GRE

MARCH 2019

PROJECT ID: 4996-01-79

WITH: N/A

COUNTY: SHEBOYGAN

ORDER OF SHEETS

Section No.	1	Title
Section No.	2	Typical Sections and Details (Includes Erosion Control Plan)
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 = 312

N

DESIGN DESIGNATION

A.A.D.T.	(2019)	= 11,000
A.A.D.T.	(2039)	= 12,100
D.H.V.	(2039)	= 1,450
D.D.		= 59/41
T.		= 3.6%
DESIGN SPEED		= 30 MPH
ESALS		= 850,000

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)
- OVERHEAD UTILITY (OH)
- 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

C SHEBOYGAN, NORTH AVE

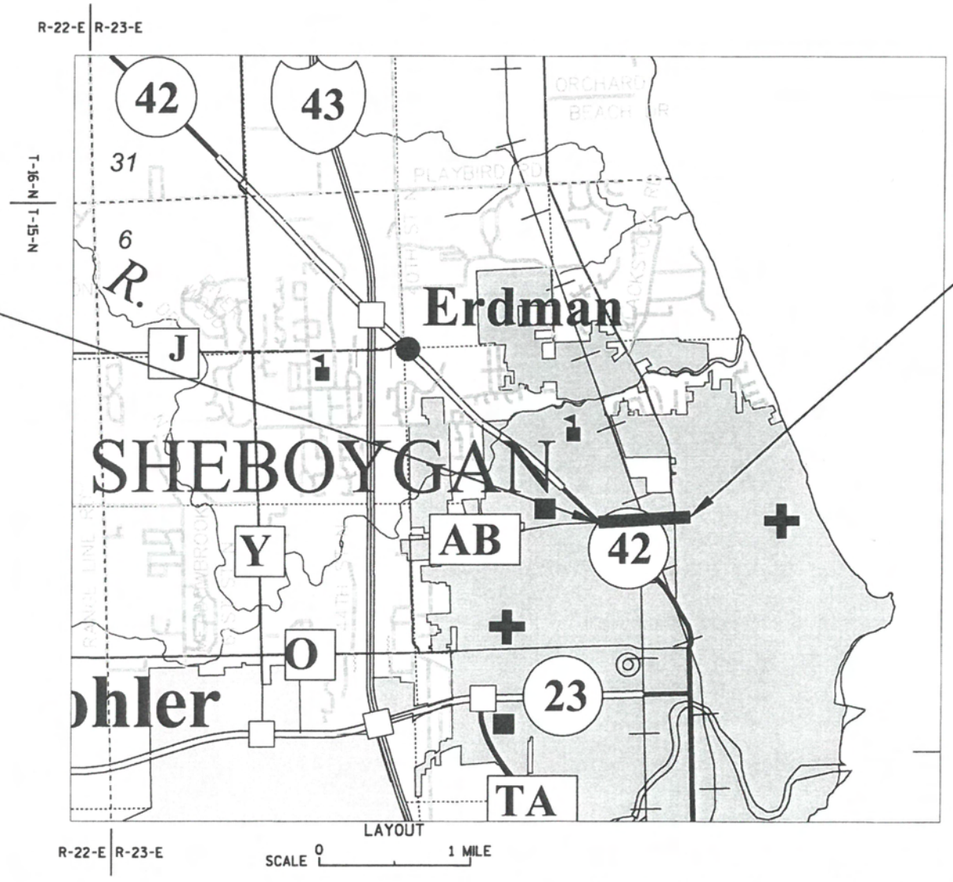
CALUMET DR TO 15TH ST

LOCAL STREET

SHEBOYGAN COUNTY

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
4996-01-79	WISC 2019173	1

STATE PROJECT NUMBER
4996-01-79



BEGIN PROJECT
STA. 12+33.85
Y = 184962.81
X = 213132.79

END PROJECT
STA. 46+23

TOTAL NET LENGTH OF CENTERLINE = 0.642 MI

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COUNTY COORDINATES, SHEBOYGAN 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.

ACCEPTED FOR
CITY OF SHEBOYGAN

10/30/18 DATE — Ryan J. Sayre SIGNATURE

CITY ENGINEER
TITLE OF OFFICIAL

ORIGINAL PLANS PREPARED BY
McMAHON ENGINEERS ARCHITECTS

WISCONSIN
JOSHUA G. FREWERD
E-43652
APPLETON
WI
PROFESSIONAL ENGINEER

10/26/2018 DATE — SIGNATURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

SURVEYOR	McMAHON
DESIGNER	McMAHON
MANAGEMENT CONSULTANT	JT-ENGINEERING

APPROVED FOR THE DEPARTMENT
DATE: 12/13/18
MANAGEMENT CONSULTANT SIGNATURE

E

GENERAL NOTES

BEARINGS AND COORDINATES SHOWN ON THIS PLAN ARE REFERENCED TO THE SHEBOYGAN COUNTY COORDINATE SYSTEM. DISTANCES SHOWN ARE GROUND DISTANCES.

ELEVATIONS ON THIS PLAN ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 WITH 2007 ADJUSTMENT (NAVD88(07)).

THE LOCATIONS OF EXISTING AND PROPOSED UTILITY FACILITIES AS SHOWN ON THE PLAN ARE APPROXIMATE AND ARE BASED ON UTILITY LOCATES OBTAINED FROM THE UTILITIES WHEN THE SURVEY DATA WAS COLLECTED PRIOR TO THE FINAL DESIGN OF THE PROJECT. IT IS ANTICIPATED THAT UTILITY FACILITIES WILL BE RELOCATED AS PART OF THIS PROJECT AS DESCRIBED IN THE SPECIAL PROVISIONS. ALL PROPOSED RELOCATED UTILITIES ARE NOT SHOWN ON THE PLAN SHEETS. THERE MAY BE OTHER UTILITY FACILITIES WITHIN THE PROJECT LIMITS THAT ARE NOT SHOWN ON THE PLAN SHEETS.

THE EXACT LOCATION OF ALL EROSION CONTROL ITEMS IS APPROXIMATE AND MAY BE ADJUSTED BY THE ENGINEER IN THE FIELD.

THE EXACT LIMITS OF CONCRETE, ASPHALT, OR GRAVEL SURFACES REMOVAL AND REPLACEMENT ARE APPROXIMATE AND SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.

EXCAVATION BELOW SUBGRADE (EBS) AREAS ARE CALLED OUT AS UNDISTRIBUTED ON THE PLAN QUANTITIES FOR COMMON EXCAVATION. THESE AREAS ARE TO BE BACKFILLED WITH BREAKER RUN. EXACT LOCATIONS SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.

PRIOR TO ORDERING DRAINAGE PIPES AND STRUCTURES, THE CONTRACTOR SHALL VERIFY RELATED DRAINAGE INFORMATION IN THE PLAN WITH THE ENGINEER.

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

THE REMOVAL OF CONCRETE DRIVEWAYS WILL BE MEASURED AND PAID FOR AS REMOVING PAVEMENT. THE REMOVAL OF SIDEWALK WITHIN THE LIMITS OF THE DRIVEWAY WILL BE PAID FOR AS REMOVING PAVEMENT. THE REMOVAL OF ASPHALTIC DRIVEWAY APRONS AND ASPHALTIC DRIVEWAYS BEHIND THE SIDEWALK WILL BE PAID FOR AS COMMON EXCAVATION.

PROPOSED CONCRETE SIDEWALK THROUGH DRIVEWAYS SHALL BE PAID FOR AS CONCRETE DRIVEWAY (SEE CONSTRUCTION DETAIL).

REMOVAL OF ANY REINFORCEMENT AND MESH FOUND IN THE EXISTING CONCRETE SHALL BE CONSIDERED INCIDENTAL TO THE ITEM OF REMOVING PAVEMENT.

MULTIPLE TREES ARE PLANNED TO BE CLEARED BY OTHERS PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL PERFORM GRUBBING OF THE CLEARED TREES AS SHOWN ON THE PLANS. NO TREES OR SHRUBS ARE TO BE REMOVED WITHOUT APPROVAL OF THE ENGINEER.

THE PROPOSED LOCATIONS OF THE UP RAILROAD'S FLASHING SIGNALS, GATES, AND CANTILEVERED FLASHING SIGNALS ARE SHOWN ON THE PLANS FOR INFORMATIONAL PURPOSES. THE FINAL LOCATIONS OF THESE RAILROAD FACILITIES MAY VARY FROM WHAT IS SHOWN.

DIGGERS HOTLINE
Dial 811 or (800)242-8511

www.DiggersHotline.com

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

TOTAL PROJECT AREA = 7.46 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 8.20 ACRES

UTILITIES

AT&T
CHUCK BARTELT
70 E DIVISION ST
FOND DU LAC, WI 54935
920-929-1013
920-410-5104 (CELL)
CB1461@ATT.COM

ATC
GERALD RHODE
801 O'KEEFE ROAD
DEPERE, WI 54115
920-338-6523
GRHODE@ATCLLC.COM

ALLIANT ENERGY
MATTHEW SCHMITZ
4421 TOWER DR
SHEBOYGAN, WI 53081
920-748-4011
920-238-1137 (CELL)
MATTHEWSCHMITZ@ALLIANTENERGY.COM

CHARTER COMMUNICATIONS
TOM HARYCKI
1515 W WASHINGTON AVE
WEST BEND, WI 53095
262-429-1235 EXT 20702
262-416-2437 (CELL)
TOM.HARYCKI@CHARTER.COM

EXTENET SYSTEMS - COMMUNICATIONS
MATT SIMPSON
3030 WARRENVILLE RD, SUITE 340
LISLE, IL 60532
630-799-6807
847-878-4320 (CELL)
MSIMPSON@EXTENETSYSTEMS.COM

CITY OF SHEBOYGAN - SEWER, SHEBOYGAN FIBER
KEVIN JUMP
2026 NEW JERSEY AVE
SHEBOYGAN, WI 53081
920-459-3367
KEVIN.JUMP@SHEBOYGANWI.GOV

WINDSTREAM
MARY BETH FISHER
13935 BISHOPS DRIVE
BROOKFIELD, WI 53005
262-792-7938
MARY.B.FISHER@WINDSTREAM.COM

SHEBOYGAN WATER UTILITY
RICH DALE
72 PARK AVE
SHEBOYGAN, WI 53081
920-459-3839
RICHDALE@SHEBOYGANWATER.ORG

WPS - GAS
KEVIN KOLB
933 S WILDWOOD AVE
SHEBOYGAN, WI 53081
920-451-3733
KCKOLB@WISCONSINPUBLICSERVICE.COM

CITY OF SHEBOYGAN- TRAFFIC SIGNALS & LIGHTING
MIKE WILLMAS
2026 NEW JERSEY AVENUE
SHEBOYGAN, WI 53081
920-459-3444
MIKE.WILLMAS@SHEBOYGANWI.GOV

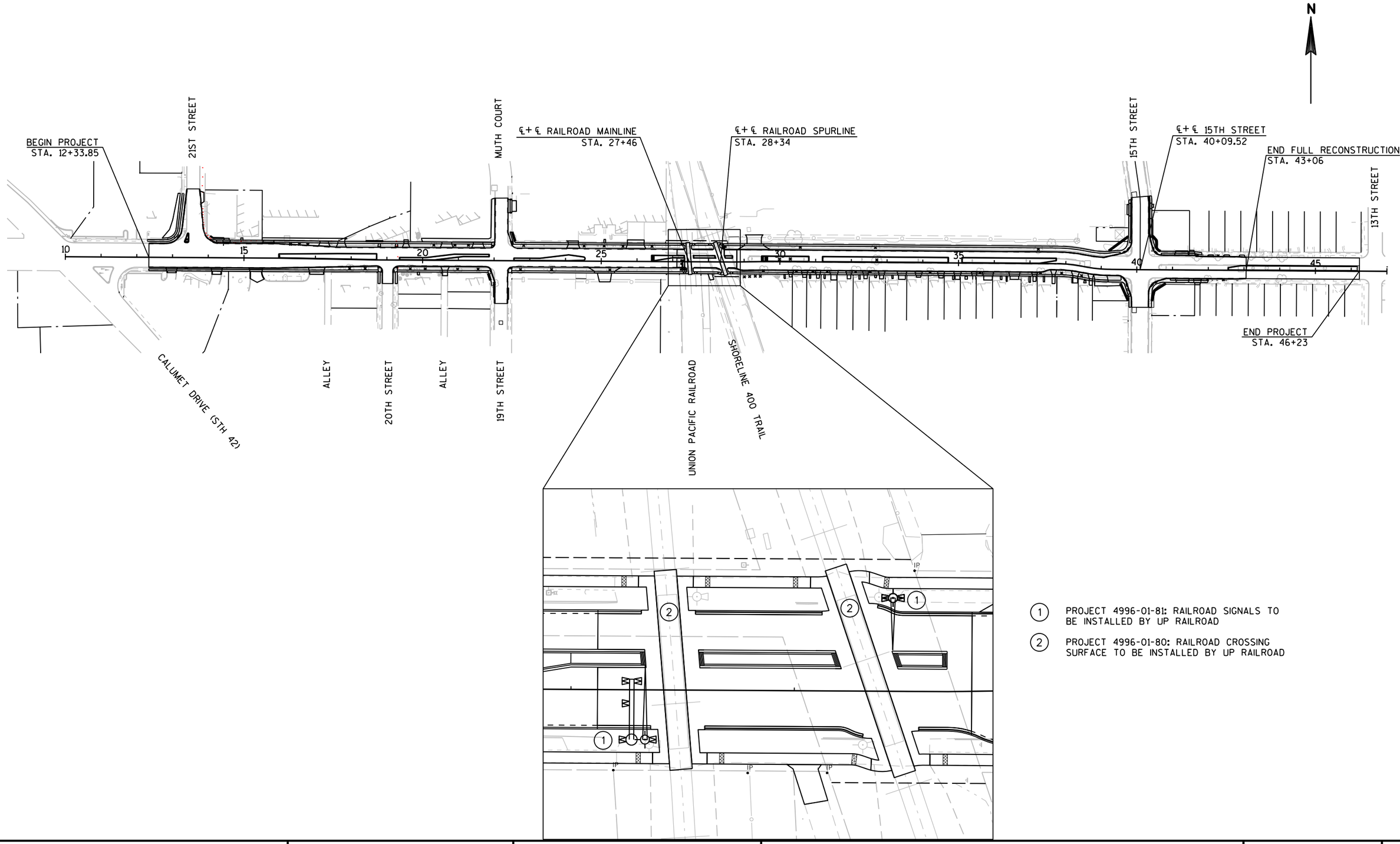
ORDER OF SECTION 2 SHEETS

PROJECT OVERVIEW
TYPICAL SECTIONS
CONSTRUCTION DETAILS
PAVING DETAILS
EROSION CONTROL
STORM SEWER
SIGNING
LIGHTING DETAILS
TRAFFIC SIGNALS
PAVEMENT MARKING
TRAFFIC CONTROL
ALIGNMENT

DNR LIAISON

DEPARTMENT OF NATURAL RESOURCES
JAY SCHIEFELBEIN
2984 SHAWANO AVE
GREEN BAY, WI 54313
920-662-5130
JEREMIAH.SCHIEFELBEIN@WISCONSIN.GOV

2



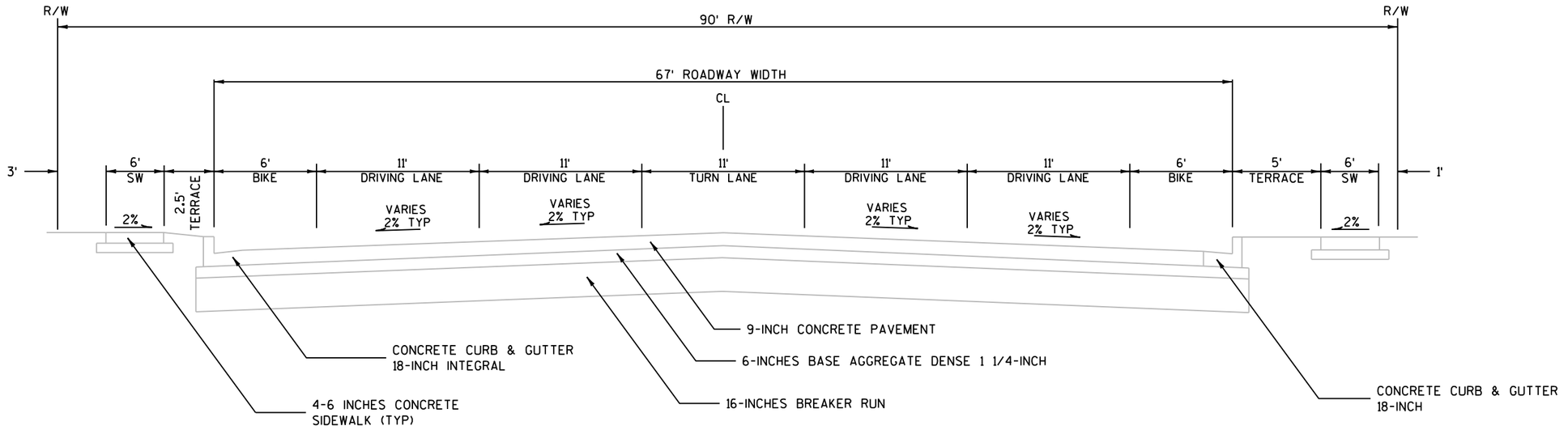
1. PROJECT 4996-01-81: RAILROAD SIGNALS TO BE INSTALLED BY UP RAILROAD
2. PROJECT 4996-01-80: RAILROAD CROSSING SURFACE TO BE INSTALLED BY UP RAILROAD

PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN	PROJECT OVERVIEW	SHEET 3	E

2

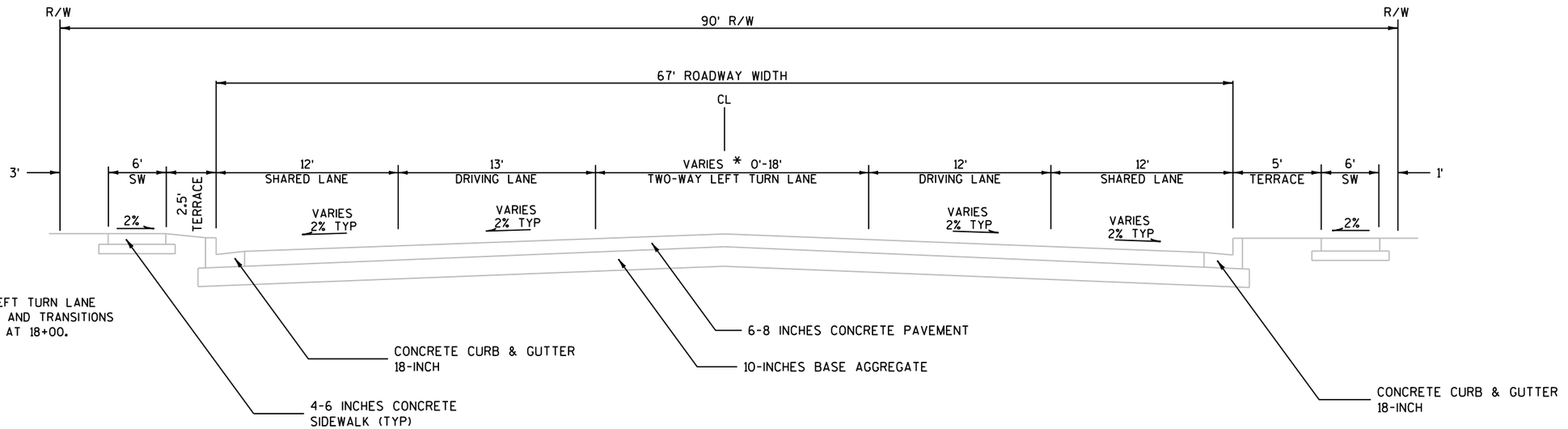
STANDARD ABBREVIATIONS AND SYMBOLS

ADJ.	ADJUST (MANHOLE COVER OR WATER VALVE BOX)
ASPH	ASPHALT
AVE.	AVENUE
⊕	BENCH MARK
B-B	BACK TO BACK OF CURB
B.A.D.	BASE AGGREGATE DENSE
B.O.C. or B/C	BACK OF CURB
℄ or CL	CENTERLINE
CONC	CONCRETE
C.M.P.	CORRUGATED METAL CULVERT PIPE
C.T.H.	COUNTY TRUNK HIGHWAY
CL.	CLASS
△	DELTA
D.	DEGREE OF CURVE
DW	DRIVEWAY
E.	EAST
EB	EASTBOUND
E-MAT	EROSION MAT
ELEV	ELEVATION
EOP	EDGE OF PAVEMENT
EOR	END OF RADIUS
EXIST.	EXISTING
FE	FIELD ENTRANCE
F-F	FACE TO FACE OF CURB
FL	FLOWLINE
GRAV	GRAVEL
GV	GAS VALVE
HDPE	HIGH DENSITY POLYETHYLENE CULVERT PIPE
HE	HIGHWAY EASEMENT
HMA	HMA
H.P.	HIGH POINT
HYD.	HYDRANT
L.	LENGTH OF CURVE
LP	LIGHT POLE
L.V.C.	LENGTH OF VERTICAL CURVE
L.S.	LANDSCAPING
LT.	LEFT
MH	MANHOLE
MAX	MAXIMUM
MIN	MINIMUM
NB	NORTH BOUND
NO.	NUMBER
NOR.	NORMAL
P.E.	PRIVATE ENTRANCE
P.G.L.	PROFILE GRADE LINE
P.I.	POINT OF INTERSECTION
PP	POWER POLE (OVERHEAD LINES)
P.T.	POINT OF TANGENCY
P.V.C.	POINT OF VERTICAL CURVATURE
P.V.I.	POINT OF VERTICAL INTERSECTION
P.V.T.	POINT OF VERTICAL TANGENCY
P/L	PROPERTY LINE
PVT.	PAVEMENT
PED.	PEDESTAL
R or RAD	RADIUS
R.C.P.	REINFORCED CONCRETE PIPE
RECON.	RECONSTRUCT
REQ'D	REQUIRED
R/L	REFERENCE LINE
REM.	REMOVE
R/W	RIGHT OF WAY
RD.	ROAD
RT.	RIGHT
S.	SOUTH
SAN	SANITARY SEWER
SB	SOUTH BOUND
S.D.D.	STANDARD DETAIL DRAWING
SI	SLOPE INTERCEPT
STA.	STATION
S.T.H.	STATE TRUNK HIGHWAY
STA.	STATION
SW	CONCRETE SIDEWALK
T.I.	TEMPORARY INTEREST
TLE	TEMPORARY LIMITED INTEREST
TYP.	TYPICAL
V.C.	VERTICAL CURVE
WB	WESTBOUND
W	WATERMAIN
WV	WATER VALVE/SHUTOFF
	HYDRANT W/AUXILIARY VALVE
	LIGHT POLE



EXISTING TYPICAL SECTION

STA 12+33.85 TO STA 14+00

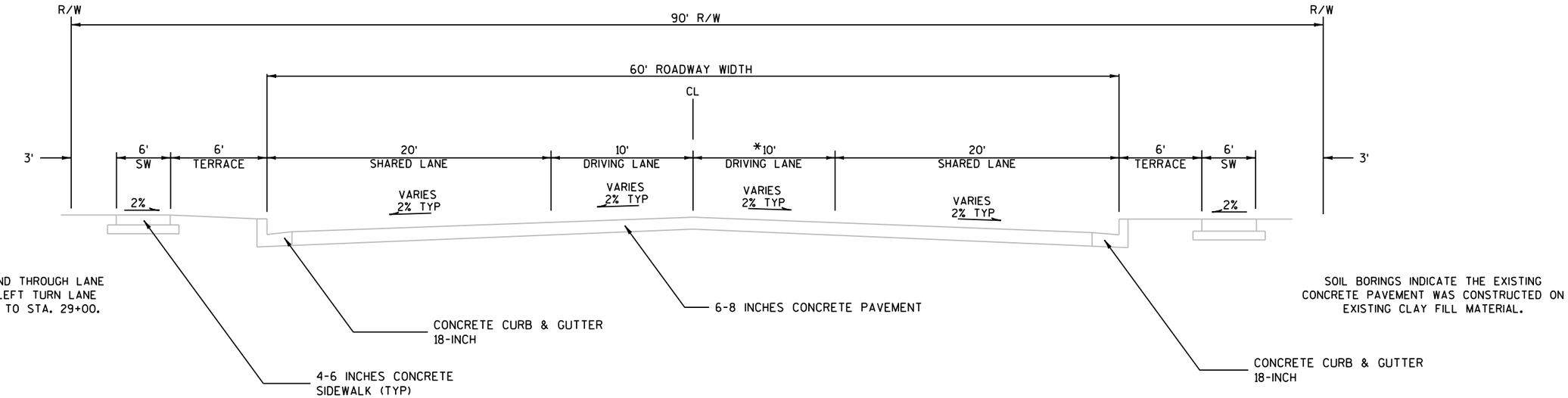


EXISTING TYPICAL SECTION

STA 14+00 TO STA 18+00

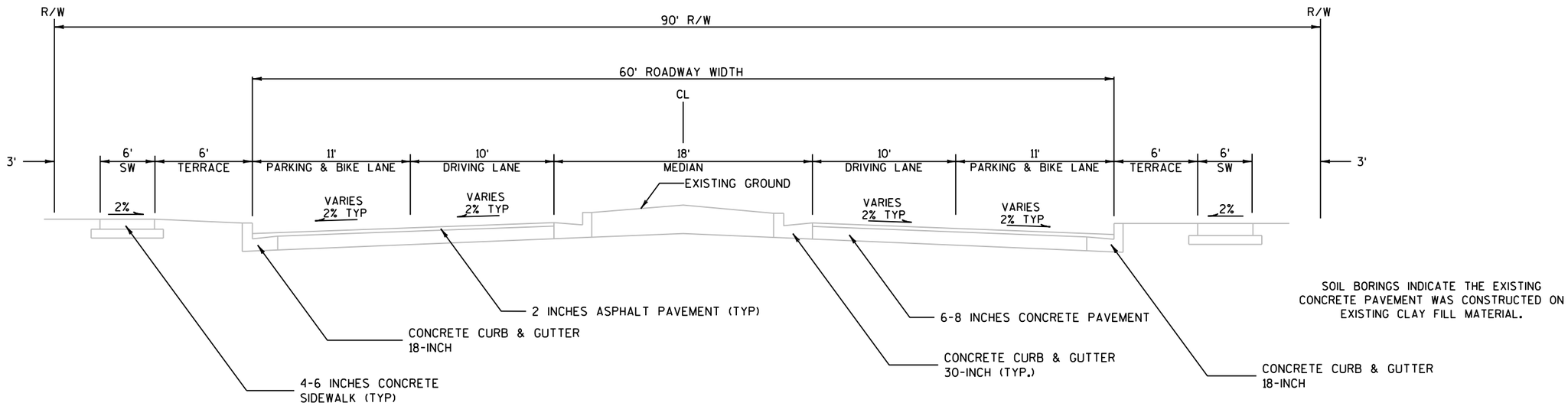
PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN	TYPICAL SECTIONS	SHEET 5	E

FILE NAME : W:\PROJECTS\W0059\81500117\CADD\CIVIL3D\PLAN SHEETS\02-TYPICALS\NORTH-TYPICALS.DWG
LAYOUT NAME - 01
PLOT DATE : 11/1/2018 4:35 PM PLOT BY : CHRIS CLEMENS PLOT NAME : PLOT SCALE : 1'-0" = 1'-0"
WISDOT/CADDS SHEET 42



EXISTING TYPICAL SECTION

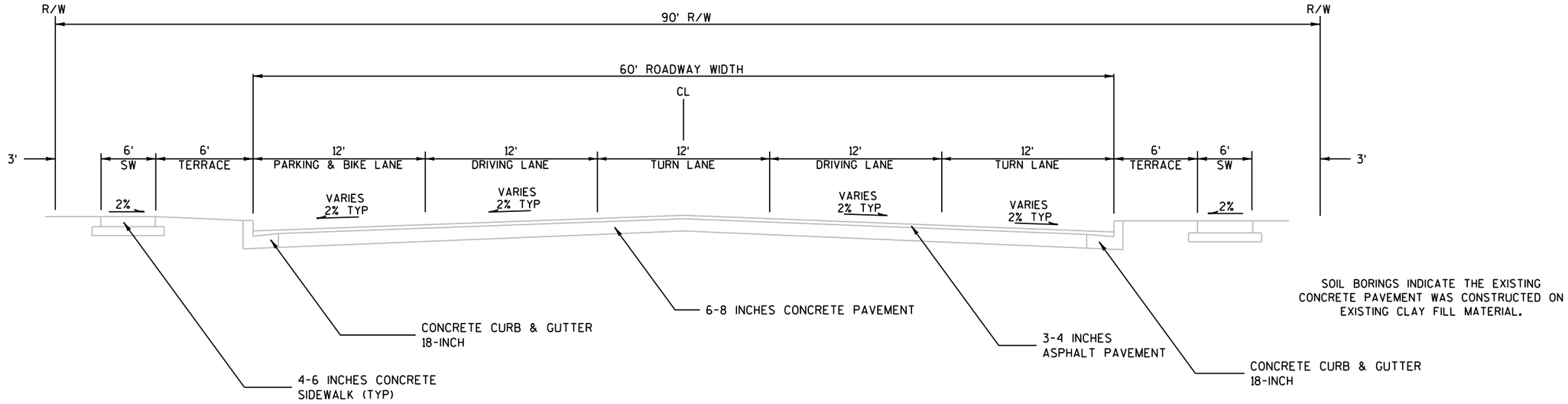
STA 18+00 TO STA 29+00



EXISTING TYPICAL SECTION

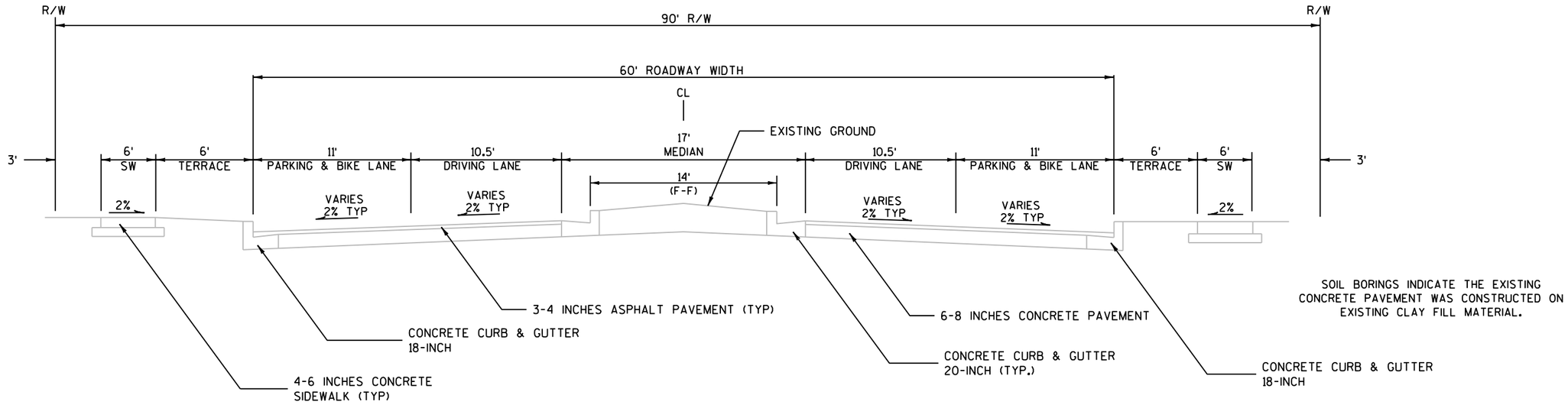
STA 29+00 TO STA 38+50

PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN	TYPICAL SECTIONS	SHEET 6	E



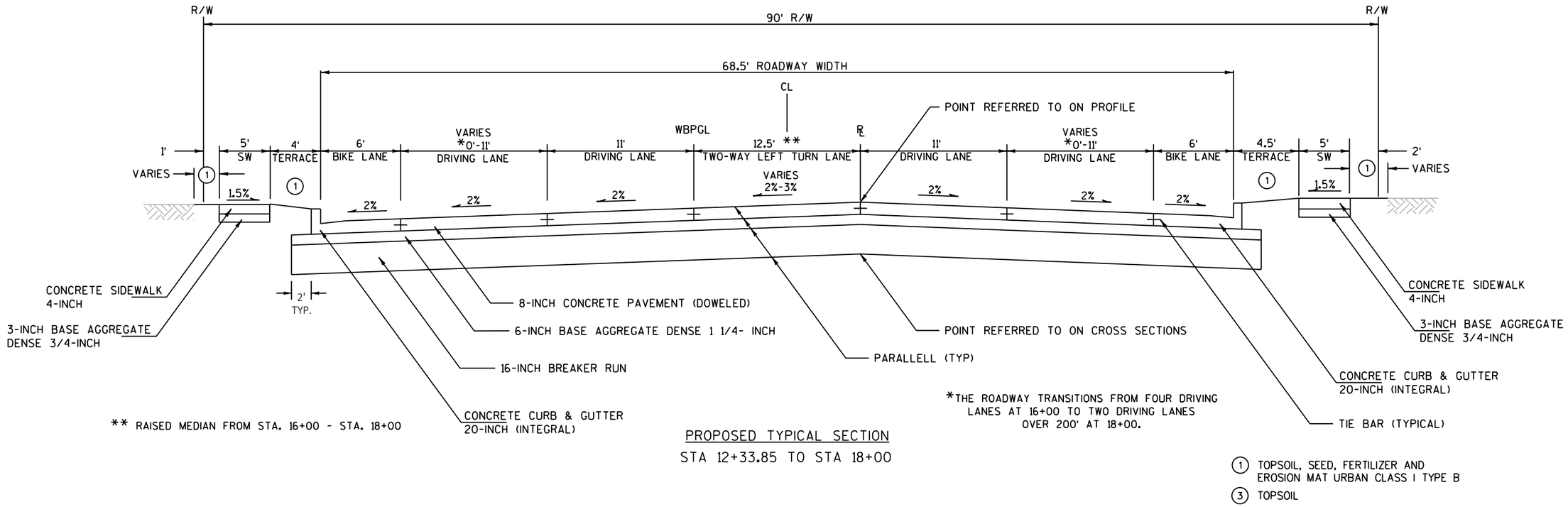
EXISTING TYPICAL SECTION

STA 38+50 TO STA 40+50



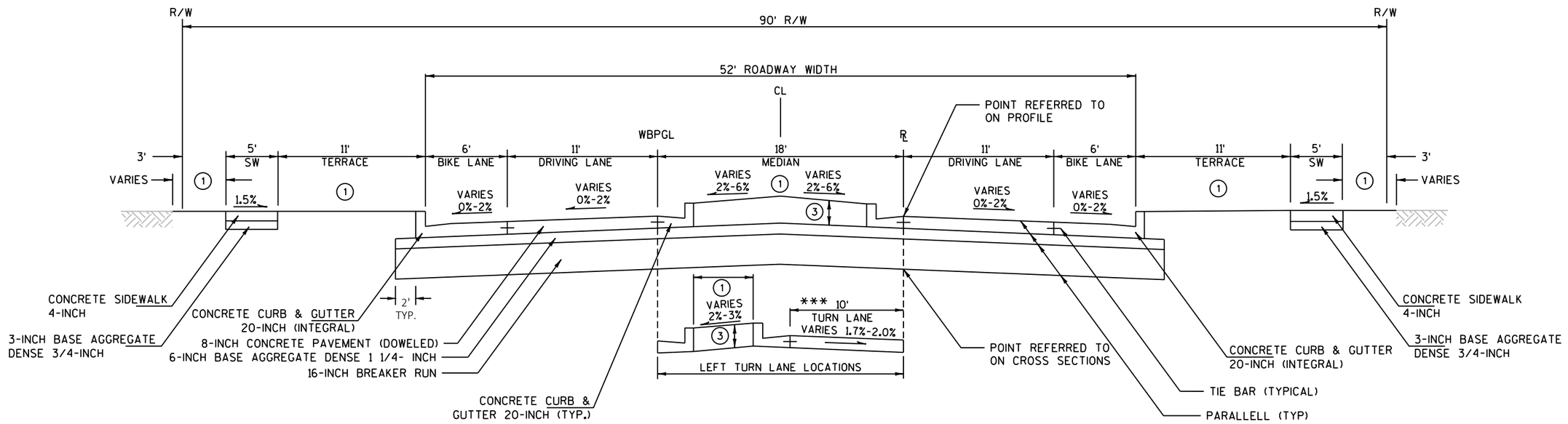
EXISTING TYPICAL SECTION

STA 40+50 TO STA 46+23



PROPOSED TYPICAL SECTION

STA 12+33.85 TO STA 18+00

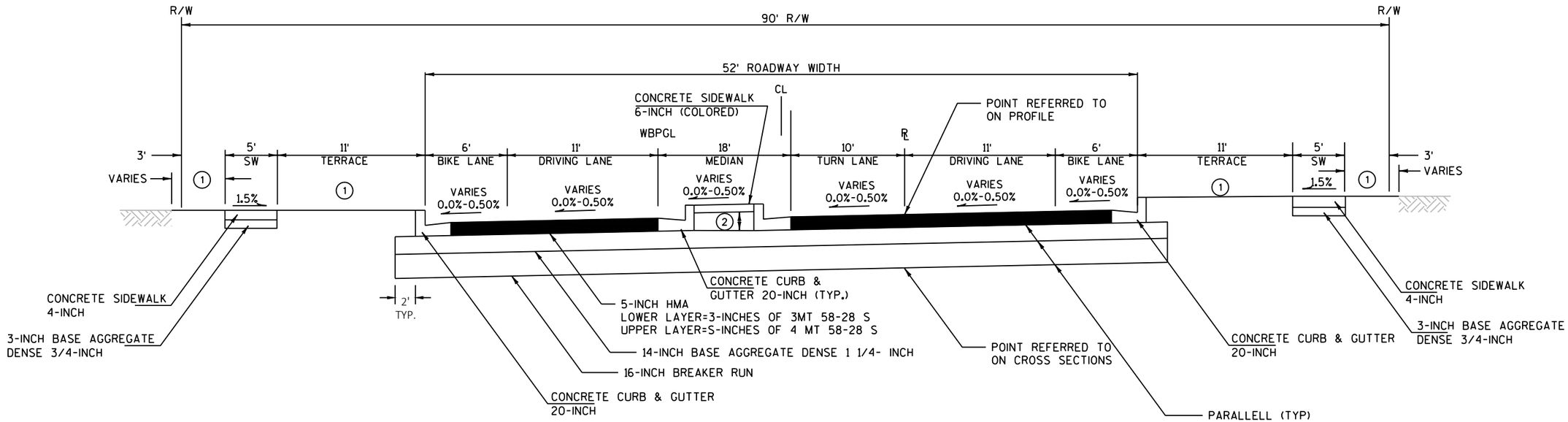


*** LEFT TURN LANE DETAIL
WB LEFT TURN LANE IS A MIRROR IMAGE

PROPOSED TYPICAL SECTION

STA 18+00 TO STA 27+11.91

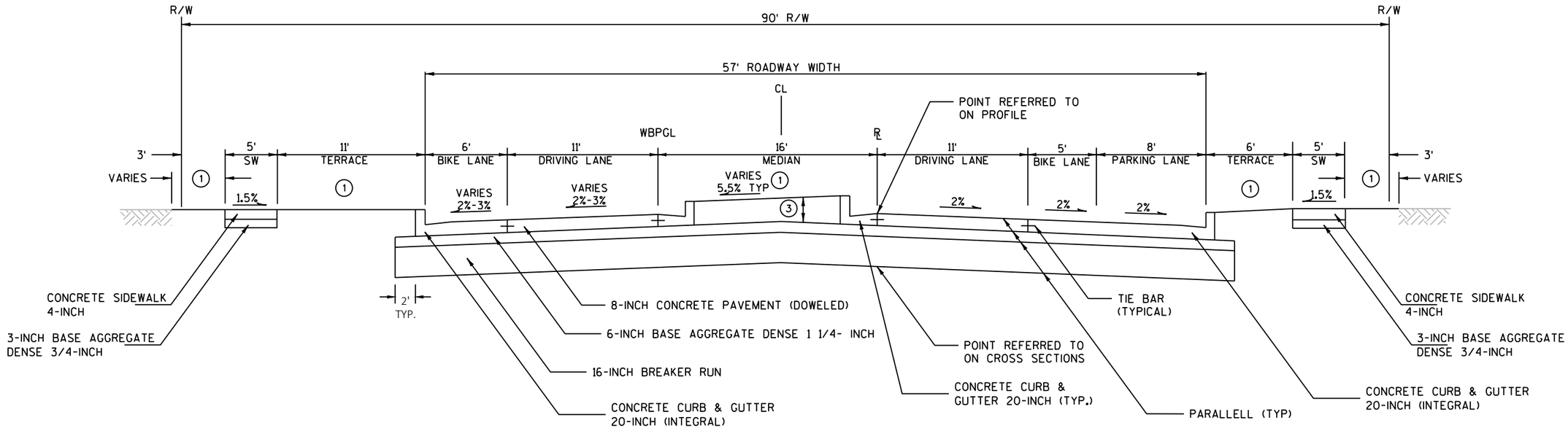
PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN	TYPICAL SECTIONS	SHEET 8	E



PROPOSED TYPICAL SECTION

STA 27+11.91 TO STA 28+79.50
(RAILROAD CROSSINGS)

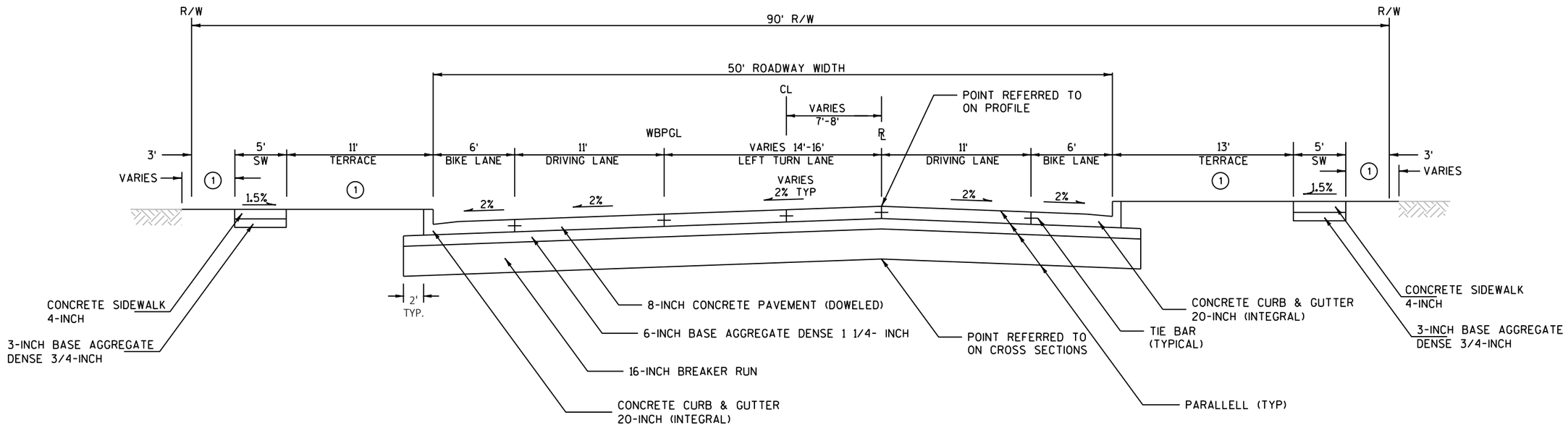
1. TOPSOIL, SEED, FERTILIZER AND EROSION MAT URBAN CLASS I TYPE B
2. BASE AGGREGATE DENSE 1 1/4-INCH
3. TOPSOIL



PROPOSED TYPICAL SECTION

STA 28+79.50 TO STA 37+75

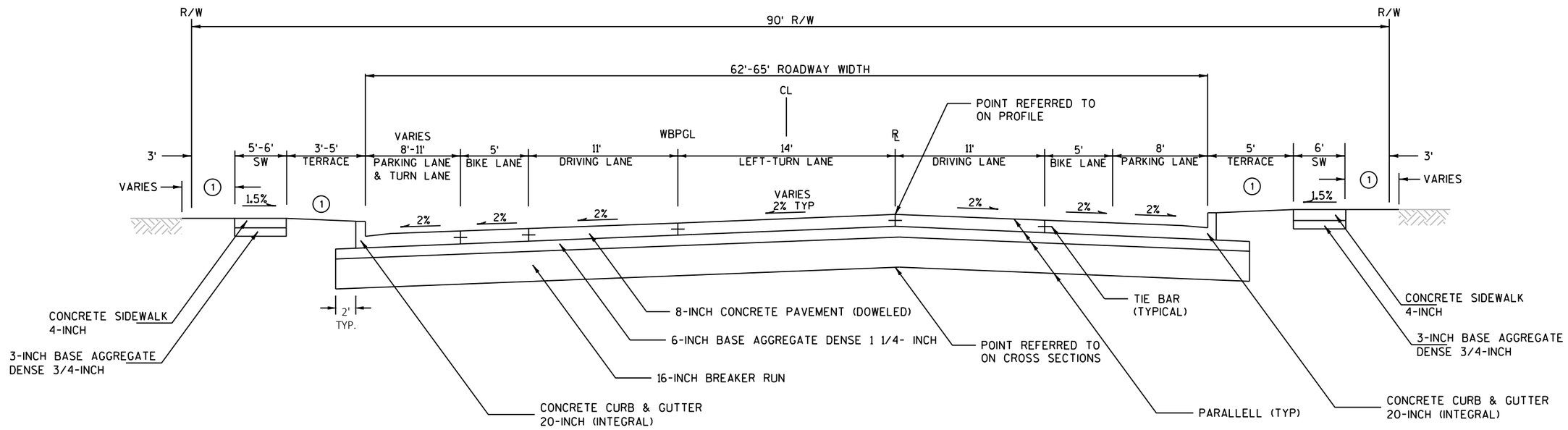
PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN	TYPICAL SECTIONS	SHEET 9	E



PROPOSED TYPICAL SECTION

STA 37+75 TO STA 39+75

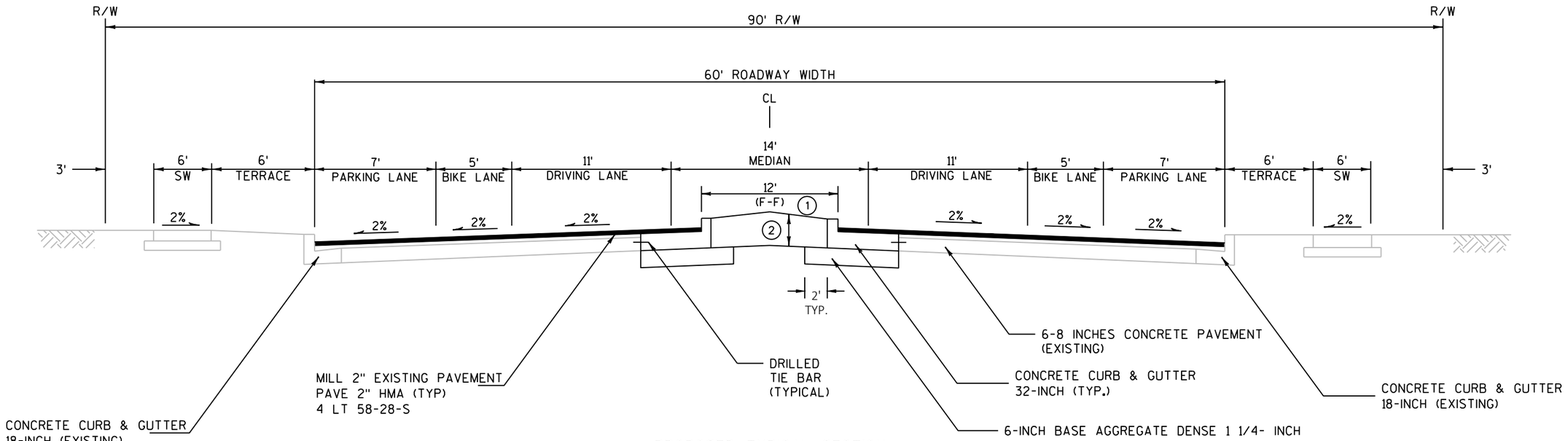
(1) TOPSOIL, SEED, FERTILIZER AND EROSION MAT URBAN CLASS I TYPE B



PROPOSED TYPICAL SECTION

STA 39+75 TO STA 43+06

PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN	TYPICAL SECTIONS	SHEET 10	E



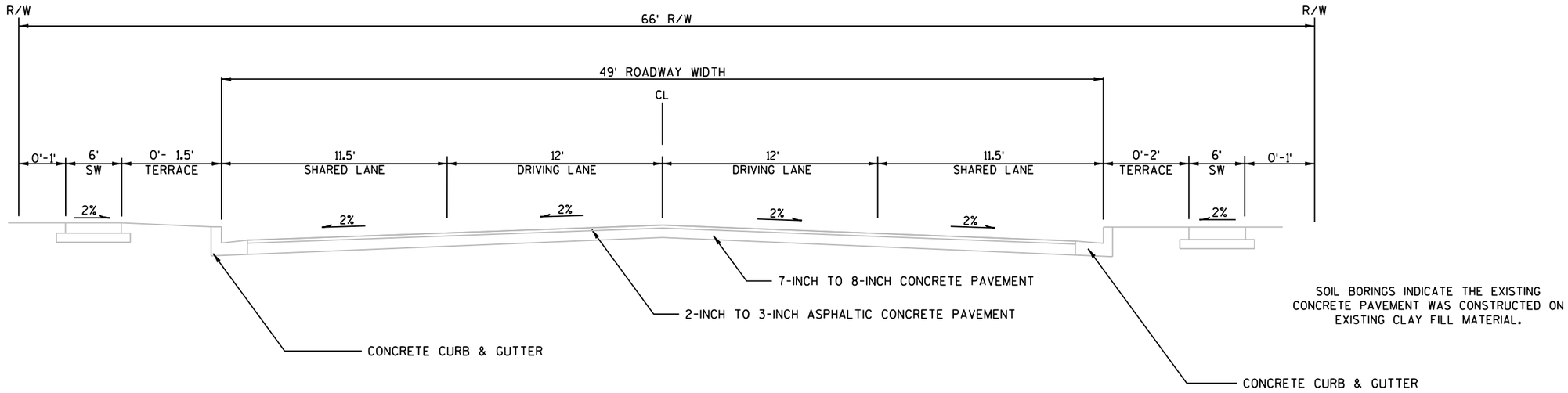
PROPOSED TYPICAL SECTION

STA 43+06 TO STA 46+23

(1) TOPSOIL, SEED, FERTILIZER AND EROSION MAT URBAN CLASS I TYPE B

(2) TOPSOIL

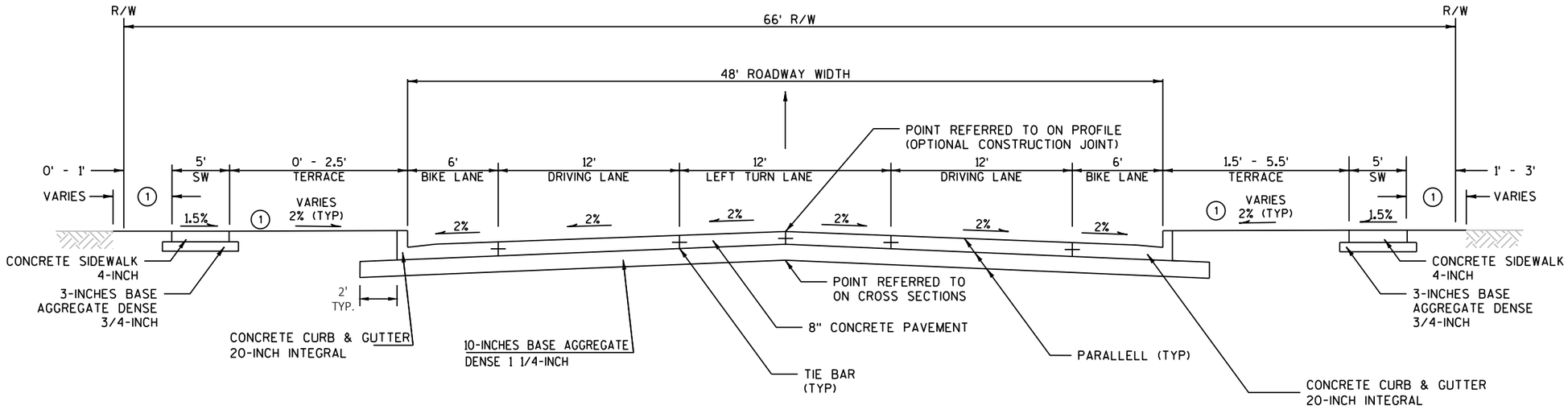
PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN	TYPICAL SECTIONS	SHEET 11	E



EXISTING TYPICAL SECTION

N. 15TH STREET

(1) TOPSOIL, SEED, FERTILIZER AND EROSION MAT URBAN CLASS I TYPE B



PROPOSED TYPICAL SECTION

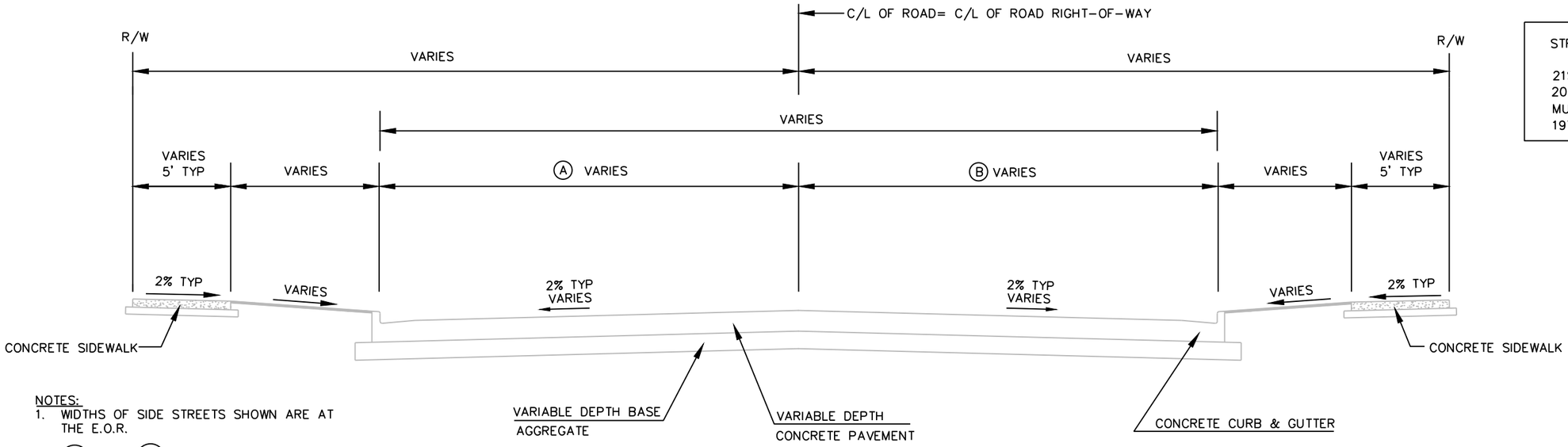
N. 15TH STREET

STA. 88+95 TO STA. 92+04

PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN	PLAN: TYPICAL SECTIONS - 15TH STREET	SHEET 12	E

FILE NAME : W:\PROJECTS\W0059\81500117\CADD\CIVIL3D\PLAN SHEETS\02-TYPICALS\NORTH-TYPICALS.DWG
LAYOUT NAME - 08 15TH STREET-TYPICALS

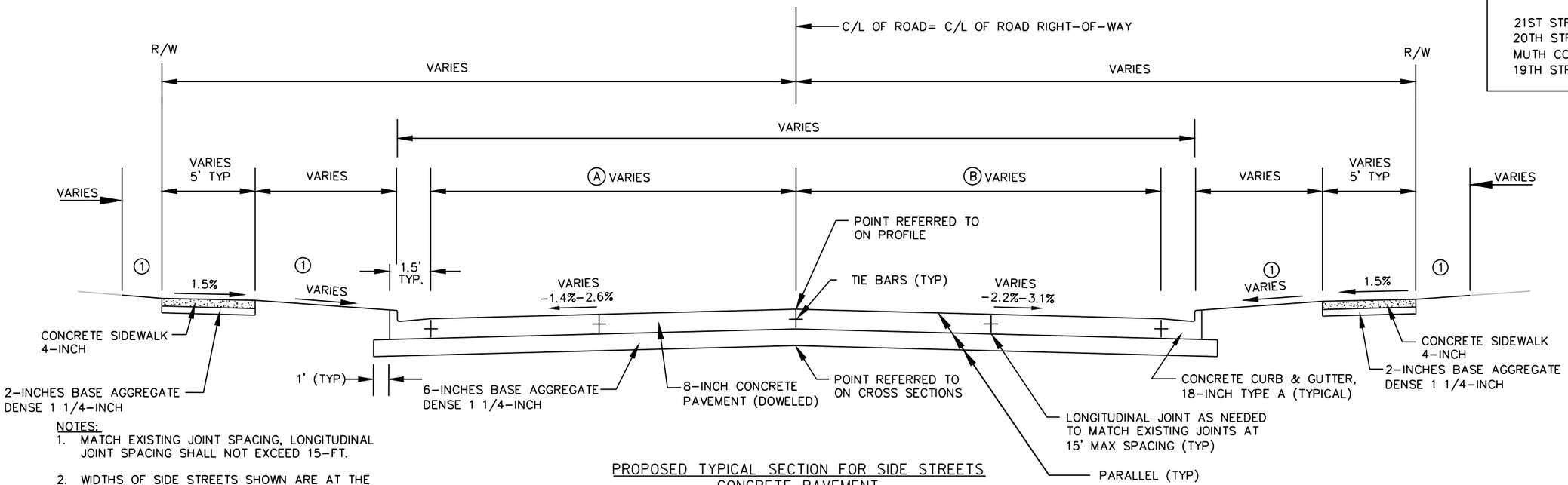
PLOT DATE : 11/1/2018 4:35 PM PLOT BY : CHRIS CLEMENS PLOT NAME : PLOT SCALE : 1'-0" = 1'-0"



STREET NAME	A	B
21ST STREET	17.81'	25.78'
20TH STREET	14.8'	14.8'
MUTH COURT	18.0'	18.0'
19TH STREET	17.8'	18.0'

NOTES:
1. WIDTHS OF SIDE STREETS SHOWN ARE AT THE E.O.R.
2. (A) AND (B) = DISTANCE FROM C/L TO FACE OF CURB

EXISTING TYPICAL SECTION FOR SIDE STREETS
EXISTING CONCRETE PAVEMENT
(SEE TABLE FOR STREET NAMES)



STREET NAME	A	B
21ST STREET	17.81'	25.78'
20TH STREET	14.8'	14.8'
MUTH COURT	18.0'	18.0'
19TH STREET	17.8'	18.0'

NOTES:
1. MATCH EXISTING JOINT SPACING, LONGITUDINAL JOINT SPACING SHALL NOT EXCEED 15-FT.
2. WIDTHS OF SIDE STREETS SHOWN ARE AT THE E.O.R.
3. (A) AND (B) = DISTANCE FROM C/L TO GUTTER FLANGE
4. (1) TOPSOIL, SEED, FERTILIZER AND EROSION MAT URBAN CLASS I TYPE B

PROPOSED TYPICAL SECTION FOR SIDE STREETS
CONCRETE PAVEMENT
(SEE TABLE FOR STREET NAMES)

(SEE PAVING DETAILS FOR PAVING LIMITS)

PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN	PLAN: TYPICAL SECTIONS - SIDE STREETS	SHEET 13	E

DRIVEWAY ENTRANCE DETAIL WITH SIDEWALK, CURB & GUTTER

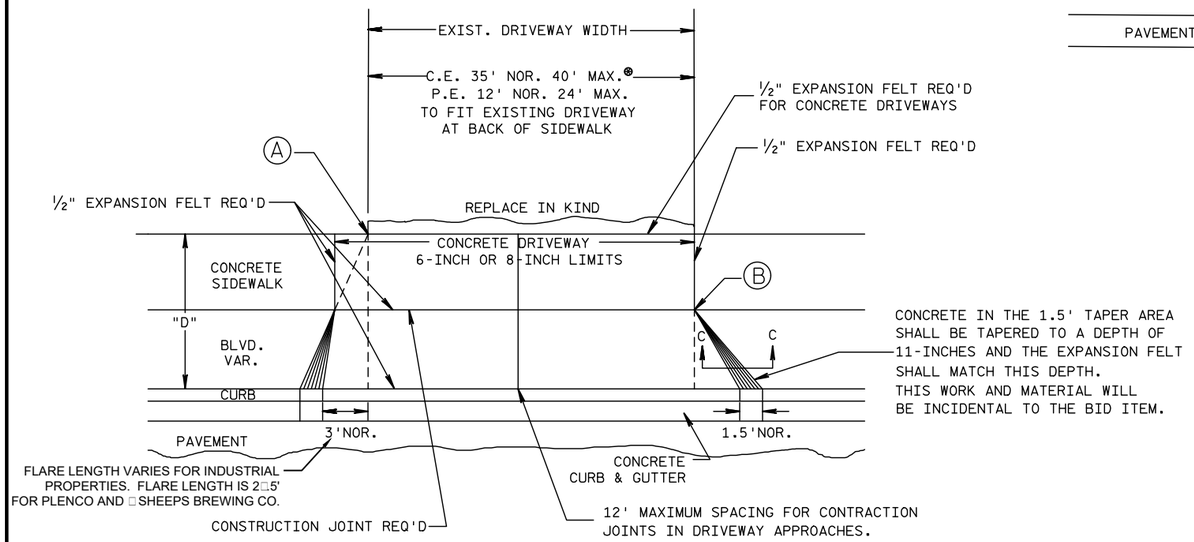
⊛ UNLESS EXISTING WIDTH IS WIDER THAN 40', THEN EXISTING WIDTH IS MAXIMUM.

① RESIDENTIAL DRIVEWAYS SHALL BE REPLACED WITH CONCRETE DRIVEWAY 6-INCH OVER 6" BASE AGGREGATE DENSE 1 1/4".

② COMMERCIAL DRIVEWAYS AND ALLEYS SHALL BE REPLACED WITH CONCRETE DRIVEWAY 8-INCH OVER 6" BASE AGGREGATE DENSE 1 1/4".

③ COMMERCIAL ASPHALT DRIVEWAYS & PARKING LOTS SHALL BE REPLACED WITH 4" OF ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES OVER 12" OF BASE AGGREGATE DENSE 1 1/4"

④ RESIDENTIAL DRIVEWAYS SHALL BE 2" OF ASPHALT SURFACE FOR DRIVEWAYS AND FIELD ENTRANCES OVER 8" OF BASE AGGREGATE DENSE 1 1/4".

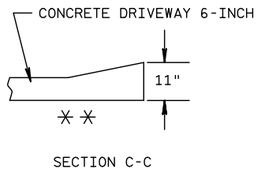


CONCRETE IN THE 1.5' TAPER AREA SHALL BE TAPERED TO A DEPTH OF 11-INCHES AND THE EXPANSION FELT SHALL MATCH THIS DEPTH. THIS WORK AND MATERIAL WILL BE INCIDENTAL TO THE BID ITEM.

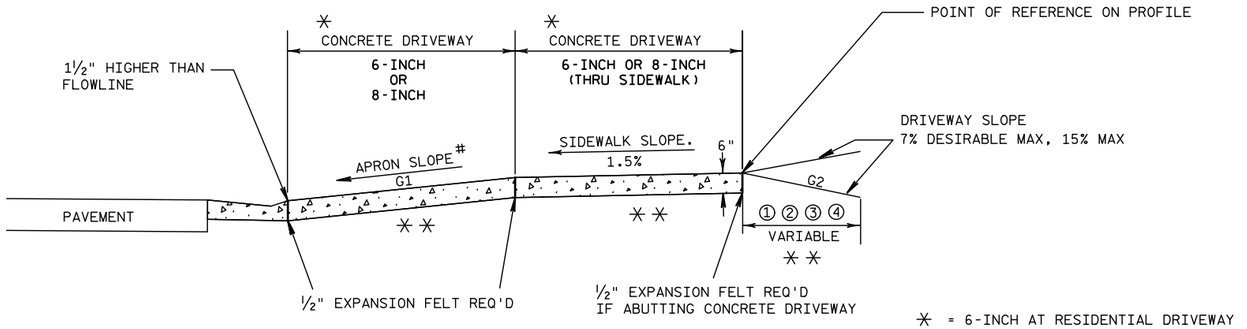
PLAN VIEW

Ⓐ WHEN "D" IS 13' OR LESS, ALIGN TAPER WITH BACK OF SIDEWALK

Ⓑ WHEN "D" IS GREATER THAN 13', ALIGN TAPER WITH FRONT OF SIDEWALK



SECTION C-C



TYPICAL SIDEWALK SECTION

⁂ = 6-INCH AT RESIDENTIAL DRIVEWAY AND 8-INCH AT COMMERCIAL DRIVEWAY

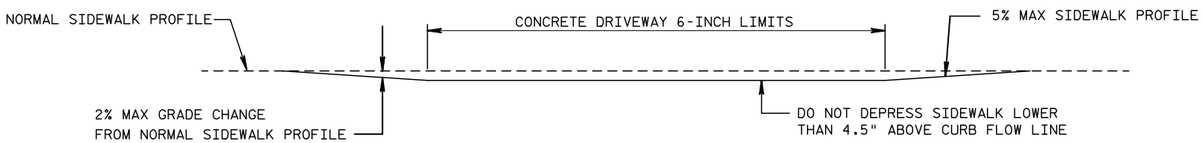
⁂⁂ = 6" BASE AGG. DENSE 1 1/4-INCH REQ'D UNDER CONCRETE DRWY

\#

TERRACE WIDTH	APRON SLOPE (G1) MIN %	DESIRABLE %	MAX %
3 FT	7.0	8.5	10.0
4 FT	5.0	7.0	10.0
5 FT	4.0	7.0	10.0
6 FT	4.0	7.0	10.0
7 FT	3.5	7.0	10.0
8 FT	3.0	7.0	10.0

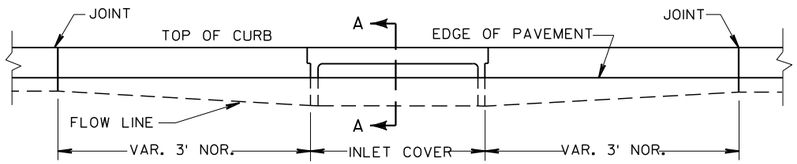
NOTE: ALGEBRAIC DIFFERENCE BETWEEN TANGENT GRADES G1 & G2 TO NOT EXCEED 15%

DEPRESS SIDEWALK PROFILE IF DRIVEWAY APRON EXCEEDS MAX SLOPE

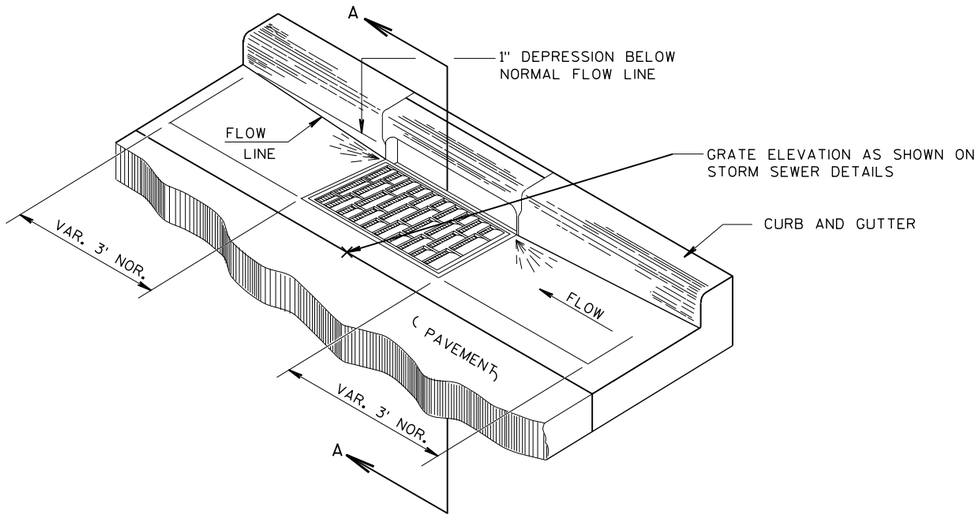


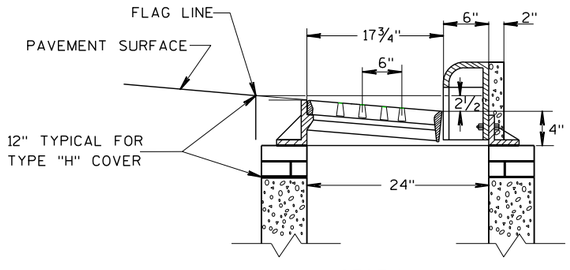
DEPRESSED SIDEWALK PROFILE DETAIL

PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN	CONSTRUCTION DETAILS	SHEET 14	E



ELEVATION



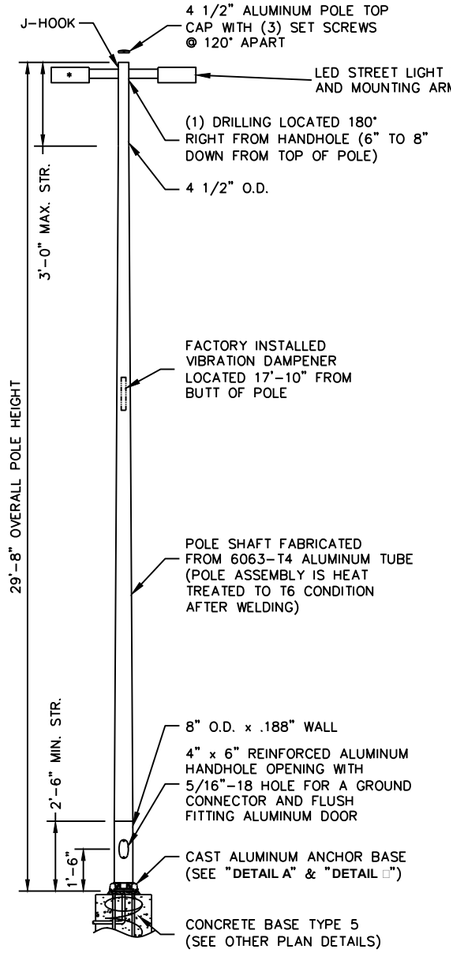


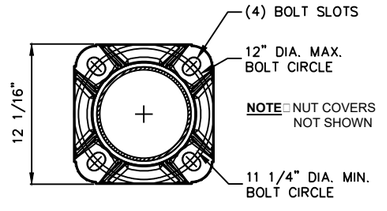
SECTION A-A

DETAIL OF CURB AND GUTTER AT INLETS

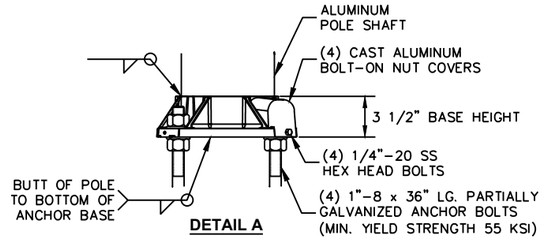
(TYPE 2x3-H INLET SHOWN)

* TWO LIGHT FICTURES REQUIRED AT MEDIAN LOCATIONS





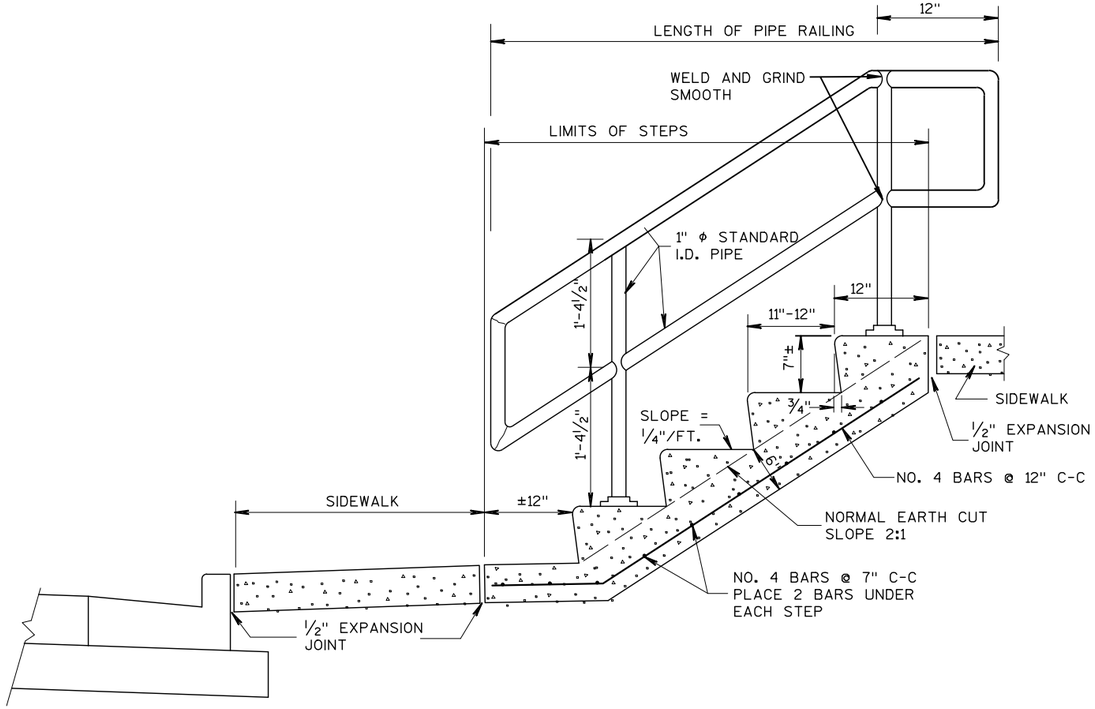
DETAIL □



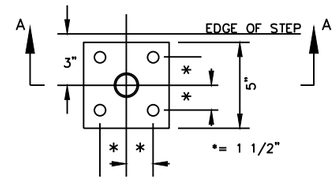
DETAIL A

POLE RATING (PER AASHTO 2013):
3-SEC GUST WIND SPEED: 90 MPH MAX
EPA (LUMINAIRE): 12.0 SQ. FT. MAX
WEIGHT (LUMINAIRE): 150 LBS MAX

LIGHTING ASSEMBLY

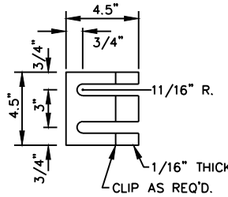


CONCRETE STEPS DETAIL

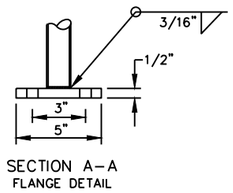


PLAN VIEW

FOUR 11/16" HOLES. 5/8" CONCRETE MASONRY ANCHORS, TYPE S (EPOXY). MIN. PULLOUT CAPACITY OF 3.6 KIPS. EMBED A MIN. 4-INCHES.



SHIM DETAIL



SECTION A-A
FLANGE DETAIL

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

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

MINIMUM WIDTH OF STEP EQUALS 4 FEET.

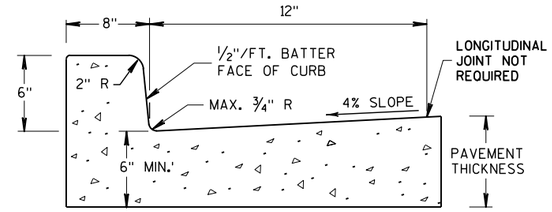
STEEL RAILING TO BE PLACED ON LEFT ASCENDING SIDE OF STEPS ONLY.

STEEL RAILING POST SPACING SHALL VERY WITH TREAD LENGTH.

HOLD PIPE 1/16" ABOVE BASE PLATE TO ALLOW POST AND BASE PLATE TO BE WELDED TOGETHER. PLACE PIPE POST VERTICAL AND CENTERED ON BASE PLATE.

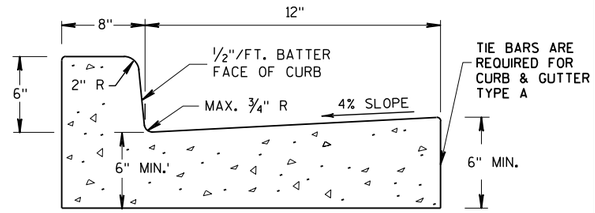
BASE PLATE SHALL CONFORM TO ASTM DESIGNATION A709 GRADE 36.

SHIM AS REQUIRED TO OBTAIN VERTICAL POSTS. FILL EXPOSED OPENINGS BETWEEN SHIMS, BASE PLATE, TOP OF CONCRETE, POST ANCHOR HOLES WITH NON-STANNING GRAY NON-BITUMINOUS JOINT SEALER.



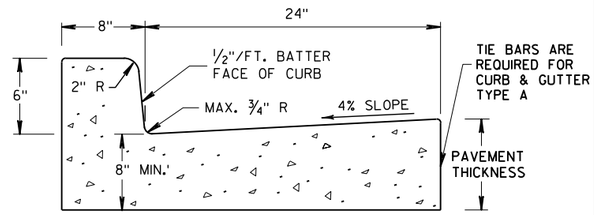
CONCRETE CURB AND GUTTER, 20-INCH INTEGRAL

IF ADJACENT CURB AND GUTTER HAS A 6-INCH CURB HEAD, TRANSITION FROM 8-INCH TO 6-INCH CURB HEAD OVER 6-FEET. TRANSITION LENGTH TO BE PAID FOR UNDER THE BID ITEM CONCRETE CURB AND GUTTER 20-INCH INTEGRAL.



CONCRETE CURB & GUTTER, 20-INCH, TYPES A & D

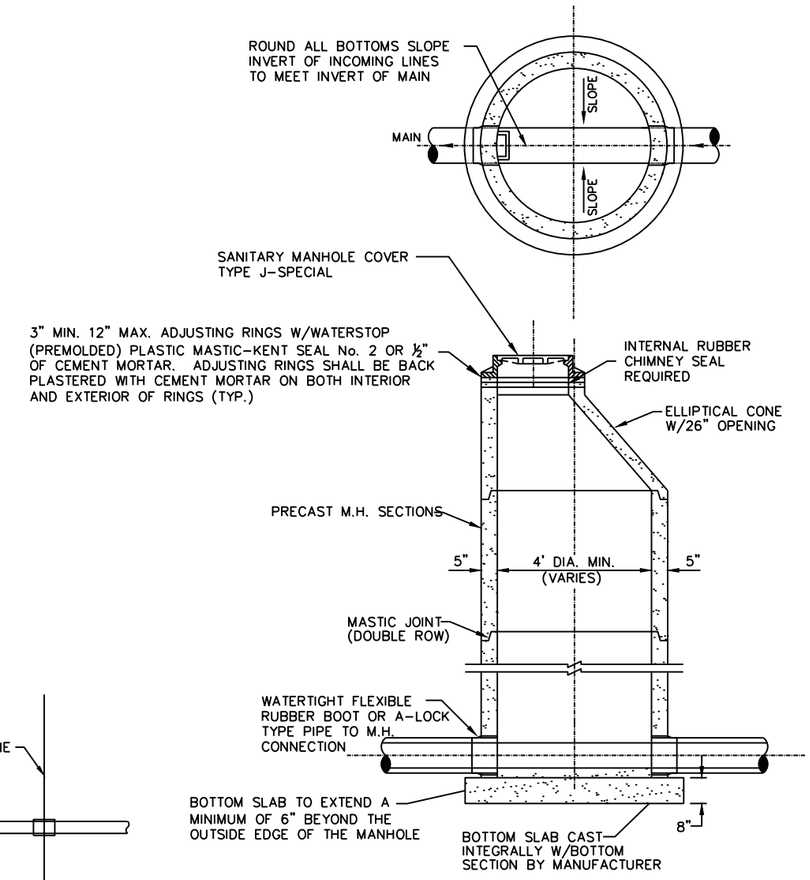
IF ADJACENT CURB AND GUTTER HAS A 6-INCH WIDE CURB HEAD, TRANSITION FROM 8-INCH TO 6-INCH CURB HEAD OVER 6-FEET. TRANSITION LENGTH TO BE PAID FOR UNDER THE BID ITEM CONCRETE CURB AND GUTTER 20-INCH, TYPE A OR D.



CONCRETE CURB & GUTTER, 32-INCH, TYPES A & D

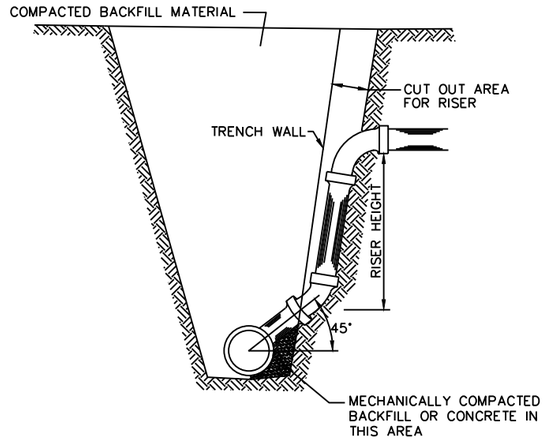
IF ADJACENT CURB AND GUTTER HAS A 6-INCH WIDE CURB HEAD, TRANSITION FROM 8-INCH TO 6-INCH CURB HEAD OVER 6-FEET. TRANSITION LENGTH TO BE PAID FOR UNDER THE BID ITEM CONCRETE CURB AND GUTTER 32-INCH, TYPE A OR D.

2



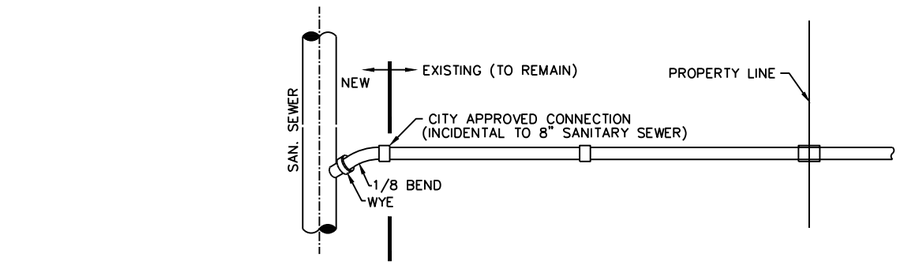
EXISTING SANITARY MANHOLE

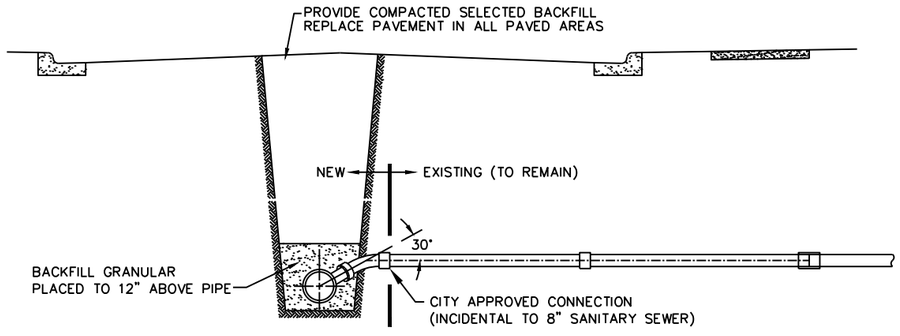
INCLUDES REQUIREMENTS FOR ADJUSTING MANHOLE COVER, INTERNAL CHIMNEY SEALS, AND RECONSTRUCTS



SANITARY LATERAL RISER

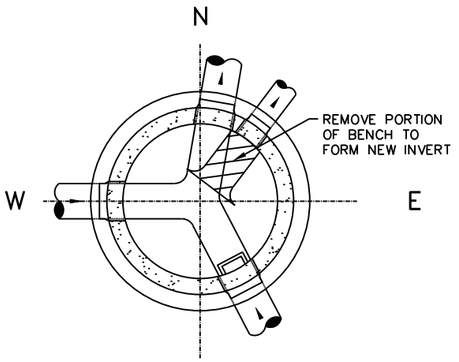
(FOR INFORMATION ONLY)

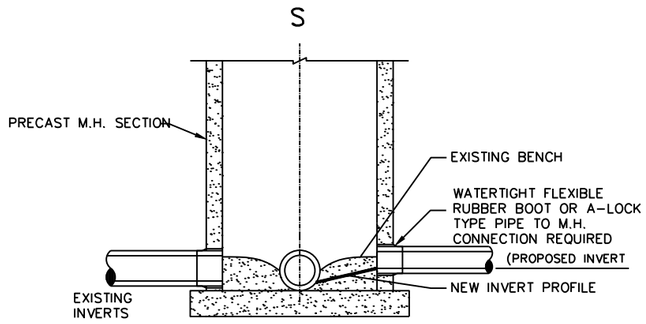




TYPICAL CONNECTION SEWER

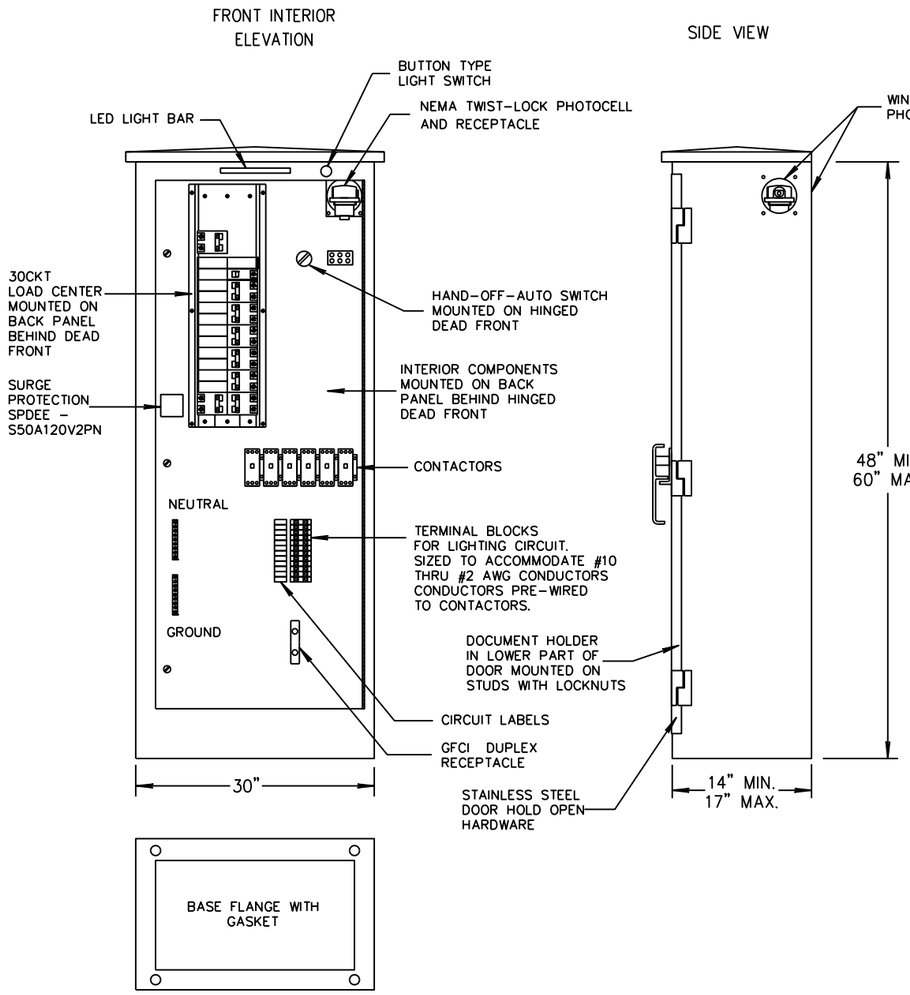
(FOR INFORMATION ONLY)

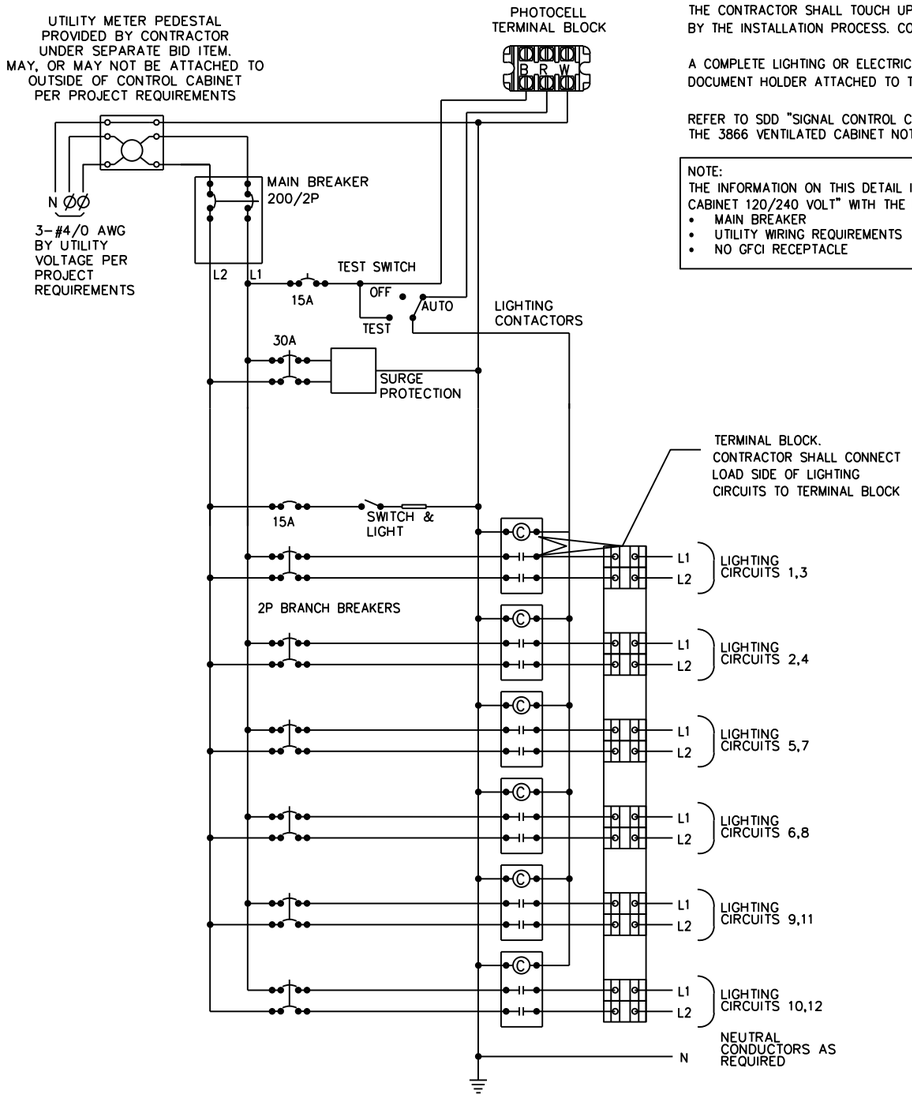




CONNECTING TO EXISTING SANITARY MANHOLE AT 15TH STREET

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.

ALL INTERNAL ELECTRICAL COMPONENTS WILL BE PRE-WIRED BY THE CABINET FABRICATOR.

ALL CONDUIT ENTRIES SHALL BE SEALED WITH AN APPROPRIATE DUCT SEALING COMPOUND.

ORIENT PHOTOCELL AWAY FROM AMBIENT LIGHT SOURCES AND ONCOMING TRAFFIC HEADLIGHTS.

THE CONTRACTOR SHALL TOUCH UP ANY DAMAGE TO THE ANODIZED FINISH CAUSED BY THE INSTALLATION PROCESS. COLOR MATCH PAINT SHALL BE USED.

A COMPLETE LIGHTING OR ELECTRICAL PLAN SHALL BE SECURELY PLACED IN THE DOCUMENT HOLDER ATTACHED TO THE DOOR.

REFER TO SDD "SIGNAL CONTROL CABINET' FOR ADDITIONAL INFORMATION REGARDING THE 3866 VENTILATED CABINET NOT SHOWN ON THIS DRAWING.

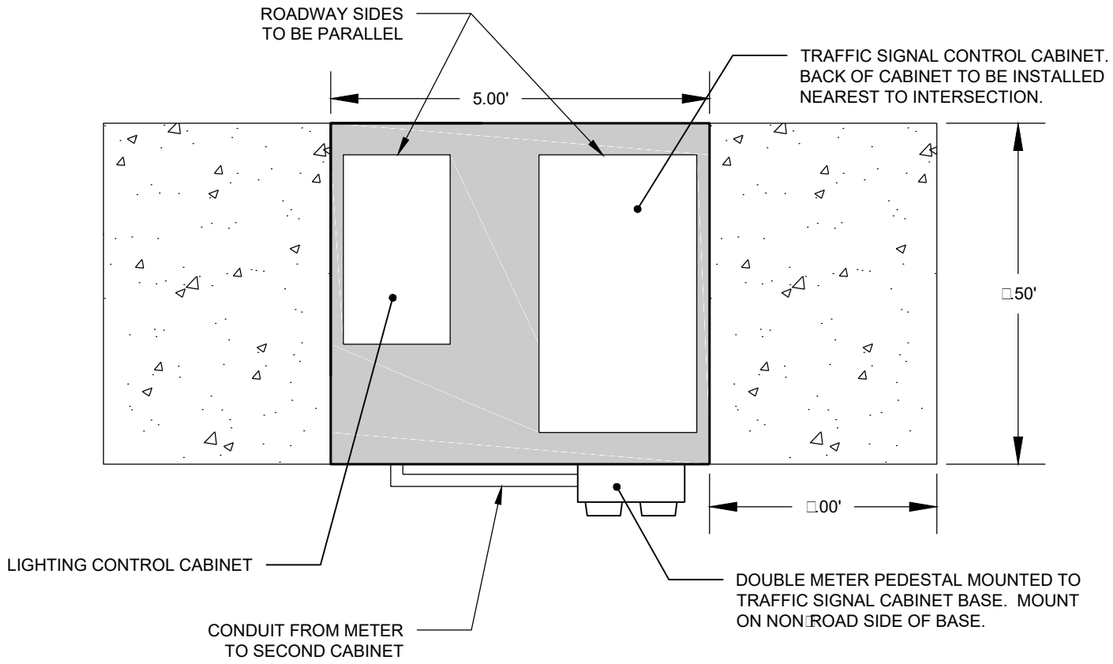
NOTE:
THE INFORMATION ON THIS DETAIL IS THE SAME AS ON "SDD LIGHTING CONTROL CABINET 120/240 VOLT" WITH THE FOLLOWING EXCEPTIONS:
- MAIN BREAKER
- UTILITY WIRING REQUIREMENTS
- NO GFCI RECEPTACLE

LIGHTING CONTROL CABINET 120/240 VOLT

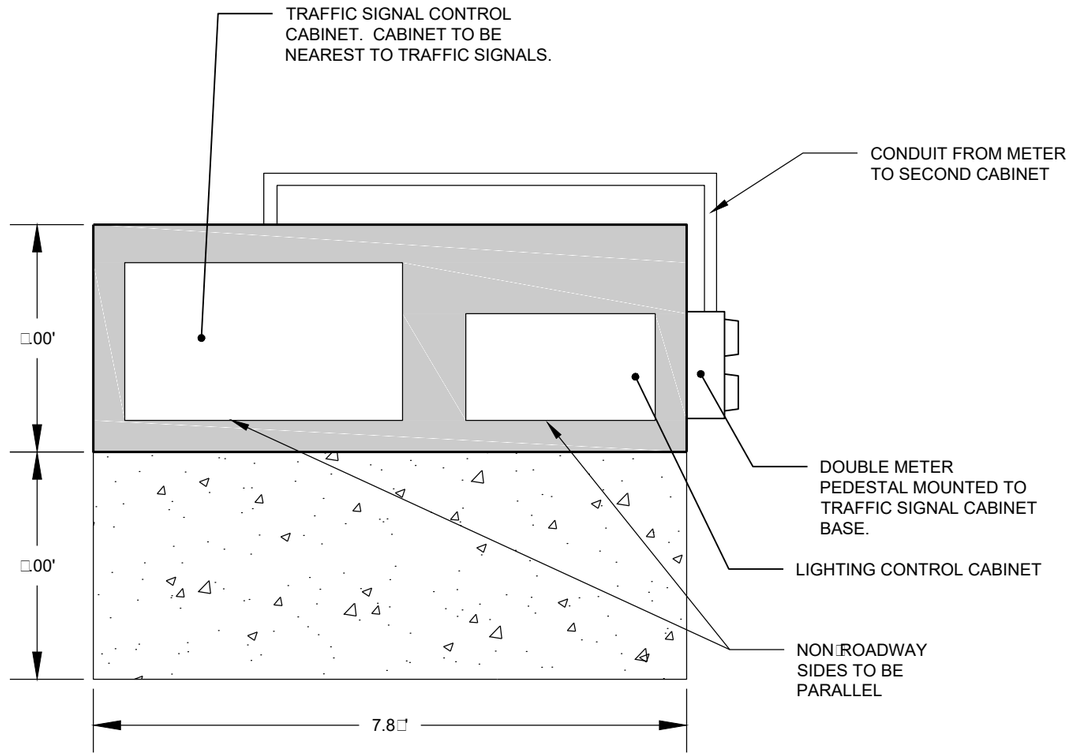
CONTROL CABINET SCHEMATIC

NOTES:

1. DOUBLE METER PEDESTAL REQUIRED FOR FOR DUAL CONTROLLER CABINET INSTALLATIONS. PROVIDE DOUBLE METER PEDESTAL ACCEPTABLE WITH LOCAL UTILITY.
2. INSTALL CONDUIT FROM DOUBLE METER PEDESTAL TO EACH CABINET BASE AS SHOWN. MODIFICATIONS NEEDED TO MEET THE REQUIREMENTS OF THIS DETAIL ARE INCIDENTAL TO THE ELECTRIC SERVICE METER BREAKER PEDESTAL BID ITEM.
3. SIDE-BY-SIDE OR BACK-TO-BACK ORIENTATION TO BE DETERMINED BY ENGINEER.
4. REFER TO WISDOT CONTROL CABINET BASE, TYPE 9, SPECIAL AND TYPE L (30) FOR ADDITIONAL DETAILS OF CONSTRUCTION.
5. MODIFICATIONS REQUIRED TO MEET REQUIREMENTS OF THIS DETAIL ARE INCIDENTAL TO THE CONCRETE BASE BID ITEMS.



BACK-TO-BACK ORIENTATION



SIDE-BY-SIDE ORIENTATION

CITY OF SHEBOYGAN
DEPARTMENT OF PUBLIC WORKS
ENGINEERING DIVISION
2026 NEW JERSEY AVENUE
SHEBOYGAN, WI 53081

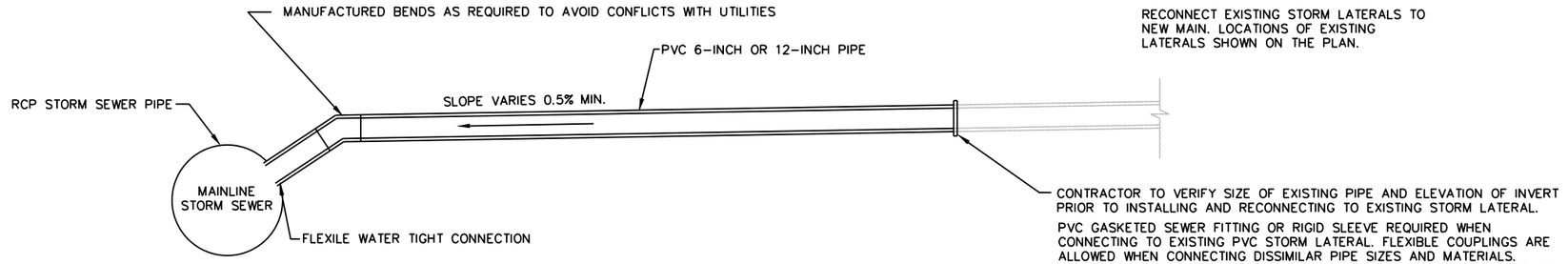
CITY OF SHEBOYGAN STANDARD DETAILS
FOR ROAD AND SEWER CONSTRUCTION

ISSUED: 7/24/18
REV: --

DETAIL NUMBER: 06 CD

DUAL CONTROLLER CABINET LAYOUT

2



EXACT STORM SEWER LATERAL FIELD TAP ELEVATION TO BE DETERMINED IN THE FIELD.

AT A MINIMUM THE FLOWLINE OF THE STORM LATERAL SHALL MATCH THE SPRINGLINE OF THE MAINLINE STORM SEWER.

TRACER WIRE IS REQUIRED FOR ALL STORM LATERALS.

LIMIT STORM SEWER LATERAL PENETRATION INTO STORM SEWER TO 1" MAX.

STORM SEWER LATERAL

SPOT ELEVATIONS SHOWN ARE FINISHED GRADES AT THE REFERENCE LINE, WBPGL AND EDGE OF PAVEMENT. SPOT ELEVATIONS ARE LOCATED AT 25' INTERVALS, PI'S, PVC'S, PVT'S, CL-CL'S, MATCH POINTS, AROUND RADII, AND AT INLET LOCATIONS.

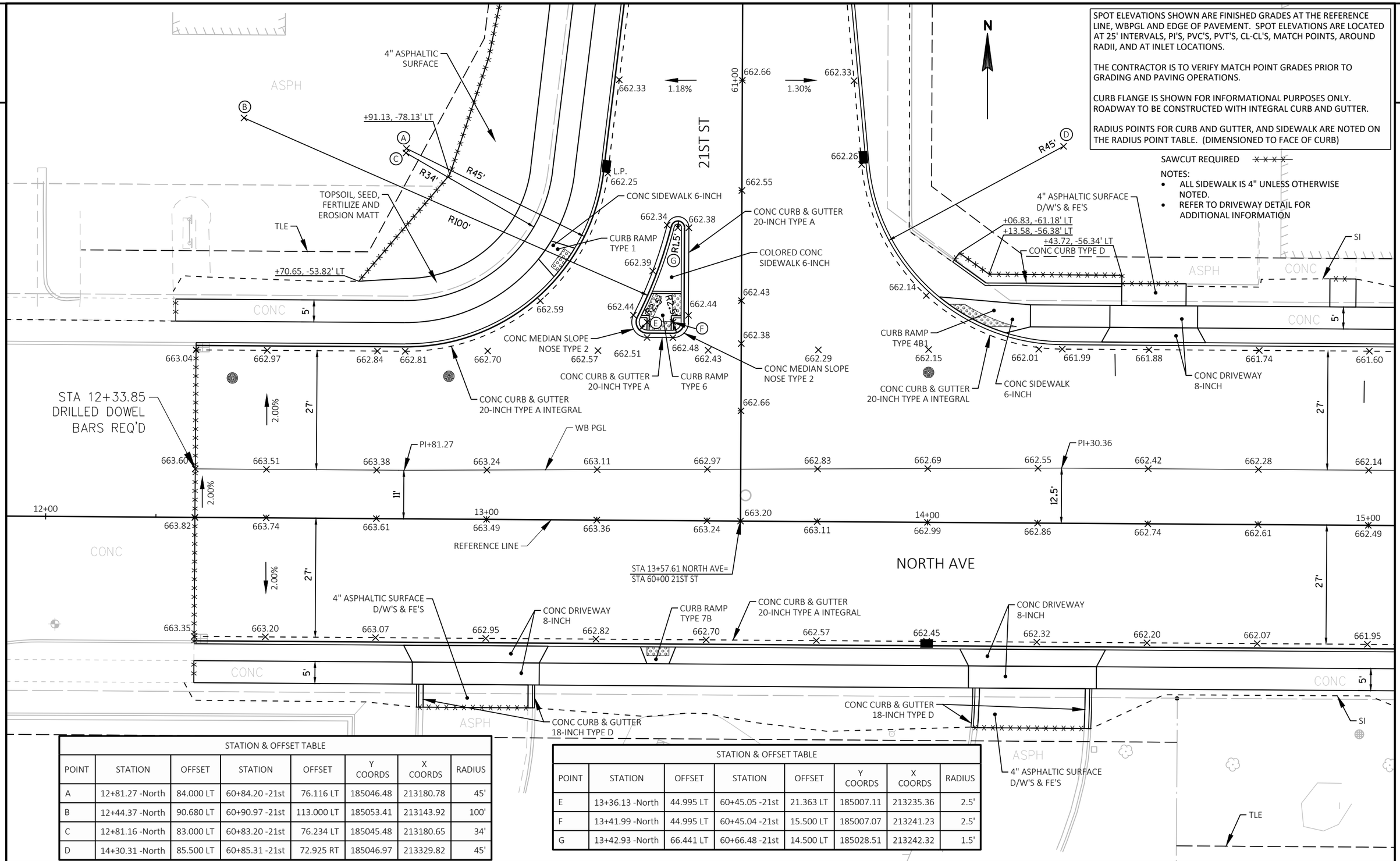
THE CONTRACTOR IS TO VERIFY MATCH POINT GRADES PRIOR TO GRADING AND PAVING OPERATIONS.

CURB FLANGE IS SHOWN FOR INFORMATIONAL PURPOSES ONLY. ROADWAY TO BE CONSTRUCTED WITH INTEGRAL CURB AND GUTTER.

RADIUS POINTS FOR CURB AND GUTTER, AND SIDEWALK ARE NOTED ON THE RADIUS POINT TABLE. (DIMENSIONED TO FACE OF CURB)

SAWCUT REQUIRED

NOTES:
- ALL SIDEWALK IS 4" UNLESS OTHERWISE NOTED.
- REFER TO DRIVEWAY DETAIL FOR ADDITIONAL INFORMATION



STATION & OFFSET TABLE							
POINT	STATION	OFFSET	STATION	OFFSET	Y COORDS	X COORDS	RADIUS
A	12+81.27 -North	84.000 LT	60+84.20 -21st	76.116 LT	185046.48	213180.78	45'
B	12+44.37 -North	90.680 LT	60+90.97 -21st	113.000 LT	185053.41	213143.92	100'
C	12+81.16 -North	83.000 LT	60+83.20 -21st	76.234 LT	185045.48	213180.65	34'
D	14+30.31 -North	85.500 LT	60+85.31 -21st	72.925 RT	185046.97	213329.82	45'

STATION & OFFSET TABLE							
POINT	STATION	OFFSET	STATION	OFFSET	Y COORDS	X COORDS	RADIUS
E	13+36.13 -North	44.995 LT	60+45.05 -21st	21.363 LT	185007.11	213235.36	2.5'
F	13+41.99 -North	44.995 LT	60+45.04 -21st	15.500 LT	185007.07	213241.23	2.5'
G	13+42.93 -North	66.441 LT	60+66.48 -21st	14.500 LT	185028.51	213242.32	1.5'

PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN	PAVING DETAILS	SHEET 21	E

FILE NAME : W:\PROJECTS\W0059\81500117\CADD\CIVIL3D\PLAN SHEETS\02-PAVING DETAILS\NORTHAVE-PD.DWG
LAYOUT NAME - 01 NorthAve-PD
PLOT DATE : 11/1/2018 4:36 PM
PLOT BY : CHRIS CLEMENS
PLOT NAME :
PLOT SCALE : 1 IN:20 FT
WISDOT/CADDS SHEET 42

SAWCUT REQUIRED

NOTES:
- ALL SIDEWALK IS 4" UNLESS OTHERWISE NOTED.
- REFER TO DRIVEWAY DETAIL FOR ADDITIONAL INFORMATION

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RADIUS POINTS FOR CURB AND GUTTER, AND SIDEWALK ARE NOTED ON THE RADIUS POINT TABLE. (DIMENSIONED TO FACE OF CURB)

N

TLE
4" ASPHALTIC SURFACE
D/W'S & FE'S
SI
CONC
ASPH
5'
27'
661.60 661.47 661.33 661.19 661.17 661.02 660.74 660.32 660.06 659.89 659.78 659.19 658.59 658.00 657.74 657.39
CONC CURB & GUTTER 20-INCH TYPE A INTEGRAL
CONC DRIVEWAY 8-INCH
+96.78
CONC DRIVEWAY 8-INCH
CONC DRIVEWAY 8-INCH
16'
WB PGL
PVC+80
PI+96.82
662.14 662.01 661.87 661.73 661.71 661.55 661.24 660.79 PVT+70 660.34 660.21 659.59 658.96 658.34 658.05 657.71
CONC CURB & GUTTER 20-INCH TYPE A
12.5'
3.12%
TOPSOIL, SEED, FERTILIZE AND EROSION MAT
PI+61.41
15+00 662.49 662.36 662.24 PVC+80 662.11 662.09
16+00 661.94 661.64 661.19 PVT+70 660.73 660.61
17+00 659.98 659.36 658.74 658.11
CONC MEDIAN SLOPE NOSE TYPE 1
PI+96.82
CONC CURB & GUTTER 20-INCH TYPE A
REFERENCE LINE
27'
NORTH AVE
CONC DRIVEWAY 8-INCH
CONC CURB & GUTTER 20-INCH TYPE A INTEGRAL
+97.21
661.95 661.82 661.70 661.57 661.55 661.40 661.12 660.69 660.25 660.13 659.53
+35.90, 22.45' RT
+79.26, 20.72' RT
LIMITS OF 8-INCH CURB HEAD
6'
6'
658.92 658.32 657.71
659.28 TC 658.92 TC 658.18 TC
WPS
WPS
659.58 659.68 659.07 658.49
659.68 659.78 659.17 658.59
CONC
CONC
5'
SI
SI
3.83'
2'
CONC CURB & GUTTER 20-INCH TYPE A
CONC CURB & GUTTER 20-INCH TYPE A
+18.81, 58.23' RT
+56.67, 59.01' RT
+37.30, 68.33' RT
TLE

1. TAPER FROM 6-INCH CURB HEAD TO 8-INCH CURB HEAD IN 6-FEET. 8-INCH CURB HEAD TO EXTEND PAST WPS VAULTS AND THEN TRANSITION BACK TO 6-INCH IN 6-FEET. COST OF ADDITIONAL CURB HEAD TO BE INCLUDED IN LF UNIT PRICE FOR CURB & GUTTER.
2. DIRECT SIDEWALK DRAINAGE FROM WEST EDGE OF WESTERNMOST VAULT TO DRIVEWAY OPENING.
3. ELEVATION OF NW CORNER OF VAULT = 659.45
4. ELEVATION OF NW CORNER OF VAULT = 658.30

PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN	PAVING DETAILS	SHEET 22	E

SAWCUT REQUIRED ~~~~

NOTES:
- ALL SIDEWALK IS 4" UNLESS OTHERWISE NOTED.
- REFER TO DRIVEWAY DETAIL FOR ADDITIONAL INFORMATION

SPOT ELEVATIONS SHOWN ARE FINISHED GRADES AT THE REFERENCE LINE, WBPGL AND EDGE OF PAVEMENT. SPOT ELEVATIONS ARE LOCATED AT 25' INTERVALS, PI'S, PVC'S, PVT'S, CL-CL'S, MATCH POINTS, AROUND RADII, AND AT INLET LOCATIONS.

THE CONTRACTOR IS TO VERIFY MATCH POINT GRADES PRIOR TO GRADING AND PAVING OPERATIONS.

CURB FLANGE IS SHOWN FOR INFORMATIONAL PURPOSES ONLY. ROADWAY TO BE CONSTRUCTED WITH INTEGRAL CURB AND GUTTER.

RADIUS POINTS FOR CURB AND GUTTER, AND SIDEWALK ARE NOTED ON THE RADIUS POINT TABLE. (DIMENSIONED TO FACE OF CURB)

N

TLE
CONC SIDEWALK 4-INCH
SI
4" ASPHALTIC SURFACE D/W'S & FE'S
CURB RAMP TYPE 7B
CURB RAMP TYPE 7B
CONC DRIVEWAY 8-INCH
CONC CURB & GUTTER 20-INCH TYPE A
CONC DRIVEWAY 8-INCH
CONC CURB & GUTTER 20-INCH TYPE A INTEGRAL
PI+72.13
WB PGL
CONC MEDIAN SLOPE NOSE TYPE 1
CONC CURB & GUTTER 20-INCH TYPE A
TOPSOIL, SEED, FERTILIZE AND EROSION MAT
STA 19+02.34 NORTH AVE= STA 70+00 20TH ST
TOPSOIL, SEED, FERTILIZE AND EROSION MAT
CONC CURB & GUTTER 20-INCH TYPE A
CONC CURB & GUTTER 20-INCH TYPE A INTEGRAL
PI+72.36
NORTH AVE
REFERENCE LINE
CONC CURB & GUTTER 20-INCH TYPE A INTEGRAL
+79.26, 20.72' RT
HEAD
CONC SIDEWALK 6-INCH
CONC SIDEWALK 6-INCH
CURB RAMP TYPE 2
CURB RAMP TYPE 2
CONC DRIVEWAY 8-INCH
L.P.
SI
TLE
STA 69+34.00
DRILLED DOWEL BARS REQ'D
20TH ST

STATION & OFFSET TABLE							
POINT	STATION	OFFSET	STATION	OFFSET	Y COORDS	X COORDS	RADIUS
H	0+00.00	0.000	69+68.05 -20th	30.066 LT	184923.43	213771.02	15'
I	19+32.32 -North	32.000 RT	69+67.95 -20th	29.924 RT	184923.07	213831.01	15'

PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN	PAVING DETAILS	SHEET 23	E

FILE NAME : W:\PROJECTS\W0059\81500117\CADD\CIVIL3D\PLAN SHEETS\02-PAVING DETAILS\NORTHAVE-PD.DWG
LAYOUT NAME - 03 NorthAve-PD
PLOT DATE : 11/1/2018 4:36 PM PLOT BY : CHRIS CLEMENS PLOT NAME : PLOT SCALE : 1 IN:20 FT

2

ASPH

4" ASPHALTIC SURFACE
D/W'S & FE'S

CURB RAMP
TYPE 2

L.P. 1.00%

646.63

646.75

646.89

CONC SIDEWALK
6-INCH

CONC

5'

R15'

K

649.71 649.03 648.35 648.19 647.72 647.23 647.04 646.89

CONC DRIVEWAY
8-INCH

CONC DRIVEWAY
8-INCH

CONC CURB & GUTTER
20-INCH TYPE A INTEGRAL

CONC CURB & GUTTER
20-INCH TYPE A

CONC MEDIAN SLOPE
NOSE TYPE 1

16'

650.03 +88.80 649.66 649.35 648.67 PVC+30.9 648.51 648.04 647.55 647.36 647.21 646.90

TOPSOIL, SEED, FERTILIZE
AND EROSION MAT

2.38%

PVT+20.9

CROWN LINE

647.41 647.22 647.20

649.73 649.34 +14.16 649.01 648.84 648.32 647.78 647.58 +87.07

10'

2.00%

2.00%

650.41 650.31 21+00 649.56 648.81 648.64 PVC+30.9 648.12 647.58 647.22 22+00 647.04

PVT+20.9

CONC CURB & GUTTER
20-INCH TYPE A

16'

CONC DRIVEWAY
8-INCH

649.99 649.24 648.49 648.32 647.80 647.26 646.90

CONC CURB & GUTTER
20-INCH TYPE A INTEGRAL

647.17

CONC SIDEWALK
6-INCH

647.12

CURB RAMP
TYPE 2

R15'

J

CONC

5'

GRVL

SI

L.P.

647.05

647.13

1.00%

647.21

+40.25, -16.89' LT

+30.20, -26.95' LT

647.40

647.71

CONC

19TH ST

79+00

2.05%

1.98%

647.95 648.29 647.96

CONC

646.65

646.80

MUTH CT

646.60

CONC SIDEWALK
6-INCH

646.58

646.54

TLE

SI

R15'

L

CURB RAMP
TYPE 2

CONC

5'

646.55 646.47 646.41 646.27 646.13 645.99

CONC CURB & GUTTER
20-INCH TYPE A INTEGRAL

NORTH AVE

16'

646.72 646.69

STA 22+20.86 NORTH AVE=
STA 80+00 MUTH CT

646.87 646.73 646.59 646.45 646.31

WB PGL

1.72%

10'

1.82%

+28.72

647.04 647.01 647.04 647.02 646.90 646.77 646.63 646.45

CONC CURB & GUTTER
20-INCH TYPE A

CONC MEDIAN
SLOPE NOSE
TYPE 1

TOPSOIL, SEED, FERTILIZE
AND EROSION MAT

646.88 646.86 +54.62 646.74 646.61 646.47 646.33

STA 22+20.04 NORTH AVE=
STA 80+00 19TH ST

CONC CURB & GUTTER
20-INCH TYPE A

CONC CURB & GUTTER
20-INCH TYPE A INTEGRAL

REFERENCE LINE

16'

646.72 646.70

CONC SIDEWALK
6-INCH

646.55 646.42 646.29 646.15 646.01

646.67

CURB RAMP
TYPE 2

646.86

646.79

R15'

M

CONC

5'

646.89

647.02

647.23

647.36

647.61

647.69

647.99

TLE

647.96

CONC

SPOT ELEVATIONS SHOWN ARE FINISHED GRADES AT THE REFERENCE LINE, WBPGL AND EDGE OF PAVEMENT. SPOT ELEVATIONS ARE LOCATED AT 25' INTERVALS, PI'S, PVC'S, PVT'S, CL-CL'S, MATCH POINTS, AROUND RADII, AND AT INLET LOCATIONS.

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RADIUS POINTS FOR CURB AND GUTTER, AND SIDEWALK ARE NOTED ON THE RADIUS POINT TABLE. (DIMENSIONED TO FACE OF CURB)

SAWCUT REQUIRED

NOTES:

- ALL SIDEWALK IS 4" UNLESS OTHERWISE NOTED.
- REFER TO DRIVEWAY DETAIL FOR ADDITIONAL INFORMATION

STATION & OFFSET TABLE

POINT	STATION	OFFSET	STATION	OFFSET	Y COORDS	X COORDS	RADIUS
J	21+77.16 -North	32.000 RT	79+68.07 -19th	42.936 LT	184921.63	214075.85	15'
M	22+52.94 -North	32.000 RT	79+67.94 -19th	32.850 RT	184921.18	214151.63	15'

STATION & OFFSET TABLE

POINT	STATION	OFFSET	STATION	OFFSET	Y COORDS	X COORDS	RADIUS
K	21+87.32 -North	50.000 LT	80+50.34 -Muth	33.028 LT	185003.57	214086.49	15'
L	22+63.61 -North	50.000 LT	80+49.56 -Muth	43.261 RT	185003.12	214162.78	15'

STA 78+80.00
DRILLED DOWEL BARS REQ'D

N

PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN	PAVING DETAILS	SHEET 24	E

FILE NAME : W:\PROJECTS\W0059\81500117\CADD\CIVIL3D\PLAN SHEETS\02-PAVING DETAILS\NORTHAVE-PD.DWG
LAYOUT NAME - 04 NorthAve-PD

PLOT DATE : 11/1/2018 4:36 PM PLOT BY : CHRIS CLEMENS PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 42

SPOT ELEVATIONS SHOWN ARE FINISHED GRADES AT THE REFERENCE LINE, WBPGL AND EDGE OF PAVEMENT. SPOT ELEVATIONS ARE LOCATED AT 25' INTERVALS, PI'S, PVC'S, PVT'S, CL-CL'S, MATCH POINTS, AROUND RADII, AND AT INLET LOCATIONS.

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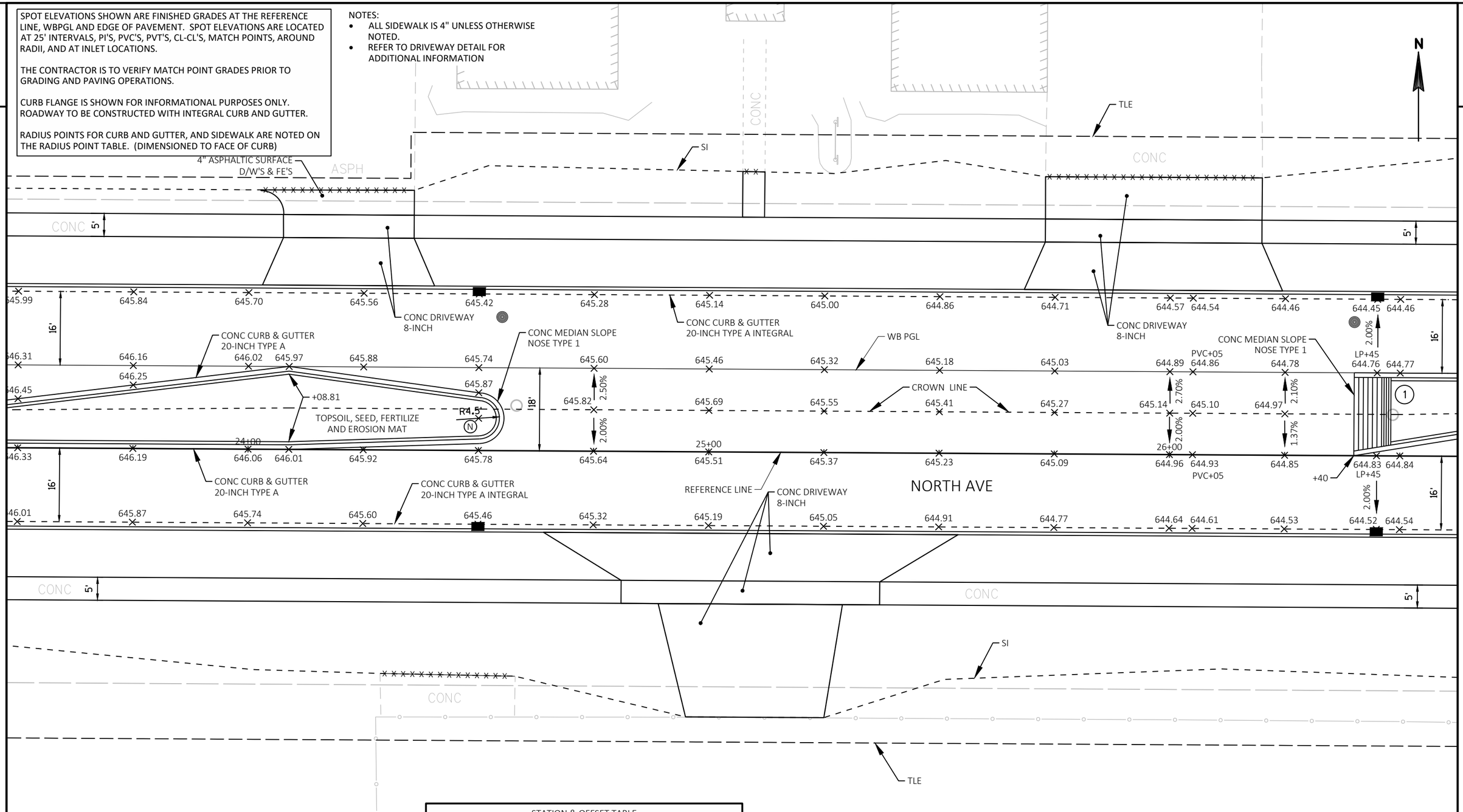
CURB FLANGE IS SHOWN FOR INFORMATIONAL PURPOSES ONLY. ROADWAY TO BE CONSTRUCTED WITH INTEGRAL CURB AND GUTTER.

RADIUS POINTS FOR CURB AND GUTTER, AND SIDEWALK ARE NOTED ON THE RADIUS POINT TABLE. (DIMENSIONED TO FACE OF CURB)

NOTES:
- ALL SIDEWALK IS 4" UNLESS OTHERWISE NOTED.
- REFER TO DRIVEWAY DETAIL FOR ADDITIONAL INFORMATION



STATION & OFFSET TABLE					
POINT	STATION	OFFSET	Y COORDS	X COORDS	RADIUS
N	24+50.00 -North	7.000 LT	184959.02	214348.91	4.5'

(1) CONCRETE MEDIAN SLOPED NOSE TYPE 1

SAWCUT REQUIRED ××××

PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN	PAVING DETAILS	SHEET 25	E

2

UP RR

C/L OF TRACKS

C/L OF TRACKS

TLE

SI

SI

ASPH

4" ASPHALTIC SURFACE
D/W'S & FE'S

CURB RAMP
TYPE 8

R10'

V

ASPH

5'

10'

2

CURB RAMP
TYPE 8

CURB RAMP
TYPE 8

ASPH

CURB RAMP
TYPE 8

10'

2

R20'

R10'

T

CONC CURB & GUTTER
20-INCH TYPE D

CONC

5'

644.45 644.46 644.62 644.81 644.87 645.15 645.22 645.29 645.29 645.09 644.87 644.80 644.76 644.68 644.67 643.84 644.68 644.55 644.50 644.15 643.61 643.26 643.05

2.00%

LP+45
644.76 644.77

16'

CONC CURB & GUTTER
20-INCH TYPE A INTEGRAL

PVT+95
644.99 645.03

644.85

CONC CURB
& GUTTER
20-INCH
TYPE D

0.37%

645.24 645.30 645.35

CONC CURB & GUTTER
20-INCH TYPE D

WB PGL

645.35 645.31

PVI+53

645.15

644.93 644.81 644.76

PVI+20.5
644.74

U

R19'

0.37%

PVC+48

PI+68.34

644.75 644.74

644.68 644.63

CONC CURB & GUTTER
20-INCH TYPE A INTEGRAL

CONC DRIVEWAY
8-INCH

644.35

643.88

PVT+38
643.57

PVC+45
643.42

643.26

16'

1

TOPSOIL, SEED, FERTILIZE
AND MULCH

1

COLORED CONC
SIDEWALK 6-INCH

1

PVI+38.5

12'

12'

1

COLORED CONC
SIDEWALK 6-INCH

1

12'

S

12'

1

COLORED CONC
SIDEWALK 6-INCH

1

18'

0.61%

LIMITS CONCRETE PAVEMENT
STA. 28+79.5

645.15 645.20

644.98

1%

10'

645.31 645.34

645.34 645.18 644.96 644.77

644.77 644.71

CONC CURB &
GUTTER 20-INCH
TYPE D

R33.7'

X

NORTH AVE

3.30%

PVT+95
27+00

+41.47
PVI+38.5

+51.51
PVI+53

CONC CURB & GUTTER
20-INCH TYPE D

28+00

PVI+20.5

+31.81

P

+42.37
PVC+48

644.77

644.74

644.83 644.84

644.92

645.06 645.10

645.31 645.42

645.42

645.22

645.00

644.81

644.81

29+00

644.54

644.23

644.01

PVT+38

643.80

LP+45

LIMITS CONCRETE PAVEMENT
STA. 27+11.91

CONC CURB &
GUTTER
20-INCH
TYPE D

0.37%

+47.94

2.00%

16'

CONC CURB & GUTTER
20-INCH TYPE A INTEGRAL

REFERENCE LINE

R20'

0.37%

16'

PI+68.86

CONC CURB &
GUTTER 20-INCH
TYPE A INTEGRAL

23'

2.00%

644.52 644.54

644.72 644.94 645.01

645.32 645.45 645.48

645.48

645.42 645.28 645.05 644.87

644.88

R

644.87 644.84 644.75 644.70

644.60

644.38 644.36

643.90 643.62 643.34

CURB RAMP
TYPE 8

4' (TYP)

15' (TYP)

ASPH

R10'

O

R20'

CONC CURB
& GUTTER
20-INCH
TYPE D

5'

CONC

5'

12' (TYP)

CURB RAMP
TYPE 8

R10'

CURB RAMP
TYPE 8

CURB RAMP
TYPE 8

Q

R33.7'

W

SI

TLE

ASPH

SHORELINE 400 TRAIL

3" ASPHALTIC SURFACE
D/W'S & FE'S OVER 9" BASE
AGGREGATE DENSE 1 ¼"

SAWCUT REQUIRED

N

STATION & OFFSET TABLE					
POINT	STATION	OFFSET	Y COORDS	X COORDS	RADIUS
O	28+19.92 -North	27.000 RT	184922.83	214718.63	10'
P	28+33.97 -North	0.450 RT	184949.30	214732.84	20'
Q	28+25.65 -North	43.000 RT	184906.80	214724.26	10'
R	28+39.26 -North	15.926 RT	184933.79	214738.03	20'
S	28+33.91 -North	18.610 LT	184968.36	214732.88	20'
T	28+48.22 -North	45.000 LT	184994.66	214747.35	10'
U	28+28.78 -North	33.921 LT	184983.70	214727.85	20'
V	28+42.37 -North	61.000 LT	185010.70	214741.60	10'
W	28+68.85 -North	50.654 RT	184898.89	214767.41	33.7'
X	28+97.84 -North	9.621 LT	184959.55	214796.58	33.7'

1 CONCRETE MEDIAN SLOPED NOSE TYPE 1

2 LIMITS OF CONCRETE PANEL CROSSING SURFACE TO BE INSTALLED BY THE UP RAILROAD

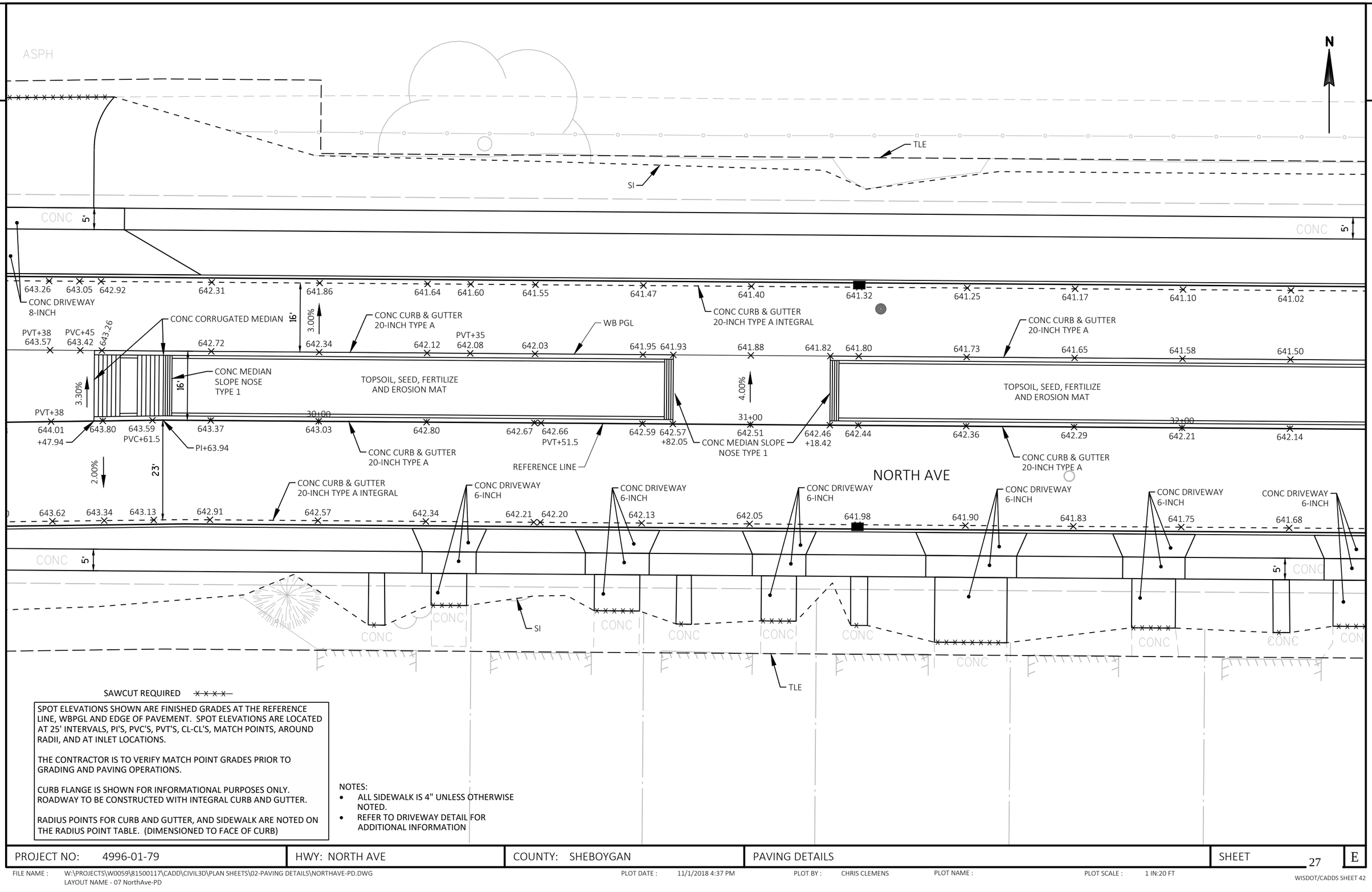
NOTES:
- ALL SIDEWALK IS 4" UNLESS OTHERWISE NOTED.
- REFER TO DRIVEWAY DETAIL FOR ADDITIONAL INFORMATION

SPOT ELEVATIONS SHOWN ARE FINISHED GRADES AT THE REFERENCE LINE, WBPGL AND EDGE OF PAVEMENT. SPOT ELEVATIONS ARE LOCATED AT 25' INTERVALS, PI'S, PVC'S, PVT'S, CL-CL'S, MATCH POINTS, AROUND RADII, AND AT INLET LOCATIONS.

THE CONTRACTOR IS TO VERIFY MATCH POINT GRADES PRIOR TO GRADING AND PAVING OPERATIONS.

CURB FLANGE IS SHOWN FOR INFORMATIONAL PURPOSES ONLY. ROADWAY TO BE CONSTRUCTED WITH INTEGRAL CURB AND GUTTER.

RADIUS POINTS FOR CURB AND GUTTER, AND SIDEWALK ARE NOTED ON THE RADIUS POINT TABLE. (DIMENSIONED TO FACE OF CURB)



PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN	PAVING DETAILS	SHEET 27	E

SAWCUT REQUIRED ~~~~

NOTES:
- ALL SIDEWALK IS 4" UNLESS OTHERWISE NOTED.
- REFER TO DRIVEWAY DETAIL FOR ADDITIONAL INFORMATION

SPOT ELEVATIONS SHOWN ARE FINISHED GRADES AT THE REFERENCE LINE, WBPGL AND EDGE OF PAVEMENT. SPOT ELEVATIONS ARE LOCATED AT 25' INTERVALS, PI'S, PVC'S, PVT'S, CL-CL'S, MATCH POINTS, AROUND RADII, AND AT INLET LOCATIONS.

THE CONTRACTOR IS TO VERIFY MATCH POINT GRADES PRIOR TO GRADING AND PAVING OPERATIONS.

CURB FLANGE IS SHOWN FOR INFORMATIONAL PURPOSES ONLY. ROADWAY TO BE CONSTRUCTED WITH INTEGRAL CURB AND GUTTER.

RADIUS POINTS FOR CURB AND GUTTER, AND SIDEWALK ARE NOTED ON THE RADIUS POINT TABLE. (DIMENSIONED TO FACE OF CURB)

N

TLE

SI

CONC 5'

641.02 640.95 640.87 640.80 640.72 640.65 640.57 640.50 640.42 640.35 640.27 640.20 640.12

16'

CONC CURB & GUTTER 20-INCH TYPE A

CONC CURB & GUTTER 20-INCH TYPE A INTEGRAL

WB PGL

641.50 641.43 641.35 641.28 641.20 641.13 641.05 640.98 640.90 640.83 640.76 640.75 640.68 640.65 640.60

TOPSOIL, SEED, FERTILIZE AND EROSION MAT

CONC MEDIAN SLOPE NOSE TYPE 1

4.00%

CONC MEDIAN SLOPE NOSE TYPE 1

642.14 642.06 641.99 33+00 641.91 641.84 641.76 641.69 34+00 641.61 641.54 641.46 641.40 +72.22 641.39 35+00 641.31 641.29 +08.70 641.24

CONC CURB & GUTTER 20-INCH TYPE A

REFERENCE LINE

23'

NORTH AVE

CONC DRIVEWAY 6-INCH

641.68 641.60 641.53 641.45 641.38 641.30 641.23 641.15 641.08 641.00 640.93 640.85 640.78

CONC CURB & GUTTER 20-INCH TYPE A INTEGRAL

SI

TLE

CONC STEPS 2 RISERS PIPE RAILING REQ'D

PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN	PAVING DETAILS	SHEET 28	E

SAWCUT REQUIRED ~~X X X X~~

NOTES:
- ALL SIDEWALK IS 4" UNLESS OTHERWISE NOTED.
- REFER TO DRIVEWAY DETAIL FOR ADDITIONAL INFORMATION

SPOT ELEVATIONS SHOWN ARE FINISHED GRADES AT THE REFERENCE LINE, WBPGL AND EDGE OF PAVEMENT. SPOT ELEVATIONS ARE LOCATED AT 25' INTERVALS, PI'S, PVC'S, PVT'S, CL-CL'S, MATCH POINTS, AROUND RADII, AND AT INLET LOCATIONS.

THE CONTRACTOR IS TO VERIFY MATCH POINT GRADES PRIOR TO GRADING AND PAVING OPERATIONS.

CURB FLANGE IS SHOWN FOR INFORMATIONAL PURPOSES ONLY. ROADWAY TO BE CONSTRUCTED WITH INTEGRAL CURB AND GUTTER.

RADIUS POINTS FOR CURB AND GUTTER, AND SIDEWALK ARE NOTED ON THE RADIUS POINT TABLE. (DIMENSIONED TO FACE OF CURB)

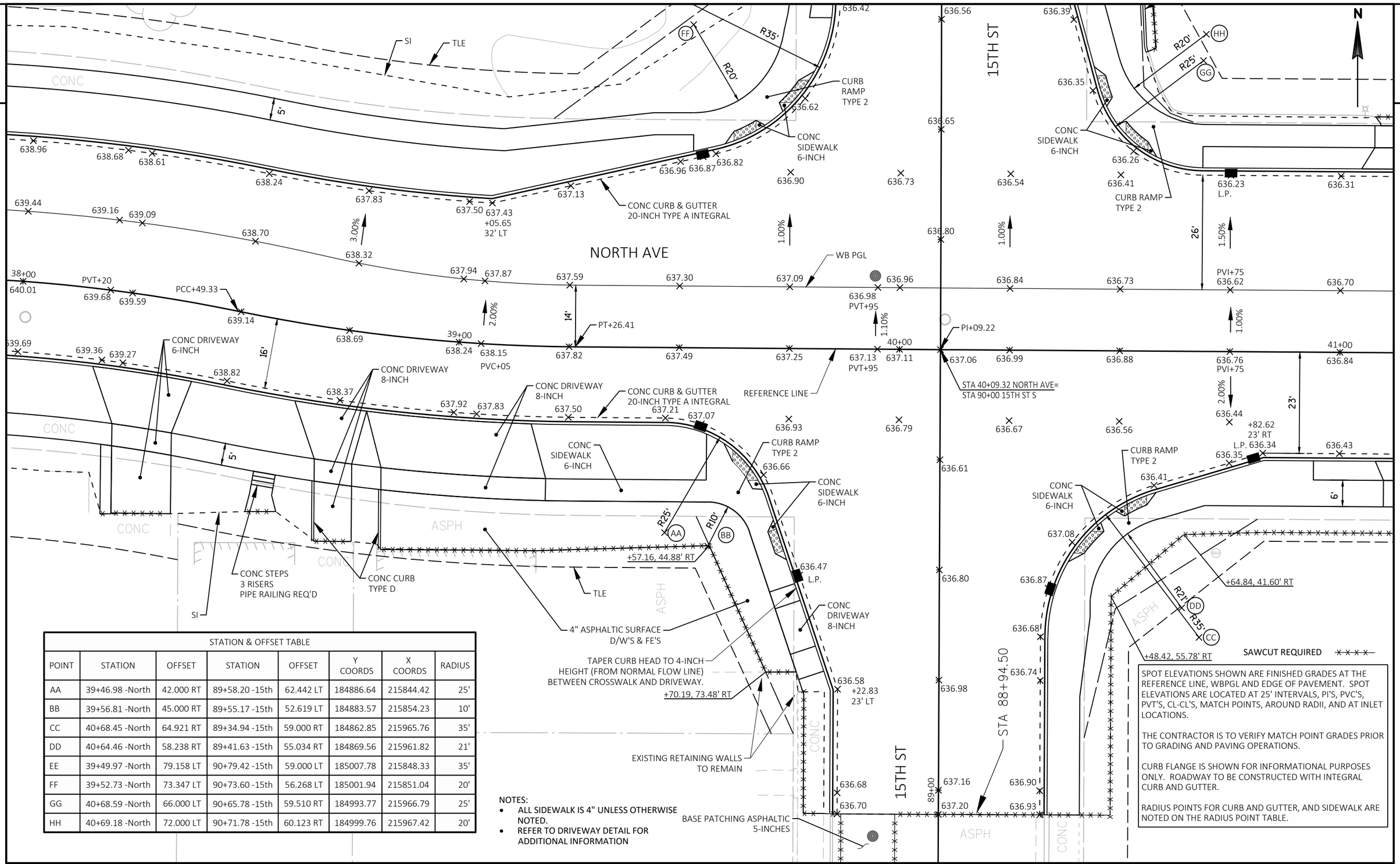
N

SI
TLE
5'
CONC
CONC
16'
640.12 640.05 639.97 639.90 639.82 639.75 639.67 639.60 639.52 639.51 639.42 639.23 638.96 638.68
CONC CURB & GUTTER 20-INCH TYPE A INTEGRAL
CONC CURB & GUTTER 20-INCH TYPE A
WB PGL
CONC MEDIAN SLOPE NOSE TYPE 1
PVC+30
639.99
640.00
639.90
639.71
639.44
639.16
0.65 640.60 640.53 640.45 640.38 640.30 640.23 640.15 640.08
CONC MEDIAN SLOPE NOSE TYPE 1
TOPSOIL, SEED, FERTILIZE AND EROSION MAT
16'
3.75%
640.02
PC+74.98
Y
R32'
1.29 641.24 641.16 641.09 36+00 641.01 640.94 640.86 640.79 37+00 640.71 640.64 640.62 640.53 640.32 38+00 640.01 PVT+20 639.68
8.70
PVC+30
23'
REFERENCE LINE
CONC CURB & GUTTER 20-INCH TYPE A
NORTH AVE
AY
CONC DRIVEWAY 6-INCH
CONC DRIVEWAY 6-INCH
CONC CURB & GUTTER 20-INCH TYPE A INTEGRAL
CONC DRIVEWAY 6-INCH
CONC DRIVEWAY 6-INCH
23'
16'
H.P. 640.19
640.15
640.00
639.69
639.36
639
640.78 640.70 640.63 640.55 640.48 640.40 640.33 640.25 640.18
L.P. 640.16
640.18
R36'
5'
CONC
CONC STEP 1 RISER
CONC STEP 1 RISER
CONC STEPS 2 RISERS PIPE RAILING REQ'D
GRVL
CONC
CONC
CONC
CONC
CONC
CONC
CONC
TLE
SI
Z

STATION & OFFSET TABLE					
POINT	STATION	OFFSET	Y COORDS	X COORDS	RADIUS
Y	37+28.98 -North	7.893 LT	184952.93	215627.88	32'
Z	37+58.98 -North	52.893 RT	184891.92	215657.42	36'

PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN	PAVING DETAILS	SHEET 29	E

FILE NAME : W:\PROJECTS\W0059\81500117\CADD\CIVIL3D\PLAN SHEETS\02-PAVING DETAILS\NORTHAVE-PD.DWG
LAYOUT NAME - 09 NorthAve-PD
PLOT DATE : 11/1/2018 4:37 PM PLOT BY : CHRIS CLEMENS PLOT NAME : PLOT SCALE : 1 IN:20 FT



STATION & OFFSET TABLE							
POINT	STATION	OFFSET	STATION	OFFSET	Y COORDS	X COORDS	RADIUS
AA	39+46.98 -North	42.000 RT	89+58.20 -15th	62.442 LT	184886.64	215844.42	25'
BB	39+56.81 -North	45.000 RT	89+55.17 -15th	52.619 LT	184883.57	215854.23	10'
CC	40+68.45 -North	64.921 RT	89+34.94 -15th	59.000 RT	184862.85	215965.76	35'
DD	40+64.46 -North	58.238 RT	89+41.63 -15th	55.034 RT	184869.56	215961.82	21'
EE	39+49.97 -North	79.158 LT	90+79.42 -15th	59.000 LT	185007.78	215848.33	35'
FF	39+52.73 -North	73.347 LT	90+73.60 -15th	56.268 LT	185001.94	215851.04	20'
GG	40+68.59 -North	66.000 LT	90+65.78 -15th	59.510 RT	184993.77	215966.79	25'
HH	40+69.18 -North	72.000 LT	90+71.78 -15th	60.123 RT	184999.76	215967.42	20'

NOTES:
- ALL SIDEWALK IS 4" UNLESS OTHERWISE NOTED.
- REFER TO DRIVEWAY DETAIL FOR ADDITIONAL INFORMATION

SPOT ELEVATIONS SHOWN ARE FINISHED GRADES AT THE REFERENCE LINE, WBPGL AND EDGE OF PAVEMENT. SPOT ELEVATIONS ARE LOCATED AT 25' INTERVALS, PI'S, PVC'S, PVT'S, CL-CL'S, MATCH POINTS, AROUND RADII, AND AT INLET LOCATIONS.

THE CONTRACTOR IS TO VERIFY MATCH POINT GRADES PRIOR TO GRADING AND PAVING OPERATIONS.

CURB FLANGE IS SHOWN FOR INFORMATIONAL PURPOSES ONLY. ROADWAY TO BE CONSTRUCTED WITH INTEGRAL CURB AND GUTTER.

RADIUS POINTS FOR CURB AND GUTTER, AND SIDEWALK ARE NOTED ON THE RADIUS POINT TABLE.

2

N

CONC CURB TYPE D

R5'

R20'

R25'

HH

GG

ASPH

CONC

+81.37, -48.84' LT

EXISTING SERVICE WALK BETWEEN BACK OF CURB AND FRONT OF SIDEWALK TO BE ELIMINATED

5'

636.26

636.41

CURB RAMP TYPE 2

636.23 L.P.

636.31

636.38

CONC DRIVEWAY 6-INCH

636.46

636.50 +61.95

636.57

636.60 +79.95

636.66

CONC DRIVEWAY 6-INCH

CONC CURB & GUTTER 20-INCH TYPE A INTEGRAL

636.74

636.79

636.74

CONC DRIVEWAY 6-INCH

636.64

636.63

CONC DRIVEWAY 6-INCH

636.55

636.58

SI

26'

1.50%

23'

WB PGL

CONC CURB & GUTTER 32-INCH TYPE A

636.73

PVI+75 636.62

636.70

636.77

636.85

636.93

637.01

637.08

PVI+40 637.13

637.09

636.99

636.92

636.88

636.85

637.15

+91.08

TOPSOIL, SEED, FERTILIZE AND EROSION MAT

1.00%

14'

NORTH AVE

636.88

41+00

636.76 PVI+75

636.84

636.91

636.99

637.06

42+00

637.14

637.21

H.P. PVI+40

637.26

637.23

637.21 +54.95

637.15

CONC MEDIAN SLOPE NOSE TYPE 1

43+00

637.08

636.99

REFERENCE LINE

2.00%

636.44

+82.62 23' RT

L.P. 636.34

636.35

636.56

636.41

CURB RAMP TYPE 2

636.43

636.57

636.64

CONC DRIVEWAY 8-INCH

CONC DRIVEWAY 6-INCH

636.72

CONC CURB & GUTTER 20-INCH TYPE A INTEGRAL

636.79

636.87

636.91

636.88

636.81

636.75

636.85

STA 43+06.00

6'

6'

SI

4" ASPHALTIC SURFACE D/W'S & FE'S

+64.84, 41.60' RT

+99.00, 34.83' RT

EXISTING SERVICE WALK BETWEEN BACK OF CURB AND FRONT OF SIDEWALK TO BE ELIMINATED

R21'

R35'

DD

CC

+48.42, 55.78' RT

SAWCUT REQUIRED

SPOT ELEVATIONS SHOWN ARE FINISHED GRADES AT THE REFERENCE LINE, WBPGL AND EDGE OF PAVEMENT. SPOT ELEVATIONS ARE LOCATED AT 25' INTERVALS, PI'S, PVC'S, PVT'S, CL-CL'S, MATCH POINTS, AROUND RADII, AND AT INLET LOCATIONS.

THE CONTRACTOR IS TO VERIFY MATCH POINT GRADES PRIOR TO GRADING AND PAVING OPERATIONS.

CURB FLANGE IS SHOWN FOR INFORMATIONAL PURPOSES ONLY. ROADWAY TO BE CONSTRUCTED WITH INTEGRAL CURB AND GUTTER.

RADIUS POINTS FOR CURB AND GUTTER, AND SIDEWALK ARE NOTED ON THE RADIUS POINT TABLE. (DIMENSIONED TO FACE OF CURB)

NOTES:

- ALL SIDEWALK IS 4" UNLESS OTHERWISE NOTED.
- REFER TO DRIVEWAY DETAIL FOR ADDITIONAL INFORMATION

PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN	PAVING DETAILS	SHEET 31	E

SPOT ELEVATIONS SHOWN ARE FINISHED GRADES AT THE REFERENCE LINE, WBPGL AND EDGE OF PAVEMENT. SPOT ELEVATIONS ARE LOCATED AT 25' INTERVALS, PI'S, PVC'S, PVT'S, CL-CL'S, MATCH POINTS, AROUND RADII, AND AT INLET LOCATIONS.

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CURB FLANGE IS SHOWN FOR INFORMATIONAL PURPOSES ONLY. ROADWAY TO BE CONSTRUCTED WITH INTEGRAL CURB AND GUTTER.

RADIUS POINTS FOR CURB AND GUTTER, AND SIDEWALK ARE NOTED ON THE RADIUS POINT TABLE. (DIMENSIONED TO FACE OF CURB)

SAWCUT REQUIRED

N

NORTH AVE

ASPH

CONC

SI

R100'

R34'

R45'

R1.5'

R2.5'

L.P.

+79.49, -42.64' LT

663.07 663.38 662.84 663.61 11' PI+81.27

662.95 663.24 662.81 663.40 13+00

662.82 663.11 662.70 663.36

662.70 662.97 662.43 663.24

662.59 662.57 662.44 662.51 662.39 662.34 662.25 662.33 662.43 662.52 662.62 662.68

662.48 662.44 662.38

1.18%

61+00 62+00

662.66 662.38 662.43 662.55 662.66 662.78 662.89 663.01 663.09

663.20

STA 13+57.61 NORTH AVE=
STA 60+00 21ST ST

2.40%

2.44%

CONC DRIVEWAY
8-INCH

21ST ST

STA 61+92.00
DRILLED DOWEL BARS REQ'D

1.30%

662.57 662.83 662.29 662.33 662.43 662.52 662.61 662.68

663.11

662.45 662.69 662.26 662.14 662.15 14+00

662.32 662.55 662.01 661.99 662.86 12.5' PI+30.36

662.20 662.42 661.88 662.74

NOTES:

- ALL SIDEWALK IS 4" UNLESS OTHERWISE NOTED.
- REFER TO DRIVEWAY DETAIL FOR ADDITIONAL INFORMATION

STATION & OFFSET TABLE

POINT	STATION	OFFSET	STATION	OFFSET	Y COORDS	X COORDS	RADIUS
A	12+81.27 -North	84.000 LT	60+84.20 -21st	76.116 LT	185046.48	213180.78	45'
B	12+44.37 -North	90.680 LT	60+90.97 -21st	113.000 LT	185053.41	213143.92	100'
C	12+81.16 -North	83.000 LT	60+83.20 -21st	76.234 LT	185045.48	213180.65	34'
D	14+30.31 -North	85.500 LT	60+85.31 -21st	72.925 RT	185046.97	213329.82	45'
E	13+36.13 -North	44.995 LT	60+45.05 -21st	21.363 LT	185007.11	213235.36	2.5'
F	13+41.99 -North	44.995 LT	60+45.04 -21st	15.500 LT	185007.07	213241.23	2.5'
G	13+42.93 -North	66.441 LT	60+66.48 -21st	14.500 LT	185028.51	213242.32	1.5'

PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN	PAVING DETAILS	SHEET 32	E

FILE NAME : W:\PROJECTS\W0059\81500117\CADD\CIVIL3D\PLAN SHEETS\02-PAVING DETAILS\SIDEROADS-PD.DWG
LAYOUT NAME - 12 21st-PD

PLOT DATE : 11/1/2018 4:38 PM PLOT BY : CHRIS CLEMENS PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 42

2

N

SPOT ELEVATIONS SHOWN ARE FINISHED GRADES AT THE REFERENCE LINE, WBPGL AND EDGE OF PAVEMENT. SPOT ELEVATIONS ARE LOCATED AT 25' INTERVALS, PI'S, PVC'S, PVT'S, CL-CL'S, MATCH POINTS, AROUND RADII, AND AT INLET LOCATIONS.

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CURB FLANGE IS SHOWN FOR INFORMATIONAL PURPOSES ONLY. ROADWAY TO BE CONSTRUCTED WITH INTEGRAL CURB AND GUTTER.

RADIUS POINTS FOR CURB AND GUTTER, AND SIDEWALK ARE NOTED ON THE RADIUS POINT TABLE. (DIMENSIONED TO FACE OF CURB)

SAWCUT REQUIRED

NOTES:
- ALL SIDEWALK IS 4" UNLESS OTHERWISE NOTED.
- REFER TO DRIVEWAY DETAIL FOR ADDITIONAL INFORMATION

STA 81+75.00
DRILLED DOWEL BARS REQ'D

STA 22+20.04 NORTH AVE=
STA 80+00 19TH ST

STA 22+20.86 NORTH AVE=
STA 80+00 MUTH CT

NORTH AVE

MUTH CT

CONC DRIVEWAY
8-INCH

4" ASPHALTIC SURFACE
D/W'S & FE'S

STATION & OFFSET TABLE							
POINT	STATION	OFFSET	STATION	OFFSET	Y COORDS	X COORDS	RADIUS
J	21+77.16 -North	32.000 RT	79+68.07 -19th	42.936 LT	184921.63	214075.85	15'
M	22+52.94 -North	32.000 RT	79+67.94 -19th	32.850 RT	184921.18	214151.63	15'

STATION & OFFSET TABLE							
POINT	STATION	OFFSET	STATION	OFFSET	Y COORDS	X COORDS	RADIUS
K	21+87.32 -North	50.000 LT	80+50.34 -Muth	33.028 LT	185003.57	214086.49	15'
L	22+63.61 -North	50.000 LT	80+49.56 -Muth	43.261 RT	185003.12	214162.78	15'

PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN	PAVING DETAILS	SHEET 33	E

FILE NAME : W:\PROJECTS\W0059\81500117\CADD\CIVIL3D\PLAN SHEETS\02-PAVING DETAILS\SIDEROADS-PD.DWG
LAYOUT NAME - 13 Muth-PD
PLOT DATE : 11/1/2018 4:38 PM PLOT BY : CHRIS CLEMENS PLOT NAME : PLOT SCALE : 1 IN:20 FT
WISDOT/CADDS SHEET 42

2

STATION & OFFSET TABLE							
POINT	STATION	OFFSET	STATION	OFFSET	Y COORDS	X COORDS	RADIUS
AA	39+46.98 -North	42.000 RT	89+58.20 -15th	62.442 LT	184886.64	215844.42	25'
BB	39+56.81 -North	45.000 RT	89+55.17 -15th	52.619 LT	184883.57	215854.23	10'
CC	40+68.45 -North	64.921 RT	89+34.94 -15th	59.000 RT	184862.85	215965.76	35'
DD	40+64.46 -North	58.238 RT	89+41.63 -15th	55.034 RT	184869.56	215961.82	21'
EE	39+49.97 -North	79.158 LT	90+79.42 -15th	59.000 LT	185007.78	215848.33	35'
FF	39+52.73 -North	73.347 LT	90+73.60 -15th	56.268 LT	185001.94	215851.04	20'
GG	40+68.59 -North	66.000 LT	90+65.78 -15th	59.510 RT	184993.77	215966.79	25'
HH	40+69.18 -North	72.000 LT	90+71.78 -15th	60.123 RT	184999.76	215967.42	20'

NORTH AVE

15TH ST

ASPH

TLE

AA

BB

R25'

R10'

637.50

637.21

637.07

636.66

636.93

L.P. 636.47

+22.83
23' LT
636.58

637.82

PT+26.41

14'

637.59

637.49

637.30

637.25

637.09

1.00%

PVT+95
637.13

PVT+95
636.98

1.10%

637.11

40+00

636.96

636.79

637.06

636.98

636.80

636.61

STA 40+09.32 NORTH AVE=
STA 90+00 15TH ST S

PI+09.22

636.67

636.99

636.84

1.00%

636.54

636.74

636.68

636.87

637.08

636.88

636.73

636.56

636.41

ASPH

R35'

R21'

DD

CC

636.44

PVI+75
636.76

2.00%

1.00%

PVI+75
636.62

1.50%

636.35

+82.62
23' RT
L.P. 636.34

L.P.636.23

TLE

23'

26'

636.84

41+00

636.70

636.43

636.31

637.13

636.96

636.87

636.82

FF

EE

R20'

R35'

636.90

636.62

636.42

636.25

636.10

635.96

635.81

635.69

635.68

TLE

SI

CONC

CONC

CONC DRIVEWAY
8-INCH

91+00

636.80

636.65

636.56

636.48

636.39

636.31

636.23

92+00

636.14

636.13

STA 92+03.65

ASPH

+00.84
23' RT
636.25

636.08

635.90

635.73

635.56

635.54

CONC DRIVEWAY
8-INCH

636.39

636.35

R5'

R5'

+95.78, 35.00' RT

+39.99, 35.00' RT

ASPH

ASPH

4" ASPHALTIC SURFACE
D/W'S & FE'S

BASE PATCHING ASPHALTIC
5-INCHES

+94.07, 37.91' RT

CONC CURB
TYPE D

+82.85, 47.55' RT

+68.60, 48.75' RT

R25'

R20'

GG

HH

SAWCUT REQUIRED

SPOT ELEVATIONS SHOWN ARE FINISHED GRADES AT THE REFERENCE LINE, WBPGL AND EDGE OF PAVEMENT. SPOT ELEVATIONS ARE LOCATED AT 25' INTERVALS, PI'S, PVC'S, PVT'S, CL-CL'S, MATCH POINTS, AROUND RADII, AND AT INLET LOCATIONS.

THE CONTRACTOR IS TO VERIFY MATCH POINT GRADES PRIOR TO GRADING AND PAVING OPERATIONS.

CURB FLANGE IS SHOWN FOR INFORMATIONAL PURPOSES ONLY. ROADWAY TO BE CONSTRUCTED WITH INTEGRAL CURB AND GUTTER.

RADIUS POINTS FOR CURB AND GUTTER, AND SIDEWALK ARE NOTED ON THE RADIUS POINT TABLE. (DIMENSIONED TO FACE OF CURB)

N

NOTES:

- ALL SIDEWALK IS 4" UNLESS OTHERWISE NOTED.
- REFER TO DRIVEWAY DETAIL FOR ADDITIONAL INFORMATION

PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN	PAVING DETAILS	SHEET 34	E

NOTE:
THE EXACT LOCATIONS OF THE PROPOSED TREES WILL BE DETERMINED BY THE ENGINEER AFTER ALL UTILITY, STORM SEWER, AND ELECTRICAL INSTALLATIONS HAVE BEEN COMPLETED. REFER TO SPECIAL PROVISIONS FOR ADDITIONAL INFORMATION.

TRACKING PADS REQUIRED FOR STAGE 2 AND STAGE 4 CONSTRUCTION

TRACKING PADS REQUIRED FOR STAGE 2

SI

TLE

21ST STREET

62+00

61+00

11+00

12+00

13+00

14+00

15+00

N

LEGEND

- SILT FENCE
- (D) INLET PROTECTION PLACED ON PROPOSED INLETS
- (B) (C) INLET PROTECTION PLACED ON EXISTING INLETS
- EROSION MAT URBAN CL 1 TYPE B
- PROPOSED TREE
- DRAINAGE FLOW ARROWS

PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN	EROSION CONTROL DETAILS	SHEET 35	E

FILE NAME : W:\PROJECTS\W0059\81500117\CADD\CIVIL3D\PLAN SHEETS\02-EC\NORTHAVE-EC.DWG
LAYOUT NAME - NorthAve-01EC

PLOT DATE : 11/1/2018 4:38 PM PLOT BY : CHRIS CLEMENS PLOT NAME : PLOT SCALE : 1 IN:40 FT

NOTE:
THE EXACT LOCATIONS OF THE PROPOSED TREES WILL BE DETERMINED BY THE ENGINEER AFTER ALL UTILITY, STORM SEWER, AND ELECTRICAL INSTALLATIONS HAVE BEEN COMPLETED. REFER TO SPECIAL PROVISIONS FOR ADDITIONAL INFORMATION.

TREE LIST

SYMBOL	COMMON NAME
AC	ADIRONDACK CRAB
AS	AUTUMN BRILLIANCE SERVICEBERRY
AP	AUTUMN BLAZE PEAR
PH	PRAIRIE SENTINEL HACKBERRY
EC	ESPRESSO KENTUCKY COFFEETREE
SC	SPRING SNOW CRABAPPLE
SO	SWAMP WHITE OAK
AG	AUTUMN GOLD GINKO
ER	EASTERN REDBUD
RB	ROBIN HILL SERVICE BERRY
EB	EARLY GLOW BUCKEYE
CH	CHICAGOLAND HACKBERRY

REFER TO TREE PLANTING CHART FOR ADDITIONAL INFORMATION.

N

SI
TLE
15+00
16+00
17+00
18+00
19+00
20+00
21+00
69+00
ALLEY
20TH STREET

LEGEND
- SILT FENCE
- (D) INLET PROTECTION PLACED ON PROPOSED INLETS
- (B)(C) INLET PROTECTION PLACED ON EXISTING INLETS
- EROSION MAT URBAN CL 1 TYPE B
- PROPOSED TREE
- DRAINAGE FLOW ARROWS

PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN	EROSION CONTROL DETAILS	SHEET 36	E

FILE NAME : W:\PROJECTS\W0059\81500117\CADD\CIVIL3D\PLAN SHEETS\02-EC\NORTHAVE-EC.DWG
LAYOUT NAME - NorthAve-02EC
PLOT DATE : 11/1/2018 4:38 PM
PLOT BY : CHRIS CLEMENS
PLOT NAME :
PLOT SCALE : 1 IN:40 FT

NOTE:
THE EXACT LOCATIONS OF THE PROPOSED TREES WILL BE DETERMINED BY THE ENGINEER AFTER ALL UTILITY, STORM SEWER, AND ELECTRICAL INSTALLATIONS HAVE BEEN COMPLETED. REFER TO SPECIAL PROVISIONS FOR ADDITIONAL INFORMATION.

TREE LIST

SYMBOL	COMMON NAME
AC	ADIRONDACK CRAB
AS	AUTUMN BRILLIANCE SERVICEBERRY
AP	AUTUMN BLAZE PEAR
PH	PRAIRIE SENTINEL HACKBERRY
EC	ESPRESSO KENTUCKY COFFEETREE
SC	SPRING SNOW CRABAPPLE
SO	SWAMP WHITE OAK
AG	AUTUMN GOLD GINKO
ER	EASTERN REDBUD
RB	ROBIN HILL SERVICE BERRY
EB	EARLY GLOW BUCKEYE
CH	CHICAGOLAND HACKBERRY

REFER TO TREE PLANTING CHART FOR ADDITIONAL INFORMATION.

N

MUTH COURT

81+00

SI

TLE

21+00

22+00

23+00

24+00

25+00

26+00

ALLEY

19TH STREET

79+00

LEGEND

- SILT FENCE
- (D) INLET PROTECTION PLACED ON PROPOSED INLETS
- (B) (C) INLET PROTECTION PLACED ON EXISTING INLETS
- EROSION MAT URBAN CL 1 TYPE B
- PROPOSED TREE
- DRAINAGE FLOW ARROWS

PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN	EROSION CONTROL DETAILS	SHEET 37	E

FILE NAME : W:\PROJECTS\W0059\81500117\CADD\CIVIL3D\PLAN SHEETS\02-EC\NORTHAVE-EC.DWG
LAYOUT NAME - NorthAve-03EC

PLOT DATE : 11/1/2018 4:38 PM PLOT BY : CHRIS CLEMENS PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

NOTE:
THE EXACT LOCATIONS OF THE PROPOSED TREES WILL BE DETERMINED BY THE ENGINEER AFTER ALL UTILITY, STORM SEWER, AND ELECTRICAL INSTALLATIONS HAVE BEEN COMPLETED. REFER TO SPECIAL PROVISIONS FOR ADDITIONAL INFORMATION.

TREE LIST

SYMBOL	COMMON NAME
AC	ADIRONDACK CRAB
AS	AUTUMN BRILLIANCE SERVICEBERRY
AP	AUTUMN BLAZE PEAR
PH	PRAIRIE SENTINEL HACKBERRY
EC	ESPRESSO KENTUCKY COFFEETREE
SC	SPRING SNOW CRABAPPLE
SO	SWAMP WHITE OAK
AG	AUTUMN GOLD GINKO
ER	EASTERN REDBUD
RB	ROBIN HILL SERVICE BERRY
EB	EARLY GLOW BUCKEYE
CH	CHICAGOLAND HACKBERRY

REFER TO TREE PLANTING CHART FOR ADDITIONAL INFORMATION.

N

SI

TLE

26+00 27+00 28+00 29+00 30+00 31+00

UNION PACIFIC RAILROAD

SHORELINE 400 TRAIL

LEGEND

- SILT FENCE
- (D) INLET PROTECTION PLACED ON PROPOSED INLETS
- (B) (C) INLET PROTECTION PLACED ON EXISTING INLETS
- EROSION MAT URBAN CL 1 TYPE B
- (+) PROPOSED TREE
- DRAINAGE FLOW ARROWS

PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN	EROSION CONTROL DETAILS	SHEET 38	E

FILE NAME : W:\PROJECTS\W0059\81500117\CADD\CIVIL3D\PLAN SHEETS\02-EC\NORTHAVE-EC.DWG
LAYOUT NAME - NorthAve-04EC

PLOT DATE : 11/1/2018 4:38 PM PLOT BY : CHRIS CLEMENS PLOT NAME : PLOT SCALE : 1 IN:40 FT

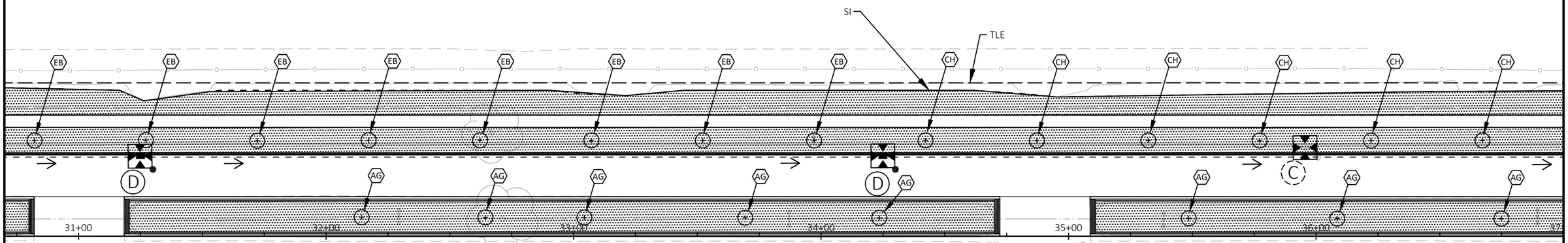
WISDOT/CADDS SHEET 42

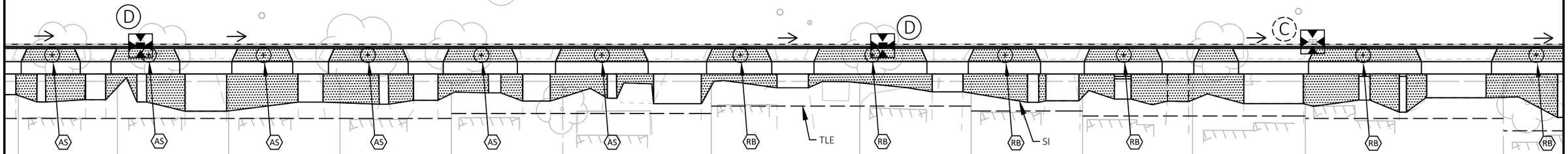
2

N

LEGEND

- SILT FENCE
- D — INLET PROTECTION PLACED ON PROPOSED INLETS
- B C — INLET PROTECTION PLACED ON EXISTING INLETS
- EROSION MAT URBAN CL 1 TYPE B
- PROPOSED TREE
- DRAINAGE FLOW ARROWS





NOTE:
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TREE LIST

SYMBOL	COMMON NAME
AC	ADIRONDACK CRAB
AS	AUTUMN BRILLIANCE SERVICEBERRY
AP	AUTUMN BLAZE PEAR
PH	PRAIRIE SENTINEL HACKBERRY
EC	ESPRESSO KENTUCKY COFFEETREE
SC	SPRING SNOW CRABAPPLE
SO	SWAMP WHITE OAK
AG	AUTUMN GOLD GINKO
ER	EASTERN REDBUD
RB	ROBIN HILL SERVICE BERRY
EB	EARLY GLOW BUCKEYE
CH	CHICAGOLAND HACKBERRY

REFER TO TREE PLANTING CHART FOR ADDITIONAL INFORMATION.

PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN	EROSION CONTROL DETAILS	SHEET 39	E

2

LEGEND

- SILT FENCE
- (D) INLET PROTECTION PLACED ON PROPOSED INLETS
- (B) (C) INLET PROTECTION PLACED ON EXISTING INLETS
- EROSION MAT URBAN CL 1 TYPE B
- PROPOSED TREE
- DRAINAGE FLOW ARROWS

N

TRACKING PADS REQUIRED FOR STAGE 2 (2)

15TH STREET

92+00

91+00

90+00

87+00

38+00

39+00

40+00

41+00

42+00

SI

TLE

NOTE:
THE EXACT LOCATIONS OF THE PROPOSED TREES WILL BE DETERMINED BY THE ENGINEER AFTER ALL UTILITY, STORM SEWER, AND ELECTRICAL INSTALLATIONS HAVE BEEN COMPLETED. REFER TO SPECIAL PROVISIONS FOR ADDITIONAL INFORMATION.

TREE LIST

SYMBOL	COMMON NAME
AC	ADIRONDACK CRAB
AS	AUTUMN BRILLIANCE SERVICEBERRY
AP	AUTUMN BLAZE PEAR
PH	PRAIRIE SENTINEL HACKBERRY
EC	ESPRESSO KENTUCKY COFFEETREE
SC	SPRING SNOW CRABAPPLE
SO	SWAMP WHITE OAK
AG	AUTUMN GOLD GINKO
ER	EASTERN REDBUD
RB	ROBIN HILL SERVICE BERRY
EB	EARLY GLOW BUCKEYE
CH	CHICAGOLAND HACKBERRY

REFER TO TREE PLANTING CHART FOR ADDITIONAL INFORMATION.

TRACKING PADS REQUIRED FOR STAGE 4 (2)

PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN	EROSION CONTROL DETAILS	SHEET 40	E

FILE NAME : W:\PROJECTS\W0059\81500117\CADD\CIVIL3D\PLAN SHEETS\02-EC\NORTHAVE-EC.DWG
LAYOUT NAME - NorthAve-06EC
PLOT DATE : 11/1/2018 4:38 PM
PLOT BY : CHRIS CLEMENS
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

NOTE:
THE EXACT LOCATIONS OF THE PROPOSED TREES WILL BE DETERMINED BY THE ENGINEER AFTER ALL UTILITY, STORM SEWER, AND ELECTRICAL INSTALLATIONS HAVE BEEN COMPLETED. REFER TO SPECIAL PROVISIONS FOR ADDITIONAL INFORMATION.

