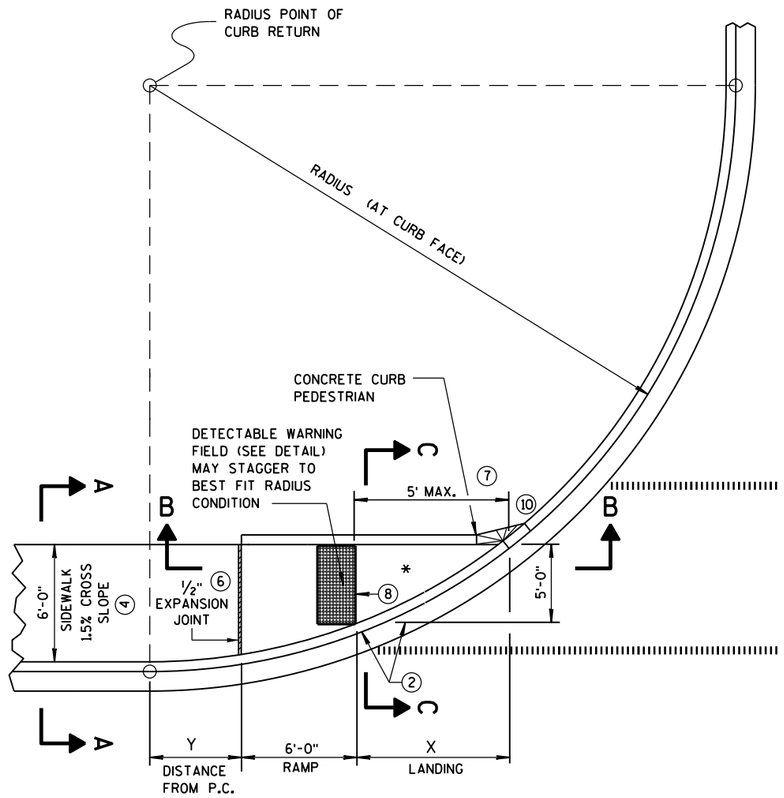
(OUTSIDE OF CROSSWALK AREA)

CURB RAMPS TYPES 2 AND 3

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

S.D.D. 8 D 5-16b

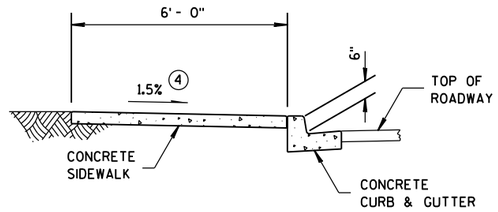


CURB RAMP TYPE 4A

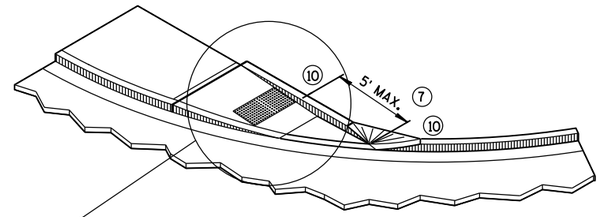
PLAN VIEW

RADIUS (AT CURB FACE)	X	Y
20 FEET	6'-1¾"	2'-7¼"
30 FEET	7'-11¾"	4'-8¼"
40 FEET	9'-5¼"	6'-5"
50 FEET	10'-8¾"	7'-11¼"
60 FEET	11'-10¼"	9'-3½"

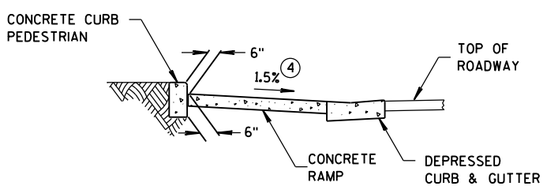
INTERMEDIATE RADII CAN BE INTERPOLATED



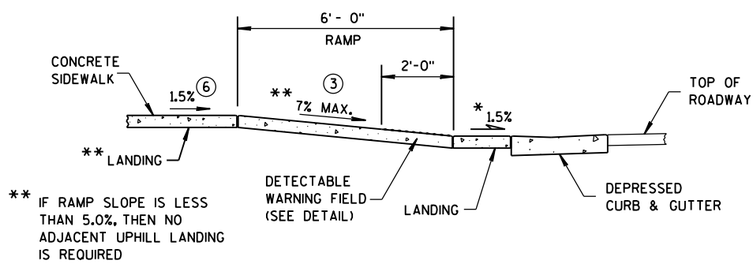
SECTION A-A FOR TYPE 4A



ISOMETRIC VIEW FOR TYPE 4A

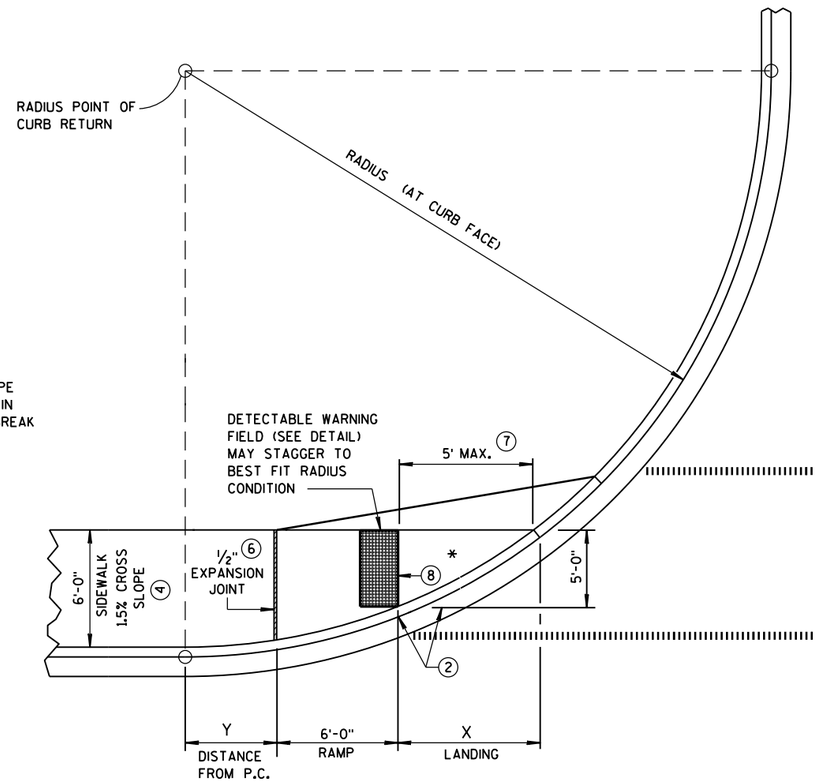


SECTION C-C FOR TYPE 4A



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 DRAINAGE AWAY FROM CURB RAMP AT GUTTER FLAG INTERFACE. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/4-INCH ARE ALLOWED.

(3) ABSOLUTE MAXIMUM 12H:1V (8.33%) CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

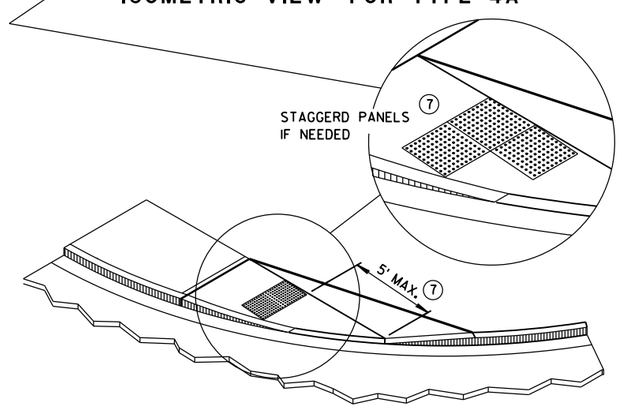
(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET (MINIMUM 4 FEET X 4 FEET).

(7) WHEN THIS DISTANCE EXCEEDS 5 FEET, USE MULTIPLE DETECTABLE WARNING PANELS ACROSS THE RAMP AND STAGGER ADDITIONAL DETECTABLE WARNING PANEL(S) FORWARD TO REDUCE THIS DISTANCE.

(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 4A1

LEGEND

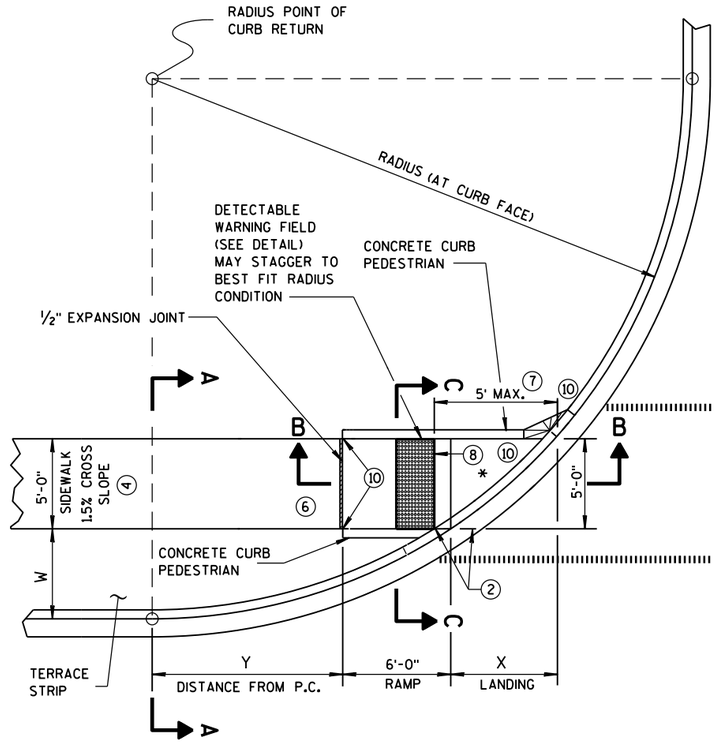
- ½" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)

CURB RAMPS
TYPES 4A AND 4A1

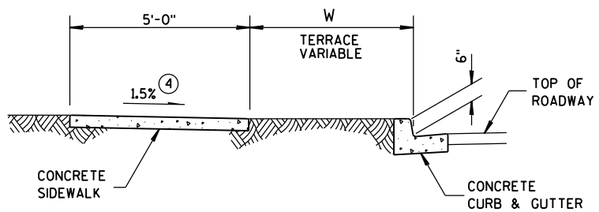
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

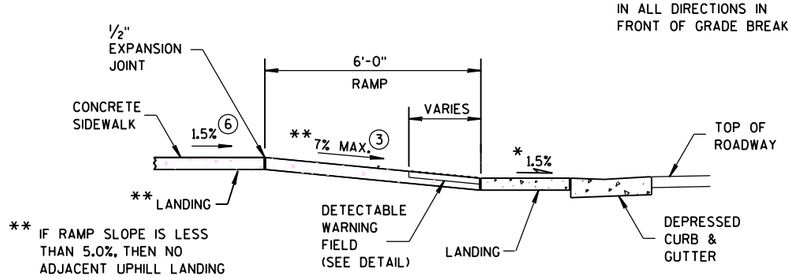
S.D.D. 8 D 5-16c



CURB RAMP TYPE 4B
PLAN VIEW



SECTION A-A FOR TYPE 4B



* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK

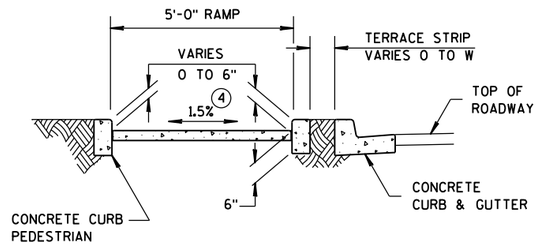
SECTION B-B FOR TYPE 4B

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'-5½"	4'-6½"	4'-8½"	6'-0"	4'-1"	7'-2¾"	3'-7"	8'-3½"	3'-1½"	9'-2½"
30 FEET	7'-3¾"	7'-1"	6'-5½"	8'-11½"	5'-9¼"	10'-7"	5'-2½"	12'-0"	4'-8¾"	13'-3¼"
40 FEET	8'-9½"	9'-2½"	7'-10"	11'-5¼"	7'-1"	13'-4½"	6'-5¾"	15'-¾"	5'-11½"	16'-7¼"
50 FEET	10'-¾"	11'-¾"	9'-¼"	13'-7¼"	8'-2½"	15'-9½"	7'-6½"	17'-9"	6'-11¾"	19'-6¼"
60 FEET	11'-2½"	12'-8¾"	10'-¾"	15'-6½"	9'-2¼"	17'-11¾"	8'-5¾"	20'-1¾"	7'-10½"	22'-1½"

INTERMEDIATE RADII CAN BE INTERPOLATED

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 DRAINAGE AWAY FROM CURB RAMP AT GUTTER FLAG INTERFACE. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼-INCH ARE ALLOWED.

(3) ABSOLUTE MAXIMUM 12H:1V (8.33%) CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

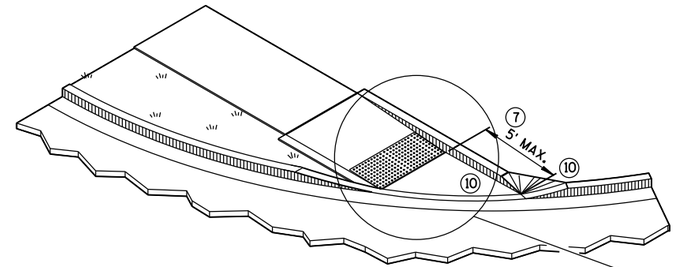
(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET (MINIMUM 4 FEET X 4 FEET).

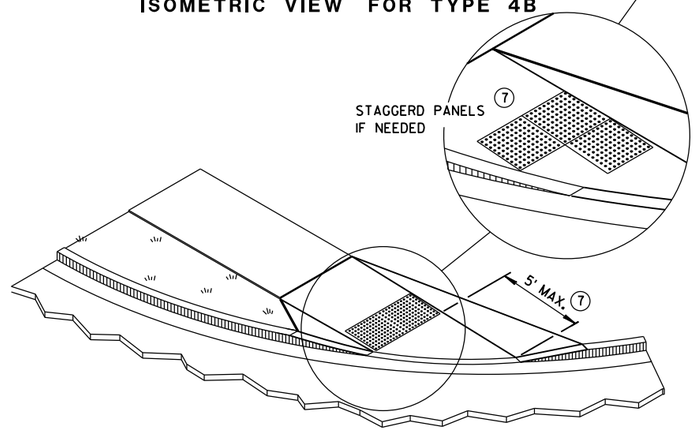
(7) WHEN THIS DISTANCE EXCEEDS 5 FEET, USE MULTIPLE DETECTABLE WARNING PANELS ACROSS THE RAMP AND STAGGER ADDITIONAL DETECTABLE WARNING PANEL(S) FORWARD TO REDUCE THIS DISTANCE.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

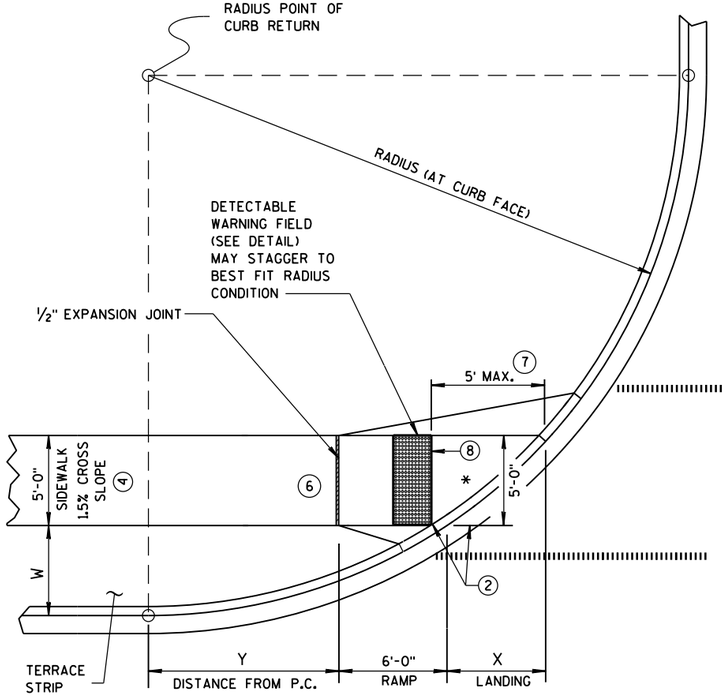
(10) INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.



ISOMETRIC VIEW FOR TYPE 4B



ISOMETRIC VIEW FOR TYPE 4B1



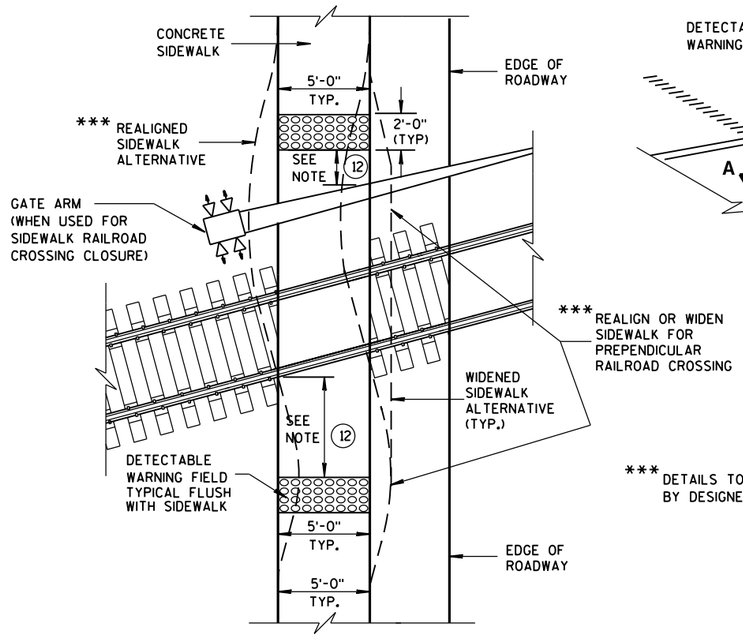
CURB RAMP TYPE 4B1
PLAN VIEW

CURB RAMPS
TYPE 4B AND 4B1

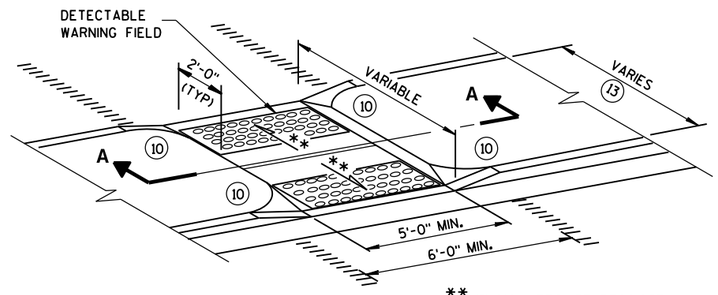
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

S.D.D. 8 D 5-16d



TYPE 8
DETECTABLE WARNINGS AT RAILROAD CROSSING



** 1% MIN. (PROVIDE DRAINAGE)

MEDIAN ISLAND NON-ELEVATED CROSSING
TYPE 5

*** DETAILS TO BE DETERMINED BY DESIGNER

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 DRAINAGE AWAY FROM CURB RAMP AT GUTTER FLAG INTERFACE. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/4-INCH ARE ALLOWED.

(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.

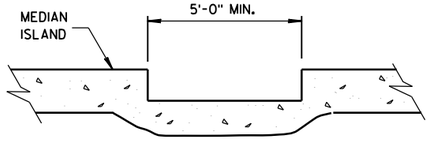
(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET (MINIMUM 4 FEET X 4 FEET).

(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.

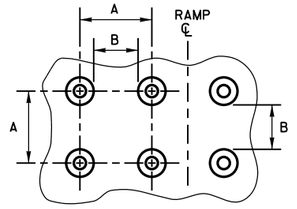
(13) DO NOT INSTALL DETECTABLE WARNING FIELDS IF MEDIAN WIDTH BETWEEN BACK OF CURBS IS LESS THAN 6 FEET.



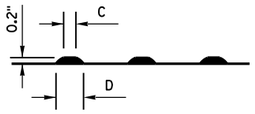
SECTION A-A

	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.

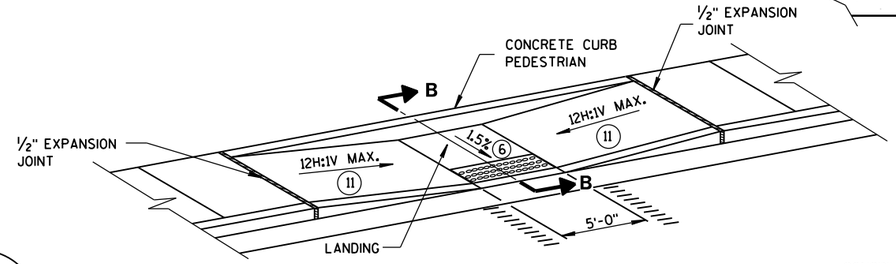


PLAN VIEW

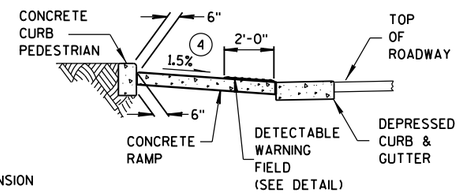


ELEVATION VIEW

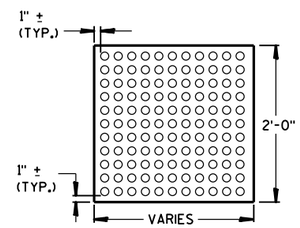
TRUNCATED DOMES
DETECTABLE WARNING PATTERN DETAIL



MID-BLOCK CROSSING
TYPE 7A

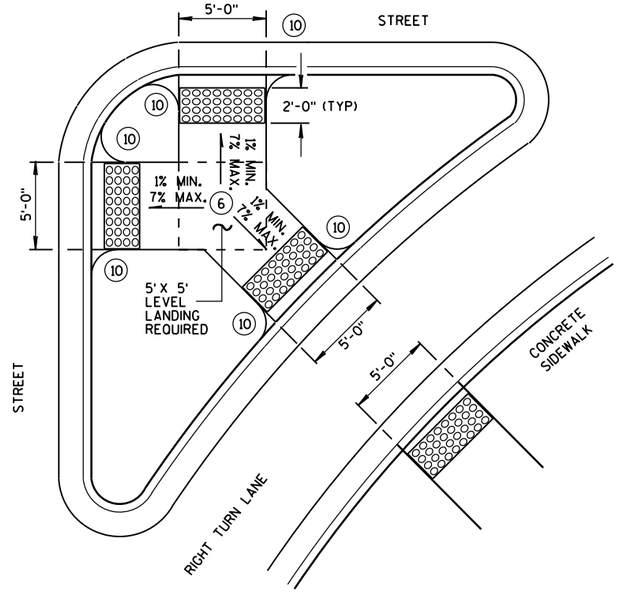


SECTION B-B

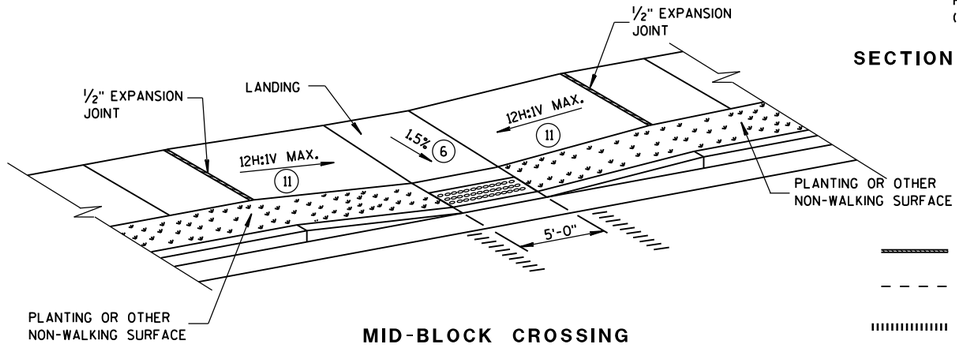


PLAN VIEW
DETECTABLE WARNING FIELD (TYPICAL)

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)

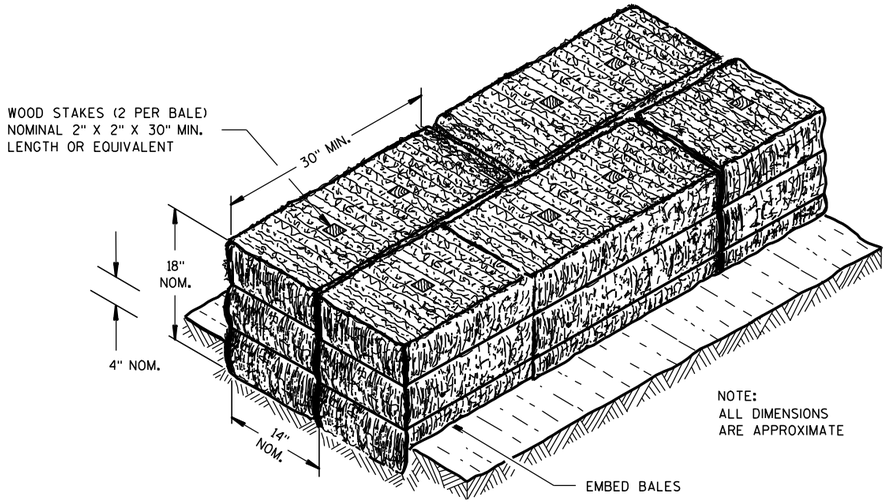
CURB RAMPS
TYPES 5, 6, 7A, 7B & 8

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

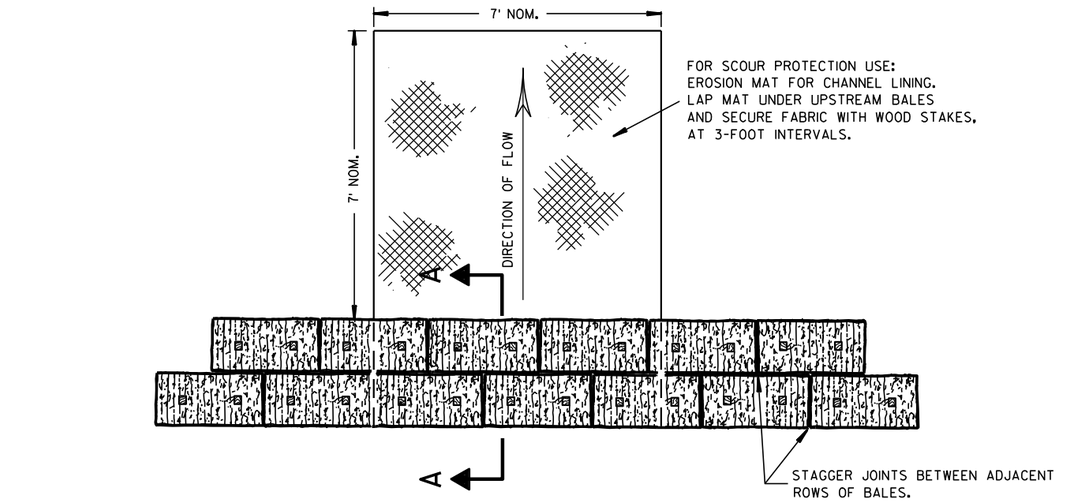
APPROVED
June, 2015 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER
FHWA

6

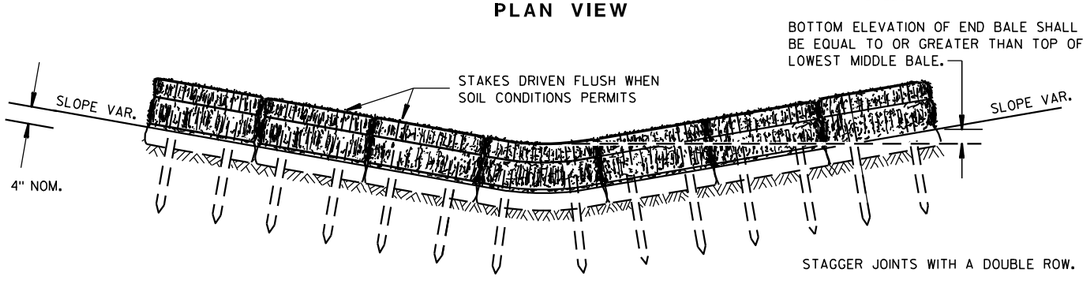
S.D.D. 8 D 5-16e



SECTION A-A



PLAN VIEW



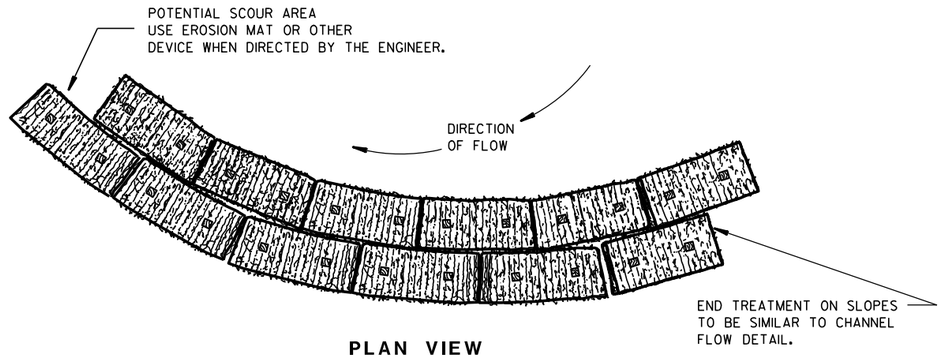
FRONT ELEVATION

TEMPORARY DITCH CHECK USING EROSION BALES (1)

GENERAL NOTES

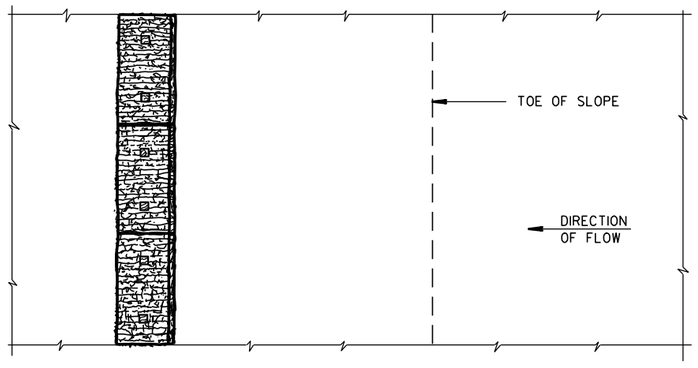
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

(1) TEMPORARY DITCH CHECKS EITHER EROSION BALES OR MANUFACTURED SHALL BE PAID FOR UNDER THE BID ITEM OF TEMPORARY DITCH CHECK. THE DEPARTMENT WILL NOT PAY FOR TEMPORARY DITCH CHECKS CONSTRUCTED OF A SINGLE ROW OF EROSION BALES.

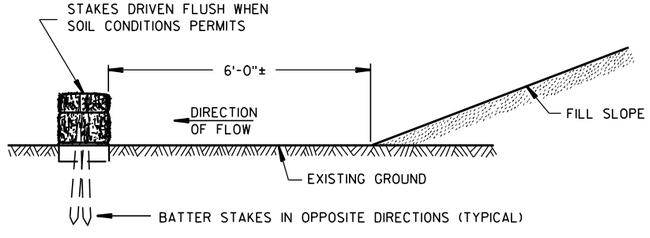


PLAN VIEW

WHEN ALTERING THE DIRECTION OF FLOW



PLAN VIEW



FRONT ELEVATION

WHEN EXISTING GROUND SLOPES AWAY FROM FILL SLOPE

EROSION BALES FOR SHEET FLOW

TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

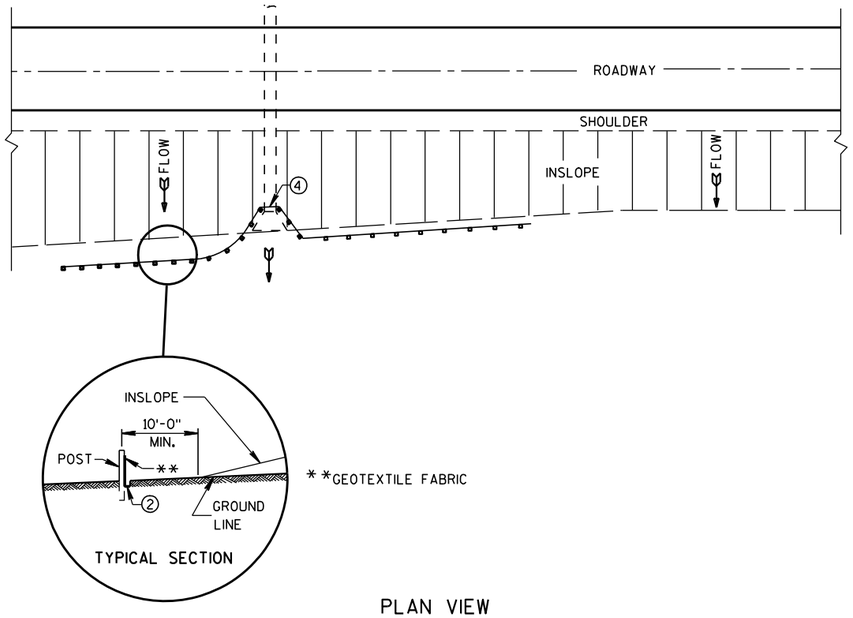
APPROVED

6/04/02 — DATE

/S/ Beth Cannestra — CHIEF ROADWAY DEVELOPMENT ENGINEER

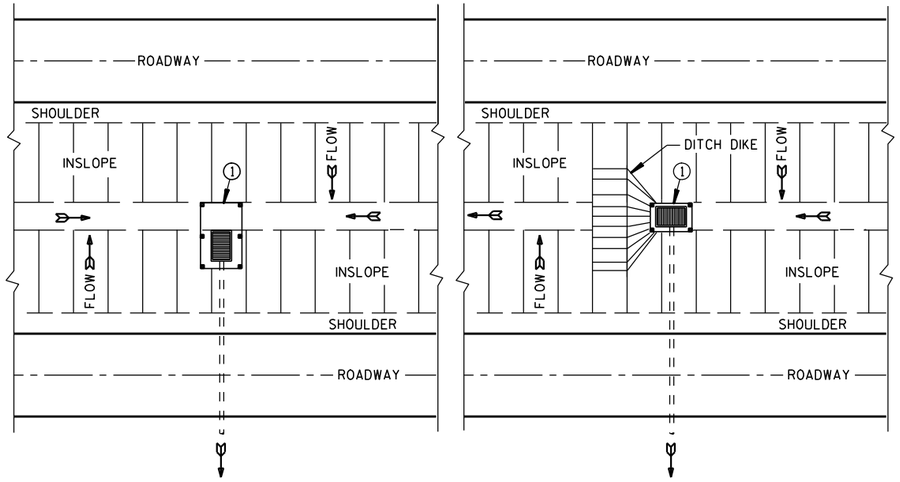
FHWA

6
S.D.D. 8 E 8-3



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.

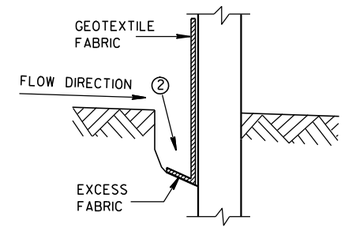
① HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.

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.

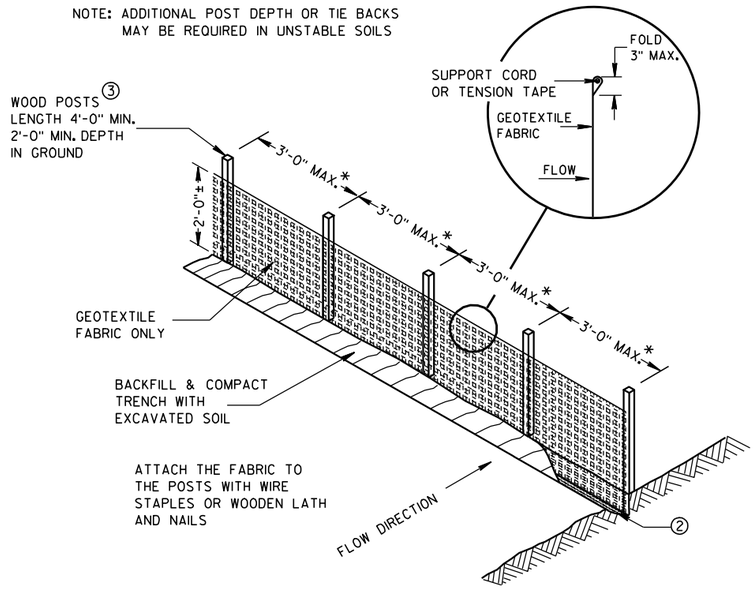
③ WOOD POSTS SHALL BE A MINIMUM SIZE OF 1⅛" X 1⅛" OF OAK OR HICKORY.

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.

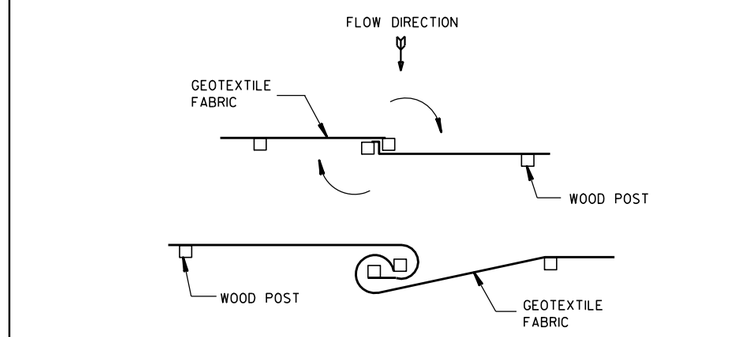


TRENCH DETAIL

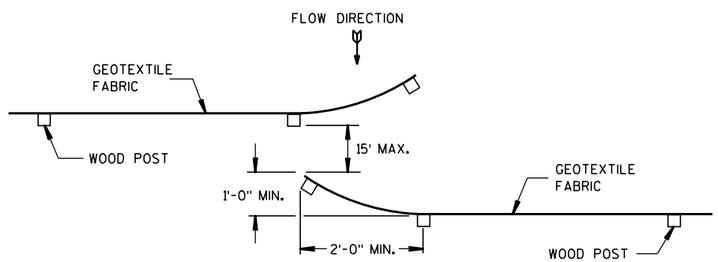


*NOTE: 8'-0" POST SPACING ALLOWED IF A WOVEN GEOTEXTILE FABRIC IS USED.

SILT FENCE

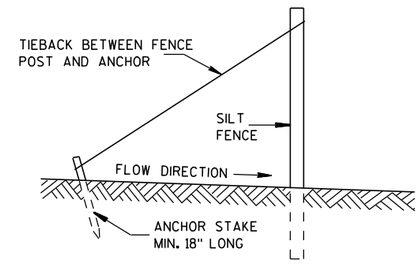


TWIST METHOD



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

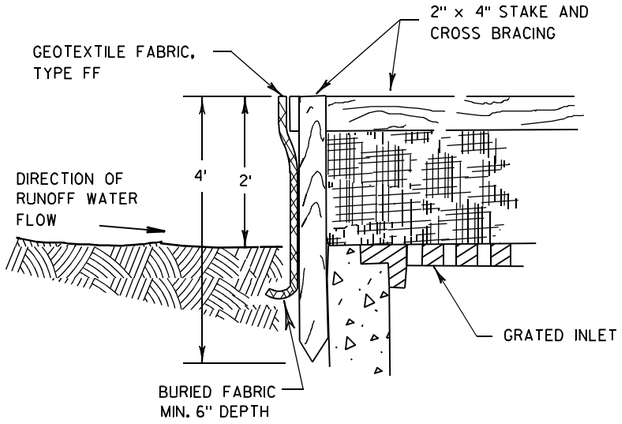
APPROVED
4-29-05 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

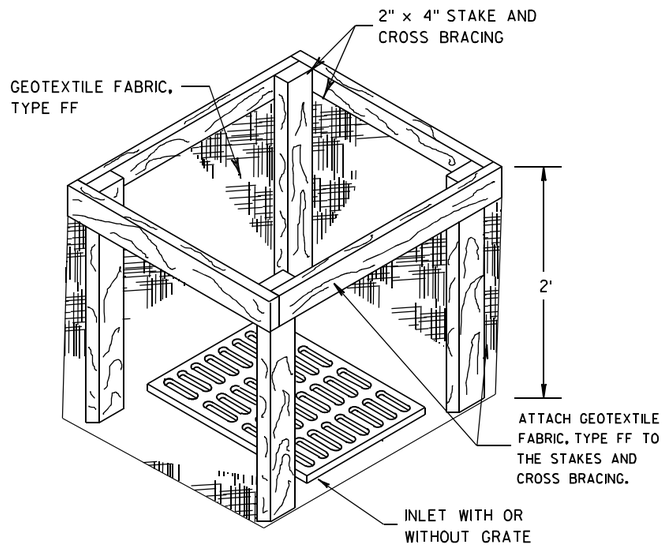
6

S.D.D. 8 E 9-6

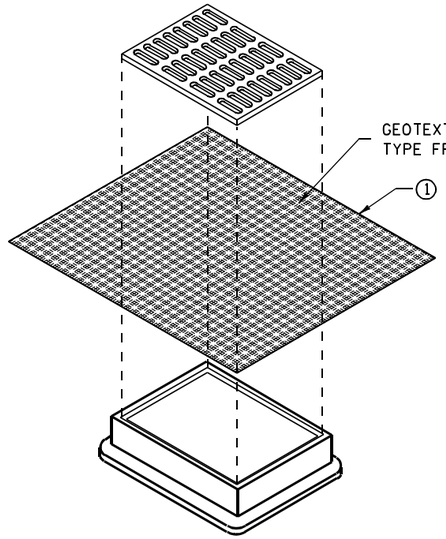
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S.D.D. 8 E 9-6



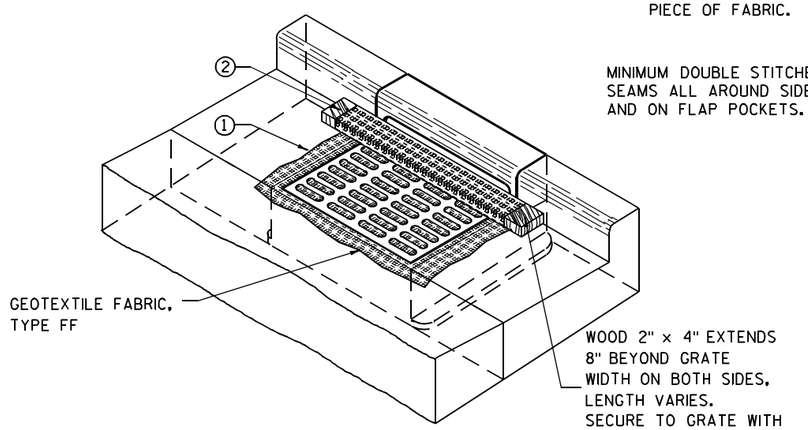


INLET PROTECTION, TYPE A

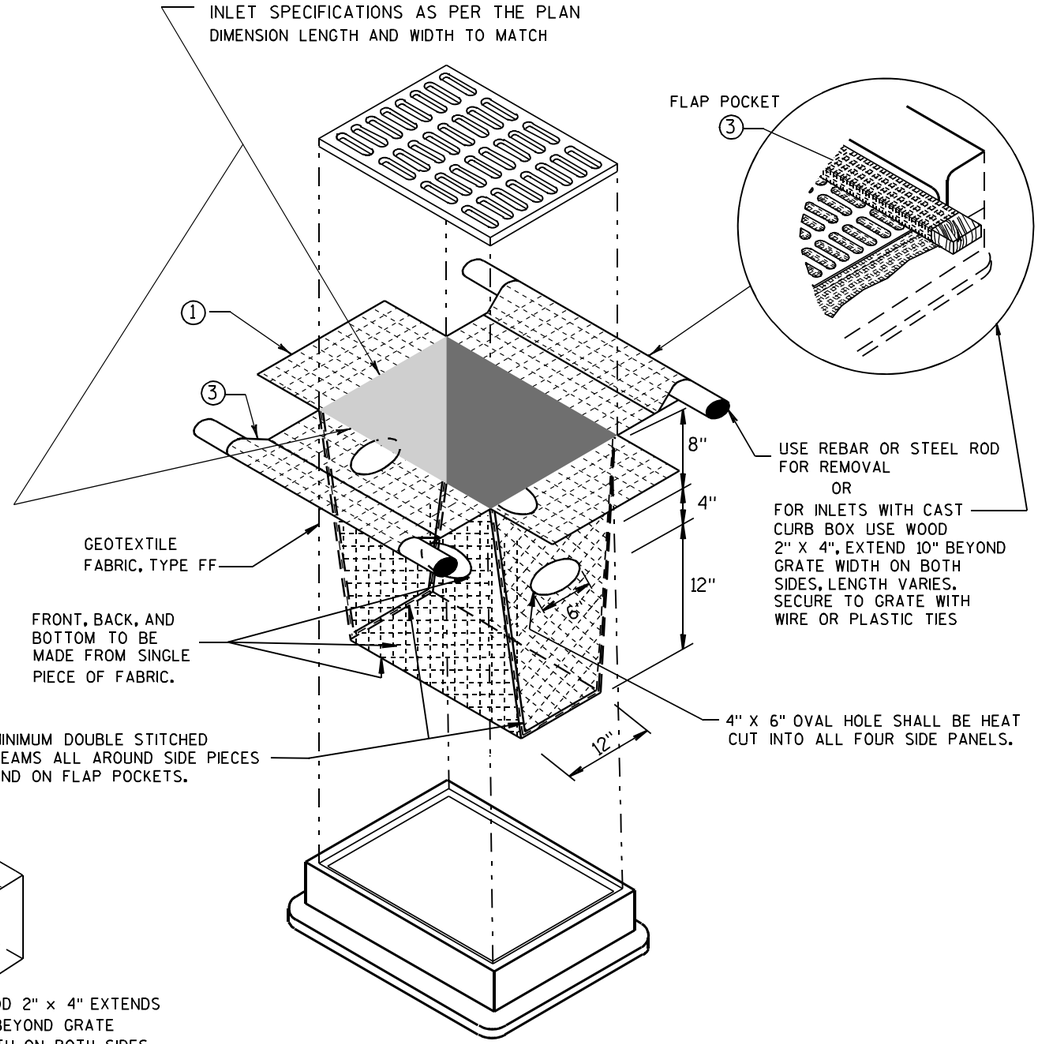


INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)

(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

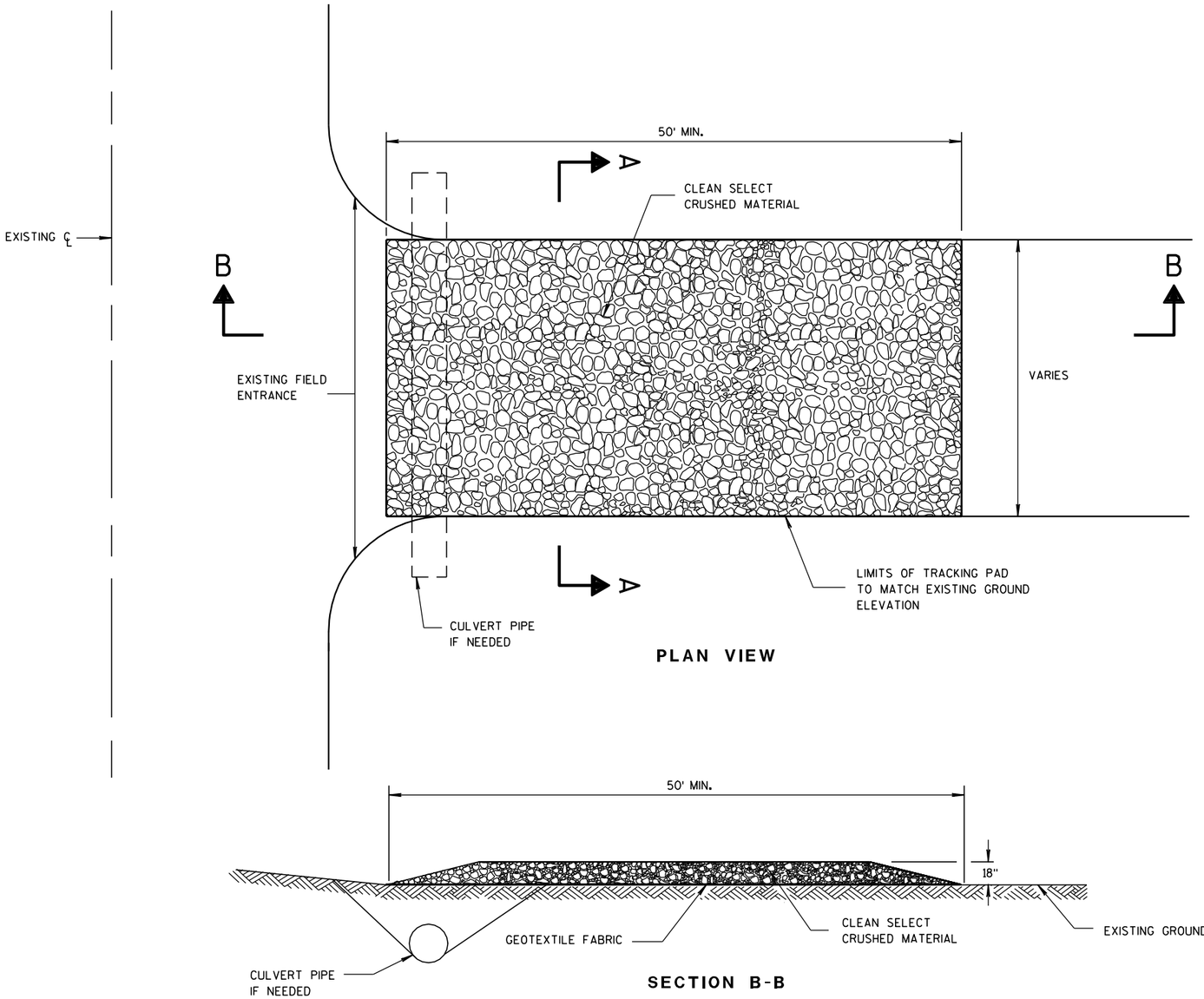
FHWA

6

S.D.D. 8 E 10-2

6

S.D.D. 8 E 10-2



PLAN VIEW

SECTION B-B

GENERAL NOTES

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

TRACKING PAD SHALL BE INSPECTED DAILY. DEFICIENT AREAS SHALL BE REPAIRED OR REPLACED IMMEDIATELY.

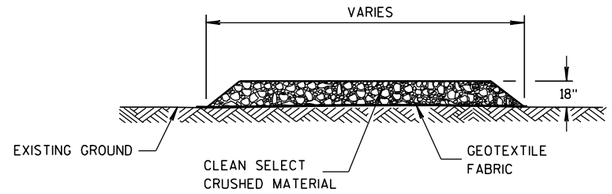
TRACKING PAD TO BE REMOVED AFTER CONSTRUCTION IS COMPLETED.

TRACKING PAD SHALL BE THE FULL WIDTH OF THE EGRESS POINT.

SURFACE WATER MUST BE PREVENTED FROM PASSING THROUGH THE TRACKING PAD. FLOWS SHALL BE DIVERTED AWAY, AROUND OR CONVEYED UNDER THE TRACKING PAD.

CULVERT PIPE OR OTHER BMP USED TO DIVERT WATER AWAY, AROUND OR UNDER THE TRACKING PAD SHALL BE DESIGNED TO CONVEY THE 2 YEAR - 24 HOUR EVENT.

THE COST OF ADDITIONAL BMP TO DIVERT WATER ARE INCIDENTAL TO THE TRACKING PAD BID ITEM.



SECTION A-A

TRACKING PAD

TRACKING PAD

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
3/24/2011 — DATE
/S/ Jerry H. Zoda — ROADWAY STANDARDS ENGINEER
FHWA

6

S.D.D. 8 E 14-1

6

S.D.D. 8 E 14-1

METAL APRON ENDWALLS

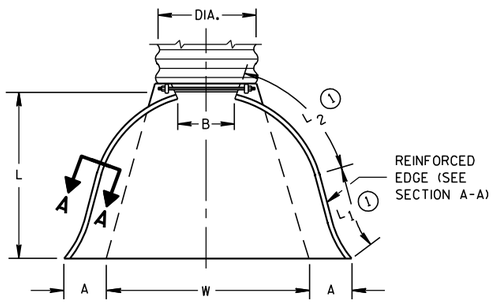
PIPE DIA. (IN.)	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
12	.064	.060	6	6	6	21	12	17 1/2	24	2 1/2 to 1	1 Pc.
15	.064	.060	7	8	6	26	14	21 3/4	30	2 1/2 to 1	1 Pc.
18	.064	.060	8	10	6	31	15	28 1/4	36	2 1/2 to 1	1 Pc.
21	.064	.060	9	12	6	36	18	29 5/8	42	2 1/2 to 1	1 Pc.
24	.064	.075	10	13	6	41	18	37 1/4	48	2 1/2 to 1	1 Pc.
30	.079	.075	12	16	8	51	18	52 1/4	60	2 1/2 to 1	1 Pc.
36	.079	.105	14	19	9	60	24	59 3/4	72	2 1/2 to 1	2 Pc.
42	.109	.105	16	22	11	69	24	75 5/8	84	2 1/2 to 1	2 Pc.
48	.109	.105	18	27	12	78	24	81	90	2 1/4 to 1	3 Pc.
54	.109	.105	18	30	12	84	30	85 1/2	102	2 1/4 to 1	3 Pc.
60	.109×	.105×	18	33	12	87	—	—	114	2 to 1	3 Pc.
66	.109×	.105×	18	36	12	87	—	—	120	2 to 1	3 Pc.
72	.109×	.105×	18	39	12	87	—	—	126	2 to 1	3 Pc.
78	.109×	.105×	18	42	12	87	—	—	132	1 1/2 to 1	3 Pc.
84	.109×	.105×	18	45	12	87	—	—	138	1 1/2 to 1	3 Pc.
90	.109×	.105×	18	37	12	87	—	—	144	1 1/2 to 1	3 Pc.
96	.109×	.105×	18	35	12	87	—	—	150	1 1/2 to 1	3 Pc.

× EXCEPT CENTER PANEL SEE GENERAL NOTES

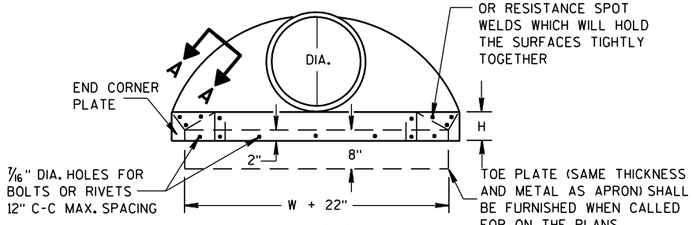
REINFORCED CONCRETE APRON ENDWALLS

PIPE DIA. (IN.)	DIMENSIONS (Inches) T	A	B	C	D	E	G	APPROX. SLOPE
12	2	4	24	48 7/8	72 1/8	24	2	3 to 1
15	2 1/4	6	27	46	73	30	2 1/4	3 to 1
18	2 1/2	9	27	46	73	36	2 1/2	3 to 1
21	2 3/4	9	36	37 1/2	73 1/2	42	2 3/4	3 to 1
24	3	9 1/2	43 1/2	30	73 1/2	48	3	3 to 1
27	3 1/4	10 1/2	49 1/2	24	73 1/2	54	3 1/4	3 to 1
30	3 1/2	12	54	19 3/4	73 1/2	60	3 1/2	3 to 1
36	4	15	63	34 3/4	97 3/4	72	4	3 to 1
42	4 1/2	21	63	35	98	78	4 1/2	3 to 1
48	5	24	72	26	98	84	5	3 to 1
54	5 1/2	27	65	* 33 1/4 - ** 35	* 98 1/4 - ** 100	90	5 1/2	2 2/5 to 1
60	6	* 30 - ** 35	60	39	99	96	5	2 to 1
66	6 1/2	* 24 - ** 30	* 72 - ** 78	* 21 - ** 27	99	102	5 1/2	2 to 1
72	7	* 24 - ** 36	78	21	99	108	6	2 to 1
78	7 1/2	* 24 - ** 36	78	21	99	114	6 1/2	2 to 1
84	8	36	90 1/2	21	111 1/2	120	6 1/2	1 1/2 to 1
90	8 1/2	41	87 1/2	24	111 1/2	132	6 1/2	1 1/2 to 1

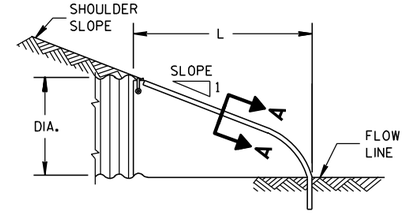
*MINIMUM
**MAXIMUM



PLAN VIEW

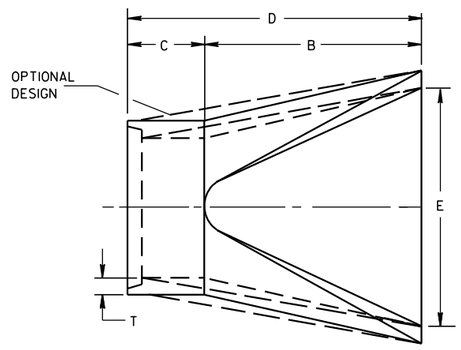


END VIEW

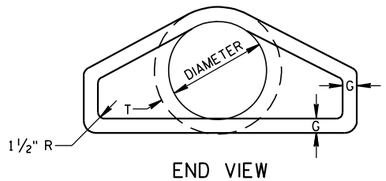


SIDE ELEVATION

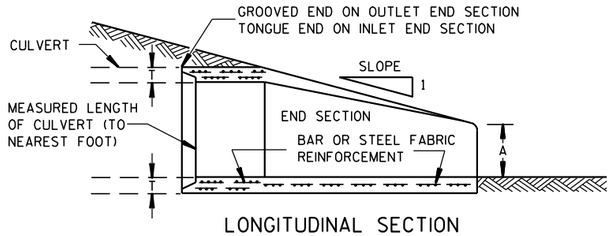
METAL ENDWALLS



PLAN

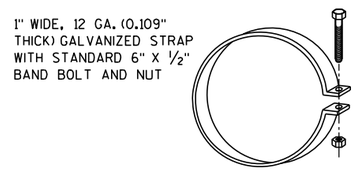


END VIEW



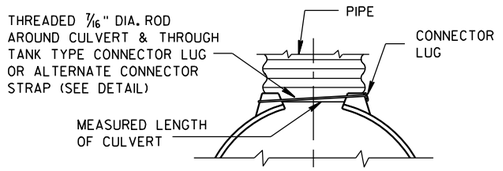
LONGITUDINAL SECTION

CONCRETE ENDWALLS

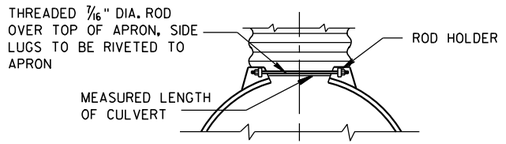


ALTERNATE FOR TYPE 1 CONNECTION

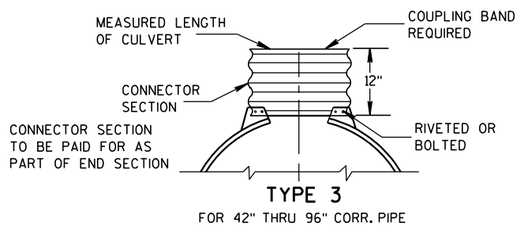
END SECTION CONNECTOR STRAP



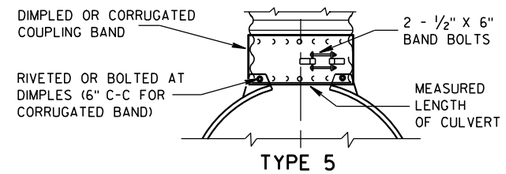
TYPE 1
FOR 12" THRU 24" CORR. PIPE



TYPE 2
FOR 30" THRU 96" CORR. PIPE



TYPE 3
FOR 42" THRU 96" CORR. PIPE



TYPE 5
ALTERNATE FOR:
ALL SIZES CORRUGATED CIRCULAR PIPE

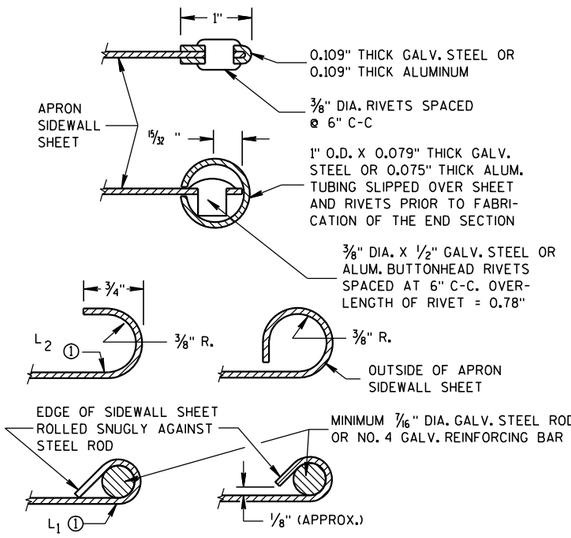
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL. AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

FOR CIRCUMFERENTIALLY CORRUGATED PIPE USE ENDWALL CONNECTION DETAILS 1, 2, 3 OR 5 AS APPLICABLE.

FOR HELICALLY CORRUGATED PIPE USE ENDWALL CONNECTION DETAILS 1, 2 OR 5.

FOR HELICALLY CORRUGATED PIPES WITH TWO CIRCUMFERENTIAL CORRUGATIONS AT EACH END USE ENDWALL CONNECTION DETAILS 1, 2 OR 3.

CONNECTION DETAILS



SECTION A-A

GENERAL NOTES

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

CONCRETE CULVERT ENDWALLS MAY NOT BE USED WITH GALVANIZED STEEL OR ALUMINUM CULVERT PIPE OR VISE VERSA. GALVANIZED STEEL OR ALUMINUM ENDWALLS SHALL NORMALLY BE INSTALLED ON CULVERT PIPE OF THE SAME METAL.

ALL THREE PIECE STEEL APRON ENDWALLS FOR 60" DIAMETER PIPE AND LARGER SHALL HAVE 0.109" SIDES AND 0.138" CENTER PANELS. ALL THREE PIECE ALUMINUM APRON ENDWALLS FOR 60" DIAMETER PIPE AND LARGER SHALL HAVE 0.105" SIDES AND 0.134" CENTER PANELS. THE WIDTH OF CENTER PANELS SHALL BE GREATER THAN 20 PERCENT OF THE PIPE PERIMETER.

LAP SEAMS SHALL BE TIGHTLY JOINED BY GALVANIZED RIVETS OR BOLTS FOR STEEL UNITS AND ALUMINUM RIVETS AND BOLTS FOR ALUMINUM UNITS. FOR THE 60" THROUGH 96" DIAMETER APRON ENDWALL SIZES, THE REINFORCED EDGES AND CENTER PANEL SEAMS SHALL BE FURTHER REINFORCED WITH GALVANIZED STEEL OR ALUMINUM STIFFENER ANGLES. THE ANGLES SHALL BE ATTACHED BY GALVANIZED NUTS AND BOLTS FOR STEEL UNITS AND ALUMINUM NUTS AND BOLTS FOR ALUMINUM UNITS.

WHERE TWO OR MORE PIPES WITH APRON ENDWALLS ARE LAID ADJACENT TO EACH OTHER, THEY SHALL BE SEPARATED BY A DISTANCE SUFFICIENT TO PROVIDE A MINIMUM CLEARANCE OF 6 INCHES BETWEEN APRON ENDWALLS.

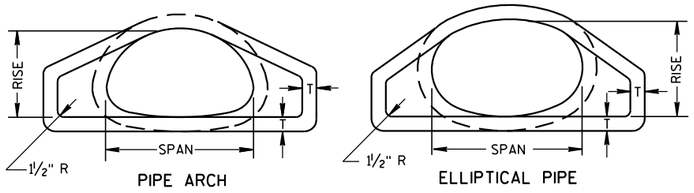
① FOR PIPE SIZES UP TO 60" DIAMETER, A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

APRON ENDWALLS FOR CULVERT PIPE

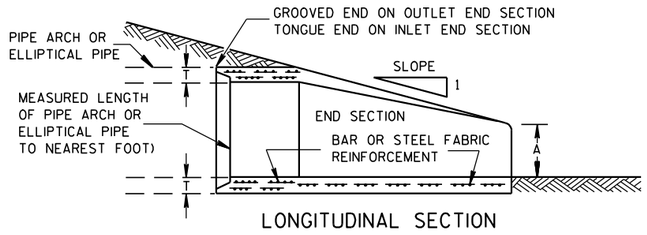
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11/30/94 DATE
/S/ Rory L. Rhinesmith
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

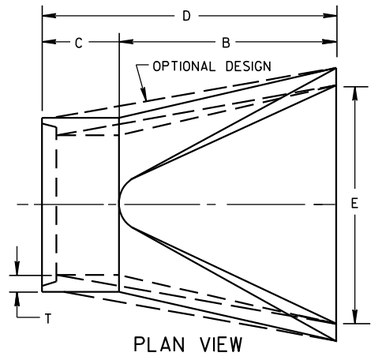
6
S.D.D. 8 F 1-11



END VIEW

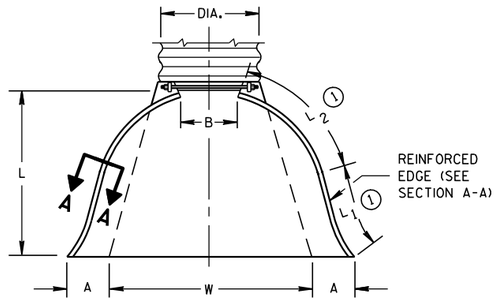


LONGITUDINAL SECTION

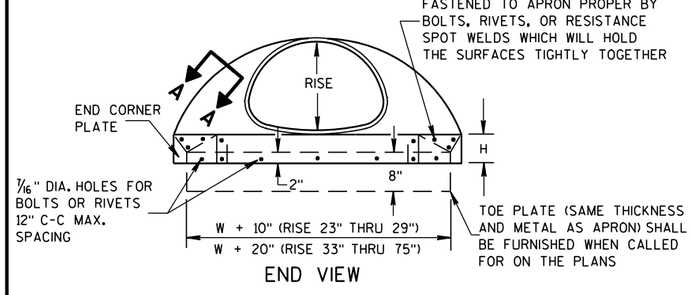


PLAN VIEW

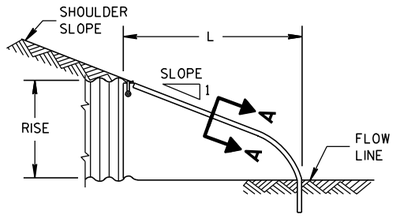
CONCRETE ENDWALLS



PLAN VIEW

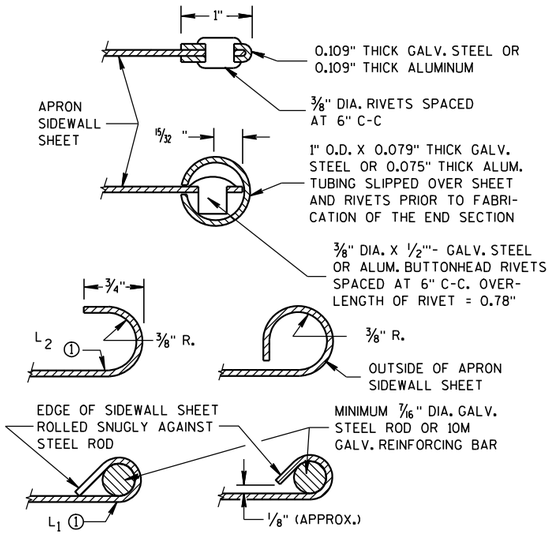


END VIEW



SIDE ELEVATION

METAL ENDWALLS



SECTION A-A

2- 2/3" X 1/2" CORRUGATIONS

EQUIV. DIA. (Inches)	(Inches) SPAN	(Inches) RISE	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
15	17	13	.064	.060	7	9	6	19	14	16	30	2½ to 1	1 Pc.
18	21	15	.064	.060	7	10	6	23	14	19⅜	36	2½ to 1	1 Pc.
21	24	18	.064	.060	8	12	6	28	18	21¾	42	2½ to 1	1 Pc.
24	28	20	.064	.060	9	14	6	32	18	27½	48	2½ to 1	1 Pc.
30	35	24	.079	.075	10	16	6	39	18	37⅝	60	2½ to 1	1 Pc.
36	42	29	.079	.075	12	18	8	46	24	45⅜	75	2½ to 1	1 Pc.
42	49	33	.109	.105	13	21	9	53	24	54¾	85	2½ to 1	2 Pc.
48	57	38	.109	.105	18	26	12	63	24	68	90	2½ to 1	3 Pc.
54	64	43	.109	.105	18	30	12	70	24	72¾	102	2¼ to 1	3 Pc.
60	71	47	.109*	.105*	18	33	12	77	30	82¼	114	2¼ to 1	3 Pc.
66	77	52	.109*	.105*	18	36	12	77	—	—	126	2 to 1	3 Pc.
72	83	57	.109*	.105*	18	39	12	77	—	—	138	2 to 1	3 Pc.

3" X 1" CORRUGATIONS

EQUIV. DIA. (Inches)	(Inches) SPAN	(Inches) RISE	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
48	53	41	.109	.105	18	26	12	63	24	72¾	90	2½ to 1	2 Pc.
54	60	46	.109	.105	18	30	12	70	30	82¼	102	2 to 1	2 Pc.
60	66	51	.109*	.105*	18	33	12	77	—	—	114	1½ to 1	3 Pc.
66	73	55	.109*	.105*	18	36	12	77	—	—	126	1½ to 1	3 Pc.
72	81	59	.109*	.105*	18	39	12	77	—	—	138	2 to 1	3 Pc.
78	87	63	.109*	.105*	22	38	12	77	—	—	148	1½ to 1	3 Pc.
84	95	67	.109*	.105*	22	34	12	77	—	—	162	1½ to 1	3 Pc.
90	103	71	.109*	.105*	22	38	12	77	—	—	174	1½ to 1	3 Pc.
96	112	75	.109*	.105*	24	40	12	77	—	—	174	1½ to 1	3 Pc.

NOTE: ALL SPLICES TO BE LAP RIVETED OR BOLTED.

* EXCEPT CENTER PANEL SEE GENERAL NOTES

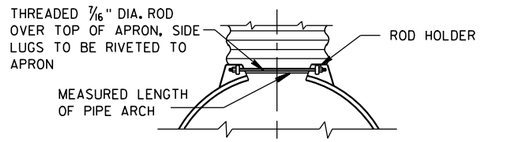
REINFORCED CONCRETE PIPE ARCH

EQUIV. DIA. (Inches)	DIMENSIONS (Inches) ** SPAN	** RISE	T	A	B	C	D	E	APPROX. SLOPE
24	29	18	3	8½	39	33	72	48	3 to 1
30	36	22	3½	9½	50	46	96	60	3 to 1
36	44	27	4	11⅛	60	36	96	72	3 to 1
42	51	31	4½	15 13/16	60	36	96	78	3 to 1
48	58	36	5	21	60	36	96	84	3 to 1
54	65	40	5½	25½	60	36	96	90	3 to 1
60	73	45	6	31	60	36	96	96	3 to 1
72	88	54	7	31	60	39	99	120	2 to 1
84	102	62	8	28½	83	19	102	144	2 to 1

REINFORCED CONCRETE ELLIPTICAL PIPE

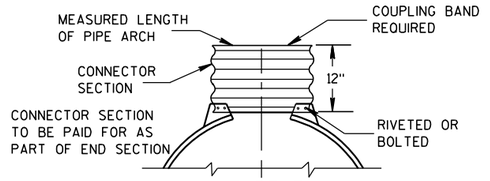
EQUIV. DIA. (Inches)	DIMENSIONS (Inches) ** SPAN	** RISE	T	A	B	C	D	E	APPROX. SLOPE
24	30	19	3¼	8½	39	33	72	48	3 to 1
30	38	24	3¾	9½	54	18	72	60	3 to 1
36	45	29	4½	11⅛	60	24	84	72	2½ to 1
42	53	34	5	15¾	60	36	96	78	2½ to 1
48	60	38	5½	21	60	36	96	84	2½ to 1
54	68	43	6	25½	60	36	96	90	2½ to 1
60	76	48	6½	30	60	36	96	96	2½ to 1

**NOMINAL SIZE



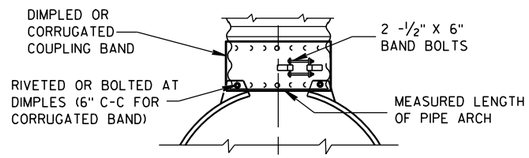
TYPE 2

FOR 17" X 13" THRU 112" X 75" PIPE ARCH



TYPE 3

FOR 64" X 43" THRU 112" X 75" PIPE ARCH



TYPE 5

ALTERNATE FOR:

ALL SIZES CORRUGATED PIPE ARCHES

NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL, AND CORRUGATED BAND FITS INSIDE ENDWALL.

CONNECTION DETAILS

GENERAL NOTES

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

CONCRETE APRON ENDWALLS MAY NOT BE USED WITH GALVANIZED STEEL OR ALUMINUM CULVERT PIPE OR VISE VERSA. GALVANIZED STEEL OR ALUMINUM APRON ENDWALLS SHALL NORMALLY BE INSTALLED ON CULVERT PIPE OF THE SAME METAL.

ALL THREE PIECE STEEL APRON ENDWALLS FOR 66" X 51" PIPE ARCH AND LARGER SHALL HAVE 0.109" SIDES AND 0.138" CENTER PANELS. ALL THREE PIECE ALUMINUM APRON ENDWALLS FOR 66" X 51" PIPE ARCH AND LARGER SHALL HAVE 0.105" SIDES AND 0.134" CENTER PANELS. THE WIDTH OF CENTER PANELS SHALL BE GREATER THAN 20 PERCENT OF THE PIPE ARCH PERIMETER.

LAP SEAMS SHALL BE TIGHTLY JOINED BY GALVANIZED RIVETS OR BOLTS FOR STEEL UNITS AND ALUMINUM RIVETS AND BOLTS FOR ALUMINUM UNITS. FOR THE 77" X 52" THROUGH 112" X 75" APRON ENDWALL SIZES, THE REINFORCED EDGES AND CENTER PANEL SEAMS SHALL BE FURTHER REINFORCED WITH GALVANIZED STEEL OR ALUMINUM STIFFENER ANGLES. THE ANGLES SHALL BE ATTACHED BY GALVANIZED NUTS AND BOLTS FOR STEEL UNITS AND ALUMINUM NUTS AND BOLTS FOR ALUMINUM UNITS.

WHERE TWO OR MORE PIPES WITH APRON ENDWALLS ARE LAID ADJACENT TO EACH OTHER, THEY SHALL BE SEPARATED BY A DISTANCE SUFFICIENT TO PROVIDE A MINIMUM CLEARANCE OF 6 INCHES BETWEEN APRON ENDWALLS.

① FOR PIPE ARCH SIZES UP TO 73" X 55" A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

APRON ENDWALLS FOR PIPE ARCH AND ELLIPTICAL PIPE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

11/30/94 — DATE

/S/ Rory L. Rhinesmith — CHIEF ROADWAY DEVELOPMENT ENGINEER

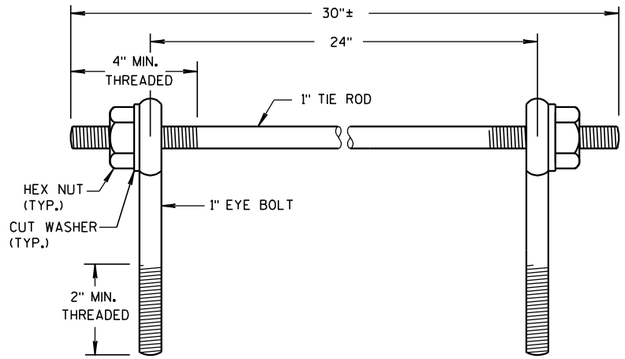
FHWA

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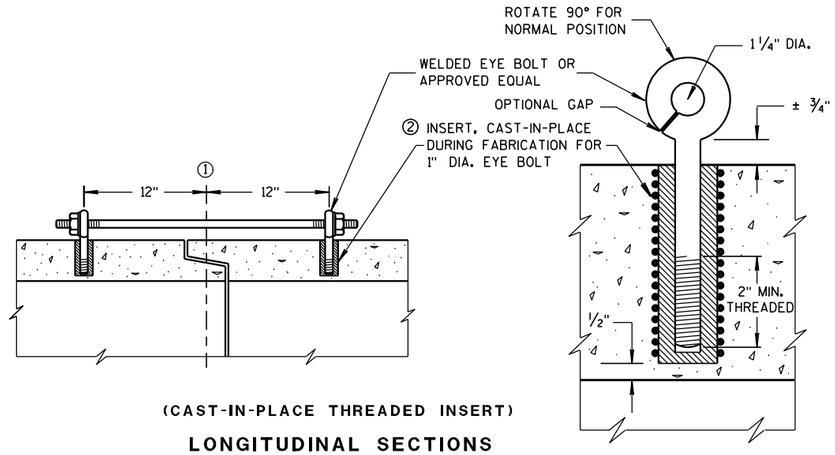
S.D.D. 8 F 2-1

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S.D.D. 8 F 2-1



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.

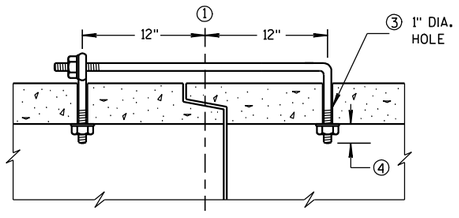
② THE INSIDE OF THE THREADED INSERTS SHALL BE CLEAN TO ALLOW THE INSERTION OF THREADED EYE BOLTS.

③ HOLES SHALL BE CAST-IN-PLACE OR DRILLED 12 INCHES FROM ℄ OF TONGUE AND GROOVE.

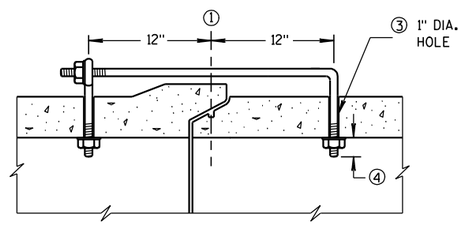
④ BOLT PROJECTION INSIDE OF PIPE SHALL NOT EXCEED 2 INCHES.

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)

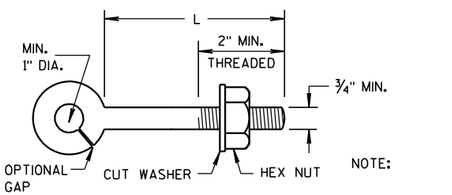


(MODIFIED BELL PIPE)

LONGITUDINAL SECTION

EYE BOLT DIMENSION TABLE

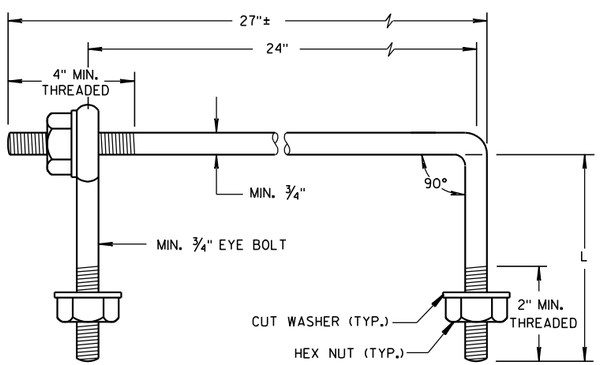
PIPE SIZE	L = LENGTH	
	TONGUE & GROOVE PIPE	MODIFIED BELL PIPE
18" TO 24"	4 1/2"	6 1/4"
30"	5"	7"
36"	5 1/2"	7"
42"	6"	
48"	6 1/2"	
60"	7 1/2"	
66"	8"	



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

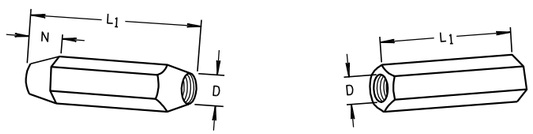
(JOINT TIES FOR 18" TO 66" DIA. CONCRETE PIPE)

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

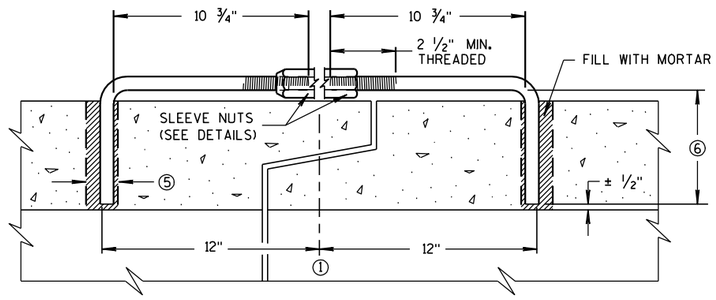
DIMENSIONS SHOWN ARE IN INCHES



TAPERED PLAIN

RIGHT AND LEFT THREADS

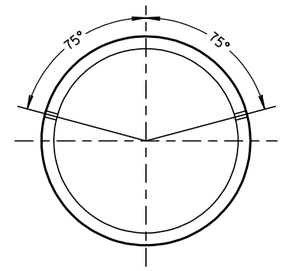
SLEEVE NUTS



LONGITUDINAL SECTION

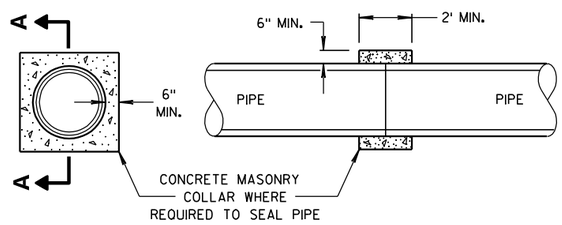
(JOINT TIES FOR 12" TO 108" DIA. CONCRETE PIPE)

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

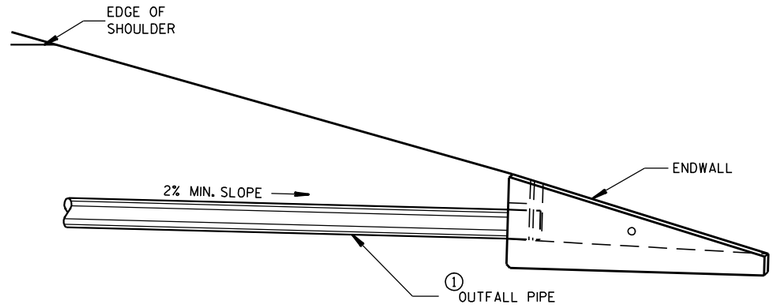
APPROVED
6/5/2012 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER
399
FHWA

6

S.D.D. 8 F 4-7

DIMENSIONS IN INCHES											
PIPE DIA.	A	B	C	D	E	F	G	H	J	L	Z
**4	6	12	5 1/4	9	8	32	36	11	2 3/8	6 1/2	4
6	8	14	7 1/4	11	10	42	44	13	3 5/8	8 1/2	6

**APRON ENDWALL FOR 6 INCH DIAMETER PIPE MAY BE SUBSTITUTED FOR THIS SIZE PROVIDED THE HOLE IN THE HEADWALL IS SIZED AND LOCATED TO CONFORM TO THE 4 INCH DIAMETER PIPE DIMENSIONS (C & J)



INSTALLATION 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.

ALTERNATIVE DESIGNS WHICH PROVIDE EQUIVALENT CAPACITY AND STRENGTH MAY BE USED WHEN APPROVED BY THE ENGINEER. ENDWALL MAY BE EITHER PRECAST OR CAST-IN-PLACE CONCRETE.

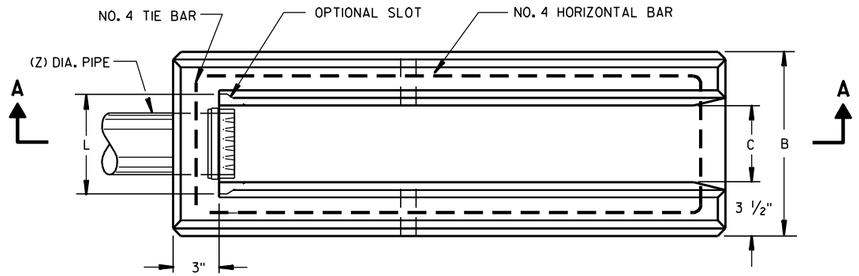
THE UNDERDRAIN PIPE SHALL BE FULLY INSERTED AND SEALED INTO THE ENDWALL WITH CEMENT MORTAR PRIOR TO BACKFILLING AROUND THE STRUCTURE.

THE UPPERMOST POINT OF THE ENDWALL SHALL BE PLACED FLUSH WITH THE ROADWAY SLOPE. ADJACENT EMBANKMENT SLOPES SHALL BE SHAPED TO FIT THE SIDES AND TOE OF THE ENDWALL. EXACT PLACEMENT OF THE OUTFALL PIPE AND ENDWALL SHALL BE DETERMINED BY THE ENGINEER TO MATCH THE ELEVATIONS AND FLOW DIRECTION OF THE ROADSIDE DITCH.

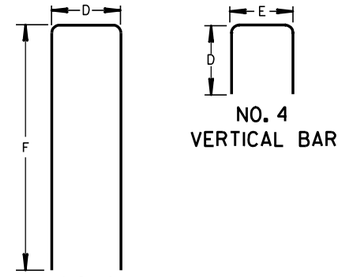
① THE OUTFALL PIPE UNDERDRAIN AND FITTINGS SHALL CONFORM TO THE REQUIREMENTS OF THE SPECIFICATION FOR POLY (VINYL CHORIDE) (PVC) PLASTIC DRAIN, WASTE AND VENT PIPE AND FITTINGS, ASTM DESIGNATION: D 2665, SCHEDULE 40 PVC OR THE STANDARD SPECIFICATION FOR TYPE PSM POLY (VINYL CHORIDE) (PVC) SEWER PIPE AND FITTINGS, ASTM DESIGNATION: D 3034, TYPE PSM SDR 23.5 PVC SEWER PIPE, ALL JOINTS SHALL BE SOLVENT WELDED.

THE OUTFALL PIPE INCLUDING ALL FITTINGS AND THE RODENT SHIELD SHALL BE MEASURED AND PAID FOR AS PIPE UNDERDRAIN UNPERFORATED.

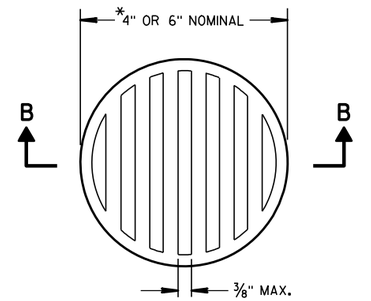
② THE RODENT SHIELD SHALL BE A PVC GRATE SIMILAR TO THIS DETAIL. THE GRATE IS COMMERCIALLY AVAILABLE AS A FLOOR STRAINER. A PIPE COUPLING IS REQUIRED FOR THE ATTACHMENT OF THIS SHIELD TO THE OUTFALL PIPE. THE SHIELD SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO. 10 X 1-INCH STAINLESS STEEL SHEET METAL SCREWS.



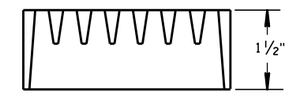
PLAN VIEW



BAR STEEL REINFORCEMENT DETAILS



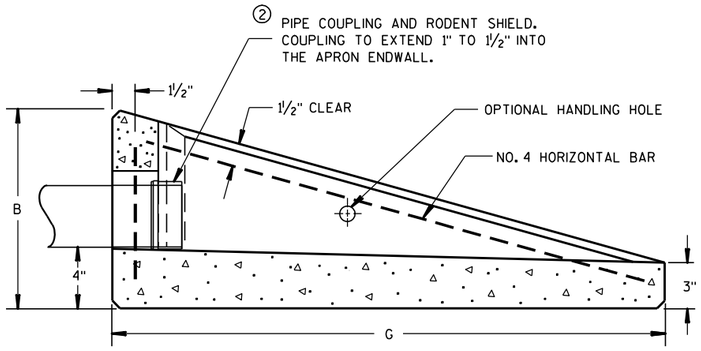
NOTE: ORIENT SHIELD SO SLOTS ARE VERTICAL.



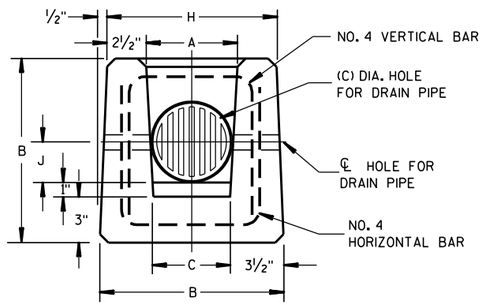
SECTION B-B

② RODENT SHIELD

*NOTE: DIMENSIONS ARE APPROXIMATE. THE GRATE IS SIZED TO FIT INTO A PIPE COUPLING.



SECTION A-A



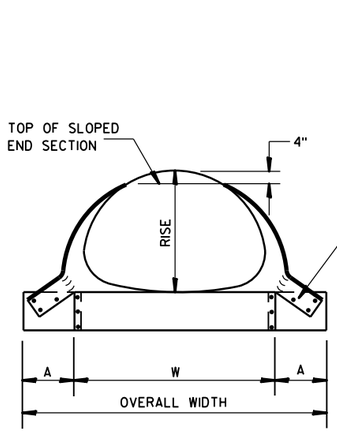
END VIEW

CONCRETE APRON ENDWALL FOR UNDERDRAIN

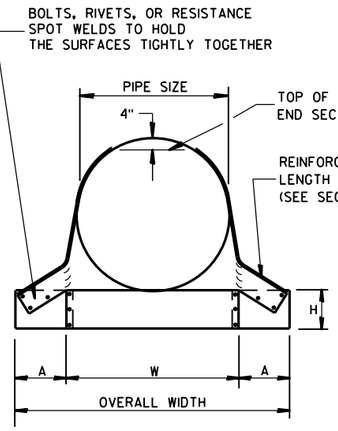
REINFORCED CONCRETE APRON ENDWALL FOR PIPE UNDERDRAIN

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

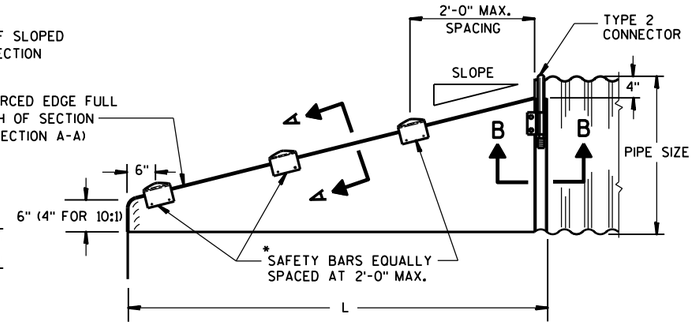
APPROVED
3/10/98 DATE
/S/ Rory L. Rhinesmith
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA



FRONT VIEW



FRONT VIEW



SIDE VIEW

GENERAL NOTES

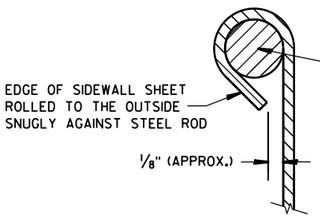
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

SLOPED END SECTIONS SHALL CONFORM TO THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS, SECTION 521 FOR STEEL APRON ENDWALLS.

SAFETY BARS SHALL BE FABRICATED FROM GALVANIZED STEEL PIPE MEETING THE REQUIREMENTS OF ASTM A-53, GRADE B, SCHEDULE 40 OR APPROVED EQUAL.

STEEL APRON ENDWALLS FOR CULVERT PIPE
SLOPED SIDE DRAINS

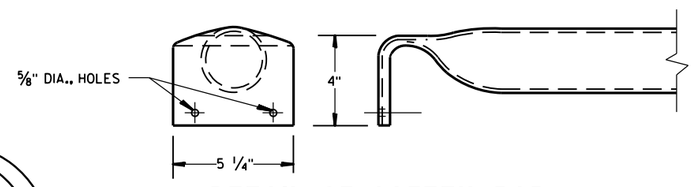
PIPE DIA. (IN.)	MIN. THICK. (Inches)	DIMENSIONS (Inches)				L DIMENSIONS					
		A	H	W	OVERALL WIDTH	SLOPE	LENGTH INCHES	SLOPE	LENGTH INCHES	SLOPE	LENGTH INCHES
15	.064	8	6	21	37	4:1	20	6:1	30	10:1	70
18	.064	8	6	24	40	4:1	32	6:1	48	10:1	100
21	.064	8	6	27	43	4:1	44	6:1	66	10:1	130
24	.064	8	6	30	46	4:1	56	6:1	84	10:1	160
30	.109	12	9	36	60	4:1	80	6:1	120	10:1	220
36	.109	12	9	42	66	4:1	104	6:1	156	10:1	280
42	.109	16	12	48	80	4:1	128	6:1	192	——	——
48	.109	16	12	54	86	4:1	152	6:1	228	——	——
54	.109	16	12	60	92	4:1	176	6:1	264	——	——
60	.109	16	12	66	98	4:1	200	6:1	300	——	——



SECTION A-A

*NOTE:
THREE SAFETY BARS ARE SHOWN. ACTUAL NUMBER OF BARS REQUIRED AT A 2'-0" C-C MAX. SPACING WILL VARY DEPENDING ON THE LENGTH OF THE END SECTION.

3" GALVANIZED PIPE. FLATTEN ENDS, THEN BEND OUTSIDE 4" TO MATCH END SECTION SIDES.

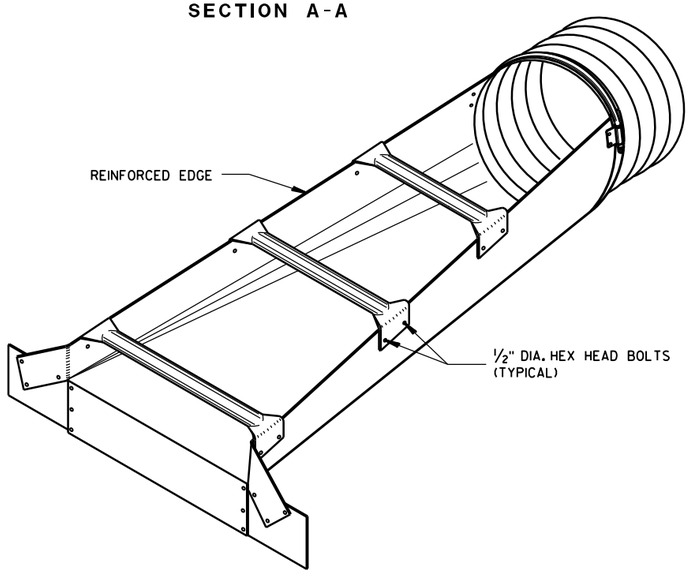


DETAIL OF SAFETY BAR

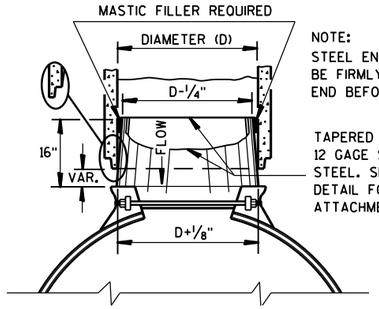
STEEL APRON ENDWALLS FOR PIPE ARCH
SLOPED SIDE DRAINS

EQUIV. DIA. (Inches)	(Inches) SPAN	(Inches) RISE	MIN. THICK. (Inches) ①	DIMENSIONS (Inches) A	H	W	OVERALL WIDTH	L DIMENSIONS SLOPE	LENGTH INCHES	SLOPE	LENGTH INCHES	SLOPE	LENGTH INCHES
15	17	13	.064 *	7	6	30	44	4:1	19	6:1	30	10:1 ②	70
18	21	15	.064 *	8	6	27	43	4:1	20	6:1	30	10:1	70
21	24	18	.064 *	8	6	30	46	4:1	32	6:1	48	10:1	100
24	28	20	.064 *	8	6	34	50	4:1	40	6:1	60	10:1	120
30	35	24	.079 *	12	9	41	65	4:1	56	6:1	84	10:1	160
36	42	29	.109 *	12	9	48	72	4:1	76	6:1	114	10:1	210
42	49	33	.109	16	12	55	87	4:1	92	6:1	138	——	——
48	57	38	.109	16	12	63	95	4:1	112	6:1	168	——	——
54	64	43	.109	16	12	70	102	4:1	132	6:1	198	——	——

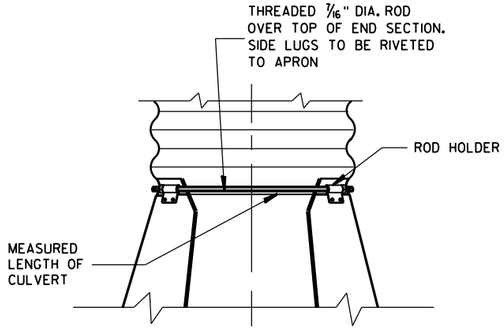
① * MINIMUM THICKNESS OF ALL 10:1 SLOPED SIDE DRAINS IS 0.109".
② ACTUAL SLOPE GREATER THAN 10:1.



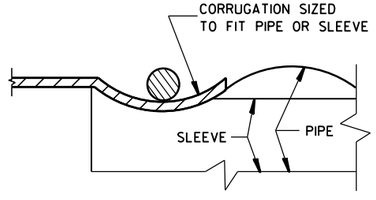
ISOMETRIC VIEW



STEEL ADAPTER SLEEVE FOR CONCRETE PIPE



TYPE 2
CONNECTION DETAIL



SECTION B-B

STEEL APRON ENDWALLS FOR CULVERT PIPE AND PIPE ARCH SLOPED SIDE DRAINS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
9/14/2012 — DATE
/S/ Jerry H. Zoda — ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

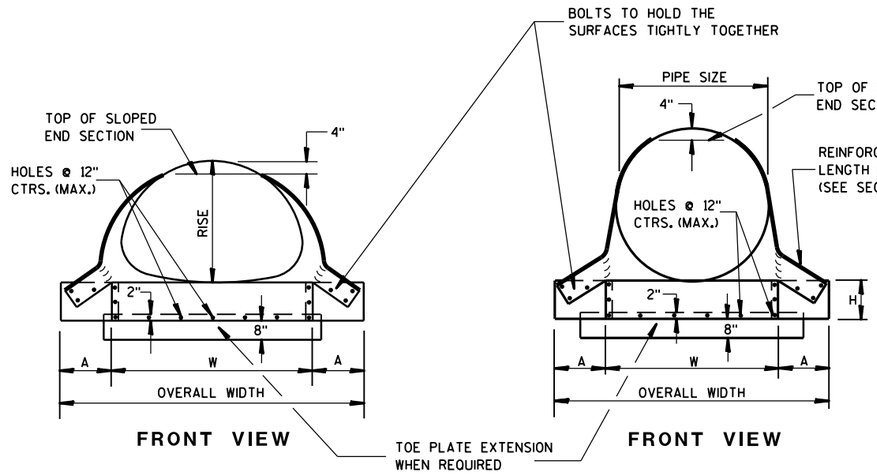
401

6

S.D.D. 8 F 7-5

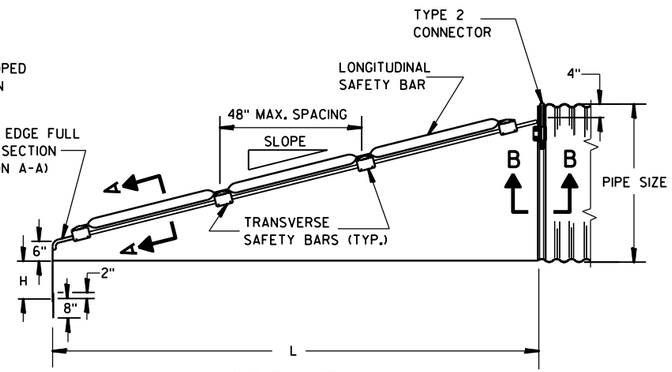
6

S.D.D. 8 F 7-5



FRONT VIEW

FRONT VIEW



SIDE VIEW
(48" SIZE ILLUSTRATED)

GENERAL NOTES

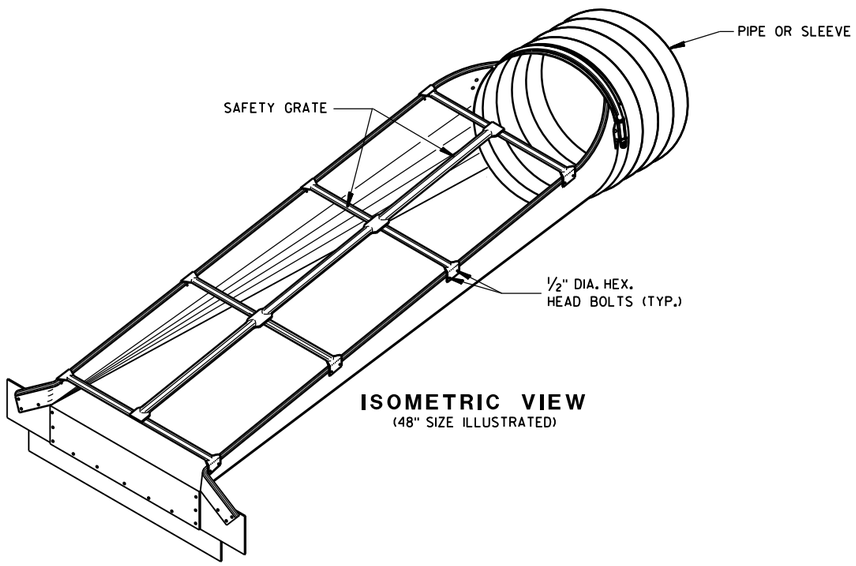
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

SAFETY GRATES SHALL BE FABRICATED FROM 3-INCH DIAMETER GALVANIZED PIPE MEETING THE REQUIREMENTS OF ASTM A-53, GRADE B, SCHEDULE 40 OR APPROVED EQUAL. THE LONGITUDINAL BAR SHALL BE WELDED TO THE TRANSVERSE BARS WHERE THE BARS CROSS. THE NUMBER OF TRANSVERSE BARS REQUIRED WILL VARY DEPENDING ON THE LENGTH OF THE END SECTION.

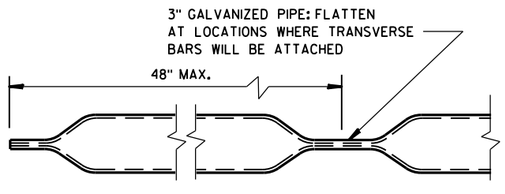
SLOPED STEEL ENDWALLS LOCATED AT THE ENDS OF CONCRETE CULVERT PIPE SHALL BE FURNISHED WITH STEEL ADAPTER SLEEVES.

STEEL APRON ENDWALLS FOR CULVERT PIPE CROSS DRAINS

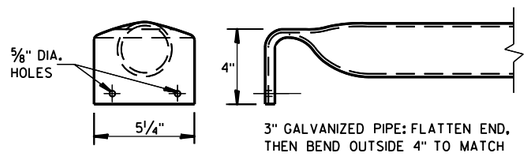
PIPE DIA. (IN.)	MIN. THICK.		DIMENSIONS (Inches)				L DIMENSIONS			
	IN.	GAGE	A	H	W	OVERALL WIDTH	SLOPE	LENGTH INCHES	SLOPE	LENGTH INCHES
36	.109	12	12	9	42	66	4:1	104	6:1	156
42	.109	12	16	12	48	80	4:1	128	6:1	192
48	.109	12	16	12	54	86	4:1	152	6:1	228
54	.109	12	16	12	60	92	4:1	176	6:1	264
60	.109	12	16	12	66	98	4:1	200	6:1	300



ISOMETRIC VIEW
(48" SIZE ILLUSTRATED)



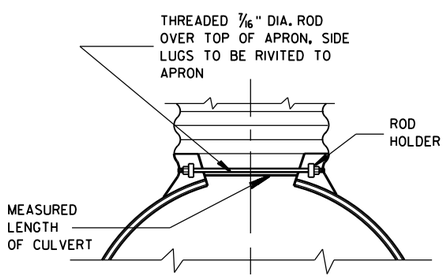
LONGITUDINAL SAFETY BAR



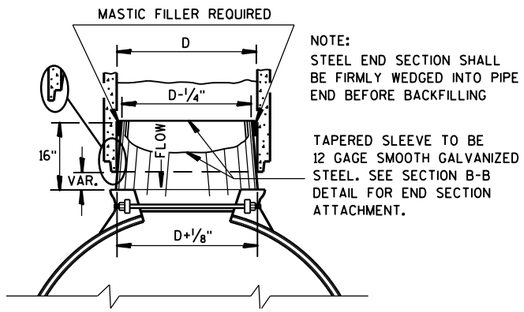
TRANSVERSE SAFETY BAR

STEEL APRON ENDWALLS FOR PIPE ARCH SLOPED CROSS DRAINS

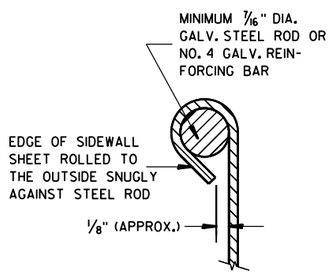
EQUIV. DIA. (IN.)	INCHES		MIN. THICK.		DIMENSIONS (Inches)				L DIMENSIONS			
	SPAN	RISE	IN.	GAGE	A	H	W	OVERALL WIDTH	SLOPE	LENGTH INCHES	SLOPE	LENGTH INCHES
30	35	24	.079	14	12	9	41	65	4:1	56	6:1	84
36	42	29	.109	12	12	9	48	72	4:1	76	6:1	114
42	49	33	.109	12	16	12	55	87	4:1	92	6:1	138
48	57	38	.109	12	16	12	63	95	4:1	112	6:1	168
54	64	43	.109	12	16	12	70	102	4:1	132	6:1	198
60	71	47	.109	12	16	12	77	109	4:1	148	6:1	222



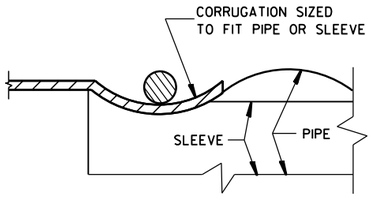
TYPE 2 CONNECTOR DETAIL



STEEL ADAPTER SLEEVE FOR CONCRETE PIPE



SECTION A-A



SECTION B-B

STEEL APRON ENDWALLS FOR CULVERT PIPE AND PIPE ARCH SLOPED CROSS DRAINS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

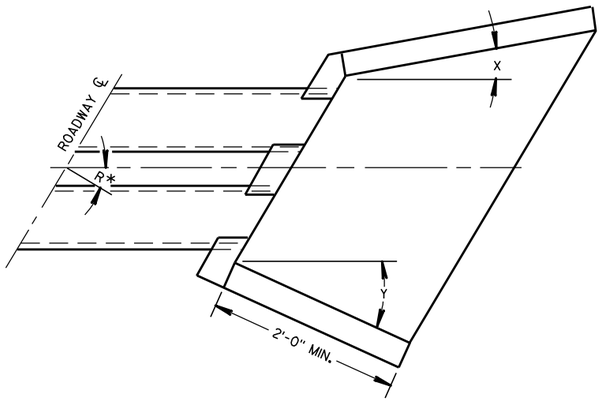
6/5/2012 — DATE

/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER

FHWA

6

S.D.D. 8 F 8-2



WINGWALL ANGLE DETAILS

INLET			OUTLET		
R*	X	Y	R*	X	Y
0 - 7°	30°	30°	0 - 15°	15°	15°
8 - 22°	25°	"	16 - 45°	10°	"
23 - 37°	20°	"	46 - 75°	5°	"
38 - 52°	15°	"	OVER 75°	0°	"
53 - 67°	10°	"			
68 - 82°	5°	"			
OVER 82°	0°	"			

*R = NUMBER OF DEGREES RIGHT OR LEFT HAND FORWARD

PIPE SIZE (D)	FRONT FACE ("F")	BACK FACE ("B")	"W"
24" - 48"	6" PER FT.	6" PER FT.	1.0'
60" C.M.P. 60" R.C.C.P.	6" PER FT.	3" PER FT.	2.2' 2.4'
72" C.M.P. 72" R.C.C.P.	6" PER FT.	3" PER FT.	2.4' 2.7'

ALL ENDWALLS FOR PIPE ARCHES SHALL HAVE A 6" PER FT. SLOPE ON FRONT AND BACK FACE

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.

FILL SLOPES FLATTER THAN 2 ½:1 SHALL BE WARPED TO MEET THE TOP OF THE WINGWALLS.

HEADWALLS AND WINGWALLS SHALL BE CONSTRUCTED OF MORTAR RUBBLE MASONRY.

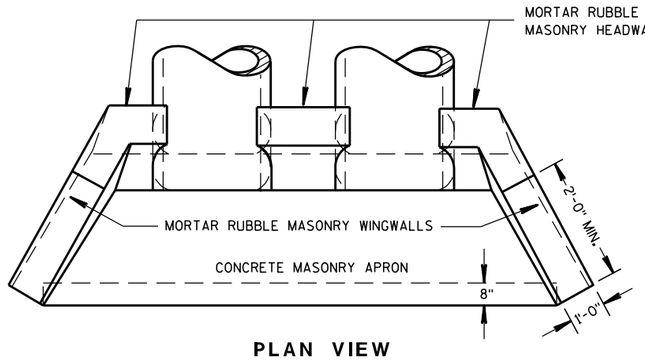
APRONS AND CUT-OFF WALLS SHALL BE CONSTRUCTED OF CONCRETE MASONRY REINFORCED AS SHOWN ON THIS DRAWING.

ALL WELDED STEEL WIRE FABRIC SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE NOTED.

(1) MINIMUM REINFORCEMENT SHALL BE 6" X 6" - W4.0 X W4.0 OR NO. 3 BARS SPACED 12" C-C IN BOTH DIRECTIONS.

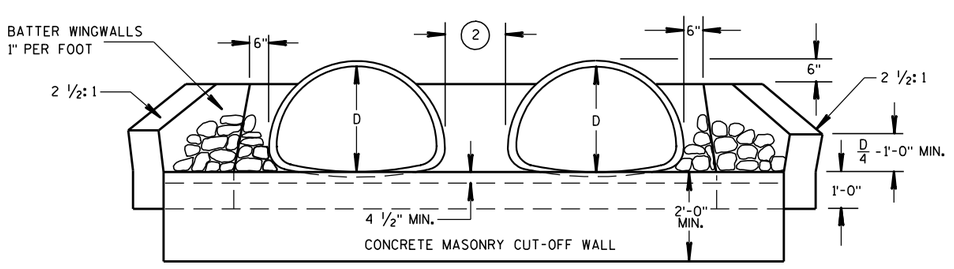
(2) THE SPACE BETWEEN CULVERT PIPES OR PIPE ARCHES SHALL BE AS FOLLOWS:

DIAMETER OR SPAN	SPACE
UP TO AND INCLUDING 48"	2'-0'
OVER 48" TO 72"	½ DIA. OR SPAN
OVER 72"	3'-0"



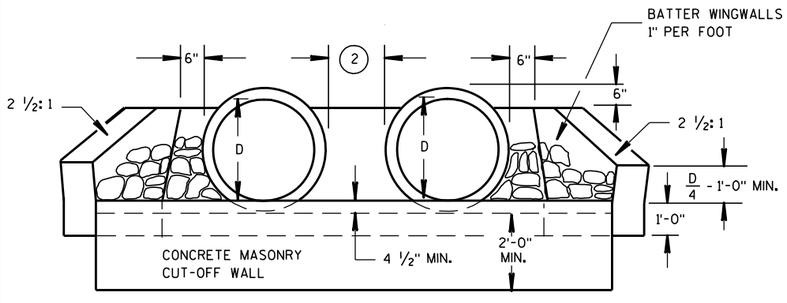
PLAN VIEW

CULVERT PIPE AND PIPE ARCH



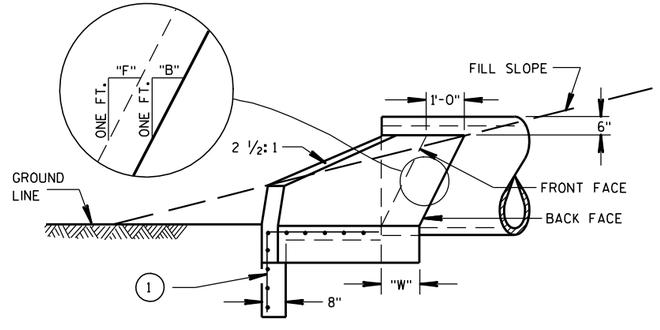
END ELEVATION

PIPE ARCH



END ELEVATION

CULVERT PIPE



SIDE ELEVATION

CULVERT PIPE AND PIPE ARCH

MORTAR RUBBLE MASONRY ENDWALLS FOR CULVERT PIPE AND PIPE ARCH

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

9/14/98 DATE

/S/ R. L. Rhine
CHIEF ROADWAY DEVELOPMENT ENGINEER

FHWA

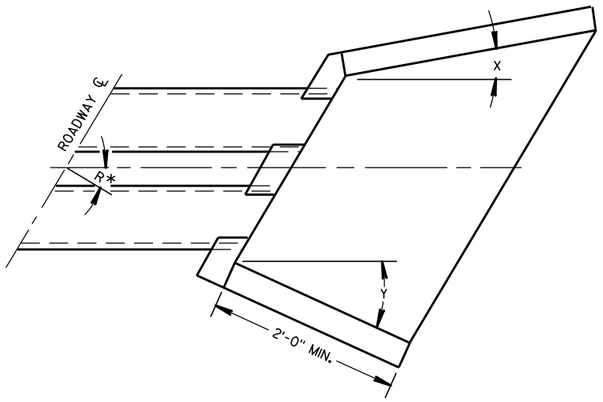
403

6

S.D.D. 8 F 9-1

6

S.D.D. 8 F 9-1



WINGWALL ANGLE DETAILS

INLET			OUTLET		
R*	X	Y	R*	X	Y
0 - 7°	30°	30°	0 - 15°	15°	15°
8 - 22°	25°	"	16 - 45°	10°	"
23 - 37°	20°	"	46 - 75°	5°	"
38 - 52°	15°	"	OVER 75°	0°	"
53 - 67°	10°	"			
68 - 82°	5°	"			
OVER 82°	0°	"			

*R = NUMBER OF DEGREES RIGHT OR LEFT HAND FORWARD

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.

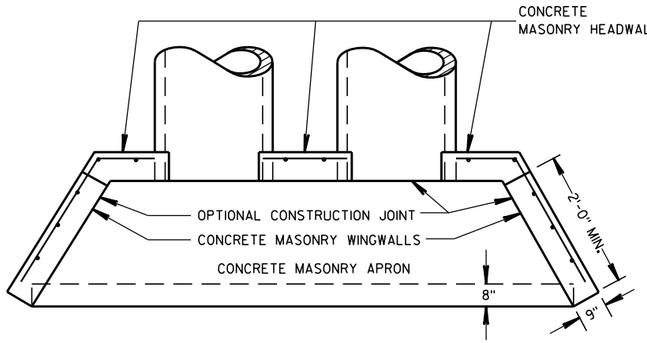
FILL SLOPES FLATTER THAN 2 ½:1 SHALL BE WARPED TO MEET THE TOP OF THE WINGWALLS.

ALL STEEL REINFORCEMENT AND WELDED STEEL WIRE FABRIC SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE NOTED.

(1) MINIMUM REINFORCEMENT SHALL BE 6" X 6" - W4.0 X W4.0 OR NO. 3 BARS SPACED 12" C-C IN BOTH DIRECTIONS.

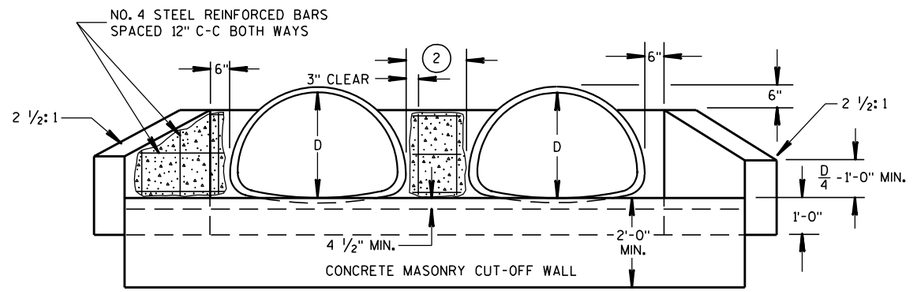
(2) THE SPACE BETWEEN PIPES SHALL BE AS FOLLOWS:

DIAMETER OR SPAN	SPACE
UP TO AND INCLUDING 48"	2'-0"
OVER 48" TO 72"	½ DIA. OR SPAN
OVER 72"	3'-0"



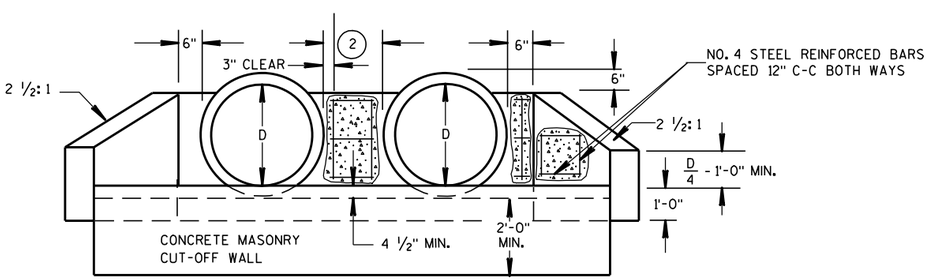
PLAN VIEW

CULVERT PIPE AND PIPE ARCH



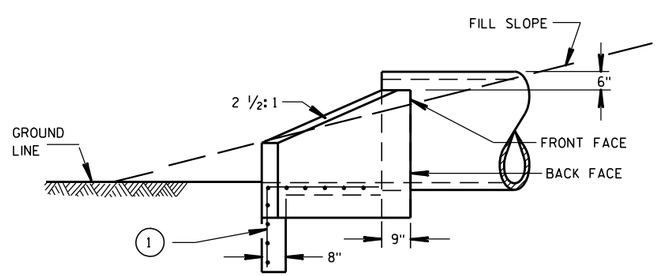
END ELEVATION

PIPE ARCH



END ELEVATION

CULVERT PIPE



SIDE ELEVATION

CULVERT PIPE AND PIPE ARCH

CONCRETE MASONRY ENDWALLS FOR CULVERT PIPE AND PIPE ARCH

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

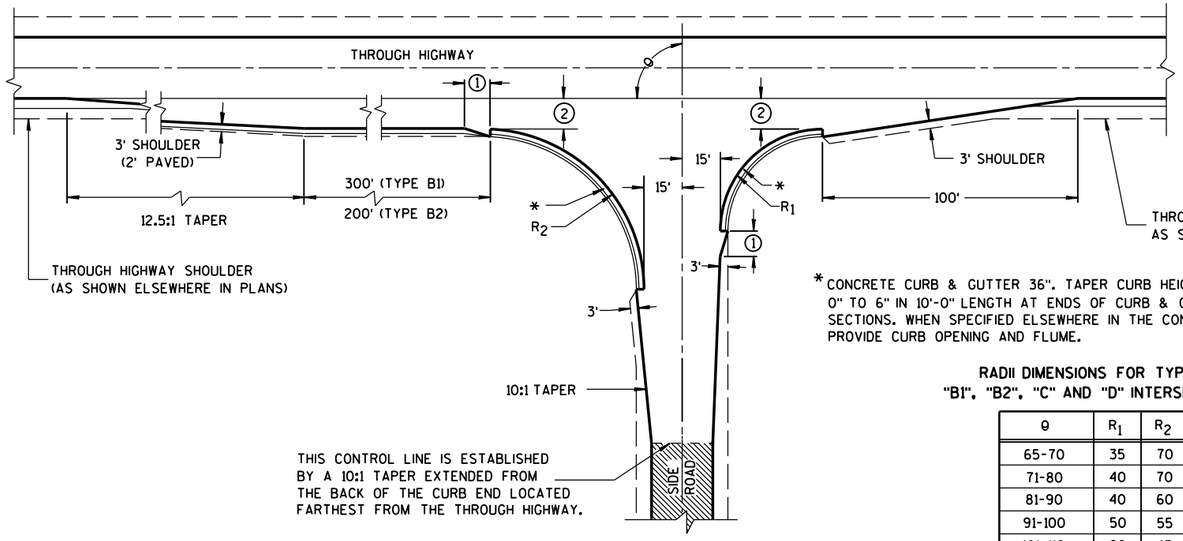
APPROVED

9/14/98 DATE

/S/ Rory L. Rhinehart
CHIEF ROADWAY DEVELOPMENT ENGINEER

FHWA

6
S.D.D. 8 F 10-1

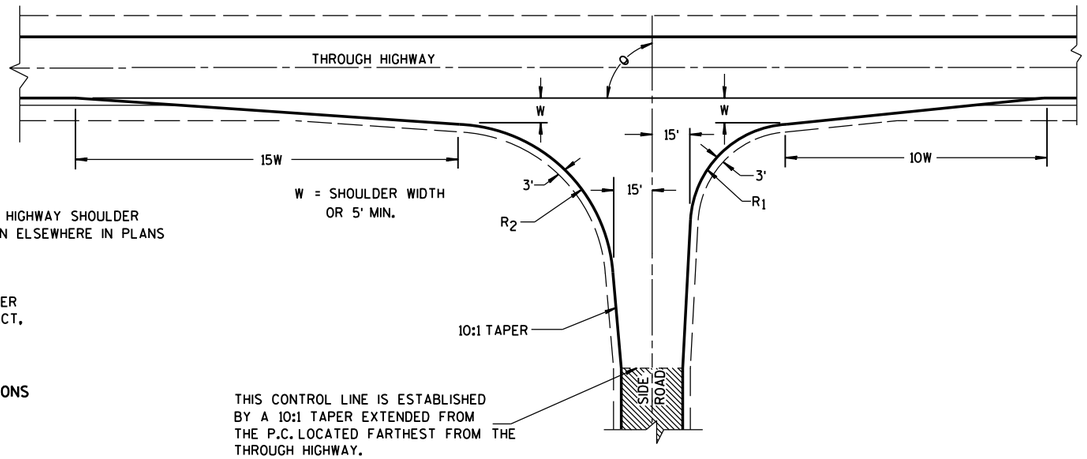


TYPE "B1" AND "B2"

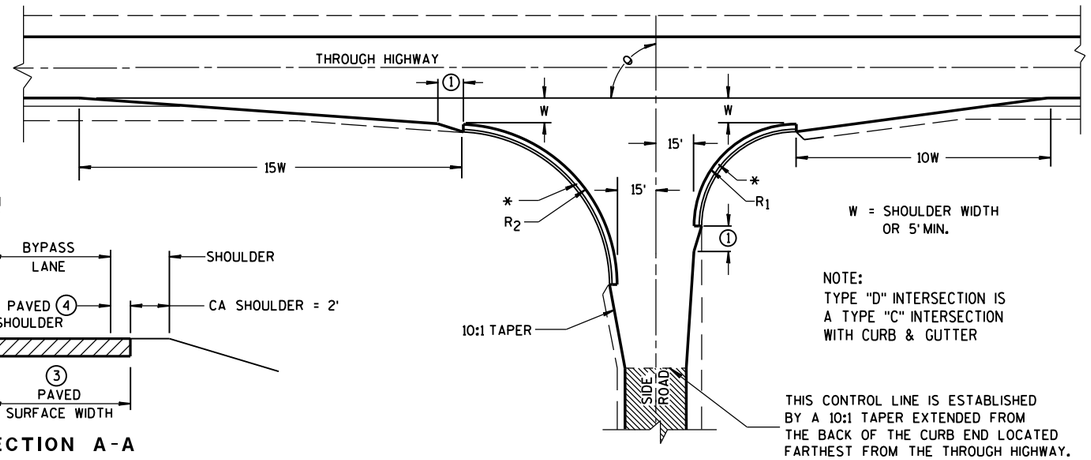
*CONCRETE CURB & GUTTER 36". TAPER CURB HEIGHT 0" TO 6" IN 10'-0" LENGTH AT ENDS OF CURB & GUTTER SECTIONS. WHEN SPECIFIED ELSEWHERE IN THE CONTRACT, PROVIDE CURB OPENING AND FLUME.

RADII DIMENSIONS FOR TYPES "B1", "B2", "C" AND "D" INTERSECTIONS

θ	R_1	R_2
65-70	35	70
71-80	40	70
81-90	40	60
91-100	50	55
101-110	60	45



TYPE "C"



TYPE "D"

GENERAL NOTES

DESIGNS MAY BE USED INTERCHANGEABLY IN COMBINATION OR SEPARATELY FOR ANY ONE COMPLETE INTERSECTION DEPENDING UPON INTERSECTION ANGLE AND SURFACING OF EACH APPROACH ROADWAY.

SIDE ROAD SURFACING NOTE

WHEN THE SIDE ROAD IS NOT PRESENTLY PAVED, PAVEMENT SHALL BE PLACED TO THE LIMITS SHOWN UNLESS OTHERWISE PROVIDED IN THE CONTRACT. WHERE THE CONSTRUCTION LIMITS ARE BEYOND THE PAVING LIMITS, CRUSHED AGGREGATE SURFACING SHALL BE PLACED BETWEEN THE PAVING LIMITS AND CONSTRUCTION LIMITS.

WHEN THE SIDE ROAD IS PRESENTLY PAVED, NEW PAVEMENT SHALL BE PLACED TO THE LIMITS OF DESIGN AS SHOWN AND BEYOND, IF NECESSARY, TO MEET EXISTING PAVEMENT.

WHEN THE SIDE ROAD IS THE CONSTRUCTION PROJECT, THE INTERSECTION SURFACING SHALL BE THE SAME AS FOR THE PROJECT.

EXISTING PAVED SURFACE

BYPASS LANE

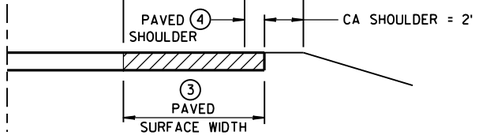
(1) 10-FT TYPICAL.

(2) 12-FT** PLUS ADDITIONAL WIDTH FOR BIKE LANE IF SHOWN ELSEWHERE IN THE PLAN.

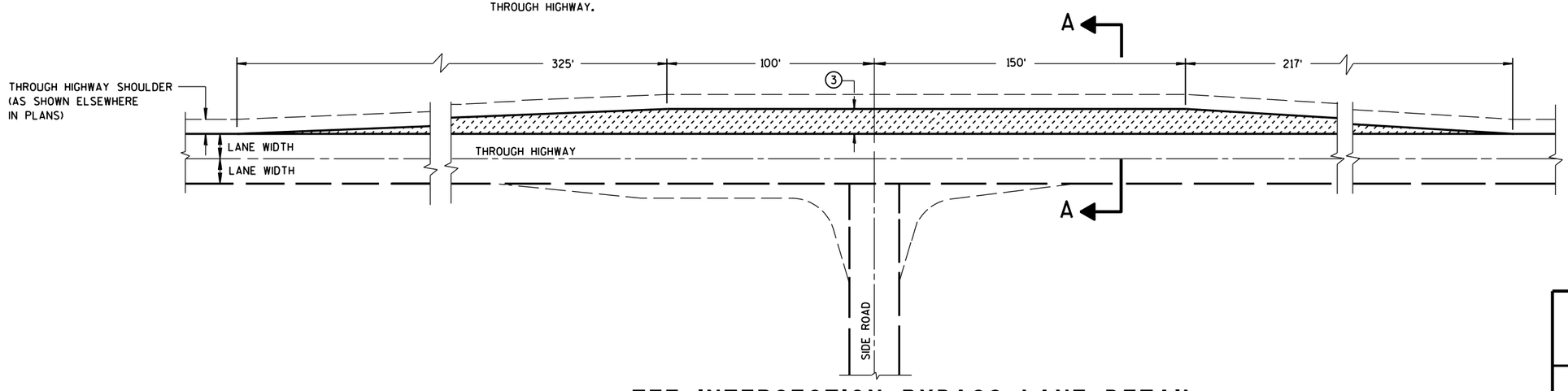
**10-FT MAY BE USED ON TYPE B2 ON RESURFACING PROJECTS IF SPECIFIED IN THE CONTRACT.

(3) BYPASS LANE PAVED SURFACE WIDTH OUTSIDE OF TRAVEL LANE
-ASPHALT = 12-FT PLUS PAVED SHOULDER WIDTH.
-PC CPNCRETE = 13-FT PLUS PAVED SHOULDER WIDTH.

(4) BYPASS LANE PAVED SHOULDER WIDTH = THE GREATER OF 1-FT OR THE PAVED SHOULDER WIDTH OF THE THROUGH HIGHWAY.



SECTION A-A
(SHOWING BYPASS LANE AND SHOULDER)



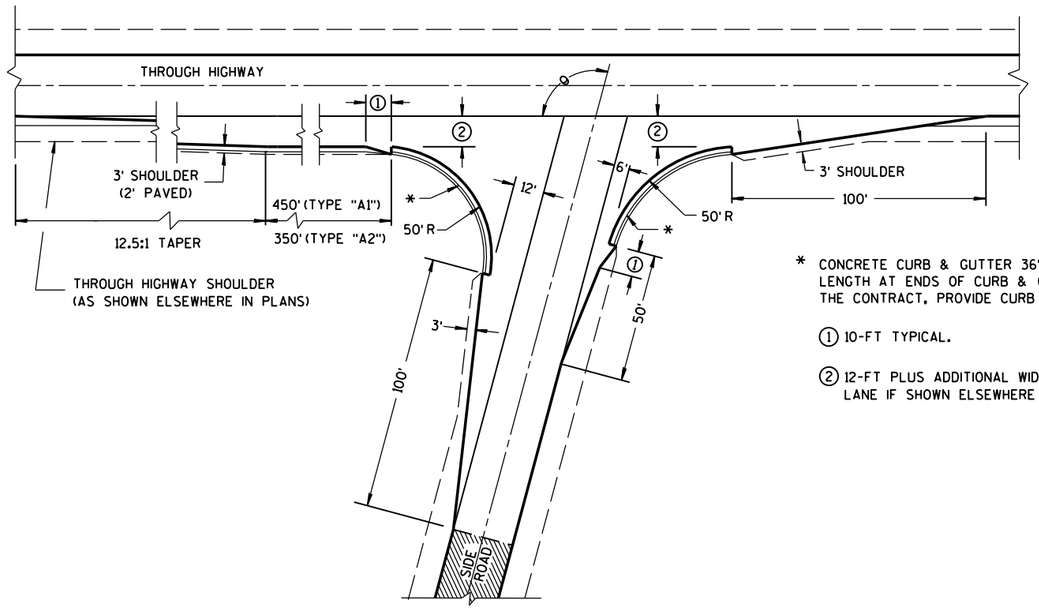
TEE INTERSECTION BYPASS LANE DETAIL

AT-GRADE SIDE ROAD INTERSECTION, TYPES "B1", "B2", "C" AND "D" AND TEE INTERSECTION BYPASS LANE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

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S.D.D. 9 A 1-13a



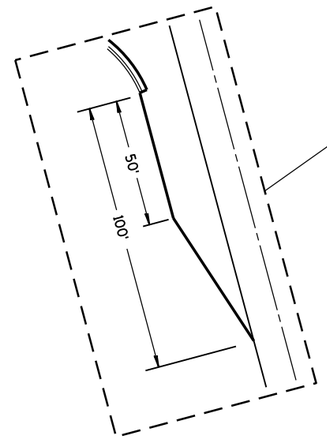
θ = MORE THAN 80°

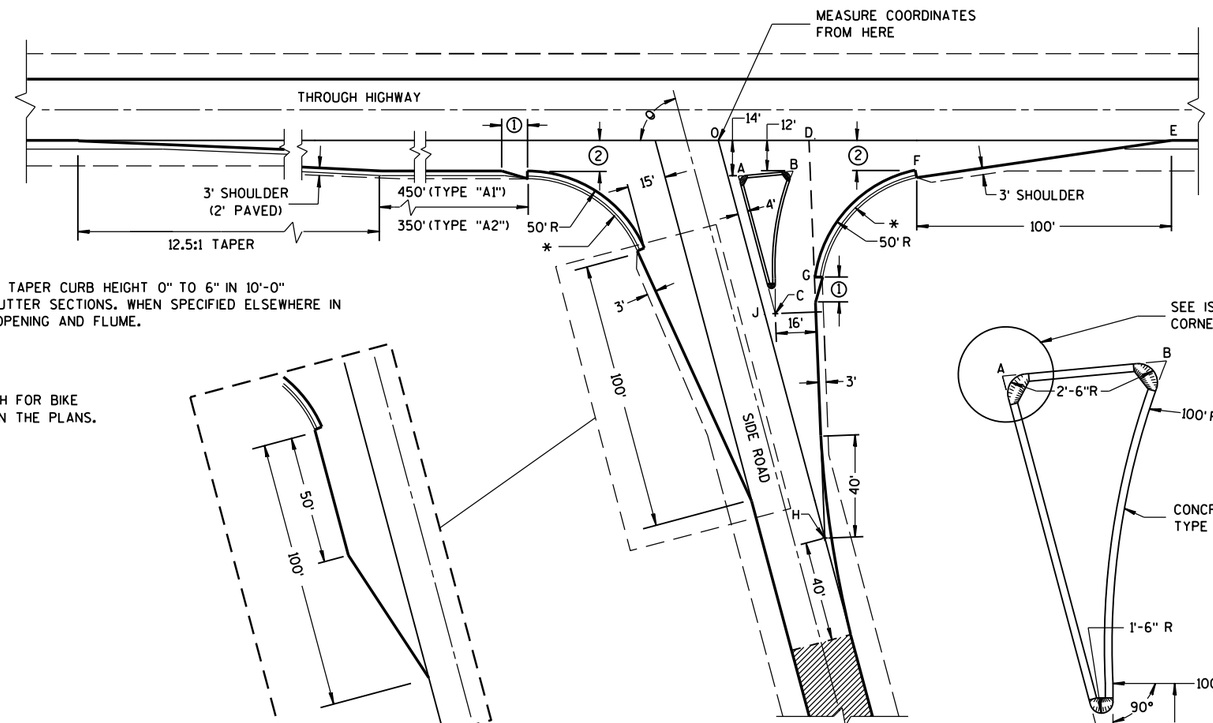
* CONCRETE CURB & GUTTER 36". TAPER CURB HEIGHT 0" TO 6" IN 10'-0" LENGTH AT ENDS OF CURB & GUTTER SECTIONS. WHEN SPECIFIED ELSEWHERE IN THE CONTRACT, PROVIDE CURB OPENING AND FLUME.

① 10-FT TYPICAL.

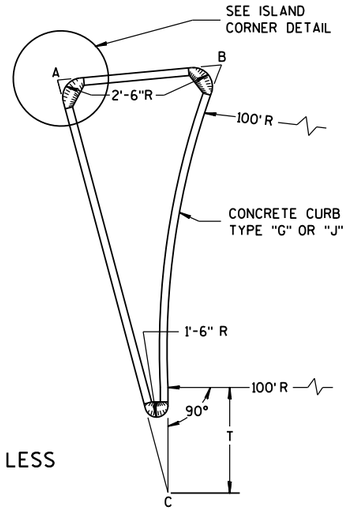
② 12-FT PLUS ADDITIONAL WIDTH FOR BIKE LANE IF SHOWN ELSEWHERE IN THE PLANS.

EXISTING PAVED SURFACE

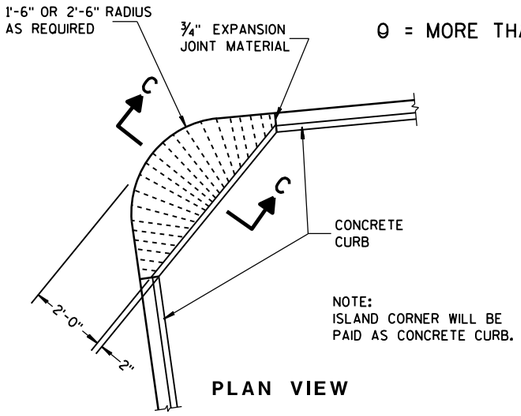




θ = ACUTE ANGLES 80° OR LESS

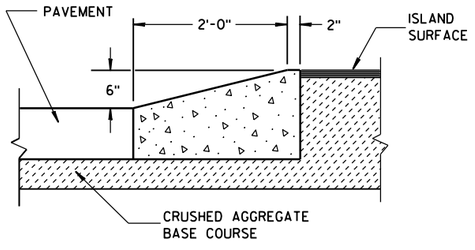


SIDE ROAD WIDENING AND TAPER REQUIRED WHERE
THE THROUGH HIGHWAY CARRIES TWO-WAY TRAFFIC
θ = ACUTE ANGLES 70° OR LESS



NOTE:
ISLAND CORNER WILL BE
PAID AS CONCRETE CURB.

PLAN VIEW



SECTION C-C

ISLAND CORNER DETAIL

(TO BE CONSTRUCTED AT ALL ISLAND CORNERS)

TABLE OF DIMENSIONS FOR
VARIABLE SIDE ROAD INTERSECTION ANGLES
(INTERPOLATE VALUES FOR ANGLES NOT SHOWN)

ANGLE θ DEGREES	COORDINATES IN FEET (MEASURED FROM POINT "O") X / Y								LENGTH IN FEET				
	A	B	C	D	E	F	G	H	AB	AC	T	OJ	OH
60	12.7 / -14.0	44.9 / -12.0	46.4 / -72.4	41.9 / 0.0	205.0 / 0.0	104.6 / -12.0	64.0 / -75.5	85.0 / -147.1	32.3	67.4	4.9	85.9	169.9
65	10.9 / -14.0	39.0 / -12.0	37.8 / -71.6	39.4 / 0.0	196.1 / 0.0	95.7 / -12.0	54.1 / -71.5	70.5 / -151.3	28.2	63.6	8.5	80.9	166.9
70	9.4 / -14.0	33.9 / -12.0	29.8 / -70.1	37.4 / 0.0	188.3 / 0.0	87.8 / -12.0	45.6 / -67.5	56.1 / -154.2	24.6	59.7	11.5	76.1	164.1
75	7.9 / -14.0	29.3 / -12.0	22.3 / -67.9	35.7 / 0.0	181.2 / 0.0	80.7 / -12.0	38.2 / -63.4	41.8 / -155.9	21.5	55.8	13.8	71.4	161.4
80	6.5 / -14.0	25.4 / -12.0	15.6 / -65.2	34.4 / 0.0	174.8 / 0.0	74.4 / -12.0	31.8 / -59.3	27.6 / -156.5	18.9	52.0	15.6	66.9	158.9

TYPE "A1" & "A2" SIDE ROAD INTERSECTION DETAILS

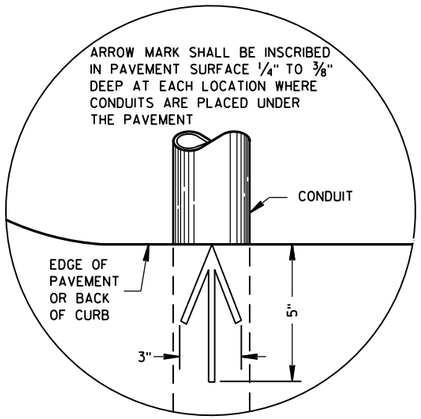
AT-GRADE SIDE ROAD
INTERSECTION, TYPE "A1" & "A2"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
12/18/12 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

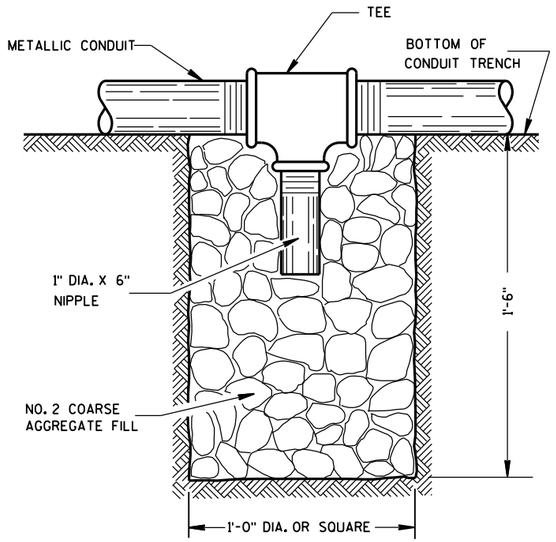
6

S.D.D. 9 A 1-13b



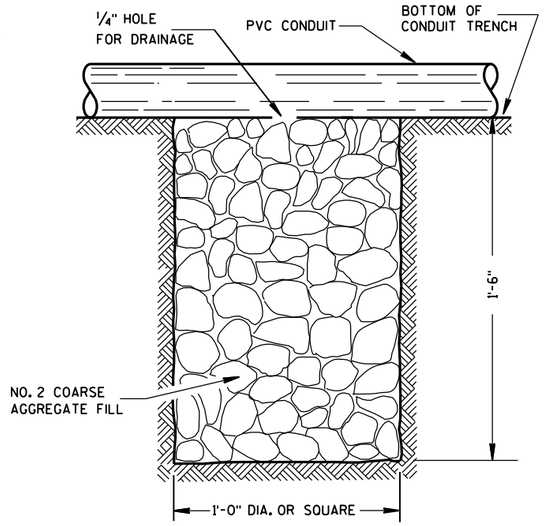
PLAN VIEW

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.

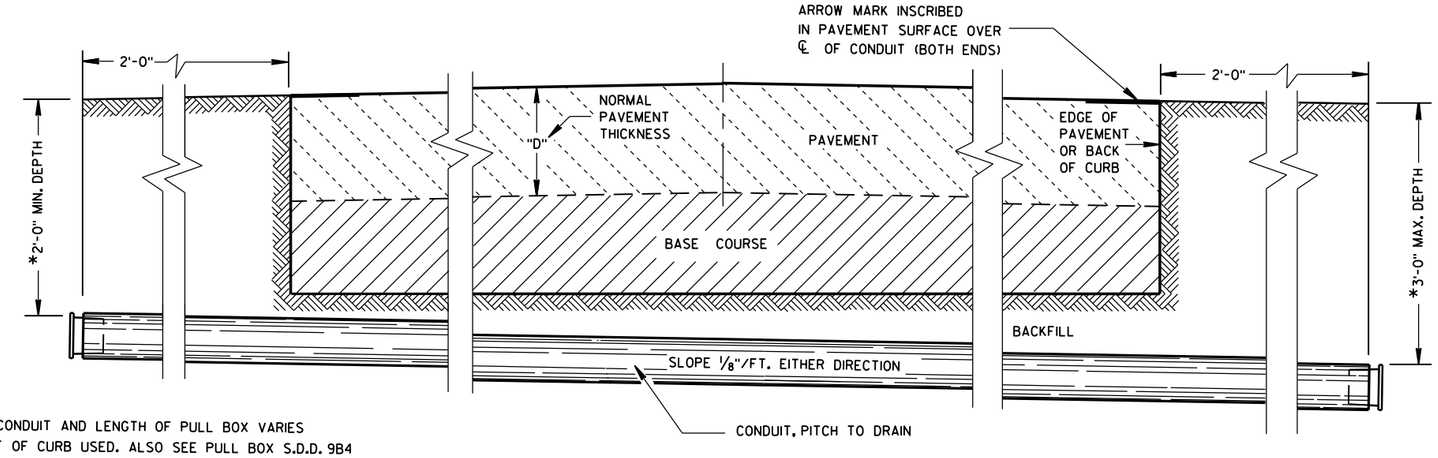
PRIOR TO CONDUIT ACCEPTANCE, CONDUIT CAPS OR PLUGS SHALL BE REMOVED, AND THE CAPS, PLUGS AND CONDUIT ENDS SHALL BE THOROUGHLY CLEANED AND THEN THE CAPS OR PLUGS REINSTALLED TO ENSURE THAT THE CAPS OR PLUGS CAN BE EASILY REMOVED IN THE FUTURE.

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

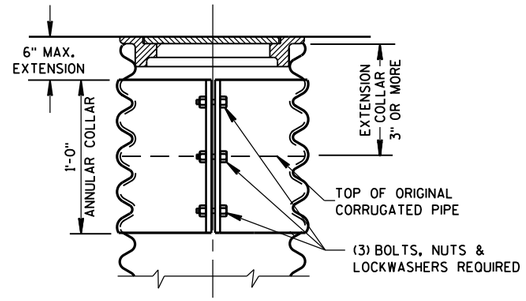
S.D.D. 9 B 2-9

TABLE OF NOMINAL DIMENSIONS AND WEIGHTS

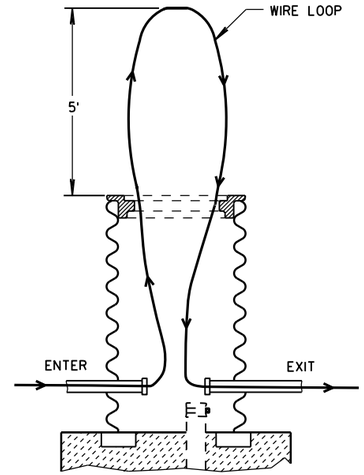
DIMENSION IN INCHES		CORRUGATED STEEL PIPE								
PIPE DIAMETER (INSIDE)	A	12	12	12	18	18	18	24	24	24
PIPE LENGTH **	B	24	30	36	24	30	36	36	42	48
WALL THICKNESS	C	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064
COVER	D	10 1/4	10 1/4	10 1/4	16 1/4	16 1/4	16 1/4	22 1/4	22 1/4	22 1/4
FRAME	E	14 1/2	14 1/2	14 1/2	20 1/2	20 1/2	20 1/2	26 1/2	26 1/2	26 1/2
FRAME	F	8 1/2	8 1/2	8 1/2	14 1/2	14 1/2	14 1/2	20 1/2	20 1/2	20 1/2
FRAME	G	11 1/2	11 1/2	11 1/2	17 1/2	17 1/2	17 1/2	23 1/2	23 1/2	23 1/2
WEIGHT IN POUNDS *										
FRAME AND COVER		60	60	60	110	110	110	155	155	155

* THE ACTUAL WEIGHT OF THE MANHOLE FRAME AND COVER MAY VARY WITHIN 5 PERCENT PLUS OR MINUS OF THE WEIGHTS SHOWN.

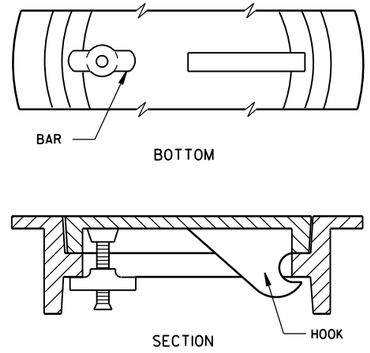
** NORMALLY USED LENGTHS. THE PROJECT ENGINEER SHALL DETERMINE IF PIPE LENGTHS, OTHER THAN THOSE SPECIFIED, SHALL BE USED, TO A MAXIMUM OF 48" (CONTINUOUS LENGTH, NON-SPLICED). THE ADDITIONAL LENGTH SHALL BE INCIDENTAL TO THE PULL BOX BID PRICE.



CORRUGATED PIPE EXTENDER

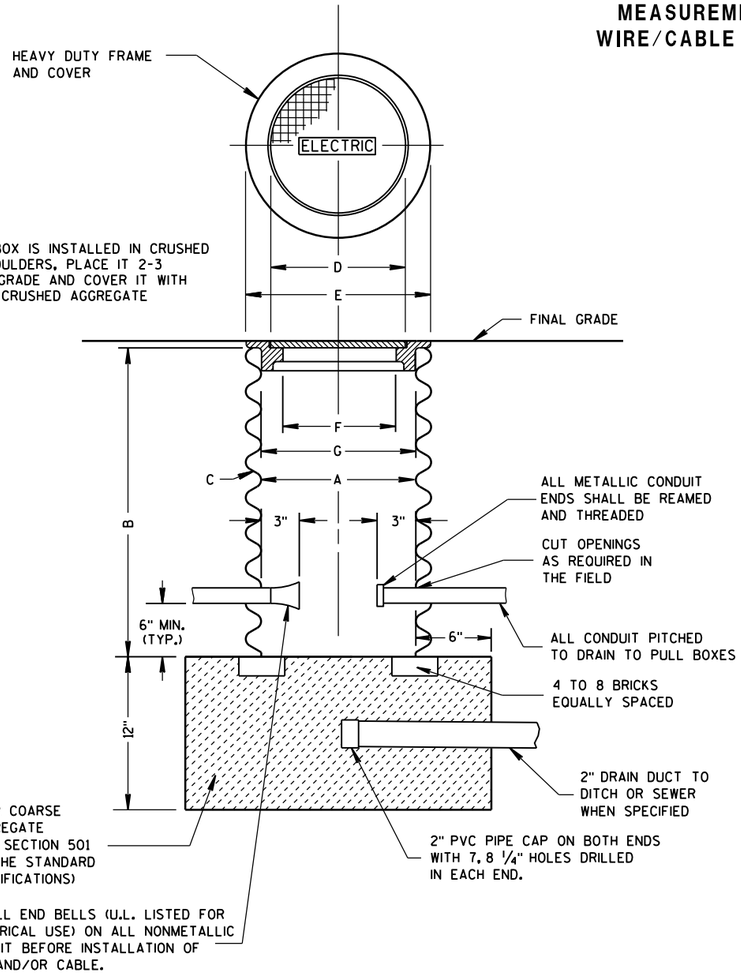


MEASUREMENT DETAIL FOR WIRE/CABLE IN THE PULL BOX



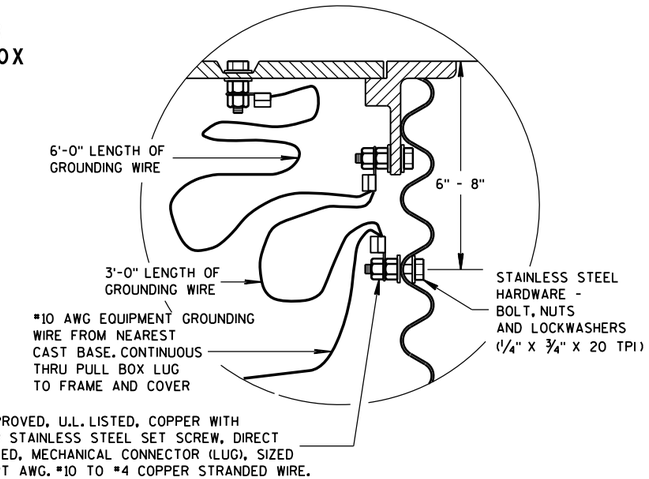
ALTERNATE COVER (LOCKING)

TIGHTENING BAR TYPE

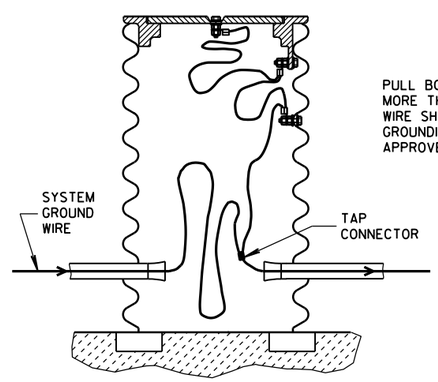


WHEN A PULL BOX IS INSTALLED IN CRUSHED AGGREGATE SHOULDERS, PLACE IT 2-3 INCHES BELOW GRADE AND COVER IT WITH 2-3 INCHES OF CRUSHED AGGREGATE

PULL BOX



EQUIPMENT GROUNDING LUG AND LOCATION IN STEEL PULL BOXES



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

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.

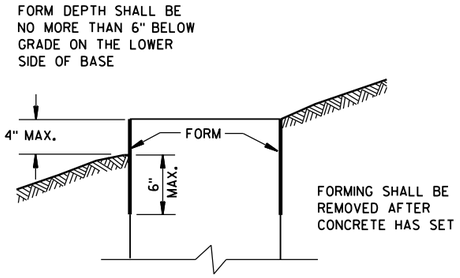
PULL BOX

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL 408
FHWA

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S.D.D. 9 B 4-11



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.

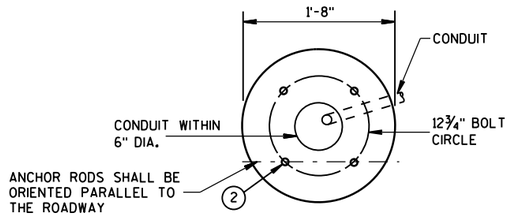
(4) (6) NO. 6 X 6'-8" BAR STEEL REINFORCEMENT.

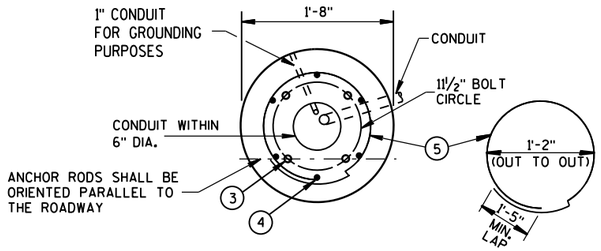
(5) (7) NO. 4 X 5'-1" BAR STEEL REINFORCEMENT @ 1'-0" C-C.

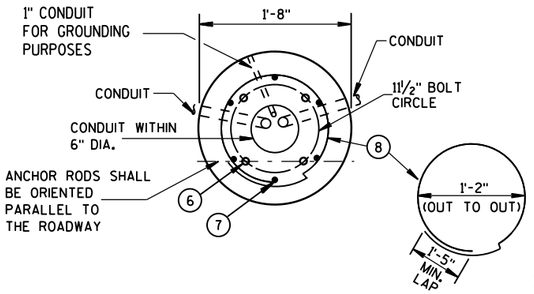
(6) (4) 1" DIA. X 3'-6" ANCHOR RODS.

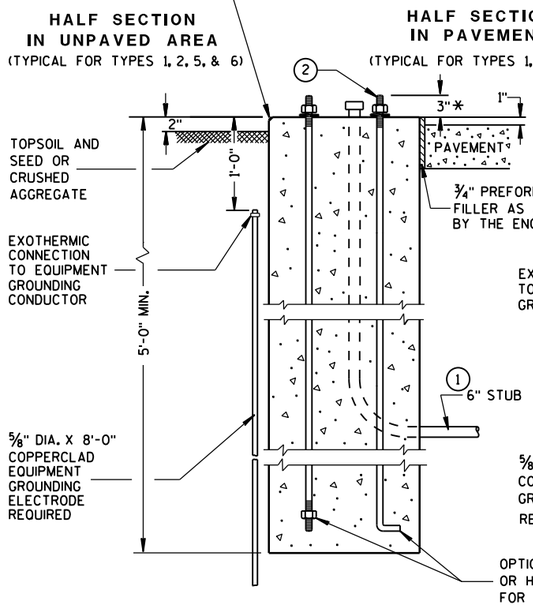
(7) (6) NO.4 X 4'-8" BAR STEEL REINFORCEMENT.

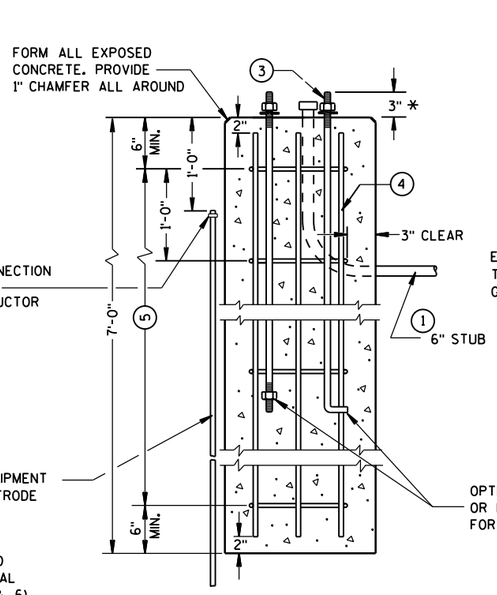
(8) (5) NO. 4 X 5'-1" BAR STEEL REINFORCEMENT @ 1'-0" C-C.



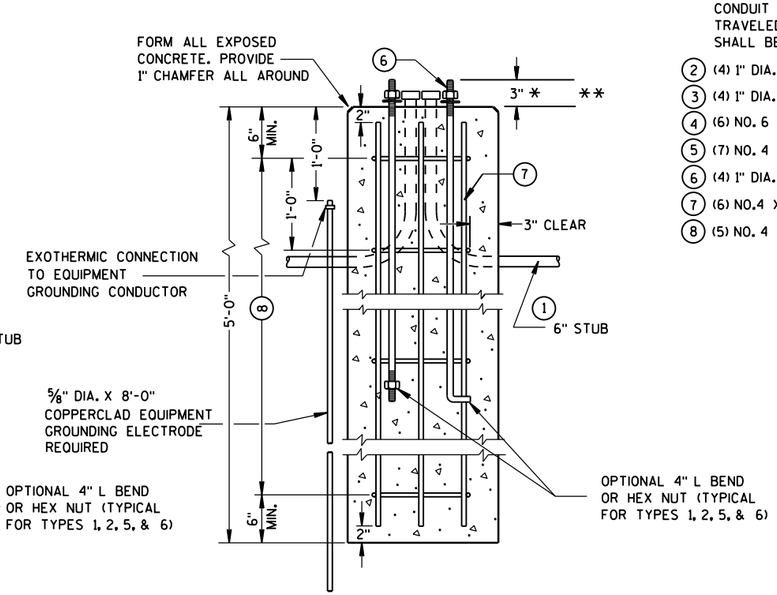








TYPE 2



TYPE 5 & 6

CONCRETE BASES

* ANY ANCHOR ROD PROJECTION SHORTER THAN 2¾" OR LONGER THAN 3¼" SHALL REQUIRE THE BASE TO BE REMOVED AND REPLACED AT THE CONTRACTORS EXPENSE.

** FOR NONBREAKAWAY INSTALLATIONS, 4½" ± ANCHOR ROD PROJECTION WITH THE USE OF LEVELING NUTS. RODENT SCREEN REQUIRED.

CONCRETE BASES, TYPES 1, 2, 5, & 6

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

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S.D.D. 9 C 2-7

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

FOUR (4) BOLTS SHALL BE FURNISHED WITH EACH TRANSFORMER BASE. BOLTS SHALL BE 1" DIAMETER, 4" IN LENGTH, WITH WASHERS, LOCK WASHERS AND NUTS. BOLTS, NUTS AND WASHERS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 641.2.2 OF THE STANDARD SPECIFICATIONS.

LEVELING SHIMS, IF NEEDED, SHALL BE DESIGNED FOR THE PURPOSE AND USED UNDER CAST BASES WHEN PLUMBING POLES OR STANDARDS DURING INSTALLATION. THE USE OF WASHERS IN LIEU OF PROPER LEVELING SHIMS IS NOT ACCEPTABLE.

SHIM LENGTH SHALL BE LONG ENOUGH TO COMPLETELY COVER THE AREA UNDER THE LENGTH AND WIDTH OF THE BASE MOUNTING FLANGE.

DOUBLE NUTTING IS NOT ACCEPTABLE FOR LEVELING OR MOUNTING PURPOSES.

A NEMA APPROVED, U.L. LISTED, COPPER WITH BRASS OR STAINLESS STEEL SET SCREW, DIRECT BURY RATED, MECHANICAL CONNECTOR (LUG), SIZED TO ACCEPT AWG. #10 TO #4 COPPER STRANDED WIRE SHALL BE FURNISHED AND INSTALLED IN THE PEDESTAL AND TRANSFORMER BASES.

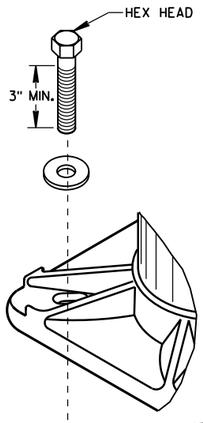
THE MECHANICAL CONNECTOR SHALL BE INSTALLED USING A 1/4" - 20 (TPI) STAINLESS STEEL HEX HEAD BOLT OF SUFFICIENT LENGTH TO FIRMLY ATTACH THE LUG TO THE BASE.

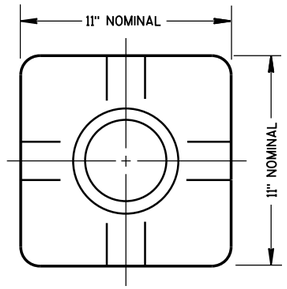
SHOULD THE MANNER OF ATTACHMENT OF THE LUG REQUIRE WASHERS, HEX NUTS, LOCK WASHER - THEY SHALL BE STAINLESS STEEL AS IS THE BOLT. THE MANNER OF ATTACHMENT SHALL NOT BLOCK ACCESSIBILITY TO WIRE PLACEMENT IN THE CONNECTOR.

PEDESTAL BASE COLLAR THREADING SHALL BE TAPERED AND IN ACCORDANCE WITH NATIONAL PIPE THREADING DIMENSIONS.

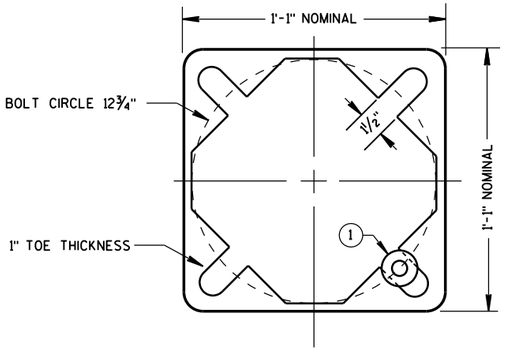
BASE COLLAR THREADING SHALL EXTEND INTO THE BASE COLLAR WITH SUFFICIENT DEPTH TO ACCEPT THE INSTALLATION OF TRAFFIC SIGNAL STANDARDS TO A DEPTH OF 1 1/2", THEN TIGHTENING TO A POINT OF BEING IMMOVABLE.

THE ACCESS DOOR SHALL BE OF THE SAME MATERIAL AS THE BASE.

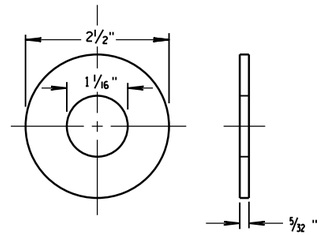




TOP VIEW
(PEDESTAL BASE)

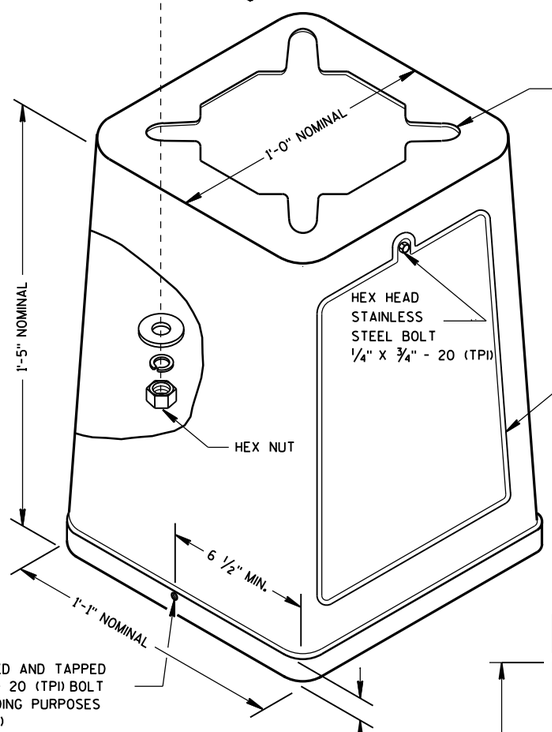


BOTTOM VIEW
(PEDESTAL BASE)

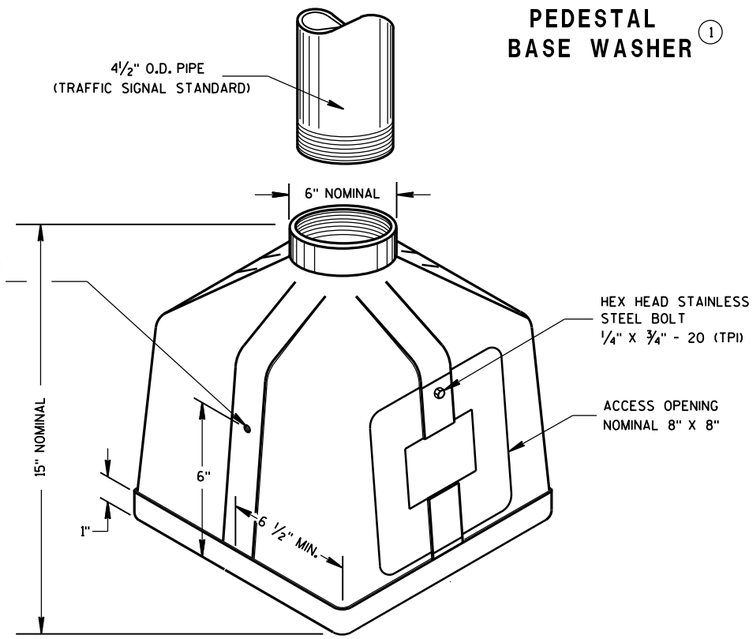


ZINC COATED STEEL WASHER
TO BE PROVIDED BY THE CONTRACTOR

PEDESTAL BASE WASHER (1)

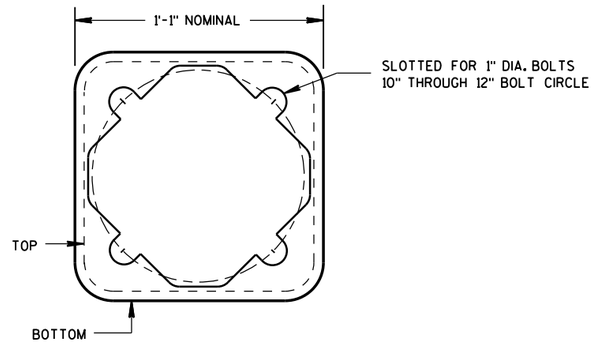


ISOMETRIC VIEW

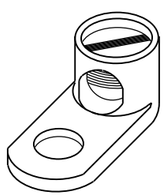


ISOMETRIC VIEW

PEDESTAL BASE



BOTTOM VIEW
(TRANSFORMER BASE)

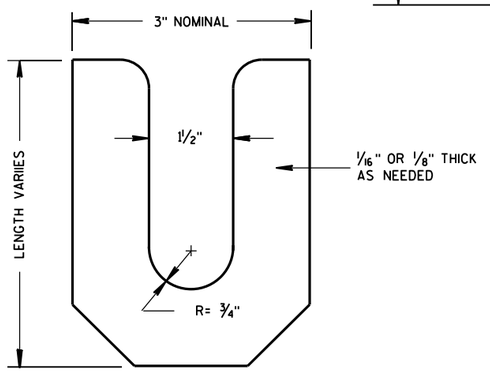


TYPICAL MECHANICAL CONNECTOR LUG

TO BE FURNISHED WITH EACH BASE

TRANSFORMER BASE

INTENDED FOR USE WITH TYPE 2, 3, 4, 5 & 6 POLES



LEVELING SHIM

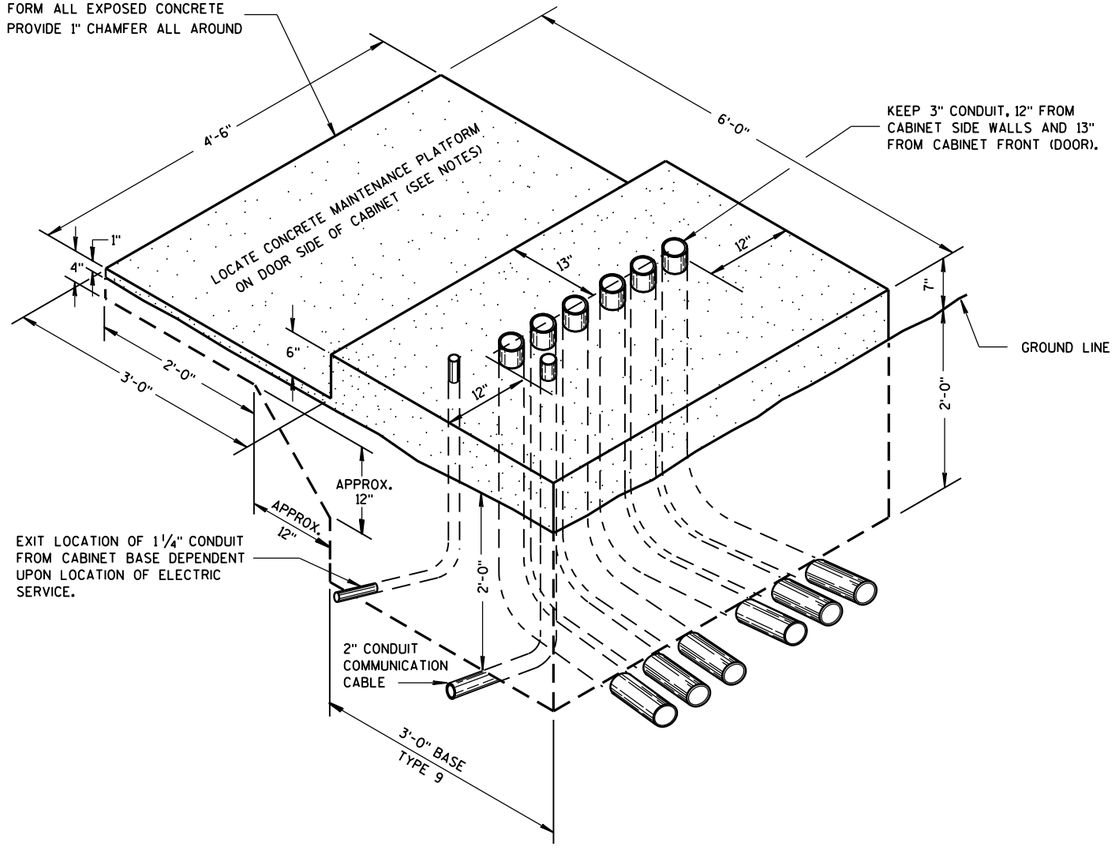
TRANSFORMER/PEDESTAL BASES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

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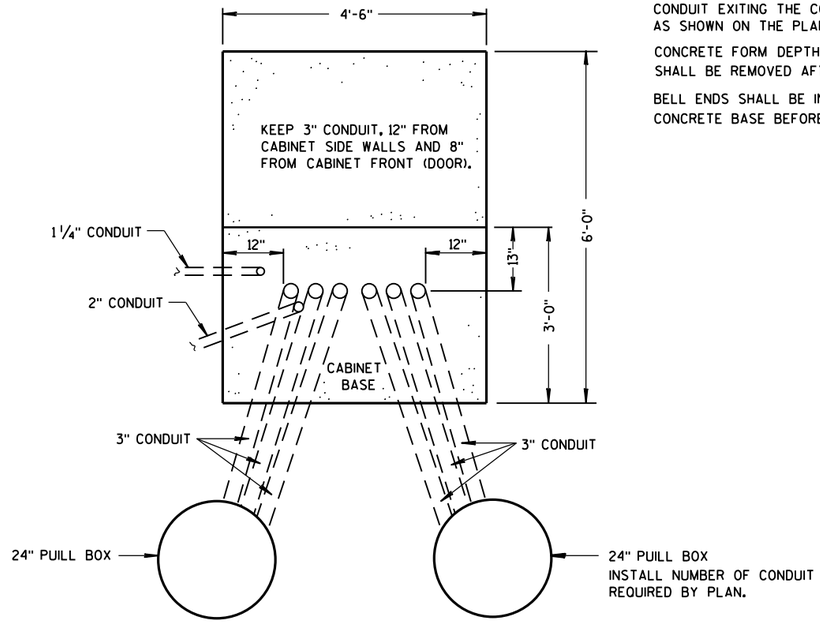
S.D.D. 9 C 3-4



ISOMETRIC VIEW

TYPE 9, SPECIAL

(C.Y. CONCRETE = APPROX. 1.56)



PLAN VIEW

CONCRETE CONTROL CABINET BASE, TYPE 9, SPECIAL

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

INSTALL FOUR ½ INCH MINIMUM DIAMETER X 4 INCH MINIMUM LENGTH STAINLESS STEEL APPROVED CONCRETE MASONRY ANCHORS WITH A PULLOUT STRENGTH OF 9,000 LBS. TO ANCHOR THE CABINET TO TYPE 6, 7, 8, AND 9 BASES. THE ANCHOR STUDS SHALL BE LOCATED AS DIRECTED BY THE ENGINEER TO PROPERLY ANCHOR THE CONTROL CABINET TO THE BASE.

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS, U.L. LISTED FOR ELECTRICAL USE, SHALL BE USED.

CONDUIT HEIGHT ABOVE THE CONCRETE BASE SHALL BE 1 INCH.

DEPTH OF CONDUIT INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES MINIMUM AND 36 INCHES MAXIMUM.

DEPTH OF CONDUIT INSTALLED THAT IS NOT BELOW THE TRAVELED WAY SHALL BE 18 INCHES MINIMUM AND 36 INCHES MAXIMUM.

ANY EXCEPTION TO THE MAXIMUM DEPTH SHALL BE ONLY WITH THE WRITTEN APPROVAL OF THE ENGINEER.

CONTROL CABINET BASE TOP SURFACE SHALL BE TROWEL FINISHED SMOOTH AND LEVEL.

MAINTENANCE PLATFORM SHALL BE FLOAT OR BROOM FINISHED AND BE LEVEL.

MAINTENANCE PLATFORMS ARE NOT REQUIRED WHEN THE SURROUNDING AREA IS PAVED.

MINIMUM BENDING RADIUS OF CONDUIT = 6 X THE DIAMETER.

ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED.

CAP ALL BELOW GRADE METALLIC CONDUIT ENDS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED.

PLUG ALL BELOW GRADE NONMETALLIC CONDUIT ENDS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED.

ALL CONDUIT ENDS AT THE TOP OF CONCRETE BASES SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUITS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

CONDUIT EXITING THE CONCRETE BASE (SIX THREE INCH) SHALL TERMINATE IN PULL BOXES AS SHOWN ON THE PLANS.

CONCRETE FORM DEPTH BELOW FINISHED GRADE SHALL BE 6" MAXIMUM. CONCRETE FORMS SHALL BE REMOVED AFTER CONCRETE HAS SET.

BELL ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF THE CONCRETE BASE BEFORE INSTALLATION OF CABLE OR WIRE.

CONCRETE CONTROL CABINET BASE, TYPE 9, SPECIAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

S.D.D. 9 C 6-7

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

BASES SHALL BE EXCAVATED BY USE OF A CIRCULAR AUGER.

TOP SURFACES OF CONCRETE BASES SHALL BE TROWEL FINISHED AND LEVEL.

CONDUIT SIZES AND LOCATIONS SHALL BE AS SHOWN ON THE PLANS.

THE FINAL OR TERMINATING CONCRETE BASE IN A CONDUIT RUN SHALL HAVE A 6" EXIT STUB INSTALLED FOR FUTURE CABLING USE. THE EXIT STUB SHALL BE SIZED AS USED THROUGHOUT THE CONDUIT RUN AS SHOWN AT THE ENTRANCE OF THE BASE.

MINIMUM BENDING RADIUS OF CONDUIT IS EQUAL TO 6 X THE DIAMETER.

CONDUIT HEIGHT ABOVE CONCRETE BASES SHALL BE 4 INCHES. ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED. NONMETALLIC CONDUIT SHALL HAVE BELL END INSTALLED. ALL CONDUIT SHALL BE SLOPED TO PULL BOX.

ALL CONDUIT ENDS AT THE TOP OF CONCRETE BASES SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUIT IN WHICH WIRE OR CABLE IS NOT INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

BELL ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF CONCRETE BASES BEFORE INSTALLATION OF CABLE OR WIRE.

ENDS OF CONDUIT INSTALLED BELOW GRADE FOR FUTURE USE SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC.

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS, U.L. LISTED FOR ELECTRICAL USE, SHALL BE USED.

IF A BASE REQUIRES A DEEP FORM BECAUSE OF LOOSE DIRT OR FILL, THE FORM SHALL BE REMOVED BEFORE BACKFILLING AROUND THE BASE. BACKFILL SHALL BE TAMPED TIGHT AGAINST THE BARE CONCRETE BASE IN LAYERS OF 1 FOOT OR LESS.

A NO. 4 AWG, STRANDED COPPER EQUIPMENT GROUNDING CONDUCTOR SHALL BE EXOTHERMICALLY WELDED TO THE EQUIPMENT GROUNDING ELECTRODE (GROUND ROD).

THE EQUIPMENT GROUNDING CONDUCTOR SHALL ENTER THE BASE THROUGH A 1 INCH CONDUIT INSTALLED FOR GROUNDING PURPOSES, LEAVING A 4 FOOT COIL OF WIRE ABOVE THE CONCRETE BASE. THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE NEATLY COILED AND THE COILS TIED TOGETHER.

WELDING OF THE ANCHOR RODS TO THE CAGE IS UNACCEPTABLE. TEMPLATES SHALL BE USED.

BAR STEEL REINFORCEMENT SHALL BE COATED WITH POWDERED EPOXY RESIN IN ACCORDANCE WITH SECTION 505 OF THE STANDARD SPECIFICATIONS (LATEST EDITION).

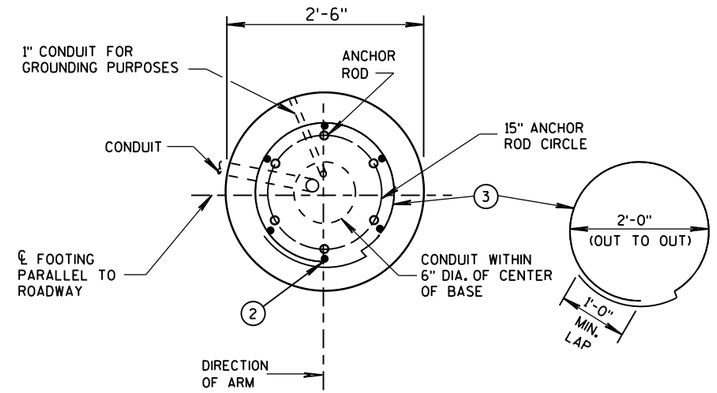
ANCHOR RODS SHALL BE INSTALLED WITH MISALIGNMENTS OF LESS THAN 1:40 FROM VERTICAL.

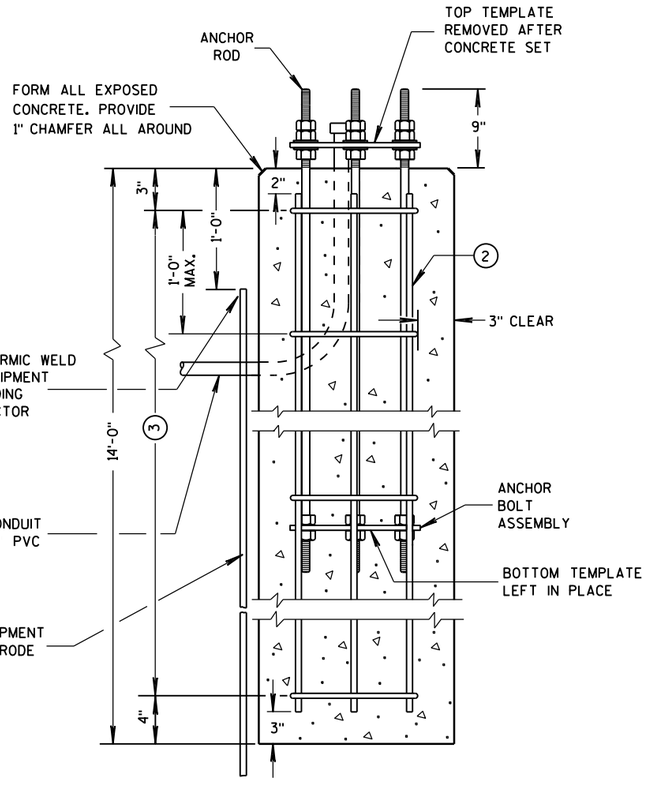
(1) THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE AND INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES. THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE THAT IS NOT INSTALLED BELOW THE TRAVELED WAY SHALL BE 18 INCHES. THE MAXIMUM DEPTH OF ALL CONDUIT SHALL BE 36 INCHES, (GREATER THAN 36 INCHES IF INSTALLED IN BREAKER-RUN), EXCEPT WITH WRITTEN APPROVAL BY THE ENGINEER.

(2) (6) NO. 6 X 13'-7" BAR STEEL REINFORCEMENT.

(3) (15) NO. 4 X 7'-4" BAR STEEL REINFORCEMENT @ 1'-0" MAX. C-C.

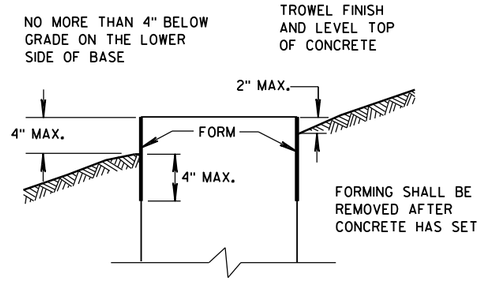
CONCRETE MASONRY	fc=3,500 p.s.i.
HIGH STRENGTH BAR STEEL REINFORCEMENT, GRADE 60	fy=60,000 p.s.i.
ANCHOR RODS, AASHTO M314 GRADE 55	fy=55,000 p.s.i.
TEMPLATES, ASTM, A709 GRADE 36	fy=36,000 p.s.i.



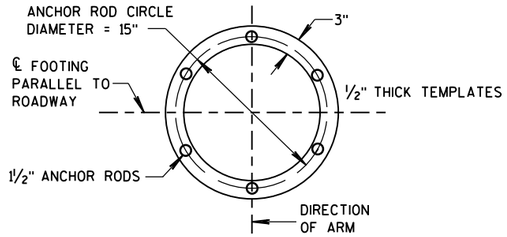


CONCRETE BASE TYPE 10
(FOR TYPE 9 & 10 POLES)

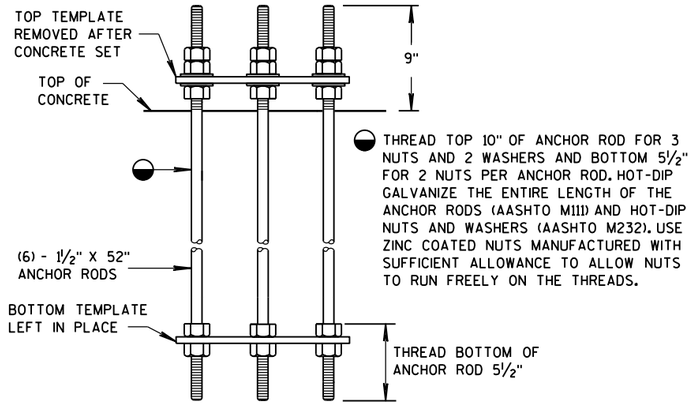
TO BE USED WHEN GROUND ELEVATION AT BASE EQUALS OR IS GREATER THAN HIGH POINT OF ROADWAY ELEVATION. SEE S.D.D. 9C13-2 WHEN GROUND ELEVATION AT BASE IS LOWER THAN HIGH POINT OF ROADWAY ELEVATION.



FORMING DETAIL



TOP AND BOTTOM TEMPLATES



ANCHOR BOLT ASSEMBLY DETAIL

CONCRETE BASE TYPE 10 ANCHOR ASSEMBLY

QUANTITY REQUIREMENTS	
APPROX. CUBIC YARDS OF CONCRETE	2.5
LBS. OF HOOP BAR STEEL	69
LBS. OF VERTICAL BAR STEEL	122

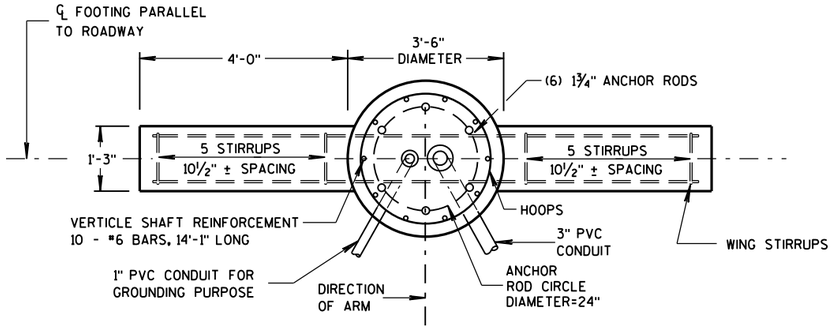
CONCRETE BASE TYPE 10

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

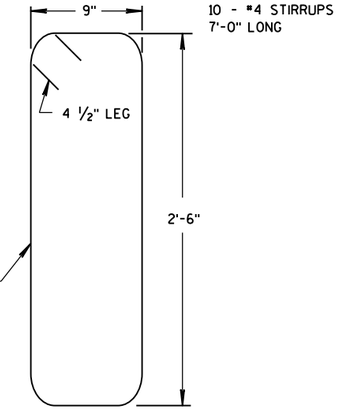
APPROVED
Sept., 2015 — DATE
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FHWA

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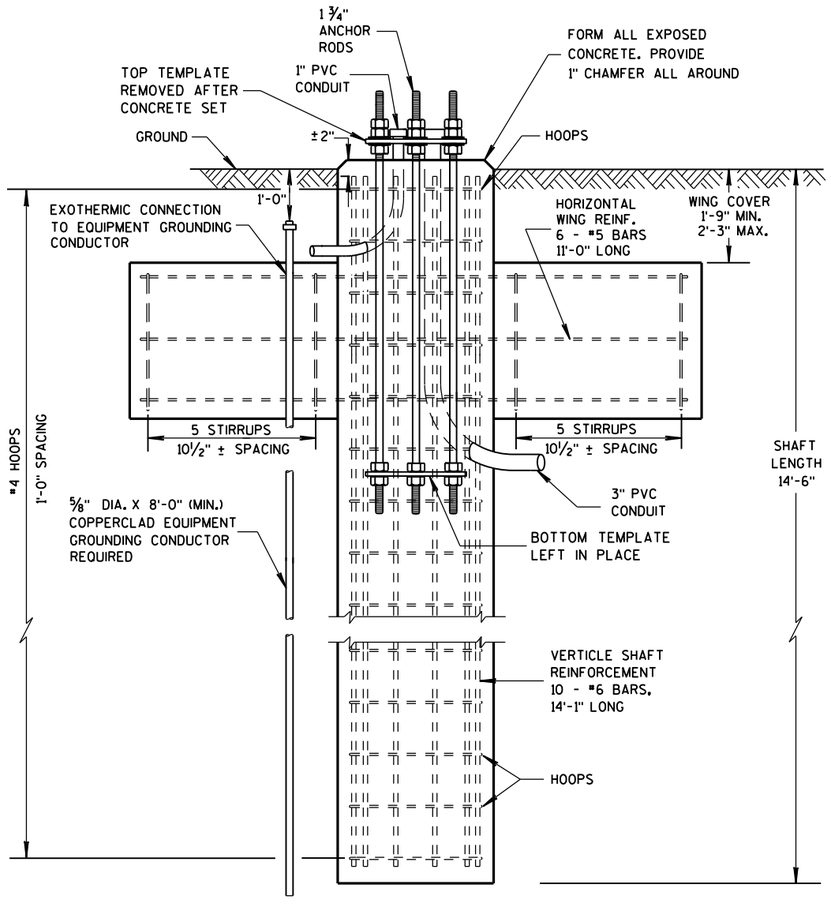
S.D.D. 9 C 11-8



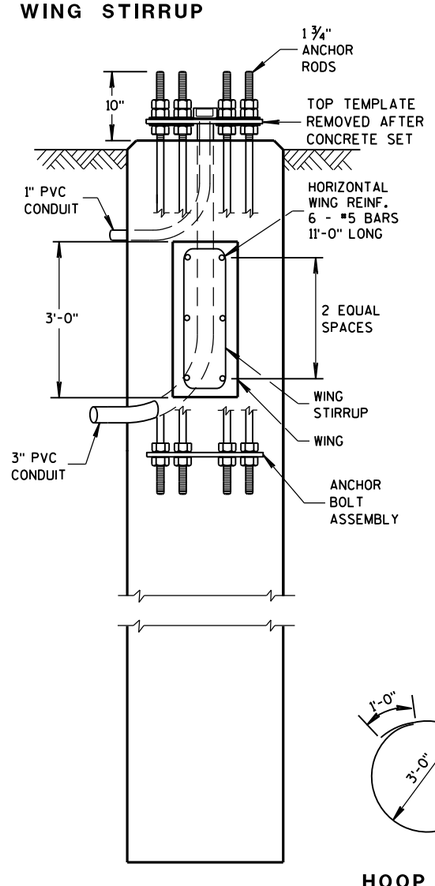
PLAN VIEW



WING STIRRUP

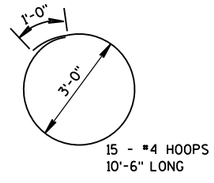


ELEVATION VIEW



SIDE VIEW

DOES NOT SHOW HOOPS OR VERTICAL SHAFT REINFORCEMENT



15 - #4 HOOPS 10'-6" LONG

HOOP DETAIL

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

ORIENT ANCHOR RODS IN FOOTING AND PROVIDE ANCHOR ROD PROJECTION ABOVE TOP OF CONCRETE FOOTING BASE PER THIS SHEET.

BENDING DIMENSIONS FOR REINFORCING BARS ARE OUT TO OUT.

USE 3" CLEAR FOR ALL REINFORCEMENT UNLESS NOTED OTHERWISE.

THE CONTRACTOR IS RESPONSIBLE FOR MAKING HIS OWN DETERMINATION AS TO THE TYPE AND LOCATION OF THE UNDERGROUND UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE THERETO.

WELDING OF ANCHOR RODS TO THE CAGE IS UNACCEPTABLE. TEMPLATES SHALL BE USED.

BASES (SHAFT), BELOW THE WING, SHALL BE EXCAVATED BY THE USE OF A CIRCULAR AUGER. IF A BASE REQUIRES A DEEP FORM BECAUSE OF LOOSE SOIL, THE FORM SHALL BE REMOVED BEFORE BACKFILLING AROUNG THE BASE. BACKFILL SHALL BE TAMPED TIGHT AGAINST THE BARE CONCRETE BASE IN LAYERS OF 1 FOOT OR LESS.

TOP SURFACE OF THE CONCRETE BASE SHALL BE TROWEL FINISHED AND LEVEL.

CONDUIT SIZE AND LOCATIONS SHALL BE AS SHOWN ON THE PLANS.

MINIMUM BENDING RADIUS OF CONDUIT IS EQUAL TO 6 X THE DIAMETER.

CONDUIT HEIGHT ABOVE CONCRETE BASE SHALL BE 4½" INCHES. ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED. NONMETALLIC CONDUIT SHALL HAVE BELL ENDS INSTALLED. ALL CONDUIT SHALL SLOPE TO PULL BOX.

ALL CONDUIT ENDS AT THE TOP OF THE BASES SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUITS IN WHICH WIRE OR CABLE IS NOT INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

BELL ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF CONCRETE BASES BEFORE INSTALLATION OF CABLE OR WIRE.

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTOR FITTINGS, UL LISTED FOR ELECTRICAL USE, SHALL BE USED.

A NO. 4 AWG, STRANDED COPPER EQUIPMENT GROUNDING CONDUCTOR SHALL BE EXOTHERMICALLY WELDED TO THE EQUIPMENT GROUNDING ELECTRODE (GROUND ROD).

THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE FURNISHED AND INSTALLED TO ENTER THE BASE THROUGH A 1-INCH CONDUIT INSTALLED FOR GROUNDING PURPOSES, LEAVING A 4-FOOT COIL OF WIRE ABOVE THE CONCRETE BASE, THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE NEATLY COILED AND THE COILS TIED TOGETHER.

BAR STEEL REINFORCEMENT SHALL BE COATED WITH POWDERED EPOXY RESIN IN ACCORDANCE WITH SECTION 505 OF THE STANDARD SPECIFICATIONS.

THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE AND INSTALLED BELOW THE TRAVEL WAY SHALL BE 24-INCHES. THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE THAT IS NOT INSTALLED BELOW THE TRAVELED WAY SHALL BE 18-INCHES. THE MAXIMUM DEPTH OF ALL CONDUIT SHALL BE 36-INCHES, (GREATER THAN 36-INCHES IF INSTALLED IN BREAKER-RUN), EXCEPT WITH THE WRITTEN APPROVAL OF THE ENGINEER.

ANCHOR RODS SHALL BE INSTALLED WITH MISALIGNMENTS OF LESS THAN 1:40 FROM VERTICAL.

CONCRETE MASONRY	fc=3,500 p.s.i.
HIGH STRENGTH BAR STEEL REINFORCEMENT, GRADE 60	fy=60,000 p.s.i.
ANCHOR RODS, AASHTO M314 GRADE 55	fy=55,000 p.s.i.
TEMPLATES, ASTM A709 GRADE 36	fy=36,000 p.s.i.

(FOR TYPE 12 & 13 POLES)

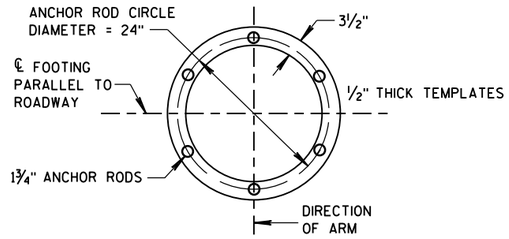
CONCRETE = 6.3 C.Y.
H.S. REINFORCEMENT = 433 LBS.

TO BE USED WHEN GROUND ELEVATION AT BASE EQUALS OR IS GREATER THAN HIGH POINT OF ROADWAY ELEVATION.
SEE S.D.D. 9C13-2 WHEN GROUND ELEVATION AT BASE IS LOWER THAN HIGH POINT OF ROADWAY ELEVATION.

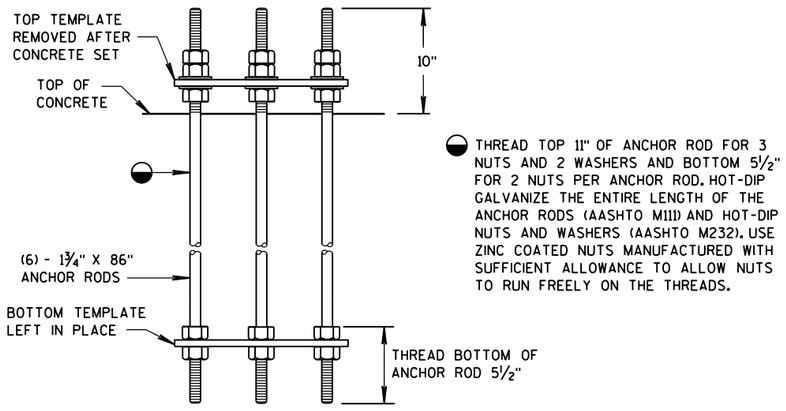
CONCRETE BASE TYPE 13

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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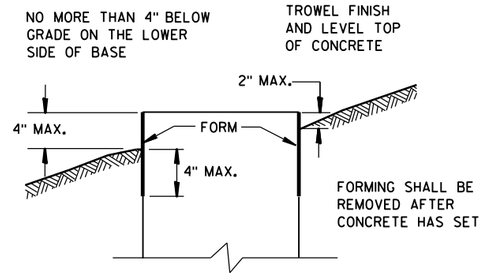


TOP AND BOTTOM TEMPLATES



ANCHOR BOLT ASSEMBLY DETAIL

CONCRETE BASE TYPE 13 ANCHOR ASSEMBLY

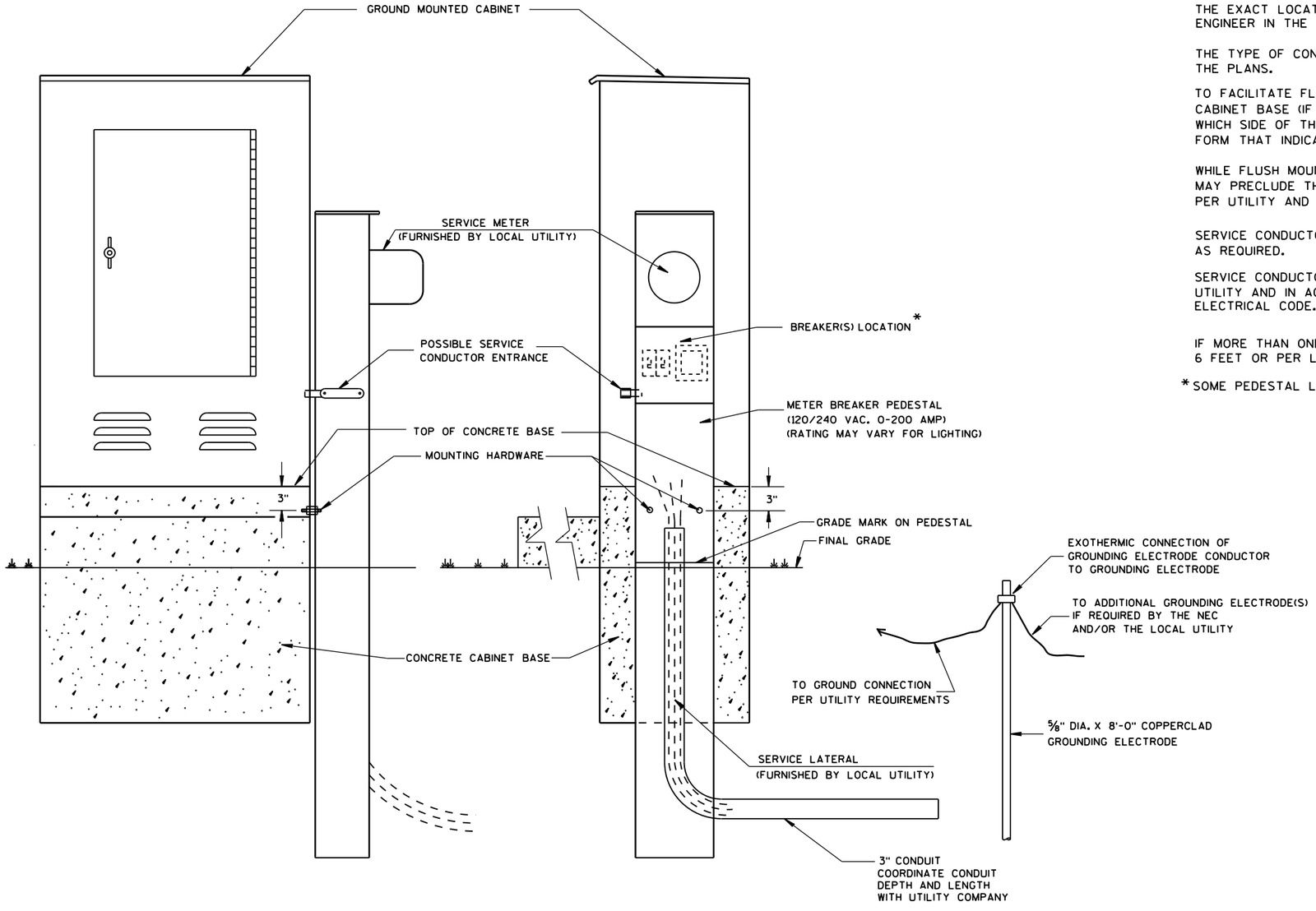


FORMING DETAIL

CONCRETE BASE TYPE 13	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED Sept. 2015 DATE FHWA	/S/ Ahmet Demirbilek STATE ELECTRICAL

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S.D.D. 9 C 12-7b



TYPICAL CABINET SERVICE INSTALLATION

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

THE EXACT LOCATION OF THE METER BREAKER PEDESTAL SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.

THE TYPE OF CONCRETE CABINET BASE TO BE INSTALLED SHALL BE AS CALLED FOR IN THE PLANS.

TO FACILITATE FLUSH MOUNTING OF THE METER BREAKER PEDESTAL AGAINST THE SIDE OF THE CABINET BASE (IF FLUSH MOUNTING POSSIBLE. CONFER WITH THE LOCAL UTILITY TO DETERMINE WHICH SIDE OF THE CONCRETE BASE THE ELECTRICAL SERVICE LATERAL WILL APPROACH. THEN FORM THAT INDICATED SIDE FOR FULL SIDE DEPTH.

WHILE FLUSH MOUNTING IS THE MOST DESIRABLE MOUNTING CONFIGURATION UTILITY REQUIREMENTS MAY PRECLUDE THIS OPTION. CONTRACTOR MUST PROVIDE UTILITY APPROVED PEDESTAL AND INSTALL PER UTILITY AND MANUFACTURERS REQUIREMENTS.

SERVICE CONDUCTOR ENTRANCES SHALL BE RIGID METALLIC CONDUIT, NIPPLES AND/OR CONDULETS AS REQUIRED.

SERVICE CONDUCTOR ENTRANCES SHALL BE SIZED AND LOCATED AS REQUIRED BY THE LOCAL UTILITY AND IN ACCORDANCE WITH APPROPRIATE ARTICLES OF THE LATEST ACCEPTED NATIONAL ELECTRICAL CODE.

IF MORE THAN ONE GROUNDING ELECTRODE IS REQUIRED, THE DISTANCE APART SHALL BE 6 FEET OR PER LOCAL UTILITY REGULATIONS.

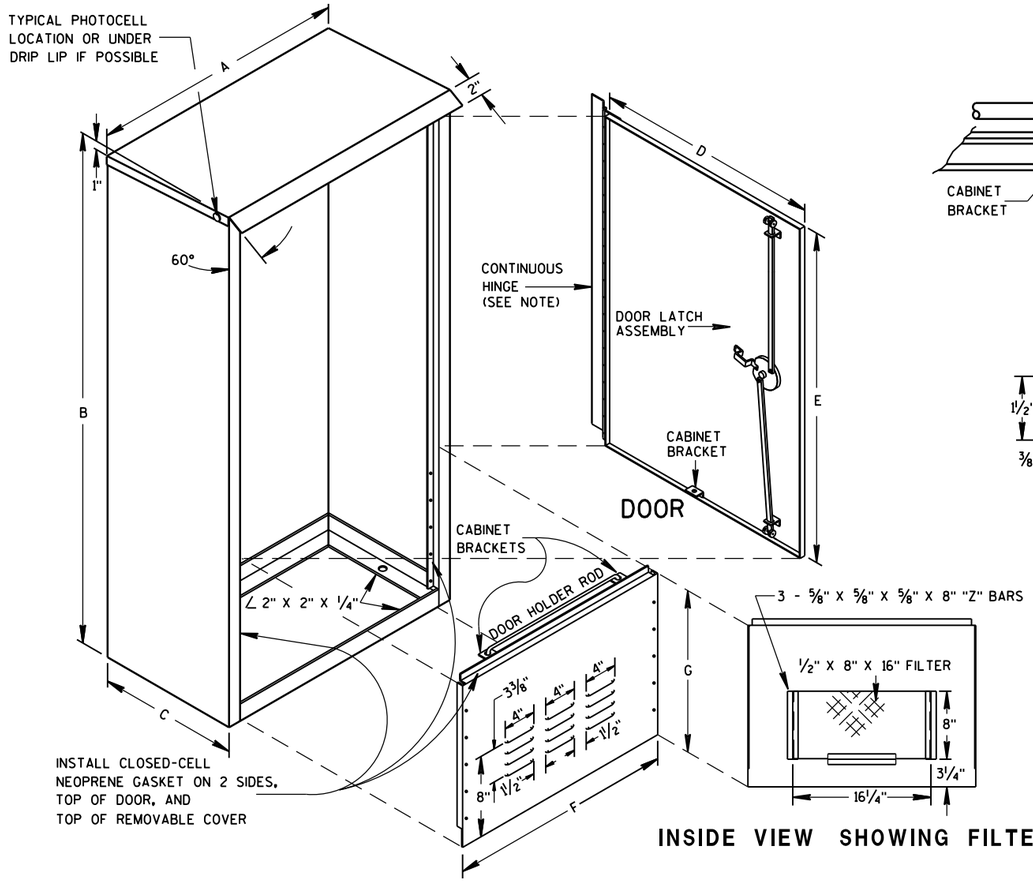
*SOME PEDESTAL LIGHTING PLANS SHOW MAIN LUGS ONLY.

CABINET SERVICE INSTALLATION (METER BREAKER PEDESTAL)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

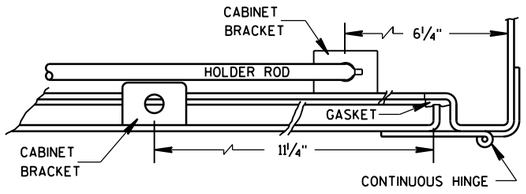
APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

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S.D.D. 9 D 1-5

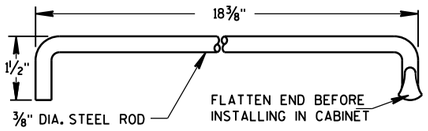


REMOVABLE COVER

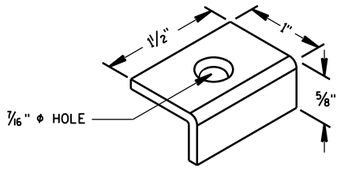
INSIDE VIEW SHOWING FILTER



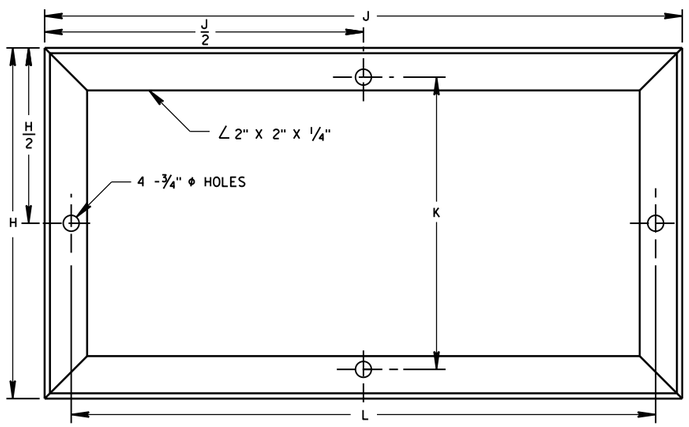
HINGE & DOOR HOLDER



HOLDER ROD



CABINET BRACKET



MOUNTING BASE

TABLE OF DIMENSIONS (INCHES)

MARK	CABINET TYPE		
	3060	3860	3866
A	30	38	38
B	60	60	66
C	16 1/2	16 1/2	24
D	26 1/2	34 3/4	33 3/4
E	38 3/4	38 3/4	38 3/4
F	26 1/2	34 3/4	33 3/4
G	19	19	25
H	16 1/2	16 1/2	24
H/2	8 1/4	8 1/4	12
J	30	38	38
J/2	15	19	19
K	13 3/4	13 3/4	21 1/4
L	27 1/2	35 1/2	35 1/2

GENERAL NOTES

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

PRIME WITH PHOSPHATE TREATMENT AND PRIMER.

FINISH EXTERIOR SURFACES WITH RUSTOLEUM #906 SILVER GRAY OR APPROVED EQUAL.

FINISH INTERIOR WITH RUSTOLEUM #2766 HIGH GLOSS WHITE ENAMEL OR APPROVED EQUAL.

ALL SHEET METAL PARTS SHALL BE .125 INCH THICK ALUMINUM.

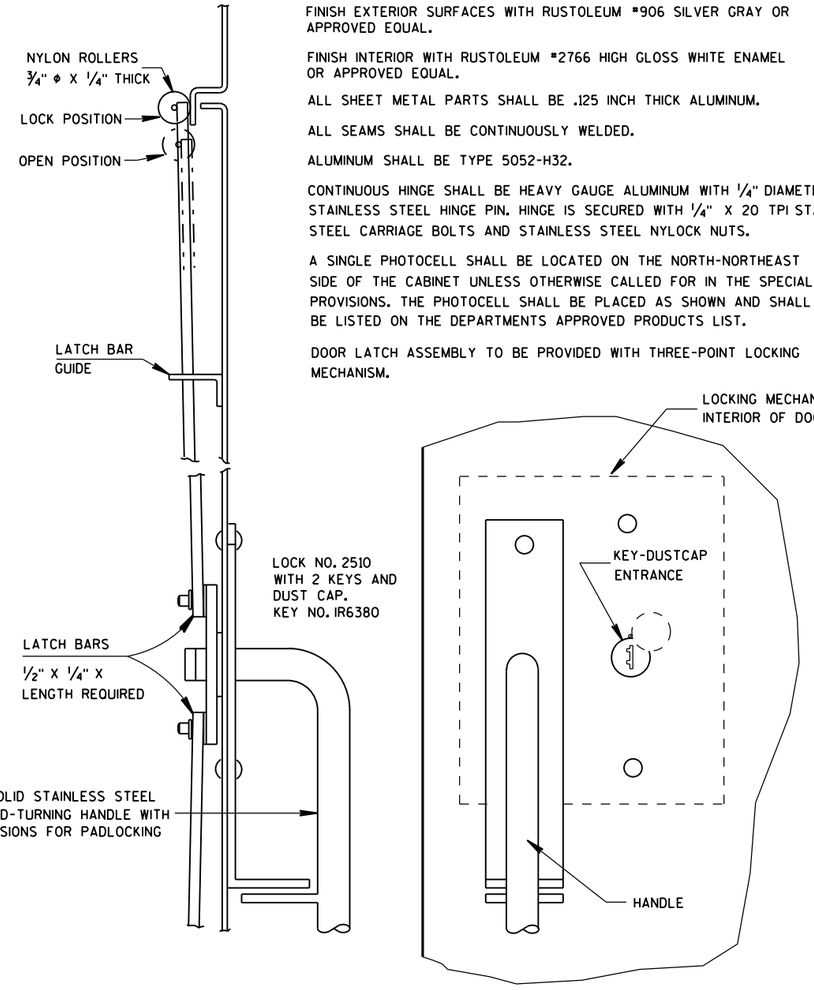
ALL SEAMS SHALL BE CONTINUOUSLY WELDED.

ALUMINUM SHALL BE TYPE 5052-H32.

CONTINUOUS HINGE SHALL BE HEAVY GAUGE ALUMINUM WITH 1/4" DIAMETER STAINLESS STEEL HINGE PIN. HINGE IS SECURED WITH 1/4" X 20 TPI STAINLESS STEEL CARRIAGE BOLTS AND STAINLESS STEEL NYLOCK NUTS.

A SINGLE PHOTOCELL SHALL BE LOCATED ON THE NORTH-NORTHEAST SIDE OF THE CABINET UNLESS OTHERWISE CALLED FOR IN THE SPECIAL PROVISIONS. THE PHOTOCELL SHALL BE PLACED AS SHOWN AND SHALL BE LISTED ON THE DEPARTMENTS APPROVED PRODUCTS LIST.

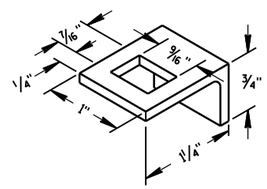
DOOR LATCH ASSEMBLY TO BE PROVIDED WITH THREE-POINT LOCKING MECHANISM.



