NEL NOV 2015

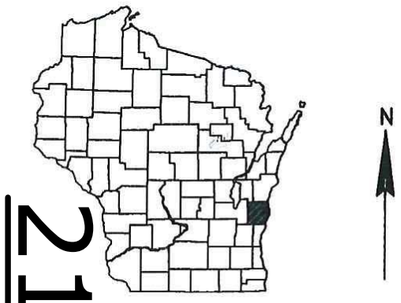
PROJECT ID: 4996-01-58

COUNTY: SHEBOYGAN

ORDER OF SHEETS

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

TOTAL SHEETS = 446



N

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

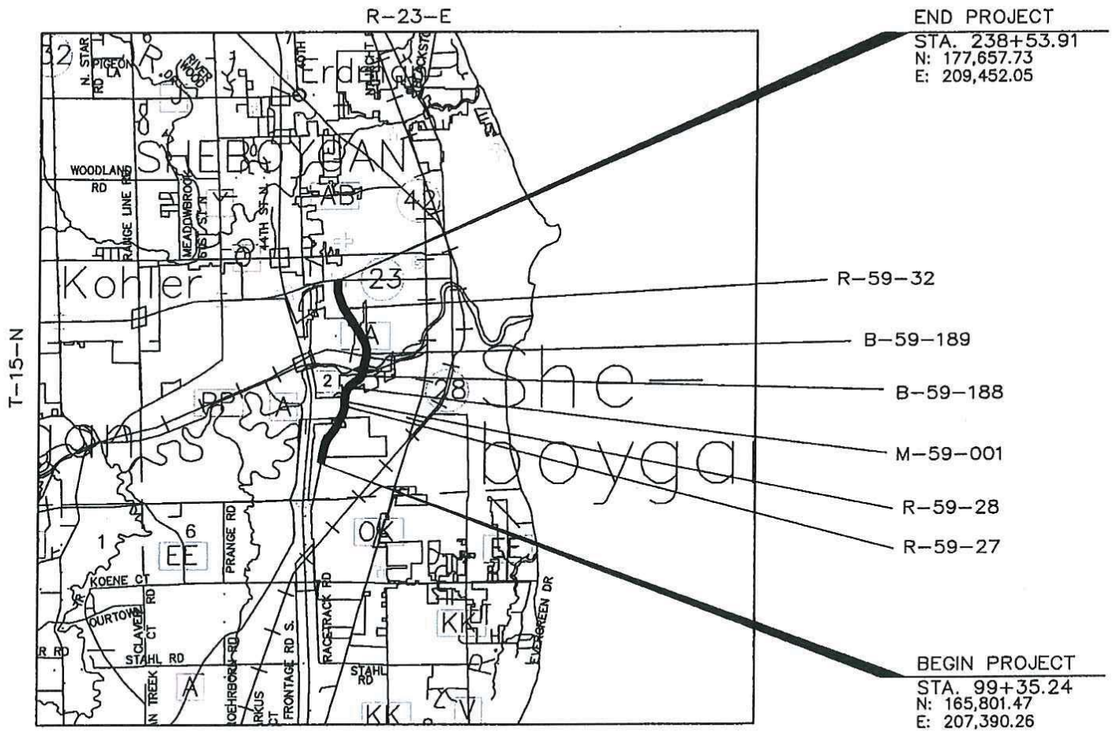
TAYLOR DRIVE, CITY OF SHEBOYGAN

KOHLER MEMORIAL DR - CROCKER AVE

LOCAL STREET
SHEBOYGAN COUNTY

STATE PROJECT NUMBER
4996-01-58

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
4996-01-58	WISC 2015144	1



LAYOUT
SCALE 0 1.0 MI.

TOTAL NET LENGTH OF CENTERLINE = 2.636 MI.

COORDINATES ON THIS PLAN ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM (WCCS), SHEBOYGAN COUNTY.

DESIGN DESIGNATION

A.A.D.T.	=	NA
A.A.D.T.	=	NA
D.H.V.	=	NA
D.D.	=	NA
T.	=	NA
DESIGN SPEED	=	NA
ESALS	=	NA

CONVENTIONAL SYMBOLS

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

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

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

ACCEPTED FOR
County of Sheboygan

10-30-14 (Date)
Sheboygan County Planning Director (Signature & Title of Official)

ORIGINAL PLANS PREPARED BY
DONOHUE

WISCONSIN TAMMY L. KUEHLMANN E-30670 SHEBOYGAN WI PROFESSIONAL ENGINEER

10.30.14 (Date) (Signature)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY
Surveyor: TerraTec Engineering
Designer: Donohue & Associates
Management Consultant: SEH

C.O. Examiner

APPROVED FOR THE DEPARTMENT
DATE: 10/30/14 (Signature)

E

FILE NAME : L:\PROJECTS\11744\DWG\010101_TI.DWG PLOT DATE : 10/29/2014 2:25 PM PLOT BY : JUMP, KEVIN PLOT NAME :

WISDOT/CADDS SHEET 10

2

GENERAL NOTES

THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS AS SHOWN ON THE PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN. IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY DIGGERS HOTLINE.

CROSS DRAIN PIPE ELEVATIONS, LENGTHS AND LOCATIONS AS SHOWN ON THE PLANS MAY BE ADJUSTED TO FIT EXISTING FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.

DISTURBED AREAS WITHIN THE RIGHT-OF-WAY ARE TO BE TOPSOILED, SEEDED, FERTILIZED AND MULCHED AS DIRECTED BY THE ENGINEER. ALL OTHER DISTURBED AREAS ARE TO BE SEEDED, FERTILIZED AND MULCHED AT THE CONTRACTORS EXPENSE.

WHEN THE QUANTITY OF THE ITEM OF ASPHALTIC SURFACE OR BASE COURSE IS MEASURED FOR PAYMENT BY THE TON THE DEPTH OR THICKNESS OF THE COURSE SHOWN ON THE PLANS IS APPROXIMATE AND THE ACTUAL THICKNESS WILL DEPEND ON THE DISTRIBUTION OF MATERIAL AS DIRECTED BY THE ENGINEER.

SEED MIXTURE 40 SHALL BE USED ON ALL DISTURBED AREAS, UNLESS OTHERWISE NOTED.

THE EXACT LOCATION AND WIDTHS OF PRIVATE AND COMMERCIAL DRIVEWAYS ARE TO BE DETERMINED BY THE ENGINEER IN THE FIELD.

ALL DISTANCES ARE GROUND DISTANCES. TIES ARE HORIZONTAL UNLESS SHOWN OTHERWISE.

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

COMMON EXCAVATION HAS NOT BEEN EXPANDED.

EXCAVATION BELOW SUBGRADE (EBS) LOCATIONS ARE NOT SHOWN ON THE CROSS SECTIONS. EXCAVATION BELOW SUBGRADE (EBS) IS NOT USED TO BALANCE YARDAGE. IF EBS IS REQUIRED, IT SHALL BE MEASURED AND PAID FOR AS COMMON EXCAVATION. EXACT LOCATIONS OF EBS WILL BE DETERMINED BY THE ENGINEER IN THE FIELD.

ALL CURB AND GUTTER RADII SHOWN ON THE PLANS ARE MEASURED TO THE FACE OF THE CURB UNLESS OTHERWISE NOTED.

ELEVATIONS SHOWN ON THIS PLAN ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).

EROSION CONTROL ITEMS SHOWN ON THE PLANS ARE AT SUGGESTED LOCATIONS. THE ENGINEER MAY MODIFY LOCATION AS NEEDED. ALL EROSION CONTROL MEASURES SHALL BE MAINTAINED UNTIL SUCH TIME AS THE ENGINEER DETERMINES THE MEASURE IS NO LONGER NECESSARY.

THE AREA IN THE SOUTHWEST CORNER OF INDIANA AVENUE AND TAYLOR DRIVE IS AN ENVIRONMENTALLY SENSITIVE AREA. CARE SHOULD BE TAKEN TO AVOID IMPACTS TO VEGETATION UNLESS SHOWN ON THE PLANS, INSIDE THE SILT FENCE, OR APPROVED BY THE ENGINEER.

STATIONING AND ALIGNMENT INFORMATION IN LOCATIONS PARALLEL TO THE BACK OF CURB IS FOR QUANTITIES ONLY. FOLLOW TERRACE WIDTHS LISTED ON TYPICAL SECTION AND PAVING DETAILS. ALIGNMENT IN AREAS NOT PARALLEL TO BACK OF CURB IS FOR LAYOUT.

TYPICAL SECTION & DETAIL SHEET INDEX

GENERAL NOTES

PROJECT OVERVIEW

TYPICAL SECTIONS

CONSTRUCTION DETAILS

INTERSECTION DETAILS

EROSION CONTROL

PERMANENT SIGNING & PAVEMENT MARKING

LIGHTING PLAN

TRAFFIC SIGNAL PLAN

TRAFFIC CONTROL

ALIGNMENT DIAGRAM

DIGGERS HOTLINE

Dial 811 or (800)242-8511

www.DiggersHotline.com

UTILITIES

UTILITY: TELEPHONE
AT&T
ANNALISA SUPRENAND
70 E. DIVISION STREET
FOND DU LAC, WI 54935
920-929-8459
AD5647@ATT.COM

UTILITY: SANITARY & STORM SEWER
ENGINEERING
CITY OF SHEBOYGAN
RYAN SAZAMA
2026 NEW JERSEY AVENUE
SHEBOYGAN, WI 53081
920-459-3485
RSAZAMA@CI.SHEBOYGAN.WI.US

UTILITY: NATURAL GAS
WISCONSIN PUBLIC SERVICE
MICHAEL LOWTHER (FIELD CONTACT)
933 S WILDWOOD AVE
SHEBOYGAN, WI 53081
920-451-3743
MLLOWTHER@WISCONSINPUBLICSERVICE.COM

LORI BUTRY (OFFICE CONTACT)
700 N ADAMS ST
PO BOX 19001
GREEN BAY, WI 54307-9001
920-433-1703
LABUTRY@INTEGRYSGROUP.COM

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

UTILITY: ELECTRIC DISTRIBUTION
MATT ERNST
ATC
PO BOX 6113
801 O'KEEFE ROAD
DEPERE, WI 54115
920-338-6573
MERSNT@ATCLLC.COM

UTILITY: CABLE TV
CHARTER COMMUNICATIONS
TOM HARYCKI
1515 WEST WASHINGTON AVE.
WEST BEND, WI 53095
262-416-2437
TOM.HARYCKI@CHARTER.COM

UTILITY: ELECTRIC
ALLIANT ENERGY
JOE KOCHAN (FIELD CONTACT)
4421 TOWER DRIVE
SHEBOYGAN, WI 53081
920-459-6331
JOEKOCHAN@ALLIANTENERGY.COM

JASON HOGAN (OFFICE CONTACT)
4902 N BILTMORE LN
MADISON, WI 53718
608-458-4871
JASONHOGAN@ALLIANTENERGY.COM

UTILITY: ELECTRIC
MARK PAWASARAT
CITY OF SHEBOYGAN
2026 NEW JERSEY AVE
SHEBOYGAN, WI 53081
920-459-3444
MARK.PAWASARAT@CI.SHEBOYGAN.WI.US

UTILITY: GAS
LARRY HUBER
TRANSCANADA PIPELINE COMPANY
W3925 PIPELINE LANE
EDEN, WI 53019
920-477-2235
LAWRENCE_HUBER@TRANSCANADA.COM

UTILITY: COMMUNICATION
WINDSTREEM KDL, INC.
DENNIS RUESS
4001 RODNEY PARHAM ROAD
LITTLE ROCK, AR 72212-2442
812-456-1249
DENNIS.RUESS@WINDSTREAM.COM

UNION PACIFIC RAILROAD COMPANY
JOHN VENICE
101 NORTH WACKER DR, SUITE 1920
CHICAGO, IL 60606
OFFICE: 312-777-2043
FAX 402-233-2796
JNVENICE@UP.COM

24 HOUR EMERGENCY RAILROAD
SIGNAL CONTACT 1-800-848-8715

CALL BEFORE YOU DIG
1-800-336-9196 (ALL FIBER OPTIC LINES)

DNR CONTACT
JAY SCHIEFELBEIN
ENVIRONMENTAL ANALYSIS & LIAISON SECTION
WDNR NORTHEAST REGION
2984 SHAWANO AVENUE
GREEN BAY, WI 54313
(920) 662-5130
E-MAIL: JEREMIAH.SCHIEFELBEIN@WISCONSIN.GOV

2

2

IH43

INTERSTATE "43"

STH 28

GERMAINE AVE.

S. TAYLOR DR. FRNTG. RD E.

WASH. AVE.

FRNTG RD S.

GREENWING DR.

WASHINGTON AVENUE

CROCKER AVENUE
STA 99+35

BEGIN PROJECT
STA 99+35.24

PAINE AVENUE
STA 111+87

UNIVERSITY DRIVE
STA 166+77

UNION AVENUE
STA 142+20

CTH PP - W. INDIANA AVENUE
STA 178+08

UNION PACIFIC RAILROAD
STA 188+00

CTH PP - E. INDIANA AVENUE
STA 177+14

SHEBOYGAN RIVER
STA 181+00

NEW JERSEY AVENUE
STA 197+40

W. ERIE AVENUE
STA 229+53

E. ERIE AVENUE
STA 229+28

TAYLOR DRIVE FRONTAGE ROAD
STA 214+50

STH 23 - KOHLER MEMORIAL DRIVE

END PROJECT
STATION 238+53.91

S. TAYLOR DRIVE

SOUTH TAYLOR DRIVE

100 110 120 130 140 150 160 170 180 190 200 210 220 230 235 238 10 15 20

N

C.T.H. "AB"

KOEHN AVE.

KRUSCHKE DR.

N. 43RD ST.

N. 42ND

41ST

N. 40TH ST.

SHERIDAN

C.T.H.

S. 38TH ST.

N. 38TH ST.

N. 37TH ST.

N. 36TH ST.

N. 35TH ST.

N. 34TH ST.

KOHLER MEMORIAL DRIVE

MICHIGAN AVENUE

SUPERIOR

SAEMANN AVE.

N. 31ST ST.

N. 30TH ST.

N. 28TH ST.

N. 27TH ST.

N. 26TH ST.

N. 25TH ST.

N. 24TH ST.

N. 23RD ST.

N. 22ND ST.

N. EVANS ST.

S. EVANS

WILDWOOD AVENUE

FAIRWAY DR.

RIDGEWAY

VIRGINIA

MARYLAND

NEW JERSEY

ONTARIO AVE.

ERIE AVENUE

MEMORIAL DRIVE

GARFIELD AVE.

WIEMANN AVE.

CAMBRIDGE

SIBLEY CT.

KIWANIS PARK

FOXCROFT APTS.

MEADOWLAND DR.

SKYLINE

HILLSHIRE

TERRACE VIEW

WOODGLEN

BOLLMANN

PARKVIEW TERRACE

WOODBINE DR.

ASHBY CT.

RAMMER CT.

GEORGIA

BLACKFOOT

ALGON.

TACOMA

CHEYENNE

SENECA

CHIPPEWA

PAWNEE

DAKOTA

HIAWATHA

OTTAWA

INDIAN MEADOWS MOBILE HOME PARK

CROSSCREEK DR.

COUNTRY PL.

MEADOW CT.

BROOK

BROOKFIELD CT.

CREEKSIDE CT.

GREEN WOOD CT.

CAMELOT BLVD

SUNFLOWER AV

DAISY CT.

POINSETTIA AVE.

CARMEN AVE

FOX HILL

KNOLL CREST

FLORIDA

GREENFIELD

HICKORY CIR.

ELM

MAPLE

OHIO AV.

KANSAS

DAKOTA AVE.

CUSTER

MEAD AVE.

ASHLAND

OAKLAND

ELM AVE.

ARIZONA AVE.

GRAMS

MARVIN

NORMA

CLARA

BROADWAY

SAUK TRAIL ROAD

SOUTH BUSINESS DRIVE

SAUK TRAIL RD.

DAVID AV

LEON AVE.

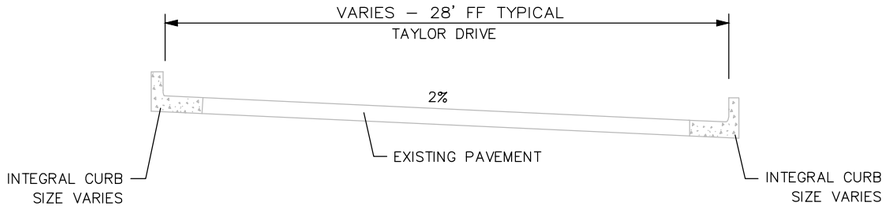
MUDDY

LOST CRK CIR.

W.

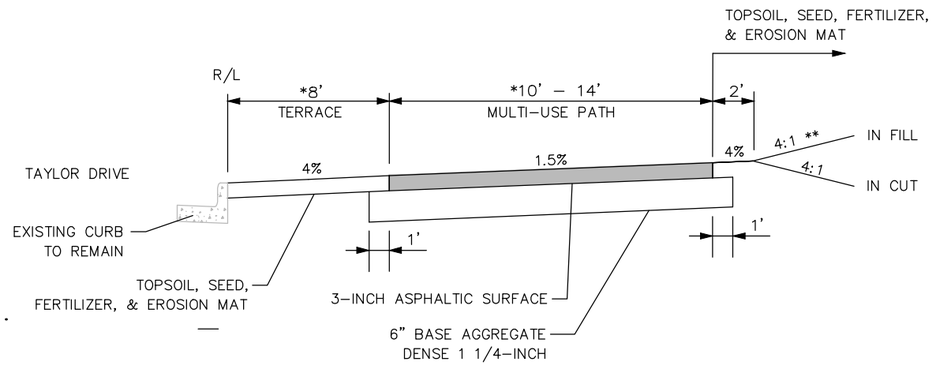
E.

PROJECT NO: 4996-01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	PROJECT OVERVIEW	SHEET 3 E



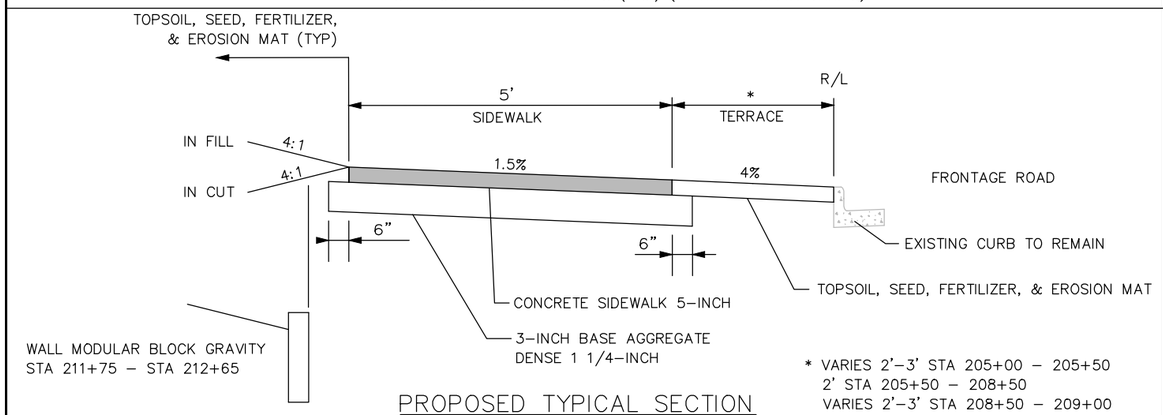
EXISTING TYPICAL SECTION

TAYLOR DRIVE NORTHBOUND ONLY



PROPOSED TYPICAL SECTION

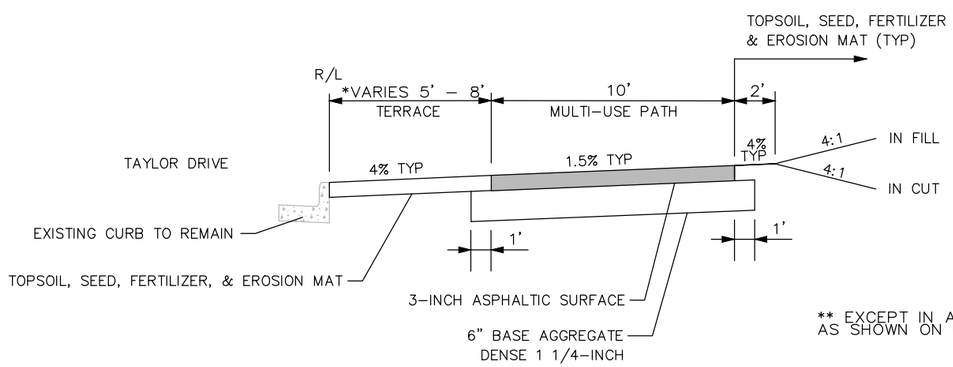
STA 143+00 – STA 148+00 (*12') (** 5:1)
STA 176+00 – STA 178+00 (*14')
STA 201+00 – STA 202+28 (*10') (*TERRACE WIDTH VARIES)



* VARIES 2'–3' STA 205+00 – 205+50
2' STA 205+50 – 208+50
VARIES 2'–3' STA 208+50 – 209+00

PROPOSED TYPICAL SECTION

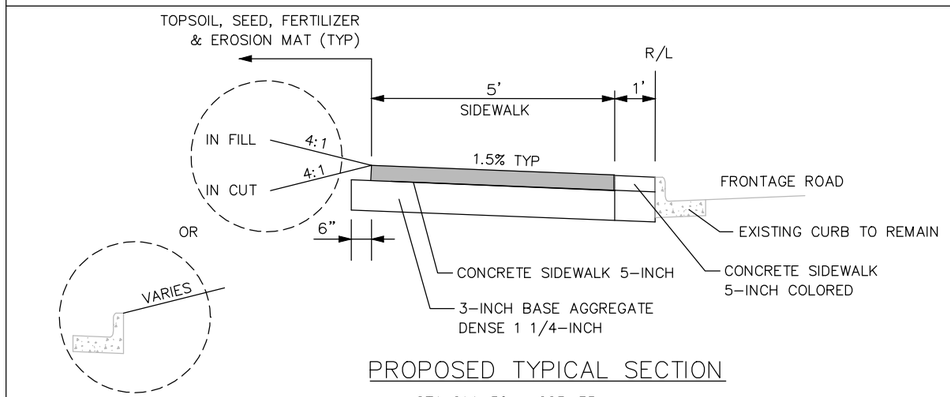
STA 202+28 – STA 204+75
STA 204+75 – STA 205+75 (REVERSE CROSS SLOPE)
STA 205+75 – STA 214+50



** EXCEPT IN AREAS TO AVOID UTILITIES
AS SHOWN ON PLAN AND PROFILE SHEETS

PROPOSED TYPICAL SECTION **

STA 100+00 – STA 128+50 (*5')
STA 128+50 – ST. 133+50 (*5') REVERSE CROSS SLOPE
STA 133+50 – STA 143+00 (*5') REVERSE CROSS SLOPE STA 137+50 TO STA 139+50
STA 178+00 – STA 180+16 (*8')
STA 182+02 – STA 187+66 (*8)
STA 189+21 – STA 201+00 (*8) TERRACE WIDTH VARIES STA 194+00 TO STA 198+50
STA 225+60 – STA 228+40 (*5')
STA 229+75 – STA 231+25 (*5')

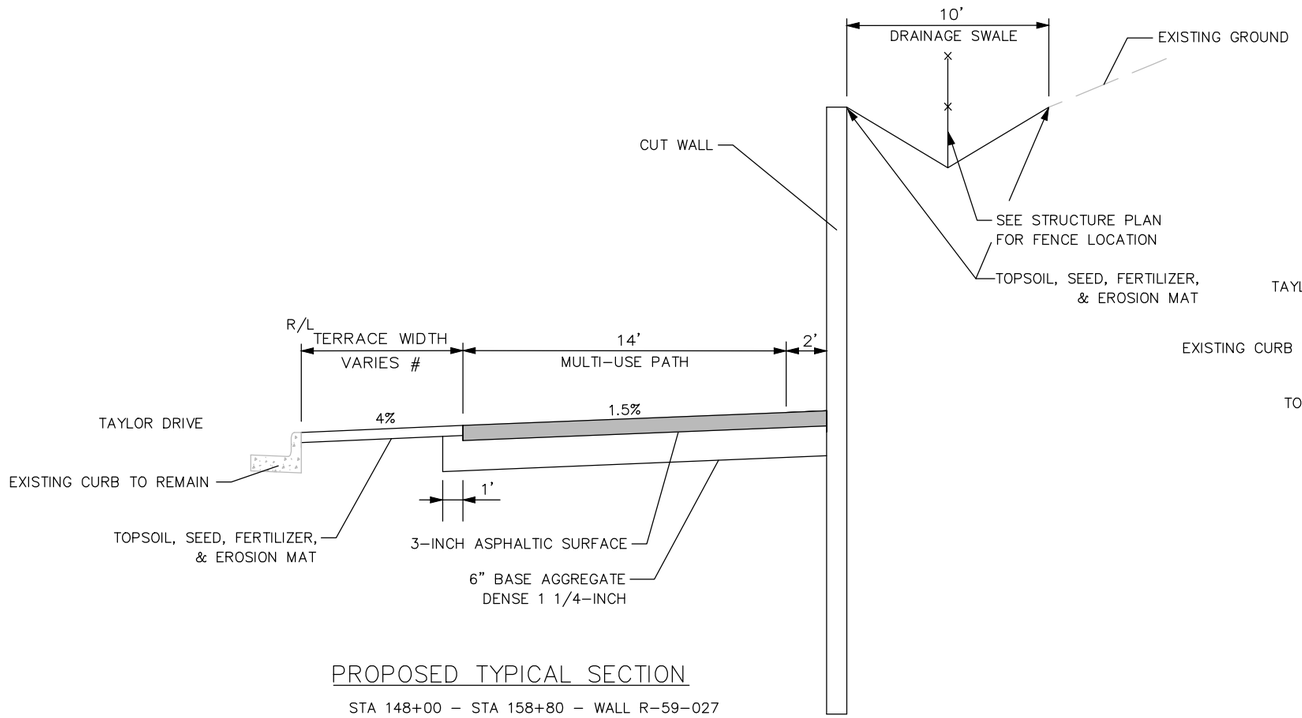


MATCH EXISTING NB TAYLOR DRIVE CURB
STA 218+00 TO STA 225+35

PROPOSED TYPICAL SECTION

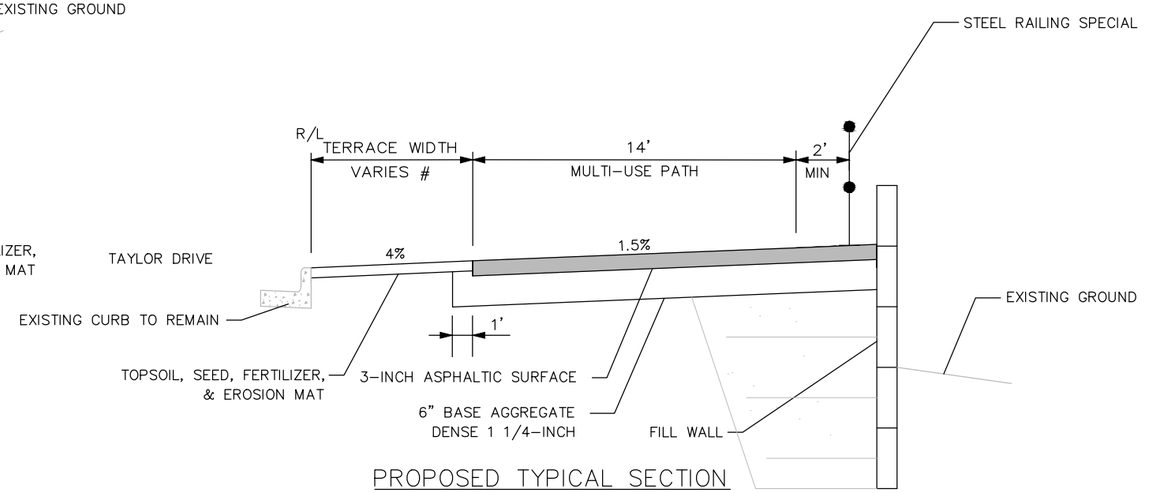
STA 214+50 – 225+35

PROJECT NO: 4996-01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	TYPICAL SECTIONS	SHEET 4	E



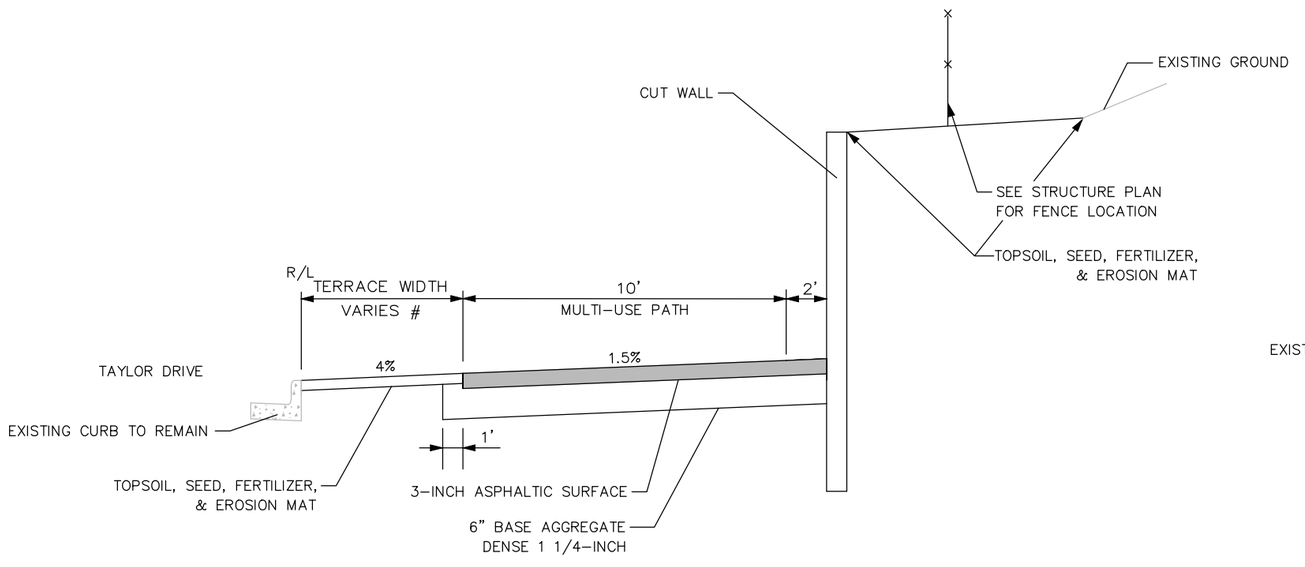
PROPOSED TYPICAL SECTION

STA 148+00 – STA 158+80 – WALL R-59-027
FOR EXACT DIMENSION SEE STRUCTURE PLANS AND WALL ALIGNMENT



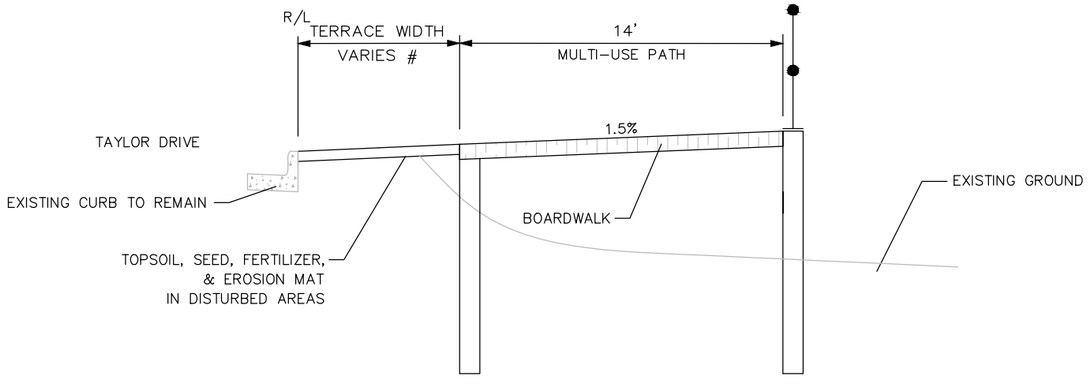
PROPOSED TYPICAL SECTION

STA 158+80 – STA 164+00 – WALL R-59-028
FOR EXACT DIMENSION SEE STRUCTURE PLANS AND WALL ALIGNMENT



PROPOSED TYPICAL SECTION

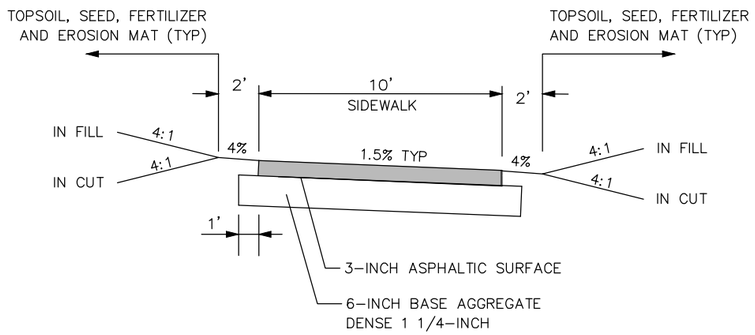
STA 231+25 – STA 233+75 – WALL R-59-032
FOR EXACT DIMENSION SEE STRUCTURE PLANS AND WALL ALIGNMENT



PROPOSED TYPICAL SECTION

STA 164+00 – STA 176+00 – BOARDWALK-M-59-001
FOR EXACT DIMENSION SEE STRUCTURE PLANS AND BOARDWALK ALIGNMENT

PROJECT NO: 4996-01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	TYPICAL SECTIONS	SHEET -----	E

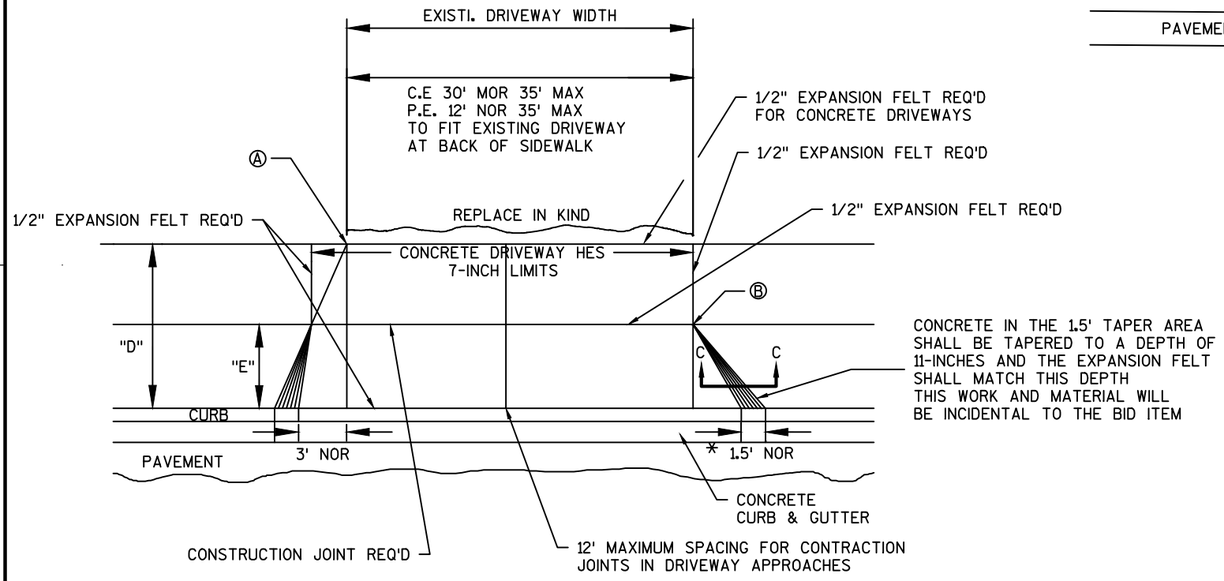


PROPOSED TYPICAL SECTION

STA 233+75 – 237+67
STA 10+23 – 20+76 (NEAR LUTHERAN HIGH SCHOOL)

DRIVEWAY ENTRANCE WITH SIDEWALK, CURB & GUTTER

2

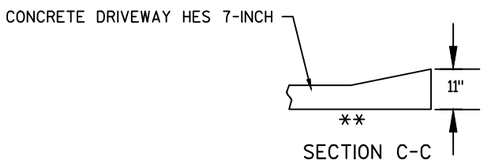


PLAN VIEW

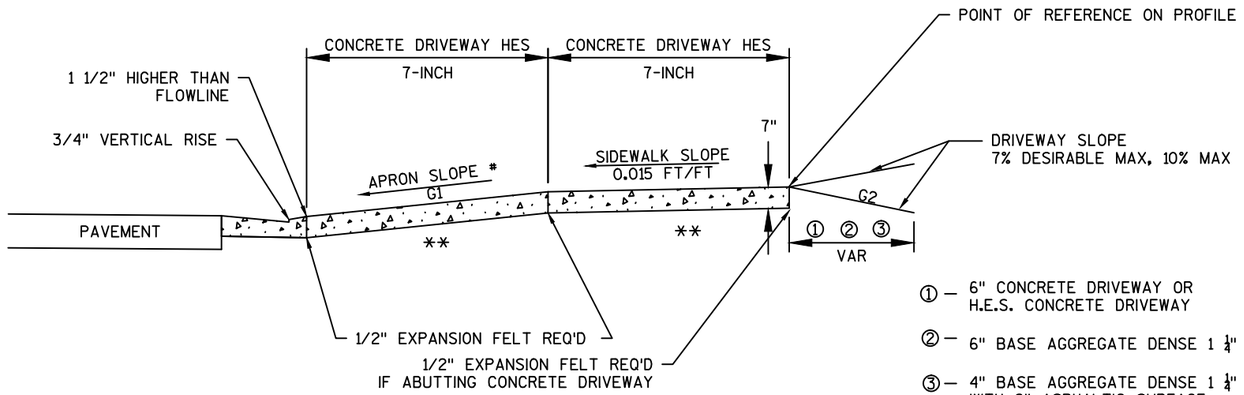
Ⓐ WHEN "D" IS 13' OR LESS, ALIGN TAPER WITH BACK OF SIDEWALK

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

* WHEN "E" =0 MAKE CURB TAPER 5'



SECTION C-C



TYPICAL SIDEWALK SECTION

① — 6" CONCRETE DRIVEWAY OR H.E.S. CONCRETE DRIVEWAY

② — 6" BASE AGGREGATE DENSE 1 ¼"

③ — 4" BASE AGGREGATE DENSE 1 ¼" WITH 2" ASPHALTIC SURFACE

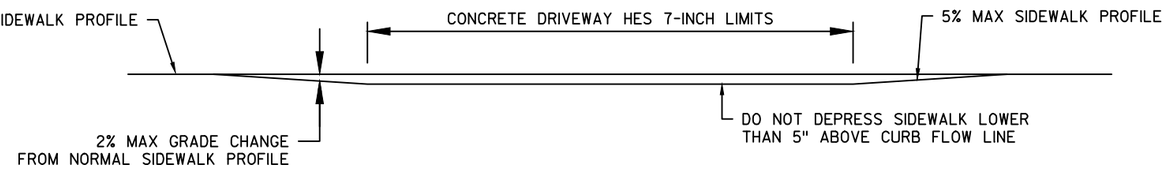
** 6" BASE AGGREGATE DENSE 1 ¼" REQ'D UNDER CONCRETE DRWY

\#

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

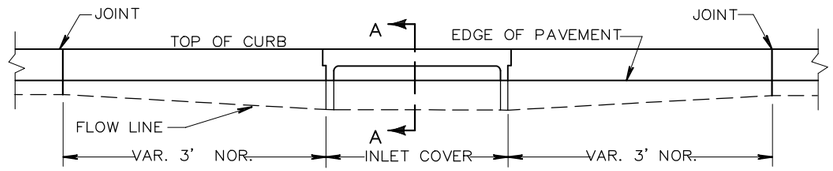
NOTE: ALGEBRAIC DIFFERENCE BETWEEN TANGENT GRADES G1 & G2 TO NOT EXCEED 15%

DEPRESS SIDEWALK PROFILE IF DRIVEWAY APRON EXCEEDS MAX SLOPE

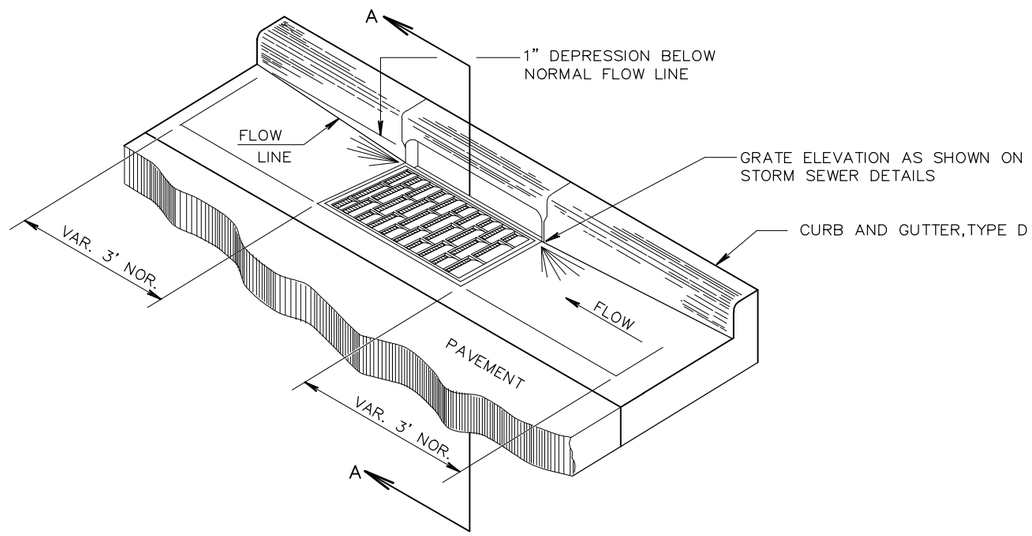


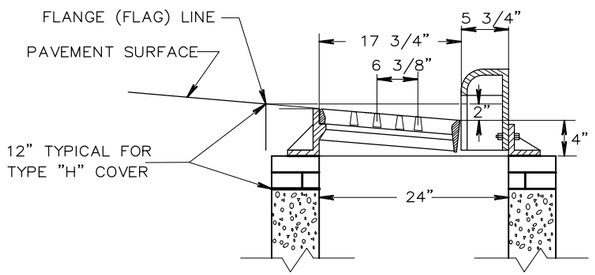
DEPRESSED SIDEWALK PROFILE DETAIL

PROJECT NO: 4996-01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	PLAN: CONSTRUCTION DETAILS	SHEET 7	E



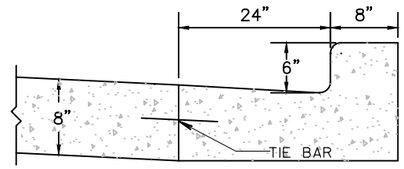
ELEVATION



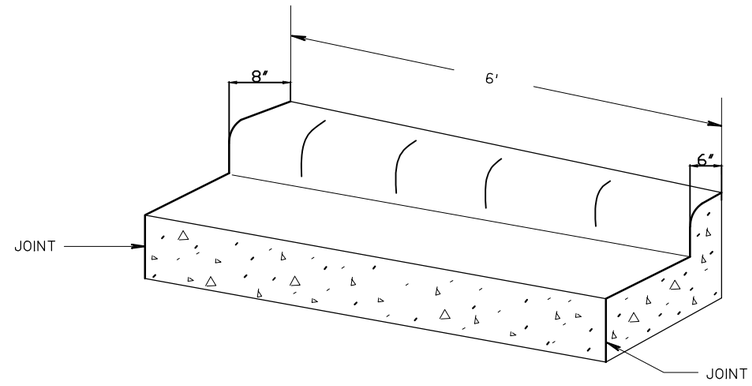


SECTION A–A

DETAIL OF CURB AND GUTTER AT INLETS



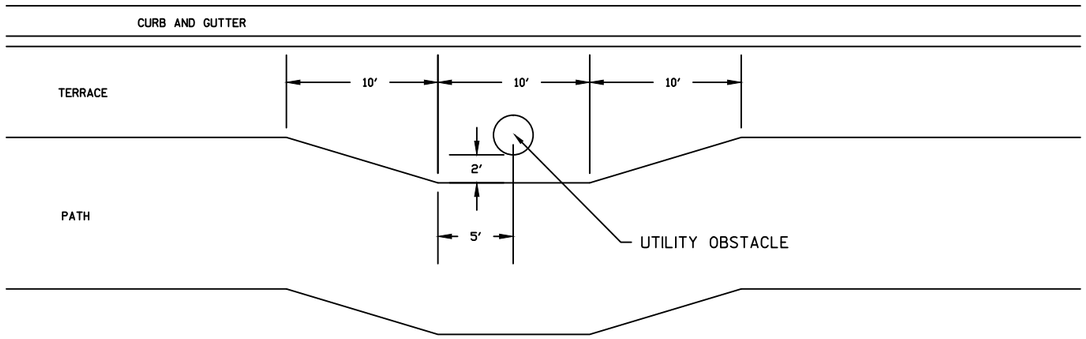
CONCRETE CURB AND GUTTER TYPE A SPECIAL SHALL CONFORM TO THE REQUIREMENTS OF CONCRETE CURB AND GUTTER 30-INCH TYPE A EXCEPT THE CURB HEAD SHALL BE 8-INCH.



CONCRETE CURB AND GUTTER TYPE A SPECIAL

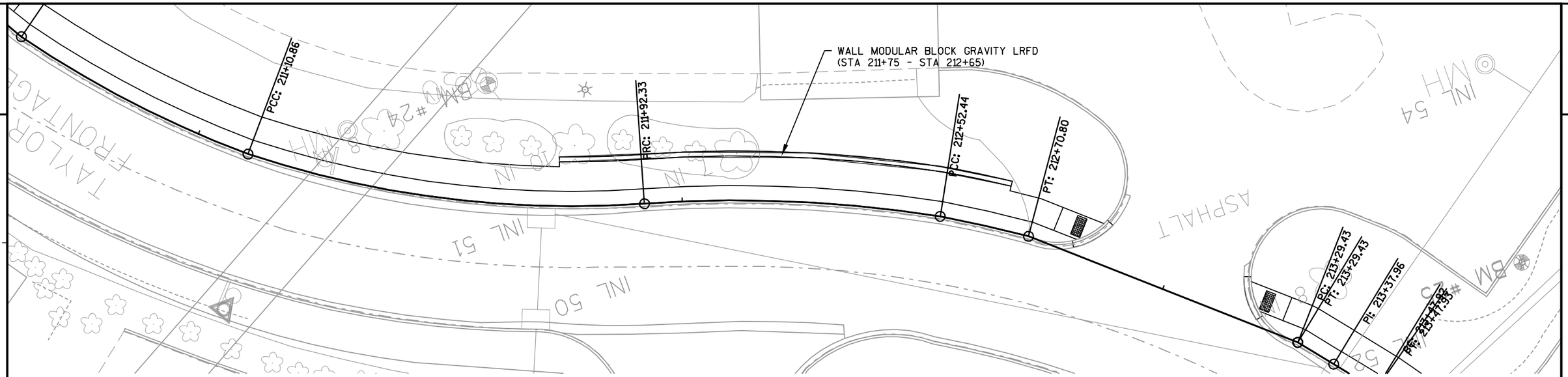
IF ADJACENT CURB AND GUTTER HAS A 6-INCH CURB HEAD TRANSITION FROM 8-INCH TO 6-INCH CURB HEAD OVER 6 FEET. TRANSITION LENGTH TO BE PAID FOR UNDER BID ITEM CONCRETE CURB AND GUTTER TYPE A SPECIAL.

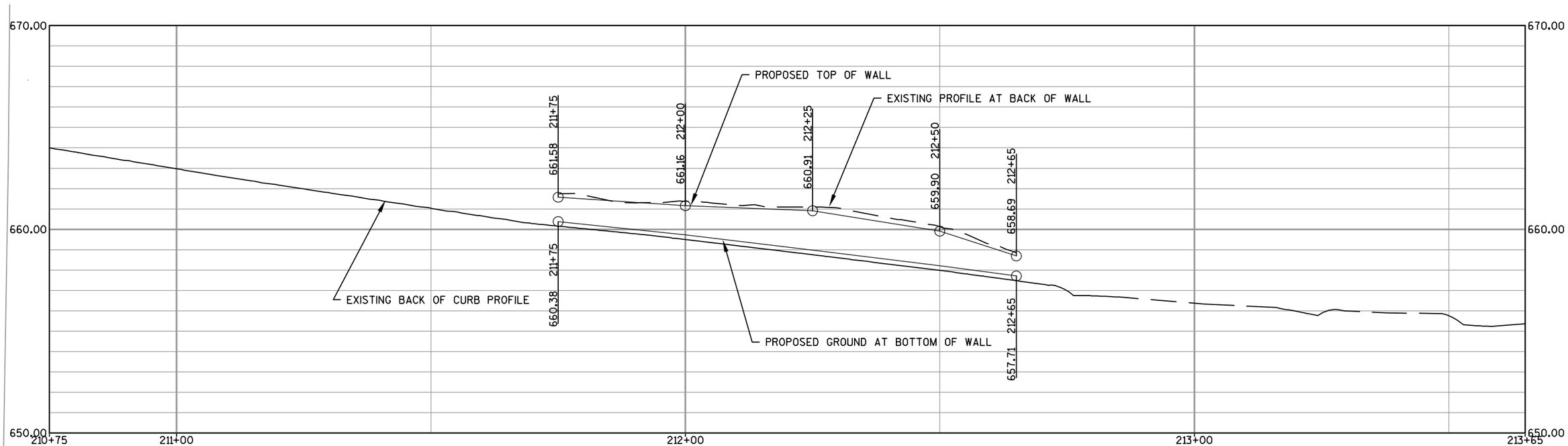
2



UTILITY BY-PASS

PROJECT NO: 4996-01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	PLAN: CONSTRUCTION DETAILS	SHEET 9	E



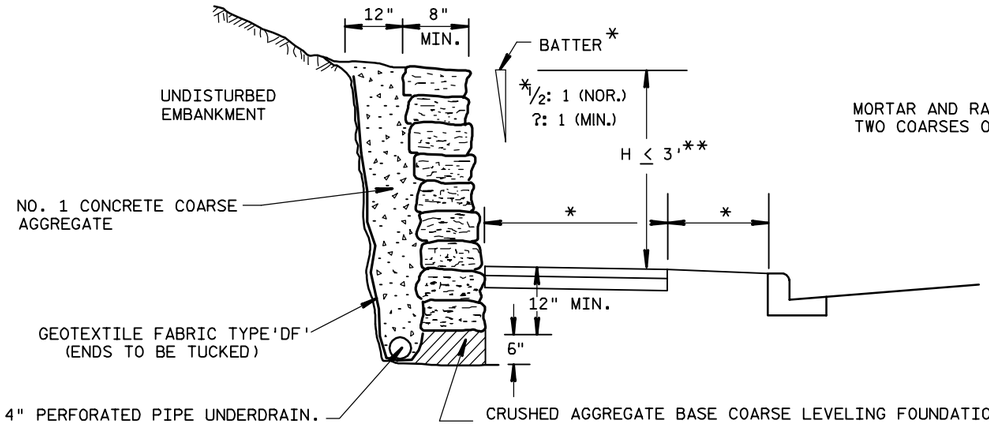


PROJECT NO: 4996-01-57	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	PLAN: CONSTRUCTION DETAILS	SHEET	E

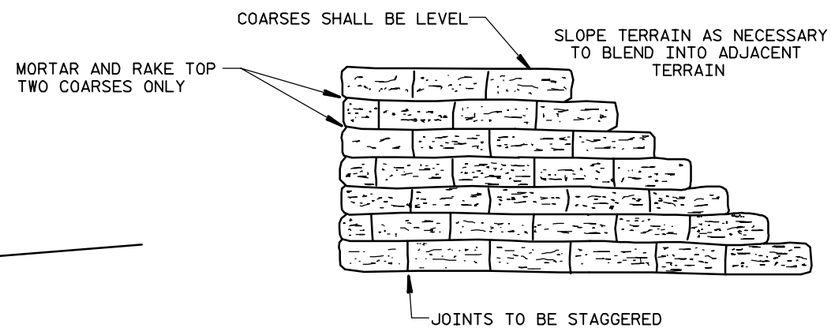
FILE NAME : L:\PROJECTS\11744\DWG\021001_CD RETAINING WALL.DWG PLOT DATE : 8/4/2015 10:51 AM PLOT BY : BREMER, SAM PLOT NAME : PLOT SCALE : 1:20_XREF WISDOT/CAI

*SEE TYPICAL SECTIONS FOR ACTUAL DIMENSIONS

**SEE PLAN SHEETS AND/OR CROSS SECTIONS FOR ACTUAL DIMENSIONS. WALLS GREATER THAN 3 FT. MUST BE DESIGNED BY A GEOTECHNICAL ENGINEER.