N

13TH STREET

SI

TLE

42+00

43+00

44+00

45+00

46+00

C

TLE

SI

LEGEND

- SILT FENCE
- (D) INLET PROTECTION PLACED ON PROPOSED INLETS
- (B) (C) INLET PROTECTION PLACED ON EXISTING INLETS
- EROSION MAT URBAN CL 1 TYPE B
- PROPOSED TREE
- DRAINAGE FLOW ARROWS

PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN	EROSION CONTROL DETAILS	SHEET 41	E

FILE NAME : W:\PROJECTS\W0059\81500117\CADD\CIVIL3D\PLAN SHEETS\02-EC\NORTHAVE-EC.DWG
LAYOUT NAME - NorthAve-07EC

PLOT DATE : 11/1/2018 4:39 PM PLOT BY : CHRIS CLEMENS PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

N

TREE PLANTING DATA CHART

SYMBOL	COMMON NAME	SCIENTIFIC NAME	AVERAGE MATURE HEIGHT	CALIPER	ROOT ZONE MODE	PLANT HOLE DIAMETER DEPTH	BRACE/GUY	RODENT PROTECTION REQUIRED	MULCH DIAMETER	FERTILIZER	TOTAL NUMBER
AC	ADIRONDACK CRAB	MALUS 'ADIRONDACK'	18'	2"	B&B	36"/18"	AS NEEDED	YES	44"		3
AS	AUTUMN BRILLIANCE SERVICEBERRY	AMELANCHIER X GRANDIFLORA (TREE FORM)	25'	2"	B&B	36"/18"	AS NEEDED	YES	44"		11
AP	AUTUMN BLAZE PEAR	PYUS CALLERYANA	35'	2"	B&B	36"/18"	AS NEEDED	YES	44"		8
PH	PRAIRIE SENTINEL HACKBERRY	CELTIS OCCIDENTALIS	45'	2"	B&B	36"/18"	AS NEEDED	YES	44"		3
EC	ESPRESSO KENTUCKY COFFEETREE	GYMNCLADUS DIOICUS	50'	2"	B&B	36"/18"	AS NEEDED	YES	44"		6
SC	SPRING SNOW CRABAPPLE	MALUS 'SPRING SNOW' (TREE FORM)	30'	2"	B&B	36"/18"	AS NEEDED	YES	44"		7
SO	SWAMP WHITE OAK	QUERCUS BICOLOR	65'	2"	B&B	36"/18"	AS NEEDED	YES	44"		6
AG	AUTUMN GOLD GINKO	GINKGO BILOBA	45'	2"	B&B	36"/18"	AS NEEDED	YES	44"		11
ER	EASTERN REDBUD	CERCIS CANADENSIS	30'	2"	B&B	36"/18"	AS NEEDED	YES	44"		4
RB	ROBIN HILL SERVICE BERRY	AMELANCHIER X GRANDIFLORA (TREE FORM)	20'	2"	B&B	36"/18"	AS NEEDED	YES	44"		6
EB	EARLY GLOW BUCKEYE	AESCULUS GLABRA	30'	2"	B&B	36"/18"	AS NEEDED	YES	44"		10
CH	CHICAGOLAND HACKBERRY	CELTIS OCCIDENTALIS	50'	2"	B&B	36"/18"	AS NEEDED	YES	44"		10
											85

PLANT HOLE DIAMETER – TWO TIMES THE WIDTH OF THE ROOT BALL, 36"
PLANT HOLE DEPTH – ROOT COLLAR SHALL BE LEVEL OR UP TO 1"-2" ABOVE FINISHED GRADE, 18"
MULCH DIAMETER – 44", 2"-4" AGED WOOD CHIPS. KEEP MULCH 6" BACK FROM THE TREE

2

N

RS	REMOVE STRUCTURE
AS	ABANDON STRUCTURE
RP	REMOVE SEWER PIPE
ASP	ABANDON SEWER PIPE
AWV	ADJUST WATER VALVE
RSAN	SANITARY MH RECONSTRUCT
ASAN	ADJUST SANITARY MH RIM

STA 13+27, 80.3' LT
CATCH BASINS 2x3-H-S (1.1)

STA 13+85, 82.7' LT
CATCH BASINS 2x3-H-S (1.2)

STA 12+91, 32.4' LT
MANHOLES 5-J-S (0.0)

STA 12+42, 31.7' LT
ADJUST MH COVER (E.0)

RECONNECT EXISTING STORM SEWER LATERAL (6-INCH PVC)

21ST ST

STA 14+00, 34.0' LT
MANHOLES 5-J-S (1.0)

RECONNECT EXISTING STORM SEWER LATERAL (12-INCH PVC)
CONTRACTOR TO FIELD VERIFY PIPE SIZE

NORTH AVE

STA 14+00, 27.5' RT
CATCH BASINS 2x3-H-S (1.3)

STA 16+63, 37.1' LT
CATCH BASINS 2x3-H-S (2.1)

STA 16+68, 31.5' LT
MANHOLES 5-J-S (2.0)

NORTH AVE

RECONNECT EXISTING PIPE

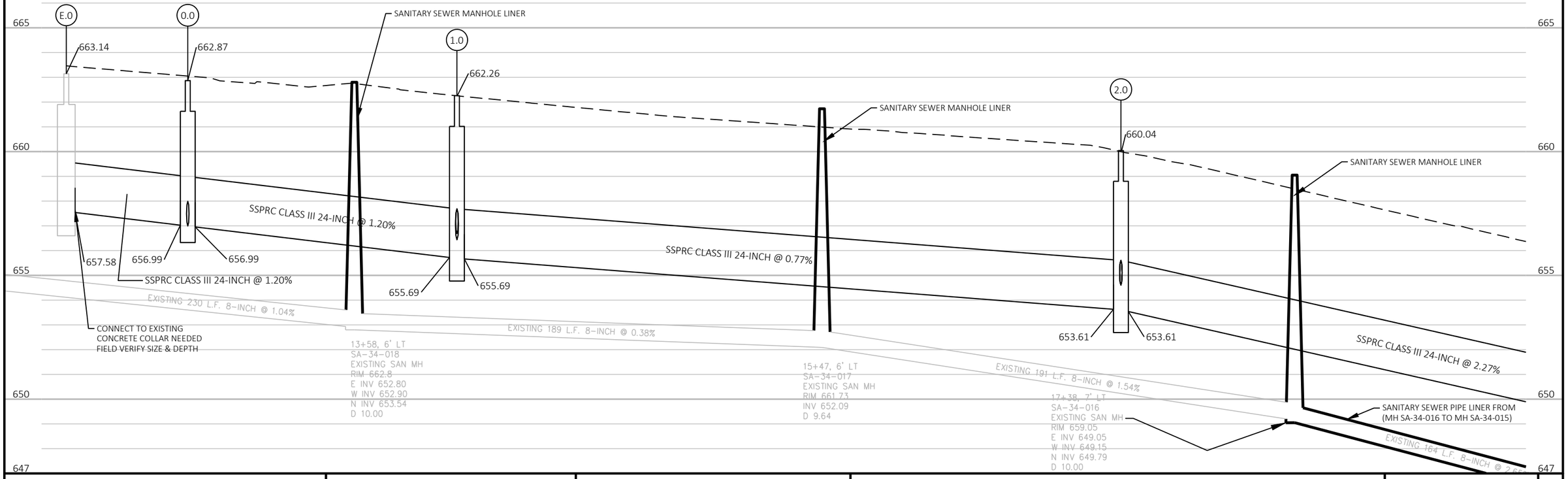
STA 16+68, 24.7' RT
CATCH BASINS 2x3-H-S (2.2)

SANITARY SEWER PIPE LINER FROM
MH SA-34-016 TO MH SA-34-015

STA 18+71, 16.6' RT
CATCH BASINS 2x3-H-S (3.4)

STA 18+88, 40.0' RT
CATCH BASINS 2x3-H-S (3

13+00 14+00 15+00 16+00 17+00 18+00



PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN	STORM AND SANITARY SEWER DETAILS - MAINLINE	SHEET 43	E

FILE NAME : W:\PROJECTS\W0059\81500117\CADD\CIVIL3D\PLAN SHEETS\02-SS DETAILS\NORTHAVE-SS.DWG
LAYOUT NAME - NorthAve-SS01

PLOT DATE : 11/1/2018 4:39 PM PLOT BY : CHRIS CLEMENS PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

RS REMOVE STRUCTURE
AS ABANDON STRUCTURE
RP REMOVE SEWER PIPE
ASP ABANDON SEWER PIPE
AWV ADJUST WATER VALVE
RSAN SANITARY MH RECONSTRUCT
ASAN ADJUST SANITARY MH RIM

N

STA 19+12, 34.5' LT
CATCH BASINS 2x3-H-S (3.1)

(3.0) STA 19+17, 29.0' LT
MANHOLES 5-J-S

STA 22+03, 59.8' LT
CATCH BASINS 2x3-H-S (4.1)

(4.2) STA 22+44, 60.2' LT
CATCH BASINS 2x3-H-S

(4.0) STA 22+31, 29.0' LT
MANHOLES 8-J-S

81+00

MUTH CT

18+00 19+00 20+00 21+00 22+00 23+00

SANITARY SEWER PIPE LINER FROM
MH SA-34-016 TO MH SA-34-015

STA 18+71, 16.6' RT
CATCH BASINS 2x3-H-S (3.4)

SANITARY SEWER PIPE LINER FROM
(MH SA-34-014 TO MH SA-34-013)

NORTH AVE

20TH ST

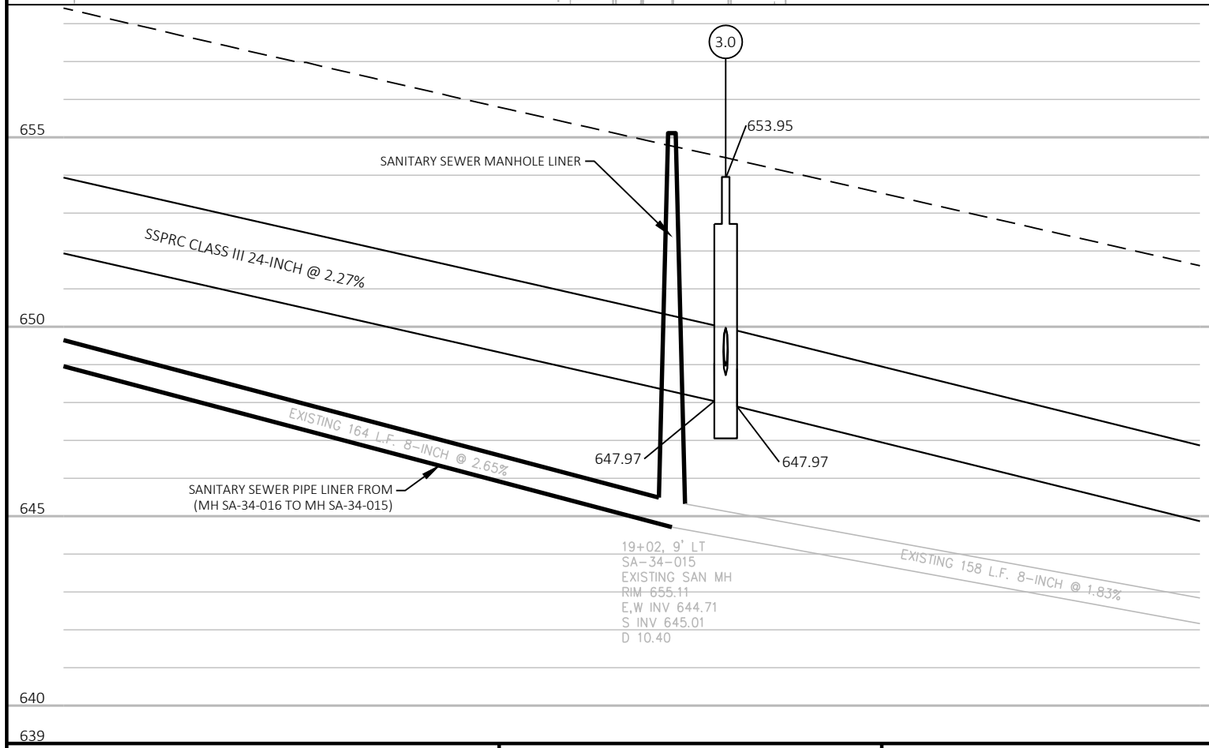
19TH ST

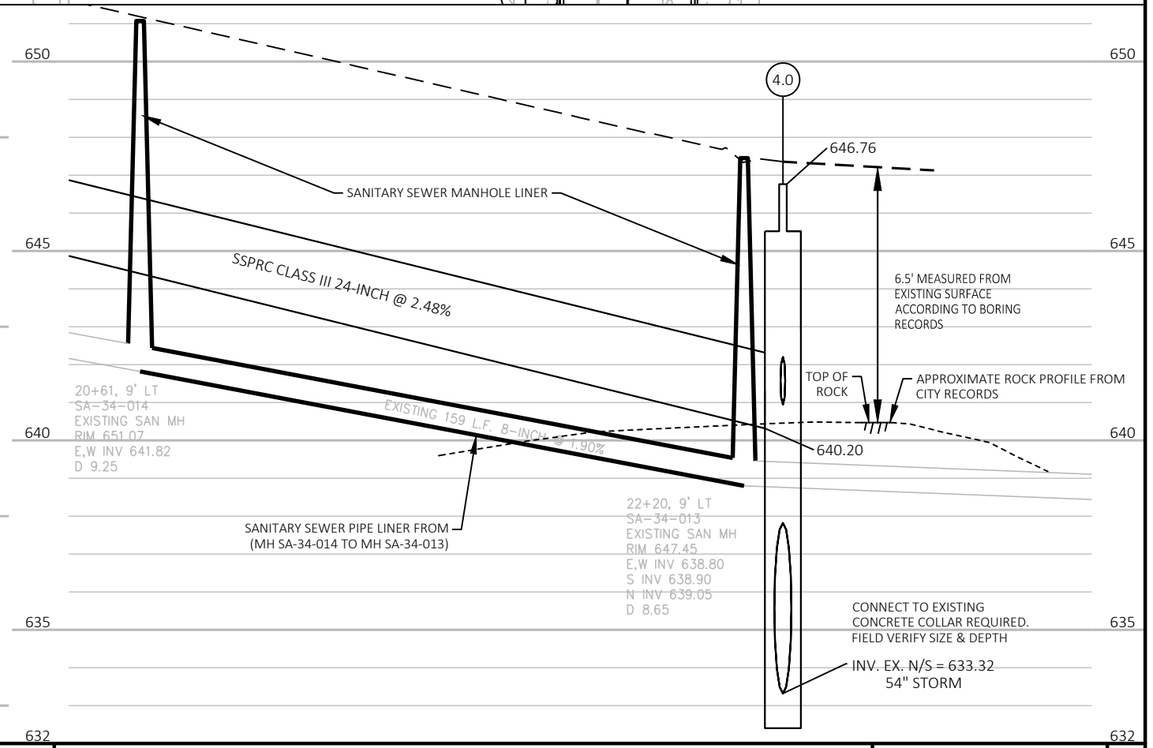
STA 18+88, 40.0' RT
CATCH BASINS 2x3-H-S (3.3)

(3.2) STA 19+17, 40.0' RT
CATCH BASINS 2x3-H-S

STA 21+96, 40.0' RT
CATCH BASINS 2x3-H-S (4.3)

(4.4) STA 22+38, 40.0' RT
CATCH BASINS 2x3-H-S





PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN	STORM AND SANITARY SEWER DETAILS - MAINLINE	SHEET 44	E

RS REMOVE STRUCTURE
AS ABANDON STRUCTURE
RP REMOVE SEWER PIPE
ASP ABANDON SEWER PIPE
AWV ADJUST WATER VALVE
RSAN SANITARY MH RECONSTRUCT
ASAN ADJUST SANITARY MH RIM

N

STA 24+50, 34.5' LT
CATCH BASINS 2x3-H-S 5.1

STA 26+45, 34.5' LT
CATCH BASINS 2x3-H-S 6.1

6.0 STA 26+40, 29.0' LT
MANHOLES 5-J-S

PROPOSED CASING PIPE UNDER RAIL ROAD TRACKS
(36-INCH)

STA 28+07, 34.5' LT
CATCH BASINS 2x3-H-S 7.1

PROPOSED CASING PIPE UNDER RAIL ROAD TRACKS
(36-INCH)

8.1 STA 28+43, 35.6' LT
CATCH BASINS 2x3-H-S

SPOT REPAIR SAG IN SAN LINE FROM
117' TO 123' EAST OF EX. MH

STA 28+02, 23.5' LT
MANHOLES 5-J-S 7.0

8.0 STA 28+54, 23.5' LT
MANHOLES 8-J-S

AWV
5.0 STA 24+55, 29.0' LT
MANHOLES 5-J-S
RSAN

24+00 25+00 26+00 27+00 28+00 29+00

STA 26+45, 16.5' RT
CATCH BASINS 2x3-H-S 6.2

NORTH AVE

7.2 STA 28+13, 17.5' LT
CATCH BASINS 2x3-H-S

STA 24+50, 16.5' RT
CATCH BASINS 2x3-H-S 5.2

SANITARY SEWER PIPE LINER FROM
(MH SA-34-011 TO MH SA-34-079)

SANITARY SEWER PIPE LINER FROM
(MH SA-34-010 TO MH SA-34-009)

7.3 STA 28+01, 44.6' RT
ADJUST MANHOLE

5.0
645.49
EXISTING GROUND OVER PROPOSED PIPE
6.0
644.54
SANITARY SEWER MANHOLE LINER
STA. 27+45.74
TOP OF RAIL= 645.42 (PROPOSED)
7.0
644.89
STA. 28+37
TOP OF RAIL= 644.81 (PROPOSED)
8.0
644.70
SPOT REPAIR SAG IN
SAN LINE FROM 117' TO
123' EAST OF EX. MH
SANITARY SEWER MANHOLE LINER

645
640
635
630

SANITARY SEWER MANHOLE LINER
SANITARY SEWER MANHOLE LINER
6.□'
6.2'
SSPRC CLASS III 24-INCH @ 0.50%
639.98
238 L.F. 8-INCH @ 0.39%
190 L.F. 8-INCH @ 0.42%
639.05
47 L.F. 8-INCH @ 0.40%
637.04
SSPRC CLASS V 24-INCH @ 0.50%
230 L.F. 8-INCH @ 0.62%
636.23
636.23
635.97
250 L.F. 8-INCH @ 0.50%
CONNECT TO EXISTING
CONCRETE COLLAR REQUIRED
FIELD VERIFY SIZE & DEPTH

24+58, 9' LT
EXISTING SAN MH
SA-34-012
RIM 646.42
E,W INV 637.87
D 8.55

26+48, 9' LT
EXISTING SAN MH
SA-34-011
RIM 645.61
E,W INV 637.08
D 8.53

26+95, 9' LT
EXISTING SAN MH
SA-34-079
RIM 645.19
E,W INV 636.89
D 8.30

29+25, 8' RT
EXISTING SAN MH
SA-34-010
RIM 643.15
INV 635.47
D 7.68

SANITARY SEWER PIPE LINER FROM MH SA-34-011 TO MH SA-34-079
CASING END
88' WEST MH 7.0
CASING BEGIN
28' WEST MH 7.0
36" CASING PIPE UNDER RAIL
ROAD CROSSING
36" CASING PIPE UNDER RAIL
ROAD CROSSING
(FROM MH 7.0 TO 8.0)
SANITARY SEWER PIPE LINER
FROM MANHOLE TO MANHOLE
SANITARY SEWER PIPE LINER FROM
(MH SA-34-010 TO MH SA-34-009)
SSPRC CLASS V 24-INCH @ 0.50%

PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN	STORM AND SANITARY SEWER DETAILS - MAINLINE	SHEET 45	E

FILE NAME : W:\PROJECTS\W0059\81500117\CADD\CIVIL3D\PLAN SHEETS\02-SS DETAILS\NORTHAVE-SS.DWG
LAYOUT NAME - NorthAve-SS03
PLOT DATE : 11/1/2018 4:39 PM PLOT BY : CHRIS CLEMENS PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

RS	REMOVE STRUCTURE
AS	ABANDON STRUCTURE
RP	REMOVE SEWER PIPE
ASP	ABANDON SEWER PIPE
AWV	ADJUST WATER VALVE
RSAN	SANITARY MH RECONSTRUCT
ASAN	ADJUST SANITARY MH RIM

N

9.1 STA 31+25, 32.5' LT
CATCH BASINS 2x3-H-S

9.0 STA 31+30, 27.0' LT
MANHOLES 5-J-S

10.1 STA 34+25, 32.5' LT
CATCH BASINS 2x3-H-S

10.0 STA 34+30, 27.0' LT
MANHOLES 5-J-S

STA 37+30, 27.0' LT
MANHOLES 5-J-S 11.0

STA 37+25, 32.5' LT
CATCH BASINS 2x3-H-S 11.1

SANITARY SEWER PIPE LINER FROM
(MH SA-34-010 TO MH SA-34-009)

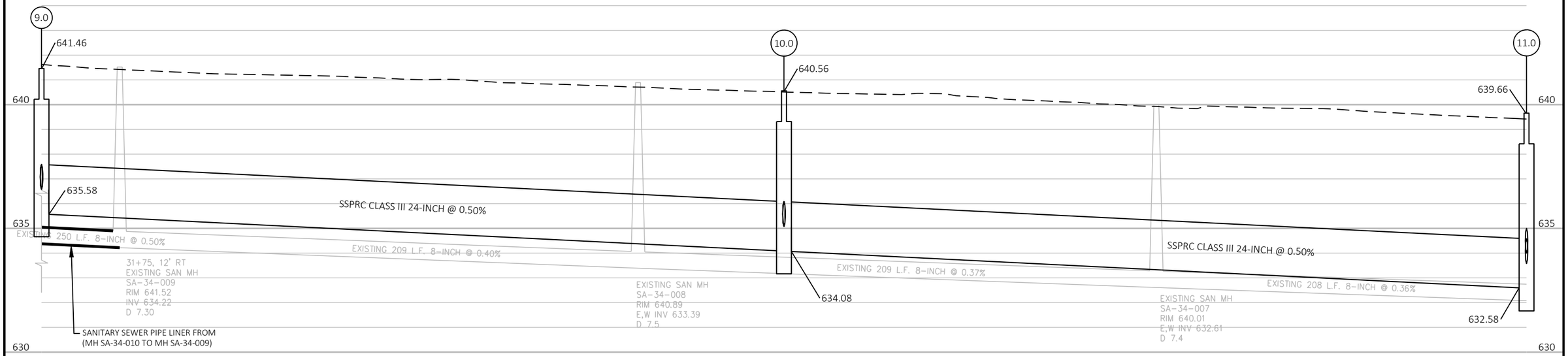
NORTH AVE

32+00 33+00 34+00 35+00 36+00 37+00

RSAN RSAN AWV RSAN RS RP RP RS

9.2 STA 31+25, 23.5' RT
CATCH BASINS 2x3-H-S

10.2 STA 34+25, 23.5' RT
CATCH BASINS 2x3-H-S



PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN	STORM AND SANITARY SEWER DETAILS - MAINLINE	SHEET 46 E

FILE NAME : W:\PROJECTS\W0059\81500117\CADD\CIVIL3D\PLAN SHEETS\02-SS DETAILS\NORTHAVE-SS.DWG
LAYOUT NAME - NorthAve-SS04

PLOT DATE : 11/1/2018 4:39 PM PLOT BY : CHRIS CLEMENS PLOT NAME : PLOT SCALE : 1 IN:40 FT

RS REMOVE STRUCTURE
AS ABANDON STRUCTURE
RP REMOVE SEWER PIPE
ASP ABANDON SEWER PIPE
AWV ADJUST WATER VALVE
RSAN SANITARY MH RECONSTRUCT
ASAN ADJUST SANITARY MH RIM

STA 37+30, 27.0' LT
MANHOLES 5-J-S
11.0

STA 37+25, 32.5' LT
CATCH BASINS 2x3-H-S
11.1

STA 37+34, 23.1' RT
CATCH BASINS 2x3-H-S
11.2

CONNECT TO EXISTING LATERAL

STA 39+55, 43.9' LT
CATCH BASINS 2x3-H-S
12.2

STA 39+94, 16.6' LT
MANHOLES 8-J-S
12.0

STA 39+55, 17.8' RT
CATCH BASINS 2x3-H-S
12.1

STA 39+77, 51.6' RT
CATCH BASINS 2x3-H-S
12.3

STA 40+75, 40.5' LT
CATCH BASINS 2x3-H-S
12.4

STA 40+81, 24.1' RT
CATCH BASINS 2x3-H-S
12.5

STA 40+35, 54.1' RT
CATCH BASINS 2x3-H-S
12.6

SANITARY SEWER 8-INCH
FROM EXISTING MH
(SA-34-005) TO
54' NORTH

15TH ST 91+00

15TH ST

NORTH AVE

36+00
37+00
38+00
39+00
40+00
41+00

N

11.0
639.66
632.58
632.58

12.0
636.96
627.51

SSPRC CLASS III 24-INCH @ 0.50%
EXISTING 208 L.F. 8-INCH @ 0.36%
SSPRC CLASS III 24-INCH @ 1.92%
EXISTING 209 L.F. 8-INCH @ 4.44%

EXISTING SAN MH
SA-34-006
RIM 639.07
E,W INV 631.87
D 7.2

EXISTING SAN MH
SA-34-005
RIM 636.85
N INV 622.75
NW INV 623.60
W INV 622.85
E INV 622.60
S INV 630.35
D 14.25

640
635
630
625
623

PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN	STORM AND SANITARY SEWER DETAILS - MAINLINE	SHEET 47	E

FILE NAME : W:\PROJECTS\W0059\81500117\CADD\CIVIL3D\PLAN SHEETS\02-SS DETAILS\NORTHAVE-SS.DWG
LAYOUT NAME - NorthAve-SS05
PLOT DATE : 12/14/2018 2:52 PM PLOT BY : JOSH FREWERD PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

* SANITARY SEWER SPOT REPAIRS TO BE DONE PRIOR TO MAINLINE LINING.

SANITARY SEWER PIPE LINER FROM MANHOLE TO MANHOLE

STA 21+96, 40.0' RT
CATCH BASINS 2x3-H-S (4.3)

SANITARY SEWER PIPE LINER FROM MANHOLE TO MANHOLE

STA 22+03, 59.8' LT
CATCH BASINS 2x3-H-S (4.1)

78+00

79+00

19TH ST

81+00

MUTH CT

82+00

EXISTING SAN MH

83+00

*5' - 8-INCH SPOT REPAIR REQUIRED

CONCRETE BASE PATCHING REQ'D

STA 22+38, 40.0' RT
CATCH BASINS 2x3-H-S (4.4)

NORTH AVE

22+00

23+00

STA 22+44, 60.2' LT
CATCH BASINS 2x3-H-S (4.2)

STA 22+31, 29.0' LT
MANHOLES 8-J-S (4.0)

SANITARY SEWER PIPE LINER FROM MANHOLE TO MANHOLE

* 5' - 8-INCH SPOT REPAIR REQUIRED
CONCRETE BASE PATCHING REQ'D

N

645

640

635

630

SANITARY SEWER MANHOLE LINER

* 5' - 8-INCH SPOT REPAIR REQUIRED

* 5' - 8 INCH SPOT REPAIR
8-INCH x 6-INCH WYE REQUIRED
RECONNECT SANITARY LATERAL

EXISTING SAN MH
RIM 649.08
N,S INV 641.22
D 7.86

182' SOUTH OF
EXISTING MANHOLE

EXISTING 201 L.F. 8" INCH @ 1.15%

109' SOUTH OF
EXISTING MANHOLE

80+09, 19TH ST
EXISTING SAN MH
RIM 647.45
E,W INV 638.80
S INV 638.9
N INV 639.05
D 8.55

SANITARY SEWER PIPE LINER
FROM MANHOLE TO MANHOLE

EXISTING 300 L.F. 8" INCH @ 0.32%

* 5' - 8-INCH SPOT REPAIR
8-INCH x 6-INCH WYE REQUIRED
RECONNECT SANITARY LATERAL

EXISTING SAN MH
RIM 646.92
N,S INV 640.00
D 6.92

290' NORTH OF EXISTING MANHOLE

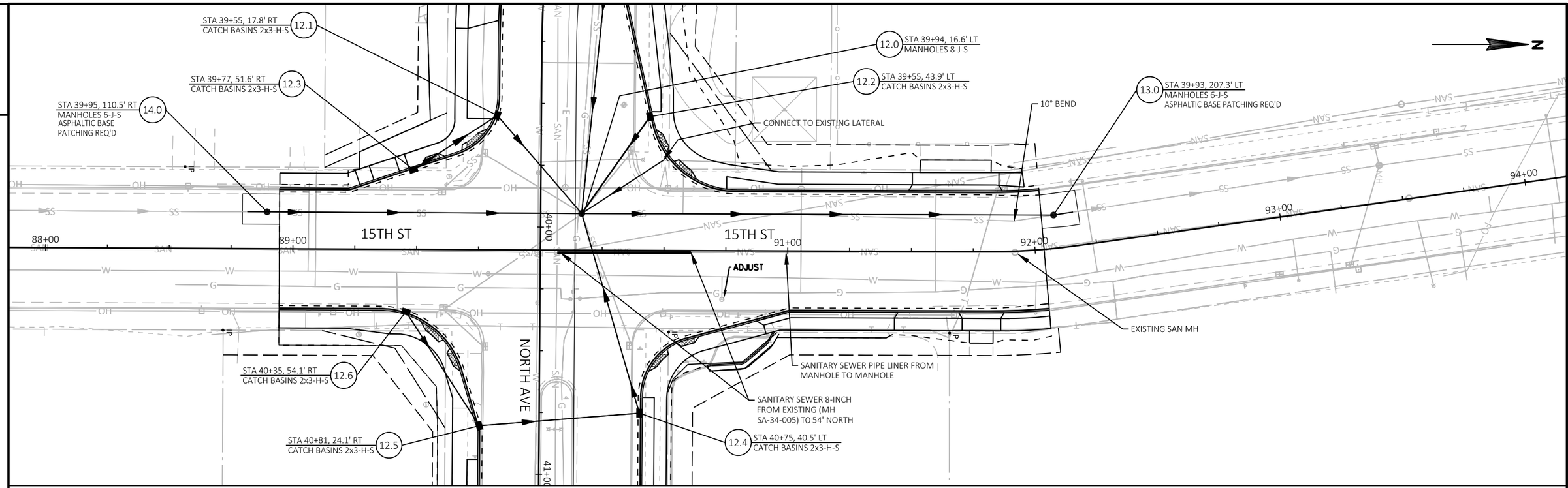
PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN	STORM & SANITARY SEWER DETAIL - SIDE STREETS	SHEET 48	E

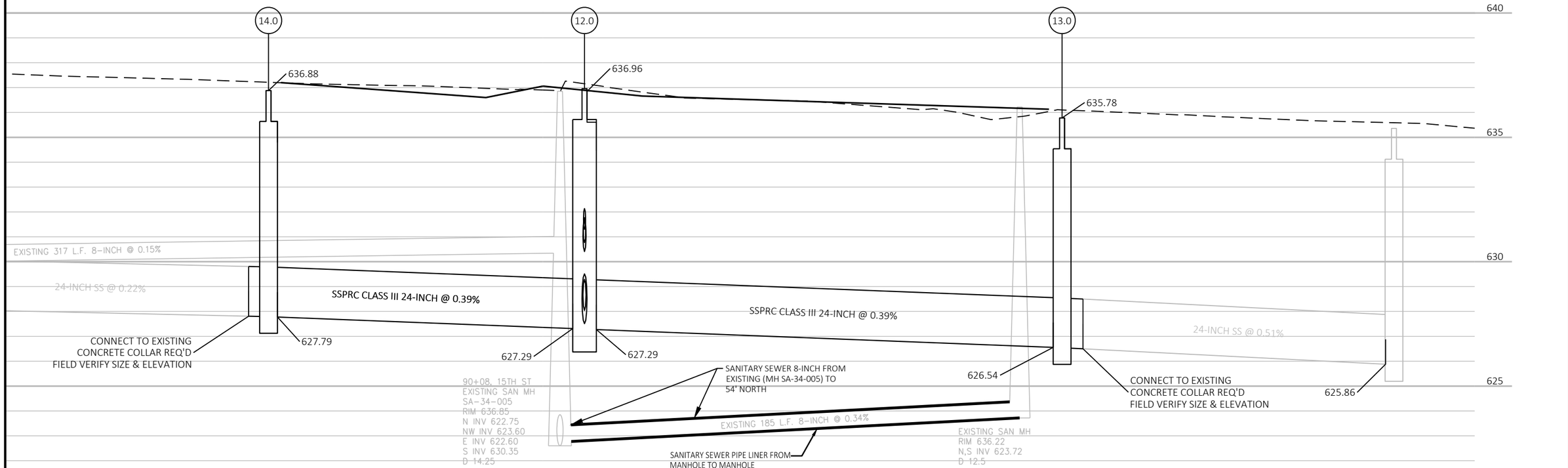
FILE NAME : W:\PROJECTS\W0059\81500117\CADD\CIVIL3D\PLAN SHEETS\02-SS DETAILS\NORTHAVE-SS.DWG
LAYOUT NAME - MUTH CT-SAN07

PLOT DATE : 11/1/2018 4:40 PM PLOT BY : CHRIS CLEMENS PLOT NAME : PLOT SCALE : 1 IN:40 FT

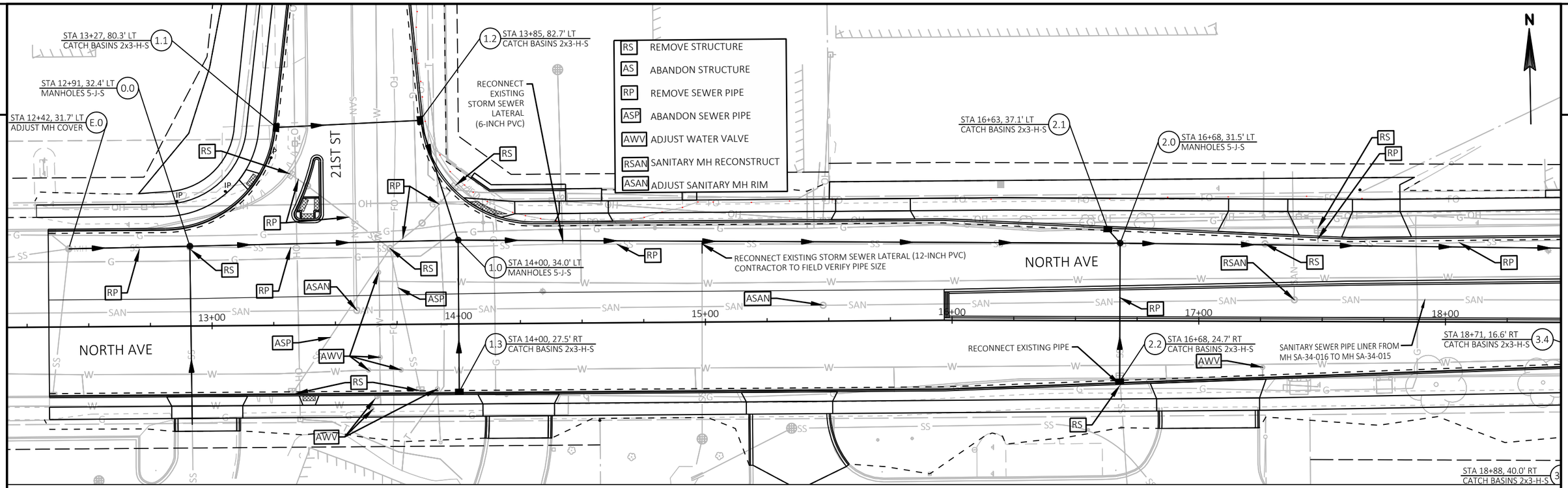
WISDOT/CADDS SHEET 41

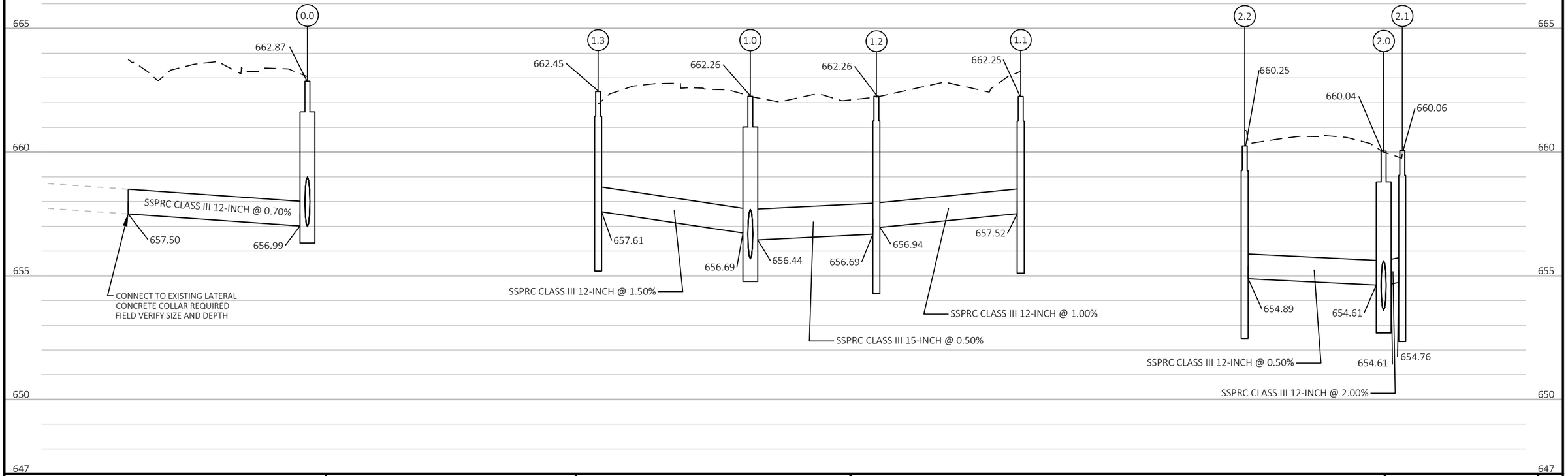
2





PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN	STORM & SANITARY SEWER DETAIL - SIDE STREETS	SHEET 49	E





PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN	STORM SEWER DETAIL - INLETS AND LEADS	SHEET 50	E

FILE NAME : W:\PROJECTS\W0059\81500117\CADD\CIVIL3D\PLAN SHEETS\02-SS DETAILS\NORTHAVE-SS.DWG
LAYOUT NAME - NorthAve-SS01-laterals
PLOT DATE : 11/1/2018 4:40 PM
PLOT BY : CHRIS CLEMENS
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 41

2

RS REMOVE STRUCTURE
AS ABANDON STRUCTURE
RP REMOVE SEWER PIPE
ASP ABANDON SEWER PIPE
AWV ADJUST WATER VALVE
RSAN SANITARY MH RECONSTRUCT
ASAN ADJUST SANITARY MH RIM

N

STA 19+12, 34.5' LT
CATCH BASINS 2x3-H-S (3.1)

(3.0) STA 19+17, 29.0' LT
MANHOLES 5-J-S

STA 22+03, 59.8' LT
CATCH BASINS 2x3-H-S (4.1)

(4.2) STA 22+44, 60.2' LT
CATCH BASINS 2x3-H-S

(4.0) STA 22+31, 29.0' LT
MANHOLES 8-J-S

SANITARY SEWER PIPE LINER FROM
MH SA-34-016 TO MH SA-34-015

STA 18+71, 16.6' RT
CATCH BASINS 2x3-H-S (3.4)

SANITARY SEWER PIPE LINER FROM
(MH SA-34-014 TO MH SA-34-013)

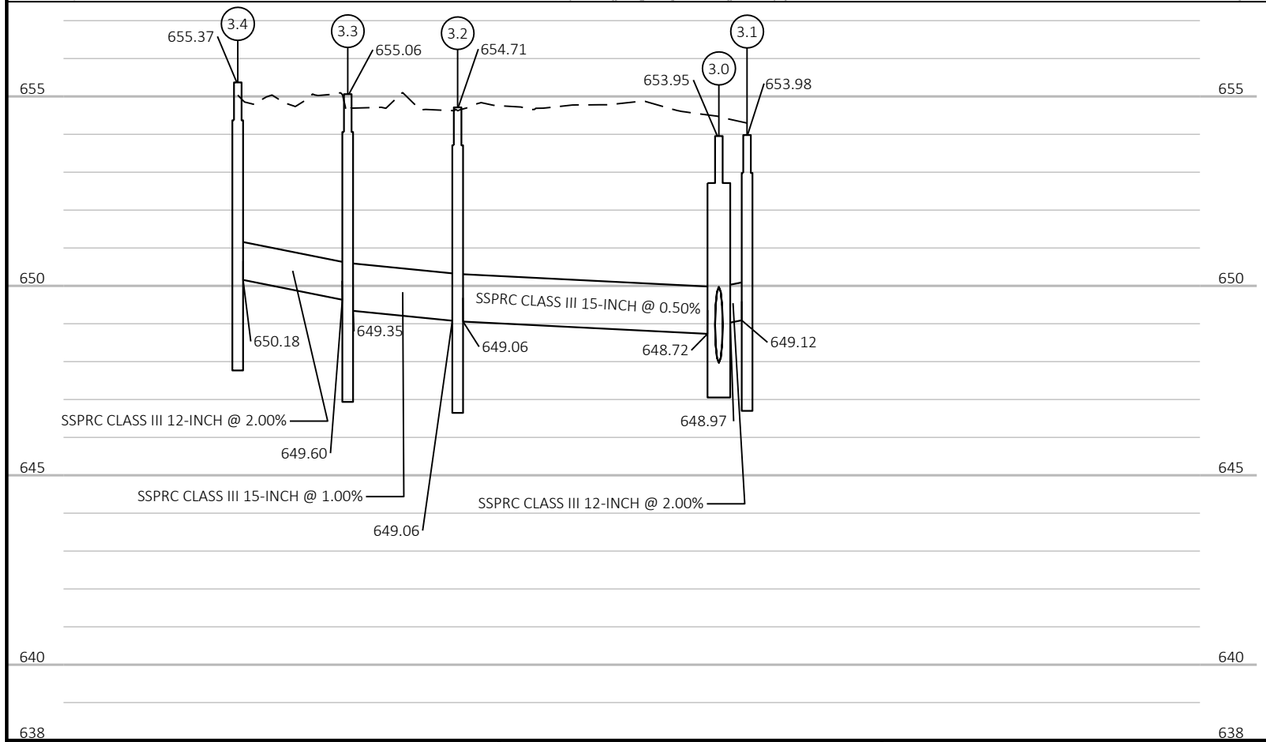
STA 18+88, 40.0' RT
CATCH BASINS 2x3-H-S (3.3)

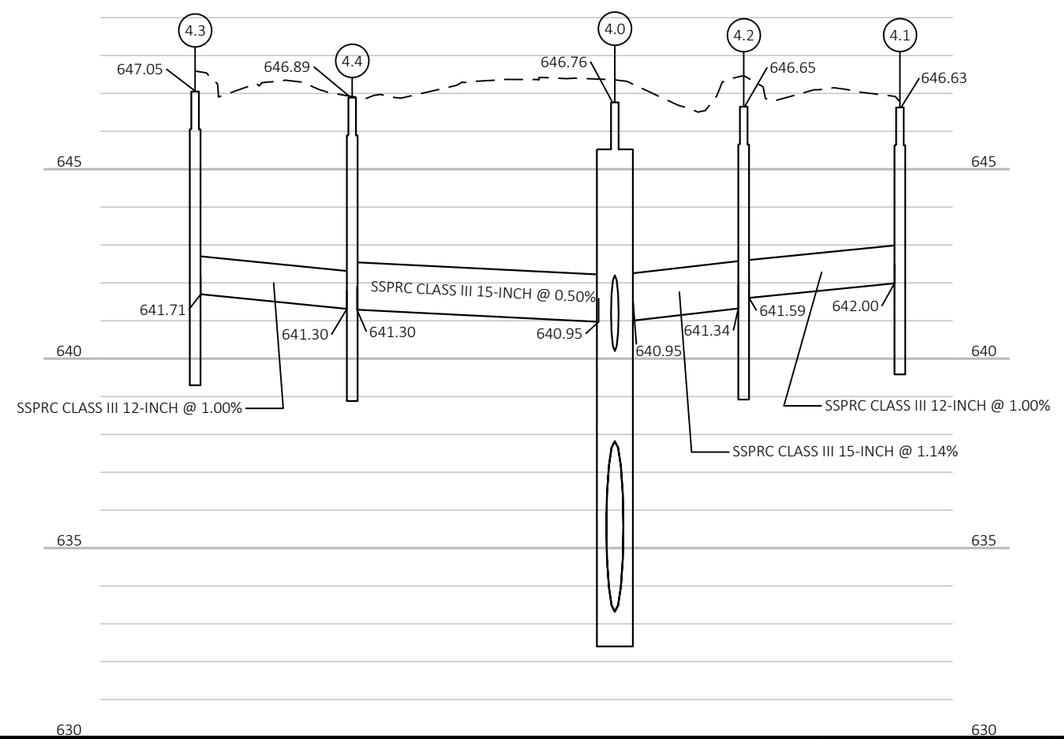
(3.2) STA 19+17, 40.0' RT
CATCH BASINS 2x3-H-S

STA 21+96, 40.0' RT
CATCH BASINS 2x3-H-S (4.3)

(4.4) STA 22+38, 40.0' RT
CATCH BASINS 2x3-H-S

MUTH CT
NORTH AVE
20TH ST
19TH ST
81+00
18+00
19+00
20+00
21+00
22+00
23+00





PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN	STORM SEWER DETAIL - INLETS AND LEADS	SHEET 51	E

FILE NAME : W:\PROJECTS\W0059\81500117\CADD\CIVIL3D\PLAN SHEETS\02-SS DETAILS\NORTHAVE-SS.DWG
LAYOUT NAME - NorthAve-SS02-laterals
PLOT DATE : 11/1/2018 4:40 PM
PLOT BY : CHRIS CLEMENS
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 41

RS REMOVE STRUCTURE
AS ABANDON STRUCTURE
RP REMOVE SEWER PIPE
ASP ABANDON SEWER PIPE
AWV ADJUST WATER VALVE
RSAN SANITARY MH RECONSTRUCT
ASAN ADJUST SANITARY MH RIM

N

STA 24+50, 34.5' LT
CATCH BASINS 2x3-H-S 5.1

STA 26+45, 34.5' LT
CATCH BASINS 2x3-H-S 6.1

6.0 STA 26+40, 29.0' LT
MANHOLES 5-J-S

PROPOSED CASING PIPE UNDER RAIL ROAD TRACKS
(36-INCH)

STA 28+07, 34.5' LT
CATCH BASINS 2x3-H-S 7.1

PROPOSED CASING PIPE UNDER RAIL ROAD TRACKS
(36-INCH)

8.1 STA 28+43, 35.6' LT
CATCH BASINS 2x3-H-S

SPOT REPAIR SAG IN SAN LINE FROM
117' TO 123' EAST OF EX. MH

STA 28+02, 23.5' LT
MANHOLES 5-J-S 7.0

8.0 STA 28+54, 23.5' LT
MANHOLES 8-J-S

5.0 STA 24+55, 29.0' LT
MANHOLES 5-J-S

24+00 25+00 26+00 27+00 28+00 29+00

NORTH AVE

STA 26+45, 16.5' RT
CATCH BASINS 2x3-H-S 6.2

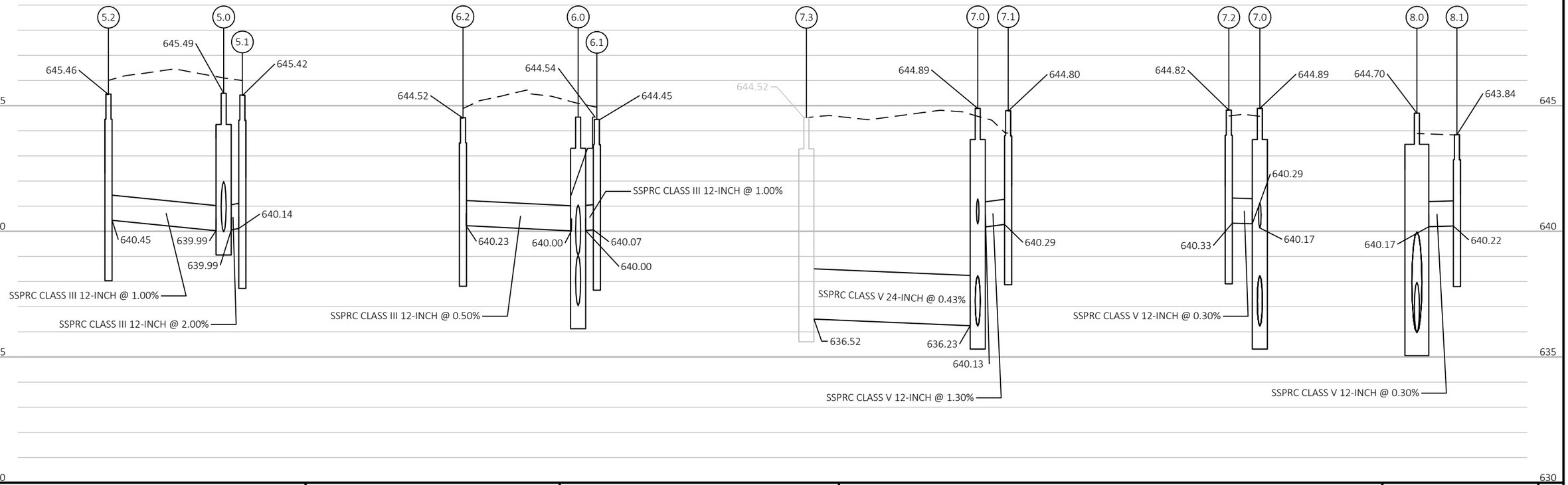
7.2 STA 28+13, 17.5' LT
CATCH BASINS 2x3-H-S

STA 24+50, 16.5' RT
CATCH BASINS 2x3-H-S 5.2

SANITARY SEWER PIPE LINER FROM
(MH SA-34-011 TO MH SA-34-079)

SANITARY SEWER PIPE LINER FROM
(MH SA-34-010 TO MH SA-34-009)

7.3 STA 28+01, 44.6' RT
ADJUST MANHOLE



PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN	STORM SEWER DETAIL - INLETS AND LEADS	SHEET 52	E

FILE NAME : W:\PROJECTS\W0059\81500117\CADD\CIVIL3D\PLAN SHEETS\02-SS DETAILS\NORTHAVE-SS.DWG
LAYOUT NAME - NorthAve-SS03-laterals
PLOT DATE : 11/1/2018 4:40 PM PLOT BY : CHRIS CLEMENS PLOT NAME : PLOT SCALE : 1 IN:40 FT

RS	REMOVE STRUCTURE
AS	ABANDON STRUCTURE
RP	REMOVE SEWER PIPE
ASP	ABANDON SEWER PIPE
AWV	ADJUST WATER VALVE
RSAN	SANITARY MH RECONSTRUCT
ASAN	ADJUST SANITARY MH RIM

9.1 STA 31+25, 32.5' LT
CATCH BASINS 2x3-H-S

9.0 STA 31+30, 27.0' LT
MANHOLES 5-J-S

SANITARY SEWER PIPE LINER FROM
(MH SA-34-010 TO MH SA-34-009)

NORTH AVE

9.2 STA 31+25, 23.5' RT
CATCH BASINS 2x3-H-S

10.1 STA 34+25, 32.5' LT
CATCH BASINS 2x3-H-S

10.0 STA 34+30, 27.0' LT
MANHOLES 5-J-S

10.2 STA 34+25, 23.5' RT
CATCH BASINS 2x3-H-S

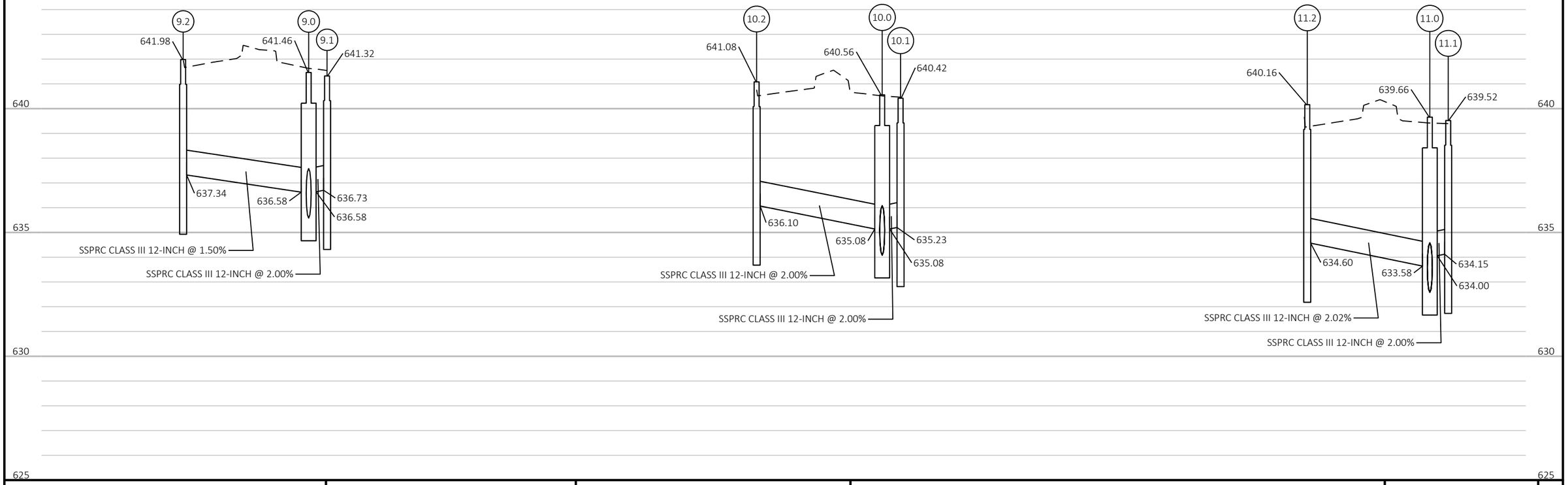
11.0 STA 37+30, 27.0' LT
MANHOLES 5-J-S

11.1 STA 37+25, 32.5' LT
CATCH BASINS 2x3-H-S

32+00 33+00 34+00 35+00 36+00 37+00

RSAN AWV RP RS

N

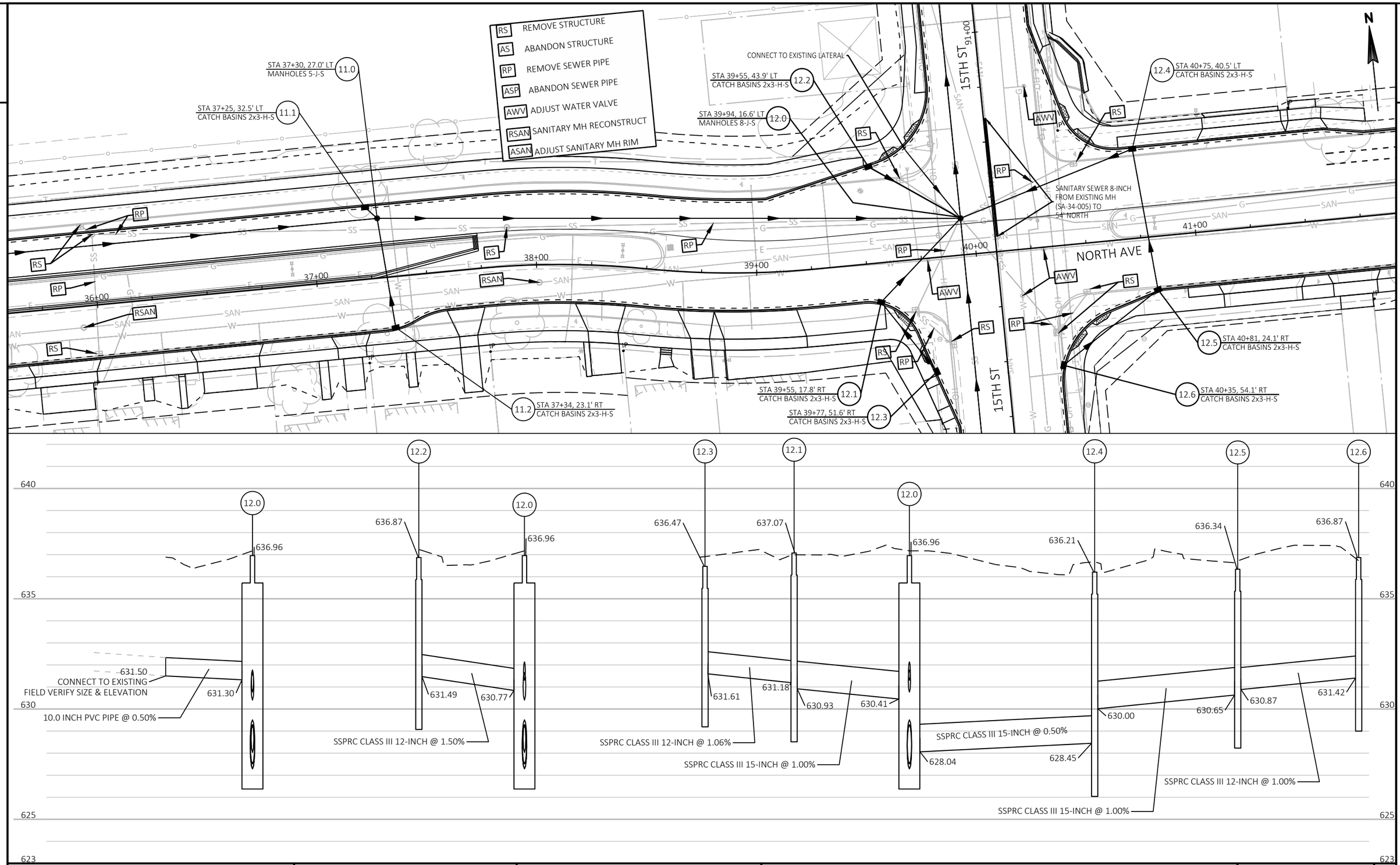


PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN	STORM SEWER DETAIL - INLETS AND LEADS	SHEET 53	E

FILE NAME : W:\PROJECTS\W0059\81500117\CADD\CIVIL3D\PLAN SHEETS\02-SS DETAILS\NORTHAVE-SS.DWG
LAYOUT NAME - NorthAve-SS04-laterals

PLOT DATE : 11/1/2018 4:40 PM PLOT BY : CHRIS CLEMENS PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 41



PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN	STORM SEWER DETAIL - INLETS AND LEADS	SHEET 54	E

FILE NAME : W:\PROJECTS\W0059\81500117\CADD\CIVIL3D\PLAN SHEETS\02-SS DETAILS\NORTHAVE-SS.DWG
LAYOUT NAME - NorthAve-SS05-laterals

PLOT DATE : 12/14/2018 2:53 PM PLOT BY : JOSH FREWERD PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 41

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- X.X DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

1.A BEGIN RIGHT TURN LANE YIELD TO BIKES / NO PARKING ANY TIME — TO REMAIN

1.B ONLY ONLY — MOVE

1.C — REMOVE

1.D STOP — REMOVE

1.E SPEED LIMIT 25 — REMOVE

1.F NO PARKING ANY TIME — REMOVE

1.G BIKE LANE — MOVE

1.H BIKE LANE — MOVE

1.I SPEED LIMIT 25 — REMOVE

1.J MAY USE FULL LANE — REMOVE

1.1 W4-2R 36"X36"

1.2 TRUCK ROUTE R14-1 24"X18"

1.3 H D9-2 24"X24"

1.4 SPEED LIMIT 25 R2-1 24"X30"

1.5 S1-1 36"X36"

1.6 STOP R1-1 30"X30"

1.7 STOP R1-1 30"X30"

1.8 SPEED LIMIT 25 R2-1 24"X30"

1.9 NO PARKING ANY TIME R7-1D 18"X24"

1.10 BIKE LANE R3-17 30"X24"

1.11 NO PARKING ANY TIME R7-1D 18"X24"

1.12 W12-1D 24"X24"

HUMANE SOCIETY — MOVE

ENDS — REMOVE

21ST STREET

CALUMET DRIVE (STH 42)

IP

11+00 12+00 13+00 14+00 15+00

N

PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN	PERMANENT SIGNING	SHEET 55	E

FILE NAME : W:\PROJECTS\W0059\81500117\CADD\CIVIL3D\PLAN SHEETS\02-SIGNING\NORTHAVE-SIGNING.DWG
LAYOUT NAME - NorthAve-01Signing

PLOT DATE : 11/1/2018 4:40 PM PLOT BY : CHRIS CLEMENS PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

N

1.10
BIKE LANE
R3-17
30"X24"

1.11
NO PARKING ANY TIME
R7-1D
18"X24"

2.G
NO PARKING ANY TIME
REMOVE

TRUCK ROUTE
REMOVE

2.H
NO PARKING ANY TIME
REMOVE

SNOW ROUTE DURING SNOW EMERGENCY
MOVE

2.8
TRUCK ROUTE
R14-1
24"X18"

2.9
NO PARKING ANY TIME
R7-1D
18"X24"

IP

2.10
BIKE LANE
R3-17
30"X24"

2.11
NO PARKING ANY TIME
R7-1D
18"X24"

3.A
MAY USE FULL LANE
REMOVE

IP

15+00

16+00

17+00

18+00

19+00

20+00

21+00

2.12
R4-7
24"X30"
(ON LP)

ALLEY

2.A
NO PARKING ANY TIME
REMOVE

SNOW ROUTE DURING SNOW EMERGENCY
REMOVE

TRUCK ROUTE
REMOVE

2.1
NO PARKING ANY TIME
R7-1D
18"X24"

2.2
BIKE LANE
R3-17
30"X24"

2.3
R5-2
24"X24"

2.B
REMOVE

20TH STREET

2.C
STOP
REMOVE

2.4
STOP
R1-1
30"X30"

2.D
SNOW ROUTE DURING SNOW EMERGENCY
REMOVE

2.E
MAY USE FULL LANE
REMOVE

2.F
NO OUTLET
REMOVE

2.5
BIKE LANE
R3-17
30"X24"

2.6
NO PARKING ANY TIME
R7-1D
18"X24"

ALLEY

2.7
NO OUTLET
W14-2
30"X30"

PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN	PERMANENT SIGNING	SHEET 56	E

FILE NAME : W:\PROJECTS\W0059\81500117\CADD\CIVIL3D\PLAN SHEETS\02-SIGNING\NORTHAVE-SIGNING.DWG
LAYOUT NAME - NorthAve-02Signing

PLOT DATE : 11/1/2018 4:41 PM PLOT BY : CHRIS CLEMENS PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

N

MUTH COURT

IP

3.1 STOP R1-1 30"X30"

3.2 NO PARKING ANY TIME R7-1D 18"X24"

3.3 BIKE LANE R3-17 30"X24"

3.4 NO PARKING ANY TIME R7-1D 18"X24"

3.12 R4-7 24"X30" (ON LP)

3.A MAY USE FULL LANE REMOVE

3.B NO PASSING ZONE REMOVE

3.C NO PARKING ANY TIME REMOVE

3.D STOP REMOVE

3.E DO NOT ENTER REMOVE

EMPLOYEE PARKING ONLY ALLEGIS BLUE CARS MOVE

3.F NO THRU TRAFFIC REMOVE

3.G DO NOT ENTER REMOVE

21+00 22+00 23+00 24+00 25+00 26+00

2.7 NO OUTLET W14-2 30"X30"

3.11 R4-7 24"X30"

ALLEY

19TH STREET

2.F NO OUTLET REMOVE

2.5 BIKE LANE R3-17 30"X24"

2.6 NO PARKING ANY TIME R7-1D 18"X24"

3.5 STOP R1-1 30"X30"

3.I TRUCK ROUTE REMOVE SNOW ROUTE DURING SNOW EMERGENCY REMOVE

3.6 TRUCK ROUTE R14-1 24"X18"

3.7 NO PARKING ANY TIME R7-1D 18"X24"

3.H STOP REMOVE

3.8 BIKE LANE R3-17 30"X24"

3.13 R4-7 24"X30" (ON LP)

3.9 W10-1 36"X36"

3.10 EXEMPT W10-1A 24"X12"

3.J REMOVE ONLY ONLY REMOVE

3.K REMOVE

PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN	PERMANENT SIGNING	SHEET 57	E

FILE NAME : W:\PROJECTS\W0059\81500117\CADD\CIVIL3D\PLAN SHEETS\02-SIGNING\NORTHAVE-SIGNING.DWG
LAYOUT NAME - NorthAve-03Signing

PLOT DATE : 11/1/2018 4:41 PM PLOT BY : CHRIS CLEMENS PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

2

N

4.1
TRUCK ROUTE
R14-1
24"X18"

4.2
NO PARKING ANY TIME
R7-1D
18"X24"

4.A
TRUCK ROUTE
REMOVE
SNOW ROUTE DURING SNOW EMERGENCY
MOVE

TO BE INSTALLED BY OTHERS
4.3
EXEMPT
R15-3
24"X12"
INSTALL ON SIGNAL MAST, BELOW CROSSBUCK SIGN

4.B
REMOVE
REMOVE
REMOVE

4.C
REMOVE

4.D
REMOVE

4.4
W10-1
36"X36"

4.5
EXEMPT
W10-1A
24"X12"

IP

26+00
27+00
28+00
29+00
30+00
31+00

3.J
REMOVE
ONLY ONLY
REMOVE

3.K
REMOVE

TO BE INSTALLED BY OTHERS
4.6
EXEMPT
R15-3
24"X12"
INSTALL ON SIGNAL MAST, BELOW CROSSBUCK SIGN

NO MOTOR VEHICLES
TO REMAIN

UNION PACIFIC RAILROAD (MAINLINE)

SHORELINE 400 TRAIL

UNION PACIFIC RAILROAD (SPUR LINE)

4.E
TRUCK ROUTE
REMOVE
SNOW ROUTE DURING SNOW EMERGENCY
MOVE

4.7
TRUCK ROUTE
R14-1
24"X18"

4.8
R4-7
24"X30"

4.9
BIKE LANE
R3-17
30"X24"

PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN	PERMANENT SIGNING	SHEET 58	E

FILE NAME : W:\PROJECTS\W0059\81500117\CADD\CIVIL3D\PLAN SHEETS\02-SIGNING\NORTHAVE-SIGNING.DWG
LAYOUT NAME - NorthAve-04Signing

PLOT DATE : 11/1/2018 4:41 PM PLOT BY : CHRIS CLEMENS PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

N

5.1

BIKE LANE

R3-17
30"X24"

5.2

NO PARKING ANY

R7-1D
18"X24"

31+00

32+00

33+00

34+00

35+00

36+00

37+

5.3

BIKE LANE

R3-17
30"X24"

PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN	PERMANENT SIGNING	SHEET 59	E

FILE NAME : W:\PROJECTS\W0059\81500117\CADD\CIVIL3D\PLAN SHEETS\02-SIGNING\NORTHAVE-SIGNING.DWG
LAYOUT NAME - NorthAve-05Signing

PLOT DATE : 11/1/2018 4:41 PM PLOT BY : CHRIS CLEMENS PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

2

6.1 TRUCK ROUTE R14-1 24"X18"

6.2 NO PARKING ANY TIME R7-1D 18"X24"

6.3 R4-7 24"X30"

6.4 SPEED LIMIT 25 R2-1 24"X30"

6.5 TRUCK ROUTE R14-1 24"X18"

6.6 M6-6 21"X21"

6.7 NO PARKING ANY TIME R7-1D 18"X24"

6.8 NO PARKING HERE TO CORNER R7-51L 18"X24"

6.9 BEGIN LEFT TURN LANE R3-20L 24"X36"

6.10 TRUCK ROUTE R14-1 24"X18"

6.11 M6-4 21"X21"

6.12 TRUCK ROUTE R14-1 24"X18"

6.13 M6-6 21"X21"

6.14 SPEED LIMIT 25 R2-1 24"X30"

6.15 D9-2 24"X24"

6.16 S1-1 36"X36"

6.17 STOP R1-1F 30"X30" (PLACED ON TRAFFIC SIGNAL STANDARD)

6.18 STOP R1-1F 30"X30" (PLACED ON TRAFFIC SIGNAL STANDARD)

6.19 STOP R1-1F 30"X30" (PLACED ON TRAFFIC SIGNAL STANDARD)

6.20 STOP R1-1F 30"X30" (PLACED ON TRAFFIC SIGNAL STANDARD)

6.21 BEGIN RIGHT TURN LANE R3-20R 24"X36"

6.A SPEED LIMIT 25 REMOVE

6.B MOVE

6.C STOP REMOVE ALL WAY REMOVE

6.D TRUCK ROUTE REMOVE REMOVE

6.E NO PARKING ANY TIME REMOVE

6.F SNOW ROUTE DURING SNOW EMERGENCY MOVE; NO PARKING 2:00-4:00 MOVE

6.G

6.H STOP REMOVE ALL WAY REMOVE

6.I

6.J NO PARKING HERE TO CORNER REMOVE

6.K REMOVE

6.L STOP REMOVE ALL WAY REMOVE

6.M SNOW ROUTE DURING SNOW EMERGENCY MOVE; NO PARKING 2:00-4:00 MOVE

6.N TRUCK ROUTE REMOVE REMOVE

6.O STOP REMOVE ALL WAY REMOVE

6.P NO PARKING HERE TO CORNER REMOVE

6.Q SPEED LIMIT 25 REMOVE

6.R H REMOVE HOSPITAL 3/4 MILE MOVE

6.S REMOVE; SNOW ROUTE DURING SNOW EMERGENCY MOVE

6.T BEGIN RIGHT TURN LANE YIELD TO BIKES REMOVE; TRUCK ROUTE REMOVE REMOVE

15TH STREET

ONLY

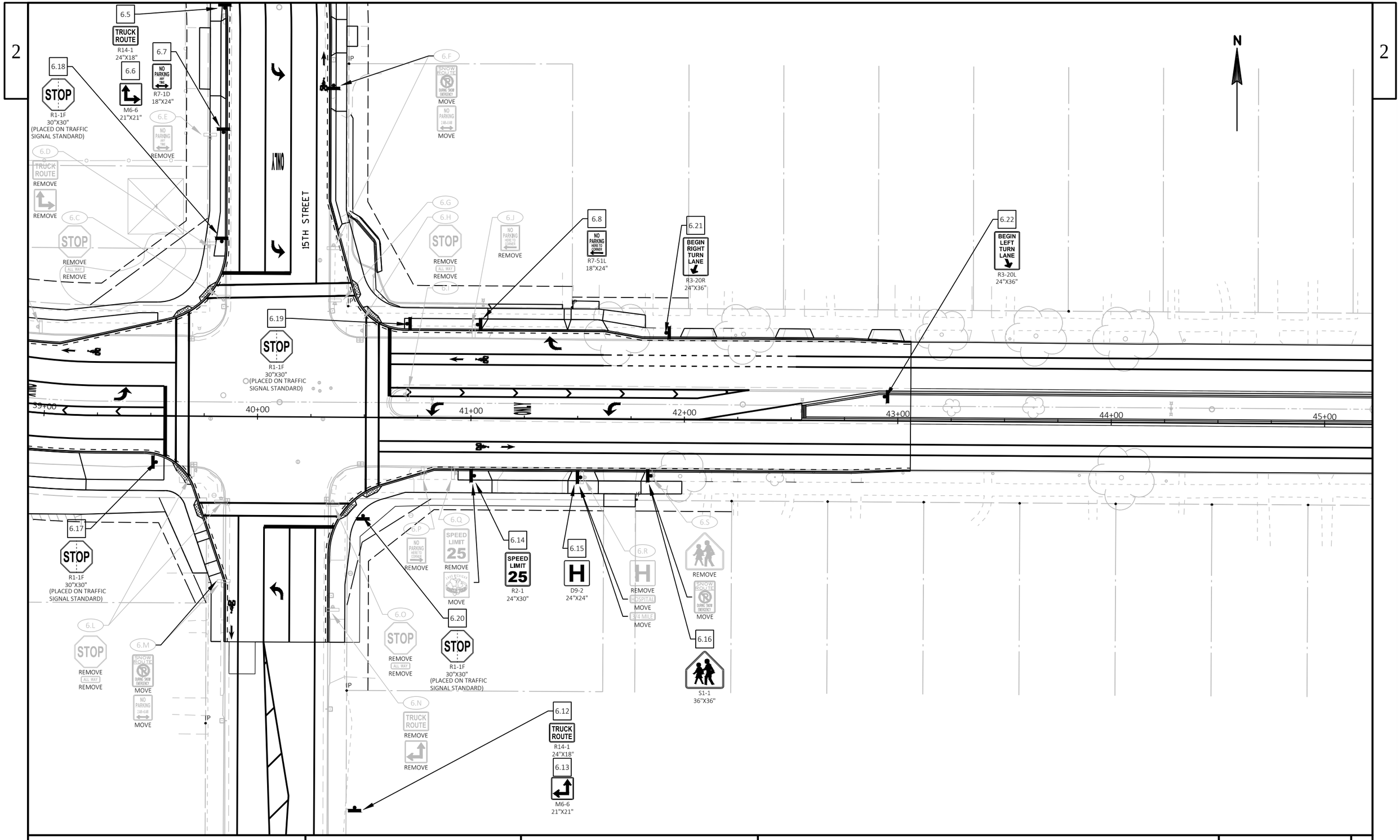
N

37+00 38+00 39+00 40+00 41+00 42+00

PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN	PERMANENT SIGNING	SHEET 60	E

FILE NAME : W:\PROJECTS\W0059\81500117\CADD\CIVIL3D\PLAN SHEETS\02-SIGNING\NORTHAVE-SIGNING.DWG
LAYOUT NAME - NorthAve-06Signing

PLOT DATE : 11/1/2018 4:41 PM PLOT BY : CHRIS CLEMENS PLOT NAME : PLOT SCALE : 1 IN:40 FT



PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN	PERMANENT SIGNING	SHEET 61	E

FILE NAME : W:\PROJECTS\W0059\81500117\CADD\CIVIL3D\PLAN SHEETS\02-SIGNING\NORTHAVE-SIGNING.DWG
LAYOUT NAME - NorthAve-07Signing

PLOT DATE : 11/1/2018 4:41 PM PLOT BY : CHRIS CLEMENS PLOT NAME : PLOT SCALE : 1 IN:40 FT

NOTE:
PRIOR TO INSTALLING ELECTRICAL CONDUIT IN THE TERRACE AREAS FOR STREET LIGHTING, CONTRACTOR TO COORDINATE WITH THE ENGINEER TO VERIFY THE FINAL LOCATION OF TREES BEING PLANTED AS PART OF THIS PROJECT. ADJUST LOCATION OF ELECTRICAL CONDUIT AS REQUIRED. ADJUSTING THE LOCATION OF THE ELECTRICAL CONDUIT FOR STREET LIGHTING SHALL BE CONSIDERED INCIDENTAL TO THE ITEM OF CONDUIT RIGID NO METALLIC SCHEDULE 40 2-INCH.

N

21ST STREET

LP1 C1-1

LP2 C1-1

LP3 C1-1

LP4 C1-1

LP5 C1-2

LP6 C1-3

LP7 C1-2

EXPBL1

PBS-1

PBS-2

PBS-3

PBS-4

2-3"

CONDUIT & PULL BOXES FOR FUTURE TRAFFIC SIGNALS

CONNECT TO EXISTING PULLBOX

EXISTING EMPTY CONDUIT

EXISTING PBL

EXISTING LIGHTING CONTROL CABINET #1 (LC-1) W/ METER BREAKER PEDESTAL

CONNECT TO EXISTING CONDUIT

ROUTE CONDUIT FOR STREET LIGHTS AROUND TRAFFIC SIGNAL PULL BOXES

11+00 12+00 13+00 14+00 15+00

CALUMET DRIVE (STH 42)

LIGHTING PLAN LEGEND

PROPOSED	EXISTING	
		METER BREAKER PEDESTAL
		LIGHTING CONTROL CABINET
		SIGNAL PULL BOX- 24" X 42"
		LIGHTING PULL BOX- 12" X 36"
		CONDUIT- 2" UNLESS OTHERWISE NOTED (MIN DEPTH = 30-INCHES)
		LIGHT POLE, 30-FT, ARM MOUNTED LUMINAIRE, TYPE 5 BASE
LPXX		LIGHT POLE #
CX-X		LIGHTING CONTROL CABINET # - CIRCUIT #

PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN	STREET LIGHTING	SHEET 62	E

FILE NAME : W:\PROJECTS\W0059\81500117\CADD\CIVIL3D\PLAN SHEETS\02-LIGHTING\NORTHAVE-LIGHTING.DWG
LAYOUT NAME - NorthAve-01Lighting
PLOT DATE : 11/1/2018 4:41 PM PLOT BY : CHRIS CLEMENS PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

2

NOTE:
PRIOR TO INSTALLING ELECTRICAL CONDUIT IN THE TERRACE AREAS FOR STREET LIGHTING, CONTRACTOR TO COORDINATE WITH THE ENGINEER TO VERIFY THE FINAL LOCATION OF TREES BEING PLANTED AS PART OF THIS PROJECT. ADJUST LOCATION OF ELECTRICAL CONDUIT AS REQUIRED. ADJUSTING THE LOCATION OF THE ELECTRICAL CONDUIT FOR STREET LIGHTING SHALL BE CONSIDERED INCIDENTAL TO THE ITEM OF CONDUIT RIGID NO METALLIC SCHEDULE 40 2-INCH.

N

LP8
C1-3

LP9
C1-2

LP10
C1-3

LP11
C1-2

15+00
16+00
17+00
18+00
19+00
20+00
21+00

PBL-2

ALLEY

20TH STREET

ALLEY

LIGHTING PLAN LEGEND

PROPOSED

- METER BREAKER PEDESTAL
- LIGHTING CONTROL CABINET
- LIGHTING PULL BOX- 12" X 36"
- CONDUIT- 2" UNLESS OTHERWISE NOTED (MIN DEPTH = 30-INCHES)
- LIGHT POLE, 30-FT, ARM MOUNTED LUMINAIRE, TYPE 5 BASE
- LPXX / CX-X — LIGHT POLE # / LIGHTING CONTROL CABINET # - CIRCUIT #

PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN	STREET LIGHTING	SHEET 63	E

FILE NAME : W:\PROJECTS\W0059\81500117\CADD\CIVIL3D\PLAN SHEETS\02-LIGHTING\NORTHAVE-LIGHTING.DWG
LAYOUT NAME - NorthAve-02Lighting
PLOT DATE : 11/1/2018 4:41 PM
PLOT BY : CHRIS CLEMENS
PLOT NAME :
PLOT SCALE : 1 IN:40 FT

2

LIGHTING PLAN LEGEND

PROPOSED

- METER BREAKER PEDESTAL
- LIGHTING CONTROL CABINET
- LIGHTING PULL BOX- 12" X 36"
- CONDUIT- 2" UNLESS OTHERWISE NOTED (MIN DEPTH = 30-INCHES)
- LIGHT POLE, 30-FT, ARM MOUNTED LUMINAIRE, TYPE 5 BASE
- LPXX — LIGHT POLE #
- CX-X — LIGHTING CONTROL CABINET # - CIRCUIT #

N

LP12 C1-3

LP13 C1-2

LP14 C1-3

LP15 C1-2

LP16 C1-3

MUTH COURT

19TH STREET

ALLEY

21+00 22+00 23+00 24+00 25+00 26+00

NOTE:
PRIOR TO INSTALLING ELECTRICAL CONDUIT IN THE TERRACE AREAS FOR STREET LIGHTING, CONTRACTOR TO COORDINATE WITH THE ENGINEER TO VERIFY THE FINAL LOCATION OF TREES BEING PLANTED AS PART OF THIS PROJECT. ADJUST LOCATION OF ELECTRICAL CONDUIT AS REQUIRED. ADJUSTING THE LOCATION OF THE ELECTRICAL CONDUIT FOR STREET LIGHTING SHALL BE CONSIDERED INCIDENTAL TO THE ITEM OF CONDUIT RIGID NO METALLIC SCHEDULE 40 2-INCH.

2

2

LIGHTING PLAN LEGEND

PROPOSED

- METER BREAKER PEDESTAL
- LIGHTING CONTROL CABINET
- LIGHTING PULL BOX- 12" X 36"
- CONDUIT- 2" UNLESS OTHERWISE NOTED (MIN DEPTH = 30-INCHES)
- LIGHT POLE, 30-FT, ARM MOUNTED LUMINAIRE, TYPE 5 BASE
- LPXX / CX-X — LIGHT POLE # / LIGHTING CONTROL CABINET # - CIRCUIT #

N

LP15 C1-2

LP17 C1-2

LP18 C2-1

LP19 C2-2

LP20 C2-1

LP16 C1-3

PBL-3

26+00 27+00 28+00 29+00 30+00 31+00

UNION PACIFIC RAILROAD

SHORELINE 400 TRAIL

NOTE:
PRIOR TO INSTALLING ELECTRICAL CONDUIT IN THE TERRACE AREAS FOR STREET LIGHTING, CONTRACTOR TO COORDINATE WITH THE ENGINEER TO VERIFY THE FINAL LOCATION OF TREES BEING PLANTED AS PART OF THIS PROJECT. ADJUST LOCATION OF ELECTRICAL CONDUIT AS REQUIRED. ADJUSTING THE LOCATION OF THE ELECTRICAL CONDUIT FOR STREET LIGHTING SHALL BE CONSIDERED INCIDENTAL TO THE ITEM OF CONDUIT RIGID NO METALLIC SCHEDULE 40 2-INCH.

PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN	STREET LIGHTING	SHEET 65	E

FILE NAME : W:\PROJECTS\W0059\81500117\CADD\CIVIL3D\PLAN SHEETS\02-LIGHTING\NORTHAVE-LIGHTING.DWG
LAYOUT NAME - NorthAve-04Lighting

PLOT DATE : 11/1/2018 4:41 PM PLOT BY : CHRIS CLEMENS PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

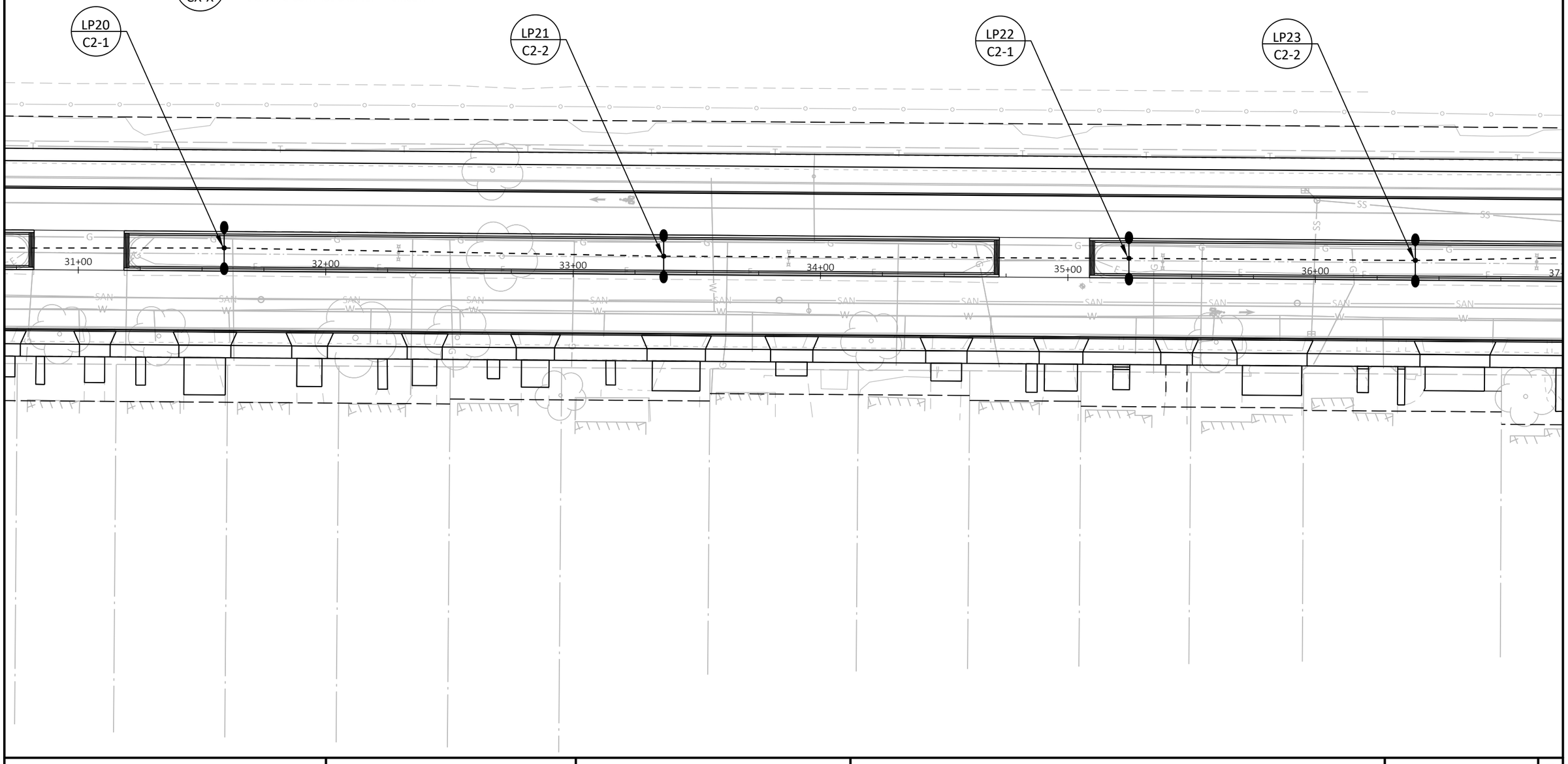
LIGHTING PLAN LEGEND

PROPOSED

- METER BREAKER PEDESTAL
- LIGHTING CONTROL CABINET
- LIGHTING PULL BOX- 12" X 36"
- CONDUIT- 2" UNLESS OTHERWISE NOTED (MIN DEPTH = 30-INCHES)
- LIGHT POLE, 30-FT, ARM MOUNTED LUMINAIRE, TYPE 5 BASE
- LPXX / CX-X — LIGHT POLE # / LIGHTING CONTROL CABINET # - CIRCUIT #

NOTE:
PRIOR TO INSTALLING ELECTRICAL CONDUIT IN THE TERRACE AREAS FOR STREET LIGHTING, CONTRACTOR TO COORDINATE WITH THE ENGINEER TO VERIFY THE FINAL LOCATION OF TREES BEING PLANTED AS PART OF THIS PROJECT. ADJUST LOCATION OF ELECTRICAL CONDUIT AS REQUIRED. ADJUSTING THE LOCATION OF THE ELECTRICAL CONDUIT FOR STREET LIGHTING SHALL BE CONSIDERED INCIDENTAL TO THE ITEM OF CONDUIT RIGID NO METALLIC SCHEDULE 40 2-INCH.

N



2

PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN	STREET LIGHTING	SHEET 66	E

FILE NAME : W:\PROJECTS\W0059\81500117\CADD\CIVIL3D\PLAN SHEETS\02-LIGHTING\NORTHAVE-LIGHTING.DWG
LAYOUT NAME - NorthAve-05Lighting
PLOT DATE : 11/1/2018 4:41 PM PLOT BY : CHRIS CLEMENS PLOT NAME : PLOT SCALE : 1 IN:40 FT

LIGHTING PLAN LEGEND

PROPOSED

- METER BREAKER PEDESTAL
- LIGHTING CONTROL CABINET
- LIGHTING PULL BOX- 12 X 36"
- CONDUIT- 2" UNLESS OTHERWISE NOTED (MIN DEPTH = 30-INCHES)
- LIGHT POLE, 30-FT, ARM MOUNTED LUMINAIRE, TYPE 5 BASE
- LUMINAIRE INSTALLED ON 30-FT TRAFFIC SIGNAL POLE
- LPXX / CX-X — LIGHT POLE # / LIGHTING CONTROL CABINET # - CIRCUIT #

NOTE:
PRIOR TO INSTALLING ELECTRICAL CONDUIT IN THE TERRACE AREAS FOR STREET LIGHTING, CONTRACTOR TO COORDINATE WITH THE ENGINEER TO VERIFY THE FINAL LOCATION OF TREES BEING PLANTED AS PART OF THIS PROJECT. ADJUST LOCATION OF ELECTRICAL CONDUIT AS REQUIRED. ADJUSTING THE LOCATION OF THE ELECTRICAL CONDUIT FOR STREET LIGHTING SHALL BE CONSIDERED INCIDENTAL TO THE ITEM OF CONDUIT RIGID NO METALLIC SCHEDULE 40 2-INCH.

CONDUIT FOR FUTURE EXTENSION OF LIGHTING. CAP END OF CONDUIT.

LP28 / C2-3

LIGHTING CONTROL CABINET #2 (LC-2) W/ METER BREAKER PEDESTAL

LP26 / C2-2

DUAL CONTROLLER CABINET LAYOUT. REFER TO CONSTRUCTION DETAIL FOR ADDITIONAL INFORMATION.

LP23 / C2-2

PBL-3A

PBL-4

15TH STREET

LP32 / C2-3

LP30 / C2-3

N

37+00 38+00 39+00 40+00 41+00 42+00

PBL-4A

LP24 / C2-1

LP25 / C2-4

LP27 / C2-4

LP29 / C2-4

LP31 / C2-4

CONDUIT FOR FUTURE EXTENSION OF LIGHTING. CAP END OF CONDUIT.

PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN	STREET LIGHTING	SHEET 67	E

FILE NAME : W:\PROJECTS\W0059\81500117\CADD\CIVIL3D\PLAN SHEETS\02-LIGHTING\NORTHAVE-LIGHTING.DWG
LAYOUT NAME - NorthAve-06Lighting

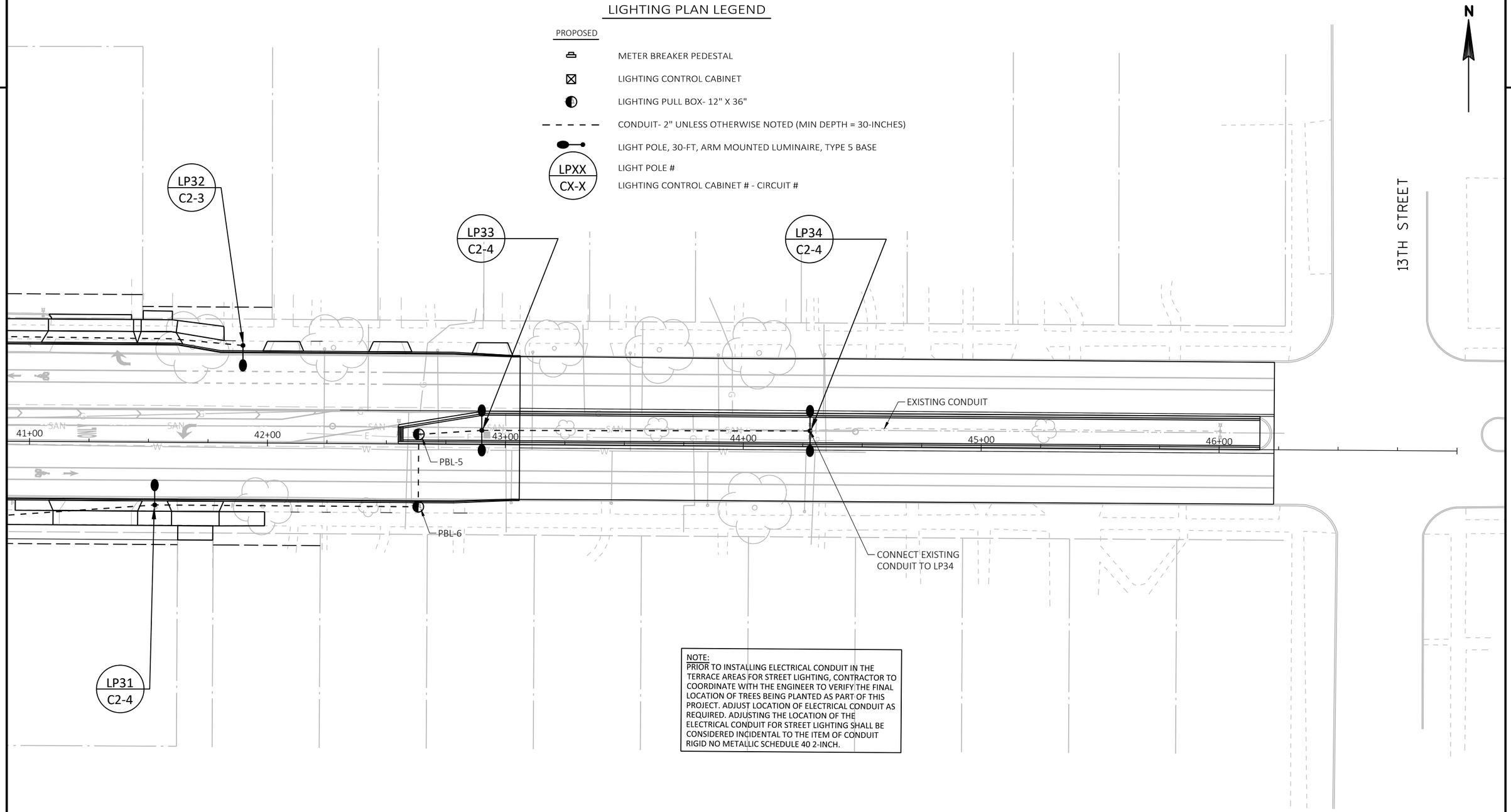
PLOT DATE : 11/1/2018 4:41 PM PLOT BY : CHRIS CLEMENS PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

LIGHTING PLAN LEGEND

PROPOSED

- METER BREAKER PEDESTAL
- LIGHTING CONTROL CABINET
- LIGHTING PULL BOX- 12" X 36"
- CONDUIT- 2" UNLESS OTHERWISE NOTED (MIN DEPTH = 30-INCHES)
- LIGHT POLE, 30-FT, ARM MOUNTED LUMINAIRE, TYPE 5 BASE
- LPXX / CX-X — LIGHT POLE # / LIGHTING CONTROL CABINET # - CIRCUIT #



NOTE:
PRIOR TO INSTALLING ELECTRICAL CONDUIT IN THE TERRACE AREAS FOR STREET LIGHTING, CONTRACTOR TO COORDINATE WITH THE ENGINEER TO VERIFY THE FINAL LOCATION OF TREES BEING PLANTED AS PART OF THIS PROJECT. ADJUST LOCATION OF ELECTRICAL CONDUIT AS REQUIRED. ADJUSTING THE LOCATION OF THE ELECTRICAL CONDUIT FOR STREET LIGHTING SHALL BE CONSIDERED INCIDENTAL TO THE ITEM OF CONDUIT RIGID NO METALLIC SCHEDULE 40 2-INCH.

LEGEND

- CONTROL CABINET
- NONMETALLIC CONDUIT 3", UNLESS OTHERWISE NOTED
- TRAFFIC SIGNAL STANDARD (10'), PEDESTAL BASE, PEDESTRIAN HEAD, PUSH BUTTON
- MONOTUBE BASE, POLE, 45'-50' ARM
- SIGNAL HEAD, LUMINAIRE, TRAFFIC POLE (30'), TRANSFORMER BASE
- VIDEO DETECTION ZONE

SB3, SB6
SB9, SB12

SB3, SB6
SB9, SB12

LEGEND

- VIDEO DETECTION CAMERA
- PULL BOX, 24" X 42"
- SIGNAL HEAD NUMBER
- DON'T WALK INDICATOR 16" WALK INDICATOR 16"
- EVP DESIGNATION
- EVP DETECTOR HEAD
- LANE DESIGNATION FOR INFO ONLY
- METER BREAKER PEDESTAL

N

DUAL CONTROLLER CABINET LAYOUT. REFER TO CONSTRUCTION DETAIL FOR ADDITIONAL INFORMATION.

15TH STREET

NORTH AVENUE

SPEED LIMIT 25

180' FROM DETECTION ZONE TO NEAR SIGNAL

DRIVEWAY OPENING TO BE ELIMINATED

SIGNAL BASE	STRUCTURE NUMBER	DESCRIPTION
SB2	S-59-0090	NEW 45-FOOT MONOTUBE ARM AT NE CORNER OF NORTH AVENUE AND 15TH STREET
SB5	S-59-0089	NEW 50-FOOT MONOTUBE ARM AT SE CORNER OF NORTH AVENUE AND 15TH STREET
SB8	S-59-0088	NEW 45-FOOT MONOTUBE ARM AT SW CORNER OF NORTH AVENUE AND 15TH STREET
SB11	S-59-0087	NEW 45-FOOT MONOTUBE ARM AT NW CORNER OF NORTH AVENUE AND 15TH STREET

CONSTRUCTION NOTES:

1. THE DEPTH OF ALL CONDUIT INSTALLED FOR SIGNALS SHALL BE 24-INCHES MINIMUM AND 36-INCHES MAXIMUM. (FROM FINISHED GROUND)
2. PULL BOXES FOR LOOP DETECTORS TO BE IN ACCORDANCE WITH STANDARD DETAIL DRAWING "LOOP DETECTORS INSTALLED IN BASE COURSE WITH PULL BOX OFF ROADWAY (OPTION 2)"
3. ALL NONMETALLIC CONDUIT JOINTS TO BE PRIMED AND GLUED. REFER TO SPECIAL PROVISIONS.
4. NO STRUCTURE ID PLAQUES REQUIRED.

MOUNTING CONFIGURATION WITH HEAD NUMBER		
PROPOSED SIGNAL FACES		
3-V	4-VLP	
R Y G	R SY FY G	PH2-A PH2-B PH4-A PH4-B PH6-A PH6-B PH8-A PH8-B
1, 4, 5 6, 9, 10 11, 14, 15 16, 19, 20	2, 3 7, 8 12, 13 17, 18	
NOTE: ALL LENSES ARE 12-INCHES LED		

TRAFFIC CONTROL SIGNAL
NORTH AVENUE & 15TH STREET
CITY OF SHEBOYGAN
SHEBOYGAN COUNTY

SIGNAL NO. CONTROLLER TYPE: 0000

CITY CONTACT: MIKE WILLMAS
DESIGNED BY: MCMAHON
REVISED BY:

PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN	TRAFFIC SIGNAL PLAN	SHEET 69	E

FILE NAME : W:\PROJECTS\W0059\81500117\CADD\CIVIL3D\PLAN SHEETS\02-SIGNALS\NORTHAVE-SIGNALS.DWG
LAYOUT NAME - NorthAve-01SigPlan

PLOT DATE : 12/14/2018 11:14 AM PLOT BY : JOSH FREWERD PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

SEQUENCE OF OPERATION

N

RING 1

PHASE	HEAD NUMBERS	#1 R/W	#1 CLEAR TO * *	#2 R/W	#2 CLEAR TO * *	#3 R/W	#3 CLEAR TO * *	#4 R/W	#4 CLEAR TO * *	FLASH
1	2, 3	G	– –	–	– –	–	– –	–	– –	
2	6, 9, 1Ø	R	R R	G	Y R	R	R R	R	R R	R
3	17, 18	–	– –	–	– –	G	– –	–	– –	
4	11, 14, 15	R	R R	R	R R	R	R R	G	Y R	R
5	7, 8	–	– –	–	– –	–	– –	–	– –	
6	1, 4, 5	R	R R	R	R R	R	R R	R	R R	R
7	12, 13	–	– –	–	– –	–	– –	–	– –	
8	16, 19, 20	R	R R	R	R R	R	R R	R	R R	R
OL "A"	2, 3	–	Y R	FY	Y R	R	R R	R	R R	R
OL "B"	17, 18	R	R R	R	R R	–	Y R	FY	Y R	R
OL "C"	7, 8	R	R R	R	R R	R	R R	R	R R	R
OL "D"	12, 13	R	R R	R	R R	R	R R	R	R R	R
2P	PH2–A, PH2–B	D	D D	*	D D	D	D D	D	D D	
4P	PH4–A, PH4–B	D	D D	D	D D	D	D D	*	D D	
6P	PH6–A, PH6–B	D	D D	D	D D	D	D D	D	D D	
8P	PH8–A, PH8–B	D	D D	D	D D	D	D D	D	D D	

RING 2

PHASE	HEAD NUMBERS	#5 R/W	#5 CLEAR TO * *	#6 R/W	#6 CLEAR TO * *	#7 R/W	#7 CLEAR TO * *	#8 R/W	#8 CLEAR TO * *
1	2, 3	–	– –	–	– –	–	– –	–	– –
2	6, 9, 1Ø	R	R R	R	R R	R	R R	R	R R
3	17, 18	–	– –	–	– –	–	– –	–	– –
4	11, 14, 15	R	R R	R	R R	R	R R	R	R R
5	7, 8	G	– –	–	– –	–	– –	–	– –
6	1, 4, 5	R	R R	G	Y R	R	R R	R	R R
7	12, 13	–	– –	–	– –	G	– –	–	– –
8	16, 19, 20	R	R R	R	R R	R	R R	G	Y R
OL "A"	2, 3	R	R R	R	R R	R	R R	R	R R
OL "B"	17, 18	R	R R	R	R R	R	R R	R	R R
OL "C"	7, 8	–	Y R	FY	Y R	R	R R	R	R R
OL "D"	12, 13	R	R R	R	R R	–	Y R	FY	Y R
2P	PH2–1, PH2–2	D	D D	D	D D	D	D D	D	D D
4P	PH4–1, PH4–2	D	D D	D	D D	D	D D	D	D D
6P	PH6–1, PH6–2	D	D D	*	D D	D	D D	D	D D
8P	PH8–1, PH8–2	D	D D	D	D D	D	D D	*	D D

BARRIER

- * WHEN CALLED TIMED STEADY WALK, FOLLOWED BY A FLASHING DON'T WALK, THEN STEADY DON'T WALK
- ** CLEARANCE TO A PHASE IN CONFLICT WITH THIS PHASE ON (SEE CHART 1 BELOW)

NOTES:

1. ANY ACTUATED PHASE FOR WHICH THERE IS NO CALL SHALL BE SKIPPED.
2. WHEN ONE PHASE IS ON ALONE, ANY NON–CONFLICTING PHASE MAY START TIMING CONCURRENTLY WITHOUT A CLEARANCE INTERVAL (SEE CHART 1).
3. WHEN OPPOSING THRU PHASES ARE TIMED CONCURRENTLY, THEY SHALL TERMINATE TOGETHER DUE TO PERMISSIVE LEFT TURN CONFLICT.
4. VIDEO DETECTION LOCATIONS AND ZONE SIZES TO BE DETERMINED IN THE FIELD BY THE CITY OF SHEBOYGAN TRAFFIC DIVISION.

CHART 1

PHASE ON	NON–CONFLICTING PHASE ALLOWED TO TIME CONCURRENTLY	PHASES IN CONFLICT WITH PHASE ON
1	5 OR 6	2, 3, 4, 7, 8
2	5 OR 6	1, 3, 4, 7, 8
3	7 OR 8	1, 2, 4, 5, 6
4	7 OR 8	1, 2, 3, 5, 6
5	1 OR 2	3, 4, 6, 7, 8
6	1 OR 2	3, 4, 5, 7, 8
7	3 OR 4	1, 2, 5, 6, 8
8	3 OR 4	1, 2, 5, 6, 7

DETECTOR LOGIC

DETECTOR NUMBER	AMPLIFIER CHANNEL NUMBER	DETECTOR OPERATION: CALLS AND EXTENDS	DETECTOR OPERATION: CALLS ONLY	DETECTOR OPERATION: EXTENDS ONLY	PHASE CALLED	PHASE EXTENDED	DETECTOR DISCONNECT PHASE	CALLING DELAY	EXTENSION STRETCH	APPROX. SIZE	NUMBER OF TURNS
11		X			1	1				6' X 20'	
21		X			2	2				6' X 20'	
22		X			2	2		X		6' X 20'	
23		X			2	2		X		6' X 20'	
24				X	2	2				6' X 20'	
31		X			3	3				6' X 20'	
41		X			4	4				6' X 20'	
42		X			4	4				6' X 20'	
43		X			4	4				6' X 20'	
51		X			5	5				6' X 20'	
61		X			6	6				6' X 20'	
62				X		6				6' X 20'	
71		X			7	7				6' X 20'	
81		X			8	8				6' X 20'	
82		X			8	8				6' X 20'	
83		X			8	8				6' X 20'	

REFER TO NOTE #4 FOR ADDITIONAL DETECTOR LOCATION INFORMATION.

TYPE OF INTERCONNECT	
NONE	X
CLOSED LOOP TWISTED PAIR	
CLOSED LOOP FIBER OPTIC	
HARDWIRE	
TONE (FREQ)	
SIGNAL SYSTEM:	

EMERGENCY VEHICLE PREEMPTION SEQUENCE				
EMERGENCY VEHICLE DETECTOR	A	B	C	D
MOVEMENT				
PHASE	2 AND 5	1 AND 6	4 AND 7	3 AND 8

TYPE OF PRE–EMPT	
NONE	
RAILROAD	
EMERGENCY VEHICLE	X
LIFT BRIDGE	
QUEUE DETECTOR	

TYPE OF LIGHTING	
NONE	
IN TRAFFIC CONTROL CABINET	
IN SEPARATE CONTROL CABINET	X

CONTROLLER LOGIC

PHASE NUMBER	PHASE LOCKING	DUAL ENTRY W / Ø	PHASE RECALL	PHASE ACTIVE
1				YES
2			MIN	YES
3				YES
4		8		YES
5				YES
6			MIN	YES
7				YES
8		4		YES

SPECIAL OVERLAPS

	PROTECTED	PERMISSIVE
OL "A"	1	2
OL "B"	3	4
OL "C"	5	6
OL "D"	7	8

TRAFFIC CONTROL SIGNAL
NORTH AVENUE & 15TH STREET
CITY OF SHEBOYGAN
SHEBOYGAN COUNTY

SIGNAL NO.

REGION CONTACT: REGION CONTACT
DESIGNED BY: MCMAHON
REVISED BY:

PAGE XX OF XX

PROJECT ID:	4996-01-78
INTERSECTION:	NORTH AVE. & 15TH ST.

SIGNAL WIRE COLOR CODING	BLK – BLACK	RED – RED	GRN – GREEN
	WHT – WHITE	BLU – BLUE	ORG – ORANGE

CB-1 TO	JUMPER	# OF COND.	HEAD NO.	PHASE	SIGNAL INDICATION WIRE COLOR								WALK	PED BUTTON
					RED	YELLOW	GREEN	<RED>	<YELLOW> SOLID	<YELLOW> FLASHING	<GREEN>	D/WALK		
SB1		15	11	4	RED	ORG	GRN							
			17	3				RED/BLK	ORG/BLK	RED/WHT	GRN/BLK			
SB2		21	20	8	RED/BLK	ORG/BLK	GRN/BLK							
			19	8	RED	ORG	GRN							
			18	3				RED/WHT	ORG/RED	ORG/GRN	GRN/WHT			
SB3		12	PH2B	2P								BLK	BLU	
			2B	2P										WHT/BLK
			PH8A	8P								BLK/WHT	BLU/BLK	
			8B	8P										RED/BLK
SB4		15	6	2	RED	ORG	GRN							
			2	1				RED/BLK	ORG/BLK	RED/WHT	GRN/BLK			
SB5		21	3	1				RED/WHT	ORG/RED	ORG/GRN	GRN/WHT			
			4	6	RED	ORG	GRN							
			5	6	RED/BLK	ORG/BLK	GRN/BLK							
SB6		12	PH6A	6P								BLK	BLU	
			2B	2P										WHT/BLK
			PH8B	8P								BLK/WHT	BLU/BLK	
			8B	8P										RED/BLK
SB7		15	12	7				RED/BLK	ORG/BLK	RED/WHT	GRN/BLK			
			16	8	RED	ORG	GRN							
SB8		21	13	7				RED/WHT	ORG/RED	ORG/GRN	GRN/WHT			
			14	4	RED	ORG	GRN							
			15	4	RED/BLK	ORG/BLK	GRN/BLK							
SB9		12	PH4A	4P								BLK	BLU	
			4B	4P										WHT/BLK
			PH6B	6P								BLK/WHT	BLU/BLK	
			6B	6P										RED/BLK
SB10		15	1	6	RED	ORG	GRN							
			7	5				RED/BLK	ORG/BLK	RED/WHT	GRN/BLK			
SB11		21	8	5				RED/WHT	ORG/RED	ORG/GRN	GRN/WHT			
			9	2	RED	ORG	GRN							
			10	2	RED/BLK	ORG/BLK	GRN/BLK							
SB12		12	PH2A	2P								BLK	BLU	
			2B	2P										WHT/BLK
			PH4B	4P								BLK/WHT	BLU/BLK	
			4B	4P										RED/BLK

NOTES:
1. USE THE WHITE CONDUCTOR IN THE SIGNAL CABLE AS THE GROUNDED CONDUCTOR FOR ALL TRAFFIC SIGNAL INDICATIONS.
2. ENSURE THE GROUNDED CONDUCTOR IN THE FEEDER CABLE AND THE POLE CABLES ARE BOTH 12" LONGER THAN THE UNGROUNDED CONDUCTORS.
3. AT THE SIGNAL BASES, CONNECT ONE TERMINAL FROM THE PEDESTRIAN PUSHBUTTONS TO THE COLOR INDICATED IN THE CHART, CONNECT THE OTHER TERMINAL TO THE GROUNDED CONDUCTOR.

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	SB9
SB9	SB10
SB10	SB11
SB11	SB12
SB12	CB1

PULL BOX BONDING JUMPER 10 AWG GREEN XLP	
FROM	TO
PB1	CB1
PB2	SB3
PB3	SB4
PB4	SB5
PB5	SB6
PB6	SB9
PB7	SB10
PB8	SB11

EMERGENCY VEHICLE PREEPMPTION CABLE	
FROM	TO
CB1	SB3
SB3	HEAD D
CB1	SB11
SB11	HEAD B
CB1	SB8
SB8	HEAD C
CB1	SB5
SB5	HEAD A

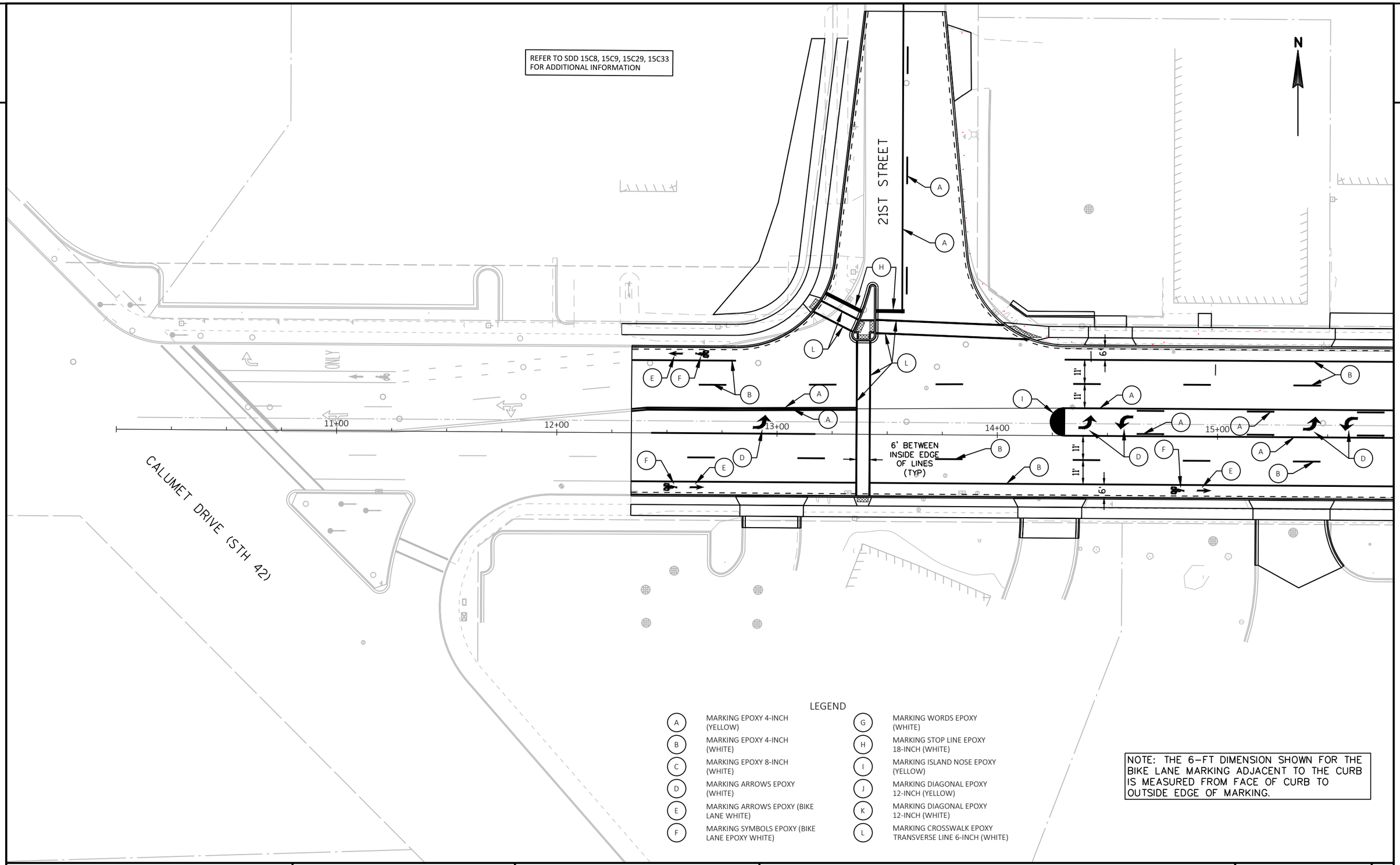
VIDEO DETECTION CABLE	
FROM	TO
CB1	SB1
SB1	V4
CB1	SB4
SB4	V1
CB1	SB10
SB10	V2
CB1	SB7
SB7	V3

TRAFFIC CONTROL SIGNAL
CALUMET DRIVE & NORTH AVENUE
CITY OF SHEBOYGAN
SHEBOYGAN COUNTY

SIGNAL NO. CONTROLLER TYPE: EPAC

CITY CONTACT: MIKE WILLMAS
DESIGNED BY: MCMAHON
REVISED BY:

REFER TO SDD 15C8, 15C9, 15C29, 15C33 FOR ADDITIONAL INFORMATION



LEGEND

A	MARKING EPOXY 4-INCH (YELLOW)	G	MARKING WORDS EPOXY (WHITE)
B	MARKING EPOXY 4-INCH (WHITE)	H	MARKING STOP LINE EPOXY 18-INCH (WHITE)
C	MARKING EPOXY 8-INCH (WHITE)	I	MARKING ISLAND NOSE EPOXY (YELLOW)
D	MARKING ARROWS EPOXY (WHITE)	J	MARKING DIAGONAL EPOXY 12-INCH (YELLOW)
E	MARKING ARROWS EPOXY (BIKE LANE WHITE)	K	MARKING DIAGONAL EPOXY 12-INCH (WHITE)
F	MARKING SYMBOLS EPOXY (BIKE LANE EPOXY WHITE)	L	MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH (WHITE)

NOTE: THE 6-FT DIMENSION SHOWN FOR THE BIKE LANE MARKING ADJACENT TO THE CURB IS MEASURED FROM FACE OF CURB TO OUTSIDE EDGE OF MARKING.

PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN	PAVEMENT MARKING DETAILS	SHEET 72	E

FILE NAME : W:\PROJECTS\W0059\81500117\CADD\CIVIL3D\PLAN SHEETS\02-PM\NORTHAVE-PM.DWG
LAYOUT NAME - NorthAve-01PM

PLOT DATE : 11/1/2018 4:42 PM PLOT BY : CHRIS CLEMENS PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

REFER TO SDD 15C8, 15C9, 15C29, 15C33 FOR ADDITIONAL INFORMATION

NOTE: THE 6-FT DIMENSION SHOWN FOR THE BIKE LANE MARKING ADJACENT TO THE CURB IS MEASURED FROM FACE OF CURB TO OUTSIDE EDGE OF MARKING.

N

6' BETWEEN INSIDE EDGE OF LINES (TYP)

15+00 16+00 17+00 18+00 19+00 20+00 21+00

ALLEY

20TH STREET

ALLEY

LEGEND

A	MARKING EPOXY 4-INCH (YELLOW)	G	MARKING WORDS EPOXY (WHITE)
B	MARKING EPOXY 4-INCH (WHITE)	H	MARKING STOP LINE EPOXY 18-INCH (WHITE)
C	MARKING EPOXY 8-INCH (WHITE)	I	MARKING ISLAND NOSE EPOXY (YELLOW)
D	MARKING ARROWS EPOXY (WHITE)	J	MARKING DIAGONAL EPOXY 12-INCH (YELLOW)
E	MARKING ARROWS EPOXY (BIKE LANE WHITE)	K	MARKING DIAGONAL EPOXY 12-INCH (WHITE)
F	MARKING SYMBOLS EPOXY (BIKE LANE EPOXY WHITE)	L	MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH (WHITE)

PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN	PAVEMENT MARKING DETAILS	SHEET 73	E

FILE NAME : W:\PROJECTS\W0059\81500117\CADD\CIVIL3D\PLAN SHEETS\02-PM\NORTHAVE-PM.DWG
LAYOUT NAME - NorthAve-02PM

PLOT DATE : 11/1/2018 4:42 PM PLOT BY : CHRIS CLEMENS PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

2

REFER TO SDD 15C8, 15C9, 15C29, 15C33 FOR ADDITIONAL INFORMATION

NOTE: THE 6-FT DIMENSION SHOWN FOR THE BIKE LANE MARKING ADJACENT TO THE CURB IS MEASURED FROM FACE OF CURB TO OUTSIDE EDGE OF MARKING.

N

MUTH COURT

19TH STREET

ALLEY

21+00

22+00

23+00

24+00

25+00

26+00

6' BETWEEN INSIDE EDGE OF LINES (TYP)

6'

11'

10'

18'

LEGEND

A	MARKING EPOXY 4-INCH (YELLOW)	G	MARKING WORDS EPOXY (WHITE)
B	MARKING EPOXY 4-INCH (WHITE)	H	MARKING STOP LINE EPOXY 18-INCH (WHITE)
C	MARKING EPOXY 8-INCH (WHITE)	I	MARKING ISLAND NOSE EPOXY (YELLOW)
D	MARKING ARROWS EPOXY (WHITE)	J	MARKING DIAGONAL EPOXY 12-INCH (YELLOW)
E	MARKING ARROWS EPOXY (BIKE LANE WHITE)	K	MARKING DIAGONAL EPOXY 12-INCH (WHITE)
F	MARKING SYMBOLS EPOXY (BIKE LANE EPOXY WHITE)	L	MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH (WHITE)
		M	MARKING RAILROAD CROSSING EPOXY (WHITE)

PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN	PAVEMENT MARKING DETAILS	SHEET 74	E

FILE NAME : W:\PROJECTS\W0059\81500117\CADD\CIVIL3D\PLAN SHEETS\02-PM\NORTHAVE-PM.DWG
LAYOUT NAME - NorthAve-03PM

PLOT DATE : 11/1/2018 4:42 PM PLOT BY : CHRIS CLEMENS PLOT NAME : PLOT SCALE : 1 IN:40 FT

REFER TO SDD 15C8, 15C9, 15C29, 15C33 FOR ADDITIONAL INFORMATION

LEGEND

- A — MARKING EPOXY 4-INCH (YELLOW)
- B — MARKING EPOXY 4-INCH (WHITE)
- C — MARKING EPOXY 8-INCH (WHITE)
- D — MARKING ARROWS EPOXY (WHITE)
- E — MARKING ARROWS EPOXY (BIKE LANE WHITE)
- F — MARKING SYMBOLS EPOXY (BIKE LANE EPOXY WHITE)
- G — MARKING WORDS EPOXY (WHITE)
- H — MARKING STOP LINE EPOXY 18-INCH (WHITE)
- I — MARKING ISLAND NOSE EPOXY (YELLOW)
- J — MARKING DIAGONAL EPOXY 12-INCH (YELLOW)
- K — MARKING DIAGONAL EPOXY 12-INCH (WHITE)
- L — MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH (WHITE)
- M — MARKING RAILROAD CROSSING EPOXY (WHITE)

N

26+00 27+00 28+00 29+00 30+00 31+00

6' 11' 11' 5' 8'

NOTE: THE 6-FT DIMENSION SHOWN FOR THE BIKE LANE MARKING ADJACENT TO THE CURB IS MEASURED FROM FACE OF CURB TO OUTSIDE EDGE OF MARKING.

UNION PACIFIC RAILROAD

SHORELINE 400 TRAIL

PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN	PAVEMENT MARKING DETAILS	SHEET 75	E

FILE NAME : W:\PROJECTS\W0059\81500117\CADD\CIVIL3D\PLAN SHEETS\02-PM\NORTHAVE-PM.DWG
LAYOUT NAME - NorthAve-04PM

PLOT DATE : 11/1/2018 4:42 PM PLOT BY : CHRIS CLEMENS PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

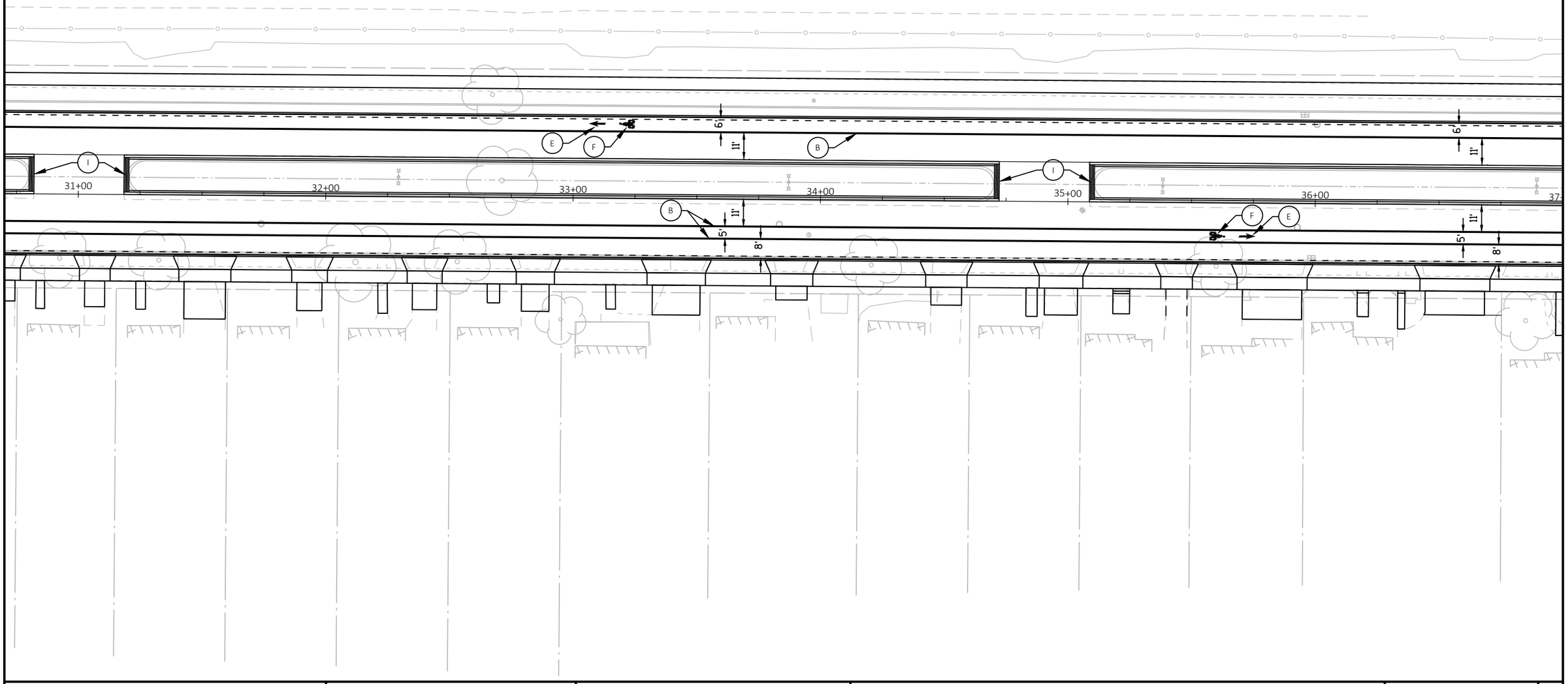
LEGEND

A	MARKING EPOXY 4-INCH (YELLOW)	G	MARKING WORDS EPOXY (WHITE)
B	MARKING EPOXY 4-INCH (WHITE)	H	MARKING STOP LINE EPOXY 18-INCH (WHITE)
C	MARKING EPOXY 8-INCH (WHITE)	I	MARKING ISLAND NOSE EPOXY (YELLOW)
D	MARKING ARROWS EPOXY (WHITE)	J	MARKING DIAGONAL EPOXY 12-INCH (YELLOW)
E	MARKING ARROWS EPOXY (BIKE LANE WHITE)	K	MARKING DIAGONAL EPOXY 12-INCH (WHITE)
F	MARKING SYMBOLS EPOXY (BIKE LANE EPOXY WHITE)	L	MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH (WHITE)

REFER TO SDD 15C8, 15C9, 15C29, 15C33 FOR ADDITIONAL INFORMATION

NOTE: THE 6-FT DIMENSION SHOWN FOR THE BIKE LANE MARKING ADJACENT TO THE CURB IS MEASURED FROM FACE OF CURB TO OUTSIDE EDGE OF MARKING.

N



PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN	PAVEMENT MARKING DETAILS	SHEET 76	E

FILE NAME : W:\PROJECTS\W0059\81500117\CADD\CIVIL3D\PLAN SHEETS\02-PM\NORTHAVE-PM.DWG
LAYOUT NAME - NorthAve-05PM

PLOT DATE : 11/1/2018 4:42 PM PLOT BY : CHRIS CLEMENS PLOT NAME : PLOT SCALE : 1 IN:40 FT

LEGEND

A	MARKING EPOXY 4-INCH (YELLOW)	G	MARKING WORDS EPOXY (WHITE)
B	MARKING EPOXY 4-INCH (WHITE)	H	MARKING STOP LINE EPOXY 18-INCH (WHITE)
C	MARKING EPOXY 8-INCH (WHITE)	I	MARKING ISLAND NOSE EPOXY (YELLOW)
D	MARKING ARROWS EPOXY (WHITE)	J	MARKING DIAGONAL EPOXY 12-INCH (YELLOW)
E	MARKING ARROWS EPOXY (BIKE LANE WHITE)	K	MARKING DIAGONAL EPOXY 12-INCH (WHITE)
F	MARKING SYMBOLS EPOXY (BIKE LANE EPOXY WHITE)	L	MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH (WHITE)

REFER TO SDD 15C8, 15C9, 15C29, 15C33 FOR ADDITIONAL INFORMATION

NOTE: THE 6-FT DIMENSION SHOWN FOR THE BIKE LANE MARKING ADJACENT TO THE CURB IS MEASURED FROM FACE OF CURB TO OUTSIDE EDGE OF MARKING.

N

15TH STREET

SEE 15TH STREET NORTH

SEE 15TH STREET SOUTH

NOTE:
DOUBLE YELLOW FROM MEDIAN NOSE AT STA 37+74.42 TO STOP LINE AT STA 39+56.70 IS ON WBPGL. WIDTH OF LEFT TURN LANE VARIES FROM 10-FT AT STA 38+04.18.

6' BETWEEN INSIDE EDGE OF LINES (TYP)

+74.42, -16.00' LT

+04.18, -4.00' LT

+56.70, -14.00' LT

37+00 38+00 39+00 40+00 41+00 42+00

91+00 92+00 89+00

A DOUBLE

PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN	PAVEMENT MARKING DETAILS	SHEET 77	E

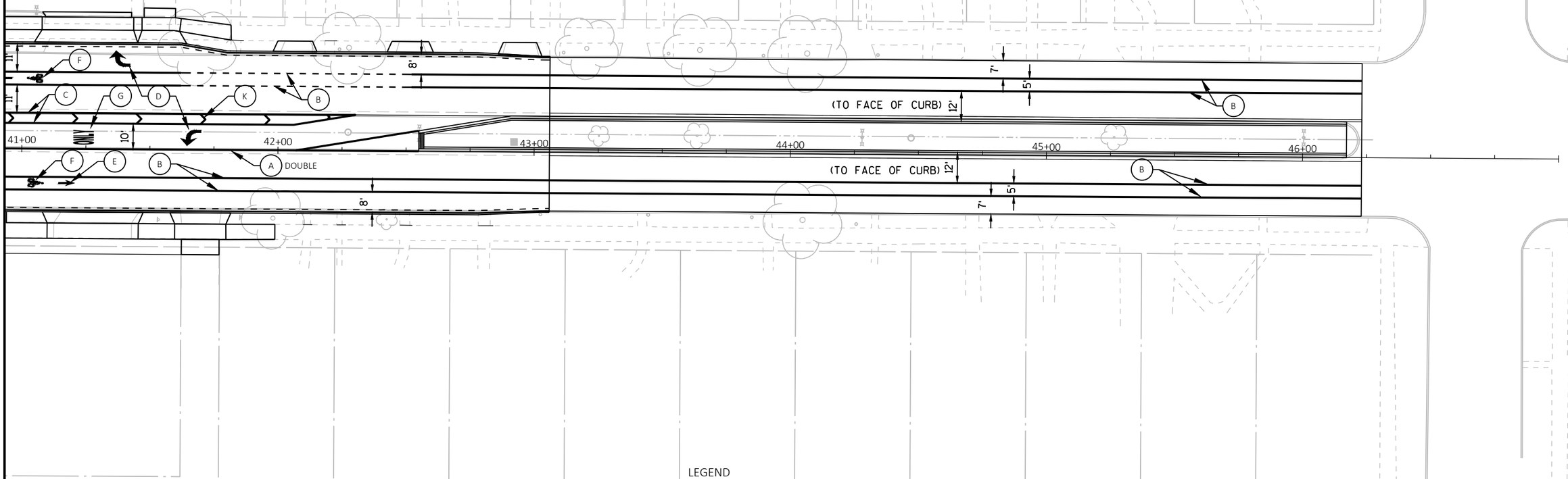
FILE NAME : W:\PROJECTS\W0059\81500117\CADD\CIVIL3D\PLAN SHEETS\02-PM\NORTHAVE-PM.DWG
LAYOUT NAME - NorthAve-06PM

PLOT DATE : 11/1/2018 4:42 PM PLOT BY : CHRIS CLEMENS PLOT NAME : PLOT SCALE : 1 IN:40 FT

REFER TO SDD 15C8, 15C9, 15C29, 15C33
FOR ADDITIONAL INFORMATION

N

13TH STREET



LEGEND

A	MARKING EPOXY 4-INCH (YELLOW)	G	MARKING WORDS EPOXY (WHITE)
B	MARKING EPOXY 4-INCH (WHITE)	H	MARKING STOP LINE EPOXY 18-INCH (WHITE)
C	MARKING EPOXY 8-INCH (WHITE)	I	MARKING ISLAND NOSE EPOXY (YELLOW)
D	MARKING ARROWS EPOXY (WHITE)	J	MARKING DIAGONAL EPOXY 12-INCH (YELLOW)
E	MARKING ARROWS EPOXY (BIKE LANE WHITE)	K	MARKING DIAGONAL EPOXY 12-INCH (WHITE)
F	MARKING SYMBOLS EPOXY (BIKE LANE EPOXY WHITE)	L	MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH (WHITE)

PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN	PAVEMENT MARKING DETAILS	SHEET 78	E

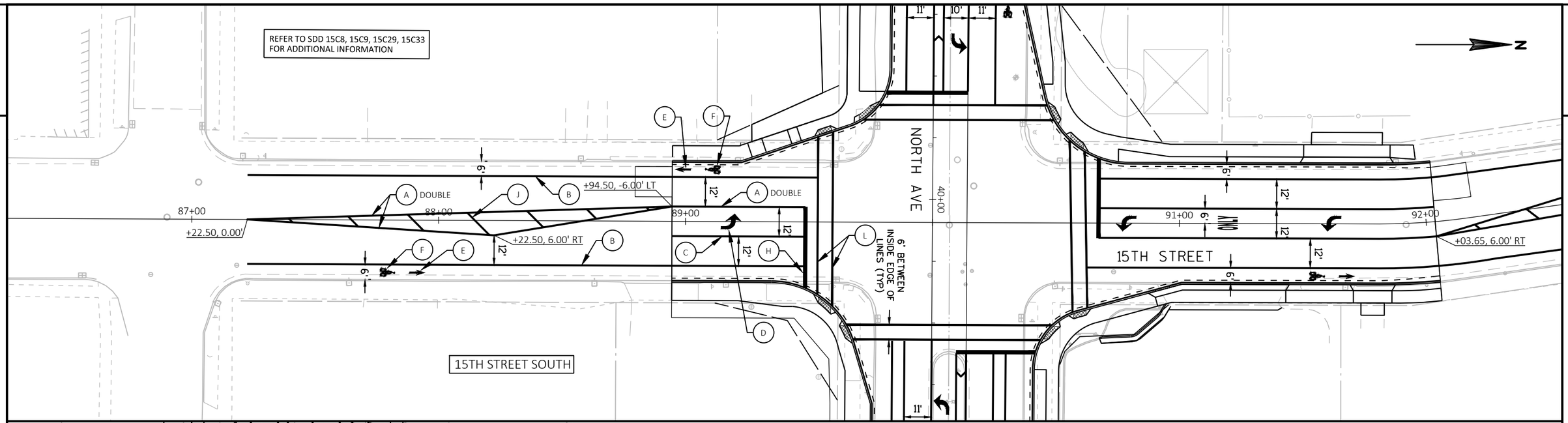
FILE NAME : W:\PROJECTS\W0059\81500117\CADD\CIVIL3D\PLAN SHEETS\02-PM\NORTHAVE-PM.DWG
LAYOUT NAME - NorthAve-07PM

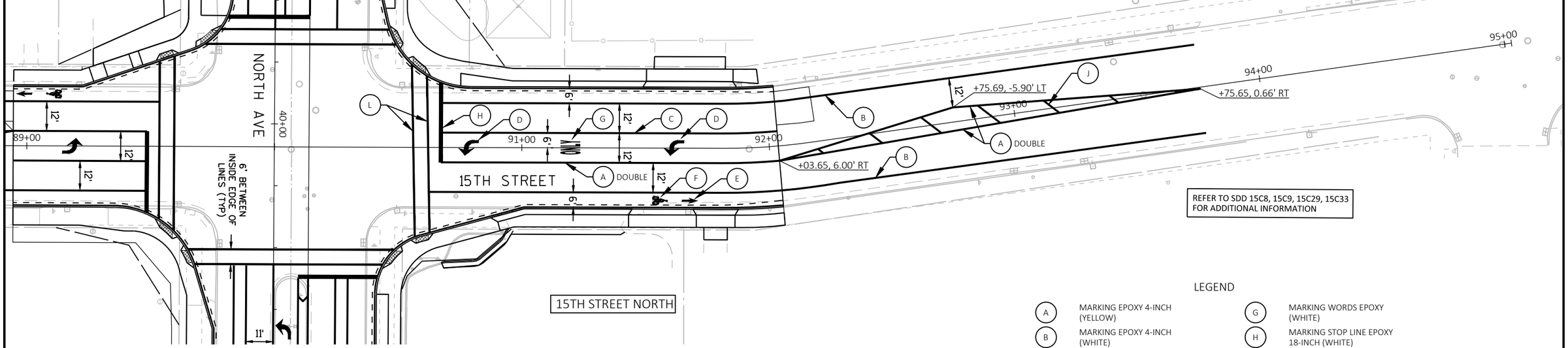
PLOT DATE : 11/1/2018 4:42 PM PLOT BY : CHRIS CLEMENS PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

REFER TO SDD 15C8, 15C9, 15C29, 15C33
FOR ADDITIONAL INFORMATION



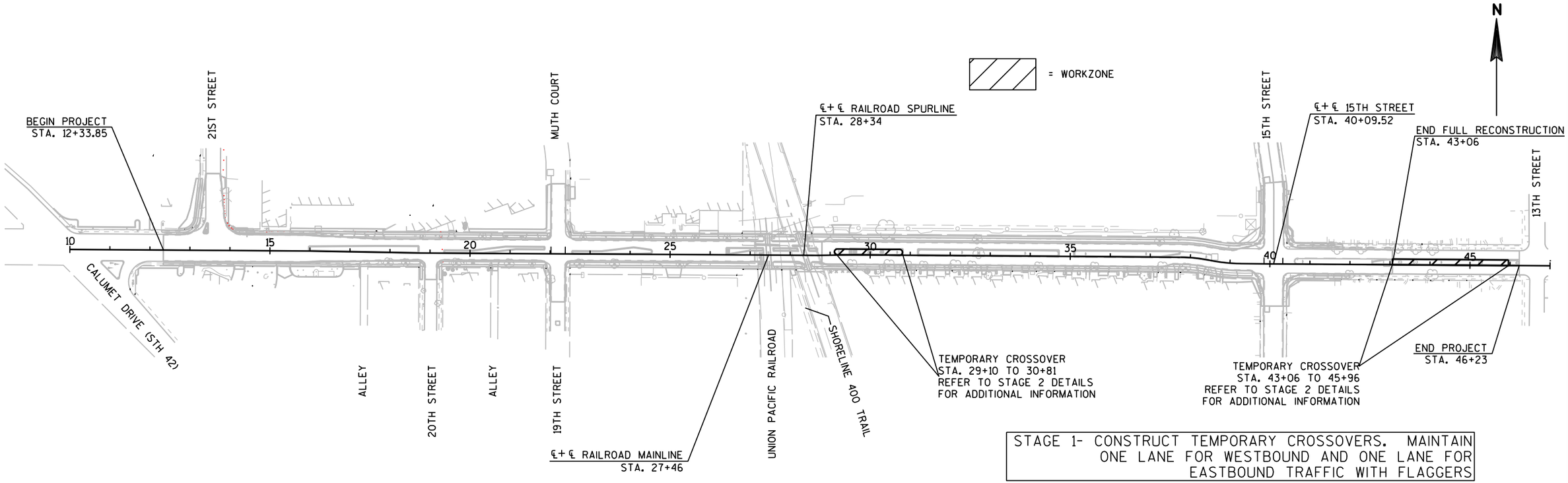


REFER TO SDD 15C8, 15C9, 15C29, 15C33
FOR ADDITIONAL INFORMATION

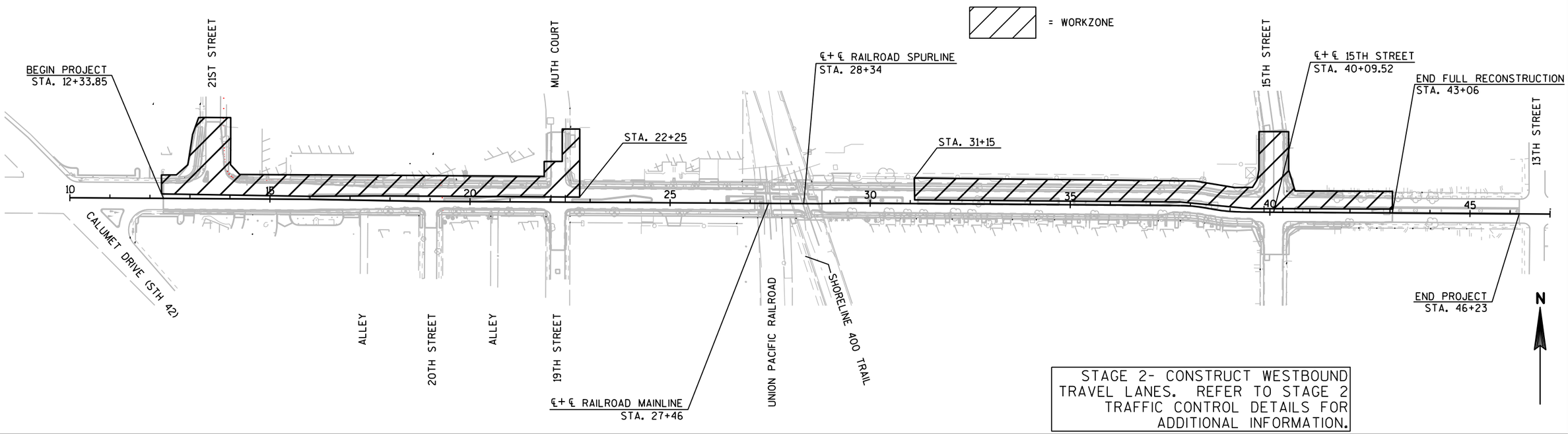
LEGEND

A	MARKING EPOXY 4-INCH (YELLOW)	G	MARKING WORDS EPOXY (WHITE)
B	MARKING EPOXY 4-INCH (WHITE)	H	MARKING STOP LINE EPOXY 18-INCH (WHITE)
C	MARKING EPOXY 8-INCH (WHITE)	I	MARKING ISLAND NOSE EPOXY (YELLOW)
D	MARKING ARROWS EPOXY (WHITE)	J	MARKING DIAGONAL EPOXY 12-INCH (YELLOW)
E	MARKING ARROWS EPOXY (BIKE LANE WHITE)	K	MARKING DIAGONAL EPOXY 12-INCH (WHITE)
F	MARKING SYMBOLS EPOXY (BIKE LANE EPOXY WHITE)	L	MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH (WHITE)

PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN	PAVEMENT MARKING DETAILS	SHEET 79	E



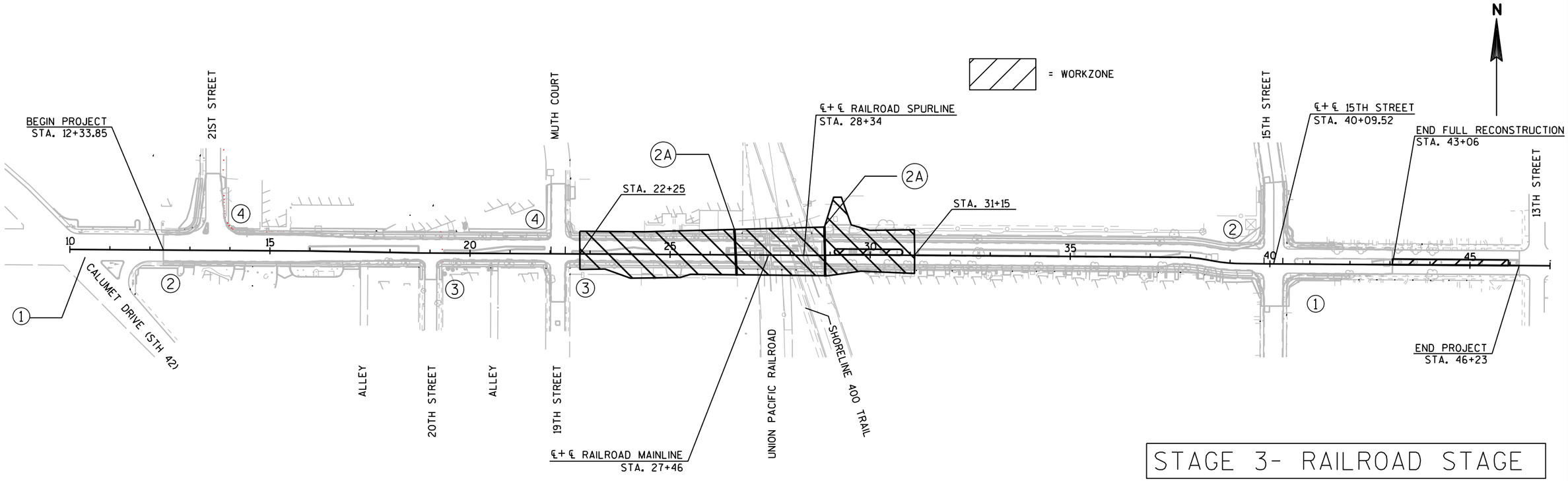
STAGE 1- CONSTRUCT TEMPORARY CROSSOVERS. MAINTAIN ONE LANE FOR WESTBOUND AND ONE LANE FOR EASTBOUND TRAFFIC WITH FLAGGERS



STAGE 2- CONSTRUCT WESTBOUND TRAVEL LANES. REFER TO STAGE 2 TRAFFIC CONTROL DETAILS FOR ADDITIONAL INFORMATION.

PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN	TRAFFIC CONTROL OVERVIEW	SHEET 80	E

FILE NAME : W:\PROJECTS\W0059\81500117\CADD\CIVIL3D\PLAN SHEETS\02-NOTES AND OVERVIEW\NORTH AVENUE TRAFFIC CONTROL OVERVIEW.DWG
LAYOUT NAME - 02 TRAFFIC OVERVIEW 1-2
PLOT DATE : 11/1/2018 4:42 PM
PLOT BY : CHRIS CLEMENS
PLOT NAME :
PLOT SCALE : 1 IN:250 FT
WISDOT/CADDS SHEET 42



STAGE 3- RAILROAD STAGE

(1) REFER TO SDD 15C2-6A FOR BARRICADES AND SIGNS FOR MAINLINE CLOSURES, DETAIL B
(MAINLINE CLOSURE WITH POSTED DETOUR)

(2) REFER TO SDD 15C2-6B FOR BARRICADES AND SIGNS FOR MAINLINE CLOSURES, DETAIL E
(LANE CLOSURE BARRICADE DETAIL)

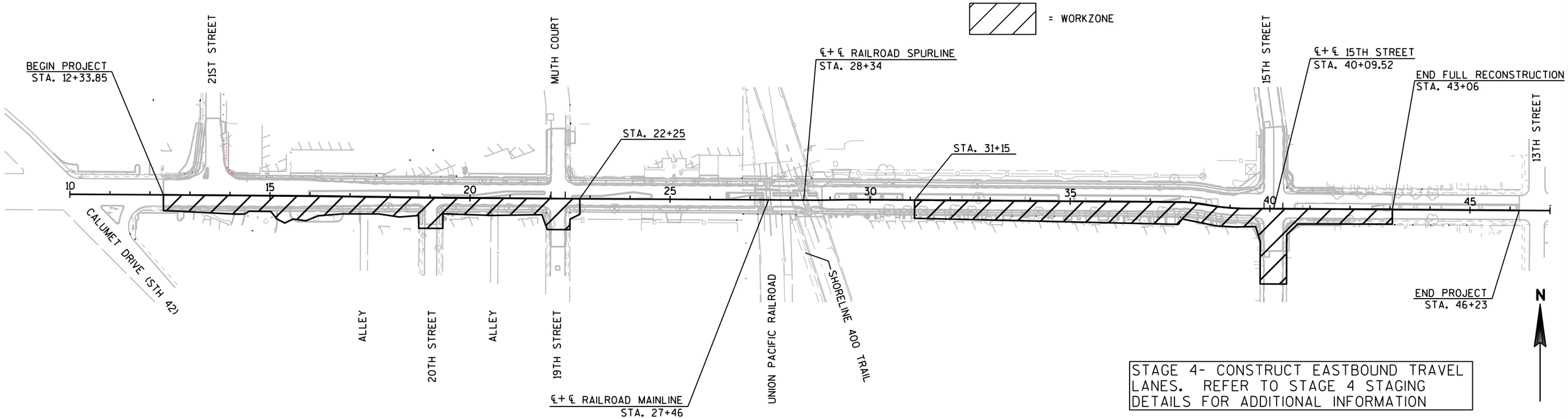
(2A) REFER TO SDD 15C2-6B FOR BARRICADES AND SIGNS FOR MAINLINE CLOSURES, DETAIL D
(ROAD CLOSURE BARRICADE DETAIL)

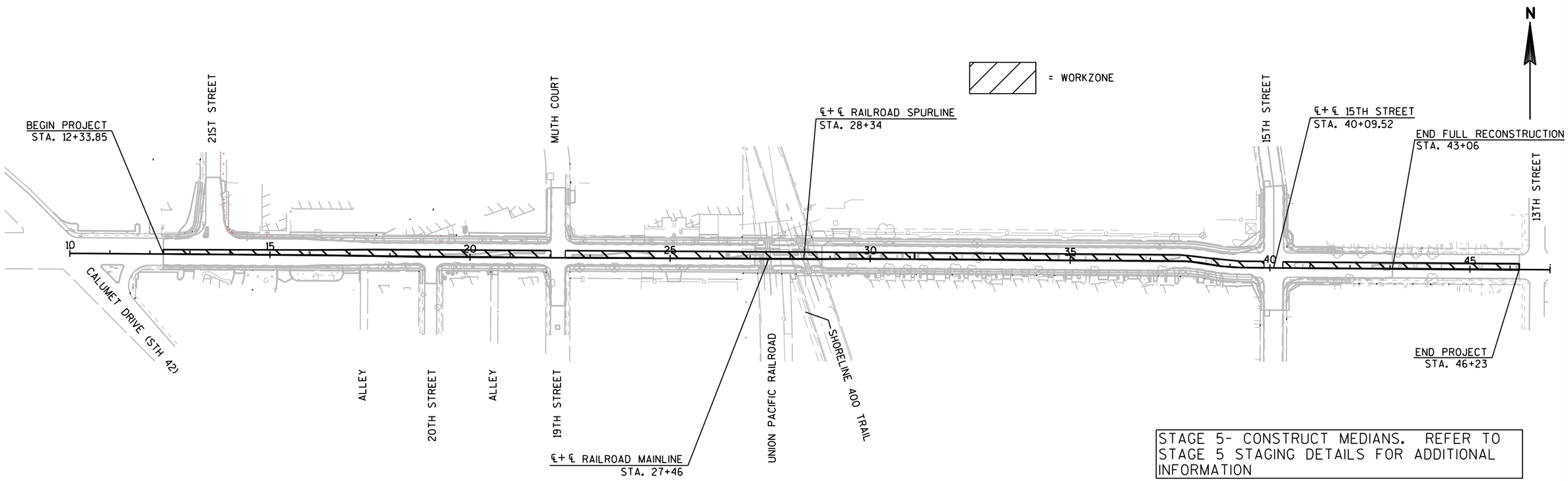
(3) REFER TO SDD 15C3-5 FOR BARRICADES AND SIGNS FOR SIDEROAD CLOSURES, DETAIL 1
(NO ACCESS TO PROJECT)

(4) REFER TO SDD 15C3-5 FOR BARRICADES AND SIGNS FOR SIDEROAD CLOSURES, DETAIL 4
(CONTRACTOR, LOCAL BUSINESS, AND RESIDENT ACCESS TO PROJECT)

NOTE- ADVANCE WARNING SIGNS EAST AND WEST OF PROJECT LIMITS ON NORTH AVENUE AND AT EACH SIDE ROAD TO BE SAME AS SHOWN ON STAGE 2 TRAFFIC CONTROL DETAIL

PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN	TRAFFIC CONTROL OVERVIEW	SHEET 81	E





PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN	TRAFFIC CONTROL OVERVIEW	SHEET 82	E

FILE NAME : W:\PROJECTS\W0059\81500117\CADD\CIVIL3D\PLAN SHEETS\02-NOTES AND OVERVIEW\NORTH AVENUE TRAFFIC CONTROL OVERVIEW.DWG
LAYOUT NAME - 02 TRAFFIC OVERVIEW 5
PLOT DATE : 11/1/2018 4:42 PM
PLOT BY : CHRIS CLEMENS
PLOT NAME :
PLOT SCALE : 1 IN:250 FT
WISDOT/CADDS SHEET 42

2

N

LEGEND

- DRUM
- DRUM WITH TYPE C LIGHT
- TRAFFIC FLOW ARROW
- SIGN
- TYPE 3 BARRICADE WITH SIGN
- TYPE 3 BARRICADE
- ASPHALTIC SURFACE TEMPORARY
- WORK ZONE

ROAD CLOSED
R11-2
48"X30"

REFER TO SDD 15 C 3-5, DETAIL 1, FOR 21ST STREET NORTH OF PROJECT LIMITS

MAINTAIN PEDESTRIAN ACCESS FROM 21ST STREET TO CALUMET DRIVE. REFER TO SPECIAL PROVISIONS.

21ST STREET

R3-1
24"X24"

LANE CLOSED
R11-2L
48"X30"

TEMPORARY PAVEMENT MARKING, 4-INCH WHITE EDGE LINE

11+00

12+00

13+00

14+00

15+00

25' SPACING (TYP)

11.5

11.5

CALUMET DRIVE (STH 42)

LANE CLOSED
R11-2L
48"X30"

WO1-6
48"X24"

WO6-3
48" X 48"

R3-2
24"X24"

TEMPORARY PAVEMENT MARKING, 4-INCH DOUBLE YELLOW

ROAD CLOSED
R11-2
48"X30"

IP

IP

REFER TO SDD 15 C 5-5, FOR NORTH AVENUE WEST OF PROJECT AND CALUMET DRIVE NORTH AND SOUTH OF PROJECT

PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN	TRAFFIC CONTROL - STAGE 2	SHEET 83	E

FILE NAME : W:\PROJECTS\W0059\81500117\CADD\CIVIL3D\PLAN SHEETS\02-TC\NORTH AVE- TRAFFIC CONTROL.DWG
LAYOUT NAME - NorthAve-01Signing

PLOT DATE : 11/1/2018 4:42 PM PLOT BY : CHRIS CLEMENS PLOT NAME : PLOT SCALE : ##########

2

2

LEGEND

- DRUM
- DRUM WITH TYPE C LIGHT
- TRAFFIC FLOW ARROW
- SIGN
- TYPE 3 BARRICADE WITH SIGN
- TYPE 3 BARRICADE
- ASPHALTIC SURFACE TEMPORARY
- WORK ZONE

N

TEMPORARY PAVEMENT MARKING, 4-INCH WHITE EDGE LINE

25' SPACING (TYP)

15+00 16+00 17+00 18+00 19+00 20+00 21+00

11.5 11.5 11.5' 11.5

TEMPORARY PAVEMENT MARKING, 4-INCH DOUBLE YELLOW

R3-1 24"X24"

ROAD CLOSED

R11-2 48"X30"

R3-2 24"X24"

REFER TO SDD 15 C 3-5, DETAIL 1, FOR 20TH STREET SOUTH OF PROJECT LIMITS

ALLEY

20TH STREET

ALLEY

PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN	TRAFFIC CONTROL - STAGE 2	SHEET 84	E

FILE NAME : W:\PROJECTS\W0059\81500117\CADD\CIVIL3D\PLAN SHEETS\02-TC\NORTH AVE- TRAFFIC CONTROL.DWG
LAYOUT NAME - NorthAve-02Signing

PLOT DATE : 11/1/2018 4:42 PM PLOT BY : CHRIS CLEMENS PLOT NAME : PLOT SCALE : ##########

2

LEGEND

- DRUM
- DRUM WITH TYPE C LIGHT
- TRAFFIC FLOW ARROW
- SIGN
- TYPE 3 BARRICADE WITH SIGN
- TYPE 3 BARRICADE
- ASPHALTIC SURFACE TEMPORARY
- WORK ZONE

N

REFER TO SDD 15 C 3-5, DETAIL 2, FOR MUTH COURT NORTH OF PROJECT LIMITS

MUTH COURT

RAILROAD STAGE WEST LIMITS (STAGE 3)

LANE CLOSED
R11-2L
48"X30"

STOP
R1-1
30"X30"

LANE CLOSED
R11-2L
48"X30"

WO6-3
48" X 48"

WO1-6
48"X24"

25' SPACING (TYP)

21+00

22+00

23+00

24+00

25+00

26+00

TEMPORARY PAVEMENT MARKING, 4-INCH WHITE EDGE LINE

TEMPORARY PAVEMENT MARKING, 4-INCH WHITE EDGE LINE

11.5

11.5'

+75.85

TEMPORARY PAVEMENT MARKING, 4-INCH DOUBLE YELLOW

TEMPORARY PAVEMENT MARKING, 4-INCH YELLOW

R3-1
24"X24"

R3-1
24"X24"

R3-2
24"X24"

ALLEY

19TH STREET

ROAD CLOSED
R11-2
48"X30"

REFER TO SDD 15 C 3-5, DETAIL 1, FOR 19TH STREET SOUTH OF PROJECT LIMITS

MAINTAIN PEDESTRIAN CROSSING TO EAST SIDE OF MUTH COURT.

PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN	TRAFFIC CONTROL - STAGE 2	SHEET 85	E

FILE NAME : W:\PROJECTS\W0059\81500117\CADD\CIVIL3D\PLAN SHEETS\02-TC\NORTH AVE- TRAFFIC CONTROL.DWG
LAYOUT NAME - NorthAve-03Signing

PLOT DATE : 11/1/2018 4:42 PM PLOT BY : CHRIS CLEMENS PLOT NAME : PLOT SCALE : ##########

2

N

WO1-6
48"X24"

TEMPORARY PAVEMENT MARKING,
4-INCH YELLOW

TEMPORARY PAVEMENT MARKING,
4-INCH WHITE EDGE LINE

TEMPORARY CROSSOVER
STA. 29+10 TO STA. 30+81
TEMPORARY ASPHALT
CONSTRUCTIED IN STAGE 1.
3-INCHES OF ASPHALTIC SURFACE
TEMPORARY OF 9-INCHES BASE
AGGREGATE DENSE 1 1/4-INCH

RAILROAD STAGE EAST LIMITS
(STAGE 3)

LANE
CLOSED
R11-2L
48"X30"

+39.85
26+00
27+00
28+00
29+00
+03.45
11.5
30+00
+18.09
31+00
11.5
11.5

25'
SPACING
(TYP)

TEMPORARY PAVEMENT MARKING,
4-INCH YELLOW

WO1-6
48"X24"

WO6-3
48" X 48"

SHORELINE 400 TRAIL

UNION PACIFIC RAILROAD

LEGEND

- DRUM
- DRUM WITH TYPE C LIGHT
- TRAFFIC FLOW ARROW
- SIGN
- TYPE 3 BARRICADE WITH SIGN
- TYPE 3 BARRICADE
- ASPHALTIC SURFACE TEMPORARY
- WORK ZONE

PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN	TRAFFIC CONTROL - STAGE 2	SHEET 86	E

FILE NAME : W:\PROJECTS\W0059\81500117\CADD\CIVIL3D\PLAN SHEETS\02-TC\NORTH AVE- TRAFFIC CONTROL.DWG
LAYOUT NAME - NorthAve-04Signing

PLOT DATE : 11/1/2018 4:42 PM PLOT BY : CHRIS CLEMENS PLOT NAME : PLOT SCALE : ##########

2

2

N

RAILROAD STAGE EAST LIMITS
(STAGE 3)

LANE
CLOSED

R11-2L
48"X30"

TEMPORARY PAVEMENT MARKING,
4-INCH WHITE EDGE LINE

+18.09

31+00

32+00

33+00

34+00

25'
SPACING
(TYP)

35+00

36+00

37

11.5

11.5

11.5

11.5

IP

WO1-6
48"X24"

TEMPORARY PAVEMENT MARKING,
4-INCH DOUBLE YELLOW

LEGEND

- DRUM
- DRUM WITH TYPE C LIGHT
- TRAFFIC FLOW ARROW
- SIGN
- TYPE 3 BARRICADE WITH SIGN
- TYPE 3 BARRICADE
- ASPHALTIC SURFACE TEMPORARY
- WORK ZONE

PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN	TRAFFIC CONTROL - STAGE 2	SHEET 87	E

FILE NAME : W:\PROJECTS\W0059\81500117\CADD\CIVIL3D\PLAN SHEETS\02-TC\NORTH AVE- TRAFFIC CONTROL.DWG
LAYOUT NAME - NorthAve-05Signing

PLOT DATE : 11/1/2018 4:42 PM PLOT BY : CHRIS CLEMENS PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 42

2

N

REFER TO SDD 15 C 5-5 FOR 15TH STREET NORTH & SOUTH OF PROJECT.

15TH STREET

TEMPORARY PAVEMENT MARKING, 4-INCH WHITE EDGE LINE

WO6-3
48" X 48"

STOP
ALL WAY
R1-3P
18"X6"
R1-1
30"X30"

LANE CLOSED
R11-2L
48"X30"

TEMPORARY PAVEMENT MARKING, 4-INCH WHITE EDGE LINE

25' SPACING (TYP)

37+00 38+00 39+00 40+00 41+00 42+00

+85.84

11.5

11.5

TEMPORARY PAVEMENT MARKING, 4-INCH DOUBLE YELLOW

EXISTING STOP SIGNS TO STAY IN PLACE

STOP
ALL WAY
R1-3P
18"X6"
R1-1
30"X30"

TEMPORARY PAVEMENT MARKING, 4-INCH DOUBLE YELLOW

SEE 15TH STREET STAGING DETAILS

LEGEND

- DRUM
- DRUM WITH TYPE C LIGHT
- TRAFFIC FLOW ARROW
- SIGN
- TYPE 3 BARRICADE WITH SIGN
- TYPE 3 BARRICADE
- ASPHALTIC SURFACE TEMPORARY
- WORK ZONE

NOTE:
4-WAY STOP AT 15TH STREET TO BE MAINTAINED

MAINTAIN PEDESTRIAN CROSSWALK AT SOUTH AND EAST INTERSECTION APPROACHES FOR 15TH STREET.

15TH STREET MAY BE REDUCED TO A SINGLE LANE OF TRAFFIC WITH FLAGGERS IN ACCORDANCE WITH SDD 15C 12-6 DURING STORM SEWER AND SANITARY SEWER OPERATIONS AS PROVIDED IN THE SPECIAL PROVISIONS.

PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN	TRAFFIC CONTROL - STAGE 2	SHEET 88	E

2

N

13TH STREET

REFER TO SDD 15 C 5-5 FOR NORTH AVENUE EAST OF PROJECT AND NORTH AND SOUTH ON 13TH STREET.

LANE CLOSED
R11-2L
48"X30"

WO6-3
48" X 48"

WO1-6
48"X24"

TEMPORARY PAVEMENT MARKING,
4-INCH WHITE EDGE LINE

TEMPORARY PAVEMENT MARKING,
4-INCH WHITE EDGE LINE

42+00

43+00

44+00

45+00

46+00

+30.87

+96.25

11.5

11.5

11.5

IP

RARY PAVEMENT MARKING,
DOUBLE YELLOW

TEMPORARY CROSSOVER
STA. 43+06 TO STA. 45+96
3-INCHES OF ASPHALTIC SURFACE
TEMPORARY OF 9-INCHES BASE
AGGREGATE DENSE 1 1/4-INCH
(CONSTRUCT IN STAGE 1)

NOTE:
EXISTING 4-WAY STOP AT 13TH STREET TO BE MAINTAINED

LEGEND

- DRUM
- DRUM WITH TYPE C LIGHT
- TRAFFIC FLOW ARROW
- SIGN
- TYPE 3 BARRICADE WITH SIGN
- TYPE 3 BARRICADE
- ASPHALTIC SURFACE TEMPORARY
- WORK ZONE

PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN	TRAFFIC CONTROL - STAGE 2	SHEET 89	E

FILE NAME : W:\PROJECTS\W0059\81500117\CADD\CIVIL3D\PLAN SHEETS\02-TC\NORTH AVE- TRAFFIC CONTROL.DWG
LAYOUT NAME - NorthAve-07Signing

PLOT DATE : 11/1/2018 4:43 PM PLOT BY : CHRIS CLEMENS PLOT NAME : PLOT SCALE : ##########

2

N

STOP
ALL WAY
R1-3P
18"X6"
R1-1
30"X30"

TEMPORARY PAVEMENT MARKING,
4-INCH WHITE EDGE LINE

EXISTING STOP SIGN TO STAY IN PLACE

LANE CLOSED
R11-2L
48"X30"

R3-1
24"X24"

25' SPACING
(TYP)

LANE CLOSED
R11-2L
48"X30"

WO1-6
48"X24"

TEMPORARY PAVEMENT MARKING,
4-INCH WHITE EDGE LINE

88+00
89+00
91+00
92+00
93+00
94+00
+00.01
+54.69
+53.32
+92.05
11+00
12+00

15TH STREET

11

WO1-6
48"X24"

R4-7
24"X30"

NO RIGHT TURN
FOR TRUCKS
24"X24"

STOP
ALL WAY
R1-3P
18"X6"
R1-1
30"X30"

EXISTING STOP SIGN TO STAY IN PLACE

TEMPORARY PAVEMENT MARKING,
4-INCH DOUBLE YELLOW

REFER TO SDD 15 C 5-5 FOR 15TH STREET NORTH & SOUTH OF PROJECT .

NOTE:
4-WAY STOP AT 15TH STREET TO BE MAINTAINED

NOTE:
STOP SIGNS TO BE PLACED A MAXIMUM OF 30-FT FROM THE NEAREST EDGE OF THE INTERSECTING ROADWAY

LEGEND

- DRUM
- DRUM WITH TYPE C LIGHT
- TRAFFIC FLOW ARROW
- SIGN
- TYPE 3 BARRICADE WITH SIGN
- TYPE 3 BARRICADE
- ASPHALTIC SURFACE TEMPORARY
- WORK ZONE

PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN	TRAFFIC CONTROL - 15TH STREET STAGE 2A	SHEET 90	E

FILE NAME : W:\PROJECTS\W0059\81500117\CADD\CIVIL3D\PLAN SHEETS\02-TC\NORTH AVE- TRAFFIC CONTROL- 15TH STREET.DWG
LAYOUT NAME - North Ave- Traffic Control- 15TH STREET - 15TH STREET-2A

PLOT DATE : 11/1/2018 4:43 PM PLOT BY : CHRIS CLEMENS PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 42

2

N

+02.32, 0.71' RT

LANE CLOSED
R11-2L
48"X30"

STOP
ALL WAY
R1-3P
18"X6"
R1-1
30"X30"

NO LEFT TURN
FOR TRUCKS
24"X24"

LANE CLOSED
R11-2L
48"X30"

+69.86, -14.93' LT

EXISTING STOP SIGN TO STAY IN PLACE

+84.54, -38.18' LT

11

25' SPACING (TYP)

15TH STREET

11

88+00

89+00

91+00

92+00

93+00

94+00

+00.00

+54.81

+92.22

+99.23

+73.41

40+00

11+00

12+00

WO1-6
48"X24"

NO RIGHT TURN
FOR TRUCKS
24"X24"

EXISTING STOP SIGN TO STAY IN PLACE

TEMPORARY PAVEMENT MARKING, 4-INCH WHITE EDGE LINE

WO1-6
48"X24"

LANE CLOSED
R11-2L
48"X30"

STOP
ALL WAY
R1-3P
18"X6"
R1-1
30"X30"

REFER TO SDD 15 C 5-5 FOR 15TH STREET NORTH & SOUTH OF PROJECT .

NOTE:
4-WAY STOP AT 15TH STREET TO BE MAINTAINED

NOTE:
STOP SIGNS TO BE PLACED A MAXIMUM OF 30-FT FROM THE NEAREST EDGE OF THE INTERSECTING ROADWAY

LEGEND

- DRUM
- DRUM WITH TYPE C LIGHT
- TRAFFIC FLOW ARROW
- SIGN
- TYPE 3 BARRICADE WITH SIGN
- TYPE 3 BARRICADE
- ASPHALTIC SURFACE TEMPORARY
- WORK ZONE

PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN	TRAFFIC CONTROL - 15TH STREET STAGE 2B	SHEET 91	E

FILE NAME : W:\PROJECTS\W0059\81500117\CADD\CIVIL3D\PLAN SHEETS\02-TC\NORTH AVE- TRAFFIC CONTROL- 15TH STREET.DWG
LAYOUT NAME - North Ave- Traffic Control- 15TH STREET - 15TH STREET-2B

PLOT DATE : 11/1/2018 4:43 PM PLOT BY : CHRIS CLEMENS PLOT NAME : PLOT SCALE : ##########

2

N

+02.32, 0.71' RT

LANE CLOSED
R11-2L
48"X30"

STOP
ALL WAY
R1-3P
18"X6"
R1-1
30"X30"

NO LEFT TURN FOR TRUCKS
24"X24"

TEMPORARY PAVEMENT MARKING, 4-INCH WHITE EDGE LINE

WO1-6
48"X24"

+69.86, -14.93' LT

EXISTING STOP SIGN TO STAY IN PLACE

TEMPORARY PAVEMENT MARKING, 4-INCH DOUBLE YELLOW

+84.54, -38.18' LT

+57.08

+18.35

94+00

93+00

92+00

91+00

90+00

89+00

88+00

+79.59

+18.75

11.5

15TH STREET

25' SPACING (TYP)

NO RIGHT TURN FOR TRUCKS
24"X24"

STOP
ALL WAY
R1-3P
18"X6"
R1-1
30"X30"

WO1-6
48"X24"

LANE CLOSED
R11-2L
48"X30"

LANE CLOSED
R11-2L
48"X30"

STOP
ALL WAY
R1-3P
18"X6"
R1-1
30"X30"

R3-1
24"X24"

LANE CLOSED
R11-2L
48"X30"

REFER TO SDD 15 C 5-5 FOR 15TH STREET NORTH & SOUTH OF PROJECT .

NOTE:
4-WAY STOP AT 15TH STREET TO BE MAINTAINED

NOTE:
STOP SIGNS TO BE PLACED A MAXIMUM OF 30-FT FROM THE NEAREST EDGE OF THE INTERSECTING ROADWAY

LEGEND

- DRUM
- DRUM WITH TYPE C LIGHT
- TRAFFIC FLOW ARROW
- SIGN
- TYPE 3 BARRICADE WITH SIGN
- TYPE 3 BARRICADE
- ASPHALTIC SURFACE TEMPORARY
- WORK ZONE

PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN	TRAFFIC CONTROL - 15TH STREET STAGE 2C	SHEET 92	E

FILE NAME : W:\PROJECTS\W0059\81500117\CADD\CIVIL3D\PLAN SHEETS\02-TC\NORTH AVE- TRAFFIC CONTROL- 15TH STREET.DWG
LAYOUT NAME - North Ave- Traffic Control- 15TH STREET - 15TH STREET-2C

PLOT DATE : 11/1/2018 4:43 PM PLOT BY : CHRIS CLEMENS PLOT NAME : PLOT SCALE : ##########

2

LEGEND

- DRUM
- DRUM WITH TYPE C LIGHT
- TRAFFIC FLOW ARROW
- SIGN
- TYPE 3 BARRICADE WITH SIGN
- TYPE 3 BARRICADE
- ASPHALTIC SURFACE TEMPORARY
- WORK ZONE

N

REFER TO SDD 15 C 3-5, DETAIL 2, FOR 21ST STREET NORTH OF PROJECT LIMITS

21ST STREET

TEMPORARY PAVEMENT MARKING, 4-INCH DOUBLE YELLOW

STOP
R1-1
30"X30"

WO6-3
48" X 48"

11.5

11.5

11.5

11.5

+32.43

11+00

+77.96

12+00

13+00

14+00

15+00

25' SPACING
(TYP)

CALUMET DRIVE (STH 42)

LANE CLOSED
R11-2L
48"X30"

W1-7
48"X24"

WO1-6
48"X24"

IP

IP

IP

IP

REFER TO SDD 15 C 5-5, FOR NORTH AVENUE WEST OF PROJECT AND CALUMET DRIVE NORTH AND SOUTH OF PROJECT

NOTE:
STOP SIGNS TO BE PLACED A MAXIMUM OF 30-FT FROM THE NEAREST EDGE OF THE INTERSECTING ROADWAY

PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN	TRAFFIC CONTROL - STAGE 4	SHEET 93	E

2

N

WO6-3
48" X 48"

3-INCHES OF ASPHALTIC SURFACE
TEMPORARY OF 9-INCHES BASE
AGGREGATE DENSE 1 1/4-INCH
(STAGE 2)

TEMPORARY PAVEMENT MARKING,
4-INCH DOUBLE YELLOW

WO6-3
48" X 48"

R3-2
24"X24"

IP

IP

11.5

+96.21

15+00

16+00

17+00

+60.82

18+00

19+00

11.5

11.5

20+00

21+00

25' SPACING
(TYP)

LEGEND

- DRUM
- DRUM WITH TYPE C LIGHT
- TRAFFIC FLOW ARROW
- SIGN
- TYPE 3 BARRICADE WITH SIGN
- TYPE 3 BARRICADE
- ASPHALTIC SURFACE TEMPORARY
- WORK ZONE

ALLEY

R3-1
24"X24"

REFER TO SDD 15 C 3-5, DETAIL 1, FOR 20TH STREET SOUTH OF PROJECT LIMITS

20TH STREET

ROAD CLOSED

R11-2
48"X30"

ALLEY

PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN	TRAFFIC CONTROL - STAGE 4	SHEET 94	E

FILE NAME : W:\PROJECTS\W0059\81500117\CADD\CIVIL3D\PLAN SHEETS\02-TC\NORTH AVE- TRAFFIC CONTROL- STAGE 4.DWG
LAYOUT NAME - NorthAve-02Signing
PLOT DATE : 11/1/2018 4:43 PM PLOT BY : CHRIS CLEMENS PLOT NAME : PLOT SCALE : ##########
WISDOT/CADDS SHEET 42

2

N

REFER TO SDD 15 C 3-5, DETAIL 2, FOR MUTH COURT NORTH OF PROJECT LIMITS

MUTH COURT

ROAD CLOSED
WO1-7
48"X24"
R11-2
48"X30"

3-INCHES OF ASPHALTIC SURFACE TEMPORARY OF 9-INCHES BASE AGGREGATE DENSE 1 1/4-INCH (STAGE 2)

RAILROAD STAGE WEST LIMITS
STA. 22+64
(STAGE 3)

R3-2
24"X24"

WO6-3
48" X 48"

TEMPORARY CROSSOVER
STA. 23+76 TO STA. 26+41
TEMPORARY PAVEMENT MARKING,
4-INCH DOUBLE YELLOW

TEMPORARY PAVEMENT MARKING,
4-INCH YELLOW

11.5

11.5

+76.55

21+00

22+00

23+00

24+00

25+00

26+00

+41.30

25' SPACING
(TYP)

TEMPORARY PAVEMENT MARKING,
4-INCH WHITE EDGE LINE

3-INCHES OF ASPHALTIC SURFACE TEMPORARY OF 9-INCHES BASE AGGREGATE DENSE 1 1/4-INCH (STAGE 3)

WO1-6
48"X24"

ALLEY

R3-1
24"X24"

19TH STREET

MAINTAIN PEDESTRIAN CROSSING TO EAST SIDE OF MUTH COURT

REFER TO SDD 15 C 3-5, DETAIL 1, FOR 19TH STREET SOUTH OF PROJECT LIMITS

NOTE:
STOP SIGNS TO BE PLACED A MAXIMUM OF 30-FT FROM THE NEAREST EDGE OF THE INTERSECTING ROADWAY

ROAD CLOSED
R11-2
48"X30"

LEGEND

- DRUM
- DRUM WITH TYPE C LIGHT
- TRAFFIC FLOW ARROW
- SIGN
- TYPE 3 BARRICADE WITH SIGN
- TYPE 3 BARRICADE
- ASPHALTIC SURFACE TEMPORARY
- WORK ZONE

PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN	TRAFFIC CONTROL - STAGE 4	SHEET 95	E

2

N

TEMPORARY CROSSOVER
STA. 29+02 TO STA. 31+18
3-INCHES OF ASPHALTIC SURFACE
TEMPORARY OF 9-INCHES BASE
AGGREGATE DENSE 1 1/4-INCH
(STAGE 1)

RAILROAD STAGE EAST LIMITS
(STAGE 3)

TEMPORARY PAVEMENT MARKING,
4-INCH YELLOW

TEMPORARY PAVEMENT MARKING,
4-INCH YELLOW

TEMPORARY PAVEMENT
MARKING, 4-INCH YELLOW

IP

11.5

25' SPACING
(TYP)

+17.29

26+00

27+00

28+00

29+00

30+00

31+00

+41.30

11.5

+01.85

TEMPORARY PAVEMENT MARKING,
4-INCH WHITE EDGE LINE

WO1-6
48"X24"

LANE
CLOSED
R11-2L
48"X30"

TEMPORARY PAVEMENT
MARKING, 4-INCH WHITE
EDGE LINE

TEMPORARY PAVEMENT MARKING,
4-INCH YELLOW

UNION PACIFIC RAILROAD

SHORELINE 400 TRAIL

LEGEND

- DRUM
- DRUM WITH TYPE C LIGHT
- TRAFFIC FLOW ARROW
- SIGN
- TYPE 3 BARRICADE WITH SIGN
- TYPE 3 BARRICADE
- ASPHALTIC SURFACE TEMPORARY
- WORK ZONE

PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN	TRAFFIC CONTROL - STAGE 4	SHEET 96	E

FILE NAME : W:\PROJECTS\W0059\81500117\CADD\CIVIL3D\PLAN SHEETS\02-TC\NORTH AVE- TRAFFIC CONTROL- STAGE 4.DWG
LAYOUT NAME - NorthAve-04Signing

PLOT DATE : 11/1/2018 4:43 PM PLOT BY : CHRIS CLEMENS PLOT NAME : PLOT SCALE : ##########

2

2

N

RAILROAD STAGE EAST LIMITS
(STAGE 3)

WO6-3
48" X 48"

TEMPORARY PAVEMENT MARKING,
4-INCH DOUBLE YELLOW

3-INCHES OF ASPHALTIC SURFACE
TEMPORARY OF 9-INCHES BASE
AGGREGATE DENSE 1 1/4-INCH
(STAGE 2)

+17.29

11.5

11.5

31+00

32+00

33+00

34+00

35+00

36+00

37

25' SPACING
(TYP)

LANE
CLOSED

R11-2L
48"X30"

TEMPORARY PAVEMENT MARKING,
4-INCH WHITE EDGE LINE

LEGEND

- DRUM
- DRUM WITH TYPE C LIGHT
- TRAFFIC FLOW ARROW
- SIGN
- TYPE 3 BARRICADE WITH SIGN
- TYPE 3 BARRICADE
- ASPHALTIC SURFACE TEMPORARY
- WORK ZONE

PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN	TRAFFIC CONTROL - STAGE 4	SHEET 97	E

FILE NAME : W:\PROJECTS\W0059\81500117\CADD\CIVIL3D\PLAN SHEETS\02-TC\NORTH AVE- TRAFFIC CONTROL- STAGE 4.DWG
LAYOUT NAME - NorthAve-05Signing

PLOT DATE : 11/1/2018 4:43 PM PLOT BY : CHRIS CLEMENS PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 42

2

N

REFER TO SDD 15 C 5-5 FOR 15TH STREET NORTH & SOUTH OF PROJECT.

3-INCHES OF ASPHALTIC SURFACE TEMPORARY OF 9-INCHES BASE AGGREGATE DENSE 1 1/4-INCH (STAGE 2)

WO6-3
48" X 48"

TEMPORARY PAVEMENT MARKING, 4-INCH WHITE EDGE LINE

STOP
ALL WAY
R1-3P
18"X6"
R1-1
30"X30"

15TH STREET

TEMPORARY PAVEMENT MARKING, 4-INCH DOUBLE YELLOW

TEMPORARY PAVEMENT MARKING, 4-INCH WHITE EDGE LINE

37+00

38+00

+12.16

39+00

+08.86

40+00

41+00

42+00

11.5

25' SPACING (TYP)

25'

TEMPORARY PAVEMENT MARKING, 4-INCH DOUBLE YELLOW

LANE CLOSED
R11-2L
48"X30"

SEE 15TH STREET STAGING DETAILS

NOTE:
STOP SIGNS TO BE PLACED A MAXIMUM OF 30-FT FROM THE NEAREST EDGE OF THE INTERSECTING ROADWAY

NOTE:
4-WAY STOP AT 15TH STREET TO BE MAINTAINED

MAINTAIN PEDESTRIAN CROSSWALK AT SOUTH AND EAST INTERSECTION APPROACHES FOR 15TH STREET.

LEGEND

- DRUM
- DRUM WITH TYPE C LIGHT
- TRAFFIC FLOW ARROW
- SIGN
- TYPE 3 BARRICADE WITH SIGN
- TYPE 3 BARRICADE
- ASPHALTIC SURFACE TEMPORARY
- WORK ZONE

PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN	TRAFFIC CONTROL - STAGE 4	SHEET 98	E

FILE NAME : W:\PROJECTS\W0059\81500117\CADD\CIVIL3D\PLAN SHEETS\02-TC\NORTH AVE- TRAFFIC CONTROL- STAGE 4.DWG
LAYOUT NAME - NorthAve-06Signing

PLOT DATE : 11/1/2018 4:43 PM PLOT BY : CHRIS CLEMENS PLOT NAME : PLOT SCALE : ##########

2

N

13TH STREET

REFER TO SDD 15 C 5-5 FOR NORTH AVENUE EAST OF PROJECT AND NORTH AND SOUTH ON 13TH STREET.

PAVEMENT MARKING,
BLE YELLOW

TEMPORARY PAVEMENT MARKING,
4-INCH WHITE EDGE LINE

TEMPORARY PAVEMENT MARKING,
4-INCH DOUBLE YELLOW

WO6-3
48" X 48"

TEMPORARY CROSSOVER
STA. 43+06 TO STA. 45+71

TEMPORARY PAVEMENT MARKING,
4-INCH YELLOW

TEMPORARY PAVEMENT MARKING,
4-INCH WHITE EDGE LINE

LANE CLOSED

R11-2L
48"X30"

WO1-6
48"X24"

11.5

11.5

+09.38

42+00

43+00

44+00

45+00

46+00

11.5

+72.28

25' SPACING
(TYP)

LANE CLOSED

R11-2L
48"X30"

TEMPORARY ASPHALT PAVEMENT
(STAGE 1)

TEMPORARY PAVEMENT MARKING,
4-INCH WHITE EDGE LINE

NOTE:
EXISTING 4-WAY STOP AT 13TH STREET TO BE MAINTAINED

LEGEND

- DRUM
- DRUM WITH TYPE C LIGHT
- TRAFFIC FLOW ARROW
- SIGN
- TYPE 3 BARRICADE WITH SIGN
- TYPE 3 BARRICADE
- ASPHALTIC SURFACE TEMPORARY
- WORK ZONE

EAST

PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN	TRAFFIC CONTROL - STAGE 4	SHEET 99	E

FILE NAME : W:\PROJECTS\W0059\81500117\CADD\CIVIL3D\PLAN SHEETS\02-TC\NORTH AVE- TRAFFIC CONTROL- STAGE 4.DWG
LAYOUT NAME - NorthAve-07Signing

PLOT DATE : 11/1/2018 4:43 PM PLOT BY : CHRIS CLEMENS PLOT NAME : PLOT SCALE : ##########

2

N

TEMPORARY PAVEMENT MARKING,
4-INCH DOUBLE YELLOW

STOP
ALL WAY
R1-3P
18"X6"
R1-1
30"X30"

LANE CLOSED
R11-2L
48"X30"

TEMPORARY PAVEMENT MARKING,
4-INCH DOUBLE YELLOW

STOP
ALL WAY
R1-3P
18"X6"
R1-1
30"X30"

TEMPORARY PAVEMENT MARKING,
4-INCH WHITE EDGE LINE

WO1-6
48"X24"

39+00

40+00

11.5

11.5

11.5

88+00

+94.02

89+00

+05.89

91+00

92+00

+92.46

93+00

+55.78

25' SPACING
(TYP)

15TH STREET

WO1-6
48"X24"

LANE CLOSED
R11-2L
48"X30"

TEMPORARY PAVEMENT MARKING,
4-INCH WHITE EDGE LINE

NO RIGHT TURN
FOR TRUCKS
24"X24"

STOP
ALL WAY
R1-3P
18"X6"
R1-1
30"X30"

WO1-6
48"X24"

41+00

LANE CLOSED
R11-2L
48"X30"

TEMPORARY PAVEMENT MARKING,
4-INCH DOUBLE YELLOW

42+00

REFER TO SDD 15 C 5-5 FOR 15TH STREET NORTH & SOUTH OF PROJECT .