SIDE VIEW

FRONT VIEW

LATCH ASSEMBLY



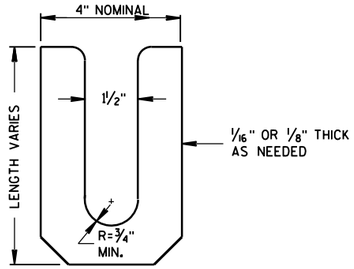
LATCH BAR GUIDE

SIGNAL CONTROL CABINET

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DEPARTMENT OF TRANSPORTATION

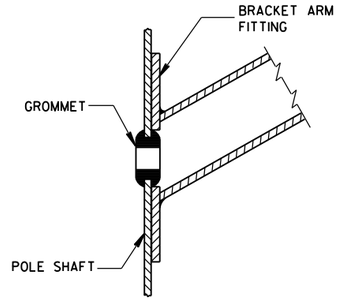
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Sept. 2014
DATE
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STATE ELECTRICAL
FHWA

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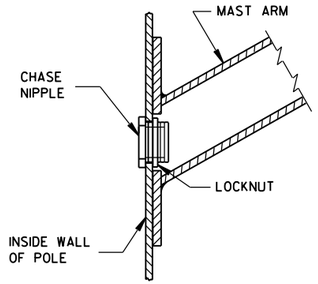


LEVELING SHIM (13)

SHALL BE ALUMINUM



TYPICAL APPLICATION OF GROMMET IN POLE SHAFT



TYPICAL APPLICATION OF CHASE NIPPLE IN POLE SHAFT

GENERAL NOTES

CLAMP BOLT-NUT TIGHTENING TORQUE SHALL BE INDICATED BY INDENT STAMPING (1/2 INCH NUMERALS AND LETTERS) OR WEATHERPROOF PRINTING ON THE INSIDE OF THE CLAMP THAT IS WELDED TO THE ARM MEMBER.

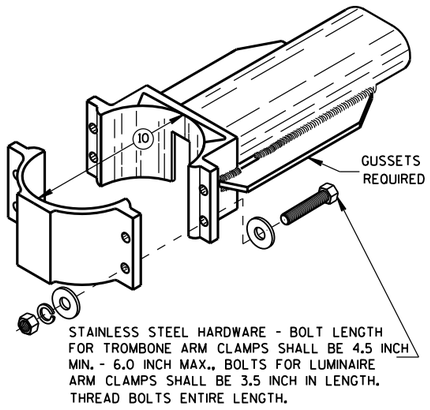
(10) 4.5" I.D. FOR LUMINAIRE MAST ARM CLAMP.
6.625" I.D. FOR TROMBONE MAST ARM CLAMP.

(11) INDIVIDUAL BASE PLATE ANCHOR ROD COVERS. (4 REQUIRED)

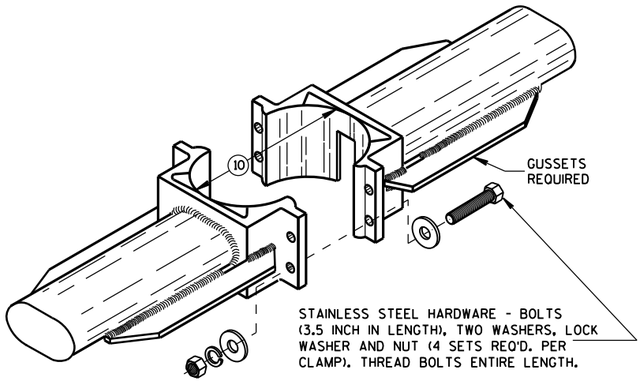
(12) BASE PLATE SLOTTED TO ACCEPT 11" THROUGH 12" BOLT CIRCLE USING 1" DIAMETER ANCHOR RODS.

(13) LEVELING SHIMS, DESIGNED FOR THE PURPOSE, SHALL BE USED WHEN PLUMBING POLES. THE USE OF WASHERS IN LIEU OF PROPER LEVELING SHIMS IS NOT ACCEPTABLE. LEVELING SHIMS SHALL BE USED ONLY BETWEEN THE TOP OF THE CONCRETE BASE AND A METALLIC BASE PLATE.

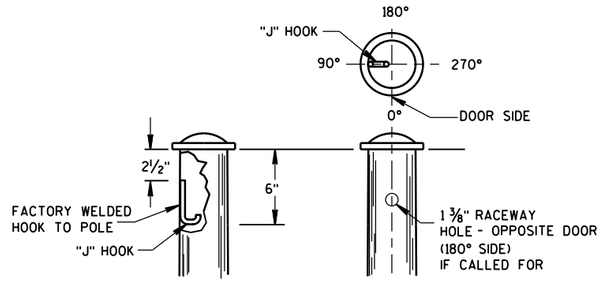
SHIMS SHALL BE LONG ENOUGH AND WIDE ENOUGH TO COMPLETELY COVER THE AREA UNDER THE LENGTH AND WIDTH OF THE BASE MOUNTING FLANGE.



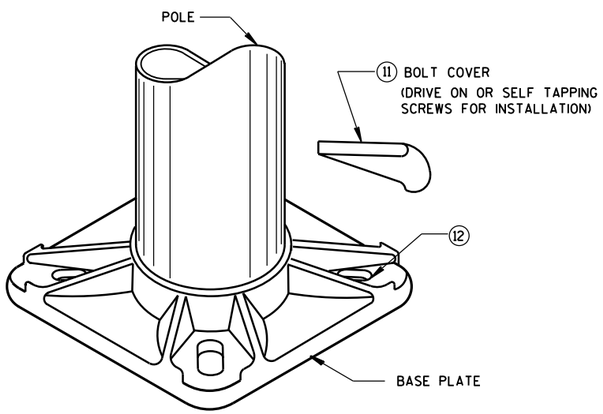
TYPICAL TROMBONE MAST ARM AND SINGLE LUMINAIRE MAST ARM MOUNTING CLAMP



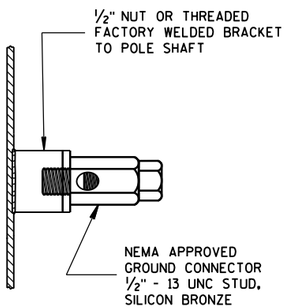
TYPICAL LUMINAIRE MAST ARM (DOUBLE) MOUNTING BRACKETS

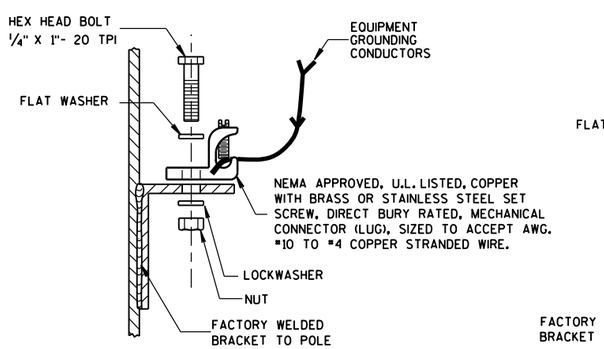


TYPICAL "J" HOOK LOCATION



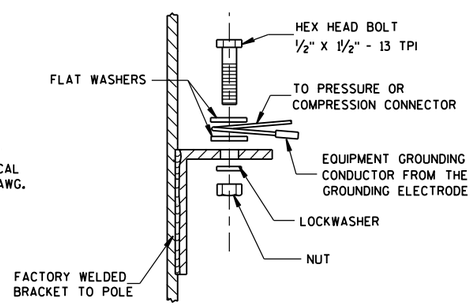
BASE PLATE





TYPICAL GROUNDING CONNECTIONS

NUT, BOLT AND WASHERS SHALL BE STAINLESS STEEL



HARDWARE DETAILS FOR POLE MOUNTINGS

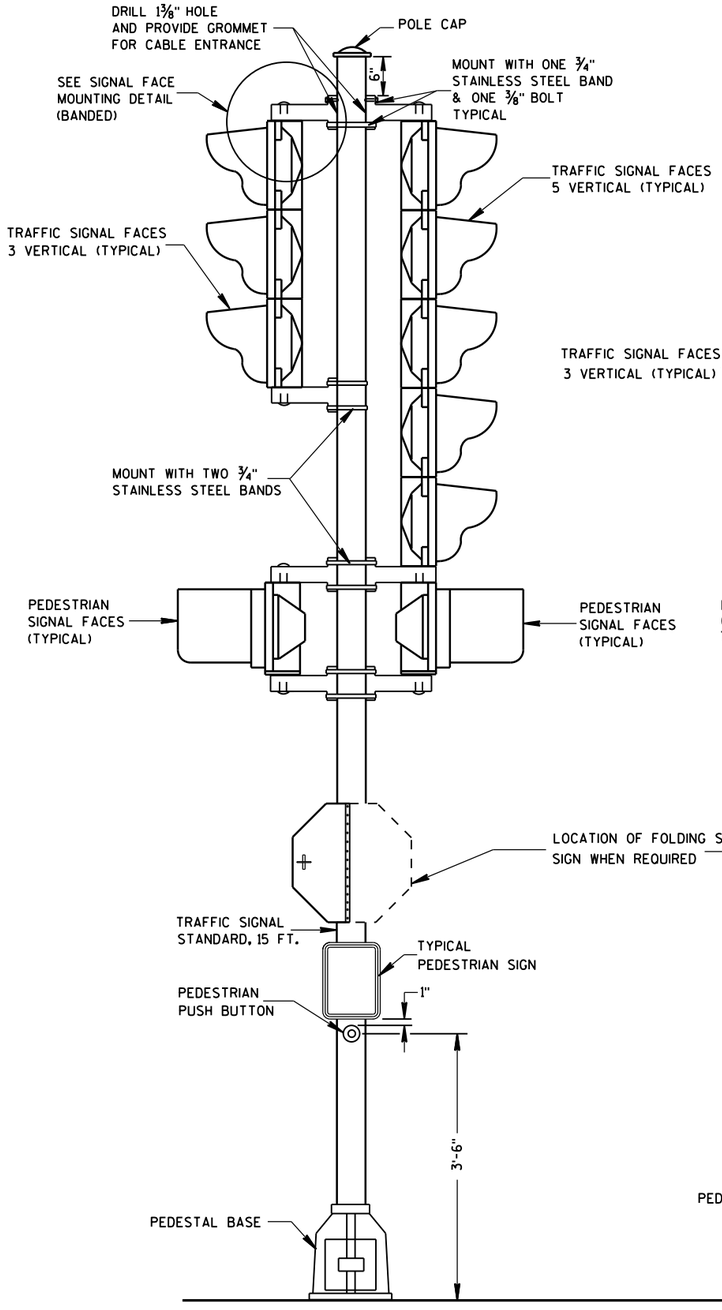
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Feb. 2015
DATE

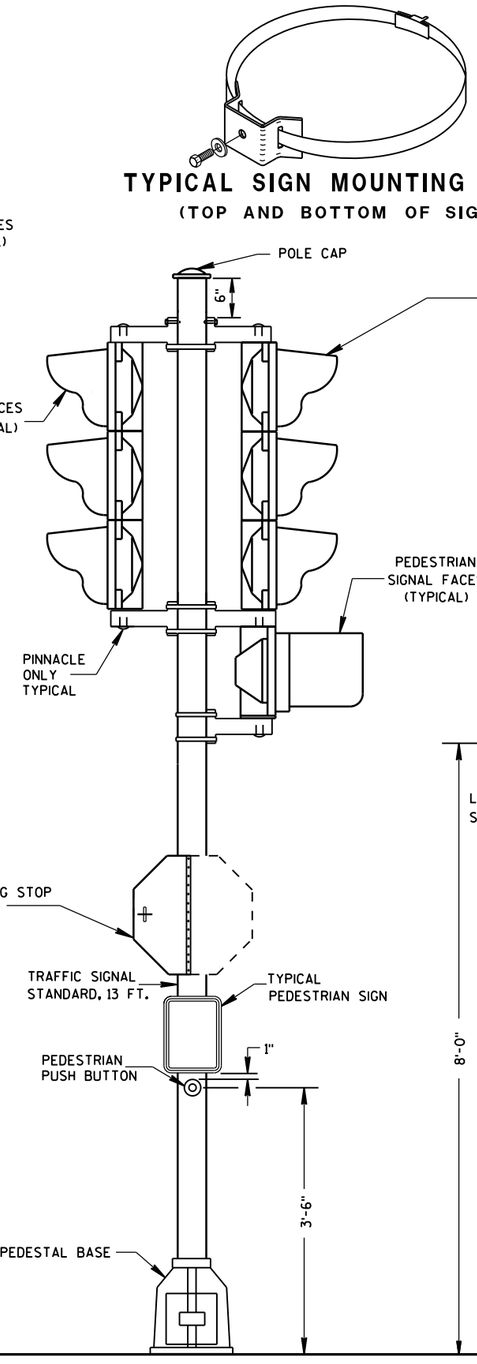
/S/ Ahmet Demirbilek
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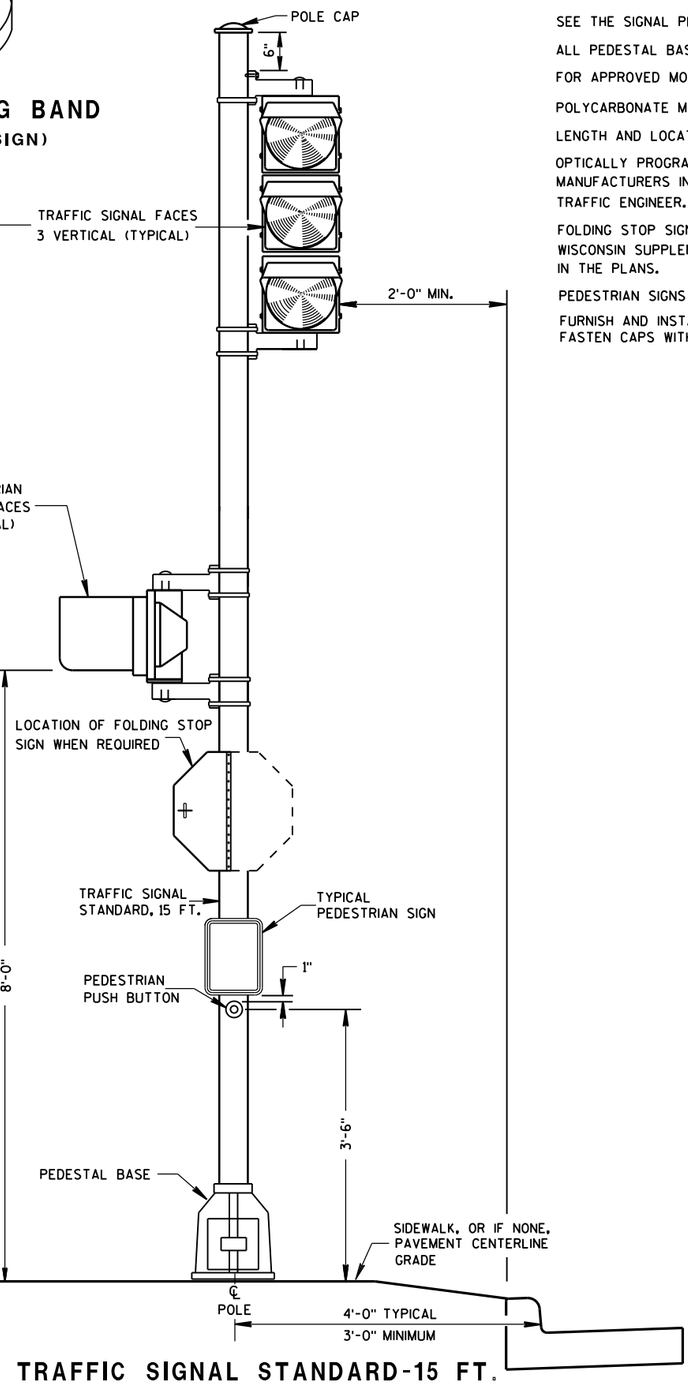


TRAFFIC SIGNAL STANDARD-15 FT.



TRAFFIC SIGNAL STANDARD-13 FT.

TYPICAL SIGN MOUNTING BAND
(TOP AND BOTTOM OF SIGN)



TRAFFIC SIGNAL STANDARD-15 FT.
3M MOUNTING (TYPICAL)

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

SEE THE SIGNAL PLAN FOR REQUIRED SIGNAL FACE SIZES.

ALL PEDESTAL BASES SHALL BE MOUNTED ON CONCRETE BASE - TYPE 1.

FOR APPROVED MOUNTING HARDWARE, SEE THE CONTRACT SPECIAL PROVISIONS.

POLYCARBONATE MOUNTING BRACKETS SHALL BE USED.

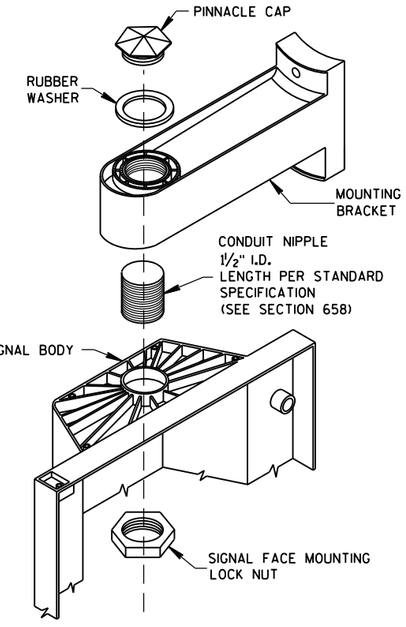
LENGTH AND LOCATION OF TRAFFIC SIGNAL STANDARDS SHALL BE AS SHOWN ON THE PLANS.

OPTICALLY PROGRAMMED SIGNAL FACES SHALL BE MASKED IN ACCORDANCE WITH MANUFACTURERS INSTRUCTIONS, AND UNDER THE DIRECTIONS OF THE REGION TRAFFIC ENGINEER.

FOLDING STOP SIGNS SHALL BE IN ACCORDANCE WITH THE MUTCD AND/OR THE LATEST WISCONSIN SUPPLEMENT. THE SIGNS SHALL BE SIZED AND LOCATED AS CALLED FOR IN IN THE PLANS.

PEDESTRIAN SIGNS SHALL BE AS DESIGNATED IN THE PLANS.

FURNISH AND INSTALL VENTILATED, CAST, METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) ¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.



SIGNAL FACE MOUNTING DETAIL
(BANDED)

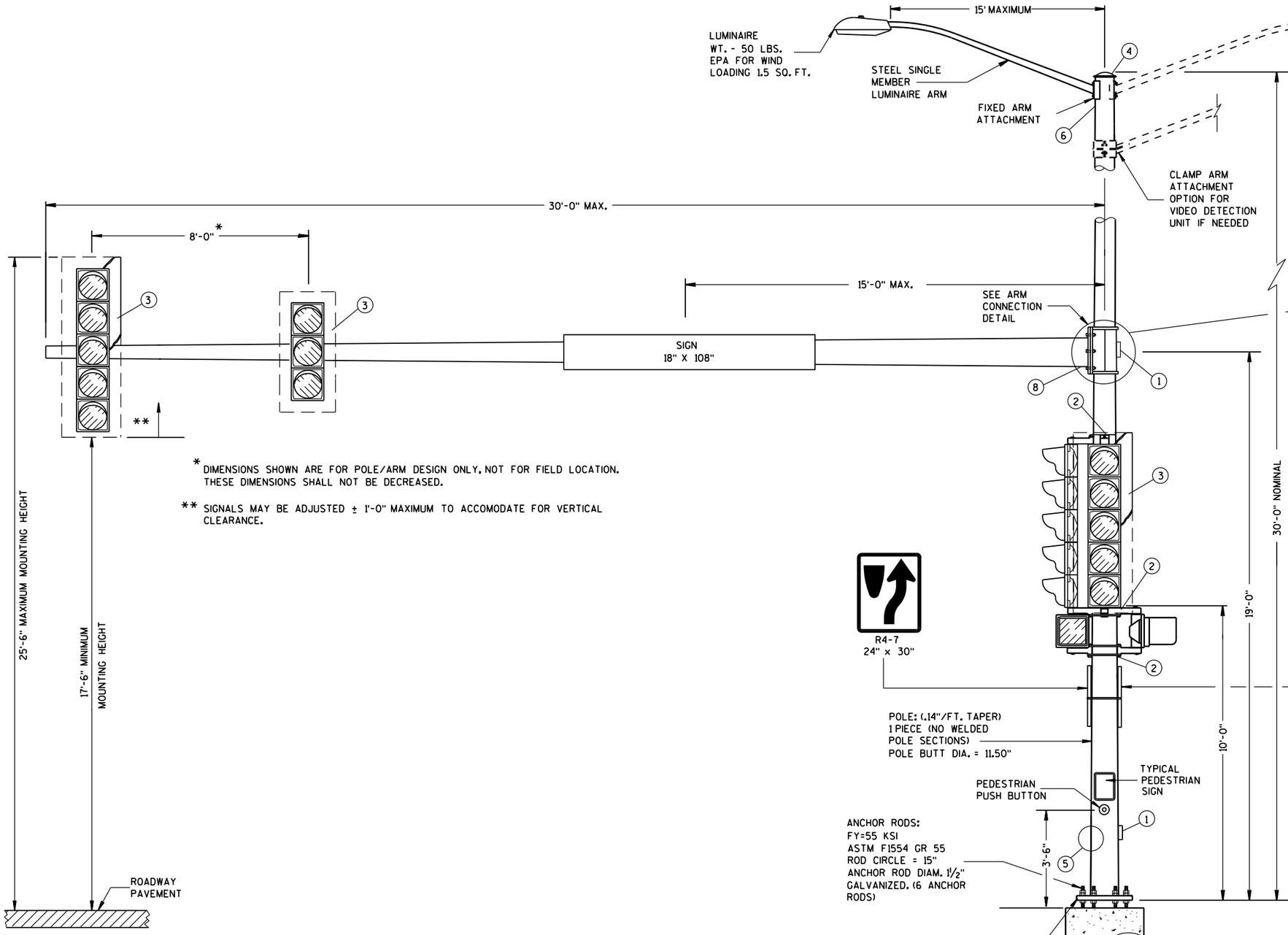
TRAFFIC SIGNAL STANDARD
POLY BRACKET MOUNTINGS
(TYPICAL) 13 FT. OR 15 FT.

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
2/28/2013 — DATE
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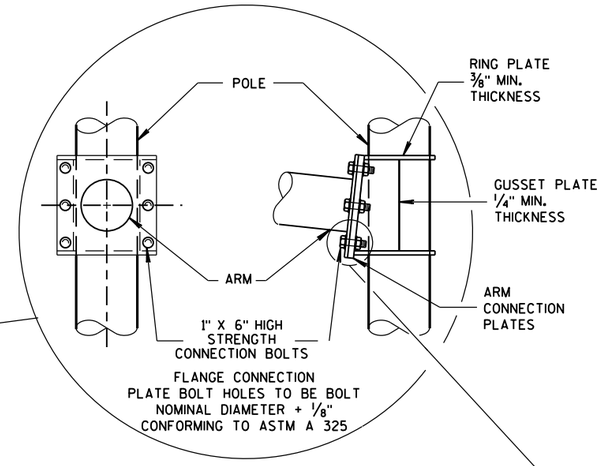
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S.D.D. 9 E 6-5

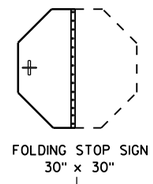


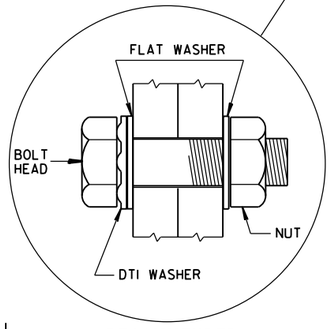
* DIMENSIONS SHOWN ARE FOR POLE/ARM DESIGN ONLY, NOT FOR FIELD LOCATION. THESE DIMENSIONS SHALL NOT BE DECREASED.

** SIGNALS MAY BE ADJUSTED ± 1'-0" MAXIMUM TO ACCOMODATE FOR VERTICAL CLEARANCE.

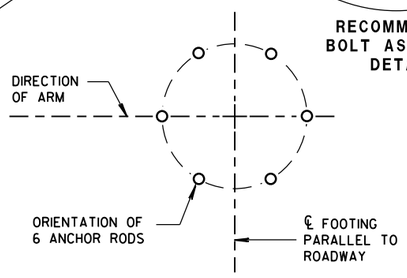


6 BOLT ARM CONNECTION DETAIL





RECOMMENDED
BOLT ASSEMBLY
DETAIL



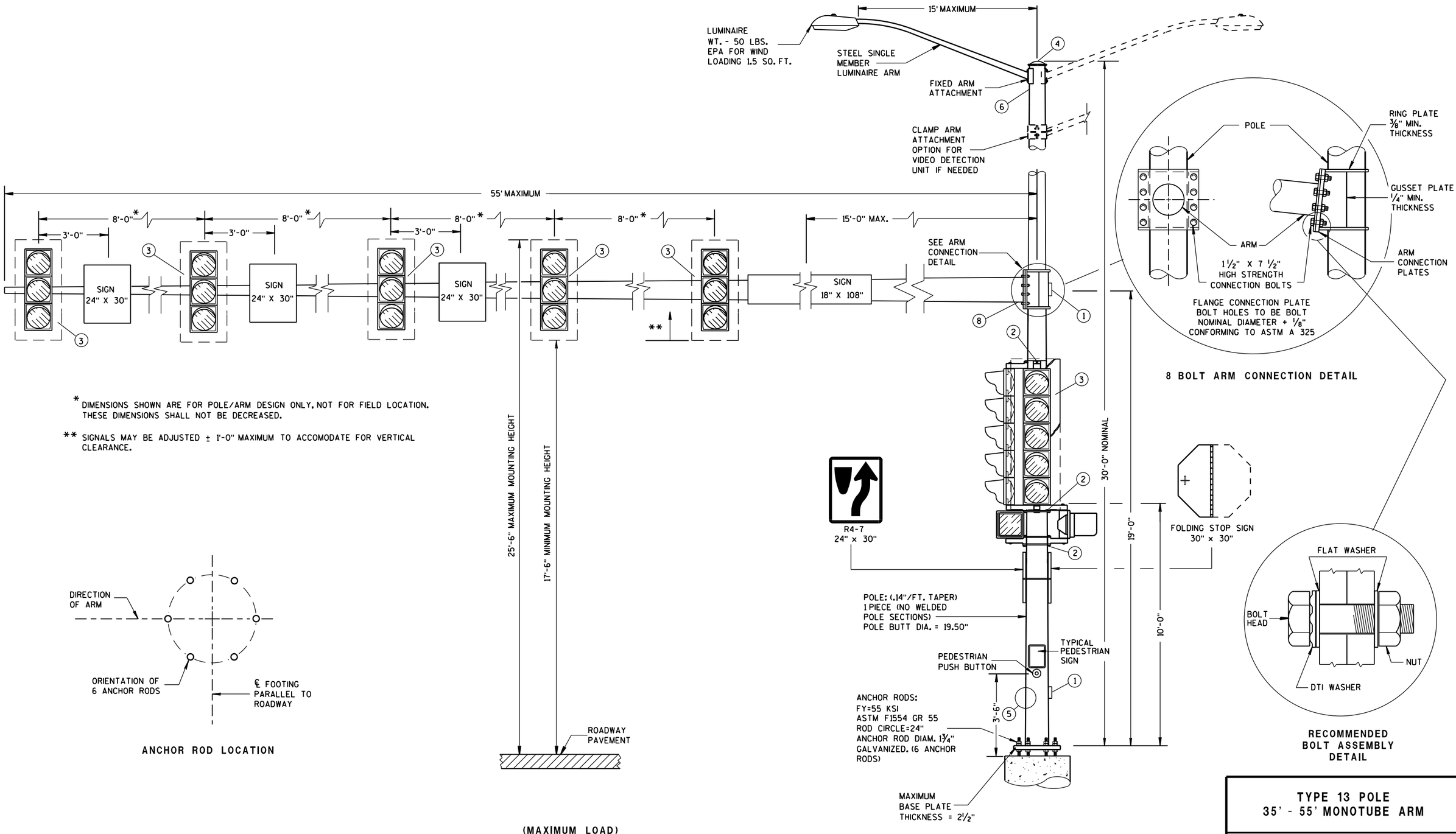
ANCHOR ROD LOCATION

(MAXIMUM LOAD)

TYPE 10 POLE
15'- 30' MONOTUBE ARM

TYPE 10 POLE 15' - 30' MONOTUBE ARM	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED June, 2015 DATE FHWA	/S/ Ahmet Demirbilek STATE ELECTRICAL

6
S.D.D. 9 E 8-7b



8 BOLT ARM CONNECTION DETAIL

RECOMMENDED
BOLT ASSEMBLY
DETAIL

* DIMENSIONS SHOWN ARE FOR POLE/ARM DESIGN ONLY, NOT FOR FIELD LOCATION. THESE DIMENSIONS SHALL NOT BE DECREASED.

** SIGNALS MAY BE ADJUSTED ± 1'-0" MAXIMUM TO ACCOMODATE FOR VERTICAL CLEARANCE.

ANCHOR ROD LOCATION

(MAXIMUM LOAD)

TYPE 13 POLE 35'- 55' MONOTUBE ARM

TYPE 13 POLE 35' - 55' MONOTUBE ARM
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION
APPROVED June. 2015 — DATE /S/ Ahmet Demirbilek — STATE ELECTRICAL FHWA

6
S.D.D. 9 E 8-7d

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

POLE TYPES 9 AND 10 ARE FOR ARM LENGTHS 15-FOOT TO 30-FOOT.

POLE TYPES 12 AND 13 ARE FOR ARM LENGTHS 35-FOOT TO 55-FOOT.

MONOTUBE POLE AND ARM SHALL BE GALVANIZED STEEL.

RING-STIFFENED BUILT-UP BOX TYPE OF ATTACHMENT FOR TRAFFIC SIGNAL ARM.

ONE (1) PIECE POLE CONSTRUCTION (NO WELDED POLE SECTIONS).

STANDARD STRAIGHT ARM DESIGN (3 % ± RISE).

SECTION 657, POLES OF THE STANDARD SPECIFICATIONS SHALL APPLY TO THIS DRAWING.

PROVIDE WIREWAY THRU POLE WALL AND ARM CONNECTION PLATES. PROVIDE ROUND, SMOOTH INSIDE SURFACE.

MANUFACTURER'S SUBMITTED POLE DESIGNS AND DRAWINGS SHALL BE SIGNED AND STAMPED BY A REGISTERED PROFESSIONAL ENGINEER AND CERTIFIED AS BEING IN COMPLIANCE WITH THE AASHTO 2013 6TH EDITION AND ALL PERTINENT WISDOT SPECIFICATIONS AND DRAWINGS FOR TRAFFIC AND LIGHTING STRUCTURES AND AS FOLLOWS:

- CATEGORY III FATIGUE LOADS OF GALLOPING, TRUCK GUSTS (AT 45 MPH VEHICLE VELOCITY) AND NATURAL WIND GUSTS FOR DESIGN OF TYPE 9 AND TYPE 10 STRUCTURES.
- CATEGORY II FATIGUE LOADS OF GALLOPING, TRUCK GUSTS (AT 45 MPH VEHICLE VELOCITY) AND NATURAL WIND GUSTS FOR DESIGN OF TYPE 12 AND TYPE 13 STRUCTURES.
- 90 MPH (3-SECOND GUST) WIND SPEED AND A 50 YEAR DESIGN LIFE.

SECURE THE OPENING BELOW THE BASE PLATE WITH STAINLESS STEEL OR GALVANIZED STEEL MESH AND SECURE THE MESH WITH ¾" S.S. BANDING AROUND THE LEVELING NUTS.

INDENT PRINT (NOMINAL ½" HIGH) THE POLE LENGTH AND FIRST TWO LETTERS OF THE MANUFACTURERS NAME ON TWO SIDES OF THE BASE PLATE 180 DEGREES APART, BEFORE GALVANIZING. THE ARM SHALL BE IDENTIFIED WITH THE SAME INFORMATION BY INDENT PRINT.

SIGNAL FACE SHALL BE MOUNTED 6 INCHES (NOMINAL) FROM THE END OF THE MONOTUBE ARM OR AS SHOWN ON THE PLAN CONSTRUCTION DETAIL OR AS DIRECTED BY THE PROJECT ENGINEER/ELECTRICAL OPERATIONS PERSONNEL. MOUNT ALL LIKE HEADS AT SAME ELEVATION.

SIGN MOUNTING BRACKETS SHALL BE FURNISHED IN ACCORDANCE WITH SECTION 637 OF THE STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION.

(1) DESIGN FOR MAXIMUM ALLOWABLE HANDHOLE WITH COVER ASSEMBLY WITH TWO ¼" X ¾" - 20 TPI STAINLESS STEEL HEX HEAD BOLTS.

(2) SIGNAL MOUNTING BRACKETS FOR POLE MOUNTING, MOUNT WITH CAP SCREW AND BANDING, (SEE SPECIFICATIONS SEC. 658).

(3) SECURELY MOUNT BACKPLATES, PROJECTING 5" BEYOND ALL SIDES OF THE SIGNAL FACE HOUSING, PER MANUFACTURERS RECOMMENDATIONS.

(4) THE TOP OF THE POLE SHAFT AND THE END OF THE MONOTUBE ARM SHALL BE EQUIPPED WITH A REMOVABLE, VENTILATED CAP HELD SECURELY IN PLACE WITH SET SCREWS.

(5) FACTORY-WELDED BRACKET FOR GROUNDING LUG, OPPOSITE HANDHOLE, (LUG AND HARDWARE PAID UNDER SEPARATE ITEM). PROVIDE HOLE IN BRACKET FOR ¼" X ¾" - 20 TPI STAINLESS STEEL HEX HEAD BOLT.

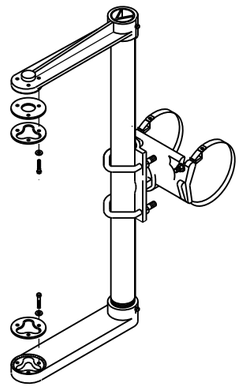
(6) FACTORY-WELDED "J" HOOK FOR STRAIN RELIEF FOR POLE LUMINAIRE WIRE.

(7) INSTALL STRUCTURAL IDENTIFICATION PLAQUES.

STRUCTURAL IDENTIFICATION PLAQUES SHALL BE PLACED ON THE POLES IN THE SAME DIRECTION AS THE ARM.

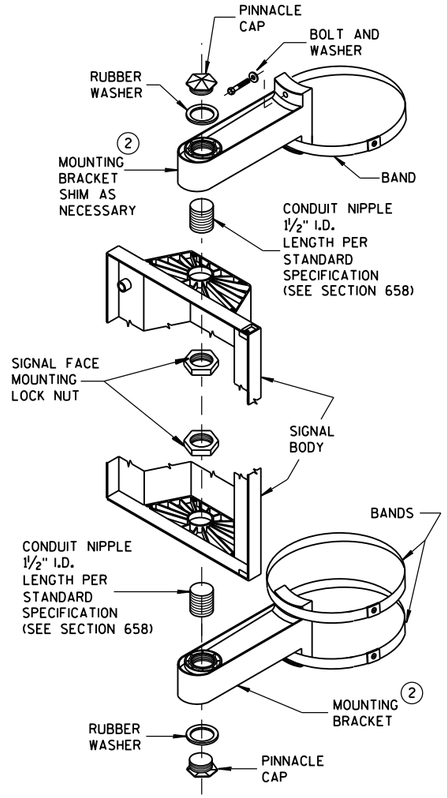
MOUNTING HEIGHT SHALL BE 6'-0" ABOVE THE CURB OR SHOULDER. ADJUST IF IT IS KNOWN THAT REQUIRED TRAFFIC SIGNS WILL BE OBSTRUCTED.

(8) FACTORY DRILLED ½" DRAIN HOLE 2" FROM FLANGE CONNECTION PLATE.

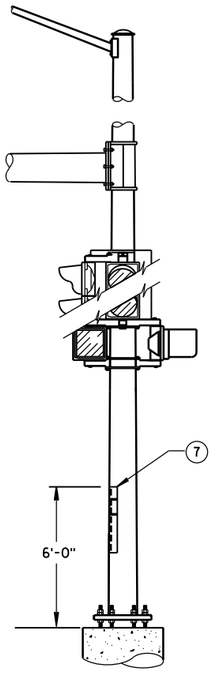


SIGNAL FACE MOUNTING BRACKET DETAIL FOR MONOTUBE ARM

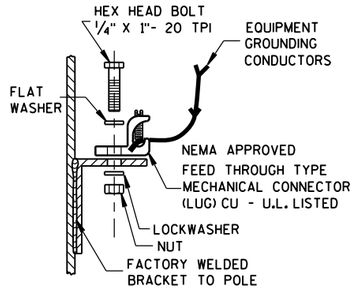
(MOUNT PER MANUFACTURER'S RECOMMENDATION)



SIGNAL FACE VERTICAL MOUNTING DETAIL

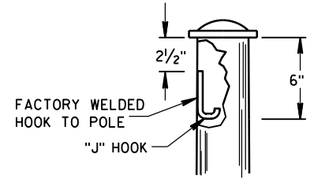


STRUCTURAL IDENTIFICATION PLAQUE PLACEMENT



TYPICAL GROUNDING CONNECTIONS (5)

NUT, BOLT AND WASHERS SHALL BE STAINLESS STEEL



"J" HOOK WIRE SUPPORT (6)

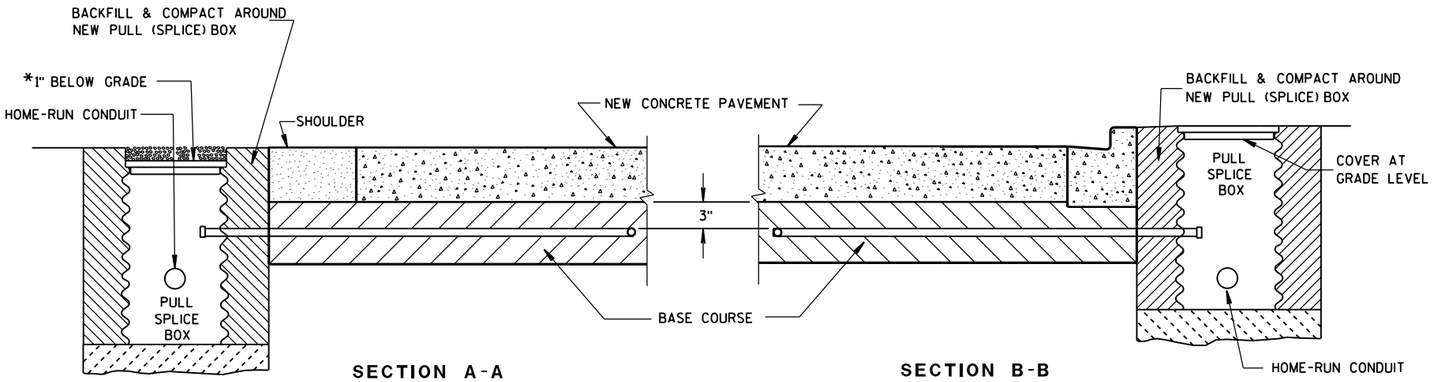
GENERAL NOTES AND HARDWARE DETAILS FOR TYPE 9, 10, 12 & 13 POLES WITH MONOTUBE ARMS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2015 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

6

S.D.D. 9 E 8-7e



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.

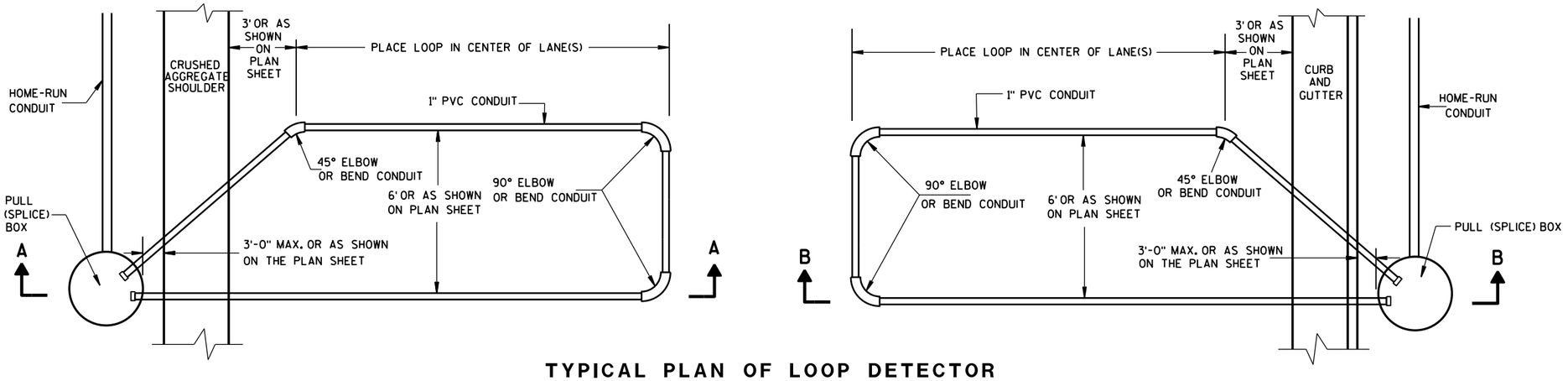
THE #12 AWG. LOOP WIRE IN THE PULL (SPLICE) BOX SHALL BE HAND TWISTED AT LEAST 3 TWISTS PER FOOT BEFORE BEING SPLICED TO THE LOOP LEAD-IN CABLE.

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

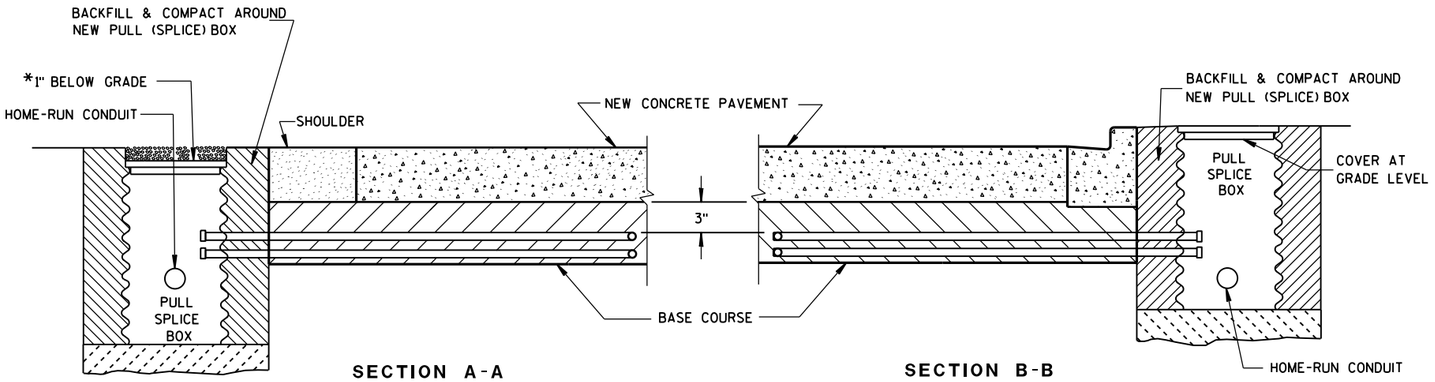
APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

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S.D.D. 9 F 15-4a

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S.D.D. 9 F 15-4a



SECTION A-A
NO CURB & GUTTER

SECTION B-B
CURB & GUTTER

*RECESS PULL (SPLICE) BOX SO THAT THE COVER IS 3" BELOW GRADE IN SHOULDER AREAS OF CRUSHED AGGREGATE. BACKFILL OVER COVER WITH THE CRUSHED AGGREGATE TO BRING THE AREA TO GRADE LEVEL.

LOOP DETECTOR INSTALLATION DETAIL

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

LOOP SIZE, CONFIGURATION LOCATION, NUMBER OF TURNS OF WIRE AND ASSOCIATED SIGNAL PHASE SHALL BE AS SHOWN ON THE PLANS.

PITCH LEAD OUT CONDUIT TO DRAIN TO ROADSIDE PULL (SPLICE) BOX.

SPLICES SHALL BE INSTALLED BY USING CAST IN PLACE SPLICE KITS LISTED ON THE DEPARTMENTS APPROVED PRODUCTS LIST OR AN ENGINEER APPROVED EQUAL. NON-INSULATED BUTT SPLICES TO FIT #12 AWG STRANDED WIRE SHALL BE USED. SPLICES SHALL BE SOLDERED AND INSULATED FROM EACH OTHER AS PER INSTRUCTIONS INCLUDED IN THE SPLICE KIT.

MEASURE GROUND RESISTANCE USING A MEGGER. REPLACE LOOP WIRE NOT ATTAINING A READING OF INFINITY TO GROUND.

AFTER SPLICING THE LOOP WIRE TO THE LOOP LEAD-IN CABLE, THE CONTRACTOR SHALL MEASURE INDUCTANCE, GROUND RESISTANCE AND WIRE RESISTANCE AT THE CABINET END OF THE LEAD-IN CABLE AND FURNISH A COPY OF THE READINGS TO THE PROJECT ENGINEER FOR EVALUATION.

LOOP DETECTOR LEADS SHALL BE IDENTIFIED WITH THEIR ASSOCIATED LOOP BY USE OF WATERPROOF TAGS AT BOTH ENDS OF THE CABLE. A LISTING OF THE CABLE IDENTIFICATION PER INDIVIDUAL LOOP LEAD-IN SHALL BE PLACED IN THE CABINET.

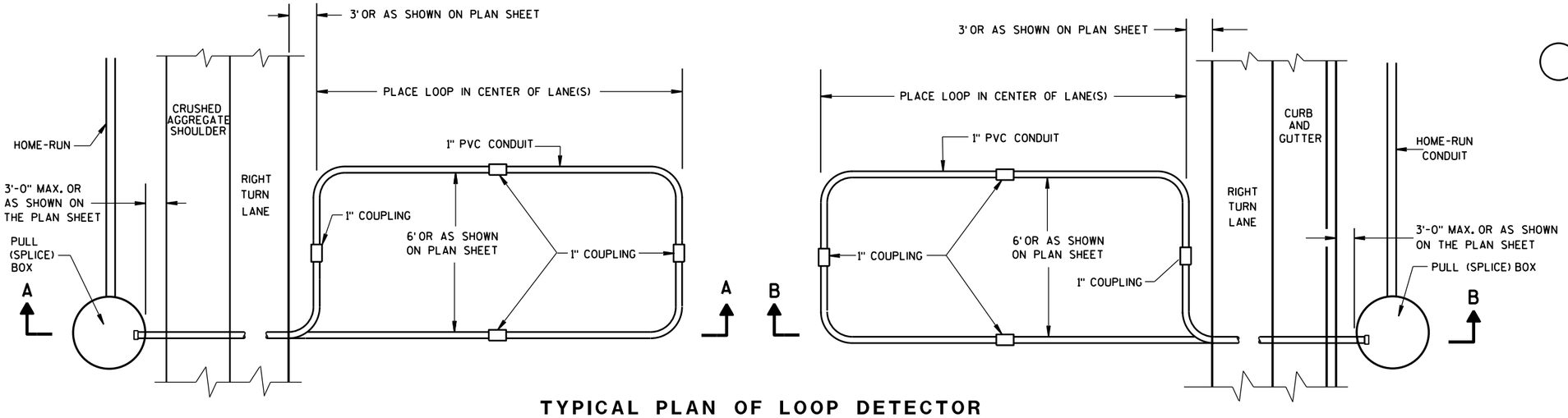
THE #12 AWG. LOOP WIRE IN THE PULL (SPLICE) BOX SHALL BE HAND TWISTED AT LEAST 3 TWISTS PER FOOT BEFORE BEING SPLICED TO THE LOOP LEAD-IN CABLE.

SPLICES OF LOOP WIRE TO LEAD-IN CABLE SHALL BE MADE ONLY IN PULL (SPLICE) BOXES AT THE SIDE OF THE ROAD.

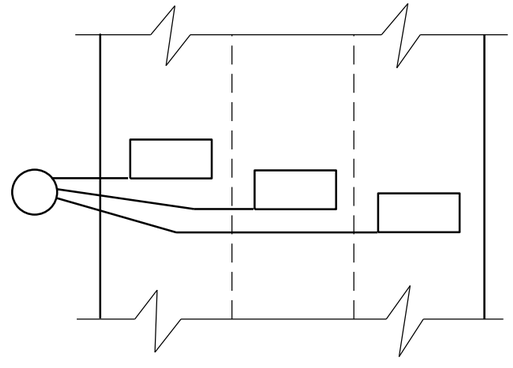
THE #12 AWG LOOP WIRE SHALL BE INSTALLED FROM THE ROADSIDE PULL (SPLICE) BOX, THROUGH THE LOOP CONDUIT, BACK TO THE ROADSIDE PULL (SPLICE) BOX, AND BE INSTALLED IN ONE, NON-SPLICED CONTINUOUS LENGTH.

PROTECTION OF THE CONDUITS IN THE BASE COURSE SHALL BE REQUIRED AFTER INSTALLATION AND BEFORE NEW PAVEMENT IS INSTALLED.

SHOULD INSTALLATION REPAIR BE REQUIRED, IT SHALL BE DONE UNDER THE DIRECTION OF THE PROJECT ENGINEER.

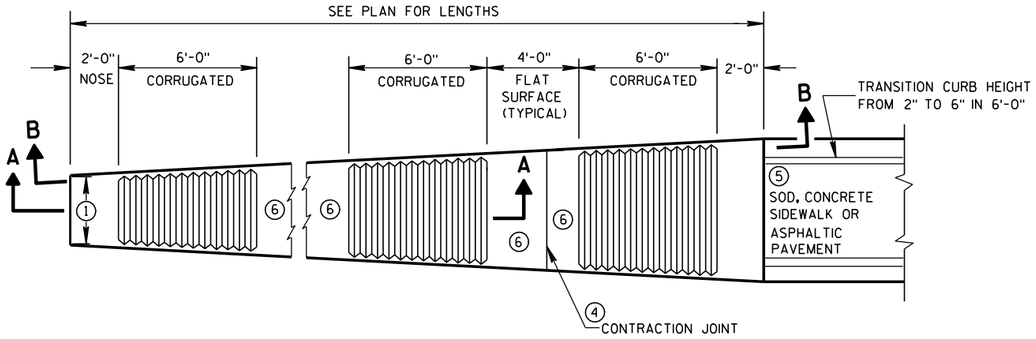


TYPICAL PLAN OF LOOP DETECTOR WITH 24" PULL (SPLICE) BOX



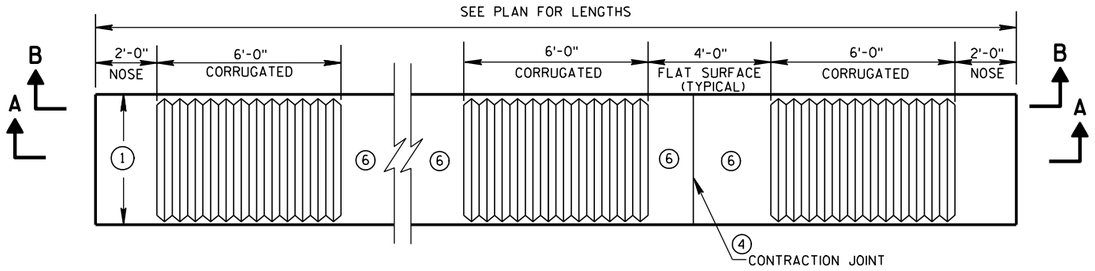
MULTI-LANE INSTALLATION

LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION
APPROVED Sept. 2014 DATE — /S/ Ahmet Demirbilek STATE ELECTRICAL FHWA



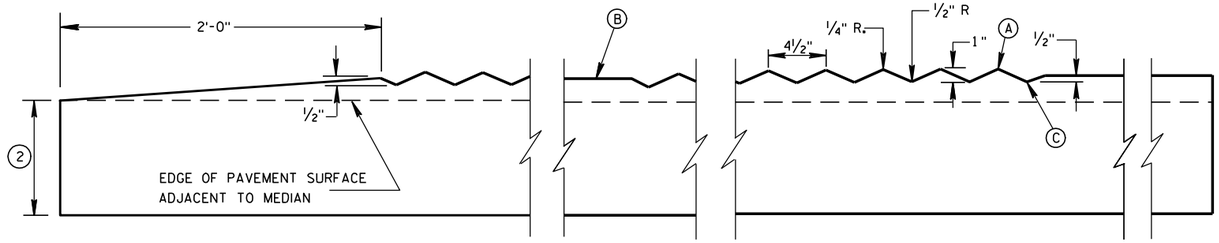
PLAN VIEW

VARIABLE WIDTH CONCRETE CORRUGATED MEDIAN



PLAN VIEW

UNIFORM WIDTH CONCRETE CORRUGATED MEDIAN



SECTION A-A

LONGITUDINAL SECTION

GENERAL NOTES

(1) SEE PLANS FOR CONSTANT OR VARIABLE WIDTH.

(2) THE DEPTH OF THE CONCRETE CORRUGATED MEDIAN SHALL BE 9-INCHES UNLESS SHOWN OTHERWISE IN THE PLAN.

ADJACENT PAVEMENT STRUCTURE DETAILS ARE SHOWN IN THE PLAN. TYPICAL OPTIONS ARE:

(1) NEW OR EXISTING CONCRETE PAVEMENT.

(2) ASPHALTIC CONCRETE OVER NEW OR EXISTING CONCRETE BASE COURSE, OR PAVEMENT.

(3) ASPHALTIC PAVEMENT OVER BASE AGGREGATE DENSE.

(3) 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.

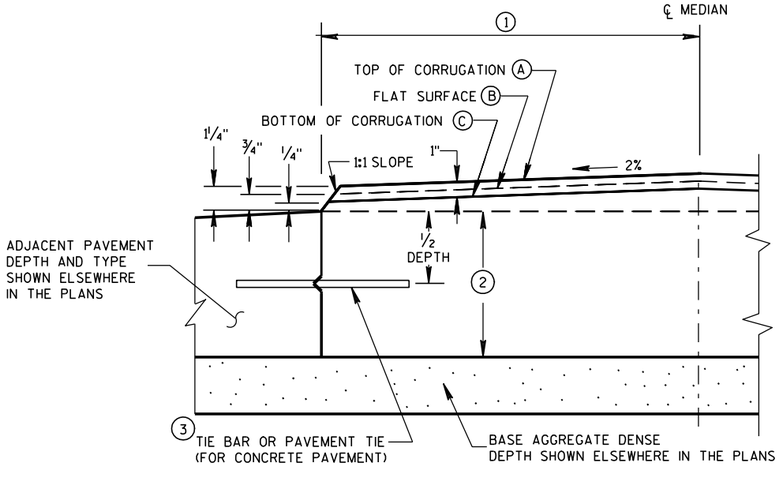
INSTALL TIE BARS TO MAINTAIN A MINIMUM OF 3-INCHES OF COVER BETWEEN THE TIE BAR AND THE CONCRETE SURFACE (BOTTOM AND TOP).

PAVEMENT TIES REQUIRED IN EXISTING CONCRETE PAVEMENT OR 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.

(4) CONCRETE CORRUGATED MEDIAN CONTRACTION JOINTS SHALL BE CONSTRUCTED TO MATCH THE JOINTS IN ADJACENT CONCRETE PAVEMENT. WHERE ADJACENT PAVEMENT IS ASPHALT WITH BASE AGGREGATE DENSE. TRANSVERSE CONTRACTION JOINTS SHALL BE PROVIDED AT 20 FOOT INTERVALS.

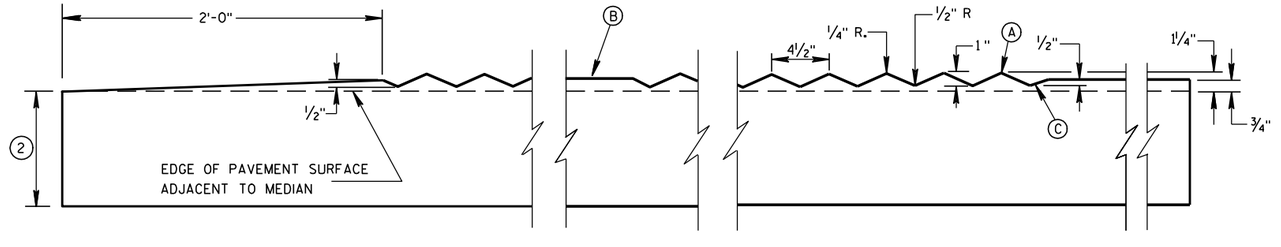
(5) SURFACE TYPE AND DETAILS ARE DEFINED ELSEWHERE IN THE PLAN.

(6) YELLOW MARKING ON FLAT SURFACE WHEN MEDIAN SEPARATES OPPOSING TRAFFIC.



HALF CROSS SECTION

(2) CONCRETE CORRUGATED MEDIAN AND ADJACENT PAVEMENT



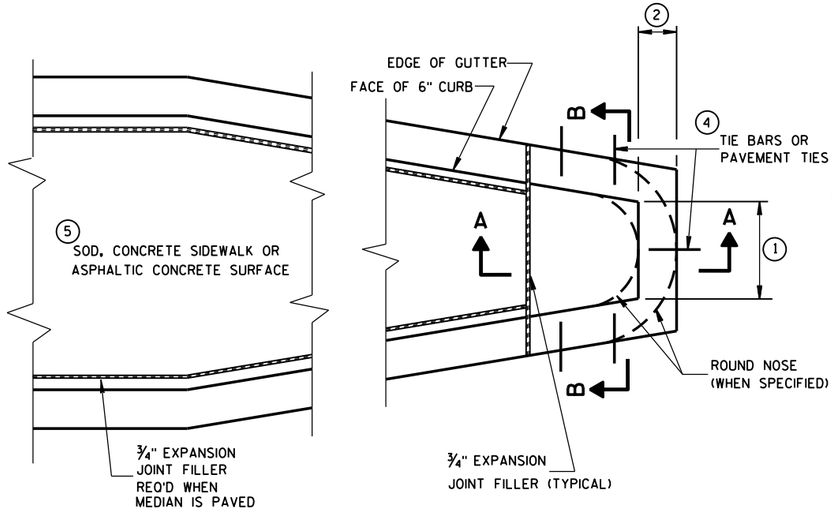
SECTION B-B

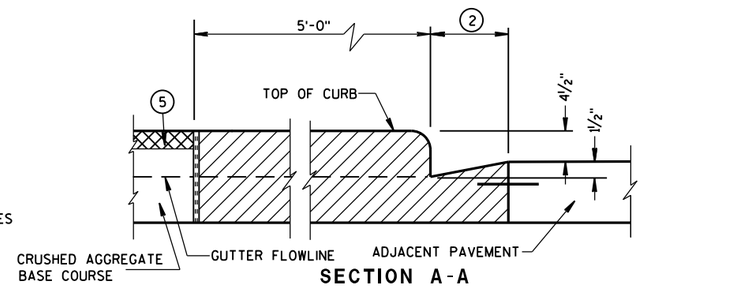
LONGITUDINAL SECTION

CONCRETE CORRUGATED MEDIAN	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED	
12/17/07 DATE	/S/ Jerry H. Zogg ROADWAY STANDARDS ENGINEER
FHWA	

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S.D.D. 11 B 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.

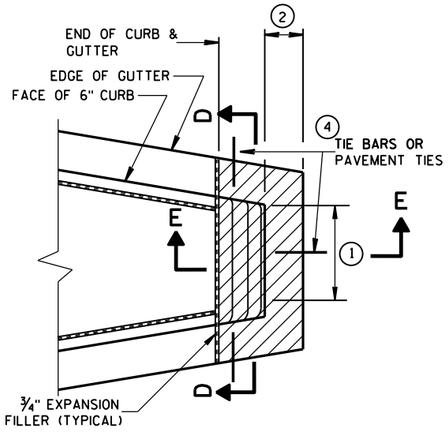
(2) ASPHALTIC CONCRETE PAVEMENT OVER NEW OR EXISTING CONCRETE BASE COURSE.

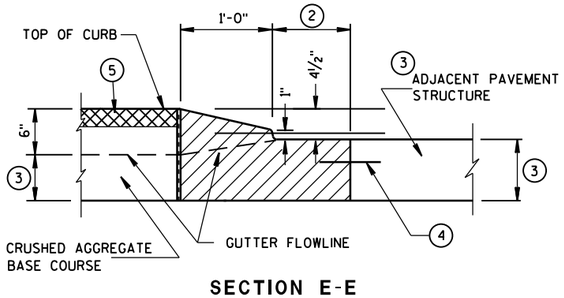
(3) ASPHALTIC CONCRETE PAVEMENT OVER CRUSHED AGGREGATE BASE COURSE.

(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.

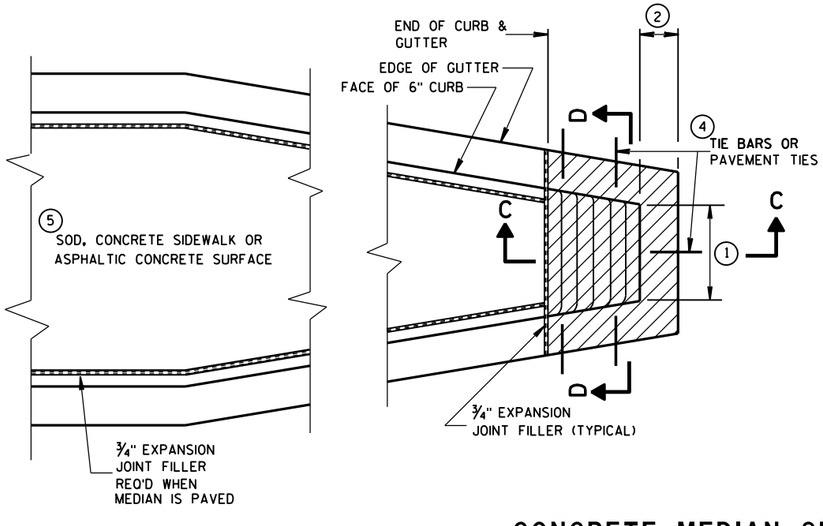
(5) SURFACE TYPE AND DETAILS ARE SHOWN ELSEWHERE IN THE PLAN.

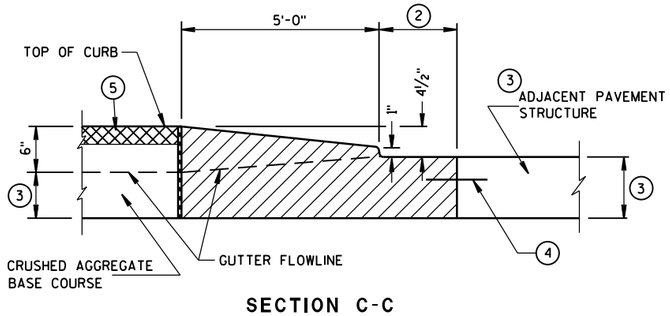




SECTION E-E

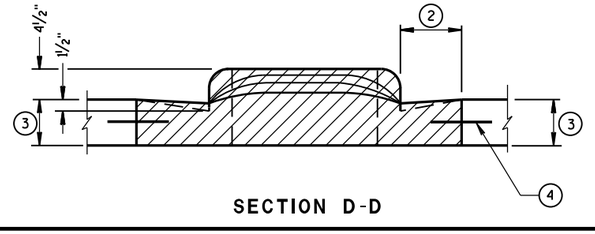
CONCRETE MEDIAN SLOPED NOSE TYPE 2





SECTION C-C

CONCRETE MEDIAN SLOPED NOSE TYPE 1



SECTION D-D

CONCRETE MEDIAN NOSE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

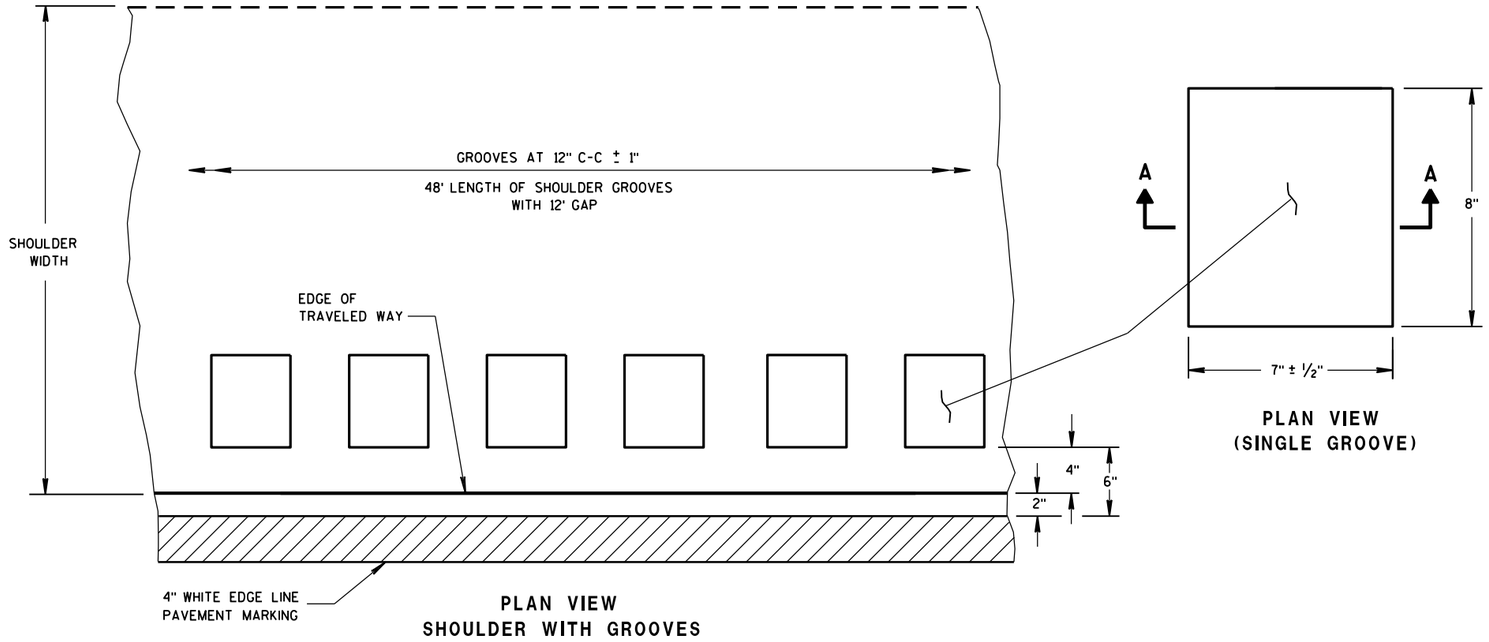
APPROVED
6/8/2006
DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS D ENGINEER
FHWA

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S.D.D. 11 B 2-2

6

S.D.D. 11 B 2-2



PLAN VIEW
SHOULDER WITH GROOVES

PLAN VIEW
(SINGLE GROOVE)

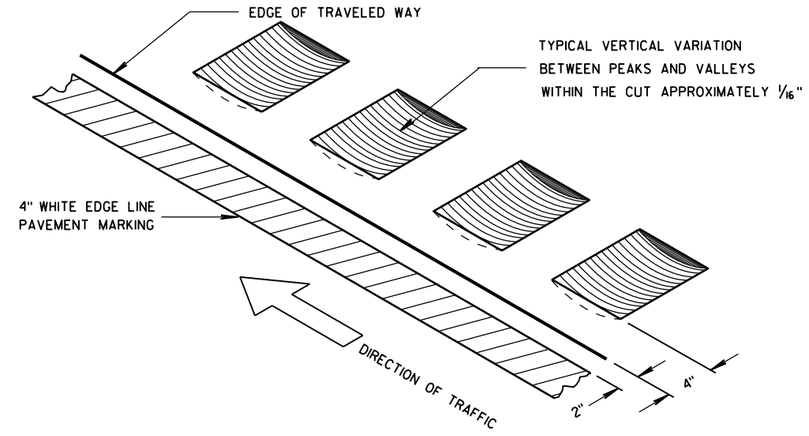
PLACEMENT DETAIL FOR TYPE 1 MILLED RUMBLE STRIP

GENERAL NOTES

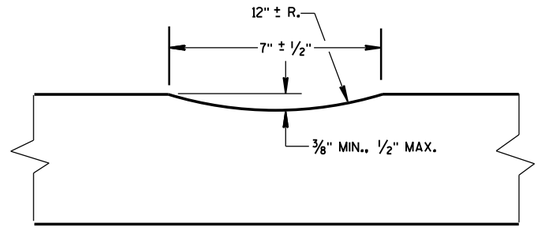
DETAILS OF CONSTRUCTION SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

DO NOT MILL SHOULDER GROOVES THROUGH ANY INTERSECTION, MARKED CROSSWALK, NON-MOTORIZED PATH CROSSING, OR SNOWMOBILE CROSSING.

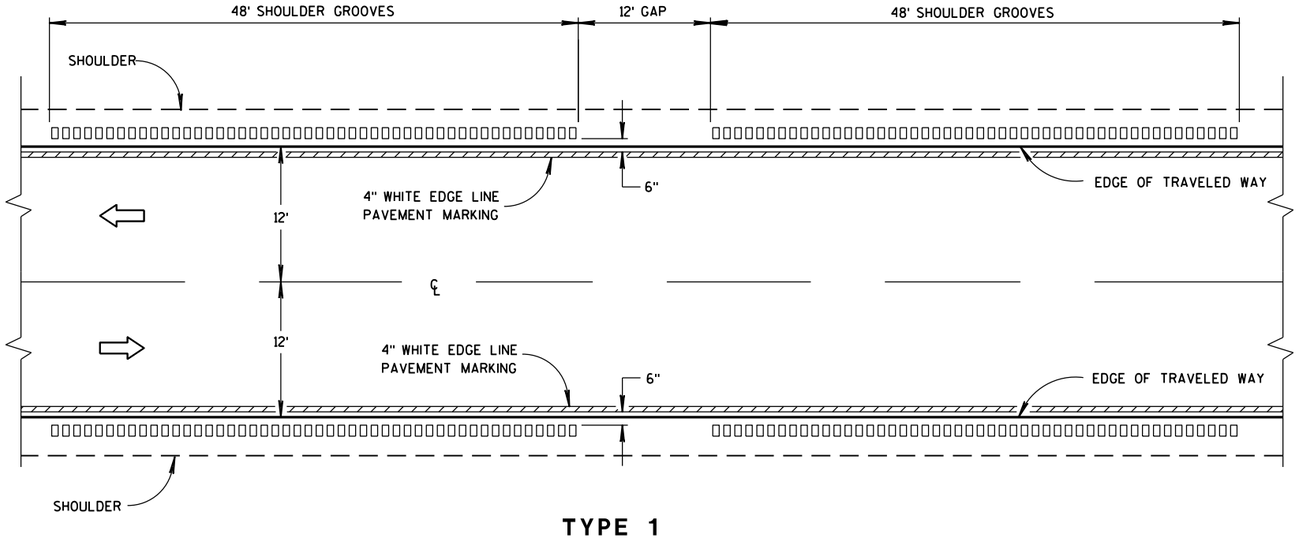
(1) SHOULDER GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS, WHEN DIRECTED BY THE ENGINEER.



ISOMETRIC



SECTION A-A



TYPE 1
2-LANE SHOULDER RUMBLE STRIP

2-LANE RURAL
SHOULDER RUMBLE STRIP, MILLING

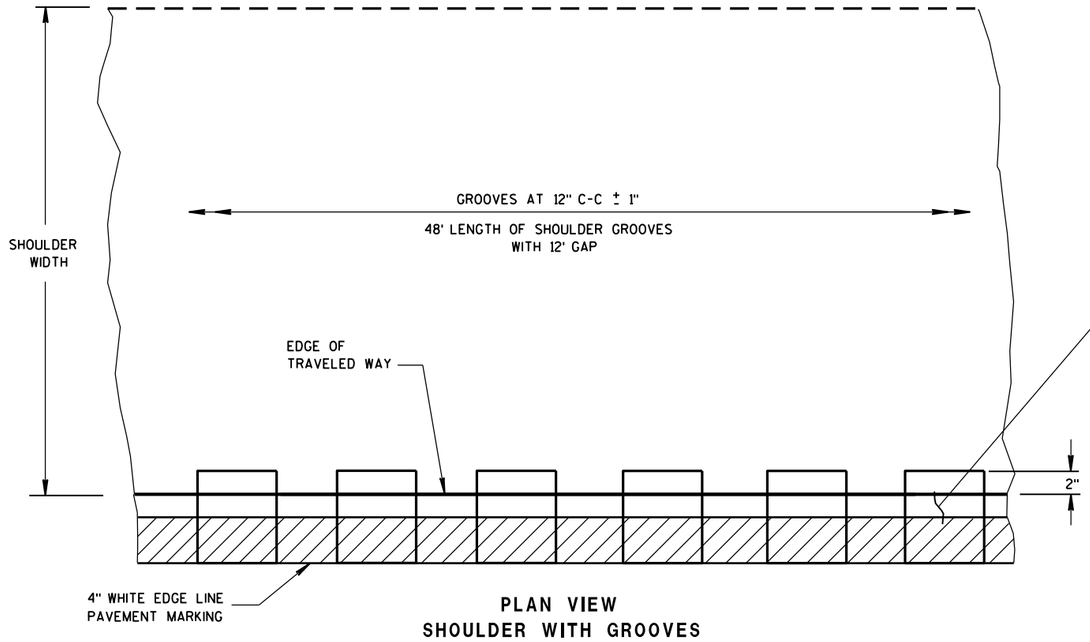
STATE OF WISCONSIN
DEPARTMENT OF TRANSPO

6

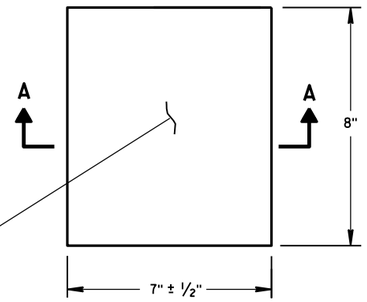
S.D.D. 13 A 10-1a

6

S.D.D. 13 A 10-1a



PLAN VIEW
SHOULDER WITH GROOVES



PLAN VIEW
(SINGLE GROOVE)

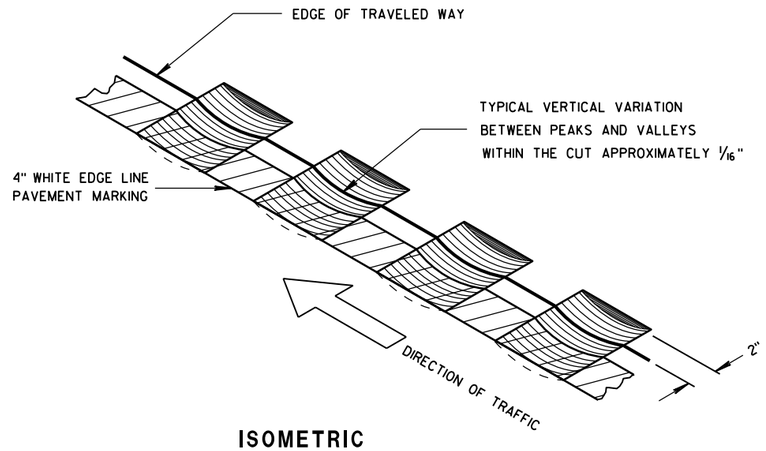
PLACEMENT DETAIL FOR TYPE 2 MILLED RUMBLE STRIP

GENERAL NOTES

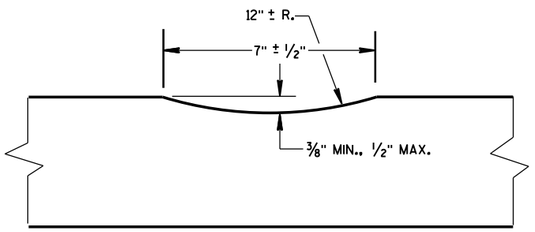
DETAILS OF CONSTRUCTION SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

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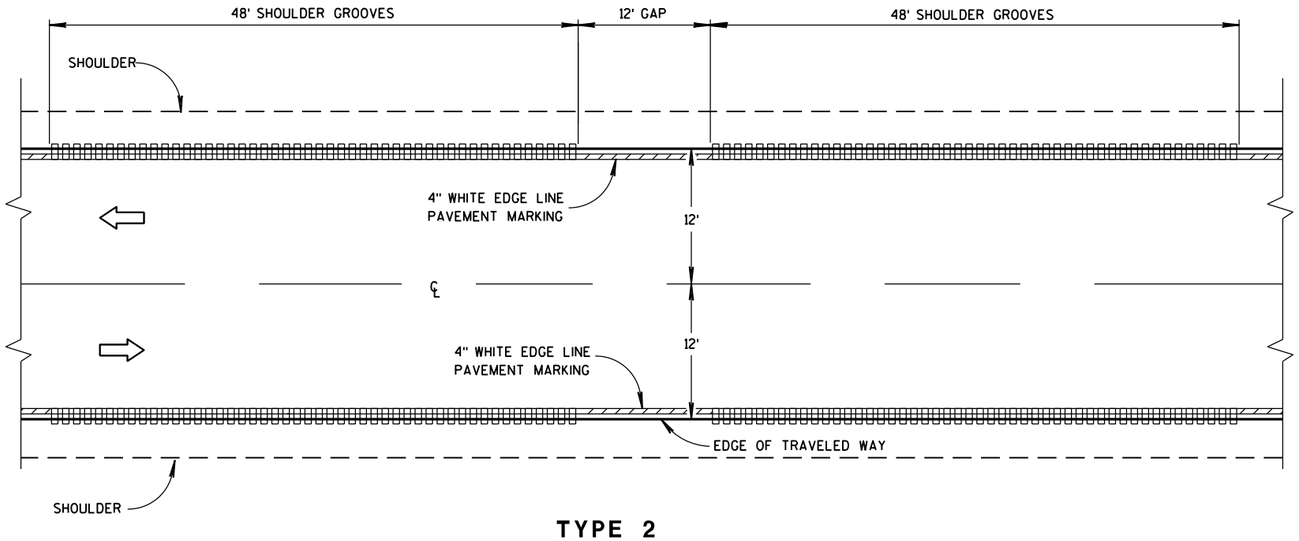
(1) SHOULDER GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS, WHEN DIRECTED BY THE ENGINEER.



ISOMETRIC



SECTION A-A



TYPE 2
2-LANE SHOULDER RUMBLE STRIP

2-LANE RURAL
SHOULDER RUMBLE STRIP, MILLING

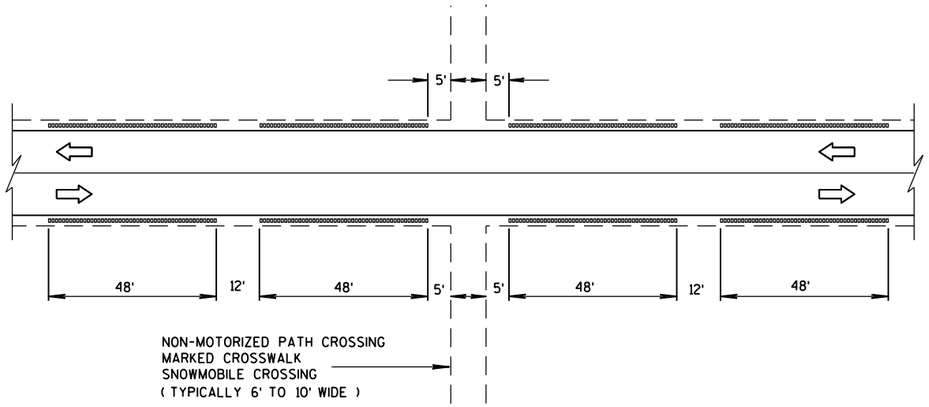
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

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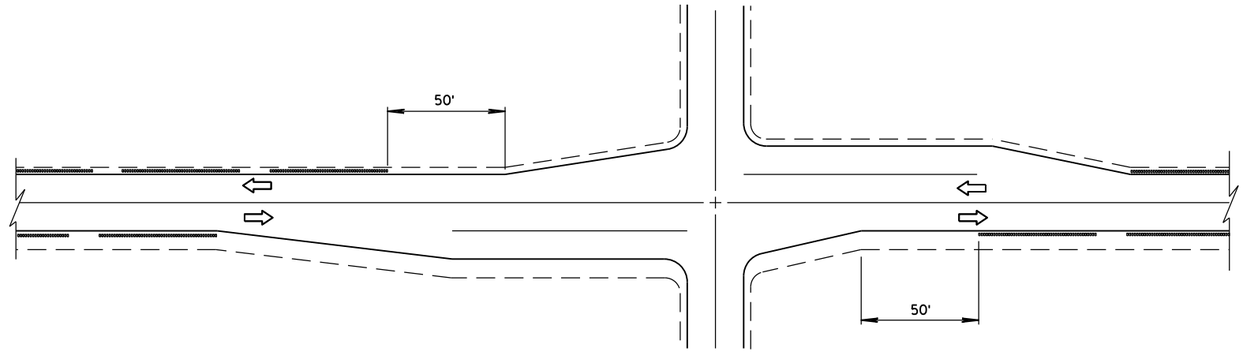
S.D.D. 13 A 10-1b

6

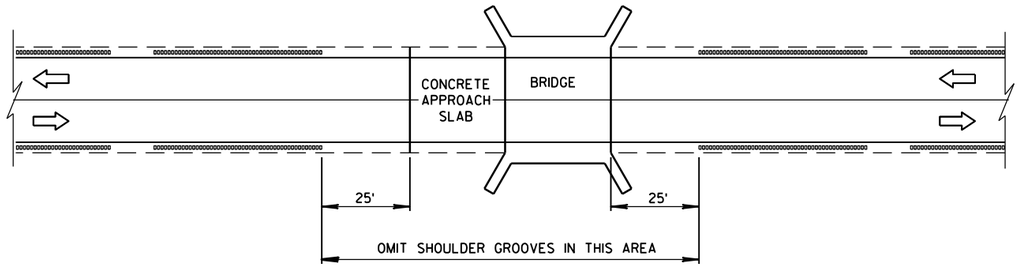
S.D.D. 13 A 10-1b



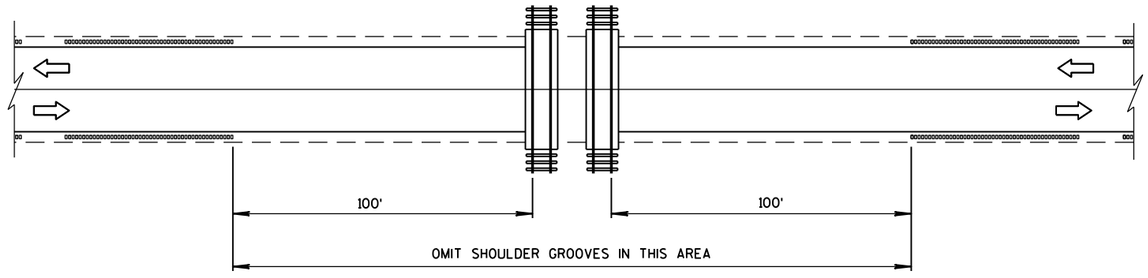
SHOULDER GROOVES AT MISCELLANEOUS CROSSINGS



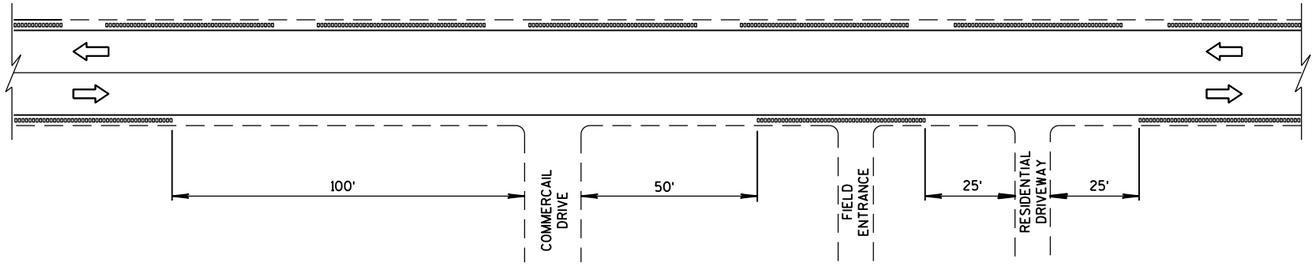
SHOULDER GROOVES AT INTERSECTIONS



SHOULDER GROOVES AT BRIDGES



SHOULDER GROOVES AT RAILROADS

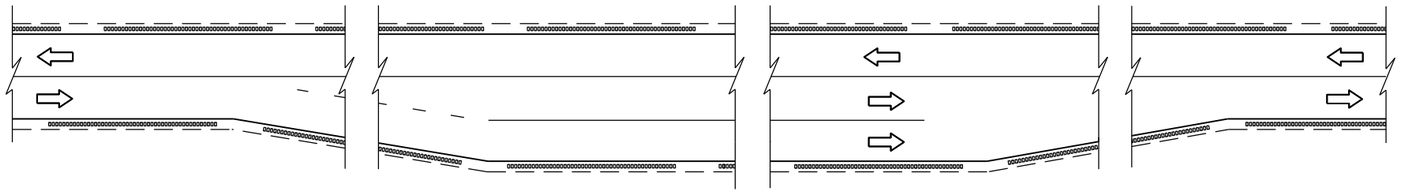


SHOULDER GROOVES AT DRIVEWAYS (1)

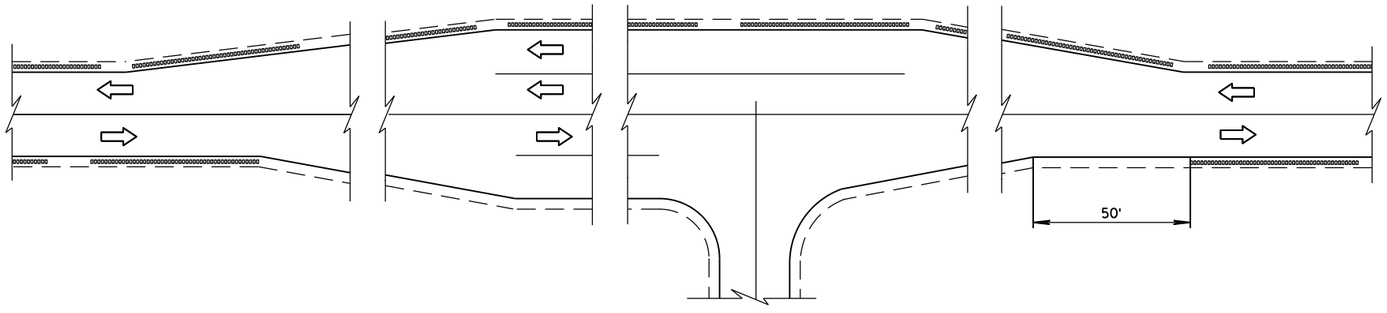
2-LANE RURAL
SHOULDER RUMBLE STRIP, MILLING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6
S.D.D. 13 A 10-1c



SHOULDER GROOVES AT PASSING AND CLIMBING LANES



SHOULDER GROOVES AT BYPASS LANES

6

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S.D.D. 13 A 10-1d

S.D.D. 13 A 10-1d

2-LANE RURAL
SHOULDER RUMBLE STRIP, MILLING

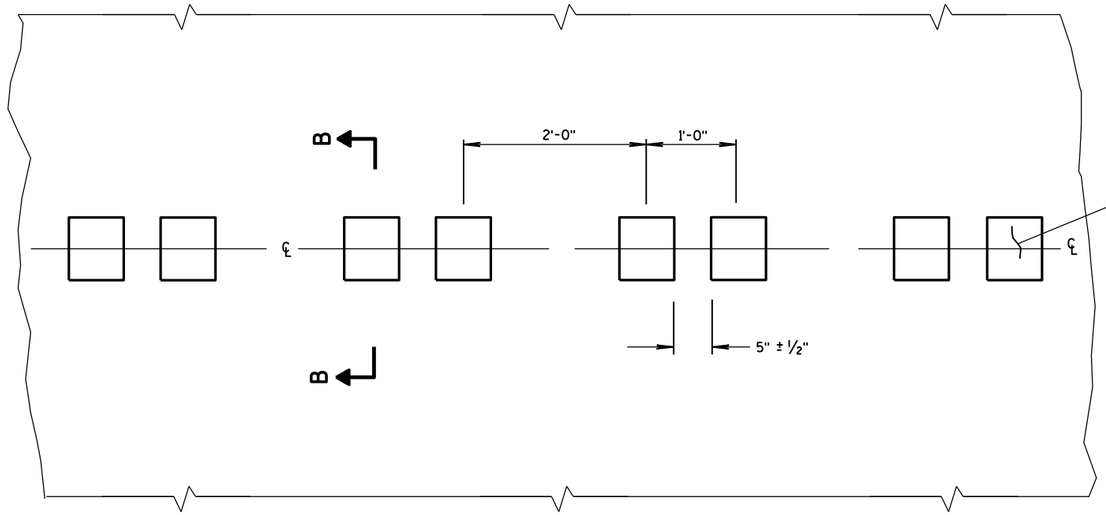
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

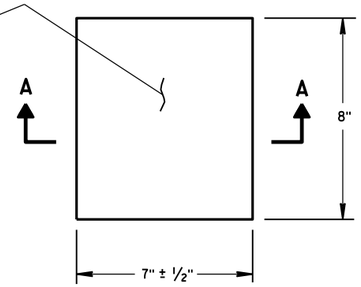
12/17/2012
DATE

/S/ Jerry H. Zoga
ROADWAY STANDARDS ENGINEER

FHWA



PLAN VIEW
CENTER LINE WITH GROOVES



PLAN VIEW
(SINGLE GROOVE)

PLACEMENT DETAIL FOR MILLED RUMBLE STRIP

GENERAL NOTES

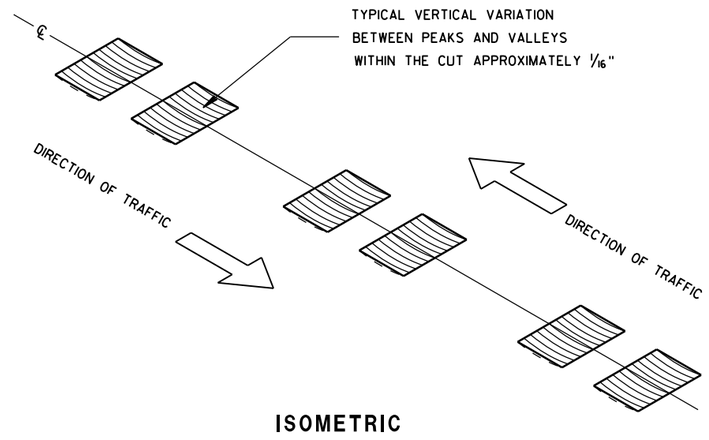
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DO NOT MILL CENTER LINE GROOVES THROUGH ANY INTERSECTION, MARKED CROSSWALK, NON-MOTORIZED PATH CROSSING, OR SNOWMOBILE CROSSING.

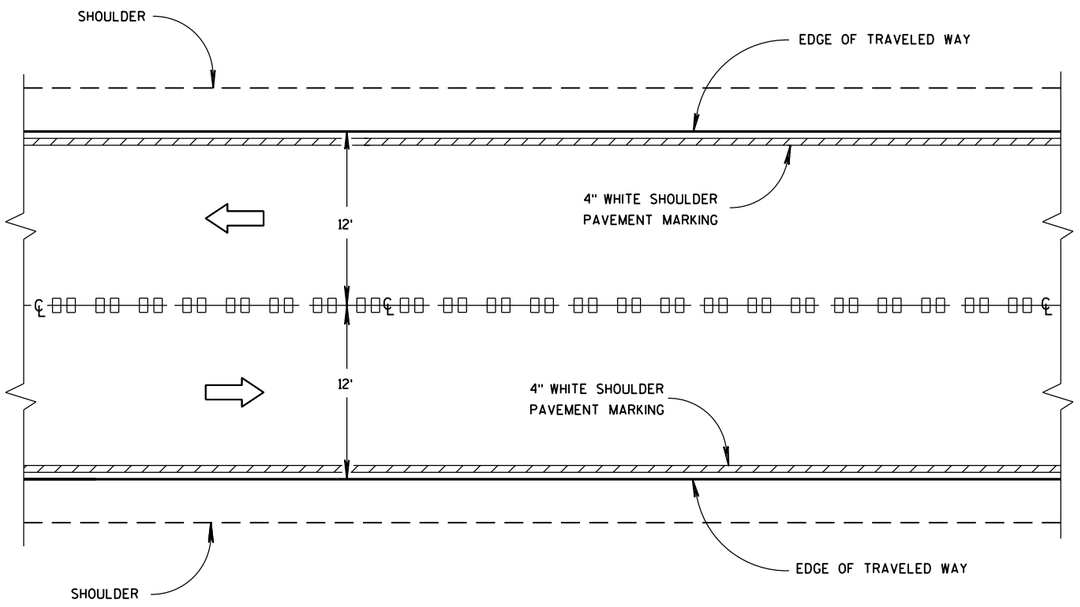
INSTALL PAVEMENT MARKING AFTER THE GROOVES ARE INSTALLED.

SEE SIGNING PLAN FOR SIGN REQUIREMENTS THAT MAY BE NEEDED.

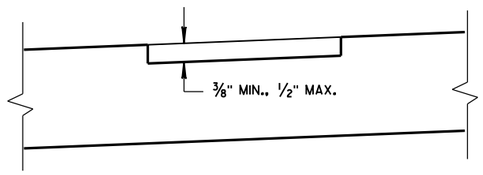
(1) CENTERLINE GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS, WHEN DIRECTED BY THE ENGINEER.



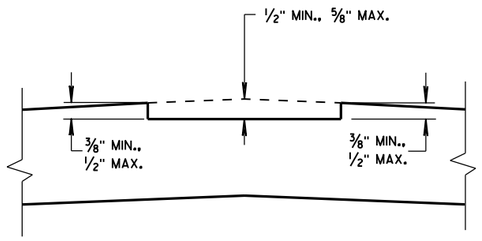
ISOMETRIC



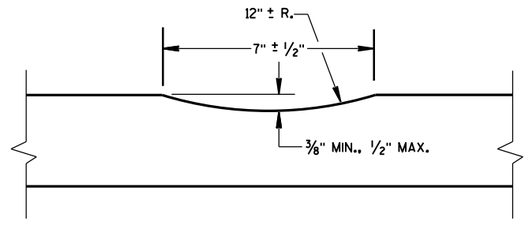
CENTER LINE GROOVES ON TWO-WAY ROADWAYS



SECTION B-B
SUPERELEVATED ROADWAY



SECTION B-B
CROWNED ROADWAY



SECTION A-A

6

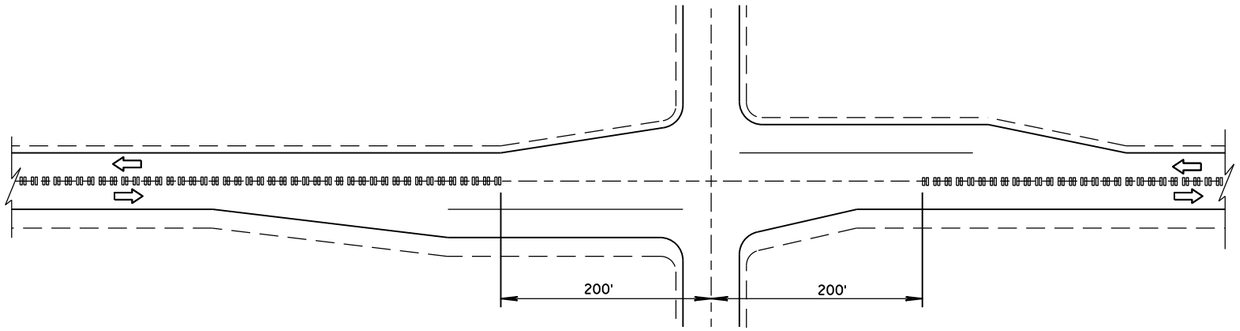
S.D.D. 13 A 11-2a

2-LANE RURAL
CENTER LINE RUMBLE STRIP,
MILLING

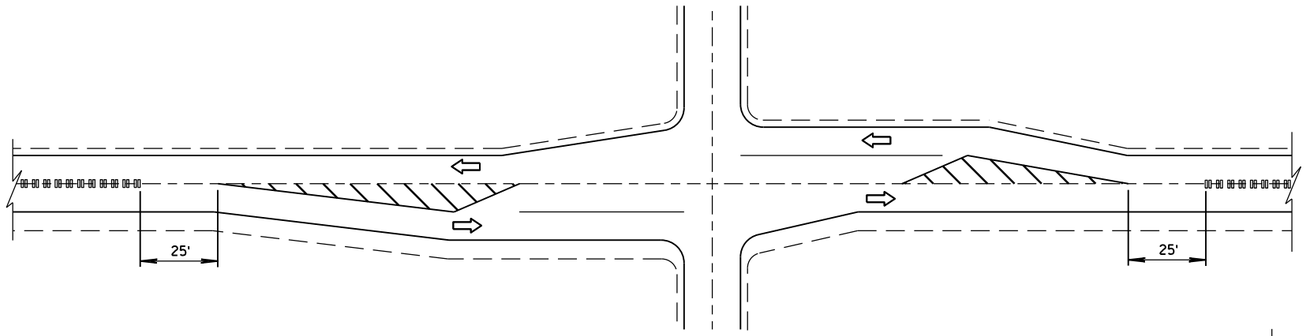
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

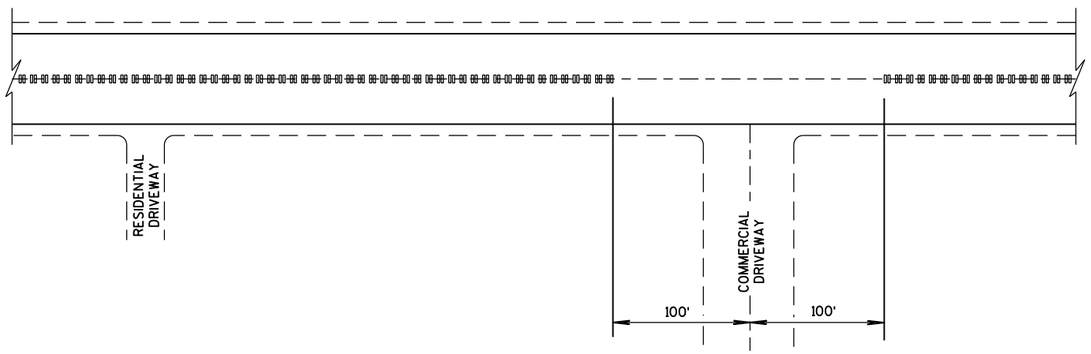
S.D.D. 13 A 11-2a



CENTER LINE GROOVES AT INTERSECTIONS

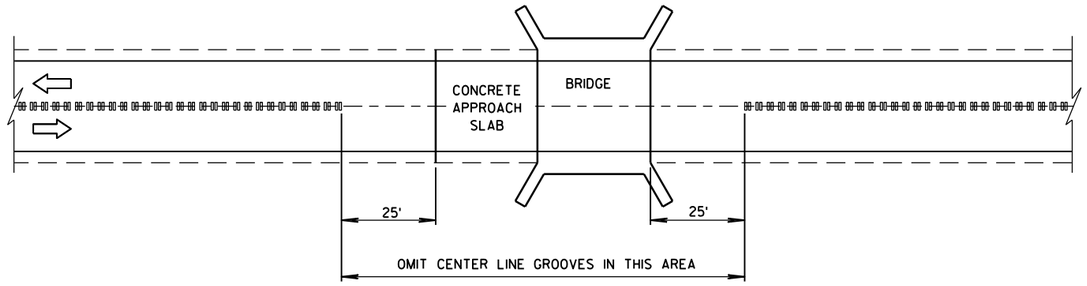


CENTER LINE GROOVES AT INTERSECTIONS
(WITH LEFT TURN LANES)

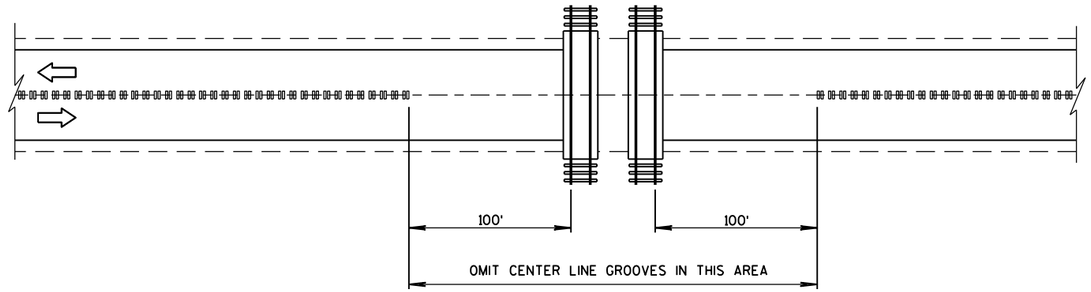


CENTER LINE GROOVES AT DRIVEWAYS (1)

(1) CENTERLINE GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS, WHEN DIRECTED BY THE ENGINEER.



CENTER LINE GROOVES AT BRIDGES



CENTER LINE GROOVES AT RAILROADS

6

S.D.D. 13 A 11-2b

6

S.D.D. 13 A 11-2b

2-LANE RURAL
CENTER LINE RUMBLE STRIP, MILLING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

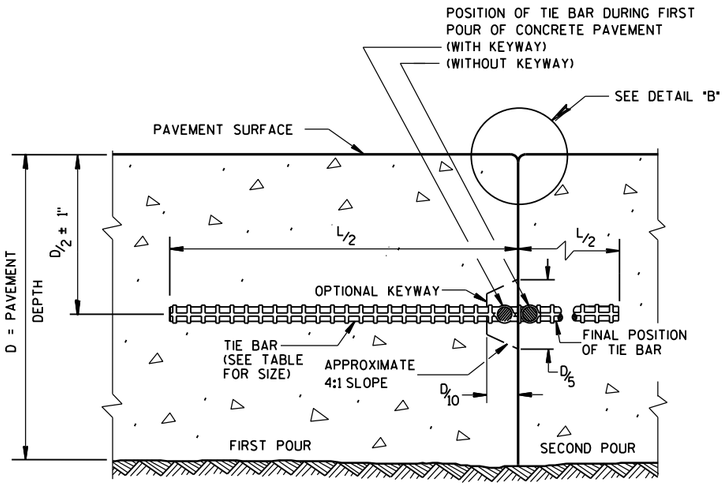
APPROVED

5/15/2013
DATE

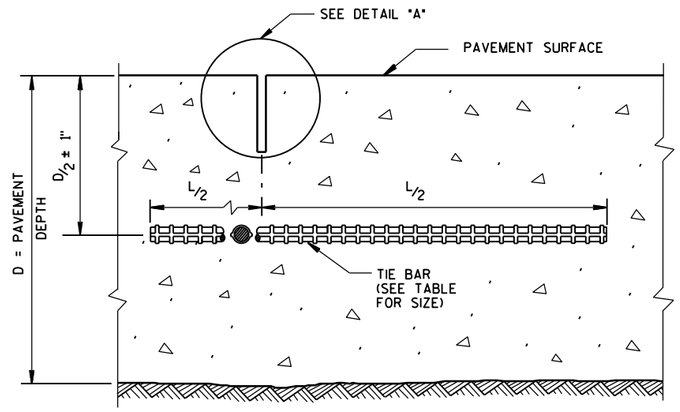
/S/ Jerry H. Zoda
ROADWAY STANDARDS DEVELOPMENT ENGINEER

NT

FHWA



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"

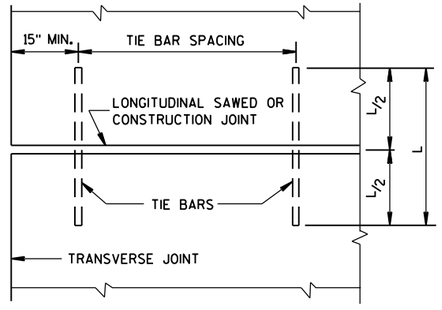
DETAIL "C"

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.



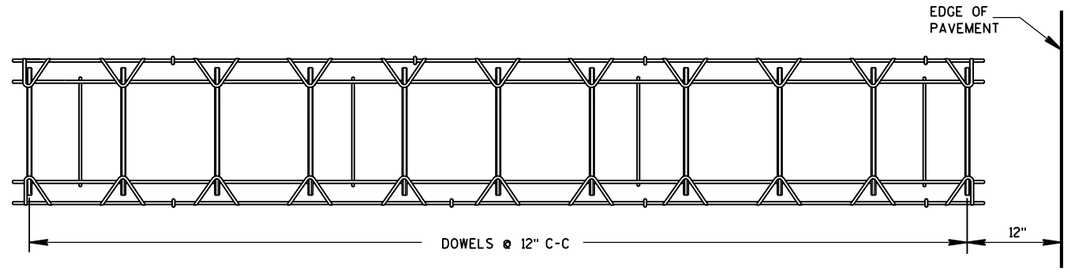
PLAN VIEW
SHOWING LOCATION OF TIE BARS

CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2015 — DATE
/S/ Peter Kemp, P.E. — PAVEMENT SUPER
FHWA

6
S.D.D. 13 C 1-18

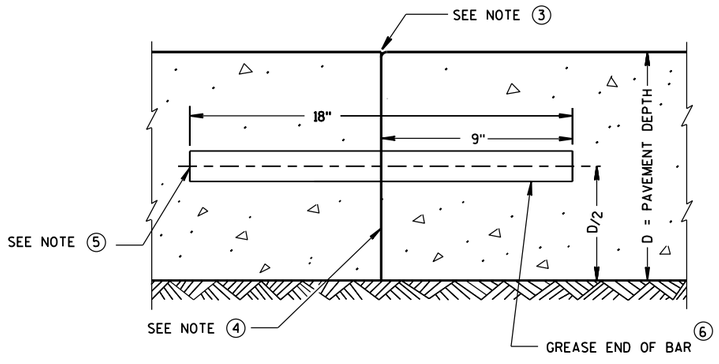


PLAN VIEW

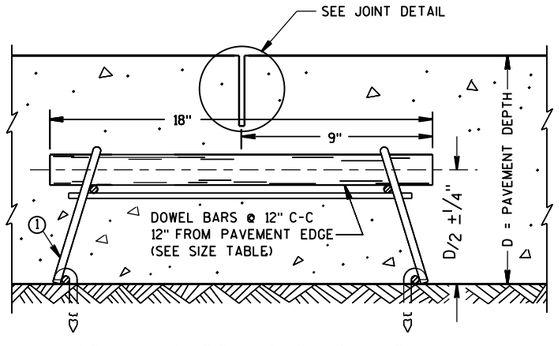


SIDE VIEW

CONTRACTION JOINT DOWEL ASSEMBLY ①



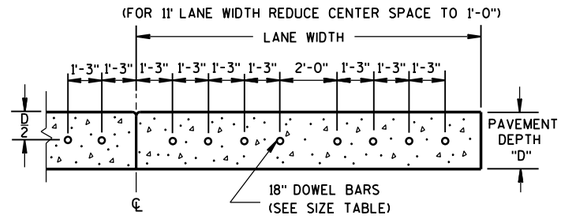
TRANSVERSE CONSTRUCTION JOINT



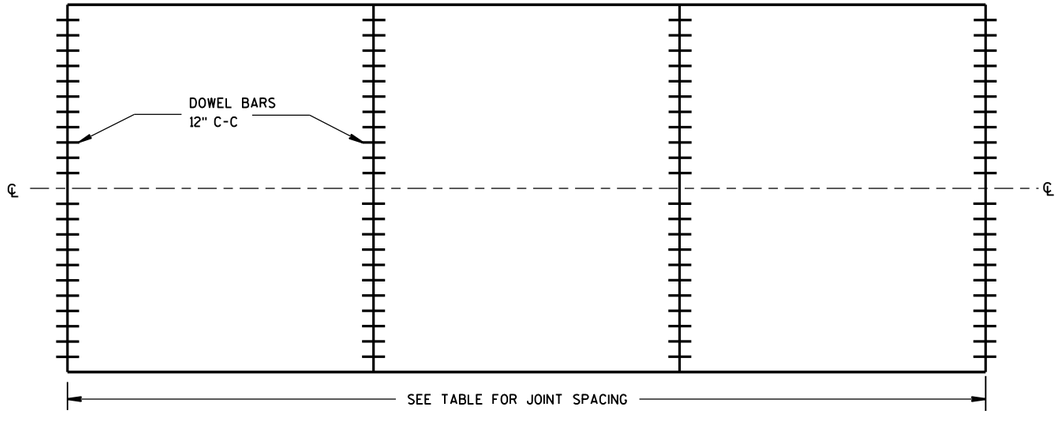
DOWELED CONTRACTION JOINT

PAVEMENT DEPTH, DOWEL BAR SIZE AND JOINT SPACING TABLE

PAVEMENT DEPTH (D)	DOWEL BAR DIAMETER	CONTRACTION JOINT SPACING
5 ½", 6", 6 ½"	NONE	12'
7", 7 ½"	1"	14'
8", 8 ½"	1 ¼"	15'
9", 9 ½"	1 ¼"	15'
10" & ABOVE	1 ½"	15'



DRILLED DOWEL BAR CONSTRUCTION JOINT ⑦



CONTRACTION JOINT LOCATIONS

GENERAL NOTES

CONTRACTION JOINTS

CONSTRUCT TRANSVERSE CONTRACTION JOINTS NORMAL TO THE CENTERLINE. SHOW THE LOCATION OF CONTRACTION JOINTS THROUGH INTERSECTIONS ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

DO NOT SEAL OR FILL CONTRACTION JOINTS.

INSTALL DOWEL BARS PARALLEL TO THE PAVEMENT CENTERLINE AND PAVEMENT SURFACE.

FOR PAVEMENT SLABS OF VARYING WIDTHS, LOCATE THE OUTER MOST DOWEL BAR SO THAT THE CENTER OF THE BAR IS A MINIMUM OF 6 INCHES AND A MAXIMUM OF 18 INCHES FROM THE LONGITUDINAL JOINT AND THE FREE EDGE OF PAVEMENT.

CONSTRUCTION JOINTS

LOCATE CONSTRUCTION JOINTS A MINIMUM OF 6 FEET FROM THE NEAREST CONTRACTION JOINT AND ALIGN PARALLEL TO CONTRACTION JOINTS.

① **OBTAIN THE ENGINEER'S APPROVAL FOR THE USE OF ALTERNATIVE DESIGNS OF THE DOWEL ASSEMBLY. USE MECHANICAL DOWEL BAR INSERTERS OR DOWEL ASSEMBLIES WHEN CONSTRUCTING CONTRACTION JOINTS.**

② SECURE BASKETS WITH ANCHORS TO HOLD DOWEL BARS IN THE CORRECT POSITION AND ALIGNMENT. TYPE, LOCATION, NUMBER AND LENGTH OF ANCHORS ARE DEPENDENT UPON FIELD CONDITIONS.

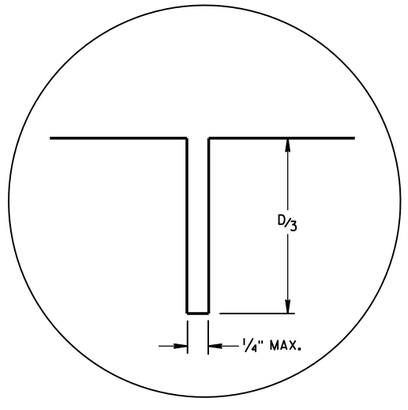
③ FORM OR SAW CONSTRUCTION JOINTS. PROVIDE A ¼-INCH RADIUS AT FORMED JOINTS.

④ PROVIDE A SMOOTH VERTICAL FACE FOR THE ENTIRE DEPTH OF THE PAVEMENT WHEN FORMING CONSTRUCTION JOINTS.

⑤ INSTALL DOWEL BARS AT CONSTRUCTION JOINTS BY FORMING OR DRILLING. INSTALL FORMED DOWEL BARS 12 INCHES C-C AND 12 INCHES FROM PAVEMENT EDGE. REMOVE EXCESS CONCRETE FROM THE FREE END OF THE DOWEL BAR IF DOWEL BARS ARE FORMED THROUGH A HEADER BOARD. INSTALL DRILLED DOWEL BARS ACCORDING TO *DRILLED DOWEL BAR CONSTRUCTION JOINT* DETAIL.

⑥ APPLY A THIN UNIFORM COATING OF SURFACE TREATMENT TO THE FREE END OF DOWEL BARS TO PREVENT BONDING.

⑦ ANCHOR DOWEL BARS INTO DRILLED HOLES WITH AN EPOXY. MAXIMUM DRILLED HOLE SIZE IS ⅛-INCH GREATER THAN DOWEL BAR DIAMETER, 9 INCHES IN LENGTH.



JOINT DETAIL

URBAN DOWELED CONCRETE PAVEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
5/3/2013 DATE
/S/ Deb Bischoff
PAVEMENT POLICY & DE ENGINEER
FHWA

6

S.D.D. 13 C 13-8

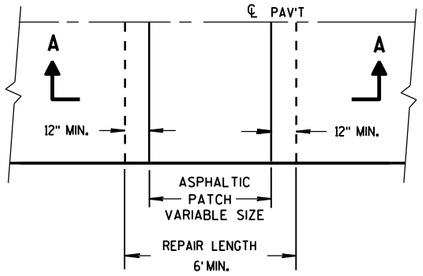
GENERAL NOTES

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.

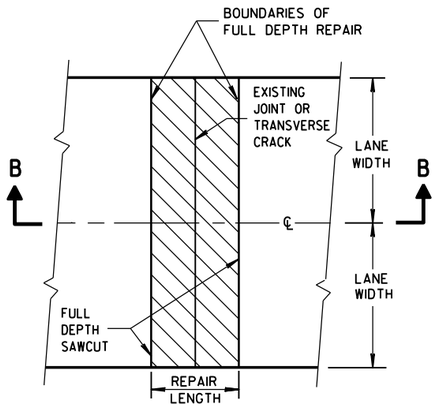
PROVIDE 6-FOOT MINIMUM DISTANCE FROM BOUNDARIES OF CONCRETE REPAIR AREAS TO ADJACENT TRANSVERSE JOINT OR CRACK.

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.

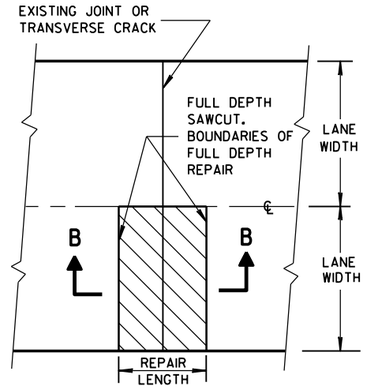
(1) DOWEL BARS MIGHT NOT EXIST.



PLAN VIEW

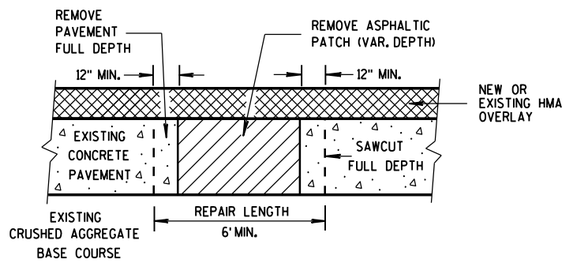


PLAN VIEW
(DOUBLE LANE REPAIR)



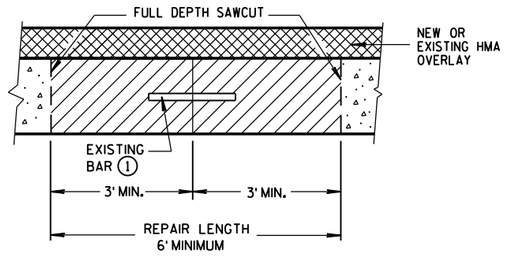
PLAN VIEW
(SINGLE LANE REPAIR)

FULL DEPTH CONCRETE PAVEMENT REMOVAL



SECTION A-A

HMA PATCH REMOVAL



SECTION B-B

CONCRETE REMOVAL

BASE PATCHING CONCRETE

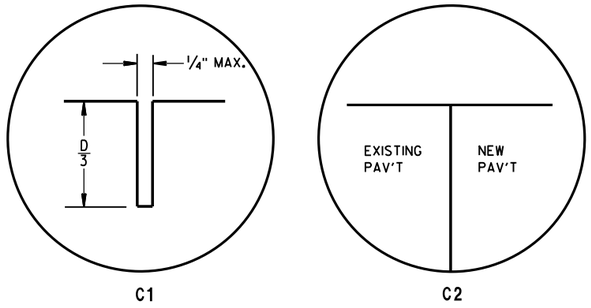
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

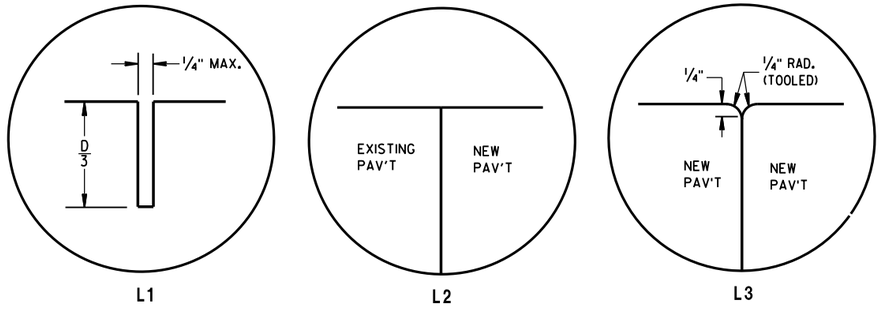
S.D.D. 13 C 14-6a

6

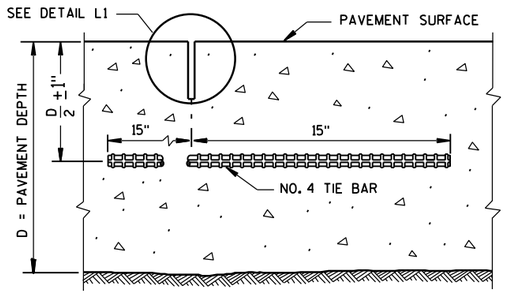
S.D.D. 13 C 14-6a



TRANSVERSE JOINTS

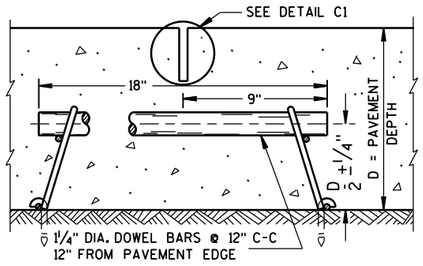


LONGITUDINAL JOINTS



SECTION C-C

SAWED LONGITUDINAL JOINT



SECTION F-F

CONTRACTION JOINT

GENERAL NOTES

INSTALL DOWEL BARS PARALLEL TO THE PAVEMENT CENTERLINE AND PAVEMENT SURFACE.

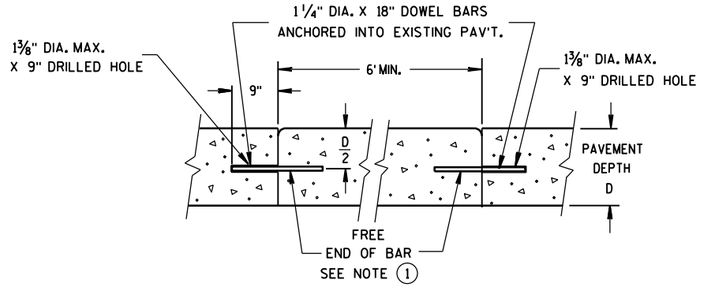
CONCRETE BASE PATCHES OF EXISTING NONDOWELED CONCRETE PAVEMENTS DO NOT NEED TO BE DOWELED.

DO NOT SEAL OR FILL JOINTS.

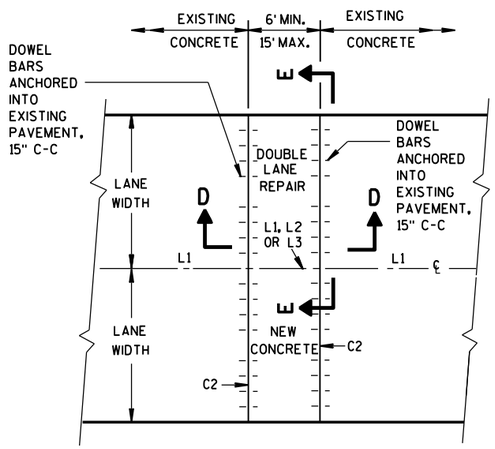
ANCHOR DOWEL BARS AND TIE BARS INTO DRILLED HOLES WITH AN EPOXY.

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.

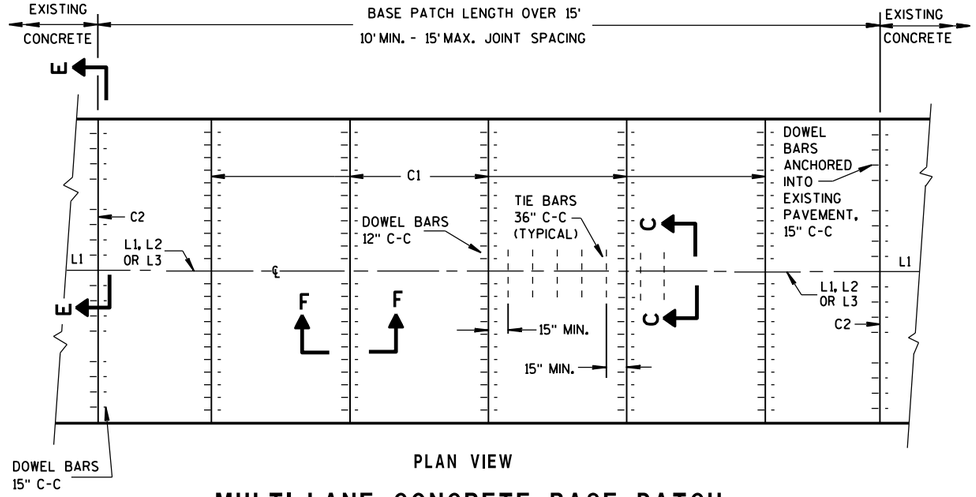


SECTION D-D



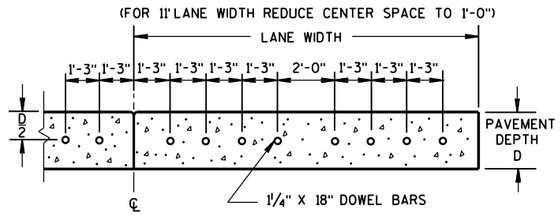
PLAN VIEW

MULTI-LANE CONCRETE BASE PATCH 15' MAXIMUM LENGTH



PLAN VIEW

MULTI-LANE CONCRETE BASE PATCH GREATER THAN 15' IN LENGTH



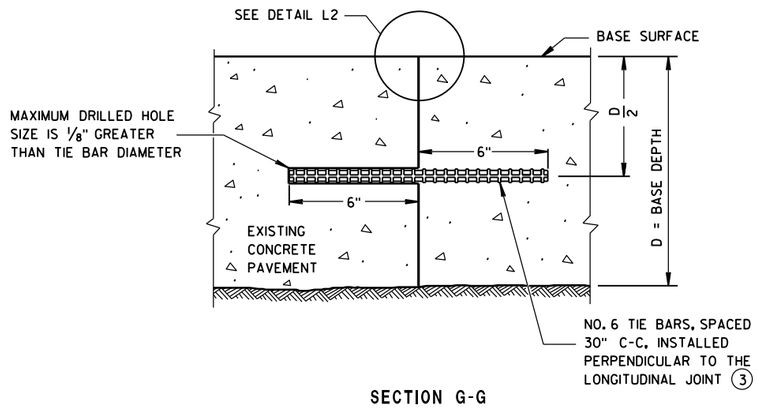
SECTION E-E

SPACING OF DOWEL BARS ANCHORED INTO EXISTING PAVEMENT

BASE PATCHING CONCRETE

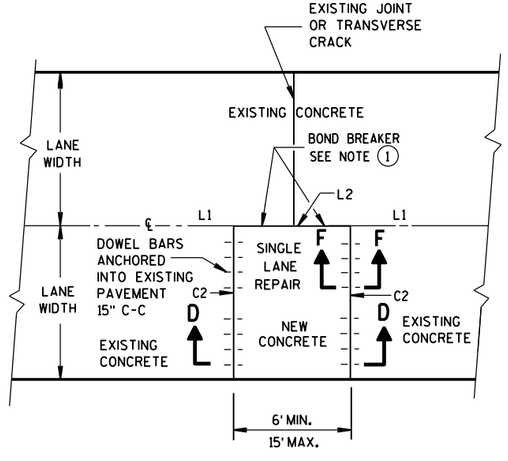
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6
S.D.D. 13 C 14-6b



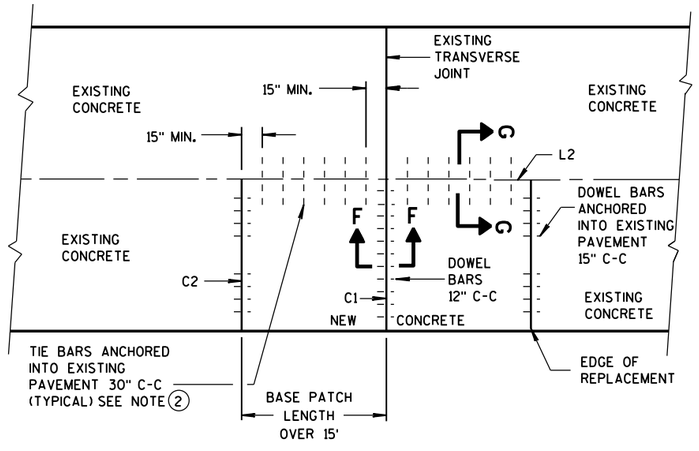
SECTION G-G

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

6
S.D.D. 13 C 14-6c

GENERAL NOTES

PCCP = PORTLAND CEMENT CONCRETE PAVEMENT.

SHLDR = SHOULDER.

CONTINUE SAW CUT CONTRACTION JOINT ACROSS TURN LANE, EXIT TAPER AND PASSING LANE.

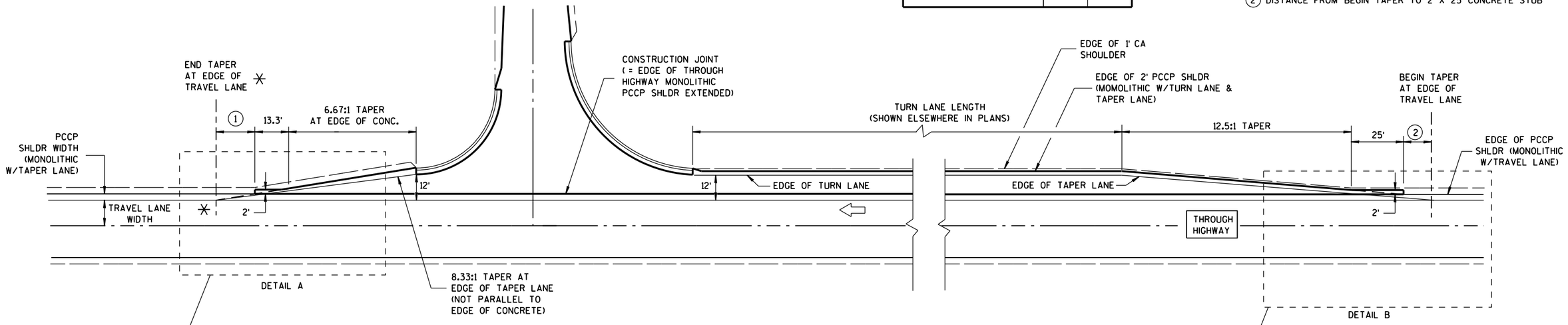
PAVEMENT MARKING DETAILS AND SPECIFICATIONS ARE PROVIDED ELSEWHERE IN THE CONTRACT.

THROUGH HIGHWAY LANE WIDTH AND PCCP SHOULDER WIDTH ARE SHOWN ELSEWHERE IN PLANS

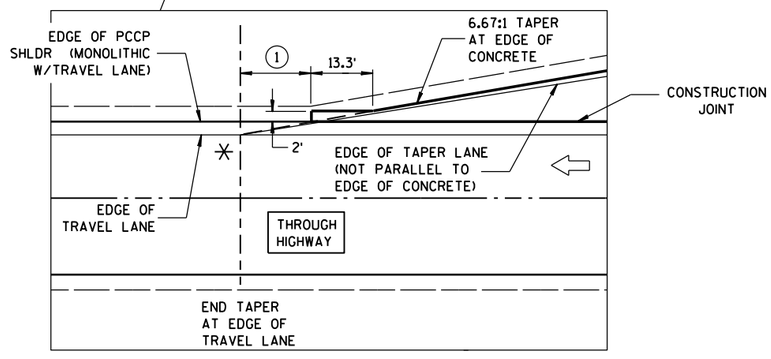
(1) DISTANCE FROM END TAPER TO 2' X 13.3' CONCRETE STUB

(2) DISTANCE FROM BEGIN TAPER TO 2' X 25' CONCRETE STUB

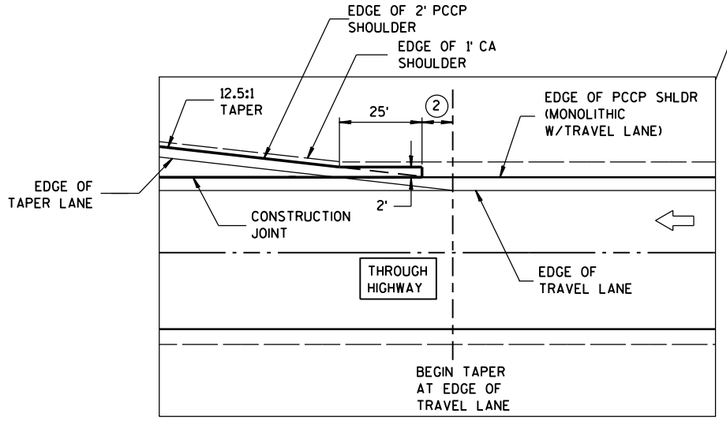
THROUGH HIGHWAY MONOLITHIC PCCP SHOULDER WIDTH (FEET)	DISTANCE (FEET)	
	(1)	(2)
2	13.3	0.0
3	20.0	12.5
TAPER RATE : 1	6.67	12.5



NOTE: EDGE OF CONCRETE TAPER (EXTENDED) & EDGE OF TAPER LANE CONVERGE



DETAIL A



DETAIL B

RIGHT TURN LANE AND EXIT TAPER

DETAIL FOR RIGHT TURN LANE/ TEE INTERSECTION BYPASS LANE ON A CONCRETE ROADWAY

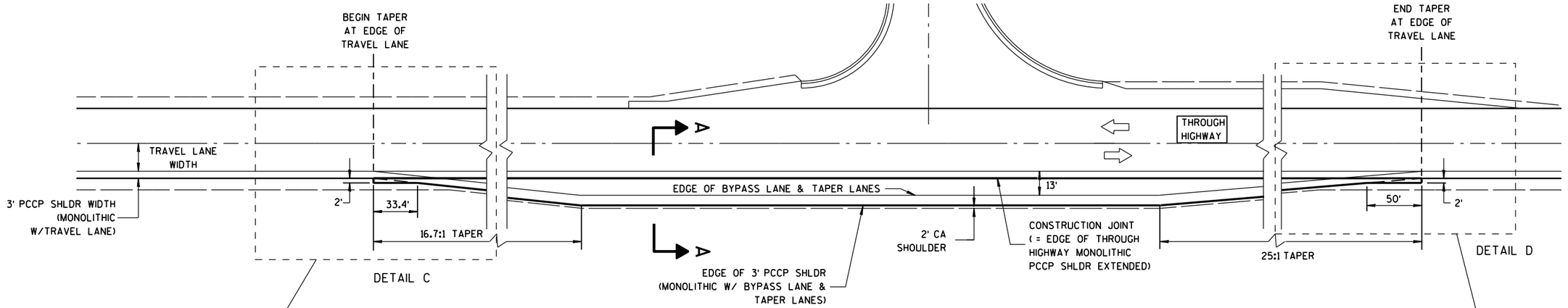
STATE OF WISCONSIN
DEPARTMENT OF TRANSPO

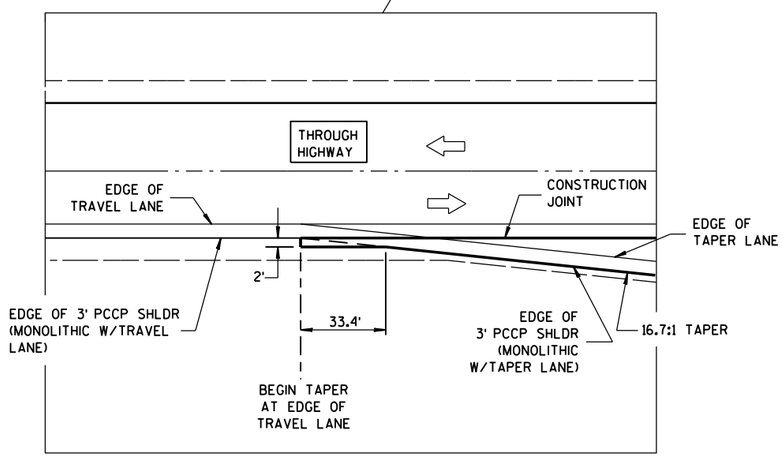
6

S.D.D. 13 C 16-2a

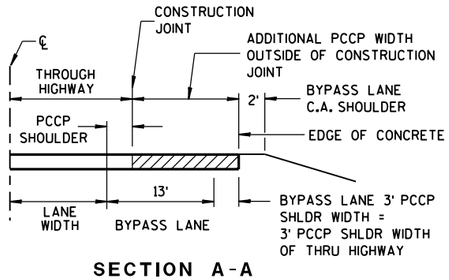
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S.D.D. 13 C 16-2a



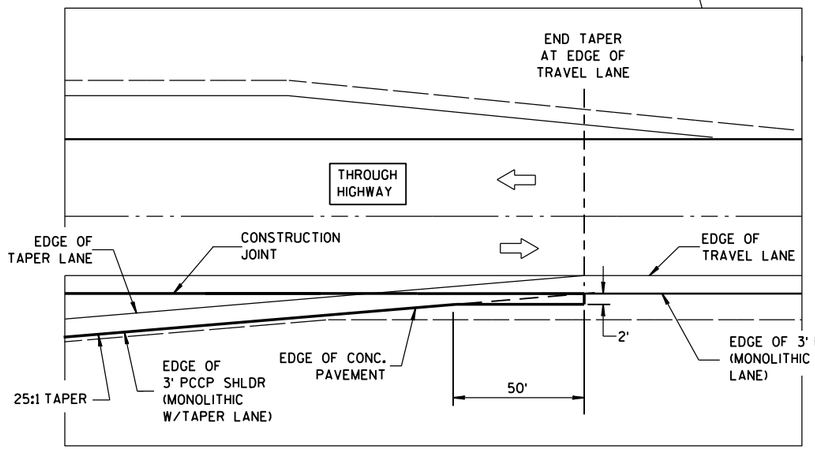


DETAIL C



SECTION A-A

(SHOWING BYPASS LANE AND SHOULDER)



DETAIL D

TWO LANE UNDIVIDED HIGHWAY TEE INTERSECTION BYPASS LANE

DETAIL FOR RIGHT TURN LANE/ TEE INTERSECTION BYPASS LANE ON A CONCRETE ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

12/18/12 — DATE

/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER

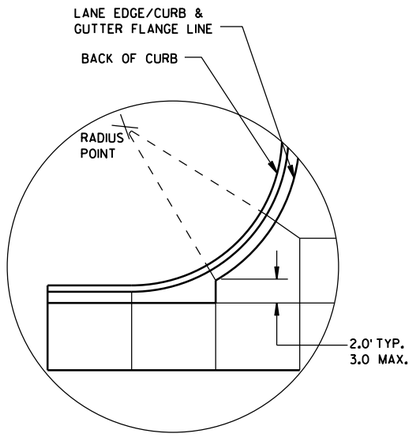
FHWA

6

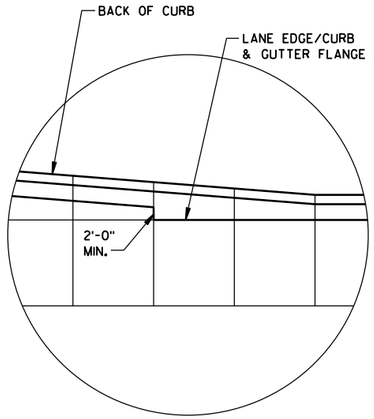
S.D.D. 13 C 16-2b

6

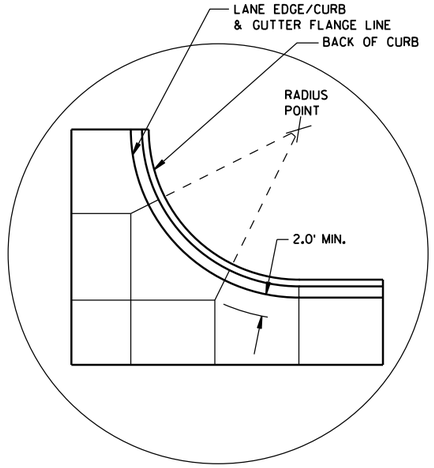
S.D.D. 13 C 16-2b



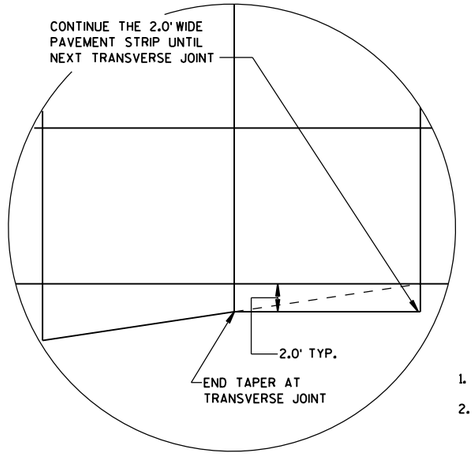
DETAIL "A"



DETAIL "B"



DETAIL "C"



DETAIL "D"

GENERAL NOTES

THE PRIMARY ROADWAY CONTROLS THE TRANSVERSE JOINT PATTERN.

ALIGN NEW JOINTS WITH EXISTING JOINTS OR CRACKS.

CONSTRUCT TRANSVERSE JOINTS PERPENDICULAR TO THE ROADWAY.

ADJUST TRANSVERSE JOINTS TO ALIGN WITH UTILITY FIXTURES (E.G. MANHOLES AND INLETS) IN THE PAVEMENT STRUCTURE WHEN POSSIBLE. WATER VALVES DO NOT REQUIRE JOINT ADJUSTMENT.

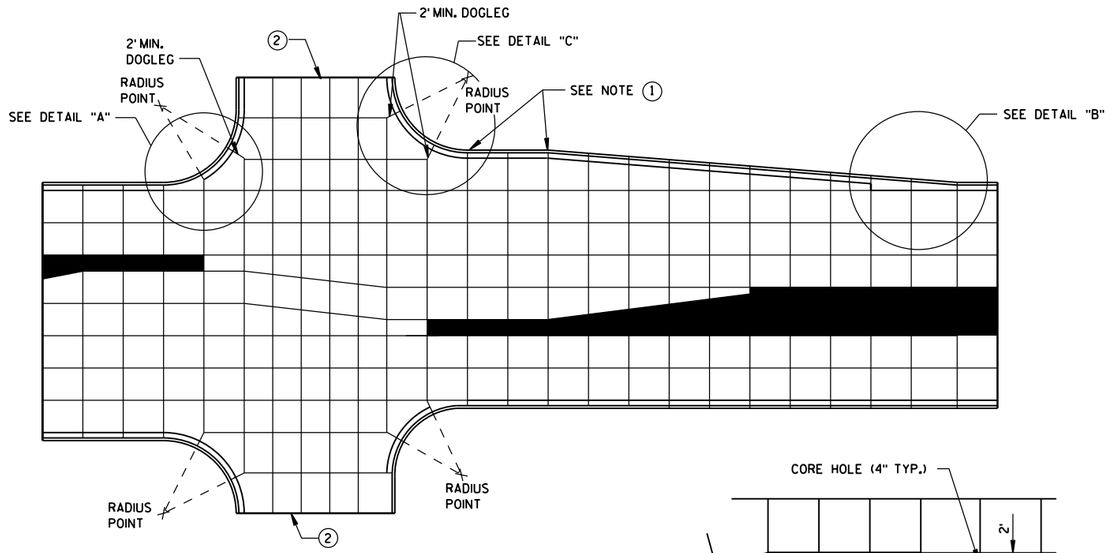
AVOID SLABS LESS THAN 2 FEET WIDE OR GREATER THAN 15 FEET WIDE.

SEE TABLE FOR TRANSVERSE JOINT SPACING. JOINT SPACING SPECIFIED IS MAXIMUM AND ACTUAL SPACING CAN BE ADJUSTED TO ACCOMMODATE INTERSECTIONS.

AVOID ANGLES LESS THAN 60° BY DOGLEGGING JOINTS THROUGH CURVE RADIUS POINTS. USE 90° ANGLES WHEN POSSIBLE.

CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

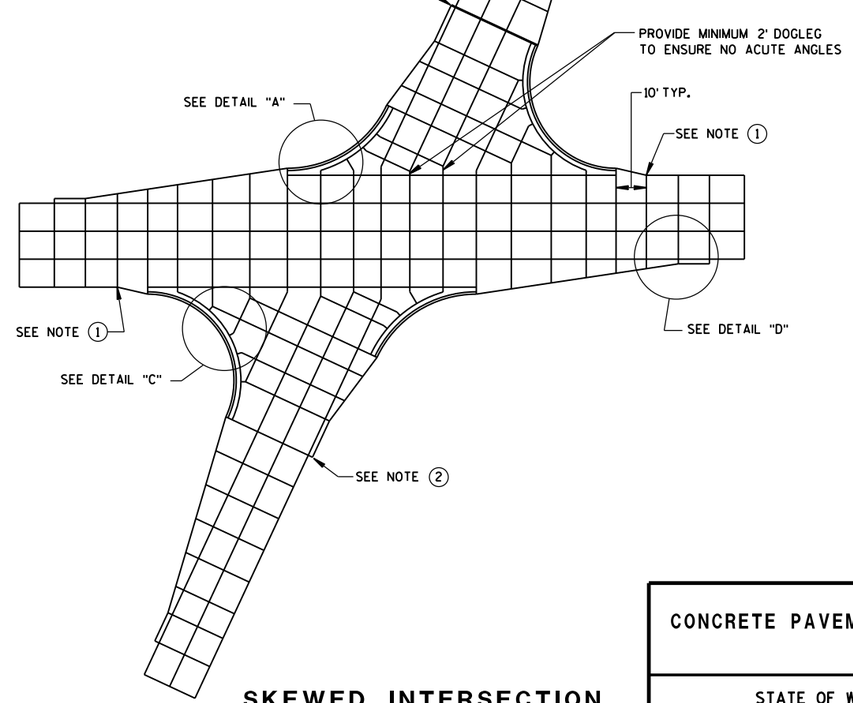
1. PROVIDE TRANSVERSE JOINTS AT ALL PAVEMENT WIDTH CHANGES.
2. CONSTRUCT DOWELED EXPANSION JOINT ON THE SIDE ROAD OF AN INTERSECTION IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH. ALIGN EXPANSION JOINT WITH EDGE OF RADIUS.
3. THE ENGINEER MAY APPROVE SLIGHT VARIATIONS FROM THESE JOINTING DETAILS.



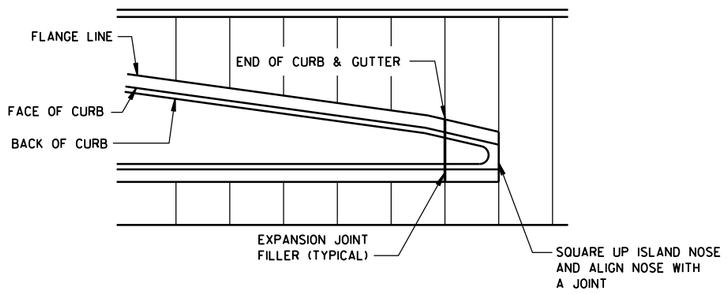
STANDARD INTERSECTION

PAVEMENT DEPTH AND JOINT SPACING TABLE

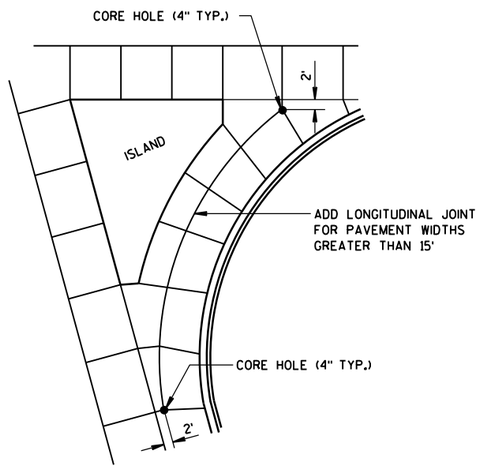
PAVEMENT DEPTH (D)	CONTRACTION JOINT SPACING
6", 6½"	12'
7", 7½"	14'
8" & ABOVE	15'



SKEWED INTERSECTION



APPROACH TO MEDIAN



LARGE RIGHT TURN

CONCRETE PAVEMENT JOINTING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

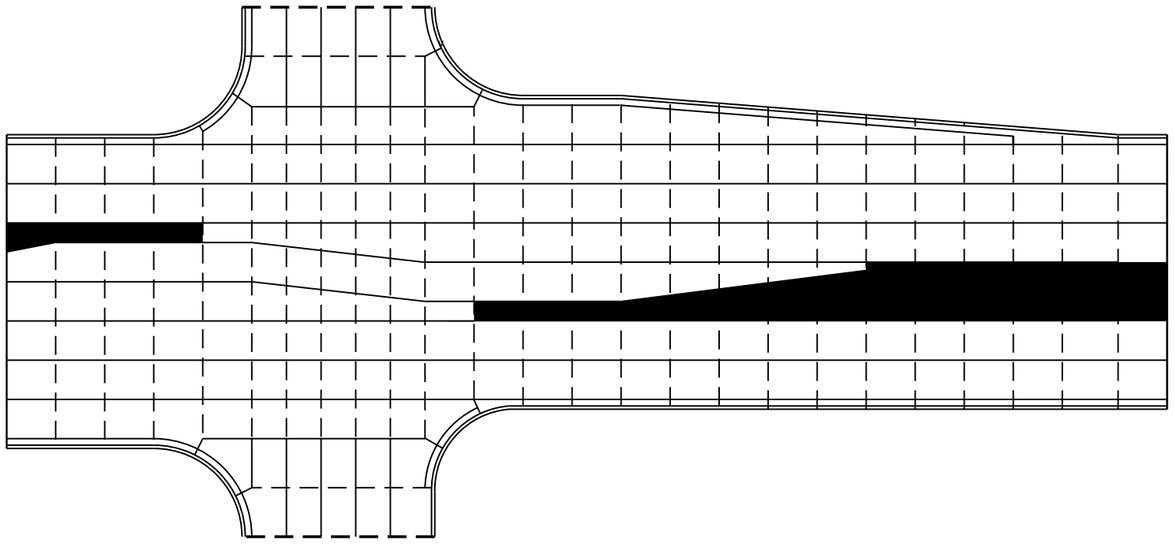
6
S.D.D. 13 C 18-3a

LEGEND

POTENTIAL DOWELED EXPANSION JOINT

DOWELED JOINT

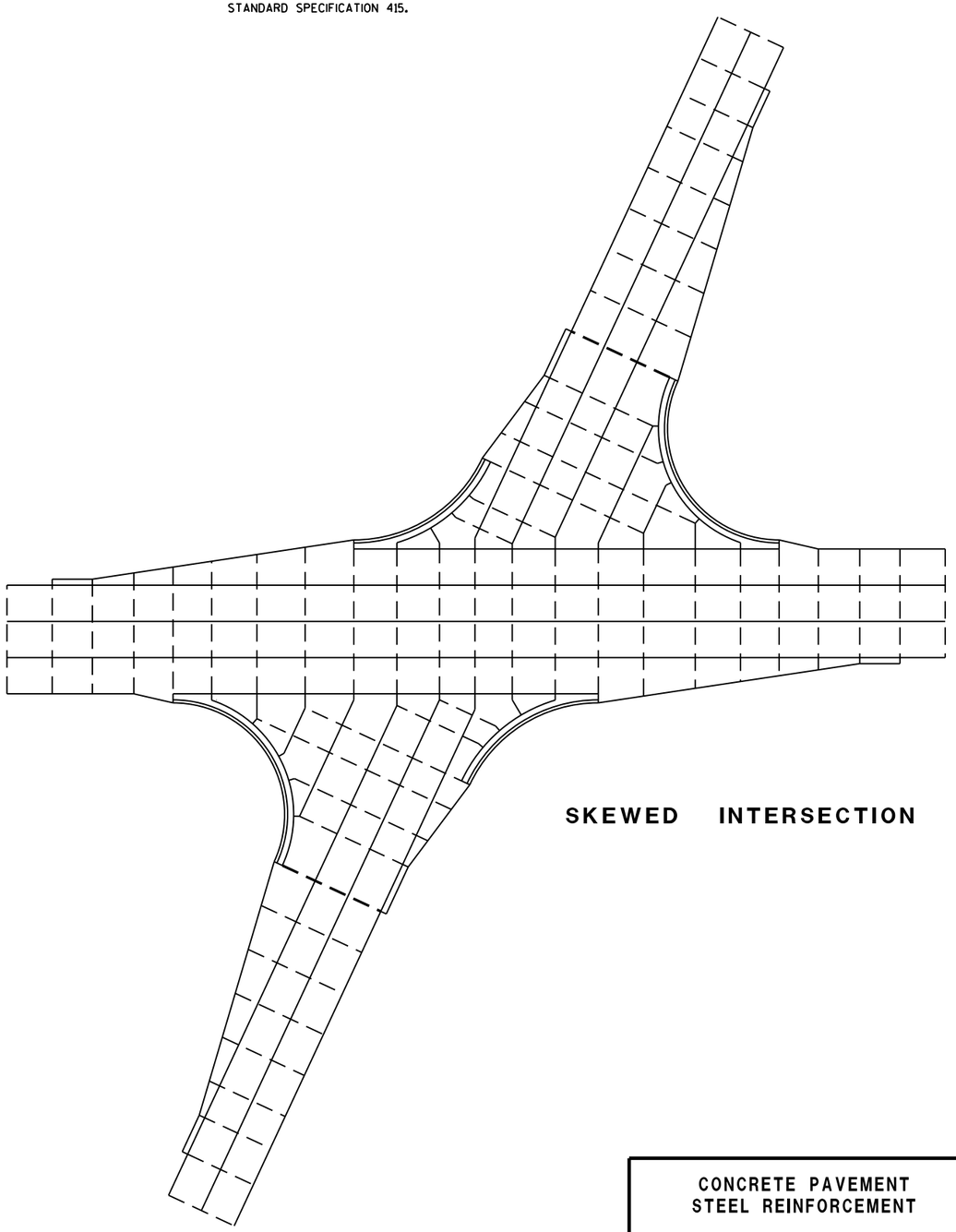
TIED JOINT



STANDARD INTERSECTION

GENERAL NOTES

USE AN EXPANSION JOINT FILLER MEETING THE REQUIREMENTS OF STANDARD SPECIFICATION 415.



SKEWED INTERSECTION

CONCRETE PAVEMENT
STEEL REINFORCEMENT

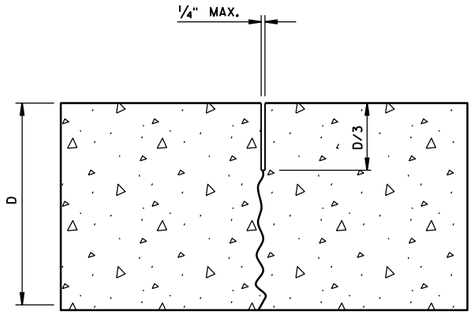
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

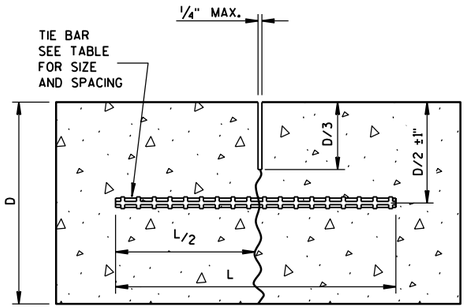
S.D.D. 13 C 18-3b

6

S.D.D. 13 C 18-3b



UNDOWELED-TRANSVERSE



TIED LONGITUDINAL

TIE BAR TABLE

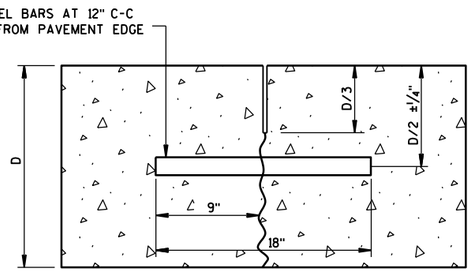
PAVEMENT DEPTH (D)	TIE BAR SIZE	TIE BAR LENGTH (L)	MAX. TIE BAR SPACING
< 10 1/2"	NO. 4	30"	36"
≥ 10 1/2"	NO. 5	36"	36"
	NO. 4*	30"	24"**

* 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

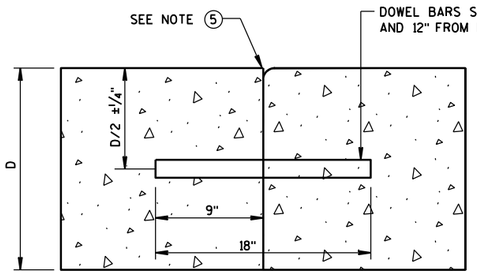
1. USE DOWELED EXPANSION JOINTS ON SIDE ROADS AT INTERSECTIONS (TO ISOLATE THE SIDE ROAD FROM THE THROUGH STREET) IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH.
2. SPACE CONTRACTION JOINTS IN ACCORDANCE WITH 13C4, 13C11 OR 13C13.
3. LOCATE CONSTRUCTION JOINTS A MINIMUM OF 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.



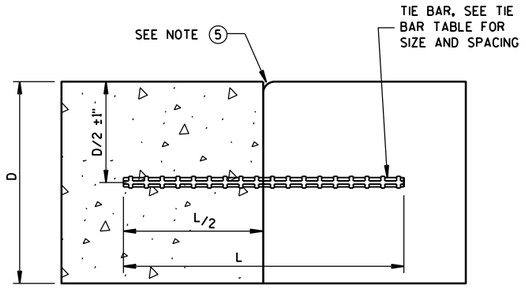
DOWELED-TRANSVERSE

CONTRACTION JOINTS

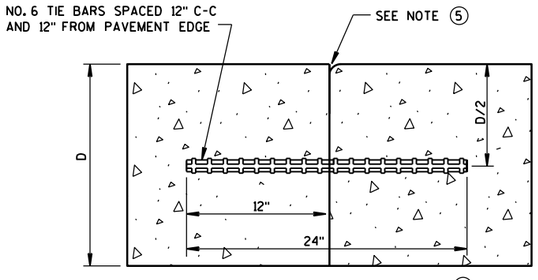
SEE NOTE (2)



DOWELED TRANSVERSE (3)

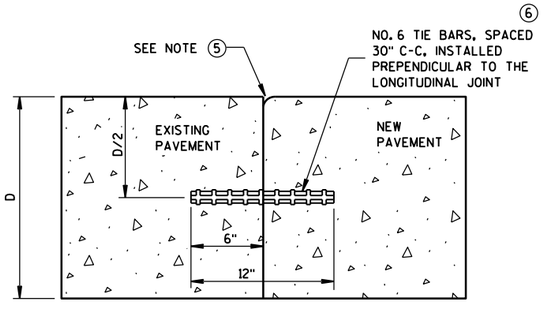


TIED LONGITUDINAL



TIED TRANSVERSE (3)

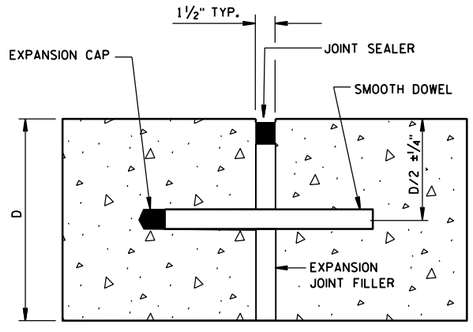
(FOR USE ON NON-DOWELED PAVEMENTS ONLY)



TIED LONGITUDINAL TO EXISTING

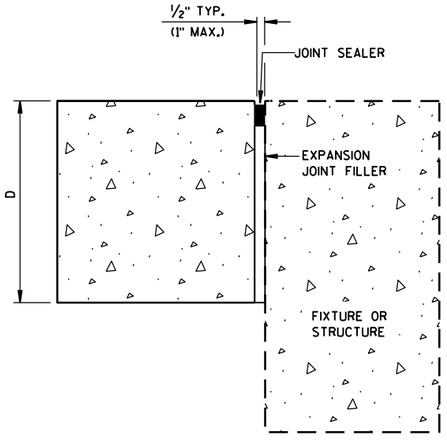
CONSTRUCTION JOINTS

SEE NOTE (4)



DOWELED-TRANSVERSE

SEE NOTE (1)



UNTIED-LONGITUDINAL

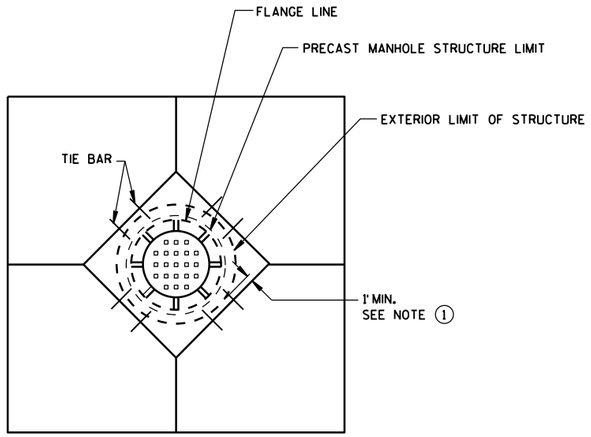
EXPANSION JOINTS

CONCRETE PAVEMENT
JOINT TYPES

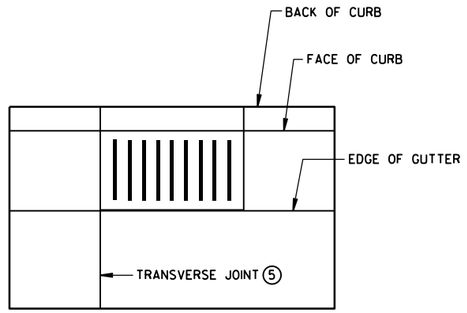
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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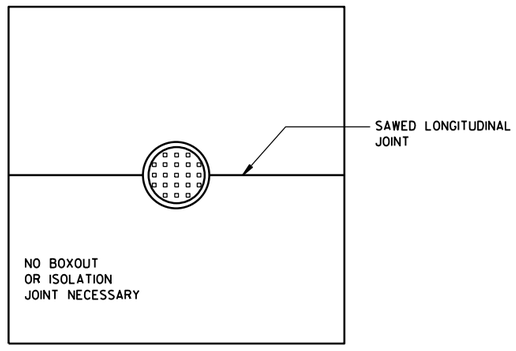
S.D.D. 13 C 18-3c



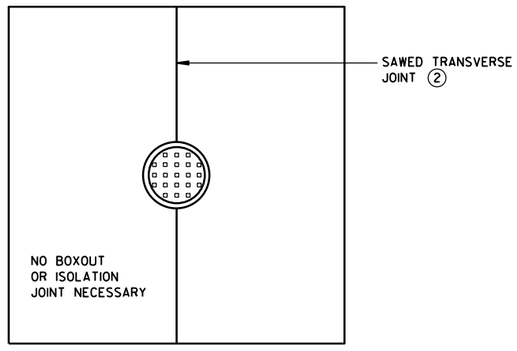
DIAGONAL MANHOLE BOXOUT FOR CONSTRUCTION JOINTS



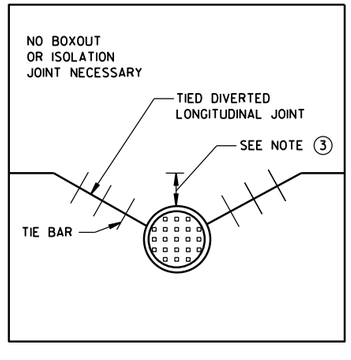
INLET WITH TRANSVERSE JOINT



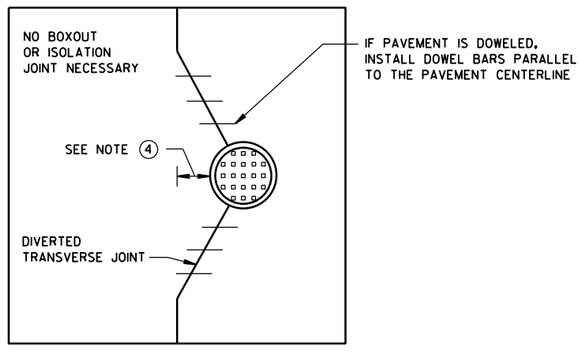
MANHOLE WITH LONGITUDINAL JOINT



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.

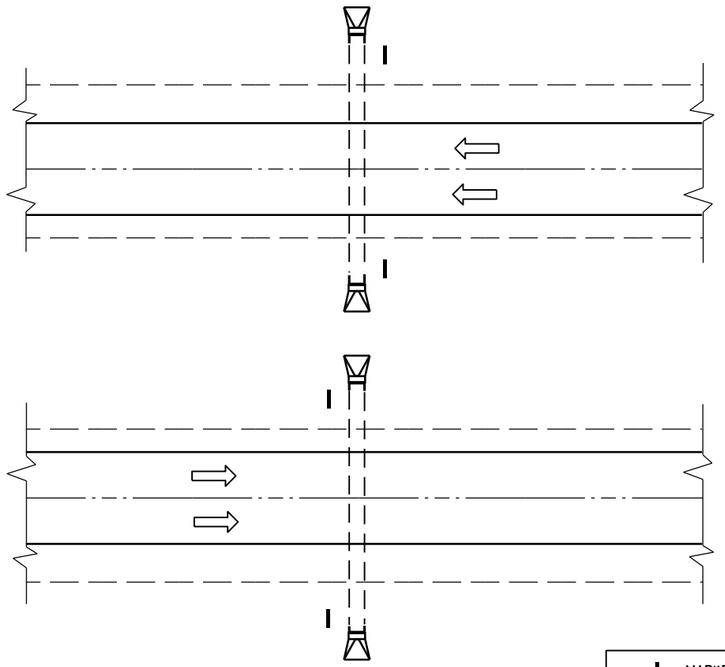
CONCRETE PAVEMENT JOINTING AT UTILITY FIXTURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2015
DATE
/S/ Peter Kemp, P.E.
PAVEMENT SUPER
FHWA

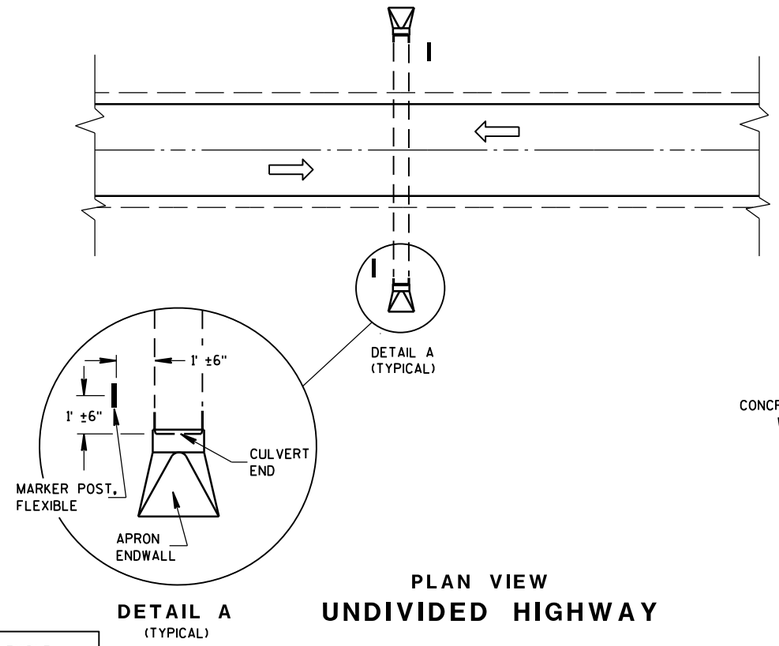
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S.D.D. 13 C 18-3d



PLAN VIEW

DIVIDED HIGHWAY



DETAIL A
(TYPICAL)

PLAN VIEW

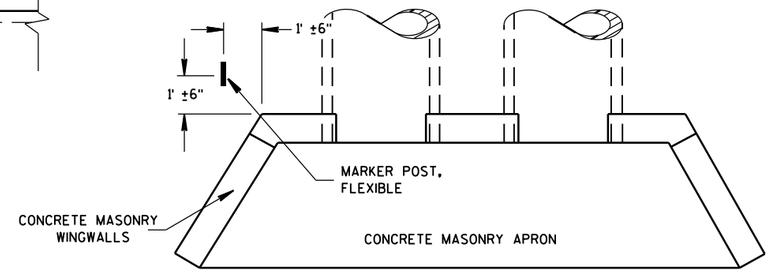
UNDIVIDED HIGHWAY

MARKER POST, FLEXIBLE

DIRECTION OF TRAFFIC FLOW

GENERAL NOTES

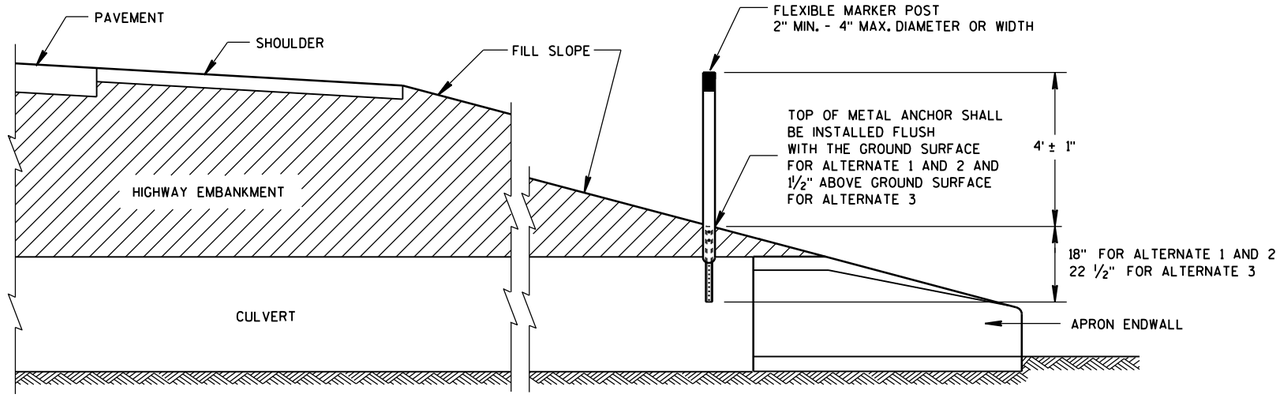
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.



PLAN VIEW

CONCRETE MASONRY ENDWALLS FOR CULVERT PIPE AND PIPE ARCH

FLEXIBLE MARKER POST LOCATION



CROSS SECTION

FLEXIBLE MARKER POST

FLEXIBLE MARKER POST FOR CULVERT END

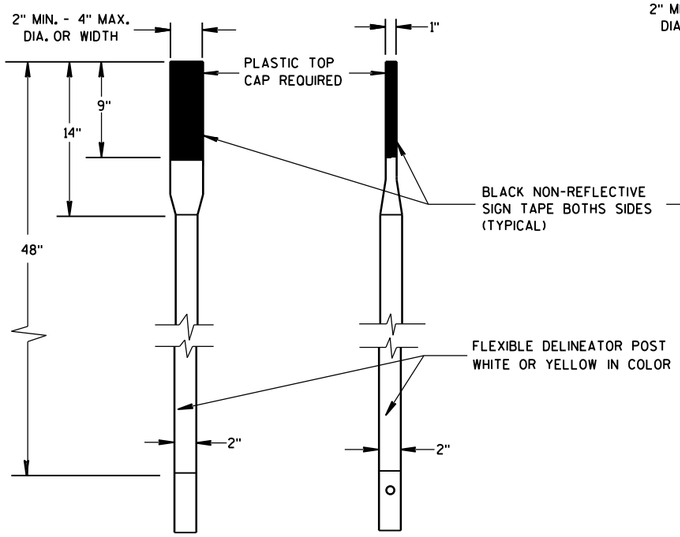
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

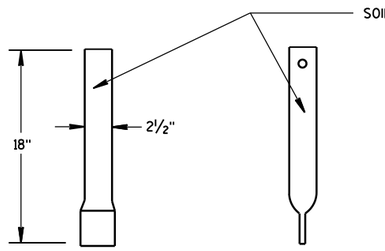
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S.D.D. 15 A 3-2a

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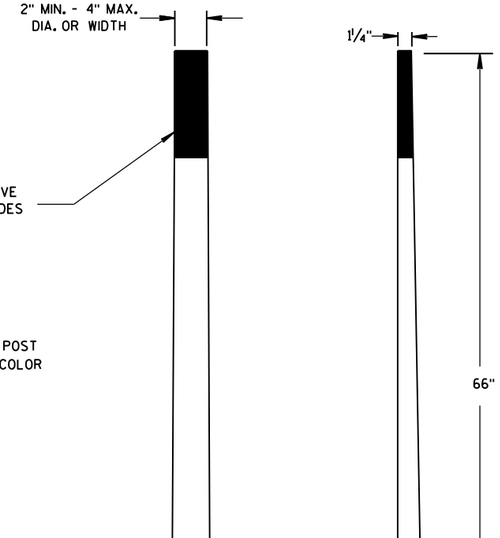
S.D.D. 15 A 3-2a





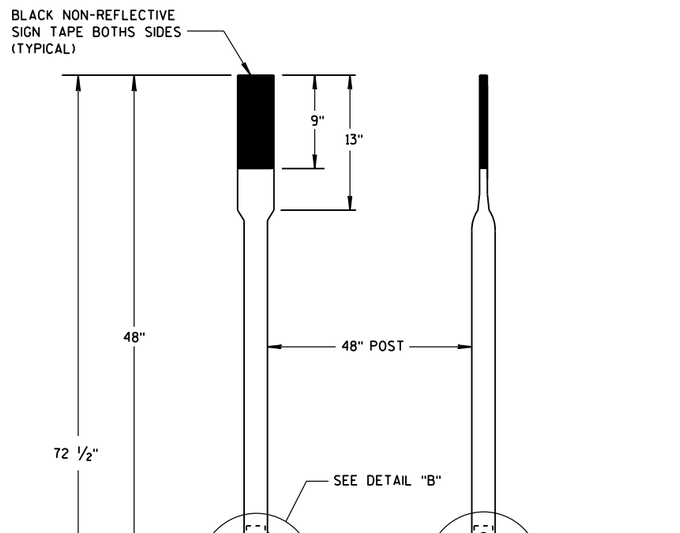
FRONT VIEW SIDE VIEW

ALTERNATE 1



FRONT VIEW SIDE VIEW

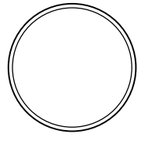
ALTERNATE 2



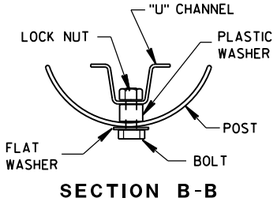
FRONT VIEW SIDE VIEW

ALTERNATE 3

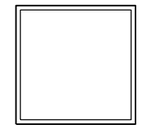
FLEXIBLE MARKER POSTS



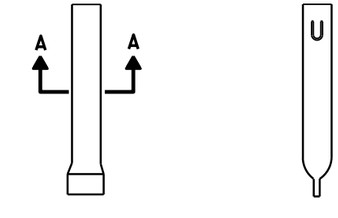
SECTION A-A



SECTION B-B

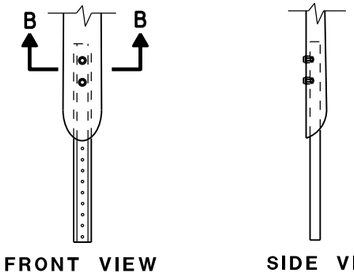


SECTION C-C



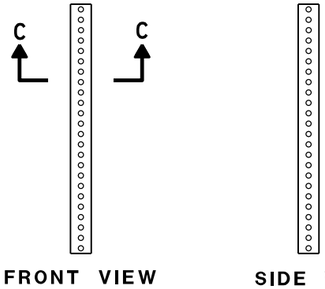
FRONT VIEW SIDE VIEW

ALTERNATE 1



FRONT VIEW SIDE VIEW

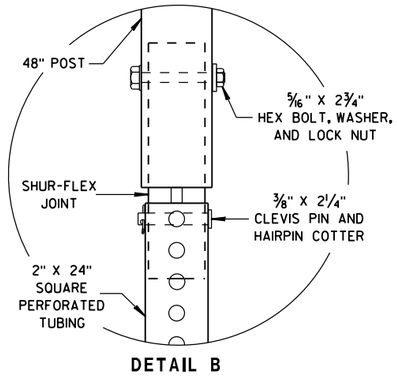
ALTERNATE 2



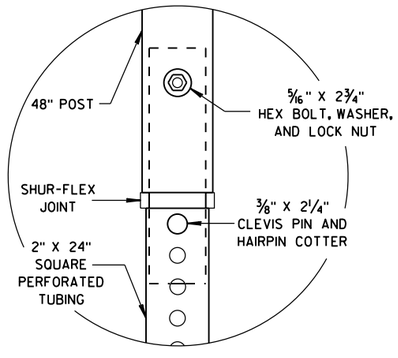
FRONT VIEW SIDE VIEW

ALTERNATE 3

FLEXIBLE MARKER POST ANCHORS



DETAIL B



DETAIL C

FLEXIBLE MARKER POST
FOR CULVERT END

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

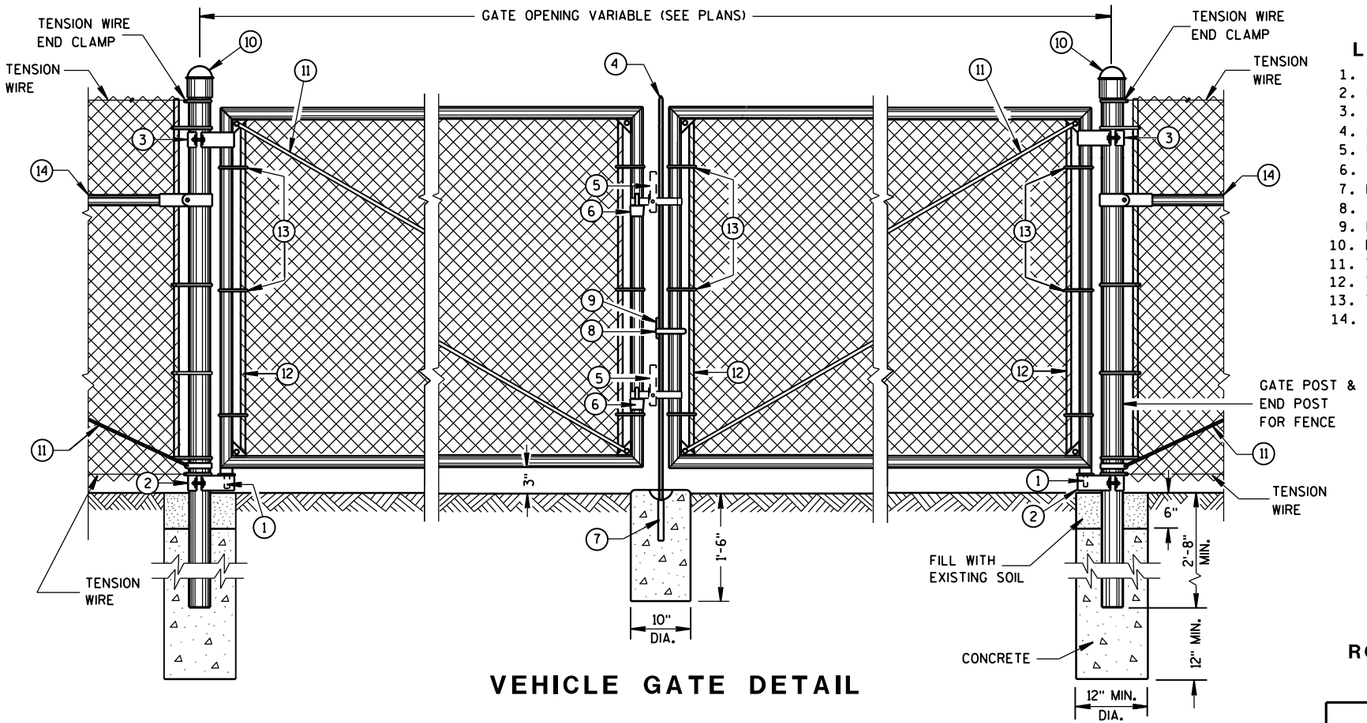
APPROVED
10/1/2012 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER
FHWA

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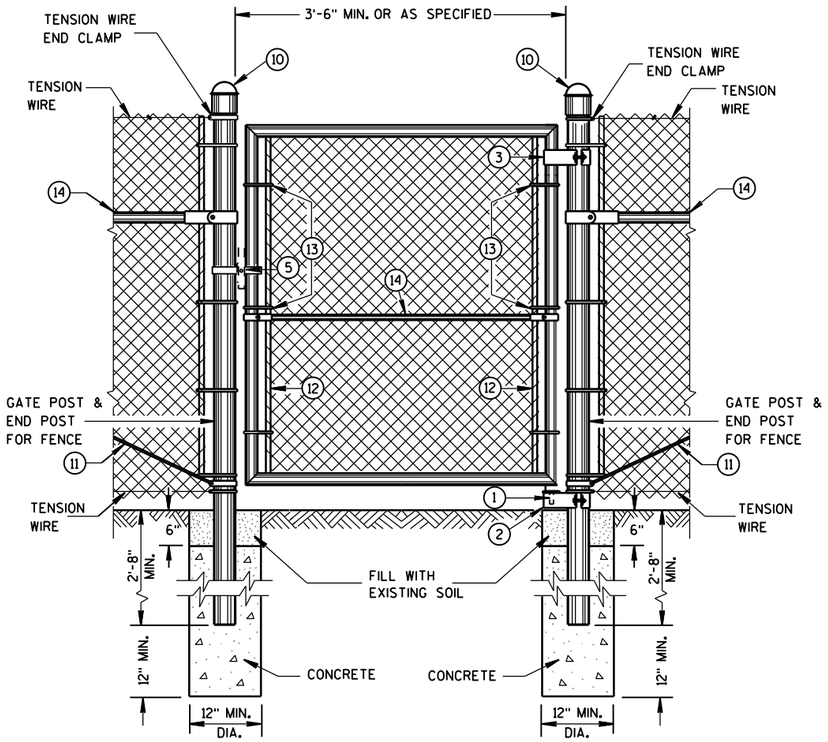
S.D.D. 15 A 3-2b

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S.D.D. 15 A 3-2b



VEHICLE GATE DETAIL



PEDESTRIAN GATE DETAIL

LEGEND

1. STRAIGHT PLUG
2. BOTTOM HINGE
3. TOP HINGE
4. PLUNGER ROD
5. FULCRUM LATCH
6. FORK CATCH *
7. PLUNGER ROD CATCH
8. LOCK KEEPER GUIDE
9. LOCK KEEPER
10. DOME TOPS
11. TRUSS RODS
12. TENSION BAR
13. TENSION BANDS
14. BRACE RAIL

*NOT REQUIRED ON SINGLE SWING PEDESTRIAN GATE

GENERAL NOTES

FENCE POSTS INSTALLED ON CONCRETE WALLS SHALL BE ANCHORED INTO EMBEDDED METAL SLEEVES OR CORED HOLE BY FILLING THE ANNULAR SPACE WITH PEA GRAVEL FOLLOWED BY AN EPOXY RESIN ADHESIVE. THE EPOXY RESIN ADHESIVE SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M 235, CLASS A, B OR C.

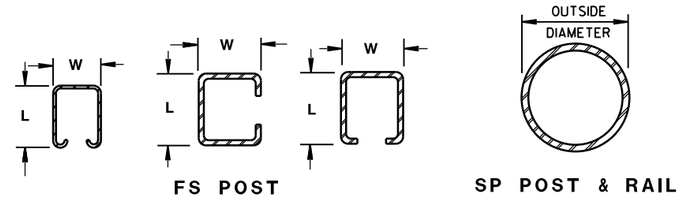
USE FENCE FABRIC KNUCKLED AT BOTH SELVAGES.

FOR LEAF GATES GREATER THAN 8 FEET WIDE, INSTALL INTERIOR VERTICAL BRACE RAIL AT 8 FOOT INTERVALS.

FOR FABRIC HEIGHTS GREATER THAN 8 FEET, INSTALL INTERIOR HORIZONTAL BRACE RAILS TO LEAF GATE.

MAXIMUM SAG FOR OUTER GATE MEMBER SHALL NOT EXCEED THE GREATER OF 1% OF THE LEAF GATE WIDTH OR 2 INCHES.

USE TYPE 2, CLASS 3, MARCELLED/CRIMPED, TENSION WIRE PER ASTM A 817.



FS POST — SP POST & RAIL

CROSS SECTIONS OF POSTS AND RAILS

REQUIRED FENCE POST SIZES

USE	FABRIC HEIGHTS FEET	POST TYPE
TERMINAL POSTS **	LESS THAN OR EQUAL TO 6 FT.	SP3
	GREATER THAN OR EQUAL TO 6 FT.	SP4
LINE POSTS	LESS THAN OR EQUAL TO 6 FT.	SP2
	LESS THAN OR EQUAL TO 8 FT.	SP3
	GREATER THAN OR EQUAL TO 8 FT.	SP4
	LESS THAN OR EQUAL TO 8 FT.	FS2 OR FS2†
	GREATER THAN OR EQUAL TO 8 FT.	FS3

BRACE RAIL TYPES

USE		TYPE
BRACE RAIL		SP1 OR FS1

** INCLUDES END, CORNER, ANGLE, INTERSECTION AND INTERMEDIATE BRACED POSTS

ROLLED-FORMED STEEL FENCE POST (2.0 OZ./SQ. FT. COATING)

POST TYPE	LENGTH (L) INCH	WIDTH (W) INCH	WEIGHT LBS/FT
FS1	1.625	1.25	1.35
FS2†	1.875	1.625	1.850
FS2	1.875	1.625	2.400
FS3	2.250	1.700	2.780

REQUIRED POST SIZE FOR GATES

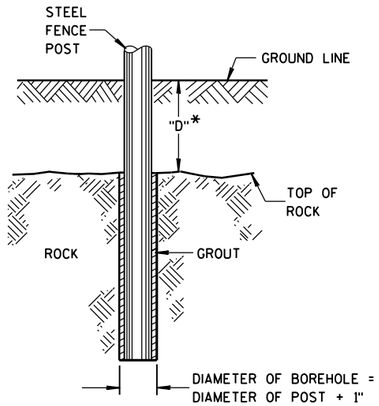
USE	LEAF WIDTHS FEET	POST TYPE
GATES	LESS THAN OR EQUAL TO 6 FT.	SP4
	LESS THAN OR EQUAL TO 13 FT.	SP5
	LESS THAN OR EQUAL TO 18 FT.	SP6
	LESS THAN OR EQUAL TO 23 FT.	SP7

ROUND STEEL FENCE POST (1.8 OZ./SQ. FT. COATING)

POST TYPE	OUTSIDE DIMENSION INCH	WALL THICKNESS INCH	WEIGHT LBS/FT
SP1	1.660	0.140	2.270
SP2	1.900	0.145	2.720
SP3	2.375	0.154	3.650
SP4	2.875	0.203	5.800
SP5	4.000	0.226	9.120
SP6	6.625	0.280	18.990
SP7	8.625	0.322	28.580

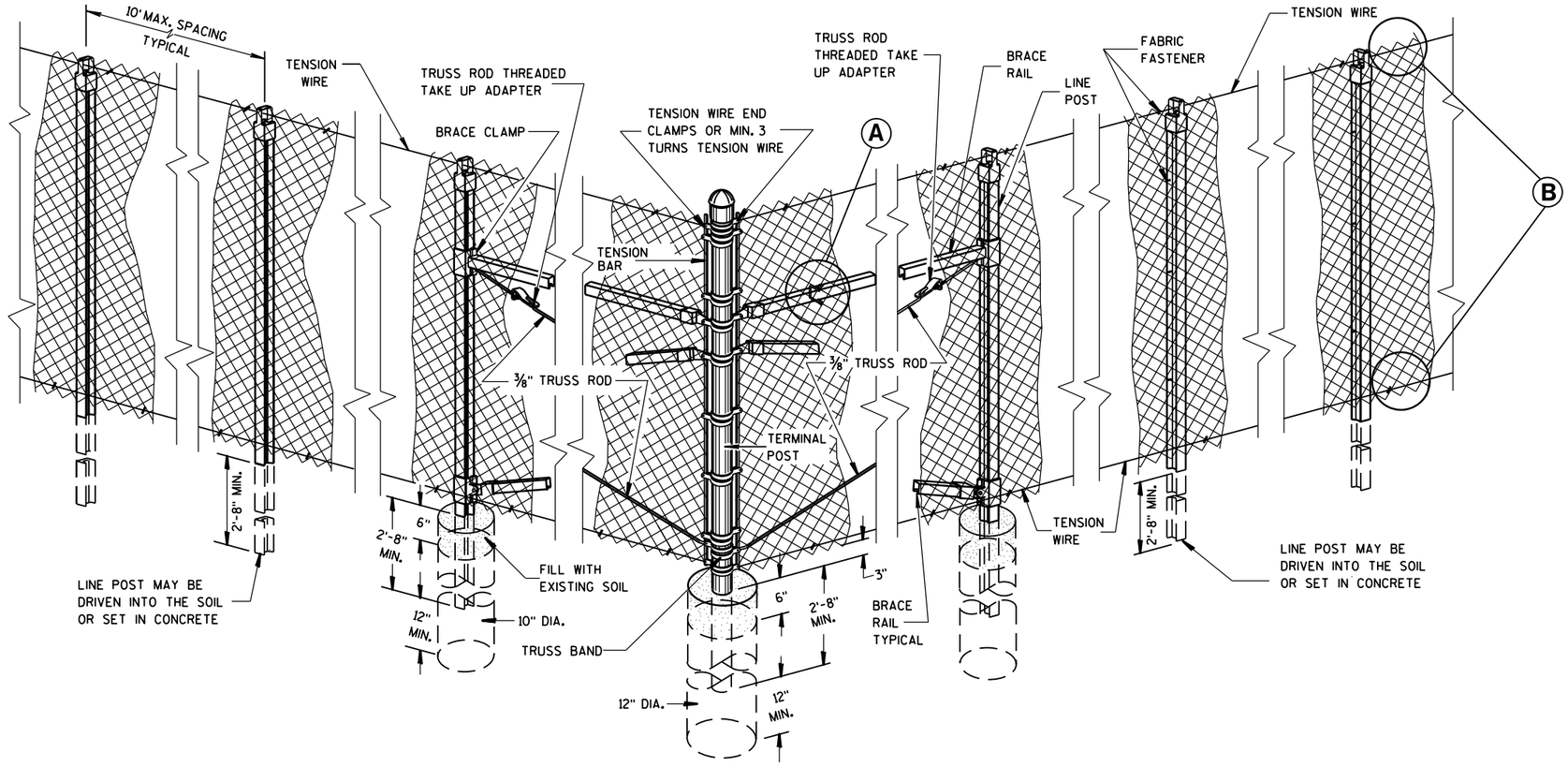
FENCE CHAIN LINK

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR 445

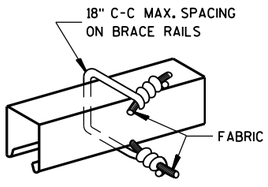


*IF "D" IS LESS THAN 2'-6", DRILL ROCK AND INSTALL GROUT

ROCK INSTALLATION OF LINE POST



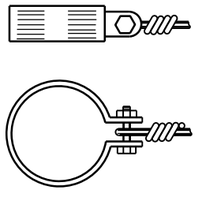
END, CORNER, ANGLE INTERSECTION & INTERMEDIATE BRACED POSTS



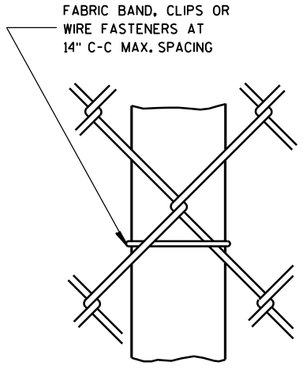
BRACE RAIL

FABRIC FASTENER

Ⓐ



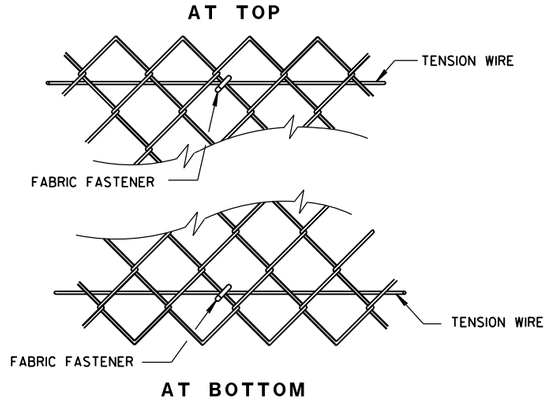
TENSION WIRE END CLAMP



LINE POST

FABRIC FASTENER

AT TOP



AT BOTTOM

SELVAGES

Ⓑ

FENCE CHAIN LINK

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

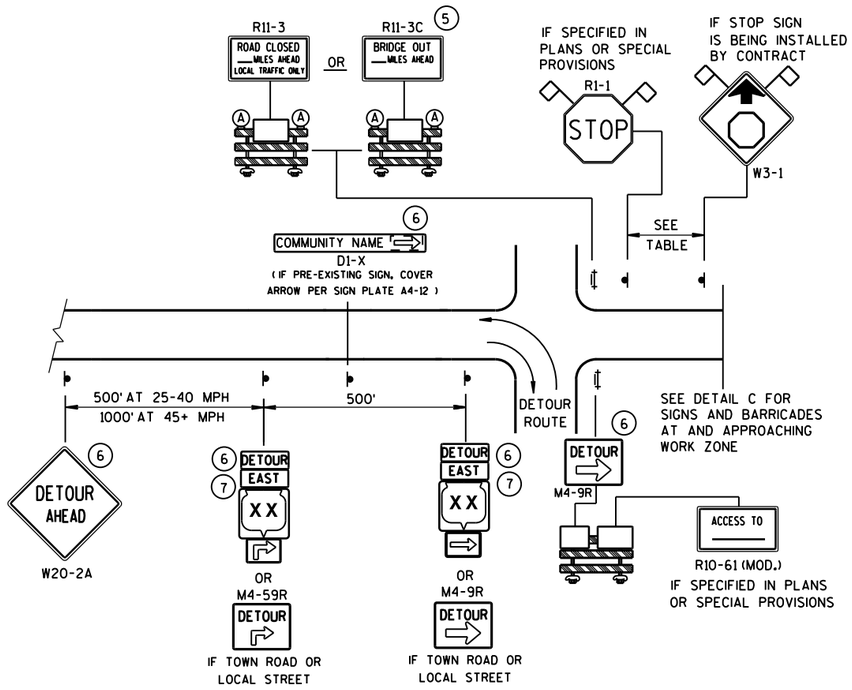
APPROVED
FEB. 2015 DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

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S.D.D. 15 B 3-15b

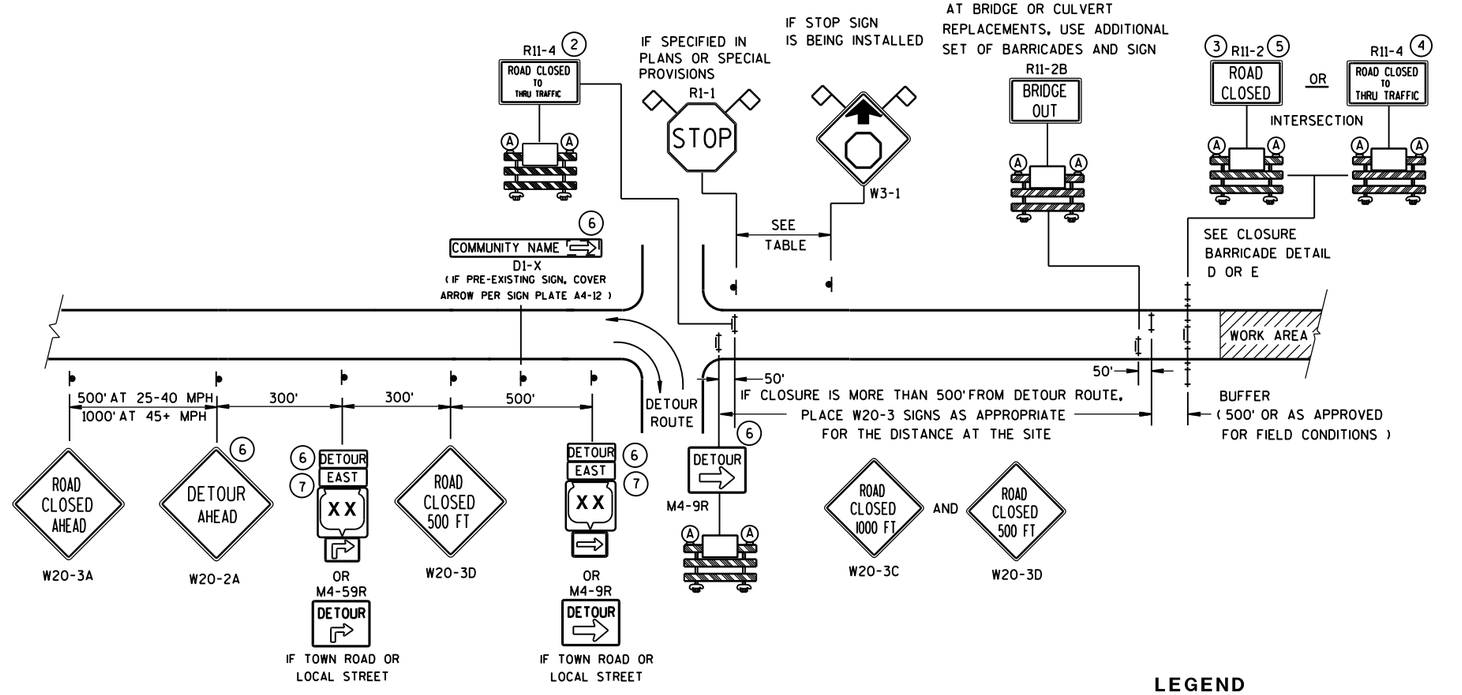
6

S.D.D. 15 B 3-15b



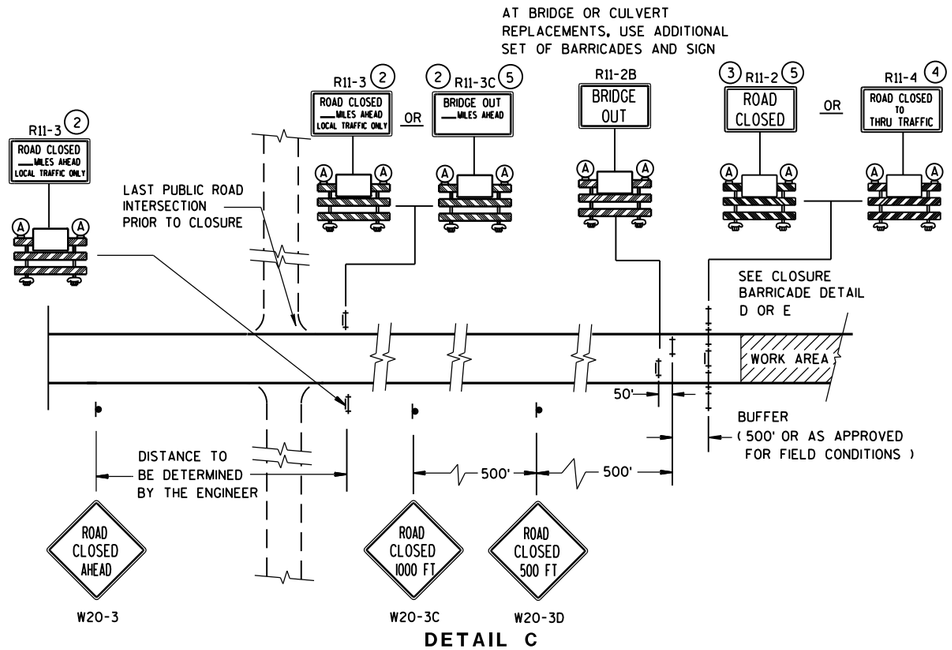
DETAIL A
MAINLINE CLOSURE WITH POSTED DETOUR

WORK ZONE GREATER THAN ½ MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)



DETAIL B
MAINLINE CLOSURE WITH POSTED DETOUR

WORK ZONE LESS THAN ½ MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)



DETAIL C
MAINLINE CLOSURE, NO POSTED DETOUR

SPEED LIMIT (MPH)	"STOP AHEAD" ADVANCE WARNING DISTANCE (FT)
25	200
30	200
35	350
40	350
45	500
50	550
55	750

LEGEND

- SIGN ON PERMANENT SUPPORT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- (A) TYPE "A" WARNING LIGHT (FLASHING)
- WORK AREA
- DETOUR / EAST — M4-8 / M3-X
- XX — M1-4; COUNTY XX — M1-5A; XX — M1-6
- M05-1 OR M06-1
- FLAGS, 16" X 16" MIN., (ORANGE)

SEE SDD 15C2-SHEET "**b**" FOR GENERAL NOTES AND FOOTNOTES (1) THROUGH (7)

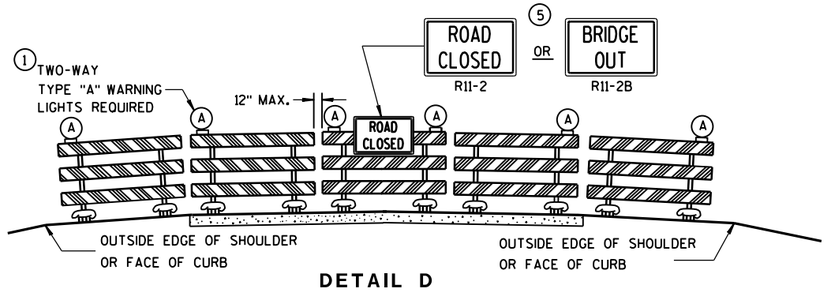
BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

Sept. 2015 — DATE
/S/ Peter Amakobe Atepe
STATEWIDE WORK ZONE TRAFFIC SAFETY ENGINEER
FHWA

S.D.D. 15 C 2-6a

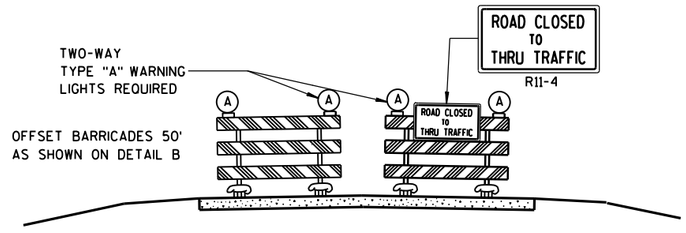
S.D.D. 15 C 2-6a



DETAIL D

ROAD CLOSURE BARRICADE DETAIL

APPROACH VIEW



DETAIL E

LANE CLOSURE BARRICADE DETAIL

APPROACH VIEW

SEE SDD 15C2-SHEET "**a**" FOR LEGEND

GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND BARRICADES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

BARRICADES THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED UPON COMPLETION OF THE OPERATION OR, FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

ALL TYPE III BARRICADES SHALL HAVE RAILS REFLECTORIZED ON BOTH FACES. STRIPES SHALL BE PROPERLY SLOPED DOWN TOWARD THE TRAFFIC SIDE OR AS SHOWN IN THE ROAD CLOSURE BARRICADE DETAIL D FOR FULL ROAD CLOSURES.

TYPE "A" LOW-INTENSITY FLASHING WARNING LIGHTS SHALL BE VISIBLE ON BOTH SIDES OF THE BARRICADE.

THE R11-2, R11-3, M4-9, R11-4 AND R10-61 SIGNS PLACED ON BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE OR BOTTOM RAILS.

"WO AND "MO" SIGNS ARE THE SAME AS "W" AND "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:
- R11-2 SHALL BE 48" X 30".
- R11-3, R11-4 AND R10-61 SHALL BE 60" X 30".
- M4-9 SHALL BE 30" X 24".
- M3-X SHALL BE 24" X 12". (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS.)
- M4-8 SHALL BE 24" X 12". (30" X 15" IF NEEDED TO MATCH EXISTING SIGNS.)
- M1-4, M1-5A, AND M1-6 SHALL BE 24" X 24". (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS.)
- M05-1 AND M06-1 SHALL BE 21" X 21". (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS.)
- D1-X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.
- R1-1 SHALL BE 36" X 36".

(1) TWO WARNING LIGHTS SHALL BE PROVIDED ON THE CENTER BARRICADE AND A MINIMUM OF ONE WARNING LIGHT SHALL BE PROVIDED ON EACH OF THE OTHER BARRICADES WITHIN THE ROADWAY LIMITS. SPACING OF THE WARNING LIGHTS SHALL BE UNIFORM TO THE EDGE OF ROADWAY AS SHOWN (APPROX. 8-FOOT LIGHT SPACING).

(2) THESE SIGNS AND BARRICADES ARE NOT REQUIRED IF ROAD CLOSURE BEGINS AT INTERSECTION.

(3) FOR ROAD CLOSURE WITHOUT LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL D.

(4) FOR ROAD CLOSURE WITH LOCAL ACCESS TO PROJECT, SEE LANE CLOSURE BARRICADE DETAIL E.

(5) FOR BRIDGE OR CULVERT REPLACEMENTS, SUBSTITUTE "BRIDGE OUT" INSTEAD OF "ROAD CLOSED" ON R11-2 AND R11-3 SIGNS.

(6) INSTALL DETOUR AND COMMUNITY GUIDE SIGNS AND ARROWS ONLY IF SPECIFIED IN THE CONTRACT. IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. MODIFY EXISTING SIGNS WHERE POSSIBLE. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. IF DETOUR SIGNS ARE BEING INSTALLED BY OTHERS, PLACE THE CONTRACTED TRAFFIC CONTROL SIGNS TO ALLOW FOR PLACEMENT OF ALL WARNING, DETOUR AND GUIDE SIGNS AS SHOWN.

(7) "EAST" CARDINAL DIRECTION MARKERS AND RIGHT TURN ARROWS ARE SHOWN. USE OTHER CARDINAL DIRECTIONS AND ARROWS AS APPROPRIATE.

BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

Sept. 2015 — DATE

/S/ Peter Amakobe Atepe
STATEWIDE WORK ZO SAFETY ENGI

FHWA

FIC

6

S.D.D. 15 C 2-6b

6

S.D.D. 15 C 2-6b

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.

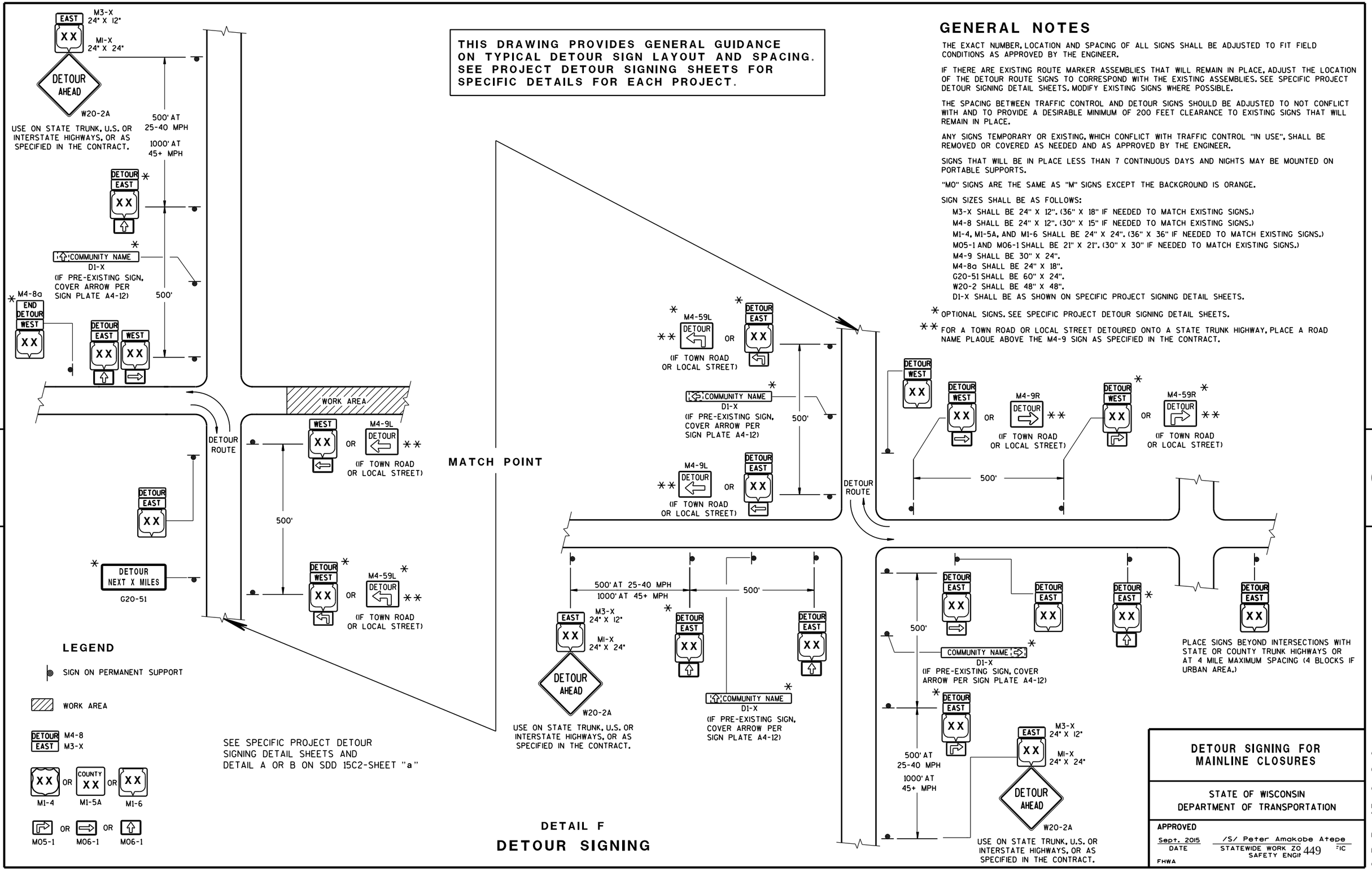
"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

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.



LEGEND

- SIGN ON PERMANENT SUPPORT
- WORK AREA
- DETOUR EAST — M4-8, M3-X
- XX OR COUNTY XX OR XX — M1-4, M1-5A, M1-6
- MO5-1 OR MO6-1 OR MO6-1

SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS AND DETAIL A OR B ON SDD 15C2-SHEET "a"

DETAIL F

DETOUR SIGNING

DETOUR SIGNING FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

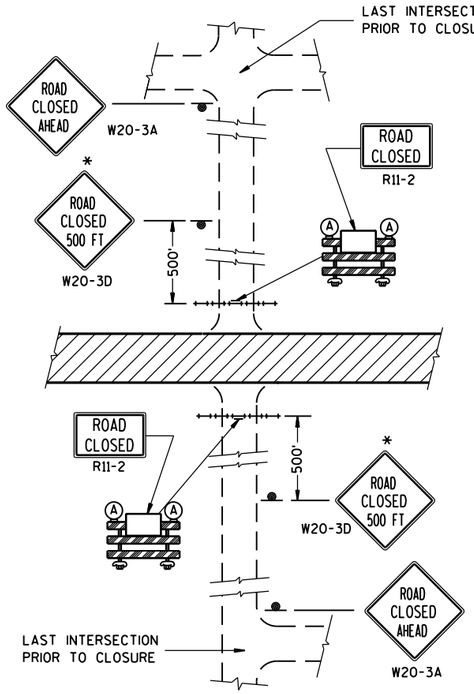
Sept. 2015 — DATE

/S/ Peter Amakobe Atepe — STATEWIDE WORK ZO SAFETY ENGI FIC

FHWA

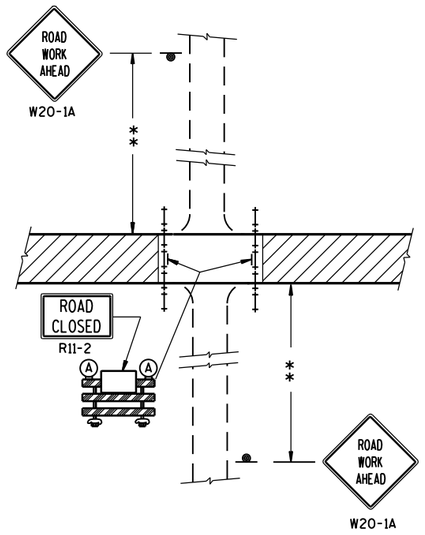
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S.D.D. 15 C 2-6c



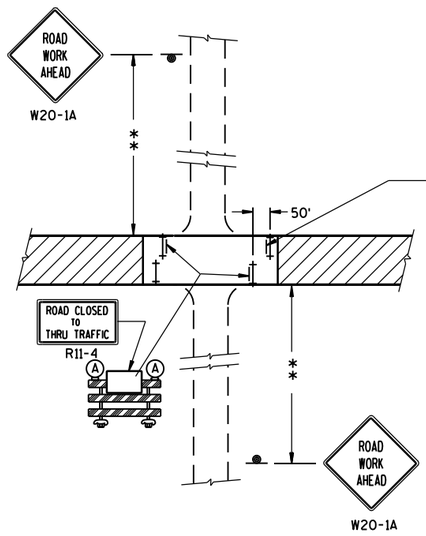
DETAIL 1

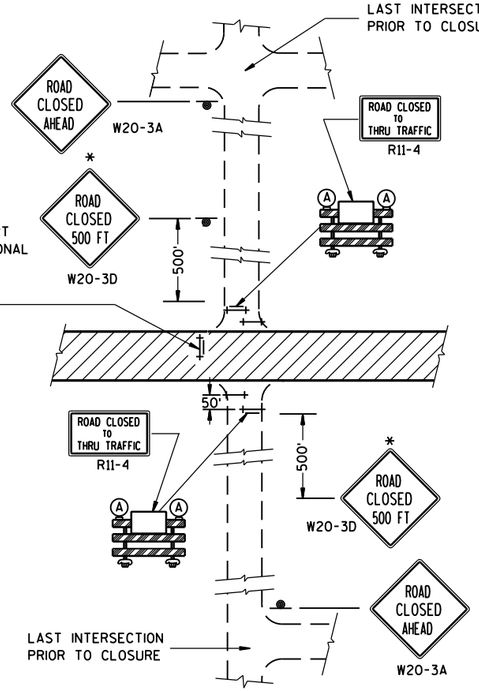
(NO ACCESS TO PROJECT)



DETAIL 2

(PUBLIC CROSS-TRAFFIC MAINTAINED.
NO ACCESS TO PROJECT).