SIDE VIEW

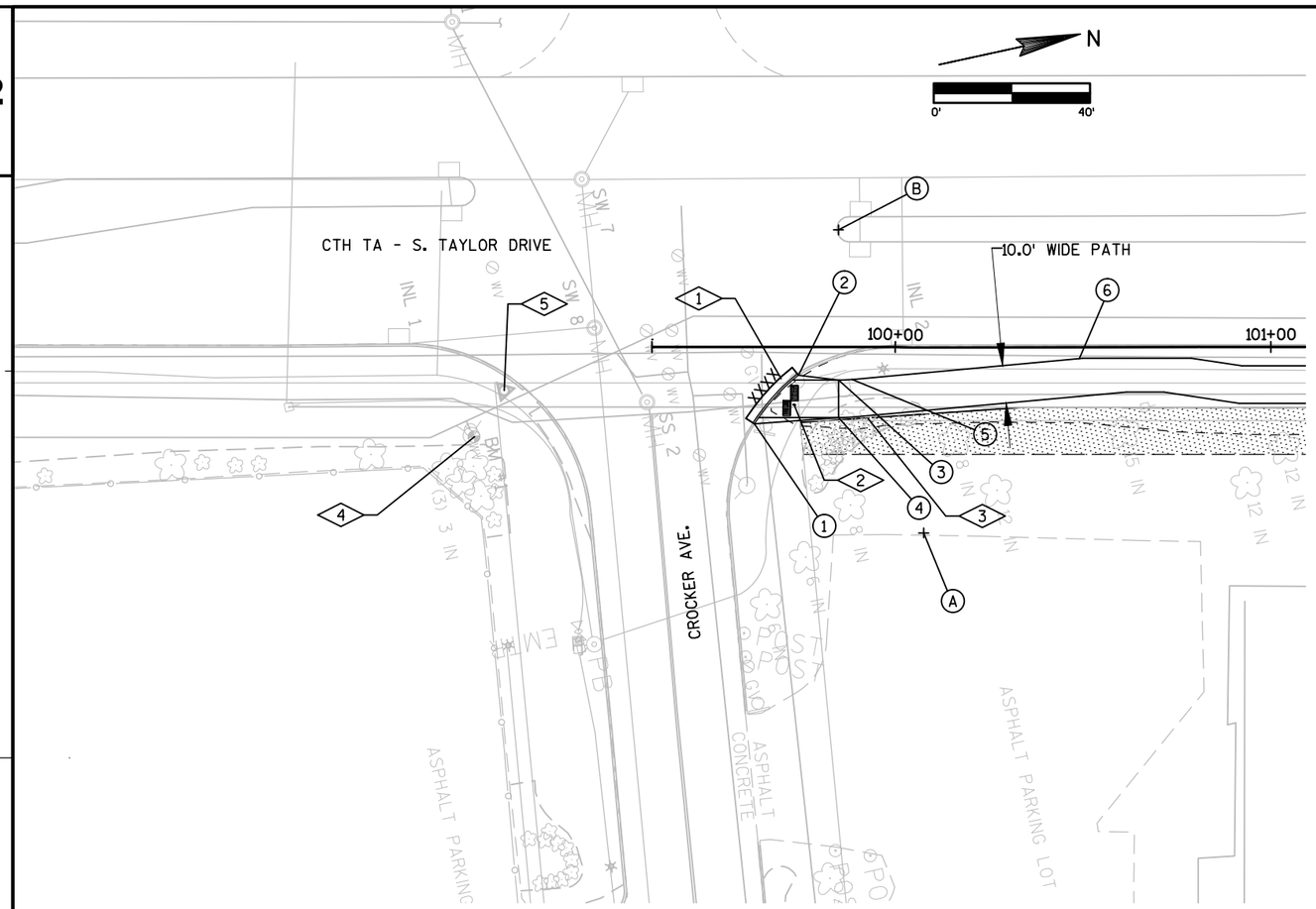


FRONT VIEW

MEASURED AND PAID FOR AS "WALL MODULAR BLOCK GRAVITY LRFD", PAY HEIGHT = H + 12"

DETAIL FOR WALL MODULAR BLOCK GRAVITY LRFD

PROJECT NO: 4996-01-57	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	PLAN: CONSTRUCTION DETAILS	SHEET	E



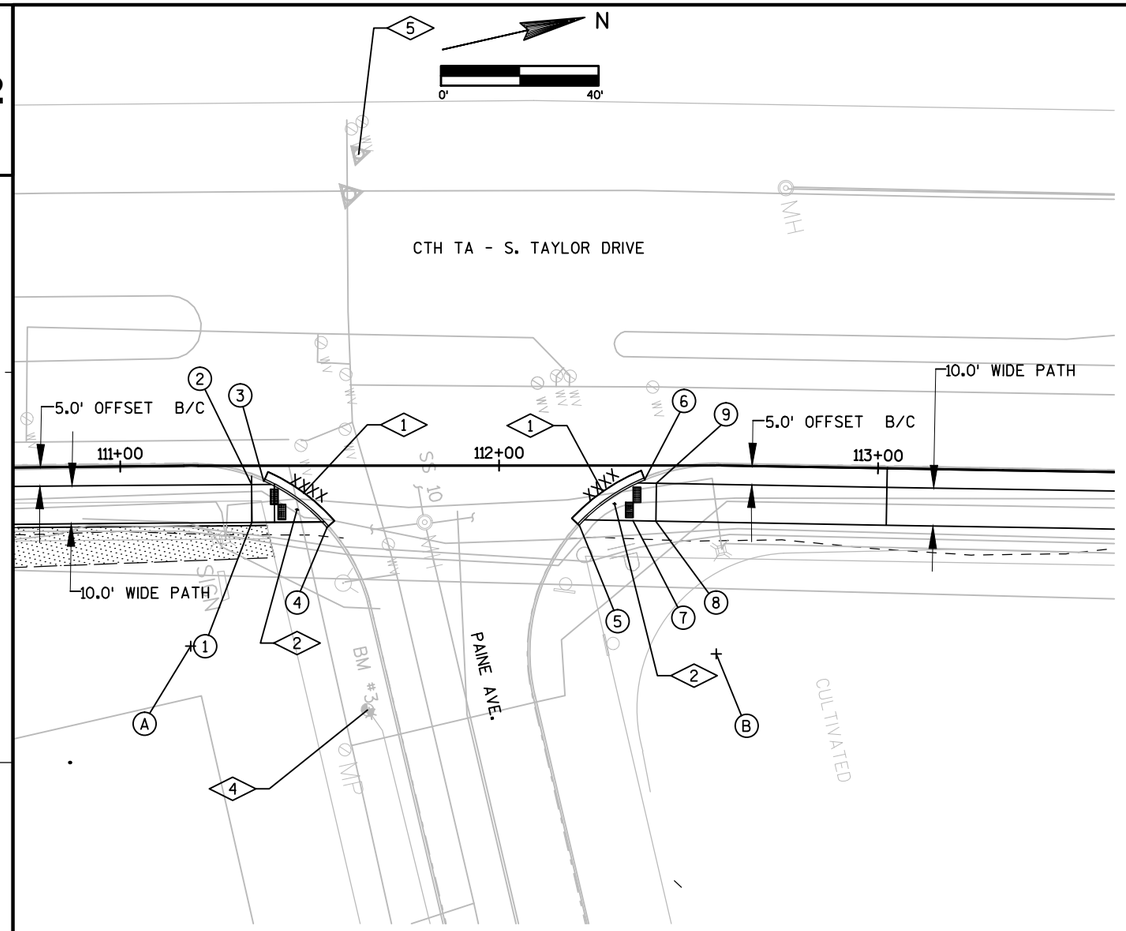
RADIUS INFORMATION

NO.	Y COORDINATE	X COORDINATE	STATION	OFFSET	RADIUS
A	165861.61	207454.03	100+07.49	49.41'RT	53.60'
B	165856.64	207370.34	99+84.91	31.21'LT	40.00'

LAYOUT INFORMATION

NO.	Y COORDINATE	X COORDINATE	ELEVATION	STATION	OFFSET	POINT TYPE
1	165823.79	207416.05	695.95-ME	99+62.53	20.45'RT	B/C AT TIE IN
2	165838.00	207405.91	696.19-ME	99+74.26	7.52'RT	B/C AT TIE IN
3	165848.13	207409.42	696.35	99+84.91	8.79'RT	RAMP/PATH-PC
4	165846.00	207419.19	696.45	99+84.91	18.79'RT	RAMP/PATH-PC
5	165851.72	207410.04	696.40	99+88.55	8.62'RT	PATH-PT
6	165911.96	207417.50	696.88	100+48.99	3.00'RT	PATH-PI

1. REMOVE CURB AND GUTTER
2. CURB RAMP TYPE 4B1 MODIFIED
3. REMOVE LANDSCAPE AREA AS NEEDED
4. BENCH MARK - F.HYD.; EL.=698.36
5. CONTROL POINT:
   Y COORD.- 165760.57
   X COORD.- 207393.19
   ELEVATION- 696.16



RADIUS INFORMATION

NO.	Y COORDINATE	X COORDINATE	STATION	OFFSET	RADIUS
A	166945.89	207690.41	111+17.32	49.07'RT	49.28'
B	167082.17	207722.07	112+58.55	49.82'RT	49.91'

LAYOUT INFORMATION

NO.	Y COORDINATE	X COORDINATE	ELEVATION	STATION	OFFSET	POINT TYPE
1	166969.98	207660.89	704.62	111+34.71	14.94'RT	PATH/RAMP
2	166972.14	207651.12	704.47	111+34.65	4.94'RT	PATH/RAMP
3	166975.44	207650.97	704.44-ME	111+37.84	4.06'RT	B/C AT TIE-IN
4	166988.98	207666.64	704.60-ME	111+54.50	16.36'RT	B/C AT TIE-IN
5	167054.09	207680.81	704.94-ME	112+21.13	15.79'RT	B/C AT TIE-IN
6	167073.51	207672.91	705.35-ME	112+38.34	3.80'RT	B/C AT TIE-IN
7	167068.19	207682.77	704.93	112+35.32	14.59'RT	LANDING/PATH
8	167074.02	207684.21	705.29	112+41.32	14.70'RT	RAMP/PATH
9	167076.41	207674.49	705.29	112+41.51	4.70'RT	RAMP/PATH

<1> REMOVE CURB AND GUTTER

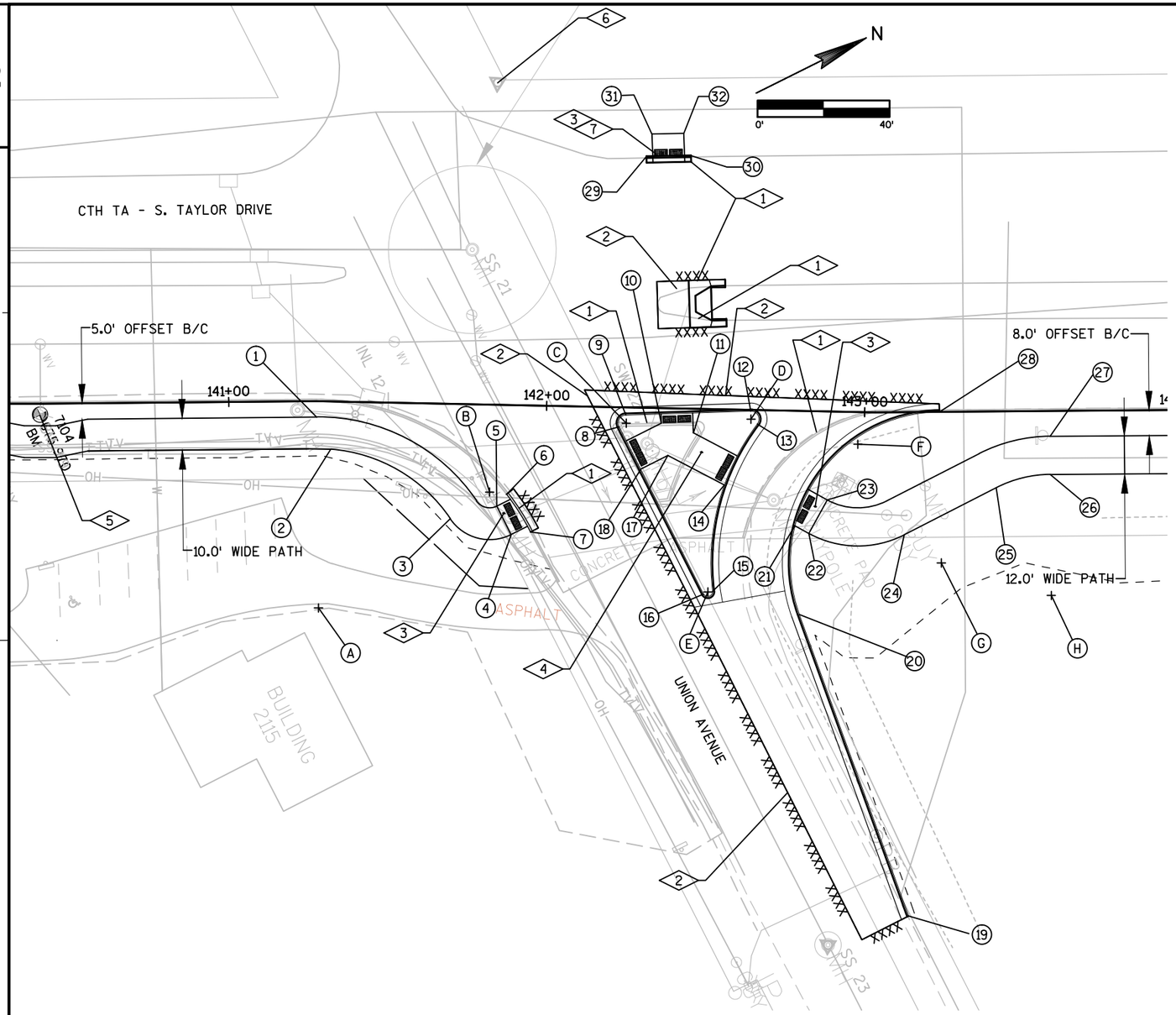
<2> CURB RAMP TYPE 4B1 MODIFIED

<4> BENCH MARK - F.HYD.; EL.=704.11/704.39

<5> CONTROL POINT:
Y COORD.- 167019.04
X COORD.- 207572.40
ELEVATION- 705.21

PROJECT NO: 4996-01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	INTERSECTION DETAILS	SHEET	E

FILE NAME : L:\PROJECTS\11744\DWG\021101_ID.DWG PLOT DATE : 10/31/2014 1:52 PM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1:40_XREF
WISDOT/CADDS SHEET 42



RADIUS INFORMATION

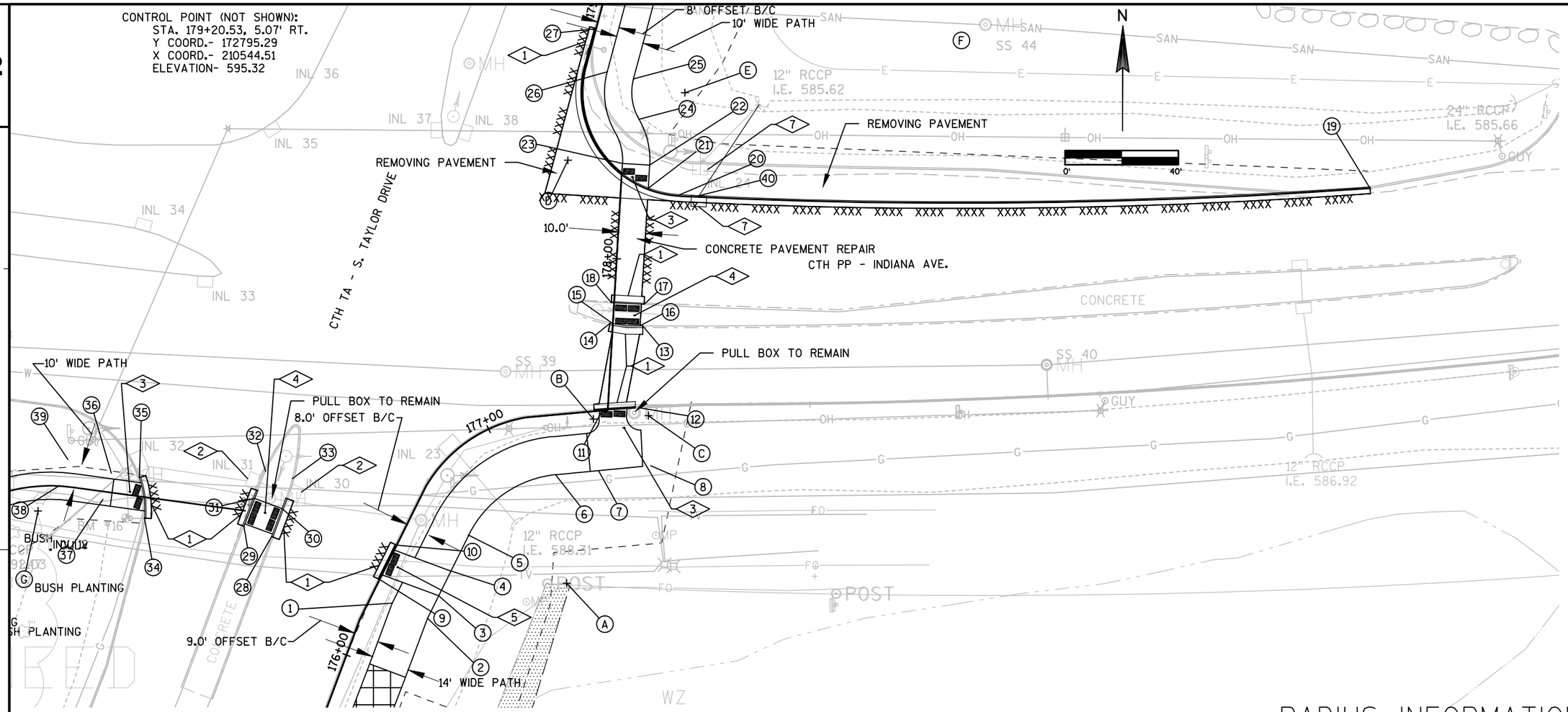
NO.	Y COORDINATE	X COORDINATE	STATION	OFFSET	RADIUS
A	169603.78	208998.23	141+29.50	64.97'RT	50'/60'
B	169668.22	208989.71	141+82.59	27.46'RT	5'/15'
C	169716.32	208989.59	142+25.11	4.98'RT	5'
D	169751.99	209006.01	142+64.33	2.93'RT	5'
E	169715.55	209048.50	142+51.83	57.49'RT	5'
F	169778.52	209028.08	142+98.08	10.13'RT	20'/32'
G	169785.30	209073.19	143+23.75	47.50'RT	47.50'
H	169811.67	209097.80	143+58.25	57.99'RT	38'/50'

LAYOUT INFORMATION

NO.	Y COORDINATE	X COORDINATE	ELEVATION	STATION	OFFSET	POINT TYPE
1	169630.14	208944.33	673.85	141+27.77	5.00'RT	PATH-PC
2	169629.49	208955.35	673.90	141+32.32	15.05'RT	PATH-PC
3	169653.35	208991.68	672.69	141+70.34	36.12'RT	PATH-PT/PC
4	169668.27	209004.71	672.04	141+89.61	40.72'RT	PATH/RAMP
5	169668.23	208994.71	672.04	141+84.93	31.88'RT	PATH/RAMP
6	169672.65	208992.73	672.44-ME	141+87.92	28.07'RT	B/C TIE-IN
7	169674.08	209006.69	672.22-ME	141+95.67	39.77'RT	B/C TIE-IN
8	169713.83	208989.57	672.76	142+22.90	6.12'RT	B/C-PC
9	169717.38	208987.29	672.89	142+24.98	2.45'RT	B/C-PT
10	169726.19	208994.50	672.34	142+36.14	4.74'RT	PATH/RAMP
11	169733.86	209001.76	672.40	142+46.30	7.60'RT	RAMP-PI
12	169753.05	209003.72	672.46	142+64.20	0.41'RT	B/C-PC
13	169753.11	209008.23	672.08	142+66.36	4.37'RT	B/C-PT
14	169735.22	209020.77	670.92	142+56.35	23.79'RT	B/C-RAMP
15	169716.96	209049.00	670.22	142+53.31	52.28'RT	B/C-PC
16	169714.05	209048.50	670.53	142+50.50	58.19'RT	B/C-PT
17	169723.52	209004.51	672.48	142+38.43	14.85'RT	PATH-PI
18	169713.89	209004.55	671.81	142+29.92	19.35'RT	B/C-RAMP
19	169726.46	209167.91	664.76-ME	143+12.60	158.45'RT	B/C TIE-IN
20	169738.12	209067.70	669.21	142+80.75	63.99'RT	B/C-PC
21	169749.35	209042.15	670.26	142+78.80	36.15'RT	B/C/RAMP
22	169752.20	209046.28	670.34	142+83.25	38.48'RT	RAMP-PATH PC
23	169762.07	209039.45	670.49	142+88.81	27.85'RT	RAMP-PATH PC
24	169778.79	209060.08	672.00	143+12.13	38.59'RT	PATH-PT
25	169811.34	209059.80	672.12	143+41.23	24.01'RT	PATH-PC
26	169828.41	209063.69	671.51	143+58.27	19.99'RT	PATH-PT
27	169833.70	209052.92	671.36	143+58.28	8.00'RT	PATH-PT
28	169805.99	209030.43	671.66-ME	143+23.50	0.00'RT	B/C TIE-IN
29	169759.52	208917.39	ME	142+29.78	79.03'LT	B/C TIE-IN
30	169772.16	208923.41	ME	142+43.77	79.57'LT	B/C TIE-IN
31	169764.26	208911.89	---	142+31.42	86.10'LT'	PATH/RAMP
32	196773.28	208916.20	---	142+41.41	86.48'LT	PATH/RAMP

1. REMOVE CURB AND GUTTER
2. REMOVE PAVEMENT
3. CURB RAMP TYPE 4B1 MODIFIED
4. CURB RAMP TYPE 6
5. BENCH MARK - F.HYD.; EL.=675.95/675.97
6. CONTROL POINT:
   Y COORD.- 169728.05
   X COORD.- 208875.73
   ELEVATION- 674.46
7. MATCH EXISTING CURB AND GUTTER ELEVATION. DO NOT EXCEED MAXIMUM SLOPES ON CURB RAMP.

PROJECT NO: 4996-01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	INTERSECTION DETAILS	SHEET 14	E



LAYOUT INFORMATION

NO.	Y COORDINATE	X COORDINATE	ELEVATION	STATION	OFFSET	POINT TYPE
1	172555.97	210456.88	598.29	176+24.56	8.00'RT	PATH-PI
2	172550.43	210469.76	598.63	176+25.33	22.00'RT	PATH-PI
3	172558.74	210473.89	598.36	176+34.61	22.00'RT	PATH-RAMP
4	172567.75	210478.36	598.32	176+44.66	22.00RT	PATH-RAMP
5	172581.05	210484.97	598.08	176+59.52	22.00'RT	PATH-PC
6	172603.06	210516.74	697.52	177+23.27	21.89'RT	PATH-PT
7	172604.27	210529.43	597.09	177+36.02	21.85'RT	PATH/RAMP
8	172606.09	210548.62	596.80			RAMP
9	172564.63	210452.25	598.01-ME	176+30.27	0.00'RT	B/C TIE-IN
10	172577.22	210458.51	597.93-ME	176+44.32	0.00'RT	B/C TIE-IN
11	172626.61	210532.84	596.47-ME	177+41.47	0.00'RT	B/C TIE-IN
12	172627.13	210542.89	596.47-ME	177+45.20	7.04'RT	B/C TIE-IN
13	172657.62	210547.68	595.79-ME	177+75.98	11.00'RT	B/C TIE-IN
14	172658.66	210536.74	595.82-ME	177+76.31	1.00'LT	B/C TIE-IN
15	172658.45	210537.71	595.36	177+76.16	0.00'RT	RAMP-B/C
16	172657.63	210547.68	595.36	177+75.93	10.00'RT	RAMP-B/C
17	172665.49	210549.15	595.50-ME	177+83.87	11.00'RT	B/C TIE-IN
18	172666.09	210537.17	595.58-ME	177+83.75	1.00'RT	B/C TIE-IN
19	172708.58	210815.17	592.46	179+06.76	288.95'RT	B/C-PT
20	172705.69	210562.27	594.60	178+24.78	21.70'RT	B/C-PC

LAYOUT INFORMATION

NO.	Y COORDINATE	X COORDINATE	ELEVATION	STATION	OFFSET	POINT TYPE
21	172708.13	210550.70	594.10	178+26.52	10.00'RT	RAMP-B/C
22	172716.59	210551.21	594.23			RAMP/PATH
23	172717.18	210541.22	594.08	178+33.62	2.89'RT	RAMP/PATH
24	172733.39	210547.23	594.97	178+45.77	18.00'RT	PATH-PT/PC
25	172748.19	210545.28	595.02	178+75.23	18.00'RT	PATH PT
26	172750.77	210535.62	595.17	178+75.23	8.00'RT	PATH PT
27	172766.62	210531.58	594.90-ME	178+89.49	0.00'RT	B/C TIE-IN
28	172580.37	210412.65	597.88-ME	176+26.75	42.47'LT	B/C TIE-IN
29	172584.13	210402.50	597.92-ME	176+25.60	53.23'LT	B/C TIE-IN
30	172590.68	210416.48	597.69	176+37.68	43.62'LT	RAMP-B/C
31	172594.39	210406.47	597.45	176+36.56	54.24'LT	RAMP-B/C
32	172601.66	210420.26	597.79-ME	176+49.21	45.12'LT	B/C TIE-IN
33	172604.27	210410.42	597.57-ME	176+47.16	55.10'LT	B/C TIE-IN
34	172587.17	210366.06	597.33-ME	176+14.06	87.25'LT	B/C TIE-IN
35	172602.02	210364.18	597.17-ME	176+24.58	95.51'LT	B/C TIE-IN
36	172603.58	210353.89	597.71	176+21.40	105.42'LT	RAMP-PATH
37	172594.05	210350.85	597.86	176+14.05	103.94'LT	RAMP-PATH
38	172599.14	210334.90	598.31	176+14.02	120.56'LT	PATH PI
39	172608.67	210337.94	598.16	176+18.87	121.97'LT	PATH PI
40	172705.35	210569.33	594.45	178+24.86	28.76'RT	C-L INLET-B/C

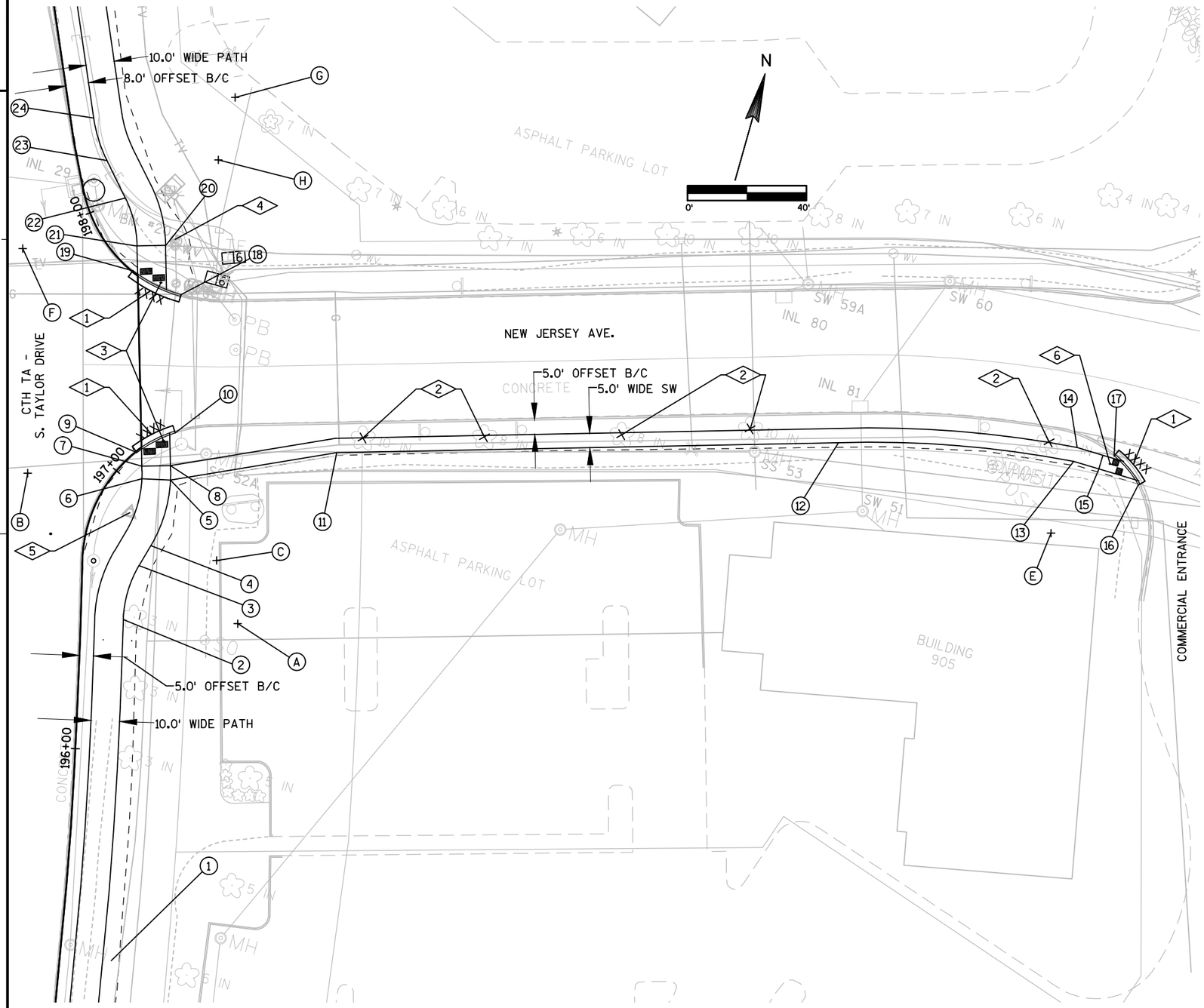
RADIUS INFORMATION

NO.	Y COORDINATE	X COORDINATE	STATION	OFFSET	RADIUS
A	172563.32	210520.79	176+59.52	62.00'RT	40'/54'
B	172623.18	210527.63	177+35.96	2.85'RT	5'
C	172624.44	210547.14			5'
D	172718.38	210521.26	178+45.77	12.00'LT	20'/30'
E	172743.14	210564.22	178+75.26	37.60'RT	19.5'/29.5'/37.5'
F	174788.66	210664.97	199+90.75	5.75'RT	2,085.50'
G	172589.78	210327.01	176+09.88	124.44'LT	39.13'

1. REMOVE CURB AND GUTTER
2. ADJUST CATCH BASIN
3. CURB RAMP TYPE 4B1 MODIFIED
4. CURB RAMP TYPE 5
5. CURB RAMP TYPE 7B
6. BENCH MARK #16 - SIGNAL BASE.; EL.=599.65
7. REMOVE EXISTING STORM INLET; RELOCATE STORM INLET TO LOCATION SHOWN; PROVIDE 12" STORM SEWER TO EXISTING OUTLET LOCATION.

PROJECT NO: 4996-01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	INTERSECTION DETAILS	SHEET E

FILE NAME : L:\PROJECTS\11744\DWG\021101_ID.DWG PLOT DATE : 10/31/2014 1:52 PM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1:40_XREF
WISDOT/CADDS SHEET 42



RADIUS INFORMATION

NO.	Y COORDINATE	X COORDINATE	STATION	OFFSET	RADIUS
A	174488.04	210826.56	196+45.38	54.90'RT	40.00'/50.00'
B	174519.14	210741.71	196+86.20	26.13'LT	40.00'/50.00'
C	174507.38	210813.52	196+82.84	46.62'RT	46.91'
D	174250.96	211122.74	194+01.84	311.07'RT	371.09'
E	174594.60	211092.19	197+12.04	317.34'RT	34.80'
F	174594.42	210719.04	197+97.82	26.51'LT	40.00'/50.00'
G	174665.23	210776.50	198+32.80	58.00'RT	40.00'/50.00'
H	174642.60	210776.70	198+09.70	48.34'RT	48.95'

(OUT OF VIEW)

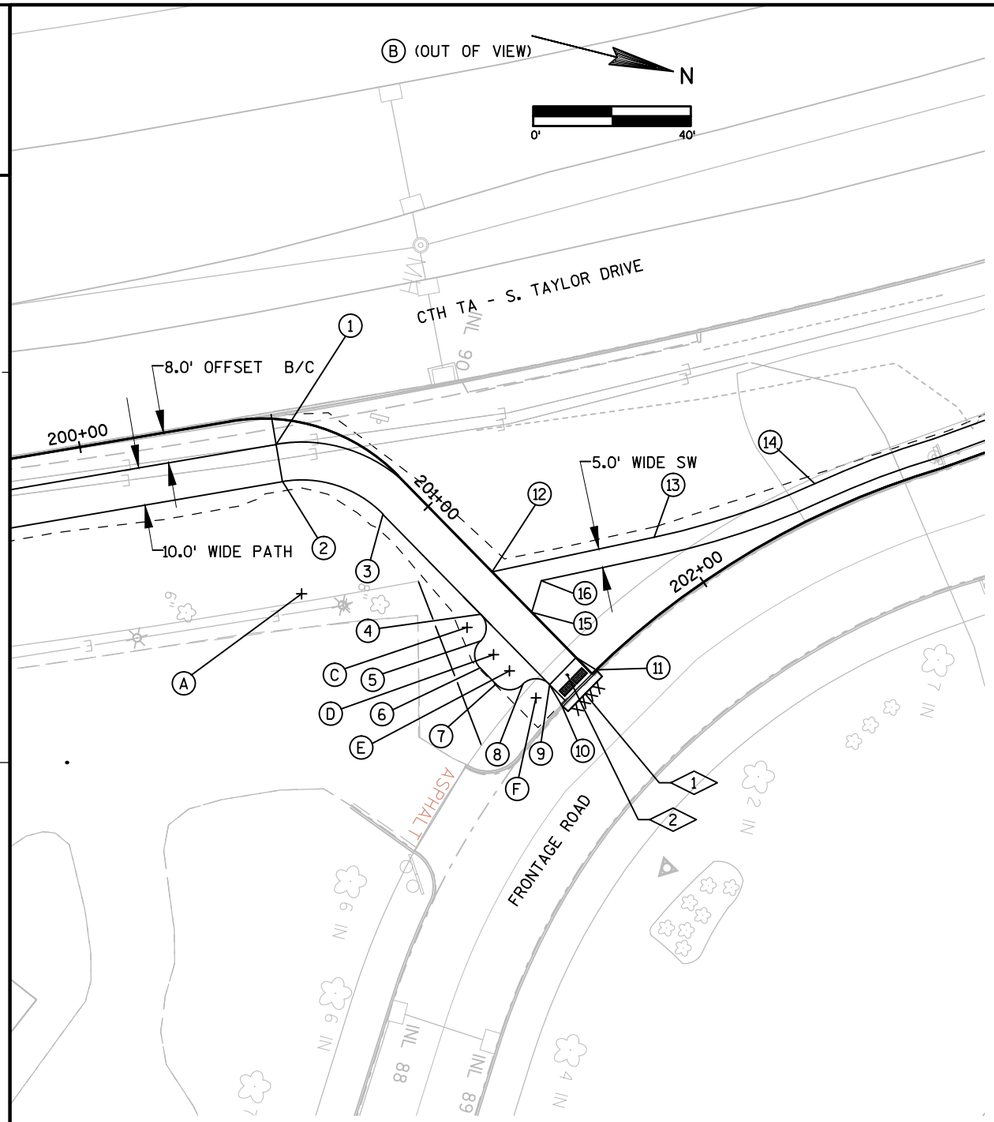
LAYOUT INFORMATION

NO.	Y COORDINATE	X COORDINATE	ELEVATION	STATION	OFFSET	POINT TYPE
1	174362.60	210815.44	645.59	195+27.26	18.00'RT	PATH-PI
2	174478.74	210787.66	646.21	196+45.61	14.90'RT	PATH-PC
3	174498.39	210787.92	646.40	196+64.03	19.88'RT	PATH-PT
4	174506.21	210790.01	646.42	196+76.77	23.13'RT	PATH-PC
5	174530.17	210790.48	645.55	197+12.04	9.88'RT-11.69'(S)	PATH/SW
6	174527.96	210780.73	645.50	197+04.29	8.40'RT	PATH-SW
7	174532.17	210779.56	645.42	197+07.75	5.23'RT	PATH-CONC
8	174535.06	210789.14	645.39	197+12.04	10.00'RT-6.62'(S)	PATH-SW
9	174536.31	210776.58	645.44-ME	197+09.62	0.45'RT	B/C AT TIE-IN
10	174546.53	210787.67	645.31-ME	197+16.83	11.90'RT	B/C AT TIE-IN
11	174554.93	210843.96	645.26	197+12.04	68.22'RT-3.40'(S)	SW-P1
12	174605.18	211012.13	644.20	197+12.04	243.74'RT-3.78'(S)	SW-PC
13	174620.86	211093.13	642.09	197+12.04	325.82'RT-12.12'(S)	SW-PT/PI
14	174625.87	211092.98	642.09	197+12.04	327.12'RT-7.29'(S)	SW-PT/PI
15	174620.68	211102.30	641.47	197+12.04	334.55'RT-14.94'(S)	SW/RAMP
16	174618.94	211117.08	641.24-ME	197+12.04	348.20'RT-19.01'(S)	B/C AT TIE-IN
17	174626.45	211106.24	641.58-ME	197+12.04	339.99'RT-10.55'(S)	B/C AT TIE-IN
18	174593.65	210776.67	645.35-ME	197+65.12	14.96'RT	B/C AT TIE-IN
19	174597.23	210758.32	645.82	197+74.41	0.41'RT	B/C AT TIE-IN
20	174608.84	210766.92	645.32	197+72.02	10.00'RT-10.45'(N)	RAMP/PATH-PC
21	174605.95	210757.34	645.47	197+79.67	7.75'RT	RAMP/PATH-PC
22	174621.02	210748.91	646.69	198+00.63	13.38'RT	PATH-PT
23	174631.97	210739.16	646.99	198+16.96	10.00'RT	PATH-PC
24	174645.05	210730.75	647.47	198+32.80	8.00'RT	PATH-PT

1. REMOVE CURB AND GUTTER
2. REMOVE TREE
3. CURB RAMP TYPE 4B1
4. BENCH MARK - F.HYD.; EL.=646.61
5. CONTROL POINT:
   Y COORD.- 174515.41
   X COORD.- 210779.81
   ELEVATION- 646.11
6. CURB RAMP TYPE 4B1 MODIFIED

PROJECT NO: 4996-01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	INTERSECTION DETAILS	SHEET	E

FILE NAME : L:\PROJECTS\11744\DWG\021101_ID.DWG PLOT DATE : 10/31/2014 1:52 PM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1:40_XREF
WISDOT/CADDS SHEET 42



RADIUS INFORMATION

NO.	Y COORDINATE	X COORDINATE	STATION	OFFSET	RADIUS
A	174861.01	210679.24	200+93.13	40.00'RT	30.00'/40.00'
B	174859.48	210462.49	200+62.85	173.06'LT	200'/205'
C	174905.55	210677.19	201+30.04	15.00'RT	5.00'
D	174914.08	210682.41	201+40.04	15.00'RT	5.00'
E	174919.20	210685.55	201+46.05	15.00'RT	5.00'
F	174927.73	210690.77	201+56.05	15.00'RT	5.00'

LAYOUT INFORMATION

NO.	Y COORDINATE	X COORDINATE	ELEVATION	STATION	OFFSET	POINT TYPE
1	174844.87	210642.64		200+52.97	6.64'RT	PATH-PC
2	174848.91	210651.79		200+56.65	16.23'RT	PATH-PC
3	174876.67	210653.65		200+93.13	10.00'RT	PATH-PT
4	174908.16	210672.93	650.23	201+30.04	10.00'RT	REST AREA-PC
5	174909.81	210679.80	650.28	201+35.04	15.00'RT	REST AREA-PC/PT
6	174911.46	210686.68	650.30	201+40.04	20.00'RT	REST AREA-PT
7	174916.59	210689.81	650.32	201+46.05	20.00'RT	REST AREA-PC
8	174923.46	210688.16	650.34	201+51.05	15.00'RT	REST AREA PT/PC
9	174930.34	210686.50	650.21	201+56.05	10.00'RT	PATH-PT
10	174934.73	210690.96	650.42-ME			B/C TIE-IN
11	174941.27	210679.71	650.68-ME	201+63.33	0.00'RT	B/C TIE-IN
12	174908.33	210661.31	650.53	201+24.12	0.00'LT	SW
13	174947.61	210642.02	651.81	201+96.28	17.13'LT	SW-PC
14	174985.25	210617.99	652.32	202+37.72	8.00'LT	SW-PT
15	174921.13	210669.14		201+39.14	0.00'RT	SW-PI
16	174921.54	210660.39		201+34.91	7.68'LT	SW-PI

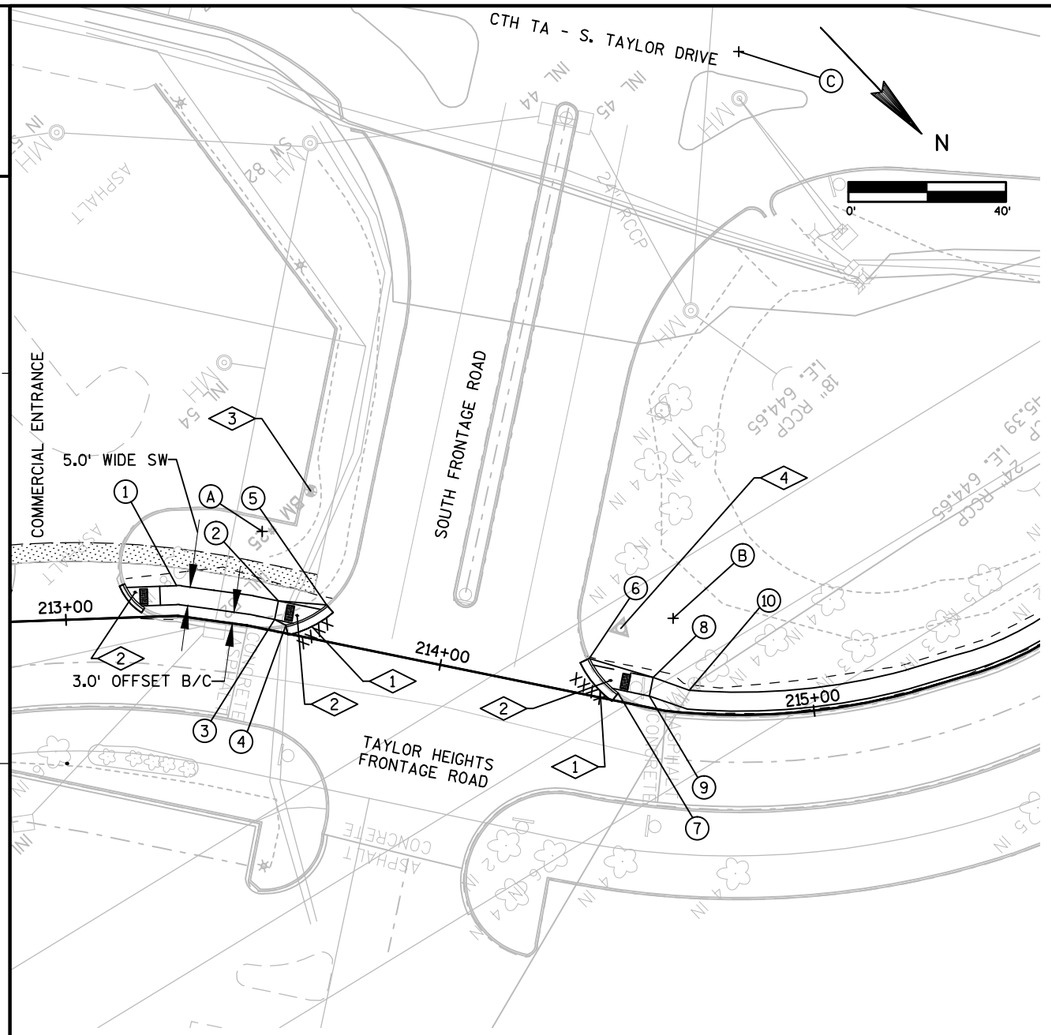
<1> REMOVE CURB AND GUTTER

<2> CURB RAMP TYPE 3 MODIFIED

<3> CONTROL POINT:
Y COORD.- 174515.41
X COORD.- 210779.81
ELEVATION- 646.11

PROJECT NO: 4996-01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	INTERSECTION DETAILS	SHEET	E

FILE NAME : L:\PROJECTS\11744\DWG\021101_ID.DWG PLOT DATE : 10/31/2014 1:53 PM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1:40_XREF
WISDOT/CADDS SHEET 42



RADIUS INFORMATION

NO.	Y COORDINATE	X COORDINATE	STATION	OFFSET	RADIUS
A	175880.94	210140.42	213+18.03	24.64'LT	24.62'
B	175971.09	210077.85	214+57.77	24.34"LT	24.53'
C	175874.57	209962.25	214+44.80	174.38'LT	167.11

LAYOUT INFORMATION

NO.	Y COORDINATE	X COORDINATE	ELEVATION	STATION	OFFSET	POINT TYPE
1	175874.53	210166.93	656.19	213+29.44	8.00'LT	SW-PI
2	175895.99	210150.21	655.91	213+54.77	8.00'LT	SW/RAMP
3	175898.85	210154.31	655.83	213+54.77	3.00'LT	SW/RAMP
4	175901.98	210153.19	655.67-ME	213+57.97	2.12'LT	B/C AT TIE-IN
5	175905.53	210141.68	655.41-ME	213+67.47	9.53'LT	B/C AT TIE-IN
6	175963.51	210101.18	655.06-ME	214+38.20	9.55'LT	B/C AT TIE-IN
7	175973.38	210102.27	655.43-ME	214+45.67	3.00'LT	B/C AT TIE-IN
8	175978.79	210092.40	655.19	214+55.75	8.00'LT	RAMP/SW
9	175971.65	210096.50	655.61	214+55.75	3.00'LT	RAMP-SW
10	175987.81	210087.85	655.73	214+66.53	6.00'LT	SW-PI

<1> REMOVE CURB AND GUTTER

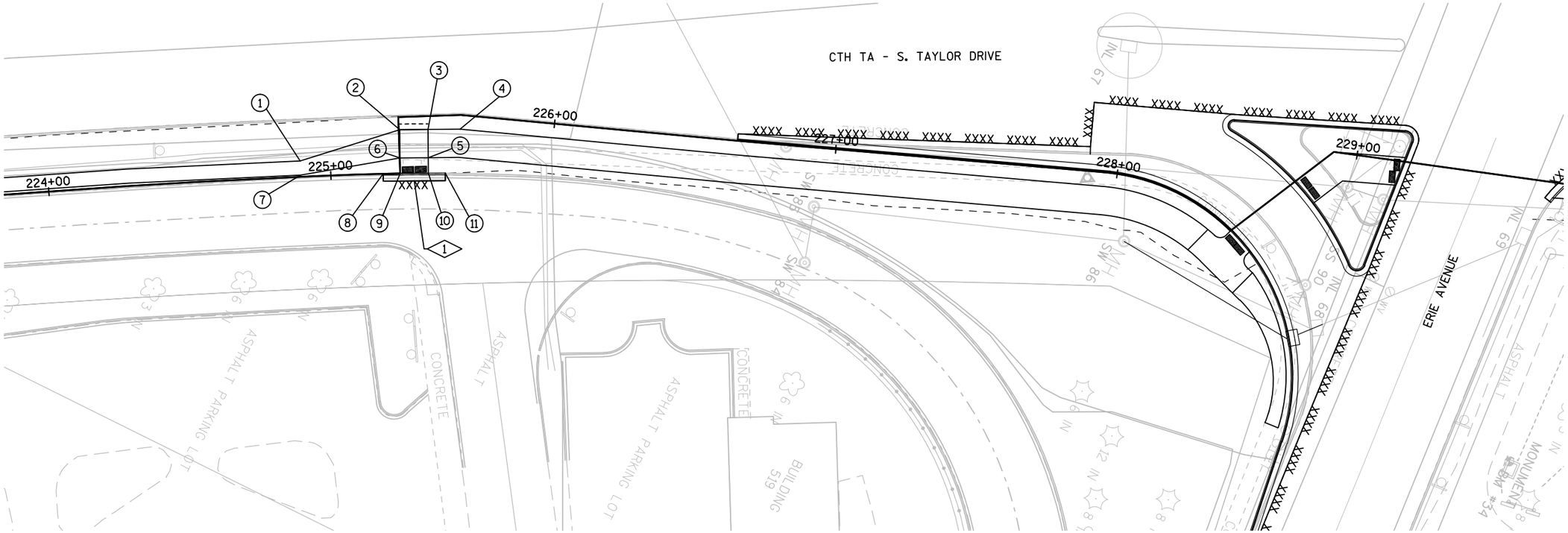
<2> CURB RAMP TYPE 4B1

<3> BENCH MARK*25 - LIGHT BASE; EL.=659.49

<4> CONTROL POINT:
Y COORD.- 175963.51
X COORD.- 210089.71
ELEVATION- 654.62

PROJECT NO: 4996-01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	INTERSECTION DETAILS	SHEET	E

FILE NAME : L:\PROJECTS\11744\DWG\021101_ID.DWG PLOT DATE : 10/31/2014 1:53 PM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1:40_XREF
WISDOT/CADDS SHEET 42

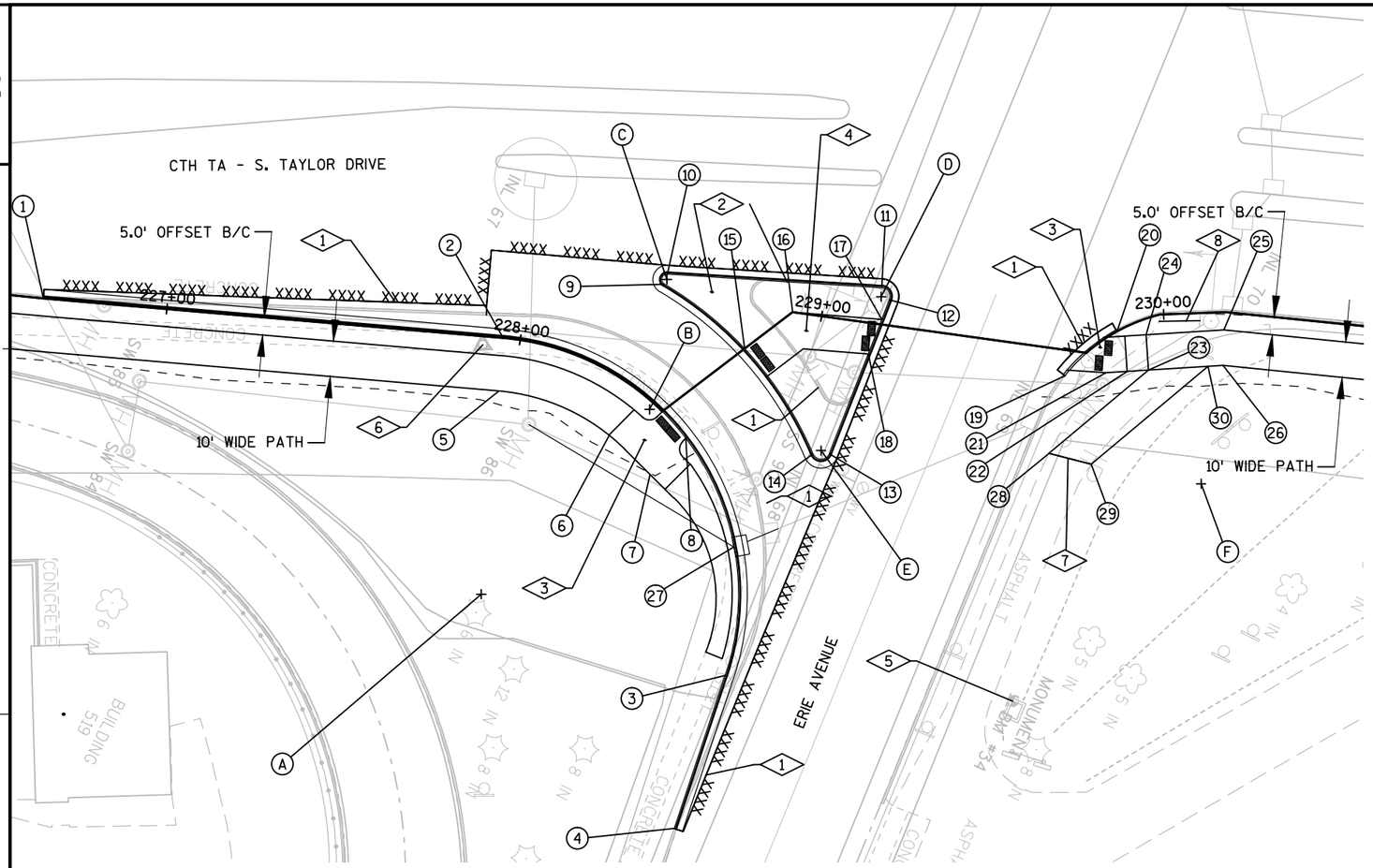


LAYOUT INFORMATION

NO.	Y COORDINATE	X COORDINATE	ELEVATION	STATION	OFFSET	POINT TYPE
1	176720.28	209424.32	671.38	224+89.40	5.51' LT	SIDEWALK-PI
2	176746.75	209398.50	672.95	225+40.05	0.40' RT	TURNING AREA-CORNER
3	176755.62	209393.89	673.05	225+54.95	4.71' RT	TURNING AREA-CORNER
4	176765.62	209388.71	673.65	255+66.21	4.96' RT	PATH-PI
5	176760.23	209402.77	673.20	225+29.79	10.15' RT	RAMP/TURNING AREA
6	176751.35	209407.37	673.10	225+30.05	0.15' RT	RAMP/TURNING AREA
7	176722.75	209428.67	671.32	224+89.38	0.61' LT	SIDEWALK-PI
8	176748.55	209415.02	673.10	225+18.56	0.00'	B/C AT TIE-IN
9	176753.82	209412.14	673.00	225+24.55	0.00'	B/C AT RAMP
10	176762.76	209407.65	673.50	225+54.60	20.21'RT	B/C AT RAMP
11	176768.08	209404.88	674.10	225+60.60	20.34'RT	B/C AT TIE-IN

1. REMOVE CURB AND GUTTER
2. REMOVE TREE
3. CURB RAMP TYPE 4B1 (MODIFIED)
4. BENCH MARK - F.HYD.; EL.=646.61
5. CONTROL POINT:
   Y COORD.- 174515.41
   X COORD.- 210779.81
   ELEVATION- 646.11

PROJECT NO: 4996-01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	INTERSECTION DETAILS	SHEET 19	E



RADIUS INFORMATION

NO.	Y COORDINATE	X COORDINATE	STATION	OFFSET	RADIUS
A	177002.91	209366.40	227+95.16	72.50'RT	5.00'/15.00'/72.50'
B	177021.64	209298.43	228+42.49	2.00'RT	3.00'
C	177009.45	209263.60	228+69.18	28.82'LT	1.5'
D	177065.49	209240.55	229+15.90	7.80'LT	1.5'
E	177070.02	209286.94	228+74.51	35.88'RT	1.5'
F	177169.79	209246.79	230+08.84	48.10'RT	49.03'

LAYOUT INFORMATION

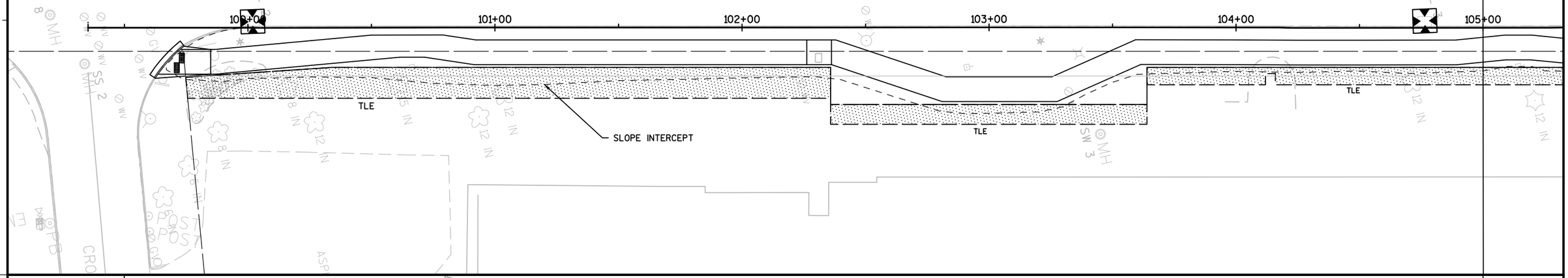
NO.	Y COORDINATE	X COORDINATE	ELEVATION	STATION	OFFSET	POINT TYPE
1	176855.14	209347.90	678.25-ME	226+65.08	0.00'RT	B/C TIE-IN
2	176975.75	209299.17	684.74	227+95.16	0.00'RT	B/C-PC
3	177074.61	209355.70	691.16			B/C-PT
4	177081.32	209400.67	692.54-ME			B/C TIE-IN
5	176981.37	209313.08	684.86	227+95.16	15.00'RT	PATH-PC
6	177014.72	209310.12	686.78	228+38.00	15.00'RT	PATH-PT/PC
7	177030.05	209314.73	687.09			PATH-PI
8	177034.44	209301.11	686.87	228+46.27	10.00'RT	PATH-PC-B/C
9	177009.35	209265.10	686.13	228+67.79	28.25'LT	B/C-PC
10	177008.85	209262.23	686.57	228+70.16	29.95'LT	B/C-PT
11	177064.50	209238.26	688.25	229+15.72	10.30'LT	B/C-PC
12	177067.98	209240.31	688.58	229+18.33	7.22'LT	B/C-PT
13	177072.48	209286.69	689.19	228+75.81	37.99'RT	B/C-PC
14	177068.38	209288.84	688.96	228+72.09	35.23'RT	B/C-PT
15	177037.83	209271.09	686.86	228+74.78	0.00'RT	B/C-PATH
16	177045.21	209255.80	688.00	228+91.76	0.00'RT	PATH-PI
17	177068.55	209246.23	688.69	229+16.95	1.44'LT	PATH-B/C
18	177069.56	209256.63	688.86	229+14.51	8.72'RT	PATH-B/C
19	177121.73	209237.00	689.26-ME	229+70.22	7.17'RT	B/C TIE-IN
20	177129.19	209219.26	689.93-ME	229+85.89	0.00'RT	B/C TIE-IN
21	177131.59	209231.08	689.12	229+75.83	7.78'RT	RAMP-PI
22	177136.83	209227.99	689.23	229+82.12	11.12'RT	RAMP-PI - PATH
23	177142.00	209224.95	689.32	229+89.35	13.71'RT	RAMP-PATH
24	177136.93	209216.33	689.47	229+93.33	4.25'RT	RAMP-PATH
25	177155.85	209205.19	691.34	230+16.80	5.00'RT	PATH-PI
26	177160.22	209214.22	691.49	230+16.25	15.00'RT	RAMP-PI
27	177060.38	209332.30	689.25			C-L INLET-B/C
28	177127.65	209258.58	689.76-ME	229+67.78	29.51'RT	PATH-ME
29	177139.67	209255.90	690.22-ME			PATH-ME
30	177156.53	209216.40	690.82	230+11.97	15.09'RT	PATH-PATH

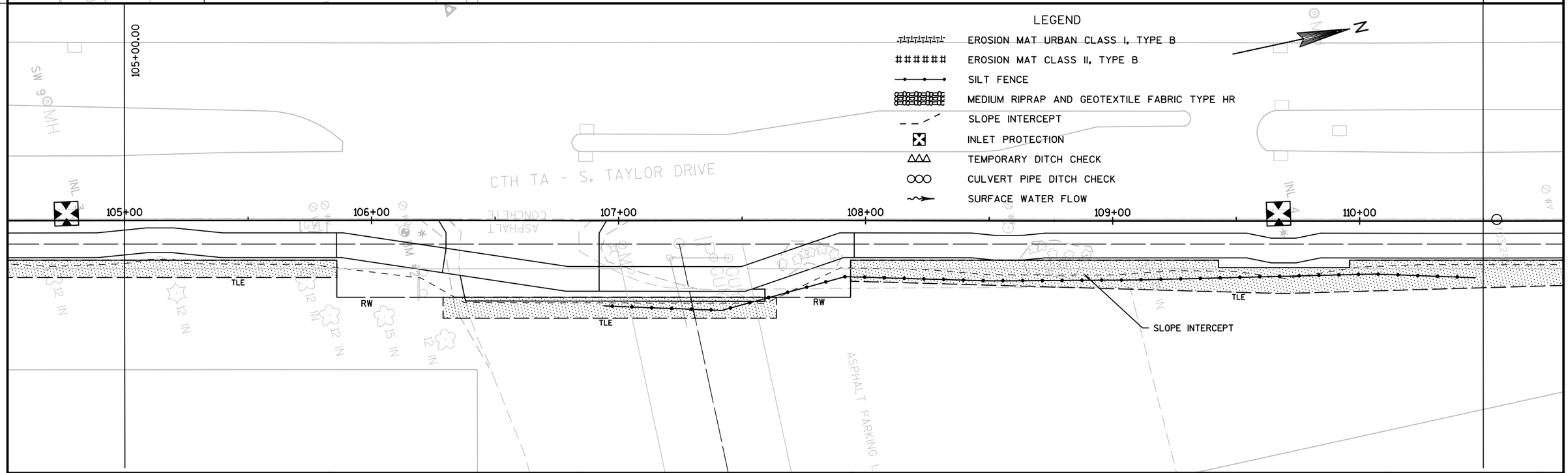
1. REMOVE CURB AND GUTTER
2. REMOVE PAVEMENT
3. CURB RAMP TYPE 4B1 (MODIFIED)
4. CURB RAMP TYPE 5
5. BENCH MARK - MONUMENT.; EL.=693.60
6. CONTROL POINT:
   Y COORD.- 176971.45
   X COORD.- 209303.45
   ELEVATION- 684.40
7. SAW CUT AND MATCH EXISTING PATH
8. SAW CUT 2' OFF BACK OF CURB. DO NOT CONNECT TO EXISTING PATH.