NOTE:
4-WAY STOP AT 15TH STREET TO BE MAINTAINED

NOTE:
STOP SIGNS TO BE PLACED A MAXIMUM OF 30-FT FROM THE NEAREST EDGE OF THE INTERSECTING ROADWAY

LEGEND

- DRUM
- DRUM WITH TYPE C LIGHT
- TRAFFIC FLOW ARROW
- SIGN
- TYPE 3 BARRICADE WITH SIGN
- TYPE 3 BARRICADE
- ASPHALTIC SURFACE TEMPORARY
- WORK ZONE

PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN	TRAFFIC CONTROL - 15TH STREET STAGE 4A	SHEET 100	E

FILE NAME : W:\PROJECTS\W0059\81500117\CADD\CIVIL3D\PLAN SHEETS\02-TC\NORTH AVE- TRAFFIC CONTROL- 15TH STREET-STAGE 4.DWG
LAYOUT NAME - 15TH STREET-4A

PLOT DATE : 11/1/2018 4:44 PM PLOT BY : CHRIS CLEMENS PLOT NAME : PLOT SCALE : ##########

2

N

STOP
ALL WAY
R1-3P
18"X6"
R1-1
30"X30"

LANE CLOSED
R11-2L
48"X30"

LANE CLOSED
R11-2L
48"X30"

TEMPORARY PAVEMENT MARKING,
4-INCH WHITE EDGE LINE

STOP
ALL WAY
R1-3P
18"X6"
R1-1
30"X30"

TEMPORARY PAVEMENT MARKING,
4-INCH WHITE EDGE LINE

25' SPACING
(TYP)

WO1-6
48"X24"

88+00
+05.91
89+00
+94.04
91+00
+92.33
92+00
93+00
+55.57
39+00
40+00
41+00
42+00
11.5
11.5
11.5
15TH STREET

WO1-6
48"X24"

TEMPORARY PAVEMENT MARKING,
4-INCH WHITE EDGE LINE

NO RIGHT TURN
FOR TRUCKS
24"X24"

STOP
ALL WAY
R1-3P
18"X6"
R1-1
30"X30"

STOP
ALL WAY
R1-3P
18"X6"
R1-1
30"X30"

NO LEFT TURN
FOR TRUCKS
24"X24"

REFER TO SDD 15 C 5-5 FOR 15TH STREET NORTH & SOUTH OF PROJECT .

NOTE:
4-WAY STOP AT 15TH STREET TO BE MAINTAINED

NOTE:
STOP SIGNS TO BE PLACED A MAXIMUM OF 30-FT FROM THE NEAREST EDGE OF THE INTERSECTING ROADWAY

LEGEND

- DRUM
- DRUM WITH TYPE C LIGHT
- TRAFFIC FLOW ARROW
- SIGN
- TYPE 3 BARRICADE WITH SIGN
- TYPE 3 BARRICADE
- ASPHALTIC SURFACE TEMPORARY
- WORK ZONE

PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN	TRAFFIC CONTROL - 15TH STREET STAGE 4B	SHEET 101	E

FILE NAME : W:\PROJECTS\W0059\81500117\CADD\CIVIL3D\PLAN SHEETS\02-TC\NORTH AVE- TRAFFIC CONTROL- 15TH STREET-STAGE 4.DWG
LAYOUT NAME - 15TH STREET-4B

PLOT DATE : 11/1/2018 4:44 PM PLOT BY : CHRIS CLEMENS PLOT NAME : PLOT SCALE : ##########

2

N

NO RIGHT TURN
FOR TRUCKS
24"X24"

STOP
ALL WAY
R1-3P
18"X6"
R1-1
30"X30"

LANE CLOSED
R11-2L
48"X30"

STOP
ALL WAY
R1-3P
18"X6"
R1-1
30"X30"

TEMPORARY PAVEMENT MARKING,
4-INCH WHITE EDGE LINE

WO1-6
48"X24"

TEMPORARY PAVEMENT MARKING,
4-INCH WHITE EDGE LINE

WO1-6
48"X24"

+07.73
88+00
+67.42
+07.77
89+00
+94.03
11.5
11.5
39+00
40+00
91+00
92+00
15TH STREET
11.5
11.5
+03.63
93+00
+45.71

TEMPORARY PAVEMENT MARKING,
4-INCH DOUBLE YELLOW

TEMPORARY PAVEMENT MARKING,
4-INCH DOUBLE YELLOW

NO RIGHT TURN
FOR TRUCKS
24"X24"

LANE CLOSED
R11-2L
48"X30"

STOP
ALL WAY
R1-3P
18"X6"
R1-1
30"X30"

STOP
ALL WAY
R1-3P
18"X6"
R1-1
30"X30"

41+00
42+00

REFER TO SDD 15 C 5-5 FOR 15TH STREET NORTH & SOUTH OF PROJECT .

NOTE:
4-WAY STOP AT 15TH STREET TO BE MAINTAINED

NOTE:
STOP SIGNS TO BE PLACED A MAXIMUM OF 30-FT FROM THE NEAREST EDGE OF THE INTERSECTING ROADWAY

LEGEND

- DRUM
- DRUM WITH TYPE C LIGHT
- TRAFFIC FLOW ARROW
- SIGN
- TYPE 3 BARRICADE WITH SIGN
- TYPE 3 BARRICADE
- ASPHALTIC SURFACE TEMPORARY
- WORK ZONE

PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN	TRAFFIC CONTROL - 15TH STREET STAGE 4C	SHEET 102	E

FILE NAME : W:\PROJECTS\W0059\81500117\CADD\CIVIL3D\PLAN SHEETS\02-TC\NORTH AVE- TRAFFIC CONTROL- 15TH STREET-STAGE 4.DWG
LAYOUT NAME - 15TH STREET-4c

PLOT DATE : 11/1/2018 4:44 PM PLOT BY : CHRIS CLEMENS PLOT NAME : PLOT SCALE : ##########

2

N

LEGEND

- DRUM
- DRUM WITH TYPE C LIGHT
- TRAFFIC FLOW ARROW
- SIGN
- TYPE 3 BARRICADE WITH SIGN
- TYPE 3 BARRICADE
- ASPHALTIC SURFACE TEMPORARY
- WORK ZONE

REFER TO SDD 15 C 3-5, DETAIL 2, FOR 21ST STREET NORTH OF PROJECT LIMITS

21ST STREET

11+00

12+00

13+00

14+00

15+00

CALUMET DRIVE (STH 42)

TEMPORARY PAVEMENT MARKING, 4-INCH DOUBLE YELLOW

IP

REFER TO SDD 15 C 5-5, FOR NORTH AVENUE WEST OF PROJECT AND CALUMET DRIVE NORTH AND SOUTH OF PROJECT

PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN	TRAFFIC CONTROL - STAGE 5	SHEET 103	E

FILE NAME : W:\PROJECTS\W0059\81500117\CADD\CIVIL3D\PLAN SHEETS\02-TC\NORTH AVE- TRAFFIC CONTROL-STAGE 5.DWG
LAYOUT NAME - NorthAve-01Signing

PLOT DATE : 11/1/2018 4:44 PM PLOT BY : CHRIS CLEMENS PLOT NAME : PLOT SCALE : ##########

2

LEGEND

- DRUM
- DRUM WITH TYPE C LIGHT
- TRAFFIC FLOW ARROW
- SIGN
- TYPE 3 BARRICADE WITH SIGN
- TYPE 3 BARRICADE
- ASPHALTIC SURFACE TEMPORARY
- WORK ZONE

N

IP

R3-2
24"X24"

IP

15+00

16+00

17+00

18+00

25' SPACING (TYP)

19+00

20+00

21+00

R3-1
24"X24"

ROAD CLOSED

R11-2
48"X30"

ALLEY

20TH STREET

REFER TO SDD 15 C 3-5, DETAIL 1, FOR 20TH STREET SOUTH OF PROJECT LIMITS

ALLEY

PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN	TRAFFIC CONTROL - STAGE 5	SHEET 104	E

FILE NAME : W:\PROJECTS\W0059\81500117\CADD\CIVIL3D\PLAN SHEETS\02-TC\NORTH AVE- TRAFFIC CONTROL-STAGE 5.DWG
LAYOUT NAME - NorthAve-02Signing

PLOT DATE : 11/1/2018 4:44 PM PLOT BY : CHRIS CLEMENS PLOT NAME : PLOT SCALE : ##########

2

2

LEGEND

- DRUM
- DRUM WITH TYPE C LIGHT
- TRAFFIC FLOW ARROW
- SIGN
- TYPE 3 BARRICADE WITH SIGN
- TYPE 3 BARRICADE
- ASPHALTIC SURFACE TEMPORARY
- WORK ZONE

N

REFER TO SDD 15 C 3-5, DETAIL 2, FOR MUTH COURT NORTH OF PROJECT LIMITS

MUTH COURT

R3-2
24"X24"

21+00

22+00

25' SPACING (TYP)

23+00

24+00

25+00

26+00

R3-1
24"X24"

ALLEY

19TH STREET

ROAD CLOSED
R11-2
48"X30"

REFER TO SDD 15 C 3-5, DETAIL 1, FOR 19TH STREET SOUTH OF PROJECT LIMITS

PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN	TRAFFIC CONTROL - STAGE 5	SHEET 105	E

FILE NAME : W:\PROJECTS\W0059\81500117\CADD\CIVIL3D\PLAN SHEETS\02-TC\NORTH AVE- TRAFFIC CONTROL-STAGE 5.DWG
LAYOUT NAME - NorthAve-03Signing

PLOT DATE : 11/1/2018 4:44 PM PLOT BY : CHRIS CLEMENS PLOT NAME : PLOT SCALE : ##########

2

N

26+00

27+00

28+00

29+00

30+00

31+00

25' SPACING (TYP)

IP

SHORELINE 400 TRAIL

UNION PACIFIC RAILROAD

LEGEND

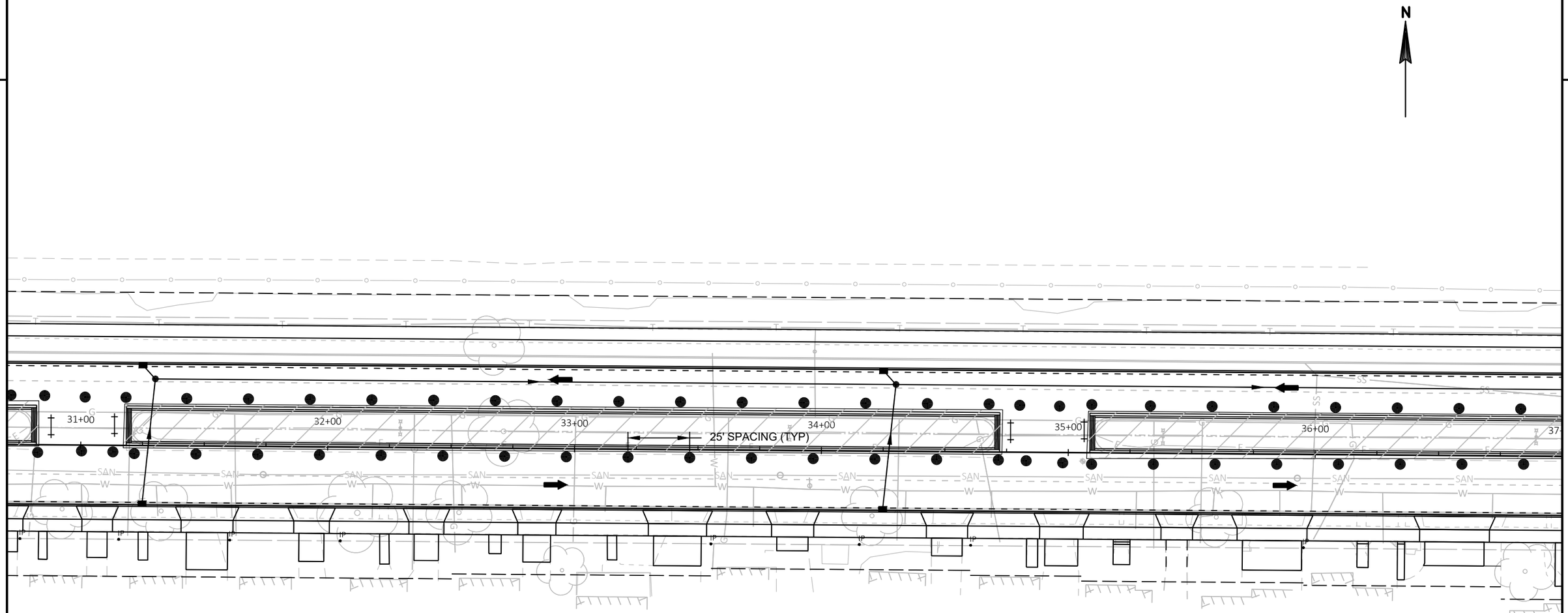
- DRUM
- DRUM WITH TYPE C LIGHT
- TRAFFIC FLOW ARROW
- SIGN
- TYPE 3 BARRICADE WITH SIGN
- TYPE 3 BARRICADE
- ASPHALTIC SURFACE TEMPORARY
- WORK ZONE

PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN	TRAFFIC CONTROL - STAGE 5	SHEET 106	E

FILE NAME : W:\PROJECTS\W0059\81500117\CADD\CIVIL3D\PLAN SHEETS\02-TC\NORTH AVE- TRAFFIC CONTROL-STAGE 5.DWG
LAYOUT NAME - NorthAve-04Signing

PLOT DATE : 11/1/2018 4:44 PM PLOT BY : CHRIS CLEMENS PLOT NAME : PLOT SCALE : 1 IN:40 FT

2



LEGEND

- DRUM
- DRUM WITH TYPE C LIGHT
- TRAFFIC FLOW ARROW
- SIGN
- TYPE 3 BARRICADE WITH SIGN
- TYPE 3 BARRICADE
- ASPHALTIC SURFACE TEMPORARY
- WORK ZONE

PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN	TRAFFIC CONTROL - STAGE 5	SHEET 107	E

FILE NAME : W:\PROJECTS\W0059\81500117\CADD\CIVIL3D\PLAN SHEETS\02-TC\NORTH AVE- TRAFFIC CONTROL-STAGE 5.DWG
LAYOUT NAME - NorthAve-05Signing

PLOT DATE : 11/1/2018 4:44 PM PLOT BY : CHRIS CLEMENS PLOT NAME : PLOT SCALE : ##########

2

N

15TH STREET

REFER TO SDD 15 C 5-5 FOR 15TH STREET NORTH & SOUTH OF PROJECT.

STOP
ALL WAY
R1-3P
18"X6"
R1-1
30"X30"

37+00

38+00

39+00

40+00

41+00

42+00

REFER TO SDD 15 C 3-5, DETAIL 1, FOR 19TH STREET SOUTH OF PROJECT LIMITS

MAINTAIN 4-WAY STOP AT 15TH STREET UNTIL TRAFFIC SIGNALS ARE OPERATIONAL

NOTE:
STOP SIGNS TO BE PLACED A MAXIMUM OF 30-FT FROM THE NEAREST EDGE OF THE INTERSECTING ROADWAY

LEGEND

- DRUM
- DRUM WITH TYPE C LIGHT
- TRAFFIC FLOW ARROW
- SIGN
- TYPE 3 BARRICADE WITH SIGN
- TYPE 3 BARRICADE
- ASPHALTIC SURFACE TEMPORARY
- WORK ZONE

PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN	TRAFFIC CONTROL - STAGE 5	SHEET 108	E

FILE NAME : W:\PROJECTS\W0059\81500117\CADD\CIVIL3D\PLAN SHEETS\02-TC\NORTH AVE- TRAFFIC CONTROL-STAGE 5.DWG
LAYOUT NAME - NorthAve-06Signing

PLOT DATE : 11/1/2018 4:44 PM PLOT BY : CHRIS CLEMENS PLOT NAME : PLOT SCALE : ##########

2

N

13TH STREET

REFER TO SDD 15 C 5-5 FOR NORTH AVENUE EAST OF PROJECT AND NORTH AND SOUTH ON 13TH STREET.

42+00

43+00

44+00

45+00

46+00

25' SPACING (TYP)

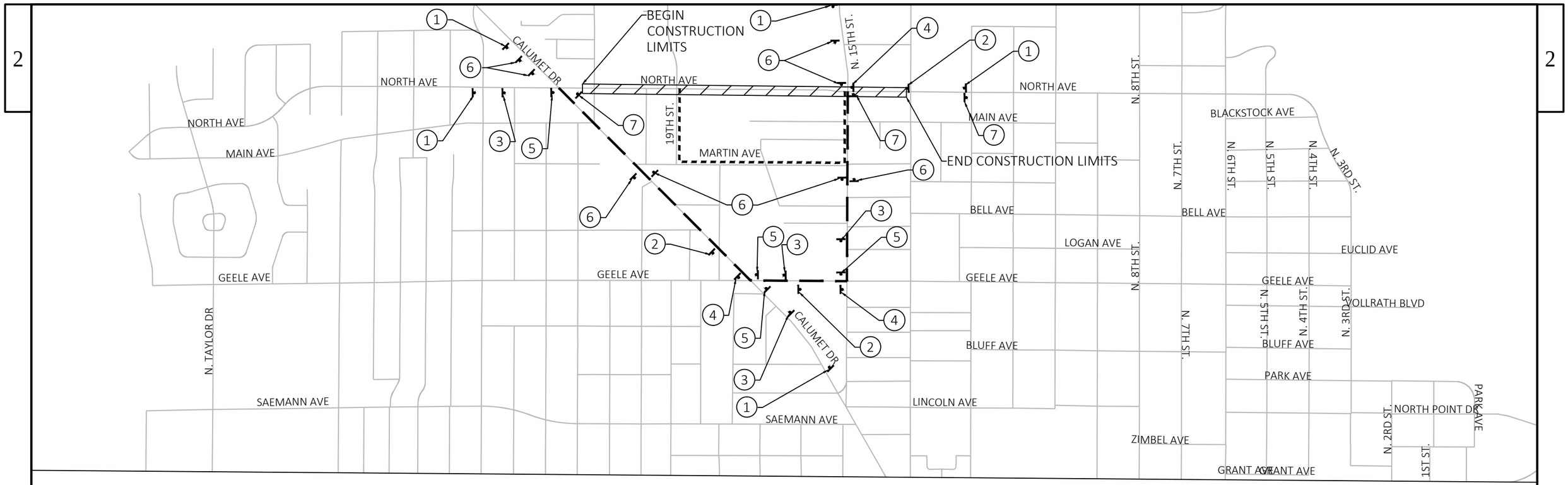
LEGEND

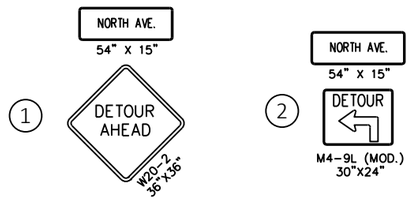
- DRUM
- DRUM WITH TYPE C LIGHT
- TRAFFIC FLOW ARROW
- SIGN
- TYPE 3 BARRICADE WITH SIGN
- TYPE 3 BARRICADE
- ASPHALTIC SURFACE TEMPORARY
- WORK ZONE

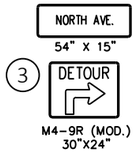
NOTE:
EXISTING 4-WAY STOP AT 13TH STREET TO BE MAINTAINED

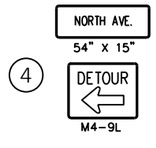
PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN	TRAFFIC CONTROL - STAGE 5	SHEET 109	E

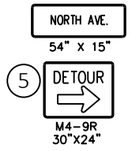
FILE NAME : W:\PROJECTS\W0059\81500117\CADD\CIVIL3D\PLAN SHEETS\02-TC\NORTH AVE- TRAFFIC CONTROL-STAGE 5.DWG
LAYOUT NAME - NorthAve-07Signing
PLOT DATE : 11/1/2018 4:44 PM PLOT BY : CHRIS CLEMENS PLOT NAME : PLOT SCALE : ##########
WISDOT/CADDS SHEET 42

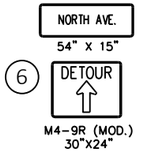


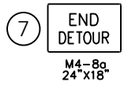












LEGEND:

= NORTH AVENUE DETOUR ROUTE

= CONSTRUCTION LIMITS

= POST MOUNTED SIGN

= PEDESTRIAN DETOUR ROUTE

NOTES:

1. NORTH AVENUE WILL BE CLOSED DURING STAGE 3 (RAILROAD STAGE) WESTBOUND AND EASTBOUND TRAFFIC WILL BE DETOURED .
2. CONTRACTOR SHALL COVER EXISTING SIGNS WHICH CONFLICT WITH THE PROPOSED DETOUR AS DIRECTED BY THE ENGINEER.
3. REFER TO THE WISDOT STANDARD DETAIL DRAWINGS FOR MAINLINE CLOSURE FOR LOCATION AND SPACING BETWEEN SIGNS: BARRICADES AND SIGNS FOR MAINLINE CLOSURES; DETOUR SIGNING FOR MAINLINE CLOSURES.
4. THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS, AS APPROVED BY THE ENGINEER.

NOTES:

1. COLOR:
   BACKGROUND - REFLECTORIZED ORANGE
   LETTERS - BLACK
2. FACE MATERIAL - REFLECTORIZED SHEETING
3. ALL LETTERS ARE SERIES "C"
4. PAID FOR AS TRAFFIC CONTROL SIGNS FIXED MESSAGE

SIGN DETIAL

PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN	PLAN: DETOUR SIGNING PLAN	SHEET 110	E

FILE NAME : W:\PROJECTS\W0059\81500117\CADD\CIVIL3D\PLAN SHEETS\02-NOTES AND OVERVIEW\NORTH AVENUE DETOUR.DWG
LAYOUT NAME - 02
PLOT DATE : 11/1/2018 4:44 PM
PLOT BY : CHRIS CLEMENS
PLOT NAME :
PLOT SCALE : 1 IN:1000 FT
WISDOT/CADDS SHEET 42

WBPG LINE

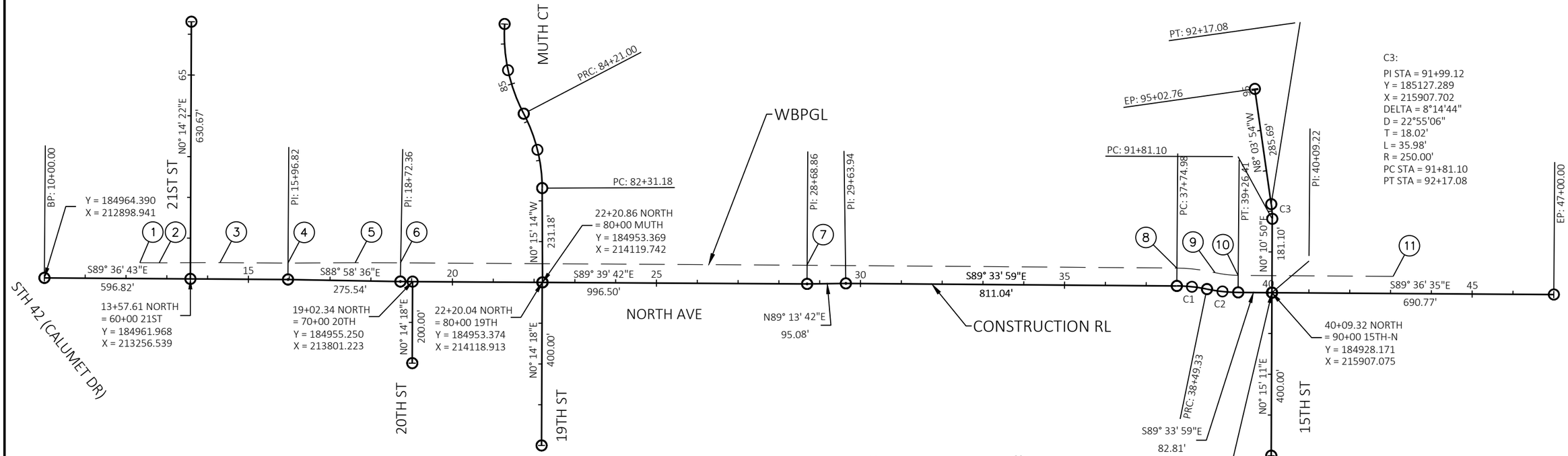
POINT #	STATION	OFFSET FROM CONSTRUCTION RL
1	11+.33.84 (MATCH)	11' LT
2	12+81.27	11' LT
3	14+30.36	12.5' LT
4	15+96.82	12.5' LT
5	17+61.41	16.43' LT
6	18+72.13	18' LT
7	28+68.34	18' LT
8	37+74.98 (PC)	16' LT
9	38+66.91 (PCC)	15.88' LT
10	39+26.41 (PT)	14' LT
11	43+06 (MATCH)	14' LT

CONTROL POINTS

	STATION	OFFSET	DESCRIPTION	NORTHING	EASTING
	13+41	345' LT	MAG NAIL	185307.04	213242.41
	13+41	28' RT	MAG NAIL	184933.91	213239.48
	13+42	140' LT	MAG NAIL	185102.48	213241.69
	16+15	32' RT	MAG NAIL	184928.45	213513.67
	16+19	55' LT	MAG NAIL	185015.09	213519.38
	19+04	47' LT	MAG NAIL	185001.96	213802.70
	19+16	105' RT	MAG NAIL	184849.81	213814.58
	19+16	240' RT	MAG NAIL	184714.75	213813.30
	20+75	28' RT	MAG NAIL	184926.29	213973.55
	22+00	203' LT	MAG NAIL	185156.76	214099.89
	22+07	49' LT	MAG NAIL	185002.53	214105.71
	22+38	135' RT	MAG NAIL	184818.53	214136.58

CONTROL POINTS

	STATION	OFFSET	DESCRIPTION	NORTHING	EASTING
	24+36	52' LT	MAG NAIL	185004.47	214334.79
	27+94	24' RT	MAG NAIL	184925.82	214692.69
	28+12	70' RT	MAG NAIL	184879.50	214710.02
	29+04	363' RT	MAG NAIL	184587.05	214807.35
	29+88	52' LT	3/4" REBAR	185002.91	214887.00
	32+16	34' RT	MAG NAIL	184914.46	215114.28
	34+11	54' LT	3/4" REBAR	185001.03	215310.46
	37+73	53' LT	3/4" REBAR	184997.55	215671.98
	38+60	11' LT	MAG NAIL	184945.24	215760.01
	40+22	252' LT	MAG NAIL	185179.92	215921.69
	40+31	200' RT	MAG NAIL	184728.24	215927.84
	40+38	41' RT	MAG NAIL	184886.48	215935.51



C3:
PI STA = 91+99.12
Y = 185127.289
X = 215907.702
DELTA = 8°14'44"
D = 22°55'06"
T = 18.02'
L = 35.98'
R = 250.00'
PC STA = 91+81.10
PT STA = 92+17.08

C1:
PI STA = 38+12.27
Y = 184944.405
X = 215711.108
DELTA = 11°11'52"
D = 15°03'42"
T = 37.29'
L = 74.35'
R = 380.40'
PC STA = 37+74.98
PT STA = 38+49.33

C2:
PI STA = 38+87.99
Y = 184929.091
X = 215785.504
DELTA = 11°11'52"
D = 14°31'38"
T = 38.66'
L = 77.08'
R = 394.40'
PC STA = 38+49.33
PT STA = 39+26.41

PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN	HORIZONTAL ALIGNMENT	SHEET 111	E

FILE NAME : W:\PROJECTS\W0059\81500117\CADD\CIVIL3D\PLAN SHEETS\02-HORIZ ALI\NORTHAVE-ALIGNMENT.DWG
LAYOUT NAME - NorthAve-01ALI
PLOT DATE : 11/1/2018 4:44 PM PLOT BY : CHRIS CLEMENS PLOT NAME : PLOT SCALE : 1 IN:250 FT

4996-01-79

Line	Item	Item Description	Unit	Total	Qty
0002	201.0105	Clearing	STA	1.000	1.000
0004	201.0120	Clearing	ID	798.000	798.000
0006	201.0205	Grubbing	STA	1.000	1.000
0008	201.0220	Grubbing	ID	798.000	798.000
0010	204.0100	Removing Pavement	SY	24,679.000	24,679.000
0012	204.0120	Removing Asphaltic Surface Milling	SY	1,400.000	1,400.000
0014	204.0150	Removing Curb & Gutter	LF	1,284.000	1,284.000
0016	204.0155	Removing Concrete Sidewalk	SY	3,641.000	3,641.000
0018	204.0170	Removing Fence	LF	128.000	128.000
0020	204.0205	Removing Utility Poles	EACH	10.000	10.000
0022	204.0210	Removing Manholes	EACH	10.000	10.000
0024	204.0220	Removing Inlets	EACH	27.000	27.000
0026	204.0245	Removing Storm Sewer (size) 01. 12-Inch or Less	LF	1,295.000	1,295.000
0028	204.0245	Removing Storm Sewer (size) 02. 13 - 17-Inch	LF	858.000	858.000
0030	204.0245	Removing Storm Sewer (size) 03. 18 - 24-Inch	LF	318.000	318.000
0032	204.0291.S	Abandoning Sewer	CY	42.000	42.000
0034	205.0100	Excavation Common	CY	23,580.000	23,580.000
0036	213.0100	Finishing Roadway (project) 01. 4996-01-79	EACH	1.000	1.000
0038	305.0110	Base Aggregate Dense 3/4-Inch	TON	1,000.000	1,000.000
0040	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	10,208.000	10,208.000
0042	311.0110	Breaker Run	TON	25,350.000	25,350.000
0044	390.0103	Base Patching	SY	22.000	22.000
0046	390.0303	Base Patching Concrete	SY	32.000	32.000
0048	405.0100	Coloring Concrete WisDOT Red	CY	11.000	11.000
0050	415.0080	Concrete Pavement 8-Inch	SY	21,367.000	21,367.000
0052	415.0210	Concrete Pavement Gaps	EACH	13.000	13.000
0054	415.4100	Concrete Pavement Joint Filling	SY	21,367.000	21,367.000
0056	415.5110.S	Concrete Pavement Joint Layout	LS	1.000	1.000
0058	416.0160	Concrete Driveway 6-Inch	SY	664.000	664.000
0060	416.0180	Concrete Driveway 8-Inch	SY	1,314.000	1,314.000
0062	416.0610	Drilled Tie Bars	EACH	329.000	329.000
0064	416.0620	Drilled Dowel Bars	EACH	269.000	269.000
0066	455.0605	Tack Coat	GAL	35.000	35.000
0068	460.2000	Incentive Density HMA Pavement	DOL	300.000	300.000
0070	460.5224	HMA Pavement 4 LT 58-28 S	TON	307.000	307.000
0072	460.6223	HMA Pavement 3 MT 58-28 S	TON	152.000	152.000
0074	465.0120	Asphaltic Surface Driveways and Field Entrances	TON	171.000	171.000
0076	465.0125	Asphaltic Surface Temporary	TON	155.000	155.000
0078	513.2001	Railing Pipe	LF	5.000	5.000
0080	520.8000	Concrete Collars for Pipe	EACH	7.000	7.000

4996-01-79

Line	Item	Item Description	Unit	Total	Qty
0082	601.0110	Concrete Curb Type D	LF	101.000	101.000
0084	601.0405	Concrete Curb & Gutter 18-Inch Type A	LF	60.000	60.000
0086	601.0407	Concrete Curb & Gutter 18-Inch Type D	LF	30.000	30.000
0088	602.0405	Concrete Sidewalk 4-Inch	SF	25,892.000	25,892.000
0090	602.0415	Concrete Sidewalk 6-Inch	SF	2,548.000	2,548.000
0092	602.0515	Curb Ramp Detectable Warning Field Natural Patina	SF	230.000	230.000
0094	602.0615	Curb Ramp Detectable Warning Field Radial Natural Patina	SF	90.000	90.000
0096	602.1500	Concrete Steps	SF	90.000	90.000
0098	608.0005	Storm Sewer Rock Excavation	CY	45.000	45.000
0100	608.0312	Storm Sewer Pipe Reinforced Concrete Class III 12-Inch	LF	795.000	795.000
0102	608.0315	Storm Sewer Pipe Reinforced Concrete Class III 15-Inch	LF	453.000	453.000
0104	608.0324	Storm Sewer Pipe Reinforced Concrete Class III 24-Inch	LF	2,373.000	2,373.000
0106	608.0348	Storm Sewer Pipe Reinforced Concrete Class III 48-Inch	LF	10.000	10.000
0108	608.0354	Storm Sewer Pipe Reinforced Concrete Class III 54-Inch	LF	10.000	10.000
0110	608.0512	Storm Sewer Pipe Reinforced Concrete Class V 12-Inch	LF	40.000	40.000
0112	608.0524	Storm Sewer Pipe Reinforced Concrete Class V 24-Inch	LF	282.000	282.000
0114	611.0639	Inlet Covers Type H-S	EACH	32.000	32.000
0116	611.1230	Catch Basins 2x3-FT	EACH	32.000	32.000
0118	611.2005	Manholes 5-FT Diameter	EACH	10.000	10.000
0120	611.2006	Manholes 6-FT Diameter	EACH	2.000	2.000
0122	611.2008	Manholes 8-FT Diameter	EACH	3.000	3.000
0124	611.8110	Adjusting Manhole Covers	EACH	10.000	10.000
0126	618.0100	Maintenance And Repair of Haul Roads (project) 01. 4996-01-79	EACH	1.000	1.000
0128	619.1000	Mobilization	EACH	1.000	1.000
0130	620.0100	Concrete Corrugated Median	SF	256.000	256.000
0132	620.0300	Concrete Median Sloped Nose	SF	1,375.000	1,375.000
0134	624.0100	Water	MGAL	16.000	16.000
0136	625.0100	Topsoil	SY	11,472.000	11,472.000
0138	627.0200	Mulching	SY	500.000	500.000
0140	628.1504	Silt Fence	LF	440.000	440.000
0142	628.1520	Silt Fence Maintenance	LF	440.000	440.000
0144	628.1905	Mobilizations Erosion Control	EACH	15.000	15.000
0146	628.1910	Mobilizations Emergency Erosion Control	EACH	6.000	6.000
0148	628.2008	Erosion Mat Urban Class I Type B	SY	11,472.000	11,472.000

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Line	Item	Item Description	Unit	Total	Qty
0150	628.7005	Inlet Protection Type A	EACH	3.000	3.000
0152	628.7010	Inlet Protection Type B	EACH	4.000	4.000
0154	628.7015	Inlet Protection Type C	EACH	32.000	32.000
0156	628.7020	Inlet Protection Type D	EACH	37.000	37.000
0158	628.7504	Temporary Ditch Checks	LF	50.000	50.000
0160	628.7560	Tracking Pads	EACH	8.000	8.000
0162	628.7570	Rock Bags	EACH	20.000	20.000
0164	629.0210	Fertilizer Type B	CWT	9.100	9.100
0166	630.0140	Seeding Mixture No. 40	LB	201.000	201.000
0168	630.0200	Seeding Temporary	LB	304.000	304.000
0170	632.0101	Trees (species) (size) (root) 01. Adirondack Crab, 2" Caliper, B&B	EACH	3.000	3.000
0172	632.0101	Trees (species) (size) (root) 02. Autumn Brilliance Serviceberry, 2" Caliper, B&B	EACH	11.000	11.000
0174	632.0101	Trees (species) (size) (root) 03. Autumn Blaze Pear, 2" Caliper, B&B	EACH	8.000	8.000
0176	632.0101	Trees (species) (size) (root) 04. Prairie Sentinel Hackberry, 2" Caliper, B&B	EACH	3.000	3.000
0178	632.0101	Trees (species) (size) (root) 05. Espresso Kentucky Coffee Tree, 2" Caliper, B&B	EACH	6.000	6.000
0180	632.0101	Trees (species) (size) (root) 06. Spring Snow Crabapple, 2" Caliper, B&B	EACH	7.000	7.000
0182	632.0101	Trees (species) (size) (root) 07. Swamp White Oak, 2" Caliper, B&B	EACH	6.000	6.000
0184	632.0101	Trees (species) (size) (root) 08. Autumn Gold Ginkgo, 2" Caliper, B&B	EACH	11.000	11.000
0186	632.0101	Trees (species) (size) (root) 09. Eastern Redbud, 2" Caliper, B&B	EACH	4.000	4.000
0188	632.0101	Trees (species) (size) (root) 10. Robin Hill Serviceberry, 2" Caliper, B&B	EACH	6.000	6.000
0190	632.0101	Trees (species) (size) (root) 11. Early Glow Buckeye, 2" Caliper, B&B	EACH	10.000	10.000
0192	632.0101	Trees (species) (size) (root) 12. Chicagoland Hackberry, 2" Caliper, B&B	EACH	10.000	10.000
0194	632.9101	Landscape Planting Surveillance and Care Cycles	EACH	10.000	10.000
0196	634.0814	Posts Tubular Steel 2x2-Inch X 14-FT	EACH	31.000	31.000
0198	634.0816	Posts Tubular Steel 2x2-Inch X 16-FT	EACH	24.000	24.000
0200	637.2210	Signs Type II Reflective H	SF	267.000	267.000
0202	637.2230	Signs Type II Reflective F	SF	46.000	46.000
0204	638.2102	Moving Signs Type II	EACH	14.000	14.000
0206	638.2602	Removing Signs Type II	EACH	52.000	52.000
0208	638.3000	Removing Small Sign Supports	EACH	50.000	50.000

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Line	Item	Item Description	Unit	Total	Qty
0210	643.0300	Traffic Control Drums	DAY	55,950.000	55,950.000
0212	643.0410	Traffic Control Barricades Type II	DAY	2,862.000	2,862.000
0214	643.0420	Traffic Control Barricades Type III	DAY	10,488.000	10,488.000
0216	643.0705	Traffic Control Warning Lights Type A	DAY	14,829.000	14,829.000
0218	643.0715	Traffic Control Warning Lights Type C	DAY	9,654.000	9,654.000
0220	643.0900	Traffic Control Signs	DAY	17,282.000	17,282.000
0222	643.5000	Traffic Control	EACH	1.000	1.000
0224	644.1410.S	Temporary Pedestrian Surface Asphalt	SF	1,250.000	1,250.000
0226	644.1601.S	Temporary Curb Ramp	EACH	6.000	6.000
0228	644.1616.S	Temporary Pedestrian Safety Fence	LF	200.000	200.000
0230	646.1020	Marking Line Epoxy 4-Inch	LF	11,953.000	11,953.000
0232	646.3020	Marking Line Epoxy 8-Inch	LF	1,891.000	1,891.000
0234	646.5020	Marking Arrow Epoxy	EACH	34.000	34.000
0236	646.5120	Marking Word Epoxy	EACH	4.000	4.000
0238	646.5220	Marking Symbol Epoxy	EACH	17.000	17.000
0240	646.5320	Marking Railroad Crossings Epoxy	EACH	2.000	2.000
0242	646.6120	Marking Stop Line Epoxy 18-Inch	LF	230.000	230.000
0244	646.7120	Marking Diagonal Epoxy 12-Inch	LF	195.000	195.000
0246	646.7420	Marking Crosswalk Epoxy Transverse Line 6-Inch	LF	1,605.000	1,605.000
0248	646.8220	Marking Island Nose Epoxy	EACH	20.000	20.000
0250	646.9000	Marking Removal Line 4-Inch	LF	138.000	138.000
0252	649.0150	Temporary Marking Line Removable Tape 4-Inch	LF	21,000.000	21,000.000
0254	650.4000	Construction Staking Storm Sewer	EACH	47.000	47.000
0256	650.4500	Construction Staking Subgrade	LF	3,954.000	3,954.000
0258	650.7000	Construction Staking Concrete Pavement	LF	3,954.000	3,954.000
0260	650.8500	Construction Staking Electrical Installations (project) 01. 4996-01-79	LS	1.000	1.000
0262	650.9910	Construction Staking Supplemental Control (project) 01. 4996-01-79	LS	1.000	1.000
0264	650.9920	Construction Staking Slope Stakes	LF	3,954.000	3,954.000
0266	652.0225	Conduit Rigid Nonmetallic Schedule 40 2-Inch	LF	4,059.000	4,059.000
0268	652.0235	Conduit Rigid Nonmetallic Schedule 40 3-Inch	LF	1,607.000	1,607.000
0270	653.0115	Pull Boxes Steel 12x36-Inch	EACH	6.000	6.000
0272	653.0140	Pull Boxes Steel 24x42-Inch	EACH	12.000	12.000
0274	654.0101	Concrete Bases Type 1	EACH	4.000	4.000
0276	654.0102	Concrete Bases Type 2	EACH	4.000	4.000
0278	654.0105	Concrete Bases Type 5	EACH	34.000	34.000
0280	654.0113	Concrete Bases Type 13	EACH	4.000	4.000
0282	654.0217	Concrete Control Cabinet Bases Type 9 Special	EACH	1.000	1.000
0284	654.0230	Concrete Control Cabinet Bases Type L30	EACH	1.000	1.000

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Line	Item	Item Description	Unit	Total	Qty
0286	655.0230	Cable Traffic Signal 5-14 AWG	LF	435.000	435.000
0288	655.0240	Cable Traffic Signal 7-14 AWG	LF	362.000	362.000
0290	655.0260	Cable Traffic Signal 12-14 AWG	LF	669.000	669.000
0292	655.0270	Cable Traffic Signal 15-14 AWG	LF	674.000	674.000
0294	655.0290	Cable Traffic Signal 21-14 AWG	LF	671.000	671.000
0296	655.0515	Electrical Wire Traffic Signals 10 AWG	LF	1,089.000	1,089.000
0298	655.0610	Electrical Wire Lighting 12 AWG	LF	3,060.000	3,060.000
0300	655.0620	Electrical Wire Lighting 8 AWG	LF	5,163.000	5,163.000
0302	655.0625	Electrical Wire Lighting 6 AWG	LF	15,537.000	15,537.000
0304	655.0700	Loop Detector Lead In Cable	LF	48.000	48.000
0306	656.0200	Electrical Service Meter Breaker Pedestal (location) 01. 15th Street Signal Cabinet	LS	1.000	1.000
0308	656.0200	Electrical Service Meter Breaker Pedestal (location) 02. 15th Street Lighting Cabinet	LS	1.000	1.000
0310	657.0100	Pedestal Bases	EACH	4.000	4.000
0312	657.0315	Poles Type 4	EACH	4.000	4.000
0314	657.0355	Poles Type 12	EACH	4.000	4.000
0316	657.0430	Traffic Signal Standards Aluminum 10-FT	EACH	4.000	4.000
0318	657.0545	Monotube Arms 45-FT	EACH	3.000	3.000
0320	657.0550	Monotube Arms 50-FT	EACH	1.000	1.000
0322	658.0173	Traffic Signal Face 3S 12-Inch	EACH	12.000	12.000
0324	658.0174	Traffic Signal Face 4S 12-Inch	EACH	8.000	8.000
0326	658.0416	Pedestrian Signal Face 16-Inch	EACH	8.000	8.000
0328	658.0500	Pedestrian Push Buttons	EACH	8.000	8.000
0330	658.5069	Signal Mounting Hardware (location) 01. 15th Street	LS	1.000	1.000
0332	659.2130	Lighting Control Cabinets 120/240 30-Inch	EACH	1.000	1.000
0334	690.0150	Sawing Asphalt	LF	1,304.000	1,304.000
0336	690.0250	Sawing Concrete	LF	1,769.000	1,769.000
0338	715.0415	Incentive Strength Concrete Pavement	DOL	6,410.000	6,410.000
0340	715.0710	Optimized Aggregate Gradation Incentive	DOL	15,469.000	15,469.000
0342	740.0440	Incentive IRI Ride	DOL	2,325.000	2,325.000
0344	ASP.1T0A	On-the-Job Training Apprentice at $5.00/HR	HRS	2,000.000	2,000.000
0346	ASP.1T0G	On-the-Job Training Graduate at $5.00/HR	HRS	1,320.000	1,320.000
0348	SPV.0060	Special 01. Storm Sewer Manhole Cover Type J-Modified	EACH	15.000	15.000
0350	SPV.0060	Special 02. Internal Chimney Seals	EACH	16.000	16.000
0352	SPV.0060	Special 03. Sanitary Manhole Reconstructs	EACH	8.000	8.000
0354	SPV.0060	Special 05. Traffic Signal Controller and Cabinet	EACH	1.000	1.000
0356	SPV.0060	Special 09. Lighting Assembly Single Fixture	EACH	17.000	17.000
0358	SPV.0060	Special 10. Lighting Assembly Twin Fixture	EACH	17.000	17.000

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Line	Item	Item Description	Unit	Total	Qty
0360	SPV.0060	Special 11. LED Luminaires	EACH	4.000	4.000
0362	SPV.0060	Special 12. Luminaire Arms Steel 10-FT	EACH	4.000	4.000
0364	SPV.0060	Special 23. Adjusting Water Valve Boxes	EACH	17.000	17.000
0366	SPV.0075	Special 01. Street Sweeping	HRS	50.000	50.000
0368	SPV.0090	Special 01. Concrete Curb and Gutter 20-Inch, Type A	LF	3,320.000	3,320.000
0370	SPV.0090	Special 02. Concrete Curb and Gutter 20-Inch, Type A Integral	LF	6,798.000	6,798.000
0372	SPV.0090	Special 03. Concrete Curb and Gutter 20-Inch, Type D	LF	430.000	430.000
0374	SPV.0090	Special 04. Concrete Curb and Gutter 32-Inch, Type D	LF	622.000	622.000
0376	SPV.0090	Special 05. Televising Storm Sewer	LF	3,963.000	3,963.000
0378	SPV.0090	Special 06. Bore And Jack Storm Sewer Installation 24-Inch	LF	110.000	110.000
0380	SPV.0090	Special 07. Storm Sewer Lateral 6-Inch	LF	5.000	5.000
0382	SPV.0090	Special 08. Storm Sewer Lateral 10-Inch	LF	39.000	39.000
0384	SPV.0090	Special 09. Storm Sewer Lateral 12-Inch	LF	5.000	5.000
0386	SPV.0090	Special 10. Sanitary Sewer Cured-In-Place Liner	LF	1,536.000	1,536.000
0388	SPV.0090	Special 11. Sanitary Sewer 8-Inch	LF	75.000	75.000
0390	SPV.0090	Special 12. Salvage and Reset Fence	LF	15.000	15.000
0392	SPV.0090	Special 15. Televising Sanitary Sewer	LF	1,611.000	1,611.000
0394	SPV.0105	Special 02. Grading and Shaping for Temporary Widening and Temporary Crossovers	LS	1.000	1.000
0396	SPV.0105	Special 05. Construction Staking Sanitary Sewer	LS	1.000	1.000
0398	SPV.0105	Special 10. Vehicular Video Detection System 4-Camera	LS	1.000	1.000
0400	SPV.0105	Special 11. Traffic Signal Preemption and Priority Control System	LS	1.000	1.000
0402	SPV.0105	Special 15. Research and Locate Existing Land Parcel Monuments	LS	1.000	1.000
0404	SPV.0105	Special 16. Verify and Replace Existing Land Parcel Monuments	LS	1.000	1.000
0406	SPV.0105	Special 17. Staking Proposed Right-of-Way Monuments	LS	1.000	1.000
0408	SPV.0120	Special 01. Water for Seeded Areas	MGAL	16.000	16.000
0410	SPV.0195	Special 01. Excavation, Hauling and Disposal of Petroleum-Contaminated Soil	TON	885.000	885.000
0412	SPV.0200	Special 02. Sanitary Sewer Manhole Liner	VF	66.000	66.000

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CLEARING AND GRUBBING

STATION	LOCATION	201.0120 CLEARING ID	201.0220 GRUBBING ID	201.0105 CLEARING STA	201.0205 GRUBBING STA
16+30 LT	NORTH AVE	6	6	-	-
16+55 LT	NORTH AVE	6	6	-	-
16+78 LT	NORTH AVE	8	8	-	-
17+96 RT	NORTH AVE	24	24	-	-
18+40 RT	NORTH AVE	20	20	-	-
19+65 RT	NORTH AVE	24	24	-	-
20+08 RT	NORTH AVE	8	8	-	-
20+31 LT	NORTH AVE	18	18	-	-
20+09 LT	NORTH AVE	8	8	-	-
20+98 RT	NORTH AVE	24	24	-	-
21+28 LT	NORTH AVE	8	8	-	-
21+56 RT	NORTH AVE	16	16	-	-
22+01 RT	NORTH AVE	18	18	-	-
22+01 RT	NORTH AVE	16	16	-	-
22+74 RT	NORTH AVE	24	24	-	-
22+88 LT	NORTH AVE	16	16	-	-
23+61 RT	NORTH AVE	24	24	-	-
24+52 LT	NORTH AVE	14	14	-	-
25+08 LT	NORTH AVE	18	18	-	-
25+24 RT	NORTH AVE	18	18		
25+61 LT	NORTH AVE	16	16	-	-
26+42 LT	NORTH AVE	18	18	-	-
29+00 - 30+00 RT	NORTH AVE	-	-	1	1
29+99 LT	NORTH AVE	10	10	-	-
30+29 LT	NORTH AVE	10	10	-	-
30+46 RT	NORTH AVE	30	30	-	-
30+56 LT	NORTH AVE	8	8	-	-
30+93 RT	NORTH AVE	24	24	-	-
31+33 RT	NORTH AVE	24	24	-	-
32+12 RT	NORTH AVE	32	32	-	-
32+54 RT	NORTH AVE	26	26	-	-
32+67 LT	NORTH AVE	24	24	-	-
32+71 LT	NORTH AVE	28	28	-	-
34+21 RT	NORTH AVE	24	24	-	-
35+60 RT	NORTH AVE	24	24	-	-
37+23 LT	NORTH AVE	24	24	-	-
37+30 RT	NORTH AVE	28	28	-	-
37+90 RT	NORTH AVE	24	24	-	-
38+50 RT	NORTH AVE	16	16	-	-
41+68 LT	NORTH AVE	30	30	-	-
41+98 RT	NORTH AVE	24	24	-	-
42+27 LT	NORTH AVE	28	28	-	-
42+43 RT	NORTH AVE	8	8	-	-
PROJECT TOTALS		798	798	1	1

REMOVING CONCRETE SIDEWALK

204.0155

STAGE	STATION	LOCATION	S.Y.
2	12+32 - 13+36 LT	NORTH AVE	82
4	12+32 - 19+00 RT	NORTH AVE	380
2	13+75 - 22+25 LT	NORTH AVE	485
4	19+00 - 22+25 RT	NORTH AVE	210
3	22+25 - 31+15 LT	NORTH AVE	305
3	22+25 - 31+15 RT	NORTH AVE	295
2	31+15 - 40+00 LT	NORTH AVE	865
4	31+15 - 40+00 RT	NORTH AVE	600
2	90+00 - 92+00 LT & RT	15TH ST	180
4	89+00 - 90+00 LT & RT	15TH ST	142
2	41+00 - 43+00 LT	NORTH AVE	32
4	41+00 - 43+00 RT	NORTH AVE	65
PROJECT TOTAL			3641

REMOVING UTILITY POLES

204.0205

STAGE	STATION	LOCATION	EACH
2	29+22 LT	NORTH AVE	1
2	30+67 LT	NORTH AVE	1
2	32+30 LT	NORTH AVE	1
2	33+87 LT	NORTH AVE	1
2	35+38 LT	NORTH AVE	1
2	36+88 LT	NORTH AVE	1
2	38+40 LT	NORTH AVE	1
2	40+83 LT	NORTH AVE	1
2	42+55 LT	NORTH AVE	1
2	44+28 LT	NORTH AVE	1
PROJECT TOTAL			10

REMOVING CURB AND GUTTER

204.0150

STAGE	STATION	LOCATION	L.F.	REMARKS
4	12+85 RT	NORTH AVE	10	DRIVEWAY
4	13+10 RT	NORTH AVE	10	DRIVEWAY
4	14+12 RT	NORTH AVE	10	DRIVEWAY
2	14+15 LT	NORTH AVE	40	DRIVEWAY
4	14+37 RT	NORTH AVE	10	DRIVEWAY
4	15+18 RT	NORTH AVE	21	DRIVEWAY
4	15+52 RT	NORTH AVE	24	DRIVEWAY
4	16+84 RT	NORTH AVE	7	DRIVEWAY
4	17+84 RT	NORTH AVE	7	DRIVEWAY
2	40+54 LT	NORTH AVE	33	DRIVEWAY
2	40+60 - 46+16 LT	NORTH AVE	1112	MEDIAN
PROJECT TOTAL			1284	

REMOVING PAVEMENT

204.0100

STAGE	STATION	LOCATION	S.Y.	REMARKS
2	12+33.85 - 22+25	NORTH AVE	4733	MAINLINE PAVEMENT
2	31+15 - 46+23	NORTH AVE	7099	MAINLINE PAVEMENT
3	22+25 - 31+15	NORTH AVE	4250	MAINLINE PAVEMENT
4	12+33.85 - 22+25	NORTH AVE	2757	MAINLINE PAVEMENT
4	31+15 - 46+23	NORTH AVE	4136	MAINLINE PAVEMENT
2	12+33.85 - 13+58	NORTH AVE	36	DRIVEWAYS
2 & 4	13+58 - 19+02	NORTH AVE	362	DRIVEWAYS
2 & 4	19+02 - 22+21	NORTH AVE	95	DRIVEWAYS
2,3 & 4	22+21 - 40+09	NORTH AVE	1016	DRIVEWAYS
2 & 4	40+09 - 46+23	NORTH AVE	195	DRIVEWAYS
PROJECT TOTAL			24679	

REMOVING STORM SEWER STRUCTURES

STAGE	STATION	LOCATION	204.0220 REMOVING INLETS EA.	204.0250 REMOVING MANHOLES EA.
2	12+34 - 43+06	NORTH AVE	9	8
3	22+35 - 31+15	NORTH AVE	4	2
4	12+34 - 43+06	NORTH AVE	14	0
PROJECT TOTALS			27	10

ALL ITEMS ON THIS SHEET ARE CATEGORY 0010 UNLESS OTHERWISE NOTED

REMOVING AND ABANDONING STORM SEWER

STAGE	STATION	LOCATION	204.0150.01 12-INCH OR LESS L.F.	204.0150.02 13-17-INCH L.F	204.0150.03 18-24 L.F	204.0291.S ABANDON CY
2	12+42LT - 12+92LT	NORTH AVE	49	-	-	-
2	12+92LT - 13+77LT	NORTH AVE	81	-	-	-
2,4	13+32RT - 13+72LT	NORTH AVE	-	-	-	2.1
2,4	13+84RT - 13+72LT	NORTH AVE	-	-	-	1.8
2	13+32LT - 13+39LT	NORTH AVE	9	-	-	-
2	13+39LT - 13+72LT	NORTH AVE	42	-	-	-
2	13+99LT - 13+86LT	NORTH AVE	206	-	-	-
2	13+86LT - 13+72LT	NORTH AVE	17	-	-	-
2	13+72LT - 17+27LT	NORTH AVE	-	355	-	-
2,4	16+68RT - 16+68LT	NORTH AVE	54	-	-	-
2	17+49LT - 17+49LT	NORTH AVE	6	-	-	-
2	17+27LT - 19+13LT	NORTH AVE	-	186	-	-
2,4	18+79RT - 19+13LT	NORTH AVE	-	-	-	2.0
2	18+99LT - 19+13LT	NORTH AVE	15	-	-	-
2,4	19+28RT - 19+13LT	NORTH AVE	-	-	-	1.8
2	19+13LT - 22+31LT	NORTH AVE	-	318	-	-
2	22+00LT - 22+31LT	NORTH AVE	33	-	-	-
2,4	22+00RT - 22+31LT	NORTH AVE	-	-	-	2
2	22+43LT - 22+31LT	NORTH AVE	16	-	-	-
2,4	22+42RT - 22+31LT	NORTH AVE	62	-	-	-
2,4	26+00RT - 25+99LT	NORTH AVE	55	-	-	-
3	27+15LT - 27+22RT	NORTH AVE	-	-	-	1.5
3	27+16RT - 27+22RT	NORTH AVE	-	-	-	0.3
3	27+22RT - 28+24RT	NORTH AVE	-	-	-	3.0
3	28+01RT - 28+24RT	NORTH AVE	-	-	-	4.6
3	28+28RT - 28+24RT	NORTH AVE	-	-	-	0.3
3	28+24RT - 28+54LT	NORTH AVE	-	-	-	21.3
3	28+07LT - 28+24RT	NORTH AVE	-	-	-	1.5
2	35+96LT - 36+00LT	NORTH AVE	7	-	-	-
2	36+00LT - 37+88LT	NORTH AVE	188	-	-	-
2	37+88LT - 39+95LT	NORTH AVE	206	-	-	-
2	39+69LT - 39+95LT	NORTH AVE	33	-	-	-
4	39+86RT - 39+71RT	NORTH AVE	22	-	-	-
2,4	39+71RT - 39+95LT	NORTH AVE	47	-	-	-
2,4	40+34RT - 39+95LT	NORTH AVE	68	-	-	-
4	40+49RT - 40+34RT	NORTH AVE	22	-	-	-
2	40+48LT - 39+95LT	NORTH AVE	57	-	-	-
2	39+95LT - 39+93LT	NORTH AVE	-	-	191	-
2,4	39+95RT - 39+95LT	NORTH AVE	-	-	127	-
	PROJECT TOTALS		1295	858	318	42

EARTHWORK SUMMARY

Division	Stage	From/To Station	Location	Common Excavation (Item # 205.0100) Cut	Common Excavation (Item # 205.0100) EBS	Salvaged/Unusable Pavement Material	Available Material	Unexpanded Fill	*Expanded Fill Factor 1.33	Mass Ordinate +/-
	2	12+33.85 - 22+25	NORTH AVE	4,047		1,144	2,903	74	98	2,805
	4	12+33.85 - 22+25	NORTH AVE	2,277		644	1,633	41	55	1,578
	3	22+25 - 31+15	NORTH AVE	5,424		1,533	3,891	370	492	3,399
	4	31+15 - 43+06	NORTH AVE	4,159		1,175	2,984	180	239	2,745
	4	31+15 - 43+06	NORTH AVE	2,142		605	1,537	93	124	1,413
	2	60+00 - 61+92	21ST ST	1,045		200	845	3	4	841
	4	78+80 - 80+00	19TH ST	488		200	288	2	3	285
	2	80+00 - 81+75	MUTH CT	680		175	505	3	4	501
	4	69+34 - 70+00	20TH ST	184		75	109	5	7	102
	4	88+94.5 - 90+00	15TH ST (SOUTH)	646		90	556	3	4	552
	2	90+00 - 92+03.65	15TH ST (NORTH)	988		200	788	4	5	783
	2,3,4	110+15 - 164+05	UNDISTRIBUTED		1,500	0	0	0	0	0
Subtotal				22,080	1,500	6,041	16,039	778	1,035	15,004
Grand Total				23,580		6,041	16,039	778	1,035	15,004

Total Common Excavation **23,580**

ASPHALTIC ITEMS

STAGE	STATION	LOCATION	204.0120 REMOVING ASPHALTIC SURFACE MILLING SY	455.0605 TACK COAT GAL	460.5224 HMA PAVEMENT 4 LT. 58-28 S TONS	460.6223 HMA PAVEMENT 3 MT. 58-28 S TONS	465.0120 ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES TONS	465.0125 ASPHALTIC SURFACE TEMPORARY TONS	REMARKS
2 & 4	43+06 - 46+23	NORTH AVE	1400	35	205	-	-	-	MAINLINE OVERLAY
2	13+00 LT	NORTH AVE	-	-	-	-	32	-	DRIVEWAY
4	13+00 RT	NORTH AVE	-	-	-	-	3	-	DRIVEWAY
2	14+25 LT	NORTH AVE	-	-	-	-	2	-	DRIVEWAY
4	14+25 RT	NORTH AVE	-	-	-	-	4	-	DRIVEWAY
2	14+51 LT	NORTH AVE	-	-	-	-	2	-	DRIVEWAY
2	17+00 LT	NORTH AVE	-	-	-	-	21	-	DRIVEWAY
2	20+65 LT	NORTH AVE	-	-	-	-	63	-	DRIVEWAY
4	20+65 RT	NORTH AVE	-	-	-	-	3	-	DRIVEWAY
2	24+20 LT	NORTH AVE	-	-	-	-	3	-	DRIVEWAY
2	29+25 LT	NORTH AVE	-	-	-	-	21	-	DRIVEWAY
2	41+25 LT	NORTH AVE	-	-	-	-	2	-	DRIVEWAY
4	81+50 RT	MUTH CT	-	-	-	-	8	-	DRIVEWAY
4	90+90 RT	15TH ST	-	-	-	-	4	-	DRIVEWAY
4	91+75 RT	15TH ST	-	-	-	-	1	-	DRIVEWAY
4	28+00 RT	NORTH AVE	-	-	-	-	3	-	TRAIL CONNECTION
3	27+11.91 - 28+79.50	NORTH AVE	-	-	102	152	-	-	RR CROSSINGS
1	STAGE I	NORTH AVE	-	-	-	-	-	120	TEMPORARY CROSSOVERS
2	STAGE II	NORTH AVE	-	-	-	-	-	20	TEMP WIDENING
3	STAGE III	NORTH AVE	-	-	-	-	-	15	TEMP WIDENING
	PROJECT TOTALS		1400	35	307	152	171	155	

CONCRETE DRIVEWAYS

STAGE	STATION	LOCATION	416.0160 6-INCH S.Y.	416.0180 8-INCH S.Y.
4	12+90 RT	NORTH AVE	-	28
4	14+25 RT	NORTH AVE	-	28
2	14+50 LT	NORTH AVE	-	19
4	15+35 RT	NORTH AVE	-	131
2	15+70 LT	NORTH AVE	-	29
2	17+00 LT	NORTH AVE	-	86
2	17+25 LT	NORTH AVE	-	42
2	17+75 LT	NORTH AVE	-	39
2	19+55 LT	NORTH AVE	34	-
4	20+60 RT	NORTH AVE	-	31
2	20+70 LT	NORTH AVE	-	52
2	21+55 LT	NORTH AVE	-	51
3	24+25 LT	NORTH AVE	-	54
3	25+10 RT	NORTH AVE	-	211
3	26+00 LT	NORTH AVE	-	133
3	29+25 LT	NORTH AVE	-	113
3	30+30 RT	NORTH AVE	22	-
3	30+70 RT	NORTH AVE	27	-
3	31+10 RT	NORTH AVE	24	-
4	31+50 RT	NORTH AVE	52	-
4	31+90 RT	NORTH AVE	30	-
4	32+40 RT	NORTH AVE	53	-
4	32+85 RT	NORTH AVE	32	-
4	33+90 RT	NORTH AVE	28	-
4	34+50 RT	NORTH AVE	30	-
4	34+95 RT	NORTH AVE	37	-
4	35+85 RT	NORTH AVE	65	-
4	36+55 RT	NORTH AVE	58	-
4	37+10 RT	NORTH AVE	29	-
4	38+30 RT	NORTH AVE	41	-
4	38+75 RT	NORTH AVE	34	
4	39+00 RT	NORTH AVE	-	63
2	41+25 LT	NORTH AVE	-	40
4	41+25 RT	NORTH AVE	-	41
2	41+50 LT	NORTH AVE	13	-
4	41+60 RT	NORTH AVE	32	-
2	42+10 LT	NORTH AVE	7	-
2	42+50 LT	NORTH AVE	8	-
2	42+95 LT	NORTH AVE	8	-
2	81+50 RT	MUTH CT	-	44
2	89+35 LT	15TH ST	-	15
4	91+25 RT	15TH ST	-	39
2	91+70 LT	15TH ST	-	25
	PROJECT TOTALS		664	1314

BASE AGGREGATE AND WATER

STATION	LOCATION	305.0110 DENSE 3/4-INCH TON	305.0120 DENSE 1-1/4-INCH TON	311.0110 BREAKER RUN TON	624.0100 WATER MGAL	REMARKS
12+33.85 - 46+23	NORTH AVE	-	8140	21600	-	MAINLINE & SIDEROADS
12+33.85 - 46+23	NORTH AVE	1000	-	-	-	SIDEWALK
12+33.85 - 46+23	NORTH AVE	-	400	-	-	CONCRETE DRIVEWAYS
12+33.85 - 46+23	NORTH AVE	-	450	-	-	ASPHALT DRIVEWAYS
43+06 - 46+23	NORTH AVE	-	115	-	-	MEDIAN CURB AREA
27+11.91 - 28+79.5	NORTH AVE	-	653	750	-	HMA PAVEMENT SECTION AT RR TRACKS
12+33.85 - 46+23	NORTH AVE	-	450	-	-	TEMP CROSSOVERS AND TEMP WIDENING
UNDISTRIBUTED	NORTH AVE	-	-	-	16	FOR COMPACTION AND DUST CONTROL
UNDISTRIBUTED	NORTH AVE	-	-	3000	-	FOR EBS BACKFILL
PROJECT TOTALS		1000	10208	25350	16	

CONCRETE PAVEMENT SUMMARY

STAGE	STATION	LOCATION	415.0080 CONCRETE PAVEMENT 8-INCH SY	416.0610* DRILLED TIE BARS EACH	416.0620* DRILLED DOWEL BARS EACH	415.4100 CONCRETE JOINT FILLING SY
2,5	12+33.85 - 22+25	NORTH AVE	5602	80	59	5602
4	12+33.85 - 22+25	NORTH AVE	3026	99	32	3026
3	22+25 - 31+15	NORTH AVE	3899		41	3899
2,5	33+15 - 46+23	NORTH AVE	5405	40	57	5405
4	33+15 - 46+23	NORTH AVE	3435	66	36	3435
	PROJECT TOTALS		21367	285	225	21367

* QUANTITIES INCLUDED ELSEWHERE

CONCRETE CURB AND GUTTER

STAGE	STATION	LOCATION	SPV.0090.01 20-INCH TYPE A LF	SPV.0090.02 20-INCH TYPE A INTEGRAL LF	SPV.0090.03 20-INCH TYPE D LF	SPV.0090.04 32-INCH TYPE D L.F.	601.0110 CURB TYPE D L.F.	601.0405 18-INCH TYPE A L.F.	601.0407 18-INCH TYPE D L.F.	REMARKS
2	12+33 - 13+55 LT	NORTH AVE	63	226	-	-	-	-	-	MAINLINE & ISLAND
2	13+55 - 22+25 LT	NORTH AVE	1056	1086	-	-	40	-	-	MAINLINE, MEDIAN & DRIVEWAYS
3	22+25 - 27+46 LT	NORTH AVE	593	616	-	-	-	-	-	MAINLINE & MEDIAN
3	27+46 - 33+15 LT	NORTH AVE	678	563	142	-	-	-	-	MAINLINE & MEDIAN
2	33+15 - 40+10 LT	NORTH AVE	828	688	173	-	-	-	-	MAINLINE & MEDIAN
2	40+10 - 46+23 LT	NORTH AVE	102	419	-	311	35	-	-	MAINLINE, MEDIAN & DRIVEWAYS
4	12+33 - 19+00 RT	NORTH AVE	-	700	-	-	-	45	30	MAINLINE AND DRIVEWAYS
4	19+00 - 22+25 RT	NORTH AVE	-	420	-	-	-	15	-	MAINLINE AND DRIVEWAYS
3	22+25 - 27+46 RT	NORTH AVE	-	572	20	-	-	-	-	MAINLINE
3	27+46 - 33+15 RT	NORTH AVE	-	529	43	-	-	-	-	MAINLINE
4	33+15 - 40+10 RT	NORTH AVE	-	647	52	-	-	-	-	MAINLINE
4	38+65 RT	NORTH AVE	-	-	-	-	13	-	-	DRIVEWAY
4	38+80 RT	NORTH AVE	-	-	-	-	13	-	-	DRIVEWAY
4	40+10 - 46+23 RT	NORTH AVE	-	332	-	311	-	-	-	MAINLINE & MEDIAN
	PROJECT TOTALS		3320	6798	430	622	101	60	30	

3

SANITARY SEWER AND BASE PATCH SUMMARY

CAT 0020

FROM STATION	TO STATION	390.0303 BASE PATCHING CONCRETE SY	* 416.0610 DRILLED TIE BARS EA	* 416.0620 DRILLED DOWEL BARS EA	* 520.8000 CONCRETE COLLAR EA	* 690.0250 SAWING CONCRETE LF	SPV.0090.11 8-INCH LF	SPV.0090.15 TELEVISING SANITARY SEWER LF	REMARKS
31+12, RT	31+18 RT	-	-	-	-	-	6	6	SAN. SPOT REPAIR
EXIST MH, 90+08 15TH ST, CL	90+62 15TH ST, CL	-	-	-	1	-	54	54	SAN. SPOT REPAIR
78+27 19TH ST, CL	78+32 19TH ST, CL	16	22	22	-	40	5	5	SAN. SPOT REPAIR
78+98 19TH ST, CL	79+03 19TH ST, CL	-	-	-	-	-	5	5	SAN. SPOT REPAIR
82+96 MUTH CT, RT	83+01 MUTH CT, RT	16	22	22	-	40	5	5	SAN. SPOT REPAIR
PROJECT TOTALS		32	44	44	1	80	75	75	

* ADDITIONAL QUANTITIES ELSEWHERE

CONCRETE STEPS AND RAILING

STATION	LOCATION	513.2001 RAILING PIPE LF	602.1500 CONCRETE STEPS SF
35+18 - 35+26	NORTH AVE RT.	-	30
36+17 - 36+22	NORTH AVE RT.	-	20
36+34 - 36+37	NORTH AVE RT.	-	15
38+59 - 38+64	NORTH AVE RT.	5	25
PROJECT TOTALS		5	90

3

CURB RAMP DETECTABLE WARNING FIELD NATURAL PATINA

STAGE	INTERSECTION	LOCATION	602.0515 SF	602.0615 RADIAL SF
2	21ST ST.	NW QUAD	10	-
4	21ST ST.	SOUTH	10	-
2	21ST ST.	NE QUAD	-	10
2	21ST ST.	ISLAND	30	-
2	20TH ST.	NE QUAD	10	-
4	20TH ST.	SE QUAD	10	-
4	20TH ST.	SW QUAD	10	-
2	20TH ST.	NW QUAD	10	-
2	19TH ST.	NE QUAD	10	-
4	19TH ST.	SE QUAD	20	-
4	19TH ST.	SW QUAD	20	-
2	19TH ST.	NW QUAD	10	-
3	WEST TRACKS	NE QUAD	10	-
3	WEST TRACKS	SE QUAD	10	-
3	WEST TRACKS	SW QUAD	10	-
3	WEST TRACKS	NW QUAD	10	-
3	EAST TRACKS	NE QUAD	10	-
3	EAST TRACKS	SE QUAD	10	-
3	EAST TRACKS	SW QUAD	10	-
3	EAST TRACKS	NW QUAD	10	-
2	15TH ST.	NE QUAD	-	20
4	15TH ST.	SE QUAD	-	20
4	15TH ST.	SW QUAD	-	20
2	15TH ST.	NW QUAD	-	20
PROJECT TOTALS			230	90

BASE PATCHING ASPHALTIC

390.0103

STATION	LOCATION	SY	REMARKS
88+90 LT	15TH ST	11	STORM MH
92+10 LT	15TH ST	11	STORM MH
PROJECT TOTAL		22	

SANITARY MANHOLE SUMMARY

CAT 0020

STATION	LOCATION	EXISTING COVER ELEVATION	PROPOSED COVER ELEVATION	PROPOSED ELEVATION CHANGE VF	* 611.8110 ADJUSTING MANHOLE COVERS EACH	SPV.0060.02 INTERNAL CHIMNEY SEAL EACH	SPV.0060.03 RECONSTRUCTS EACH
13+59, 6' LT.	NORTH AVE	662.80	663.06	0.26	1	1	-
15+48, 6' LT.	NORTH AVE	661.73	662.06	0.33	1	1	-
17+39, 9' LT.	NORTH AVE	659.05	658.78	-0.27	1	1	-
19+03, 9' LT.	NORTH AVE	655.11	654.71	-0.40	1	1	-
20+61, 9' LT.	NORTH AVE	651.07	650.67	-0.40	1	1	-
22+21, 9' LT.	NORTH AVE	647.45	647.22	-0.23	1	1	-
24+58, 10' LT.	NORTH AVE	646.42	645.85	-0.57	-	1	1
26+48, 9' LT.	NORTH AVE	645.61	644.83	-0.78	-	1	1
26+95, 9' LT.	NORTH AVE	645.19	645.15	-0.04	1	1	-
29+23, 8' RT.	NORTH AVE	643.15	644.15	1.00	-	1	1
31+74, 11' RT.	NORTH AVE	641.52	642.07	0.55	-	1	1
33+83, 10' RT.	NORTH AVE	640.89	641.46	0.57	-	1	1
35+93, 10' RT.	NORTH AVE	640.01	640.84	0.83	-	1	1
38+01, 8' RT.	NORTH AVE	639.07	639.83	0.76	-	1	1
40+10, 7' RT.	NORTH AVE	636.85	636.99	0.14	1	1	-
42+27, 7' RT.	NORTH AVE	637.75	637.15	-0.60	-	1	1
PROJECT TOTALS					8	16	8

* ADDITIONAL QUANTITIES INCLUDED ELSEWHERE

PAVING GAPS

415.0210

STAGE	STATION	LOCATION	EACH
2	14+50	DRIVEWAY LT	1
2	17+70	DRIVEWAY LT	1
2	19+50	DRIVEWAY LT	1
2	22+20	MUTH CT	1
2	26+00	DRIVEWAY LT	1
2	41+30	DRIVEWAY LT	1
2	91+25	15TH ST DRIVEWAY RT	1
4	14+00	DRIVEWAY RT	1
4	17+00	DRIVEWAY RT	1
4	20+60	ALLEY	1
4	24+50	DRIVEWAY RT	1
4	39+00	DRIVEWAY RT	1
4	41+25	DRIVEWAY RT	1
PROJECT TOTAL			13

CONCRETE COLLARS FOR PIPE

520.8000

STATION	LOCATION	* EACH
12+42 LT	NORTH AVENUE	1
12+92 RT	NORTH AVENUE	1
22+30 LT	NORTH AVENUE	1
28+54 LT	NORTH AVENUE	1
39+93 LT	15TH STREET	1
39+95 RT	15TH STREET	1
PROJECT TOTAL		6

* ADDITIONAL QUANTITIES ELSEWHERE

3

CONCRETE SIDEWALK

STAGE	STATION	LOCATION	602.0405 4-INCH SF	602.0415 6-INCH SF	405.0100 COLORING CONCRETE WISDOT RED CY	REMARKS
4	12+32 - 12+86	NORTH AVE RT	264	-	-	
4	13+10 - 14+12	NORTH AVE RT	500	-	-	
4	14+36 - 15+19	NORTH AVE RT	411	-	-	
4	15+49 - 16+85	NORTH AVE RT	675	-	-	
4	17+23 - 18+76	NORTH AVE RT	763	-	-	
4	19+29 - 20+56	NORTH AVE RT	632	-	-	
4	19+85 - 19+92	NORTH AVE RT	49	-	-	SERVICE WALK
4	20+70 - 22+02	NORTH AVE RT	680	-	-	
3	22+49 - 24+82	NORTH AVE RT	1160	-	-	
3	25+37 - 27+37	NORTH AVE RT	997	-	-	
3	27+61 - 28+34	NORTH AVE RT	370	-	-	
3	30+12 - 30+16	NORTH AVE RT	46	-	-	SERVICE WALK
3	30+35 - 30+64	NORTH AVE RT	137	-	-	
3	30+75 - 31+03	NORTH AVE RT	130	-	-	
3	30+83 - 30+87	NORTH AVE RT	40	-	-	SERVICE WALK
3	31+11 - 31+43	NORTH AVE RT	150	-	-	
3	31+24 - 31+28	NORTH AVE RT	44	-	-	SERVICE WALK
3	31+60 - 31+89	NORTH AVE RT	134	-	-	
3	31+99 -32+35	NORTH AVE RT	172	-	-	
3	32+21 - 32+25	NORTH AVE RT	47	-	-	SERVICE WALK
3	32+45 - 32+79	NORTH AVE RT	161	-	-	
3	32+65 - 32+71	NORTH AVE RT	39	-	-	SERVICE WALK
3,4	32+91 - 33+52	NORTH AVE RT	198	-	-	
3,4	33+14 - 33+17	NORTH AVE RT	38	-	-	SERVICE WALK
4	33+52 - 33+82	NORTH AVE RT	142	-	-	
4	33+95 - 34+45	NORTH AVE RT	240	-	-	
4	34+57 - 34+91	NORTH AVE RT	157	-	-	
4	34+83 - 34+88	NORTH AVE RT	53	-	-	SERVICE WALK
4	35+04 - 35+71	NORTH AVE RT	323	-	-	
4	35+18 - 35+26	NORTH AVE RT	40	-	-	SERVICE WALK
4	35+95 - 36+45	NORTH AVE RT	239	-	-	
4	36+17 - 36+22	NORTH AVE RT	33	-	-	SERVICE WALK
4	36+34 - 36+37	NORTH AVE RT	36	-	-	SERVICE WALK
4	36+68 - 37+09	NORTH AVE RT	190	-	-	
4	36+98 - 37+02	NORTH AVE RT	72	-	-	SERVICE WALKS
4	37+17 - 37+62	NORTH AVE RT	219	-	-	
4	37+37 - 37+41	NORTH AVE RT	63	-	-	SERVICE WALKS
4	37+70 - 38+25	NORTH AVE RT	250	-	-	
4	38+22 - 38+25	NORTH AVE RT	39	-	-	SERVICE WALKS
4	38+40 - 38+72	NORTH AVE RT	165	-	-	
4	38+59 - 38+65	NORTH AVE RT	25	-	-	SERVICE WALKS
4	38+80 - 38+86	NORTH AVE RT	34	-	-	SERVICE WALKS
4	39+14 - 39+85	NORTH AVE RT	-	602	-	
4	40+34 - 41+10	NORTH AVE RT	971	-	-	
4	41+46 - 41+63	NORTH AVE RT	93	-	-	
		SUBTOTALS	11221	602	0	

STAGE	STATION	LOCATION	602.0405 4-INCH SF	602.0415 6-INCH SF	405.0100 COLORING CONCRETE WISDOT RED CY	REMARKS
4	41+78 - 42+00	NORTH AVE RT	122	-	-	
4	42+10 -42+13	NORTH AVE RT	13	-	-	SERVICE WALK
4	42+23 - 42+26	NORTH AVE RT	9	-	-	SERVICE WALK
4	42+48 - 42+52	NORTH AVE RT	17	-	-	SERVICE WALK
4	42+78 - 42+83	NORTH AVE RT	21	-	-	SERVICE WALK
2	12+91 - 13+31	NORTH AVE LT	1027	-	-	
2	14+23 - 15+53	NORTH AVE LT	651	-	-	
2	14+91 - 14+97	NORTH AVE LT	38	-	-	SERVICE WALK
2	15+84 - 17+12	NORTH AVE LT	645	-	-	
2	17+36 - 17+62	NORTH AVE LT	131	-	-	
2	17+81 - 19+47	NORTH AVE LT	827	-	-	
2	18+40 - 18+89	NORTH AVE LT	139	-	-	
2	19+60 - 20+54	NORTH AVE LT	472	-	-	
2	20+82 - 21+42	NORTH AVE LT	302	-	-	
2	21+69 - 21+94	NORTH AVE LT	125	-	-	
2,3	22+44 - 24+07	NORTH AVE LT	1118	-	-	
3	24+36 - 25+73	NORTH AVE LT	685	-	-	
3	25+07 - 25+12	NORTH AVE LT	47	-	-	SERVICE WALK
3	26+20 - 27+29	NORTH AVE LT	551	-	-	
3	27+54 - 28+07	NORTH AVE LT	262	-	-	
3	28+33 - 29+01	NORTH AVE LT	338	-	-	
3,2	29+56 - 39+82	NORTH AVE LT	6111	-	-	
2	40+35 - 41+09	NORTH AVE LT	967	-	-	
2	41+43 - 41+47	NORTH AVE LT	20	-	-	
2	41+81 - 41+85	NORTH AVE LT	17	-	-	SERVICE WALK
2	42+18 - 42+22	NORTH AVE LT	16	-	-	SERVICE WALK
2	13+11	NORTH AVE LT	-	35	-	CURB RAMP
2,4	13+39	NORTH AVE LT & RT	-	155	1	MEDIAN ISLAND
2	14+18	NORTH AVE LT	-	95	-	CURB RAMP
2	18+78	NORTH AVE LT	-	67	-	CURB RAMP
4	18+78	NORTH AVE RT	-	133	-	CURB RAMP
2	19+25	NORTH AVE LT	-	67	-	CURB RAMP
4	19+25	NORTH AVE RT	-	144	-	CURB RAMP
4	21+89	NORTH AVE RT	-	45	-	CURB RAMP
2	21+99	NORTH AVE LT	-	94	-	CURB RAMP
4	20+46	NORTH AVE RT	-	130	-	CURB RAMP
2	22+50	NORTH AVE LT	-	25	-	CURB RAMP
3	27+00	NORTH AVE LT	-	144	3	MEDIAN ISLAND
3	27+87	NORTH AVE LT	-	272	5	MEDIAN ISLAND
3	28+56	NORTH AVE LT	-	90	1	MEDIAN ISLAND
4	39+66	NORTH AVE RT	-	100	-	CURB RAMP
2	39+66	NORTH AVE LT	-	100	-	CURB RAMP
4	40+49	NORTH AVE RT	-	125	-	CURB RAMP
2	40+49	NORTH AVE LT	-	125	-	CURB RAMP
		SUBTOTALS	14671	1946	11	
		PROJECT TOTALS	25892	2548	11	

STORM SEWER PIPES

ALL ITEMS ON THIS SHEET ARE CATEGORY 0010 UNLESS OTHERWISE NOTED

FROM	-	TO	LOCATION	608.0312 Storm Sewer Pipe Reinforced Concrete Class III 12-Inch LF	608.0315 Storm Sewer Pipe Reinforced Concrete Class III 15-Inch LF	608.0324 Storm Sewer Pipe Reinforced Concrete Class III 24-Inch LF	608.0348 Storm Sewer Pipe Reinforced Concrete Class III 48-Inch LF	608.0354 Storm Sewer Pipe Reinforced Concrete Class III 54-Inch LF	608.0512 Storm Sewer Pipe Reinforced Concrete Class V 12-Inch LF	608.0524 Storm Sewer Pipe Reinforced Concrete Class V 24-Inch LF	SPV.0090.05 Televising Storm Sewer LF	INLET ELEVATION	DISCHARGE ELEVATION	SLOPE FT/FT
E.0	-	0.0	NORTH AVE			49					49	657.58	656.99	0.0120
0.0	-	1.0	NORTH AVE			109					109	656.99	655.69	0.0119
1.0	-	2.0	NORTH AVE			268					268	655.69	653.61	0.0078
1.1	-	1.2	NORTH AVE	58							58	657.52	656.94	0.0100
1.2	-	1.0	NORTH AVE		51						51	656.69	656.44	0.0049
1.3	-	1.0	NORTH AVE	61							61	657.61	656.69	0.0151
2.0	-	3.0	NORTH AVE			249					249	653.61	647.97	0.0227
2.1	-	2.0	NORTH AVE	8							8	654.76	654.61	0.0187
2.2	-	2.0	NORTH AVE	56							56	654.89	654.61	0.0050
3.0	-	4.0	NORTH AVE			314					314	647.97	640.20	0.0247
3.1	-	3.0	NORTH AVE	7							7	649.12	648.97	0.0214
3.2	-	3.0	NORTH AVE		69						69	649.06	648.72	0.0049
3.3	-	3.2	NORTH AVE		29						29	649.35	649.06	0.0100
3.4	-	3.3	NORTH AVE	29							29	650.18	649.60	0.0200
4.1	-	4.2	NORTH AVE	41							41	642.00	641.59	0.0100
4.2	-	4.0	NORTH AVE		34						34	641.34	640.95	0.0115
4.4	-	4.0	NORTH AVE		69						69	641.30	640.95	0.0051
4.4	-	4.3	NORTH AVE	41							41	641.71	641.30	0.0100
5.0	-	6.0	NORTH AVE			185					185	639.98	639.05	0.0050
5.1	-	5.0	NORTH AVE	7							7	640.14	639.99	0.0214
5.2	-	5.0	NORTH AVE	46							46	640.45	639.99	0.0100
6.0	-	7.0	NORTH AVE							162	162	637.04	636.23	0.0050
6.1	-	6.0	NORTH AVE	7							7	640.07	640.00	0.0100
6.2	-	6.0	NORTH AVE	46							46	640.23	640.00	0.0050
7.0	-	8.0	NORTH AVE							52	52	636.23	635.97	0.0050
7.1	-	7.0	NORTH AVE						12		12	640.29	640.13	0.0133
7.2	-	7.0	NORTH AVE						12		12	640.33	640.29	0.0033
7.3	-	7.0	NORTH AVE							68	68	636.52	636.23	0.0043
8.1	-	8.0	NORTH AVE						16		16	640.22	640.17	0.0031
9.0	-	10.0	NORTH AVE			300					300	635.58	634.08	0.0050
9.1	-	9.0	NORTH AVE	7							7	636.73	636.58	0.0214
9.2	-	9.0	NORTH AVE	51							51	637.34	636.58	0.0149
10.0	-	11.0	NORTH AVE			300					300	634.08	632.58	0.0050
10.1	-	10.0	NORTH AVE	7							7	635.23	635.08	0.0214
10.2	-	10.0	NORTH AVE	51							51	636.10	635.08	0.0200
11.0	-	12.0	NORTH AVE			265					265	632.58	627.51	0.0191
11.1	-	11.0	NORTH AVE	7							7	634.15	634.00	0.0214
11.2	-	11.0	NORTH AVE	50							50	634.60	633.58	0.0204
12.0	-	13.0	NORTH AVE			191					191	627.29	626.54	0.0039
12.1	-	12.0	NORTH AVE		52						52	630.93	630.41	0.0100
12.2	-	12.0	NORTH AVE	48							48	631.49	630.77	0.0150
12.3	-	12.1	NORTH AVE	40							40	631.61	631.18	0.0108
12.4	-	12.0	NORTH AVE		84						84	628.45	628.04	0.0049
12.5	-	12.4	NORTH AVE		65						65	630.65	630.00	0.0100
12.6	-	12.5	NORTH AVE	55							55	631.42	630.87	0.0100
13.0	-	EXIST	NORTH AVE			8					8	626.54	626.50	0.0050
14.0	-	12.0	NORTH AVE			127					127	627.79	627.29	0.0039
EXIST	-	4.0	NORTH AVE					10			10	633.35	633.32	0.0030
EXIST	-	8.0	NORTH AVE				10				10	635.97	635.96	0.0010
EXIST	-	0.0	NORTH AVE	72							72	657.50	656.99	0.0071
EXIST	-	14.0	NORTH AVE			8					8	627.81	627.79	0.0025
			TOTALS	795	453	2373	10	10	40	282	3963			

STORM SEWER STRUCTURES

ALL ITEMS ON THIS SHEET ARE CATEGORY 0010 UNLESS OTHERWISE NOTED

STAGE	STRUCTURE	STATION	OFFSET*	LOCATION	SPV.0060.01 Manhole Covers Type J-Modified EACH	611.0639 Inlet Covers Type H-S EACH	611.1230 Catch Basins 2x3-FT EACH	611.2005 Manholes 5-FT Diameter EACH	611.2006 Manholes 6-FT Diameter EACH	611.2008 Manholes 8-FT Diameter EACH	611.8110 Adjusting Manhole Covers EACH	650.4000 Construction Staking Storm Sewer EACH	RIM ELEVATION	INVERT** ELEVATION	DEPTH*** FT
2	0.0	12+91.21	32.4' LT	NORTHAVE	1			1				1	662.87	656.99	4.89
2	1.0	14+00.00	34' LT	NORTHAVE	1			1				1	662.26	655.69	5.58
2	1.1	13+26.64	80.3' LT	NORTHAVE		1	1					1	662.25	655.52	5.73
2	1.2	13+84.92	82.7' LT	NORTHAVE		1	1					1	662.26	654.69	6.57
4	1.3	14+00.00	27.5' RT	NORTHAVE		1	1					1	662.45	655.61	5.84
2	2.0	16+68.00	31.5' LT	NORTHAVE	1			1				1	660.04	653.61	5.44
2	2.1	16+63.00	37.1' LT	NORTHAVE		1	1					1	660.06	652.76	6.30
4	2.2	16+68.00	24.7' RT	NORTHAVE		1	1					1	660.25	652.89	6.36
2	3.0	19+16.86	29' LT	NORTHAVE	1			1				1	653.95	647.97	4.99
2	3.1	19+11.86	34.5' LT	NORTHAVE		1	1					1	653.98	647.12	5.86
4	3.2	19+16.86	40' RT	NORTHAVE		1	1					1	654.71	647.06	6.65
4	3.3	18+87.85	40' RT	NORTHAVE		1	1					1	655.06	647.35	6.71
4	3.4	18+70.97	16.6' RT	NORTHAVE		1	1					1	655.37	648.18	6.18
2	4.0	22+30.56	29' LT	NORTHAVE	1					1		1	646.76	633.32	12.66
2	4.1	22+02.80	59.8' LT	NORTHAVE		1	1					1	646.63	640.00	5.63
3	4.2	22+44.02	60.2' LT	NORTHAVE		1	1					1	646.65	639.34	6.31
4	4.3	21+96.16	40' RT	NORTHAVE		1	1					1	647.05	639.71	6.34
3	4.4	22+37.62	40' RT	NORTHAVE		1	1					1	646.89	639.30	6.59
3	5.0	24+55.00	29' LT	NORTHAVE	1			1				1	645.49	639.98	4.52
3	5.1	24+50.00	34.5' LT	NORTHAVE		1	1					1	645.42	638.14	6.28
3	5.2	24+50.00	16.5' RT	NORTHAVE		1	1					1	645.46	638.45	6.01
3	6.0	26+40.00	29' LT	NORTHAVE	1			1				1	644.54	637.04	6.51
3	6.1	26+45.00	34.5' LT	NORTHAVE		1	1					1	644.45	638.07	5.38
3	6.2	26+45.00	16.5' RT	NORTHAVE		1	1					1	644.52	638.23	5.29
3	7.0	28+01.86	23.5' LT	NORTHAVE	1			1				1	644.89	636.23	7.67
3	7.1	28+06.86	34.5' LT	NORTHAVE		1	1					1	644.80	638.29	5.51
3	7.2	28+12.65	17.5' LT	NORTHAVE		1	1					1	644.82	638.33	5.49
3	7.3	28+01.37	44.6' RT	NORTHAVE							1		644.52		
3	8.0	28+53.71	23.5' LT	NORTHAVE	1					1		1	644.70	635.97	7.74
3	8.1	28+43.45	35.6' LT	NORTHAVE		1	1					1	643.84	638.22	4.63
2	9.0	31+30.00	27' LT	NORTHAVE	1			1				1	641.46	635.58	4.89
2	9.1	31+25.00	32.5' LT	NORTHAVE		1	1					1	641.32	634.73	5.59
4	9.2	31+25.00	23.5' RT	NORTHAVE		1	1					1	641.98	635.34	5.64
2	E.0	12+42.11	31.7' LT	NORTHAVE							1		663.14		
2	10.0	34+30.00	27' LT	NORTHAVE	1			1				1	640.56	634.08	5.49
2	10.1	34+25.00	32.5' LT	NORTHAVE		1	1					1	640.42	633.23	6.19
4	10.2	34+25.00	23.5' RT	NORTHAVE		1	1					1	641.08	634.10	5.98
2	11.0	37+30.00	27' LT	NORTHAVE	1			1				1	639.66	632.58	6.08
2	11.1	37+25.00	32.5' LT	NORTHAVE		1	1					1	639.52	632.15	6.37
4	11.2	37+33.75	23.1' RT	NORTHAVE		1	1					1	640.16	632.60	6.56
2	12.0	39+94.39	16.6' LT	NORTHAVE	1					1		1	636.96	627.51	8.46
4	12.1	39+55.00	17.8' RT	NORTHAVE		1	1					1	637.07	628.93	7.14
2	12.2	39+55.00	43.9' LT	NORTHAVE		1	1					1	636.87	629.49	6.38
4	12.3	39+77.21	51.6' RT	NORTHAVE		1	1					1	636.47	629.61	5.86
2	12.4	40+75.00	40.5' LT	NORTHAVE		1	1					1	636.21	626.45	8.76
4	12.5	40+80.55	24.1' RT	NORTHAVE		1	1					1	636.34	628.65	6.69
4	12.6	40+34.62	54.1' RT	NORTHAVE		1	1					1	636.87	629.42	6.45
2	13.0	39+93.47	207.3' LT	NORTHAVE	1				1			1	635.78	626.54	8.25
4	14.0	39+94.75	110.5' RT	NORTHAVE	1				1			1	636.88	627.79	8.10
				TOTALS	15	32	32	10	2	3	2	47			

REMARKS

* STATIONS AND OFFSETS ARE TO CENTER OF STRUCTURE

** FOR STRUCTURES WITH SUMPS, THE INVERT ELEVATION IS THE ELEVATION OF THE SUMP. FOR STRUCTURES WITHOUT SUMPS, THE INVERT ELEVATION IS THE ELEVATION OF THE LOWEST PIPE FLOW LINE

*** DEPTH = RIM ELEV -(INVERT ELEVATION OF LOWEST PIPE + PIPE THICKNESS) - COVER HEIGHT - 6 -INCH ADJUSTMENT RING HEIGHT

3

STORM SEWER LATERALS

CAT. 0200

STATION	LOCATION	SPV.0090.07 Storm Sewer Lateral 6-Inch LF	SPV.0090.08 Storm Sewer Lateral 10-Inch LF	SPV.0090.09 Storm Sewer Lateral 12-Inch LF
39+75 LT - MH 12	NORTH AVE	-	39	-
14+43 LT	NORTH AVE	5	-	-
14+99 LT	NORTH AVE	-	-	5
PROJECT TOTALS		5	39	5

STORM SEWER ROCK EXCAVATION

608.0005

STATION	LOCATION	C.Y.
21+50 - 22+50	NORTH AVE	45
PROJECT TOTAL		45

SILT FENCE

STATION	LOCATION	628.1504 SILT FENCE LF	628.1520 SILT FENCE MAINTENANCE LF
26+20 - 27+05 LT	NORTH AVE	85	85
26+70 - 27+25 RT	NORTH AVE	55	55
12+33.85 - 43+06	UNDISTRIBUTED	300	300
PROJECT TOTALS		440	440

CONCRETE CORRUGATED MEDIAN

620.0100

STATION	LOCATION	SF
29+48 LT	NORTH AVE	256
PROJECT TOTAL		256

LANDSCAPING SUMMARY

STAGE	STATION	LOCATION	625.0100 TOPSOIL SY	627.0200 MULCHING SY	628.2008 EROSION MAT URBAN CLASS I TYPE B SY	629.0210 FERTILIZER TYPE B CWT	630.0140 SEEDING MIXTURE NO. 40 LB	630.0200 SEEDING TEMPORARY LB	SPV.0120.01 WATER FOR SEEDED AREAS MGAL
2	12+33 - 13+55 LT	NORTH AVE	242	-	242	0.2	0.3	0.5	0.3
2	13+55 - 22+25 LT	NORTH AVE	1340	-	1340	0.9	24	36	1.7
3	22+25 - 27+46 LT	NORTH AVE	1105	-	1105	0.7	20	30	1.4
3	27+46 - 33+15 LT	NORTH AVE	1661	-	1661	1.0	30	45	2.1
2	33+15 - 40+10 LT	NORTH AVE	2030	-	2030	1.3	36	55	2.5
2	40+10 - 46+23 LT	NORTH AVE	190	-	190	0.1	3.5	5	0.2
4	12+33 - 19+00 RT	NORTH AVE	850	-	850	0.5	15	23	1.1
4	19+00 - 22+25 RT	NORTH AVE	525	-	525	0.3	9	14	0.7
3	22+25 - 27+46 RT	NORTH AVE	1250	-	1250	0.8	23	34	1.6
3	27+46 - 33+15 RT	NORTH AVE	711	-	711	0.5	12.6	19.4	0.9
4	31+15 - 40+10 RT	NORTH AVE	869	-	869	0.6	15.4	23.7	1.1
4	40+10 - 46+23 RT	NORTH AVE	600	-	600	0.3	10.8	16.2	2.4
	UNDISTRIBUTED	NORTH AVE	100	500	100	2.0	1	2	-
	PROJECT TOTALS		11472	500	11472	9.1	201	304	16

CONCRETE MEDIAN SLOPED NOSE

620.0300

STATION	LOCATION	SF	TYPE
13+35 LT.	NORTH AVE	11	2
13+43 LT.	NORTH AVE	11	2
16+00 LT.	NORTH AVE	75	1
18+70 LT.	NORTH AVE	106	1
19+36 LT.	NORTH AVE	48	1
21+84 LT.	NORTH AVE	48	1
22+58 LT.	NORTH AVE	48	1
24+52 LT.	NORTH AVE	54	1
26+43 LT.	NORTH AVE	105	1
27+31 LT.	NORTH AVE	48	1
27+61 LT.	NORTH AVE	48	1
28+18 LT.	NORTH AVE	49	1
28+49 LT.	NORTH AVE	59	1
28+67 LT.	NORTH AVE	48	1
29+64 LT.	NORTH AVE	98	1
30+80 LT.	NORTH AVE	96	1
31+21 LT.	NORTH AVE	96	1
34+70 LT.	NORTH AVE	96	1
35+12 LT.	NORTH AVE	96	1
37+71 LT.	NORTH AVE	50	1
42+58 LT.	NORTH AVE	51	1
60+65 LT.	21ST ST.	34	1
PROJECT TOTAL		1375	

3

INLET PROTECTION

STRUCTURE TYPE	STATION	LOCATION	628.7005 TYPE A EACH	628.7010 TYPE B EACH	628.7015 TYPE C EACH	628.7020 TYPE D EACH	REMARKS
EXISTING	13+32 26' RT.	NORTH AVE	-	-	1	-	MAINLINE
EXISTING	13+32 61' LT.	NORTH AVE	-	-	1	-	MAINLINE
EXISTING	13+84 26' RT.	NORTH AVE	-	-	1	-	MAINLINE
EXISTING	13+99 55' LT.	NORTH AVE	-	-	1	-	MAINLINE
EXISTING	16+34 43' RT	NORTH AVE	-	1	-	-	DRIVEWAY
EXISTING	16+68 25' RT.	NORTH AVE	-	-	1	-	MAINLINE
EXISTING	16+91 77- RT.	NORTH AVE	-	1	-	-	DRIVEWAY
EXISTING	17+48 37' LT.	NORTH AVE	-	-	1	-	MAINLINE
EXISTING	18+80 23' RT.	NORTH AVE	-	-	1	-	MAINLINE
EXISTING	18+99 39' LT,	NORTH AVE	-	-	1	-	MAINLINE
EXISTING	19+28 22' RT.	NORTH AVE	-	-	1	-	MAINLINE
EXISTING	22+0 44- LT.	NORTH AVE	-	-	1	-	MAINLINE
EXISTING	22+0 27' RT.	NORTH AVE	-	-	1	-	MAINLINE
EXISTING	22+42 44' LT.	NORTH AVE	-	-	1	-	MAINLINE
EXISTING	22+42 26' RT.	NORTH AVE	-	-	1	-	MAINLINE
EXISTING	27+15 38' LT.	NORTH AVE	-	-	1	-	MAINLINE
EXISTING	27+15 20' RT.	NORTH AVE	-	-	1	-	MAINLINE
EXISTING	28+07 37' LT.	NORTH AVE	-	-	1	-	MAINLINE
EXISTING	28+27 21' RT.	NORTH AVE	-	-	1	-	MAINLINE
EXISTING	28+42 67' RT.	NORTH AVE	1	-	-	-	
EXISTING	36+0 35 LT.	NORTH AVE	-	-	1	-	MAINLINE
EXISTING	36+0 22' RT.	NORTH AVE	-	-	1	-	MAINLINE
EXISTING	39+69 36' LT.	NORTH AVE	-	-	1	-	MAINLINE
EXISTING	39+70 23' RT.	NORTH AVE	-	-	1	-	MAINLINE
EXISTING	39+86 40' RT.	NORTH AVE	-	-	1	-	MAINLINE
EXISTING	40+33 39' RT.	NORTH AVE	-	-	1	-	MAINLINE
EXISTING	40+48 39' RT.	NORTH AVE	-	-	1	-	MAINLINE
EXISTING	40+48 36' LT	NORTH AVE	-	-	1	-	MAINLINE
EXISTING	40+48 22' RT.	NORTH AVE	-	-	1	-	MAINLINE
	SUBTOTALS		1	2	26	0	

INLET PROTECTION

STRUCTURE TYPE	STATION	LOCATION	628.7005 TYPE A EACH	628.7010 TYPE B EACH	628.7015 TYPE C EACH	628.7020 TYPE D EACH	REMARKS
PROPOSED	13+27 81- LT.	NORTH AVE	-	-	-	1	MAINLINE
PROPOSED	13+84 82' LT	NORTH AVE	-	-	-	1	MAINLINE
PROPOSED	14+00 28' RT.	NORTH AVE	-	-	-	1	MAINLINE
PROPOSED	16+63 37' LT	NORTH AVE	-	-	-	1	MAINLINE
PROPOSED	16+67 25' RT.	NORTH AVE	-	-	-	1	MAINLINE
PROPOSED	18+88 40' RT.	NORTH AVE	-	-	-	1	MAINLINE
PROPOSED	19+12 35' LT.	NORTH AVE	-	-	-	1	MAINLINE
PROPOSED	19+16 41' RT.	NORTH AVE	-	-	-	1	MAINLINE
PROPOSED	21+96 40' RT.	NORTH AVE	-	-	-	1	MAINLINE
PROPOSED	22+03 60' LT.	NORTH AVE	-	-	-	1	MAINLINE
PROPOSED	22+37 40' RT.	NORTH AVE	-	-	-	1	MAINLINE
PROPOSED	22+44 60' LT.	NORTH AVE	-	-	-	1	MAINLINE
PROPOSED	24+50 16' RT.	NORTH AVE	-	-	-	1	MAINLINE
PROPOSED	24+50 35' LT.	NORTH AVE	-	-	-	1	MAINLINE
PROPOSED	26+45 35' LT.	NORTH AVE	-	-	-	1	MAINLINE
PROPOSED	26+45 16' RT.	NORTH AVE	-	-	-	1	MAINLINE
PROPOSED	28+07 34' LT.	NORTH AVE	-	-	-	1	MAINLINE
PROPOSED	28+13 17' LT.	NORTH AVE	-	-	-	1	MAINLINE
PROPOSED	28+43 36' LT.	NORTH AVE	-	-	-	1	MAINLINE
PROPOSED	31+25 23' RT.	NORTH AVE	-	-	-	1	MAINLINE
PROPOSED	31+25 32' LT.	NORTH AVE	-	-	-	1	MAINLINE
PROPOSED	34+25 32' LT.	NORTH AVE	-	-	-	1	MAINLINE
PROPOSED	34+25 23' RT.	NORTH AVE	-	-	-	1	MAINLINE
PROPOSED	37+25 30' LT.	NORTH AVE	-	-	-	1	MAINLINE
PROPOSED	37+25 23' RT.	NORTH AVE	-	-	-	1	MAINLINE
PROPOSED	39+55 44' LT.	NORTH AVE	-	-	-	1	MAINLINE
PROPOSED	39+55 18' RT.	NORTH AVE	-	-	-	1	MAINLINE
PROPOSED	39+78 54' RT.	NORTH AVE	-	-	-	1	MAINLINE
PROPOSED	40+35 54' RT.	NORTH AVE	-	-	-	1	MAINLINE
PROPOSED	40+75 40' LT.	NORTH AVE	-	-	-	1	MAINLINE
PROPOSED	40+80 24' RT.	NORTH AVE	-	-	-	1	MAINLINE
UNDISTRIBUTED	-	NORTH AVE	2	2	6	6	-
	SUBTOTALS		2	2	6	37	
	PROJECT TOTALS		3	4	32	37	

TEMPORARY DITCH CHECKS

628.7504

STATION	LOCATION	LF
UNDISTRIBUTED	NORTH AVE	50
PROJECT TOTAL		50

ROCK BAGS

628.7570

STATION	LOCATION	EACH
UNDISTRIBUTED	NORTH AVE	20
PROJECT TOTAL		20

TRACKING PADS

628.7560

STAGE	STATION	LOCATION	EACH
2	12+50 LT	NORTH AVE	1
4	12+50 RT	NORTH AVE	1
2	61+80	21ST ST	1
2	92+00	15TH ST	2
4	89+00	15TH ST	2
-	UNDISTRIBUTED	NORTH AVE	1
PROJECT TOTAL			8

TREE PLANTINGS

STATION	LOCATION	632.0101.01 ADIRINDACK CRAB B&B 2" CALIPER EACH	632.0101.02 AUTUMN BRILLIANCE SERVICEBERRY B&B 2" CALIPER EACH	632.0101.03 AUTUMN BLAZE PEAR B&B 2" CALIPER EACH	632.0101.04 PRAIRIE SENTINEL HACKBERRY B&B 2" CALIPER EACH	632.0101.05 EXPRESSO KENTUCKY COFFEETREE B&B 2" CALIPER EACH	632.0101.06 SPRING SNOW CRABAPPLE B&B 2" CALIPER EACH	632.0101.07 SWAMP WHITE OAK B&B 2" CALIPER EACH	632.0101.08 AUTUMN GOLD GINKO B&B 2" CALIPER EACH	632.0101.09 EASTERN REDBUD B&B 2" CALIPER EACH	632.0101.10 ROBIN HILL SERVICE BERRY B&B 2" CALIPER EACH	632.0101.11 EARLY GLOW BUCKEYE B&B 2" CALIPER EACH	632.0101.12 CHICAGO-LAND HACKBERRY B&B 2" CALIPER EACH
16+30	LT	1	-	-	-	-	-	-	-	-	-	-	-
16+50	LT	-	-	1	-	-	-	-	-	-	-	-	-
16+55	LT	1	-	-	-	-	-	-	-	-	-	-	-
16+79	LT	-	-	-	-	-	-	-	-	-	-	-	-
16+90	LT	1	-	1	-	-	-	-	-	-	-	-	-
17+60	LT	-	-	1	-	-	-	-	-	-	-	-	-
17+94	RT	-	-	-	-	-	-	-	-	-	-	-	-
18+00	LT	-	-	1	-	1		-	-				
18+35	LT	-	1	-	-	-	-	-	-	-	-	-	-
18+40	LT	-	-	1	-	1	-	-	-	-	-	-	-
18+40	RT	-	-	-	-			-					
19+65	RT	-	-	-	-	1	-	-	-	-	-	-	-
19+83	LT	-	1	-	-	1	-	-	-	-	-	-	-
20+07	RT	-	-	-	-	-	-	-	-	-	-	-	-
20+30	LT	-	1	-	-	-	-	-	-	-	-	-	-
20+41	LT	-	-	-	1	-	-	-	-	-	-	-	-
20+68	LT	-	-	-	1	-	-	-	-	-	-	-	-
20+88	LT	-	-	-	1	-	-	-	-	-	-	-	-
21+00	LT	-	-	-	-	1	-	-	-	-	-	-	-
21+10	LT	-	1	-	-	-	-	-	-	-	-	-	-
21+56	RT	-	-	-	-	1	-	-	-	-	-	-	-
22+93	LT	-	-	-	-	-	1	-	-	-	-	-	-
22+98	RT	-	-	-	-	-	-	1	-	-	-	-	-
23+38	LT	-	-	-	-	-	1	-	-	-	-	-	-
23+60	RT	-	-	-	-	-	-	1	-	-	-	-	-
23+82	LT	-	-	1	-	-	-	-	-	-	-	-	-
23+84	LT	-	-	-	-	-	1	-	-	-	-	-	-
24+05	RT	-	-	-	-	-	-	1	-	-	-	-	-
24+08	LT	-	-	1	-	-	-	-	-	-	-	-	-
24+33	LT	-	-	1	-	-	-	-	-	-	-	-	-
24+45	RT	-	-	-	-	-	-	1	-	-	-	-	-
24+60	LT	-	-	-	-	-	1	-	-	-	-	-	-
25+00	LT	-	-	-	-	-	1	-	-	-	-	-	-
25+40	LT	-	-	-	-	-	1	-	-	-	-	-	-
25+70	RT	-	-	-	-	-	-	1	-	-	-	-	-
26+40	LT	-	-	-	-	-	1	-	-	-	-	-	-
26+42	RT	-	-	-	-	-	-	1	-	-	-	-	-
29+55	RT	-	-	-	-	-	-	-	-	1	-	-	-
29+93	LT	-	-	-	-	-	-	-	-	-	-	1	-
30+00	LT	-	-	-	-	-	-	-	1	-	-	-	-
30+38	LT	-	-	-	-	-	-	-	-	-	-	1	-
30+40	LT	-	-	-	-	-	-	-	1	-	-	-	-
30+50	RT	-	1	-	-	-	-	-	1	-	-	-	-
30+82	LT	-	-	-	-	-	-	-	-	-	-	1	-
30+90	RT	-	1	-	-	-	-	-	-	-	-	-	-
SUBTOTALS		3	6	8	3	6	7	6	3	1	0	3	0

TREE PLANTINGS (CONT.)

STATION	LOCATION	632.0101.01 ADIRINDACK CRAB B&B 2" CALIPER EACH	632.0101.02 AUTUMN BRILLIANCE SERVICEBERRY B&B 2" CALIPER EACH	632.0101.03 AUTUMN BLAZE PEAR B&B 2" CALIPER EACH	632.0101.04 PRAIRIE SENTINEL HACKBERRY B&B 2" CALIPER EACH	632.0101.05 EXPRESSO KENTUCKY COFFEETREE B&B 2" CALIPER EACH	632.0101.06 SPRING SNOW CRABAPPLE B&B 2" CALIPER EACH	632.0101.07 SWAMP WHITE OAK B&B 2" CALIPER EACH	632.0101.08 AUTUMN GOLD GINKO B&B 2" CALIPER EACH	632.0101.09 EASTERN REDBUD B&B 2" CALIPER EACH	632.0101.10 ROBIN HILL SERVICE BERRY B&B 2" CALIPER EACH	632.0101.11 EARLY GLOW BUCKEYE B&B 2" CALIPER EACH	632.0101.12 CHICAGO-LAND HACKBERRY B&B 2" CALIPER EACH
31+27	RT	-	1	-	-	-	-	-	-	-	-	-	-
31+28	LT	-	-	-	-	-	-	-	-	-	-	1	-
31+70	LT	-	-	-	-	-	-	-	-	-	-	1	-
31+75	RT	-	1	-	-	-	-	-	-	-	-	-	-
32+15	LT	-	-	-	-	-	-	-	1	-	-	-	-
32+16	RT	-	1	-	-	-	-	-	-	-	-	-	-
32+18	LT	-	-	-	-	-	-	-	-	-	-	1	-
32+61	RT	-	1	-	-	-	-	-	-	-	-	-	-
32+63	LT	-	-	-	-	-	-	-	-	-	-	1	-
32+65	LT	-	-	-	-	-	-	-	1	-	-	-	-
33+05	LT	-	-	-	-	-	-	-	1	-	-	-	-
33+08	LT	-	-	-	-	-	-	-	-	-	-	1	-
33+12	RT	-	1	-	-	-	-	-	-	-	-	-	-
33+50	LT	-	-	-	-	-	-	-	-	-	-	1	-
33+68	RT	-	-	-	-	-	-	-	-	-	1	-	-
33+70	LT	-	-	-	-	-	-	-	1	-	-	-	-
34+00	LT	-	-	-	-	-	-	-	-	-	-	1	-
34+20	RT	-	-	-	-	-	-	-	-	-	1	-	-
34+25	LT	-	-	-	-	-	-	-	1	-	-	-	-
34+45	LT	-	-	-	-	-	-	-	-	-	-	-	1
34+74	RT	-	-	-	-	-	-	-	-	-	1	-	-
34+85	LT	-	-	-	-	-	-	-	-	-	-	-	1
35+20	RT	-	-	-	-	-	-	-	-	-	1	-	-
35+33	LT	-	-	-	-	-	-	-	-	-	-	-	1
35+48	LT	-	-	-	-	-	-	-	1	-	-	-	-
35+87	LT	-	-	-	-	-	-	-	-	-	-	-	1
36+10	LT	-	-	-	-	-	-	-	1	-	-	-	-
36+18	RT	-	-	-	-	-	-	-	-	-	1	-	-
36+25	LT	-	-	-	-	-	-	-	-	-	-	-	1
36+68	LT	-	-	-	-	-	-	-	-	-	-	-	1
36+75	LT	-	-	-	-	-	-	-	1	-	-	-	-
36+90	RT	-	-	-	-	-	-	-	-	-	1	-	-
37+10	LT	-	-	-	-	-	-	-	-	-	-	-	1
37+48	RT	-	-	-	-	-	-	-	-	1	-	-	-
37+53	LT	-	-	-	-	-	-	-	-	-	-	-	1
37+90	RT	-	-	-	-	-	-	-	-	1	-	-	-
38+00	LT	-	-	-	-	-	-	-	-	-	-	-	1
38+40	LT	-	-	-	-	-	-	-	-	-	-	-	1
38+50	RT	-	-	-	-	-	-	-	-	1	-	-	-
SUBTOTALS		0	5	0	0	0	0	0	8	3	6	7	10
PROJECT TOTALS		3	11	8	3	6	7	6	11	4	6	10	10

PERMANENT SIGNING, TYPE II

SIGN NO.	STATION	LOCATION	SIGN CODE	SIGN SIZE W X H	637.2210 SIGNS TYPE II REFLECTIVE H S.F.	637.2230 SIGNS TYPE II REFLECTIVE F S.F.	* 634.0814 POSTS TUBULAR STEEL 2x2x14 EACH	* 634.0816 POSTS TUBULAR STEEL 2x2x16 EACH
1.1	12+72 RT	NORTH AVE	W4-2R	36" X 36"	-	9.00	-	1
1.2	13+84 RT	NORTH AVE	R14-1	24" X 18"	3.00	-	-	1
1.3	13+82 RT	NORTH AVE	D9-2	24" X 24"	4.00	-	-	-
1.4	14+65 RT	NORTH AVE	R2-1	24" X 30"	5.00	-	1	
1.5	12+83 LT	NORTH AVE	S1-1	36" X 36"	-	9.00	-	1
1.6	13+19 LT	NORTH AVE	R1-1	30" X 30"	5.18	-	1	-
1.7	13+41 LT	NORTH AVE	R1-1	30" X 30"	5.18	-	1	-
1.8	13+83 LT	NORTH AVE	R2-1	24" X 30"	5.00	-	-	1
1.9	13+83 LT	NORTH AVE	R7-1D	18" X 24"	3.00	-	-	-
1.10	15+16 LT	NORTH AVE	R3-17	30" X 24"	5.00	-	-	1
1.11	15+16 LT	NORTH AVE	R7-1D	18" X 24"	3.00	-	-	-
1.12	13+42 LT	NORTH AVE	W12-1D	24" X 24"	4.00	-	-	-
2.1	17+54 RT	NORTH AVE	R7-1D	18" X 24"	3.00	-	-	1
2.2	17+54 RT	NORTH AVE	R3-17	24" X 30"	5.00	-	-	-
2.3	18+84 RT	NORTH AVE	R5-2	24" X 24"	4.00	-	1	-
2.4	19+21 RT	NORTH AVE	R1-1	30" X 30"	5.18	-	1	-
2.5	19+97 RT	NORTH AVE	R3-17	30" X 24"	5.00	-	-	1
2.6	19+97 RT	NORTH AVE	R7-1D	18" X 24"	3.00	-	-	-
2.7	20+74 RT	NORTH AVE	W14-2	30" X 30"	-	6.25	1	-
2.8	18+27 LT	NORTH AVE	R14-1	24" X 18"	3.00	-	-	1
2.9	18+27 LT	NORTH AVE	R7-1D	18" X 24"	3.00	-	-	-
2.10	20+04 LT	NORTH AVE	R3-17	30" X 24"	5.00	-	-	1
2.11	20+04 LT	NORTH AVE	R7-1D	18" X 24"	3.00	-	-	-
2.12	16+08 LT	NORTH AVE	R4-7	24" X 30"	5.00	-	-	-
3.1	22+00 LT	NORTH AVE	R1-1	30" X 30"	5.18	-	1	-
3.2	21+99 LT	MUTH CT	R7-1D	18" X 24"	3.00	-	1	-
3.3	23+45 LT	NORTH AVE	R3-17	30" X 24"	5.00	-	-	1
3.4	23+45 LT	NORTH AVE	R7-1D	18" X 24"	3.00	-	-	-
3.5	22+42 RT	NORTH AVE	R1-1	30" X 30"	5.18	-	1	-
3.6	23+33 RT	NORTH AVE	R14-1	24" X 18"	3.00	-	-	1
3.7	23+33 RT	NORTH AVE	R7-1D	18" X 24"	3.00	-	-	-
3.8	24+25 RT	NORTH AVE	R3-17	30" X 24"	5.00	-	1	-
3.9	25+71 RT	NORTH AVE	W10-1	36" X 36"	-	9.00	-	1
3.10	25+71 RT	NORTH AVE	W10-1A	24" X 12"	-	2.00	-	-
3.11	21+82 LT	NORTH AVE	R4-7	24" X 30"	5.00	-	-	-
SUBTOTALS					124	35	10	12

SIGN NO.	STATION	LOCATION	SIGN CODE	SIGN SIZE W X H	637.2210 SIGNS TYPE II REFLECTIVE H S.F.	637.2230 SIGNS TYPE II REFLECTIVE F S.F.	* 634.0814 POSTS TUBULAR STEEL 2x2x14 EACH	* 634.0816 POSTS TUBULAR STEEL 2x2x16 EACH
3.12	22+67 LT	NORTH AVE	R4-7	24" X 30"	5.00	-	-	-
3.13	24+47 LT	NORTH AVE	R4-7	24" X 30"	5.00	-	-	-
4.1	26+95 LT	NORTH AVE	R14-1	24" X 18"	3.00	-	1	-
4.2	26+95 LT	NORTH AVE	R7-1D	18" X 24"	3.00	-	-	-
4.3	28+44 LT	NORTH AVE	R15-3	24" X 12"	2.00	-	1	-
4.4	30+08 LT	NORTH AVE	W10-1	36" X 36"	-	9.00	-	1
4.5	30+08 LT	NORTH AVE	W10-1A	24" X 12"	-	2.00	-	-
4.6	27+26 RT	NORTH AVE	R15-3	24" X 12"	2.00	-	1	-
4.7	29+43 RT	NORTH AVE	R14-1	24" X 18"	3.00	-	1	-
4.8	29+70 LT	NORTH AVE	R4-7	24" X 30"	5.00	-	1	-
4.9	30+05 RT	NORTH AVE	R3-17	18" X 24"	3.00	-	1	-
5.1	33+05 LT	NORTH AVE	R3-17	30" X 24"	5.18	-	-	1
5.2	33+05 LT	NORTH AVE	R7-1D	18" X 24"	3.00	-	-	-
5.3	34+17 RT	NORTH AVE	R3-17	24" X 30"	5.00	-	1	-
6.1	37+38 LT	NORTH AVE	R14-1	24" X 18"	3.00	-	-	1
6.2	37+38 LT	NORTH AVE	R7-1D	18" X 24"	3.00	-	-	-
6.3	37+68 LT	NORTH AVE	R4-7	24" X 30"	5.00	-	1	-
6.4	38+36 LT	NORTH AVE	R2-1	24" X 30"	5.00	-	-	1
6.5	39+83 LT	15TH ST	R14-1	24" X 18"	3.00	-	-	1
6.6	39+83 LT	15TH ST	M6-6	21" X 21"	3.06	-	-	-
6.7	39+83 LT	15TH ST	R7-1D	18" X 24"	5.18	-	1	-
6.8	41+03 LT	NORTH AVE	R7-51L	18" X 24"	3.00	-	1	-
6.9	37+27 LT	NORTH AVE	R3-20L	24" X 36"	6.00	-	1	-
6.10	37+54 RT	NORTH AVE	R14-1	24" X 18"	3.00	-	-	1
6.11	37+54 RT	NORTH AVE	M6-4	21" X 21"	3.06	-	-	-
6.12	40+47 RT	15TH ST	R14-1	24" X 18"	3.00	-	-	1
6.13	40+47 RT	NORTH AVE	M6-6	21" X 21"	3.06	-	-	-
6.14	41+02 RT	NORTH AVE	R2-1	24" X 30"	5.00	-	-	1
6.15	41+52 RT	MUTH COURT	D9-2	24" X 24"	4.00	-	-	1
6.16	41+85 RT	NORTH AVE	S1-1	36" X 36"	9.00	-	-	1
6.17	39+46 RT	NORTH AVE & 15TH ST	R1-1-F	30" X 30"	5.18	-	-	-
6.18	39+79 LT	NORTH AVE & 15TH ST	R1-1-F	30" X 30"	5.18	-	-	-
6.19	40+72 LT	NORTH AVE & 15TH ST	R1-1-F	30" X 30"	5.18	-	-	-
6.20	40+37 RT	NORTH AVE & 15TH ST	R1-1-F	30" X 30"	5.18	-	-	-
6.21	40+81 LT	NORTH AVE	R3-20R	24" X 36"	6.00	-	1	-
6.22	42+90 LT	NORTH AVE	R3-20L	24" X 36"	6.00	-	1	-
SUBTOTALS					143	11	13	10
PROJECT TOTALS					267	46	23	22

* ADDITIONAL QUANTITIES FOUND ELSEWHERE

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MOVING AND REMOVING SIGNS

STATION	LOCATION	SIGN #	638.2102 MOVING SIGNS TYPE II EACH	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	* 634.0814 POSTS TUBULAR STEEL 2x2x14 EACH	* 634.0816 POSTS TUBULAR STEEL 2x2x16 EACH	REMARKS
12+34 LT.	NORTH AVE	1.A	-	1	-	-	-	
12+49 LT.	NORTH AVE	1.B	1	-	1	1	-	PLACE AT STA. 12+59 LT.
12+76 LT	NORTH AVE	1.C	-	1	1	-	-	
13+36 LT.	NORTH AVE	1.D	-	1	1	-	-	
13+84 LT.	NORTH AVE	1.E	-	1	1	-	-	SIGN ON 21ST ST.
14+42 LT.	NORTH AVE	1.F	1	1	1	1	-	PLACE AT STA. 14+69 LT.
12+66 LT.	NORTH AVE	1.G	1	-	-	1	-	PLACE AT STA. 16+23 LT.
12+76 RT.	NORTH AVE	1.H	1	1	1	1	-	PLACE AT STA.13+28 RT.
13+28 RT.	NORTH AVE	1.I	-	1	1	-	-	
14+52 RT.	NORTH AVE	1.J	-	1	1	-	-	
17+49 RT.	NORTH AVE	2.A	-	1	1	-	-	
18+84 RT.	NORTH AVE	2.B	-	1	1	-	-	
19+21 RT.	NORTH AVE	2.C	-	1	1	-	-	
19+48 RT.	NORTH AVE	2.D	-	1	1	-	-	
19+58 RT.	NORTH AVE	2.E	-	1	1	-	-	
20+50 RT.	NORTH AVE	2.F	-	1	1	-	-	
17+45 LT.	NORTH AVE	2.G	-	1	1	-	-	
18+13 LT.	NORTH AVE	2.H	1	1	1	1	-	PLACE AT SAME LOCATION
21+34 LT.	NORTH AVE	3.A	-	1	1	-	-	
21+77 LT.	NORTH AVE	3.B	-	1	1	-	-	
22+00 LT.	NORTH AVE	3.C	-	1	1	-	-	SIGN ON MUTH CT.
22+00 LT.	NORTH AVE	3.D	-	1	1	-	-	
22+43 LT.	NORTH AVE	3.E	1	1	1	1	-	MOVE SIGN ON MUTH CT.
22+43 LT.	NORTH AVE	3.F	-	1	1	-	-	
22+42 LT.	NORTH AVE	3.G	-	1	1	-	-	
22+41 RT.	NORTH AVE	3.H	-	1	1	-	-	
22+60 RT.	NORTH AVE	3.I	-	1	1	-	-	
25+76 RT.	NORTH AVE	3.J	-	1	1	-	-	
26+00 RT.	NORTH AVE	3.K	-	1	1	-	-	
26+81 LT.	NORTH AVE	4.A	1	1	1	1	-	PLACE IN SAME LOCATION
29+19 LT.	NORTH AVE	4.B	-	1	-	-	-	
29+71 LT.	NORTH AVE	4.C	-	1	1	-	-	
29+95 LT.	NORTH AVE	4.D	-	1	1	-	-	
28+83 RT.	NORTH AVE	4.E	1	1	1	1	-	IN MEDIAN
37+70 LT.	NORTH AVE	6.A	-	1	1	-	-	MOVE SIGNS TO STA. 9+18 LT.
38+93 LT.	NORTH AVE	6.B	1	1	1	-	-	MOVE TO STA. 38+37 LT.
39+84 LT.	NORTH AVE	6.C	-	1	1	-	-	
39+77 LT.	NORTH AVE	6.D	-	1	1	-	-	SIGN ON 15TH ST.
39+77 LT.	NORTH AVE	6.E	-	1	1	-	-	SIGN ON 15TH ST.
40+35 LT.	NORTH AVE	6.F	1	1	1	-	1	SIGN ON 15TH ST.
40+36 LT	NORTH AVE	6.G	-	1	1	-	-	
40+48 LT.	NORTH AVE	6.H	-	1	1	-	-	
40+69 LT.	NORTH AVE	6.I	-	1	1	-	-	
41+00 LT.	NORTH AVE	6.J	-	1	1	-	-	
38+38 LT.	NORTH AVE	6.K	-	1	-	-	-	
39+72 RT.	NORTH AVE	6.L	-	2	2	-	-	AND SIGN AT 39+83
39+85 RT.	NORTH AVE	6.M	1	-	-	-	1	PLACE AT SAME LOCATION ON 15TH ST.
40+36 RT.	NORTH AVE	6.N	-	1	1	-	-	ON 15TH ST.
40+35 RT.	NORTH AVE	6.O	-	1	1	-	-	
40+79 RT.	NORTH AVE	6.P	-	1	1	-	-	
40+93 RT.	NORTH AVE	6.Q	1	1	1	-	-	PLACE AT STA. 41+02
41+53 RT.	NORTH AVE	6.R	1	1	1	-	-	PLACE AT STA. 41+51 RT.
41+86 RT.	NORTH AVE	6.S	1	1	1	-	-	PLACE IN SAME LOCATION
38+18 RT.	NORTH AVE	6.T	-	1	1	-	-	
	PROJECT TOTALS		14	52	50	8	2	

* ADDITIONAL QUANTITIES FOUND ELSEWHERE

ALL ITEMS ON THIS SHEET ARE CATEGORY 0010 UNLESS OTHERWISE NOTED

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MARKING

STATION	LOCATION	646.1020 LINE EPOXY 4-INCH LF	646.3020 LINE EPOXY 8-INCH LF	646.5320 RAILROAD CROSSING EPOXY EA.	646.5020 ARROWS EPOXY EA	646.5120 WORD EPOXY EA	646.5220 SYMBOLS BIKE LANE EPOXY EA	646.6120 STOP LINE EPOXY 18 INCH LF	646.7120 DIAGONAL EPOXY 12 INCH LF	646.8220 ISLAND NOSE EPOXY EA	646.7420 CROSS WALK EPOXY TRANSVERSE LINE 6-INCH LF	649.0150 TEMPORARY LINE REMOVABLE TAPE 4-INCH LF
12+33 - 14+00	BEGIN PROJECT TO 21ST ST.	670	-	-	3	-	2	13	-	-	310	-
14+00 - 19+00	21ST ST TO 20TH ST.	1480	-	-	6	-	2	-	-	3	110	-
19+00 - 22+25	20TH ST. TO 19TH (MUTH CT.)	568	150	-	4	-	2	27	-	2	305	-
22+25 - 39+75	19TH ST - 15TH ST	5225	520	2	10	2	6	90	55	14	450	-
39+75 - 46+23	15TH ST - END OF PROJECT	2550	336	-	5	1	2	100	40	1	430	-
87+22 - 93+76	15TH ST	1460	885	-	6	1	3	-	100	-	-	-
11+00 - 46+00	CONSTRUCTION STAGING	-	-	-	-	-	-	-	-	-	-	21,000
	PROJECT TOTALS	11953	1891	2	34	4	17	230	195	20	1605	21000

MARKING REMOVAL LINE 4-INCH

646.9000

STATION	LOCATION	LF	REMARKS
92+04 - 93+76	15TH ST	63	5 SKIPS
87+23 - 88+95	15TH ST	75	6 SKIPS
PROJECT TOTAL		138	

CONSTRUCTION STAKING

STATION	LOCATION	650.4500 SUBGRADE LF	650.7000 CONCRETE PAVEMENT LF	650.8500 ELECTRICAL INSTALLATIONS LS	650.9910 SUPPLEMENTAL CONTROL LS	650.9920 SLOPE STAKES LF	* SPV.0105.05 SANITARY SEWER LS
12+34 - 43+06	NORTH AVE	3072	3072	1	1	3072	1
60+00 - 61+92	21ST ST	192	192	-	-	192	
18+25 - 19+00	20TH ST	75	75	-	-	75	
80+00 - 81+75	MUTH CT	175	175	-	-	175	
78+80 - 80+00	19TH ST	130	130	-	-	130	
90+00 - 92+04	15TH ST	204	204	-	-	204	
88+94 - 90+00	15TH ST	106	106	-	-	106	
PROJECT TOTALS		3954	3954	1	1	3954	1

* CATEGORY 0020

TRAFFIC CONTROL SUMMARY

LOCATION	SERVICE DAYS	643.0300 DRUMS NO	643.0300 DRUMS DAYS	643.0410 BARRICADES TYPE II NO	643.0410 BARRICADES TYPE II DAYS	643.0420 BARRICADES TYPE III NO	643.0420 BARRICADES TYPE III DAYS	643.0705 WARNING LIGHTS TYPE A NO	643.0705 WARNING LIGHTS TYPE A DAYS	643.0715 WARNING LIGHTS TYPE C NO	643.0715 WARNING LIGHTS TYPE C DAYS	643.0900 SIGNS NO	643.0900 SIGNS DAYS	REMARKS
NORTH AVE	7	60	420	-	-	6	42	6	42	20	140	12	84	STAGE 1
NORTH AVE	56	270	15120	-	-	45	2520	60	3360	56	3136	67	3752	STAGE 2
NORTH AVE	42	215	9030	-	-	50	2100	60	2520	48	2016	72	3024	STAGE 3
NORTH AVE	44	270	11340	-	-	45	1890	60	2520	56	2352	67	2814	STAGE 4
NORTH AVE	10	250	10500	-	-	18	756	12	504	10	420	30	1260	STAGE 5
NORTH AVE	159	10	1590	12	1908	10	1590	22	3498	-	-	12	1908	SIDEWALK CLOSURES
UNDISTRIBUTED	159	50	7950	6	954	10	1590	15	2385	10	1590	20	3180	DRIVEWAYS, ETC
DETOUR	42	-	-	-	-	-	-	-	-	-	-	30	1260	STAGE 3
PROJECT TOTALS			55950		2862		10488		14829		9654		17282	

EXCAVATION, HAULING AND DISPOSAL OF PETROLEUM-CONTAMINATED SOIL

STATION	LOCATION	SPV.0195.01 CATEGORY 0020 CY
39+20 - 39+75, RT	NORTH AVE	240
40+05 - 41+10, RT	NORTH AVE	570
40+85 - 41+40, LT	NORTH AVE	75
PROJECT TOTALS		885

3

3

LIGHTING SUMMARY

LP / PBL	STATION	LOCATION	653.0115 PULL BOXES 12x36-INCH EACH	654.0105 CONCRETE BASES TYPE 5 EACH	654.0230 CONCRETE CONTROL CABINET BASES TYPE L30 EACH	659.2130 LIGHTING CONTROL CABINETS 120/240 30-INCH EACH	SPV.0060.09 LIGHTING ASSEMBLY SINGLE FIXTURE EACH	SPV.0060.10 LIGHTING ASSEMBLY TWIN FIXTURES EACH	SPV.0060.11 LED LUMINAIRES EACH	SPV.0060.12 LUMINAIRE ARMS STEEL 10-FT EACH
LP1	11+21.99 42.7' LT.	NORTH AVE	-	1	-	-	1	-	-	-
LP2	12+47.56 42.6' LT.	NORTH AVE	-	1	-	-	1	-	-	-
LP3	13+41.04 54.5' LT.	NORTH AVE	-	1	-	-	1	-	-	-
LP4	14+69.81 43.0' LT.	NORTH AVE	-	1	-	-	1	-	-	-
LP5	12+33.14 30.5 ' RT.	NORTH AVE	-	1	-	-	1	-	-	-
LP6	13+48.00 30.4 ' RT.	NORTH AVE	-	1	-	-	1	-	-	-
LP7	14+76.18 30.9' RT.	NORTH AVE	-	1	-	-	1	-	-	-
PBL2	16+11.00 30.4' RT.	NORTH AVE	1	-	-	-	-	-	-	-
LP8	16+08.06 6.8' LT.	NORTH AVE	-	1	-	-	-	1	-	-
LP9	17+31.50 7.6' LT.	NORTH AVE	-	1	-	-	-	1	-	-
LP10	18+65.46 8.4' LT.	NORTH AVE	-	1	-	-	-	1	-	-
LP11	19+74.76 4.6' LT.	NORTH AVE	-	1	-	-	-	1	-	-
LP12	21+53.99 14.3' LT.	NORTH AVE	-	1	-	-	-	1	-	-
LP13	22+66.97 4.2' LT.	NORTH AVE	-	1	-	-	-	1	-	-
LP14	24+46.62 7.4' LT.	NORTH AVE	-	1	-	-	-	1	-	-
LP15	25+61.36 39.1' LT.	NORTH AVE	-	1	-	-	1	-	-	-
LP16	25+86.89 20.9' RT.	NORTH AVE	-	1	-	-	1	-	-	-
PBL3	26+57.37 12.1' LT.	NORTH AVE	1	-	-	-	-	-	-	-
LP17	26+99.92 14.4' ;T.	NORTH AVE	-	1	-	-	-	1	-	-
LP18	26+62.05 13.9' LT.	NORTH AVE	-	1	-	-	-	1	-	-
LP19	29+80.38 8.0' LT.	NORTH AVE	-	1	-	-	-	1	-	-
LP20	31+58.89 9.3' LT.	NORTH AVE	-	1	-	-	-	1	-	-
LP21	33+36.55 7.4' LT.	NORTH AVE	-	1	-	-	-	1	-	-
LP22	35+14.63 7.9' LT	NORTH AVE	-	1	-	-	-	1	-	-
LP23	36+40.39 8.0' LT.	NORTH AVE	-	1	-	-	-	1	-	-
LP24	37+66.71 11.2' LT.	NORTH AVE	-	1	-	-	-	1	-	-
LP25	38+63.11 21.1' LT.	NORTH AVE	-	1	-	-	1	-	-	-
LP26	38+75.97 36.7' LT.	NORTH AVE	-	1	-	-	1	-	-	-
PBL4	39+05.30 40.6' LT.	NORTH AVE	1	-	-	-	-	-	-	-
LP27	39+59.98 27.5' RT.	NORTH AVE	-	1	-	-	1	-	-	-
LP28	39+70.44 65.2' LT.	NORTH AVE	-	1	-	-	1	-	-	-
LP29	40+49.73 46.9' RT.	NORTH AVE	-	1	-	-	1	-	-	-
LP30	40+69.72 41.3' LT	NORTH AVE	-	1	-	-	1	-	-	-
LP31	41+57.23 26.4' RT.	NORTH AVE	-	1	-	-	1	-	-	-
LP32	41+89.40 40.9' LT.	NORTH AVE	-	1	-	-	1	-	-	-
PBL5	42+63.55 4.0' LT.	NORTH AVE	1	-	-	-	-	-	-	-
LP33	42+90.05 5.9' LT.	NORTH AVE	-	1	-	-	-	1	-	-
LC2	39+63.41 62.1' LT	NORTH AVE	-	-	1	1	-	-	-	-
SB1	39+79.18 72.5' LT.	NORTH AVE	-	-	-	-	-	-	1	1
SB4	40+72.05 44.0' LT.	NORTH AVE	-	-	-	-	-	-	1	1
LP34	44+30, 5.9' LT	NORTH AVE	-	1	-	-	-	1	-	-
PBL-3A	37+65, 40' LT	NORTH AVE	1	-	-	-	-	-	-	-
PBL-4A	39+33, 22' RT	NORTH AVE	1	-	-	-	-	-	-	-
SB7	40+37.87 58.3' RT.	NORTH AVE	-	-	-	-	-	-	1	1
SB10	39+46.18 22.1' RT.	NORTH AVE	-	-	-	-	-	-	1	1
	PROJECT TOTALS		6	34	1	1	17	17	4	4

ELECTRICAL WIRE & CONDUIT FOR STREET LIGHTING

LOCATION		655.0610 12 AWG	655.0620 8 AWG	655.0625 6 AWG	652.0225 CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH
FROM	TO	LF	LF	LF	LF
(CABINET 1-CIRCUIT 1)					
LC1	PBL1		60		-
PBL1	EXPBL1		528		-
EXPBL1	LP1	60	264		78
LP1	LP2	60	408		126
LP2	LP3	60	315		95
LP3	LP4	60	420		130
SUBTOTALS		240	1995	0	429
(CABINET 1-CIRCUIT 2 AND 3)					-
LC1	PBL1	-	-	100	-
PBL1	LP5	60		450	6
LP5	LP6	60		675	125
LP6	LP7	60		700	130
LP7	PBL2			725	135
PBL2	LP8	120		235	37
LP8	LP9	120		665	123
LP9	LP10	120	-	720	134
LP10	LP11	120		595	109
LP11	LP12	120		950	180
LP12	LP13	120		615	113
LP13	LP14	120		950	180
LP14	LP15	60		645	119
LP15	LP16	60		375	65
LP16	PBL3			240	79
PBL3	LP17	120		159	43
SUBTOTALS		1260	0	8799	1578
SUBTOTALS (CABINET 1)		1500	1995	8799	2007

ELECTRICAL WIRE & CONDUIT FOR STREET LIGHTING

LOCATION		655.0610 12 AWG	655.0620 8 AWG	655.0625 6 AWG	652.0225 CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH
FROM	TO	LF	LF	LF	LF
(CABINET 2-CIRCUIT 1 AND 2)					
LC-2	PBL4	-	-	490	60
PBL4	LP26	60	-	185	27
LP26	LP24	120	-	620	114
LP24	LP23	120	-	680	126
LP23	LP22	120	-	630	126
LP22	LP21	120	-	940	178
LP21	LP20	120	-	940	178
LP20	LP19	120	-	945	179
LP19	LP18	120	-	384	118
SUBTOTALS		900	0	5814	1106
(CABINET 2 CIRCUIT 4)					
LC-2	PBL4	-	210	420	60
PBL4	LP25	60	252	504	74
LP25	LP27	60	333	-	101
LP27	LP29	60	306	-	92
LP29	LP31	60	360	-	110
LP31	PBL5		363	-	111
PBL5	LP33	120	111	-	27
LP33	LP34	120	450	-	140
SUBTOTALS		480	2385	924	715
(CABINET 2-CIRCUIT 3)					
LC-2	LP28	60	57	-	9
LP28	LP30	60	336	-	102
LP30	LP32	60	390	-	120
SUBTOTALS		180	783	0	231
SUBTOTALS (CABINET 2)		1560	3168	6738	2052
PROJECT TOTALS		3060	5163	15537	4059

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CABLE TRAFFIC SIGNAL & LOOP DETECTOR LEAD IN CABLE

FROM	TO	655.0230 5-14 AWG LF	655.0240 7-14 AWG LF	655.0260 12-14 AWG LF	655.0270 15-14 AWG LF	655.0290 21-14 AWG LF	655.0700 LOOP DETECTOR LEAD IN CABLE LF
CB1	SB1	-	-	-	51	-	-
SB1	HEAD 11	17	-	-	-	-	-
SB1	HEAD 17	-	17	-	-	-	-
CB1	SB2	-	-	-	-	151	-
SB2	HEAD 18	-	69	-	-	-	-
SB2	HEAD 19	59	-	-	-	-	-
SB2	HEAD 20	17	-	-	-	-	-
CB1	SB3	-	-	146	-	-	-
SB3	PH2B	11	-	-	-	-	-
SB3	2B	-	-	-	-	-	6
SB3	PH8A	11	-	-	-	-	-
SB3	8B	-	-	-	-	-	6
CB1	SB4	-	-	-	189	-	-
SB4	HEAD 5	17	-	-	-	-	-
SB4	HEAD 2	-	17	-	-	-	-
CB1	SB5	-	-	-	-	287	-
SB5	HEAD 3	-	75	-	-	-	-
SB5	HEAD 4	60	-	-	-	-	-
SB5	HEAD 5	17	-	-	-	-	-
CB1	SB6	-	-	292	-	-	-
SB6	PH6A	11	-	-	-	-	-
SB6	6B	-	-	-	-	-	6
SB6	PH8B	11	-	-	-	-	-
SB6	8B	-	-	-	-	-	6
CB1	SB7	-	-	-	286	-	-
SB7	HEAD 7	-	17	-	-	-	-
SB7	HEAD 8	-	17	-	-	-	-
CB1	SB8	-	-	-	-	180	-
SB8	HEAD 13	-	69	-	-	-	-
SB8	HEAD 14	57	-	-	-	-	-
SB8	HEAD 15	17	-	-	-	-	-
CB1	SB9	-	-	177	-	-	-
SB9	PH4A	11	-	-	-	-	-
SB9	4B	-	-	-	-	-	6
SB9	PH6B	11	-	-	-	-	-
SB9	6B	-	-	-	-	-	6
CB1	SB10	-	-	-	148	-	-
SB10	HEAD 1	17	-	-	-	-	-
SB10	HEAD 7	-	17	-	-	-	-
CB1	SB11	-	-	-	-	53	-
SB11	HEAD 8	-	64	-	-	-	-
SB11	HEAD 9	52	-	-	-	-	-
SB11	HEAD 10	17	-	-	-	-	-
CB1	SB12	-	-	54	-	-	-
SB12	PH2A	11	-	-	-	-	-
SB12	2B	-	-	-	-	-	6
SB12	PH4B	11	-	-	-	-	-
SB12	4B	-	-	-	-	-	6
PROJECT TOTALS		435	362	669	674	671	48

VIDEO DETECTION, PREEMPTION, AND TRAFFIC SIGNAL CONTROLLER & CABINET

BASE NO.	SPV.0105.10 VEHICULAR VIDEO DETECTION SYSTEM 4-CAMERA LS	SPV.0105.11 TRAFFIC SIGNAL PREEMPTION AND PRIORITY CONTROL SYSTEM LS	SPV.0060.05 TRAFFIC SIGNAL CONTROLLER & CABINET EACH	654.0217 CONCRETE CONTROL CABINET BASES TYPE 9 SPECIAL EACH
CB1	1	1	1	1
PROJECT TOTALS	1	1	1	1

CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH

652.0235

FROM	TO	15TH ST LF	21ST ST LF
CBI	PB1	12	-
CBI	PB8	11	-
CBI	SERVICE LATERAL	30	
PB1	SB1	10	-
PB1	PB2	162	-
PB2	SB2	12	-
PB2	SB3	7	-
PB2	PB3	26	-
PB3	SB4	9	-
PB3	PB4	168	-
PB4	SB5	7	-
PB4	PB5	21	-
PB5	SB6	9	-
PB5	SB7	13	-
PB5	PB6	172	-
PB6	SB8	8	-
PB6	SB9	4	-
PB6	PB7	18	-
PB7	SB10	10	-
PB7	PB8	164	-
PB8	SB11	12	-
PB8	SB12	12	-
PB1	PB8	22	-
PBS-1	PBS-2	-	164
PBS-2	PBS-3	-	184
PBS-3	PBS-4	-	140
PBS-4	PBS-1	-	200
	SUBTOTAL	919	688
	PROJECT TOTALS	1607	

ELECTRICAL WIRE TRAFFIC SIGNALS 10 AWG

655.0515

FROM	TO	LF
CB-1	SB1	43
SB1	SB2	114
SB2	SB3	50
SB3	SB4	81
SB4	SB5	122
SB5	SB6	42
SB6	SB7	45
SB7	SB8	145
SB8	SB9	34
SB9	SB10	70
SB10	SB11	143
SB11	SB12	46
SB12	CB1	42
PB1	CB1	45
PB2	SB2	12
PB3	SB4	8
PB4	SB5	7
PB5	SB7	13
PB6	SB8	7
PB7	SB10	9
PB8	SB11	11
	PROJECT TOTAL	1,089

PULL BOXES STEEL 24X42-INCH

653.0140

PULL BOX NO.	STATION	LOCATION	21ST ST EA	15TH ST EA
PB1	39+70 70' LT.	NORTH AVE	-	1
PB2	40+51 68' LT.	NORTH AVE	-	1
PB3	40+64 45' LT.	NORTH AVE	-	1
PB4	40+64 38' RT.	NORTH AVE	-	1
PB5	40+48 50' RT.	NORTH AVE	-	1
PB6	39+63 42' RT.	NORTH AVE	-	1
PB7	39+5526' RT.	NORTH AVE	-	1
PB8	39+54 56' LT.	NORTH AVE	-	1
PBS-1	13+20 67' LT.	NORTH AVE	1	-
PBS-2	14+03 57' RT.	NORTH AVE	1	-
PBS-3	13+98 35' RT.	NORTH AVE	1	-
PBS-4	13+26 35' RT.	NORTH AVE	1	-
	SUBTOTAL		4	8
	PROJECT TOTAL		12	

3

TRAFFIC SIGNAL FACES, BACKPLATES, AND LED MODULES

SIGNAL HEAD NO.	SIGNAL BASE NO.	658.0173 TRAFFIC SIGNAL FACE 3-12 INCH VERTICAL EACH	658.0174 TRAFFIC SIGNAL FACE 4-12 INCH VERTICAL EACH	658.0416 PEDESTRIAN SIGNAL FACE 16-INCH EACH
1	SB1	-	1	-
2	SB1	1	-	-
3	SB2	-	1	-
4	SB2	1	-	-
5	SB2	1	-	-
6	SB4	-	1	-
7	SB4	1	-	-
8	SB5	1	-	-
9	SB5	-	1	-
10	SB5	1	-	-
11	SB7	-	1	-
12	SB7	1	-	-
13	SB8	1	-	-
14	SB8	-	1	-
15	SB8	1	-	-
16	SB10	-	1	-
17	SB10	1	-	-
18	SB11	1	-	-
19	SB11	-	1	-
20	SB11	1	-	-
PH6A	SB12	-	-	1
PH4B	SB12	-	-	1
PH6B	SB3	-	-	1
PH8A	SB3	-	-	1
PH8B	SB6	-	-	1
PH2A	SB6	-	-	1
PH4A	SB9	-	-	1
PH2B	SB9	-	-	1
PROJECT TOTALS		12	8	8

PEDESTAL BASES, TRAFFIC SIGNAL STANDARDS, PEDESTRIAN PUSH BUTTONS, POLES, MONOTUBE POLES & ARMS

SIGNAL BASE NO.	657.0100 PEDESTAL BASES EACH	657.0430 TRAFFIC SIGNAL STANDARDS ALUMINUM 10-FT EACH	658.0500 PEDESTRIAN PUSH BUTTONS EACH	657.0545 MONOTUBE ARM 45-FT EACH	657.0550 MONOTUBE ARM 50-FT EACH	657.0315 POLES TYPE 4 EACH	657.0355 POLES TYPE 12 EACH
SB1	-	-	-	-	-	1	-
SB2	-	-	-	1	-	-	1
SB3	1	1	2	-	-	-	-
SB4	-	-	-	-	-	1	-
SB5	-	-	-	-	1	-	1
SB6	1	1	2	-	-	-	-
SB7	-	-	-	-	-	1	-
SB8	-	-	-	1	-	-	1
SB9	1	1	2	-	-	-	-
SB10	-	-	-	-	-	1	-
SB11	-	-	-	1	-	-	1
SB12	1	1	2	-	-	-	-
PROJECT TOTALS	4	4	8	3	1	4	4

CONCRETE BASES

BASE NO.	STATION	LOCATION	654.0101 TYPE 1 EACH	654.0102 TYPE 2 EACH	654.0113 TYPE 13 EACH
SB1	39+79.18 72.5' LT.	NORTH AVE	-	1	-
SB2	40+50.96 79.2' LT.	NORTH AVE	-	-	1
SB3	40+53.81 61.3' LT.	NORTH AVE	1	-	-
SB4	40+72.05 44.0' LT.	NORTH AVE	-	1	-
SB5	40+71.34 37.1' RT	NORTH AVE	-	-	1
SB6	40+53.49 43.1' RT.	NORTH AVE	1	-	-
SB7	40+37.87 58.3' RT.	NORTH AVE	-	1	-
SB8	39+66.73 48.3' RT.	NORTH AVE	-	-	1
SB9	39+62.89 37.7' RT.	NORTH AVE	1	-	-
SB10	39+46.18 22.1' RT.	NORTH AVE	-	1	-
SB11	39+45.85 47.3' LT.	NORTH AVE	-	-	1
SB12	39+65.35 59.4' LT.	NORTH AVE	1	-	-
PROJECT TOTALS			4	4	4

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SAWING ASPHALT
690.0150

STATION	LOCATION	LF	DESCRIPTION
13+00 RT	NORTH AVE	24	DRIVEWAY
13+00 LT	NORTH AVE	146	PARKING LOT
14+25 LT	NORTH AVE	68	DRIVEWAY / PARKING LOT
14+25 RT	NORTH AVE	25	DRIVEWAY
11+50 - 17+80 LT	NORTH AVE	235	DRIVEWAY/PARKING LOT
19+96 - 21+90 LT	NORTH AVE	313	DRIVEWAY/PARKING LOT
24+25 LT	NORTH AVE	34	DRIVEWAY
29+25 LT	NORTH AVE	50	DRIVEWAY
38+86 - 39+77 RT	NORTH AVE	117	DRIVEWAY/PARKING LOT
88+94 - 41+63 RT	NORTH AVE	116	DRIVEWAY/PARKING LOT
40+43 - 41+42 LT	NORTH AVE	176	DRIVEWAY/PARKING LOT
PROJECT TOTALS		1304	

TEMPORARY PEDESTRIAN FACILITIES

LOCATION	644.1410.S TEMPORARY PEDESTRIAN SURFACE ASPHALT SF	644.1601.S TEMPORARY CURB RAMP EACH	644.1616.S TEMPORARY PEDESTRIAN SAFETY FENCE LF	REMARKS
NORTH AVE	750	-	100	TEMPORARY SIDEWALK NW QUAD 21ST ST INTERSECTION STAGE 2
NORTH AVE	400	4	80	MUTH CT AND 15TH ST CONSTRUCTED IN STAGE 2 AND 4
NORTH AVE	100	2	20	UNDISTRIBUTED
PROJECT TOTALS	1250	6	200	

SAWING CONCRETE
690.0250
*

STATION	LOCATION	LF	DESCRIPTION
12+34	NORTH AVE	68	MATCH POINT
12+31 LT	NORTH AVE	6	SIDEWALK
12+31 RT	NORTH AVE	7	SIDEWALK
12+86 RT	NORTH AVE	1.5	CURB
13+10 RT	NORTH AVE	1.5	SIDEWALK
14+94 LT	NORTH AVE	6	SIDEWALK
15+37 RT	NORTH AVE	46	DRIVEWAY
17+00 RT	NORTH AVE	41	DRIVEWAY
19+54 LT	NORTH AVE	12	DRIVEWAY
19+88 RT	NORTH AVE	6	SIDEWALK
24+44 RT	NORTH AVE	29	DRIVEWAY
25+96 LT	NORTH AVE	47	DRIVEWAY
30+14 RT	NORTH AVE	4	WALK
30+31 RT	NORTH AVE	8	DRIVEWAY
30+70 RT	NORTH AVE	11	DRIVEWAY
30+85 RT	NORTH AVE	4	WALK
31+07 RT	NORTH AVE	8	DRIVEWAY
31+26 RT	NORTH AVE	4	WALK
31+52 RT	NORTH AVE	17	DRIVEWAY
31+95 RT	NORTH AVE	11	DRIVEWAY
32+24 RT	NORTH AVE	4	WALK
32+40 RT	NORTH AVE	10	DRIVEWAY
32+69 RT	NORTH AVE	5	WALK
32+85 RT	NORTH AVE	12	DRIVEWAY
33+16 RT	NORTH AVE	4	WALK
SUBTOTAL		373	

SAWING CONCRETE
690.0250
*

STATION	LOCATION	LF	DESCRIPTION
33+43 RT	NORTH AVE	19	DRIVEWAY
33+89 RT	NORTH AVE	13	DRIVEWAY
34+51 RT	NORTH AVE	13	DRIVEWAY
34+86 RT	NORTH AVE	5	WALK
34+98 RT	NORTH AVE	14	DRIVEWAY
35+22 RT	NORTH AVE	7	WALK
35+85 RT	NORTH AVE	25	DRIVEWAY
36+20 RT	NORTH AVE	5	WALK
36+35 RT	NORTH AVE	3	WALK
36+57 RT	NORTH AVE	32	DRIVEWAY
37+00 RT	NORTH AVE	4	WALK
37+14 RT	NORTH AVE	9	DRIVEWAY
37+40 RT	NORTH AVE	4	WALK
37+67 RT	NORTH AVE	9	DRIVEWAY
38+35 RT	NORTH AVE	16	DRIVEWAY
38+62 RT	NORTH AVE	7	WALK
38+78 RT	NORTH AVE	10	CURB
41+70 RT	NORTH AVE	15	DRIVEWAY
41+82 LT	NORTH AVE	6	SIDEWALK
41+99 RT	NORTH AVE	6	SIDEWALK
43+00-46+00 LT	NORTH AVE	600	MEDIAN
SUBTOTAL		822	

* QUANTITIES INCLUDED ELSEWHERE

SAWING CONCRETE
690.0250
*

STATION	LOCATION	LF	DESCRIPTION
61+92	21ST ST	37	MATCH POINT
61+79	21ST ST	5	SIDEWALK
69+32	20TH ST	31	MATCH POINT
69+67	20TH ST LT	6	SIDEWALK
69+67	20TH ST RT	6	SIDEWALK
78+80	19TH ST	37	MATCH
79+23	19TH ST LT	6	SIDEWALK
79+64	19TH ST RT	7	SIDEWALK
81+75	MUTH CT	37	MATCH
91+43	15TH ST RT	2	CURB
92+04	15TH ST	49	MATCH
11+22	26TH ST	37	
80+80	MUTH CT RT	6	SIDEWALK
81+75	MUTH CT	37	MATCH
88+95	15TH ST	85	MATCH
88+95	15TH ST RT	7	SIDEWALK
88+95	15TH ST LT	6	SIDEWALK
91+43	15TH ST RT	2	CURB
91+97	15TH ST LT	6	SIDEWALK
92+04	15TH ST	78	MATCH
92+04	15TH ST RT	7	SIDEWALK
SUBTOTAL		494	
PROJECT TOTAL		1689	

3

SANITARY SEWER REHAB AND REMOVALS

STATION	LOCATION	CAT 0020 SPV.0090.10 SANITARY SEWER PIPE LINER LF	* SPV.0090.15 TELEVISING SANITARY SEWER LF	SPV.0200.02 MANHOLE LINER VF	COMMENT
13+58 LT	SANITARY MANHOLE	-	-	10.0	MH SA-34-018
15+47 LT	SANITARY MANHOLE	-	-	9.6	MH SA-34-017
17+38 LT	SANITARY MANHOLE	-	-	10.0	MH SA-34-016
17+38 LT - 19+02 LT	SANITARY PIPE	164	164	-	MH SA-34-016 TO MH SA-34-15
19+02 LT	SANITARY MANHOLE	-	-	10.4	MH SA-34-014
20+61 LT - 22+20 LT	SANITARY PIPE	159	159	-	MH SA-34-014 TO MH SA-34-13
24+58 LT	SANITARY MANHOLE	-	-	8.6	MH SA-34-012
26+48 LT	SANITARY MANHOLE	-	-	8.5	MH SA-34-011
26+48 LT - 26+95 LT	SANITARY PIPE	47	47	-	MH SA-34-011 To MH SA-34-079
26+95 LT	SANITARY MANHOLE	-	-	8.3	MH SA-34-079
26+95 LT - 29+25 RT	SANITARY PIPE	230	230	-	MH SA-34-079 To MH SA-34-010
29+25 RT - 31+75 RT	SANITARY PIPE	250	250	-	MH SA-34-010 To MH SA-34-009
90+08 CL - 91+93 CL, 15TH ST	SANITARY PIPE	185	185	-	MH SA-34-005 To MANHOLE
78+08 CL - 80+09 CL, 19TH ST	SANITARY PIPE	201	201	-	MANHOLE TO MANHOLE
80+09 CL - 83+08 RT, 19TH ST	SANITARY PIPE	300	300	-	MANHOLE TO MANHOLE
	PROJECT TOTALS	1536	1536	65	

* QUANTITIES INCLUDED ELSEWHERE

ADJUSTING WATER VALVE BOXES

SPV.0060.23

STAGE	STATION	LOCATION	CATEGORY 0020 EACH
4	13+63 RT	NORTH AVE	1
4	13+68 RT	NORTH AVE	1
2	13+69 LT	NORTH AVE	1
4	13+90 RT	NORTH AVE	1
4	17+25 RT	NORTH AVE	1
4	19+03 RT	NORTH AVE	1
4	22+11 RT	NORTH AVE	1
4	22+12 RT	NORTH AVE	1
2	22+37 LT	NORTH AVE	1
3	24+93 LT	NORTH AVE	1
3	26+62 LT	NORTH AVE	1
3	30+20 LT	NORTH AVE	1
3	30+23 RT	NORTH AVE	1
3	30+26 LT	NORTH AVE	1
4	33+97 RT	NORTH AVE	1
2	39+80	NORTH AVE	1
2	40+30 LT	NORTH AVE	1
	PROJECT TOTAL		17

BORE AND JACK STORM SEWER INSTALLATION 24 INCH

SPV.0090.06

STATION	LOCATION	LF
27+46	UP MAIN LINE TRACK	60
28+34	UP SPUR LINE TRACK	50
	PROJECT TOTAL	110

FENCE

STATION	LOCATION	204.0000 REMOVE LF	SPV.0090.12 SALVAGE AND RESET LF
27+80, 38'-51' RT	NORTH AVE	-	15
28+97 - 30+00 RT	NORTH AVE	128	-
	PROJECT TOTALS	128	15

CONVENTIONAL SYMBOLS

SECTION LINE
QUARTER LINE
SIXTEENTH LINE
NEW REFERENCE LINE
NEW R/W LINE
EXISTING R/W OR HE LINE
PROPERTY LINE — P.L.
LOT, TIE & OTHER MINOR LINES
SLOPE INTERCEPT
CORPORATE LIMITS
UNDERGROUND FACILITY (COMMUNICATIONS, ELECTRIC, ETC) — W (TYPE)
NEW R/W (FEE OR HE) (HATCHING VARIES BY OWNER)
TEMPORARY LIMITED EASEMENT AREA
EASEMENT AREA (PERMANENT LIMITED OR RESTRICTED DEVELOPMENT)
TRANSMISSION STRUCTURES
BUILDING — TO BE REMOVED
BRIDGE

SECTION CORNER SYMBOL (16 23 24 15 9)
SECTION CORNER MONUMENT
GEODETIC SURVEY MONUMENT
SIXTEENTH CORNER MONUMENT
SIGN — SIGN
OFF-PREMISE SIGN — I-25 — SIGN

R/W MONUMENT (TO BE SET)
NON-MONUMENTED R/W POINT
FOUND IRON PIN (1-INCH UNLESS NOTED) — IP

	COMPENSABLE	NON-COMPENSABLE
ELECTRIC POLE		
TELEPHONE POLE		
PEDESTAL (LABEL TYPE) (TV, TEL, ELEC, ETC.)		

ACCESS RESTRICTED BY ACQUISITION
NO ACCESS (BY STATUTORY AUTHORITY)
ACCESS RESTRICTED (BY PREVIOUS PROJECT OR CONTROL)
NO ACCESS (NEW HIGHWAY)

PARCEL NUMBER (25) — UTILITY NUMBER (40)
PARALLEL OFFSETS

CONVENTIONAL ABBREVIATIONS

ACCESS RIGHTS	AR	POINT OF COMPOUND CURVE	PCC
ACRES	AC	POINT OF INTERSECTION	PI
AHEAD	AH	PROPERTY LINE	P/L
ALUMINUM	ALUM	RECORDED AS	(100')
AND OTHERS	ET AL	REEL / IMAGE	R/I
BACK	BK	REFERENCE LINE	R/L
BLOCK	BLK	REMAINING	REM
CENTERLINE	C/L	RESTRICTIVE DEVELOPMENT EASEMENT	RDE
CERTIFIED SURVEY MAP	CSM	RIGHT	RT
CONCRETE	CONC	RIGHT OF WAY	R/W
COUNTY	CO	SECTION	SEC
COUNTY TRUNK HIGHWAY	CTH	SEPTIC VENT	SEPV
DISTANCE	DIST	SLOPE INTERCEPT	SI
CORNER	COR	SQUARE FEET	SF
DOCUMENT NUMBER	DOC	STATE TRUNK HIGHWAY	STH
EASEMENT	EASE	STATION	STA
EXISTING	EX	TELEPHONE PEDESTAL	TP
GAS VALVE	GV	TEMPORARY LIMITED EASEMENT	TLE
GRID NORTH	GN	TRANSPORTATION PROJECT PLAT	TPP
HIGHWAY EASEMENT	HE	UNITED STATES HIGHWAY	USH
IDENTIFICATION	ID	VOLUME	V
LAND CONTRACT	LC	WALKWAY	WW
LEFT	LT		
MONUMENT	MON		
NATIONAL GEODETIC SURVEY NUMBER	NGS NO		
OUTLOT	OL		
PARKING LOT	P.L.		
PAGE	P		
POINT OF TANGENCY	PT		
PERMANENT LIMITED EASEMENT	PLE		
POINT OF BEGINNING	POB		
POINT OF CURVATURE	PC		

CURVE DATA

LONG CHORD	LCH
LONG CHORD BEARING	LCB
RADIUS	R
DEGREE OF CURVE	D
CENTRAL ANGLE	Δ/DELTA
LENGTH OF CURVE	L
TANGENT	T
DIRECTION AHEAD	DA
DIRECTION BACK	DB

NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WISCRS), SHEBOYGAN COUNTY, NAD 83 (1991) IN US SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

RIGHT OF WAY MONUMENTS ARE TYPE 2 MONUMENTS (TYPICALLY 3/4" X 24" REBAR) AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

RIGHT OF WAY BOUNDARIES ARE DEFINED WITH COURSES OF THE PERIMETER OF THE HIGHWAY LANDS REFERENCED TO THE U.S. PUBLIC LAND SURVEY OR OTHER SURVEYS OF PUBLIC RECORD.

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

BASIS FOR EXISTING R/W

SUBDIVISION PLATS
- TRANSPORTATION PROJECT PLAT 4630-05-21 JUNE 06, 2015
- ERDMANN & HEERMANN'S ADD. #2 SEPTEMBER 29, 1908
- J. SCHUBERT'S SUBDIVISION JUNE 14, 1887
- HENNING'S SUBDIVISION JUNE, 1925
- EDWIN SCHAETZER'S SUBDIVISION APRIL, 1926

CERTIFIED SURVEY MAPS
- VOLUME 25 PAGES 176-178 JUNE 08, 2012
- VOLUME 8 PAGES 268-270 OCTOBER 20, 1988
- VOLUME 24 PAGES 35-37 DECEMBER 16, 2008
- VOLUME 25 PAGES 14-15 APRIL 22, 2011
- VOLUME 26 PAGES 176-178 AUGUST 07, 2014
- VOLUME 3 PAGE 278 APRIL 18, 1977
- VOLUME 20 PAGES 161-164 FEBRUARY 16, 2004

DEEDS OF RECORD
- VOLUME R OF CONTRACTS PAGES 123-124 FEBRUARY 11, 1938
- VOLUME 101 PAGE 472 DECEMBER 16, 1904
- VOLUME 42 PAGE 412 AUGUST 08, 1874
- VOLUME 42 PAGE 425 JUNE 25, 1874
- VOLUME 205 PAGE 36 AUGUST 26, 1932
- VOLUME 205 PAGE 31 AUGUST 26, 1932
- VOLUME 208 PAGE 18 JULY 28 1933
- VOLUME 205 PAGE 35 AUGUST 24, 1932
- VOLUME 204 PAGE 588 AUGUST 08, 1932
- VOLUME 205 PAGE 22 SEPTEMBER 01, 1932

FOUND SURVEY MONUMENTATION AS SHOWN ON THIS PLAT OF RIGHT-OF-WAY

PLAT OF SURVEYS

N

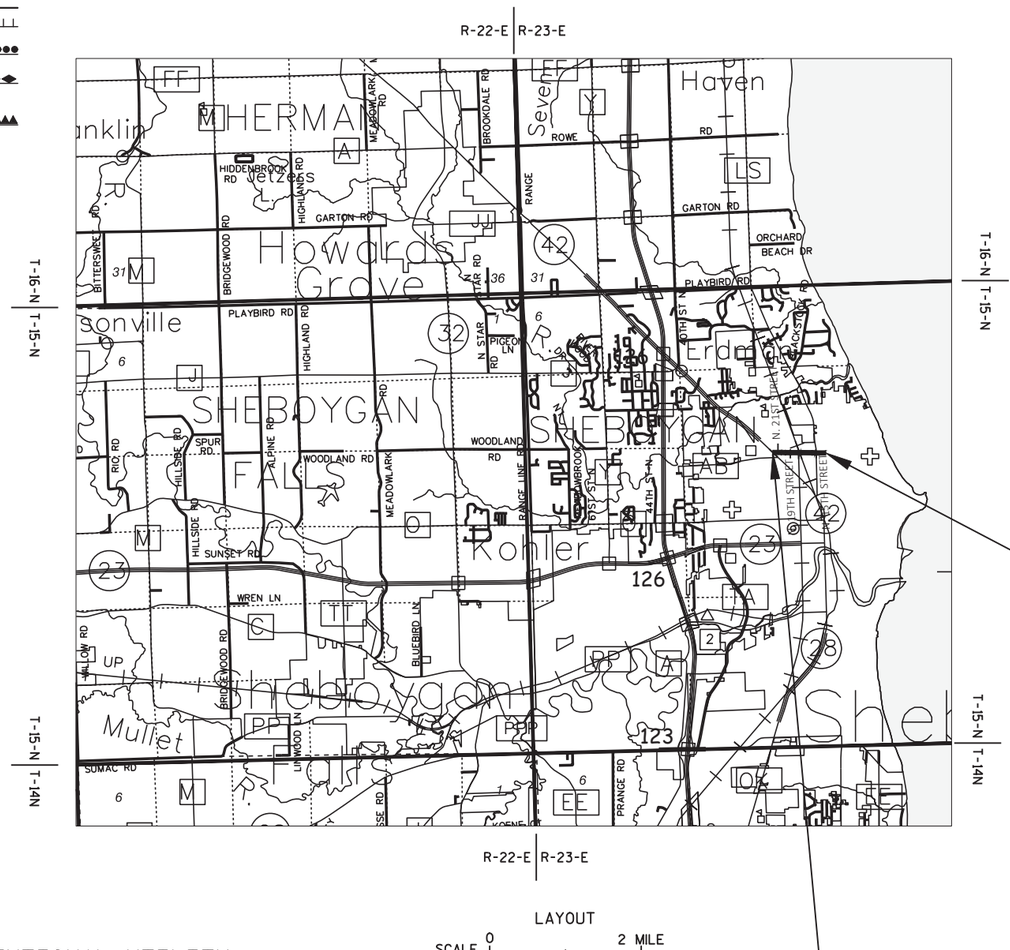
R/W PROJECT NUMBER 4996-01-78	SHEET NUMBER	TOTAL SHEETS
R/W PROJECT NUMBER 4996-01-78	4.01	12

PLAT OF RIGHT OF WAY REQUIRED FOR

CALUMET AVE - N. 13TH STREET CITY OF SHEBOYGAN

NORTH AVENUE — SHEBOYGAN CO.

CAUTION
THIS PLAT IS FOR ILLUSTRATIVE PURPOSES ONLY. DEEDS MUST BE CHECKED TO DETERMINE PROPERTY BOUNDARIES.



LAYOUT
SCALE 0 — 2 MILE

TOTAL NET LENGTH OF CENTERLINE = 0.66

BEGIN RELOCATION ORDER STA 11+50.00
1533.48' WEST AND 616.64' SOUTH OF
THE NORTH 1/4 CORNER OF SECTION 15,
TOWNSHIP 15 NORTH, RANGE 23 EAST
Y-184963.374 X-213048.938

A TEMPORARY LIMITED EASEMENT (TLE) IS A RIGHT FOR CONSTRUCTION PURPOSES, AS DEFINED HEREIN, INCLUDING THE RIGHT TO OPERATE NECESSARY EQUIPMENT THEREON, THE RIGHT OF INGRESS AND EGRESS, AS LONG AS REQUIRED FOR SUCH PU8LIC, PURPOSE, Including THE RIGHT TO PRESERVE, PROTECT, REMOVE, OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM DESIRABLE. ALL (TLEs) ON THIS PLAT EXPIRE AT THE COMPLETION OF THE CONSTRUCTION PROJECT FOR WHICH THIS INSTRUMENT IS GIVEN. TLE AREAS ARE TO THE FACE OF THE BUILDING FOR SLOPING, NOT WITHIN THE BUILDING.

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 DESIRABLE, BUT WITHOUT PREJUDICE TO THE OWNER'S RIGHTS TO MAKE OR CONSTRUCT IMPROVEMENTS ON SAID LANDS OR TO FLATTEN THE SLOPES, PROVIDING SAID ACTIVITIES WILL NOT IMPAIR OR OTHERWISE ADVERSELY AFFECT THE HIGHWAY FACILITIES.

AN EASEMENT FOR HIGHWAY PURPOSES (HE), AS LONG AS SO USED, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE, OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM DESIRABLE.

END RELOCATION ORDER STA 46+23.00
1938.31' EAST AND 656.02' SOUTH OF
THE NORTH 1/4 CORNER OF SECTION 15,
TOWNSHIP 15 NORTH, RANGE 23 EAST
Y-184923.993 X-216520.730

ORIGINAL PLAT PREPARED BY MCMAHON

WISCONSIN
DAVID M. SCHMALZ
S-1284
NEENAH
WIS.
LAND SURVEYOR

August 3, 2018 — DATE — David M. Schmalz — SIGNATURE

REVISION DATE	CITY OF SHEBOYGAN
	DATE: 8/03/18 Ryan J. Sazama (Signature) Ryan J. Sazama (Print Name)

FILE NAME : W:\PROJECTS\W0059\81500117\CADD\CIVIL3D\PLAN SHEETS\04-RW PLAT\NORTH-01-TITLE.DWG
LAYOUT NAME - NORTHAVE-01RW
PLOT DATE : 11/1/2018 4:45 PM PLOT BY : CHRIS CLEMENS PLOT NAME :
WISDOT/CADDS SHEET 50

SCHEDULE OF LAND & INTEREST REQUIRED

PARCEL NUMBER	SHEET NUMBER	OWNER(S)	TAX KEY NUMBER	INTEREST REQUIRED	TOTAL ACRES	R/W ACRES REQUIRED NEW	R/W ACRES REQUIRED EXISTING	R/W ACRES REQUIRED TOTAL	TOTAL ACRES REMAINING	TLE ACRES	PLE ACRES	HIGHWAY EASEMENT ACRES
2	4.05	NORTH CALUMET, LLC A WISCONSIN LIMITED LIABILTY COMPANY	59281630210	TLE	0.491					0.086		
3	4.05	2100 NORTH, LLC A WISCONSIN LIMITED LIABILTY COMPANY	59281630220	TLE	1.133					0.065		
4	4.05	J & P REAL ESTATE, LLC A WISCONSIN LIMITED LIABILTY COMPANY	59281629560	TLE	0.504					0.064		
6	4.05, 4.06	KT REAL ESTATE HOLDINGS LLC	59281602421	TLE	2.109					0.210		
7	4.06	PHOENIX SHEBOYGAN LLC, A WISCONSIN LIMITED LIABILTY COMPANY	59281629510	TLE	6.066					0.066		
8	4.06	DENNIS D. KALTENBRUN	59281629540	TLE	0.195					0.033		
9	4.06	DOUGLAS L. MARTHA H. LEPPANEN	59281608630	TLE	0.291					0.056		
11	4.06	LARRY L. JACQUELINE A. WALSTON	59281608620	TLE	0.163					0.028		
12	4.07	LISA MICHELLE GUELIG	59281608341	FEE & TLE	0.143	0.001		0.001	0.142	0.031		
13	4.06, 4.07	KALTENBRUN BROS. ROOFING CO., INC.	59281629520	TLE	0.863					0.052		
14	4.07, 4.08	MANNING LIGHTING INC	59281629480	FEE & TLE	3.040	0.003		0.003	3.037	0.162		
16	4.07, 4.08	KINGSBURY BREWERIES INVESTMENTS, LLC A WISCONSIN LIMITED LIABILTY COMPANY	59281608791	TLE	3.438					0.115		
18	4.08	CRAFTED PLASTICS ACQUISITION, LLC, A WISCONSIN LIMITED LIABILTY COMPANY	59281608760	TLE	1.810					0.013		
20	4.08	UNION PACIFIC RAILROAD	59281626405, 59281626410 & 59281629400	TLE & HE						0.108		0.028
21	4.08	PLASTICS ENGINEERING COMPANY	59281626422	PLE	1.130						0.007	
24	4.08, 4.09, 4.10	PLASTICS ENGINEERING COMPANY	59281629040	FEE & TLE	18.850	0.023		0.023	18.827	0.350		
26	4.08	DENNIS A. STONE	59281626430	TLE	0.363					0.053		
27	4.08	KENNETH SCHILLING	59281626440	TLE	0.118					0.014		
28	4.08	STEPHANIE D. VAN DE WEGHE	59281626450	TLE	0.118					0.014		
29	4.08, 4.09	MEE YANG	59281626460	TLE	0.133					0.015		
31	4.09	PATRICIA H. SIENKIEWICZ	59281626470	TLE	0.133					0.015		
32	4.09	STONEY RIDGE HOMES, LLC	59281626480	TLE	0.133					0.015		
33	4.09	MARK S. BUTZEN	59281626490	TLE	0.133					0.013		
34	4.09	CARRIE S. WILLIAMS	59281626500	TLE	0.178					0.018		
36	4.09	JOHN L. VAN GROTHEEST	59281626510	TLE	0.178					0.014		
37	4.09	LARRY M. & CARLA M. VAN DYKE	59281626520	TLE	0.133					0.010		
38	4.09	MARIA K. ZACHARI PERSONAL ASSET TRUST UTA 08-26-1998	59281626530	TLE	0.133					0.012		
39	4.09	SHAWN R. HANSEN	59281626540	TLE	0.133					0.014		
41	4.09	PAMELA J. NESPODZANY	59281626550	TLE	0.136					0.015		
42	4.09, 4.10	JOSEPH P. BONELLI	59281626560	TLE	0.237					0.026		
43	4.10	FRED J. & NICOLE M. DEKANICH	59281626570	TLE	0.133					0.021		
44	4.10	JAMES N. WAGNER	59281626580	TLE	0.163					0.025		
46	4.10	TIMOTHY STEVENS	59281626590	TLE	0.178					0.028		
47	4.10	GLENN C. & SYLVIA A. MOORE TRUST DATED JENUARY 13, 2006	59281626660	TLE	0.110					0.012		
48	4.10	ACCURATE REPAIRS, LLC A WISCONSIN LIMITED LIABILTY COMPANY	59281626610	HE & TLE	0.095					0.037		0.013
49	4.10	SHEILA & CARLA MATLIN	59281626220	FEE & TLE	0.081	0.003		0.003	0.078	0.011		
51	4.10	ADITHI LLC, A WISCONSIN LIMITED LIABILTY COMPANY	59281708890	HE & TLE	0.275					0.055		0.011
52	4.10	BRUNS CHIROPRACTIC OFFICE, S.C., A WISCONSIN CORPORATION	59281718060	HE & TLE	0.248					0.042		0.013
53	4.10	DANIEL C. WILSON	59281708900	TLE	0.143					0.006		
54	4.10	STEVE M. MUELLER & SARAH A. OPPENEER	59281718050	TLE	0.116					0.005		
55	4.10	RITGER CONSERVATION DEVELOPMENT LLC & WILLIAM WESSING	59281709655	TLE	1.690					0.009		

SCHEDULE OF LAND & INTEREST REQUIRED

PARCEL NUMBER	SHEET NUMBER	OWNER(S)	INTEREST REQUIRED
100	4.05, 4.07, 4.10	AT&T-WISCONSIN	RELEASE OF RIGHTS
101	4.05, 4.08	PAETEC (a.k.a Windstream)	RELEASE OF RIGHTS

OWNER'S NAME ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTEREST TO THE CITY.