DETAIL 3

(PUBLIC CROSS-TRAFFIC MAINTAINED. CONTRACTOR, LOCAL BUSINESS AND RESIDENT ACCESS).

DETAIL 4

(CONTRACTOR, LOCAL BUSINESS AND RESIDENT ACCESS TO PROJECT)

GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND BARRICADES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

IF A "STOP" SIGN MUST BE REMOVED FOR A WORK OPERATION, A TEMPORARY "STOP" SIGN SHALL BE PLACED PRIOR TO THE SIGN REMOVAL, OR A FLAGGER SHALL BE PROVIDED UNTIL THE SIGN IS RE-ESTABLISHED.

BARRICADES THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED UPON COMPLETION OF THE OPERATION OR, FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

ALL TYPE III BARRICADES SHALL HAVE RAILS REFLECTORIZED ON BOTH FACES. STRIPES SHALL BE PROPERLY SLOPED DOWN TOWARD THE TRAFFIC SIDE OR AS SHOWN IN THE ROAD CLOSURE BARRICADE DETAIL D FOR FULL ROAD CLOSURES.

TYPE "A" LOW-INTENSITY FLASHING WARNING LIGHTS SHALL BE VISIBLE ON BOTH SIDES OF THE BARRICADE.

THE R11-2, R11-3 AND R11-4 SIGNS PLACED ON BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE OR BOTTOM RAILS.

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:
R11-2 SHALL BE 48" X 30".
R11-4 AND R11-3 SHALL BE 60" X 30".

*OMIT THE "ROAD CLOSED 500 FT." SIGN IF THE LAST INTERSECTION IS 500 FT. OR LESS FROM THE WORK ZONE.

**500' MAX. OR AT LAST INTERSECTION WHICHEVER IS CLOSER.

LEGEND

- SIGN ON PERMANENT SUPPORT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- (A) TYPE "A" WARNING LIGHT (FLASHING)
- WORK AREA

BARRICADES AND SIGNS FOR SIDEROAD CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

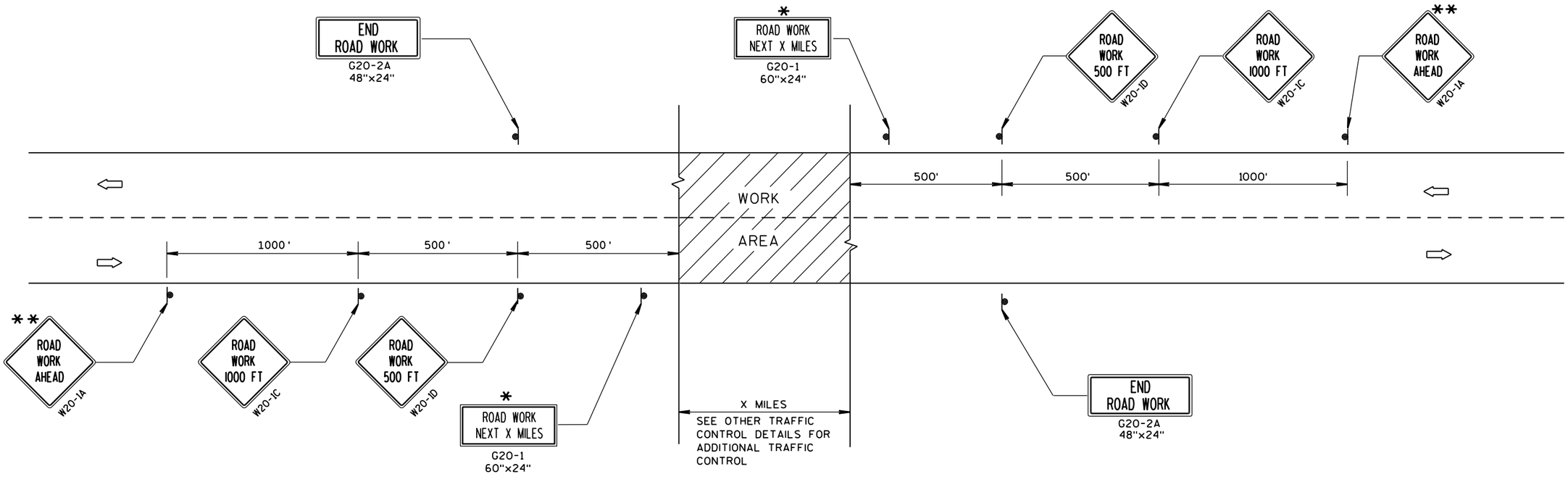
APPROVED
Sept. 2015 — DATE
/S/ Peter Amakobe Atepe
STATEWIDE WORK ZO[illegible]FIC SAFETY ENGI[illegible]
FHWA

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S.D.D. 15 C 3-3

6

S.D.D. 15 C 3-3



TYPICAL SIDEROAD APPROACH WARNING SIGN DETAIL

GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

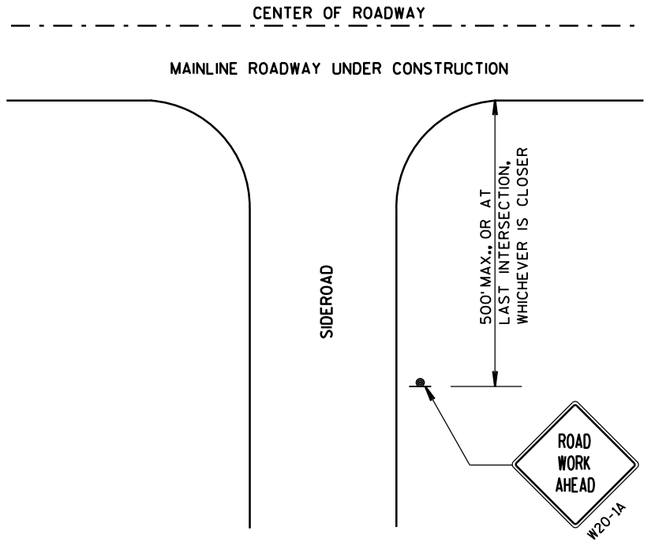
ALL SIGNS ARE 48"×48" UNLESS OTHERWISE NOTED.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

IF A "STOP" SIGN MUST BE REMOVED FOR A WORK OPERATION, A TEMPORARY "STOP" SIGN SHALL BE PLACED PRIOR TO THE SIGN REMOVAL, OR A FLAGGER SHALL BE PROVIDED UNTIL THE SIGN IS RE-ESTABLISHED.

* OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS.

** PLACE ADDITIONAL W20-1A "ROAD WORK AHEAD" SIGN IF WORK AREA WITHIN THE PROJECT IS SEPARATED BY MORE THAN 2 MILES FROM PREVIOUS WORK AREA.



LEGEND

- SIGN ON PERMANENT SUPPORT
- DIRECTION OF TRAFFIC
- WORK AREA

TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

Sept. 2015 — DATE

/S/ Peter Amakobe Atepe — STATEWIDE WORK ZONE SAFETY ENGINEER

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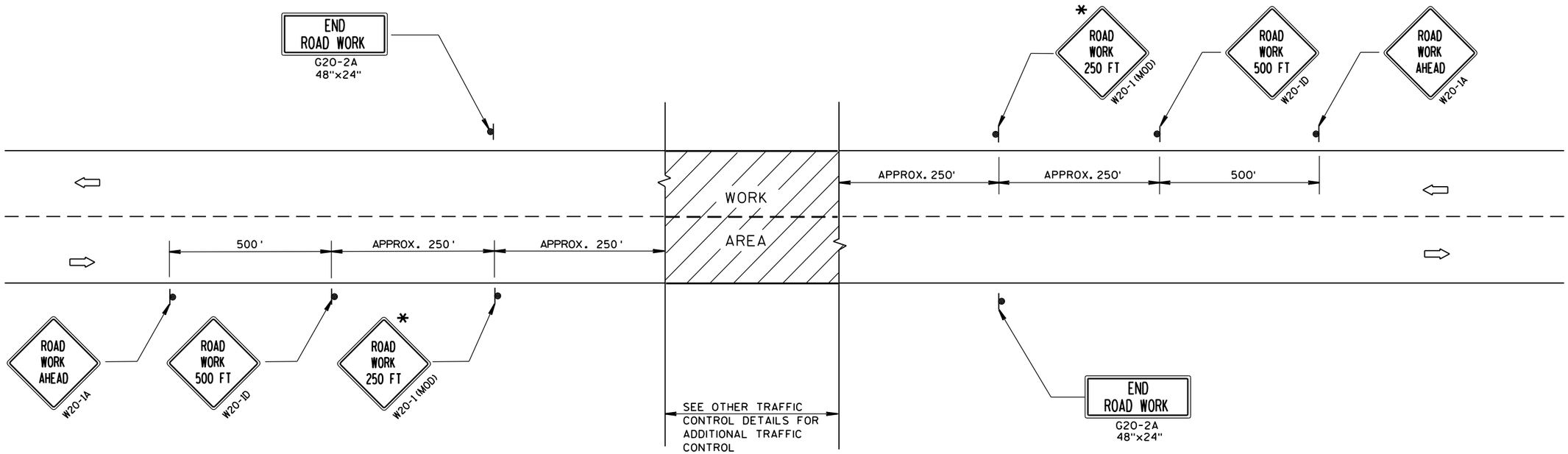
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S.D.D. 15 C 4-3

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S.D.D. 15 C 4-3

TYPICAL SIDEROAD APPROACH WARNING SIGN DETAIL



GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.

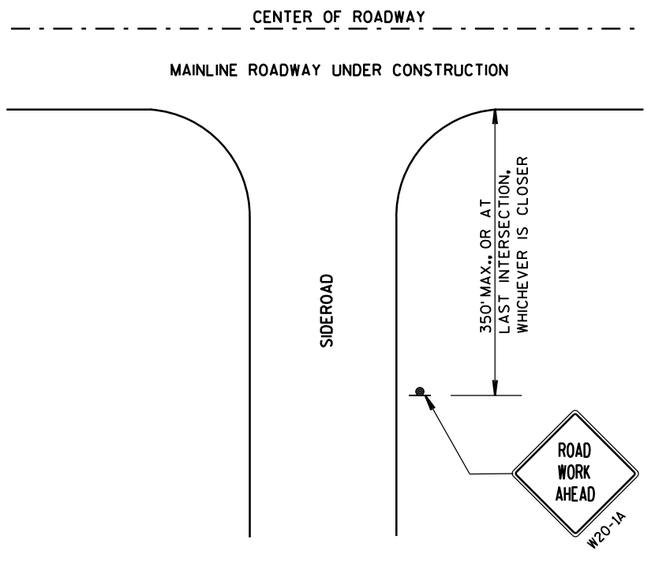
THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS, 36"x36" SIGNS MAY BE USED INSTEAD OF 48"x48" SIGNS.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

IF A "STOP" SIGN MUST BE REMOVED FOR A WORK OPERATION, A TEMPORARY "STOP" SIGN SHALL BE PLACED PRIOR TO THE SIGN REMOVAL, OR A FLAGGER SHALL BE PROVIDED UNTIL THE SIGN IS RE-ESTABLISHED.

* THE THIRD W20-1 SIGN IS REQUIRED ONLY IF THERE IS AN INTERSECTION BETWEEN THE "ROAD WORK 500 FT" SIGN AND THE WORK ZONE. ADJUST THE PLACEMENT OF THIS SIGN BASED ON INTERSECTION LOCATION AND OTHER FIELD CONDITIONS.



LEGEND

- SIGN ON PERMANENT SUPPORT
- DIRECTION OF TRAFFIC
- WORK AREA

TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2015 — DATE
/S/ Peter Amakobe Atepe
STATEWIDE WORK ZONE SAFETY ENGINEER
FHWA

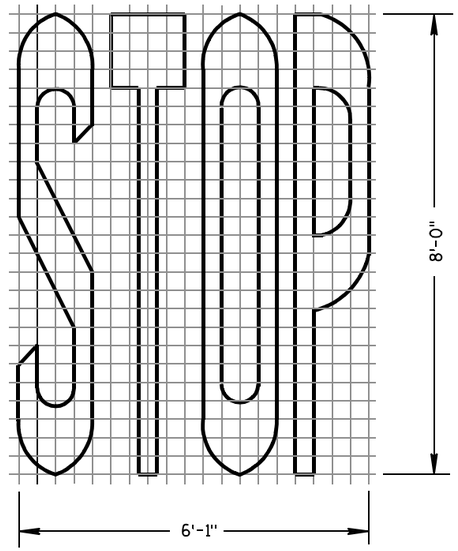
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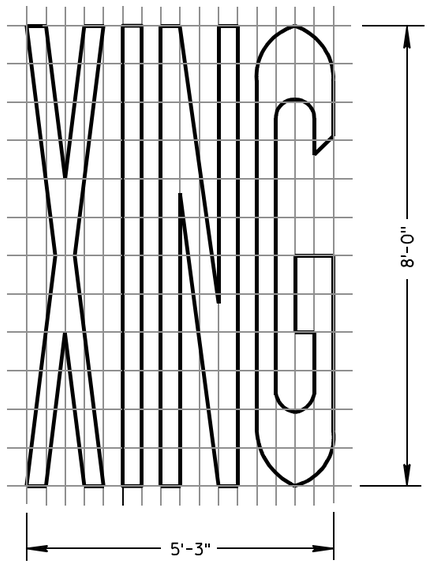
S.D.D. 15 C 5-3

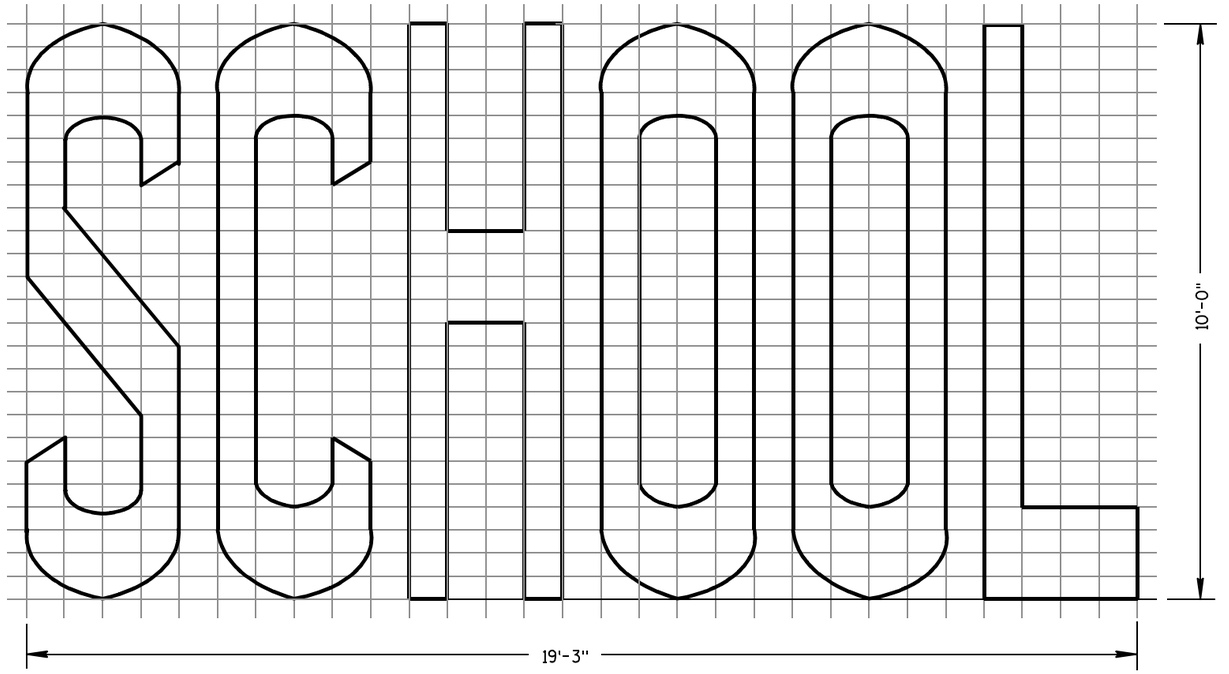
GENERAL NOTES

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

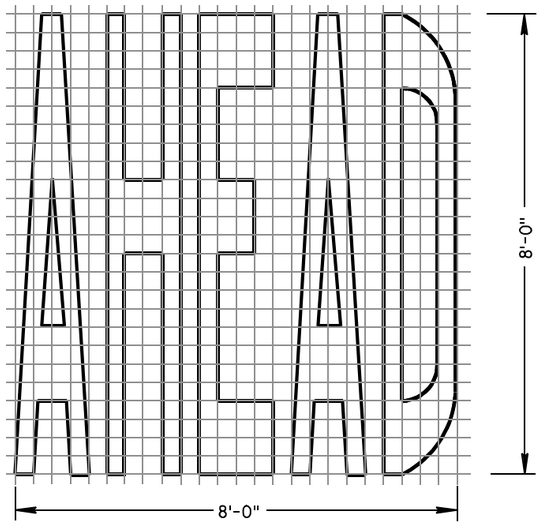
ALL LETTERS, ARROWS AND SYMBOLS SHALL BE IN CONFORMANCE WITH REQUIREMENTS INCLUDED IN "STANDARD ALPHABETS FOR HIGHWAY SIGNS AND PAVEMENT MARKING" BOOK BY THE FEDERAL HIGHWAY ADMINISTRATION. ALL LETTERS, ARROWS AND SYMBOLS SHALL BE WHITE AND REFLECTORIZED. SMALL DIFFERENCES IN DIMENSIONS WITHIN THE TOLERANCES OF THAT BOOK ARE ACCEPTABLE.

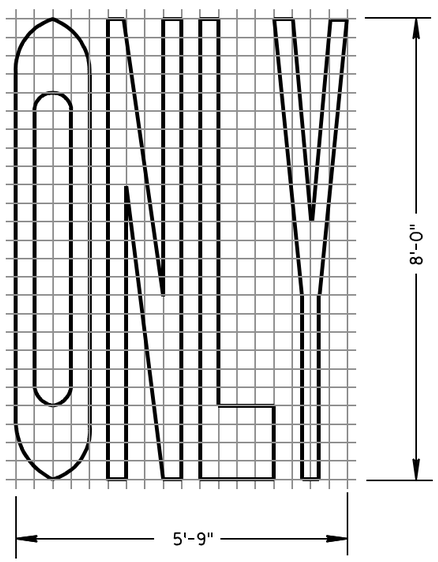


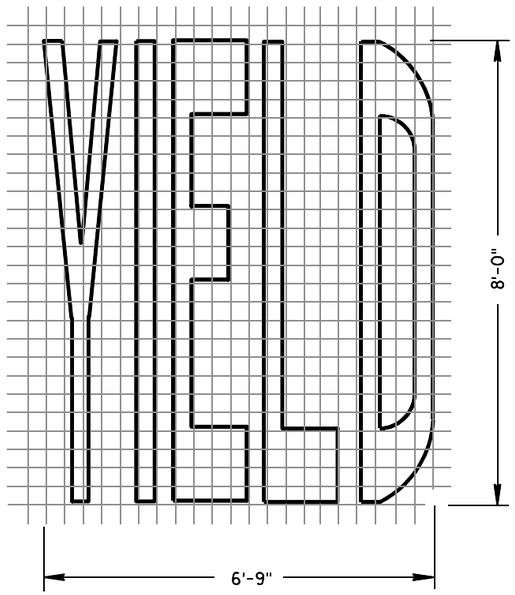


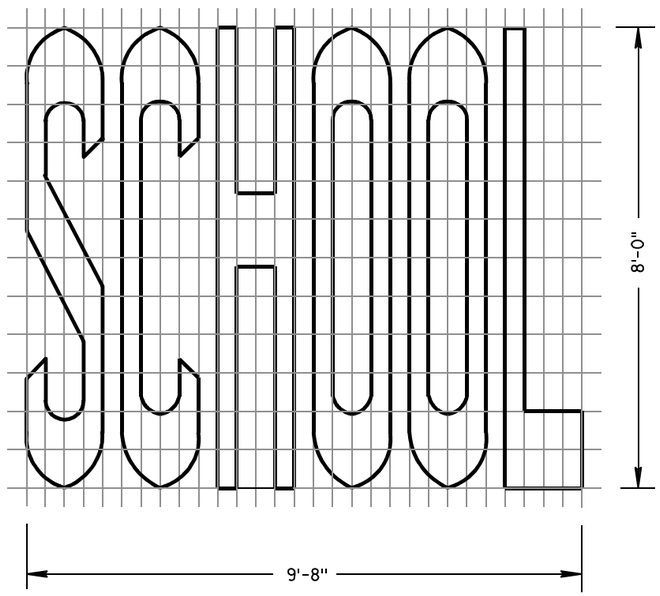


TWO-LANE









SINGLE-LANE

PAVEMENT MARKING WORDS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

7-1-11 DATE

/S/ Thomas N. Nothohm
STATE TRAFFIC ENGINEER

FHWA

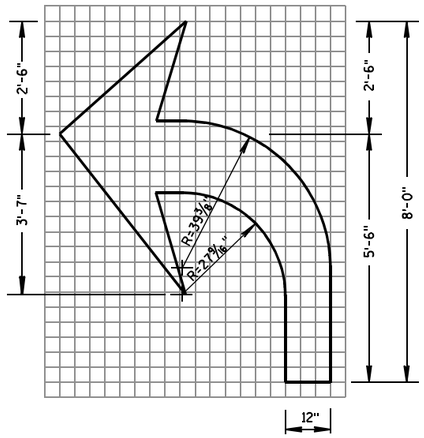
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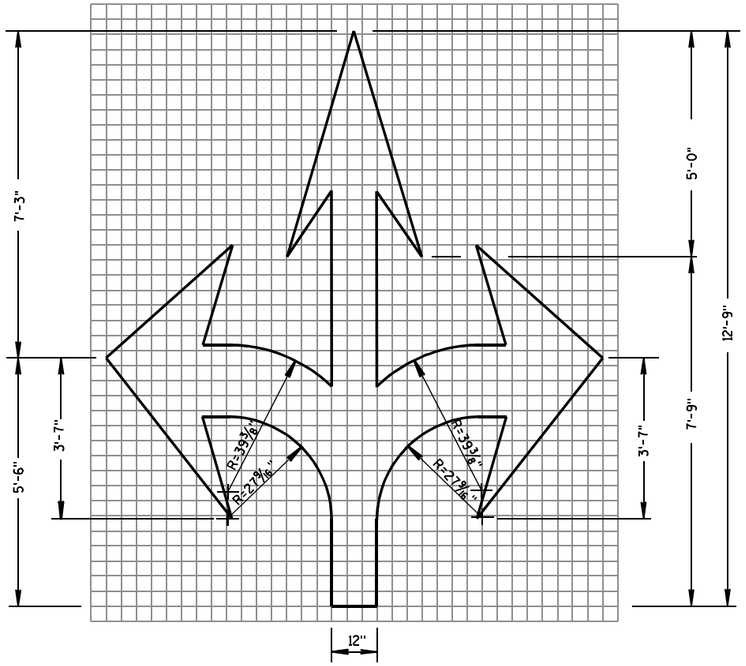
S.D.D. 15 C 7-12b

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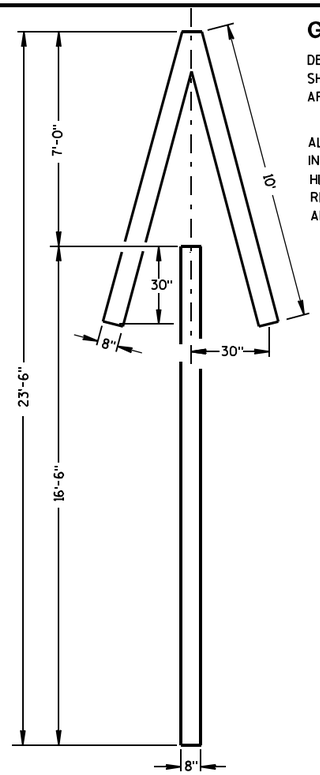
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TYPE 2



TYPE 6

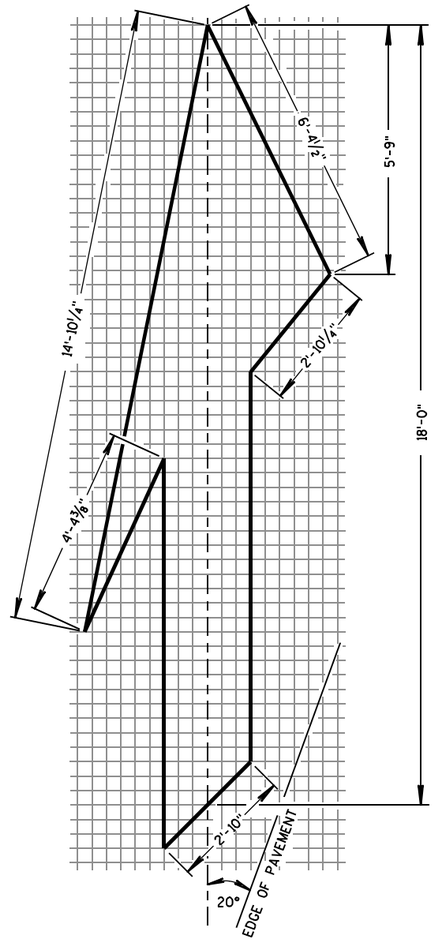


TYPE 4

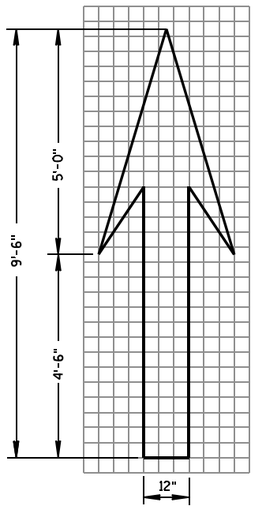
GENERAL NOTES

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

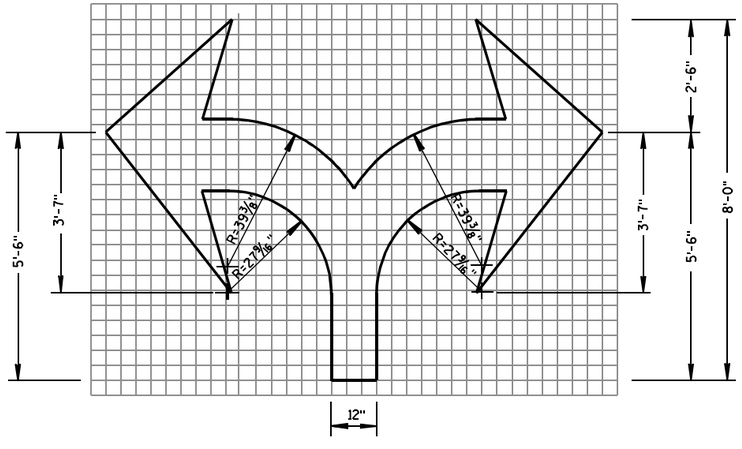
ALL LETTERS, ARROWS AND SYMBOLS SHALL BE IN CONFORMANCE WITH REQUIREMENTS INCLUDED IN "STANDARD ALPHABETS FOR HIGHWAY SIGNS AND PAVEMENT MARKING" BOOK BY THE FEDERAL HIGHWAY ADMINISTRATION. ALL LETTERS, ARROWS AND SYMBOLS SHALL BE WHITE AND REFLECTORIZED. SMALL DIFFERENCES IN DIMENSIONS WITHIN THE TOLERANCES OF THAT BOOK ARE ACCEPTABLE.



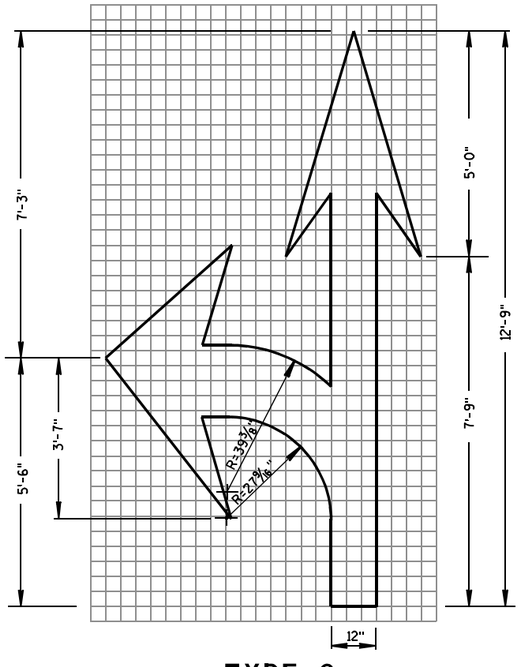
TYPE 5 LANE DROP ARROW



TYPE 1



TYPE 7



TYPE 3

PAVEMENT MARKING ARROWS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

7/1/11 — DATE

/S/ Thomas N. Nothdurft — STATE TRAFFIC ENGINEER

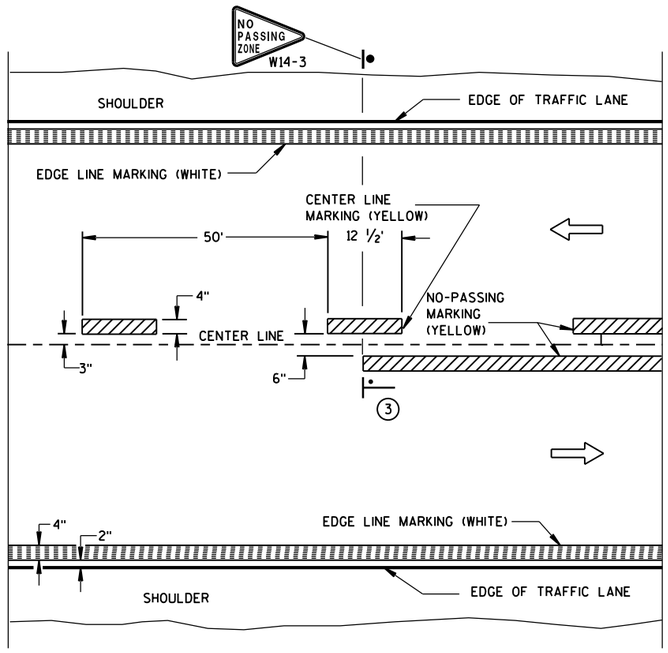
FHWA

6

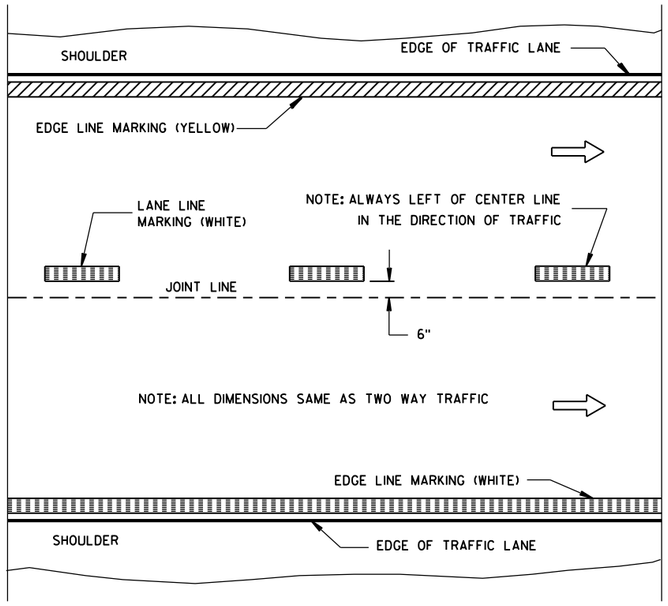
S.D.D. 15 C 7-12c

6

S.D.D. 15 C 7-12c

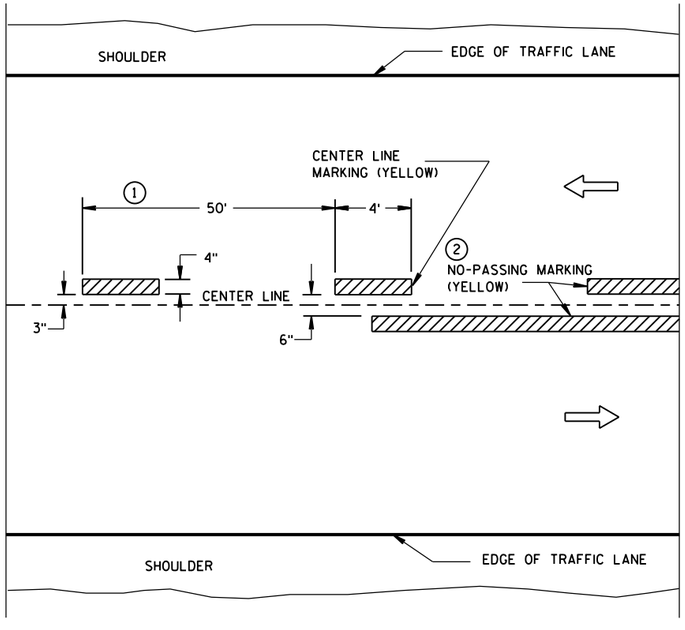


TWO WAY TRAFFIC

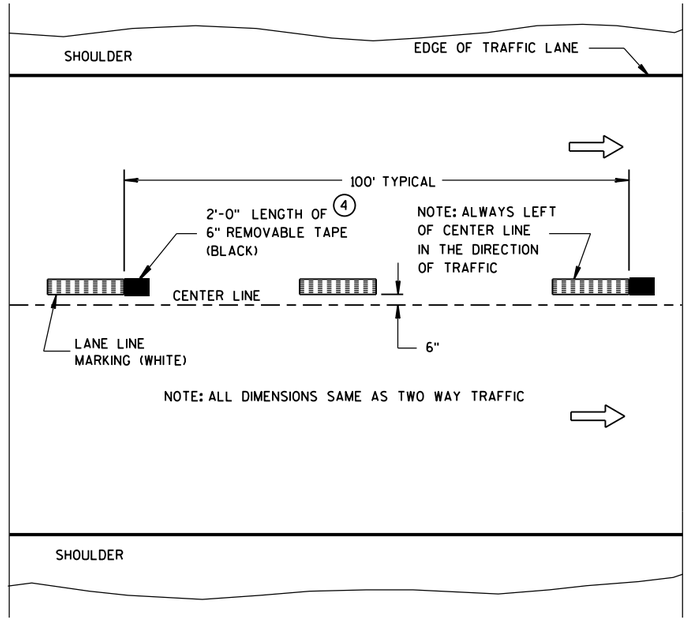


ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY (INTERMEDIATE) PAVEMENT MARKING

(SHOWS CYCLE FOR TEMPORARY CENTER LINE OR TEMPORARY LANE LINE MARKING)

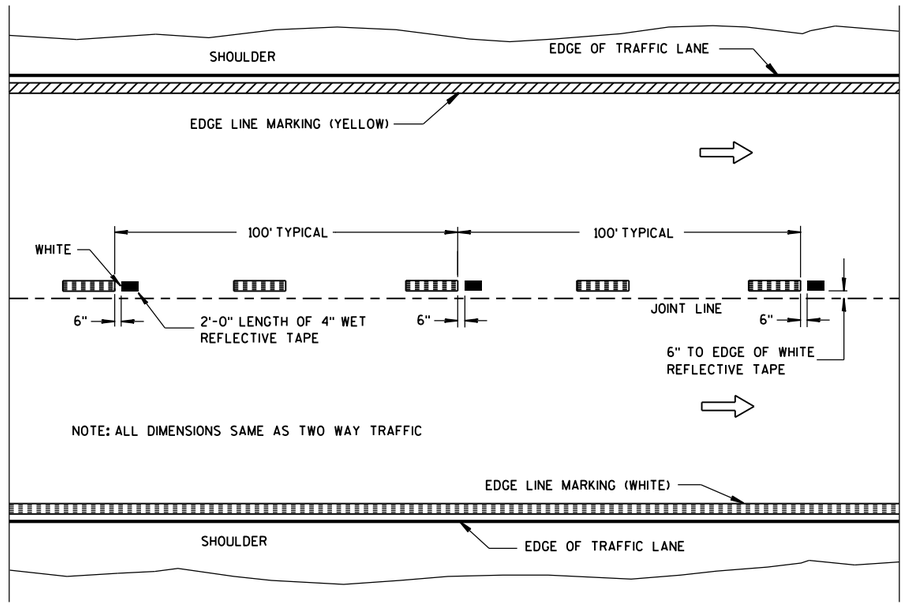
GENERAL NOTES

DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.

1. HALF CYCLE LENGTHS (25'±) WITH 2' MINIMUM STRIPE LENGTHS SHALL BE PROVIDED ON ROADWAYS (INCLUDING TEMPORARY TRAVELED WAYS) WITH REVERSE CURVATURE, CURVATURE OF OVER 5 DEGREES OR WHEN DIRECTED BY THE ENGINEER TO MARK UNUSUAL ALIGNMENT OF THE TRAVELED WAY.
2. NO PASSING ZONE TEMPORARY PAVEMENT MARKING IS REQUIRED TO BE PLACED, WHERE APPROPRIATE, ALONG WITH CENTERLINE TEMPORARY PAVEMENT MARKING WHEN A SAME DAY PERMANENT PAVEMENT MARKING ITEM IS INCLUDED IN THE CONTRACT.
3. NO PASSING ZONE MARKINGS ARE PLACED ACCORDING TO "T" MARKINGS. IF EXISTING NO PASSING ZONE W14-3 SIGNS ARE BEYOND 50 FEET IN EITHER DIRECTION, THE SIGNS SHALL BE MOVED TO THE "T" MARKINGS.
4. CONCRETE ONLY.

NOTE

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL



WET REFLECTIVE TAPE SUPPLEMENT TO
SPRAYED OR NON WET REFLECTIVE TAPE LANE LINE

LEGEND

"T" MARKING

POST MOUNTED SIGN

PAVEMENT MARKING (MAINLINE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

5-13-2013
DATE

/S/ Travis Feltes
STATE TRAFFIC E

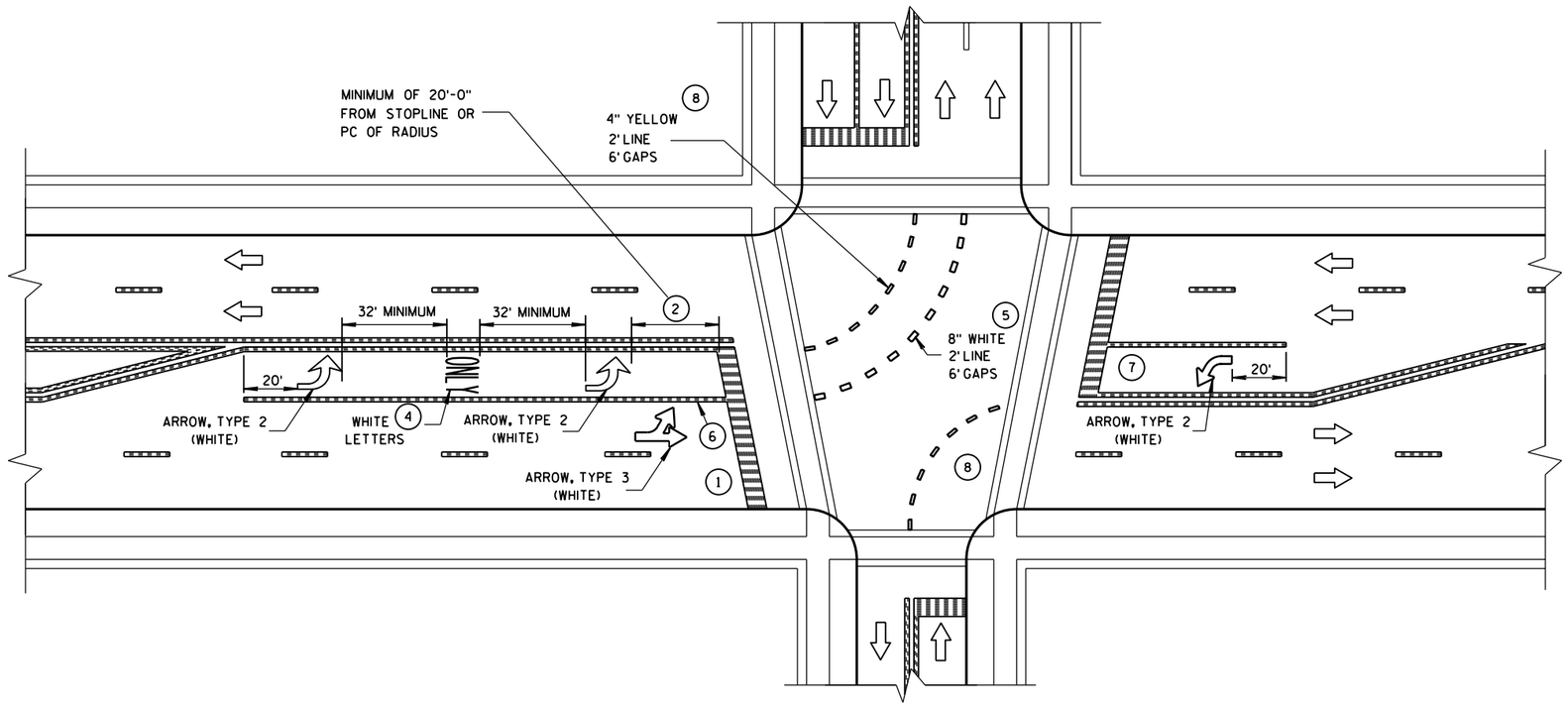
FHWA

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S.D.D. 15 C 8-16a

6

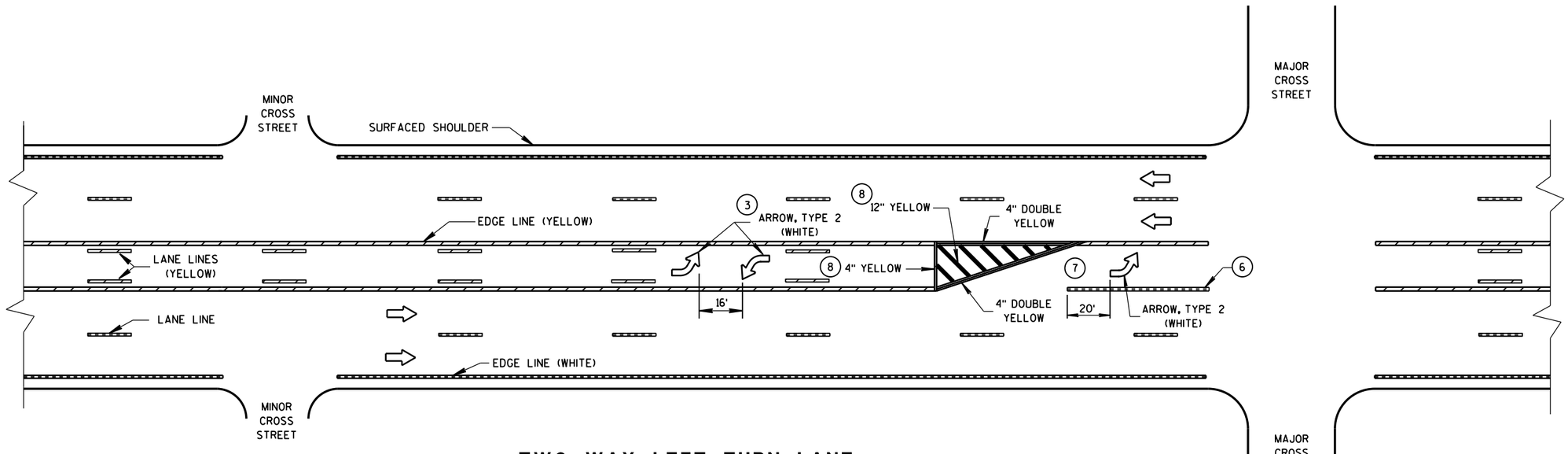
S.D.D. 15 C 8-16a



GENERAL NOTES

1. STOP BAR IS REQUIRED ONLY WHEN SPECIFIED IN THE CONTRACT.
2. DISTANCE MAY BE ADJUSTED TO ACCOMODATE SHORT LEFT TURN LANES. AS APPROVED BY THE ENGINEER.
3. A SET OF ARROWS IS REQUIRED EVERY 400 FEET OR NEAR INTERSECTIONS OR DRIVEWAYS WITH TURNING TRAFFIC.
4. ADD EXTRA SETS OF ONE ARROW AND ONE ONLY PER 160 FEET OR WHEN ON A CURVE.
5. 8" WHITE WITH 2' LINE 6' GAPS FOR DUAL TURN LANE.
6. 8" WHITE
7. ADD SECOND ARROW WHEN TURN BAY IS GREATER THAN OR EQUAL TO 108 FEET.
8. REQUIRED ONLY WHEN SPECIFIED IN THE CONTRACT.

NOTE:
ARROW SYMBOL (⇨)
SHOWS DIRECTION OF TRAVEL



TWO WAY LEFT TURN LANE

PAVEMENT MARKING (LEFT TURN LANE)

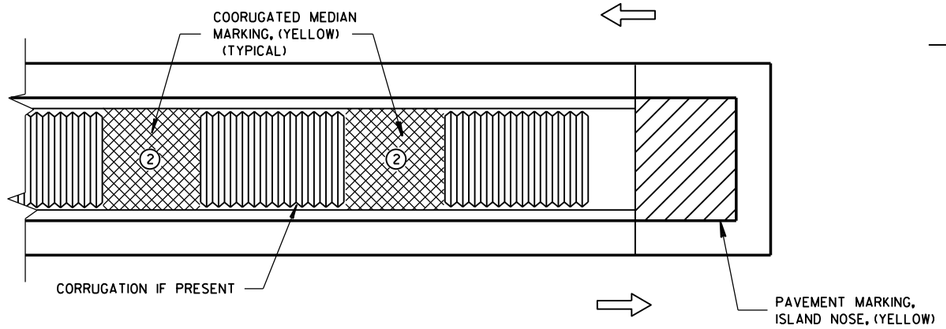
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

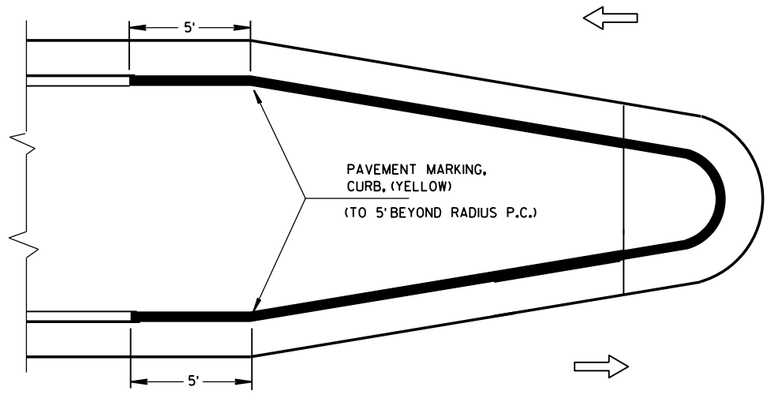
S.D.D. 15 C 8-16e

6

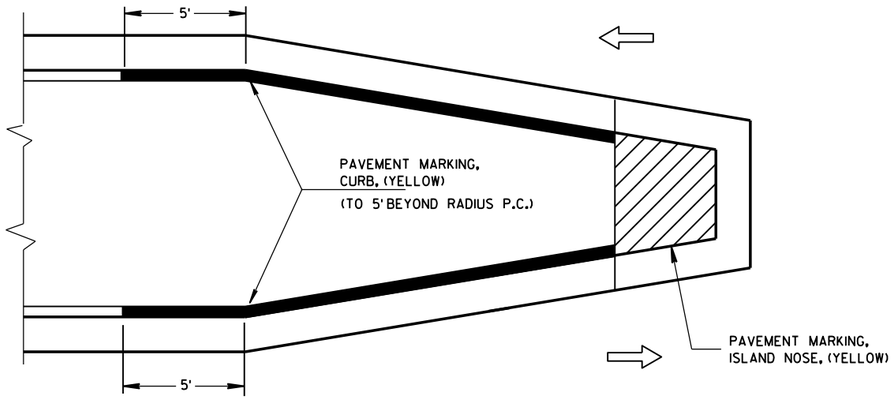
S.D.D. 15 C 8-16e



MEDIAN ISLAND WITH SQUARE BLUNT NOSE

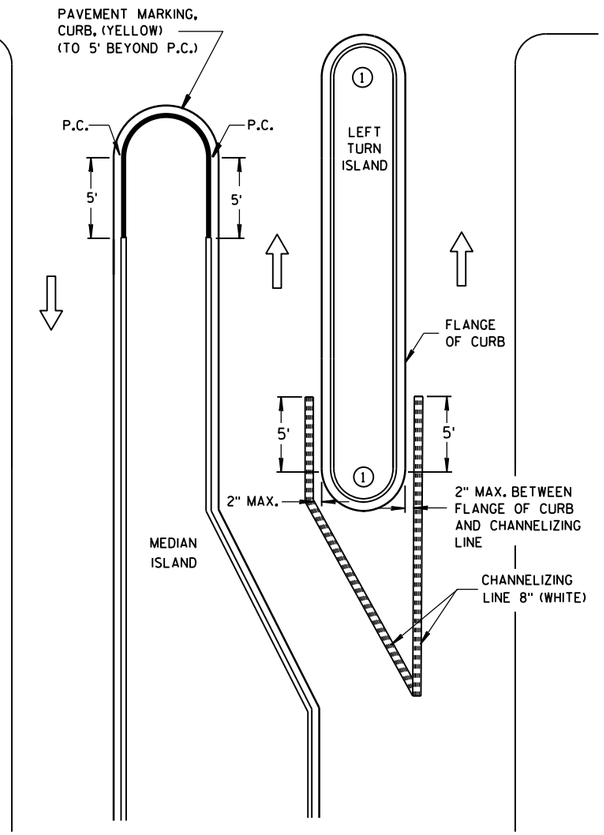


MEDIAN ISLAND WITH ROUND BLUNT NOSE



MEDIAN ISLAND WITH SLOPED NOSE

TYPICAL PLACEMENT OF PAVEMENT MARKING ON MEDIAN ISLANDS

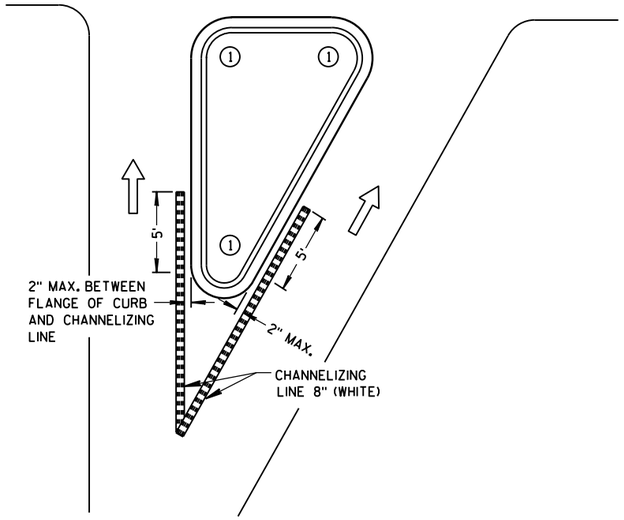


LEFT TURN & MEDIAN ISLAND

GENERAL NOTES

1. DO NOT MARK CURB NOSES THAT SEPARATE LANES OF TRAFFIC TRAVELING IN THE SAME DIRECTION.

2. WHEN CONCRETE CORRUGATED MEDIAN IS CONSTRUCTED TO SEPARATE TRAFFIC OPERATING IN THE OPPOSING DIRECTION YELLOW PAVEMENT MARKING SHALL BE APPLIED TO THE FLAT PORTION OF THE CONCRETE CORRUGATED MEDIAN. THE ITEM OF PAVEMENT MARKING, CONCRETE CORRUGATED MEDIAN, WILL BE MEASURED IN PLACE AND AND ACCEPTED IN ACCORDANCE WITH THE CONTRACT AND PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE FOOT.



RIGHT TURN ISLAND

LEGEND

- ISLAND NOSE MARKING
- CURB MARKING
- CORRUGATED MEDIAN MARKING
- DIRECTION OF TRAVEL

PAVEMENT MARKING
(ISLANDS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

S.D.D. 15 C 8-16f

LEGEND

SIGN ON PORTABLE OR PERMANENT SUPPORT

DIRECTION OF TRAFFIC

WORK AREA

FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF

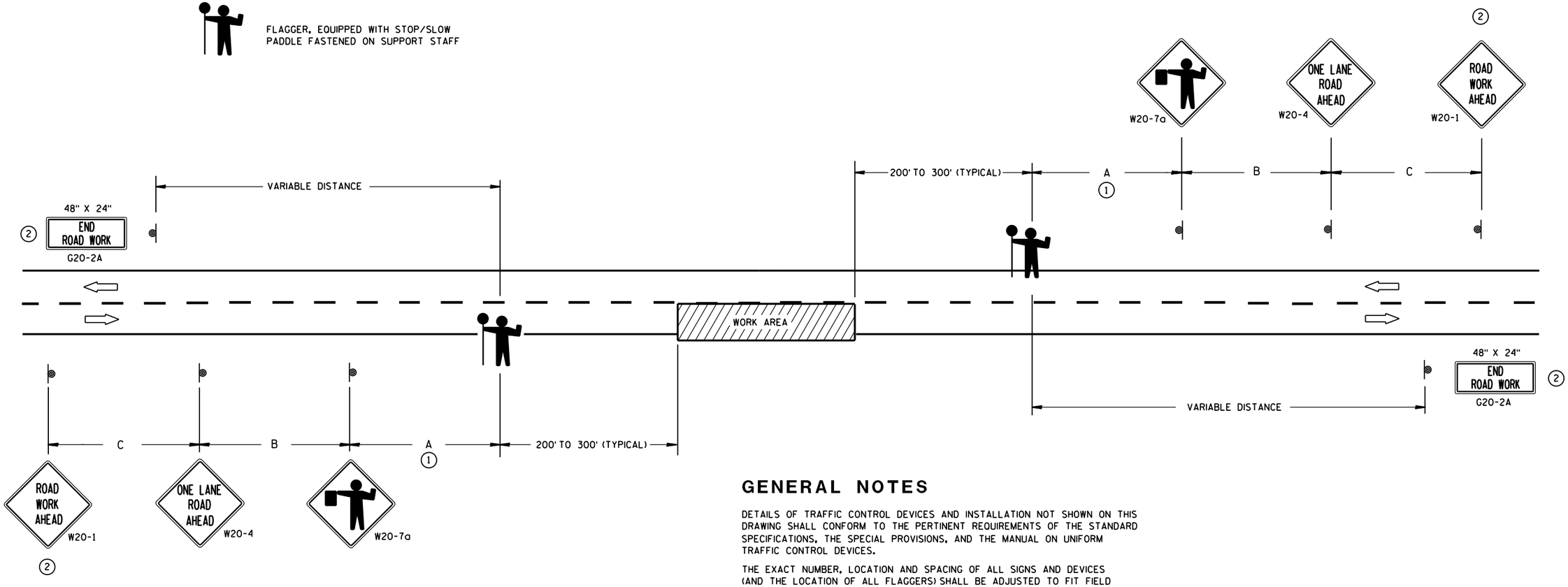
SIGN SPACING TABLE

SPEED LIMIT	SIGN SPACING A,B,C
25-35 MPH	200'
35-40 MPH	350'
45-55 MPH	500'



W3-4

USE OF THE "BE PREPARED TO STOP" SIGN IS OPTIONAL. WHEN USED, THIS SIGN SHALL BE LOCATED BETWEEN THE W20-7a AND W20-4 SIGNS. A 500' TYPICAL SPACING SHALL BE PROVIDED BETWEEN THE SIGNS.



(1) FOR A MOVING WORK OPERATION,
SIGNING FOR BOTH DIRECTIONS SHALL BE REESTABLISHED (AS SIMULTANEOUSLY AS PRACTICAL) AT APPROXIMATELY 3500 FOOT INTERVALS IN THE MOVING WORK OPERATION OR AS APPROVED BY THE ENGINEER.

(2) SIGN NOT REQUIRED IF FLAGGING OPERATION OCCURS WITHIN A SIGNED ROAD WORK ZONE AREA.

GENERAL NOTES

DETAILS OF TRAFFIC CONTROL DEVICES AND INSTALLATION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS, THE SPECIAL PROVISIONS, AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS AND DEVICES (AND THE LOCATION OF ALL FLAGGERS) SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

THE FIRST ADVANCE WARNING SIGN SHOULD TYPICALLY BE LOCATED IN ADVANCE OF THE ANTICIPATED TRAFFIC BACKUP OR QUEUE.

WHEN A SIDE ROAD OR RAMP INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, ADDITIONAL TRAFFIC CONTROLS SHALL BE PROVIDED AS SPECIFIED IN THE PLANS AND/OR THE SPECIAL PROVISIONS OR AS APPROVED BY THE ENGINEER.

FLAGGERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIMES. THEY SHALL BE EQUIPPED WITH STOP/SLOW PADDLES FASTENED ON SUPPORT STAFFS. WHEN THE FLAGGING OPERATION IS NOT IN EFFECT, COVER OR REMOVE ALL TEMPORARY TRAFFIC CONTROL SIGNS.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
8/2013
DATE
/S/ Travis Feltes
STATE TRAFFIC ENGINEER

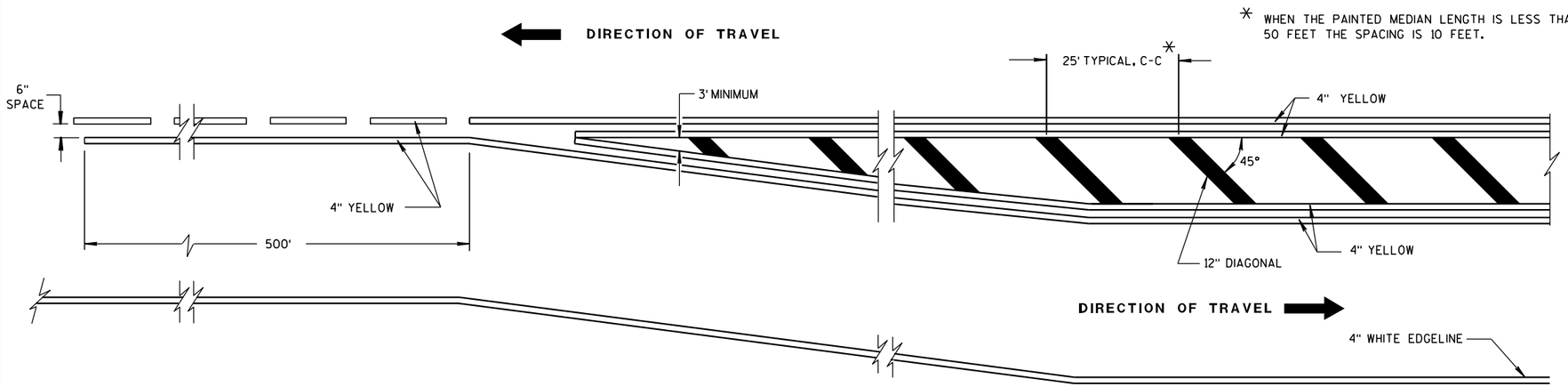
FHWA

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S.D.D. 15 C 12-4

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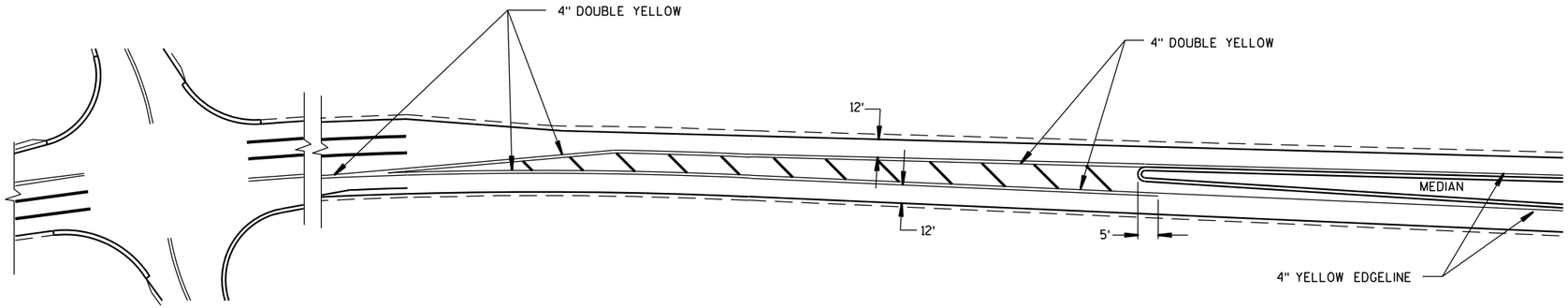
S.D.D. 15 C 12-4



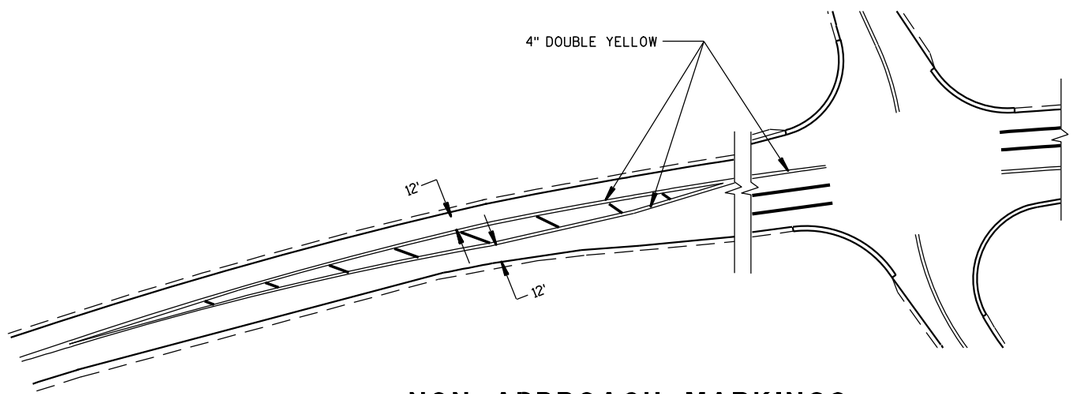
MEDIAN ISLAND DETAIL

GENERAL NOTE

DIAGONALS ARE OPTIONAL WHEN PAINTED ISLAND IS LESS THAN 6 FEET AT WIDEST POINT.



APPROACH MARKINGS FOR OTHER MEDIAN TYPES



NON APPROACH MARKINGS

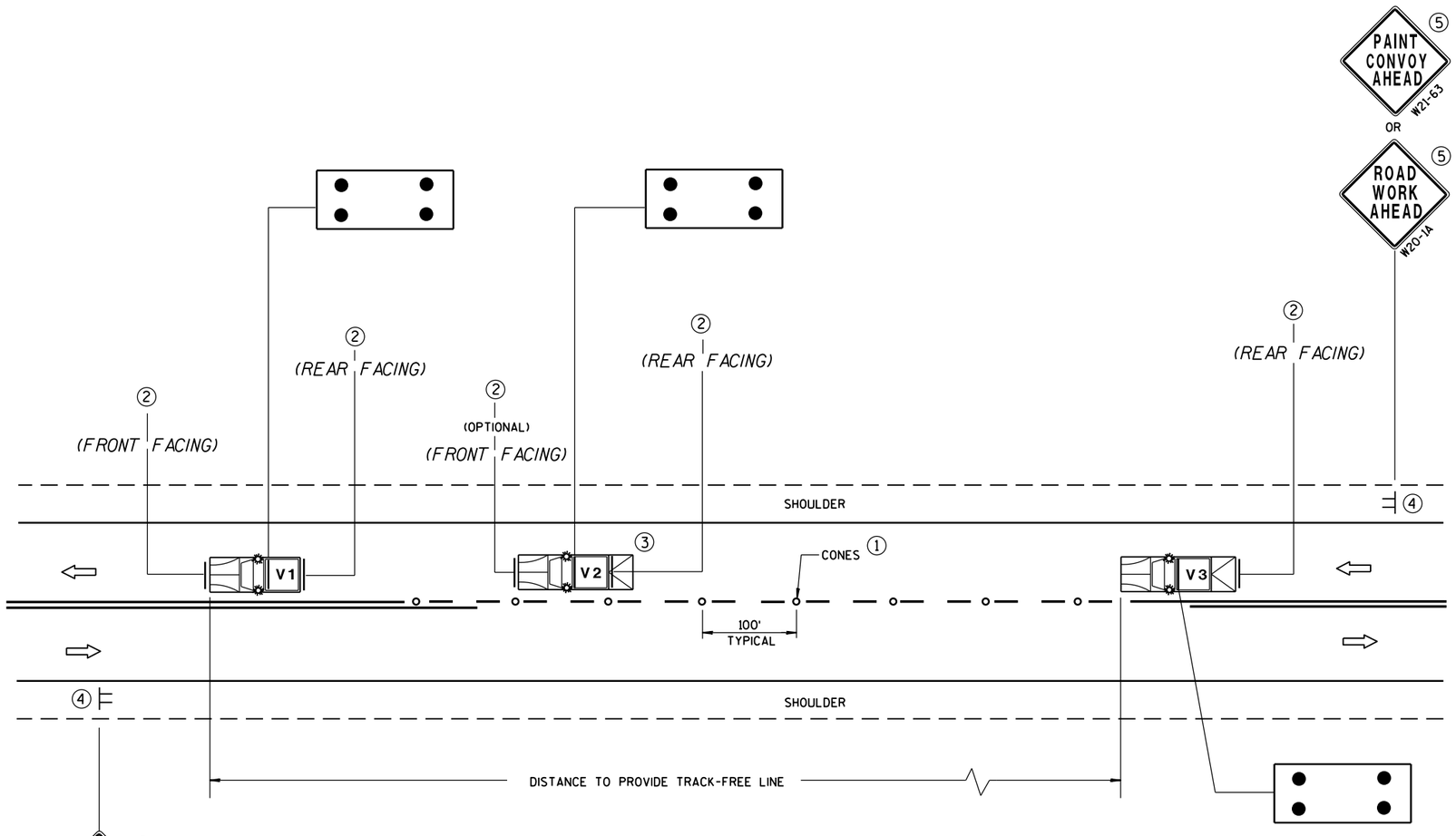
MEDIAN ISLAND MARKING	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 2-5-09 DATE	/S/ Thomas N. Nothohm STATE TRAFFIC ENGINEER
FHWA	459 IGN

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S.D.D. 15 C 18-3

6

S.D.D. 15 C 18-3



MOVING PAVEMENT MARKING OPERATIONS
TWO-LANE TWO-WAY 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.

VEHICLES SHALL BE EQUIPPED WITH REAR FACING TYPE B OR C FLASHING ARROW PANEL OPERATING IN CAUTION MODE. 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.

THE WORK AND SHADOW VEHICLES SHOULD PULL OVER PERIODICALLY TO ALLOW TRAFFIC TO PASS.

THIS DRAWING SHALL BE USED FOR CENTERLINE OR EDGELINE MARKING.

WHEN NO WORK ACTIVITY IS TAKING PLACE, REMOVE OR TURN THE STATIONARY WARNING SIGNS AWAY FROM TRAFFIC.

(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) OPTIONAL TRUCK-MOUNTED ATTENUATOR.

(4) SIGNS SHALL BE REPEATED APPROXIMATELY EVERY THREE MILES.

(5) 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
o	CONES
⁘	FLASHING ARROW PANEL (CAUTION)

MOVING PAVEMENT MARKING OPERATION
TWO-LANE TWO-WAY ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

/S/ Peter Amakobe Atepe
STATEWIDE WORK ZOI SAFETY ENGIN

DATE

FHWA

460

C

6

S.D.D. 15 C 19-3a

6

S.D.D. 15 C 19-3a

GENERAL NOTES

SIGNING AND MARKING IS SHOWN AS TYPICAL PLACEMENT. FIELD CONDITIONS MAY DICTATE CHANGES IN SIGNING AND MARKING PLACEMENT.

A DISTANCE DEPENDENT ON SPEED (SEE TABLE)

(1) WRONG WAY PREVENTION SIGNS ARE DISCUSSED IN T G M 2-15-12

(2) OPTIONAL - USED ONLY WHEN APPROVED BY REGION TRAFFIC ENGINEER.

SYMBOLS

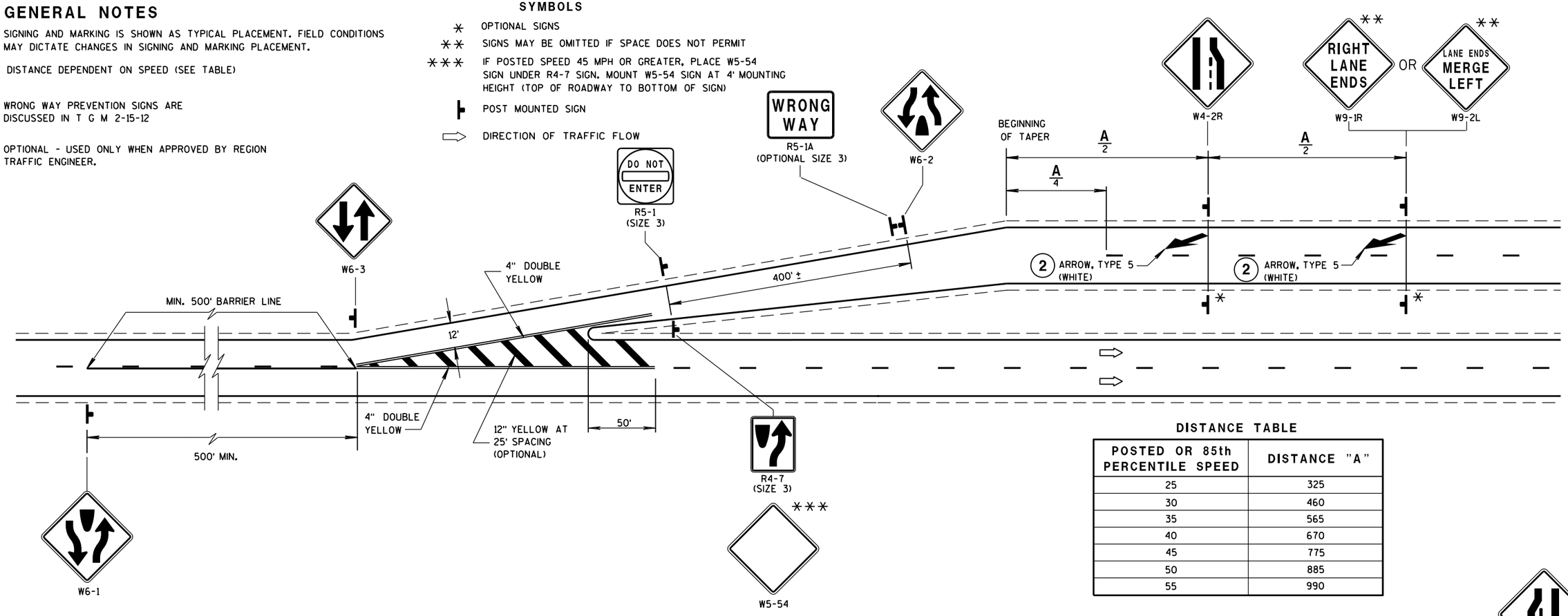
* OPTIONAL SIGNS

** SIGNS MAY BE OMITTED IF SPACE DOES NOT PERMIT

*** IF POSTED SPEED 45 MPH OR GREATER, PLACE W5-54 SIGN UNDER R4-7 SIGN. MOUNT W5-54 SIGN AT 4' MOUNTING HEIGHT (TOP OF ROADWAY TO BOTTOM OF SIGN)

POST MOUNTED SIGN

DIRECTION OF TRAFFIC FLOW



DISTANCE TABLE

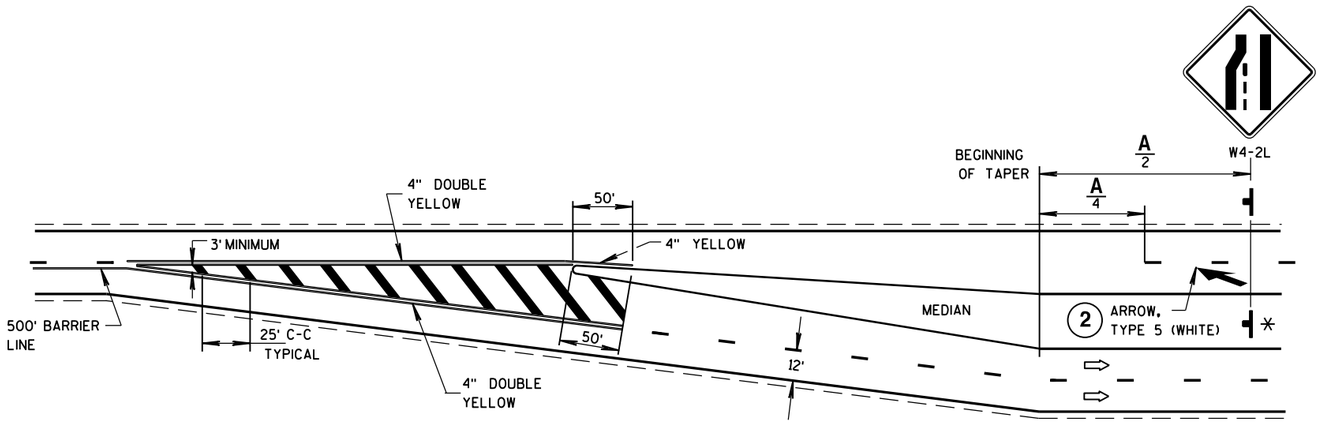
POSTED OR 85th PERCENTILE SPEED	DISTANCE "A"
25	325
30	460
35	565
40	670
45	775
50	885
55	990

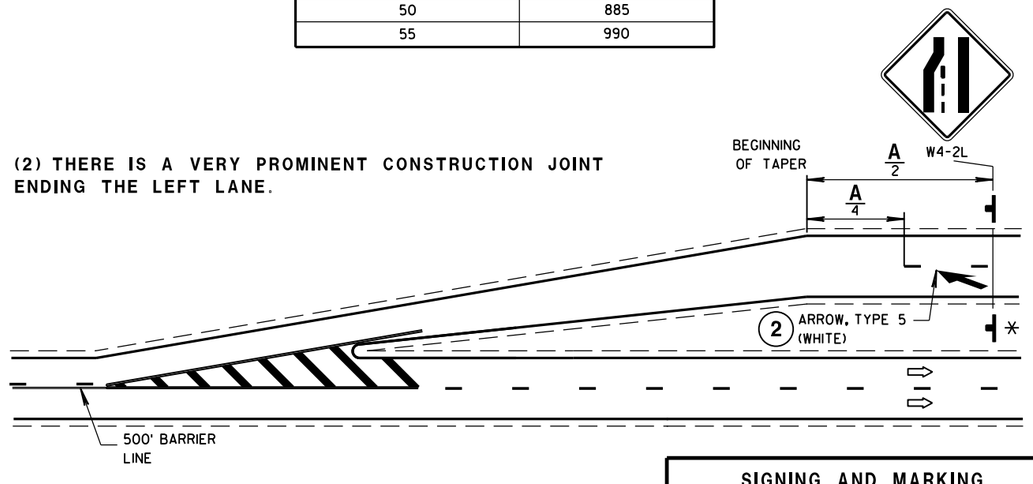
USE W4-2L IF :

(1) THE LEFT LANE IS PUSHED TO THE RIGHT:

OR

(2) THERE IS A VERY PROMINENT CONSTRUCTION JOINT ENDING THE LEFT LANE.





SIGNING AND MARKING
TWO LANE TO FOUR LANE
DIVIDED TRANSITIONS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

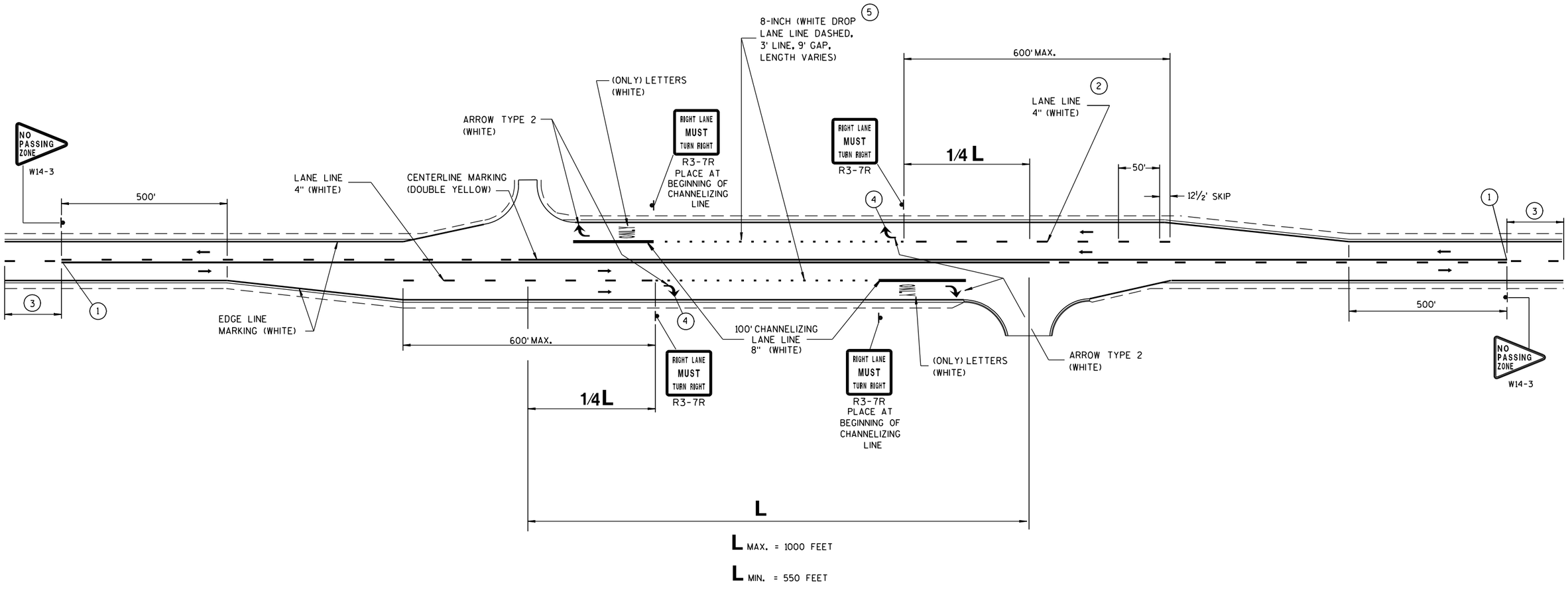
APPROVED
June, 2015 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER
FHWA

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S.D.D. 15 C 21-6

GENERAL NOTES

1. BARRIER LINE STARTS AT 500 FEET PRIOR TO THE BYPASS TAPER.
2. PLACE R3-7R SIGNS AT BEGINNING OF WHITE DROP LANE LINE DASHED AND WHITE CHANNEL LINE.
3. IF THE DISTANCE BETWEEN TWO SUCCESSIVE NO PASSING ZONES IS LESS THAN THE MINIMUM DISTANCE BETWEEN ZONES, CONNECT THE TWO ZONES.
4. REQUIRED ONLY WHEN SPECIFIED IN THE PLANS.
5. 3' LINE 9' GAP, EXCEPT RETRACE THE EXISTING LINE - GAP PATTERN WHERE EXISTING MARKINGS ARE IN PLACE.



LEGEND

⇄ DIRECTION OF TRAFFIC

SIGNING AND MARKING FOR COMBINATION RIGHT TURN AND BYPASS LANE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

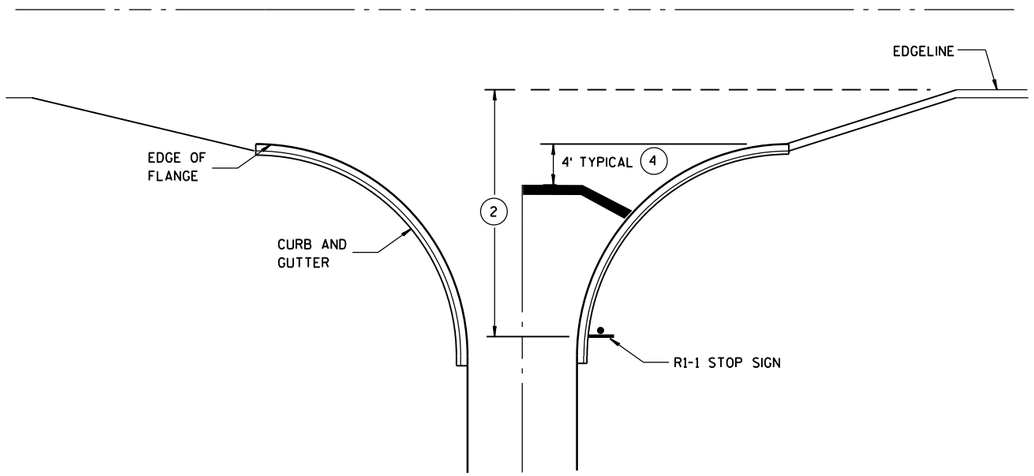
5-13-10 DATE

/S/ Thomas N. Notbohm
STATE TRAFFIC ENGINEER

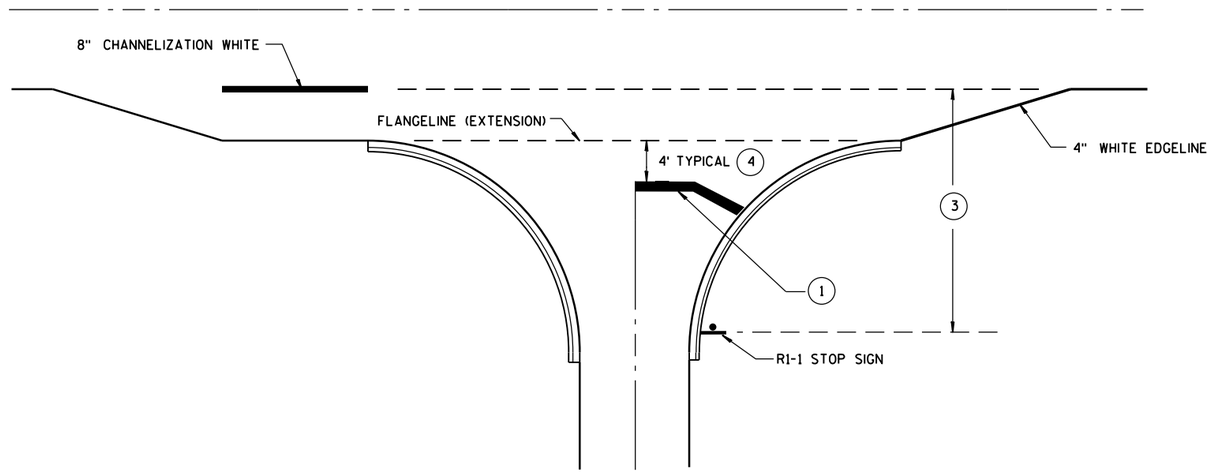
FHWA

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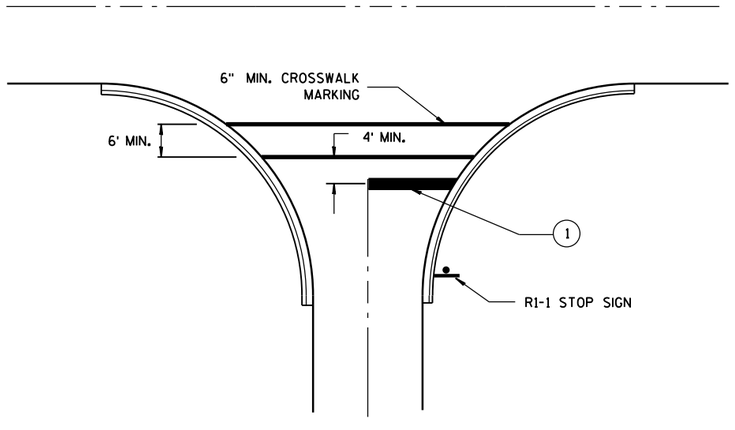
S.D.D. 15 C 28-2



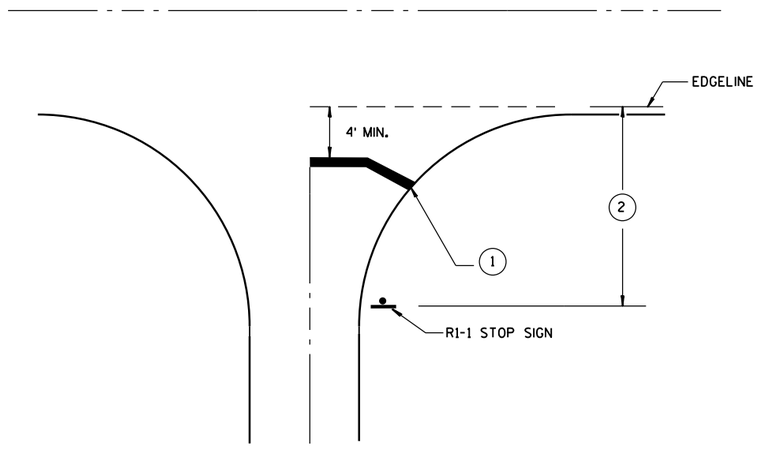
TYPICAL STOP LINE PAVEMENT MARKING WITH CURB AND GUTTER



TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH RIGHT TURN LANE



TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH CROSSWALK MARKING



TYPICAL STOP LINE PAVEMENT MARKING WITHOUT CURB AND GUTTER

GENERAL NOTES

1. 18-INCH STOP LINES MAY BE DELETED OR ADDED BY THE PROJECT ENGINEER BASED ON VISIBILITY AND SIGHT LINES.
2. IF STOP SIGN IS LESS THAN OR EQUAL TO 40 FEET FROM THE EDGELINE THAN NO STOP LINE IS REQUIRED.
3. IF STOP SIGN IS LESS THAN OR EQUAL TO 30 FEET FROM THE FLANGELINE EXTENSION THAN NO STOP LINE IS REQUIRED.
4. MOVE CLOSER TO EDGE OF TRAVEL LANE AS NEEDED FOR VISIBILITY AND SIGHT LINES.

STOP LINE AND CROSSWALK PAVEMENT MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

4/30/2013
DATE

/S/ Travis Feltes
STATE TRAFFIC E

FHWA

6

S.D.D. 15 C 33-1

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. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36" X 36" SIGNS MAY BE USED IF APPROVED BY DISTRICT TRAFFIC UNIT.

"WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS 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.

W20-1A AND G20-2A SIGNS ARE NOT REQUIRED IF THE WORK AREA IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT. G20-2A SIGNS MAY ALSO BE OMITTED IF DURATION OF WORK IS LESS THAN 7 CONTINUOUS DAYS AND NIGHTS.

CHANNELIZING DEVICES PLACED ADJACENT TO THE WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

TABLE A

SHOULDER TAPER LENGTH (FEET)					BUFFER SPACE (FEET)
S \ W	4	6	8	10	
30	20	30	40	50	200
35	30	45	55	70	250
40	40	55	75	90	305
45	60	90	120	150	360
50	70	100	135	170	425
55	75	110	150	185	495

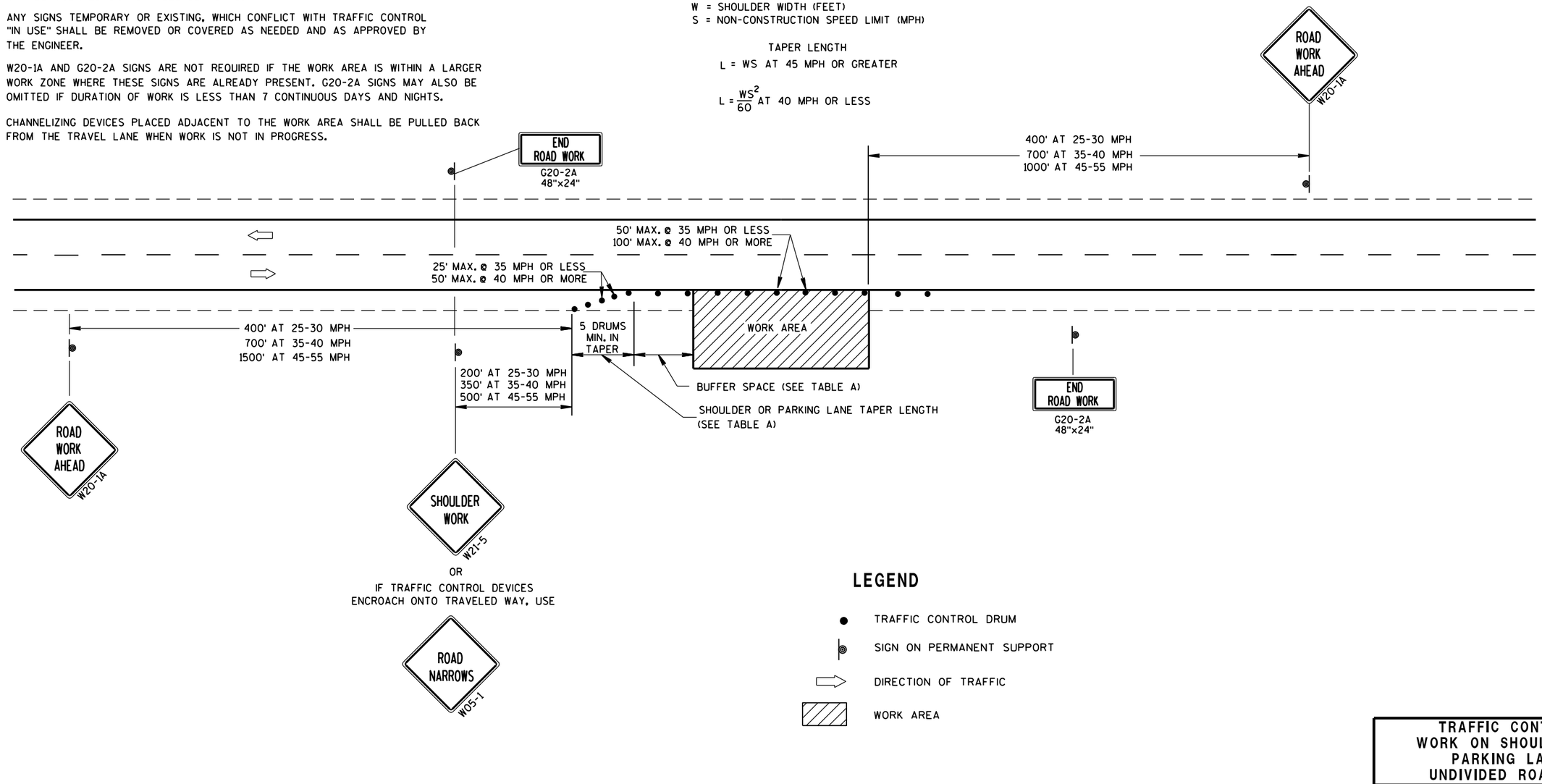
W = SHOULDER WIDTH (FEET)
S = NON-CONSTRUCTION SPEED LIMIT (MPH)

TAPER LENGTH

L = WS AT 45 MPH OR GREATER

$L = \frac{WS^2}{60}$ AT 40 MPH OR LESS

SHOULDER TAPER LENGTH = $\frac{1}{3}L$



LEGEND

- TRAFFIC CONTROL DRUM
- SIGN ON PERMANENT SUPPORT
- DIRECTION OF TRAFFIC
- WORK AREA

TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

July 14, 2015 — DATE

/S/ Peter Amakobe Atepe
STATEWIDE WORK ZO[illegible] SAFETY ENGI[illegible] FIC

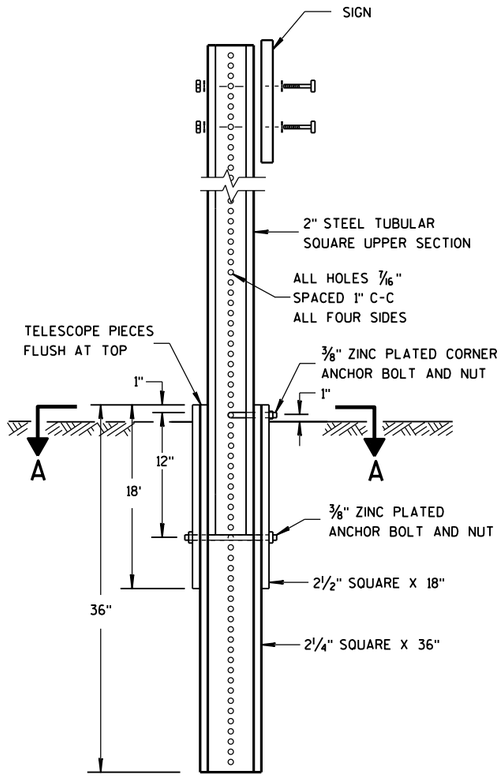
FHWA

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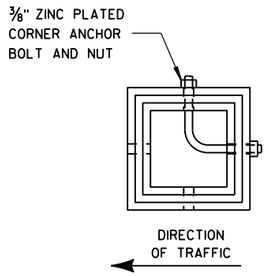
S.D.D. 15 D 28-3

6

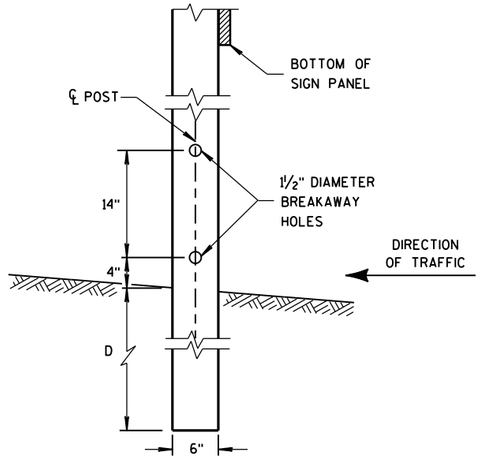
S.D.D. 15 D 28-3



DETAIL OF TUBULAR STEEL SIGN POST



SECTION A-A



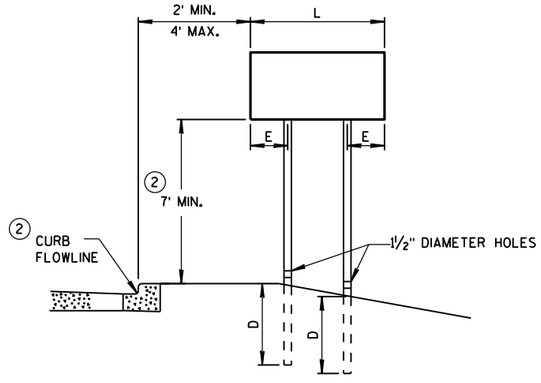
4"x6" WOOD POST MODIFICATION

GENERAL NOTES

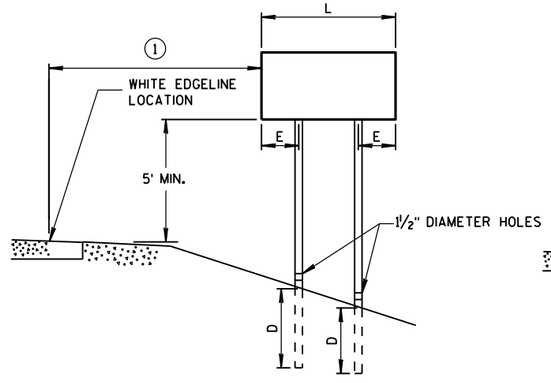
(1) 6 FEET FROM THE EDGE OF PAVEMENT (EDGE LINE LOCATION) UNLESS OTHERWISE DIRECTED BY THE PROJECT ENGINEER. LATERAL OFFSET SHOULD BE ADJUSTED TO AVOID THE DITCH FLOWLINE.

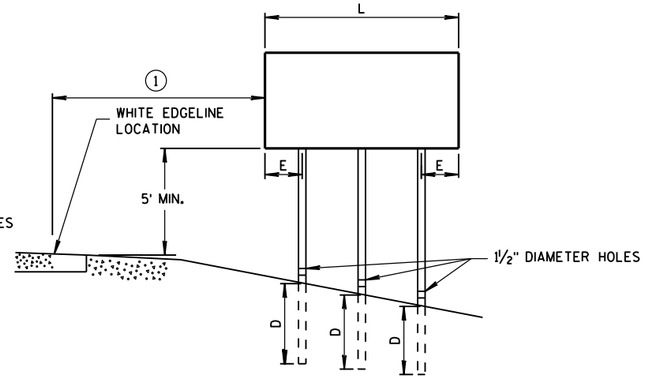
(2) THE EXISTENCE OF CURB AND GUTTER DOES NOT IN ITSELF MANDATE THE VERTICAL CLEARANCE ILLUSTRATED. THAT HEIGHT IS TYPICALLY MEASURED WHERE THERE IS SIDEWALK ADJACENT TO THE ROADWAY OR PARKING IS PERMITTED. IN THE ABSENCE OF SIDEWALK, VERTICAL CLEARANCE IS MEASURED FROM THE TOP OF THE CURB. IF NO SIDEWALK 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

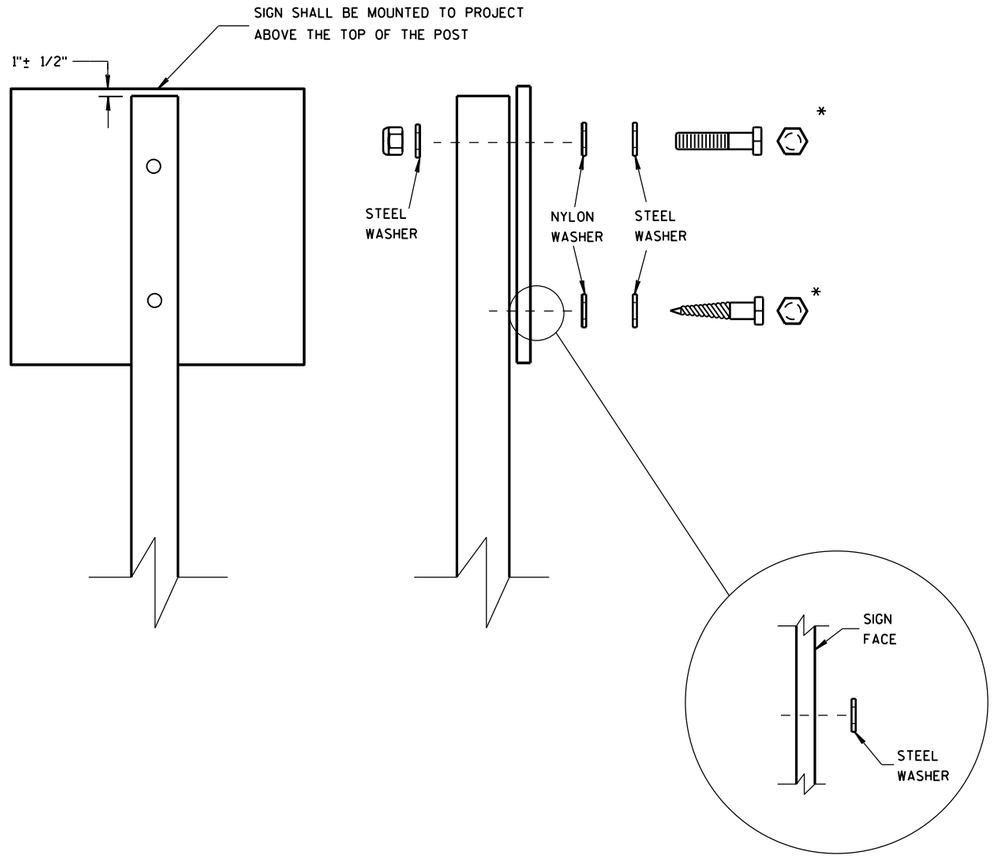
SEE NOTE (3)

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.

6

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

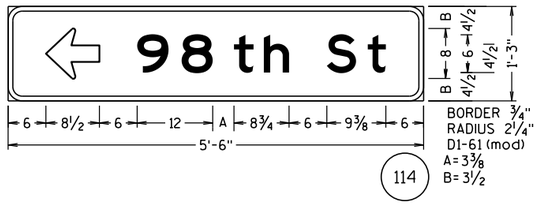
APPROVED

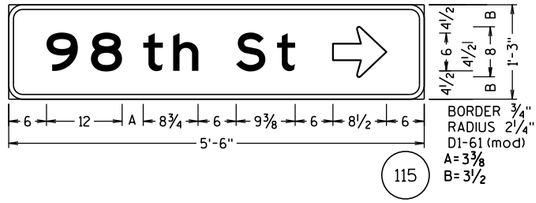
Feb. 2015 — DATE

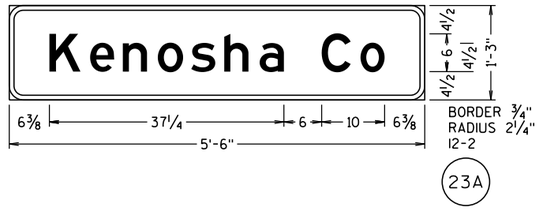
/S/ Travis Feltes — STATE TRAFFIC ENGINEER

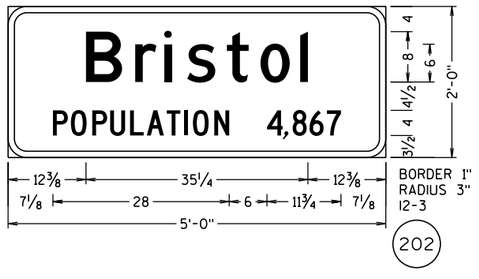
FHWA

SIGN









GENERAL NOTES:

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

2. UNLESS OTHERWISE NOTED, ALL SIGNS SHOWN ON THIS SHEET ARE "SIGNS, TYPE II".

3. UNLESS OTHERWISE NOTED, TYPE II SIGNS ON THIS SHEET SHALL HAVE "TYPE H REFLECTIVE SHEETING" AND, "TYPE H MESSAGE MATERIAL". TYPE I SIGNS SHALL HAVE TYPE SH REFLECTIVE SHEETING.

4. UNLESS OTHERWISE NOTED, ALL SIGNS SHOWN ON THIS SHEET SHALL HAVE A GREEN BACKGROUND AND WHITE MESSAGE.

5. TYPE II SIGNS ALL UPPER CASE MESSAGE (EXCEPT ON SHIELDS OR WHERE OTHERWISE NOTED) SHALL BE "SERIES E. ALL LOWER CASE MESSAGE WITH AN INITIAL UPPER CASE LETTER SHALL BE "SERIES E.

6. TYPE I SIGNS - ALL UPPER CASE MESSAGE (EXCEPT ON SHIELDS OR WHERE OTHERWISE NOTED) SHALL BE SERIES "E" MODIFIED. ALL LOWER CASE MESSAGE WITH AN INITIAL UPPER CASE LETTER SHALL BE SERIES "E" MODIFIED. ALL CAP WORDS ARE "SERIES E"

7. UNLESS OTHERWISE NOTED, ALL SIGNS SHOWN ON THIS SHEET SHALL HAVE "TYPE A" OR "TYPE C" ARROWS AS SHOWN. SEE THE STANDARD SIGN PLATES FOR FURTHER DETAILS.

8. SEE THE STANDARD SIGN PLATES FOR FURTHER DETAILS ON ROUTE MARKER SHIELDS.

9. THE SIGN NUMBER IS DENOTED IN THE CIRCLE NEAR EACH DETAIL.

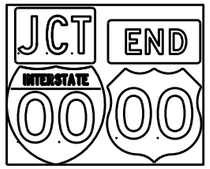
10. NUMBER FRACTIONS FOR INTERCHANGE SEQUENCE SIGNS SHALL BE SERIES "E" PER PLATES ALL-7 AND ALL-10

11. DO NOT SCALE.

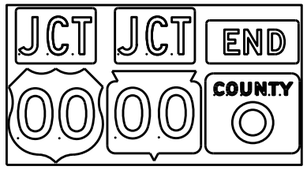
TYPICAL ASSEMBLIES



J1-1



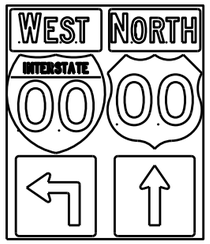
J1-2



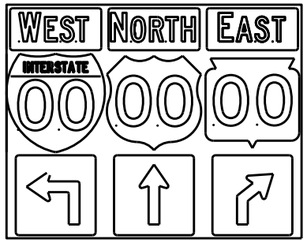
J1-3



J2-1



J2-2

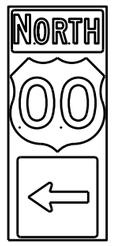


J2-3

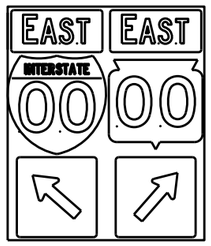


JV

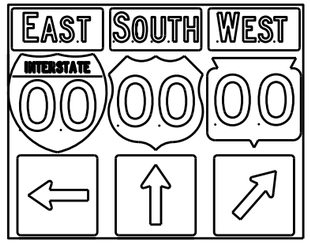
(Typical Vertical J-Assembly
See Note 10 and 11)



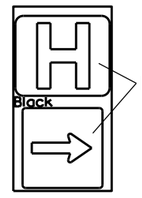
J3-1



J3-2



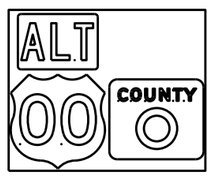
J3-3



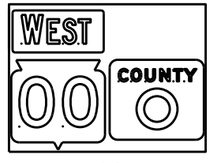
JH-1



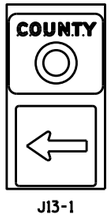
J4-1



J4-2



J4-2



J13-1



J12-1



J32-1



J33-1

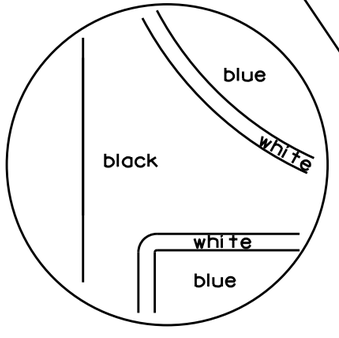


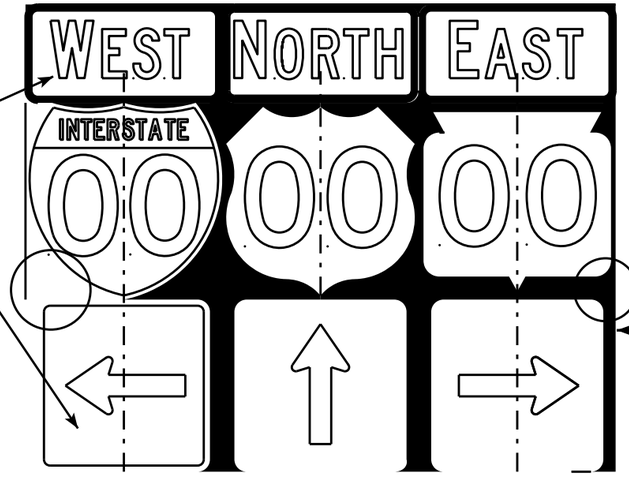
J23-1

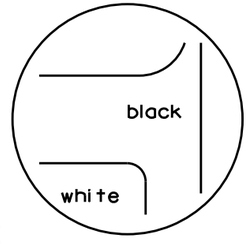


J22-1

[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

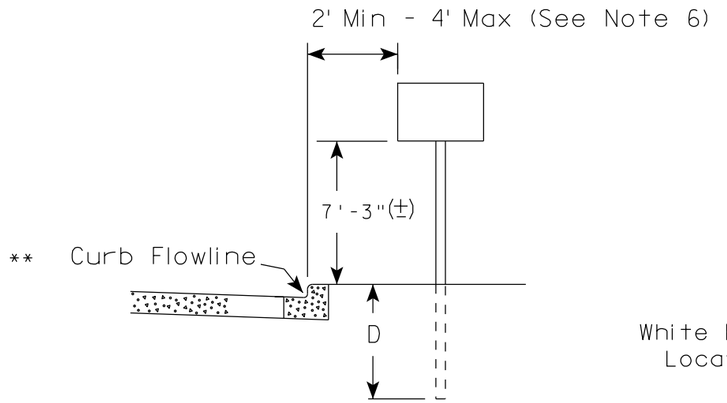
DATE 2/06/14 PL... A2-1S.8

PROJECT NO: | SHEET NO: E

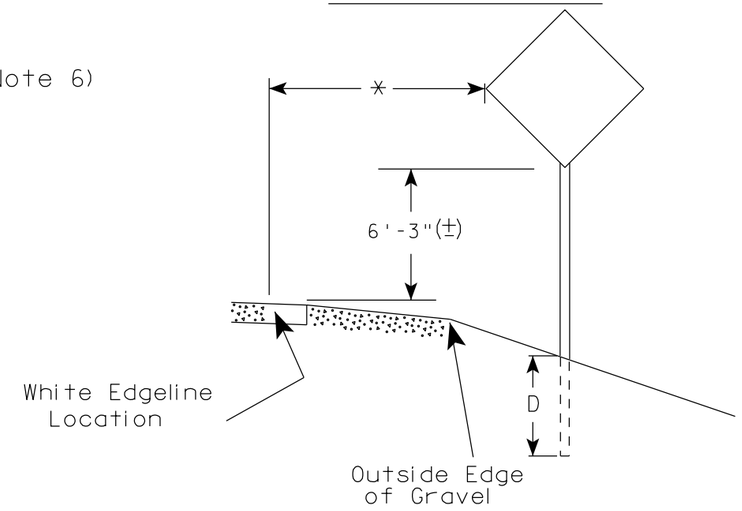
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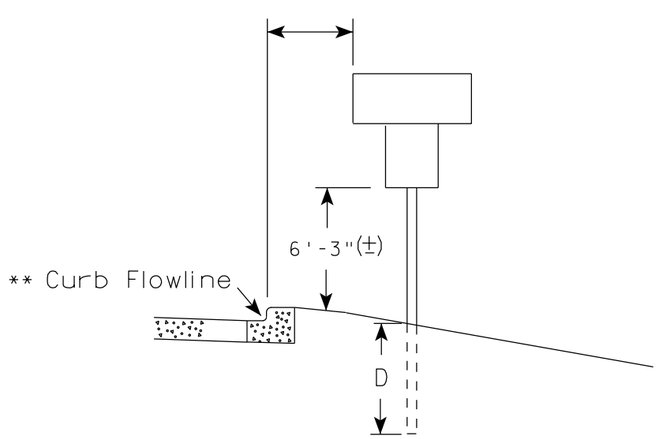
WISDOT/CADDS SHEET 42

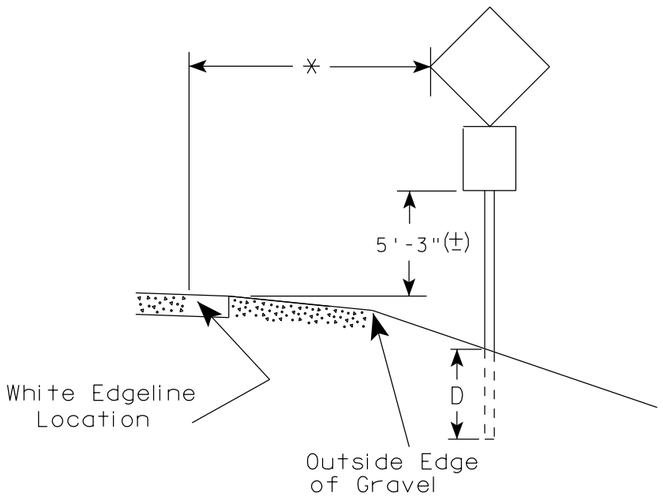
URBAN AREA



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" (±).

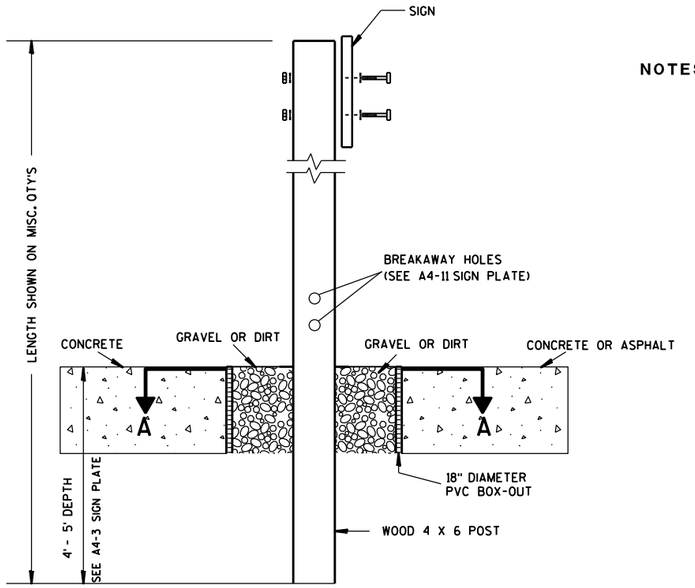
TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 7/23/15 PLATE NO. A4-3.20

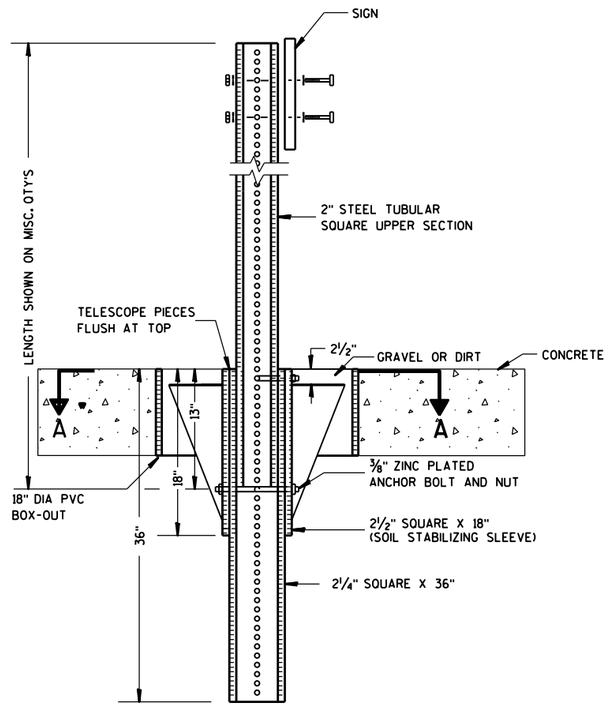
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



ELEVATION VIEW

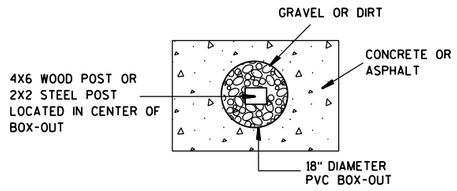
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

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

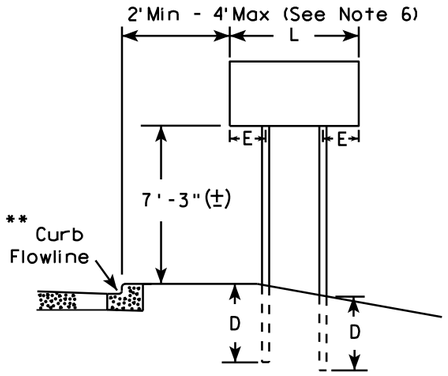
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/27/14 PLATE NO. A4-3B.1

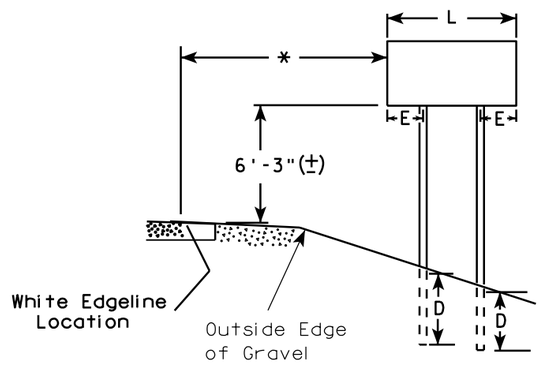
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

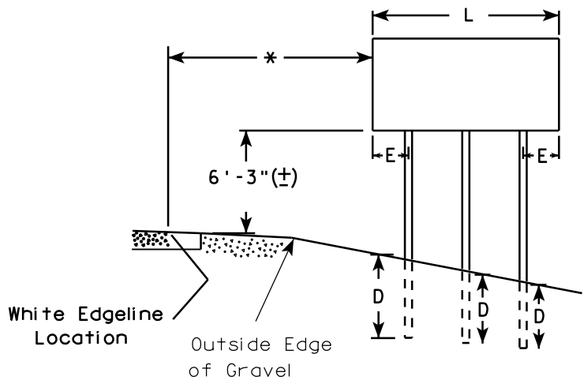
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A43B.DGN PLOT DATE : 27-JAN-2014 09:48 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 13.659812:1.000000 WISDOT/CADDS SHEET 42

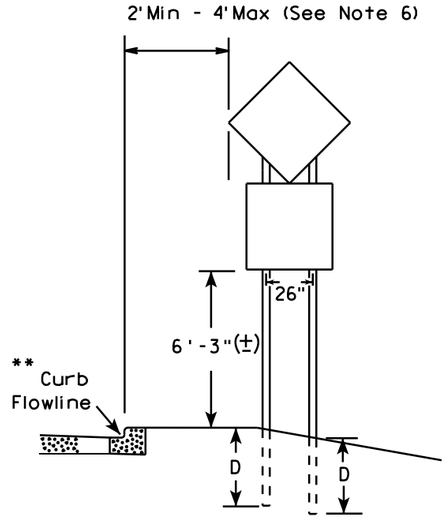
URBAN AREA



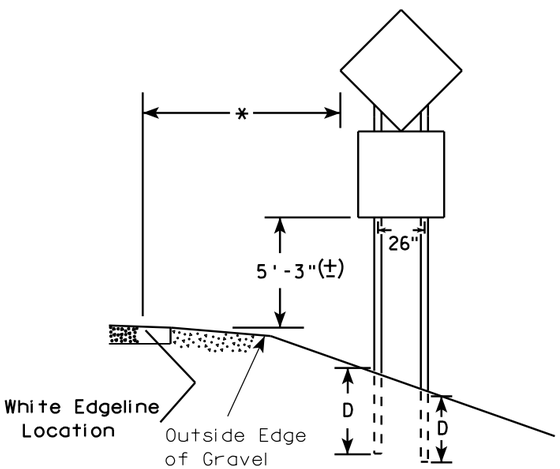
RURAL AREA (See Note 3)







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

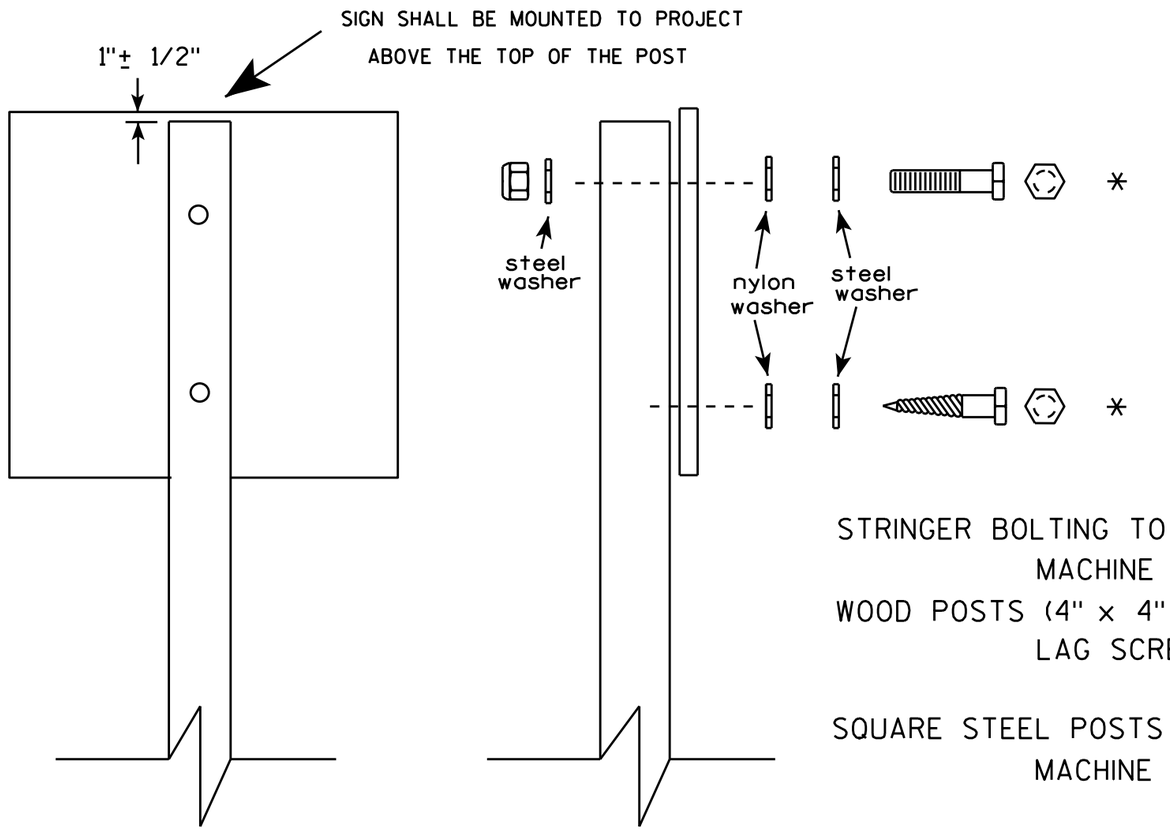
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 7/23/15 PLATE NO. A4-4 471 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



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/ 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

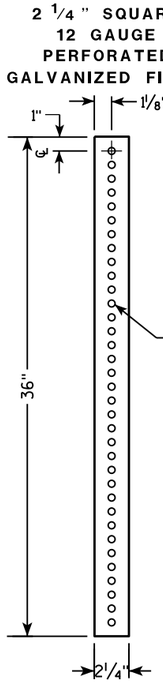
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/27/16 PLATE NO. A4-8.8

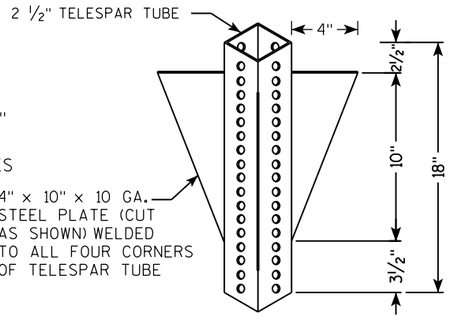
PROJECT NO: SHEET NO: E

TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM

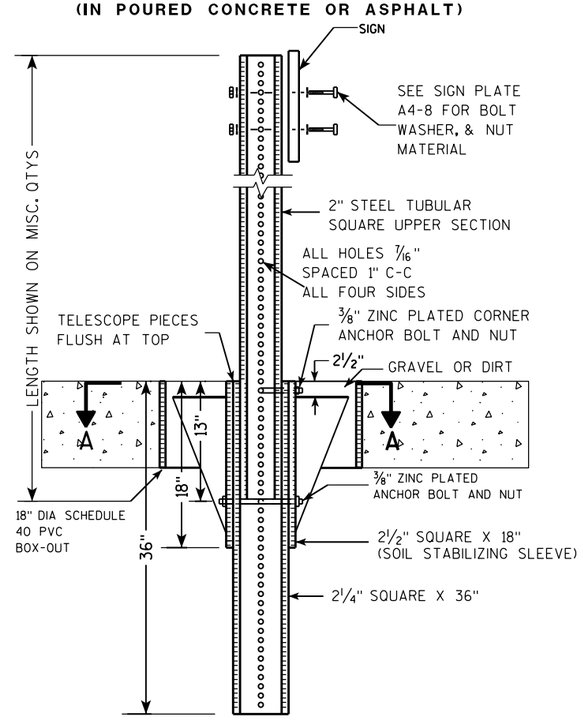
2 ¼ " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH



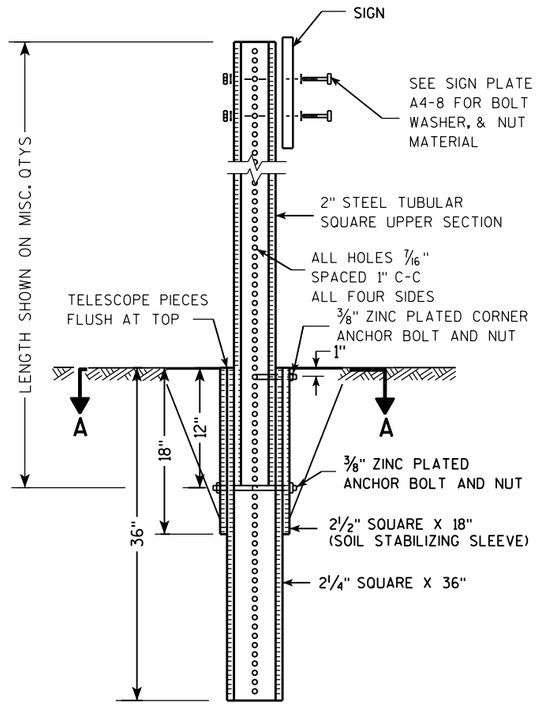
2 ½ " SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH

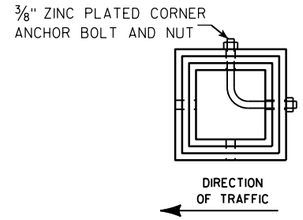


DETAIL OF TUBULAR STEEL SIGN POST
(IN POURED CONCRETE OR ASPHALT)



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).

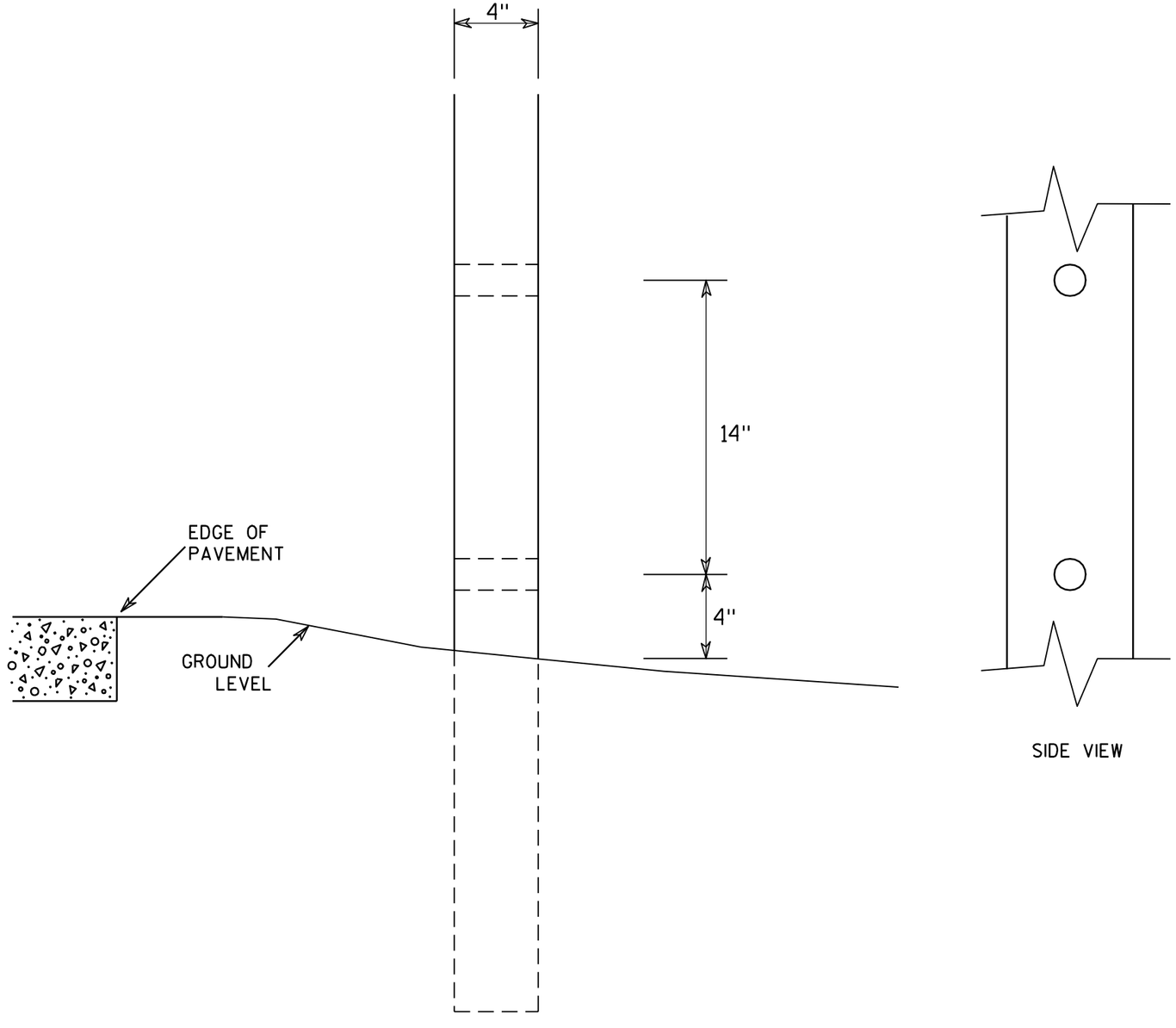
TUBULAR STEEL
SIGN POST
A4-9

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

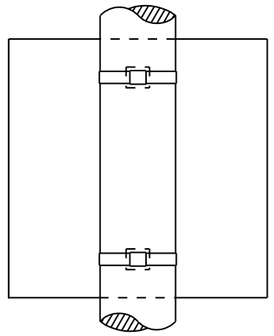
APPROVED Chester J Spang for State Traffic Engineer

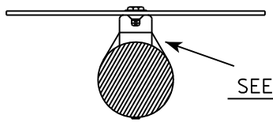
DATE 3/27/97 PLATE NO. A4-11.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 474	E

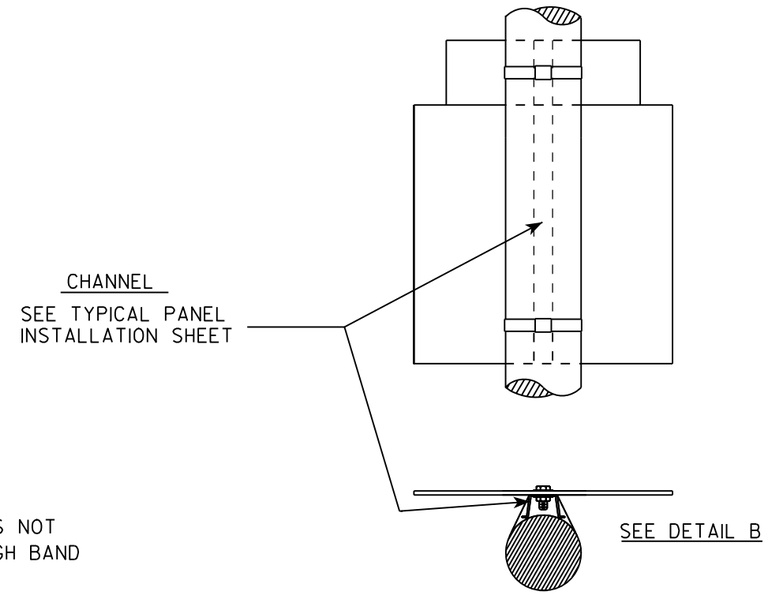
BANDING

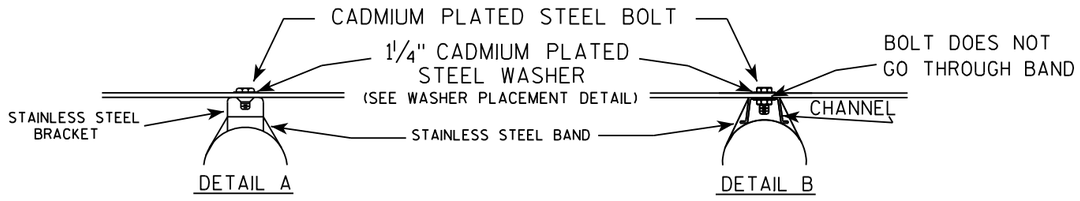
SINGLE SIGN



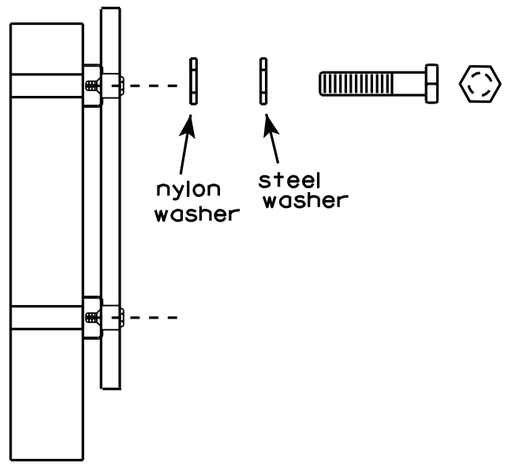


"J" ASSEMBLY





WASHER PLACEMENT



WASHERS (ALL POSTS) -
1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON
FOR ALL TYPE H SIGNS

GENERAL NOTES

1. Any sign over 3 feet in width shall use the V-Block banding method. See A5-10 standard plate.
2. Signs 3 feet or greater in height shall have three bracket bands installed. Signs less than 3 feet in height shall have two bracket bands installed.
3. Banding and assembly bracket shall be stainless steel. All bands shall be ¾" in width and 0.025" thickness.

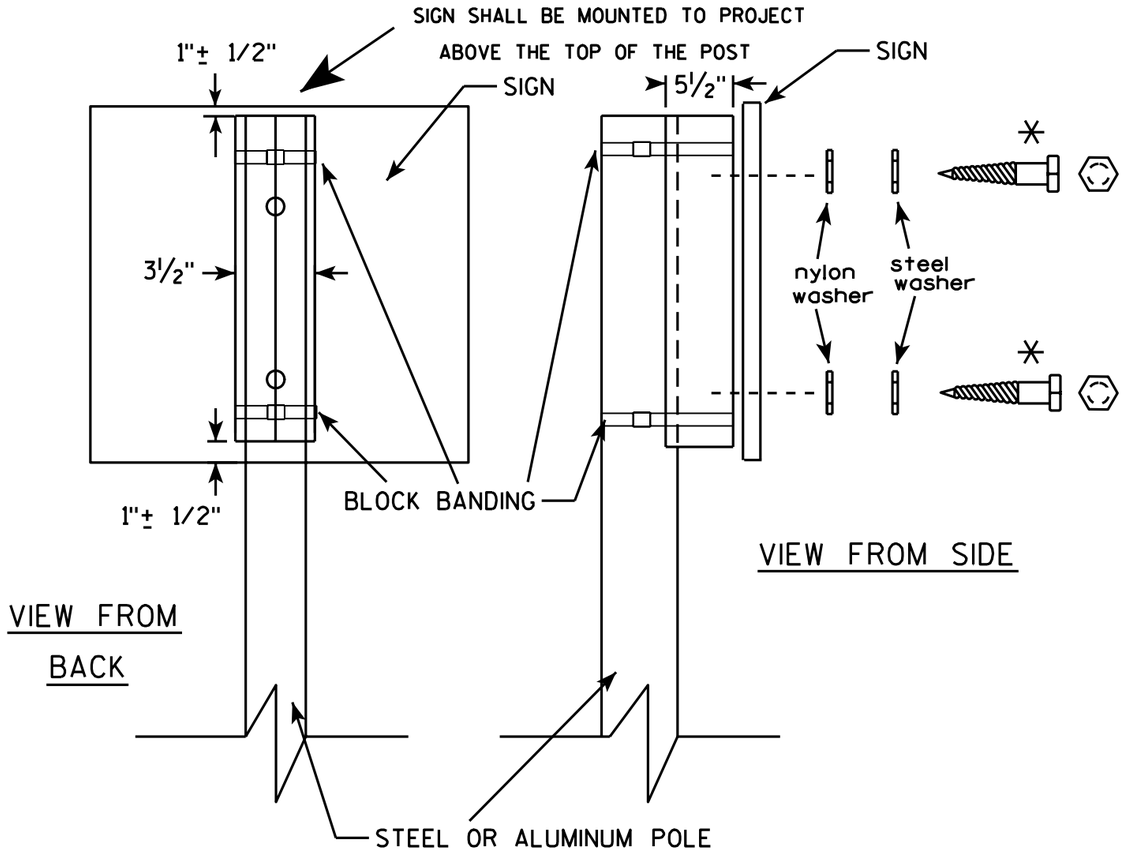
STANDARD SIGN
SIGN BANDING DETAILS

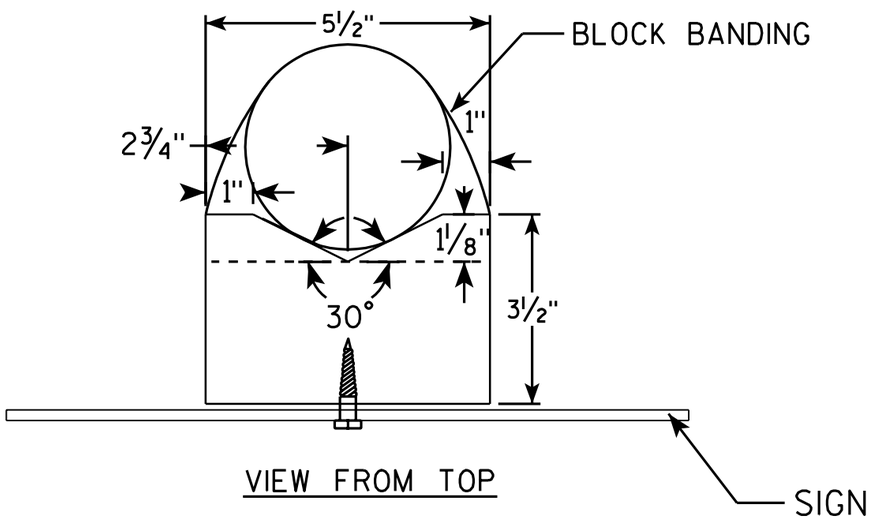
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 8/16/13 PLATE NO. A5-9.3

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 475	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

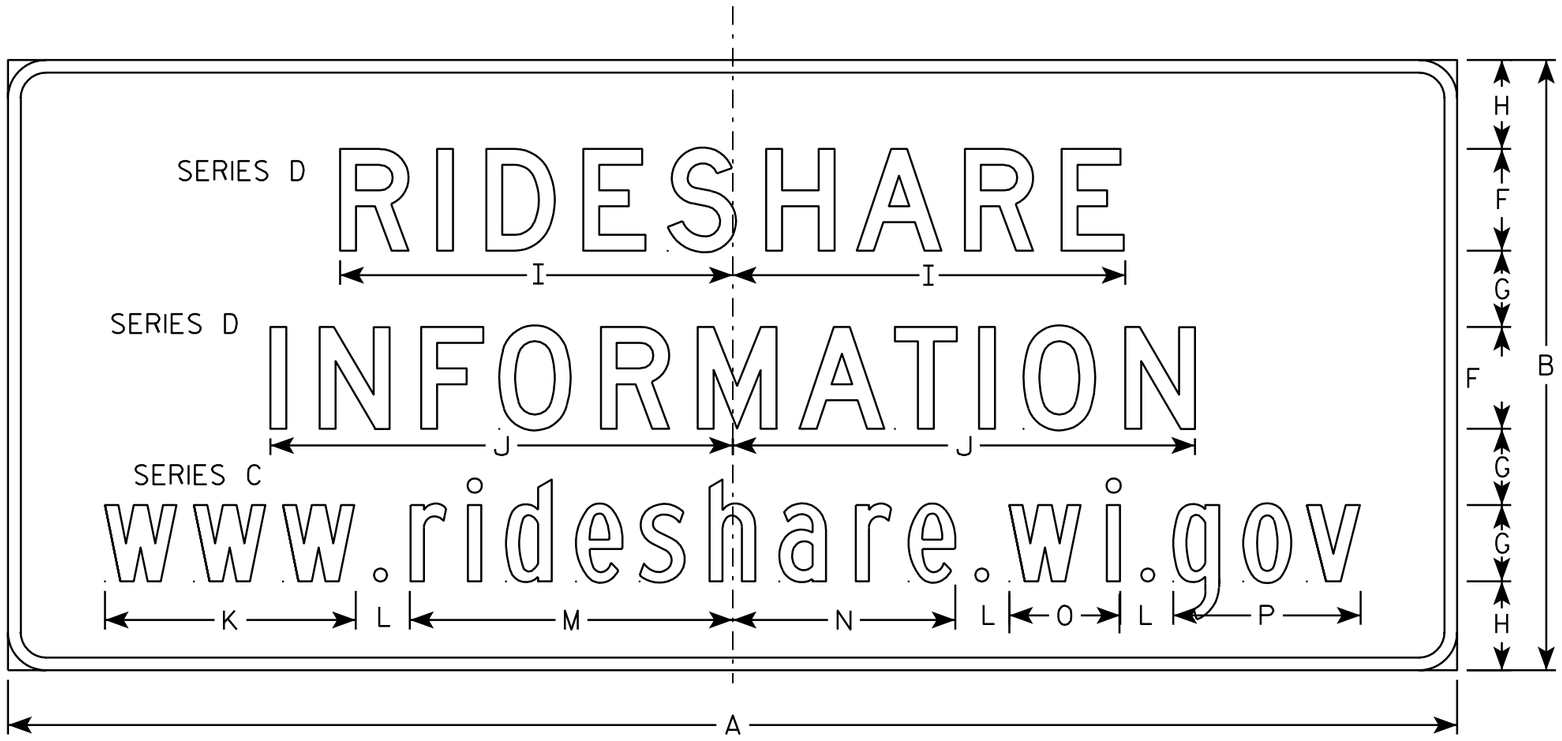
DATE 7/12/07 PLATE NO. A5-10.1

PROJECT NO:

SHEET NO: 476 E

FILE NAME : C:\Users\Projects\tr_stdplate\A510.dgn PLOT DATE : 06-AUG-2007 13:37 PLOT BY : ditjph

WISDOT/CADDS SHEET 42



D12-2B

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
3. Message Series - Lines 1 & 2 are Series D and Line 3 is 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	
2	2100 mm X 900 mm
3	
4	2850 mm X 1200 mm
5	2850 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	Area sq. ft.	Area m2
1																												
2	84	36	2 1/4		3/4	6	4 1/2	5 1/4	24 1/4	28 5/8	14 3/4	3	19	13 1/8	6 1/2	11											21.0	1.90
3																												
4	114	48	3		1	8	6	7	30 7/8	36 3/8	19 3/4	4 1/4	25 3/8	17 1/2	8 3/4	14 3/4											38.0	3.42
5	114	48	3		1	8	6	7	30 7/8	36 3/8	19 3/4	4 1/4	25 3/8	17 1/2	8 3/4	14 3/4											38.0	3.42

STANDARD SIGN
D12-2B

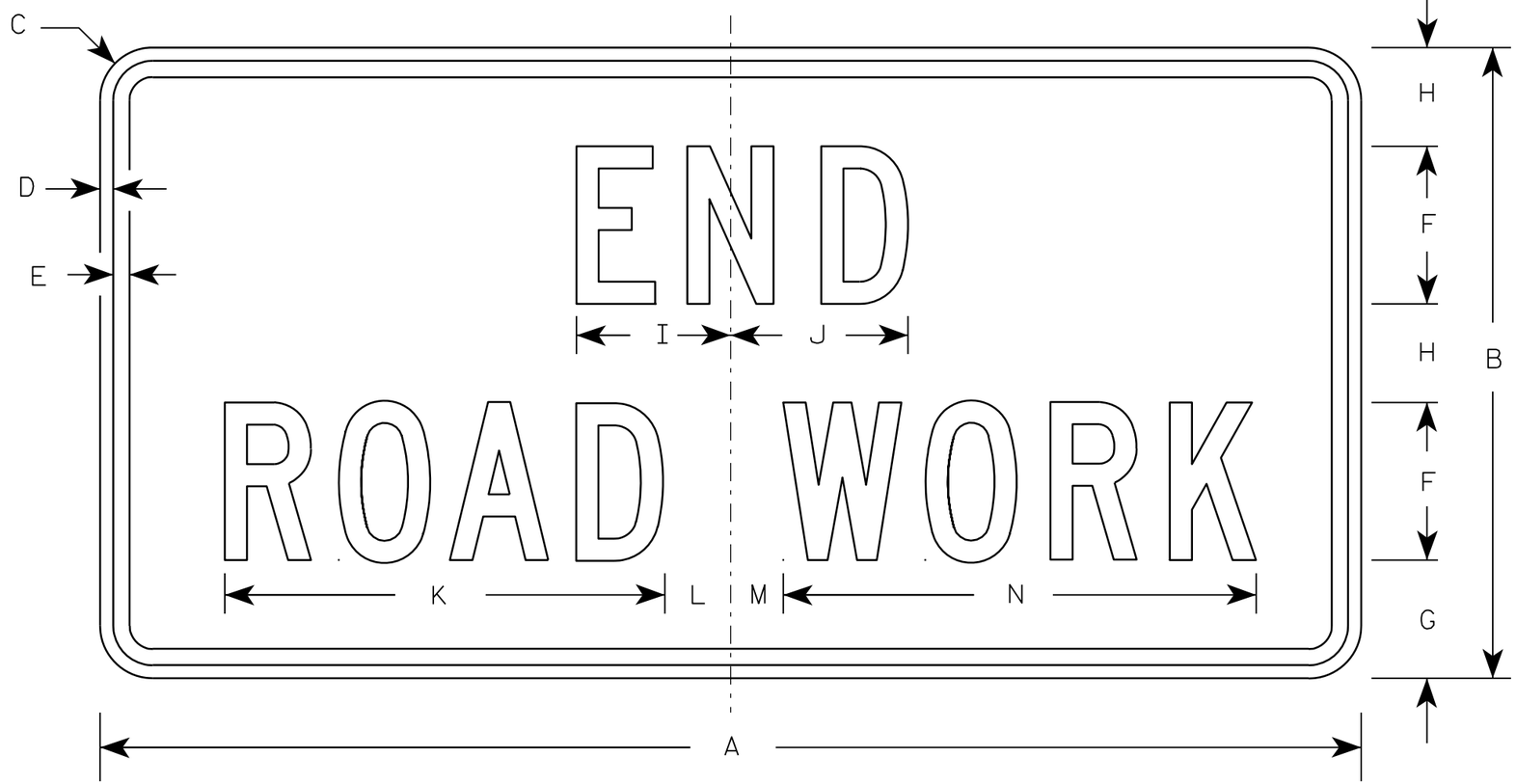
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 8/04/08 PLATE NO D12-2B.2

PROJECT NO:

SHEET NO: 477 E



G20-2A

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

Metric equivalent for this sign is:

SIZE	
1	900 mm X 450 mm
2	1200 mm X 600 mm
3	1200 mm X 600 mm
4	1200 mm X 600 mm
5	1200 mm X 600 mm

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m2
1	36	18	1 1/8	3/8	1/2	4	3 3/4	2 1/2	4 1/8	4 1/8	11 1/8	2	1	12 1/8													4.5	0.41
2	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72
3	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72
4	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72
5	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72

STANDARD SIGN
G20-2A

WISCONSIN DEPT OF TRANSPORTATION

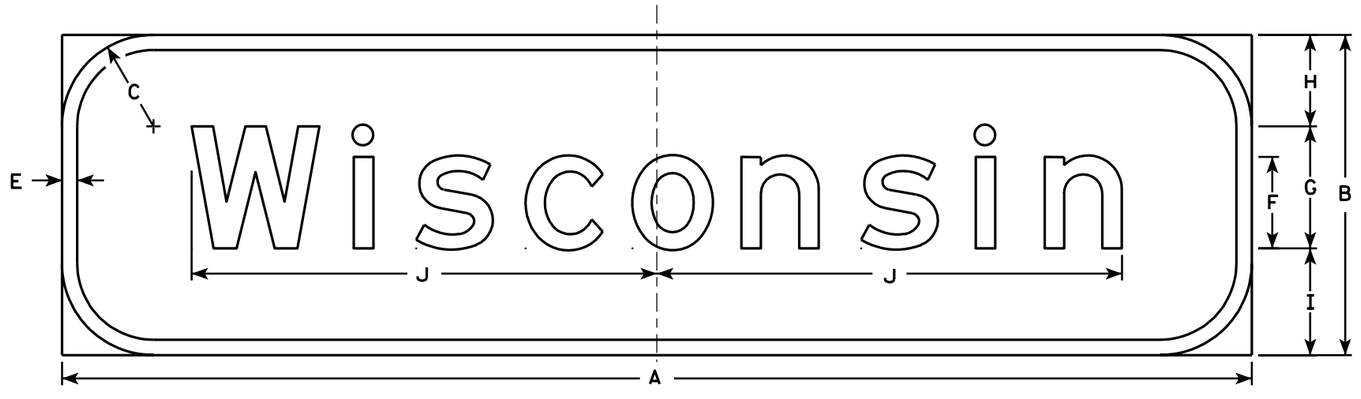
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 9/30/09 PLATE NO. G20-2A.8

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 478	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 - Green
   Message - White - Type H Reflective
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.



I2-1

Metric equivalent for this sign is:

SIZE	
1	
2	
3	
4	1950 mm X 525 mm
5	1950 mm X 525 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 sq. m.
1																												
2																												
3																												
4	78	21	6		1	6	8	6	7	30 ½																	11.4	1.06
5	78	21	6		1	6	8	6	7	30 ½																	11.4	1.06

STANDARD SIGN
I2-1

WISCONSIN DEPT OF TRANSPORTATION

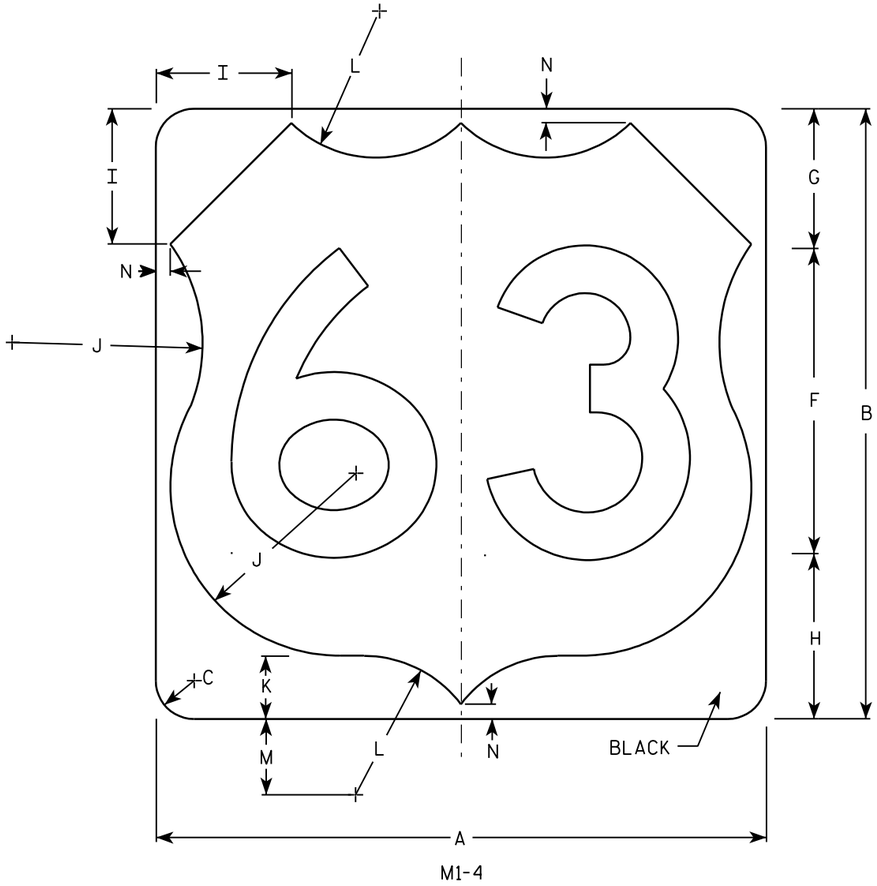
APPROVED Chester J Spang for State Traffic Engineer

DATE 1/24/02 PLATE NO. I2-1.4

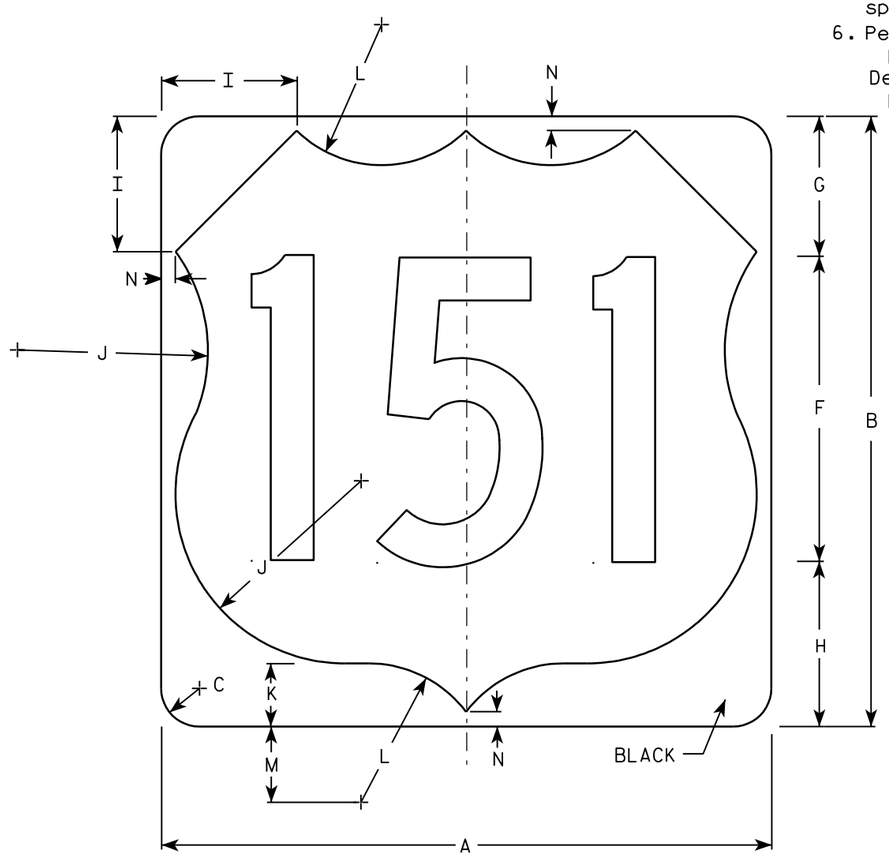
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 479	E

NOTES

1. Sign is Type II - See Note 6 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White & Black - See Note 6
   Message - Black
3. Message Series - See note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals and adjust spacing as per Plate A10-1.
6. Permanent Signs
   Background - Type H Reflective
   Detour or other temporary signs
   Background - Reflective



M1-4



M1-4

7

7

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	Areq. sq. ft.	Area m2
1																												
2	24	24	1 1/2			12	5 1/2	6 1/2	5	7 1/2	2 1/2	5 1/2	3	1/2													4.0	.36
3	36	36	2 1/4			18	8 1/4	9 1/4	7 1/4	11 1/4	3 3/4	8 1/4	4 1/2	3/4													9.0	.81
4	36	36	2 1/4			18	8 1/4	9 1/4	7 1/4	11 1/4	3 3/4	8 1/4	4 1/2	3/4													9.0	.81
5	36	36	2 1/4			18	8 1/4	9 1/4	7 1/4	11 1/4	3 3/4	8 1/4	4 1/2	3/4													9.0	.81

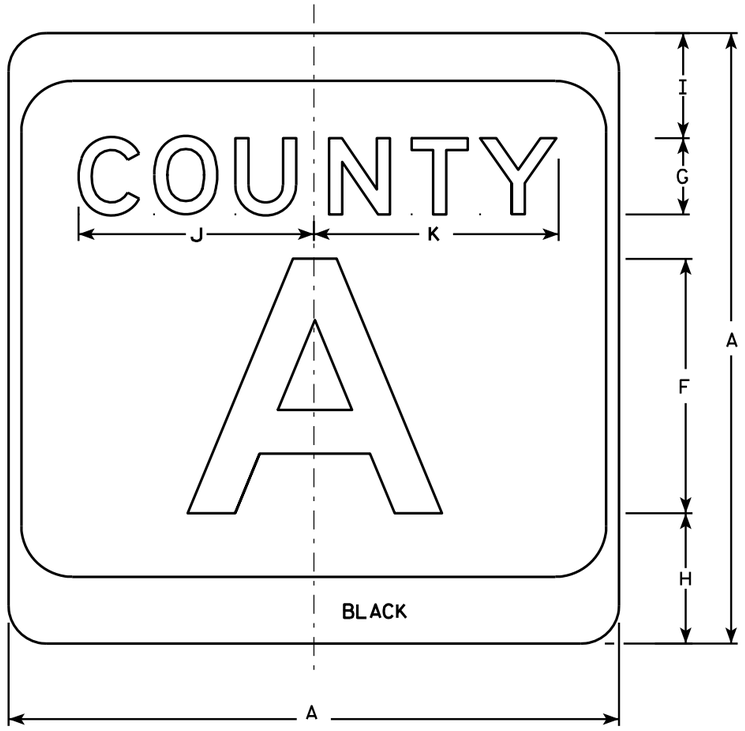
USH MARKER
M1-4 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

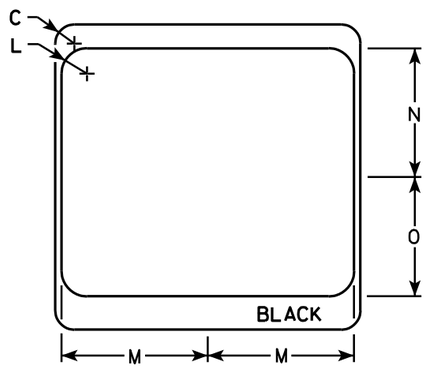
APPROVED Matthew R Rauch
for State Traffic Engineer

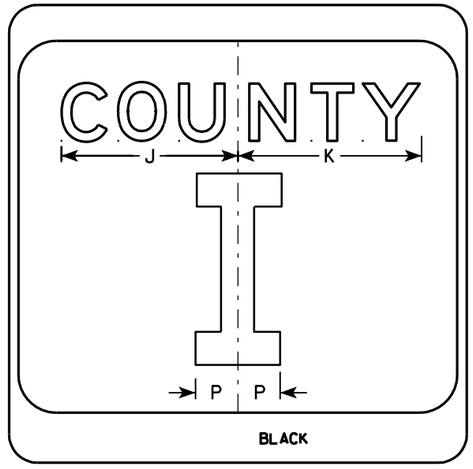
DATE 08/25/05 PLATE NO. M1-4.9

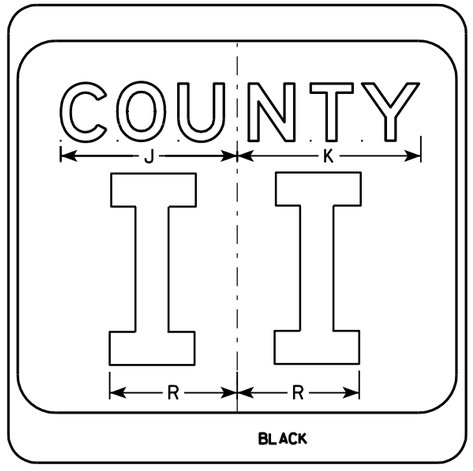
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 480	E



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

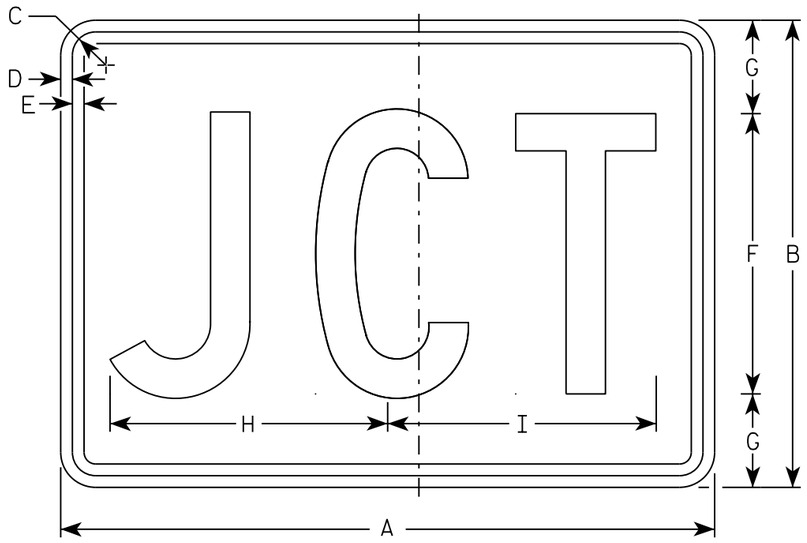
CTH MARKER
M1-5A FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

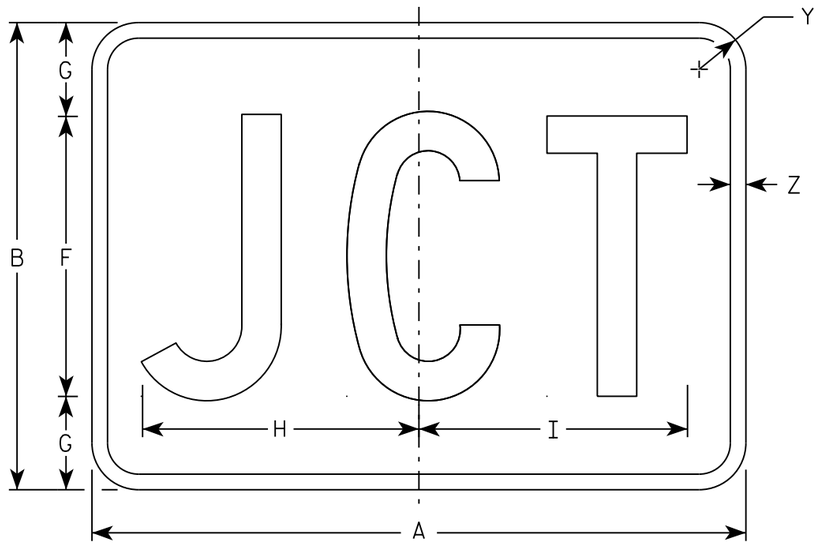
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 9/27/11 PLATE NO. M1-5A.8

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 481	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

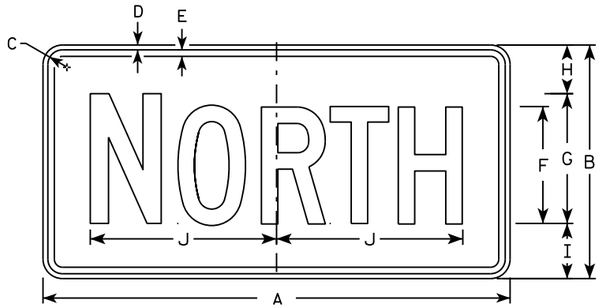
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

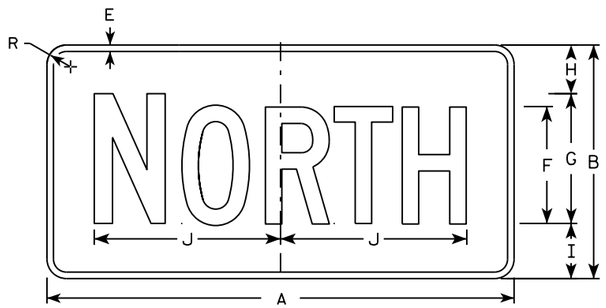
DATE 10/15/15 PLATE 482 12-1.12

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



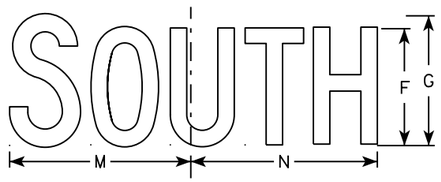
MB3-1
MK3-1
MN3-1



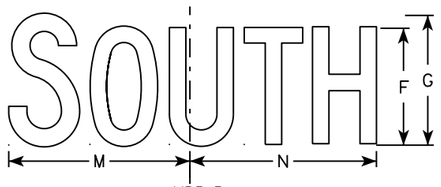
M3-2
MM3-2
MP3-2



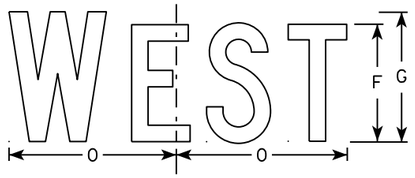
MB3-2
MK3-2
MN3-2



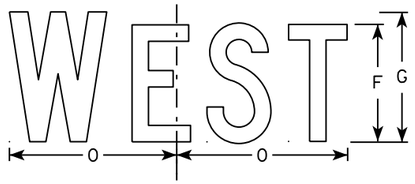
M3-3
MM3-3
MP3-3



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

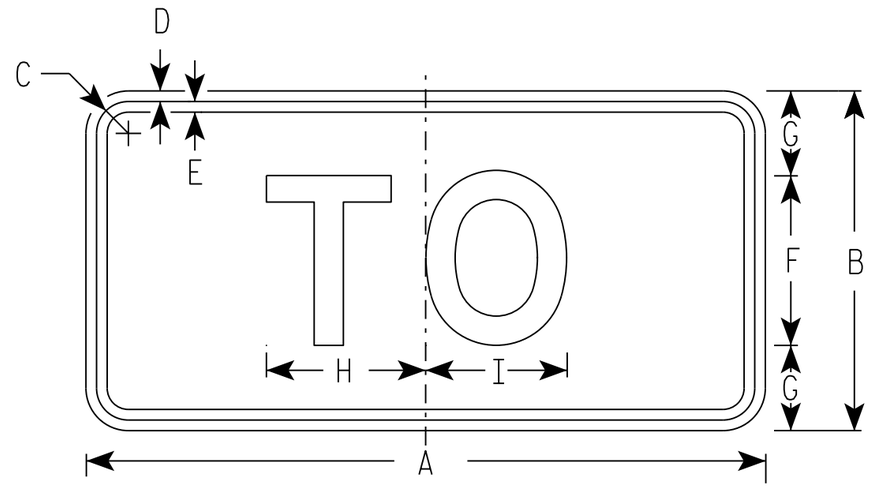
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew P Rauch for State Traffic Engineer

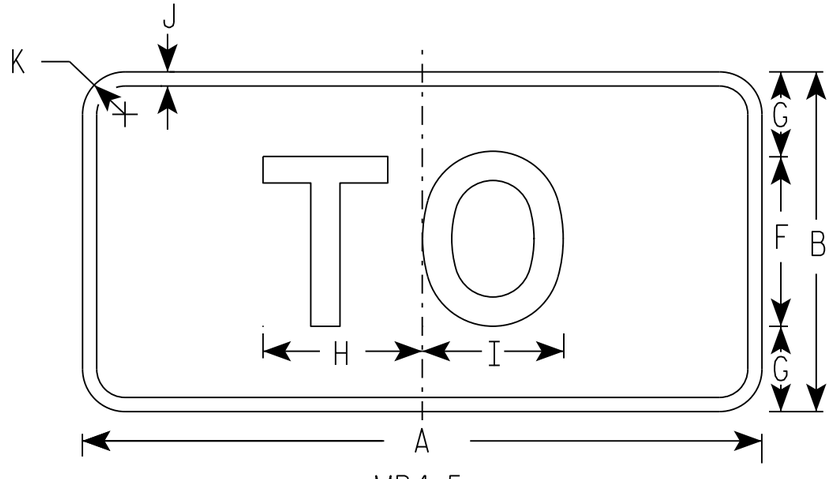
DATE 10/15/15 PLATE NO M3-1.14

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



M4-5
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

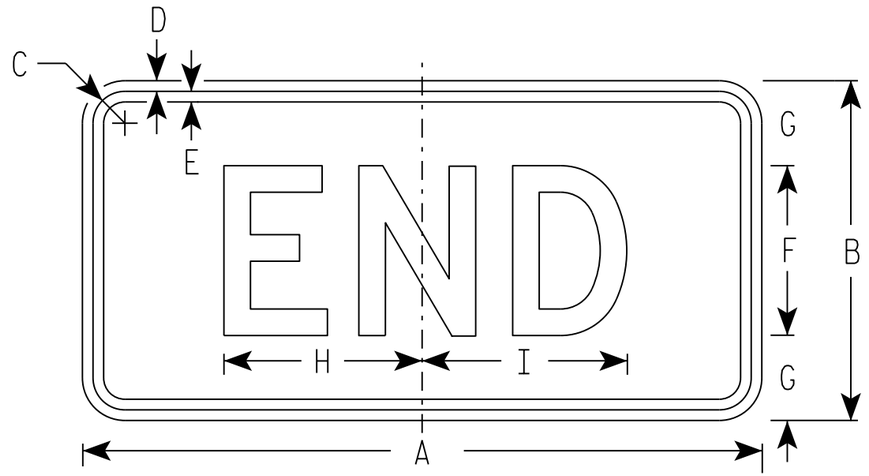
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

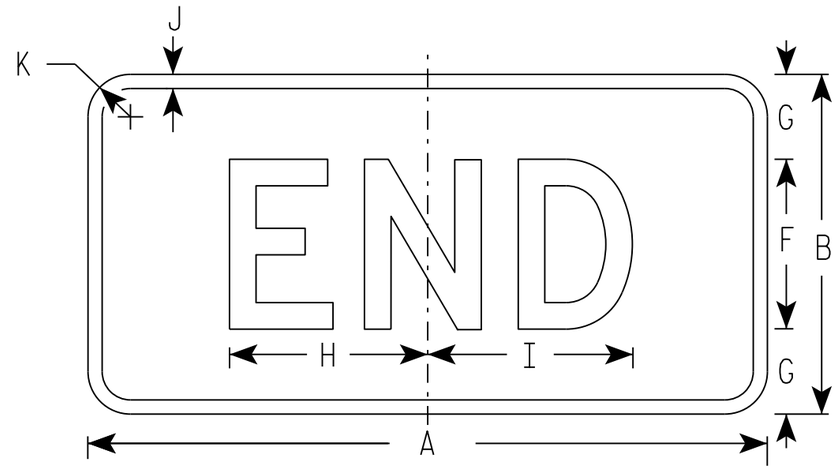
DATE 10/15/15 PLATE 484 M4-5.8

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

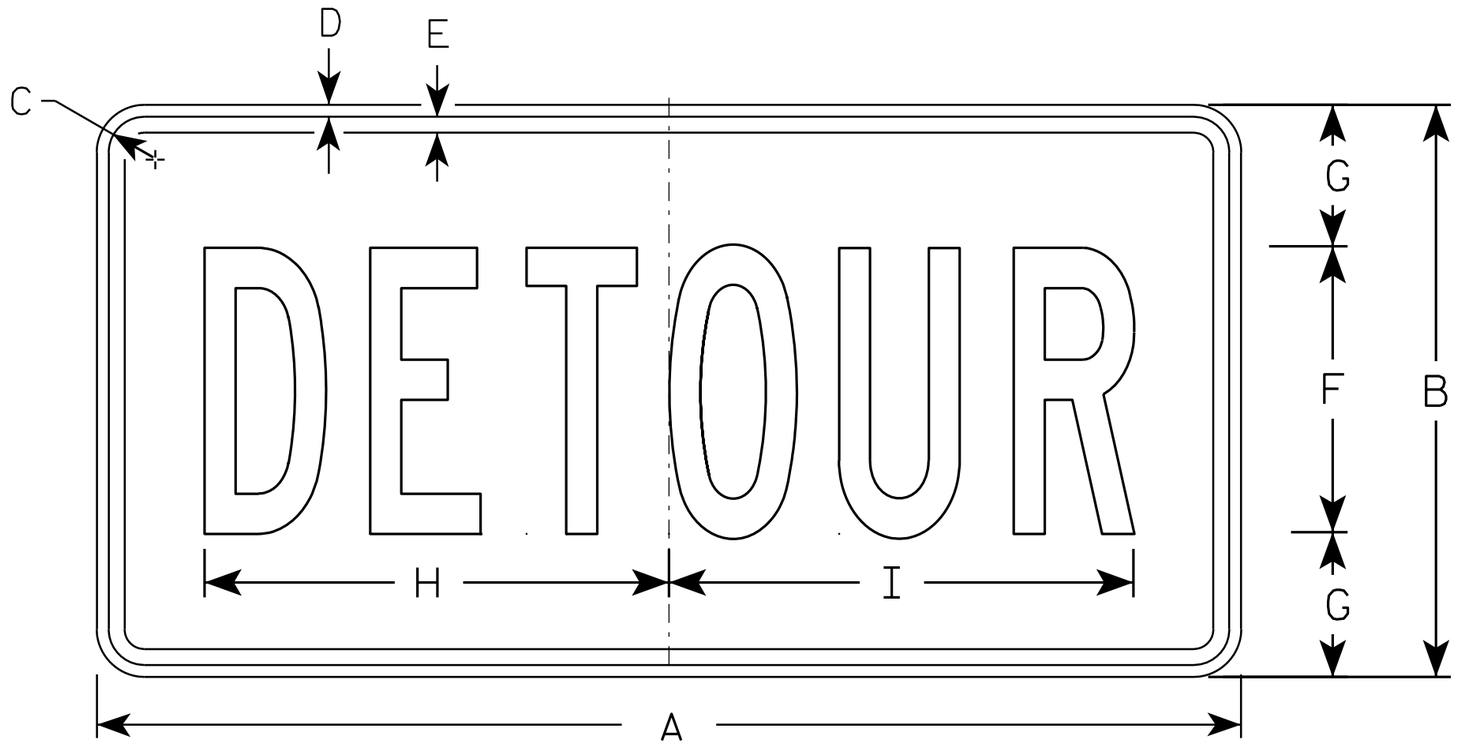
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/15/15 PLATE 485 '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																											

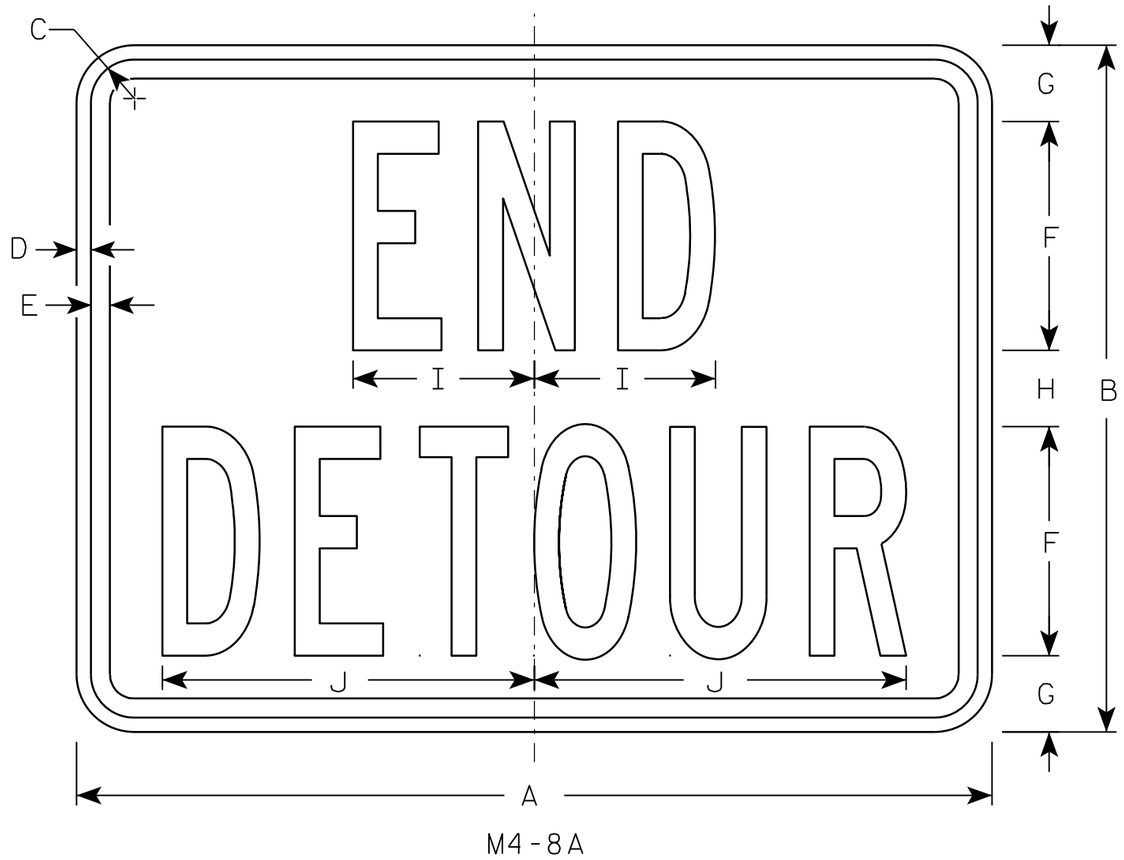
STANDARD SIGN
M4-8

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: 486	E



M4-8A

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - B
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	18	1 1/8	3/8	1/2	6	2	2	4 3/4	9 3/4																	3.0
3	30	24	1 1/8	3/8	1/2	8	2 1/2	3	6 3/4	13																	5.0
4																											
5																											

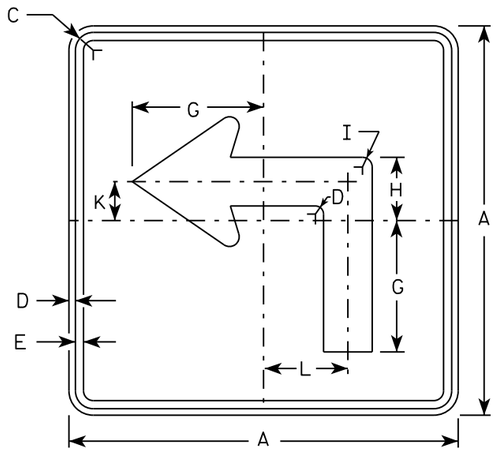
STANDARD SIGN
M4-8A

WISCONSIN DEPT OF TRANSPORTATION

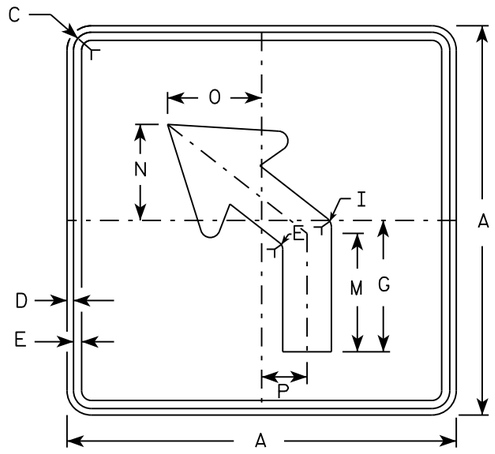
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/9/11 PLATE NO. M4-8A.2

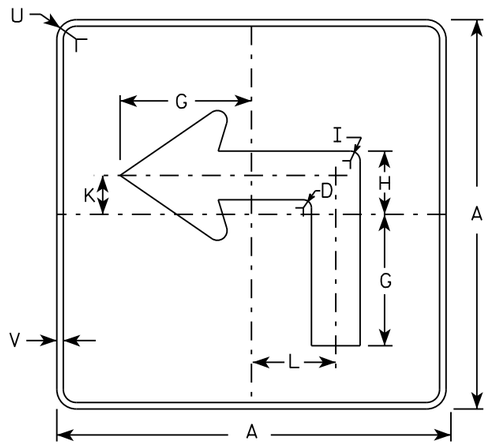
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 487	E



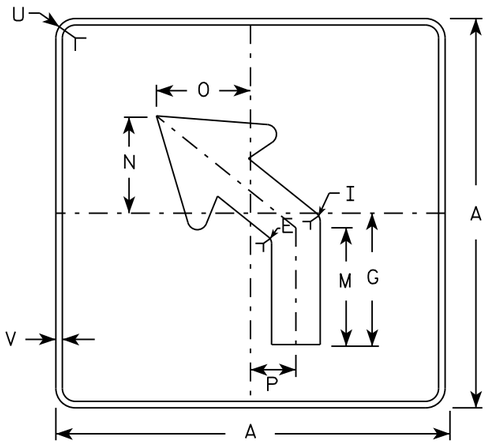
M5-1L
MM5-1L
MO5-1L
MP5-1L



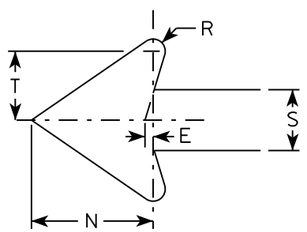
M5-2L
MM5-2L
MO5-2L
MP5-2L



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

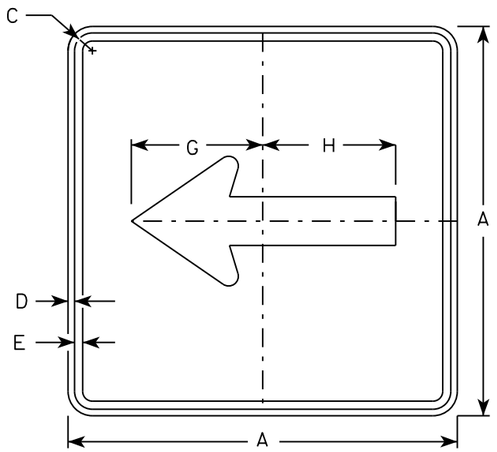
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

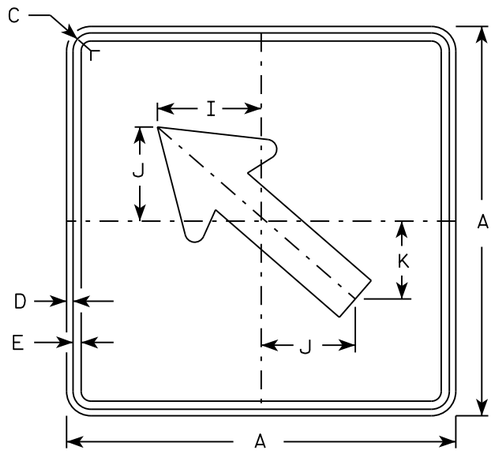
DATE 10/15/15 PLATE NO. M5-1.13

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



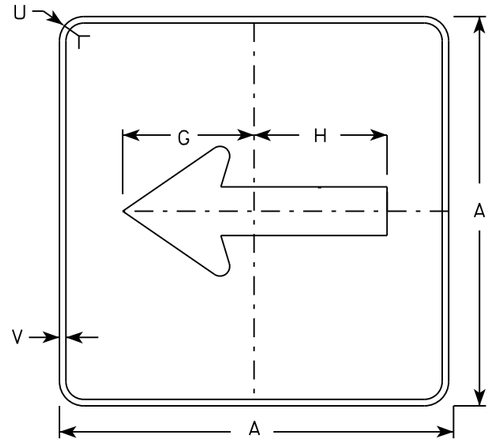
M6-1
MM6-1
MO6-1
MP6-1



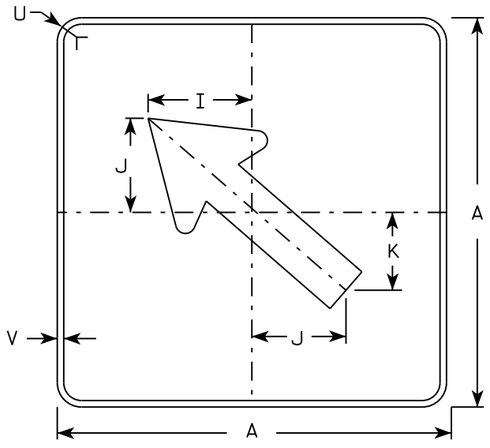
M6-2
MM6-2
MO6-2
MP6-2

NOTES

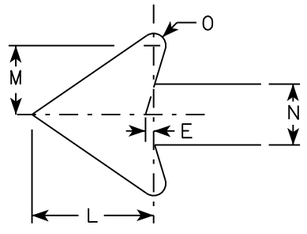
1. Signs are Type II - Type H except as Shown
2. Color:
   Background - See note 4
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M6-1 and M6-2 Background - 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

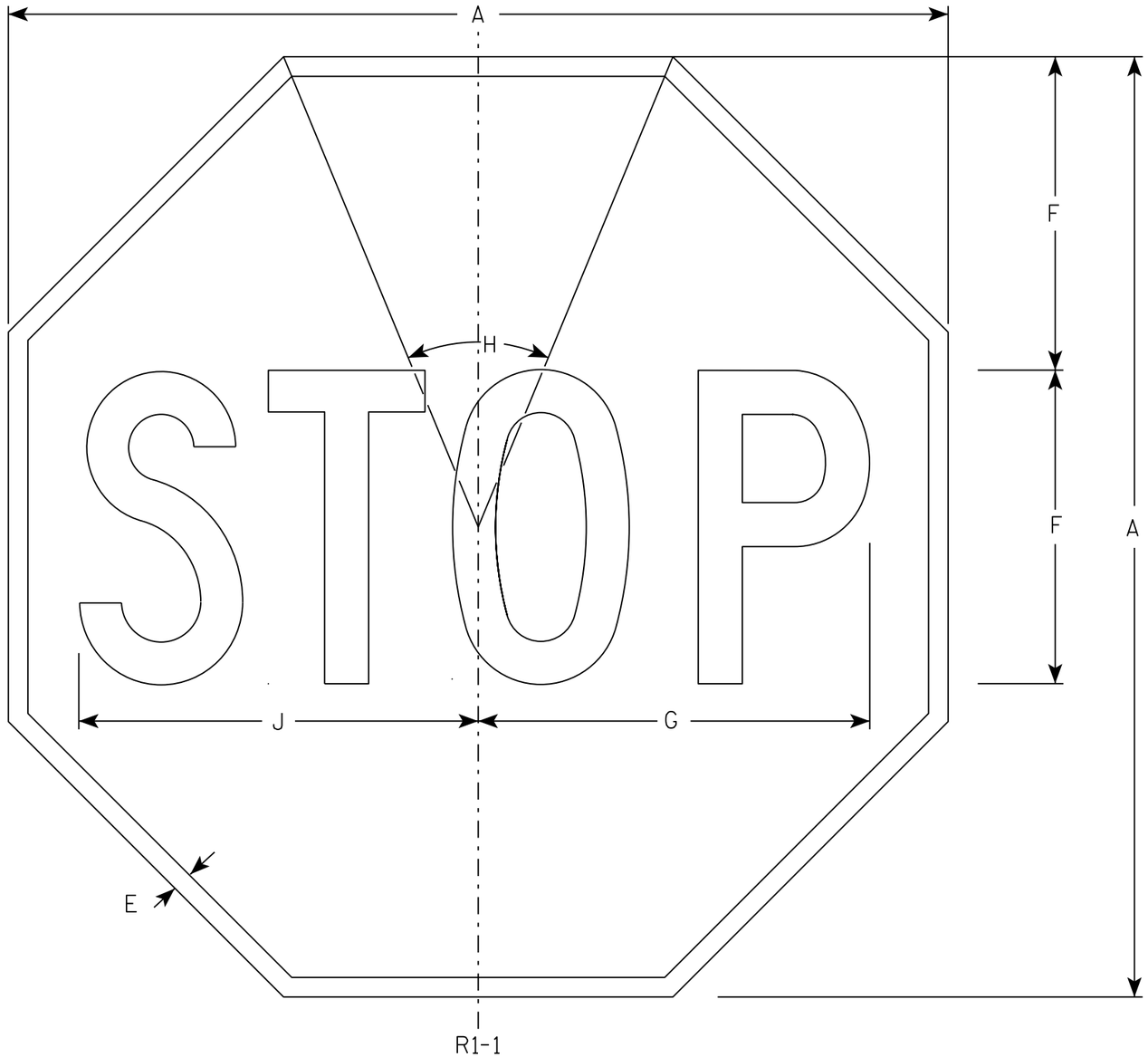
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/15/15 PLATE 489 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



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

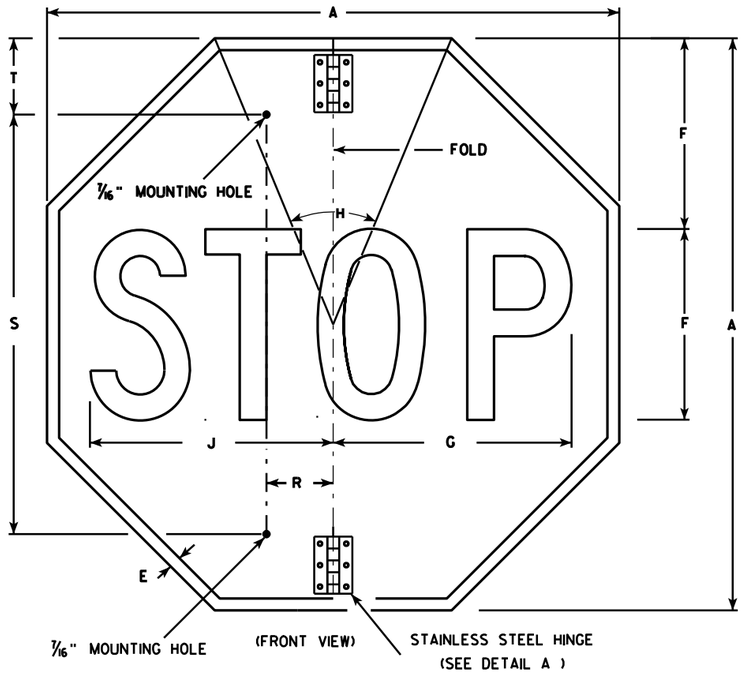
WISCONSIN DEPT OF TRANSPORTATION

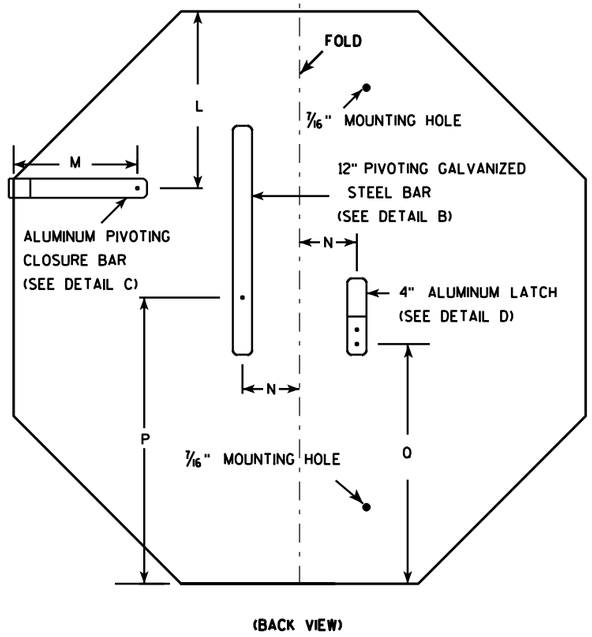
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/12/15 PLATE 490 R1-1.13

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

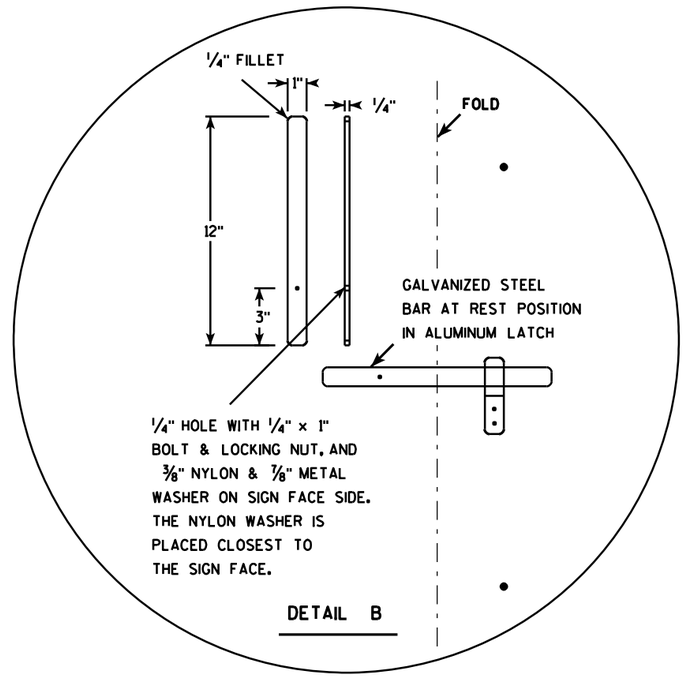
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\R11.DGN PLOT DATE : 01-DEC-2015 18:07 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 4.378143:1.000000



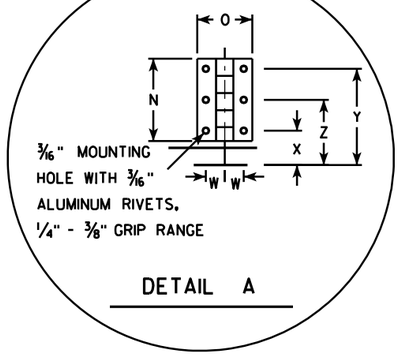


NOTES

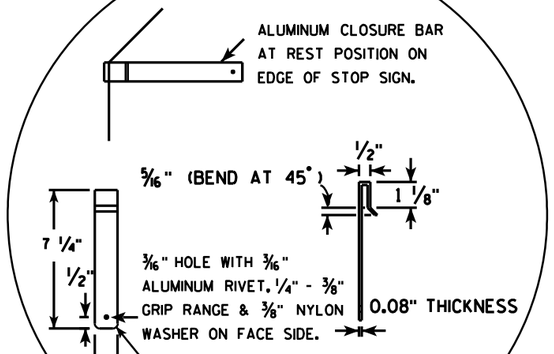
1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Red
   Message - White
3. Message Series - C
4. All hardware used on the folding STOP sign installation shall conform to 637.2.4 of the WIS DOT Standard Specification.



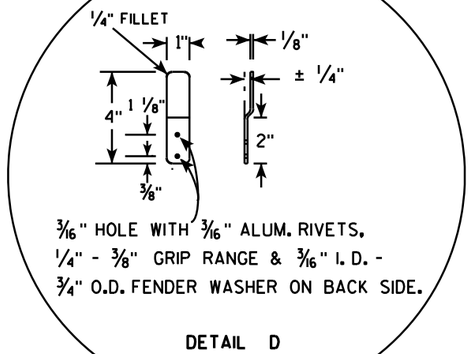
DETAIL B



DETAIL A



DETAIL C



DETAIL D

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

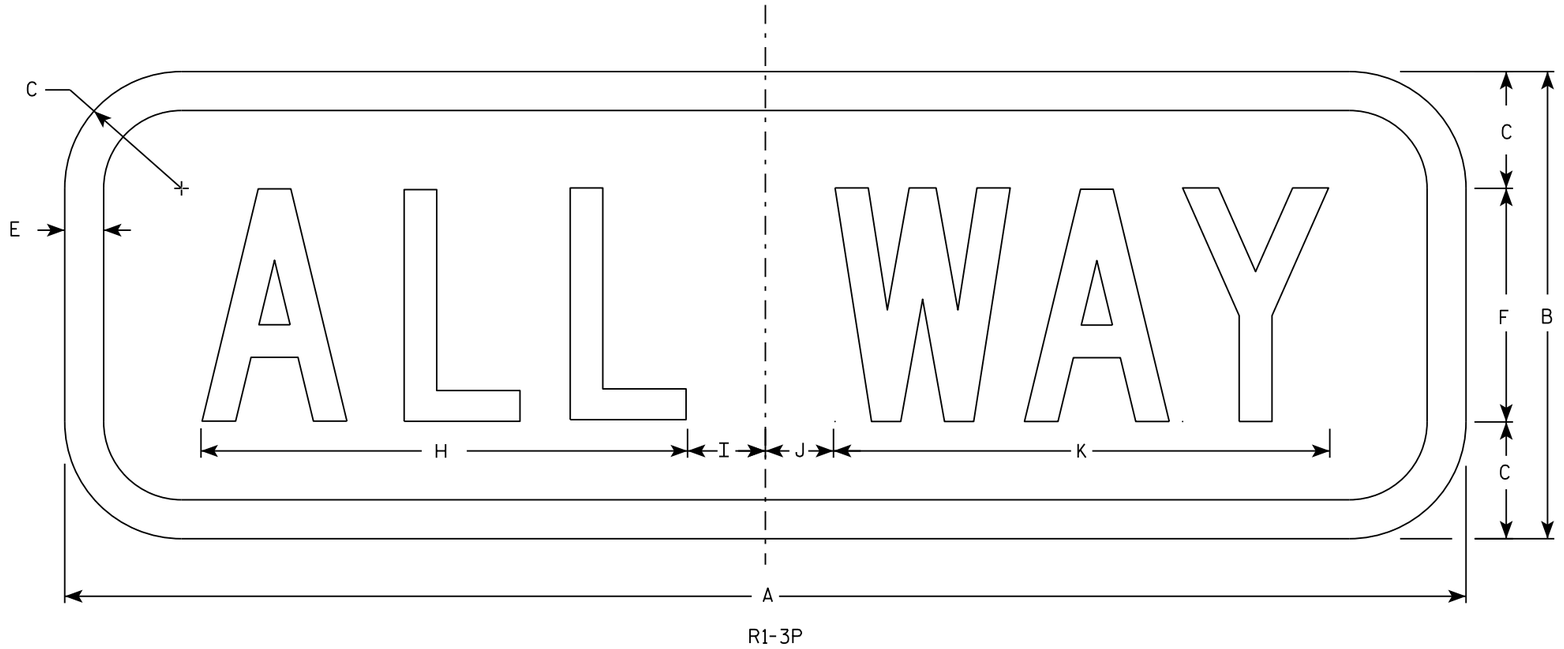
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 491 | E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\R11F.DGN PLOT DATE : 02-DEC-2010 15:26 PLOT BY : dotsja PLOT NAME : PLOT SCALE : 7.945391:1.000000

WISDOT/CADDS SHEET 42

7

7



R1-3P

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. 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	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

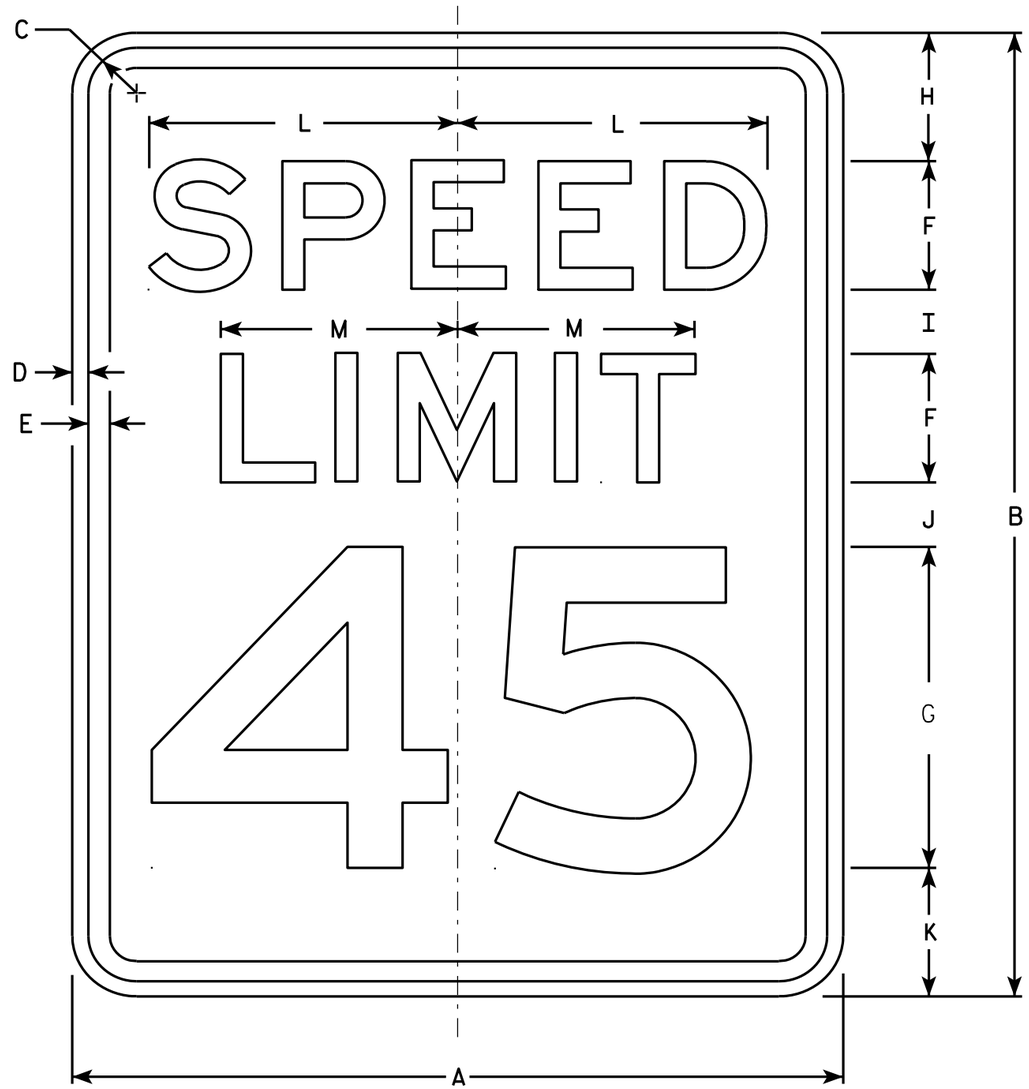
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 9/24/15 PLATE No. R1-3P.2

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\R13P.DGN PLOT DATE : 01-DEC-2015 18:08 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 1.945842:1.000000



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

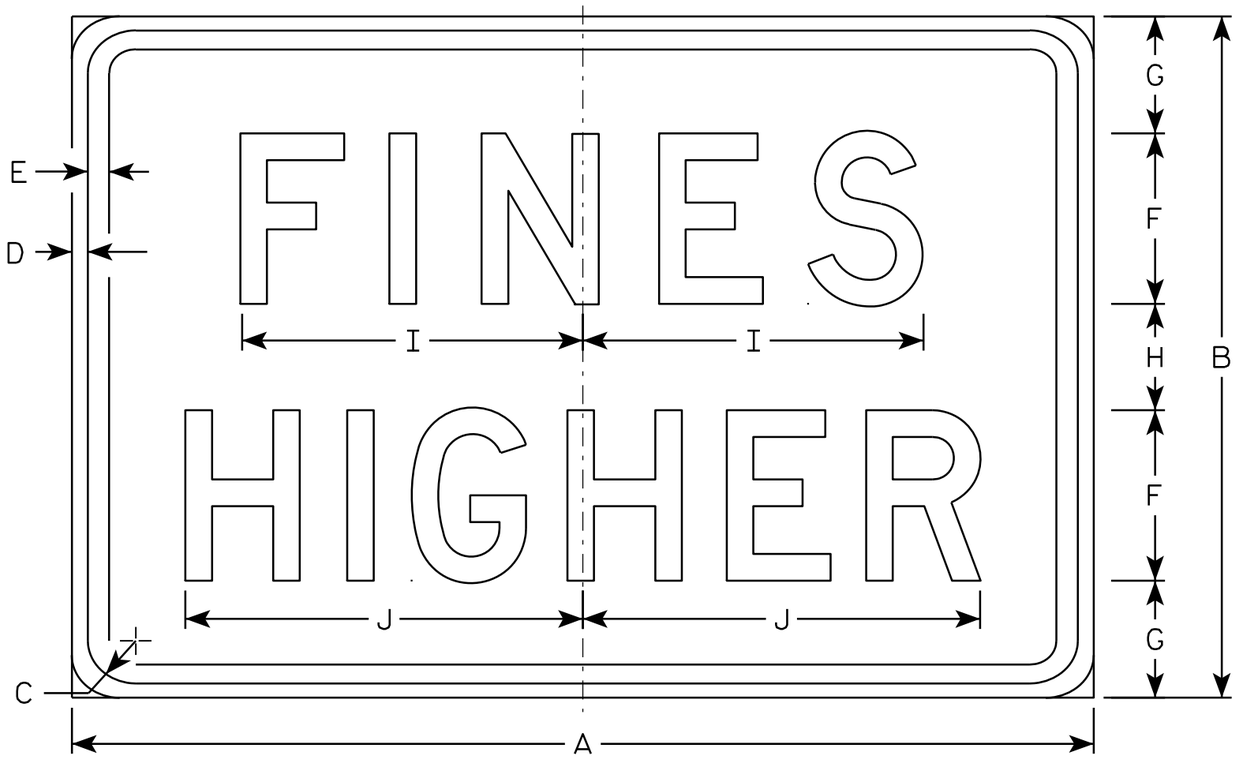
STANDARD SIGN
R2-1

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: 493 | E



R2-6P

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	24	18	1 1/8	3/8	3/8	4	3 1/2	3	7 5/8	9 1/4																	3.0
2M	24	18	1 1/8	3/8	3/8	4	3 1/2	3	7 5/8	9 1/4																	3.0
3	36	24	1 1/8	3/8	1/2	6	4 1/8	3 3/4	12	14																	6.0
4	36	24	1 1/8	3/8	1/2	6	4 1/8	3 3/4	12	14																	6.0
5	48	36	1 3/8	1/2	5/8	8	7	6	15 1/8	19																	12.0

STANDARD SIGN
R2-6P

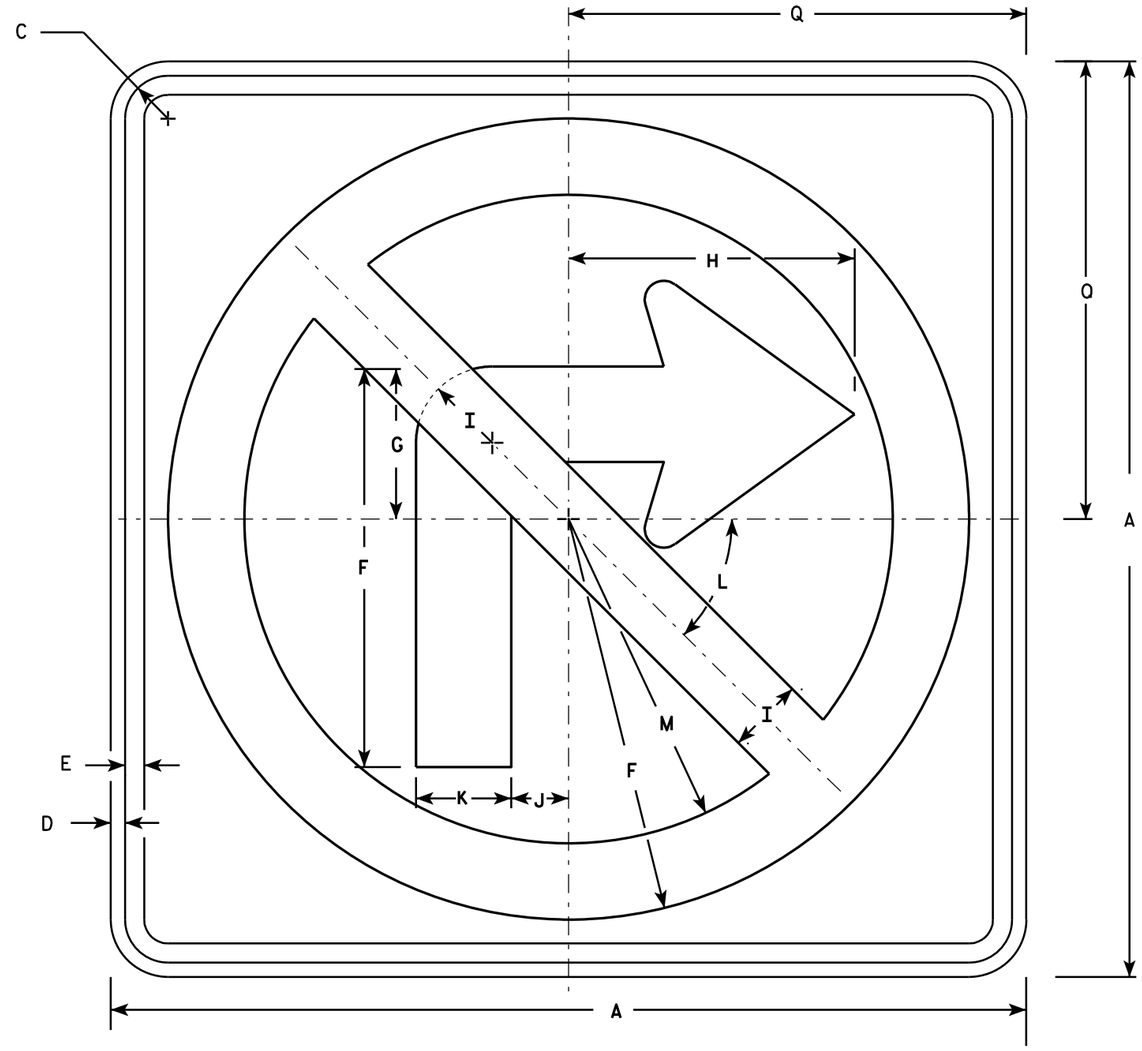
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/20/10 PLATE NO. R2-6P.2

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 494 | E

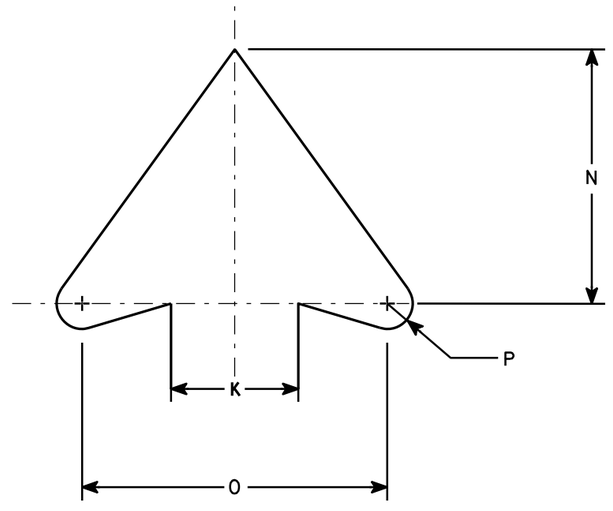
7



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

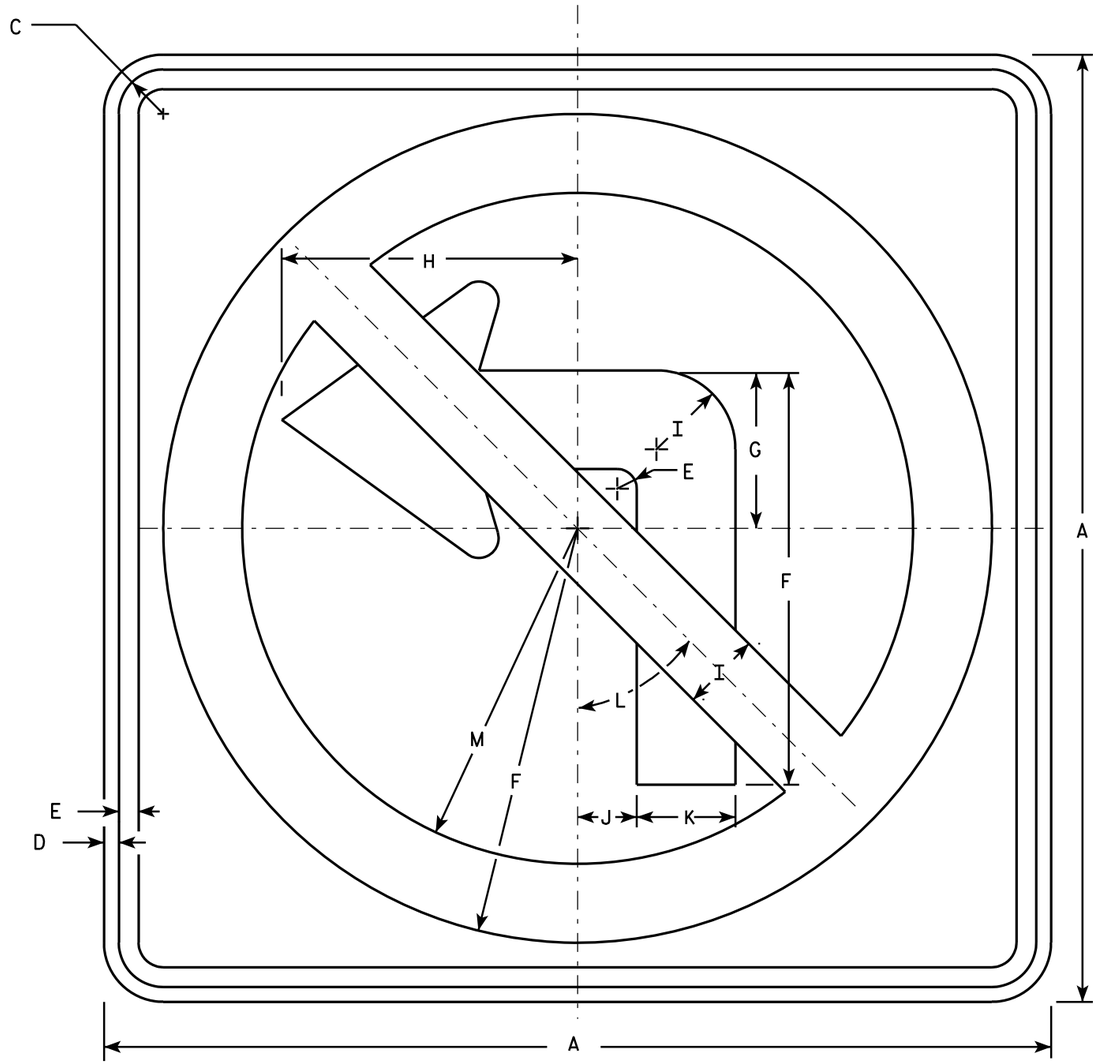
STANDARD SIGN
R3-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/08/10 PLATE NO. R3-1.5

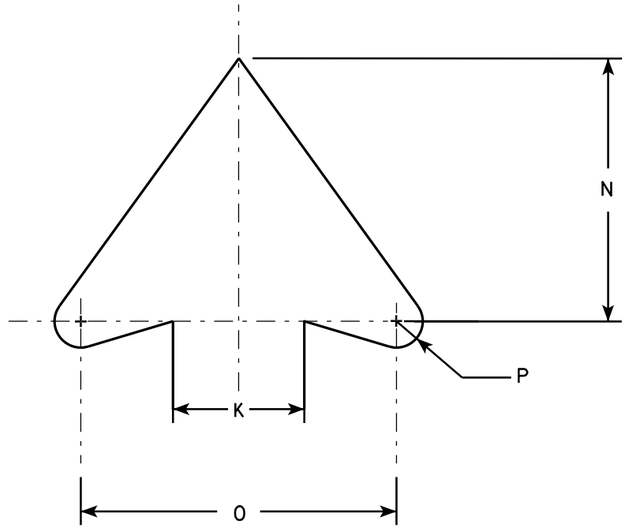
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 495	E



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

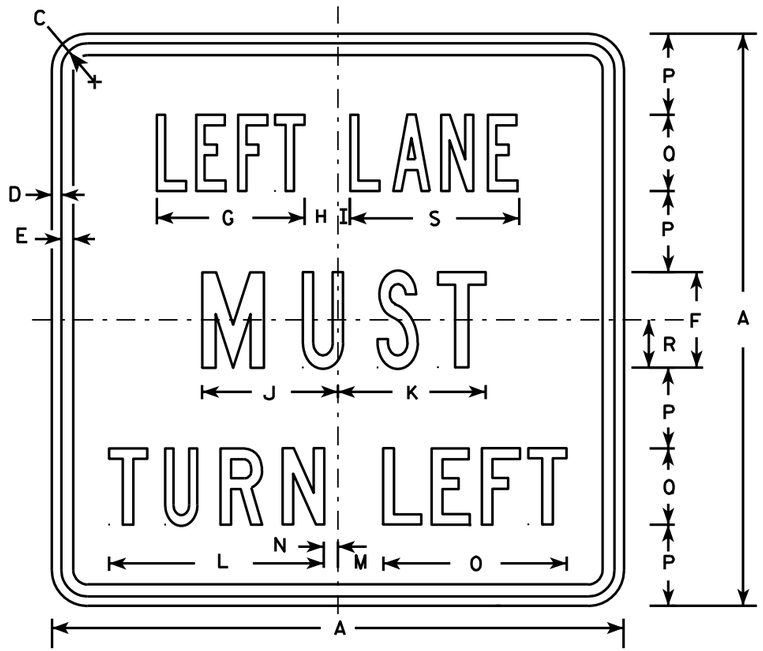
STANDARD SIGN
R3-2

WISCONSIN DEPT OF TRANSPORTATION

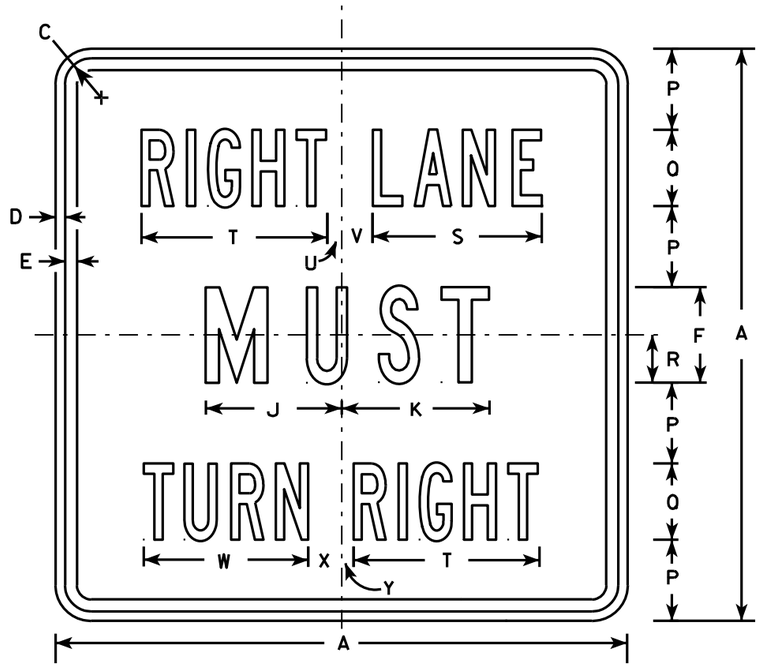
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/08/10 PLATE NO. R3-2.10

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 496	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																											

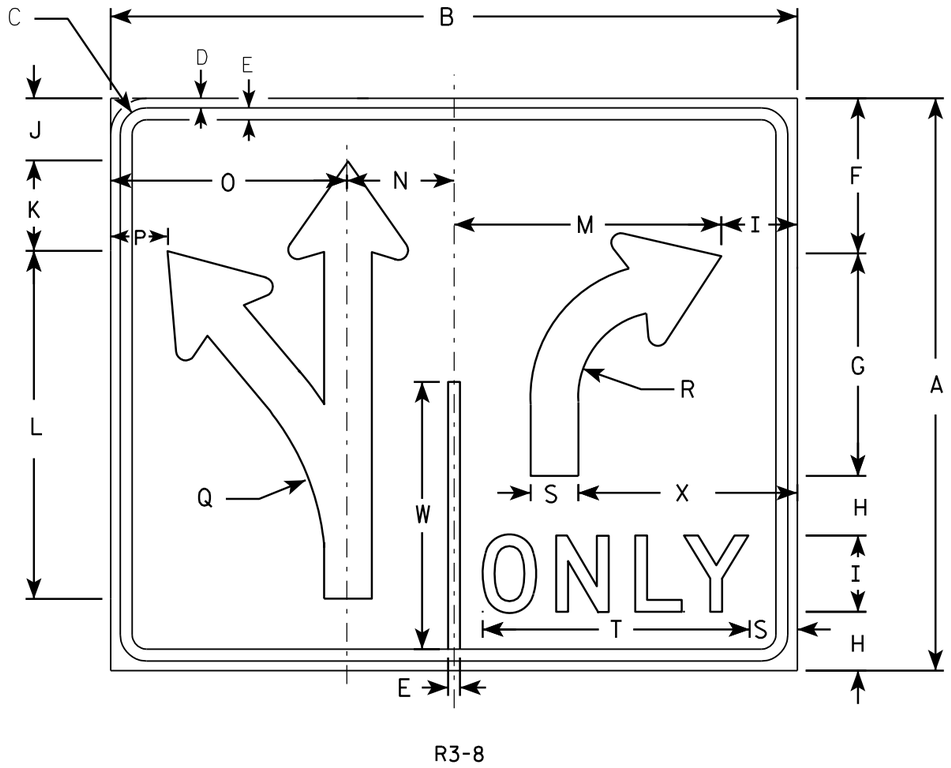
STANDARD SIGN
R3-7L & R3-7R

WISCONSIN DEPT OF TRANSPORTATION

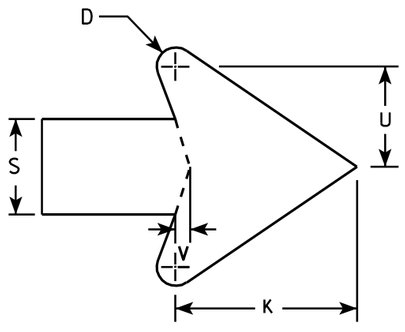
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/18/2011 PLATE NO. R3-7.3

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 497 | E



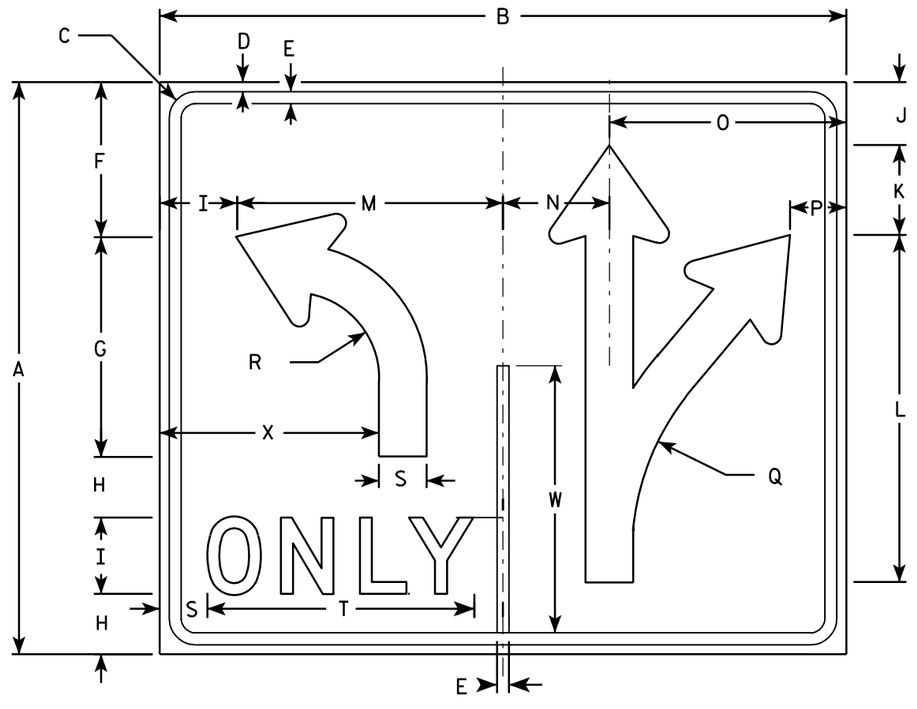
R3-8



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

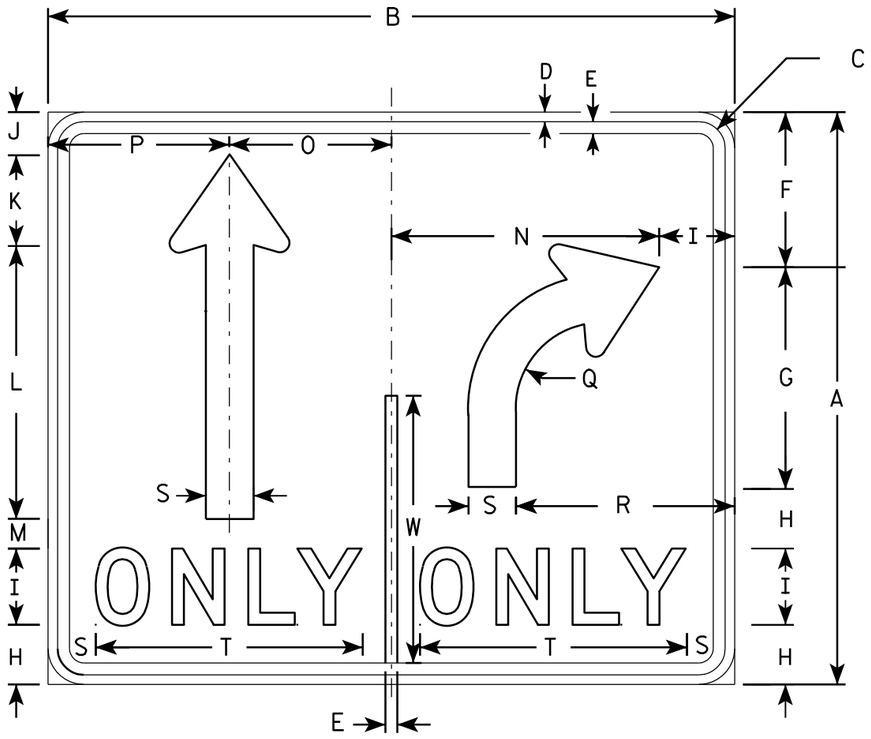
STANDARD SIGN
R3-8 & R3-8A

WISCONSIN DEPT OF TRANSPORTATION

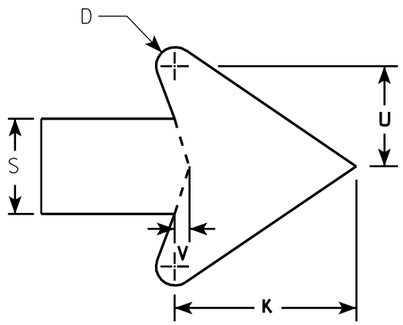
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/18/2011 PLATE NO. R3-8.5

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 498	E



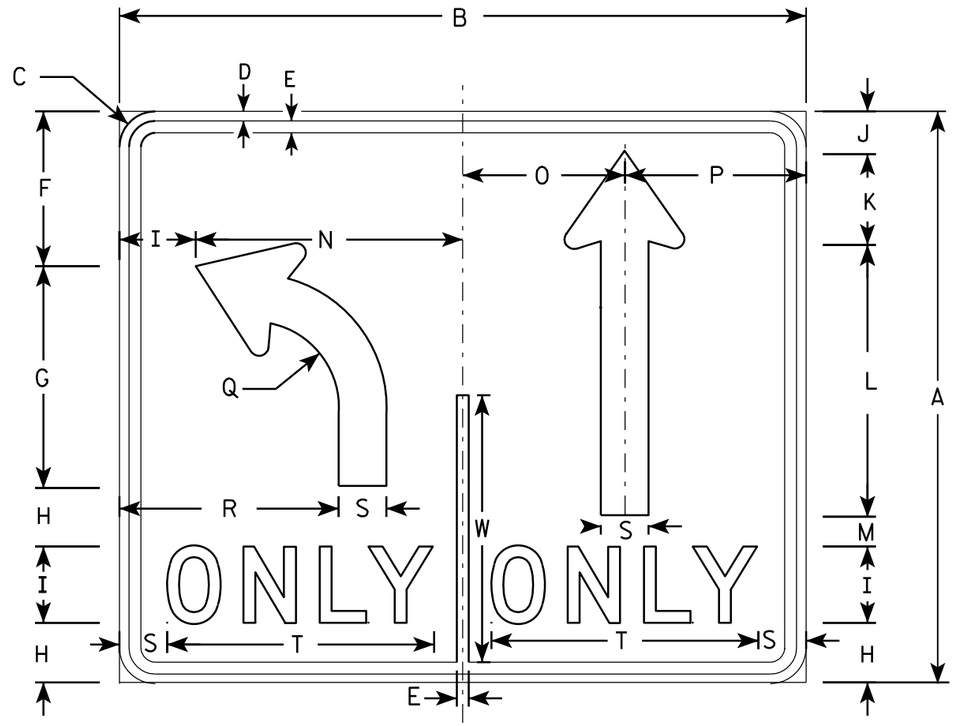
R3-8D



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.