PROJECT NO: 4996-01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	INTERSECTION DETAILS	SHEET 20	E

GENERAL NOTES

- EROSION MAT URBAN CLASS 1, TYPE A TO BE USED AT ALL DISTURBED LOCATIONS OUTSIDE OF PAVEMENT AREAS WITH A SLOPE OF 4:1 OR FLATTER, UNLESS NOTED IN EROSION CONTROL SHEETS.
- EROSION MAT URBAN CLASS 1, TYPE B TO BE USED AT ALL DISTURBED LOCATIONS OUTSIDE OF PAVEMENT AREAS WITH A SLOPE STEEPER THAN 4:1, UNLESS NOTED IN EROSION CONTROL SHEETS.



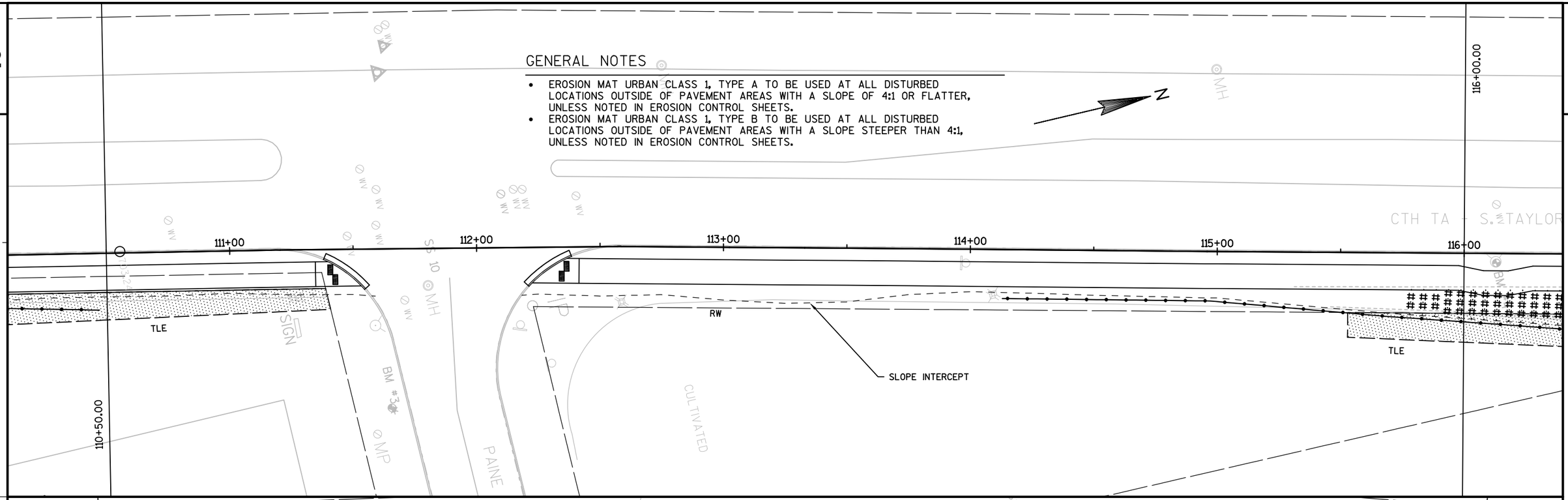


PROJECT NO: 4996-01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	EROSION CONTROL	SHEET 21	E

FILE NAME : L:\PROJECTS\11744\DWG\022001_EC.DWG
LAYOUT NAME - 022001_EC - 050101
PLOT DATE : 1/13/2015 9:37 AM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1" = 40'_XREF
WISDOT/CADDS SHEET 44

GENERAL NOTES

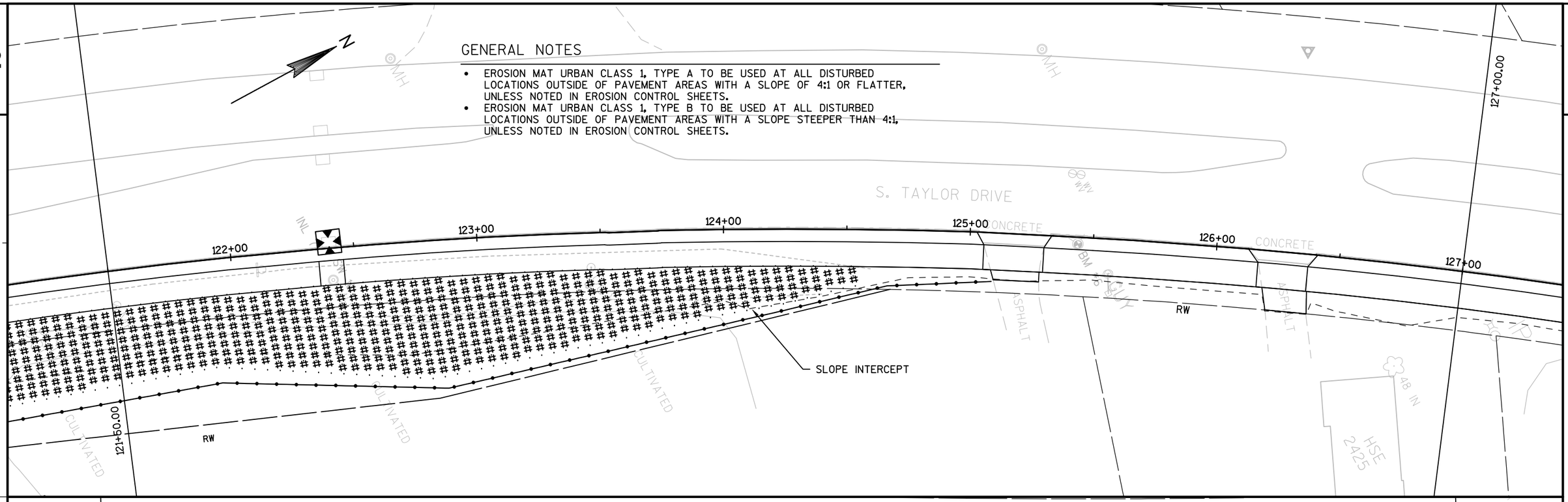
- EROSION MAT URBAN CLASS 1, TYPE A TO BE USED AT ALL DISTURBED LOCATIONS OUTSIDE OF PAVEMENT AREAS WITH A SLOPE OF 4:1 OR FLATTER, UNLESS NOTED IN EROSION CONTROL SHEETS.
- EROSION MAT URBAN CLASS 1, TYPE B TO BE USED AT ALL DISTURBED LOCATIONS OUTSIDE OF PAVEMENT AREAS WITH A SLOPE STEEPER THAN 4:1, UNLESS NOTED IN EROSION CONTROL SHEETS.



PROJECT NO: 4996-01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	EROSION CONTROL	SHEET 22	E

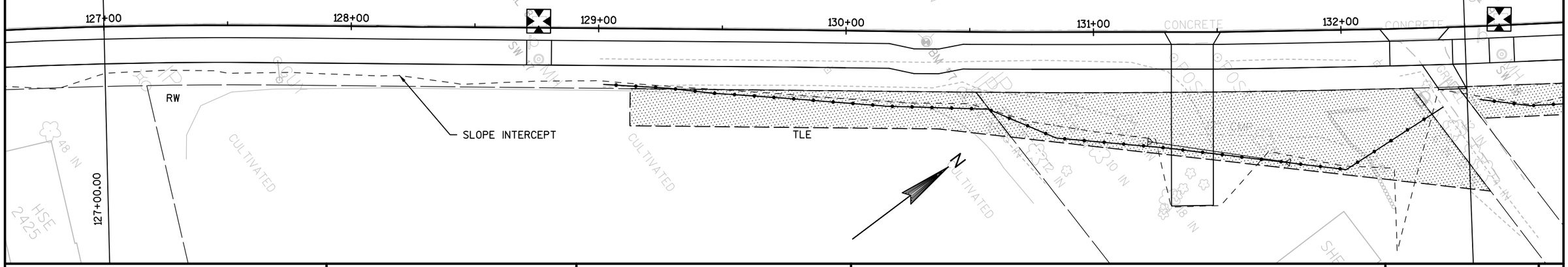
GENERAL NOTES

- EROSION MAT URBAN CLASS 1, TYPE A TO BE USED AT ALL DISTURBED LOCATIONS OUTSIDE OF PAVEMENT AREAS WITH A SLOPE OF 4:1 OR FLATTER, UNLESS NOTED IN EROSION CONTROL SHEETS.
- EROSION MAT URBAN CLASS 1, TYPE B TO BE USED AT ALL DISTURBED LOCATIONS OUTSIDE OF PAVEMENT AREAS WITH A SLOPE STEEPER THAN 4:1, UNLESS NOTED IN EROSION CONTROL SHEETS.



LEGEND

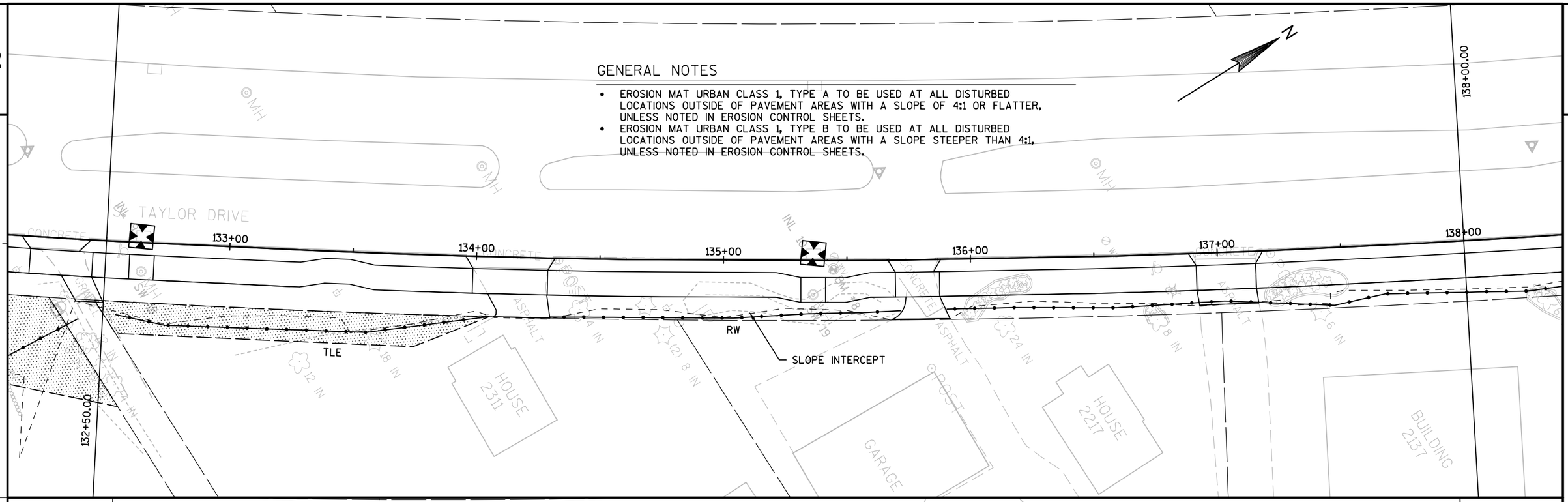
- EROSION MAT URBAN CLASS I, TYPE B
- EROSION MAT CLASS II, TYPE B
- SILT FENCE
- MEDIUM RIPRAP AND GEOTEXTILE FABRIC TYPE HR
- SLOPE INTERCEPT
- INLET PROTECTION
- TEMPORARY DITCH CHECK
- CULVERT PIPE DITCH CHECK
- SURFACE WATER FLOW



PROJECT NO: 4996-01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	EROSION CONTROL	SHEET 23	E

GENERAL NOTES

- EROSION MAT URBAN CLASS 1, TYPE A TO BE USED AT ALL DISTURBED LOCATIONS OUTSIDE OF PAVEMENT AREAS WITH A SLOPE OF 4:1 OR FLATTER, UNLESS NOTED IN EROSION CONTROL SHEETS.
- EROSION MAT URBAN CLASS 1, TYPE B TO BE USED AT ALL DISTURBED LOCATIONS OUTSIDE OF PAVEMENT AREAS WITH A SLOPE STEEPER THAN 4:1, UNLESS NOTED IN EROSION CONTROL SHEETS.



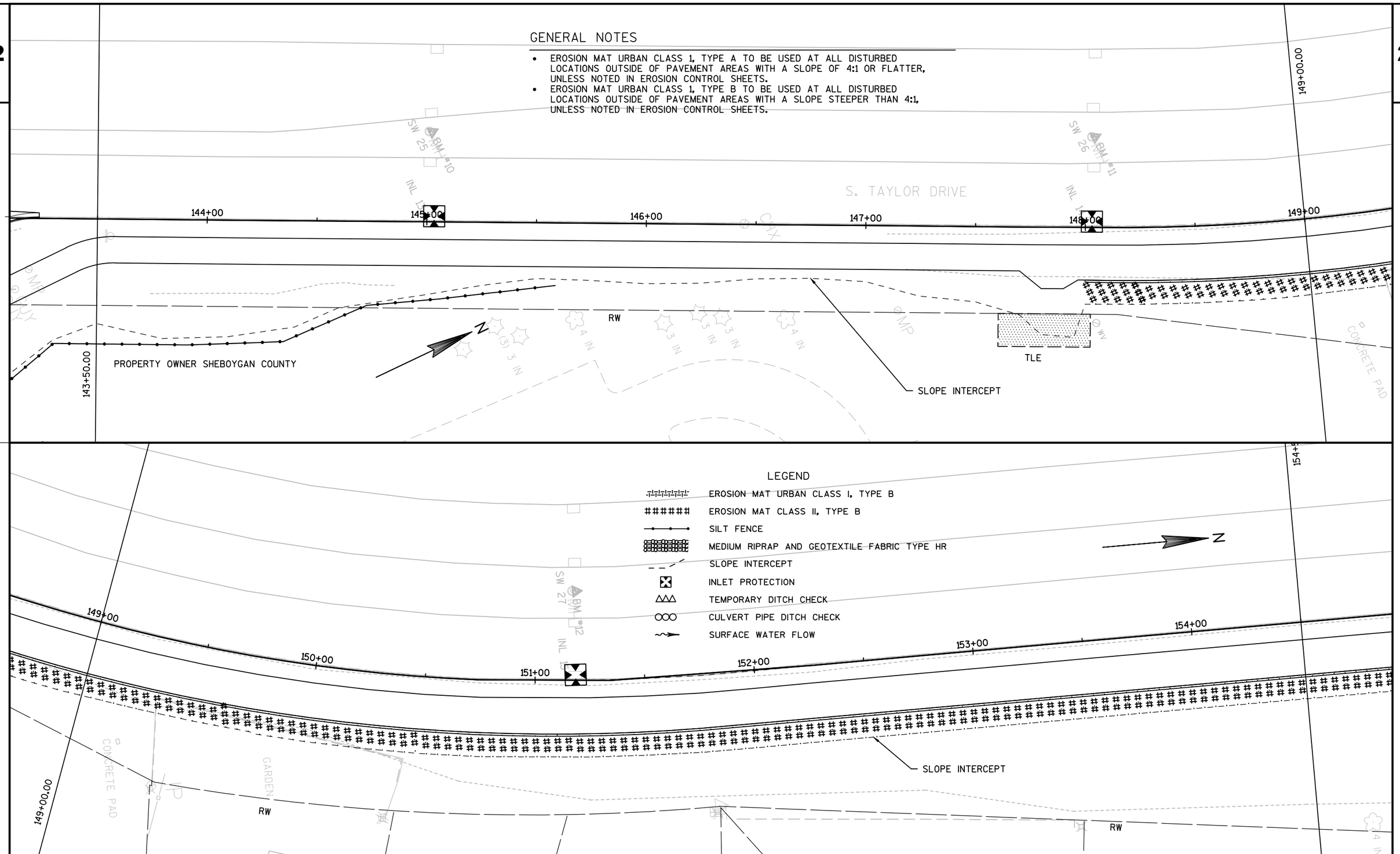
PROJECT NO: 4996-01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	EROSION CONTROL	SHEET 24	E

FILE NAME : L:\PROJECTS\11744\DWG\022001_EC.DWG
LAYOUT NAME - 050107

PLOT DATE : 3/24/2015 9:24 AM PLOT BY : JUMP, KEVIN PLOT NAME : PLOT SCALE : 1" = 40'_XREF

GENERAL NOTES

- EROSION MAT URBAN CLASS 1, TYPE A TO BE USED AT ALL DISTURBED LOCATIONS OUTSIDE OF PAVEMENT AREAS WITH A SLOPE OF 4:1 OR FLATTER, UNLESS NOTED IN EROSION CONTROL SHEETS.
- EROSION MAT URBAN CLASS 1, TYPE B TO BE USED AT ALL DISTURBED LOCATIONS OUTSIDE OF PAVEMENT AREAS WITH A SLOPE STEEPER THAN 4:1, UNLESS NOTED IN EROSION CONTROL SHEETS.

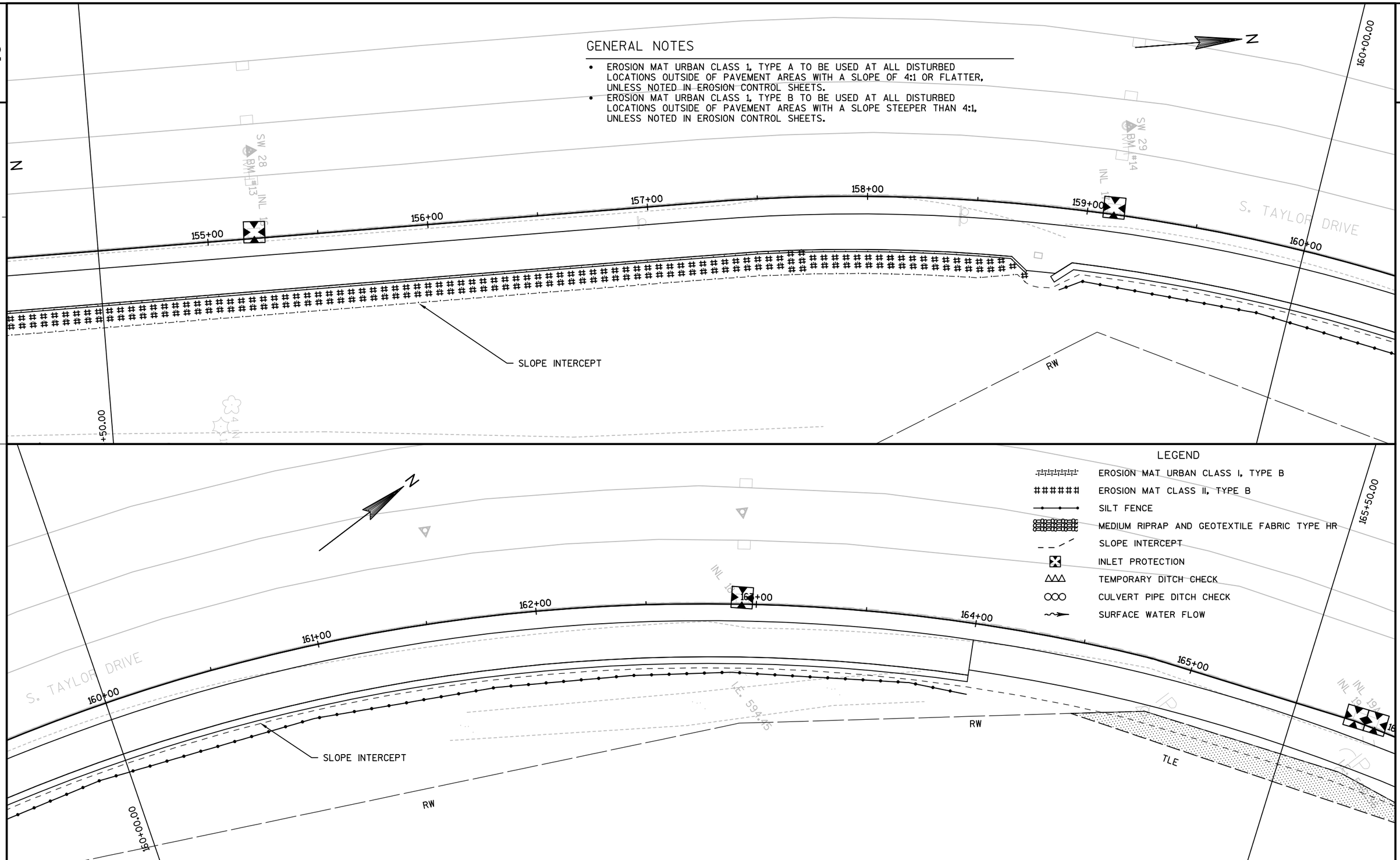


PROJECT NO: 4996-01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	EROSION CONTROL	SHEET 25	E

FILE NAME : L:\PROJECTS\11744\DWG\022001_EC.DWG
LAYOUT NAME - 022001_EC - 050109
PLOT DATE : 1/13/2015 9:39 AM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1" = 40'_XREF
WISDOT/CADDS SHEET 44

GENERAL NOTES

- EROSION MAT URBAN CLASS 1, TYPE A TO BE USED AT ALL DISTURBED LOCATIONS OUTSIDE OF PAVEMENT AREAS WITH A SLOPE OF 4:1 OR FLATTER, UNLESS NOTED IN EROSION CONTROL SHEETS.
- EROSION MAT URBAN CLASS 1, TYPE B TO BE USED AT ALL DISTURBED LOCATIONS OUTSIDE OF PAVEMENT AREAS WITH A SLOPE STEEPER THAN 4:1, UNLESS NOTED IN EROSION CONTROL SHEETS.



PROJECT NO: 4996-01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	EROSION CONTROL	SHEET 26	E

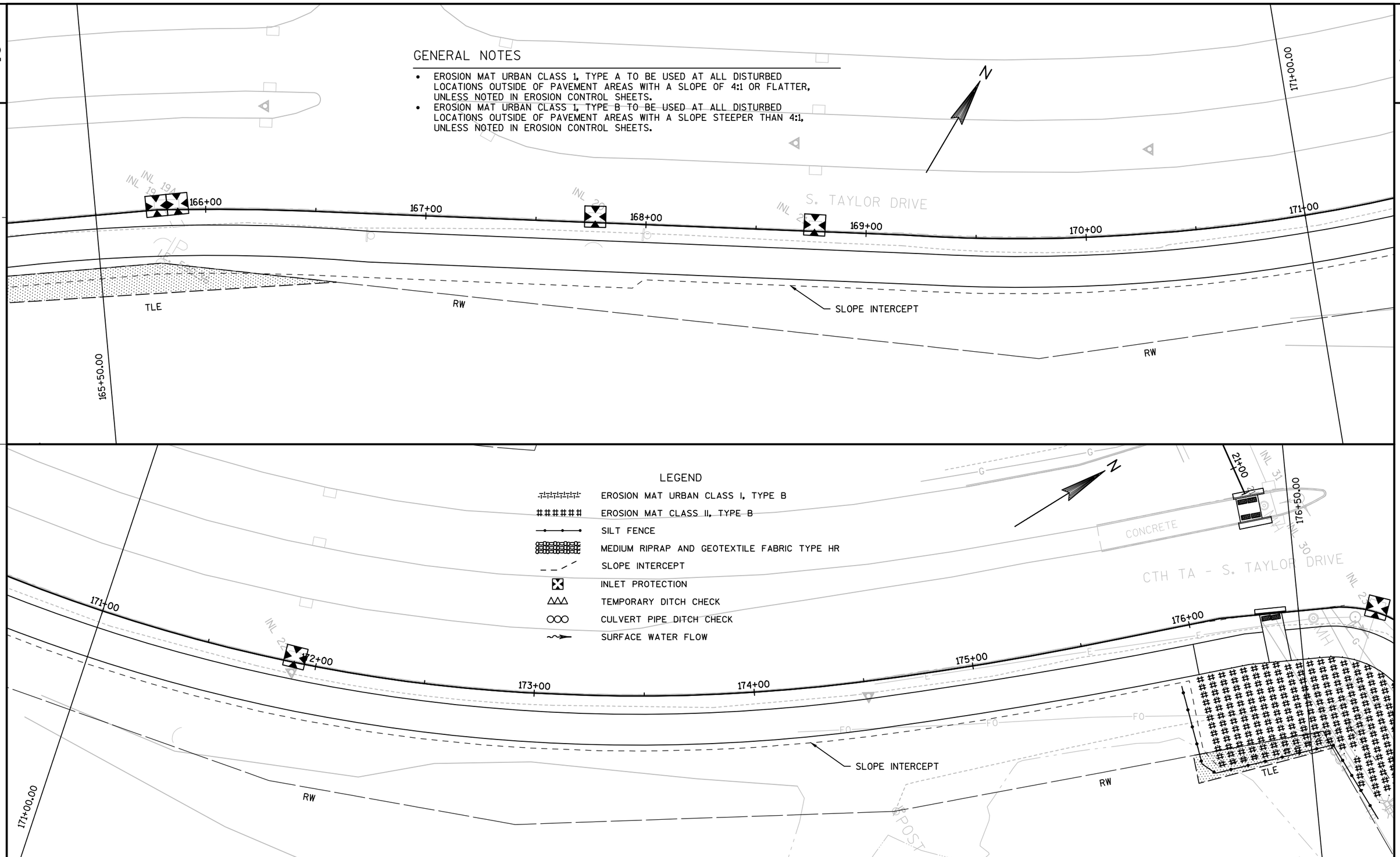
FILE NAME : L:\PROJECTS\11744\DWG\022001_EC.DWG
LAYOUT NAME - 022001_EC - 050111

PLOT DATE : 1/13/2015 9:40 AM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1" = 40'_XREF

WISDOT/CADDS SHEET 44

GENERAL NOTES

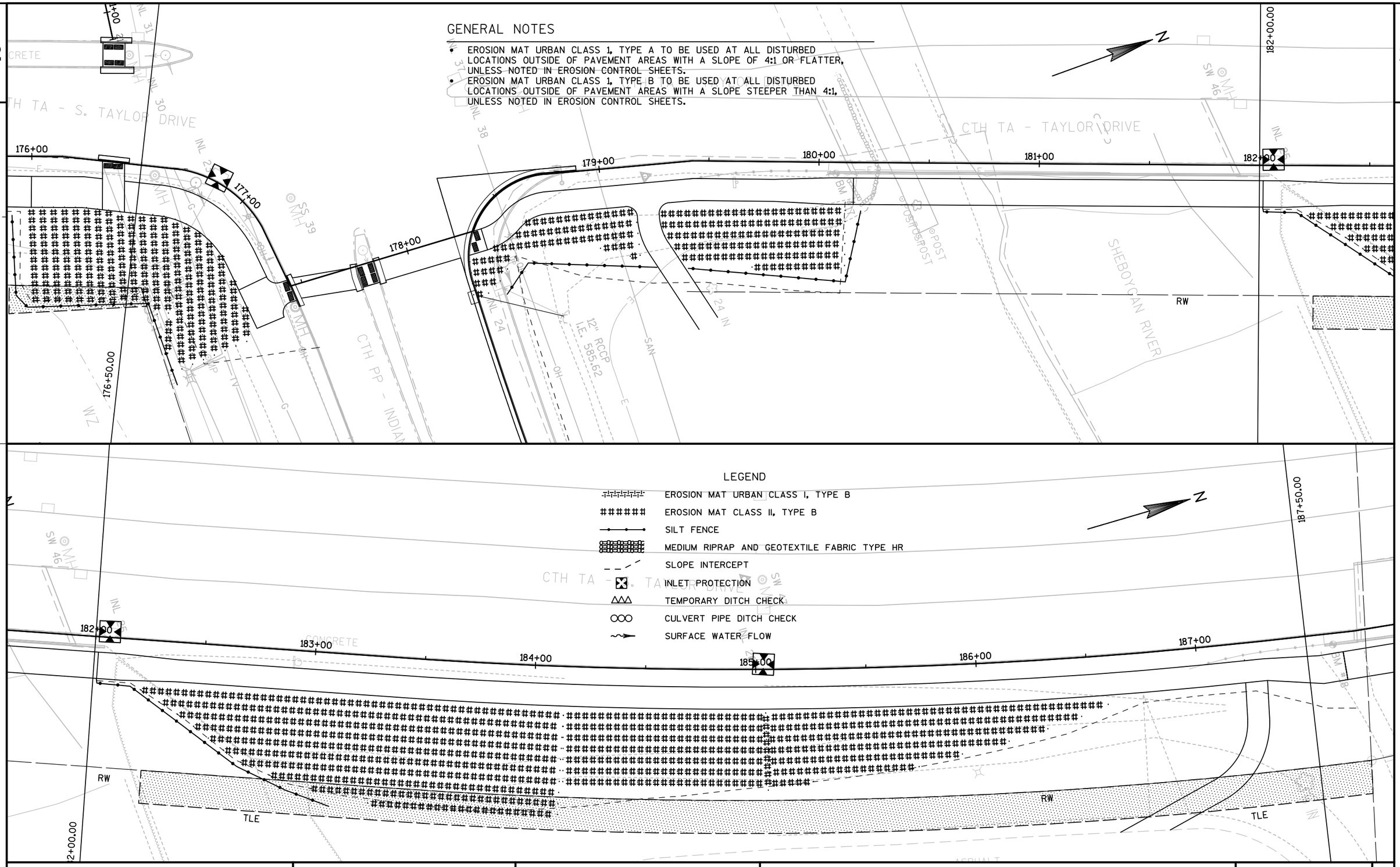
- EROSION MAT URBAN CLASS 1, TYPE A TO BE USED AT ALL DISTURBED LOCATIONS OUTSIDE OF PAVEMENT AREAS WITH A SLOPE OF 4:1 OR FLATTER, UNLESS NOTED IN EROSION CONTROL SHEETS.
- EROSION MAT URBAN CLASS 1, TYPE B TO BE USED AT ALL DISTURBED LOCATIONS OUTSIDE OF PAVEMENT AREAS WITH A SLOPE STEEPER THAN 4:1, UNLESS NOTED IN EROSION CONTROL SHEETS.



PROJECT NO: 4996-01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	EROSION CONTROL	SHEET 27	E

GENERAL NOTES

- EROSION MAT URBAN CLASS 1, TYPE A TO BE USED AT ALL DISTURBED LOCATIONS OUTSIDE OF PAVEMENT AREAS WITH A SLOPE OF 4:1 OR FLATTER, UNLESS NOTED IN EROSION CONTROL SHEETS.
- EROSION MAT URBAN CLASS 1, TYPE B TO BE USED AT ALL DISTURBED LOCATIONS OUTSIDE OF PAVEMENT AREAS WITH A SLOPE STEEPER THAN 4:1, UNLESS NOTED IN EROSION CONTROL SHEETS.



LEGEND

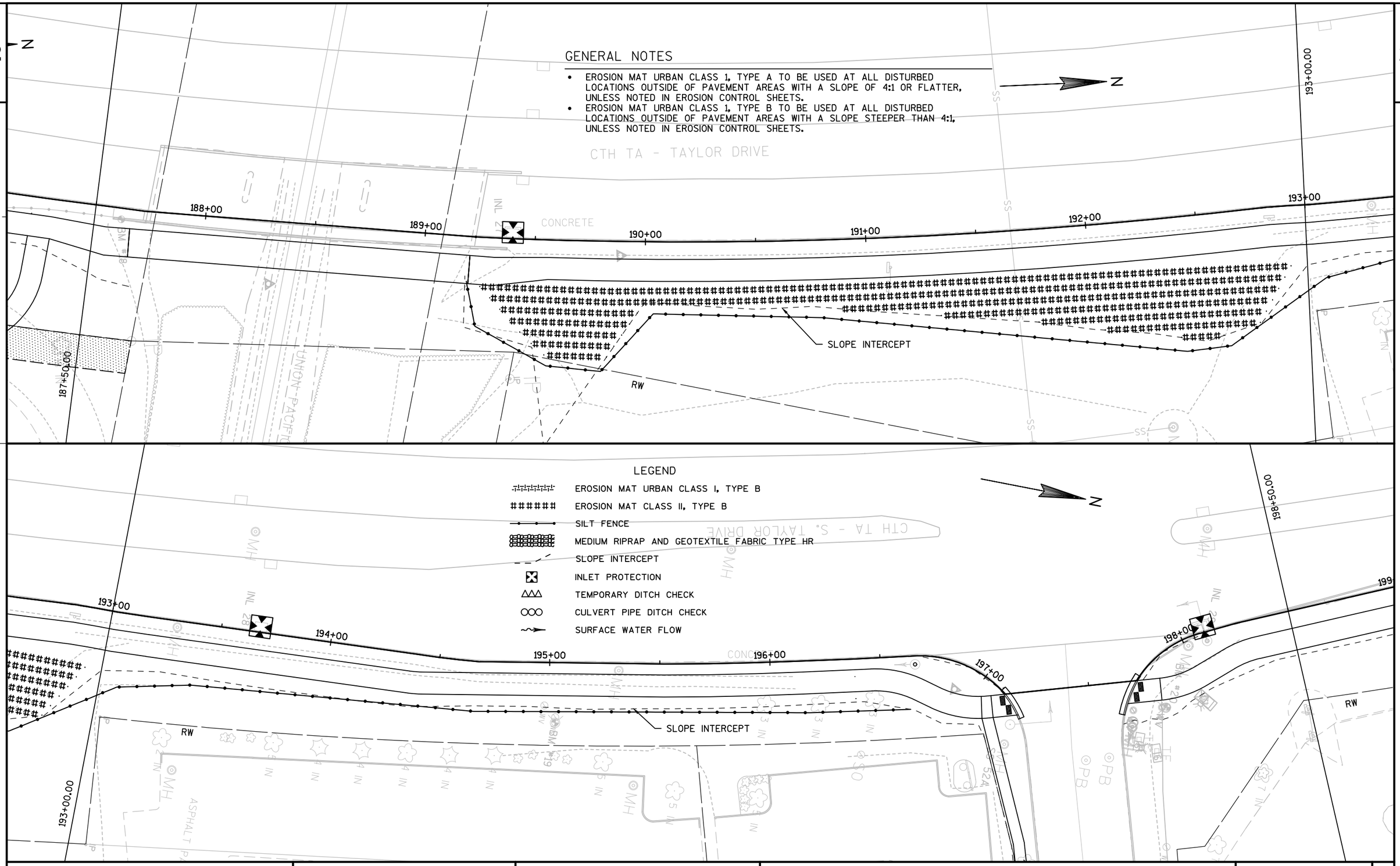
- EROSION MAT URBAN CLASS I, TYPE B
- EROSION MAT CLASS II, TYPE B
- SILT FENCE
- MEDIUM RIPRAP AND GEOTEXTILE FABRIC TYPE HR
- SLOPE INTERCEPT
- INLET PROTECTION
- TEMPORARY DITCH CHECK
- CULVERT PIPE DITCH CHECK
- SURFACE WATER FLOW

PROJECT NO: 4996-01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	EROSION CONTROL	SHEET 28	E

FILE NAME : L:\PROJECTS\11744\DWG\022001_EC.DWG
LAYOUT NAME - 022001_EC - 050115
PLOT DATE : 1/13/2015 9:41 AM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1" = 40'_XREF
WISDOT/CADDS SHEET 44

GENERAL NOTES

- EROSION MAT URBAN CLASS 1, TYPE A TO BE USED AT ALL DISTURBED LOCATIONS OUTSIDE OF PAVEMENT AREAS WITH A SLOPE OF 4:1 OR FLATTER, UNLESS NOTED IN EROSION CONTROL SHEETS.
- EROSION MAT URBAN CLASS 1, TYPE B TO BE USED AT ALL DISTURBED LOCATIONS OUTSIDE OF PAVEMENT AREAS WITH A SLOPE STEEPER THAN 4:1, UNLESS NOTED IN EROSION CONTROL SHEETS.



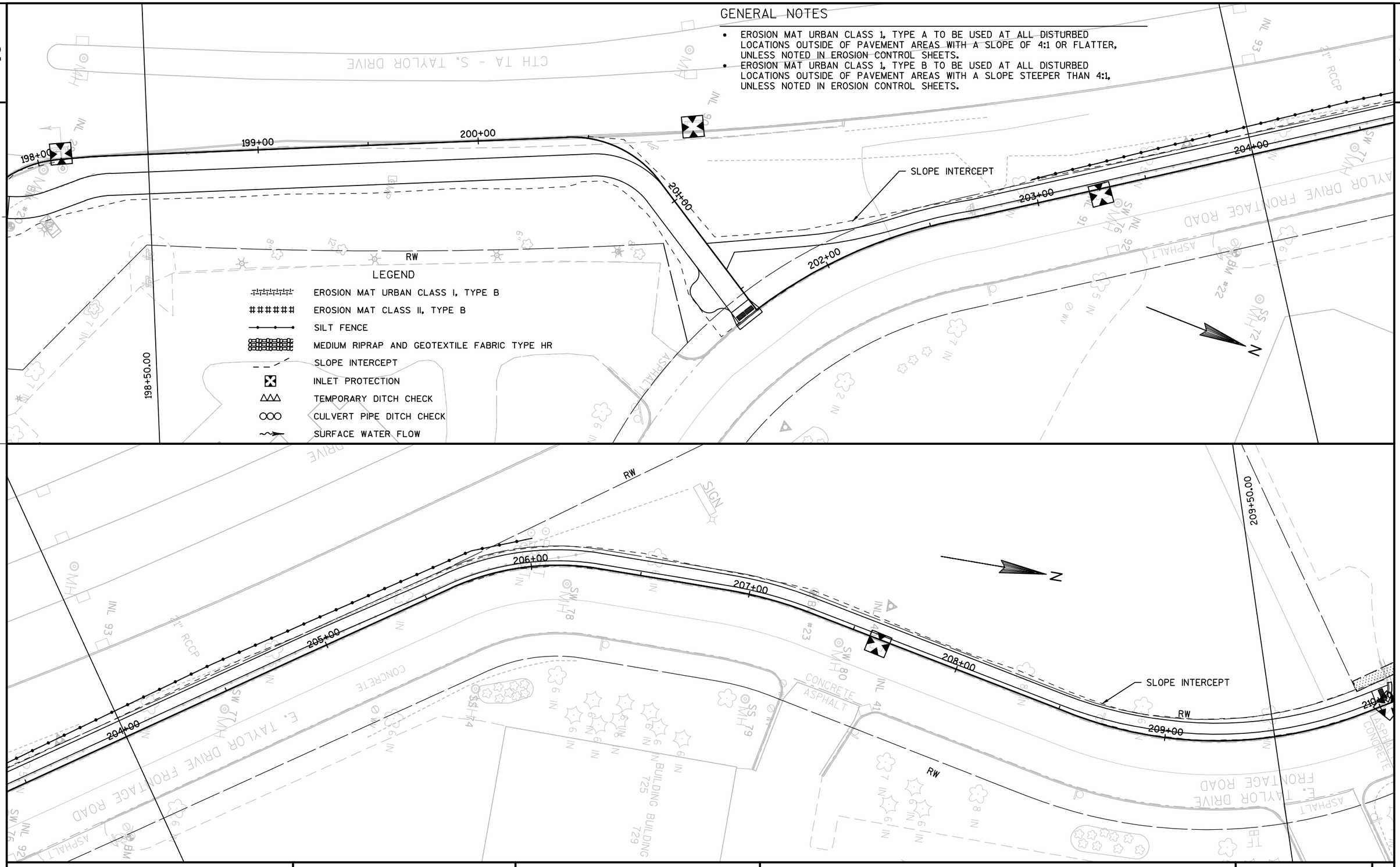
PROJECT NO: 4996-01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	EROSION CONTROL	SHEET 29	E

FILE NAME : L:\PROJECTS\11744\DWG\022001_EC.DWG
LAYOUT NAME - 022001_EC - 050117

PLOT DATE : 1/13/2015 9:42 AM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1" = 40'_XREF

GENERAL NOTES

- EROSION MAT URBAN CLASS 1, TYPE A TO BE USED AT ALL DISTURBED LOCATIONS OUTSIDE OF PAVEMENT AREAS WITH A SLOPE OF 4:1 OR FLATTER, UNLESS NOTED IN EROSION CONTROL SHEETS.
- EROSION MAT URBAN CLASS 1, TYPE B TO BE USED AT ALL DISTURBED LOCATIONS OUTSIDE OF PAVEMENT AREAS WITH A SLOPE STEEPER THAN 4:1, UNLESS NOTED IN EROSION CONTROL SHEETS.

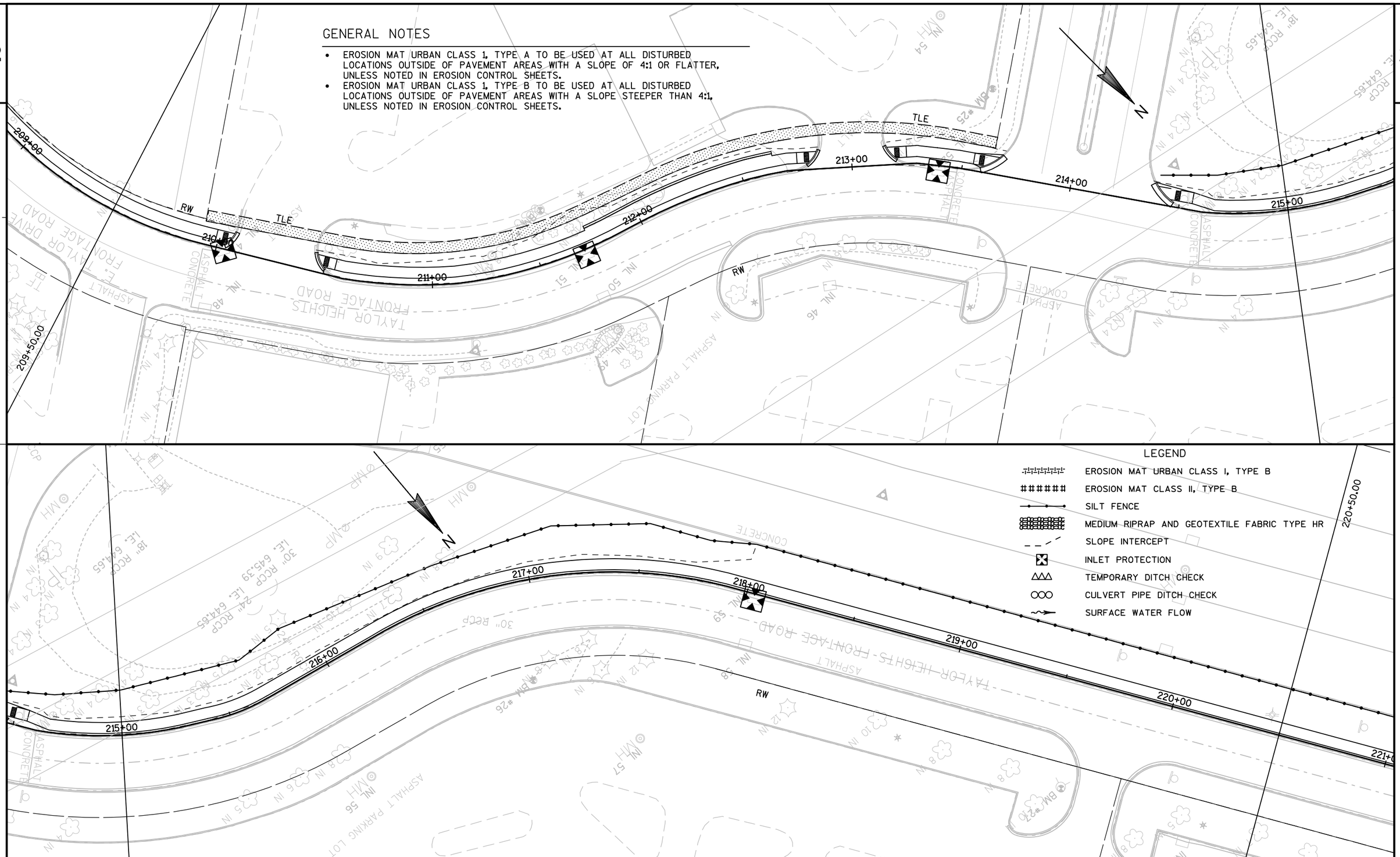


PROJECT NO: 4996-01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	EROSION CONTROL	SHEET 30	E

FILE NAME : L:\PROJECTS\11744\DWG\022001_EC.DWG
LAYOUT NAME - 022001_EC - 050119
PLOT DATE : 1/13/2015 9:42 AM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1" = 40'_XREF
WISDOT/CADDS SHEET 44

GENERAL NOTES

- EROSION MAT URBAN CLASS 1, TYPE A TO BE USED AT ALL DISTURBED LOCATIONS OUTSIDE OF PAVEMENT AREAS WITH A SLOPE OF 4:1 OR FLATTER, UNLESS NOTED IN EROSION CONTROL SHEETS.
- EROSION MAT URBAN CLASS 1, TYPE B TO BE USED AT ALL DISTURBED LOCATIONS OUTSIDE OF PAVEMENT AREAS WITH A SLOPE STEEPER THAN 4:1, UNLESS NOTED IN EROSION CONTROL SHEETS.