REVISION DATE

DATE 07/17/2018

GRID FACTOR N/A

SCALE, FEET 0 20 40

HWY: NORTH AVE

COUNTY: SHEBOYGAN

STATE R/W PROJECT NUMBER 4996-01-78

CONSTRUCTION PROJECT NUMBER 4996-01-79

PLAT SHEET 4.02

PS&E SHEET 139

E

FILE NAME : NORTHAVE-RW PLAT SOI.DWG
LAYOUT NAME - 02 NorhtAve-02RW

PLOT DATE : 11/1/2018 4:46 PM PLOT BY : CHRIS CLEMENS PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 75

4

4

4

4

N

CITY OF

NW¼ NW¼ SEC. 15-15-23

NE¼ NW¼ SEC. 15-15-23

NW¼ NW¼ SEC. 15-15-23

NE¼ NW¼ SEC. 15-15-23

CALUMET DRIVE

S.T.H. 42

NORTH AVE

21ST ST

20TH ST

19TH ST

MUTH CT

PUBLIC ALLEY

PUBLIC ALLEY

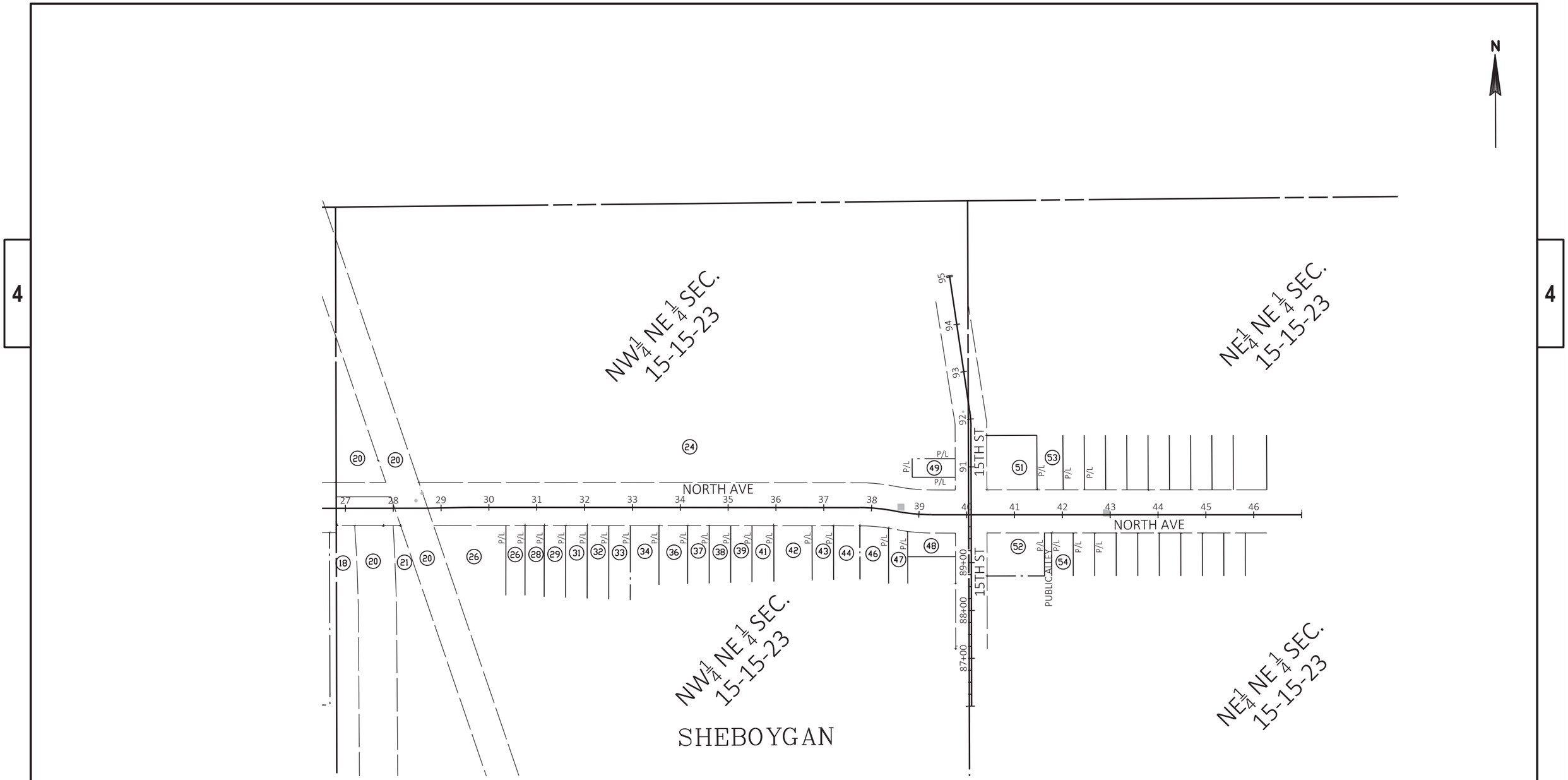
P/L

REVISION DATE	DATE 07/17/2018	SCALE, FEET 0 100 200	HWY: NORTH AVE	STATE R/W PROJECT NUMBER 4996-01-78	PLAT SHEET 4.03	
	GRID FACTOR N/A		COUNTY: SHEBOYGAN	CONSTRUCTION PROJECT NUMBER 4996-01-79	PS&E SHEET 140	E

FILE NAME : NORTHAVE-RW PLAT LAYOUT SHEETS.DWG
LAYOUT NAME - 03 NorthAve-03RW

PLOT DATE : 11/1/2018 4:46 PM PLOT BY : CHRIS CLEMENS PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 75



REVISION DATE	DATE 07/17/2018	SCALE, FEET 0 100 200	HWY: NORTH AVE	STATE R/W PROJECT NUMBER 4996-01-78	PLAT SHEET 4.04
	GRID FACTOR N/A		COUNTY: SHEBOYGAN	CONSTRUCTION PROJECT NUMBER 4996-01-79	PS&E SHEET 141 E

FILE NAME : NORTHAVE-RW PLAT LAYOUT SHEETS.DWG
LAYOUT NAME - 04 NorthAve-04RW

PLOT DATE : 11/1/2018 4:46 PM PLOT BY : CHRIS CLEMENS PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 75

LOT 1 CERTIFIED SURVEY MAP
VOLUME 27 PAGES 294-296
DOC NO. 2033749

NE-NW

LOT 2 CERTIFIED SURVEY MAP
VOLUME 27 PAGES 294-296
DOC NO. 2033749

LOT 2 CERTIFIED SURVEY MAP
VOLUME 27 PAGES 294-296
DOC NO. 2033749

CITY OF SHEBOYGAN

(2)

Tax Key # 59281630210
OWNER: NORTH CALUMET, LLC A
WISCONSIN LIMITED LIABILTY COMPANY

0.086 AC TLE
FOR DRIVEWAY & P.L. CONSTRUCTION
SLOPING AND GRADING

BLDG

61+97.91
33.00' TLE

61+98.02
48.03' TLE

61+09.28
58.54' TLE

12+07.63
60.50' TLE

12+72.83
60.50' TLE

SI

IP

N 21ST STREET

R/L-N00°14'22"E

61+00

62+00

33'

33'

10'

61+89.42
33.00' TLE

61+89.39
43.00' TLE

N

NE-NW

0.064 AC TLE
FOR DRIVEWAY & P.L. CONSTRUCTION
SLOPING AND GRADING

(4)

Tax Key # 59281629560
OWNER: J & P REAL ESTATE, LLC A
WISCONSIN LIMITED LIABILTY COMPANY

UNPLATTED
LANDS

60+76.12
43.00' TLE

14+21.65
60.50' TLE

15+50.45
60.50' TLE

BLDG

P/L

10'

10'

SHEBOYGAN COUNTY
ID: 53100020
Y 185580.014
X 214582.422
CONCRETE MONUMENT
W/ BRASS CAP

T 15 N
R 22 E
15
10
15

4

4

MATCH LINE 15□50.62
SEE SHEET □.06

EAST LINE NW1/4 SEC. 15 624.45'
NE1/4 SEC. 15 2626.08'
WEST LINE NE1/4 SEC. 15

N89°44'31"W 1130.07'
TO REFERENCE LINE
STATION 15+50.61

2001.63'
S00°15'29"W

11+00 12+00 13+00 14+00 15+00

C/L-S89°36'43"E 717.08'

R/L NORTH AVE 13+57.61
R/L N 21ST STREET 60+00
Y-184961.968
X-213256.539

R/L-S89°36'43"E 596.82'

BEGIN RELOCATION ORDER
STA 11+50.00
Y-184963.374
X-213048.938

NORTH AVENUE

45'

50.5'

45'

10'

101

100

3/4" REBAR

11+67.80
49.50' TLE

14+56.97
49.50' TLE

14+56.97
73.00' TLE

33.5'

P/L

3/4"REBAR

0.065 AC TLE
FOR DRIVEWAY CONSTRUCTION
SLOPING AND GRADING

SI

BLDG

S.T.H 42
CALUMET DRIVE

NE-NW

(3)

Tax Key # 59281630220
OWNER: 2100 NORTH, LLC A WISCONSIN
LIMITED LIABILTY COMPANY

LOT 1 CERTIFIED SURVEY MAP
VOLUME 24 PAGES 35-37
DOC NO. 1866132
AFFIDAVIT DOC NO. 1896797

EAST LINE NW¼ SEC. 15-15-23
WEST LINE NE¼ NW¼ SEC. 15-15-23

0.072 AC TLE
FOR DRIVEWAY CONSTRUCTION
SLOPING AND GRADING

(6)

Tax Key # 59281602421
OWNER: KT REAL ESTATE HOLDINGS LLC

LOT 2 CERTIFIED SURVEY MAP
VOLUME 24 PAGES 35-37
DOC NO. 1866132
AFFIDAVIT DOC NO. 1896797

SHEBOYGAN COUNTY
ID: 53100020
Y 182953.961
X 214570.594
P.K. NAIL

T 15 N
R 22 E
15

REVISION DATE	DATE 07/17/2018	SCALE, FEET 0 20 40	HWY: NORTH AVE	STATE R/W PROJECT NUMBER 4996-01-78	PLAT SHEET 4.05	
	GRID FACTOR N/A		COUNTY: SHEBOYGAN	CONSTRUCTION PROJECT NUMBER 4996-01-79	PS&E SHEET — 142	E

FILE NAME : NORTHAVE-RW PLAT.DWG
LAYOUT NAME - 05 NorthAve-05RW

PLOT DATE : 11/1/2018 4:46 PM PLOT BY : CHRIS CLEMENS PLOT NAME : PLOT SCALE : 1 IN:40 FT

4

4

NE-NW

N

CITY OF SHEBOYGAN

BLDG

7
Tax Key # 59281629510
OWNER: PHOENIX SHRBOYGAN LLC,
A WISCONSIN LIMITED LIABILTY COMPANY

P/L 15+50.44
64.00' TLE

SI

0.066 AC TLE
FOR DRIVEWAY & P.L. CONSTRUCTION
SLOPING AND GRADING

UNPLATTED
LANDS

MAG
NAIL

IP

0.015 AC TLE
FOR DRIVEWAY CONSTRUCTION
SLOPING AND GRADING

8
Tax Key # 59281629540
OWNER: DENNIS D. KALTENBRUN

0.018 AC TLE
FOR DRIVEWAY CONSTRUCTION
SLOPING AND GRADING

UNPLATTED
LANDS

13
Tax Key # 59281629520
OWNER: KALTENBRUN BROS.ROOFING CO., INC.

UNPLATTED
LANDS

0.020 AC TLE
FOR DRIVEWAY & P.L. CONSTRUCTION
SLOPING AND GRADING

SHEBOYGAN COUNTY
ID: 53100020
Y 185580.014
X 214582.422
CONCRETE MONUMENT W/
BRASS CAP

T 15 N
R 2□ E
10
15

628.49'
2626.08'

EAST LINE NW1/4 SEC. 15
WEST LINE NE1/4 SEC. 15

N89°44'31"W 628.50'
TO REFERENCE LINE
STATION 20+50

SEE SHEET □.05
MATCH LINE 15□50.61

MATCH LINE 20□52.22
SEE SHEET □.07

50.5'
45'
54'
39.5'
36'
33.5'

C/L-S89°36'43"E 717.08'
C/L-S89°47'12"E, 145.68'
C/L P.I. 9.00' LT.
18+72.25
Y-184964.427
X-213771.291
C/L-S89°39'42"E, 996.51'

16+00
17+00
18+00
19+00
20+00

REF. LINE
15+96.82 P.I.
Y-184960.348
X-213495.746

NORTH AVENUE

R/L-S88°58'36"E 275.54'

REF. LINE
18+72.36 P.I.
Y-184955.427
X-213771.247

R/L NORTH AVE 13+57.61
R/L N 21ST STREET 60+00
Y-184961.968
X-213256.539

R/L-S89°39'42"E 996.50'

6"X6" CONCRETE
MONUMENT W/
1/2" REBAR

MATCH

0.138 AC TLE
FOR DRIVEWAY CONSTRUCTION
SLOPING AND GRADING

17+27.59
73.00' TLE

PUBLIC ALLEY

18'

LOT 1 BLOCK NO. 2
ERMANN & HEERMANN'S ADD NO. 2

0.056 AC TLE
FOR SLOPING AND GRADING

SI

17+45.38
56.00' TLE

18+72.44
56.00' TLE

LOT 2 BLOCK NO. 2
ERDMANN & HEERMANN'S ADD NO. 2

HOUSE

HOUSE

9
Tax Key # 59281608630
OWNER: DOUGLAS L. MARTHA H. LEPPANEN

N

6
Tax Key # 59281602421
OWNER: KT REAL ESTATE HOLDINGS LLC

LOT 2 CERTIFIED SURVEY MAP
VOLUME 24 PAGES 35-37
DOC NO. 1866132
AFFIDAVIT DOC NO. 1896797

LOT 3 BLOCK NO. 2
ERDMANN & HEERMANN'S ADD NO. 2

N 20TH STREET

R/L-N00°14'18"E

69+00

30'
30'
60'

LOT 34 BLOCK NO. 1
ERMANN & HEERMANN'S ADD NO. 2

HOUSE

0.028 AC TLE
FOR SLOPING AND GRADING

19+32.42
46.00' TLE

20+52.30
46.00' TLE

11
Tax Key # 59281608620
OWNER: LARRY L. JACQUELINE A.
WALSTON
LOT 33 BLOCK NO. 1
ERDMANN & HEERMANN'S ADD NO. 2

LOT 32 BLOCK NO. 1
ERDMANN & HEERMANN'S ADD NO. 2

1997.59'
S00°15'29"W

SHEBOYGAN COUNTY
ID: 53100020
Y 182953.961
X 214570.594
P.K. NAIL

T 15 N
R 2□ E
15

NE-NW

REVISION DATE	DATE 07/17/2018	SCALE, FEET 0 20 40	HWY: NORTH AVE	STATE R/W PROJECT NUMBER 4996-01-78	PLAT SHEET 4.06
	GRID FACTOR N/A		COUNTY: SHEBOYGAN	CONSTRUCTION PROJECT NUMBER 4996-01-79	PS&E SHEET 143 E

FILE NAME : NORTHAVE-RW PLAT.DWG
LAYOUT NAME - 06 NorthAve-06RW

PLOT DATE : 11/1/2018 4:46 PM PLOT BY : CHRIS CLEMENS PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 75

4

4

REF. LINE
82+31.18 P.I.
Y=185184.551
X=214118.718

82+32.11
44.00' TLE

82+32.14
30.00' TLE

82+00

14'

60'

30' 30'

MUTH COURT

81+00

R/L-N00°15'14"W

NE-NW

0.134 AC TLE
FOR DRIVEWAY CONSTRUCTION
SLOPING AND GRADING

CITY OF SHEBOYGAN

SHEBOYGAN COUNTY
ID: 53100020
Y 185580.014
X 214582.422
CONCRETE MONUMENT W/
BRASS CAP
SC132

T 15 N
10
15
R 2□ E

BLDG

(13)
Tax Key # 59281629520
OWNER: KALTENBRUN BROS. ROOFING CO., INC.

(14)
Tax Key # 59281629480
OWNER: MANNING LIGHTING INC

UNPLATTED LANDS

0.032 AC TLE
FOR DRIVEWAY & P.L. CONSTRUCTION
SLOPING AND GRADING

21+90.20
64.00' TLE

PRW103
PRW104

22+64.26
59.00' TLE

24+35.00
69.00' TLE

24+35.00
59.00' TLE

ERW105

SI

10'

15'

5'

(100)

EAST LINE NW1/4 SEC. 15

629.25'

2626.08'

WEST LINE NE1/4 SEC. 15

1996.83'

S00°15'29"W

SEE SHEET □06
MATCH LINE 20□52.22

R/L NORTH AVE 22+20.04
R/L N 19TH STREET 80+00.00
Y-184953.374
X-214118.913

R/L NORTH AVE 22+20.86
R/L MUTH STREET 80+00.00
Y-184953.369
X-214119.742

54'

45'

C/L-S89°39'42"E, 996.51'

21+00 22+00 23+00 24+00 25+00 26

R/L-S89°39'42"E 996.50'

NORTH AVENUE

60'

51'

MATCH LINE 26□00
SEE SHEET □08

TP139

ERW100

TP138

TP137

PRW101

CONCRETE MONUMENT

IP

10'

17'

20+70.30
46.00' TLE

21+79.70
46.00' TLE

HOUSE

0.031 AC TLE
FOR SLOPING AND GRADING

Tax Key # 59281608341
OWNER: LISA & MICHELLE GUELIG
LOT 1 CERTIFIED SURVEY MAP
VOLUME 25 PAGES 14-15
DOC NO. 1923148

(12)

PRW102

79+22.54
30.00' TLE

R/L-N00°14'18"E

N 19TH STREET

79+00

12'

22+50.15
63.00' TLE

SI

0.096 AC TLE
FOR DRIVEWAY CONSTRUCTION
SLOPING AND GRADING

N89°39'42"W 80.72'
TO REFERENCE LINE
STATION 26+00

SHEBOYGAN COUNTY
ID: 53100020
Y 182953.961
X 214570.594
P.K. NAIL

T 15 N
15
R 2□ E

PUBLIC ALLEY

18'

LOT 2 CERTIFIED SURVEY MAP
VOLUME 25 PAGES 14-15
DOC NO. 1923148

60'

30' 30'

(16)
Tax Key # 59281608791
OWNER: KINGSBURY BREWERIES
INVESTMENTS, LLC A WISCONSIN
LIMITED LIABILTY COMPANY

UNPLATTED LANDS

REVISION DATE	DATE 07/17/2018	SCALE, FEET 0 20 40	HWY: NORTH AVE	STATE R/W PROJECT NUMBER 4996-01-78	PLAT SHEET 4.07
	GRID FACTOR N/A		COUNTY: SHEBOYGAN	CONSTRUCTION PROJECT NUMBER 4996-01-79	PS&E SHEET 144 E

FILE NAME : NORTHAVE-RW PLAT.DWG
LAYOUT NAME - 07 NorthAve-07RW

PLOT DATE : 11/1/2018 4:46 PM PLOT BY : CHRIS CLEMENS PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 75

4

NE-NW

SHEBOYGAN COUNTY
ID: 53100020
Y 185580.014
X 214582.422
CONCRETE MONUMENT W/
BRASS CAP
SC132

T 15 N
10
15
R 23 E

BLDG

629.37'
WEST LINE 2626.08'
NE1/4 SEC. 15

(14)
Tax Key # 59281629480
OWNER: MANNING LIGHTING INC
UNPLATTED
LANDS

(20)
Tax Key #
59281626405
OWNER: UNION
PACIFIC RAILROAD

(20)
Tax Key #
59281626405
OWNER: UNION
PACIFIC RAILROAD

LOT 19 J. SCHUBERT'S SUBDIVSION

LOT 18 J. SCHUBERT'S SUBDIVSION

LOT 17 J. SCHUBERT'S SUBDIVSION

LOT 16 J. SCHUBERT'S SUBDIVSION

LOT 15 J. SCHUBERT'S SUBDIVSION

20'
STORM
SEWER
EASEMENT

NW-NE

(24)
Tax Key # 59281629040
OWNER: PLASTICS ENGINEERING COMPANY

N

26+80.62
69.00' TLE

26+80.61
74.00' TLE

P/L

0.028 AC TLE
FOR DRIVEWAY CONSTRUCTION
SLOPING AND GRADING

SI

HE126

0.058 AC TLE
FOR SLOPING AND GRADING

28+46.75
74.00' TLE

28+45.04
79.00' TLE

HE125

0.117 AC TLE
FOR DRIVEWAY CONSTRUCTION
SLOPING AND GRADING

30+00.00
79.00' TLE

30+00.00
62.00' TLE

10'

LINE

0.020 AC HE
FOR GRADING

ERW127

(LANDS OWNED BY THE RAILROAD)
EASEMENT FROM CNWRR TO THE CITY
PER VOL. R PGS. 124-126 DOC #359725

ERW129

C/L P.I. 9.00' LT.
28+69.04
Y-184958.543
X-214767.788

45'

NORTH AVENUE

C/L-S89°39'42"E, 996.51'

SEE SHEET □.07
MATCH LINE 26□00

27+00

28+00

29+00

30+00

31+00

MATCH LINE □1□15.65
SEE SHEET □.0□

Y-184950.654
X-214579.587

R/L-S89°39'42"E 996.50'

REF. LINE
28+68.86 P.I.
Y-184949.543
X-214767.727

R/L-N89°13'42"E
95.08'

REF. LINE
29+63.94 P.I.
Y-184950.824
X-214862.799

R/L-S89°33'59"E
811.04'

ERW136

ERW131

HE124

ERW130

0.013 AC TLE
FOR DRIVEWAY CONSTRUCTION
SLOPING AND GRADING

(101)

0.007 AC PLE
FOR GRADING

0.008 AC HE
FOR GRADING

0.014 AC TLE
FOR DRIVEWAY CONSTRUCTION
SLOPING AND GRADING

MATCH LINE

12'

26+66.65
63.00' TLE

26+80.79
51.00' TLE

27+20.21
51.00' TLE

27+20.41
53.00' TLE

0.031 AC TLE
FOR SLOPING AND GRADING

28+00.69
53.00' TLE

28+20.99
53.00' TLE

0.019 AC TLE
FOR SLOPING AND GRADING

HE123

SI

0.053 AC TLE
FOR DRIVEWAY & WW
CONSTRUCTION
SLOPING AND GRADING

15'

HOUSE

HOUSE

HOUSE

0.014 AC TLE
FOR DRIVEWAY & WW
CONSTRUCTION
SLOPING AND GRADING

MATCH LINE

1996.71'

EAST LINE NE1/4 NW1/4 SEC. 15

S00°15'29"W

0.018 AC TLE
FOR DRIVEWAY CONSTRUCTION
SLOPING AND GRADING

(16)
Tax Key # 59281608791
OWNER: KINGSBURY BREWERIES
INVESTMENTS, LLC A WISCONSIN
LIMITED LIABILTY COMPANY

UNPLATTED
LANDS

NE-NW

LOT 22 J. SCHUBERT'S SUBDIVSION

TLE FOR
GRADING 0.013

(18)
Tax Key #
59281608760
OWNER: CRAFTED
PLASTICS
ACQUISITION, LLC,
A WISCONSIN
LIMITED LIABILTY
COMPANY

(20)
Tax Key #
59281626410
OWNER: UNION
PACIFIC RAILROAD

UNION PACIFIC RAILROAD

VOL 429 PG 590-591 DRIVEWAY
EASEMENT FROM RAILROAD TO PLASTICS
ENGINEERING COMPANY

EASEMENT PER
DOC. 1993783
FOR TRAIL TO
SHEBOYGAN
COUNTY

(21)
Tax Key #
59281626422
OWNER: PLASTICS
ENGINEERING
COMPANY

LOT 1 CERTIFIED SURVEY MAP
VOLUME 26 PAGES 176-178
DOC NO. 1990051

(20)
Tax Key #
59281629400
OWNER: UNION
PACIFIC RAILROAD

UNION PACIFIC RAILROAD

LOT 25 J. SCHUBERT'S SUBDIVSION

LOT 26 J. SCHUBERT'S SUBDIVSION

LOT 27 J. SCHUBERT'S SUBDIVSION

LOT 28 J. SCHUBERT'S SUBDIVSION

(26)
Tax Key # 59281626430
OWNER: DENNIS A. STONE

(27)
Tax Key #
59281626440
OWNER: KENNETH
SCHILLING

(28)
Tax Key #
59281626450
OWNER:
STEPHANIE D.
VAN DE WEGHE

CITY OF SHEBOYGAN

NW-NE

SHEBOYGAN COUNTY
ID: 53100020
Y 182953.961
X 214570.594
P.K. NAIL

T 15 N
15
R 23 E

30'

50'

REVISION DATE	DATE 07/17/2018	SCALE, FEET 0 20 40	HWY: NORTH AVE	STATE R/W PROJECT NUMBER 4996-01-78	PLAT SHEET 4.08
	GRID FACTOR N/A		COUNTY: SHEBOYGAN	CONSTRUCTION PROJECT NUMBER 4996-01-79	PS&E SHEET 145 E

FILE NAME : NORTHAVE-RW PLAT.DWG
LAYOUT NAME - 08 NorthAve-08RW

PLOT DATE : 11/1/2018 4:46 PM PLOT BY : CHRIS CLEMENS PLOT NAME : PLOT SCALE : 1 IN:40 FT

SHEBOYGAN COUNTY
ID: 53100020
Y 185580.014
X 214582.422
CONCRETE MONUMENT W/
BRASS CAP

T 15 N
10
15
R 2□ E

628.39'

2626.08'

N89°44'31"W
434.91'
TO
REFERENCE
LINE
STATION
31+15.65

SEC. 15

EAST LINE NW1/4 SEC. 15

1997.69'

S00°15'29"W WEST LINE NE1/4 SEC. 15

SHEBOYGAN COUNTY
ID: 53100020
Y 182953.961
X 214570.594
P.K. NAIL

T 15 N
15
R 2□ E

CITY OF SHEBOYGAN

NW-NE

24

Tax Key # 59281629040
OWNER: PLASTICS ENGINEERING COMPANY

LOT 14 J. SCHUBERT'S SUBDIVISION
LOT 13 J. SCHUBERT'S SUBDIVISION
LOT 12 J. SCHUBERT'S SUBDIVISION
LOT 11 J. SCHUBERT'S SUBDIVISION
LOT 10 J. SCHUBERT'S SUBDIVISION
LOT 9 J. SCHUBERT'S SUBDIVISION
LOT 8 J. SCHUBERT'S SUBDIVISION
LOT 7 J. SCHUBERT'S SUBDIVISION
LOT 6 J. SCHUBERT'S SUBDIVISION

0.123 AC TLE
FOR DRIVEWAY CONSTRUCTION
SLOPING AND GRADING

SI

LINE

NORTH AVENUE

C/L-S89°33'59"E, 906.11'

R/L-S89°33'59"E
811.04'

45'
62'
10'

32+00
33+00
34+00
35+00
36+00

SEE SHEET □□08
MATCH LINE □□15.65

MATCH LINE □□6□50
SEE SHEET □□10

0.015 AC TLE
FOR DRIVEWAY & WW
CONSTRUCTION
SLOPING AND GRADING

0.015 AC TLE
FOR DRIVEWAY & WW
CONSTRUCTION
SLOPING AND GRADING

0.013 AC TLE
FOR DRIVEWAY & WW
CONSTRUCTION
SLOPING AND GRADING

0.012 AC TLE
FOR DRIVEWAY & WW
CONSTRUCTION
SLOPING AND GRADING

0.015 AC TLE
FOR DRIVEWAY CONSTRUCTION
SLOPING AND GRADING

0.018 AC TLE
FOR DRIVEWAY & WW
CONSTRUCTION
SLOPING AND GRADING

0.014 AC TLE
FOR DRIVEWAY CONSTRUCTION
SLOPING AND GRADING

0.010 AC TLE
FOR DRIVEWAY & WW
CONSTRUCTION
SLOPING AND GRADING

0.014 AC TLE
FOR DRIVEWAY & WW
CONSTRUCTION
SLOPING AND GRADING

0.015 AC TLE
FOR DRIVEWAY & WW
CONSTRUCTION
SLOPING AND GRADING

0.017 AC TLE
FOR DRIVEWAY & WW
CONSTRUCTION
SLOPING AND GRADING

32+50.64
53.00' TLE

32+50.64
51.00' TLE

33+55.64
51.00' TLE

33+55.64
48.00' TLE

34+60.64
48.00' TLE

34+60.64
50.00' TLE

35+05.64
50.00' TLE

35+05.64
52.00' TLE

35+95.63
52.00' TLE

35+95.63
53.00' TLE

HOUSE
P/L
IP

LOT 29 J. SCHUBERT'S SUBDIVISION
LOT 30 J. SCHUBERT'S SUBDIVISION
LOT 31 J. SCHUBERT'S SUBDIVISION
LOT 32 J. SCHUBERT'S SUBDIVISION
LOT 33 J. SCHUBERT'S SUBDIVISION
LOT 34 J. SCHUBERT'S SUBDIVISION
LOT 35 J. SCHUBERT'S SUBDIVISION
LOT 36 J. SCHUBERT'S SUBDIVISION
LOT 37 J. SCHUBERT'S SUBDIVISION

29 Tax Key # 59281626460 OWNER: MEE YANG
31 Tax Key # 59281626470 OWNER: PATRICIA H. SIENKIEWICZ
32 Tax Key # 59281626480 OWNER: STONEY RIDGE HOMES, LLC
33 Tax Key # 59281626490 OWNER: MARK S. BUTZEN
34 Tax Key # 59281626500 OWNER: CARRIE S. WILLIAMS
36 Tax Key # 59281626510 OWNER: JOHN L. VAN GROTHEEST
37 Tax Key # 59281626520 OWNER: LARRY M. & CARLA M. VAN DYKE
38 Tax Key # 59281626530 OWNER: MARIA K. ZACHARI PERSONAL ASSET TRUST UTA 08-26-1998
39 Tax Key # 59281626540 OWNER: SHAWN R. HANSEN
41 Tax Key # 59281626550 OWNER: PAMELA J. NESPODZANY
42 Tax Key # 59281626560 OWNER: JOSEPH P. BONELLI

NW-NE

REVISION DATE	DATE 07/17/2018	SCALE, FEET 0 20 40	HWY: NORTH AVE	STATE R/W PROJECT NUMBER 4996-01-78	PLAT SHEET 4.09
	GRID FACTOR N/A		COUNTY: SHEBOYGAN	CONSTRUCTION PROJECT NUMBER 4996-01-79	PS&E SHEET 146 E

FILE NAME : NORTHAVE-RW PLAT.DWG
LAYOUT NAME - 09 NorthAve-09RW

PLOT DATE : 11/1/2018 4:46 PM PLOT BY : CHRIS CLEMENS PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 75

4

C4 CURVE DATA
PI 91+99.12
Y 185127.289
X 215907.702
T-18.02'
RADIUS-250.00'
ARC LENGTH-35.98'
CHORD LENGTH-35.95'

SHEBOYGAN COUNTY
ID: 53100020
Y 185580.014
X 214582.422
CONCRETE MONUMENT W/
BRASS CAP
SC132

C1 CURVE DATA
PI 38+12.28
Y 184944.405
X 215711.108
T-37.29'
RADIUS-380.41'
ARC LENGTH-74.35'
CHORD LENGTH-74.23'

T 15 N
10
15
R 2□ E

630.02'

WEST LINE NE1/4 SEC. 15

2626.08'

PRW120 - PRW121
C3 CURVE DATA
RADIUS-378.48'
ARC LENGTH-4.91'
CHORD LENGTH 4.91'

TP135

N89°44'31"W 969.26'
TO REFERENCE LINE
STATION 36+50

EAST LINE NW1/4 SEC. 15

1996.06'

S00°15'29"W

SEE SHEET □0
MATCH LINE □6□50

N

NW-NE

LOT 3 J. SCHUBERT'S SUBDIVSION

LOT 5 J. SCHUBERT'S SUBDIVSION

LOT 4 J. SCHUBERT'S SUBDIVSION

LOT 1 J. SCHUBERT'S SUBDIVSION

LOT 2 J. SCHUBERT'S SUBDIVSION

(24)
Tax Key # 59281629040
OWNER: PLASTICS ENGINEERING COMPANY

(49)
Tax Key # 59281626220
OWNER: SHEILA & CARLA MATLIN

0.019 AC TLE
FOR DRIVEWAY CONSTRUCTION
SLOPING AND GRADING

0.011 AC TLE
FOR SLOPING AND GRADING

0.091 AC TLE
FOR DRIVEWAY CONSTRUCTION
SLOPING AND GRADING

37+74.98
62.00' TLE

SI

PRW119

PRW120

PRW121

39+26.48
62.00' TLE

90+91.73
43.00' TLE

NORTH AVENUE

52'

C/L P.C. 7.00' LT.
37+74.98
Y-184951.687
X-215673.871

C/L-S89°33'59"E, 906.11'

C/L P.C./P.T. 6.10' LT.
38+40.43
Y-184944.576
X-215739.989

C3

ERW109

45'

C/L P.T. 6.75' LT.
39+26.09
Y-184935.551
X-215823.899
C/L-S89°33'59"E
80.21'

TP133

37+00

38+00

39+00

40+00

41+00

R/L-S89°33'59"E
811.04'

REF. LINE
37+74.98 P.C.
Y-184944.687
X-215673.818

C1

REF. LINE
38+49.33 P.C./P.T.
Y-184936.886
X-215747.634

C2

REF. LINE
39+26.41 P.T.
Y-184928.799
X-215824.167

REF. LINE
40+09.22 P.I.
Y-184928.172
X-215906.979

R/L-S89°33'59"E
82.81'

R/L NORTH AVE 40+09.32
R/L N 15TH STREET 90+00.00
Y-184928.171
X-215907.075

R/L NORTH AVE 40+09.29
R/L N 15TH STREET 90+00.00
Y-184928.171
X-215907.044

R/L-S89°36'36"E
811.04'

TP134

0.021 AC TLE
FOR DRIVEWAY & WW
CONSTRUCTION
SLOPING AND GRADING

0.012 AC TLE
FOR DRIVEWAY CONSTRUCTION
SLOPING AND GRADING

HE111

ERW107

ERW106

HE114

HE110

HE112

HE113

N 15TH STREET

R/L-N00°10'50"E

R/L-N00°15'11"E

91+00

92+00

89+00

IP

P/L

SI

20'

12'

37.2'

66'

33'

38'

10'

HOUSE

36+75.63
53.00' TLE

36+75.65
58.00' TLE

38+45.10
50.00' TLE

38+46.89
58.00' TLE

39+54.01
50.00' TLE

89+12.63
38.00' TLE

89+32.55
43.00' TLE

88+71.97
43.00' TLE

0.009 AC TLE
FOR DRIVEWAY & WW
CONSTRUCTION
SLOPING AND GRADING

LOT 38 J. SCHUBERT'S SUBDIVSION

(43)
Tax Key # 59281626570
OWNER: FRED J. &
NICOLE M. DEKANICH

0.025 AC TLE
FOR DRIVEWAY & WW
CONSTRUCTION
SLOPING AND GRADING

LOT 39 J. SCHUBERT'S SUBDIVSION

(44)
Tax Key # 59281626580
OWNER: JAMES N.
WAGNER

NW-NE

0.028 AC TLE
FOR DRIVEWAY & WW
CONSTRUCTION
SLOPING AND GRADING

LOT 40 J. SCHUBERT'S SUBDIVSION

(46)
Tax Key # 59281626590
OWNER: TIMOTHY
STEVENS

(47)
Tax Key #
59281626660
OWNER: GLENN C. &
SYLVIA A. MOORE
TRUST DATED
JENUARY 13, 2006

BL DG
0.037 AC TLE
FOR DRIVEWAY CONSTRUCTION
SLOPING AND GRADING

LOT 41 J. SCHUBERT'S SUBDIVSION

(48)
Tax Key # 59281626610
OWNER: ACCURATE REPAIRS, LLC A
WISCONSIN LIMITED LIABILTY COMPANY

CITY OF SHEBOYGAN

C2-CURVE DATA
PI-38+87.99
Y-184929.091
X-215785.504
T-38.66'
RADIUS-394.41'
ARC LENGTH-77.08'
CHORD LENGTH-76.96'

T 15 N
15
R 2□ E

SHEBOYGAN COUNTY
ID: 53100020
Y 182953.961
X 214570.594
P.K. NAIL

(55)
Tax Key # 59281709655
OWNER: RITGER CONSERVATION
DEVELOPMENT LLC
WILLIAM WESSING

0.009 AC TLE
FOR DRIVEWAY CONSTRUCTION
SLOPING AND GRADING

92+03.65
33.82' TLE

92+03.65
42.16' TLE

92+06.29
42.00' TLE

92+06.29
32.14' TLE

91+81.10
42.00' TLE

(100)

LOT 1 HENNING'S SUBDIVSION

(51)
NE-NE

91+00.94
42.00' TLE

Tax Key # 59281708890
OWNER: ADITHI LLC, A WISCONSIN
LIMITED LIABILTY COMPANY

0.055 AC TLE
FOR DRIVEWAY & P.L. CONSTRUCTION
SLOPING AND GRADING

HE122

HE118

HE117

HE116

HE115

LOT 2 HENNING'S SUBDIVSION

41+47.08
62.00' TLE

40+72.84
62.00' TLE

ERW108

LOT 11 EDWIN SCHAETZER'S SUBD.

40+82.99
43.00' TLE

(52)
Tax Key # 59281718060
OWNER: BRUNS CHIROPRACTIC OFFICE,
S.C., A WISCONSIN CORPORATION

0.040 AC TLE
FOR DRIVEWAY & P.L. CONSTRUCTION
SLOPING AND GRADING

LOT 12 EDWIN SCHAETZER'S SUBD.

(100)

NE-NE

EAST LINE NW1/4 SEC. 15-15-23
WEST LINE NE1/4 SEC. 15-15-23

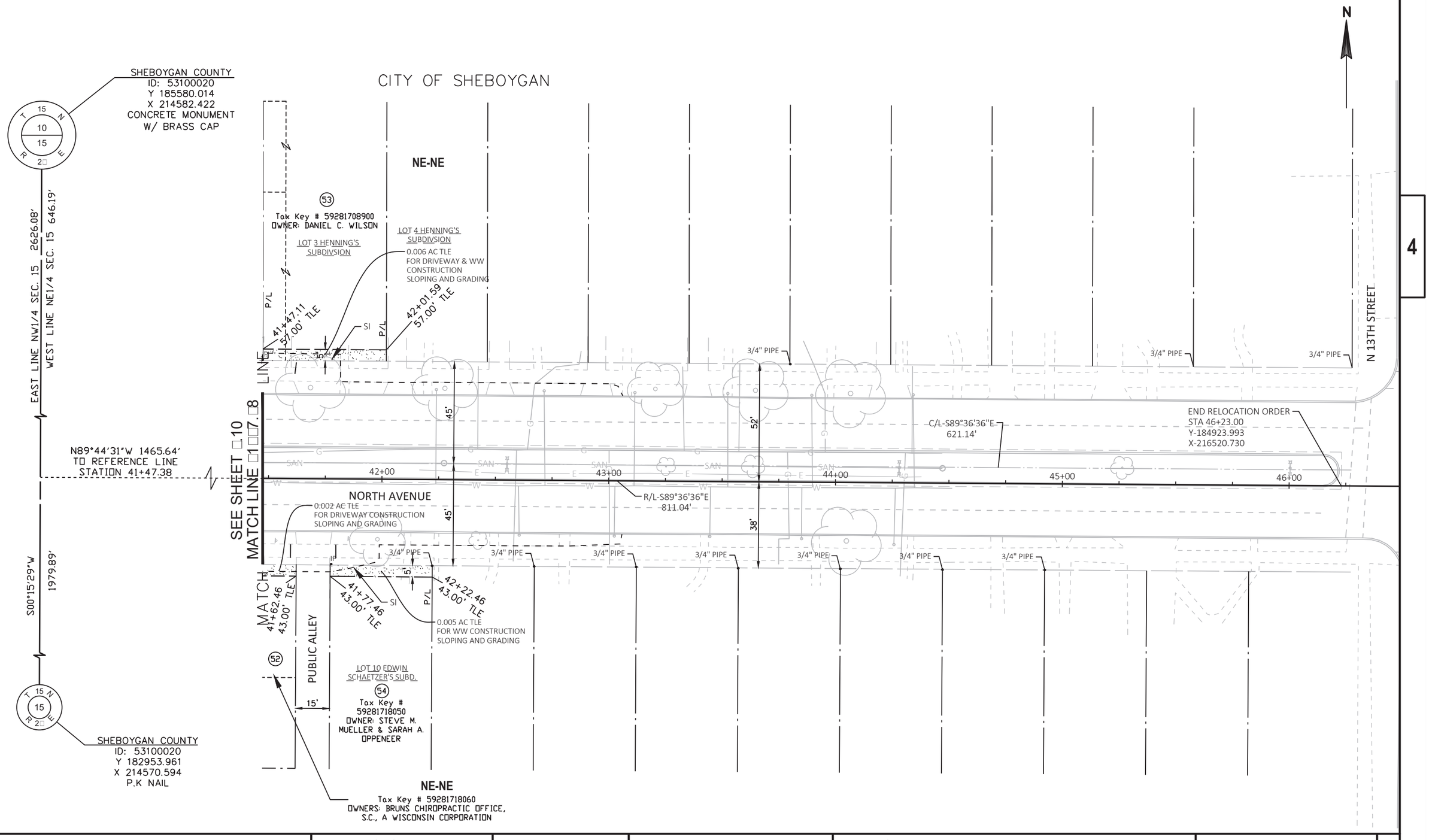
MATCH LINE □1□7.□8
SEE SHEET □11

REVISION DATE	DATE 07/17/2018	SCALE, FEET 0 20 40	HWY: NORTH AVE	STATE R/W PROJECT NUMBER 4996-01-78	PLAT SHEET 4.10
	GRID FACTOR N/A		COUNTY: SHEBOYGAN	CONSTRUCTION PROJECT NUMBER 4996-01-79	PS&E SHEET — 147 E

FILE NAME : NORTHAVE-RW PLAT.DWG
LAYOUT NAME - 10 NorthAve-10RW

PLOT DATE : 11/1/2018 4:46 PM PLOT BY : CHRIS CLEMENS PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 75



REVISION DATE	DATE 07/17/2018	SCALE, FEET 0 20 40	HWY: NORTH AVE	STATE R/W PROJECT NUMBER 4996-01-78	PLAT SHEET 4.11
	GRID FACTOR N/A		COUNTY: SHEBOYGAN	CONSTRUCTION PROJECT NUMBER 4996-01-79	PS&E SHEET 148 E

FILE NAME : NORTHAVE-RW PLAT.DWG
LAYOUT NAME - 11 NorthAve-11RW

PLOT DATE : 11/1/2018 4:46 PM PLOT BY : CHRIS CLEMENS PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 75

4

COURSE TABLE REPORT			
START PT NAME	END PT NAME	BEARING	DISTANCE
SC132	TP135	S00°15'29"W	630.02'
TP135	TP133	S89°44'31"E	1294.54'
TP133	ERW109	N00° 10' 50"E	36.00'
ERW109	PRW121	N89° 33' 59"W	50.00'
PRW121	PRW120	SEE CURVE DATA	
PRW120	PRW119	N53° 36' 09"E	68.38'
PRW119	ERW109	S00°10'50"W	41.02'

COURSE TABLE REPORT			
START PT NAME	END PT NAME	BEARING	DISTANCE
SC132	TP135	S00°15'29"W	630.02'
TP135	TP133	S89°44'31"E	1294.54'
TP133	ERW107	S00° 15' 11"W	54.00'
ERW107	HE110	S00° 15' 11"W	49.22'
HE110	HE111	N24° 03' 49"W	54.09'
HE111	ERW107	S89° 33' 59"E	22.27'

COURSE TABLE REPORT			
START PT NAME	END PT NAME	BEARING	DISTANCE
SC132	TP135	S00°15'29"W	630.02'
TP135	TP134	S89°44'31"E	1360.55'
TP134	ERW106	S00° 15' 11"W	53.93'
ERW106	HE114	S89° 36' 36"E	39.15'
HE114	HE113	S57° 51' 06"W	38.08'
HE113	HE112	S13° 37' 30"W	30.27'
HE112	ERW106	N00° 15' 11"E	49.95'

COURSE TABLE REPORT			
START PT NAME	END PT NAME	BEARING	DISTANCE
SC132	TP135	S00°15'29"W	630.02'
TP135	TP134	S89°44'31"E	1360.55'
TP134	ERW108	N00° 10' 50"E	36.07'
ERW108	HE122	N00° 10' 50"E	43.91'
HE122	HE118	S40° 30' 40"E	18.41'
HE118	HE117	S02° 25' 18"E	22.03'
HE117	HE116	S44° 42' 53"E	8.50'
HE116	HE115	S68° 58' 27"E	5.68'
HE115	ERW108	N89° 36' 35"W	24.30'

STATION & OFFSET TABLE					
POINT	ALIGN	STATION	OFFSET	Y COORDS	X COORDS
HE114	North Ave	40+81.53	38.00 RT	184889.680	215979.027
ERW106	North Ave	40+42.38	38.00 RT	184889.947	215939.876
ERW107	North Ave	39+76.41	38.25 RT	184890.172	215873.876
HE111	North Ave	39+54.14	38.25 RT	184890.340	215851.604
TP134	North Ave	40+42.26	15.93 LT	184943.872	215940.124
TP133	North Ave	39+76.25	15.75 LT	184944.170	215874.125
TP135	North Ave	26+80.72	0.65 RT	184950.000	214579.584
HE115	North Ave	40+66.43	52.00 LT	184979.781	215964.541
ERW108	North Ave	40+42.13	52.00 LT	184979.947	215940.238
ERW109	North Ave	39+76.09	51.75 LT	184980.171	215874.238
PRW121	North Ave	39+26.04	51.75 LT	184980.550	215824.239
PRW120	North Ave	39+20.39	51.74 LT	184980.619	215819.326
HE116	North Ave	40+61.12	54.00 LT	184981.817	215959.244

SHEET 4.10

STATION & OFFSET TABLE					
POINT	ALIGN	STATION	OFFSET	Y COORDS	X COORDS
HE112	N 15th St	89+11.97	33.00 RT	184840.001	215939.655
HE110	N 15th St	89+12.63	33.00 LT	184840.952	215873.659
HE113	N 15th St	89+41.42	40.00 RT	184869.417	215946.785

STATION & OFFSET TABLE					
POINT	ALIGN	STATION	OFFSET	Y COORDS	X COORDS
HE117	N 15th St	90+59.83	46.00 RT	184987.858	215953.263
HE118	N 15th St	90+81.84	45.00 RT	185009.865	215952.332
PRW119	N 15th St	90+92.92	33.00 LT	185021.195	215874.367
HE122	N 15th St	90+95.79	33.00 RT	185023.858	215940.376

STATION & OFFSET TABLE					
POINT	ALIGN	STATION	OFFSET	Y COORDS	X COORDS
ERW100	North Ave	21+90.10	36.00 RT	184917.551	214088.764
PRW101	North Ave	21+83.75	36.00 RT	184917.589	214082.419
TP139	North Ave	26+80.72	0.00	184950.654	214579.587
TP137	North Ave	22+50.87	0.00	184953.192	214149.743
TP138	North Ave	21+90.04	0.00	184953.551	214088.914
PRW104	North Ave	22+58.64	54.00 LT	185007.145	214157.838
ERW105	North Ave	22+50.31	54.00 LT	185007.194	214149.504

STATION & OFFSET TABLE					
POINT	ALIGN	STATION	OFFSET	Y COORDS	X COORDS
PRW103	Muth Ct	80+80.37	30.00 RT	185033.869	214149.386

STATION & OFFSET TABLE					
POINT	ALIGN	STATION	OFFSET	Y COORDS	X COORDS
PRW102	N 19th St	79+44.85	30.00 LT	184898.354	214088.684

SHEET 4.07

COURSE TABLE REPORT			
START PT NAME	END PT NAME	BEARING	DISTANCE
SC132	TP139	S00°15'29"W	629.37'
TP139	TP138	N89°39242"W	490.68
TP138	ERW100	S00° 14' 18"W	36.00'
ERW100	PRW102	S00° 14' 18"W	19.20'
PRW102	PRW101	N18° 02' 27"W	20.23'
PRW101	ERW100	S89° 39' 42"E	6.35'

COURSE TABLE REPORT			
START PT NAME	END PT NAME	BEARING	DISTANCE
SC132	TP139	S00°15'29"W	629.37'
TP139	TP137	N89°39242"W	429.85
TP137	ERW105	N00° 15' 14"W	54.00'
ERW105	PRW103	N00° 15' 14"W	26.68'
PRW103	PRW104	S17° 33' 07"E	28.03'
PRW104	ERW105	N89° 39' 42"W	8.33'

4

COURSE TABLE REPORT			
START PT NAME	END PT NAME	BEARING	DISTANCE
SC132	HE126	S00°15'29"W	570.37'
HE126	ERW127	S00°15'29"W	5.00'
ERW127	EW129	S89°40'13"E	172.90'
EW129	HE125	N18°27'25"W	5.28'
HE125	HE126	N89°40'13"W	171.21'

COURSE TABLE REPORT			
START PT NAME	END PT NAME	BEARING	DISTANCE
SC132	ERW136	S00°15'29"W	665.37'
ERW136	ERW131	S89°39'42"E	134.41'
ERW131	ERW130	S89°38'26"E	69.00'
ERW130	HE123	S18°27'25"E	5.28'
HE123	HE124	N89°38'26"W	69.01'
HE124	ERW131	N18°31'23"W	5.28'

SHEET 4.08

STATION & OFFSET TABLE					
POINT	ALIGN	STATION	OFFSET	Y COORDS	X COORDS
HE123	North Ave	28+85.10	41.35 RT	184908.417	214784.518
HE124	North Ave	28+16.89	41.00 RT	184908.850	214715.515
ERW130	North Ave	28+83.49	36.32 RT	184913.428	214782.846
ERW131	North Ave	28+15.18	36.00 RT	184913.861	214713.836
ERW136	North Ave	26+80.77	36.00 RT	184914.655	214579.425
ERW129	North Ave	28+53.54	54.03 LT	185003.659	214752.730
ERW127	North Ave	26+80.64	54.00 LT	185004.654	214579.831
HE125	North Ave	28+51.84	59.03 LT	185008.668	214751.058
HE126	North Ave	26+80.64	59.00 LT	185009.654	214579.853

REVISION DATE

DATE 07/17/2018

GRID FACTOR N/A

SCALE, FEET 0

HWY: NORTH AVE

COUNTY: SHEBOYGAN

STATE R/W PROJECT NUMBER 4996-01-78

CONSTRUCTION PROJECT NUMBER 4996-01-79

PLAT SHEET 4.12

PS&E SHEET

E

FILE NAME : NORTHAVE-RW PLAT.DWG
LAYOUT NAME - 12 NorthAve-12RW

PLOT DATE : 11/1/2018 4:47 PM PLOT BY : CHRIS CLEMENS PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 75

LEGEND

= CLEARING AND GRUBBING.

BEGIN PRO□ECT
STA 12□□□.85
Y□18□□62.81
□□21□1□2.7□

BP: 10+00.00

Tax Key # 59281630210
OWNER: NORTH CALUMET, LLC A
WISCONSIN LIMITED LIABILTY COMPANY
2108 NORTH AVENUE

Tax Key # 59281629560
OWNER: J & P REAL ESTATE, LLC A
WISCONSIN LIMITED LIABILTY COMPANY
2040 NORTH AVENUE

SHEBOYGAN FIBER

SLOPE INTERCEPT

SHEBOYGAN FIBER

21ST ST

N

R/W

TLE

WB PGL

PROPOSED ℄

NORTH AVE

11+00 12+00 13+00 14+00 15+00

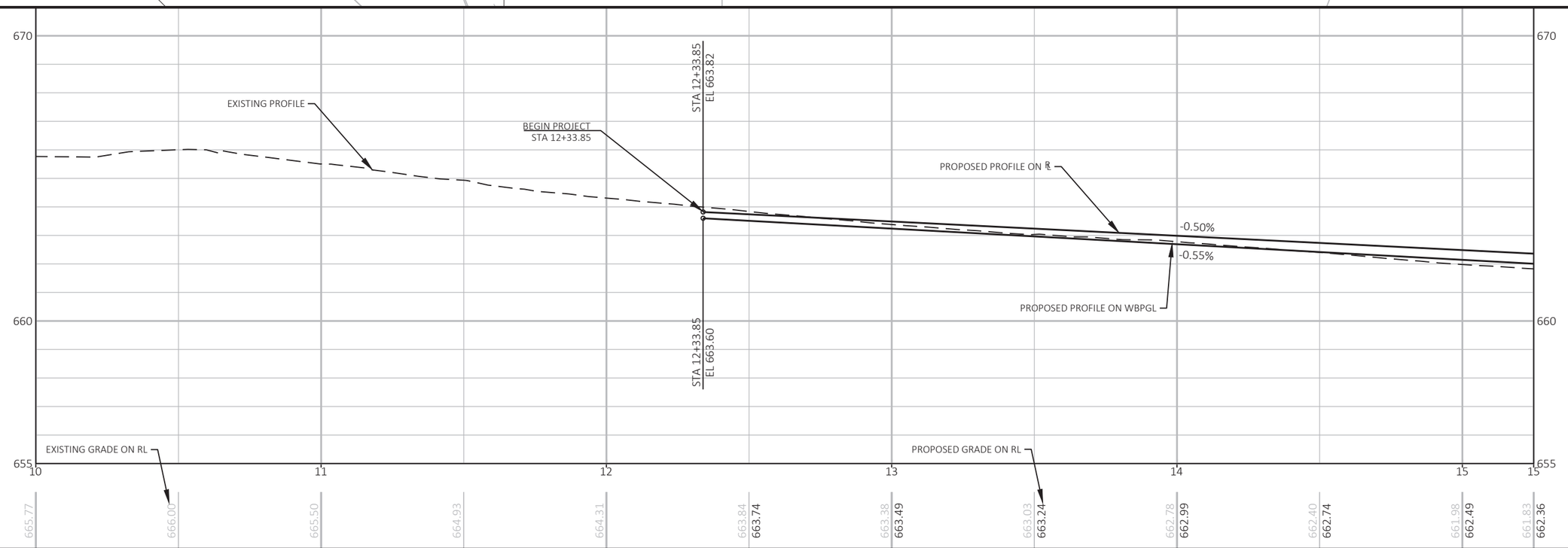
BEGIN CONSTRUCTION
STA 10+37.94

SLOPE INTERCEPT

2619 CALUMET DRIVE
Tax Key # 59281630220
OWNER: 2100 NORTH, LLC A WISCONSIN
LIMITED LIABILTY COMPANY

2033 NORTH AVENUE
Tax Key # 59281602421
OWNER: KT REAL ESTATE HOLDINGS LLC

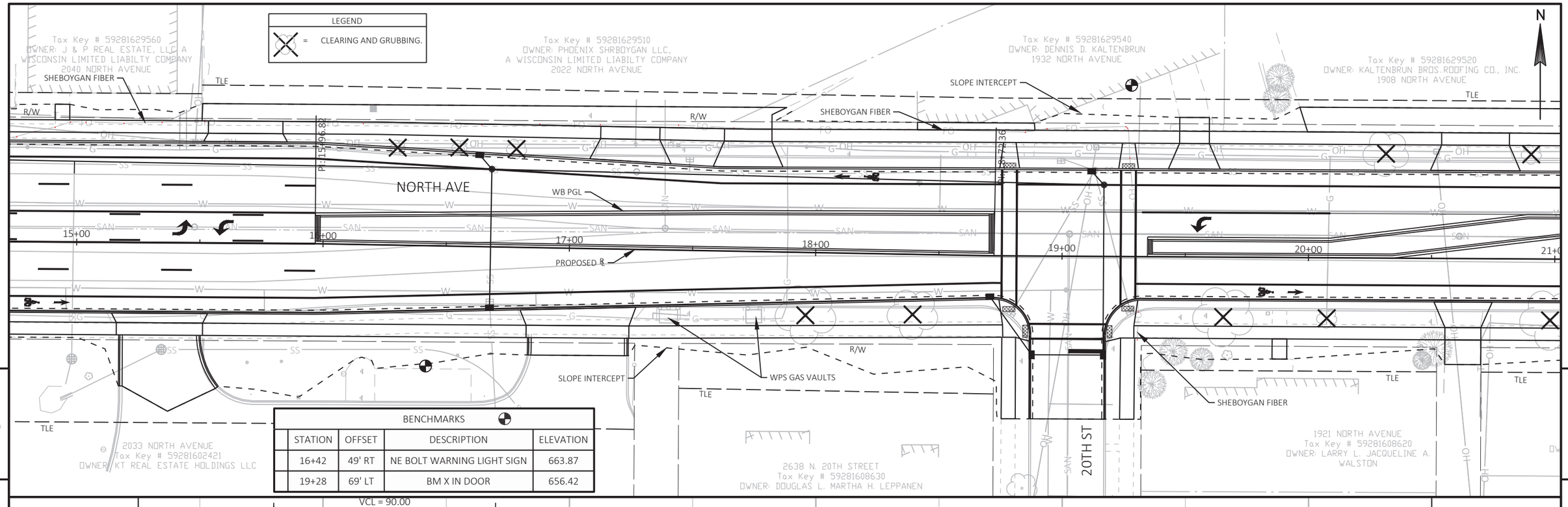
BENCHMARK			
STATION	OFFSET	DESCRIPTION	ELEVATION
13+34	73' LT	MAG IN POWER POLE	663.17



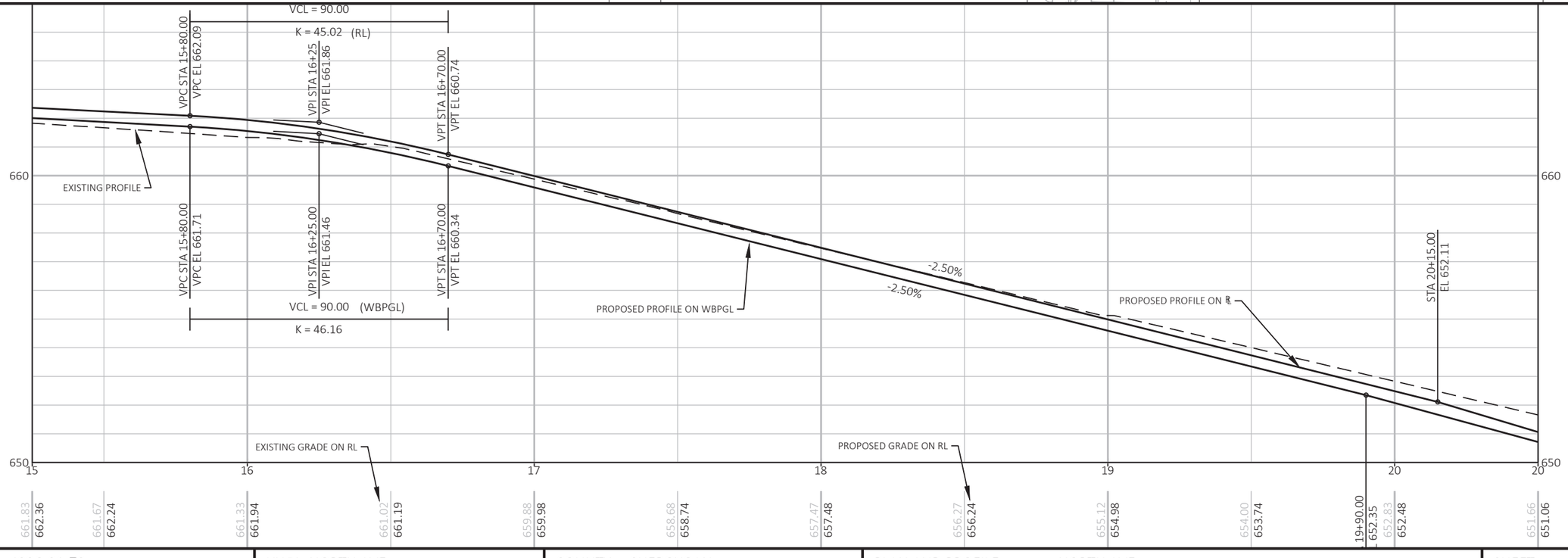
PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN	PLAN AND PROFILE: NORTH AVE	SHEET 150	E

FILE NAME : W:\PROJECTS\W0059\81500117\CADD\CIVIL3D\PLAN SHEETS\05-PLAN AND PROFILE\NORTHAVE-PP.DWG
LAYOUT NAME - NorthAve-01PP

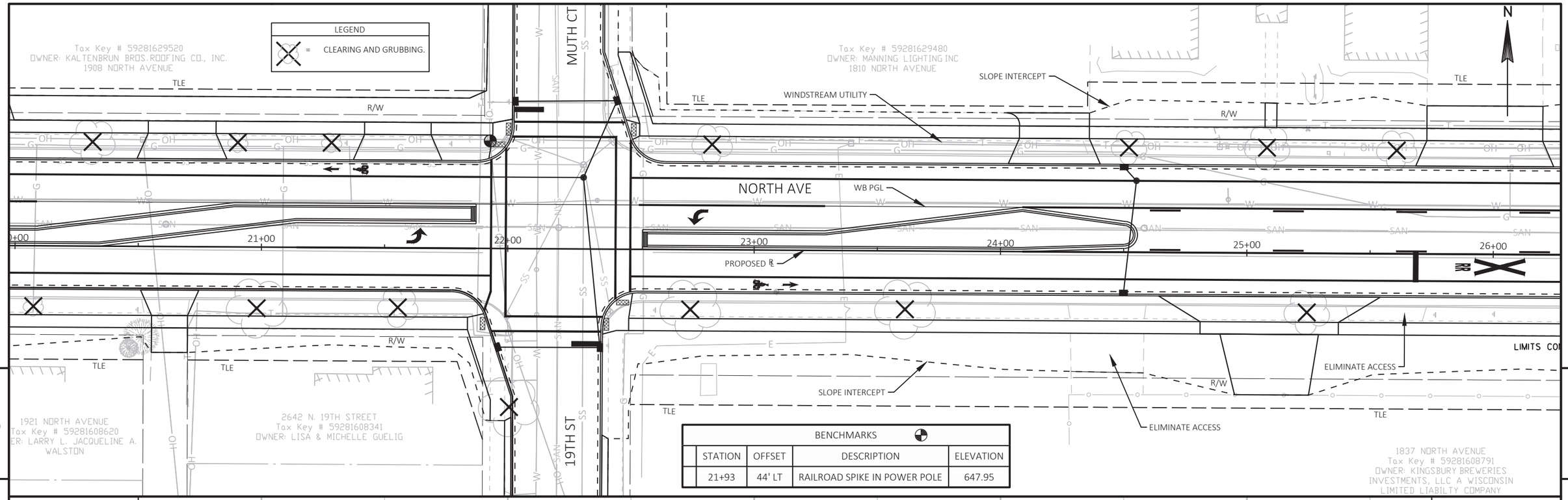
PLOT DATE : 11/1/2018 4:47 PM PLOT BY : CHRIS CLEMENS PLOT NAME : PLOT SCALE : 1 IN:40 FT



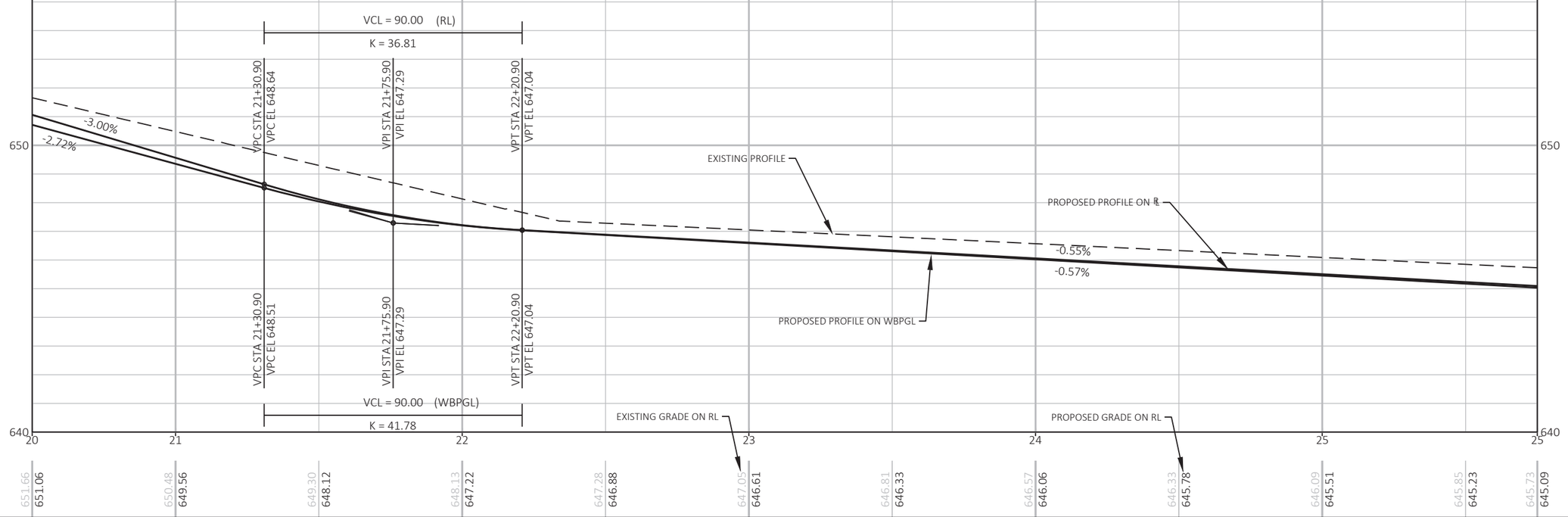
BENCHMARKS			
STATION	OFFSET	DESCRIPTION	ELEVATION
16+42	49' RT	NE BOLT WARNING LIGHT SIGN	663.87
19+28	69' LT	BM X IN DOOR	656.42



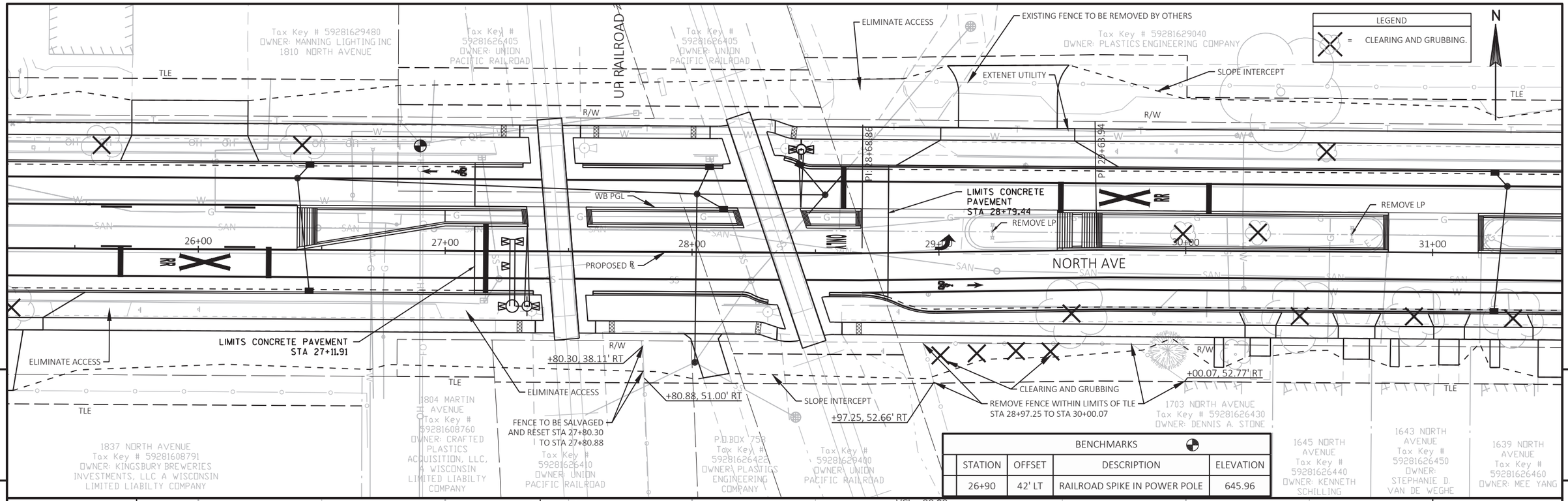
PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN	PLAN AND PROFILE: NORTH AVE	SHEET 151	E



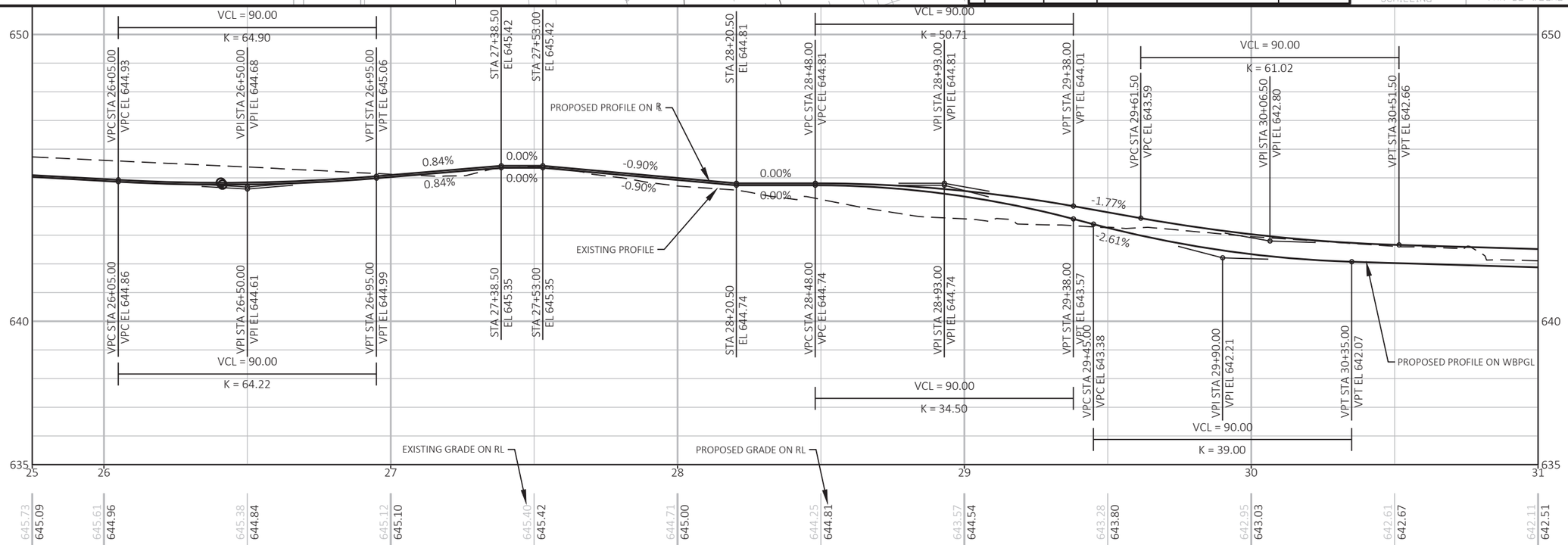
BENCHMARKS			
STATION	OFFSET	DESCRIPTION	ELEVATION
21+93	44' LT	RAILROAD SPIKE IN POWER POLE	647.95



PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN	PLAN AND PROFILE: NORTH AVE	SHEET 152	E



BENCHMARKS			
STATION	OFFSET	DESCRIPTION	ELEVATION
26+90	42' LT	RAILROAD SPIKE IN POWER POLE	645.96



PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN	PLAN AND PROFILE: NORTH AVE	SHEET 153	E

FILE NAME : W:\PROJECTS\W0059\81500117\CADD\CIVIL3D\PLAN SHEETS\05-PLAN AND PROFILE\NORTHAVE-PP.DWG
LAYOUT NAME - NorthAve-04PP

PLOT DATE : 11/1/2018 4:48 PM PLOT BY : CHRIS CLEMENS PLOT NAME : PLOT SCALE : 1 IN:40 FT

LEGEND	
⨯	= CLEARING AND GRUBBING.

BENCHMARKS			
STATION	OFFSET	DESCRIPTION	ELEVATION
31+89	54' RT	NE CORNER BOTTOM STEP HOUSE #1635	643.22

N

Tax Key # 59281629040
OWNER: PLASTICS ENGINEERING COMPANY

EXTENET UTILITY

SLOPE INTERCEPT

REMOVE TIMBER RETAINING WALL AND LANDSCAPING (INCIDENTAL TO EXCAVATION COMMON)

TLE

R/W

NORTH AVE

WB PGL

REMOVE LP

PROPOSED ℄

31+00 32+00 33+00 34+00 35+00 36+00

SLOPE INTERCEPT

CONCRETE STEPS AND PIPE RAILING

CONCRETE STEPS

5

5

1645 NORTH AVENUE Tax Key # 59281626440 OWNER: KENNETH CHILLING

1643 NORTH AVENUE Tax Key # 59281626450 OWNER: STEPHANIE D. VAN DE WEGHE

1639 NORTH AVENUE Tax Key # 59281626460 OWNER: MEE YANG

1635 NORTH AVENUE Tax Key # 59281626470 OWNER: PATRICIA H. SIENKIEWICZ

1629 NORTH AVENUE Tax Key # 59281626480 OWNER: STONEY RIDGE HOMES, LLC

1623 NORTH AVENUE Tax Key # 59281626490 OWNER: MARK S. BUTZEN

1619 NORTH AVENUE Tax Key # 59281626500 OWNER: CARRIE S. WILLIAMS

1615 NORTH AVENUE Tax Key # 59281626510 OWNER: JOHN L. VAN GROTHEEST

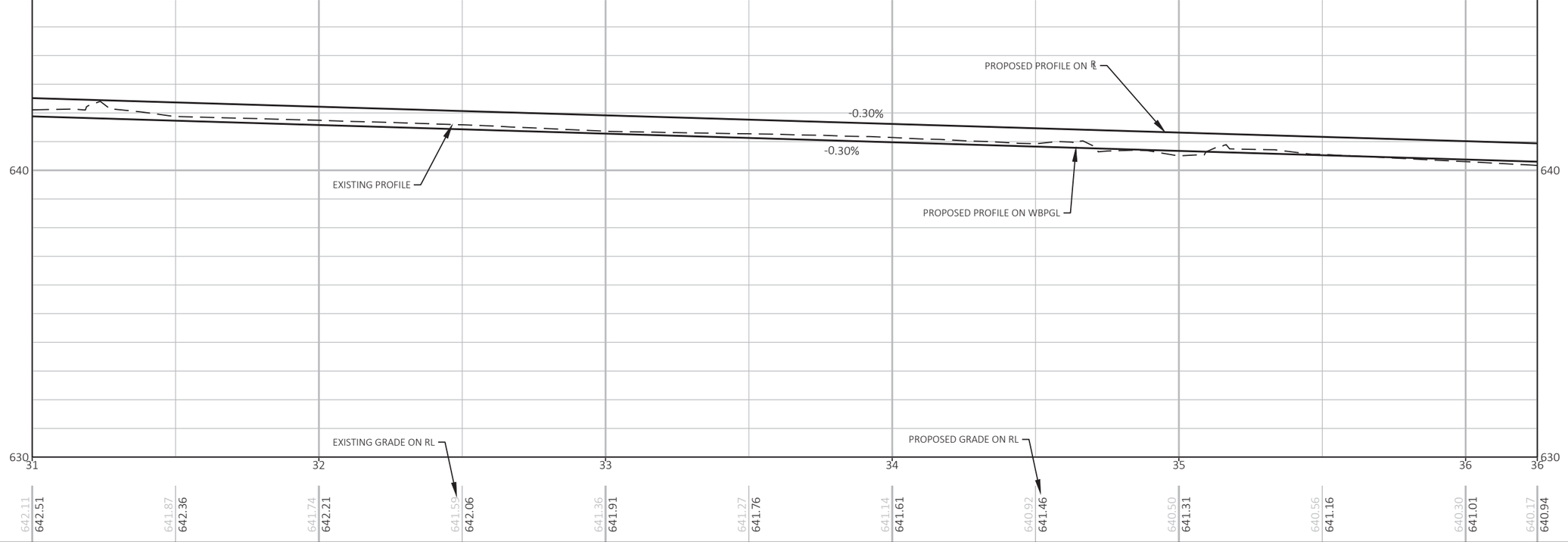
1607 NORTH AVENUE Tax Key # 59281626520 OWNER: LARRY M. & CARLA M. VAN DYKE

1603 NORTH AVENUE Tax Key # 59281626530 OWNER: MARIA K. ZACHARI PERSONAL ASSET TRUST UTA 08-26-1998

1545 NORTH AVENUE Tax Key # 59281626540 OWNER: SHAWN R. HANSEN

1541 NORTH AVENUE Tax Key # 59281626550 OWNER: PAMELA J. NESPODZANY

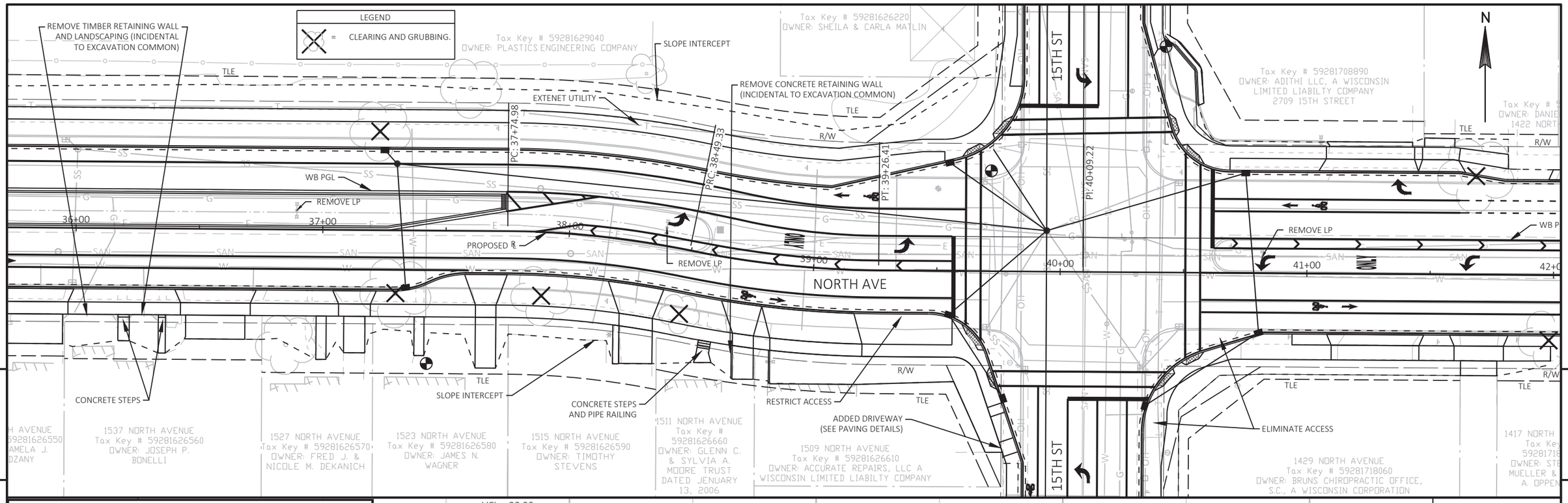
1537 NORTH AVENUE Tax Key # 59281626560 OWNER: JOSEPH P. BONELLI



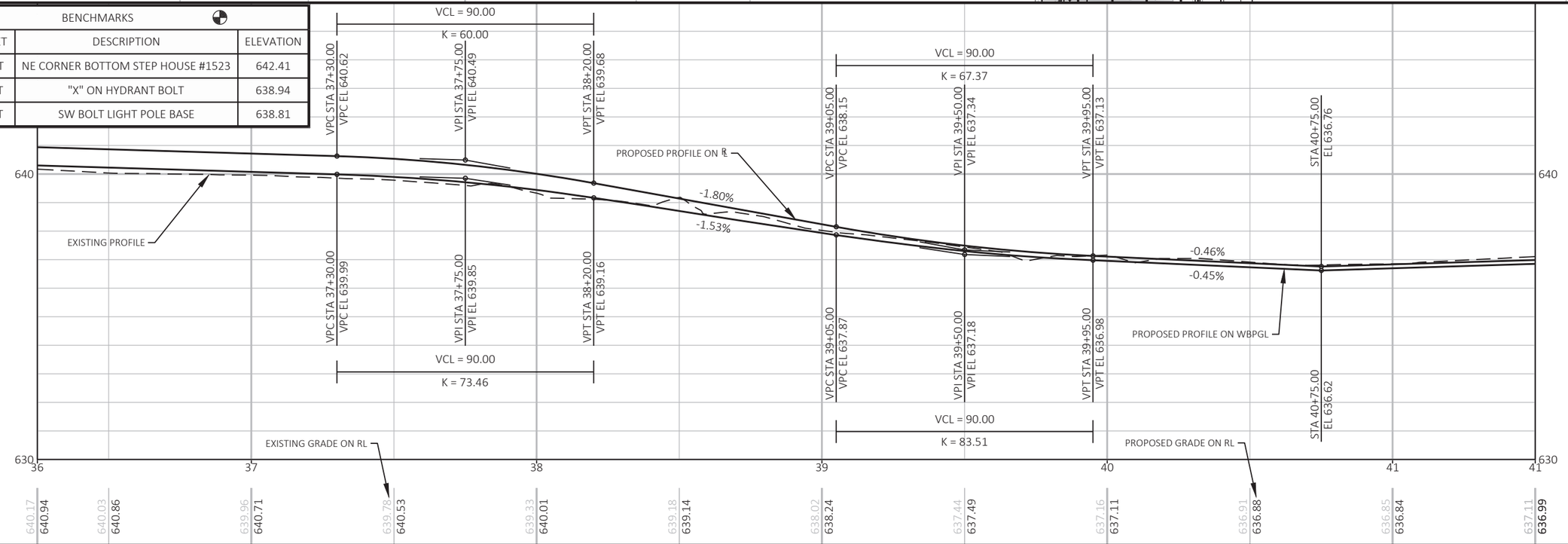
PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN	PLAN AND PROFILE: NORTH AVE	SHEET 154	E

FILE NAME : W:\PROJECTS\W0059\81500117\CADD\CIVIL3D\PLAN SHEETS\05-PLAN AND PROFILE\NORTHAVE-PP.DWG
LAYOUT NAME - NorthAve-05PP

PLOT DATE : 11/1/2018 4:48 PM PLOT BY : CHRIS CLEMENS PLOT NAME : PLOT SCALE : 1 IN:40 FT



BENCHMARKS			
STATION	OFFSET	DESCRIPTION	ELEVATION
37+42	54' RT	NE CORNER BOTTOM STEP HOUSE #1523	642.41
39+72	41' LT	"X" ON HYDRANT BOLT	638.94
40+42	92' LT	SW BOLT LIGHT POLE BASE	638.81



PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN	PLAN AND PROFILE: NORTH AVE	SHEET 155	E

LEGEND	
⊗	= CLEARING AND GRUBBING.

BENCHMARKS ⊕			
STATION	OFFSET	DESCRIPTION	ELEVATION
40+42	92' LT	SW BOLT LIGHT POLE BASE	638.81

Tax Key # 59281708890
OWNER: ADITHI LLC, A WISCONSIN LIMITED LIABILTY COMPANY
2709 15TH STREET

Tax Key # 59281708900
OWNER: DANIEL C. WILSON
1422 NORTH AVENUE

1429 NORTH AVENUE
Tax Key # 59281718060
OWNER: BRUNS CHIROPRACTIC OFFICE, S.C., A WISCONSIN CORPORATION

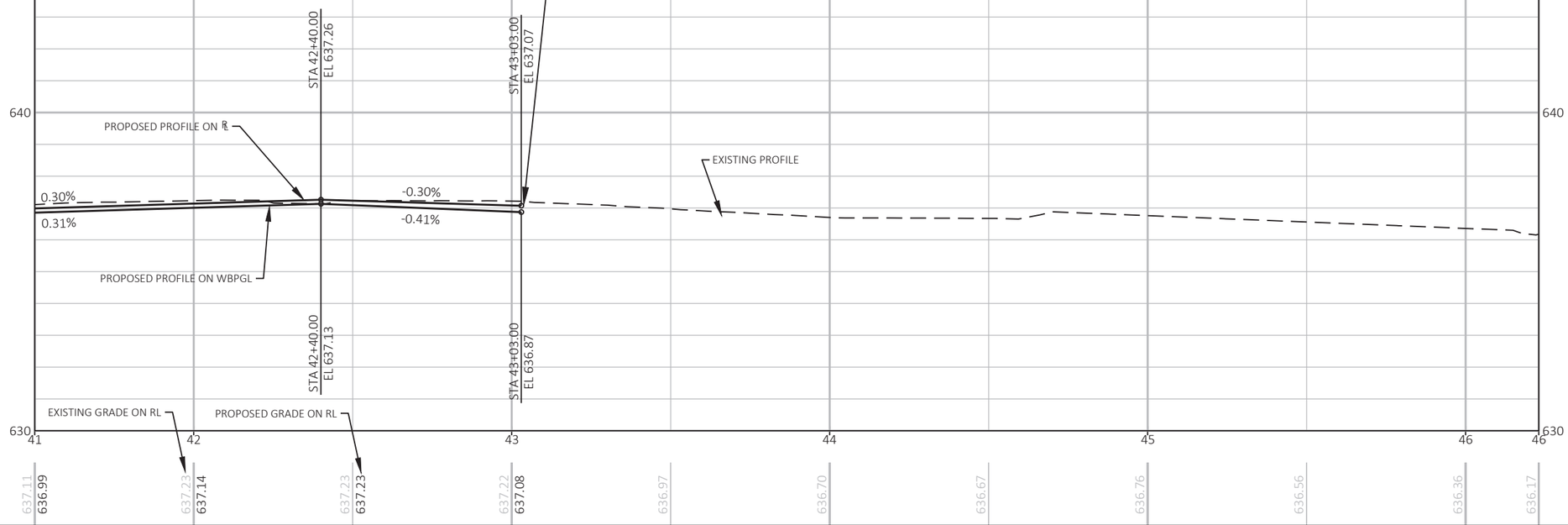
1417 NORTH AVENUE
Tax Key # 59281718050
OWNER: STEVE M. MUELLER & SARAH A. OPPENEER

N

TLE
R/W
SLOPE INTERCEPT
REMOVE LP
WB PGL
PROPOSED ℄
NORTH AVE
LIMITS OF MILL □ OVERLAY
ELIMINATE ACCESS
SLOPE INTERCEPT
LIMITS OF FULL RECONSTRUCTION
STA □□□06
END PRO□ECT
STA □6□2□
Y□ 18□□2□.□□
□□ 216520.80

41+00 42+00 43+00 44+00 45+00 46+00

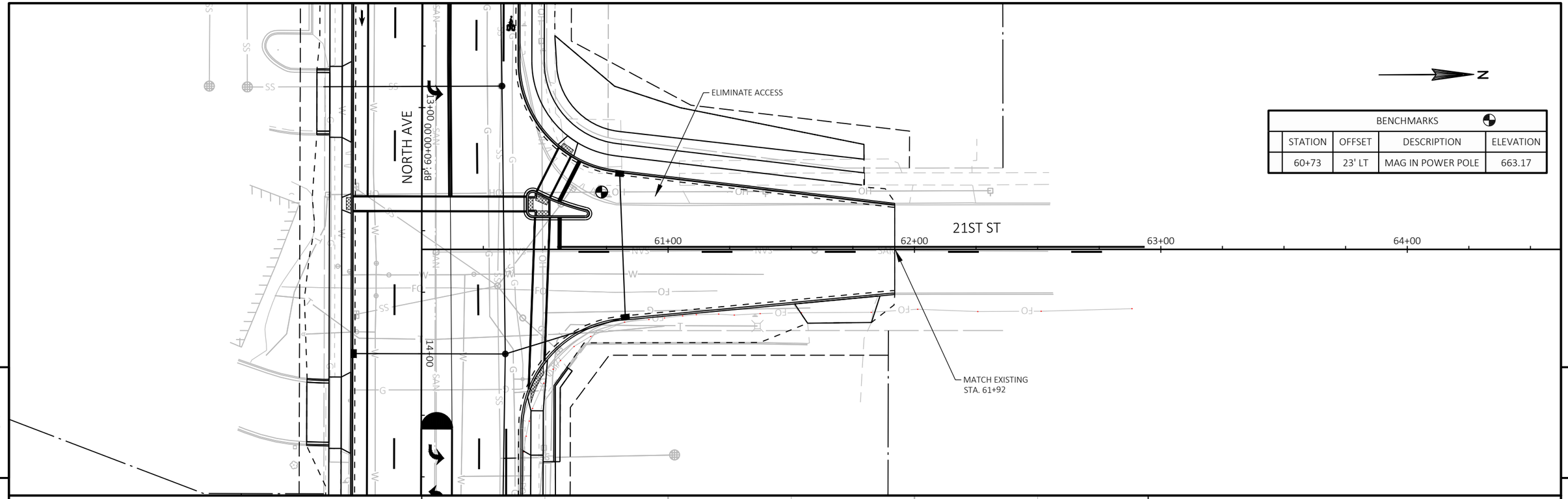
5 5



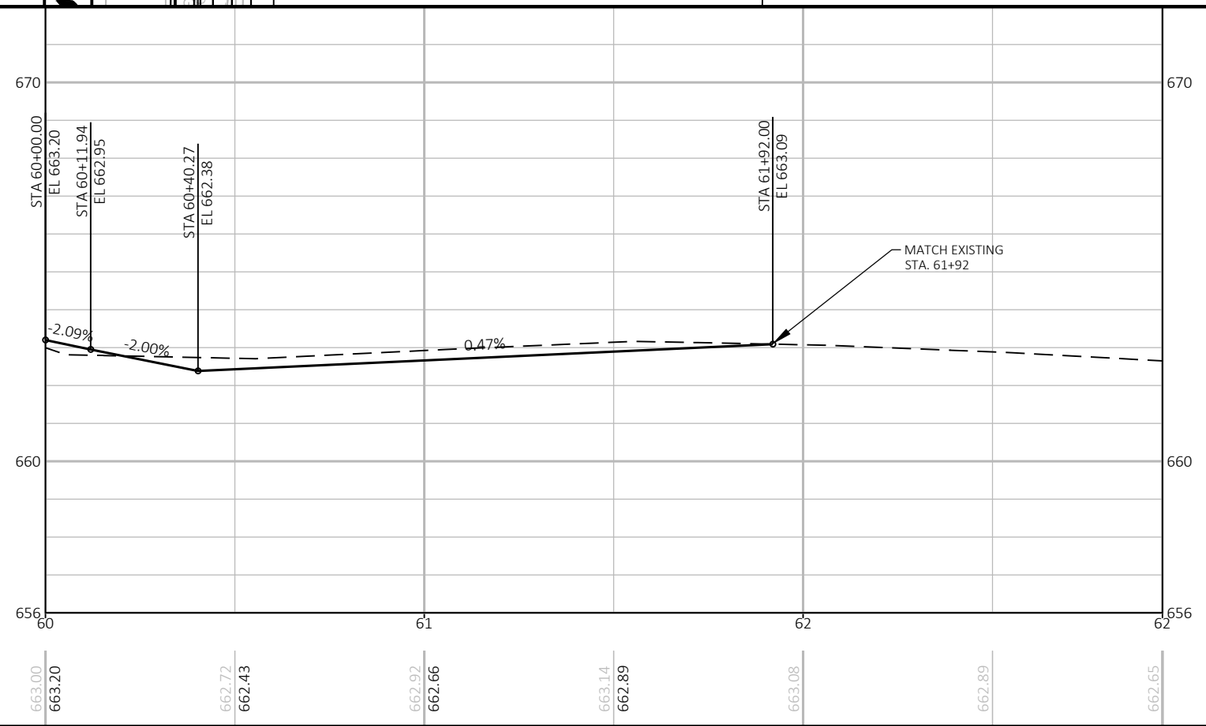
PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN	PLAN AND PROFILE: NORTH AVE	SHEET 156	E

FILE NAME : W:\PROJECTS\W0059\81500117\CADD\CIVIL3D\PLAN SHEETS\05-PLAN AND PROFILE\NORTHAVE-PP.DWG
LAYOUT NAME - NorthAve-07PP

PLOT DATE : 11/1/2018 4:48 PM PLOT BY : CHRIS CLEMENS PLOT NAME : PLOT SCALE : 1 IN:40 FT

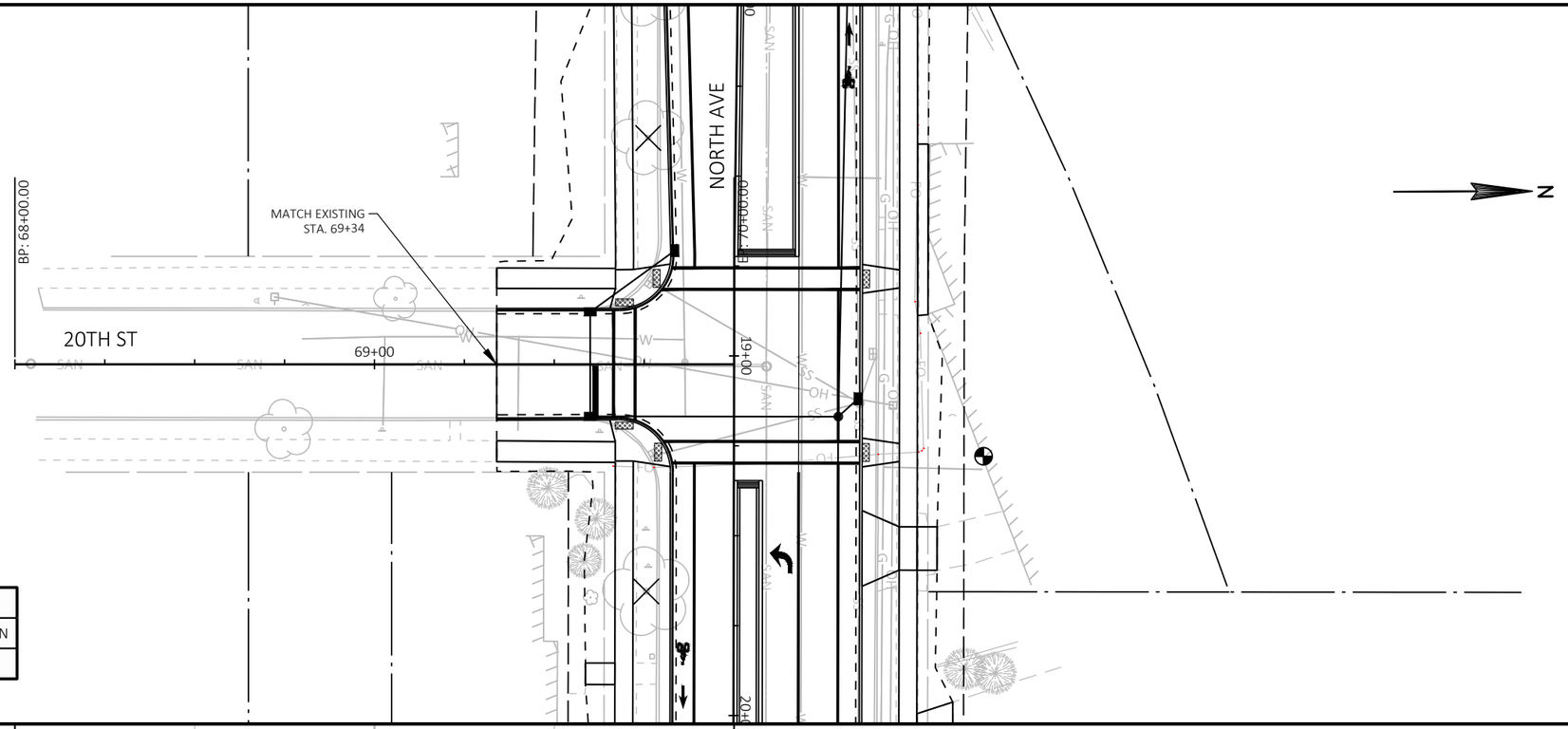


BENCHMARKS			
STATION	OFFSET	DESCRIPTION	ELEVATION
60+73	23' LT	MAG IN POWER POLE	663.17

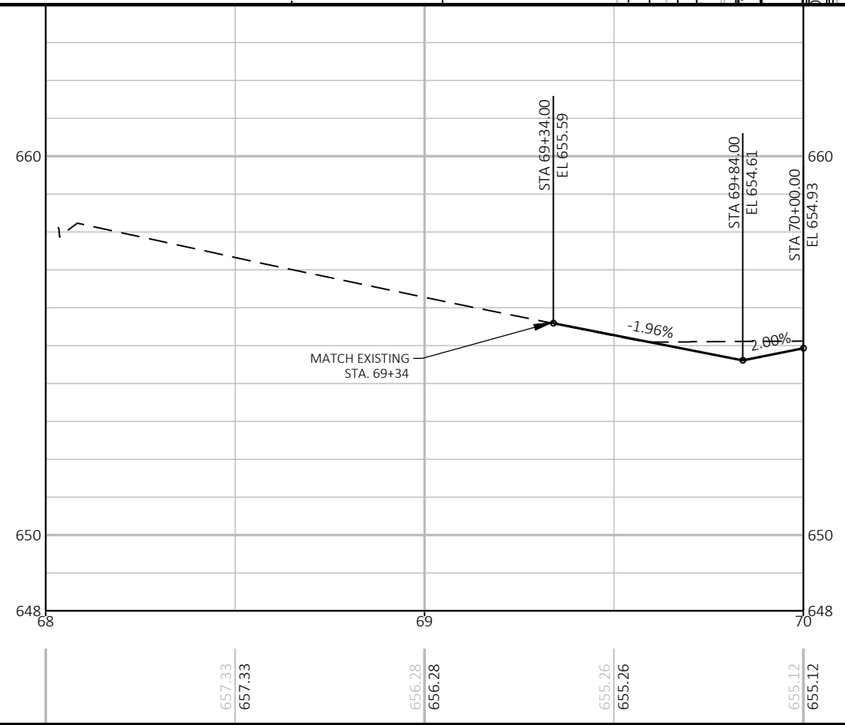


PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN	PLAN AND PROFILE: 21ST STREET	SHEET 157	E

FILE NAME : W:\PROJECTS\W0059\81500117\CADD\CIVIL3D\PLAN SHEETS\05-PLAN AND PROFILE\NORTHAVE-SIDEROADS-PP.DWG
LAYOUT NAME - 7 21st-PP
PLOT DATE : 11/1/2018 4:48 PM PLOT BY : CHRIS CLEMENS PLOT NAME : PLOT SCALE : 1 IN:40 FT

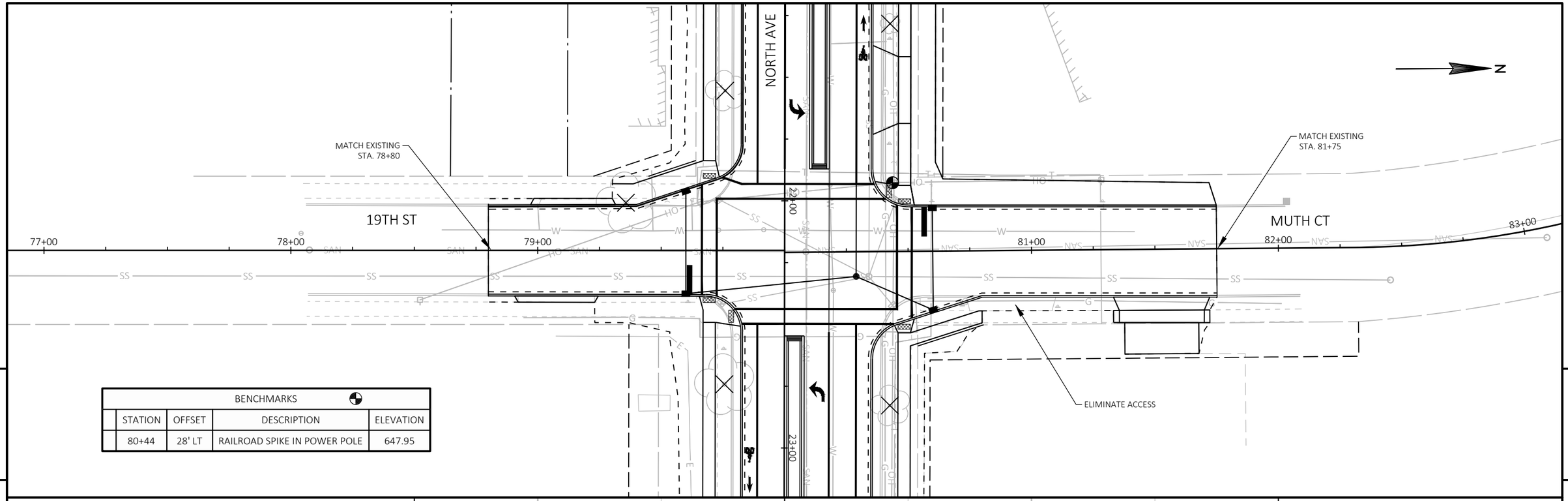


BENCHMARKS			
STATION	OFFSET	DESCRIPTION	ELEVATION
19+28	69' LT	BM X IN DOOR	656.42

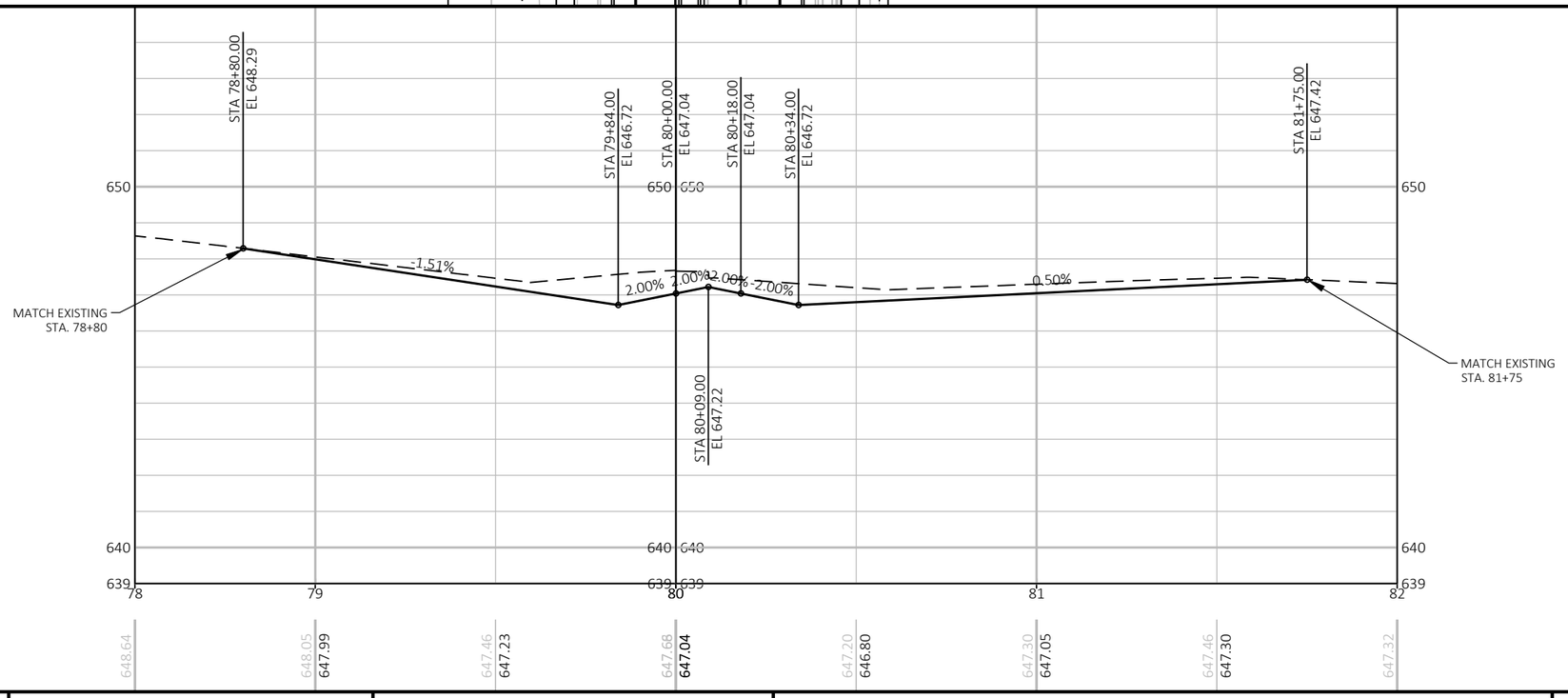


PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN	PLAN AND PROFILE: 20TH STREET	SHEET 158	E

FILE NAME : W:\PROJECTS\W0059\81500117\CADD\CIVIL3D\PLAN SHEETS\05-PLAN AND PROFILE\NORTHAVE-SIDEROADS-PP.DWG
LAYOUT NAME - 8 20th-PP
PLOT DATE : 11/1/2018 4:48 PM PLOT BY : CHRIS CLEMENS PLOT NAME : PLOT SCALE : 1 IN:40 FT

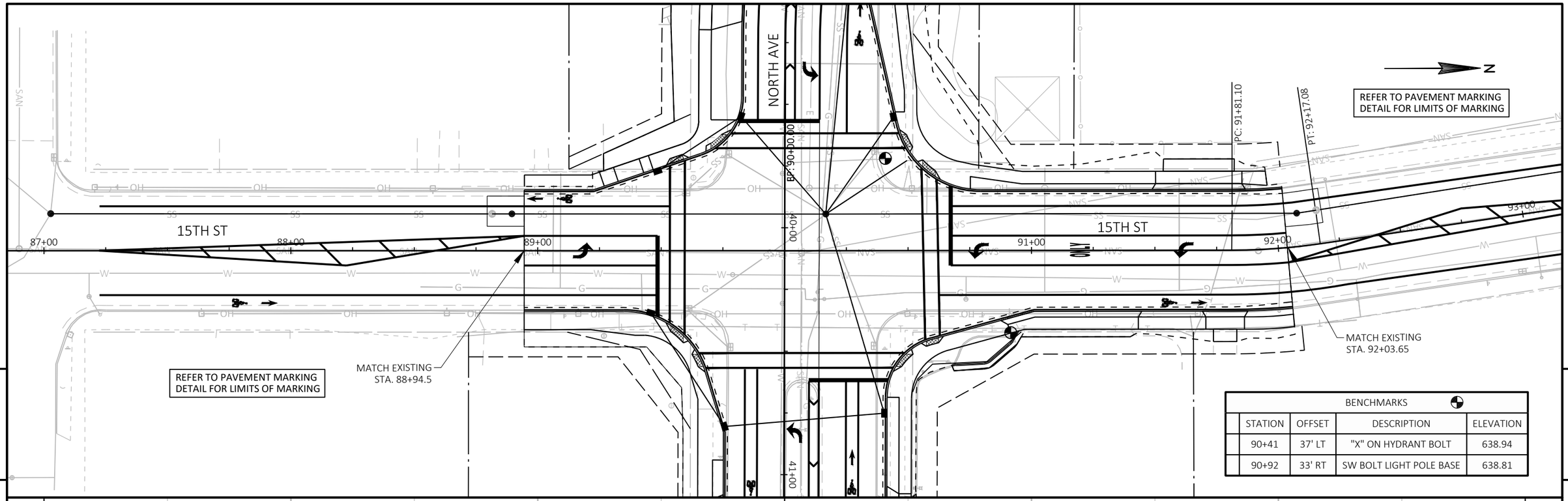


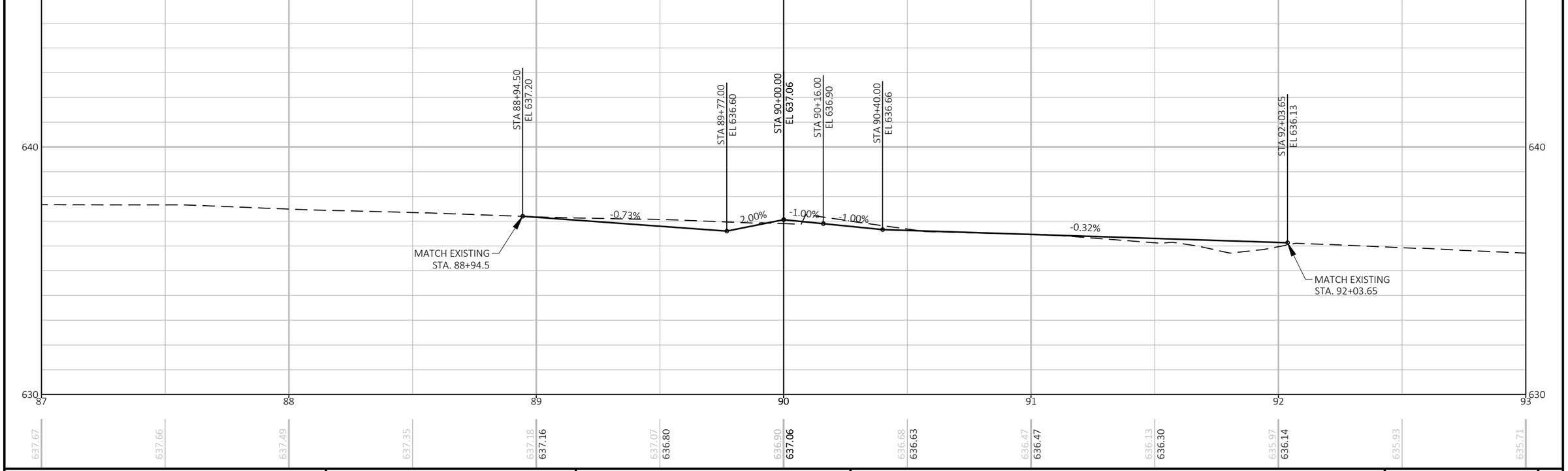
BENCHMARKS			
STATION	OFFSET	DESCRIPTION	ELEVATION
80+44	28' LT	RAILROAD SPIKE IN POWER POLE	647.95



PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN	PLAN AND PROFILE: 19TH STREET AND MUTH COURT	SHEET 159	E

FILE NAME : W:\PROJECTS\W0059\81500117\CADD\CIVIL3D\PLAN SHEETS\05-PLAN AND PROFILE\NORTHAVE-SIDEROADS-PP.DWG
LAYOUT NAME - 9 19th-PP
PLOT DATE : 11/1/2018 4:48 PM PLOT BY : CHRIS CLEMENS PLOT NAME : PLOT SCALE : 1 IN:40 FT





PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN	PLAN AND PROFILE: 15TH STREET	SHEET 160	E

FILE NAME : W:\PROJECTS\W0059\81500117\CADD\CIVIL3D\PLAN SHEETS\05-PLAN AND PROFILE\NORTHAVE-SIDEROADS-PP.DWG
LAYOUT NAME - 10 15th-PP
PLOT DATE : 11/1/2018 4:48 PM
PLOT BY : CHRIS CLEMENS
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 44

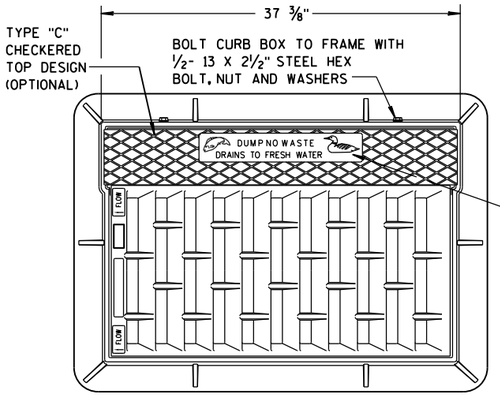
Standard Detail Drawing List

08A05-19A	INLET COVERS TYPE A, H, A-S, H-S & Z
08A05-19D	INLET COVER TYPE BW, MANHOLE COVERS, TYPE K, J, J-S, L & M
08A09-02	CATCH BASINS 2X3-FT AND 2.5X3-FT
08B09-02	MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT AND 8-FT DIAMETER
08D01-20A	CONCRETE CURB & GUTTER
08D01-20B	CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS
08D05-19A	CURB RAMPS TYPES 1 AND 1-A
08D05-19B	CURB RAMPS TYPES 2 AND 3
08D05-19C	CURB RAMPS TYPES 4A AND 4A1
08D05-19D	CURB RAMPS TYPE 4B AND 4B1
08D05-19E	CURB RAMPS TYPES 5, 6, 7A, 7B & 8
08D05-19F	CURB RAMPS RADIAL DETECTABLE WARNING FIELD APPLICATIONS
08D05-19G	CURB RAMPS RECTANGULAR AND RADIAL DETECTABLE WARNING PLATES
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
08F04-07	JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL
09B02-10	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
09C12-09A	CONCRETE BASE TYPE 13
09C12-09B	CONCRETE BASE TYPE 13
09C14-02	CONCRETE CONTROL CABINET BASE, TYPE L
09D01-05	CABINET SERVICE INSTALLATION (METER BREAKER PEDESTAL)
09D05-01	L30 LIGHTING CONTROL CABINET 240/480 VOLT
09E01-14C	POLE MOUNTINGS FOR TRAFFIC SIGNALS AND LIGHTING UNITS, TYPE 4
09E01-14G	HARDWARE DETAILS FOR POLE MOUNTINGS
09E03-05	NON-FREEWAY LIGHTING UNIT POLE WIRING
09E07-05	TRAFFIC SIGNAL STANDARD PEDESTRIAN AND FLASHER TYPICAL MOUNTING DETAILS
09E08-08C	TYPE 12 POLE 35'-55' MONOTUBE ARM
09E08-08E	GENERAL NOTES AND HARDWARE DETAILS FOR TYPE 9, 10, 12 & 13 POLES WITH MONOTUBE ARMS
11B01-05	CONCRETE CORRUGATED MEDIAN
11B02-02	CONCRETE MEDIAN NOSE
12A04-03	STRUCTURE IDENTIFICATION PLAQUES, RAMP GATES, SIGN BRIDGES & OVERHEAD SIGN SUPPORTS & TRAFFIC SIGNALS
13B01-10	PAVEMENT DETAILS FOR RAILROAD APPROACH
13C01-19	CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES
13C13-09	URBAN DOWELED CONCRETE PAVEMENT
13C14-07A	BASE PATCHING CONCRETE
13C14-07B	BASE PATCHING CONCRETE
13C14-07C	BASE PATCHING CONCRETE
13C18-06A	CONCRETE PAVEMENT JOINTING
13C18-06B	CONCRETE PAVEMENT STEEL REINFORCEMENT
13C18-06C	CONCRETE PAVEMENT JOINT TYPES
13C18-06D	CONCRETE PAVEMENT JOINT TYPES AT UTILITY FIXTURES
13C18-06F	CONCRETE PAVEMENT INTERSECTION BOXOUT FOR INTEGRAL CURB AND GUTTER
14A02-01	TREE PLANTING DETAIL
15C02-06A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-06B	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-06C	DETOUR SIGNING FOR MAINLINE CLOSURES
15C03-05	BARRICADES AND SIGNS FOR SIDEROAD CLOSURES
15C05-05	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS
15C07-14A	PAVEMENT MARKING SYMBOLS
15C07-14B	PAVEMENT MARKING WORDS
15C07-14C	PAVEMENT MARKING ARROWS
15C07-14E	PAVEMENT MARKING FOR BIKE LANES
15C08-19A	LONGITUDINAL MARKING (MAINLINE)
15C08-19B	PAVEMENT MARKING (TURN LANES)
15C08-19C	PAVEMENT MARKING (TURN LANES)
15C09-11A	SIGNING AND PAVEMENT MARKING DETAILS FOR RAILROAD-HIGHWAY GRADE CROSSINGS
15C11-07B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS
15C12-06	TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION
15C18-04	MEDIAN ISLAND MARKING
15C27-03A	DOUBLE ARROW WARNING SIGN PLACEMENT
15C27-03B	PAVEMENT MARKING (ISLANDS)

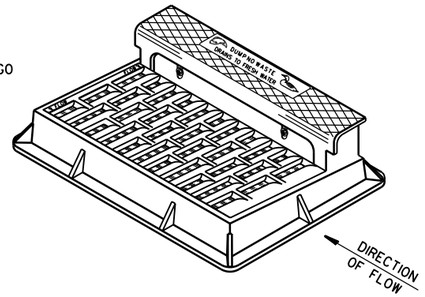
6

Standard Detail Drawing List

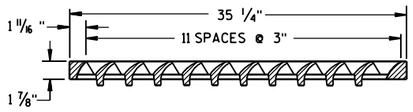
15C29-06A	BICYCLE LANE MARKING
15C33-03	STOP LINE AND CROSSWALK PAVEMENT MARKING
15D20-04	TRAFFIC CONTROL, SINGLE LANE CLOSURE, NON-FREEWAY/EXPRESSWAY
15D21-06	TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE
15D28-03	TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY
15D29-05	TRAFFIC CONTROL, VEHICLE ENTRANCE/EXIT OR HAUL ROAD
15D30-04A	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-04B	TRAFFIC CONTROL, TEMPORARY ADA COMPLIANT PEDESTRIAN ACCOMMODATION
15D30-04C	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D38-02A	TEMPORARY TRAFFIC CONTROL SIGN MOUNTING
15D38-02B	ATTACHMENT OF SIGNS TO POSTS
15D40-01	TRAFFIC CONTROL, LANE SHIFT, MULTILANE DIVIDED OR ONE WAY ROAD

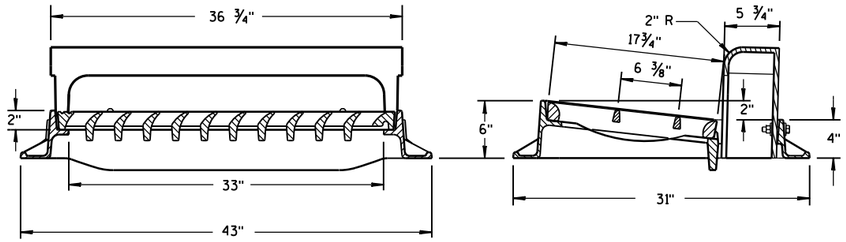


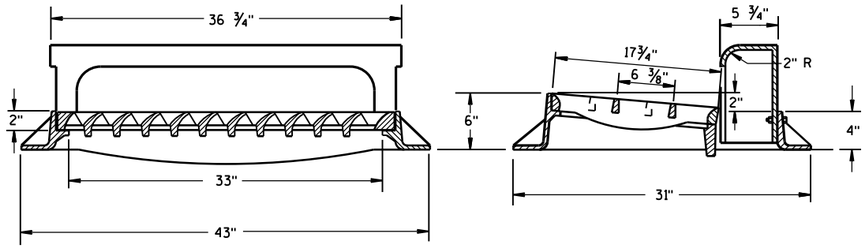
NOTE:
GRATE IS REVERSIBLE.



NOTE: CURB BOX HEIGHT ADJUSTABLE 6" TO 9"

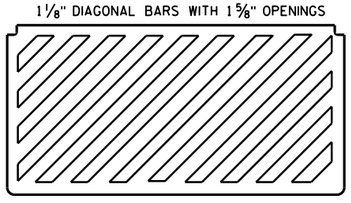






TYPE "H"

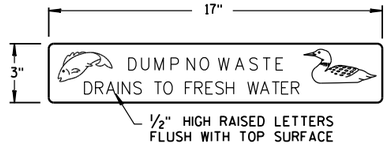
NOTE: EITHER CASTING IS ACCEPTABLE



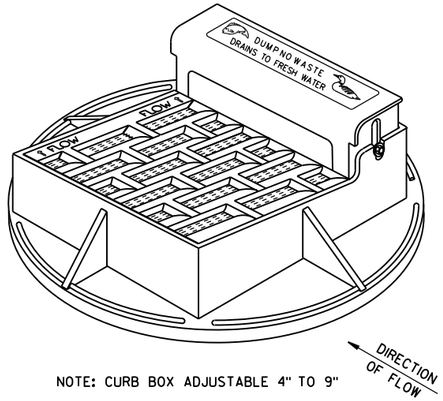
SPECIAL GRATE FOR TYPE "H" COVER

(MEASURES 35 1/4" X 17 3/4" X 2")

(NOTED AS TYPE H-S ON DRAINAGE TABLE)

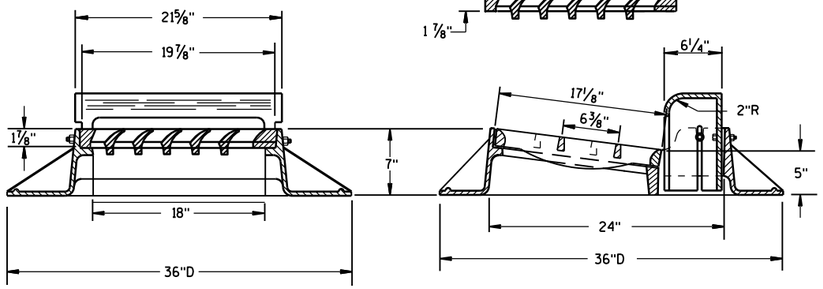


LOGO DETAIL



NOTE: CURB BOX ADJUSTABLE 4" TO 9"

NOTE:
GRATE IS REVERSIBLE.



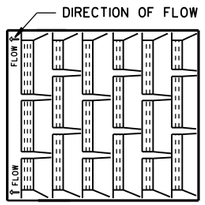
TYPE "A"

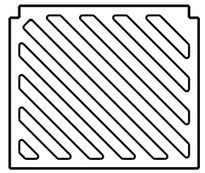
GENERAL NOTES

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.

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.

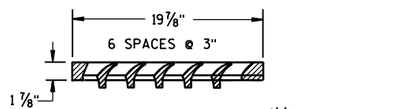


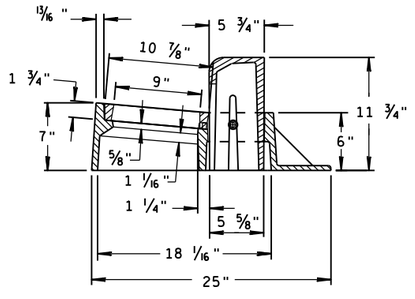


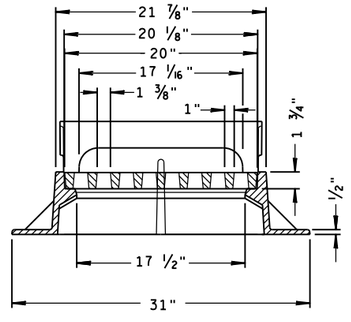
SPECIAL GRATE FOR TYPE "A" COVER

(MEASURES 19 3/4" X 17" X 1 7/8")

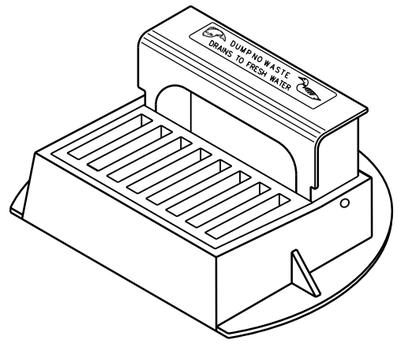
(NOTED AS TYPE A-S ON DRAINAGE TABLE)







TYPE "Z"



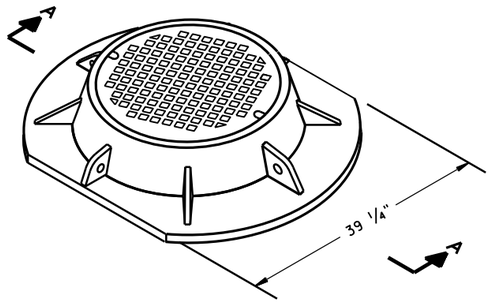
INLET COVERS
TYPE A, H, A-S, H-S & Z

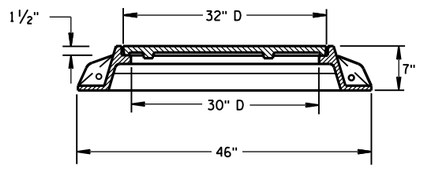
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11-27-13 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER
FHWA

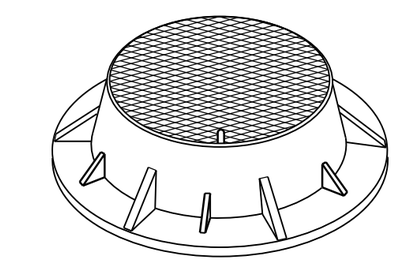
6

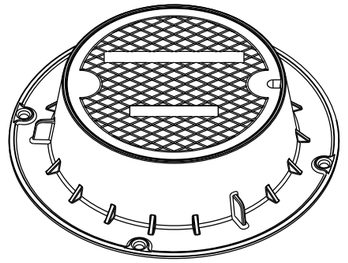
S.D.D. 8 A 5-19a

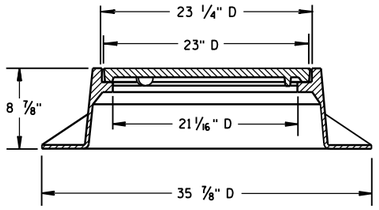


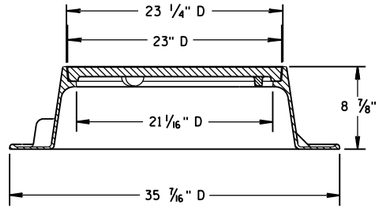


SECTION A-A
TYPE "K"









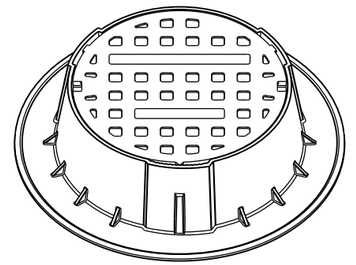
TYPE "J"
NOTE: EITHER CASTING IS ACCEPTABLE

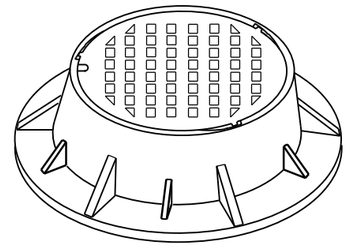
GENERAL NOTES

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

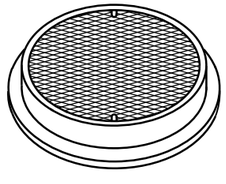
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR MANHOLE COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

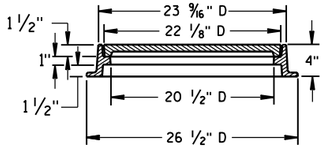
ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.





TYPE "J" SPECIAL
TYPE "B" NON-ROCKING SELF-SEAL LID
(NOTED AS TYPE J-S ON THE DRAINAGE TABLE)
NOTE: EITHER CASTING IS ACCEPTABLE





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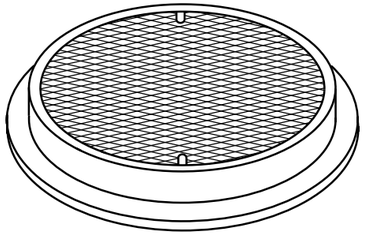

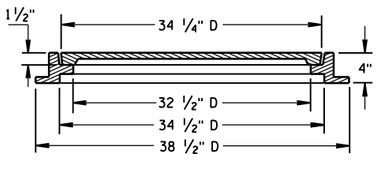

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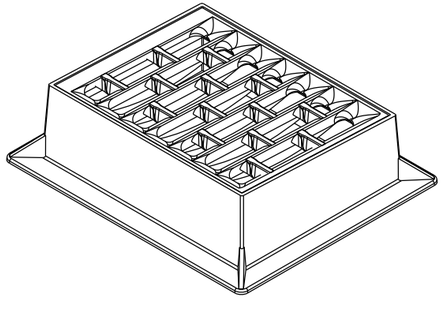
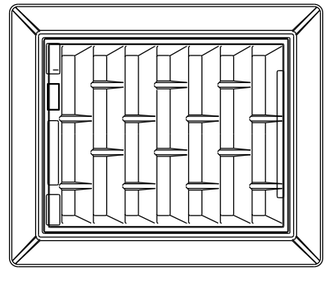
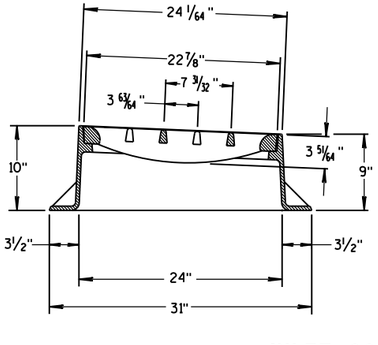
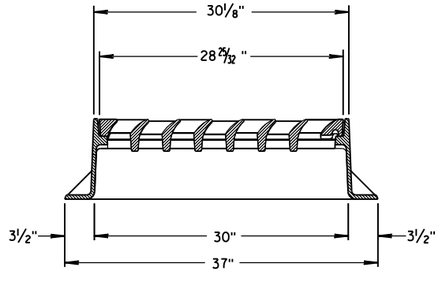








INLET COVER TYPE "BW"

INLET COVER TYPE BW
MANHOLE COVERS, TYPE K, J, J-S, L & M

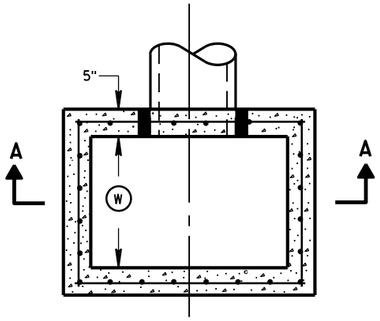
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11/27/2013
DATE
FHWA

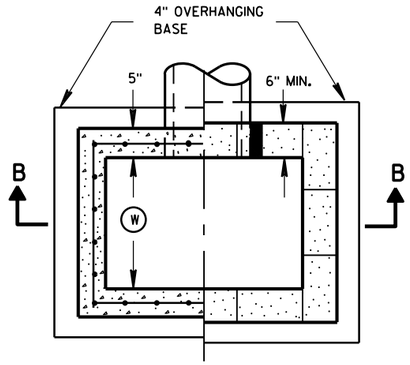
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER

6

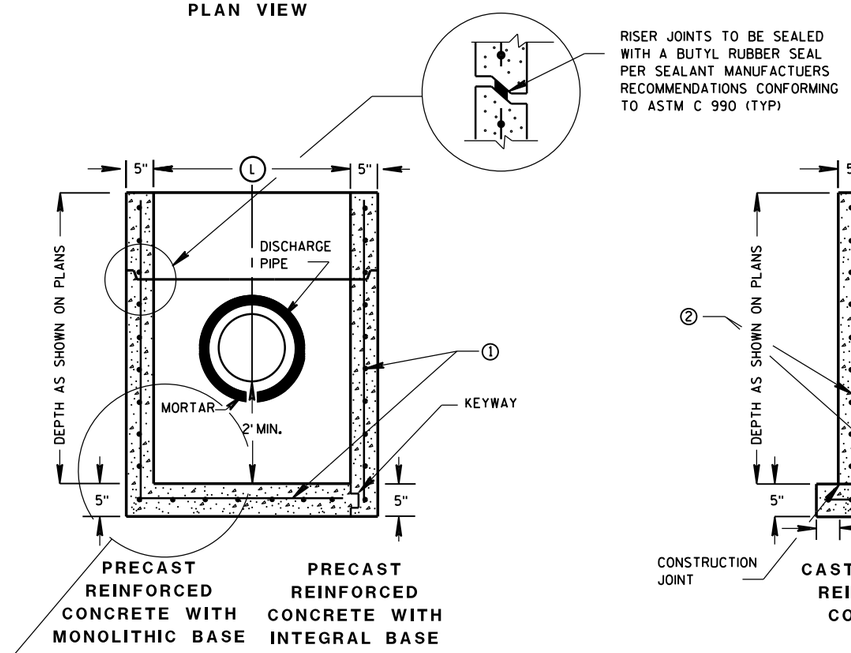
S.D.D. 8 A 5-19d



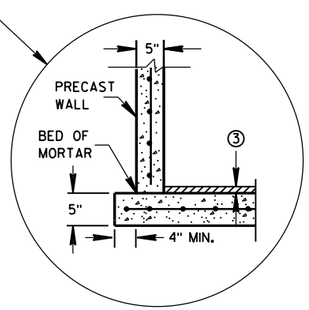
PLAN VIEW



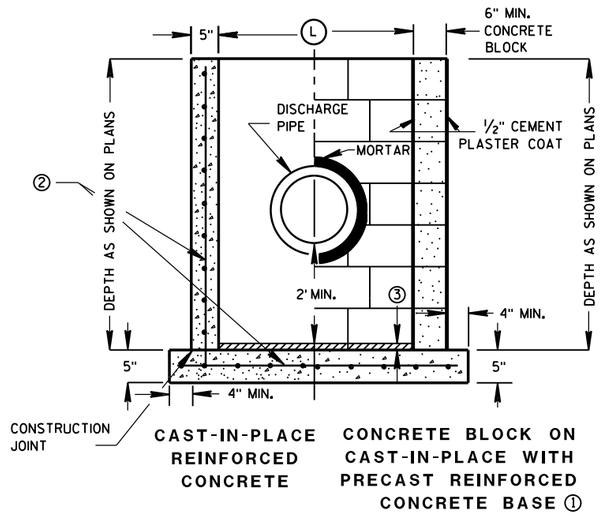
PLAN VIEW



SECTION A-A



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION



SECTION B-B

GENERAL NOTES

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

UNLESS OTHERWISE AUTHORIZED IN WRITING BY THE ENGINEER, THE CONTRACTOR SHALL NOT ORDER AND DELIVER PRECAST CATCH BASIN UNITS REQUIRED FOR THE PROJECT UNTIL A LIST OF SIZES IS FURNISHED BY THE ENGINEER.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR UNDERGROUND DRAINAGE STRUCTURES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ALL PRECAST CATCH BASIN UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF ASTM C 913.

ALL DRAINAGE STRUCTURES ARE DESIGNATED ON THE PLANS AS "MANHOLES 3X3-L", "CATCH BASINS 4-B", "INLETS 2X3-H", ETC. THE FIRST NUMBERS DESIGNATES THE SIZE OF THE STRUCTURE, AND THE FOLLOWING LETTER DESIGNATES THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6 INCHES IN DEPTH, WHICH MEETS THE REQUIREMENTS OF FOUNDATION BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.

ALL BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

PRECAST REINFORCED RISERS SHALL HAVE A TONGUE AND GROOVE JOINT WITH TONGUE UP OR DOWN.

4" OVERHANGING BASES ARE REQUIRED FOR CAST-IN-PLACE REINFORCED CONCRETE AND CONCRETE BLOCK INSTALLATIONS.
4" OVERHANG IS REQUIRED WHEN SEPARATE PRECAST BASE IS PROVIDED.
OVERHANG IS NOT REQUIRED ON PRECAST STRUCTURES WITH AN INTEGRAL OR MONOLITHIC BASE.

MAXIMUM INSIDE PIPE DIAMETER DETERMINED BY 3" CLEARANCE ON EACH SIDE OF THE OUTSIDE WALL OF THE PIPE. SEE DETAIL "A". ASSUMES PIPE ENTERS PERPENDICULAR TO THE STRUCTURE.

① FOR PRECAST CATCH BASINS PROVIDE REINFORCING STEEL IN ACCORDANCE TO ASTM C 913.

② CONTRACTOR TO PROVIDE DRAWING(S) STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCING DESIGN FOR CAST-IN-PLACE STRUCTURES.

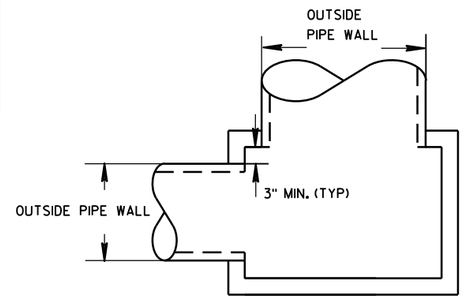
③ 1" CONCRETE KEY POURED AFTER INSTALLATION. 2' SUMP MEASURED FROM TOP OF KEY.

CATCH BASIN COVER MATRIX

CATCH BASIN SIZE		INLET COVER TYPE	F	ALL H'S
	WIDTH (W) (FT)	LENGTH (L) (FT)		
2X3-FT	2	3		X
2.5X3-FT	2.5	3	X	

PIPE MATRIX

CATCH BASIN SIZE	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES	
	WIDTH (IN)	LENGTH (IN)
2X3-FT	12	24
2.5X3-FT	18	24



DETAIL "A"

CATCH BASINS 2X3-FT AND 2.5X3-FT

CATCH BASINS 2X3-FT AND 2.5X3-FT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept., 2016
DATE
FHWA

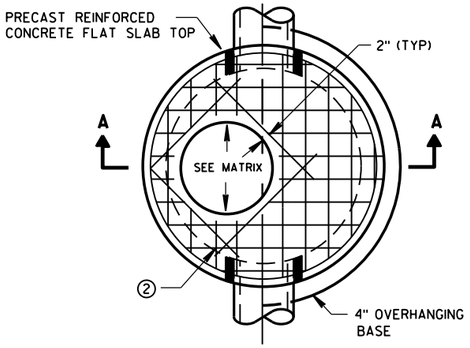
/S/ Rodney Taylor
ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

6

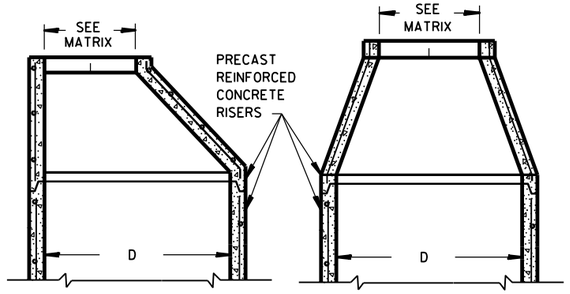
S.D.D. 8 A 9-2

6

S.D.D. 8 A 9-2

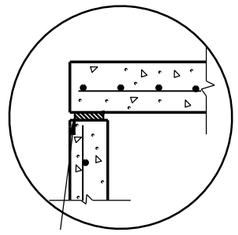


PLAN VIEW CIRCULAR OPENING

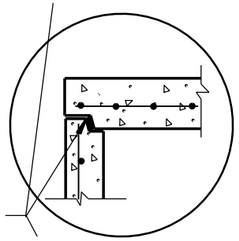


OPTIONAL PRECAST REINFORCED CONCRETE ECCENTRIC TOP

OPTIONAL PRECAST REINFORCED CONCRETE CONCENTRIC TOP

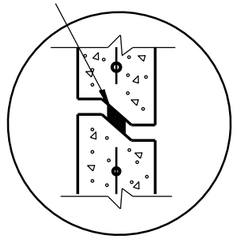


TOP WITH PLAIN END JOINT



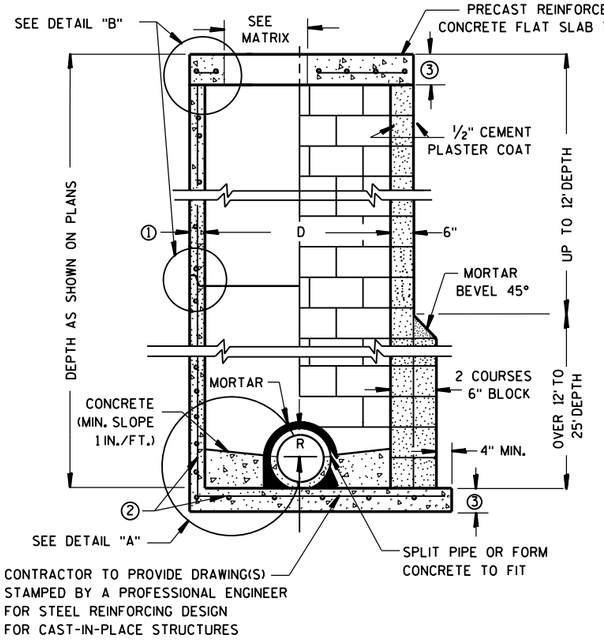
JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C990 (TYP)

TOP WITH TONGUE AND GROOVE JOINT



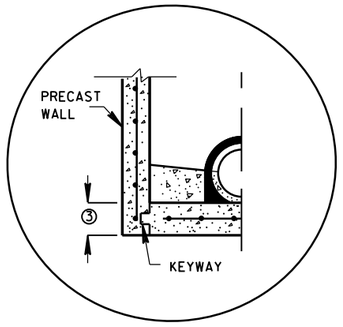
RISER WITH TONGUE AND GROOVE JOINT

DETAIL "B"

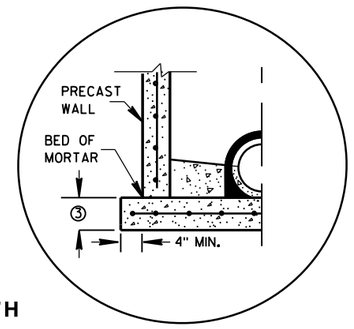


PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

CONCRETE BLOCK WITH CAST-IN-PLACE OR PRECAST REINFORCED CONCRETE BASE ②

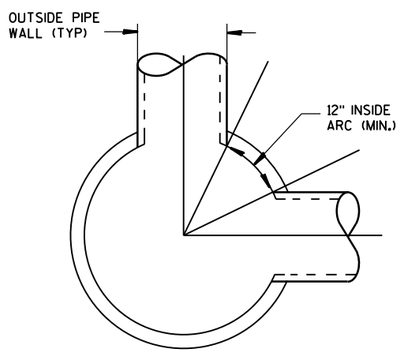


PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION



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 FOUNDATION 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.

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

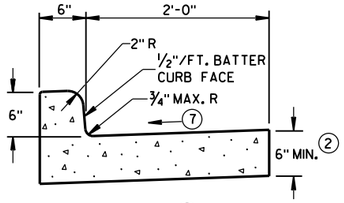
APPROVED

Sept., 2016
DATE

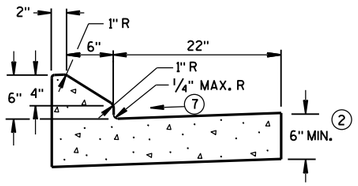
/S/ Rodney Taylor
ROADWAY STANDARDS DEVELOPMENT
UNIT SUPERV

FHWA

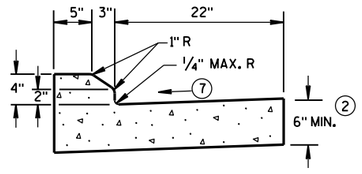
6
S.D.D. 8 B 9-2



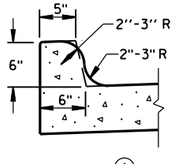
TYPES A (1) & D



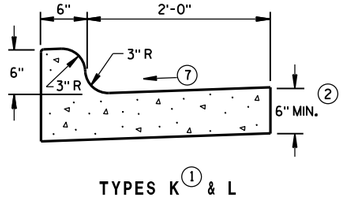
6" SLOPED CURB TYPES G (1) & J



4" SLOPED CURB TYPES G (1) & J

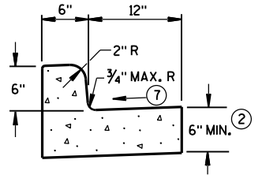


TYPES K (1) & L
(OPTIONAL CURB SHAPE)



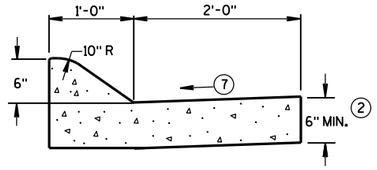
TYPES K (1) & L

CONCRETE CURB & GUTTER 30"

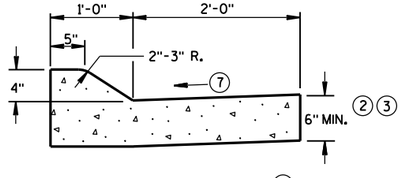


TYPES A (1) & D

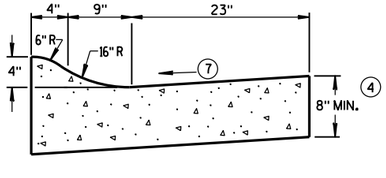
CONCRETE CURB & GUTTER 18"



6" SLOPED CURB TYPES A (1) & D

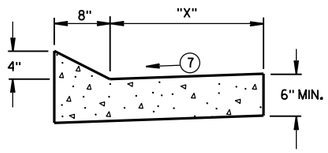


4" SLOPED CURB TYPES A (1) & D



4" SLOPED CURB TYPES R (1) & T (5)

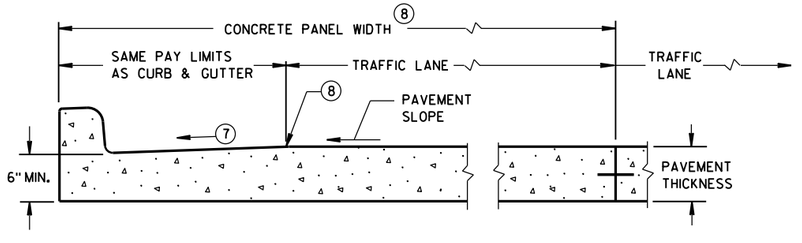
CONCRETE CURB & GUTTER 36"



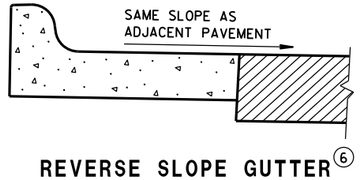
TYPES TBT & TBTT (1)

CONCRETE CURB & GUTTER

TBT & TBTT	"X"
30"	22"
36"	28"



PARTIAL SECTION OF PAVEMENT *
WITH INTEGRAL CURB & GUTTER



REVERSE SLOPE GUTTER (6)
(TYPICAL FOR ALL CURB & GUTTER TYPES)

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.

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) USE 8" MINIMUM GUTTER THICKNESS WHEN USED WITH AN ADJACENT CONCRETE TRUCK APRON PLACED BEHIND BACK OF CURB.

(4) 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.

(5) THE FACE OF CURB IS 6" FROM THE BACK OF CURB.

(6) WHEN REVERSE SLOPE GUTTER IS REQUIRED, THE LOCATION(S) WILL BE SHOWN ELSEWHERE IN THE PLAN.

(7) USE 4% GUTTER CROSS SLOPE UNLESS OTHERWISE NOTED IN THE PLANS.

(8) INCLUDE LONGITUDINAL JOINT AND TIE BARS ALONG LANE EDGE WHEN CONCRETE PANEL WIDTH EXCEEDS THE MAXIMUM WIDTH PER TABLE BELOW. LONGITUDINAL JOINT(S) ARE NOT ALLOWED WITHIN TRAFFIC LANES AND BIKE LANES. LONGITUDINAL JOINT MAY BE SAWED.

PAVEMENT THICKNESS AND MAXIMUM CONCRETE PANEL WIDTH TABLE

PAVEMENT THICKNESS	MAXIMUM PANEL WIDTH
LESS THAN 10"	12'
10" & ABOVE	15'

* BIKE LANE IS NOT SHOWN.

CONCRETE CURB & GUTTER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPO...

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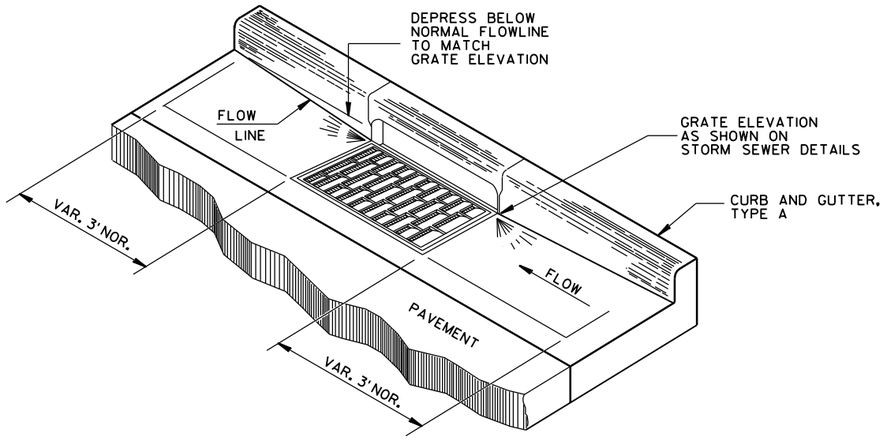
S.D.D. 8 D 1-20a



DETAIL OF CURB AND GUTTER AT INLETS

(TYPE H INLET COVER SHOWN)

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

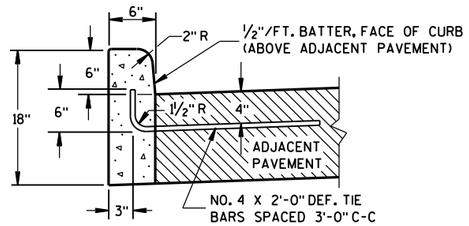
PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

UNLESS OTHERWISE SHOWN ON THE TYPICAL CROSS SECTIONS, THE BASE AGGREGATE AND COMMON EXCAVATION LIMITS ARE 2'-0" BEHIND THE BACK OF CURBS.

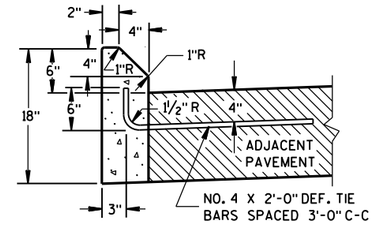
(1) TIE BARS ARE REQUIRED FOR CURB AND GUTTER TYPES A, G, K, R AND TBTT.

(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.

(9) REFER TO SDD 8D18 AND SDD 8D19 FOR ADDITIONAL DRIVEWAY ENTRANCE CURB DETAILS.

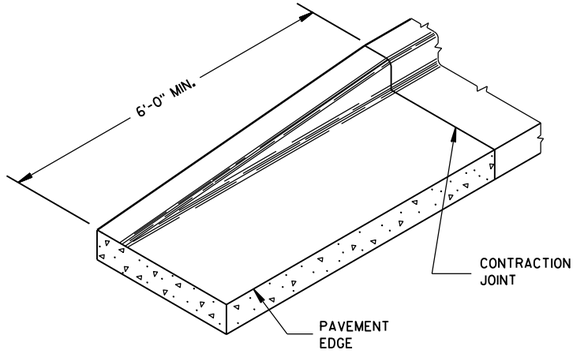


TYPES A(1) & D

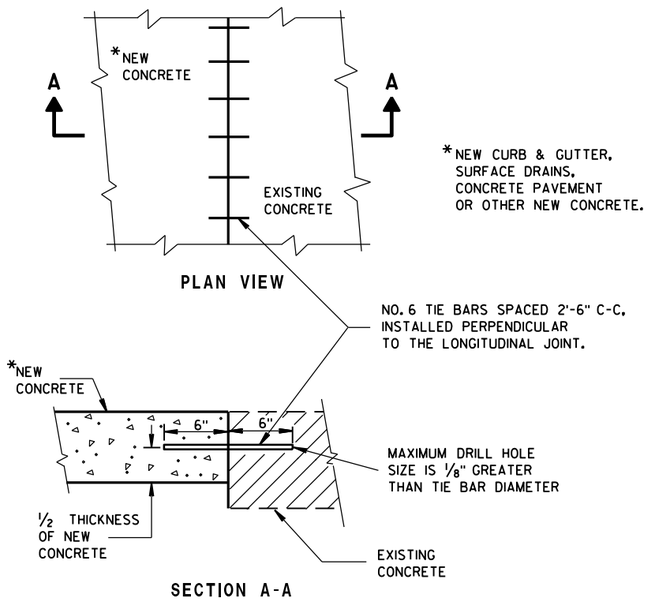


TYPES G(1) & J

CONCRETE CURB



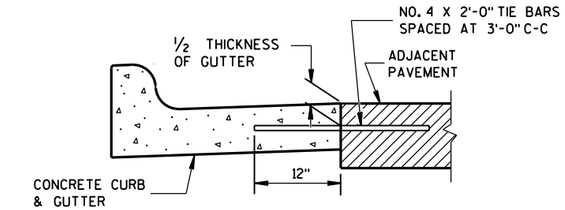
END SECTION CURB & GUTTER



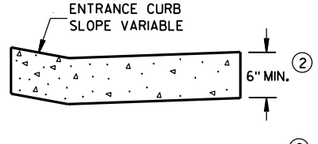
PLAN VIEW

SECTION A-A

TIE BARS DRILLED INTO EXISTING PAVEMENT



TYPICAL TIE BAR LOCATION (1)



DRIVEWAY ENTRANCE CURB (9)

(WHEN DIRECTED BY THE ENGINEER)

CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2017 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS UNIT SUPERVISOR
FHWA
ENT

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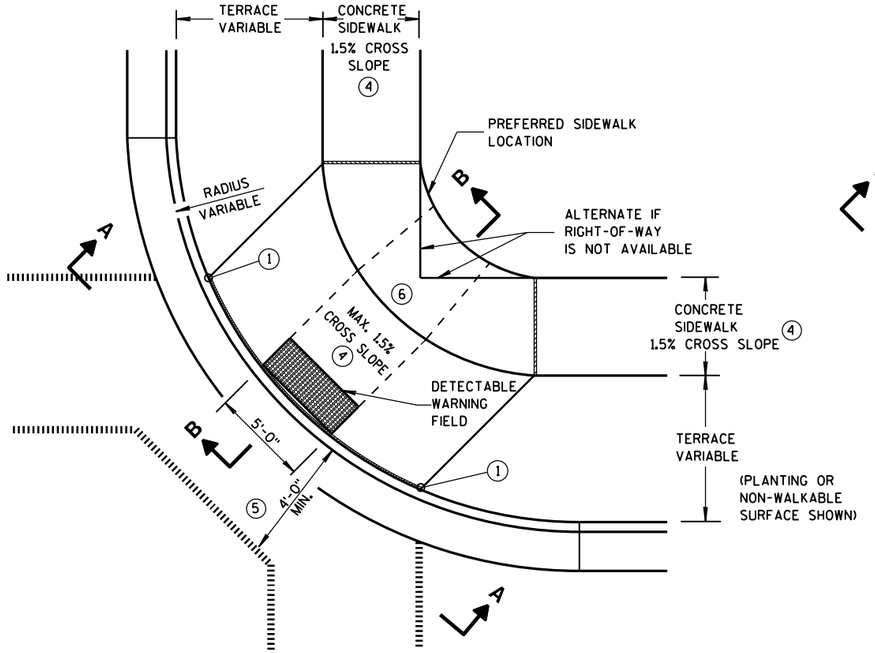
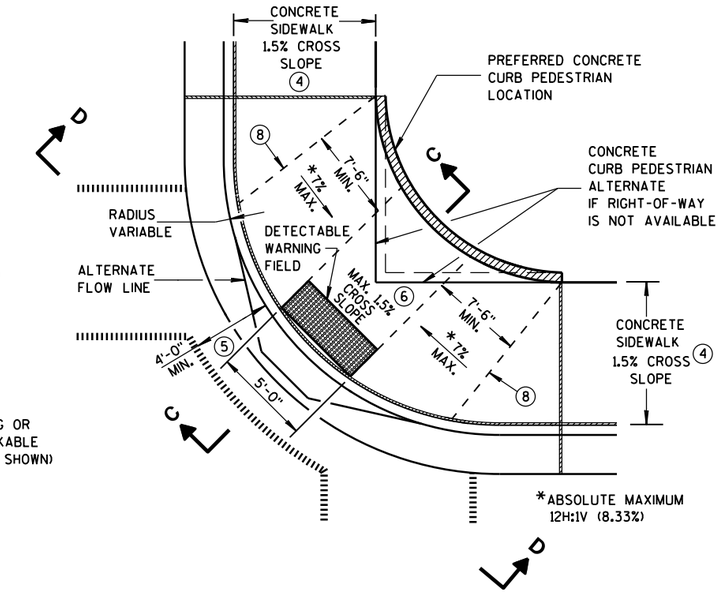
S.D.D. 8 D 1-20b



PLAN VIEW

TYPE 1 RAMP

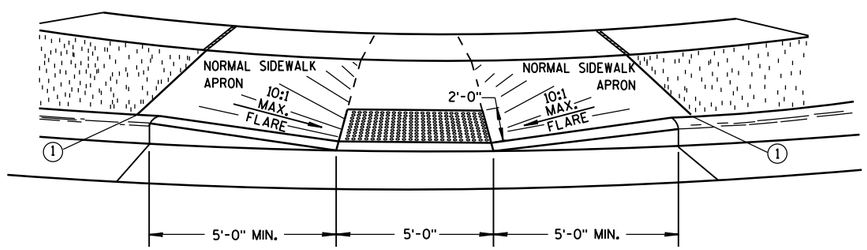
(CENTER OF CORNER RADIUS)



PLAN VIEW

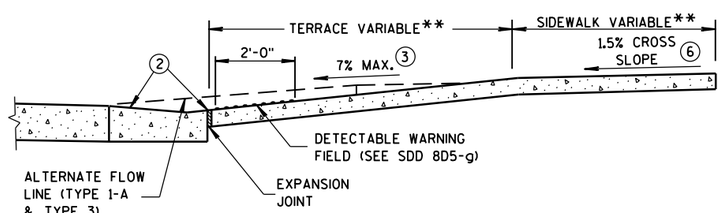
TYPE 1-A RAMP

(NO TERRACE)

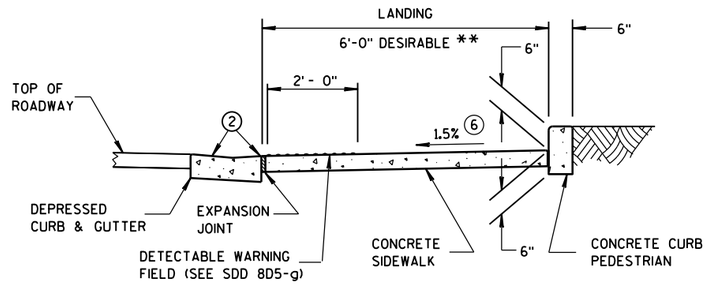


VIEW A-A

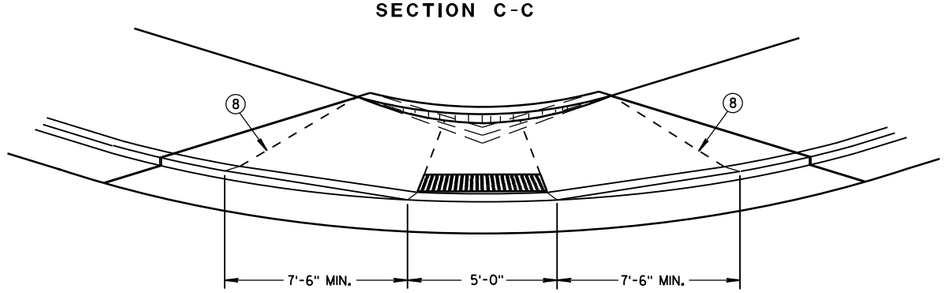
** WIDTH SHOWN ELSEWHERE IN THE PLANS



SECTION B-B



SECTION C-C



VIEW D-D

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

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

WHEN NECESSARY, THE SIDEWALK ELEVATION MAY BE LOWERED TO MEET THE HIGH POINT ON THE RAMP.

TYPE 1 RAMPS SHALL HAVE A NORMAL SIDEWALK APRON AND CURB ON BOTH SIDES OF RAMP.

DETECTABLE WARNING FIELD SHALL BE MEASURED AND PAID BY THE SQUARE FOOT AS "CURB RAMP DETECTABLE WARNING FIELD". THE CONCRETE PEDESTRIAN CURB, IF NEEDED, SHALL BE MEASURED AND PAID BY THE LINEAL FOOT AS "CONCRETE CURB PEDESTRIAN". CONCRETE SIDEWALK IN THE CURB RAMP AREA SHALL BE MEASURED AND PAID BY THE SQUARE FOOT AS CONCRETE SIDEWALK, INCLUDING THE AREA UNDER THE DETECTABLE WARNING FIELD.

SELECT CURB RAMP DETECTABLE WARNING FIELD MATERIALS AND DEVICES FROM THE DEPARTMENT'S APPROVED MATERIALS LIST. THE COLOR OF THE DETECTABLE WARNING FIELD IS SPECIFIED ELSEWHERE AND IS INCIDENTAL TO THE BID ITEM OF "CURB RAMP DETECTABLE WARNING FIELD".

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

SURFACE TEXTURE OF THE RAMP SHALL BE OBTAINED BY COARSE BROOMING TRANSVERSE TO THE SLOPE OF THE RAMP.

(1) THIS POINT IS AN EXTENSION OF OUTSIDE EDGE OF APPROACHING SIDEWALK WHERE IT MEETS THE BACK OF CONCRETE CURB. POINT LOCATION MAY BE ADJUSTED TO ALIGN WITH BEGINNING OF FULL-HEIGHT CURB IF THIS DISTANCE IS SHORT.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/4-INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) ABSOLUTE MAXIMUM 12H:1V (8.33%) CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(5) PROVIDE A LEVEL LANDING IN THE STREET AND GUTTER AREA. (2% MAXIMUM SLOPE IN ANY DIRECTION). WHEN THE GUTTER SLOPE EXCEEDS 2%, CONSTRUCT THE LEVEL LANDING IN THE STREET AREA.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

LEGEND

- 1/2" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)
- ALTERNATIVE LAYOUT

CURB RAMPS TYPES 1 AND 1-A

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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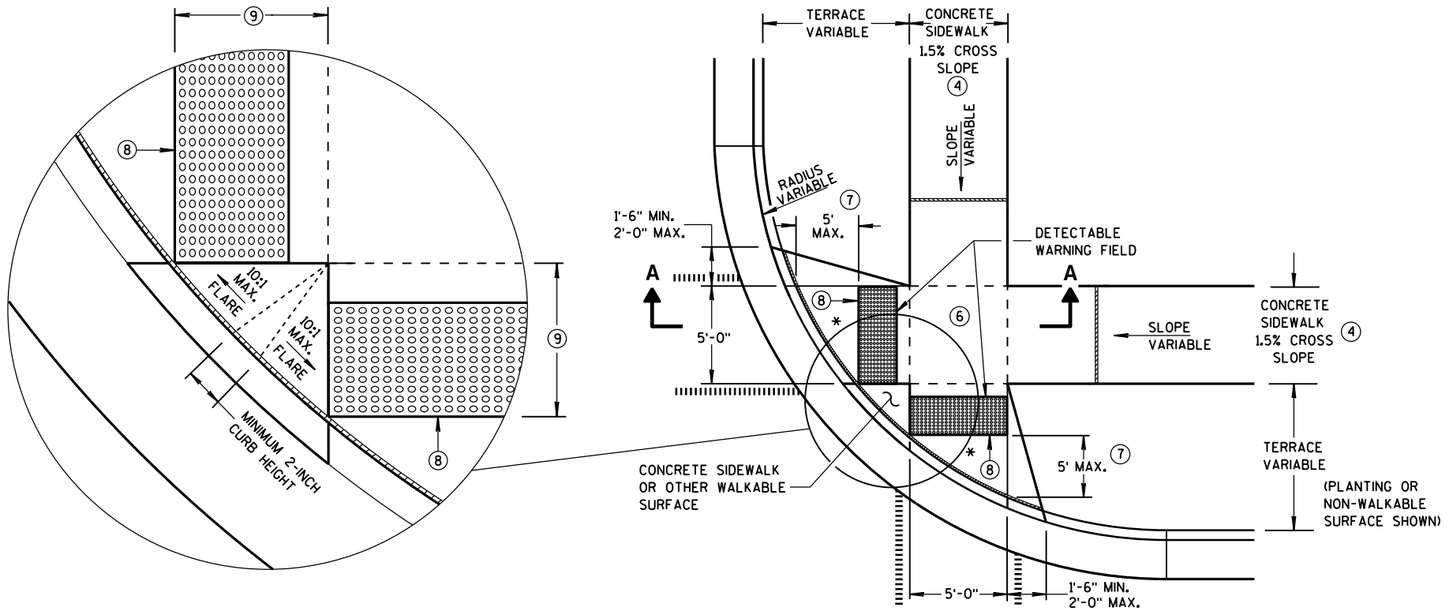
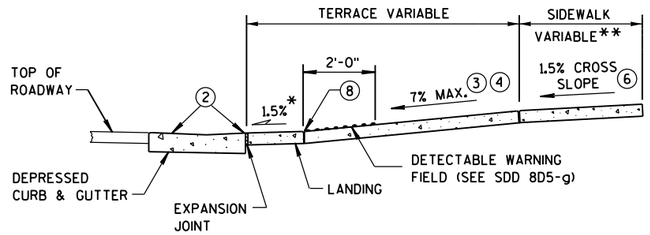


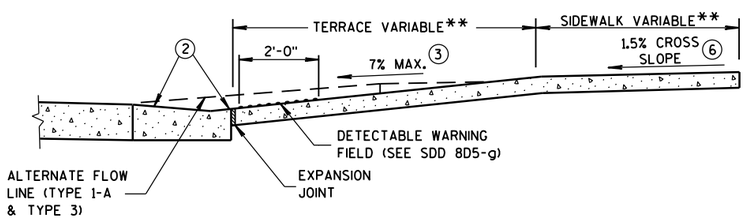
PLAN VIEW
TYPE 2 RAMP
(ON LINE WITH SIDEWALK)

* 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

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/4-INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) ABSOLUTE MAXIMUM 12H:1V (8.33%) CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET.

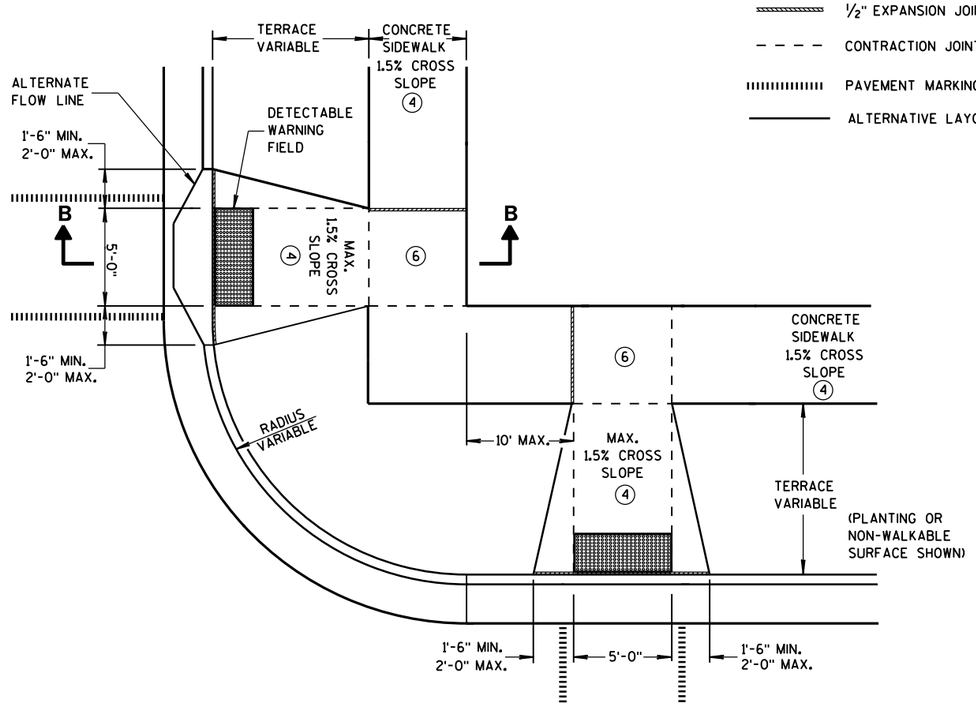
(7) WHEN THIS GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

(9) WHEN THIS DISTANCE IS LESS THAN 6'-0", IT MAY BE DIFFICULT TO ACHIEVE A 7% SLOPE OR FLATTER ALONG THE RAMP. REDUCE CURB HEIGHT IN TRIANGLE AREA TO ACHIEVE 7% SLOPE OR FLATTER ON RAMP. CONSTRUCT 2-INCH MINIMUM CURB HEIGHT BETWEEN 10:1 FLARES.

LEGEND

- ½" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)
- ALTERNATIVE LAYOUT



PLAN VIEW
TYPE 3 RAMP
(OUTSIDE OF CROSSWALK AREA)

CURB RAMPS TYPES 2 AND 3

STATE OF WISCONSIN
DEPARTMENT OF TRANSPO

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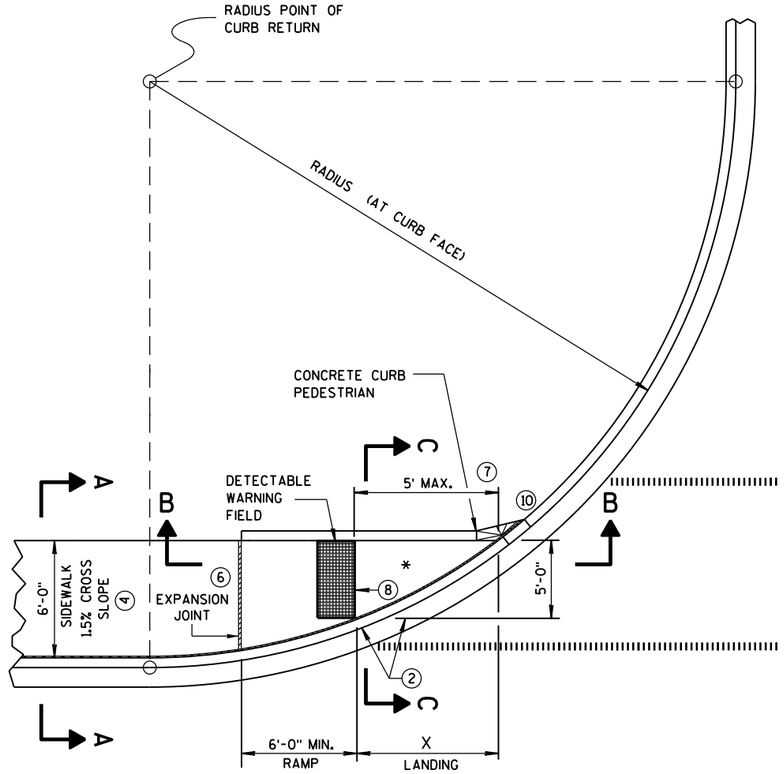
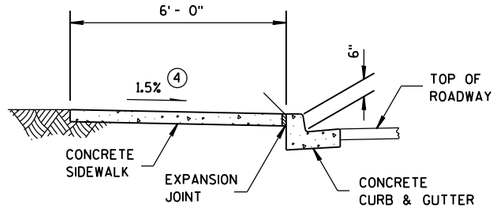


CURB RAMP TYPE 4A
PLAN VIEW

RADIUS (AT CURB FACE)	X
10 FEET	4'-7"
15 FEET	6'-5½"

INTERMEDIATE RADII CAN BE INTERPOLATED



SECTION A-A FOR TYPE 4A

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼-INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) ABSOLUTE MAXIMUM 12H:1V (8.33%) CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

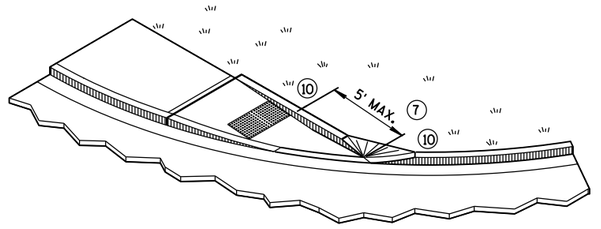
(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET.

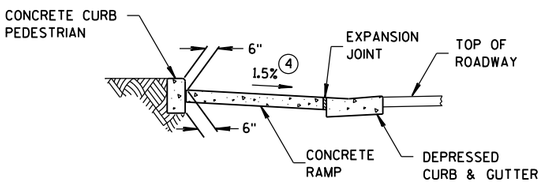
(7) WHEN THIS GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

(10) INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.

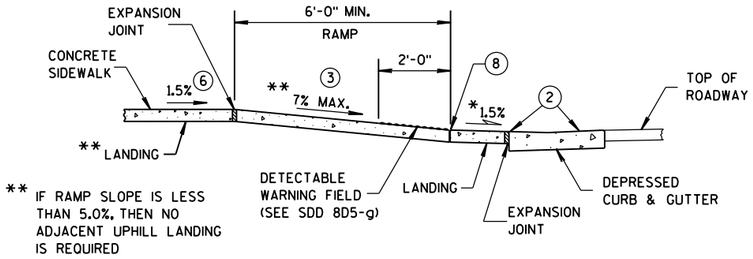


ISOMETRIC VIEW FOR TYPE 4A



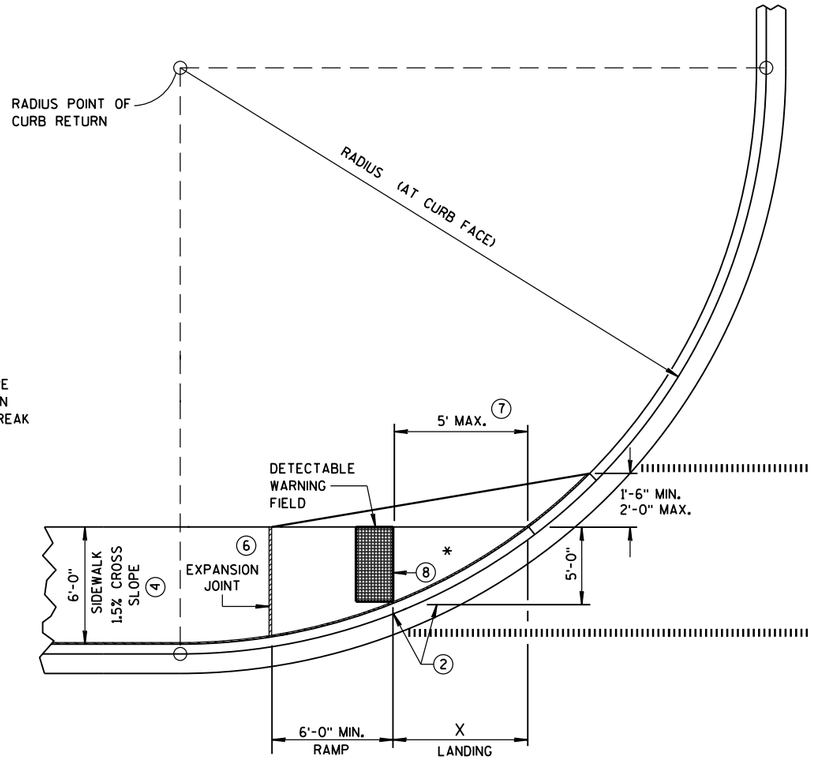
SECTION C-C FOR TYPE 4A

* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK

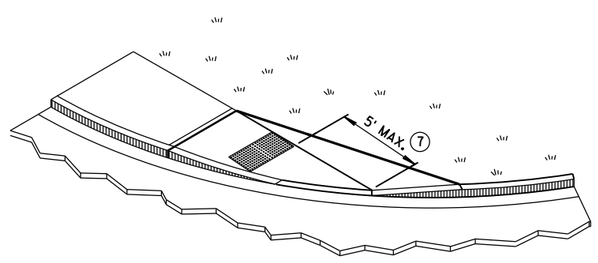


** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

SECTION B-B FOR TYPE 4A



CURB RAMP TYPE 4A1
PLAN VIEW



ISOMETRIC VIEW FOR TYPE 4A1

LEGEND

½" EXPANSION JOINT-SIDEWALK

CONTRACTION JOINT FIELD LOCATED

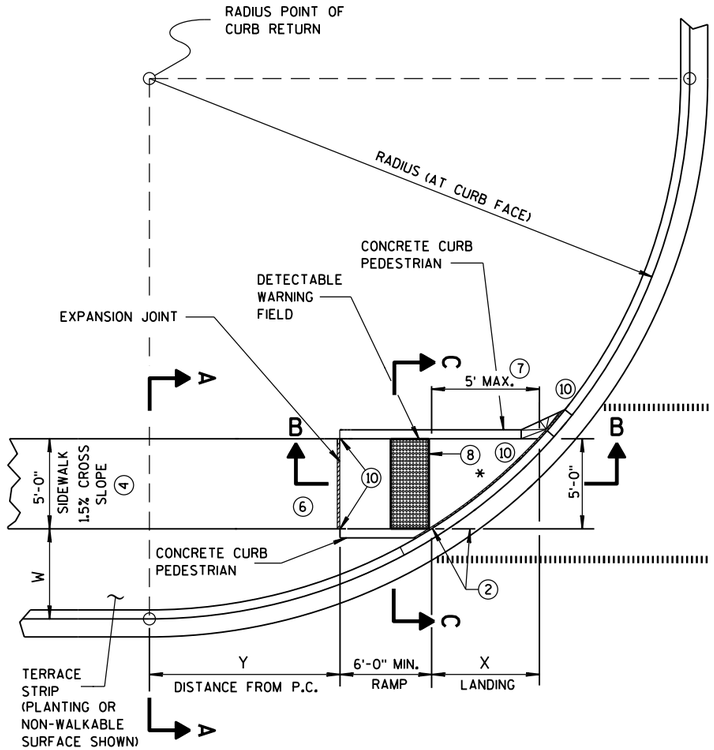
PAVEMENT MARKING CROSSWALK (WHITE)

CURB RAMPS
TYPES 4A AND 4A1

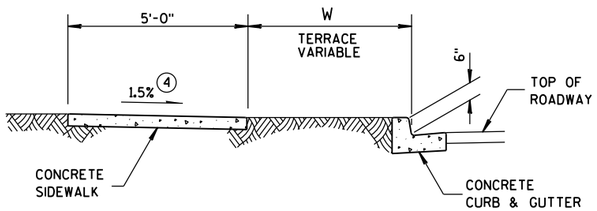
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

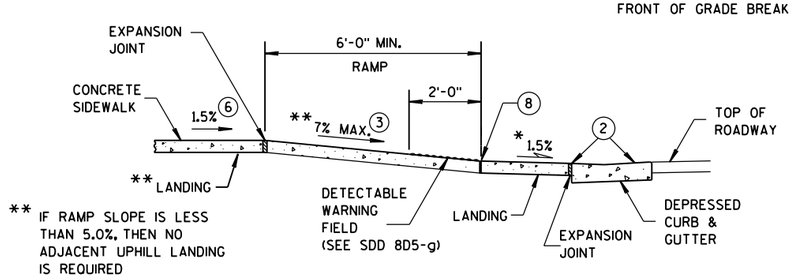
S.D.D. 8 D 5-19c



CURB RAMP TYPE 4B
PLAN VIEW



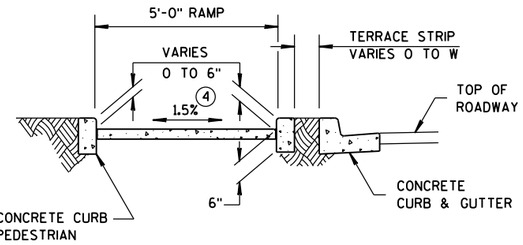
SECTION A-A FOR TYPE 4B



SECTION B-B FOR TYPE 4B

RADIUS (AT CURB FACE)	W = 3'-0"		W = 4'-0"		W = 5'-0"		W = 6'-0"		W = 7'-0"		W = 8'-0"		W = 9'-0"		W = 10'-0"	
	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y
10 FEET	2'-10¼"	0'-5"	2'-1"	1'-4½"	1'-5"	2'-1"	0'-10"	2'-7½"	0'-3¼"	3'-0¼"						
15 FEET	4'-6¾"	2'-1¾"	3'-9"	3'-5¼"	3'-1¼"	4'-6"	2'-6¾"	5'-4½"	2'-1"	6'-1"	1'-8"	6'-8½"	1'-3¼"	7'-2½"	0'-10¾"	7'-7¼"
20 FEET	5'-9¾"	3'-6½"	4'-11½"	5'-1¾"	4'-3¼"	6'-5½"	3'-8¾"	7'-7"	3'-3"	8'-6½"	2'-10"	9'-4½"	2'-5½"	10'-1¼"	2'-1¼"	10'-9"
30 FEET			6'-9¼"	7'-11¼"	6'-0¼"	9'-8"	5'-5"	11'-1¾"	4'-10¾"	12'-5¾"	4'-5½"	13'-7¾"	4'-0¾"	14'-8½"	3'-8½"	15'-8¼"
40 FEET									6'-1¾"	15'-8½"	5'-8"	17'-2"	5'-3"	18'-5¾"	4'-10¾"	19'-8¼"
50 FEET															5'-10¼"	23'-2"

INTERMEDIATE RADII CAN BE INTERPOLATED
DIMENSION "Y" IS CALCULATED BASED ON 6'-0" RAMP LENGTH
DIMENSION "X" IS CALCULATED BASED ON 5'-0" SIDEWALK WIDTH



SECTION C-C FOR TYPE 4B

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼-INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) ABSOLUTE MAXIMUM 12H:1V (8.33%) CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

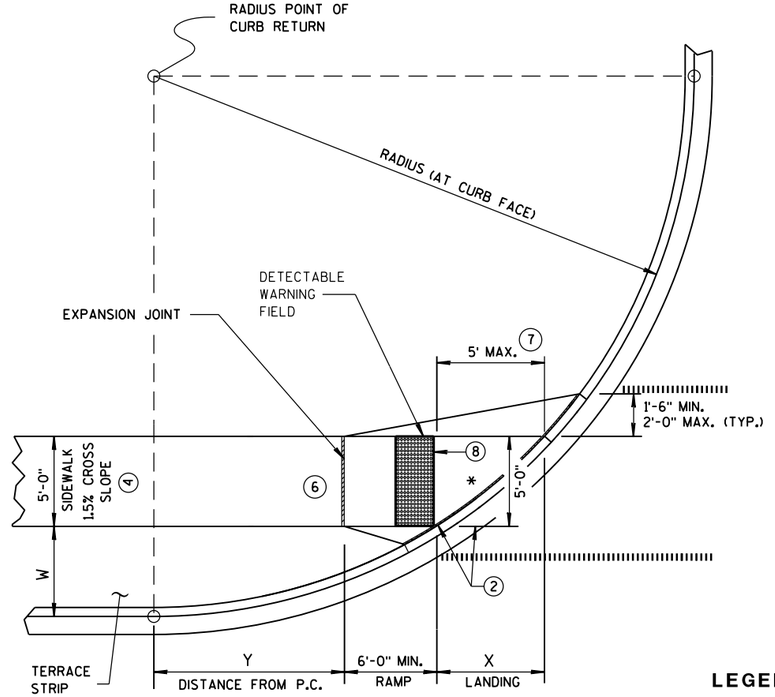
(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET.