R3-8E

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	36	1 3/8	1/2	5/8	8 1/8	11 5/8	3 1/8	4	2 1/4	4 3/4	14 1/4	1 5/8	14	8 1/2	9 1/2	4 1/2	11 1/2	2 1/2	14	2 5/8	3/8	14				7.5
2M	30	36	1 3/8	1/2	5/8	8 1/8	11 5/8	3 1/8	4	2 1/4	4 3/4	14 1/4	1 5/8	14	8 1/2	9 1/2	4 1/2	11 1/2	2 1/2	14	2 5/8	3/8	14				7.5
3																											
4	48	54	2 1/4	3/4	1	13 1/4	18 1/2	5 1/8	6	3 1/2	7 1/8	21 1/2	4 3/4	21	12 3/4	14 1/4	7 1/4	17 1/8	3 3/4	20 5/8	4	5/8	22 3/8				18.0
5	48	54	2 1/4	3/4	1	13 1/4	18 1/2	5 1/8	6	3 1/2	7 1/8	21 1/2	4 3/4	21	12 3/4	14 1/4	7 1/4	17 1/8	3 3/4	20 5/8	4	5/8	22 3/8				18.0

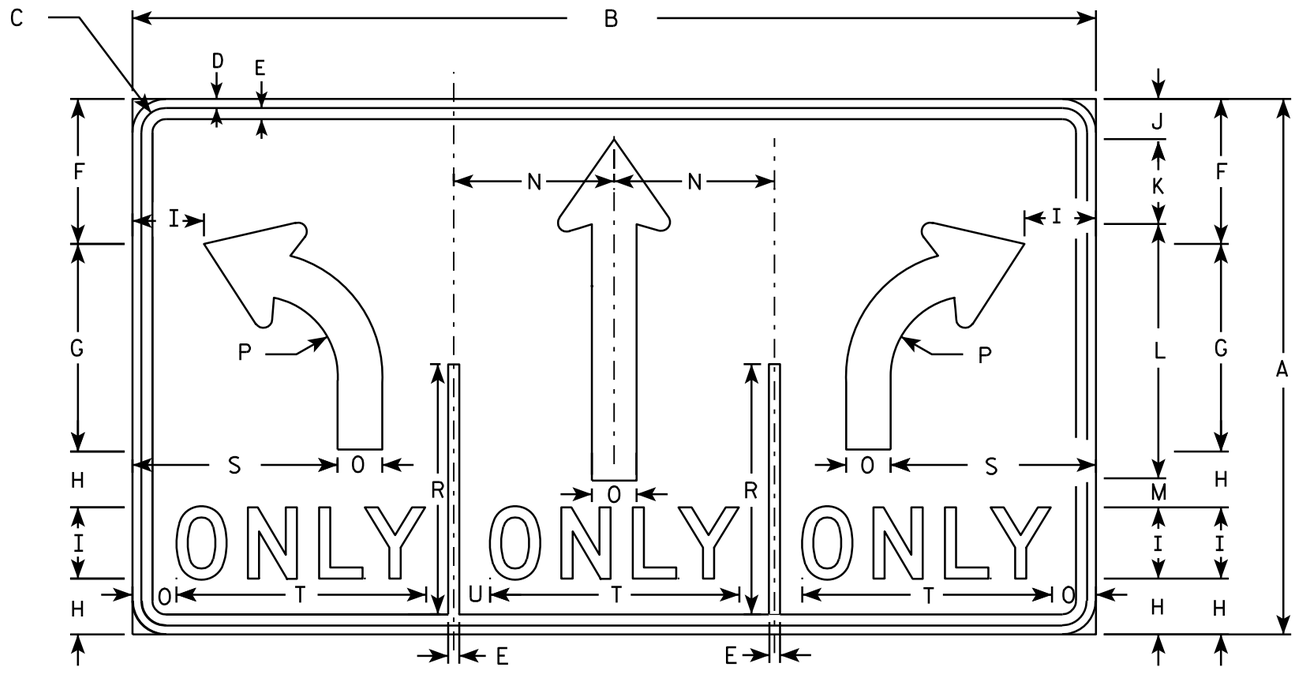
STANDARD SIGN
R3-8D & R3-8E

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/18/2011 PLATE NO. R3-8D.2

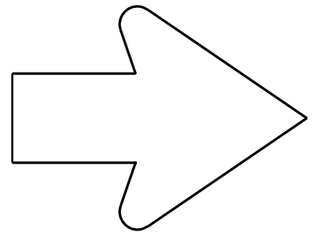
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 499	E



R3-8W

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - WHITE
   Message - BLACK
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



SEE R3-8 FOR ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	O	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	54	1 3/8	1/2	5/8	8 1/8	11 5/8	3 1/8	4	2 1/4	4 3/4	14 1/4	1 5/8	9	2 1/2	4 1/2		14	11 1/2	14	2						11.25
2M	30	54	1 3/8	1/2	5/8	8 1/8	11 5/8	3 1/8	4	2 1/4	4 3/4	14 1/4	1 5/8	9	2 1/2	4 1/2		14	11 1/2	14	2						11.25
3																											
4	48	84	2 1/4	3/4	1	13	18 1/2	5 1/4	6	3 3/4	7	29 1/8	2 3/8	14	3 3/4	7 1/4		22 3/8	17 1/4	20 1/2	3 1/4						28.0
5	48	84	2 1/4	3/4	1	13	18 1/2	5 1/4	6	3 3/4	7	29 1/8	2 7/8	14	3 3/4	7 1/4		22 3/8	17 1/4	20 1/2	3 1/4						28.0

STANDARD SIGN
R3-8W

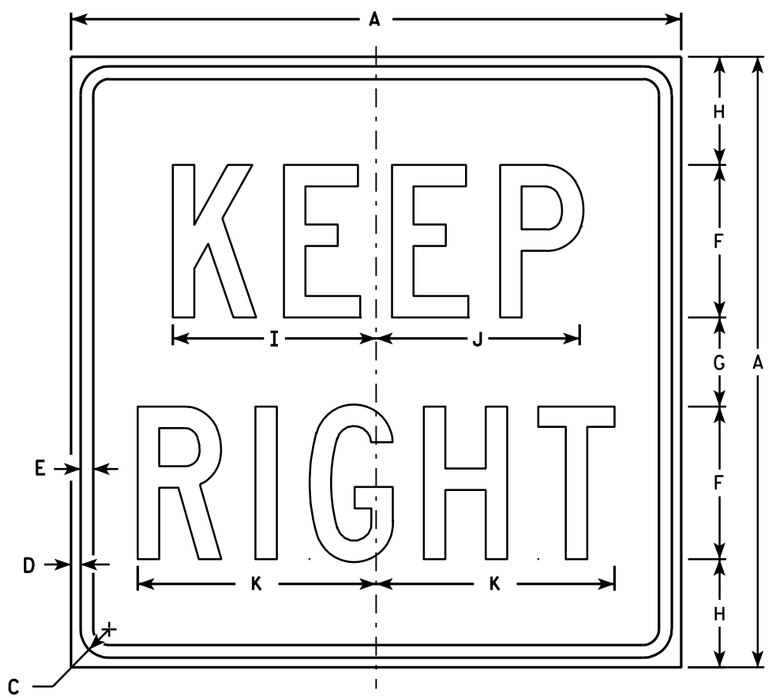
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

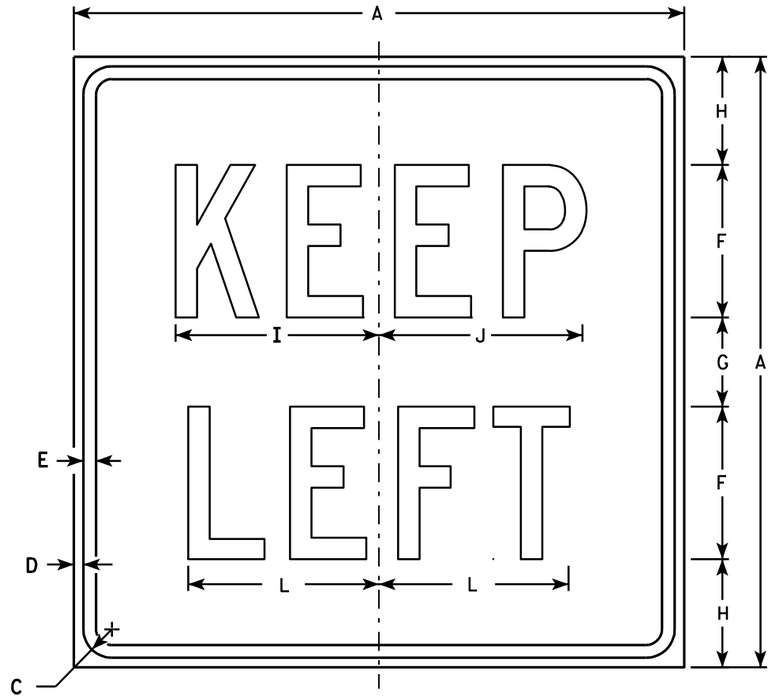
DATE 3/24/2011 PLATE NO. R3-8W.4

PROJECT NO:

SHEET NO: 500 E



R4-52R



R4-52L

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	18		1 1/8	3/8	3/8	5	2	3	6 3/4	6 5/8	7 1/2	6 1/4															2.25
2S	24		1 1/8	3/8	1/2	6	3 1/2	4 1/4	8	8	9 3/8	7 1/2															4.0
2M	24		1 1/8	3/8	1/2	6	3 1/2	4 1/4	8	8	9 3/8	7 1/2															4.0
3	36		1 5/8	5/8	3/4	10	5	5 1/2	13 1/2	13 3/8	14 1/2	12 1/2															9.0
4																											
5																											

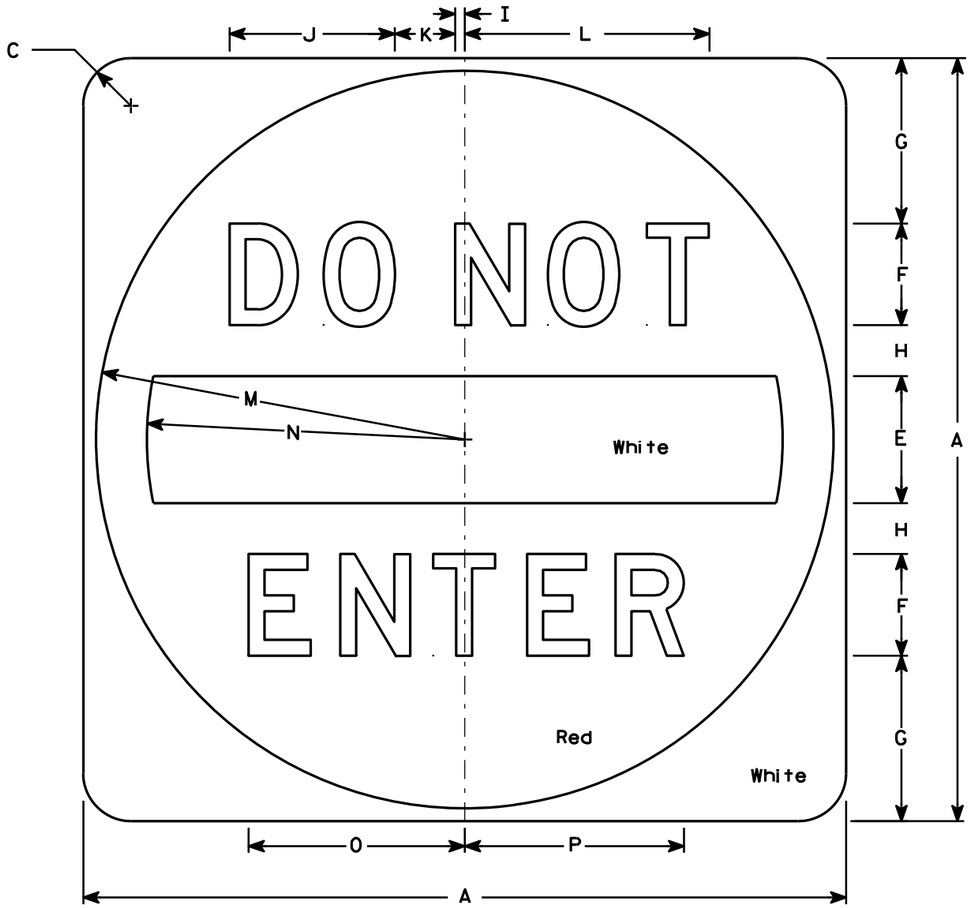
STANDARD SIGN
R4-52R & R4-52L

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/29/2011 PLATE NO. R4-52.6

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 501	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

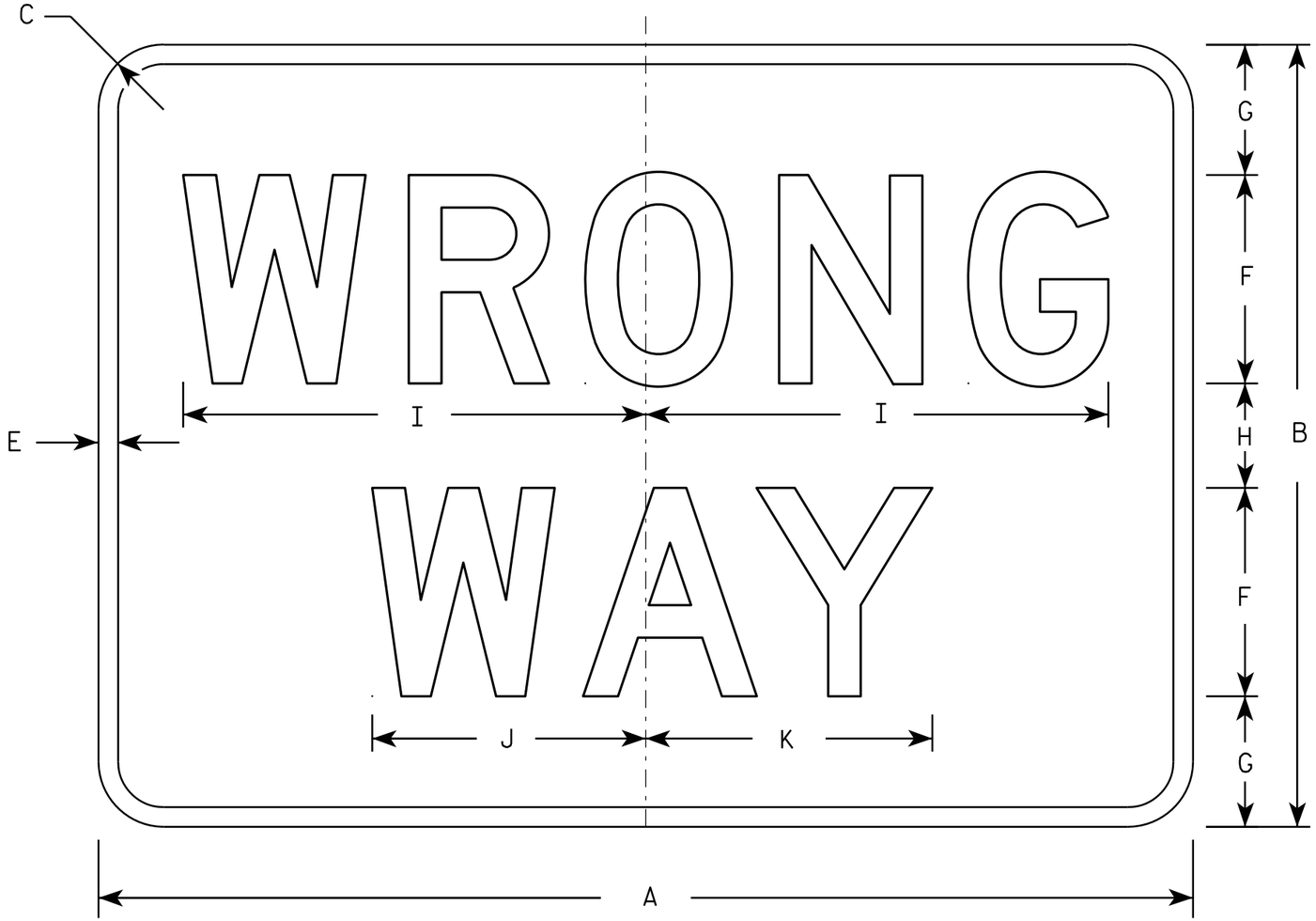
STANDARD SIGN
R5-1

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: 502 | 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

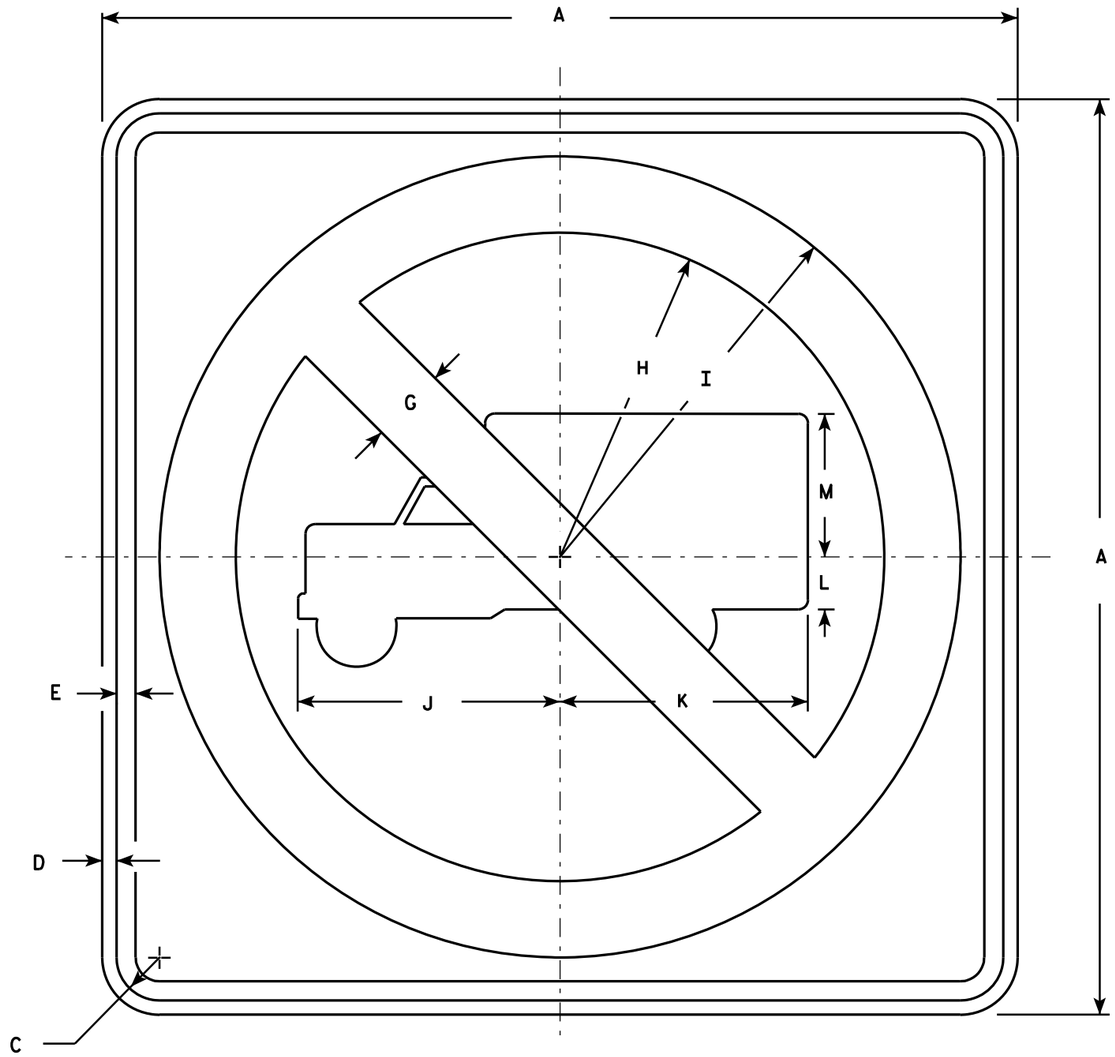
STANDARD SIGN
R5-1A

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: 503	E



R5-2

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - See Note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. Circle & Diagonal - Reflective red.
   Truck Symbol & Border - Non-reflective black.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24		1 1/8	3/8	1/2		2	8 1/2	10 1/2	6 7/8	6 1/2	1 3/8	3 3/4														4.0
2M	24		1 1/8	3/8	1/2		2	8 1/2	10 1/2	6 7/8	6 1/2	1 3/8	3 3/4														4.0
3	30		1 3/8	1/2	5/8		2 1/2	10 5/8	13 1/8	8 1/2	8 1/8	1 5/8	4 3/4														6.25
4	36		1 5/8	5/8	3/4		3	12 3/4	15 3/4	10 1/4	9 3/4	2	5 3/4														9.0
5	48		2 1/4	3/4	1		4	17	21	13 5/8	13	2 5/8	7 5/8														16.0

STANDARD SIGN
R5-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/29/2011 PLATE NO. R5-2.6

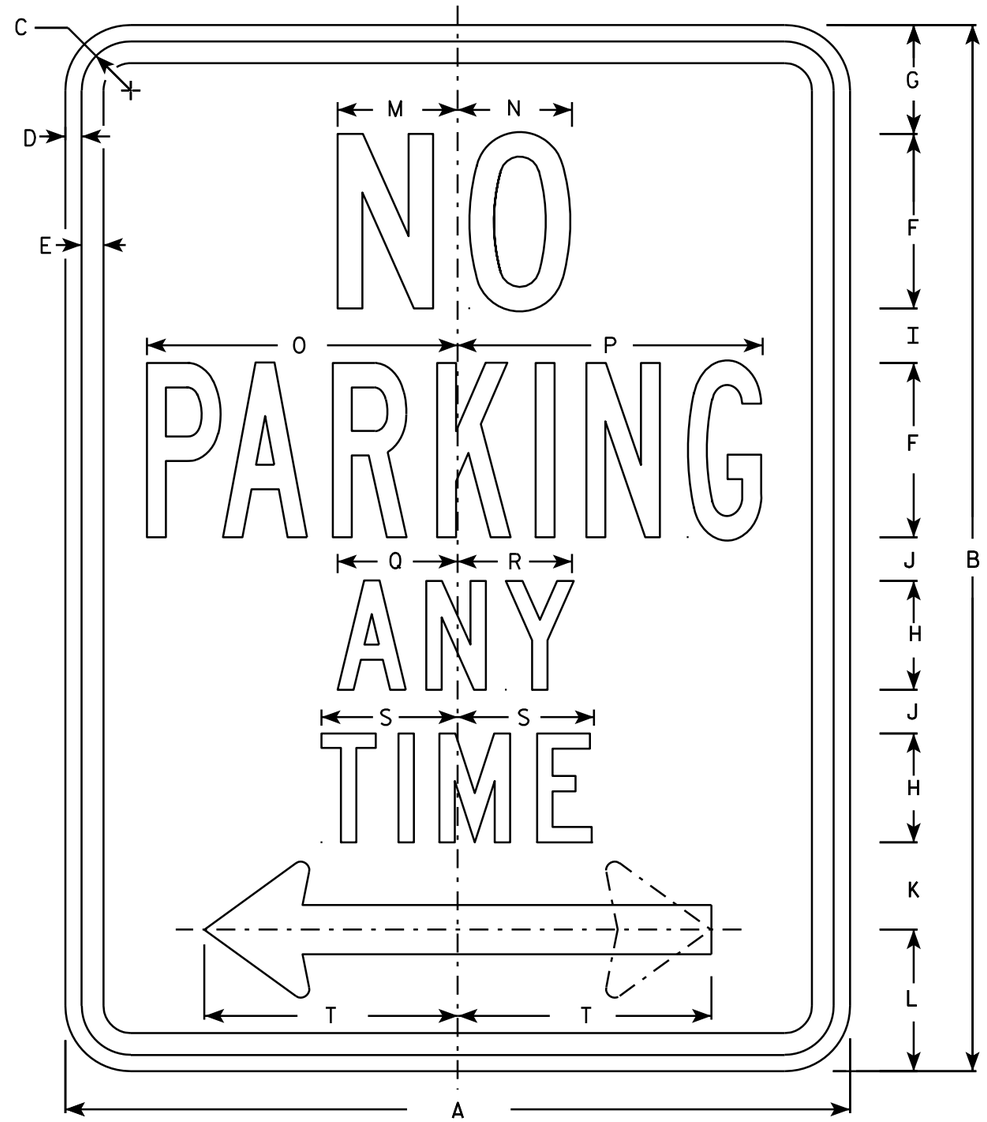
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 504	E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\R52.DGN PLOT DATE : 29-MAR-2011 11:02 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 5.959043:1.000000

WISDOT/CADDS SHEET 42

7

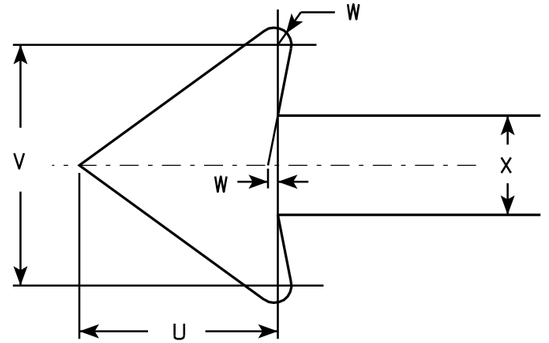
7



R7-1

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Red
3. Message Series - See Note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Lines 1, 3 and 4 are series C, line 2 is series B.
6. R7-1D (double arrow)
   R7-1L (left arrow)
   R7-1R (right arrow)



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	12	18	1 1/8	3/8	3/8	3	1 7/8	2	7/8	5/8	1 1/2	2 1/2	2	2	4 7/8	4 7/8	2 1/4	2 1/8	2 1/2	3 7/8	1 1/2	1 3/4	1/8	3/4			1.5
2S	18	24	1 1/8	3/8	1/2	4	2 1/2	2 1/2	1 1/4	1	2	3 1/4	2 3/4	2 5/8	7 1/8	7	2 3/4	2 5/8	3 1/8	5 7/8	2 1/4	2 5/8	1/4	1 1/8			3.0
2M	24	30	1 1/8	3/8	1/2	5	3	3	2	1 1/4	2 1/2	4	3 1/4	3 3/8	9 1/4	9 1/4	3 1/4	3 1/4	3 3/4	7 3/4	3	3 1/2	1/4	1 1/2			5.0
3	24	30	1 1/8	3/8	1/2	5	3	3	2	1 1/4	2 1/2	4	3 1/4	3 3/8	9 1/4	9 1/4	3 1/4	3 1/4	3 3/4	7 3/4	3	3 1/2	1/4	1 1/2			5.0
4																											
5																											

STANDARD SIGN
R7-1

WISCONSIN DEPT OF TRANSPORTATION

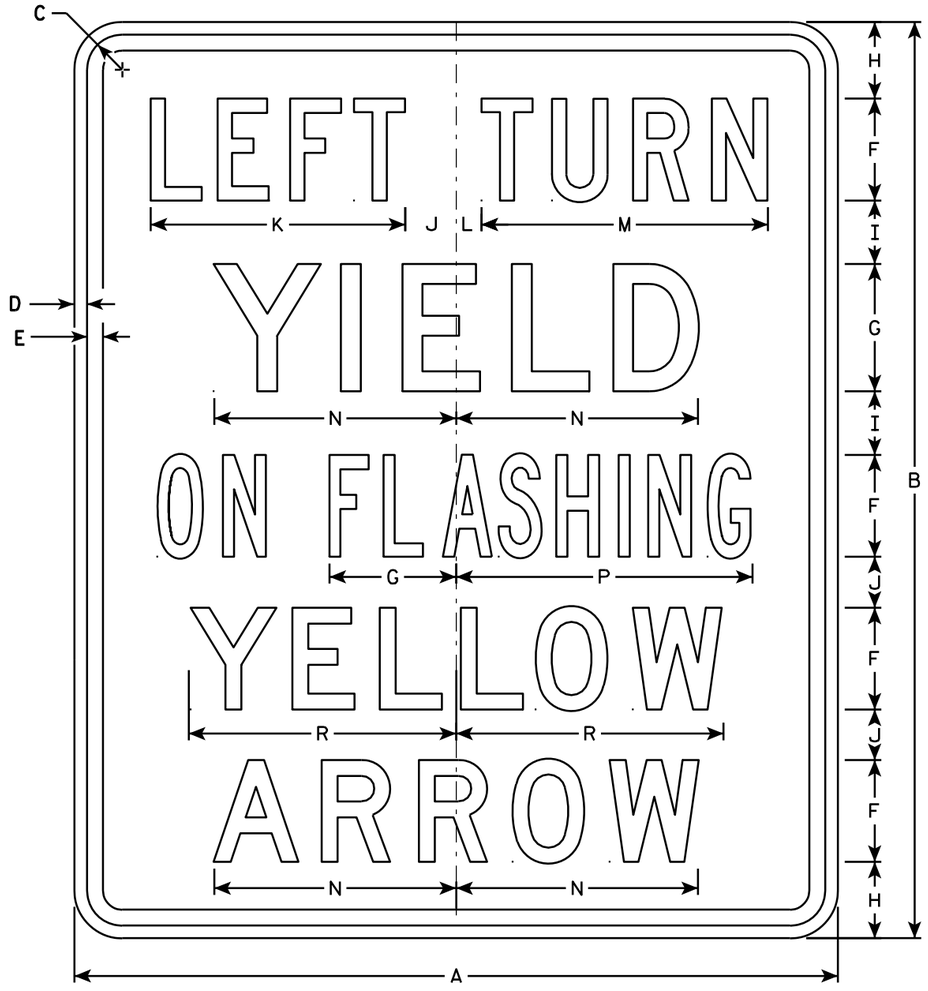
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/31/2011 PLATE NO. R7-1.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 505	E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\R71.DGN PLOT DATE : 31-MAR-2011 09:20 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 3.476110:1.000000

WISDOT/CADDS SHEET 42

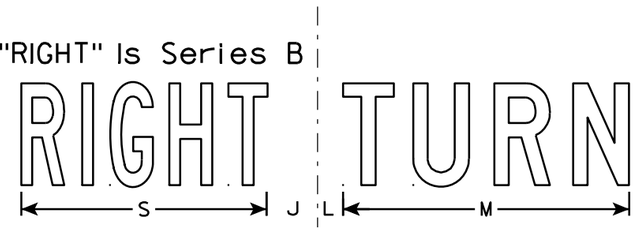


R10-50L

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - see note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Line 1 is Series C.
   Lines 2, 4 and 5 are Series D.
   Line 3 is Series B.

"RIGHT" Is Series B



R10-50R

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	36	1 3/8	1/2	5/8	4	5	3	2 1/2	2	10	1	11 1/4	9 1/2	4 1/4	11 5/8		10 1/2	9 5/8								7.5
2M	30	36	1 3/8	1/2	5/8	4	5	3	2 1/2	2	10	1	11 1/4	9 1/2	4 1/4	11 5/8		10 1/2	9 5/8								7.5
3																											
4																											
5																											

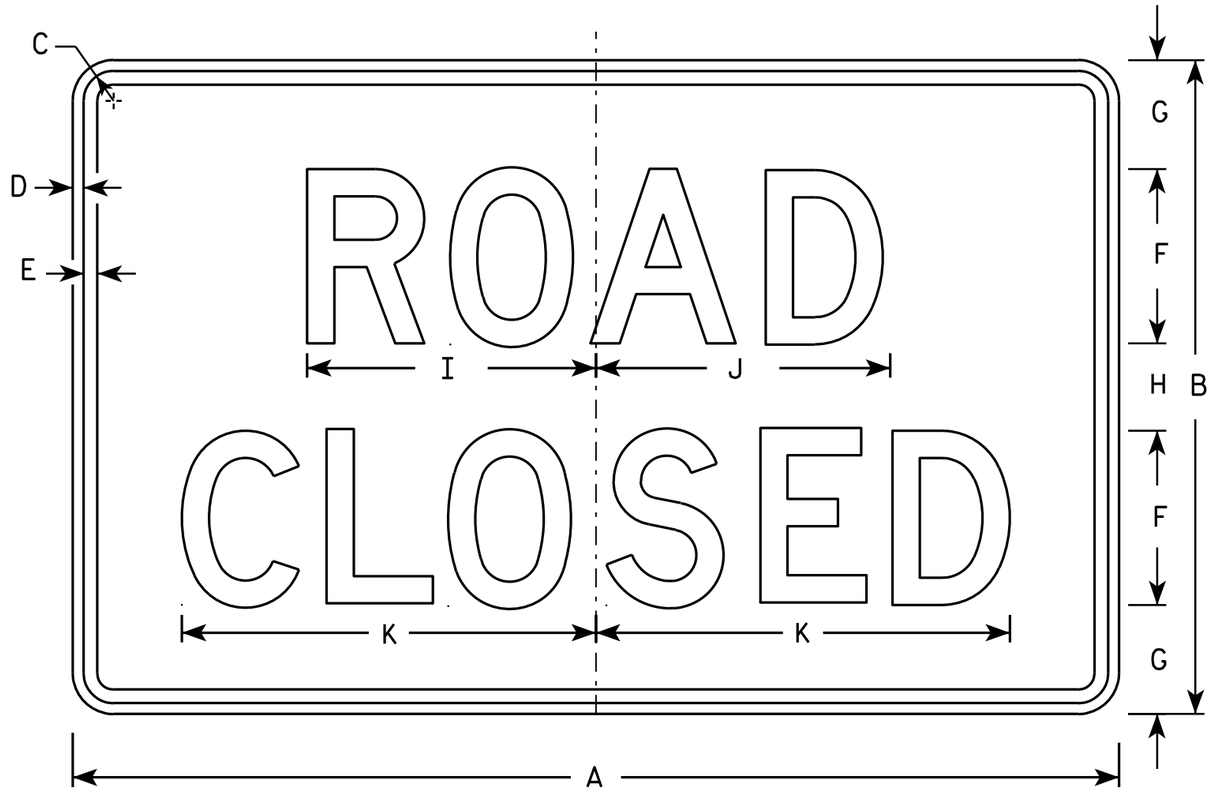
STANDARD SIGN
R10-50

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/11/13 PLATE NO. R10-50.2

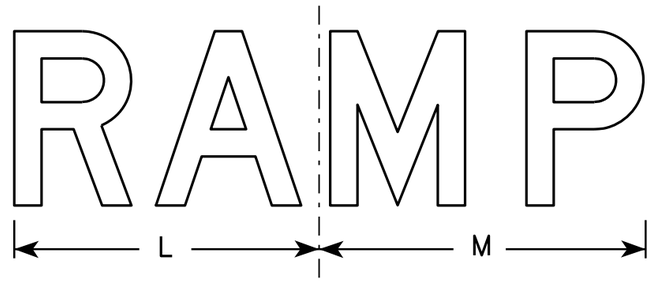
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 506	E



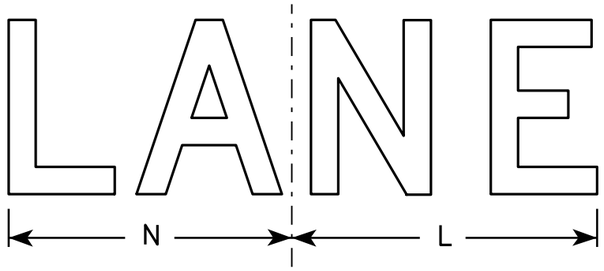
R11-2

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

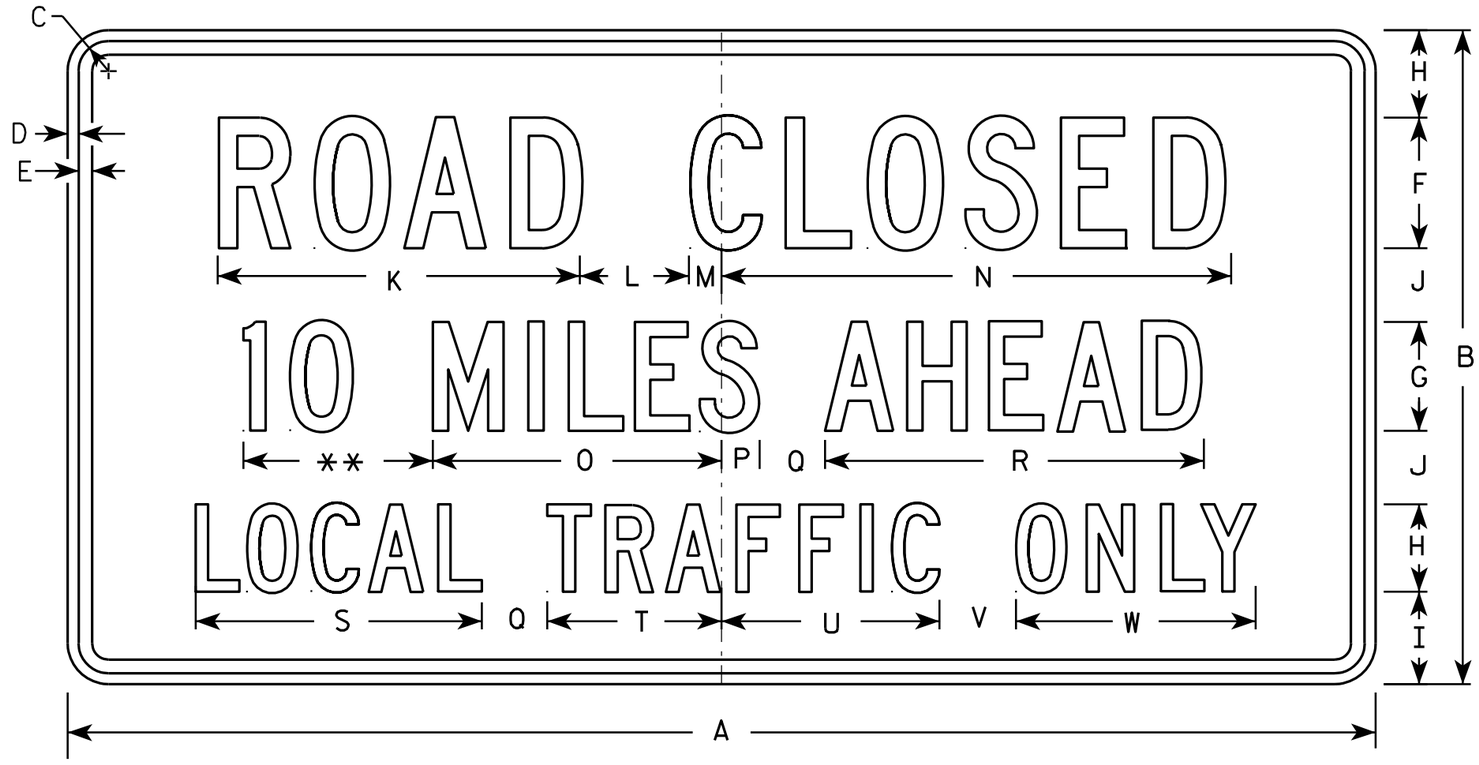
STANDARD SIGN
R11-2

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: 507	E



R11-3

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals and optically adjust spacing to achieve proper balance.

** See Note 5

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36	18	1 3/8	1/2	5/8	4	3	2 1/2	2	2	11 1/8	3	1 1/8	15 1/4	8	1 1/2	2	10 3/4	8 3/8	4 3/4	6 1/2	2	6 3/4				4.5
2S	60	30	1 3/8	1/2	5/8	6	5	4	4 1/4	3 3/8	16 5/8	5	1 1/2	23	13 1/4	1 3/4	3	17 3/8	13 1/8	8	10	3 1/2	11				12.5
2M	60	30	1 3/8	1/2	5/8	6	5	4	4 1/4	3 3/8	16 5/8	5	1 1/2	23	13 1/4	1 3/4	3	17 3/8	13 1/8	8	10	3 1/2	11				12.5
3																											
4																											
5																											

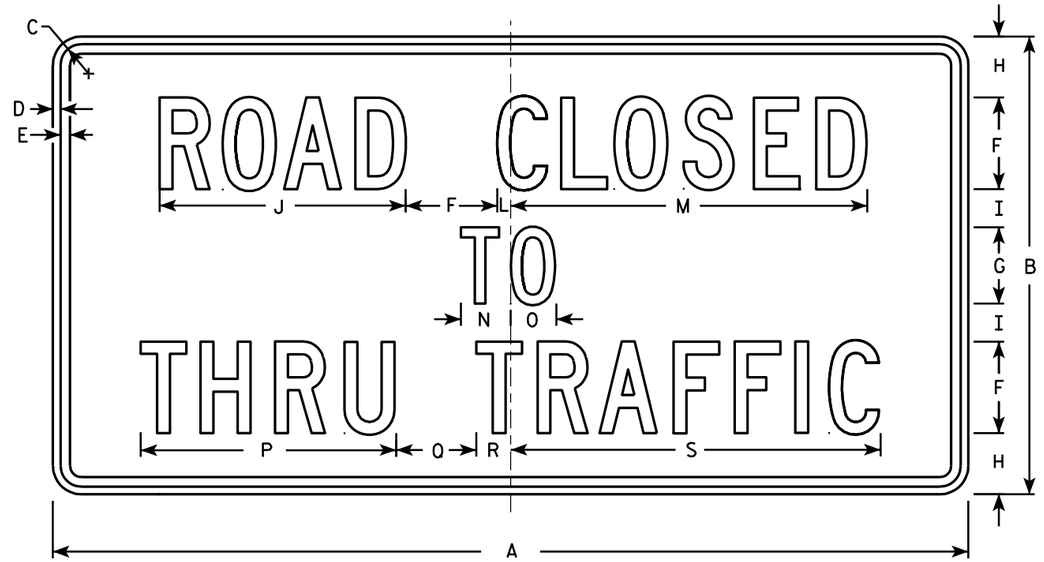
STANDARD SIGN
R11-3

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/1/11 PLATE NO. R11-3.6

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 508 | E



R11-4

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	60	30	1 3/8	1/2	5/8	6	5	4	2 1/2	16 1/8		7/8	23 3/8	3 1/4	3	16 3/4	5 1/4	2 1/4	24 1/4								12.5
2M	60	30	1 3/8	1/2	5/8	6	5	4	2 1/2	16 1/8		7/8	23 3/8	3 1/4	3	16 3/4	5 1/4	2 1/4	24 1/4								12.5
3																											
4																											
5																											

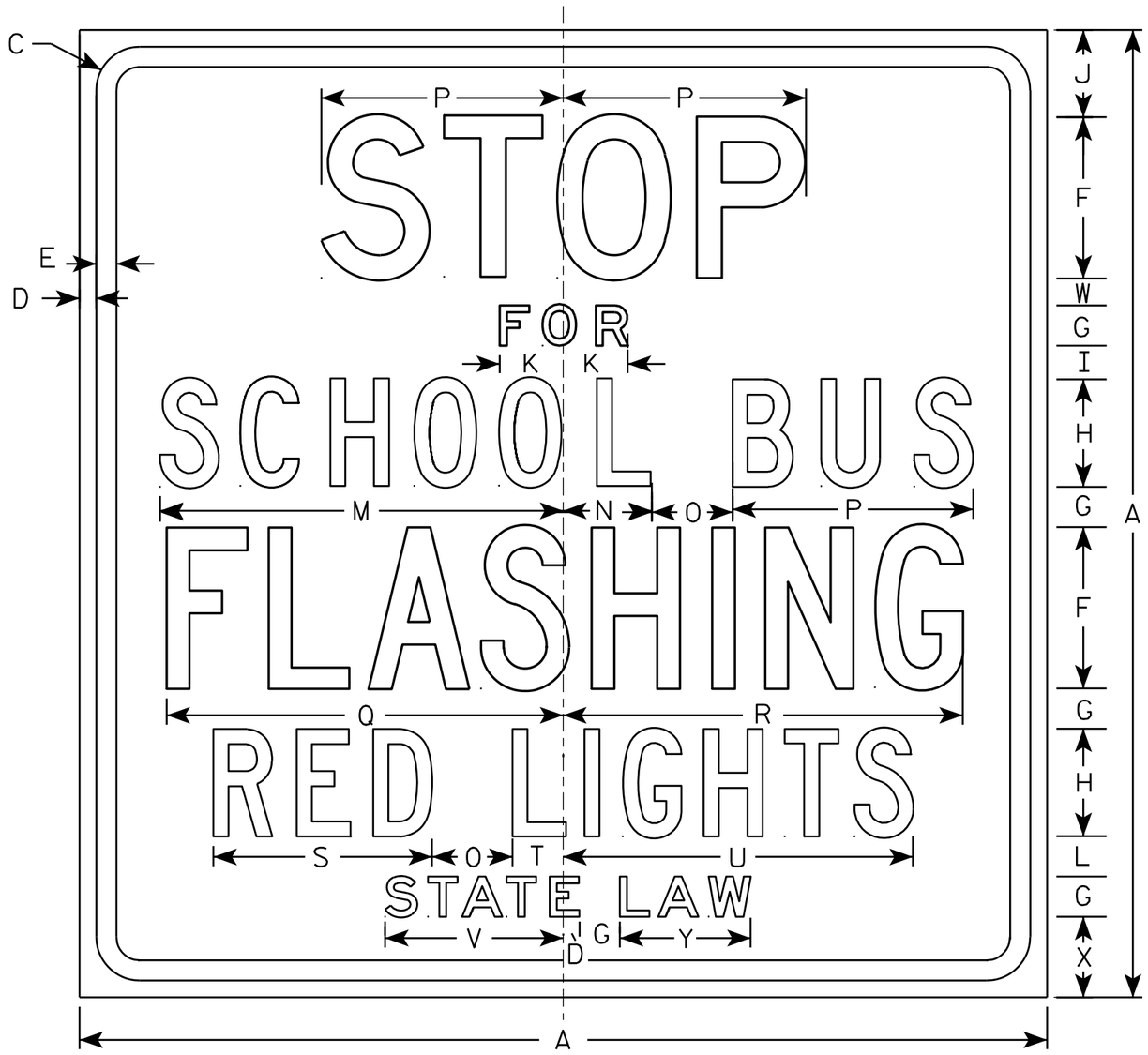
STANDARD SIGN
R11 - 4

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 4/1/11 PLATE NO. R11-4.3

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 509	E



R59-51

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - See note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Line 1 is Series D
   Lines 2 & 6 are Series E
   Line 3, 4 & 5 are Series C

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	36		1 5/8	5/8	3/4	6	1 1/2	4	1 1/4	3 1/4	2 3/8	1 1/2	15	3 1/4	3	9	14 3/4	14 7/8	8 1/8	1 7/8	13	6 5/8	1	3	4 7/8		9.0
2M	36		1 5/8	5/8	3/4	6	1 1/2	4	1 1/4	3 1/4	2 3/8	1 1/2	15	3 1/4	3	9	14 3/4	14 7/8	8 1/8	1 7/8	13	6 5/8	1	3	4 7/8		9.0
3	48		2 1/4	3/4	1	8	2	6	1 1/4	4 3/4	3 1/4	1 1/2	20 1/4	5	3 5/8	12	19 1/2	20	11 5/8	3 3/4	19	9 1/2	1	3 1/2	6 3/4		16.0
4	48		2 1/4	3/4	1	8	2	6	1 1/4	4 3/4	3 1/4	1 1/2	20 1/4	5	3 5/8	12	19 1/2	20	11 5/8	3 3/4	19	9 1/2	1	3 1/2	6 3/4		16.0
5																											

STANDARD SIGN
R59-51

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/30/11 PLATE NO. R59-51.10

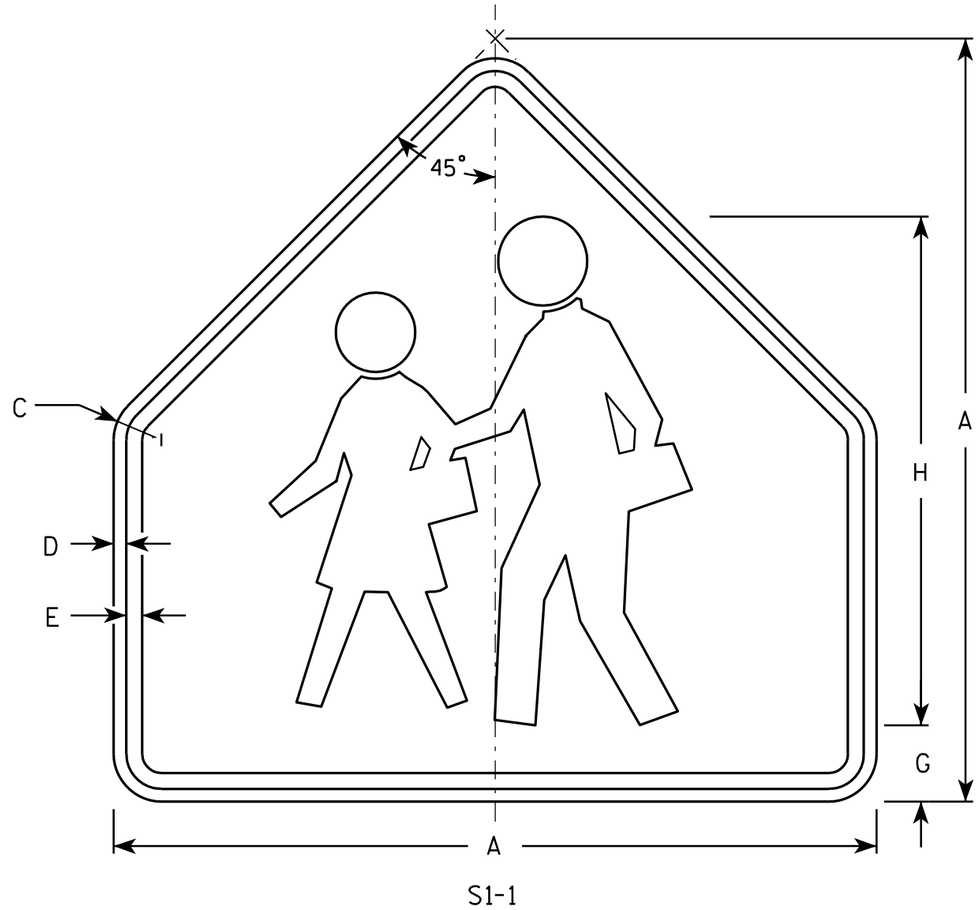
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 510 | E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\R5951.DGN 30-MAR-2011 09:59 PLOT DATE : 30-MAR-2011 09:59 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 5.287650:1.000000

WISDOT/CADDS SHEET 42

7

7



S1-1

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-Green
   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	30		1 3/8	1/2	5/8		3	20																			4.69
2	36		1 5/8	5/8	3/4		3 1/2	24																			6.75
3	36		1 5/8	5/8	3/4		3 1/2	24																			6.75
4	48		2 1/4	3/4	1		4 3/4	32																			12
5																											

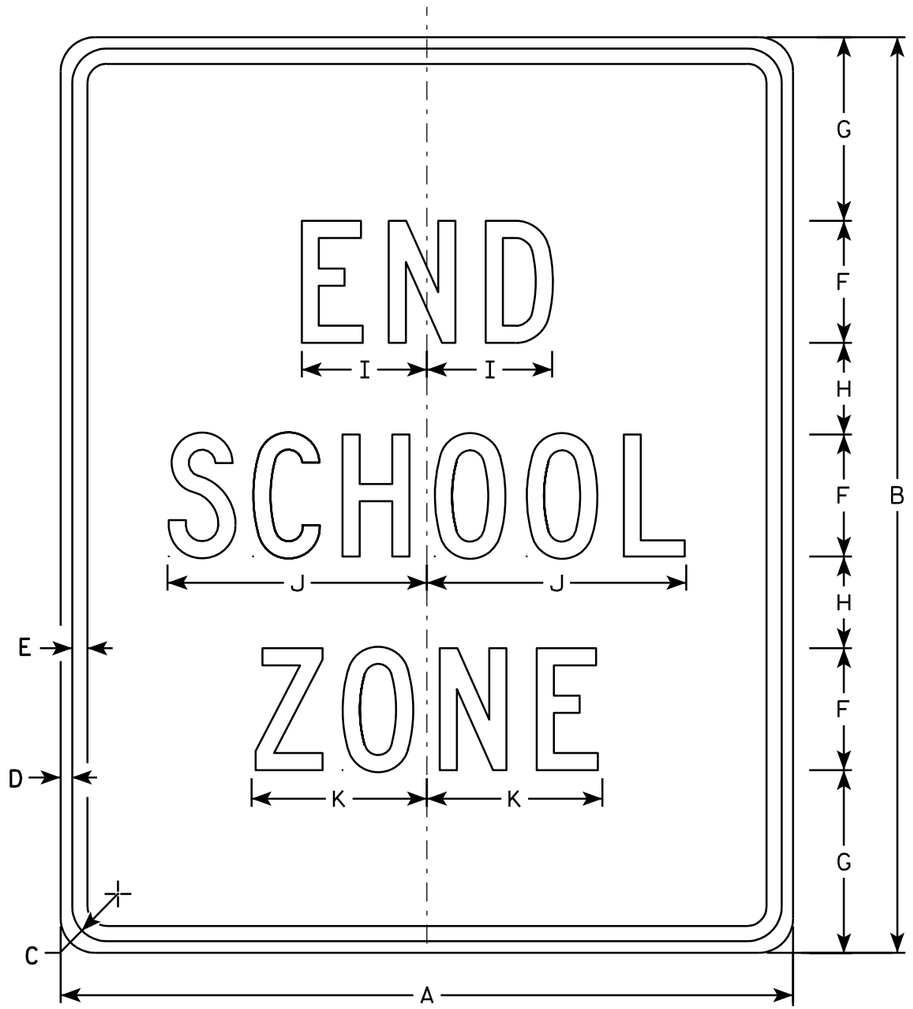
STANDARD SIGN
S1-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/30/05 PLATE NO. S1-1.8

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 511	E



S5-2

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 - 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																											
2	24	30	1 1/8	3/8	1/2	4	6	3	4 1/8	8 1/2	5 3/4																5.0
3	36	42	1 5/8	5/8	3/4	6	7	5	6 1/8	12 5/8	8 5/8																10.5
4																											
5																											

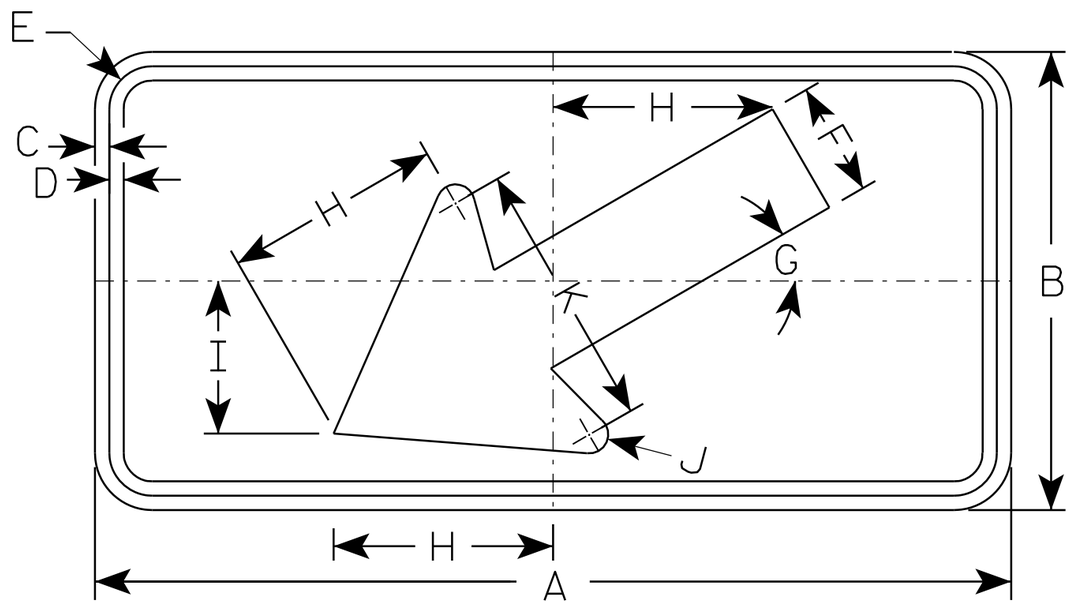
STANDARD SIGN
S5-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/8/11 PLATE NO. S5-2.2

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 512 | E



S16-7L

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-Green
   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. S16-7R are the same as S16-7L 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	24	12	3/8	3/8	1 1/8	3	30°	5 3/4	4	1/2	7																2.0
2S	30	18	3/8	1/2	1 1/8	4 1/2	30°	8 1/2	6	5/8	10 1/4																3.75
2M	30	18	3/8	1/2	1 1/8	4 1/2	30°	8 1/2	6	5/8	10 1/4																3.75
3	30	18	3/8	1/2	1 1/8	4 1/2	30°	8 1/2	6	5/8	10 1/4																3.75
4	48	24	1/2	5/8	1 3/8	6	30°	11 1/2	8	1	14																8.0
5																											

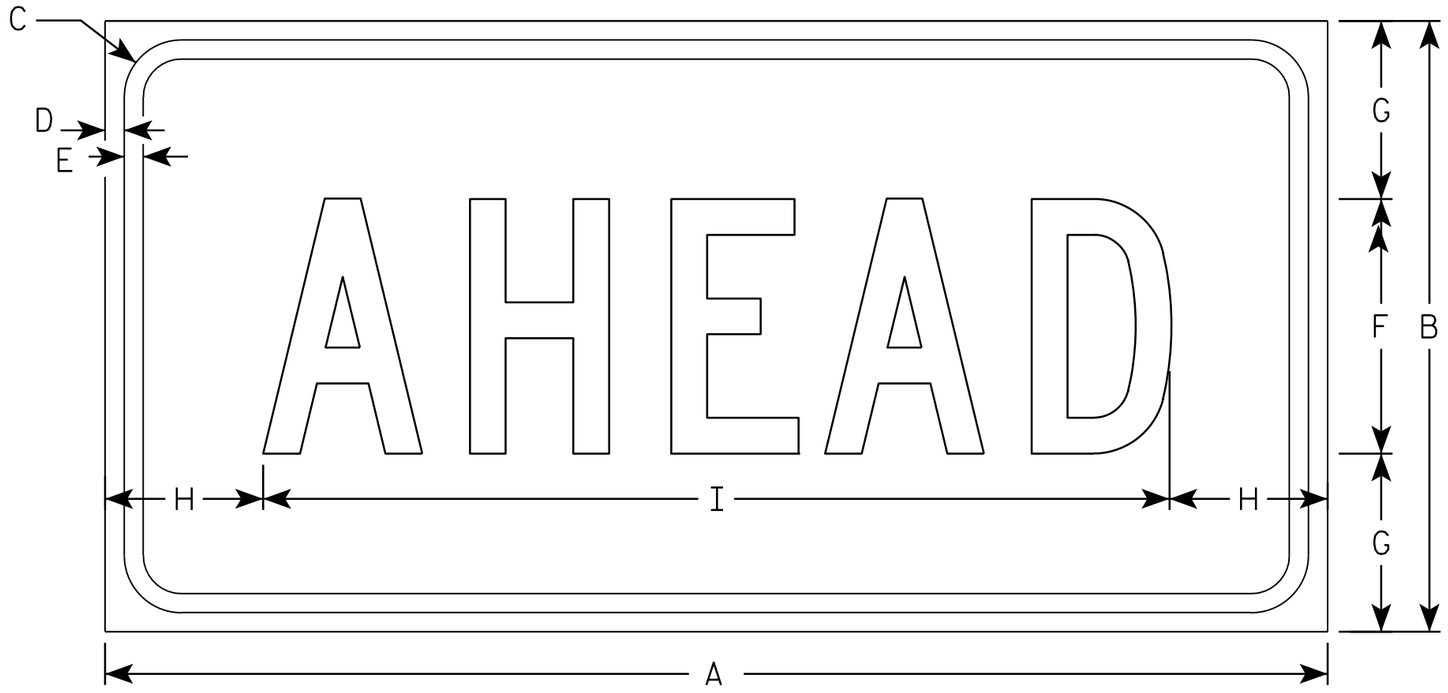
STANDARD SIGN
S16-7

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 7/22/13 PLATE NO. S16-7.1

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 513 | E



S16-9P

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-Green
   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	12	1 1/8	3/8	3/8	5	3 1/2	3 1/8	17 3/4																		2.0
2S	30	18	1 1/8	3/8	1/2	7	5 1/2	2 3/4	24 1/2																		3.75
2M	30	18	1 1/8	3/8	1/2	7	5 1/2	2 3/4	24 1/2																		3.75
3	30	18	1 1/8	3/8	1/2	7	3 1/2	2 3/4	24 1/2																		3.75
4	48	24	1 3/8	1/2	5/8	10	7	6 1/8	35 3/4																		8.0
5																											

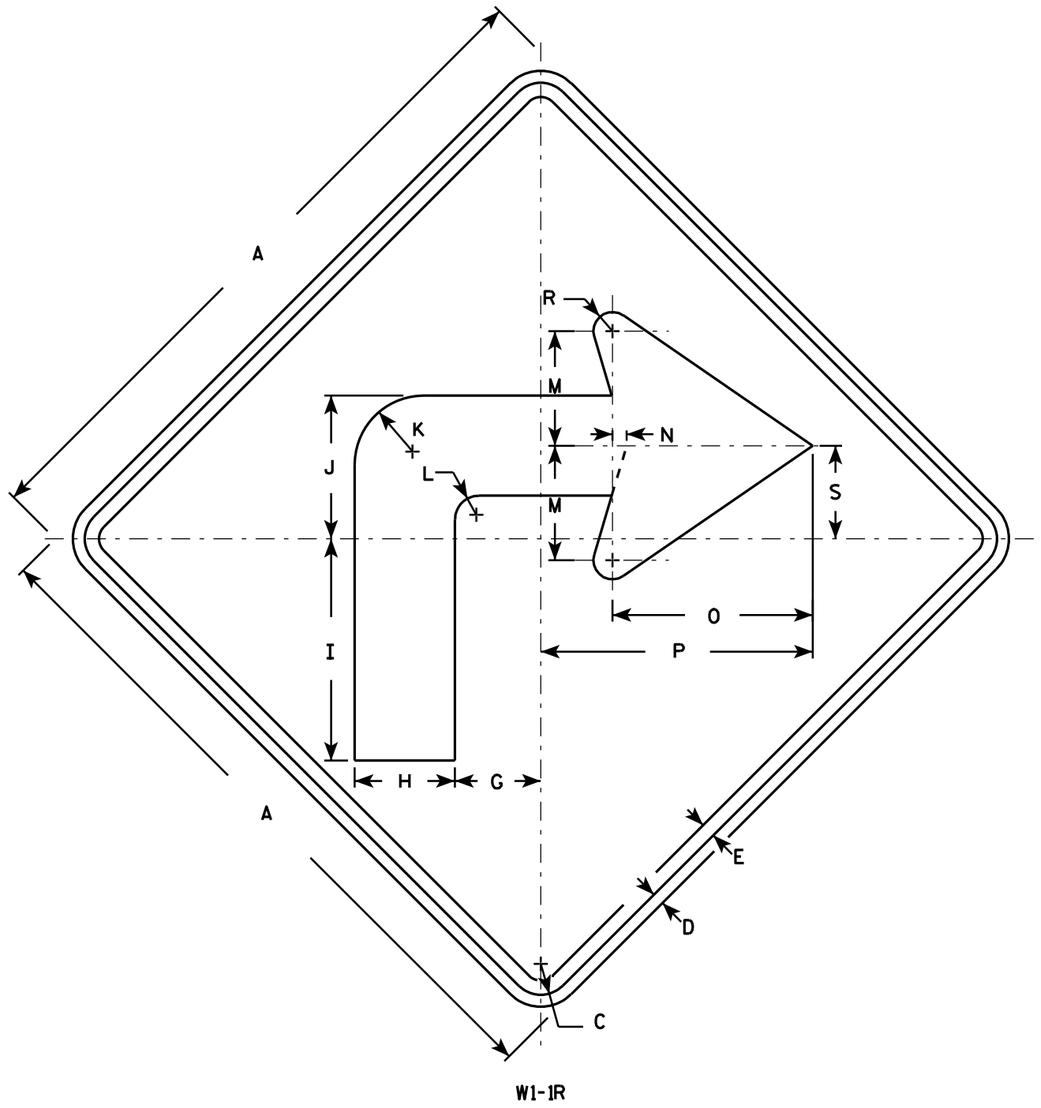
STANDARD SIGN
S16-9P

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 7/22/13 PLATE NO. S16-9P.1

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 514 | E



W1-1R

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. 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. W1-1L is the same as W1-1R 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	24		1 1/8	3/8	1/2		3	3 1/2	7 3/4	5	2 1/2	7/8	4	1/2	7	9 1/2		5/8	3 1/4								4.0
2S	36		1 5/8	5/8	3/4		4 1/2	5 1/4	11 5/8	7 1/2	3 5/8	1 1/4	6	3/4	10 1/2	14 1/4		1	4 7/8								9.0
2M	36		1 5/8	5/8	3/4		4 1/2	5 1/4	11 5/8	7 1/2	3 5/8	1 1/4	6	3/4	10 1/2	14 1/4		1	4 7/8								9.0
3	36		1 5/8	5/8	3/4		4 1/2	5 1/4	11 5/8	7 1/2	3 5/8	1 1/4	6	3/4	10 1/2	14 1/4		1	4 7/8								9.0
4	48		2 1/4	3/4	1		6	7	15 1/2	10	4 7/8	1 5/8	8	1	14	19		1 1/4	6 1/2								16.0
5	48		2 1/4	3/4	1		6	7	15 1/2	10	4 7/8	1 5/8	8	1	14	19		1 1/4	6 1/2								16.0

STANDARD SIGN
W1-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/15/12 PLATE NO. W1-1.11

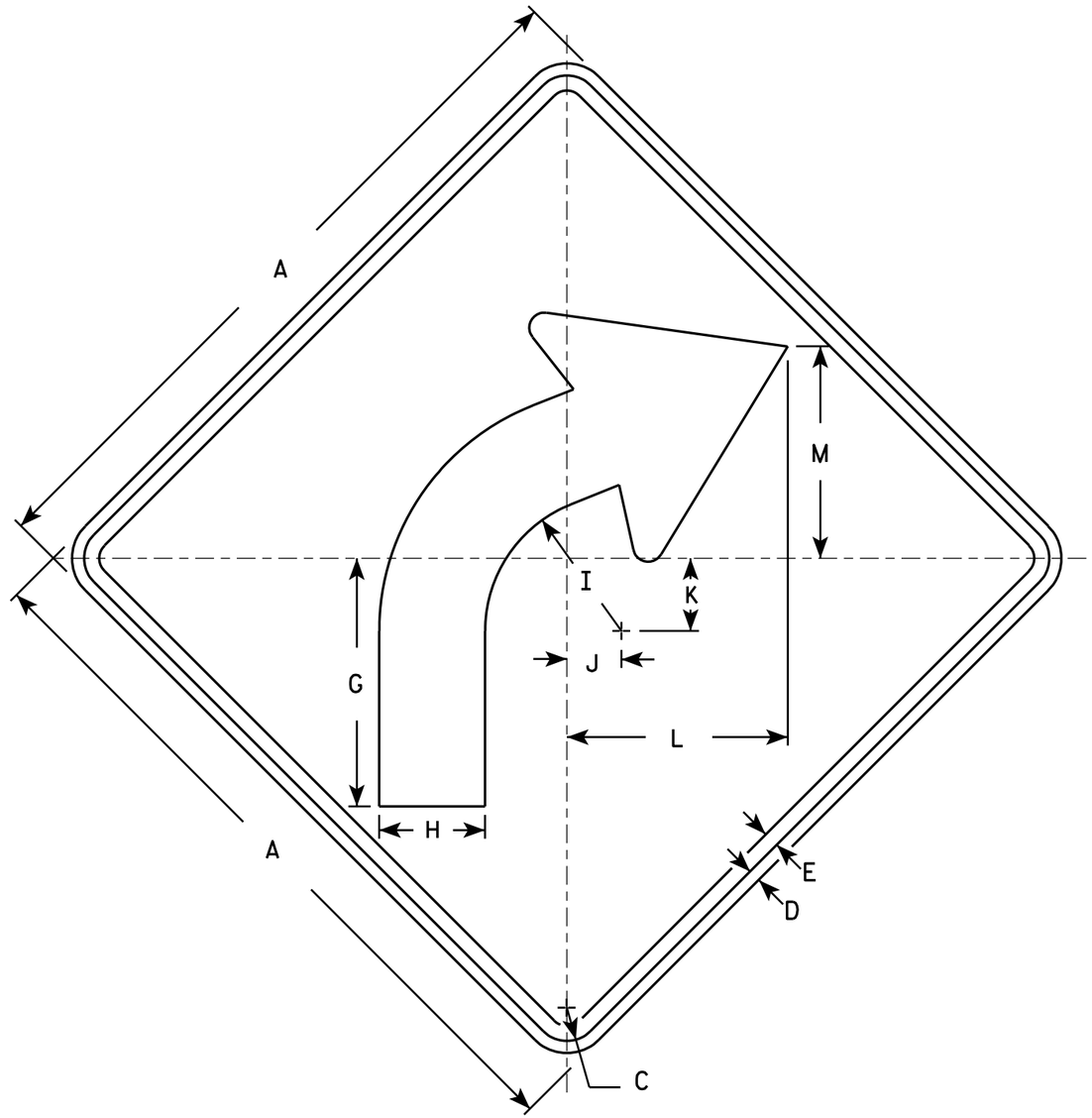
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 515 | E

7

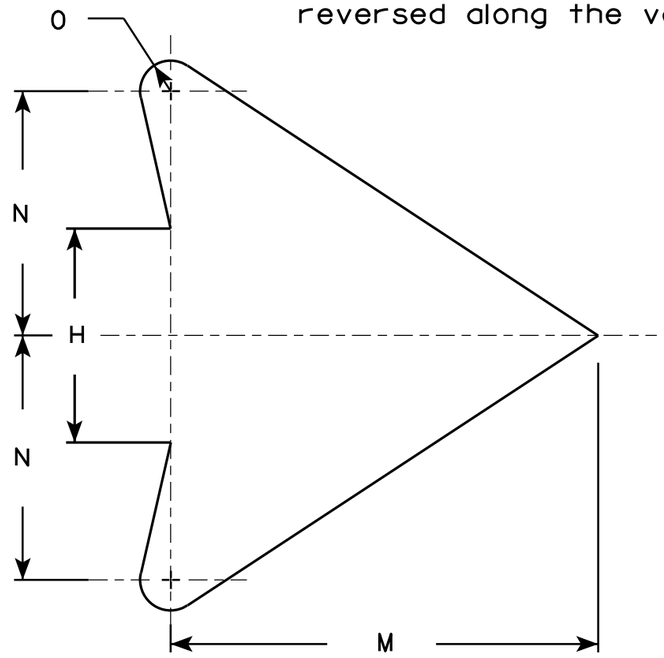
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W11.DGN PLOT DATE : 15-MAY-2012 13:47 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 7.939035:1.000000
WISDOT/CADDS SHEET 42

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

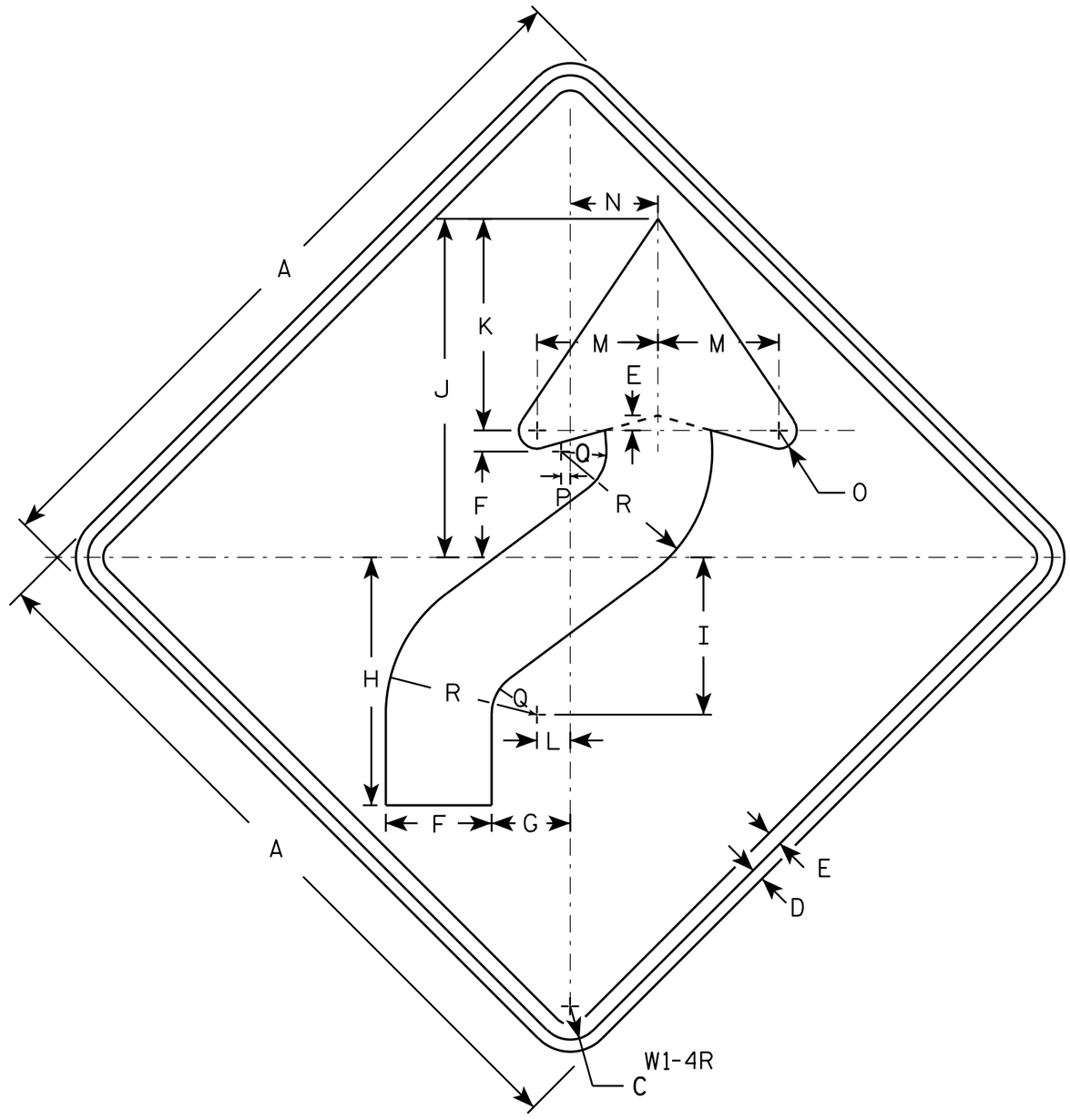
STANDARD SIGN
W1-2

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: 516	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.
4. W1-4L is the same as W1-4R except the arrow is reversed along the vertical centerline.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2	3 1/2	2 5/8	8 1/4	5 1/4	11 1/4	7	1 1/8	4	3	5/8	1/4	1 1/2	5									4.0
2S	30		1 3/8	1/2	5/8	4 3/8	3 1/4	10 1/4	6 1/2	14	8 3/4	1 3/8	5	3 5/8	3/4	3/8	1 7/8	6 1/4									6.25
2M	36		1 5/8	5/8	3/4	5 1/4	4	12 3/8	7 7/8	16 7/8	10 1/2	1 5/8	6	4 1/2	1	1/2	2 1/4	7 1/2									9.0
3	36		1 5/8	5/8	3/4	5 1/4	4	12 3/8	7 7/8	16 7/8	10 1/2	1 5/8	6	4 1/2	1	1/2	2 1/4	7 1/2									9.0
4	36		1 5/8	5/8	3/4	5 1/4	4	12 3/8	7 7/8	16 7/8	10 1/2	1 5/8	6	4 1/2	1	1/2	2 1/4	7 1/2									9.0
5	48		2 1/4	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0

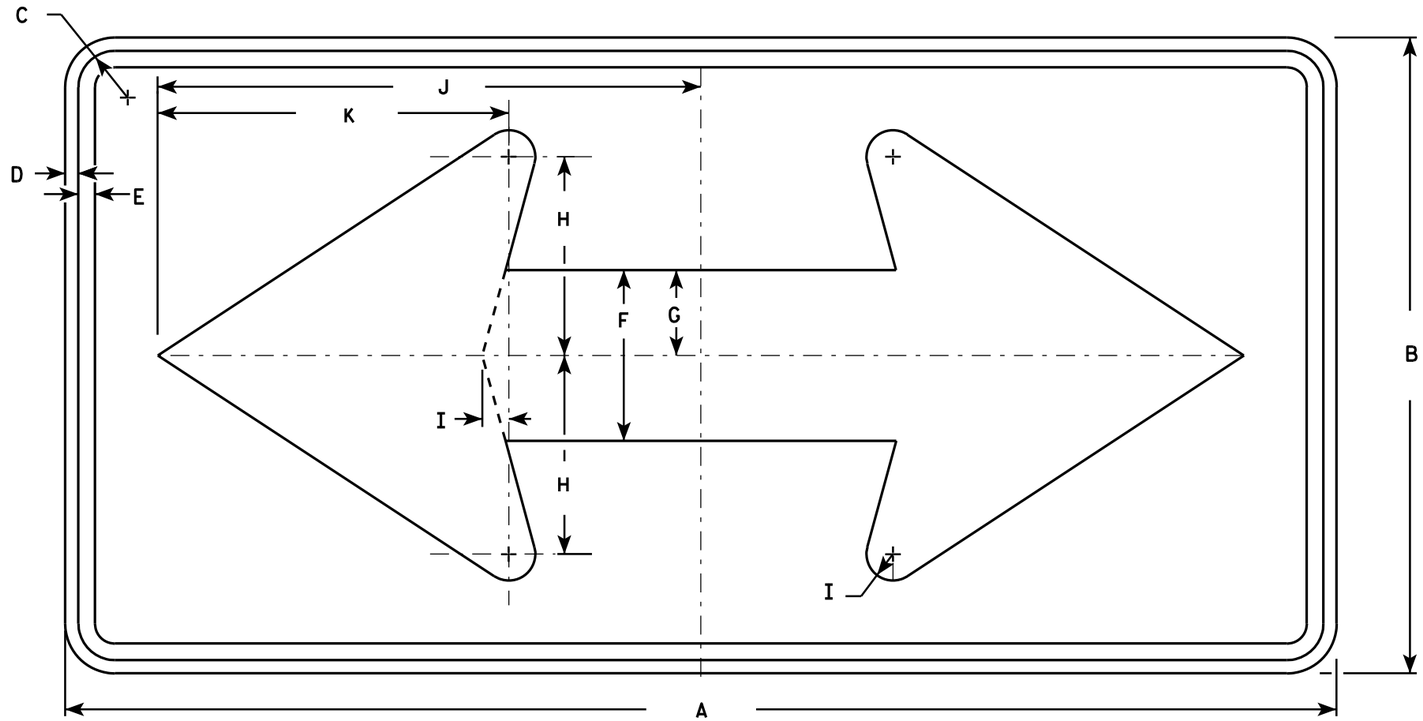
STANDARD SIGN
W1-4

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/17/12 PLATE NO. W1-4.11

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 517 | E



W1-7

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.

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	1/2	5	2 1/2	5 3/4	3/4	15 5/8	10 1/8																4.5
2S	48	24	1 3/8	1/2	5/8	6 1/2	3 1/4	7 1/2	1	20 1/2	13 1/4																8.0
2M	48	24	1 3/8	1/2	5/8	6 1/2	3 1/4	7 1/2	1	20 1/2	13 1/4																8.0
3	60	30	1 3/8	1/2	5/8	8	4	9 1/4	1 1/4	25 3/8	16 1/4																12.5
4	60	30	1 3/8	1/2	5/8	8	4	9 1/4	1 1/4	25 3/8	16 1/4																12.5
5	96	48	2 1/4	3/4	1	13	6 1/2	15	2	41	26 1/2																32.0

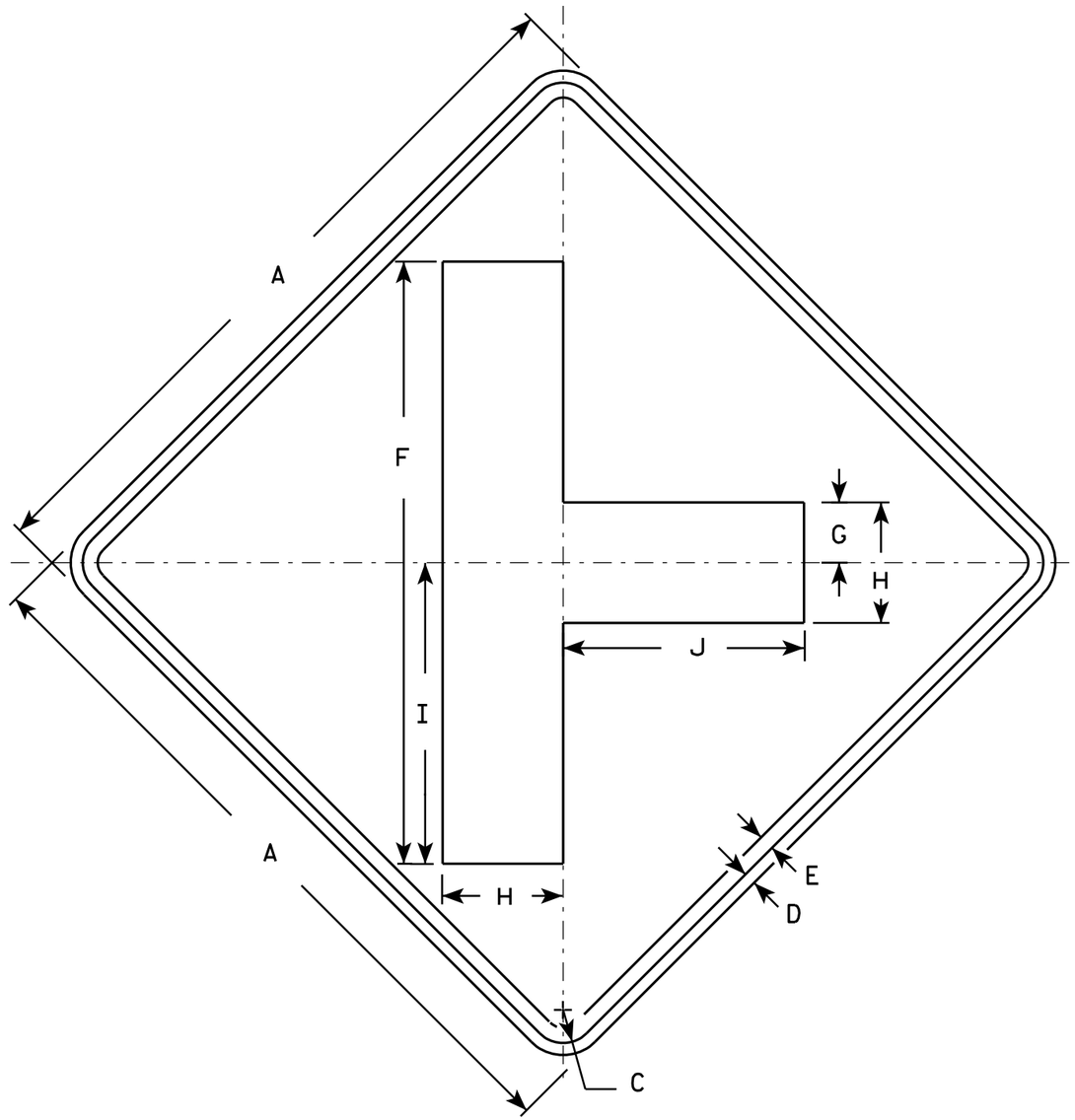
STANDARD SIGN
W1-7

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/7/10 PLATE NO. W1-7.7

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 518 | E



W2-2

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	20	2	4	10	8																	4.0
2S	30		1 3/8	1/2	5/8	25	2 1/2	5	12 1/2	10																	6.25
2M	30		1 3/8	1/2	5/8	25	2 1/2	5	12 1/2	10																	6.25
3	36		1 5/8	5/8	3/4	30	3	6	15	12																	9.0
4	48		2 1/4	3/4	1	40	4	8	20	16																	16.0
5																											

STANDARD SIGN
W2-2

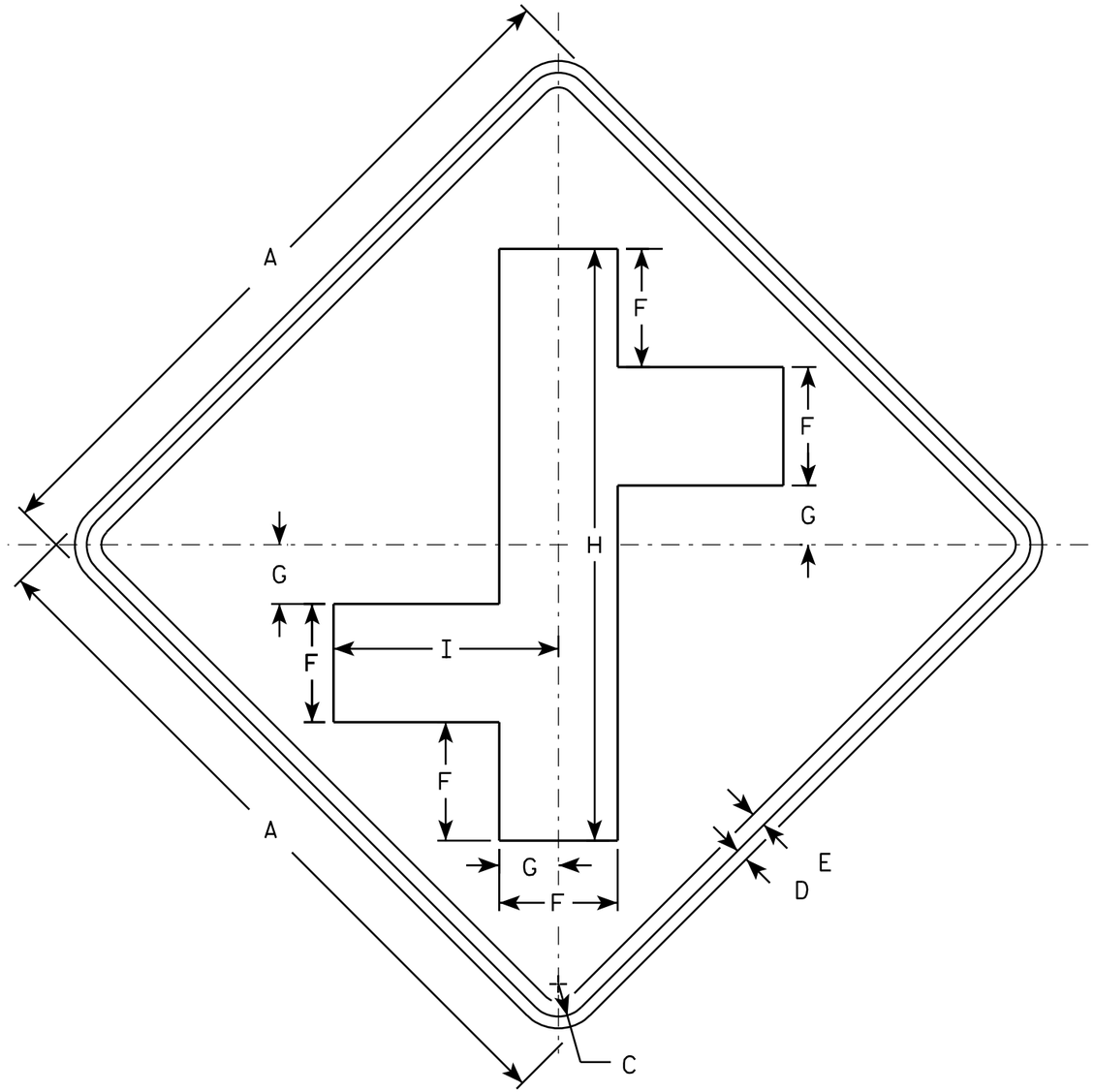
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 5/29/12 PLATE NO. W2-2.6

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 519 | E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W22.DGN PLOT DATE : 29-MAY-2012 10:18 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 6.202372:1.000000
WISDOT/CADDS SHEET 42



W2-7L

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																											
2S	30		1 3/8	1/2	5/8	5	2 1/2	25	9 1/2																		
2M	30		1 3/8	1/2	5/8	5	2 1/2	25	9 1/2																		6.25
3	36		1 5/8	5/8	3/4	6	3	30	11 3/8																		9.0
4	48		2 1/4	3/4	1	8	4	40	15 1/4																		16.0
5																											

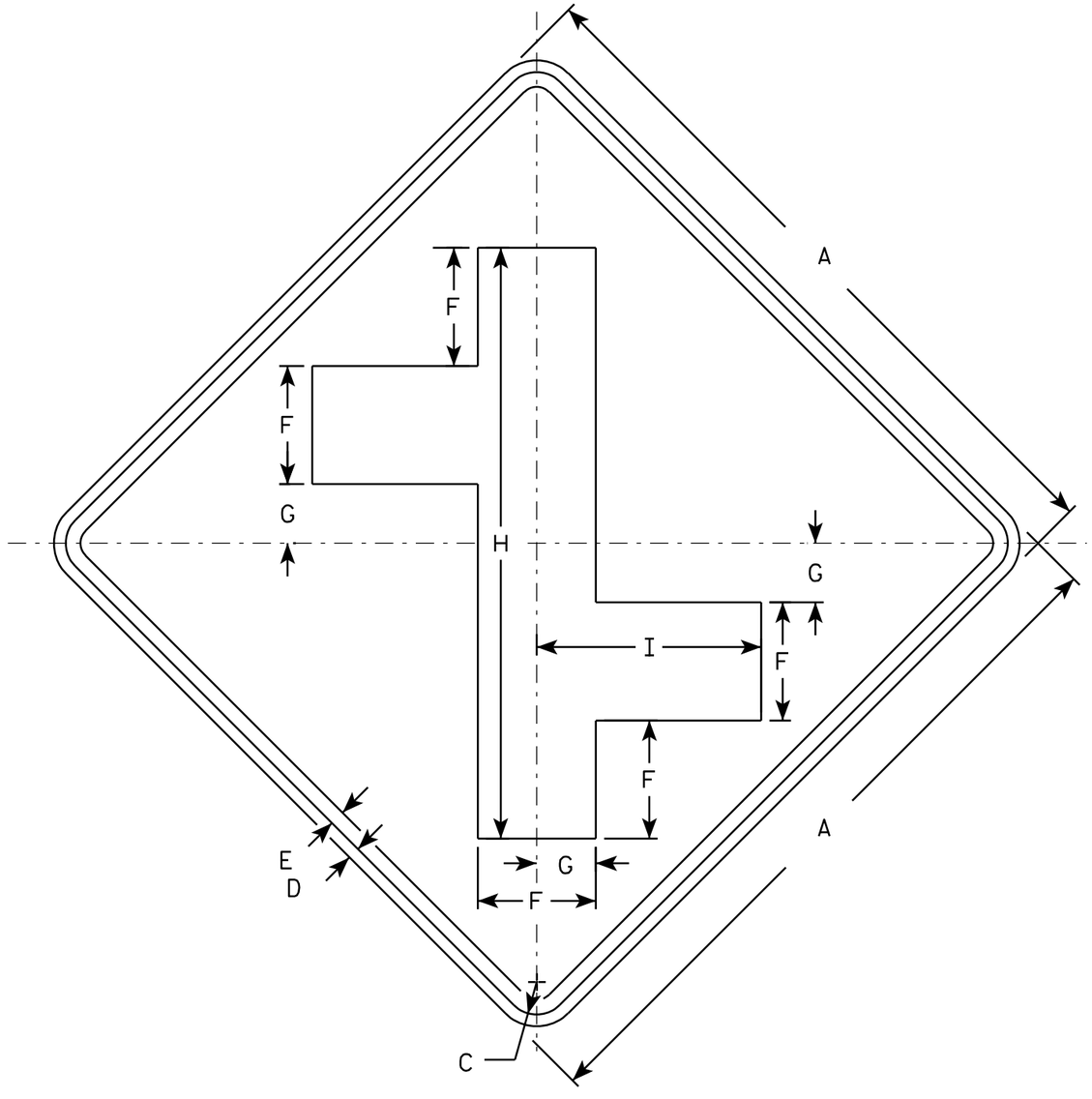
STANDARD SIGN
W2-7L

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/29/12 PLATE NO. W2-7L.2

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 520 | E



W2-7R

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																											
2S	30		1 3/8	1/2	5/8	5	2 1/2	25	9 1/2																		6.25
2M	30		1 3/8	1/2	5/8	5	2 1/2	25	9 1/2																		6.25
3	36		1 5/8	5/8	3/4	6	3	30	11 3/8																		9.0
4	48		2 1/4	3/4	1	8	4	40	15 1/4																		16.0
5																											

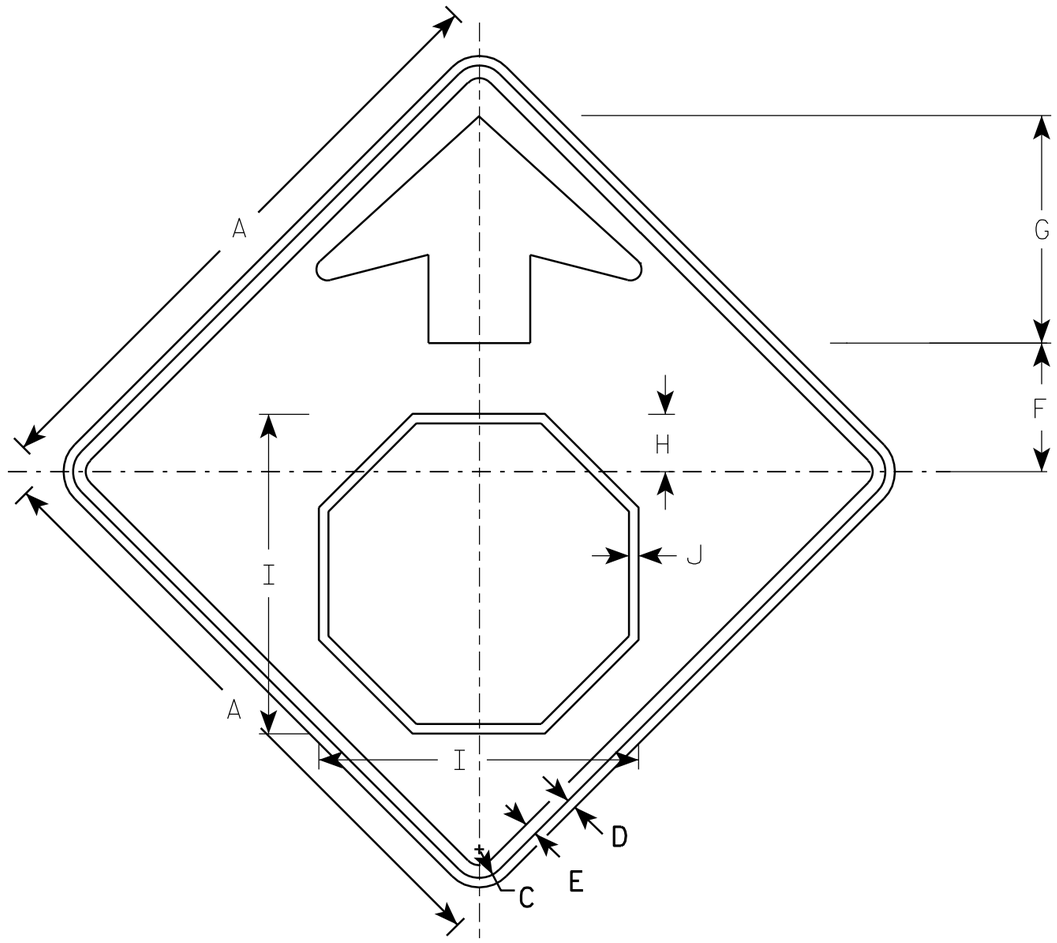
STANDARD SIGN
W2-7R

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/29/12 PLATE NO. W2-7R.2

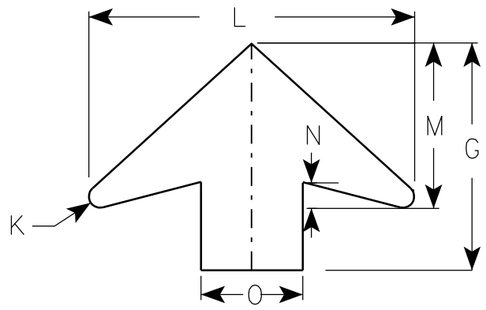
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 521	E



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

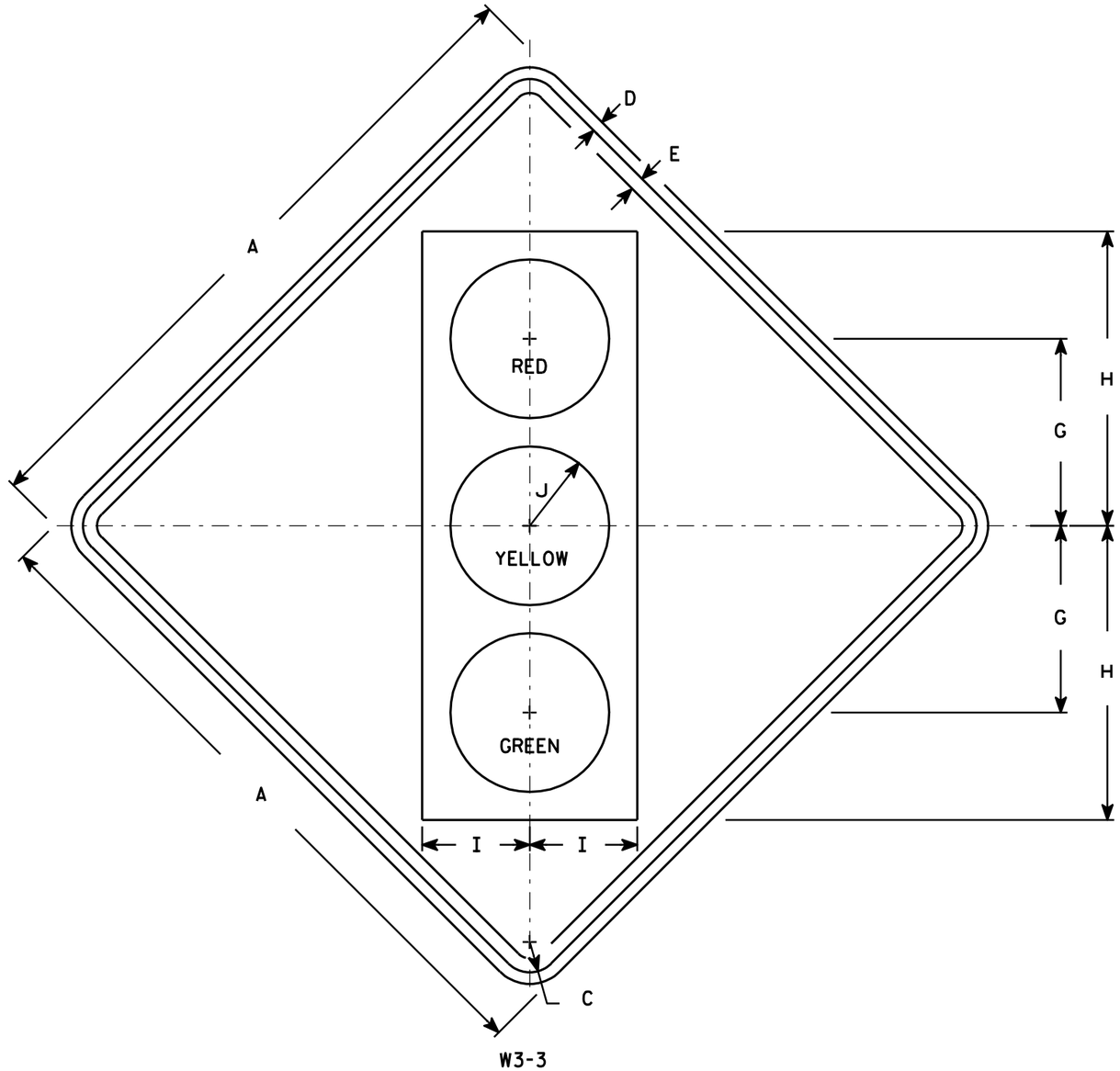
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/7/10 PLATE NO. W3-1.12

PROJECT NO:

SHEET NO: 522 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

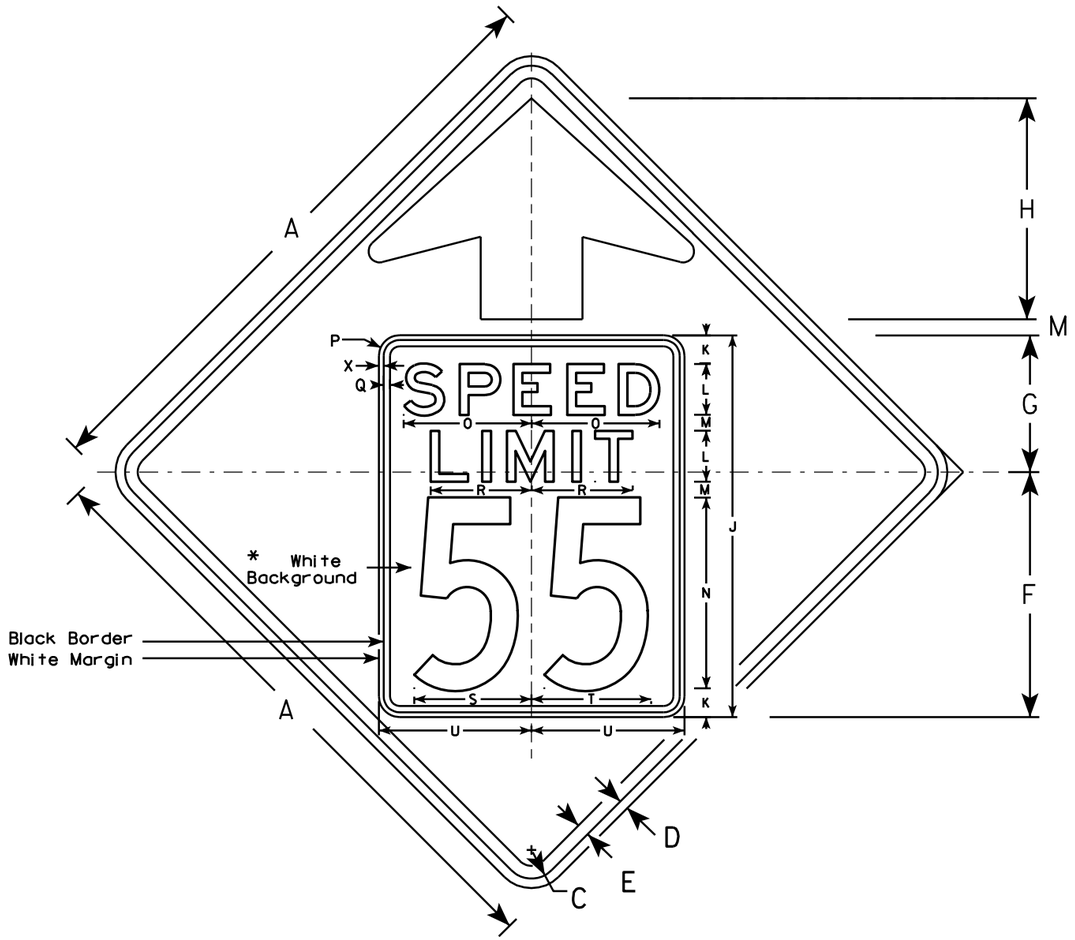
STANDARD SIGN
W3-3

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: 523 | E

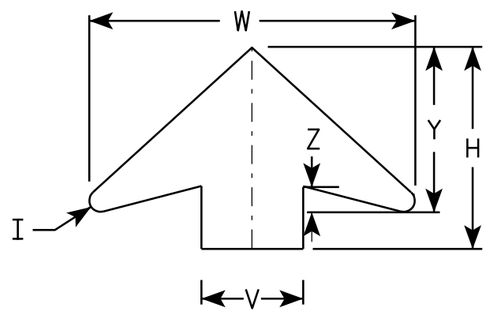


W3-5

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

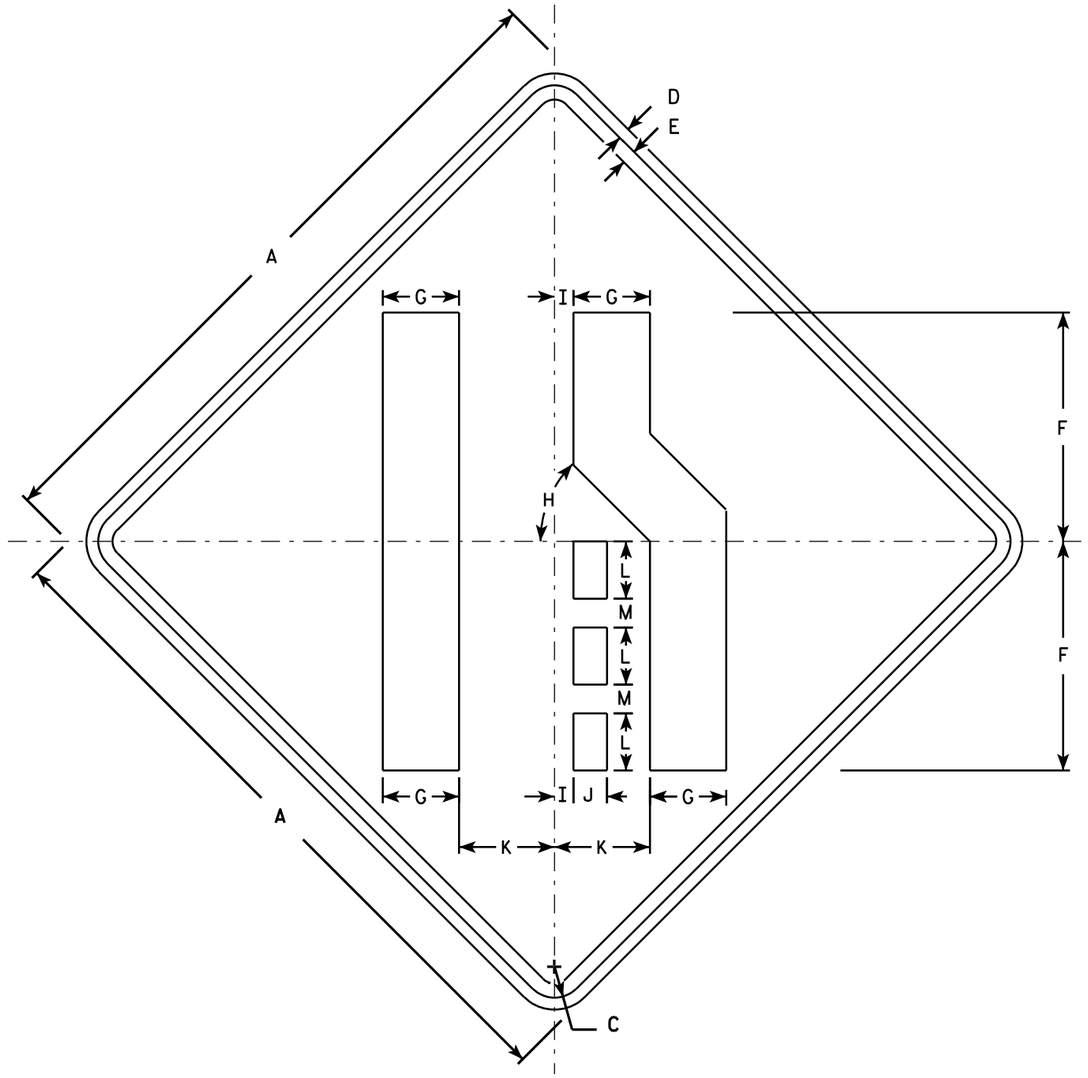
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/29/12 PLATE NO. W3-5.5

PROJECT NO:

SHEET NO: 524 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

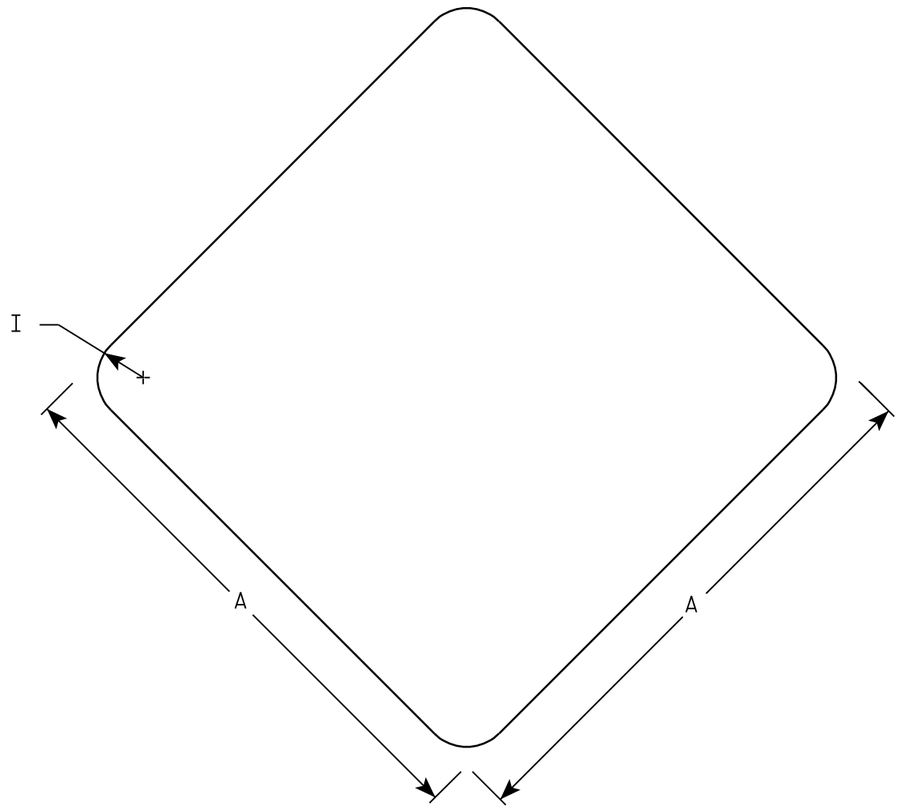
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/12/13 PLATE NO. W4-2.14

PROJECT NO:

SHEET NO: 525 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																											

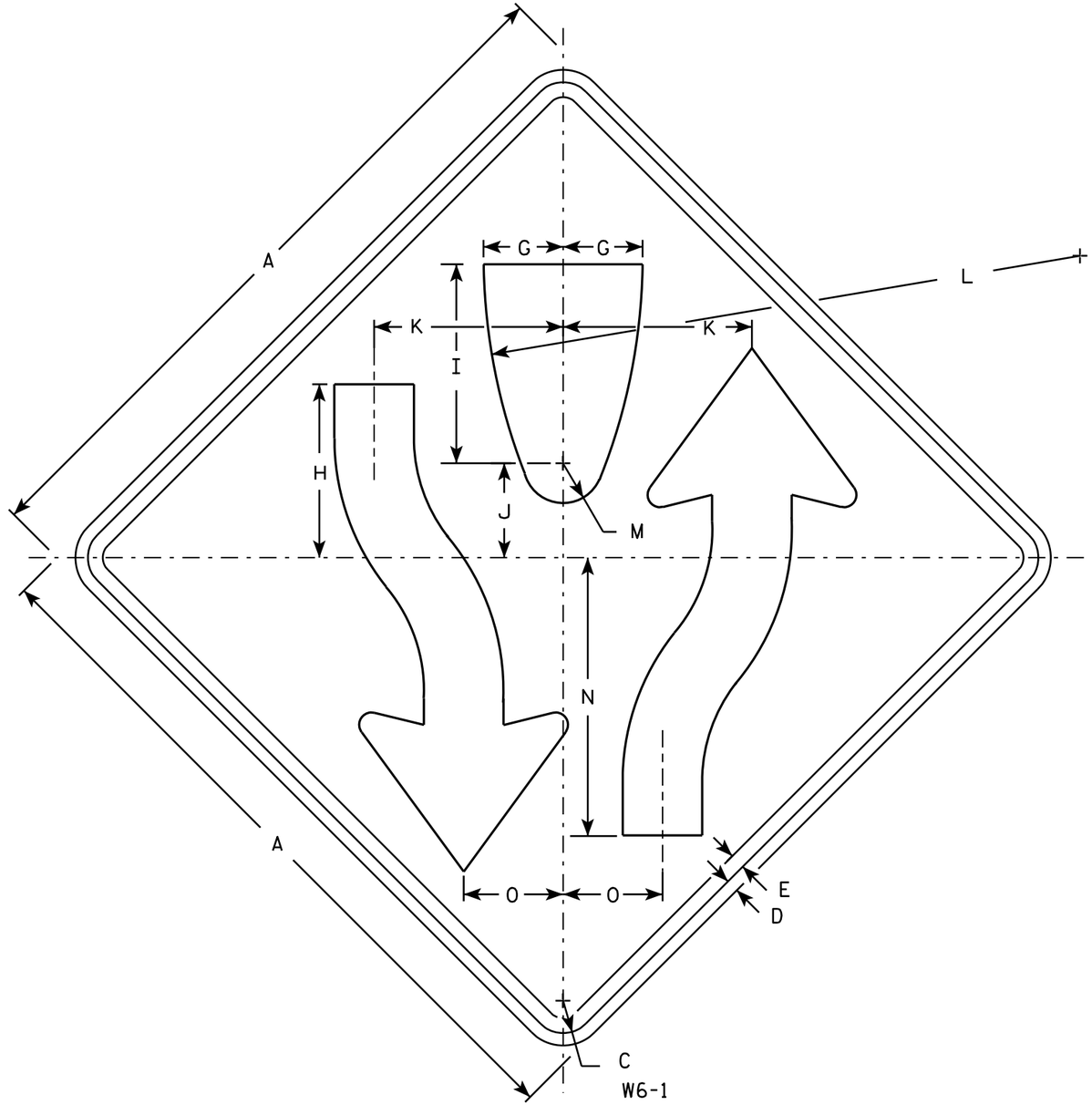
STANDARD SIGN
W5-54

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

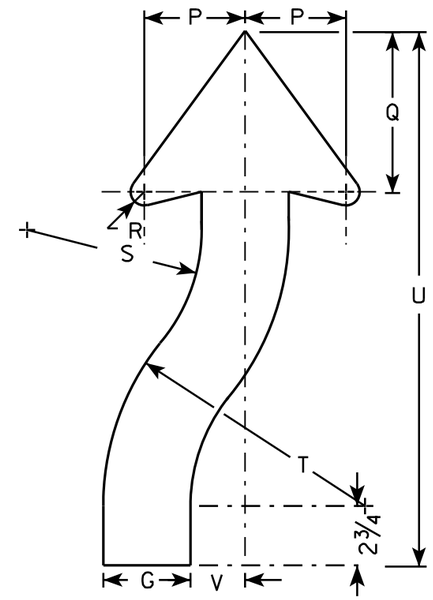
DATE 11/3/10 PLATE NO. W5-54.8

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 526 | 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.
4. W6-2 same as W6-1 but is rotated 180° when mounted.



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		3 1/4	8	8 1/4	4 1/8	7 7/8	25	1 3/4	11 5/8	4 1/8	3 7/8	6 3/4	5/8	6 5/8	9 7/8	21 5/8	2					6.25
2S	36		1 5/8	5/8	3/4		4	8 3/4	10	4 3/4	9 1/2	30	2	14	5	4 5/8	7 3/8	7/8	8	12	24 1/2	2 1/2					9.0
2M	36		1 5/8	5/8	3/4		4	8 3/4	10	4 3/4	9 1/2	30	2	14	5	4 5/8	7 3/8	7/8	8	12	24 1/2	2 1/2					9.0
3																											
4	48		2 1/4	3/4	1		5 3/8	11 5/8	13 3/8	6 3/8	12 5/8	40	2 5/8	18 5/8	6 5/8	6 1/4	9 7/8	1 1/4	10 5/8	16	32 5/8	3 3/8					16.0
5	48		2 1/4	3/4	1		5 3/8	11 5/8	13 3/8	6 3/8	12 5/8	40	2 5/8	18 5/8	6 5/8	6 1/4	9 7/8	1 1/4	10 5/8	16	32 5/8	3 3/8					16.0

STANDARD SIGN
W6-1 & W6-2

WISCONSIN DEPT OF TRANSPORTATION

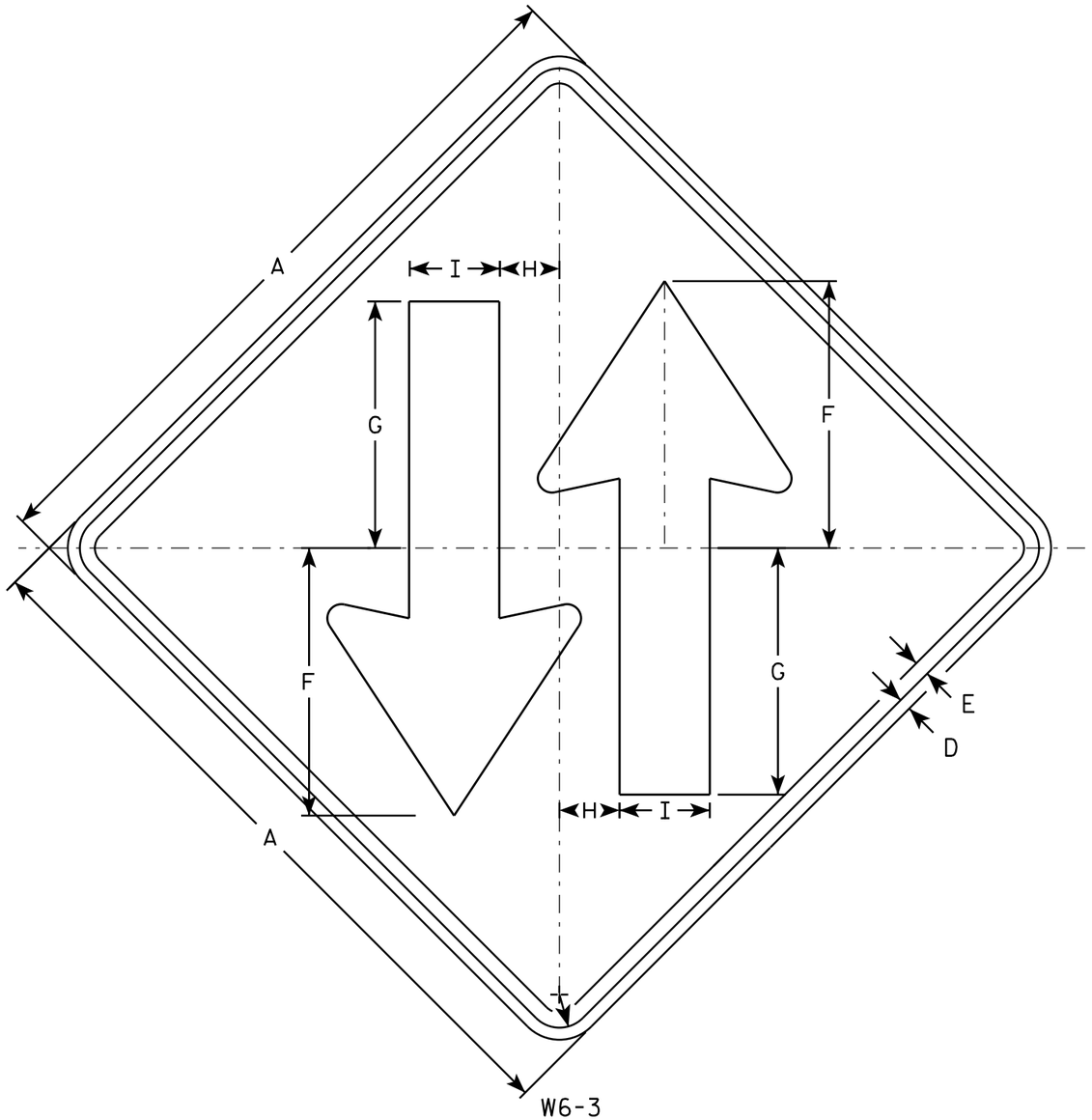
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 03/12/13 PLATE NO. W6-1.14

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 527	E

7

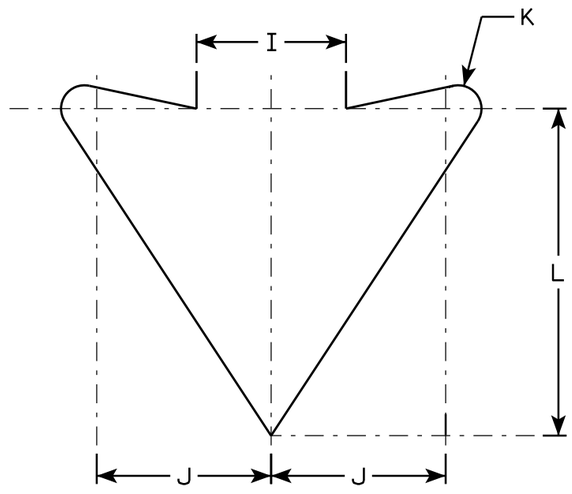
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W61.DGN PLOT DATE : 12-MAR-2013 14:02 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 6.946657:1.000000
WISDOT/CADDS SHEET 42



W6-3

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - 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	30		1 3/8	1/2	5/8	11 1/8	10 1/4	2 1/2	3 3/4	4 3/8	5/8	8 1/4															6.25
2S	36		1 5/8	5/8	3/4	13 3/8	12 1/4	3	4 1/2	5 1/4	3/4	9 7/8															9.0
2M	36		1 5/8	5/8	3/4	13 3/8	12 1/4	3	4 1/2	5 1/4	3/4	9 7/8															9.0
3																											
4	48		2 1/4	3/4	1	17 3/4	16 3/8	4	6	7	1	13 1/8															16.0
5	48		2 1/4	3/4	1	17 3/4	16 3/8	4	6	7	1	13 1/8															16.0

STANDARD SIGN
W6-3

WISCONSIN DEPT OF TRANSPORTATION

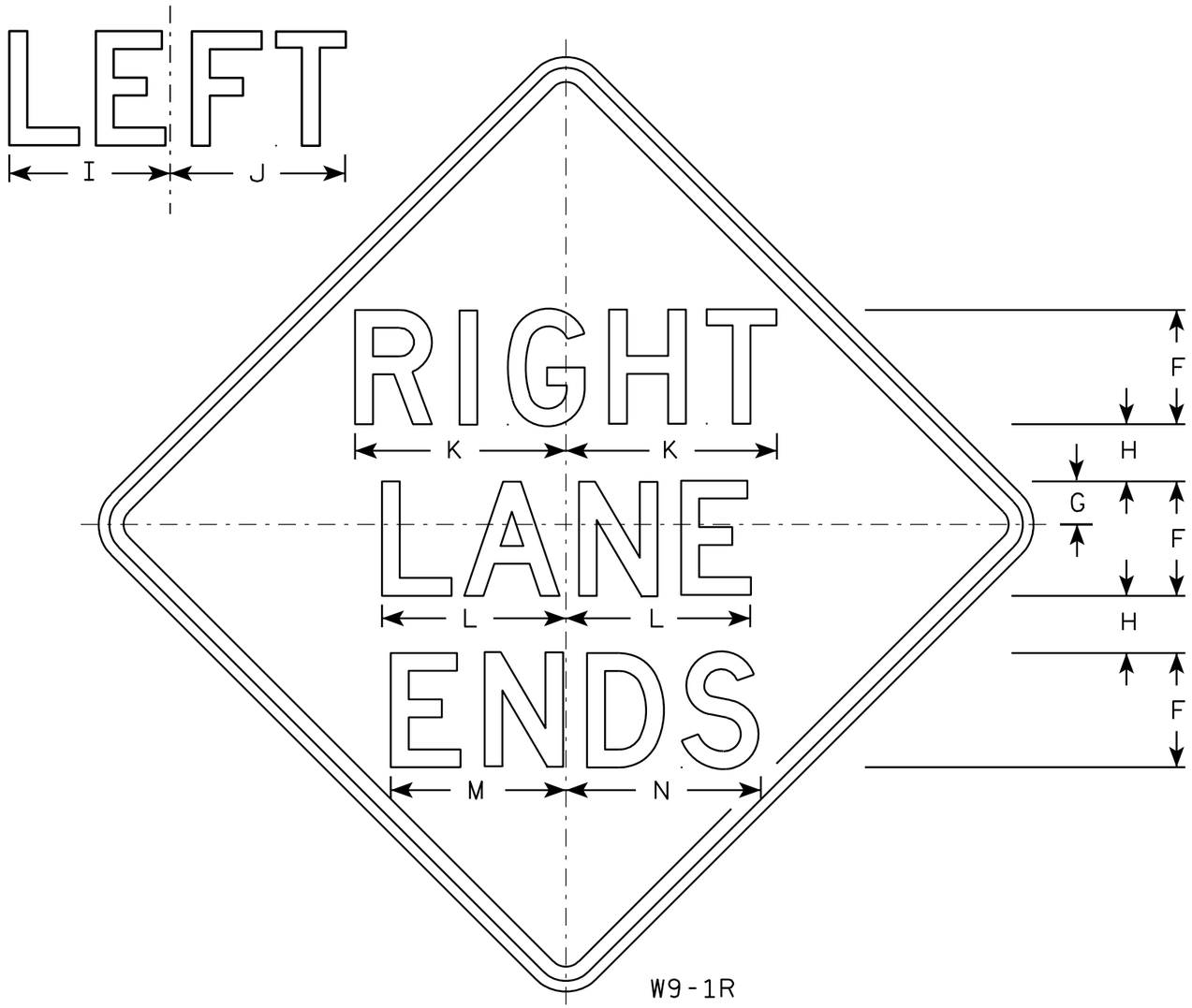
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/10/16 PLATE W6-3.11

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

7

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W63.DGN PLOT DATE : 10-MAR-2016 14:01 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 6.080757:1.000000 WISDOT/CADDS SHEET 42



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

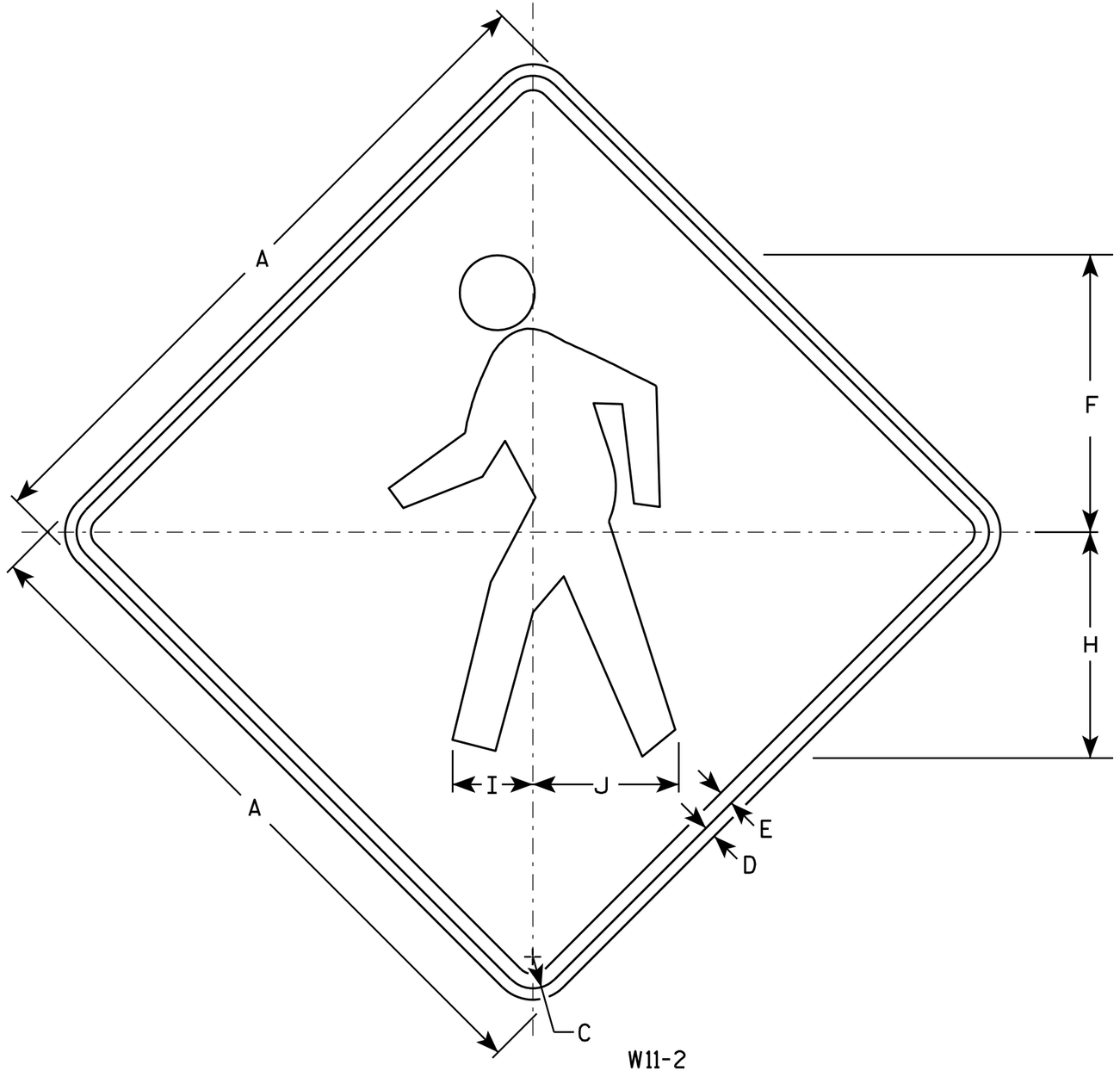
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 03/18/13 PLATE NO. W9-1.8

PROJECT NO:

SHEET NO: 529 E



W11-2

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	9 3/4		7 7/8	2 7/8	5 1/8																	4.0
2S	30		1 3/8	1/2	5/8	12 1/8		9 7/8	3 1/2	6 3/8																	6.25
2M	36		1 5/8	5/8	3/4	14 1/2		11 7/8	4 1/4	7 5/8																	9.0
3	36		1 5/8	5/8	3/4	14 1/2		11 7/8	4 1/4	7 5/8																	9.0
4	48		2 1/4	3/4	1	19 3/8		15 3/4	5 5/8	10 1/4																	16.0
5																											

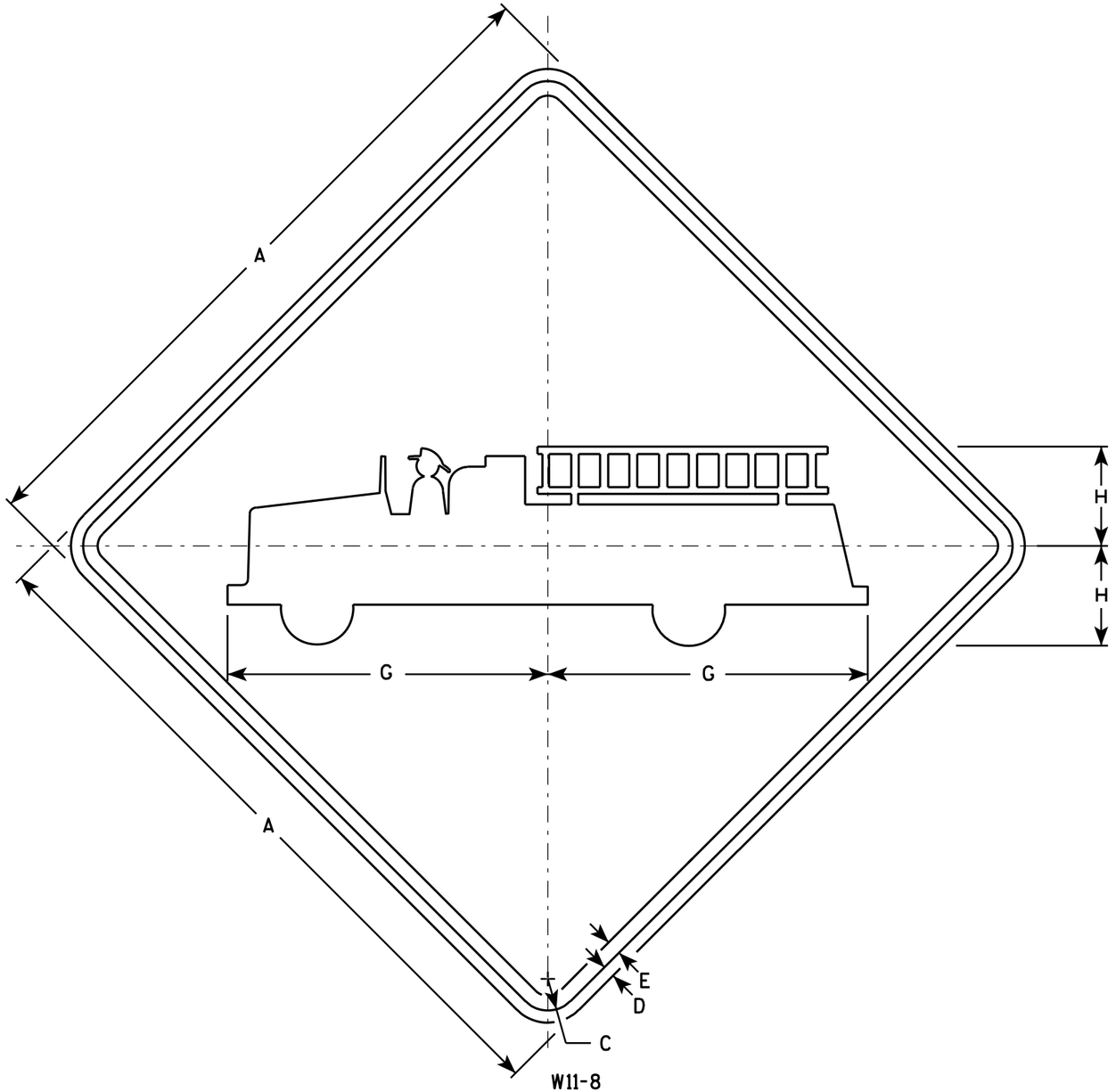
STANDARD SIGN
W11-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/7/10 PLATE NO. W11-2.7

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 530	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		11	3 3/8																			4.0
2S	30		1 3/8	1/2	5/8		13 3/4	4 3/8																			6.25
2M	30		1 3/8	1/2	5/8		13 3/4	4 3/8																			6.25
3	36		1 5/8	5/8	3/4		16 1/2	5 1/4																			9.0
4	48		2 1/4	3/4	1		22	7																			16.0
5																											

STANDARD SIGN
W11-8

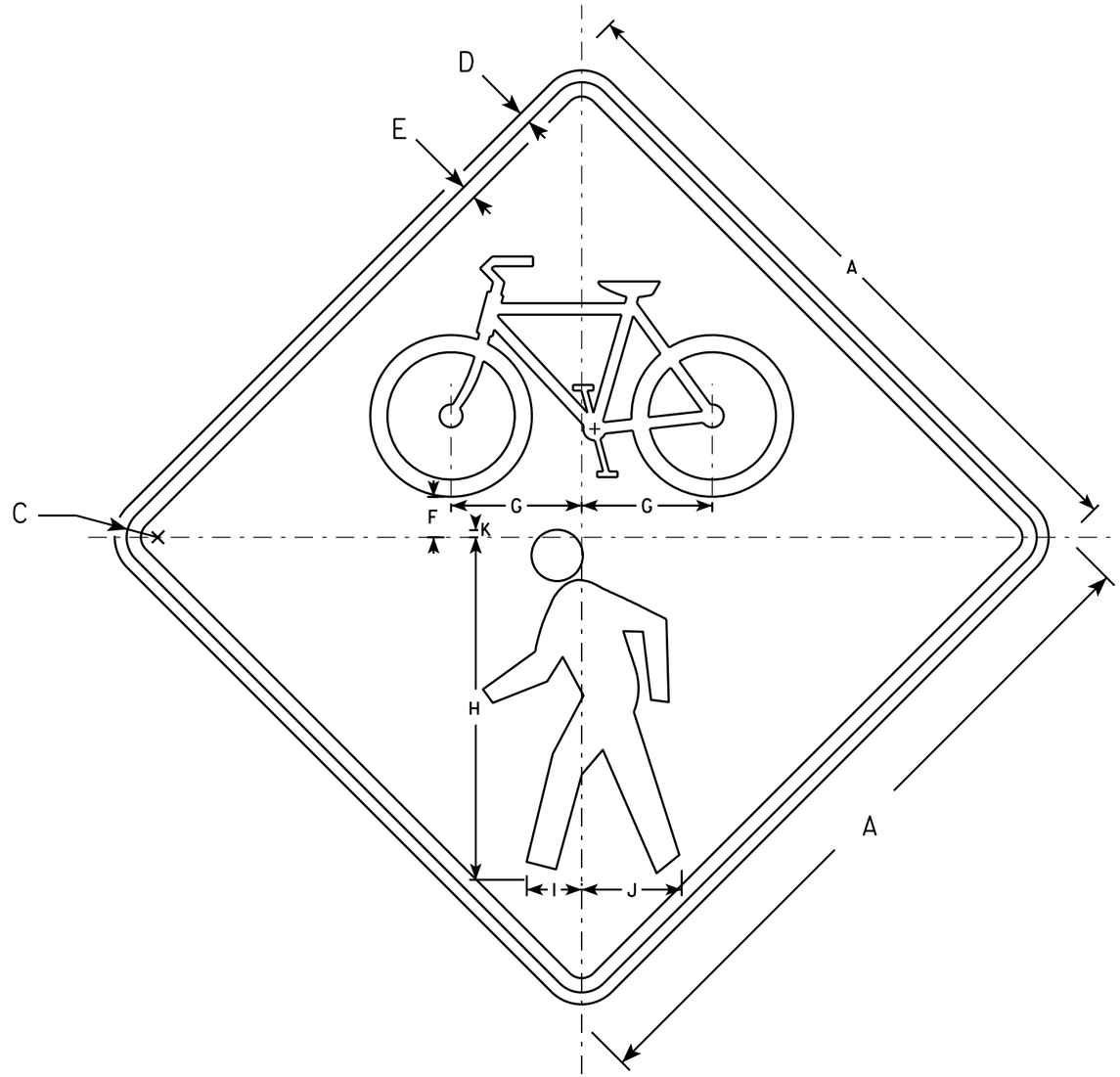
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/13/13 PLATE NO. W11-8.7

PROJECT NO:

SHEET NO: 531 E



W11-15

NOTES

1. Sign is Type II - Type F Reflective
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	1 3/8	4 5/8	12	1 7/8	3 1/2	1/4																4.0
2S	30		1 3/8	1/2	5/8	1 3/4	5 3/4	15	2 3/8	4 3/8	3/8																6.25
2M	36		1 5/8	5/8	3/4	2 1/8	6 7/8	18	2 7/8	5 1/4	3/8																9.0
3	36		1 5/8	5/8	3/4	2 1/8	6 7/8	18	2 7/8	5 1/4	3/8																16.0
4	48		2 1/4	3/4	1	2 7/8	9 1/8	24	3 7/8	7	1/2																16.0
5																											

STANDARD SIGN
W11-15

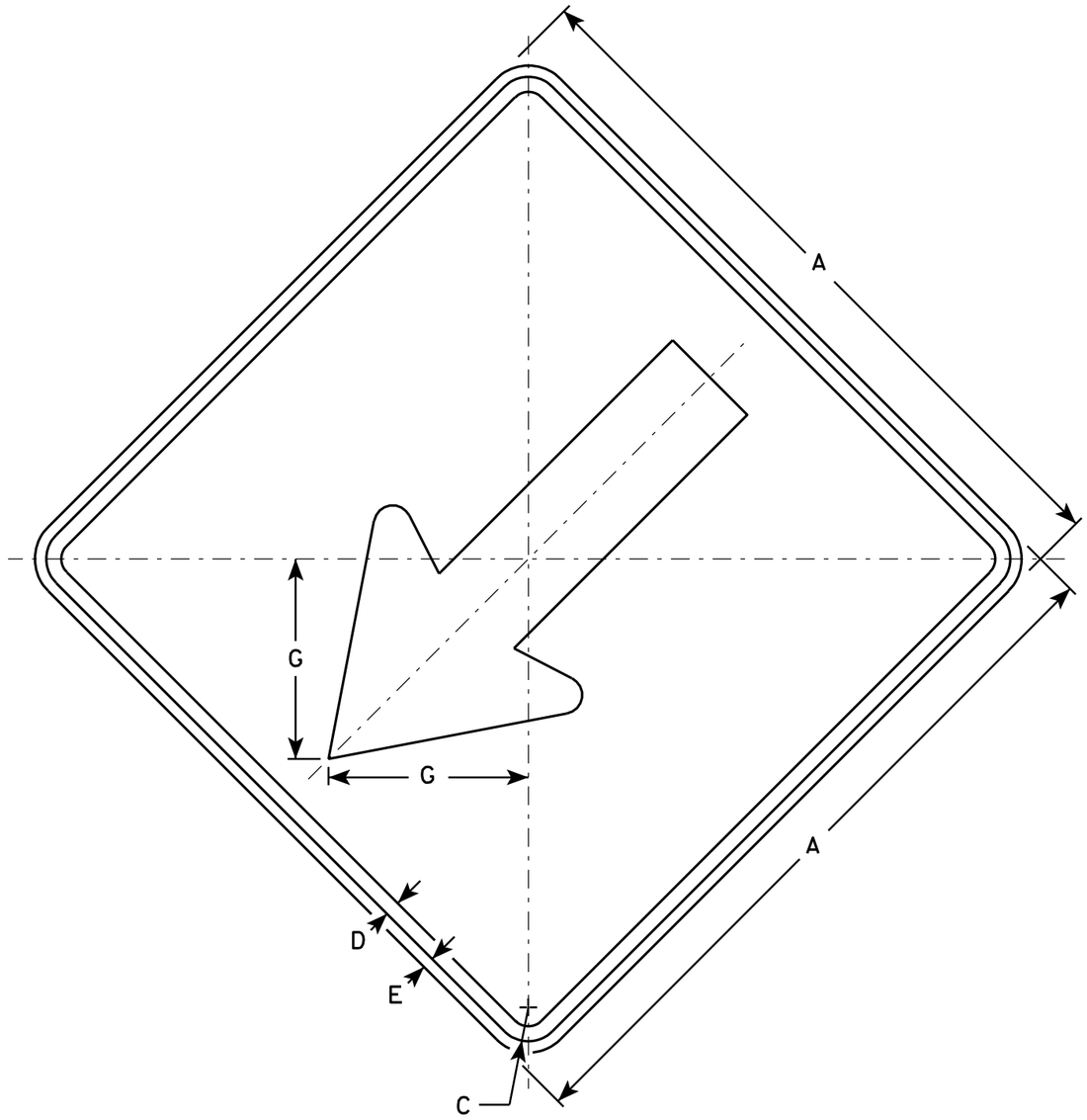
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 2/13/14 PLATE NO. W11-15.4

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

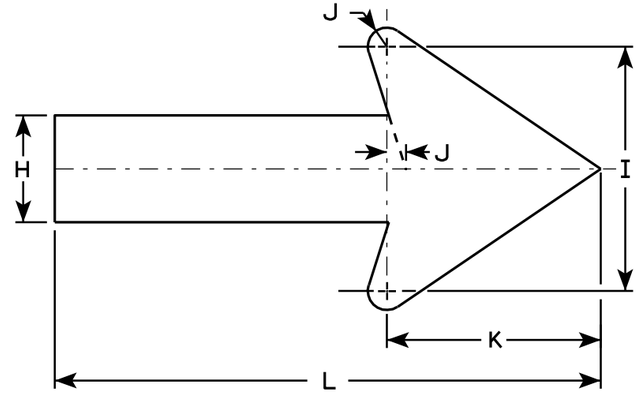
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W1115.DGN PLOT DATE : 13-FEB-2014 10:54 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 7.783368:1.000000
WISDOT/CADDS SHEET 42



W12-1

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		6 5/8	3 1/2	8	5/8	7	18															4
2M	24		1 1/8	1/2	3/8		6 5/8	3 1/2	8	5/8	7	18															4
3	30		1 3/8	5/8	1/2		8 1/4	4 3/8	10	3/4	8 3/4	22 3/8															6.25
4	36		1 3/4	3/4	5/8		10 3/8	5 1/2	12 1/2	1	11	27 7/8															9.0
5	48		2 1/4	3/4	1		12 1/2	6 5/8	15	1 1/4	13 1/4	33 1/2															16

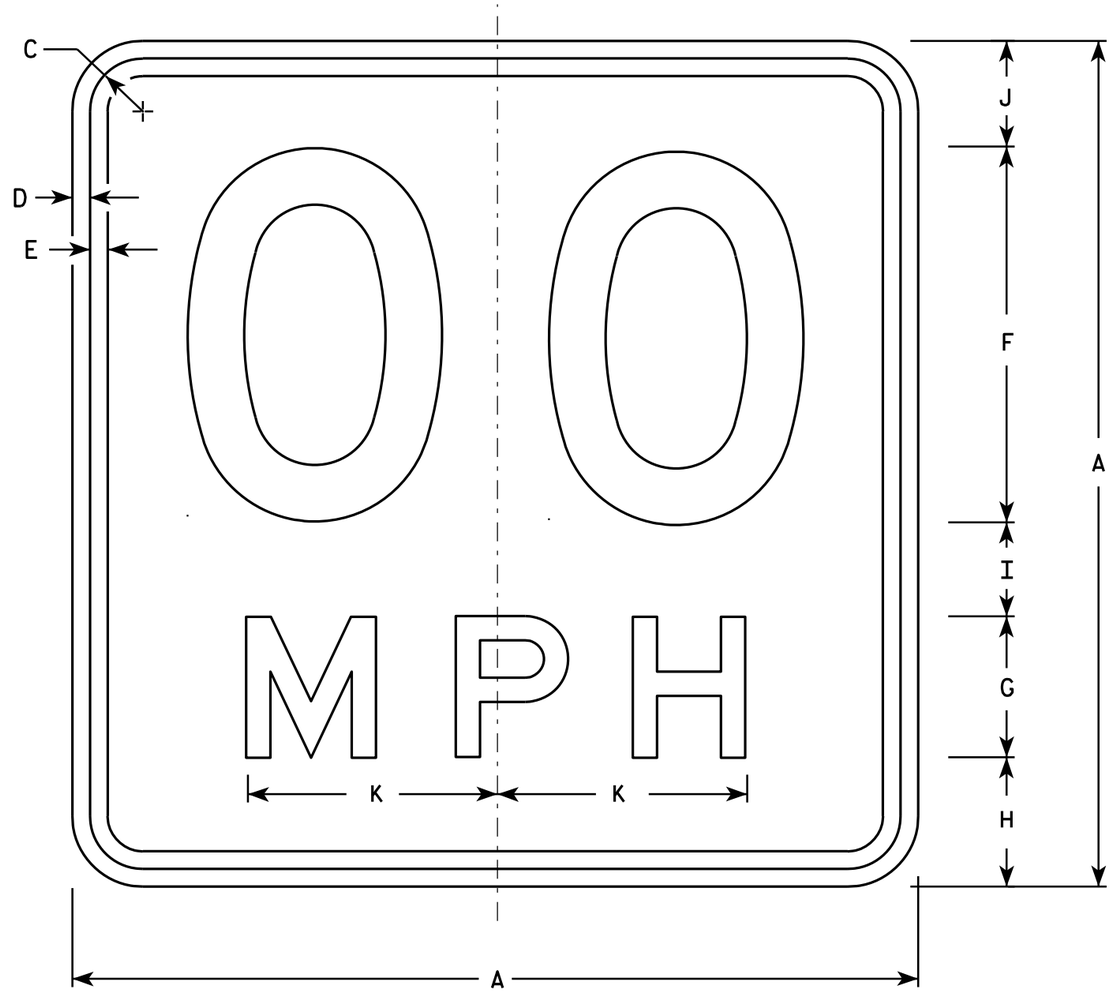
STANDARD SIGN
W12-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/13/13 PLATE NO. W12-1.12

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 533 | E



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

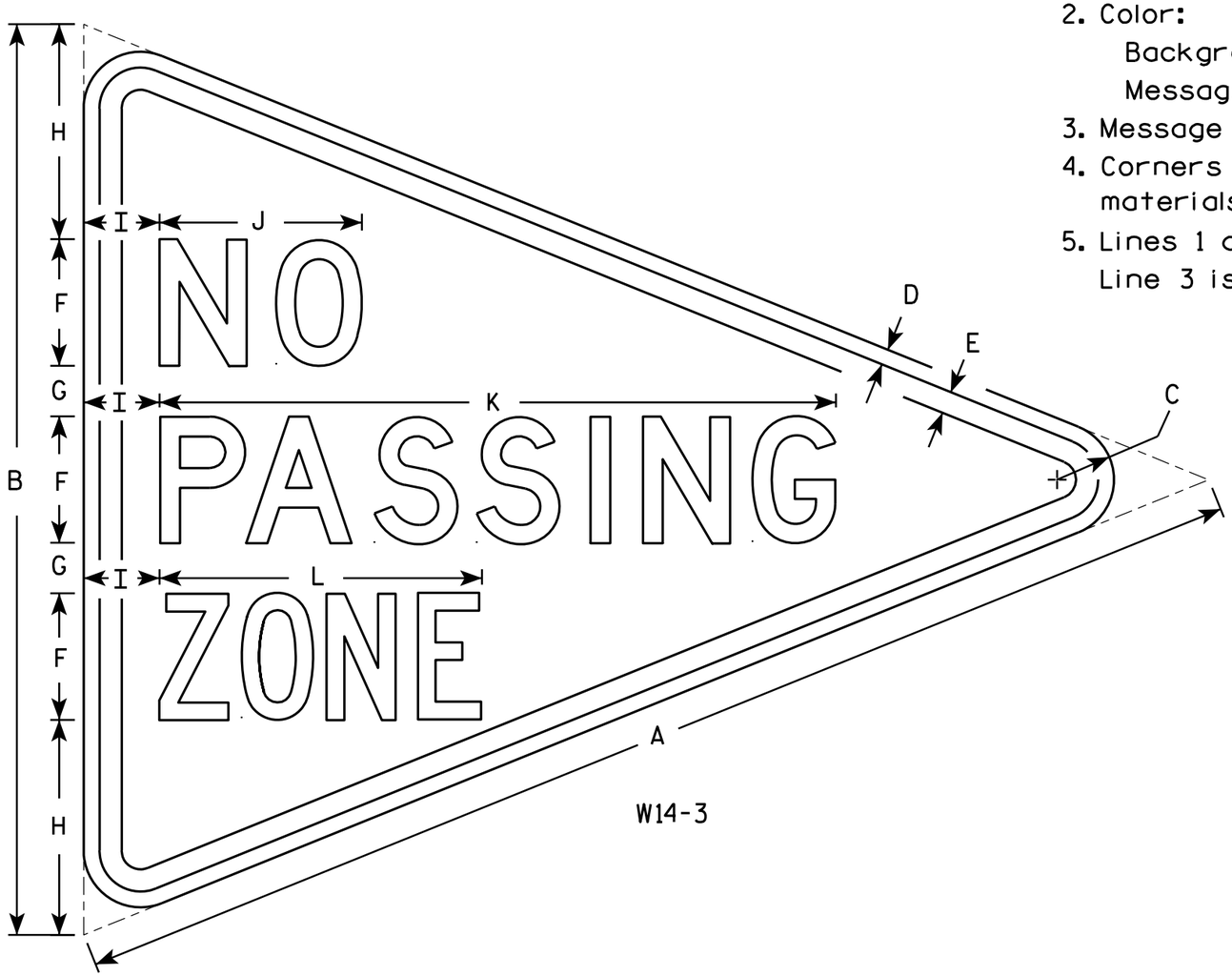
APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 5/31/12 PLATE NO. W13-1.16

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 534 | 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. Message Series - See note 5
4. Corners and borders shall be rounded on all base materials for this sign.
5. Lines 1 and 2 are Series D.
   Line 3 is series C.



W14-3

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	48	36	2 1/4	5/8	7/8	5	2	8 1/2	3	8	26 3/4	12 3/4															6.0
2M	48	36	2 1/4	5/8	7/8	5	2	8 1/2	3	8	26 3/4	12 3/4															6.0
3	64	48	3	3/4	1 1/4	6	3	12	4	10 3/4	33 5/8	16 1/2															10.7
4																											
5																											

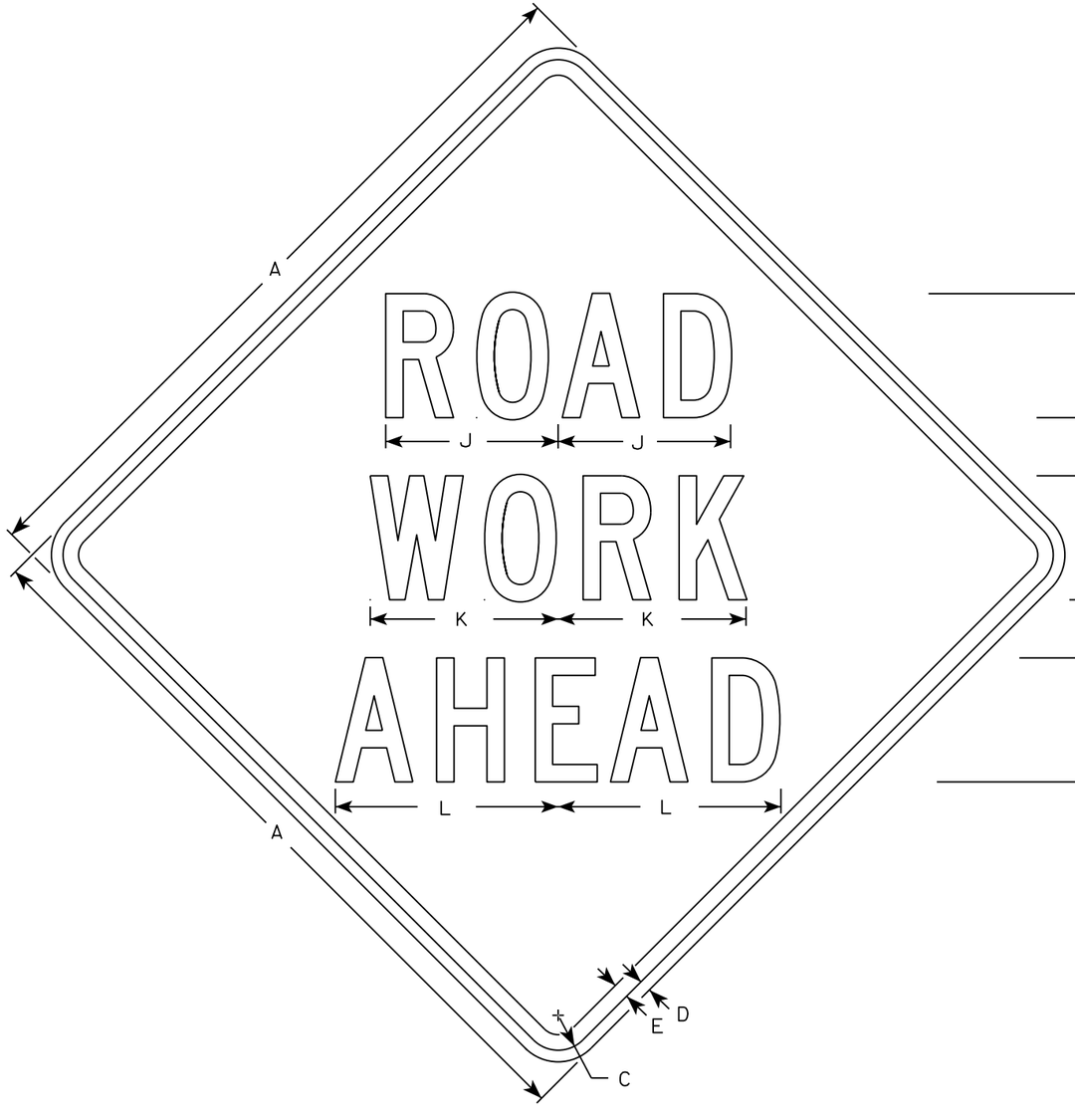
STANDARD SIGN
W14-3

WISCONSIN DEPT OF TRANSPORTATION

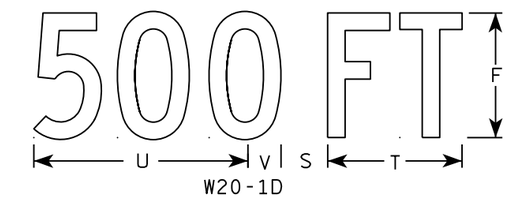
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/7/10 PLATE NO. W14-3.9

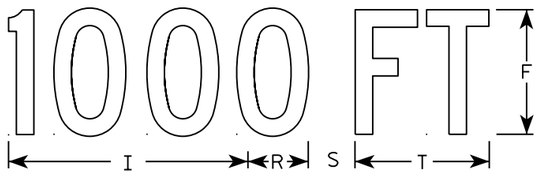
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 535	E



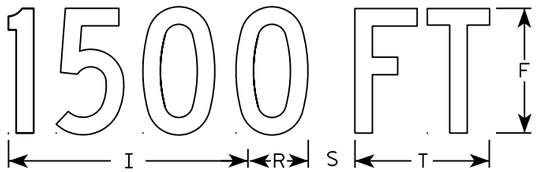
W20-1A



W20-1D



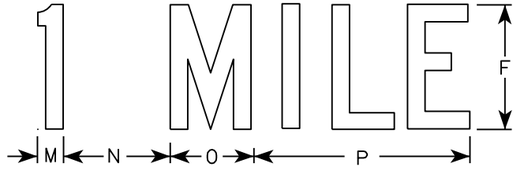
W20-1C



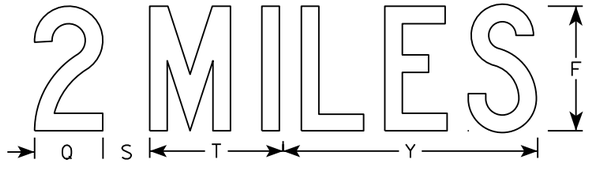
W20-1B



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

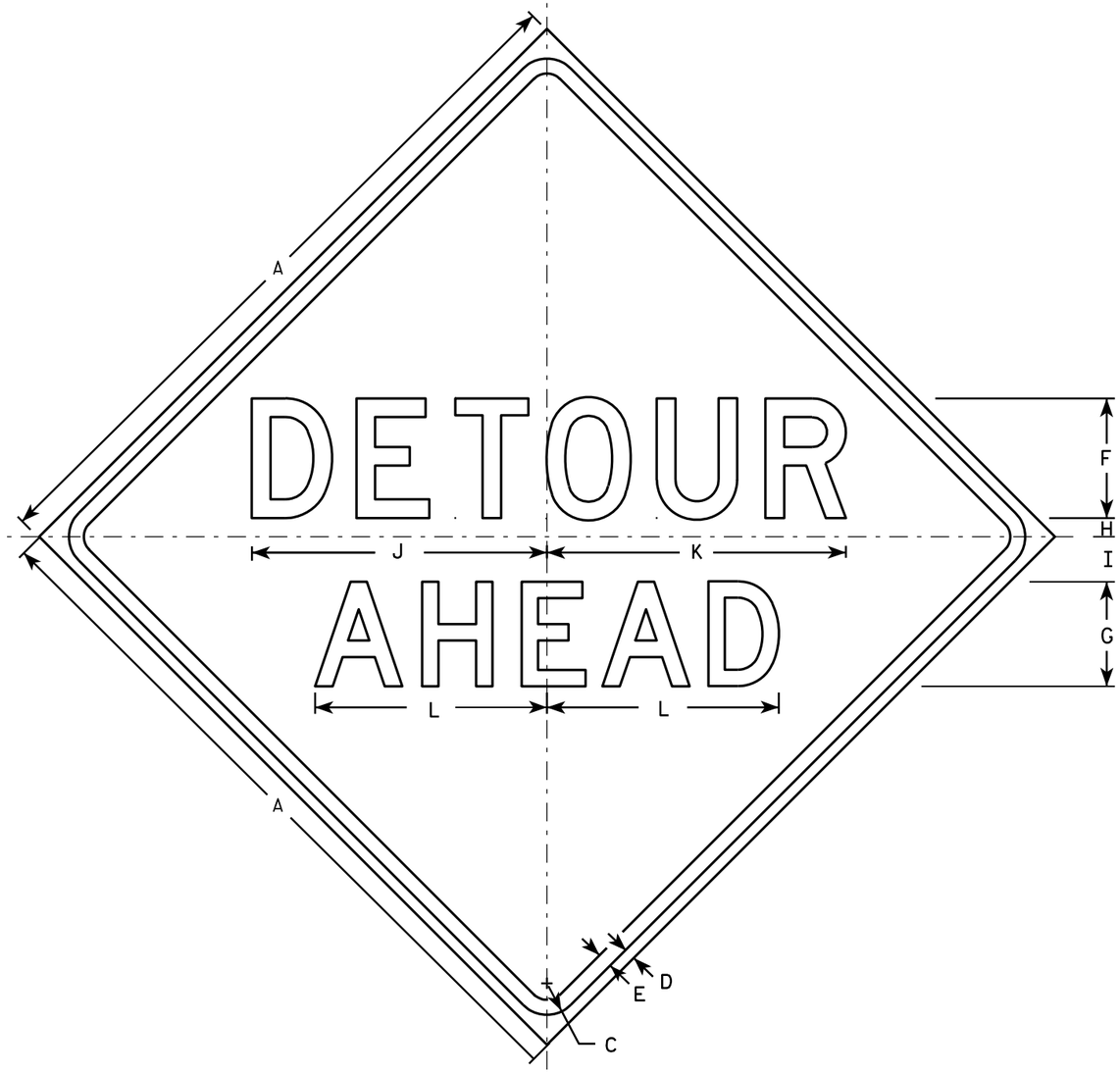
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/07/15 PLATE NO. W20-1.10

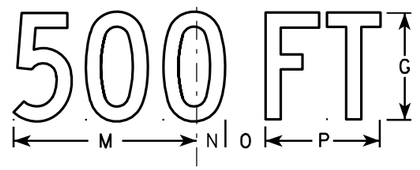
PROJECT NO:

SHEET NO: E

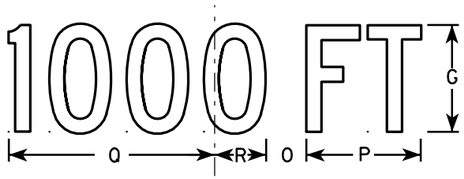
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W201.DGN PLOT DATE : 01-DEC-2015 18:24 PLOT BY : $$ plotuser $$



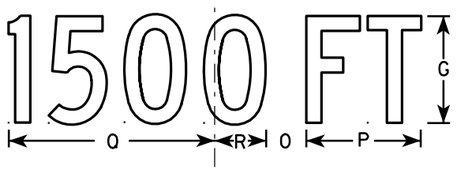
W20-2A



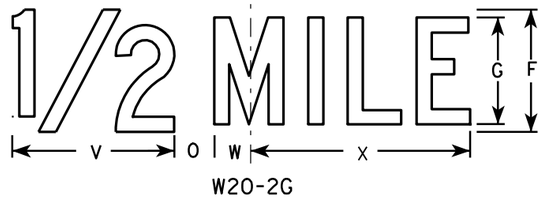
W20-2D



W20-2C



W20-2B



W20-2G



W20-2F

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - See note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Line 1 is Series D.
   Line 2 is Series D for AHEAD and Series C for all other distances.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	O	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	6	5	1	2 1/4	14 3/4	15	11 5/8	9	1 3/8	1 7/8	5 5/8	10 1/8	2 1/2	1 1/8	4 1/2	3 1/2	8	1 3/4	10 3/4			9.0
2S	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
2M	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
3	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
4	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
5	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0

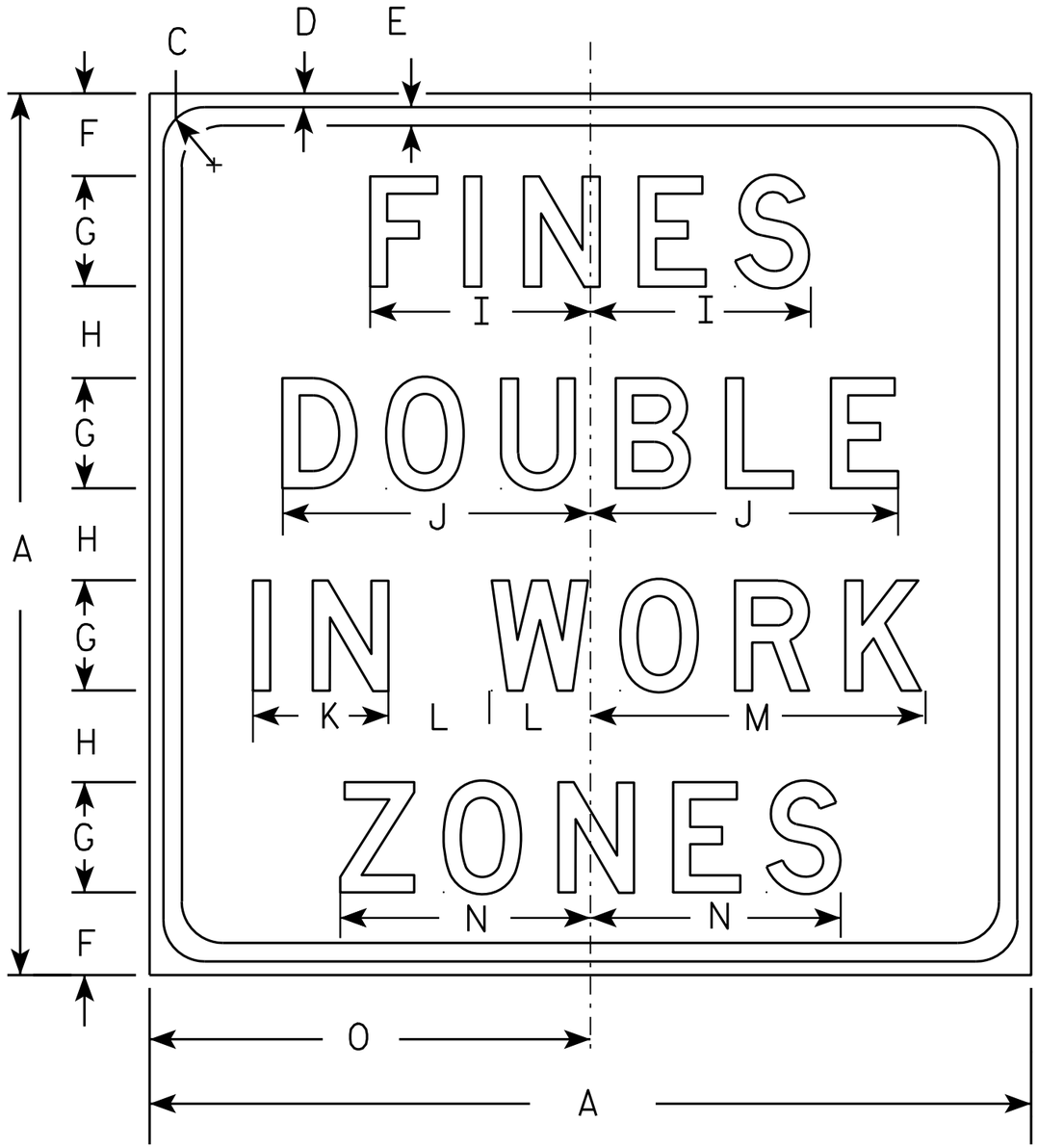
STANDARD SIGN
W20-2A,B,C,D,F & G

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/18/11 PLATE NO. W20-2.6

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 537 | E



W21-61

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	24		1 1/8	3/8	1/2	2 1/4	3	2 1/2	6	8 3/8	3 3/4	2 3/4	9 1/8	6 7/8	12												4.0
2S	36		1 5/8	5/8	3/4	3 3/8	4 1/2	3 3/4	9	12 5/8	5 1/2	4 1/8	13 3/4	10 1/4	18												9.0
2M	36		1 5/8	5/8	3/4	3 3/8	4 1/2	3 3/4	9	12 5/8	5 1/2	4 1/8	13 3/4	10 1/4	18												9.0
3	48		2 1/4	3/4	1	4 1/2	6	5	12	16 3/4	7 3/8	5 1/2	18 1/4	13 5/8	24												16.0
4																											
5																											

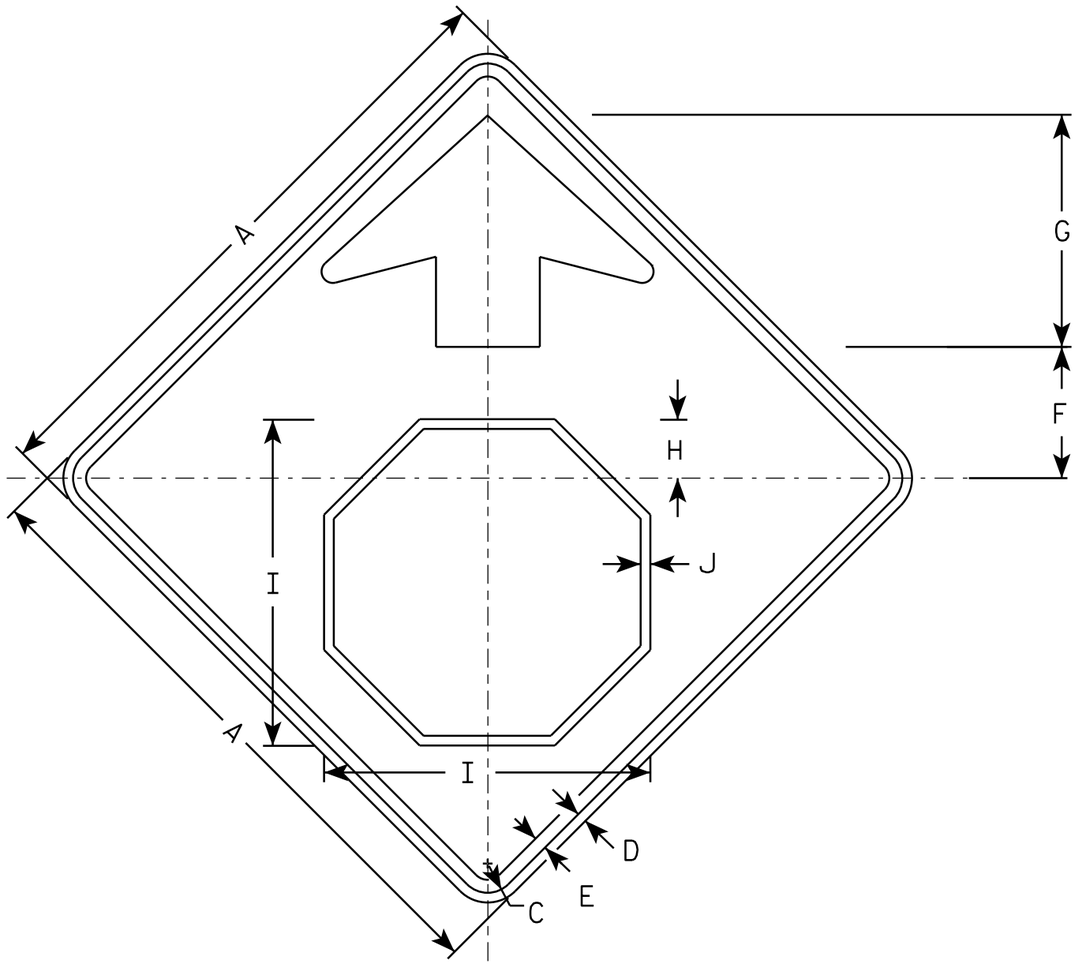
STANDARD SIGN
W21-61

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 3/21/11 PLATE NO. W21-61.4

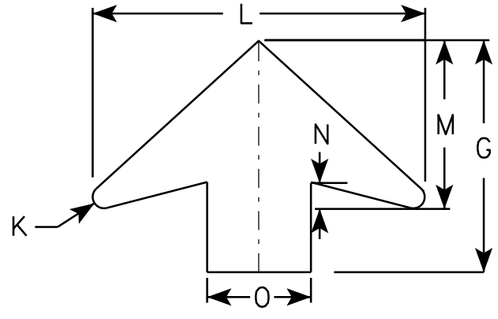
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 538	E



W03-1

NOTES

1. All Signs Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - ORANGE
   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	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
2S	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
2M	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
3	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
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
W03-1

WISCONSIN DEPT OF TRANSPORTATION

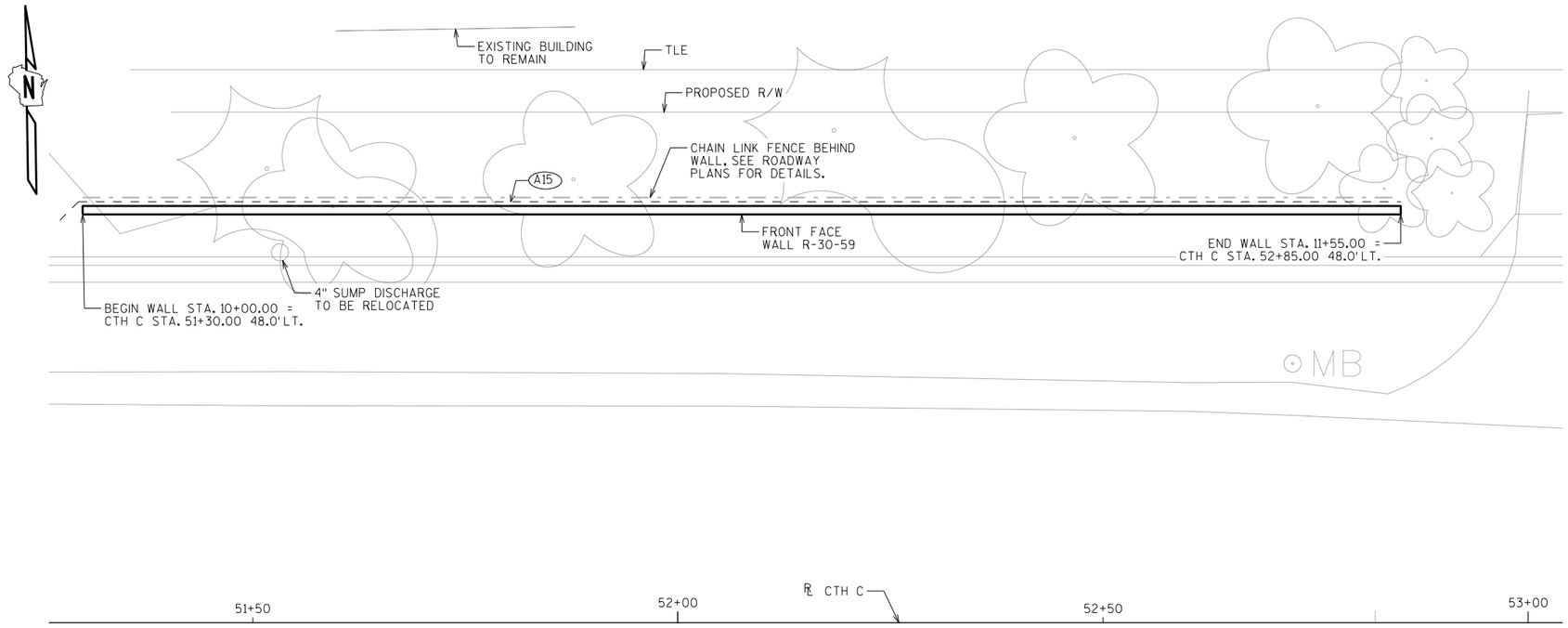
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/20/13 PLATE 539 03-1.1

PROJECT NO: | SHEET NO: E

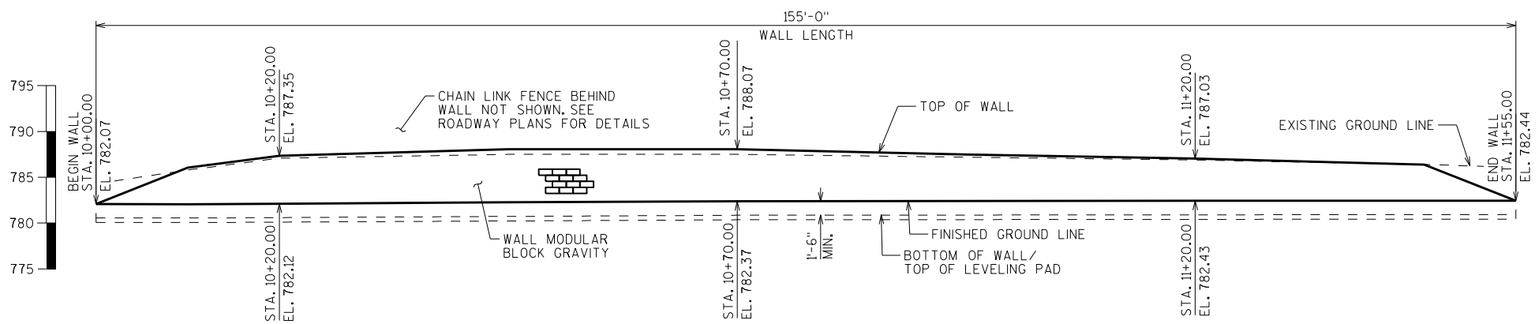
7 7

STATE PROJECT NUMBER
3200-02-73



PLAN

MODULAR BLOCK GRAVITY RETAINING WALL



ELEVATION

LOOKING AT F.F. WALL

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED

THE CONTRACTOR SHALL PROVIDE COMPLETE DESIGN, PLANS, DETAILS, SPECIFICATIONS, AND SHOP DRAWINGS FOR THE RETAINING WALLS IN ACCORDANCE WITH THE SPECIAL PROVISIONS. THE RETAINING WALL MANUFACTURER SHALL PROVIDE TECHNICAL ASSISTANCE TO THE CONTRACTOR DURING CONSTRUCTION. THE COST OF FURNISHING THESE ITEMS SHALL BE INCLUDED IN THE BID ITEM "WALL MODULAR BLOCK GRAVITY LRFD".

PLANS, ELEVATIONS AND DETAILS SHOWN ON THESE DRAWINGS ARE INTENDED TO INDICATE WALL LOCATIONS, LENGTHS, HEIGHTS, AND DETAILS COMMON TO THE WALL SYSTEM SELECTED. THE CONTRACTOR SHALL VERIFY THAT THE WALL SYSTEM SELECTED WILL CONFORM TO THE REQUIRED ALIGNMENTS AND DETAILS.

THE RETAINING WALL IS TO BE DESIGNED USING THE ELEVATIONS GIVEN ON THIS PLAN.

DESIGN RETAINING WALL TO PROVIDE FOR FINISHED GRADE SLOPED BEHIND WALL AS SHOWN.

DESIGN RETAINING WALL FOR A LIVE LOAD SURCHARGE OF 100 PSF

ALL WALL STATIONING AND OFFSETS ARE GIVEN AT THE FRONT FACE OF WALL R-30-59.

THE PLAN QUANTITY FOR THE BID ITEM "WALL MODULAR BLOCK GRAVITY LRFD" IS BASED ON A WALL HEIGHT MEASURED FROM THE TOP OF THE WALL TO A CONSTANT DEPTH OF 1'-6" BELOW FINISHED GRADE.

THE BACKFILL BEHIND THE WALL SHALL BE COARSE AGGREGATE NO. 1.

THE REGION SOILS ENGINEER SHALL REVIEW THE FILL SUBSURFACE CONDITIONS PRIOR TO CONSTRUCTION OF THE WALL, WITHIN 3 DAYS OF NOTIFICATION.

OVER-EXCAVATION BEYOND THE FIRST 12 INCHES IS PAID FOR UNDER THE BID ITEM "WALL MODULAR BLOCK GRAVITY LRFD".

THE MAXIMUM VALUE OF THE ANGLE OF INTERNAL FRICTION OF THE WALL BACKFILL MATERIAL IN THE REINFORCED ZONE SHALL BE ASSUMED TO BE 30° WITHOUT CERTIFIED TEST VALUES.

ALLOWABLE WALL SYSTEMS

WALL MODULAR BLOCK GRAVITY LRFD

TOTAL ESTIMATED QUANTITIES

BID ITEM NUMBER	BID ITEMS	UNIT	TOTALS
612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	175
SPV.0165	WALL MODULAR BLOCK GRAVITY LRFD	SF	963

LIST OF DRAWINGS

1. GENERAL PLAN
2. WALL DETAILS & ELEVATIONS
3. SUBSURFACE EXPLORATION

A15 PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. RODENT SHIELD REQUIRED.

STRUCTURE DESIGN CONTACTS:

DANIELLE DE TENNIS (608) 266-8689

LAURA SHADEWALD (608) 267-9592

NO.	DATE	REVISION	BY

Plans Prepared By **WISDOT**

BUREAU OF STRUCTURES

ACCEPTED William C. Dreher LLS 5/10/16

CHIEF STRUCTURES DESIGN ENGINEER — DATE

STRUCTURE R-30-59

MODULAR BLOCK WALL ALONG CTH C

COUNTY	~~TOWN/CITY~~/VILLAGE
KENOSHA	BRISTOL

DESIGN SPEC. AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS

DESIGNED BY	DFD	DESIGN CK'D.	MWB	DRAWN BY	DFD	PLANS CK'D.	MWB

GENERAL PLAN

SHEET 1 OF 3

540

SCALE = 6

I.D. 3200-02-03A

DATE: FEB. 2016

STATE PROJECT NUMBER

3200-02-73

SOIL PARAMETERS

SOIL DESCRIPTION	FRICTION ANGLE (DEGREES)	COHESION (PSF)	UNIT WEIGHT (PCF)
GRANULAR BACKFILL BEHIND THE WALL IN THE REINFORCING ZONE	30	0	120
FILL, GRANULAR BEHIND THE THE REINFORCING ZONE	31	0	120
BOR-2 - STA. 51+25.00 - 50'LT OF ℄ CTH C			
SILT, BROWN, LITTLE CLAY, TRACE SAND EL. 780.6 TO EL 775.3	32	0	120
CLAY, GRAY, SOME SILT, TRACE GRAVEL EL. 775.3 AND BELOW	0	2,500	120
BOR-1 - STA. 52+05.00 - 55'LT OF ℄ CTH C			
SILT, GRAY/BROWN, TRACE CLAY EL. 780.9 TO EL 777.1	32	0	120
CLAY, BROWN, SOME SILT EL. 777.1 TO EL 773.1	0	4,500	120
SILT, BROWN, SOME SAND AND GRAVEL EL. 773.1 TO EL 772.1	32	0	120
CLAY, GRAY, LITTLE SILT EL. 772.1 TO EL 770.1	0	2,500	120
SILT, GRAY, SOME CLAY EL. 770.1 TO EL 769.1	32	0	120
CLAY, GRAY, LITTLE SILT EL. 769.1 AND BELOW	0	2,500	120

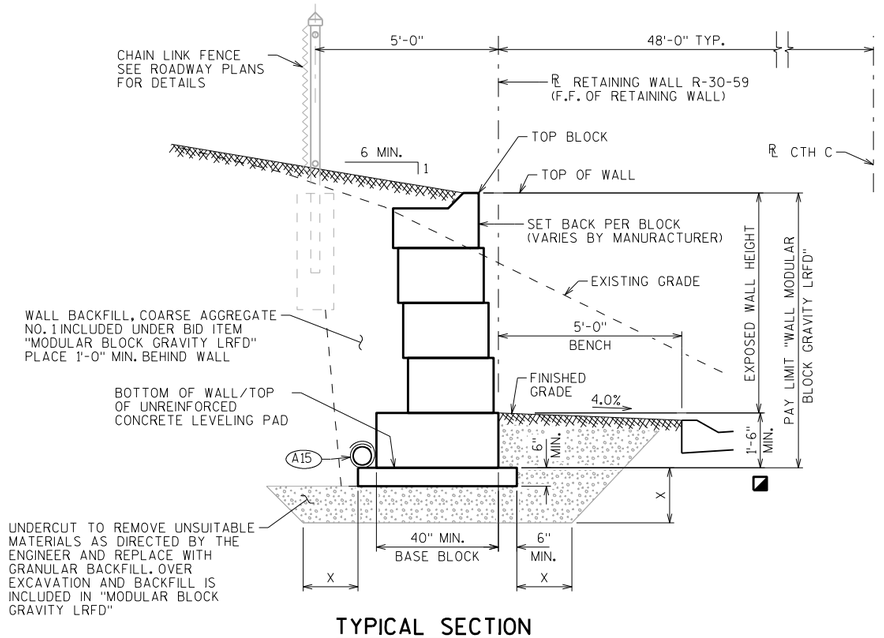
WALL EXTERNAL STABILITY EVALUATION

DIMENSIONS		
WALL HEIGHT (FEET)[1]	5.4	7.3
EXPOSED WALL HEIGHT (FEET)	3.9	5.8
MINIMUM BOTTOM BLOCK WIDTH (IN)	40	40
BORING LOCATION USED	BOR - 2	BOR - 1
APPROXIMATE WALL STATION	1+10	1+45
CAPACITY TO DEMAND RATIO (CDR)[2]		
SLIDING (CDR > 1.0)	1.3	1.2
ECCENTRICITY (CDR > 1.0)	24.2	2.7
OVERALL STABILITY (CDR > 1.0)	NA[3]	1.8
BEARING RESISTANCE (CDR > 1.0)	2.4	2.0
FACTORED BEARING RESISTANCE (PSF)	6,000	5,000

NOTES:
1. THE WALL HEIGHT INCLUDES AN EMBEDMENT OF 1.5 FEET.
2. CDR REQUIREMENTS AND LOAD AND RESISTANCE FACTORS ARE PRESENTED IN CHAPTER 14 OF THE BRIDGE MANUAL.
3. NA NOT APPLICABLE, GLOBAL SLOPE STABILITY WAS EVALUATED AT THE CRITICAL WALL LOCATION.

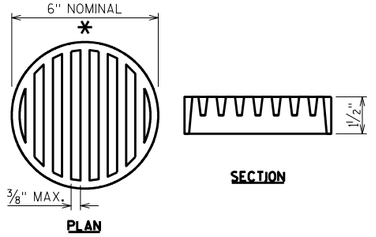
GEOMETRY TABLE

WALL STATION	R/L CTH C STATION	OFFSET TO F.F. WALL	TOP OF WALL EL.	FINISHED GRADE EL.	EXISTING GRADE EL.
10+00.00	51+30.00	48'.0' LT.	782.07	782.07	784.30
10+10.00	51+40.00	48'.0' LT.	786.04	782.06	785.80
10+20.00	51+50.00	48'.0' LT.	787.35	782.12	787.10
10+45.00	51+75.00	48'.0' LT.	788.07	782.26	787.50
10+70.00	52+00.00	48'.0' LT.	788.07	782.37	787.50
10+95.00	52+25.00	48'.0' LT.	787.49	782.40	787.20
11+20.00	52+50.00	48'.0' LT.	787.03	782.43	786.90
11+45.00	52+75.00	48'.0' LT.	786.39	782.44	786.40
11+55.00	52+85.00	48'.0' LT.	782.44	782.44	786.10



TYPICAL SECTION

LOOKING EAST
X = LEVELING PAD THICKNESS + UNDERCUT THICKNESS
(ANTICIPATED UNDERCUT THICKNESS = 12")



PLAN

SECTION

RODENT SHIELD DETAIL

* DIMENSIONS ARE APPROXIMATE. THE GRATE IS SIZED TO FIT INTO A PIPE COUPLING. ORIENT SO SLOTS ARE VERTICAL.

THE RODENT SHIELD, PIPE COUPLING AND SCREWS SHALL BE CONSIDERED INCIDENTAL TO THE BID ITEM "PIPE UNDERDRAIN WRAPPED 6-INCH".

THE RODENT SHIELD SHALL BE A PVC GRATE SIMILAR TO THIS DETAIL. THE GRATE IS COMMERCIALLY AVAILABLE AS A FLOOR STRAINER. A PIPE COUPLING IS REQUIRED FOR THE ATTACHEMENT OF THIS SHIELD TO THE EXPOSED END OF THE PIPE UNDERDRAIN. THE SHIELD SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO. 10 X 1-INCH STAINLESS STEEL SHEET METAL SCREWS.

(A15) PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. RODENT SHIELD REQUIRED.

◪ MINIMUM EMBEDMENT BASED ON SITE SPECIFIC PARAMETERS (1'-6" MINIMUM FOR ALL WALLS ON LEVEL GROUND). FIELD EMBEDMENTS SHALL MEET OR EXCEED THE MINIMUM EMBEDMENT. FIELD EMBEDMENTS BELOW MINIMUM EMBEDMENT SHALL NOT BE INCLUDED IN THE PAY LIMITS

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE R-30-59

DRAWN BY DFD | PLANS CK'D. MWB

WALL DETAILS & ELEVATIONS

SHEET 2

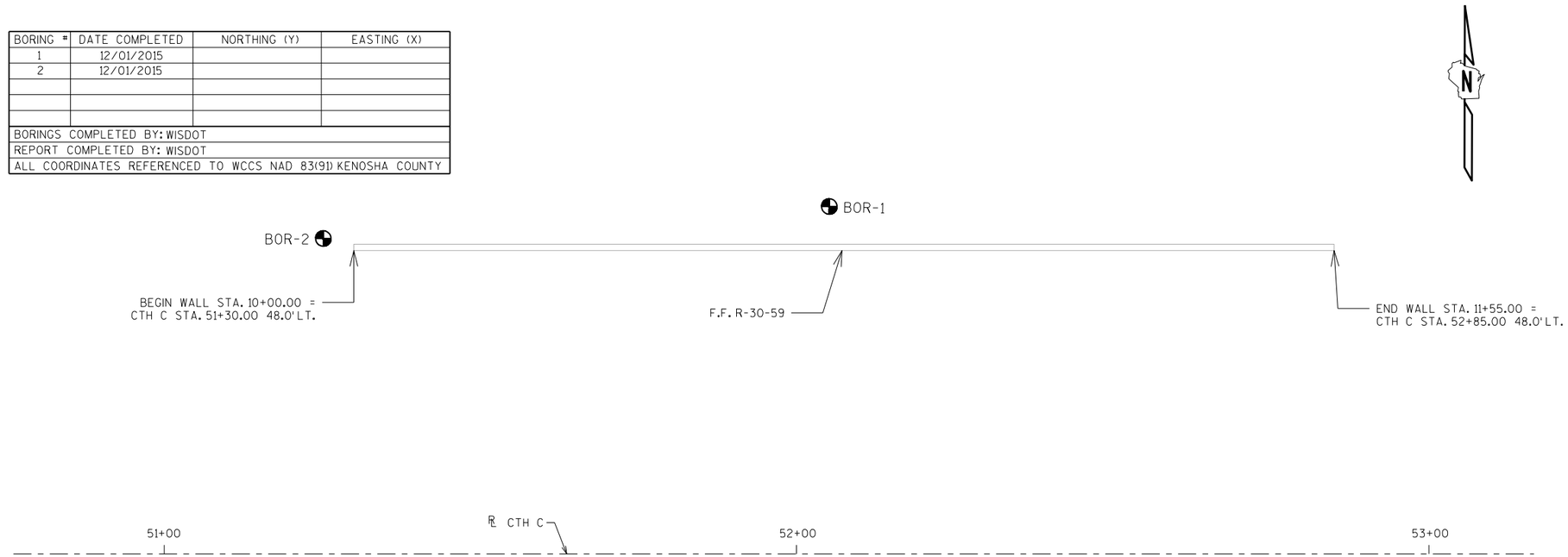
541

SCALE = 2.0

8

8

BORING #	DATE COMPLETED	NORTHING (Y)	EASTING (X)
1	12/01/2015		
2	12/01/2015		
BORINGS COMPLETED BY: WISDOT			
REPORT COMPLETED BY: WISDOT			
ALL COORDINATES REFERENCED TO WCCS NAD 83(91) KENOSHA COUNTY			



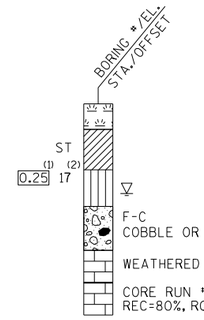
STATE PROJECT NUMBER

3200-02-03

MATERIAL SYMBOLS

ASPHALT	TOPSOIL	PEAT
CONCRETE	FILL	GRAVEL
SAND	CLAY	SILT
BOULDERS OR COBBLES	LIMESTONE	BEDROCK (UNKNOWN)
SHALE	SANDSTONE	IGNEOUS/ META

LEGEND OF BORING



(1) UNCONFINED STRENGTH, AS DETERMINED BY A POCKET PENETROMETER (TSF)

(2) UNLESS OTHERWISE, SPECIFIED THE SPT 'N' VALUE IS BASED ON AASHTO T-206, STANDARD PENETRATION TEST. THE SPT 'N' VALUE PRESENTED HAS NOT BEEN CORRECTED FOR OVERBURDEN PRESSURE OR HAMMER EFFICIENCY.

GROUND WATER ELEVATION

- ▽ AT TIME OF DRILLING
- ▼ END OF DRILLING
- ▽ AFTER DRILLING

ABBREVIATIONS

F-FINE M-MEDIUM C-COARSE ST-SHELBY TUBE

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

BORINGS WERE COMPLETED AT POINTS APPROXIMATELY AS INDICATED ON THIS DRAWING TO OBTAIN INFORMATION CONCERNING THE CHARACTER OF SUBSURFACE MATERIALS FOUND AT THE SITE. BECAUSE THE INVESTIGATED DEPTHS ARE LIMITED AND THE AREA OF THE BORINGS IS VERY SMALL IN RELATION TO THE ENTIRE SITE, THE WISCONSIN DEPARTMENT OF TRANSPORTATION DOES NOT WARRANT SIMILAR SUBSURFACE CONDITIONS BELOW, BETWEEN, OR BEYOND THESE BORINGS. VARIATIONS IN SOIL CONDITIONS SHOULD BE EXPECTED AND FLUCTUATIONS IN GROUNDWATER LEVELS MAY OCCUR.