PROJECT NO: 4996-01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	EROSION CONTROL	SHEET 31	E

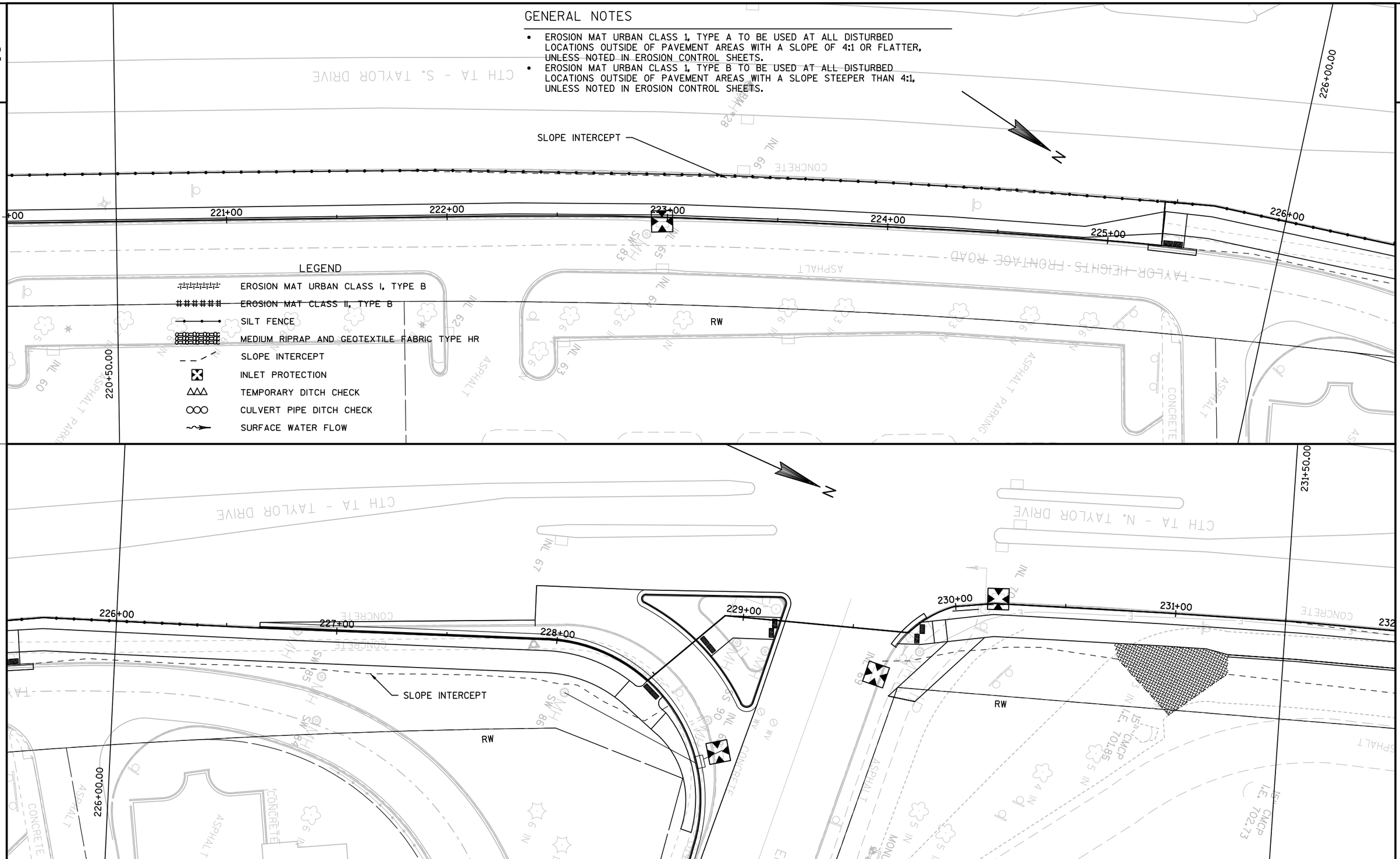
FILE NAME : L:\PROJECTS\11744\DWG\022001_EC.DWG
LAYOUT NAME - 022001_EC - 050121

PLOT DATE : 1/13/2015 9:43 AM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1" = 40'_XREF

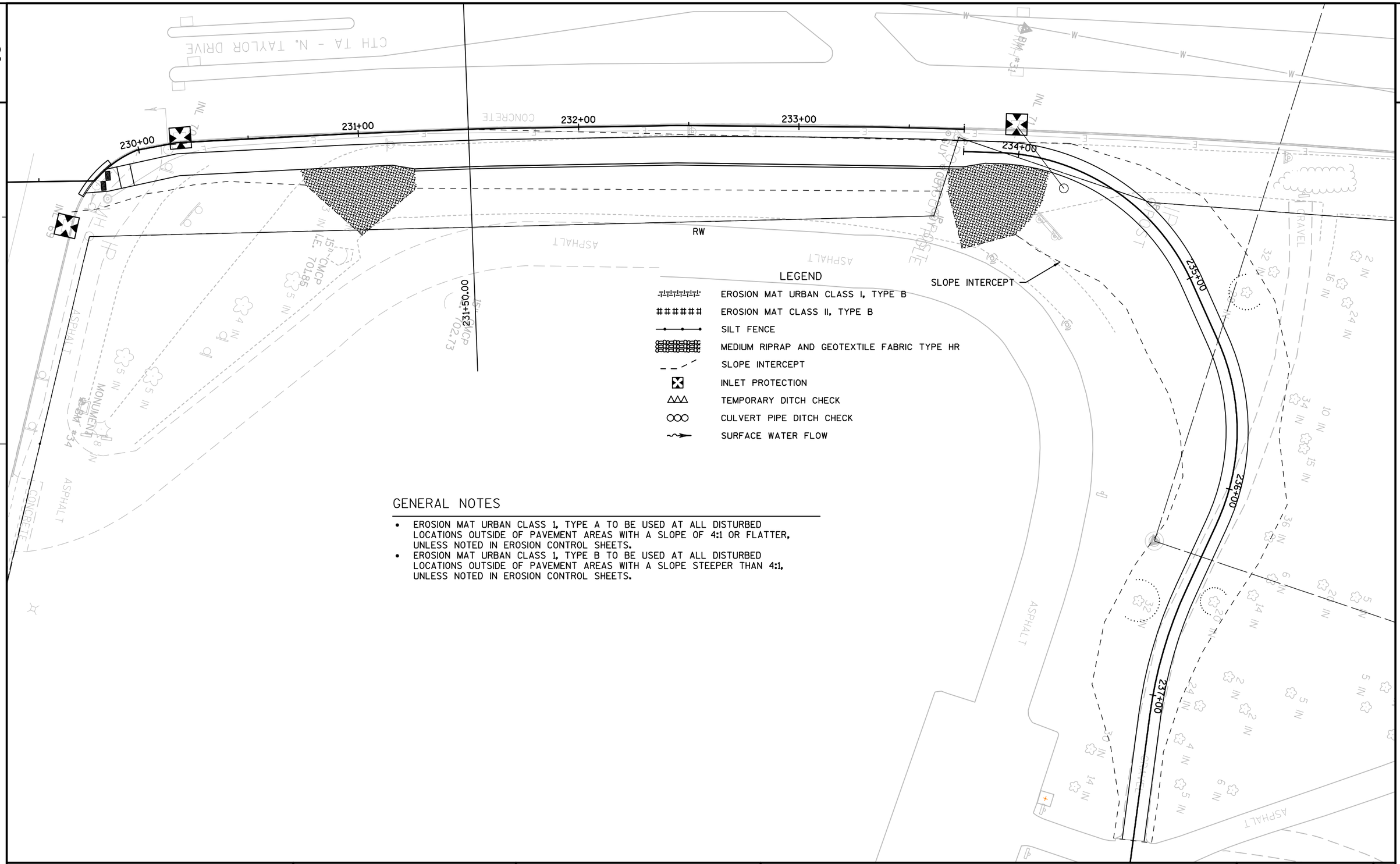
WISDOT/CADDS SHEET 44

GENERAL NOTES

- EROSION MAT URBAN CLASS 1, TYPE A TO BE USED AT ALL DISTURBED LOCATIONS OUTSIDE OF PAVEMENT AREAS WITH A SLOPE OF 4:1 OR FLATTER, UNLESS NOTED IN EROSION CONTROL SHEETS.
- EROSION MAT URBAN CLASS 1, TYPE B TO BE USED AT ALL DISTURBED LOCATIONS OUTSIDE OF PAVEMENT AREAS WITH A SLOPE STEEPER THAN 4:1, UNLESS NOTED IN EROSION CONTROL SHEETS.



PROJECT NO: 4996-01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	EROSION CONTROL	SHEET 32	E



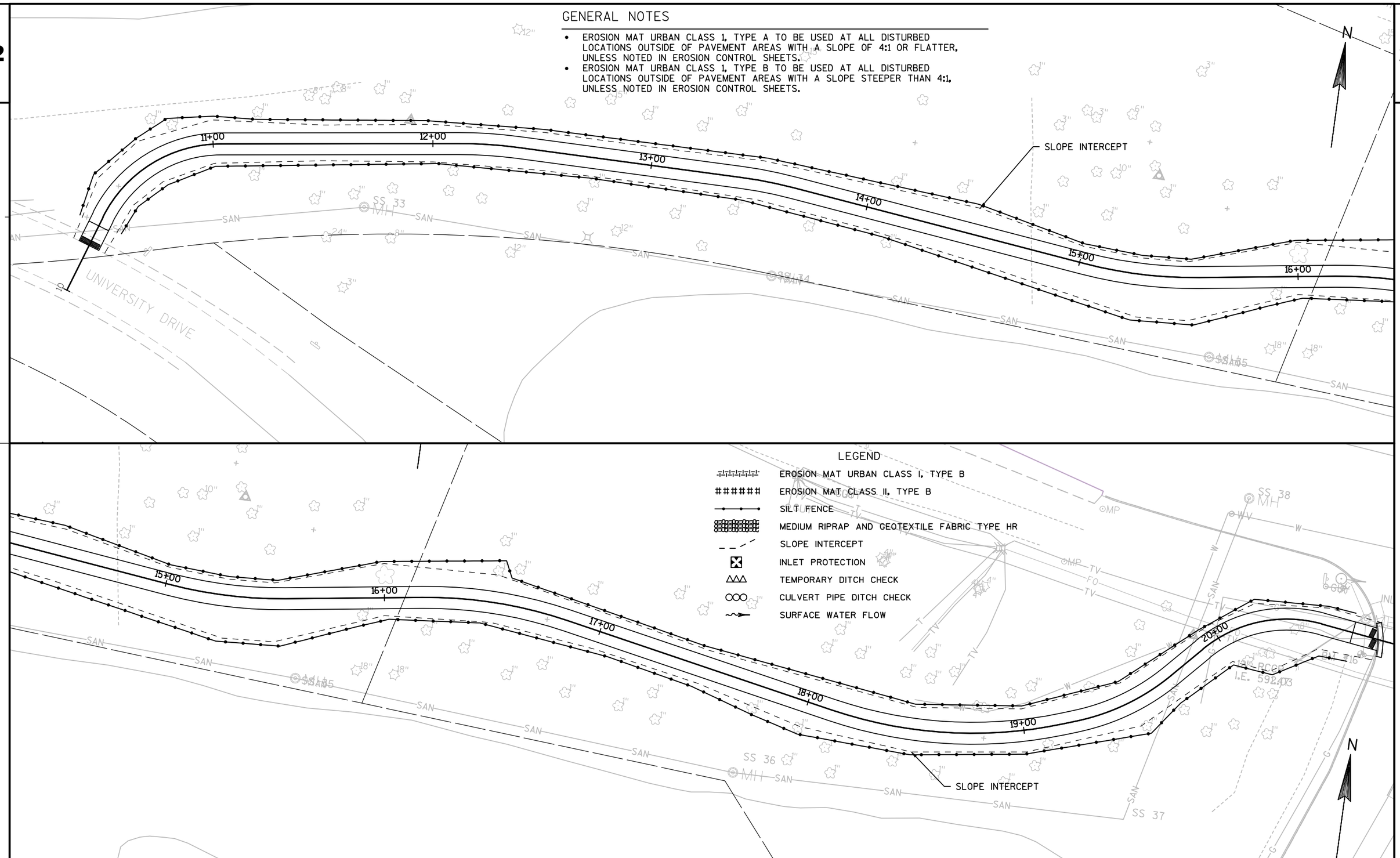
GENERAL NOTES

- EROSION MAT URBAN CLASS 1, TYPE A TO BE USED AT ALL DISTURBED LOCATIONS OUTSIDE OF PAVEMENT AREAS WITH A SLOPE OF 4:1 OR FLATTER, UNLESS NOTED IN EROSION CONTROL SHEETS.
- EROSION MAT URBAN CLASS 1, TYPE B TO BE USED AT ALL DISTURBED LOCATIONS OUTSIDE OF PAVEMENT AREAS WITH A SLOPE STEEPER THAN 4:1, UNLESS NOTED IN EROSION CONTROL SHEETS.

PROJECT NO: 4996-01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	EROSION CONTROL	SHEET 33	E

GENERAL NOTES

- EROSION MAT URBAN CLASS 1, TYPE A TO BE USED AT ALL DISTURBED LOCATIONS OUTSIDE OF PAVEMENT AREAS WITH A SLOPE OF 4:1 OR FLATTER, UNLESS NOTED IN EROSION CONTROL SHEETS.
- EROSION MAT URBAN CLASS 1, TYPE B TO BE USED AT ALL DISTURBED LOCATIONS OUTSIDE OF PAVEMENT AREAS WITH A SLOPE STEEPER THAN 4:1, UNLESS NOTED IN EROSION CONTROL SHEETS.



LEGEND

- EROSION MAT URBAN CLASS I, TYPE B
- EROSION MAT CLASS II, TYPE B
- SILT FENCE
- MEDIUM RIPRAP AND GEOTEXTILE FABRIC TYPE HR
- SLOPE INTERCEPT
- INLET PROTECTION
- TEMPORARY DITCH CHECK
- CULVERT PIPE DITCH CHECK
- SURFACE WATER FLOW

PROJECT NO: 4996-01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	EROSION CONTROL	SHEET 34	E

2

2

N

105+15.00

S. TAYLOR DRIVE

99+35 100+00 101+00 102+00 103+00 104+00 105+00

EXISTING STOP SIGN
REMOVING SIGNS TYPE I
REMOVING SMALL SIGN SUPPORTS

CROCKER AVENUE

ASPHALT PARKING LOT

STOP ①
R1-1
30"X30"

NO MOTOR VEHICLES ②
R5-3
24"X24"

PROJECT NO: 4496-01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	PERMANENT SIGNING AND PAVEMENT MARKING	SHEET 35	E

FILE NAME : L:\PROJECTS\11744\DWG\023201_PS.DWG PLOT DATE : 1/13/2015 10:08 AM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1:40_XREF

WISDOT/CADDS SHEET 42

2

2

N

110+95.00

S. TAYLOR DRIVE

CTH TA - S. TAYLOR DRIVE

105+00 106+00 107+00 108+00 109+00 110+00 111+00

CONCRETE

ASPHALT

12 IN 12 IN 12 IN 15 IN 12 IN

EXISTING SIGN

15 IN

ASPHALT PARKING LOT

105+15.00

PROJECT NO: 4996-01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	PERMANENT SIGNING AND PAVEMENT MARKING	SHEET E

FILE NAME : L:\PROJECTS\11744\DWG\023201_PS.DWG PLOT DATE : 1/13/2015 10:09 AM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1:40_XREF

WISDOT/CADDS SHEET 42

2

2

N

116+75.00

S. TAYLOR DRIVE

TAYLOR DRIVE

CTH TA - S. TAYLOR DRIVE

111+00 112+00 113+00 114+00 115+00 116+00 117

③ EXISTING SIGN
REMOVING SIGNS TYPE II
REMOVING SMALL SIGN SUPPORTS
R2-1, 35 MPH

Ⓐ Ⓒ

Ⓑ ④ ⑤

EXISTING SIGN

EXISTING STOP SIGN
REMOVING SIGNS TYPE I
REMOVING SMALL SIGN SUPPORTS

SIGN

PAINE AVENUE

PAINE AVENUE

PAINE AVENUE

12 IN

CULTIVATED

CULTIVATED

110+95.00

Ⓐ PAVEMENT MARKING CROSSWALK EPOXY 6-INCH
Ⓑ PAVEMENT MARKING STOP LINE EPOXY 12-INCH
Ⓒ PAVEMENT MARKING CROSSWALK EPOXY 18-INCH 6 FT C-C

STOP ④
R1-1
30"X30"

NO MOTOR VEHICLES ③⑤
R5-3
24"X24"

PROJECT NO: 4996-01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	PERMANENT SIGNING AND PAVEMENT MARKINGS	SHEET	E

FILE NAME : L:\PROJECTS\11744\DWG\023201_PS.DWG PLOT DATE : 1/13/2015 10:09 AM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1:40_XREF

WISDOT/CADDS SHEET 42

2

2

N

S. TAYLOR DRIVE

EXISTING SIGN
MOVING SIGNS TYPE II
REMOVING SMALL SIGN SUPPORTS

117+00
118+00
119+00
120+00
121+00
122+00

122+55.00

116+75.00

36" W

CULTIVATED

CULTIVATED

CULTIVATED

CULTIVATED

PROJECT NO: 4996-01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	PERMANENT SIGNING AND PAVEMENT MARKING	SHEET	E

FILE NAME : L:\PROJECTS\11744\DWG\023201_PS.DWG PLOT DATE : 1/13/2015 10:10 AM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1:40_XREF

WISDOT/CADDS SHEET 42

2

S. TAYLOR DRIVE

S. TAYLOR DRIVE

123+00
124+00
125+00
126+00
127+00
128+00
CONCRETE
CONCRETE
ASPHALT
ASPHALT
128+35.00
122+55.00
CULTIVATED
CULTIVATED
CULTIVATED
48 IN
HSE
2425
BARN
SHED
GARAGE
IP

PROJECT NO: 4996-01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	PERMANENT SIGNING AND PAVEMENT MARKING	SHEET 39	E

FILE NAME : L:\PROJECTS\11744\DWG\023201_PS.DWG PLOT DATE : 1/13/2015 10:10 AM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1:40_XREF

WISDOT/CADDS SHEET 42

2

2

N

134+15.00

EXISTING SIGN
REMOVING SIGNS TYPE II
REMOVING SMALL SIGN SUPPORTS
R2-1, 35 MPH

EXISTING SIGN
REMOVING SIGNS TYPE II
REMOVING SMALL SIGN SUPPORTS
W3-3

S. TAYLOR DRIVE

S. TAYLOR DRIVE

129+00 130+00 131+00 132+00 133+00 134+00

CONCRETE CONCRETE CONCRETE

ASPHALT

E.O.P.

POST POST

12" CMP

CRUSHED

6 IN 12 IN 12 IN 24 IN 18 IN 10 IN 12 IN 18 IN 12 IN 18 IN

4 IN 4 IN

CULTIVATED CULTIVATED

SHED

HOUSE 2311

128+35.00

PROJECT NO: 4996-01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	PERMANENT SIGNING AND PAVEMENT MARKING	SHEET E

FILE NAME : L:\PROJECTS\11744\DWG\023201_PS.DWG PLOT DATE : 1/13/2015 10:11 AM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1:40_XREF

WISDOT/CADDS SHEET 42

2

2

EXISTING SIGN
MOVING SIGNS TYPE II
REMOVING SMALL SIGN SUPPORTS
NOTE: 14' POST

S. TAYLOR DRIVE

134+00 135+00 136+00 137+00 138+00 139+00 140+00

139+95.00

134+15.00

CONCRETE ROAD ASPHALT 4 IN (2) 8 IN CONCRETE ASPHALT 24 IN 8 IN CONCRETE ROAD ASPHALT 6 IN 6 IN CONCRETE ASPHALT 15 IN

HOUSE 2311

GARAGE

POST

HOUSE 2217

BUILDING 2137

SHED

N

PROJECT NO: 4996-01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	PERMANENT SIGNING AND PAVEMENT MARKING	SHEET E

FILE NAME : L:\PROJECTS\11744\DWG\023201_PS.DWG PLOT DATE : 1/13/2015 10:11 AM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1:40_XREF

2

2

S. TAYLOR DRIVE

S. TAYLOR DRIVE

140+00

141+00

142+00

143+00

144+00

145+00

146

145+75.00

139+95.00

EXISTING SIGN
REMOVING SIGNS TYPE II
REMOVING SMALL SIGN SUPPORTS
R2-1, 45 MPH

EXISTING SIGN

UNION AVENUE

BUILDING 2115

SHED

CONCRETE PAD

ASPHALT

CONCRETE

BUILDING 3114

(A) PAVEMENT MARKING CROSSWALK EPOXY 6-INCH
(B) PAVEMENT MARKING STOP LINE EPOXY 12-INCH
(C) PAVEMENT MARKING CROSSWALK EPOXY 18-INCH 6 FT C-C
(D) REMOVING PAVEMENT MARKING -STOP BARS
(E) PAVEMENT MARKING EPOXY 4-INCH
(F) PAVEMENT MARKING EPOXY 4-INCH W/SKIP DASH

NO MOTOR VEHICLES
R5-3
24"X24"
⑥ ⑦

PROJECT NO: 4996-01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	PERMANENT SIGNING AND PAVEMENT MARKING	SHEET 42	E

FILE NAME : L:\PROJECTS\11744\DWG\023201_PS.DWG PLOT DATE : 3/24/2015 9:11 AM PLOT BY : JUMP, KEVIN PLOT NAME : PLOT SCALE : 1:40_XREF

2

2

N

151+55.00

S. TAYLOR DRIVE

S. TAYLOR DRIVE

146+00

147+00

148+00

149+00

150+00

151+00

F

E

8

W7-5
STEEP GRADE AHEAD (8)

(E) PAVEMENT MARKING EPOXY 4-INCH
(F) PAVEMENT MARKING EPOXY 4-INCH W/SKIP DASH

145+75.00

4 IN

3 IN

3 IN

3 IN

4 IN

CONCRETE PAD

GARDEN

HSE 3062

HSE 3056

HSE 3050

BUILDING 3114

PROJECT NO: 4996-01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	PERMANENT SIGNING AND PAVEMENT MARKING	SHEET 43	E

FILE NAME : L:\PROJECTS\11744\DWG\023201_PS.DWG PLOT DATE : 1/13/2015 10:12 AM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1:40_XREF

WISDOT/CADDS SHEET 42

2

2

N

157+35.00

151+55.00

S. TAYLOR DRIVE

152+00 153+00 154+00 155+00 156+00 157+00

(F) (E)

EXISTING SIGN
REMOVING SIGNS TYPE II
REMOVING SMALL SIGN SUPPORTS
R2-1, 45 MPH

(E) PAVEMENT MARKING EPOXY 4-INCH
(F) PAVEMENT MARKING EPOXY 4-INCH W/SKIP DASH

4 IN
12 IN
4 IN

HSE 1832

HSE 1835

HSE 1700

MH

PROJECT NO: 4996-01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	PERMANENT SIGNING AND PAVEMENT MARKING	SHEET 44	E

2

2

N

S. TAYLOR DRIVE

S. TAYLOR DRIVE

EXISTING SIGN

158+00

159+00

160+00

161+00

162+00

163+00

163+15.00

157+35.00

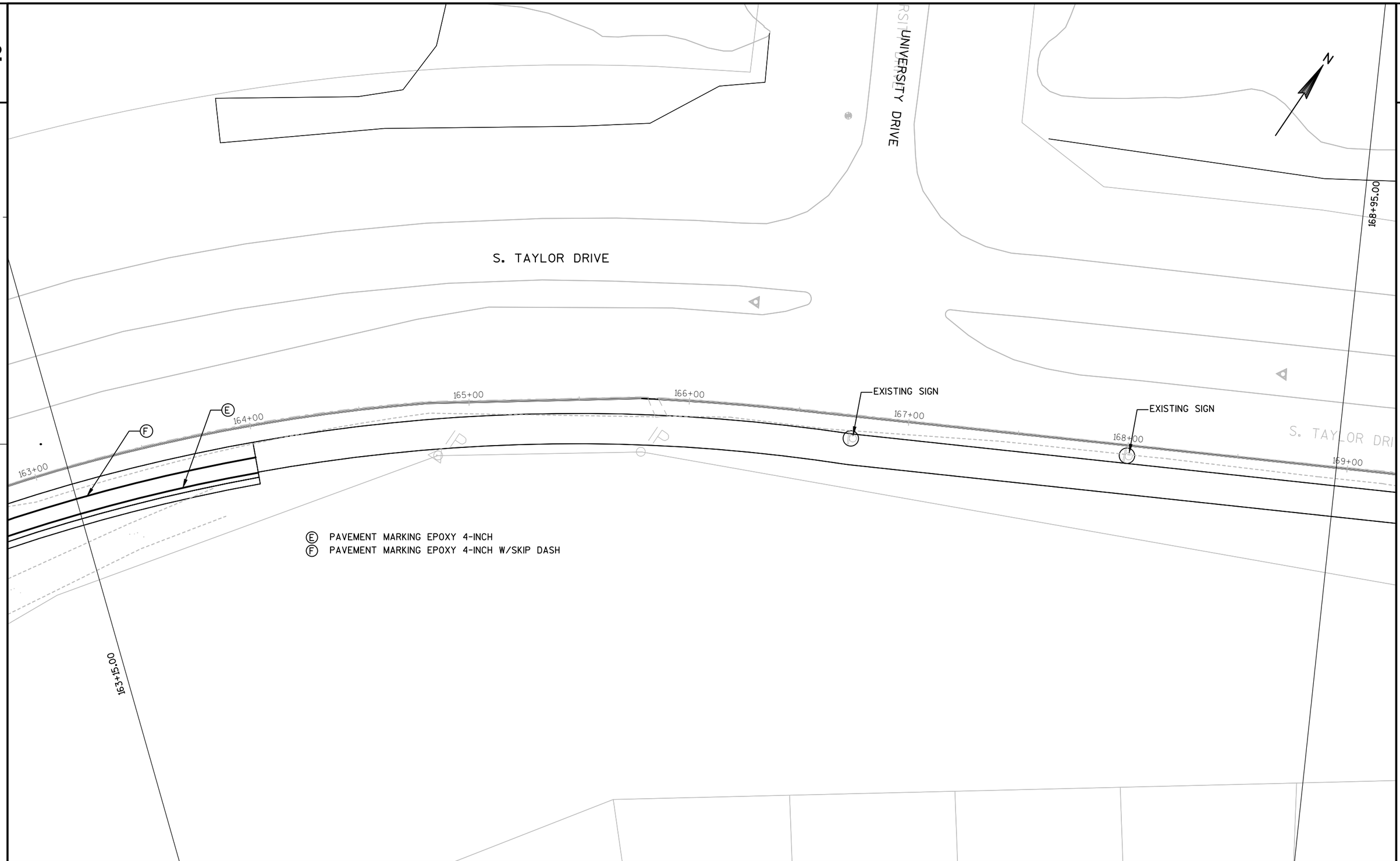
Ⓔ PAVEMENT MARKING EPOXY 4-INCH

Ⓕ PAVEMENT MARKING EPOXY 4-INCH W/SKIP DASH

PROJECT NO: 4996-01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	PERMANENT SIGNING AND PAVEMENT MARKING	SHEET 45	E

FILE NAME : L:\PROJECTS\11744\DWG\023201_PS.DWG PLOT DATE : 1/13/2015 10:13 AM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1:40_XREF

2



PROJECT NO: 4996-01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	PERMANENT SIGNING AND PAVEMENT MARKING	SHEET	E

FILE NAME : L:\PROJECTS\11744\DWG\023201_PS.DWG PLOT DATE : 1/13/2015 10:13 AM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1:40_XREF

2

2

S. TAYLOR DRIVE

S. TAYLOR DRIVE

169+00

170+00

171+00

172+00

173+00

174+00

175+00

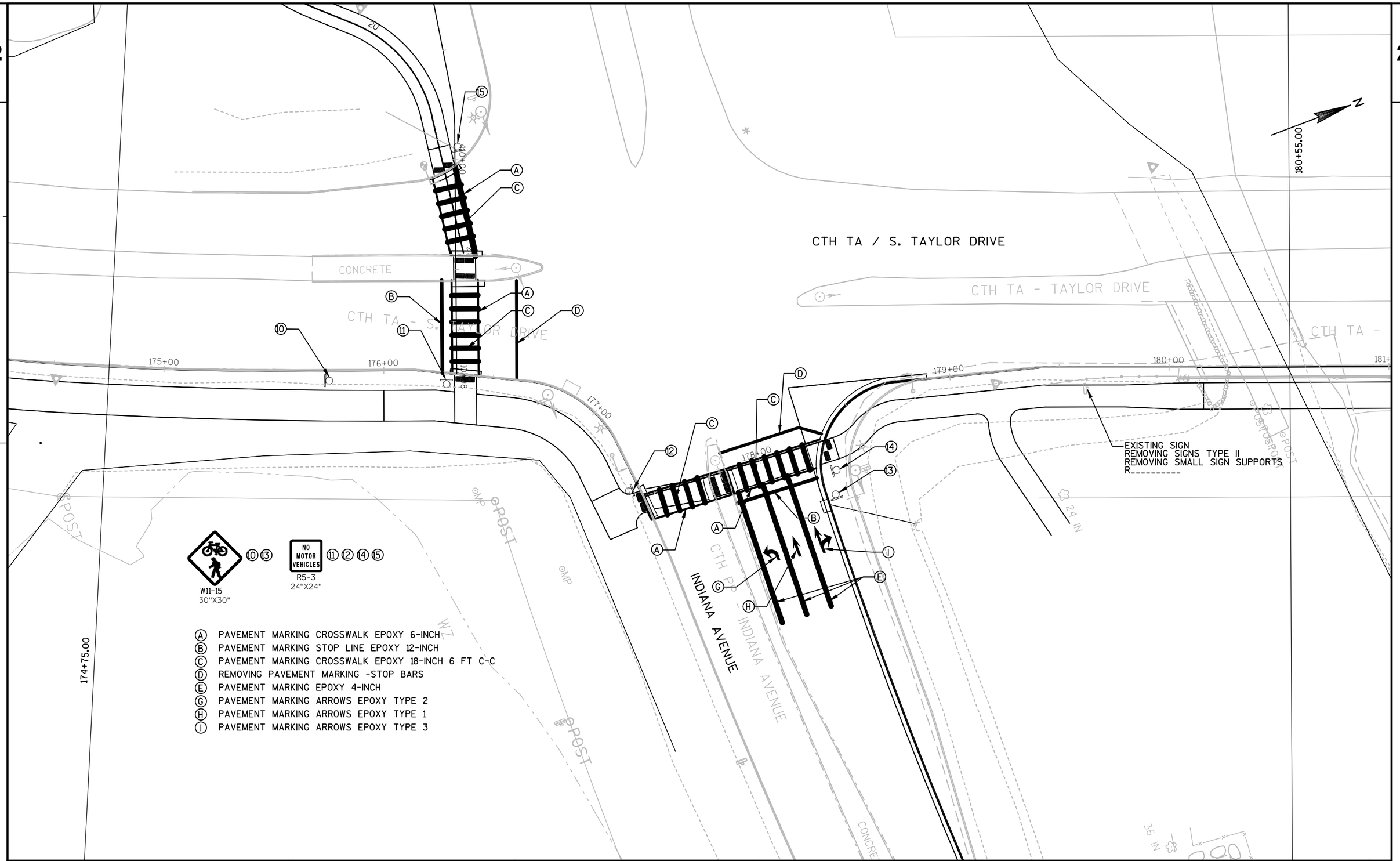
174+75.00

POST

PROJECT NO: 4996-01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	PERMANENT SIGNING AND PAVEMENT MARKING	SHEET 47	E

FILE NAME : L:\PROJECTS\11744\DWG\023201_PS.DWG PLOT DATE : 1/13/2015 10:14 AM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1:40_XREF

WISDOT/CADDS SHEET 42



PROJECT NO: 4996-01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	PERMANENT SIGNING AND PAVEMENT MARKING	SHEET 48 E

2

2

N

186+35.00

CTH TA - TAYLOR DRIVE

CTH TA - S. TAYLOR DRIVE

S. TAYLOR DRIVE

181+00

182+00

183+00

184+00

185+00

186+00

CONCRETE

ASPHALT

EXISTING SIGN

SHEBOYGAN RIVER

180+55.00

PROJECT NO: 4996-01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	PERMANENT SIGNING AND PAVEMENT MARKING	SHEET	E

FILE NAME : L:\PROJECTS\11744\DWG\023201_PS.DWG PLOT DATE : 1/13/2015 10:15 AM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1:40_XREF

WISDOT/CADDS SHEET 42

2

2

N

192+15.00

S. TAYLOR DRIVE

TAYLOR DRIVE

187+00

188+00

189+00

CONCRETE

190+00

191+00

192+00

EXISTING SIGN
TO BE REMOVED BY OWNER

UNION PACIFIC RAILROAD

UNION PACIFIC RAILROAD

18 IN

186+35.00

PROJECT NO: 4996-01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	PERMANENT SIGNING AND PAVEMENT MARKING	SHEET	E

FILE NAME : L:\PROJECTS\11744\DWG\023201_PS.DWG PLOT DATE : 1/13/2015 10:15 AM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1:40_XREF

WISDOT/CADDS SHEET 42

2

2

S. TAYLOR DRIVE

192+00

193+00

194+00

195+00

196+00

197+00

197+95.00

192+15.00

CTH TA - S. TAYLOR DRIVE

CONCRETE

ASPHALT PARKING LOT

NEW JERSEY AVENUE

MH

N

NO MOTOR VEHICLES
R5-3
24"X24"
16 18

W11-15
30"X30"
17

16 A C 18 D B 17

Ⓐ PAVEMENT MARKING CROSSWALK EPOXY 6-INCH
Ⓑ PAVEMENT MARKING STOP LINE EPOXY 12-INCH
Ⓒ PAVEMENT MARKING CROSSWALK EPOXY 18-INCH 6 FT C-C
Ⓓ REMOVING PAVEMENT MARKING -STOP BARS

PROJECT NO: 4996-01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	PERMANENT SIGNING AND PAVEMENT MARKING	SHEET E

FILE NAME : L:\PROJECTS\11744\DWG\023201_PS.DWG PLOT DATE : 1/13/2015 10:16 AM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1:40_XREF

2

2

S. TAYLOR DRIVE

CTH TA - S. TAYLOR DRIVE

N

198+00

199+00

200+00

201+00

202+00

203+00

203+75.00

204+00

197+95.00

EXISTING SIGN

FRONTAGE ROAD

E. TAYLOR DRIVE

ASPHALT PARKING LOT

BUILDING

ASPHALT

19 d

20 21 d

24 d

22 23 d

27 d

25 26 d

29 d

19 20 22 27 D11-1 BIKE ROUTE 24"X18"

28 M6-1 21"X21"

21 M5-1L 21"X21"

25 W11-1 30"X30"

23 M5-1R 21"X21"

26 SHARE THE ROAD W16-1P 24"X30"

24 NO MOTOR VEHICLES R5-3 24"X24"

29 R4-11 MAY USE FULL LANE

PROJECT NO: 4996-01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	PERMANENT SIGNING AND PAVEMENT MARKING	SHEET E

FILE NAME : L:\PROJECTS\11744\DWG\023201_PS.DWG PLOT DATE : 1/13/2015 10:16 AM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1:40_XREF

WISDOT/CADDS SHEET 42

2

2

S. TAYLOR DRIVE

CTH TA - S. TAYLOR DRIVE

EXISTING SIGN

SIGN

205+00

206+00

207+00

208+00

209+00

209+55.00

EXISTING SIGN

E. TAYLOR DRIVE FRONTAGE ROAD

E. TAYLOR DRIVE FRONTAGE ROAD

204+00

203+75.00

ASPHALT

CONCRETE

ASPHALT

ASPHALT PARKING LOT

ASPHALT PARKING LOT

BUILDING 725

BUILDING 729

BUILDING 733

BUILDING 737

MH

N

PROJECT NO: 4996-01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	PERMANENT SIGNING AND PAVEMENT MARKING	SHEET	E

FILE NAME : L:\PROJECTS\11744\DWG\023201_PS.DWG PLOT DATE : 1/13/2015 10:17 AM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1:40_XREF

WISDOT/CADDS SHEET 42

2

S. TAYLOR DRIVE

EXISTING SIGN

EXISTING SIGN

EXISTING SIGN

EXISTING STOP SIGN
MOVING SIGN TYPE II
MOVING SMALL SIGN POSTS

TAYLOR HEIGHTS
FRONTAGE ROAD

EXISTING SIGN
REMOVE SIGN TYPE II
REMOVE SMALL SIGN POSTS

W11-15
30"X30"

AHEAD
W16-9P
24"X8"

W16-7L
24"X12"

R4-11
MAY USE FULL LANE

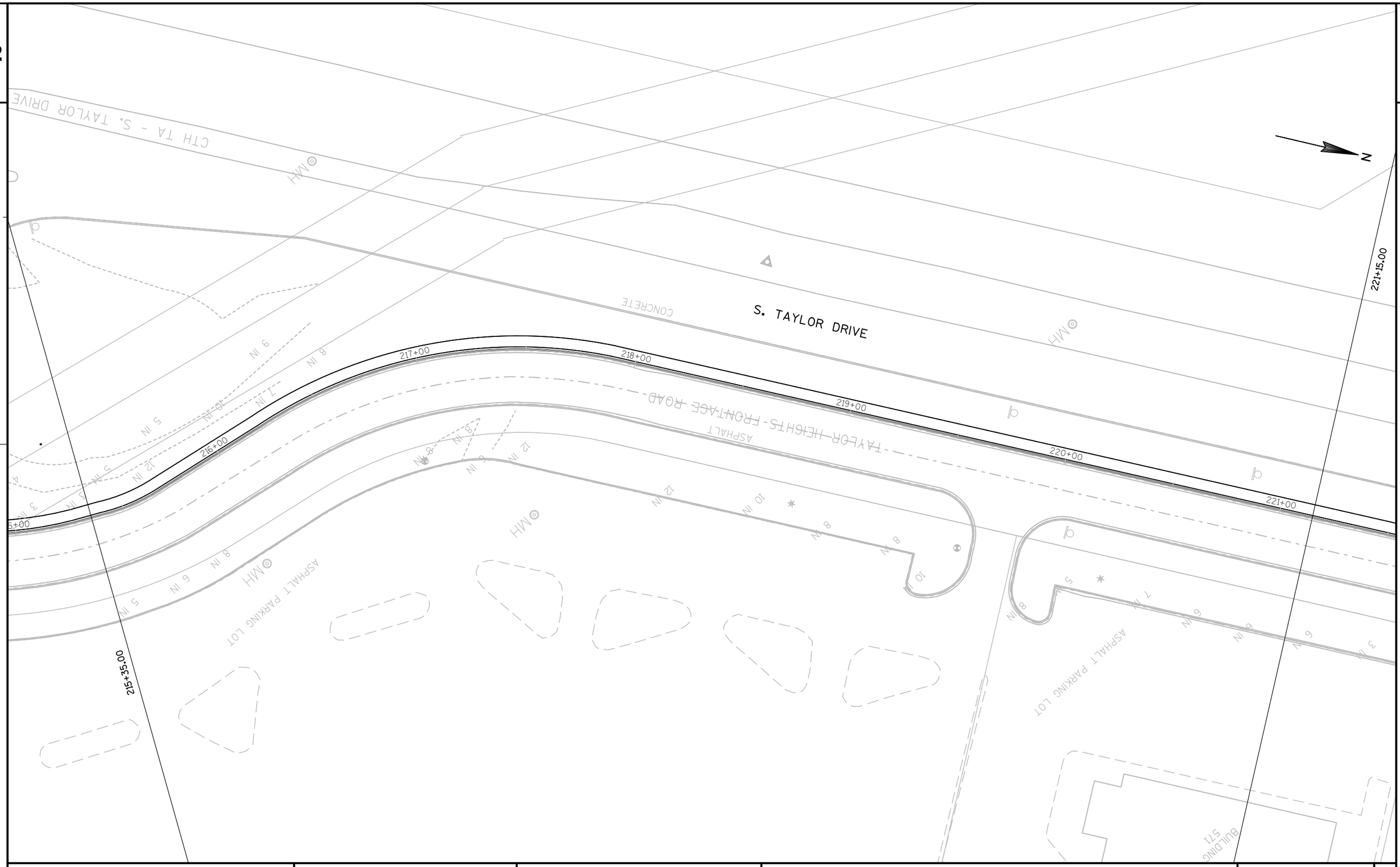
(A) PAVEMENT MARKING CROSSWALK EPOXY 6-INCH
(C) PAVEMENT MARKING CROSSWALK EPOXY 18-INCH 6 FT C-C

PROJECT NO: 4996-01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	PERMANENT SIGNING AND PAVEMENT MARKING	SHEET	E

FILE NAME : L:\PROJECTS\11744\DWG\023201_PS.DWG PLOT DATE : 1/13/2015 10:17 AM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1:40_XREF

WISDOT/CADDS SHEET 42

2



PROJECT NO: 4996-01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	PERMANENT SIGNING AND PAVEMENT MARKING	SHEET	E

FILE NAME : L:\PROJECTS\11744\DWG\023201_PS.DWG PLOT DATE : 1/13/2015 10:18 AM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1:40_XREF

2

2

S. TAYLOR DRIVE

EXISTING SIGN
REMOVING SIGNS TYPE II
REMOVING SMALL SIGN SUPPORTS

38 39 40 41 42 43 44 49 50 51 52 53 54 55

221+00 222+00 223+00 224+00 225+00 226+00

226+95.00

221+15.00

45 46 47 48

EXISTING SIGN

R4-11
MAY USE FULL LANE 38 39

BIKE ROUTE
D11-1
24"X18"
40 41 43 45

M5-1R
21"X21"
42

M5-1L
21"X21"
44 46

W11-15
30"X30"
47 50 54

W16-7L
24"X12"
48 51

NO MOTOR VEHICLES
R5-3
24"X24"
49

W11-1
30"X30"
52

SHARE THE ROAD
W16-1P
24"X30"
53

AHEAD
W16-9P
24"X8"
55

(A) PAVEMENT MARKING CROSSWALK EPOXY 6-INCH
(C) PAVEMENT MARKING CROSSWALK EPOXY 18-INCH 6 FT C-C

PROJECT NO: 4996-01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	PERMANENT SIGNING AND PAVEMENT MARKING	SHEET E

FILE NAME : L:\PROJECTS\11744\DWG\023201_PS.DWG PLOT DATE : 1/13/2015 10:18 AM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1:40_XREF
WISDOT/CADDS SHEET 42

2

N. TAYLOR DRIVE

EXISTING SIGN
MOVING SIGNS TYPE II
REMOVING SMALL SIGN SUPPORTS

EXISTING SIGN

EXISTING SIGN
MOVING SIGNS TYPE II
REMOVING SMALL SIGN SUPPORTS

EXISTING SIGN

EXISTING SIGN

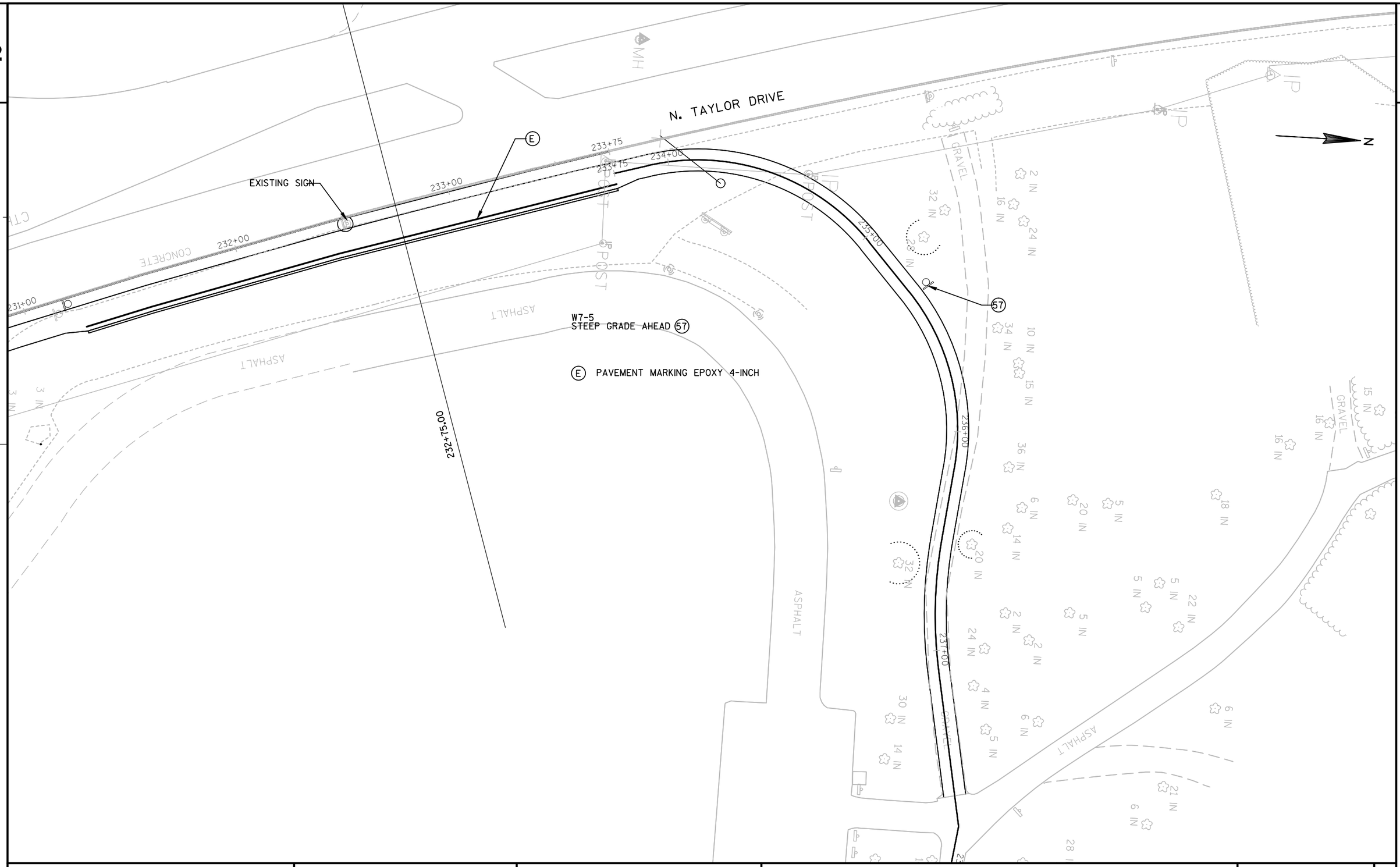
NO MOTOR VEHICLES (56)
R5-3
24"X24"

(A) PAVEMENT MARKING CROSSWALK EPOXY 6-INCH
(B) PAVEMENT MARKING STOP LINE EPOXY 12-INCH
(C) PAVEMENT MARKING CROSSWALK EPOXY 18-INCH 6 FT C-C
(E) PAVEMENT MARKING EPOXY 4-INCH

ERIE AVENUE

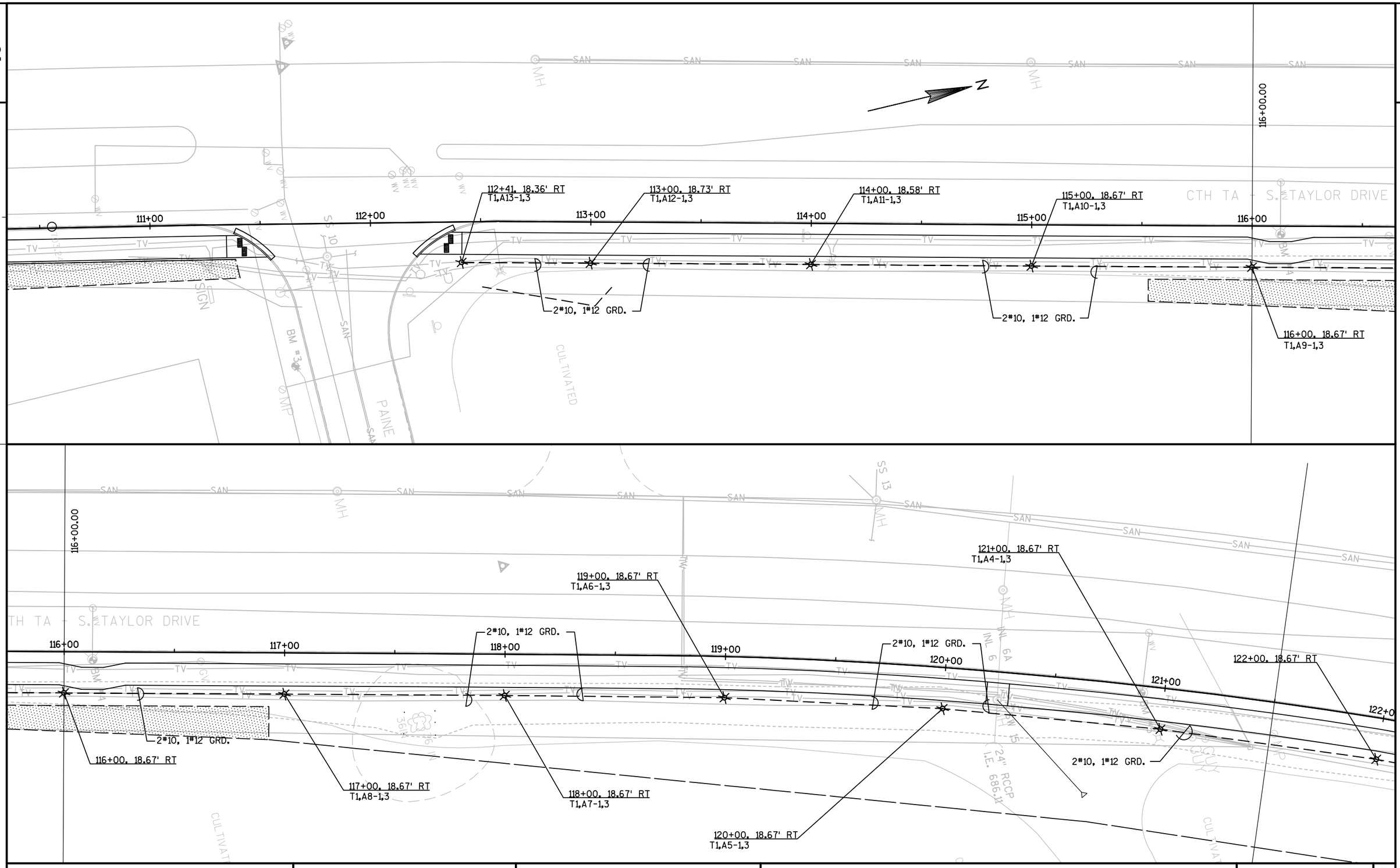
PROJECT NO: 4996-01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	PERMANENT SIGNING AND PAVEMENT MARKING	SHEET 57	E

2

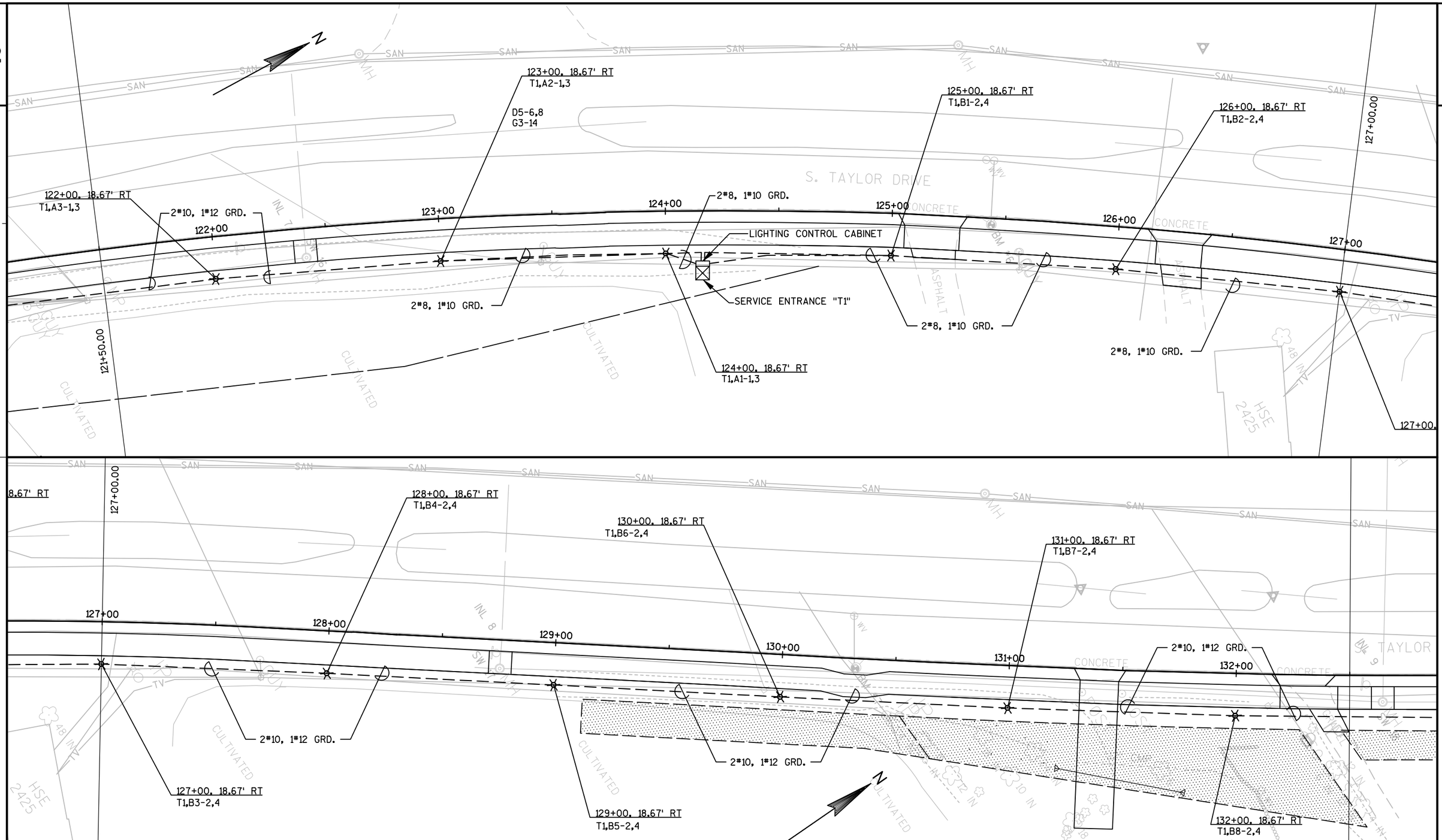


PROJECT NO: 4996-01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	PERMANENT SIGNING AND PAVEMENT MARKING	SHEET 58	E

2



PROJECT NO: 4996-01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	LIGHTING PLANS	SHEET 59	E



PROJECT NO: 4996-01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	LIGHTING PLANS	SHEET 60	E

2

2

133+00. 18.67' RT
T1,B9-2,4

134+00. 18.67' RT
T1,B10-2,4

135+00. 18.67' RT
T1,B11-2,4

136+00. 18.67' RT
T1,B12-2,4

136+85. 18.65' RT
T1,B13-2,4

138+00. 18.67' RT
T2,A10-1,3

139+00. 18.67' RT
T2,A9-1,3

140+00. 18.67' RT
T2,A8-1,3

141+00. 18.67' RT
T2,A7-1,3

141+68. 37.85' RT
T2,A6-1,3

143+20. 38.75' RT
T2,A5-1,3

PROJECT NO: 4996-01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	LIGHTING PLANS	SHEET 61 E

2

144+10, 23.67' RT
T2,A4-1,3

2*12, 1*12 GRD.

144+00

145+00

146+00

147+00

148+00

149+00

2*8, 1*10 GRD.

147+90, 4.27' RT
T2,B1-2,4

2*8, 1*10 GRD.