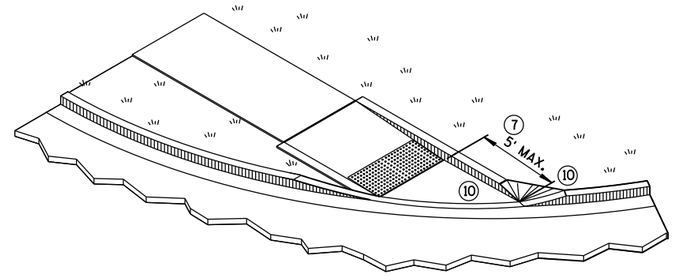
(7) WHEN THIS GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

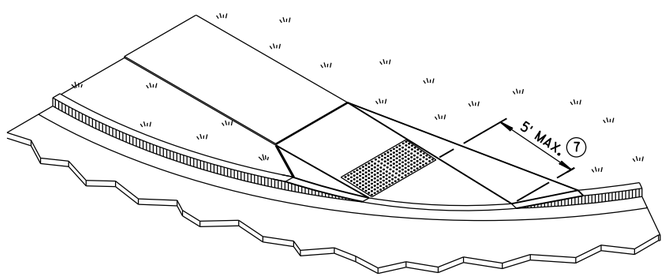
(10) INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.



CURB RAMP TYPE 4B1
PLAN VIEW



ISOMETRIC VIEW FOR TYPE 4B



ISOMETRIC VIEW FOR TYPE 4B1

LEGEND

½" EXPANSION JOINT-SIDEWALK

CONTRACTION JOINT FIELD LOCATED

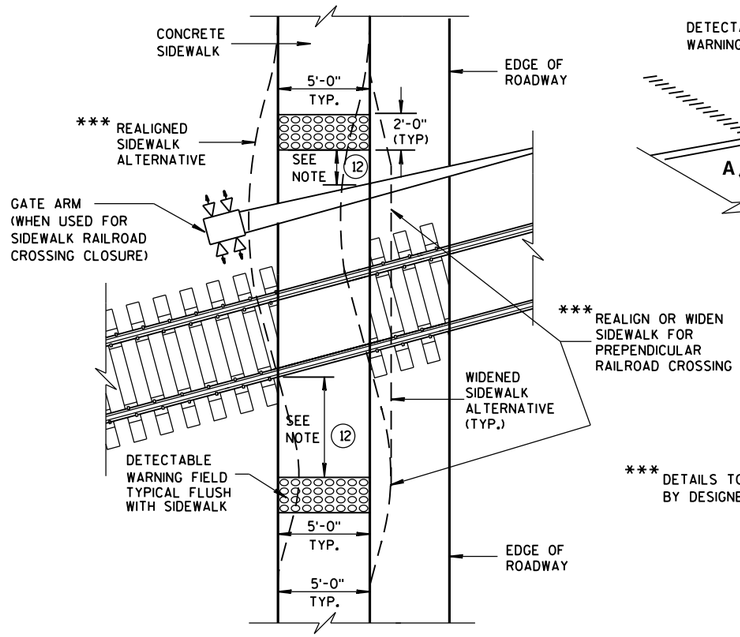
PAVEMENT MARKING CROSSWALK (WHITE)

CURB RAMPS TYPE 4B AND 4B1

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

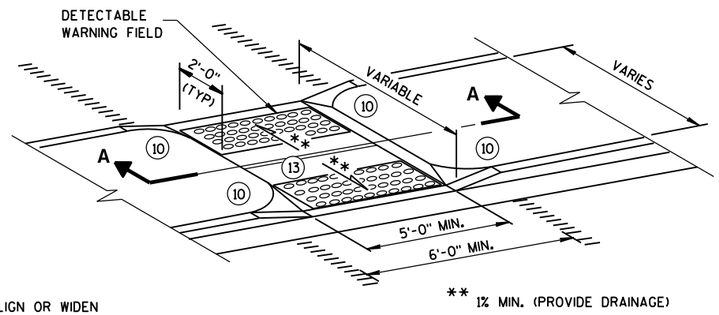
6

S.D.D. 8 D 5-19d



*** DETAILS TO BE DETERMINED BY DESIGNER

TYPE 8
DETECTABLE WARNINGS AT RAILROAD CROSSING



** 1% MIN. (PROVIDE DRAINAGE)

MEDIAN ISLAND
NON-ELEVATED PEDESTRIAN CROSSING
TYPE 5

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/4-INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) ABSOLUTE MAXIMUM 12H:1V (8.33%) CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

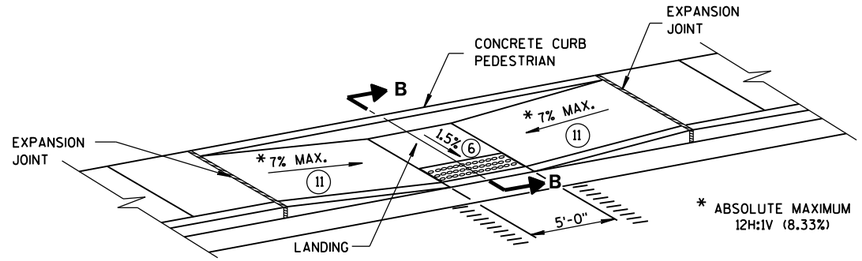
(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET.

(10) INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.

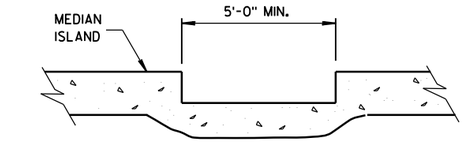
(11) SLOPE SIDEWALK TOWARD LANDING AS SHOWN WHERE THERE IS NO TERRACE OR WHERE THE TERRACE WIDTH IS LESS THAN 6 FEET WIDE.

(12) THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO A RAILROAD CROSSING SHALL BE 1.5 FEET ± 0.1' FROM THE FACE OF THE GATE ARM IF THE GATE ARM EXTENDS ACROSS THE SIDEWALK. WHERE THERE IS NO PEDESTRIAN GATE, THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO THE RAILROAD CROSSING SHALL BE 15 FEET FROM THE NEAREST RAIL.

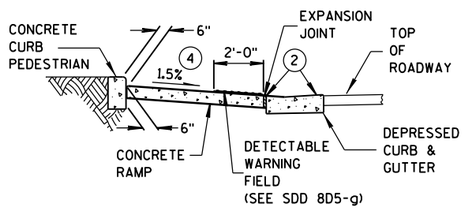
(13) DO NOT INSTALL DETECTABLE WARNING FIELDS AT THE EDGES OF STREET-LEVEL PEDESTRIAN REFUGE ISLANDS IF A MINIMUM 2-FOOT CONCRETE SURFACE WITHOUT DETECTABLE WARNINGS (MEASURED IN THE DIRECTION OF PEDESTRIAN TRAVEL) CANNOT BE ACHIEVED.



MID-BLOCK CROSSING
TYPE 7A

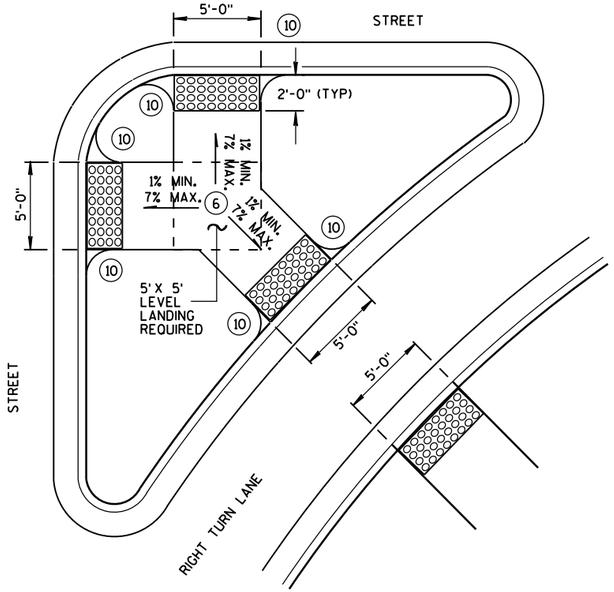


SECTION A-A

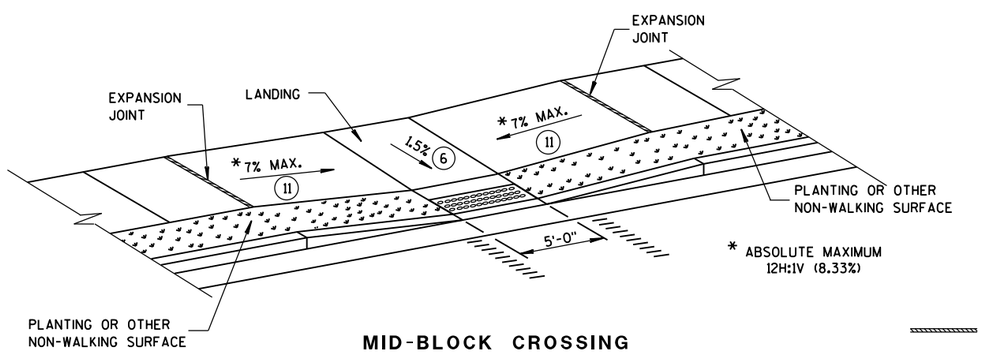


SECTION B-B

REFER TO GENERAL NOTES (2) AND (3) FOR ALL ISLAND CURB RAMPS



TYPE 6
DETECTABLE WARNING AT ISLANDS



MID-BLOCK CROSSING
TYPE 7B

NOTE: THESE PARALLEL AND PARALLEL/PERPENDICULAR CURB RAMPS MAY BE USED AT INTERSECTIONS AND MID BLOCK LOCATIONS.

LEGEND

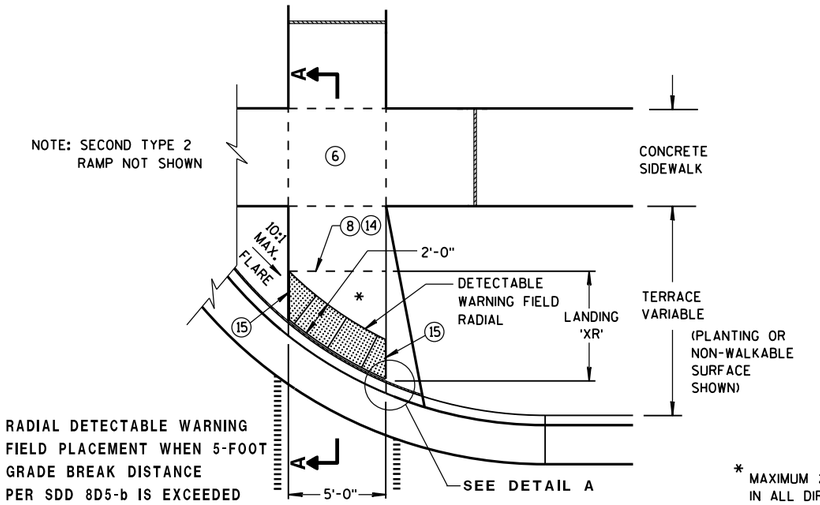
- ½" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)

CURB RAMPS
TYPES 5, 6, 7A, 7B & 8

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

S.D.D. 8 D 5-19e

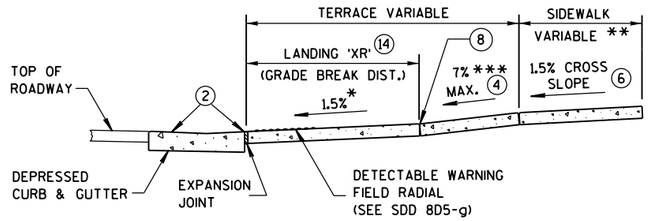


TYPE 2 RAMP
PLAN VIEW
(GRADE BREAK DISTANCE GREATER THAN 5 FEET)
(ON LINE WITH SIDEWALK)

* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK

LEGEND

- ½" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)



** WIDTH SHOWN ELSEWHERE IN THE PLANS

*** ABSOLUTE MAXIMUM 12H:1V (8.33%)

SECTION A-A

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

DETECTABLE WARNING FIELDS (DWFs) THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

APPLY RADIAL DETECTABLE WARNING PLACEMENT SIMILARLY FOR TYPE 4A AND 4A1 CURB RAMPS AND SIMILARLY FOR TYPE 4B AND 4B1 CURB RAMPS. TYPE 4A AND 4B CURB RAMPS ARE NOT SHOWN.

REFER TO SDD 8D5-g FOR ADDITIONAL RADIAL PLATE REQUIREMENTS.

FIELD CUTS AT INTERMEDIATE JOINTS WITHIN THE RADIAL DETECTABLE WARNING FIELD ARE PROHIBITED.

DETERMINE FINAL RADIAL WARNING FIELD CONFIGURATION AND ITS INDIVIDUAL PLATE LOCATIONS. PERFORM PRE-LAYOUT PRIOR TO PLACEMENT IN PLASTIC CONCRETE. FOLLOW MANUFACTURER'S PRODUCT LIST AND INSTALLATION RECOMMENDATIONS.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼-INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(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.

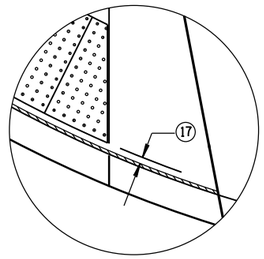
(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

(14) CONSULT ENGINEER IF GRADE BREAK LOCATION (END OF LANDING DIMENSION 'XR') REQUIRES FIELD ADJUSTMENT WHEN ESTABLISHING FINAL RADIAL DETECTABLE WARNING FIELD LOCATION.

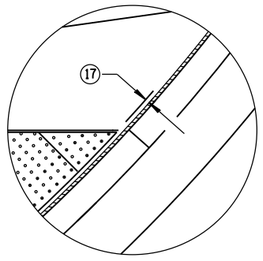
(15) FIELD SAW CUTS ALONG RADIAL DETECTABLE WARNING PLATES WILL BE NECESSARY TO MATCH EACH CURB RAMP EDGE. AVOID CUTTING THROUGH DOMES WHENEVER POSSIBLE. MAKE FIELD CUTS TRUE TO LINE AND WITHIN 1/8" DEVIATION. SMOOTH EDGES OF FIELD CUT PLATES.

(16) USE 1'X 2' RECTANGULAR END PLATE AT END OF TYPE 4A1 RAMP AND PROVIDE MINIMUM 2'-0" DETECTABLE WARNING FIELD COVERAGE (IN DIRECTION OF PEDESTRIAN TRAVEL) ALONG THE ENTIRE CURB RAMP WIDTH.

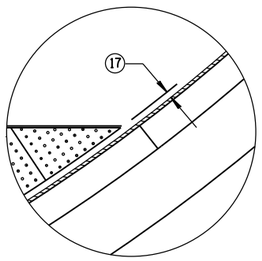
(17) A MAXIMUM 3-INCH CONCRETE BORDER WIDTH IS ALLOWABLE IN FRONT OF RADIAL DETECTABLE WARNING FIELD FOR CONSTRUCTABILITY PURPOSES. CONCRETE BORDER WIDTH MAY VARY UP TO 1 INCH.



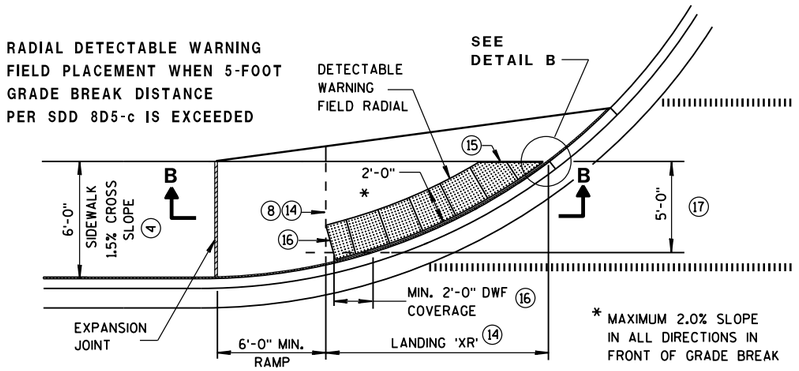
DETAIL A



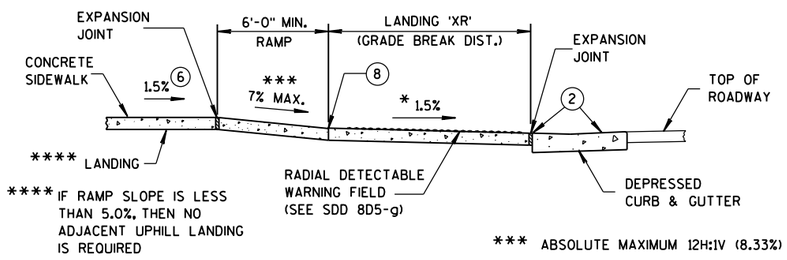
DETAIL C



DETAIL B



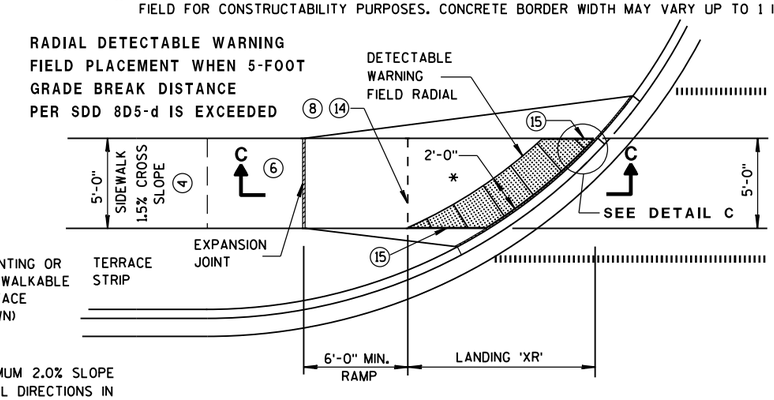
CURB RAMP TYPE 4A1
PLAN VIEW
(GRADE BREAK DISTANCE GREATER THAN 5 FEET)



**** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

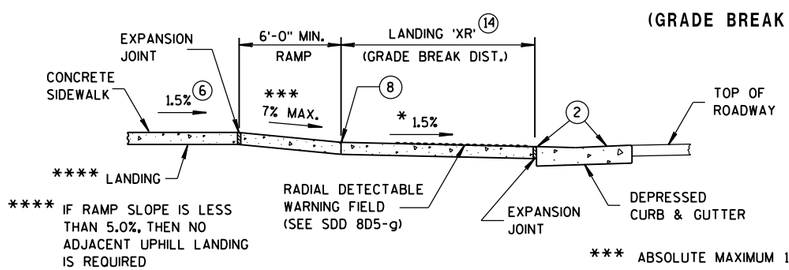
*** ABSOLUTE MAXIMUM 12H:1V (8.33%)

SECTION B-B FOR TYPE 4A1



* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK

CURB RAMP TYPE 4B1
PLAN VIEW
(GRADE BREAK DISTANCE GREATER THAN 5 FEET)



**** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

*** ABSOLUTE MAXIMUM 12H:1V (8.33%)

SECTION C-C FOR TYPE 4B1

CURB RAMPS
RADIAL DETECTABLE WARNING FIELD APPLICATIONS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR 174

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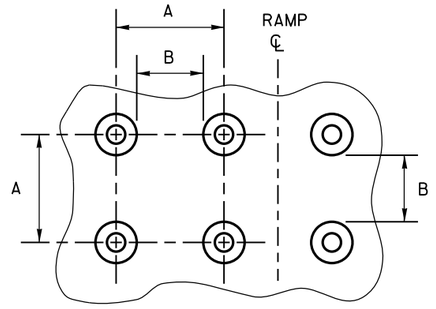
S.D.D. 8 D 5-19f

6

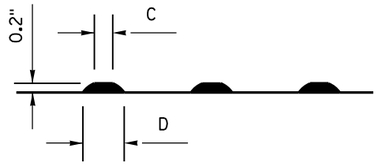
S.D.D. 8 D 5-19f

	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

GENERAL NOTES

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

PLACE ALL DETECTABLE WARNING FIELD SYSTEMS IN ACCORDANCE TO THE MANUFACTURER'S RECOMMENDATION.

FIELD CUTS AT INTERMEDIATE JOINTS WITHIN THE RADIAL DETECTABLE WARNING FIELD ARE PROHIBITED.

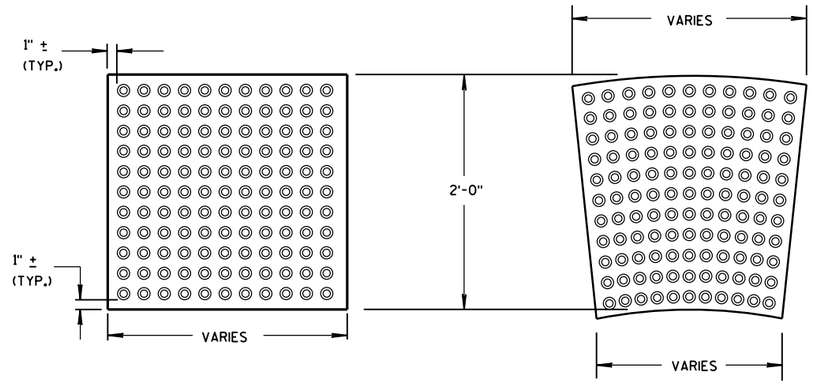
DETERMINE FINAL RADIAL WARNING FIELD CONFIGURATION AND ITS INDIVIDUAL PLATE LOCATIONS. PERFORM PRE-LAYOUT PRIOR TO PLACEMENT IN PLASTIC CONCRETE. FOLLOW MANUFACTURER'S PRODUCT LIST AND INSTALLATION RECOMMENDATIONS.

FOR RADIAL DETECTABLE WARNING FIELD APPLICATIONS WHERE STANDARD RADIAL PLATES ARE NOT AVAILABLE AT AN INTERSECTION CURB RADIUS, A COMBINATION OF SQUARE OR RECTANGULAR PLATES AND RADIAL PLATES MAY BE USED TO FORM RADIAL CONFIGURATION. RADIAL WEDGES IN COMBINATION WITH SQUARE PANELS ARE ALSO ACCEPTABLE. FOLLOW MANUFACTURER'S RECOMMENDATIONS.

REFER TO CONTRACT AND STANDARD SPECIFICATIONS FOR FIELD CUTTING REQUIREMENTS.

DO NOT EMBED IN CONCRETE ANY FIELD-CUT PLATES WITH CUT EDGES SHORTER THAN 6 INCHES. CONSULT WITH MANUFACTURER FOR RE-DRILLING AND ANCHORING REQUIREMENTS OF FIELD-CUT PLATES.

⑮ FIELD SAW CUTS ALONG RADIAL DETECTABLE WARNING PLATES WILL BE NECESSARY TO MATCH EACH CURB RAMP EDGE. AVOID CUTTING THROUGH DOMES WHENEVER POSSIBLE. MAKE FIELD CUTS TRUE TO LINE AND WITHIN 1/8" DEVIATION. SMOOTH EDGES OF FIELD CUT PLATES.

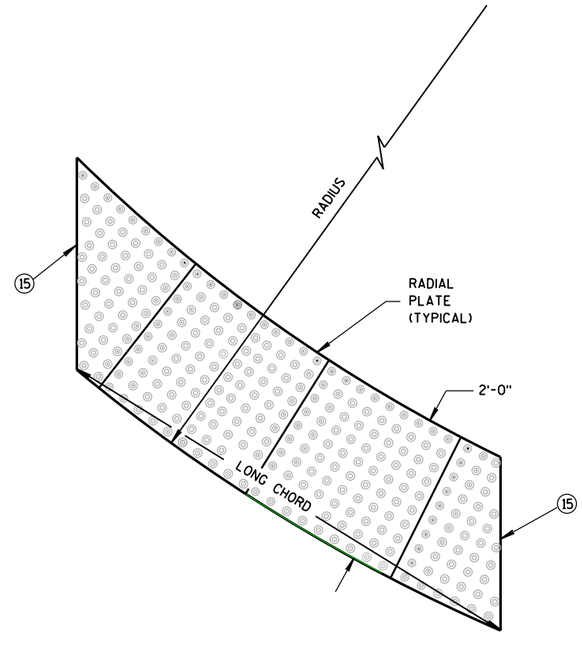


RECTANGULAR PLATES

RADIAL PLATES

DETECTABLE WARNING FIELDS (TYPICAL)

PLAN VIEW



RADIAL DETECTABLE WARNING FIELD ATTRIBUTES

CURB RAMPS
RECTANGULAR AND RADIAL
DETECTABLE WARNING PLATES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2017 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS UNIT SUPERV
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FHWA

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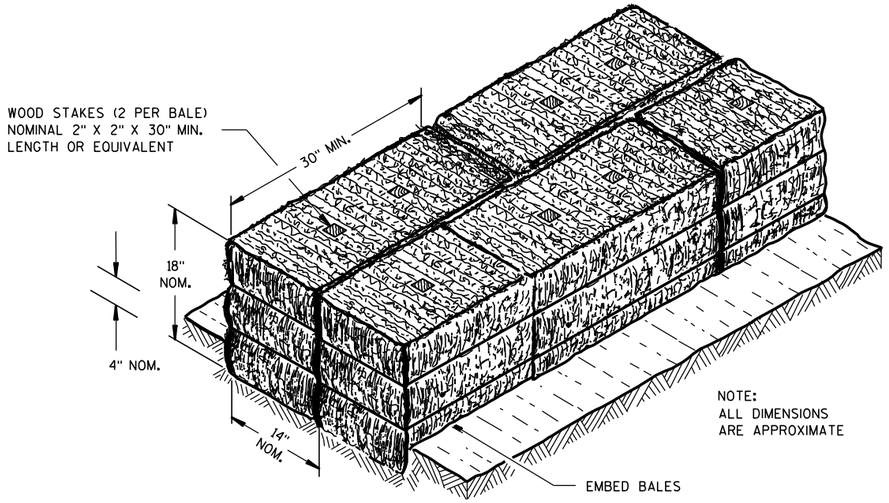
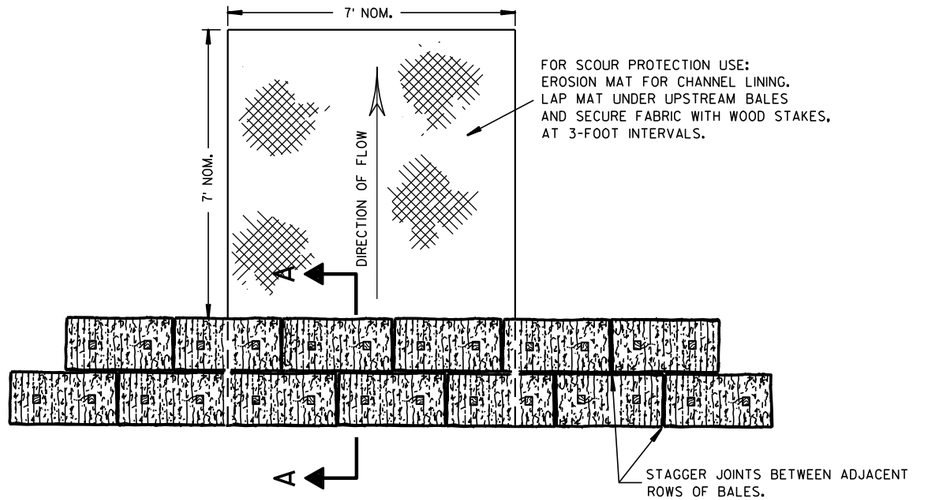
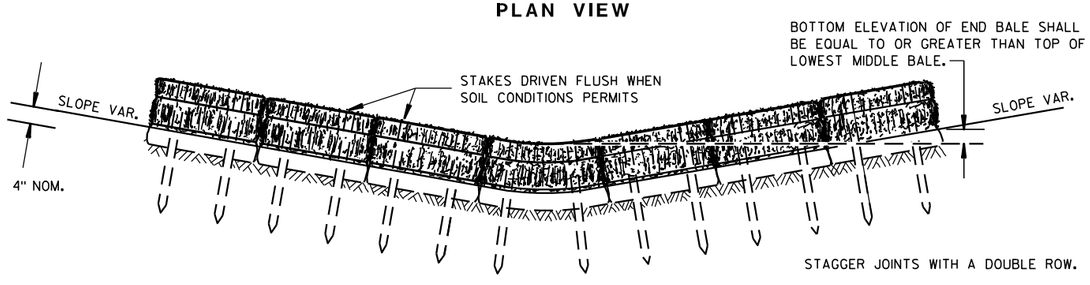


SECTION A-A



PLAN VIEW



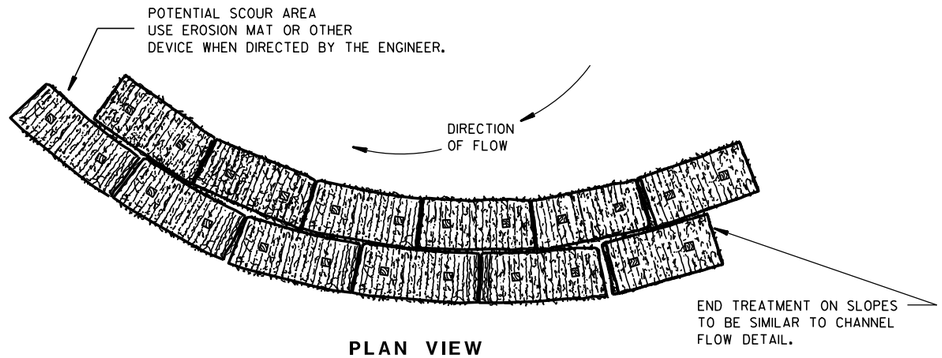
FRONT ELEVATION

TEMPORARY DITCH CHECK USING EROSION BALES ①

GENERAL NOTES

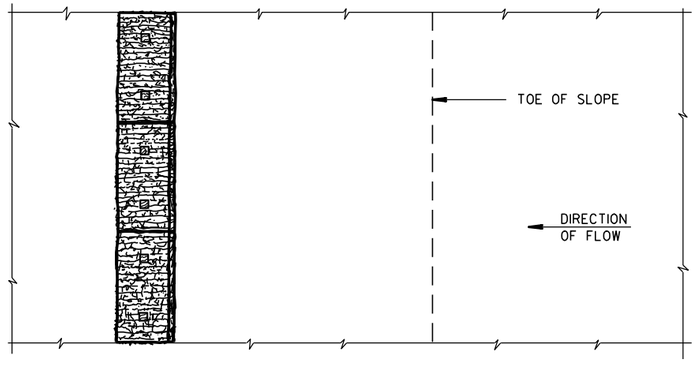
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

① TEMPORARY DITCH CHECKS EITHER EROSION BALES OR MANUFACTURED SHALL BE PAID FOR UNDER THE BID ITEM OF TEMPORARY DITCH CHECK. THE DEPARTMENT WILL NOT PAY FOR TEMPORARY DITCH CHECKS CONSTRUCTED OF A SINGLE ROW OF EROSION BALES.

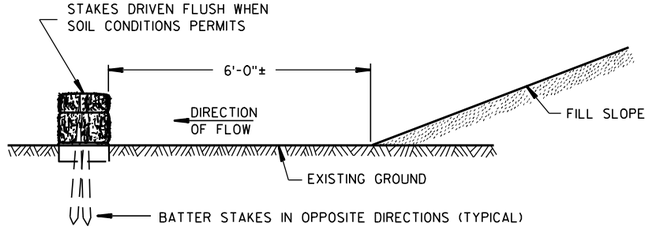


PLAN VIEW

WHEN ALTERING THE DIRECTION OF FLOW



PLAN VIEW



FRONT ELEVATION

WHEN EXISTING GROUND SLOPES AWAY FROM FILL SLOPE

EROSION BALES FOR SHEET FLOW

TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
6/04/02 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

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S.D.D. 8 E 8-3

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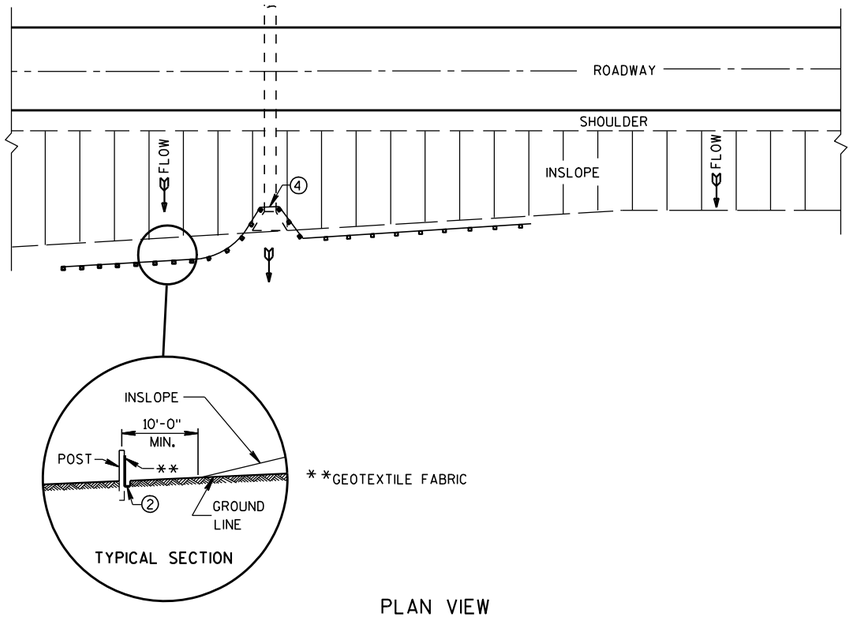
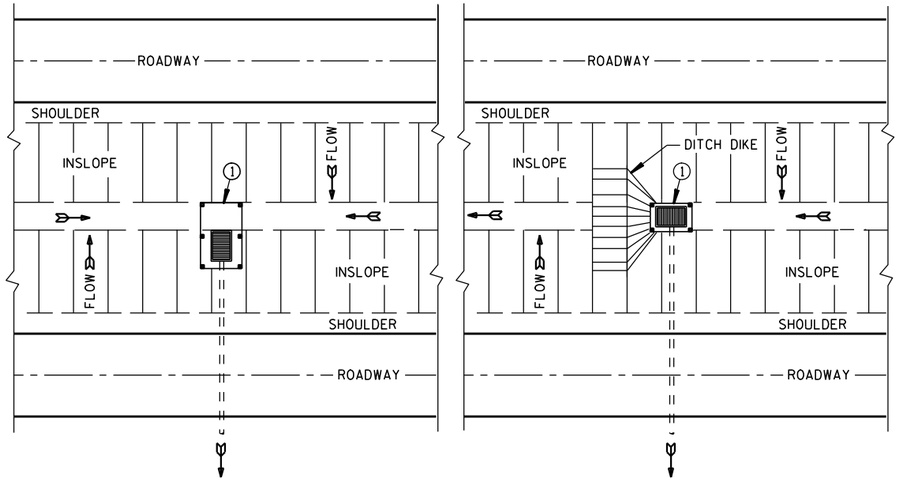


PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



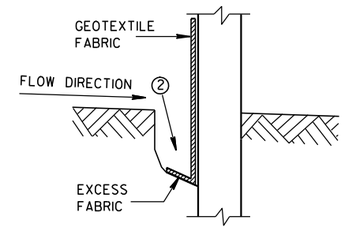
PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS

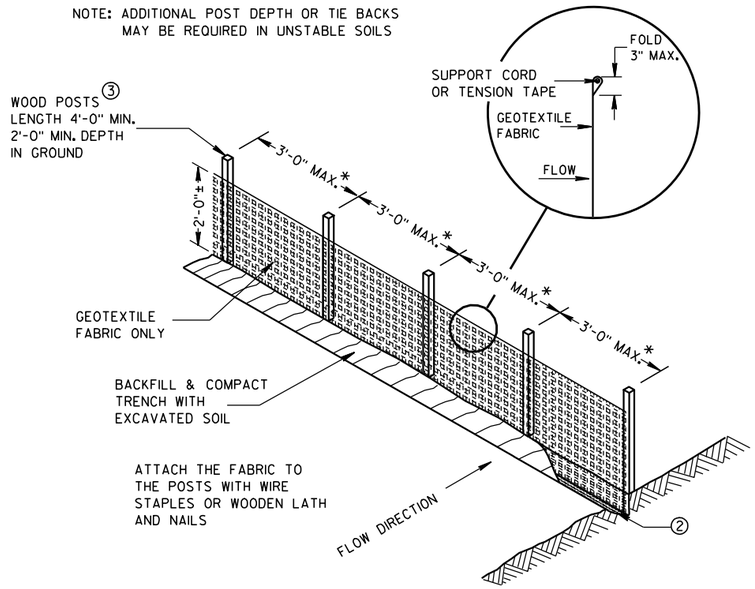
GENERAL NOTES

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

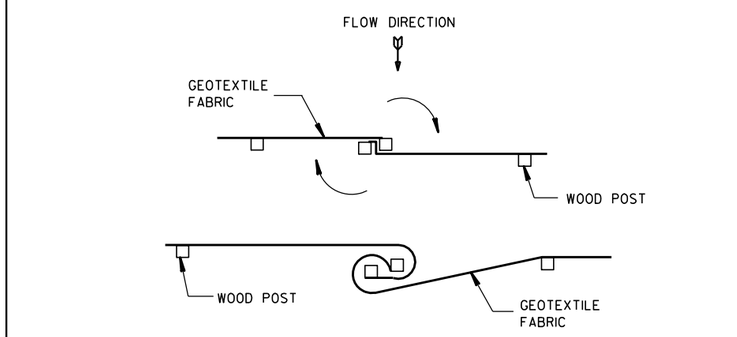
1. HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.
2. FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.
3. WOOD POSTS SHALL BE A MINIMUM SIZE OF 1⅛" X 1⅛" OF OAK OR HICKORY.
4. SILT FENCE TO EXTEND ACROSS THE TOP OF THE PIPE.
5. CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS; A) OVERLAP THE END POSTS AND TWIST, OR ROTATE, AT LEAST 180 DEGREES, B) HOOK THE END OF EACH SILT FENCE LENGTH.



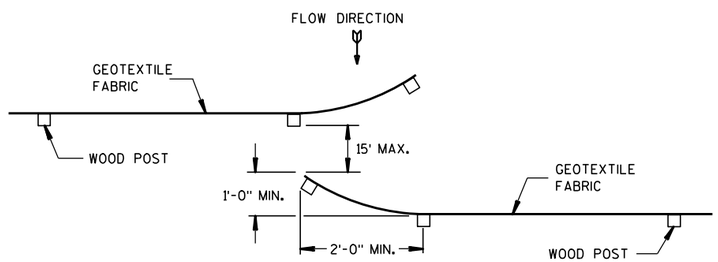
TRENCH DETAIL



SILT FENCE

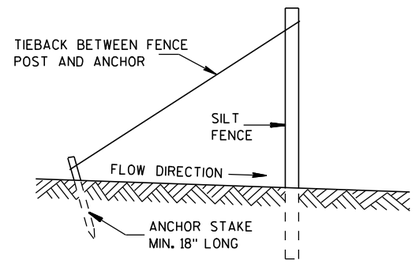


TWIST METHOD



HOOK METHOD

JOINING TWO LENGTHS OF SILT FENCE 5



SILT FENCE TIE BACK

(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
4-29-05 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

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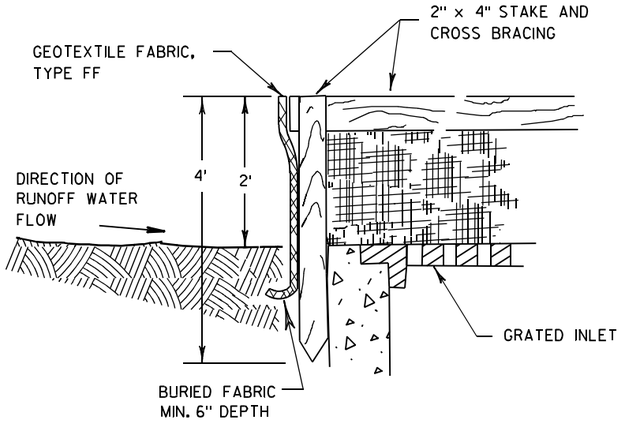
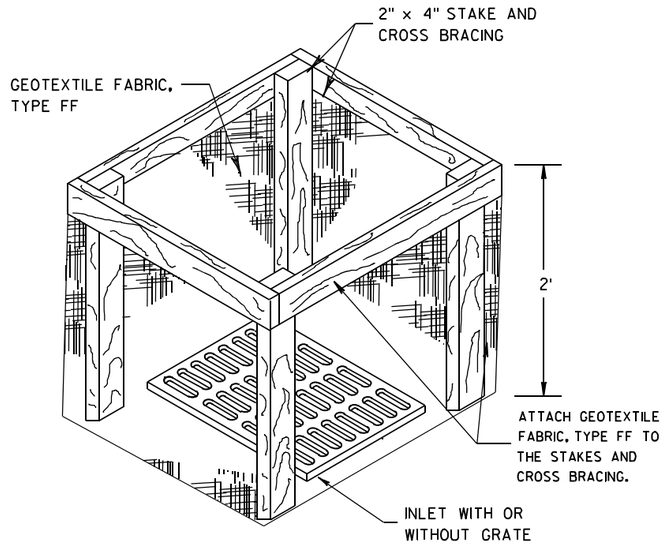
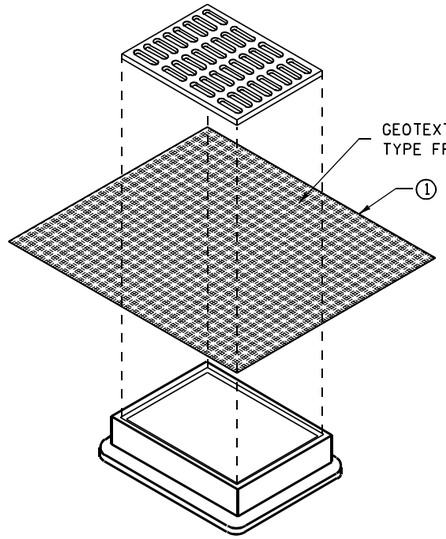


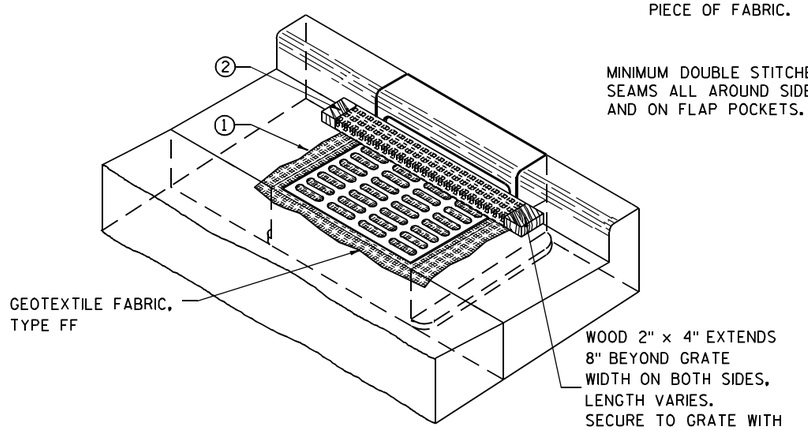


INLET PROTECTION, TYPE A

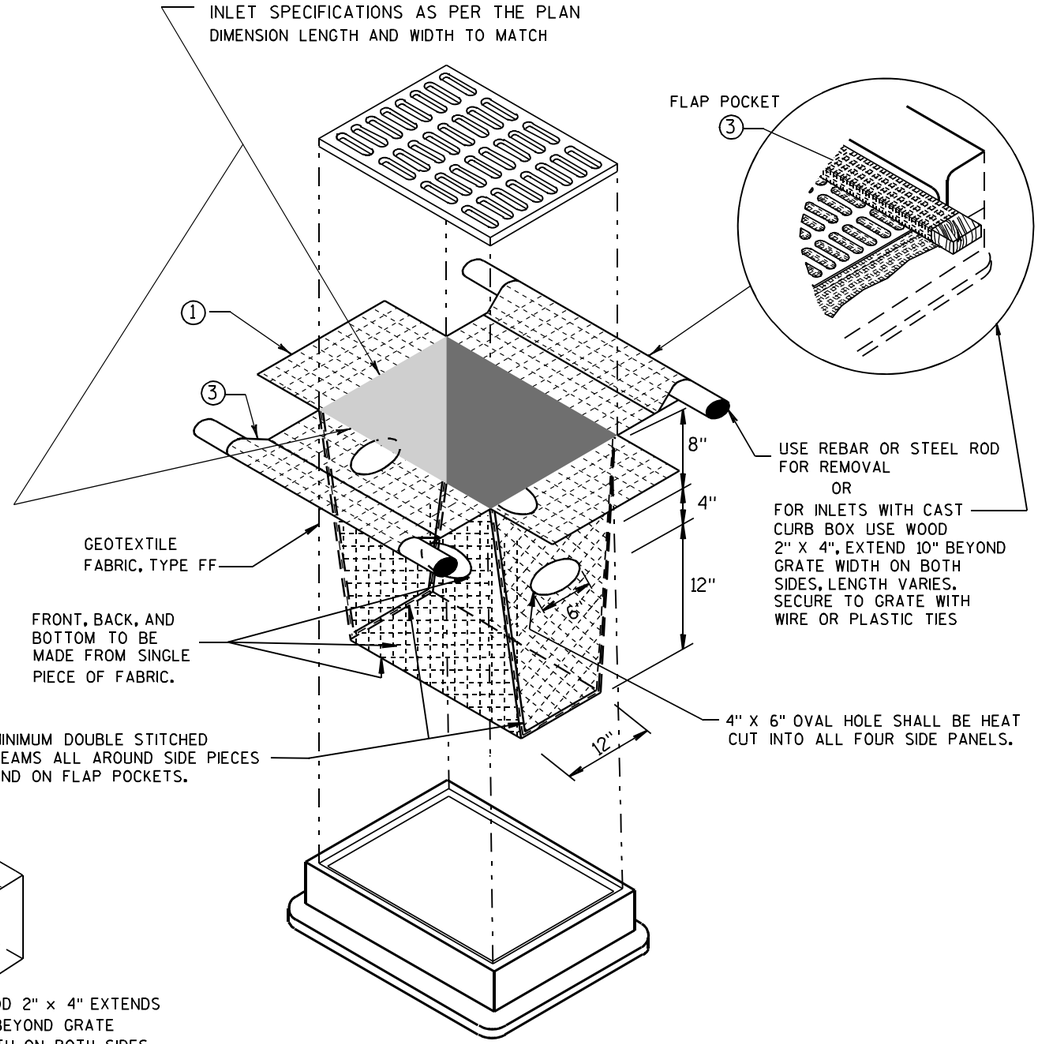


INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)

(CAN BE INSTALLED IN ANY INLET WITHOUT A CURB BOX)



INLET PROTECTION, TYPE C (WITH CURB BOX)



INLET PROTECTION, TYPE D

(CAN BE INSTALLED IN ANY INLET TYPE WITH
OR WITHOUT A CURB BOX AS PER NOTE ②)

GENERAL NOTES

INLET PROTECTION DEVICES SHALL BE MAINTAINED OR REPLACED AT THE DIRECTION OF THE ENGINEER.

MANUFACTURED ALTERNATIVES APPROVED AND LISTED ON THE DEPARTMENT'S EROSION CONTROL PRODUCT ACCEPTABILITY LIST MAY BE SUBSTITUTED.

WHEN REMOVING OR MAINTAINING INLET PROTECTION, CARE SHALL BE TAKEN SO THAT THE SEDIMENT TRAPPED ON THE GEOTEXTILE FABRIC DOES NOT FALL INTO THE INLET. ANY MATERIAL FALLING INTO THE INLET SHALL BE REMOVED IMMEDIATELY.

① FINISHED SIZE, INCLUDING FLAP POCKETS WHERE REQUIRED, SHALL EXTEND A MINIMUM OF 10" AROUND THE PERIMETER TO FACILITATE MAINTENANCE OR REMOVAL.

② FOR INLET PROTECTION, TYPE C (WITH CURB BOX), AN ADDITIONAL 18" OF FABRIC IS WRAPPED AROUND THE WOOD AND SECURED WITH STAPLES. THE WOOD SHALL NOT BLOCK THE ENTIRE HEIGHT OF THE CURB BOX OPENING.

③ FLAP POCKETS SHALL BE LARGE ENOUGH TO ACCEPT WOOD 2X4.

INSTALLATION NOTES

TYPE B & C

TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE.

THE CONTRACTOR SHALL DEMONSTRATE A METHOD OF MAINTENANCE, USING A SEWN FLAP, HAND HOLDS OR OTHER METHOD TO PREVENT ACCUMULATED SEDIMENT FROM ENTERING THE INLET.

TYPE D

DO NOT INSTALL INLET PROTECTION TYPE D IN INLETS SHALLOWER THAN 30", MEASURED FROM THE BOTTOM OF THE INLET TO THE TOP OF THE GRATE.

TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE.

THE INSTALLED BAG SHALL HAVE A MINIMUM SIDE CLEARANCE, BETWEEN THE INLET WALLS AND THE BAG, MEASURED AT THE BOTTOM OF THE OVERFLOW HOLES, OF 3". WHERE NECESSARY THE CONTRACTOR SHALL CINCH THE BAG, USING PLASTIC ZIP TIES, TO ACHIEVE THE 3" CLEARANCE. THE TIES SHALL BE PLACED AT A MAXIMUM OF 4" FROM THE BOTTOM OF THE BAG.

INLET PROTECTION
TYPE A, B, C, AND D

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

10/16/02
DATE

/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER

FHWA

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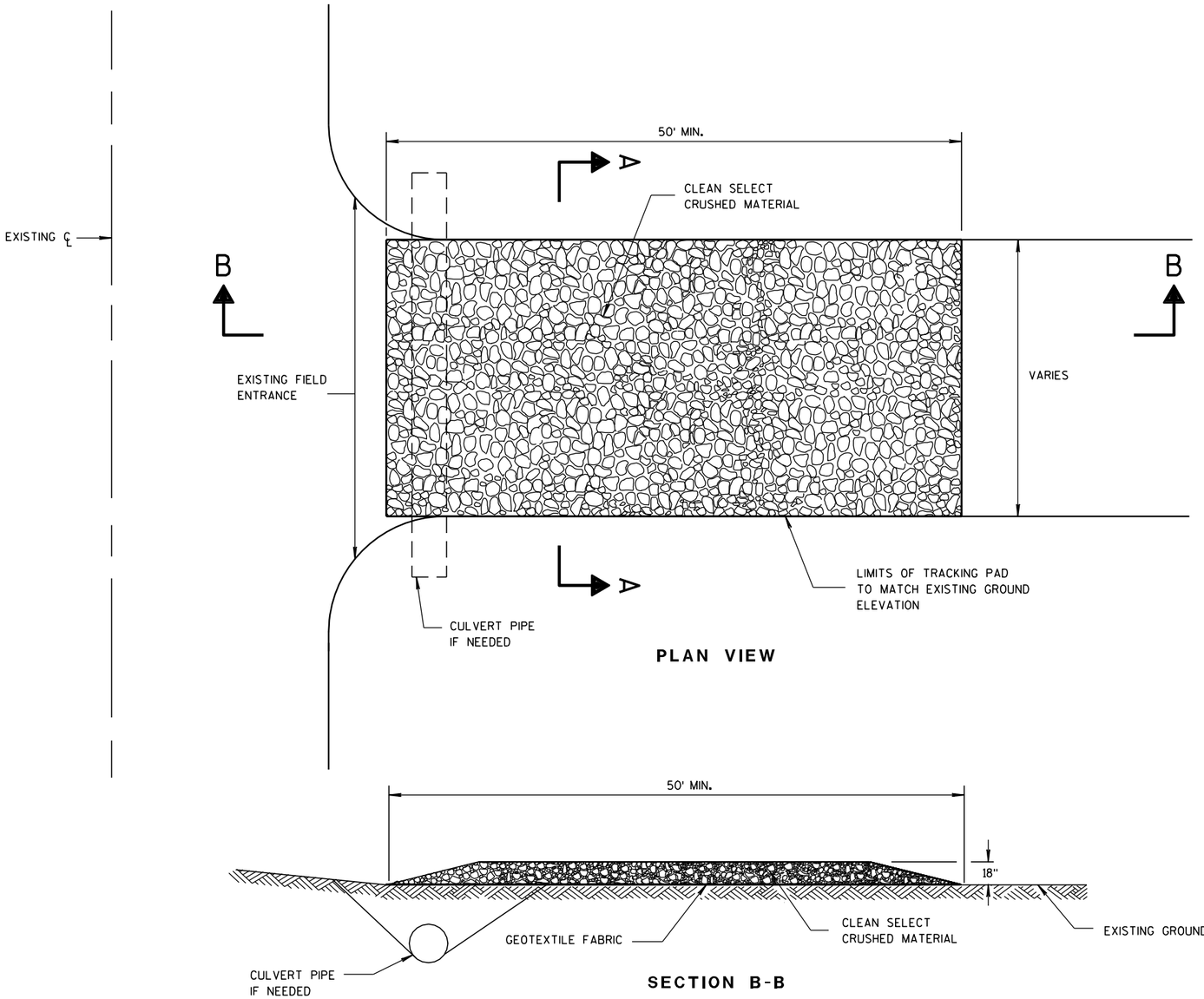
S.D.D. 8 E 10-2



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.

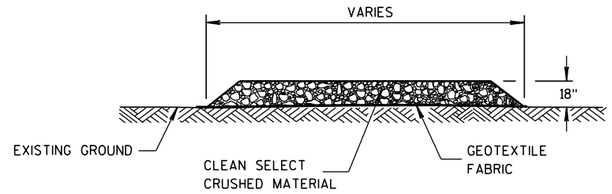
TRACKING PAD TO BE REMOVED AFTER CONSTRUCTION IS COMPLETED.

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

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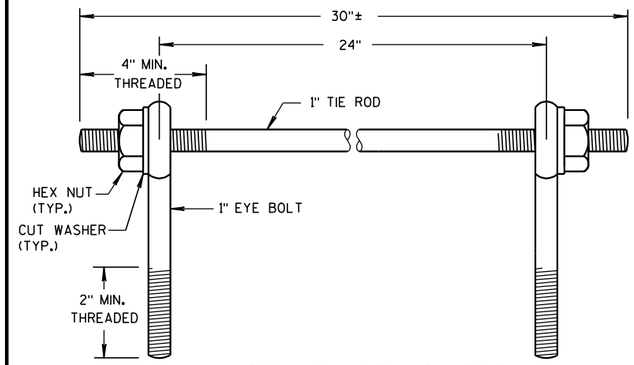
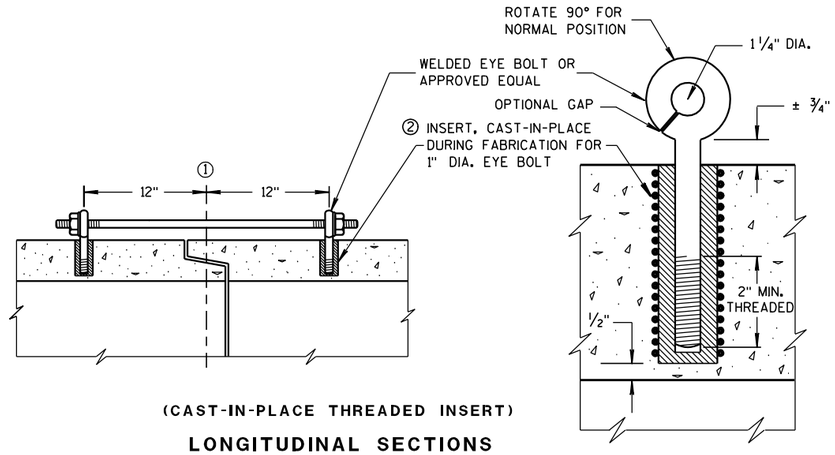


EYE BOLTS AND TIE ROD



(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.

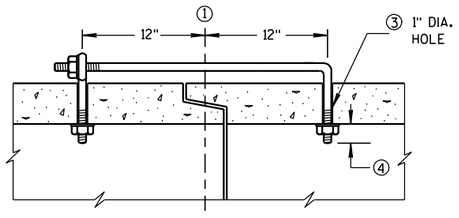
② THE INSIDE OF THE THREADED INSERTS SHALL BE CLEAN TO ALLOW THE INSERTION OF THREADED EYE BOLTS.

③ HOLES SHALL BE CAST-IN-PLACE OR DRILLED 12 INCHES FROM ℄ OF TONGUE AND GROOVE.

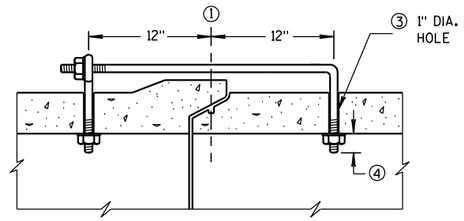
④ BOLT PROJECTION INSIDE OF PIPE SHALL NOT EXCEED 2 INCHES.

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)

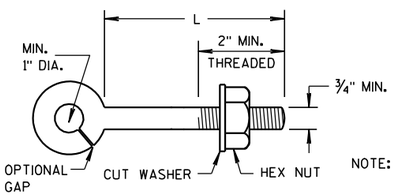


(MODIFIED BELL PIPE)

LONGITUDINAL SECTION

EYE BOLT DIMENSION TABLE

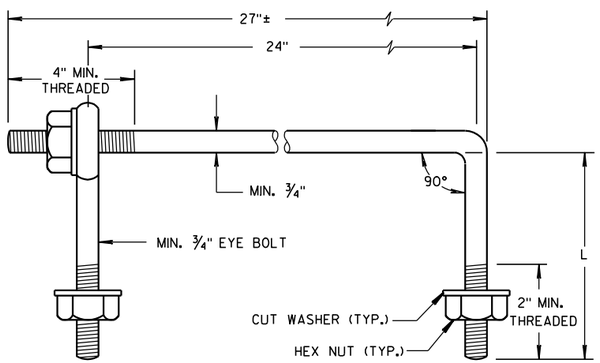
PIPE SIZE	L = LENGTH	
	TONGUE & GROOVE PIPE	MODIFIED BELL PIPE
18" TO 24"	4 1/2"	6 1/4"
30"	5"	7"
36"	5 1/2"	7"
42"	6"	
48"	6 1/2"	
60"	7 1/2"	
66"	8"	



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

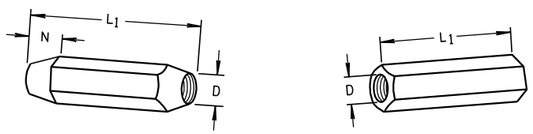
(JOINT TIES FOR 18" TO 66" DIA. CONCRETE PIPE)

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

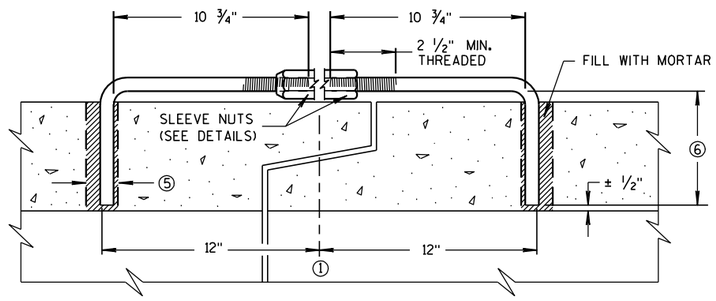
DIMENSIONS SHOWN ARE IN INCHES



TAPERED PLAIN

RIGHT AND LEFT THREADS

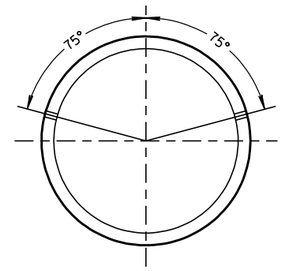
SLEEVE NUTS



LONGITUDINAL SECTION

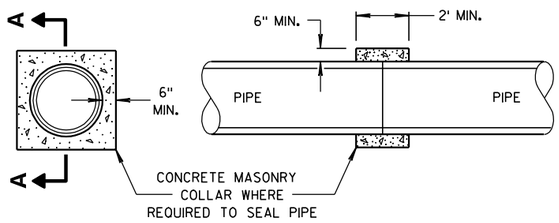
(JOINT TIES FOR 12" TO 108" DIA. CONCRETE PIPE)

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
180
FHWA

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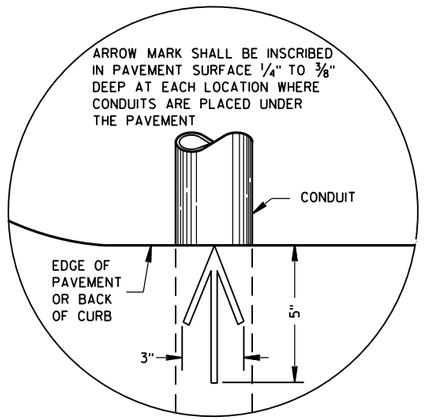
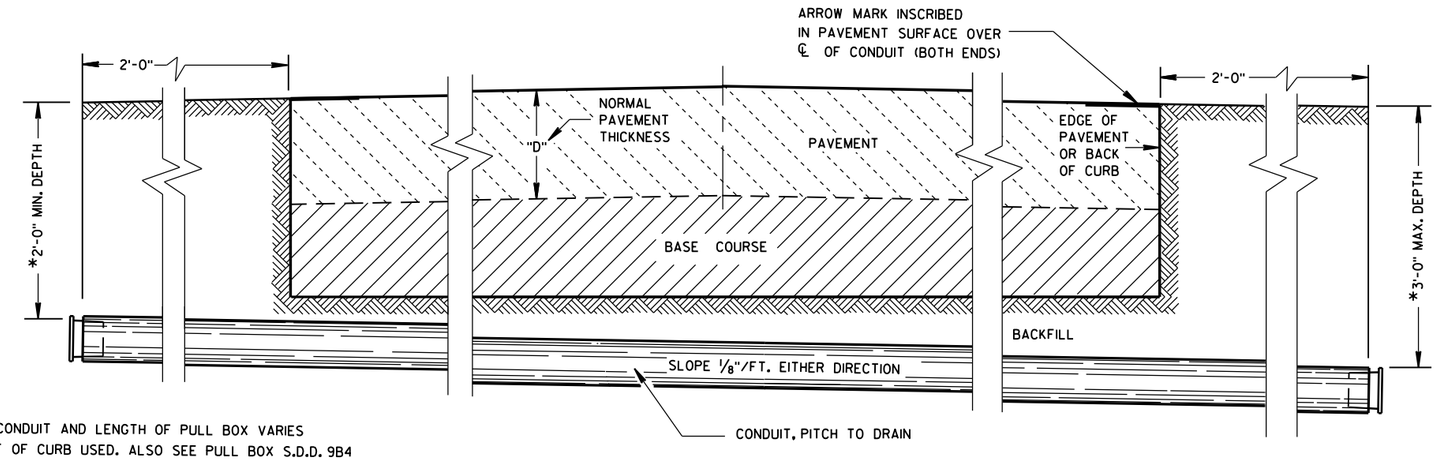


PLAN VIEW

ARROW MARK



*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

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.

CONDUIT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March, 2017 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

6

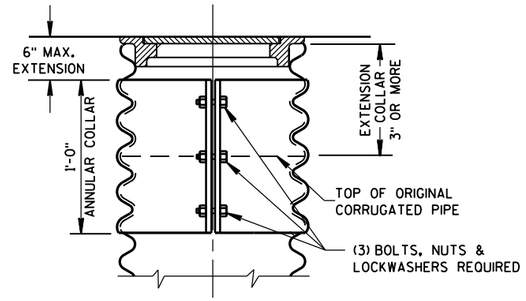
S.D.D. 9 B 2-10

TABLE OF NOMINAL DIMENSIONS AND WEIGHTS

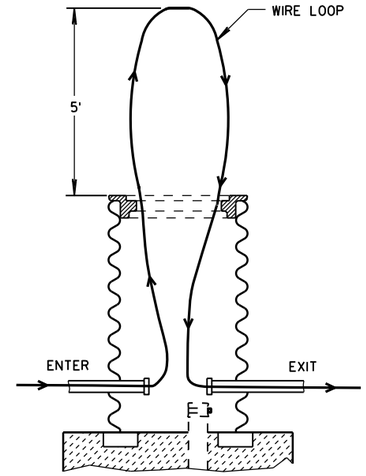
DIMENSION IN INCHES		CORRUGATED STEEL PIPE								
PIPE DIAMETER (INSIDE)	A	12	12	12	18	18	18	24	24	24
PIPE LENGTH **	B	24	30	36	24	30	36	36	42	48
WALL THICKNESS	C	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064
COVER	D	10 1/4	10 1/4	10 1/4	16 1/4	16 1/4	16 1/4	22 1/4	22 1/4	22 1/4
FRAME	E	14 1/2	14 1/2	14 1/2	20 1/2	20 1/2	20 1/2	26 1/2	26 1/2	26 1/2
FRAME	F	8 1/2	8 1/2	8 1/2	14 1/2	14 1/2	14 1/2	20 1/2	20 1/2	20 1/2
FRAME	G	11 1/2	11 1/2	11 1/2	17 1/2	17 1/2	17 1/2	23 1/2	23 1/2	23 1/2
WEIGHT IN POUNDS *										
FRAME AND COVER		60	60	60	110	110	110	155	155	155

* THE ACTUAL WEIGHT OF THE MANHOLE FRAME AND COVER MAY VARY WITHIN 5 PERCENT PLUS OR MINUS OF THE WEIGHTS SHOWN.

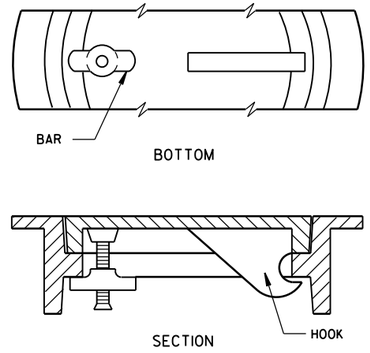
** NORMALLY USED LENGTHS. THE PROJECT ENGINEER SHALL DETERMINE IF PIPE LENGTHS, OTHER THAN THOSE SPECIFIED, SHALL BE USED, TO A MAXIMUM OF 48" (CONTINUOUS LENGTH, NON-SPLICED). THE ADDITIONAL LENGTH SHALL BE INCIDENTAL TO THE PULL BOX BID PRICE.



CORRUGATED PIPE EXTENDER

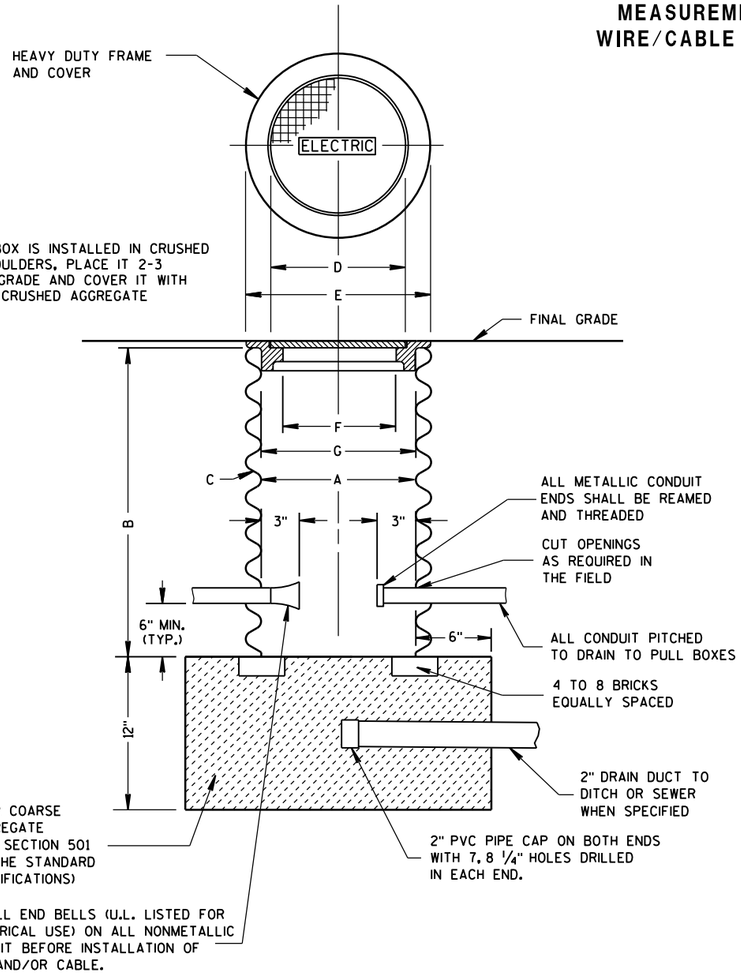


MEASUREMENT DETAIL FOR WIRE/CABLE IN THE PULL BOX



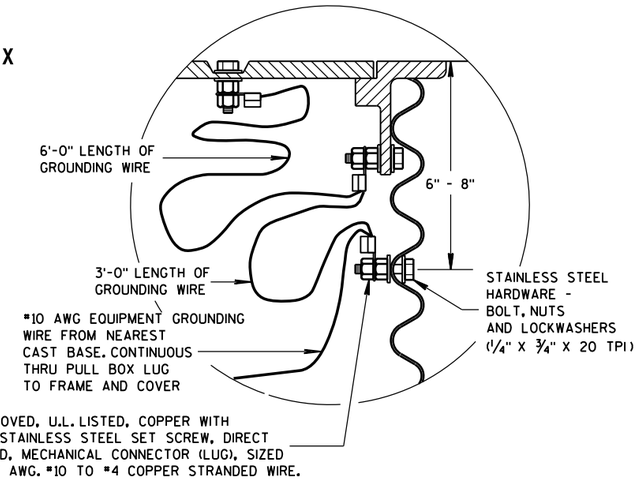
ALTERNATE COVER (LOCKING)

TIGHTENING BAR TYPE



WHEN A PULL BOX IS INSTALLED IN CRUSHED AGGREGATE SHOULDERS, PLACE IT 2-3 INCHES BELOW GRADE AND COVER IT WITH 2-3 INCHES OF CRUSHED AGGREGATE

PULL BOX



EQUIPMENT GROUNDING LUG AND LOCATION IN STEEL PULL BOXES

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

ALL FRAMES AND COVERS SHALL BE HEAVY DUTY TYPE, SUITABLE FOR VEHICULAR TRAFFIC LOADS.

PULL BOXES LOCATED IN THE ROADWAYS SHALL HAVE LOCKING COVERS.

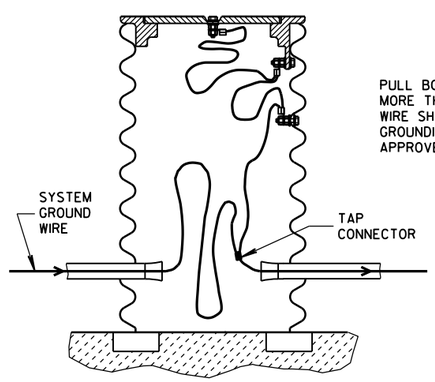
ENTRANCE HOLES INTO PULL BOXES SHALL BE CUT WITH A CIRCULAR HOLE SAW OR HYDRAULIC CONDUIT PUNCH. HOLE SIZE SHALL BE THE OUTSIDE DIAMETER OF THE CONDUIT THAT IS TO FIT IN THE OPENING PLUS NO MORE THAN 1/4".

THE CONTRACTOR SHALL NOT INSTALL WIRE IN ANY PULL BOX UNTIL ITS INSTALLATION HAS BEEN INSPECTED AND ACCEPTED BY THE ENGINEER.

GROUNDING LUGS (MECHANICAL CONNECTORS) SHALL BE U.L. LISTED AND APPROVED FOR USE WITH COPPER WIRE.

ALL METALLIC CONDUIT IN WHICH WIRE AND/OR CABLE IS TO BE INSTALLED, SHALL BE BUSHED BEFORE INSTALLATION OF THE WIRE AND/OR CABLE.

WHEN PULL BOXES ARE INSTALLED FOR FUTURE USE, DO NOT INSTALL THE EQUIPMENT GROUNDING LUG. THE EQUIPMENT GROUNDING LUG, THE EQUIPMENT GROUNDING ELECTRODE AND THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE REQUIRED AND INSTALLED UNDER A FUTURE WIRING CONTRACT.



PULL BOX TO NEAREST BASE DISTANCE MORE THAN 20 FEET. PULL BOX GROUND WIRE SHALL CONNECT AT SYSTEM GROUNDING WIRE. USE DEPARTMENT APPROVED TAP CONNECTOR.

EQUIPMENT GROUNDING LUG AND LOCATION IN STEEL PULL BOXES

PULL BOX

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

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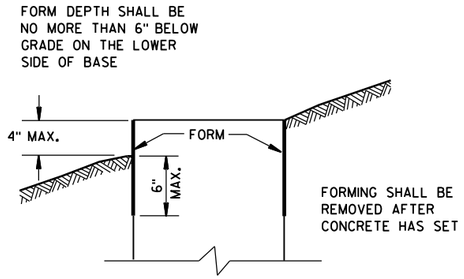
S.D.D. 9 B 4-11



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.

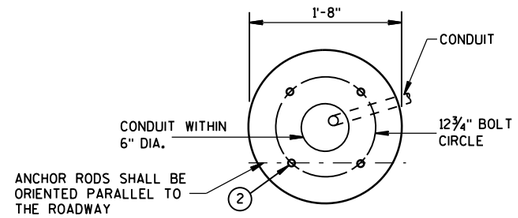
(4) (6) NO. 6 X 6'-8" BAR STEEL REINFORCEMENT.

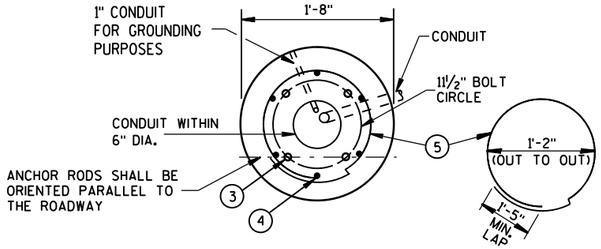
(5) (7) NO. 4 X 5'-1" BAR STEEL REINFORCEMENT @ 1'-0" C-C.

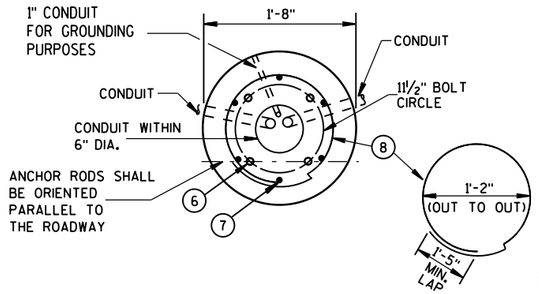
(6) (4) 1" DIA. X 3'-6" ANCHOR RODS.

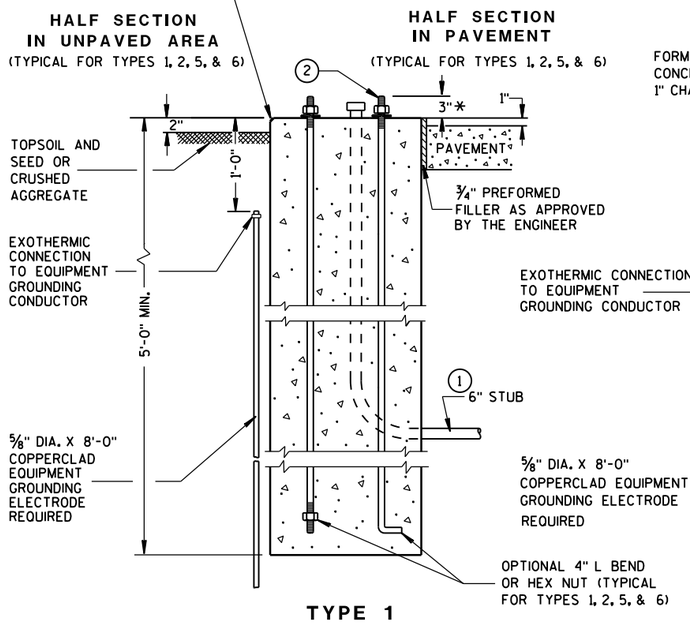
(7) (6) NO.4 X 4'-8" BAR STEEL REINFORCEMENT.

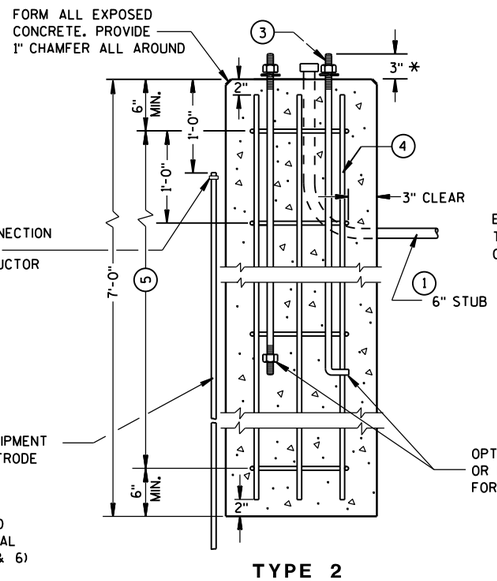
(8) (5) NO. 4 X 5'-1" BAR STEEL REINFORCEMENT @ 1'-0" C-C.

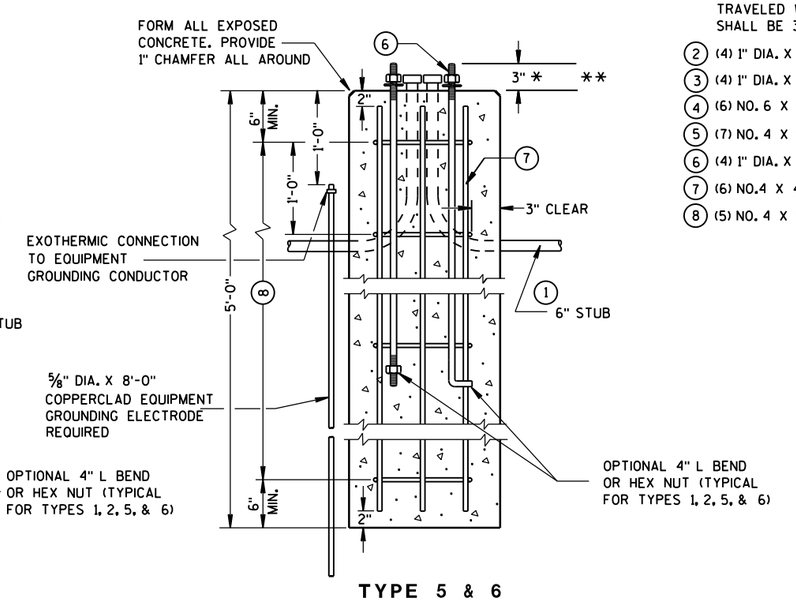












CONCRETE BASES

* ANY ANCHOR ROD PROJECTION SHORTER THAN 2¾" OR LONGER THAN 3¼" SHALL REQUIRE THE BASE TO BE REMOVED AND REPLACED AT THE CONTRACTORS EXPENSE.

** FOR NONBREAKAWAY INSTALLATIONS, 4½" ± ANCHOR ROD PROJECTION WITH THE USE OF LEVELING NUTS. RODENT SCREEN REQUIRED.

CONCRETE BASES, TYPES 1, 2, 5, & 6

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

6

S.D.D. 9 C 2-7

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

FOUR (4) BOLTS SHALL BE FURNISHED WITH EACH TRANSFORMER BASE. BOLTS SHALL BE 1" DIAMETER, 4" IN LENGTH, WITH WASHERS, LOCK WASHERS AND NUTS. BOLTS, NUTS AND WASHERS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 641.2.2 OF THE STANDARD SPECIFICATIONS.

LEVELING SHIMS, IF NEEDED, SHALL BE DESIGNED FOR THE PURPOSE AND USED UNDER CAST BASES WHEN PLUMBING POLES OR STANDARDS DURING INSTALLATION. THE USE OF WASHERS IN LIEU OF PROPER LEVELING SHIMS IS NOT ACCEPTABLE.

SHIM LENGTH SHALL BE LONG ENOUGH TO COMPLETELY COVER THE AREA UNDER THE LENGTH AND WIDTH OF THE BASE MOUNTING FLANGE.

DOUBLE NUTTING IS NOT ACCEPTABLE FOR LEVELING OR MOUNTING PURPOSES.

A NEMA APPROVED, U.L. LISTED, COPPER WITH BRASS OR STAINLESS STEEL SET SCREW, DIRECT BURY RATED, MECHANICAL CONNECTOR (LUG), SIZED TO ACCEPT AWG. #10 TO #4 COPPER STRANDED WIRE SHALL BE FURNISHED AND INSTALLED IN THE PEDESTAL AND TRANSFORMER BASES.

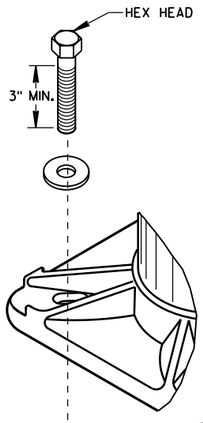
THE MECHANICAL CONNECTOR SHALL BE INSTALLED USING A 1/4" - 20 (TPI) STAINLESS STEEL HEX HEAD BOLT OF SUFFICIENT LENGTH TO FIRMLY ATTACH THE LUG TO THE BASE.

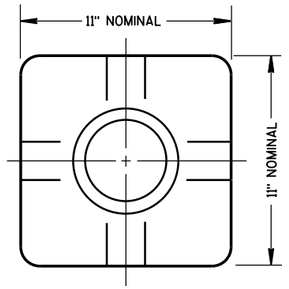
SHOULD THE MANNER OF ATTACHMENT OF THE LUG REQUIRE WASHERS, HEX NUTS, LOCK WASHER - THEY SHALL BE STAINLESS STEEL AS IS THE BOLT. THE MANNER OF ATTACHMENT SHALL NOT BLOCK ACCESSIBILITY TO WIRE PLACEMENT IN THE CONNECTOR.

PEDESTAL BASE COLLAR THREADING SHALL BE TAPERED AND IN ACCORDANCE WITH NATIONAL PIPE THREADING DIMENSIONS.

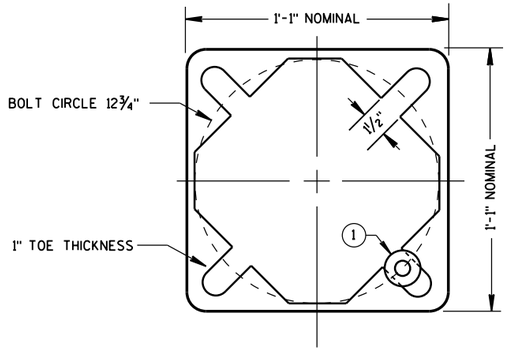
BASE COLLAR THREADING SHALL EXTEND INTO THE BASE COLLAR WITH SUFFICIENT DEPTH TO ACCEPT THE INSTALLATION OF TRAFFIC SIGNAL STANDARDS TO A DEPTH OF 1 1/2", THEN TIGHTENING TO A POINT OF BEING IMMOVABLE.

THE ACCESS DOOR SHALL BE OF THE SAME MATERIAL AS THE BASE.

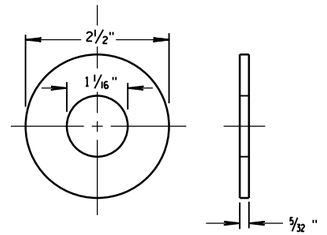




TOP VIEW
(PEDESTAL BASE)

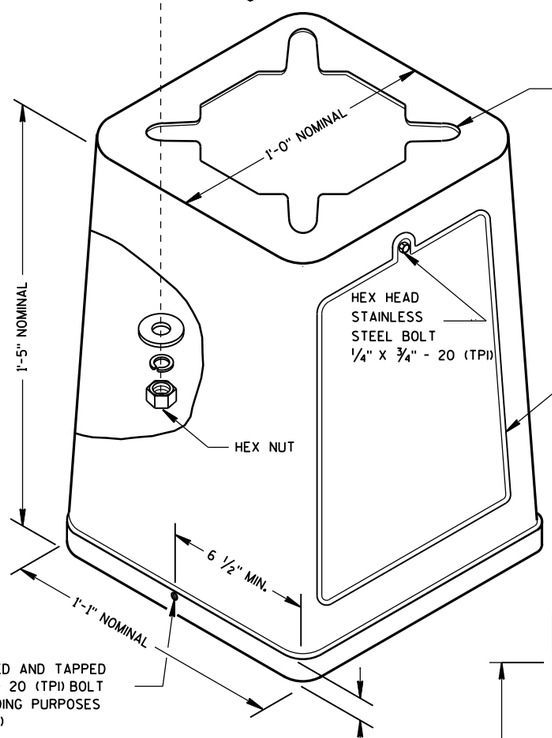


BOTTOM VIEW
(PEDESTAL BASE)

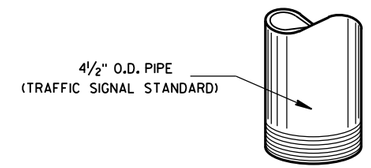


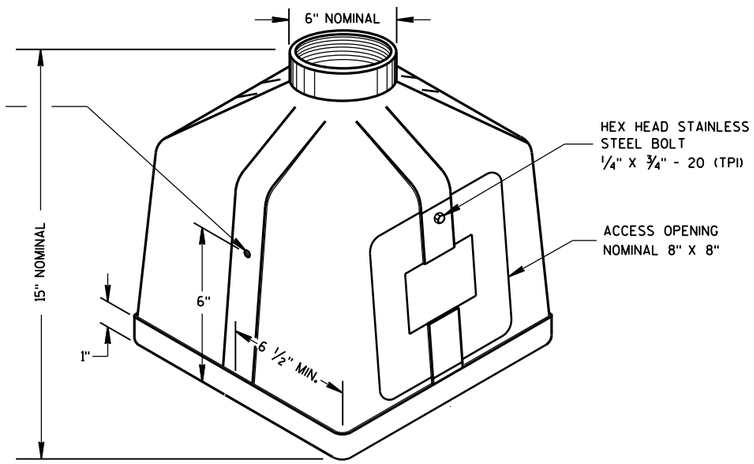
ZINC COATED STEEL WASHER
TO BE PROVIDED BY THE CONTRACTOR

PEDESTAL BASE WASHER (1)

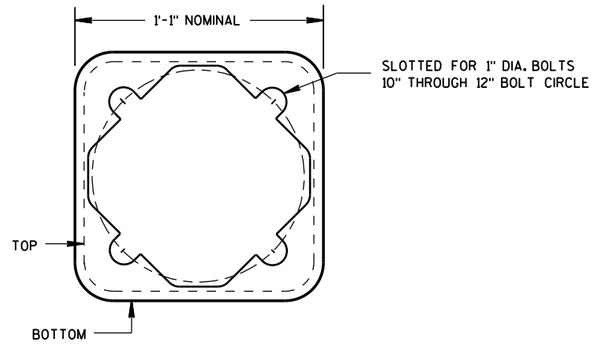


ISOMETRIC VIEW





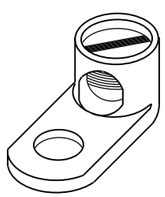
ISOMETRIC VIEW
PEDESTAL BASE



BOTTOM VIEW
(TRANSFORMER BASE)

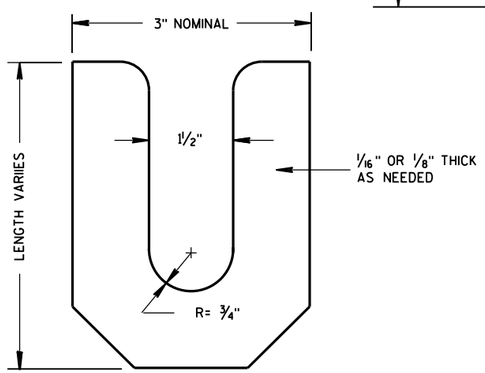
TRANSFORMER BASE

INTENDED FOR USE WITH TYPE 2, 3, 4, 5 & 6 POLES



TYPICAL MECHANICAL CONNECTOR LUG

TO BE FURNISHED WITH EACH BASE



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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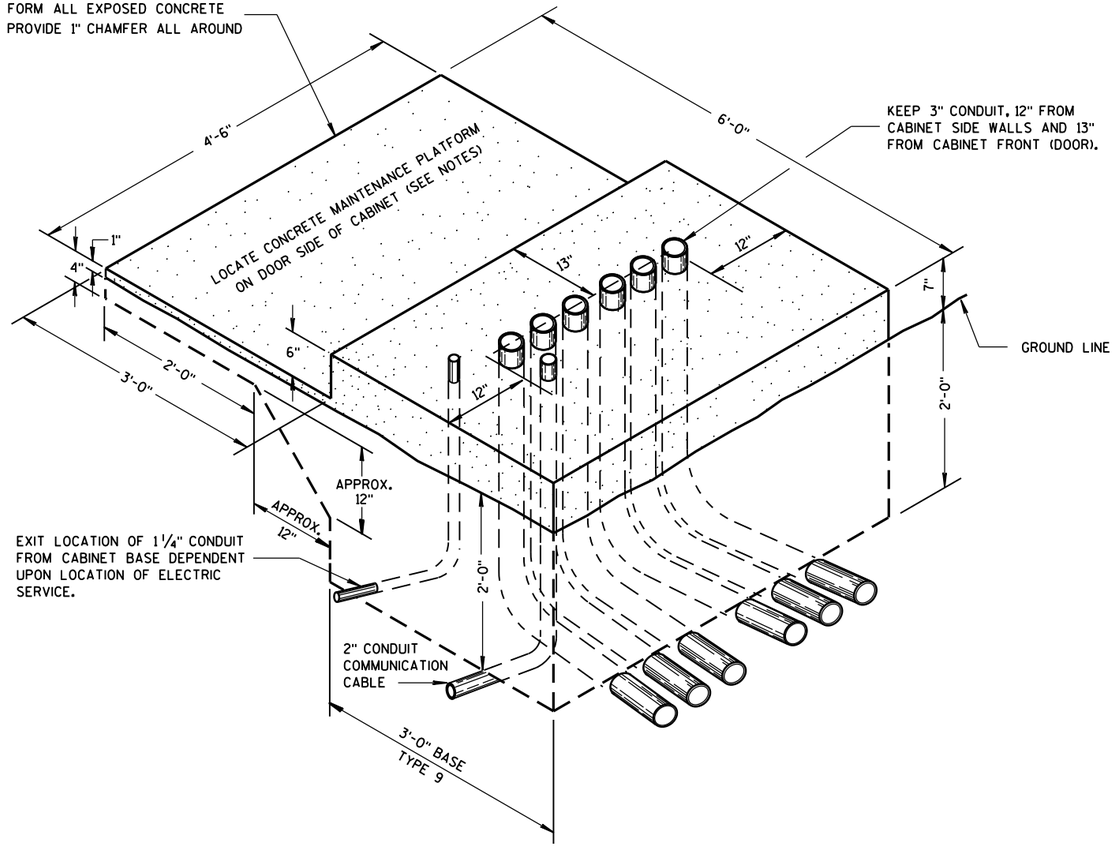
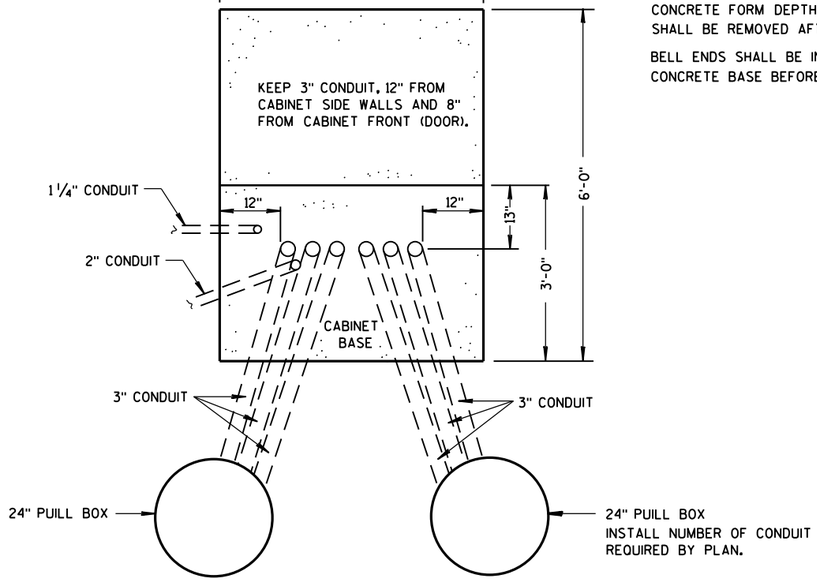
S.D.D. 9 C 3-4



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
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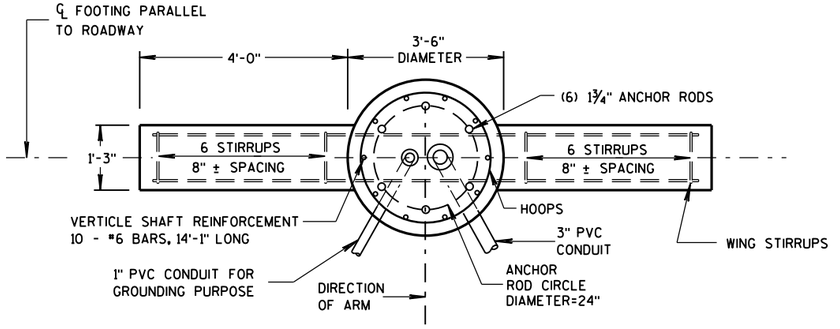
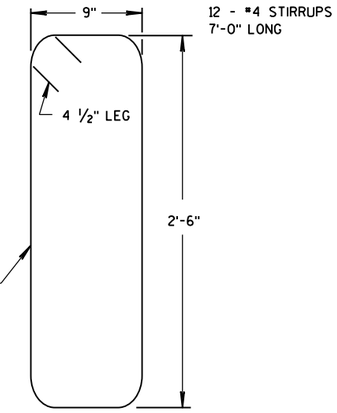
6

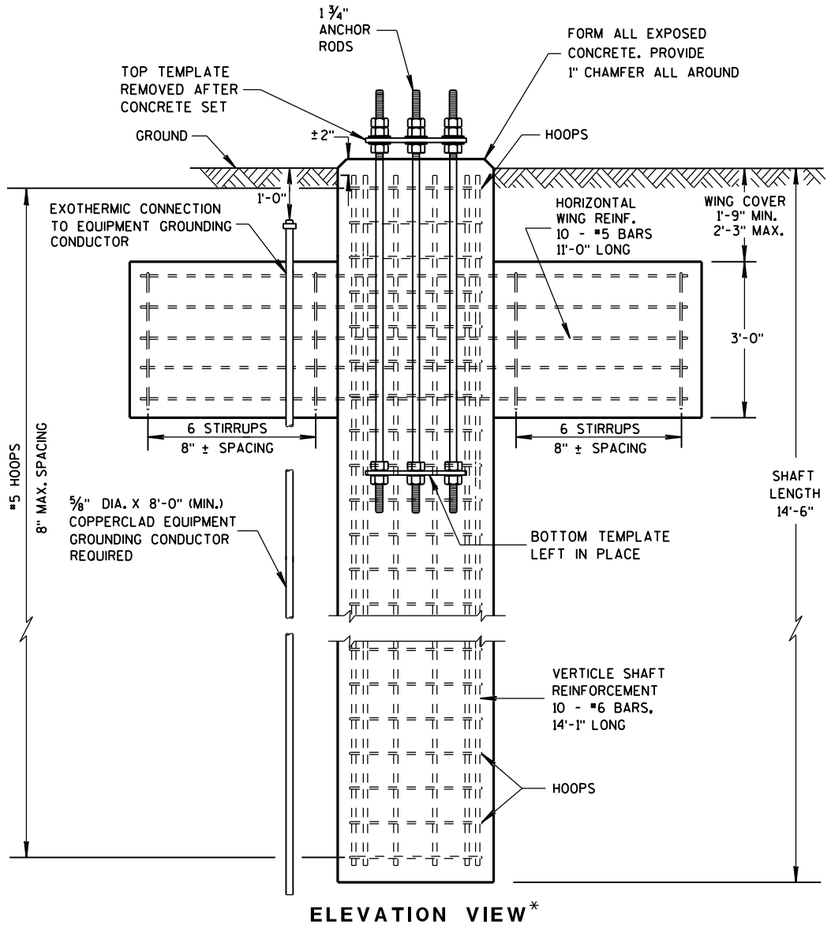
S.D.D. 9 C 6-7



PLAN VIEW

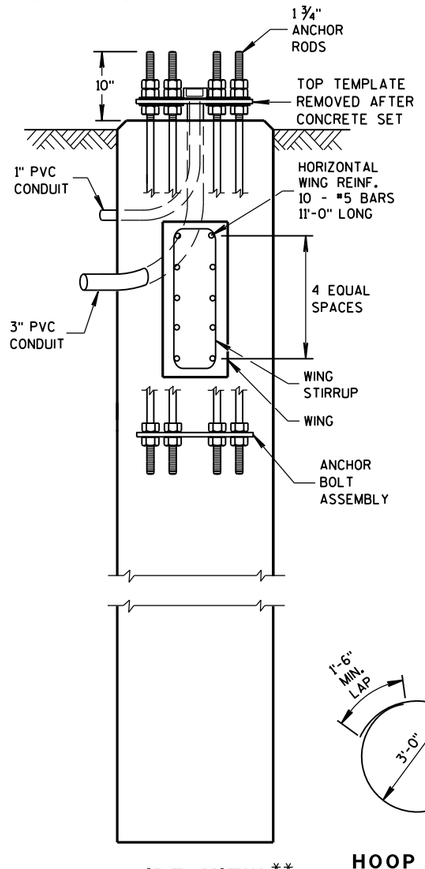


WING STIRRUP



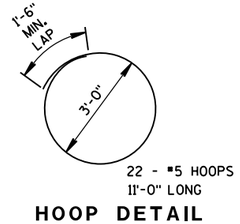
ELEVATION VIEW*

* CONDUITS ARE NOT SHOWN ON THIS VIEW FOR CLARITY



SIDE VIEW**

** HOOPS AND VERTICAL SHAFT REINFORCEMENT NOT SHOWN ON THIS VIEW FOR CLARITY



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, ASTM F1554 GRADE 55 (IN ACCORDANCE WITH SECTION 641.2.2.3 OF THE STANDARD SPECIFICATIONS	fy=55,000 p.s.i.
TEMPLATES, ASTM A709 GRADE 36	fy=36,000 p.s.i.

(FOR TYPE 12 & 13 & OVER HEIGHT (OH) POLES)

CONCRETE = 6.3 C.Y.
H.S. REINFORCEMENT = 635 LBS.

TO BE USED WHEN GROUND ELEVATION AT BASE EQUALS OR IS GREATER THAN HIGH POINT OF ROADWAY ELEVATION.
SEE S.D.D. 9C13-2 WHEN GROUND ELEVATION AT BASE IS LOWER THAN HIGH POINT OF ROADWAY ELEVATION.

CONCRETE BASE TYPE 13

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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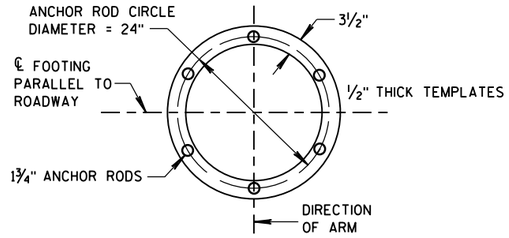
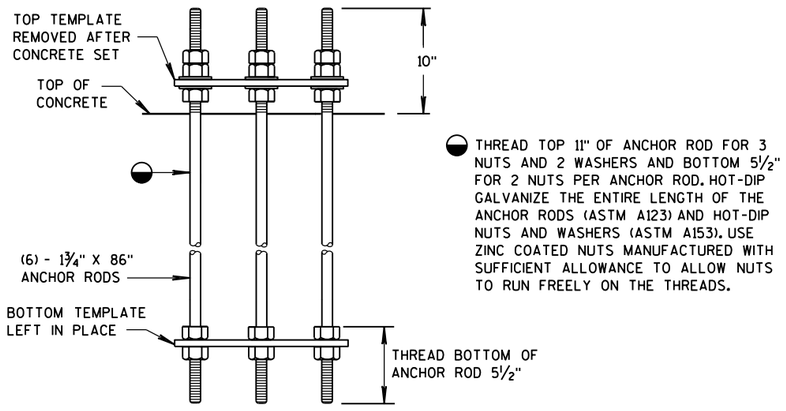
S.D.D. 9 C 12-9a

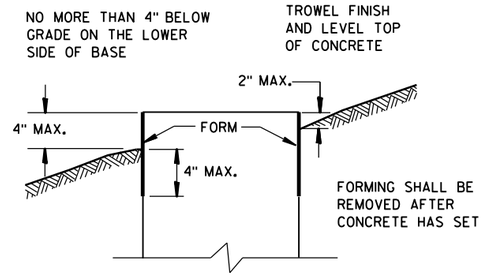


TOP AND BOTTOM TEMPLATES



ANCHOR BOLT ASSEMBLY DETAIL

CONCRETE BASE TYPE 13 ANCHOR ASSEMBLY



FORMING DETAIL

CONCRETE BASE TYPE 13

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2017 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

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S.D.D. 9 C 12-9b

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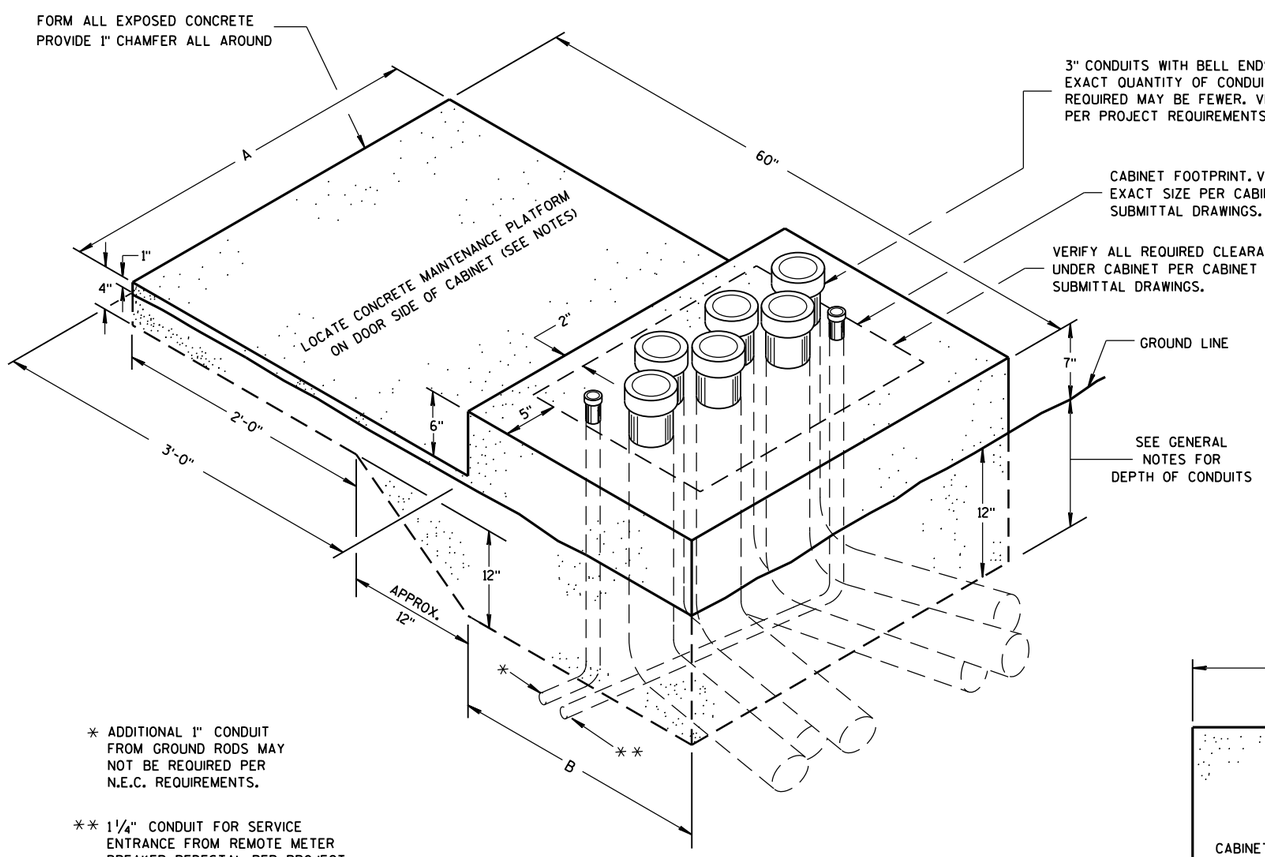
S.D.D. 9 C 12-9b



* ADDITIONAL 1" CONDUIT FROM GROUND RODS MAY NOT BE REQUIRED PER N.E.C. REQUIREMENTS.

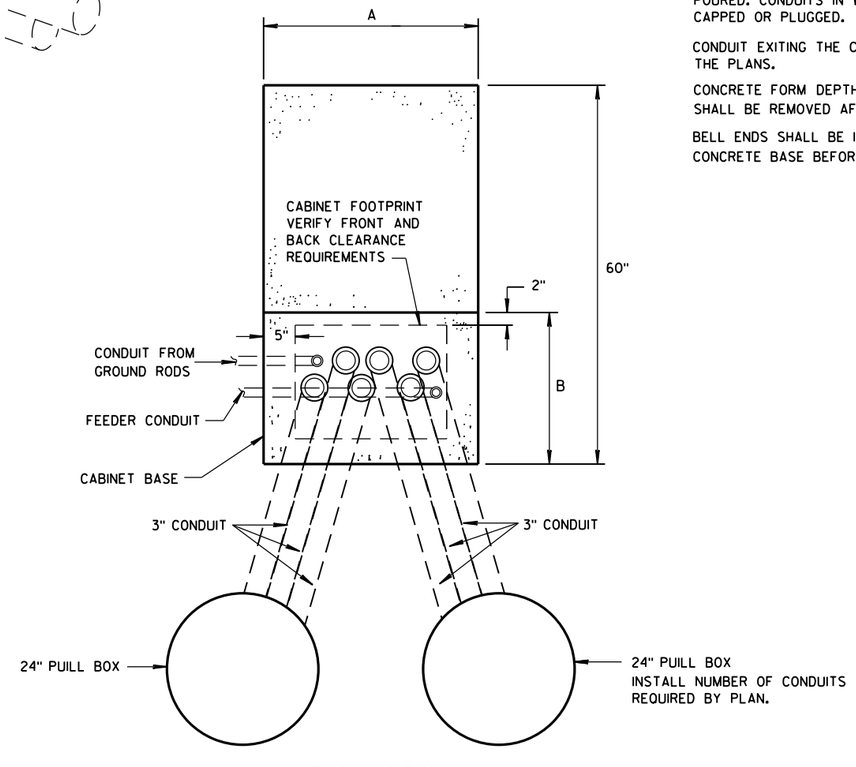
** 1¼" CONDUIT FOR SERVICE ENTRANCE FROM REMOTE METER BREAKER PEDESTAL PER PROJECT REQUIREMENTS. VERIFY LOCATION OF CONDUIT DEPENDENT UPON LOCATION OF INCOMING FEEDER AND FOR EASE OF CONNECTION TO LOAD CENTER.

ISOMETRIC VIEW

CONCRETE CONTROL CABINET BASE, TYPE L

(C.Y. CONCRETE = APPROX. 0.4)

CONCRETE BASE TYPE	CABINET WIDTH	DIMENSIONS		MAXIMUM 3" CONDUITS
		A	B	
L24	24"	34"	24"	4
L30	30"	40"	24"	6



PLAN VIEW

CONCRETE CONTROL CABINET BASE, TYPE L

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

INSTALL FOUR STAINLESS STEEL APPROVED CONCRETE MASONRY ANCHORS TO ANCHOR THE CABINET BASES. THE ANCHORS 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 SHALL TERMINATE IN PULL BOXES AS SHOWN ON THE PLANS.

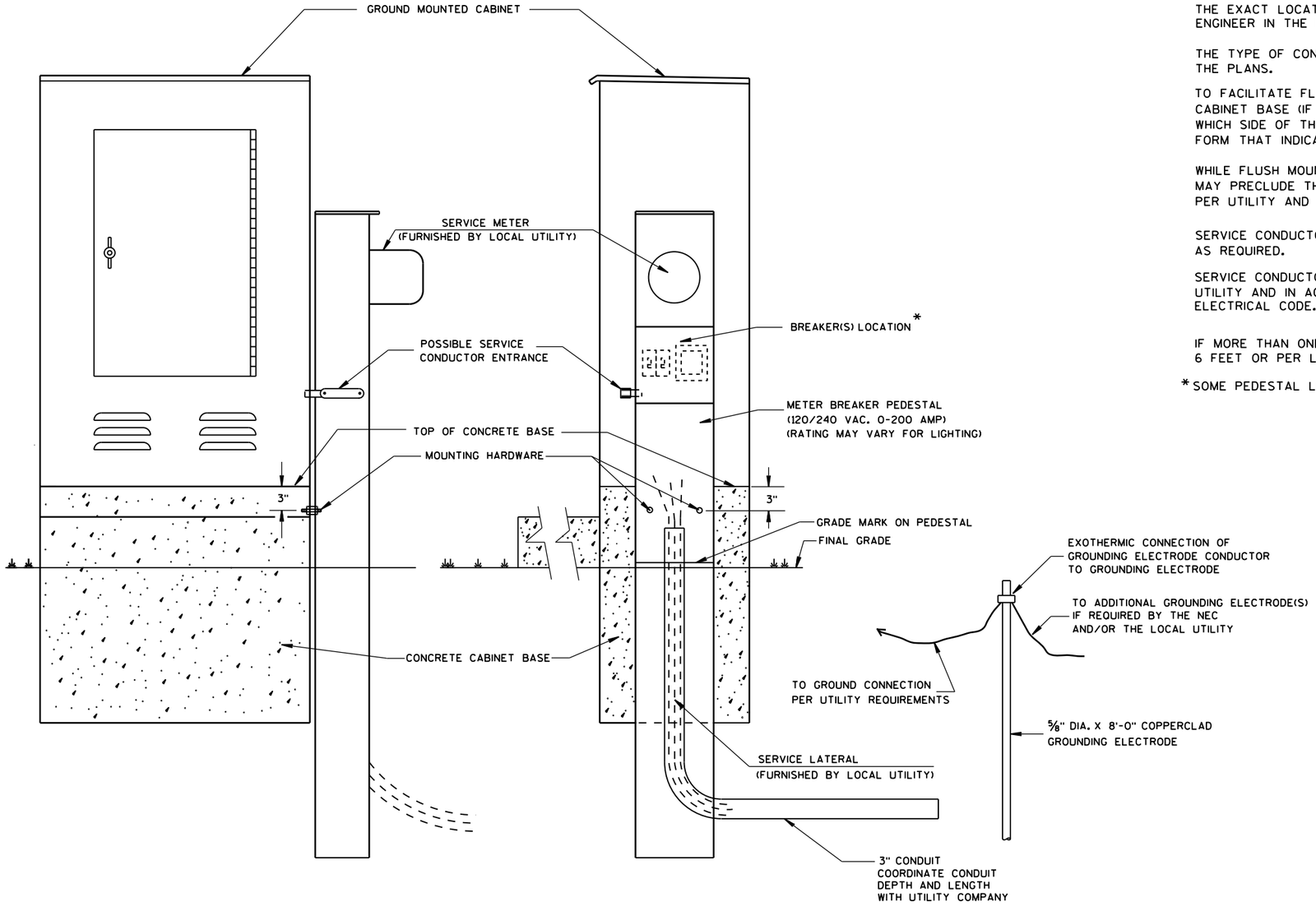
CONCRETE FORM DEPTH BELOW FINISHED GRADE SHALL BE 6" MAXIMUM. CONCRETE FORMS SHALL BE REMOVED AFTER CONCRETE HAS SET.

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 L

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Nov. 2014 — DATE
/S/ Thomas Gonring — STATE LIGHTING ENGINE
FHWA



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

6
S.D.D. 9 D 1-5

GENERAL NOTES

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

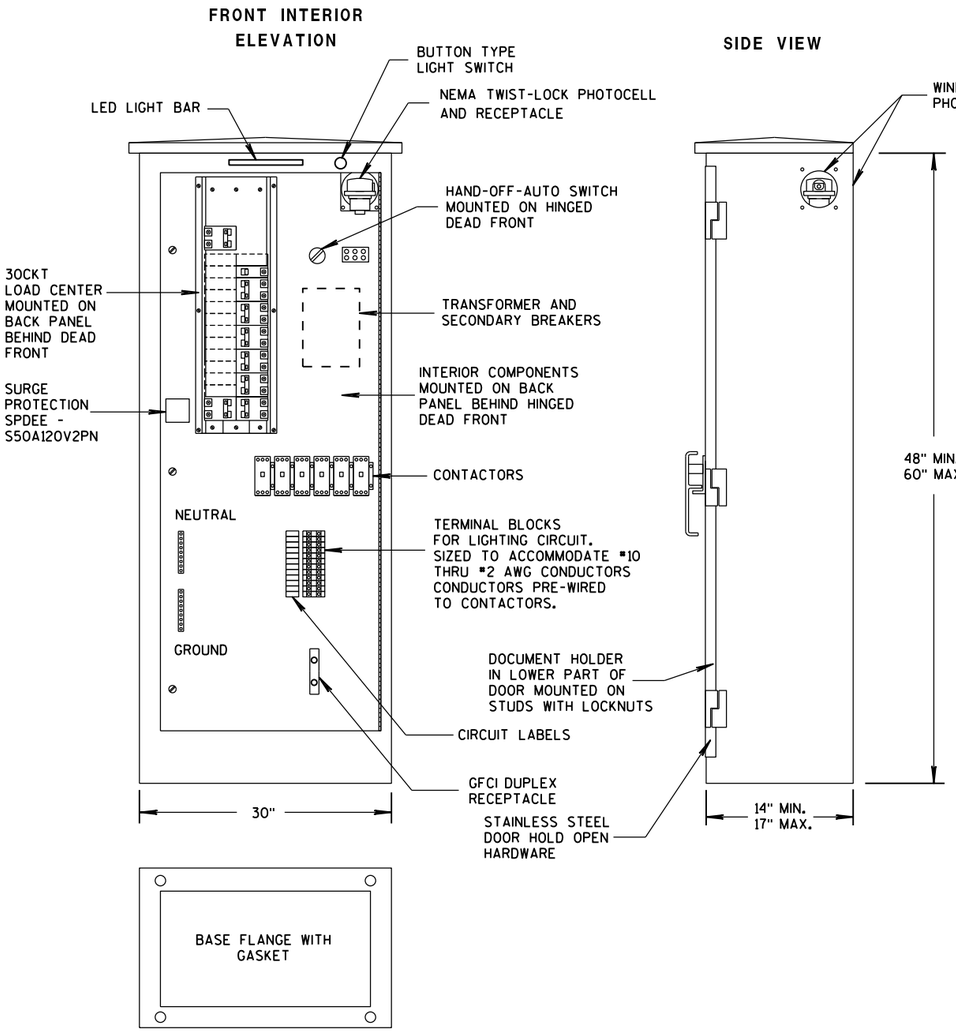
ALL INTERNAL ELECTRICAL COMPONENTS WILL BE PRE-WIRED BY THE CABINET FABRICATOR.

ALL CONDUIT ENTRIES SHALL BE SEALED WITH AN APPROPRIATE DUCT SEALING COMPOUND.

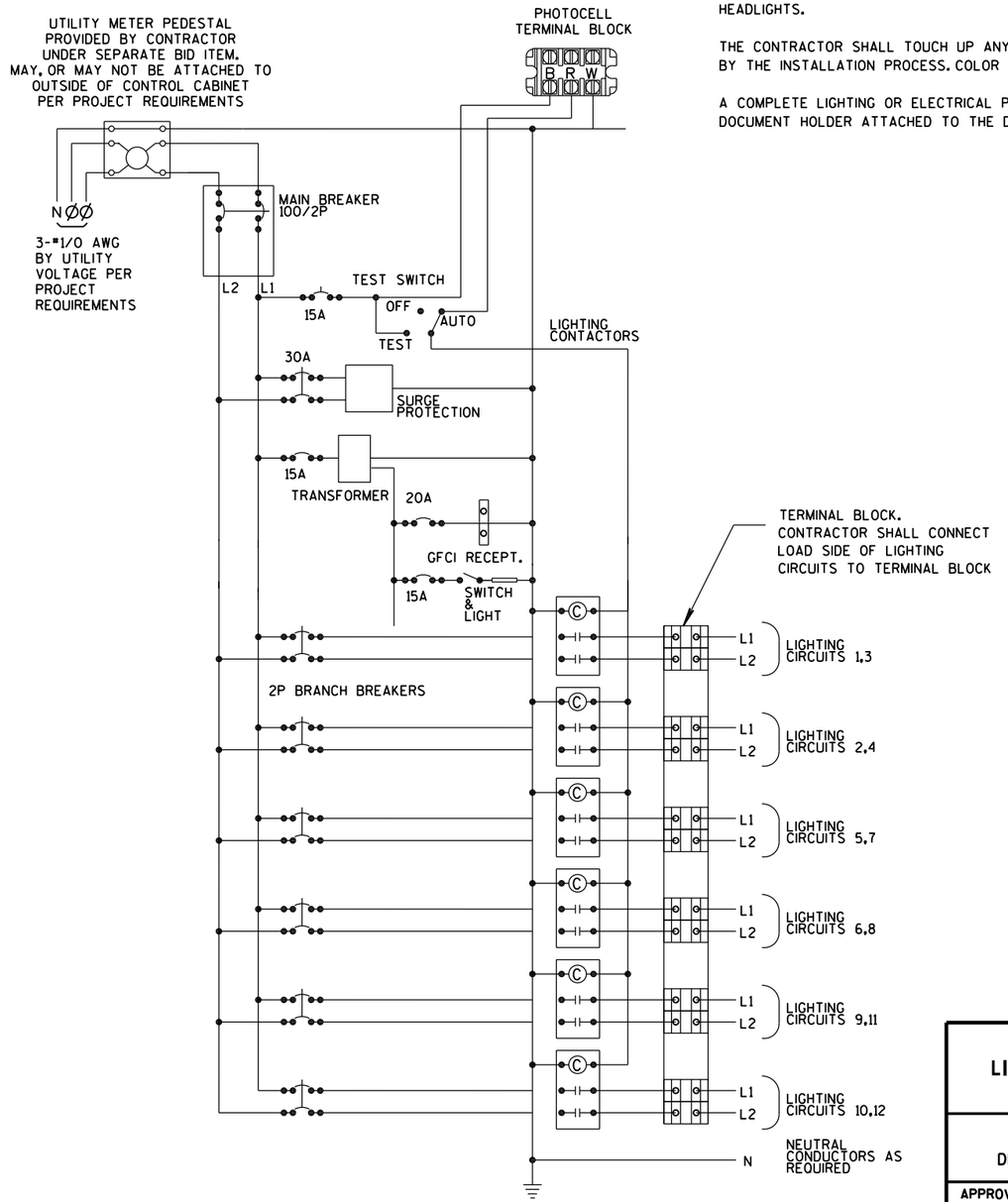
ORIENT PHOTOCELL AWAY FROM AMBIENT LIGHT SOURCES AND ONCOMING TRAFFIC HEADLIGHTS.

THE CONTRACTOR SHALL TOUCH UP ANY DAMAGE TO THE ANODIZED FINISH CAUSED BY THE INSTALLATION PROCESS. COLOR MATCH PAINT SHALL BE USED.

A COMPLETE LIGHTING OR ELECTRICAL PLAN SHALL BE SECURELY PLACED IN THE DOCUMENT HOLDER ATTACHED TO THE DOOR.



LIGHTING CONTROL CABINET



CONTROL CABINET SCHEMATIC

L30
LIGHTING CONTROL CABINET
240/480 VOLT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

Sept. 2015 — DATE

/S/ Thomas Gonring — STATE LIGHTING ENGINEER

MYS.

FHWA

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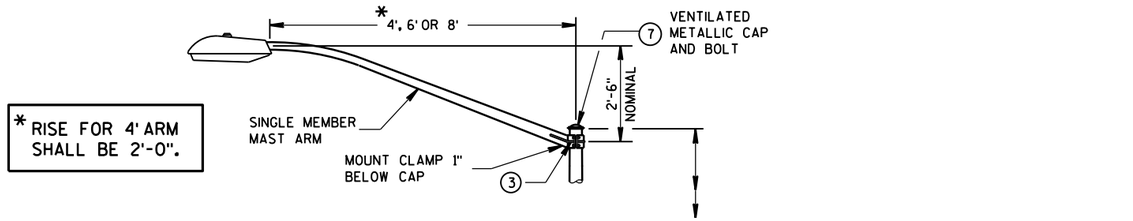
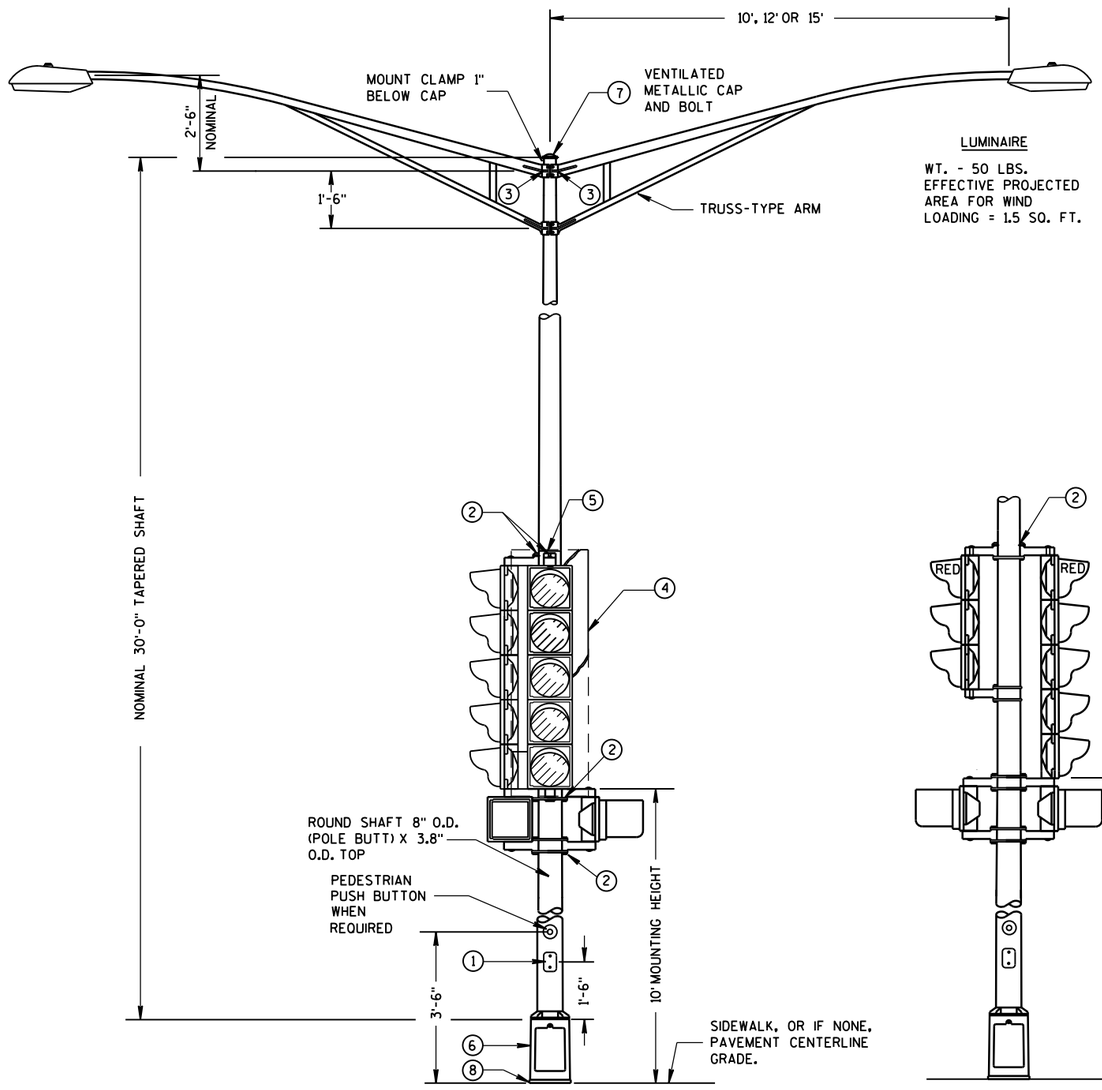
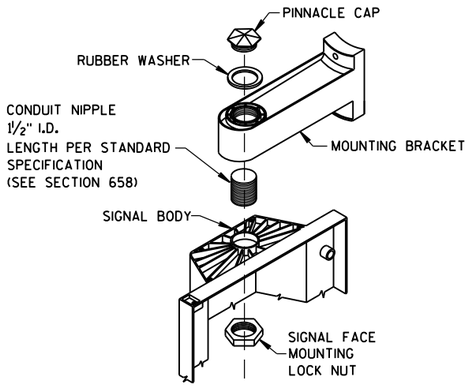




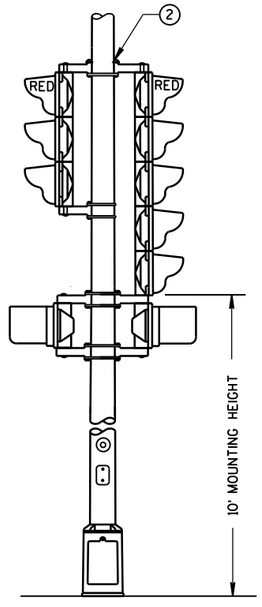
LUMINAIRE

WT. - 50 LBS.
EFFECTIVE PROJECTED AREA FOR WIND LOADING = 1.5 SQ. FT.

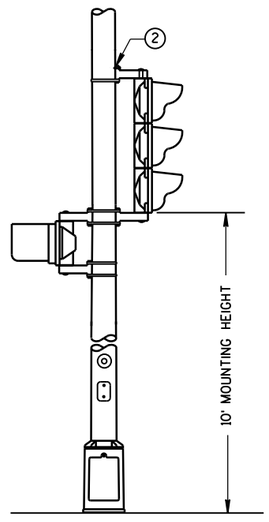
(MAXIMUM LOAD)



SIGNAL FACE MOUNTING DETAIL
(BANDED)



TYPICAL MOUNTING OF BACK TO BACK 3 AND 5 SECTION SIGNAL FACES



TYPICAL MOUNTING OF 3 SECTION SIGNAL FACE

TYPE 4 POLE MOUNTING CONFIGURATION

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

ALL TYPE 4 POLE MOUNTINGS SHALL BE DESIGNED TO INCLUDE TWIN 15' ARMS WITH LUMINAIRES.

POLES SHALL BE GALVANIZED STEEL WITH A MINIMUM WALL THICKNESS OF U.S. STANDARD 11 GAGE (.1196").

SECTION 657, POLES, OF THE STANDARD SPECIFICATIONS SHALL APPLY TO THIS DRAWING.

THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 2⅜ INCHES IN OUTSIDE DIAMETER. THE STRAIGHT PORTION OF THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 12 INCHES IN LENGTH.

WHEN TRANSFORMER BASES ARE USED, CONNECTIONS SHALL BE MADE IN THE TRANSFORMER BASE.

(1) 4" X 6" REINFORCED HANDHOLE & COVER ASSEMBLY WITH 2 (TWO) ¼" X ¾" - 20 TPI HEX HEAD STAINLESS STEEL BOLTS.

(2) SIGNAL FACE MOUNTING BRACKETS, MOUNT WITH CAP SCREWS AND BANDING. (SEE STANDARD SPECIFICATIONS - SEC. 658).

(3) GROMMETS, 1" CHASE NIPPLES OR 1" CLOSE CONDUIT NIPPLES WITH BUSHINGS SHALL BE PROVIDED FOR 1⅜" HOLE IN POLE SHAFT FOR WIRING.

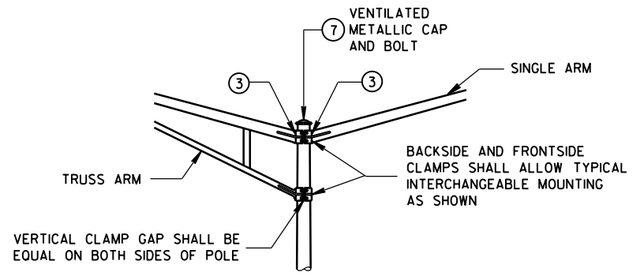
(4) SECURELY MOUNT DULL BLACK POLYCARBONATE BACKPLATES, PROJECTING 5" BEYOND ALL SIDES OF THE SIGNAL FACE HOUSING, PER MANUFACTURER'S RECOMMENDATIONS.

(5) POLE MOUNTED SIGNAL FACES SHALL REQUIRE 1 OR MORE MOUNTING SPACERS UNDER THE TOP MOUNTING BRACKET(S) AS REQUIRED, TO PLUMB THE SIGNAL FACE.

(6) CAST ALUMINUM TRANSFORMER BASE, WHEN REQUIRED.

(7) FURNISH AND INSTALL VENTILATED, CAST, METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) ¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.

(8) SHIMMING, IF NEEDED, SHALL BE LOCATED BETWEEN THE CONCRETE FOUNDATION AND THE TRANSFORMER BASE.



INTERCHANGEABLE MOUNTING DETAIL

POLE MOUNTINGS FOR TRAFFIC SIGNALS AND LIGHTING UNITS, TYPE 4

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DEPARTMENT OF TRANSPOI

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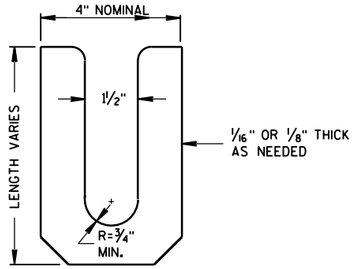
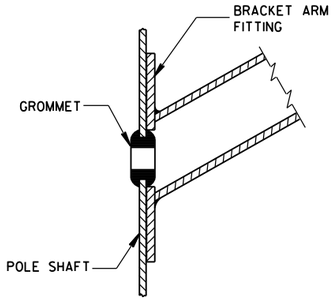
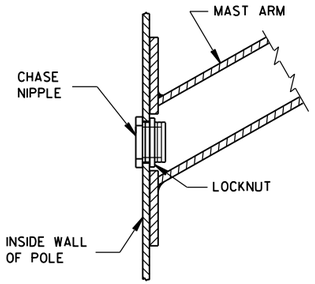


LEVELING SHIM (13)

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.

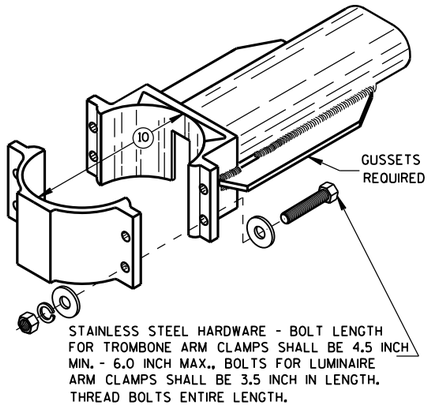
(10) 4.5" I.D. FOR LUMINAIRE MAST ARM CLAMP.
6.625" I.D. FOR TROMBONE MAST ARM CLAMP.

(11) INDIVIDUAL BASE PLATE ANCHOR ROD COVERS. (4 REQUIRED)

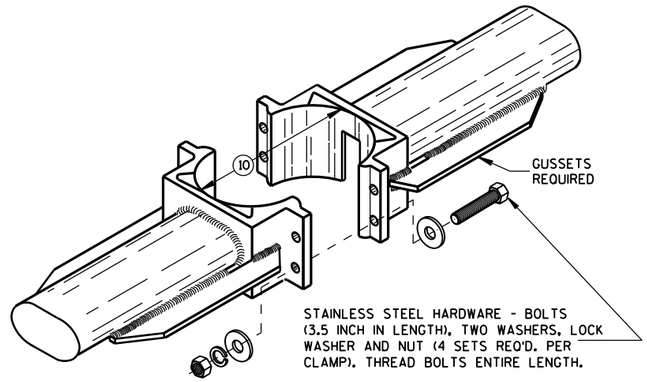
(12) BASE PLATE SLOTTED TO ACCEPT 11" THROUGH 12" BOLT CIRCLE USING 1" DIAMETER ANCHOR RODS.

(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.

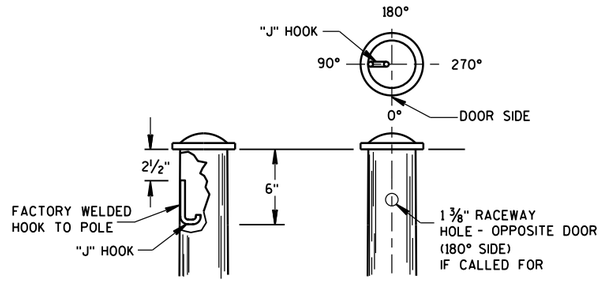
SHIMS SHALL BE LONG ENOUGH AND WIDE ENOUGH TO COMPLETELY COVER THE AREA UNDER THE LENGTH AND WIDTH OF THE BASE MOUNTING FLANGE.



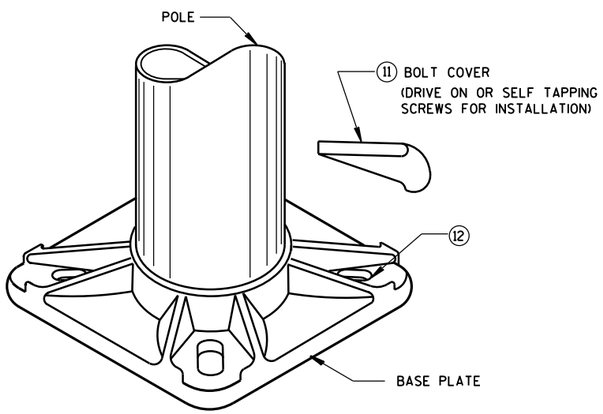
TYPICAL TROMBONE MAST ARM AND SINGLE LUMINAIRE MAST ARM MOUNTING CLAMP



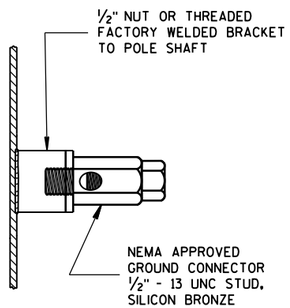
TYPICAL LUMINAIRE MAST ARM (DOUBLE) MOUNTING BRACKETS

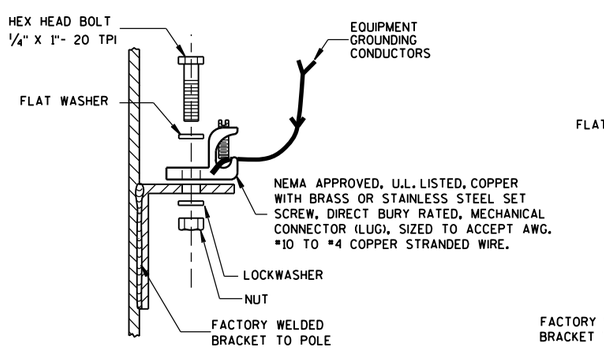


TYPICAL "J" HOOK LOCATION



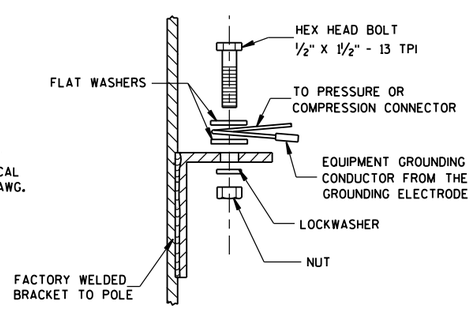
BASE PLATE





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
STATE ELECTRICAL

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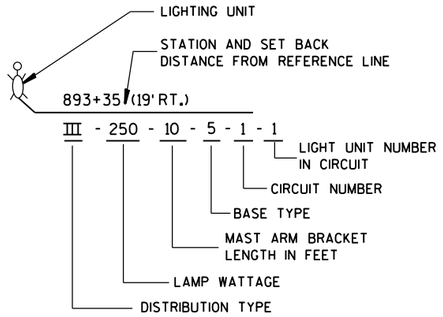
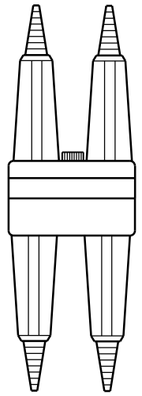
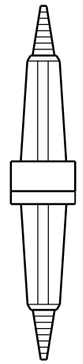


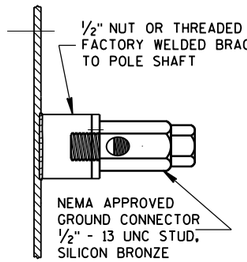
LIGHTING UNIT CODE
(TYPICAL)

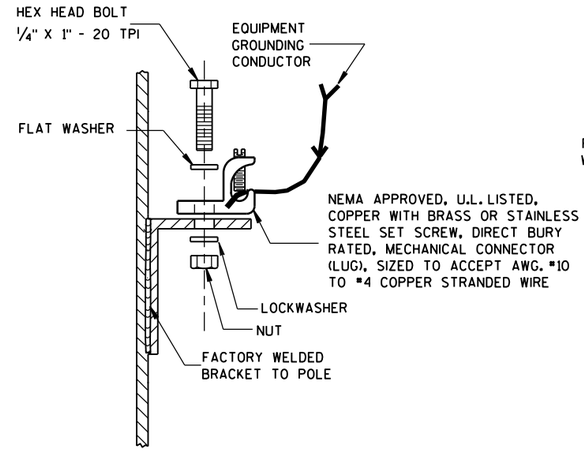


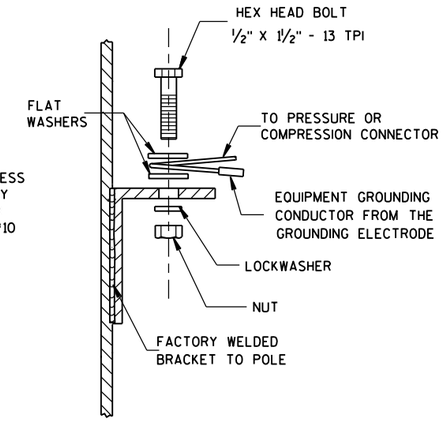
DETAIL "A"
BREAKAWY DOUBLE POLE WITH WATERPROOF INSULATING BOOT



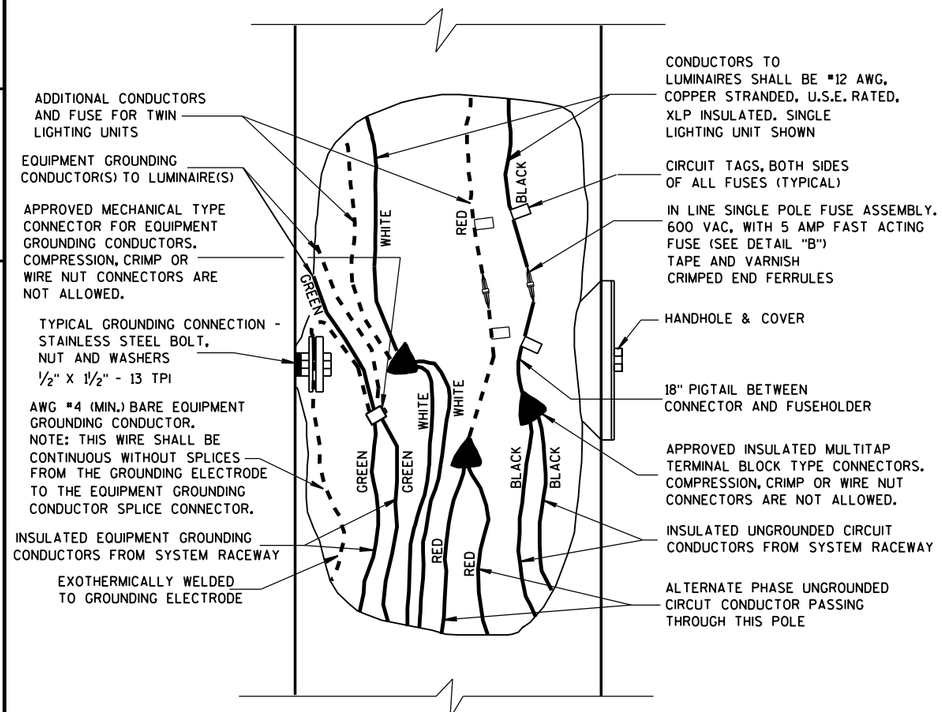
DETAIL "B"
BREAKAWY SINGLE POLE WITH WATERPROOF INSULATING BOOT



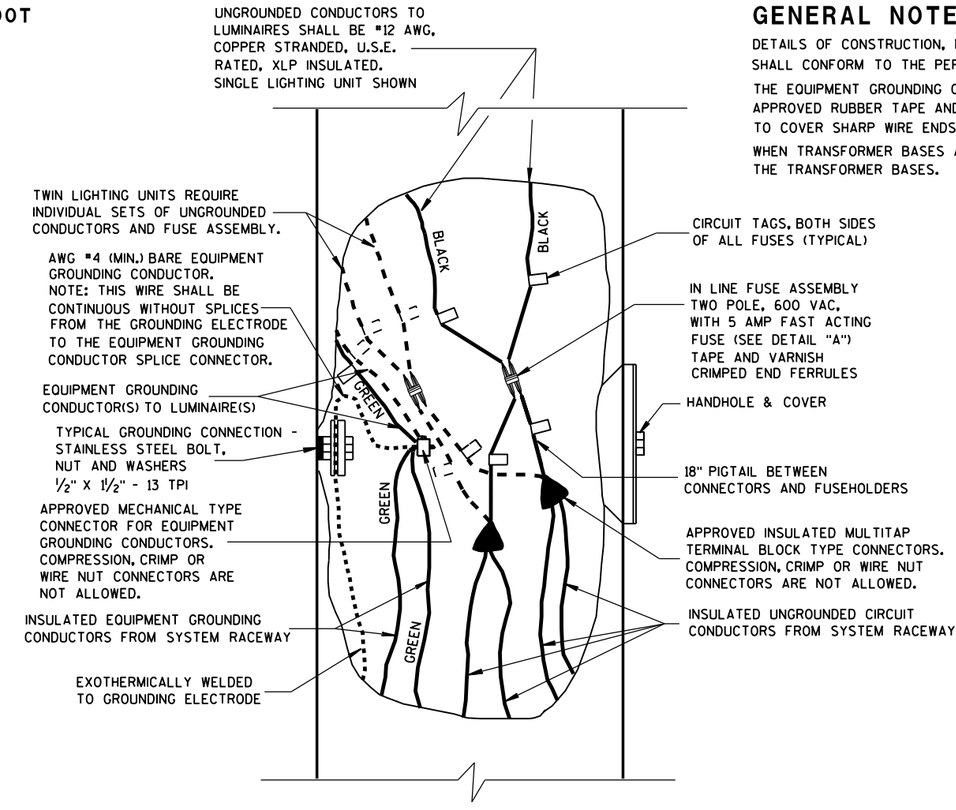




TYPICAL GROUNDING CONNECTIONS
NUT, BOLT, WASHERS AND LOCKWASHERS SHALL BE STAINLESS STEEL



3 WIRE - 120, 240 OR 480 VAC (UNGROUNDED CONDUCTOR) WITH GROUNDED CONDUCTOR AND WITH EQUIPMENT GROUNDING CONDUCTOR



2 WIRE - 240 OR 480 VAC (UNGROUNDED CONDUCTORS) WITH EQUIPMENT GROUNDING CONDUCTOR

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

THE EQUIPMENT GROUNDING CONNECTOR SHALL BE TAPED WITH 3 WRAPS (MINIMUM) OF APPROVED RUBBER TAPE AND THEN 3 WRAPS (MINIMUM) OF APPROVED VINYL TAPE TO COVER SHARP WIRE ENDS AFTER THE CONNECTION IS COMPLETED.

WHEN TRANSFORMER BASES ARE USED, ALL WIRING CONNECTIONS SHALL OCCUR WITHIN THE TRANSFORMER BASES.

NON-FREEWAY LIGHTING UNIT POLE WIRING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

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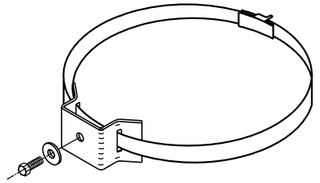
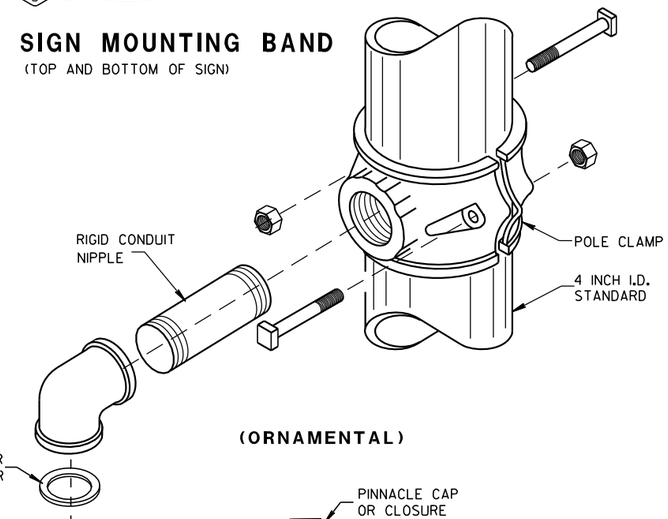


TYPICAL SIGN MOUNTING BAND
(TOP AND BOTTOM OF SIGN)



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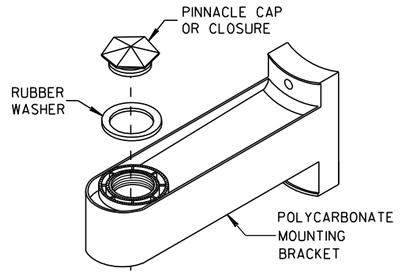

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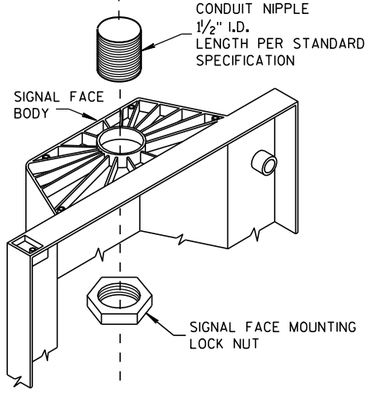
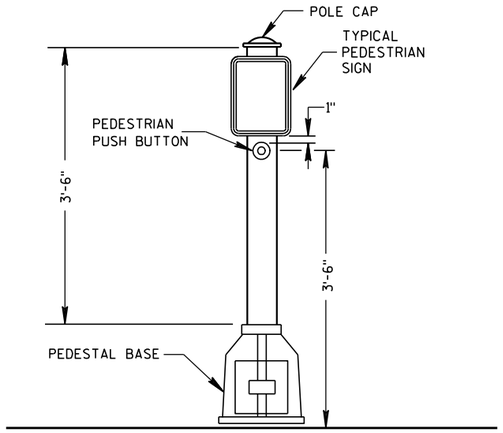


SIGNAL FACE MOUNTING DETAILS



PEDESTRIAN PUSH BUTTON TYPICAL MOUNTING

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

SEE THE SIGNAL PLAN FOR REQUIRED SIGNAL FACE SIZES.

LOCATIONS SHALL BE AS SHOWN ON THE PLANS.

ALL PEDESTAL BASES SHALL BE MOUNTED ON CONCRETE BASE - TYPE 1.

FOR APPROVED MOUNTING HARDWARE, SEE THE CONTRACT SPECIFICATIONS.

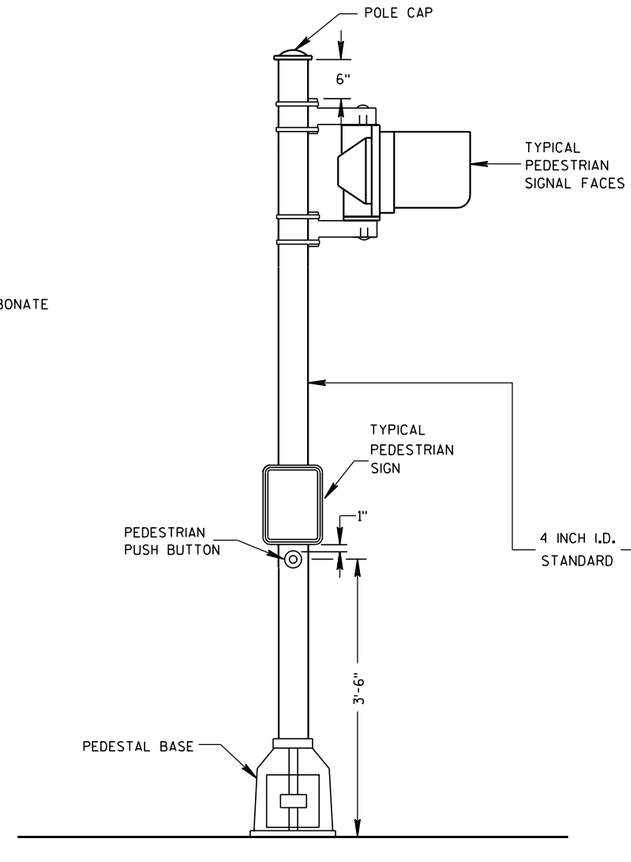
POLYCARBONATE SIGNAL FACE MOUNTING BRACKETS SHALL BE USED UNLESS ORNAMENTAL POLE CLAMPS ARE SPECIFIED.

LENGTH OF TRAFFIC STANDARDS SHALL BE AS SHOWN ON THE PLANS.

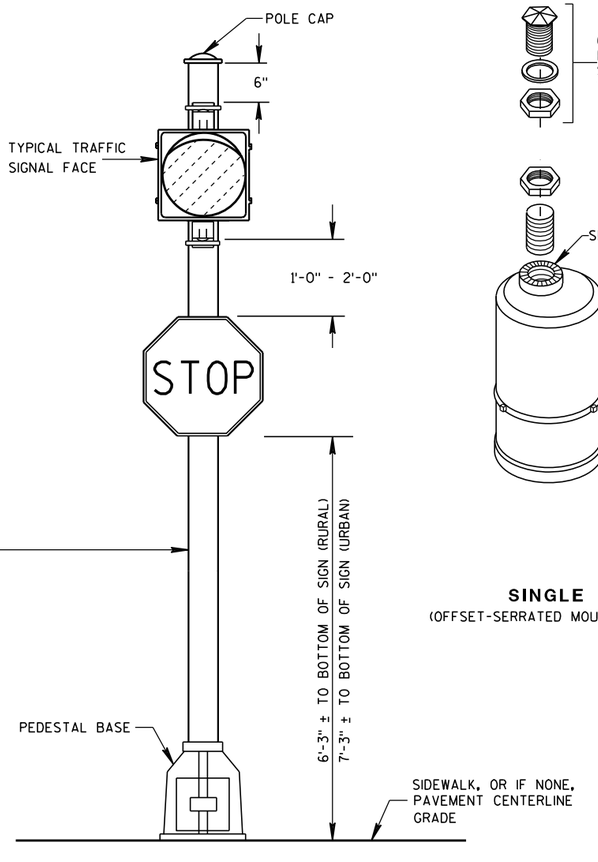
MOUNTINGS AND BRACKETS SHALL BE AS SHOWN ON THE PLANS OR DESCRIBED IN THE SPECIAL PROVISIONS (BY THE DISTRICT TRAFFIC ENGINEER).

PEDESTRIAN SIGNS SHALL BE AS DESIGNATED IN THE PLANS.

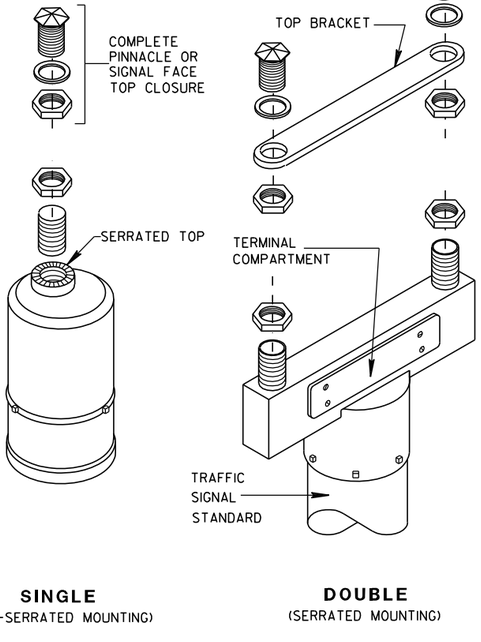
FURNISH AND INSTALL VENTILATED, CAST, METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) ¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.



PEDESTRIAN FACE STANDARD-10 FT.
(WALK-DON'T WALK)



STANDARD FLASHER.
10 FOOT, 13 FOOT OR 15 FOOT AS REQUIRED



SINGLE
(OFFSET-SERRATED MOUNTING)

DOUBLE
(SERRATED MOUNTING)

SLIPFITTERS

TRAFFIC SIGNAL STANDARD PEDESTRIAN AND FLASHER TYPICAL MOUNTING DETAILS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

5/11/10
DATE

/S/ John Corbin
STATE ELECTRICAL ENGI

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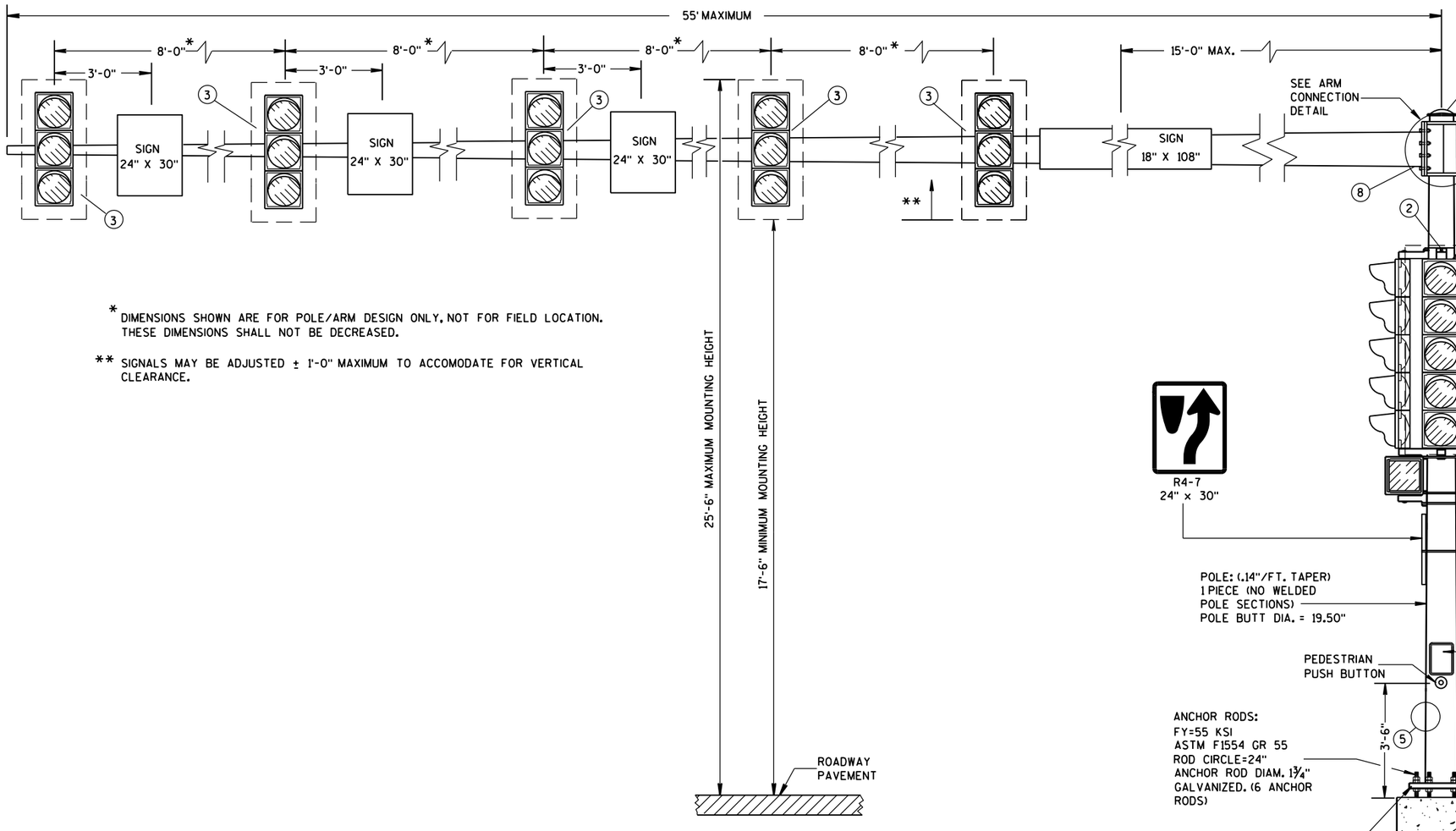
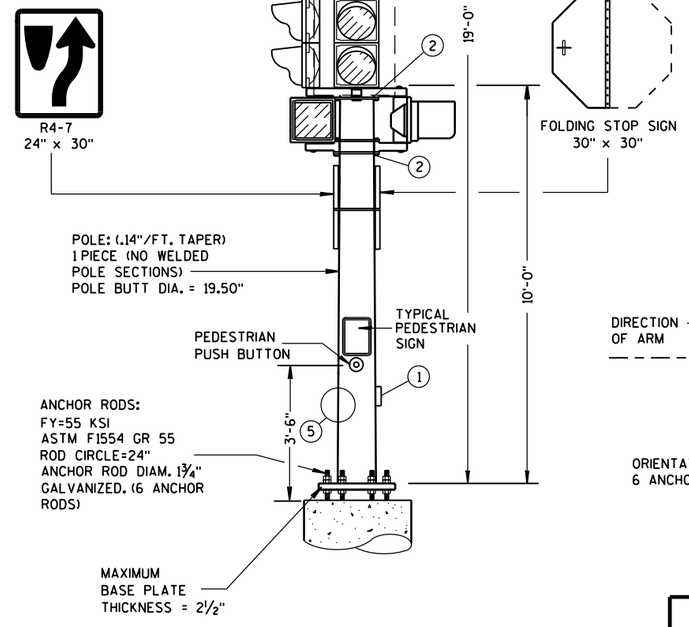
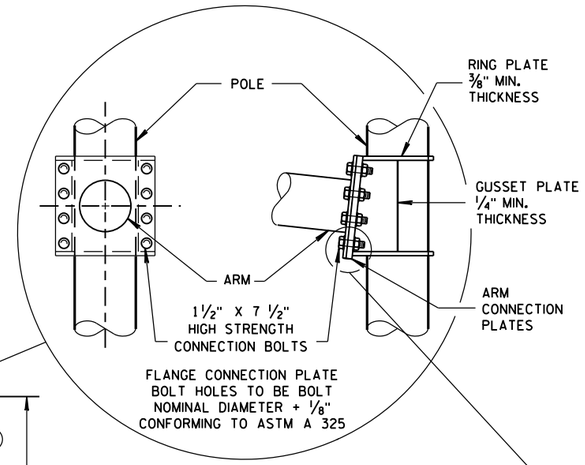


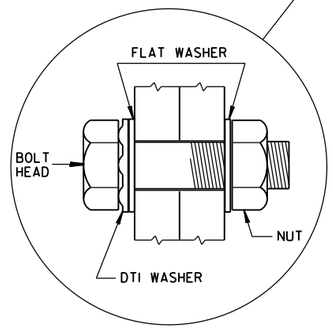
* DIMENSIONS SHOWN ARE FOR POLE/ARM DESIGN ONLY, NOT FOR FIELD LOCATION. THESE DIMENSIONS SHALL NOT BE DECREASED.

** SIGNALS MAY BE ADJUSTED ± 1'-0" MAXIMUM TO ACCOMODATE FOR VERTICAL CLEARANCE.

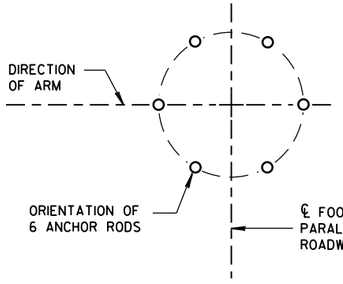




8 BOLT ARM CONNECTION DETAIL



RECOMMENDED
BOLT ASSEMBLY
DETAIL



ANCHOR ROD LOCATION

(MAXIMUM LOAD)

TYPE 12 POLE 35'- 55' MONOTUBE ARM

TYPE 12 POLE 35' - 55' MONOTUBE ARM
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION
APPROVED May, 2015 — DATE /S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

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GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

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.

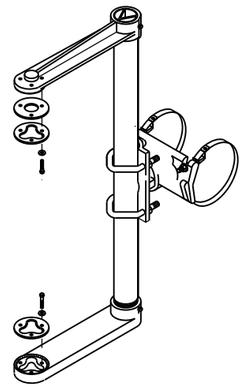
(6) FACTORY-WELDED "J" HOOK FOR STRAIN RELIEF FOR POLE LUMINAIRE WIRE.

(7) INSTALL STRUCTURAL IDENTIFICATION PLAQUES.

STRUCTURAL IDENTIFICATION PLAQUES SHALL BE PLACED ON THE POLES IN THE SAME DIRECTION AS THE ARM.

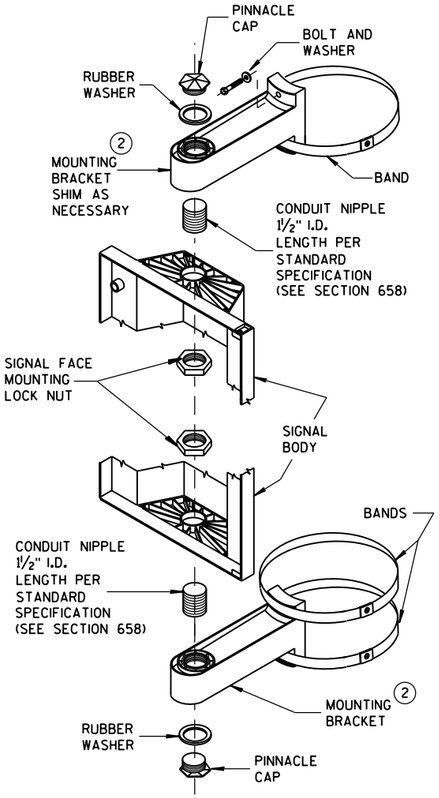
MOUNTING HEIGHT SHALL BE 6'-0" ABOVE THE CURB OR SHOULDER. ADJUST IF IT IS KNOWN THAT REQUIRED TRAFFIC SIGNS WILL BE OBSTRUCTED.

(8) FACTORY DRILLED ½" DRAIN HOLE 2" FROM FLANGE CONNECTION PLATE.

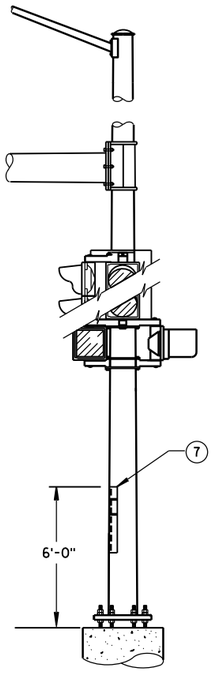


SIGNAL FACE MOUNTING BRACKET
DETAIL FOR MONOTUBE ARM

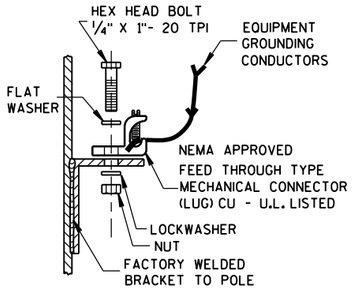
(MOUNT PER MANUFACTURER'S RECOMMENDATION)



SIGNAL FACE
VERTICAL MOUNTING DETAIL

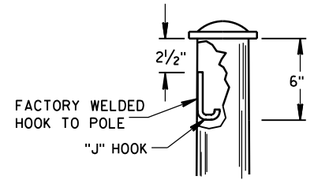


STRUCTURAL IDENTIFICATION
PLAQUE PLACEMENT



TYPICAL GROUNDING CONNECTIONS (5)

NUT, BOLT AND WASHERS SHALL
BE STAINLESS STEEL



"J" HOOK WIRE SUPPORT (6)

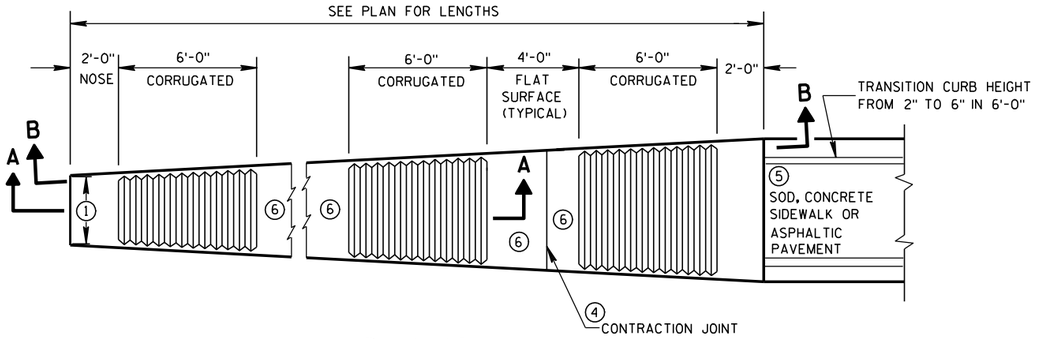
GENERAL NOTES AND HARDWARE DETAILS FOR TYPE 9, 10, 12 & 13 POLES WITH MONOTUBE ARMS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2016 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

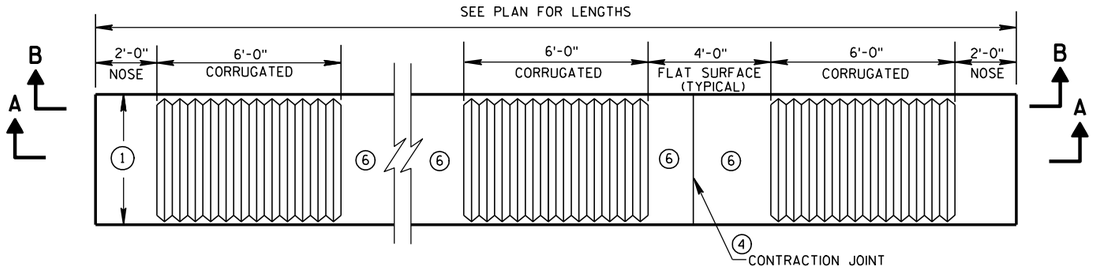
6

S.D.D. 9 E 8-8e



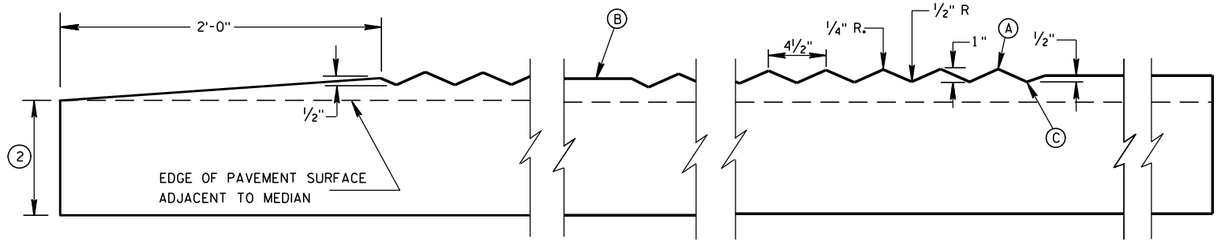
PLAN VIEW

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.

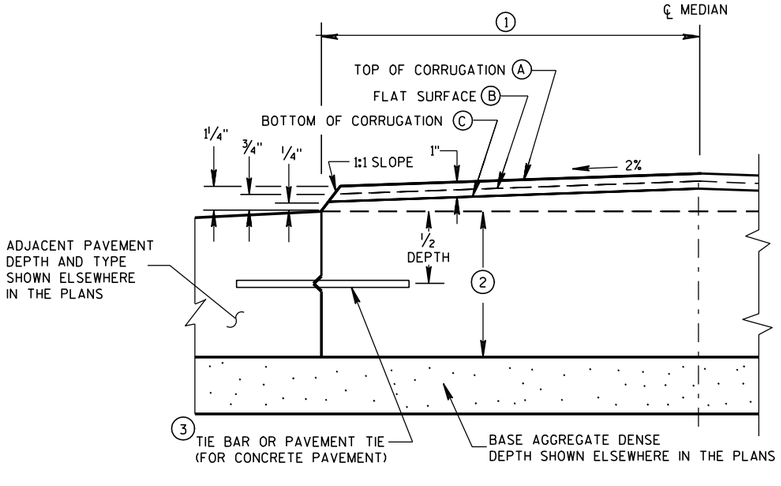
(2) THE DEPTH OF THE CONCRETE CORRUGATED MEDIAN SHALL BE 9-INCHES UNLESS SHOWN OTHERWISE IN THE PLAN.
ADJACENT PAVEMENT STRUCTURE DETAILS ARE SHOWN IN THE PLAN. TYPICAL OPTIONS ARE:
(1) NEW OR EXISTING CONCRETE PAVEMENT.
(2) ASPHALTIC CONCRETE OVER NEW OR EXISTING CONCRETE BASE COURSE, OR PAVEMENT.
(3) 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.

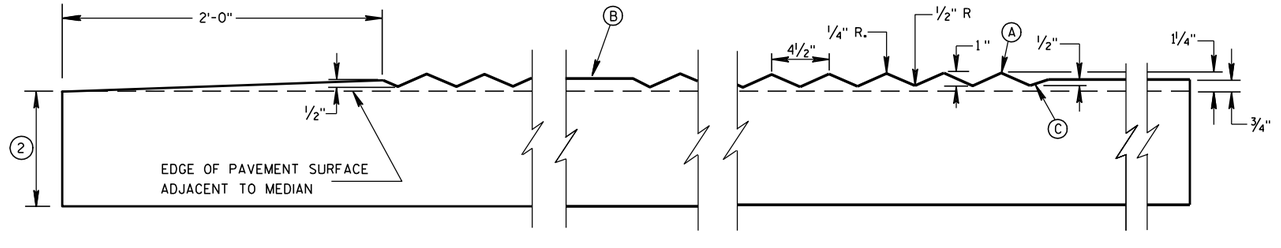
(5) SURFACE TYPE AND DETAILS ARE DEFINED ELSEWHERE IN THE PLAN.

(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 DEVELOPMENT ENGINEER

FHWA

6

S.D.D. 11 B 1-5

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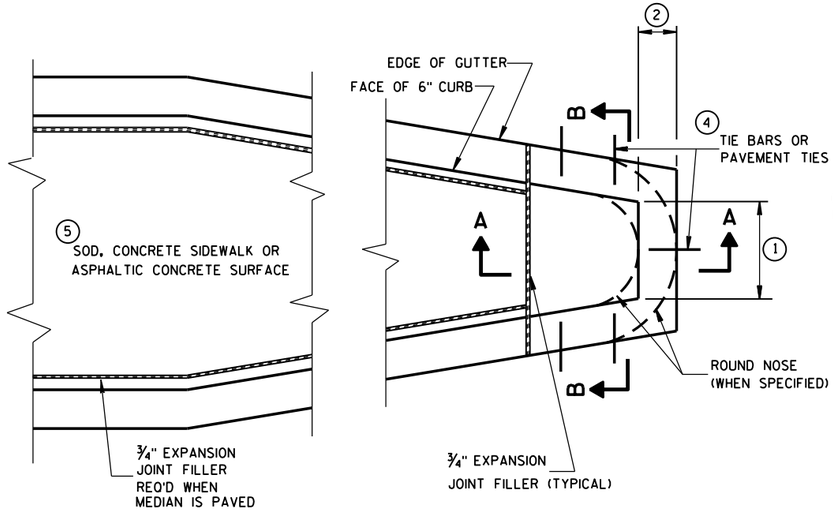
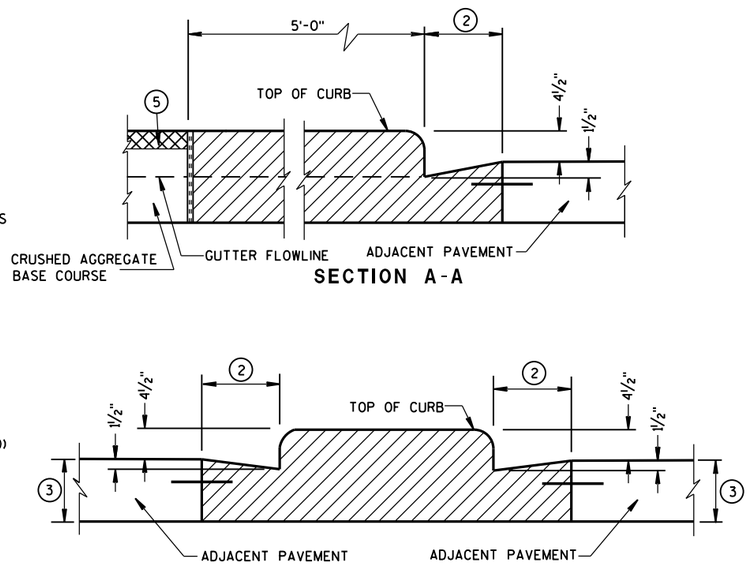
S.D.D. 11 B 1-5





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.