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE R-30-59

DRAWN BY TLP/DFD | PLANS CK'D. MWB

SUBSURFACE EXPLORATION

SHEET 3

542

SCALE =

USH 45 - DIVISION 1

STATION	Real Station	Distance	AREA (SF) Cut	AREA (SF) Fill	AREA (SF) Marsh Exc	Incremental Vol (CY) (Unadjusted) Cut Note 1	Incremental Vol (CY) (Unadjusted) Fill Note 3	Incremental Vol (CY) (Unadjusted) Marsh Exc Note 4	Cumulative Vol (CY) Cut 1.00 Note 1	Cumulative Vol (CY) Expanded Fill 1.20 Note 3	Cumulative Vol (CY) Expanded Marsh Backfill 1.40 Note 6	Mass Ordinate Note 8
19+83	1983	0	33	0	0	0	0	0	0	0	0	0
20+00	2000	17	50	2	0	26	1	0	26	1	0	25
21+00	2100	100	204	0	0	470	4	0	496	6	0	491
21+30	2130	30	102	0	0	170	0	0	667	6	0	661
22+00	2200	70	89	2	0	248	3	0	915	9	0	906
23+00	2300	100	69	2	0	293	7	0	1208	17	0	1191
24+00	2400	100	47	67	0	215	126	0	1423	168	0	1254
25+00	2500	100	42	31	0	166	180	0	1588	385	0	1203
26+00	2600	100	22	4	0	120	65	0	1708	462	0	1245
27+00	2700	100	4	3	0	49	13	0	1757	478	0	1279
28+00	2800	100	5	0	0	18	5	0	1775	484	0	1290
29+00	2900	100	2	0	0	13	1	0	1788	485	0	1302
30+00	3000	100	19	24	0	38	45	0	1826	539	0	1287
31+00	3100	100	8	17	0	49	76	0	1875	630	0	1245
32+00	3200	100	11	6	0	34	43	0	1909	682	0	1227
33+00	3300	100	27	4	0	69	19	0	1978	705	0	1274
34+00	3400	100	34	4	0	112	15	0	2090	723	0	1367
35+00	3500	100	47	3	0	149	13	0	2240	738	0	1501
36+00	3600	100	56	0	0	190	6	0	2430	745	0	1685
37+00	3700	100	26	0	0	152	1	0	2582	746	0	1837
38+00	3800	100	23	1	0	92	2	0	2675	748	0	1927
39+00	3900	100	31	0	0	101	2	0	2776	749	0	2027
40+00	4000	100	38	0	0	129	0	0	2905	750	0	2155
41+00	4100	100	11	0	0	91	1	0	2996	751	0	2246
42+00	4200	100	10	0	0	38	1	0	3034	752	0	2282
43+00	4300	100	23	1	0	60	3	0	3094	755	0	2339
44+00	4400	100	23	4	14	84	10	27	3178	767	37	2411
45+00	4500	100	24	3	20	85	13	63	3263	782	126	2481
46+00	4600	100	25	20	39	90	41	110	3354	832	280	2522
47+00	4700	100	44	19	94	128	72	246	3481	918	624	2564
48+00	4800	100	50	22	51	173	75	267	3654	1008	998	2646
49+00	4900	100	71	0	0	224	41	94	3878	1057	1130	2821
50+00	5000	100	112	2	0	339	3	0	4217	1061	1130	3156
51+00	5100	100	68	3	0	333	9	0	4550	1072	1130	3479
52+00	5200	100	91	2	0	294	10	0	4844	1083	1130	3761
53+00	5300	100	60	2	0	280	7	0	5124	1091	1130	4033
54+00	5400	100	46	5	0	197	12	0	5320	1106	1130	4215
55+00	5500	100	26	4	0	132	16	0	5453	1125	1130	4328
56+00	5600	100	6	2	0	59	10	0	5511	1137	1130	4374
57+00	5700	100	4	3	0	19	10	0	5530	1149	1130	4381
58+00	5800	100	11	0	0	27	6	0	5557	1156	1130	4401
59+00	5900	100	20	7	0	58	14	0	5614	1173	1130	4441
60+00	6000	100	20	25	0	76	60	0	5690	1245	1130	4446
61+00	6100	100	43	36	0	117	113	0	5807	1380	1130	4428
61+70	6170	70	33	0	0	98	47	0	5905	1435	1130	4470
62+00	6200	30	97	18	0	72	10	0	5977	1447	1130	4530
63+00	6300	100	65	6	0	300	44	0	6277	1501	1130	4776

Notes:
1) Cut includes Salvaged/Unusable Pavement material
2) This does not show up in cross sections
3) Expanded Fill = Unexpanded Fill & Expanded Fill Factor. Does not include Unusable Pavement Excavation volume
4) Marsh Excavation (Item number 205.0400) - to be backfilled with Backfill Granular - Grade 2
5) EBS Excavation to be backfilled with Breaker Run. See Breaker Run table for quantity
6) Expanded Marsh Backfill - This is to be filled with Backfill Granular - Grade 2 (Item number 209.0100)
7) Expanded EBS Backfill - This is to be filled with Breaker run (Item number 311.0110)
8) Mass Ordinate [Cut - Unusable Pavement Material - (Fill * Fill Factor)]. Plus quantity indicates an excess of material within the Division. Minus indicates a shortage of material within the Division.

SHEET 1 OF 14

9 9

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	EARTHWORK DATA	SHEET:	E

USH 45 - DIVISION 1

STATION	Real Station	Distance	AREA (SF) Cut	AREA (SF) Fill	AREA (SF) Marsh Exc	Incremental Vol (CY) (Unadjusted) Cut Note 1	Incremental Vol (CY) (Unadjusted) Fill Note 3	Incremental Vol (CY) (Unadjusted) Marsh Exc Note 4	Cumulative Vol (CY) Cut 1.00 Note 1	Cumulative Vol (CY) Expanded Fill 1.20 Note 3	Cumulative Vol (CY) Expanded Marsh Backfill 1.40 Note 6	Mass Ordinate Note 8
64+00	6400	100	39	26	0	192	60	0	6469	1573	1130	4896
65+00	6500	100	32	24	0	130	93	0	6599	1684	1130	4916
66+00	6600	100	0	4	0	59	52	0	6658	1746	1130	4912
67+00	6700	100	0	10	0	1	25	0	6659	1776	1130	4883
68+00	6800	100	1	7	0	2	31	0	6661	1814	1130	4847
69+00	6900	100	1	1	0	3	15	0	6665	1832	1130	4833
70+00	7000	100	8	25	0	17	49	0	6682	1891	1130	4791
71+00	7100	100	3	17	0	21	78	0	6703	1984	1130	4719
72+00	7200	100	1	16	0	7	60	0	6710	2056	1130	4654
73+00	7300	100	6	3	0	13	34	0	6723	2097	1130	4626
74+00	7400	100	18	2	0	43	9	0	6766	2107	1130	4659
75+00	7500	100	41	3	0	107	9	0	6874	2118	1130	4756
76+00	7600	100	70	9	0	204	22	0	7078	2145	1130	4933
77+00	7700	100	60	20	0	239	52	0	7317	2208	1130	5110
77+66	7766	66	32	2	0	112	26	0	7429	2238	1130	5190
78+00	7800	34	112	12	0	91	8	0	7520	2248	1130	5272
79+00	7900	100	85	5	0	365	30	0	7885	2285	1130	5600
80+00	8000	100	55	20	0	259	46	0	8144	2340	1130	5805
81+00	8100	100	35	57	0	167	143	0	8311	2511	1130	5800
82+00	8200	100	144	12	0	332	128	0	8643	2665	1130	5978
83+00	8300	100	20	46	0	305	106	0	8948	2793	1130	6155
84+00	8400	100	23	10	0	81	104	0	9029	2917	1130	6112
85+00	8500	100	4	7	0	51	33	0	9080	2956	1130	6124
86+00	8600	100	3	9	0	14	29	0	9094	2992	1130	6102
87+00	8700	100	1	15	0	7	43	0	9101	3043	1130	6057
88+00	8800	100	1	15	0	2	54	0	9103	3108	1130	5995
89+00	8900	100	0	29	0	1	81	0	9104	3205	1130	5899
90+00	9000	100	68	28	0	126	106	0	9230	3332	1130	5898
91+00	9100	100	3	13	0	131	76	0	9361	3424	1130	5938
92+00	9200	100	10	0	0	24	24	0	9385	3453	1130	5932
93+00	9300	100	3	4	0	23	9	0	9408	3463	1130	5945
94+00	9400	100	7	2	0	17	12	0	9426	3478	1130	5948
95+00	9500	100	40	1	0	87	6	0	9513	3485	1130	6028
96+00	9600	100	31	4	0	133	10	0	9645	3496	1130	6149
97+00	9700	100	54	13	120	157	32	221	9802	3534	1440	6268
98+00	9800	100	57	3	0	205	30	221	10007	3570	1749	6437
99+00	9900	100	73	5	0	241	15	0	10249	3588	1749	6661
100+00	10000	100	86	1	0	295	11	0	10544	3601	1749	6942
101+00	10100	100	54	0	0	259	3	0	10803	3604	1749	7198
102+00	10200	100	71	8	0	231	15	0	11034	3622	1749	7412
103+00	10300	100	28	8	0	184	29	0	11219	3657	1749	7561
104+00	10400	100	22	4	0	93	22	0	11311	3683	1749	7628
105+00	10500	100	4	0	0	48	8	0	11359	3693	1749	7666
106+00	10600	100	2	2	0	10	5	0	11369	3700	1749	7669
107+00	10700	100	2	1	0	6	7	0	11375	3707	1749	7667
108+00	10800	100	7	0	0	16	3	0	11391	3711	1749	7681
109+00	10900	100	10	0	0	32	0	0	11424	3711	1749	7712

Notes:
1) Cut includes Salvaged/Unusable Pavement material
2) This does not show up in cross sections
3) Expanded Fill = Unexpanded Fill & Expanded Fill Factor. Does not include Unusable Pavement Excavation volume
4) Marsh Excavation (Item number 205.0400) - to be backfilled with Backfill Granular - Grade 2
5) EBS Excavation to be backfilled with Breaker Run. See Breaker Run table for quantity
6) Expanded Marsh Backfill - This is to be filled with Backfill Granular - Grade 2 (Item number 209.0100)
7) Expanded EBS Backfill - This is to be filled with Breaker run (Item number 311.0110)
8) Mass Ordinate [Cut - Unusable Pavement Material - (Fill * Fill Factor)]. Plus quantity indicates an excess of material within the Division. Minus indicates a shortage of material within the Division.

SHEET 2 OF 14

9 9

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	EARTHWORK DATA	SHEET:	E

USH 45 - DIVISION 1

STATION	Real Station	Distance	AREA (SF) Cut	AREA (SF) Fill	AREA (SF) Marsh Exc	Incremental Vol (CY) (Unadjusted) Cut Note 1	Incremental Vol (CY) (Unadjusted) Fill Note 3	Incremental Vol (CY) (Unadjusted) Marsh Exc Note 4	Cumulative Vol (CY) Cut 1.00 Note 1	Cumulative Vol (CY) Expanded Fill 1.20 Note 3	Cumulative Vol (CY) Expanded Marsh Backfill 1.40 Note 6	Mass Ordinate Note 8
110+00	11000	100	10	0	0	37	0	0	11460	3711	1749	7749
111+00	11100	100	17	0	0	50	0	0	11511	3712	1749	7799
112+00	11200	100	4	1	0	40	2	0	11551	3714	1749	7837
113+00	11300	100	5	4	0	16	10	0	11567	3726	1749	7842
114+00	11400	100	4	4	0	16	16	0	11583	3744	1749	7839
115+00	11500	100	3	3	0	12	13	0	11595	3759	1749	7836
116+00	11600	100	24	1	0	50	7	0	11645	3768	1749	7877
117+00	11700	100	9	2	0	61	6	0	11707	3775	1749	7931
118+00	11800	100	27	4	0	67	11	0	11773	3788	1749	7985
119+00	11900	100	35	1	0	116	8	0	11889	3798	1749	8091
120+00	12000	100	52	5	0	162	11	0	12051	3811	1749	8240
120+75	12075	75	28	5	0	111	13	0	12162	3827	1749	8336
121+00	12100	25	120	5	0	68	5	0	12231	3832	1749	8399
122+00	12200	100	56	9	0	327	26	0	12557	3863	1749	8694
123+00	12300	100	42	11	0	183	37	0	12740	3908	1749	8832
124+00	12400	100	24	6	0	123	32	0	12863	3946	1749	8917
125+00	12500	100	19	4	0	79	19	0	12942	3969	1749	8973
126+00	12600	100	25	4	0	80	14	0	13023	3986	1749	9036
127+00	12700	100	19	12	0	80	29	0	13103	4021	1749	9082
128+00	12800	100	58	5	0	142	31	0	13245	4058	1749	9187
129+00	12900	100	101	3	0	295	14	0	13539	4075	1749	9465
130+00	13000	100	212	0	0	579	6	0	14119	4082	1749	10037
130+10	13010	10	127	0	0	63	0	0	14181	4082	1749	10100
131+00	13100	90	113	4	0	401	7	0	14582	4091	1749	10491
132+00	13200	100	107	21	0	408	47	0	14990	4147	1749	10842
133+00	13300	100	72	40	0	332	113	0	15321	4283	1749	11039
134+00	13400	100	66	32	0	256	132	0	15578	4441	1749	11137
135+00	13500	100	62	153	0	238	342	0	15816	4851	1749	10965
136+00	13600	100	68	117	0	242	499	0	16058	5449	1749	10608
137+00	13700	100	142	5	0	389	226	0	16447	5721	1749	10726
138+00	13800	100	98	0	0	444	10	0	16890	5733	1749	11157
139+00	13900	100	122	3	0	407	7	0	17298	5741	1749	11557
140+00	14000	100	112	16	0	434	37	0	17732	5785	1749	11947
141+00	14100	100	145	33	0	477	91	0	18208	5895	1749	12314
142+00	14200	100	119	26	0	489	109	0	18698	6026	1749	12672
142+68	14268	68	53	85	0	218	140	0	18915	6194	1749	12721
143+00	14300	32	46	95	0	59	106	0	18974	6321	1749	12653
144+00	14400	100	40	27	108	161	225	201	19135	6591	2030	12544
145+00	14500	100	46	1	0	160	52	201	19295	6653	2311	12641
146+00	14600	100	24	43	0	129	82	0	19424	6751	2311	12673
147+00	14700	100	20	9	7	82	96	13	19505	6866	2329	12639
148+00	14800	100	16	0	0	66	17	13	19572	6887	2346	12684
149+00	14900	100	32	0	0	88	1	0	19659	6889	2346	12771
150+00	15000	100	32	0	0	117	1	0	19777	6890	2346	12887
151+00	15100	100	25	1	0	105	2	0	19882	6893	2346	12989
152+00	15200	100	4	3	0	54	8	0	19935	6902	2346	13033
153+00	15300	100	1	12	0	8	28	0	19944	6936	2346	13008

Notes:
1) Cut includes Salvaged/Unusable Pavement material
2) This does not show up in cross sections
3) Expanded Fill = Unexpanded Fill & Expanded Fill Factor. Does not include Unusable Pavement Excavation volume
4) Marsh Excavation (Item number 205.0400) - to be backfilled with Backfill Granular - Grade 2
5) EBS Excavation to be backfilled with Breaker Run. See Breaker Run table for quantity
6) Expanded Marsh Backfill - This is to be filled with Backfill Granular - Grade 2 (Item number 209.0100)
7) Expanded EBS Backfill - This is to be filled with Breaker run (Item number 311.0110)
8) Mass Ordinate [Cut - Unusable Pavement Material - (Fill * Fill Factor)]. Plus quantity indicates an excess of material within the Division. Minus indicates a shortage of material within the Division.

SHEET 3 OF 14

9 9

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	EARTHWORK DATA	SHEET:	E

USH 45 - DIVISION 1

STATION	Real Station	Distance	AREA (SF) Cut	AREA (SF) Fill	AREA (SF) Marsh Exc	Incremental Vol (CY) (Unadjusted) Cut Note 1	Incremental Vol (CY) (Unadjusted) Fill Note 3	Incremental Vol (CY) (Unadjusted) Marsh Exc Note 4	Cumulative Vol (CY) Cut 1.00 Note 1	Cumulative Vol (CY) Expanded Fill 1.20 Note 3	Cumulative Vol (CY) Expanded Marsh Backfill 1.40 Note 6	Mass Ordinate Note 8
154+00	15400	100	0	11	0	2	43	0	19946	6987	2346	12958
155+00	15500	100	1	10	0	2	40	0	19948	7035	2346	12913
156+00	15600	100	0	19	0	3	55	0	19951	7101	2346	12850
157+00	15700	100	2	7	0	4	48	0	19955	7159	2346	12796
158+00	15800	100	3	5	0	8	21	0	19963	7184	2346	12779
159+00	15900	100	23	3	0	48	14	0	20010	7201	2346	12809
160+00	16000	100	21	0	0	81	6	0	20091	7208	2346	12883
161+00	16100	100	24	0	0	83	1	0	20174	7209	2346	12965
162+00	16200	100	22	0	0	86	1	0	20260	7210	2346	13050
163+00	16300	100	59	3	0	149	6	0	20409	7217	2346	13192
164+00	16400	100	42	20	0	185	43	0	20595	7269	2346	13326
165+00	16500	100	30	39	62	133	108	115	20727	7399	2507	13328
166+00	16600	100	68	158	74	182	364	251	20910	7836	2858	13074
166+83	16683	83	33	65	54	155	340	194	21065	8244	3130	12821
167+00	16700	18	61	130	0	30	63	17	21095	8320	3155	12776
168+00	16800	100	40	40	0	187	315	0	21282	8698	3155	12584
169+00	16900	100	19	14	0	110	99	0	21392	8817	3155	12575
170+00	17000	100	15	5	0	64	34	0	21456	8858	3155	12597
171+00	17100	100	1	5	0	30	19	0	21486	8881	3155	12606
172+00	17200	100	22	8	0	42	24	0	21528	8910	3155	12619
173+00	17300	100	47	2	0	127	19	0	21656	8932	3155	12724
174+00	17400	100	63	1	0	203	6	0	21859	8940	3155	12919
175+00	17500	100	191	0	0	471	2	0	22329	8942	3155	13387
175+17	17517	17	110	0	0	97	0	0	22426	8942	3155	13484
176+00	17600	83	92	1	0	309	1	0	22735	8944	3155	13791
177+00	17700	100	75	0	0	309	3	0	23044	8947	3155	14097
178+00	17800	100	62	0	0	254	1	0	23298	8949	3155	14349
179+00	17900	100	50	1	0	206	2	0	23505	8952	3155	14553
180+00	18000	100	18	3	0	125	8	0	23629	8961	3155	14669
181+00	18100	100	6	0	0	44	6	0	23674	8969	3155	14705
182+00	18200	100	22	2	0	51	4	0	23725	8974	3155	14751
183+00	18300	100	25	3	0	87	9	0	23811	8984	3155	14827
184+00	18400	100	27	2	0	97	10	0	23908	8996	3155	14912
185+00	18500	100	9	4	0	67	12	0	23976	9011	3155	14965
186+00	18600	100	2	1	0	20	11	0	23996	9024	3155	14972
187+00	18700	100	3	8	0	9	17	0	24005	9044	3155	14961
188+00	18800	100	6	1	0	17	16	0	24022	9063	3155	14959
189+00	18900	100	3	0	0	16	3	0	24038	9067	3155	14972
190+00	19000	100	4	0	0	13	1	0	24051	9068	3155	14983
191+00	19100	100	3	1	0	13	1	0	24064	9070	3155	14994
192+00	19200	100	4	1	0	12	2	0	24076	9072	3155	15004
193+00	19300	100	36	12	0	73	23	0	24149	9100	3155	15050
194+00	19400	100	39	20	0	139	59	0	24288	9170	3155	15118
195+00	19500	100	44	9	0	154	54	0	24442	9235	3155	15208
196+00	19600	100	84	0	0	236	17	0	24678	9256	3155	15423
197+00	19700	100	197	2	0	520	5	0	25198	9261	3155	15937
198+00	19800	100	123	13	0	593	29	0	25792	9295	3155	16496

Notes:
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2) This does not show up in cross sections
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4) Marsh Excavation (Item number 205.0400) - to be backfilled with Backfill Granular - Grade 2
5) EBS Excavation to be backfilled with Breaker Run. See Breaker Run table for quantity
6) Expanded Marsh Backfill - This is to be filled with Backfill Granular - Grade 2 (Item number 209.0100)
7) Expanded EBS Backfill - This is to be filled with Breaker run (Item number 311.0110)
8) Mass Ordinate [Cut - Unusable Pavement Material - (Fill * Fill Factor)]. Plus quantity indicates an excess of material within the Division. Minus indicates a shortage of material within the Division.

SHEET 4 OF 14

USH 45 - DIVISION 1

STATION	Real Station	Distance	AREA (SF) Cut	AREA (SF) Fill	AREA (SF) Marsh Exc	Incremental Vol (CY) (Unadjusted) Cut Note 1	Incremental Vol (CY) (Unadjusted) Fill Note 3	Incremental Vol (CY) (Unadjusted) Marsh Exc Note 4	Cumulative Vol (CY) Cut 1.00 Note 1	Cumulative Vol (CY) Expanded Fill 1.20 Note 3	Cumulative Vol (CY) Expanded Marsh Backfill 1.40 Note 6	Mass Ordinate Note 8
199+00	19900	100	101	41	0	416	100	0	26208	9416	3155	16792
200+00	20000	100	87	41	0	348	152	0	26556	9598	3155	16958
201+00	20100	100	110	28	0	364	128	0	26920	9752	3155	17168
202+00	20200	100	204	0	0	581	52	0	27501	9814	3155	17687
203+00	20300	100	125	0	0	609	0	0	28110	9814	3155	18296
204+00	20400	100	60	31	0	344	57	0	28454	9883	3155	18571
205+00	20500	100	43	78	117	192	202	217	28646	10124	3459	18521
206+00	20600	100	55	66	104	182	267	410	28828	10445	4033	18383
207+00	20700	100	60	30	0	213	179	193	29041	10659	4303	18382
208+00	20800	100	78	3	0	255	62	0	29295	10734	4303	18561
209+00	20900	100	76	1	0	285	8	0	29580	10743	4303	18837
210+00	21000	100	78	0	0	286	1	0	29866	10745	4303	19121
211+00	21100	100	11	0	0	165	0	0	30031	10745	4303	19286
212+00	21200	100	5	3	0	29	6	0	30060	10753	4303	19308
213+00	21300	100	3	2	0	15	9	0	30075	10763	4303	19312
214+00	21400	100	3	3	0	10	8	0	30085	10772	4303	19313
215+00	21500	100	12	0	0	28	5	0	30113	10778	4303	19335
216+00	21600	100	11	0	0	43	1	0	30157	10779	4303	19378
217+00	21700	100	9	1	0	36	3	0	30193	10782	4303	19410
218+00	21800	100	8	0	0	30	3	0	30223	10786	4303	19437
219+00	21900	100	7	1	0	27	3	0	30250	10789	4303	19461
220+00	22000	100	5	1	0	21	5	0	30271	10794	4303	19477
221+00	22100	100	5	4	0	17	9	0	30288	10805	4303	19483
222+00	22200	100	5	3	0	18	11	0	30306	10819	4303	19487
223+00	22300	100	3	4	0	14	12	0	30320	10833	4303	19487
224+00	22400	100	2	1	0	8	10	0	30328	10845	4303	19483
225+00	22500	100	5	0	0	11	3	0	30340	10849	4303	19490
226+00	22600	100	5	2	0	18	4	0	30358	10854	4303	19504
227+00	22700	100	3	5	0	15	13	0	30373	10869	4303	19504
228+00	22800	100	30	0	0	61	10	0	30434	10881	4303	19553
229+00	22900	100	6	0	0	66	1	0	30500	10882	4303	19618
230+00	23000	100	34	0	0	73	1	0	30573	10883	4303	19690
231+00	23100	100	5	3	0	71	6	0	30644	10889	4303	19754
232+00	23200	100	4	4	0	16	13	0	30660	10906	4303	19754
233+00	23300	100	16	6	0	37	19	0	30697	10928	4303	19770
234+00	23400	100	3	7	0	35	23	0	30733	10956	4303	19777
235+00	23500	100	15	0	0	33	13	0	30765	10971	4303	19794
236+00	23600	100	9	1	0	44	2	0	30810	10974	4303	19836
237+00	23700	100	6	0	0	28	2	0	30837	10976	4303	19861
238+00	23800	100	8	3	0	27	5	0	30864	10982	4303	19882
239+00	23900	100	5	1	0	24	6	0	30888	10990	4303	19898
240+00	24000	100	3	13	0	14	24	0	30902	11019	4303	19883
241+00	24100	100	6	0	0	17	24	0	30919	11047	4303	19871
242+00	24200	100	2	3	0	15	5	0	30933	11054	4303	19880
243+00	24300	100	4	7	0	12	17	0	30945	11075	4303	19870
244+00	24400	100	0	29	0	9	65	0	30953	11153	4303	19800
245+00	24500	100	6	16	0	12	83	0	30965	11253	4303	19712
					Column totals	30965	9378	3074				

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6) Expanded Marsh Backfill - This is to be filled with Backfill Granular - Grade 2 (Item number 209.0100)
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SIDE ROADS - DIVISION 1

STATION	Real Station	Distance	AREA (SF) Cut	AREA (SF) Fill	Incremental Vol (CY) (Unadjusted) Cut Note 1	Incremental Vol (CY) (Unadjusted) Fill Note 3	Cumulative Vol (CY) Cut 1.00 Note 1	Cumulative Vol (CY) Expanded Fill 1.20 Note 3	Mass Ordinate Note 8
CTH WG									
45+50	4550	0	0	0	0	0	0	0	0
46+00	4600	50	27	8	25	7	25	9	16
46+50	4650	50	49	11	70	18	95	30	66
47+00	4700	50	53	7	94	17	190	50	140
47+50	4750	50	126	7	165	13	355	65	290
48+00	4800	50	128	7	235	13	589	81	508
48+50	4850	50	98	18	209	23	798	108	690
49+00	4900	50	98	18	181	33	979	147	831
51+00	5100	200	41	0	511	65	1490	225	1265
51+50	5150	50	86	4	117	4	1608	230	1378
52+00	5200	50	107	0	179	4	1786	234	1552
52+50	5250	50	109	0	200	0	1986	234	1752
53+00	5300	50	69	1	165	1	2151	235	1916
53+50	5350	50	51	1	111	1	2262	237	2025
54+00	5400	50	29	0	74	1	2336	238	2098
54+25	5425	25	28	0	26	0	2362	238	2124
54+45	5445	20	13	0	15	0	2377	238	2139
				Column totals	2377	199			
121st St									
48+70	4870	0	10	0	0	0	0	0	0
49+00	4900	30	32	0	24	0	24	0	24
49+25	4925	25	58	6	42	3	65	4	62
				Column totals	65	3			
CTH CJ									
50+75	5075	0	34	17	0	0	0	0	0
51+00	5100	25	17	6	24	11	24	13	11
51+50	5150	50	16	0	31	6	55	20	35
				Column totals	55	16			
119th St									
48+60	4860	0	11	1	0	0	0	0	0
49+00	4900	40	15	16	20	13	20	15	4
49+25	4925	25	24	24	18	18	38	37	1
				Column totals	38	31			

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7) Expanded EBS Backfill - This is to be filled with Breaker run (Item number 311.0110)
8) Mass Ordinate [Cut - Unusable Pavement Material - (Fill * Fill Factor)]. Plus quantity indicates an excess of material within the Division. Minus indicates a shortage of material within the Division.

SIDE ROADS - DIVISION 1

STATION	Real Station	Distance	AREA (SF) Cut	AREA (SF) Fill	Incremental Vol (CY) (Unadjusted) Cut Note 1	Incremental Vol (CY) (Unadjusted) Fill Note 3	Cumulative Vol (CY) Cut 1.00 Note 1	Cumulative Vol (CY) Expanded Fill 1.20 Note 3	Mass Ordinate Note 8
CTH V									
48+30	4830	0	18	0	0	0	0	0	0
48+50	4850	20	22	2	15	1	15	1	14
49+00	4900	50	43	1	60	2	75	3	72
49+25	4925	25	60	0	48	0	123	4	119
				Column totals	123	3			
CTH Q									
50+75	5075	0	123	20	0	0	0	0	0
51+00	5100	25	72	10	90	14	90	17	74
51+50	5150	50	31	6	96	15	186	34	152
				Column totals	186	29			
192nd Ave									
48+50	4850	0	17	0	0	0	0	0	0
49+00	4900	50	41	0	53	0	53	0	53
49+25	4925	25	62	0	48	0	101	0	101
				Column totals	101	0			
CTH JS									
47+65	4765	0	10	2	0	0	0	0	0
48+00	4800	35	50	1	39	2	39	2	37
48+50	4850	50	58	0	100	1	140	4	136
49+00	4900	50	74	5	122	5	262	9	253
49+25	4925	25	129	6	94	5	356	15	340
				Column totals	356	13			
106th St									
50+75	5075	0	199	3	0	0	0	0	0
51+00	5100	25	61	1	120	2	120	2	118
51+60	5160	60	5	0	73	1	194	4	190
				Column totals	194	3			

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SIDE ROADS - DIVISION 1

STATION	Real Station	Distance	AREA (SF) Cut	AREA (SF) Fill	Incremental Vol (CY) (Unadjusted) Cut Note 1	Incremental Vol (CY) (Unadjusted) Fill Note 3	Cumulative Vol (CY) Cut 1.00 Note 1	Cumulative Vol (CY) Expanded Fill 1.20 Note 3	Mass Ordinate Note 8
196th Ave (South)									
50+75	5075	0	9	87	0	0	0	0	0
51+00	5100	25	15	42	11	60	11	72	-61
51+50	5150	50	45	5	56	44	67	125	-58
52+00	5200	50	46	5	85	10	151	137	14
52+50	5250	50	32	0	72	5	224	143	81
				Column totals	224	119			
196th Ave (North)									
50+75	5075	0	48	31	0	0	0	0	0
51+00	5100	25	56	1	48	15	48	17	31
51+50	5150	50	34	0	84	1	132	18	113
51+75	5175	25	20	0	25	0	157	18	139
				Column totals	157	15			
98th St									
48+80	4880	0	7	0	0	0	0	0	0
49+00	4900	20	56	0	23	0	23	0	23
49+25	4925	25	105	0	75	0	98	0	98
				Column totals	98	0			

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SIDE ROADS - DIVISION 1

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CTH C									
42+40	4240	0	23	0	0	0	0	0	0
42+50	4250	10	33	0	10	0	10	0	10
43+00	4300	50	31	2	60	2	70	2	68
43+50	4350	50	33	4	60	5	130	8	122
44+00	4400	50	35	2	63	5	193	14	179
44+50	4450	50	38	5	67	6	260	22	238
45+00	4500	50	37	8	69	12	329	36	293
45+50	4550	50	33	22	65	28	394	70	324
46+00	4600	50	38	19	66	38	459	116	344
46+50	4650	50	32	155	65	161	524	310	215
47+00	4700	50	37	122	64	257	589	618	-29
47+50	4750	50	108	26	134	137	723	783	-59
48+00	4800	50	60	8	156	32	879	821	58
48+50	4850	50	101	1	149	9	1029	831	197
49+00	4900	50	127	0	211	1	1240	832	408
49+25	4925	25	91	5	101	2	1341	835	506
50+75	5075	150	129	9	612	40	1953	884	1070
51+00	5100	25	64	0	90	4	2043	889	1154
51+50	5150	50	118	0	169	0	2212	889	1323
52+00	5200	50	127	0	227	0	2439	889	1550
52+50	5250	50	111	0	220	0	2659	889	1770
53+00	5300	50	94	0	190	0	2849	889	1960
53+50	5350	50	119	0	198	0	3047	889	2158
54+00	5400	50	102	1	205	1	3252	889	2363
54+50	5450	50	106	0	193	1	3445	890	2555
55+00	5500	50	105	4	196	3	3641	894	2747
55+50	5550	50	93	6	184	9	3825	904	2921
56+00	5600	50	67	5	149	10	3974	916	3057
56+50	5650	50	42	6	102	11	4075	929	3146
57+00	5700	50	51	10	86	15	4161	948	3214
57+50	5750	50	33	16	77	24	4238	976	3262
58+00	5800	50	29	28	57	41	4295	1025	3270
58+50	5850	50	26	67	51	88	4346	1131	3216
59+00	5900	50	25	21	47	82	4394	1229	3165
59+10	5910	10	24	0	9	4	4403	1233	3169
				Column totals	4403	1028			

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USH 45 - DIVISION 2

STATION	Real Station	Distance	AREA (SF) Cut	AREA (SF) Fill	Incremental Vol (CY) (Unadjusted) Cut Note 1	Incremental Vol (CY) (Unadjusted) Fill Note 3	Cumulative Vol (CY) Cut 1.00 Note 1	Cumulative Vol (CY) Expanded Fill 1.20 Note 3	Mass Ordinate Note 8
246+00	24600	0	88	15	0	0	0	0	0
246+50	24650	50	76	14	152	27	152	33	119
247+00	24700	50	96	12	160	24	312	62	250
247+50	24750	50	66	24	151	34	463	102	361
248+00	24800	50	114	39	167	59	630	173	457
248+50	24850	50	121	18	217	53	848	236	611
249+00	24900	50	143	16	244	32	1092	275	817
249+50	24950	50	155	16	276	30	1368	310	1057
250+00	25000	50	80	9	217	23	1585	338	1247
250+40	25040	40	161	7	179	12	1764	352	1412
250+50	25050	10	158	5	59	2	1823	355	1469
251+00	25100	50	70	6	211	10	2034	367	1667
251+50	25150	50	70	55	129	57	2163	435	1728
252+00	25200	50	79	39	138	87	2301	540	1761
252+50	25250	50	83	33	150	66	2450	620	1831
253+00	25300	50	81	28	151	56	2602	687	1915
253+50	25350	50	83	21	152	46	2753	742	2011
254+00	25400	50	68	18	140	37	2893	786	2106
254+50	25450	50	109	16	164	32	3056	825	2232
254+57	25457	7	114	16	29	4	3086	830	2256
255+00	25500	43	132	0	195	13	3281	845	2436
255+50	25550	50	139	0	250	0	3531	845	2686
256+00	25600	50	179	0	294	0	3825	845	2980
256+19	25619	19	248	0	151	0	3976	845	3131
256+50	25650	31	210	0	262	0	4238	845	3393
257+00	25700	50	259	0	435	0	4673	845	3828
257+50	25750	50	244	0	466	0	5139	845	4295
258+00	25800	50	232	0	441	0	5580	845	4735
258+50	25850	50	171	0	373	0	5953	845	5108
259+00	25900	50	183	0	328	0	6281	845	5436
259+50	25950	50	185	0	341	0	6623	845	5778
260+00	26000	50	171	0	330	0	6952	845	6107
260+50	26050	50	162	0	308	0	7261	845	6416
261+00	26100	50	145	0	284	0	7545	845	6700
261+50	26150	50	83	10	211	9	7755	856	6899
262+00	26200	50	67	29	139	36	7894	900	6994
262+50	26250	50	58	39	116	63	8010	975	7035
263+00	26300	50	70	65	119	96	8130	1091	7039
263+50	26350	50	83	0	142	61	8272	1163	7108
263+80	26380	30	117	18	111	10	8383	1176	7207
264+00	26400	20	84	30	75	18	8457	1197	7260
264+50	26450	50	69	21	142	47	8599	1254	7345
265+00	26500	50	67	15	126	34	8725	1294	7431
265+50	26550	50	95	11	151	24	8876	1324	7552

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USH 45 - DIVISION 2

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265+80	26580	30	150	16	136	15	9012	1342	7670
266+00	26600	20	169	13	118	11	9130	1355	7775
266+50	26650	50	46	77	199	83	9329	1454	7875
267+00	26700	50	25	55	66	122	9395	1601	7794
267+50	26750	50	4	19	27	68	9422	1683	7740
268+00	26800	50	39	29	41	44	9463	1735	7727
268+10	26810	10	35	23	14	9	9477	1747	7730
268+50	26850	40	57	2	68	18	9545	1769	7776
269+00	26900	50	112	5	156	7	9700	1777	7924
269+50	26950	50	186	0	276	4	9976	1782	8194
270+00	27000	50	240	0	395	0	10370	1782	8588
270+50	27050	50	212	0	419	0	10789	1782	9007
271+00	27100	50	158	0	343	0	11132	1782	9350
271+50	27150	50	142	0	278	0	11410	1783	9627
272+00	27200	50	87	2	212	2	11623	1786	9837
272+50	27250	50	70	5	146	6	11768	1793	9975
273+00	27300	50	115	0	171	4	11939	1799	10140
273+10	27310	10	101	0	40	0	11979	1799	10180
273+50	27350	40	50	0	112	0	12091	1799	10292
274+00	27400	50	43	129	86	119	12177	1942	10235
274+50	27450	50	39	154	76	262	12253	2256	9997
275+00	27500	50	40	141	73	273	12326	2584	9742
275+50	27550	50	45	48	78	175	12404	2794	9610
276+00	27600	50	55	8	92	52	12496	2856	9639
276+50	27650	50	83	3	127	10	12623	2868	9754
277+00	27700	50	85	12	155	14	12778	2885	9893
277+50	27750	50	75	8	149	19	12927	2908	10019
278+00	27800	50	89	7	152	14	13079	2924	10154
278+50	27850	50	99	12	174	18	13252	2946	10306
279+00	27900	50	123	0	205	12	13457	2960	10497
279+50	27950	50	184	0	283	0	13741	2960	10781
279+65	27965	15	159	0	95	0	13836	2960	10876
279+83	27983	18	156	0	102	0	13938	2960	10978
280+00	28000	18	103	0	84	0	14022	2960	11062
280+50	28050	50	88	3	177	2	14199	2963	11236
281+00	28100	50	43	34	122	34	14320	3004	11316
281+50	28150	50	30	99	67	123	14387	3152	11235
282+00	28200	50	18	138	44	219	14431	3415	11016
282+50	28250	50	8	149	23	266	14454	3734	10720
283+00	28300	50	0	159	7	285	14461	4077	10385
283+50	28350	50	149	132	138	269	14599	4400	10200
284+00	28400	50	145	140	272	252	14872	4702	10170
284+50	28450	50	108	149	234	268	15106	5023	10083
285+00	28500	50	91	91	184	223	15290	5290	10000

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USH 45 - DIVISION 2

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285+50	28550	50	112	129	188	204	15478	5535	9943
286+00	28600	50	121	98	215	210	15693	5788	9905
286+50	28650	50	98	118	202	200	15895	6028	9868
287+00	28700	50	114	148	196	246	16091	6323	9768
287+50	28750	50	137	58	232	191	16323	6552	9772
288+00	28800	50	236	20	346	72	16669	6638	10031
288+50	28850	50	137	7	345	25	17015	6669	10346
289+00	28900	50	171	0	285	7	17300	6677	10623
289+10	28910	10	177	0	64	0	17364	6677	10687
289+50	28950	40	200	0	280	0	17644	6677	10967
290+00	29000	50	229	0	398	0	18042	6677	11365
290+50	29050	50	272	0	463	0	18505	6677	11828
291+00	29100	50	249	0	482	0	18987	6677	12310
291+50	29150	50	194	2	410	2	19397	6679	12717
292+00	29200	50	114	15	285	16	19682	6698	12984
292+50	29250	50	72	82	172	90	19854	6806	13047
293+00	29300	50	54	134	116	200	19970	7047	12923
293+50	29350	50	98	122	141	238	20110	7332	12778
294+00	29400	50	57	126	143	230	20253	7607	12646
294+50	29450	50	24	153	74	258	20327	7917	12410
295+00	29500	50	21	190	42	318	20369	8299	12070
295+50	29550	50	32	170	49	333	20418	8699	11719
296+00	29600	50	37	143	63	290	20481	9046	11435
296+50	29650	50	38	120	70	244	20551	9339	11212
297+00	29700	50	43	74	76	180	20627	9555	11072
297+50	29750	50	49	123	85	182	20712	9773	10938
298+00	29800	50	55	121	96	225	20807	10044	10763
298+50	29850	50	59	63	105	170	20912	10248	10664
299+00	29900	50	66	68	116	122	21028	10394	10634
299+50	29950	50	73	118	128	173	21156	10602	10555
300+00	30000	50	94	59	154	164	21311	10798	10512
300+50	30050	50	97	36	176	87	21487	10903	10584
301+00	30100	50	135	28	214	58	21701	10973	10728
301+50	30150	50	175	25	286	49	21988	11032	10956
302+00	30200	50	106	28	261	50	22248	11092	11156
302+50	30250	50	94	21	185	46	22433	11147	11286
302+75	30275	25	37	21	61	20	22494	11170	11323
303+00	30300	25	49	19	40	18	22533	11192	11341
303+50	30350	50	46	21	89	37	22622	11237	11385
304+00	30400	50	11	25	53	42	22675	11287	11388
304+50	30450	50	12	61	21	80	22696	11383	11313
305+00	30500	50	9	1	19	58	22715	11452	11263
305+25	30525	25	10	0	8	1	22724	11453	11271
				Column totals	22724	9544			

Notes:
1) Cut includes Salvaged/Unusable Pavement material
2) This does not show up in cross sections
3) Expanded Fill = Unexpanded Fill & Expanded Fill Factor. Does not include Unusable Pavement Excavation volume
4) Marsh Excavation (Item number 205.0400) - to be backfilled with Backfill Granular - Grade 2
5) EBS Excavation to be backfilled with Breaker Run. See Breaker Run table for quantity
6) Expanded Marsh Backfill - This is to be filled with Backfill Granular - Grade 2 (Item number 209.0100)
7) Expanded EBS Backfill - This is to be filled with Breaker run (Item number 311.0110)
8) Mass Ordinate [Cut - Unusable Pavement Material - (Fill * Fill Factor)]. Plus quantity indicates an excess of material within the Division. Minus indicates a shortage of material within the Division.

SIDE ROADS - DIVISION 2

STATION	Real Station	Distance	AREA (SF) Cut	AREA (SF) Fill	Incremental Vol (CY) (Unadjusted) Cut Note 1	Incremental Vol (CY) (Unadjusted) Fill Note 3	Cumulative Vol (CY) Cut 1.00 Note 1	Cumulative Vol (CY) Expanded Fill 1.20 Note 3	Mass Ordinate Note 8
86th St									
50+75	5075	0	60	0	0	0	0	0	0
51+00	5100	25	88	0	69	0	69	0	69
51+50	5150	50	68	0	144	0	213	1	213
51+60	5160	10	43	0	20	0	234	1	233
				Column totals	234	1			
CTH AH									
48+50	4850	0	48	0	0	0	0	0	0
49+00	4900	50	111	0	148	0	148	0	148
49+50	4950	50	83	0	180	0	328	0	328
				Column totals	328	0			
84th Pl									
50+50	5050	0	111	0	0	0	0	0	0
51+00	5100	50	107	0	202	0	202	0	202
51+25	5125	25	50	0	73	0	274	0	274
				Column totals	274	0			
84th St									
50+50	5050	0	26	15	0	0	0	0	0
51+00	5100	50	38	1	59	15	59	18	41
51+10	5110	10	40	0	14	0	73	18	55
				Column totals	73	15			

Notes:
1) Cut includes Salvaged/Unusable Pavement material
2) This does not show up in cross sections
3) Expanded Fill = Unexpanded Fill & Expanded Fill Factor. Does not include Unusable Pavement Excavation volume
4) Marsh Excavation (Item number 205.0400) - to be backfilled with Backfill Granular - Grade 2
5) EBS Excavation to be backfilled with Breaker Run. See Breaker Run table for quantity
6) Expanded Marsh Backfill - This is to be filled with Backfill Granular - Grade 2 (Item number 209.0100)
7) Expanded EBS Backfill - This is to be filled with Breaker run (Item number 311.0110)
8) Mass Ordinate [Cut - Unusable Pavement Material - (Fill * Fill Factor)]. Plus quantity indicates an excess of material within the Division. Minus indicates a shortage of material within the Division.

SIDE ROADS - DIVISION 2

STATION	Real Station	Distance	AREA (SF) Cut	AREA (SF) Fill	Incremental Vol (CY) (Unadjusted) Cut Note 1	Incremental Vol (CY) (Unadjusted) Fill Note 3	Cumulative Vol (CY) Cut 1.00 Note 1	Cumulative Vol (CY) Expanded Fill 1.20 Note 3	Mass Ordinate Note 8
83rd St									
50+50	5050	0	28	1	0	0	0	0	0
51+00	5100	50	40	0	63	1	63	2	61
51+15	5115	15	43	0	23	0	86	2	84
				Column totals	86	1			
82nd St									
48+75	4875	0	38	0	0	0	0	0	0
49+00	4900	25	77	0	53	0	53	0	53
49+50	4950	50	117	0	180	0	234	0	234
50+50	5050	100	25	6	264	12	498	14	484
51+00	5100	50	0	0	23	6	522	22	500
				Column totals	522	18			
80th St									
50+50	5050	0	75	0	0	0	0	0	0
51+00	5100	50	35	0	103	0	103	0	103
				Column totals	103	0			
79th St									
50+50	5050	0	119	0	0	0	0	0	0
50+90	5090	40	83	0	150	0	150	0	150
				Column totals	150	0			

Notes:
1) Cut includes Salvaged/Unusable Pavement material
2) This does not show up in cross sections
3) Expanded Fill = Unexpanded Fill & Expanded Fill Factor. Does not include Unusable Pavement Excavation volume
4) Marsh Excavation (Item number 205.0400) - to be backfilled with Backfill Granular - Grade 2
5) EBS Excavation to be backfilled with Breaker Run. See Breaker Run table for quantity
6) Expanded Marsh Backfill - This is to be filled with Backfill Granular - Grade 2 (Item number 209.0100)
7) Expanded EBS Backfill - This is to be filled with Breaker run (Item number 311.0110)
8) Mass Ordinate [Cut - Unusable Pavement Material - (Fill * Fill Factor)]. Plus quantity indicates an excess of material within the Division. Minus indicates a shortage of material within the Division.

MATCH CTH WG
STA 49+00

MATCH CTH WG
STA 51+00

1.0% 1.0%

777.42
-102.13

777.61
62.49

777.69
102.01

21+30

CTH WG

RW

MATCH CTH WG
STA 51+00

779.71
-96.48

1.9% 1.0% 1.0% 1.0%

776.76
-52.62

776.83
-45.68

777.40
12.00

777.82
88.35

779.47
95.66

21+00

TLE RW RW TLE

DWY RT

4.0:1 6.0:1

777.59
-45.87

775.13
-36.04

776.23
-29.43

776.38
-16.08

776.42
0.00

1.1% 1.1% 1.1% 2.0% 4.6%

776.42
12.00

776.37
17.00

778.29
20.00

779.20
39.91

20+00

RW TLE

DWY RT
NOT FOR YARDAGE

0.5% 0.5% 1.2% 2.0% 3.3%

776.36
-27.87

776.44
-14.20

776.38
0.00

776.36
12.00

776.30
17.00

778.23
20.00

778.88
39.98

19+83

10 FT

20 FT

BEGIN PROJECT

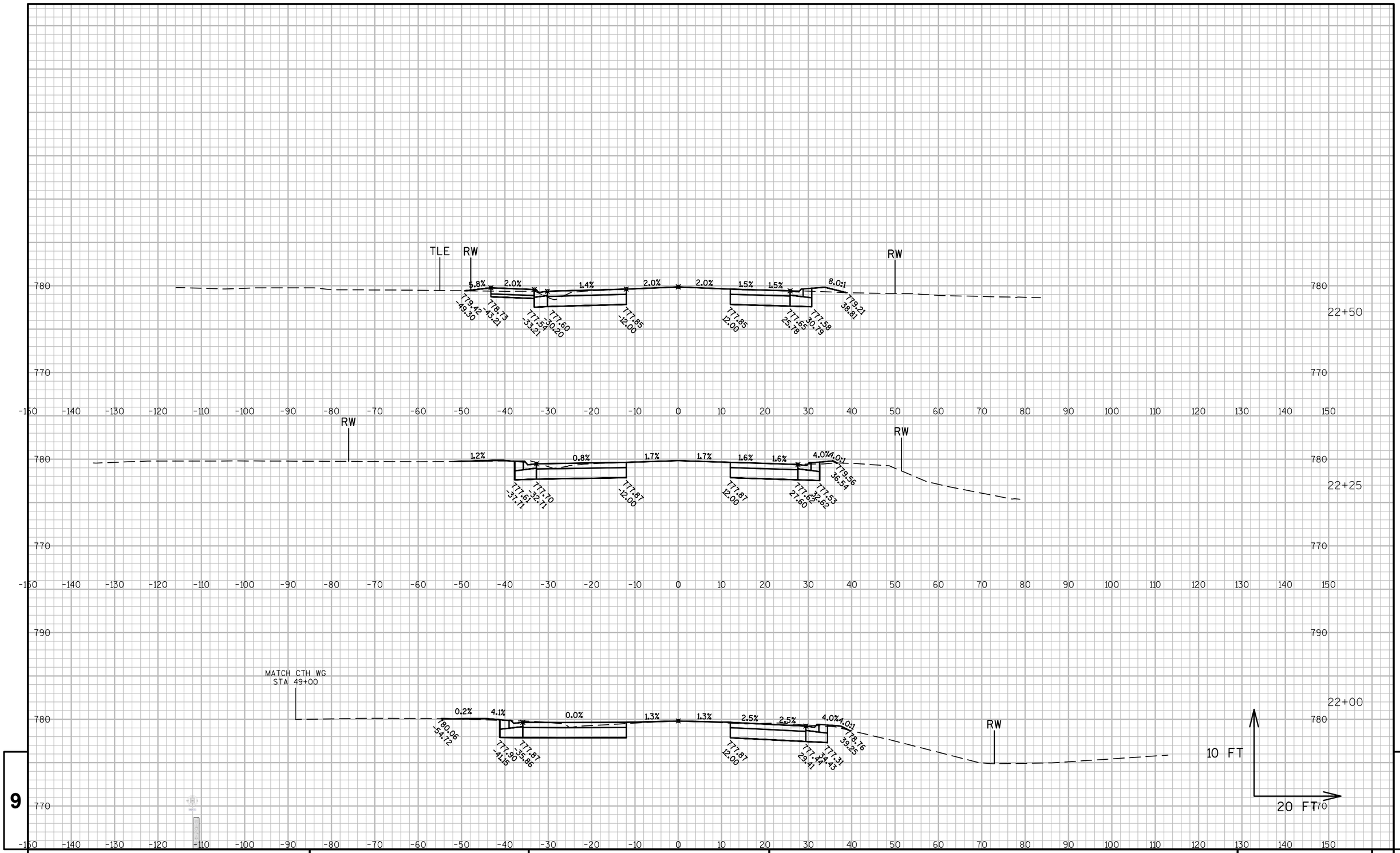
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9

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: USH 45	SHEET 557	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090201-XS-45-WG-Q.DWG PLOT DATE : 4/22/2016 11:47 AM PLOT BY : MAAS, JOSEPH A PLOT NAME :

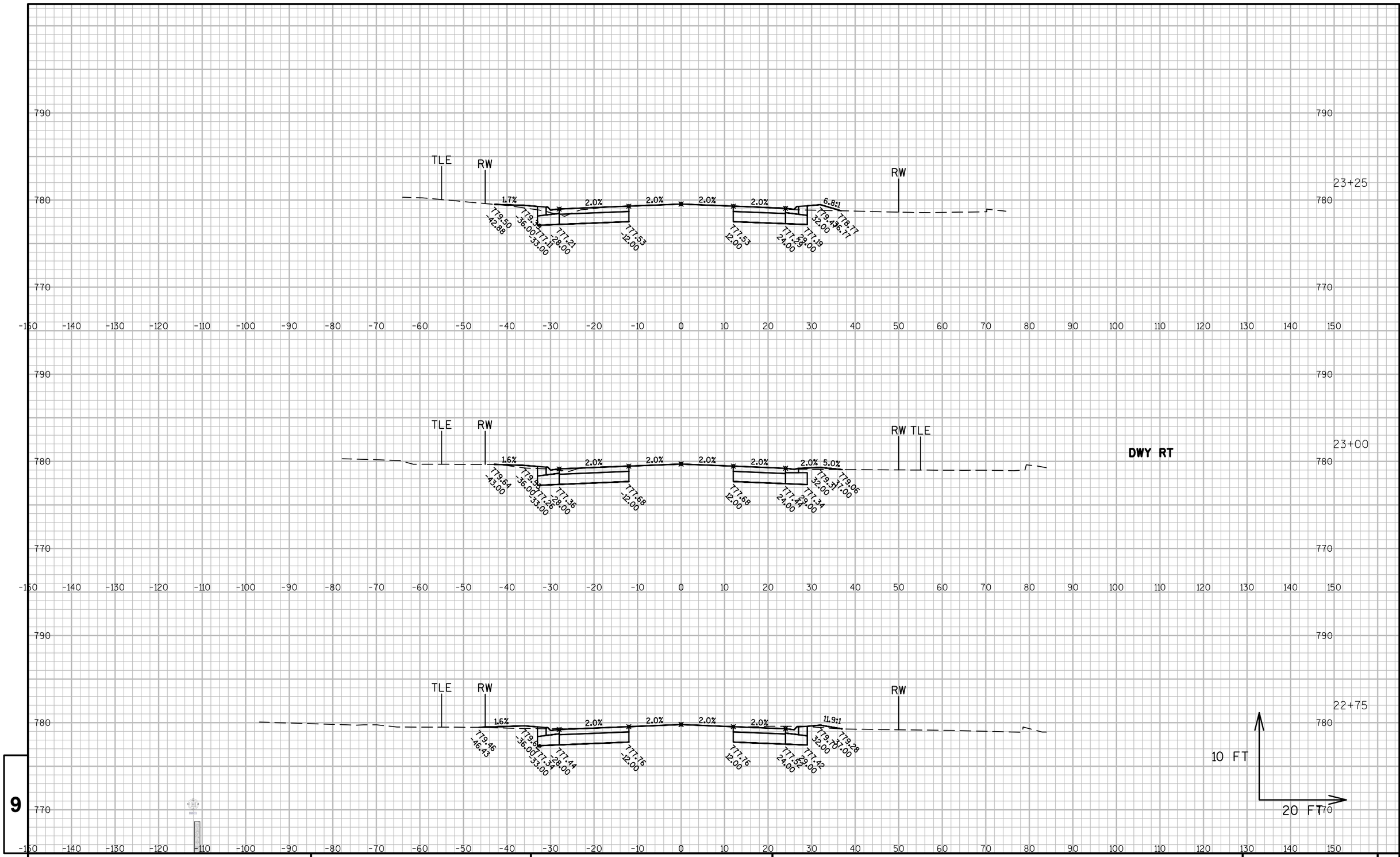
WISDOT/CADDS SHEET 49



PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: USH 45	SHEET 558	E

FILE NAME : N:\PDS\C3D\32000203\DESIGN\MISC\THIRSTYHORSEDRIVEWAY.DWG PLOT DATE : 4/29/2016 9:10 AM PLOT BY : MAAS, JOSEPH A PLOT NAME :

WISDOT/CADDS SHEET 49

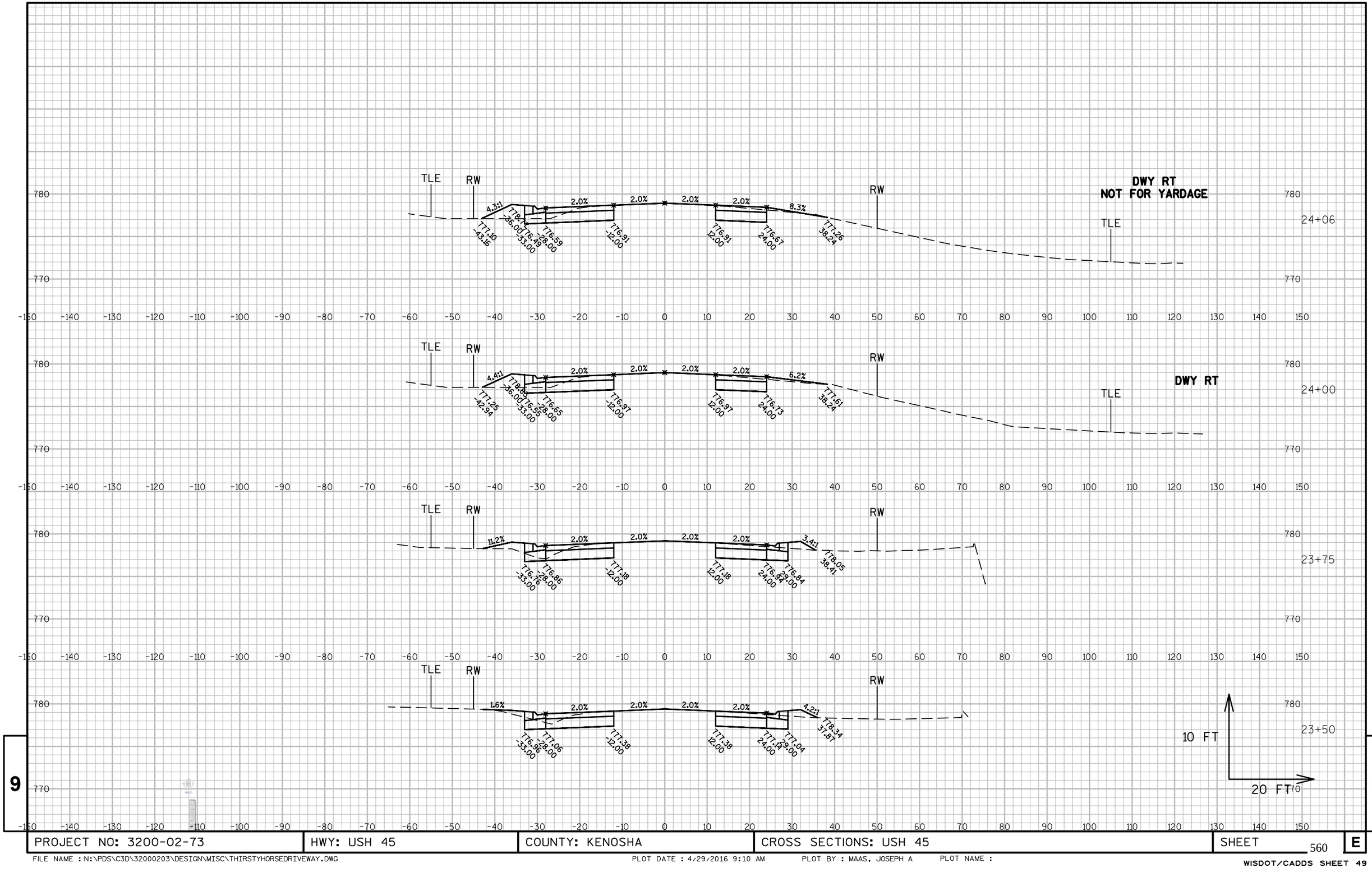


9

9

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: USH 45	SHEET 559	E

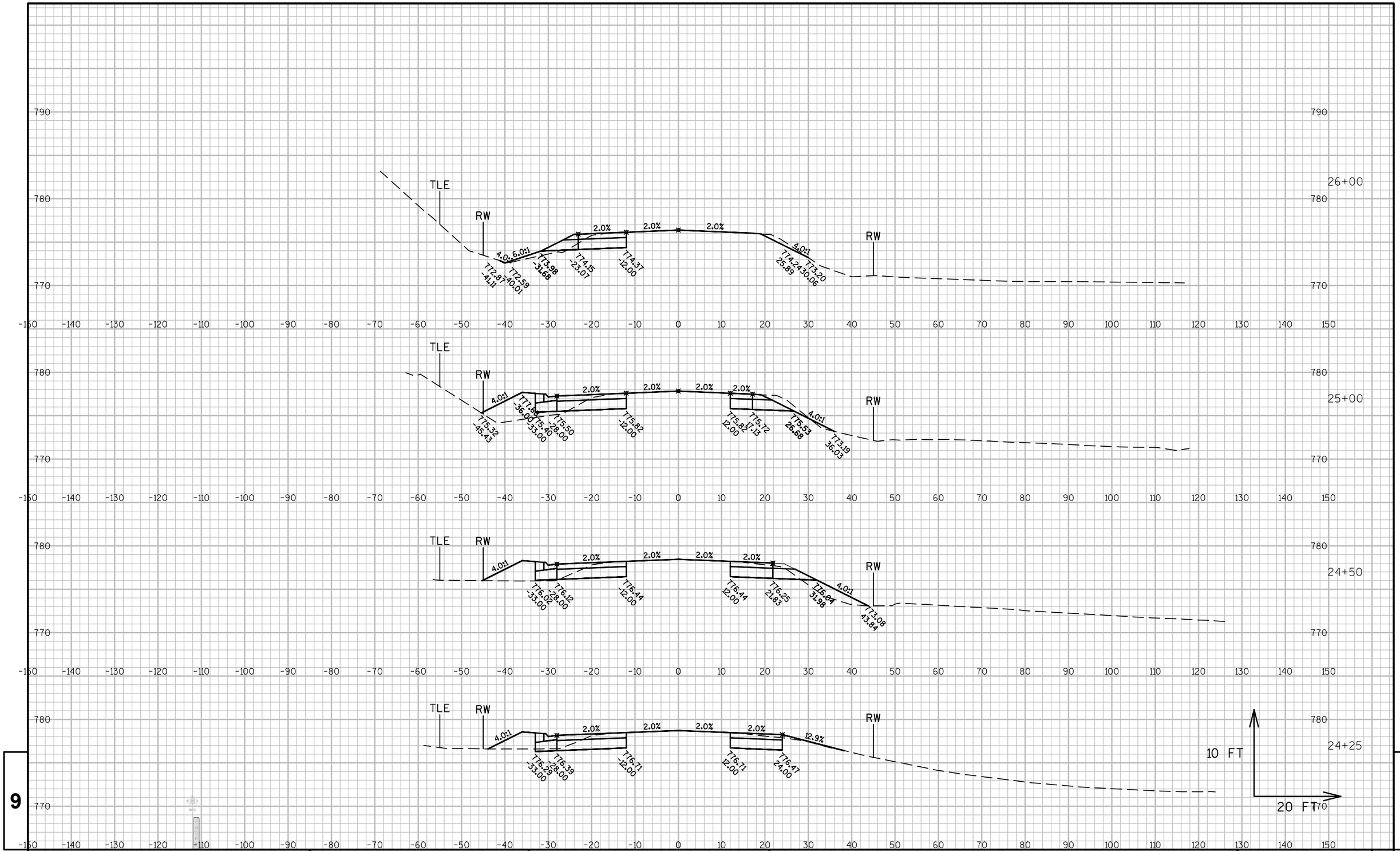
FILE NAME : N:\PDS\C3D\32000203\DESIGN\MISC\THIRSTYHORSEDRIVEWAY.DWG PLOT DATE : 4/29/2016 9:10 AM PLOT BY : MAAS, JOSEPH A PLOT NAME :



PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: USH 45	SHEET 560	E

FILE NAME : N:\PDS\C3D\32000203\DESIGN\MISC\THIRSTYHORSEDRIVEWAY.DWG PLOT DATE : 4/29/2016 9:10 AM PLOT BY : MAAS, JOSEPH A PLOT NAME :

WISDOT/CADDS SHEET 49



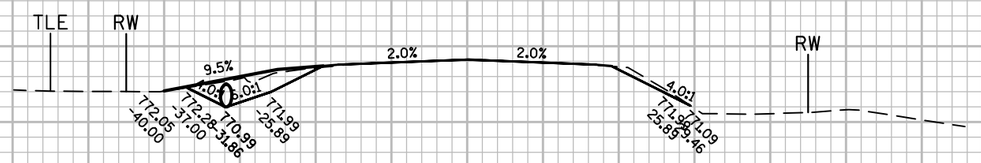
9

9

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: USH 45	SHEET 561	E

FILE NAME : N:\PDS\C3D\32000203\DESIGN\MISC\THIRSTYHORSEDRIVEWAY.DWG PLOT DATE : 4/29/2016 9:10 AM PLOT BY : MAAS, JOSEPH A PLOT NAME :

DWY LT
NOT FOR YARDAGE

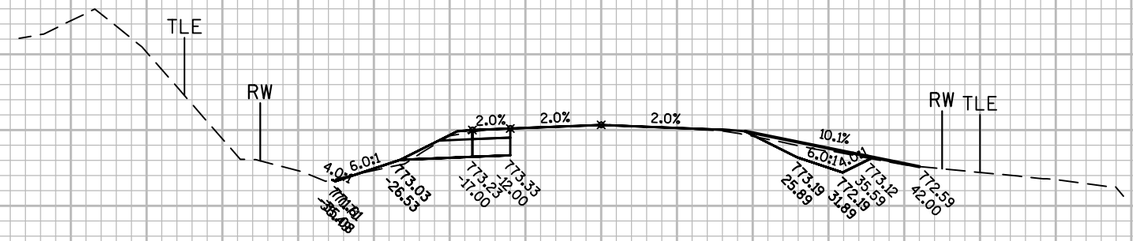


27+65

27+00



26+75



DWY RT
NOT FOR YARDAGE

10 FT

20 FT

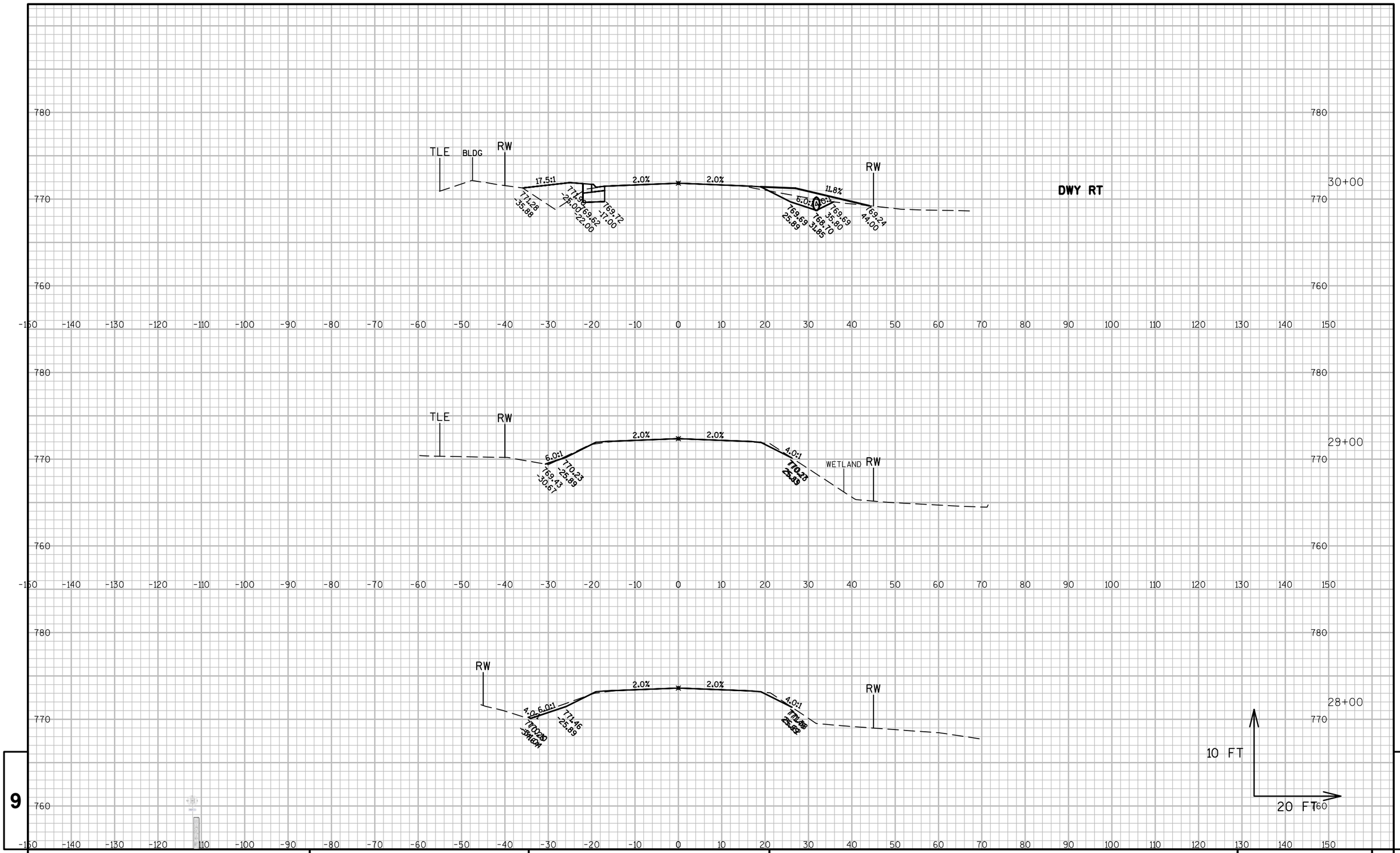
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9

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: USH 45	SHEET 562	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090201-XS-45-WG-Q.DWG PLOT DATE : 4/22/2016 11:48 AM PLOT BY : MAAS, JOSEPH A PLOT NAME :

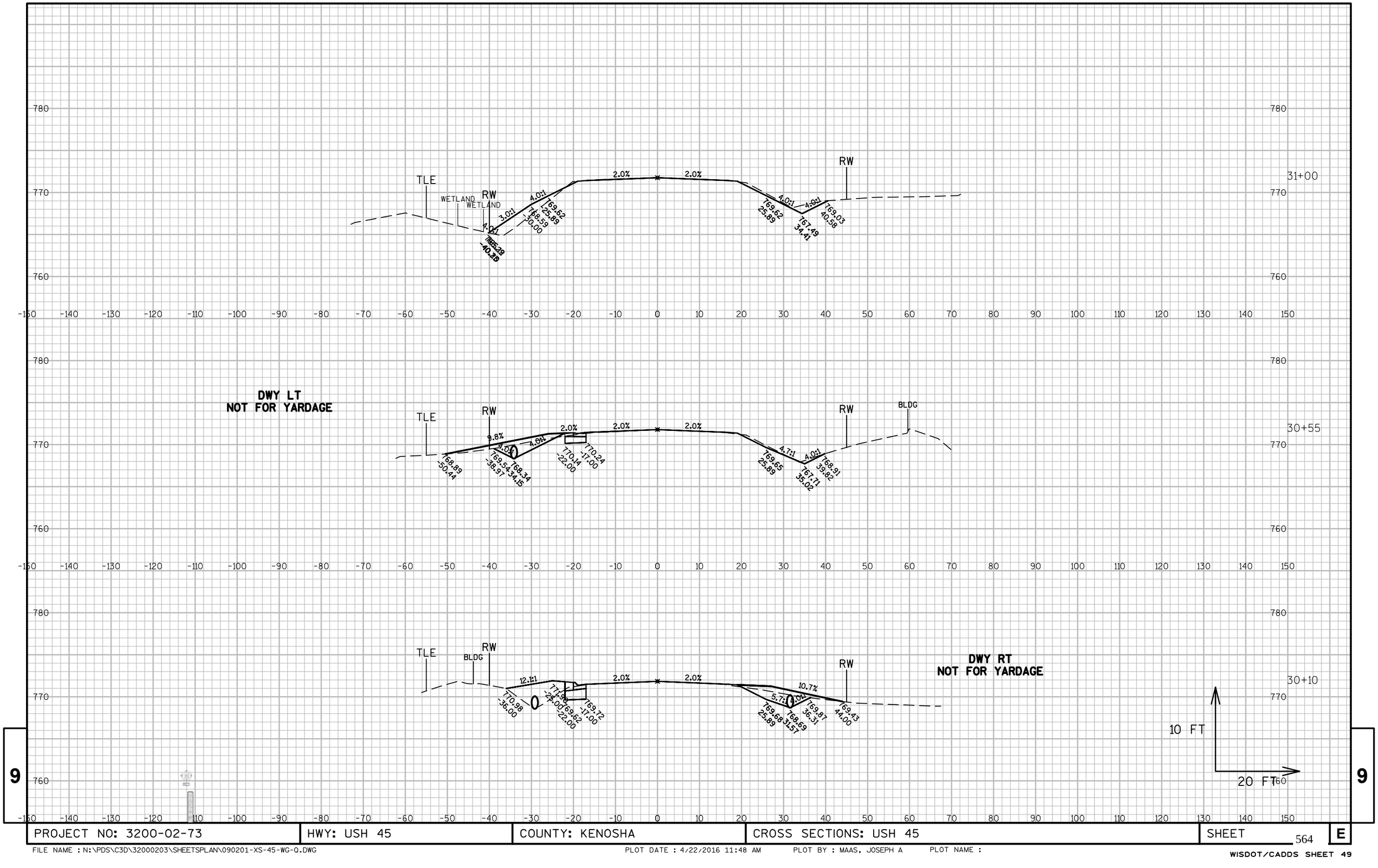
WISDOT/CADDS SHEET 49



PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: USH 45	SHEET 563	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090201-XS-45-WG-Q.DWG PLOT DATE : 4/22/2016 11:48 AM PLOT BY : MAAS, JOSEPH A PLOT NAME :

WISDOT/CADDS SHEET 49

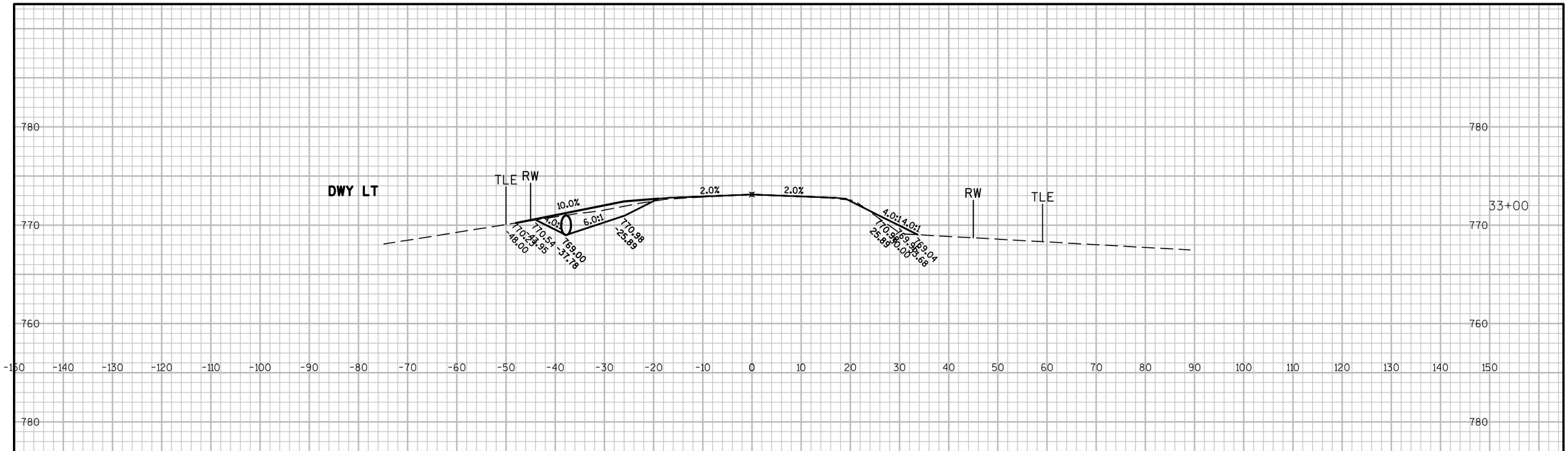


9

9

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: USH 45	SHEET 564	E

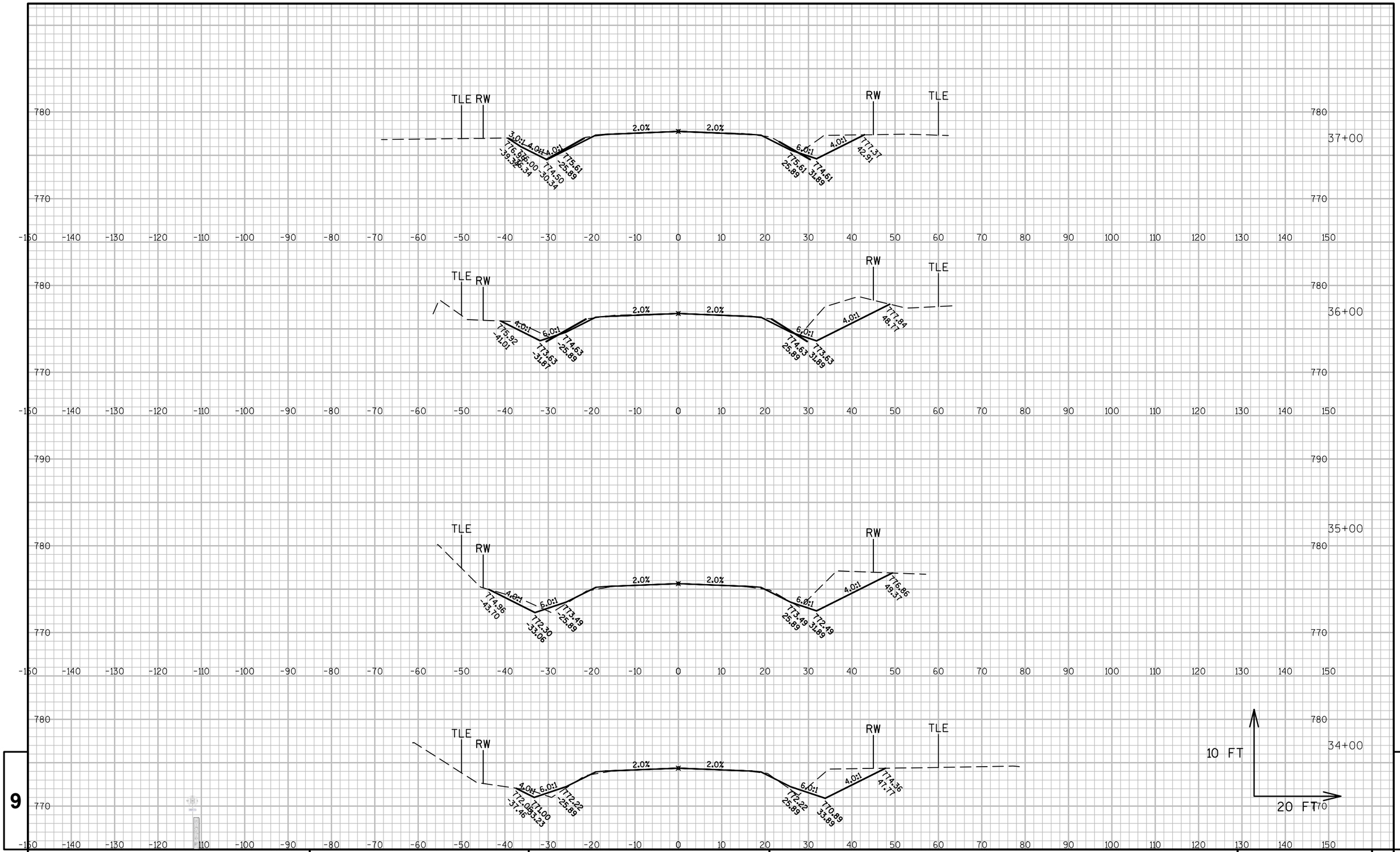
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PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: USH 45	SHEET 565	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090201-XS-45-WG-Q.DWG PLOT DATE : 4/22/2016 11:48 AM PLOT BY : MAAS, JOSEPH A PLOT NAME :

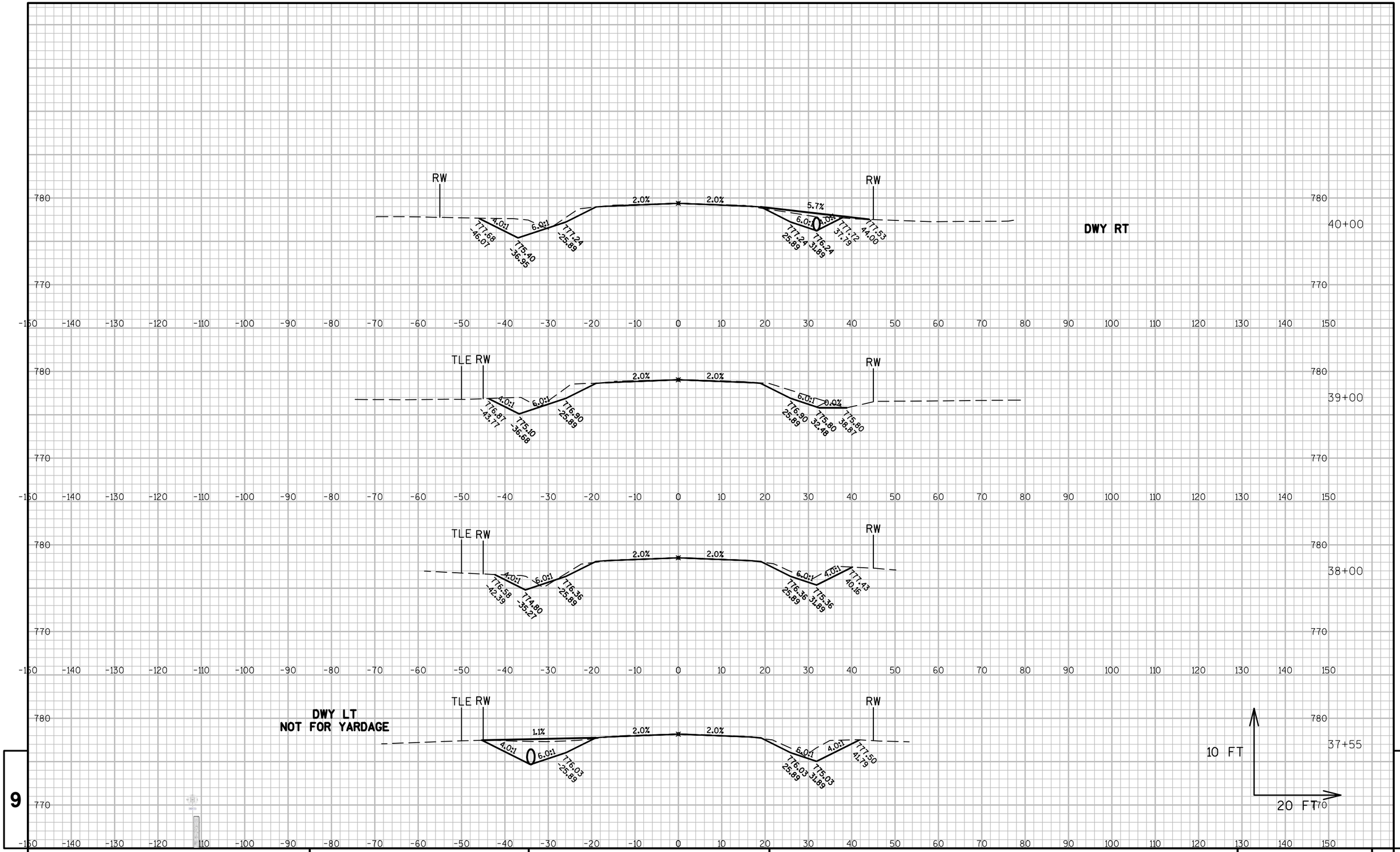
WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: USH 45	SHEET 566	E



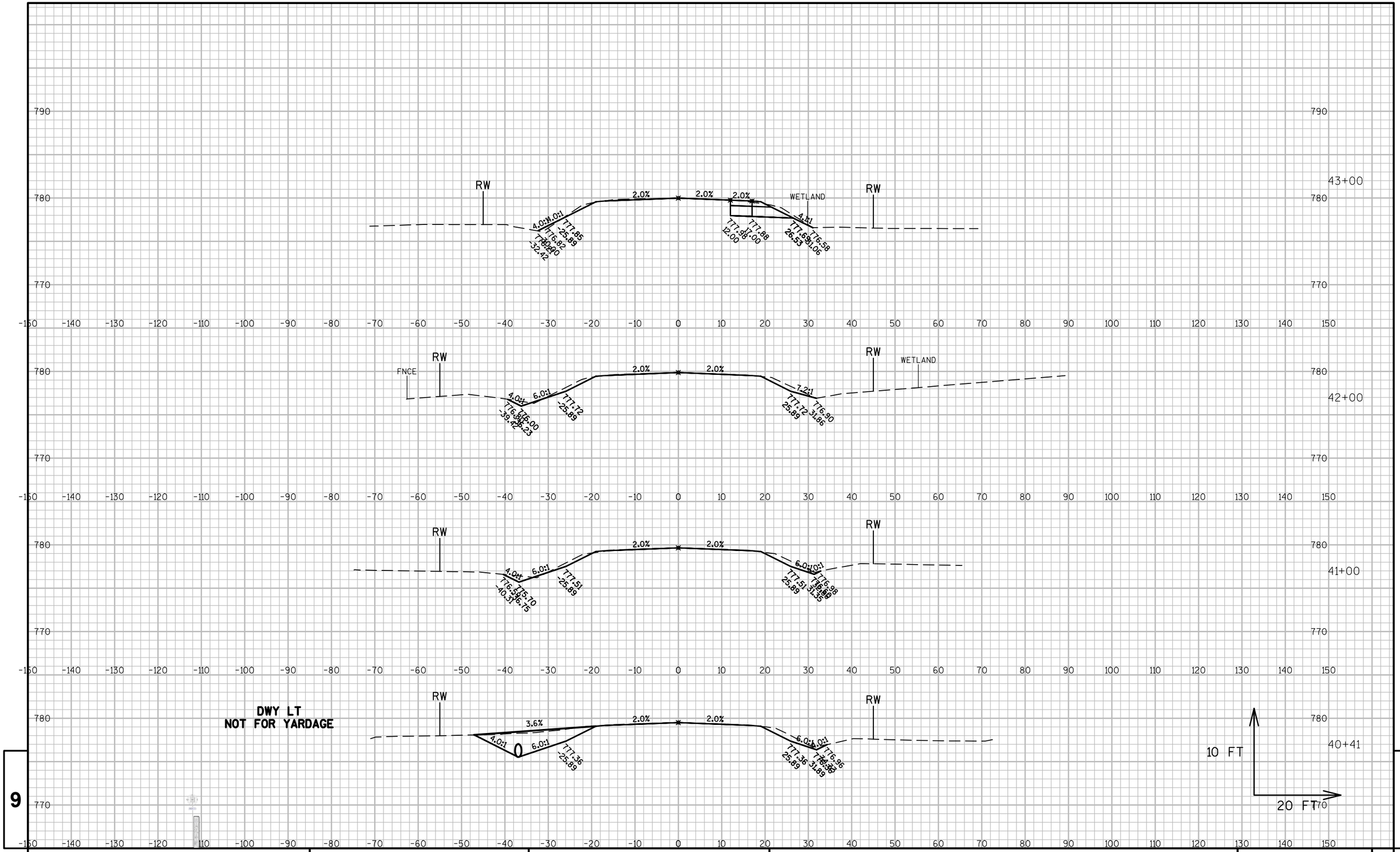
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9

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: USH 45	SHEET 567	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090201-XS-45-WG-Q.DWG PLOT DATE : 4/22/2016 11:49 AM PLOT BY : MAAS, JOSEPH A PLOT NAME :

WISDOT/CADDS SHEET 49



9

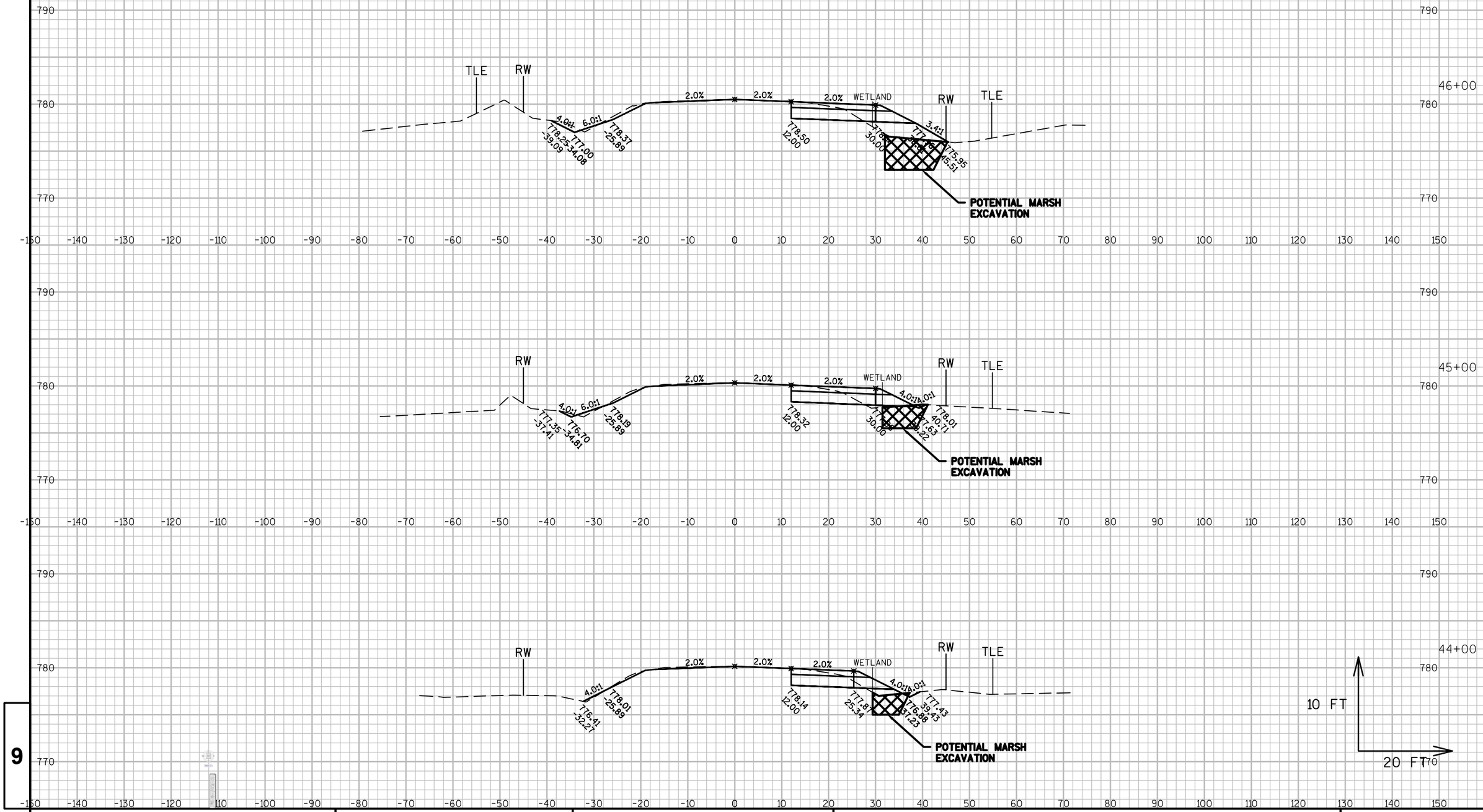
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PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: USH 45	SHEET 568	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090201-XS-45-WG-Q.DWG PLOT DATE : 4/22/2016 11:49 AM PLOT BY : MAAS, JOSEPH A PLOT NAME :

WISDOT/CADDS SHEET 49

*POTENTIAL MARSH EXCAVATION FROM 43+50-48+50
SEE CONSTRUCTION DETAIL



9

9

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: USH 45	SHEET 569	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090201-XS-45-WG-Q.DWG PLOT DATE : 4/22/2016 11:49 AM PLOT BY : MAAS, JOSEPH A PLOT NAME :

WISDOT/CADDS SHEET 49

*POTENTIAL MARSH EXCAVATION FROM 43+50-48+50
SEE CONSTRUCTION DETAIL

CTH CJ/121ST STREET

MATCH 121ST STREET
STA 49+25

MATCH CTH CJ
STA 50+75

2.0% 2.0%

779.23
31.01

779.13
66.10

49+00

RW

4.0:1 6.0:1

779.62
-43.18

777.69
-35.45

778.60
-30.01

778.61
-19.54

778.96
-12.00

2.0% 2.0% 2.0% 2.0%

778.96
12.00

WETLAND

3.0:1

778.68
30.00

778.86
45.96

RW
WETLAND

48+00

POTENTIAL MARSH
EXCAVATION

TLE

RW

4.0:1 6.0:1

781.60
-50.45

777.35
-33.43

778.61
-25.89

2.0% 2.0% 2.0% WETLAND

778.74
12.00

RW

3.0:1

778.36
30.00

778.86
45.96

TLE

47+00

POTENTIAL MARSH
EXCAVATION

10 FT

20 FT

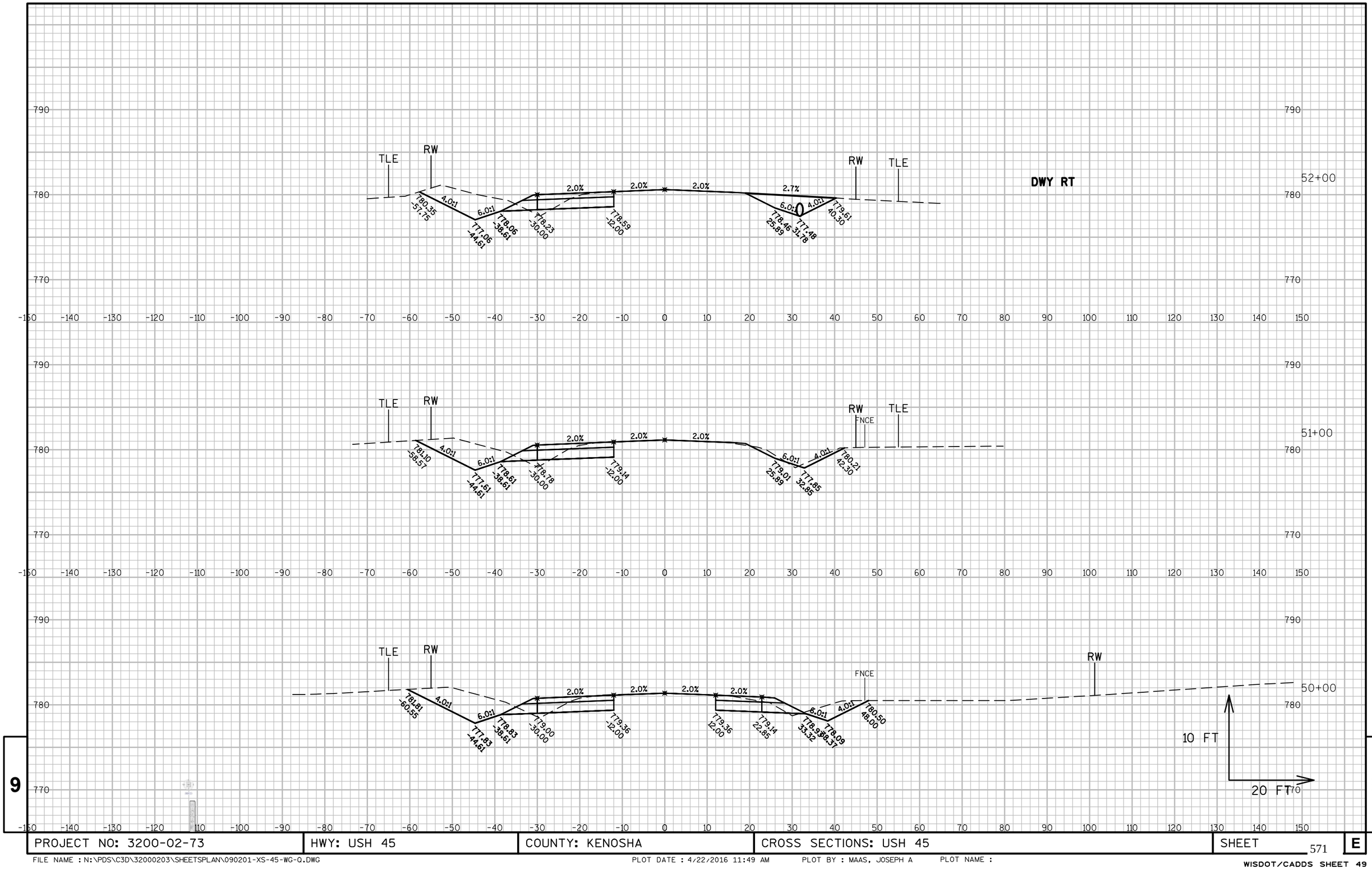
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9

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: USH 45	SHEET 570	E

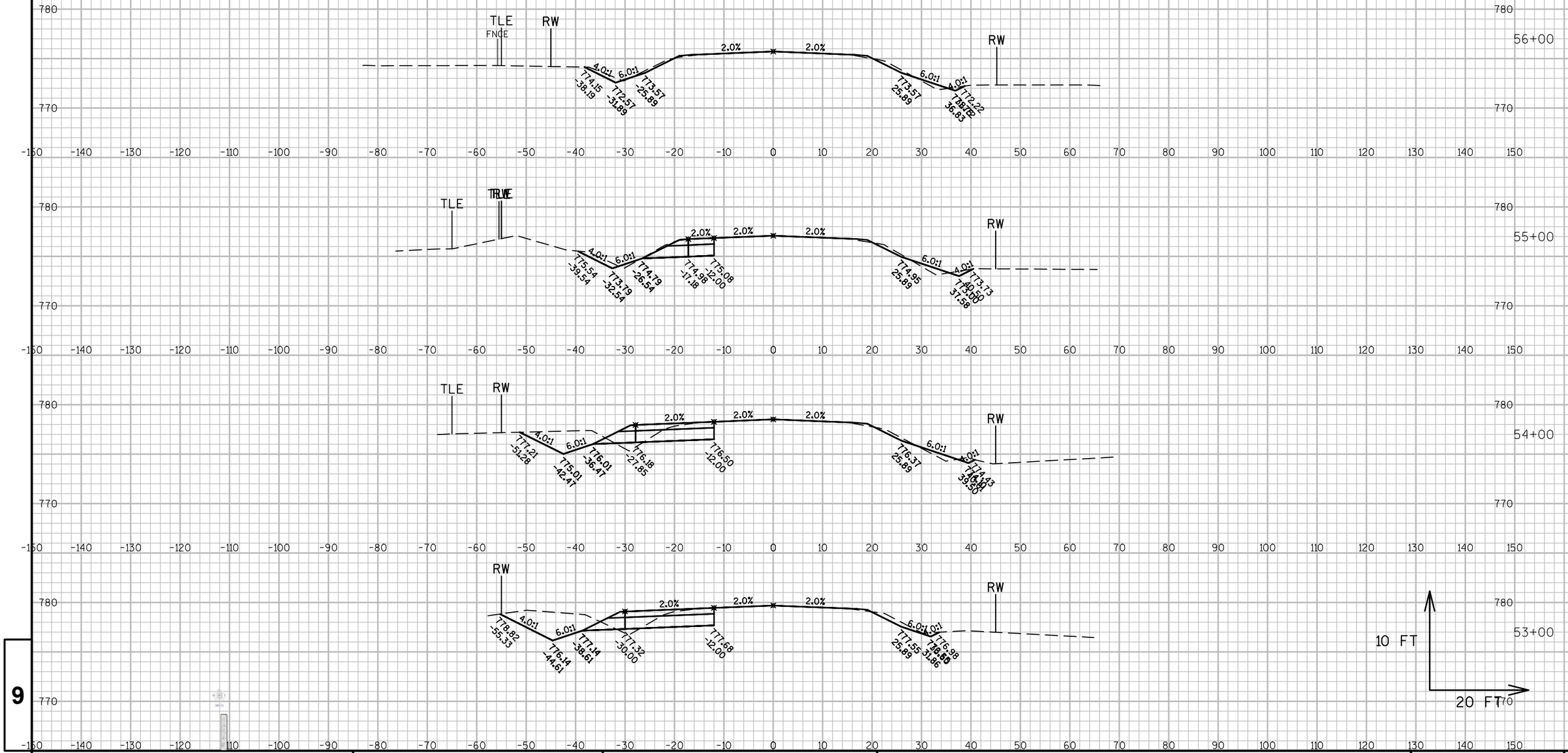
FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090201-XS-45-WG-Q.DWG PLOT DATE : 4/22/2016 11:49 AM PLOT BY : MAAS, JOSEPH A PLOT NAME :

WISDOT/CADDS SHEET 49



PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: USH 45	SHEET 571	E

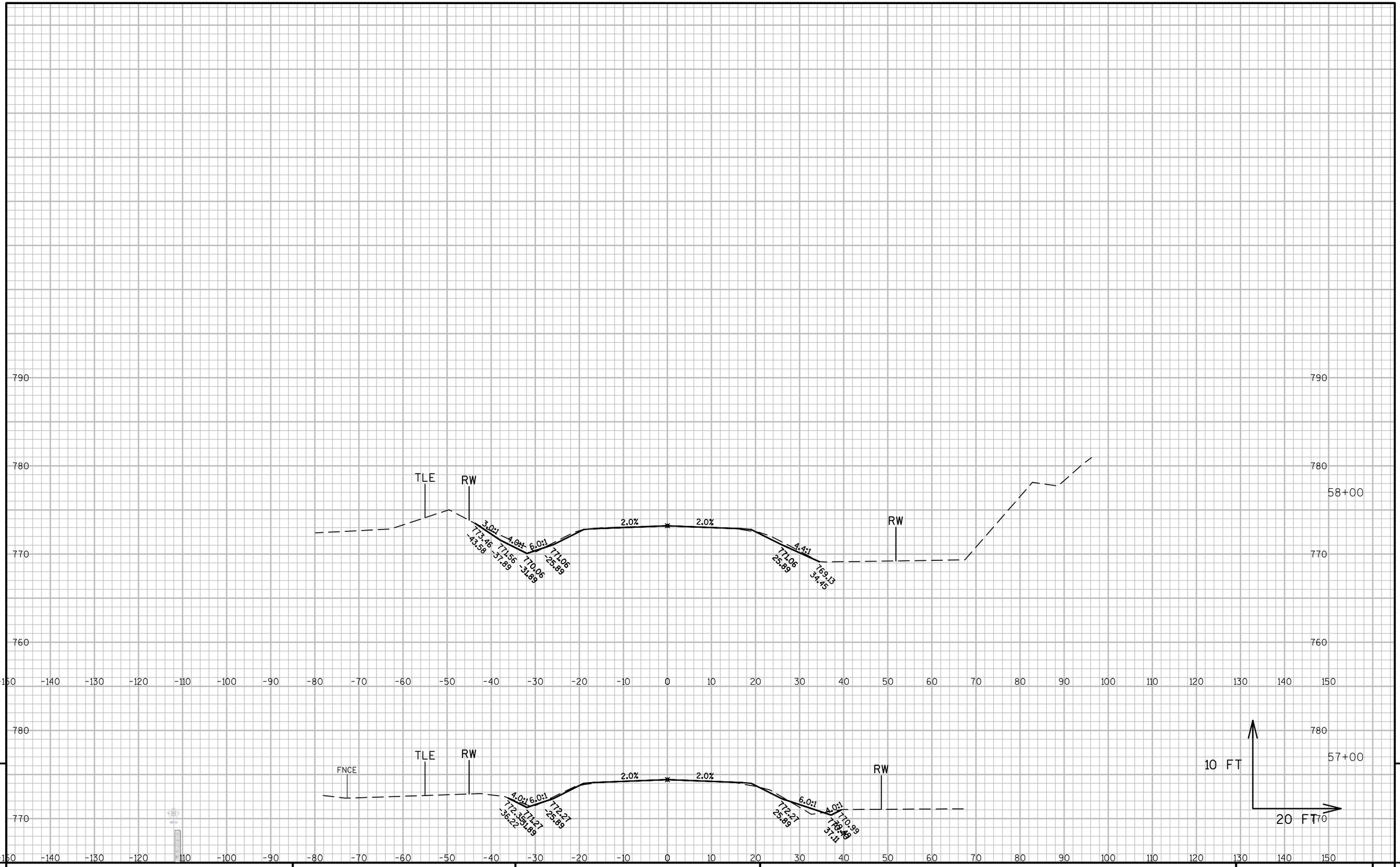
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PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: USH 45	SHEET 572	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090201-XS-45-WG-Q.DWG PLOT DATE : 4/22/2016 11:49 AM PLOT BY : MAAS, JOSEPH A PLOT NAME :

WISDOT/CADDS SHEET 49

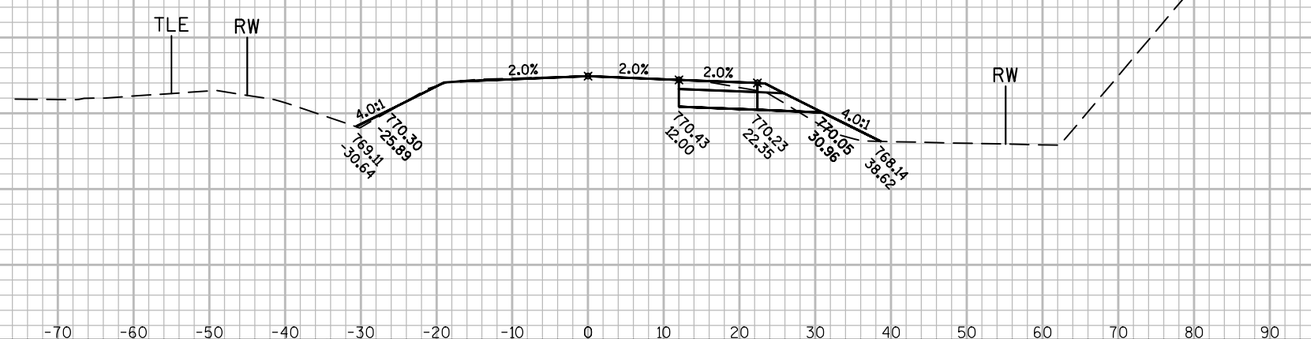


PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: USH 45	SHEET 573	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090201-XS-45-WG-Q.DWG PLOT DATE : 4/22/2016 11:49 AM PLOT BY : MAAS, JOSEPH A PLOT NAME :

WISDOT/CADDS SHEET 49





790 780 770 760

-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

60+00

59+00

10 FT

20 FT

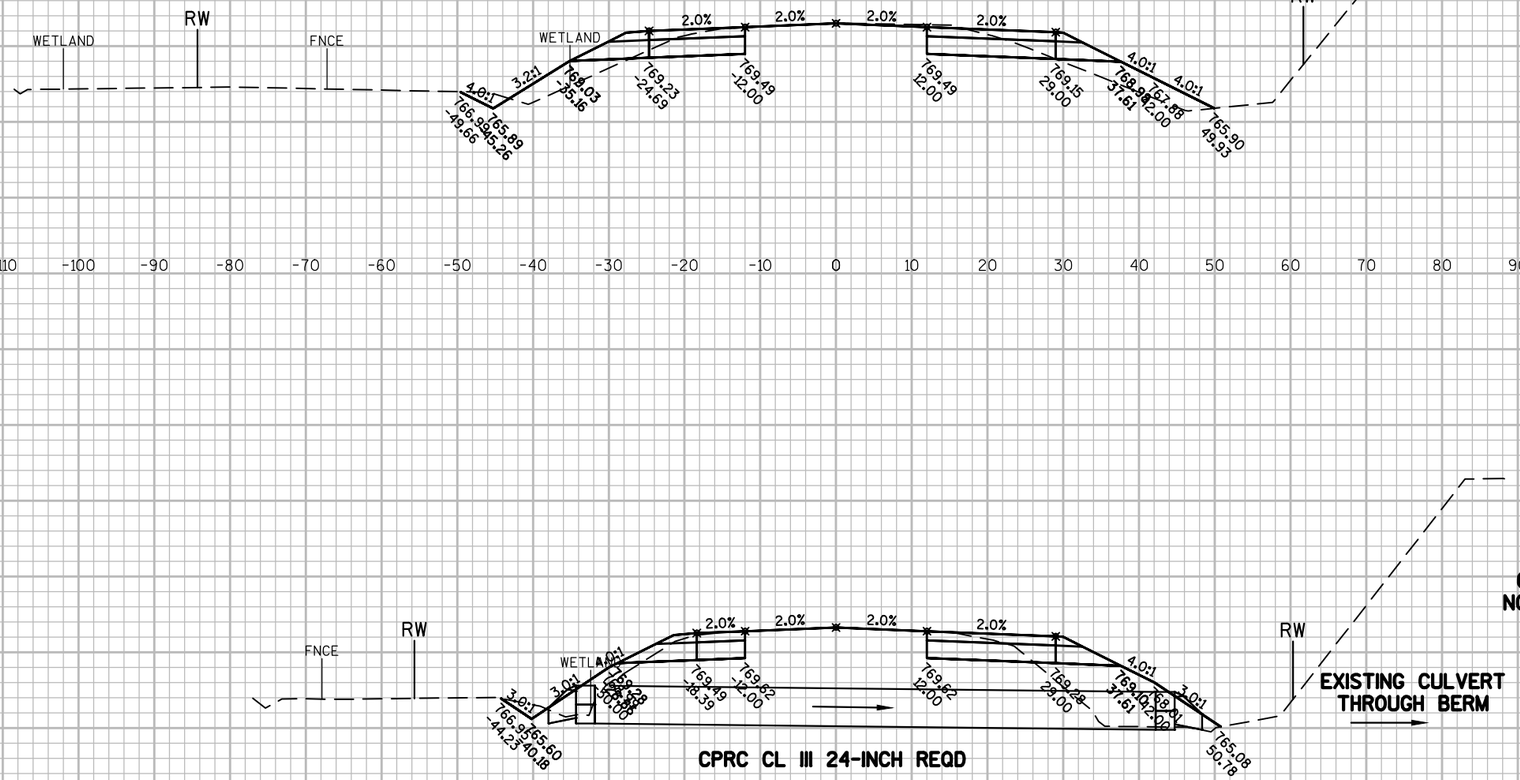
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9

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: USH 45	SHEET 574	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090201-XS-45-WG-Q.DWG PLOT DATE : 4/22/2016 11:50 AM PLOT BY : MAAS, JOSEPH A PLOT NAME :

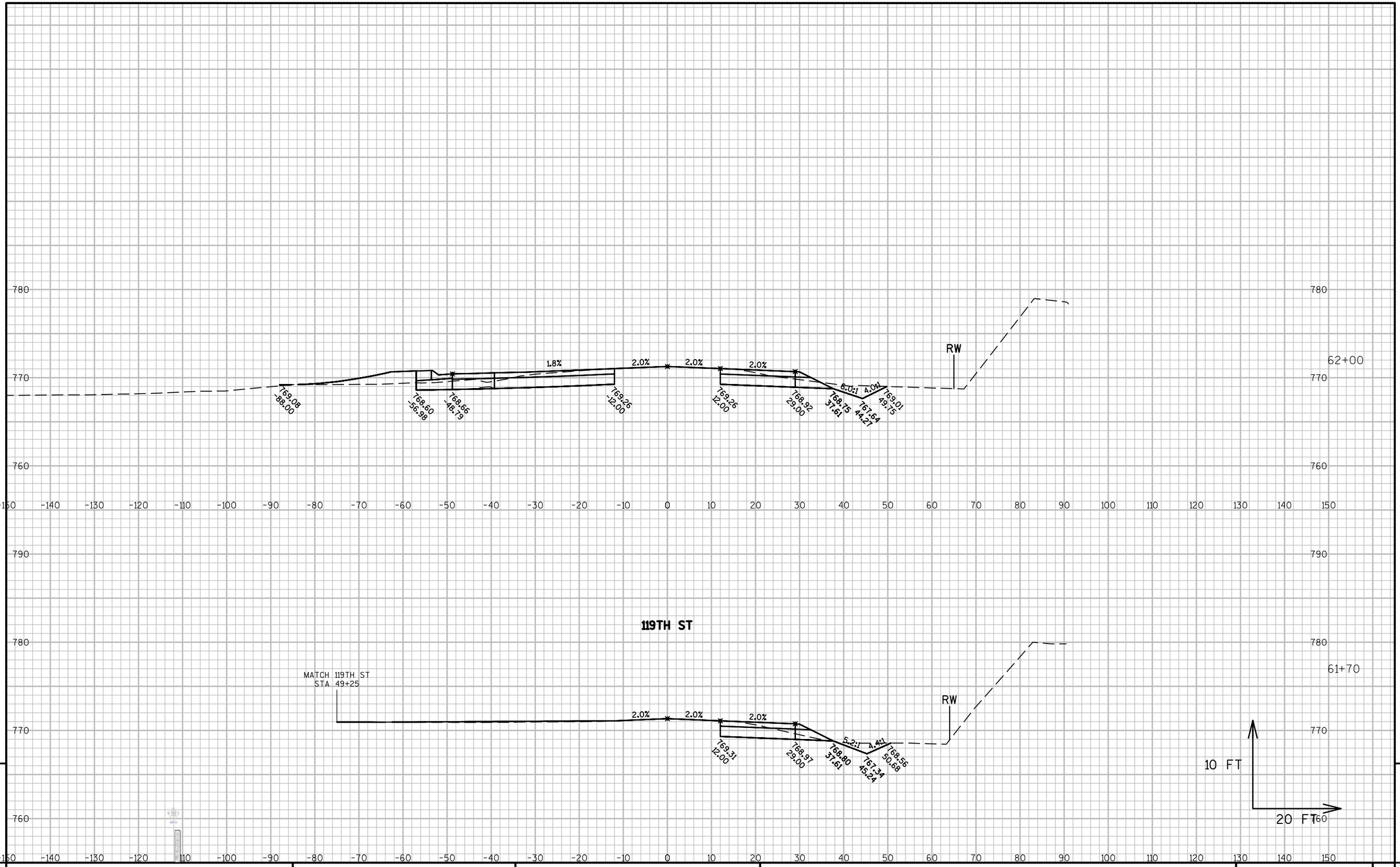
WISDOT/CADDS SHEET 49



9

9

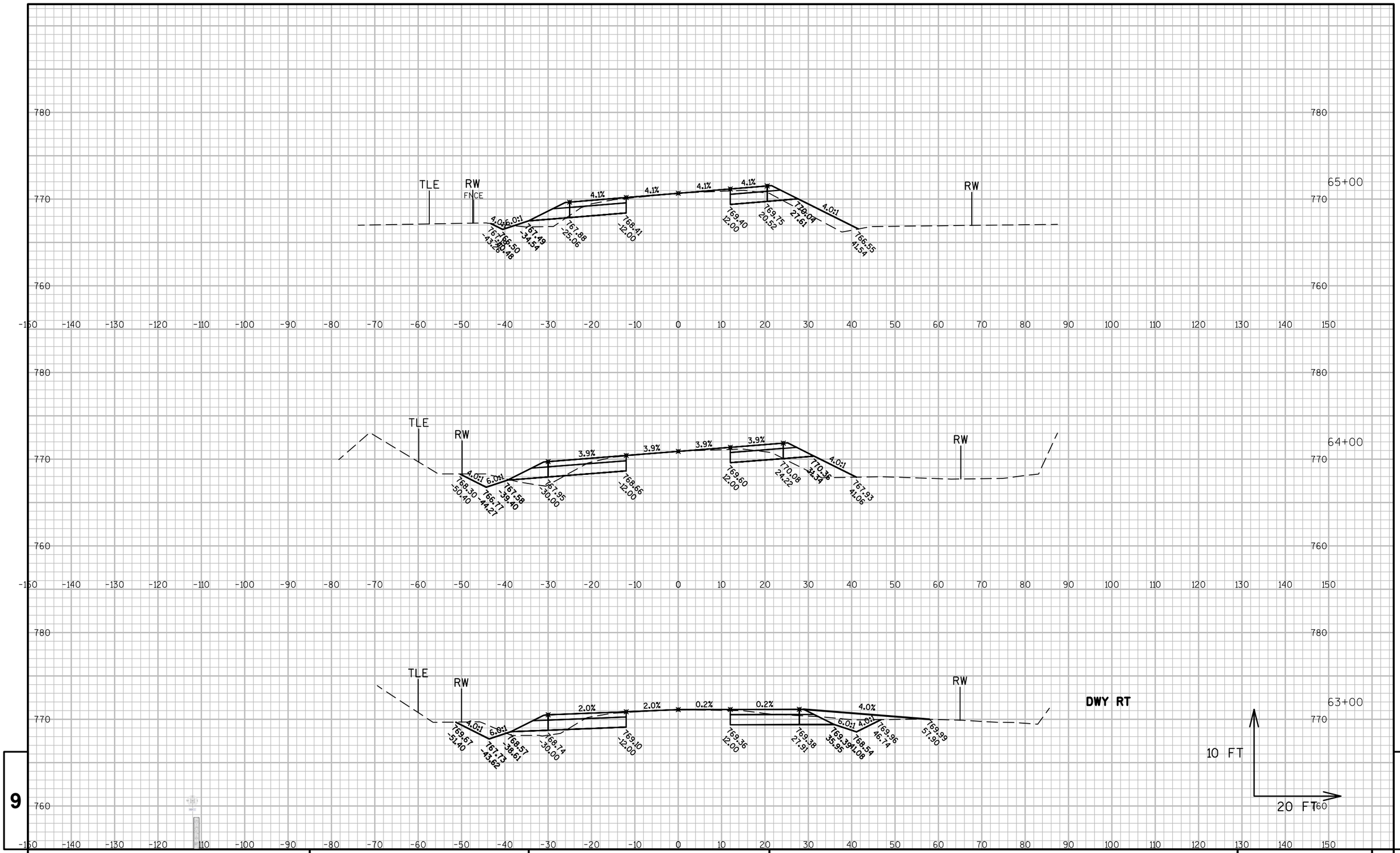
PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: USH 45	SHEET 575	E



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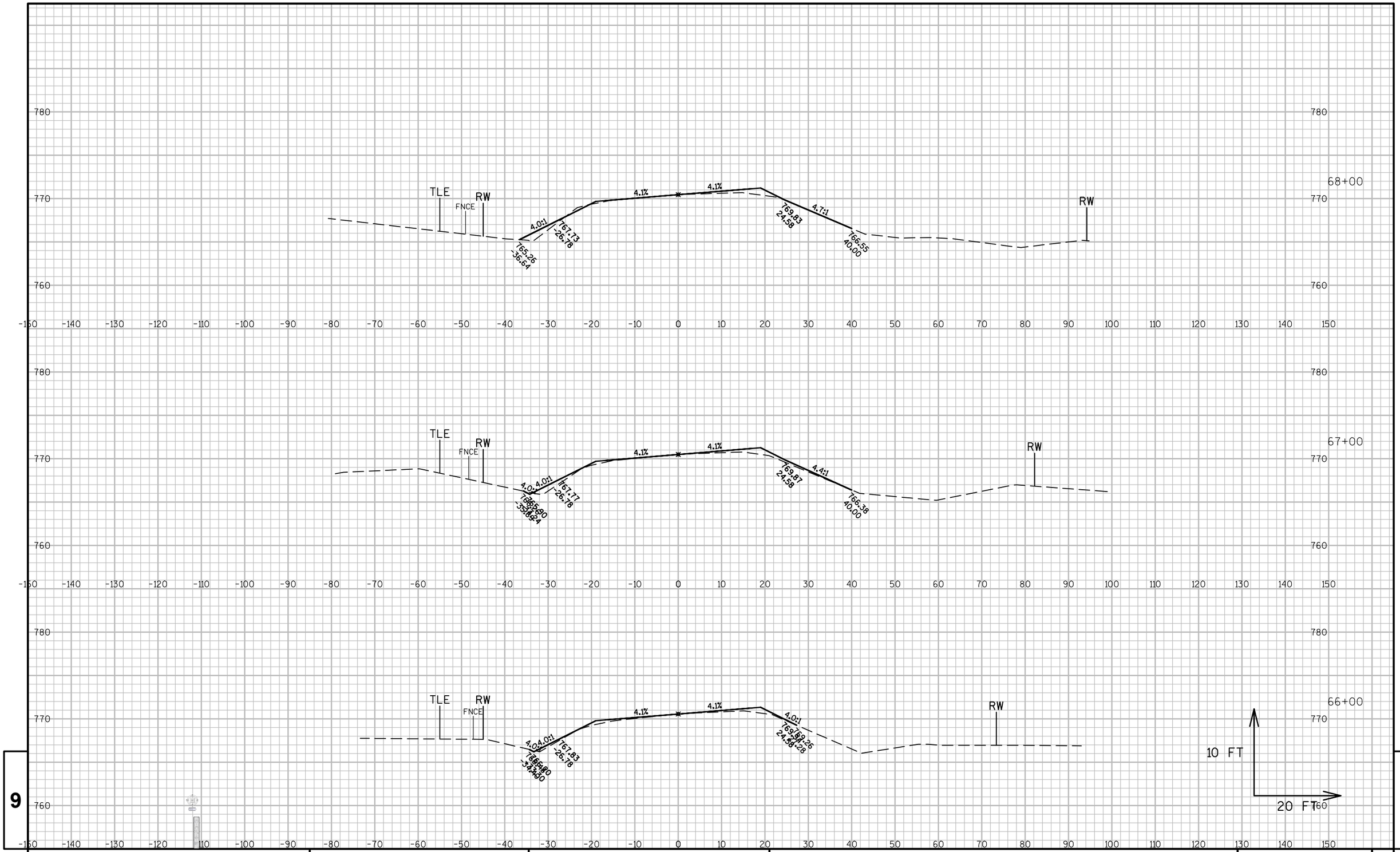
PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: USH 45	SHEET 576	E



PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: USH 45	SHEET 577	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090201-XS-45-WG-Q.DWG PLOT DATE : 4/22/2016 11:50 AM PLOT BY : MAAS, JOSEPH A PLOT NAME :

WISDOT/CADDS SHEET 49



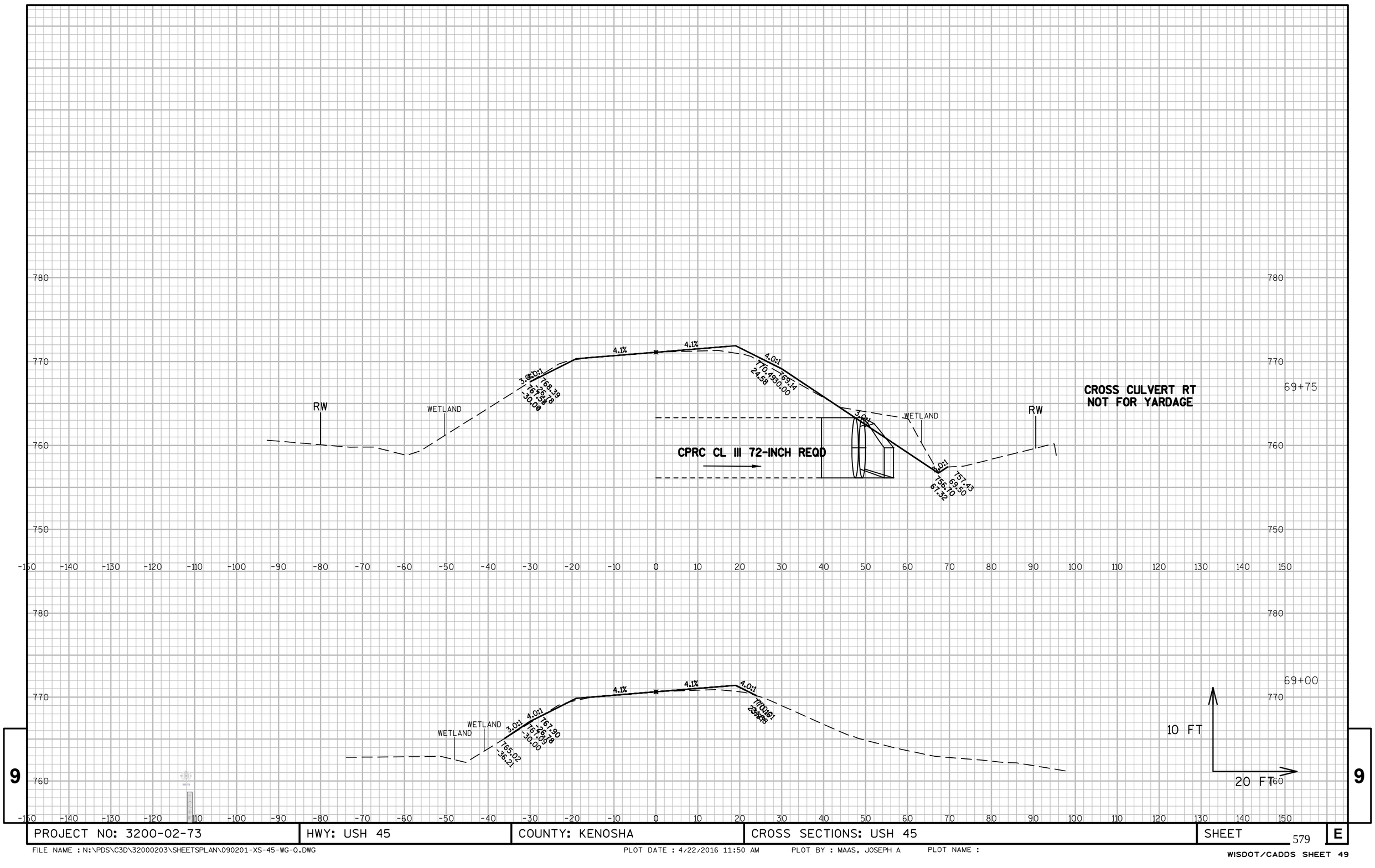
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PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: USH 45	SHEET 578	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090201-XS-45-WG-Q.DWG PLOT DATE : 4/22/2016 11:50 AM PLOT BY : MAAS, JOSEPH A PLOT NAME :

WISDOT/CADDS SHEET 49



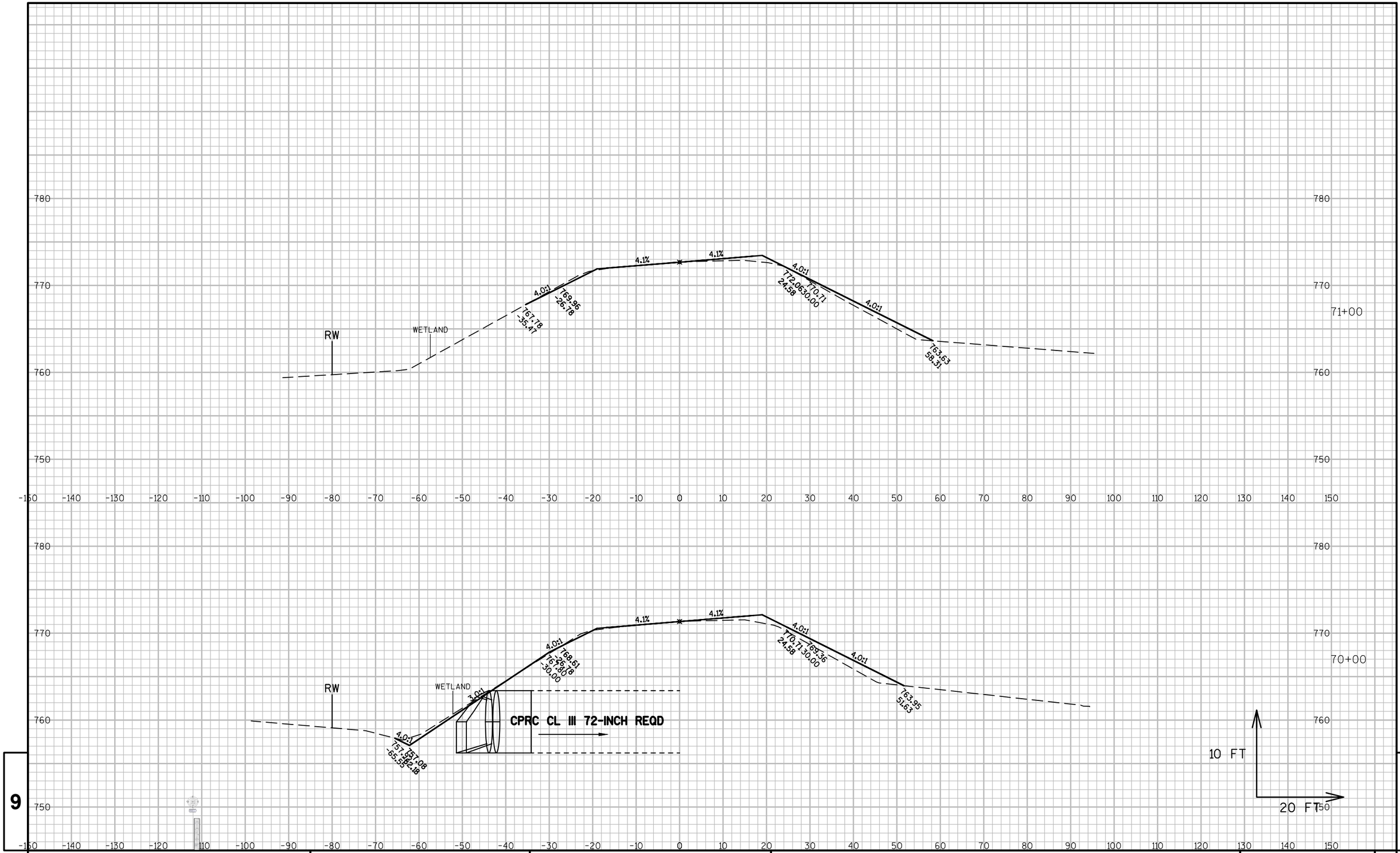
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PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: USH 45	SHEET 579	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090201-XS-45-WG-Q.DWG PLOT DATE : 4/22/2016 11:50 AM PLOT BY : MAAS, JOSEPH A PLOT NAME :

WISDOT/CADDS SHEET 49



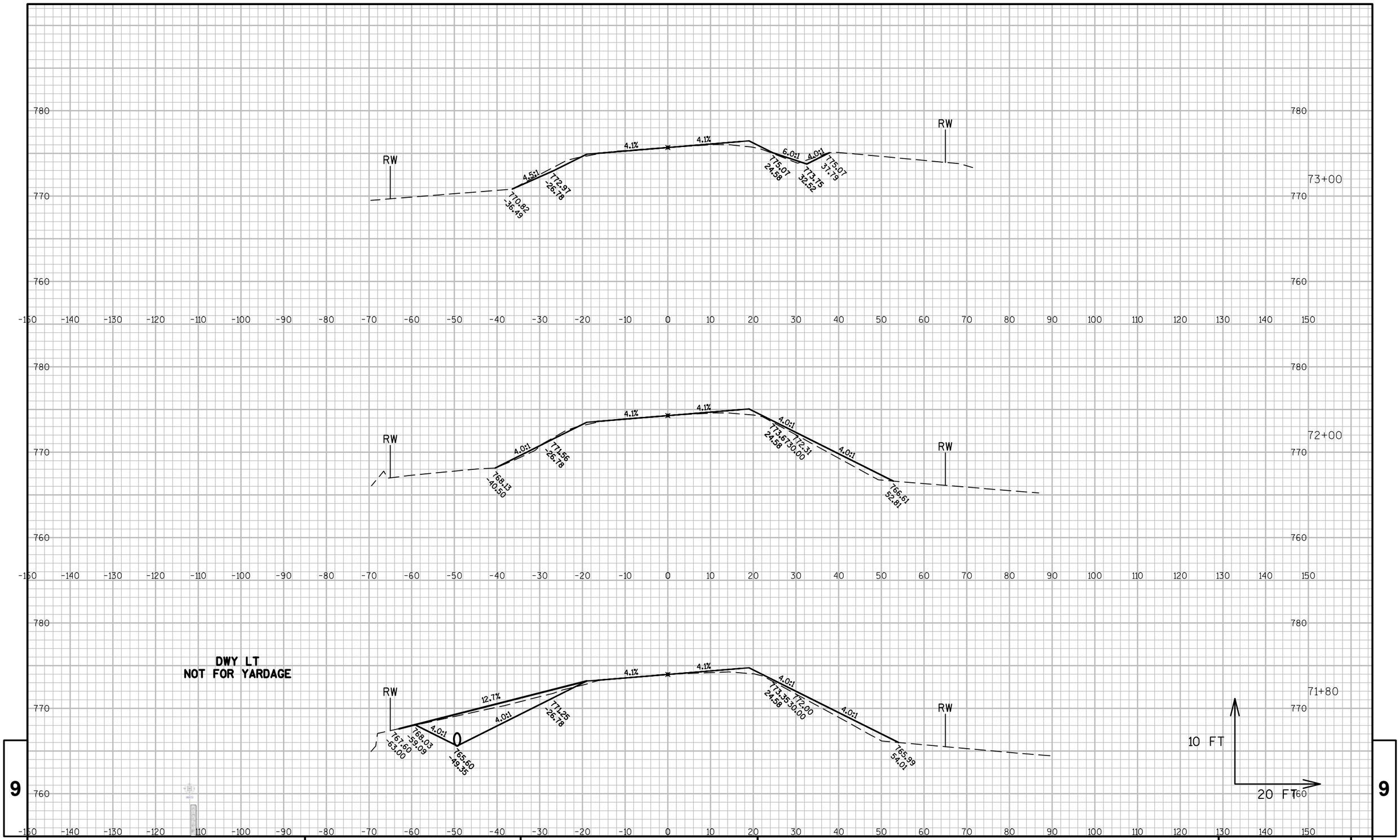
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PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: USH 45	SHEET 580	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090201-XS-45-WG-Q.DWG PLOT DATE : 4/22/2016 11:50 AM PLOT BY : MAAS, JOSEPH A PLOT NAME :

WISDOT/CADDS SHEET 49



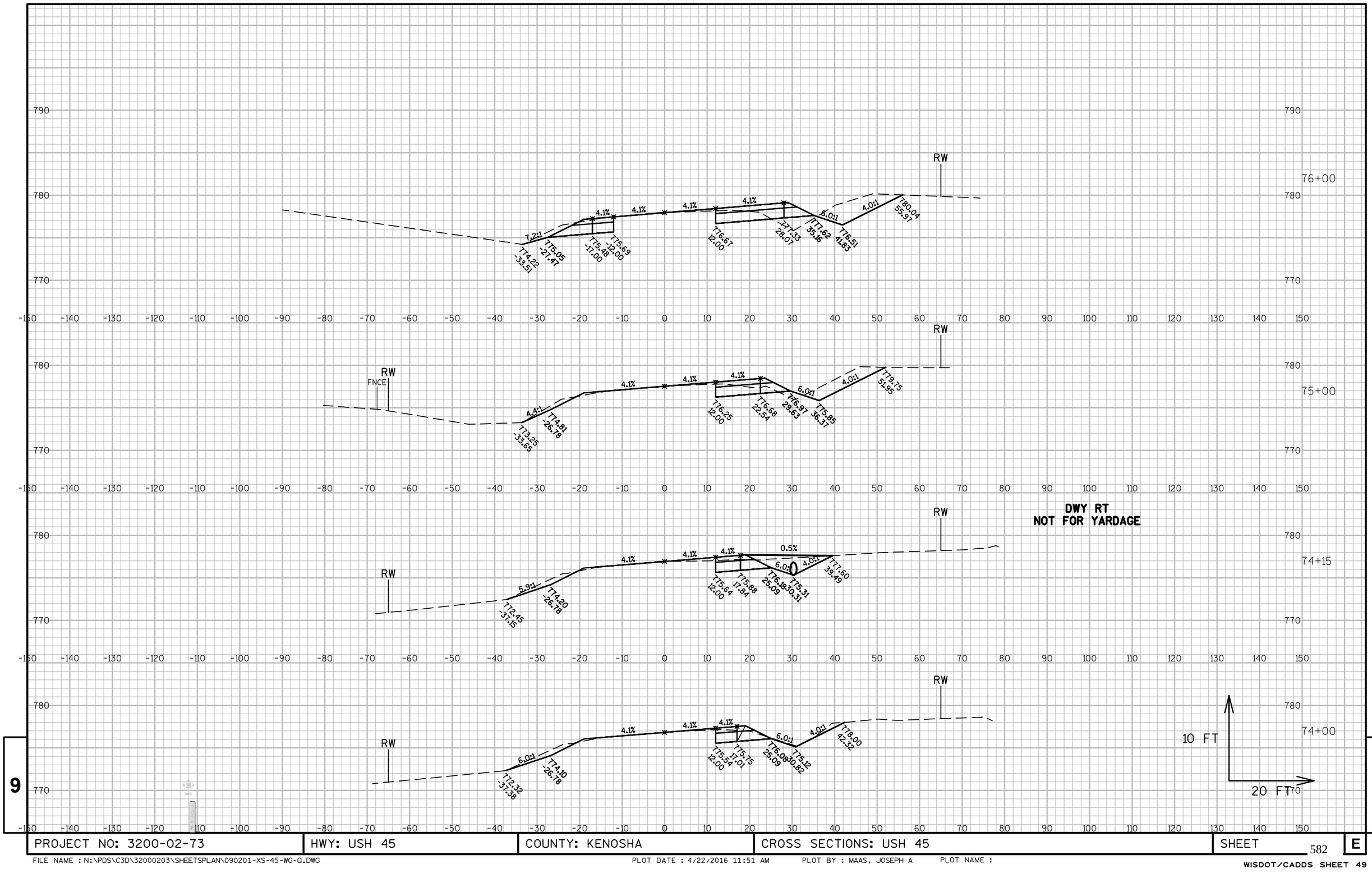
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PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: USH 45	SHEET 581	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090201-XS-45-WG-Q.DWG PLOT DATE : 4/22/2016 11:51 AM PLOT BY : MAAS, JOSEPH A PLOT NAME :

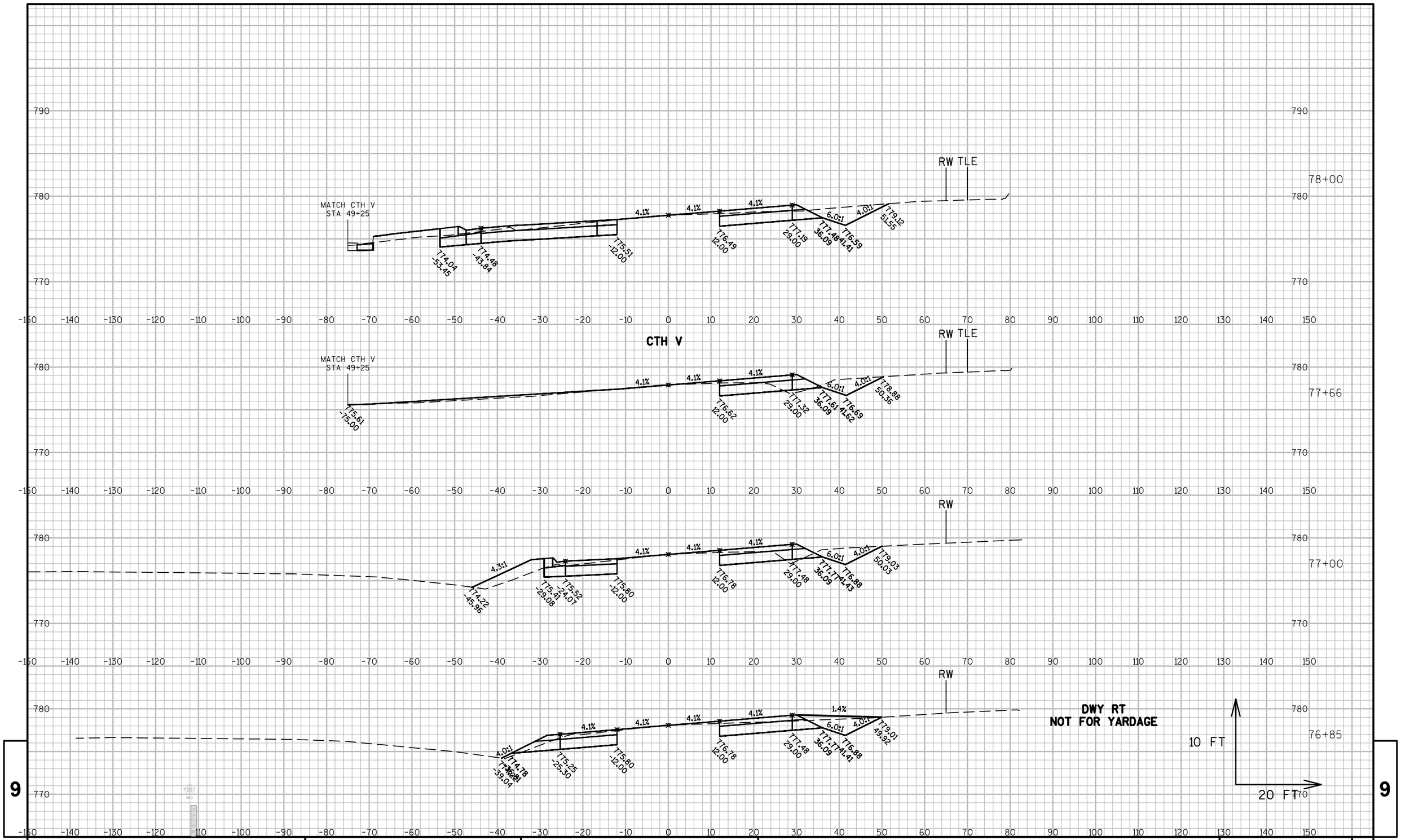
WISDOT/CADDS SHEET 49



PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: USH 45	SHEET 582	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090201-XS-45-WG-Q.DWG PLOT DATE : 4/22/2016 11:51 AM PLOT BY : MAAS, JOSEPH A PLOT NAME :

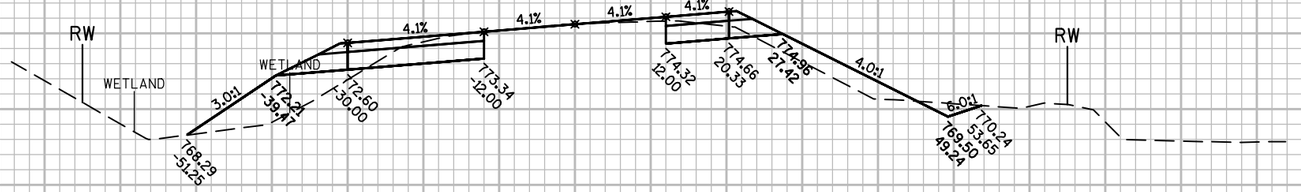
WISDOT/CADDS SHEET 49

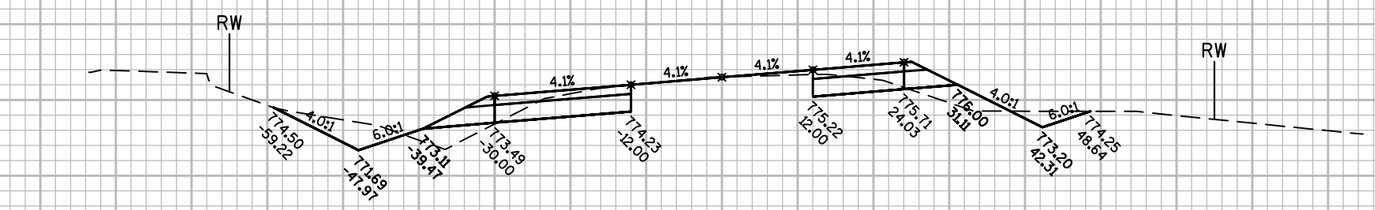


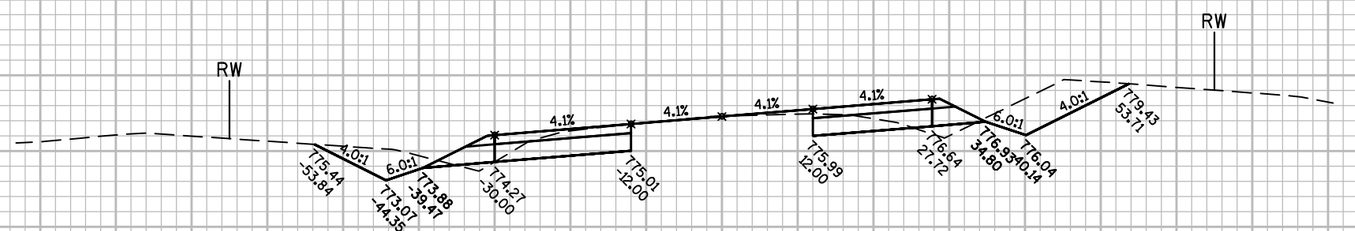
PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: USH 45	SHEET 583	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090201-XS-45-WG-Q.DWG PLOT DATE : 4/22/2016 11:51 AM PLOT BY : MAAS, JOSEPH A PLOT NAME :

WISDOT/CADDS SHEET 49









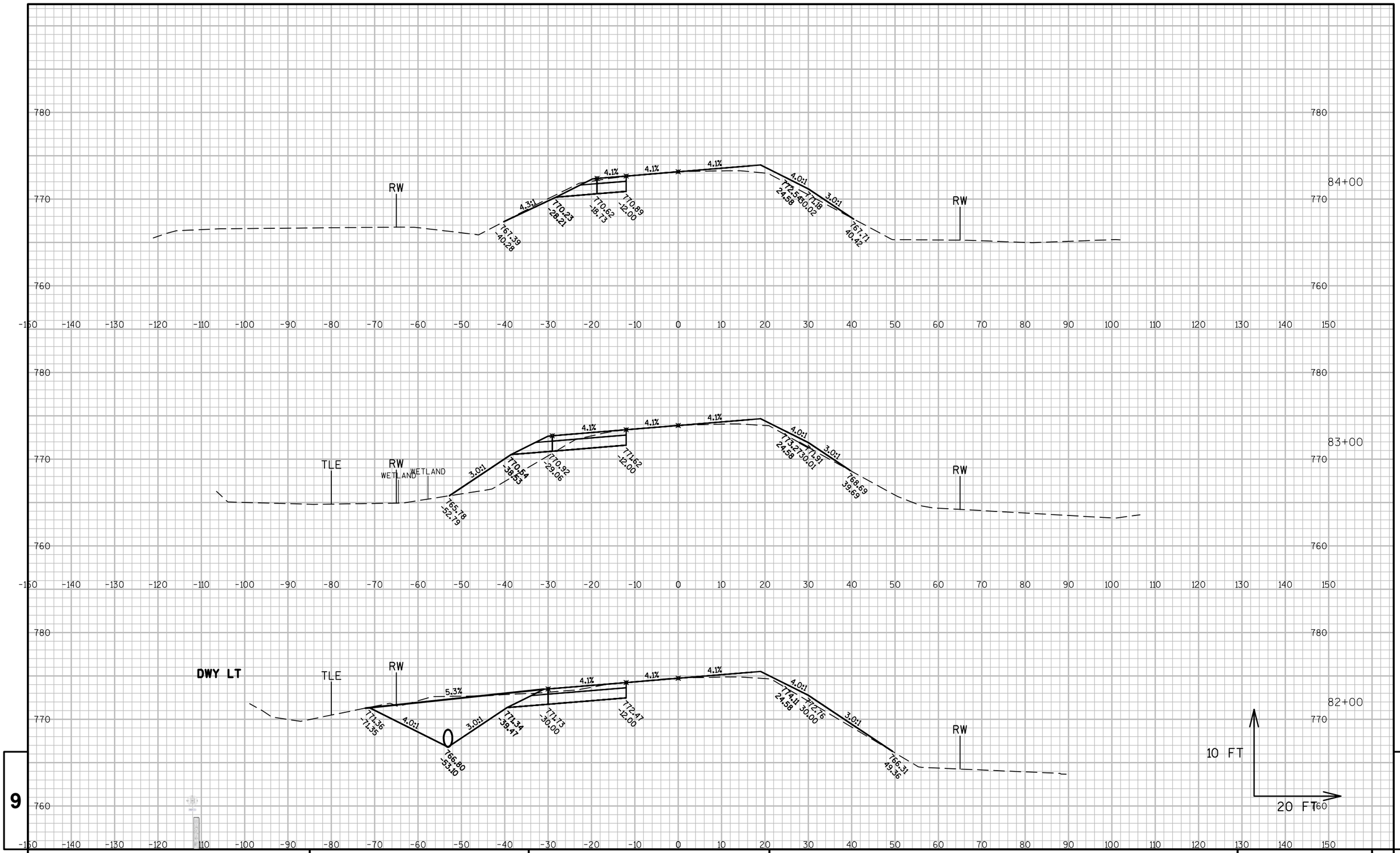
780
770
760
-150 -140 -130 -120 -110 -100 -90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150
81+00
80+00
79+00

9

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: USH 45	SHEET 584	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090201-XS-45-WG-Q.DWG PLOT DATE : 4/22/2016 11:51 AM PLOT BY : MAAS, JOSEPH A PLOT NAME :

WISDOT/CADDS SHEET 49



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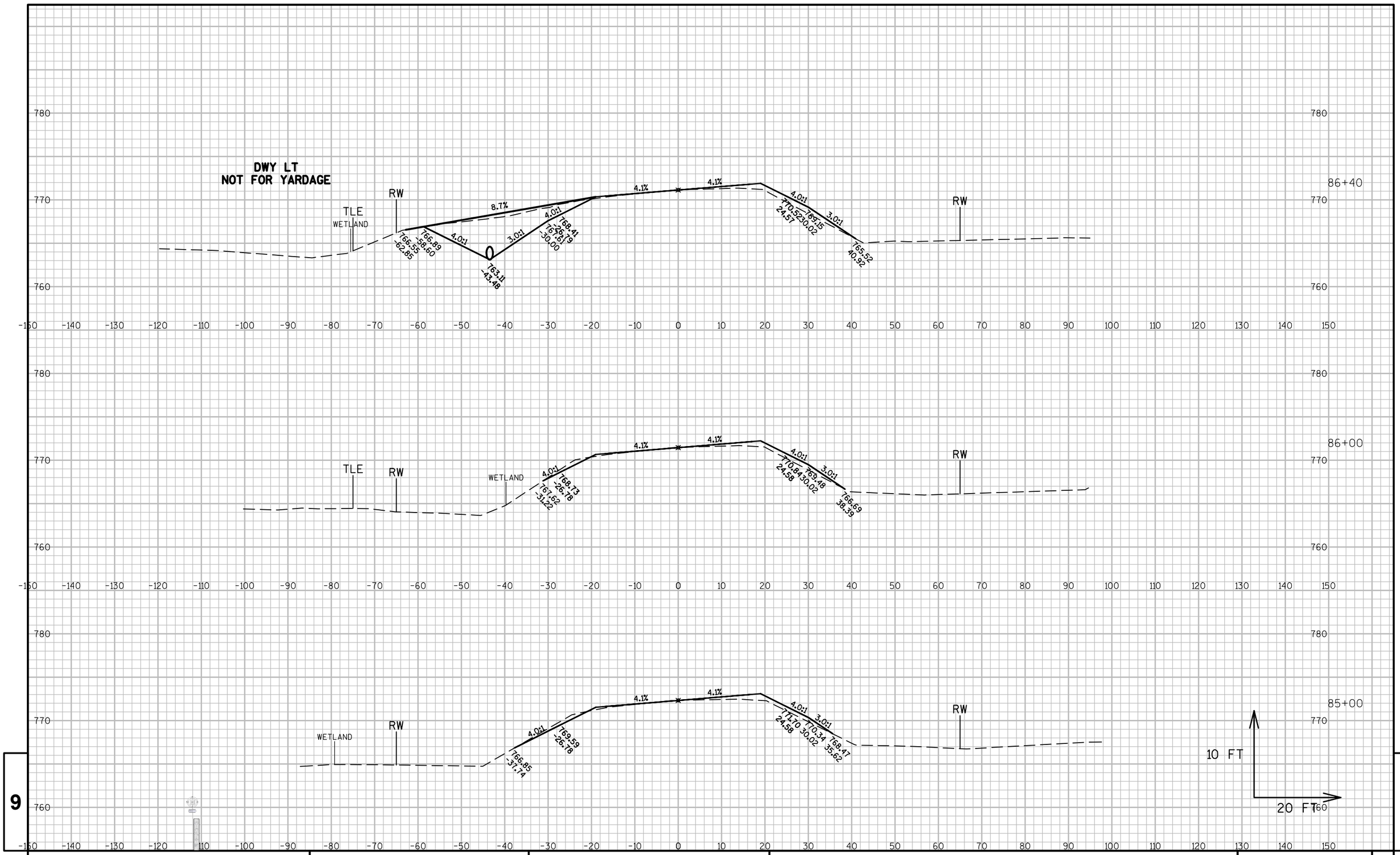
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PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: USH 45	SHEET 585	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090201-XS-45-WG-Q.DWG PLOT DATE : 4/22/2016 11:51 AM PLOT BY : MAAS, JOSEPH A PLOT NAME :

WISDOT/CADDS SHEET 49

DWY LT
NOT FOR YARDAGE



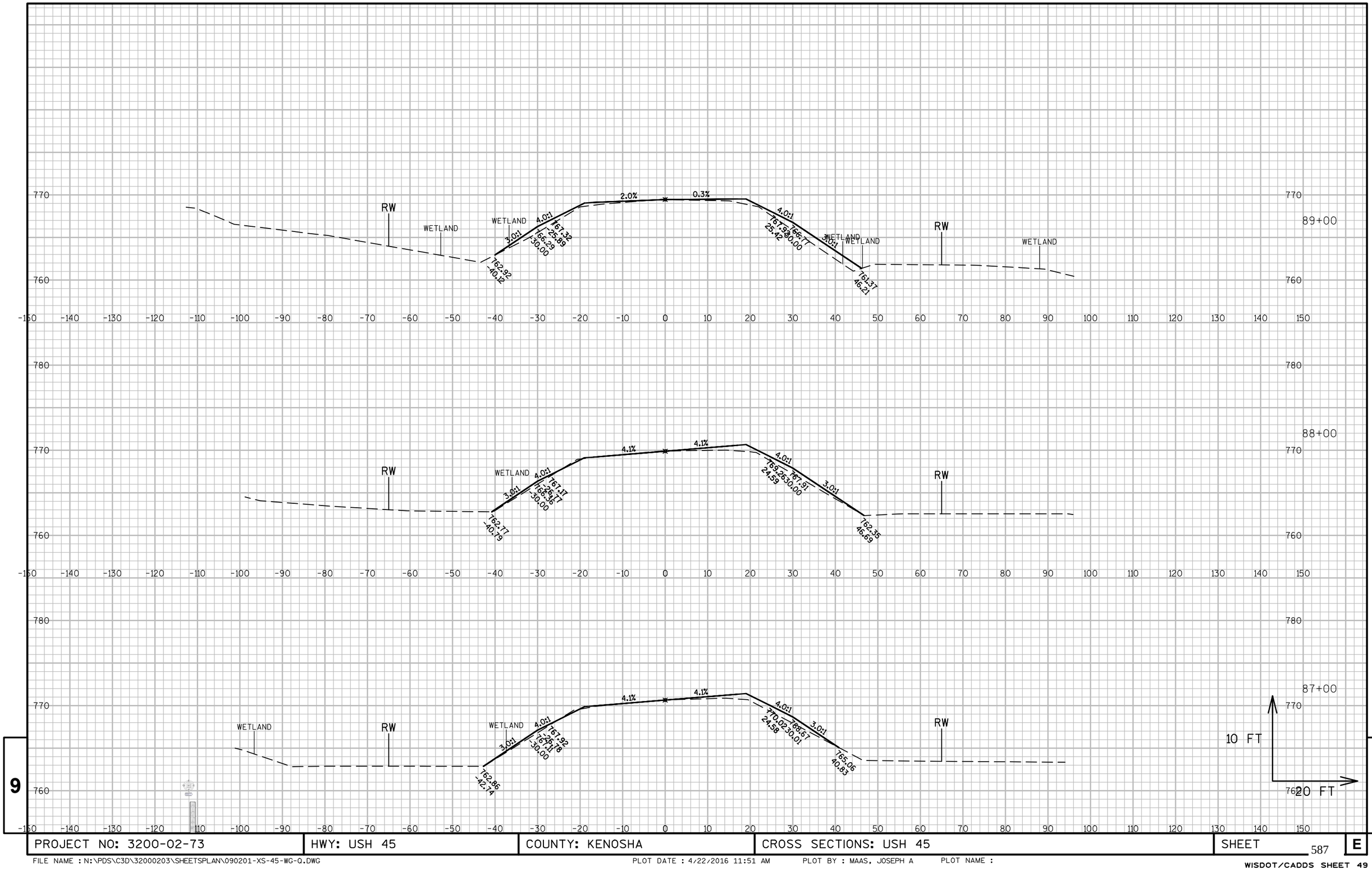
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PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: USH 45	SHEET 586	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090201-XS-45-WG-Q.DWG PLOT DATE : 4/22/2016 11:51 AM PLOT BY : MAAS, JOSEPH A PLOT NAME :

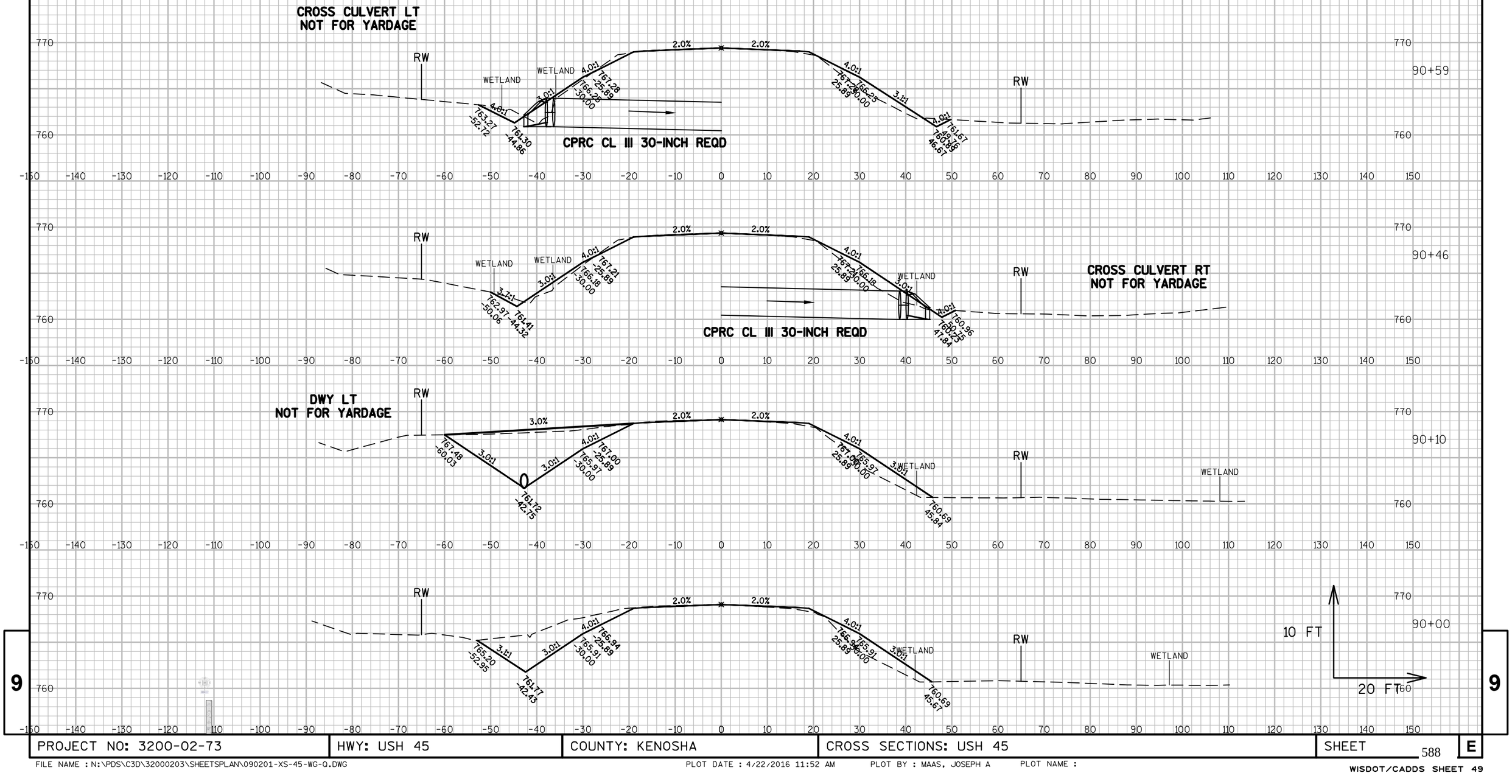
WISDOT/CADDS SHEET 49



PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: USH 45	SHEET 587	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090201-XS-45-WG-Q.DWG PLOT DATE : 4/22/2016 11:51 AM PLOT BY : MAAS, JOSEPH A PLOT NAME :

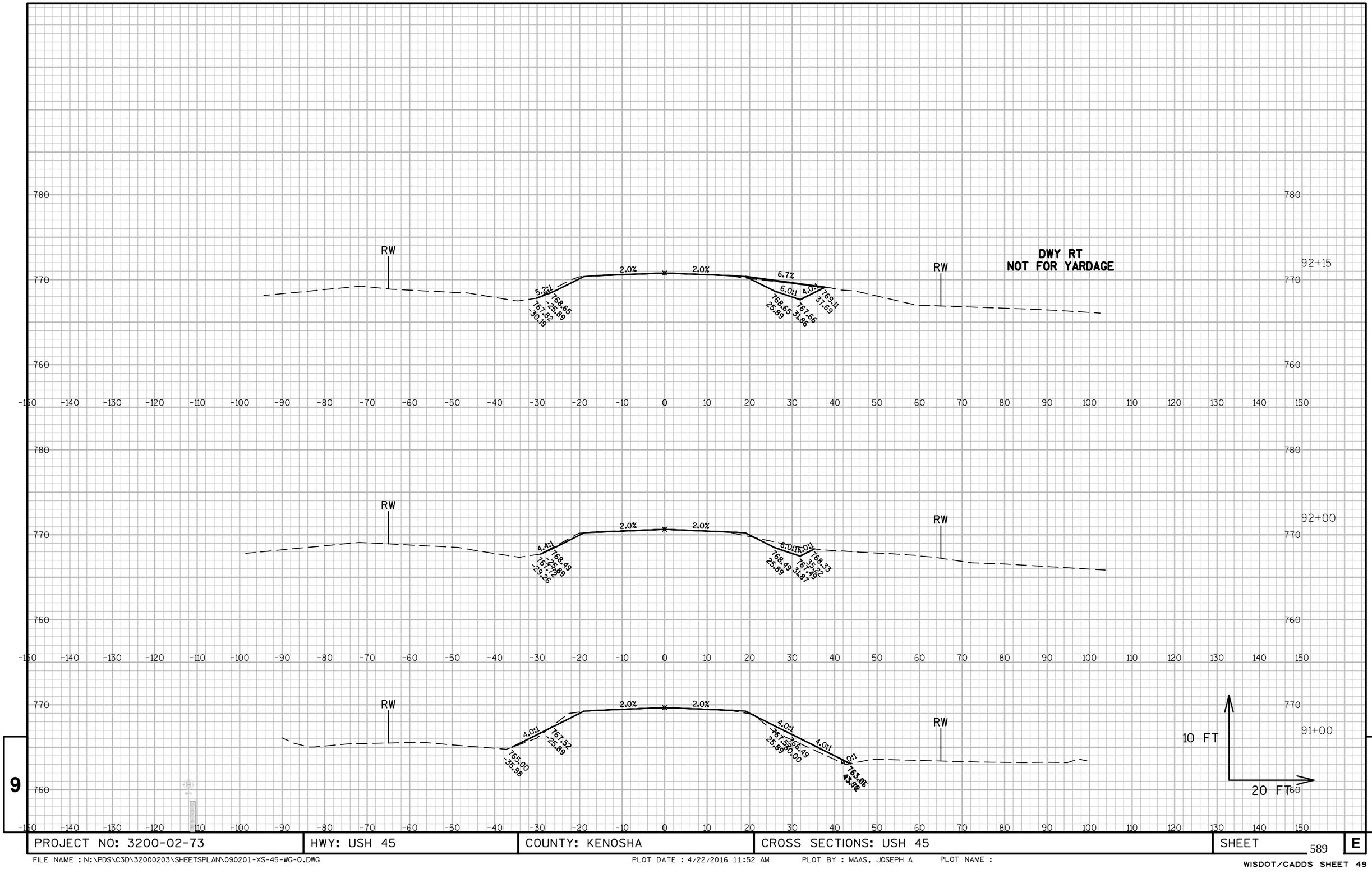
WISDOT/CADDS SHEET 49



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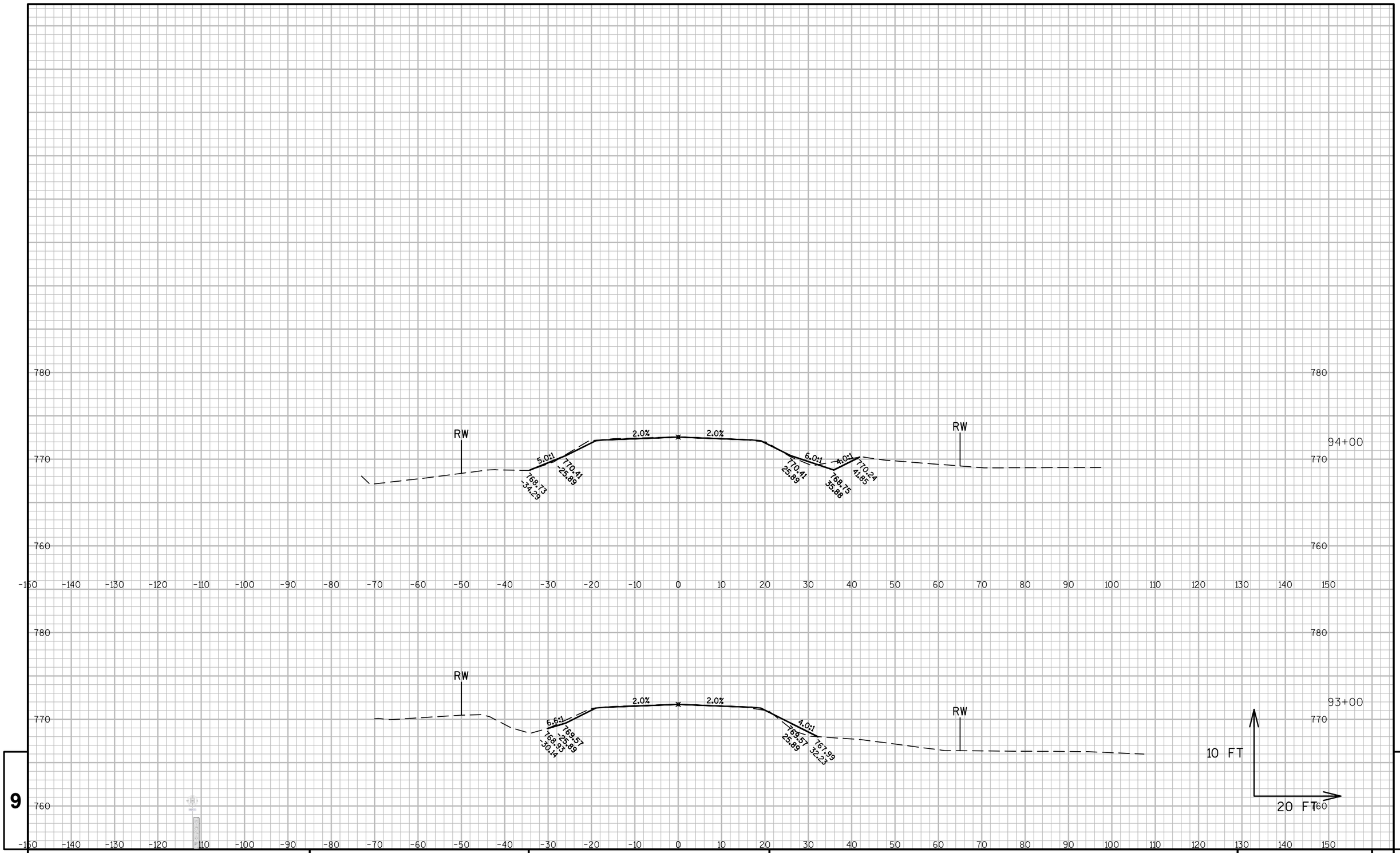
PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: USH 45	SHEET 588	E



PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: USH 45	SHEET 589	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090201-XS-45-WG-Q.DWG PLOT DATE : 4/22/2016 11:52 AM PLOT BY : MAAS, JOSEPH A PLOT NAME :

WISDOT/CADDS SHEET 49



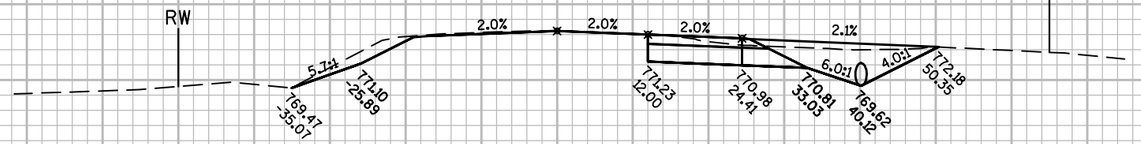
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PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: USH 45	SHEET 590	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090201-XS-45-WG-Q.DWG PLOT DATE : 4/22/2016 11:52 AM PLOT BY : MAAS, JOSEPH A PLOT NAME :

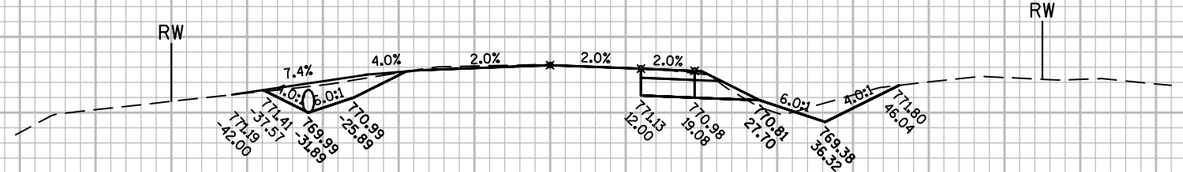
WISDOT/CADDS SHEET 49

DWY RT
NOT FOR YARDAGE



95+75

DWY LT
NOT FOR YARDAGE



95+25



95+00

10 FT
20 FT

9

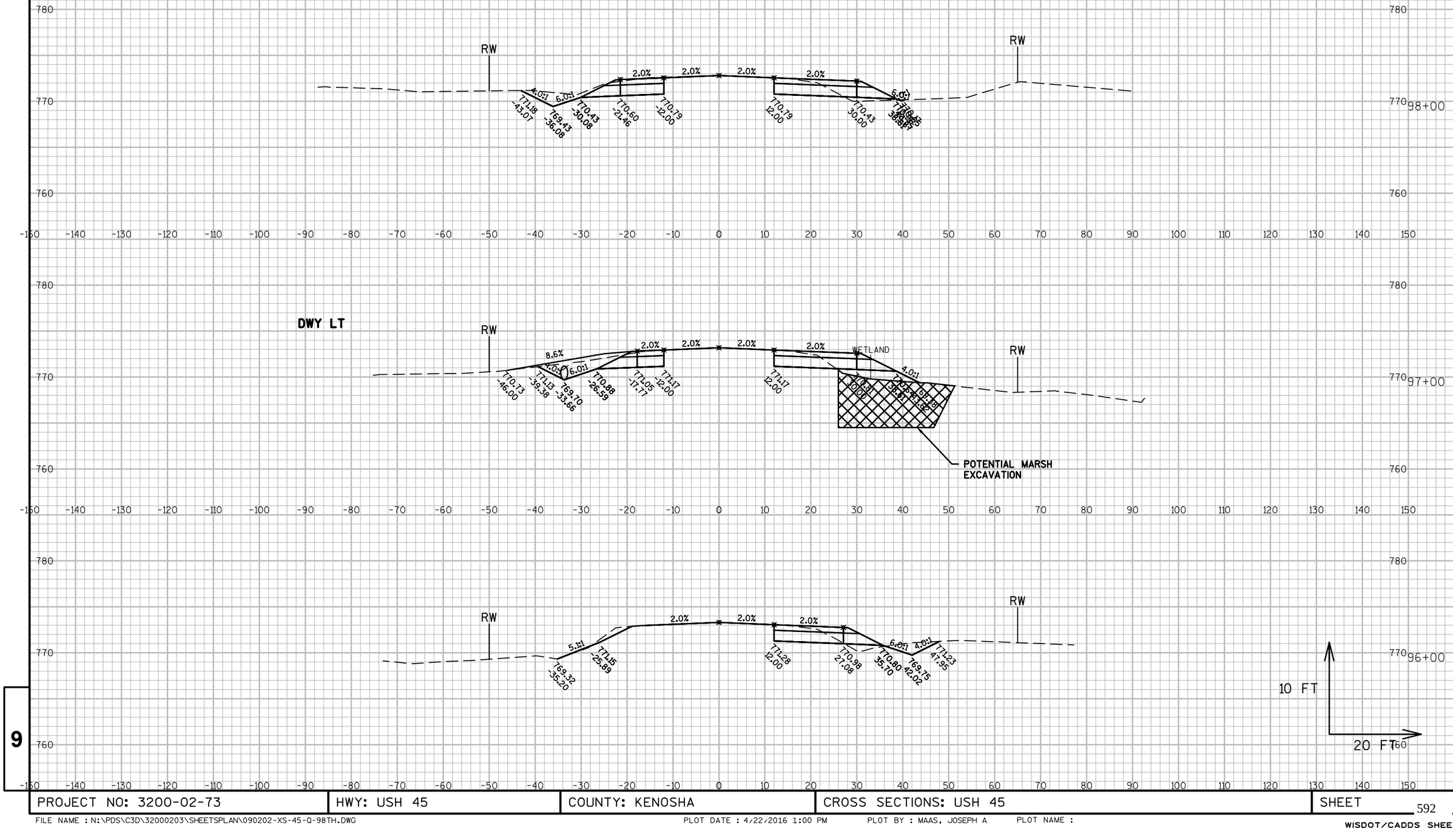
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PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: USH 45	SHEET 591	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090202-XS-45-Q-98TH.DWG PLOT DATE : 4/22/2016 1:00 PM PLOT BY : MAAS, JOSEPH A PLOT NAME :

WISDOT/CADDS SHEET 49

*POTENTIAL MARSH EXCAVATION FROM 96+50-97+50
SEE CONSTRUCTION DETAIL

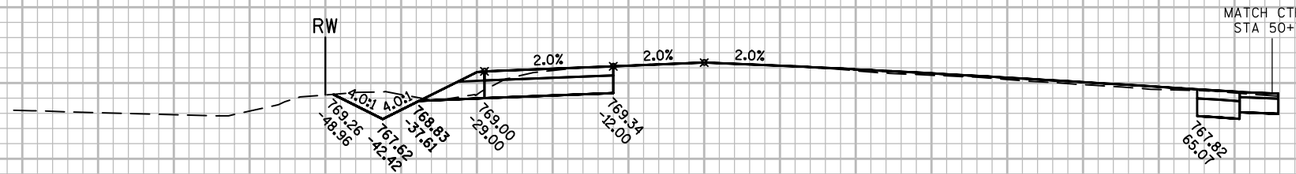


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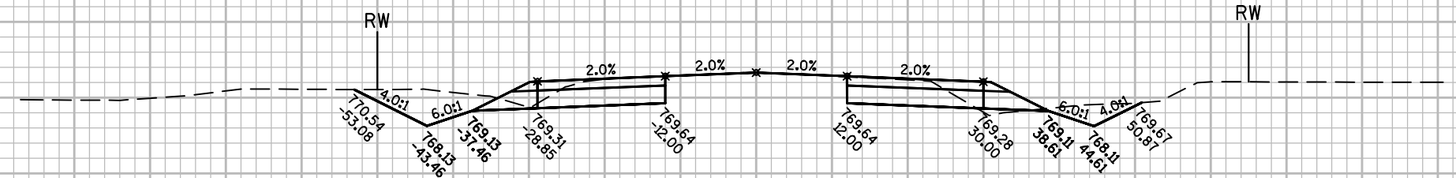
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PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: USH 45	SHEET 592	E

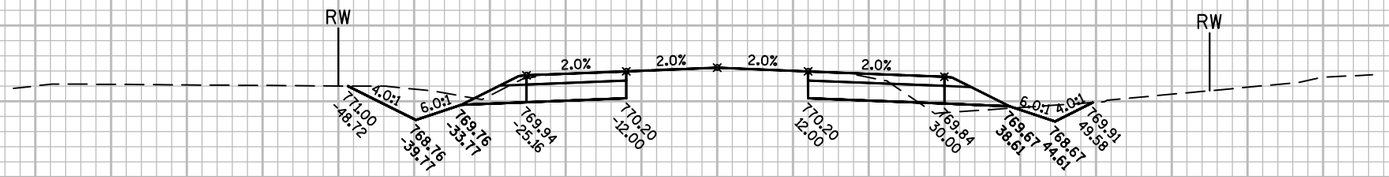
CTH Q



101+00



100+00



99+00

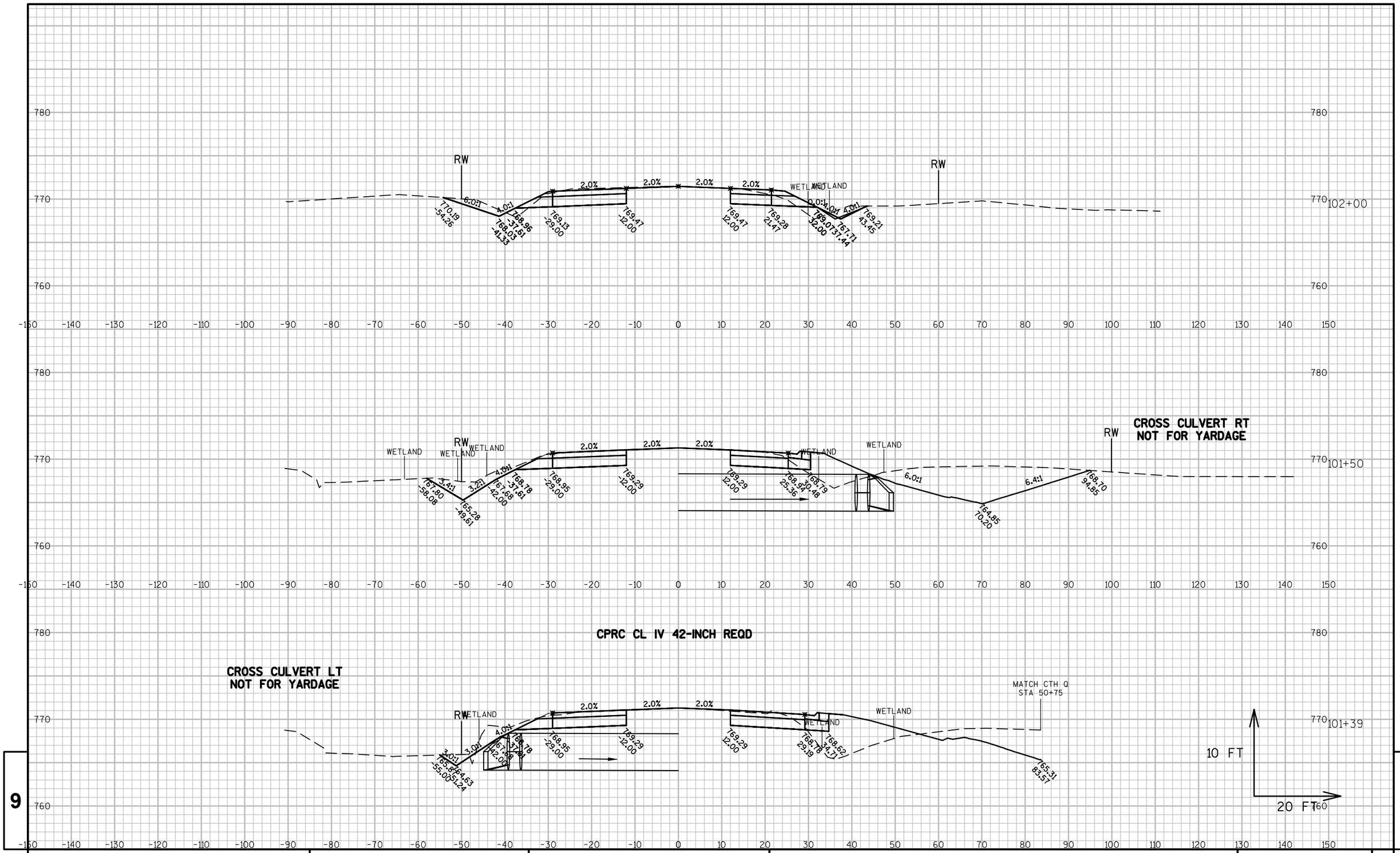
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20 FT

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: USH 45	SHEET 593	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090202-XS-45-Q-98TH.DWG PLOT DATE : 4/22/2016 1:00 PM PLOT BY : MAAS, JOSEPH A PLOT NAME :

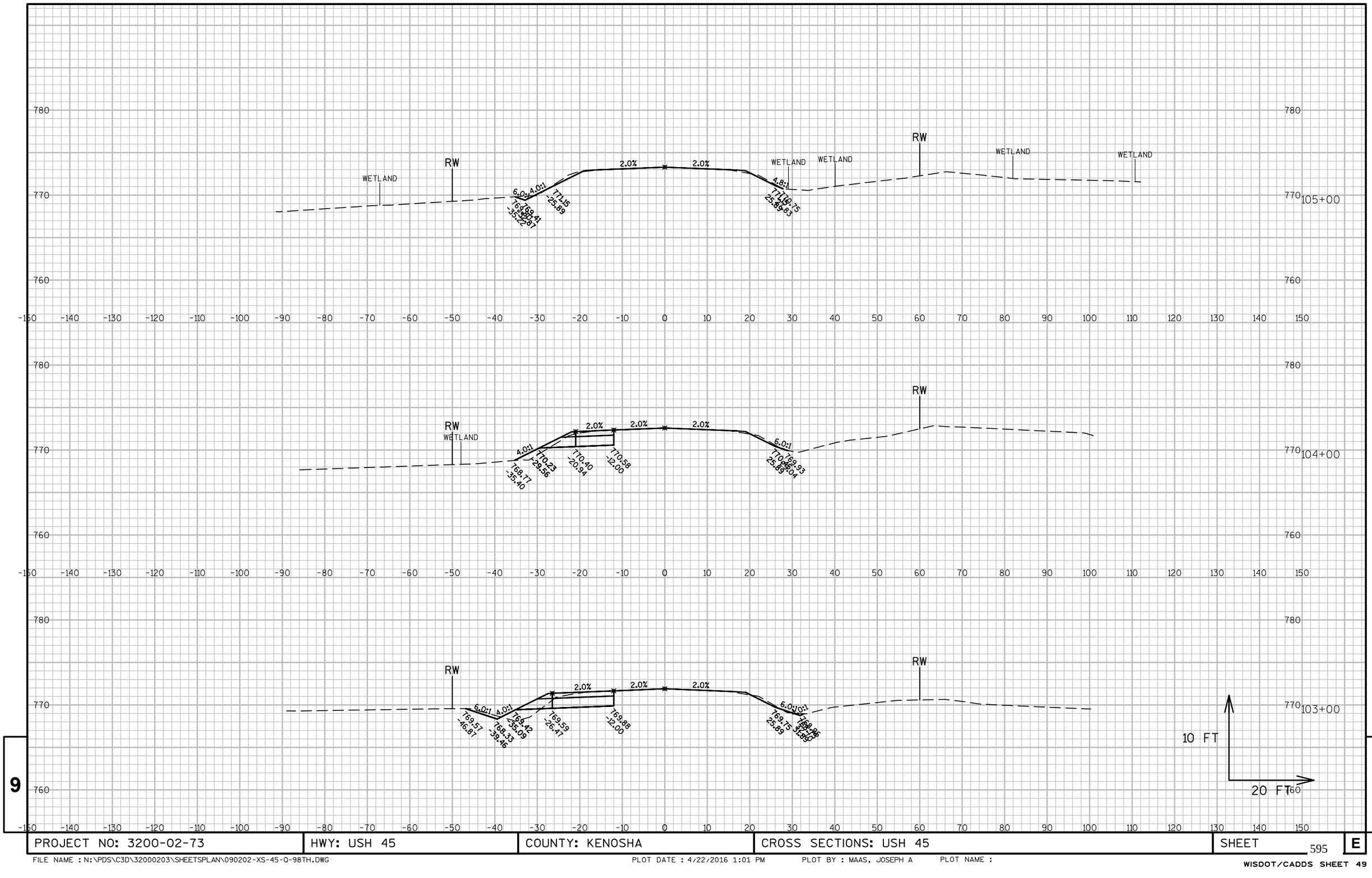
WISDOT/CADDS SHEET 49



PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: USH 45	SHEET 594	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090202-XS-45-Q-98TH.DWG PLOT DATE : 4/22/2016 1:01 PM PLOT BY : MAAS, JOSEPH A PLOT NAME :

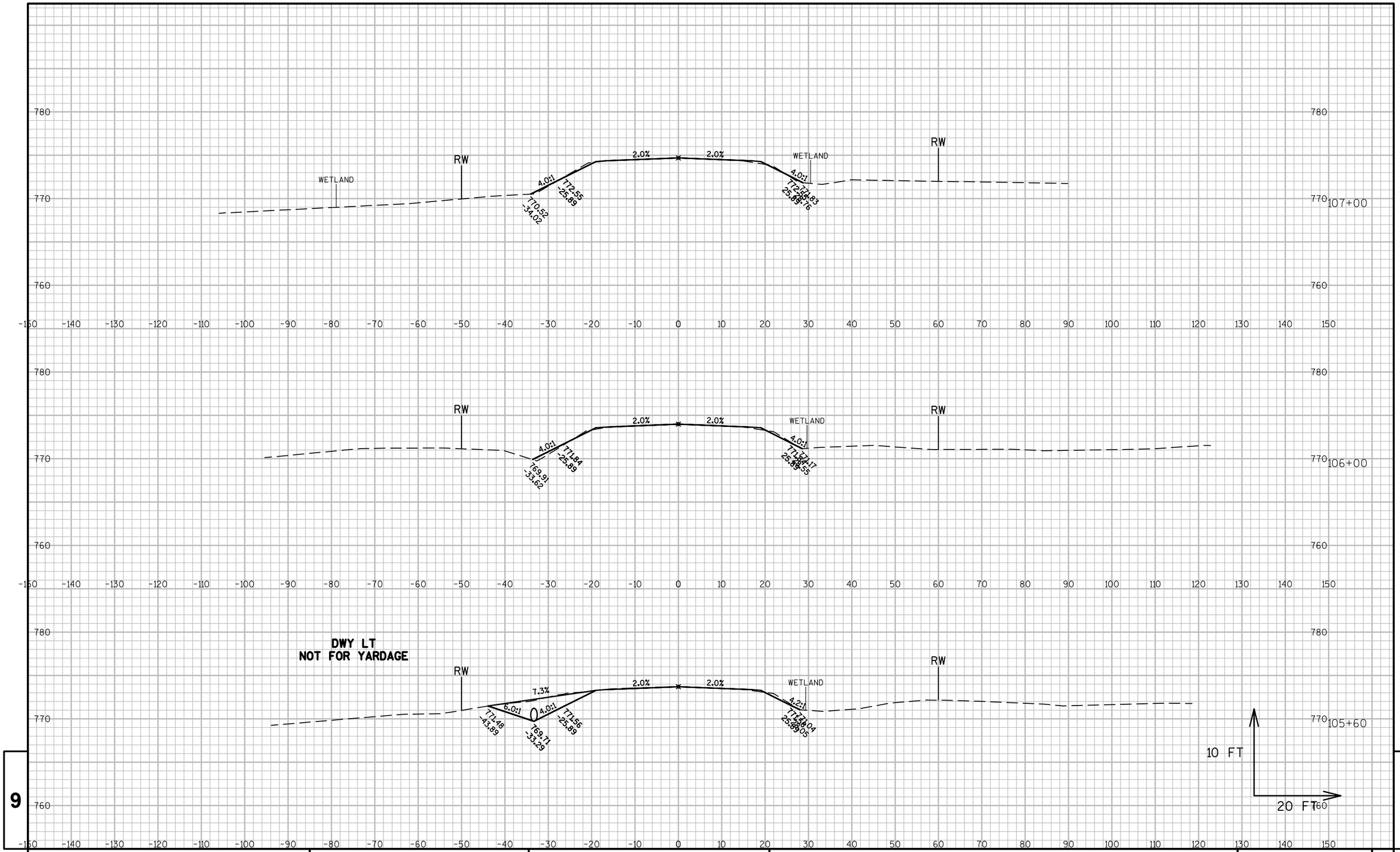
WISDOT/CADDS SHEET 49



PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: USH 45	SHEET 595	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090202-XS-45-Q-98TH.DWG PLOT DATE : 4/22/2016 1:01 PM PLOT BY : MAAS, JOSEPH A PLOT NAME :

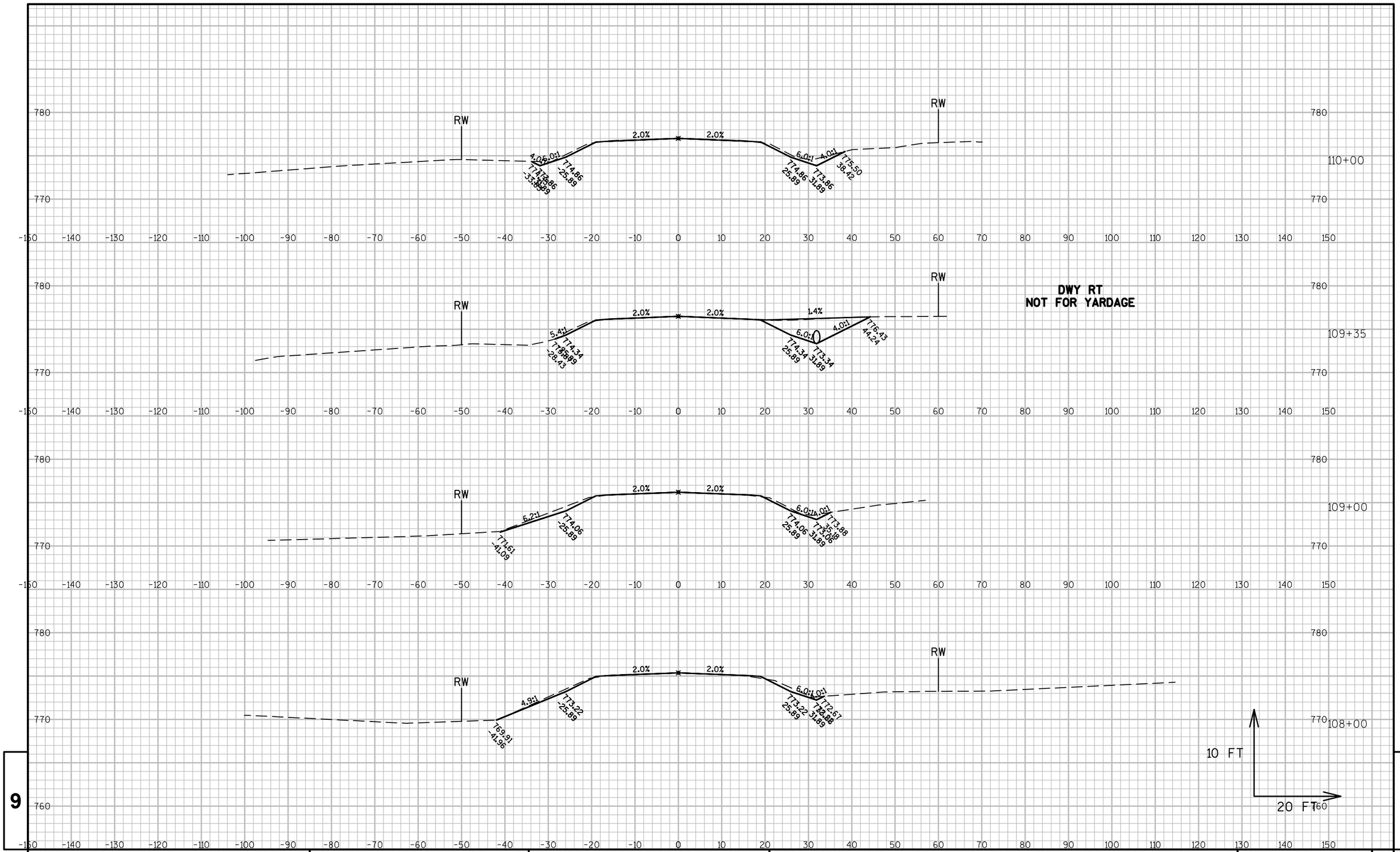
WISDOT/CADDS SHEET 49



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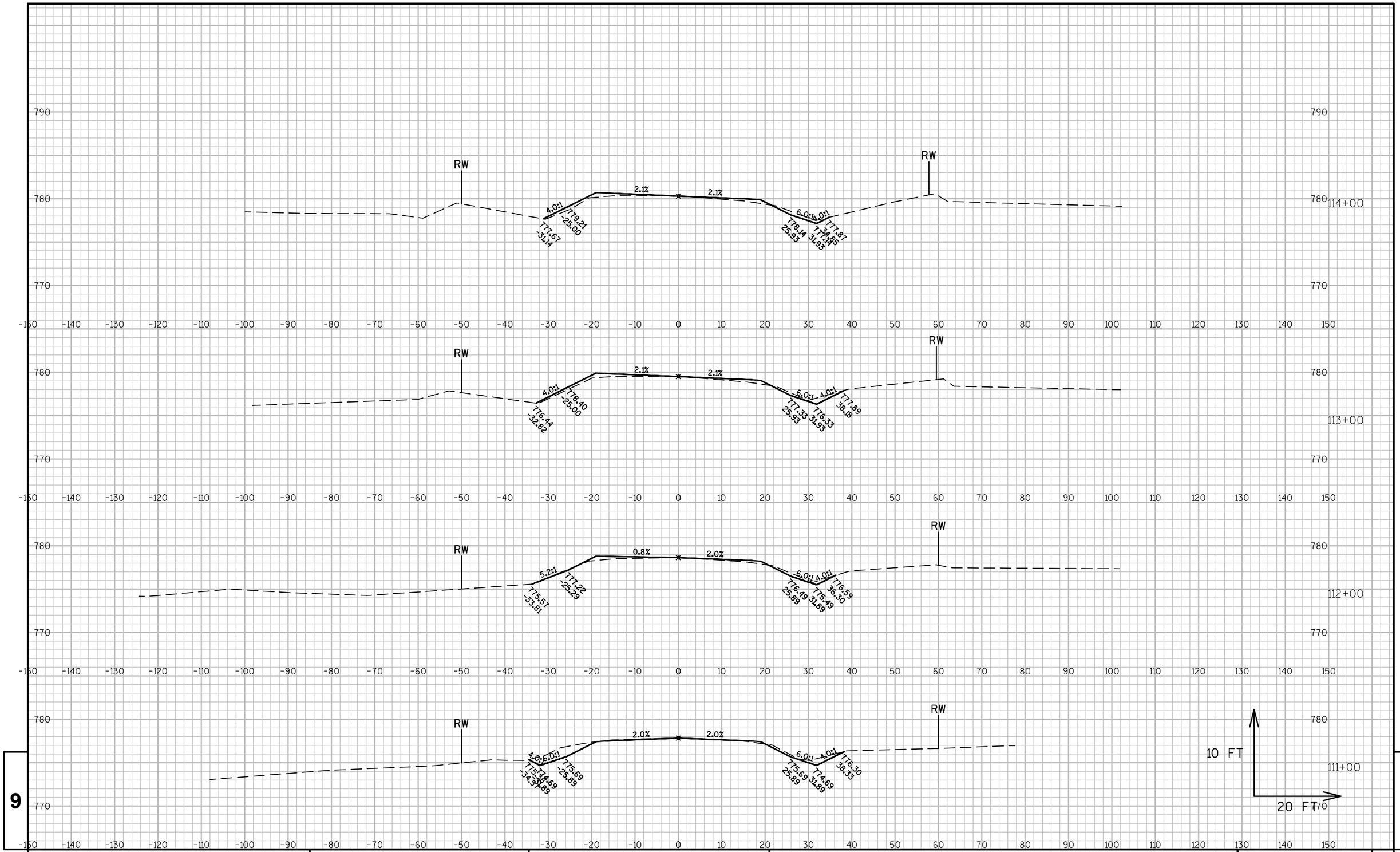
PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: USH 45	SHEET 596	E



PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: USH 45	SHEET 597	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090202-XS-45-Q-98TH.DWG PLOT DATE : 4/22/2016 1:01 PM PLOT BY : MAAS, JOSEPH A PLOT NAME :

WISDOT/CADDS SHEET 49



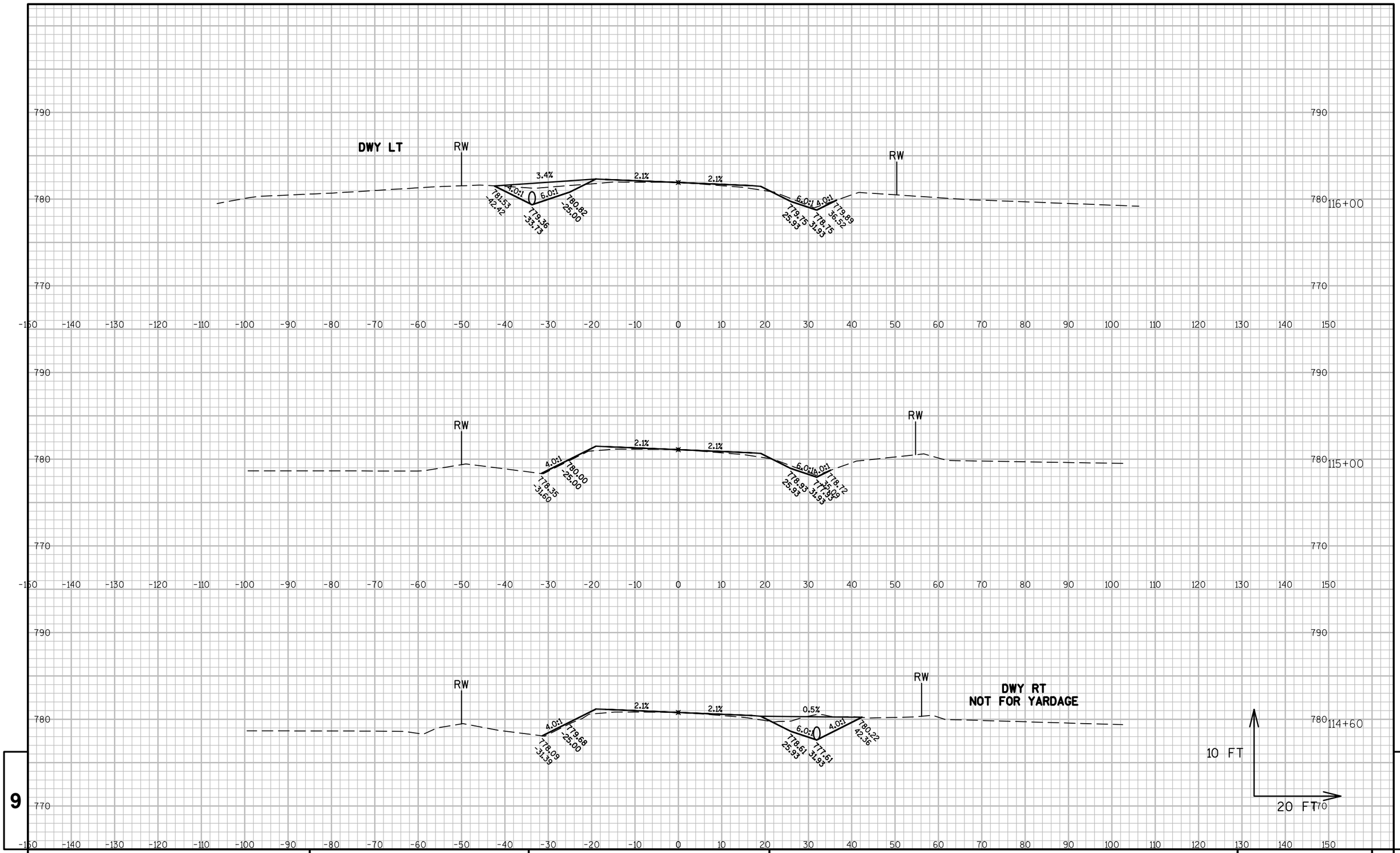
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PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: USH 45	SHEET 598	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090202-XS-45-Q-98TH.DWG PLOT DATE : 4/22/2016 1:01 PM PLOT BY : MAAS, JOSEPH A PLOT NAME :

WISDOT/CADDS SHEET 49

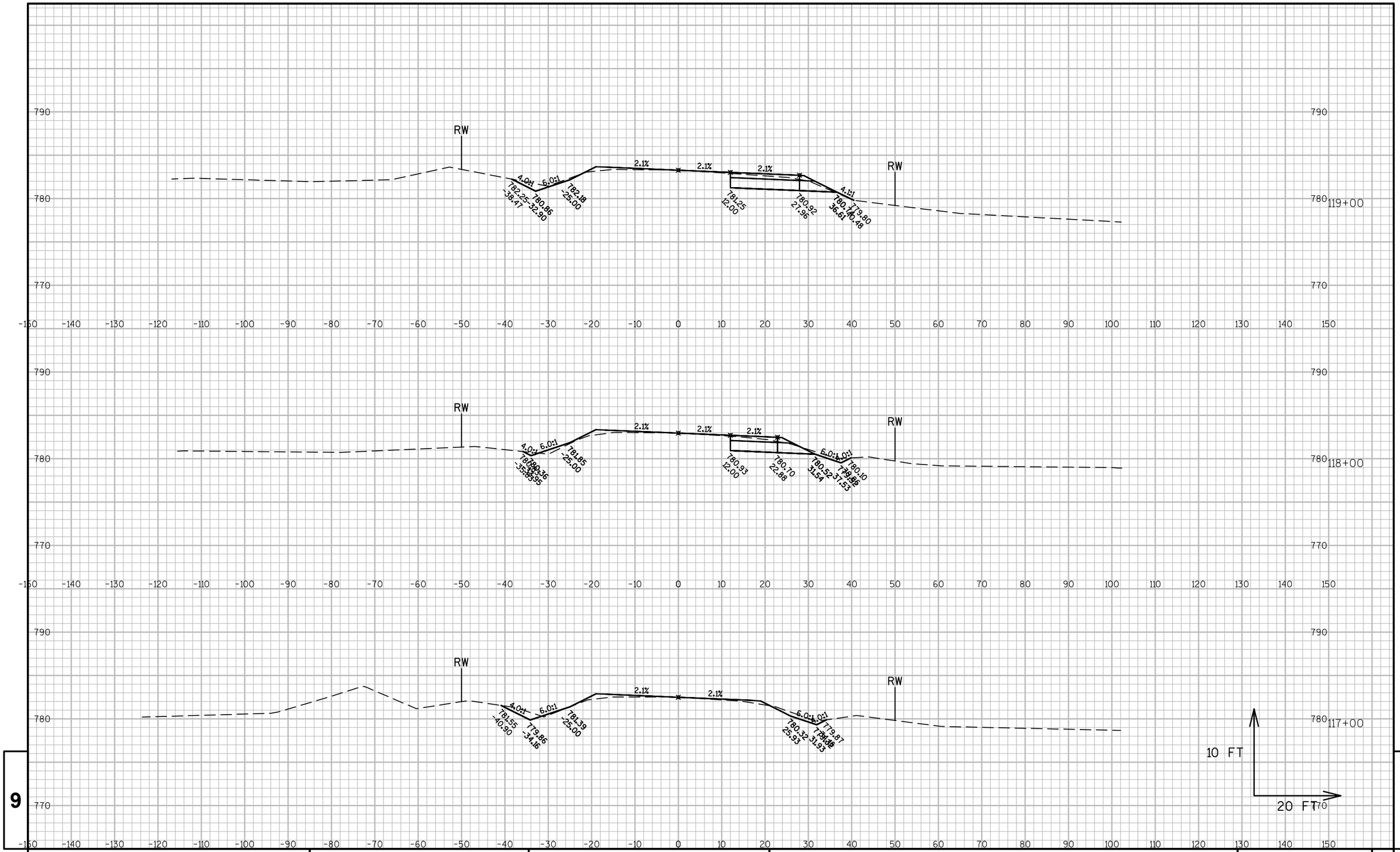


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PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: USH 45	SHEET 599	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090202-XS-45-Q-98TH.DWG PLOT DATE : 4/22/2016 1:01 PM PLOT BY : MAAS, JOSEPH A PLOT NAME :



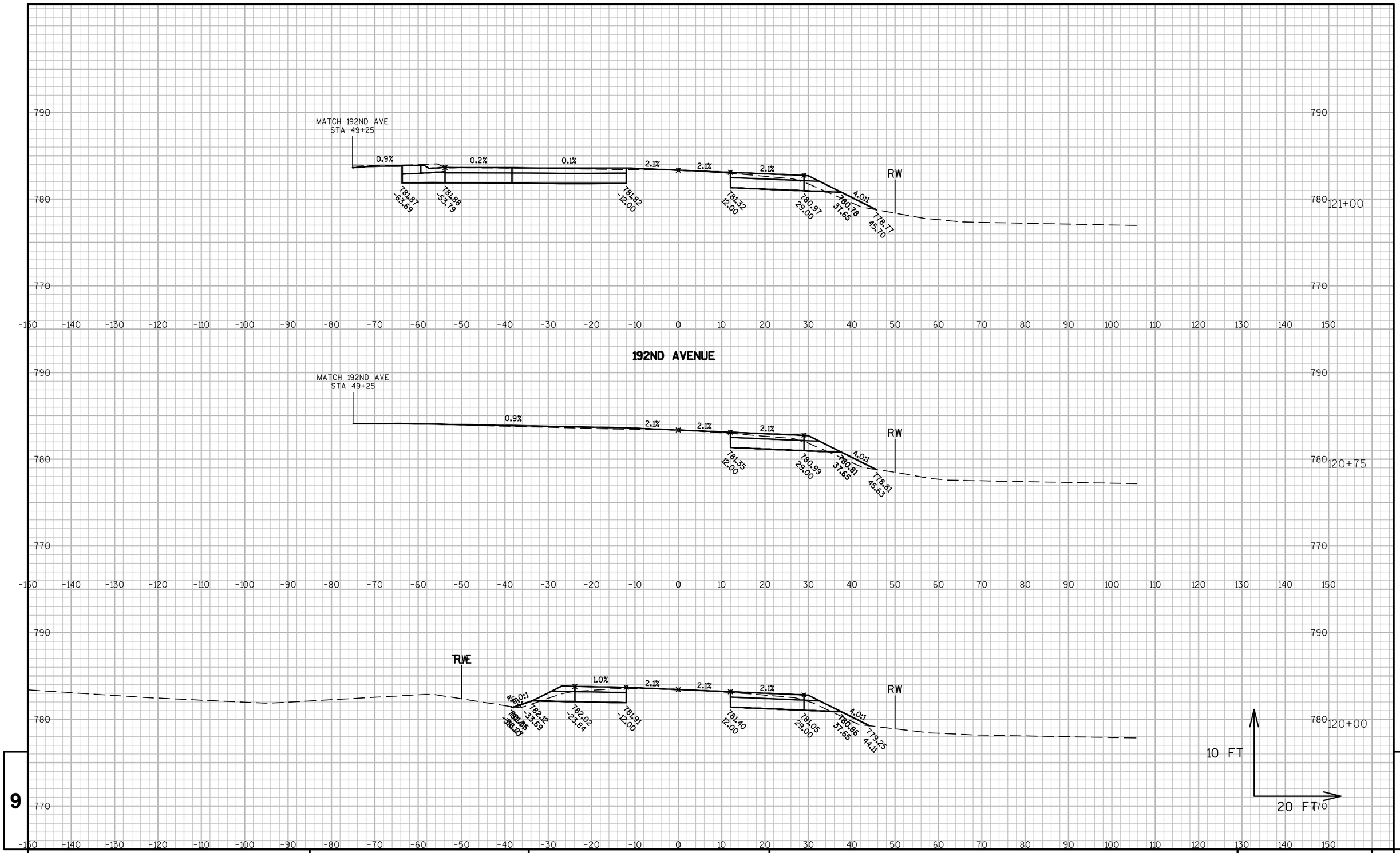
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PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: USH 45	SHEET 600	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090202-XS-45-Q-98TH.DWG PLOT DATE : 4/22/2016 1:01 PM PLOT BY : MAAS, JOSEPH A PLOT NAME :

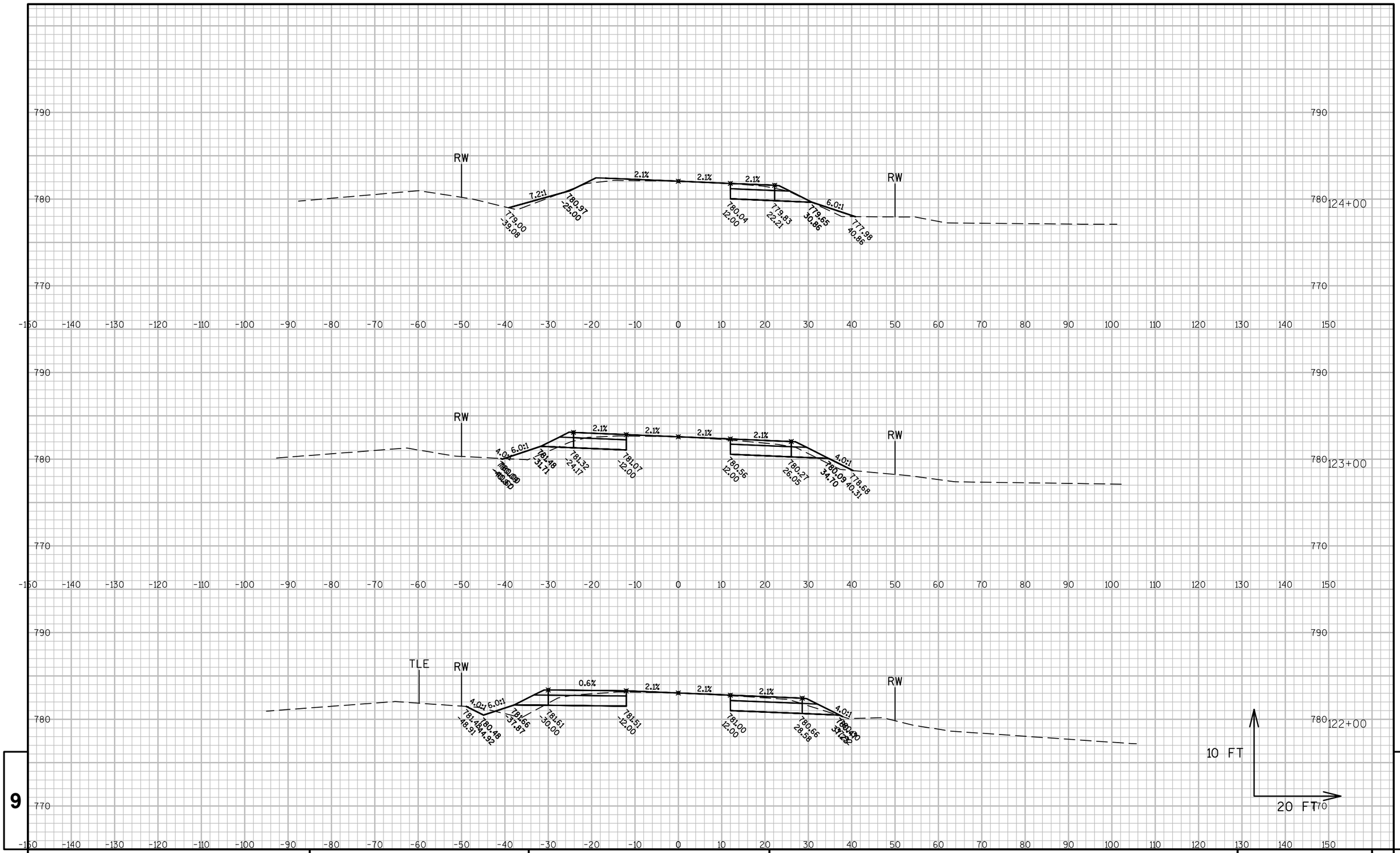
WISDOT/CADDS SHEET 49



PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: USH 45	SHEET 601	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090202-XS-45-Q-98TH.DWG PLOT DATE : 4/22/2016 1:02 PM PLOT BY : MAAS, JOSEPH A PLOT NAME :