149+00.00

S. TAYLOR DRIVE

SW 25 RM 1*10 INL 13

SW 26 RM 1*11 INL 16

2*10, 1*12 GRD.

LIGHTING CONTROL CABINET
SERVICE ENTRANCE "T2"

143+50.00

143+20, 38.75' RT

145+10, 23.67' RT
T2,A3-1,3

146+10, 23.67' RT
T2,A2-1,3

147+10, 23.67' RT
T2,A1-1,3

148+90, 4.27' RT
T2,B2-2,4

CONCRETE PAD

4.27' RT

149+00.00

149+90, 4.27' RT
T2,B3-2,4

SW 27 RM 1*12 INL 15

152+90, 4.27' RT
T2,B6-2,4

2*8, 1*10 GRD.

154+00

153+00

152+00

151+00

150+00

149+00

2*8, 1*10 GRD.

153+90, 4.27' RT
T2,B7-2,4

151+90, 4.98' RT
T2,B5-2,4

150+90, 4.27' RT
T2,B4-2,4

N

GARDEN

CONCRETE

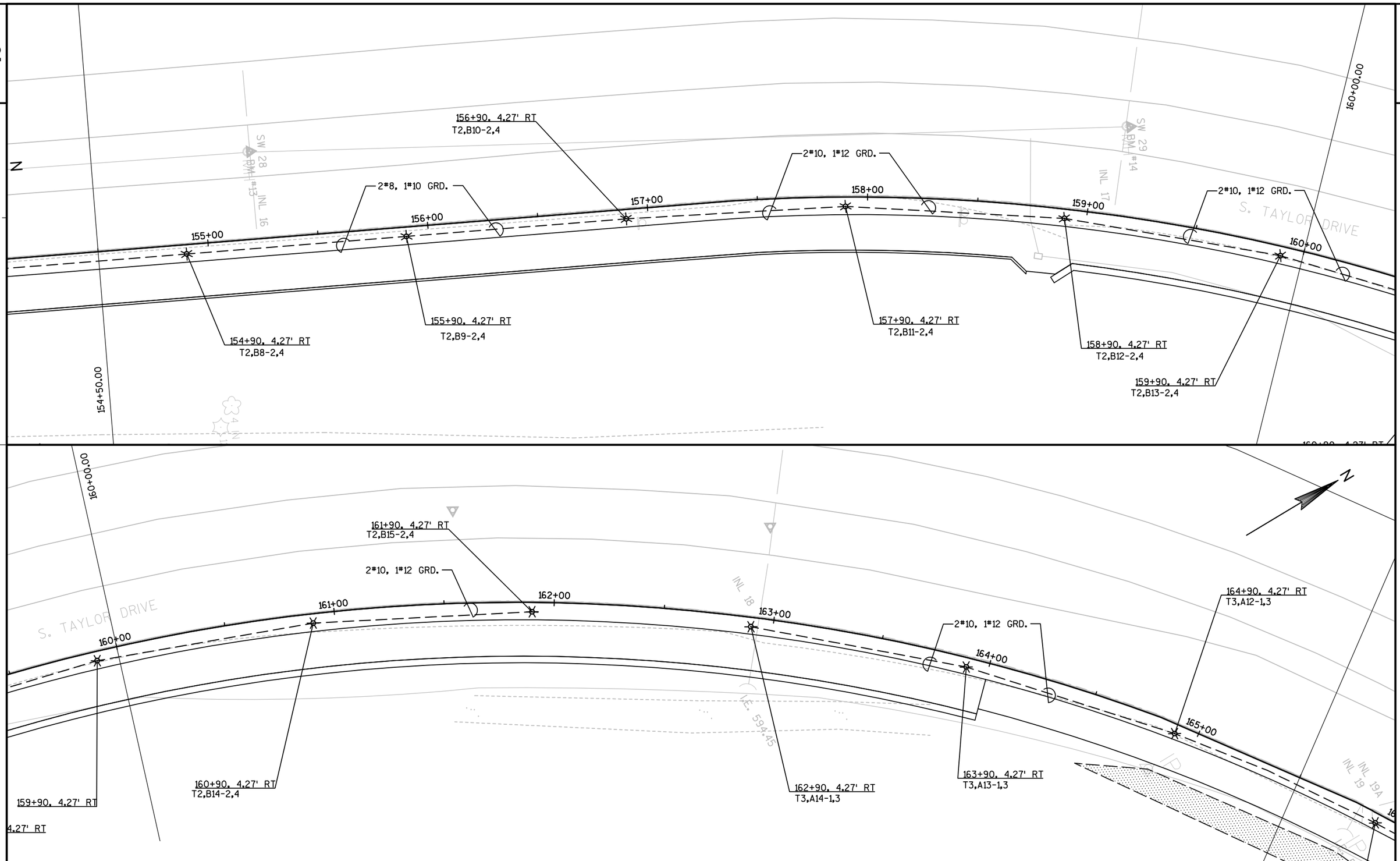
TV

PROJECT NO: 4996-01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	LIGHTING PLANS	SHEET 62	E

FILE NAME : L:\PROJECTS\11744\DWG\023501_LP.DWG
LAYOUT NAME - 023501_LP - 023504

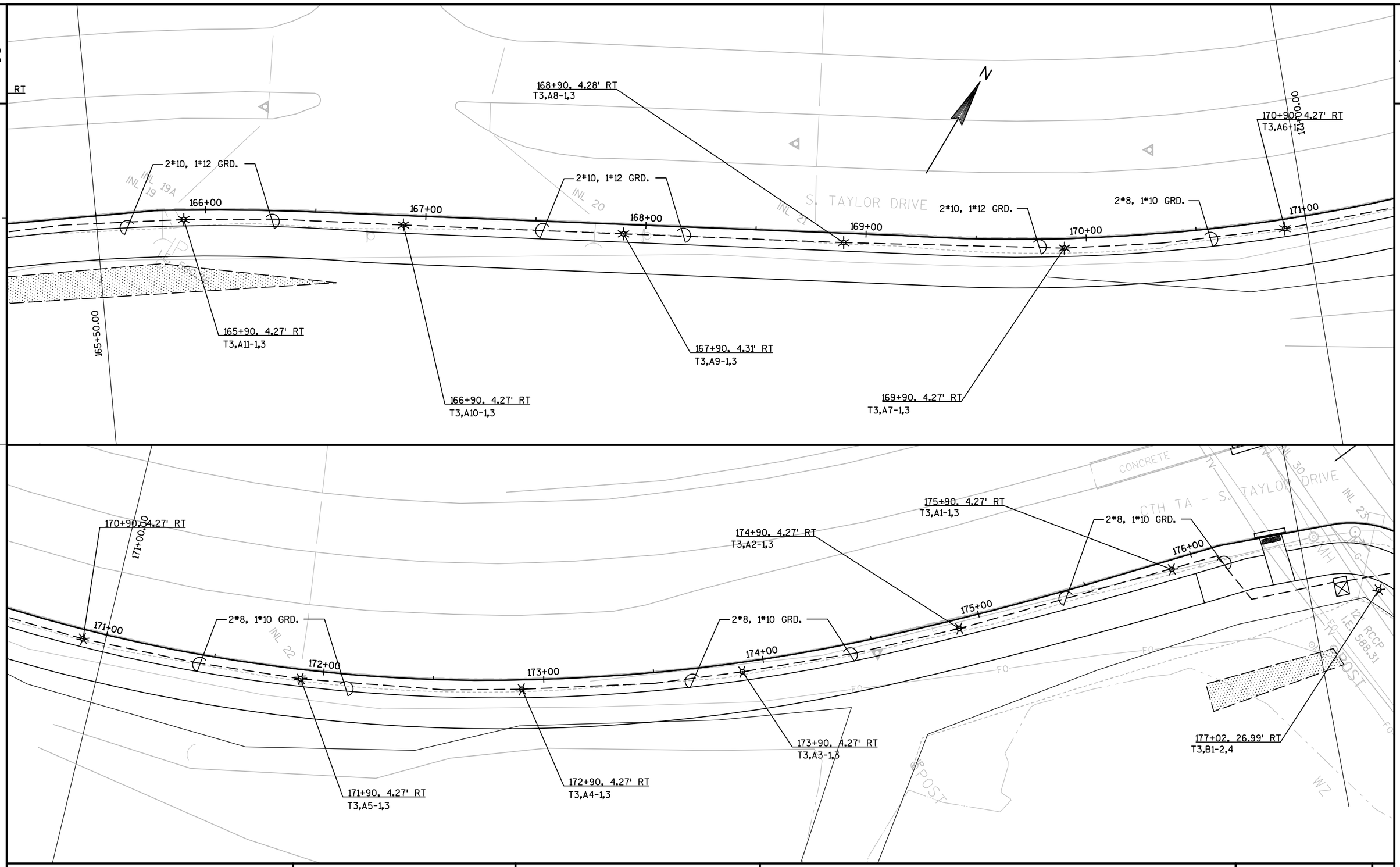
PLOT DATE : 1/13/2015 10:36 AM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1" = 40'_XREF

WISDOT/CADDS SHEET 44

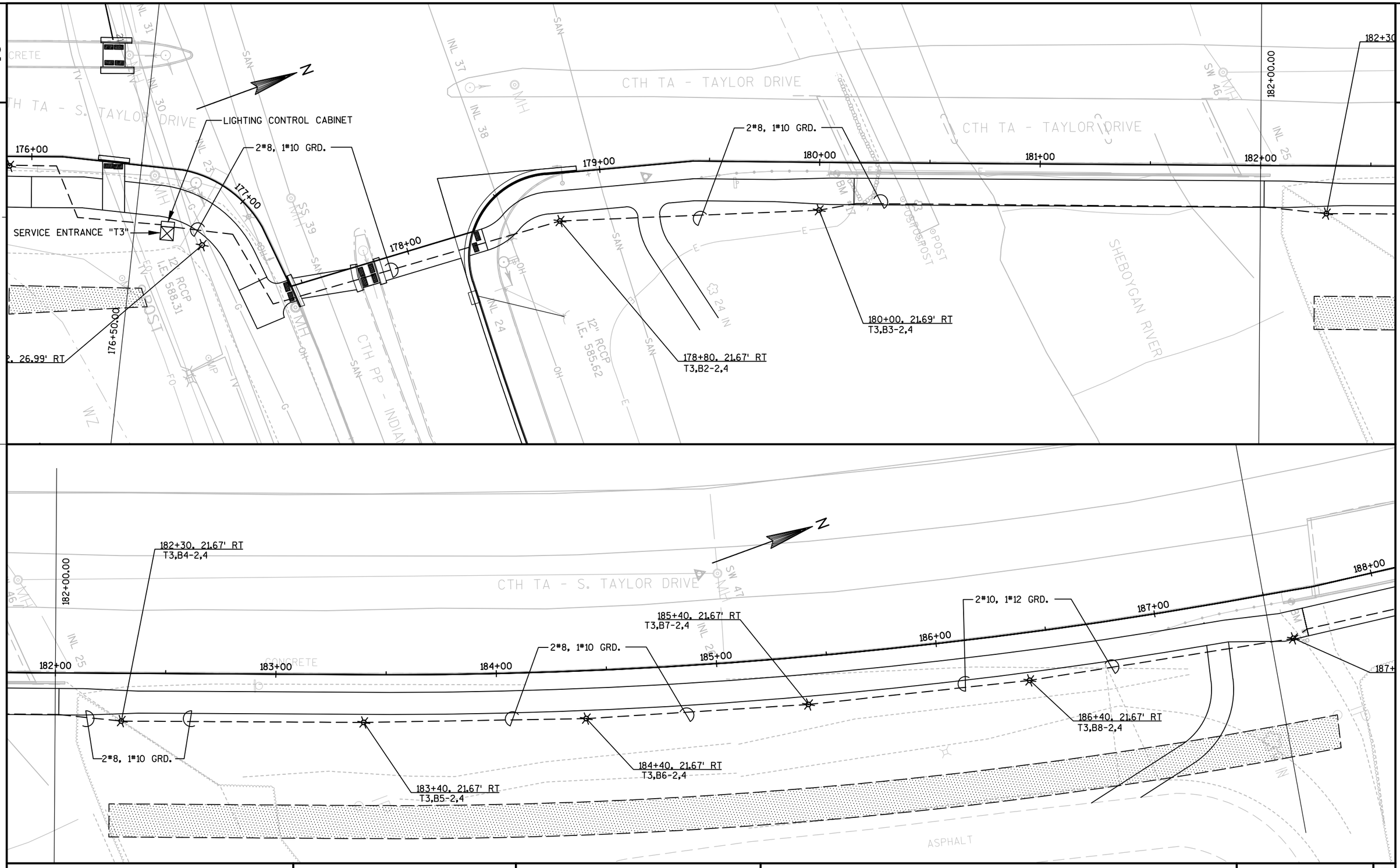


PROJECT NO: 4996-01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	LIGHTING PLANS	SHEET 63	E

FILE NAME : L:\PROJECTS\11744\DWG\023501_LP.DWG
LAYOUT NAME - 023501_LP - 023505
PLOT DATE : 1/13/2015 10:36 AM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1" = 40'_XREF
WISDOT/CADDS SHEET 44



PROJECT NO: 4996-01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	LIGHTING PLANS	SHEET 64	E



PROJECT NO: 4996-01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	LIGHTING PLANS	SHEET 65	E

2

CTH TA - TAYLOR DRIVE

188+00

189+00

190+00

191+00

192+00

193+00

2*10, 1*12 GRD.

2*10, 1*12 GRD.

187+60, 21.67' RT
T3,B9-2,4

189+30, 21.67' RT
T3,B10-2,4

190+70, 21.75' RT
T3,B11-2,4

191+80, 21.67' RT
T3,B12-2,4

192+80, 21.67' RT
T3,B13-2,4

187+50.00

UNION PACIFIC

CONCRETE

ASPHALT

GRAVEL

N

SERVICE ENTRANCE "T4"

236+50, 8.67' LT
T4,B1-2,4

236

237

238

LIGHTING CONTROL CABINET

2*12, 1*12 GRD.

2*12, 1*12 GRD.

235+50, 8.60' LT
T4,A1-1,3

235

2*12, 1*12 GRD.

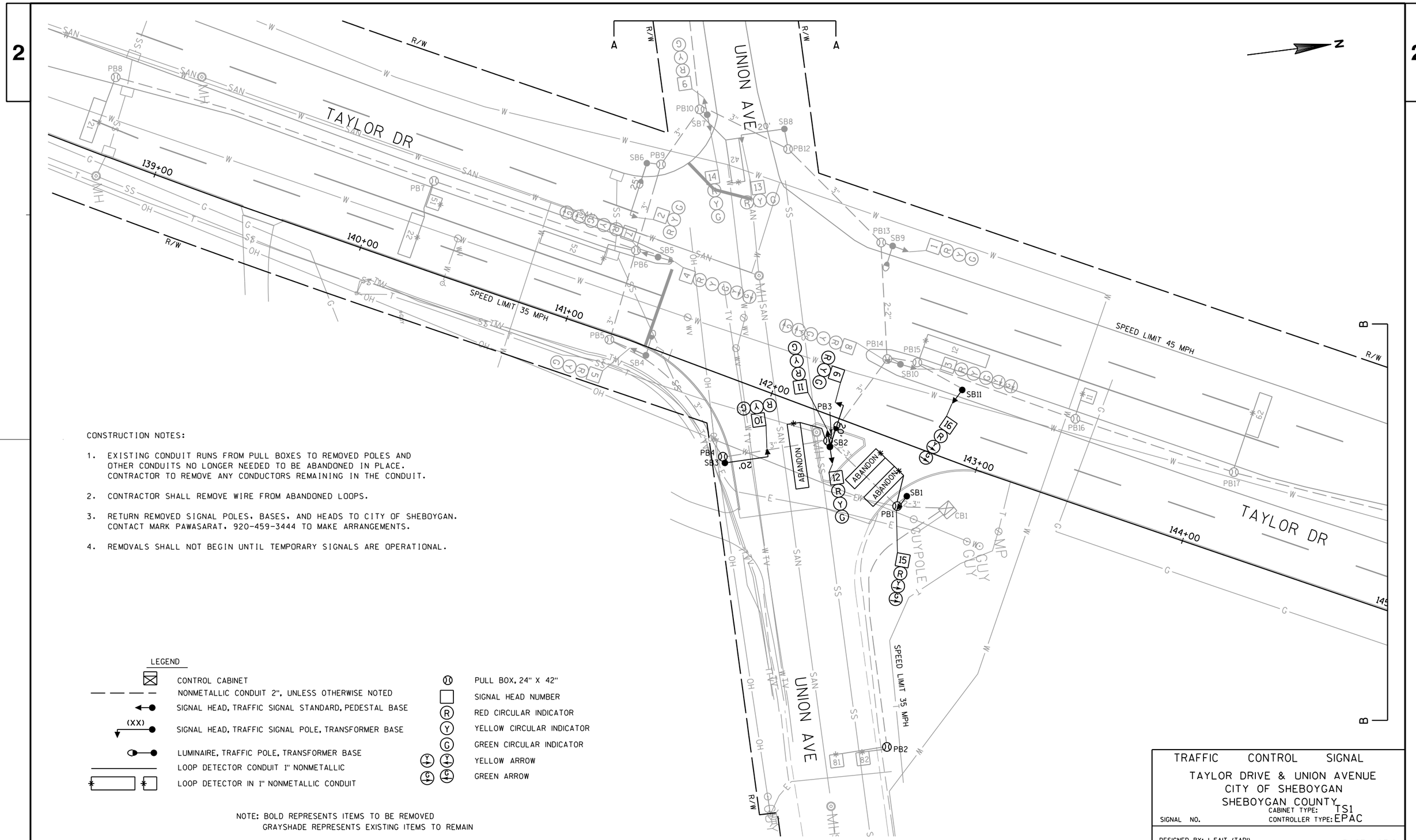
237+50, 8.77' LT
T4,B2-2,4

234+50, 8.59' LT
T4,A2-1,3

PROJECT NO: 4996-01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	LIGHTING PLANS	SHEET 66	E

FILE NAME : L:\PROJECTS\11744\DWG\023501_LP.DWG
LAYOUT NAME - 023501_LP - 023508

PLOT DATE : 1/13/2015 10:38 AM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1" = 40'_XREF



CONSTRUCTION NOTES:

1. EXISTING CONDUIT RUNS FROM PULL BOXES TO REMOVED POLES AND OTHER CONDUITS NO LONGER NEEDED TO BE ABANDONED IN PLACE. CONTRACTOR TO REMOVE ANY CONDUCTORS REMAINING IN THE CONDUIT.
2. CONTRACTOR SHALL REMOVE WIRE FROM ABANDONED LOOPS.
3. RETURN REMOVED SIGNAL POLES, BASES, AND HEADS TO CITY OF SHEBOYGAN. CONTACT MARK PAWASARAT, 920-459-3444 TO MAKE ARRANGEMENTS.
4. REMOVALS SHALL NOT BEGIN UNTIL TEMPORARY SIGNALS ARE OPERATIONAL.

LEGEND

- CONTROL CABINET
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
- (XX) SIGNAL HEAD, TRAFFIC SIGNAL POLE, TRANSFORMER BASE
- LUMINAIRE, TRAFFIC POLE, TRANSFORMER BASE
- LOOP DETECTOR CONDUIT 1" NONMETALLIC
- LOOP DETECTOR IN 1" NONMETALLIC CONDUIT
- PULL BOX, 24" X 42"
- SIGNAL HEAD NUMBER
- R RED CIRCULAR INDICATOR
- Y YELLOW CIRCULAR INDICATOR
- G GREEN CIRCULAR INDICATOR
- Y Y YELLOW ARROW
- G G GREEN ARROW

NOTE: BOLD REPRESENTS ITEMS TO BE REMOVED
GRAYSHADE REPRESENTS EXISTING ITEMS TO REMAIN

TRAFFIC CONTROL SIGNAL

TAYLOR DRIVE & UNION AVENUE
CITY OF SHEBOYGAN
SHEBOYGAN COUNTY

SIGNAL NO. CABINET TYPE: TS1
CONTROLLER TYPE: EPAC

DESIGNED BY: J. FAIT (TADI)
REVISED BY:

PAGE 1 OF 2

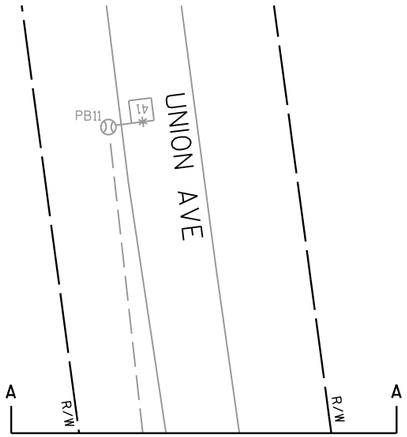
PROJECT NO: 4996-01-57	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	TRAFFIC SIGNAL REMOVAL PLAN	SHEET 67	E

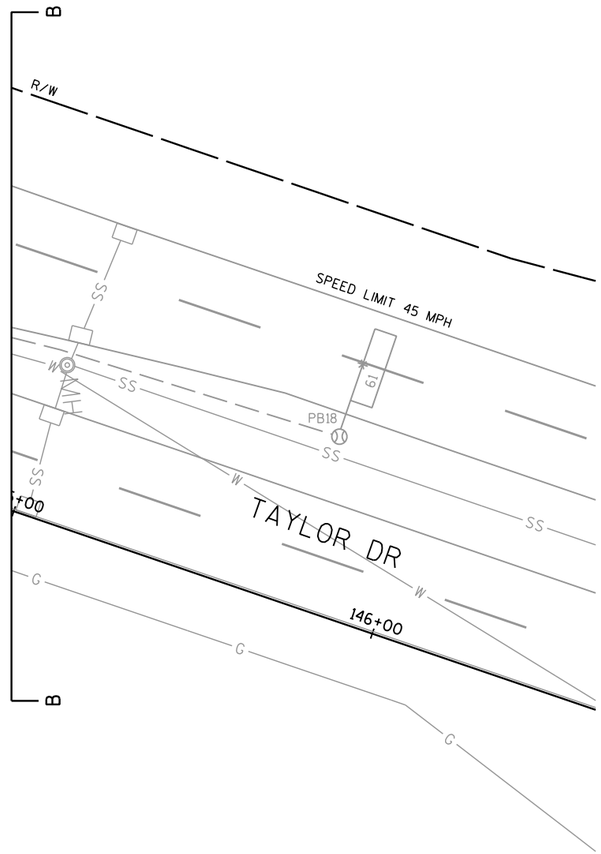
FILE NAME : Removals.dgn PLOT DATE : 3/21/2015 PLOT BY : JFAIT-TADI PLOT NAME : PLOT SCALE : 40.0000 ' / in.

WISDOT/CADDS SHEET 42

2

N





TRAFFIC CONTROL SIGNAL

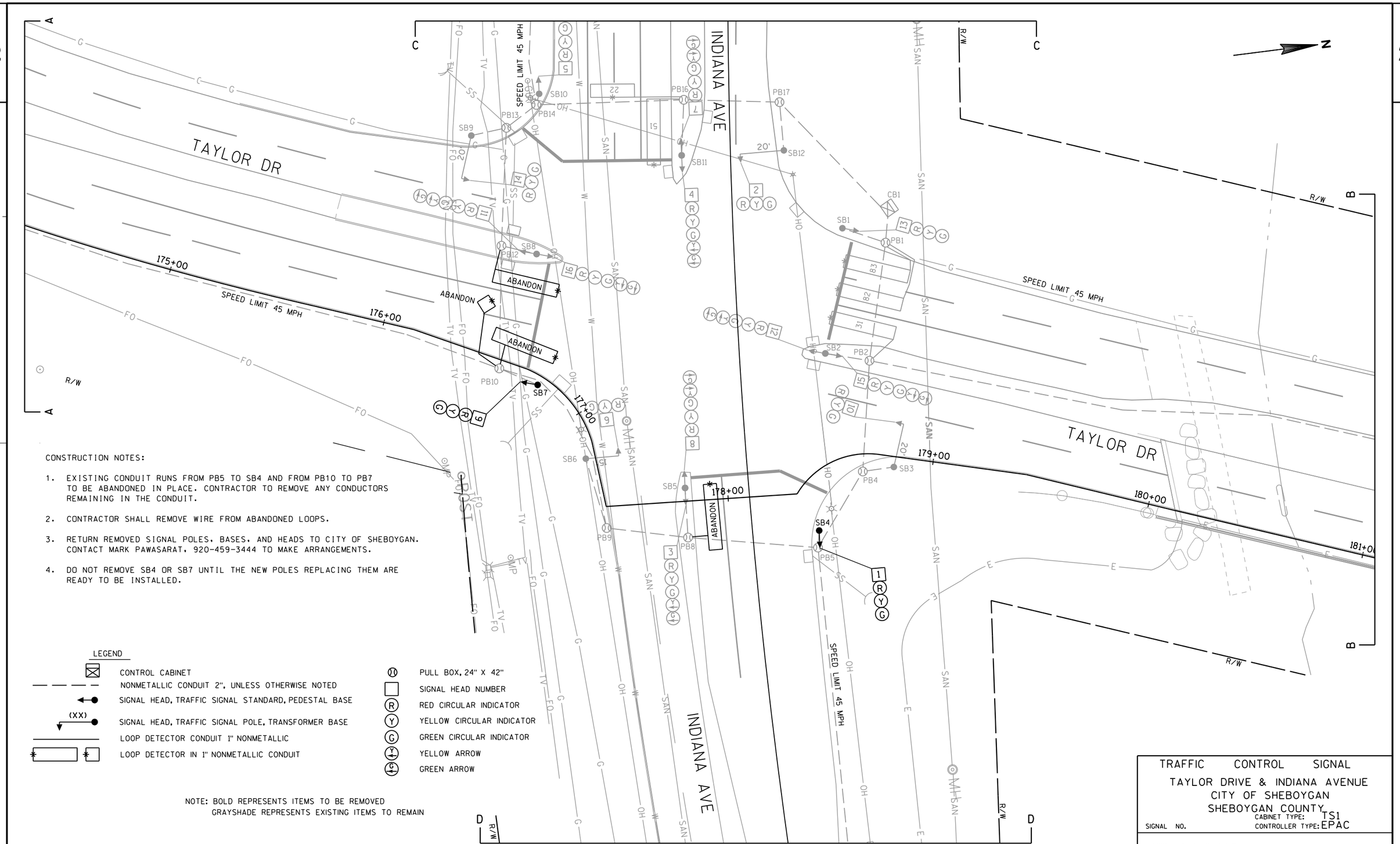
TAYLOR DRIVE & UNION AVENUE
CITY OF SHEBOYGAN
SHEBOYGAN COUNTY

SIGNAL NO.

DESIGNED BY: J. FAIT (TADI)
REVISED BY:

PAGE 2 OF 2

PROJECT NO: 4996-01-57	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	TRAFFIC SIGNAL REMOVAL PLAN	SHEET 68	E



CONSTRUCTION NOTES:

1. EXISTING CONDUIT RUNS FROM PB5 TO SB4 AND FROM PB10 TO PB7 TO BE ABANDONED IN PLACE. CONTRACTOR TO REMOVE ANY CONDUCTORS REMAINING IN THE CONDUIT.
2. CONTRACTOR SHALL REMOVE WIRE FROM ABANDONED LOOPS.
3. RETURN REMOVED SIGNAL POLES, BASES, AND HEADS TO CITY OF SHEBOYGAN. CONTACT MARK PAWASARAT, 920-459-3444 TO MAKE ARRANGEMENTS.
4. DO NOT REMOVE SB4 OR SB7 UNTIL THE NEW POLES REPLACING THEM ARE READY TO BE INSTALLED.

LEGEND

- CONTROL CABINET
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
- (XX) SIGNAL HEAD, TRAFFIC SIGNAL POLE, TRANSFORMER BASE
- LOOP DETECTOR CONDUIT 1" NONMETALLIC
- LOOP DETECTOR IN 1" NONMETALLIC CONDUIT
- PULL BOX, 24" X 42"
- SIGNAL HEAD NUMBER
- (R) RED CIRCULAR INDICATOR
- (Y) YELLOW CIRCULAR INDICATOR
- (G) GREEN CIRCULAR INDICATOR
- YELLOW ARROW
- GREEN ARROW

NOTE: BOLD REPRESENTS ITEMS TO BE REMOVED
GRAYSHADE REPRESENTS EXISTING ITEMS TO REMAIN

TRAFFIC CONTROL SIGNAL
TAYLOR DRIVE & INDIANA AVENUE
CITY OF SHEBOYGAN
SHEBOYGAN COUNTY
SIGNAL NO. CABINET TYPE: TS1
CONTROLLER TYPE: EPAC

DESIGNED BY: J. FAIT (TADI)
REVISED BY:

PAGE 1 OF 3

PROJECT NO: 4996-01-57	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	TRAFFIC SIGNAL REMOVAL PLAN	SHEET 69	E

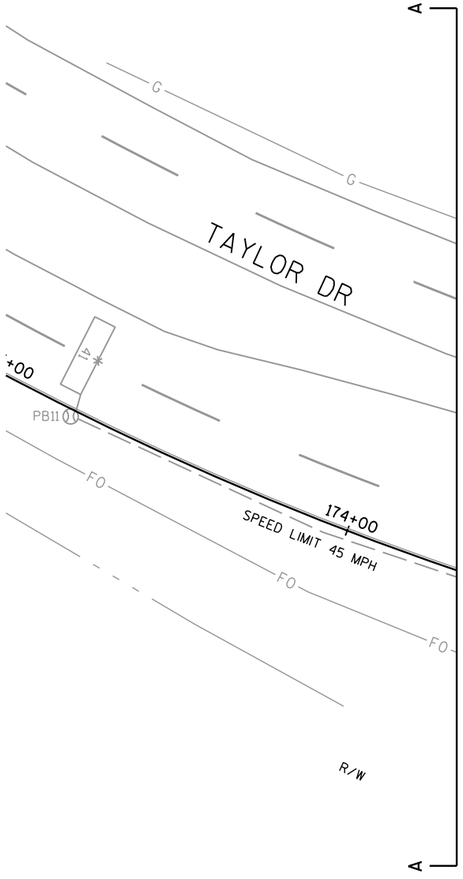
FILE NAME : Removals.dgn PLOT DATE : 3/21/2015 PLOT BY : JFAIT-TADI PLOT NAME : PLOT SCALE : 40.0000 ' / in.

WISDOT/CADDS SHEET 42

2

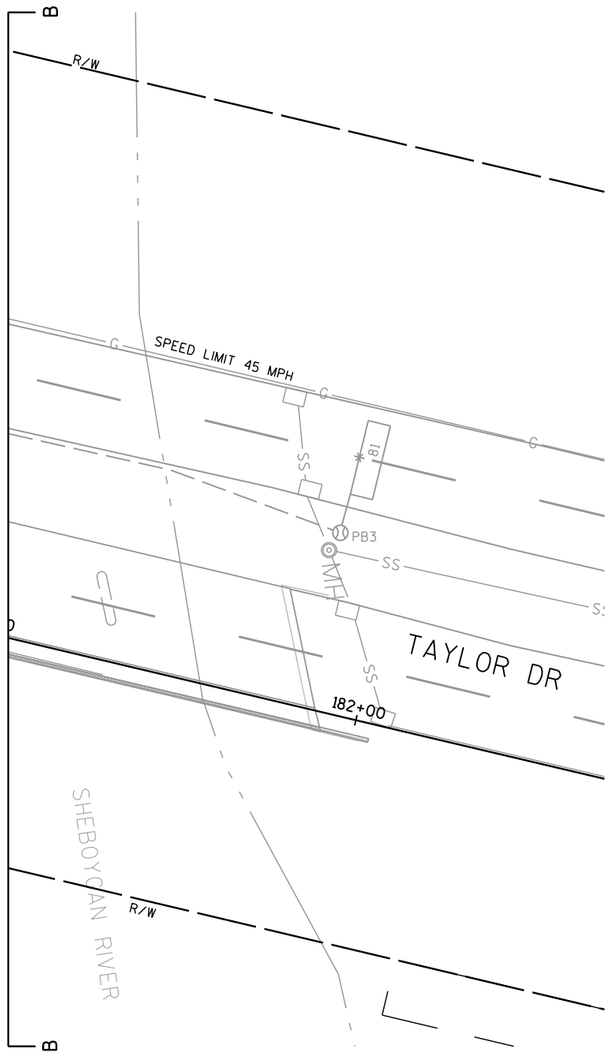
N

A



A

B



B

TRAFFIC CONTROL SIGNAL

TAYLOR DRIVE & INDIANA AVENUE
CITY OF SHEBOYGAN
SHEBOYGAN COUNTY

SIGNAL NO.

DESIGNED BY: J. FAIT (TADI)
REVISED BY:

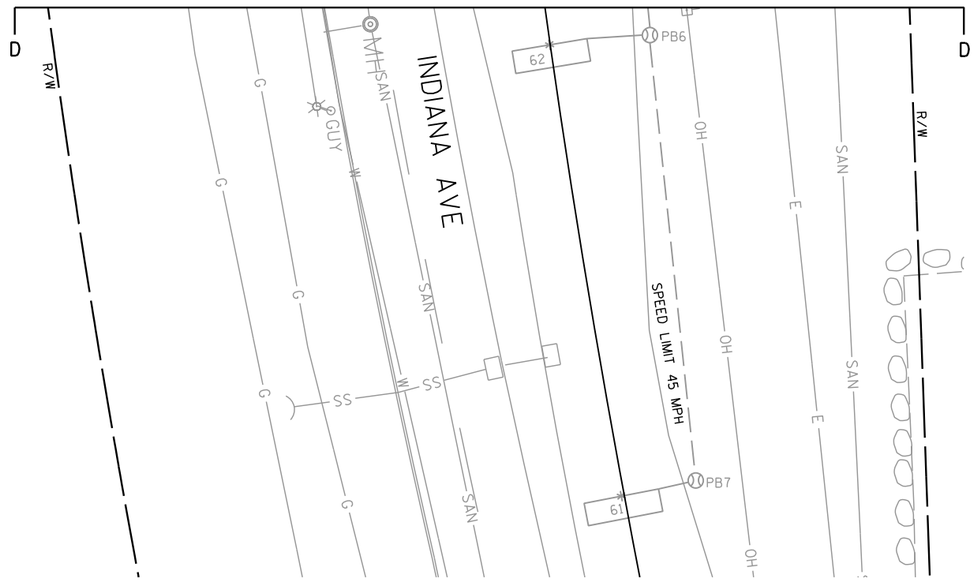
PAGE 2 OF 3

PROJECT NO: 4996-01-57	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	TRAFFIC SIGNAL REMOVAL PLAN	SHEET 70	E

2

N





TRAFFIC CONTROL SIGNAL

TAYLOR DRIVE & INDIANA AVENUE
CITY OF SHEBOYGAN
SHEBOYGAN COUNTY

SIGNAL NO.

DESIGNED BY: J. FAIT (TADI)
REVISED BY:

PAGE 3 OF 3

PROJECT NO: 4996-01-57	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	TRAFFIC SIGNAL REMOVAL PLAN	SHEET 71	E

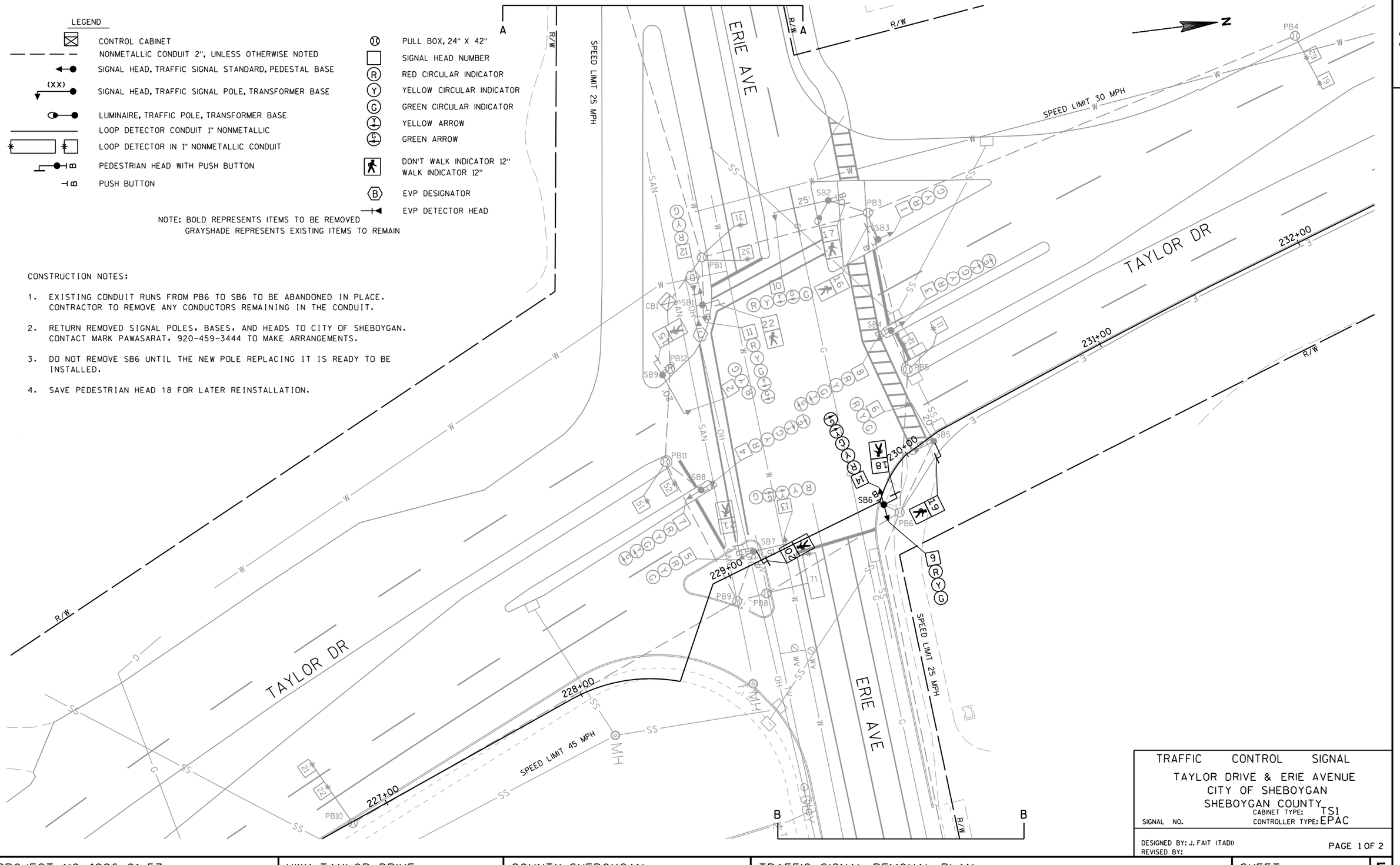
LEGEND

- CONTROL CABINET
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
- (XX) SIGNAL HEAD, TRAFFIC SIGNAL POLE, TRANSFORMER BASE
- LUMINAIRE, TRAFFIC POLE, TRANSFORMER BASE
- LOOP DETECTOR CONDUIT 1" NONMETALLIC
- LOOP DETECTOR IN 1" NONMETALLIC CONDUIT
- PEDESTRIAN HEAD WITH PUSH BUTTON
- PUSH BUTTON
- PULL BOX, 24" X 42"
- SIGNAL HEAD NUMBER
- (R) RED CIRCULAR INDICATOR
- (Y) YELLOW CIRCULAR INDICATOR
- (G) GREEN CIRCULAR INDICATOR
- YELLOW ARROW
- GREEN ARROW
- DON'T WALK INDICATOR 12" / WALK INDICATOR 12"
- (B) EVP DESIGNATOR
- EVP DETECTOR HEAD

NOTE: BOLD REPRESENTS ITEMS TO BE REMOVED
GRAYSHADE REPRESENTS EXISTING ITEMS TO REMAIN

CONSTRUCTION NOTES:

1. EXISTING CONDUIT RUNS FROM PB6 TO SB6 TO BE ABANDONED IN PLACE. CONTRACTOR TO REMOVE ANY CONDUCTORS REMAINING IN THE CONDUIT.
2. RETURN REMOVED SIGNAL POLES, BASES, AND HEADS TO CITY OF SHEBOYGAN. CONTACT MARK PAWASARAT, 920-459-3444 TO MAKE ARRANGEMENTS.
3. DO NOT REMOVE SB6 UNTIL THE NEW POLE REPLACING IT IS READY TO BE INSTALLED.
4. SAVE PEDESTRIAN HEAD 18 FOR LATER REINSTALLATION.



TRAFFIC CONTROL SIGNAL
TAYLOR DRIVE & ERIE AVENUE
CITY OF SHEBOYGAN
SHEBOYGAN COUNTY
CABINET TYPE: TS1
SIGNAL NO. CONTROLLER TYPE: EPAC

DESIGNED BY: J. FAIT (TADI)
REVISED BY:

PAGE 1 OF 2

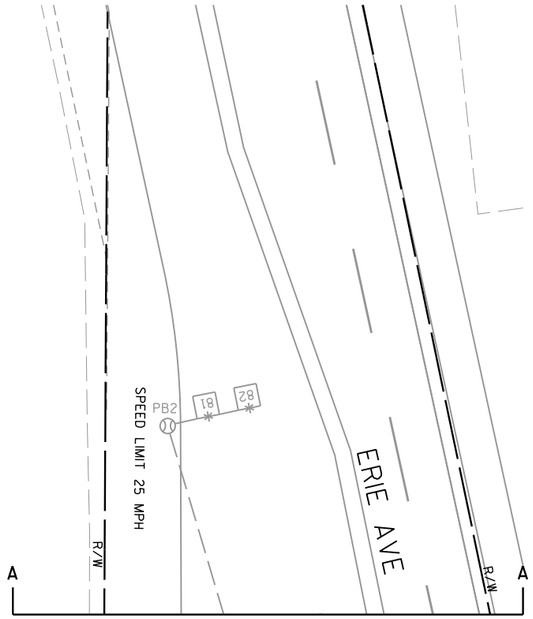
PROJECT NO: 4996-01-57	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	TRAFFIC SIGNAL REMOVAL PLAN	SHEET 72 E

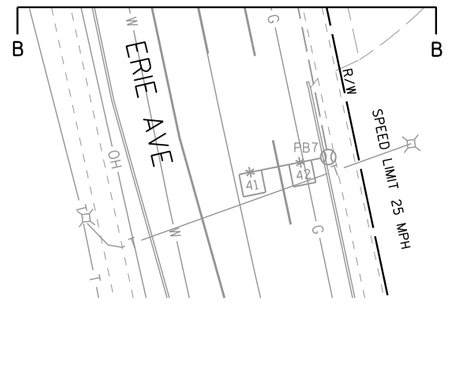
FILE NAME : Removals.dgn PLOT DATE : 3/21/2015 PLOT BY : JFAIT-TADI PLOT NAME : PLOT SCALE : 40.0000 ' / in.

WISDOT/CADDS SHEET 42

2

N





TRAFFIC CONTROL SIGNAL

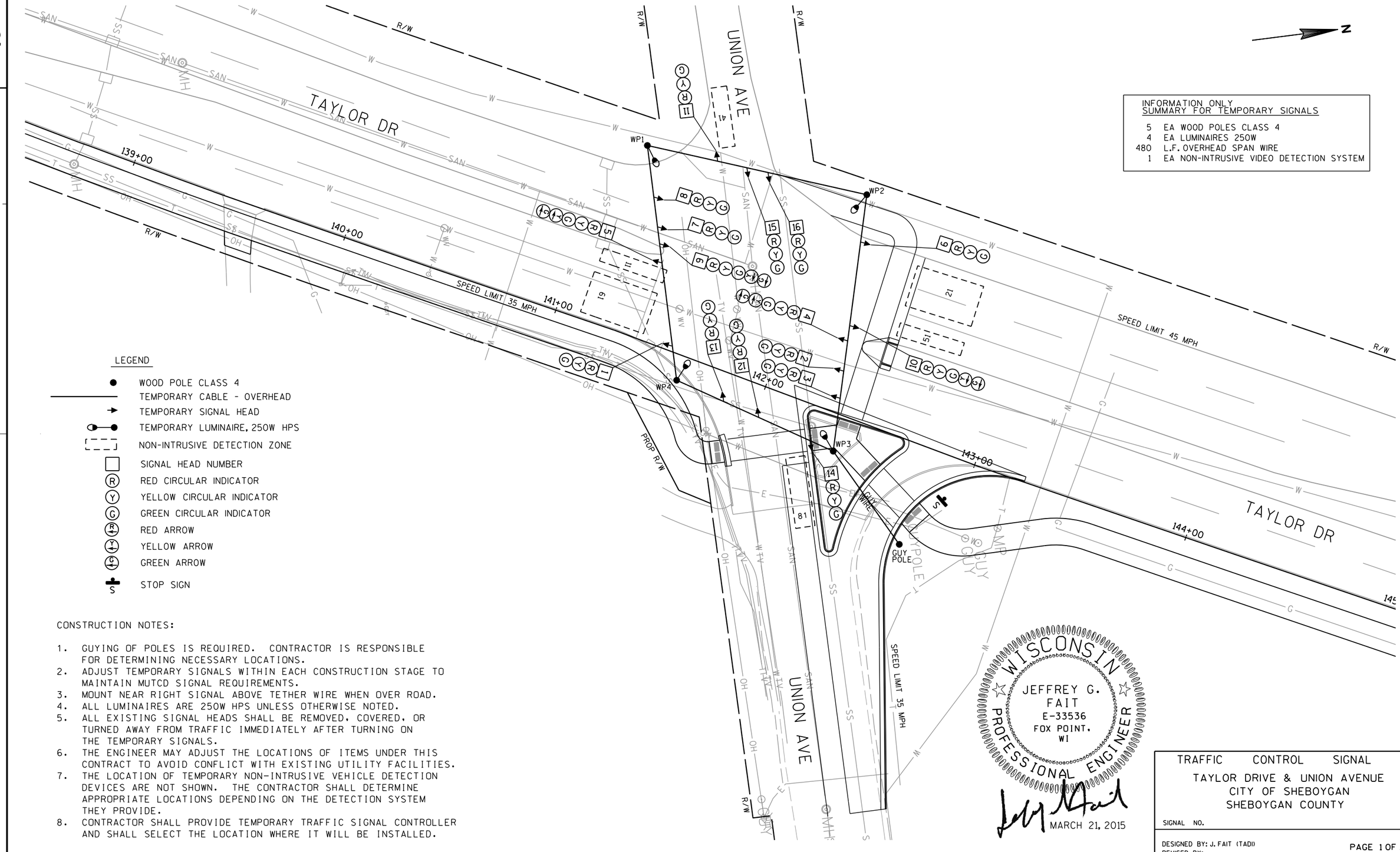
TAYLOR DRIVE & ERIE AVENUE
CITY OF SHEBOYGAN
SHEBOYGAN COUNTY

SIGNAL NO.

DESIGNED BY: J. FAIT (TADI)
REVISED BY:

PAGE 2 OF 2

PROJECT NO: 4996-01-57	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	TRAFFIC SIGNAL REMOVAL PLAN	SHEET 73	E



INFORMATION ONLY
SUMMARY FOR TEMPORARY SIGNALS

5	EA WOOD POLES CLASS 4
4	EA LUMINAIRES 250W
480	L.F. OVERHEAD SPAN WIRE
1	EA NON-INTRUSIVE VIDEO DETECTION SYSTEM

LEGEND

- WOOD POLE CLASS 4
- TEMPORARY CABLE - OVERHEAD
- TEMPORARY SIGNAL HEAD
- TEMPORARY LUMINAIRE, 250W HPS
- NON-INTRUSIVE DETECTION ZONE
- SIGNAL HEAD NUMBER
- (R) RED CIRCULAR INDICATOR
- (Y) YELLOW CIRCULAR INDICATOR
- (G) GREEN CIRCULAR INDICATOR
- (R) RED ARROW
- (Y) YELLOW ARROW
- (G) GREEN ARROW
- S STOP SIGN

CONSTRUCTION NOTES:

1. GUYING OF POLES IS REQUIRED. CONTRACTOR IS RESPONSIBLE FOR DETERMINING NECESSARY LOCATIONS.
2. ADJUST TEMPORARY SIGNALS WITHIN EACH CONSTRUCTION STAGE TO MAINTAIN MUTCD SIGNAL REQUIREMENTS.
3. MOUNT NEAR RIGHT SIGNAL ABOVE TETHER WIRE WHEN OVER ROAD.
4. ALL LUMINAIRES ARE 250W HPS UNLESS OTHERWISE NOTED.
5. ALL EXISTING SIGNAL HEADS SHALL BE REMOVED, COVERED, OR TURNED AWAY FROM TRAFFIC IMMEDIATELY AFTER TURNING ON THE TEMPORARY SIGNALS.
6. THE ENGINEER MAY ADJUST THE LOCATIONS OF ITEMS UNDER THIS CONTRACT TO AVOID CONFLICT WITH EXISTING UTILITY FACILITIES.
7. THE LOCATION OF TEMPORARY NON-INTRUSIVE VEHICLE DETECTION DEVICES ARE NOT SHOWN. THE CONTRACTOR SHALL DETERMINE APPROPRIATE LOCATIONS DEPENDING ON THE DETECTION SYSTEM THEY PROVIDE.
8. CONTRACTOR SHALL PROVIDE TEMPORARY TRAFFIC SIGNAL CONTROLLER AND SHALL SELECT THE LOCATION WHERE IT WILL BE INSTALLED.

WISCONSIN
JEFFREY G. FAIT
E-33536
FOX POINT, WI
PROFESSIONAL ENGINEER

MARCH 21, 2015

TRAFFIC CONTROL SIGNAL
TAYLOR DRIVE & UNION AVENUE
CITY OF SHEBOYGAN
SHEBOYGAN COUNTY

SIGNAL NO.

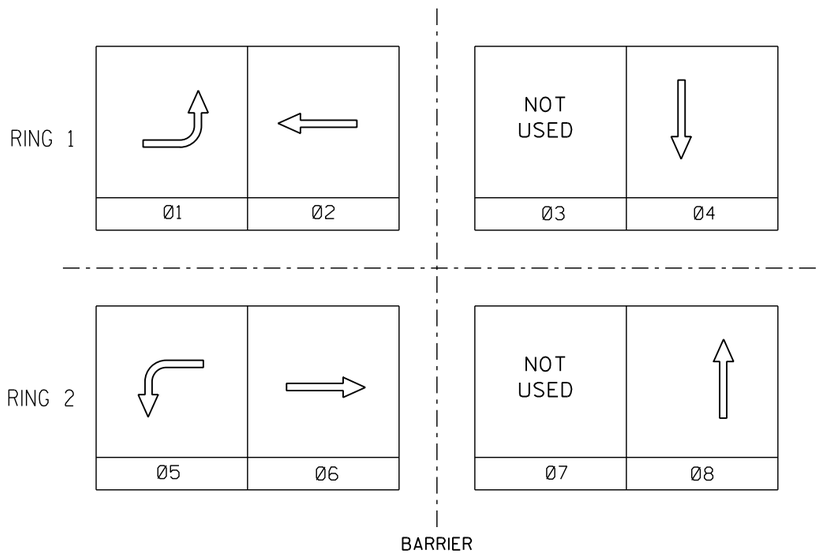
DESIGNED BY: J. FAIT (TADI)
REVISED BY:

PAGE 1 OF 2

PROJECT NO: 4996-01-57	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	TEMPORARY TRAFFIC SIGNAL PLAN	SHEET 74	E

2

	HEAD NUMBERS	FLASH
Ø1	4,5	R
Ø2	6,7,8	R
Ø3		
Ø4	11,12,13	R
Ø5	9,10	R
Ø6	1,2,3	R
Ø7		
Ø8	14,15,16	R
Ø2P		
Ø4P		
Ø6P		
Ø8P		
OLA		
OLB		
OLC		
OLD		



CONTROLLER LOGIC

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

TYPE OF INTERCONNECT/COMMUNICATION	
NONE	X
CLOSED LOOP	
TWISTED PAIR*	
FIBER OPTIC*	
FIBER OPTIC (ETHERNET)	
RADIO	

TYPE OF COORDINATION	
NONE	
TBC	X
TRAFFIC RESPONSIVE	
ADAPTIVE	
*LOCATION OF MASTER CONTROLLER NO:	S-
SIGNAL SYSTEM #:	SS- -

TYPE OF LIGHTING	
BY OTHER AGENCY	
IN TRAFFIC SIGNAL CABINET	X
IN SEPARATE DOT LIGHTING CABINET	

TYPE OF PRE-EMPT	
NONE	X
RAILROAD	
EMERGENCY VEHICLE	
GTT	
TOMAR	
HARDWIRE	
OTHER	
LIFT BRIDGE	
QUEUE DETECTOR	

DETECTOR LOGIC

DETECTOR NUMBER	DETECTOR INPUT	DETECTOR OPERATION			PHASE CALLED	PHASE EXTENDED	DETECTOR DISCONNECT PHASE	CALLING DELAY	EXTENSION STRETCH	SIZE	NUMBER OF TURNS
		CALLS AND EXTENDS	CALLS ONLY	EXTENDS ONLY							
11		X			1	1					
21		X			2	2					
41		X			4	4					
51		X			5	5					
61		X			6	6					
81		X			8	8					

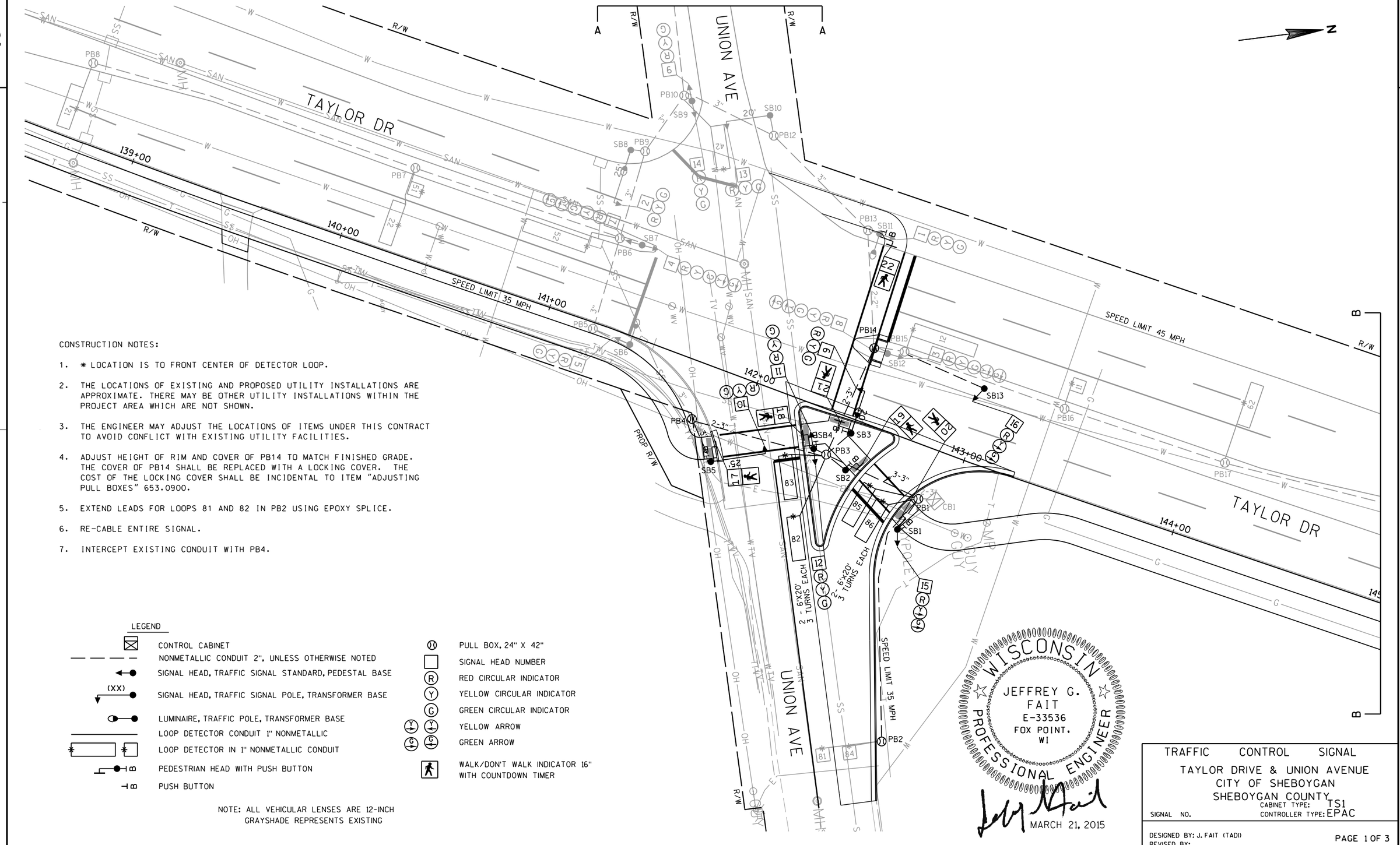
TAYLOR DRIVE & UNION AVENUE
CITY OF SHEBOYGAN
SHEBOYGAN COUNTY

SIGNAL NO.