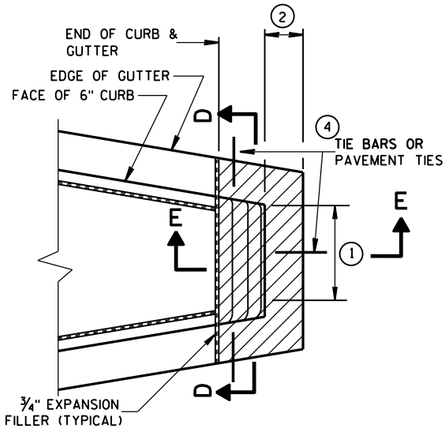
(2) ASPHALTIC CONCRETE PAVEMENT OVER NEW OR EXISTING CONCRETE BASE COURSE.

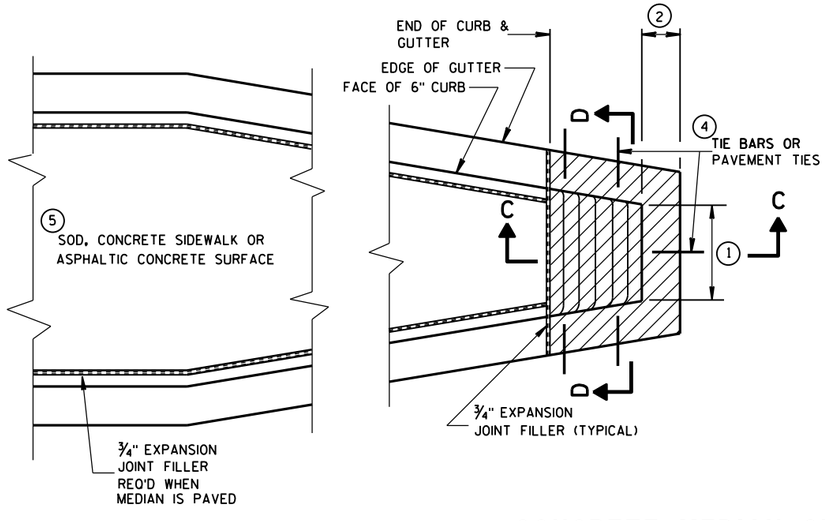
(3) ASPHALTIC CONCRETE PAVEMENT OVER CRUSHED AGGREGATE BASE COURSE.

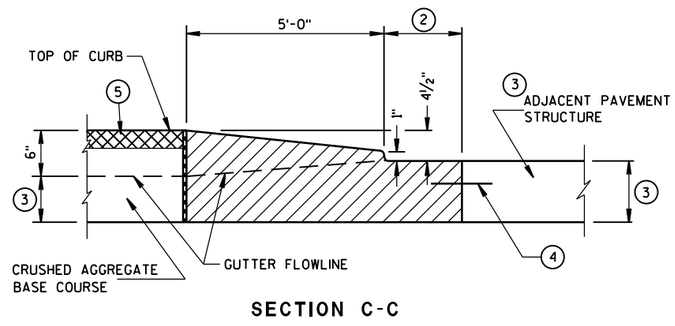
(4) TIE BARS OR PAVEMENT TIES REQUIRED IN NEW CONCRETE PAVEMENT OR CONCRETE BASE COURSE. TIE BARS SHALL BE NO. 4 X 2'-0" SPACED AT 2'-0" C-C.

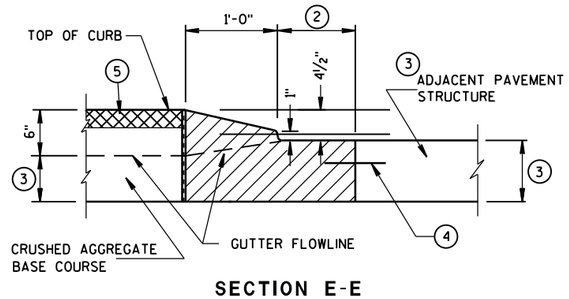
PAVEMENT TIES REQUIRED IN EXISTING CONCRETE BASE COURSE. PAVEMENT TIES SHALL BE NO. 6 X 1'-0" SPACED AT 3'-0" C-C INSTALLED ON A HORIZONTAL SKEW OF 6:1. THE DIRECTION OF SKEW SHALL ALTERNATE AFTER EVERY ONE OR TWO BARS.

(5) SURFACE TYPE AND DETAILS ARE SHOWN ELSEWHERE IN THE PLAN.



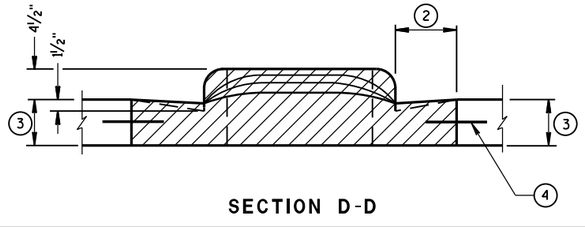






CONCRETE MEDIAN SLOPED NOSE TYPE 2

CONCRETE MEDIAN SLOPED NOSE TYPE 1



CONCRETE MEDIAN NOSE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

6/8/2006
DATE

/S/ Jerry H. Zogg
ROADWAY STANDARDS D ENGINEER

FHWA

198

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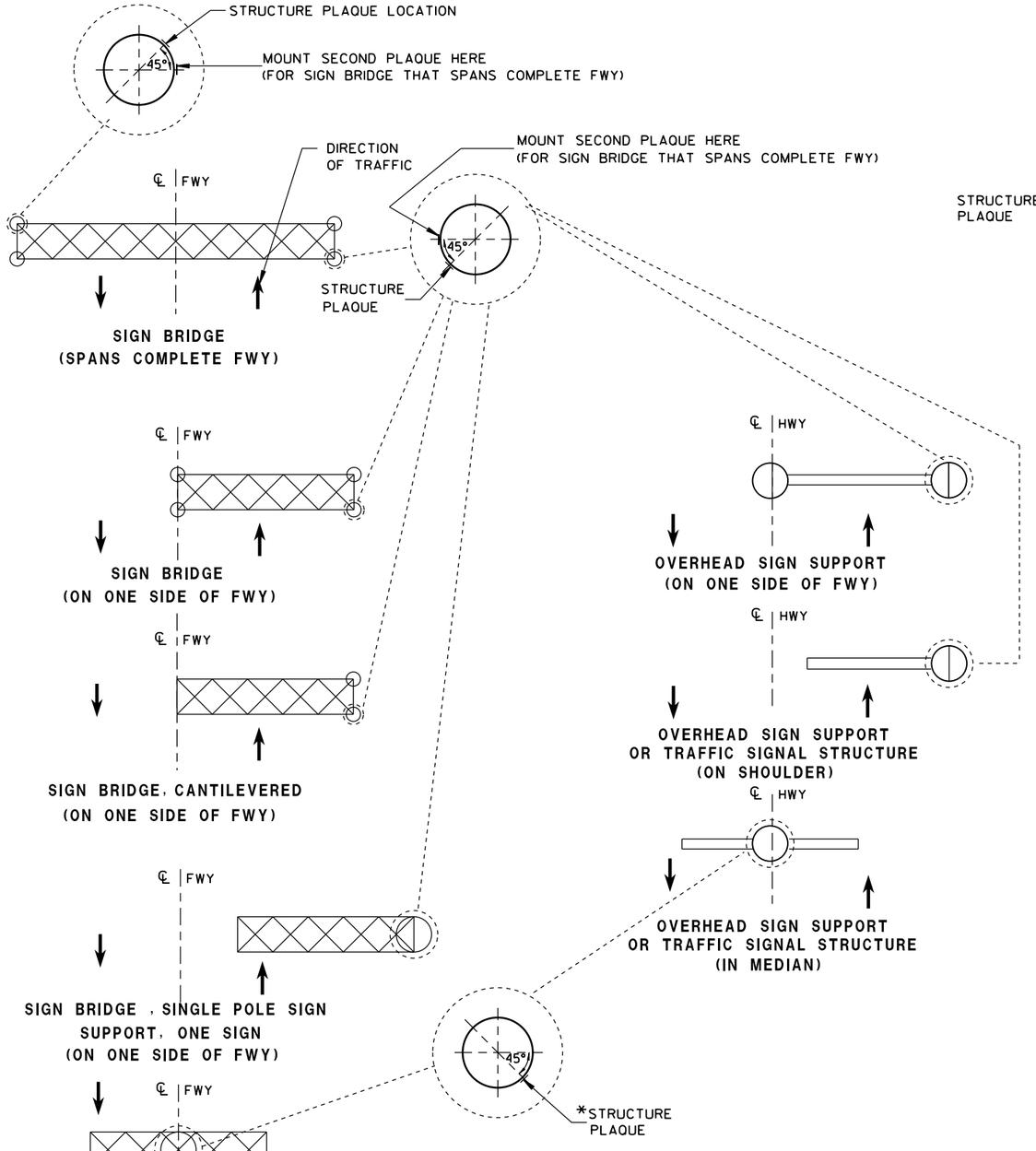
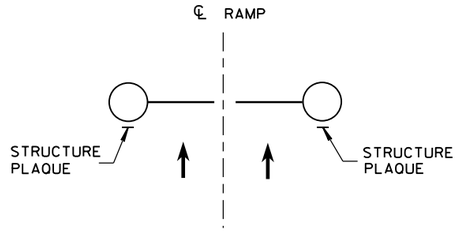
S.D.D. 11 B 2-2

S.D.D. 11 B 2-2

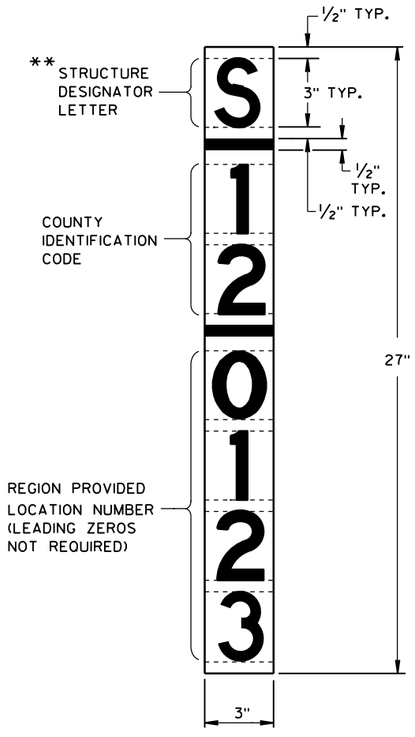


LOCATION OF RAMP GATE, SIGN BRIDGE, OVERHEAD SIGN SUPPORT & TRAFFIC SIGNAL STRUCTURE PLAQUES

*WHEN SIGNS OR GATES FACE TRAFFIC IN ONE DIRECTION, THE PLAQUE SHALL FACE TRAFFIC IN THE SAME DIRECTION. WHEN SIGNS OR GATES ARE FACING TRAFFIC IN BOTH DIRECTIONS, THE PLAQUE SHALL FACE TRAFFIC IN THE CARDINAL DIRECTION.



RAMP GATE
(ACROSS FWY ON-RAMP)



** LETTER "G" UTILIZED FOR RAMP GATES. LETTER "S" UTILIZED FOR SIGN BRIDGES, OVERHEAD SIGN SUPPORTS, AND TRAFFIC SIGNALS.

RAMP GATE, SIGN BRIDGE, OVERHEAD SIGN SUPPORT AND TRAFFIC SIGNAL STRUCTURE PLAQUE FOR SIGN BRIDGES AND OVERHEAD SIGN SUPPORT WHICH ARE NOT STRUCTURE MOUNTED

GENERAL NOTES

DETAILS OF CONSTRUCTION AND WORKMANSHIP NOT SHOWN IN THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

PLAQUES SHALL BE INCIDENTAL TO ALL NEW INSTALLATIONS.

IF THE PROPOSED SIGN BRIDGE OR OVERHEAD SIGN SUPPORT IS REPLACING AN EXISTING SIGN BRIDGE OR OVERHEAD SIGN SUPPORT, A NEW IDENTIFICATION PLAQUE WILL BE REQUIRED.

FASTEN TOP, CENTER AND BOTTOM OF PLAQUE TO POLE OR OTHER LOCATION AS FOLLOWS:

GALVANIZED STEEL SHAFT - 3 STAINLESS STEEL POP RIVETS

A588 STEEL SHAFT - SHIM FOR DRAINAGE WITH STAINLESS WASHERS; FASTEN WITH STAINLESS SELF-TAPPING SCREWS

ALUMINUM SHAFTS - 3 ALUMINUM POP RIVETS

MOUNTING HEIGHT SHALL BE APPROXIMATELY 5.0' ABOVE CURB OR SHOULDER. ADJUST IF IT IS KNOWN THAT REQUIRED TRAFFIC SIGNS WILL OBSTRUCT.

PLAQUE MATERIALS:

BASE - SHEET ALUMINUM, 0.060" THICK.

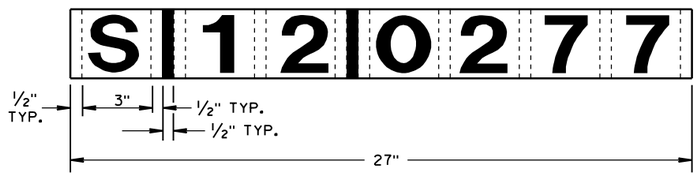
FACE - WHITE, SELF-ADHESIVE VINYL SHEETING, NON-RETROREFLECTIVE

LINES - BLACK, ½" WIDE, SELF-ADHESIVE

CHARACTERS:- BLACK, SELF ADHESIVE, SERIES "D", SIZE AS SHOWN.

FOR SIGN BRIDGES, STRUCTURE MOUNTED, THE STRUCTURE PLAQUE SHALL BE MOUNTED HORIZONTALLY AS SHOWN ON THE DRAWING. THE STRUCTURE PLAQUE SHALL BE MOUNTED HORIZONTALLY TO THE BACK OF THE SIGN, BETWEEN THE ALUMINUM EXTRUSIONS, NEAR THE TOP LEFT HAND CORNER OF THE SIGN. THE BASE MATERIAL SHALL BE OMITTED AND THE FACE ADHERED DIRECTLY TO THE ALUMINUM SURFACE. PRIOR TO ADHERING THE MATERIAL, THE ALUMINUM SURFACE SHALL BE SMOOTH, CLEAN AND DRY.

WHERE SIGN BRIDGE ILLUMINATION IS PROVIDED, THE STRUCTURE MUST ALSO HAVE A SIGN BRIDGE CIRCUIT PLAQUE AS SHOWN IN THE ELECTRICAL DETAILS.



IDENTIFICATION PLAQUE FOR SIGN BRIDGE, STRUCTURE MOUNTED

STRUCTURE IDENTIFICATION PLAQUES, RAMP GATES, SIGN BRIDGES, OVERHEAD SIGN SUPPORTS, & TRAFFIC SIGNALS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
12/4/2012 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER
FHWA

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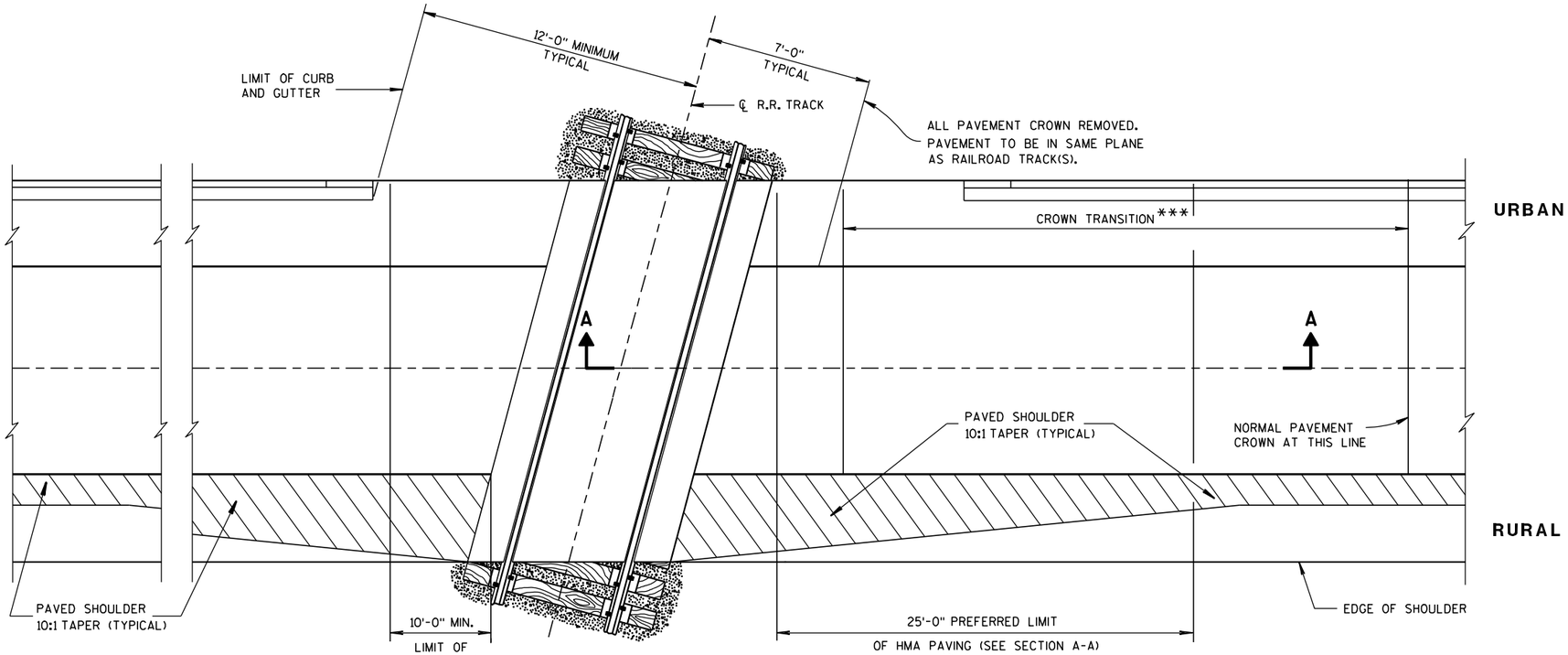
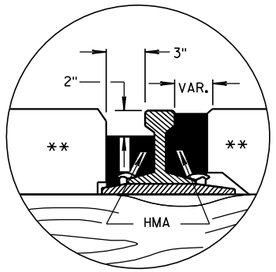
S.D.D. 12 A 4-3





DETAIL B

HMA FLANGEWAY AND FIELD FILLERS

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.

TIMBER, CONCRETE OR RUBBER CROSSING SURFACE MATERIAL, RAILS, TIES, BALLAST, GEOTEXTILE FABRIC AND CROSSING DRAINAGE SYSTEM BY OTHERS UNLESS OTHERWISE PROVIDED.

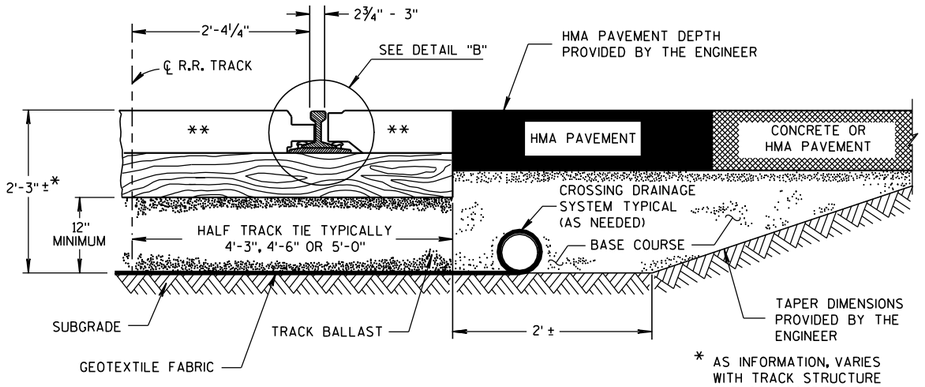
HMA PAVEMENT APPROACHES AND HMA PAVEMET CROSSING SURFACES TO BE PLACED BY CONTRACTOR UNLESS OTHERWISE PROVIDED.

HMA FLANGEWAY AND FIELD FILLERS TO BE PLACED AND THOROUGHLY HAND COMPACTED BY THE CONTRACTOR WHEN NOT PROVIDED BY OTHERS. SEE DETAIL B. HMA FILLERS NOT REQUIRED WHEN RUBBER FILLERS ARE PROVIDED.

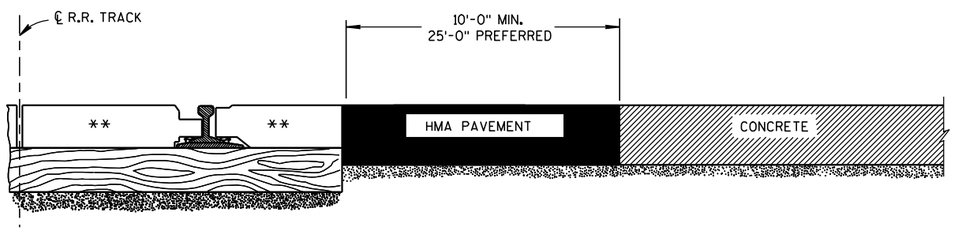
HMA PAVEMENT SHALL BE ROLLED PARALLEL TO THE TRACK.

** CROSSING SURFACE MAY BE TIMBER, RUBBER, CONCRETE, HMA PAVEMENT OR A COMBINATION OF SUCH MATERIALS.

*** CROWN TRANSITION LENGTH SHOWN ELSEWHERE IN THE PLAN.



TYPICAL HALF SECTION



SECTION A-A

CONCRETE PAVEMENT APPROACH

SECTION A-A

HMA PAVEMENT APPROACH

EXAMPLES OF PAVEMENT APPROACHES

PAVEMENT DETAILS FOR RAILROAD APPROACH

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
8-28-09 DATE
/S/ Ronald E. Adams
CHIEF, RAILROADS & HAI 200 CTION
FHWA

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S.D.D. 13 B 1-10

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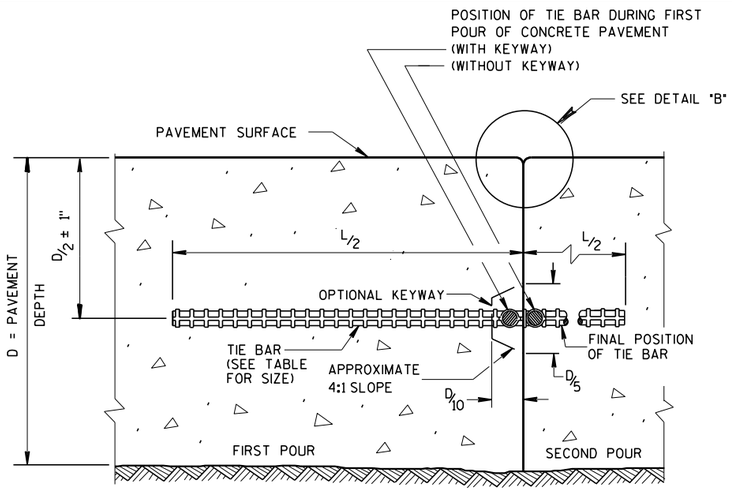
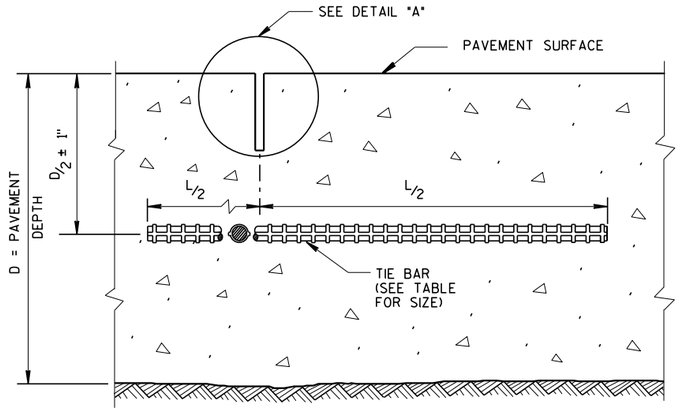
S.D.D. 13 B 1-10



CONSTRUCTION JOINT



SAWED JOINT

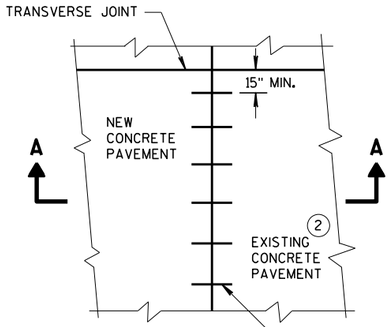
GENERAL NOTES

CREATE A LONGITUDINAL JOINT FOR PAVEMENT WIDTHS GREATER THAN 15 FEET.

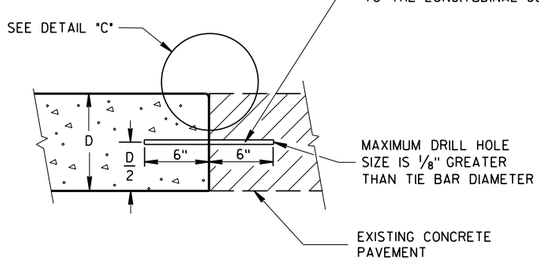
CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

(1) ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.

(2) PAVEMENT THAT WAS IN PLACE PRIOR TO THE CONTRACT.

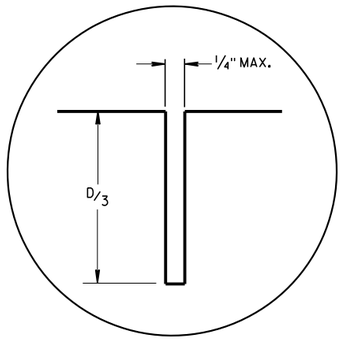


PLAN VIEW

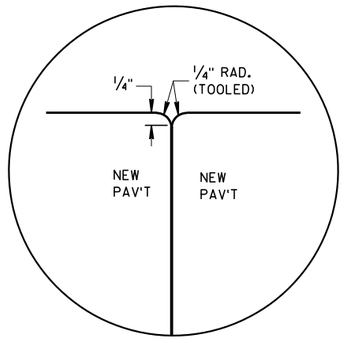


SECTION A-A

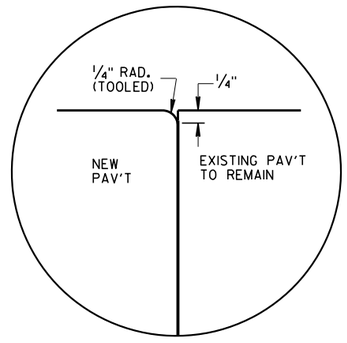
LONGITUDINAL CONSTRUCTION JOINT TIE BARS ANCHORED INTO EXISTING PAVEMENT



DETAIL "A"



DETAIL "B"



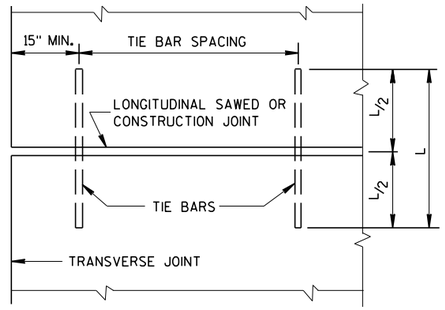
DETAIL "C"

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
March 2018 — DATE
/S/ Peter Kemp PE — PAVEMENT SUPE
FHWA

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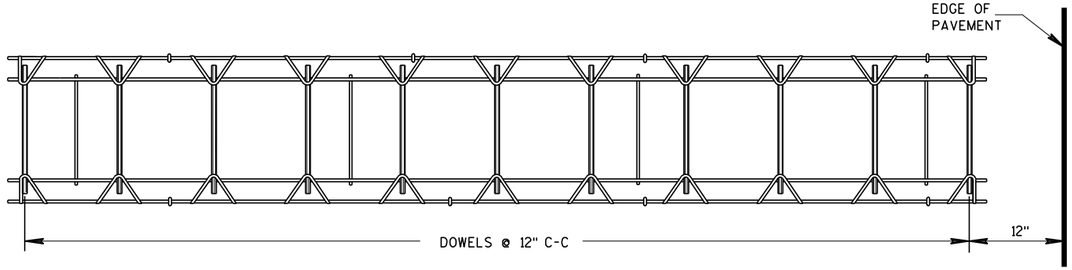
S.D.D. 13 C 1-19



PLAN VIEW

SIDE VIEW

CONTRACTION JOINT DOWEL ASSEMBLY ①

PAVEMENT DEPTH, DOWEL BAR SIZE AND JOINT SPACING TABLE

PAVEMENT DEPTH (D)	DOWEL BAR DIAMETER	CONTRACTION JOINT SPACING
5 ½", 6", 6 ½"	NONE	12'
7", 7 ½"	1"	14'
8", 8 ½"	1 ¼"	15'
9", 9 ½"	1 ¼"	15'
10" & ABOVE	1 ½"	15'

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.

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.

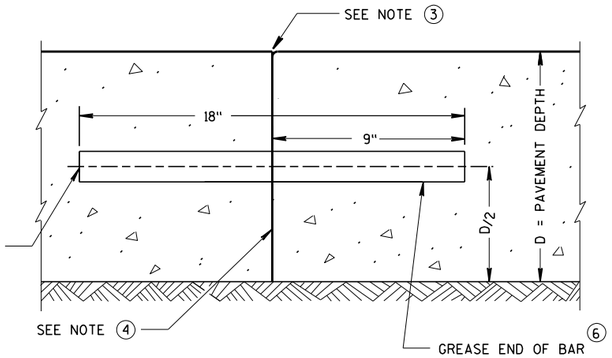
③ FORM OR SAW CONSTRUCTION JOINTS. PROVIDE A ¼-INCH RADIUS AT FORMED JOINTS.

④ PROVIDE A SMOOTH VERTICAL FACE FOR THE ENTIRE DEPTH OF THE PAVEMENT WHEN FORMING CONSTRUCTION JOINTS.

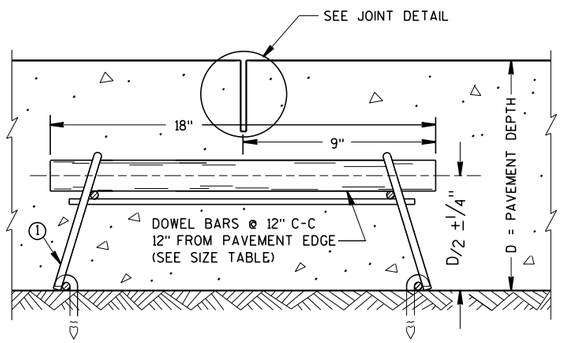
⑤ INSTALL DOWEL BARS AT CONSTRUCTION JOINTS BY FORMING OR DRILLING. INSTALL FORMED DOWEL BARS 12 INCHES C-C AND 12 INCHES FROM PAVEMENT EDGE. REMOVE EXCESS CONCRETE FROM THE FREE END OF THE DOWEL BAR IF DOWEL BARS ARE FORMED THROUGH A HEADER BOARD. INSTALL DRILLED DOWEL BARS ACCORDING TO *DRILLED DOWEL BAR CONSTRUCTION JOINT* DETAIL.

⑥ APPLY A THIN UNIFORM COATING OF SURFACE TREATMENT TO THE FREE END OF DOWEL BARS TO PREVENT BONDING.

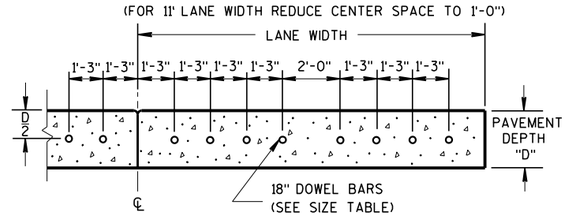
⑦ ANCHOR DOWEL BARS INTO DRILLED HOLES WITH AN EPOXY. MAXIMUM DRILLED HOLE SIZE IS ⅛-INCH GREATER THAN DOWEL BAR DIAMETER, 9 INCHES IN LENGTH.



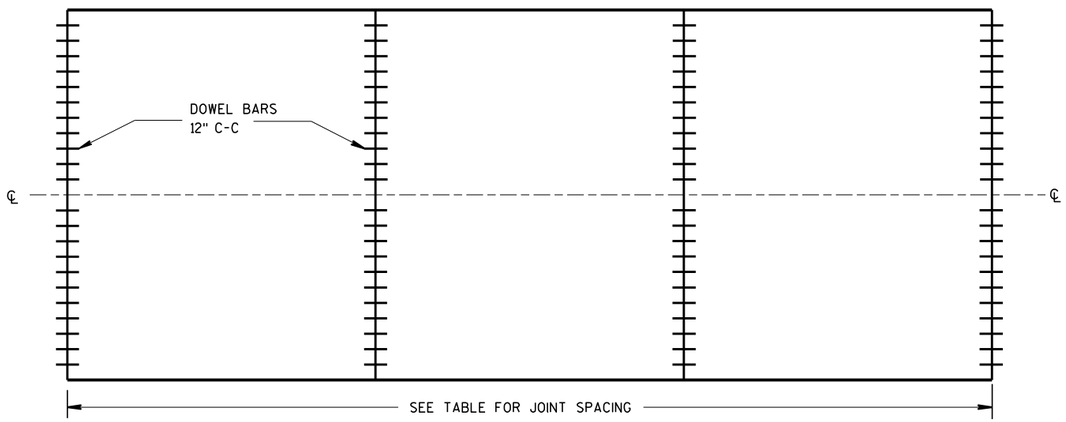
TRANSVERSE CONSTRUCTION JOINT



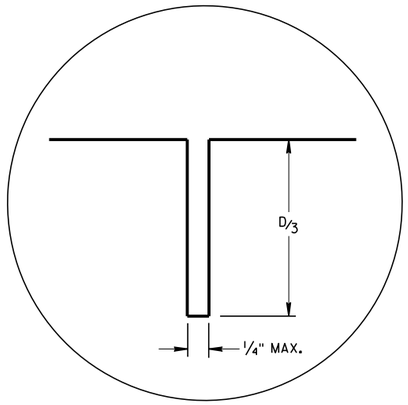
DOWELED CONTRACTION JOINT



DRILLED DOWEL BAR CONSTRUCTION JOINT ⑦



CONTRACTION JOINT LOCATIONS



JOINT DETAIL

URBAN DOWELED CONCRETE PAVEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2018 — DATE
/S/ Peter Kemp P.E. — PAVEMENT SUP
FHWA

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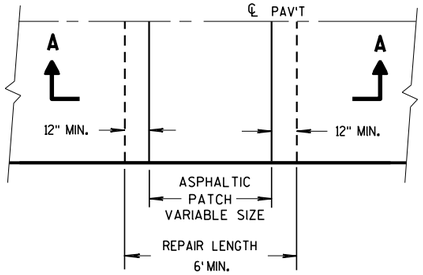
GENERAL NOTES

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.

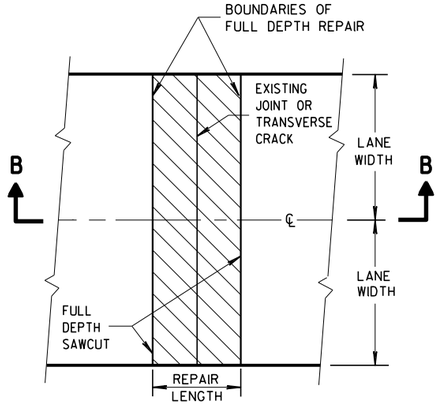
PROVIDE 6-FOOT MINIMUM DISTANCE FROM BOUNDARIES OF CONCRETE REPAIR AREAS TO ADJACENT TRANSVERSE JOINT OR CRACK.

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.

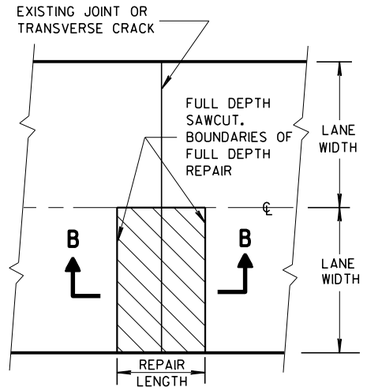
(1) DOWEL BARS MIGHT NOT EXIST.



PLAN VIEW

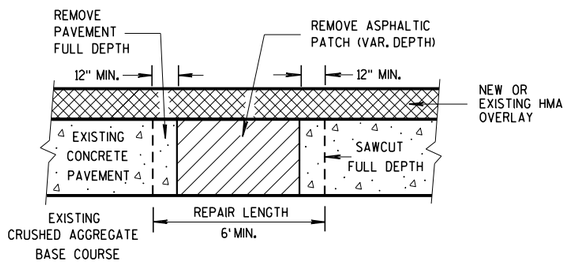


PLAN VIEW
(DOUBLE LANE REPAIR)



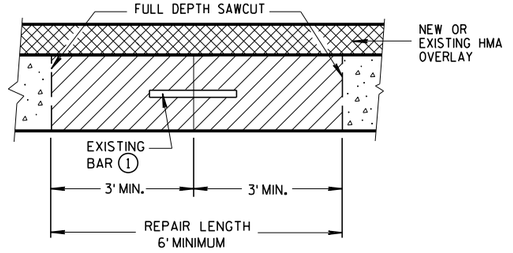
PLAN VIEW
(SINGLE LANE REPAIR)

FULL DEPTH CONCRETE PAVEMENT REMOVAL



SECTION A-A

HMA PATCH REMOVAL



SECTION B-B

CONCRETE REMOVAL

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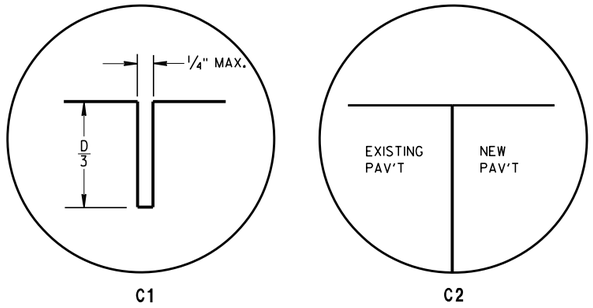
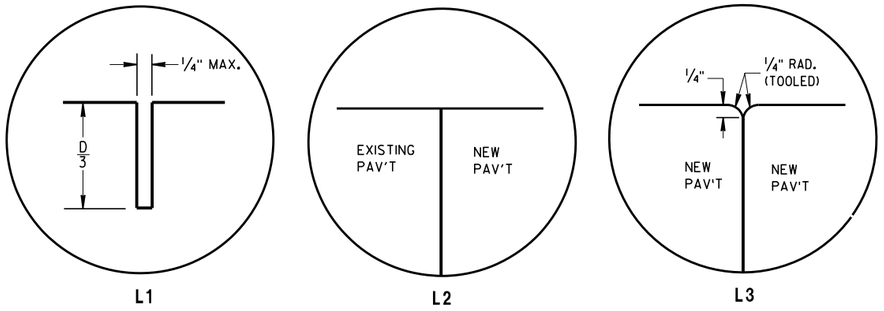
S.D.D. 13 C 14-7a

S.D.D. 13 C 14-7a

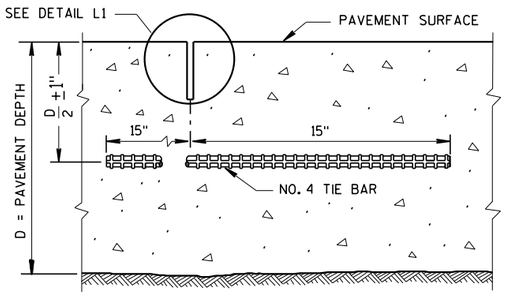
BASE PATCHING CONCRETE



TRANSVERSE JOINTS

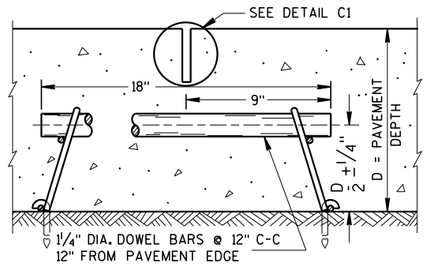


LONGITUDINAL JOINTS



SECTION C-C

SAWED LONGITUDINAL JOINT



SECTION F-F

CONTRACTION JOINT

GENERAL NOTES

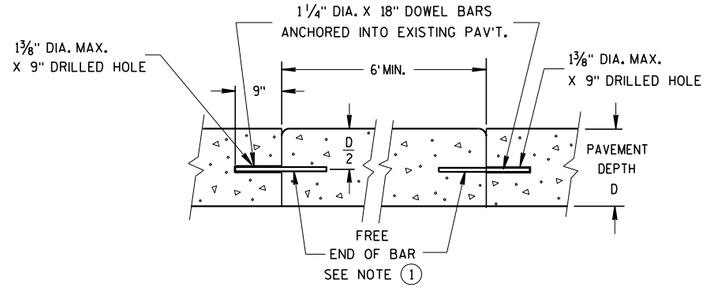
INSTALL DOWEL BARS PARALLEL TO THE PAVEMENT CENTERLINE AND PAVEMENT SURFACE.

CONCRETE BASE PATCHES OF EXISTING NONDOWELED CONCRETE PAVEMENTS DO NOT NEED TO BE DOWELED.

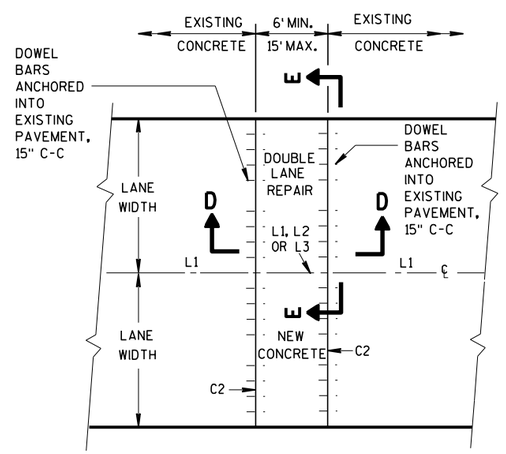
ANCHOR DOWEL BARS AND TIE BARS INTO DRILLED HOLES WITH AN EPOXY.

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.

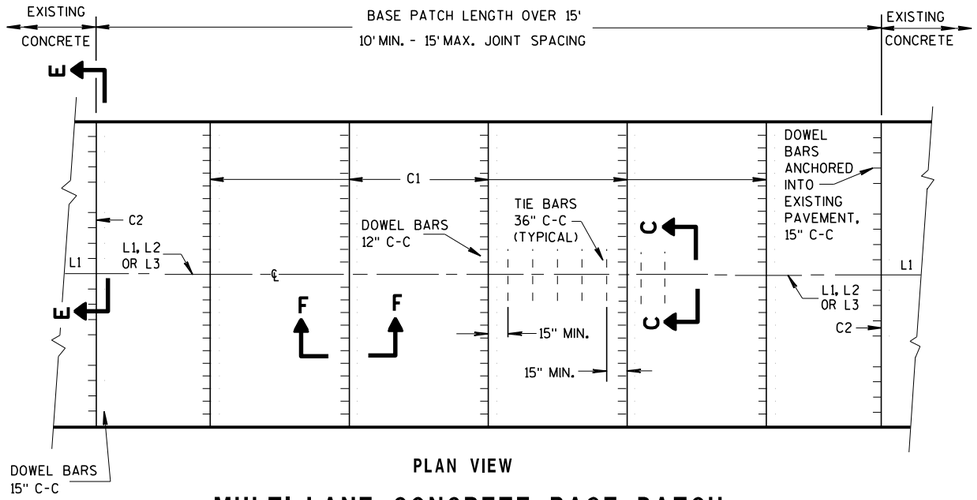


SECTION D-D



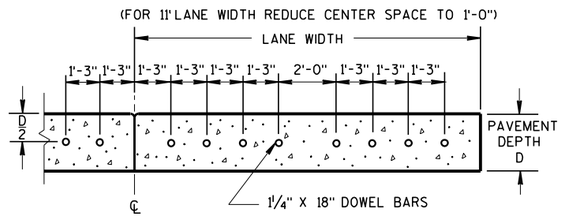
PLAN VIEW

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

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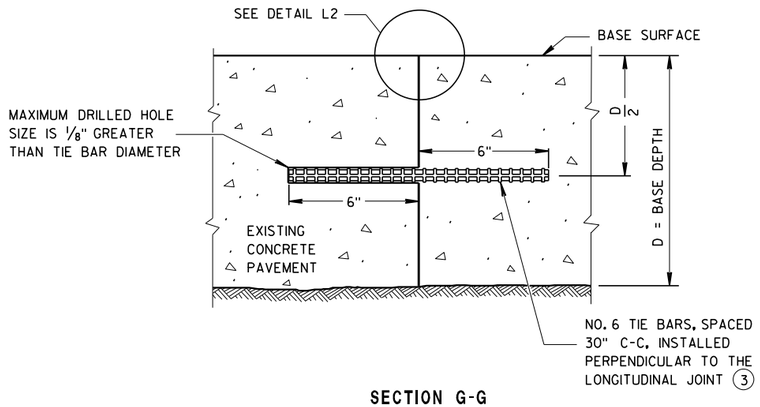
S.D.D. 13 C 14-7b



SECTION G-G

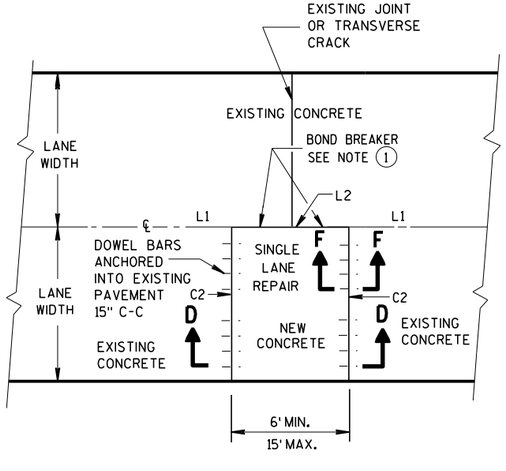
TIE BARS ANCHORED INTO EXISTING PAVEMENT

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.

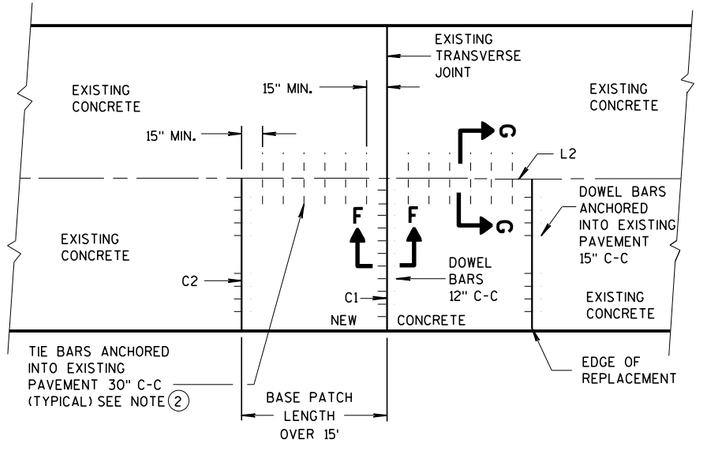
(2) WITH THE APPROVAL OF THE ENGINEER, FOR SINGLE LANE PAVEMENT REPLACEMENTS LESS THAN 30 FEET IN LENGTH, DRILLED TIE BARS MAY BE INSTALLED ON 6:1 SKEW HORIZONTALLY, DIRECTION OF SKEW ALTERNATING WITH EACH SUCCESSIVE BAR. DRIVE SKEWED TIE BARS TO A DEPTH OF 6 INCHES IN A HOLE OF SUCH A DIAMETER AS TO PROVIDE A TIGHT DRIVEN FIT.

(3) ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.



PLAN VIEW

SINGLE LANE CONCRETE BASE PATCH 15' MAXIMUM LENGTH



PLAN VIEW

SINGLE LANE CONCRETE BASE PATCH GREATER THAN 15' IN LENGTH

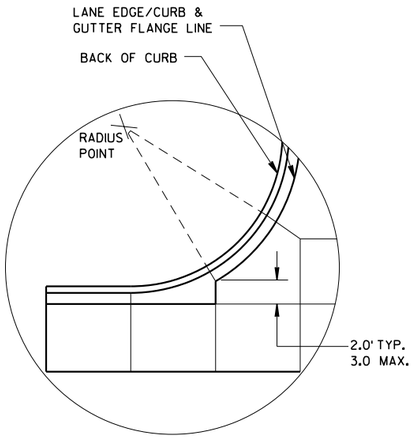
BASE PATCHING CONCRETE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

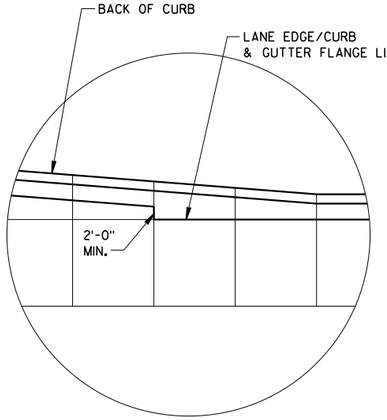
APPROVED
March 2018 — DATE
/S/ Peter Kemp P.E. — PAVEMENT SUPERVISOR
FHWA

6

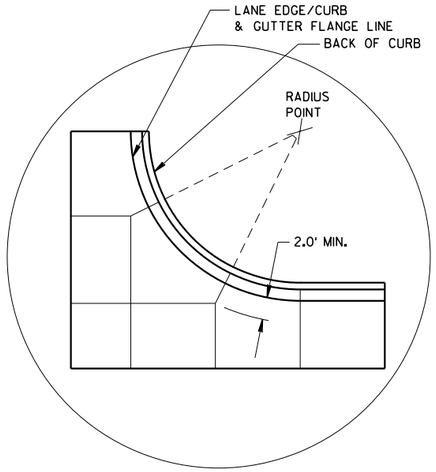
S.D.D. 13 C 14-7c



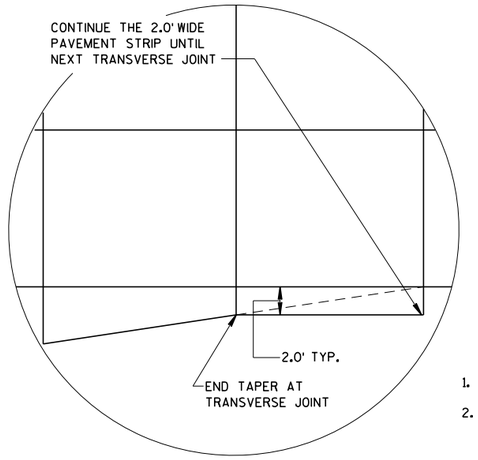
DETAIL "A"



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.

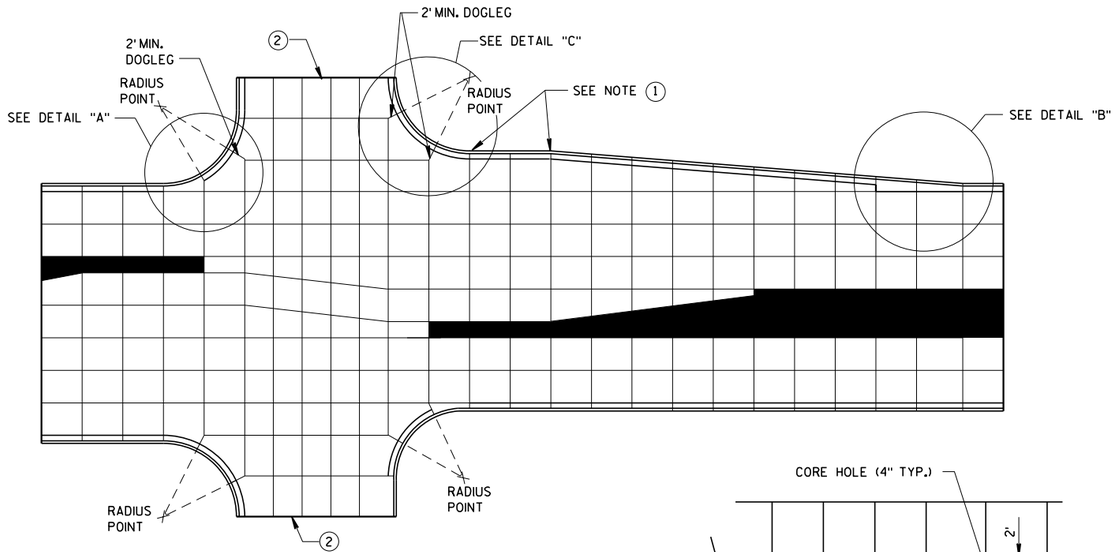
AVOID SLABS LESS THAN 2 FEET WIDE OR GREATER THAN 15 FEET WIDE.

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.

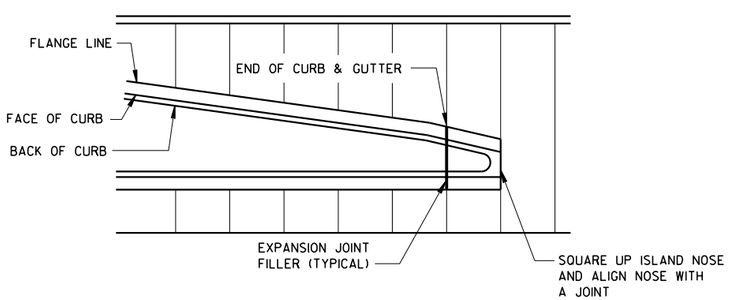


STANDARD INTERSECTION

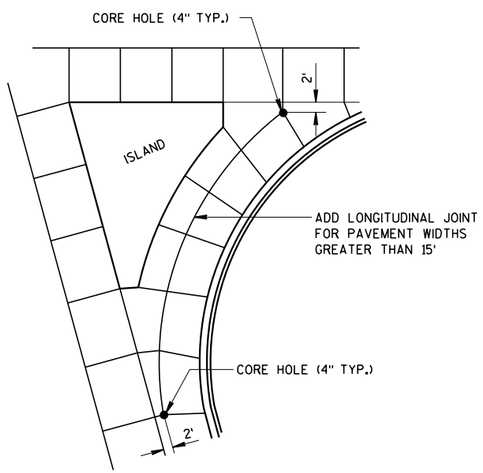
PAVEMENT DEPTH AND JOINT SPACING TABLE

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

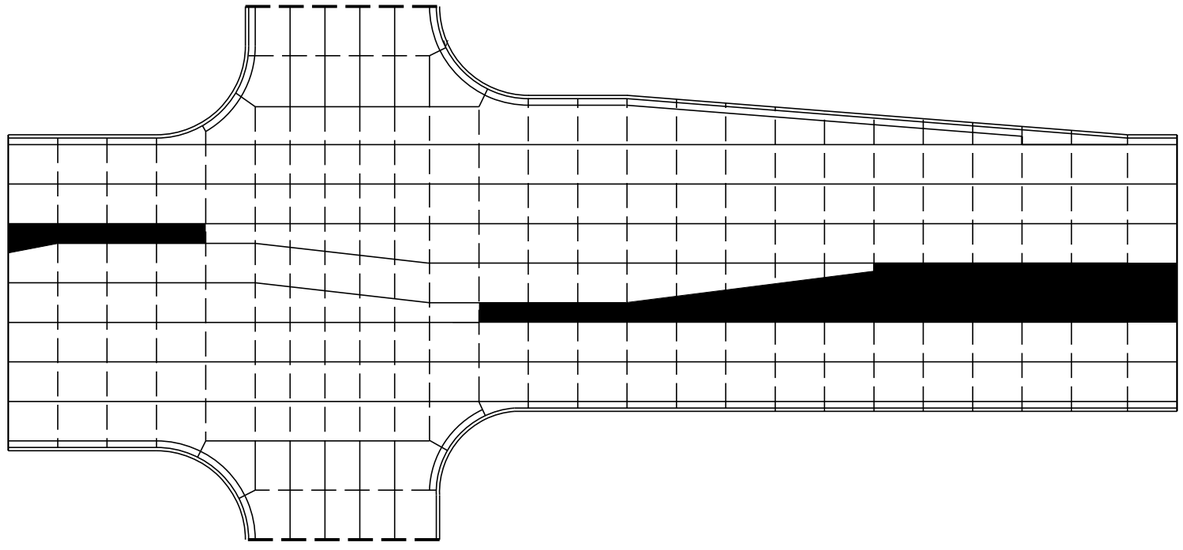
6
S.D.D. 13 C 18-6a

LEGEND

POTENTIAL DOWELED EXPANSION JOINT

DOWELED JOINT

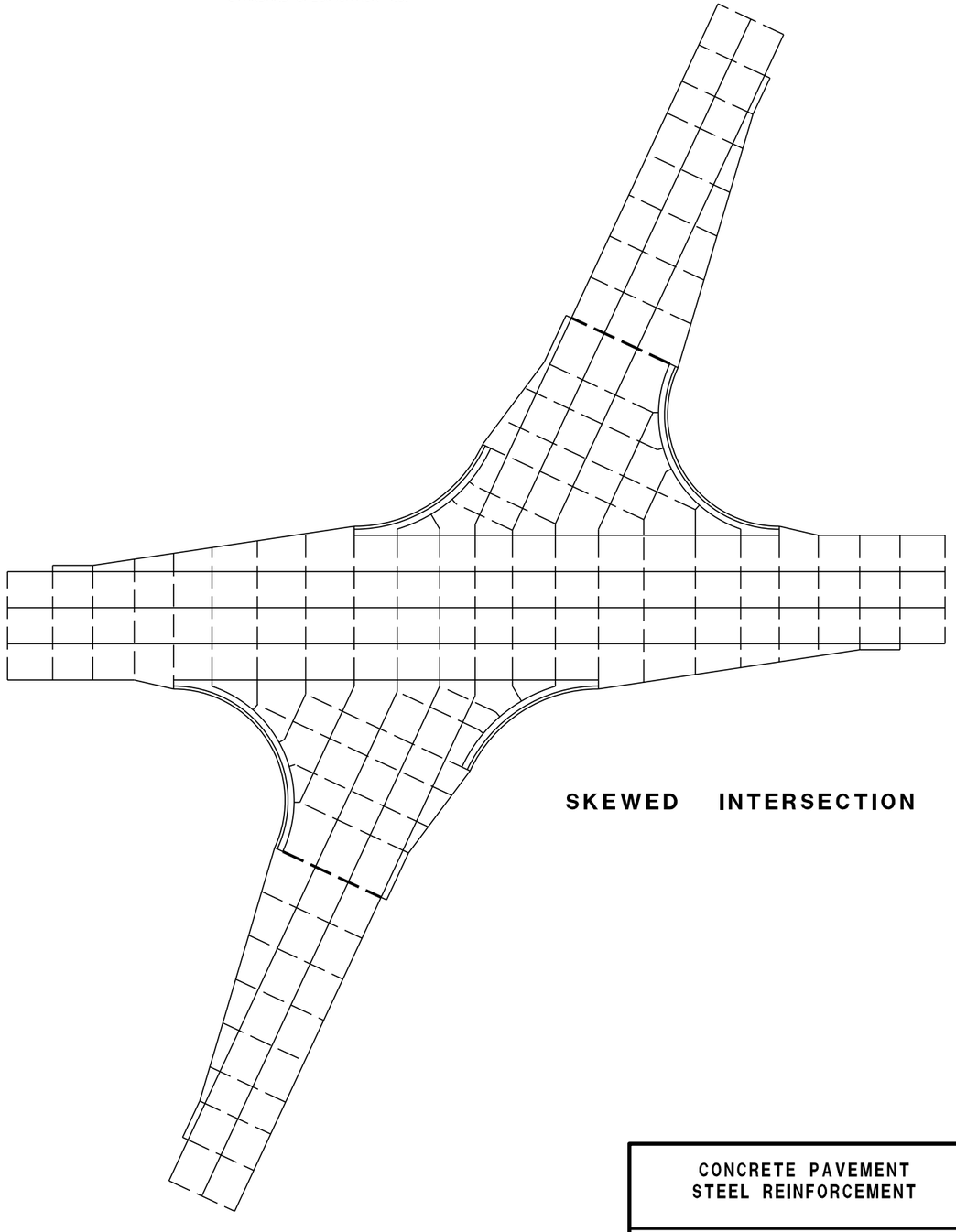
TIED JOINT



STANDARD INTERSECTION

GENERAL NOTES

USE AN EXPANSION JOINT FILLER MEETING THE REQUIREMENTS OF STANDARD SPECIFICATION 415.



SKEWED INTERSECTION

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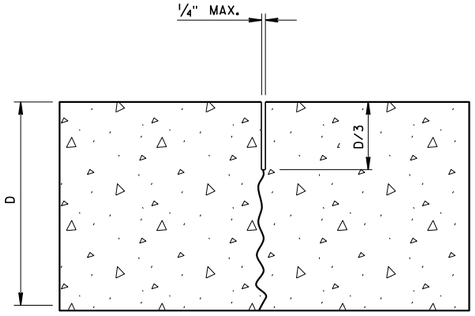
S.D.D. 13 C 18-6b

CONCRETE PAVEMENT
STEEL REINFORCEMENT

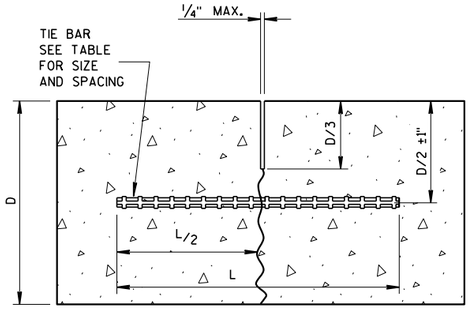
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

S.D.D. 13 C 18-6b



UNDOWELED-TRANSVERSE



TIED LONGITUDINAL

TIE BAR TABLE

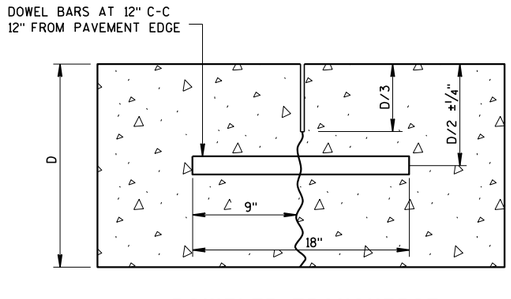
PAVEMENT DEPTH (D)	TIE BAR SIZE	TIE BAR LENGTH (L)	MAX. TIE BAR SPACING
< 10 1/2"	NO. 4	30"	36"
≥ 10 1/2"	NO. 5	36"	36"
	NO. 4 *	30"	24" **

* 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

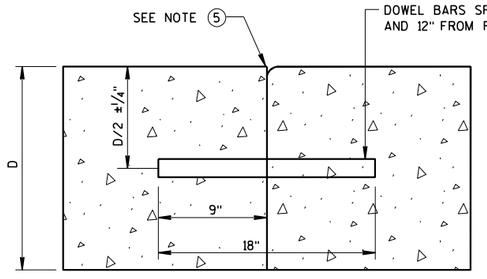
1. USE DOWELED EXPANSION JOINTS ON SIDE ROADS AT INTERSECTIONS (TO ISOLATE THE SIDE ROAD FROM THE THROUGH STREET) IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH.
2. SPACE CONTRACTION JOINTS IN ACCORDANCE WITH 13C4, 13C11 OR 13C13.
3. LOCATE CONSTRUCTION JOINTS A MINIMUM OF 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.



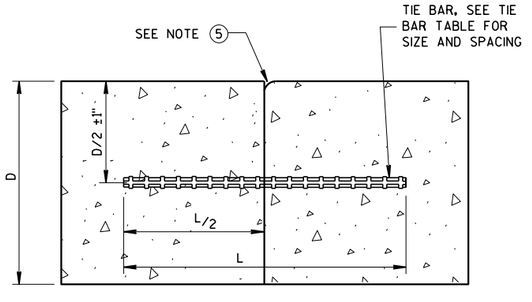
DOWELED-TRANSVERSE

CONTRACTION JOINTS

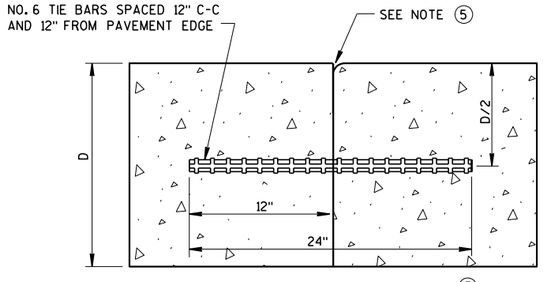
SEE NOTE (2)



DOWELED TRANSVERSE (3)

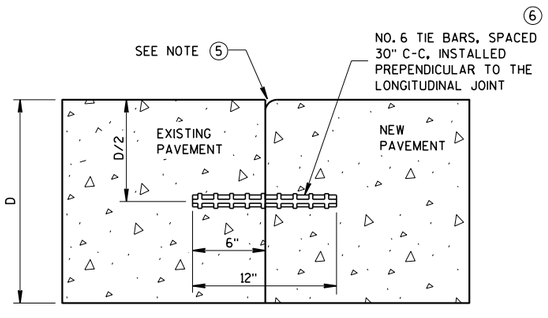


TIED LONGITUDINAL



TIED TRANSVERSE (3)

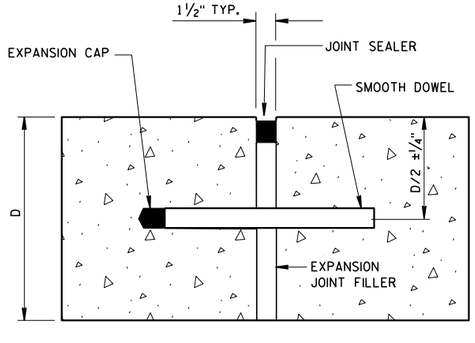
(FOR USE ON NON-DOWELED PAVEMENTS ONLY)



TIED LONGITUDINAL TO EXISTING

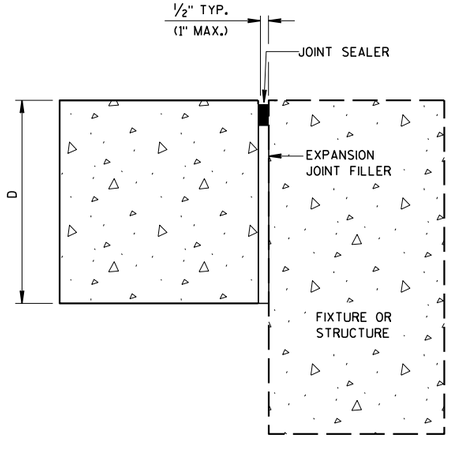
CONSTRUCTION JOINTS

SEE NOTE (4)



DOWELED-TRANSVERSE

SEE NOTE (1)



UNTIED-LONGITUDINAL

EXPANSION JOINTS

CONCRETE PAVEMENT
JOINT TYPES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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S.D.D. 13 C 18-6c

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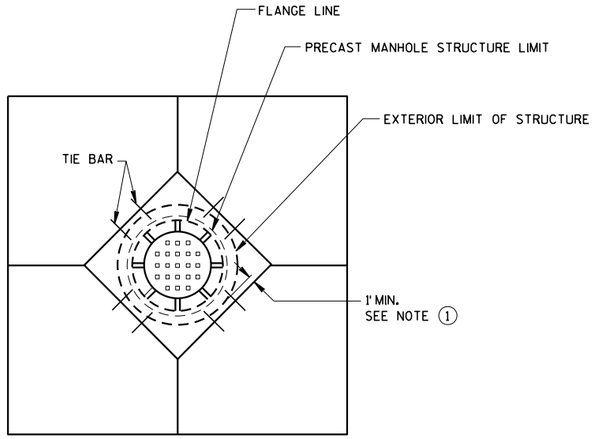
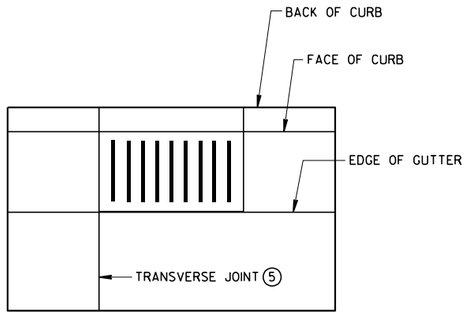
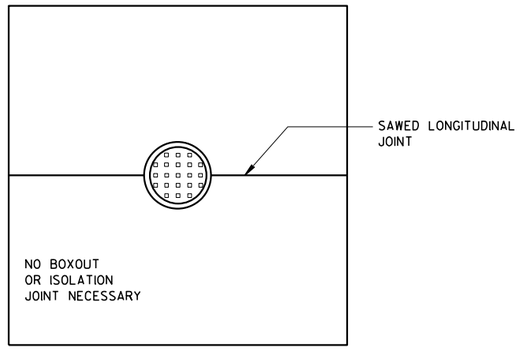
S.D.D. 13 C 18-6c



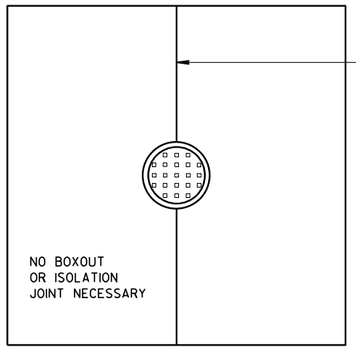
DIAGONAL MANHOLE BOXOUT FOR CONSTRUCTION JOINTS



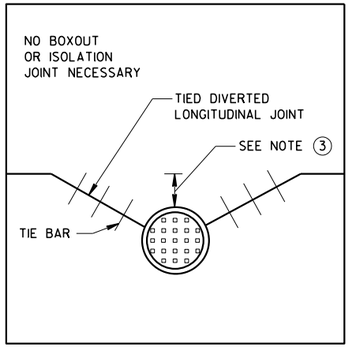
INLET WITH TRANSVERSE JOINT



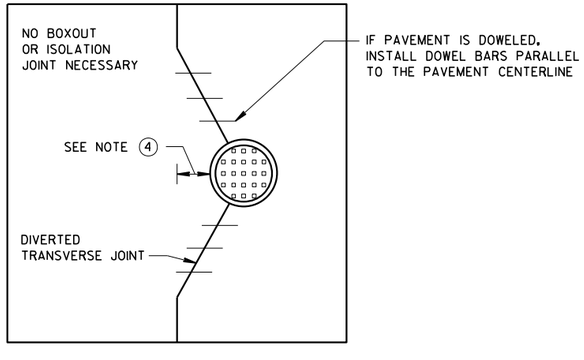
MANHOLE WITH LONGITUDINAL JOINT



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
March 2018 — DATE
/S/ Peter K... P.E. — PAVEMENT SUPT
FHWA

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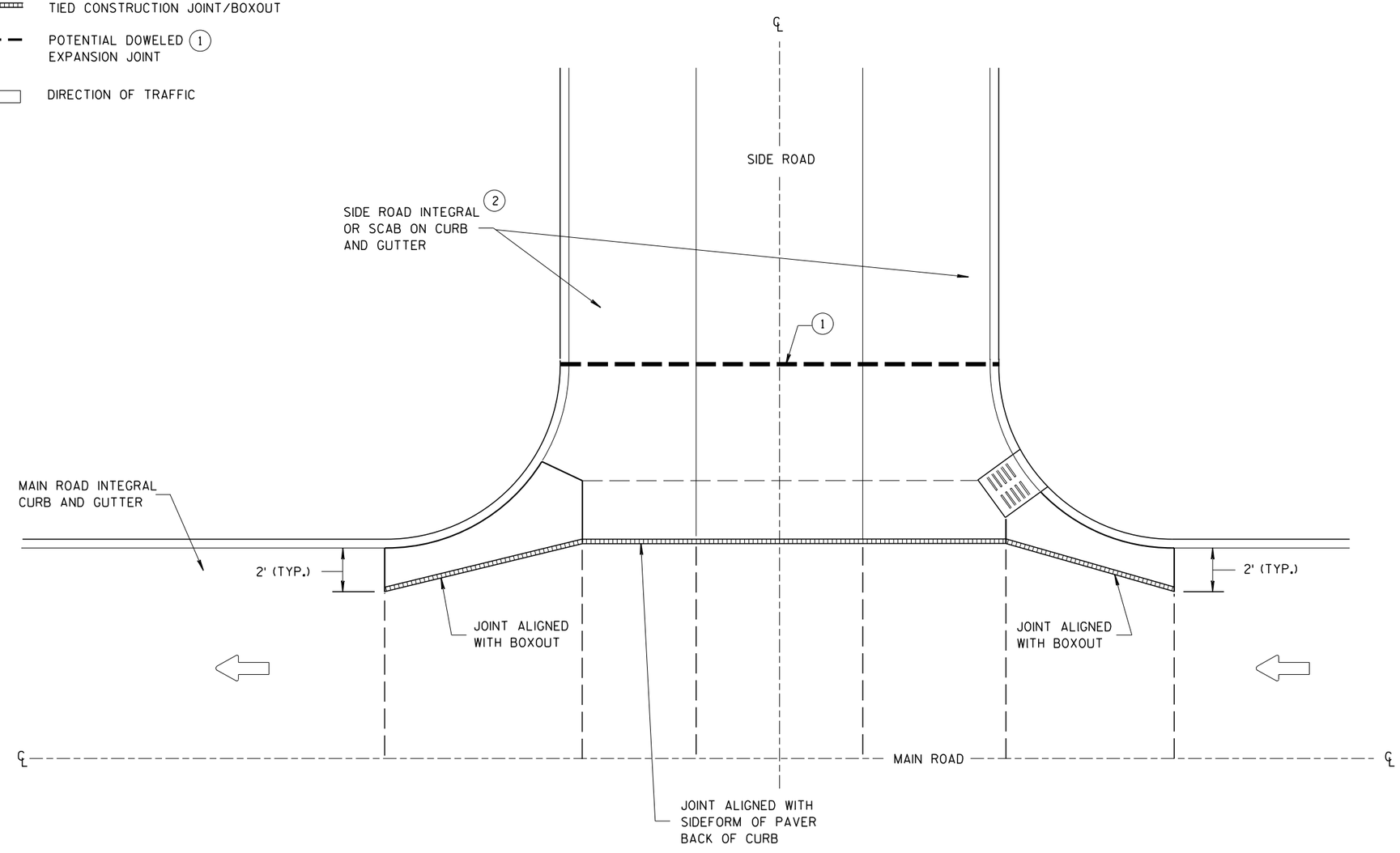
LEGEND

- DOWELED JOINT
- TIED JOINT
- TIED CONSTRUCTION JOINT/BOXOUT
- POTENTIAL DOWELED EXPANSION JOINT (1)
- DIRECTION OF TRAFFIC



GENERAL NOTES

1. 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.
2. PROVIDE TIED JOINT AT THE FLANGE OF SCAB ON CURB IF SCAB ON CURB AND GUTTER IS USED.

INTERSECTION BOXOUT FOR INTEGRAL CURB AND GUTTER

CONCRETE PAVEMENT INTERSECTION BOXOUT FOR INTEGRAL CURB AND GUTTER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2018 — DATE
/S/ Peter Kerr, P.E. — PAVEMENT SUF
FHWA

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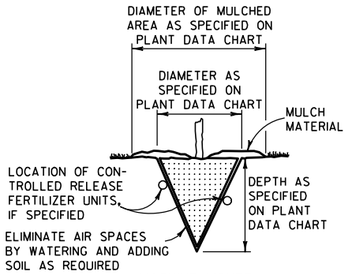
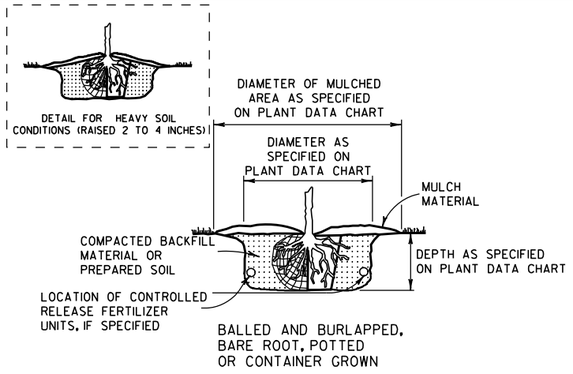
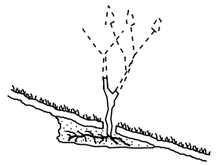
S.D.D. 13 C 18-6f



MACHINE MOVED

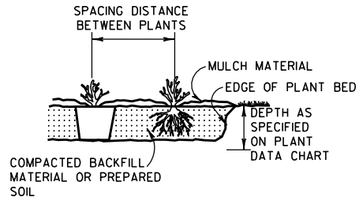


BALLED AND BURLAPPED, BARE ROOT, POTTED OR CONTAINER GROWN



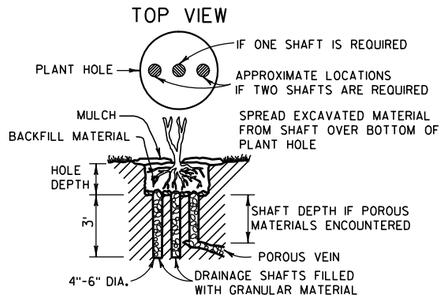
ACCOMMODATE ROOTS (SMOOTH AND STAGHORN SUMAC)

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



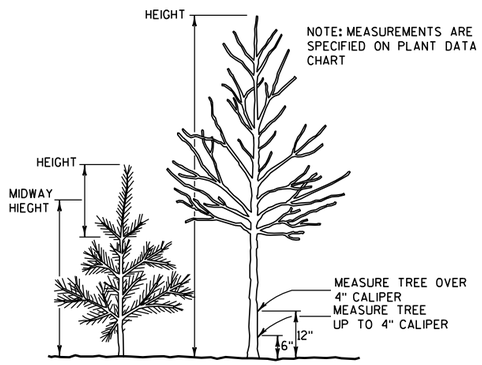
PREPARED BED (BARE ROOT AND POTTED)

PLANTING

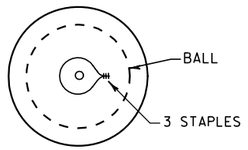


NOTE:
DRAINAGE SHAFT AS SPECIFIED ON PLANT DATA CHART

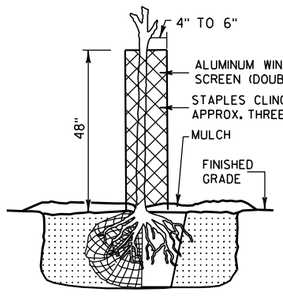
DRAINING



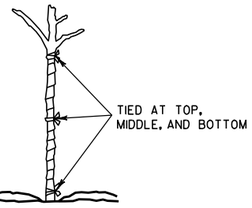
MEASURING



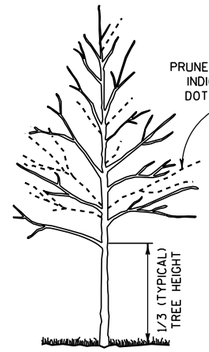
TOP VIEW



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)

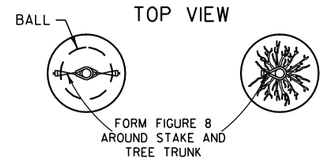
NOTE: WHEN PRUNING, PRESERVE CHARACTER AND SHAPE OF TREE. AVOID LEAVING STUBS - REMOVE BRANCH OR TWIG BACK TO THE NEAREST CROTCH
1) PRUNE TO REMOVE DEAD AND BROKEN BRANCHES
2) PRUNE TO REMOVE BRANCHES THAT TOUCH OR ARE TOO CLOSE TO OTHER BRANCHES

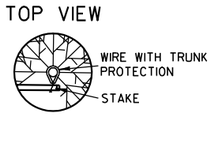
SHRUBS (GRAY DOGWOOD ARROWWOOD VIBURNUM)

SUMAC

TREE TYPE EVERGREENS (PINE, SPRUCE, FIR) EVERGREENS USUALLY ARE NOT PRUNED

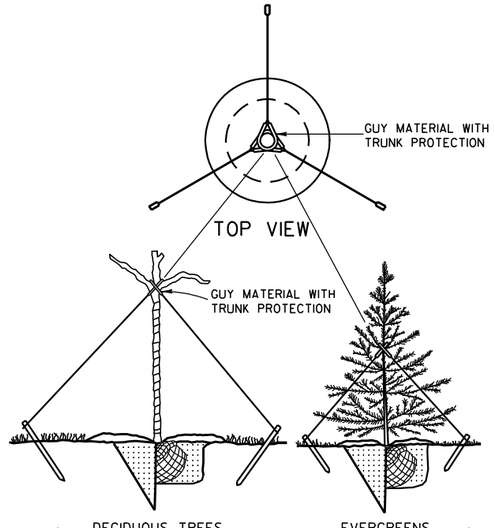
PRUNING





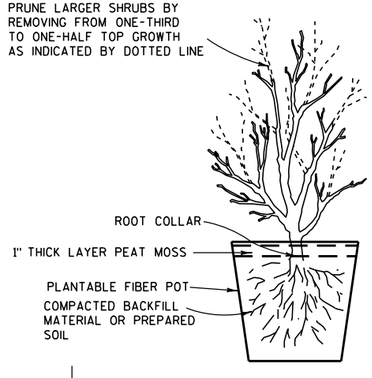
NOTE: BRACING STAKE
1) SHALL BE DRIVEN INTO THE GROUND AS CLOSE TO THE TREE AS POSSIBLE WITHOUT DAMAGING THE BRANCHES.
2) MAY BE DRIVEN AT SUCH AN ANGLE THAT IT DOES NOT PENETRATE THE BALL OR POT.
3) SHALL NOT PROTRUDE ABOVE THE TOP OF THE TREE; AND
4) SHALL HAVE A HOLE NEAR THE TOP TO HOLD THE WIRE 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

S.D.D. 14 A 2-1

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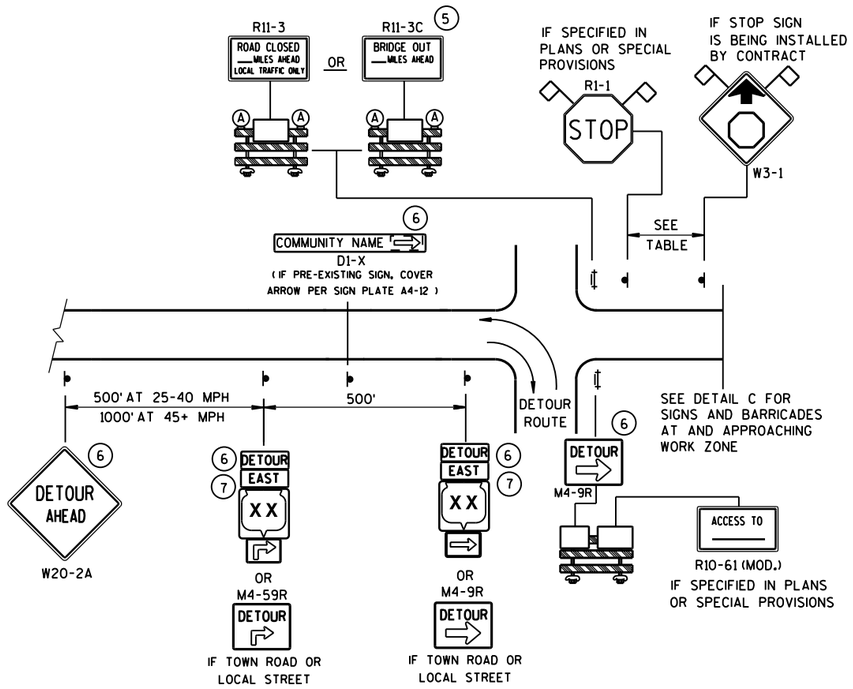
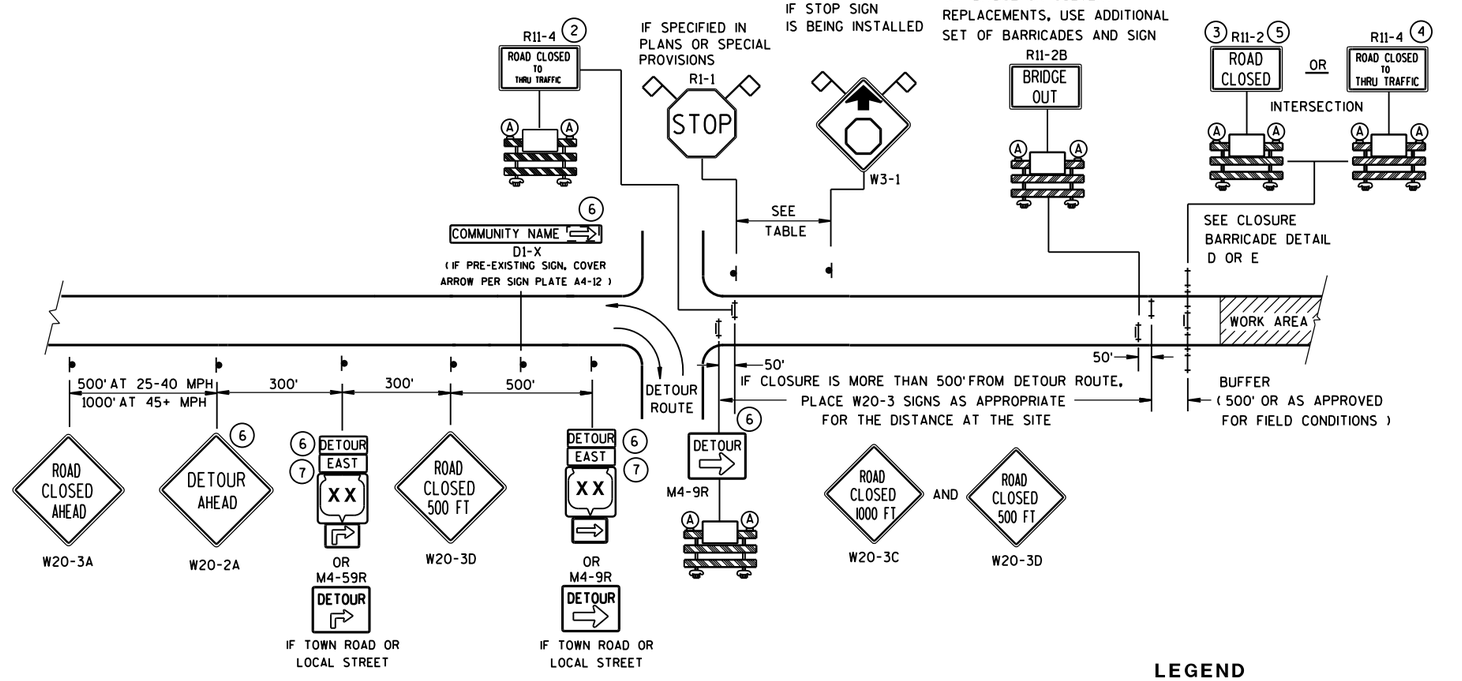
S.D.D. 14 A 2-1



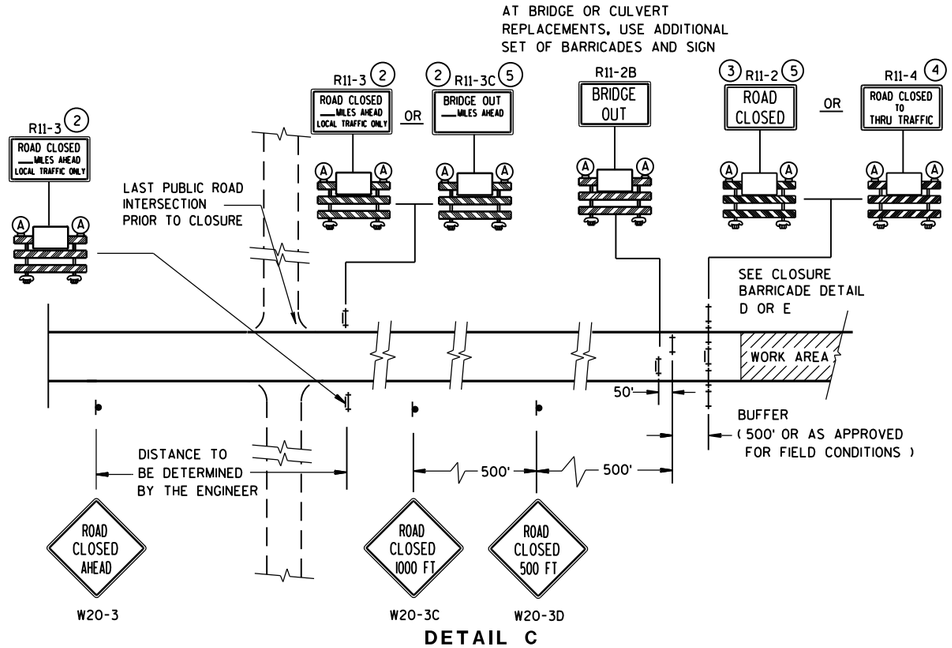
DETAIL A
MAINLINE CLOSURE WITH POSTED DETOUR

WORK ZONE GREATER THAN ½ MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)



DETAIL B
MAINLINE CLOSURE WITH POSTED DETOUR

WORK ZONE LESS THAN ½ MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)



DETAIL C
MAINLINE CLOSURE, NO POSTED DETOUR

SPEED LIMIT (MPH)	"STOP AHEAD" ADVANCE WARNING DISTANCE (FT)
25	200
30	200
35	350
40	350
45	500
50	550
55	750

SEE SDD 15C2-SHEET "**b**" FOR GENERAL NOTES AND FOOTNOTES (1) THROUGH (7)

LEGEND

- SIGN ON PERMANENT SUPPORT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- (A) TYPE "A" WARNING LIGHT (FLASHING)
- WORK AREA
- DETOUR / EAST — M4-8 / M3-X
- XX — M1-4; COUNTY XX — M1-5A; XX — M1-6
- M05-1 OR M06-1
- FLAGS, 16" X 16" MIN., (ORANGE)

BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

Sept. 2015 — DATE
/S/ Peter Amakobe Atepe
STATEWIDE WORK ZONE TRAFFIC SAFETY ENGINEER
FHWA

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S.D.D. 15 C 2-6a

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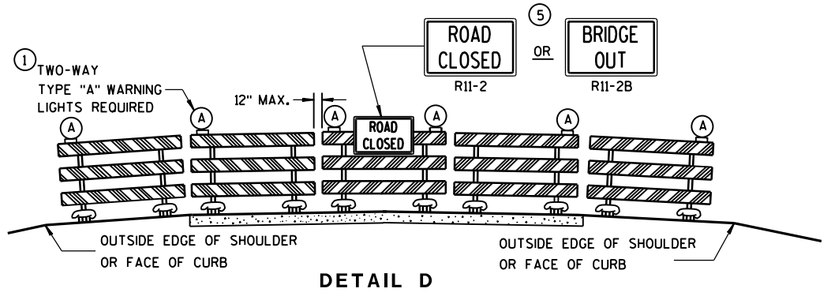
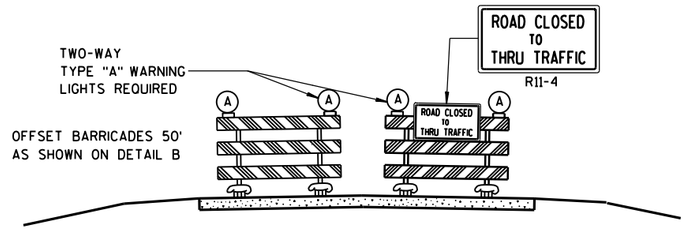
S.D.D. 15 C 2-6a



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 — FIC

FHWA

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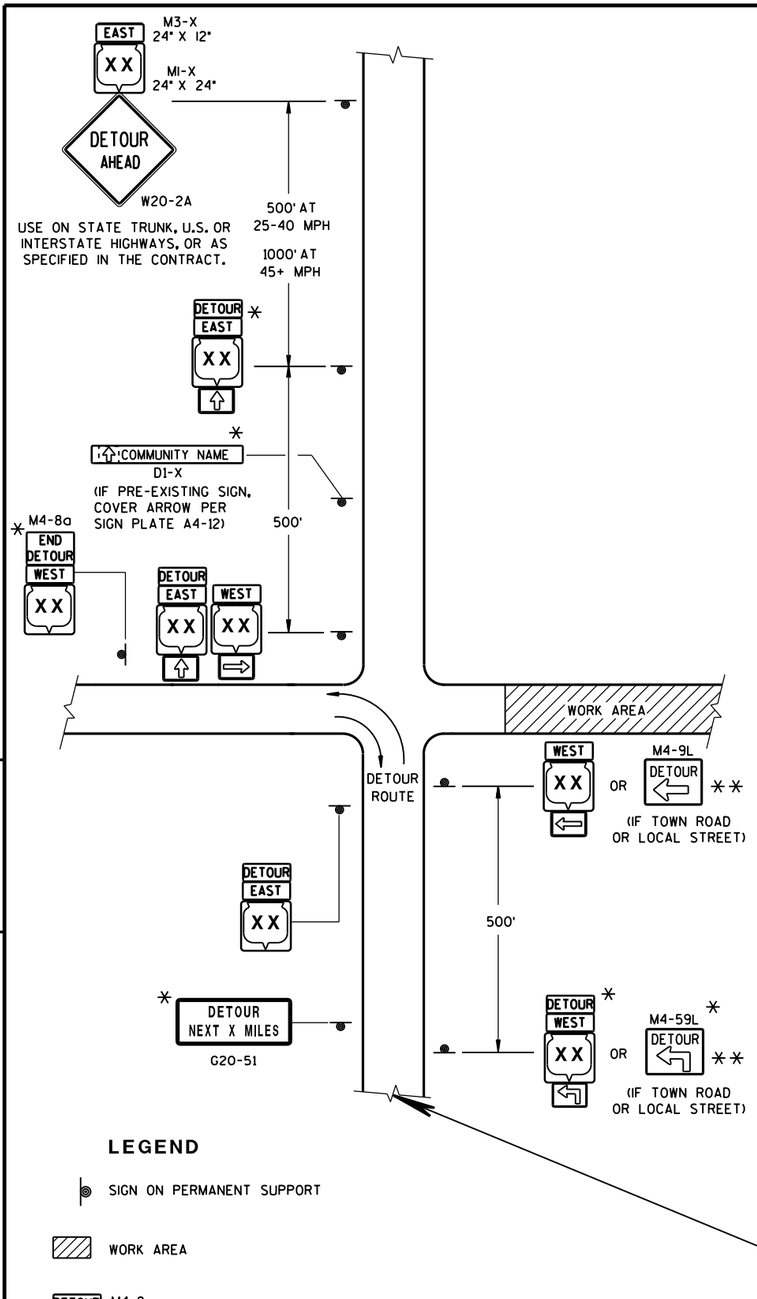
S.D.D. 15 C 2-6b



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.

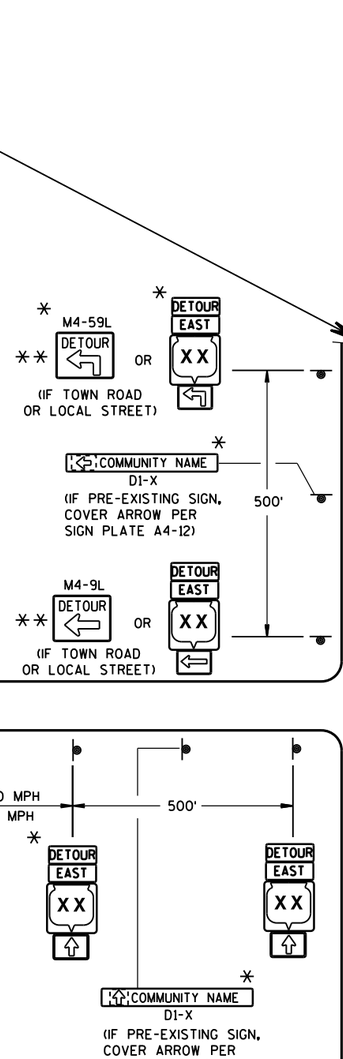
"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

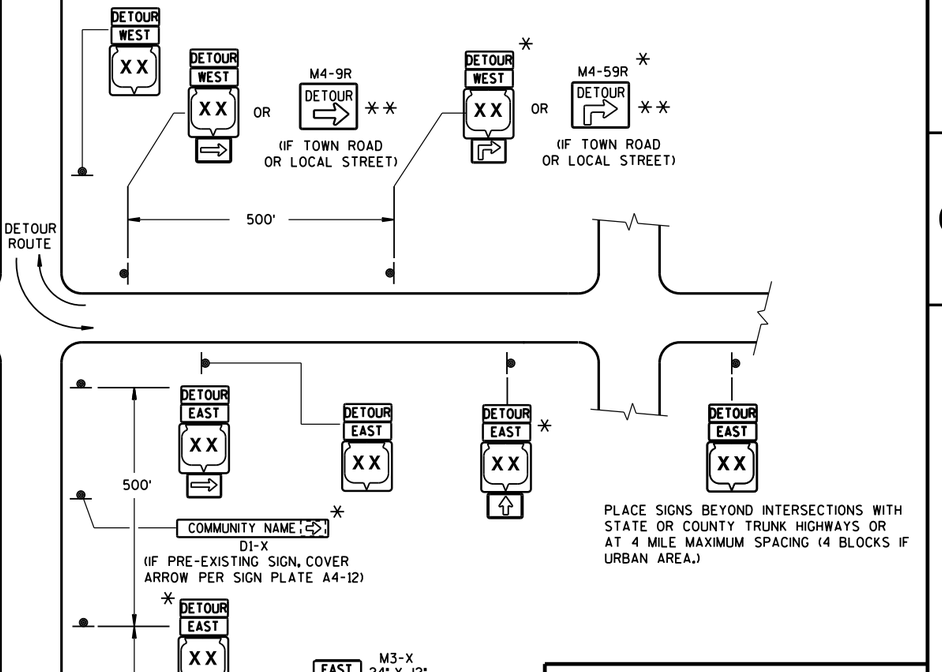
SIGN SIZES SHALL BE AS FOLLOWS:

- 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...

FHWA

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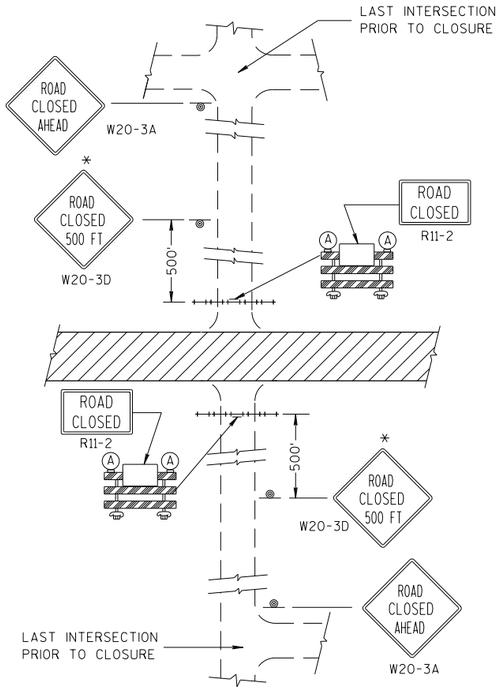
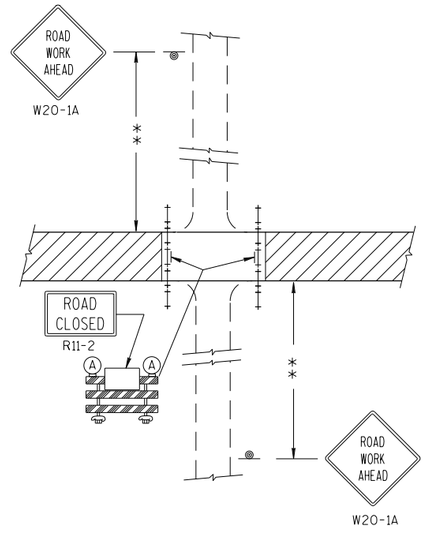
S.D.D. 15 C 2-6c



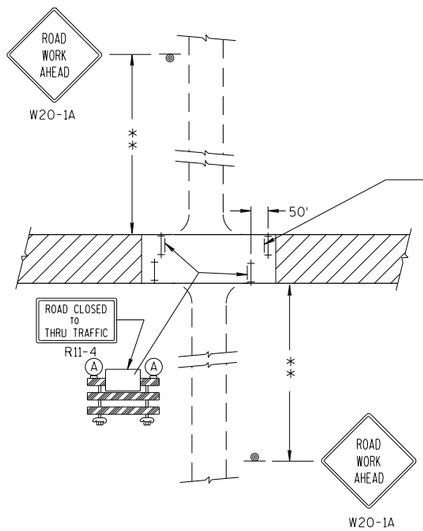
DETAIL 1

(NO ACCESS TO PROJECT)



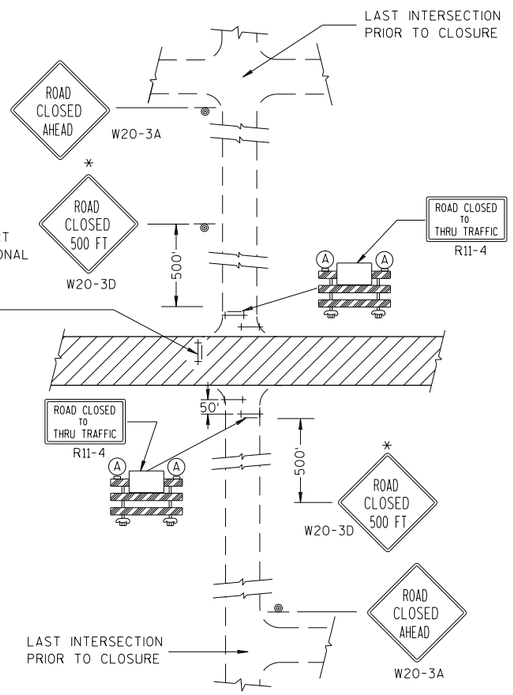
DETAIL 2

(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
7/2018 — DATE
/S/ Andrew Heidtke — WORK ZONE ENGI
FHWA

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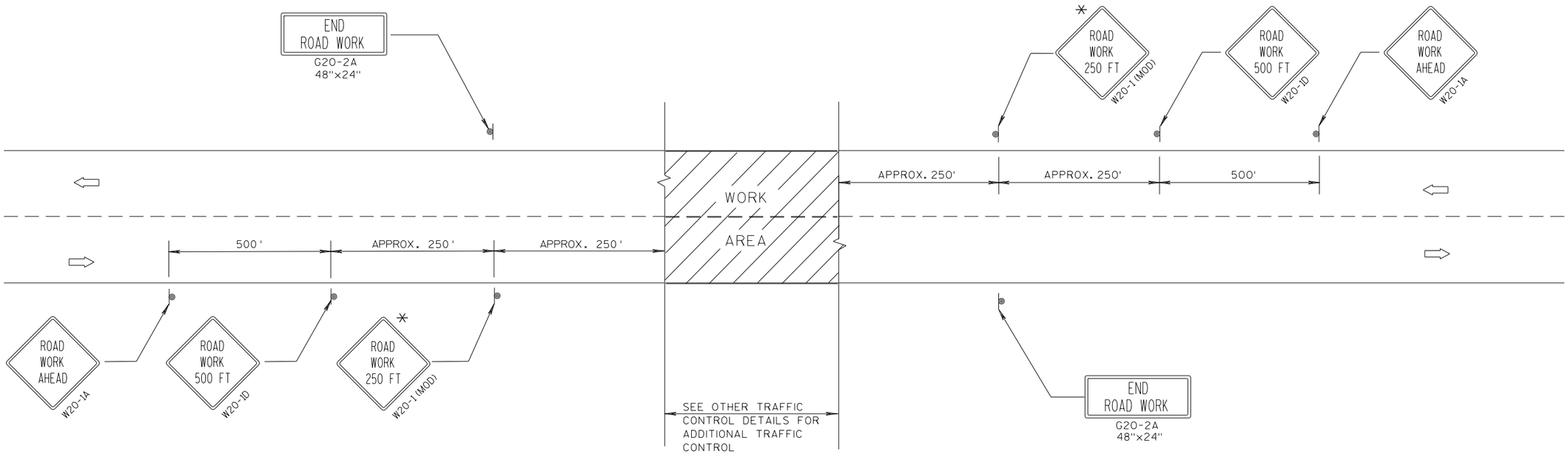
S.D.D. 15 C 3-5

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.

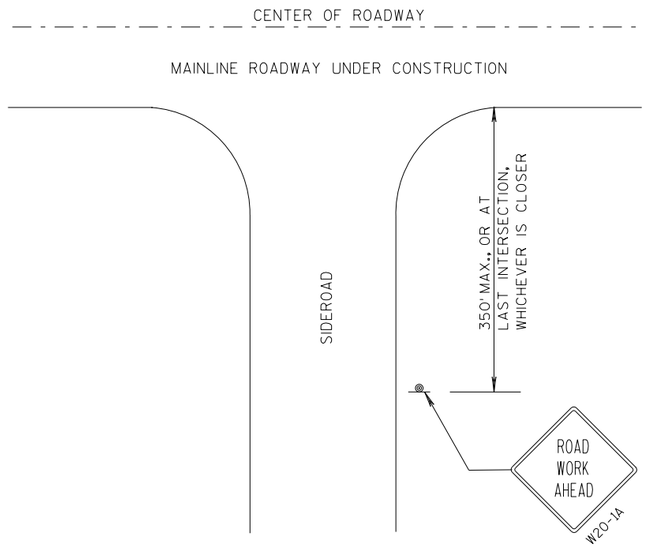
THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

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

7/2018
DATE

/S/ Andrew Heldtke
WORK ZONE ENGI

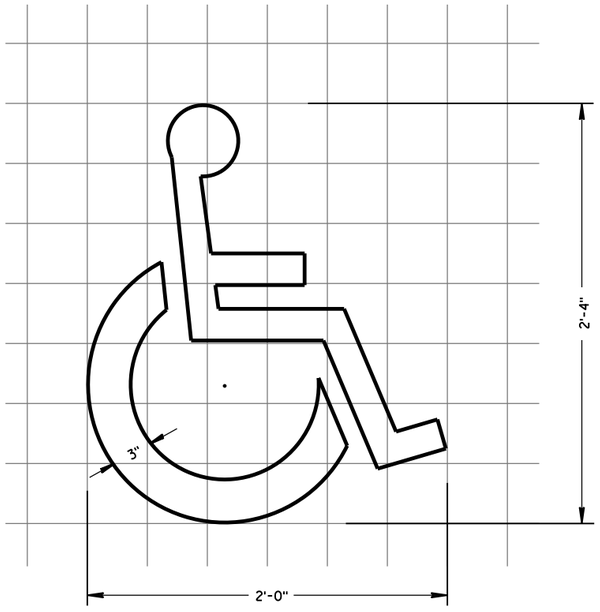
FHWA

6

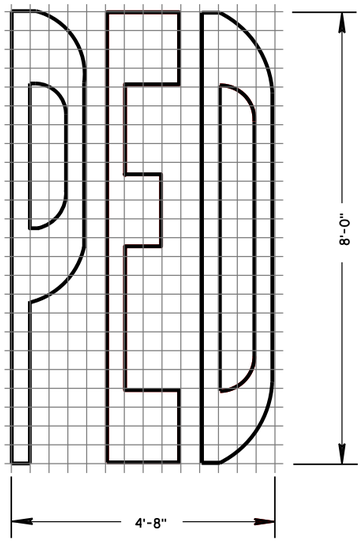
S.D.D. 15 C 5-5

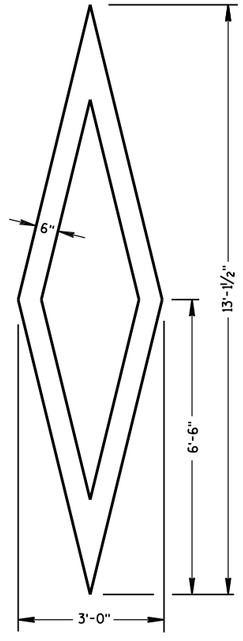
GENERAL NOTES

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.



HANDICAP SYMBOL





PREFERENTIAL LANE SYMBOL

6

6

S.D.D. 15 C 7-14a

S.D.D. 15 C 7-14a

PAVEMENT MARKING SYMBOLS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

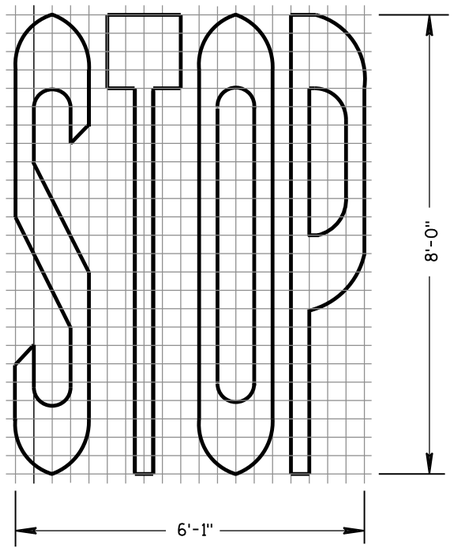
June 2017 — DATE

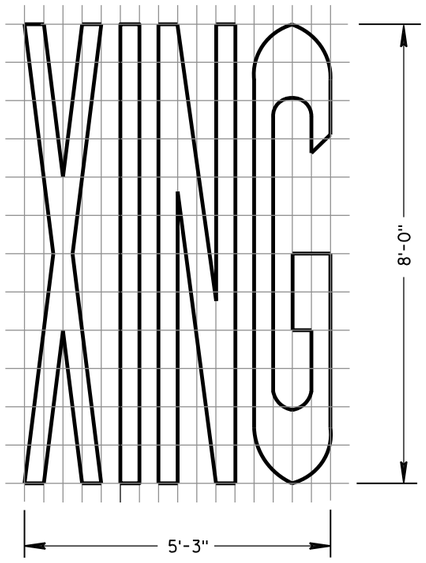
/S/ Matthew R. Rauch — STATE SIGNING AND MARK EER

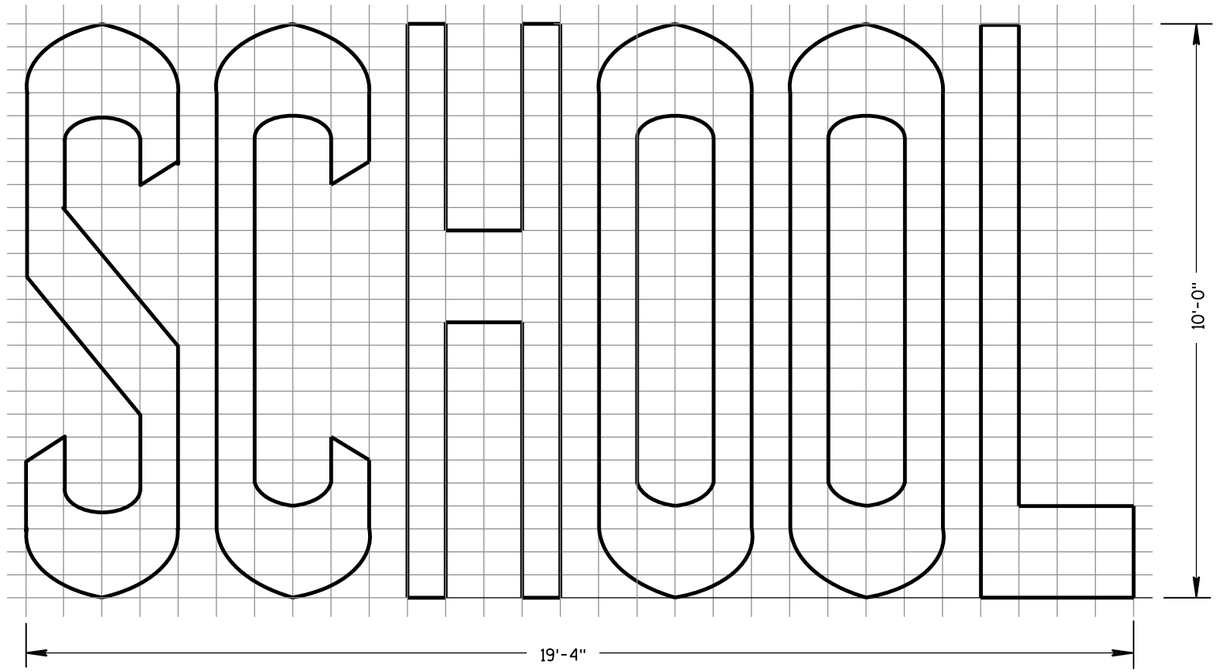
FHWA

GENERAL NOTES

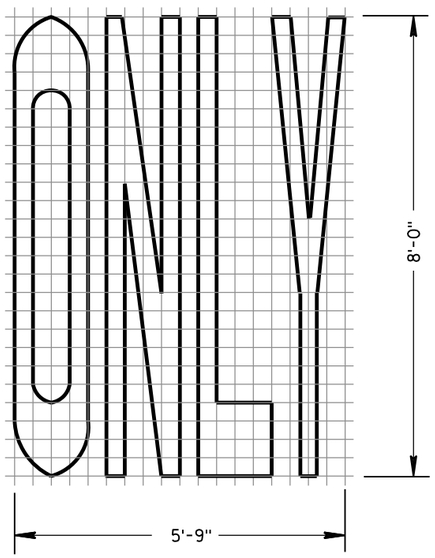
DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

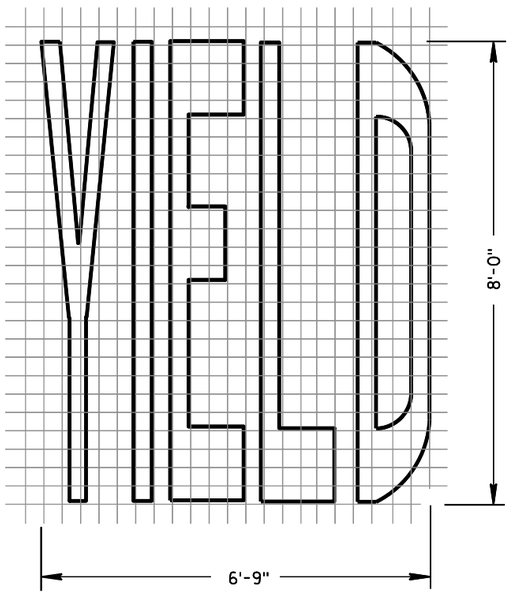


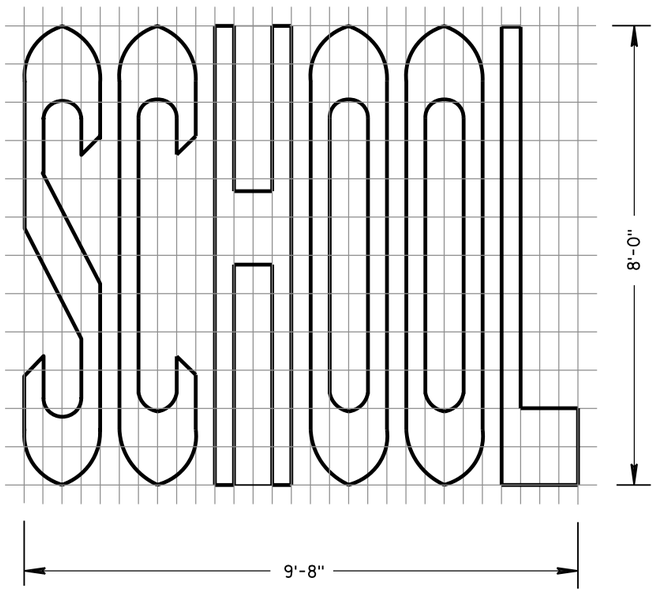




TWO-LANE







SINGLE-LANE

PAVEMENT MARKING WORDS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2017 — DATE
/S/ Matthew R. Rauch — STATE SIGNING AND MARK
EER
FHWA

6

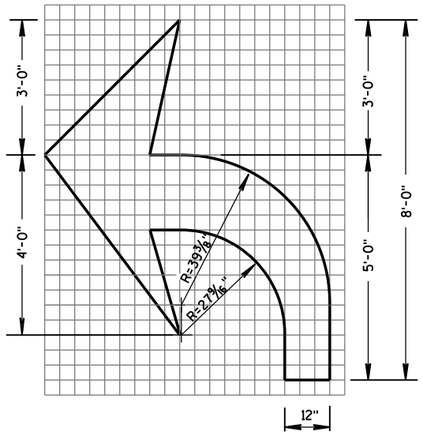
S.D.D. 15 C 7-14b

6

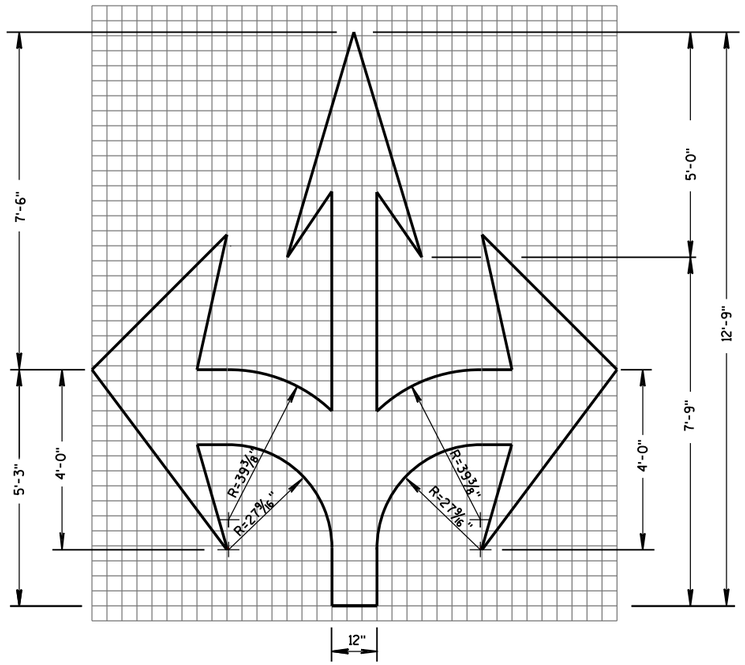
S.D.D. 15 C 7-14b

GENERAL NOTES

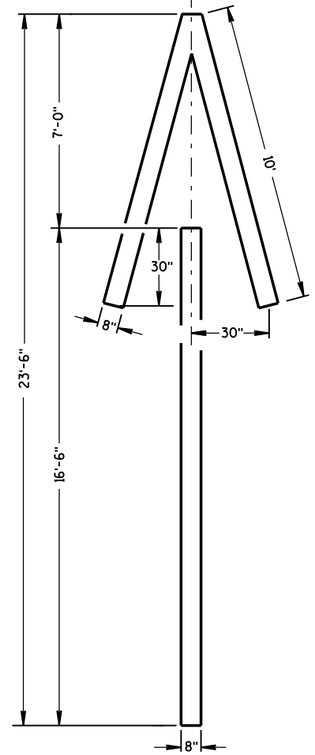
DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.



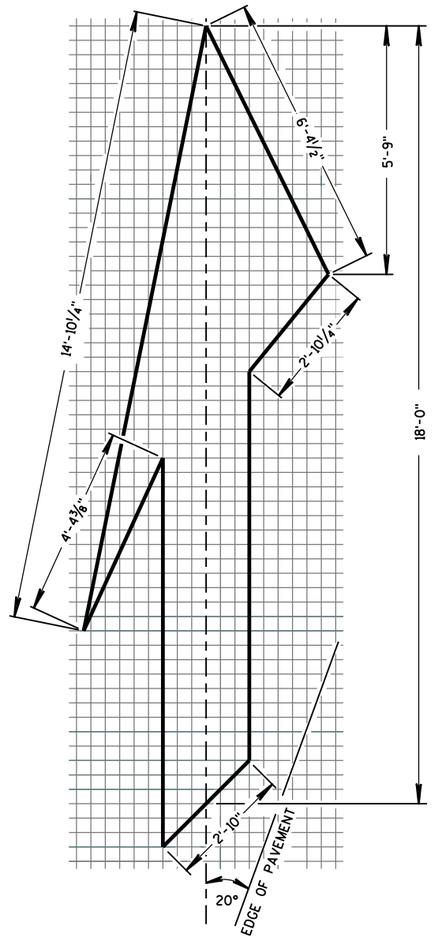
TYPE 2



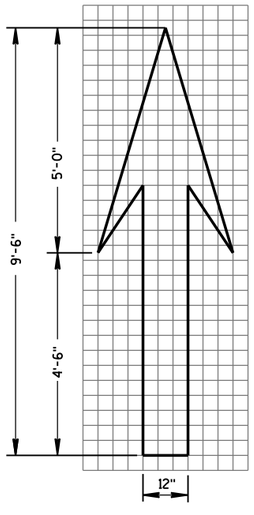
TYPE 6



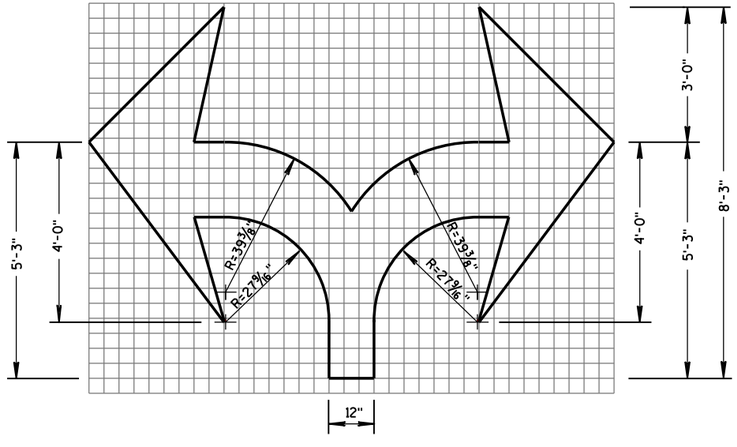
TYPE 4



TYPE 5 LANE DROP ARROW



TYPE 1



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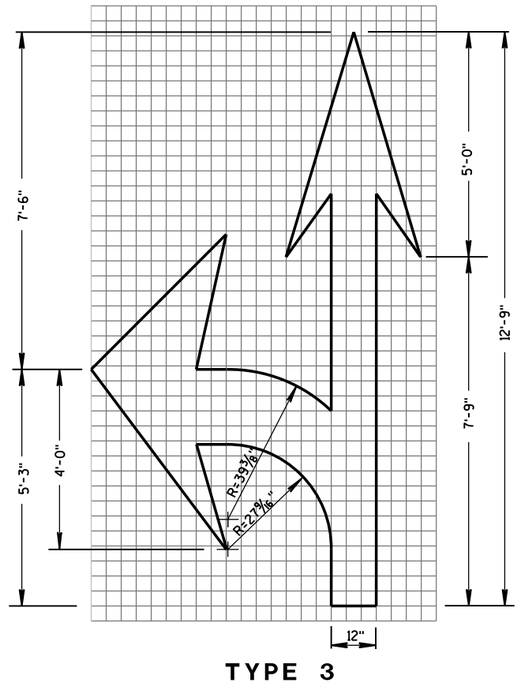

TYPE 3

PAVEMENT MARKING ARROWS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2017 — DATE
/S/ Matthew R. Rauch — STATE SIGNING AND MARKING ENGINEER
FHWA

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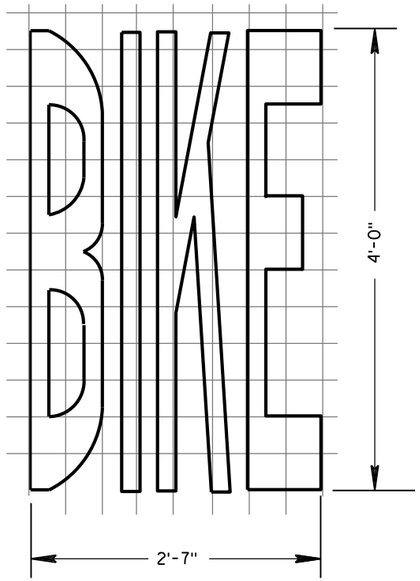
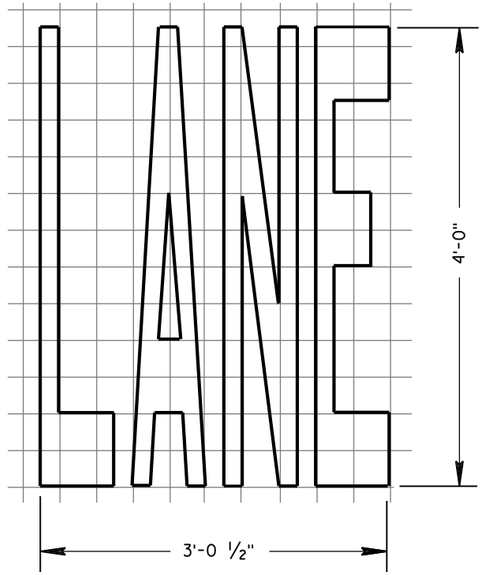
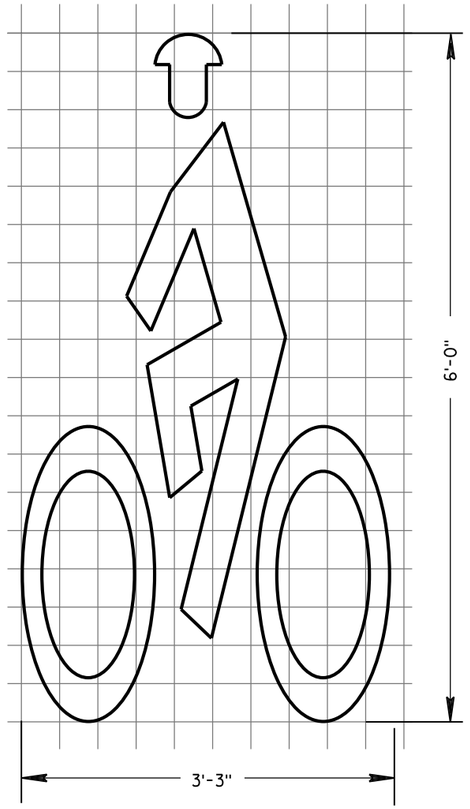
S.D.D. 15 C 7-14c

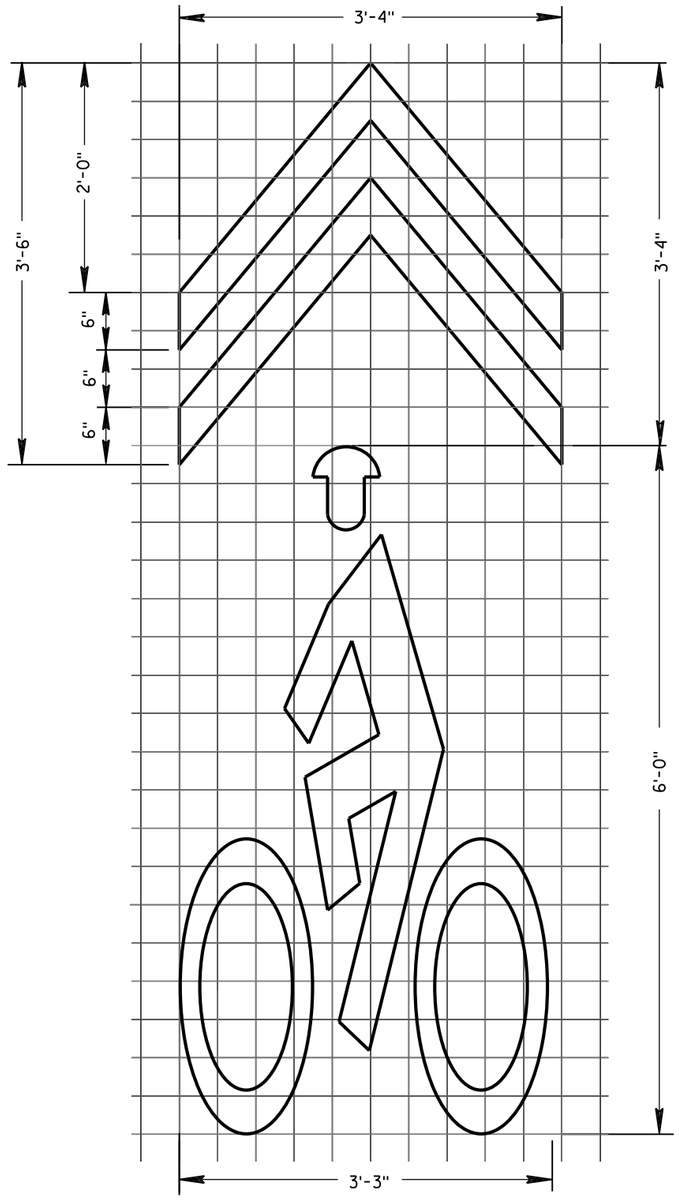




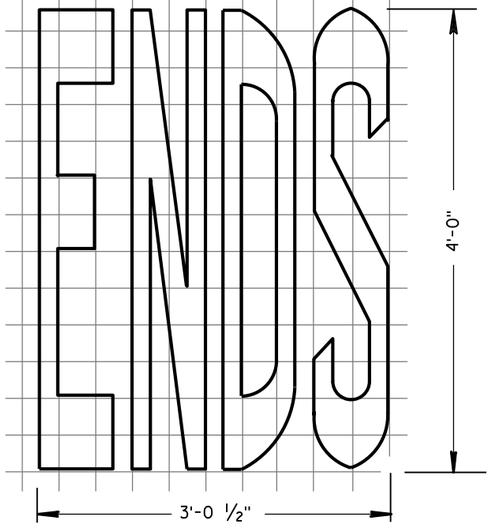
BIKE LANE WORDS



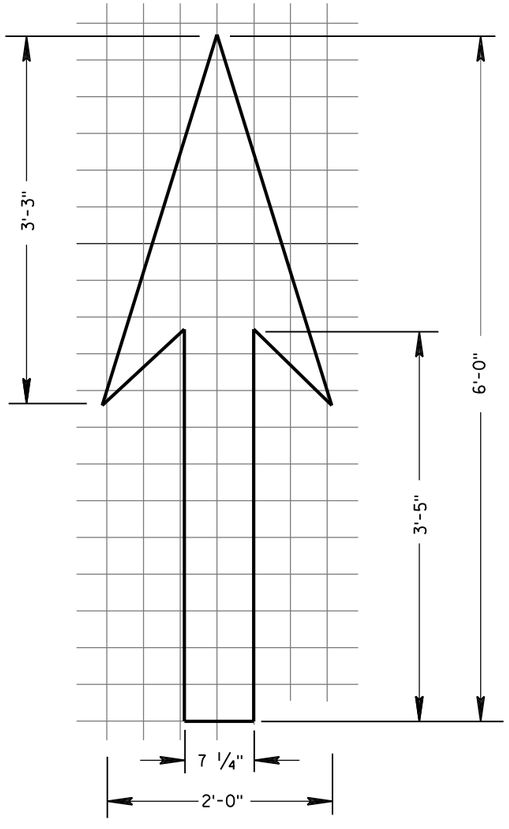
BIKE LANE SYMBOL



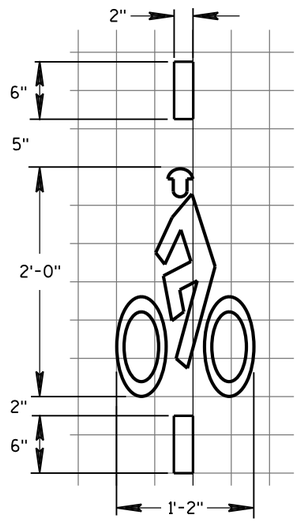
BIKE SYMBOL FOR SHARED LANE



BIKE LANE WORDS



BIKE LANE ARROW



BICYCLE DETECTOR PAVEMENT MARKING

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.

PAVEMENT MARKING FOR BIKE LANES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

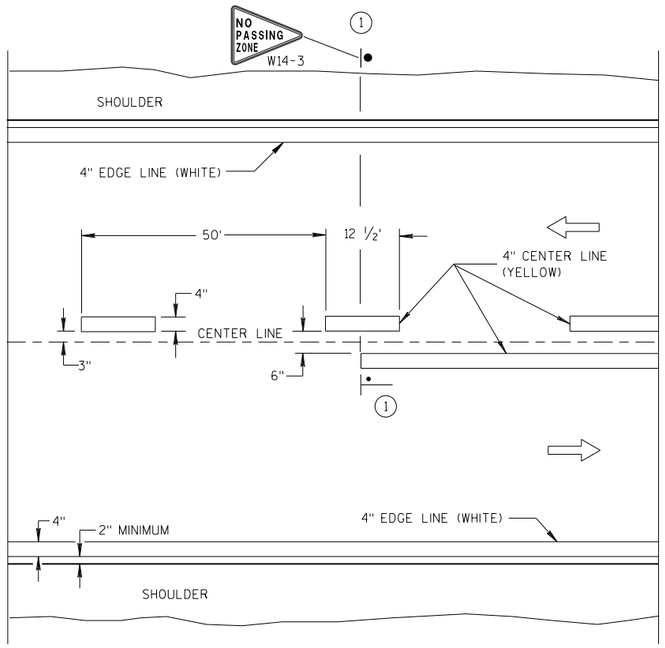
APPROVED
June 2017 — DATE
/S/ Matthew R. Rauch — STATE SIGNING AND MARKING ENGINEER
FHWA

6

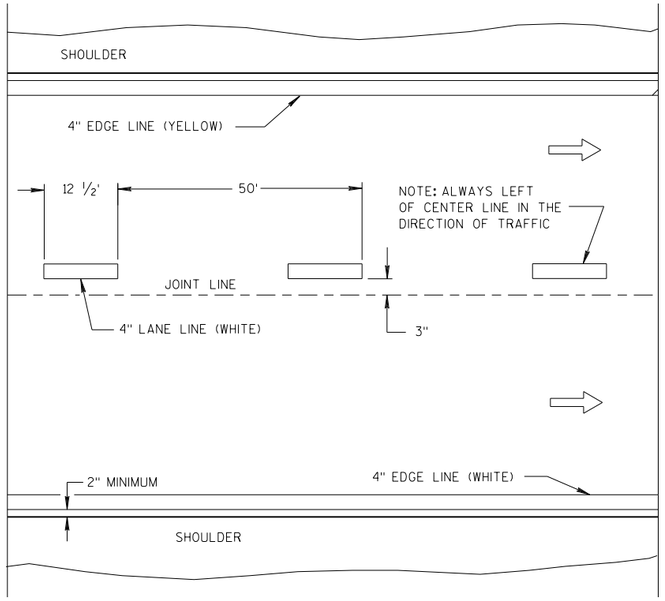
S.D.D. 15 C 7-14e

6

S.D.D. 15 C 7-14e



TWO WAY TRAFFIC



ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING

GENERAL NOTES

DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.

(1) LOCATE THE NO PASSING ZONE W14-3 SIGN WITHIN 50 FEET OF THE "T" MARKING.

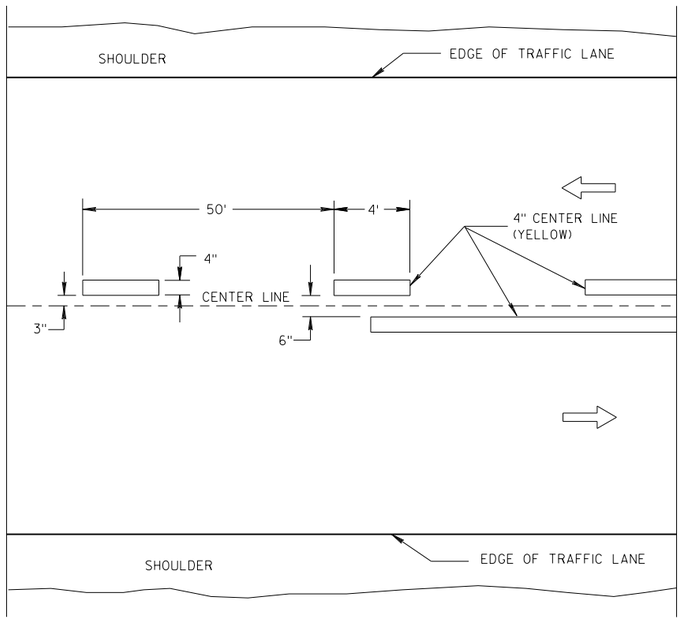
NOTE

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL

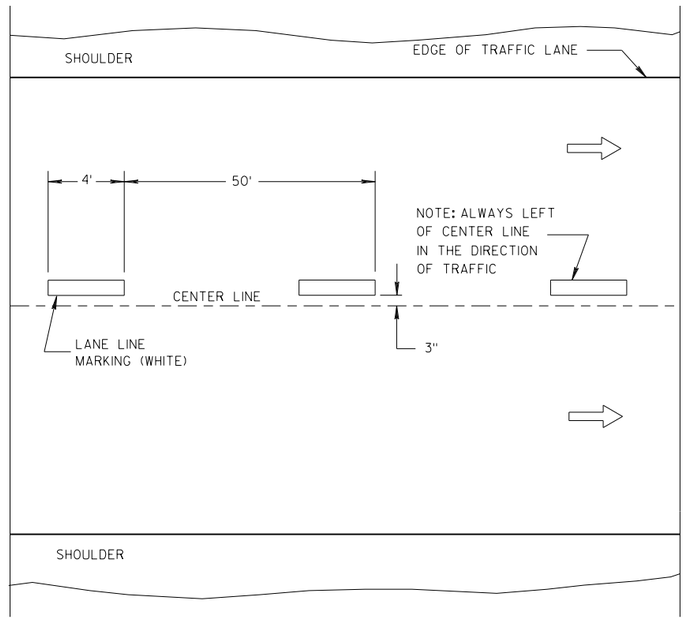
LEGEND

"T" MARKING

POST MOUNTED SIGN



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY PAVEMENT MARKING

LONGITUDINAL MARKING (MAINLINE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

7/2018 — DATE

/S/ Matthew R. Rauch — STATE SIGNING AND MARKING ENGINEER

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S.D.D. 15 C 8-19a

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S.D.D. 15 C 8-19a

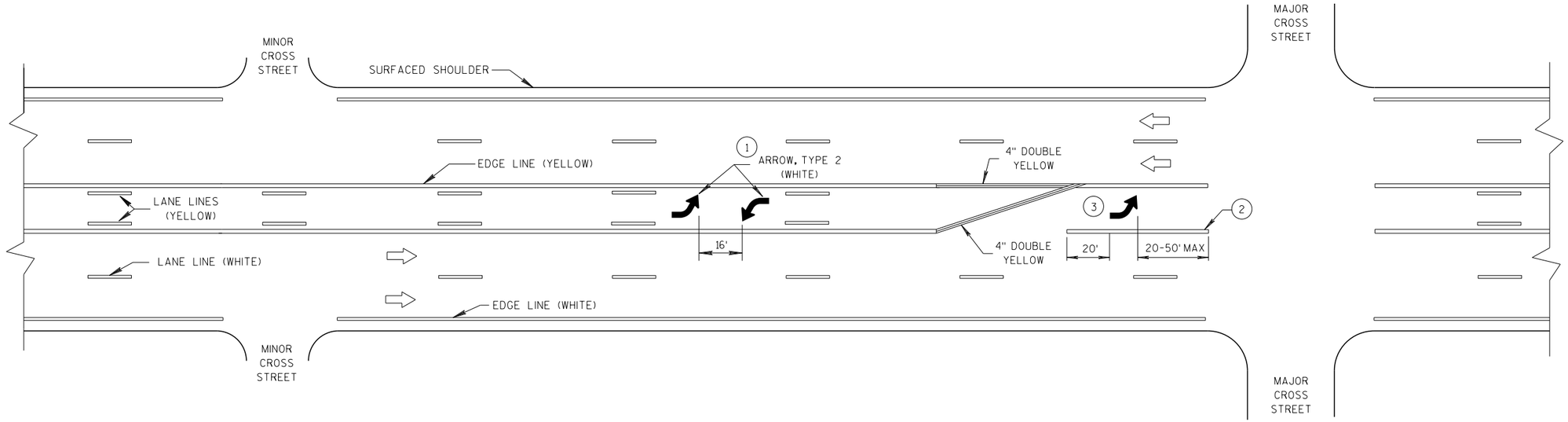
GENERAL NOTES

(1) A SET OF ARROWS IS REQUIRED EVERY 400 FEET OR NEAR INTERSECTIONS OR DRIVEWAYS WITH TURNING TRAFFIC.

(2) 8" WHITE

(3) TURN BAY LENGTH OF LESS THAN 48'DOES NOT REQUIRE PAVEMENT ARROWS OR TEXT

DIRECTION OF TRAFFIC



TWO WAY LEFT TURN LANE

PAVEMENT MARKING (TURN LANES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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S.D.D. 15 C 8-19b

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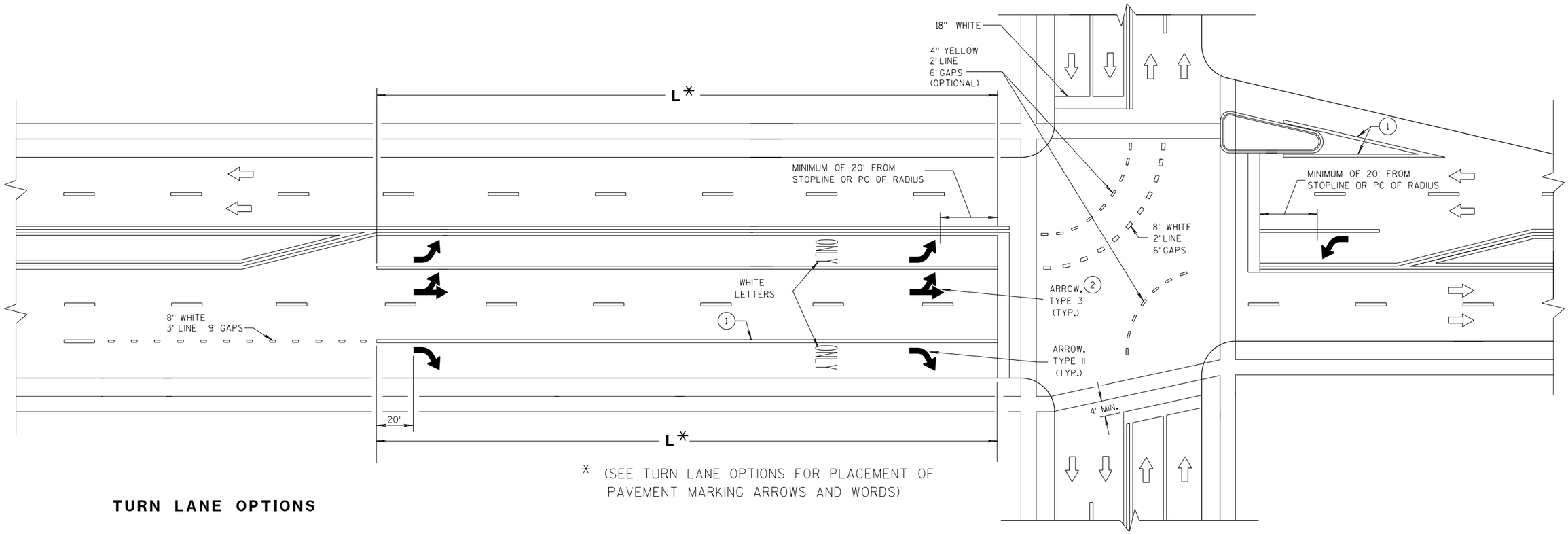
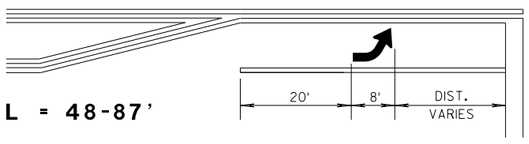
S.D.D. 15 C 8-19b



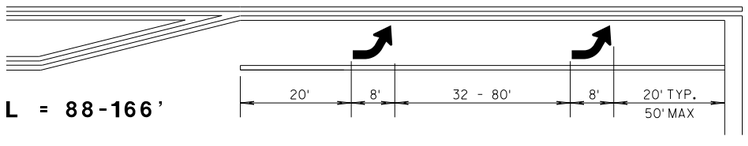
* (SEE TURN LANE OPTIONS FOR PLACEMENT OF PAVEMENT MARKING ARROWS AND WORDS)

TURN LANE OPTIONS

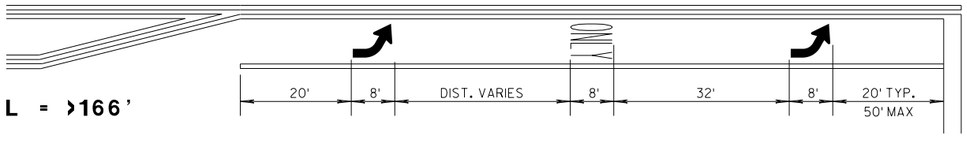
LENGTH OF TURN BAY (**L**) OF 0-47' DOES NOT REQUIRE PAVEMENT MARKING ARROWS OR WORDS



L = 48-87'



L = 88-166'



L = >166'

GENERAL NOTES

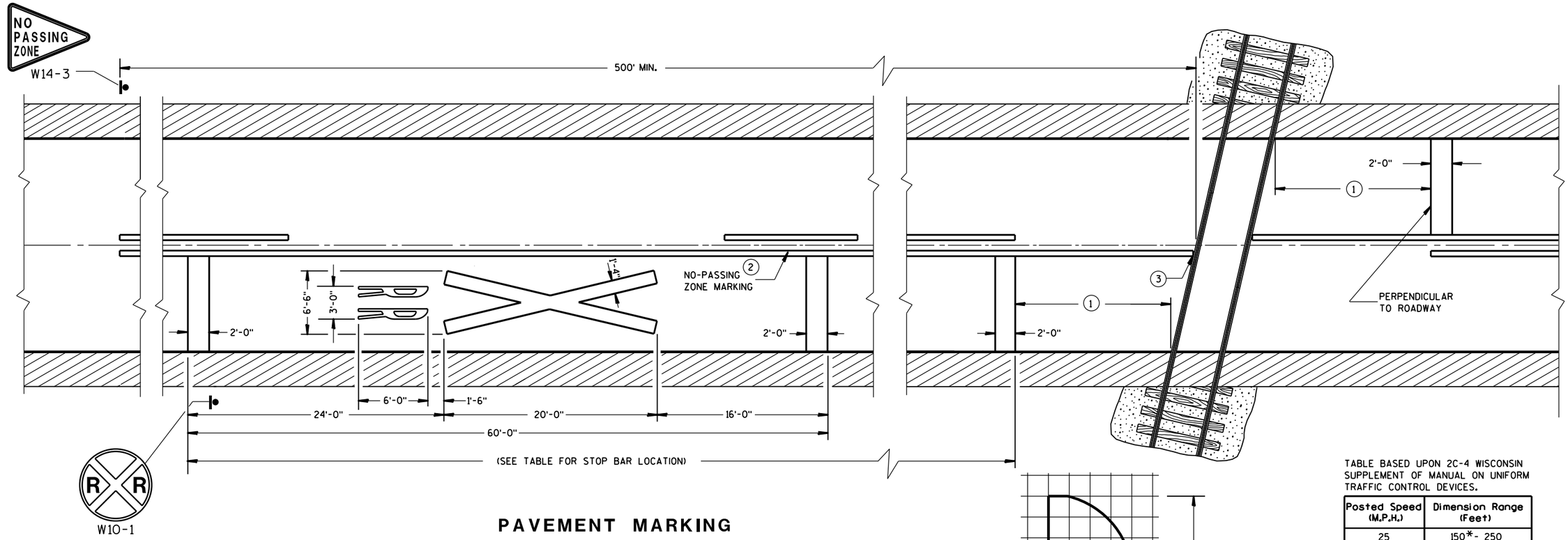
1. 8" WHITE
2. QUANTITY AND LOCATION OF TYPE 3 ARROW ARE THE SAME AS THE TYPE II ARROWS IN THE ADJACENT TURN LANE. FOR TURN LANES WITH A PHYSICAL SEPARATION, THE ARROWS AND ONLY MARKING ARE ELIMINATED.

⇨ DIRECTION OF TRAFFIC

L = LENGTH OF TURN BAY

PAVEMENT MARKING (TURN LANES)

6
S.D.D. 15 C 8-19c



PAVEMENT MARKING

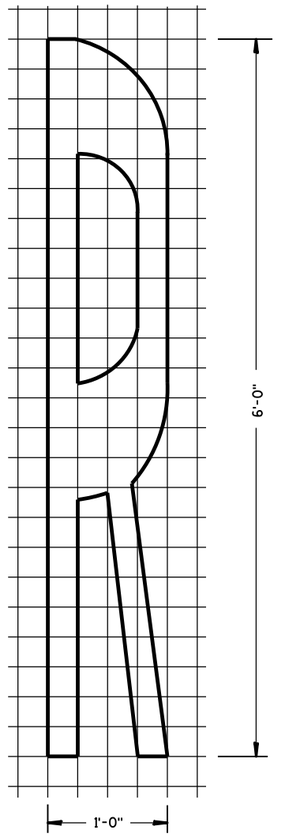


TABLE BASED UPON 2C-4 WISCONSIN SUPPLEMENT OF MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

Posted Speed (M.P.H.)	Dimension Range (Feet)
25	150*- 250
30	200*- 300
35	250*- 450
40	300*- 500
45	400*- 650
50	550*- 800
55	750*- 1000
60	1000*- 1250
65	1000*- 1250

* THE MINIMUM DISTANCES IN THE TABLE ARE DESIRABLE AND SHOULD BE USED. THE DISTANCES MAY BE INCREASED UP TO THE MAXIMUM TO ALLOW FOR FIELD CONDITIONS SUCH AS THE CLOSE PROXIMITY OF DRIVEWAYS, BRIDGES, SIDEROADS OR OTHER FEATURES THAT WOULD PROHIBIT THE MINIMUM DISTANCES FROM BEING USED.

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.

ON MULTI-LANE ROADS THE TRANSVERSE BANDS SHOULD EXTEND ACROSS ALL APPROACH LANES, AND INDIVIDUAL R X R SYMBOLS SHOULD BE USED IN EACH APPROACH LANE.

CENTER OR LANE LINES AND NO-PASSING ZONE MARKINGS SHOWN ON THIS DRAWING ARE REQUIRED AND PAID FOR UNDER OTHER ITEMS IN THE CONTRACT.

RETRACE EXISTING SYMBOL WHERE EXISTING SYMBOLS ARE PLACED.

(1) MINIMUM 8' FROM ANY RAILROAD WARNING DEVICES (SIGNALS, GATES, ETC.) OR 25' FROM THE NEAREST RAIL, WHICHEVER DISTANCE IS GREATER.

(2) 500' MINIMUM. MARKING LIMITS MAY BE EXTENDED AS DIRECTED BY THE ENGINEER TO MEET ADJACENT NO-PASSING ZONE MARKINGS.

(3) FOR MULTIPLE TRACK CROSSINGS, THE BARRIER LINE SHALL EXTEND TO THE NEAR RAIL OF THE FURTHEST TRACK IN THE DIRECTION OF HIGHWAY TRAVEL.

SIGNING AND PAVEMENT MARKING DETAILS FOR RAILROAD-HIGHWAY GRADE CROSSINGS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

Sept., 2017 — DATE

/S/ Matthew R. Rauch — STATE SIGNING AND MAI[illegible]GINEER

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S.D.D. 15 C 9-11a

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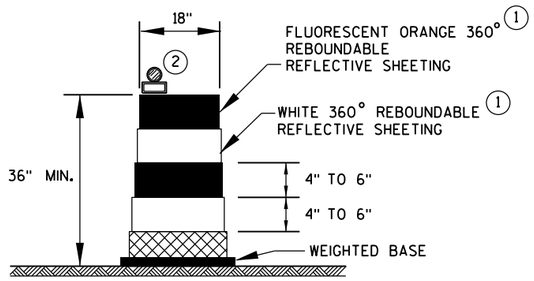
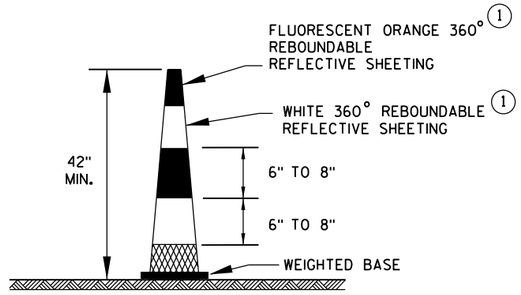
S.D.D. 15 C 9-11a



DRUM

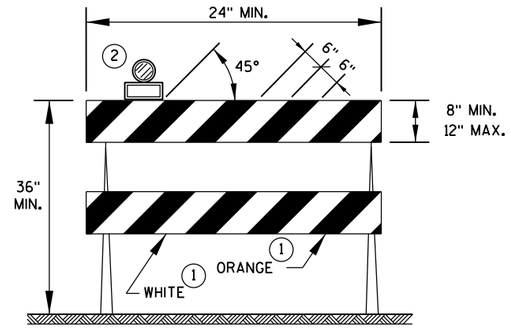


42" CONE

DO NOT USE IN TAPERS
1/2 SPACING OF DRUMS

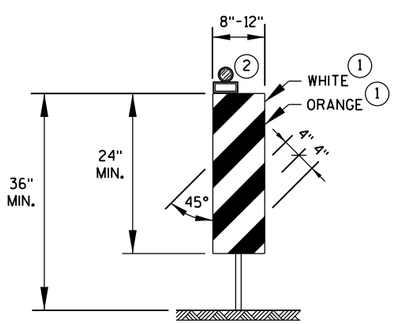
GENERAL NOTES

1. REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.
2. LOCATION OF WARNING LIGHTS WHEN SHOWN ON THE PLAN.



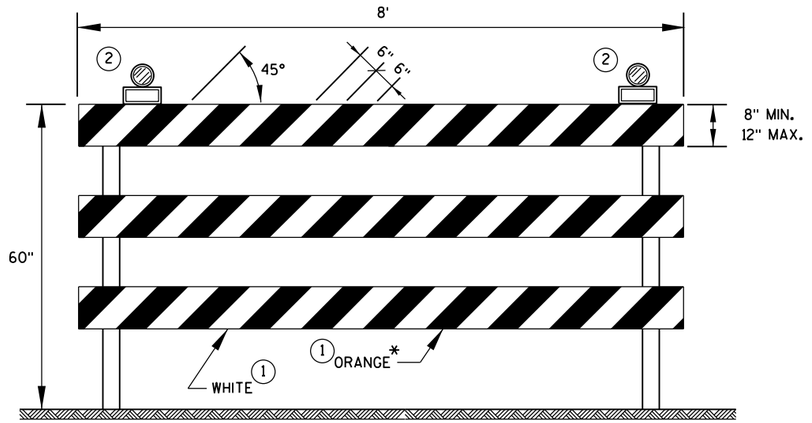
TYPE 2 BARRICADE

FOR RAILS LESS THAN 36" LONG, 4" WIDE STRIPES MAY BE USED. ALL STRIPES SHALL SLOPE DOWNWARD TO THE TRAFFIC SIDE FOR CHANNELIZATION.



VERTICAL PANEL

THE STRIPES SHALL SLOPE DOWNWARD TO THE TRAFFIC SIDE FOR CHANNELIZATION.



TYPE 3 BARRICADE

IF SIGN MOUNTED, DO NOT COVER MORE THAN 50% OF THE TOP TWO RAILS OR 33% OF THE TOTAL AREA OF THE THREE RAILS.

* IF USED FOR A PERMANENT APPLICATION, USE RED SHEETING.

CHANNELIZING DEVICES
DRUMS, CONES, BARRICADES
AND VERTICAL PANELS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2017 — DATE
/S/ Andrew Heidtke — WORK ZONE ENG
FHWA

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S.D.D. 15 C 11-7b

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LEGEND

SIGN ON PORTABLE OR PERMANENT SUPPORT

DIRECTION OF TRAFFIC

WORK AREA

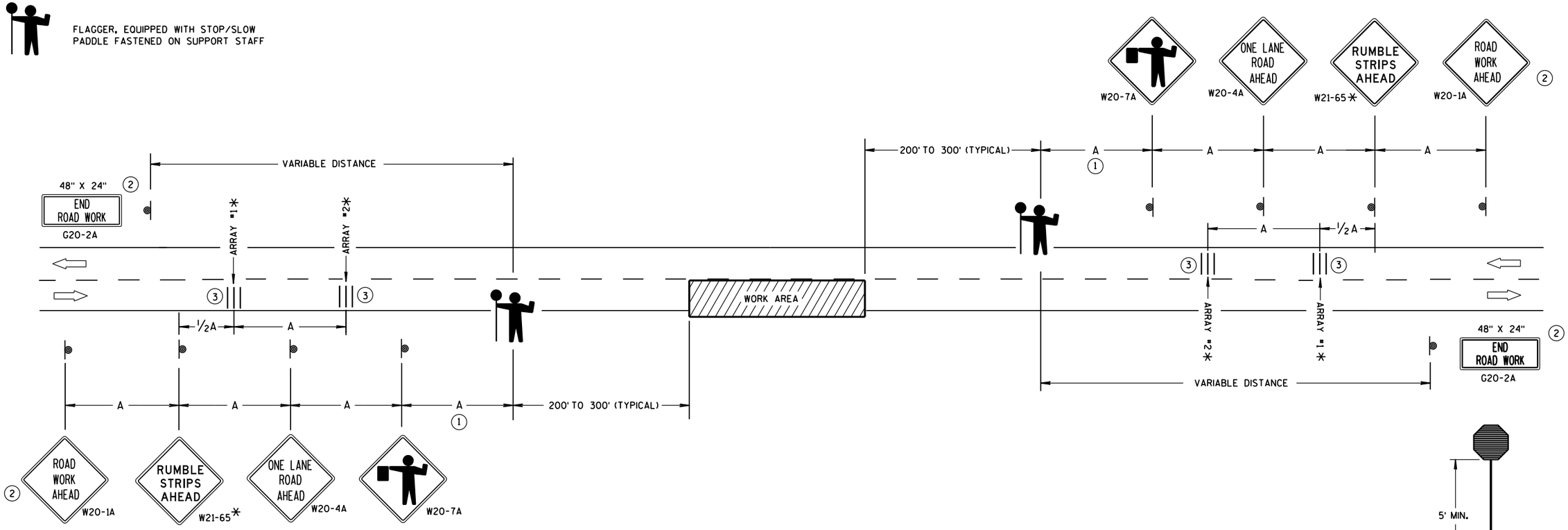
FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF

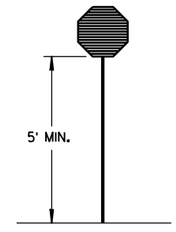
SIGN AND TEMPORARY RUMBLE STRIP ARRAY SPACING TABLE

SPEED LIMIT	SPACING A
25-35 MPH	200'
35-40 MPH	350'
45-55 MPH	500'

W03-4

USE OF THE "BE PREPARED TO STOP" SIGN IS OPTIONAL. WHEN USED, THIS SIGN SHALL BE LOCATED BETWEEN THE W20-7A AND W20-4A SIGNS, USING SPACING A.





STOP/SLOW PADDLE ON SUPPORT STAFF

TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION

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.

"WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

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.

INSTALL TEMPORARY RUMBLE STRIPS PER MANUFACTURER'S RECOMMENDATIONS.

PLACE ADVANCE SIGNING PRIOR TO INSTALLING TEMPORARY RUMBLE STRIPS.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

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, REMOVE TEMPORARY RUMBLE STRIPS PRIOR TO COVERING OR REMOVING ALL ADVANCE SIGNING.

* UTILIZE TEMPORARY RUMBLE STRIPS WHEN FLAGGING OPERATION IS ANTICIPATED TO BE STATIONARY IN EXCESS OF TWO HOURS.

(1) FOR A MOVING WORK OPERATION, SIGNING AND TEMPORARY RUMBLE STRIPS (IF USED) SHALL BE REESTABLISHED (AS SIMULTANEOUSLY AS PRACTICAL) AT APPROXIMATELY 3,500 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.

(3) EACH TEMPORARY RUMBLE STRIP ARRAY CONSISTS OF THREE RUMBLE STRIPS SPACED ACCORDING TO MANUFACTURER'S RECOMMENDATION, PLACED TRANSVERSE ACROSS THE LANE AT LOCATIONS SHOWN.

TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2017 — DATE
/S/ Andrew Heldtke — WORK ZONE ENG
FHWA

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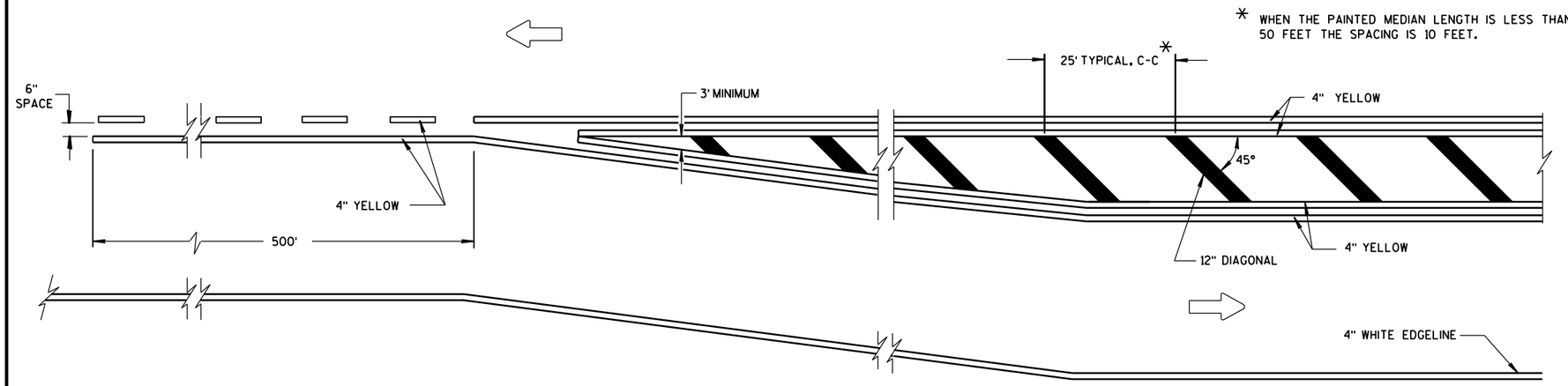
S.D.D. 15 C 12-6

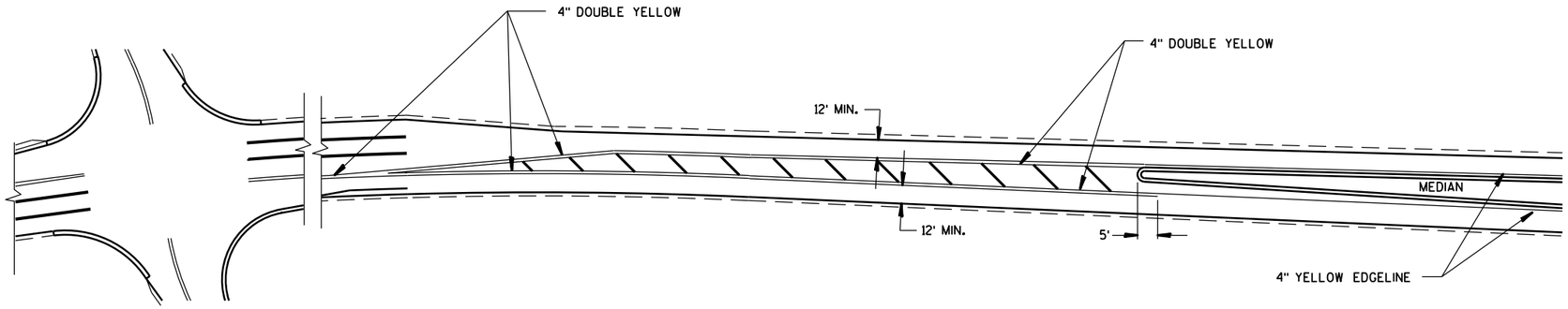


MEDIAN ISLAND DETAIL

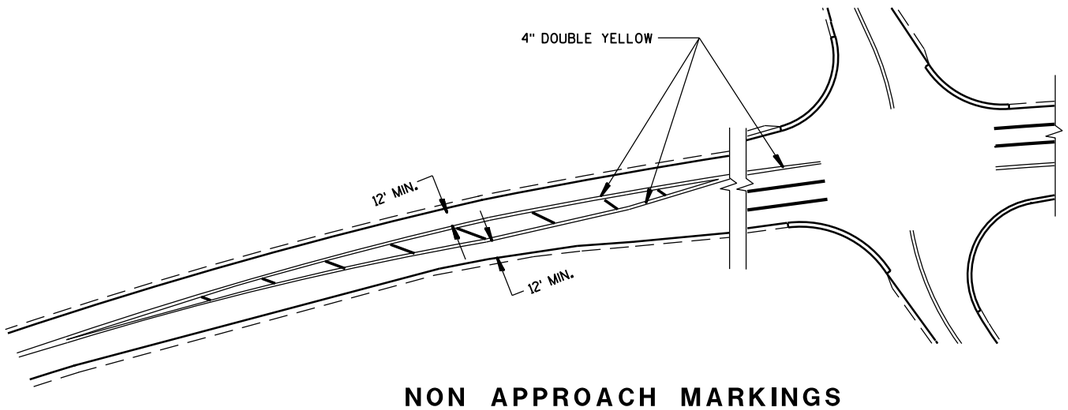
GENERAL NOTE

DIAGONALS ARE OPTIONAL WHEN PAINTED ISLAND IS LESS THAN 6 FEET AT WIDEST POINT.

DIRECTION OF TRAVEL



APPROACH MARKINGS FOR OTHER MEDIAN TYPES



NON APPROACH MARKINGS

MEDIAN ISLAND MARKING	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED June 2017 DATE FHWA	/S/ Matthew Rauch STATE SIGNING AND MARK ER

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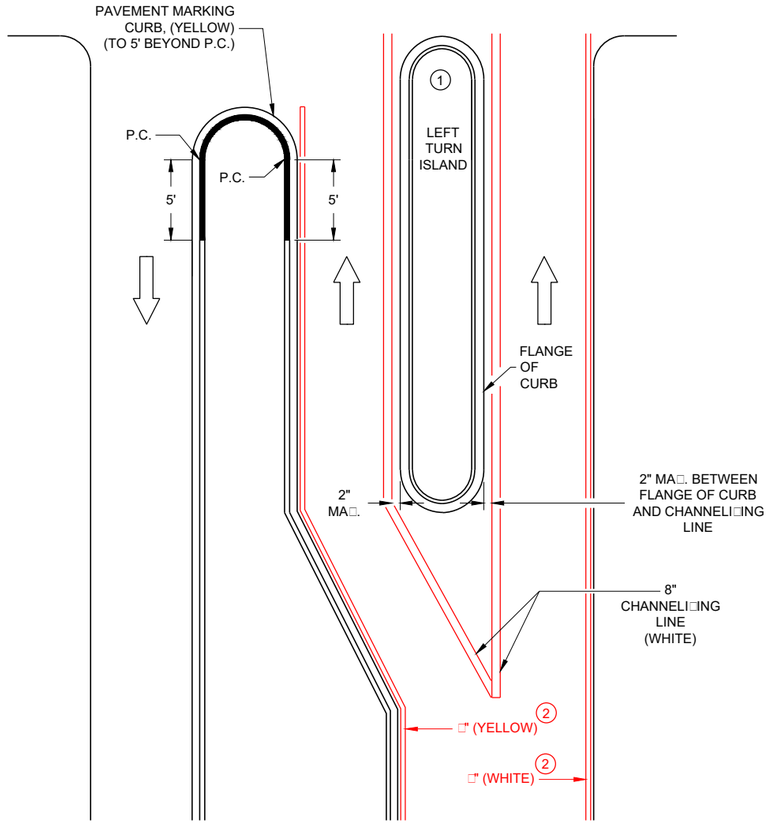
S.D.D. 15 C 18-4

REQUIREMENTS FOR EDGE LINES		
POSTED SPEED	IS THERE CONTINUOUS LIGHTING□	
	YES	NO
≤ □0 MPH	NO	OPTIONAL
□5 OR □0 MPH	OPTIONAL	RECOMMENDED
≥ □5 MPH	RECOMMENDED	REQUIRED



LEFT TURN & MEDIAN ISLAND

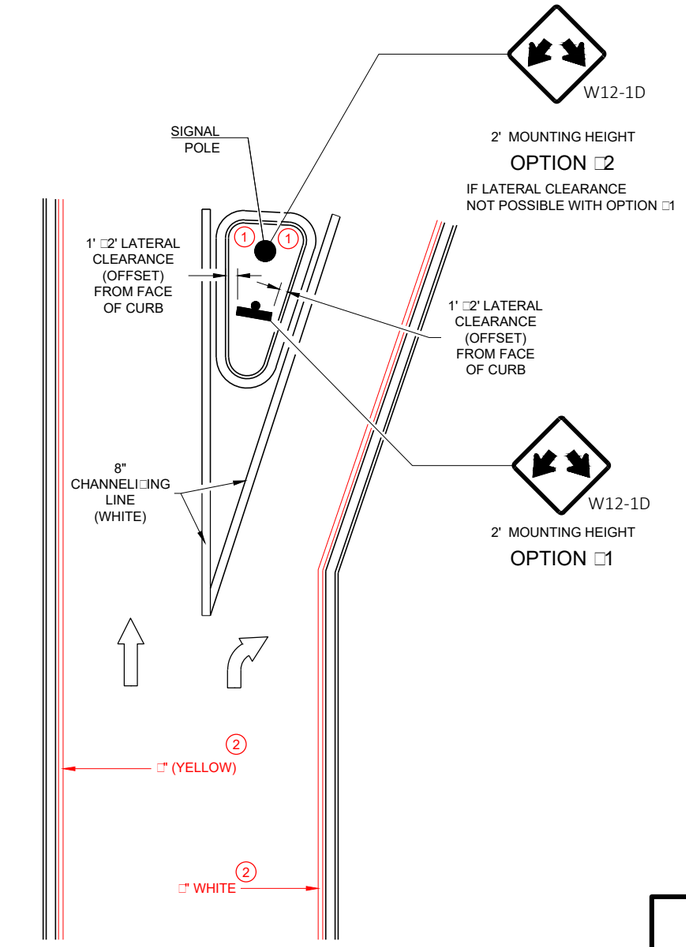
GENERAL NOTES

APPLIES TO ISLANDS AT LEFT TURNS AT ONE WAY ROADWAYS AS WELL.

SEE MISCELLANEOUS QUANTITIES FOR SIGN SI□E.

1. MARK CURB NOSES YELLOW.
2. MARK ACCORDING TO TABLE.

DIRECTION OF TRAVEL



RIGHT TURN ISLAND

D□□BLE ARR□□
□ ARNING SIGN PLACEMENT

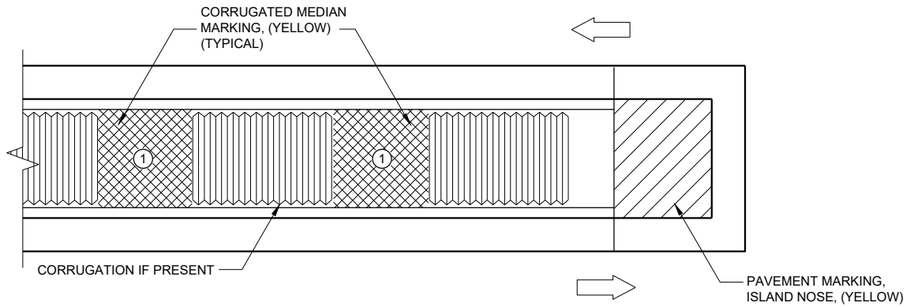
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
7/2018
DATE
/S/ Matthew R. Rauch
STATE SIGNING AND MAF ENGINEER

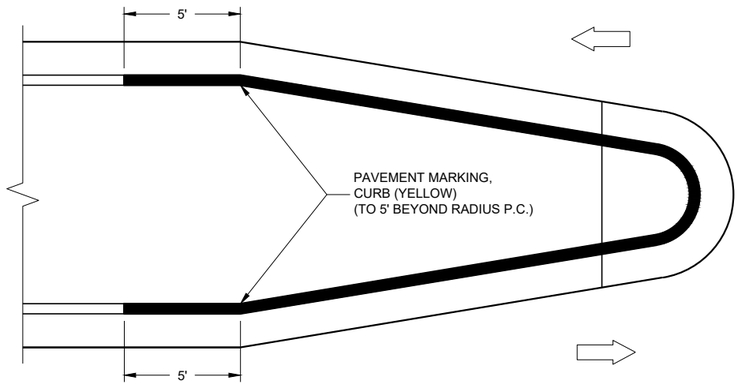
FHWA

SDD 15C27 - 03□

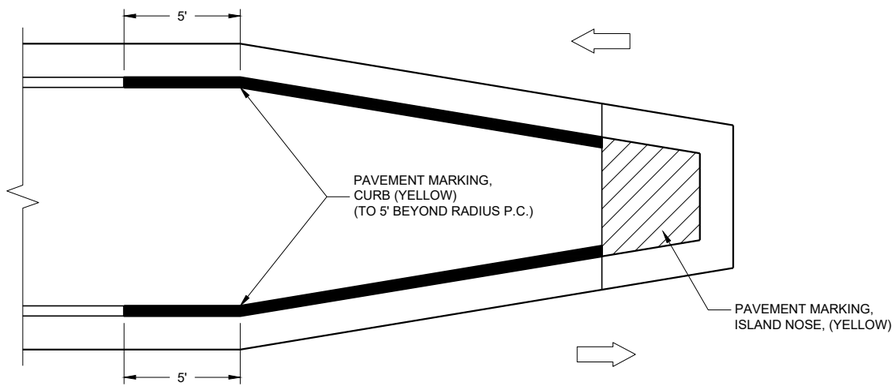
SDD 15C27 - 03□



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

GENERAL NOTES

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 ACCEPTED IN ACCORDANCE WITH THE CONTRACT AND PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE FOOT.