WISDOT/CADDS SHEET 49



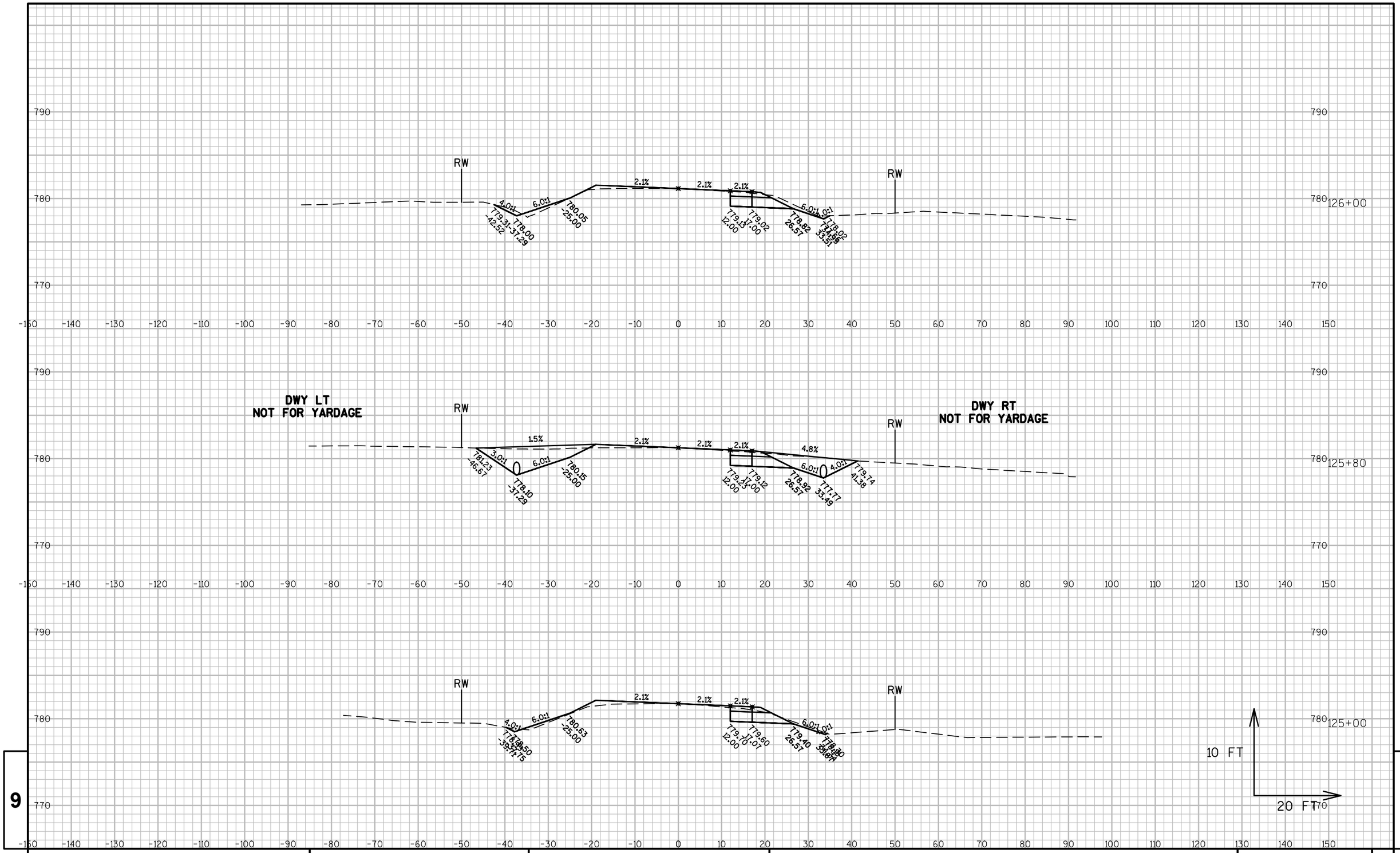
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PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: USH 45	SHEET 602	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090202-XS-45-Q-98TH.DWG PLOT DATE : 4/22/2016 1:02 PM PLOT BY : MAAS, JOSEPH A PLOT NAME :

WISDOT/CADDS SHEET 49



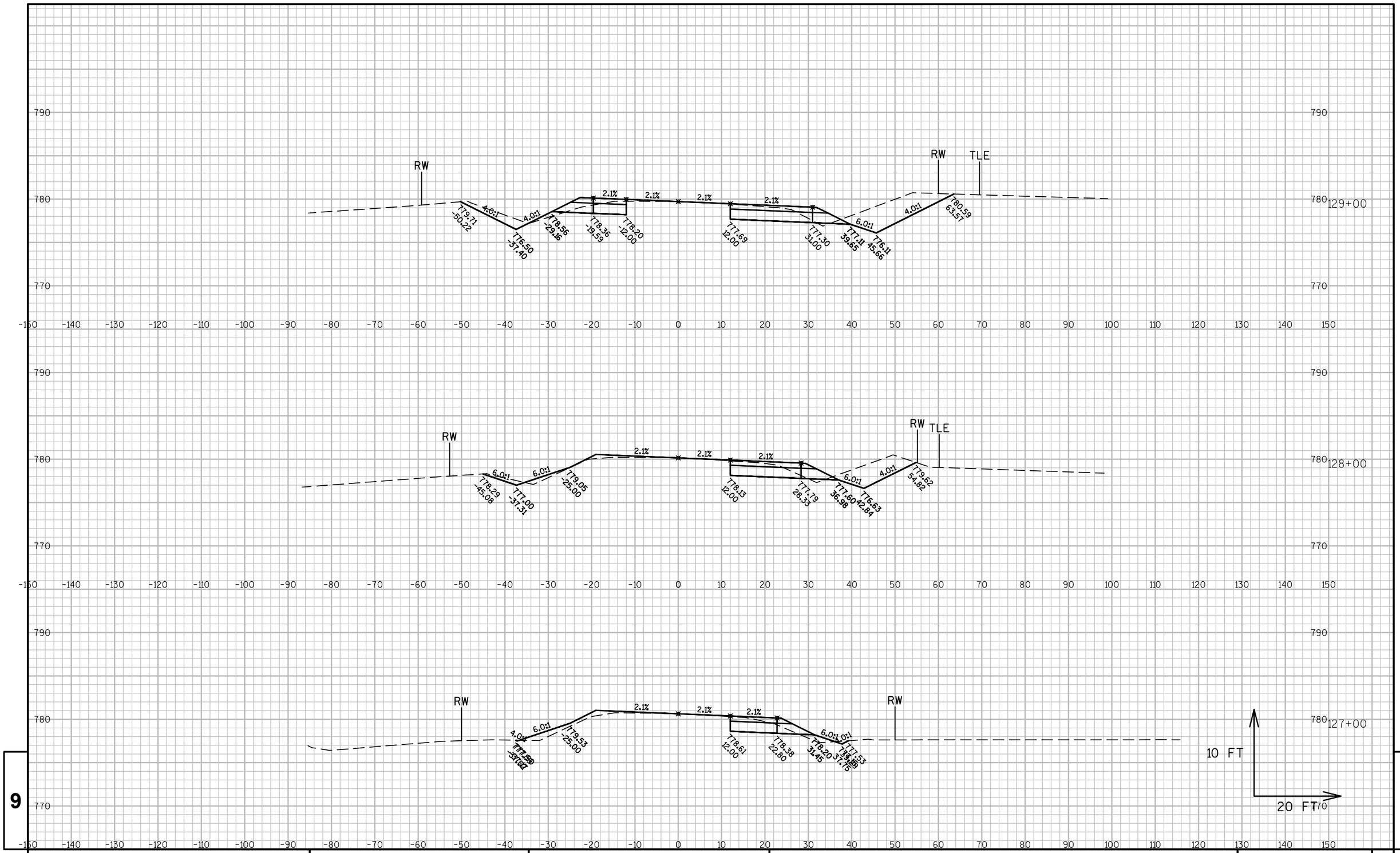
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PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: USH 45	SHEET 603	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090202-XS-45-Q-98TH.DWG PLOT DATE : 4/22/2016 1:02 PM PLOT BY : MAAS, JOSEPH A PLOT NAME :

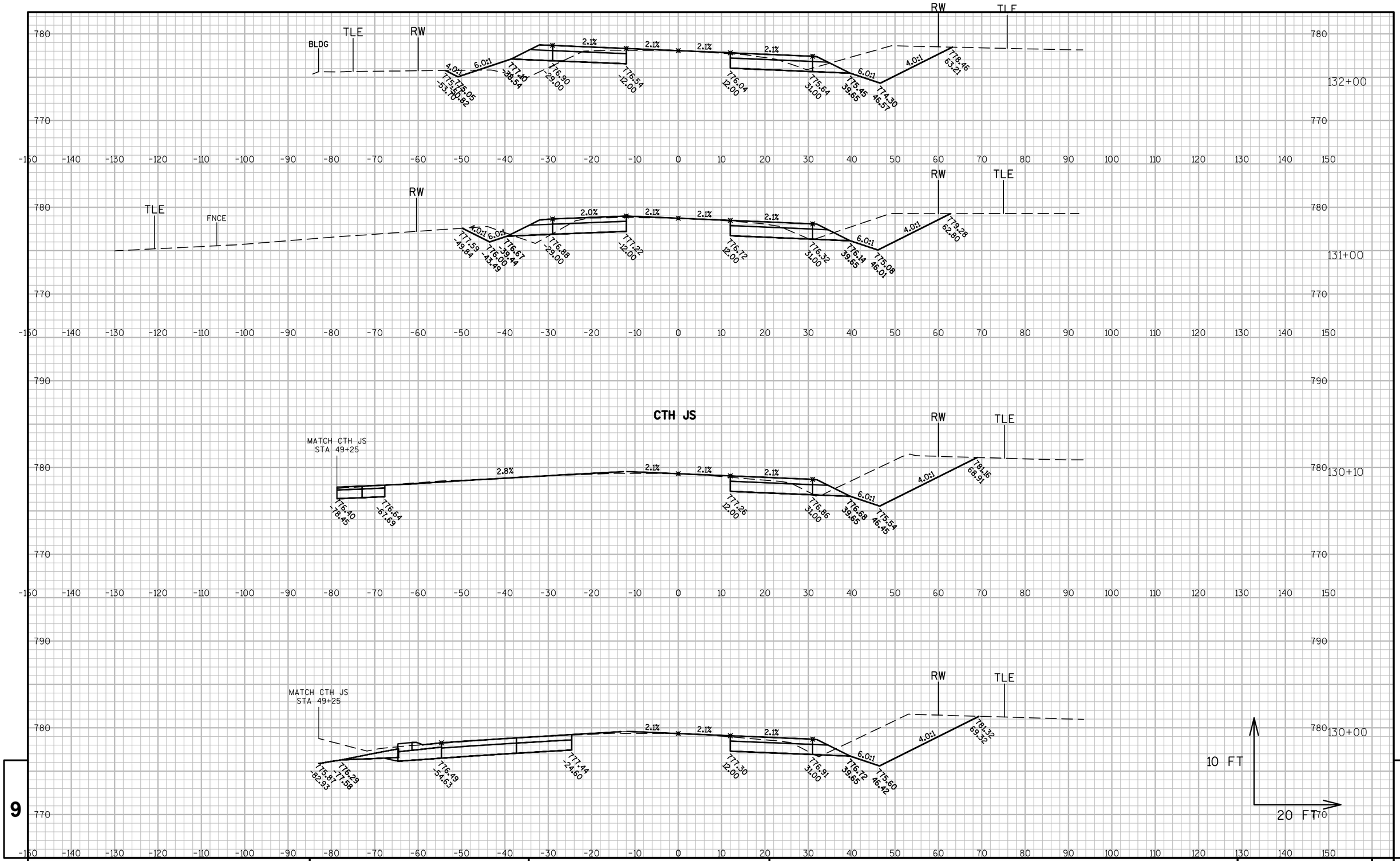
WISDOT/CADDS SHEET 49



PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: USH 45	SHEET 604	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090202-XS-45-Q-98TH.DWG PLOT DATE : 4/22/2016 1:02 PM PLOT BY : MAAS, JOSEPH A PLOT NAME :

WISDOT/CADDS SHEET 49

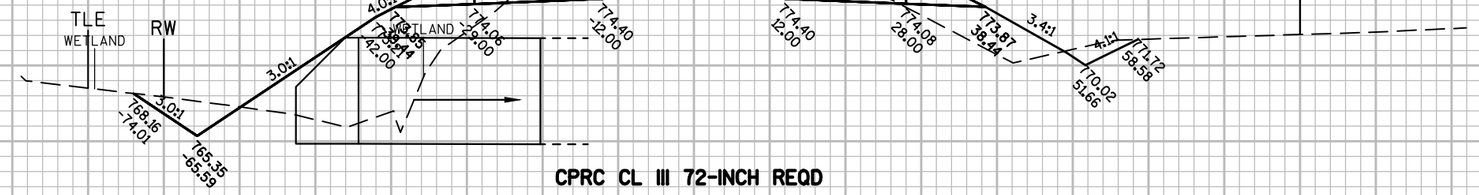


PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: USH 45	SHEET 605	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090202-XS-45-Q-98TH.DWG PLOT DATE : 4/22/2016 1:02 PM PLOT BY : MAAS, JOSEPH A PLOT NAME :

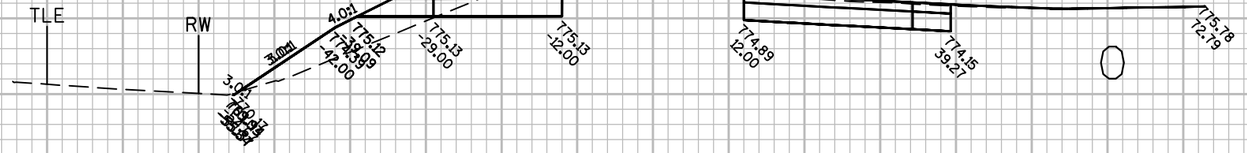
WISDOT/CADDS SHEET 49

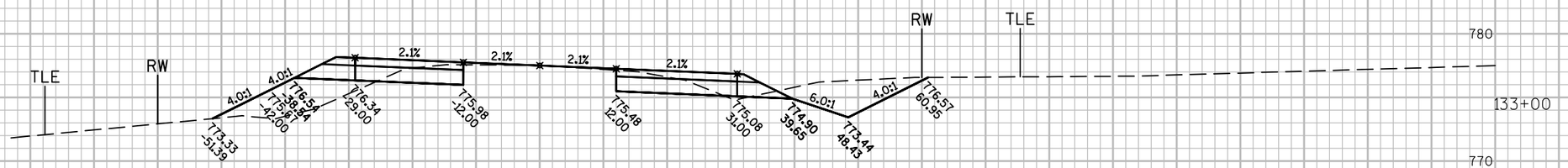
CROSS CULVERT LT
NOT FOR YARDAGE



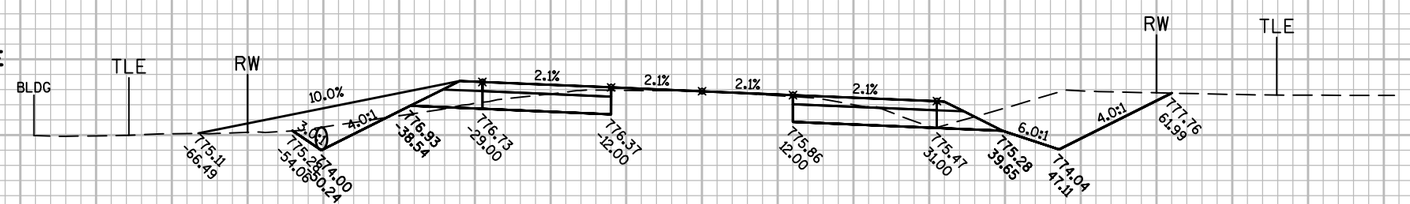
CPRC CL III 72-INCH REQD

106TH STREET





DWY LT
NOT FOR YARDAGE

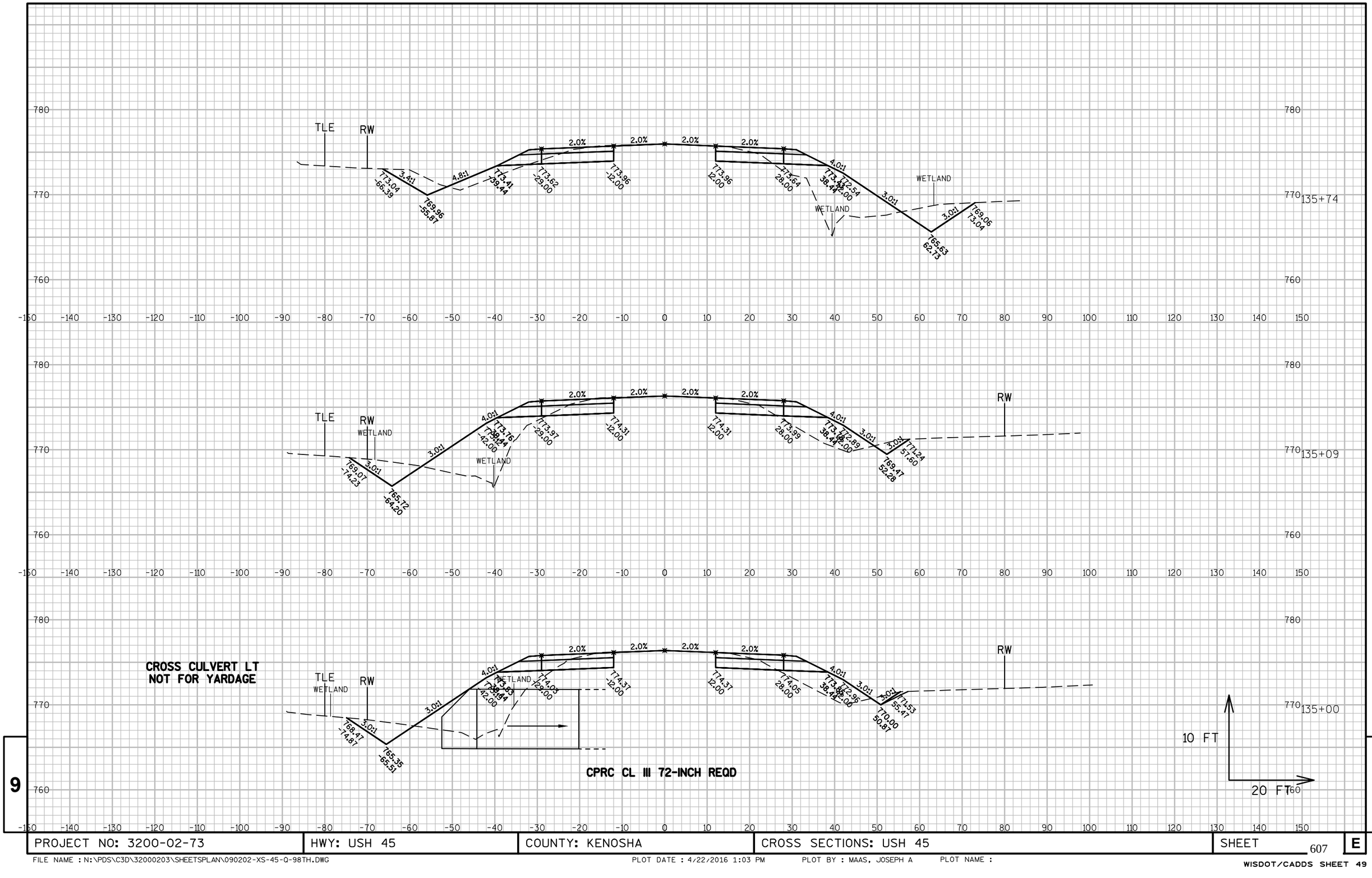




PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: USH 45	SHEET 606	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090202-XS-45-Q-98TH.DWG PLOT DATE : 4/22/2016 1:02 PM PLOT BY : MAAS, JOSEPH A PLOT NAME :

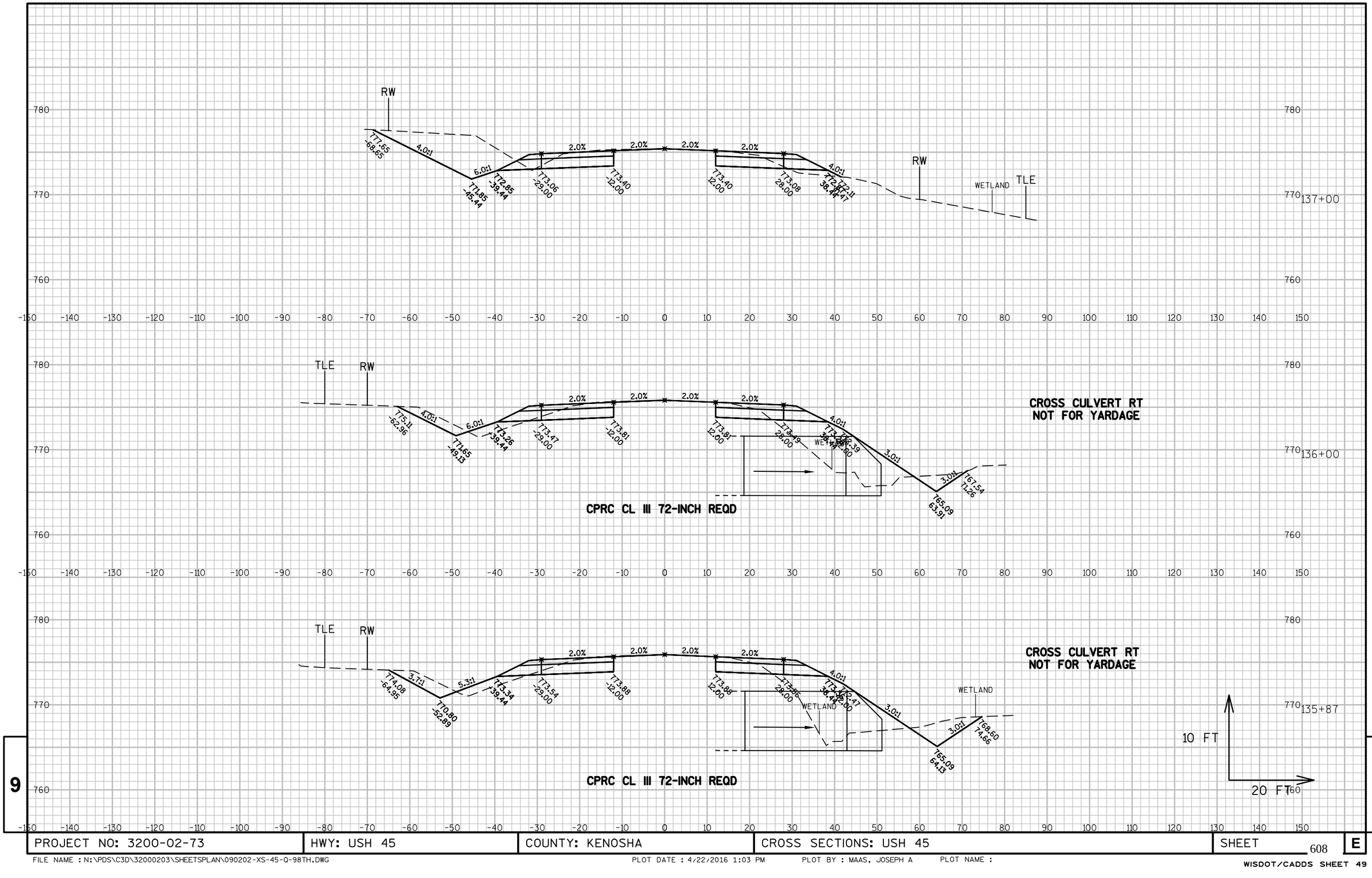
WISDOT/CADDS SHEET 49



PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: USH 45	SHEET 607	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090202-XS-45-Q-98TH.DWG PLOT DATE : 4/22/2016 1:03 PM PLOT BY : MAAS, JOSEPH A PLOT NAME :

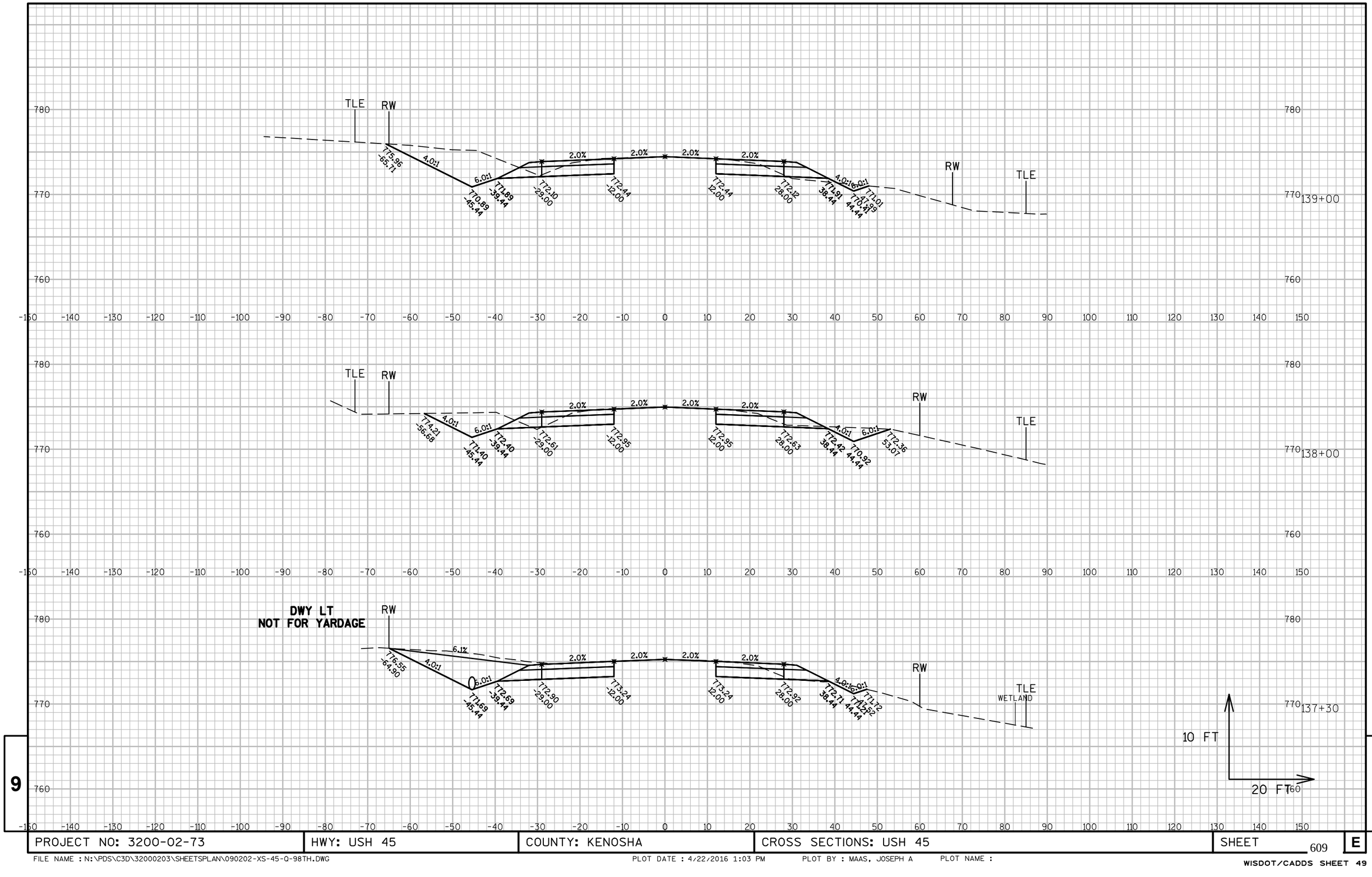
WISDOT/CADDS SHEET 49



PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: USH 45	SHEET 608	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090202-XS-45-Q-98TH.DWG PLOT DATE : 4/22/2016 1:03 PM PLOT BY : MAAS, JOSEPH A PLOT NAME :

WISDOT/CADDS SHEET 49



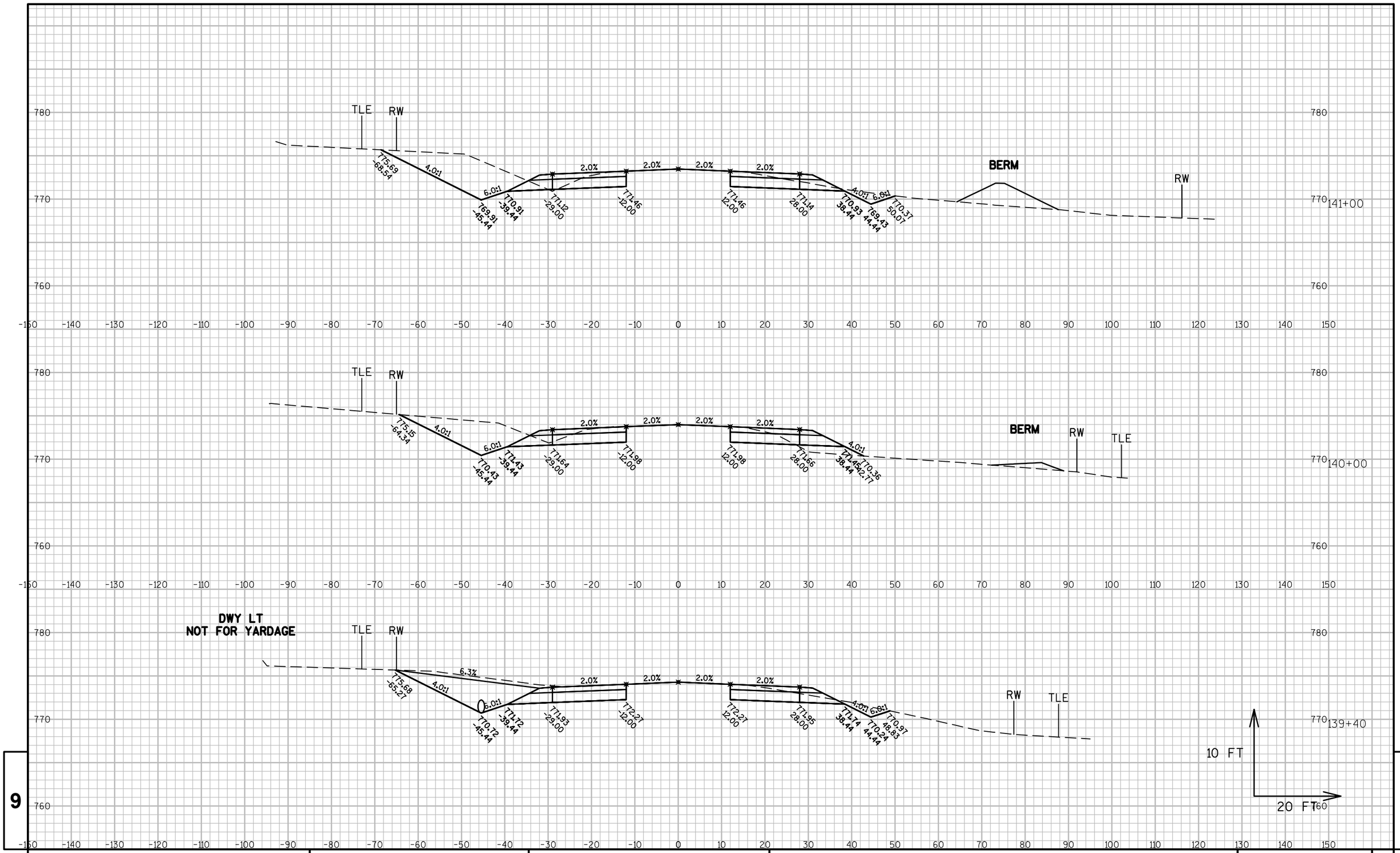
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PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: USH 45	SHEET 609	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090202-XS-45-Q-98TH.DWG PLOT DATE : 4/22/2016 1:03 PM PLOT BY : MAAS, JOSEPH A PLOT NAME :

WISDOT/CADDS SHEET 49

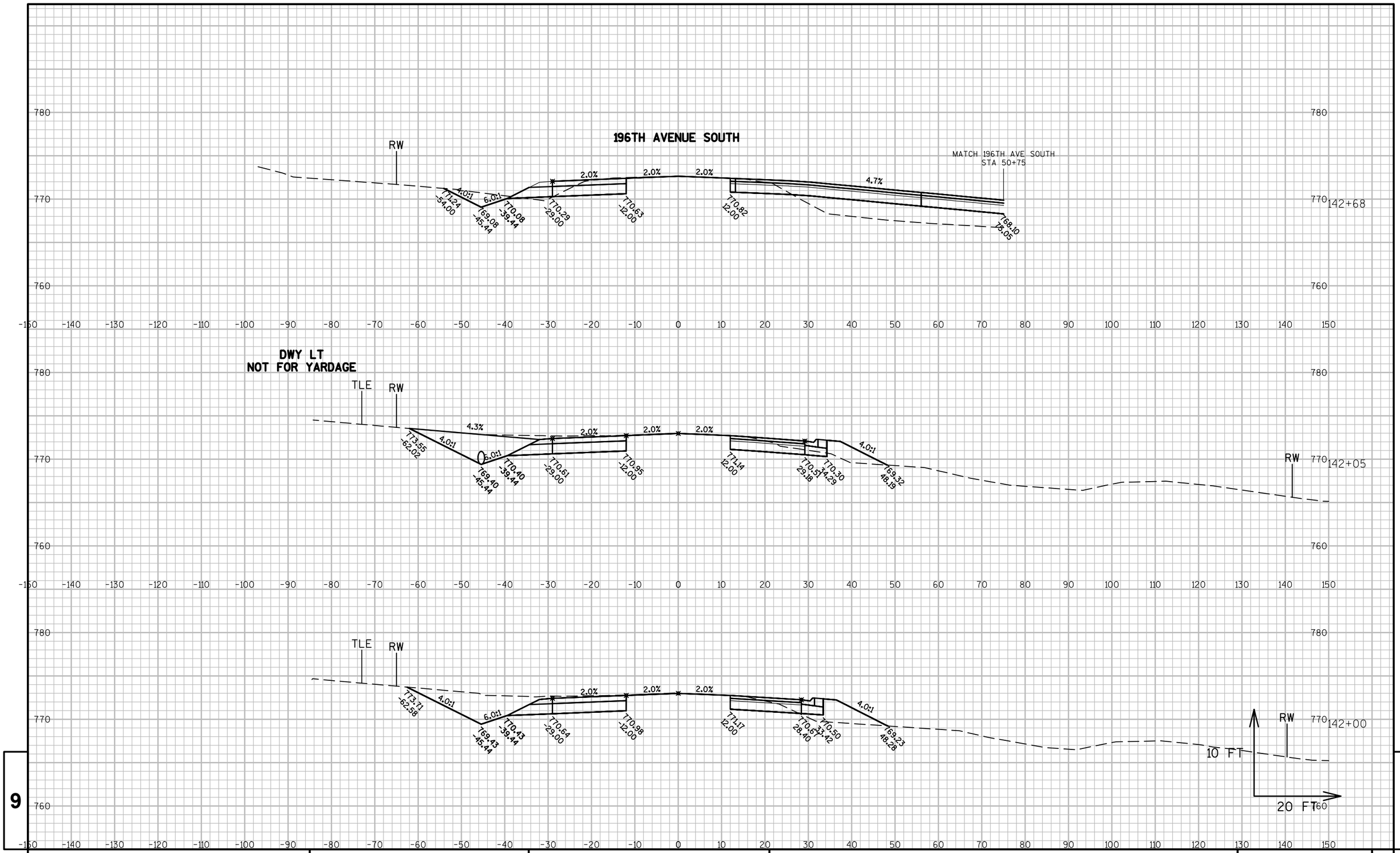


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PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: USH 45	SHEET 610	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090202-XS-45-Q-98TH.DWG PLOT DATE : 4/22/2016 1:03 PM PLOT BY : MAAS, JOSEPH A PLOT NAME :

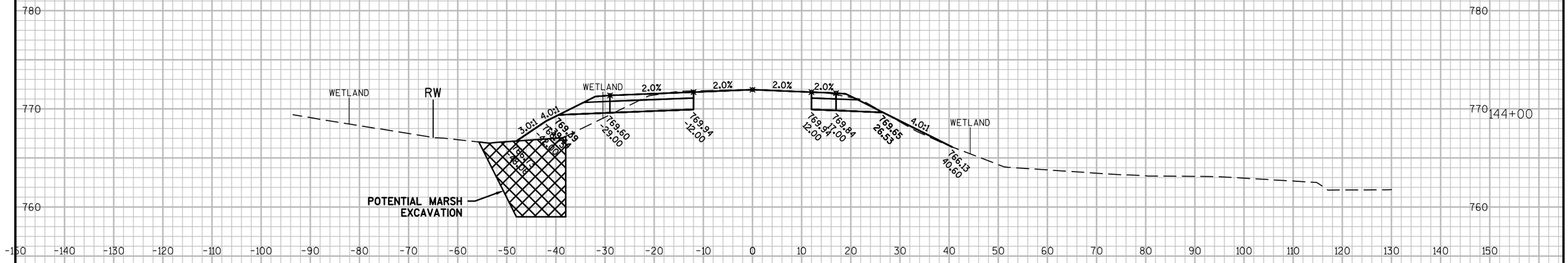


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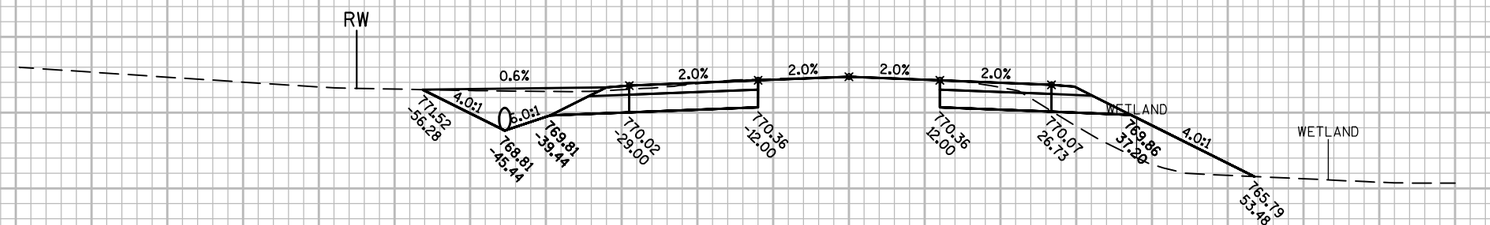
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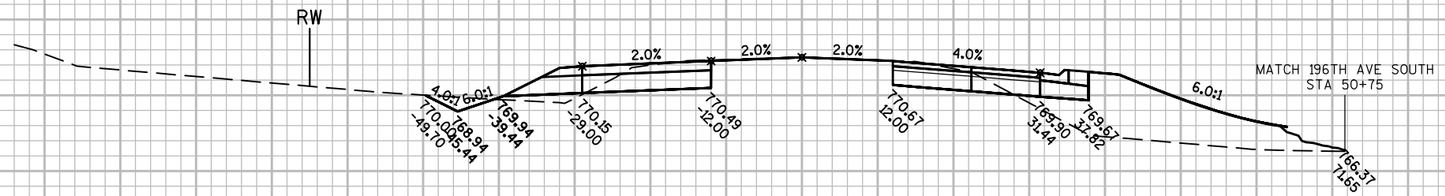
PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: USH 45	SHEET 611	E

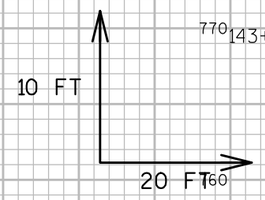
*POTENTIAL MARSH EXCAVATION FROM 144+00-147+00
SEE CONSTRUCTION DETAIL



DWY LT
NOT FOR YARDAGE





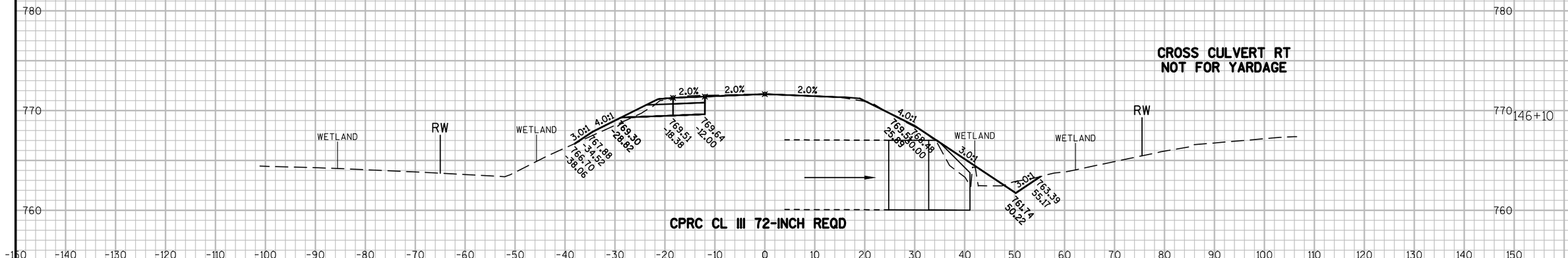


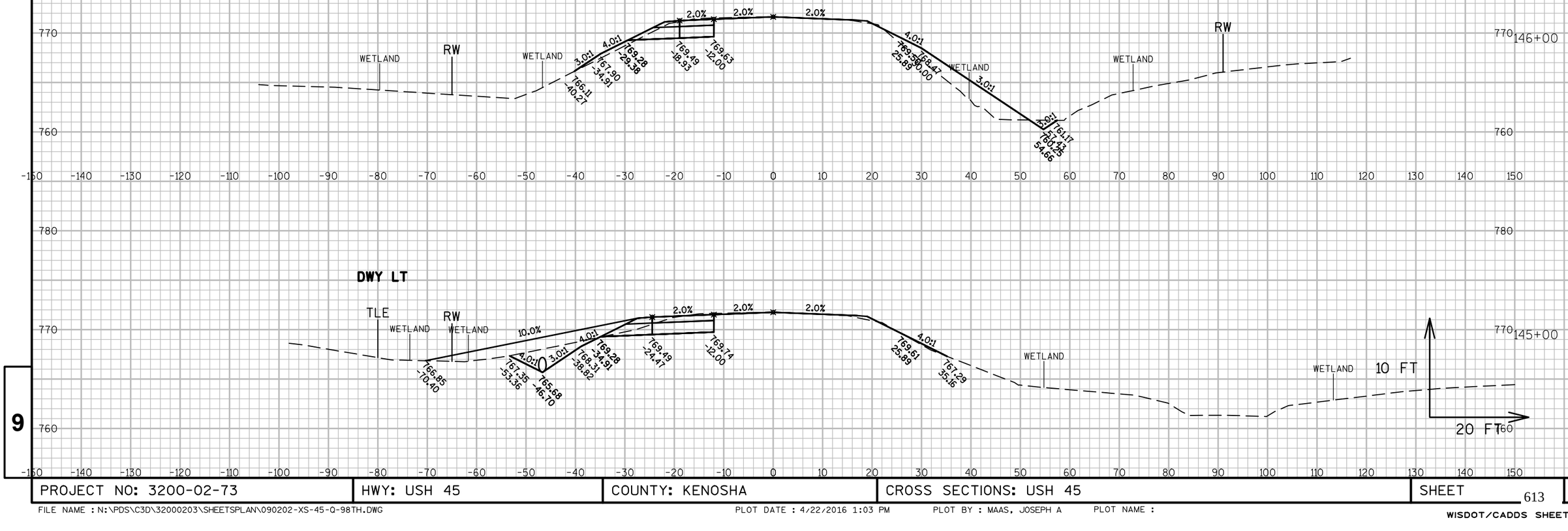
PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: USH 45	SHEET 612	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090202-XS-45-Q-98TH.DWG PLOT DATE : 4/22/2016 1:03 PM PLOT BY : MAAS, JOSEPH A PLOT NAME :

WISDOT/CADDS SHEET 49

*POTENTIAL MARSH EXCAVATION FROM 144+00-147+00
SEE CONSTRUCTION DETAIL





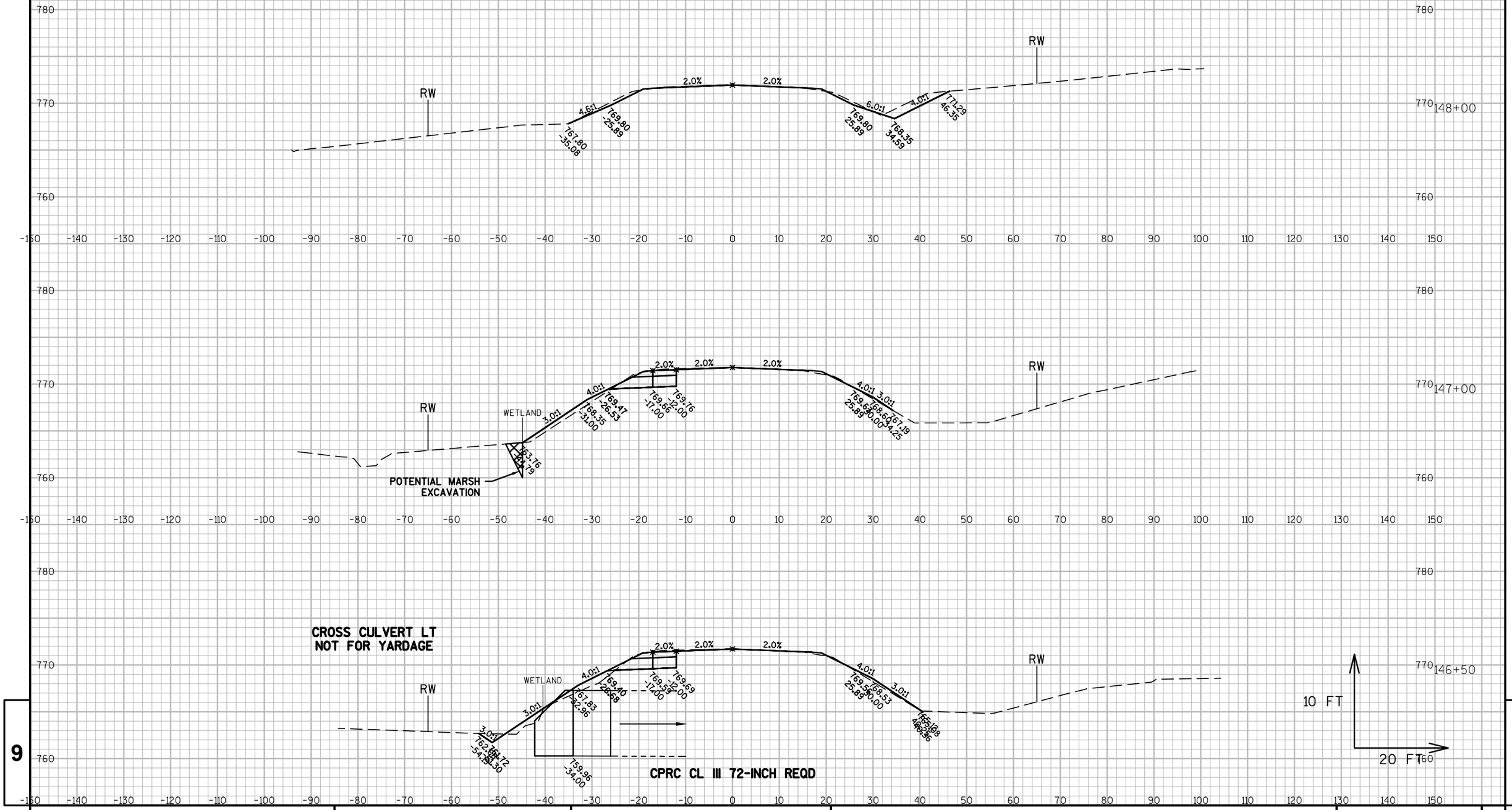
DWY LT

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: USH 45	SHEET 613	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090202-XS-45-Q-98TH.DWG PLOT DATE : 4/22/2016 1:03 PM PLOT BY : MAAS, JOSEPH A PLOT NAME :

WISDOT/CADDS SHEET 49

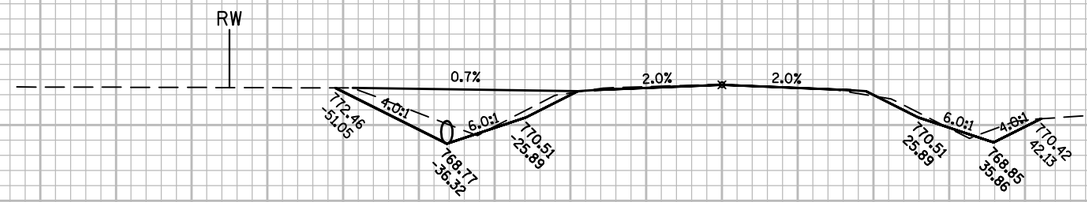
*POTENTIAL MARSH EXCAVATION FROM 144+00-147+00
SEE CONSTRUCTION DETAIL



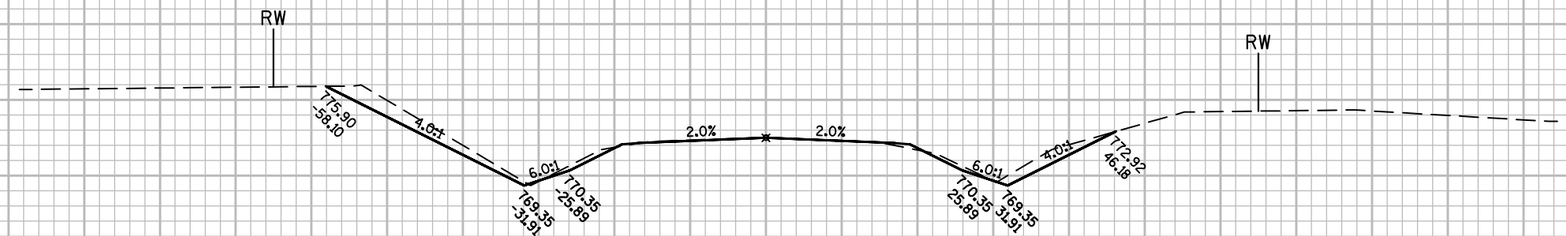
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PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: USH 45	SHEET 614 E

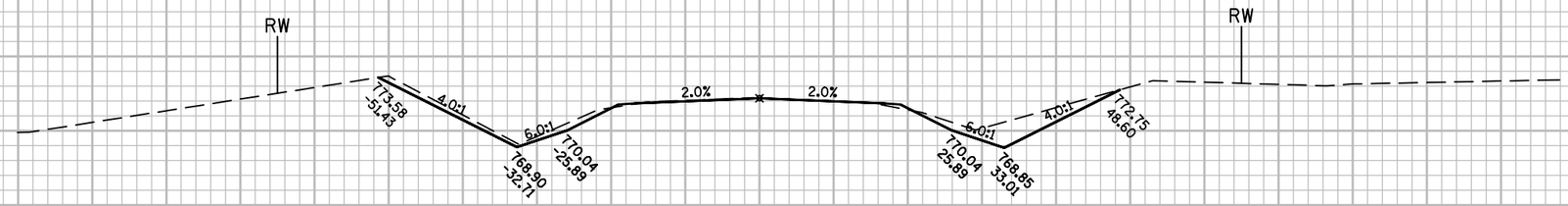
DWY LT



151+00



150+00



149+00

10 FT

20 FT

780
770
760
-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

9

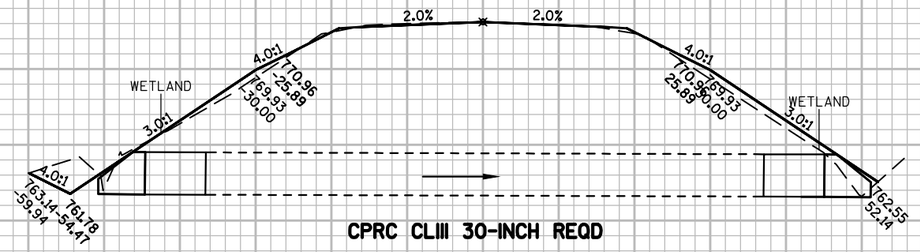
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PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: USH 45	SHEET 615	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090202-XS-45-Q-98TH.DWG PLOT DATE : 4/22/2016 1:04 PM PLOT BY : MAAS, JOSEPH A PLOT NAME :

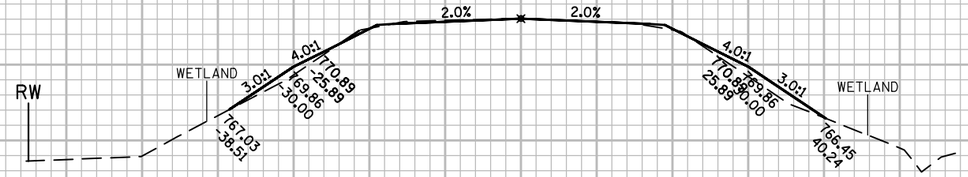
WISDOT/CADDS SHEET 49

CROSS CULVERT
NOT FOR YARDAGE

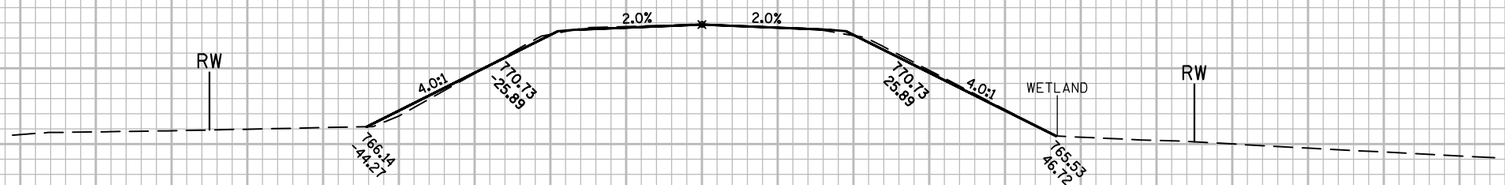


153+27

CPRC CLIII 30-INCH REQD



153+00



152+00



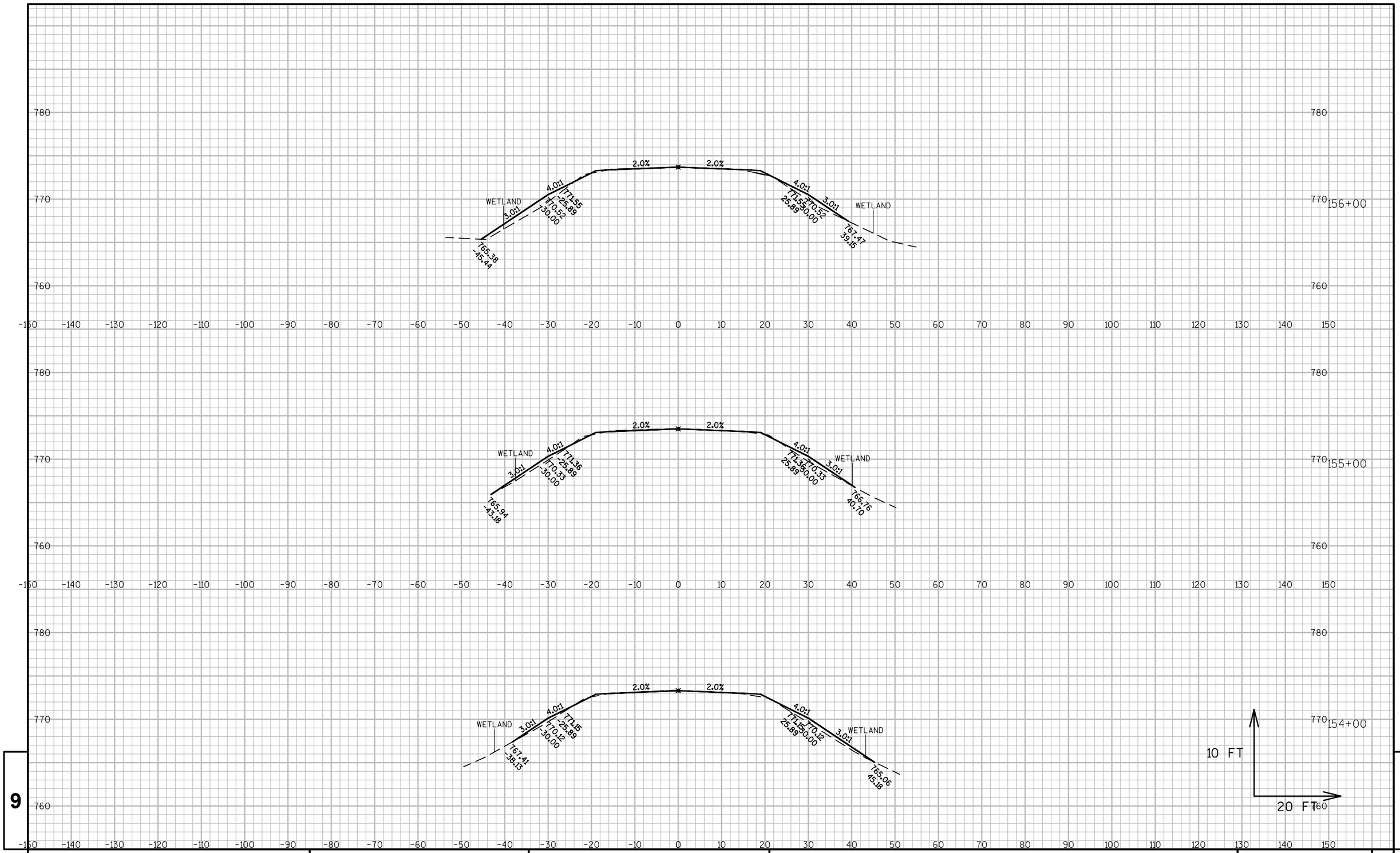
9

9

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: USH 45	SHEET 616	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090202-XS-45-Q-98TH.DWG PLOT DATE : 4/22/2016 1:04 PM PLOT BY : MAAS, JOSEPH A PLOT NAME :

WISDOT/CADDS SHEET 49



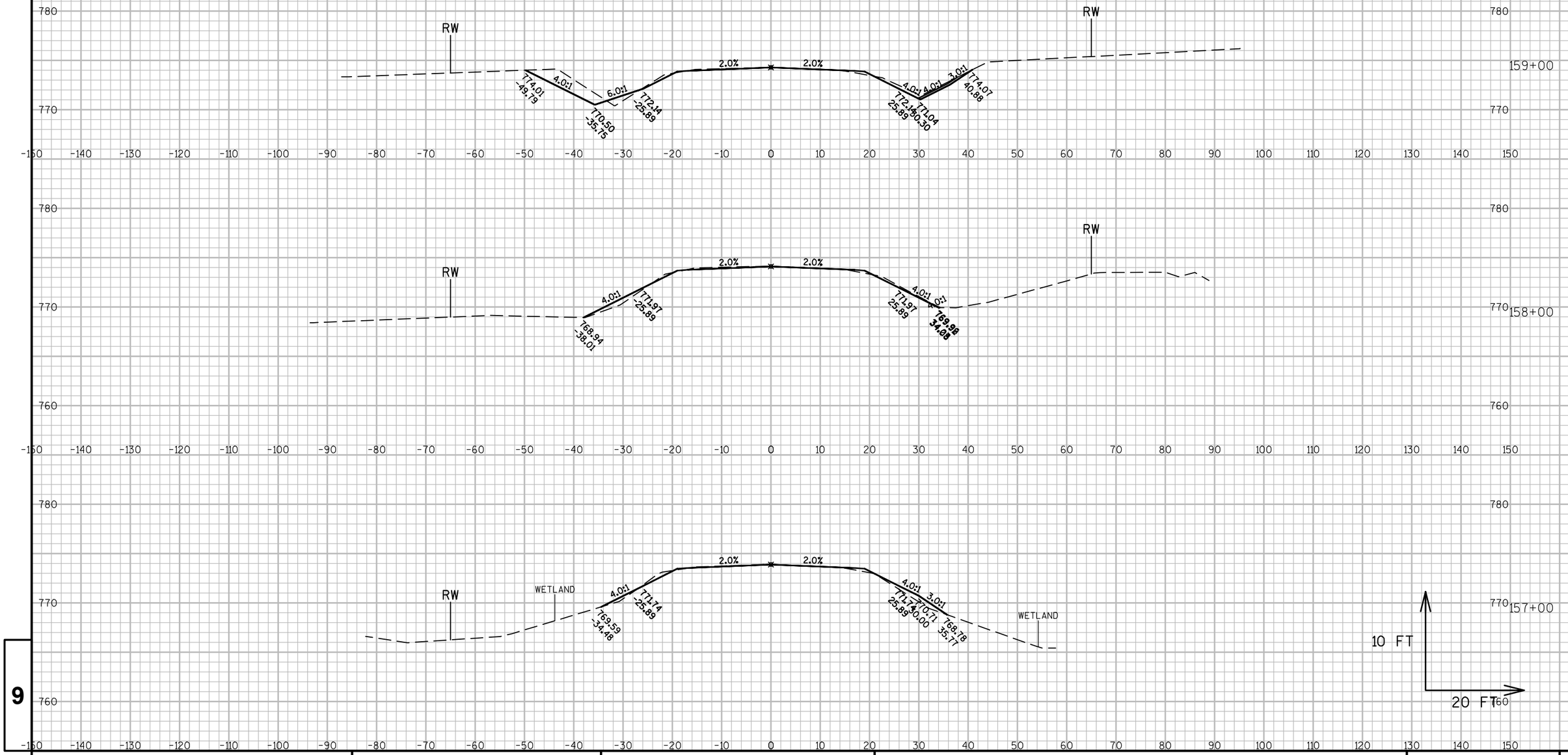
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PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: USH 45	SHEET 617	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090202-XS-45-Q-98TH.DWG PLOT DATE : 4/22/2016 1:04 PM PLOT BY : MAAS, JOSEPH A PLOT NAME :

WISDOT/CADDS SHEET 49

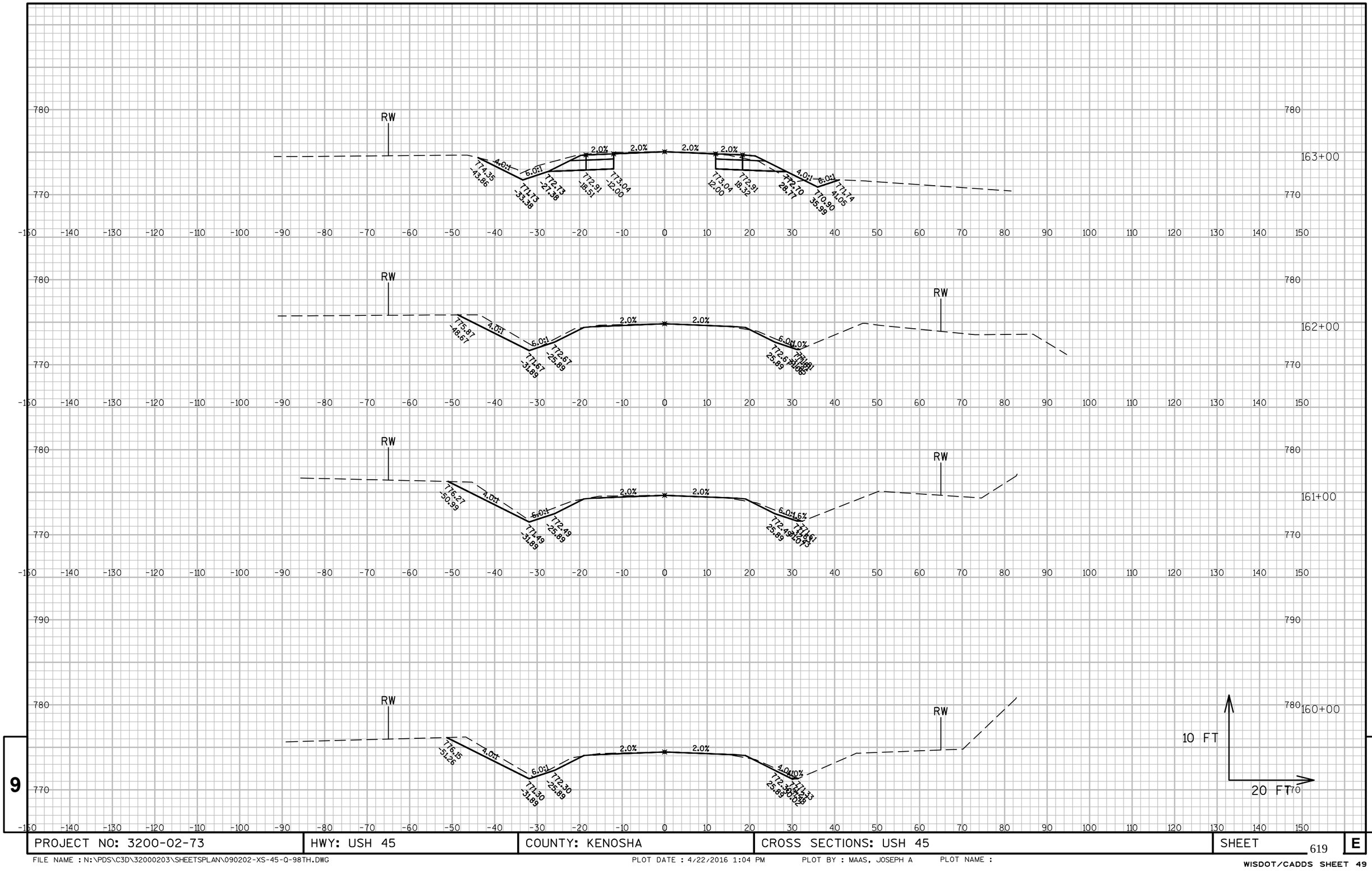


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PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: USH 45	SHEET 618	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090202-XS-45-Q-98TH.DWG PLOT DATE : 4/22/2016 1:04 PM PLOT BY : MAAS, JOSEPH A PLOT NAME :

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: USH 45	SHEET 619	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090202-XS-45-Q-98TH.DWG PLOT DATE : 4/22/2016 1:04 PM PLOT BY : MAAS, JOSEPH A PLOT NAME :

WISDOT/CADDS SHEET 49

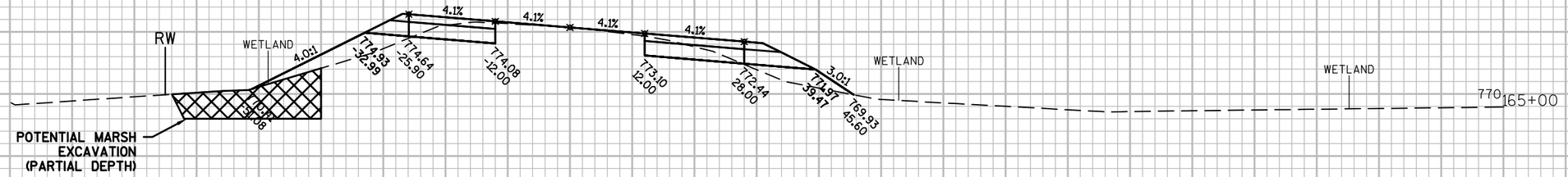
*POTENTIAL MARSH EXCAVATION FROM 164+50-167+50
SEE CONSTRUCTION DETAIL



CPRC CLIII 24-INCH REQD

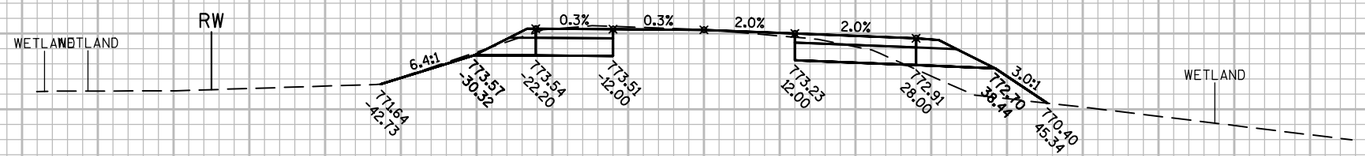
CROSS CULVERT RT
NOT FOR YARDAGE

165+78



POTENTIAL MARSH
EXCAVATION
(PARTIAL DEPTH)

165+00



164+00



9 9

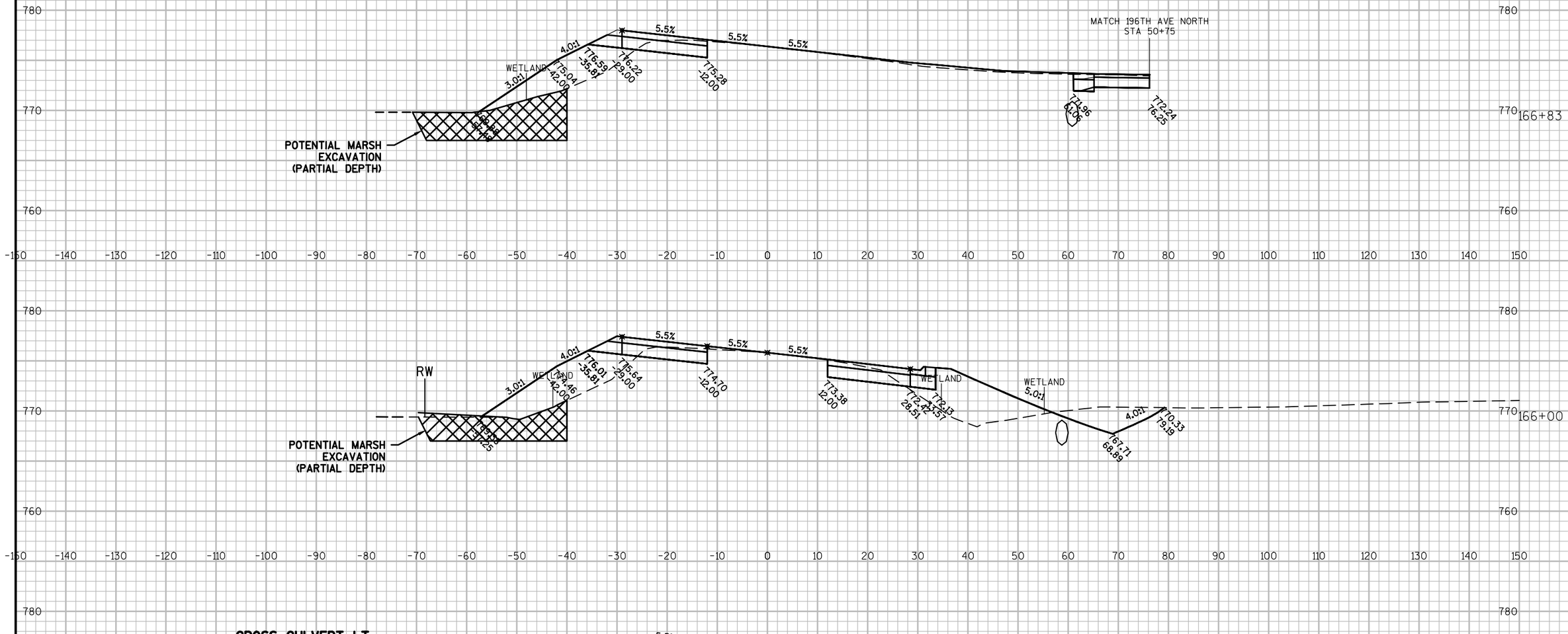
PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: USH 45	SHEET 620	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090202-XS-45-Q-98TH.DWG PLOT DATE : 4/22/2016 1:04 PM PLOT BY : MAAS, JOSEPH A PLOT NAME :

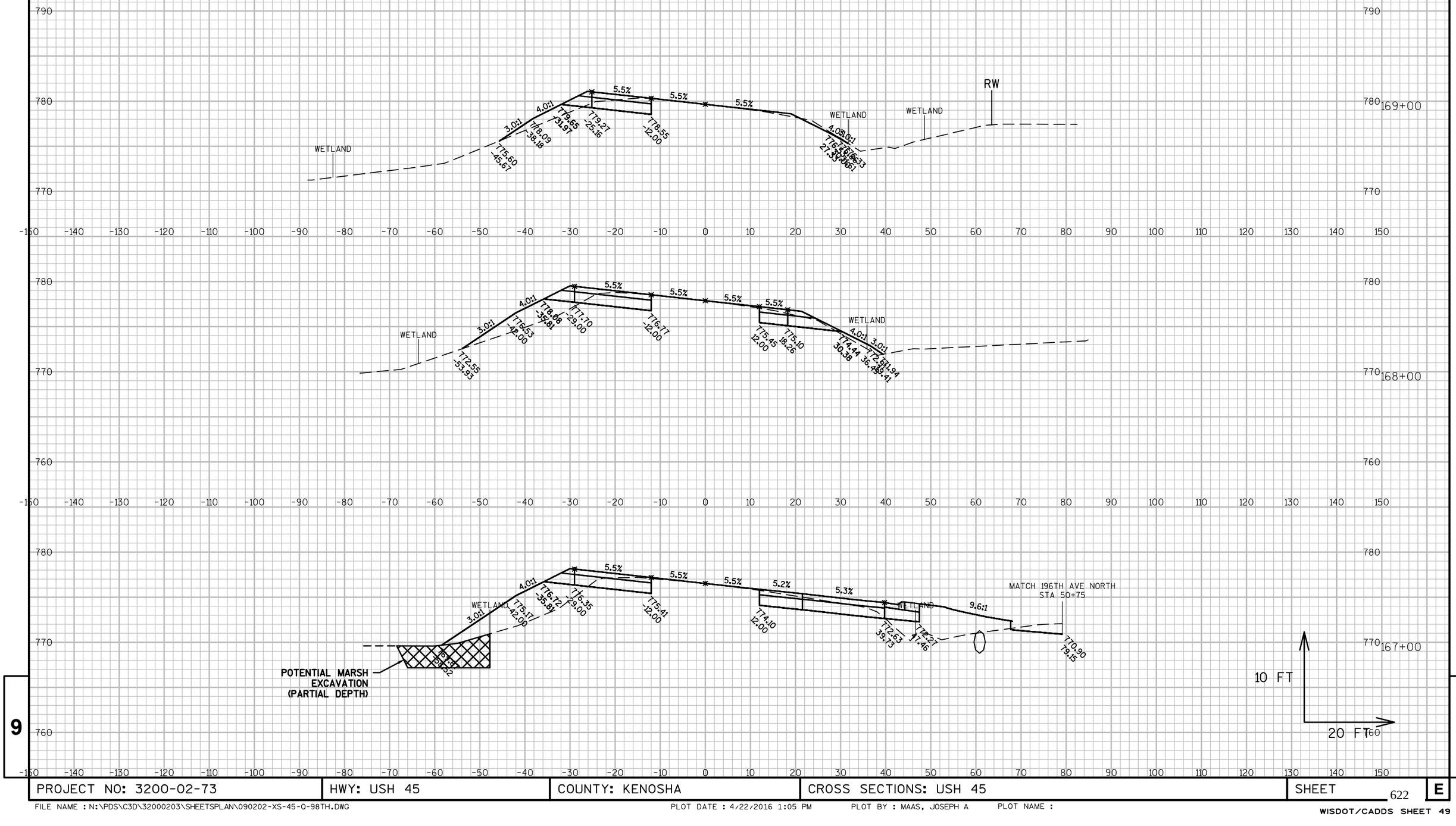
WISDOT/CADDS SHEET 49

*POTENTIAL MARSH EXCAVATION FROM 164+50-167+50
SEE CONSTRUCTION DETAIL

196TH AVENUE NORTH


780
770
760
MATCH 196TH AVE NORTH
STA 50+75
5.5%
5.5%
5.5%
4.0:1
3.0:1
WETLAND
T76.59
-35.81
T76.22
-29.00
T75.04
-42.00
T75.28
-12.00
T74.96
61.06
T72.24
76.25
166+83
POTENTIAL MARSH
EXCAVATION
(PARTIAL DEPTH)
RW
T76.01
-35.81
T75.64
-29.00
T74.46
-42.00
T74.70
-12.00
T73.38
12.00
T72.13
28.57
T72.43
28.51
WETLAND
5.0:1
T70.33
79.19
T67.71
68.89
166+00
T74.25
T74.03
T73.82
T73.61
T73.40
T73.19
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T27.20
T27.00
T26.79
T26.58
T26.37
T26.16
T25.95
T25.74
T25.53
T25.32
T25.11
T24.90
T24.69
T24.48
T24.27
T24.06
T23.85
T23.64
T23.43
T23.22
T23.01
T22.80
T22.59
T22.38
T22.17
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T21.75
T21.54
T21.33
T21.12
T20.91
T20.70
T20.49
T20.28
T20.07
T19.86
T19.65
T19.44
T19.23
T19.02
T18.81
T18.60
T18.39
T18.18
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T17.13
T16.92
T16.71
T16.50
T16.29
T16.08
T15.87
T15.66
T15.45
T15.24
T15.03
T14.82
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T14.40
T14.19
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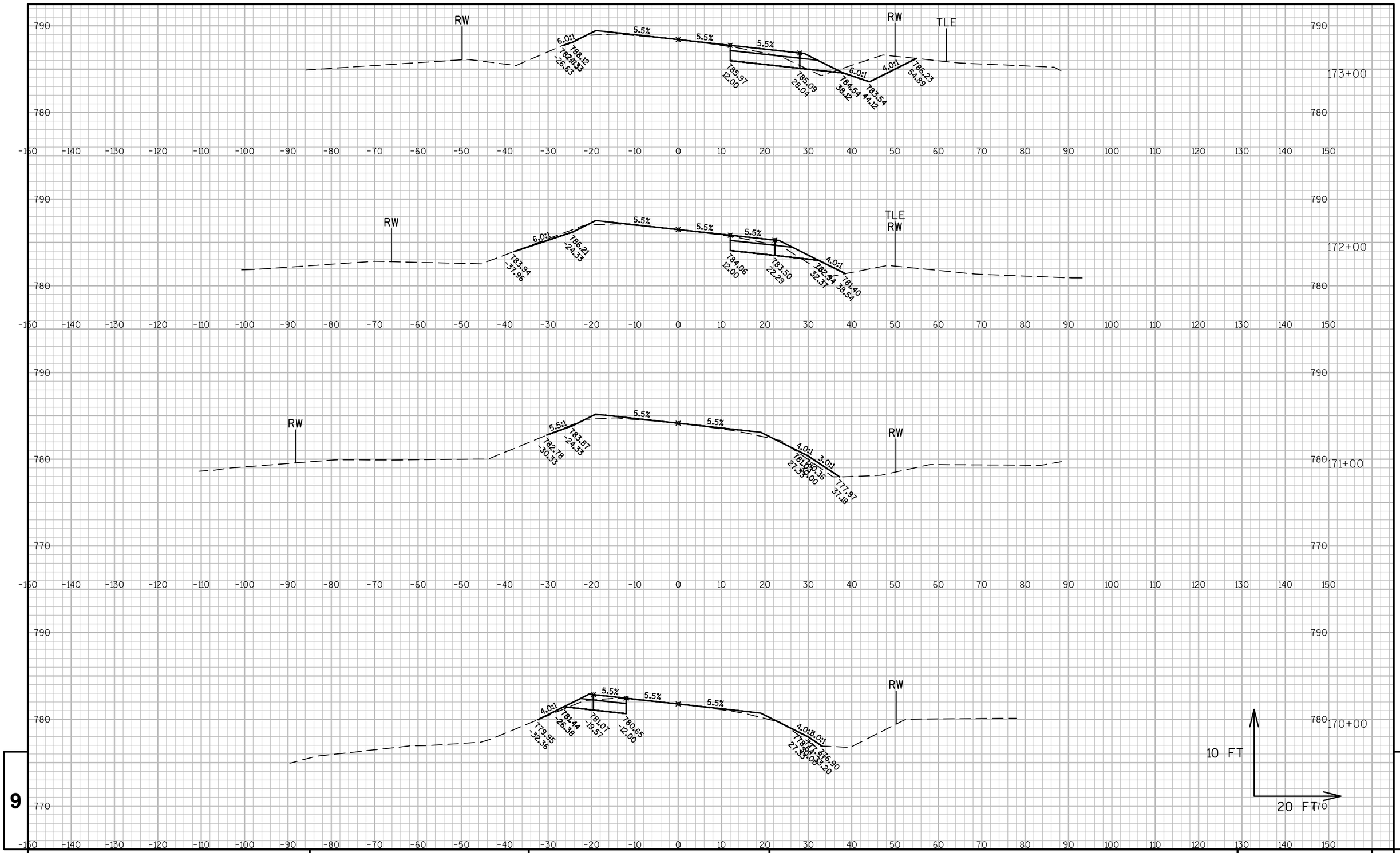
*POTENTIAL MARSH EXCAVATION FROM 164+50-167+50
SEE CONSTRUCTION DETAIL



PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: USH 45	SHEET 622	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090202-XS-45-Q-98TH.DWG PLOT DATE : 4/22/2016 1:05 PM PLOT BY : MAAS, JOSEPH A PLOT NAME :

WISDOT/CADDS SHEET 49



9

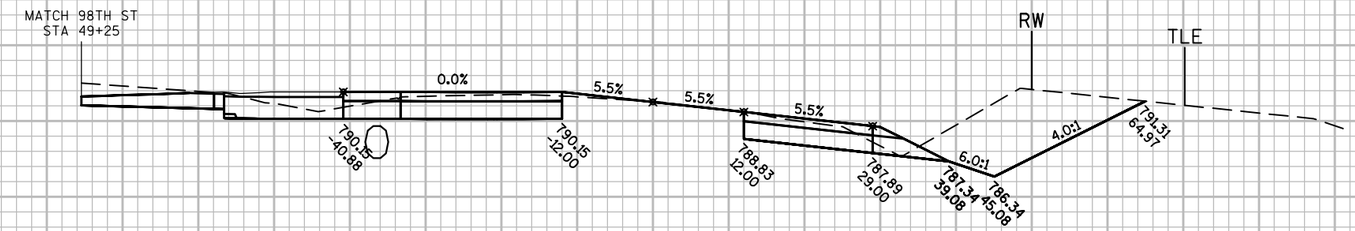
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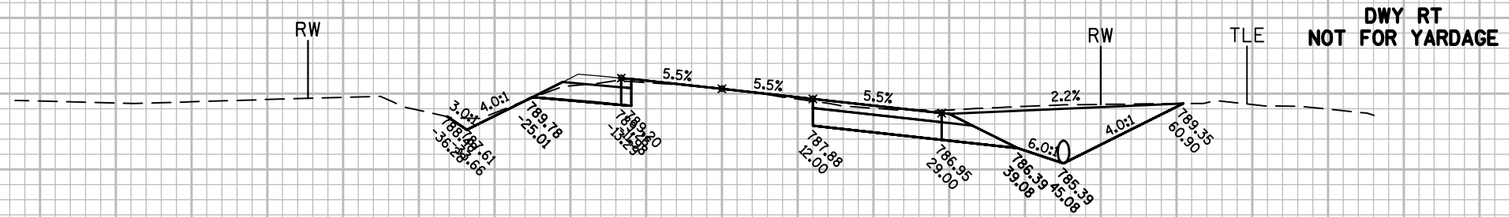
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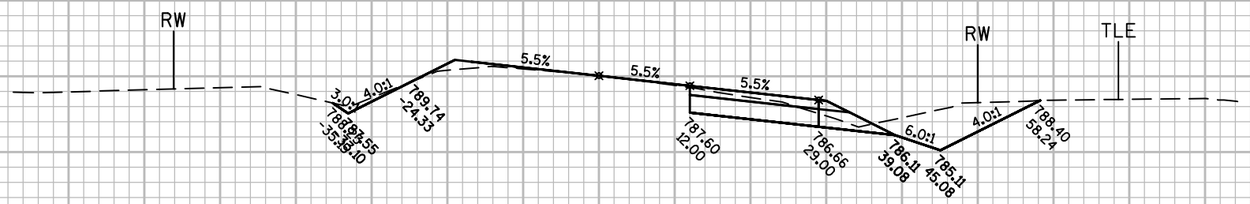
WISDOT/CADDS SHEET 49

98TH STREET



DWY RT
NOT FOR YARDAGE



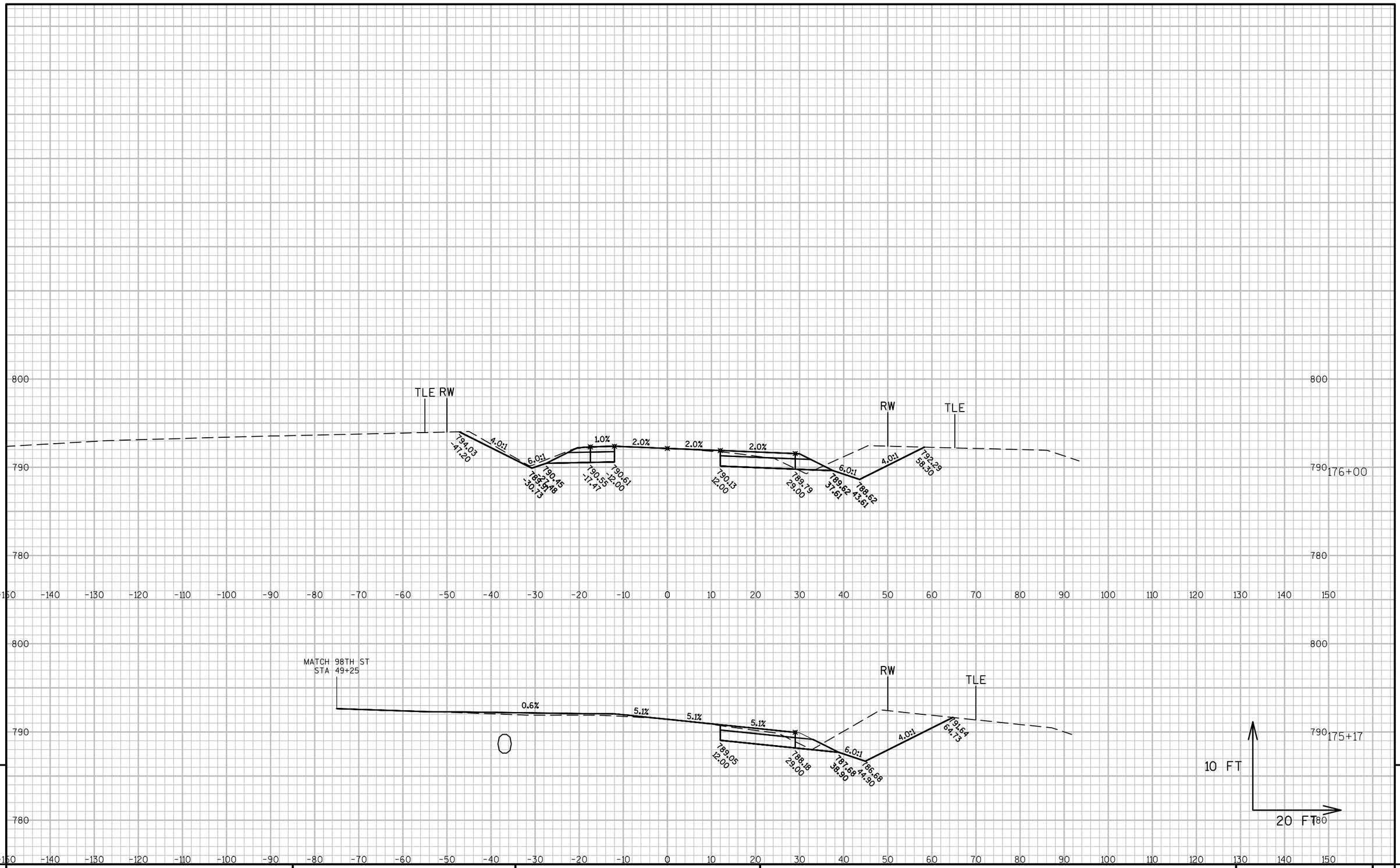




PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: USH 45	SHEET 624	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090202-XS-45-Q-98TH.DWG PLOT DATE : 4/22/2016 1:05 PM PLOT BY : MAAS, JOSEPH A PLOT NAME :

WISDOT/CADDS SHEET 49



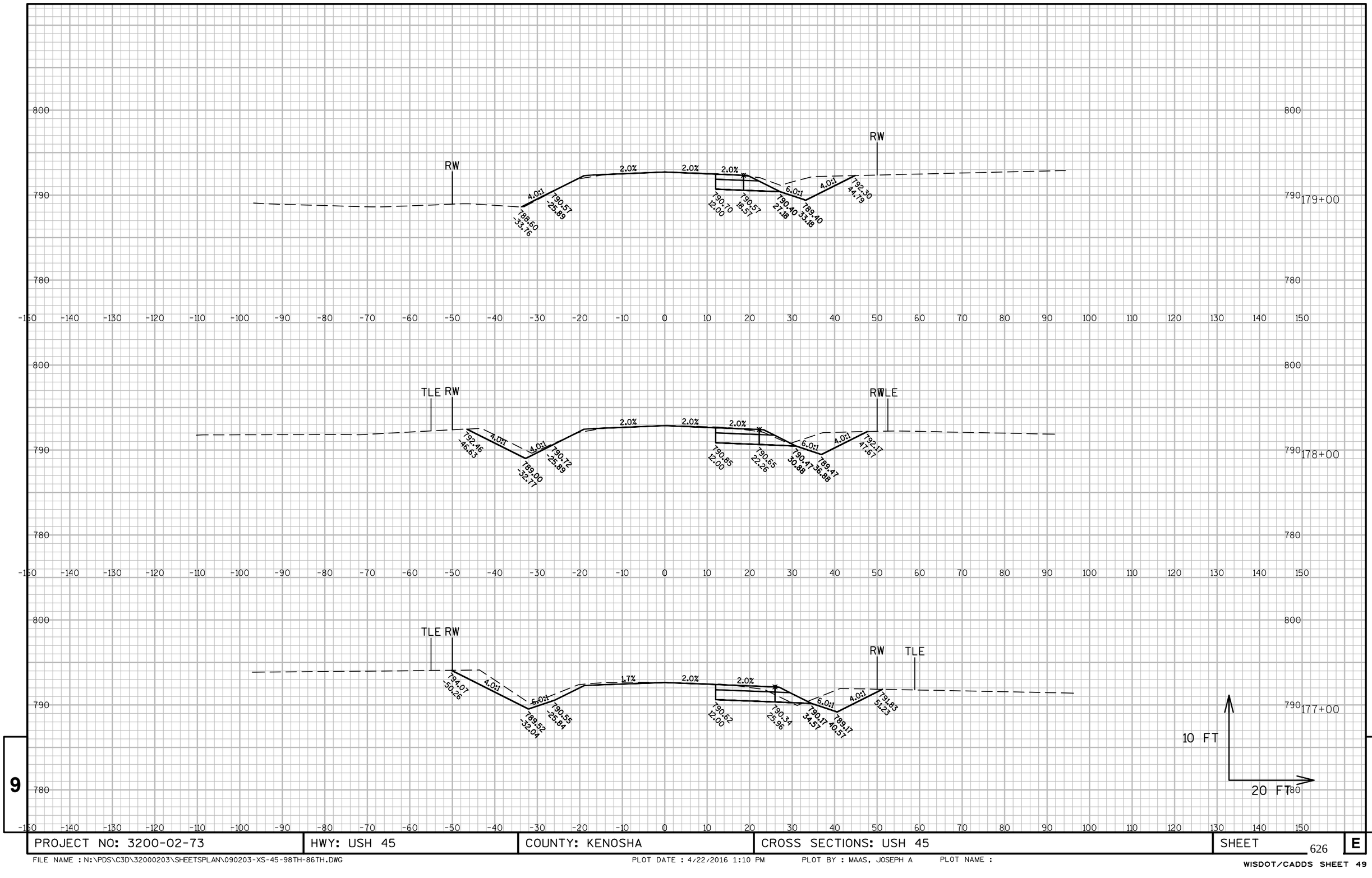
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PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: USH 45	SHEET 625	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090202-XS-45-Q-98TH.DWG PLOT DATE : 4/22/2016 1:05 PM PLOT BY : MAAS, JOSEPH A PLOT NAME :

WISDOT/CADDS SHEET 49



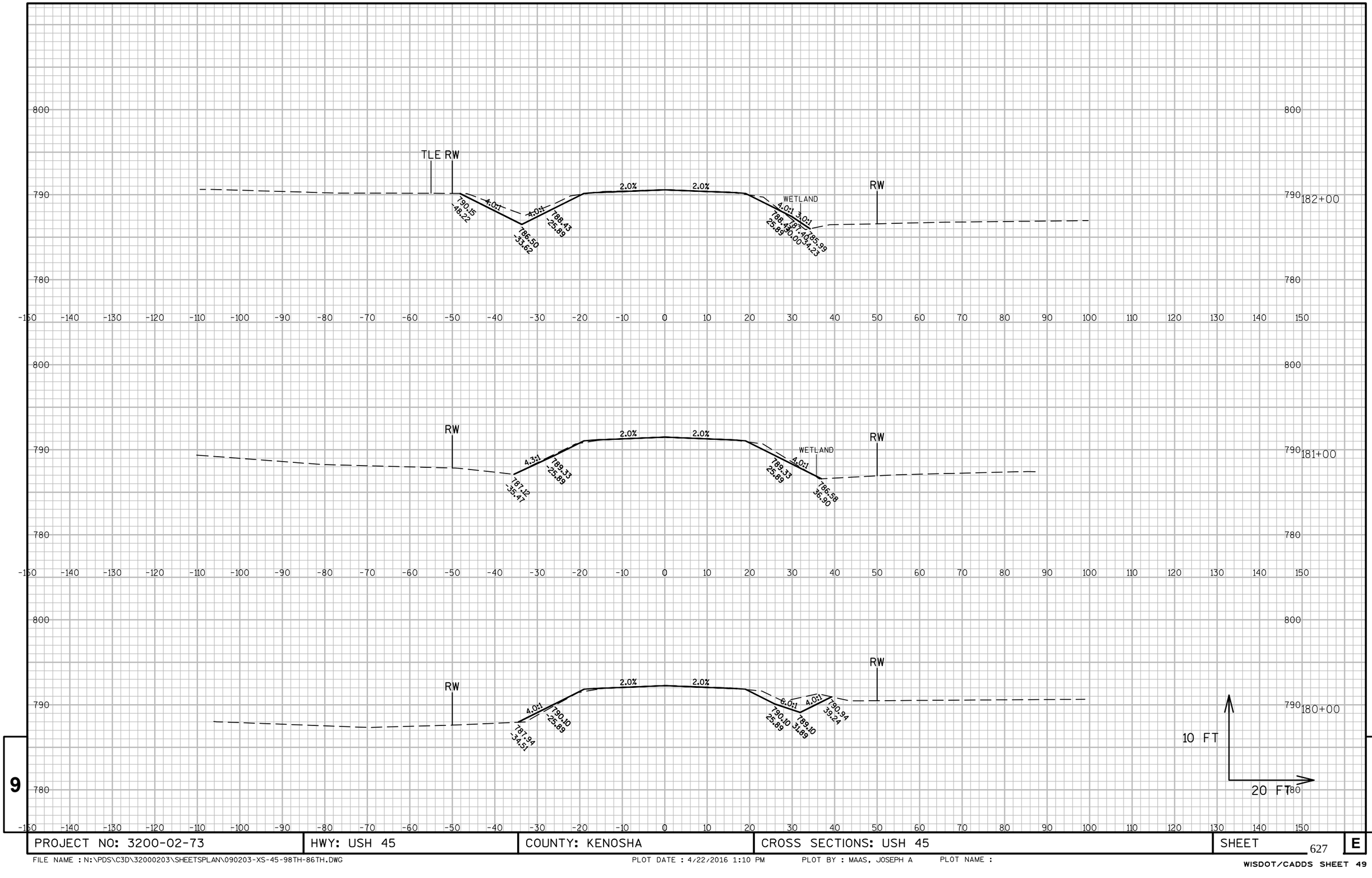
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PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: USH 45	SHEET 626	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090203-XS-45-98TH-86TH.DWG PLOT DATE : 4/22/2016 1:10 PM PLOT BY : MAAS, JOSEPH A PLOT NAME :

WISDOT/CADDS SHEET 49



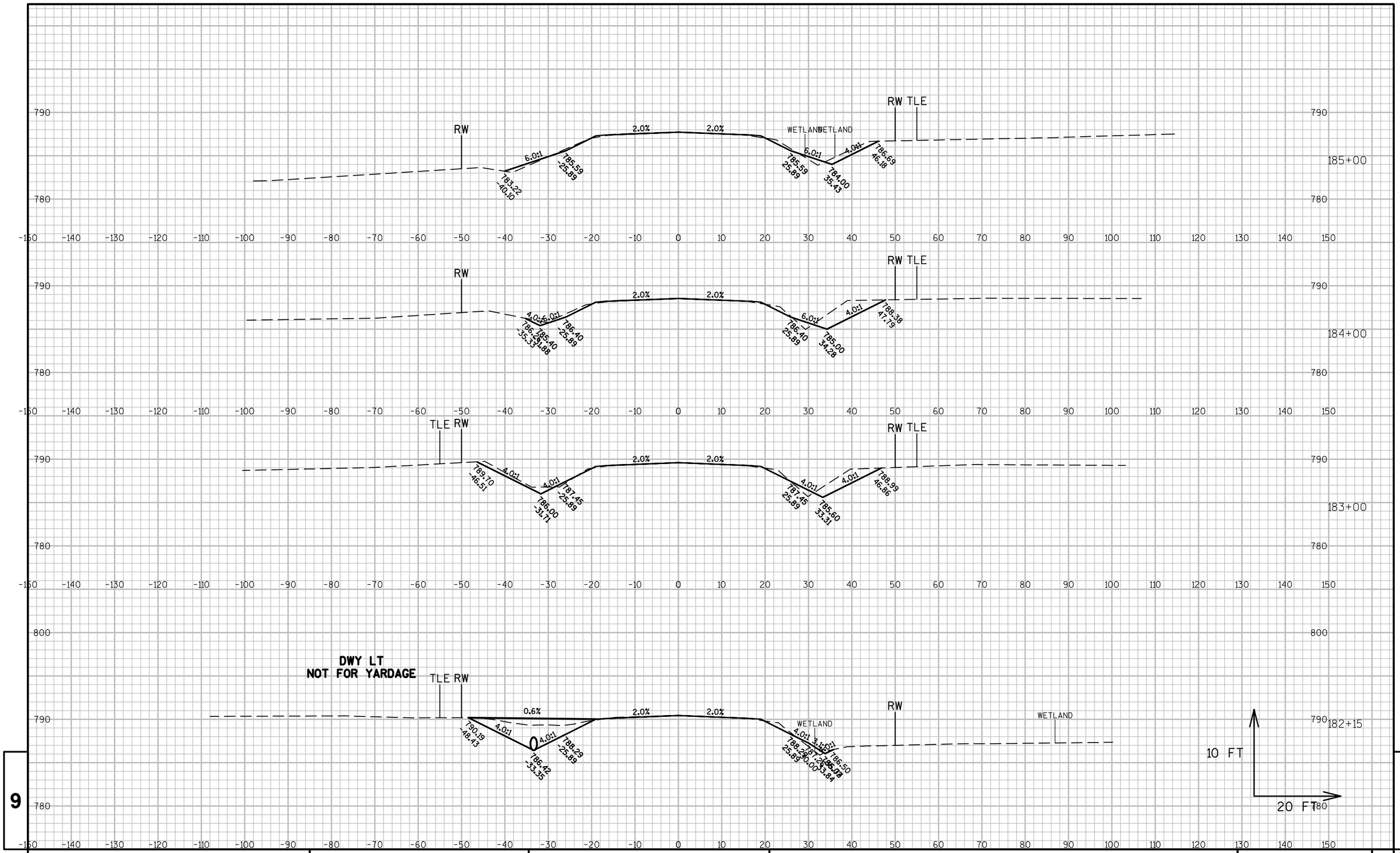
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PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: USH 45	SHEET 627	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090203-XS-45-98TH-86TH.DWG PLOT DATE : 4/22/2016 1:10 PM PLOT BY : MAAS, JOSEPH A PLOT NAME :

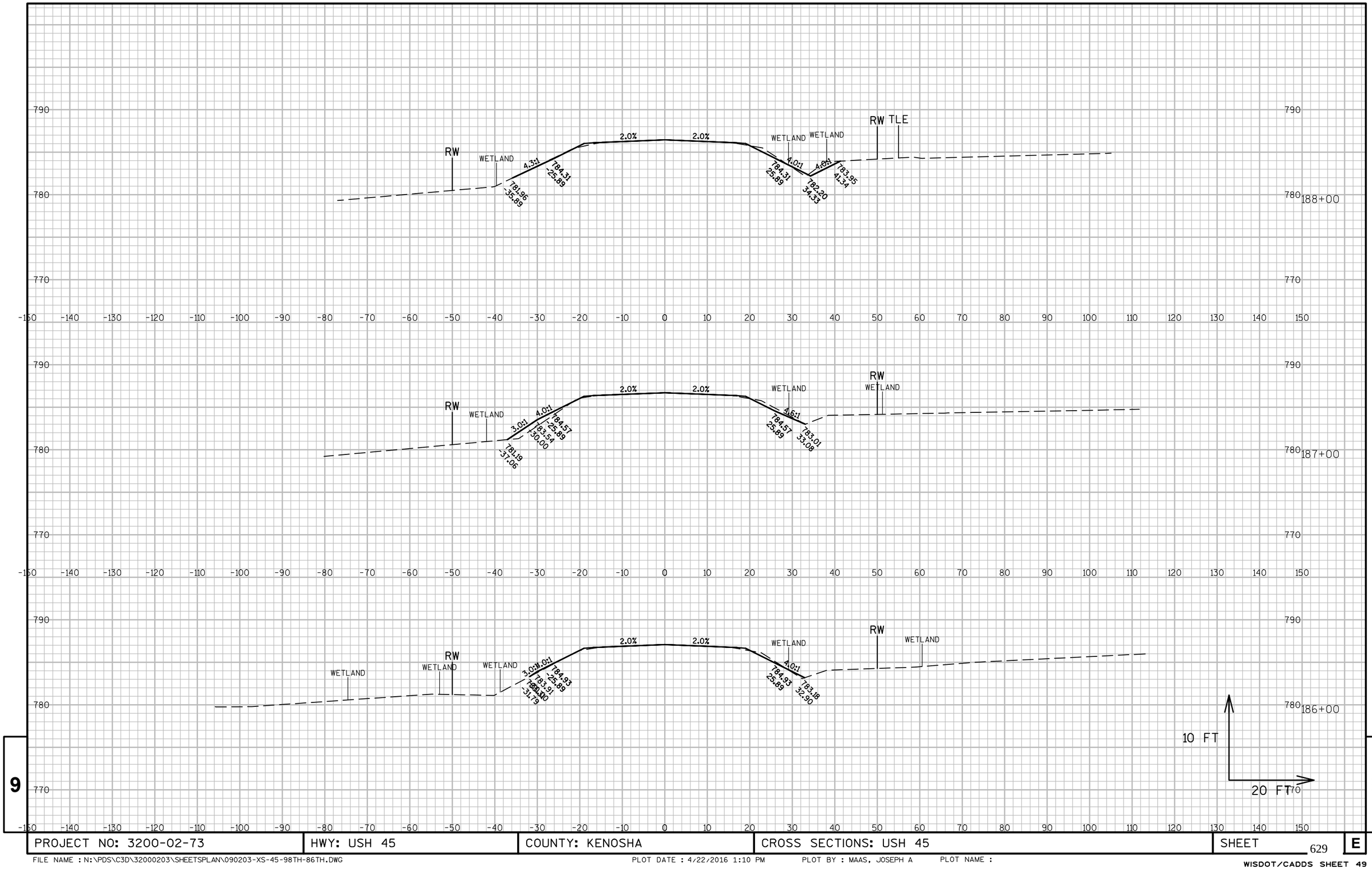
WISDOT/CADDS SHEET 49



PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: USH 45	SHEET 628	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090203-XS-45-98TH-86TH.DWG PLOT DATE : 4/22/2016 1:10 PM PLOT BY : MAAS, JOSEPH A PLOT NAME :

WISDOT/CADDS SHEET 49



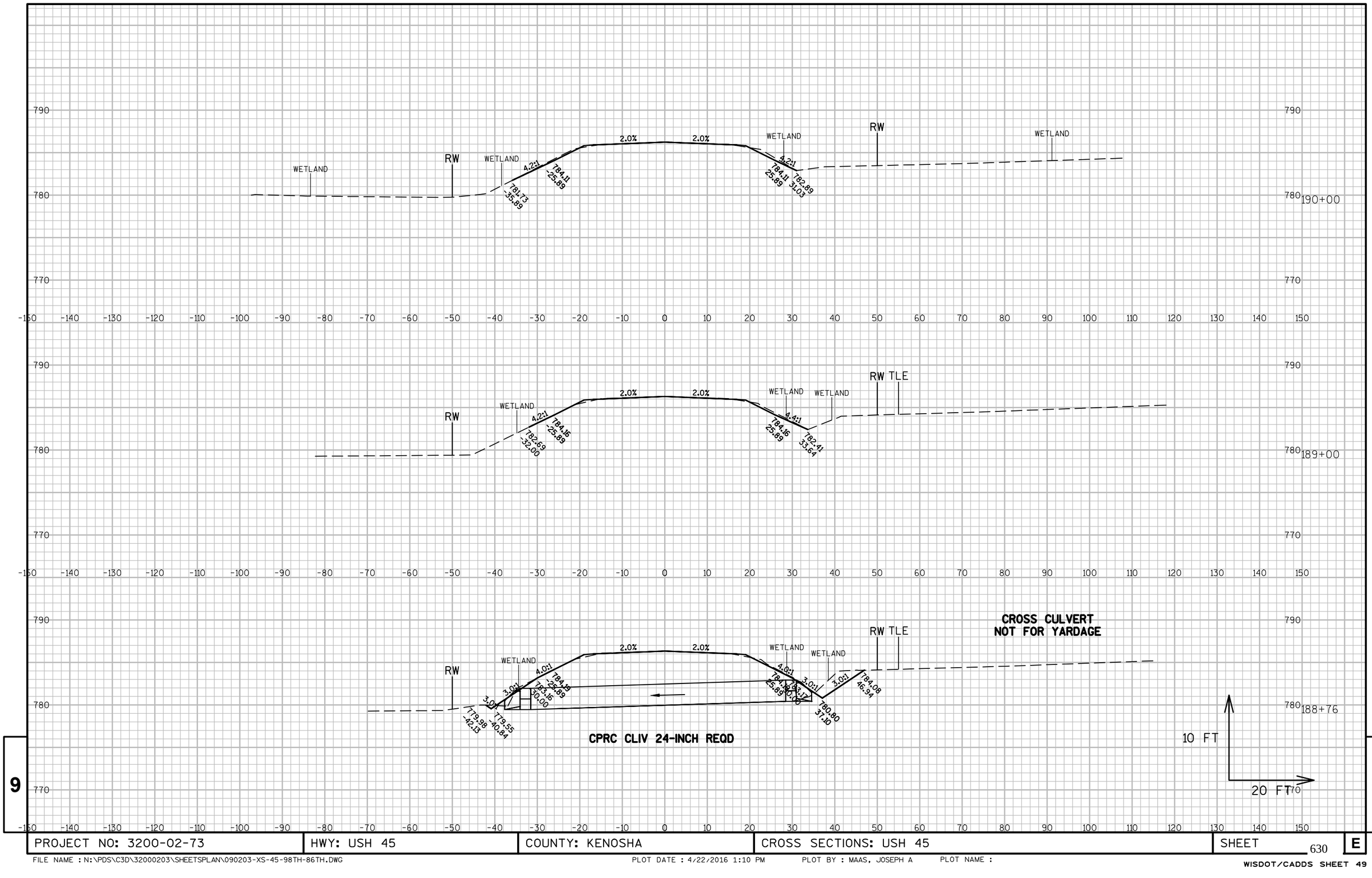
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PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: USH 45	SHEET 629	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090203-XS-45-98TH-86TH.DWG PLOT DATE : 4/22/2016 1:10 PM PLOT BY : MAAS, JOSEPH A PLOT NAME :

WISDOT/CADDS SHEET 49

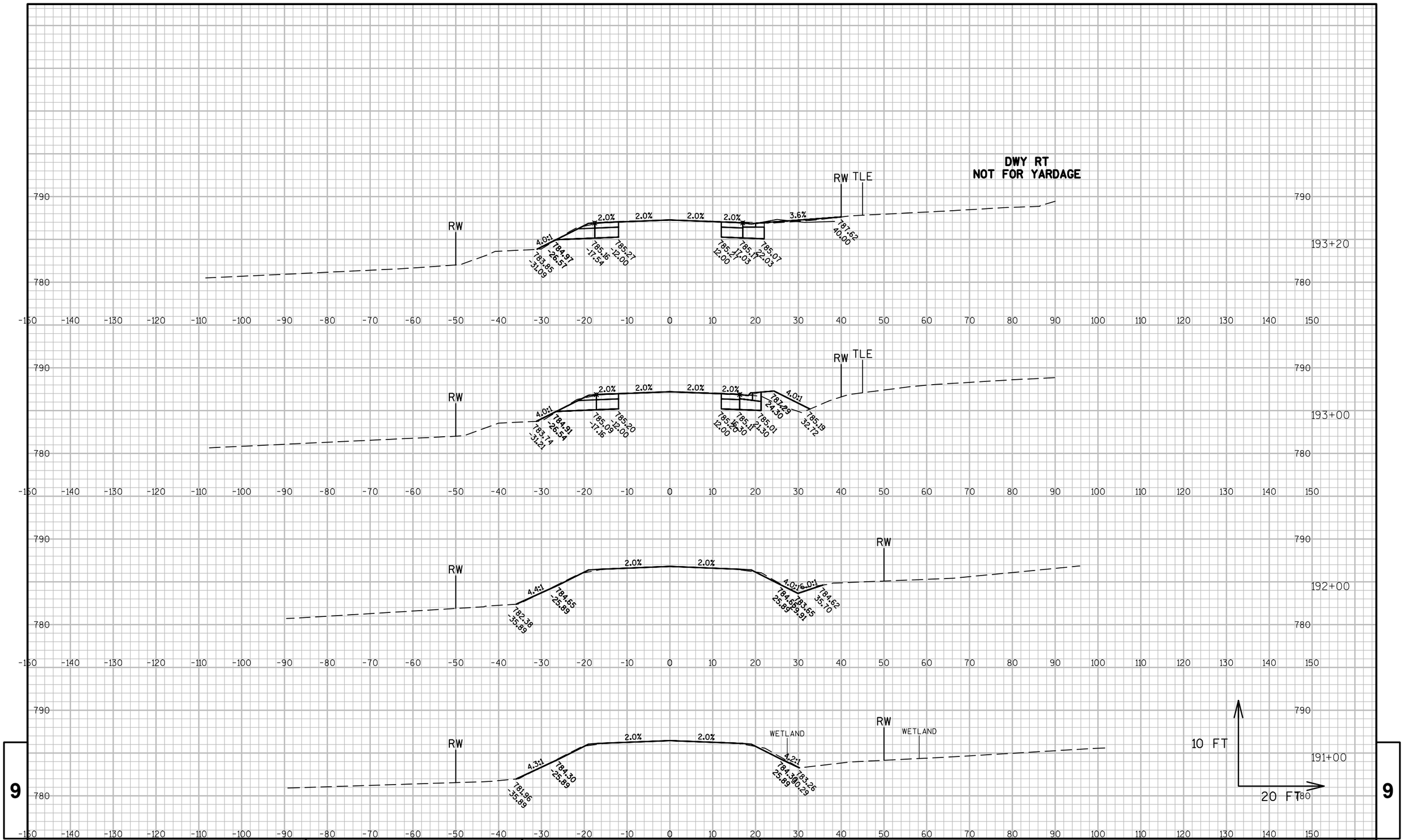


PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: USH 45	SHEET 630	E

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WISDOT/CADDS SHEET 49

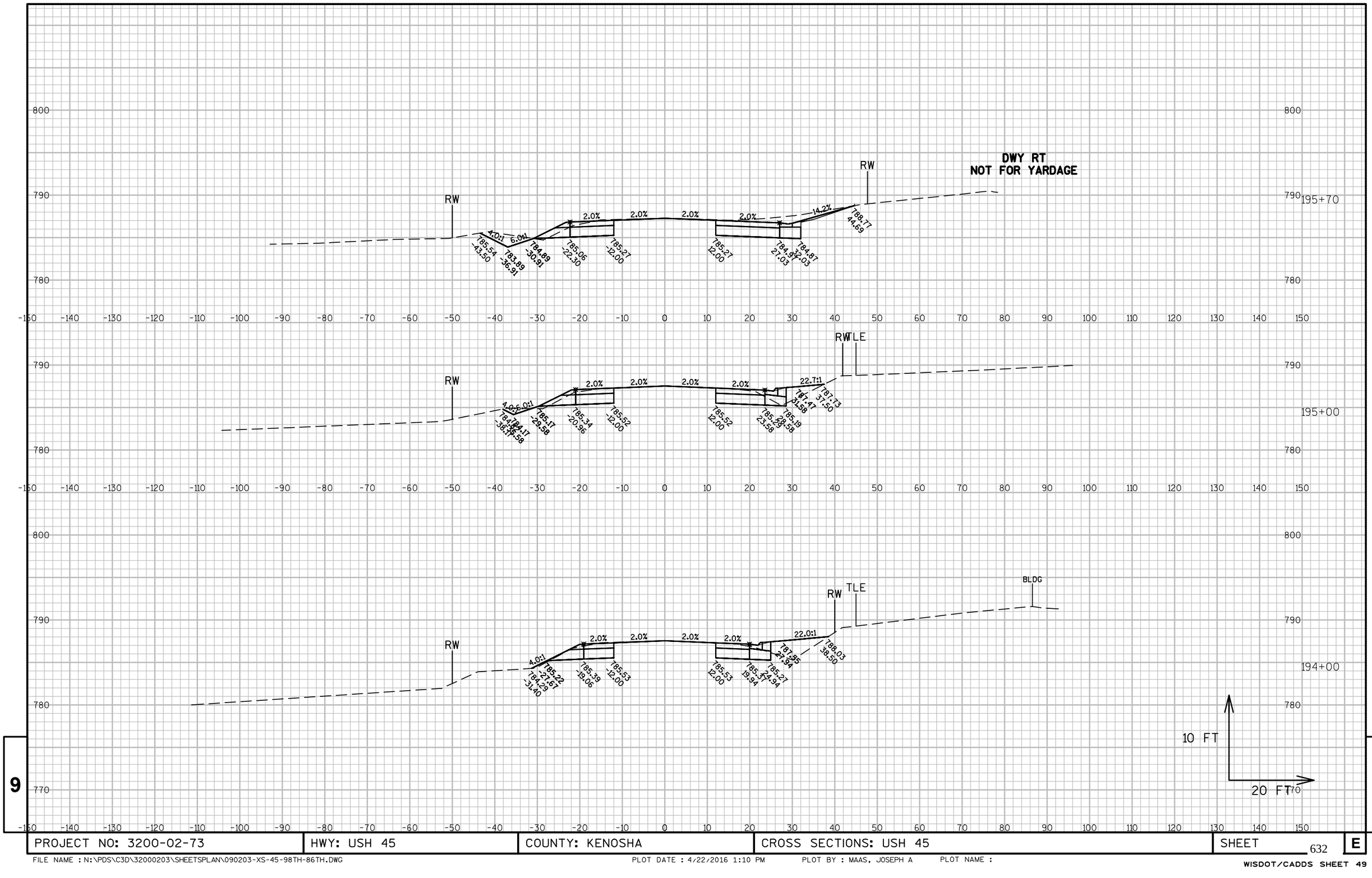
DWY RT
NOT FOR YARDAGE



PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: USH 45	SHEET 631	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090203-XS-45-98TH-86TH.DWG PLOT DATE : 4/22/2016 1:10 PM PLOT BY : MAAS, JOSEPH A PLOT NAME :

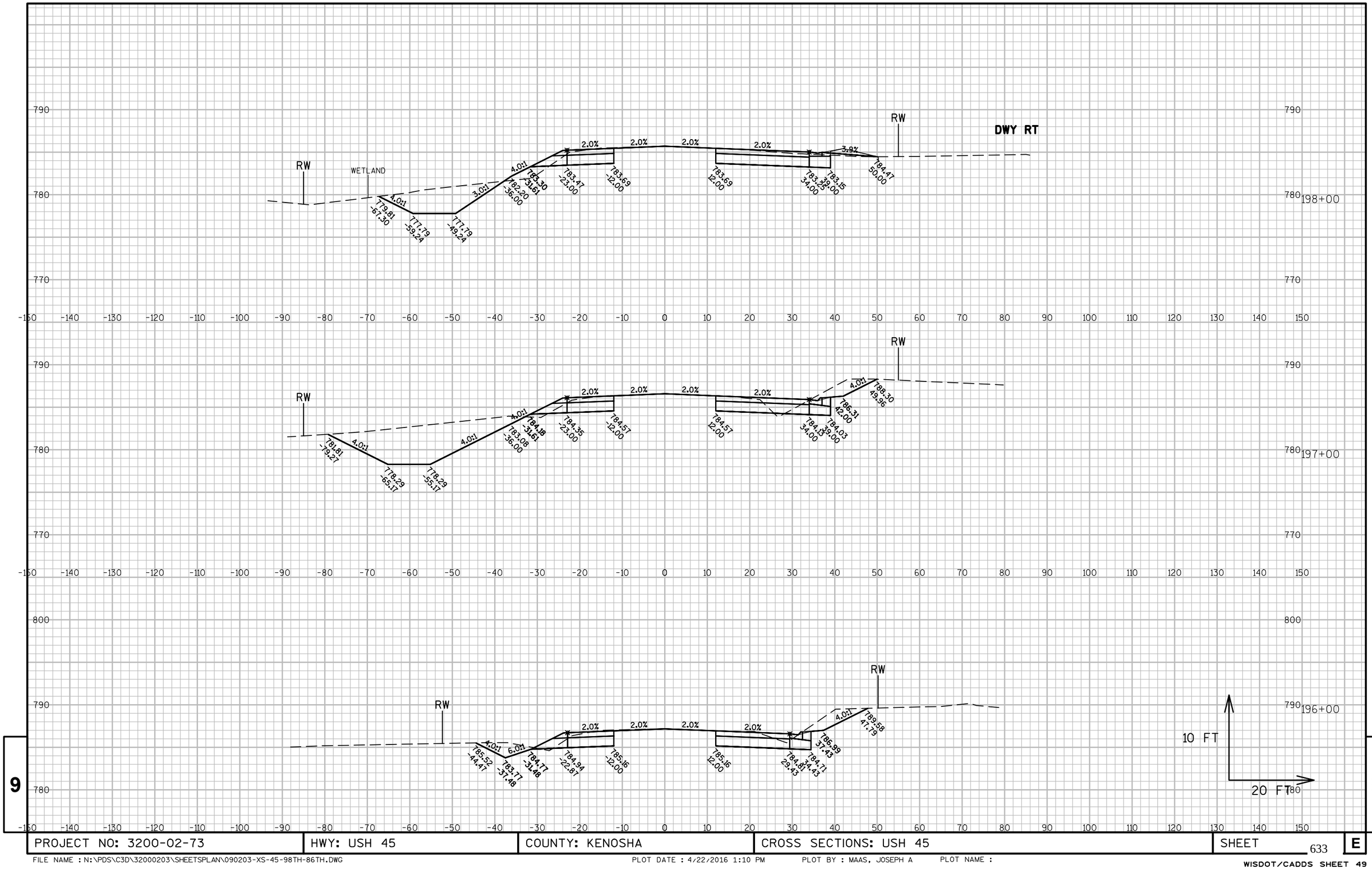
WISDOT/CADDS SHEET 49



PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: USH 45	SHEET 632	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090203-XS-45-98TH-86TH.DWG PLOT DATE : 4/22/2016 1:10 PM PLOT BY : MAAS, JOSEPH A PLOT NAME :

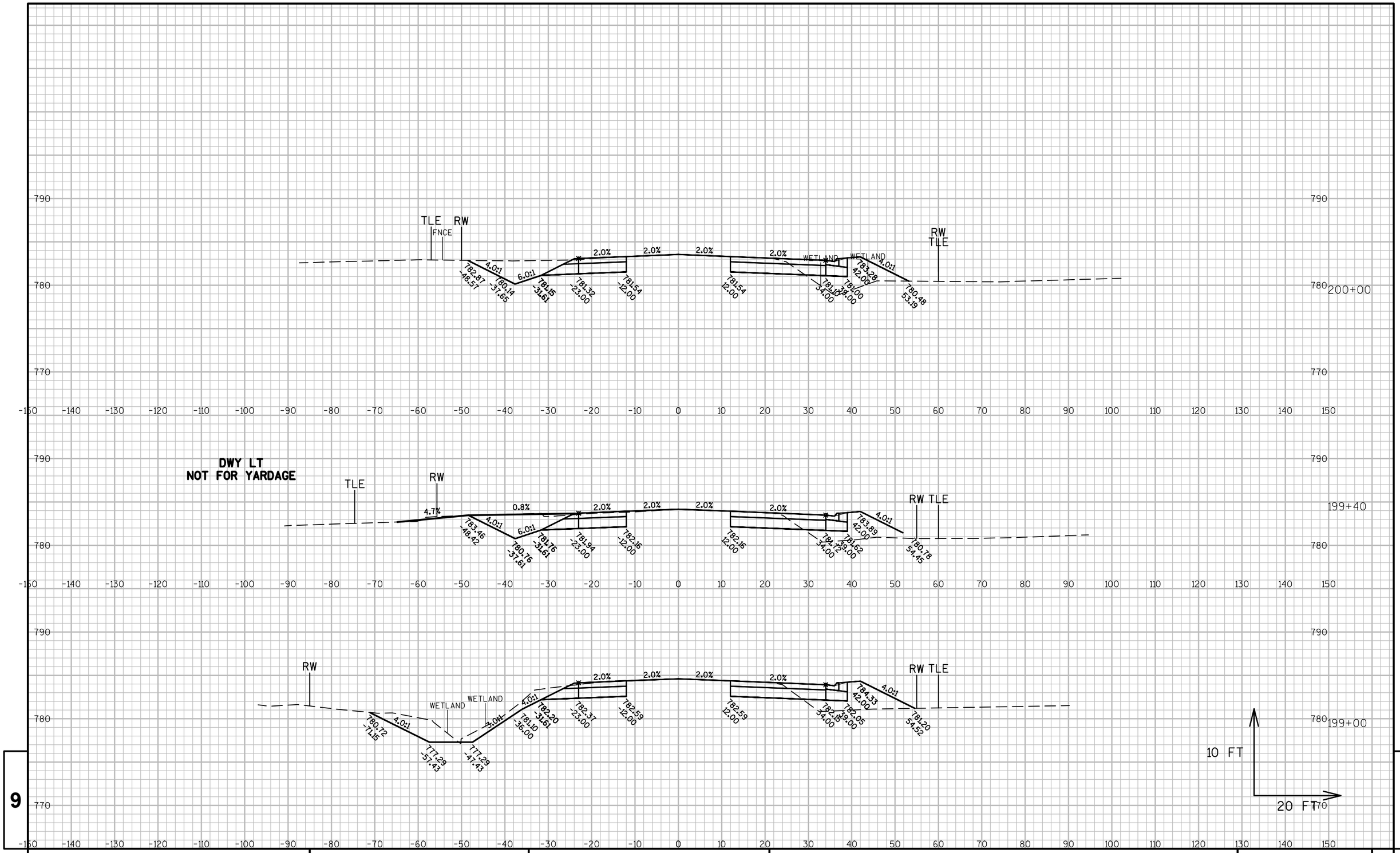
WISDOT/CADDS SHEET 49



PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: USH 45	SHEET 633	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090203-XS-45-98TH-86TH.DWG PLOT DATE : 4/22/2016 1:10 PM PLOT BY : MAAS, JOSEPH A PLOT NAME :

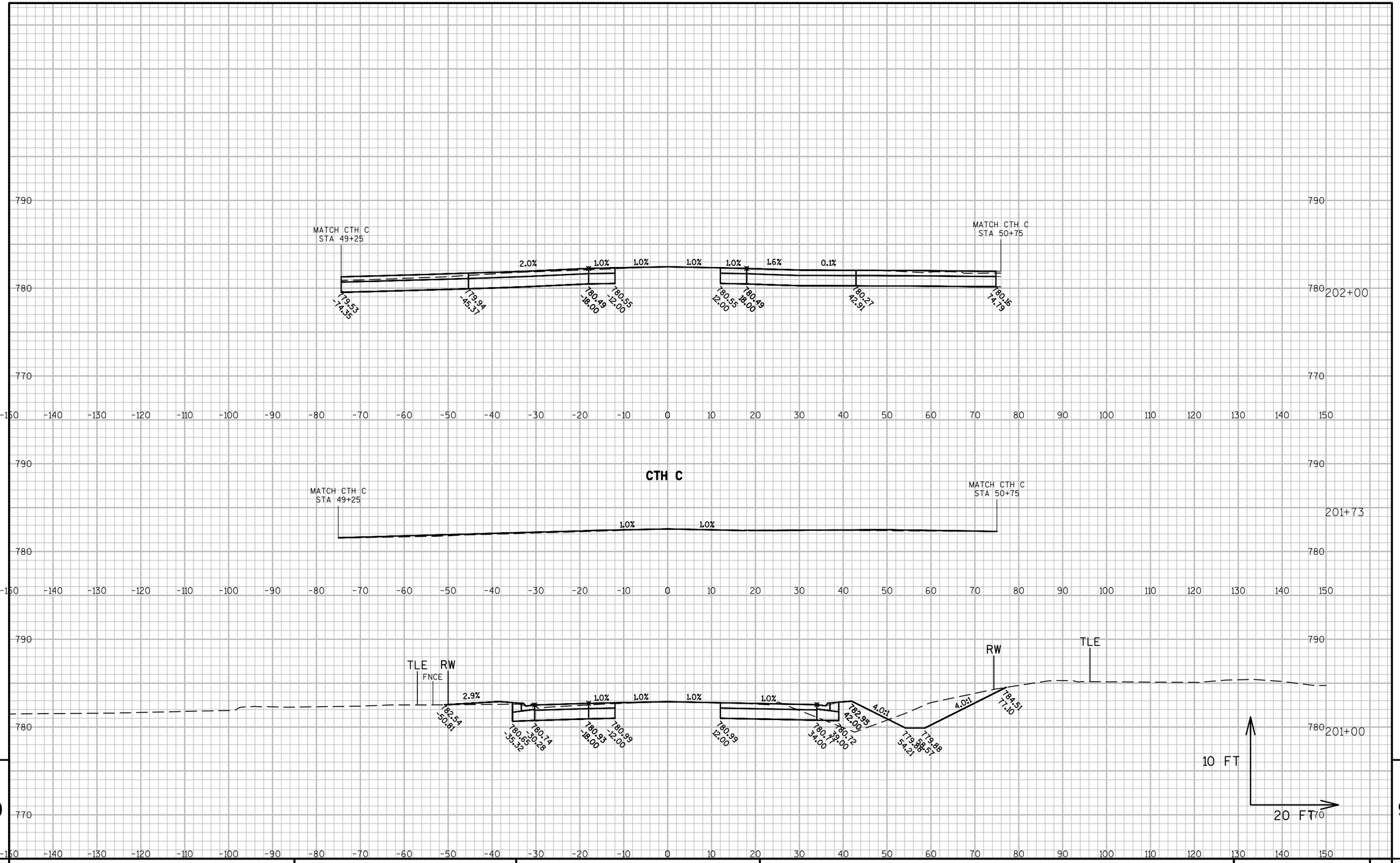
WISDOT/CADDS SHEET 49



PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: USH 45	SHEET 634	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090203-XS-45-98TH-86TH.DWG PLOT DATE : 4/22/2016 1:10 PM PLOT BY : MAAS, JOSEPH A PLOT NAME :

WISDOT/CADDS SHEET 49



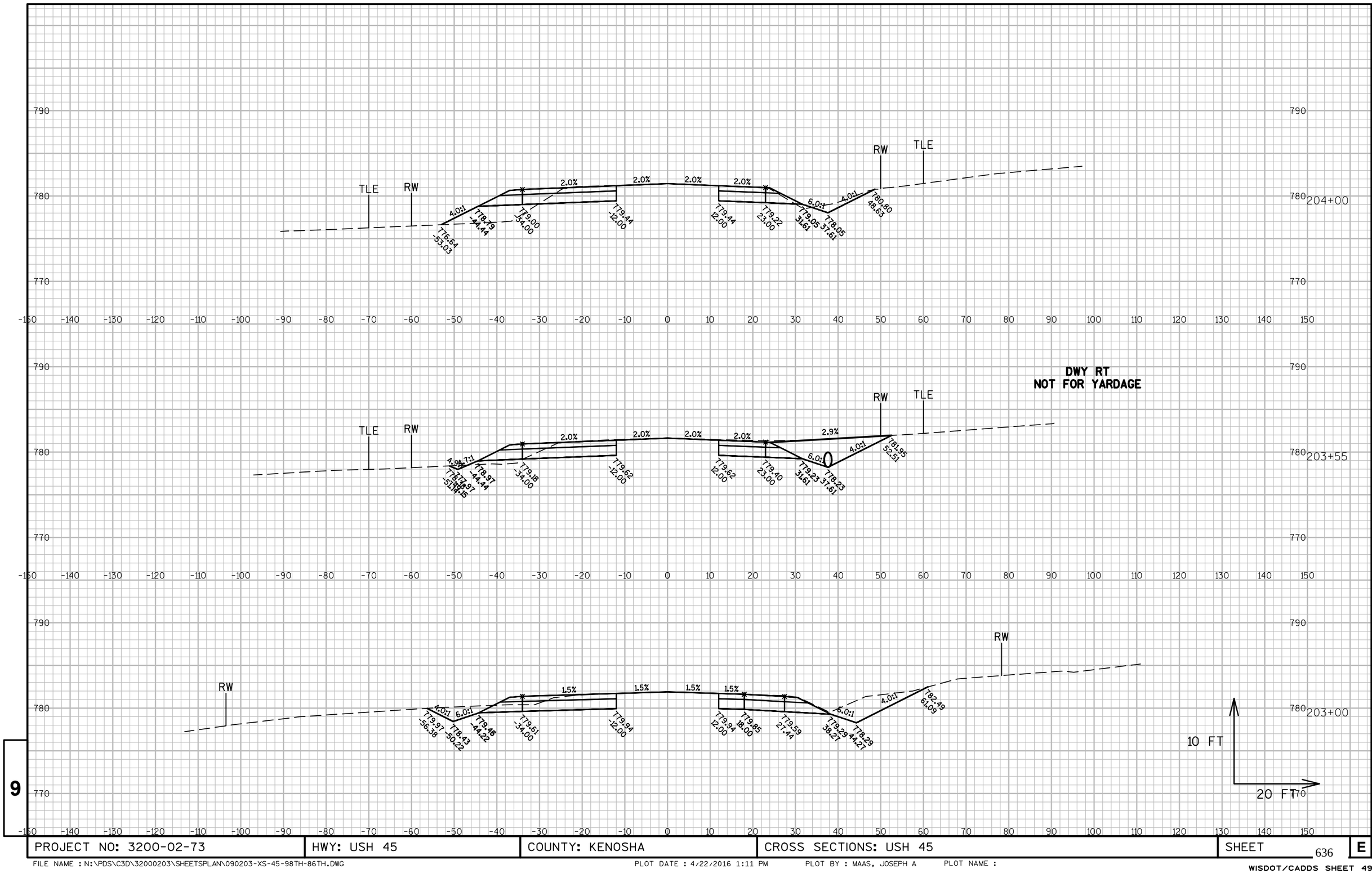
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PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: USH 45	SHEET 635	E

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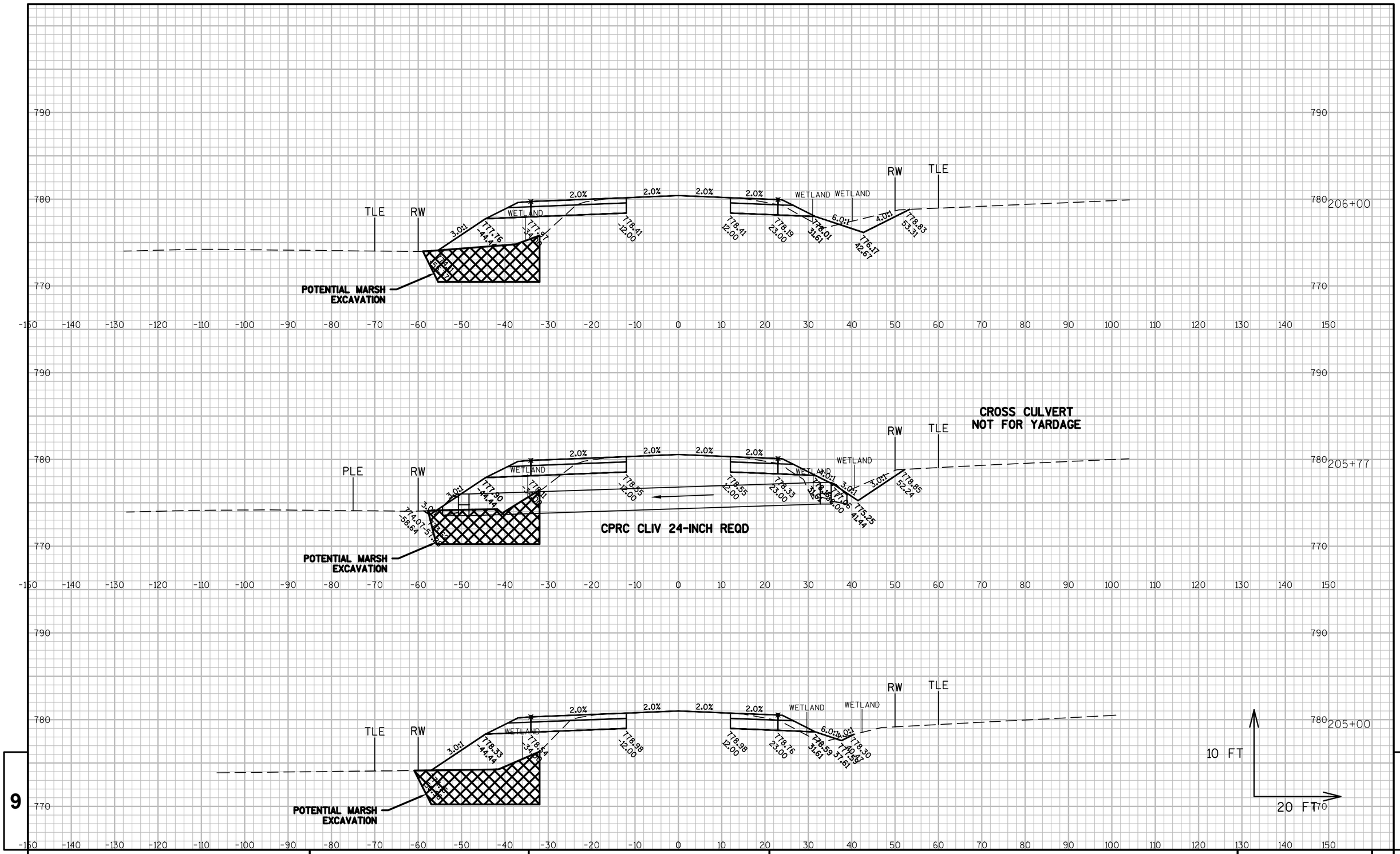
WISDOT/CADDS SHEET 49



PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: USH 45	SHEET 636	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090203-XS-45-98TH-86TH.DWG PLOT DATE : 4/22/2016 1:11 PM PLOT BY : MAAS, JOSEPH A PLOT NAME :

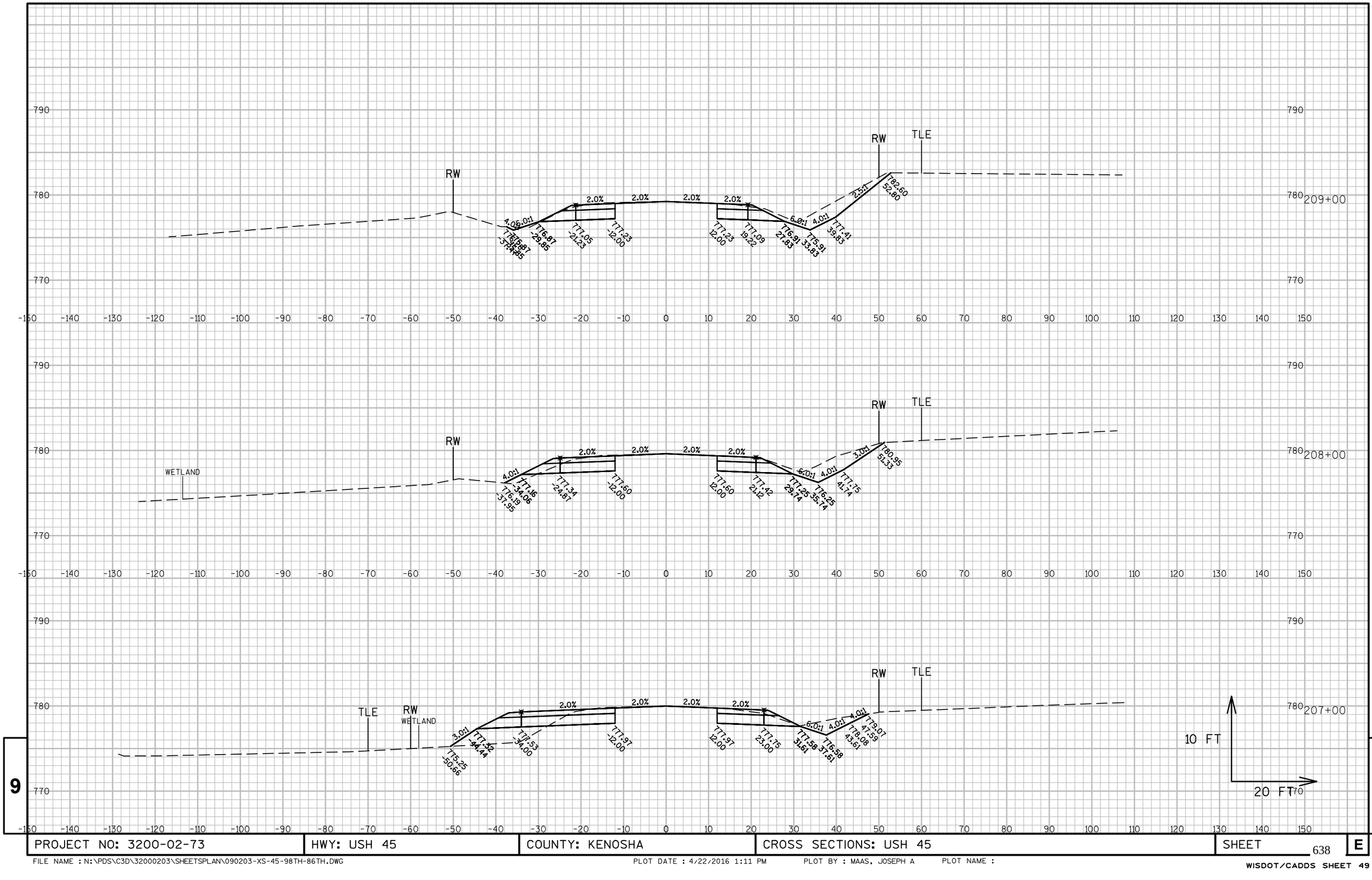
WISDOT/CADDS SHEET 49



PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: USH 45	SHEET 637	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090203-XS-45-98TH-86TH.DWG PLOT DATE : 4/22/2016 1:11 PM PLOT BY : MAAS, JOSEPH A PLOT NAME :

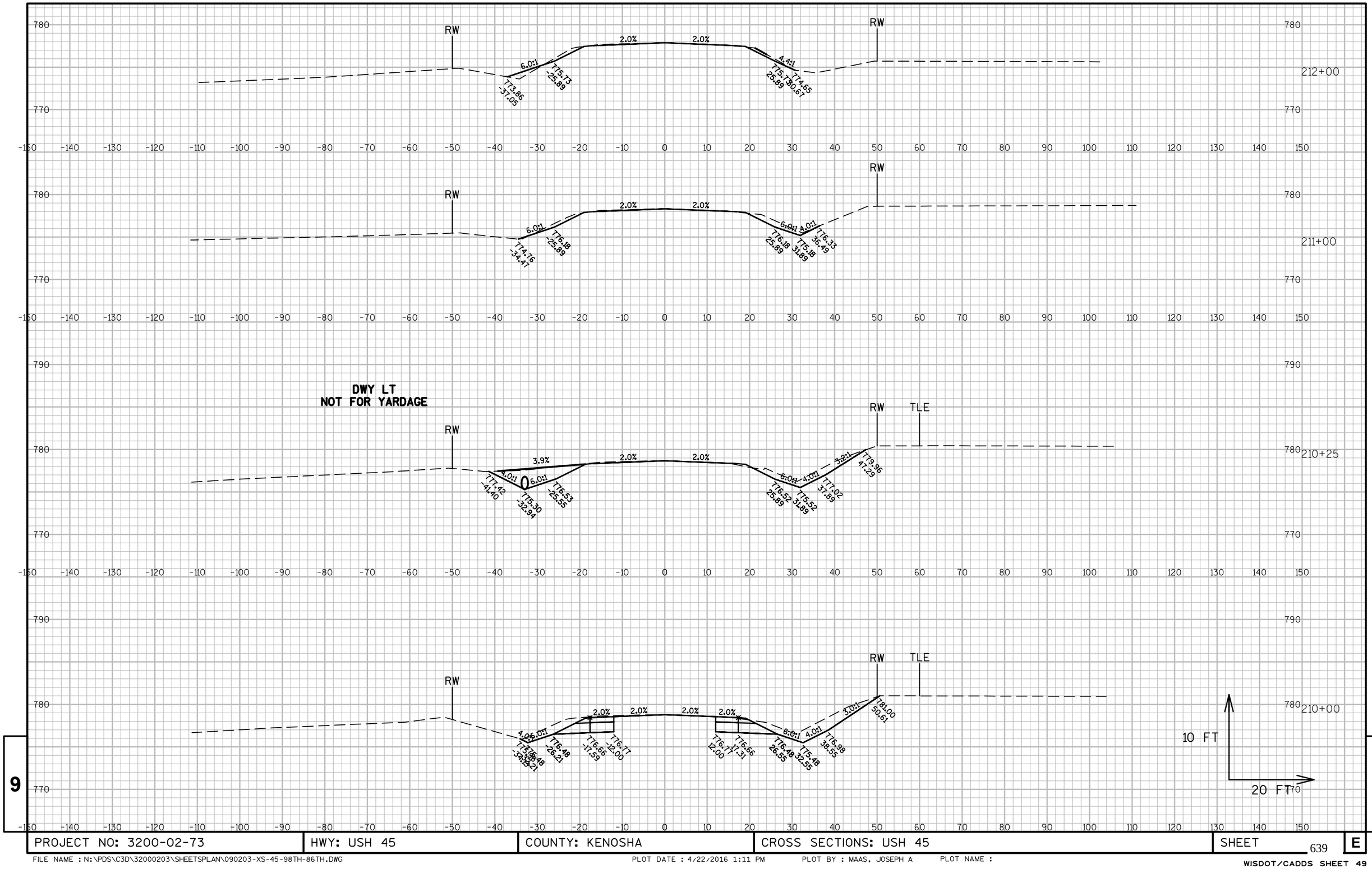
WISDOT/CADDS SHEET 49



PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: USH 45	SHEET 638	E

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WISDOT/CADDS SHEET 49



DWY LT
NOT FOR YARDAGE

9

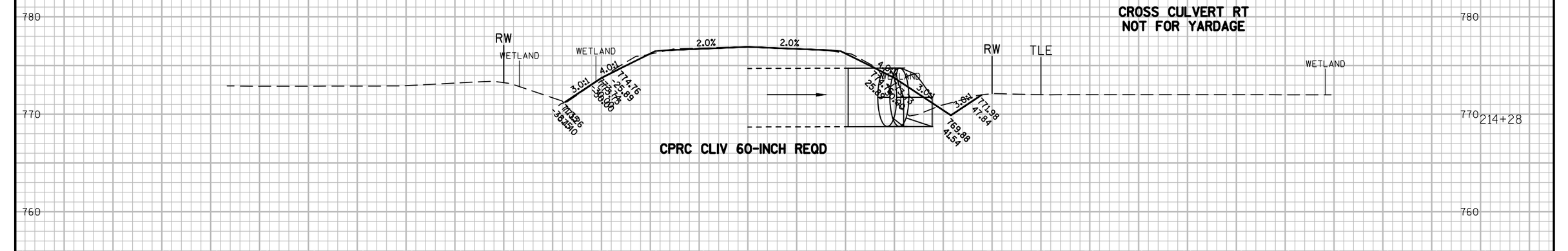
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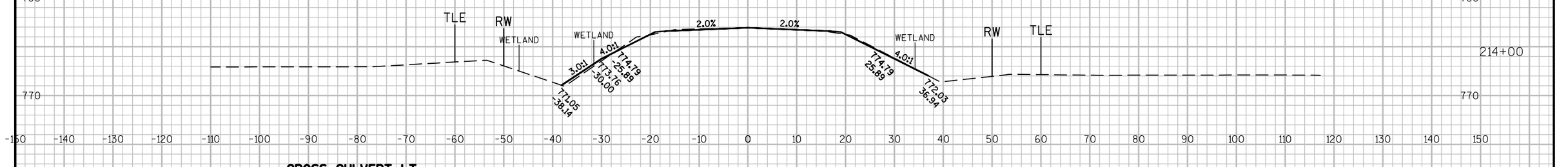
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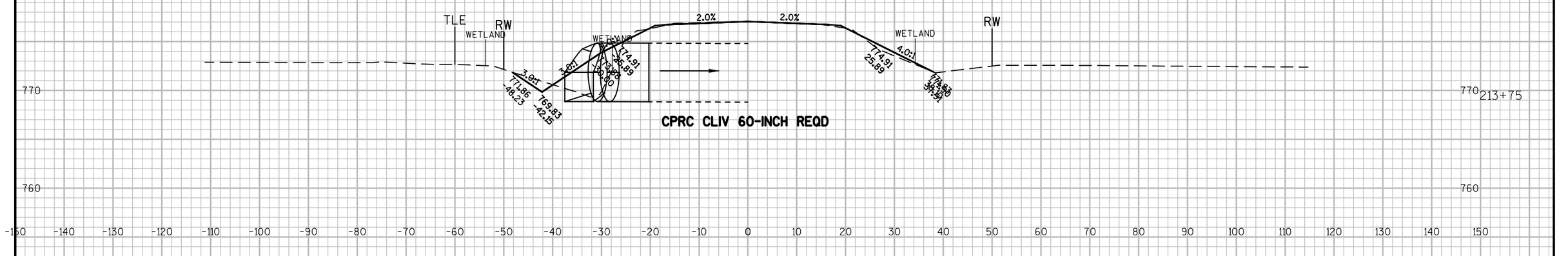
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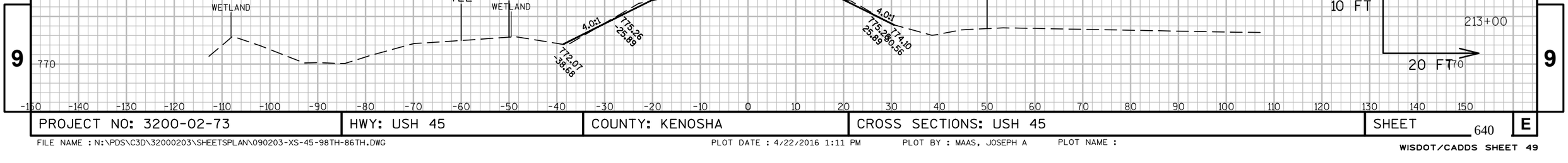
CROSS CULVERT RT
NOT FOR YARDAGE





CROSS CULVERT LT
NOT FOR YARDAGE





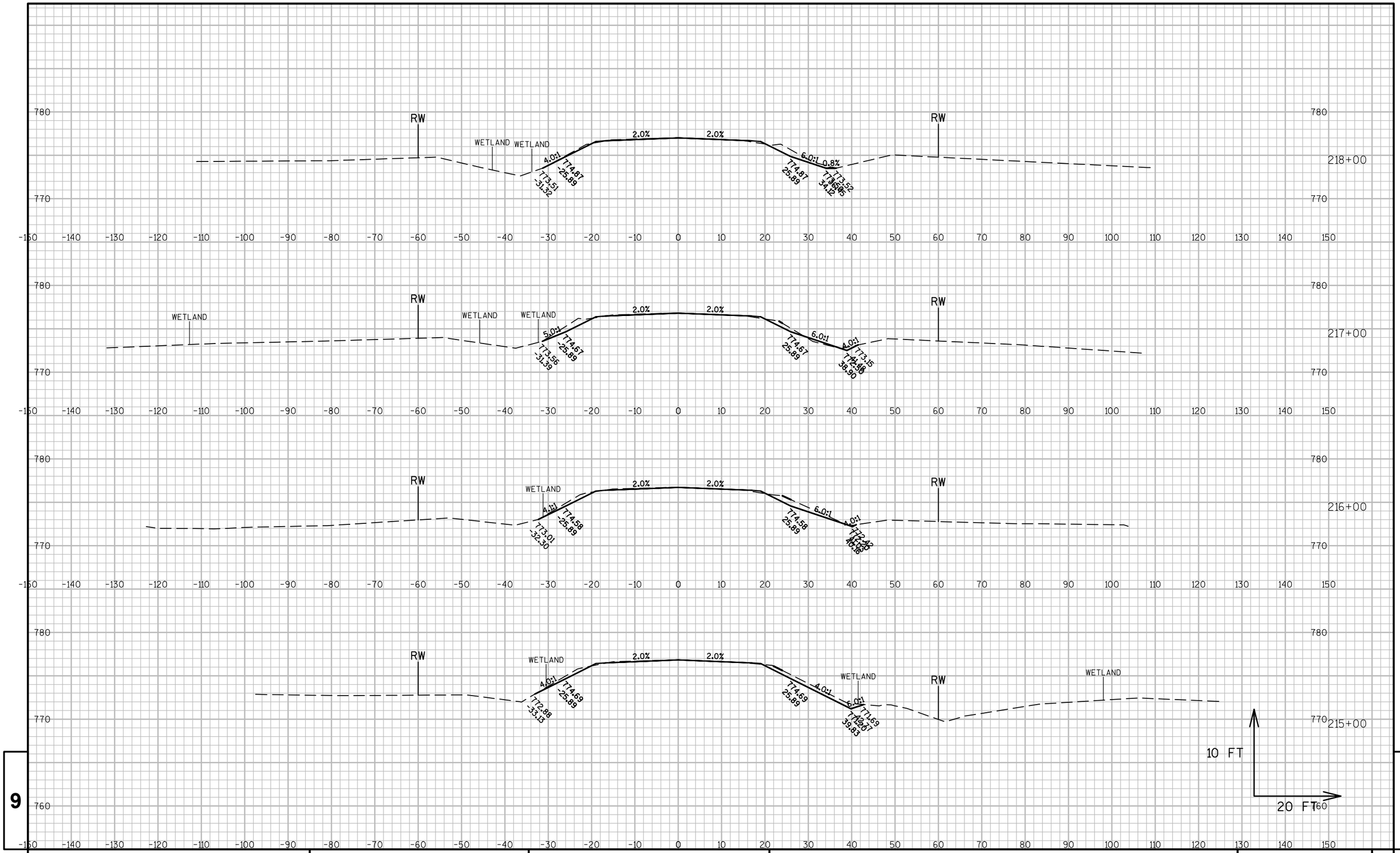
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PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: USH 45	SHEET 640	E

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WISDOT/CADDS SHEET 49

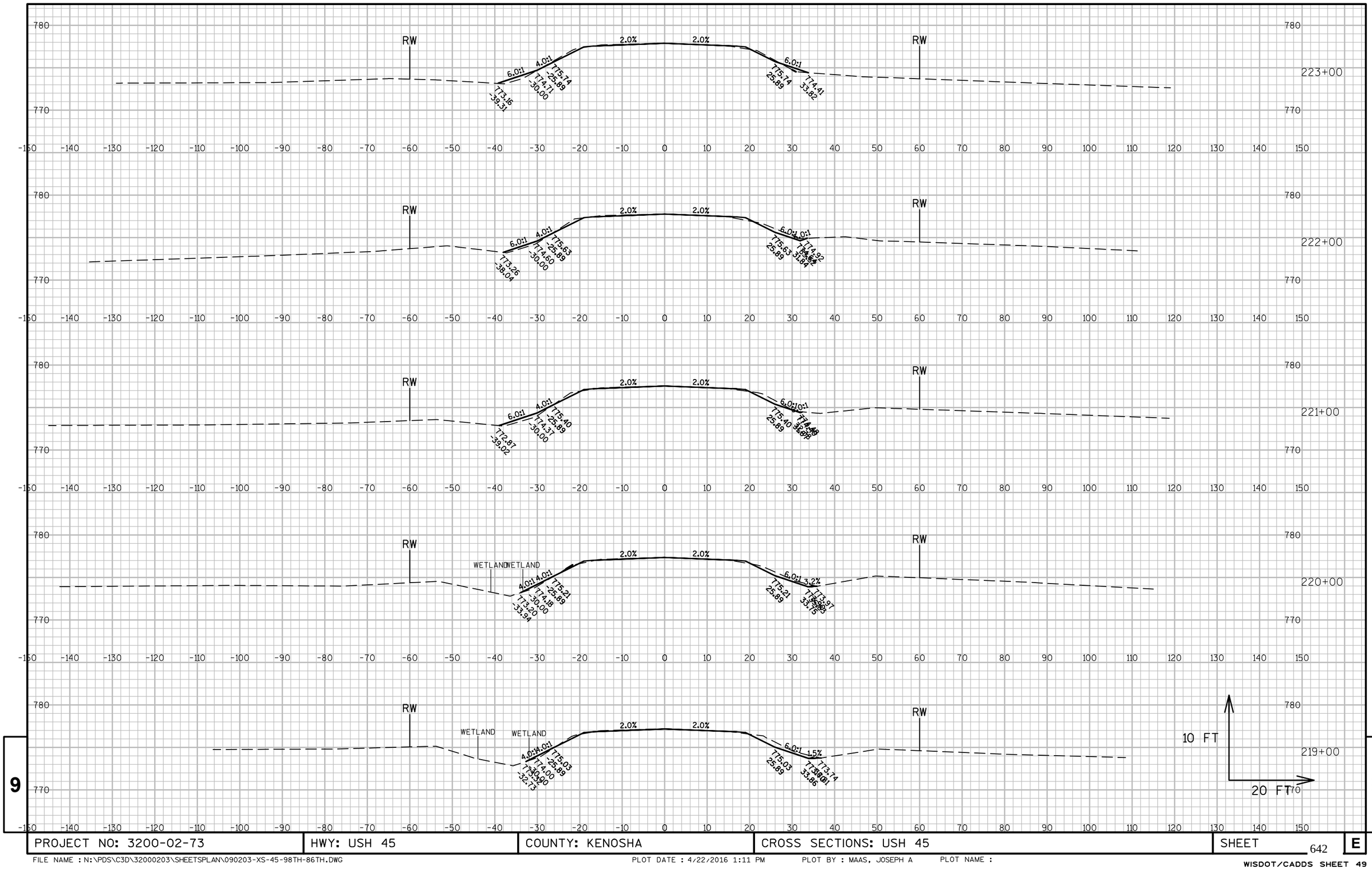


9

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PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: USH 45	SHEET 641	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090203-XS-45-98TH-86TH.DWG PLOT DATE : 4/22/2016 1:11 PM PLOT BY : MAAS, JOSEPH A PLOT NAME :



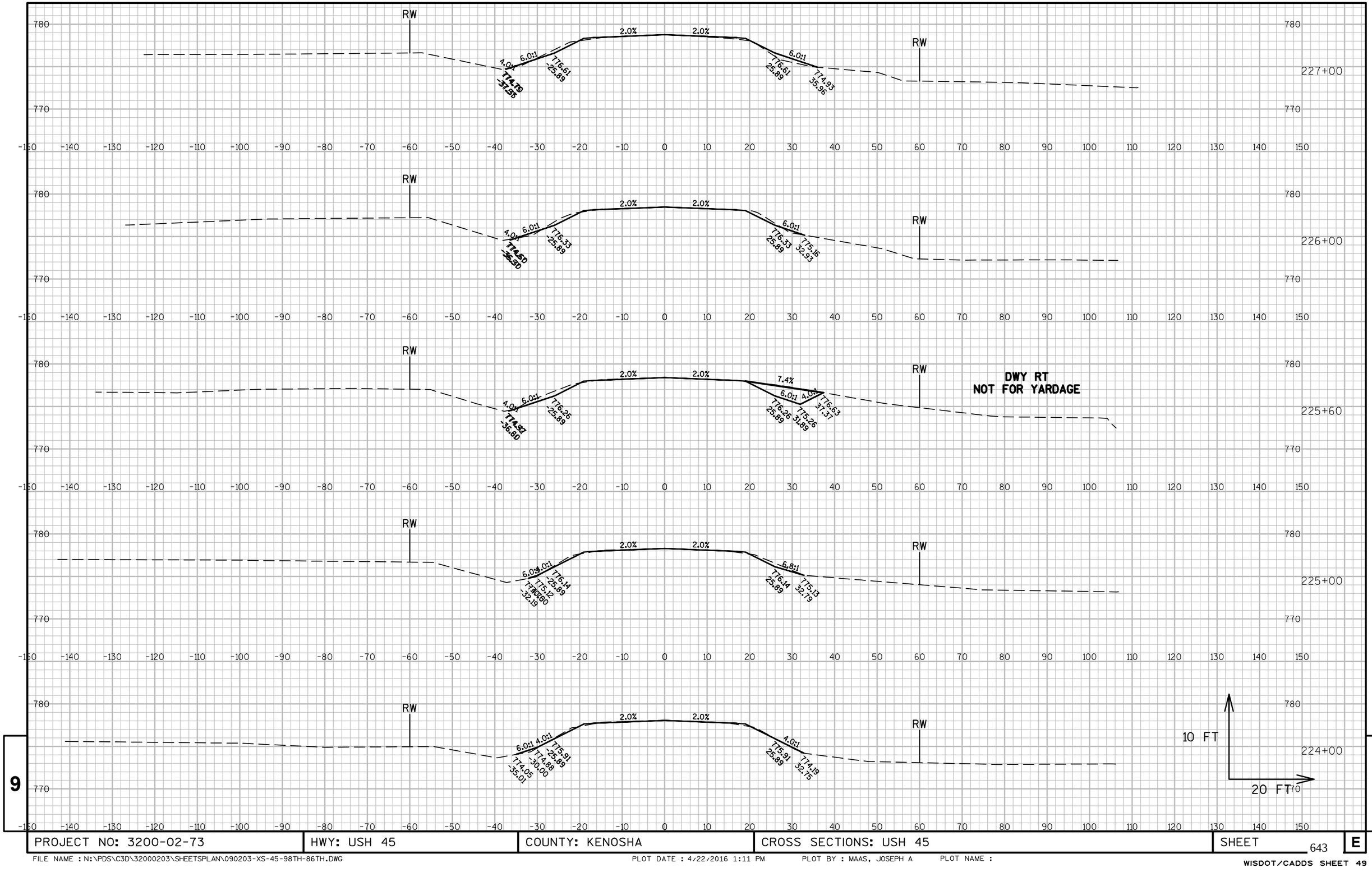
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PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: USH 45	SHEET 642	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090203-XS-45-98TH-86TH.DWG PLOT DATE : 4/22/2016 1:11 PM PLOT BY : MAAS, JOSEPH A PLOT NAME :

WISDOT/CADDS SHEET 49

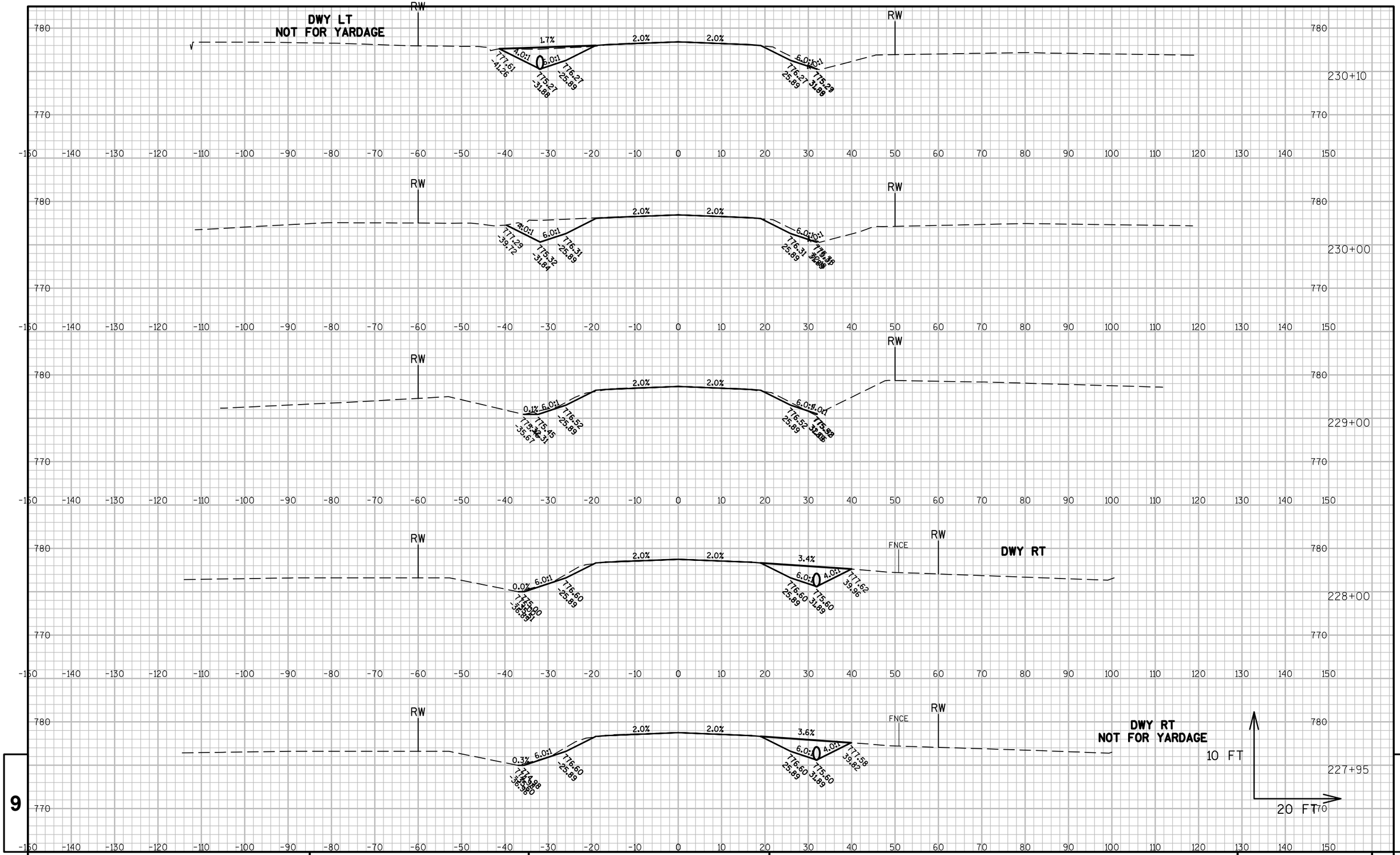


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PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: USH 45	SHEET 643	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090203-XS-45-98TH-86TH.DWG PLOT DATE : 4/22/2016 1:11 PM PLOT BY : MAAS, JOSEPH A PLOT NAME :

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: USH 45	SHEET 644	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090203-XS-45-98TH-86TH.DWG PLOT DATE : 4/22/2016 1:11 PM PLOT BY : MAAS, JOSEPH A PLOT NAME :

WISDOT/CADDS SHEET 49

CROSS CULVERT RT
NOT FOR YARDAGE



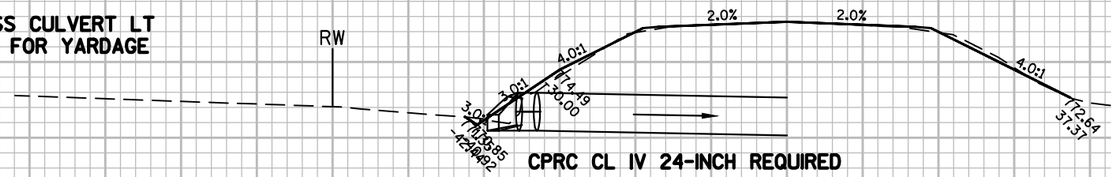
CPRC CL IV 24-INCH REQUIRED

232+08



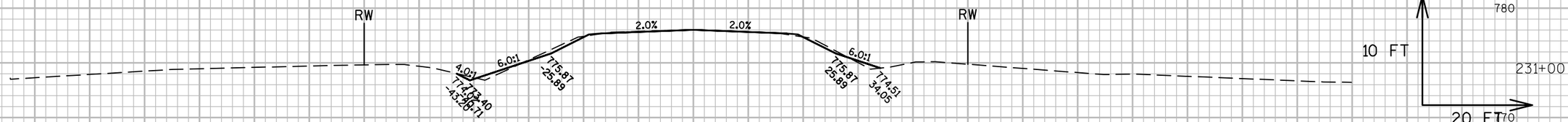
232+00

CROSS CULVERT LT
NOT FOR YARDAGE



CPRC CL IV 24-INCH REQUIRED

231+82



231+00

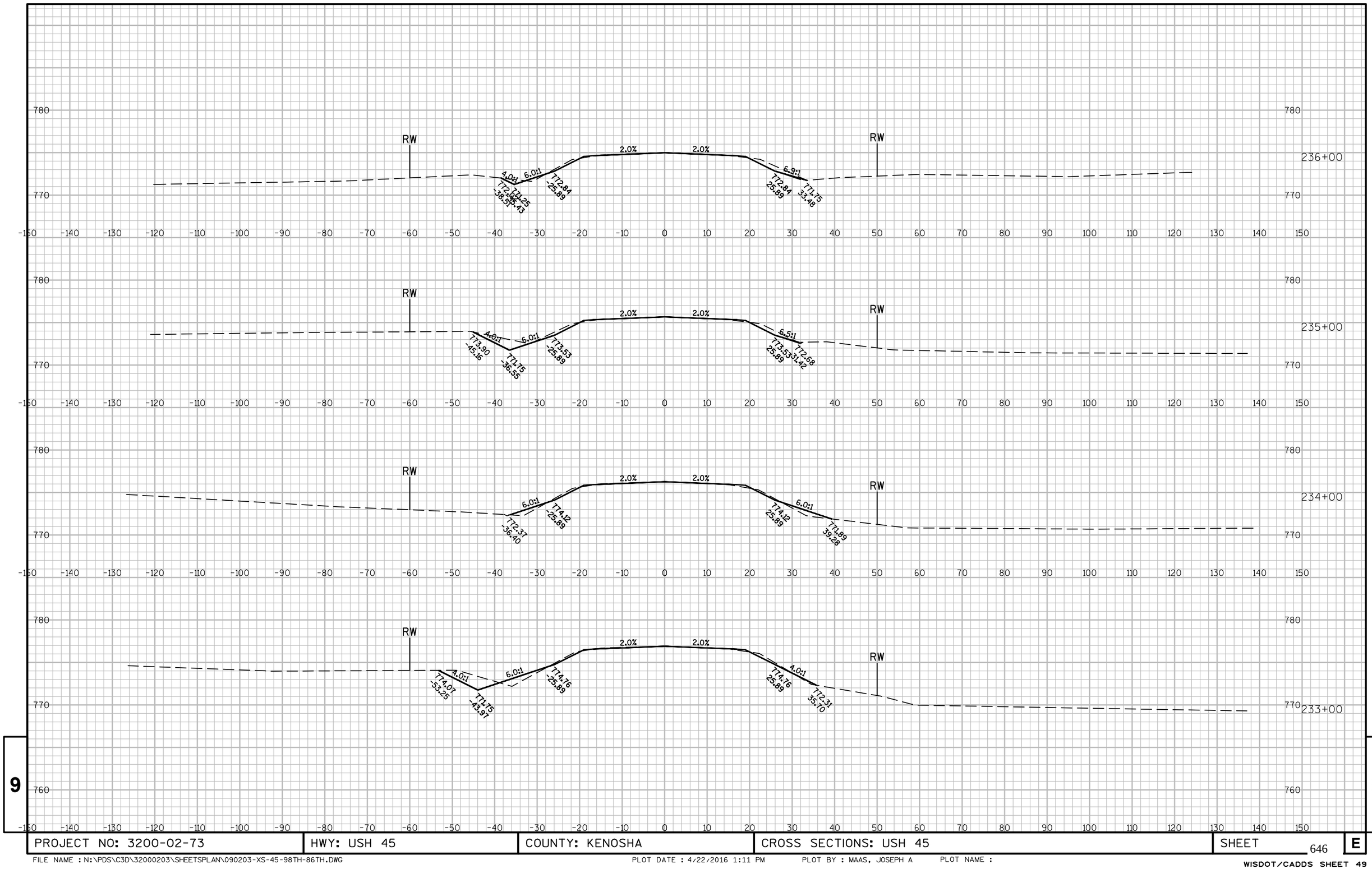
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PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: USH 45	SHEET 645	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090203-XS-45-98TH-86TH.DWG PLOT DATE : 4/22/2016 1:11 PM PLOT BY : MAAS, JOSEPH A PLOT NAME :

WISDOT/CADDS SHEET 49



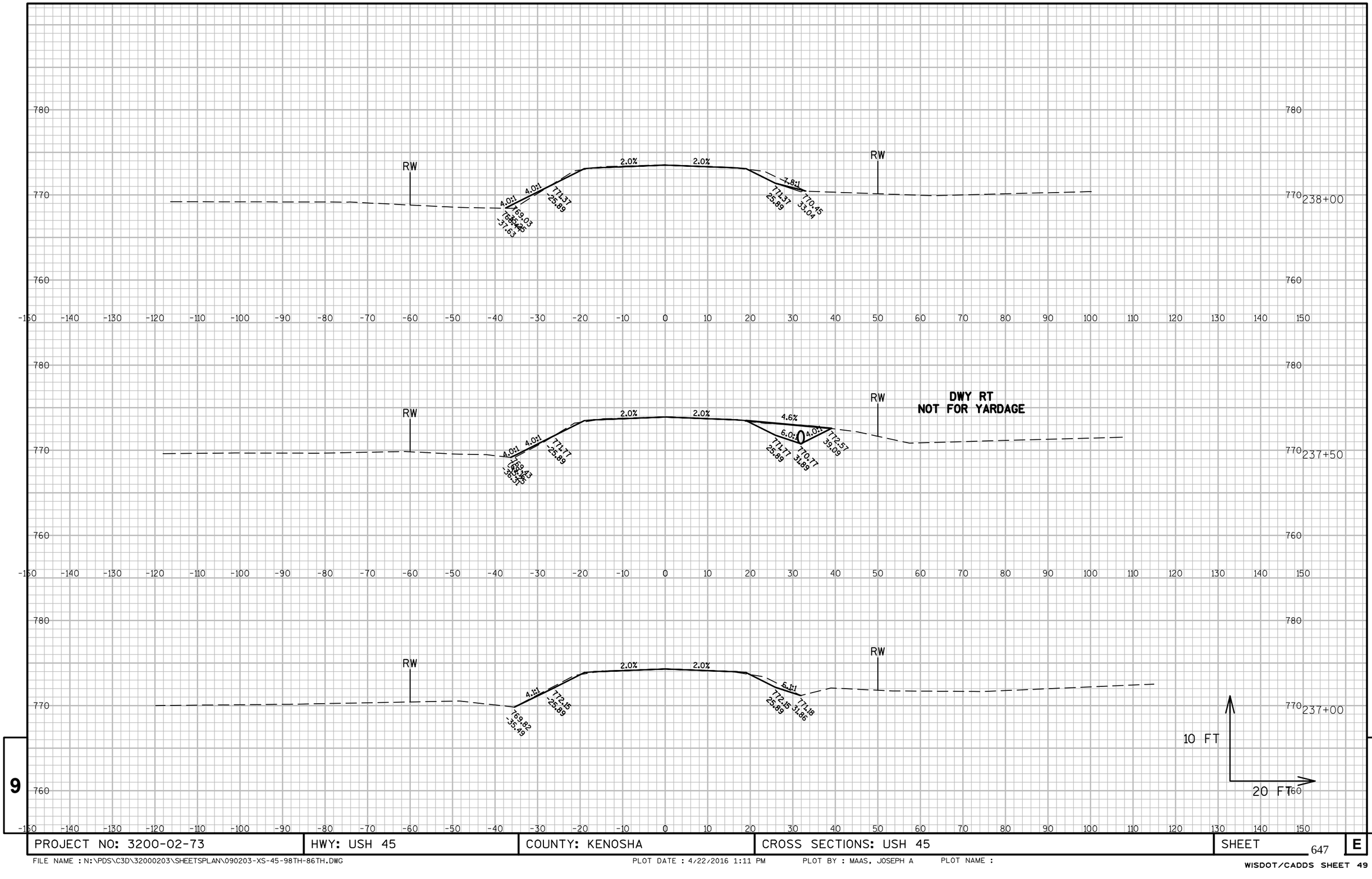
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PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: USH 45	SHEET 646	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090203-XS-45-98TH-86TH.DWG PLOT DATE : 4/22/2016 1:11 PM PLOT BY : MAAS, JOSEPH A PLOT NAME :

WISDOT/CADDS SHEET 49



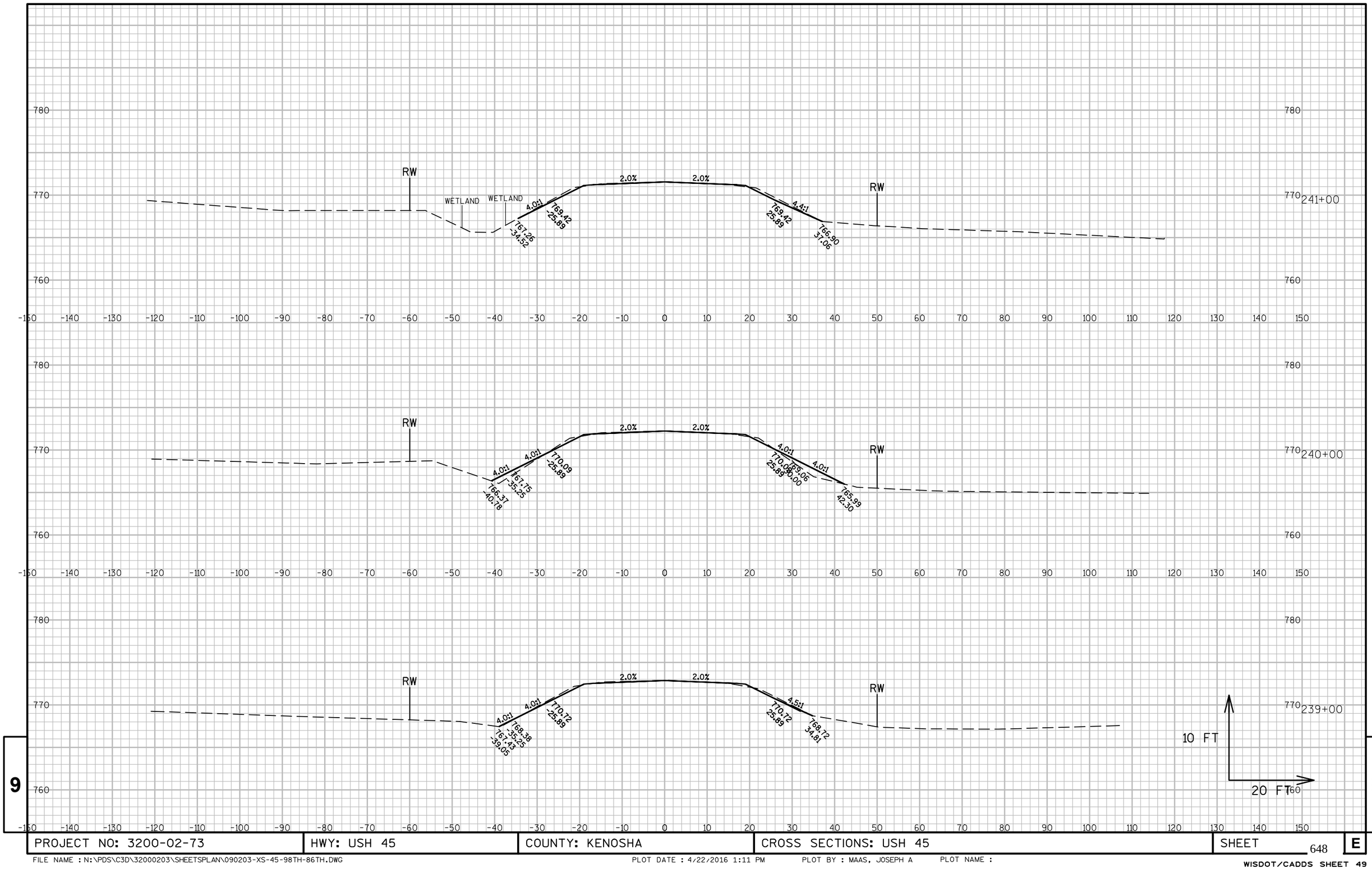
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PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: USH 45	SHEET 647	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090203-XS-45-98TH-86TH.DWG PLOT DATE : 4/22/2016 1:11 PM PLOT BY : MAAS, JOSEPH A PLOT NAME :

WISDOT/CADDS SHEET 49



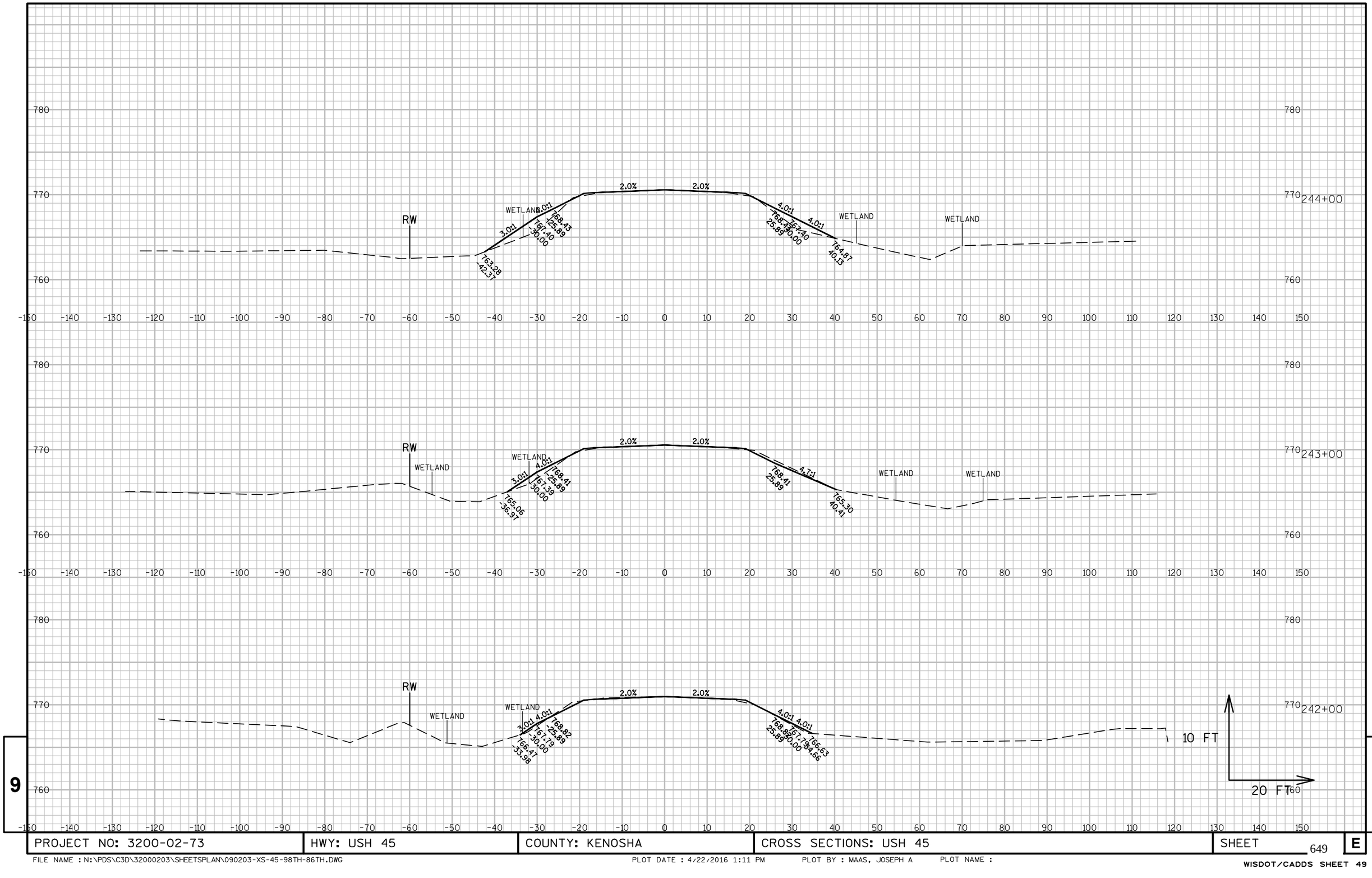
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PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: USH 45	SHEET 648	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090203-XS-45-98TH-86TH.DWG PLOT DATE : 4/22/2016 1:11 PM PLOT BY : MAAS, JOSEPH A PLOT NAME :

WISDOT/CADDS SHEET 49



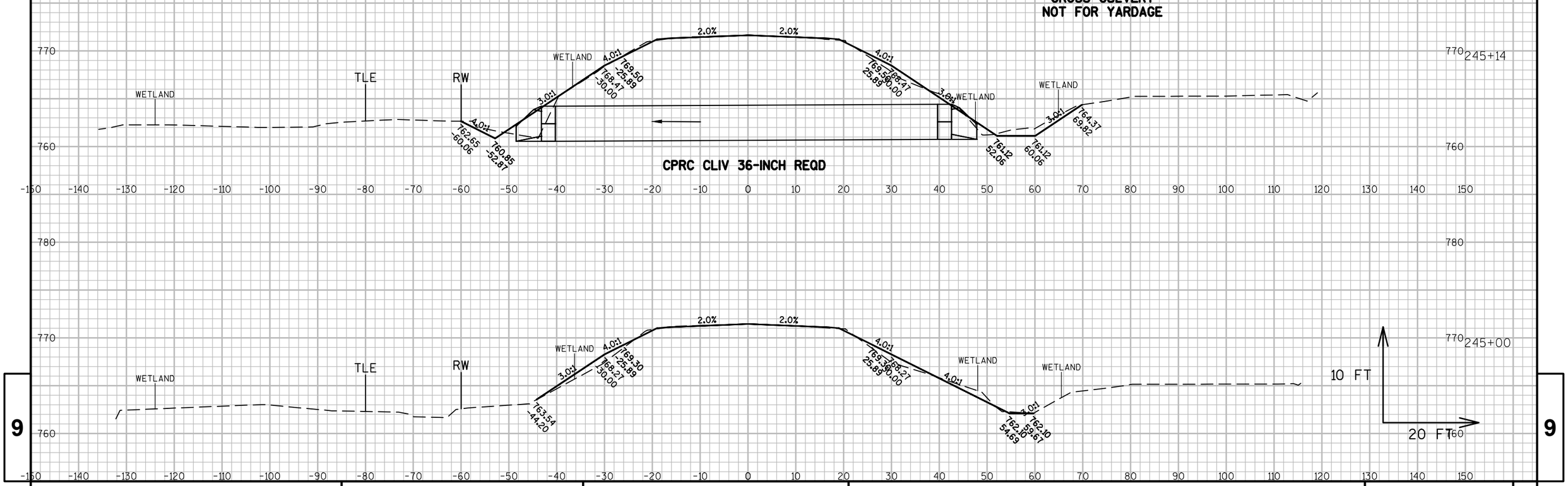
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PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: USH 45	SHEET 649	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090203-XS-45-98TH-86TH.DWG PLOT DATE : 4/22/2016 1:11 PM PLOT BY : MAAS, JOSEPH A PLOT NAME :

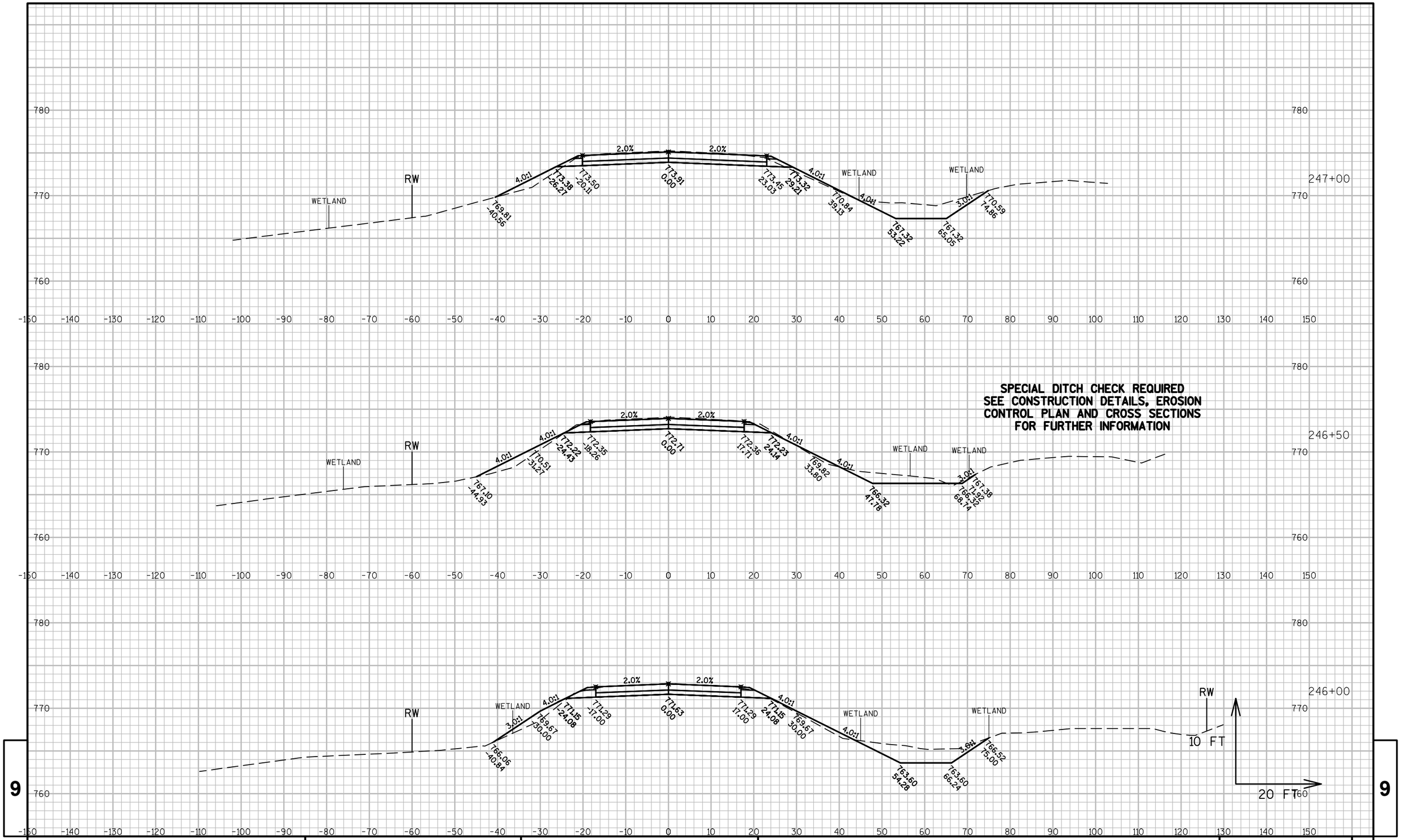
CROSS CULVERT
NOT FOR YARDAGE



9 9

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: USH 45	SHEET 650	E

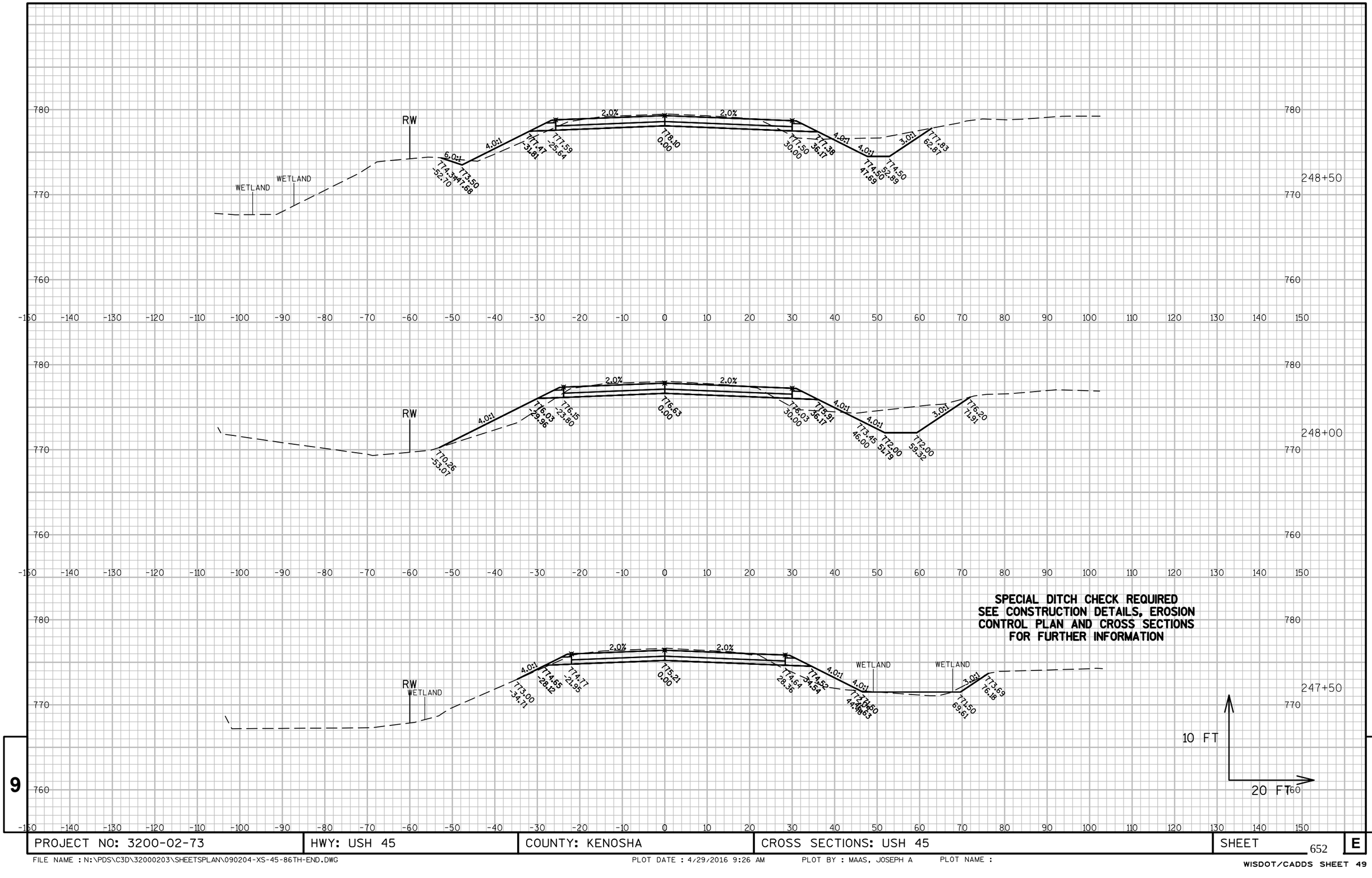
FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090203-XS-45-98TH-86TH.DWG PLOT DATE : 4/22/2016 1:11 PM PLOT BY : MAAS, JOSEPH A PLOT NAME :



PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: USH 45	SHEET 651	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090204-XS-45-86TH-END.DWG PLOT DATE : 4/22/2016 2:09 PM PLOT BY : MAAS, JOSEPH A PLOT NAME :

WISDOT/CADDS SHEET 49

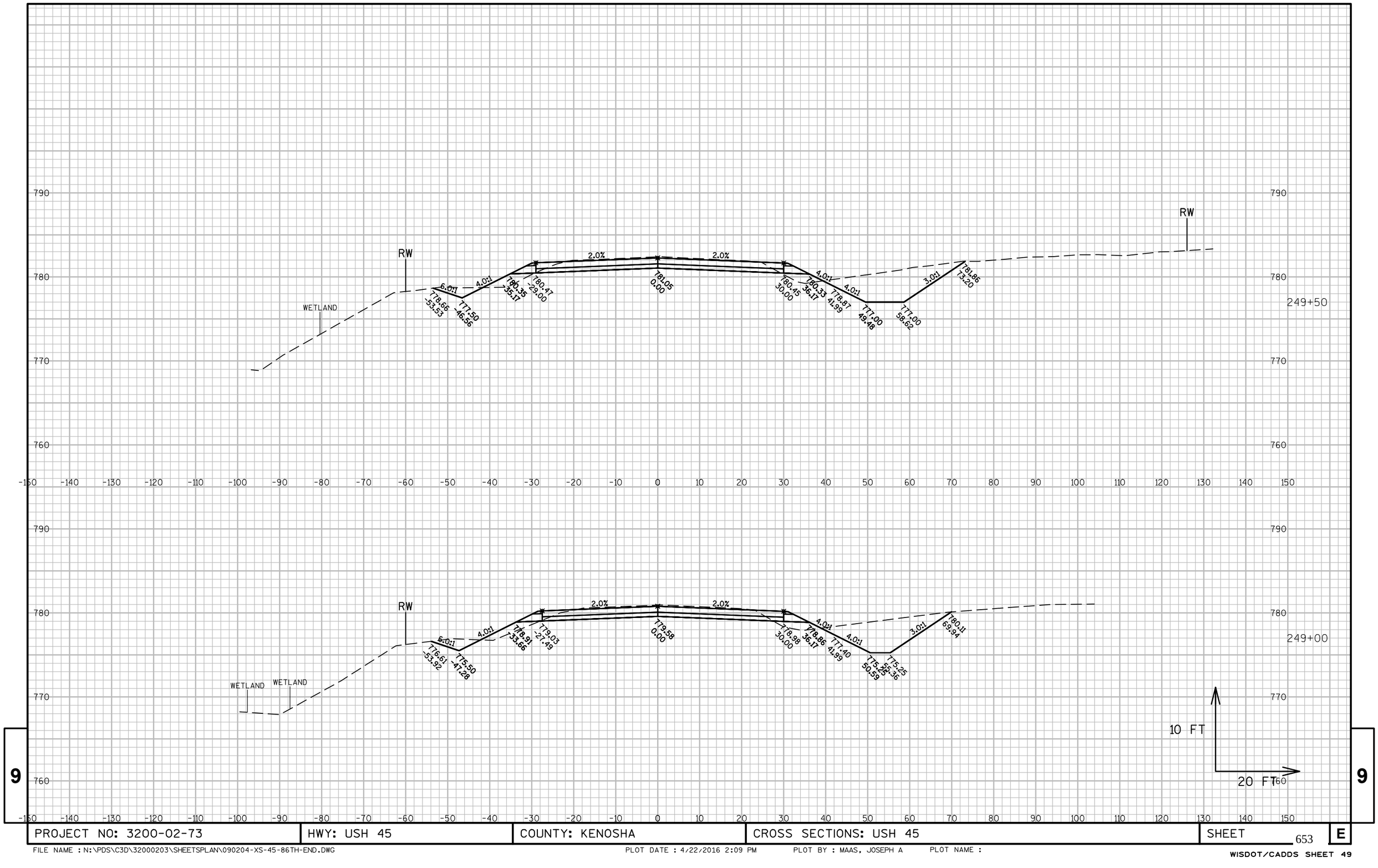


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PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: USH 45	SHEET 652	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090204-XS-45-86TH-END.DWG PLOT DATE : 4/29/2016 9:26 AM PLOT BY : MAAS, JOSEPH A PLOT NAME :



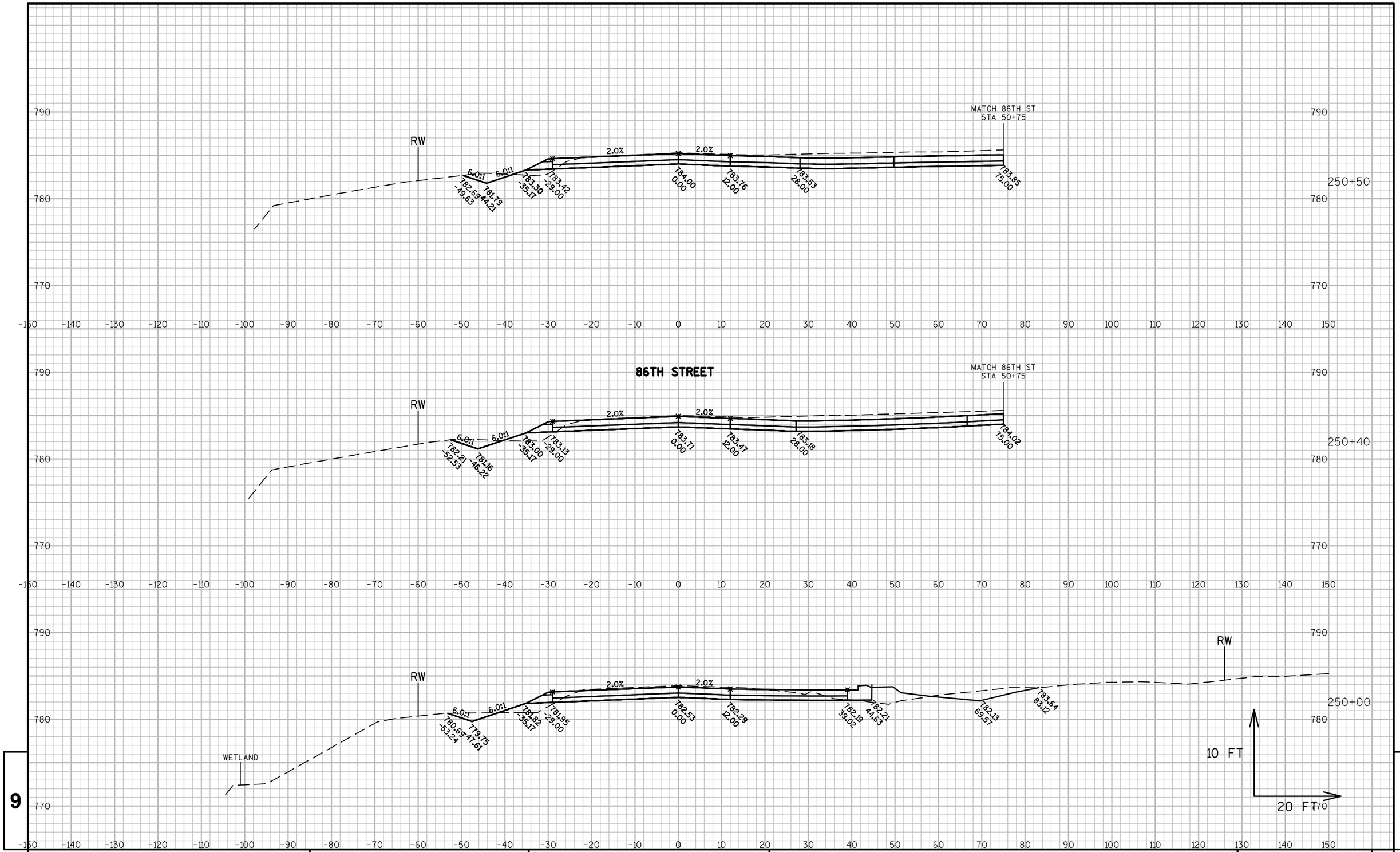
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PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: USH 45	SHEET 653	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090204-XS-45-86TH-END.DWG PLOT DATE : 4/22/2016 2:09 PM PLOT BY : MAAS, JOSEPH A PLOT NAME :

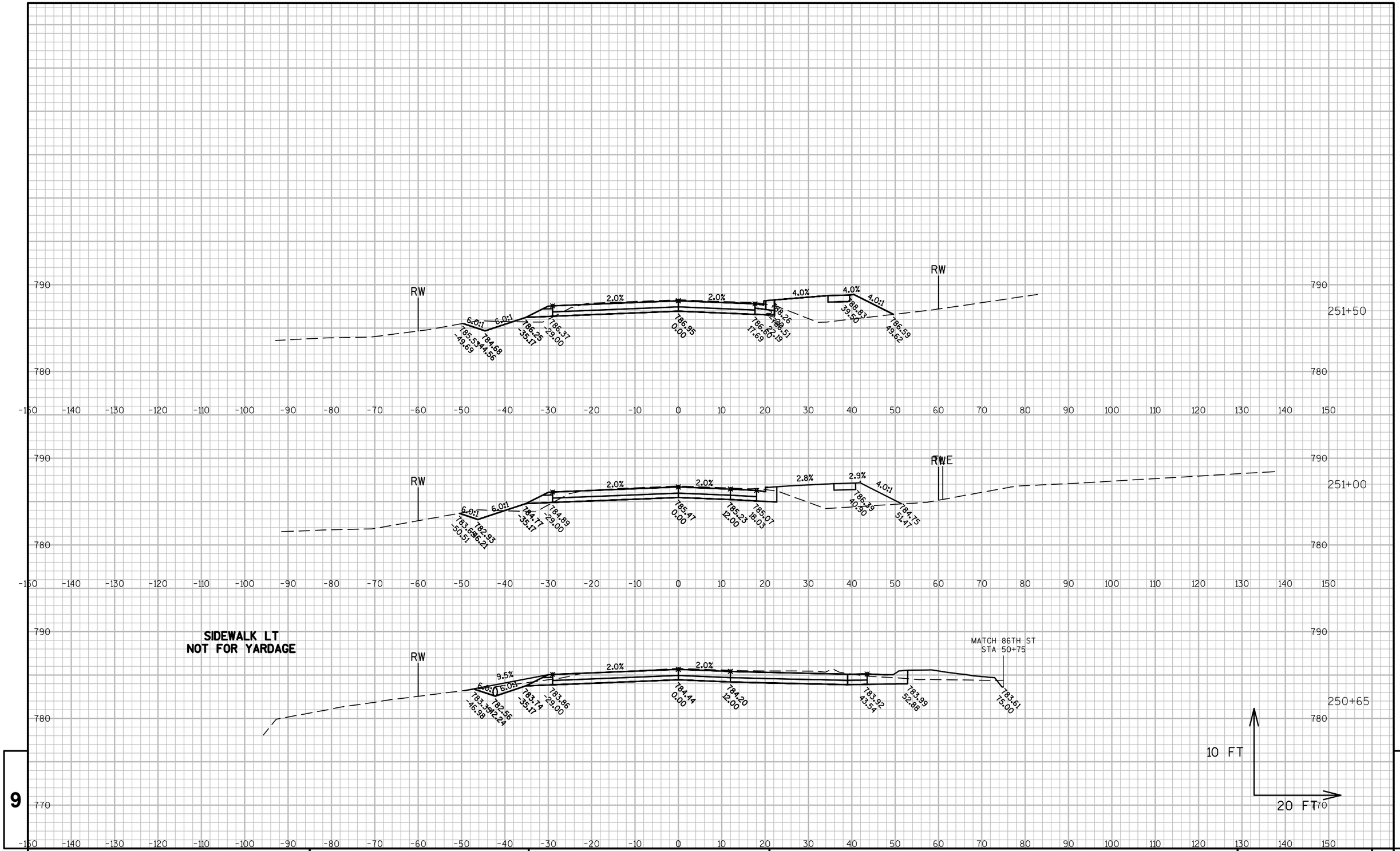
WISDOT/CADDS SHEET 49



PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: USH 45	SHEET 654	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090204-XS-45-86TH-END.DWG PLOT DATE : 4/22/2016 2:09 PM PLOT BY : MAAS, JOSEPH A PLOT NAME :

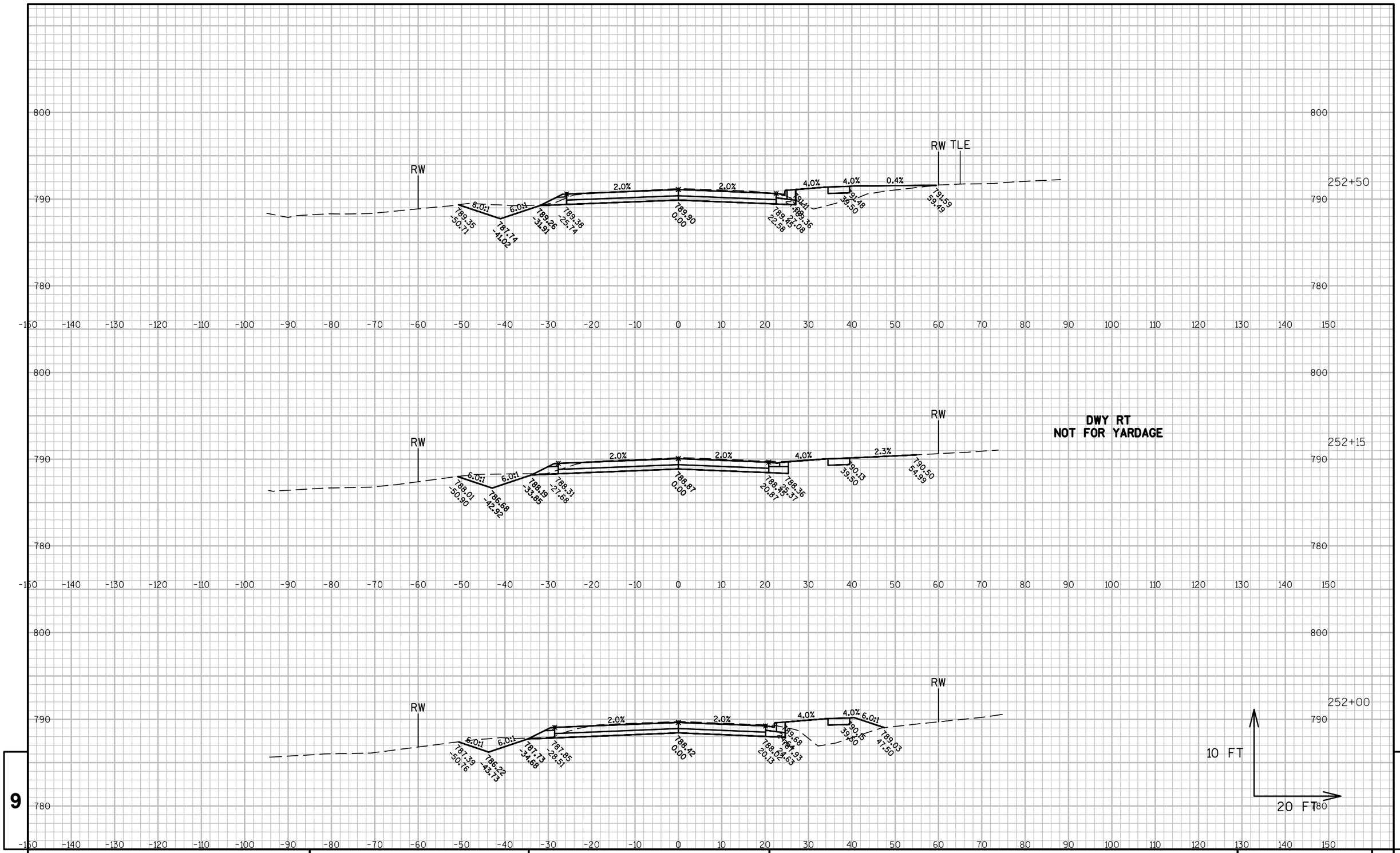
WISDOT/CADDS SHEET 49



PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: USH 45	SHEET 655	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090204-XS-45-86TH-END.DWG PLOT DATE : 4/22/2016 1:17 PM PLOT BY : MAAS, JOSEPH A PLOT NAME :

WISDOT/CADDS SHEET 49



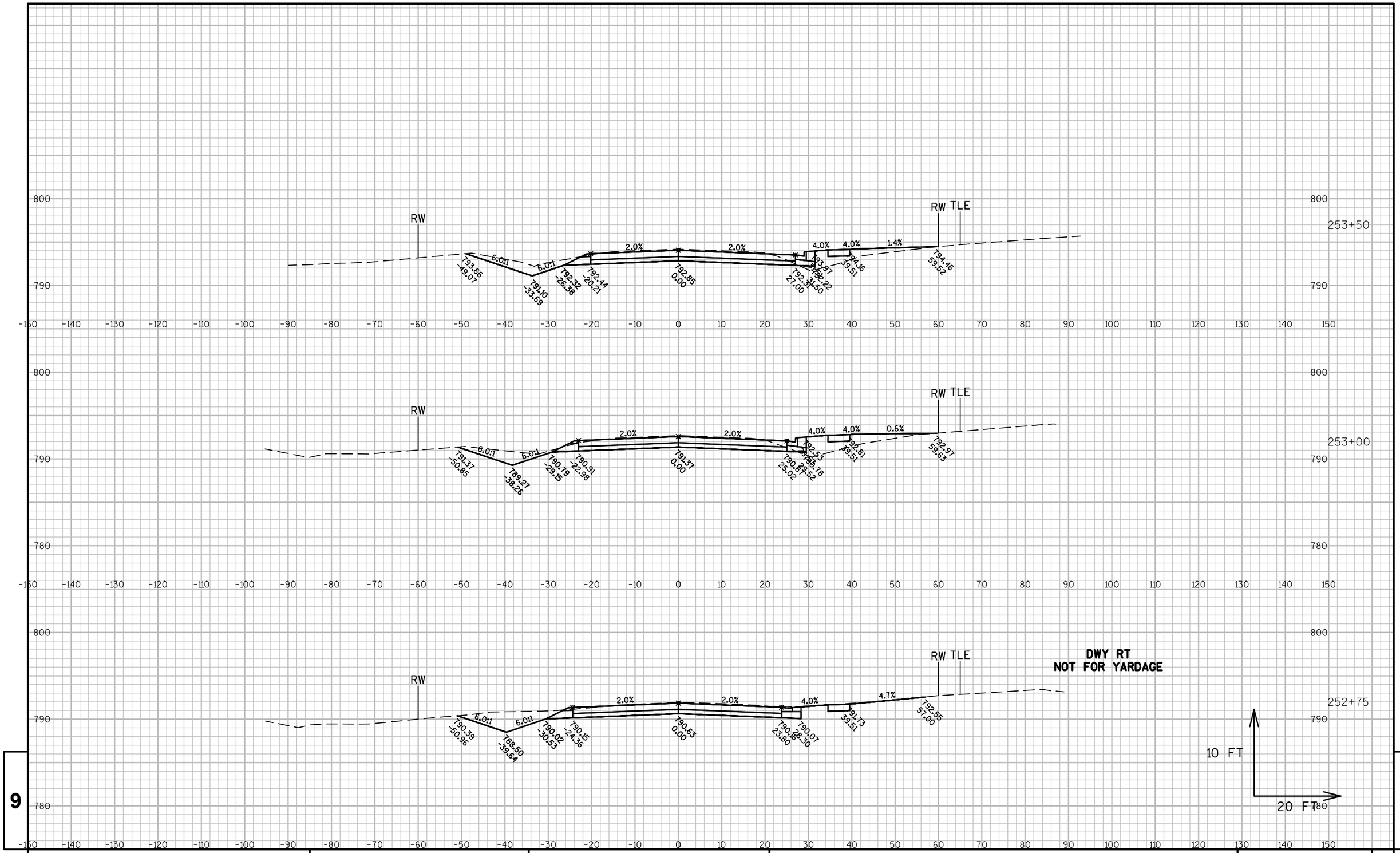
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PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: USH 45	SHEET 656	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090204-XS-45-86TH-END.DWG PLOT DATE : 4/22/2016 1:17 PM PLOT BY : MAAS, JOSEPH A PLOT NAME :