CONTROLLER TYPE: TEMP

DATE 10/14

PROJECT NO: 4996-01-57	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	TEMPORARY SEQUENCE OF OPERATIONS	SHEET 75	E



CONSTRUCTION NOTES:

1. ✱ LOCATION IS TO FRONT CENTER OF DETECTOR LOOP.
2. THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA WHICH ARE NOT SHOWN.
3. THE ENGINEER MAY ADJUST THE LOCATIONS OF ITEMS UNDER THIS CONTRACT TO AVOID CONFLICT WITH EXISTING UTILITY FACILITIES.
4. ADJUST HEIGHT OF RIM AND COVER OF PB14 TO MATCH FINISHED GRADE. THE COVER OF PB14 SHALL BE REPLACED WITH A LOCKING COVER. THE COST OF THE LOCKING COVER SHALL BE INCIDENTAL TO ITEM "ADJUSTING PULL BOXES" 653.0900.
5. EXTEND LEADS FOR LOOPS 81 AND 82 IN PB2 USING EPOXY SPLICE.
6. RE-CABLE ENTIRE SIGNAL.
7. INTERCEPT EXISTING CONDUIT WITH PB4.

LEGEND

- CONTROL CABINET
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
- (XX) SIGNAL HEAD, TRAFFIC SIGNAL POLE, TRANSFORMER BASE
- LUMINAIRE, TRAFFIC POLE, TRANSFORMER BASE
- LOOP DETECTOR CONDUIT 1" NONMETALLIC
- LOOP DETECTOR IN 1" NONMETALLIC CONDUIT
- PEDESTRIAN HEAD WITH PUSH BUTTON
- PUSH BUTTON
- PULL BOX, 24" X 42"
- SIGNAL HEAD NUMBER
- R RED CIRCULAR INDICATOR
- Y YELLOW CIRCULAR INDICATOR
- G GREEN CIRCULAR INDICATOR
- YELLOW ARROW
- GREEN ARROW
- WALK/DON'T WALK INDICATOR 16" WITH COUNTDOWN TIMER

NOTE: ALL VEHICULAR LENSES ARE 12-INCH
GRAYSHADE REPRESENTS EXISTING

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MARCH 21, 2015

TRAFFIC CONTROL SIGNAL
TAYLOR DRIVE & UNION AVENUE
CITY OF SHEBOYGAN
SHEBOYGAN COUNTY
SIGNAL NO. CABINET TYPE: TS1
CONTROLLER TYPE: EPAC

DESIGNED BY: J. FAIT (TADI)
REVISED BY:
PAGE 1 OF 3

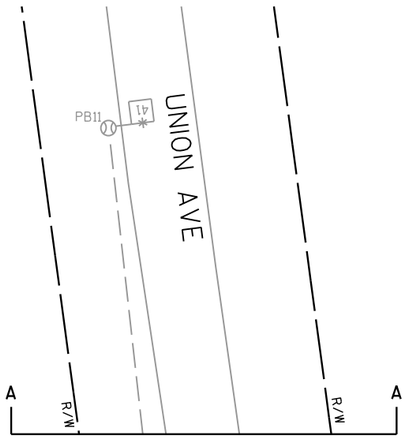
PROJECT NO: 4996-01-57	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	TRAFFIC SIGNAL PLAN	SHEET 76 E

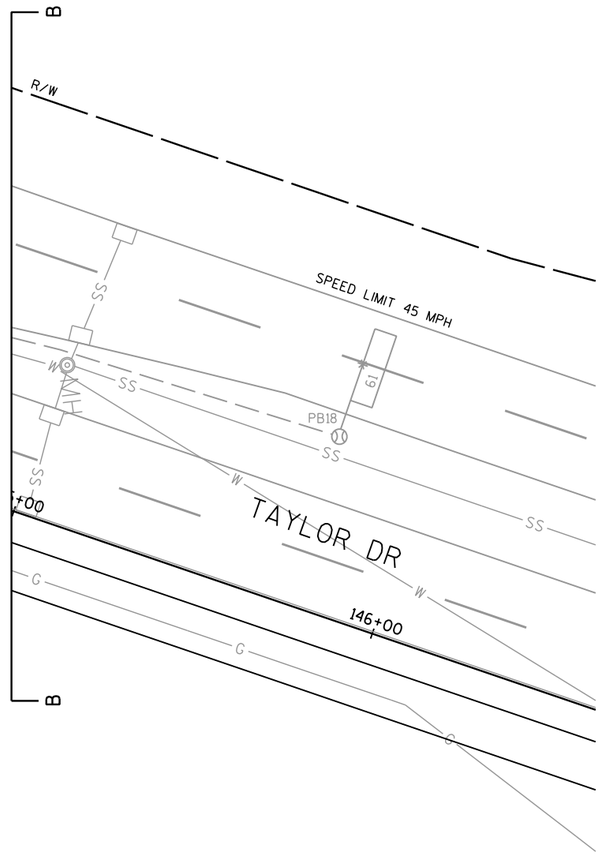
FILE NAME : Proposed Signals.dgn PLOT DATE : 3/21/2015 PLOT BY : JFAIT-TADI PLOT NAME : PLOT SCALE : 40.0000 ' / in.

WISDOT/CADDS SHEET 42

2

N





TRAFFIC CONTROL SIGNAL

TAYLOR DRIVE & UNION AVENUE
CITY OF SHEBOYGAN
SHEBOYGAN COUNTY

SIGNAL NO.

DESIGNED BY: J. FAIT (TADI)
REVISED BY:

PAGE 2 OF 3

PROJECT NO: 4996-01-57	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	TRAFFIC SIGNAL PLAN	SHEET 77	E

2

SEQUENCE OF OPERATION

N

NOT USED

NOT USED

RING 1

	HEAD NUMBERS	01 R/W	01 CLEAR TO **						02 R/W	02 CLEAR TO **						03 R/W	03 CLEAR TO **						04 R/W	04 CLEAR TO **						FLASH
01	3,4	G →	Y →	-					-	-	-												-	-	-					-
02	5,6,7,8	R	R	R					G	Y	R												R	R	R					R
03																														
04	9,10,11	R	R	R					R	R	R												G	Y	R					R
05	7,8	-	-	-					-	-	-												-	-	-					-
06	1,2,3,4	R	R	R					R	R	R												R	R	R					R
07																														
08	12,13,14,15,16	R	R	R					R	R	R												R	R	R					R
02P	17,18,19,20	D	D	D					*	D	D												D	D	D					
08P	21,22	D	D	D					D	D	D												D	D	D					

NOT USED

NOT USED

RING 2

	HEAD NUMBERS	05 R/W	05 CLEAR TO **						06 R/W	06 CLEAR TO **						07 R/W	07 CLEAR TO **						08 R/W	08 CLEAR TO **					
01	3,4	-	-	-					-	-	-												-	-	-				
02	5,6,7,8	R	R	R					R	R	R												R	R	R				
03																													
04	9,10,11	R	R	R					R	R	R												R	R	R				
05	7,8	G →	Y →	-					-	-	-												-	-	-				
06	1,2,3,4	R	R	R					G	Y	R												R	R	R				
07																													
08	12,13,14,15,16	R	R	R					R	R	R												G, G →	Y, Y →	R				
02P	17,18,19,20	D	D	D					D	D	D												D	D	D				
08P	21,22	D	D	D					D	D	D												*	D	D				

BARRIER

** CLEARANCE TO A PHASE IN CONFLICT WITH THIS PHASE ON (SEE CHART 1)

* WHEN CALLED, TIMED STEADY WALK, THEN FLASHING DON'T WALK, THEN GOES TO STEADY DON'T WALK

CHART 1

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

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	SIZE	NUMBER OF TURNS
11	1			X		1			X	EXISTING	
12	2	X			1	1				EXISTING	
21	3	X			2	2				EXISTING	
22	4	X			2	2				EXISTING	
41	5			X		4			X	EXISTING	
42	6	X			4	4				EXISTING	
51	7			X		5			X	EXISTING	
52	8	X			5	5				EXISTING	
61	9	X			6	6				EXISTING	
62	10	X			6	6				EXISTING	
81	11			X		8			X	EXISTING	
82	12	X			8	8				6X20	3
83	12	X			8	8				6X20	3
84	13			X		8			X	EXISTING	
85	14	X			8	8				6X20	3
86	14	X			8	8				6X20	3

CONTROLLER LOGIC

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

OVERLAPS

O.L. "A" =
O.L. "B" =
O.L. "C" =
O.L. "D" =

TYPE OF INTERCONNECT COMMUNICATION	
NONE	
TBC	X
CLOSED LOOP TWISTED PAIR*	
CLOSED LOOP FIBER OPTIC*	
RADIO	
*LOCATION OF MASTER CONTROLLER NO:	S-
SIGNAL SYSTEM *:	SS- -

TYPE OF PRE-EMPT	
NONE	X
RAILROAD	
EMERGENCY VEHICLE	
3M	
TOMAR	
HARDWIRE	
OTHER	
LIFT BRIDGE	
QUEUE DETECTOR	

TYPE OF LIGHTING	
BY OTHER AGENCY	
IN TRAFFIC SIGNAL CABINET	X
IN SEPARATE DOT LIGHTING CABINET	

GENERAL NOTES:

1. ANY ACTUATED PHASE FOR WHICH THERE IS NO CALL SHALL BE SKIPPED.
2. WHEN ONE PHASE IS ON ALONE, ANY NONCONFLICTING PHASE MAY START TIMING CONCURRENTLY WITHOUT A CLEARANCE INTERVAL. (SEE CHART 1 AT LEFT.)
3. IF ANY OPPOSING THRU PHASES ARE TIMING CONCURRENTLY, THEY SHALL TERMINATE TOGETHER DUE TO PERMISSIVE LEFT TURN CONFLICT.

TAYLOR DRIVE & UNION AVENUE
CITY OF SHEBOYGAN
SHEBOYGAN COUNTY

SIGNAL NO.

CONTROLLER TYPE: EPAC

DATE 10/14

PAGE NO. 3 OF 3

PROJECT NO: 4996-01-57 | HWY: TAYLOR DRIVE | COUNTY: SHEBOYGAN | SEQUENCE OF OPERATIONS | SHEET 78 | E

PROJECT ID:	4996-01-57
INTERSECTION:	TAYLOR DRIVE AT UNION AVENUE

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

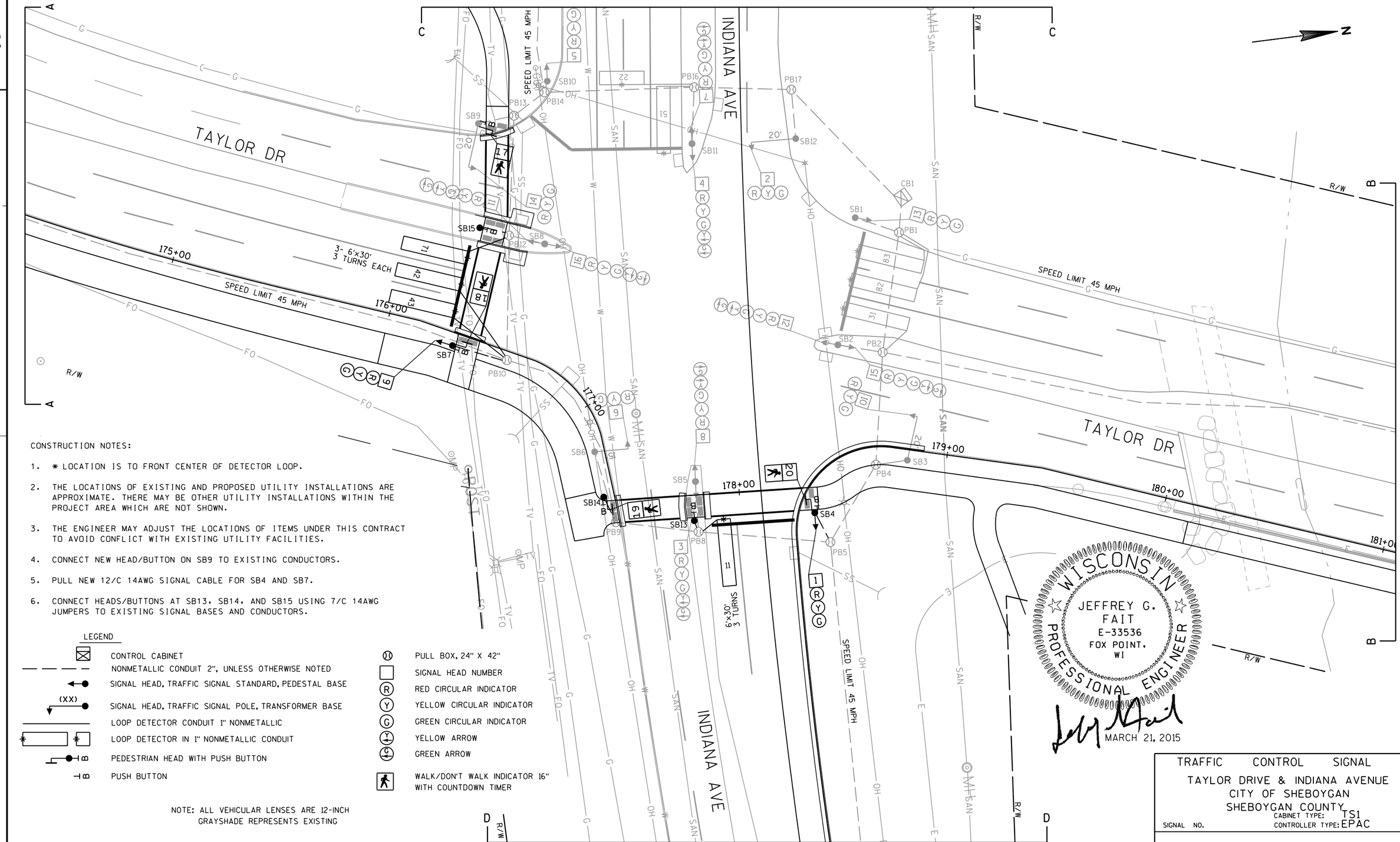
CB1 TO	JUMPER	# OF COND. AWG 14	HEAD NO.	SIGNAL INDICATION WIRE COLOR									PED BUTTON
				RED	YELLOW	GREEN	<RED>	<YELLOW>	<FL YELLOW>	<GREEN>	D/WALK	WALK	
SB1		12	15	RED				ORG		GRN			
			20								BLK	BLU	
			BUTTON										WHT/BLK
SB2		7	19								BLK	BLU	
			BUTTON										WHT/BLK
SB3		12	6	RED	ORG	GRN							
			21								BLK	BLU	
			BUTTON										WHT/BLK
SB4		12	11	RED/BLK	ORG/BLK	GRN/BLK							
			12	RED	ORG	GRN							
			18								BLK	BLU	
			BUTTON										WHT/BLK
SB5		12	10	RED	ORG	GRN							
			17								BLK	BLU	
			BUTTON										WHT/BLK
SB6		12	5	RED	ORG	GRN							
SB7		12	4	RED/BLK	ORG/BLK	GRN/BLK		BLK		BLU			
			7	RED	ORG	GRN		BLU/BLK		BLK/WHT			
SB8		12	2	RED	ORG	GRN							
SB9		12	9	RED/BLK	ORG/BLK	GRN/BLK							
			14	RED	ORG	GRN							
SB10		12	13	RED	ORG	GRN							
SB11		12	1	RED	ORG	GRN							
			22								BLK	BLU	
			BUTTON										WHT/BLK
SB12		12	3	RED/BLK	ORG/BLK	GRN/BLK		BLK		BLU			
			8	RED	ORG	GRN		BLU/BLK		BLK/WHT			
SB13		12	16	RED				ORG		GRN			

EQUIPMENT GROUNDING CONDUCTOR 10 AWG GRN XLP	
FROM	TO
CB1	SB1
SB1	SB2
SB2	SB3
SB3	SB4
SB4	SB5
SB5	SB6
SB6	SB7
SB7	SB8
SB8	SB9
SB9	SB10
SB10	SB11
SB11	SB12
SB12	SB13
SB13	CB1

PULL BOX BONDING JUMPER 10 AWG GRN XLP	
FROM	TO
CB1	PB1
SB3	PB3
SB5	PB4
SB6	PB5
SB7	PB6
SB8	PB9
SB9	PB10
SB10	PB12
SB11	PB13
SB12	PB14
SB12	PB15

LIGHTING UF 10 AWG W/GROUND	
FROM	TO
CB1	SB3
SB3	SB6
CB1	SB11
SB11	SB8

NOTES:
1. USE 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 18" LONGER THAN THE UNGROUNDED CONDUCTORS.
3. AT THE SIGNAL BASES, CONNECT ONE TERMINAL FROM THE PEDESTRIAN PUSH BUTTONS TO THE COLOR INDICATED IN THE CHART. CONNECT THE OTHER TERMINAL TO THE GROUNDED CONDUCTOR.



CONSTRUCTION NOTES:

1. * LOCATION IS TO FRONT CENTER OF DETECTOR LOOP.
2. THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA WHICH ARE NOT SHOWN.
3. THE ENGINEER MAY ADJUST THE LOCATIONS OF ITEMS UNDER THIS CONTRACT TO AVOID CONFLICT WITH EXISTING UTILITY FACILITIES.
4. CONNECT NEW HEAD/BUTTON ON SB9 TO EXISTING CONDUCTORS.
5. PULL NEW 12/C 14AWG SIGNAL CABLE FOR SB4 AND SB7.
6. CONNECT HEADS/BUTTONS AT SB13, SB14, AND SB15 USING 7/C 14AWG JUMPERS TO EXISTING SIGNAL BASES AND CONDUCTORS.

LEGEND

- CONTROL CABINET
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
- (XX) SIGNAL HEAD, TRAFFIC SIGNAL POLE, TRANSFORMER BASE
- LOOP DETECTOR CONDUIT 1" NONMETALLIC
- LOOP DETECTOR IN 1" NONMETALLIC CONDUIT
- PEDESTRIAN HEAD WITH PUSH BUTTON
- PUSH BUTTON
- PULL BOX, 24" X 42"
- SIGNAL HEAD NUMBER
- R RED CIRCULAR INDICATOR
- Y YELLOW CIRCULAR INDICATOR
- G GREEN CIRCULAR INDICATOR
- Y YELLOW ARROW
- G GREEN ARROW
- WALK/DON'T WALK INDICATOR 16" WITH COUNTDOWN TIMER

NOTE: ALL VEHICULAR LENSES ARE 12-INCH
GRAYSHADE REPRESENTS EXISTING

WISCONSIN
JEFFREY G. FAIT
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MARCH 21, 2015

TRAFFIC CONTROL SIGNAL
TAYLOR DRIVE & INDIANA AVENUE
CITY OF SHEBOYGAN
SHEBOYGAN COUNTY
SIGNAL NO. CABINET TYPE: TS1
CONTROLLER TYPE: EPAC

DESIGNED BY: J. FAIT (TADI)
REVISED BY:

PAGE 1 OF 4

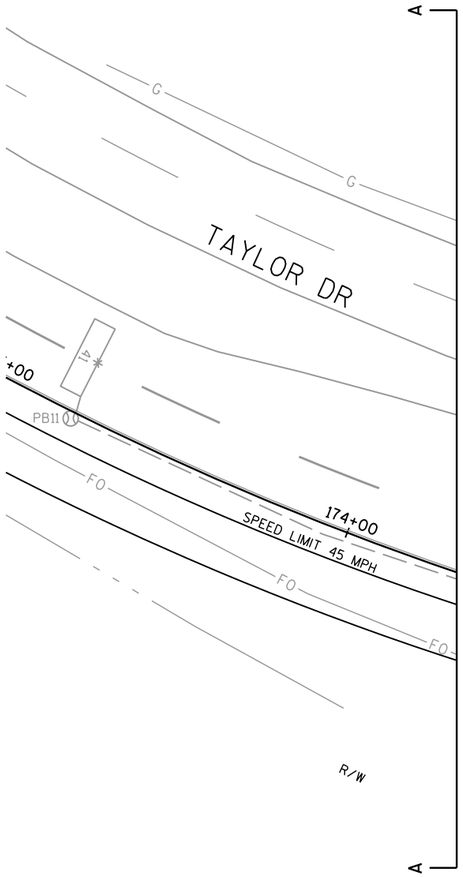
PROJECT NO: 4996-01-57	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	TRAFFIC SIGNAL PLAN	SHEET 80 E

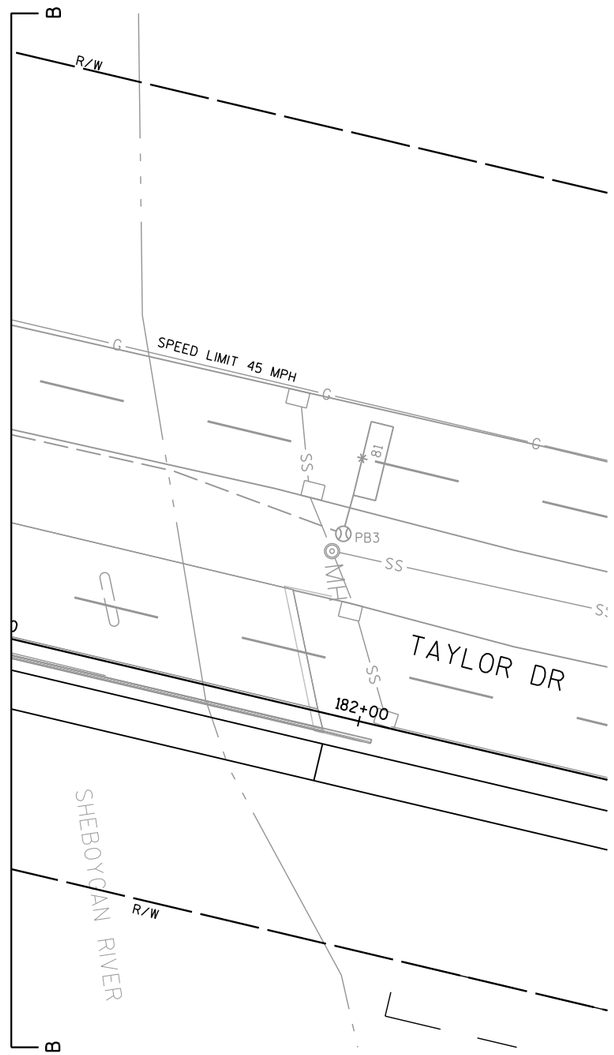
FILE NAME : Proposed Signals.dgn PLOT DATE : 3/21/2015 PLOT BY : JFAIT-TADI PLOT NAME : PLOT SCALE : 40.0000 ' / in.

WISDOT/CADDS SHEET 42

2

N





TRAFFIC CONTROL SIGNAL

TAYLOR DRIVE & INDIANA AVENUE
CITY OF SHEBOYGAN
SHEBOYGAN COUNTY

SIGNAL NO.

DESIGNED BY: J. FAIT (TADI)
REVISED BY:

PAGE 2 OF 4

PROJECT NO: 4996-01-57	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	TRAFFIC SIGNAL PLAN	SHEET 81	E

2

N


PB15
21
MH SAN
GUY
TV
TV
TV

SEQUENCE OF OPERATION

N

RING 1

	HEAD NUMBERS	Ø1 R/W	Ø1 CLEAR TO **	Ø2 R/W	Ø2 CLEAR TO **	Ø3 R/W	Ø3 CLEAR TO **	Ø4 R/W	Ø4 CLEAR TO **	FLASH
Ø1	3,4	G→	Y→	-	-	-	-	-	-	-
Ø2	5,6,7,8	R	R	G	Y	R	R	R	G	R
Ø3	15,16	-	-	-	-	G→	Y→	-	-	-
Ø4	9,10,11,12	R	R	R	R	R	R	G	Y	R
Ø5	7,8	-	-	-	-	-	-	-	-	-
Ø6	1,2,3,4	R	R	R	R	R	R	R	R	R
Ø7	11,12	-	-	-	-	-	-	-	-	-
Ø8	13,14,15,16	R	R	R	R	R	R	R	R	R
Ø4P	17,18	D	D	*	D	D	D	D	D	
Ø6P	19,20	D	D	D	D	D	D	*	D	

RING 2

	HEAD NUMBERS	Ø5 R/W	Ø5 CLEAR TO **	Ø6 R/W	Ø6 CLEAR TO **	Ø7 R/W	Ø7 CLEAR TO **	Ø8 R/W	Ø8 CLEAR TO **
Ø1	3,4	-	-	-	-	-	-	-	-
Ø2	5,6,7,8	R	R	R	R	R	R	R	R
Ø3	15,16	-	-	-	-	-	-	-	-
Ø4	9,10,11,12	R	R	R	R	R	R	R	R
Ø5	7,8	G→	Y→	-	-	-	-	-	-
Ø6	1,2,3,4	R	R	G	Y	R	R	R	R
Ø7	11,12	-	-	-	-	G→	Y→	-	-
Ø8	13,14,15,16	R	R	R	R	R	R	G	Y
Ø4P	17,18	D	D	D	D	D	D	D	D
Ø6P	19,20	D	D	D	D	D	D	D	D

BARRIER

** CLEARANCE TO A PHASE IN CONFLICT WITH THIS PHASE ON (SEE CHART 1)

* WHEN CALLED, TIMED STEADY WALK, THEN FLASHING DON'T WALK, THEN GOES TO STEADY DON'T WALK

CHART 1

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

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	SIZE	NUMBER OF TURNS
11	1	X			1	1				6X30	3
21	2	X			2	2				EXISTING	
22	3	X			2	2				EXISTING	
31	4	X			3	3				EXISTING	
41	5			X		4			X	EXISTING	
42	6	X			4	4				6X30	3
43	7	X			4	4		X		6X30	3
51	8	X			5	5				EXISTING	
61	9	X			6	6				EXISTING	
62	10	X			6	6				6X20	3
71	11	X			7	7			X	6X30	3
81	12			X		8				EXISTING	
82	13	X			8	8				EXISTING	
83	14	X			8	8		X		EXISTING	

CONTROLLER LOGIC

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

OVERLAPS

O.L. "A" =
O.L. "B" =
O.L. "C" =
O.L. "D" =

TYPE OF INTERCONNECT COMMUNICATION	
NONE	
TBC	x
CLOSED LOOP TWISTED PAIR*	
CLOSED LOOP FIBER OPTIC*	
RADIO	
*LOCATION OF MASTER CONTROLLER NO: S-	
SIGNAL SYSTEM *: SS- -	

TYPE OF PRE-EMPT	
NONE	x
RAILROAD	
EMERGENCY VEHICLE	
3M	
TOMAR	
HARDWIRE	
OTHER	
LIFT BRIDGE	
QUEUE DETECTOR	

TYPE OF LIGHTING	
BY OTHER AGENCY	x
IN TRAFFIC SIGNAL CABINET	
IN SEPARATE DOT LIGHTING CABINET	

GENERAL NOTES:

1. ANY ACTUATED PHASE FOR WHICH THERE IS NO CALL SHALL BE SKIPPED.
2. WHEN ONE PHASE IS ON ALONE, ANY NONCONFLICTING PHASE MAY START TIMING CONCURRENTLY WITHOUT A CLEARANCE INTERVAL. (SEE CHART 1 AT LEFT.)
3. IF ANY OPPOSING THRU PHASES ARE TIMING CONCURRENTLY, THEY SHALL TERMINATE TOGETHER DUE TO PERMISSIVE LEFT TURN CONFLICT.

TAYLOR DRIVE & INDIANA AVENUE
CITY OF SHEBOYGAN
SHEBOYGAN COUNTY

SIGNAL NO.

CONTROLLER TYPE: EPAC

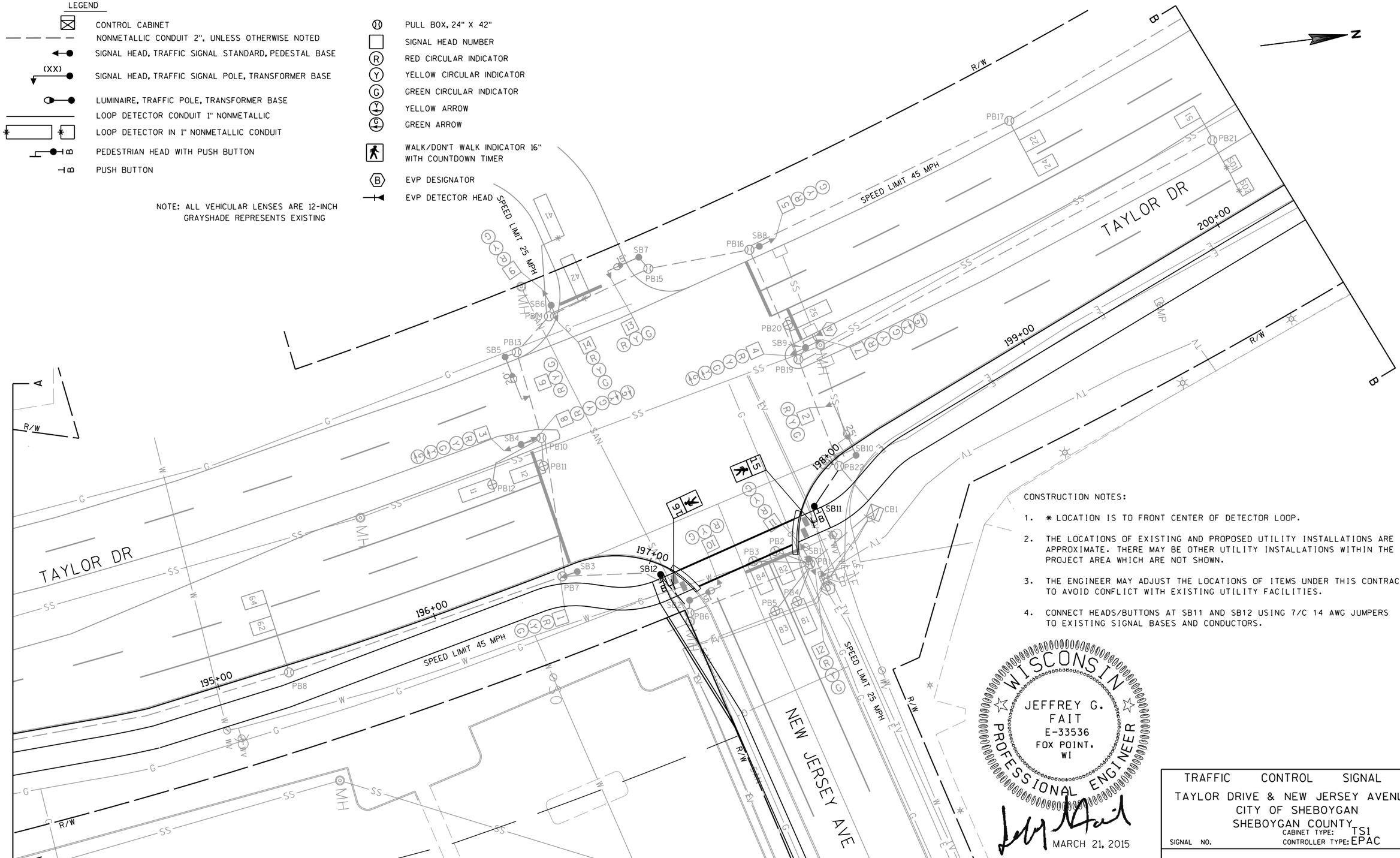
DATE 10/14 PAGE NO. 4 OF 4

PROJECT NO: 4996-01-57 | HWY: TAYLOR DRIVE | COUNTY: SHEBOYGAN | SEQUENCE OF OPERATIONS | SHEET 83 | E

LEGEND

- CONTROL CABINET
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
- (XX) SIGNAL HEAD, TRAFFIC SIGNAL POLE, TRANSFORMER BASE
- LUMINAIRE, TRAFFIC POLE, TRANSFORMER BASE
- LOOP DETECTOR CONDUIT 1" NONMETALLIC
- LOOP DETECTOR IN 1" NONMETALLIC CONDUIT
- PEDESTRIAN HEAD WITH PUSH BUTTON
- PUSH BUTTON
- PULL BOX, 24" X 42"
- SIGNAL HEAD NUMBER
- (R) RED CIRCULAR INDICATOR
- (Y) YELLOW CIRCULAR INDICATOR
- (G) GREEN CIRCULAR INDICATOR
- YELLOW ARROW
- GREEN ARROW
- WALK/DON'T WALK INDICATOR 16" WITH COUNTDOWN TIMER
- (B) EVP DESIGNATOR
- EVP DETECTOR HEAD

NOTE: ALL VEHICULAR LENSES ARE 12-INCH
GRAYSHADE REPRESENTS EXISTING



CONSTRUCTION NOTES:

1. * LOCATION IS TO FRONT CENTER OF DETECTOR LOOP.
2. THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA WHICH ARE NOT SHOWN.
3. THE ENGINEER MAY ADJUST THE LOCATIONS OF ITEMS UNDER THIS CONTRACT TO AVOID CONFLICT WITH EXISTING UTILITY FACILITIES.
4. CONNECT HEADS/BUTTONS AT SB11 AND SB12 USING 7/C 14 AWG JUMPERS TO EXISTING SIGNAL BASES AND CONDUCTORS.

WISCONSIN
JEFFREY G. FAIT
E-33536
FOX POINT, WI
PROFESSIONAL ENGINEER
MARCH 21, 2015

TRAFFIC CONTROL SIGNAL
TAYLOR DRIVE & NEW JERSEY AVENUE
CITY OF SHEBOYGAN
SHEBOYGAN COUNTY
SIGNAL NO.
CABINET TYPE: TS1
CONTROLLER TYPE: EPAC

DESIGNED BY: J. FAIT (TADI)
REVISED BY:

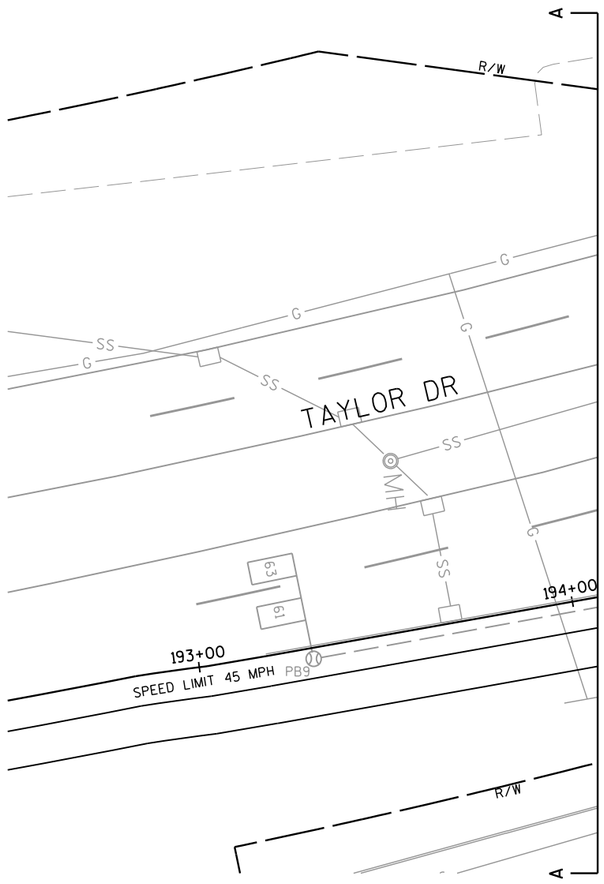
PAGE 1 OF 3

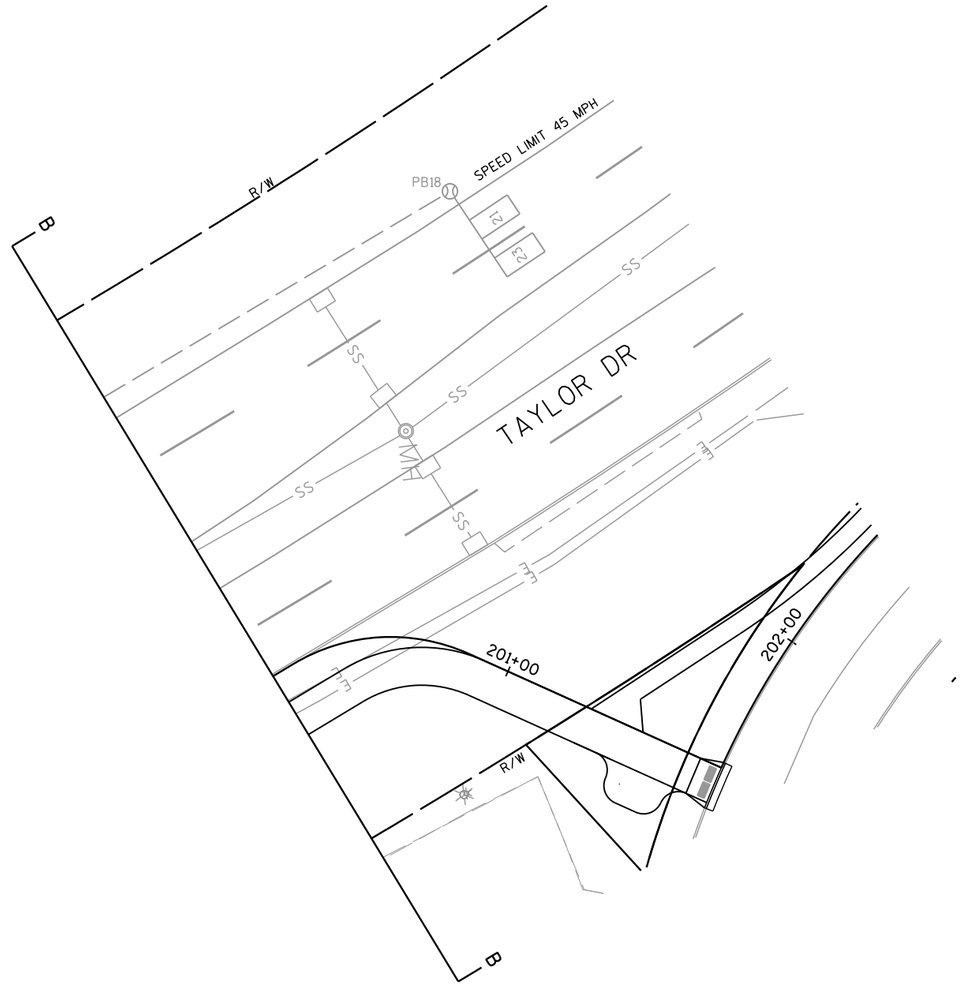
PROJECT NO: 4996-01-57	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	TRAFFIC SIGNAL PLAN	SHEET 84	E

FILE NAME : Proposed Signals.dgn PLOT DATE : 3/21/2015 PLOT BY : JFAIT-TADI PLOT NAME : PLOT SCALE : 40.0000 ' / in.

2

N





TRAFFIC CONTROL SIGNAL

TAYLOR DRIVE & NEW JERSEY AVENUE
CITY OF SHEBOYGAN
SHEBOYGAN COUNTY

SIGNAL NO.

DESIGNED BY: J. FAIT (TADI)
REVISED BY:

PAGE 2 OF 3

PROJECT NO: 4996-01-57	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	TRAFFIC SIGNAL PLAN	SHEET 85	E

SEQUENCE OF OPERATION

N

RING 1		HEAD NUMBERS	Ø1 R/W	Ø1 CLEAR TO **				Ø2 R/W	Ø2 CLEAR TO **				Ø3 R/W	Ø3 CLEAR TO **				Ø4 R/W	Ø4 CLEAR TO **				FLASH
	Ø1	3,4	G →	Y →	-			-	-	-								-	-	-			-
	Ø2	5,6,7,8	R	R	R			G	Y	R								R	R	R			R
	Ø3																						
	Ø4	9,10,11	R	R	R			R	R	R								G	Y	R			R
	Ø5	7,8	-	-	-			-	-	-								-	-	-			-
	Ø6	1,2,3,4	R	R	R			R	R	R								R	R	R			R
	Ø7																						
	Ø8	12,13,14	R	R	R			R	R	R								R	R	R			R
	Ø6P	15,16	D	D	D			D	D	D								D	D	D			

NOT USED (Ø3)

NOT USED (Ø7)

RING 2		HEAD NUMBERS	Ø5 R/W	Ø5 CLEAR TO **				Ø6 R/W	Ø6 CLEAR TO **				Ø7 R/W	Ø7 CLEAR TO **				Ø8 R/W	Ø8 CLEAR TO **			
	Ø1	3,4	-	-	-			-	-	-								-	-	-		
	Ø2	5,6,7,8	R	R	R			R	R	R								R	R	R		
	Ø3																					
	Ø4	9,10,11	R	R	R			R	R	R								R	R	R		
	Ø5	7,8	G →	Y →	-			-	-	-								-	-	-		
	Ø6	1,2,3,4	R	R	R			G	Y	R								R	R	R		
	Ø7																					
	Ø8	12,13,14	R	R	R			R	R	R								G, G →	Y, Y →	R		
	Ø6P	15,16	D	D	D			*	D	D								D	D	D		

BARRIER

** CLEARANCE TO A PHASE IN CONFLICT WITH THIS PHASE ON (SEE CHART 1)

* WHEN CALLED, TIMED STEADY WALK, THEN FLASHING DON'T WALK, THEN GOES TO STEADY DON'T WALK

CHART 1

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

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	SIZE	NUMBER OF TURNS
11	1	X			1	1				EXISTING	
12	1	X			1	1				EXISTING	
21	2	X			2	2				EXISTING	
22	3	X			2	2				EXISTING	
23	2	X			2	2				EXISTING	
24	3	X			2	2				EXISTING	
41	4	X			4	4				EXISTING	
42	5	X			4	4				EXISTING	
51	6			X		5			X	EXISTING	
52	7	X			5	5				EXISTING	
61	8	X			6	6				EXISTING	
62	9	X			6	6				EXISTING	
63	8	X			6	6				EXISTING	
64	9	X			6	6				EXISTING	
81	10	X			8	8				EXISTING	
82	11	X			8	8				EXISTING	
83	10	X			8	8				EXISTING	
84	11	X			8	8				EXISTING	

CONTROLLER LOGIC

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

OVERLAPS

O.L. "A" =
O.L. "B" =
O.L. "C" =
O.L. "D" =

TYPE OF INTERCONNECT COMMUNICATION	
NONE	
TBC	X
CLOSED LOOP TWISTED PAIR*	
CLOSED LOOP FIBER OPTIC*	
RADIO	
*LOCATION OF MASTER CONTROLLER NO:	S-
SIGNAL SYSTEM #:	SS- -

TYPE OF PRE-EMPT	
NONE	
RAILROAD	
EMERGENCY VEHICLE	X
3M	
TOMAR	
HARDWIRE	
OTHER	
LIFT BRIDGE	
QUEUE DETECTOR	

TYPE OF LIGHTING	
BY OTHER AGENCY	
IN TRAFFIC SIGNAL CABINET	X
IN SEPARATE DOT LIGHTING CABINET	

EMERGENCY VEHICLE PREEMPTION SEQUENCE

EMERGENCY VEHICLE DETECTOR	A	B		D
MOVEMENT	← ↱	→ ↗		↑
PHASE	2+5	6+1		8

AFTER PREEMPTION SEQUENCE 2+5 OR 1+6, CONTROLLER SHALL RETURN TO PHASES 2+6.
AFTER PREEMPTION SEQUENCE 8, CONTROLLER SHALL RETURN TO PHASES 4+8.

GENERAL NOTES:

1. ANY ACTUATED PHASE FOR WHICH THERE IS NO CALL SHALL BE SKIPPED.
2. WHEN ONE PHASE IS ON ALONE, ANY NONCONFLICTING PHASE MAY START TIMING CONCURRENTLY WITHOUT A CLEARANCE INTERVAL. (SEE CHART 1 AT LEFT.)
3. IF ANY OPPOSING THRU PHASES ARE TIMING CONCURRENTLY, THEY SHALL TERMINATE TOGETHER DUE TO PERMISSIVE LEFT TURN CONFLICT.

TAYLOR DRIVE & NEW JERSEY AVE
CITY OF SHEBOYGAN
SHEBOYGAN COUNTY

SIGNAL NO.

CONTROLLER TYPE: EPAC

DATE 10/14

FILE NAME : Proposed Signals.dgn PLOT DATE : 3/21/2015 PLOT BY : JFAIT-TADI PLOT NAME : PLOT SCALE : 40.0000 ' / in.
WISDOT/CADDS SHEET 42

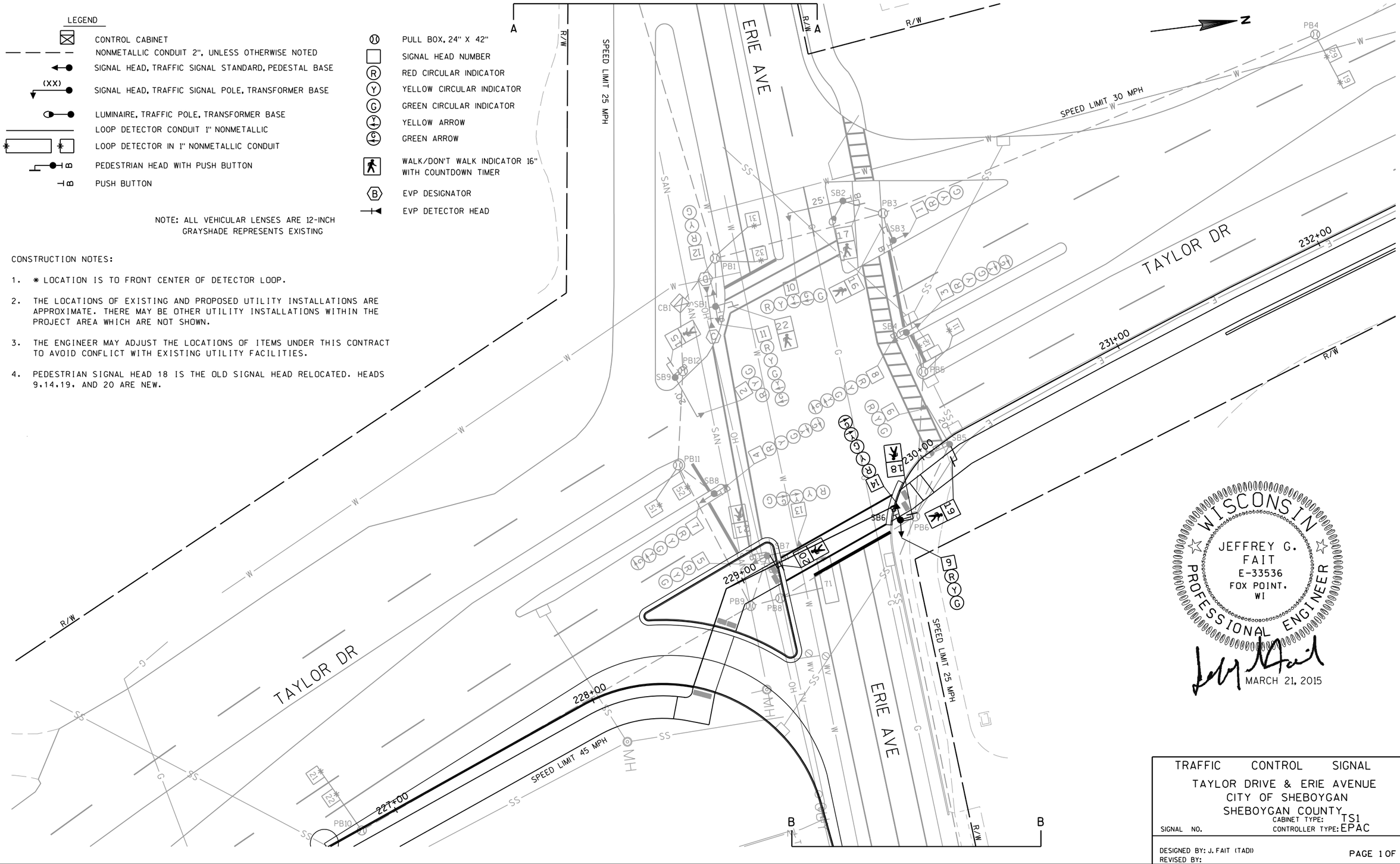
LEGEND

- CONTROL CABINET
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
- (XX) SIGNAL HEAD, TRAFFIC SIGNAL POLE, TRANSFORMER BASE
- LUMINAIRE, TRAFFIC POLE, TRANSFORMER BASE
- LOOP DETECTOR CONDUIT 1" NONMETALLIC
- LOOP DETECTOR IN 1" NONMETALLIC CONDUIT
- PEDESTRIAN HEAD WITH PUSH BUTTON
- PUSH BUTTON
- PULL BOX, 24" X 42"
- SIGNAL HEAD NUMBER
- (R) RED CIRCULAR INDICATOR
- (Y) YELLOW CIRCULAR INDICATOR
- (G) GREEN CIRCULAR INDICATOR
- YELLOW ARROW
- GREEN ARROW
- WALK/DON'T WALK INDICATOR 16" WITH COUNTDOWN TIMER
- (B) EVP DESIGNATOR
- EVP DETECTOR HEAD

NOTE: ALL VEHICULAR LENSES ARE 12-INCH
GRAYSHADE REPRESENTS EXISTING

CONSTRUCTION NOTES:

1. * LOCATION IS TO FRONT CENTER OF DETECTOR LOOP.
2. THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA WHICH ARE NOT SHOWN.
3. THE ENGINEER MAY ADJUST THE LOCATIONS OF ITEMS UNDER THIS CONTRACT TO AVOID CONFLICT WITH EXISTING UTILITY FACILITIES.
4. PEDESTRIAN SIGNAL HEAD 18 IS THE OLD SIGNAL HEAD RELOCATED. HEADS 9,14,19, AND 20 ARE NEW.



JEFFREY G. FAIT
E-33536
FOX POINT, WI
WISCONSIN PROFESSIONAL ENGINEER
MARCH 21, 2015

TRAFFIC CONTROL SIGNAL
TAYLOR DRIVE & ERIE AVENUE
CITY OF SHEBOYGAN
SHEBOYGAN COUNTY
SIGNAL NO. CABINET TYPE: TS1
CONTROLLER TYPE: EPAC

DESIGNED BY: J. FAIT (TADI)
REVISED BY:

PAGE 1 OF 3

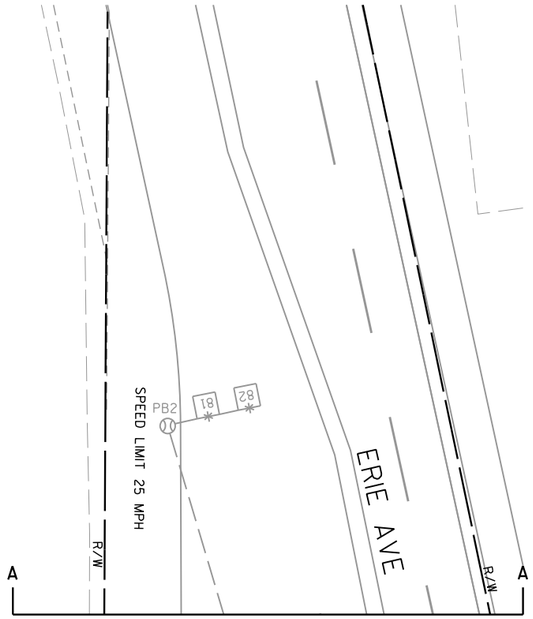
PROJECT NO: 4996-01-57	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	TRAFFIC SIGNAL PLAN	SHEET 87 E

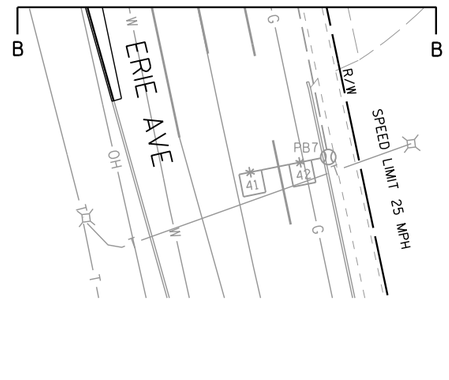
FILE NAME : Proposed Signals.dgn PLOT DATE : 3/21/2015 PLOT BY : JFAIT-TADI PLOT NAME : PLOT SCALE : 40.0000 ' / in.