ISLAND NOSE MARKING

CURB MARKING

CORRUGATED MEDIAN MARKING

DIRECTION OF TRAVEL

PAVEMENT MARKINGS
(ISLANDS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

7/2018
DATE

/S/ Matthew R. Rauch
STATE SIGNING AND MAF
ENGINEER

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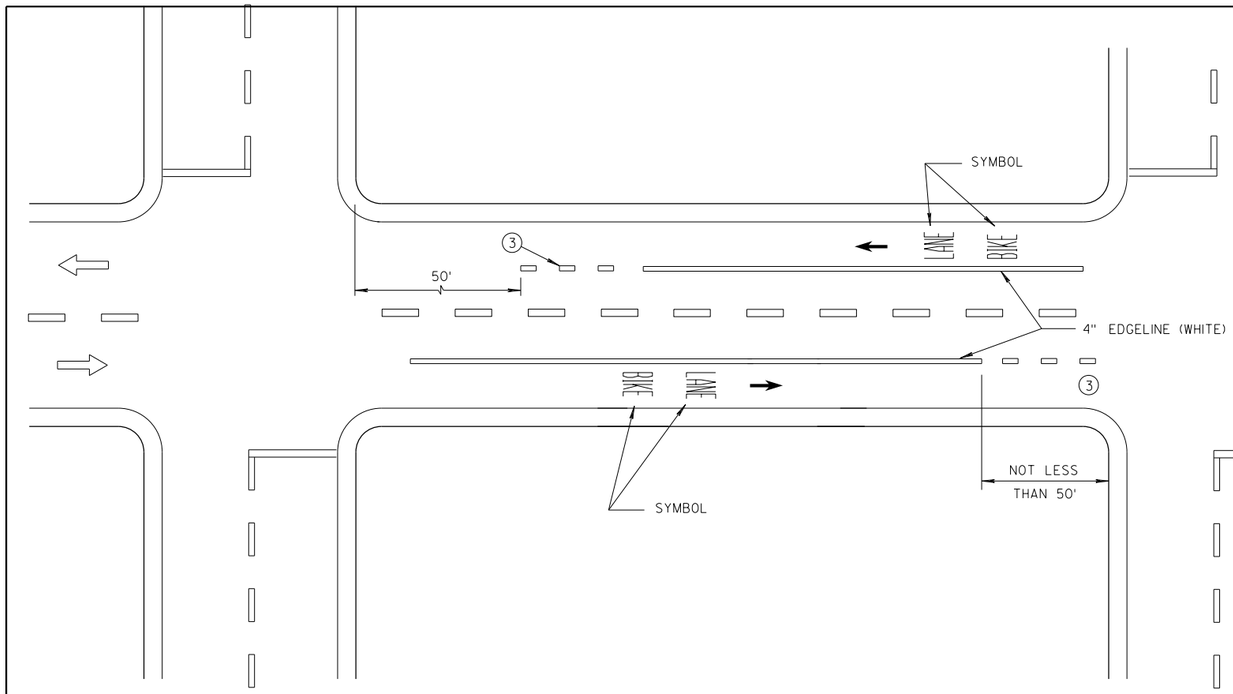
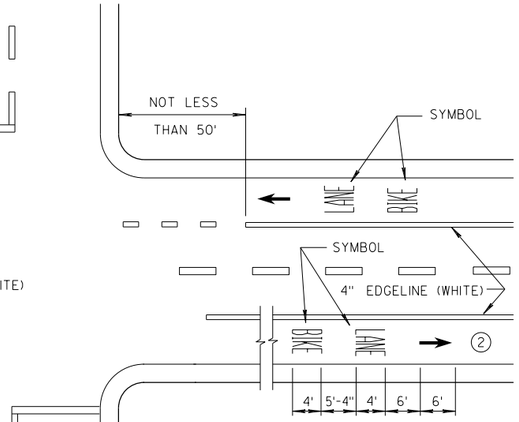
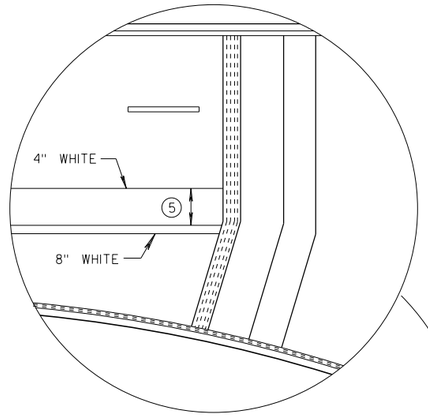
SDD 15C27 - 03b

SDD15C27 - 03b

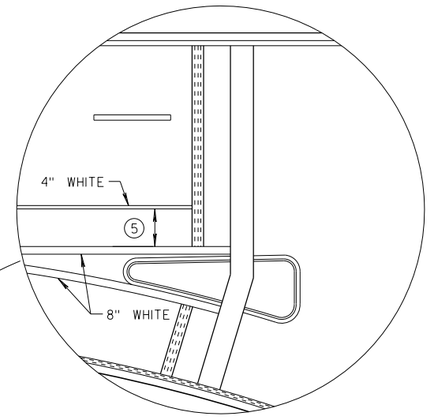




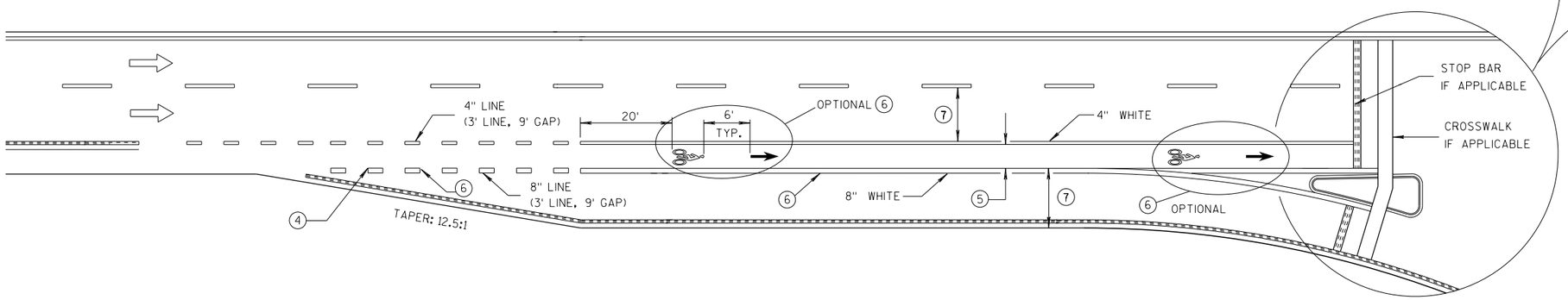
DESIGNATED BICYCLE LANE
NO PARKING



4 LANE DIVIDED WITHOUT ISLAND



4 LANE DIVIDED WITH ISLAND



BIKE LANE - FOR 2-LANE ROADWAYS AND 4-LANE DIVIDED ROADWAYS
(4-LANE DIVIDED WITH RIGHT TURN LANE SHOWN)

GENERAL NOTES

1. DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.
2. MINIMUM OF ONE PER BLOCK. MAXIMUM OF 250 FEET.
3. DOTTED LINES (3' LINE, 9' GAP) SHOULD BE USED 50 FEET TO 200 FEET IN ADVANCE OF AN INTERSECTION WHERE THERE IS NO RIGHT TURN ONLY LANE AND THERE IS HEAVY RIGHT TURN TRAFFIC OR THERE IS A NEAR-SIDE BUS STOP. AT OTHER INTERSECTIONS WHERE RIGHT TURN TRAFFIC IS LIGHT TO MODERATE, A SOLID LINE CAN BE USED UP TO THE INTERSECTION.
4. IF SIGNED AND/OR MARKED AS A BICYCLE FACILITY INCLUDE SECOND LINE OF LINE-SPACE MARKING, OTHERWISE DO NOT.
5. BIKE ACCOMODATION IS TYPICALLY 5 FEET WIDE AND A MINIMUM OF 4 FEET FROM A LONGITUDINAL JOINT. USE 5 FEET AT 45 MPH.
6. OMIT THESE MARKINGS FOR WIDER TURN LANE APPLICATIONS (MINIMUM OF 15 FEET WIDE TURN LANE).
7. REFER TO CONTRACT PLANS FOR LANE WIDTH.

DIRECTION OF TRAVEL

BICYCLE LANE MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

7/2018
DATE

/S/ Matthew R. Rauch
STATE SIGNING AND MAR 230 ...EER

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S.D.D. 15 C 29-6a

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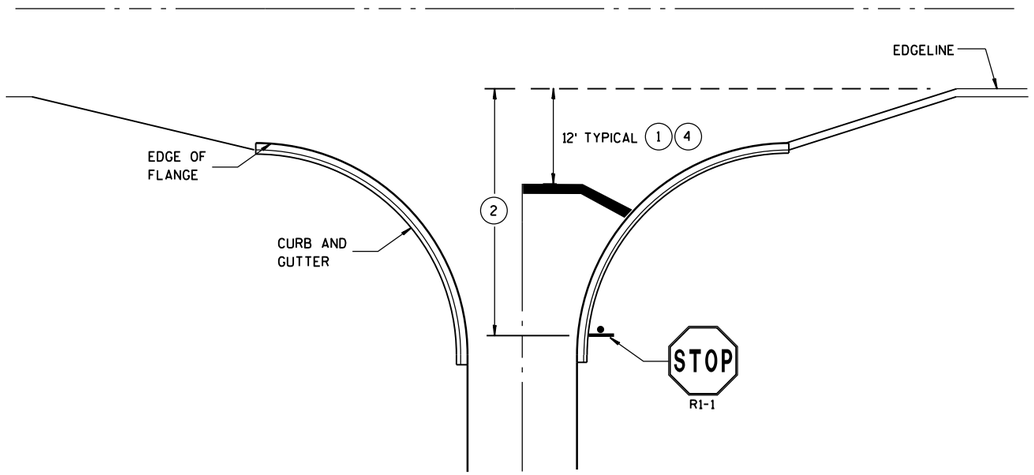
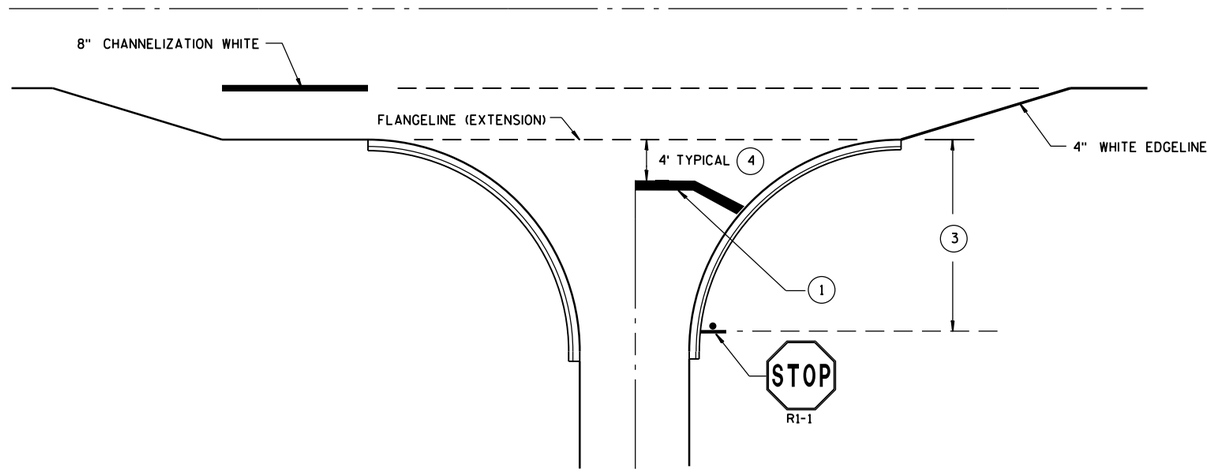
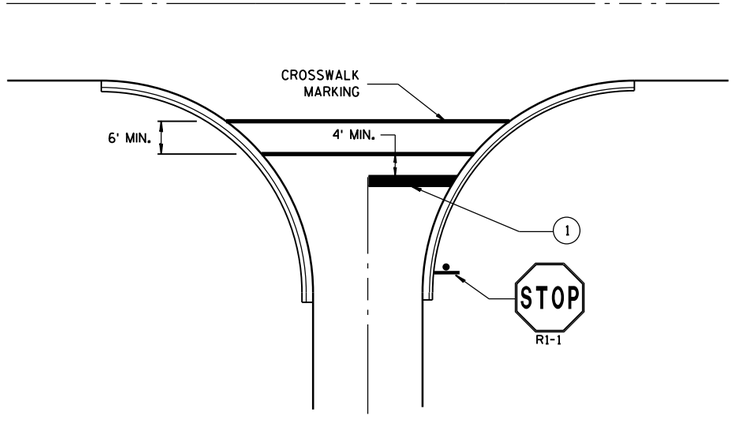
S.D.D. 15 C 29-6a



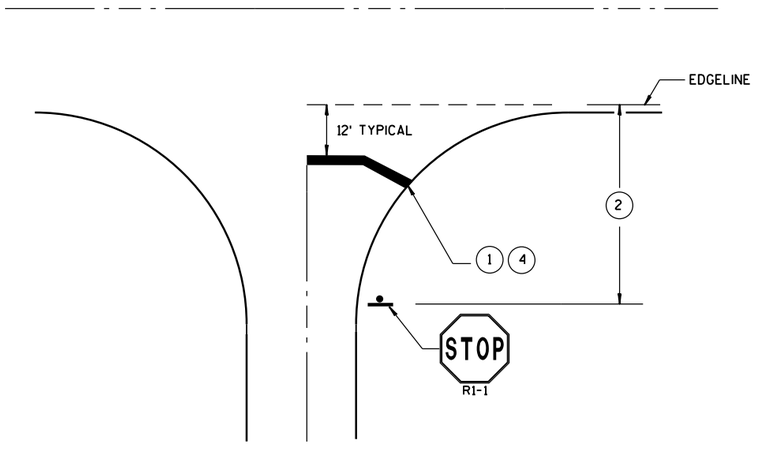
TYPICAL STOP LINE PAVEMENT MARKING WITH CURB AND GUTTER



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

STOP SIGN SHALL BE PLACED A MINIMUM OF 6 FEET TO A MAXIMUM OF 50 FEET FROM THE EDGELINE LOCATION.

1. 18-INCH STOP LINES MAY BE DELETED OR ADDED BY THE PROJECT ENGINEER BASED ON VISIBILITY AND SIGHT LINES.
2. IF STOP SIGN IS LESS THAN OR EQUAL TO 40 FEET FROM THE EDGELINE THAN NO STOP LINE IS REQUIRED.
3. IF STOP SIGN IS LESS THAN OR EQUAL TO 30 FEET FROM THE FLANGELINE EXTENSION THAN NO STOP LINE IS REQUIRED.
4. MOVE CLOSER TO EDGE OF TRAVEL LANE AS NEEDED FOR VISIBILITY AND SIGHT LINES. (NO CLOSER THAN 4 FEET).

STOP LINE AND CROSSWALK PAVEMENT MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

Sept., 2017 — DATE

/S/ Matthew R. Rauch — STATE SIGNING AND MAR[illegible]NEER

FHWA

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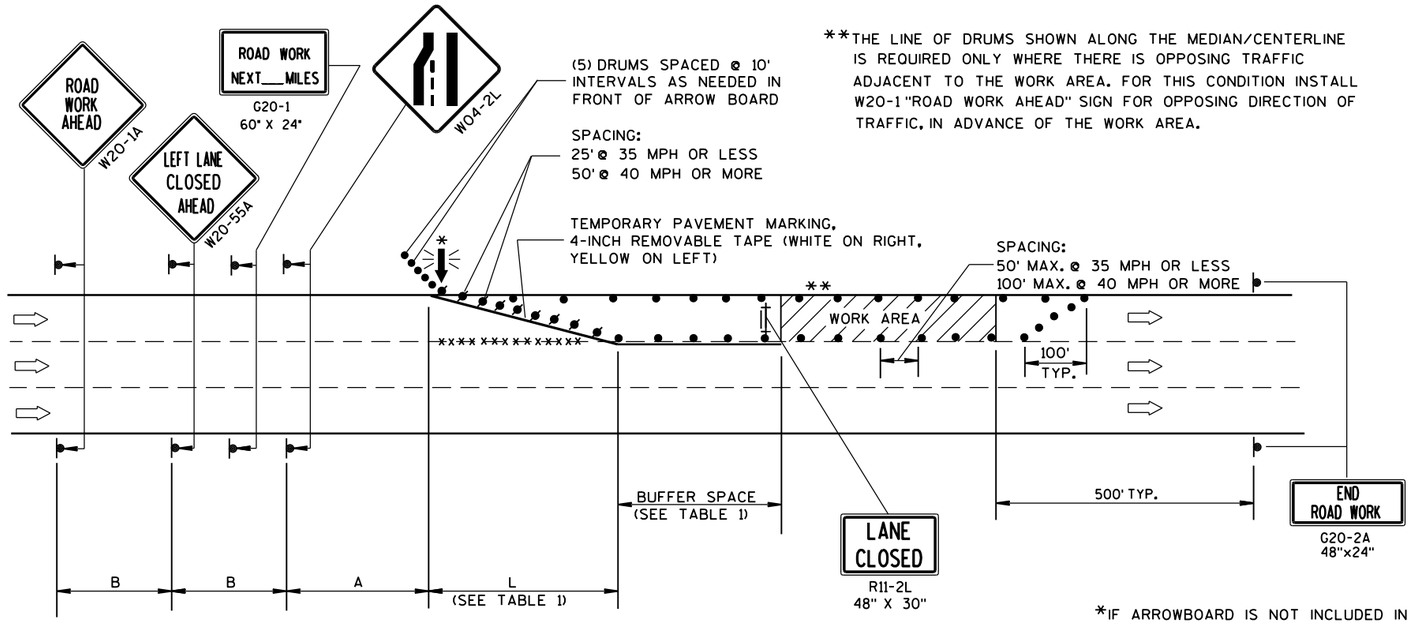

**THE LINE OF DRUMS SHOWN ALONG THE MEDIAN/CENTERLINE IS REQUIRED ONLY WHERE THERE IS OPPOSING TRAFFIC ADJACENT TO THE WORK AREA. FOR THIS CONDITION INSTALL W20-1 "ROAD WORK AHEAD" SIGN FOR OPPOSING DIRECTION OF TRAFFIC, IN ADVANCE OF THE WORK AREA.

B=400' AT 25-30 MPH
700' AT 35-40 MPH
1000' AT 45-55 MPH

A=200' AT 25-30 MPH
350' AT 35-40 MPH
500' AT 45-55 MPH

(PLACE BARRICADE AND SIGN APPROX. EVERY 1000' ACROSS THE CLOSED LANE)

*IF ARROWBOARD IS NOT INCLUDED IN MISCELLANEOUS QUANTITIES, SUBSTITUTE A TYPE III BARRICADE WITH W01-6 SIGN IN THE LANE CLOSURE TAPER.

W01-6
48"x24"

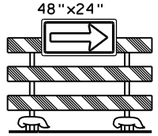

TABLE 1
TAPER AND BUFFER SPACE FOR 12' LANE WIDTH

S	L	BUFFER SPACE
25	125'	55'
30	180'	85'
35	245'	120'
40	320'	170'
45	540'	220'
50	600'	280'
55	660'	335'

FOR LANE WIDTH OTHER THAN 12':

L = WS AT 45 MPH OR GREATER

$L = \frac{WS^2}{60}$ AT 40 MPH OR LESS

L = TAPER LENGTH IN FEET

S = NON-CONSTRUCTION SPEED LIMIT (MPH)

W = WIDTH OF LANE CLOSURE

LEGEND

- TYPE III BARRICADE WITH ATTACHED SIGN
- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL DRUM
- FLASHING ARROW BOARD
- DIRECTION OF TRAFFIC
- REMOVING PAVEMENT MARKING (SEE GENERAL NOTES)
- WORK AREA

GENERAL NOTES

THIS LANE CLOSURE DETAIL IS TYPICAL FOR CLOSING THE LEFT LANE. FOR A RIGHT LANE CLOSURE, REVERSE THE TRAFFIC CONTROL.

THIS DETAIL MAY BE USED FOR ROADWAYS WITH EITHER TWO OR THREE LANES IN EACH DIRECTION.

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36" X 36" SIGNS MAY BE USED IF APPROVED BY DISTRICT TRAFFIC UNIT.

"WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, OR THAT WILL BE PLACED IN A CLOSED LANE, MAY BE MOUNTED ON PORTABLE SUPPORTS.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

ON UNDIVIDED ROADWAYS, OMIT THE SIGNS SHOWN ON LEFT SIDE OF ROAD.

W20-1A, G20-1 AND G20-2A SIGNS ARE NOT REQUIRED IF THE LANE CLOSURE IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT.

OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS.

CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROWBOARDS SO THE APPROACHING DRIVER HAS A CLEAR VIEW OF THE ARROWBOARDS AND LANE CLOSURE DRUMS.

PLACE THE ARROWBOARD AS CLOSE AS POSSIBLE TO THE BEGINNING OF THE LANE CLOSURE TAPER, PREFERABLY ON THE SHOULDER OR TERRACE.

CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

BARRICADES IN A CLOSED LANE THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED UPON COMPLETION OF THE OPERATION OR, FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

TRAFFIC CONTROL, SINGLE LANE CLOSURE, NON-FREEWAY/EXPRESSWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2016 — DATE
FHWA

/S/ Peter Amakobe Atepe
STATEWIDE WORK ZONE SAFETY ENGINEER — IC

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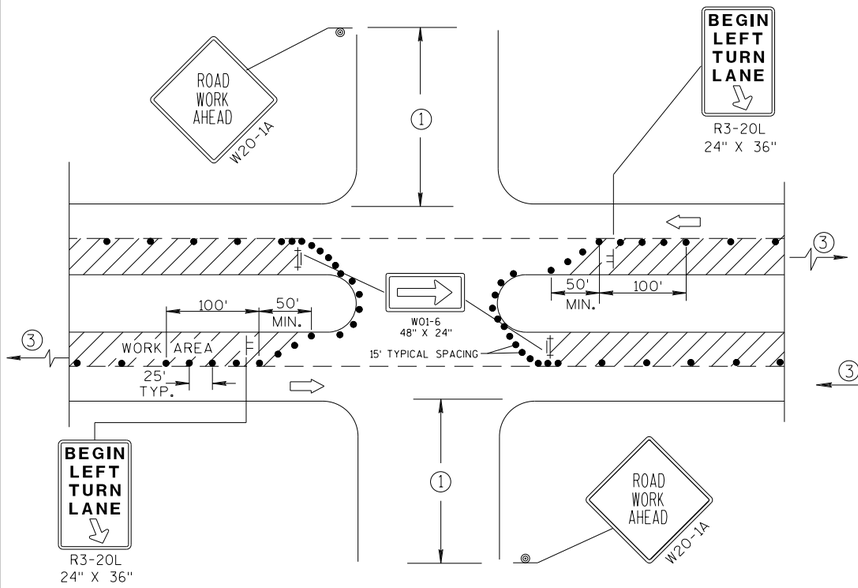
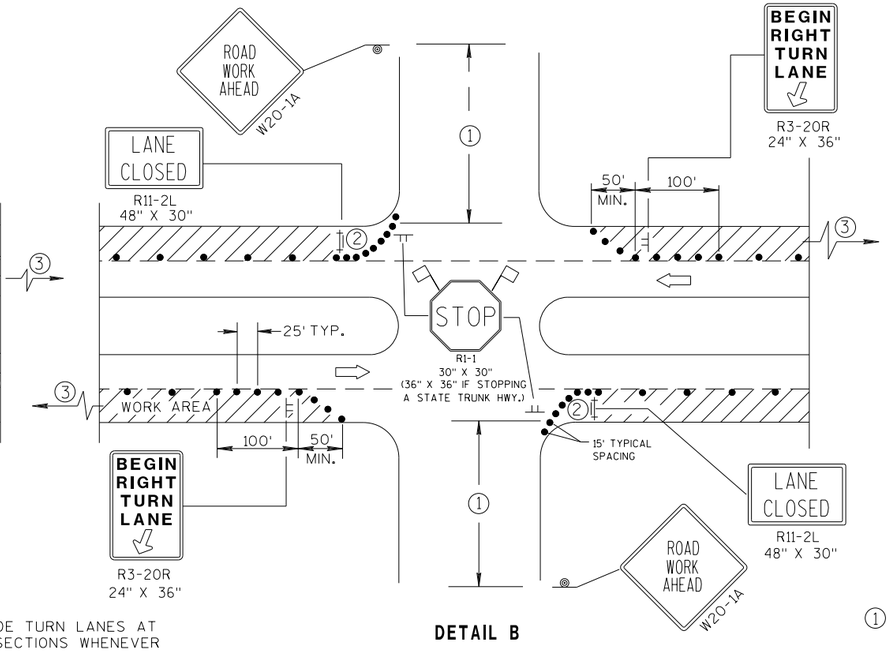


DETAIL A

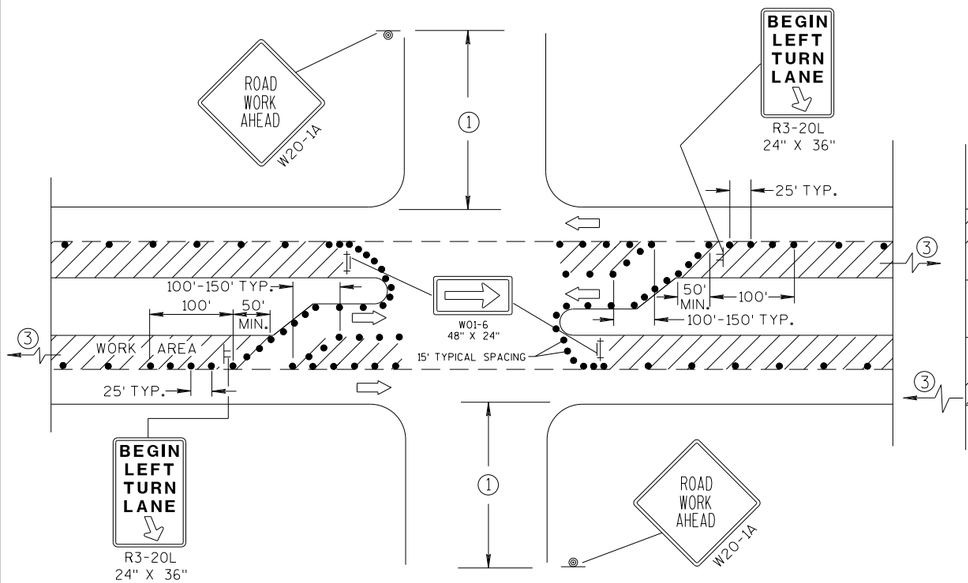
FOR LEFT LANE CLOSURE AT INTERSECTION OR MEDIAN OPENING

PROVIDE TURN LANES AT INTERSECTIONS WHENEVER STAGING OF WORK ALLOWS. TAPER AND TURN LANE LENGTHS BASED ON FIELD CONDITIONS AS APPROVED BY THE ENGINEER.



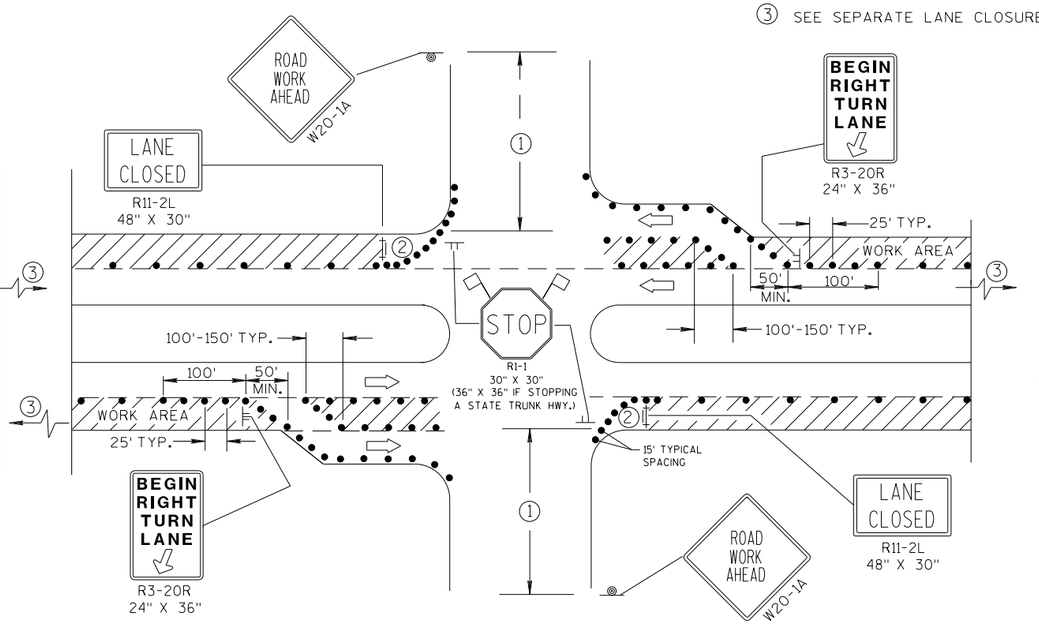
DETAIL B

FOR RIGHT LANE CLOSURE AT INTERSECTION



DETAIL C

FOR LEFT LANE CLOSURE AT INTERSECTION OR MEDIAN OPENING (WITH LEFT TURN BAY OPEN)



DETAIL D

FOR RIGHT LANE CLOSURE AT INTERSECTION (WITH RIGHT TURN BAY OPEN)

GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36" X 36" SIGNS MAY BE USED IF APPROVED BY DISTRICT TRAFFIC UNIT.

"WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE FHWA'S MANUAL OF STANDARD HIGHWAY SIGNS OR THE WISCONSIN STANDARD SIGN PLATES.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, OR THAT WILL BE PLACED IN A CLOSED LANE, MAY BE MOUNTED ON PORTABLE SUPPORTS.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

BARRICADES IN A CLOSED LANE THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED UPON COMPLETION OF THE OPERATION OR, FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

(1) 500' TYPICAL OR AT LAST INTERSECTION, WHICHEVER IS CLOSER.
350' IF 35-40 MPH.
200' IF 25-30 MPH.

(2) ALSO USE BARRICADE AND 15-FOOT TYPICAL DRUM SPACING AT COMMERCIAL DRIVEWAYS.

(3) SEE SEPARATE LANE CLOSURE DETAIL FOR ADDITIONAL TRAFFIC CONTROL.

LEGEND

- TRAFFIC CONTROL DRUM
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT (5' MIN. MOUNTING HEIGHT)
- TYPE III BARRICADE WITH ATTACHED SIGN AND TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC
- FLAGS, 16" X 16" MIN., (ORANGE)
- WORK AREA

TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

7/2018
DATE

/S/ Andrew Heldtke
WORK ZONE ENG

FHWA

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S.D.D. 15 D 21-6

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

S \ W	SHOULDER TAPER LENGTH (FEET) 4	6	8	10	BUFFER SPACE (FEET)
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

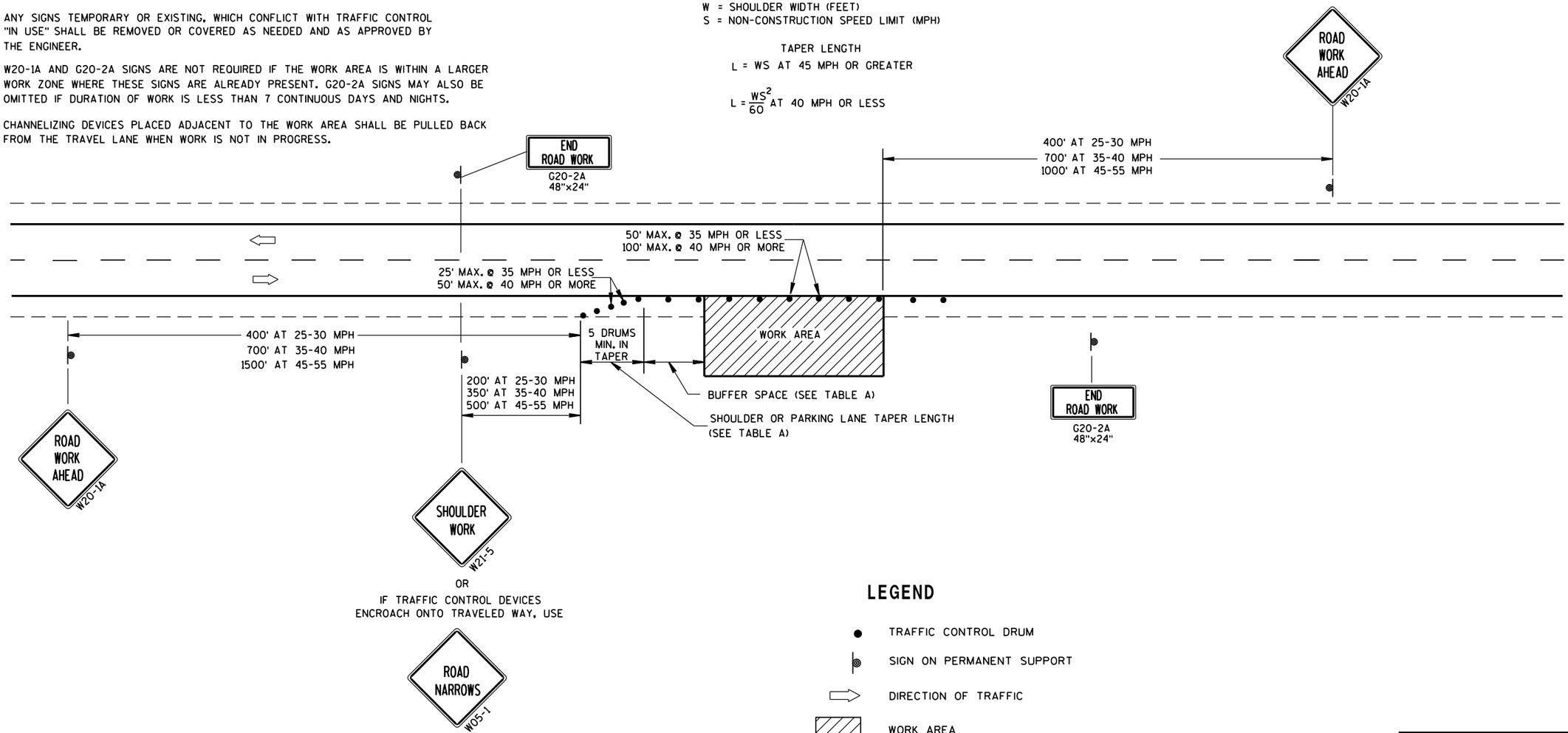
W = SHOULDER WIDTH (FEET)
S = NON-CONSTRUCTION SPEED LIMIT (MPH)

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 SAFETY ENGI FIC

FHWA

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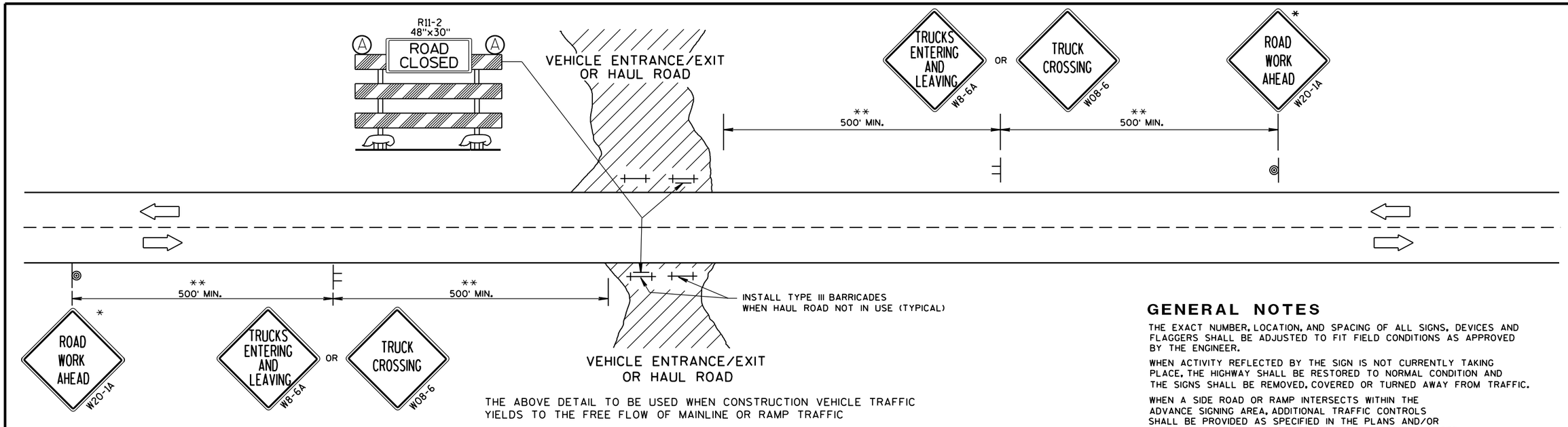


THE ABOVE DETAIL TO BE USED WHEN CONSTRUCTION VEHICLE TRAFFIC YIELDS TO THE FREE FLOW OF MAINLINE OR RAMP TRAFFIC

LEGEND

- SIGN ON TEMPORARY SUPPORT
- SIGN ON PERMANENT SUPPORT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF
- TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC

GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS, DEVICES AND FLAGGERS SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

WHEN ACTIVITY REFLECTED BY THE SIGN IS NOT CURRENTLY TAKING PLACE, THE HIGHWAY SHALL BE RESTORED TO NORMAL CONDITION AND THE SIGNS SHALL BE REMOVED, COVERED OR TURNED AWAY FROM TRAFFIC.

WHEN A SIDE ROAD OR RAMP INTERSECTS WITHIN THE ADVANCE SIGNING AREA, ADDITIONAL TRAFFIC CONTROLS SHALL BE PROVIDED AS SPECIFIED IN THE PLANS AND/OR THE SPECIAL PROVISIONS OR AS APPROVED BY THE ENGINEER.

* THESE SIGNS ARE TO BE USED ONLY WHEN VEHICLE **ENTRANCE/EXIT CONDITIONS ARE SEPARATED BY MORE THAN 2 MILES** FROM PREVIOUS WORK AREA OR SIGNING OR AS DIRECTED BY THE ENGINEER.

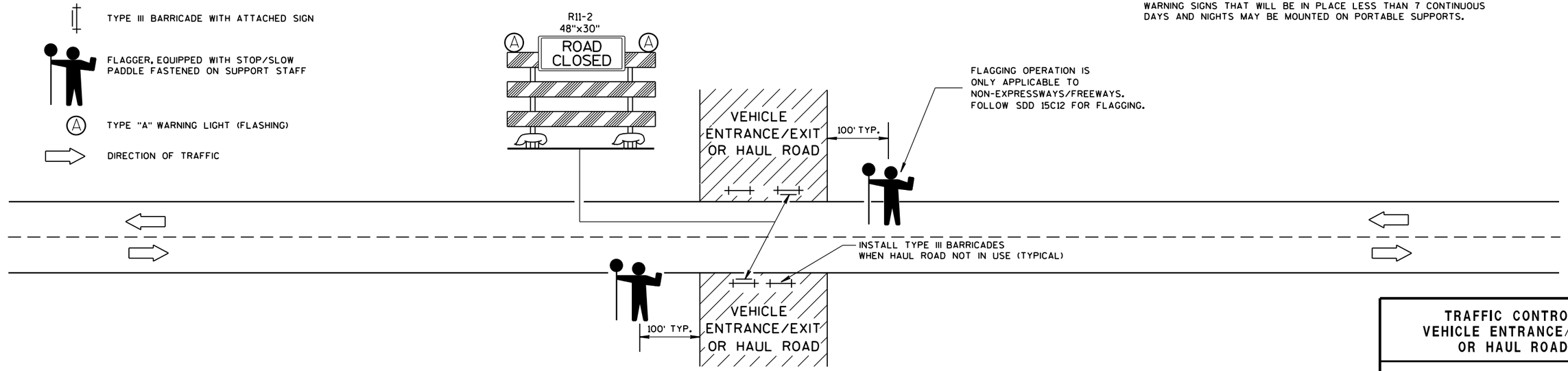
** 500 FEET SHOWN IS FOR ROADWAYS WITH A NON-CONSTRUCTION REGULATORY SPEED LIMIT OF 45 MPH OR MORE. FOR 35-40 MPH, USE 350 FEET. FOR 25-30 MPH, USE 200 FEET. USE 1000 FEET/1500 FEET FOR EXPRESSWAY/FREEWAY.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

"WO" IS THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.

PLACE SIGNS ON BOTH SIDES IF USED ON DIVIDED HIGHWAY.

WARNING SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.



THIS DETAIL TO BE USED WHEN CONSTRUCTION WORK INCLUDING TRUCKING ACTIVITY REQUIRES MAINLINE TRAFFIC TO BE TEMPORARILY STOPPED IN ONE OR BOTH DIRECTIONS. DELAY TO HIGHWAY TRAFFIC SHALL BE MINIMIZED.

TRAFFIC CONTROL, VEHICLE ENTRANCE/EXIT OR HAUL ROAD

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2017 — DATE
/S/ Andrew Heldtke — WORK ZONE ENGI
FHWA

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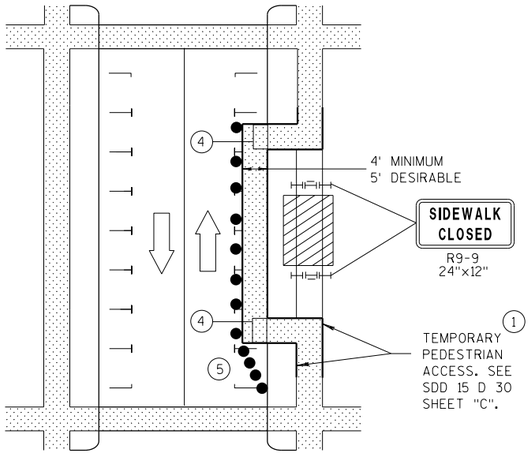
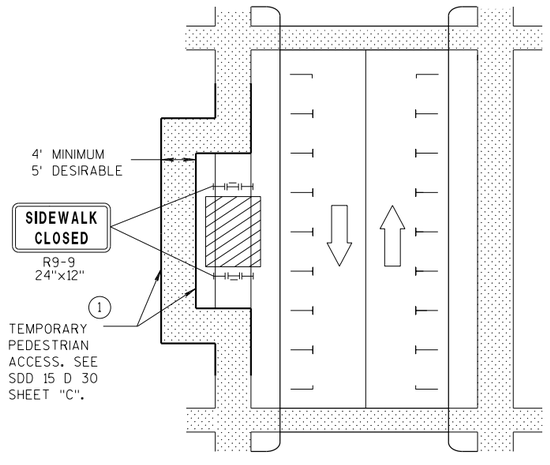
NOTE: MAY BE USED ON ROADWAY WITH POSTED SPEED OF LESS THAN 40 MPH.

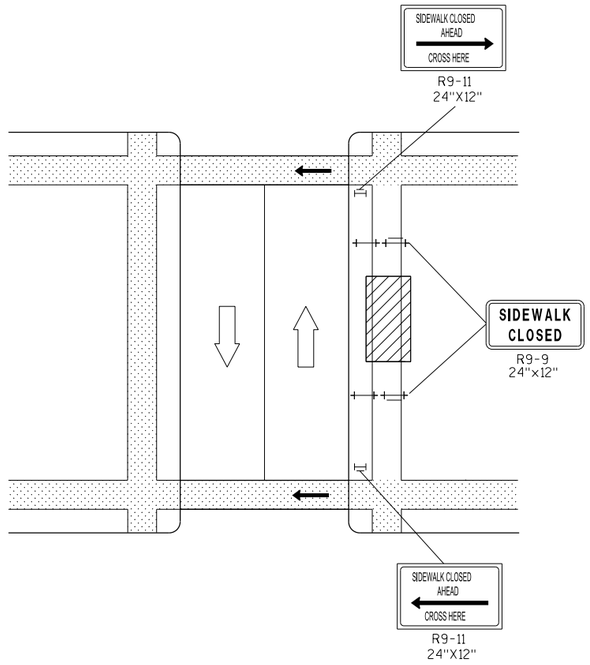


MID-BLOCK SIDEWALK CLOSURE IN PARKING LANE

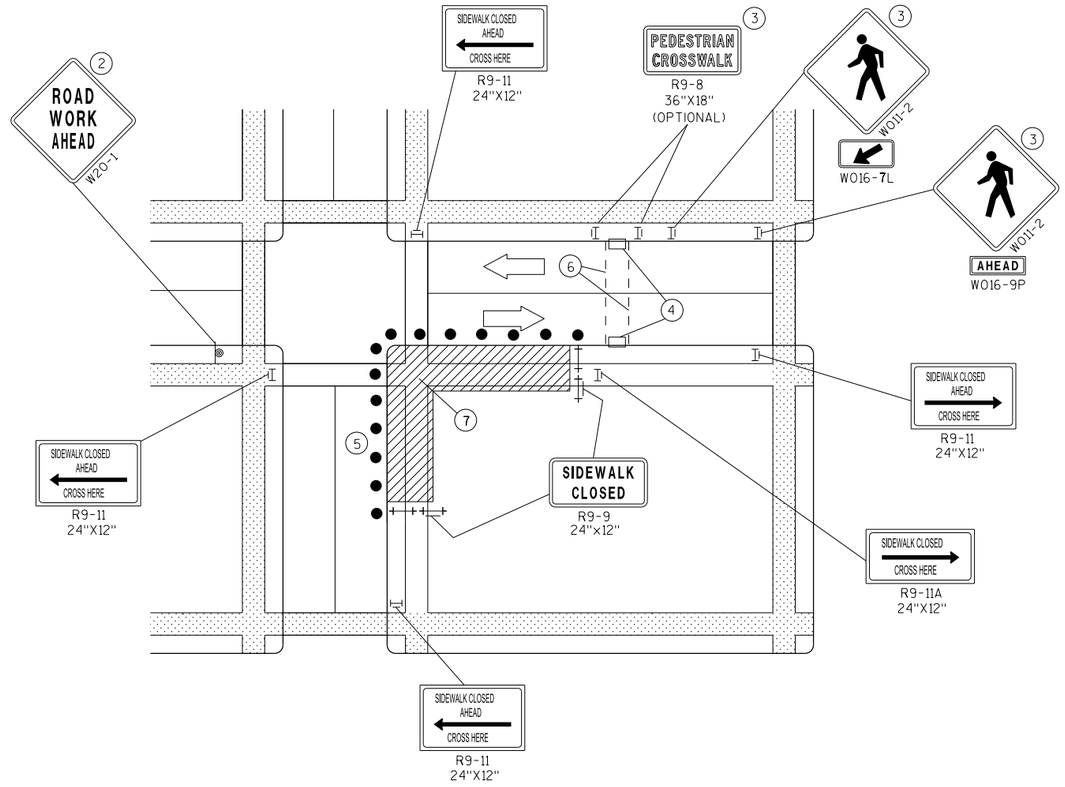
NOTE: LAYOUT SAME AS ABOVE.



SIDEWALK DIVERSION



MID-BLOCK SIDEWALK CLOSURE



CORNER SIDEWALK CLOSURE WITH TEMPORARY CROSSWALK

GENERAL NOTES

WHEN CLOSING OR RELOCATING CROSSWALKS OR SIDEWALKS, PROVIDE DETECABLE TEMPORARY FACILITIES AND INCLUDE ACCESSIBILITY FEATURES CONSISTENT WITH EXISTING PEDESTRIAN FACILITIES.

TEMPORARY TRAFFIC CONTROL DEVICES FOR PEDESTRIANS ARE SHOWN. OTHER DEVICES MAY BE NECESSARY TO CONTROL VEHICULAR TRAFFIC. STAGE WORK, AS NECESSARY, TO PROVIDE A TEMPORARY PEDESTRIAN ACCESS ROUTE AT ALL TIMES. FOR ROADWAYS WITH NO AVAILABLE DETOURS, MAINTAIN ONE OPEN SIDEWALK AT ALL TIMES.

"WO" SIGN IS THE SAME AS "W" SIGN EXCEPT THE BACKGROUND IS ORANGE.

FOR NIGHTTIME CLOSURE USE TYPE "A" FLASHING WARNING LIGHTS ON BARRICADES, SUPPORTING SIGNS AND CLOSING SIDEWALK. USE TYPE "C" STEADY BURN LIGHTS ON CHANNELIZING DEVICES SEPARATING THE WORK AREA FROM VEHICULAR TRAFFIC.

PEDESTRIAN TRAFFIC SIGNAL DISPLAY CONTROLLING CLOSED CROSSWALK SHALL BE COVERED OR DEACTIVATED.

POST MOUNTED SIGNS LOCATED ADJACENT TO A SIDEWALK SHALL HAVE A 7 FOOT MINIMUM CLEARANCE FROM THE BOTTOM OF THE SIGN TO THE SIDEWALK SURFACE.

ALTERNATE SIDEWALK WORK BETWEEN LEFT AND RIGHT SIDE OF ROADWAY TO MAINTAIN PEDESTRIAN ACCESS.

(1) IF SIDEWALK CLOSURE AFFECTS AN ACCESSIBLE AND DETECTABLE FACILITY, MAINTAIN ACCESSIBILITY AND DETECTABILITY ALONG THE ALTERNATE PEDESTRIAN ROUTE.

(2) "ROAD WORK AHEAD" SIGNS ARE NOT REQUIRED IF THE SIDEWALK CLOSURE OCCURS WITHIN A LARGER WORK ZONE WHERE ADVANCE WARNING SIGNS ARE ALREADY PRESENT, OR IF THE WORK AREA AND EQUIPMENT ARE MORE THAN 2 FEET BEHIND THE CURB.

(3) IF TEMPORARY PEDESTRIAN CROSSWALK IS NOT PROVIDED, OMIT R9-8 AND W011-2 SIGN ASSEMBLIES. IF PROVIDED INCLUDE ON BOTH SIDES OF THE CROSSWALK.

(4) TEMPORARY CURB RAMPS. SEE SDD 15 D 30 SHEET "B".

(5) DRUMS OR BARRICADES AT 25 FOOT SPACING. STREET PARKING SHALL BE PROHIBITED FOR AT LEAST 50 FEET IN ADVANCE OF THE MID-BLOCK CROSSWALK.

(6) TEMPORARY PAVEMENT MARKING FOR CROSSWALK LINES.

(7) LIMIT WORK TO ONE QUADRANT AT A TIME TO MINIMIZE PEDESTRIAN DISRUPTION.

LEGEND

- SIGN ON PERMANENT SUPPORT
- UNDER PEDESTRIAN TRAFFIC
- WORK AREA
- PEDESTRIAN CHANNELIZATION DEVICE
- TYPE II BARRICADE WITH/WITHOUT SIGN (ALL WITH ONE WARNING LIGHT, TYPE A, LOW-INTENSITY FLASHING)
- TYPE III BARRICADE WITH/WITHOUT SIGN (ALL WITH ONE WARNING LIGHT, TYPE A, LOW-INTENSITY FLASHING)
- DIRECTION OF TRAFFIC
- TRAFFIC CONTOL DRUM

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

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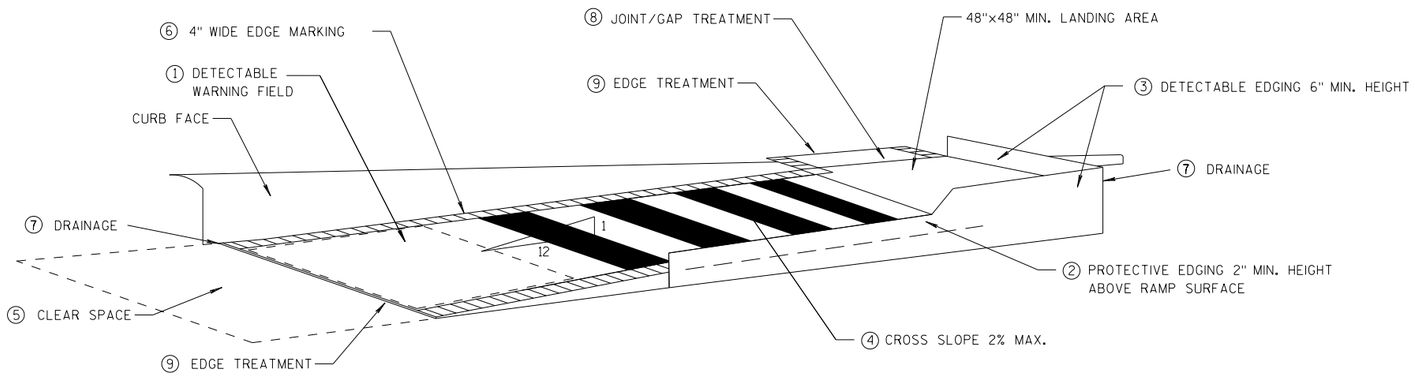
S.D.D. 15 D 30-4a



TEMPORARY CURB RAMP PARALLEL TO CURB

GENERAL NOTES

NOTIFY THE BUS COMPANY 7 DAYS IN ADVANCE OF THE BUS STOP RELOCATION.

ALTERNATE SIDEWALK WORK BETWEEN LEFT AND RIGHT SIDE OF ROADWAY TO MAINTAIN PEDESTRIAN ACCESS.

① CURB RAMPS SHALL BE 48" MIN. WIDTH WITH A FIRM, STABLE AND SLIP RESISTANT SURFACE. INSTALL CONTRASTING DETECTABLE WARNING FIELD AT PEDESTRIAN STREET CROSSINGS. REFER TO SDD 8D5 SHEET "E".

② PROTECTIVE EDGING WITH A 2" MIN. HEIGHT SHALL BE INSTALLED WHEN A CURB RAMP OR LANDING PLATFORM HAS A VERTICAL DROP OF 6" OR GREATER OR HAS A SIDE APRON SLOPE STEEPER THAN 1:3 (33%). PROTECTIVE EDGING SHOULD BE CONSIDERED WHEN CURB RAMPS OR LANDING PLATFORMS HAVE A VERTICAL DROP OF 3" OR MORE.

③ DETECTABLE EDGING WITH 6" MIN. HEIGHT AND CONTRASTING COLOR SHALL BE INSTALLED ON ALL CURB RAMP LANDINGS WHERE THE WALKWAY CHANGES DIRECTION (TURNS).

④ CURB RAMPS AND LANDINGS SHALL HAVE A 1:50 (2%) MAX. CROSS-SLOPE.

⑤ CLEAR SPACE OF 48"X48" MIN. SHALL BE PROVIDED ABOVE AND BELOW THE CURB RAMP.

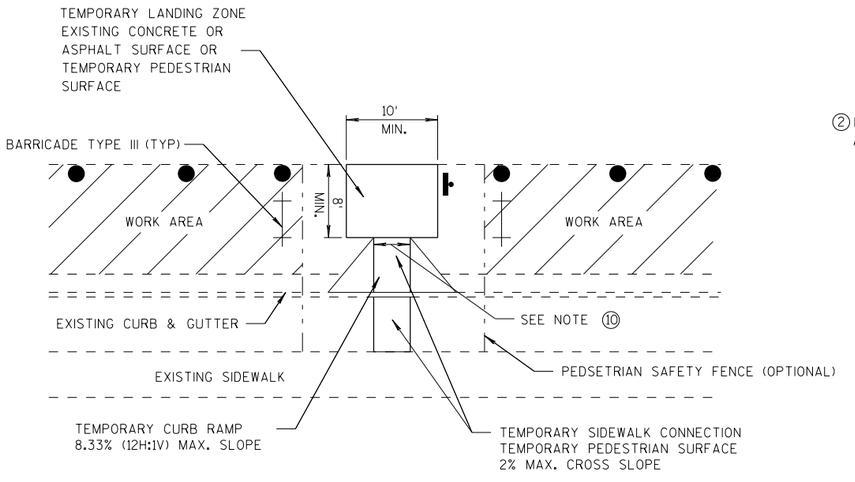
⑥ THE CURB RAMP WALKWAY EDGE SHALL BE MARKED WITH A YELLOW COLOR, 4" WIDE MARKING, UNLESS A CONTRASTING DETECTABLE WARNING FIELD IS PROVIDED.

⑦ DO NOT RESTRICT WATER FLOW IN THE GUTTER SYSTEM.

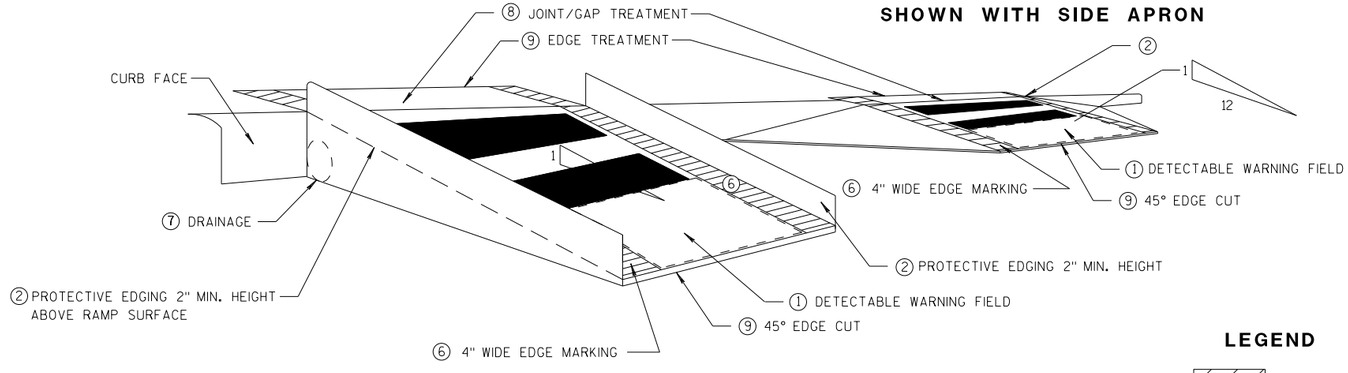
⑧ LATERAL JOINTS OR GAPS BETWEEN SURFACES SHALL BE LESS THAN 1/2" WIDTH.

⑨ CHANGES BETWEEN SURFACE HEIGHTS SHALL NOT EXCEED 1/2". LATERAL EDGES SHALL BE VERTICAL UP TO 1/4" HIGH, AND BEVELED AT 1:2 BETWEEN 1/4" AND 1/2".

⑩ 5' WIDE MIN. WITH PEDSETRIAN SAFETY FENCE, 10' WIDE MIN. WITHOUT PEDESTRIAN SAFETY FENCE.



TEMPORARY BUS STOP PAD



SHOWN WITH SIDE APRON

SHOWN WITH PROTECTIVE EDGE

TEMPORARY CURB RAMP PERPENDICULAR TO CURB

LEGEND

WORK AREA

TYPE III BARRICADE

TRAFFIC CONTOL DRUM

TRAFFIC CONTROL, TEMPORARY ADA COMPLIANT PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

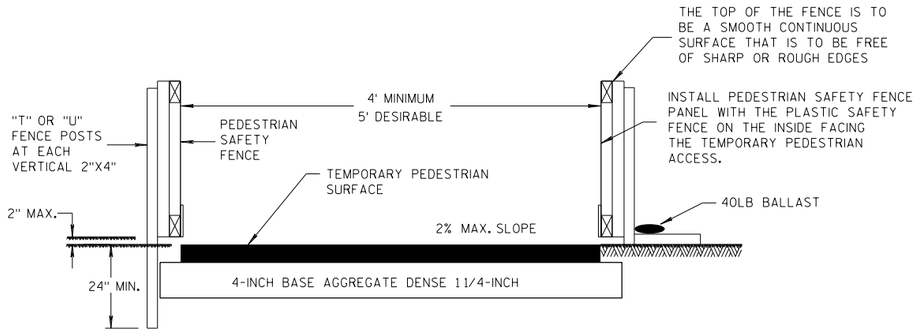
7/2018 DATE

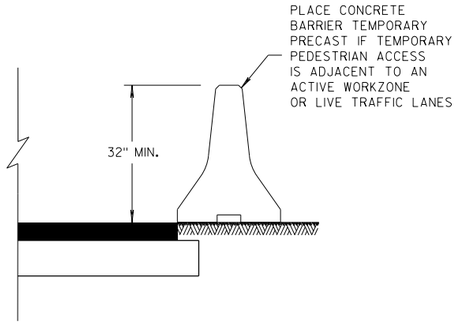
/S/ Andrew Heidtke
WORK ZONE ENG

FHWA

6

S.D.D. 15 D 30-4b

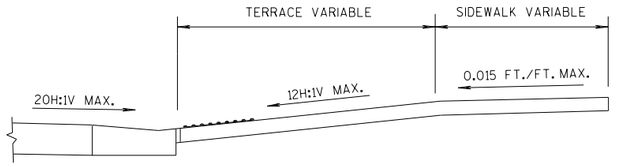




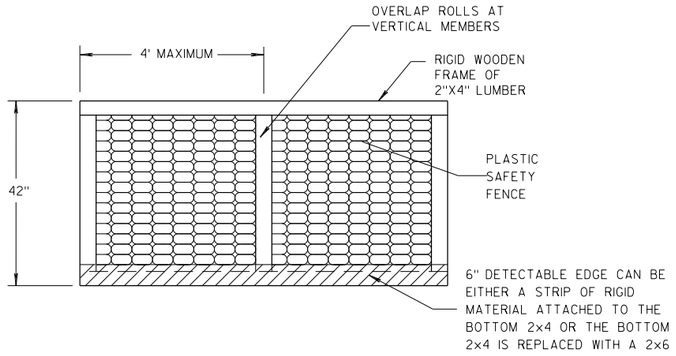
TEMPORARY PEDESTRIAN ACCESS

GENERAL NOTES

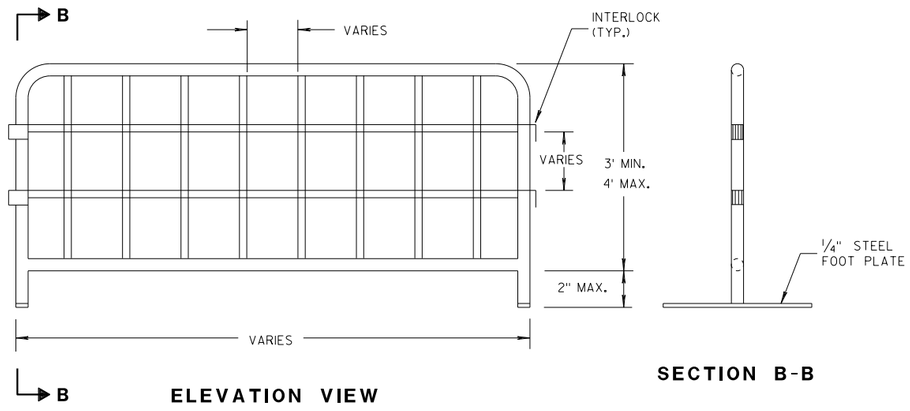
(1) INTERCHANGEABLE WITH THE PEDESTRIAN SAFETY FENCE.



SECTION A-A



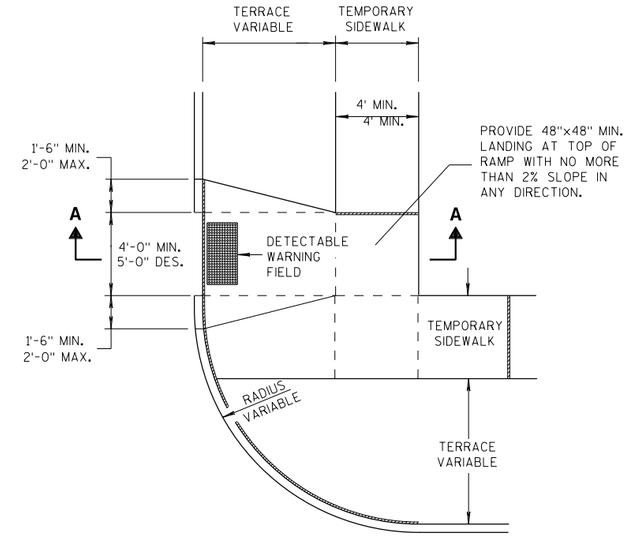
PEDESTRIAN SAFETY FENCE



ELEVATION VIEW

SECTION B-B

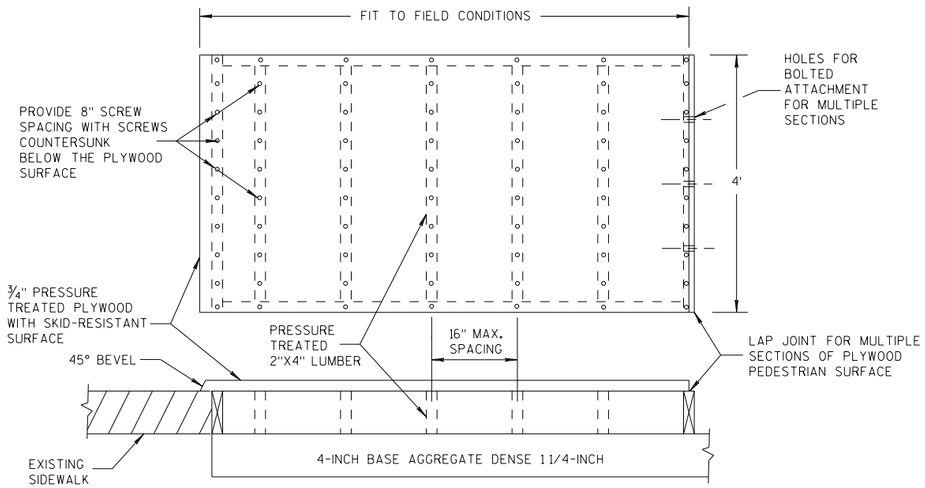
TEMPORARY PEDESTRIAN STEEL BARRICADE (1)



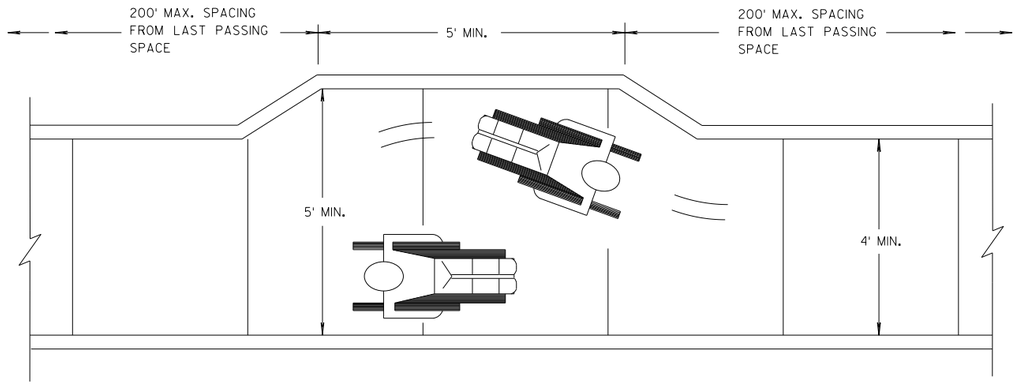
PLAN VIEW

TEMPORARY TYPE 3 RAMP

(OUTSIDE OF CROSSWALK AREA)



TEMPORARY PEDESTRIAN SURFACE PLYWOOD



NARROW SIDEWALK PASSING DETAIL

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

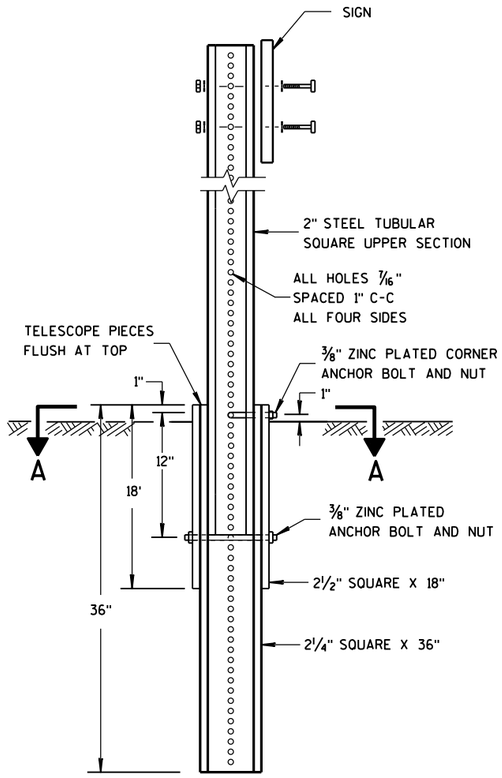
APPROVED

7/2018
DATE

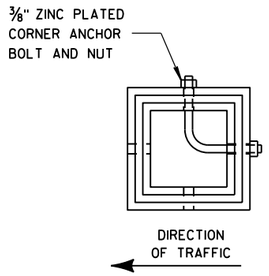
/S/ Andrew Heidtke
WORK ZONE ENG

FHWA

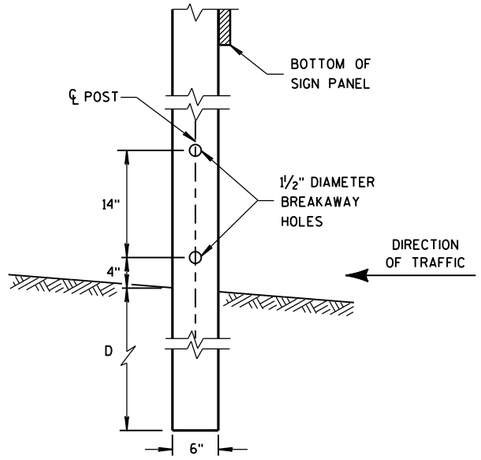
6
S.D.D. 15 D 30-4c



DETAIL OF TUBULAR STEEL SIGN POST



SECTION A-A



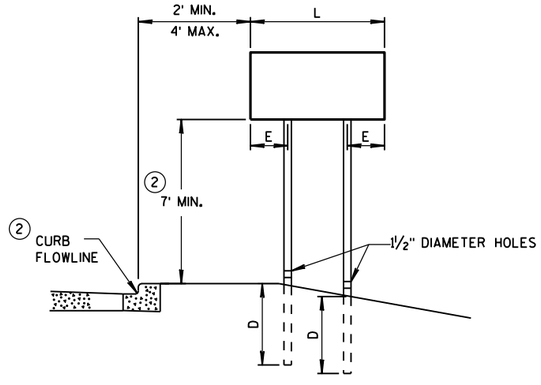
4"x6" WOOD POST MODIFICATION

GENERAL NOTES

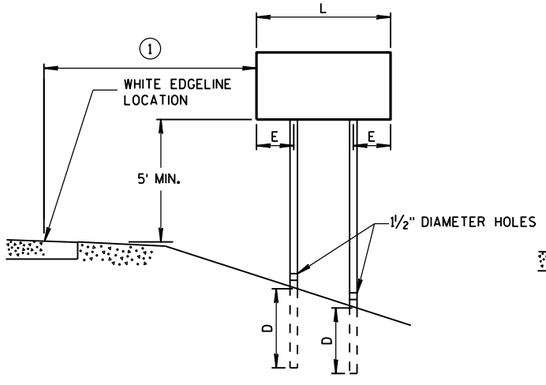
(1) 6 FEET FROM THE EDGE OF PAVEMENT (EDGE LINE LOCATION) UNLESS OTHERWISE DIRECTED BY THE PROJECT ENGINEER. LATERAL OFFSET SHOULD BE ADJUSTED TO AVOID THE DITCH FLOWLINE.

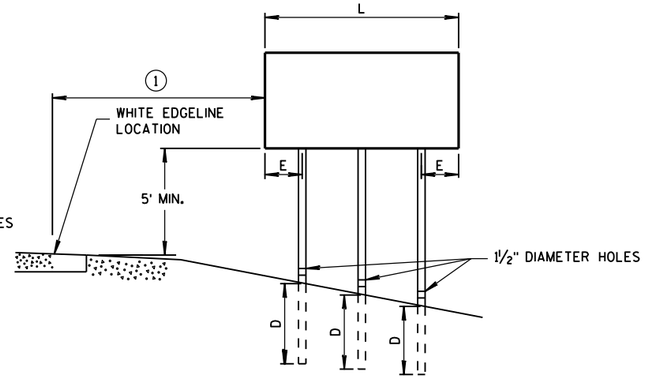
(2) THE EXISTENCE OF CURB AND GUTTER DOES NOT IN ITSELF MANDATE THE VERTICAL CLEARANCE ILLUSTRATED. THAT HEIGHT IS TYPICALLY MEASURED WHERE THERE IS SIDEWALK ADJACENT TO THE ROADWAY OR PARKING IS PERMITTED. IN THE ABSENCE OF SIDEWALK, VERTICAL CLEARANCE IS MEASURED FROM THE TOP OF THE CURB. IF NO SIDEWALK 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

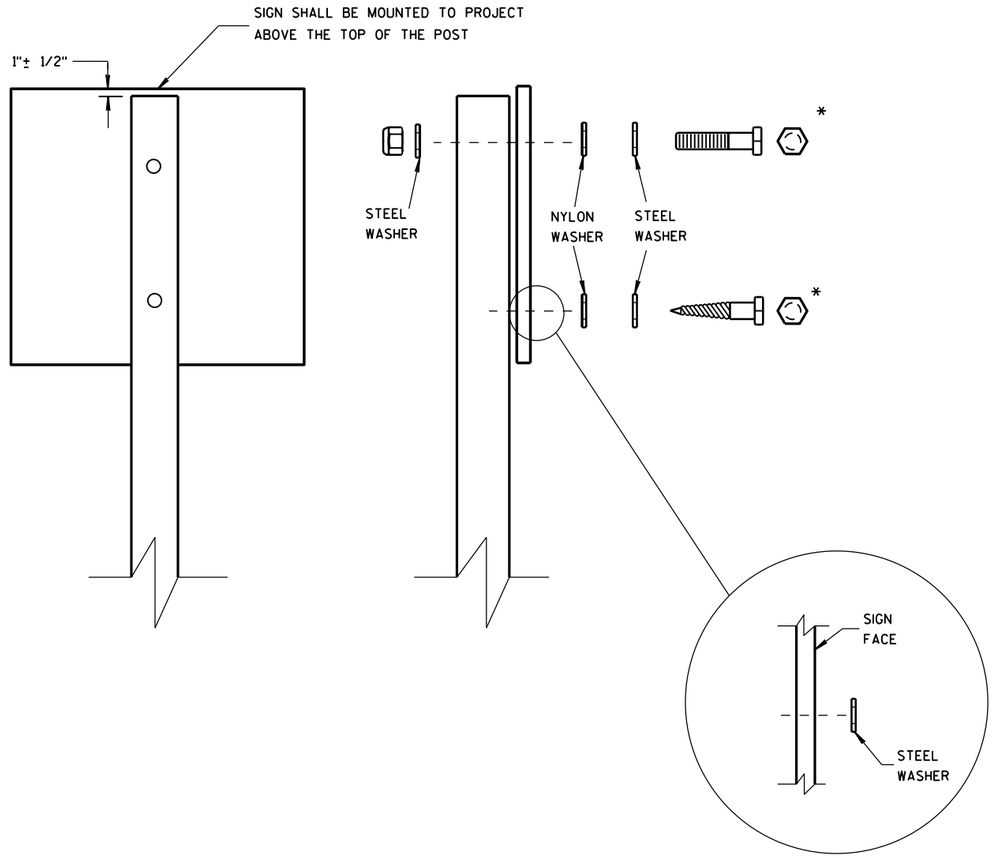
SEE NOTE (3)

TEMPORARY TRAFFIC CONTROL SIGN MOUNTING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

S.D.D. 15 D 38-2a



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 38-2b

S.D.D. 15 D 38-2b

ATTACHMENT OF SIGNS TO POSTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

June 2017
DATE

/S/ Andrew Heldtke
WORK ZONE ENG

FHWA

LEGEND

- TYPE III BARRICADE WITH ATTACHED SIGN
- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- (A) TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC
- WORK AREA
- REMOVING PAVEMENT MARKING (SEE GENERAL NOTES)

GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET, (500 FEET DESIREABLE) DISTANCE TO EXISTING SIGNS.

THIS LANE CLOSURE IS TYPICAL FOR SHIFTING RIGHT LANE - REVERSE FOR SHIFTING LEFT LANE.

ALL SIGNS ARE 48"×48" UNLESS OTHERWISE NOTED.

"WO" IS THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON "COVERED" OR "DOWNED" SIGNS.

CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARD SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARD AND LANE CLOSURE DRUMS FOR A MINIMUM 1500 FEET IN FRONT OF DRUMS.

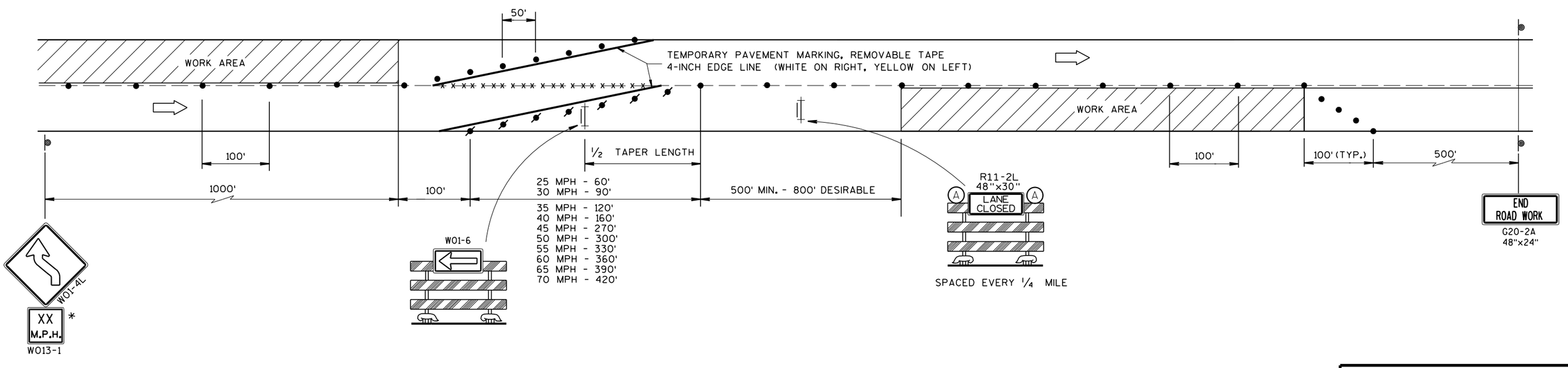
FOR A LANE CLOSURE THAT IS IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, THE ADVANCED WARNING SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS.

REMOVE PAVEMENT MARKINGS IF LANE CLOSURE IS TO BE IN PLACE FOR LONGER THAN 4 OR MORE DAYS AND NIGHTS.

WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

IF THE HORIZONTAL ALIGNMENT IS SUCH THAT A CURVE MAY REQUIRE ADDITIONAL DELINEATION, THE DEVICE SPACING MAY BE DECREASED TO 50 FEET.

ADJUSTMENTS IN BUFFER SPACE NEED TO BE INCORPORATED WHEN THE LANE CLOSURE OCCURS NEAR AN INTERCHANGE EXIT OR ENTRANCE RAMP. THE LANE CLOSURE MUST MUST TAKE PLACE FAR ENOUGH IN ADVANCE OF AN EXIT OR ENTRANCE RAMP TO STILL ALLOW FOR ADEQUATE BUFFER SPACE. THE MINIMUM LENGTH OF THE BUFFER SPACE BEFORE AN EXIT RAMP SHOULD BE 1/2 THE LENGTH OF THE TRANSITION AREA. THE ENTRANCE RAMP SHOULD BE FOLLOWED BY THE ORIGINAL BUFFER SPACE LENGTH OF 800 FEET DESIRABLE PRIOR TO ANOTHER TRAFFIC CONTROL CHANGE SUCH AS A CROSSOVER MANEUVER.



* USE ONLY IF DESIGN SPEED IS 10 MPH BELOW POSTED SPEED

LANE SHIFT MULTI-LANE DIVIDED OR ONE WAY ROAD

TRAFFIC CONTROL, LANE SHIFT, MULTI-LANE DIVIDED OR ONE WAY ROAD

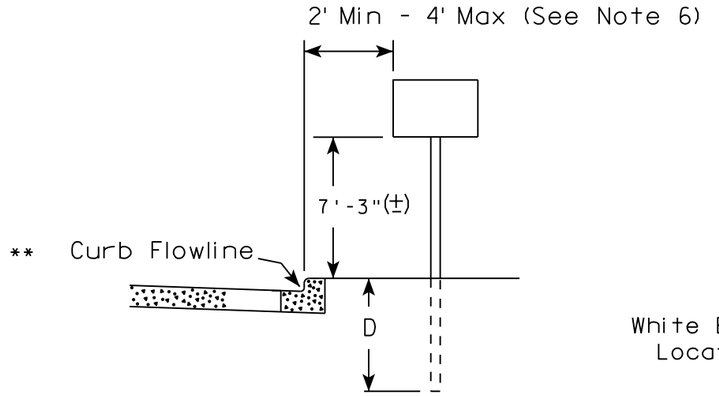
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2018
DATE
/S/ Andrew I
WORK ZONE E
FHWA

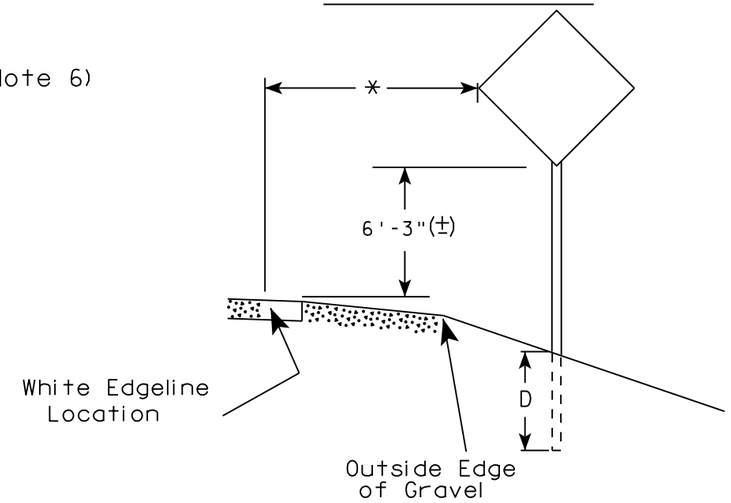
6

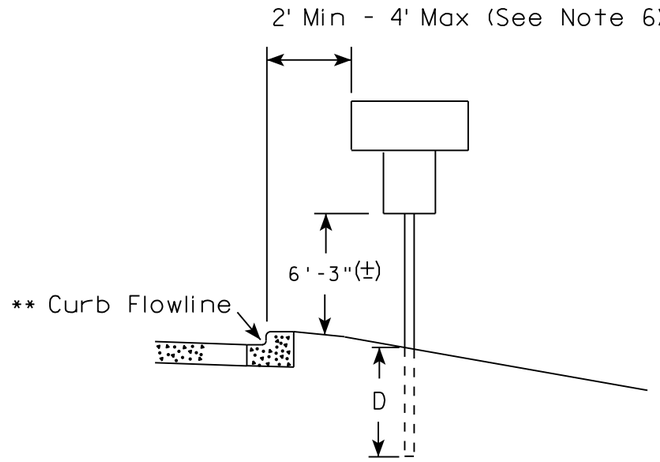
S.D.D. 15 D 40-1

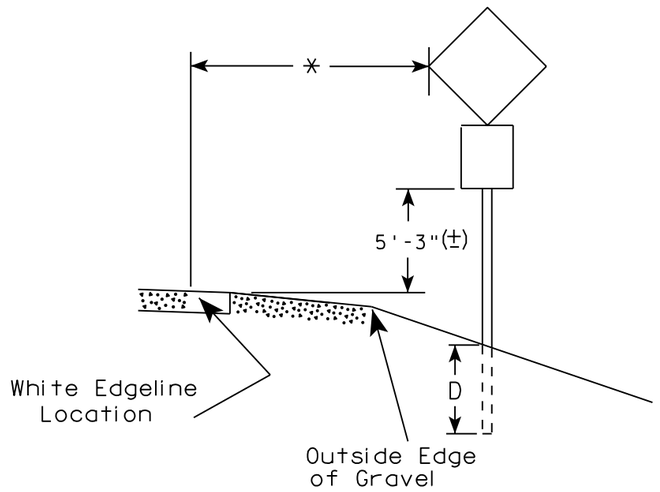
URBAN AREA



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

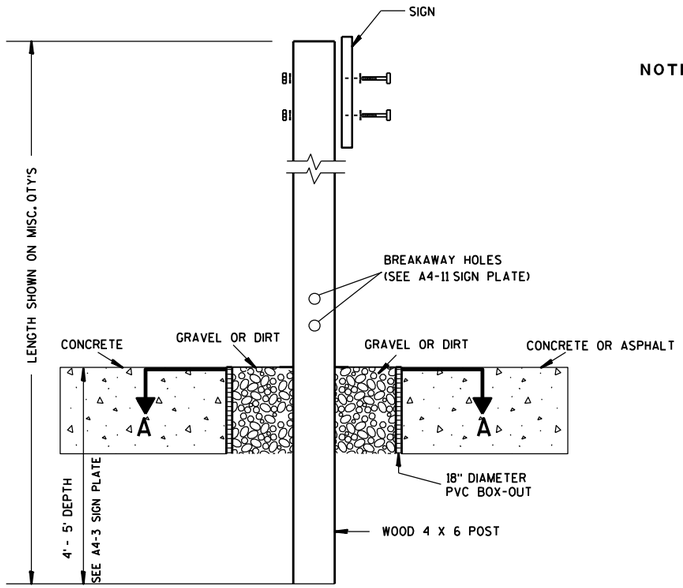
1. Signs wider than 4 feet or 20 sq.ft or larger, shall be mounted on multiple posts. Refer to plate A4-4.
2. If signs are mounted on barrier wall, see A4-10 sign plate.
3. For expressways and freeways, mounting height is 7'- 3" (±) or 6'-3" (±) depending upon existence of a sub-sign.
4. J-Assemblies are considered to be one sign for mounting height.
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

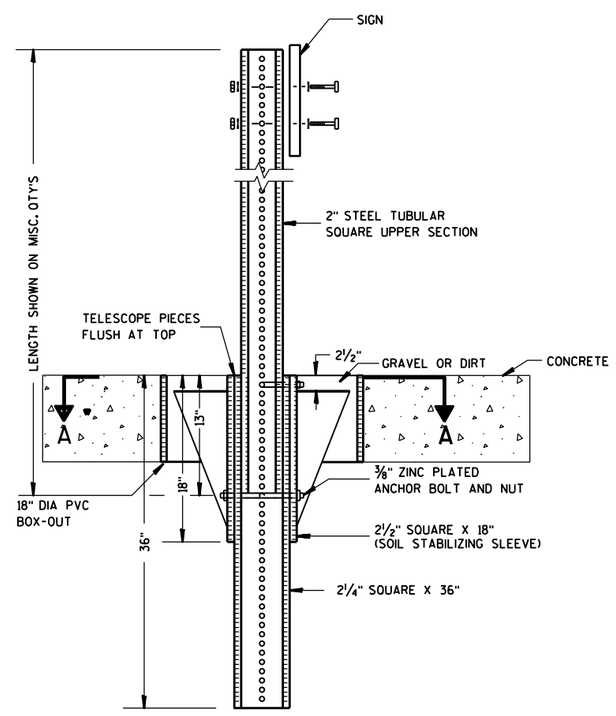
DATE 8/21/17 PLATE NO. A4-3.21



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.

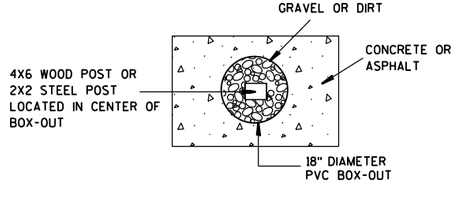
ELEVATION VIEW

DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT



ELEVATION VIEW

DETAIL OF STEEL 2 X 2 SIGN POST IN BOX-OUT



PLAN VIEW

FOR NEW CONCRETE/ASPHALT INSTALLATIONS

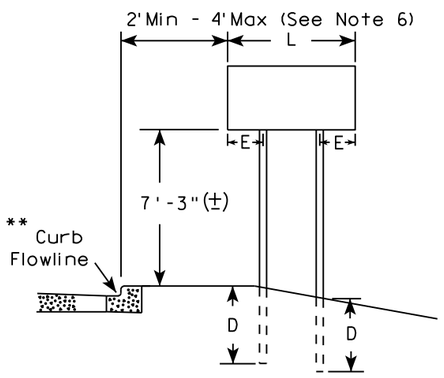
SIGN POST BOX-OUTS A4-3B

WISCONSIN DEPT OF TRANSPORTATION

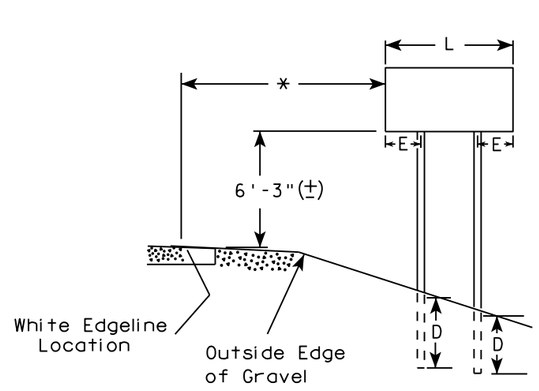
APPROVED Matthew R Rauch
for State Traffic Engineer
DATE 1/27/14 PLATE NO. A4-3B.1

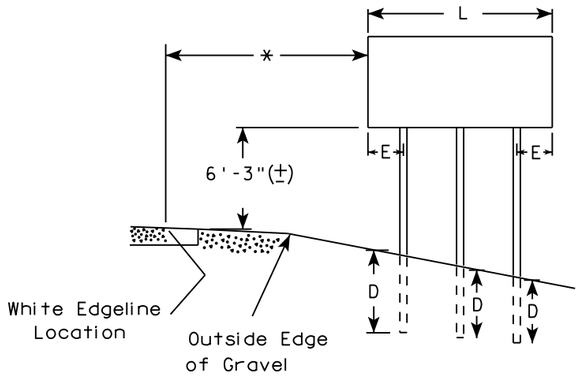
PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN		SHEET NO: 243	E

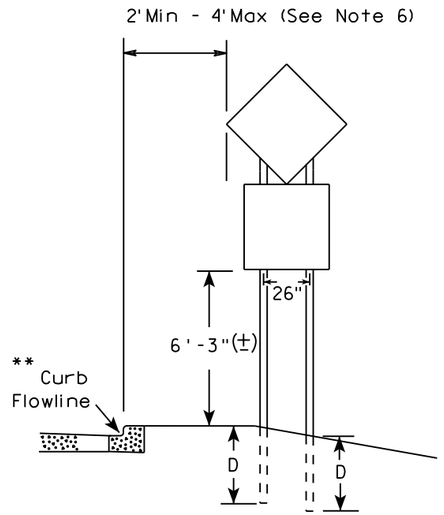
URBAN AREA



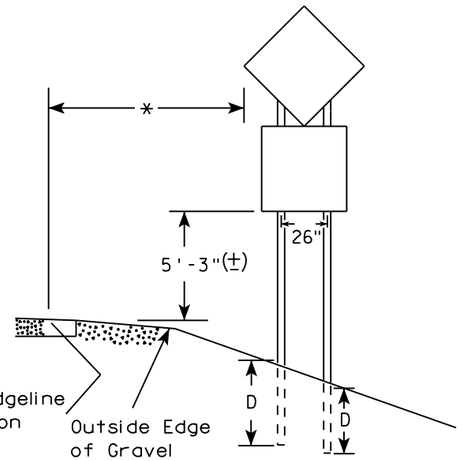
RURAL AREA (See Note 3)







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 108"	L/5

SIGN SHAPE OTHER THAN DIAMOND (THREE POSTS REQUIRED)	
L	E
Greater than 108" to 144"	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. J-Assemblies are considered to be one sign for mounting height.
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

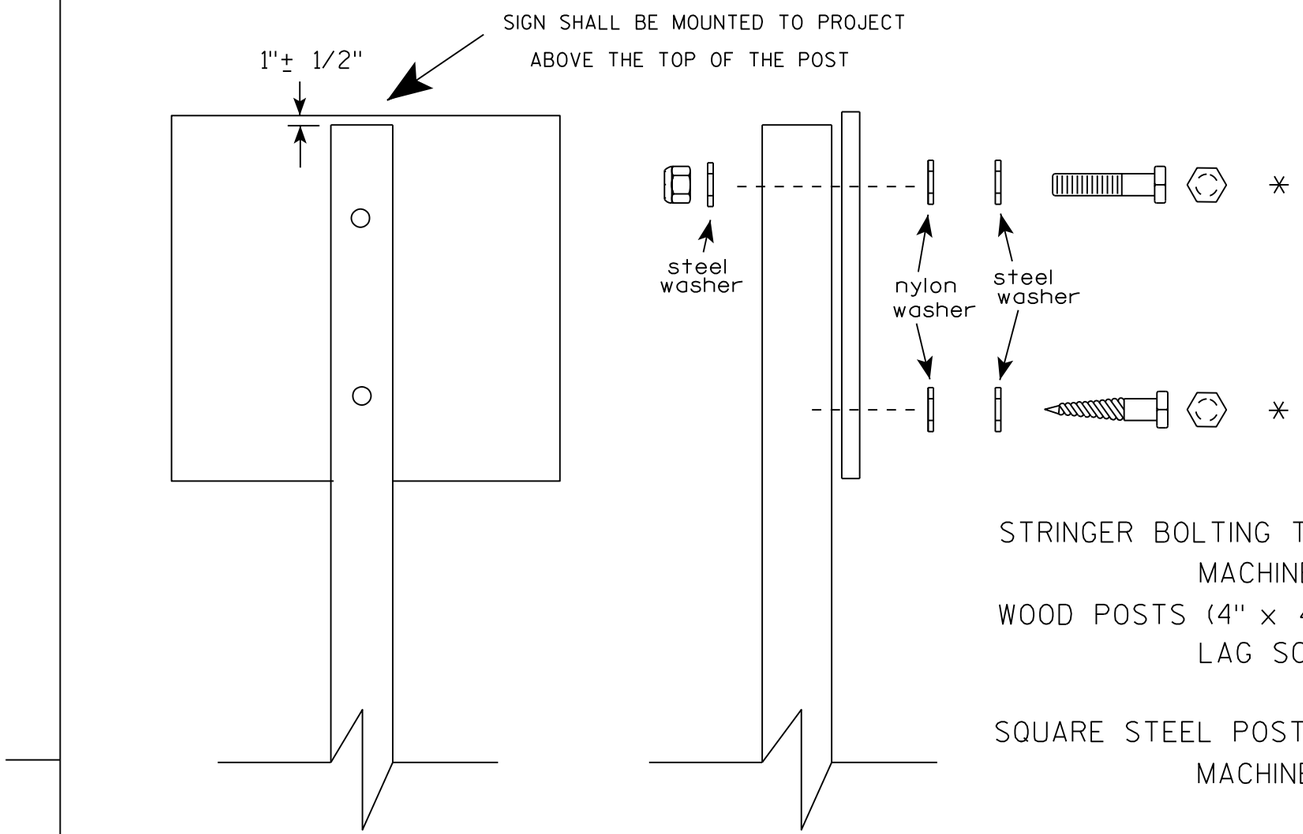
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 8/21/17 PLATE NO. A4-4.15

7

7



Nuts, bolts and lags used for mounting signs shall have hexagonal heads and shall be either :

a. Hot dip galvanized in accordance with ASTM Designation: A 153, Class D, or SC 3

b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.

Threads on bolts and nuts shall be manufactured with sufficient allowance for the cadmium plate or galvanized coating to permit the nuts to run freely on the bolts.

STRINGER BOLTING TO ALUMINUM SIGNS (SEE SIGN PLATE A4-18)

MACHINE BOLTS - 5/16" X 1-3/4" Length w/ lock nuts

WOOD POSTS (4" x 4" or 4" x 6")

LAG SCREWS - 3/8" X 3" (NO STRINGERS ON BACK OF SIGN)
3/8" X 4" (STRINGERS ON BACK OF SIGN)

SQUARE STEEL POSTS (2" x 2")

MACHINE BOLTS - 3/8" X 3-1/4" Length w/ nuts (NO STRINGER ON BACK OF SIGN)
3/8" X 5" Length w/ nuts (STRINGERS ON BACK OF SIGN)

RIVETS - 9/32" (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL
O.D. FLANGE .720-.765 INCH, GRIP RANGE .042-.375 INCH

WASHERS (ALL POSTS) -

1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL

1-1/4" O.D. X 3/8" I.D. X .080 NYLON

* Two different fastening systems are shown for illustration purposes. On any individual sign, either one or the other system shall be used. Actual number of fasteners per sign varies with the sign area, but normally there are two. For a single post installation, all signs greater than 9 sq. ft. require the use of 3 fasteners.

ATTACHMENT OF SIGNS TO POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

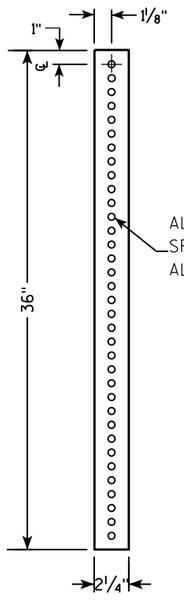
DATE 8/11/16 PLATE NO. A4-8.8

PROJECT NO: 4996-01-79	NORTH AVE	SHEBOYGAN		SHEET NO: 245	E

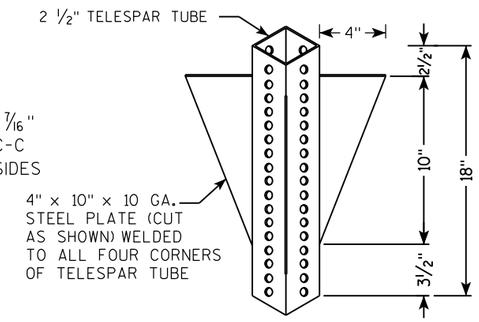
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\A48.DGN PLOT DATE : 11-AUG-2016 11:35 PLOT BY : $$ plotuser $$

TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM

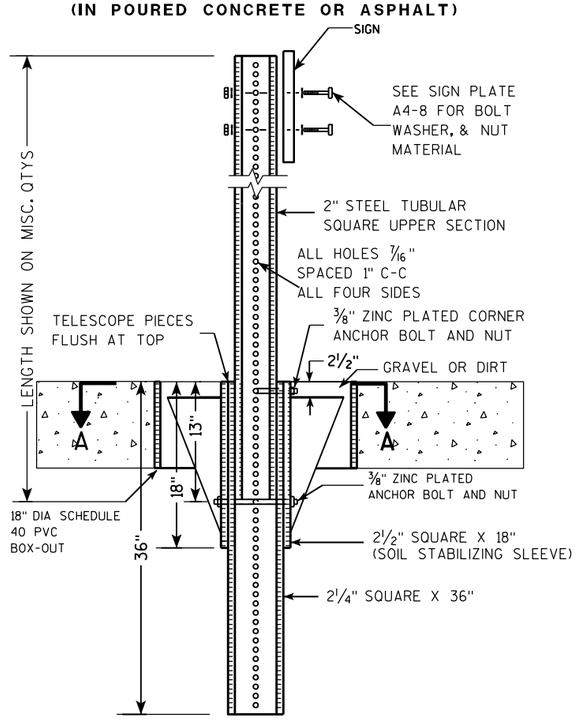
2 ¼ " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH



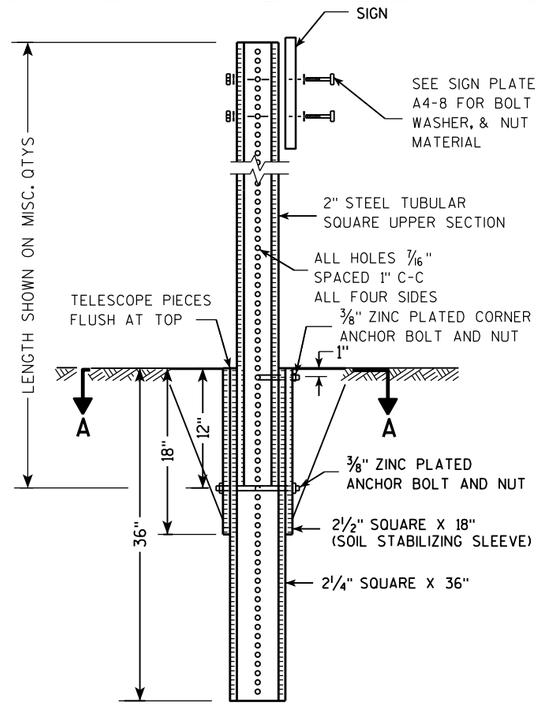
2 ½ " SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH

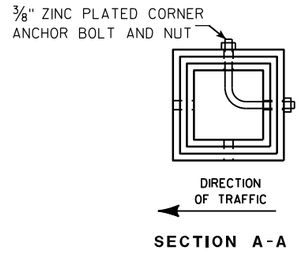


DETAIL OF TUBULAR STEEL SIGN POST
(IN POURED CONCRETE OR ASPHALT)



DETAIL OF TUBULAR STEEL SIGN POST
(IN LOCATIONS OTHER THAN POURED CONCRETE OR ASPHALT)





SECTION A-A

Area of Sign Installation (Sq. Ft.)	Number of Required Posts
9 or less	1
Greater than 9 less than or equal to 18	2
Greater than 18 less than or equal to 27	3

Signs wider than 3 feet or larger than 9 sq. ft shall be mounted on multiple posts (see above table).

TUBULAR STEEL SIGN POST A4-9

WISCONSIN DEPT OF TRANSPORTATION

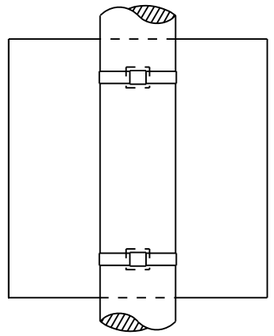
APPROVED Matthew R Rauch
for State Traffic Engineer

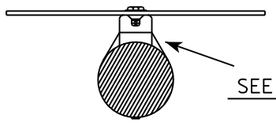
DATE 2/05/15 PLATE NO. A4-9.9

PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN		SHEET NO: 246	E

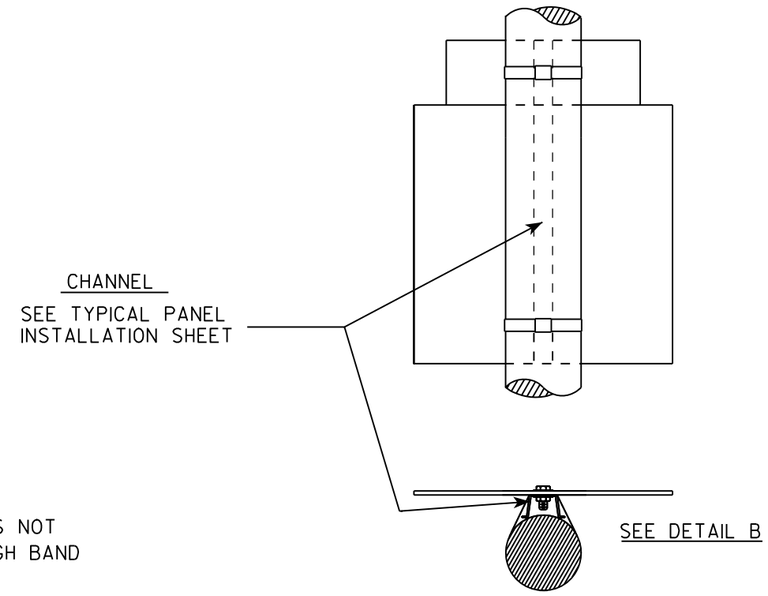
BANDING

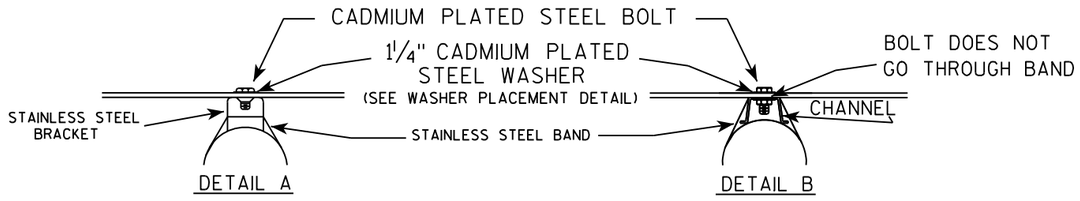
SINGLE SIGN



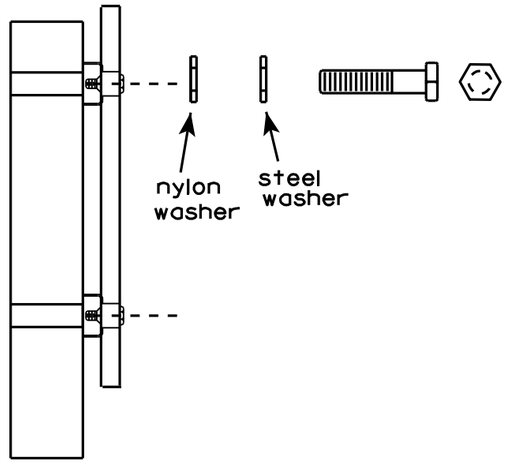


"J" ASSEMBLY





WASHER PLACEMENT



WASHERS (ALL POSTS) -
1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON
FOR ALL TYPE H SIGNS

GENERAL NOTES

1. Any sign over 3 feet in width shall use the V-Block banding method. See A5-10 standard plate.
2. Signs 3 feet or greater in height shall have three bracket bands installed. Signs less than 3 feet in height shall have two bracket bands installed.
3. Banding and assembly bracket shall be stainless steel. All bands shall be 3/4" in width and 0.025" thickness.

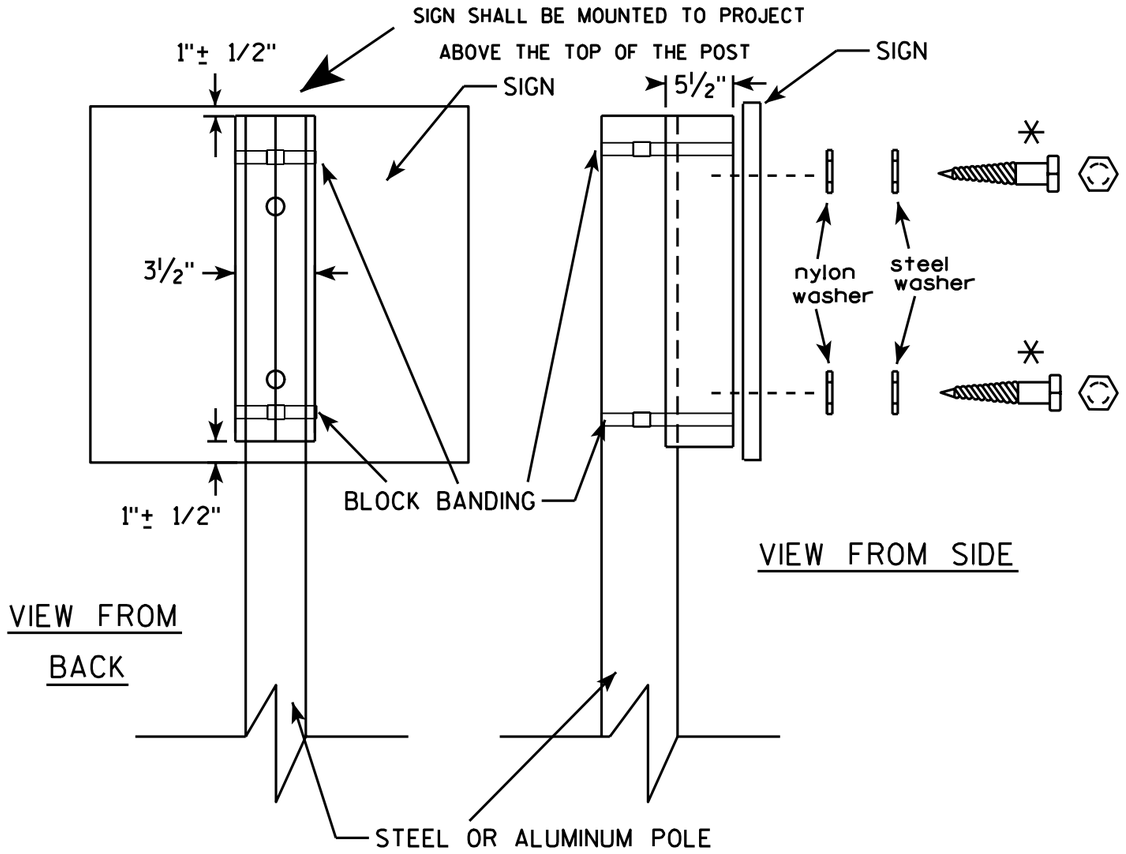
STANDARD SIGN
SIGN BANDING DETAILS

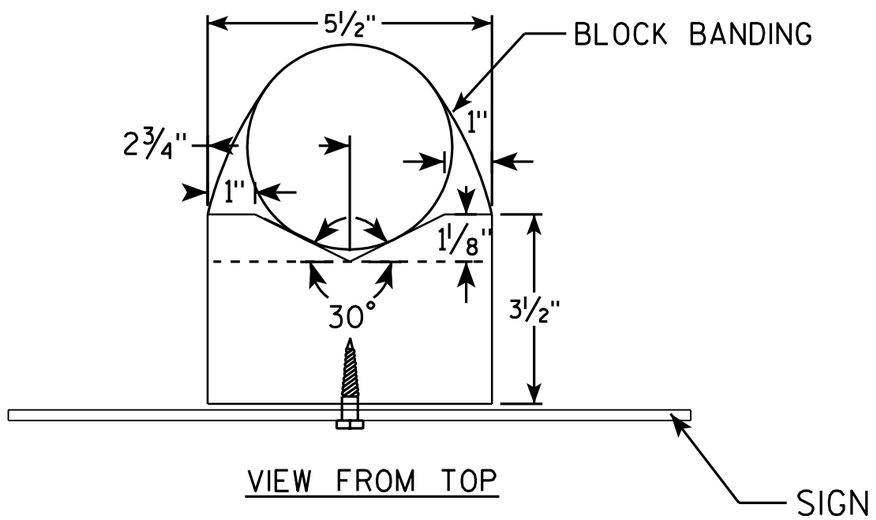
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 8/16/13 PLATE NO. A5-9.3

PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN		SHEET NO: 247	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"

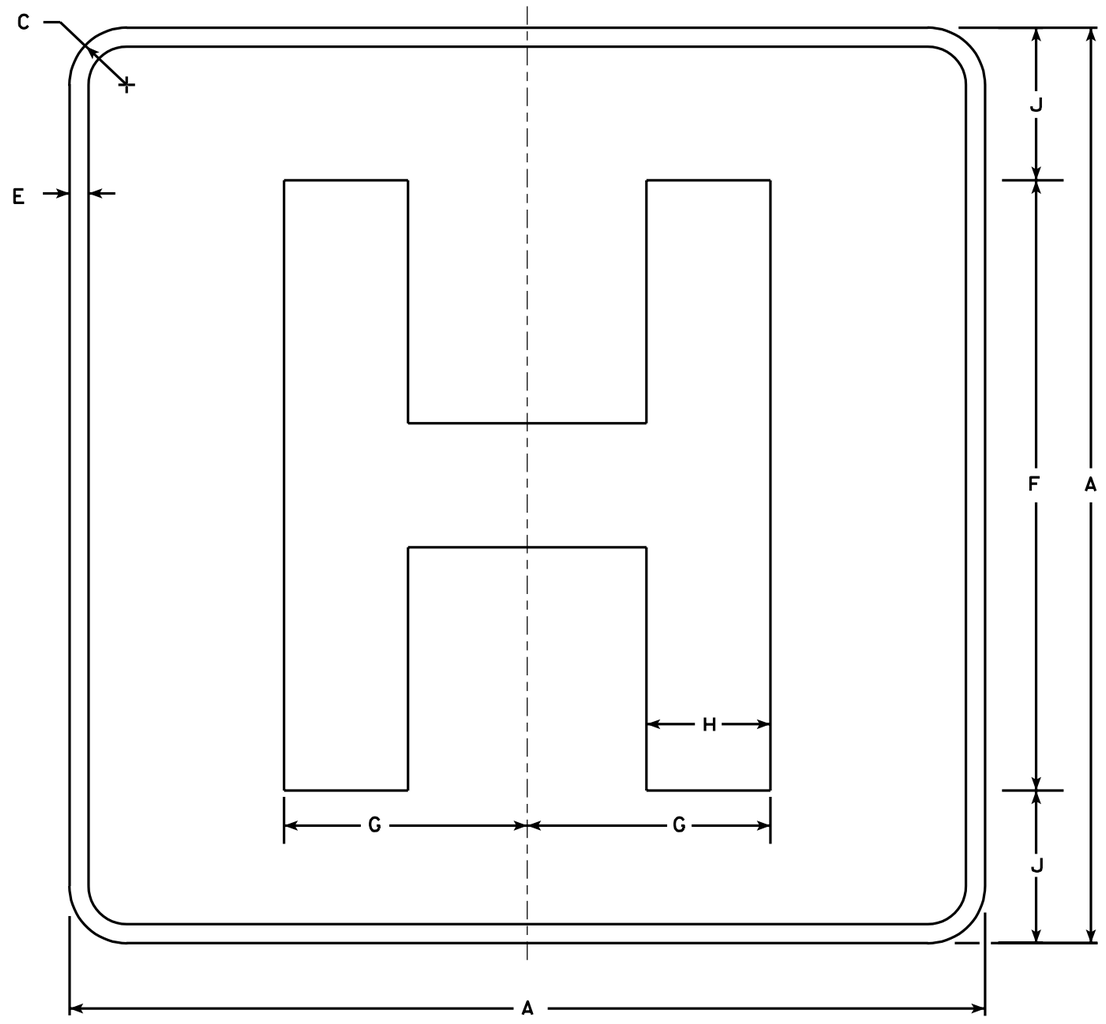
BLOCK BANDING DETAIL (V-BLOCK OPTION)

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 7/12/07 PLATE NO. A5-10.1

PROJECT NO: 4996-01-79	NORTH AVE	SHEBOYGAN		SHEET NO: 248	E



D9-2

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Blue
   Message - White - Type H Reflective
3. Message Series - E Modified
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

Metric equivalent for this sign is:

SIZE	
1	450 mmX 450 mm
2	600 mmX 600 mm
3	900 mmX 900 mm
4	X
5	X

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	18		1 1/8		1/2	12	4 3/4	2 3/8		3																	4.0
2	24		1 1/2		1/2	16	6 3/8	3 1/4		4																	4.0
3	36		2 1/4		3/4	24	9 1/2	4 7/8		6																	9.0
4																											
5																											

STANDARD SIGN
D9-2

WISCONSIN DEPT OF TRANSPORTATION

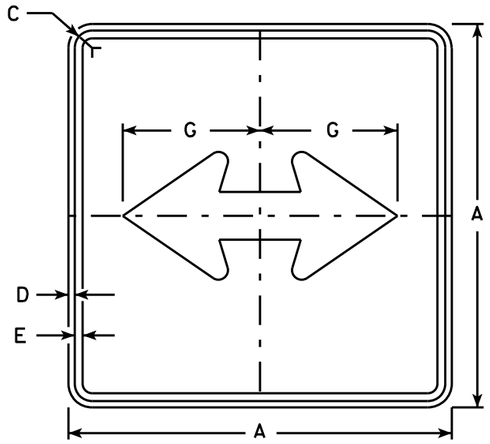
APPROVED Chester J Spong for State Traffic Engineer

DATE 1/15/02 PLATE NO. D9-2.4

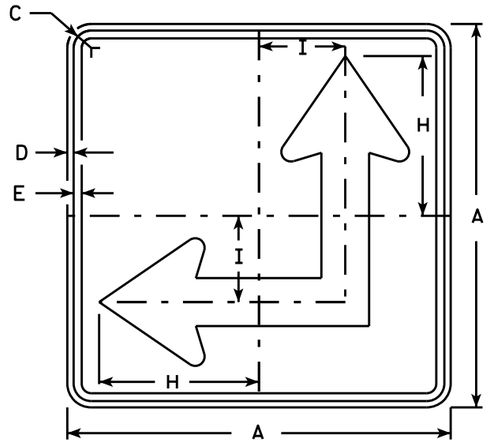
PROJECT NO: 4996-01-79	NORTH AVE	SHEBOYGAN		SHEET 249	E

FILE NAME : C:\Users\Projects\tr_stdplate\D92.DGN PLOT DATE : 21-OCT-2005 10:28 PLOT BY : DOTSJA

WISDOT/CADDS SHEET 42



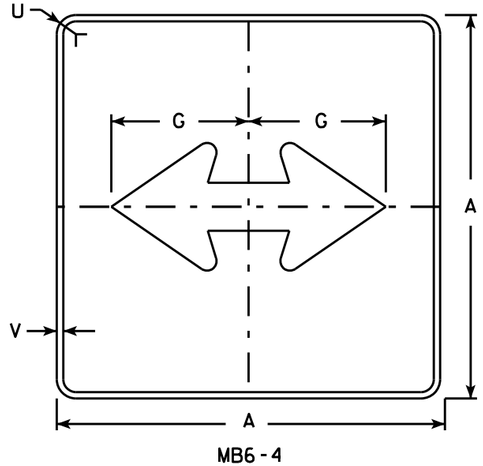
M6-4
MM6-4
MO6-4
MP6-4



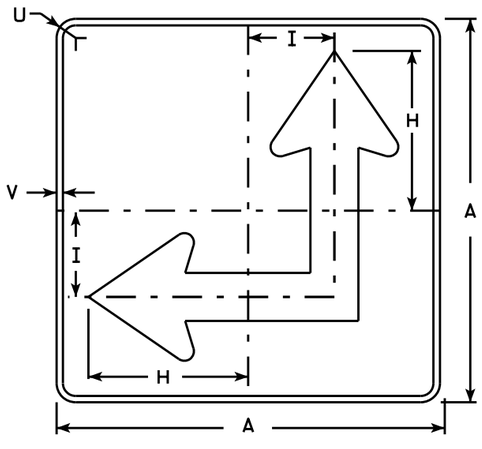
M6-6
MM6-6
MO6-6
MP6-6

NOTES

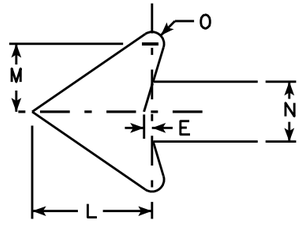
1. Signs are Type II - Type H except as Shown
2. Color:
   Background - See Note 4
   Message - See Note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M6-4 and M6-6 Background - White
   Message - Black
   MB6-4 and MB6-6 Background - Blue
   Message - White
   MK6-4 and MK6-6 Background - Green
   Message - White
   MM6-4 and MM6-6 Background - White
   Message - Green
   MN6-4 and MN6-6 Background - Brown
   Message - White
   MO6-4 and MO6-6 Background - Orange - Type F Reflective
   Message - Black
   MP6-4 and MP6-6 Background - White
   Message - Blue
   MR6-4 and MR6-6 Background - Brown
   Message - Yellow
5. M6-6R same as M6-6L except arrow points ahead and right.



MB6-4
MK6-4
MN6-4
MR6-4



MB6-6
MK6-6
MN6-6
MR6-6



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	21		1 1/8	3/8	3/8		7 1/2	8 3/4	4 1/4			5 1/4	3	2 5/8	1/2						1 1/2	1/2					3.06
3	30		1 3/8	1/2	5/8		10 3/4	12 1/2	6 3/4			7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25
4	30		1 3/8	1/2	5/8		10 3/4	12 1/2	6 3/4			7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25
5	30		1 3/8	1/2	5/8		10 3/4	12 1/2	6 3/4			7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25

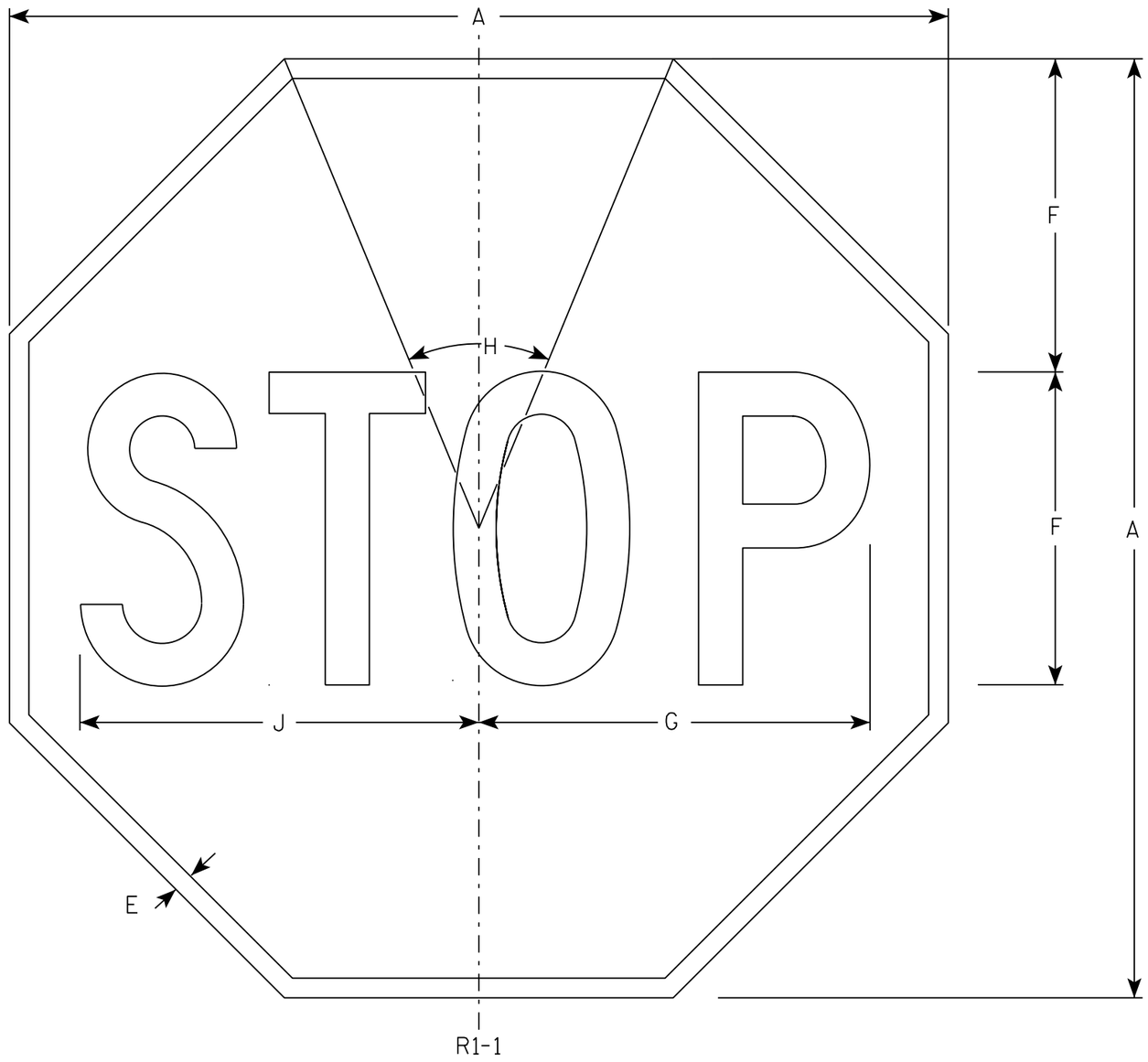
STANDARD SIGN
M6-4 & M6-6
SERIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 10/15/15 PLATE NO. M6-4.10

PROJECT NO: 4996-01-79 | HWY: NORTH AVE | COUNTY: SHEBOYGAN | SHEET 250 | E



NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Red
   Message - White
3. Message Series - C

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	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

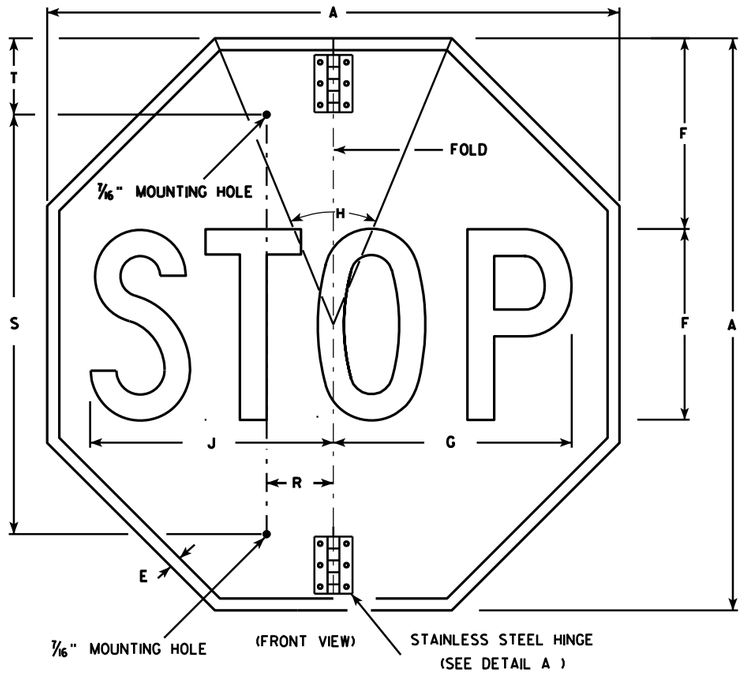
R1-1

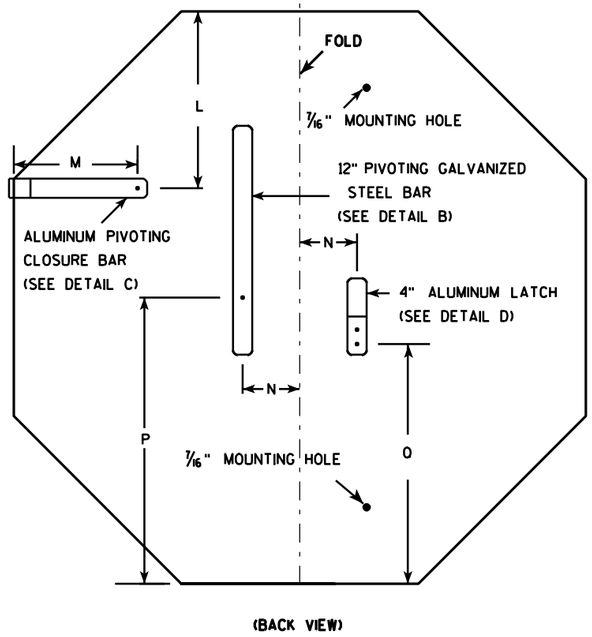
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/12/15 PLATE NO. R1-1.13

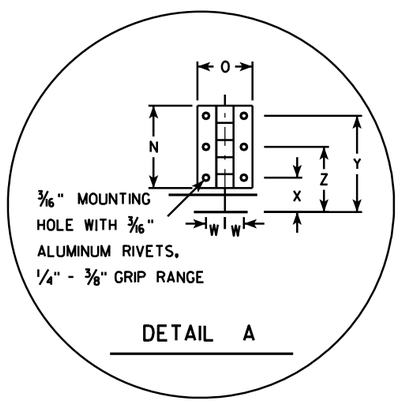
PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN		SHEET 251	E



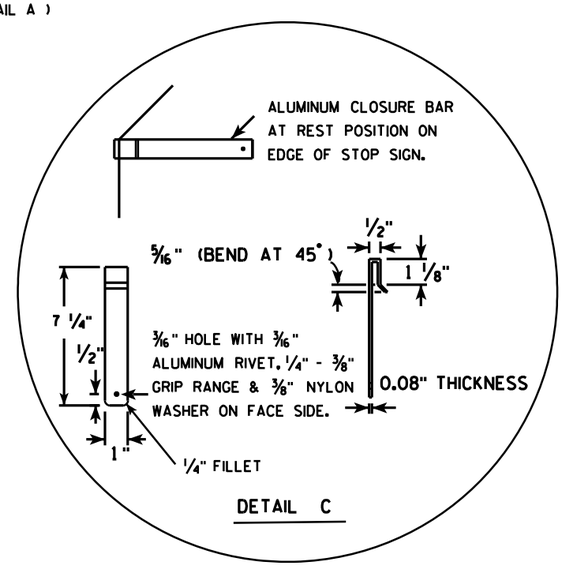


NOTES

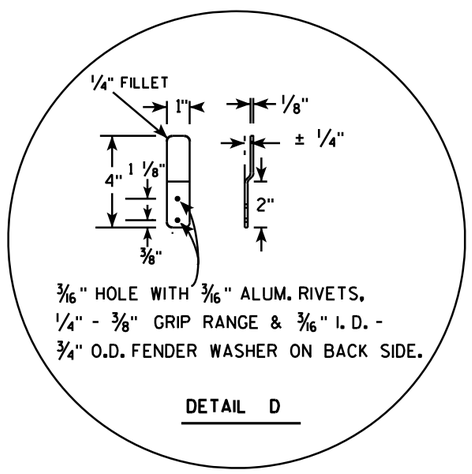
1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Red
   Message - White
3. Message Series - C
4. All hardware used on the folding STOP sign installation shall conform to 637.2.4 of the WIS DOT Standard Specification.



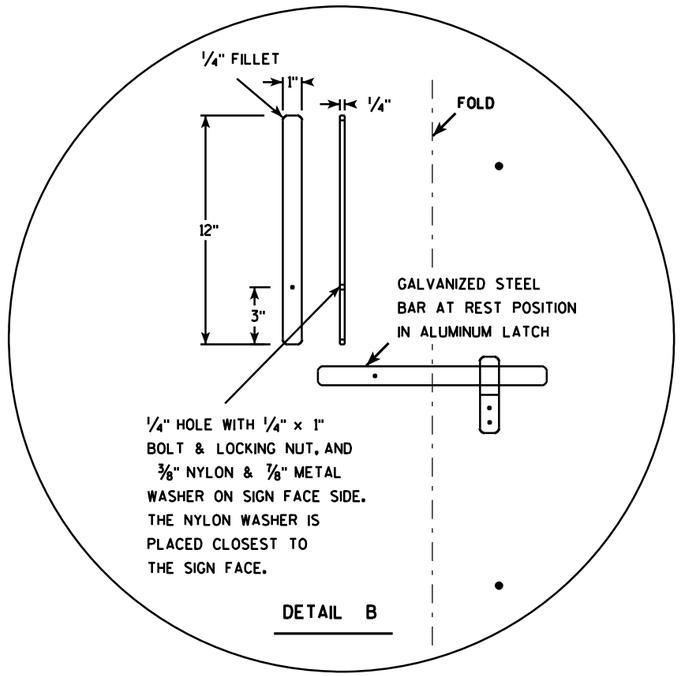
DETAIL A



DETAIL C



DETAIL D



DETAIL B

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	O	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30				5/8	10	12 1/2	45		12 3/4		9 1/4	6 1/2	3	2	15	12 3/8	2 1/2	22	5			11/16	1 1/4	3 1/2	2 3/8	5.18
2M	36				3/4	12	15	45		15 3/8		11	6 1/2	3	2	18	15 3/8	2 1/2	26	5			11/16	1 1/4	3 1/2	2 3/8	7.46
3	36				3/4	12	15	45		15 3/8		11	6 1/2	3	2	18	15 3/8	2 1/2	26	5			11/16	1 1/4	3 1/2	2 3/8	7.46
4																											
5																											

STANDARD SIGN
R1-1F

WISCONSIN DEPT OF TRANSPORTATION

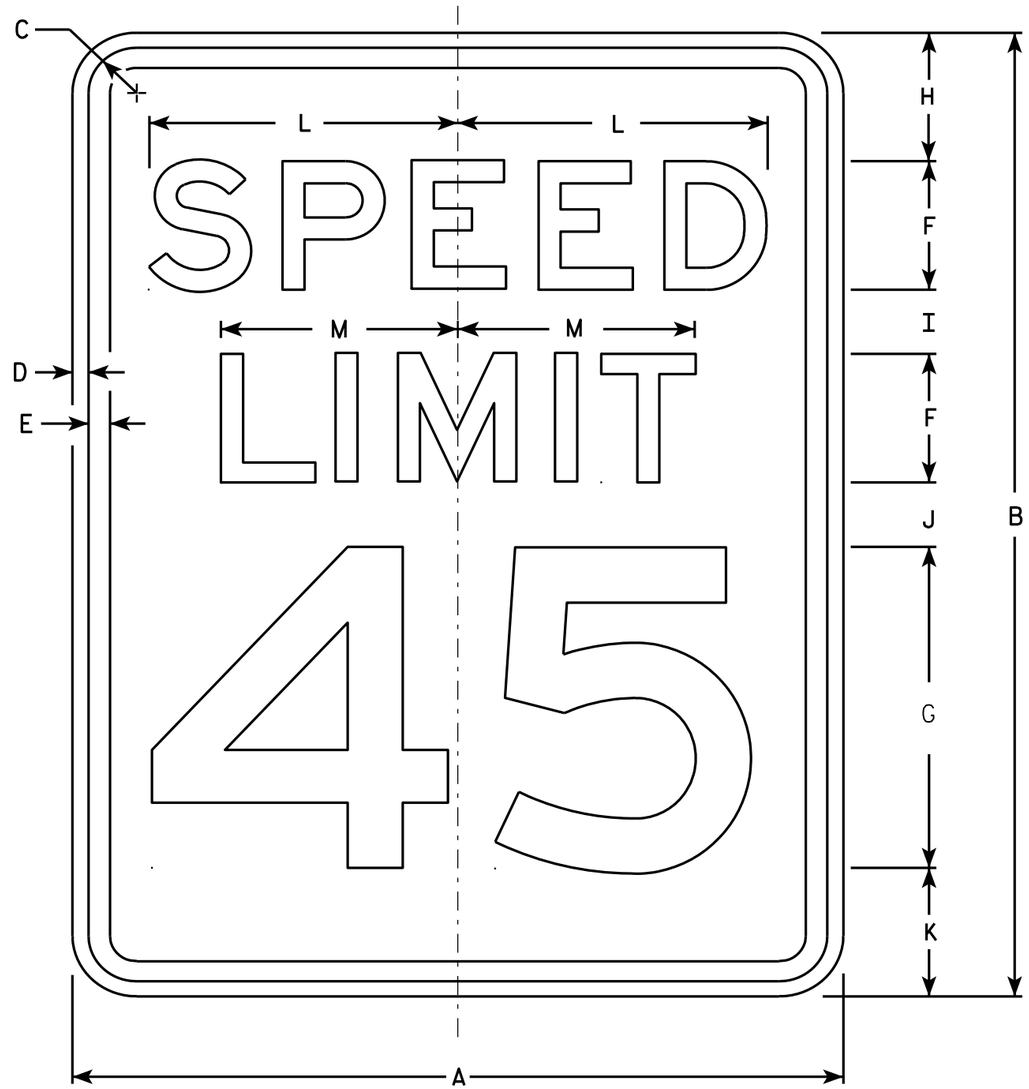
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/03/10 PLATE NO. R1-1F.3

PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN		SHEET 252	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



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

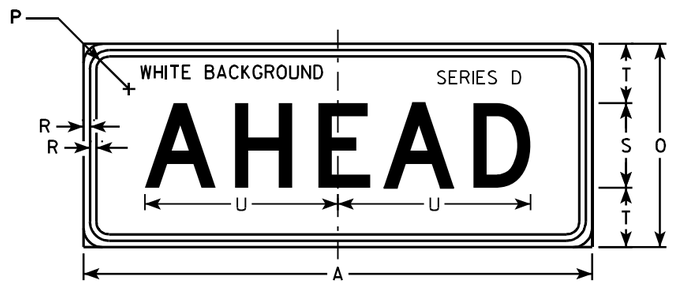
DATE 5/26/10 PLATE NO. R2-1.13

PROJECT NO: 4996-01-79 | HWY: NORTH AVE | COUNTY: SHEBOYGAN | SHEET 253 | E

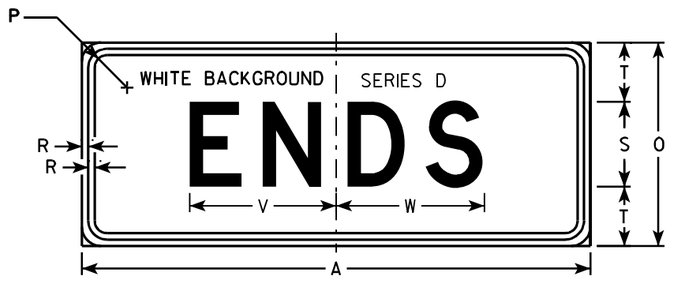
R3-17

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - AS SHOWN
   Message - BLACK
3. Message Series - C or as noted on the Signs.
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.



R3-17ap



R3-17bp

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	R3-17 Area sq. ft.	R3-17ap Area sq. ft.	R3-17bp Area sq. ft.
1																													
2S	30	24	1 1/8	3/8	1/2	2	4	4 1/8	7 7/8	6 3/8	9 1/2	2 5/8	7/8	13	12	1 1/8	3 3/8	3/8	5	3 1/2	11 3/8	8 5/8	8 3/4	2 3/8	15 5/8	8	5.0	2.5	2.5
2M	30	24	1 1/8	3/8	1/2	2	4	4 1/8	7 7/8	6 3/8	9 1/2	2 5/8	7/8	13	12	1 1/8	3 3/8	3/8	5	3 1/2	11 3/8	8 5/8	8 3/4	2 3/8	15 5/8	8	5.0	2.5	2.5
3																													
4																													
5																													

STANDARD SIGN
R3-17 & R3-17a&bp

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/12/2011 PLATE NO. R3-17.2

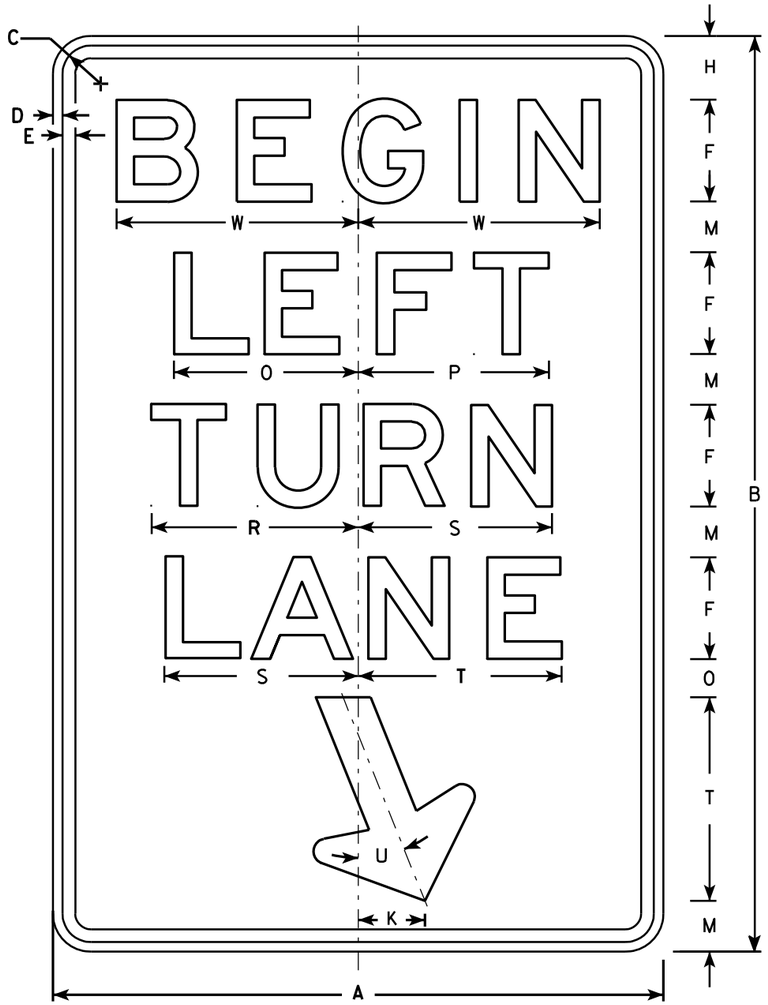
PROJECT NO: 4996-01-79 | NORTH AVE | SHEBOYGAN | SHEET 254 | E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\R317.DGN PLOT DATE : 02-APR-2013 14:09 PLOT BY : mscj9h

WISDOT/CADDS SHEET 42

7

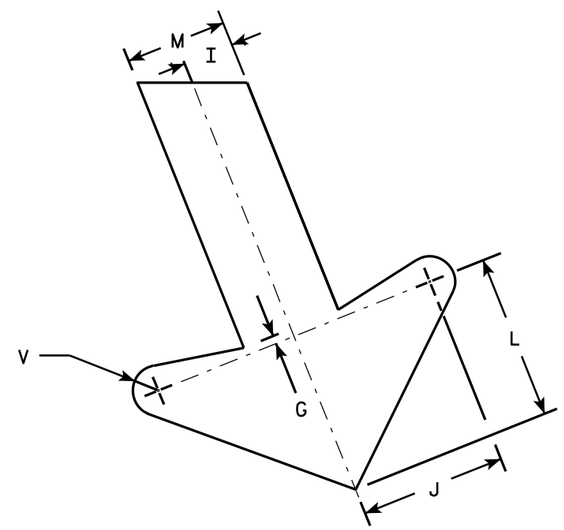
7



R3-20L

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - E
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	36	1 1/8	3/8	1/2	4	1/4	2 1/2	1	2 7/8	2 5/8	3 1/4	2	1 1/2	7 1/4	7 1/2		8 1/8	7 5/8	8	22°	1/2	9 1/2				6.0
2M	24	36	1 1/8	3/8	1/2	4	1/4	2 1/2	1	2 7/8	2 5/8	3 1/4	2	1 1/2	7 1/4	7 1/2		8 1/8	7 5/8	8	22°	1/2	9 1/2				6.0
3	36	54	1 3/4	1/2	5/8	6	3/8	3 3/4	1 1/2	4 1/4	4	4 7/8	3	2 1/4	10 7/8	11 1/4		12 1/4	11 1/2	12	22°	3/4	13 1/4				13.5
4																											
5																											

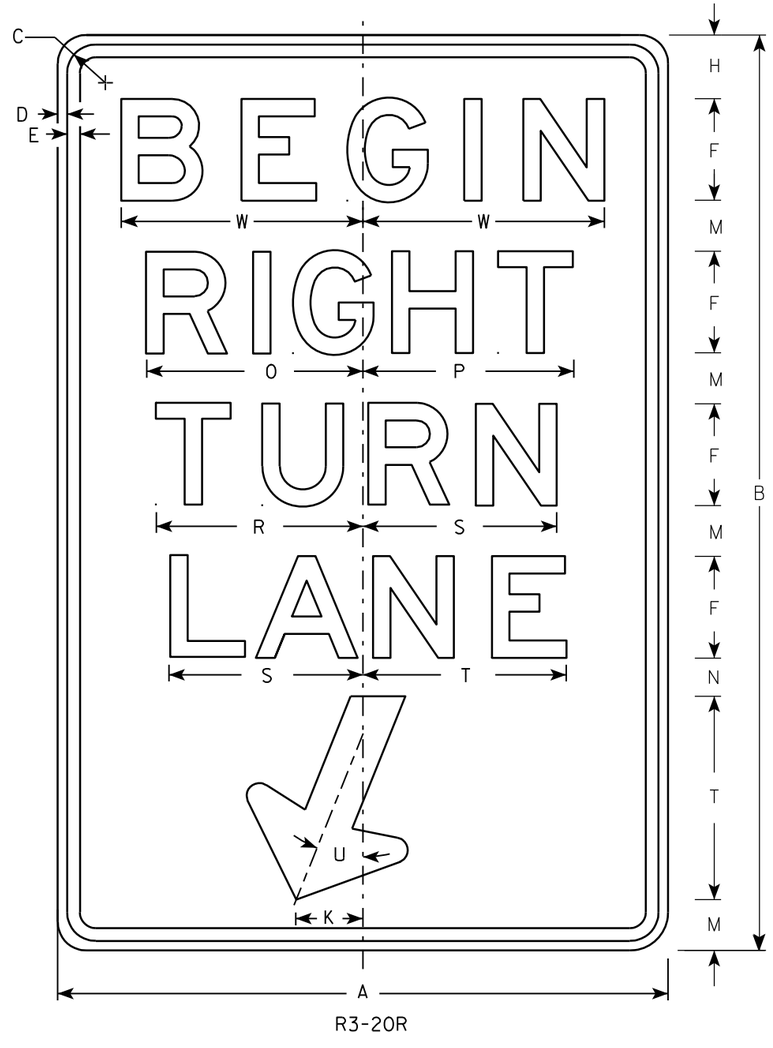
STANDARD SIGN
R3-20L

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/18/10 PLATE NO. R3-20L.7

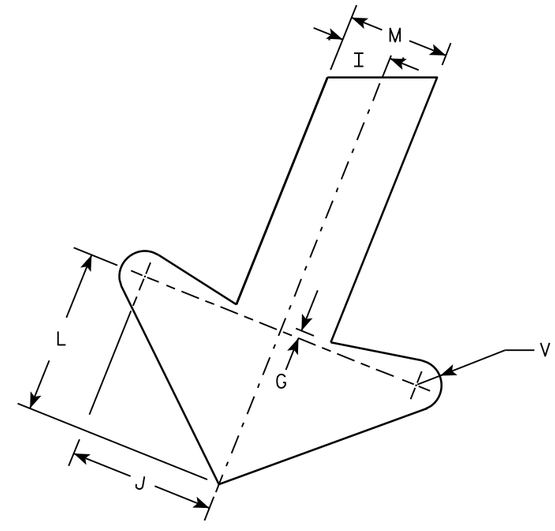
PROJECT NO: 4996-01-79 | HWY: NORTH AVE | COUNTY: SHEBOYGAN | SHEET 255 | E



R3-20R

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - E
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	36	1 1/8	3/8	1/2	4	1/4	2 1/2	1	2 7/8	2 5/8	3 1/4	2	1 1/2	8 1/2	8 1/4		8 1/8	7 5/8	8	22°	1/2	9 1/2				6.0
2M	24	36	1 1/8	3/8	1/2	4	1/4	2 1/2	1	2 7/8	2 5/8	3 1/4	2	1 1/2	8 1/2	8 1/4		8 1/8	7 5/8	8	22°	1/2	9 1/2				6.0
3	36	54	1 3/4	1/2	5/8	6	3/8	3 3/4	1 1/2	4 1/4	4	4 7/8	3	2 1/4	12 3/4	12 1/2		12 1/4	11 1/2	12	22°	3/4	13 1/4				13.5
4																											
5																											

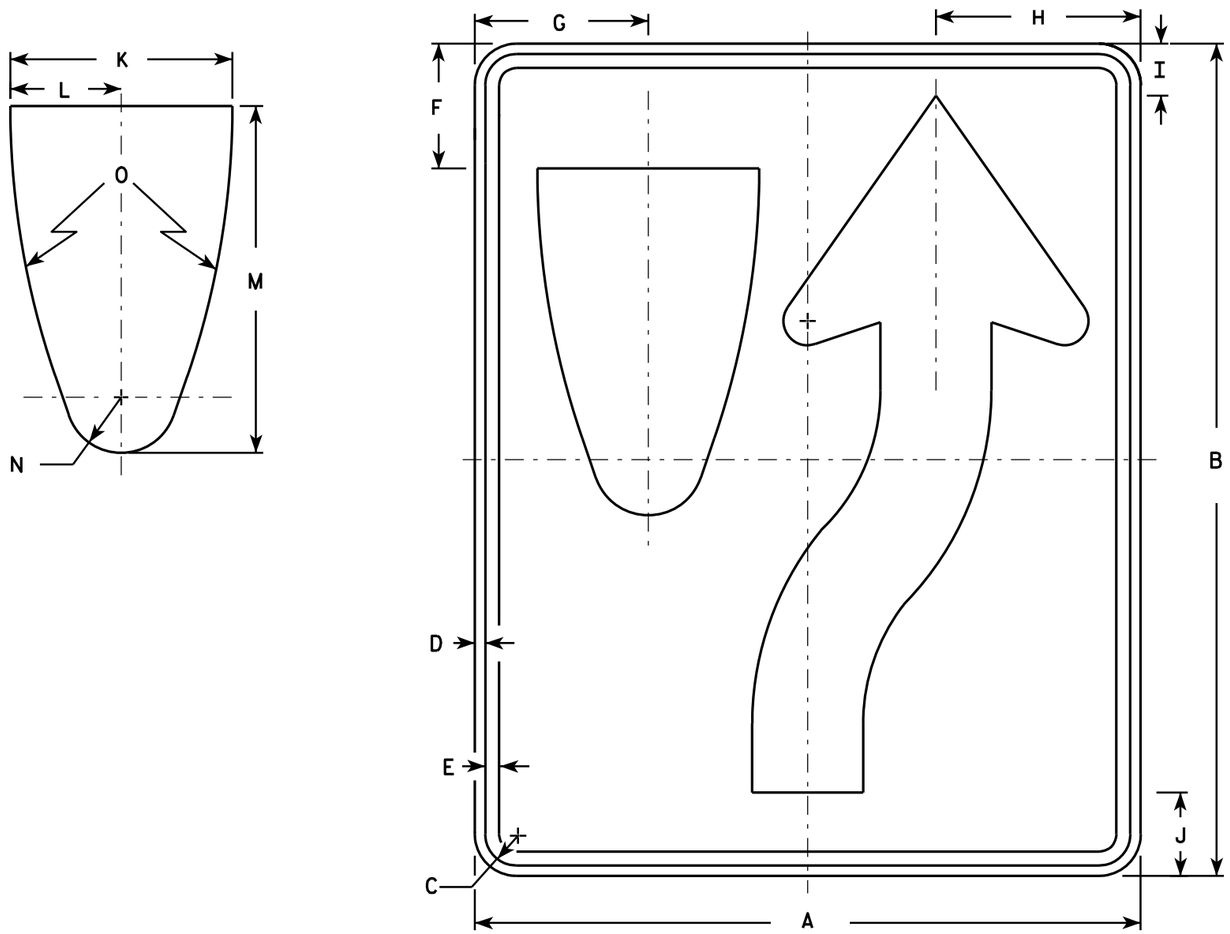
STANDARD SIGN
R3-20R

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/18/10 PLATE NO. R3-20R.6

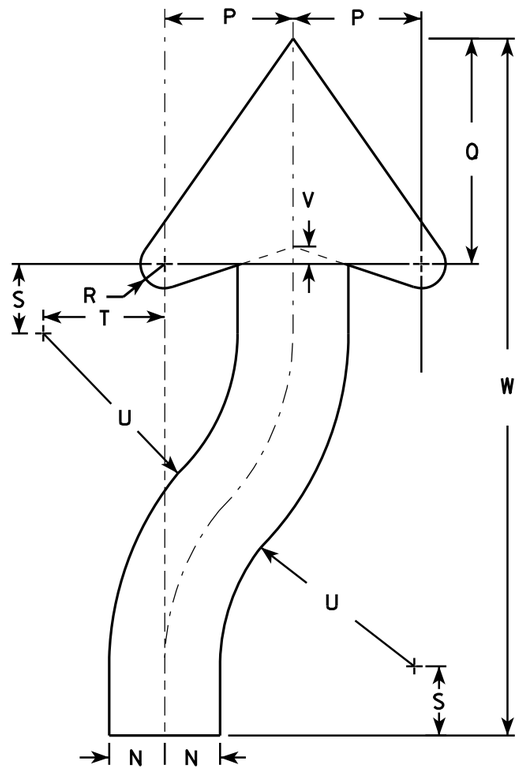
PROJECT NO: 4996-01-79 | HWY: NORTH AVE | COUNTY: SHEBOYGAN | SHEET 256 | E



R4-7

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition. material is plywood but borders shall be rounded
2. Color:
   Background - White
   Message - Black
3. Corners may be square or rounded when base as shown. When base material is metal, the corners and borders shall be rounded.
4. R4-8 is the same as R4-7 except Legend is reversed.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	18	24	1 1/8	3/8	1/2	3 3/8	4 3/4	5 1/2	1 3/8	2 1/4	6	3	9 3/8	1 1/2	22 1/2	3 1/2	6 1/8	5/8	1 7/8	3 1/4	6 3/4	1/2	20 3/8				3.0
2S	24	30	1 1/8	3/8	1/2	4 1/2	6 1/4	7 3/8	1 7/8	3	8	4	12 1/2	2	30	4 5/8	8 1/8	7/8	2 1/2	4 3/8	9	5/8	25 1/8				5.0
2M	24	30	1 1/8	3/8	1/2	4 1/2	6 1/4	7 3/8	1 7/8	3	8	4	12 1/2	2	30	4 5/8	8 1/8	7/8	2 1/2	4 3/8	9	5/8	25 1/8				5.0
3	36	48	1 3/4	1/2	5/8	6 3/4	9 3/8	11 1/8	2 7/8	4 1/2	12	6	18 3/4	3	45	6 7/8	12 1/4	1 1/4	3 3/4	6 5/8	13 1/2	1	40 3/4				12.0
4	36	48	1 3/4	1/2	5/8	6 3/4	9 3/8	11 1/8	2 7/8	4 1/2	12	6	18 3/4	3	45	6 7/8	12 1/4	1 1/4	3 3/4	6 5/8	13 1/2	1	40 3/4				12.0
5	48	60	2 1/4	3/4	1	9	12 1/2	14 3/4	3 3/4	6	16	8	25	4	60	9 1/4	16 1/4	1 5/8	5	8 3/4	18	1 1/4	50 1/4				20.0

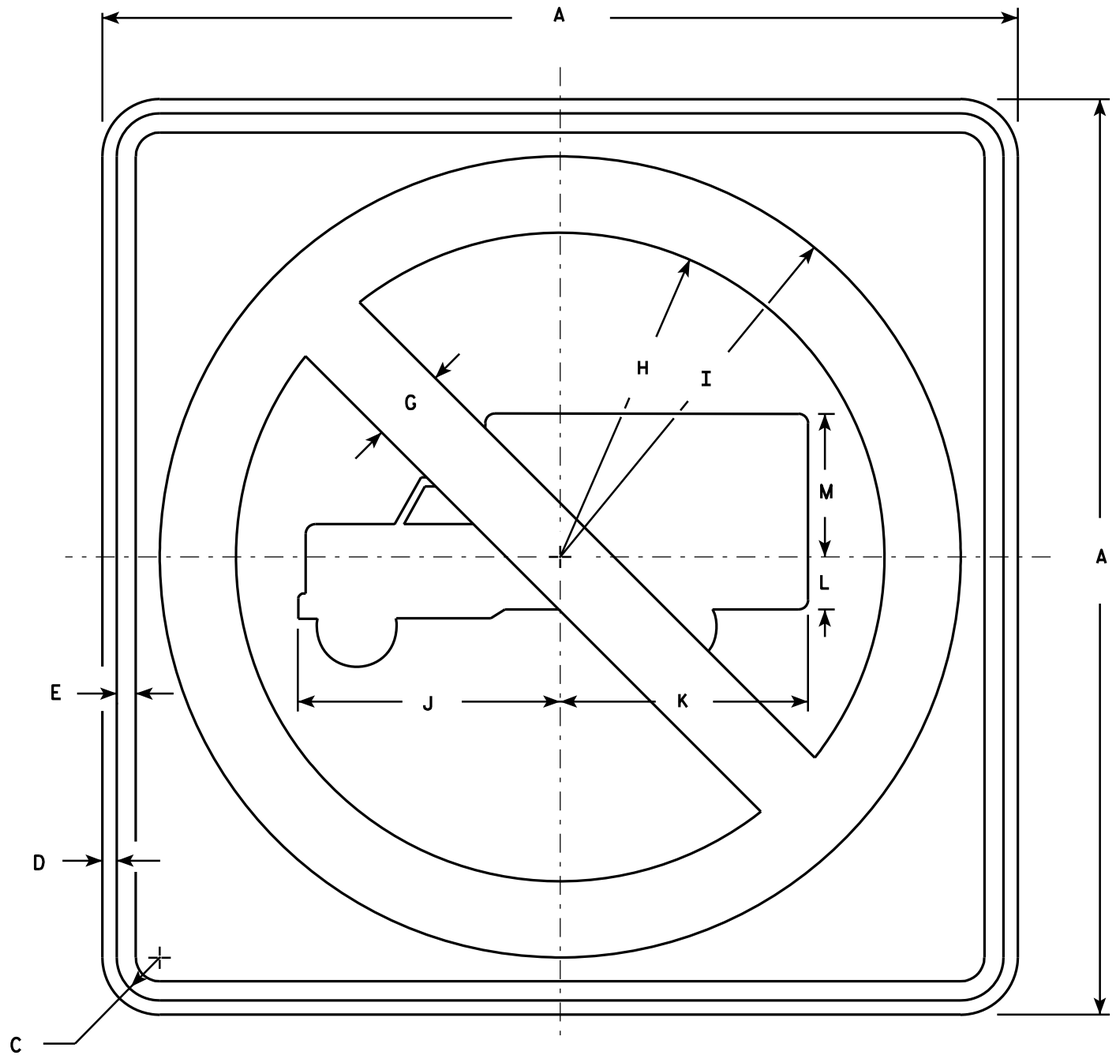
STANDARD SIGN
R4-7 & R4-8

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 3/25/2011 PLATE NO. R4-7.8

PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN		SHEET 257	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

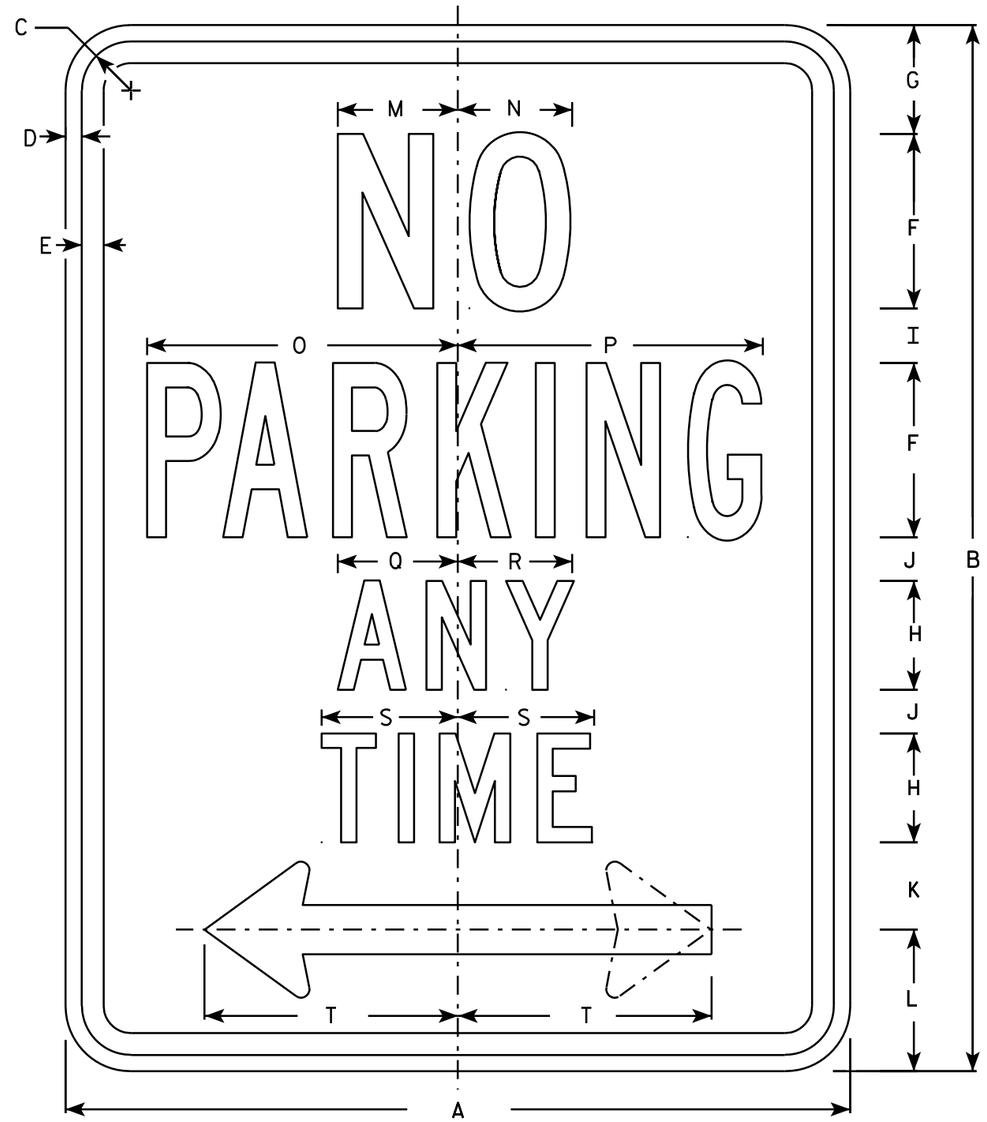
STANDARD SIGN
R5-2

WISCONSIN DEPT OF TRANSPORTATION

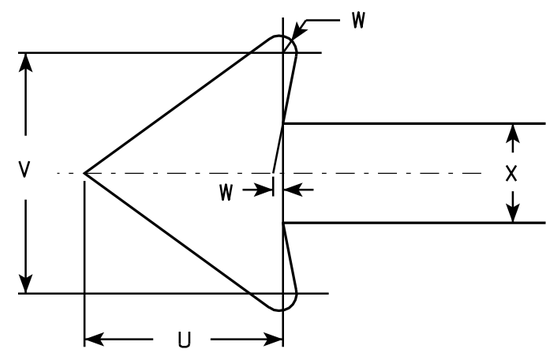
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/29/2011 PLATE NO. R5-2.6

PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN		SHEET 258	E



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: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN		SHEET 259	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

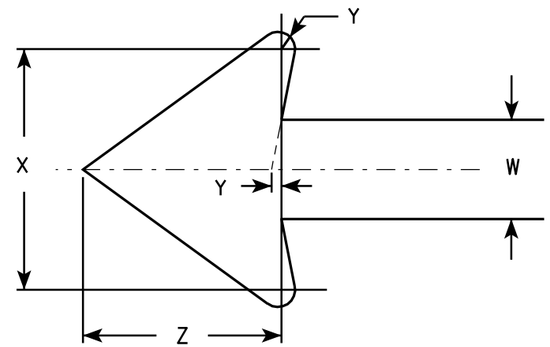
7

7

R7-51

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Red
3. Message Series - See Note 6
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. R7-51D (double arrow)
   R7-51R (right arrow)
   R7-51L (left arrow)
6. Lines 1, 3 and 4 are Series C.
   Line 2 is Series B.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	12	18	1 1/8	3/8	3/8	3	1 7/8	2	7/8	5/8	1 1/2	2 1/2	2	2	4 7/8	4 7/8	4 7/8	5/8	1 3/4	2 1/2	4 3/8	3 7/8	3/4	1 3/4	1/8	1 1/2	1.5
2S	18	24	1 1/8	3/8	1/2	4	2 1/2	2 1/2	1 1/4	1	2	3 1/4	2 3/4	2 5/8	7 1/8	7	5 3/4	1 1/8	1 1/2	3 1/8	5 1/2	5 7/8	1 1/8	2 5/8	1/4	2 1/4	3.0
2M	24	30	1 1/8	3/8	1/2	5	3	3	2	1 1/4	2 1/2	4	3 1/4	3 3/8	9 1/4	9 1/4	7 1/8	1 1/4	2	3 3/4	6 1/2	7 3/4	1 1/2	3 1/2	1/4	3	5.0
3	24	30	1 1/8	3/8	1/2	5	3	3	2	1 1/4	2 1/2	4	3 1/4	3 3/8	9 1/4	9 1/4	7 1/8	1 1/4	2	3 3/4	6 1/2	7 3/4	1 1/2	3 1/2	1/4	3	5.0
4																											
5																											

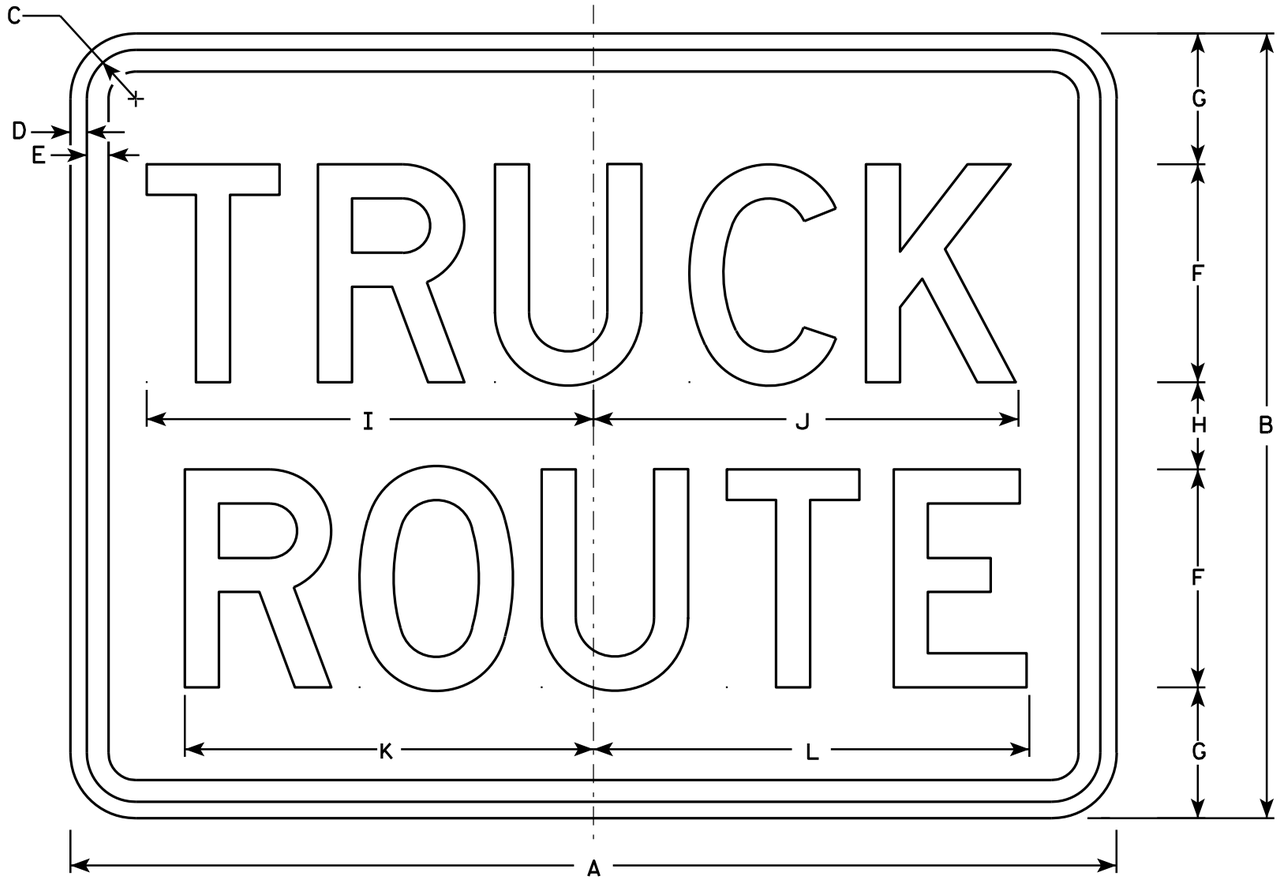
STANDARD SIGN
R7-51

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/31/2011 PLATE NO. R7-51.6

PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN			SHEET 260	E



R14-1

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	18	1 1/8	3/8	1/2	5	3	2	10 1/4	9 3/4	9 3/8	10															3.0
2	24	18	1 1/8	3/8	1/2	5	3	2	10 1/4	9 3/4	9 3/8	10															3.0
3	30	24	1 1/8	3/8	1/2	6	4	4	12 1/4	11 3/4	11 1/4	12															5.0
4																											
5																											

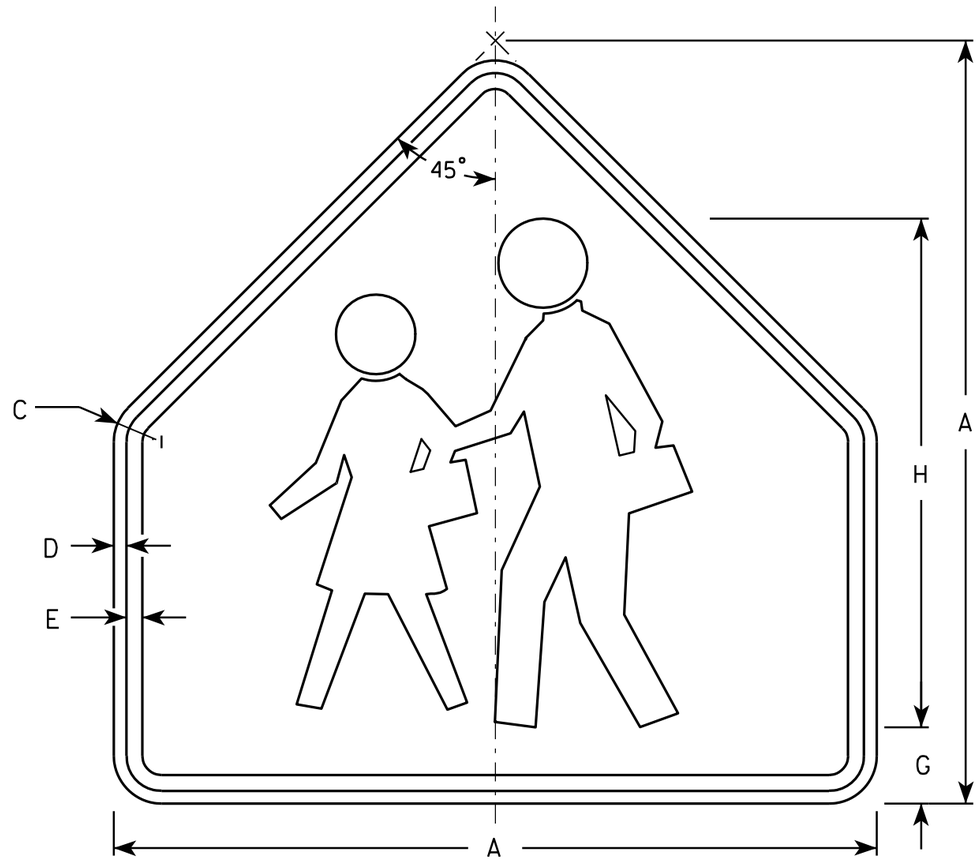
STANDARD SIGN
R14-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/1/11 PLATE NO. R14-1.6

PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN		SHEET 261	E



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

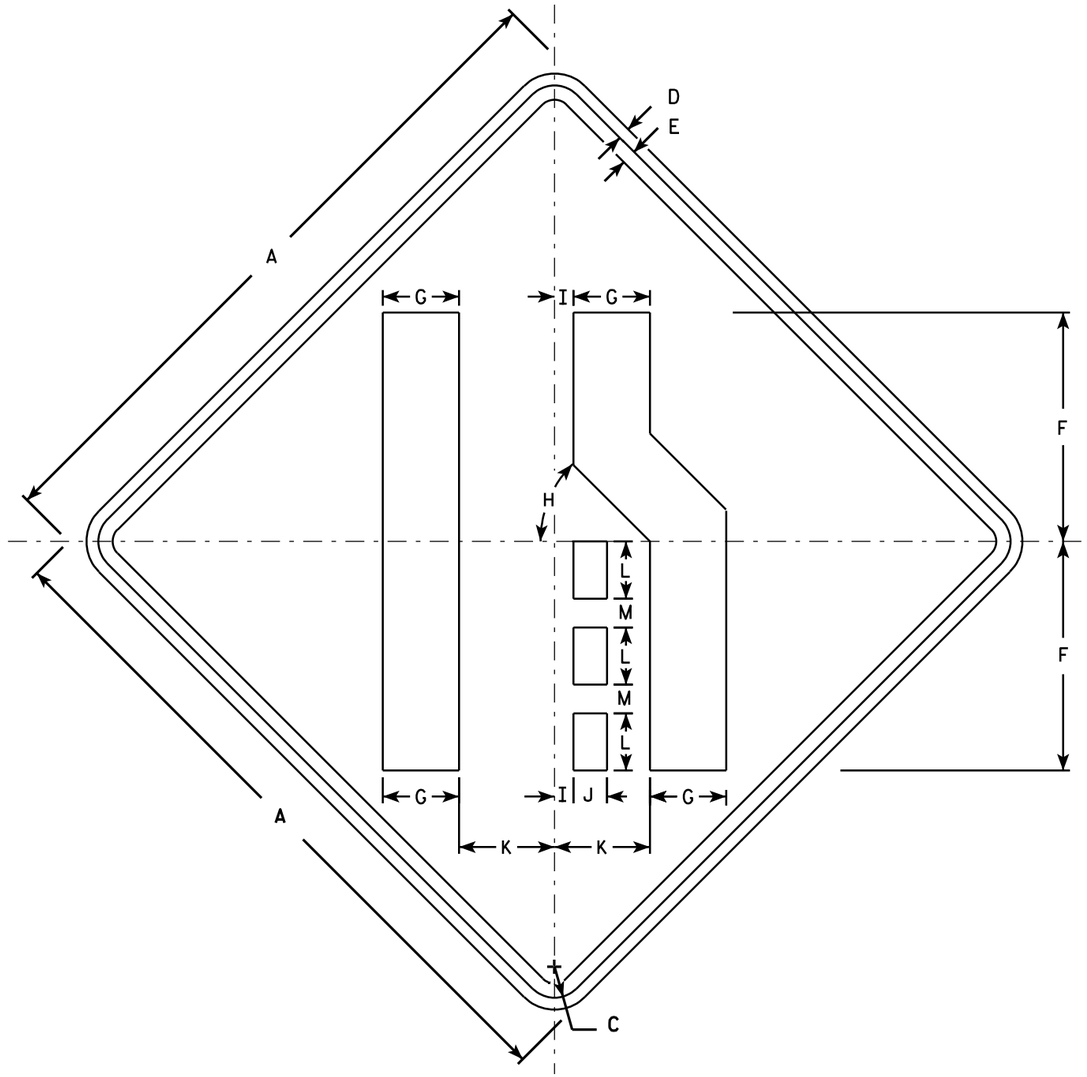
PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN		SHEET 262	E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\S11.DGN PLOT DATE : 26-MAY-2010 16:12 PLOT BY : ditjph PLOT NAME : PLOT SCALE : 5.959043:1.000000

WISDOT/CADDS SHEET 42

7

7



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

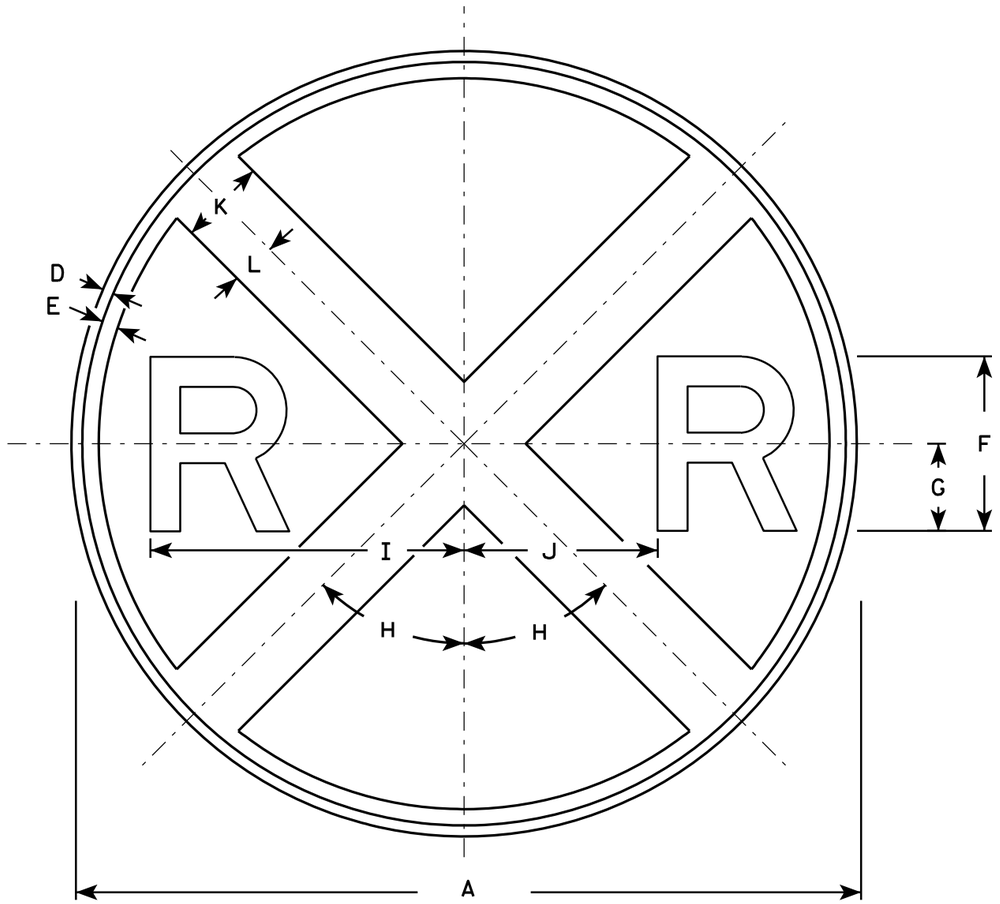
STANDARD SIGN
W4-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/12/13 PLATE NO. W4-2.14

PROJECT NO: 4996-01-79	NORTH AVE	SHEBOYGAN		SHEET 263	E



W10-1

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. Message 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	30			3/8	5/8	7	3 1/2	45°	12 3/8	7 1/8	3	1 1/2															4.91
2S	36			5/8	3/4	8	4	45°	14 3/8	8 5/8	4	2															7.07
2M	36			5/8	3/4	8	4	45°	14 3/8	8 5/8	4	2															7.07
3																											
4	48			3/4	1 1/4	10	5	45°	18 3/8	11 5/8	5	2 1/2															12.57
5																											

STANDARD SIGN
W10-1

WISCONSIN DEPT OF TRANSPORTATION

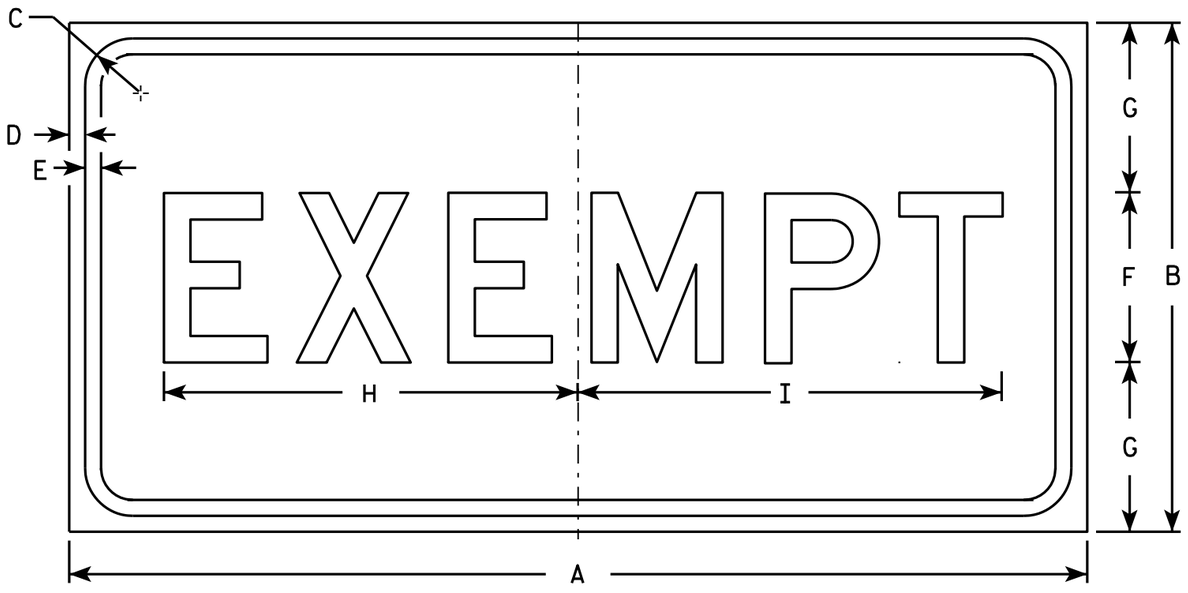
APPROVED Matthew R Rauch for State Traffic Engineer

DATE 3/13/13 PLATE NO. W10-1.8

PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN		SHEET 264	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 - See Note 5
   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. Background - R15-3 is White Type H Reflective
   W10-1A is Yellow.