WISDOT/CADDS SHEET 49



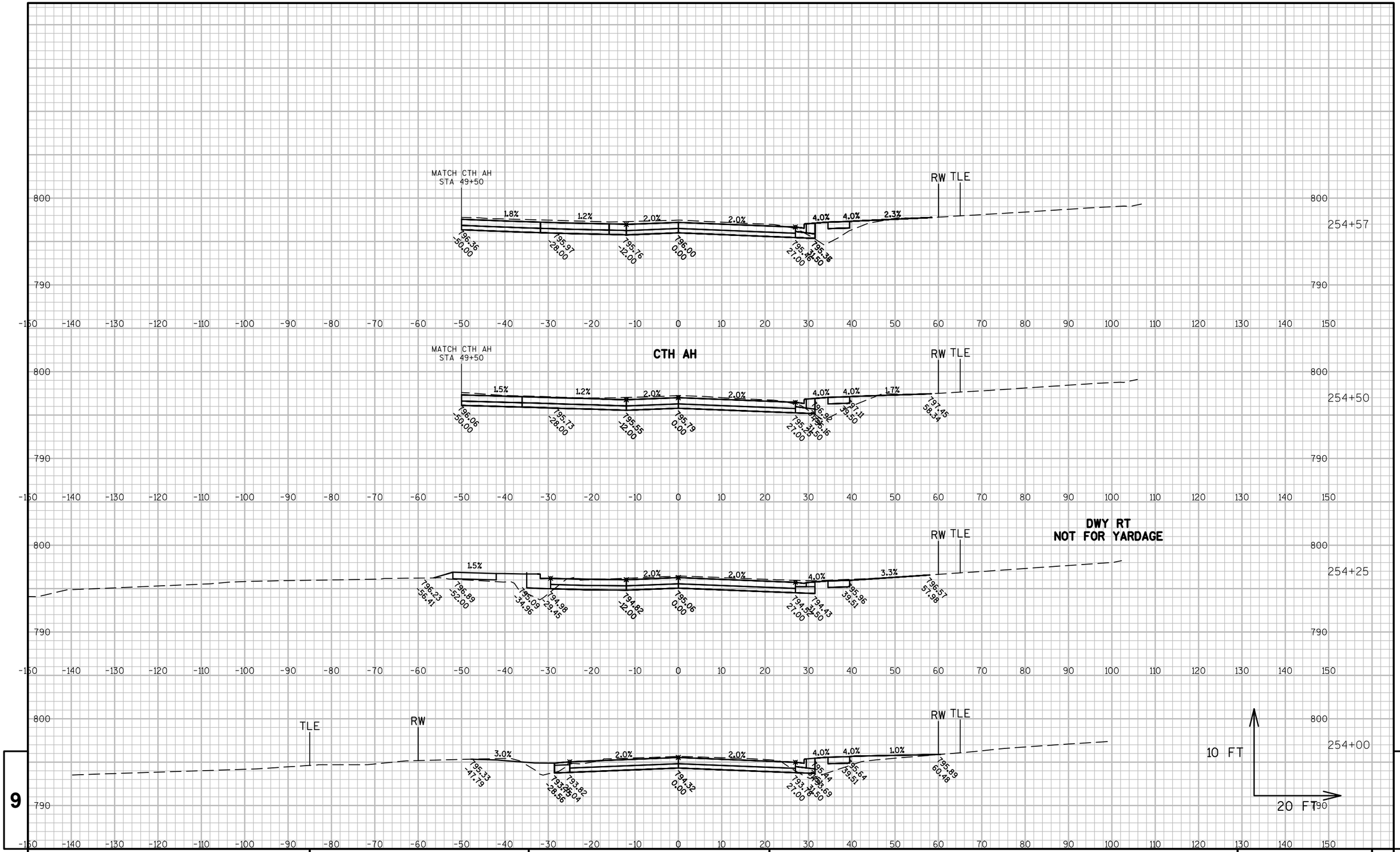
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PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: USH 45	SHEET 657	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090204-XS-45-86TH-END.DWG PLOT DATE : 4/22/2016 1:18 PM PLOT BY : MAAS, JOSEPH A PLOT NAME :

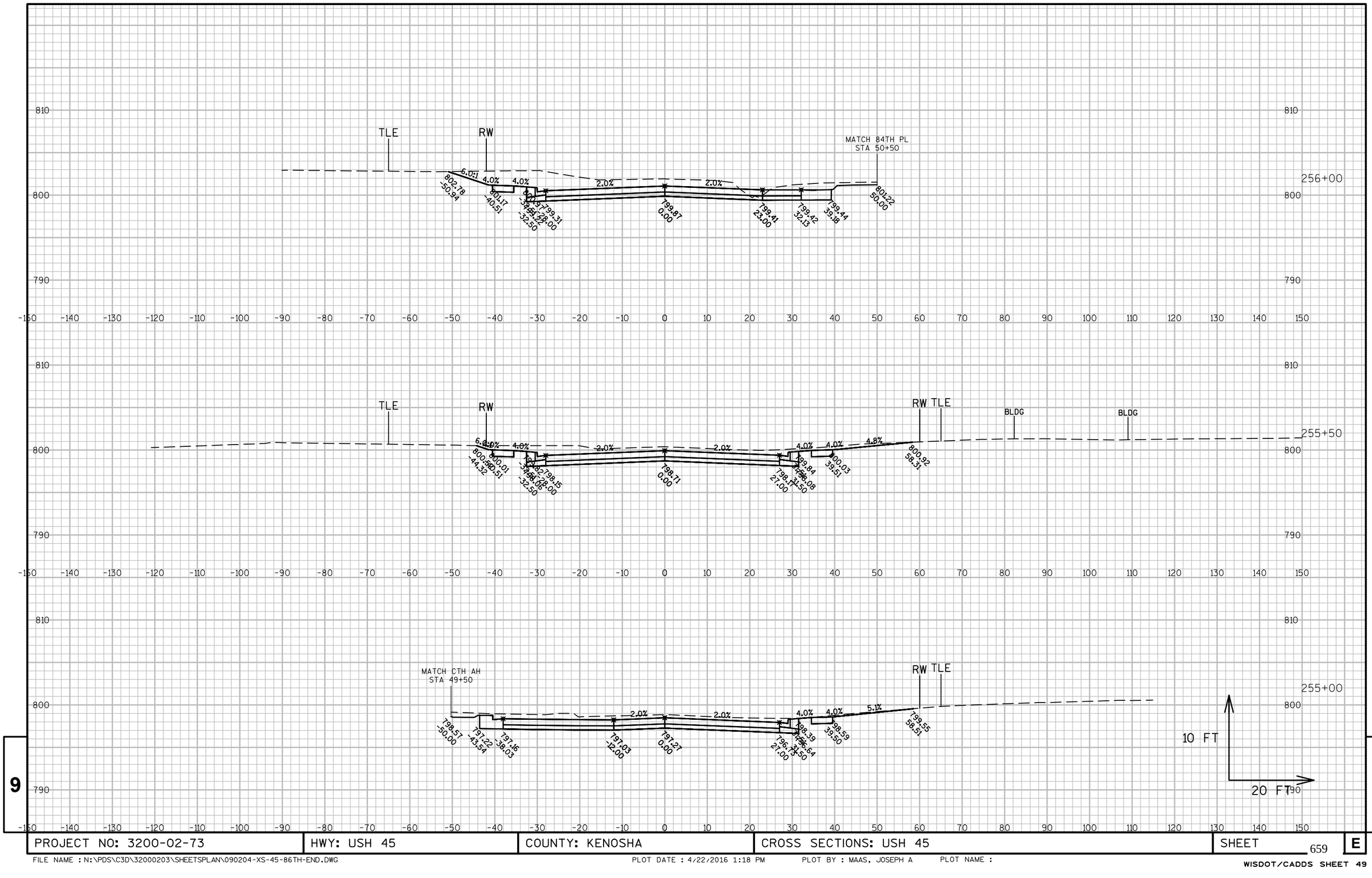
WISDOT/CADDS SHEET 49



PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: USH 45	SHEET 658	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090204-XS-45-86TH-END.DWG PLOT DATE : 4/22/2016 1:18 PM PLOT BY : MAAS, JOSEPH A PLOT NAME :

WISDOT/CADDS SHEET 49



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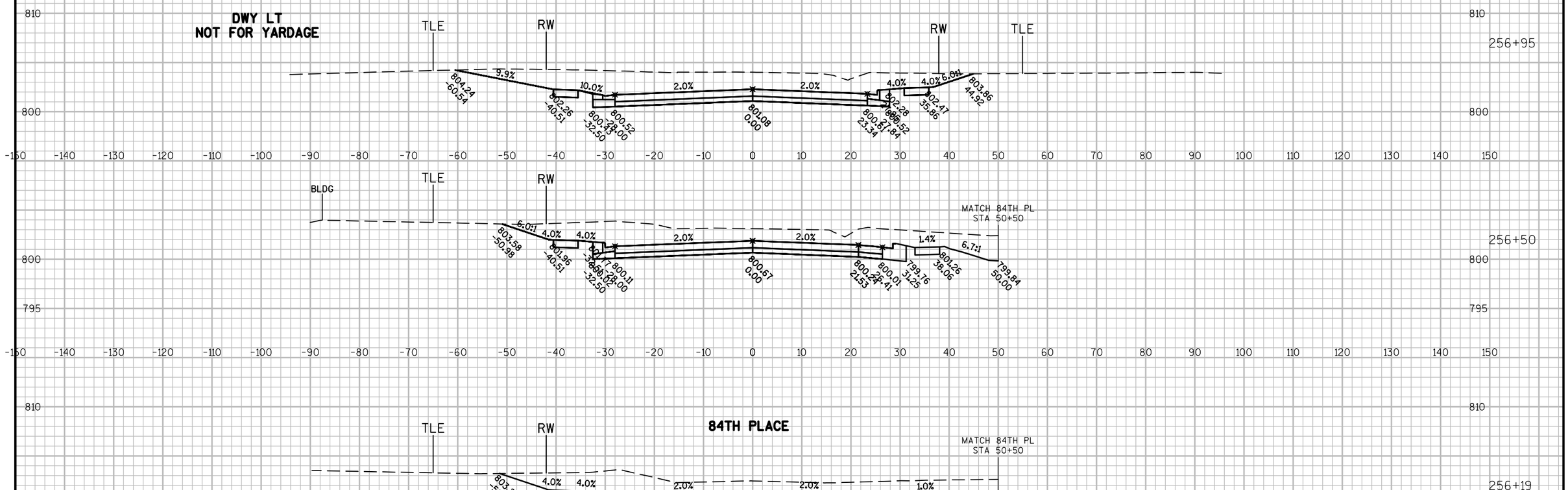
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PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: USH 45	SHEET 659	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090204-XS-45-86TH-END.DWG PLOT DATE : 4/22/2016 1:18 PM PLOT BY : MAAS, JOSEPH A PLOT NAME :

WISDOT/CADDS SHEET 49





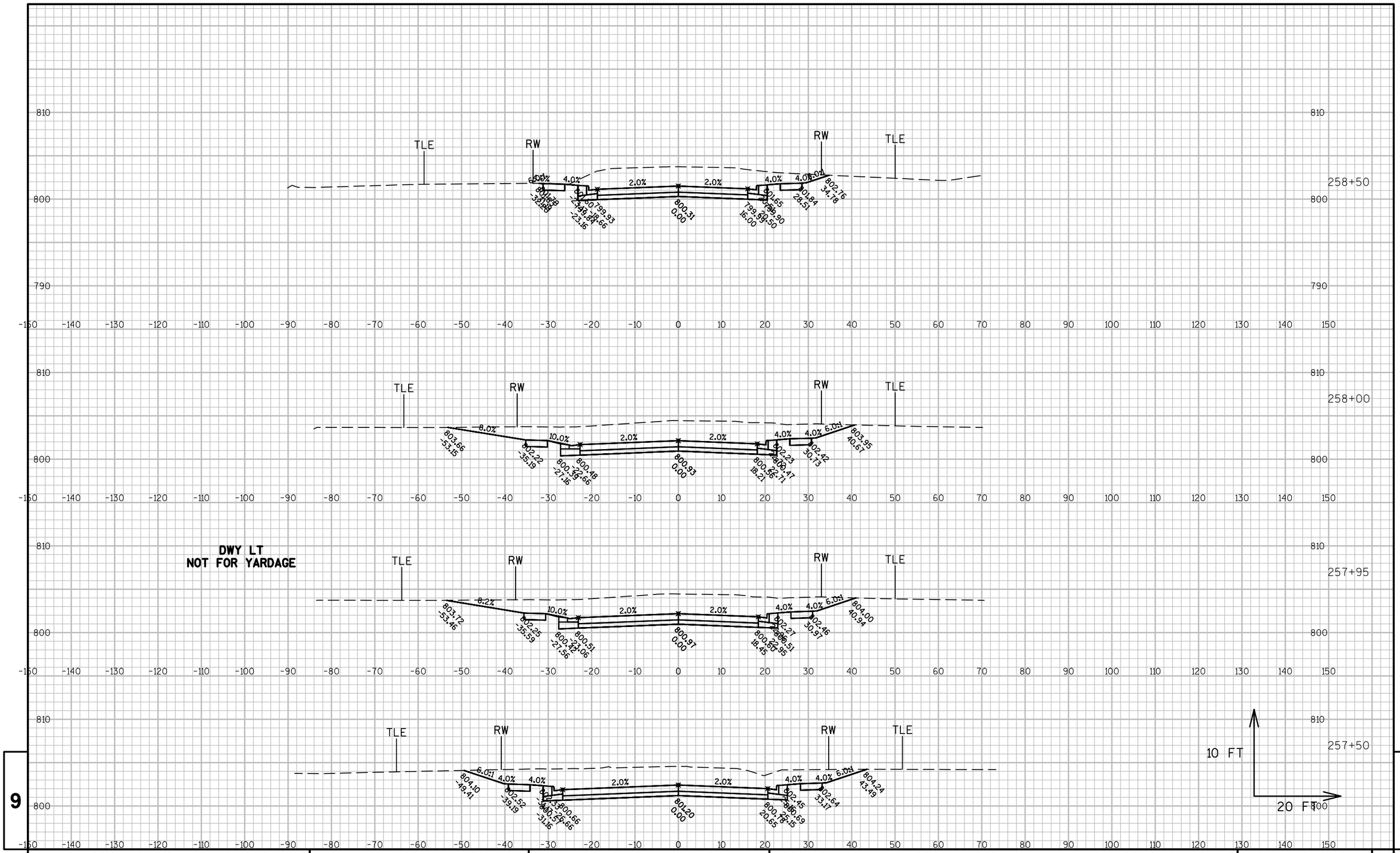
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PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: USH 45	SHEET 660	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090204-XS-45-86TH-END.DWG PLOT DATE : 4/22/2016 1:18 PM PLOT BY : MAAS, JOSEPH A PLOT NAME :

WISDOT/CADDS SHEET 49

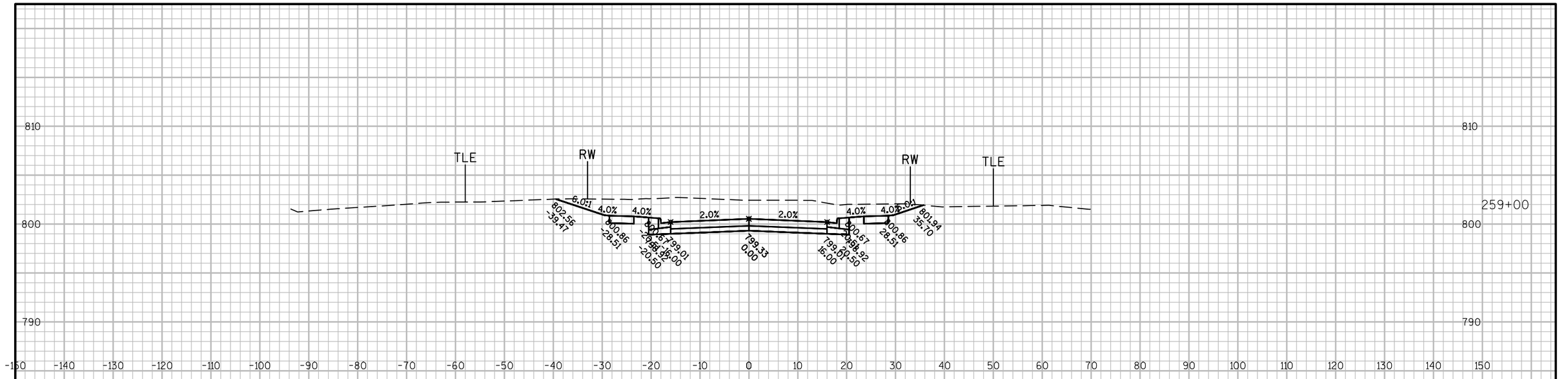


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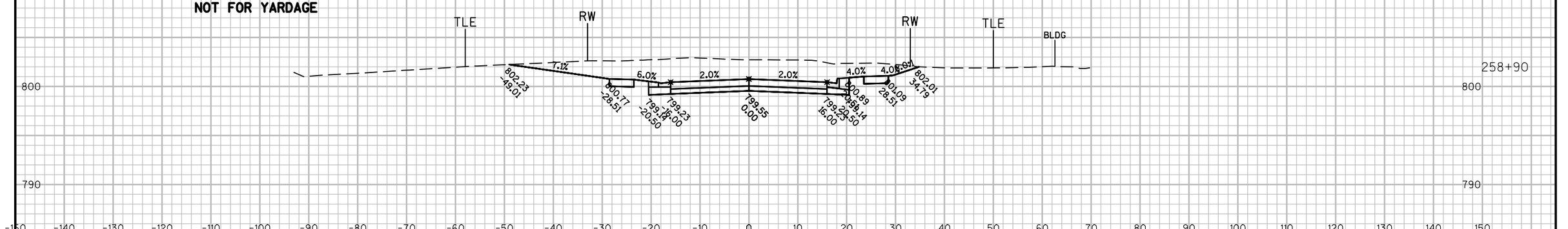
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PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: USH 45	SHEET	E

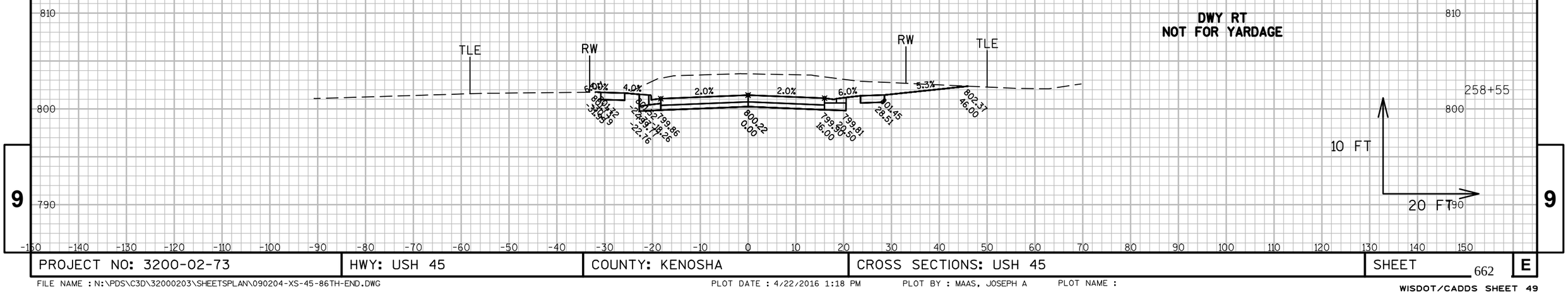
FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090204-XS-45-86TH-END.DWG PLOT DATE : 4/22/2016 1:18 PM PLOT BY : MAAS, JOSEPH A PLOT NAME :



DWY LT
NOT FOR YARDAGE

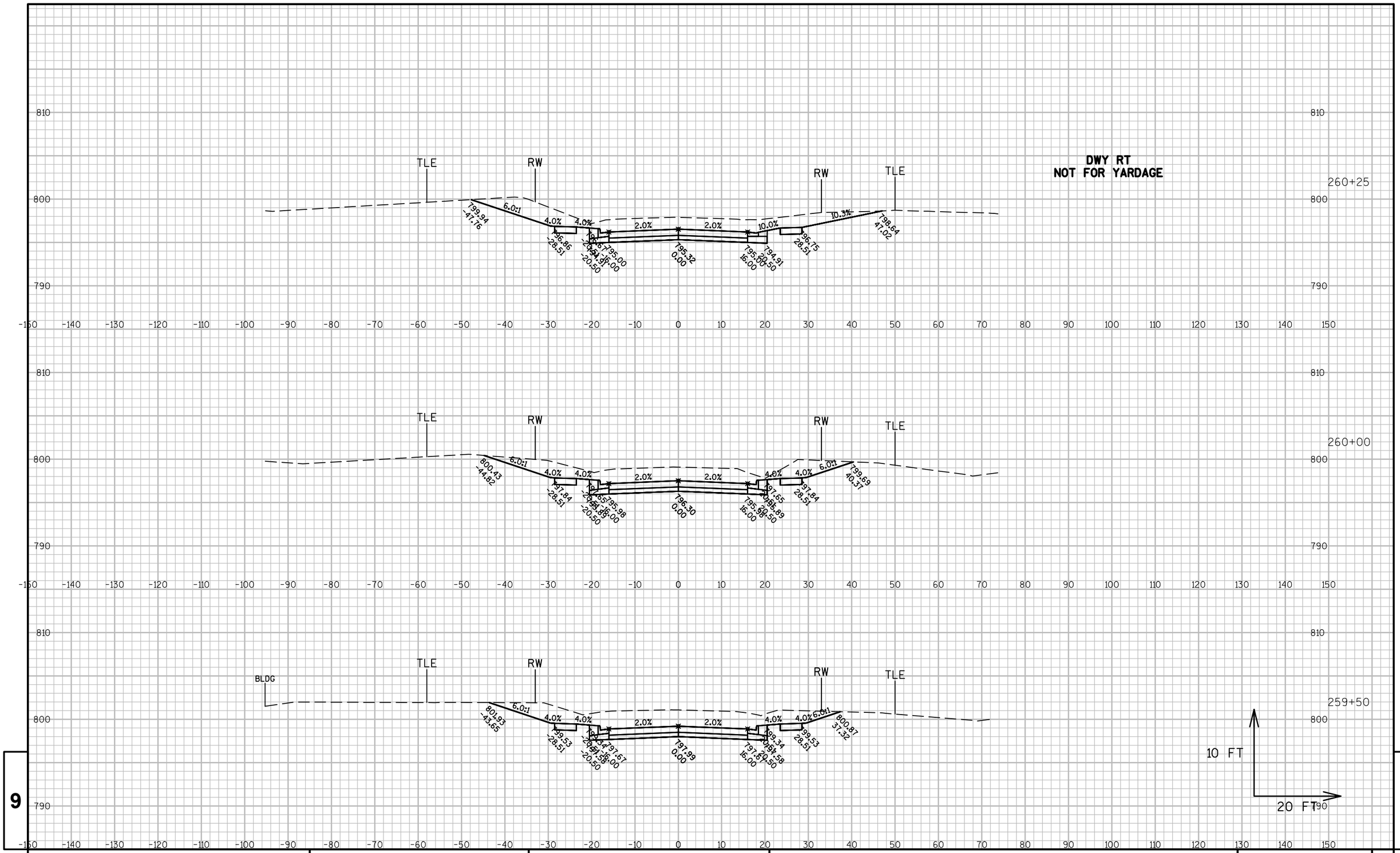


DWY RT
NOT FOR YARDAGE



9 9

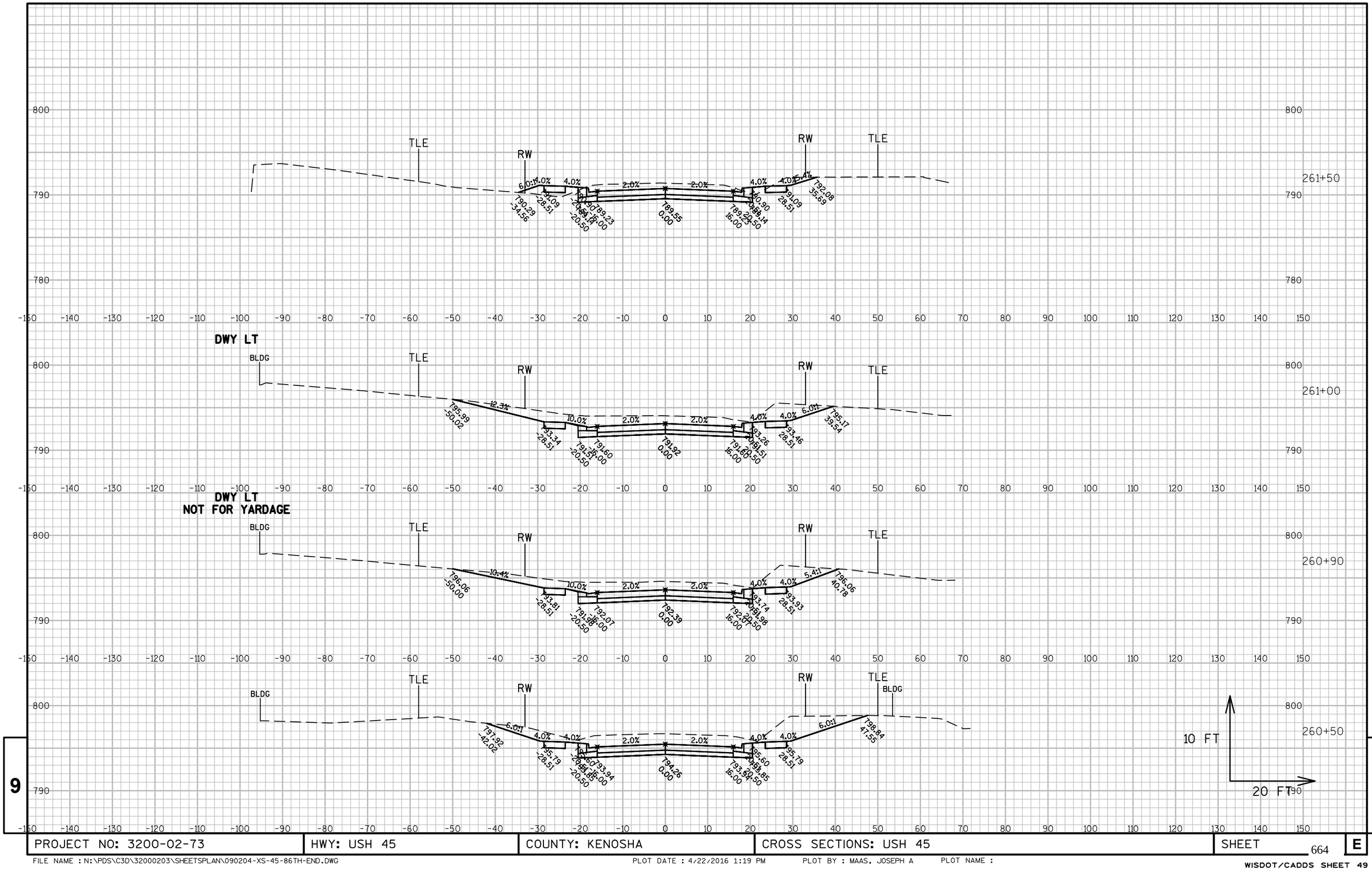
PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: USH 45	SHEET 662	E



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PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: USH 45	SHEET 663	E

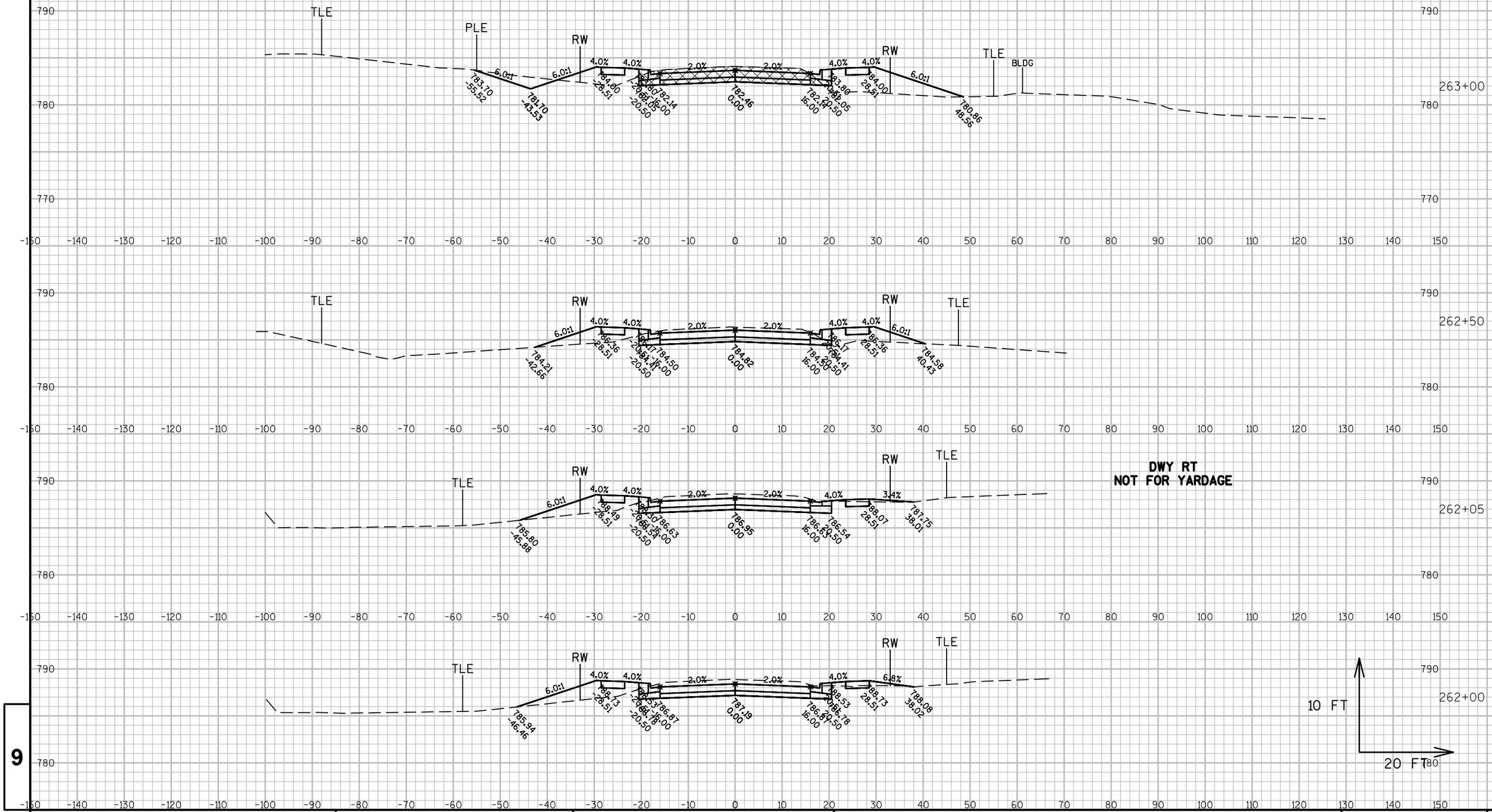


PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: USH 45	SHEET 664	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090204-XS-45-86TH-END.DWG PLOT DATE : 4/22/2016 1:19 PM PLOT BY : MAAS, JOSEPH A PLOT NAME :

WISDOT/CADDS SHEET 49

*PETROLEUM CONTAMINATED SOIL
STA 263+00 TO STA 264+75

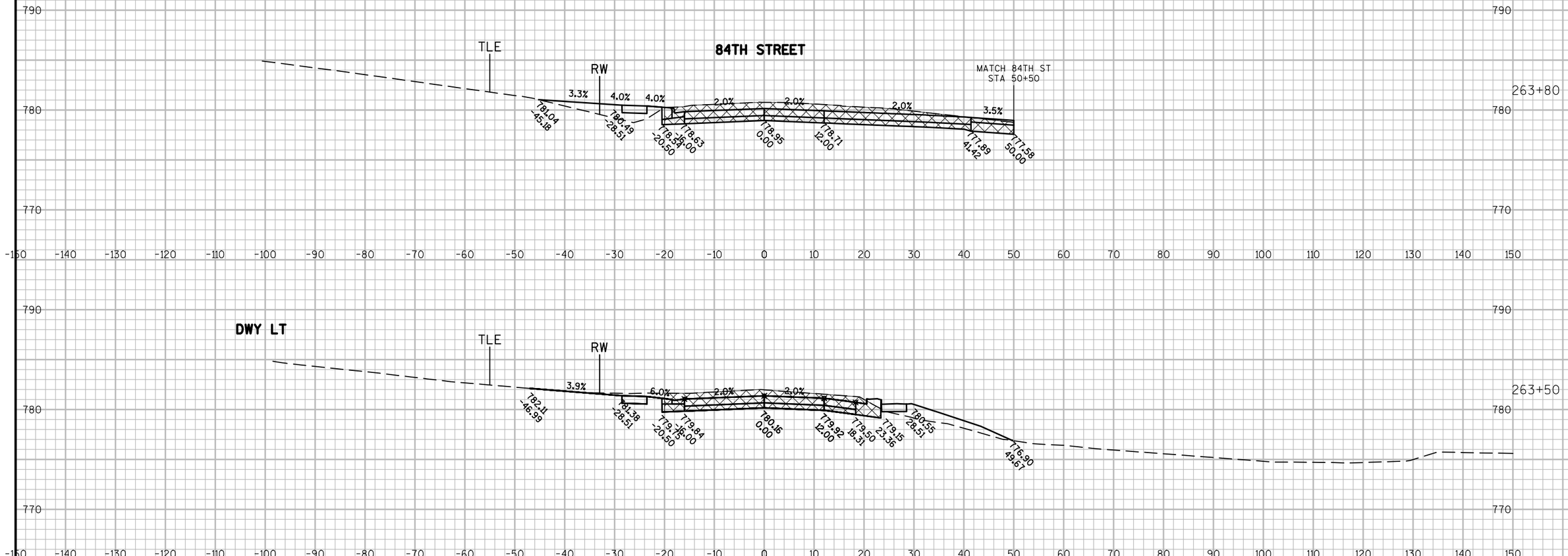


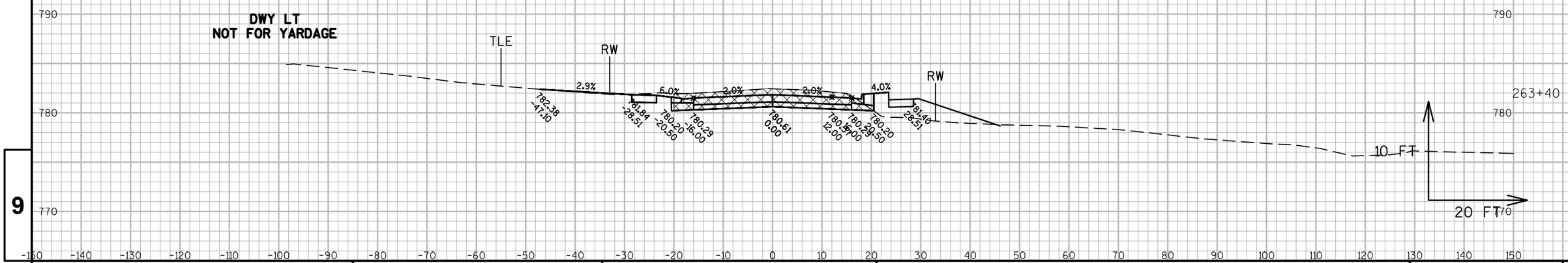
PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: USH 45	SHEET 665	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090204-XS-45-86TH-END.DWG PLOT DATE : 4/22/2016 1:19 PM PLOT BY : MAAS, JOSEPH A PLOT NAME :

WISDOT/CADDS SHEET 49

*PETROLEUM CONTAMINATED SOIL
STA 263+00 TO STA 264+75





9

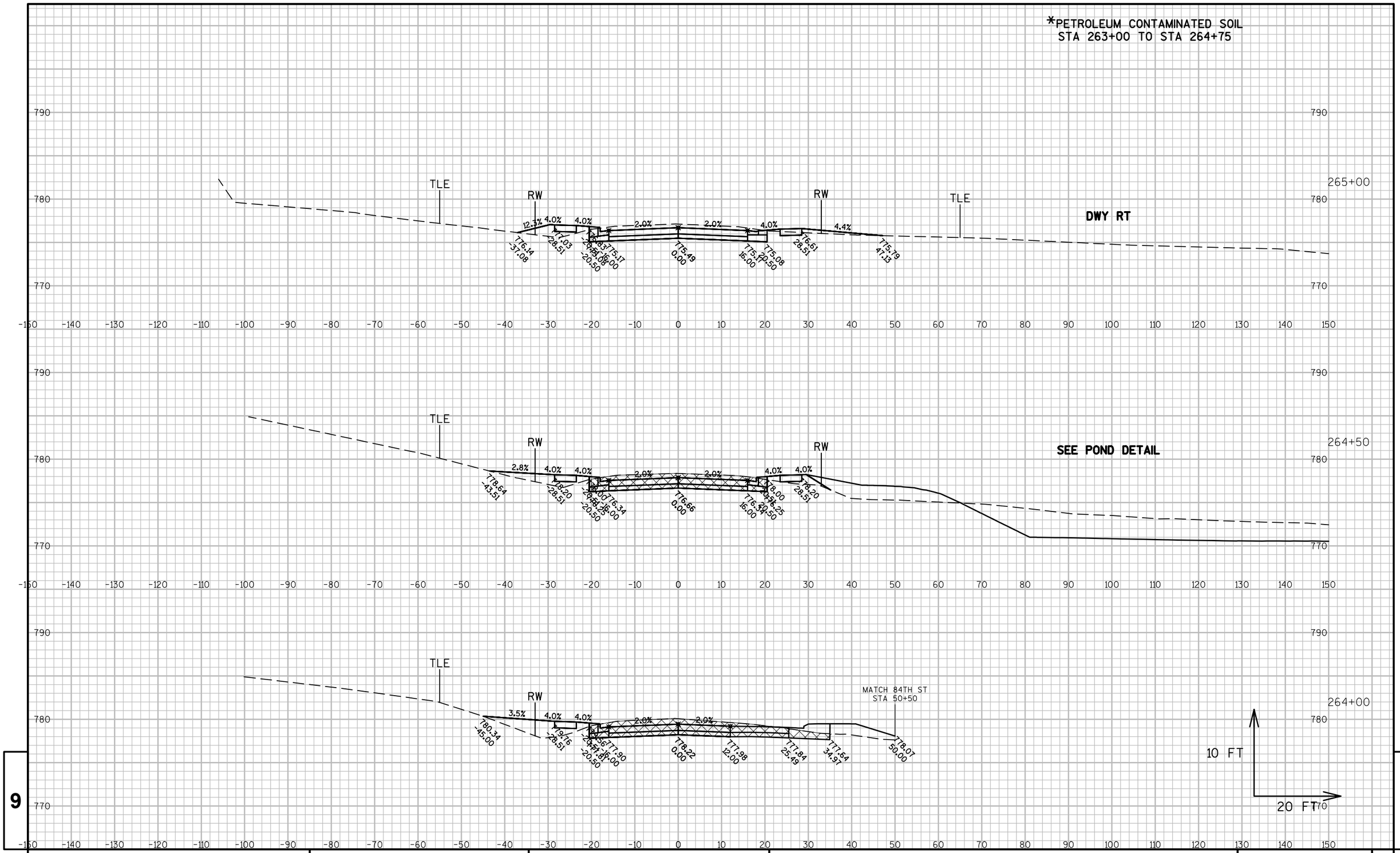
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PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: USH 45	SHEET 666	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090204-XS-45-86TH-END.DWG PLOT DATE : 4/22/2016 1:19 PM PLOT BY : MAAS, JOSEPH A PLOT NAME :

WISDOT/CADDS SHEET 49

*PETROLEUM CONTAMINATED SOIL
STA 263+00 TO STA 264+75



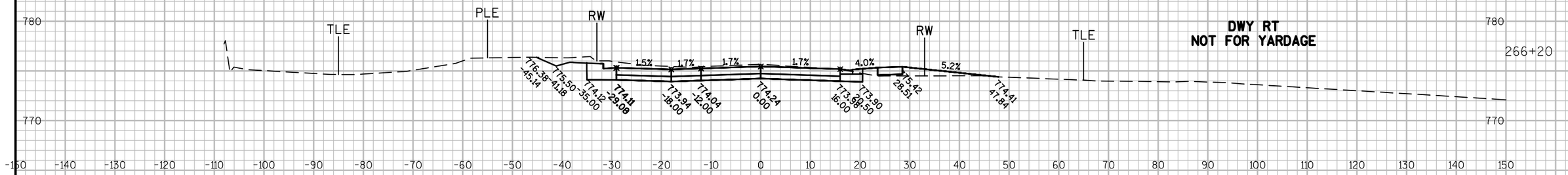
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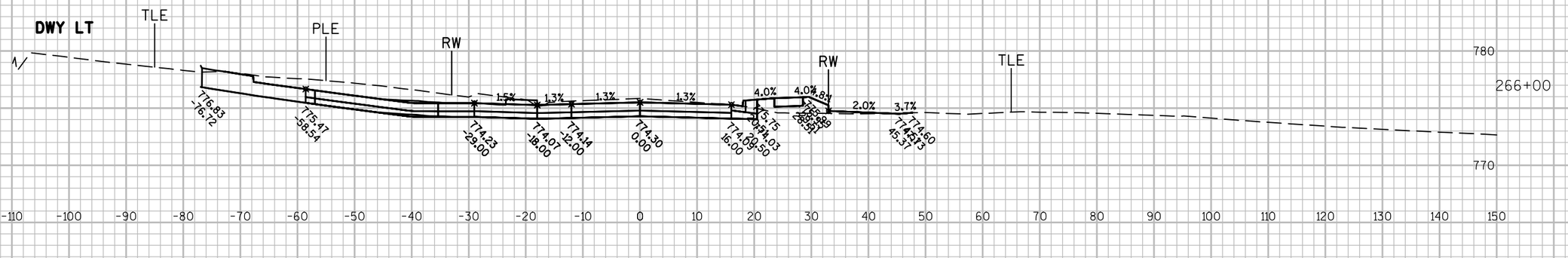
PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: USH 45	SHEET 667	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090204-XS-45-86TH-END.DWG PLOT DATE : 4/29/2016 9:36 AM PLOT BY : MAAS, JOSEPH A PLOT NAME :

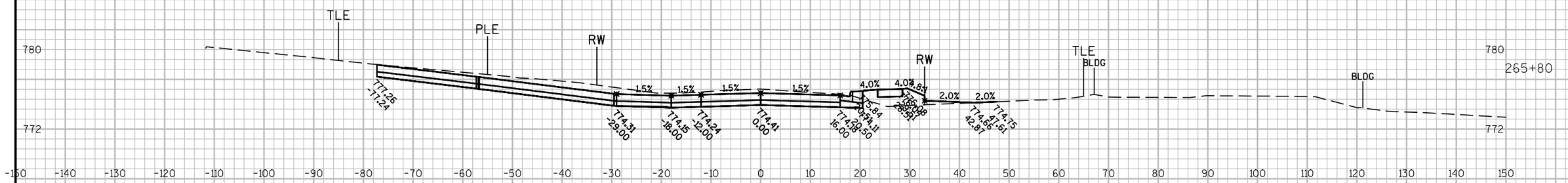
DWY RT
NOT FOR YARDAGE

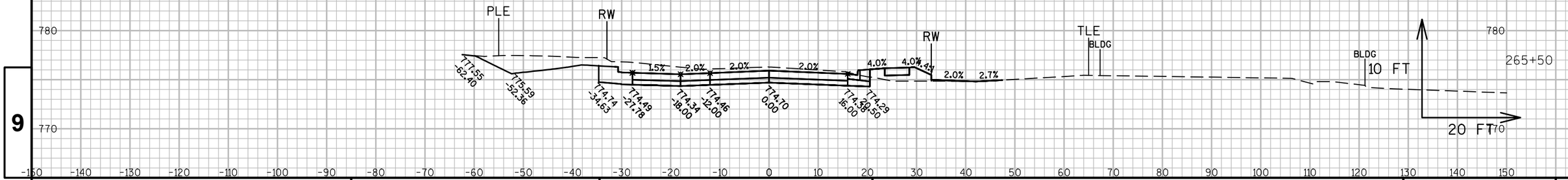


DWY LT



DWY LT
NOT FOR YARDAGE



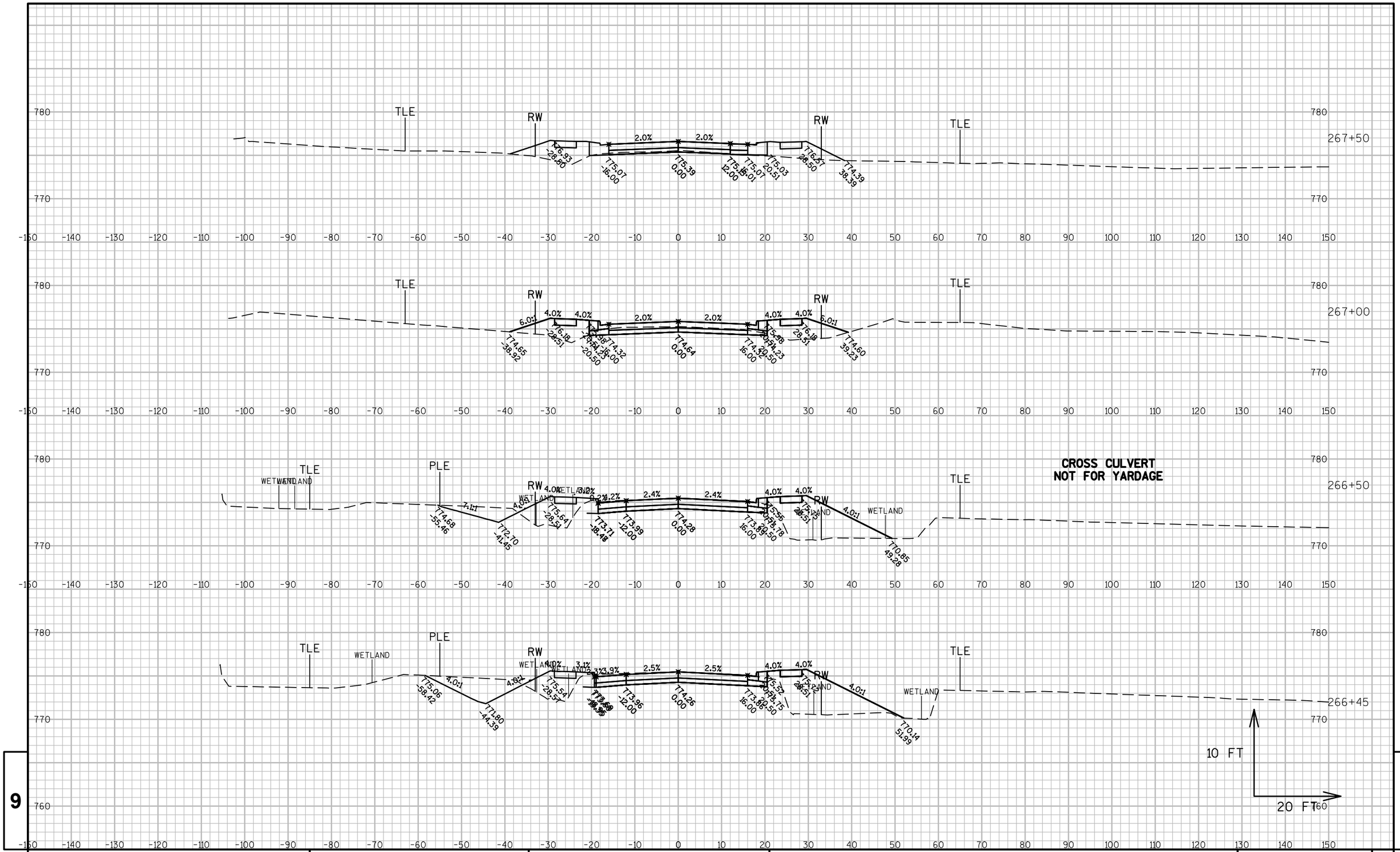


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PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: USH 45	SHEET 668	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090204-XS-45-86TH-END.DWG PLOT DATE : 4/22/2016 1:19 PM PLOT BY : MAAS, JOSEPH A PLOT NAME :

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: USH 45	SHEET 669	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090204-XS-45-86TH-END.DWG PLOT DATE : 4/22/2016 1:19 PM PLOT BY : MAAS, JOSEPH A PLOT NAME :

WISDOT/CADDS SHEET 49

790
780
770

PLE
RW
83RD STREET
MATCH 83RD ST
STA 50+50
268+10
14.3%
4.0%
4.0%
2.0%
2.0%
T77.13 -38.23
T78.34 -28.51
T76.48 0.00
T76.80 0.00
T76.56 12.00
T76.22 30.00
T75.92 50.00

-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

790
780
770

PLE
RW
MATCH 83RD ST
STA 50+50
268+00
4.0%
4.0%
2.0%
2.0%
6.0:1
4.0:1
T77.49 -54.09
T75.40 -45.74
T76.21 0.00
T76.53 0.00
T76.29 12.00
T75.98 30.00
T75.66 50.00

-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

DWY LT
NOT FOR YARDAGE

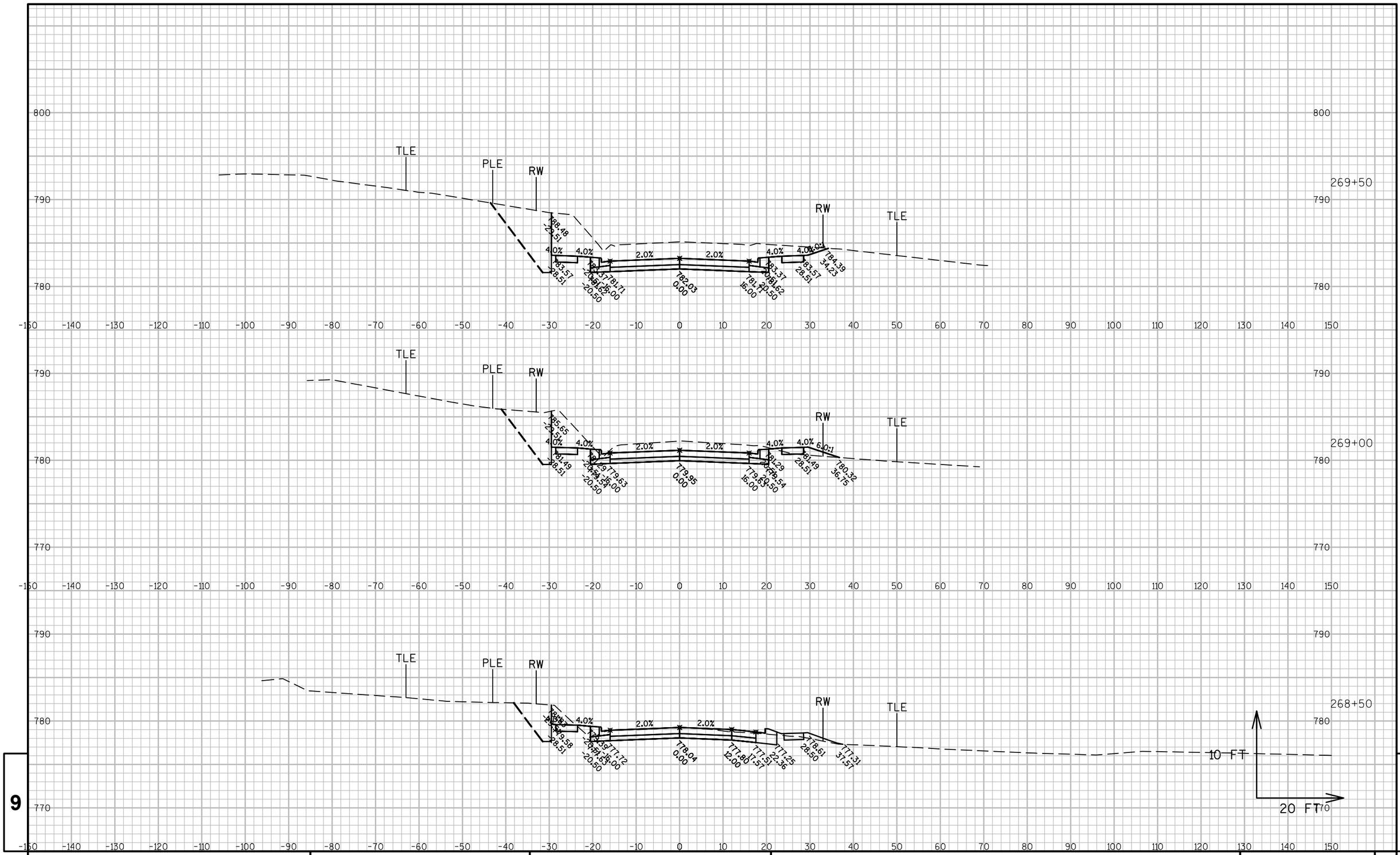
780
770

TLE
RW
RW
TLE
267+70
4.8%
4.0%
2.0%
2.0%
T76.04 -46.99
T76.92 -28.51
T75.48 0.00
T75.80 0.00
T75.56 12.00
T75.46 20.50
T75.41 25.48
T74.76 41.99
10 FT
20 FT

-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

9 9

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: USH 45	SHEET 670	E



9

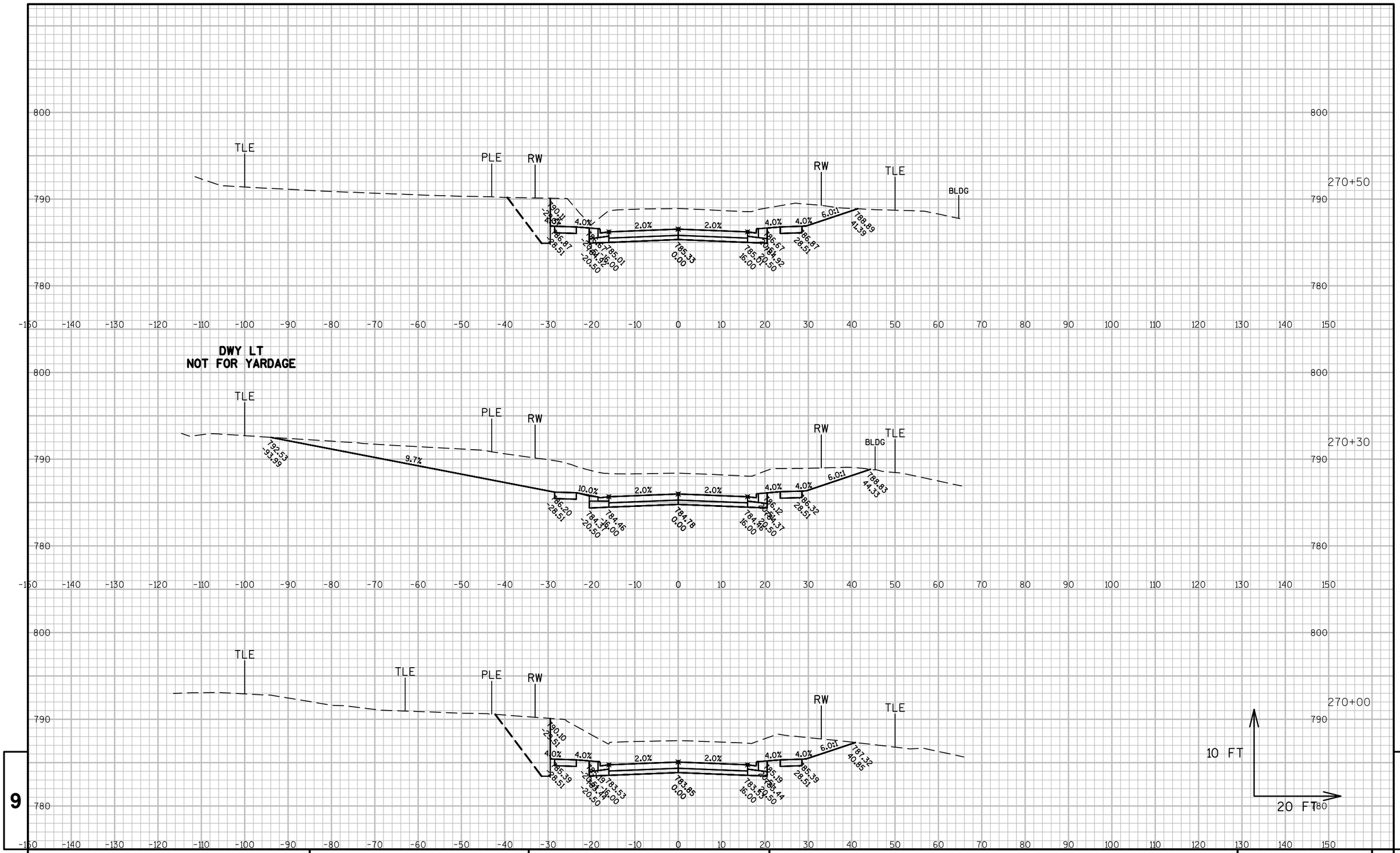
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PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: USH 45	SHEET 671	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090204-XS-45-86TH-END.DWG PLOT DATE : 4/22/2016 1:20 PM PLOT BY : MAAS, JOSEPH A PLOT NAME :

WISDOT/CADDS SHEET 49

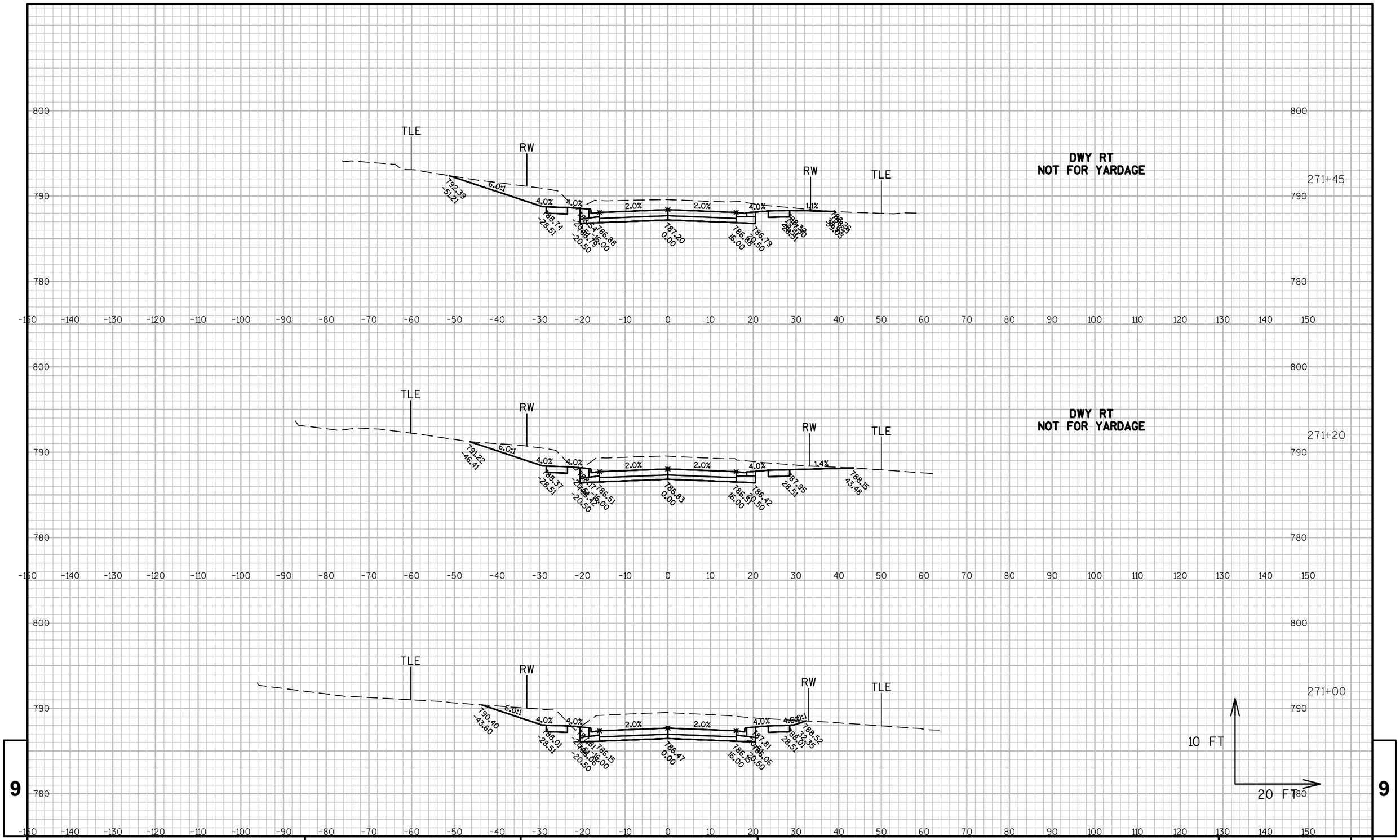
DWY LT
NOT FOR YARDAGE



PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: USH 45	SHEET 672	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090204-XS-45-86TH-END.DWG PLOT DATE : 4/22/2016 1:20 PM PLOT BY : MAAS, JOSEPH A PLOT NAME :

WISDOT/CADDS SHEET 49



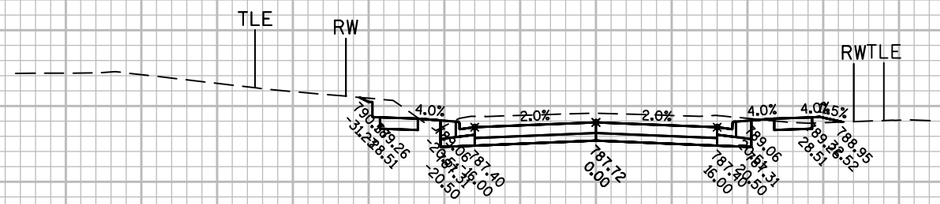
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PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: USH 45	SHEET 673	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090204-XS-45-86TH-END.DWG PLOT DATE : 4/29/2016 9:40 AM PLOT BY : MAAS, JOSEPH A PLOT NAME :

*POTENTIAL EBS AREAS FROM 273+00-285+00
SEE CONSTRUCTION DETAIL

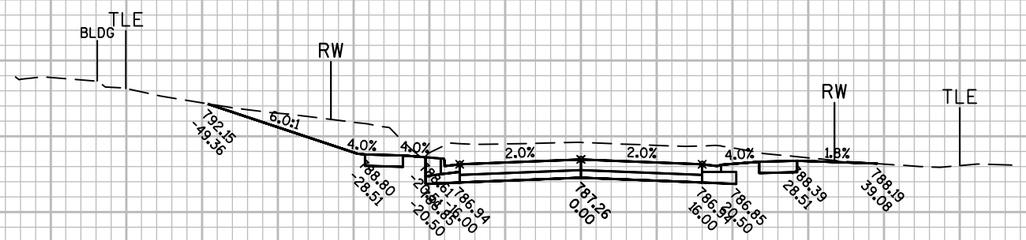


272+00

DWY LT
NOT FOR YARDAGE

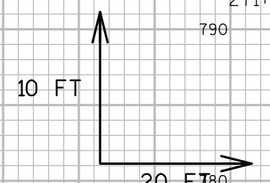


271+70



271+50

DWY RT



9

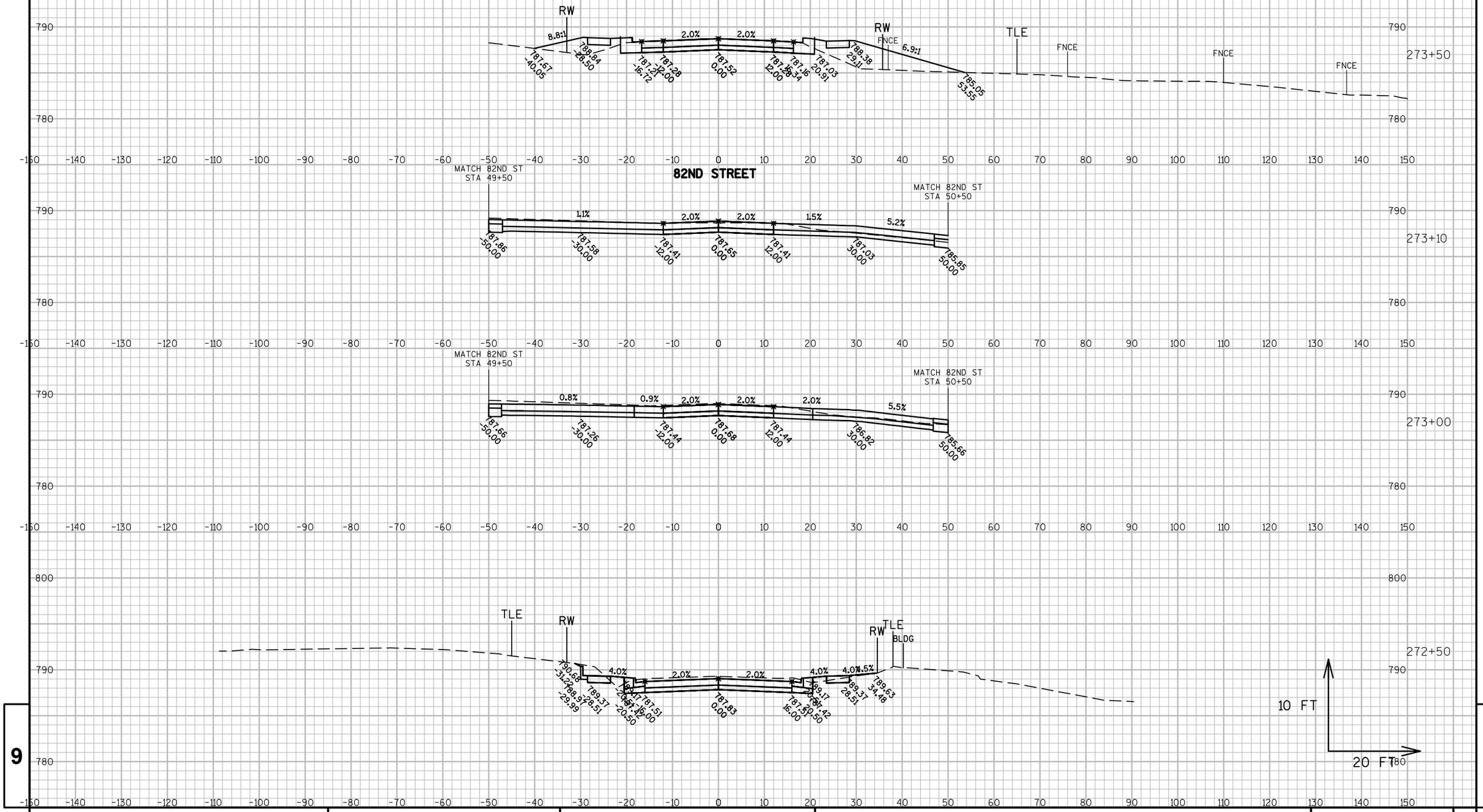
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PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: USH 45	SHEET 674	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090204-XS-45-86TH-END.DWG PLOT DATE : 4/22/2016 1:20 PM PLOT BY : MAAS, JOSEPH A PLOT NAME :

WISDOT/CADDS SHEET 49

*POTENTIAL UNSTABLE SOIL FROM 273+00-285+00
SEE CONSTRUCTION DETAIL

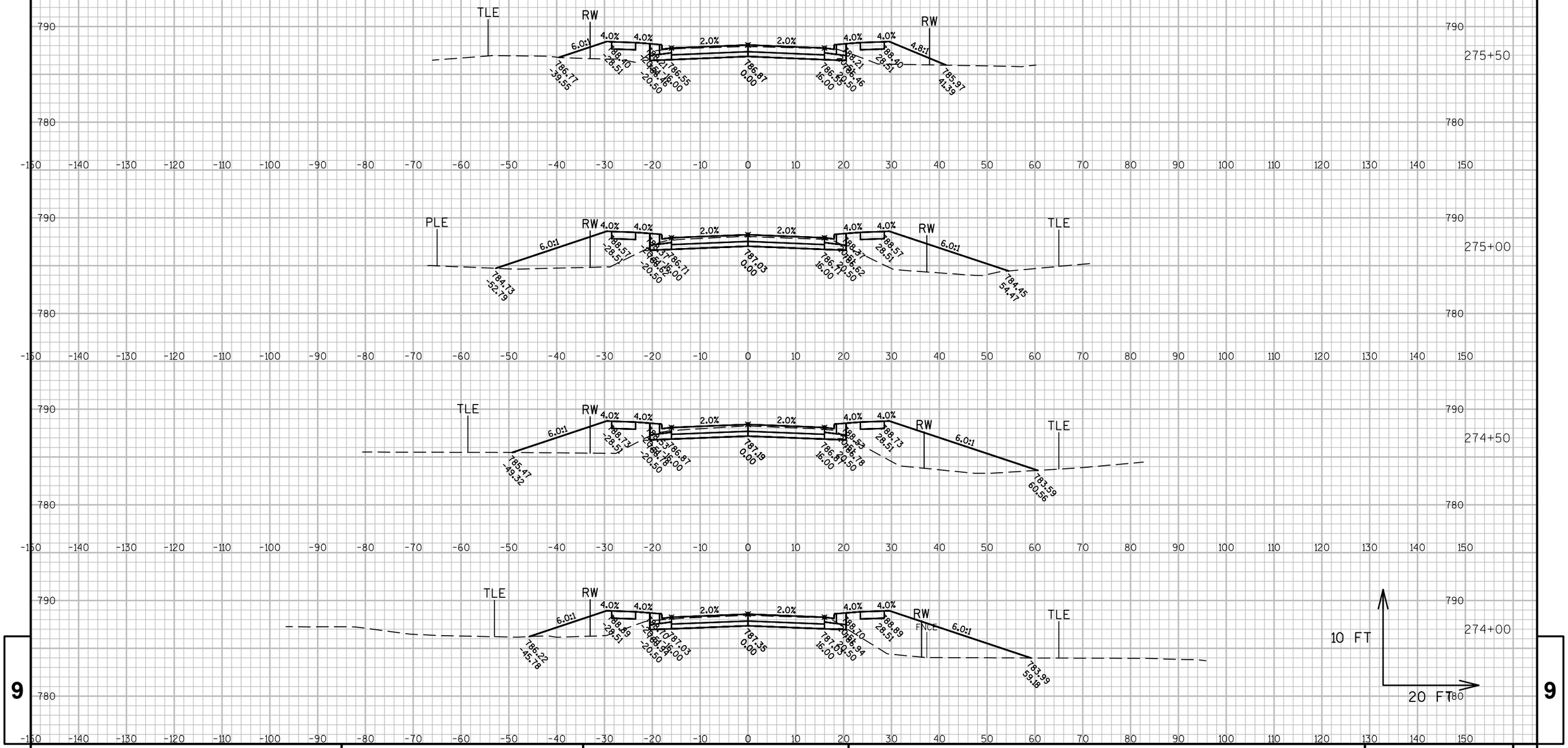


PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: USH 45	SHEET 675	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090204-XS-45-86TH-END.DWG PLOT DATE : 4/22/2016 1:20 PM PLOT BY : MAAS, JOSEPH A PLOT NAME :

WISDOT/CADDS SHEET 49

*POTENTIAL UNSTABLE SOIL FROM 273+00-285+00
SEE CONSTRUCTION DETAIL



9

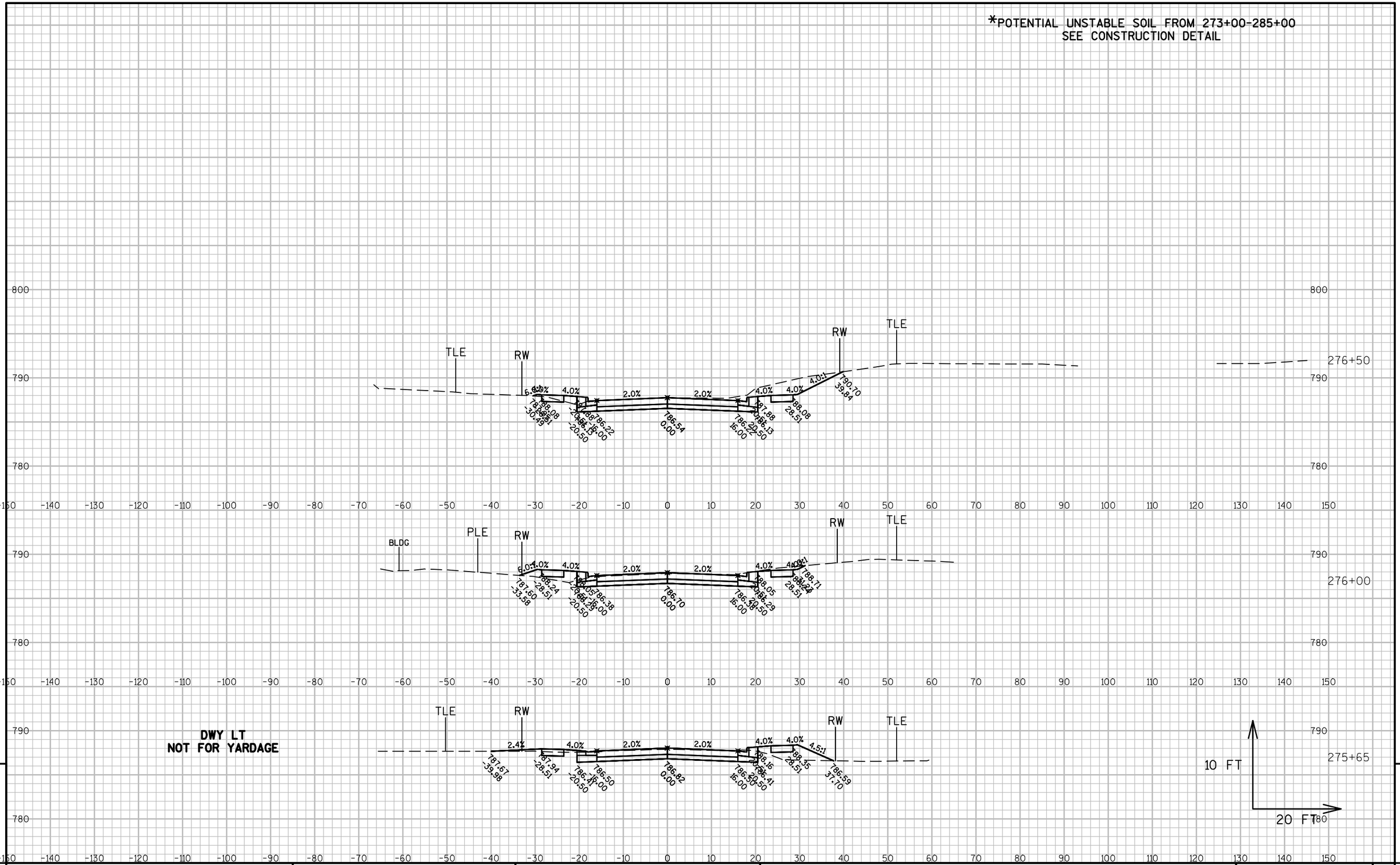
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PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: USH 45	SHEET 676	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090204-XS-45-86TH-END.DWG PLOT DATE : 4/22/2016 1:20 PM PLOT BY : MAAS, JOSEPH A PLOT NAME :

WISDOT/CADDS SHEET 49

*POTENTIAL UNSTABLE SOIL FROM 273+00-285+00
SEE CONSTRUCTION DETAIL



9 9

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: USH 45	SHEET 677	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090204-XS-45-86TH-END.DWG PLOT DATE : 4/22/2016 1:20 PM PLOT BY : MAAS, JOSEPH A PLOT NAME :

WISDOT/CADDS SHEET 49

*POTENTIAL UNSTABLE SOIL FROM 273+00-285+00
SEE CONSTRUCTION DETAIL

DWY LT
NOT FOR YARDAGE

277+30

TLE RW RW TLE BLDG

1.8% 4.0% 2.0% 2.0% 4.0% 4.0% 6.0:1

787.58 -39.96 | 787.37 -28.51 | 785.84 -20.50 | 785.93 -16.00 | 786.25 0.00 | 785.39 16.00 | 785.84 20.50 | 787.59 28.51 | 787.19 28.51 | 789.52 39.86

277+00

TLE RW RW TLE

0.1% 4.0% 4.0% 2.0% 2.0% 4.0% 4.0% 6.0:1

787.94 -57.50 | 787.91 -28.51 | 785.85 -20.50 | 786.06 -16.00 | 786.38 0.00 | 786.06 16.00 | 785.97 20.50 | 787.72 28.51 | 787.91 28.51 | 790.15 42.66

DWY RT
NOT FOR YARDAGE

276+67

TLE RW RW TLE

2.0% 4.0% 4.0% 2.0% 2.0% 10.0% 9.7%

788.29 -40.14 | 789.02 -28.51 | 786.07 -20.50 | 786.16 -16.00 | 786.48 0.00 | 786.26 16.00 | 786.07 20.50 | 787.91 28.51 | 791.79 68.50

10 FT
20 FT

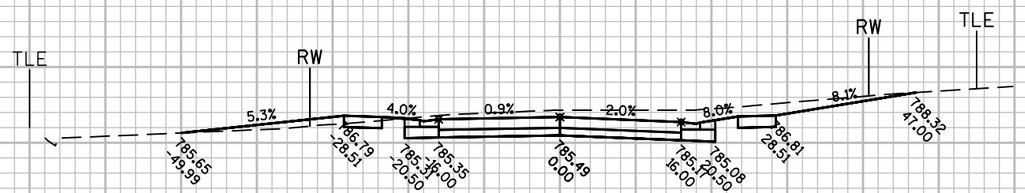
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PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: USH 45	SHEET 678	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090204-XS-45-86TH-END.DWG PLOT DATE : 4/22/2016 1:21 PM PLOT BY : MAAS, JOSEPH A PLOT NAME :

*POTENTIAL UNSTABLE SOIL FROM 273+00-285+00
SEE CONSTRUCTION DETAIL

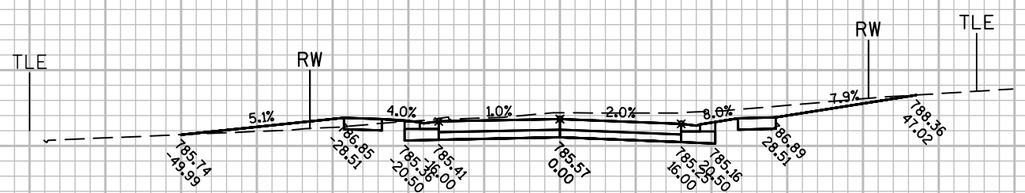
DWY LT



DWY RT

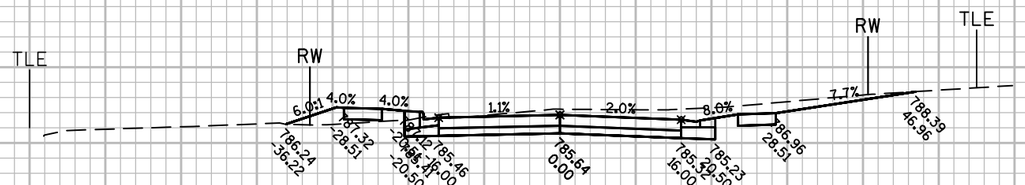
278+00

DWY LT
NOT FOR YARDAGE



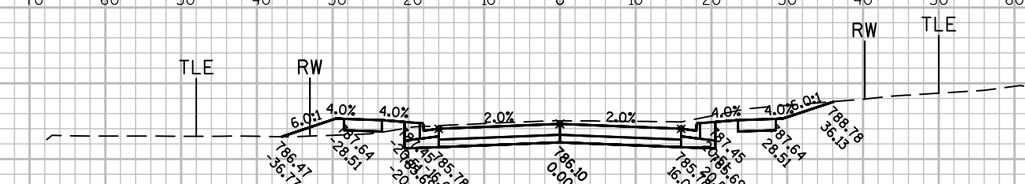
DWY RT
NOT FOR YARDAGE

277+95



DWY RT
NOT FOR YARDAGE

277+90



277+50

10 FT

20 FT

9

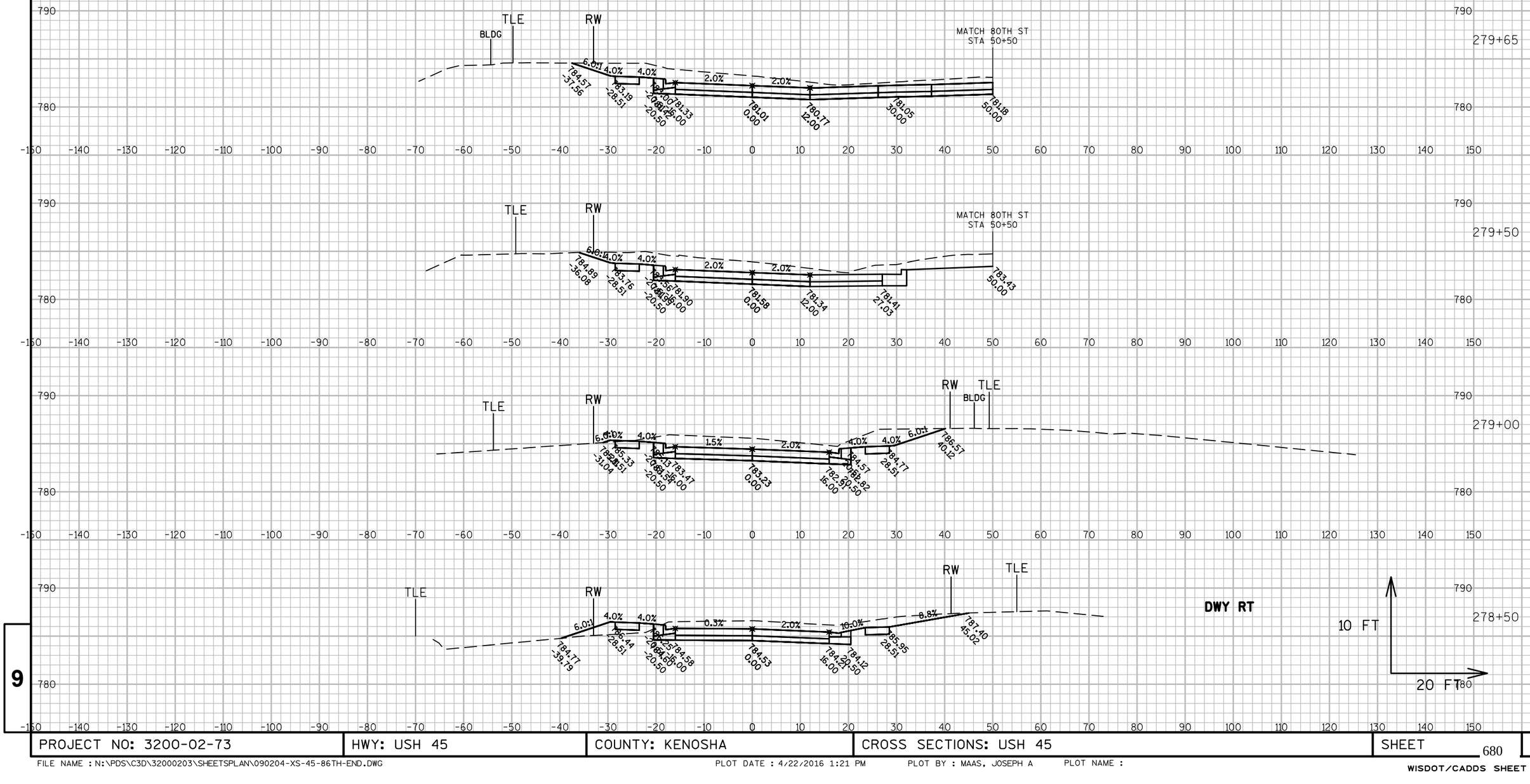
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PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: USH 45	SHEET 679	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090204-XS-45-86TH-END.DWG PLOT DATE : 4/22/2016 1:21 PM PLOT BY : MAAS, JOSEPH A PLOT NAME :

WISDOT/CADDS SHEET 49

*POTENTIAL UNSTABLE SOIL FROM 273+00-285+00
SEE CONSTRUCTION DETAIL

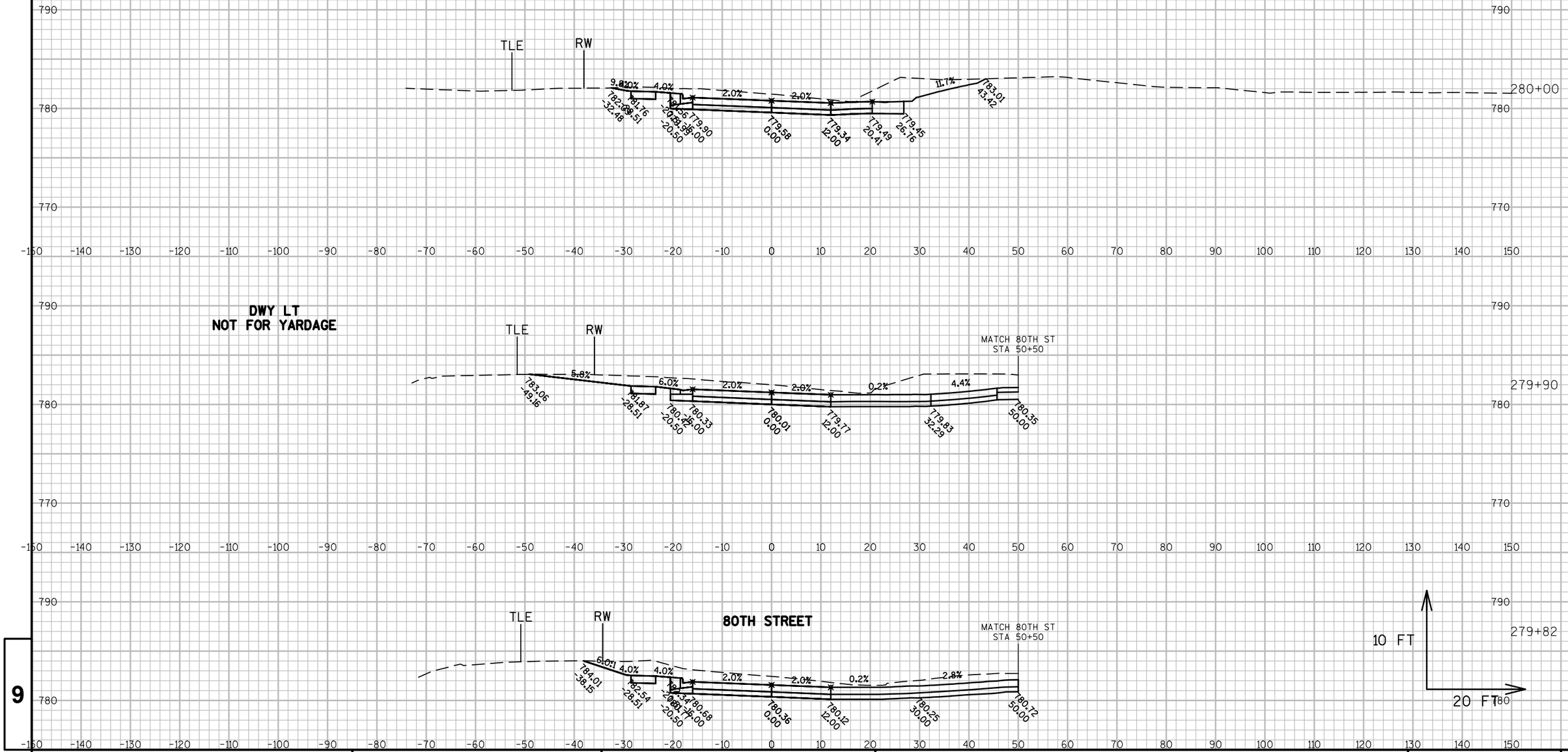


PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: USH 45	SHEET 680	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090204-XS-45-86TH-END.DWG PLOT DATE : 4/22/2016 1:21 PM PLOT BY : MAAS, JOSEPH A PLOT NAME :

WISDOT/CADDS SHEET 49

*POTENTIAL UNSTABLE SOIL FROM 273+00-285+00
SEE CONSTRUCTION DETAIL

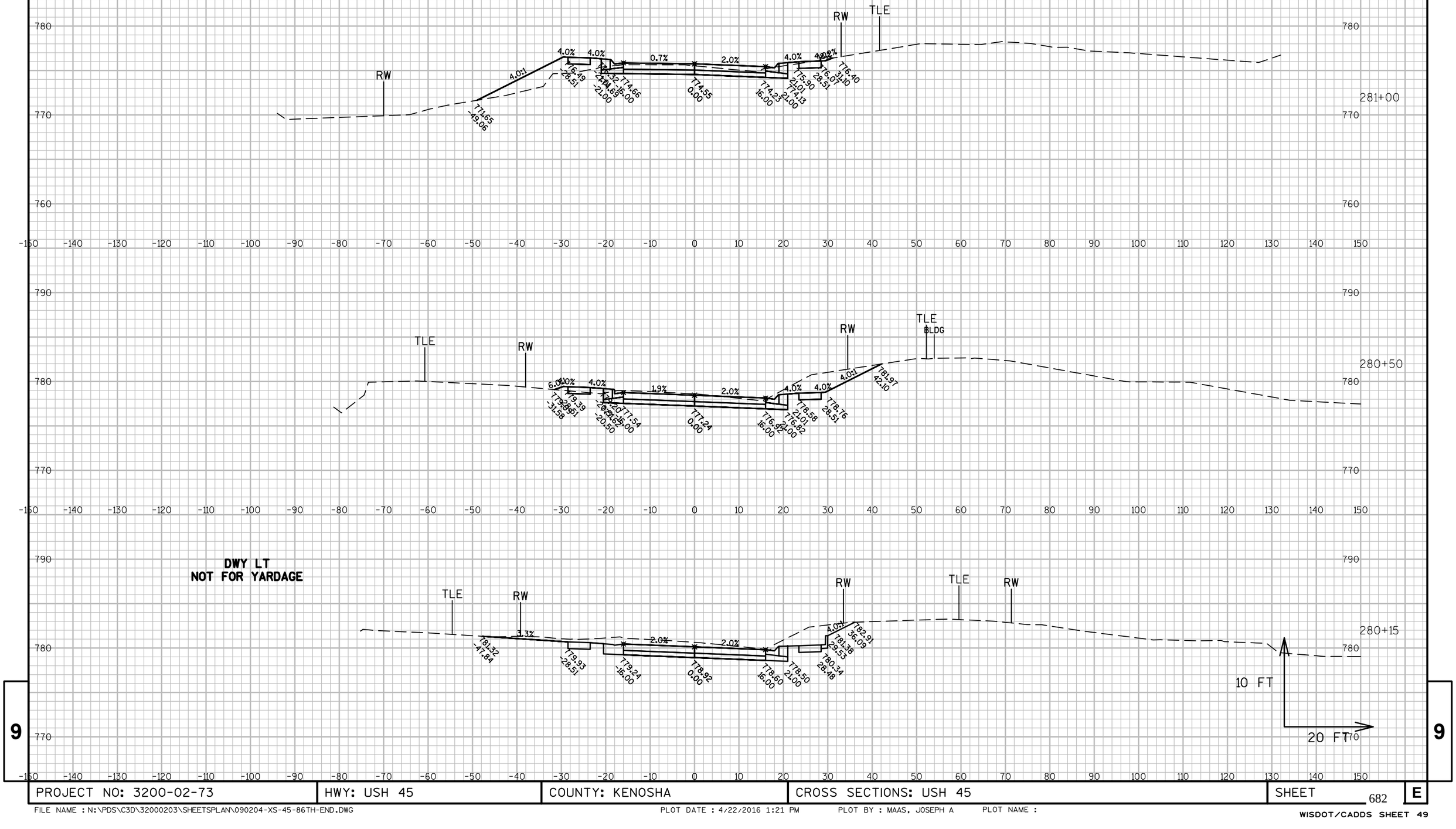


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PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: USH 45	SHEET 681	E

*POTENTIAL UNSTABLE SOIL FROM 273+00-285+00
SEE CONSTRUCTION DETAIL



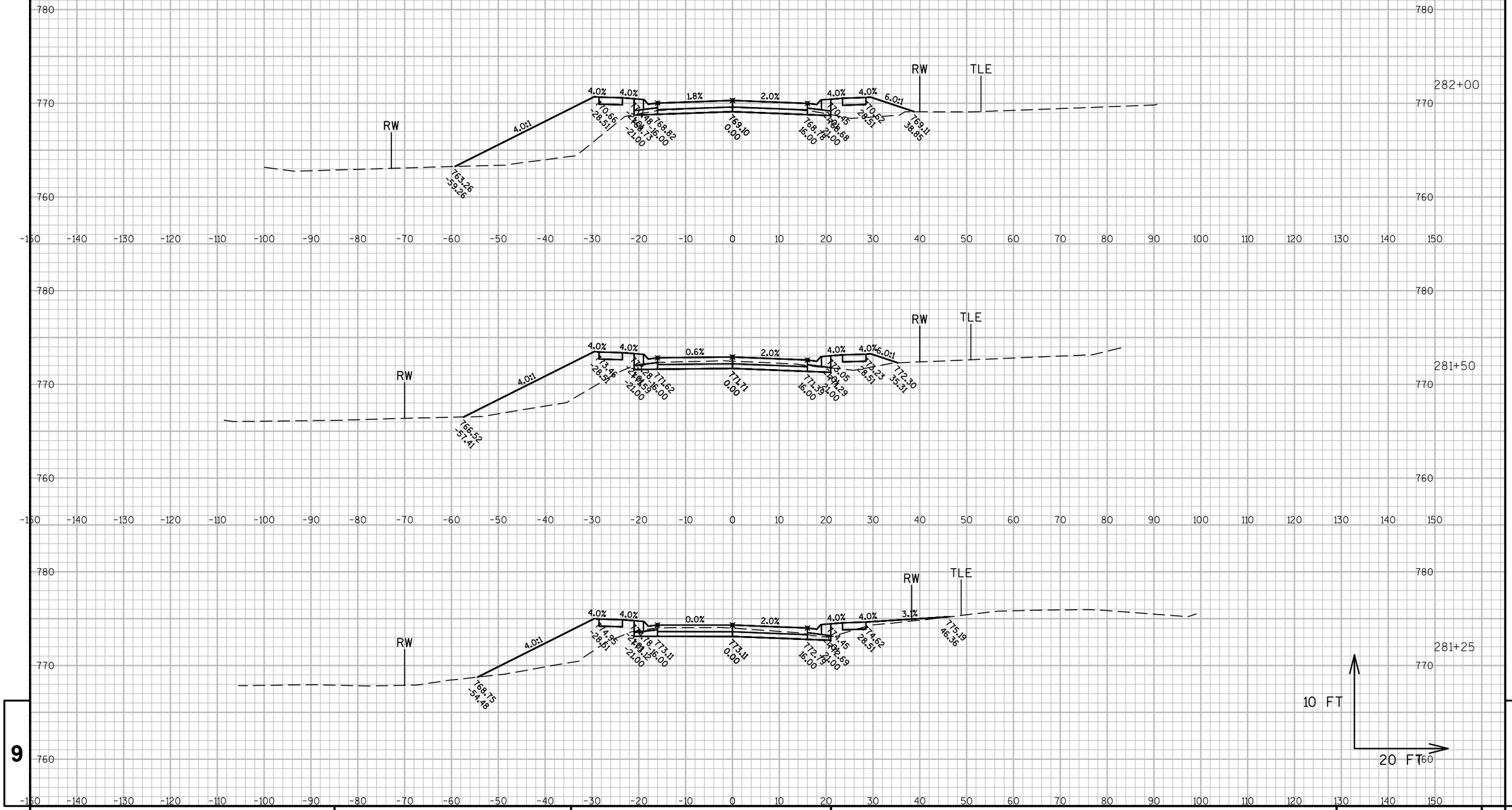
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PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: USH 45	SHEET 682 E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090204-XS-45-86TH-END.DWG PLOT DATE : 4/22/2016 1:21 PM PLOT BY : MAAS, JOSEPH A PLOT NAME :

WISDOT/CADDS SHEET 49

*POTENTIAL UNSTABLE SOIL FROM 273+00-285+00
SEE CONSTRUCTION DETAIL

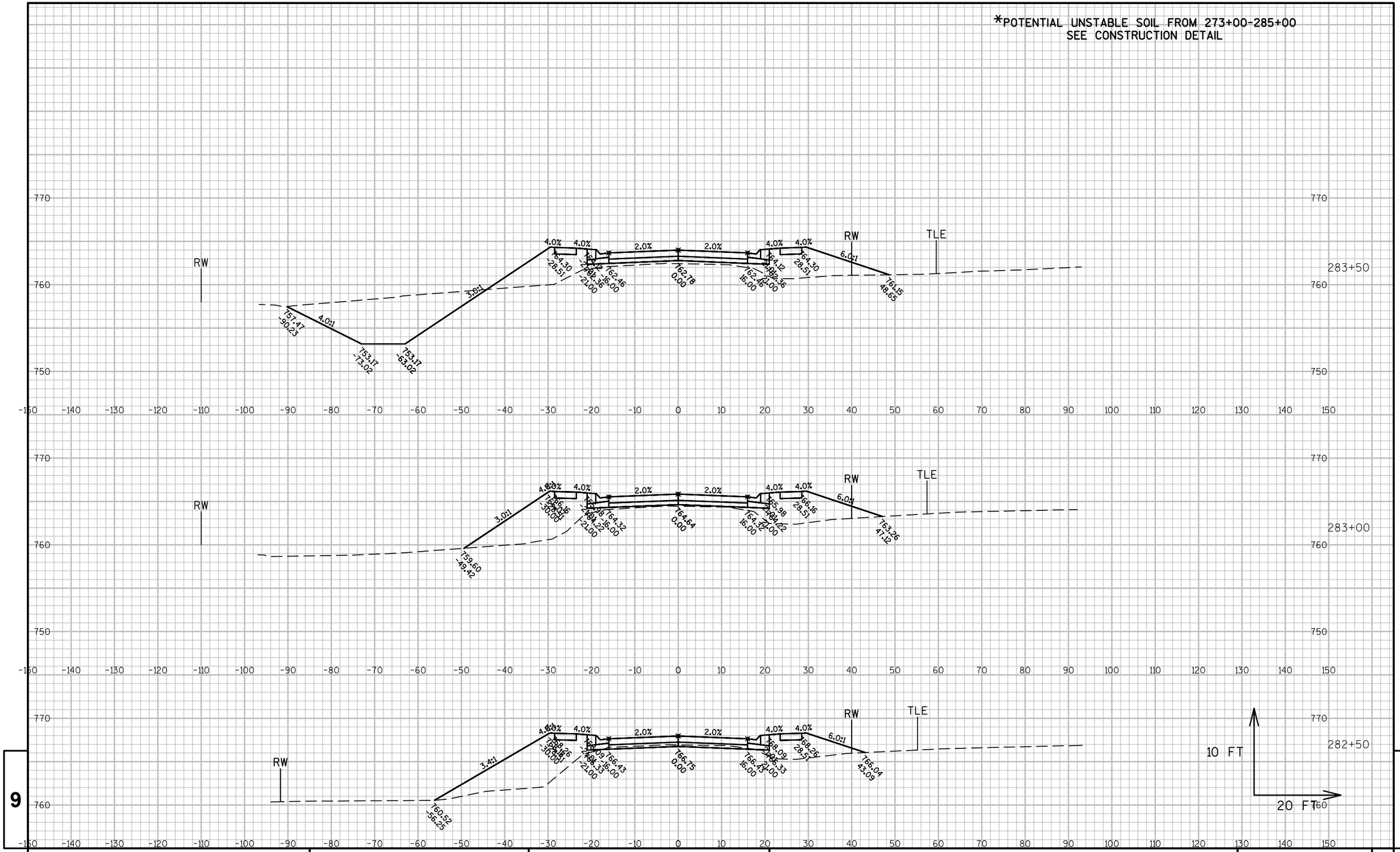


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PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: USH 45	SHEET 683	E

*POTENTIAL UNSTABLE SOIL FROM 273+00-285+00
SEE CONSTRUCTION DETAIL

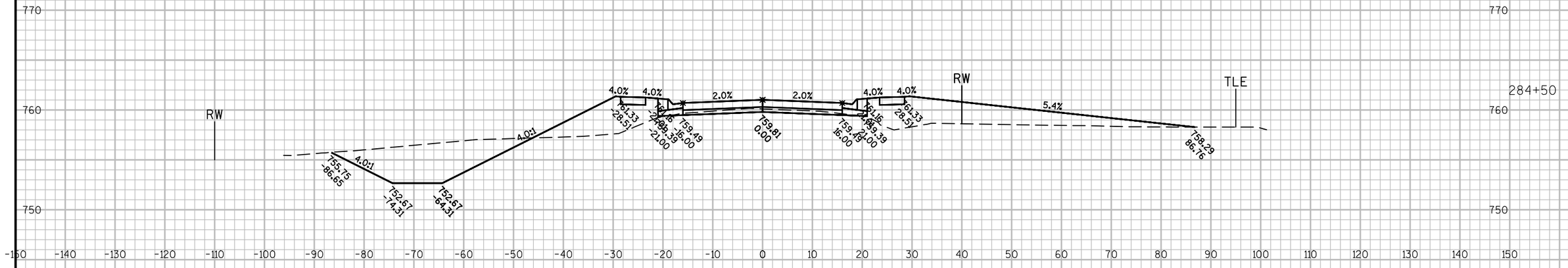


PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: USH 45	SHEET 684 E

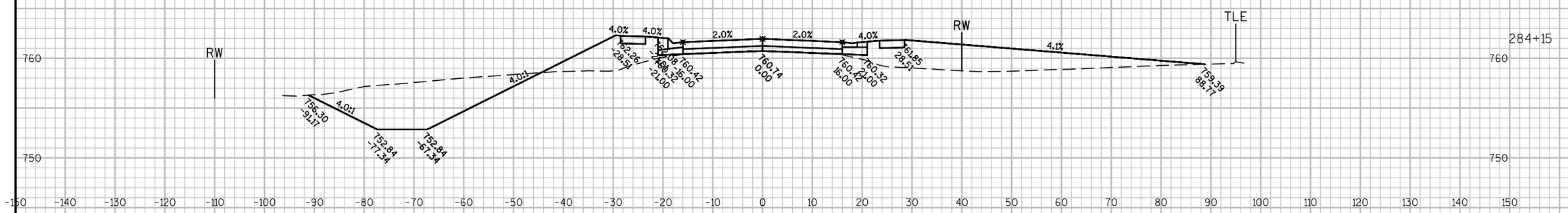
FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090204-XS-45-86TH-END.DWG PLOT DATE : 4/22/2016 1:21 PM PLOT BY : MAAS, JOSEPH A PLOT NAME :

WISDOT/CADDS SHEET 49

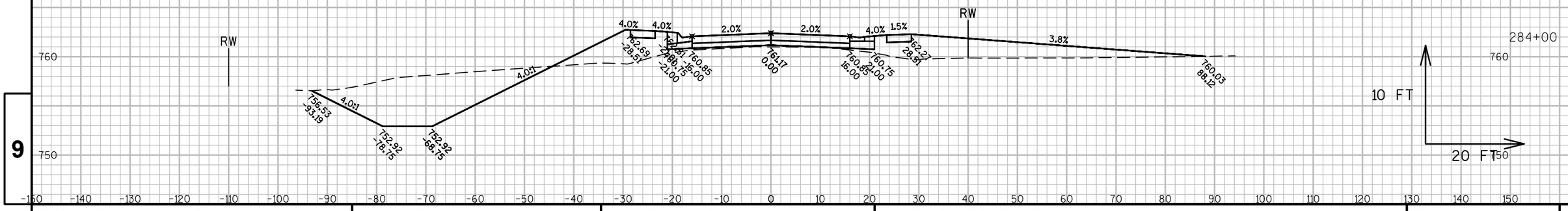
*POTENTIAL UNSTABLE SOIL FROM 273+00-285+00
SEE CONSTRUCTION DETAIL



DWY RT
NOT FOR YARDAGE



DWY RT



9

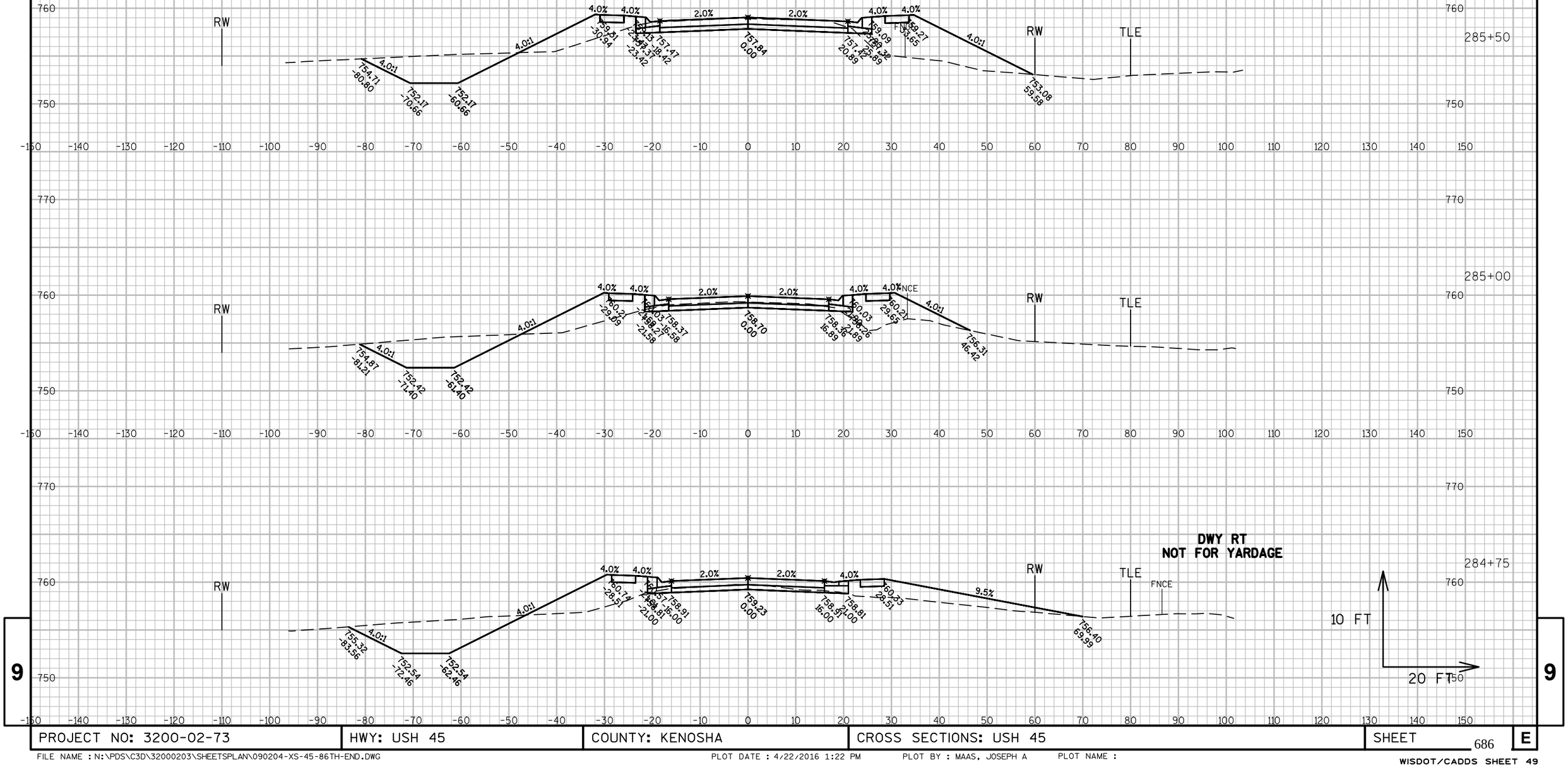
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PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: USH 45	SHEET 685	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090204-XS-45-86TH-END.DWG PLOT DATE : 4/22/2016 1:21 PM PLOT BY : MAAS, JOSEPH A PLOT NAME :

WISDOT/CADDS SHEET 49

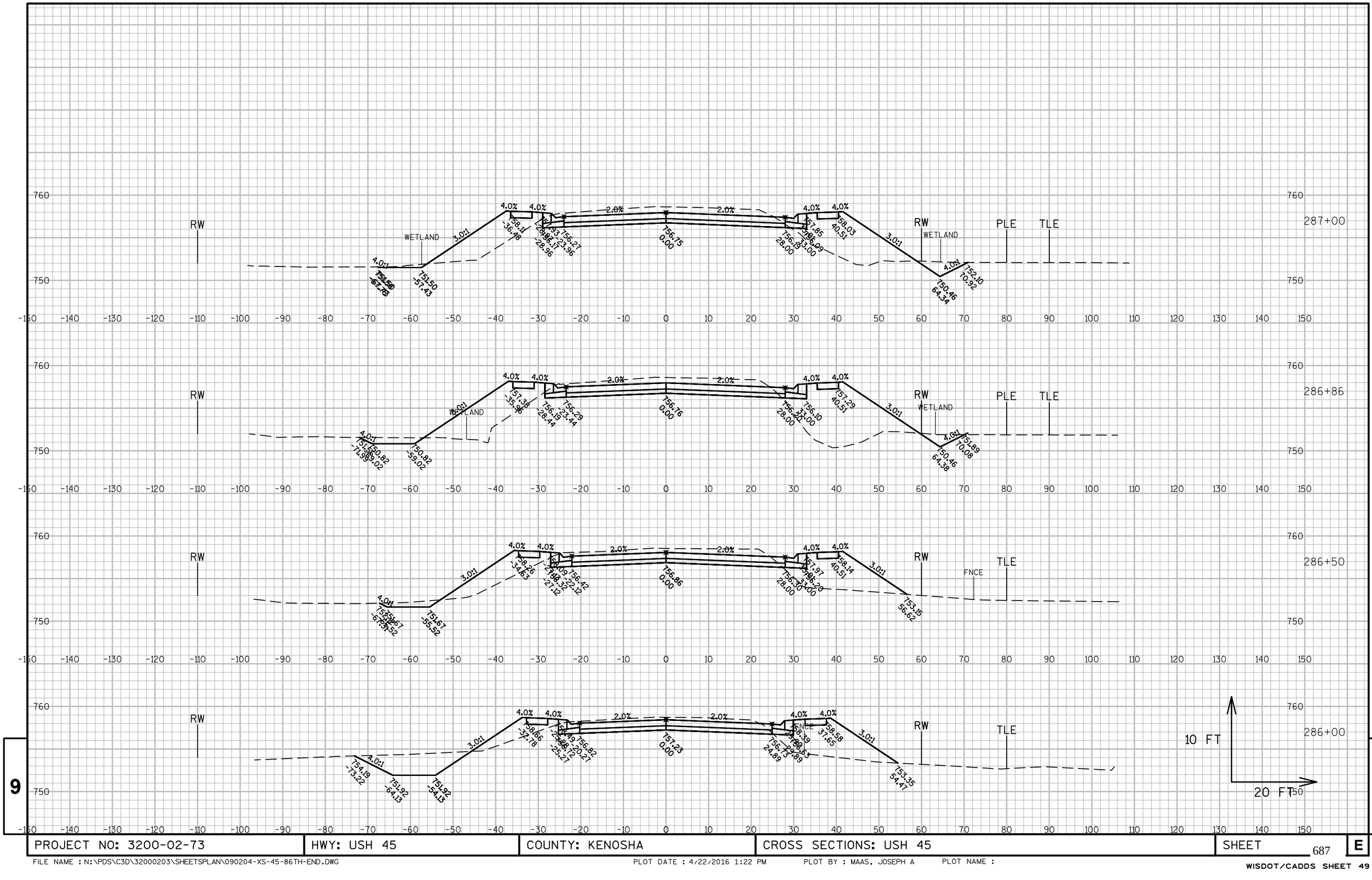
*POTENTIAL UNSTABLE SOIL FROM 273+00-285+00
SEE CONSTRUCTION DETAIL



PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: USH 45	SHEET 686	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090204-XS-45-86TH-END.DWG PLOT DATE : 4/22/2016 1:22 PM PLOT BY : MAAS, JOSEPH A PLOT NAME :

WISDOT/CADDS SHEET 49



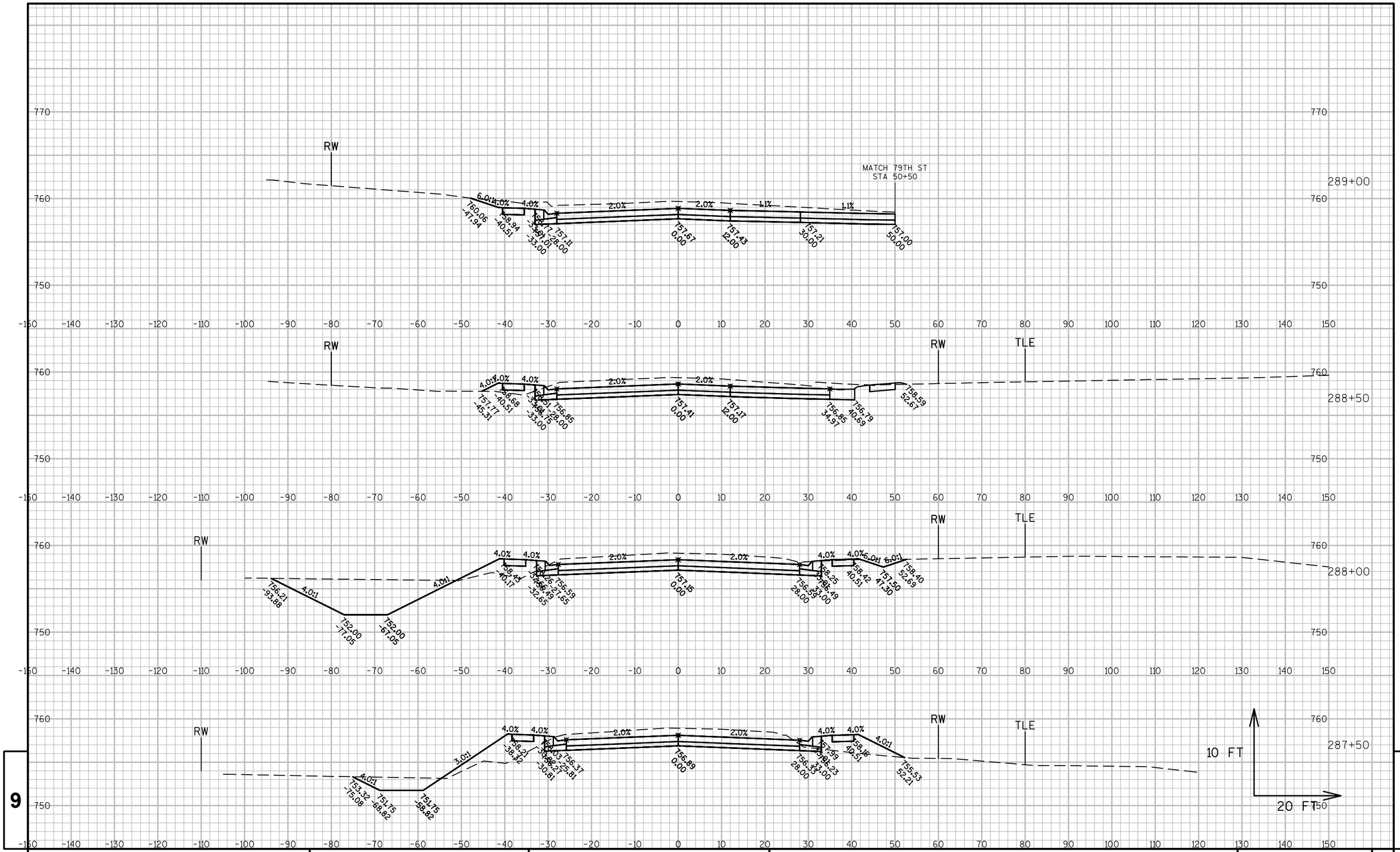
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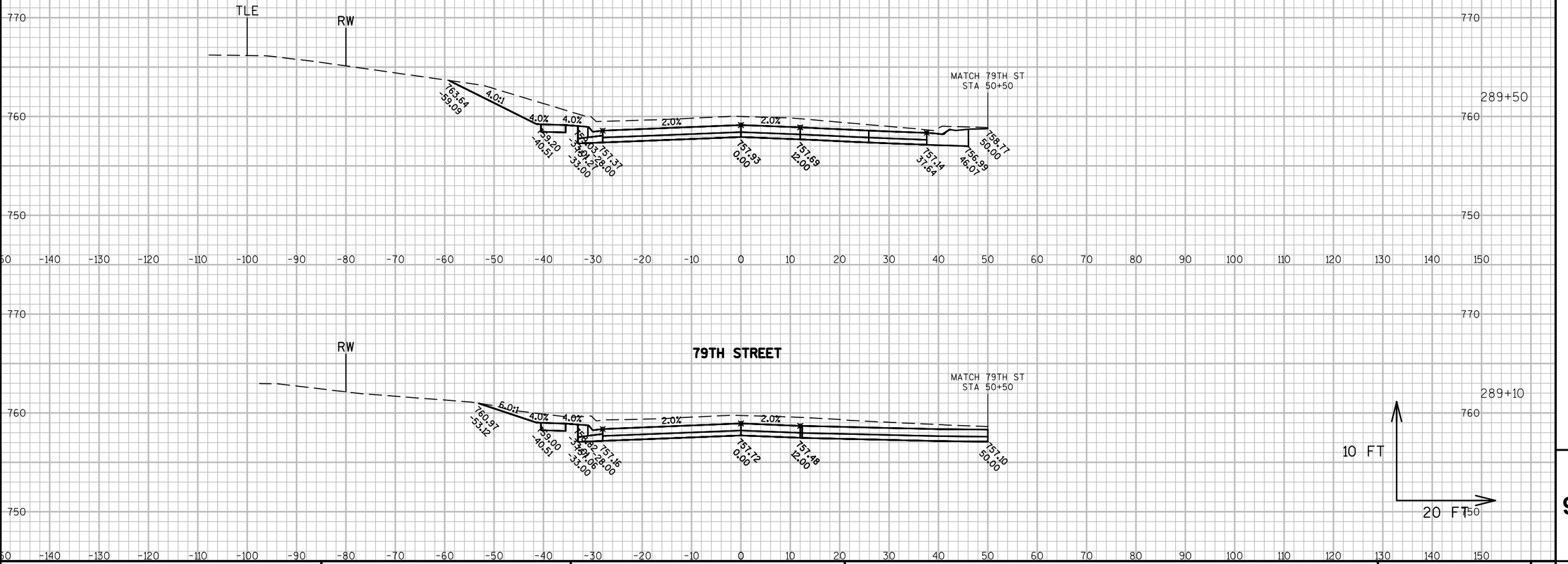
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FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090204-XS-45-86TH-END.DWG PLOT DATE : 4/22/2016 1:22 PM PLOT BY : MAAS, JOSEPH A PLOT NAME :

WISDOT/CADDS SHEET 49



PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: USH 45	SHEET 688	E

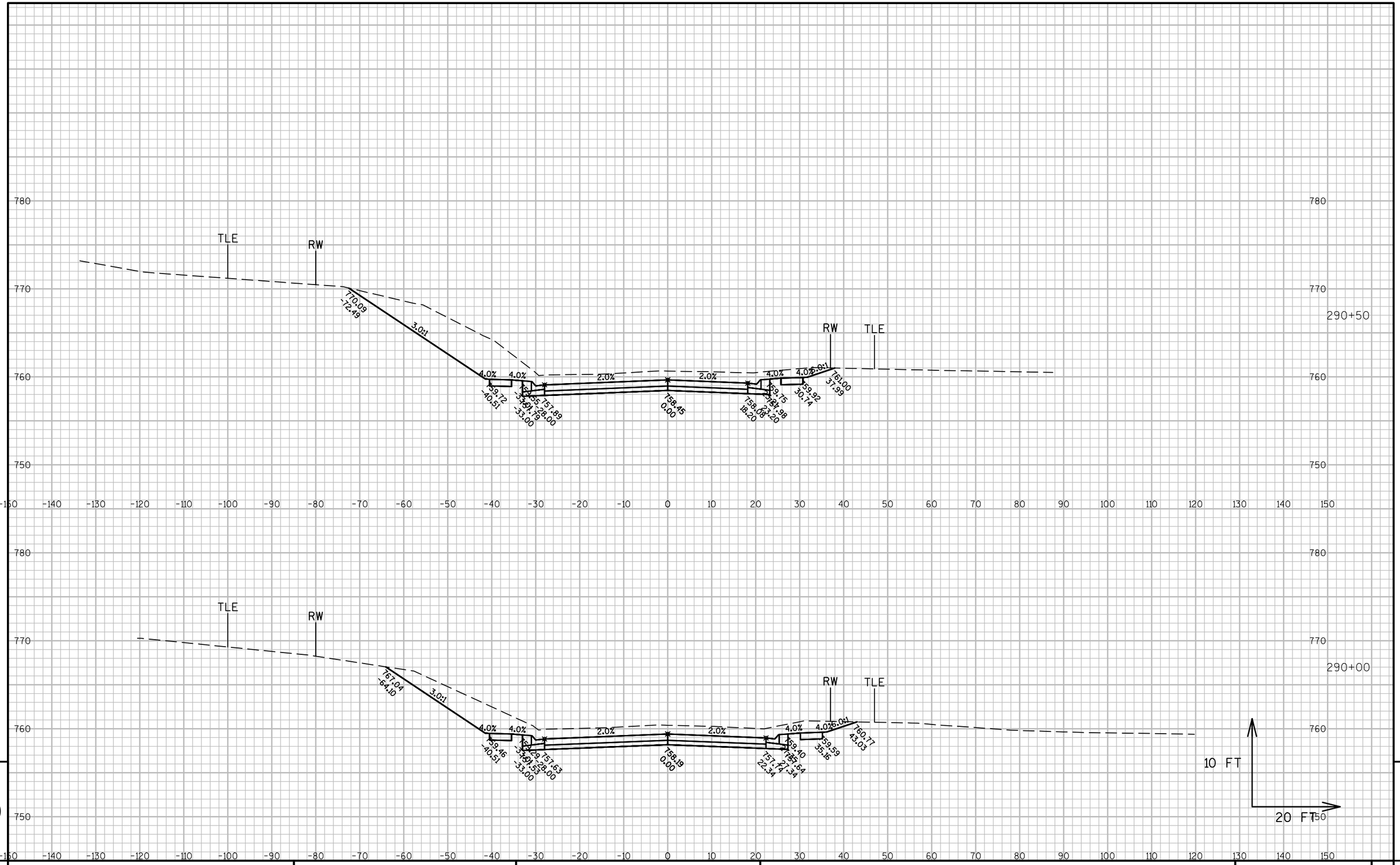


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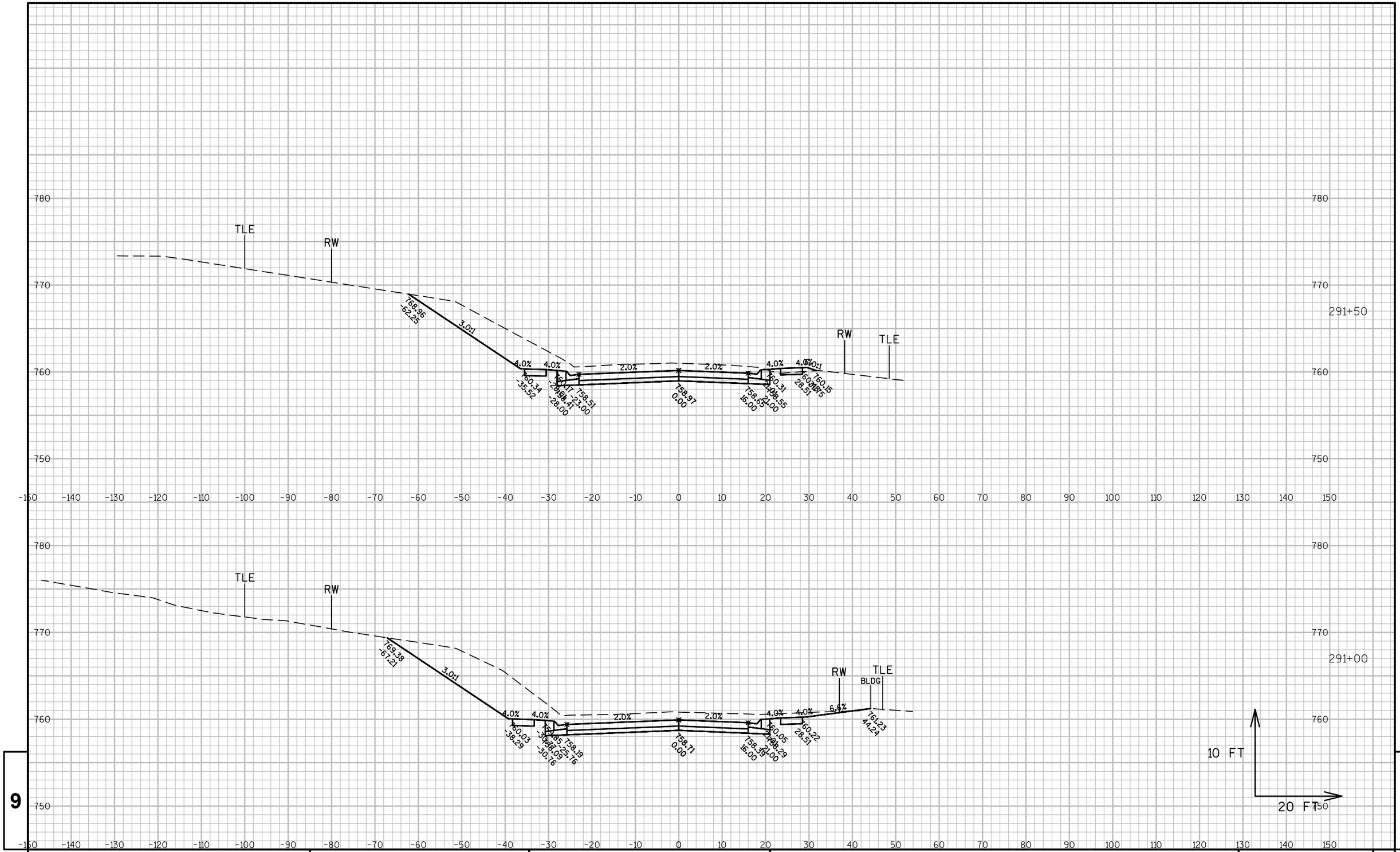
PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: USH 45	SHEET 689	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090204-XS-45-86TH-END.DWG PLOT DATE : 4/22/2016 1:22 PM PLOT BY : MAAS, JOSEPH A PLOT NAME :

WISDOT/CADDS SHEET 49



PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: USH 45	SHEET 690	E



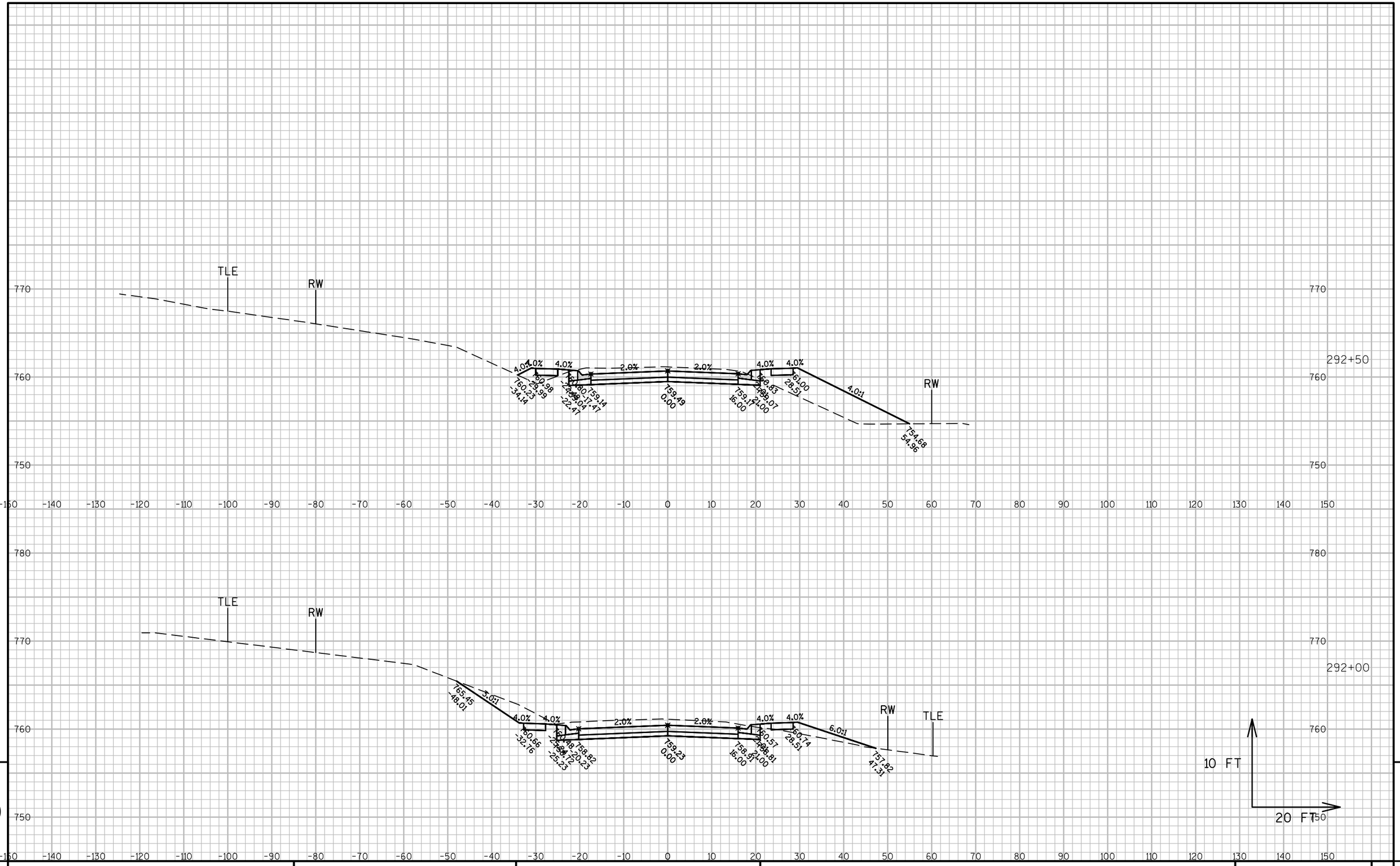
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PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: USH 45	SHEET 691	E

9

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090204-XS-45-86TH-END.DWG PLOT DATE : 4/22/2016 1:22 PM PLOT BY : MAAS, JOSEPH A PLOT NAME :

WISDOT/CADDS SHEET 49



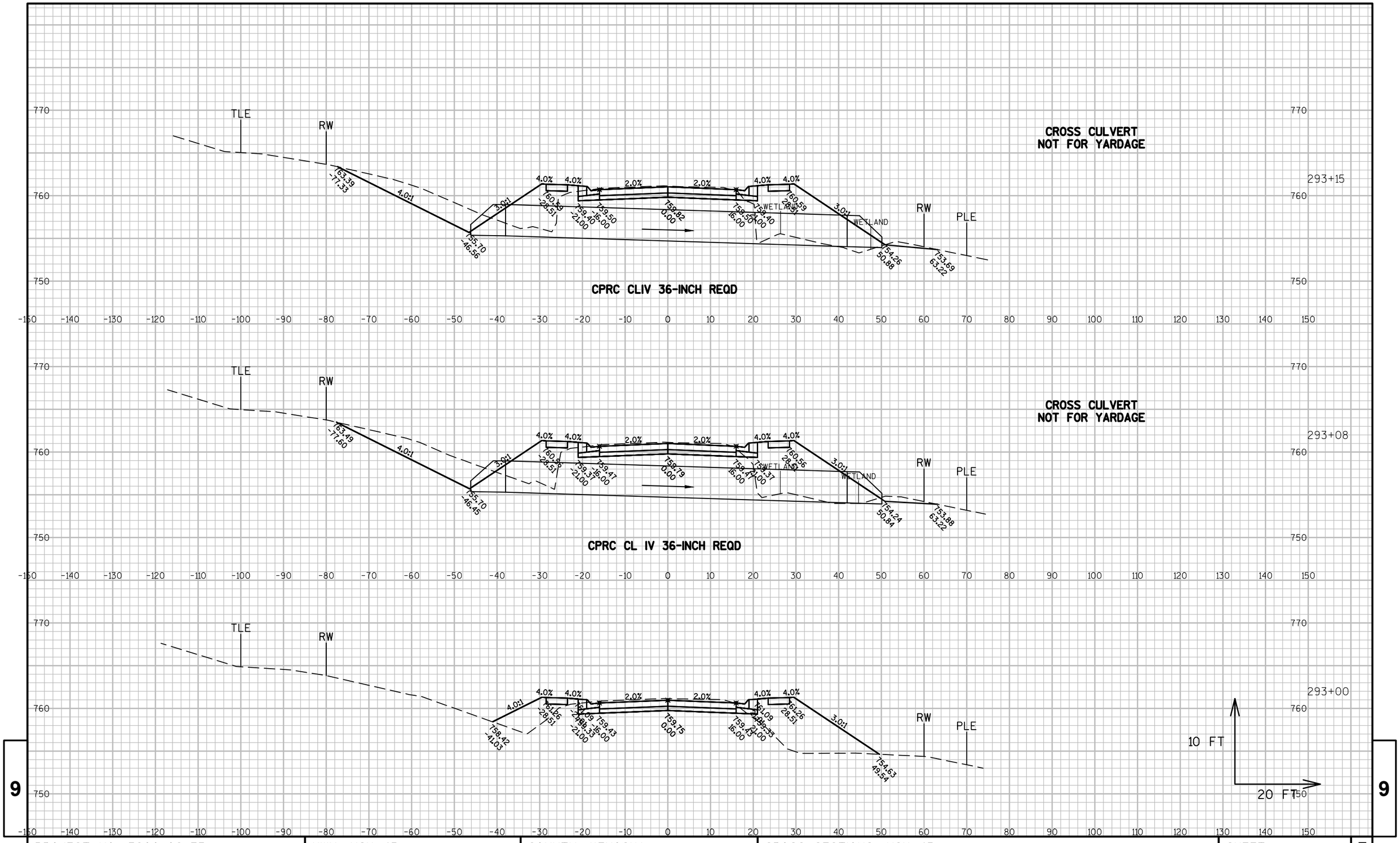
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PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: USH 45	SHEET 692	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090204-XS-45-86TH-END.DWG PLOT DATE : 4/22/2016 1:22 PM PLOT BY : MAAS, JOSEPH A PLOT NAME :

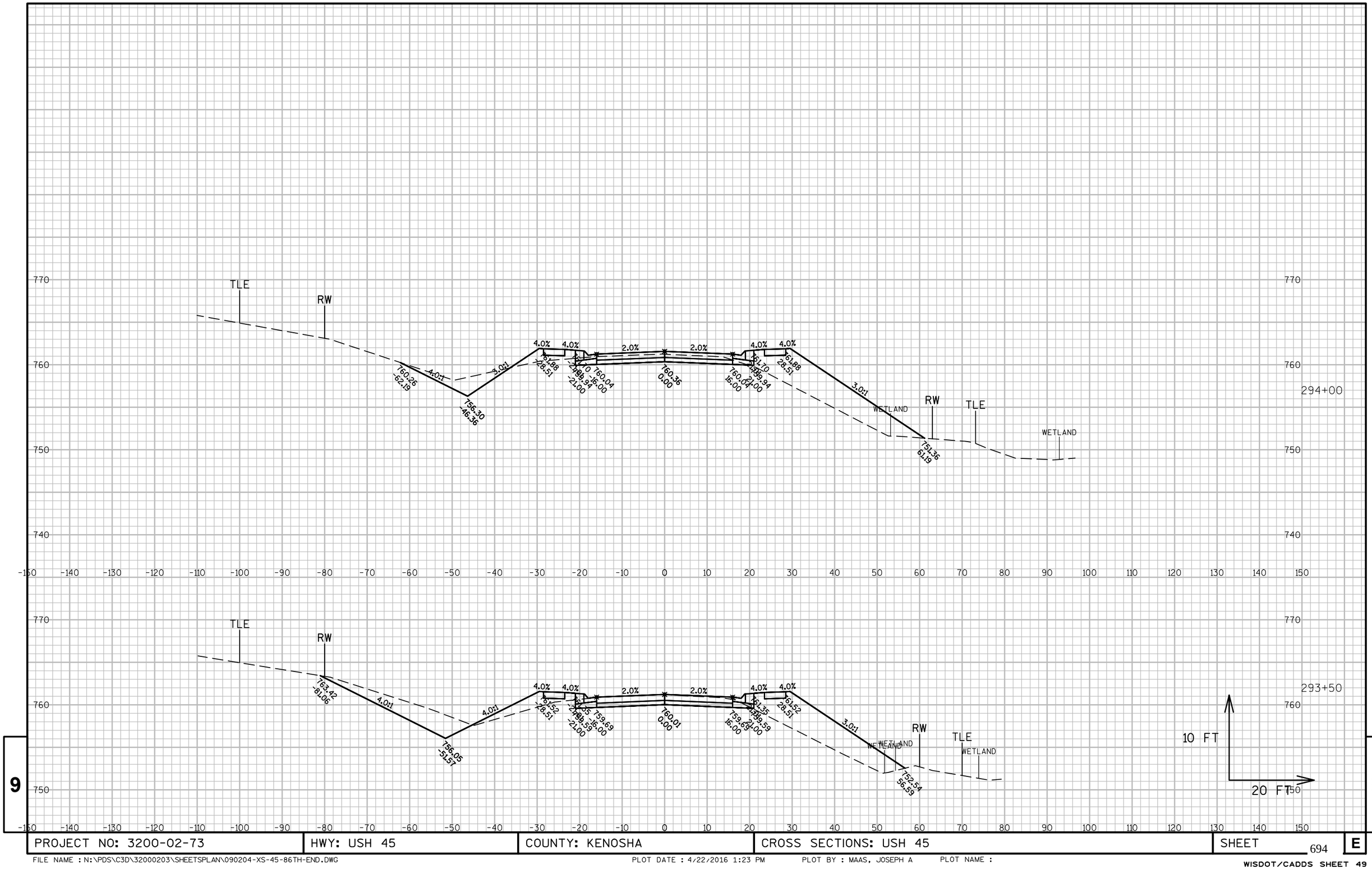
WISDOT/CADDS SHEET 49



PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: USH 45	SHEET 693	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090204-XS-45-86TH-END.DWG PLOT DATE : 4/22/2016 1:23 PM PLOT BY : MAAS, JOSEPH A PLOT NAME :

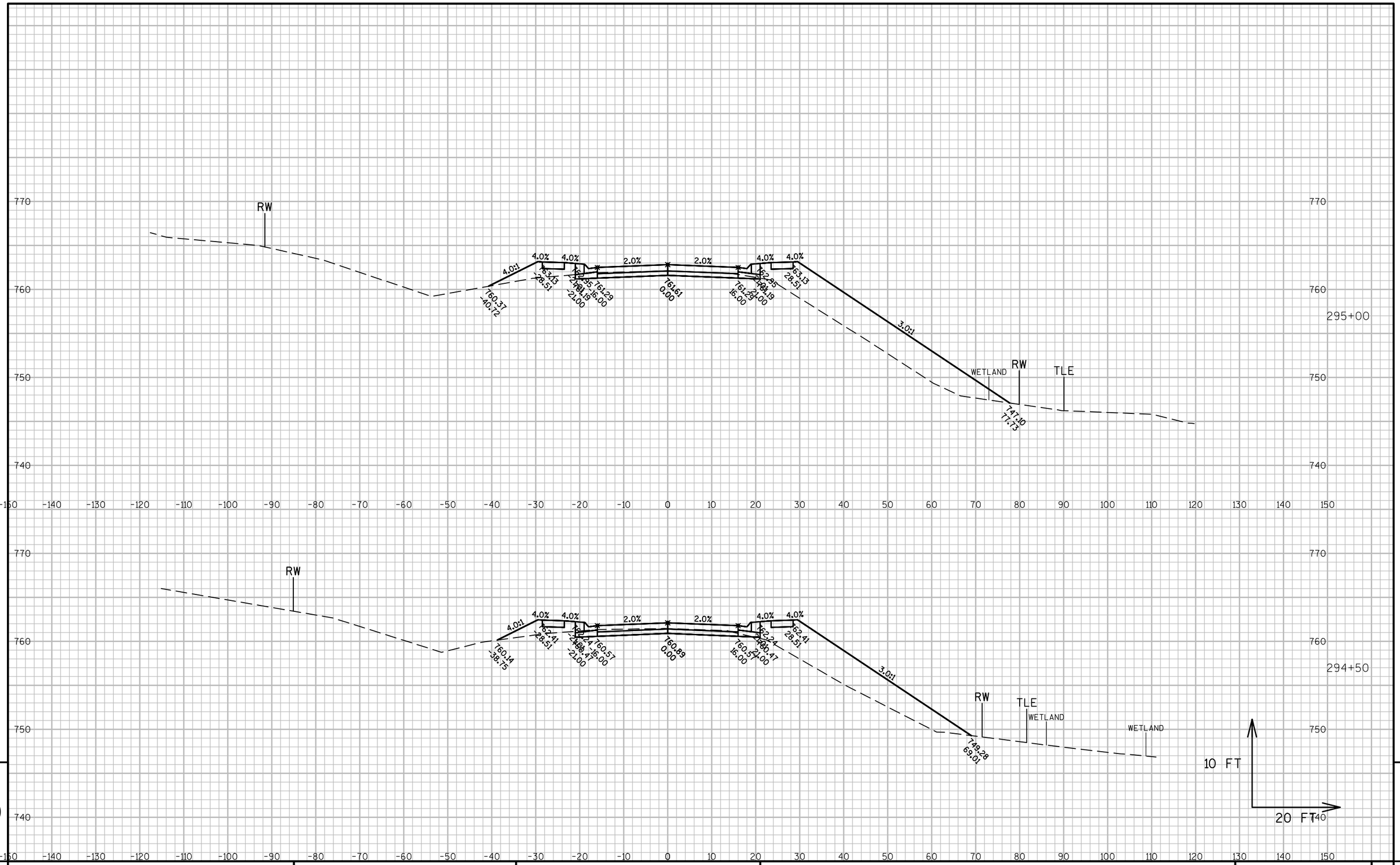
WISDOT/CADDS SHEET 49



PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: USH 45	SHEET 694	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090204-XS-45-86TH-END.DWG PLOT DATE : 4/22/2016 1:23 PM PLOT BY : MAAS, JOSEPH A PLOT NAME :

WISDOT/CADDS SHEET 49



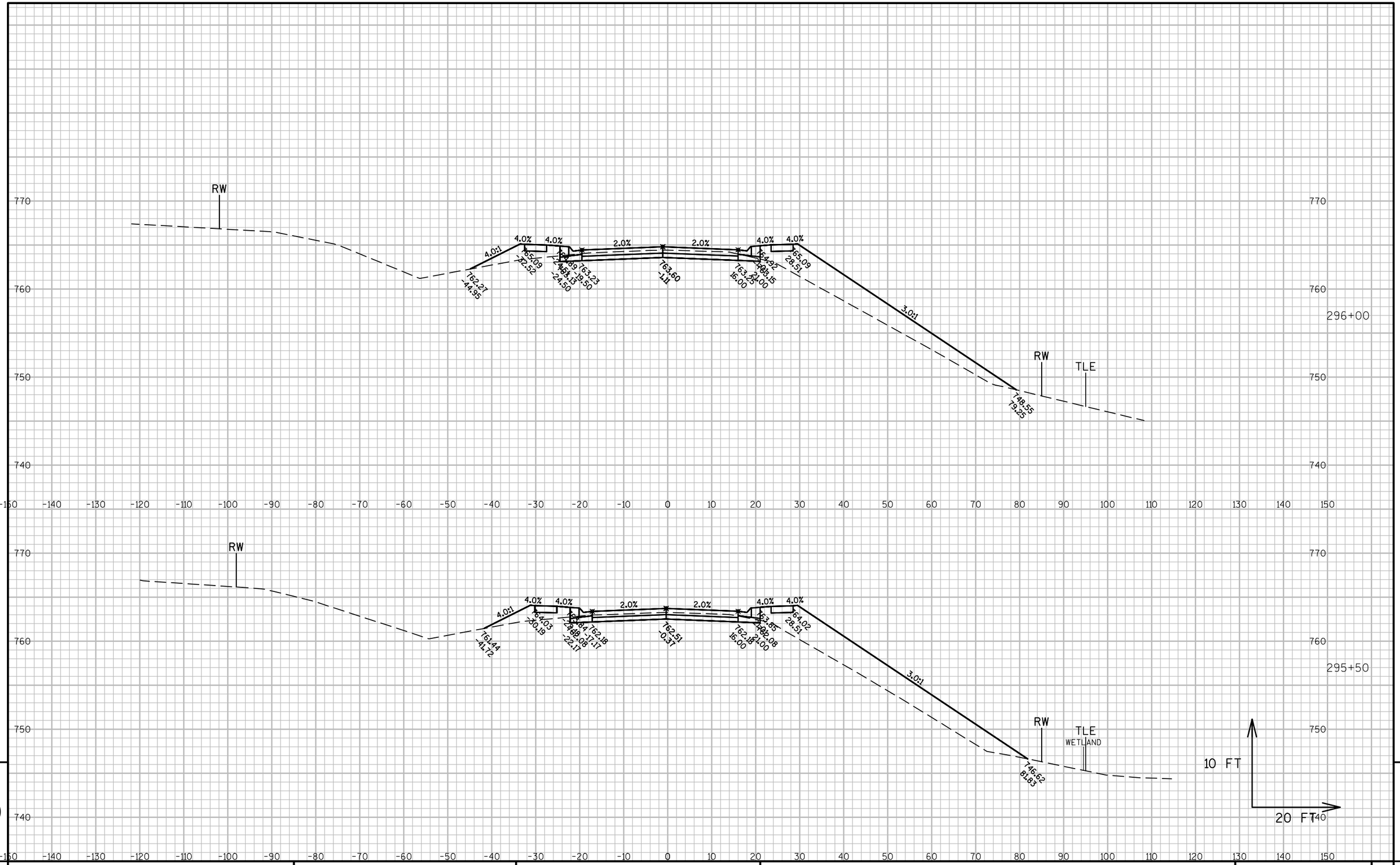
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PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: USH 45	SHEET 695	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090204-XS-45-86TH-END.DWG PLOT DATE : 4/22/2016 1:23 PM PLOT BY : MAAS, JOSEPH A PLOT NAME :

WISDOT/CADDS SHEET 49



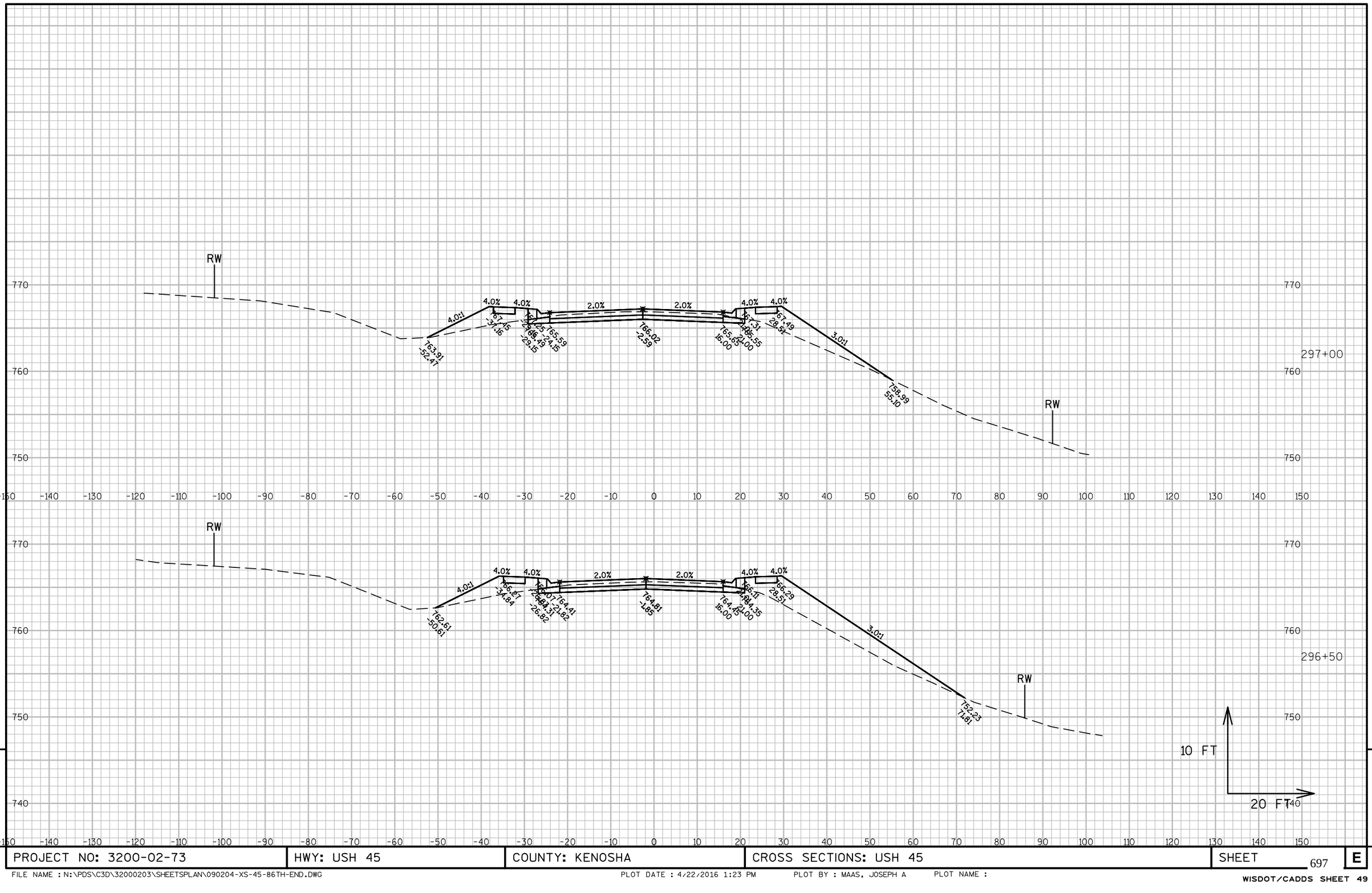
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PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: USH 45	SHEET 696	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090204-XS-45-86TH-END.DWG PLOT DATE : 4/22/2016 1:23 PM PLOT BY : MAAS, JOSEPH A PLOT NAME :

WISDOT/CADDS SHEET 49



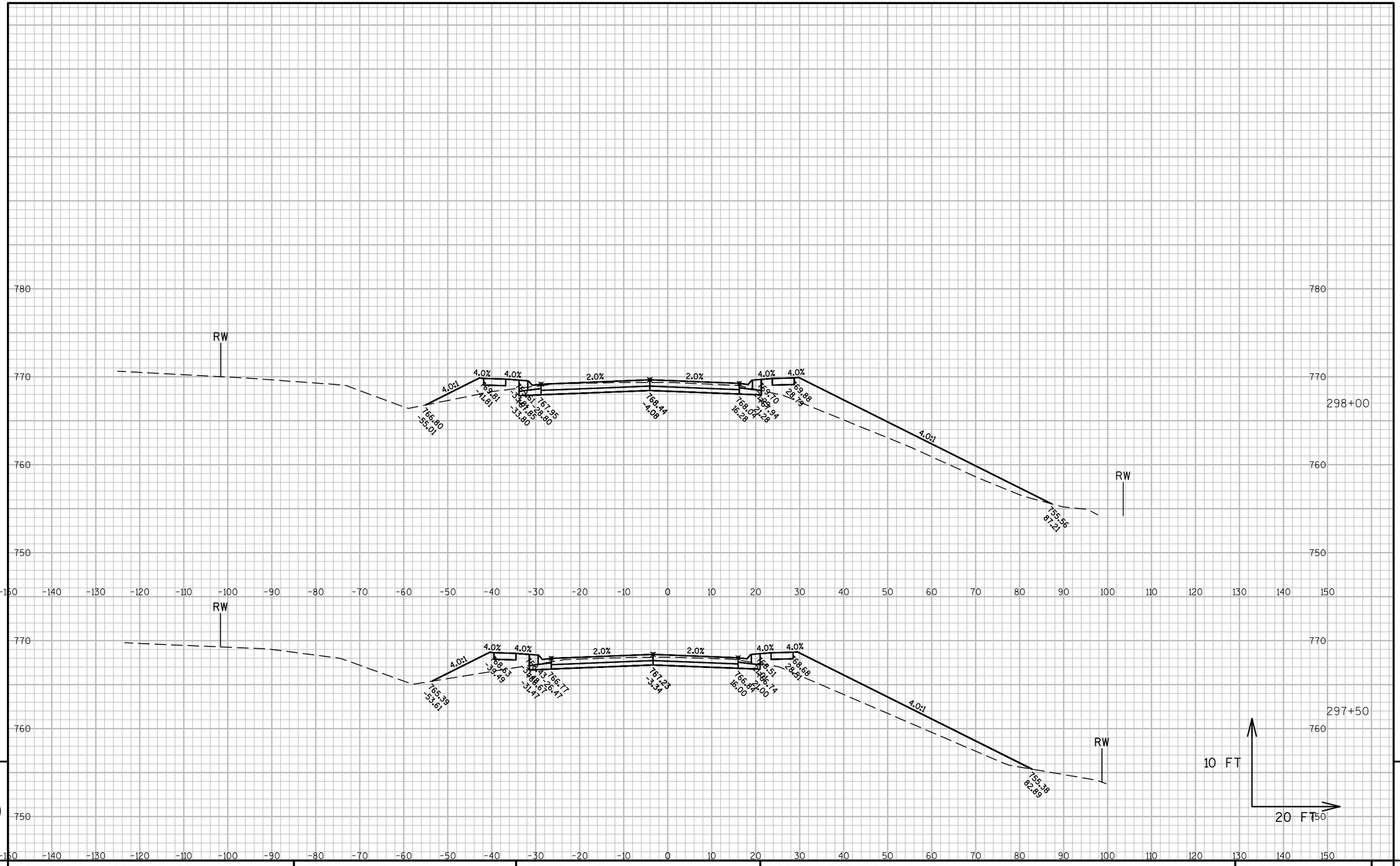
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PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: USH 45	SHEET 697	E

9

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090204-XS-45-86TH-END.DWG PLOT DATE : 4/22/2016 1:23 PM PLOT BY : MAAS, JOSEPH A PLOT NAME :

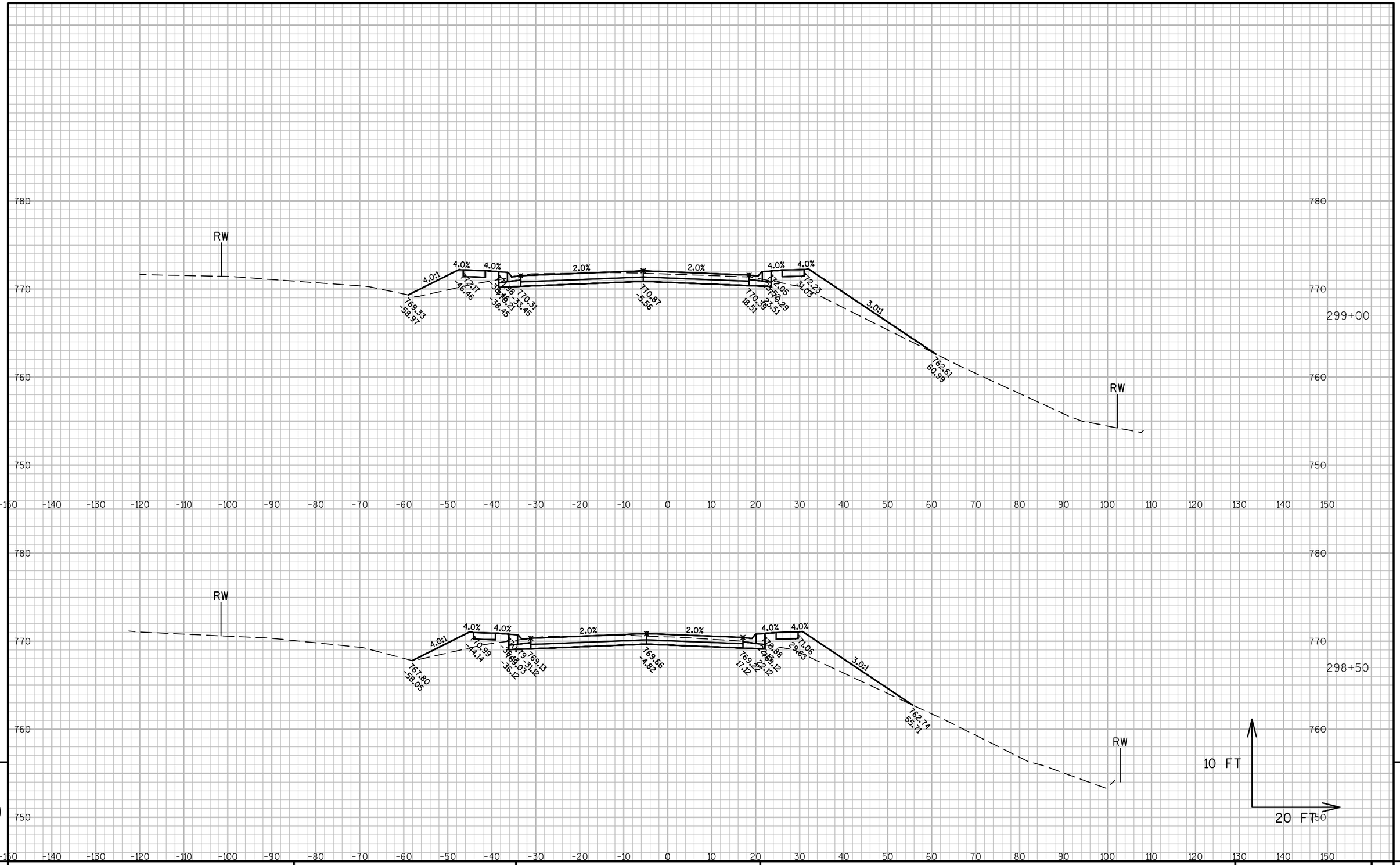
WISDOT/CADDS SHEET 49



PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: USH 45	SHEET 698	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090204-XS-45-86TH-END.DWG PLOT DATE : 4/22/2016 1:23 PM PLOT BY : MAAS, JOSEPH A PLOT NAME :

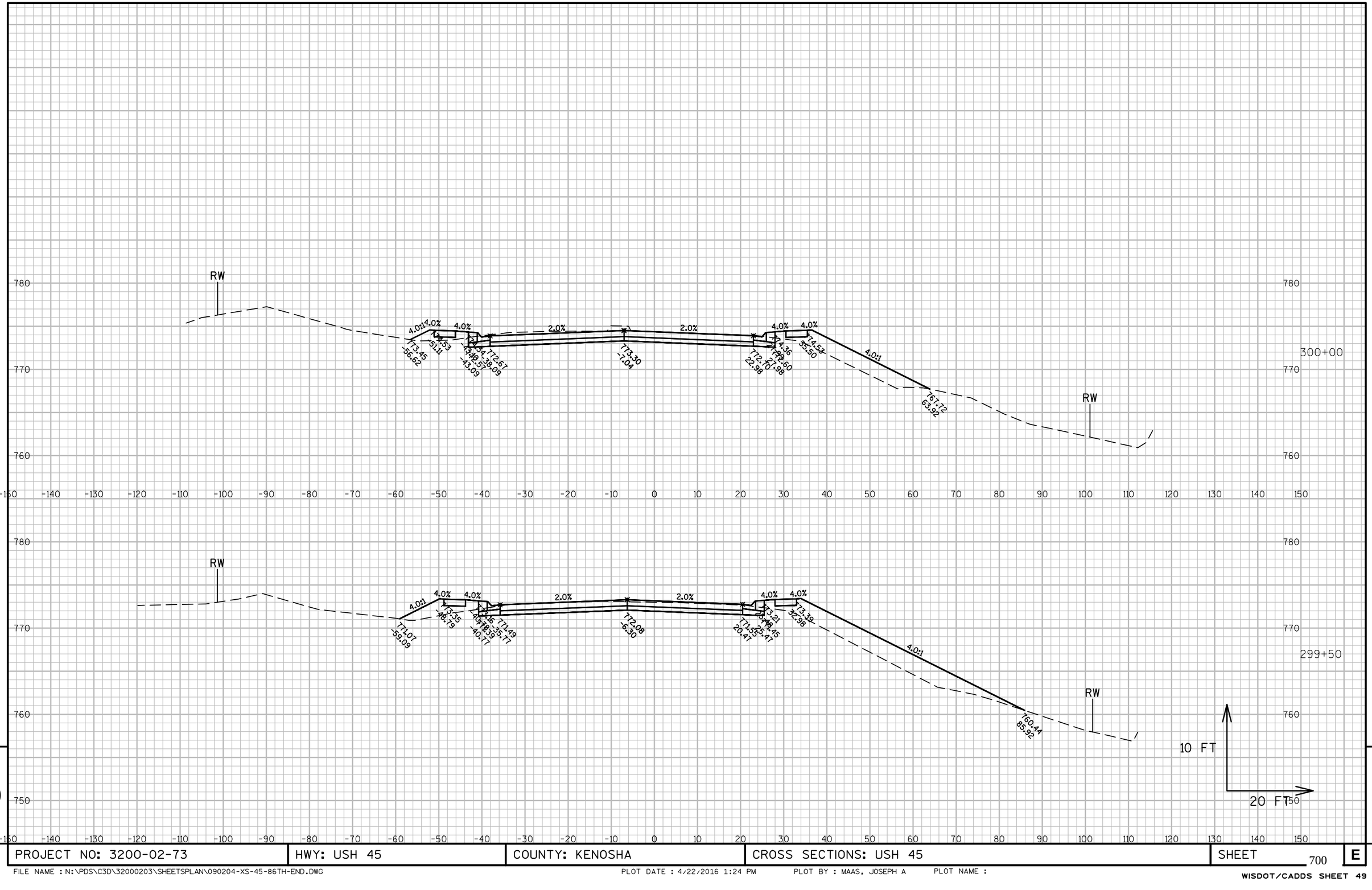
WISDOT/CADDS SHEET 49



PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: USH 45	SHEET 699	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090204-XS-45-86TH-END.DWG PLOT DATE : 4/22/2016 1:24 PM PLOT BY : MAAS, JOSEPH A PLOT NAME :

WISDOT/CADDS SHEET 49

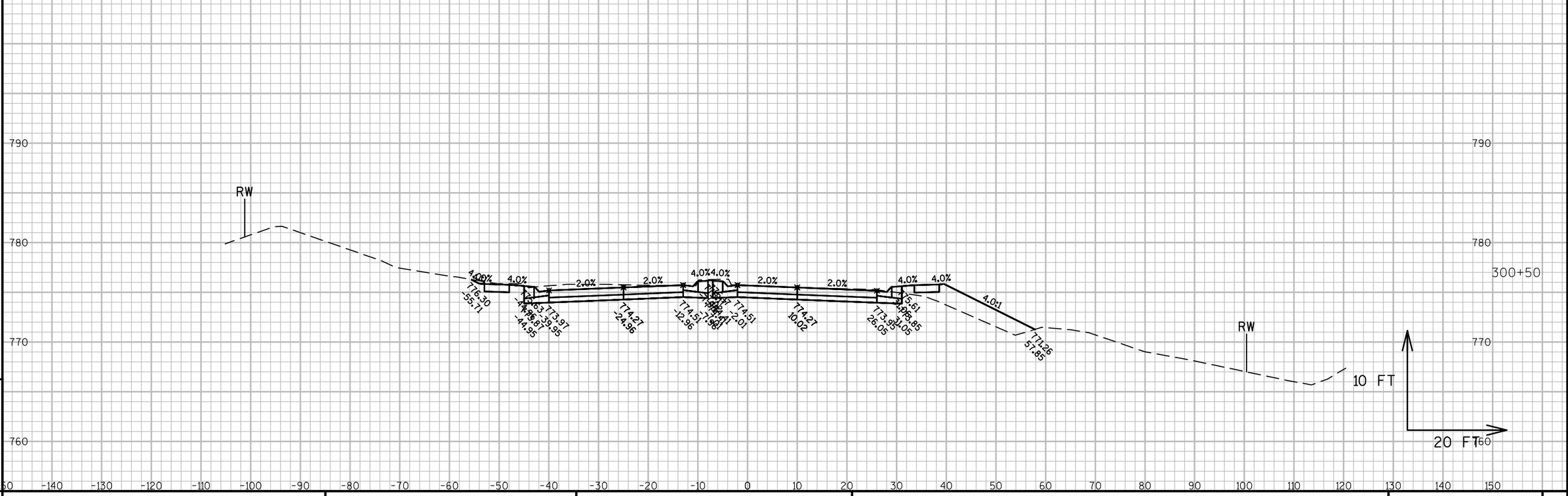


PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: USH 45	SHEET 700	E

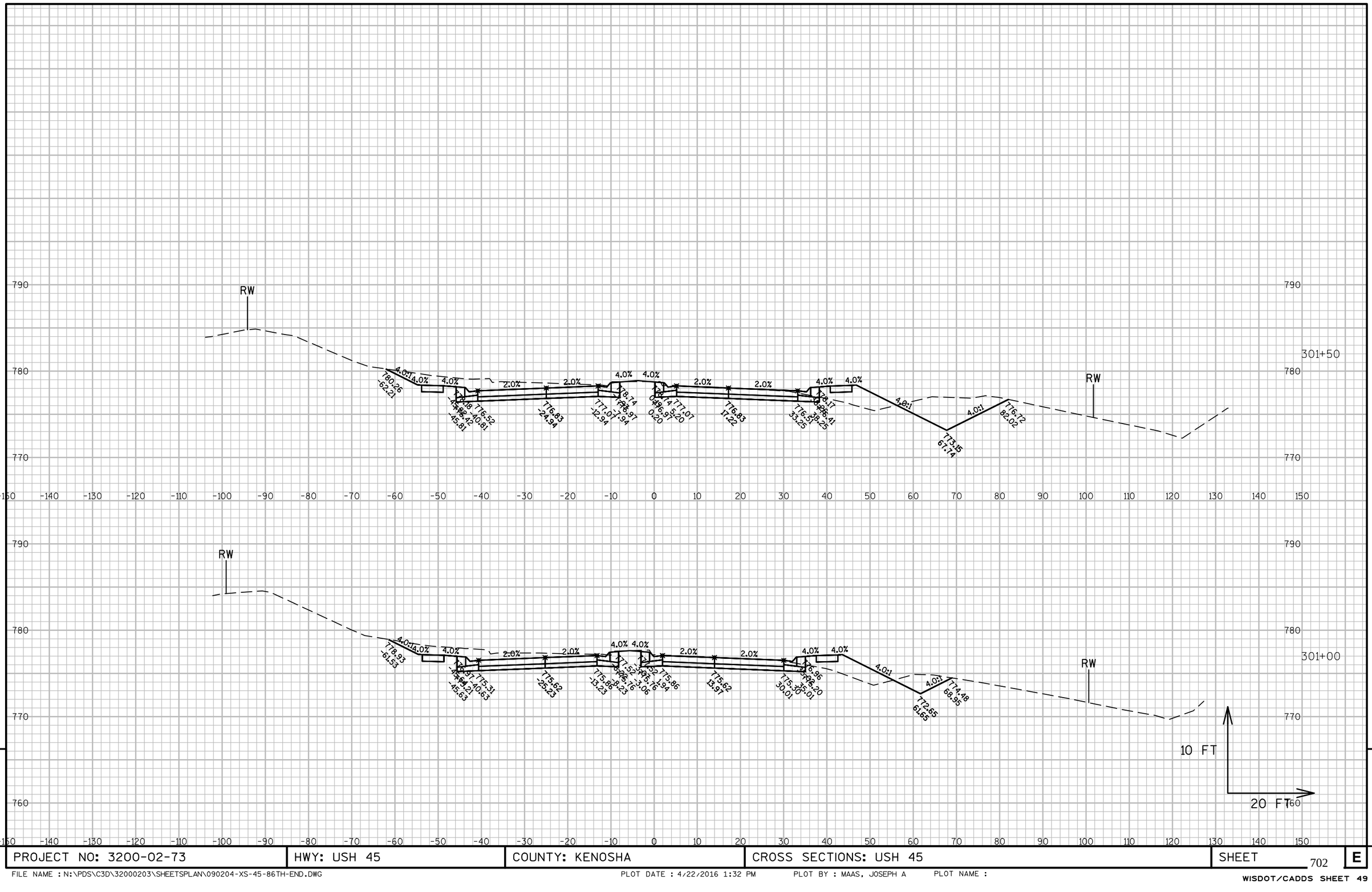
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WISDOT/CADDS SHEET 49

STATION EQUATION
STA 300+87.24 BK =
STA 300+82.01 AH



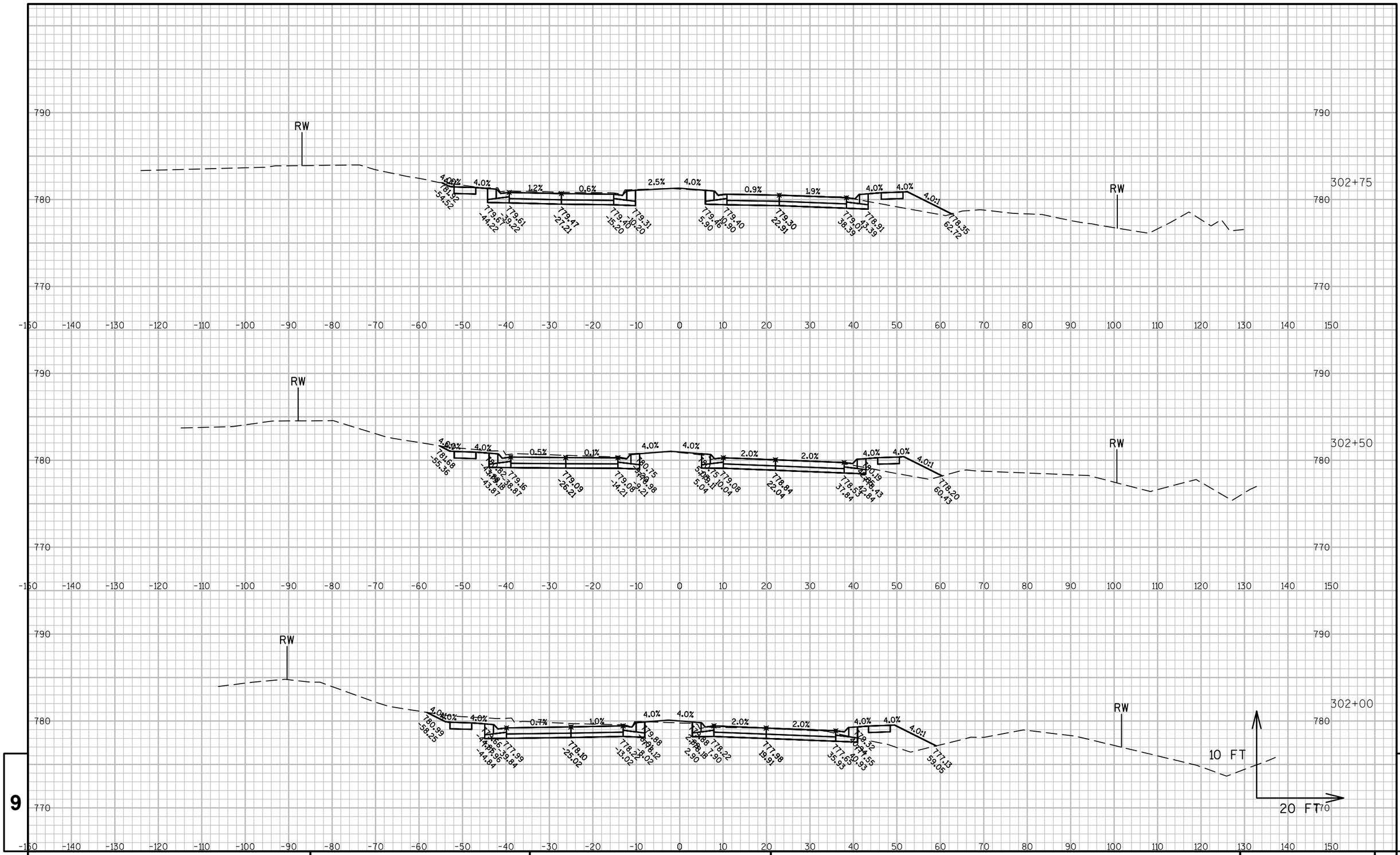
PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: USH 45	SHEET 701	E



PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: USH 45	SHEET 702	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090204-XS-45-86TH-END.DWG PLOT DATE : 4/22/2016 1:32 PM PLOT BY : MAAS, JOSEPH A PLOT NAME :

WISDOT/CADDS SHEET 49



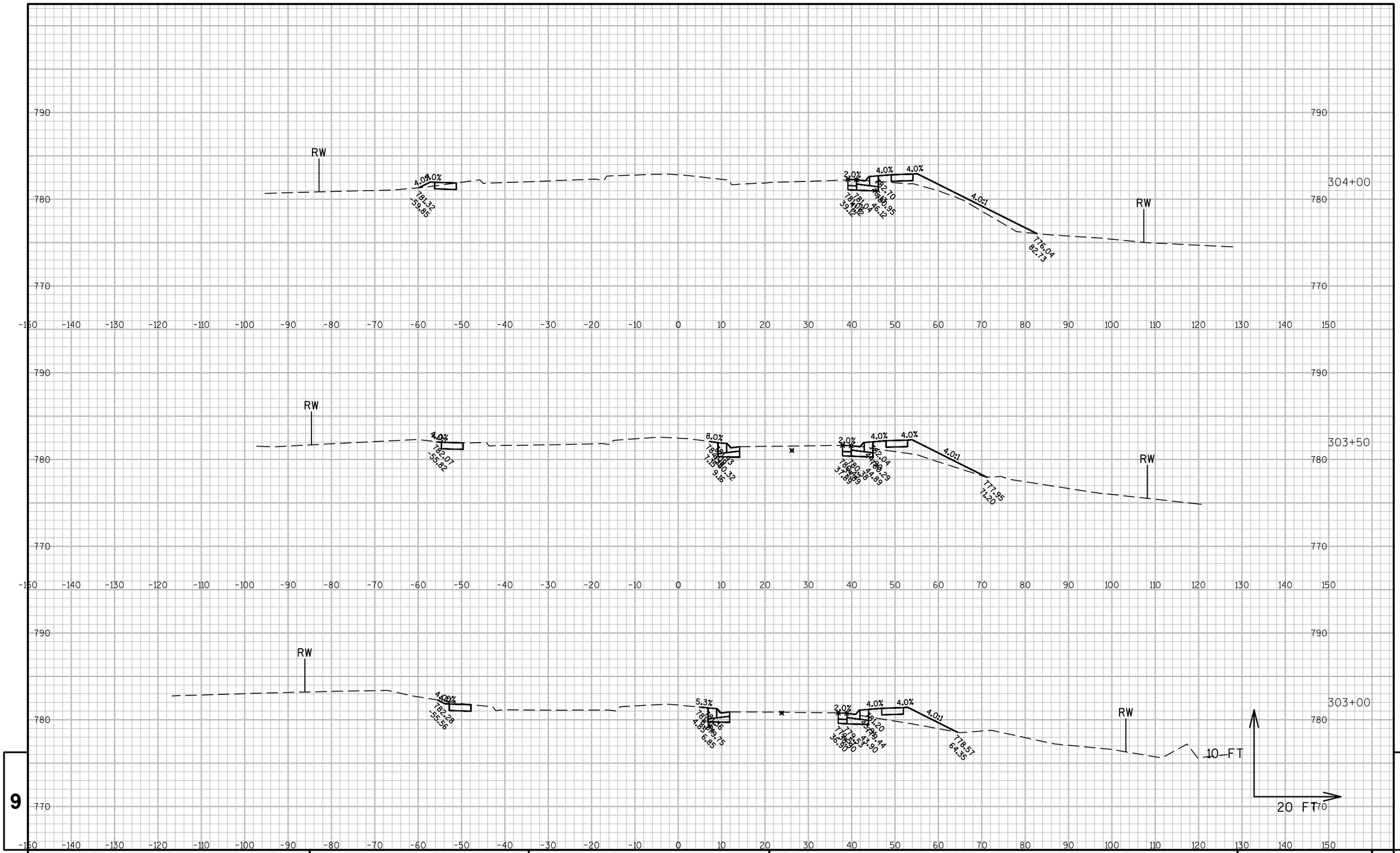
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PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: USH 45	SHEET 703	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090204-XS-45-86TH-END.DWG PLOT DATE : 4/22/2016 1:32 PM PLOT BY : MAAS, JOSEPH A PLOT NAME :

WISDOT/CADDS SHEET 49



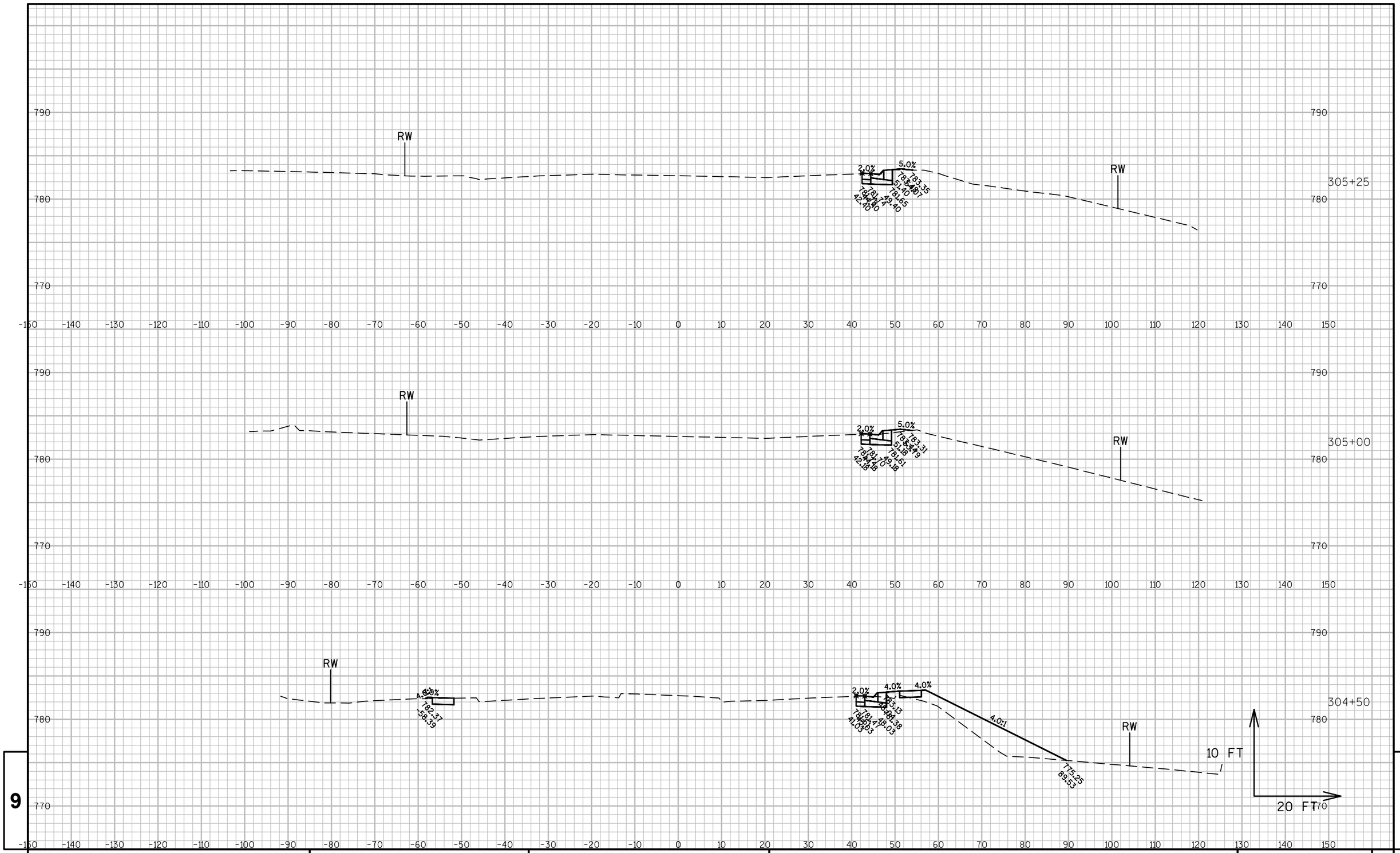
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PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: USH 45	SHEET 704	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090204-XS-45-86TH-END.DWG PLOT DATE : 4/22/2016 1:33 PM PLOT BY : MAAS, JOSEPH A PLOT NAME :

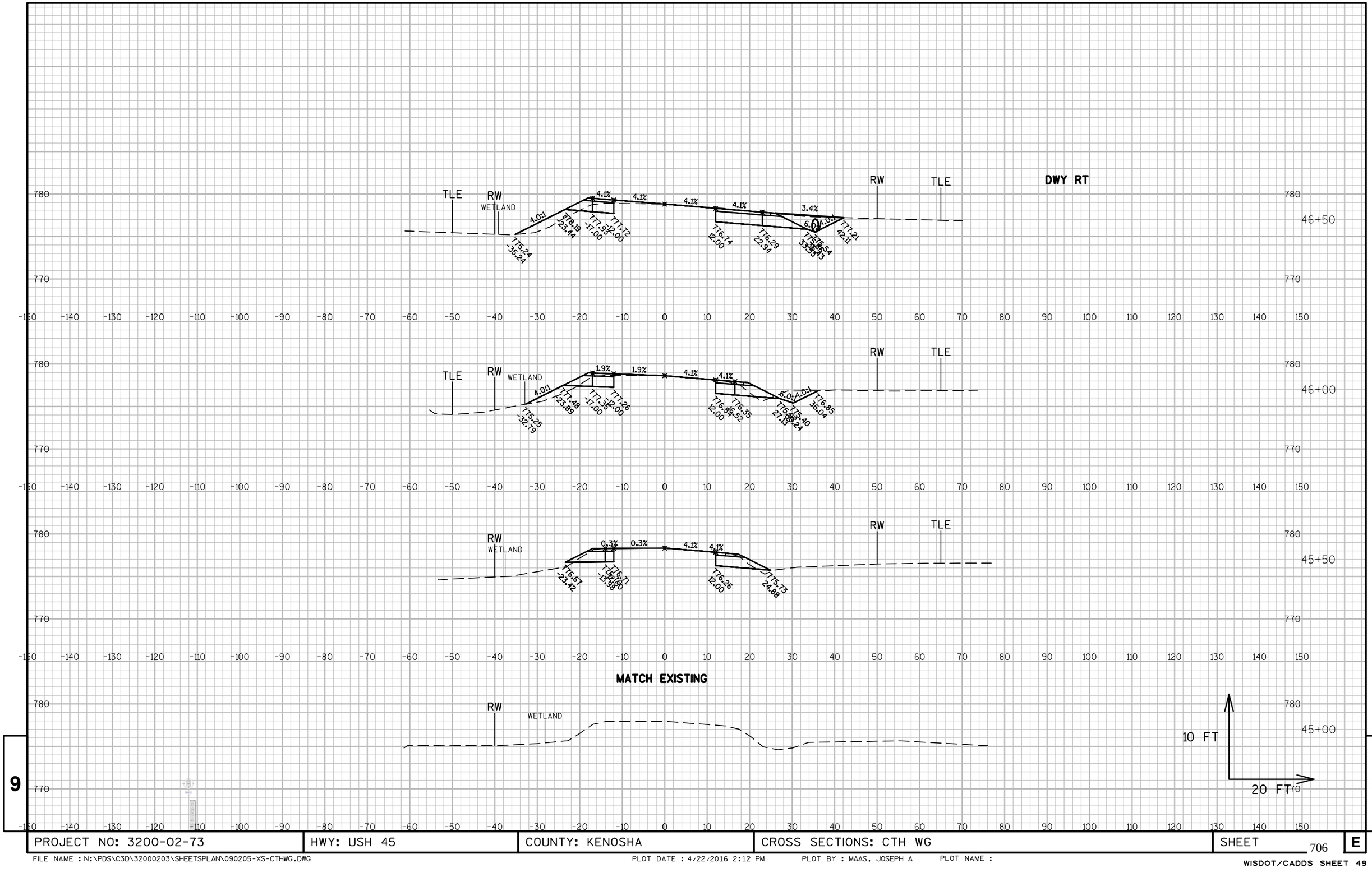
WISDOT/CADDS SHEET 49



PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: USH 45	SHEET 705	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090204-XS-45-86TH-END.DWG PLOT DATE : 4/22/2016 1:33 PM PLOT BY : MAAS, JOSEPH A PLOT NAME :

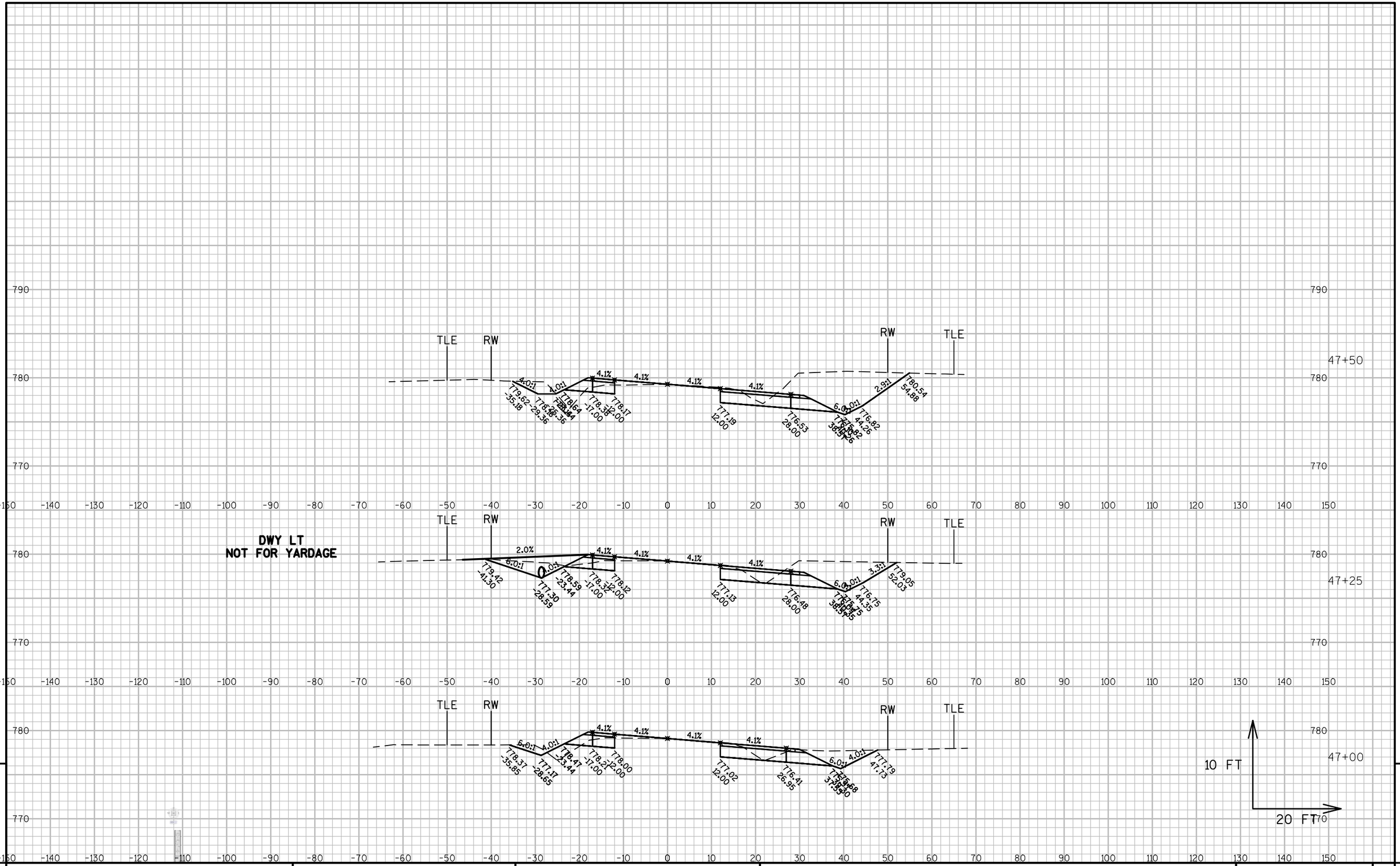
WISDOT/CADDS SHEET 49



PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: CTH WG	SHEET 706	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090205-XS-CTHWG.DWG PLOT DATE : 4/22/2016 2:12 PM PLOT BY : MAAS, JOSEPH A PLOT NAME :

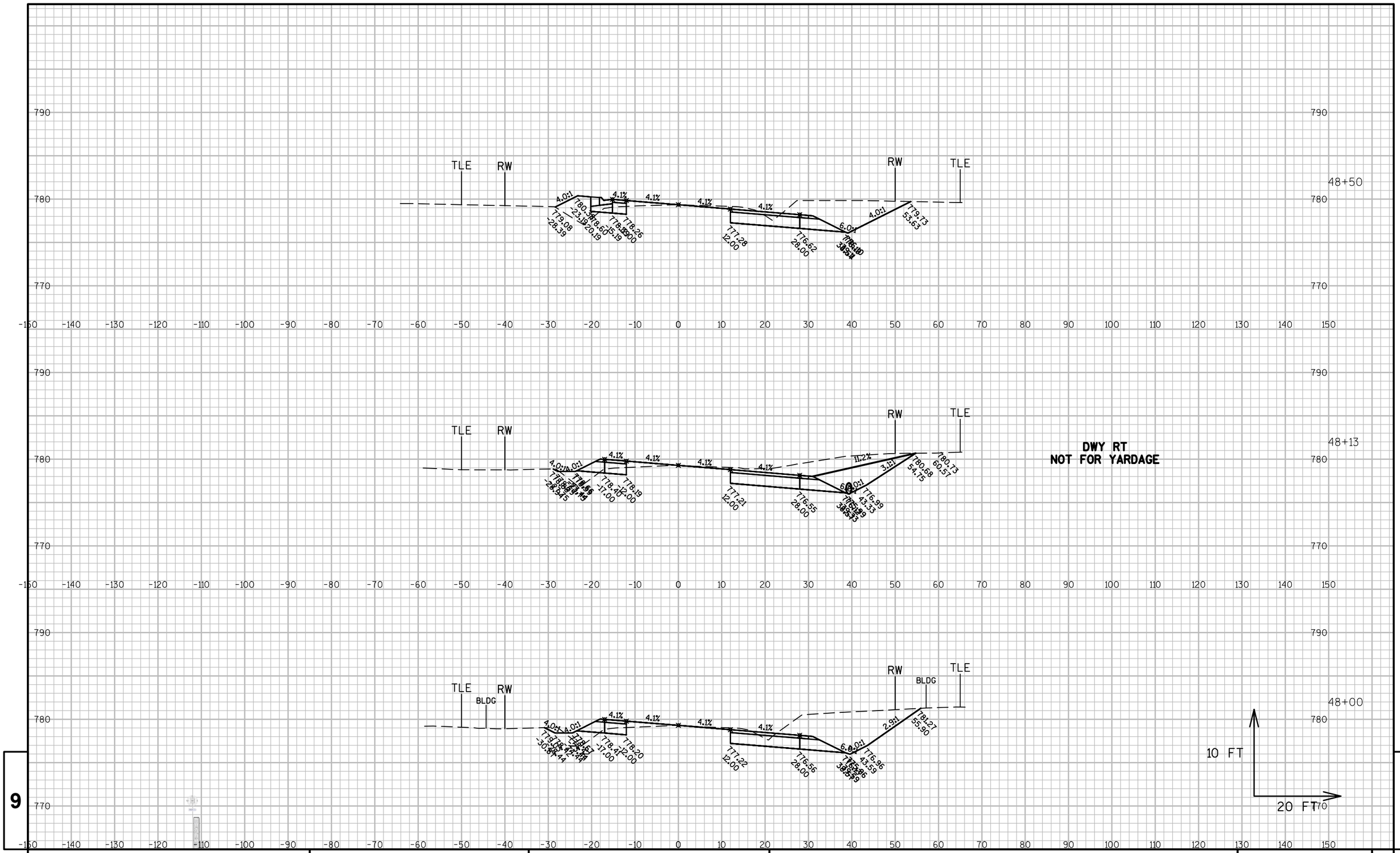
WISDOT/CADDS SHEET 49



PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: CTH WG	SHEET 707	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090205-XS-CTHWG.DWG PLOT DATE : 4/22/2016 2:12 PM PLOT BY : MAAS, JOSEPH A PLOT NAME :

WISDOT/CADDS SHEET 49



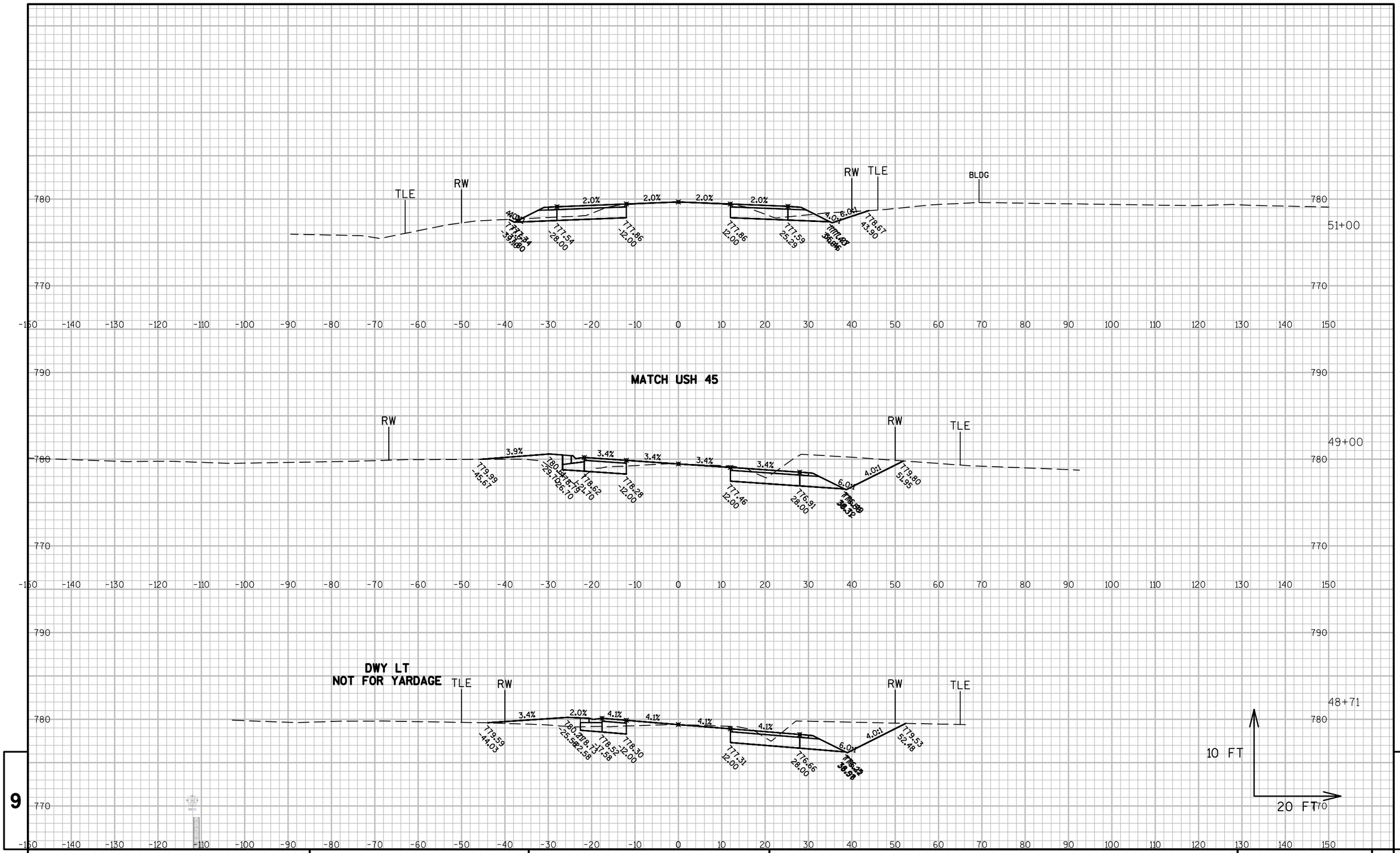
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PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: CTH WG	SHEET 708	E

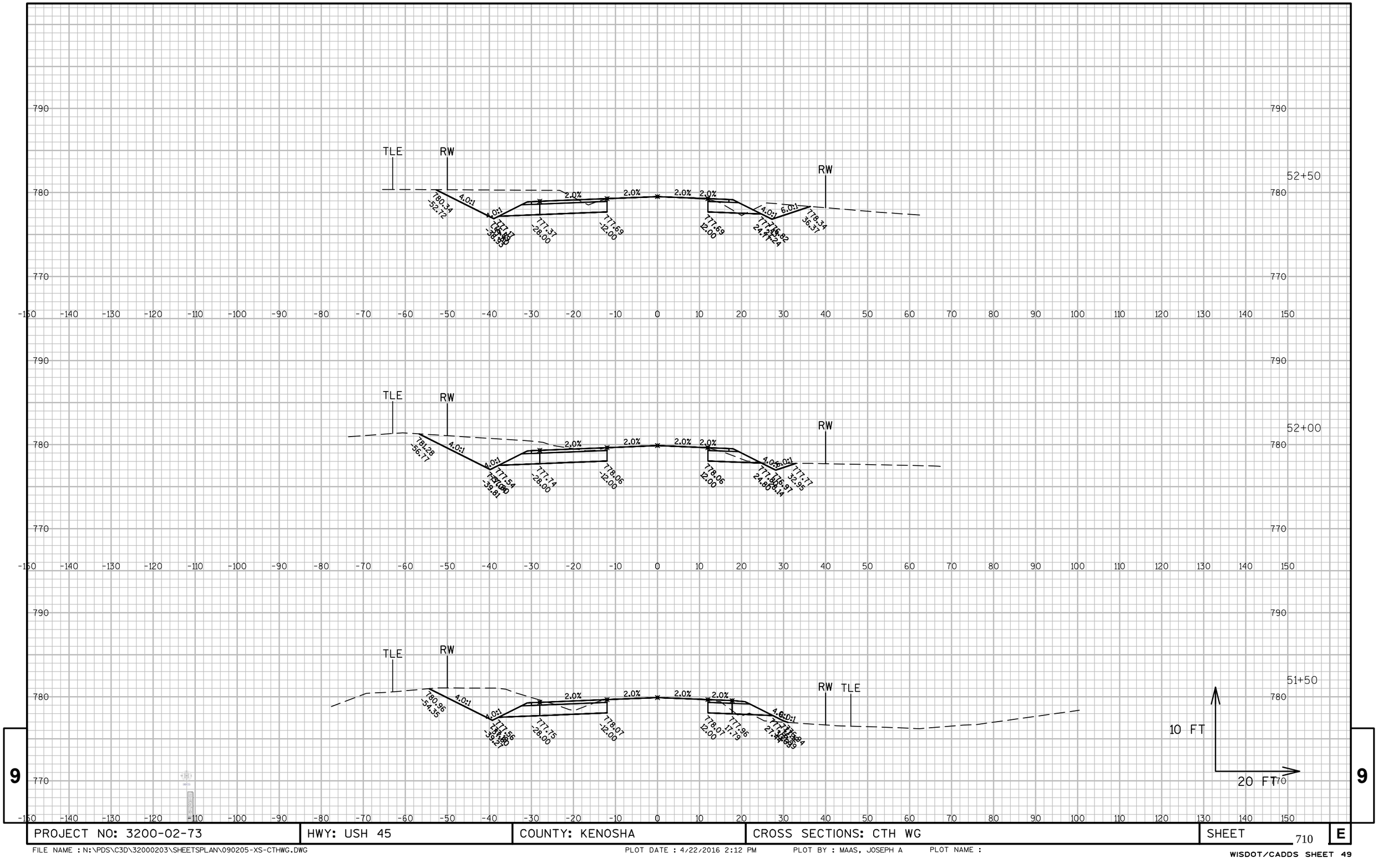
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WISDOT/CADDS SHEET 49



PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: CTH WG	SHEET 709	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090205-XS-CTHWG.DWG PLOT DATE : 4/22/2016 2:12 PM PLOT BY : MAAS, JOSEPH A PLOT NAME :



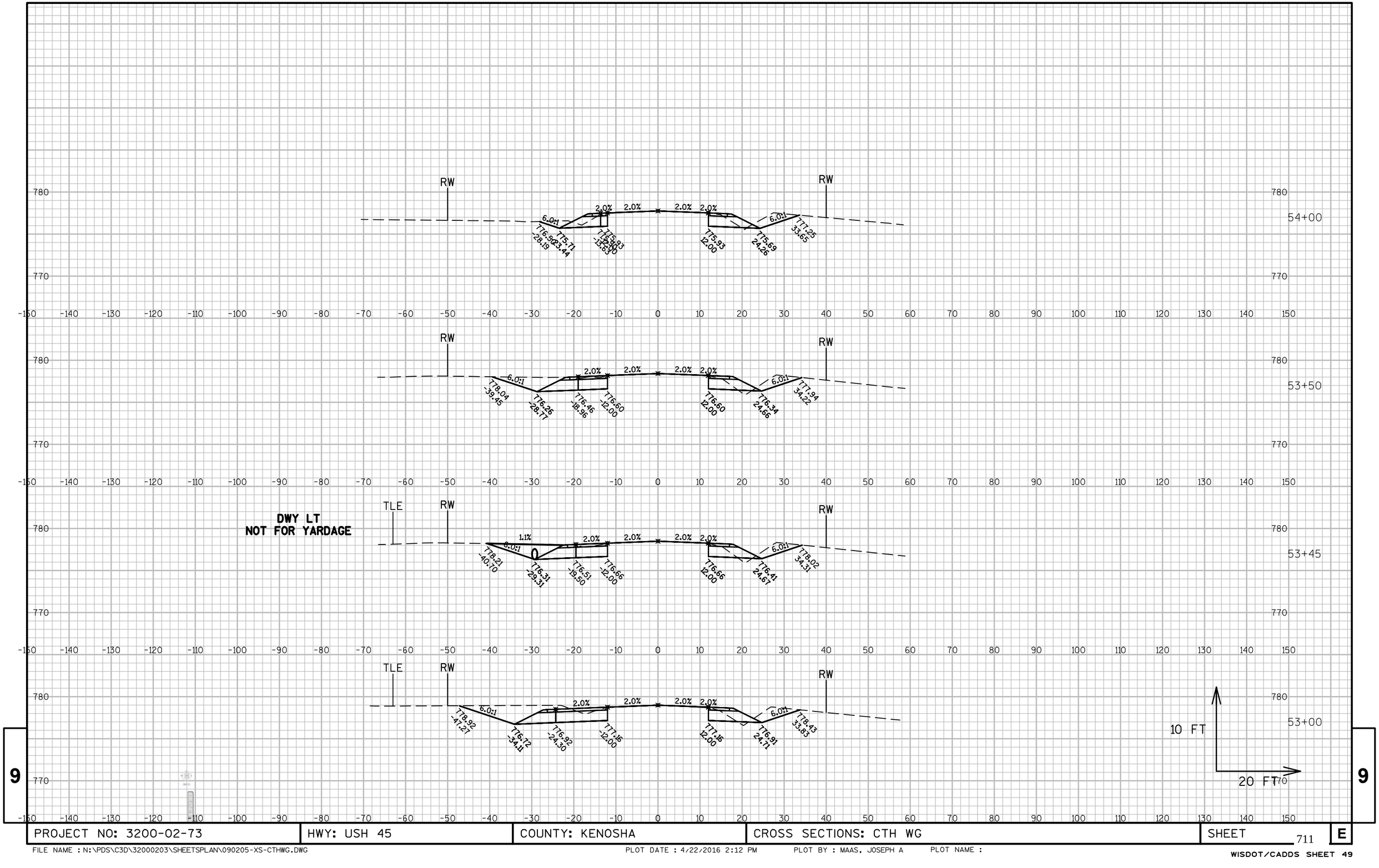
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PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: CTH WG	SHEET 710	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090205-XS-CTHWG.DWG PLOT DATE : 4/22/2016 2:12 PM PLOT BY : MAAS, JOSEPH A PLOT NAME :

WISDOT/CADDS SHEET 49



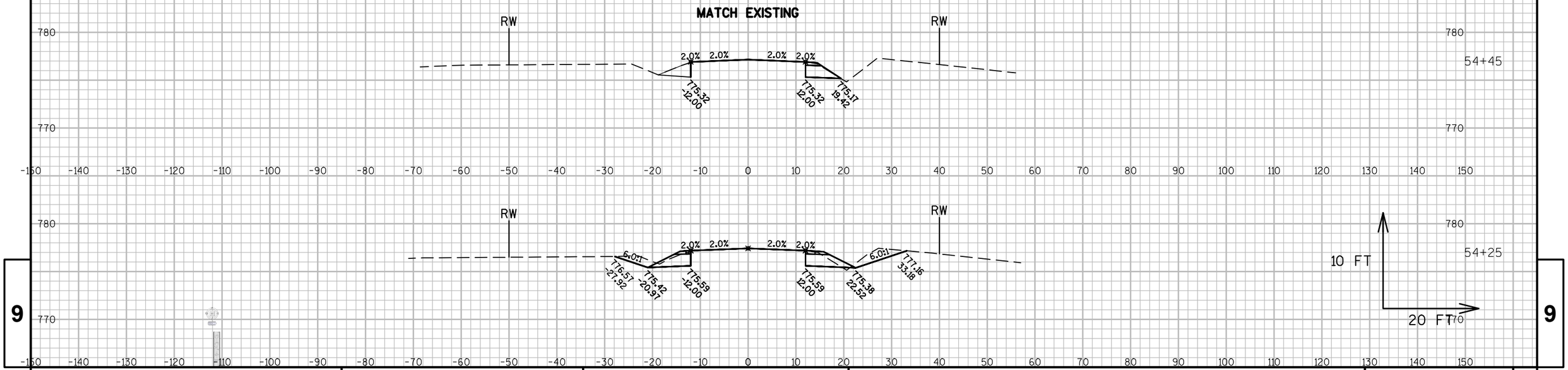
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PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: CTH WG	SHEET 711	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090205-XS-CTHWG.DWG PLOT DATE : 4/22/2016 2:12 PM PLOT BY : MAAS, JOSEPH A PLOT NAME :

WISDOT/CADDS SHEET 49



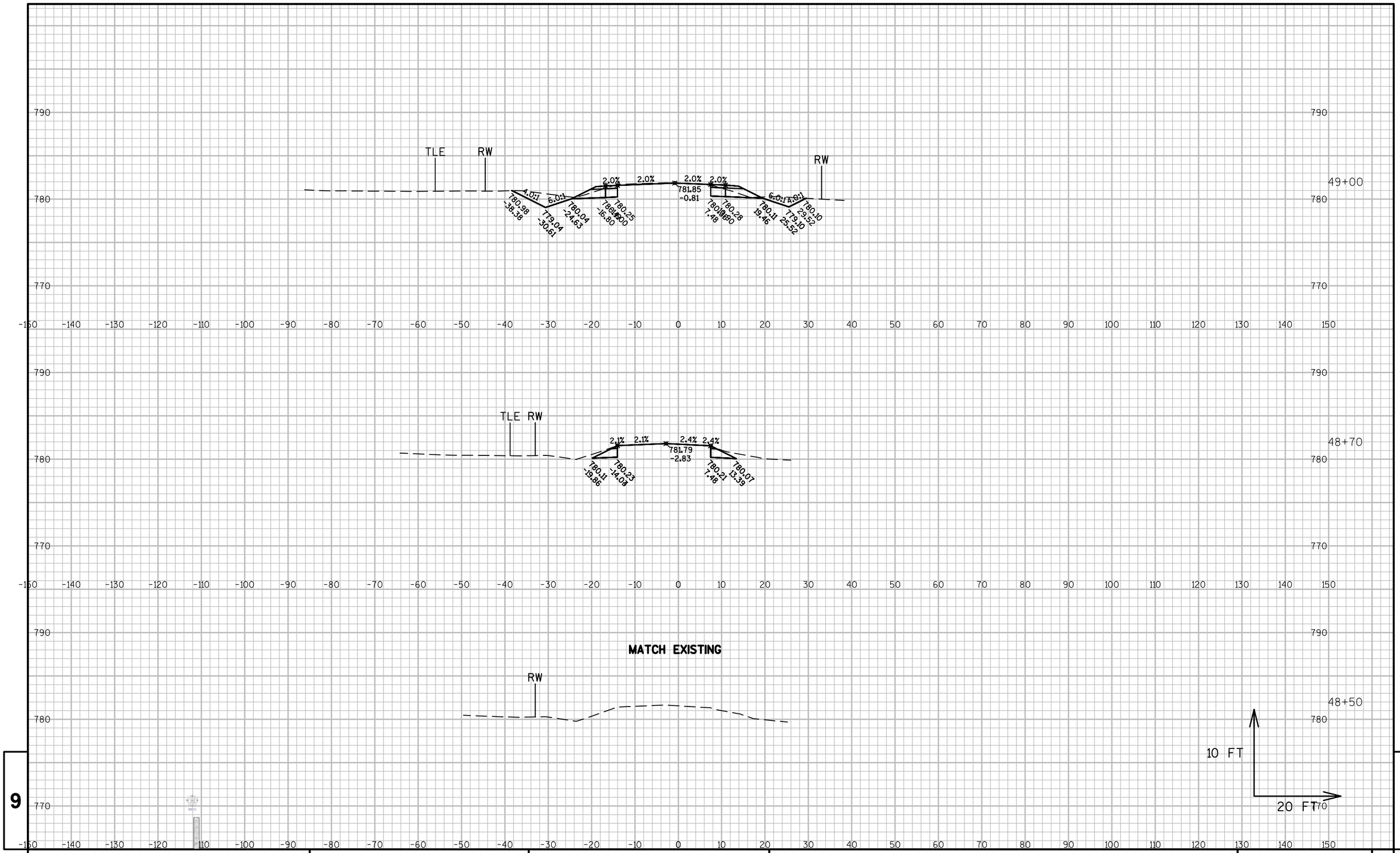
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PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: CTH WG	SHEET 712	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090205-XS-CTHWG.DWG PLOT DATE : 4/22/2016 2:12 PM PLOT BY : MAAS, JOSEPH A PLOT NAME :