WISDOT/CADDS SHEET 42

2

N





TRAFFIC CONTROL SIGNAL

TAYLOR DRIVE & ERIE AVENUE
CITY OF SHEBOYGAN
SHEBOYGAN COUNTY

SIGNAL NO.

DESIGNED BY: J. FAIT (TADI)
REVISED BY:

PAGE 2 OF 3

PROJECT NO: 4996-01-57	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	TRAFFIC SIGNAL PLAN	SHEET 88	E

2

SEQUENCE OF OPERATION

N

RING 1

	HEAD NUMBERS	Ø1 R/W	Ø1 CLEAR TO **	Ø2 R/W	Ø2 CLEAR TO **	Ø3 R/W	Ø3 CLEAR TO **	Ø4 R/W	Ø4 CLEAR TO **	FLASH
Ø1	3,4	G →	Y → -	-	- -	-	- -	-	- -	-
Ø2	5,6,7,8	R	R R	G	Y R	R	R R	R	R R	R
Ø3	13,14	-	- -	-	- -	G →	Y → -	-	- -	-
Ø4	9,10,11	R	R R	R	R R	R	R R	G	Y R	R
Ø5	7,8	-	- -	-	- -	-	- -	-	- -	-
Ø6	1,2,3,4	R	R R	R	R R	R	R R	R	R R	R
Ø7	10,11	-	- -	-	- -	-	- -	-	- -	-
Ø8	12,13,14	R	R R	R	R R	R	R R	R	R R	R
Ø2P	19,20	D	D D	*	D D	D	D D	D	D D	
Ø4P	17,18	D	D D	D	D D	D	D D	*	D D	
Ø6P	15,16	D	D D	D	D D	D	D D	D	D D	
Ø8P	21,22	D	D D	D	D D	D	D D	D	D D	

RING 2

	HEAD NUMBERS	Ø5 R/W	Ø5 CLEAR TO **	Ø6 R/W	Ø6 CLEAR TO **	Ø7 R/W	Ø7 CLEAR TO **	Ø8 R/W	Ø8 CLEAR TO **
Ø1	3,4	-	- -	-	- -	-	- -	-	- -
Ø2	5,6,7,8	R	R R	R	R R	R	R R	R	R R
Ø3	13,14	-	- -	-	- -	-	- -	-	- -
Ø4	9,10,11	R	R R	R	R R	R	R R	R	R R
Ø5	7,8	G →	Y → -	-	- -	-	- -	-	- -
Ø6	1,2,3,4	R	R R	G	Y R	R	R R	R	R R
Ø7	10,11	-	- -	-	- -	G →	Y → -	-	- -
Ø8	12,13,14	R	R R	R	R R	R	R R	G	Y R
Ø2P	19,20	D	D D	D	D D	D	D D	D	D D
Ø4P	17,18	D	D D	D	D D	D	D D	D	D D
Ø6P	15,16	D	D D	*	D D	D	D D	D	D D
Ø8P	21,22	D	D D	D	D D	D	D D	*	D D

BARRIER

** CLEARANCE TO A PHASE IN CONFLICT WITH THIS PHASE ON (SEE CHART 1)

* WHEN CALLED, TIMED STEADY WALK, THEN FLASHING DON'T WALK, THEN GOES TO STEADY DON'T WALK

CHART 1

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

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	SIZE	NUMBER OF TURNS
11	1	X			1	1				EXISTING	
12	1	X			1	1				EXISTING	
21	2	X			2	2				EXISTING	
22	2	X			2	2				EXISTING	
31	3	X			3	3				EXISTING	
32	3	X			3	3				EXISTING	
41	4			X		4		X		EXISTING	
42	4			X		4		X		EXISTING	
51	5	X			5	5				EXISTING	
52	5	X			5	5				EXISTING	
61	6	X			6	6				EXISTING	
62	6	X			6	6				EXISTING	
71	7	X			7	7				EXISTING	
81	8			X		8		X		EXISTING	
82	8			X		8		X		EXISTING	

CONTROLLER LOGIC

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

OVERLAPS

O.L. "A" =
O.L. "B" =
O.L. "C" =
O.L. "D" =

TYPE OF INTERCONNECT COMMUNICATION	
NONE	
TBC	X
CLOSED LOOP TWISTED PAIR*	
CLOSED LOOP FIBER OPTIC*	
RADIO	
*LOCATION OF MASTER CONTROLLER NO: S-	
SIGNAL SYSTEM *: SS- -	

TYPE OF PRE-EMPT	
NONE	X
RAILROAD	
EMERGENCY VEHICLE	
3M	
TOMAR	
HARDWIRE	
OTHER	
LIFT BRIDGE	
QUEUE DETECTOR	

TYPE OF LIGHTING	
BY OTHER AGENCY	
IN TRAFFIC SIGNAL CABINET	X
IN SEPARATE DOT LIGHTING CABINET	

EMERGENCY VEHICLE PREEMPTION SEQUENCE

EMERGENCY VEHICLE PREEMPTOR	CHANNEL C	CHANNEL D
MOVEMENT	↰ ↑	↓ ↘
PHASE	4+7	8+3

AFTER PREEMPTION SEQUENCE 4+7 OR 8+3, CONTROLLER SHALL RETURN TO PHASES 4+8.

GENERAL NOTES:

1. ANY ACTUATED PHASE FOR WHICH THERE IS NO CALL SHALL BE SKIPPED.
2. WHEN ONE PHASE IS ON ALONE, ANY NONCONFLICTING PHASE MAY START TIMING CONCURRENTLY WITHOUT A CLEARANCE INTERVAL. (SEE CHART 1 AT LEFT.)
3. IF ANY OPPOSING THRU PHASES ARE TIMING CONCURRENTLY, THEY SHALL TERMINATE TOGETHER DUE TO PERMISSIVE LEFT TURN CONFLICT.

TAYLOR DRIVE & ERIE AVENUE
CITY OF SHEBOYGAN
SHEBOYGAN COUNTY

SIGNAL NO.

CONTROLLER TYPE: EPAC

DATE 10/14

PAGE NO. 3 OF 3

PROJECT NO: 4996-01-57 | HWY: TAYLOR DRIVE | COUNTY: SHEBOYGAN | SEQUENCE OF OPERATIONS | SHEET 89 | E

2

CTH TA - S. TAYLOR DRIVE

TEMPORARY PAVEMENT MARKING
4-INCH. REMOVABLE TAPE

LANE CLOSED
R11-2-L
48"X30"

ROAD CLOSED
R11-2
48"X30"

25'

UNION AVENUE

R3-1
24"X24"

R3-60-L
30"X36"

IP

MH

ASPHALT

BUILDING
2115

0' 40'

N

NOTES

1. SEE SDD "TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS" FOR ADVANCED WARNING SIGNS NOT SHOWN.
2. SEE SDD "TRAFFIC CONTROL, SINGLE LANE CLOSURE, NON-FREEWAY/EXPRESSWAY" FOR LANE CLOSURES ON TAYLOR DRIVE.

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- SIGN ON TEMPORARY SUPPORT
- WORK AREA
- DIRECTION OF TRAFFIC
- MB PORTABLE CHANGEABLE MESSAGE BOARD

PROJECT NO: 4996-01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	TRAFFIC CONTROL - UNION AVENUE STAGE 1	SHEET	E

FILE NAME : L:\PROJECTS\11744\DWG\025001_TC.DWG PLOT DATE : 1/13/2015 10:45 AM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1:40_XREF

2

CTH TA - S. TAYLOR DRIVE

TEMPORARY PAVEMENT MARKING
4-INCH. REMOVABLE TAPE

LANE CLOSED
R11-2-L
48"X30"

ROAD CLOSED
R11-2
48"X30"

25'

UNION AVENUE

R3-1
24"X24"

R3-60-L
30"X36"

ASPHALT

MH

IP

BUILDING
2115

W

BM #9

0' 40'

N

NOTES

1. SEE SDD "TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS" FOR ADVANCED WARNING SIGNS NOT SHOWN.
2. SEE SDD "TRAFFIC CONTROL, SINGLE LANE CLOSURE, NON-FREEWAY/EXPRESSWAY" FOR LANE CLOSURES ON TAYLOR DRIVE.

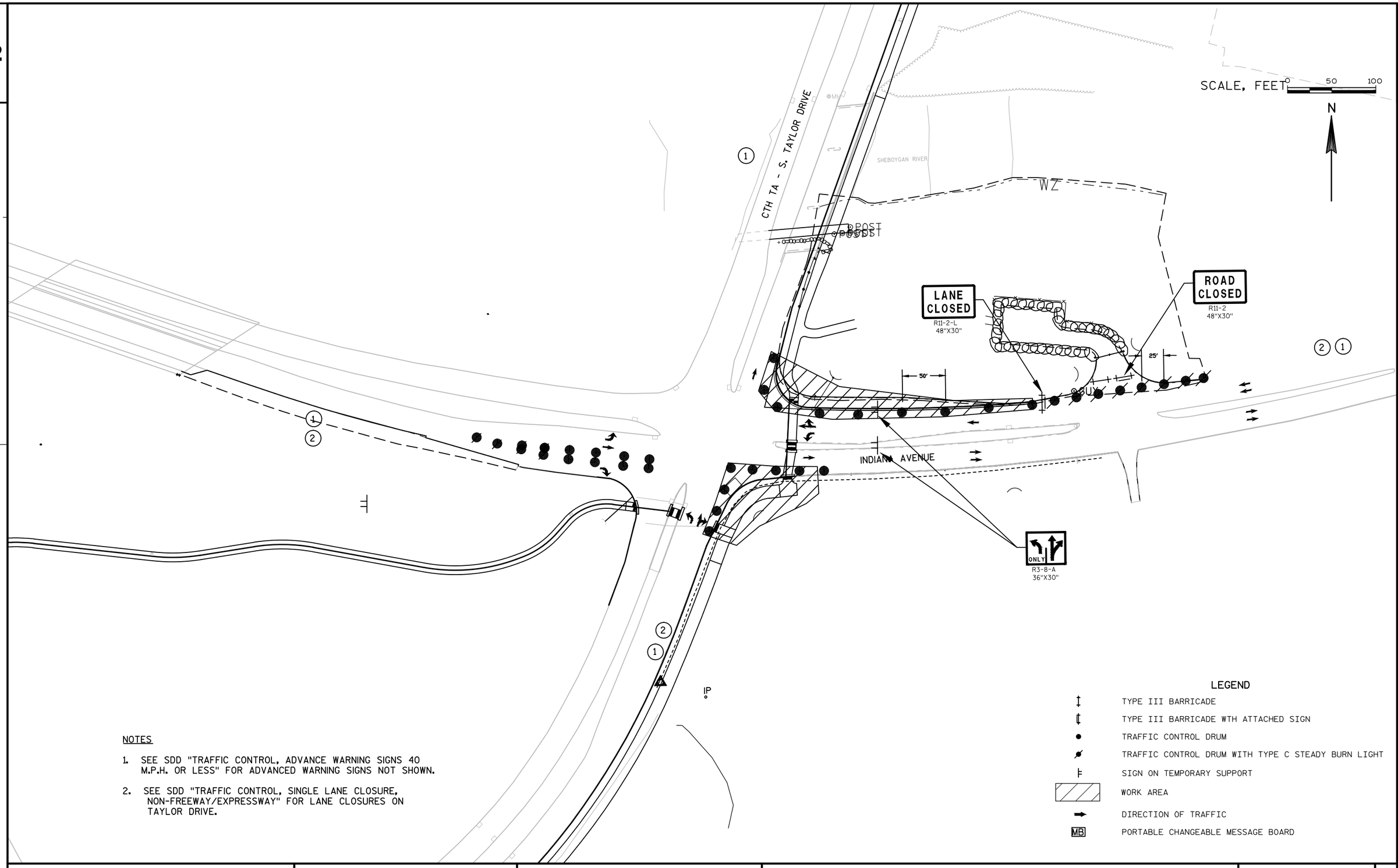
LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- SIGN ON TEMPORARY SUPPORT
- WORK AREA
- DIRECTION OF TRAFFIC
- MB PORTABLE CHANGEABLE MESSAGE BOARD

PROJECT NO: 4996-01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	TRAFFIC CONTROL - UNION AVENUE STAGE 1	SHEET 91	E

FILE NAME : L:\PROJECTS\11744\DWG\025001_TC.DWG PLOT DATE : 3/24/2015 9:16 AM PLOT BY : JUMP, KEVIN PLOT NAME : PLOT SCALE : 1:40_XREF

2



NOTES

1. SEE SDD "TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS" FOR ADVANCED WARNING SIGNS NOT SHOWN.
2. SEE SDD "TRAFFIC CONTROL, SINGLE LANE CLOSURE, NON-FREEWAY/EXPRESSWAY" FOR LANE CLOSURES ON TAYLOR DRIVE.

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- SIGN ON TEMPORARY SUPPORT
- WORK AREA
- DIRECTION OF TRAFFIC
- MB PORTABLE CHANGEABLE MESSAGE BOARD

PROJECT NO: 4996-01-57	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	TRAFFIC CONTROL - INDIANA AVENUE STAGE 1	SHEET	E

FILE NAME : L:\PROJECTS\11744\DWG\025003_TC.DWG PLOT DATE : 1/13/2015 10:47 AM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1" = 100'_XREF

2

SCALE, FEET 0 50 100

N

CTH TA - S. TAYLOR DRIVE

SHEBOYGAN RIVER

WZ

POST

POST

LANE CLOSED
R11-2-L
48"X30"

ROAD CLOSED
R11-2
48"X30"

GUY

25'

INDIANA AVENUE

INDIANA AVENUE

R3-8-K
36"X30"

STAGE 2B WORK ZONE

STAGE 2A WORK ZONE

IP

NOTES

1. SEE SDD "TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS" FOR ADVANCED WARNING SIGNS NOT SHOWN.
2. SEE SDD "TRAFFIC CONTROL, SINGLE LANE CLOSURE, NON-FREEWAY/EXPRESSWAY" FOR LANE CLOSURES ON TAYLOR DRIVE.
3. TRAFFIC CONTROL IS SHOWN FOR STAGE 2A. CHANGE LANE CLOSURE TO CLOSE SB INSIDE LANE DURING STAGE 2B. COMPLETE MEDIAN WORK IN STAGE 2A PRIOR TO SWITCHING TRAFFIC CONTROL. NO TRAFFIC CONTROL REQUIRED ON INDIANA AVENUE DURING STAGE 2B EXCEPT FOR ADVANCED WARNING SIGNS.

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- SIGN ON TEMPORARY SUPPORT
- WORK AREA
- DIRECTION OF TRAFFIC
- MB PORTABLE CHANGEABLE MESSAGE BOARD

PROJECT NO: 4996-01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	TRAFFIC CONTROL - INDIANA AVENUE STAGE 2A & 2B	SHEET	E

FILE NAME : L:\PROJECTS\11744\DWG\025004_TC.DWG PLOT DATE : 1/13/2015 10:48 AM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1" = 100'_XREF

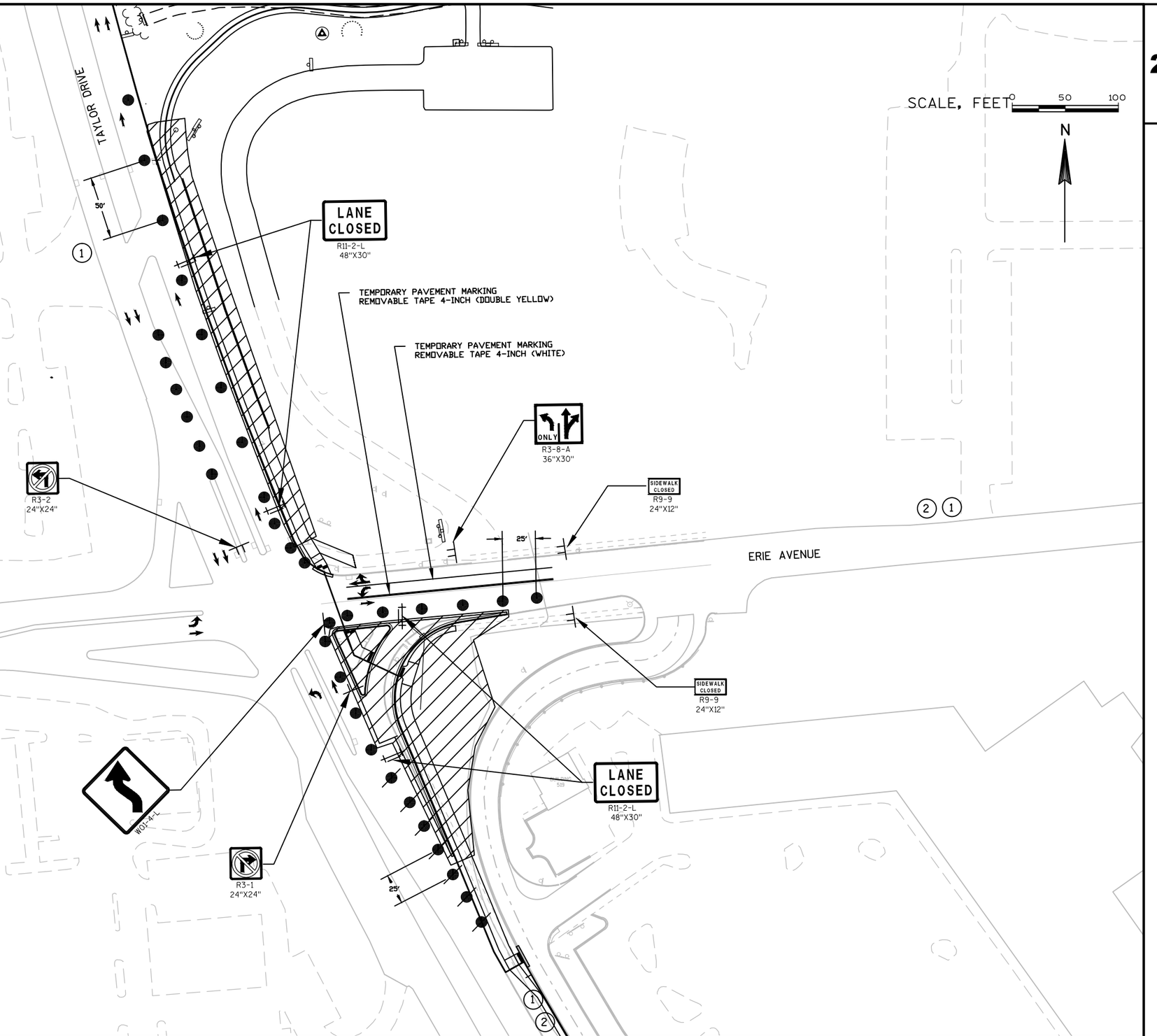
LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- SIGN ON TEMPORARY SUPPORT
- WORK AREA
- DIRECTION OF TRAFFIC
- MB — PORTABLE CHANGEABLE MESSAGE BOARD

NOTES

1. SEE SDD "TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS" FOR ADVANCED WARNING SIGNS NOT SHOWN.
2. SEE SDD "TRAFFIC CONTROL, SINGLE LANE CLOSURE, NON-FREEWAY/EXPRESSWAY" FOR LANE CLOSURES ON TAYLOR DRIVE.

DO NOT SET UP TRAFFIC CONTROL FOR LANE CLOSURES AND TURNING RESTRICTIONS UNTIL THE SOUTH TAYLOR HEIGHTS ENTRANCE IS COMPLETELY OPEN.



PROJECT NO: 4996-01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	TRAFFIC CONTROL - ERIE AVENUE STAGE 1	SHEET 94	E

FILE NAME : L:\PROJECTS\11744\DWG\025005_TC.DWG PLOT DATE : 3/24/2015 9:21 AM PLOT BY : JUMP, KEVIN PLOT NAME : PLOT SCALE : 1:100_XREF

WISDOT/CADDS SHEET 42

2

SCALE, FEET 0 50 100

N

TAYLOR DRIVE

ERIE AVENUE

SIDEWALK CLOSED
R9-9
24"X12"

25'

SIDEWALK CLOSED
R9-9
24"X12"

LANE CLOSED
R11-2-L
48"X30"

R3-1
24"X24"

25'

NOTES

1. SEE SDD "TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS" FOR ADVANCED WARNING SIGNS NOT SHOWN.

2. SEE SDD "TRAFFIC CONTROL, SINGLE LANE CLOSURE, NON-FREEWAY/EXPRESSWAY" FOR LANE CLOSURES ON TAYLOR DRIVE.

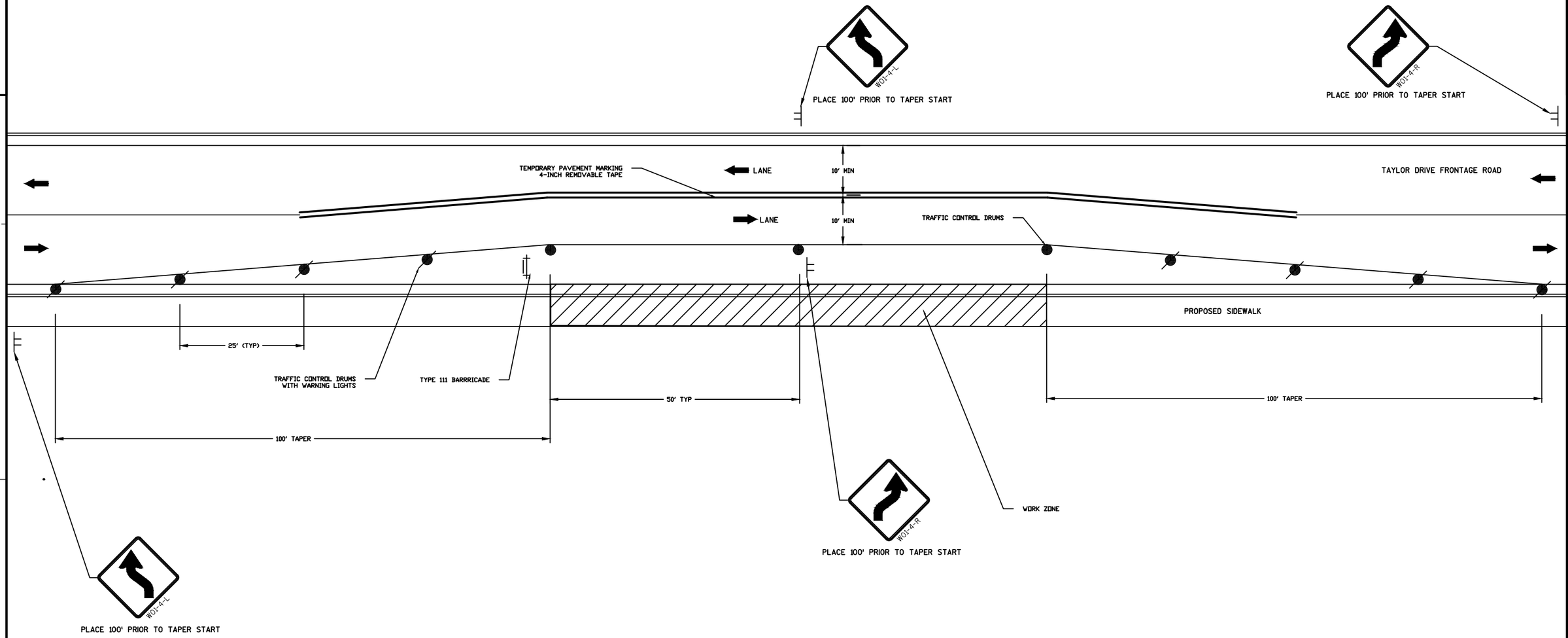
REMOVE TEMPORARY PAVEMENT MARKINGS FROM STAGE 1 PRIOR TO MOVING TRAFFIC FOR STAGE 2.

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- SIGN ON TEMPORARY SUPPORT
- WORK AREA
- DIRECTION OF TRAFFIC
- MB PORTABLE CHANGEABLE MESSAGE BOARD

PROJECT NO: 4996-01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	TRAFFIC CONTROL - ERIE AVENUE STAGE 2	SHEET 95	E

2



LANE SHIFT ON TAYLOR DRIVE FRONTAGE ROAD

GENERAL NOTES:

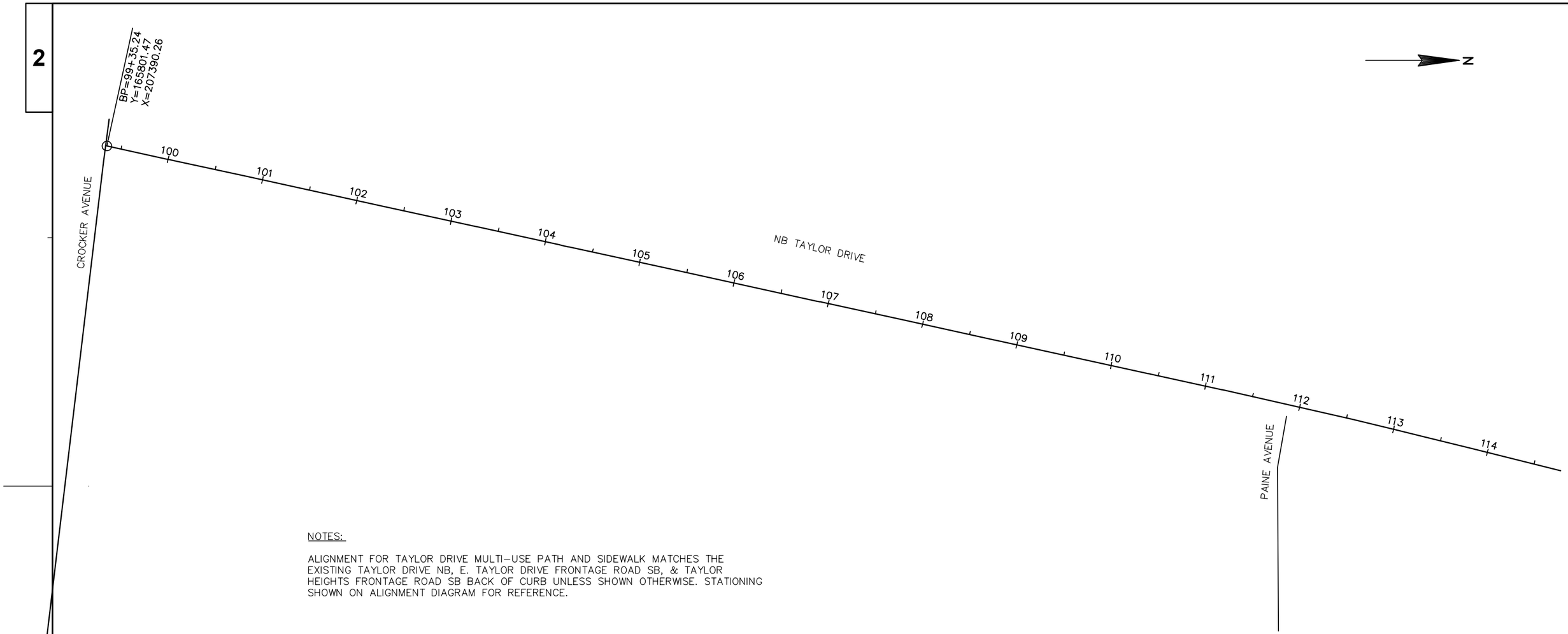
DO NOT BLOCK DRIVEWAYS OR SIDEROADS

ADVANCE WARNING SIGNING SHALL COMPLY WITH SDD "TRAFFIC CONTROL, ADVANCED WARNING SIGNS 40 M.P.H. OR LESS"

SIDEROAD ADVANCED SIGNING SHALL COMPLY WITH SDD "BARRICADES AND SINGS FOR SIDEROAD CLOSURES"

THE ACCESS ROAD TO THE TAYLOR HEIGHTS SHOPPING CENTER NORTH OF COMMUNITY BANK IS CONSIDERED A SIDEROAD

2



NOTES:

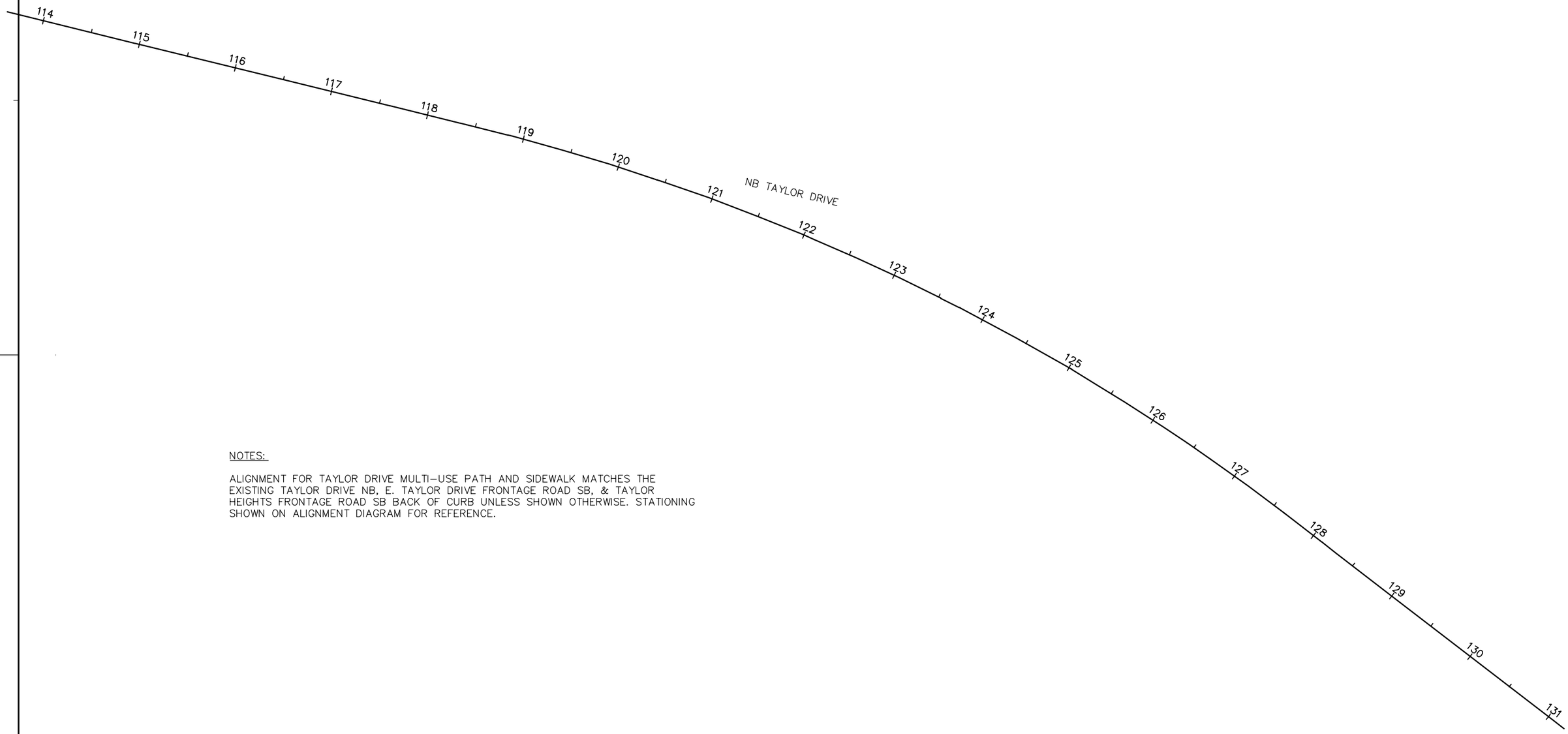
ALIGNMENT FOR TAYLOR DRIVE MULTI-USE PATH AND SIDEWALK MATCHES THE EXISTING TAYLOR DRIVE NB, E. TAYLOR DRIVE FRONTAGE ROAD SB, & TAYLOR HEIGHTS FRONTAGE ROAD SB BACK OF CURB UNLESS SHOWN OTHERWISE. STATIONING SHOWN ON ALIGNMENT DIAGRAM FOR REFERENCE.

PROJECT NO: 4996-01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	ALIGNMENT DIAGRAM	SHEET 97	E

2

2

N



NOTES:

ALIGNMENT FOR TAYLOR DRIVE MULTI-USE PATH AND SIDEWALK MATCHES THE EXISTING TAYLOR DRIVE NB, E. TAYLOR DRIVE FRONTAGE ROAD SB, & TAYLOR HEIGHTS FRONTAGE ROAD SB BACK OF CURB UNLESS SHOWN OTHERWISE. STATIONING SHOWN ON ALIGNMENT DIAGRAM FOR REFERENCE.

PROJECT NO: 4996-01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	ALIGNMENT DIAGRAM	SHEET 98	E

2

N

131 132 133 134 135 136 137 138 139 140 141 142 143 144 145 146 147 148

NB TAYLOR DRIVE

PI: 141+27.57
Y=169632.28
X=208939.82

UNION AVENUE

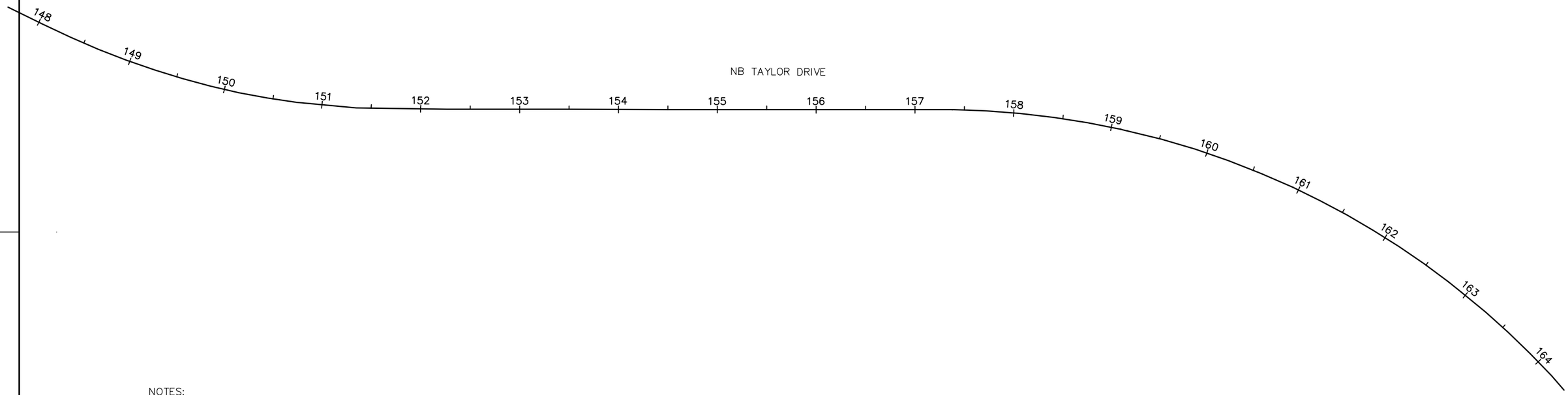
NOTES:

ALIGNMENT FOR TAYLOR DRIVE MULTI-USE PATH AND SIDEWALK MATCHES THE EXISTING TAYLOR DRIVE NB, E. TAYLOR DRIVE FRONTAGE ROAD SB, & TAYLOR HEIGHTS FRONTAGE ROAD SB BACK OF CURB UNLESS SHOWN OTHERWISE. STATIONING SHOWN ON ALIGNMENT DIAGRAM FOR REFERENCE.

PROJECT NO: 4996-01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	ALIGNMENT DIAGRAM	SHEET 99	E

2

N



NOTES:

ALIGNMENT FOR TAYLOR DRIVE MULTI–USE PATH AND SIDEWALK MATCHES THE EXISTING TAYLOR DRIVE NB, E. TAYLOR DRIVE FRONTAGE ROAD SB, & TAYLOR HEIGHTS FRONTAGE ROAD SB BACK OF CURB UNLESS SHOWN OTHERWISE. STATIONING SHOWN ON ALIGNMENT DIAGRAM FOR REFERENCE.

PROJECT NO: 4996–01–58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	ALIGNMENT DIAGRAM	SHEET 100 ___ E

2

NOTES:

ALIGNMENT FOR TAYLOR DRIVE MULTI–USE PATH AND SIDEWALK MATCHES THE EXISTING TAYLOR DRIVE NB, E. TAYLOR DRIVE FRONTAGE ROAD SB, & TAYLOR HEIGHTS FRONTAGE ROAD SB BACK OF CURB UNLESS SHOWN OTHERWISE. STATIONING SHOWN ON ALIGNMENT DIAGRAM FOR REFERENCE.

10+00
N18° 44' 12"E
BP: 10+00.00
Y=172473.06
X=209361.14
PC: 10+37.05
Y=172506.15
X=209373.04
11+00
N82° 15' 40"E
PT: 11+03.57
Y=172548.33
X=209421.79
PC: 12+11.57
Y=172562.87
X=209528.80
12+00
PT: 12+38.59
Y=172564.70
X=209555.73
PC: 13+41.14
Y=172564.70
X=209658.29
PT: 13+65.52
Y=172563.21
X=209682.60
13+00
N90° 00' 00"E
14+00
S83° 01' 03"E
PC: 15+01.88
Y=172546.63
X=209817.95
15+00
PC: 16+17.10
Y=172556.10
X=209932.38
N81° 46' 40"E
16+00
PT: 16+84.40
Y=172554.44
X=209999.34
17+00
S78° 56' 33"E
PT: 15+54.95
Y=172547.21
X=209870.87
18+00
PC: 18+11.46
Y=172530.07
X=210124.04
PC: 19+91.21
Y=172579.84
X=210287.59
19+00
N70° 30' 53"E
20+00
S82° 11' 52"E
21+00
PT: 20+48.77
Y=172598.49
X=210339.73
EP: 21+12.56
Y=172589.83
X=210402.93
PI: 178+31.40
Y=172713.61
X=210541.01
PT: 19+18.07
Y=172537.81
X=210229.11
PC: 19+24.24
Y=172539.87
X=210234.92
PT: 19+72.55
Y=172566.15
X=210274.90
PI: 177+44.44
Y=172626.81
X=210535.82

PI STATION = 10+74.20
DELTA = 63.5246
DEGREE = 95°29'35"
TANGENT = 37.15
LENGTH = 66.52
RADIUS = 60.00

PI STATION = 12+25.10
DELTA = 7.7388
DEGREE = 28°38'52"
TANGENT = 13.53
LENGTH = 27.01
RADIUS = 200.00

PI STATION = 13+53.34
DELTA = 6.9826
DEGREE = 28°38'52"
TANGENT = 12.20
LENGTH = 24.37
RADIUS = 200.00

PI STATION = 15+28.57
DELTA = 15.2050
DEGREE = 28°38'52"
TANGENT = 26.69
LENGTH = 53.08
RADIUS = 200.00

PI STATION = 16+51.07
DELTA = 19.2800
DEGREE = 28°38'52"
TANGENT = 33.97
LENGTH = 67.30
RADIUS = 200.00

PI STATION = 18+66.07
DELTA = 30.5430
DEGREE = 28°38'52"
TANGENT = 54.61
LENGTH = 106.62
RADIUS = 200.00

PI STATION = 19+48.87
DELTA = 27.6780
DEGREE = 57°17'45"
TANGENT = 24.63
LENGTH = 48.31
RADIUS = 100.00

PI STATION = 20+22.43
DELTA = 54.9656
DEGREE = 95°29'35"
TANGENT = 31.21
LENGTH = 57.56
RADIUS = 60.00

M. INDIANA AVENUE (CTH PP)

SHEBOYGAN RIVER

UNIVERSITY DRIVE

NB TAYLOR DRIVE

E. INDIANA AVENUE (CTH PP)

164 165 166 167 168 169 170 171 172 173 174 175 176 177 178 179 180

PROJECT NO: 4996–01–58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	ALIGNMENT DIAGRAM	SHEET 101 E

FILE NAME : L:\PROJECTS\11744\DWG\027201_AD.DWG PLOT DATE : 10/1/2014 6:59 AM PLOT BY : MOYER, TIM PLOT NAME : _____PLOT SCALE : $$.....plotscale.....$$

WISDOT/CADDS SHEET 42

2

N

NB TAYLOR DRIVE

180 181 182 183 184 185 186 187 188 189 190 191 192 193 194 195

SHEBOYGAN RIVER

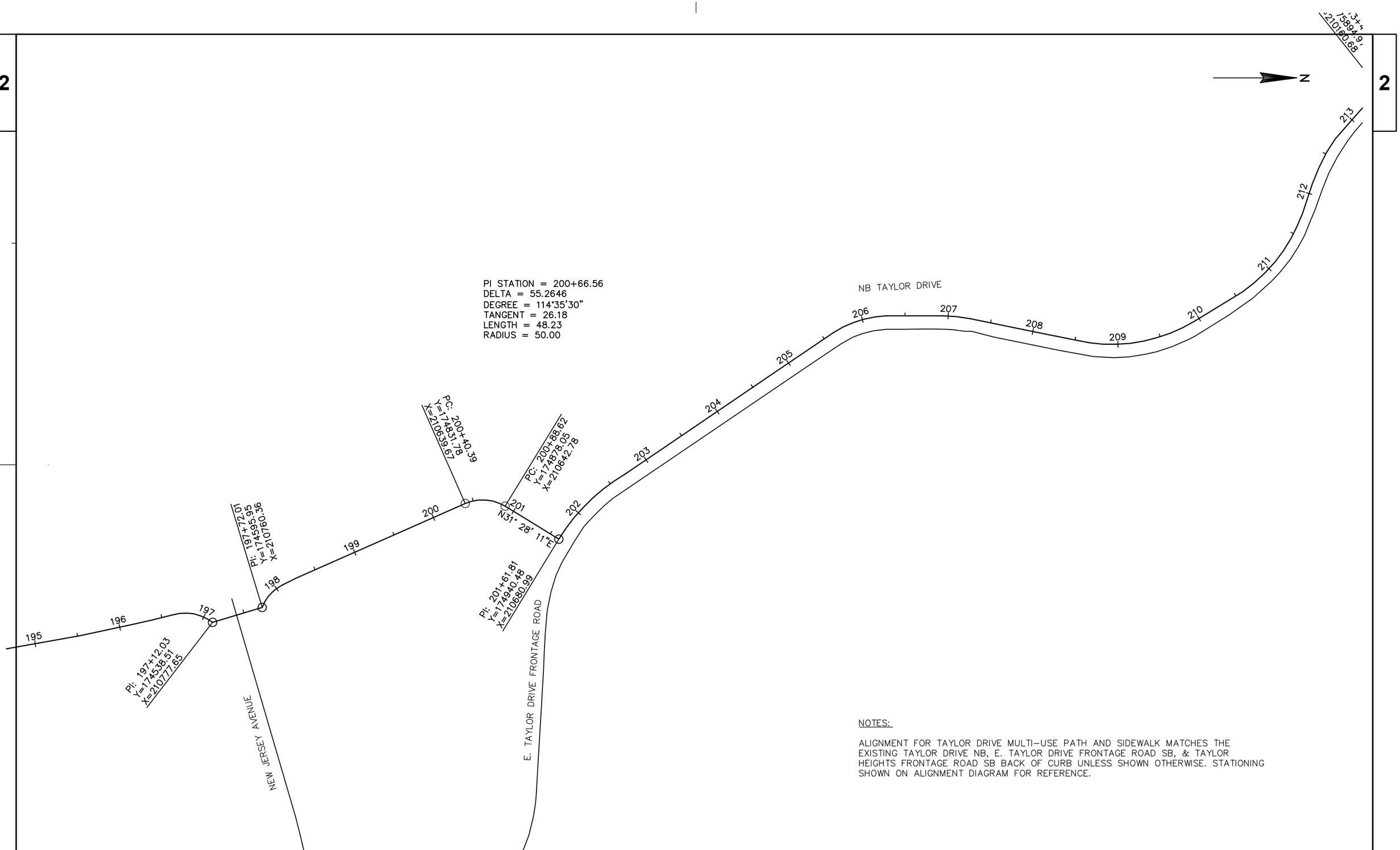
UNION PACIFIC RAILROAD

NOTES:

ALIGNMENT FOR TAYLOR DRIVE MULTI–USE PATH AND SIDEWALK MATCHES THE EXISTING TAYLOR DRIVE NB, E. TAYLOR DRIVE FRONTAGE ROAD SB, & TAYLOR HEIGHTS FRONTAGE ROAD SB BACK OF CURB UNLESS SHOWN OTHERWISE. STATIONING SHOWN ON ALIGNMENT DIAGRAM FOR REFERENCE.

PROJECT NO: 4996–01–58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	ALIGNMENT DIAGRAM	SHEET 102	E

2

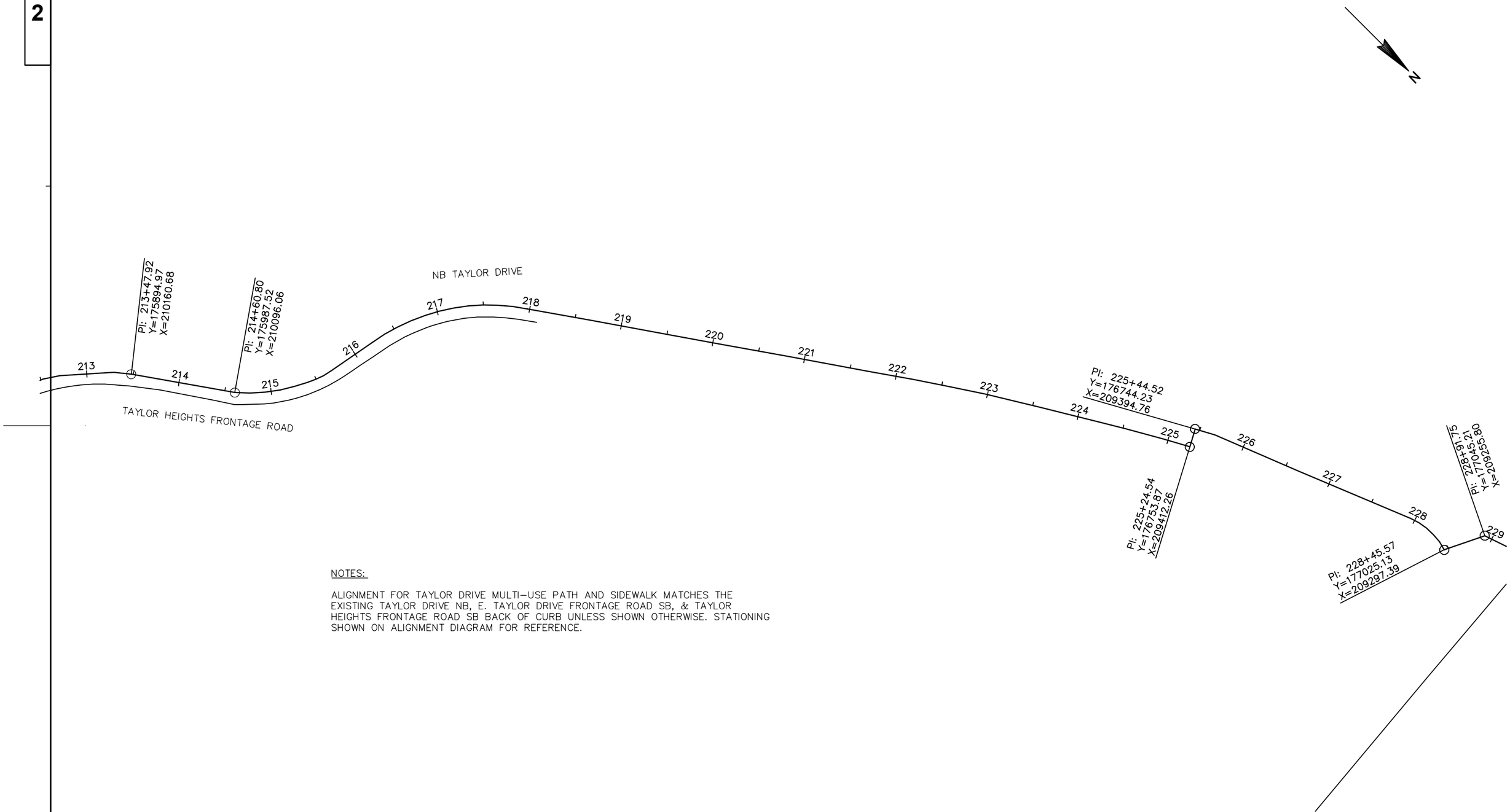


NOTES:

ALIGNMENT FOR TAYLOR DRIVE MULTI-USE PATH AND SIDEWALK MATCHES THE EXISTING TAYLOR DRIVE NB, E. TAYLOR DRIVE FRONTAGE ROAD SB, & TAYLOR HEIGHTS FRONTAGE ROAD SB BACK OF CURB UNLESS SHOWN OTHERWISE. STATIONING SHOWN ON ALIGNMENT DIAGRAM FOR REFERENCE.

PROJECT NO: 4996-01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	ALIGNMENT DIAGRAM	SHEET 103	E

2



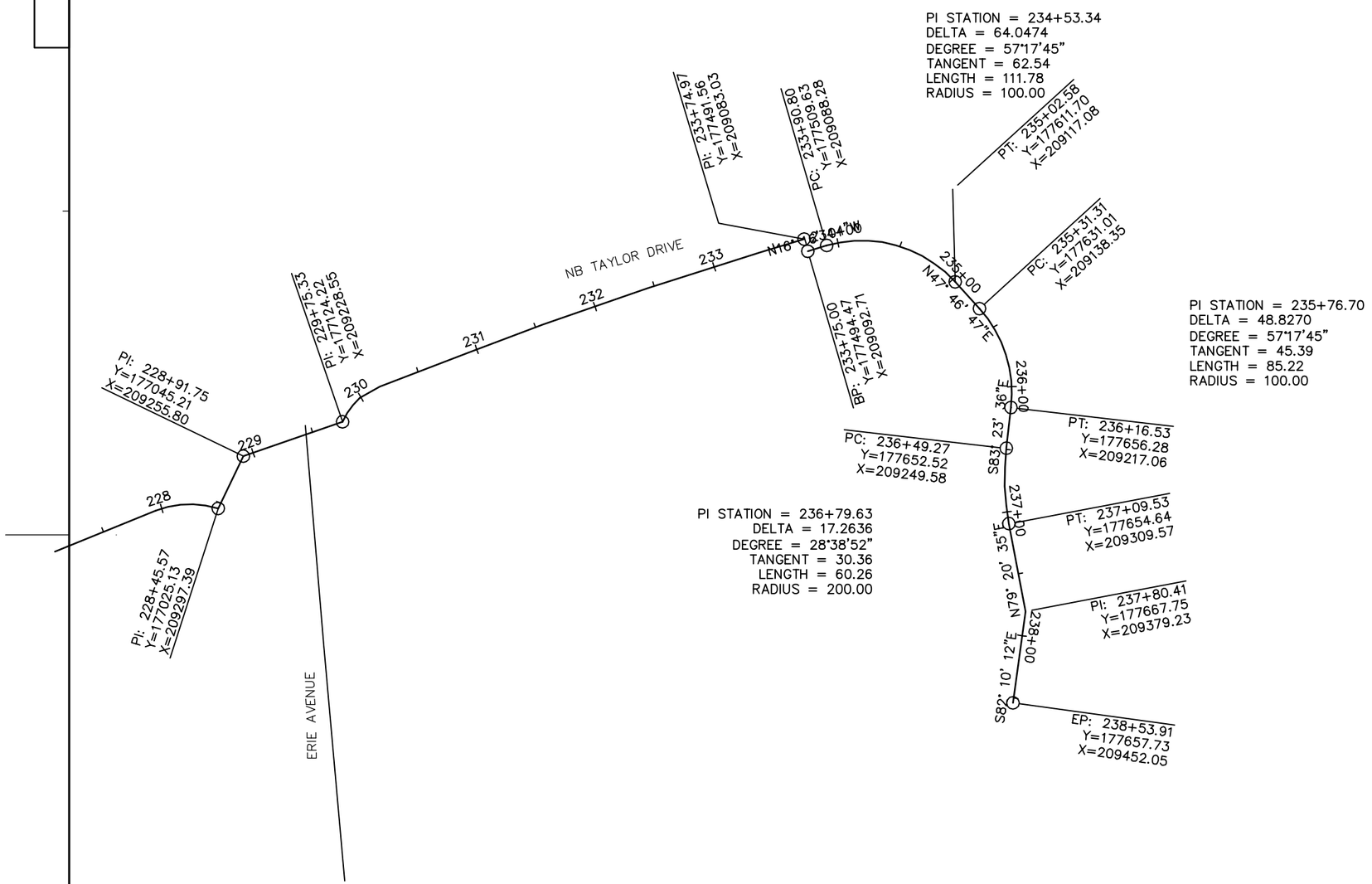
NOTES:

ALIGNMENT FOR TAYLOR DRIVE MULTI-USE PATH AND SIDEWALK MATCHES THE EXISTING TAYLOR DRIVE NB, E. TAYLOR DRIVE FRONTAGE ROAD SB, & TAYLOR HEIGHTS FRONTAGE ROAD SB BACK OF CURB UNLESS SHOWN OTHERWISE. STATIONING SHOWN ON ALIGNMENT DIAGRAM FOR REFERENCE.