R15-3
and
W10-1A

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	12	1 1/8	3/8	3/8	4	4	9 3/4	10																		2
2M	24	12	1 1/8	3/8	3/8	4	4	9 3/4	10																		2
3																											
4																											
5																											

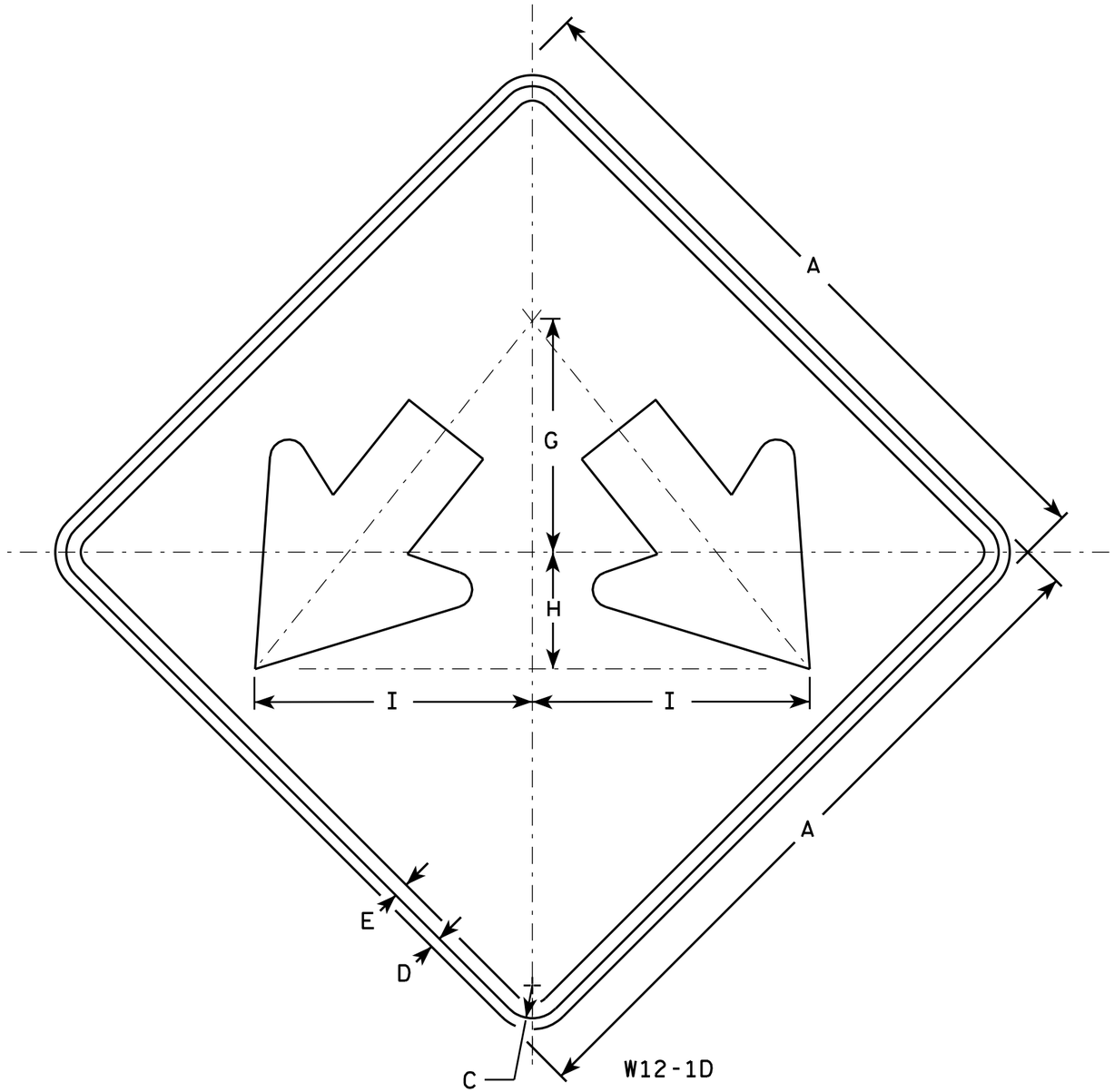
STANDARD SIGN
R15-3 & W10-1A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

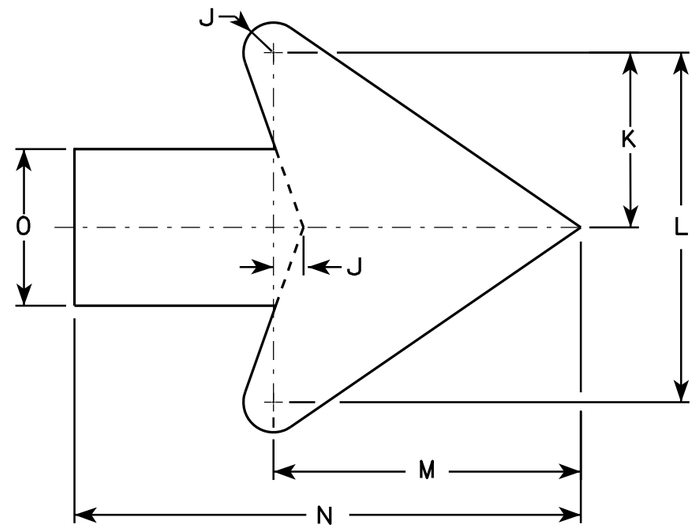
DATE 3/13/13 PLATE NO. R15-3.7

PROJECT NO: 4996-01-79 | HWY: NORTH AVE | COUNTY: SHEBOYGAN | SHEET 265 | 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.



Arrow Detail

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24		1 1/8	1/2	3/8		8	4	9 1/2	3/8	3 3/8	7 1/4	6 3/8	10 3/8	3 1/4												4.0
2M	24		1 1/8	1/2	3/8		8	4	9 1/2	3/8	3 3/8	7 1/4	6 3/8	10 3/8	3 1/4												4.0
3	30		1 3/8	1/2	5/8		10	5	11 7/8	3/4	4 1/2	9	7 7/8	13	4												6.25
4	36		1 3/8	1/2	5/8		12	6	14 1/4	1	5 1/2	10 7/8	9 5/8	15 3/4	4 3/4												9.0
5	48		2 1/4	3/4	1		16	8	19	1 1/4	7 1/4	14 1/2	12 3/4	21	6 1/4												16.0

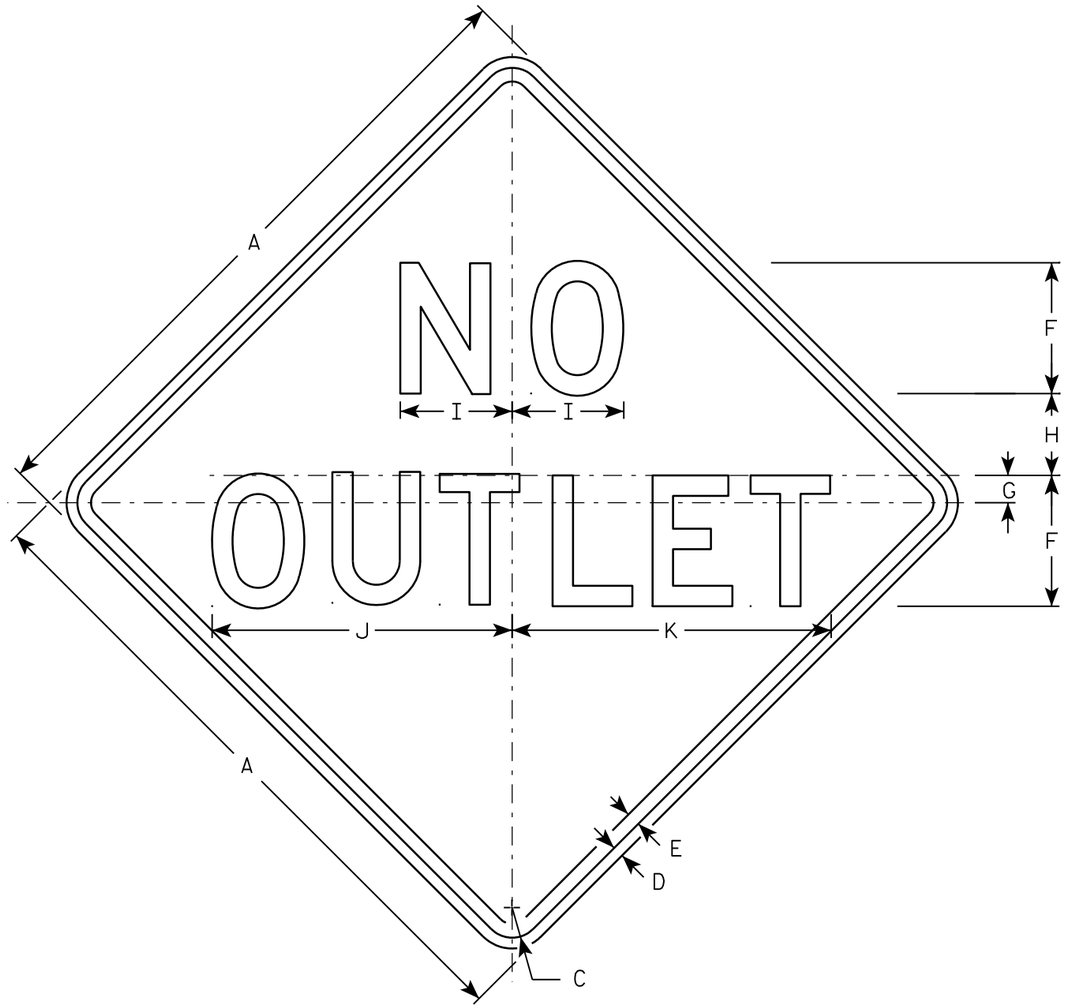
STANDARD SIGN
W12-1D

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/13/13 PLATE NO. W12-1D.15

PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN		SHEET 266	E



W14-2

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. 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	5	1	2 3/4	4 1/8	11 3/4	12 3/8																4.0
2S	30		1 3/8	1/2	5/8	6	1 1/4	3 3/4	5 1/8	13 3/4	14 5/8																6.25
2M	30		1 3/8	1/2	5/8	6	1 1/4	3 3/4	5 1/8	13 3/4	14 5/8																6.25
3	36		1 5/8	5/8	3/4	7	1 3/8	4 5/8	6	16 1/8	17 1/8																9.0
4																											
5																											

STANDARD SIGN
W14-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/13/13 PLATE NO. W14-2.3

PROJECT NO: 4996-01-79	NORTH AVE	SHEBOYGAN		SHEET 267	E

NorthAve–EOP EARTHWORK							NorthAve–EOP EARTHWORK						
Station	Fill Area (SF)	Cut Area (SF)	Fill Volume (CY)	Cut Volume (CY)	Cumulative Fill Vol (CY)	Cumulative Cut (CY)	Station	Fill Area (SF)	Cut Area (SF)	Fill Volume (CY)	Cut Volume (CY)	Cumulative Fill Vol (CY)	Cumulative Cut (CY)
12+00.00	0.00	0.00	0.00	0.00	0.00	0.00	19+00.00	0.80	160.50	21.50	268.96	104.48	4204.46
12+33.85	0.00	221.81	0.00	139.03	0.00	139.03	19+50.00	1.15	183.00	1.80	318.06	106.28	4522.52
12+50.00	0.00	216.13	0.00	131.01	0.00	270.03	20+00.00	2.73	179.64	3.59	335.78	109.87	4858.29
13+00.00	0.43	185.05	0.40	371.46	0.40	641.50	20+50.00	0.87	192.14	3.33	344.24	113.20	5202.54
13+50.00	0.00	181.42	0.40	339.32	0.81	980.82	20+65.00	0.07	200.43	0.26	109.05	113.46	5311.58
14+00.00	1.98	169.66	1.83	325.07	2.64	1305.89	21+00.00	0.73	203.98	0.52	262.11	113.98	5573.70
14+25.00	0.97	167.62	1.37	156.15	4.00	1462.04	21+50.00	0.22	219.36	0.88	391.98	114.87	5965.67
14+50.00	0.61	177.51	0.73	159.78	4.73	1621.82	22+00.00	0.00	166.31	0.21	357.10	115.07	6322.77
15+00.00	0.96	167.46	1.46	319.42	6.19	1941.24	22+50.00	0.00	147.49	0.00	290.55	115.07	6613.33
15+35.00	1.24	168.88	1.43	218.00	7.62	2159.24	23+00.00	0.64	188.80	0.59	311.38	115.67	6924.71
15+50.00	1.98	168.42	0.89	93.70	8.51	2252.93	23+50.00	0.47	191.06	1.03	351.72	116.70	7276.43
15+70.00	1.57	163.33	1.32	122.87	9.83	2375.80	24+00.00	0.20	195.18	0.62	357.63	117.32	7634.06
16+00.00	6.89	151.32	4.70	174.80	14.53	2550.61	24+25.00	0.05	198.92	0.12	182.45	117.44	7816.51
16+50.00	5.31	165.27	11.29	293.14	25.82	2843.75	24+50.00	0.12	198.98	0.08	184.21	117.52	8000.72
17+00.00	2.98	163.83	7.68	304.72	33.50	3148.47	25+00.00	0.07	203.75	0.17	372.90	117.69	8373.62
17+25.00	3.32	157.43	2.92	148.73	36.42	3297.20	25+50.00	0.04	202.04	0.10	375.73	117.79	8749.35
17+50.00	4.23	144.44	3.49	139.75	39.91	3436.95	26+00.00	0.01	204.96	0.04	376.85	117.84	9126.20
17+75.00	8.24	137.63	5.77	130.59	45.68	3567.54	26+50.00	2.40	189.05	2.23	364.83	120.07	9491.03
18+00.00	9.16	132.40	8.05	125.01	53.74	3692.55	27+00.00	22.87	137.88	23.40	302.71	143.47	9793.74
18+50.00	22.43	129.98	29.24	242.95	82.98	3935.50	27+50.00	23.11	128.04	42.57	246.21	186.04	10039.95

9

9

PROJECT NO: 4996-01-79 | HWY: NORTH AVE | COUNTY: SHEBOYGAN | CROSS SECTIONS: NORTH AVE. EARTHWORK VOLUMES | SHEET 268 | E

FILE NAME : W:\PROJECTS\W0059\81500117\CADD\CIVIL3D\PROPOSED DESIGN\NORTHAVE-PROPCRDR.DWG
LAYOUT NAME - North Ave. Earth-1

PLOT DATE : 11/1/2018 4:51 PM PLOT BY : CHRIS CLEMENS PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

NorthAve–EOP EARTHWORK							NorthAve–EOP EARTHWORK						
Station	Fill Area (SF)	Cut Area (SF)	Fill Volume (CY)	Cut Volume (CY)	Cumulative Fill Vol (CY)	Cumulative Cut (CY)	Station	Fill Area (SF)	Cut Area (SF)	Fill Volume (CY)	Cut Volume (CY)	Cumulative Fill Vol (CY)	Cumulative Cut (CY)
28+00.00	41.03	122.86	59.38	232.31	245.42	10272.26	34+50.00	6.97	122.06	12.13	225.55	558.75	13420.85
28+50.00	58.61	103.52	92.26	209.61	337.68	10481.86	35+00.00	4.74	135.26	10.85	238.26	569.60	13659.11
29+00.00	35.85	100.70	86.97	188.59	424.66	10670.45	35+45.00	9.84	119.26	12.15	212.10	581.75	13871.21
29+50.00	13.72	125.90	45.90	209.82	470.56	10880.27	35+50.00	9.69	119.36	1.81	22.09	583.56	13893.31
30+00.00	0.58	159.94	13.40	265.35	483.96	11145.62	35+85.00	9.01	115.60	12.12	152.29	595.68	14045.59
30+30.00	0.01	168.38	0.33	182.40	484.29	11328.02	36+00.00	8.93	115.71	4.98	64.25	600.66	14109.85
30+50.00	0.43	162.20	0.17	122.44	484.45	11450.46	36+50.00	11.64	114.48	19.04	213.14	619.70	14322.99
30+70.00	0.46	156.58	0.33	118.07	484.78	11568.53	37+00.00	13.52	108.12	23.29	206.11	642.99	14529.10
31+00.00	0.47	166.05	0.52	179.24	485.30	11747.77	37+15.00	17.29	107.40	8.56	59.87	651.55	14588.97
31+06.00	0.57	165.40	0.12	36.83	485.42	11784.60	37+50.00	21.61	114.29	25.21	143.69	676.76	14732.66
31+50.00	4.79	132.25	4.37	242.54	489.79	12027.13	37+67.00	24.90	116.19	14.64	72.56	691.40	14805.22
31+93.00	7.33	125.51	9.65	205.26	499.44	12232.39	38+00.00	13.05	125.40	22.46	150.70	713.86	14955.92
32+00.00	7.08	125.55	1.87	32.55	501.31	12264.94	38+30.00	10.12	136.58	12.57	149.22	726.43	15105.14
32+40.00	5.96	127.31	9.66	187.31	510.97	12452.24	38+50.00	11.35	142.40	7.76	105.51	734.19	15210.65
32+50.00	7.51	125.87	2.49	46.89	513.47	12499.13	38+75.00	10.32	147.15	10.47	131.11	744.65	15341.76
32+85.00	6.02	126.44	8.77	163.54	522.24	12662.66	39+00.00	5.09	150.48	7.56	134.57	752.22	15476.32
33+00.00	7.12	124.55	3.65	69.72	525.89	12732.39	39+50.00	0.00	143.39	4.86	268.27	757.08	15744.60
33+50.00	5.08	125.78	11.29	231.79	537.18	12964.18	40+00.00	0.00	151.03	0.00	272.61	757.08	16017.20
33+90.00	4.91	124.67	7.40	185.52	544.58	13149.70	40+50.00	0.00	155.68	0.00	283.99	757.08	16301.19
34+00.00	6.12	121.53	2.04	45.59	546.62	13195.29	41+00.00	0.02	202.10	0.02	331.28	757.09	16632.47

9

9

PROJECT NO: 4996-01-79 | HWY: NORTH AVE | COUNTY: SHEBOYGAN | CROSS SECTIONS: NORTH AVE. EARTHWORK VOLUMES | SHEET 269 | E

FILE NAME : W:\PROJECTS\W0059\81500117\CADD\CIVIL3D\PROPOSED DESIGN\NORTHAVE-PROPCRDR.DWG
LAYOUT NAME - North Ave. Earth-2

PLOT DATE : 11/1/2018 4:51 PM PLOT BY : CHRIS CLEMENS PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

NorthAve–EOP EARTHWORK						
Station	Fill Area (SF)	Cut Area (SF)	Fill Volume (CY)	Cut Volume (CY)	Cumulative Fill Vol (CY)	Cumulative Cut (CY)
41+25.00	0.00	204.76	0.01	188.36	757.10	16820.83
41+50.00	0.01	202.48	0.01	188.54	757.10	17009.37
41+70.00	0.28	199.97	0.11	149.05	757.21	17158.42
42+00.00	0.04	182.51	0.18	212.49	757.39	17370.91
42+07.00	0.00	182.58	0.01	47.33	757.40	17418.23
42+50.00	0.08	176.41	0.07	285.86	757.46	17704.09
42+95.00	0.16	175.34	0.20	293.12	757.67	17997.22
43+00.00	0.22	174.34	0.04	32.38	757.70	18029.59
43+03.00	0.46	173.59	0.04	19.33	757.74	18048.92

9

9

PROJECT NO: 4996-01-79 | HWY: NORTH AVE | COUNTY: SHEBOYGAN | CROSS SECTIONS: NORTH AVE. EARTHWORK VOLUMES | SHEET 270 | E

FILE NAME : W:\PROJECTS\W0059\81500117\CADD\CIVIL3D\PROPOSED DESIGN\NORTHAVE-PROPCRDR.DWG
LAYOUT NAME - North Ave. Earth-3

PLOT DATE : 11/1/2018 4:51 PM PLOT BY : CHRIS CLEMENS PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

15th_N EARTHWORK						
Station	Fill Area (SF)	Cut Area (SF)	Fill Volume (CY)	Cut Volume (CY)	Cumulative Fill Vol (CY)	Cumulative Cut (CY)
90+42.00	0.00	327.16	0.00	0.00	0.00	0.00
90+50.00	0.00	239.41	0.00	83.94	0.00	83.94
91+00.00	0.62	131.50	0.58	343.43	0.58	427.37
91+20.00	0.60	131.67	0.45	97.47	1.03	524.84
91+50.00	1.13	130.77	0.96	145.80	1.99	670.63
91+70.00	0.62	133.55	0.65	97.90	2.63	768.53
92+00.00	0.37	131.98	0.59	147.49	3.22	916.02
92+03.65	0.35	134.94	0.05	18.04	3.27	934.05
92+25.00	0.00	0.00	0.15	53.40	3.42	987.46

15th_S EARTHWORK						
Station	Fill Area (SF)	Cut Area (SF)	Fill Volume (CY)	Cut Volume (CY)	Cumulative Fill Vol (CY)	Cumulative Cut (CY)
88+75.00	0.00	0.00	0.00	0.00	0.00	0.00
88+94.50	0.01	141.38	0.00	51.07	0.00	51.07
89+00.00	0.00	142.76	0.00	28.92	0.00	79.98
89+50.00	0.39	176.91	0.36	295.99	0.37	375.97
89+75.00	3.29	316.57	1.70	228.46	2.07	604.43
89+80.00	2.00	124.94	0.49	40.88	2.56	645.31

9

9

19th EARTHWORK						
Station	Fill Area (SF)	Cut Area (SF)	Fill Volume (CY)	Cut Volume (CY)	Cumulative Fill Vol (CY)	Cumulative Cut (CY)
78+75.00	0.00	0.00	0.00	0.00	0.00	0.00
78+80.00	0.01	103.78	0.00	9.61	0.00	9.61
79+00.00	0.02	105.27	0.01	77.42	0.01	87.03
79+15.00	0.01	106.29	0.01	58.77	0.02	145.80
79+50.00	0.00	127.49	0.01	151.52	0.03	297.33
79+81.00	0.81	203.37	0.47	189.94	0.50	487.26

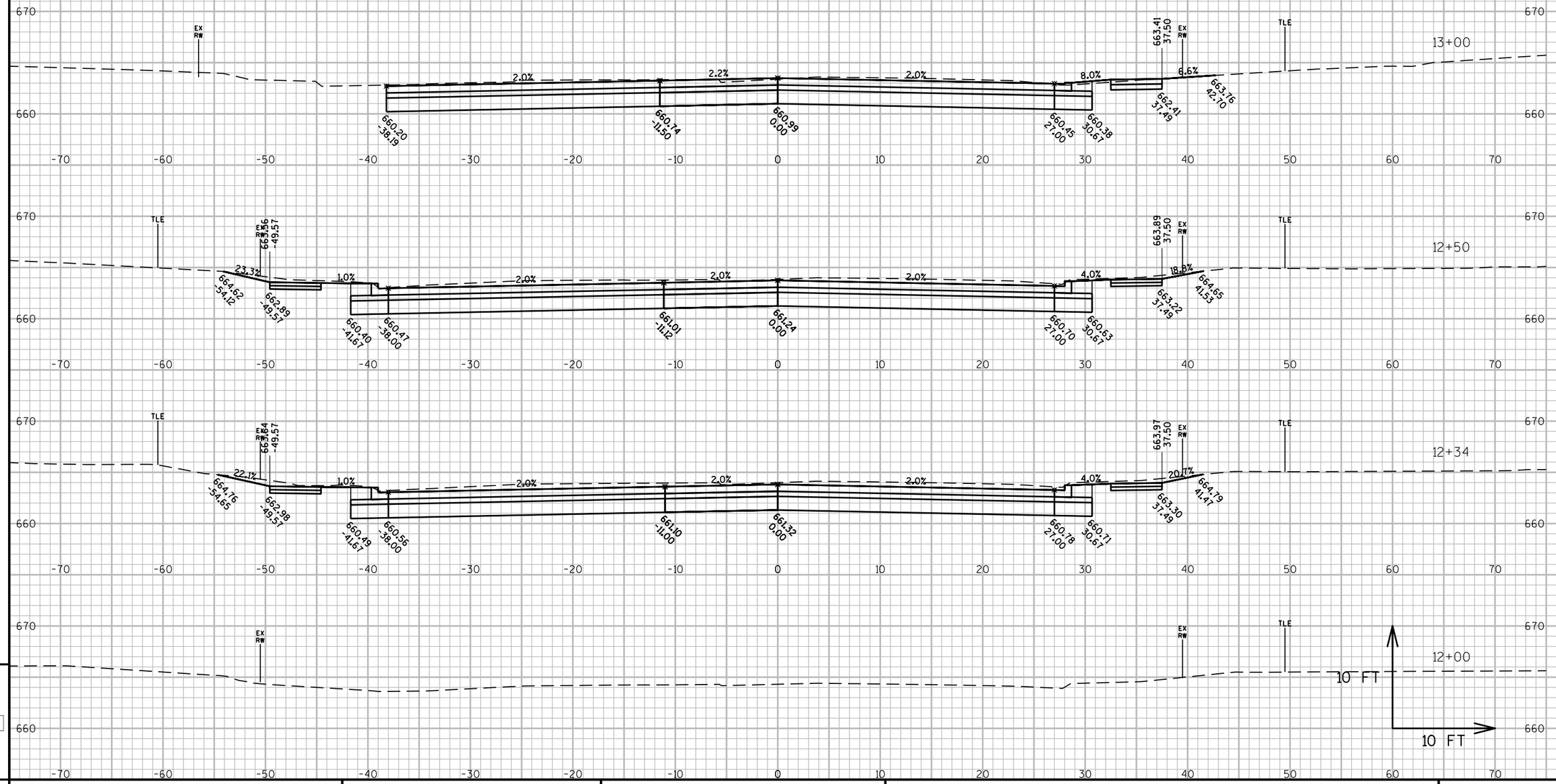
20th EARTHWORK						
Station	Fill Area (SF)	Cut Area (SF)	Fill Volume (CY)	Cut Volume (CY)	Cumulative Fill Vol (CY)	Cumulative Cut (CY)
69+25.00	0.00	0.00	0.00	0.00	0.00	0.00
69+34.10	0.71	94.18	0.12	15.87	0.12	15.87
69+50.00	2.28	88.79	0.88	53.87	1.00	69.75
69+75.00	3.71	97.85	2.77	86.41	3.77	156.15
69+81.00	0.00	150.11	0.41	27.55	4.18	183.71

21st EARTHWORK						
Station	Fill Area (SF)	Cut Area (SF)	Fill Volume (CY)	Cut Volume (CY)	Cumulative Fill Vol (CY)	Cumulative Cut (CY)
60+40.00	1.77	353.28	0.00	0.00	0.00	0.00
60+50.00	2.49	255.58	0.79	112.75	0.79	112.75
61+00.00	0.00	185.94	2.30	408.82	3.09	521.57
61+50.00	0.00	148.86	0.00	310.00	3.09	831.58
61+70.00	0.21	127.45	0.08	102.34	3.17	933.91
61+92.00	0.03	105.23	0.10	94.80	3.27	1028.71
62+00.00	0.00	0.00	0.00	15.59	3.27	1044.30

9

9

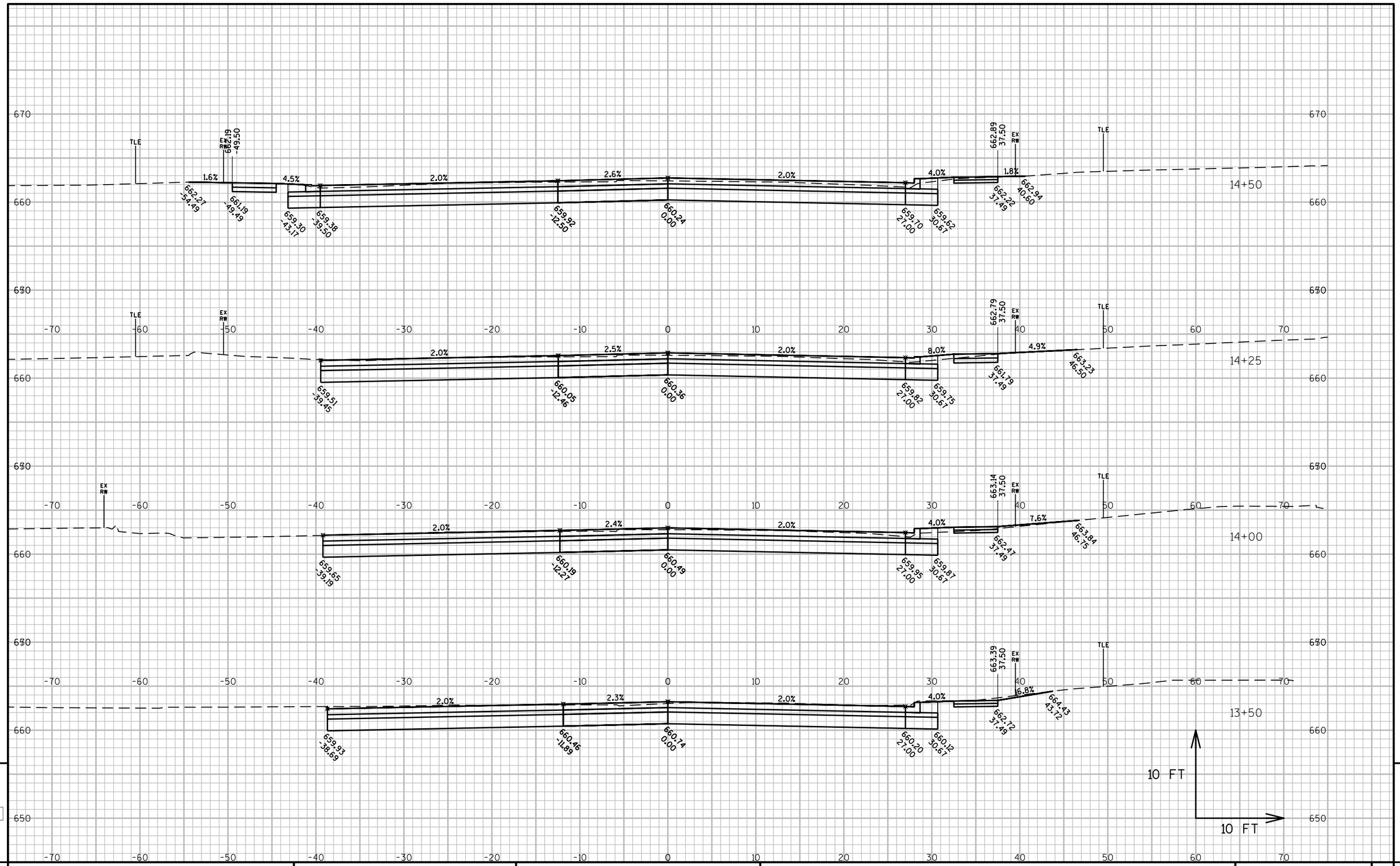
Muth EARTHWORK						
Station	Fill Area (SF)	Cut Area (SF)	Fill Volume (CY)	Cut Volume (CY)	Cumulative Fill Vol (CY)	Cumulative Cut (CY)
80+37.50	0.57	183.69	0.00	0.00	0.00	0.00
80+50.00	0.26	147.07	0.19	76.56	0.19	76.56
81+00.00	0.35	113.55	0.56	241.31	0.76	317.87
81+50.00	0.00	115.54	0.32	212.12	1.08	530.00
81+75.00	0.54	104.20	0.25	101.73	1.33	631.73
82+00.00	0.00	0.00	0.25	48.24	1.58	679.97



PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN	CROSS SECTIONS: NORTH AVE	SHEET 274	E

FILE NAME : W:\PROJECTS\W0059\81500117\CADD\CIVIL3D\PROPOSED DESIGN\NORTHAVE-PROPCRDR.DWG
LAYOUT NAME - NORTHAVE - (1)

PLOT DATE : 11/1/2018 4:52 PM PLOT BY : CHRIS CLEMENS PLOT NAME : PLOT SCALE : 1 IN:10 FT

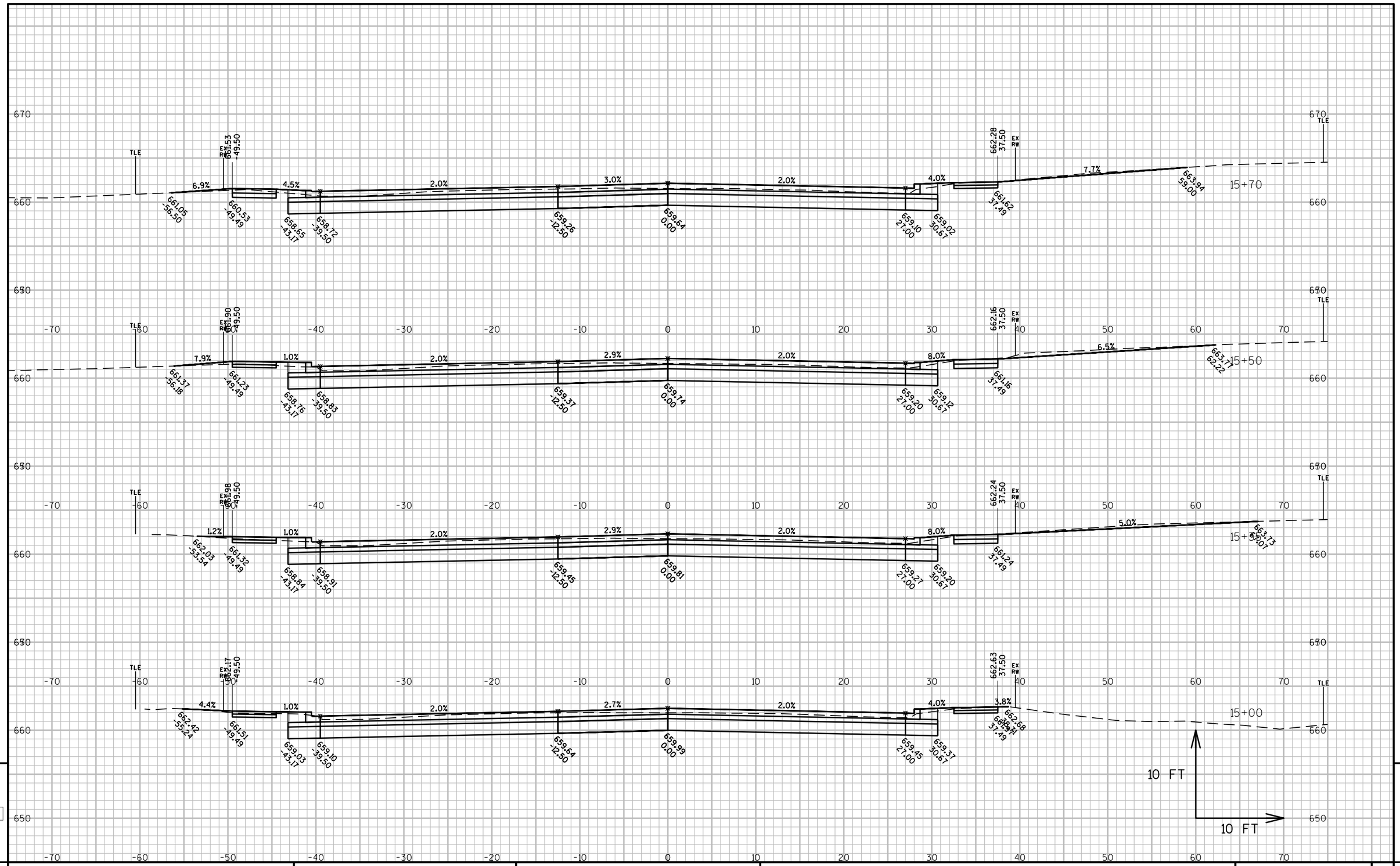


PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN	CROSS SECTIONS: NORTH AVE	SHEET 275	E

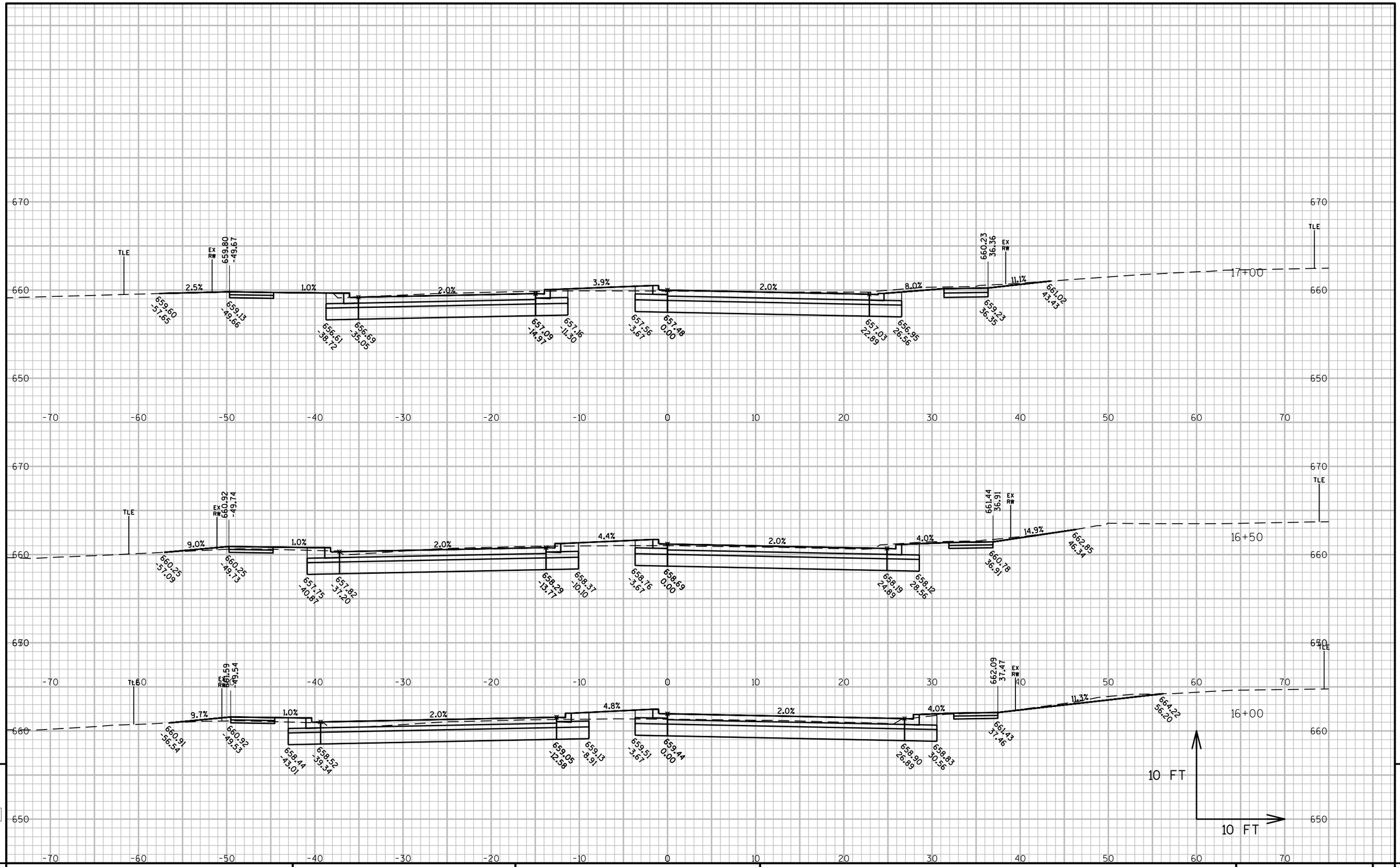
FILE NAME : W:\PROJECTS\W0059\81500117\CADD\CIVIL3D\PROPOSED DESIGN\NORTHAVE-PROPCRDR.DWG
LAYOUT NAME - NORTHAVE - (2)

PLOT DATE : 11/1/2018 4:53 PM PLOT BY : CHRIS CLEMENS PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49



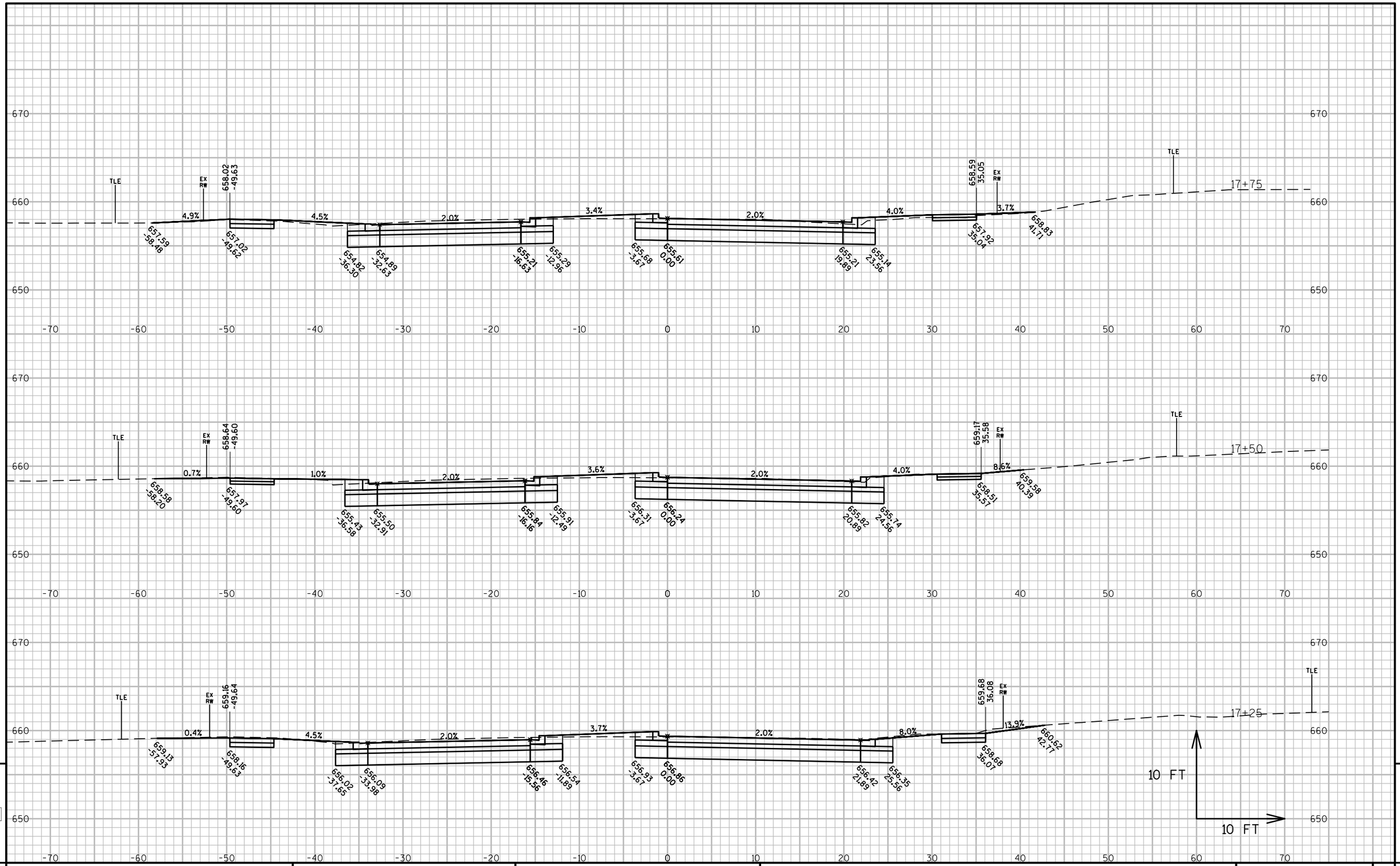
PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN	CROSS SECTIONS: NORTH AVE	SHEET 276	E



PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN	CROSS SECTIONS: NORTH AVE	SHEET 277	E

FILE NAME : W:\PROJECTS\W0059\81500117\CADD\CIVIL3D\PROPOSED DESIGN\NORTHAVE-PROPCRDR.DWG
LAYOUT NAME - NORTHAVE - (4)

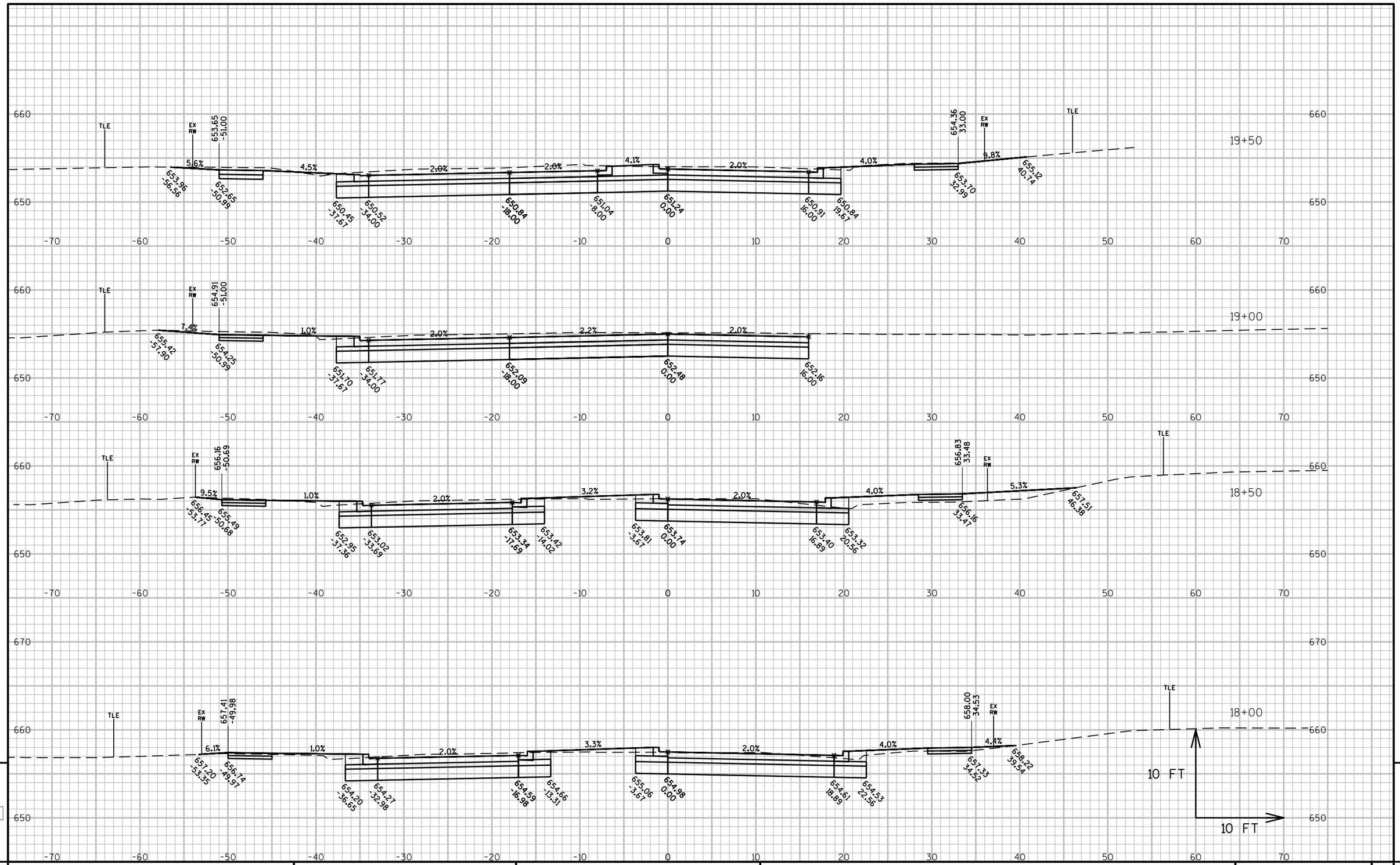
PLOT DATE : 11/1/2018 4:53 PM PLOT BY : CHRIS CLEMENS PLOT NAME : PLOT SCALE : 1 IN:10 FT



PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN	CROSS SECTIONS: NORTH AVE	SHEET 278	E

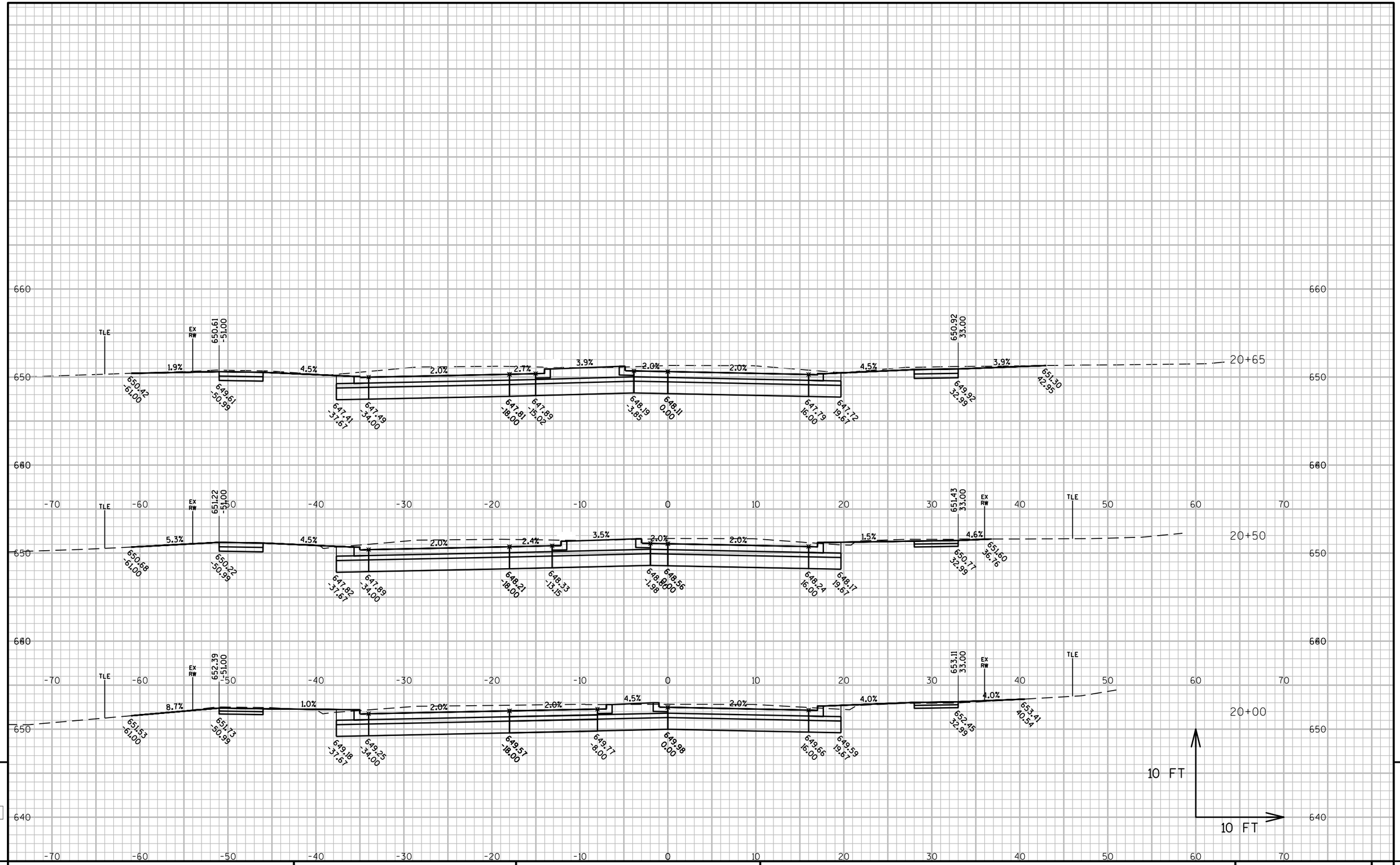
FILE NAME : W:\PROJECTS\W0059\81500117\CADD\CIVIL3D\PROPOSED DESIGN\NORTHAVE-PROPCRDR.DWG
LAYOUT NAME - NORTHAVE - (5)

PLOT DATE : 11/1/2018 4:53 PM PLOT BY : CHRIS CLEMENS PLOT NAME : PLOT SCALE : 1 IN:10 FT



PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN	CROSS SECTIONS: NORTH AVE	SHEET 279	E

FILE NAME : W:\PROJECTS\W0059\81500117\CADD\CIVIL3D\PROPOSED DESIGN\NORTHAVE-PROPCRDR.DWG
LAYOUT NAME - NORTHAVE - (6)
PLOT DATE : 11/1/2018 4:53 PM PLOT BY : CHRIS CLEMENS PLOT NAME : PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 49

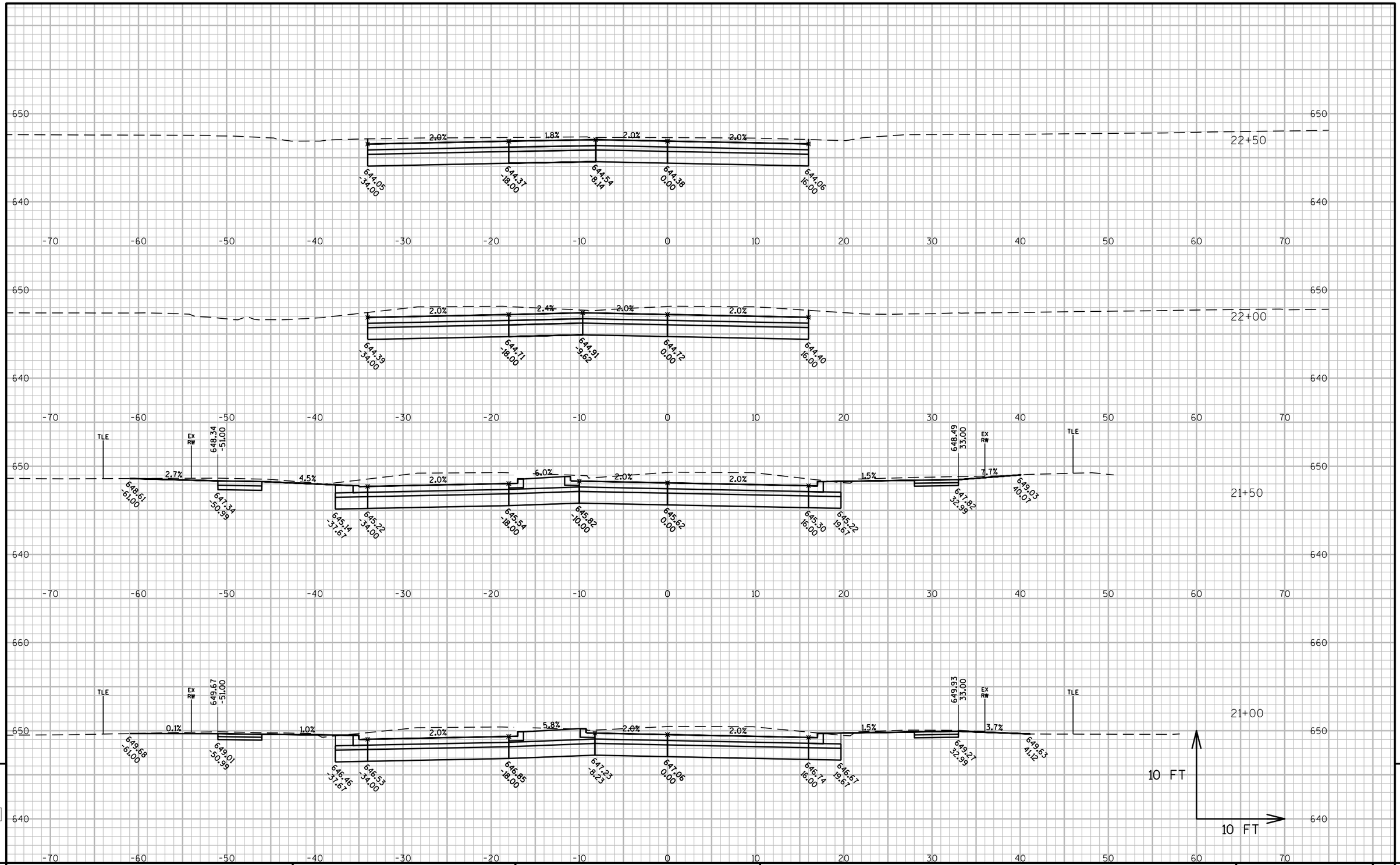


PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN	CROSS SECTIONS: NORTH AVE	SHEET 280	E

FILE NAME : W:\PROJECTS\W0059\81500117\CADD\CIVIL3D\PROPOSED DESIGN\NORTHAVE-PROPCRDR.DWG
LAYOUT NAME - NORTHAVE - (7)

PLOT DATE : 11/1/2018 4:53 PM PLOT BY : CHRIS CLEMENS PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49

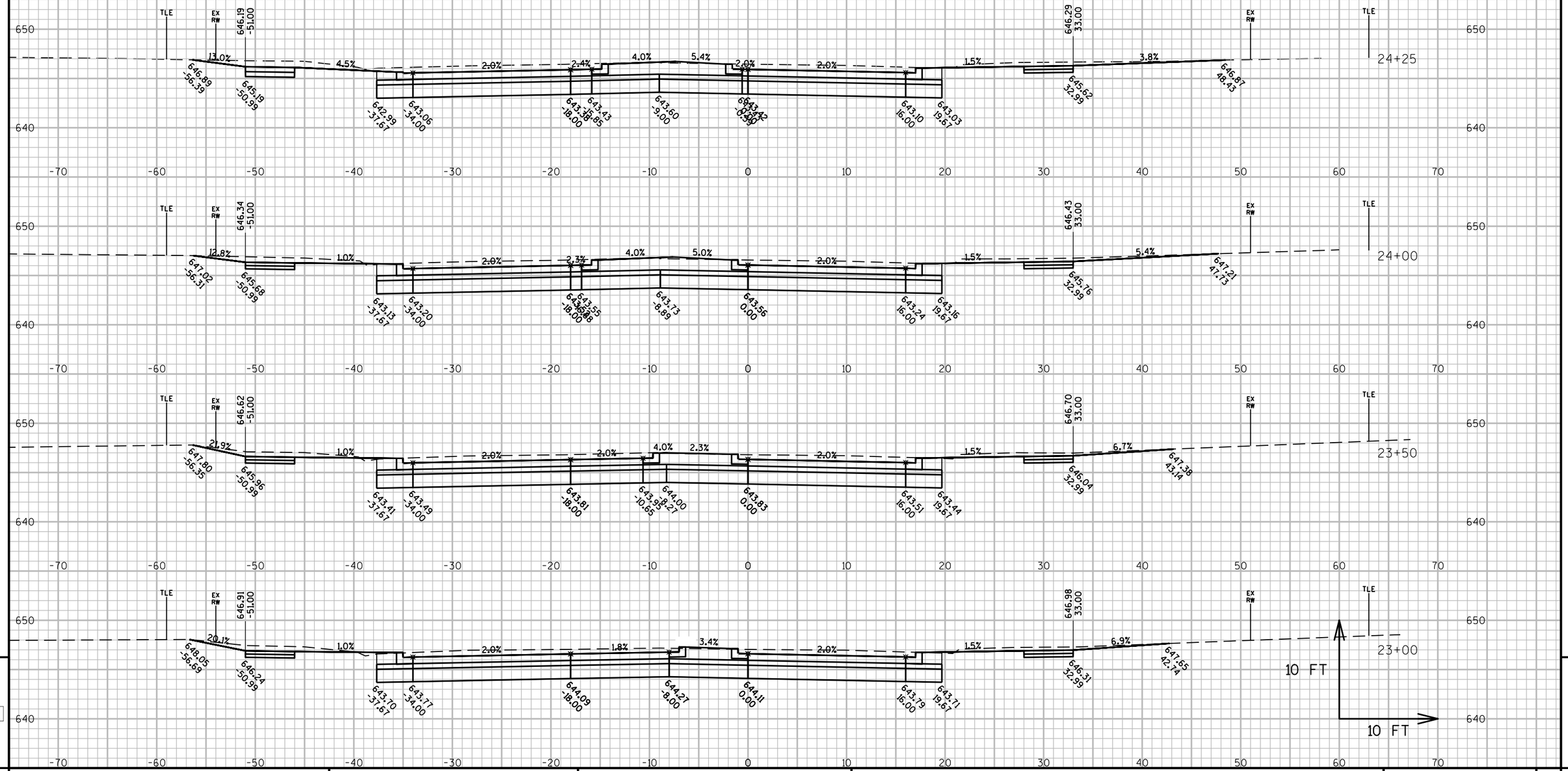


PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN	CROSS SECTIONS: NORTH AVE	SHEET 281	E

FILE NAME : W:\PROJECTS\W0059\81500117\CADD\CIVIL3D\PROPOSED DESIGN\NORTHAVE-PROPCRDR.DWG
LAYOUT NAME - NORTHAVE - (8)

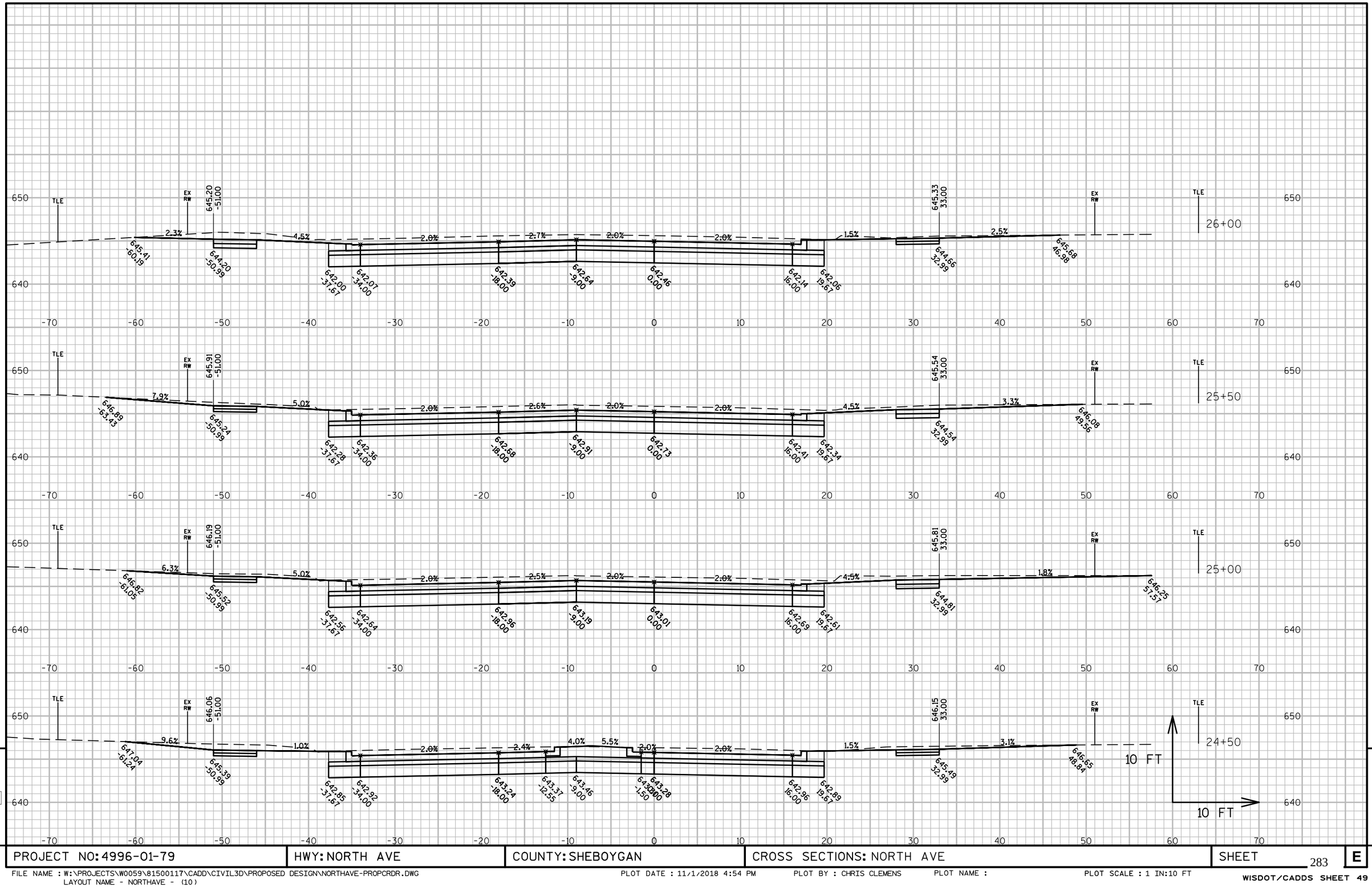
PLOT DATE : 11/1/2018 4:54 PM PLOT BY : CHRIS CLEMENS PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49



PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN	CROSS SECTIONS: NORTH AVE	SHEET 282	E

FILE NAME : W:\PROJECTS\W0059\81500117\CADD\CIVIL3D\PROPOSED DESIGN\NORTHAVE-PROPCRDR.DWG
LAYOUT NAME - NORTHAVE - (9)
PLOT DATE : 11/1/2018 4:54 PM
PLOT BY : CHRIS CLEMENS
PLOT NAME :
PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 49

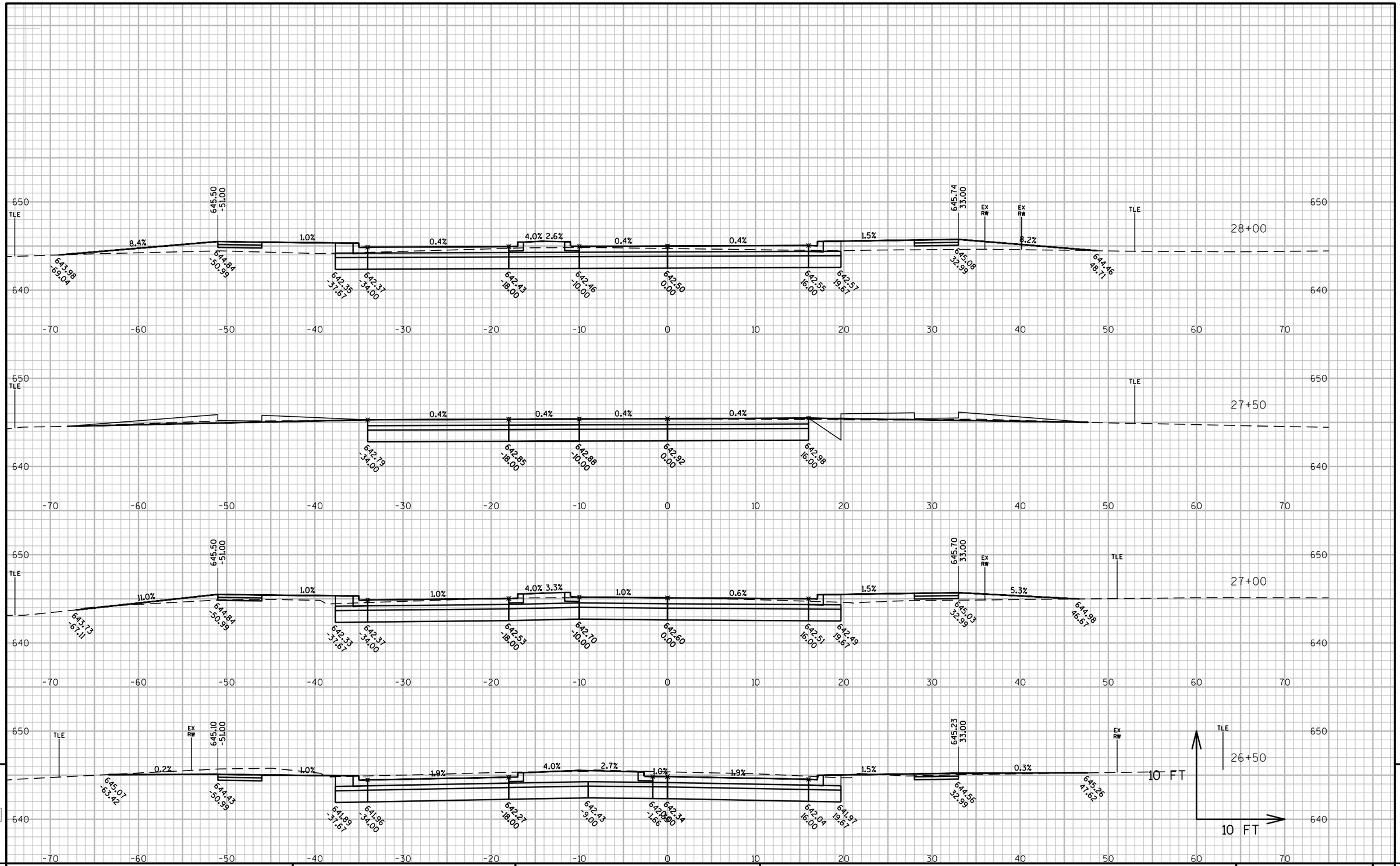


PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN	CROSS SECTIONS: NORTH AVE	SHEET 283	E

FILE NAME : W:\PROJECTS\W0059\81500117\CADD\CIVIL3D\PROPOSED DESIGN\NORTHAVE-PROPCRDR.DWG
LAYOUT NAME - NORTHAVE - (10)

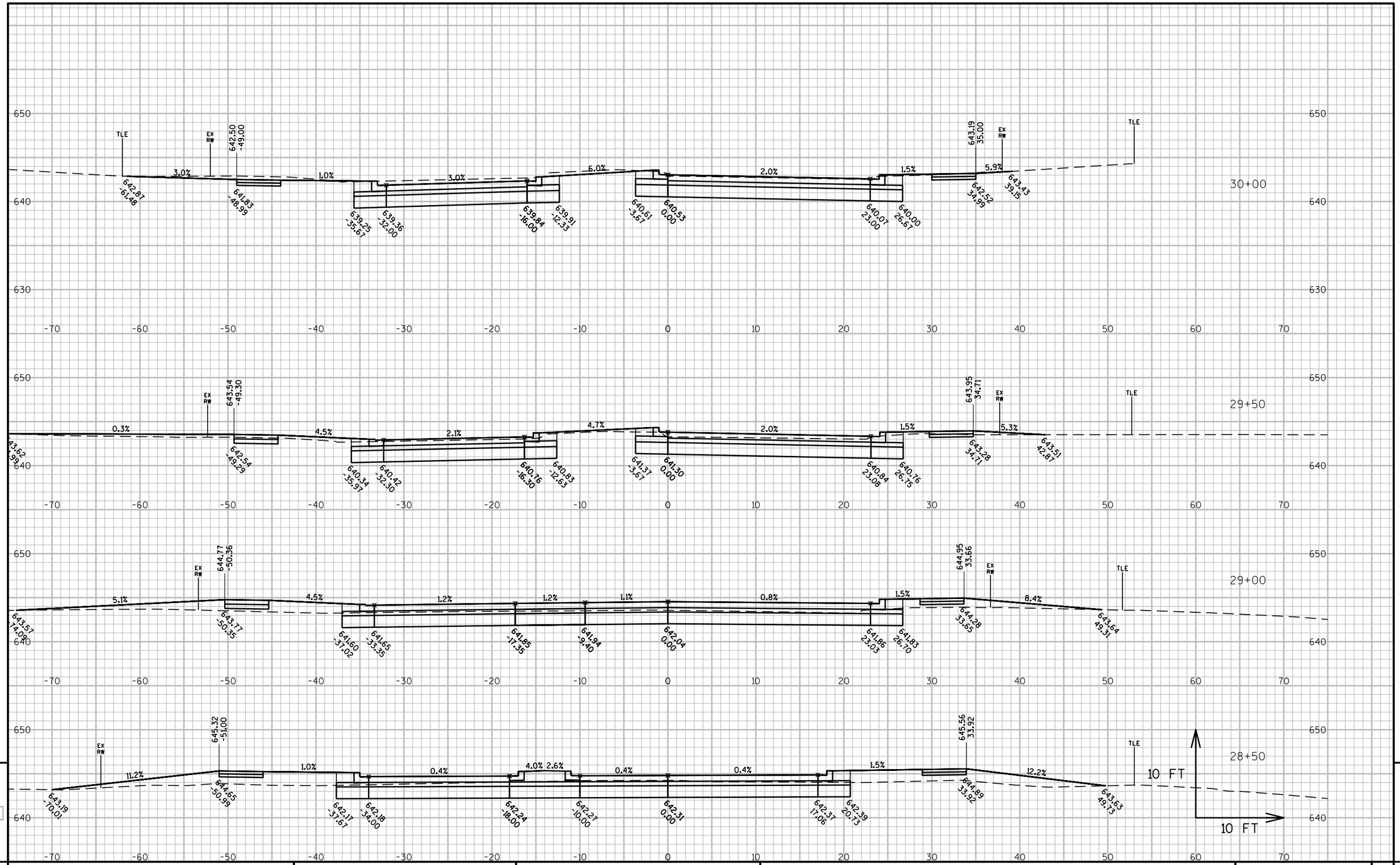
PLOT DATE : 11/1/2018 4:54 PM PLOT BY : CHRIS CLEMENS PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49



PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN	CROSS SECTIONS: NORTH AVE	SHEET 284	E

FILE NAME : W:\PROJECTS\W0059\81500117\CADD\CIVIL3D\PROPOSED DESIGN\NORTHAVE-PROPCRDR.DWG
LAYOUT NAME - NORTHAVE - (11)
PLOT DATE : 11/1/2018 4:54 PM
PLOT BY : CHRIS CLEMENS
PLOT NAME :
PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 49

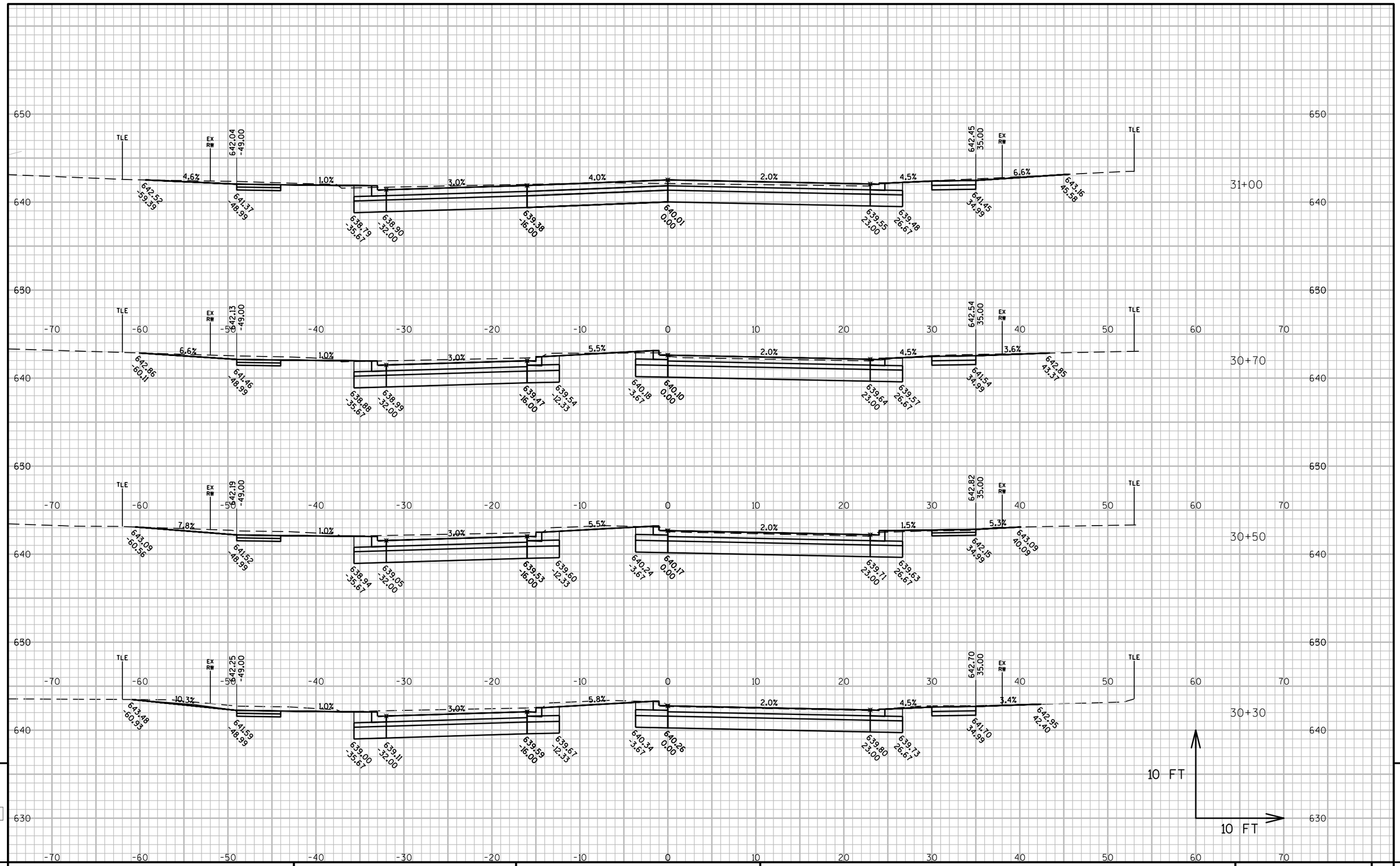


PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN	CROSS SECTIONS: NORTH AVE	SHEET 285	E

FILE NAME : W:\PROJECTS\W0059\81500117\CADD\CIVIL3D\PROPOSED DESIGN\NORTHAVE-PROPCRDR.DWG
LAYOUT NAME - NORTHAVE - (12)

PLOT DATE : 11/1/2018 4:54 PM PLOT BY : CHRIS CLEMENS PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49

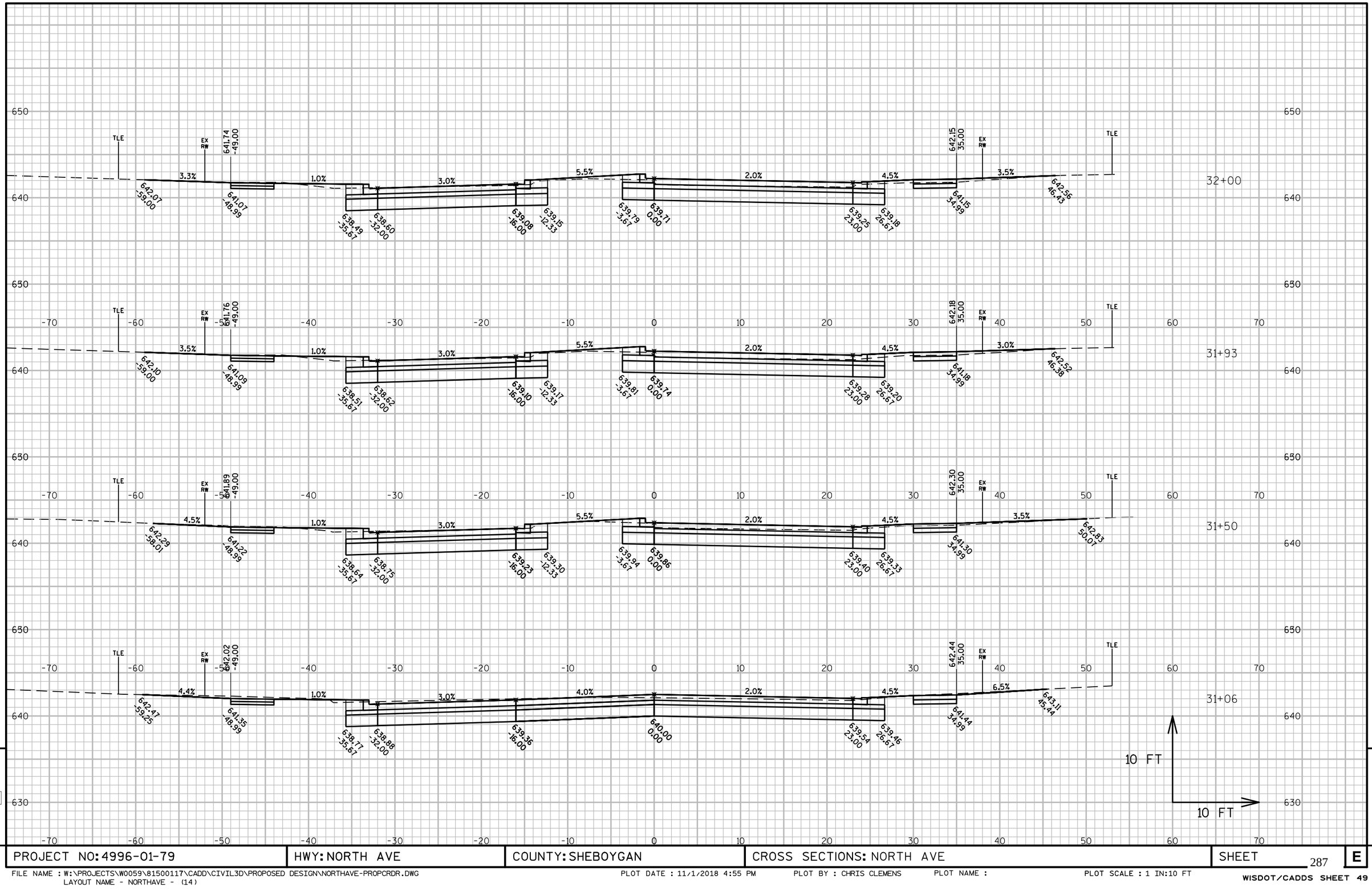


PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN	CROSS SECTIONS: NORTH AVE	SHEET 286	E

FILE NAME : W:\PROJECTS\W0059\81500117\CADD\CIVIL3D\PROPOSED DESIGN\NORTHAVE-PROPCRDR.DWG
LAYOUT NAME - NORTHAVE - (13)

PLOT DATE : 11/1/2018 4:54 PM PLOT BY : CHRIS CLEMENS PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49

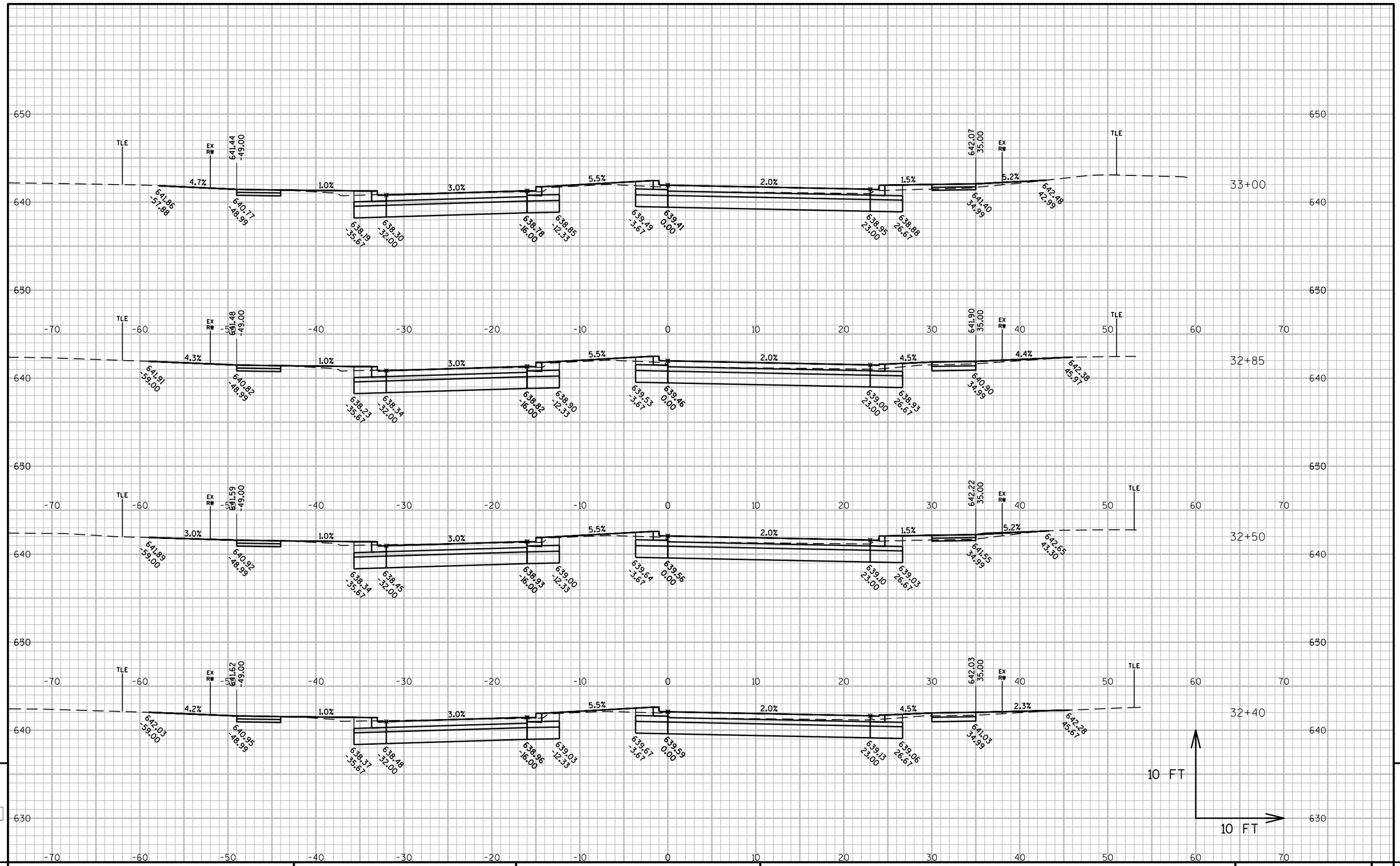


PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN	CROSS SECTIONS: NORTH AVE	SHEET 287	E

FILE NAME : W:\PROJECTS\W0059\81500117\CADD\CIVIL3D\PROPOSED DESIGN\NORTHAVE-PROPCRDR.DWG
LAYOUT NAME - NORTHAVE - (14)

PLOT DATE : 11/1/2018 4:55 PM PLOT BY : CHRIS CLEMENS PLOT NAME : PLOT SCALE : 1 IN:10 FT

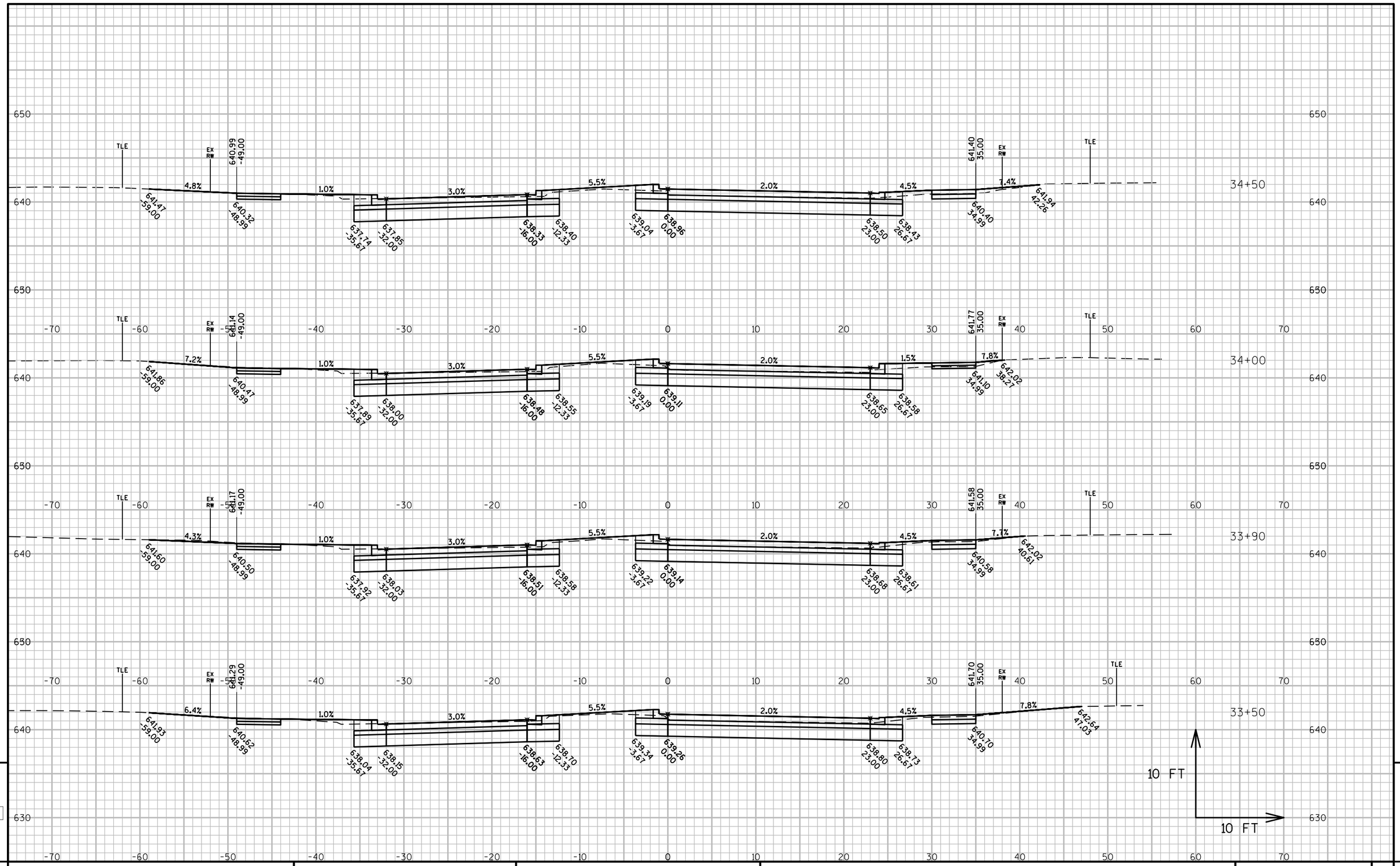
WISDOT/CADDS SHEET 49



PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN	CROSS SECTIONS: NORTH AVE	SHEET 288	E

FILE NAME : W:\PROJECTS\W0059\81500117\CADD\CIVIL3D\PROPOSED DESIGN\NORTHAVE-PROPCRDR.DWG
LAYOUT NAME - NORTHAVE - (15)

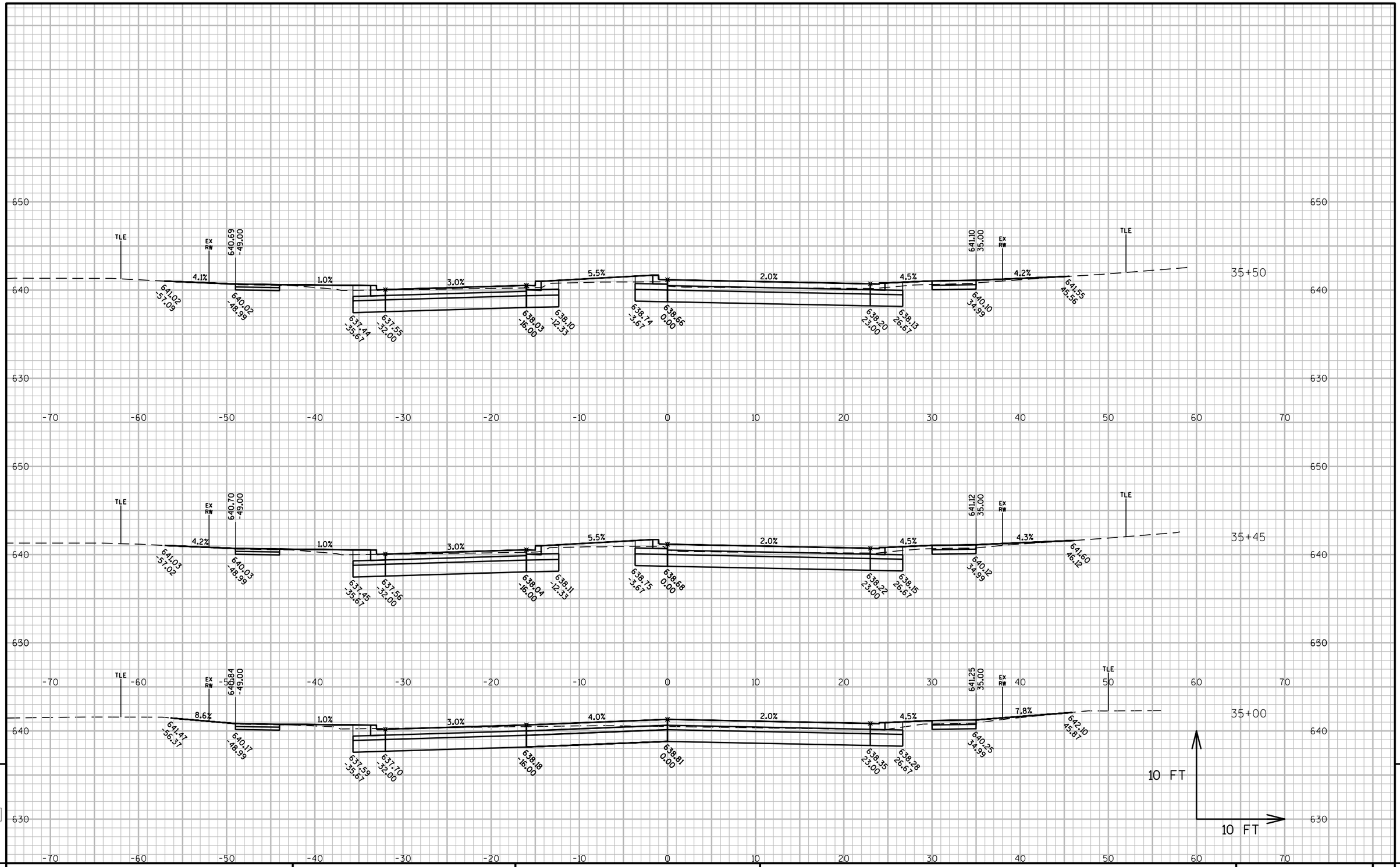
PLOT DATE : 11/1/2018 4:55 PM PLOT BY : CHRIS CLEMENS PLOT NAME : PLOT SCALE : 1 IN:10 FT



PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN	CROSS SECTIONS: NORTH AVE	SHEET 289	E

FILE NAME : W:\PROJECTS\W0059\81500117\CADD\CIVIL3D\PROPOSED DESIGN\NORTHAVE-PROPCRDR.DWG
LAYOUT NAME - NORTHAVE - (16)

PLOT DATE : 11/1/2018 4:55 PM PLOT BY : CHRIS CLEMENS PLOT NAME : PLOT SCALE : 1 IN:10 FT

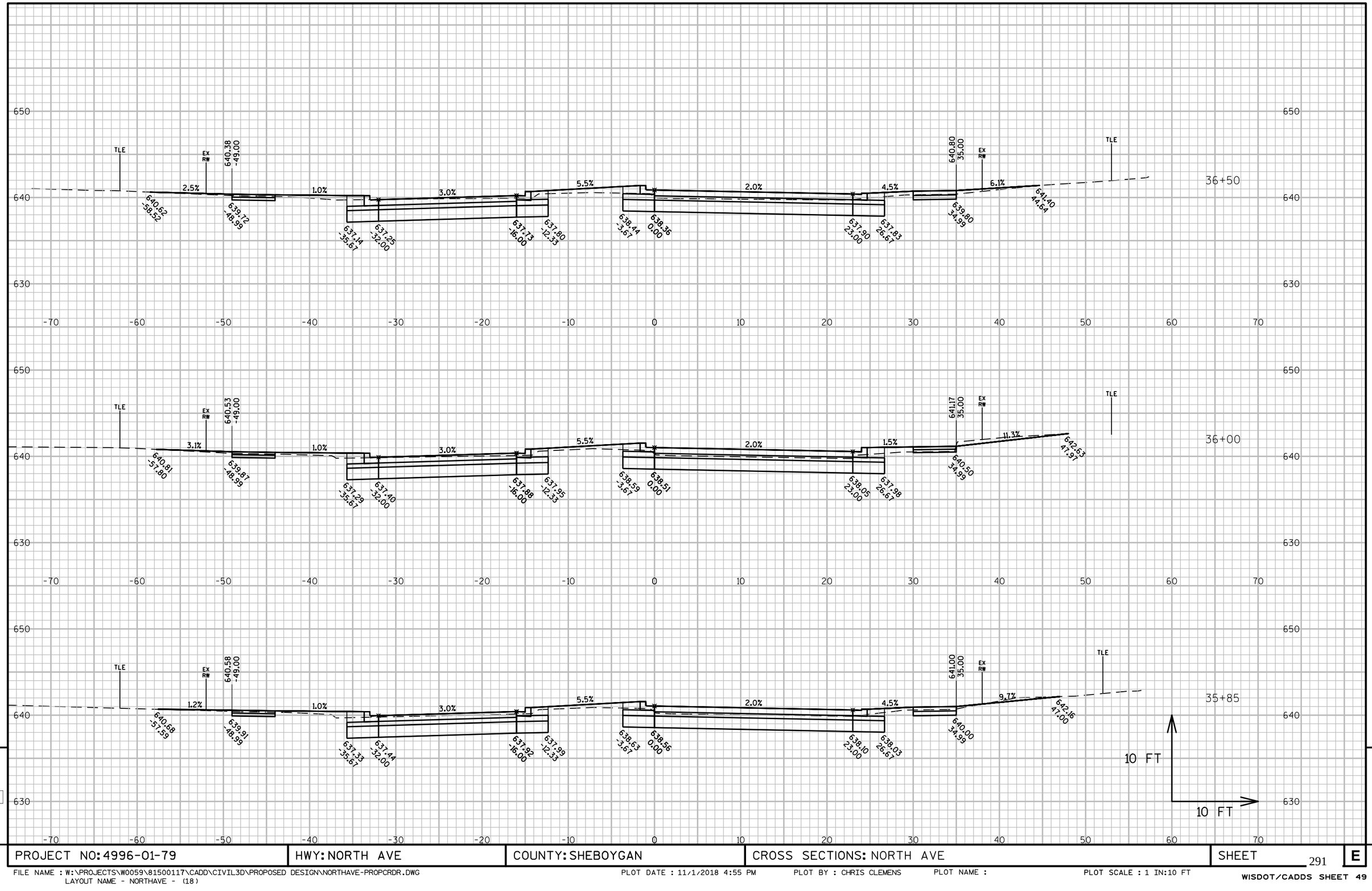


PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN	CROSS SECTIONS: NORTH AVE	SHEET 290	E

FILE NAME : W:\PROJECTS\W0059\81500117\CADD\CIVIL3D\PROPOSED DESIGN\NORTHAVE-PROPCRDR.DWG
LAYOUT NAME - NORTHAVE - (17)

PLOT DATE : 11/1/2018 4:55 PM PLOT BY : CHRIS CLEMENS PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49

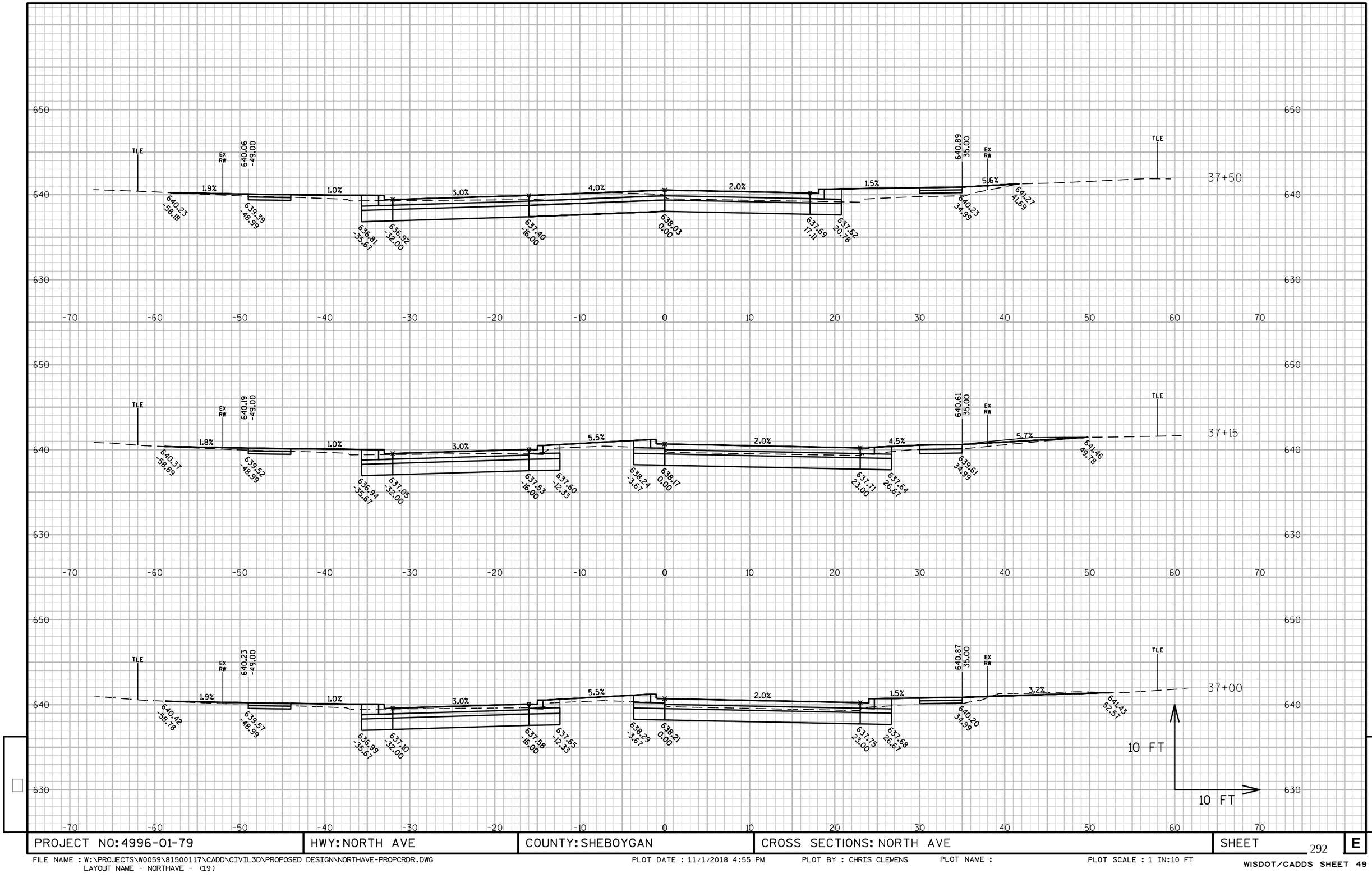


PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN	CROSS SECTIONS: NORTH AVE	SHEET 291	E

FILE NAME : W:\PROJECTS\W0059\81500117\CADD\CIVIL3D\PROPOSED DESIGN\NORTHAVE-PROPCRDR.DWG
LAYOUT NAME - NORTHAVE - (18)

PLOT DATE : 11/1/2018 4:55 PM PLOT BY : CHRIS CLEMENS PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49

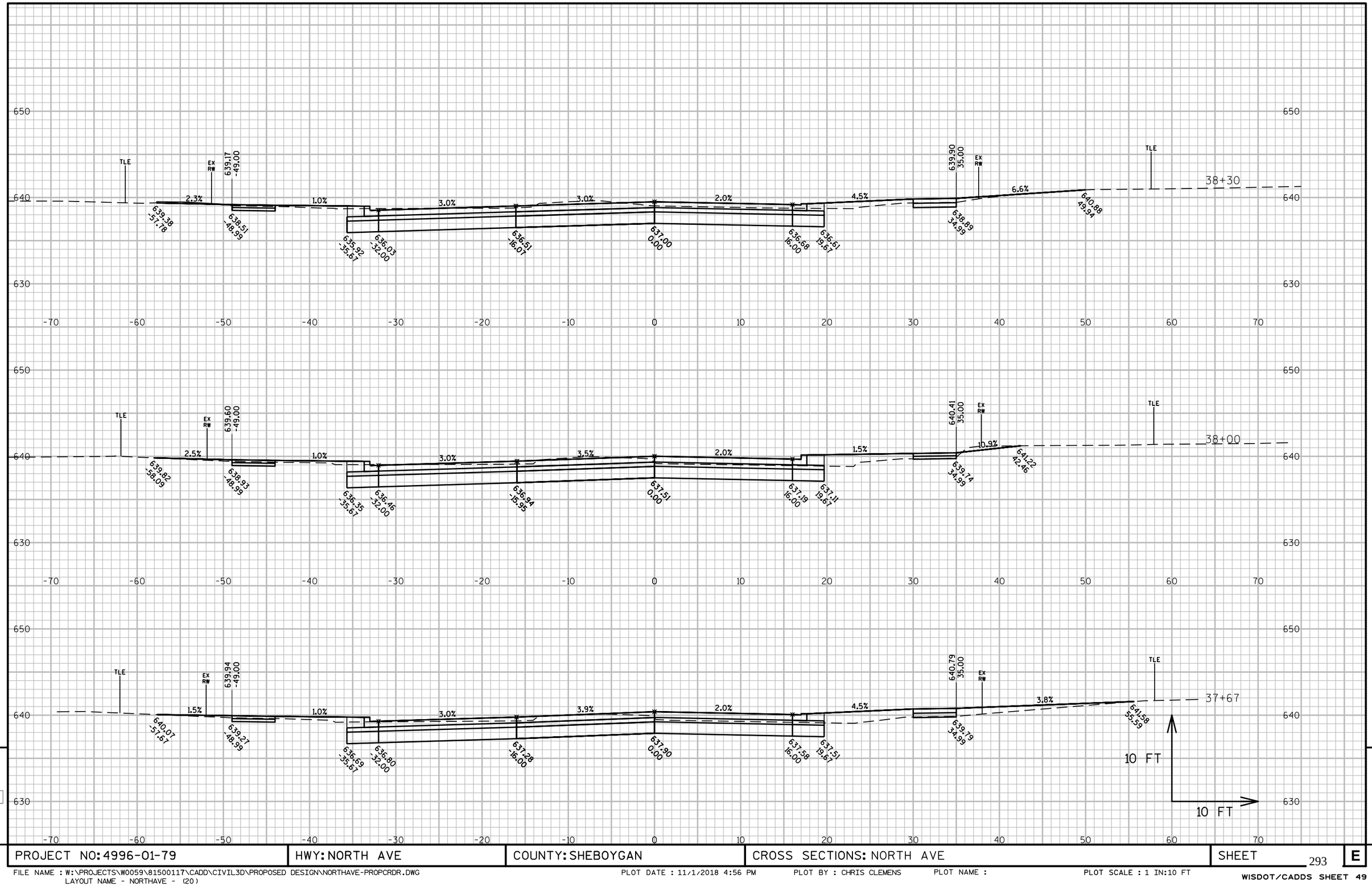


PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN	CROSS SECTIONS: NORTH AVE	SHEET 292	E

FILE NAME : W:\PROJECTS\W0059\81500117\CADD\CIVIL3D\PROPOSED DESIGN\NORTHAVE-PROPCRDR.DWG
LAYOUT NAME - NORTHAVE - (19)

PLOT DATE : 11/1/2018 4:55 PM PLOT BY : CHRIS CLEMENS PLOT NAME : PLOT SCALE : 1 IN:10 FT

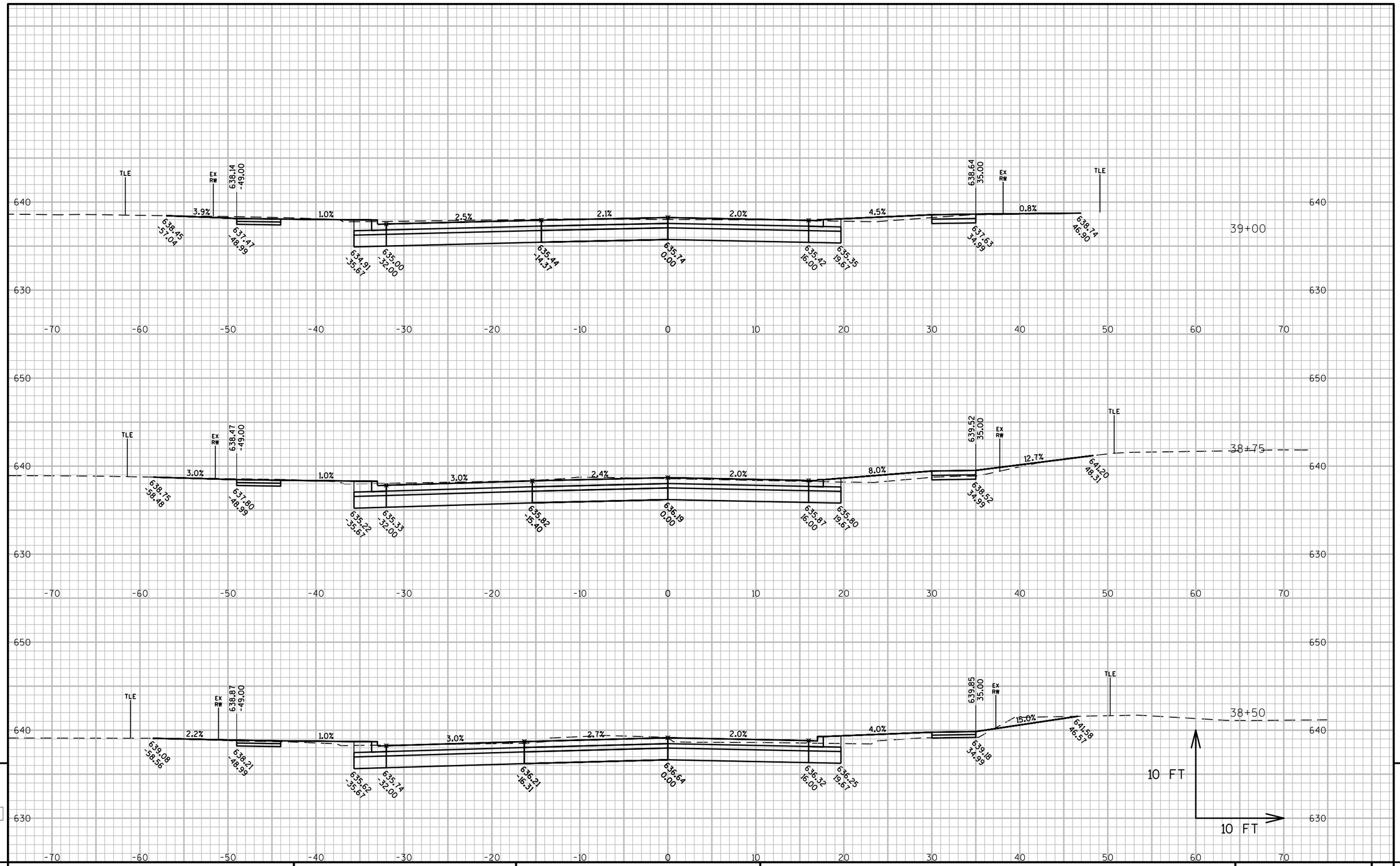
WISDOT/CADDS SHEET 49



PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN	CROSS SECTIONS: NORTH AVE	SHEET 293	E

FILE NAME : W:\PROJECTS\W0059\81500117\CADD\CIVIL3D\PROPOSED DESIGN\NORTHAVE-PROPCRDR.DWG
LAYOUT NAME - NORTHAVE - (20)

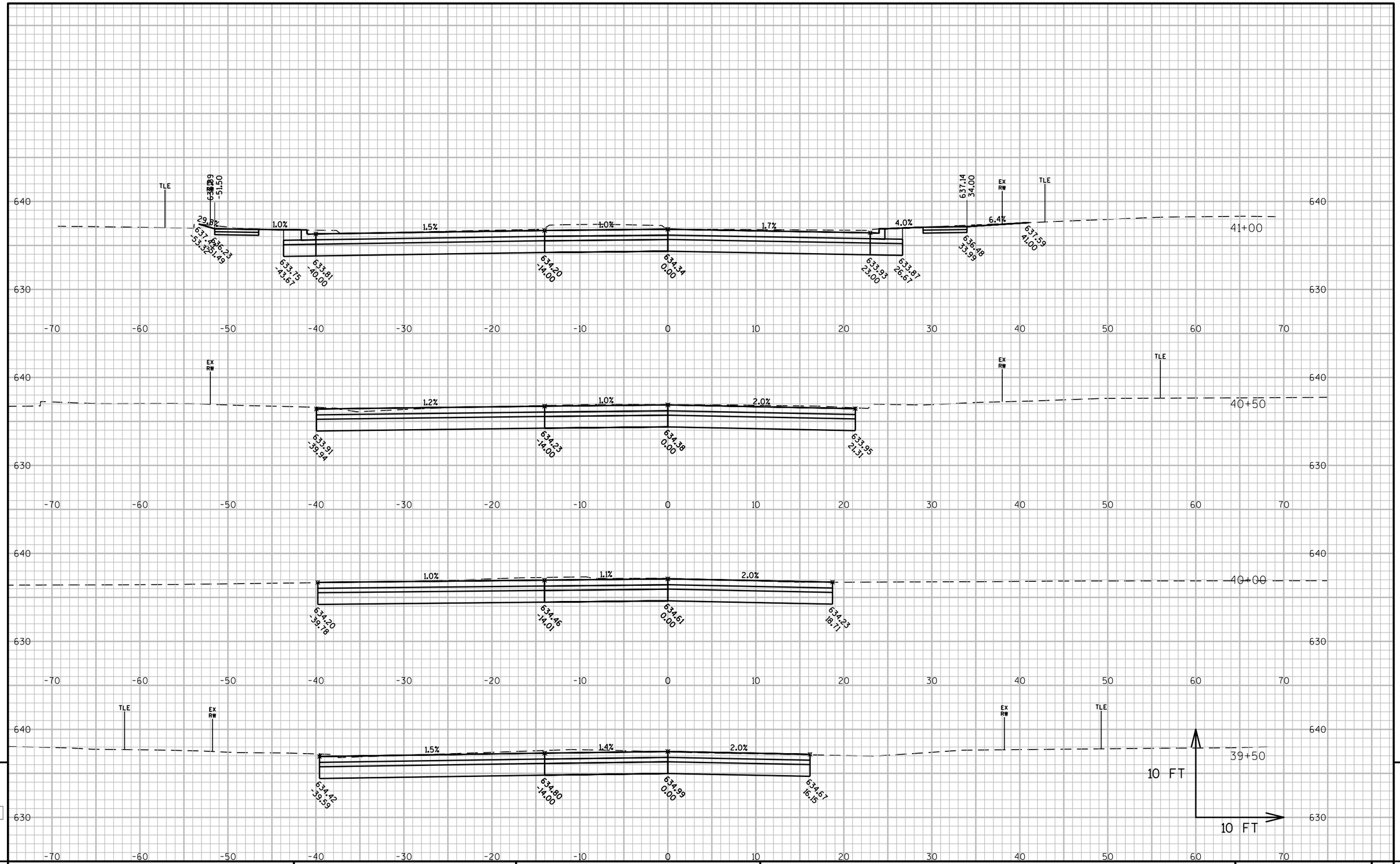
PLOT DATE : 11/1/2018 4:56 PM PLOT BY : CHRIS CLEMENS PLOT NAME : PLOT SCALE : 1 IN:10 FT



PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN	CROSS SECTIONS: NORTH AVE	SHEET 294	E

FILE NAME : W:\PROJECTS\W0059\81500117\CADD\CIVIL3D\PROPOSED DESIGN\NORTHAVE-PROPCRDR.DWG
LAYOUT NAME - NORTHAVE - (21)

PLOT DATE : 11/1/2018 4:56 PM PLOT BY : CHRIS CLEMENS PLOT NAME : PLOT SCALE : 1 IN:10 FT

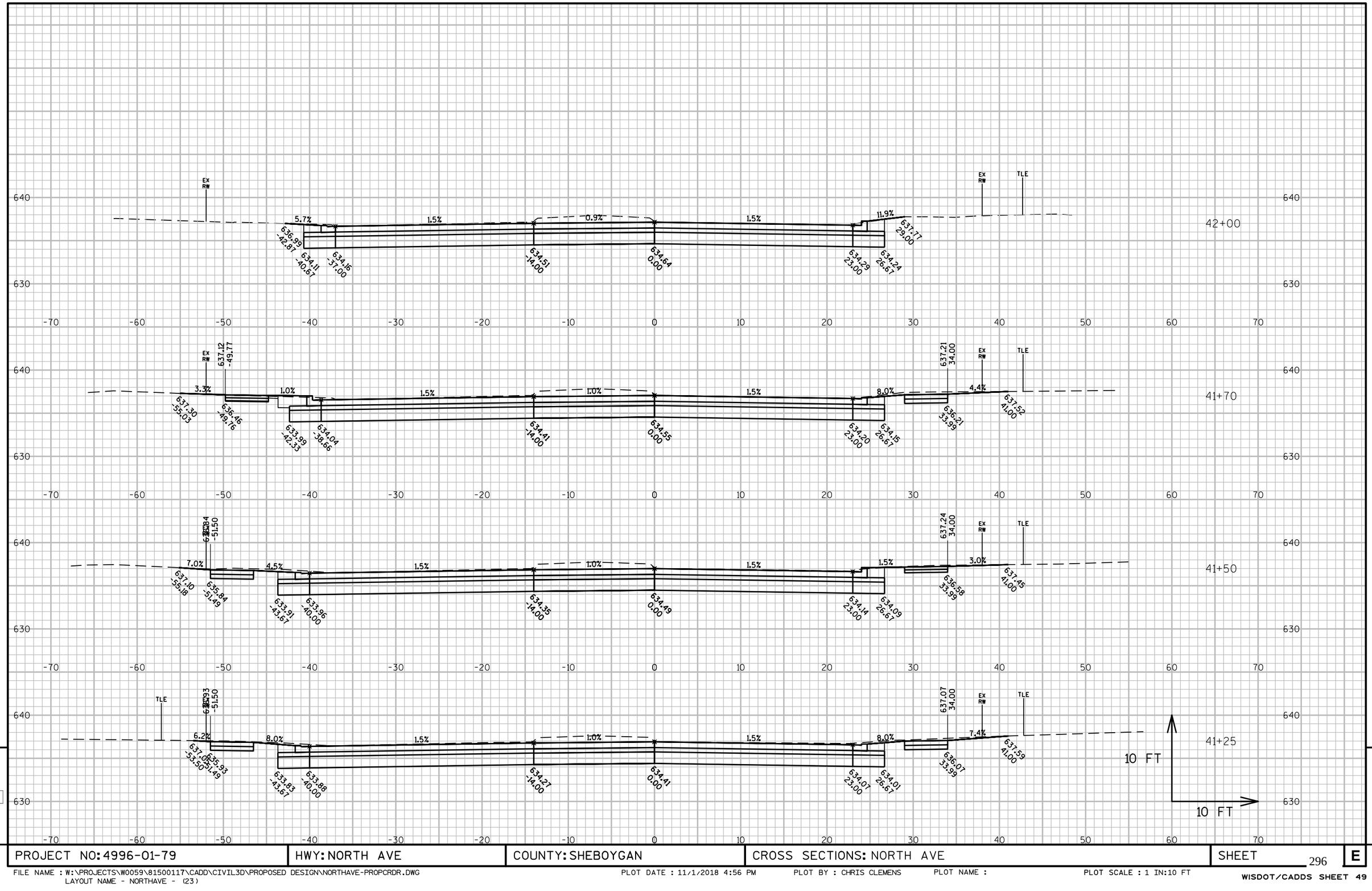


PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN	CROSS SECTIONS: NORTH AVE	SHEET 295	E

FILE NAME : W:\PROJECTS\W0059\81500117\CADD\CIVIL3D\PROPOSED DESIGN\NORTHAVE-PROPCRDR.DWG
LAYOUT NAME - NORTHAVE - (22)

PLOT DATE : 11/1/2018 4:56 PM PLOT BY : CHRIS CLEMENS PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49

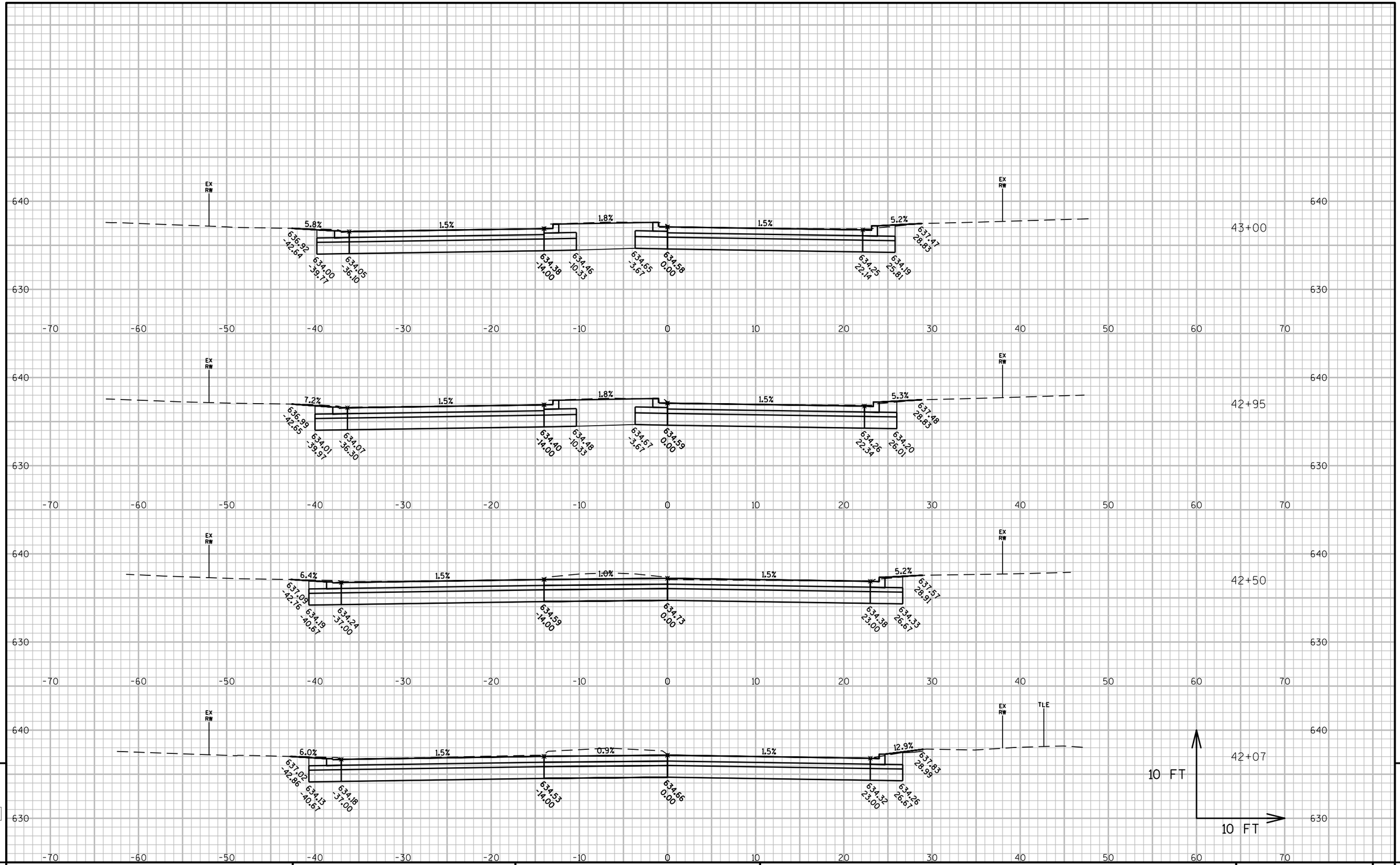


PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN	CROSS SECTIONS: NORTH AVE	SHEET 296	E

FILE NAME : W:\PROJECTS\W0059\81500117\CADD\CIVIL3D\PROPOSED DESIGN\NORTHAVE-PROPCRDR.DWG
LAYOUT NAME - NORTHAVE - (23)

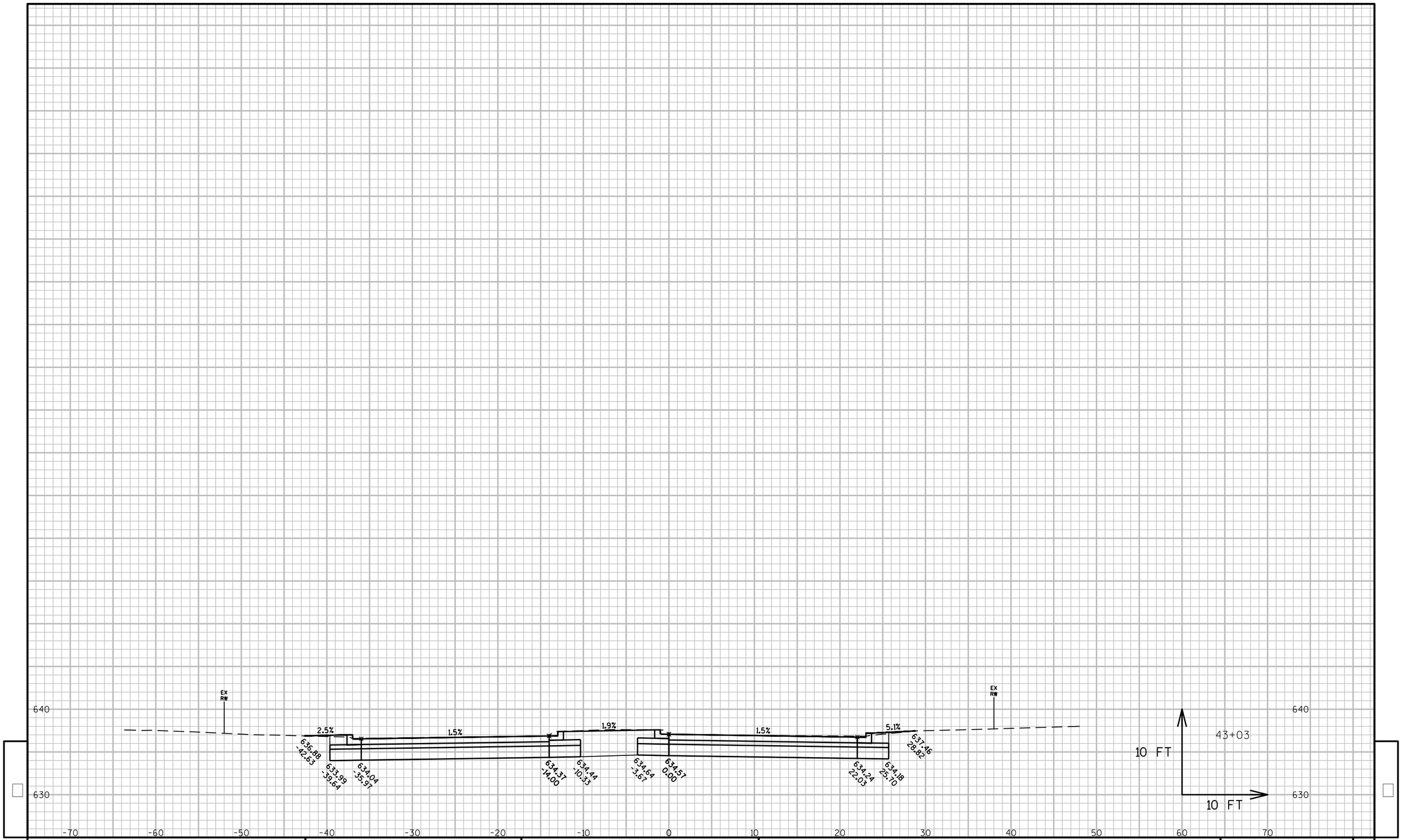
PLOT DATE : 11/1/2018 4:56 PM PLOT BY : CHRIS CLEMENS PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49



PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN	CROSS SECTIONS: NORTH AVE	SHEET 297	E

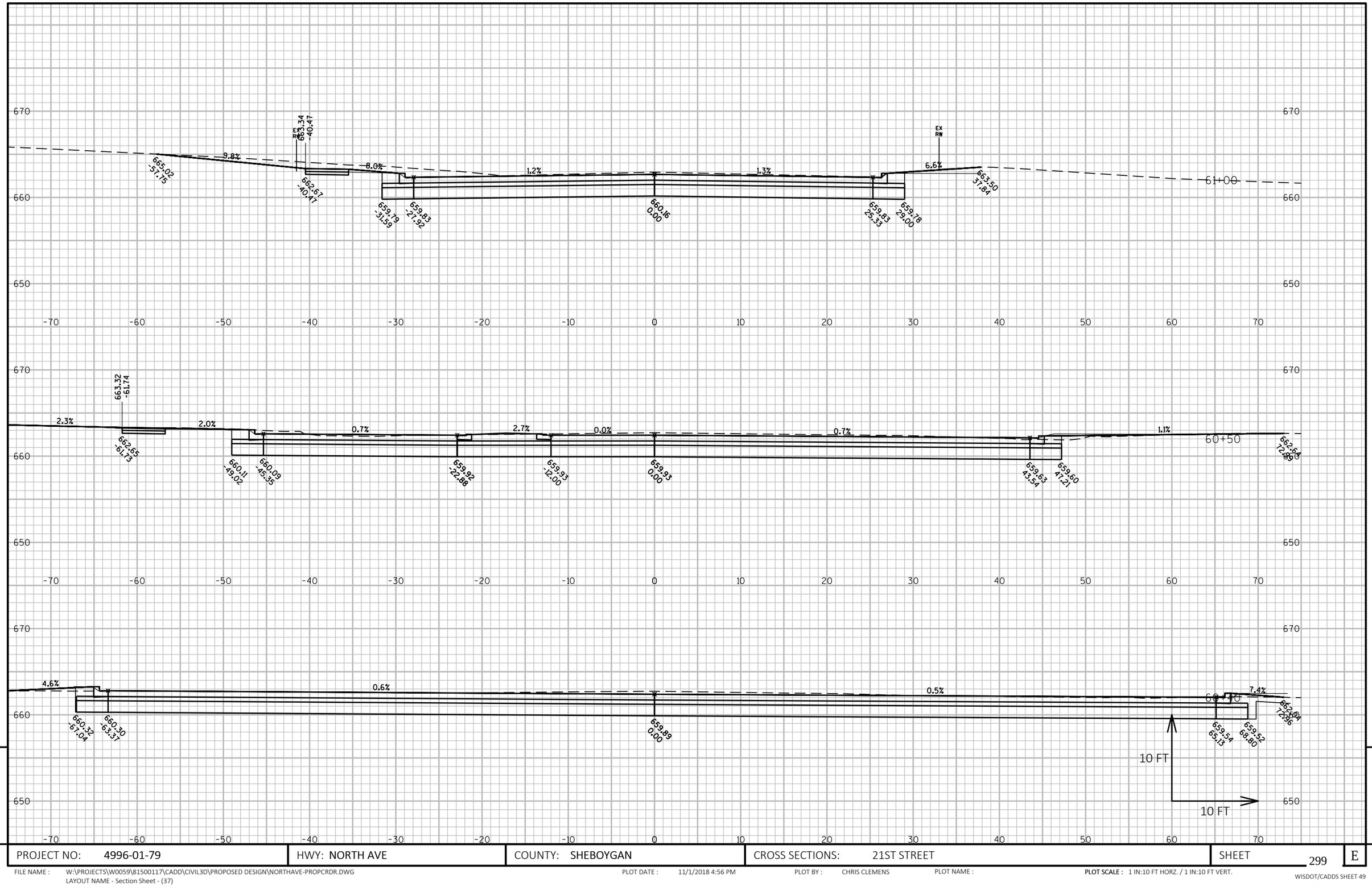
FILE NAME : W:\PROJECTS\W0059\81500117\CADD\CIVIL3D\PROPOSED DESIGN\NORTHAVE-PROPCRDR.DWG
LAYOUT NAME - NORTHAVE - (24)
PLOT DATE : 11/1/2018 4:56 PM
PLOT BY : CHRIS CLEMENS
PLOT NAME :
PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 49



PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN	CROSS SECTIONS: NORTH AVE	SHEET 298	E

FILE NAME : W:\PROJECTS\W0059\81500117\CADD\CIVIL3D\PROPOSED DESIGN\NORTHAVE-PROPCRDR.DWG
LAYOUT NAME - NORTHAVE - (25)

PLOT DATE : 11/1/2018 4:56 PM PLOT BY : CHRIS CLEMENS PLOT NAME : PLOT SCALE : 1 IN:10 FT



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PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN	CROSS SECTIONS: 21ST STREET	SHEET 299	E

FILE NAME : W:\PROJECTS\W0059\81500117\CADD\CIVIL3D\PROPOSED DESIGN\NORTHAVE-PROPCRDR.DWG
LAYOUT NAME - Section Sheet - (37)

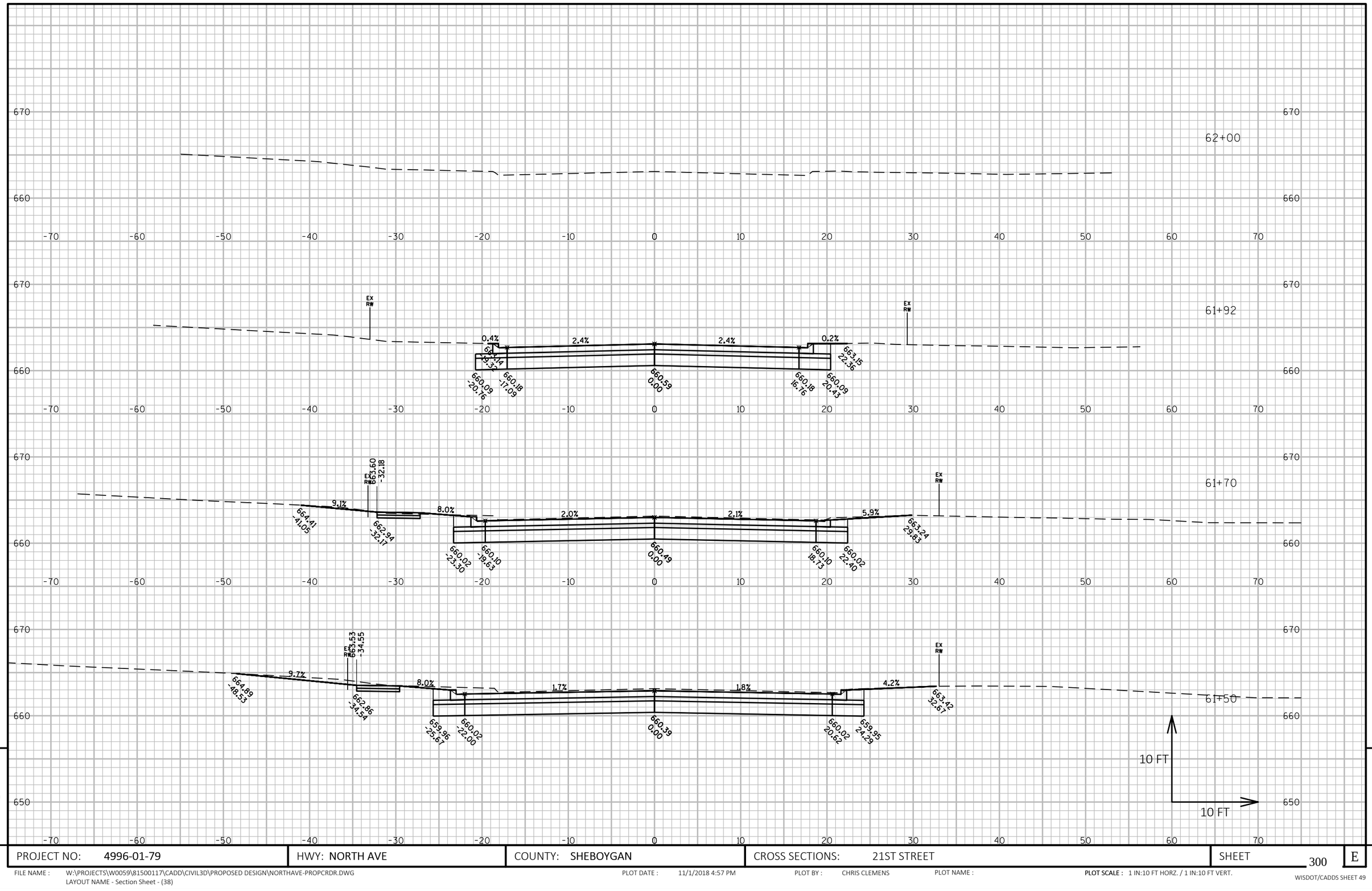
PLOT DATE : 11/1/2018 4:56 PM

PLOT BY : CHRIS CLEMENS

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

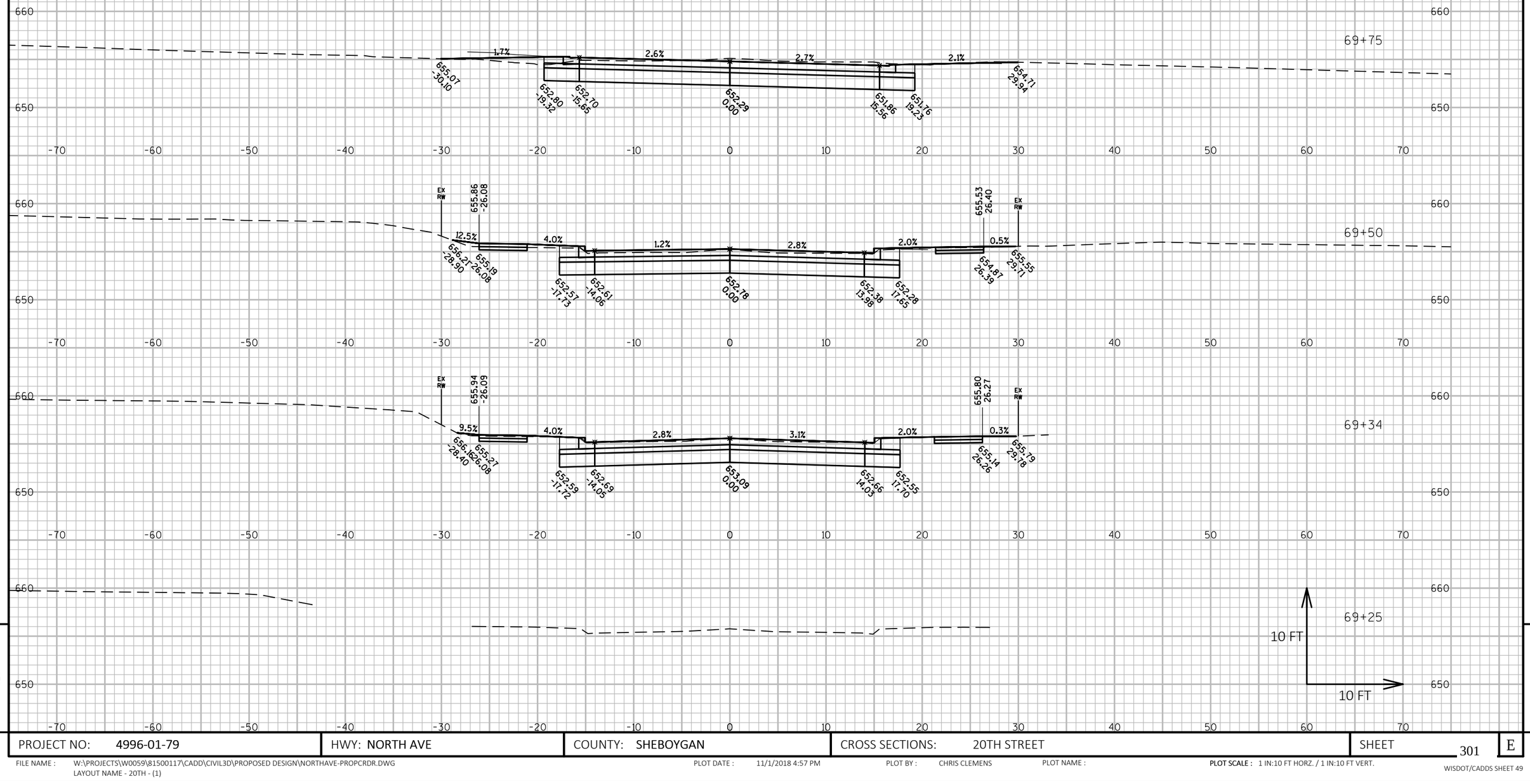


PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN	CROSS SECTIONS: 21ST STREET	SHEET 300	E

FILE NAME : W:\PROJECTS\W0059\81500117\CADD\CIVIL3D\PROPOSED DESIGN\NORTHAVE-PROPCRDR.DWG
LAYOUT NAME - Section Sheet - (38)

PLOT DATE : 11/1/2018 4:57 PM PLOT BY : CHRIS CLEMENS PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

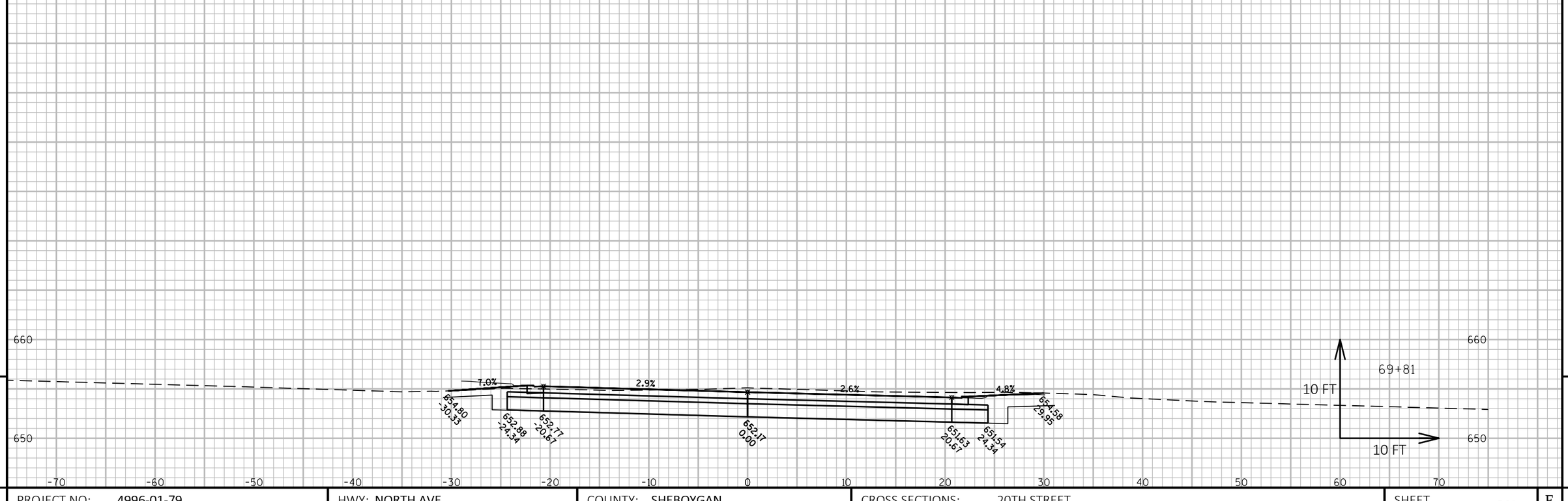
WISDOT/CADDS SHEET 49



PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN	CROSS SECTIONS: 20TH STREET	SHEET 301	E

FILE NAME : W:\PROJECTS\W0059\81500117\CADD\CIVIL3D\PROPOSED DESIGN\NORTHAVE-PROPCRDR.DWG
LAYOUT NAME - 20TH - (1)

PLOT DATE : 11/1/2018 4:57 PM PLOT BY : CHRIS CLEMENS PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



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PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN	CROSS SECTIONS: 20TH STREET	SHEET 302	E

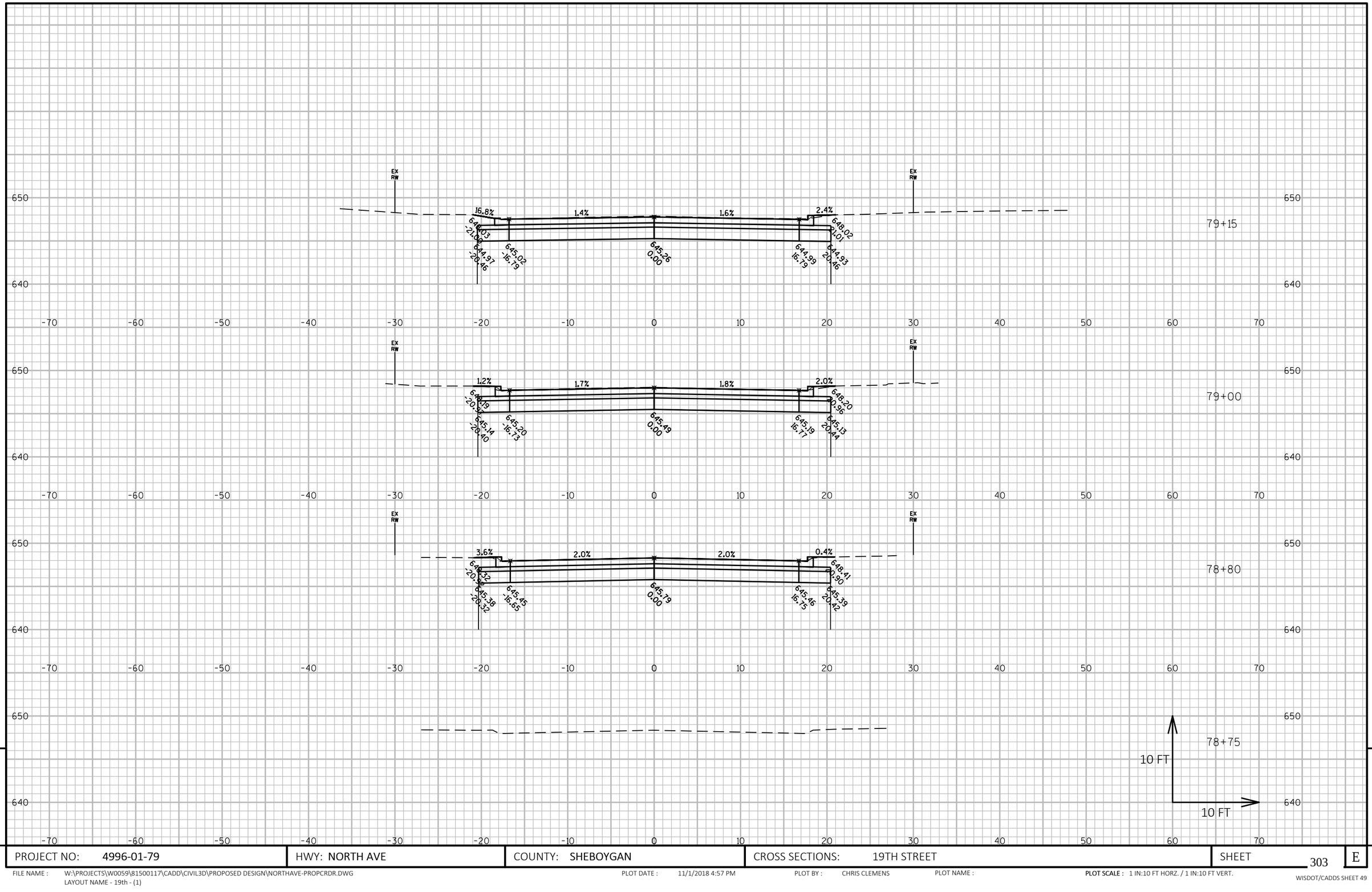
FILE NAME : W:\PROJECTS\W0059\81500117\CADD\CIVIL3D\PROPOSED DESIGN\NORTHAVE-PROPCRDR.DWG
LAYOUT NAME - 20TH - (2)

PLOT DATE : 11/1/2018 4:57 PM

PLOT BY : CHRIS CLEMENS

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



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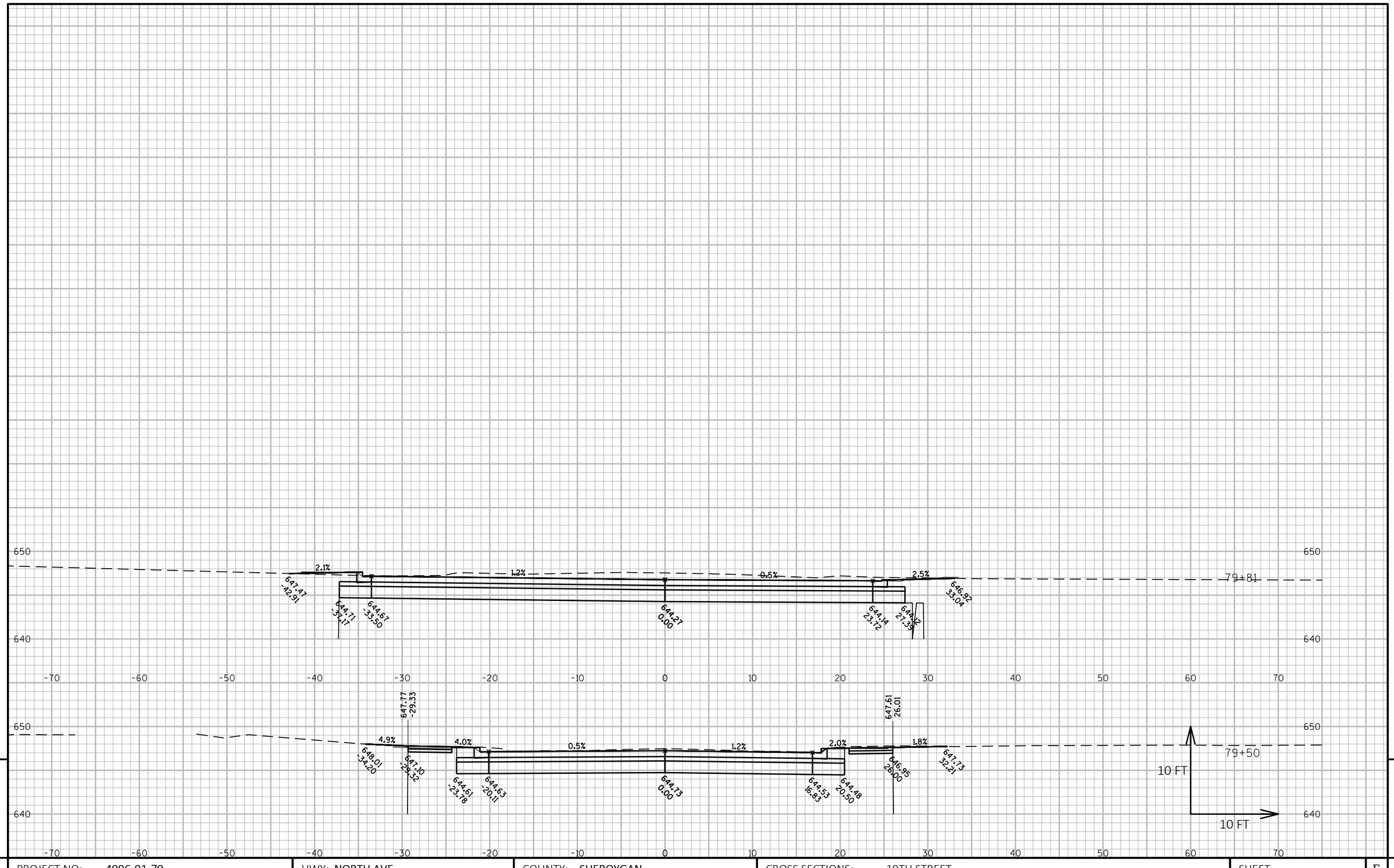
PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN	CROSS SECTIONS: 19TH STREET	SHEET 303	E

FILE NAME : W:\PROJECTS\W0059\81500117\CADD\CIVIL3D\PROPOSED DESIGN\NORTHAVE-PROPCRDR.DWG
LAYOUT NAME - 19th - (1)

PLOT DATE : 11/1/2018 4:57 PM PLOT BY : CHRIS CLEMENS PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN	CROSS SECTIONS: 19TH STREET	SHEET 304	E

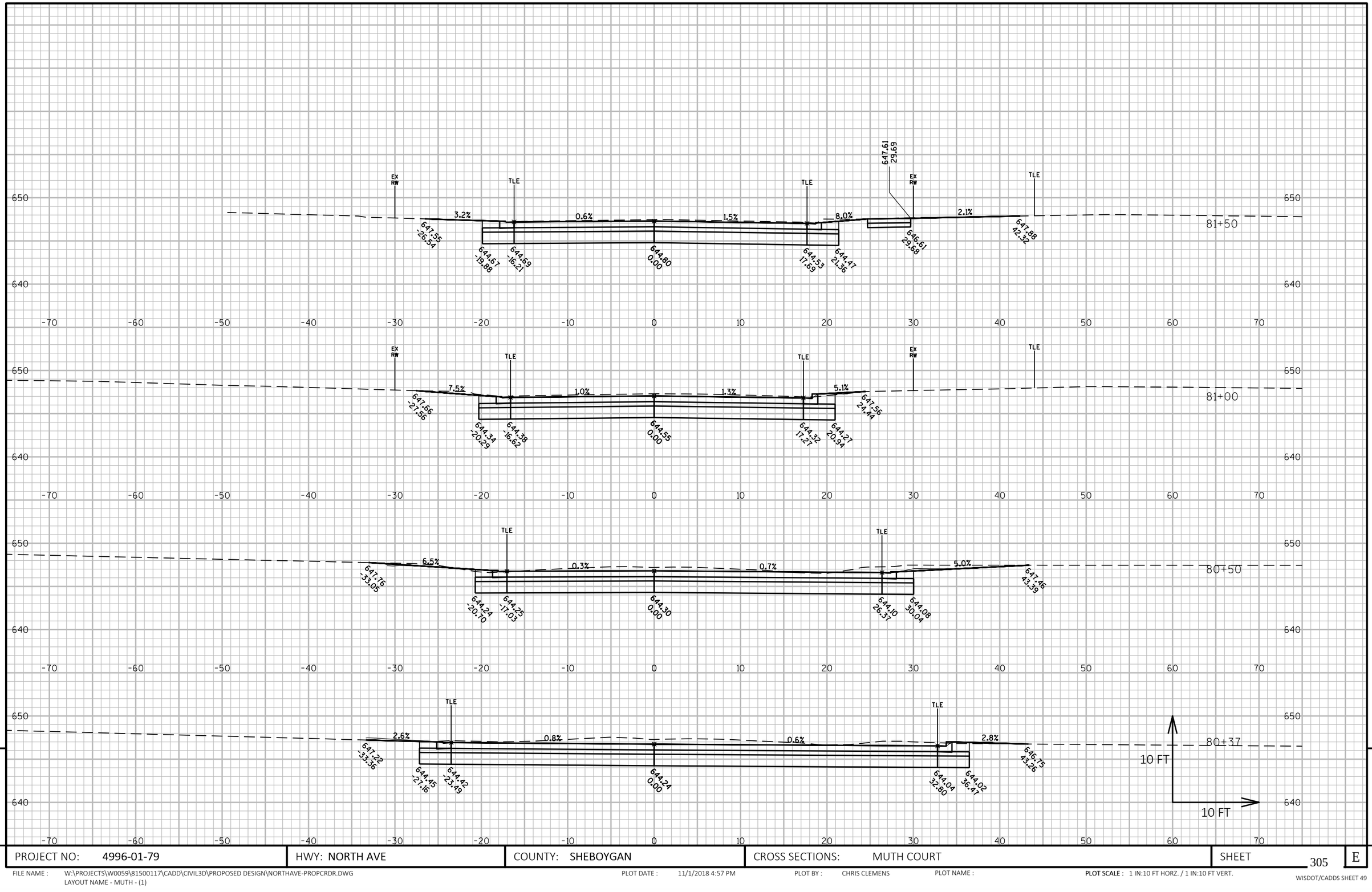
FILE NAME : W:\PROJECTS\W0059\81500117\CADD\CIVIL3D\PROPOSED DESIGN\NORTHAVE-PROPCRDR.DWG
LAYOUT NAME - 19th - (2)

PLOT DATE : 11/1/2018 4:57 PM

PLOT BY : CHRIS CLEMENS

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

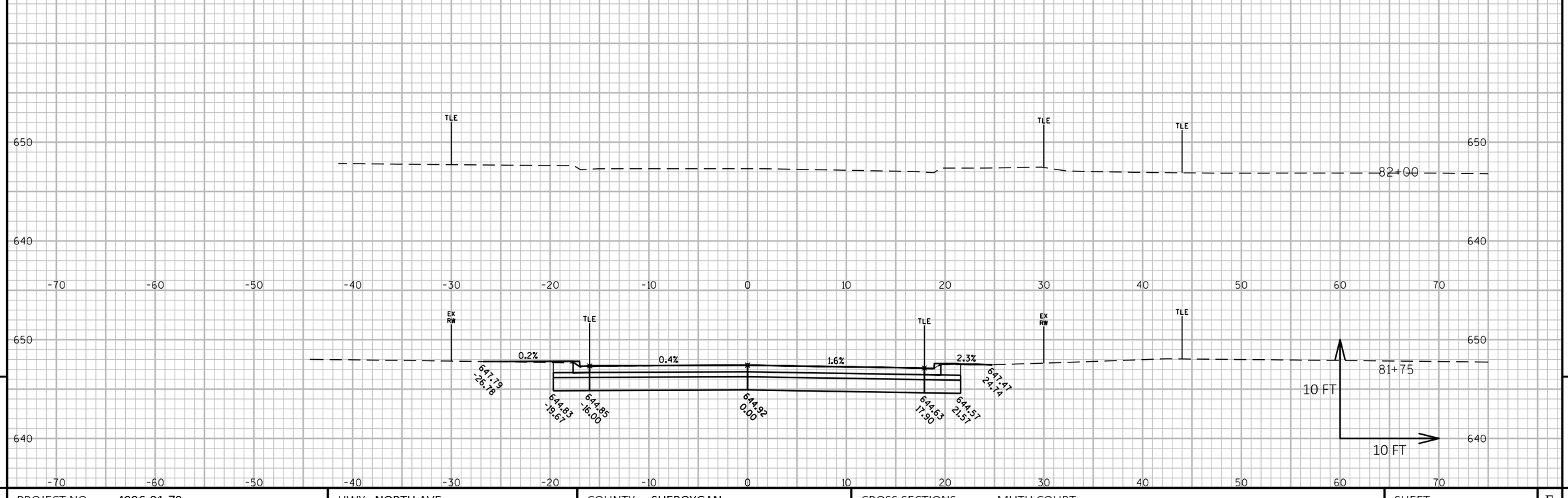


PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN	CROSS SECTIONS: MUTH COURT	SHEET 305 E

FILE NAME : W:\PROJECTS\W0059\81500117\CADD\CIVIL3D\PROPOSED DESIGN\NORTHAVE-PROPCRDR.DWG
LAYOUT NAME - MUTH - (1)

PLOT DATE : 11/1/2018 4:57 PM PLOT BY : CHRIS CLEMENS PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN	CROSS SECTIONS: MUTH COURT	SHEET 306	E

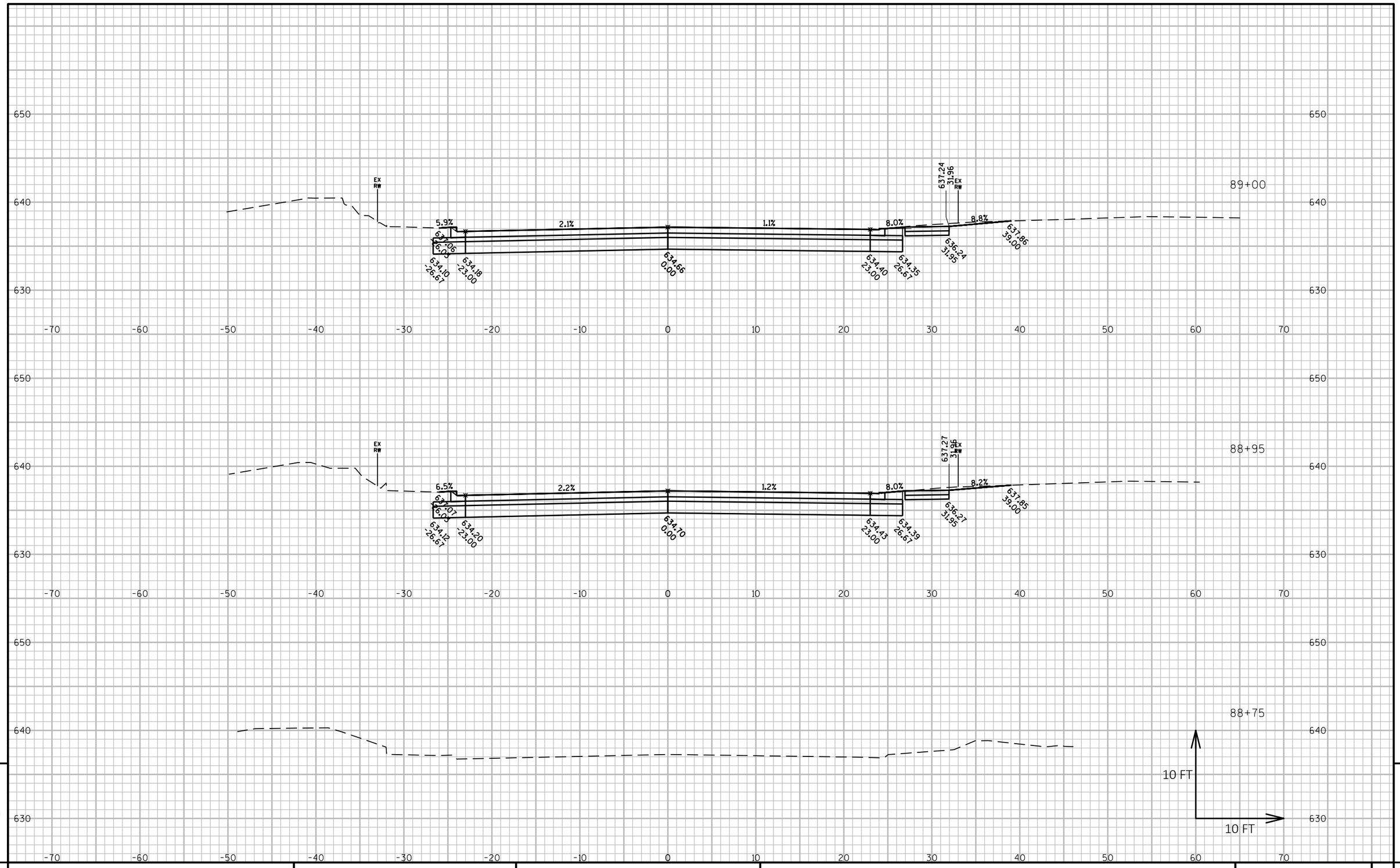
FILE NAME : W:\PROJECTS\W0059\81500117\CADD\CIVIL3D\PROPOSED DESIGN\NORTHAVE-PROPCRDR.DWG
LAYOUT NAME - MUTH - (2)

PLOT DATE : 11/1/2018 4:58 PM

PLOT BY : CHRIS CLEMENS

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

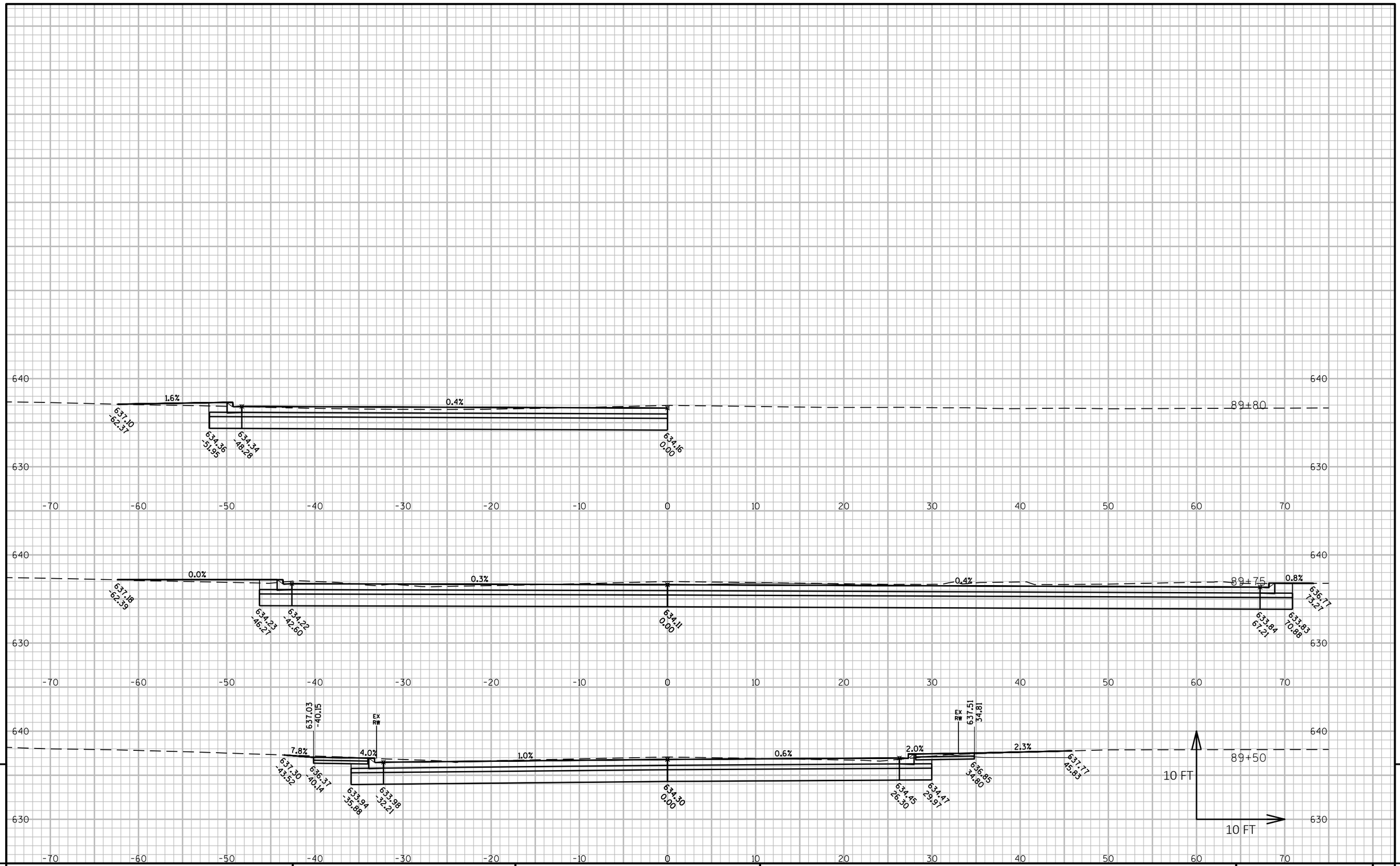


PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN	CROSS SECTIONS: 15TH STREET	SHEET 307	E

FILE NAME : W:\PROJECTS\W0059\81500117\CADD\CIVIL3D\PROPOSED DESIGN\NORTHAVE-PROPCRDR.DWG
LAYOUT NAME - 15TH - (1)

PLOT DATE : 11/1/2018 4:58 PM PLOT BY : CHRIS CLEMENS PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN	CROSS SECTIONS: 15TH STREET	SHEET 308	E

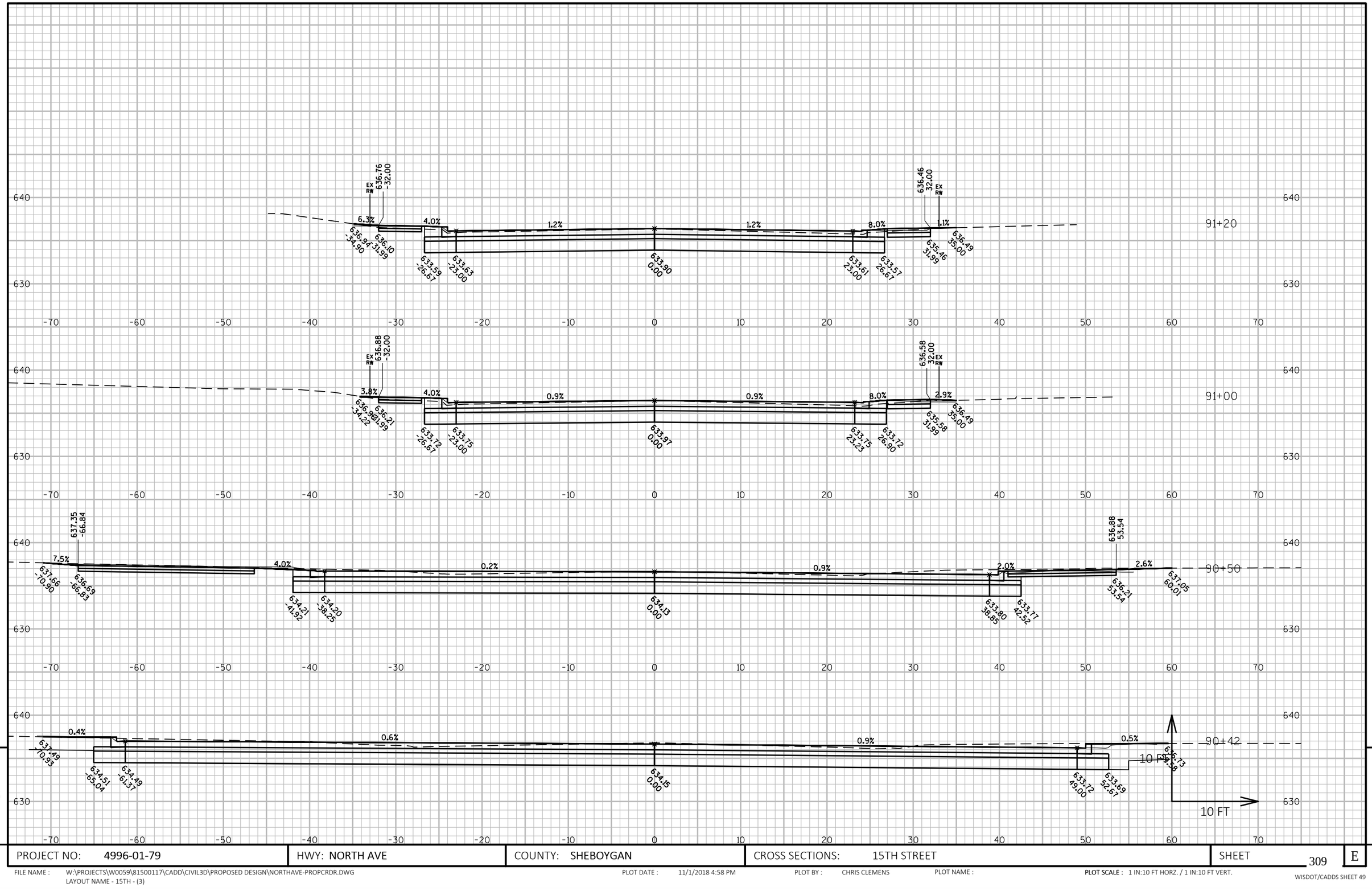
FILE NAME : W:\PROJECTS\W0059\81500117\CADD\CIVIL3D\PROPOSED DESIGN\NORTHAVE-PROPCRDR.DWG
LAYOUT NAME - 15TH - (2)

PLOT DATE : 11/1/2018 4:58 PM

PLOT BY : CHRIS CLEMENS

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

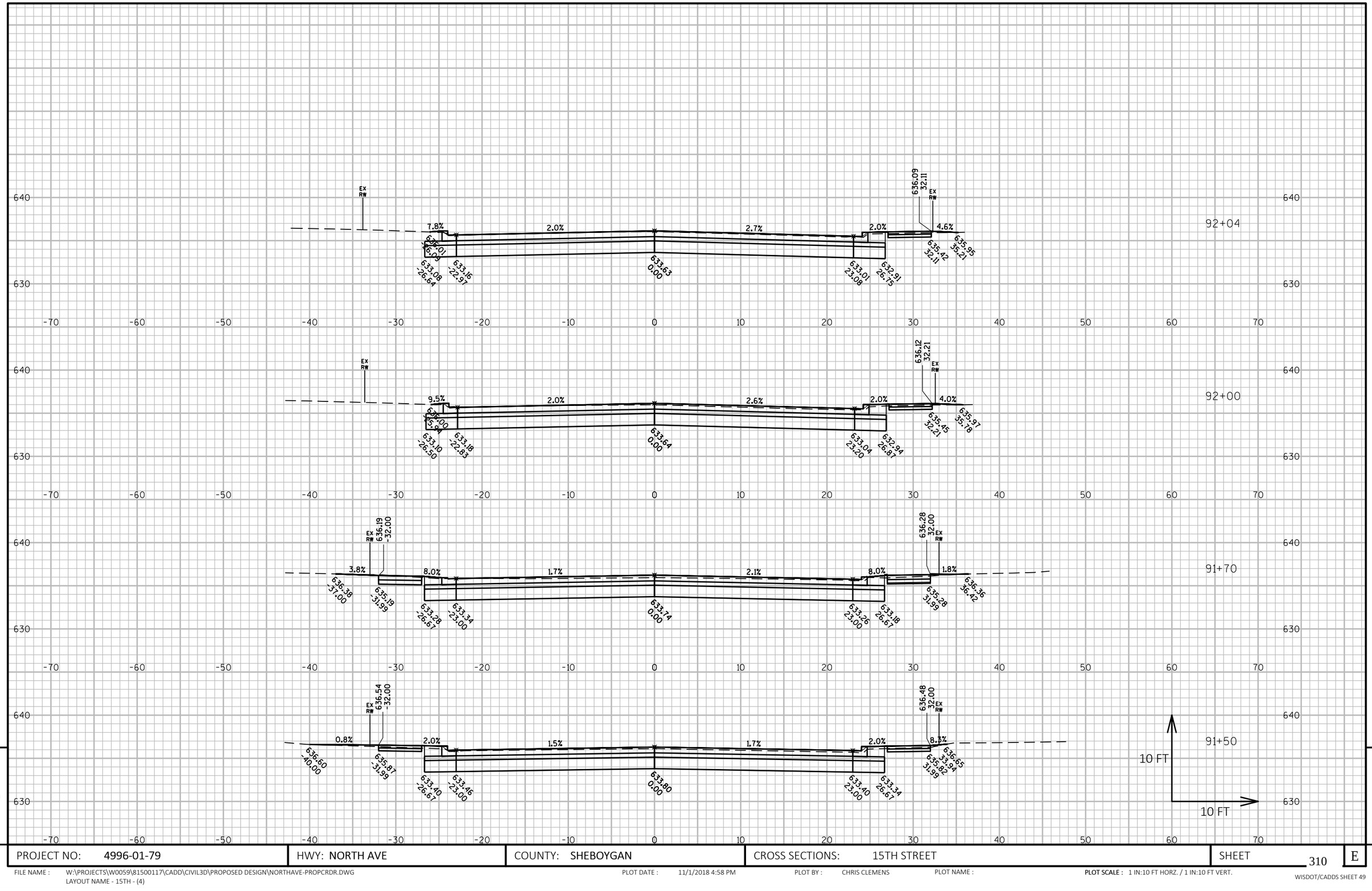


PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN	CROSS SECTIONS: 15TH STREET	SHEET 309	E

FILE NAME : W:\PROJECTS\W0059\81500117\CADD\CIVIL3D\PROPOSED DESIGN\NORTHAVE-PROPCRDR.DWG
LAYOUT NAME - 15TH - (3)

PLOT DATE : 11/1/2018 4:58 PM PLOT BY : CHRIS CLEMENS PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

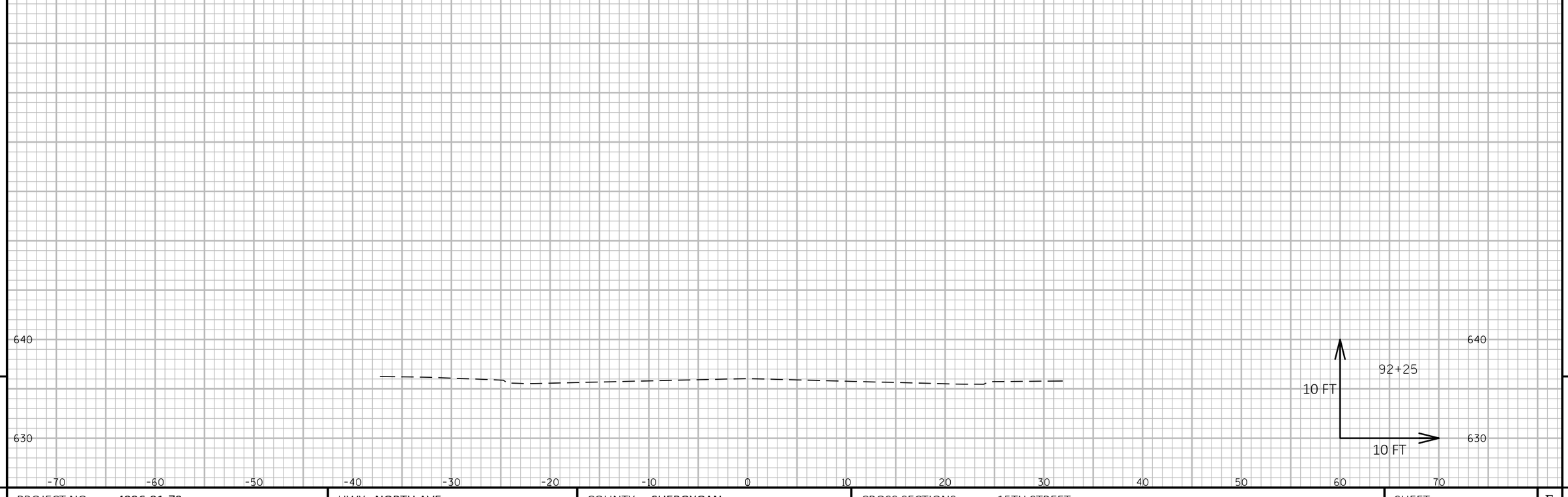


PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN	CROSS SECTIONS: 15TH STREET	SHEET 310	E

FILE NAME : W:\PROJECTS\W0059\81500117\CADD\CIVIL3D\PROPOSED DESIGN\NORTHAVE-PROPCRDR.DWG
LAYOUT NAME - 15TH - (4)

PLOT DATE : 11/1/2018 4:58 PM PLOT BY : CHRIS CLEMENS PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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9

PROJECT NO: 4996-01-79	HWY: NORTH AVE	COUNTY: SHEBOYGAN	CROSS SECTIONS: 15TH STREET	SHEET 311	E

FILE NAME : W:\PROJECTS\W0059\81500117\CADD\CIVIL3D\PROPOSED DESIGN\NORTHAVE-PROPCRDR.DWG
LAYOUT NAME - 15TH - (5)

PLOT DATE : 11/1/2018 4:58 PM PLOT BY : CHRIS CLEMENS PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

Wisconsin Department of Transportation

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