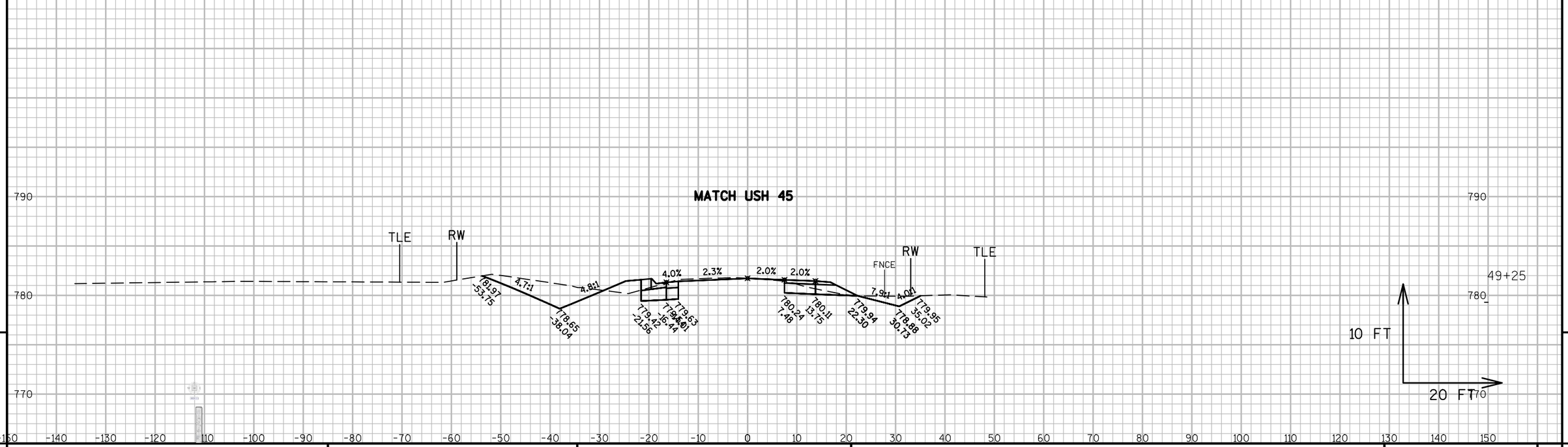
WISDOT/CADDS SHEET 49



PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: 121ST STREET	SHEET 713	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090206-XS-121STST.DWG PLOT DATE : 4/22/2016 2:21 PM PLOT BY : MAAS, JOSEPH A PLOT NAME :

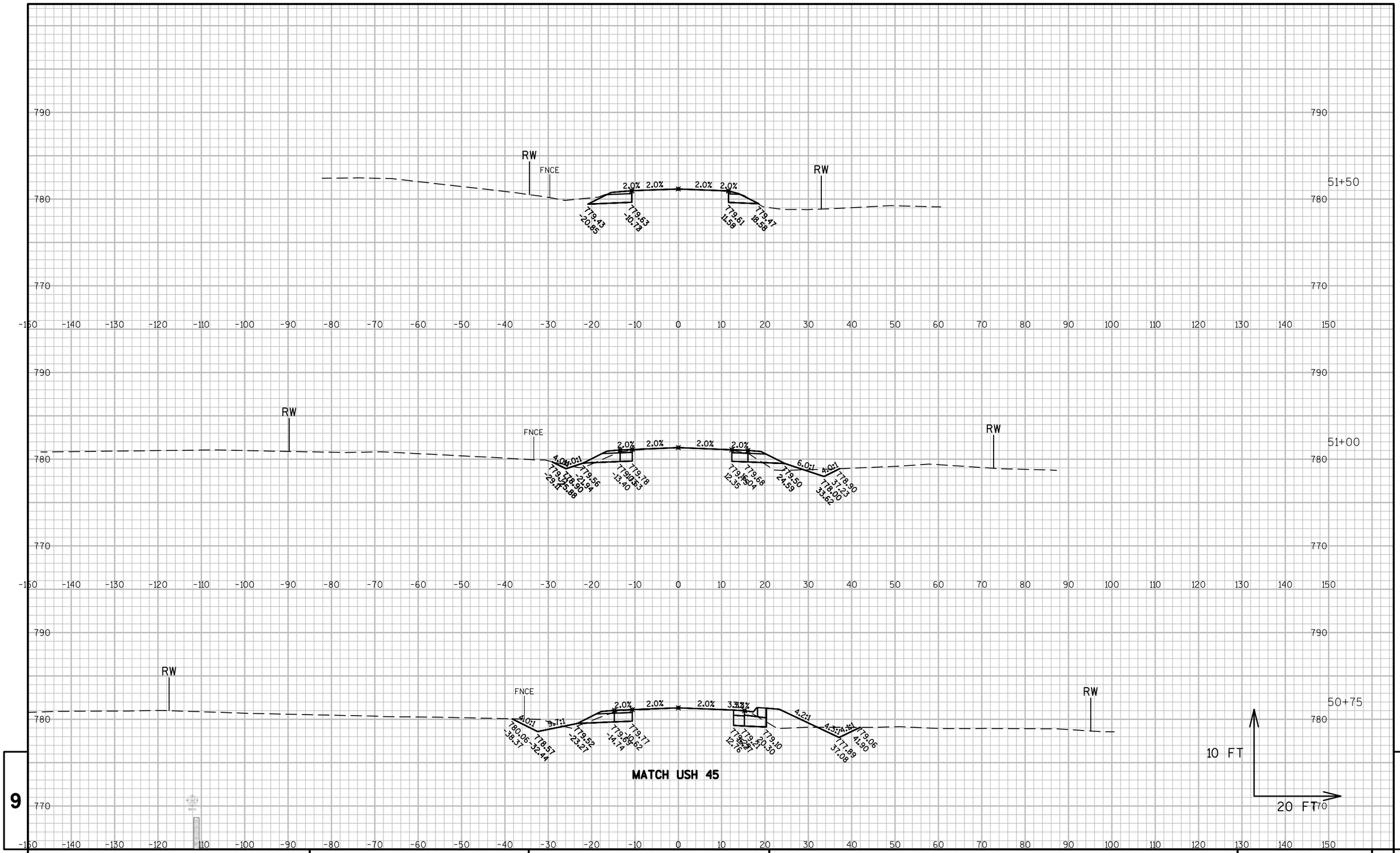
WISDOT/CADDS SHEET 49



PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: 121ST STREET	SHEET 714	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090206-XS-121STST.DWG PLOT DATE : 4/22/2016 2:21 PM PLOT BY : MAAS, JOSEPH A PLOT NAME :

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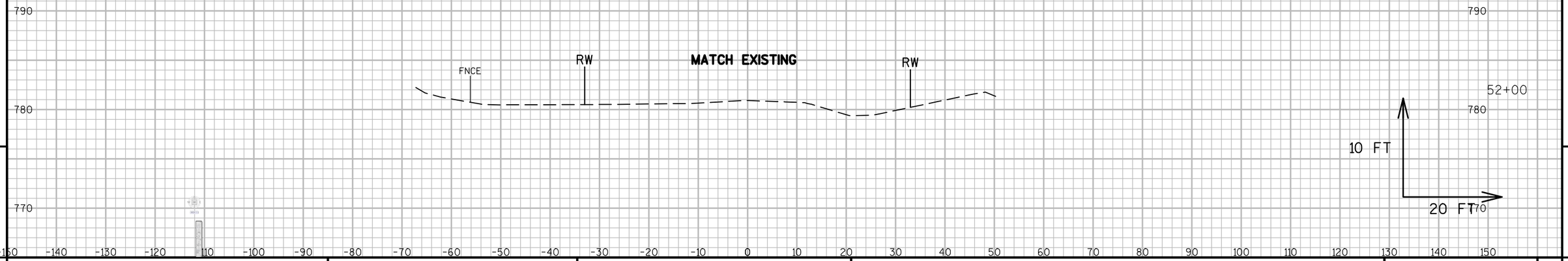
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PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: CTH CJ	SHEET 715	E

9

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090207-XS-CTH CJ.DWG PLOT DATE : 4/22/2016 2:23 PM PLOT BY : MAAS, JOSEPH A PLOT NAME :

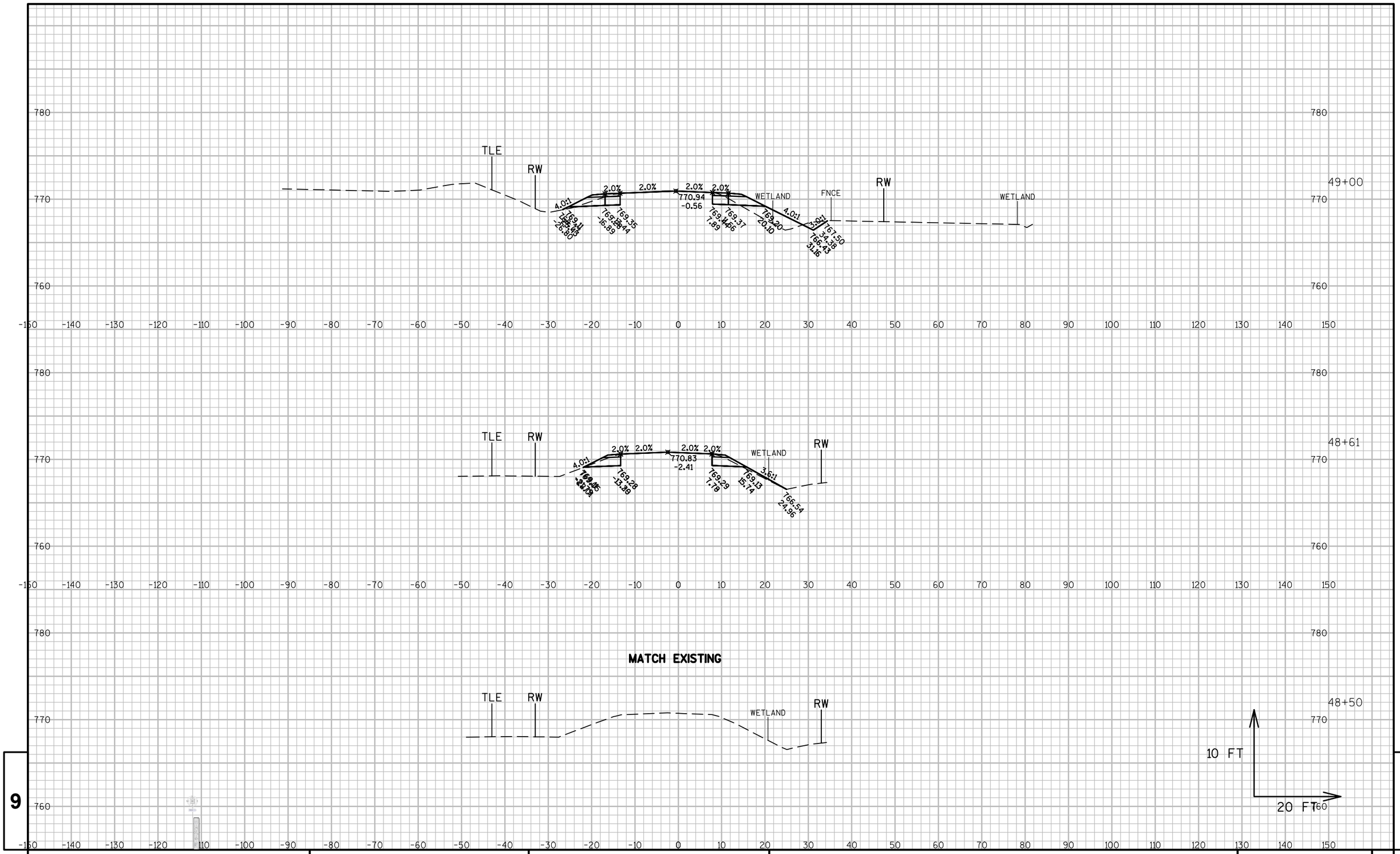
WISDOT/CADDS SHEET 49



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PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: CTH CJ	SHEET 716	E



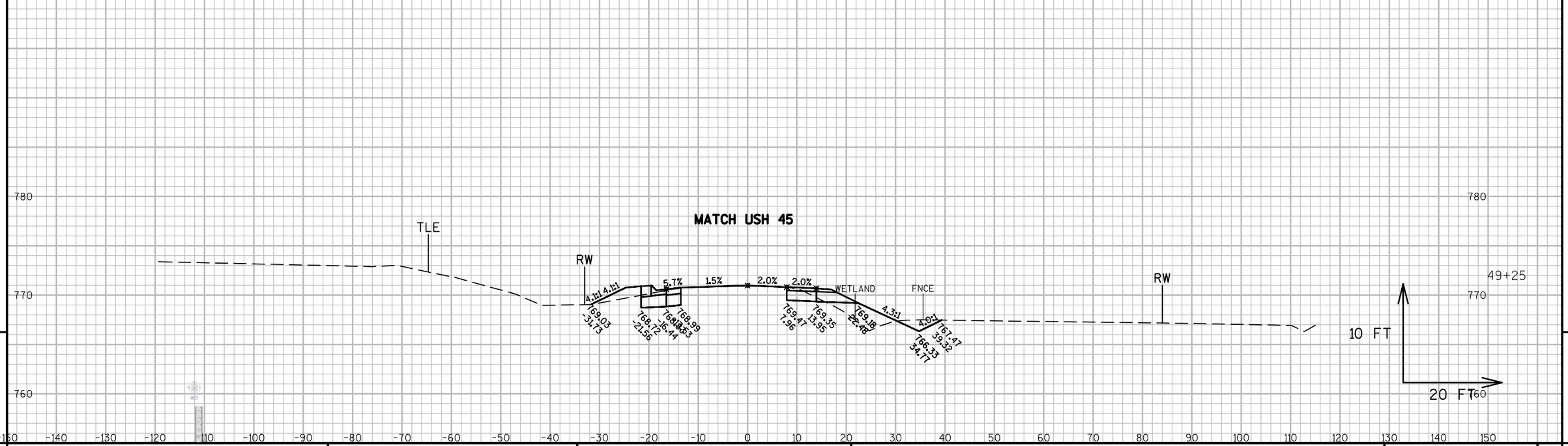
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PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: 119TH STREET	SHEET 717	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090208-XS-119TH ST.DWG PLOT DATE : 4/22/2016 2:25 PM PLOT BY : MAAS, JOSEPH A PLOT NAME :

WISDOT/CADDS SHEET 49



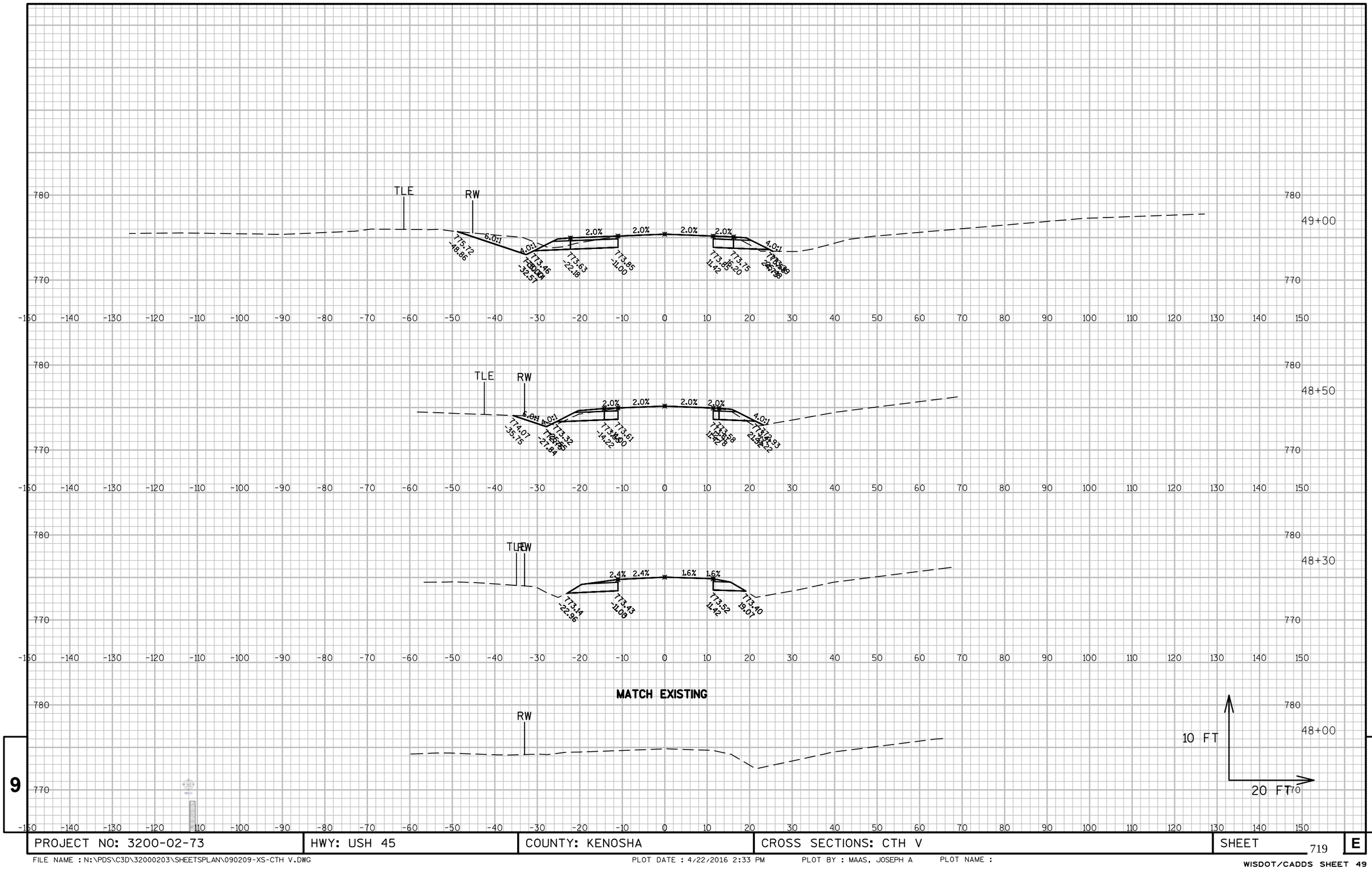
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PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: 119TH STREET	SHEET 718	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090208-XS-119TH ST.DWG PLOT DATE : 4/22/2016 2:25 PM PLOT BY : MAAS, JOSEPH A PLOT NAME :

WISDOT/CADDS SHEET 49



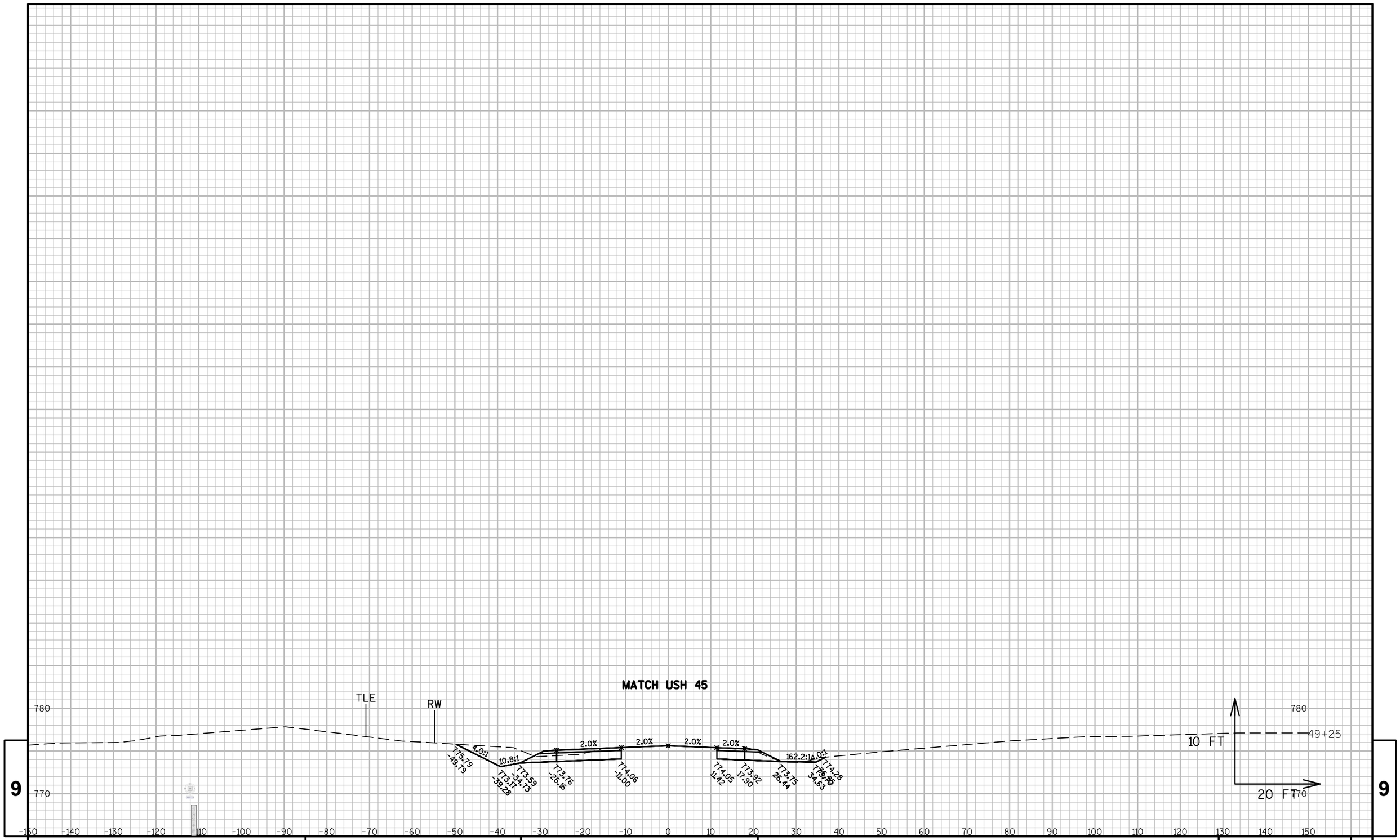
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PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: CTH V	SHEET 719	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090209-XS-CTH V.DWG PLOT DATE : 4/22/2016 2:33 PM PLOT BY : MAAS, JOSEPH A PLOT NAME :

WISDOT/CADDS SHEET 49



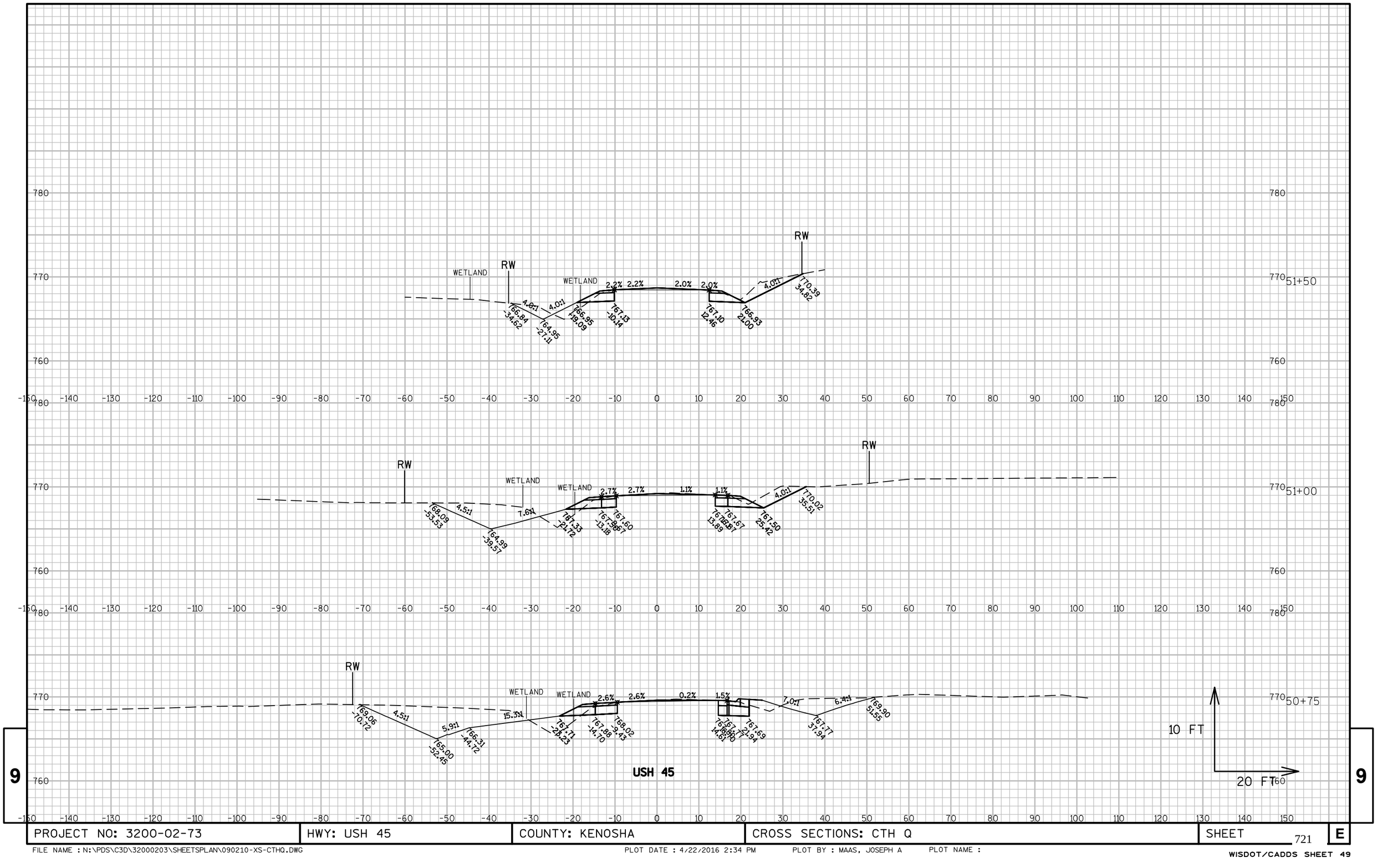
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PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: CTH V	SHEET 720	E

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WISDOT/CADDS SHEET 49



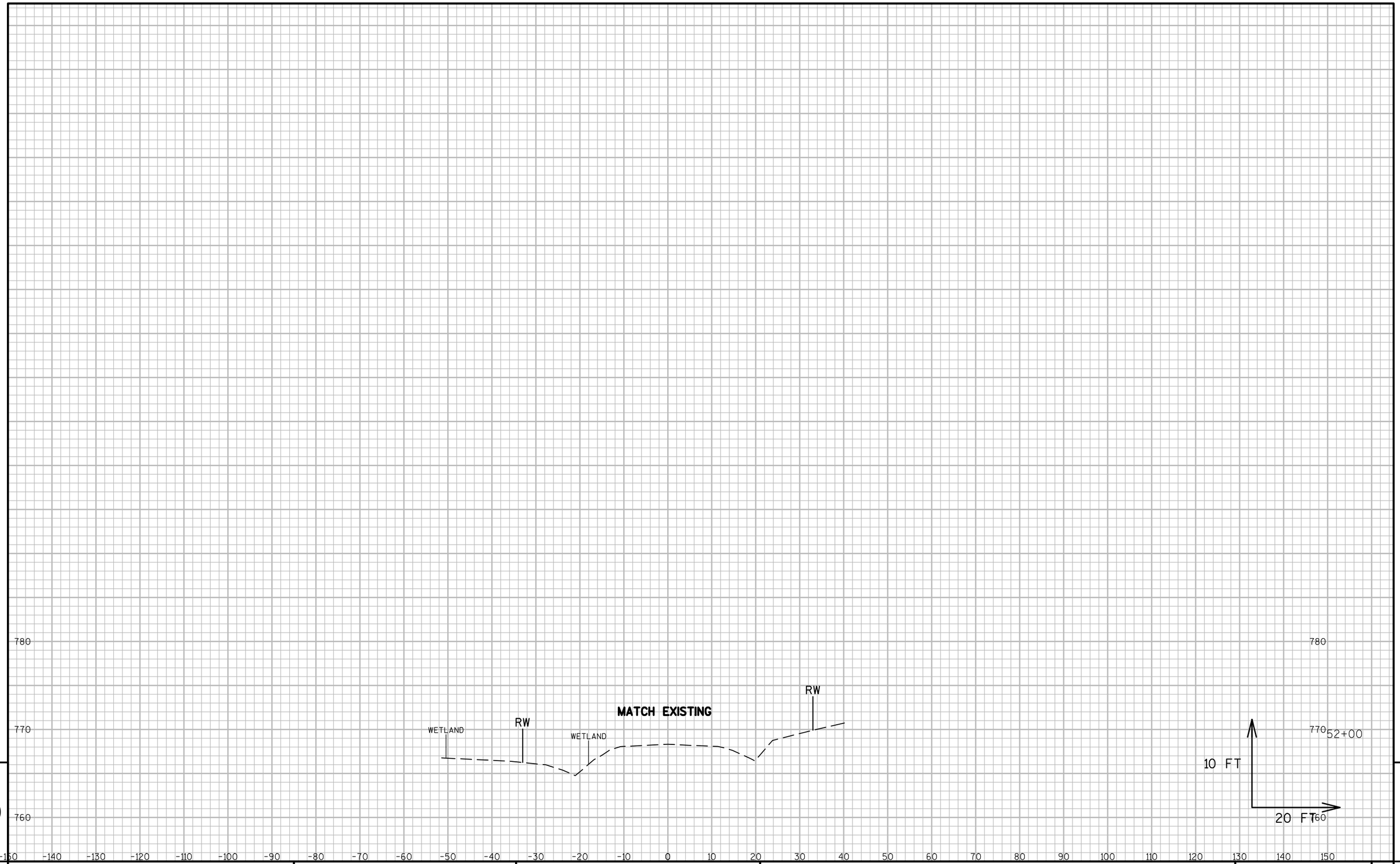
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PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: CTH Q	SHEET 721	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090210-XS-CTHQ.DWG PLOT DATE : 4/22/2016 2:34 PM PLOT BY : MAAS, JOSEPH A PLOT NAME :

WISDOT/CADDS SHEET 49



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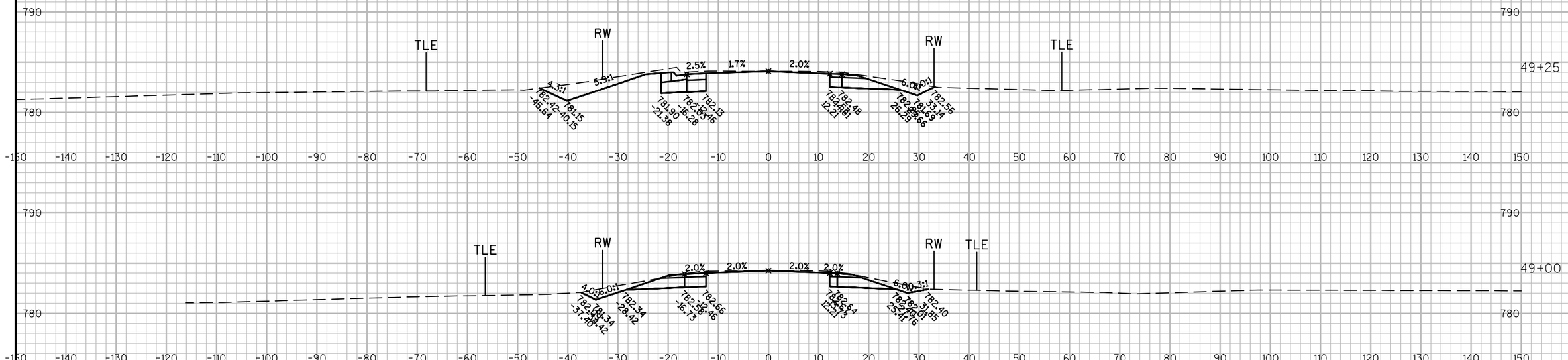
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PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: CTH Q	SHEET 722	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090210-XS-CTHQ.DWG PLOT DATE : 4/22/2016 2:34 PM PLOT BY : MAAS, JOSEPH A PLOT NAME :

WISDOT/CADDS SHEET 49

USH 45



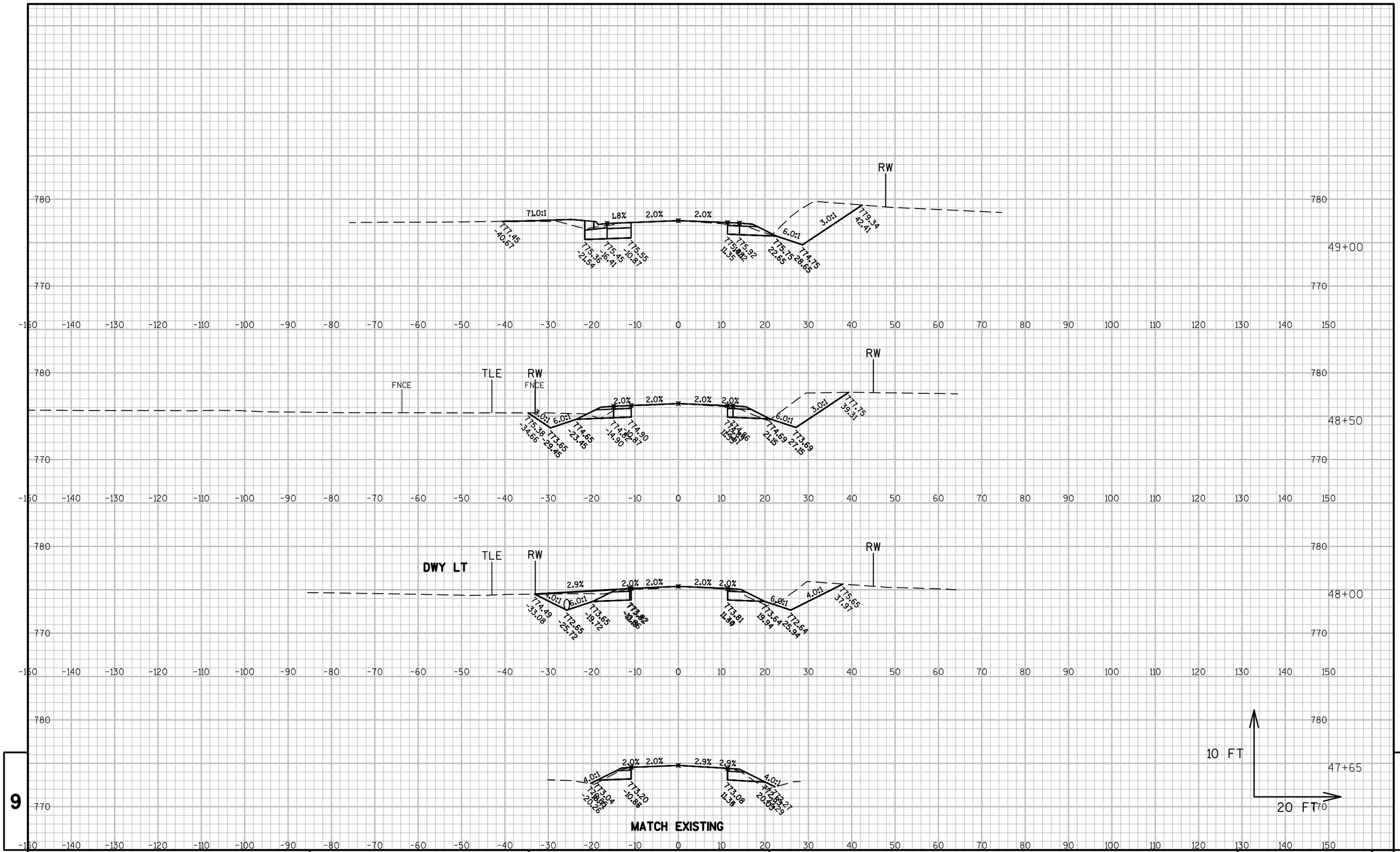
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PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: 192ND AVENUE	SHEET 723	E

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FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090211-XS-192ND AVE.DWG PLOT DATE : 4/22/2016 2:38 PM PLOT BY : MAAS, JOSEPH A PLOT NAME :

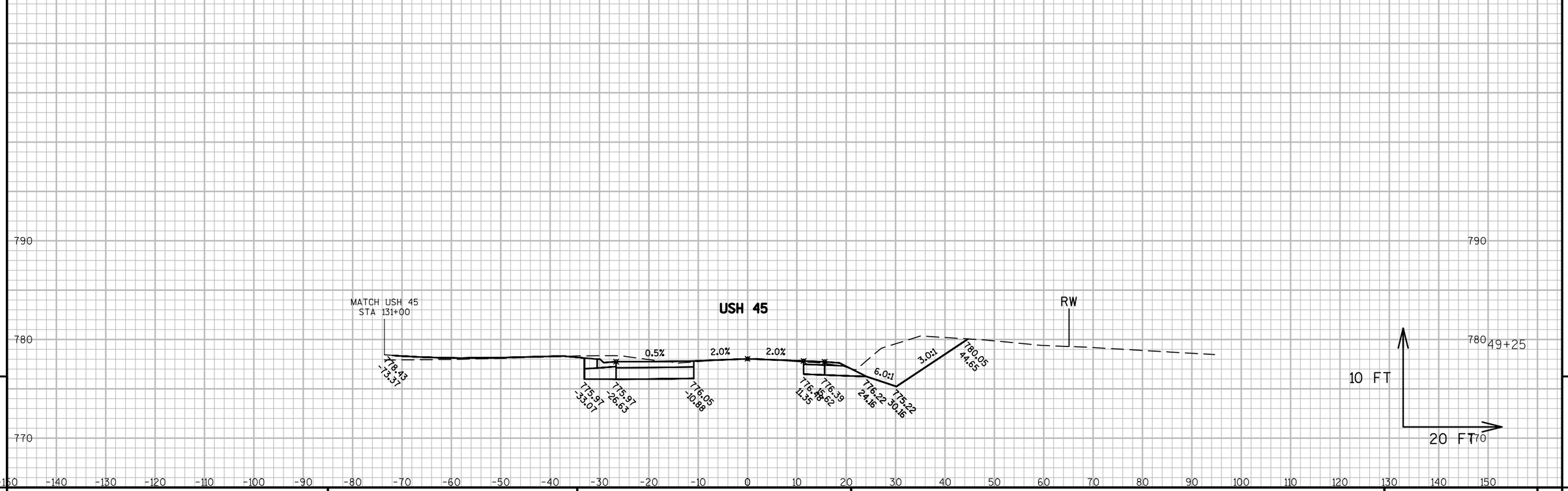
WISDOT/CADDS SHEET 49



PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: CTH JS	SHEET 724	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090212-XS-CTHJS.DWG PLOT DATE : 4/22/2016 2:52 PM PLOT BY : MAAS, JOSEPH A PLOT NAME :

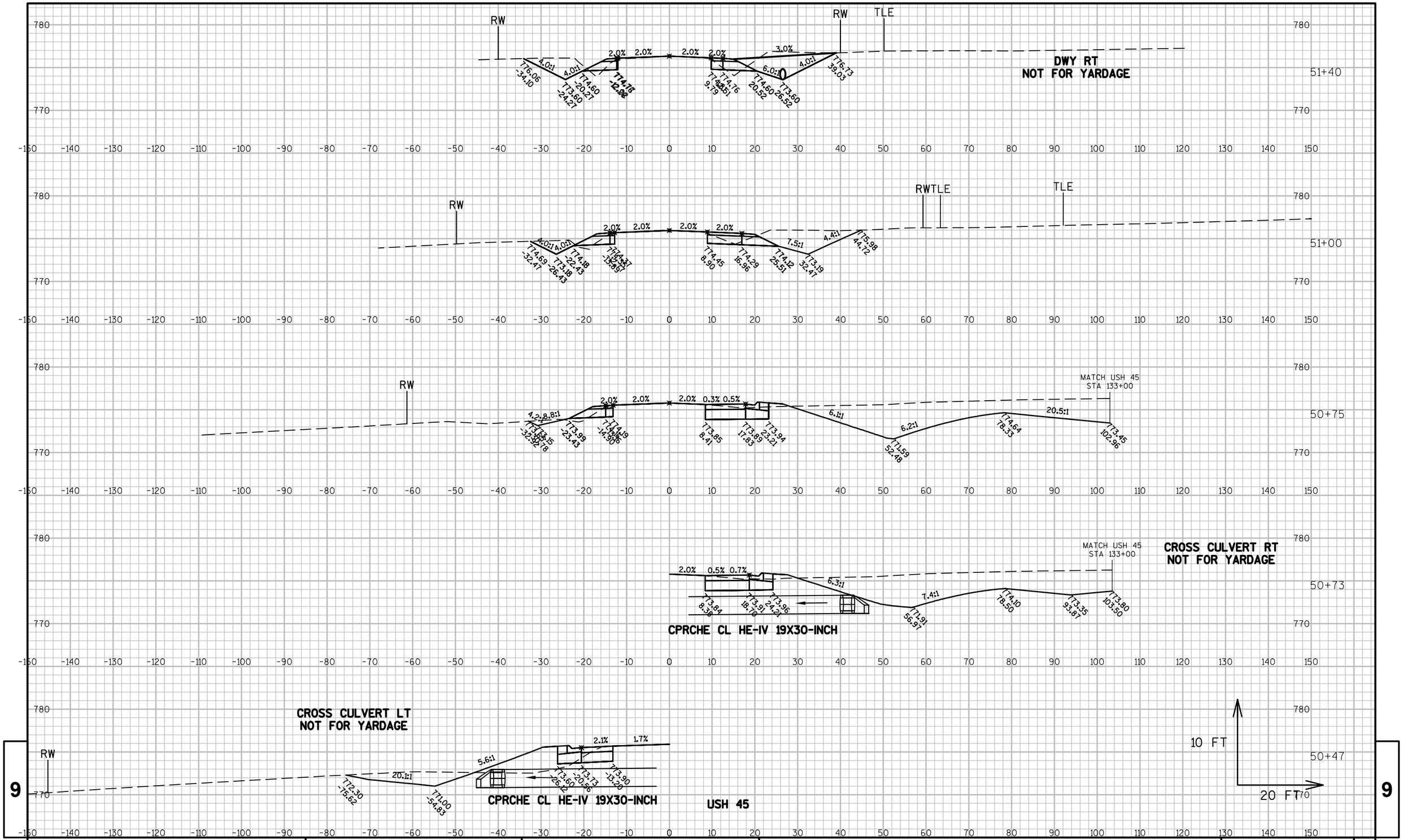
WISDOT/CADDS SHEET 49



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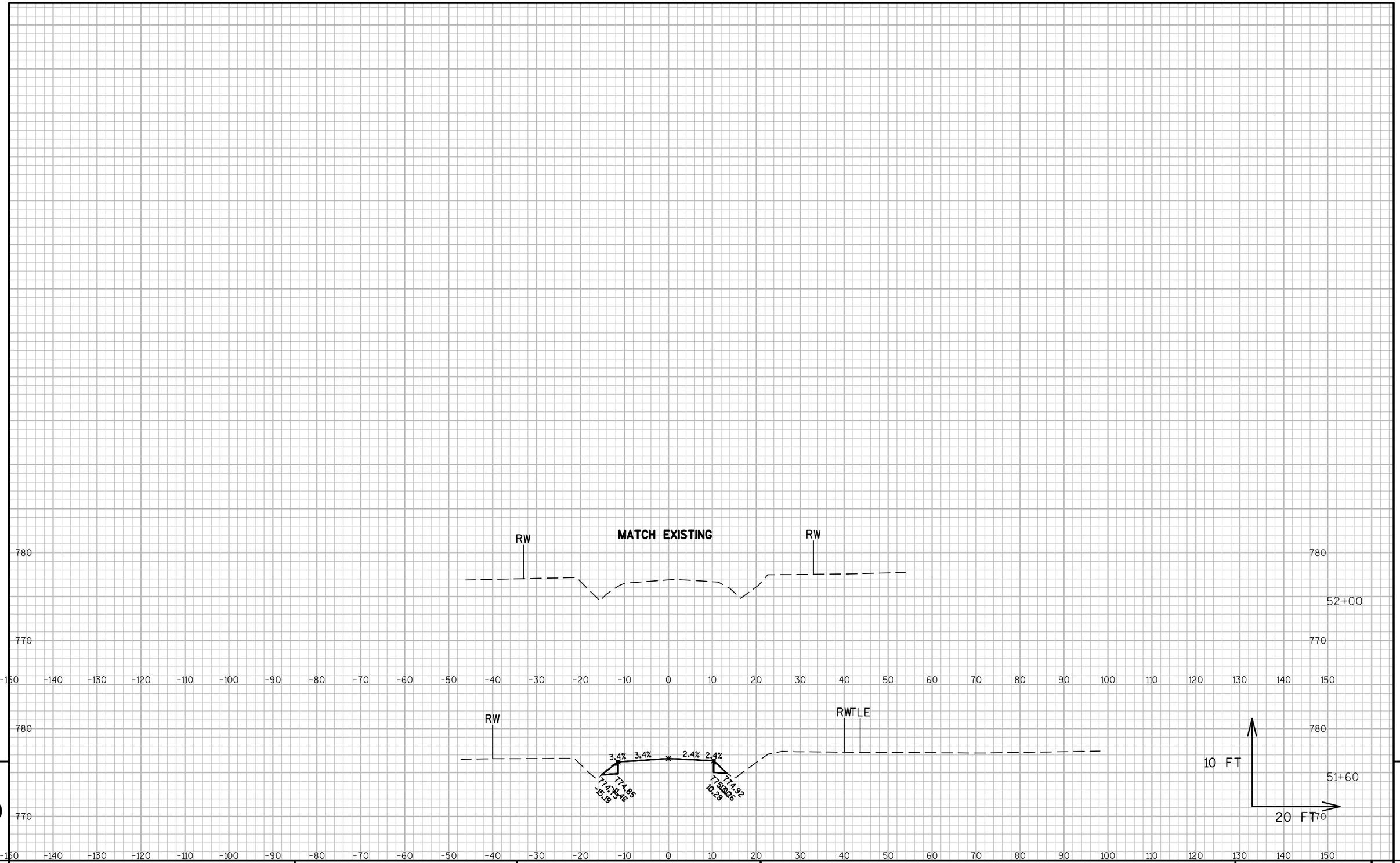
PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: CTH JS	SHEET 725	E



PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: 106TH STREET	SHEET 726	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090213-XS-106TH ST.DWG PLOT DATE : 4/22/2016 2:53 PM PLOT BY : MAAS, JOSEPH A PLOT NAME :

WISDOT/CADDS SHEET 49



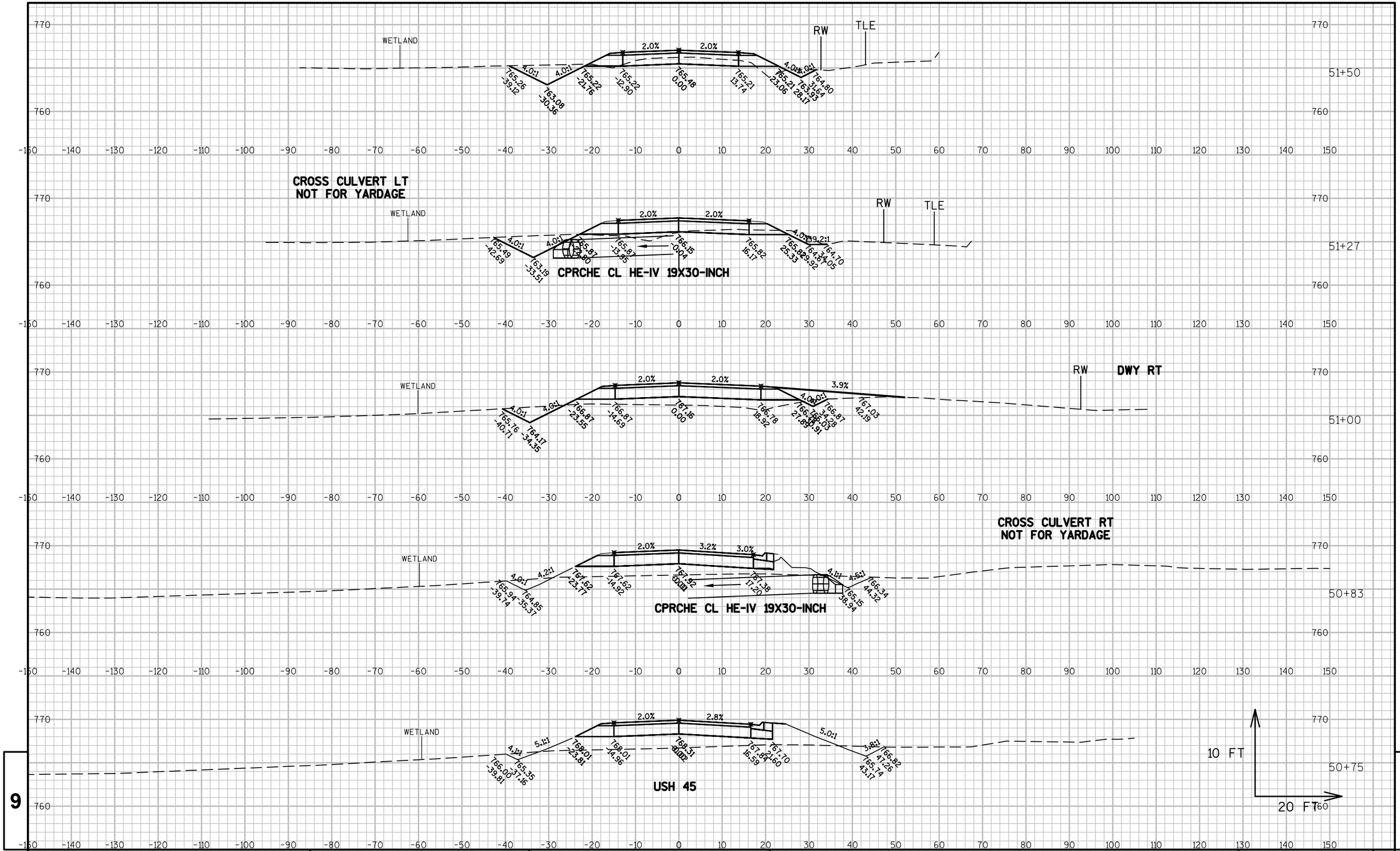
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PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: 106TH STREET	SHEET 727	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090213-XS-106TH ST.DWG PLOT DATE : 4/22/2016 2:53 PM PLOT BY : MAAS, JOSEPH A PLOT NAME :

WISDOT/CADDS SHEET 49



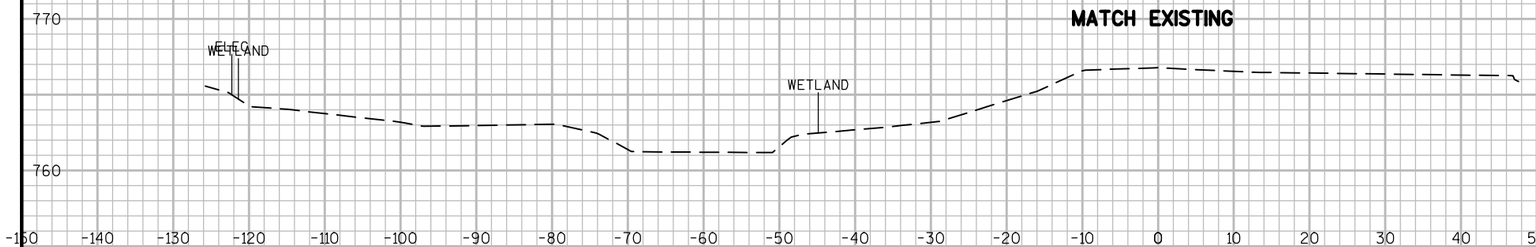
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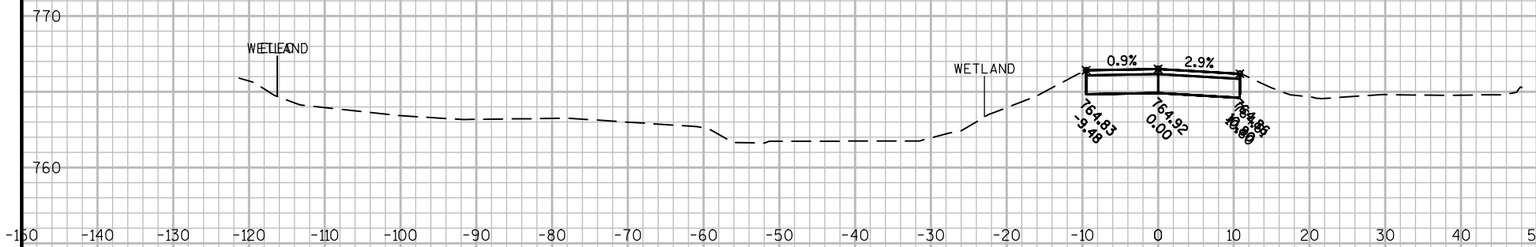
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PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: 196TH AVENUE SOUTH	SHEET 728	E

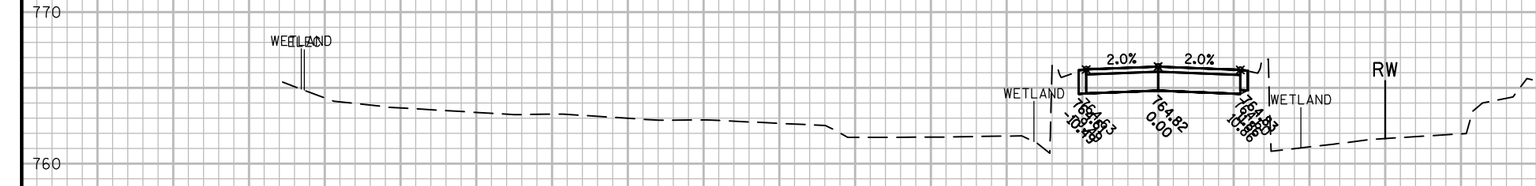
FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090214-XS-196TH AVE SOUTH.DWG PLOT DATE : 4/22/2016 2:55 PM PLOT BY : MAAS, JOSEPH A PLOT NAME :

MATCH EXISTING

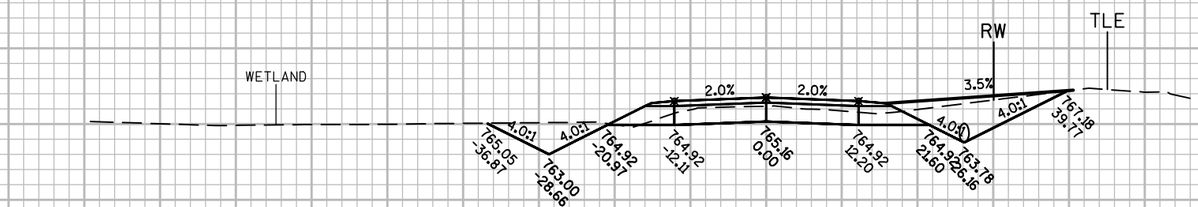




NOT FOR YARDAGE
EXISTING CULVERT TO REMAIN







DWY RT
NOT FOR YARDAGE



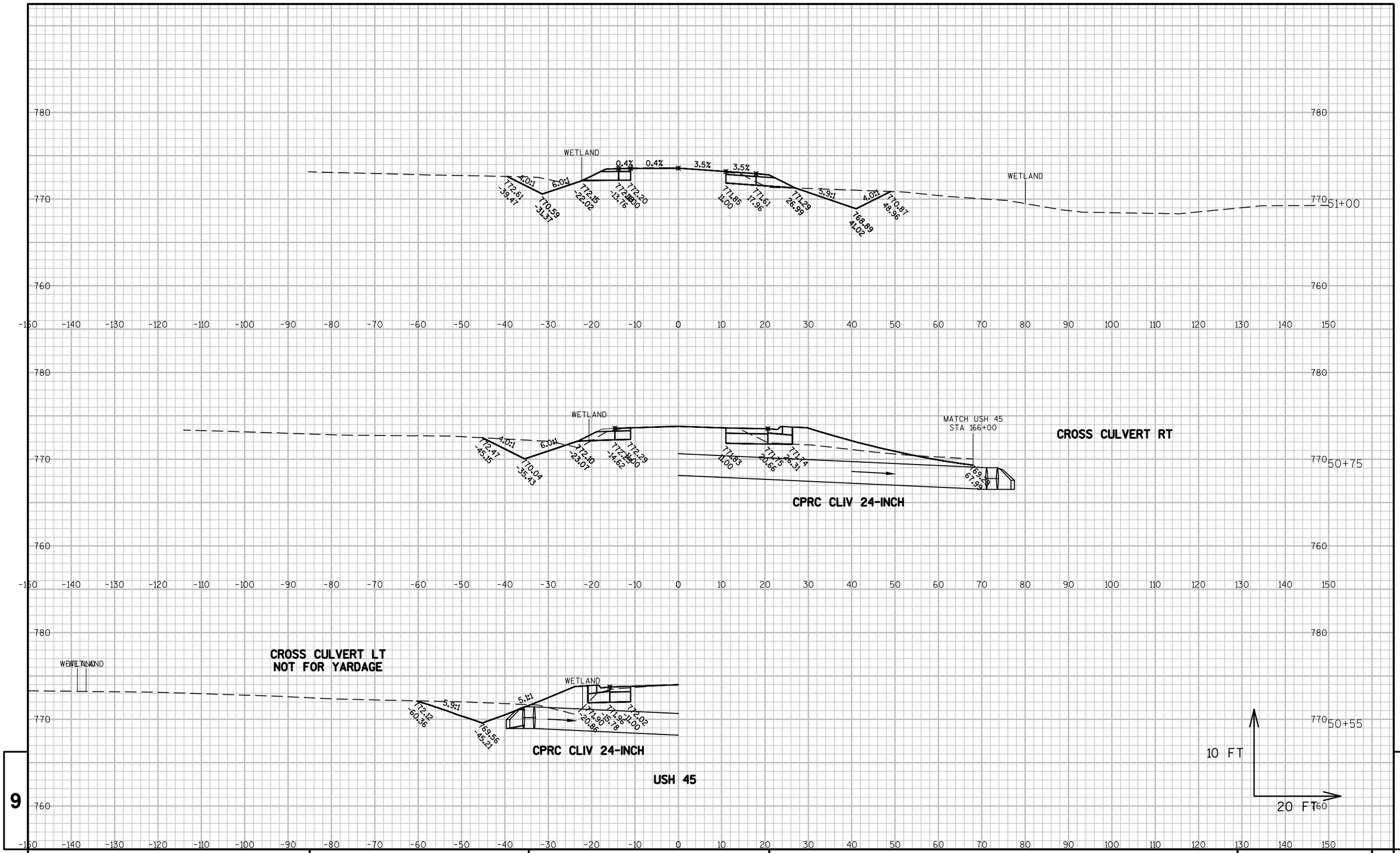
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9

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: 196TH AVENUE SOUTH	SHEET 729	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090214-XS-196TH AVE SOUTH.DWG PLOT DATE : 4/22/2016 2:55 PM PLOT BY : MAAS, JOSEPH A PLOT NAME :

WISDOT/CADDS SHEET 49



PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: 196TH AVENUE NORTH	SHEET 730	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090215-XS-196TH AVE NORTH.DWG PLOT DATE : 4/22/2016 2:56 PM PLOT BY : MAAS, JOSEPH A PLOT NAME :

WISDOT/CADDS SHEET 49

MATCH EXISTING

RW

WETLAND

52+00

WETLAND

51+75

WETLAND

WETLAND

51+50

10 FT

20 FT

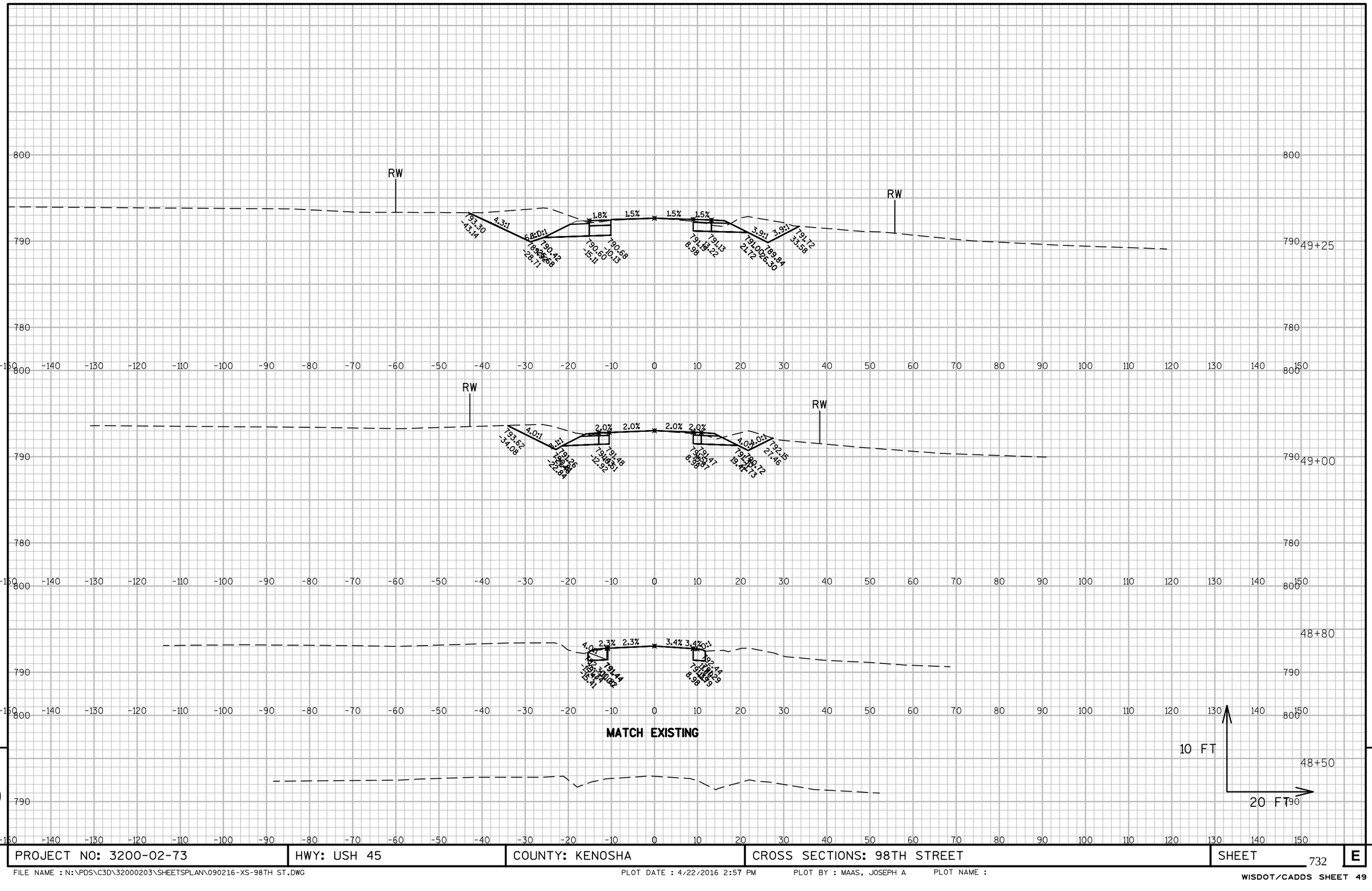
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PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: 196TH AVENUE NORTH	SHEET 731	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090215-XS-196TH AVE NORTH.DWG PLOT DATE : 4/22/2016 2:56 PM PLOT BY : MAAS, JOSEPH A PLOT NAME :

WISDOT/CADDS SHEET 49



9

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: 98TH STREET	SHEET 732	E

9

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090216-XS-98TH ST.DWG PLOT DATE : 4/22/2016 2:57 PM PLOT BY : MAAS, JOSEPH A PLOT NAME :

WISDOT/CADDS SHEET 49

USH 45

CROSS CULVERT RT
NOT FOR YARDAGE



CPRCHE CL HE-IV 19X30-INCH

CROSS CULVERT LT
NOT FOR YARDAGE



CPRCHE CL HE-IV 19X30-INCH



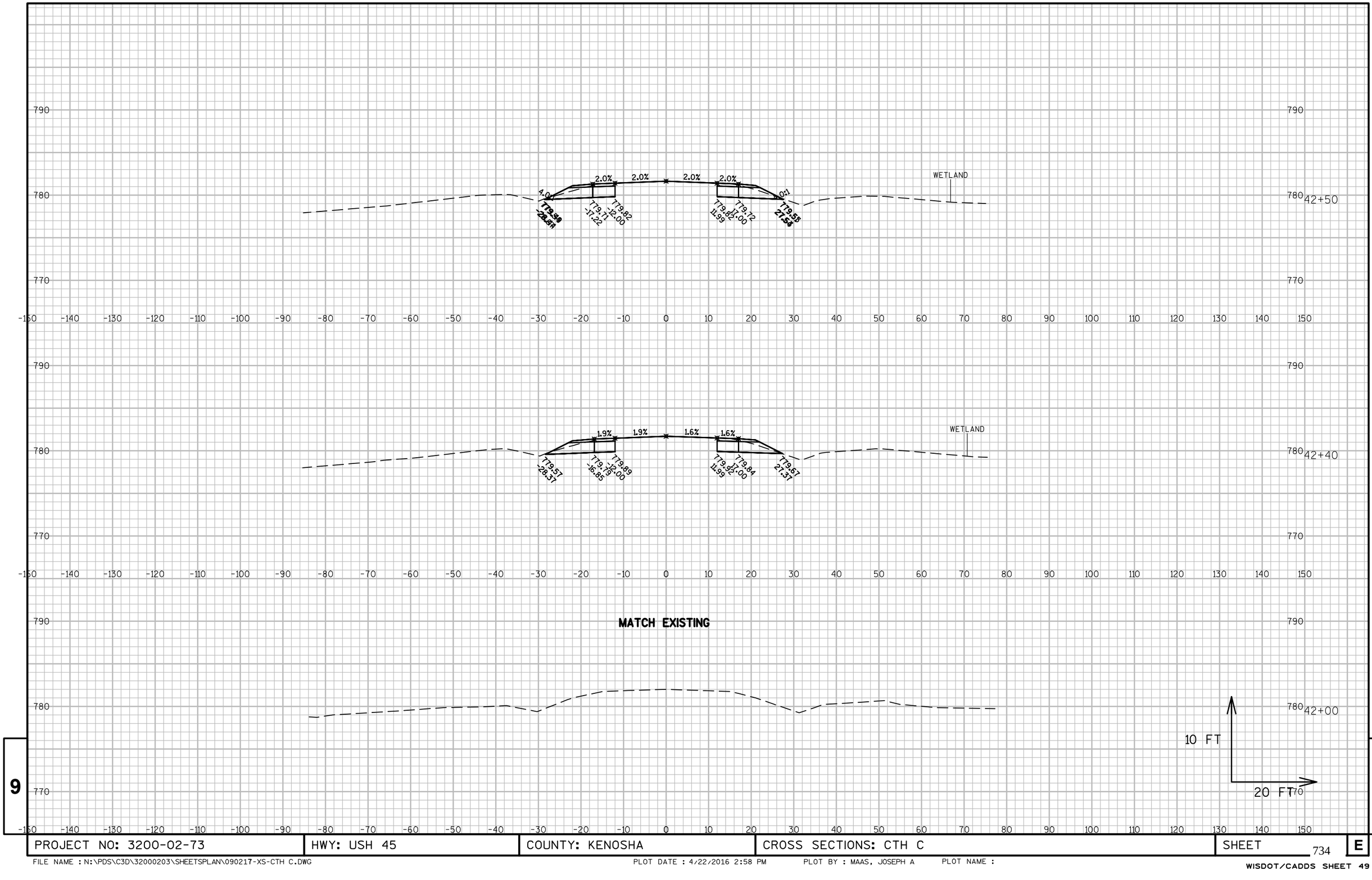
49+65

49+61

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: 98TH STREET	SHEET 733	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090216-XS-98TH ST.DWG PLOT DATE : 4/22/2016 2:57 PM PLOT BY : MAAS, JOSEPH A PLOT NAME :

WISDOT/CADDS SHEET 49



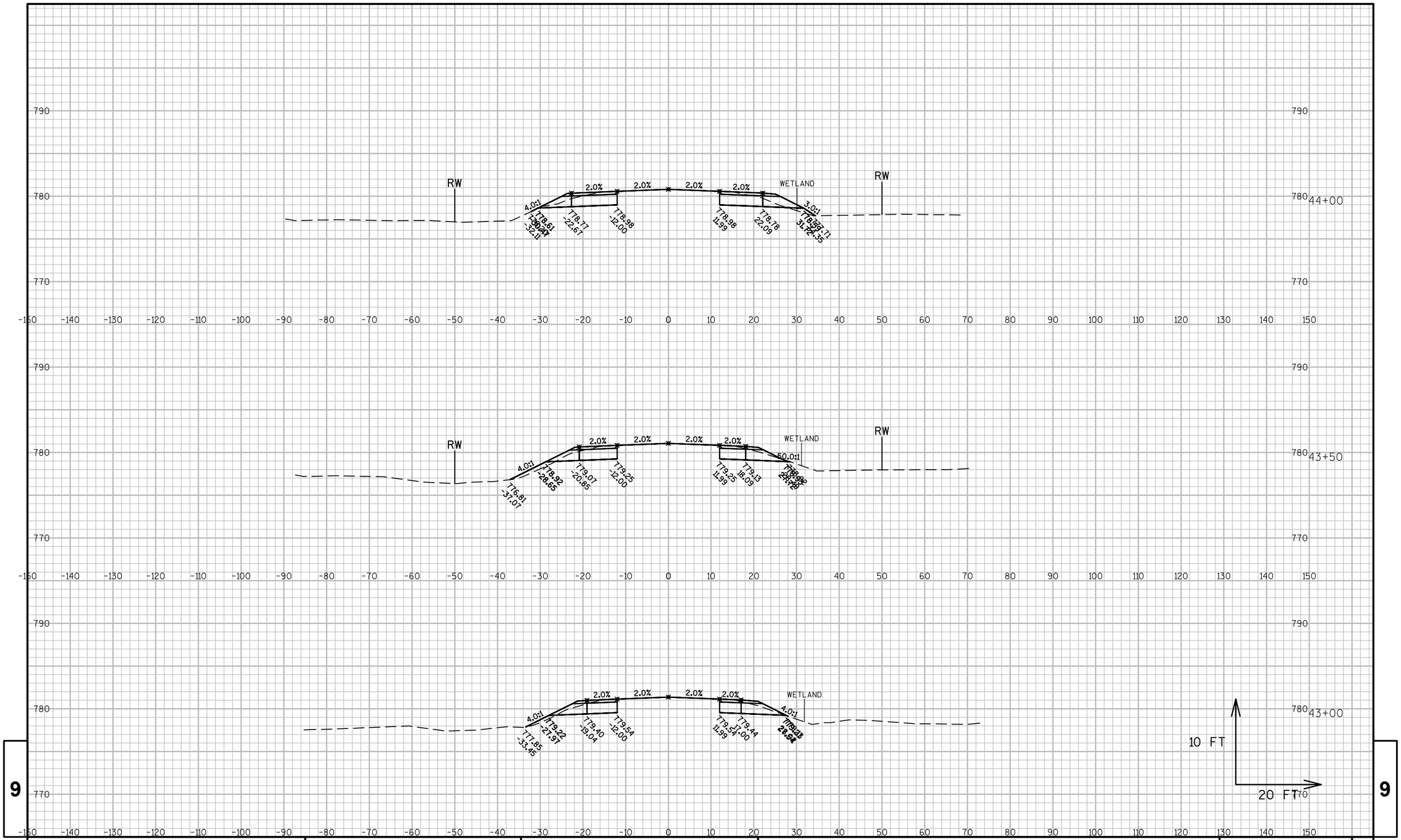
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PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: CTH C	SHEET 734	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090217-XS-CTH C.DWG PLOT DATE : 4/22/2016 2:58 PM PLOT BY : MAAS, JOSEPH A PLOT NAME :

WISDOT/CADDS SHEET 49



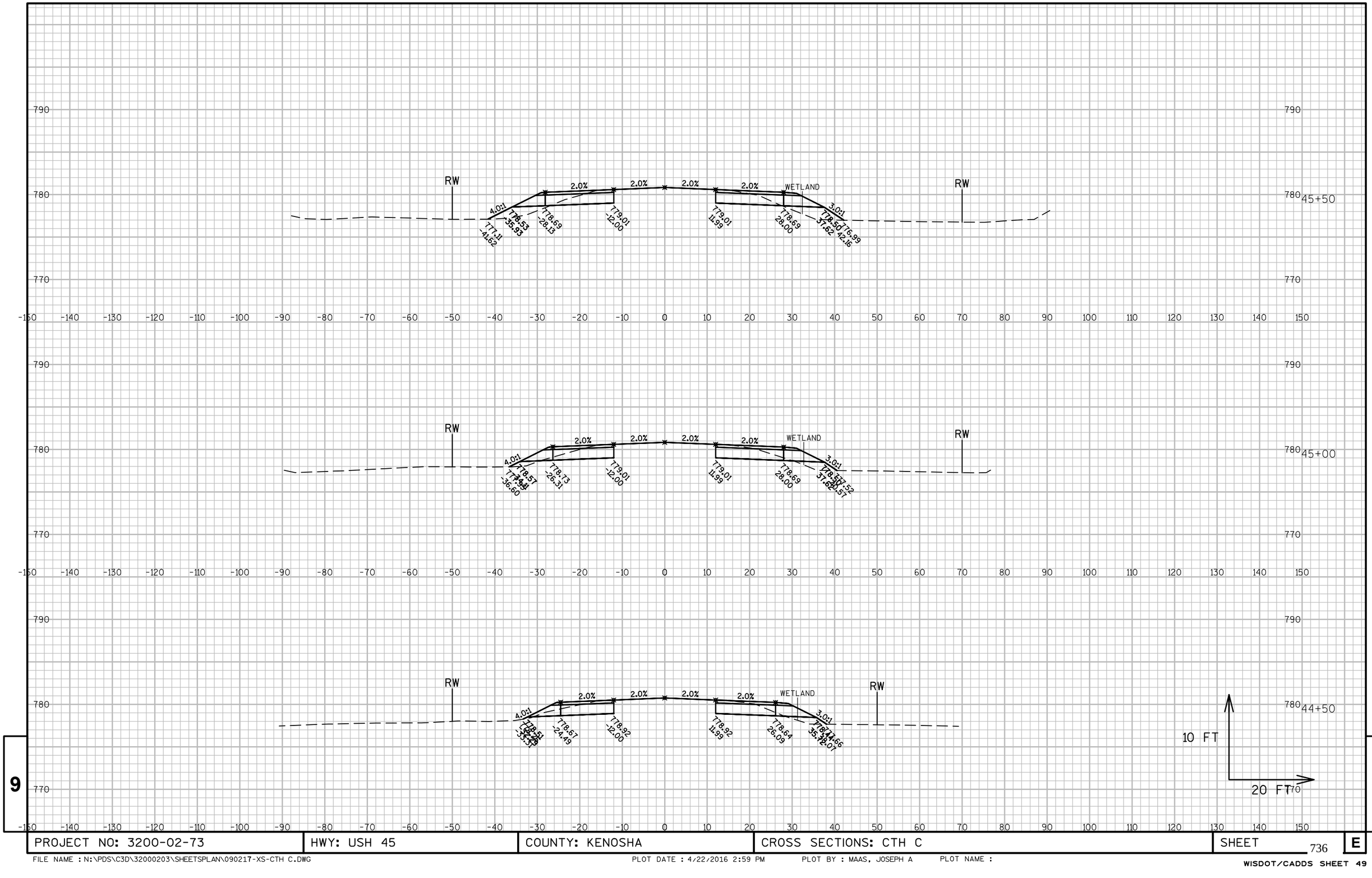
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PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: CTH C	SHEET 735	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090217-XS-CTH C.DWG PLOT DATE : 4/22/2016 2:58 PM PLOT BY : MAAS, JOSEPH A PLOT NAME :

WISDOT/CADDS SHEET 49



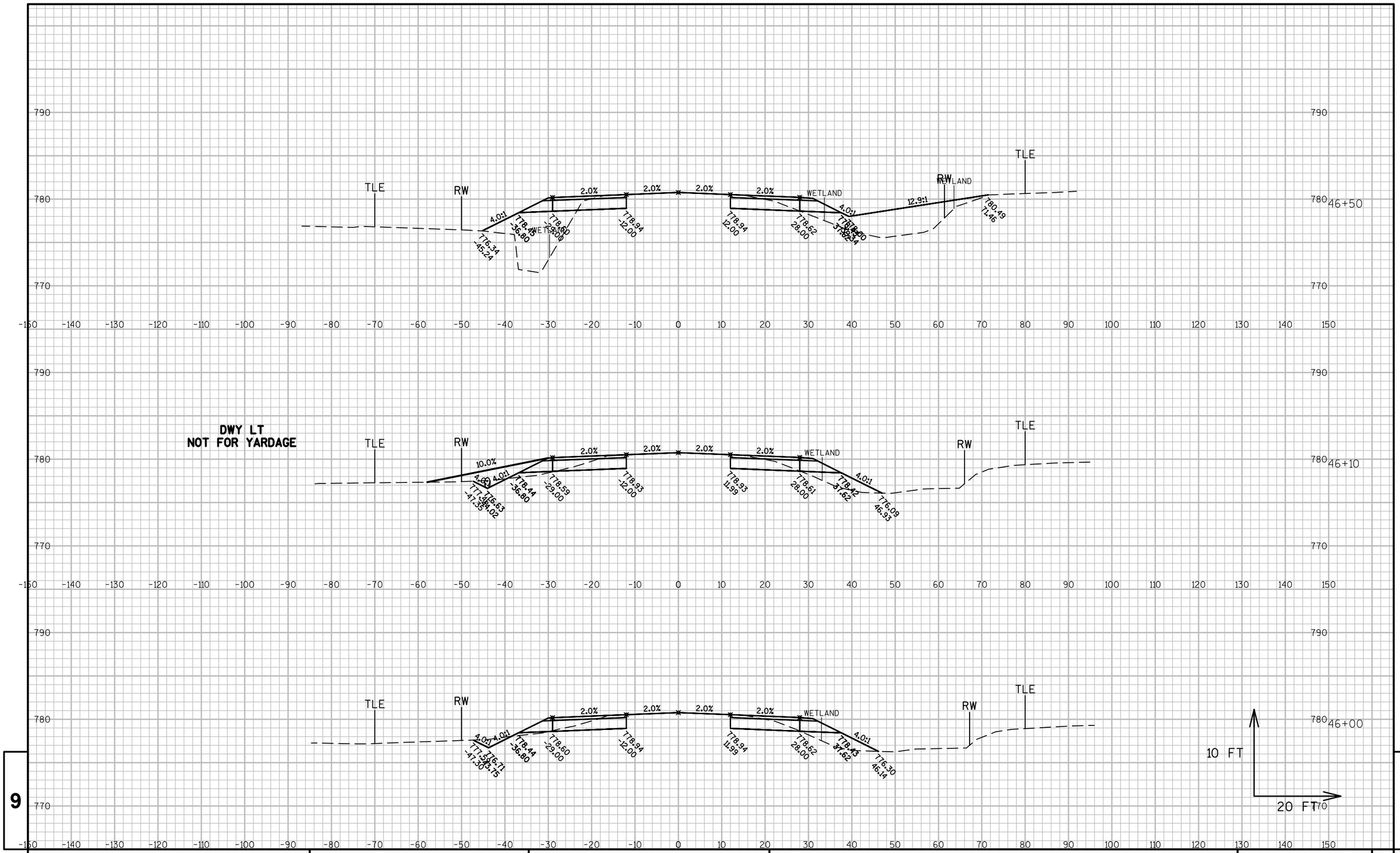
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PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: CTH C	SHEET 736	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090217-XS-CTH C.DWG PLOT DATE : 4/22/2016 2:59 PM PLOT BY : MAAS, JOSEPH A PLOT NAME :

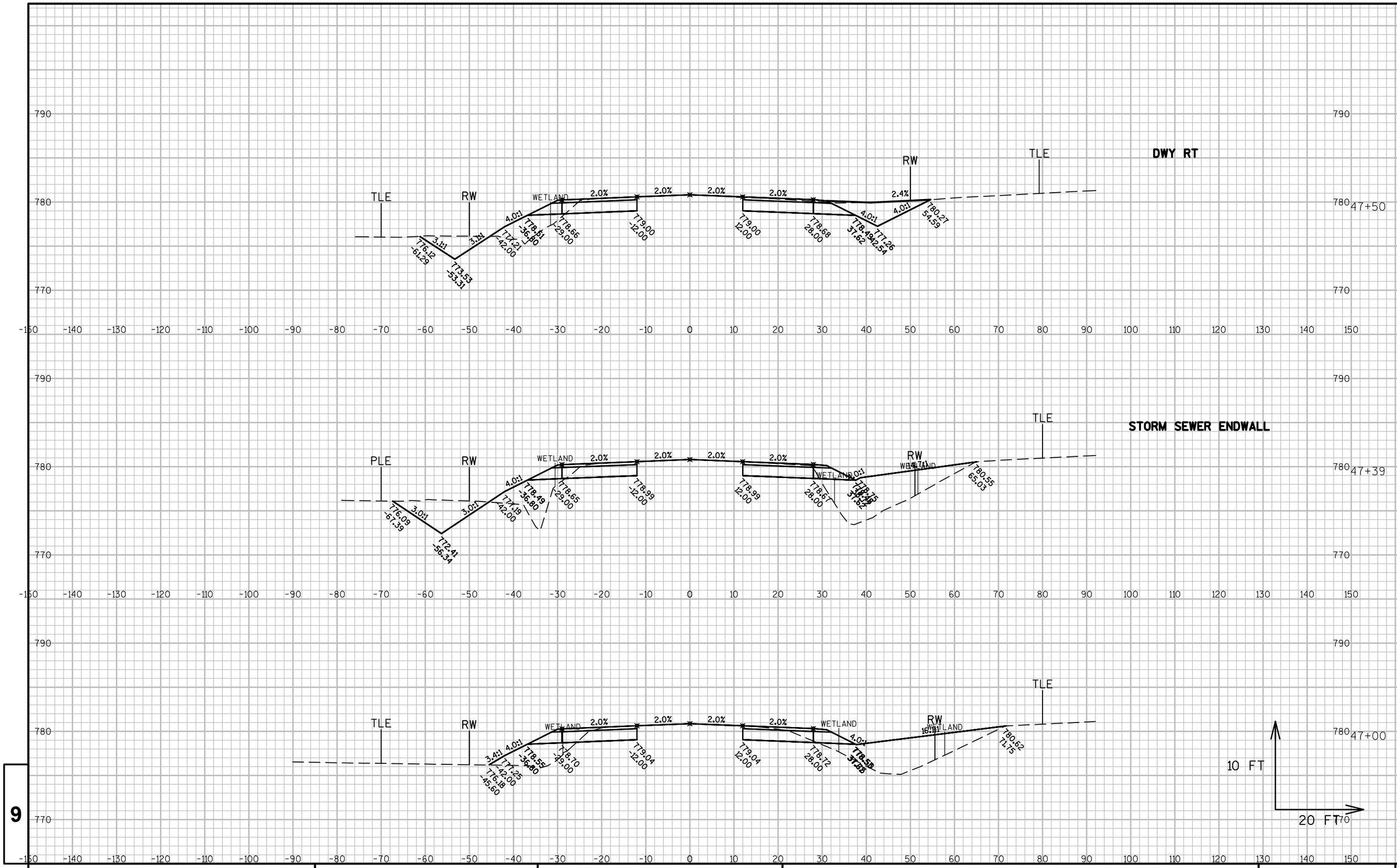
WISDOT/CADDS SHEET 49



PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: CTH C	SHEET 737	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090217-XS-CTH C.DWG PLOT DATE : 4/22/2016 2:59 PM PLOT BY : MAAS, JOSEPH A PLOT NAME :

WISDOT/CADDS SHEET 49



9

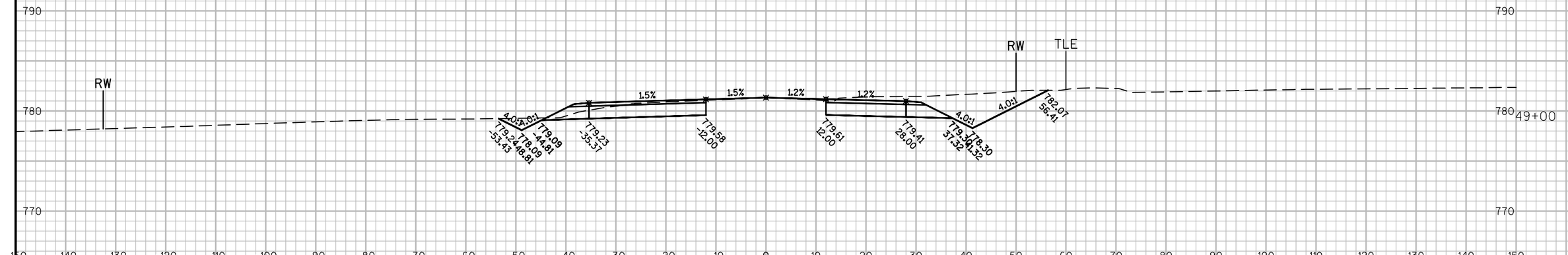
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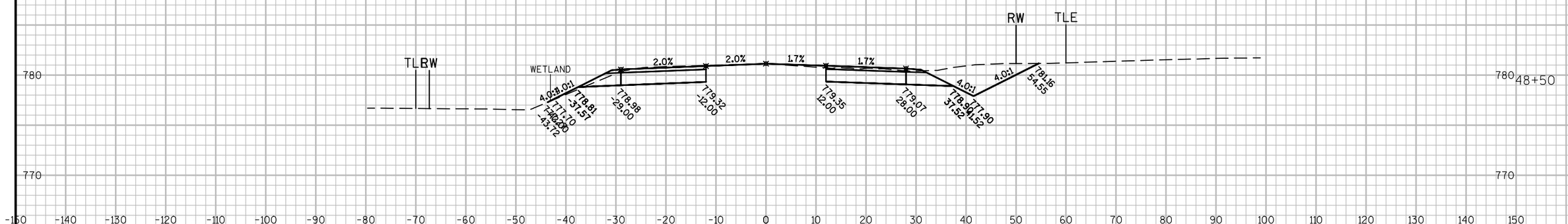
PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: CTH C	SHEET 738	E

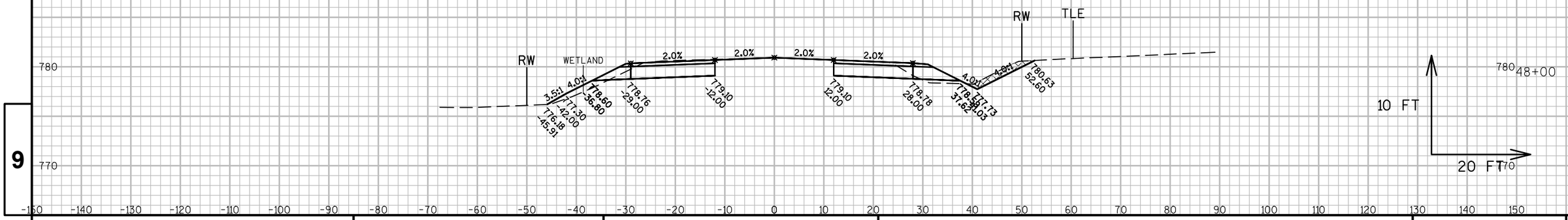
FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090217-XS-CTH C.DWG PLOT DATE : 4/22/2016 2:59 PM PLOT BY : MAAS, JOSEPH A PLOT NAME :

WISDOT/CADDS SHEET 49

*PETROLEUM CONTAMINATED SOIL
STA 47+85 to STA 48+25 RT



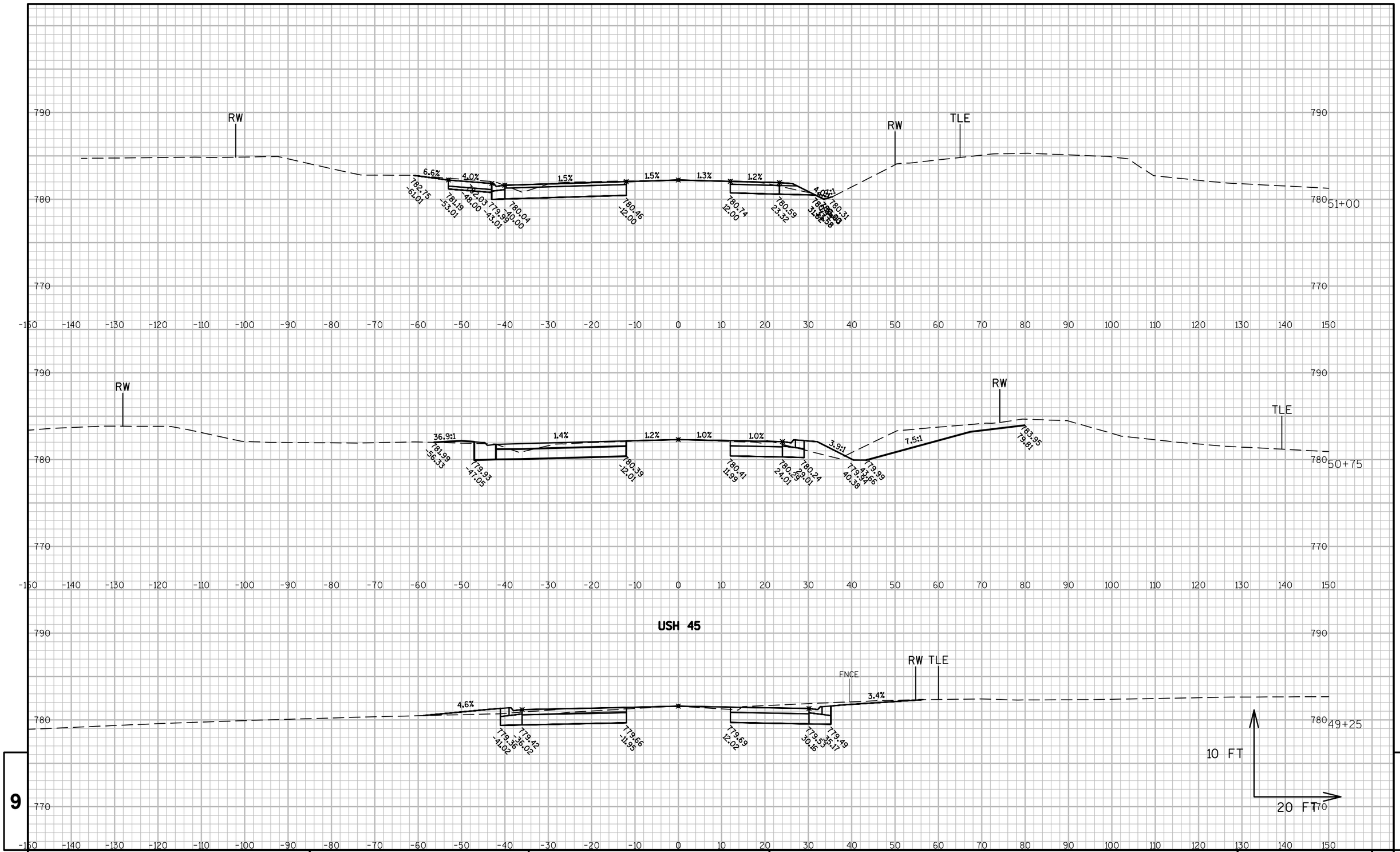




PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: CTH C	SHEET 739	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090217-XS-CTH C.DWG PLOT DATE : 4/22/2016 2:59 PM PLOT BY : MAAS, JOSEPH A PLOT NAME :

WISDOT/CADDS SHEET 49



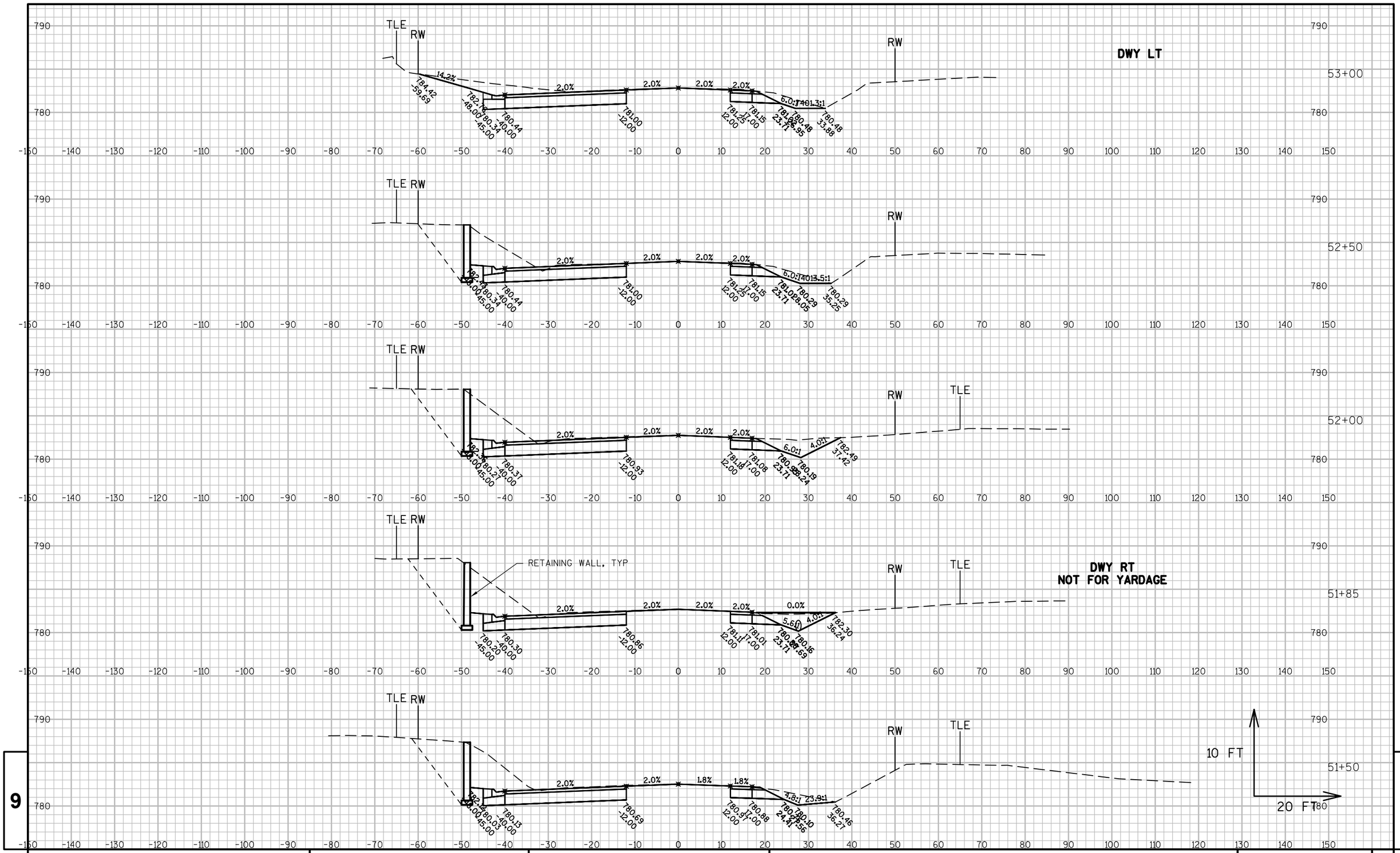
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PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: CTH C	SHEET 740	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090217-XS-CTH C.DWG PLOT DATE : 4/29/2016 9:54 AM PLOT BY : MAAS, JOSEPH A PLOT NAME :

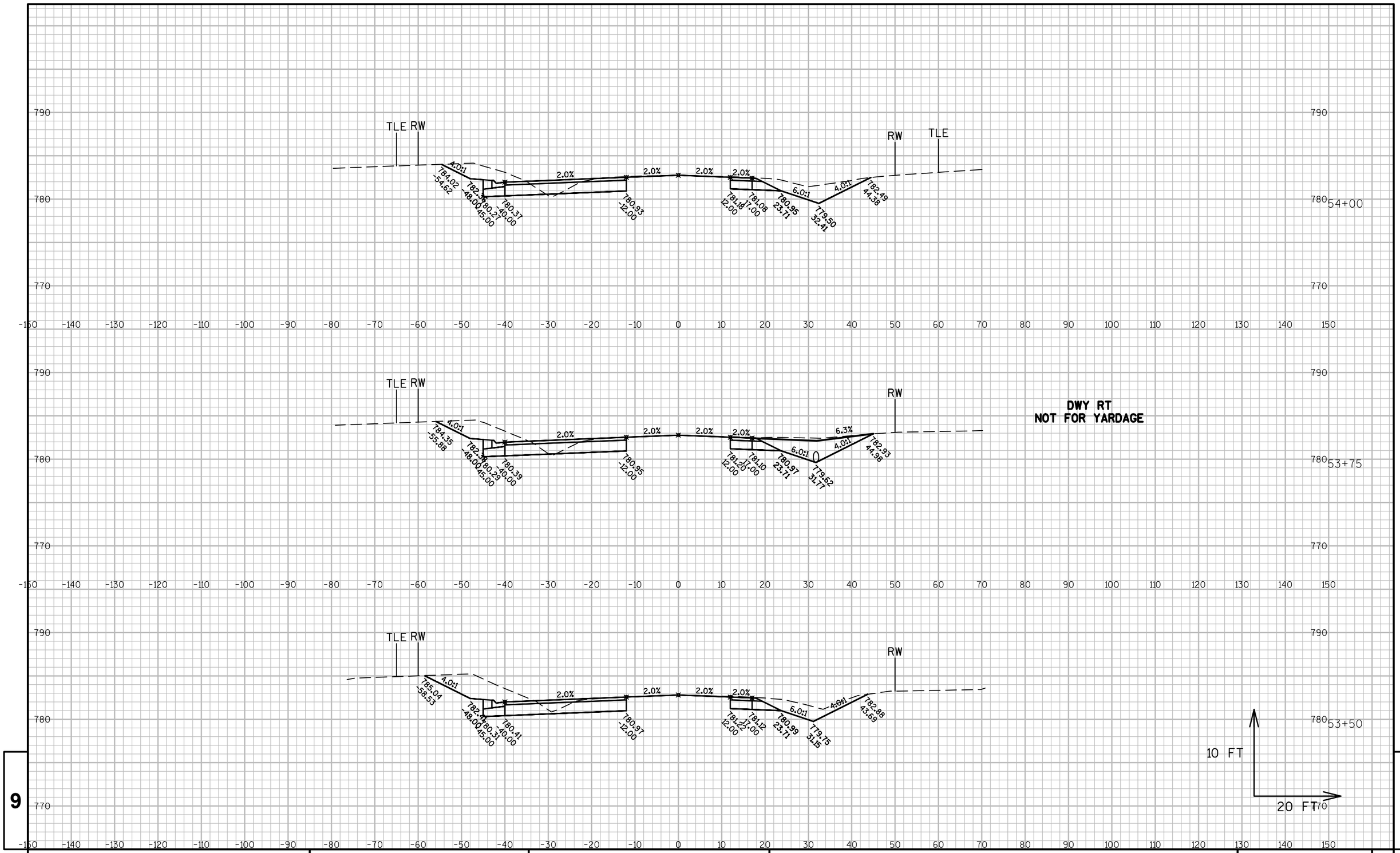
WISDOT/CADDS SHEET 49



PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: CTH C	SHEET 741	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090217-XS-CTH C.DWG PLOT DATE : 4/22/2016 2:59 PM PLOT BY : MAAS, JOSEPH A PLOT NAME :

WISDOT/CADDS SHEET 49



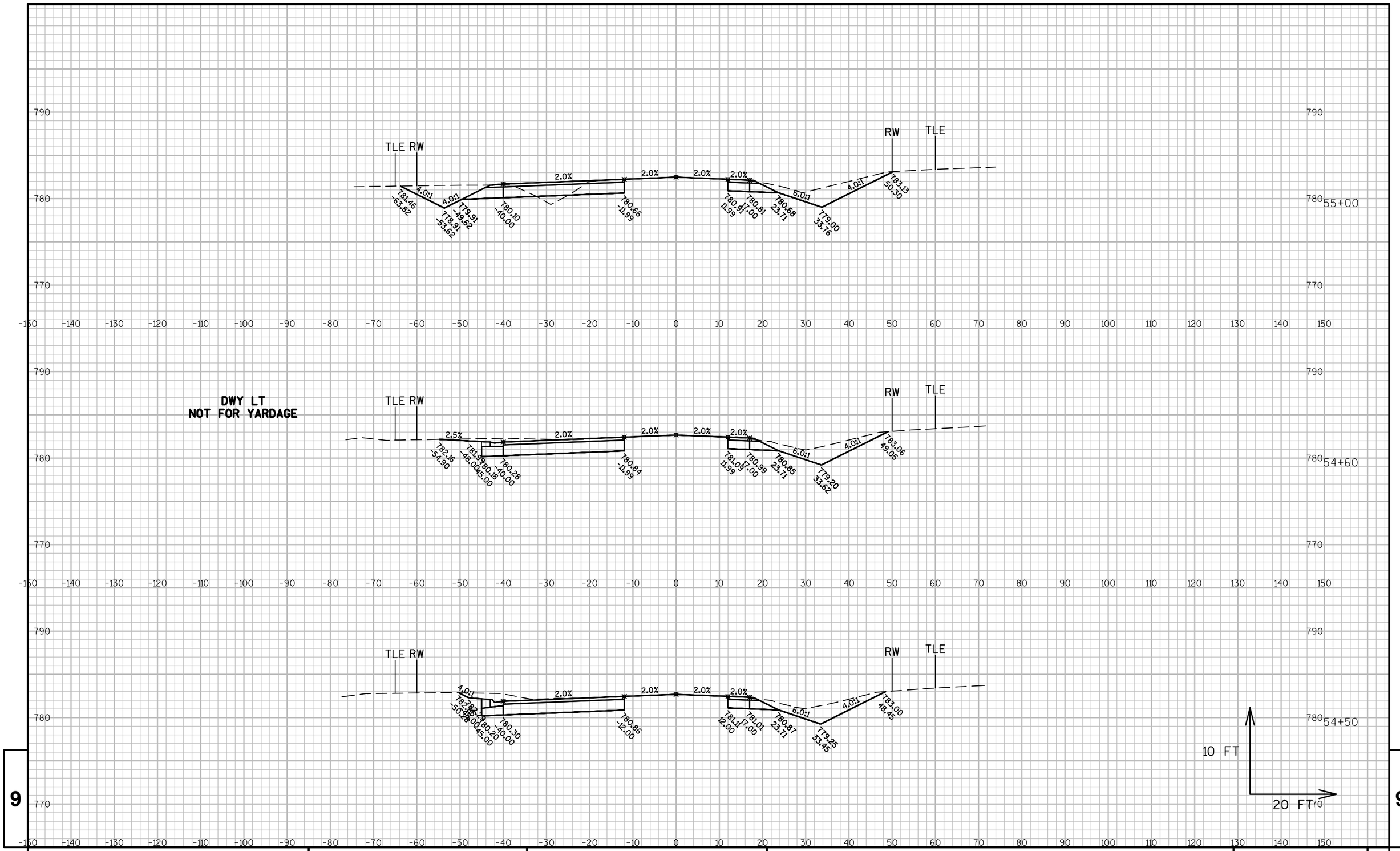
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PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: CTH C	SHEET 742	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090217-XS-CTH C.DWG PLOT DATE : 4/22/2016 2:59 PM PLOT BY : MAAS, JOSEPH A PLOT NAME :

WISDOT/CADDS SHEET 49



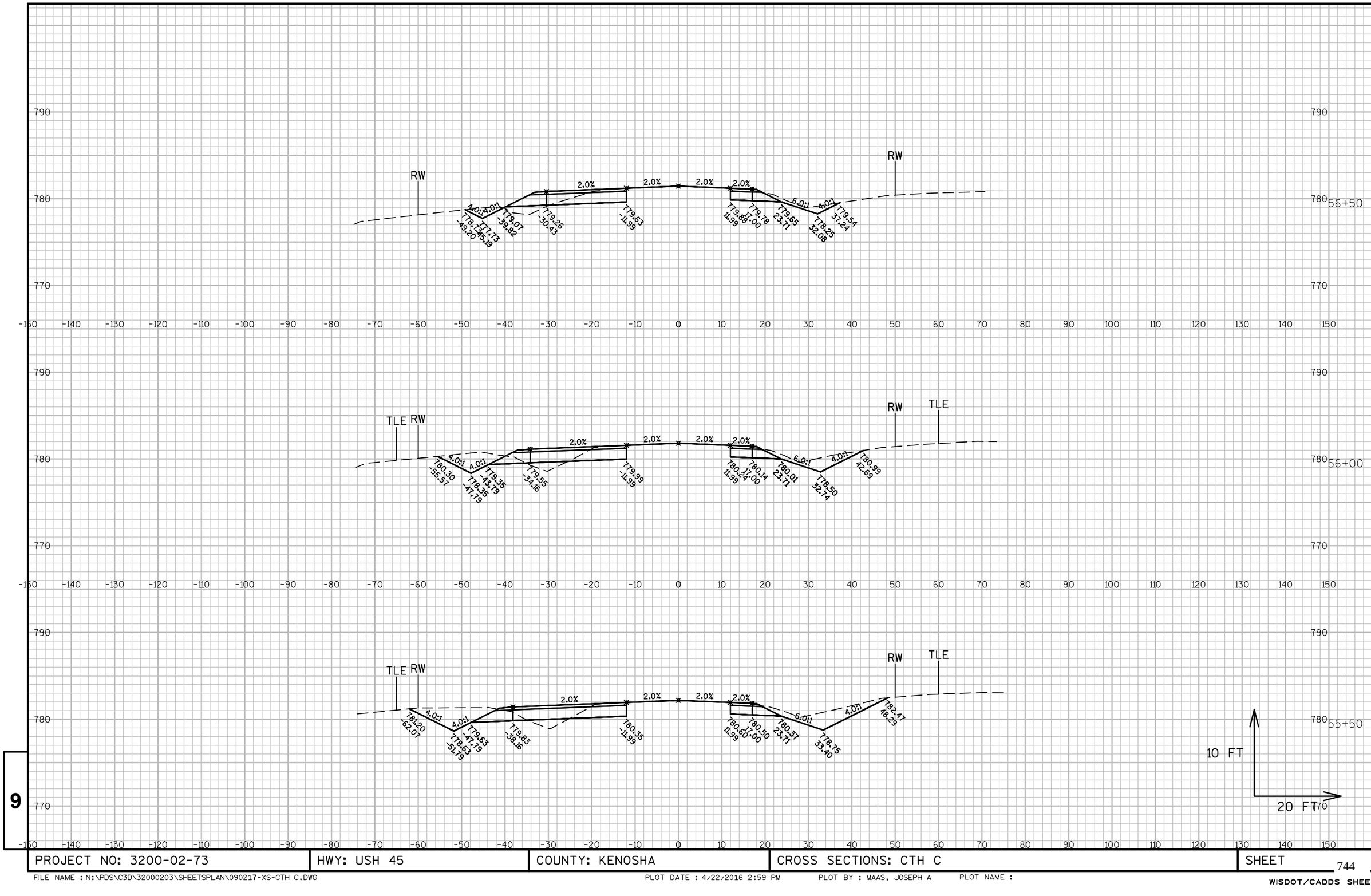
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PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: CTH C	SHEET 743	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090217-XS-CTH C.DWG PLOT DATE : 4/22/2016 2:59 PM PLOT BY : MAAS, JOSEPH A PLOT NAME :

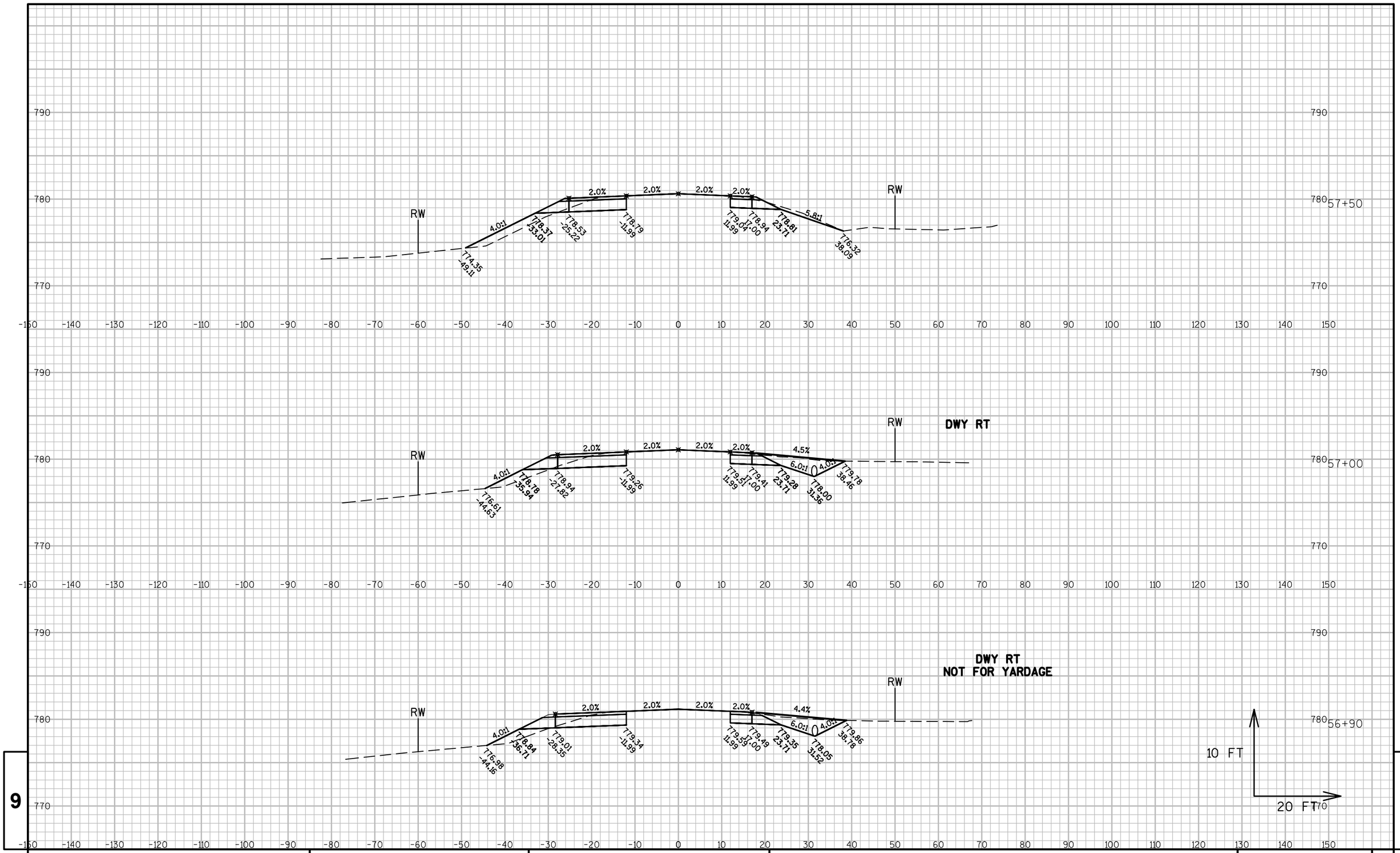
WISDOT/CADDS SHEET 49



PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: CTH C	SHEET 744	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090217-XS-CTH C.DWG PLOT DATE : 4/22/2016 2:59 PM PLOT BY : MAAS, JOSEPH A PLOT NAME :

WISDOT/CADDS SHEET 49



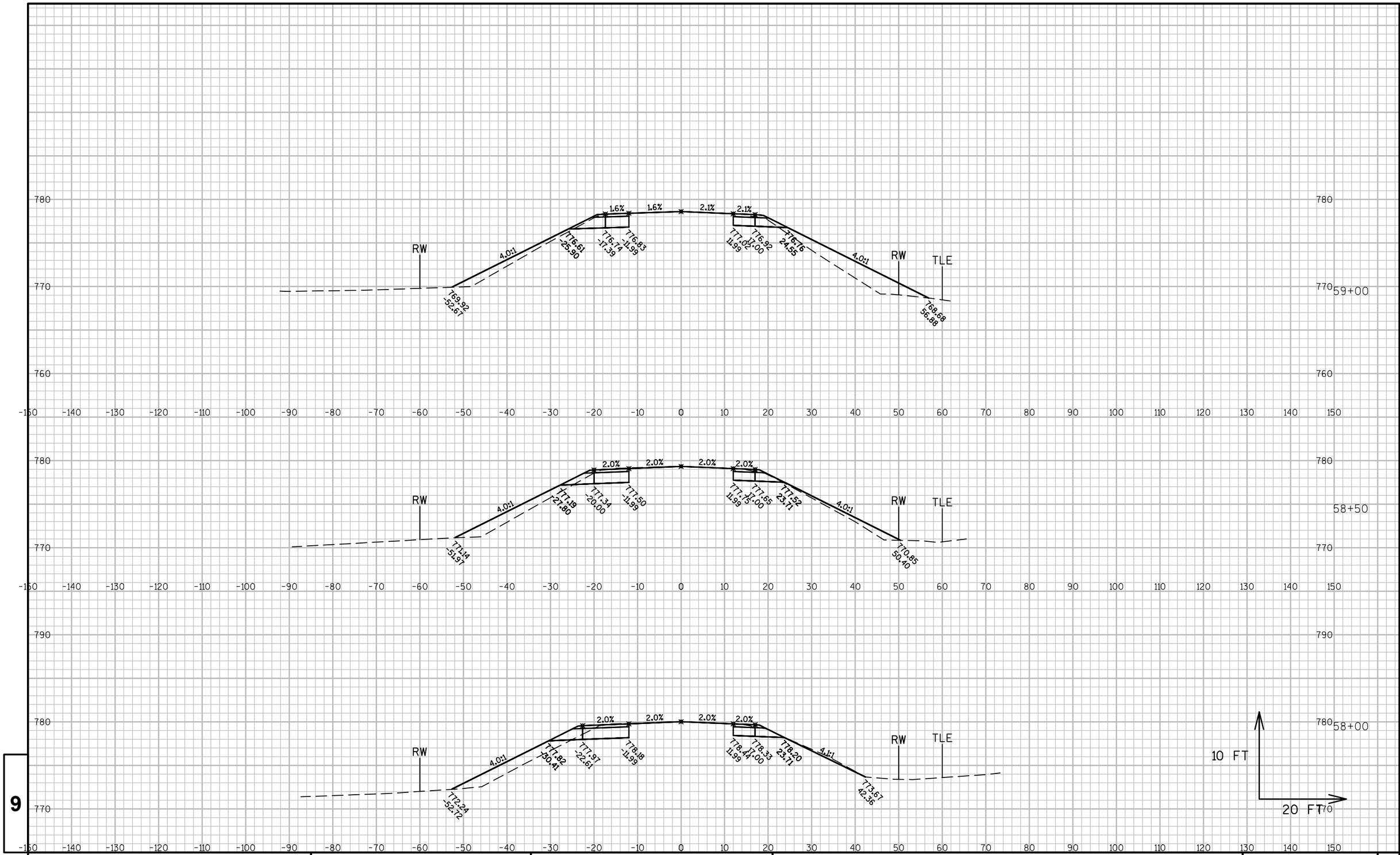
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PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: CTH C	SHEET 745	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090217-XS-CTH C.DWG PLOT DATE : 4/22/2016 2:59 PM PLOT BY : MAAS, JOSEPH A PLOT NAME :

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: CTH C	SHEET 746	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090217-XS-CTH C.DWG PLOT DATE : 4/22/2016 2:59 PM PLOT BY : MAAS, JOSEPH A PLOT NAME :

WISDOT/CADDS SHEET 49

MATCH EXISTING

780 780

RW RW

770 770 59+50

760 760

-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

780 780

RW

1.5% 1.5% 2.1% 2.1%

T76.52 -24.44 | T76.63 -11.00 | T76.71 -11.99 | T76.91 11.99 | T76.77 11.00 | T76.65 22.38

RW TLE

770 770 59+10

10 FT

20 FT

760 760

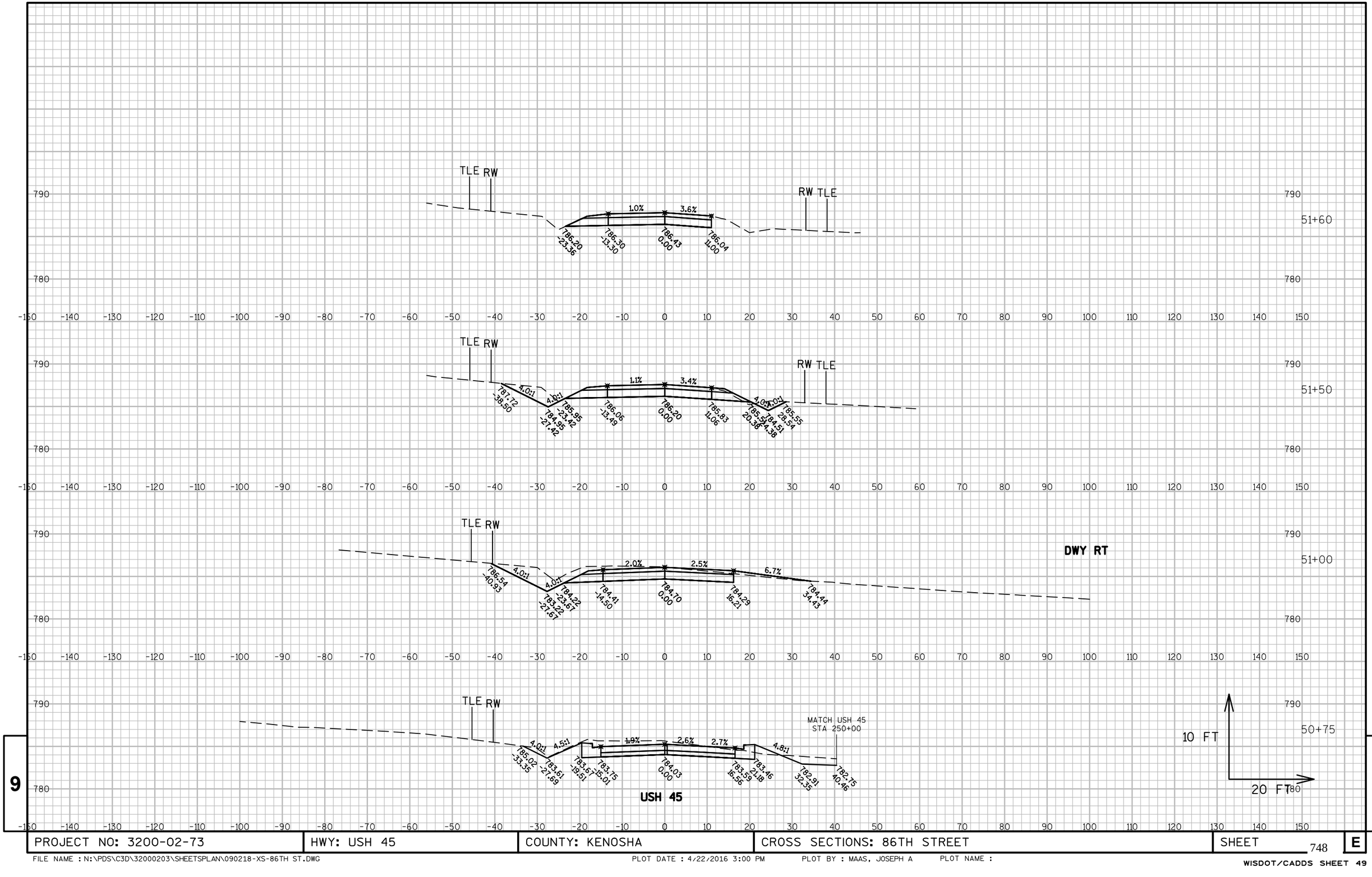
-150 -140 -130 -120 -110 -100 -90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

9 9

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: CTH C	SHEET 747	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090217-XS-CTH C.DWG PLOT DATE : 4/22/2016 2:59 PM PLOT BY : MAAS, JOSEPH A PLOT NAME :

WISDOT/CADDS SHEET 49

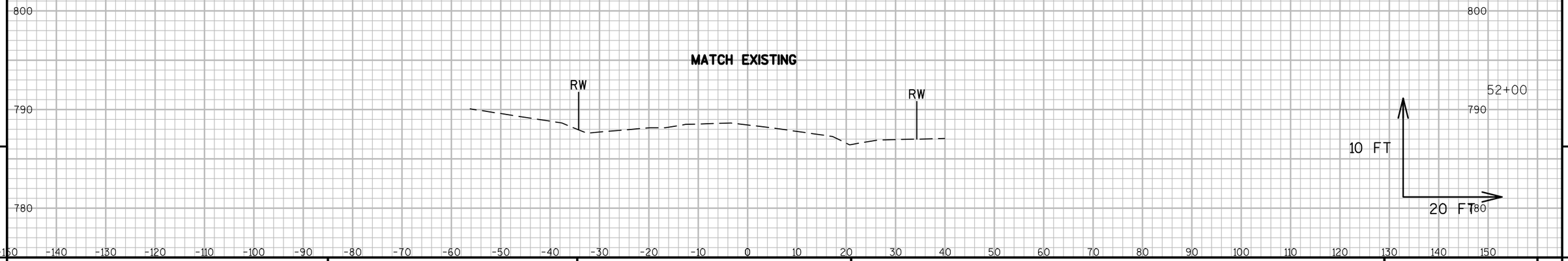


9

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: 86TH STREET	SHEET 748	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090218-XS-86TH ST.DWG PLOT DATE : 4/22/2016 3:00 PM PLOT BY : MAAS, JOSEPH A PLOT NAME :

WISDOT/CADDS SHEET 49



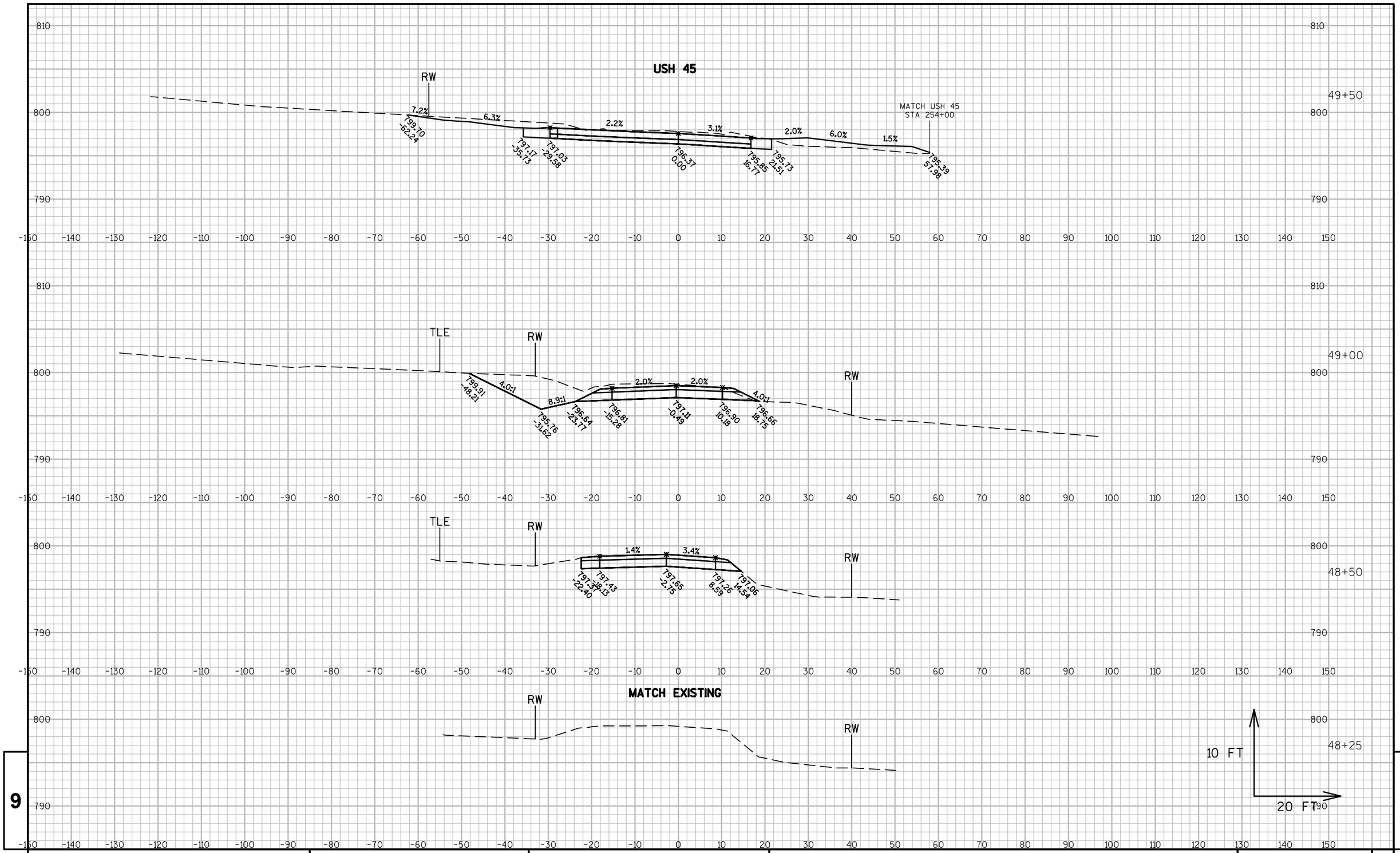
9

9

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: 86TH STREET	SHEET 749	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090218-XS-86TH ST.DWG PLOT DATE : 4/22/2016 3:00 PM PLOT BY : MAAS, JOSEPH A PLOT NAME :

WISDOT/CADDS SHEET 49



PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: CTH AH	SHEET 750	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090219-XS-CTH AH.DWG PLOT DATE : 4/22/2016 3:02 PM PLOT BY : MAAS, JOSEPH A PLOT NAME :

WISDOT/CADDS SHEET 49

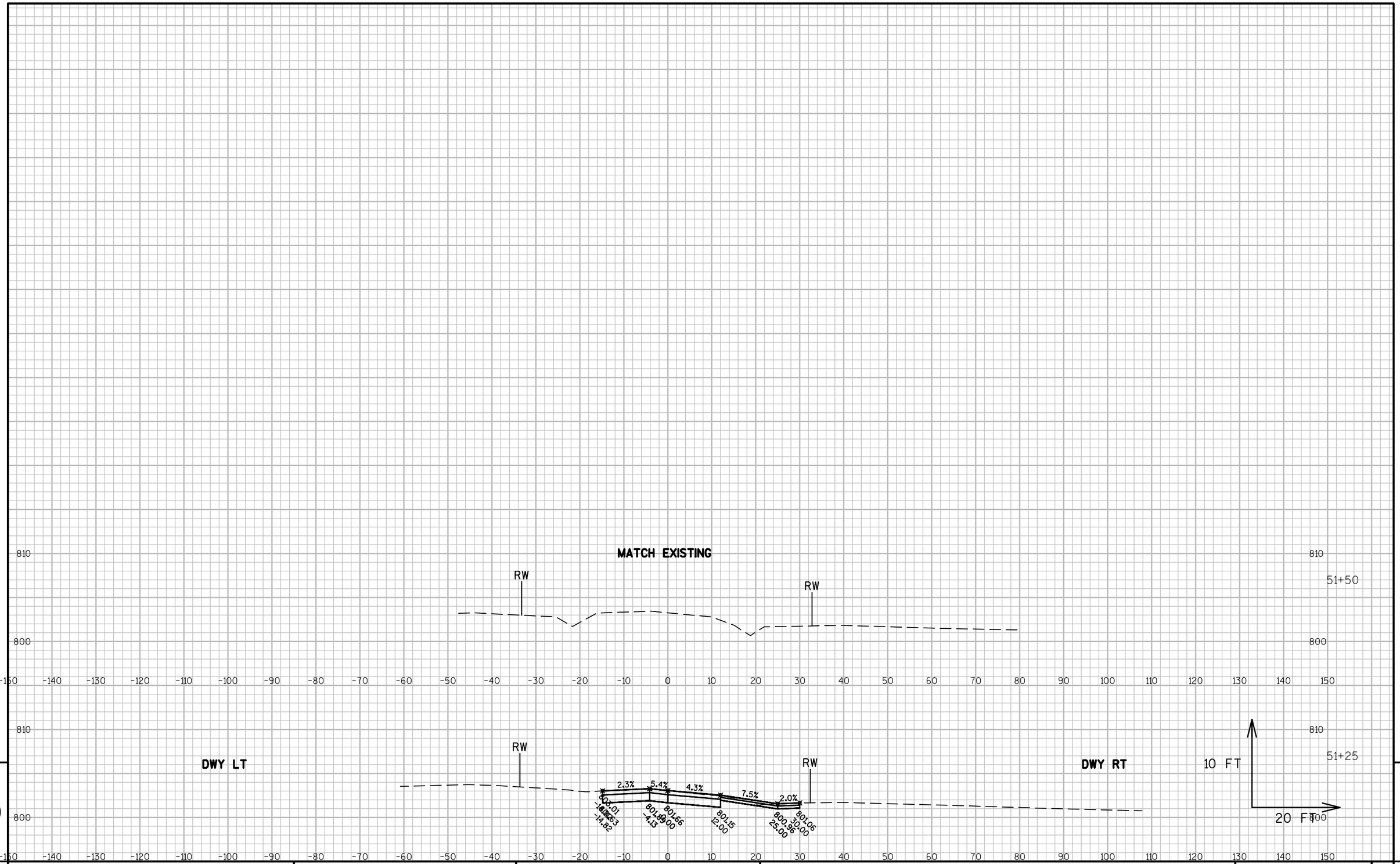
9

9

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: 84TH PLACE	SHEET 751	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090220-XS-84TH PL.DWG PLOT DATE : 4/22/2016 3:03 PM PLOT BY : MAAS, JOSEPH A PLOT NAME :

WISDOT/CADDS SHEET 49

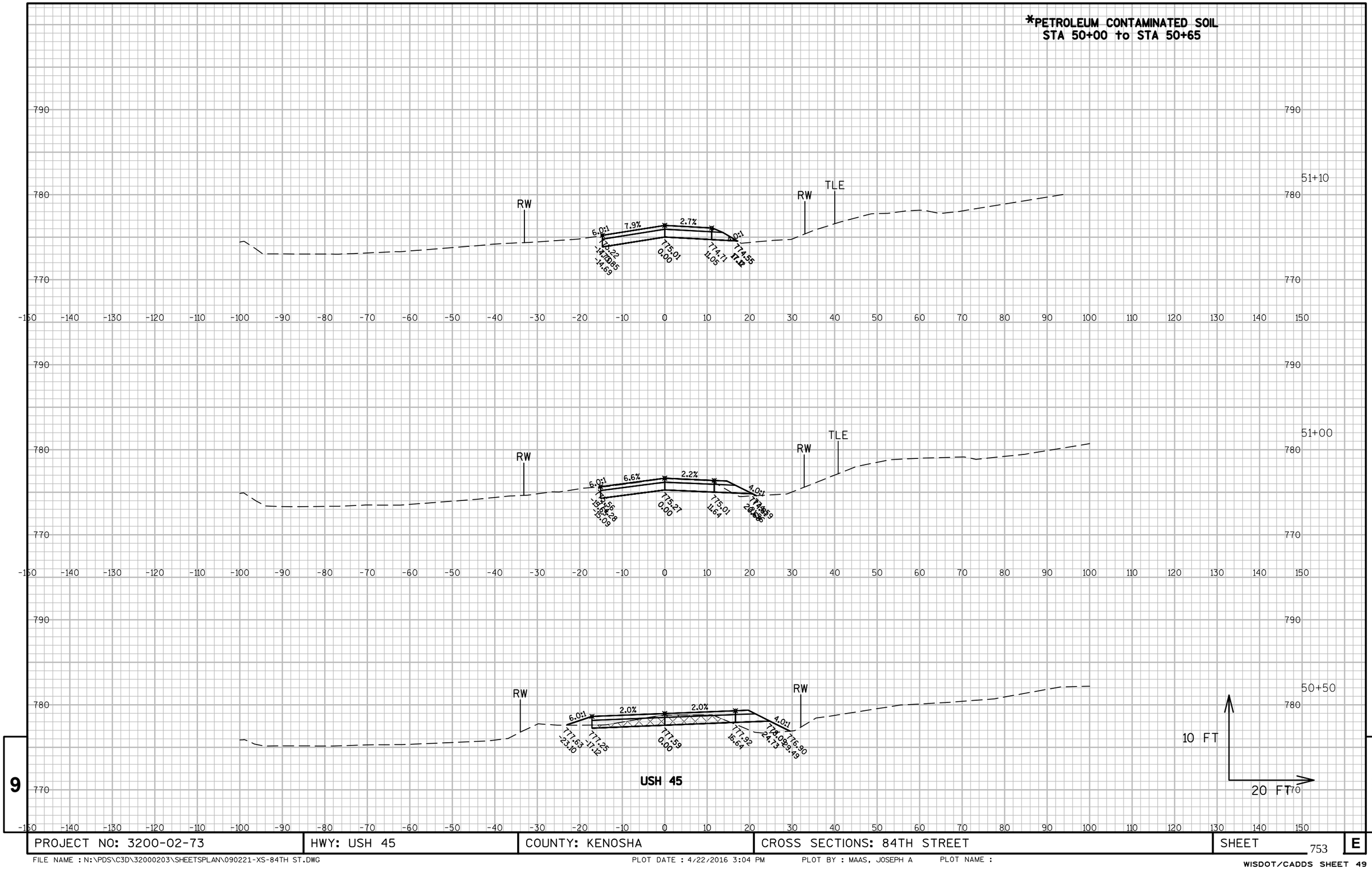


9

9

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: 84TH PLACE	SHEET 752	E

*PETROLEUM CONTAMINATED SOIL
STA 50+00 to STA 50+65



PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: 84TH STREET	SHEET 753	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090221-XS-84TH ST.DWG PLOT DATE : 4/22/2016 3:04 PM PLOT BY : MAAS, JOSEPH A PLOT NAME :

WISDOT/CADDS SHEET 49



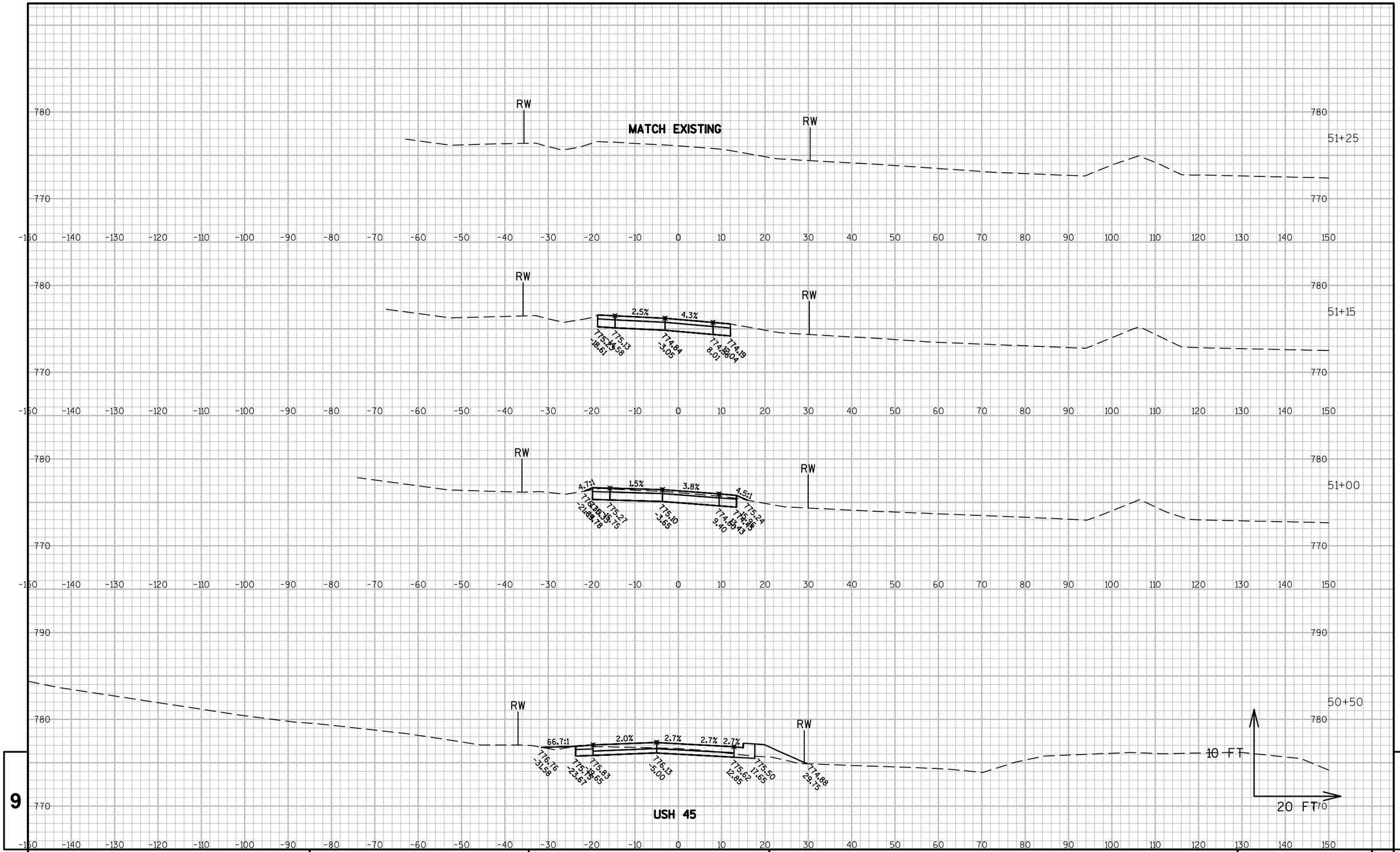
9

9

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: 84TH STREET	SHEET 754	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090221-XS-84TH ST.DWG PLOT DATE : 4/22/2016 3:04 PM PLOT BY : MAAS, JOSEPH A PLOT NAME :

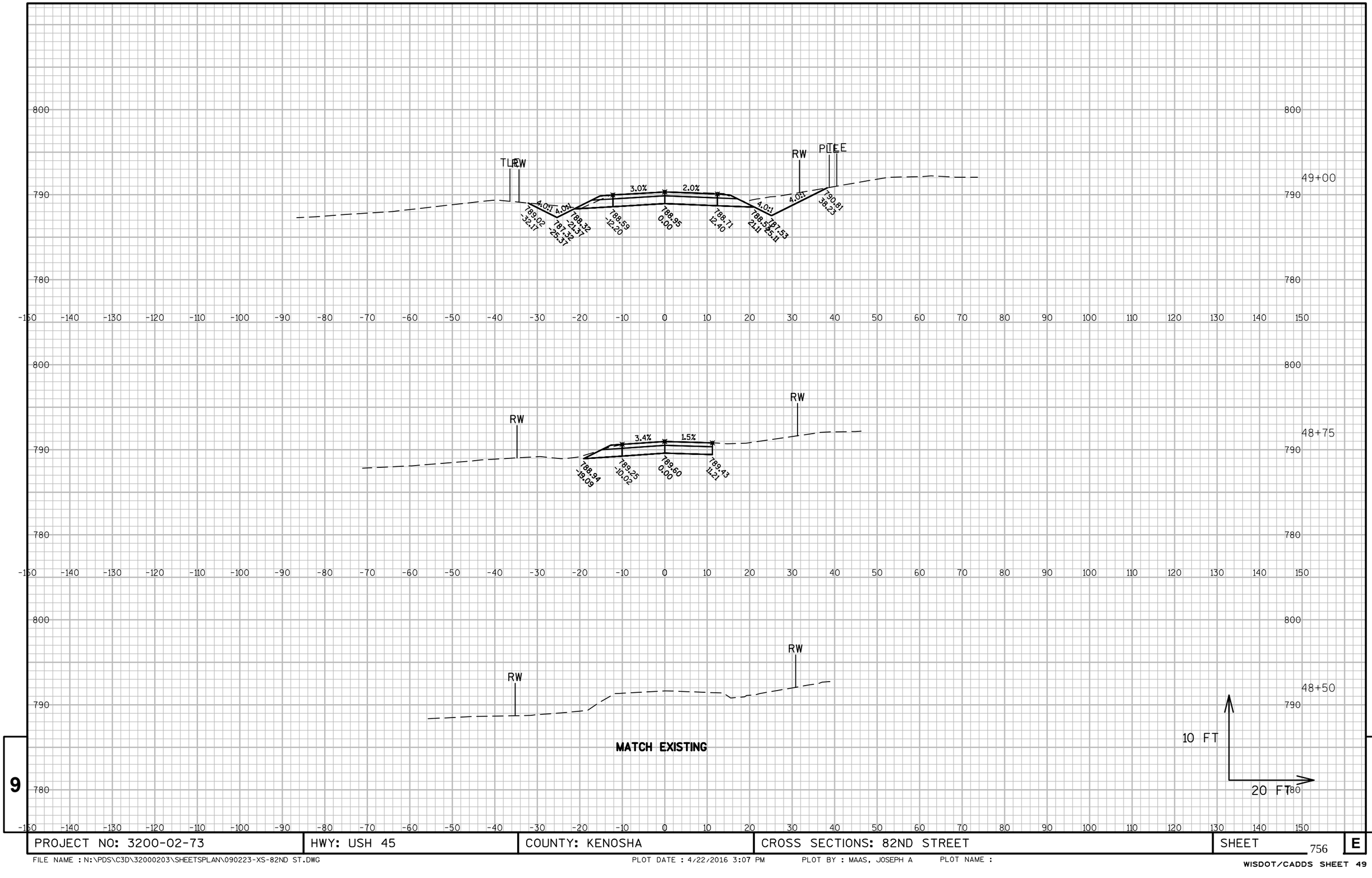
WISDOT/CADDS SHEET 49



PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: 83RD STREET	SHEET 755	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090222-XS-83RD ST.DWG PLOT DATE : 4/22/2016 3:06 PM PLOT BY : MAAS, JOSEPH A PLOT NAME :

WISDOT/CADDS SHEET 49



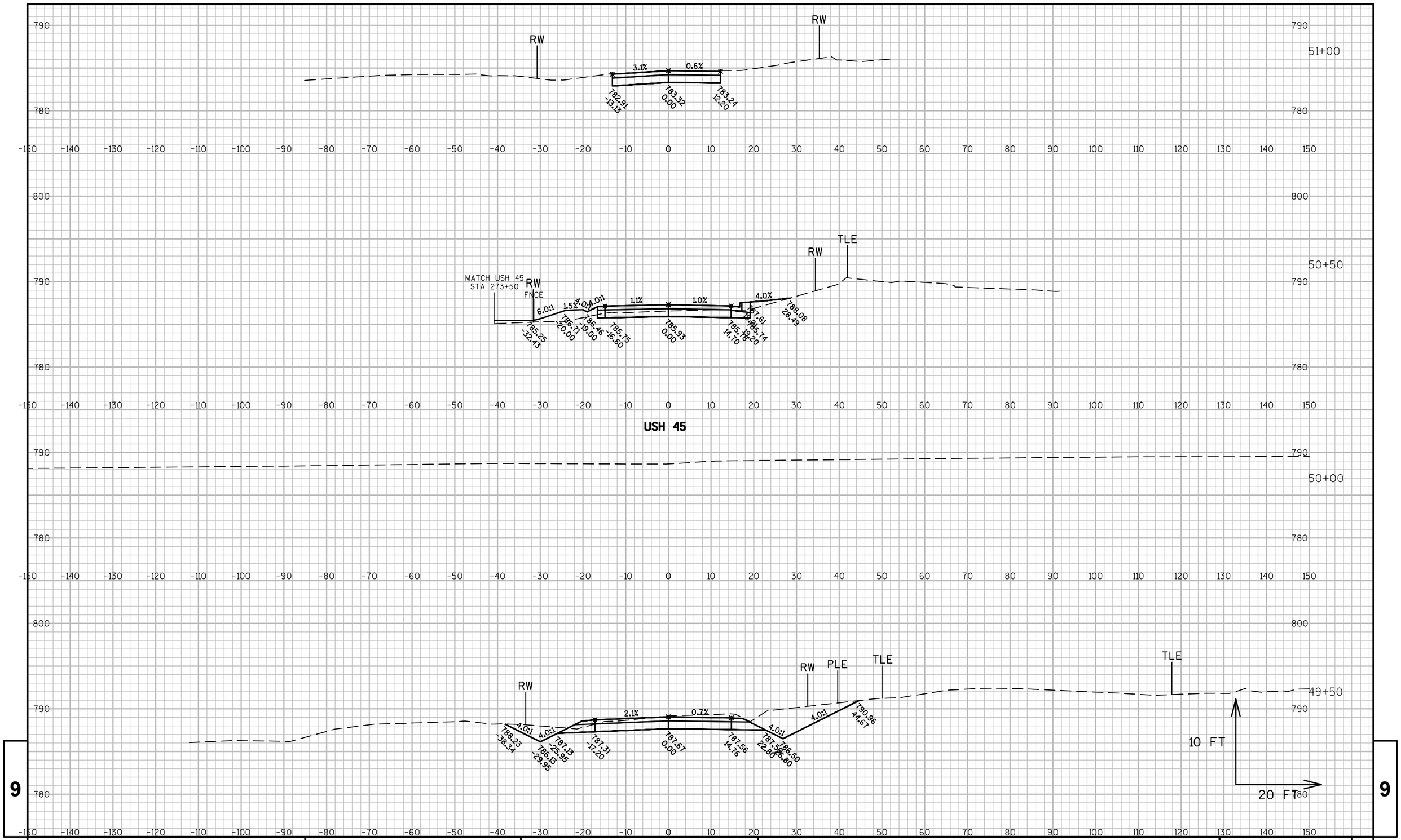
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9

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: 82ND STREET	SHEET 756	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090223-XS-82ND ST.DWG PLOT DATE : 4/22/2016 3:07 PM PLOT BY : MAAS, JOSEPH A PLOT NAME :

WISDOT/CADDS SHEET 49



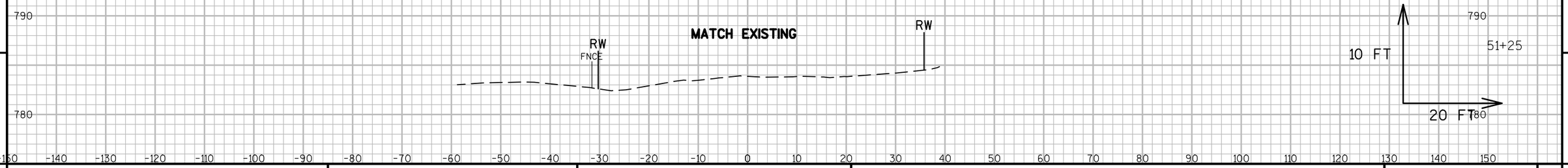
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9

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: 82ND STREET	SHEET 757	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090223-XS-82ND ST.DWG PLOT DATE : 4/22/2016 3:07 PM PLOT BY : MAAS, JOSEPH A PLOT NAME :

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: 82ND STREET	SHEET 758	E

MATCH EXISTING

RW

RW

51+25

RW

RW

TLE

40.5:1

4.8%

0.2%

20.0:1

782.35

51+00

RW

RW

TLE

TLE

RW

RW

4.2:1

4.8%

1.0%

5.5:1

785.52
28.93

50+50

10 FT

20 FT

USH 45

9

9

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: 80TH STREET	SHEET 759	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090224-XS-80TH ST.DWG PLOT DATE : 4/22/2016 3:09 PM PLOT BY : MAAS, JOSEPH A PLOT NAME :

WISDOT/CADDS SHEET 49

MATCH EXISTING

RW

RW

760

750

770

51+00

-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

TLE

RW

RW

TLE

50+90

7:1

1.0%

0.7%

58.6:1

759.33 -36.29

758.88 -35.31

757.03 -30.31

757.34 0.00

757.16 21.70

757.13 32.70

759.00 40.63

TLE

RW

50+50

0.6%

0.6%

760.18 -56.49

758.96 -50.01

756.92 -39.50

756.93 -35.10

756.88 41.11

756.87 47.75

758.73 59.04

758.51 62.78

10 FT

20 FT

9

USH 45

9

PROJECT NO: 3200-02-73	HWY: USH 45	COUNTY: KENOSHA	CROSS SECTIONS: 79TH STREET	SHEET 760	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\090225-XS-79TH ST.DWG PLOT DATE : 4/22/2016 3:10 PM PLOT BY : MAAS, JOSEPH A PLOT NAME :

Notes

Wisconsin Department of Transportation

Dedicated people creating transportation solutions
through innovation and exceptional service.

http://www.dot.wisconsin.gov

WKE

Sept 2016

PROJECT ID: 3200-02-74

WITH: 3200-02-73

COUNTY: KENOSHA

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 = 22

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

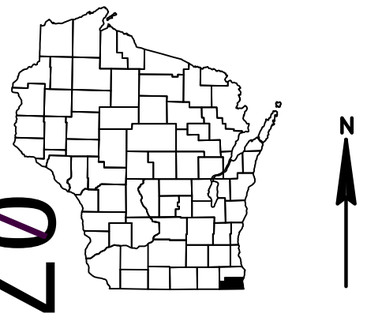
STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
3200-02-74		

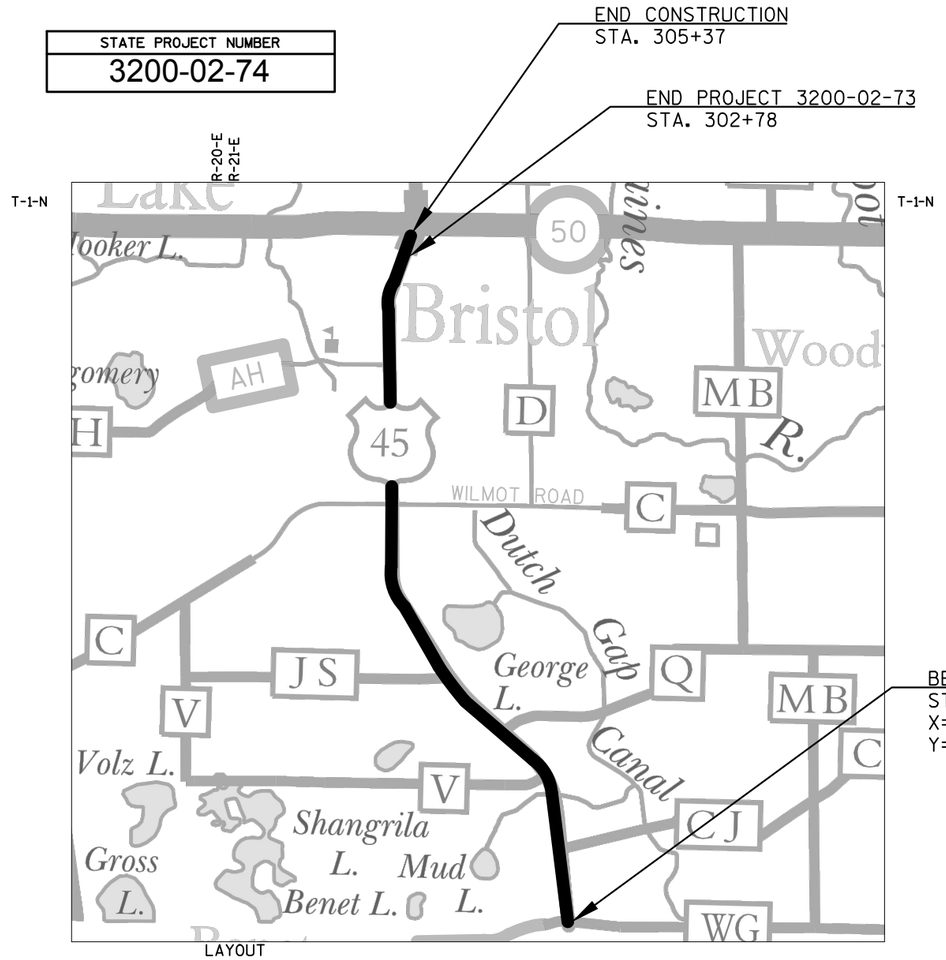
ILLINOIS STATE LINE - MILWAUKEE ROAD

ILLINOIS STATE LINE - STH 50

USH 45
(LANDSCAPING)
KENOSHA COUNTY

STATE PROJECT NUMBER
3200-02-74





LAYOUT

SCALE 0 1 MILE

TOTAL NET LENGTH OF CENTERLINE = 5.359 MI.

DESIGN DESIGNATION			TRANSITIONAL STA 19+83 TO STA 34+00	RURAL STA 34+00 TO STA 249+65	URBAN STA 249+65 TO STA 281+00	TRANSITION STA 281+00 TO STA 302+78
A.A.D.T.	2014	=	7,700	8,700	9,000	9,000
A.A.D.T.	2037	=	9,300	11,000	10,900	10,900
D.H.V.		=	1,090	1,290	1,280	1,280
D.D.		=	59/41	59/41	59/41	59/41
T.		=	18.4%	18.4%	18.4%	18.4%
DESIGN SPEED		=	50 MPH	60 MPH	40 MPH	50 MPH
ESALS		=	2,900,000	2,900,000	3,900,000	3,900,000

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

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COUNTY COORDINATES, KENOSHA COUNTY, NAD83 (2007), IN U.S. SURVEY FEET. VALUES ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	R.A. SMITH NATIONAL
Designer	JOE MAAS
Project Manager	BRIAN PLUEMER
Regional Examiner	REGIONAL EXAMINER
Regional Supervisor	REEM SHAHIN

APPROVED FOR THE DEPARTMENT

DATE: MAY 1. 2016 Brian Pluemer (Signature)

E

STANDARD ABBREVIATIONS

AP	ACCESS POINT
AC	ACRE
ADJ	ADJUST
AECPRC	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE
AH	AHEAD
AC	ASPHALT CEMENT
ASPH	ASPHALTIC
ACP	ASPHALTIC CONCRETE PAVEMENT
AVG	AVERAGE
ADT	AVERAGE DAILY TRAFFIC
BK	BACK
BAD	BASE AGGREGATE DENSE
BM	BENCHMARK
CB	CATCH BASIN
C/L	CENTER LINE
C/L CONST	CENTER LINE CONSTRUCTION
Δ	CENTRAL ANGLE OR DELTA
CL	CLASS
CONC	CONCRETE
CONST	CONSTRUCTION
CMCP	CORRUGATED METAL CULVERT PIPE
CTH	COUNTY TRUNK HIGHWAY
CABC	CRUSHED AGGREGATE BASE COURSE
CFS	CUBIC FEET PER SECOND
CY	CUBIC YARD
CP	CULVERT PIPE
CPCS	CULVERT PIPE CORRUGATED STEEL
CPRC	CULVERT PIPE REINFORCED CONCRETE
CPRCHE	CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL
C & G	CURB AND GUTTER
D	DEGREE OF CURVE
DHV	DESIGN HOUR VOLUME
DIA	DIAMETER
DD	DIRECTIONAL DISTRIBUTION
DWY	DRIVEWAY
E	EAST
X	EAST GRID COORDINATE
EB	EASTBOUND
EL	ELEVATION
ESALS	EQUIVALENT SINGLE AXLE LOADS
EXC	EXCAVATION
EBS	EXCAVATION BELOW SUBGRADE
EXIST	EXISTING
FPS	FEET PER SECOND
FERT	FERTILIZE
FE	FIELD ENTRANCE
FL	FLOW LINE
FT	FOOT
GN	GRID NORTH
HES	HIGH EARLY STRENGTH
HP HW	HIGH POINT
HW	HIGH WATER
HMA	HOT MIX ASPHALT
CWT	HUNDREDWEIGHT
HWD	HYDRANT
INL	INLET
ID	INSIDE DIAMETER
I	INTERSECTION ANGLE
INV	INVERT
IP	IRON PIPE OR PIN
JT	JOINT
LT	LEFT
LT	LENGTH OF CURVE
LF	LINEAR FOOT
LP	LOW POINT
LS	LUMP SUM
MH	MANHOLE
MAX	MAXIMUM
Mgal	MEGAGALLON
MPH	MILES PER HOUR
MIN	MINIMUM
MON	MONUMENT
NOM	NOMINAL
NC	NORMAL CROWN
N	NORTH
Y	NORTH GRID COORDINATE
NB	NORTHBOUND
NO	NUMBER
OPT	OPTIONAL
OD	OUTSIDE DIAMETER
PAVT	PAVEMENT
PLE	PERMANENT LIMITED EASEMENT
PACS	PIPE ARCH CORRUGATED STEEL
PT	POINT
PC	POINT OF CURVATURE
PI	POINT OF INTERSECTION
PT	POINT OF TANGENCY
PVC	POINT OF VERTICAL CURVE
PVI	POINT OF VERTICAL INTERSECTION
PVT	POINT OF VERTICAL TANGENCY
PVC	POLYVINYL CHLORIDE
PCC	PORTLAND CEMENT CONCRETE
LB	POUND
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PE	PRIVATE ENTRANCE
PGL	PROFILE GRADE LINE
PL	PROPERTY LINE
Q100	100-YEAR FLOW RATE
R	RADIUS
RR	RAILROAD
R	RANGE
R/L	R/L
REINF	REINFORCING OR REINFORCEMENT
REQD	REQUIRED
RT	RIGHT
R/W	RIGHT-OF-WAY
RD	ROAD
RDWY	ROADWAY
SEC	SECTION
SHLDR	SHOULDER
S	SOUTH
SB	SOUTHBOUND
SQ	SQUARE
SF	SQUARE FEET
SW	SIDEWALK
SY	SQUARE YARD
SDD	STANDARD DETAIL DRAWINGS
STH	STATE TRUNK HIGHWAYS
STA	STATION
SS	STORM SEWER
SSPRC	STORM SEWER PIPE REINFORCED CONCRETE
ST	STREET
STR	STRUCTURE OR STRUCTURAL
SEC	SUPERELEVATION
T	TANGENT
TEMP	TEMPORARY
TI	TEMPORARY INTEREST
TLE	TEMPORARY LIMITED EASEMENT
t	TON
T	TOWN
T/L	TRANSIT LINE
T	TRUCKS (PERCENT OF)
TYP	TYPICAL
USH	UNITED STATES HIGHWAY
VAR	VARIABLE
V	VELOCITY OF DESIGN SPEED
VERT	VERTICAL
VC	VERTICAL CURVE
VOL	VOLUME
WM	WATERMAIN
WV	WATER VALVE
W	WEST
WB	WESTBOUND
YD	YARD

GENERAL NOTES

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

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

TREE LOCATIONS ARE APPROXIMATE. EXACT LOCATIONS TO BE DETERMINED BY THE VILLAGE OF BRISTOL ADMINISTRATOR RANDY KERKMAN AND THE PROPERTY OWNER.

CONTRACTOR MUST CONTACT THE PROJECT ENGINEER AND THE KENOSHA COUNTY SURVEYOR JOHN WASHBURN, (262) 547-6722 EXT. 295, AT LEAST TWO WEEKS PRIOR TO WORK NEAR ANY PUBLIC SURVEY MONUMENT.

ORDER OF SECTION 2 SHEETS

PROJECT OVERVIEW
PLANTING PLAN

2

2

UTILITY CONTACTS

WE ENERGIES – GAS
SEND ALL CORRESPONDENCE TO:
LaTROY BRUMFIELD
WE ENERGIES
333 W EVERETT ST A299
MILWAUKEE, WI 53203
PHONE: (414) 221-5617

CONSTRUCTION FIELD CONTACT:
CHRIS DeGRAVE
7815 NORTHWESTERN AVE
RACINE, WI 53406
PHONE: (262) 886-7018

WE ENERGIES – ELECTRIC
SEND ALL CORRESPONDENCE TO:
LaTROY BRUMFIELD
WE ENERGIES
333 W EVERETT ST A299
MILWAUKEE, WI 53203
PHONE: (414) 221-5617

CONSTRUCTION FIELD CONTACT:
PAM RAKAUSKAS
500 S 166TH STREET
WEST ALLIS, WI 53214
PHONE: (414) 944-5549

ATC MANAGEMENT, INC.
SEND ALL CORRESPONDENCE TO:
MIKE OLSEN
ATC MANAGEMENT, INC.
801 O'KEEFE RD
PO BOX 6113
DEPERE, WI 54115-6113
PHONE: (920) 338-6582

CONSTRUCTION FIELD CONTACT:
TONY MARCINIAK
5303 FEN OAK DRIVE
MADISON, WISCONSIN 53718
PHONE: (262) 506-6814

FRONTIER - WISCONSIN
SEND ALL CORRESPONDENCE TO:
ROBERT CHURCH
FRONTIER - WISCONSIN
2222 W WISCONSIN STREET
PORTAGE, WI 53591
PHONE: (608) 742-1817

CONSTRUCTION FIELD CONTACT:
ED STIEBER
100 COMMUNICATION DRIVE
SUN PRAIRIE, WI 53590
PHONE: (608) 837-1410

SANITARY/WATER
RANDALL KERKMAN
VILLAGE OF BRISTOL
19801 83RD STREET
BRISTOL, WI 53104
PHONE: (262) 857-2368

MIDWEST FIBER NETWORKS
RICHARD TRGOVEC
MIDWEST FIBER NETWORKS
6070 NORTH FLINT ROAD
GLENDALE, WI 53209
PHONE: (414) 459-3554

TIME WARNER CABLE
STEVE CRAMER
TIME WARNER CABLE
1320 N MARTIN LUTHER KING JR DR
MILWAUKEE, WI 53212
PHONE: (414) 277-4045

OTHER CONTACTS

WISDOT REGION CONTACT
BRIAN PLUEMER
WISDOT SOUTHEAST REGION
WAUKESHA OFFICE
141 NW BARSTOW ST
WAUKESHA, WI 53187
PHONE: (262) 548-6721

WISDOT SIGNALS
141 NW BARSTOW
PO BOX 798
WAUKESHA, WI 53187
PHONE: (414) 750-2605

WISDOT LIGHTING
ERIC PEREA
141 NW BARSTOW
PO BOX 798
WAUKESHA, WI 53187
PHONE: (262) 574-5422

WISDNR CONTACT
CRAIG WEBSTER
DNR LIAISON
141 NW BARSTOW ST
WAUKESHA, WI 53187
PHONE: (262) 574-2141

WISDOT ELECTRICAL FIELD UNIT
935 S 60TH ST
WEST ALLIS, WI 53214
PHONE: (414) 266-1170

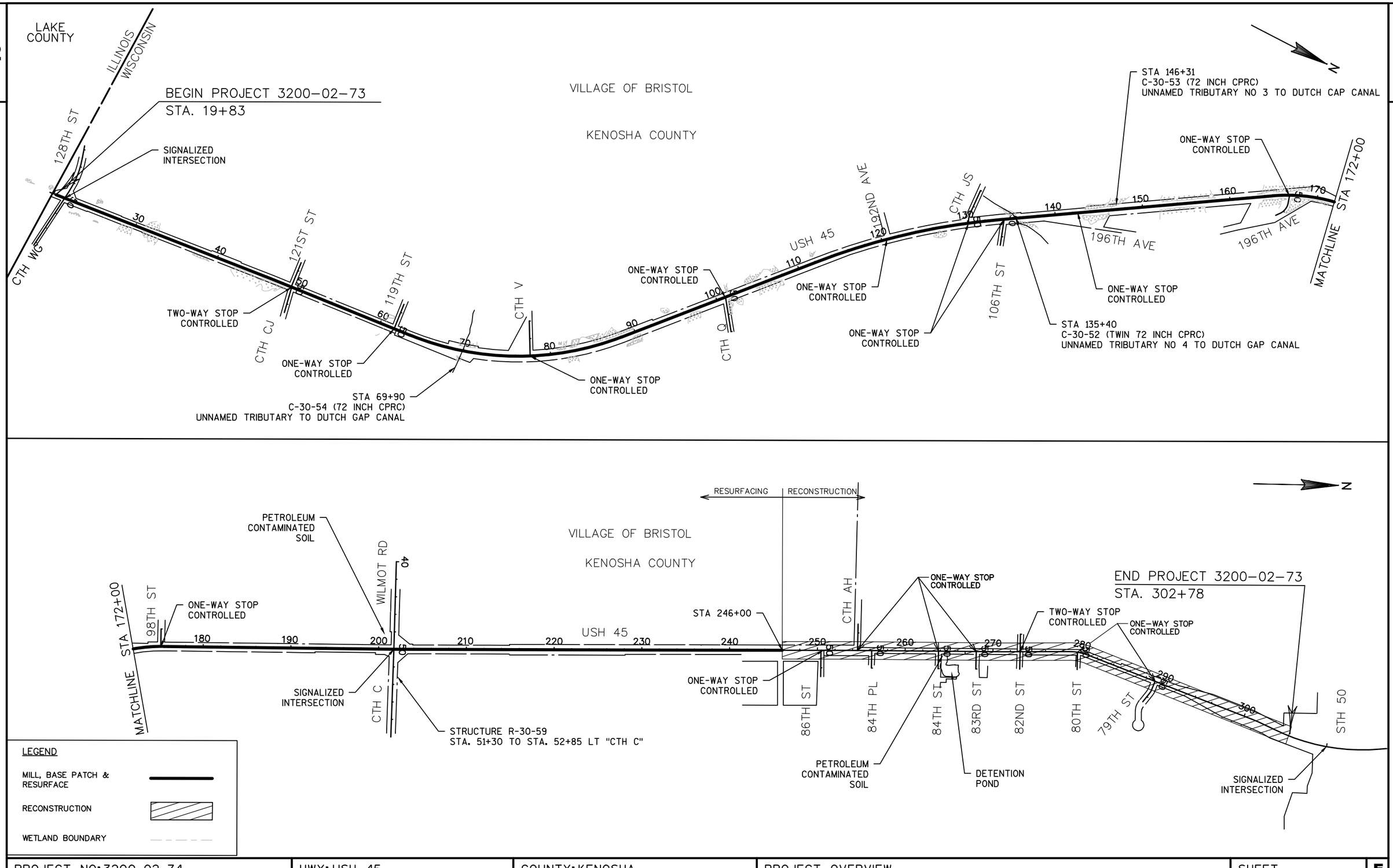
ILLINOIS DOT
CORY JUCIUS
IDOT DISTRICT 1
201 CENTER CT
SCHAUMBURG, IL 60196-1096
PHONE: (847) 705-4411

VILLAGE OF BRISTOL
RANDALL KERKMAN
VILLAGE OF BRISTOL
8101 195TH AVENUE
PO BOX 187
BRISTOL, WI 53104
PHONE: (262) 857-2368

KENOSHA COUNTY
CLEMENT ABONGWA
KENOSHA COUNTY
19600 75TH ST, SUITE 122-1
BRISTOL, WI 53104
PHONE: (262) 857-1872

SEWRPC
JOHN WASHBURN
SEWRPC (KENOSHA COUNTY SURVEYOR)
W239 N1812 ROCKWOOD DRIVE
WAUKESHA, WI 53187
PHONE: (262) 547-5722, EXT. 295

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



PROJECT NO: 3200-02-74	HWY: USH 45	COUNTY: KENOSHA	PROJECT OVERVIEW	SHEET 4	E

FILE NAME : N:\PDS\C3D\CAD\32000203\74\020201_PO.DWG
LAYOUT NAME - ****
PLOT DATE : 4/29/2016 6:25 AM PLOT BY : MAAS, JOSEPH A PLOT NAME : PLOT SCALE : 1 IN:1000 FT
WISDOT/CADDS SHEET 42

2

PLANT CODE	COMMON NAME	SCIENTIFIC NAME	AVG. MATURE HEIGHT	AVG. MATURE SPREAD	SIZE WHEN PLANTED	ROOT ZONE MODE	MINIMUM SIZE				FERT. PACK. REQ'D	MULCH RING DIA.
							MIN. BALL OR POT SIZE		MIN. HOLE SIZE			
							MIN. CONT. SIZE	MIN. CONT. DEPTH	MIN. HOLE DIA.	MIN. HOLE DEPTH		
LARGE GROWING DECIDUOUS TREES												
AB	Autumn Blaze Maple	Acer rubrum 'Autumn Blaze'	50'	40'	2" Cal.	B&B	24"	14"	48"	14"	4	60"
PS	Pacific Sunset Maple	Acer truncatum x A. platanoides 'Warrenred'	30-35'	25'	2.5" Cal.	B&B	28"	17"	52"	17"	4	64"
OB	Ohio Buckeye	Aesculus glabra	20-40'	20-35'	2.5" Cal.	B&B	28"	17"	52"	17"	4	64"
HB	Hackberry	Celtis occidentalis 'Chicagoland'	55'	40-55'	2" Cal.	B&B	24"	14"	48"	14"	4	60"
SM	Honeylocust	Gleditsia tricanthos inermis 'Shademaster'	45'	35'	3" Cal.	B&B	32"	19"	56"	19"	--	68"
SH	Honeylocust	Gleditsia tricanthos inermis 'Skyline'	45'	35'	2" Cal.	B&B	24"	14"	48"	14"	4	60"
KC	Kentucky Coffee Tree (seedless)	Gymnocladus dioicus 'Espresso'	65'	40'	1.5" Cal.	B&B	20"	12"	44"	12"	3	56"
BO	Bur Oak	Quercus macrocarpa	75'	75'	2" Cal.	B&B	24"	14"	48"	14"	4	60"
CO	Chinkapin Oak	Quercus muehlenbergii	50'	55'	2.5" Cal.	B&B	28"	17"	52"	17"	4	64"
RO	Red Oak	Quercus rubra	70'	60-75'	2" Cal.	B&B	24"	14"	48"	14"	4	60"
RL	Redmond Linden	Tilia Americana 'Redmond'	70'	45'	3" Cal.	B&B	32"	19"	56"	19"	4	68"
NH	New Horizon Elm	Ulmus 'New Horizon'	50-60'	40'	2.5" Cal.	B&B	28"	17"	52"	17"	4	64"
PE	Pioneer Elm	Ulmus parvifolia x U. carpinifolia 'Pioneer'	50'	50'	2.5" Cal.	B&B	28"	17"	52"	17"	4	64"
MEDIUM GROWING DECIDUOUS TREES												
WK	Winter King Hawthorn	Crataegus viridis 'Winter King'	25-35'	25-35'	2" Cal.	B&B	24"	14"	48"	14"	4	60"
IW	Ironwood	Ostrya virginiana	15-30'	12-15'	1.5" Cal.	B&B	20"	12"	44"	12"	3	56"
SMALL GROWING DECIDUOUS TREES												
HG	Flowering Crabapple	Malus 'Harvest Gold'	25'	18'	2" Cal.	B&B	24"	14"	48"	14"	3	60"
PF	Flowering Crabapple	Malus 'Prairiefire'	20'	20'	2" Cal.	B&B	24"	14"	48"	14"	3	60"
RR	Flowering Crabapple	Malus 'Royal Raindrops' 'JFS-KW5 PP 14375'	20'	15'	2" Cal.	B&B	24"	14"	48"	14"	3	60"
AL	Allegheny Serviceberry	Amelanchier laevis	15-25'	15'	1.5" Cal.	B&B	20"	15"	32"	16"	3	Bed
JTL	Japanese Tree Lilac	Syringa Reticulata 'Ivory Silk'	25'	20'	2" Cal.	B&B	24"	14"	44"	14"	3	Bed

B&B: Ball & Burlap

DATE 13JUL16 E S T I M A T E O F Q U A N T I T I E S

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	3200-02-74 QUANTITY
1340	619.1000	Mobilization	EACH	0.010	0.010
1630	632.0101	Trees (species) (size) (root) 01. Autumn Blaze Maple, B&B , 2-Inch Cal (AB)	EACH	8.000	8.000
1640	632.0101	Trees (species) (size) (root) 02. Pacific Sunset Maple, B&B, 2.5-Inch Cal (PS)	EACH	1.000	1.000
1650	632.0101	Trees (species) (size) (root) 03. Ohio Buckeye, B&B, 2.5-Inch Cal (OB)	EACH	3.000	3.000
1660	632.0101	Trees (species) (size) (root) 04. Hackberry, B&B, 2-Inch Cal (HB)	EACH	13.000	13.000
1670	632.0101	Trees (species) (size) (root) 05. Honeylocust, B&B, 3-Inch Cal (SM)	EACH	8.000	8.000
1680	632.0101	Trees (species) (size) (root) 06. Honeylocust, B&B, 2-Inch Cal (SH)	EACH	4.000	4.000
1690	632.0101	Trees (species) (size) (root) 07. Kentucky Coffee, B&B, 1.5-Inch Cal (KC)	EACH	3.000	3.000
1700	632.0101	Trees (species) (size) (root) 08. Bur Oak, B&B, 2-Inch Cal (BO)	EACH	3.000	3.000
1710	632.0101	Trees (species) (size) (root) 09. Chinkapin Oak, B&B, 2.5-Inch Cal (CO)	EACH	2.000	2.000
1720	632.0101	Trees (species) (size) (root) 10. Red Oak, B&B, 2-Inch Cal (RO)	EACH	8.000	8.000
1730	632.0101	Trees (species) (size) (root) 11. Redmond Linden, B&B, 3-Inch Cal (RL)	EACH	11.000	11.000
1740	632.0101	Trees (species) (size) (root) 12. New Horizon Elm, B&B, 2.5-Inch Cal (NH)	EACH	16.000	16.000
1750	632.0101	Trees (species) (size) (root) 13. Pioneer Elm, B&B, 2.5-Inch Cal (PE)	EACH	13.000	13.000
1760	632.0101	Trees (species) (size) (root) 14. Winter King Hawthorn, B&B, 2-Inch Cal (WK)	EACH	10.000	10.000
1770	632.0101	Trees (species) (size) (root) 15. Ironwood, B&B, 1.5-Inch Cal (IW)	EACH	12.000	12.000
1780	632.0101	Trees (species) (size) (root) 16. Flowering Crabapple, Harvest Gold, B&B, 2-Inch Cal (HG)	EACH	14.000	14.000
1790	632.0101	Trees (species) (size) (root) 17. Flowering Crabapple, Prairiefire, B&B, 2-Inch Cal (PF)	EACH	9.000	9.000
1800	632.0101	Trees (species) (size) (root) 18. Flowering Crabapple, Royal Raindrops B&B, 2-Inch Cal (RR)	EACH	6.000	6.000
1810	632.0101	Trees (species) (size) (root) 19. Allegheny Serviceberyy, B&B, 1.5-Inch Cal (AL)	EACH	2.000	2.000
1820	632.0101	Trees (species) (size) (root) 20. Japanese Tree Lilac, B&B, 2-Inch Cal (JTL)	EACH	14.000	14.000
1830	632.9101	Landscape Planting Surveillance and Care Cycles	EACH	25.000	25.000

3

TREES SCHEDULE 1

STATION	-	STATION	SEE PLAN SHEET FOR TREE LOCATION	632.0101.01 01. AUTUMN BLAZE MAPLE, B&B, 2-INCH CAL (AB)* EACH	632.0101.02 02. PACIFIC SUNSET MAPLE, B&B, 2.5-INCH CAL (PS)* EACH	632.0101.03 03. OHIO BUCKEY, B&B, 2.5-INCH CAL (OB)* EACH	632.0101.04 04. HACKBERRY, B&B, 2-INCH CAL (HB)* EACH	632.0101.05 05. HONEYLOCUST, B&B, 3-INCH CAL (SM)* EACH	632.0101.06 06. HONEYLOCUST, B&B, 2-INCH CAL (SH)* EACH	632.0101.07 07. KENTURCKY COFFEE, B&B, 1.5-INCH CAL (KC)* EACH	632.0101.08 08. BUR, OAK, B&B, 2-INCH CAL (BO)* EACH	632.0101.09 09. CHINKAPIN OAK, B&B, 2.5-INCH (CO)* EACH	632.0101.10 10. RED OAK, B&B, 2-INCH CAL (RO)* EACH
				TREES (SPECIES, ROOT, SIZE)									
246+00	-	251+00	1 OF 11 *	--	1	--	--	--	--	--	--	--	--
251+00	-	256+50	2 OF 11 *	--	--	--	--	--	--	--	--	--	--
256+50	-	262+25	3 OF 11 *	--	--	--	--	--	--	--	--	2	2
262+25	-	267+50	4 OF 11 *	--	--	--	4	--	--	--	--	--	--
267+50	-	272+50	5 OF 11 *	--	--	--	1	--	2	--	--	--	--
272+50	-	278+00	6 OF 11 *	--	--	--	--	--	2	--	--	--	2
278+00	-	283+50	7 OF 11 *	2	--	--	--	1	--	--	3	--	--
283+50	-	288+50	8 OF 11 *	--	--	--	--	1	--	--	--	--	4
288+50	-	293+75	9 OF 11 *	2	--	--	--	--	--	3	--	--	--
293+75	-	299+00	10 OF 11 *	4	--	3	8	--	--	--	--	--	--
299+00	-	305+00	11 OF 11 *	--	--	--	--	6	--	--	--	--	--
			TOTAL 0010	8	1	3	13	8	4	3	3	2	8

TREES SCHEDULE 2

STATION	-	STATION	SEE PLAN SHEET FOR TREE LOCATION	632.0101.11 11. REDMOND LINDEN, B&B, 3-INCH CAL (RL)* EACH	632.0101.12 12. NEW HORIZON ELM, B&B, 2.5-INCH CAL (NH)* EACH	632.0101.13 13. POINEER ELM, B&B, 2.5-INCH CAL (PE)* EACH	632.0101.14 14. WINTER KING HAWTHORN, B&B, 2-INCH CAL (WK)* EACH	632.0101.15 15. IRONWOOD, B&B, 1.5-INCH CAL (IW)* EACH	632.0101.16 16. FLOWERING CRABAPPLE, HARVEST GOLD, B&B, 2-INCH CAL (HG)* EACH	632.0101.17 17. FLOWERING CRABAPPLE, PRAIRIEFIRE, B&B, 2-INCH CAL (PF)* EACH	632.0101.18 18. FLOWERING CRABAPPLE, ROYAL RAINDROPS, B&B, 2-INCH CAL (RR)* EACH	632.0101.19 19. ALLEGHENY SERVICEBERRY, B&B, 1.5-INCH CAL (AL)* EACH	632.0101.20 20. JAPANESE TREE LILAC, B&B, 2-INCH CAL (JTL)* EACH
				TREES (SPECIES, ROOT, SIZE)									
246+00	-	251+00	1 OF 11 *	--	--	--	--	--	--	--	--	--	--
251+00	-	256+50	2 OF 11 *	--	--	--	--	--	1	--	2	--	1
256+50	-	262+25	3 OF 11 *	--	--	2	--	--	--	3	2	--	4
262+25	-	267+50	4 OF 11 *	--	--	1	--	--	1	1	--	--	2
267+50	-	272+50	5 OF 11 *	--	--	--	2	--	--	--	2	--	3
272+50	-	278+00	6 OF 11 *	--	--	--	--	--	5	3	--	--	4
278+00	-	283+50	7 OF 11 *	4	-	--	5	--	1	--	--	2	--
283+50	-	288+50	8 OF 11 *	3	--	--	3	10	--	--	--	--	--
288+50	-	293+75	9 OF 11 *	--	--	--	--	2	6	2	--	--	--
293+75	-	299+00	10 OF 11 *	4	6	--	--	--	--	--	--	--	--
299+00	-	305+00	11 OF 11 *	--	10	10	--	--	--	--	--	--	--
			TOTAL 0010	11	16	13	10	12	14	9	6	2	14

NOTES:

* SEE PLANS FOR PROPOSED TREE LOCATIONS. EXACT LOCATIONS TO BE DETERMINED AND/OR ADJUSTED TO FIT FIELD CONDITIONS BY THE FIELD ENGINEER AND RANDY KERKMAN FROM THE VILLAGE OF BRISTOL.

LANDSCAPE PLANTING SURVEILLANCE AND CARE

STATION	-	STATION	FROM	-	TO	632.9101 EACH
246+00	-	305+00	5/15/2018	-	10/15/2018	10
246+00	-	305+00	5/15/2019	-	10/15/2019	10
			UNDISTRIBUTED			5
						25

LEGEND

RR	FLOWERING CRABAPPLE	SH	HONEYLOCUST
HG	FLOWERING CRABAPPLE	WK	WINTER KING HAWTHORN
JTL	JAPANESE TREE LILAC	BO	BUR OAK
PS	PACIFIC SUNSET MAPLE	AB	AUTUMN BLAZE MAPLE
AL	ALLEGHENY SERVICEBERRY	RL	REDMOND LINDEN
CO	CHINKAPIN OAK	SM	HONEYLOCUST
RO	RED OAK	IW	IRONWOOD
PE	PIONEER ELM	KC	KENTUCKY COFFEE TREE (SEEDLESS)
HB	HACKBERRY	NH	NEW HORIZON ELM
PF	FLOWERING CRABAPPLE	OB	OHIO BUCKEYE

SMALL GROWING DECIDUOUS TREE

MEDIUM GROWING DECIDUOUS TREE

LARGE GROWING DECIDUOUS TREE

N

WETLAND BOUNDARY

CHAUCER WOODS HOMEOWNERS ASSN

WETLAND BOUNDARY

SAVE TREE

SAVE TREE

R/W

SLOPE INTERCEPT

BEGIN RECONSTRUCT

5

5

246+00 247+00 **USH 45** 248+00 USH 45 R/L 249+00 250+00 251+00

RESURFACING RECONSTRUCTION

WETLAND BOUNDARY

SLOPE INTERCEPT

24"

18" CMCP

15" CMCP

86TH ST

51+00

R/W

R/W

SAVE TREES

SAVE TREES

TLE

8601
KOZIOL INC

8511
JAMES &
JOSEPHINE
WIENKE

PROJECT NO: 3200-02-74	HWY: USH 45	COUNTY: KENOSHA	PLANTING	SHEET 8	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\PLANTING\023101-PL.DWG
LAYOUT NAME - 023101-PL

PLOT DATE : 4/29/2016 2:30 PM PLOT BY : MAAS, JOSEPH A PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 44

LEGEND

RR	FLOWERING CRABAPPLE	SH	HONEYLOCUST
HG	FLOWERING CRABAPPLE	WK	WINTER KING HAWTHORN
JTL	JAPANESE TREE LILAC	BO	BUR OAK
PS	PACIFIC SUNSET MAPLE	AB	AUTUMN BLAZE MAPLE
AL	ALLEGHENY SERVICEBERRY	RL	REDMOND LINDEN
CO	CHINKAPIN OAK	SM	HONEYLOCUST
RO	RED OAK	IW	IRONWOOD
PE	PIONEER ELM	KC	KENTUCKY COFFEE TREE (SEEDLESS)
HB	HACKBERRY	NH	NEW HORIZON ELM
PF	FLOWERING CRABAPPLE	OB	OHIO BUCKEYE

⊙ SMALL GROWING DECIDUOUS TREE

⊕ MEDIUM GROWING DECIDUOUS TREE

+ LARGE GROWING DECIDUOUS TREE

CHAUCER WOODS
HOMEOWNERS ASSN

SAVE TREE

SLOPE INTERCEPT

REMOVE
DEAD
TREE

SAVE TREES

R/W

TLE

CTH AH

XXX XXXXXX

8472
HORTON
TRUST

N

SAVE
TREE

SAVE
TREE

18" CMCP

PI: 254+56.80

USH 45

USH 45 R/L

251+00 252+00 253+00 254+00 255+00 256+00 257+

1-RR

1-HG

1-RR

SLOPE INTERCEPT

SAVE
TREE

REMOVE ACCESS

1-JTL

REMOVE ENCROACHING
PARKING

84TH PL

51+00

19960
SHERRY L
ROMANO

SAVE
TREE

SAVE TREES

SAVE TREES

SAVE TREES

8511 JAMES &
JOSEPHINE
WIENKE

8505 ARTHUR W
WESINGER TRUST

8481
RICK J
NETZEL

PROJECT NO: 3200-02-74	HWY: USH 45	COUNTY: KENOSHA	PLANTING	SHEET 9	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\PLANTING\023101-PL.DWG
LAYOUT NAME - 023102-PL

PLOT DATE : 4/29/2016 2:30 PM PLOT BY : MAAS, JOSEPH A PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 44

LEGEND

RR	FLOWERING CRABAPPLE	SH	HONEYLOCUST
HG	FLOWERING CRABAPPLE	WK	WINTER KING HAWTHORN
JTL	JAPANESE TREE LILAC	BO	BUR OAK
PS	PACIFIC SUNSET MAPLE	AB	AUTUMN BLAZE MAPLE
AL	ALLEGHENY SERVICEBERRY	RL	REDMOND LINDEN
CO	CHINKAPIN OAK	SM	HONEYLOCUST
RO	RED OAK	IW	IRONWOOD
PE	PIONEER ELM	KC	KENTUCKY COFFEE TREE (SEEDLESS)
HB	HACKBERRY	NH	NEW HORIZON ELM
PF	FLOWERING CRABAPPLE	OB	OHIO BUCKEYE

⊙ SMALL GROWING DECIDUOUS TREE

⊕ MEDIUM GROWING DECIDUOUS TREE

+ LARGE GROWING DECIDUOUS TREE

N

8472 HORTON TRUST

8458 CHAD KURSZEWSKI

8444 NORMAN R ANDERSON

8430 SANDRA A MELESKY

8404 DANIEL B & JESSIE M TONYAN

SAVE TREES

SAVE TREE

SAVE TREE

2-CO

SLOPE INTERCEPT

2-RO

2-PE

TLE

TLE

R/W

R/W

5

5

5+00

257+00

258+00

259+00

USH 45

260+00

USH 45 R/L

261+00

262+00

12"

24"

12"

84TH PL

51+00

R/W

R/W

TLE

TLE

2-RR

SAVE TREE

2-PF

R/W

SAVE TREES

2-JTL

SLOPE INTERCEPT

1-PF

2-JTL

SAVE TREE

TLE

19960 SHERRY L ROMANO

8447 JAMIES D ZIRBEL

8429 DARREN D & CYNDI L PERSINO

8417 DANIEL J & PEGGY A LANGFORD

XXX XXX

PROJECT NO: 3200-02-74	HWY: USH 45	COUNTY: KENOSHA	PLANTING	SHEET 10	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\PLANTING\023101-PL.DWG
LAYOUT NAME - 023103-PL

PLOT DATE : 4/29/2016 2:30 PM PLOT BY : MAAS, JOSEPH A PLOT NAME : PLOT SCALE : 1 IN:40 FT

LEGEND

RR	FLOWERING CRABAPPLE	SH	HONEYLOCUST
HG	FLOWERING CRABAPPLE	WK	WINTER KING HAWTHORN
JTL	JAPANESE TREE LILAC	BO	BUR OAK
PS	PACIFIC SUNSET MAPLE	AB	AUTUMN BLAZE MAPLE
AL	ALLEGHENY SERVICEBERRY	RL	REDMOND LINDEN
CO	CHINKAPIN OAK	SM	HONEYLOCUST
RO	RED OAK	IW	IRONWOOD
PE	PIONEER ELM	KC	KENTUCKY COFFEE TREE (SEEDLESS)
HB	HACKBERRY	NH	NEW HORIZON ELM
PF	FLOWERING CRABAPPLE	OB	OHIO BUCKEYE

SMALL GROWING DECIDUOUS TREE

MEDIUM GROWING DECIDUOUS TREE

LARGE GROWING DECIDUOUS TREE

N

8404 DANIEL B & JESSIE M TONYAN

8324 VALERIE J NELSON

8320 VILLAGE OF BRISTOL

20121 BRISTOL SCHOOL DISTRICT NO 1

8302 BRUCE & CONSTANCE JOHNSON

WETLAND BOUNDARY

SAVE TREE

1-PE

4-HB

SLOPE INTERCEPT

TLE

PLE

R/W

SAVE TREES

262+00 263+00 USH 45 264+00 265+00 266+00 267+00

USH 45 R/L

84TH ST

51+00

SLOPE INTERCEPT

SAVE TREE

2-JTL

8417 DANIEL J & PEGGY A LANGFORD

8403 WILLIAM & CLAUDETTE RAU

8335 WISDOT

8321 NH MANAGEMENT LLC

1-PF

1-HG

19811 VILLAGE OF BRISTOL

PROJECT NO: 3200-02-74	HWY: USH 45	COUNTY: KENOSHA	PLANTING	SHEET 11 E

LEGEND

RR	FLOWERING CRABAPPLE	SH	HONEYLOCUST
HG	FLOWERING CRABAPPLE	WK	WINTER KING HAWTHORN
JTL	JAPANESE TREE LILAC	BO	BUR OAK
PS	PACIFIC SUNSET MAPLE	AB	AUTUMN BLAZE MAPLE
AL	ALLEGHENY SERVICEBERRY	RL	REDMOND LINDEN
CO	CHINKAPIN OAK	SM	HONEYLOCUST
RO	RED OAK	IW	IRONWOOD
PE	PIONEER ELM	KC	KENTUCKY COFFEE TREE (SEEDLESS)
HB	HACKBERRY	NH	NEW HORIZON ELM
PF	FLOWERING CRABAPPLE	OB	OHIO BUCKEYE

SMALL GROWING DECIDUOUS TREE

MEDIUM GROWING DECIDUOUS TREE

LARGE GROWING DECIDUOUS TREE

N

8302
BRUCE &
CONSTANCE
JOHNSON

8250
JOHN A
DAVIDSON

8214
BRUNO J
GURGUL

8206
SCOTT J &
JACQUELIN B
HENNINGFIELD

SAVE TREES

TLE

R/W

PLE

SAVE TREE

1-HB

SLOPE INTERCEPT

WALL MODULAR BLOCK MECHANICALLY STABILIZED EARTH LRFD

SAVE 10" OAK TREE

SAVE TREES (SAWCUT ROOTS)

SAVE TREE

2-SH

REMOVE DEAD TREE

SAVE TREES (SAWCUT ROOTS) ROADSIDE CLEARING (LOWER LIMBS)

PI: 271+07.97

5

267+00 | 268+00 | USH 45 | 269+00 | USH 45 R/L | 270+00 | 271+00 | 272+00

83RD ST

51+00

19811
VILLAGE OF
BRISTOL

SAVE TREES

SLOPE INTERCEPT

2-WK

SAVE TREE

19940
JOSEPH L &
MICHELLE M
KOZAK

2-RR

8227
STEVE J JR
BOHR

2-JTL

8221
EDWARD J &
DEBRA A
ARNDT

SAVE TREES

1-JTL

8205
BETTY M
LINGO

PROJECT NO: 3200-02-74	HWY: USH 45	COUNTY: KENOSHA	PLANTING	SHEET 12	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\PLANTING\023101-PL.DWG
LAYOUT NAME - 023105-PL

PLOT DATE : 4/29/2016 2:31 PM PLOT BY : MAAS, JOSEPH A PLOT NAME : PLOT SCALE : 1 IN:40 FT

LEGEND

RR	FLOWERING CRABAPPLE	SH	HONEYLOCUST
HG	FLOWERING CRABAPPLE	WK	WINTER KING HAWTHORN
JTL	JAPANESE TREE LILAC	BO	BUR OAK
PS	PACIFIC SUNSET MAPLE	AB	AUTUMN BLAZE MAPLE
AL	ALLEGHENY SERVICEBERRY	RL	REDMOND LINDEN
CO	CHINKAPIN OAK	SM	HONEYLOCUST
RO	RED OAK	IW	IRONWOOD
PE	PIONEER ELM	KC	KENTUCKY COFFEE TREE (SEEDLESS)
HB	HACKBERRY	NH	NEW HORIZON ELM
PF	FLOWERING CRABAPPLE	OB	OHIO BUCKEYE

⊙ SMALL GROWING DECIDUOUS TREE

⊕ MEDIUM GROWING DECIDUOUS TREE

+ LARGE GROWING DECIDUOUS TREE

N

8206
SCOTT J &
JAQUELIN B
HENNINGFIELD

20008
KENNETH W &
AMY R
NEHRKORN

8102
YVON L &
NANCY A
FRIEDRICH

8024
GERALD S
RASMUSSEN

8018
ERIC
FARDOUX

REMOVE
DEAD TREE

SAVE TREES
(SAWCUT ROOTS)
ROADSIDE CLEARING
(LOWER LIMBS)

82ND ST

49+00

50+00

51+00

2-SH

SLOPE INTERCEPT

SAVE TREE

1-PF

1-RO

SAVE TULIP
TREE

2-JTL

1-RO

SAVE
TREES

TLE

PLE

R/W

5

272+00

273+00

274+00

275+00

276+00

277+00

278+

USH 45 R/L

USH 45

1-HG

SAVE
TREES

SAVE
TREE

2-HG

SAVE
TREE
(SAWCUT
ROOTS)

REMOVE
STUMP

8205
BETTY M
LINGO
OWNER TO REMOVE
LANDSCAPE BED
PRIOR TO CONSTRUCTION

19922
PAUL &
CARRIE
MATUSHEK

19916
CECIL L &
BARBARA J
SCHMITT

8031
SUSAN A
KRUEGER

8021
SHAWN D
AKER

PROJECT NO: 3200-02-74	HWY: USH 45	COUNTY: KENOSHA	PLANTING	SHEET 13	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\PLANTING\023101-PL.DWG
LAYOUT NAME - 023106-PL

PLOT DATE : 4/29/2016 2:31 PM PLOT BY : MAAS, JOSEPH A PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 44

LEGEND

RR	FLOWERING CRABAPPLE	SH	HONEYLOCUST
HG	FLOWERING CRABAPPLE	WK	WINTER KING HAWTHORN
JTL	JAPANESE TREE LILAC	BO	BUR OAK
PS	PACIFIC SUNSET MAPLE	AB	AUTUMN BLAZE MAPLE
AL	ALLEGHENY SERVICEBERRY	RL	REDMOND LINDEN
CO	CHINKAPIN OAK	SM	HONEYLOCUST
RO	RED OAK	IW	IRONWOOD
PE	PIONEER ELM	KC	KENTUCKY COFFEE TREE (SEEDLESS)
HB	HACKBERRY	NH	NEW HORIZON ELM
PF	FLOWERING CRABAPPLE	OB	OHIO BUCKEYE

SMALL GROWING DECIDUOUS TREE

MEDIUM GROWING DECIDUOUS TREE

LARGE GROWING DECIDUOUS TREE

N

5

5

8018 ERIC FARDOUX

7950 TIMOTHY SCHWELLENBACH TRUCT

7946 LARRY L & JULIE A KELLEY

SMMFLP LIMITED PARTNERSHIP

SLOPE INTERCEPT

TLE

PLE

SAVE TREES

SAVE TREE

3-BO

1-AB

1-AL

5-WK

R/W

PC: 278+58.89

PT: 280+98.47

USH 45 R/L

277+00

278+00

279+00

280+00

281+00

282+00

283+00

USH 45

80TH ST

REMOVE STUMP

1-HG

XXX XXX XXX XXX XXX XXX XXX XXX XXX XXX XXX

SAVE TREE

SAVE TREES

TLE

SLOPE INTERCEPT

1-AB

SAVE TREE

4-RL

1-SM

8021 SHAWN D AKER

8020 BRISTOL UNITED METHODIST CHURCH

8003 ROBERT C JR & KARA T THOMAS

19920 CYNTHIA WALKER

ZION EVANGELICAL LUTHERAN CHURCH

15" RCCP

PROJECT NO: 3200-02-74	HWY: USH 45	COUNTY: KENOSHA	PLANTING	SHEET 14	E

LEGEND

RR	FLOWERING CRABAPPLE	SH	HONEYLOCUST
HG	FLOWERING CRABAPPLE	WK	WINTER KING HAWTHORN
JTL	JAPANESE TREE LILAC	BO	BUR OAK
PS	PACIFIC SUNSET MAPLE	AB	AUTUMN BLAZE MAPLE
AL	ALLEGHENY SERVICEBERRY	RL	REDMOND LINDEN
CO	CHINKAPIN OAK	SM	HONEYLOCUST
RO	RED OAK	IW	IRONWOOD
PE	PIONEER ELM	KC	KENTUCKY COFFEE TREE (SEEDLESS)
HB	HACKBERRY	NH	NEW HORIZON ELM
PF	FLOWERING CRABAPPLE	OB	OHIO BUCKEYE

SMALL GROWING DECIDUOUS TREE

MEDIUM GROWING DECIDUOUS TREE

LARGE GROWING DECIDUOUS TREE

N

WETLAND BOUNDARY

R/W

SMMFLP LIMITED PARTNERSHIP

SLOPE INTERCEPT

SAVE 4" CALIPER OAK TREES

4-IW

3-WK

6-IW

5

5

283+00

284+00

USH 45

285+00

USH 45 R/L

286+00

287+00

288+00

24" MCP

18" CMCP

18" CMCP

TLE

PLE

SLOPE INTERCEPT

TLE

1-SM

R/W

3-RL

PLE

TLE

4-RO

WETLAND BOUNDARY

SAVE TREES OUTSIDE SLOPE INTERCEPT

ZION EVANGELICAL LUTHERAN CHURCH

7905 SCOTT B KRAHN

BECKETT LLC

PROJECT NO:3200-02-74	HWY: USH 45	COUNTY: KENOSHA	PLANTING	SHEET 15	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\PLANTING\023101-PL.DWG
LAYOUT NAME - 023108-PL

PLOT DATE : 4/29/2016 2:31 PM PLOT BY : MAAS, JOSEPH A PLOT NAME : PLOT SCALE : 1 IN:40 FT

LEGEND

RR	FLOWERING CRABAPPLE	SH	HONEYLOCUST
HG	FLOWERING CRABAPPLE	WK	WINTER KING HAWTHORN
JTL	JAPANESE TREE LILAC	BO	BUR OAK
PS	PACIFIC SUNSET MAPLE	AB	AUTUMN BLAZE MAPLE
AL	ALLEGHENY SERVICEBERRY	RL	REDMOND LINDEN
CO	CHINKAPIN OAK	SM	HONEYLOCUST
RO	RED OAK	IW	IRONWOOD
PE	PIONEER ELM	KC	KENTUCKY COFFEE TREE (SEEDLESS)
HB	HACKBERRY	NH	NEW HORIZON ELM
PF	FLOWERING CRABAPPLE	OB	OHIO BUCKEYE

SMALL GROWING DECIDUOUS TREE

MEDIUM GROWING DECIDUOUS TREE

LARGE GROWING DECIDUOUS TREE

N

SMMFLP LIMITED PARTNERSHIP

TLE

SLOPE INTERCEPT

R/W

CLEAR & GRUB
CLEAR 5' PAST SLOPES

2-PF

3-HG

3-HG

2-KC

2-AB

5

5

288+00

289+00

290+00

291+00

292+00

293+00

USH 45

USH 45 R/L

36" CP

36" RCCP

79TH ST

R/W

TLE

SAVE TREE

XXX XXX XXX XXX XXX XXX

51+00

BECKETT LLC

FIELD MARKED

TLE

SAVE TREES

TLE

SAVE TREE (ROADSIDE CLEARING)

SAVE TREE (ROADSIDE CLEARING)

SLOPE INTERCEPT

1-KC

R/W

TLE

PLE

TLE

2-IW

WETLAND BOUNDARY

7801
BRISTOL BAY
DEVELOPMENT
CORP

7868
VILLAGE OF
BRISTOL

PROJECT NO:3200-02-74	HWY: USH 45	COUNTY: KENOSHA	PLANTING	SHEET 16	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\PLANTING\023101-PL.DWG
LAYOUT NAME - 023109-PL

PLOT DATE : 4/29/2016 2:31 PM PLOT BY : MAAS, JOSEPH A PLOT NAME : PLOT SCALE : 1 IN:40 FT

LEGEND

RR	FLOWERING CRABAPPLE	SH	HONEYLOCUST
HG	FLOWERING CRABAPPLE	WK	WINTER KING HAWTHORN
JTL	JAPANESE TREE LILAC	BO	BUR OAK
PS	PACIFIC SUNSET MAPLE	AB	AUTUMN BLAZE MAPLE
AL	ALLEGHENY SERVICEBERRY	RL	REDMOND LINDEN
CO	CHINKAPIN OAK	SM	HONEYLOCUST
RO	RED OAK	IW	IRONWOOD
PE	PIONEER ELM	KC	KENTUCKY COFFEE TREE (SEEDLESS)
HB	HACKBERRY	NH	NEW HORIZON ELM
PF	FLOWERING CRABAPPLE	OB	OHIO BUCKEYE

SMALL GROWING DECIDUOUS TREE

MEDIUM GROWING DECIDUOUS TREE

LARGE GROWING DECIDUOUS TREE

N

SMMFLP LIMITED PARTNERSHIP

BERWICK PROPERTIES INC

TLE

R/W

R/W

SAVE TREE

2-AB

4-RL

SLOPE INTERCEPT

3-NH

4-HB

5

5

293+00

294+00

295+00

296+00

297+00

298+00

299+

36" CP

36" RCCP

36"

USH 45

USH 45 R/L

2-AB

3-OB

3-NH

4-HB

PLE

TLE

R/W

TLE

R/W

SLOPE INTERCEPT

7868
VILLAGE OF
BRISTOL

WETLAND
BOUNDARY

BECKETT LLC

PROJECT NO:3200-02-74	HWY: USH 45	COUNTY: KENOSHA	PLANTING	SHEET	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\PLANTING\023101-PL.DWG
LAYOUT NAME - 023110-PL

PLOT DATE : 4/29/2016 2:31 PM PLOT BY : MAAS, JOSEPH A PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 44

LEGEND

RR	FLOWERING CRABAPPLE	SH	HONEYLOCUST
HG	FLOWERING CRABAPPLE	WK	WINTER KING HAWTHORN
JTL	JAPANESE TREE LILAC	BO	BUR OAK
PS	PACIFIC SUNSET MAPLE	AB	AUTUMN BLAZE MAPLE
AL	ALLEGHENY SERVICEBERRY	RL	REDMOND LINDEN
CO	CHINKAPIN OAK	SM	HONEYLOCUST
RO	RED OAK	IW	IRONWOOD
PE	PIONEER ELM	KC	KENTUCKY COFFEE TREE (SEEDLESS)
HB	HACKBERRY	NH	NEW HORIZON ELM
PF	FLOWERING CRABAPPLE	OB	OHIO BUCKEYE

SMALL GROWING DECIDUOUS TREE

MEDIUM GROWING DECIDUOUS TREE

LARGE GROWING DECIDUOUS TREE

N

BERWICK PROPERTIES INC

SLOPE INTERCEPT

5-NH

SAVE TREE

5-PE

SAVE TREE

SAVE TREE

R/W

3-SM

7510 CHASE BANK

R/W

5

5

USH 45

BP: 300+82.24

PT: 302+67.42

PC: 303+68.56

300+00

301+00

302+00

303+00

304+00

305+00

USH 45 R/L

5-NH

SLOPE INTERCEPT

5-PE

3-SM

R/W

BECKETT LLC

PROJECT NO: 3200-02-74	HWY: USH 45	COUNTY: KENOSHA	PLANTING	SHEET 18	E

FILE NAME : N:\PDS\C3D\32000203\SHEETSPLAN\PLANTING\023101-PL.DWG
LAYOUT NAME - 023111-PL

PLOT DATE : 4/29/2016 2:31 PM PLOT BY : MAAS, JOSEPH A PLOT NAME : PLOT SCALE : 1 IN:40 FT

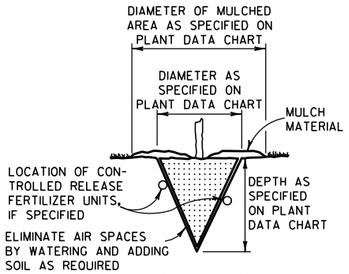
WISDOT/CADDS SHEET 44

Standard Detail Drawing List

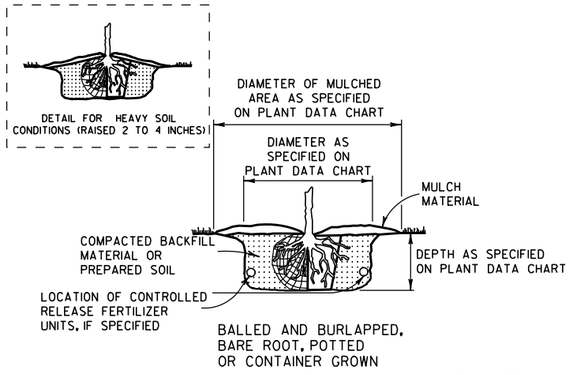
14A02-01	TREE PLANTING DETAIL

6

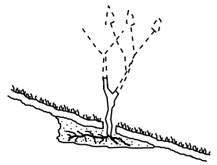
6



MACHINE MOVED

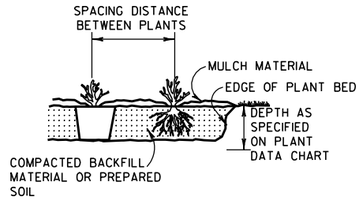


BALLED AND BURLAPPED, BARE ROOT, POTTED OR CONTAINER GROWN



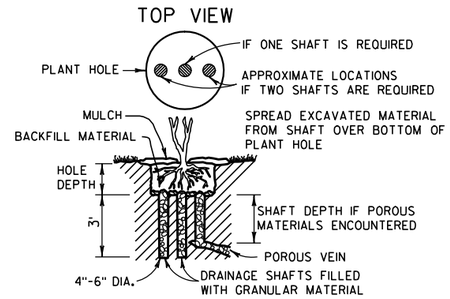
ACCOMMODATE ROOTS (SMOOTH AND STAGHORN SUMAC)

NOTE:
1) ENGINEER SHALL REQUIRE 3 SLITS IN POT TO SPEED DETERIORATION
2) METAL, PLASTIC OR OTHER NONDEGRADABLE POTS SHALL BE REMOVED PRIOR TO PLANTING



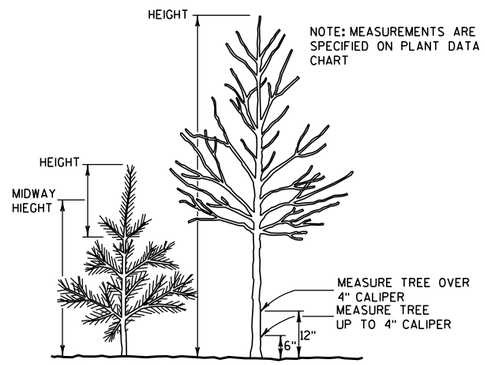
PREPARED BED (BARE ROOT AND POTTED)

PLANTING

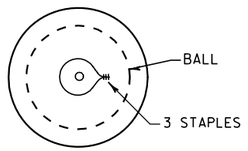


NOTE:
DRAINAGE SHAFT AS SPECIFIED ON PLANT DATA CHART

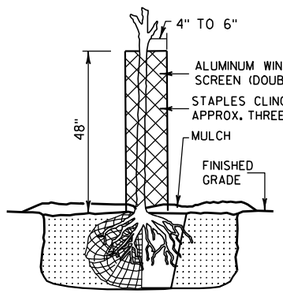
DRAINING



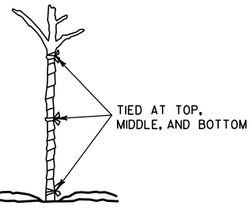
MEASURING



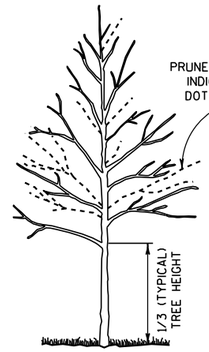
TOP VIEW



RODENT PROTECTION



WRAPPING



TALL DECIDUOUS TREES (ASH, MAPLE, LINDEN, OAK)

SINGLE STEMMED LOW DECIDUOUS TREES (CRABS AND OTHER SINGLE STEM TYPE)

MULTI-STEMMED LOW DECIDUOUS TREES OR LARGE SHRUBS (HAWTHORN, SERVICEBERRY)

NOTE: WHEN PRUNING, PRESERVE CHARACTER AND SHAPE OF TREE. AVOID LEAVING STUBS - REMOVE BRANCH OR TWIG BACK TO THE NEAREST CROTCH
1) PRUNE TO REMOVE DEAD AND BROKEN BRANCHES
2) PRUNE TO REMOVE BRANCHES THAT TOUCH OR ARE TOO CLOSE TO OTHER BRANCHES

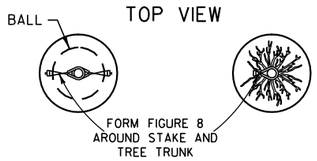


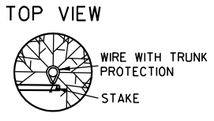
SHRUBS (GRAY DOGWOOD ARROWWOOD VIBURNUM)

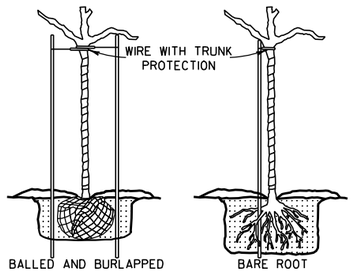
SUMAC

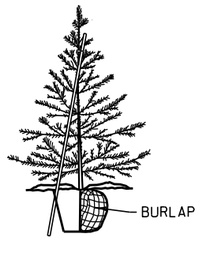
TREE TYPE EVERGREENS (PINE, SPRUCE, FIR) EVERGREENS USUALLY ARE NOT PRUNED

PRUNING



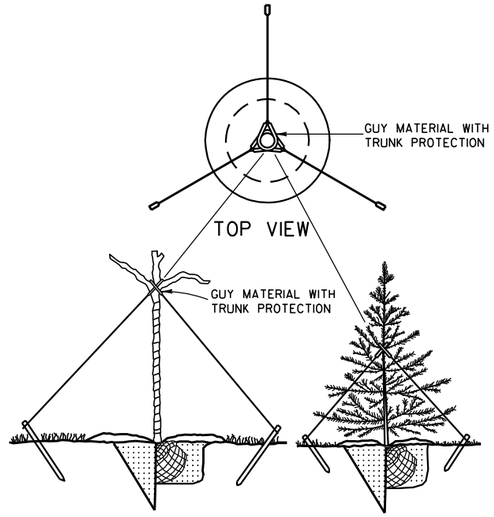






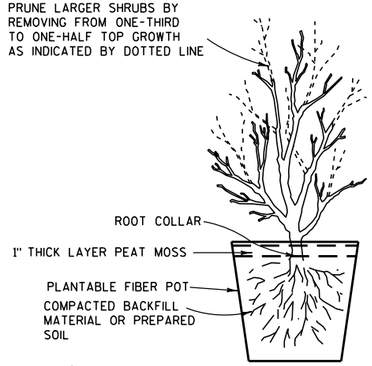
NOTE: BRACING STAKE
1) SHALL BE DRIVEN INTO THE GROUND AS CLOSE TO THE TREE AS POSSIBLE WITHOUT DAMAGING THE BRANCHES.
2) MAY BE DRIVEN AT SUCH AN ANGLE THAT IT DOES NOT PENETRATE THE BALL OR POT.
3) SHALL NOT PROTRUDE ABOVE THE TOP OF THE TREE; AND
4) SHALL HAVE A HOLE NEAR THE TOP TO HOLD THE WIRE IN PLACE.

BRACING



GUYING

PRUNE LARGER SHRUBS BY REMOVING FROM ONE-THIRD TO ONE-HALF TOP GROWTH AS INDICATED BY DOTTED LINE



POTTING

NOTES

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

BRACING, WRAPPING, GUYING, RODENT PROTECTION, FERTILIZER AND MULCH SHALL BE USED ONLY WHEN SPECIFIED ON THE PLANT DATA CHART (PART OF PLAN) OR SPECIAL PROVISIONS.

TREE PLANTING DETAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
4/11/94 — DATE
/S/ Rory L. Rhinesmith — CHIEF METHODS DEVELOPMENT ENGINEER
FHWA

6

S.D.D. 14 A 2-1

Notes

Wisconsin Department of Transportation

Dedicated people creating transportation solutions
through innovation and exceptional service.

http://www.dot.wisconsin.gov