PROJECT NO: 4996-01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	ALIGNMENT DIAGRAM	SHEET 104	E

2

N



NOTES:

ALIGNMENT FOR TAYLOR DRIVE MULTI-USE PATH AND SIDEWALK MATCHES THE EXISTING TAYLOR DRIVE NB, E. TAYLOR DRIVE FRONTAGE ROAD SB, & TAYLOR HEIGHTS FRONTAGE ROAD SB BACK OF CURB UNLESS SHOWN OTHERWISE. STATIONING SHOWN ON ALIGNMENT DIAGRAM FOR REFERENCE.

PROJECT NO: 4996-01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	ALIGNMENT DIAGRAM	SHEET 105 E

DATE 28SEP15 — E S T I M A T E O F Q U A N T I T I E S

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	4996-01-58 QUANTITY
0010	201.0105	Clearing	STA	10.000	10.000
0020	201.0205	Grubbing	STA	10.000	10.000
0030	203.0100	Removing Small Pipe Culverts	EACH	1.000	1.000
0040	204.0100	Removing Pavement	SY	1,249.000	1,249.000
0050	204.0150	Removing Curb & Gutter	LF	425.000	425.000
0060	204.0155	Removing Concrete Sidewalk	SY	159.000	159.000
0070	204.0165	Removing Guardrail	LF	132.000	132.000
0080	204.0195	Removing Concrete Bases	EACH	7.000	7.000
0090	204.0220	Removing Inlets	EACH	2.000	2.000
0100	204.0245	Removing Storm Sewer (size) 01. 24-Inch	LF	20.000	20.000
0110	204.0245	Removing Storm Sewer (size) 02. 12-Inch	LF	106.000	106.000
0120	205.0100	Excavation Common	CY	12,245.000	12,245.000
0130	206.1000	Excavation for Structures Bridges (structure) 01. M-59-001	LS	1.000	1.000
0140	206.1000	Excavation for Structures Bridges (structure) 02. R-59-188	LS	1.000	1.000
0150	206.1000	Excavation for Structures Bridges (structure) 03. B-59-189	LS	1.000	1.000
0160	206.3000	Excavation for Structures Retaining Walls (structure) 01. R-59-27	LS	1.000	1.000
0170	206.3000	Excavation for Structures Retaining Walls (structure) 02. R-59-28	LS	1.000	1.000
0180	206.3000	Excavation for Structures Retaining Walls (structure) 04. R-59-32	LS	1.000	1.000
0190	208.0100	Borrow	CY	6,668.000	6,668.000
0200	209.0200.S	Backfill Controlled Low Strength	CY	960.000	960.000
0210	210.0100	Backfill Structure	CY	2,790.000	2,790.000
0220	213.0100	Finishing Roadway (project) 01. 4996-01-58	EACH	1.000	1.000
0230	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	7,647.000	7,647.000
0240	310.0115	Base Aggregate Open Graded	CY	696.000	696.000
0250	320.0125	Concrete Base 6-Inch	SY	8.000	8.000
0260	415.0070	Concrete Pavement 7-Inch	SY	694.000	694.000
0270	416.0270	Concrete Driveway HES 7-Inch	SY	490.000	490.000
0280	416.0610	Drilled Tie Bars	EACH	506.000	506.000
0290	416.0620	Drilled Dowel Bars	EACH	10.000	10.000
0300	416.1710	Concrete Pavement Repair	SY	68.000	68.000
0310	465.0105	Asphaltic Surface	TON	2,559.000	2,559.000
0320	502.0100	Concrete Masonry Bridges	CY	322.000	322.000
0330	504.0500	Concrete Masonry Retaining Walls	CY	485.000	485.000
0340	505.0405	Bar Steel Reinforcement HS Bridges	LB	9,960.000	9,960.000
0350	505.0605	Bar Steel Reinforcement HS Coated Bridges	LB	53,320.000	53,320.000
0360	505.0615	Bar Steel Reinforcement HS Coated Retaining Walls	LB	43,310.000	43,310.000
0370	506.0605	Structural Steel HS	LB	456,234.000	456,234.000
0380	516.0500	Rubberized Membrane Waterproofing	SY	60.000	60.000
0390	520.8000	Concrete Collars for Pipe	EACH	1.000	1.000
0400	522.1012	Apron Endwalls for Culvert Pipe Reinforced Concrete 12-Inch	EACH	1.000	1.000
0410	522.1024	Apron Endwalls for Culvert Pipe Reinforced Concrete 24-Inch	EACH	3.000	3.000
0420	550.1100	Piling Steel HP 10-Inch X 42 Lb	LF	1,144.000	1,144.000
0430	602.0410	Concrete Sidewalk 5-Inch	SF	11,237.000	11,237.000
0440	602.0515	Curb Ramp Detectable Warning Field Natural Patina	SF	560.000	560.000

3

DATE 28SEP15 E S T I M A T E O F Q U A N T I T I E S

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	4996-01-58 QUANTITY
0450	604.0500	Slope Paving Crushed Aggregate	SY	28.000	28.000
0460	606.0300	Riprap Heavy	CY	81.000	81.000
0470	608.0312	Storm Sewer Pipe Reinforced Concrete Class III 12-Inch	LF	85.000	85.000
0480	608.0315	Storm Sewer Pipe Reinforced Concrete Class III 15-Inch	LF	50.000	50.000
0490	608.0324	Storm Sewer Pipe Reinforced Concrete Class III 24-Inch	LF	115.000	115.000
0500	611.0612	Inlet Covers Type C	EACH	1.000	1.000
0510	611.0624	Inlet Covers Type H	EACH	3.000	3.000
0520	611.1003	Catch Basins 3-FT Diameter	EACH	1.000	1.000
0530	611.1230	Catch Basins 2x3-FT	EACH	2.000	2.000
0540	611.8110	Adjusting Manhole Covers	EACH	6.000	6.000
0550	612.0106	Pipe Underdrain 6-Inch	LF	1,125.000	1,125.000
0560	612.0406	Pipe Underdrain Wrapped 6-Inch	LF	1,005.000	1,005.000
0570	619.1000	Mobilization	EACH	1.000	1.000
0580	620.0300	Concrete Median Sloped Nose	SF	103.000	103.000
0590	624.0100	Water	MGAL	76.000	76.000
0600	625.0100	Topsoil	SY	24,891.000	24,891.000
0610	628.1504	Silt Fence	LF	7,927.000	7,927.000
0620	628.1520	Silt Fence Maintenance	LF	7,927.000	7,927.000
0630	628.1905	Mobilizations Erosion Control	EACH	4.000	4.000
0640	628.1910	Mobilizations Emergency Erosion Control	EACH	8.000	8.000
0650	628.2006	Erosion Mat Urban Class I Type A	SY	17,041.000	17,041.000
0660	628.2008	Erosion Mat Urban Class I Type B	SY	256.000	256.000
0670	628.2023	Erosion Mat Class II Type B	SY	7,594.000	7,594.000
0680	628.7005	Inlet Protection Type A	EACH	2.000	2.000
0690	628.7015	Inlet Protection Type C	EACH	39.000	39.000
0700	629.0210	Fertilizer Type B	CWT	15.700	15.700
0710	630.0140	Seeding Mixture No. 40	LB	269.800	269.800
0720	634.0812	Posts Tubular Steel 2x2-Inch X 12-FT	EACH	41.000	41.000
0730	634.0814	Posts Tubular Steel 2x2-Inch X 14-FT	EACH	4.000	4.000
0740	637.2210	Signs Type II Reflective H	SF	120.250	120.250
0750	637.2230	Signs Type II Reflective F	SF	93.240	93.240
0760	638.2102	Moving Signs Type II	EACH	4.000	4.000
0770	638.2602	Removing Signs Type II	EACH	11.000	11.000
0780	638.3000	Removing Small Sign Supports	EACH	13.000	13.000
0790	638.4000	Moving Small Sign Supports	EACH	2.000	2.000
0800	642.5001	Field Office Type B	EACH	1.000	1.000
0810	643.0200	Traffic Control Surveillance and Maintenance (project) 01. 4996-01-58	DAY	189.000	189.000
0820	643.0300	Traffic Control Drums	DAY	34,920.000	34,920.000
0830	643.0420	Traffic Control Barricades Type III	DAY	2,820.000	2,820.000
0840	643.0705	Traffic Control Warning Lights Type A	DAY	5,640.000	5,640.000
0850	643.0715	Traffic Control Warning Lights Type C	DAY	6,700.000	6,700.000
0860	643.0800	Traffic Control Arrow Boards	DAY	200.000	200.000
0870	643.0900	Traffic Control Signs	DAY	6,320.000	6,320.000
0880	643.1050	Traffic Control Signs PCMS	DAY	70.000	70.000
0890	645.0112	Geotextile Fabric Type DF Schedule B	SY	2,438.000	2,438.000
0900	645.0120	Geotextile Fabric Type HR	SY	106.000	106.000
0910	646.0106	Pavement Marking Epoxy 4-Inch	LF	4,685.000	4,685.000
0920	646.0600	Removing Pavement Markings	LF	591.000	591.000
0930	647.0156	Pavement Marking Arrows Epoxy Type 1	EACH	1.000	1.000
0940	647.0166	Pavement Marking Arrows Epoxy Type 2	EACH	1.000	1.000

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DATE 28SEP15 E S T I M A T E O F Q U A N T I T I E S

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	4996-01-58 QUANTITY
0950	647.0176	Pavement Marking Arrows Epoxy Type 3	EACH	1.000	1.000
0960	647.0556	Pavement Marking Stop Line Epoxy 12-Inch	LF	299.000	299.000
0970	647.0606	Pavement Marking Island Nose Epoxy	EACH	1.000	1.000
0980	647.0766	Pavement Marking Crosswalk Epoxy 6-Inch	LF	1,003.000	1,003.000
0990	647.0786	Pavement Marking Crosswalk Epoxy 18-Inch	LF	946.000	946.000
1000	649.0300	Temporary Pavement Marking Reflective Tape 4-Inch	LF	7,380.000	7,380.000
1010	650.4000	Construction Staking Storm Sewer	EACH	3.000	3.000
1020	650.4500	Construction Staking Subgrade	LF	14,352.000	14,352.000
1030	650.5000	Construction Staking Base	LF	14,352.000	14,352.000
1040	650.5500	Construction Staking Curb Gutter and Curb & Gutter	LF	929.000	929.000
1050	650.6000	Construction Staking Pipe Culverts	EACH	4.000	4.000
1060	650.6500	Construction Staking Structure Layout (structure) 01. B-59-189	LS	1.000	1.000
1070	650.6500	Construction Staking Structure Layout (structure) 02. B-59-188	LS	1.000	1.000
1080	650.6500	Construction Staking Structure Layout (structure) 03. M-59-1	LS	1.000	1.000
1090	650.6500	Construction Staking Structure Layout (structure) 04. R-59-32	LS	1.000	1.000
1100	650.6500	Construction Staking Structure Layout (structure) 05. R-59-28	LS	1.000	1.000
1110	650.6500	Construction Staking Structure Layout (structure) 06. R-59-27	LS	1.000	1.000
1120	650.8500	Construction Staking Electrical Installations (project) 01. 4996-01-58	LS	1.000	1.000
1130	650.9910	Construction Staking Supplemental Control (project) 01. 4996-01-58	LS	1.000	1.000
1140	650.9920	Construction Staking Slope Stakes	LF	14,352.000	14,352.000
1150	652.0215	Conduit Rigid Nonmetallic Schedule 40 1 1/4-Inch	LF	8,327.000	8,327.000
1160	652.0225	Conduit Rigid Nonmetallic Schedule 40 2-Inch	LF	350.000	350.000
1170	652.0235	Conduit Rigid Nonmetallic Schedule 40 3-Inch	LF	165.000	165.000
1180	652.0615	Conduit Special 3-Inch	LF	240.000	240.000
1190	652.0800	Conduit Loop Detector	LF	478.000	478.000
1200	652.0900	Loop Detector Slots	LF	270.000	270.000
1210	653.0140	Pull Boxes Steel 24x42-Inch	EACH	4.000	4.000
1220	653.0900	Adjusting Pull Boxes	EACH	1.000	1.000
1230	653.0905	Removing Pull Boxes	EACH	4.000	4.000
1240	654.0101	Concrete Bases Type 1	EACH	12.000	12.000
1250	654.0102	Concrete Bases Type 2	EACH	2.000	2.000
1260	654.0200	Concrete Control Cabinet Bases Type 6	EACH	4.000	4.000
1270	655.0230	Cable Traffic Signal 5-14 AWG	LF	580.000	580.000
1280	655.0240	Cable Traffic Signal 7-14 AWG	LF	335.000	335.000
1290	655.0260	Cable Traffic Signal 12-14 AWG	LF	3,335.000	3,335.000
1300	655.0320	Cable Type UF 2-10 AWG Grounded	LF	750.000	750.000
1310	655.0515	Electrical Wire Traffic Signals 10 AWG	LF	2,445.000	2,445.000
1320	655.0610	Electrical Wire Lighting 12 AWG	LF	8,921.000	8,921.000
1330	655.0615	Electrical Wire Lighting 10 AWG	LF	13,372.000	13,372.000
1340	655.0620	Electrical Wire Lighting 8 AWG	LF	6,264.000	6,264.000
1350	655.0700	Loop Detector Lead In Cable	LF	4,005.000	4,005.000
1360	655.0800	Loop Detector Wire	LF	1,506.000	1,506.000

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DATE 28SEP15 E S T I M A T E O F Q U A N T I T I E S

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	4996-01-58 QUANTITY
1370	656.0200	Electrical Service Meter Breaker Pedestal (location) 01. 236+00	LS	1.000	1.000
1380	656.0200	Electrical Service Meter Breaker Pedestal (location) 02. 176+65	LS	1.000	1.000
1390	656.0200	Electrical Service Meter Breaker Pedestal (location) 03. 148+00	LS	1.000	1.000
1400	656.0200	Electrical Service Meter Breaker Pedestal (location) 04. 124+16	LS	1.000	1.000
1410	657.0100	Pedestal Bases	EACH	12.000	12.000
1420	657.0255	Transformer Bases Breakaway 11 1/2-Inch Bolt Circle	EACH	2.000	2.000
1430	657.0305	Poles Type 2	EACH	1.000	1.000
1440	657.0310	Poles Type 3	EACH	1.000	1.000
1450	657.0405	Traffic Signal Standards Aluminum 3.5-FT	EACH	2.000	2.000
1460	657.0425	Traffic Signal Standards Aluminum 15-FT	EACH	6.000	6.000
1470	657.0430	Traffic Signal Standards Aluminum 10-FT	EACH	4.000	4.000
1480	657.0590	Trombone Arms 20-FT	EACH	1.000	1.000
1490	657.0595	Trombone Arms 25-FT	EACH	1.000	1.000
1500	657.0609	Luminaire Arms Single Member 4-Inch Clamp 6-FT	EACH	1.000	1.000
1510	658.0110	Traffic Signal Face 3-12 Inch Vertical	EACH	6.000	6.000
1520	658.0120	Traffic Signal Face 5-12 Inch Vertical	EACH	1.000	1.000
1530	658.0155	Traffic Signal Face 3-12 Inch Horizontal	EACH	2.000	2.000
1540	658.0215	Backplates Signal Face 3 Section 12-Inch	EACH	8.000	8.000
1550	658.0225	Backplates Signal Face 5 Section 12-Inch	EACH	1.000	1.000
1560	658.0416	Pedestrian Signal Face 16-Inch	EACH	14.000	14.000
1570	658.0500	Pedestrian Push Buttons	EACH	15.000	15.000
1580	658.0600	Led Modules 12-Inch Red Ball	EACH	9.000	9.000
1590	658.0605	Led Modules 12-Inch Yellow Ball	EACH	8.000	8.000
1600	658.0610	Led Modules 12-Inch Green Ball	EACH	8.000	8.000
1610	658.0620	Led Modules 12-Inch Yellow Arrow	EACH	2.000	2.000
1620	658.0625	Led Modules 12-Inch Green Arrow	EACH	2.000	2.000
1630	658.0635	Led Modules Pedestrian Countdown Timer 16-Inch	EACH	14.000	14.000
1640	658.5069	Signal Mounting Hardware (location) 01. Taylor Drive & Erie Avenue	LS	1.000	1.000
1650	658.5069	Signal Mounting Hardware (location) 02. Taylor Drive & New Jersey Avenue	LS	1.000	1.000
1660	658.5069	Signal Mounting Hardware (location) 03. Taylor Drive & Indiana Avenue	LS	1.000	1.000
1670	658.5069	Signal Mounting Hardware (location) 04. Taylor Drive & Union Avenue	LS	1.000	1.000
1680	659.0125	Luminaires Utility HPS 250 Watts	EACH	1.000	1.000
1690	661.0200	Temporary Traffic Signals for Intersections (location) 01. Taylor Drive & Union Avenue	LS	1.000	1.000
1700	661.0300	Generators	DAY	2.000	2.000
1710	690.0150	Sawing Asphalt	LF	590.000	590.000
1720	690.0250	Sawing Concrete	LF	1,325.000	1,325.000
1730	715.0415	Incentive Strength Concrete Pavement	DOL	500.000	500.000
1740	715.0502	Incentive Strength Concrete Structures	DOL	10,242.000	10,242.000
1750	ASP.1T0A	On-the-Job Training Apprentice at $5.00/HR	HRS	2,400.000	2,400.000
1760	ASP.1T0G	On-the-Job Training Graduate at $5.00/HR	HRS	2,100.000	2,100.000
1770	SPV.0035	Special 01. Concrete Masonry Soldier Pile Footings	CY	885.000	885.000

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DATE 28SEP15 E S T I M A T E O F Q U A N T I T I E S

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	4996-01-58 QUANTITY
1780	SPV.0060	Special 01. Decorative Lighting Assembly 14-Foot Pole Led	EACH	78.000	78.000
1790	SPV.0060	Special 02. Decorative Lighting Assembly 16-Foot Led	EACH	4.000	4.000
1800	SPV.0060	Special 03. Decorative Lighting Pole Concrete Bases Type 2 Modified	EACH	4.000	4.000
1810	SPV.0060	Special 04. Decorative Lighting Pole Concrete Bases Type 5 Modified	EACH	78.000	78.000
1820	SPV.0060	Special 05. Steel Railing Special R-59-28	EACH	1.000	1.000
1830	SPV.0060	Special 07. Steel Railing Special M-59-001	EACH	1.000	1.000
1840	SPV.0060	Special 08. Steel Railing Special B-59-188	EACH	1.000	1.000
1850	SPV.0060	Special 09. Steel Railing Special B-59-189	EACH	1.000	1.000
1860	SPV.0060	Special 10. Exposing Existing Utilities	EACH	6.000	6.000
1870	SPV.0060	Special 11. Wielded Stud Shear Connections 5/8x6-Inch	EACH	1,665.000	1,665.000
1880	SPV.0060	Special 12. Tree Well And Tree Island	EACH	6.000	6.000
1890	SPV.0060	Special 13. Bench	EACH	3.000	3.000
1900	SPV.0085	Special 01. Low Maintenance Seed Mix	LB	178.200	178.200
1910	SPV.0090	Special 01. Fence Chain Link Polymer Coated 6-Ft	LF	1,332.000	1,332.000
1920	SPV.0090	Special 02. Drilled Shaft Foundation **P**	LF	2,900.000	2,900.000
1930	SPV.0090	Special 03. Foundation Drilling	LF	4,840.000	4,840.000
1940	SPV.0090	Special 04. Concrete Curb & Gutter Type A Special	LF	1,313.000	1,313.000
1950	SPV.0090	Special 05. Concrete Curb & Gutter Type D Special	LF	263.000	263.000
1960	SPV.0105	Special 01. Temp. Non-Intrusive Vehicle Detection System For Union & Taylor	LS	1.000	1.000
1970	SPV.0105	Special 02. Modify Traffic Signals, Intersection Of Taylor Drive & Union Avenue	LS	1.000	1.000
1980	SPV.0105	Special 03. Modify Traffic Signals, Intersection Of Taylor Drive & Indiana Avenue	LS	1.000	1.000
1990	SPV.0105	Special 04. Modify Traffic Signals, Intersection Of Taylor Drive & New Jersey Avenue	LS	1.000	1.000
2000	SPV.0105	Special 05. Modify Traffic Signals, Intersection Of Taylor Drive & Erie Avenue	LS	1.000	1.000
2010	SPV.0105	Special 06. Concrete Pavement Joint Layout	LS	1.000	1.000
2020	SPV.0105	Special 07. Prefabricated Steel Truss Bridge B-59-188 Lrfd	LS	1.000	1.000
2030	SPV.0105	Special 08. Prefabricated Steel Truss Bridge B-59-189 Lrfd	LS	1.000	1.000
2040	SPV.0105	Special 09. Timber Boardwalk	LS	1.000	1.000
2050	SPV.0105	Special 10. Staining Concrete Structure R-59-27	LS	1.000	1.000
2060	SPV.0110	Special 01. Timber Lagging	MBM	35.040	35.040
2070	SPV.0165	Special 01. Anti-Graffiti Coating R-59-27	SF	13,150.000	13,150.000

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DATE 28SEP15 E S T I M A T E O F Q U A N T I T I E S

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	4996-01-58 QUANTITY
2080	SPV.0165	Special 02. Concrete Sidewalk 5-Inch Colored	SF	1,098.000	1,098.000
2090	SPV.0165	Special 03. Wall Modular Block Mechanically Stabilized Earth LRFD R-59-28	SF	2,910.000	2,910.000
2100	SPV.0165	Special 04. Wall Modular Block Mechanically Stabilized Earth LRFD R-59-32	SF	1,625.000	1,625.000
2110	SPV.0165	Special 05. Wall Modular Block Gravity LRFD	SF	231.000	231.000
2120	SPV.0180	Special 01. Architectural Surface Treatment R-59-27	SY	1,171.000	1,171.000
2130	SPV.0180	Special 02. Geocomposite Drain Board	SY	116.000	116.000

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CLEARING AND GRUBBING

STATION	TO	STATION	ITEM NO. 201.0105 CLEARING STA.	ITEM NO. 201.0205 GRUBBING STA.
107+00	-	109+00	2	2
130+00		132+00	2	2
211+00	-	212+00	1	1
215+00	-	217+00	2	2
NEW JERSEY AVE			2	2
20+00	-	21+00	1	1
Total			10	10

REMOVING SMALL PIPE CULVERTS, ITEM NO. 203.0100

LOCATION	DESCRIPTION	EACH
131+50 RT	18" CORRUGATED STEEL	1
TOTAL		1

REMOVING PAVEMENT, ITEM NO. 204.0100

LOCATION	S.Y.
UNION AVE	267
INDIANA AVE	457
ERIE AVE	525
DRIVEWAYS	109
Total	1249

REMOVING CONCRETE SIDEWALK, ITEM NO. 204.0155

STATION	SY
142+61	37
176+32	26
177+80	10
229+00	86
TOTAL	**159**

REMOVING CURB AND GUTTER, ITEM NO. 204.0150

STATION	LF
TAYLOR DRIVE	
99+67	18
111+47	21
112+28	22
141+93	15
142+40 SB LT	14
142+50	45
172+32 NB RT	14
172+32 NB LT	14
177+46	15
177+74	12
177+85	12
197+15	15
197+67	19
200+74	13
210+06	9
210+50	9
212+80	9
213+17	9
213+64	13
214+41	13
225+50	22
225+50 LT	20
229+73	20
UNIVERSITY CONNECTION	
20+75	16
21+00	22
NEW JERSEY AVE	14
TOTAL	**425**

REMOVING GUARD RAIL, ITEM 204.0165

STATION	TO	STATION	LF.
179+40	-	180+07	67
186+96	-	187+61	65
Total			132

REMOVING INLETS, ITEM NO. 204.0220

STATION	DESCRIPTION	EACH
194+68	RT	1
228+49	RT	1
TOTAL		2

REMOVING STORM SEWER, ITEM NO. 204.0245

STATION	DESCRIPTION	12" LF	24" LF
120+25	RT	---	20
194+68	RT	32	---
228+49	RT	74	---
TOTAL		106	20

EARTHWORK SUMMARY TABLE

DIVISION	FROM/TO STATION	LOCATION	COMMON EXCAVATION ITEM # 205.0100		UNUSABLE PAVEMENT MATERIAL (4)	AVAILABLE MATERIAL (5)	UNEXPANDED FILL	EXPANDED FILL (6)	MASS ORDINATE +/- (14)	WASTE	BORROW	COMMENTS
			CUT (2)	EBS EXCAVATION (3)				FACTOR 1.25			ITEM # 208.0100	
1												
	99+50 - 112+00	CROCKER TO PAINE	450	0	0	450	78	98	353	353	0	
	112+00 - 142+00	PAINE TO UNION	660	0	0	660	2904	3630	-2970	0	2970	
	142+00 - 148+00	UNION TO R-59-027	314	0	0	314	671	839	-525	0	525	
	148+00 - 158+50	ALONG WALL R-59-027	3426	0	0	3426	544	680	2746	2746	0	
	158+50 - 164+00	ALONG WALL 5-59-0028	1355	0	0	1355	64	80	1275	1275	0	
	164+00 - 177+50	ALONG BOARDWALK	72	0	0	72	1580	1975	-1903	0	1903	
	177+50 - 180+16	INDIANA TO R-59-188	4	0	0	4	96	120	-116	0	116	
	182+02 - 187+66	R-59-188 TO R-59-189	2530	0	0	2530	39	49	2481	2481	0	
	189+21 - 197+50	R-59-189 TO NEW JERSEY	36	0	0	36	951	1189	-1153	0	1153	
	198+00 - 213+50	NEW NERSEY TO SHOPPING CENTER ENTRANCE	385	0	0	385	28	35	350	350	0	
	214+75 - 229+00	SHOPPING CENTER ENTRANCE TO ERIE	524	0	0	524	114	143	382	382	0	
	229+50 - 238+10	ERIE TO NORTH END	2267	0	0	2267	3	4	2263	2263	0	
	10+00 - 21+00	LUTHERAN EXTENSION	222	0	0	222	178	223	-1	0	1	
TOTAL			12245	0	0	12245	7250	9063	3183	9850	6668	
		TOTAL EXCAVATION COMMON	12245									

1) EXCAVATION COMMON IS THE SUM OF THE CUT AND EBS EXCAVATION COLUMNS. ITEM # 205.0100
2) SALVAGED / UNUSABLE PAVEMENT MATERIAL IS INCLUDED IN CUT.
3) EBS EXCAVATION TO BE BACKFILLED WITH BORROW OR CUT MATERIAL. ITEM # 208.0100 FOR BORROW.
4) SALVAGED / UNUSABLE PAVEMENT MATERIAL.
5) AVAILABLE MATERIAL = CUT - SALVAGED / UNUSABLE PAVEMENT MATERIAL.
6) Expanded Fill. Factor = 1.25
7) THE MASS ORDINATE +/- QUANTITY CALCULATED FOR THE DIVISION. PLUS QUANTITY INDICATES AN EXCESS OF MATERIAL WITHIN THE DIVISION. MINUS INDICATES A SHORTAGE OF MATERIAL WITHIN THE DIVISION.

NOTES:

1 EXCAVATION FOR RETAINING WALLS AND STRUCTURES IS NOT SHOWN ON THE CROSS SECTIONS OR INCLUDED IN THE EARTHWORK SUMMARY. CONTRACTOR SHALL DETERMINE THE VOLUME OF RETAINING WALL EXCAVATION REQUIRED DURING RETAINING WALL DESIGN AND INCLUDE THIS WORK IN THE EXCAVATION FOR STRUCTURES BID ITEM. THIS VOLUME WAS NOT INCLUDED IN THE OVERALL WASTE OR BORROW.

2 FILL VOLUMES SHOWN INCLUDE AREAS BEHIN THE RETAINING WALLS. CONTRACTOR SHALL DETERMINE THE VOLUME OF GRANULAR FACKFILL REQUIRED FOR THE RETAINING WALLS AND ADJUST THE EARTHWORK SUMMARY ACCORDINGLY. RETAINING WALL BACKFILL IS INCLUDED IN THE ITEM BACKFILL STRUCTURE.

3 THE OVERALL PROJECT IS A WASTE PROJECT WITHOUT THE ADJUSTMENTS FOR NOTES 1 AND 2 ABOVE. THE ITEM FOR BORROW HAS BEEN INCLUDED TO ACCOUNT FOR TRUCKING MATERIAL BETWEEN THE VARIOUS SEGMENTS WITHIN THE TAYLOR DRIVE PROJECT CORRIDOR.

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BASE AGGREGATE DENSE 1 1/4-INCH, ITEM 305.0120

STATION	TO	STATION	TONS
99+50	-	111+90	593
111+90	-	142+00	1422
UNION AVE			334
142+80	-	164+00	1403
176+00	-	177+47	96
176+32 LT			10
INDIANA AVE			65
178+35	-	180+16	115
182+01	-	187+68	271
189+21	-	197+16	375
197+63			186
201+63	-	213+66	905
214+37	-	228+41	417
229+71	-	237+66	386
ERIE AVE			393
UW CONNECTION			492
NEW JERSEY AVE			92
DRIVEWAYS			92
Total			7647

CONCRETE PAVEMENT 7-INCH, ITEM NO. 415.0070

LOCATION	S.Y.
UNION AVE	224
INDIANA AVE	61
ERIE AVE	409
Total	694

ASPHALTIC SURFACE, ITEM NO. 465.0105

STATION	TO	STATION	TONS
99+50	-	111+90	429
111+90	-	142+00	568
UNION AVE			46
142+80	-	164+00	623
176+00	-	177+47	30
176+32 LT			---
178+35	-	180+16	47
182+01	-	187+68	112
189+21	-	197+16	155
197+63	-	201+63	65
201+63	-	213+66	---
214+37	-	228+41	53
229+71	-	237+66	165
ERIE AVE			---
UW CONNECTION			203
NEW JERSEY AVE			32
DRIVEWAYS			31
Total			2559

CONCRETE DRIVEWAY 7-INCH HES, ITEM NO. 416.0270

STATION	S.Y.
106+60	180
125+17	43
126+27	37
131+40	30
132+32	42
134+15	53
135+77	30
137+04	42
139+52	33
Total	490

CONCRETE PAVEMENT REPAIR, ITEM NO. 416.1710

LOCATION	S.Y.
INDIANA AVE	68
Total	68

DRILLED TIE BARS AND DRILLED DOWS BARS

STATION	ITEM NO. 416.0610 DRILLED TIE BARS EACH	ITEM NO. 416.0620 DRILLED DOWEL BARS EACH
TAYLOR DRIVE		
99+67	7	---
111+47	8	---
112+28	8	---
141+93	5	---
142+40 SB LT	3	---
172+32 NB RT	5	---
172+32 NB LT	9	---
177+46	5	---
177+74	4	---
177+85	4	---
197+15	5	---
197+67	7	---
200+74	5	---
213+64	5	---
214+41	5	---
225+50	8	---
225+50 LT	7	---
229+73	7	---
UNIVERSITY CONNECTION		
20+75	6	---
21+00	8	---
NEW JERSEY AVE	5	---
142+40	74	---
178+23	143	---
228+90	163	10
Total	**506**	**10**

CONCRETE MEDIAN SLOPED NOSE, ITEM NO. 620.0300

STATION	S.F.
142+50	103
Total	103

CONCRETE SIDEWALK 5-INCH, ITEM 602.0410

STATION	ITEM NO. 602.0410 CONCRETE SIDEWALK 5-INCH SF	ITEM NO. SPV.0165.02 CONCRETE SIDEWALK 5-INCH COLORED SF
TAYLOR DRIVE		
99+67	197	---
106+10	431	---
107+45	1055	---
111+40	126	---
112+35	127	---
120+25	100	---
122+35	100	---
128+85	100	---
132+65	100	---
135+35	100	---
138+75	100	---
141+87	54	---
142+40 SB LT	70	---
142+42	379	---
142+83	67	---
176+40 RT	222	---
176+40 LT	225	---
177+45	360	---
177+80	77	---
178+29	64	---
197+08	86	---
197+71	130	---
201+45	319	---
210+00	32	---
210+52	34	---
212+78	35	---
213+23	35	---
213+60	45	---
214+48 TO 225+46	5510	1098
228+45	210	---
228+97	365	---
229+88	172	---
UNIVERSITY CONNECTION		
10+28	50	---
20+75	116	---
NEW JERSEY AVE	44	---
TOTAL	**11237**	**1098**

CURB RAMP DETECTABLE WARNING FIELDS NATURAL PATINA, ITEM NO. 602.0515

STATION	S.F.
99+72 RT	18
111+42 RT	18
112+36 RT	18
141+90 RT	18
142+29 RT	18
142+40 LT	18
142+41 RT	18
142+57 RT	18
142+82 RT	18
176+18 RT	18
176+31 LT	18
176+37 LT	18
176+37 RT	18
177+45 RT	18
177+78 RT	18
177+83 RT	18
178+31 RT	18
197+12 RT	18
197+72 RT	18
201+60 RT	18
210+03 LT	8
210+51 LT	8
212+79 LT	8
213+21 LT	8
213+59 RT	8
214+49 LT	8
225+50 RT	8
228+48 RT	18
228+78 RT	18
229+14 RT	18
229+79 LT	18
10+28	18
20+75	18
21+00	36
TOTALS	**560**

CONCRETE BASE 6-INCH, ITEM NO. 320.0125

LOCATION	S.Y.
142+50 LT	8
Total	8

RESTORATION AND EROSION CONTROL

STATION	TO	STATION	ITEM NO. 625.0100 TOPSOIL SY	ITEM NO. 629.0210 FERTILIZER TYPE B CWT	ITEM NO. 630.0140 SEED MIXTURE NO. 40 LB	ITEM NO. SPV.0085.01 LOW MAINTENANCE SEED MIX LB	ITEM NO. 628.1504 SILT FENCE LF	ITEM NO. 628.1520 SILT FENCE MAINTENANCE LF	ITEM NO. 628.2006 EROSION MAT URBAN CLASS I TYPE A SY	ITEM NO. 628.2008 EROSION MAT URBAN CLASS I TYPE B SY	ITEM NO. 628.2023 EROSION MAT CLASS II TYPE B SY	ITEM NO. 628.7005 INLET PROTECTION TYPE A EACH	ITEM NO. 628.7015 INLET PROTECTION TYPE C EACH
99+50	-	112+00	1600	1.0	28.8	—	—	—	1600	—	—	—	3
112+00	-	142+80	6207	3.9	66.3	45.5	2256	2256	3682	—	2525	—	7
142+80	-	178+00	3773	2.4	36.7	31.2	980	980	2039	—	1734	—	12
178+00	-	197+50	3967	2.5	11.4	60.0	1120	1120	632	—	3335	1	5
197+50	-	214+00	1639	1.0	29.5	—	306	306	1639	—	—	—	7
214+00	-	229+50	1215	0.8	21.9	—	1190	1190	1215	—	—	1	3
229+50	-	237+66	2148	1.4	38.7	—	—	—	1892	256	—	—	2
UW CONNECTION			2306	1.5		41.5	2075	2075	2306	—	—	—	—
NEW JERSEY AVE			2036	1.3	36.6	—	—	—	2036	—	—	—	—
Total			24891	15.7	269.8	178.2	7927	7927	17041	256	7594	2	39

DRAINAGE ITEMS

STATION	TO	STATION	ITEM NO. 520.8000 CONCRETE COLLARS FOR PIPE EACH	ITEM NO. 522.1012 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 12-INCH EACH	ITEM NO. 522.1024 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 24-INCH EACH	ITEM NO. 608.0312 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 12-INCH LF	ITEM NO. 608.0315 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 15-INCH LF	ITEM NO. 608.0324 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 24-INCH LF	ITEM NO. 611.1230 CATCH BASINS 2X3-FT EACH	ITEM NO. 611.0612 INLET COVERS TYPE C EACH	ITEM NO. 611.0624 INLET COVERS TYPE H EACH	ITEM NO. 611.1003 CATCH BASINS 3-FT DIAMETER EACH	NOTES
120+24.49, 12.61' RT		120+66.98, 50.88' RT	---	---	1	---	---	57	---	---	---	---	
131+23.90, 44.55' RT		131+78.57, 53.23' RT	---	---	2	---	---	58	---	---	---	---	
178+23.85, 28.771' RT		178+77.96, 64.934' RT	---	1	---	40	---	---	1	---	1	---	
210+03			---	---	---	---	---	---	---	---	1	---	CURB PLATE
X=209321.6891 Y=177061.1787		228+51.50, 46.04' RT	1	---	---	10	---	---	1	---	1	---	
228+08.73, 22.824' RT		X=209321.6891 Y=177061.1787	---	---	---	---	50	---	---	---	---	---	
EXINLET		2345+25, 10.00' RT	---	---	---	35	---	---	---	1	---	1	
TOTAL			1	1	3	85	50	115	2	1	3	1	

ADJUSTING MANHOLES

STATION	ITEM NO. 611.811 ADJUSTING MANHOLE COVERS EACH
120+25	1
122+35	1
128+85	1
132+65	1
135+35	1
138+75	1
TOTAL	6

WATER, ITEM 624.0100

STATION	TO	STATION	MGAL
99+50	-	111+90	6
111+90	-	142+00	14
UNION AVE			3
142+80	-	164+00	14
176+00	-	177+47	1
176+32 LT			0
INDIANA AVE			1
178+35	-	180+16	1
182+01	-	187+68	3
189+21	-	197+16	4
197+63			2
201+63	-	213+66	9
214+37	-	228+41	4
229+71	-	237+66	4
ERIE AVE			4
UW CONNECTION			5
NEW JERSEY AVE			1
DRIVEWAYS			1
Total			76

WALL MODULAR BLOCK GRAVITY LRFD, ITEM NO. SPV.0165.05

STATION	TO	STATION	SF
211+75	-	212+65	231
TOTAL			231

PAVEMENT MARKING

LOCATION STATION	-	STATION	LOCATION	646.0106 4-INCH LF	647.0156 ARROWS TYPE 1 EACH	647.0166 ARROWS TYPE 2 EACH	647.0176 PAVEMENT MARKING EPOXY ARROWS TYPE 3 EACH	647.0556 STOP LINE 12-INCH LF	647.0606 ISLAND NOSE EA	647.0766 CROSSWALK 6-INCH LF	647.0786 CROSSWALK 18-INCH LF	646.0600 REMOVING STOP BARS LF	NOTES
111+40.0	-	112+36.0	PAINE AVENUE	---	---	---	---	---	---	21	---	---	
111+53.0	-	112+22.0	PAINE AVENUE	---	---	---	---	---	---	15	---	---	
141+89.0	-	142+22.5	UNION AVENUE	---	---	---	---	---	---	35	---	---	
141+95.5	-	142+28.5	UNION AVENUE	---	---	---	---	---	---	35	---	---	
142+30.4	-	142+35.0	S. TAYLOR	---	---	---	---	---	---	78	---	---	
142+42.5	-	142+47.0	S. TAYLOR	---	---	---	---	---	---	64	---	---	
111+40.0	-	112+36.0	PAINE AVENUE	---	---	---	---	---	---	---	120	---	
141+89.0	-	142+35.0	UNION AVENUE	---	---	---	---	---	---	---	60	---	
141+95.5	-	142+28.5	S. TAYLOR	---	---	---	---	---	---	---	120	---	
142+58.5	-	142+76.5	UNION AVENUE	---	---	---	---	---	---	---	40	---	
111+88.0	-	112+19.5	PAINE AVENUE	---	---	---	---	31	---	---	---	---	
142+19.5	-	142+30.0	UNION AVENUE	---	---	---	---	12	---	---	---	---	
142+47.0	-	142+50.0	S. TAYLOR	---	---	---	---	40	---	---	---	---	
142+56.0	-	142+76.0	UNION AVENUE	---	---	---	---	20	---	---	---	---	
142+16.0	-	142+28.0	UNION AVENUE	---	---	---	---	---	---	---	---	42	12" STOP BAR
142+48.0	-	142+70.0	S. TAYLOR	---	---	---	---	---	---	---	---	78	12" STOP BAR
142+46.0	-	142+48.0	UNION AVENUE	---	---	---	---	---	---	---	---	120	12" STOP BAR
142+50.0	-	143+03.0	UNION AVENUE	26	---	---	---	---	---	---	---	---	
142+57.0	-	142+62.0	UNION AVENUE	116	---	---	---	---	---	---	---	---	
142+18.5	-	142+93.0	UNION AVENUE	158	---	---	---	---	---	---	---	---	
142+20.5	-	142+95.0	UNION AVENUE	158	---	---	---	---	---	---	---	---	
142+50.00				---	---	---	---	---	1	---	---	---	
142+80.0	-	145+75.0	S. TAYLOR	302	---	---	---	---	---	---	---	---	
145+75.0	-	151+55.0	S. TAYLOR	586	---	---	---	---	---	---	---	---	
147+97.0	-	151+55.0	S. TAYLOR	367	---	---	---	---	---	---	---	---	
151+55.0	-	157+35.0	S. TAYLOR	581	---	---	---	---	---	---	---	---	
151+55.0	-	157+35.0	S. TAYLOR	581	---	---	---	---	---	---	---	---	
157+35.0	-	163+15.0	S. TAYLOR	570	---	---	---	---	---	---	---	---	
157+35.0	-	163+15.0	S. TAYLOR	570	---	---	---	---	---	---	---	---	
163+15.0	-	164+00.0	S. TAYLOR	83	---	---	---	---	---	---	---	---	
163+15.0	-	164+00.0	S. TAYLOR	84	---	---	---	---	---	---	---	---	
176+14.0	-	176+25.5	S. TAYLOR	---	---	---	---	---	---	36	---	---	
176+24.5	-	176+37.0	S. TAYLOR	---	---	---	---	---	---	40	---	---	
176+27.0	-	176+31.0	S. TAYLOR	---	---	---	---	---	---	42	---	---	
176+39.0	-	176+43.0	S. TAYLOR	---	---	---	---	---	---	43	---	---	
176+22.5	-	176+27.0	S. TAYLOR	---	---	---	---	42	---	---	---	---	
176+14.0	-	176+37.0	S. TAYLOR	---	---	---	---	---	---	---	60	---	
176+27.0	-	176+43.0	S. TAYLOR	---	---	---	---	---	---	---	72	---	
177+86.5	-	177+88.0	INDIANA AVENUE	63	---	---	---	---	---	---	---	---	
177+98.5	-	178+00.0	INDIANA AVENUE	63	---	---	---	---	---	---	---	---	
178+10.0	-	178+11.5	INDIANA AVENUE	63	---	---	---	---	---	---	---	---	
177+95.0	-	177+95.0	INDIANA AVENUE	---	---	1	---	---	---	---	---	---	
178+04.0	-	178+04.0	INDIANA AVENUE	---	1	---	---	---	---	---	---	---	
178+15.0	-	178+15.0	INDIANA AVENUE	---	---	---	1	---	---	---	---	---	
176+22.5	-	176+27.0	S. TAYLOR	---	---	---	---	42	---	---	---	---	
177+84.5	-	178+22.5	INDIANA AVENUE	---	---	---	---	38	---	---	---	---	
177+43.5	-	178+29.0	INDIANA AVENUE	---	---	---	---	---	---	84	120		
177+46.0	-	178+23.5	INDIANA AVENUE	---	---	---	---	---	---	---	---		
176+56.0	-	176+61.0	S. TAYLOR	---	---	---	---	---	---	---	---	135	12" STOP BAR
177+84.0	-	178+33.5	INDIANA AVENUE	---	---	---	---	---	---	---	---	147	12" STOP BAR
197+41.5	-	197+64.0	NEW JERSEY	---	---	---	---	24	---	---	---	---	
197+41.5	-	197+64.5	NEW JERSEY	---	---	---	---	---	---	---	---	69	12" STOP BAR
197+11.0	-	197+73.0	NEW JERSEY	---	---	---	---	---	---	61	---	---	
197+17.0	-	197+65.5	NEW JERSEY	---	---	---	---	---	---	49	---	---	
197+41.5	-	197+64.0	NEW JERSEY	---	---	---	---	---	---	---	96	---	
213+60.5	-	214+46.0	FRONTAGE ROAD	---	---	---	---	---	---	86	---	---	
213+66.0	-	214+39.0	FRONTAGE ROAD	---	---	---	---	---	---	74	---	---	
213+60.5	-	214+46.0	FRONTAGE ROAD	---	---	---	---	---	---	---	60	---	
225+23.5	-	225+45.5	FRONTAGE ROAD	---	---	---	---	---	---	27	---	---	
225+55.5	-	225+58.5	FRONTAGE ROAD	---	---	---	---	---	---	38	---	---	
225+23.5	-	225+58.5	FRONTAGE ROAD	---	---	---	---	---	---	---	50	---	

(CONTINUED)

PAVEMENT MARKING (CONTINUED)

LOCATION STATION	-	STATION	LOCATION	646.0106 4-INCH LF	647.0156 ARROWS TYPE 1 EACH	647.0166 ARROWS TYPE 2 EACH	647.0176 PAVEMENT MARKING EPOXY ARROWS TYPE 3 EACH	647.0556 STOP LINE 12-INCH LF	647.0606 ISLAND NOSE EA	647.0766 CROSSWALK 6-INCH LF	647.0786 CROSSWALK 18-INCH LF	646.0600 REMOVING STOP BARS LF	NOTES
229+32.0	-	229+40.0	ERIE AVENUE	32	---	---	---	---	---	---	---	---	
229+44.0	-	229+51.5	ERIE AVENUE	32	---	---	---	---	---	---	---	---	
231+25.0	-	232+75.0	S. TAYLOR	150	---	---	---	---	---	---	---	---	
228+41.0	-	228+70.0	ERIE AVENUE	---	---	---	---	24	---	---	---	---	
229+40.0	-	229+64.5	ERIE AVENUE	---	---	---	---	26	---	---	---	---	
228+44.5	-	228+74.0	ERIE AVENUE	---	---	---	---	---	---	28	---	---	
228+46.5	-	228+75.0	ERIE AVENUE	---	---	---	---	---	---	28	---	---	
229+14.5	-	229+70.5	ERIE AVENUE	---	---	---	---	---	---	56	---	---	
229+18.0	-	229+84.0	ERIE AVENUE	---	---	---	---	---	---	63	---	---	
228+44.5	-	225+58.5	ERIE AVENUE	---	---	---	---	---	---	---	48	---	
229+14.5	-	229+84.0	ERIE AVENUE	---	---	---	---	---	---	---	100	---	
232+75.0	-	233+75.0	S. TAYLOR	100	---	---	---	---	---	---	---	---	
Total				4685	1	1	1	299	1	1003	946	591	

PERMANENT SIGNING

STATION	OFFSET	SIGN NO.	SIGN CODE	SIGN SIZE IN X IN	637.2210 SIGNS TYPE II REFLECTIVE H SF	637.2230 SIGNS TYPE II REFLECTIVE F SF	634.0812 TUBULAR STEEL POST 2X2-INCH 12 FT EACH	634.0814 TUBULAR STEEL POST 2X2-INCH 14 FT EACH	SIGN MOUNTED ON SAME POST AS	REMARKS
99+64.0	23.50 RT	1	R1-1	18 X 18	2.25	---	1	---	---	STOP
99+73.0	22.50 RT	2	R5-3	24 X 24	4.00	---	1	---	---	NO MOTOR VEHICLES
111+22.5	2.50 RT	3	R5-3	24 X 24	4.00	---	---	1	---	NO MOTOR VEHICLES
112+18.0	26.00 RT	4	R1-1	18 X 18	2.25	---	1	---	---	STOP
112+34.5	18.00 RT	5	R5-3	24 X 24	4.00	---	1	---	---	NO MOTOR VEHICLES
136+82.0	3.00 RT	---	EXISTING SIGN		---	---	---	1	---	PLACE EXIST SIGN/NEW POST
141+80.0	29.00 RT	6	R5-3	24 X 24	4.00	---	---	1	---	NO MOTOR VEHICLES
142+84.5	43.00 RT	7	R5-3	24 X 24	4.00	---	1	---	---	NO MOTOR VEHICLES
147+42.5	25.00 RT	8	W7-5	30 X 30	---	6.25	1	---	---	STEEP GRADE
VOID	---	9	---	---	---	---	---	---	---	VOID
175+75.0	5.00 RT	10	W11-15	30 X 30	---	6.25	---	1	---	PEDESTRIAN AND BIKE X-ING
176+29.0	5.50 RT	11	R5-3	24 X 24	4.00	---	1	---	---	NO MOTOR VEHICLES
177+40.0	5.00 RT	12	R5-3	24 X 24	4.00	---	1	---	---	NO MOTOR VEHICLES
178+28.5	25.50 RT	13	W11-15	30 X 30	---	6.25	1	---	---	PEDESTRIAN AND BIKE X-ING
178+29.0	15.00 RT	14	R5-3	24 X 24	4.00	---	1	---	---	NO MOTOR VEHICLES
176+23.5	102.50 LT	15	R5-3	24 X 24	4.00	---	1	---	---	NO MOTOR VEHICLES
197+01.0	7.00 RT	16	R5-3	24 X 24	4.00	---	1	---	---	NO MOTOR VEHICLES
197+67.5	34.00 RT	17	W11-15	30 X 30	---	6.25	1	---	---	PEDESTRIAN AND BIKE X-ING
197+73.0	13.50 RT	18	R5-3	24 X 24	4.00	---	1	---	---	NO MOTOR VEHICLES
200+18.5	24.00 RT	19	D11-1	24 X 18	3.00	---	1	---	---	BIKE ROUTE
201+05.5	16.00 RT	20	D11-1	24 X 18	3.00	---	1	---	---	BIKE ROUTE
201+05.5	16.00 RT	21	MK5-1L	12 X 9	0.75	---	---	---	20	TURN LEFT
201+87.0	4.50 LT	22	D11-1	24 X 18	3.00	---	1	---	---	BIKE ROUTE
201+87.0	4.50 LT	23	MK5-1R	12 X 9	0.75	---	---	---	22	TURN RIGHT
201+67.0	5.00 LT	24	R5-3	24 X 24	4.00	---	1	---	---	NO MOTOR VEHICLES
201+52.5	77.50 RT	25	W11-1	30 X 30	---	6.25	1	---	---	BIKE SIGN
201+52.5	77.50 RT	26	W16-1P	18 X 24	---	3.00	---	---	25	SHARE THE ROAD
201+52.5	35.00 RT	27	D11-1	24 X 18	3.00	---	1	---	---	BIKE ROUTE
201+52.5	35.00 RT	28	MK6-1	12 X 9	0.75	---	---	---	27	ARROW LEFT
202+13.5	34.50 RT	29	R4-11	30 X 30	6.25	---	1	---	---	MAY USE FULL LANE
213+68.5	91.00 LT	30	W11-15	30 X 30	---	6.25	1	---	---	PEDESTRIAN AND BIKE X-ING
213+68.5	91.00 LT	31	W16-9P	24 X 8	---	1.33	---	---	30	AHEAD
213+67.0	11.50 LT	32	W11-15	30 X 30	---	6.25	1	---	---	PEDESTRIAN AND BIKE X-ING
213+67.0	11.50 LT	33	W16-7L	24 X 12	---	2.00	---	---	32	ARROW
213+50.0	10.00 LT	34	R4-11	30 X 30	6.25	---	1	---	---	MAY USE FULL LANE
214+24.5	47.28 RT	35	W11-15	30 X 30	---	6.25	1	---	---	PEDESTRIAN AND BIKE X-ING
214+24.5	47.28 RT	36	W16-9P	24 X 8	---	1.33	---	---	35	AHEAD
214+55.5	32.00 RT	37	R4-11	30 X 30	6.25	---	1	---	---	
221+61.5	14.50 LT	38	R4-11	30 X 30	6.25	---	1	---	---	MAY USE FULL LANE
223+75.5	13.00 LT	39	R4-11	30 X 30	6.25	---	1	---	---	MAY USE FULL LANE
224+26.5	10.00 LT	40	D11-1	24 X 18	3.00	---	1	---	---	BIKE ROUTE
225+39.5	4.00 LT	41	D11-1	24 X 18	3.00	---	1	---	---	BIKE ROUTE
225+39.5	4.00 LT	42	MK5-1R	12 X 9	0.75	---	---	---	41	TURN RIGHT
225+40.5	5.50 RT	43	D11-1	24 X 18	3.00	---	1	---	---	BIKE ROUTE
225+40.5	5.50 RT	44	MK5-1L	12 X 9	0.75	---	---	---	43	TURN LEFT
224+60.0	30.50 RT	45	D11-1	24 X 18	3.00	---	1	---	---	BIKE ROUTE
224+60.0	30.50 RT	46	MK5-1L	12 X 9	0.75	---	---	---	45	TURN LEFT
225+04.5	31.50 RT	47	W11-15	30 X 30	---	6.25	1	---	---	PEDESTRIAN AND BIKE X-ING
225+04.5	31.50 RT	48	W16-7L	24 x 12	---	2.00	---	---	47	ARROW
225+80.5	18.50 RT	49	R5-3	24 X 24	4.00	---	1	---	---	NO MOTOR VEHICLES
225+86.0	18.00 RT	50	W11-15	30 X 30	---	6.25	1	---	---	PEDESTRIAN AND BIKE X-ING
225+86.0	18.00 RT	51	W16-7L	24 X 12	---	2.00	---	---	50	ARROW
226+37.5	17.50 RT	52	W11-1	30 X 30	---	6.25	1	---	---	BIKE SIGN
226+37.5	17.50 RT	53	W16-1P	18 X 24	---	3.00	---	---	52	SHARE THE ROAD
227+01.5	23.50 RT	54	W11-15	30 X 30	---	6.25	1	---	---	PEDESTRIAN AND BIKE X-ING
227+01.5	23.50 RT	55	W16-9P	24 X 8	---	1.33	---	---	54	AHEAD
230+13.0	20.00 RT	56	R5-3	24 X 24	4.00	---	1	---	---	NO MOTOR VEHICLES
230+12.0	10.50 RT	---	EXISTING SIGN		---	---	1	---	---	PLACE EXIST SIGN/NEW POST
231+20.0	3.50 RT	---	EXISTING SIGN		---	---	1	---	---	PLACE EXIST SIGN/NEW POST
235+32.5	8.50 LT	57	W7-5	18 X 18	---	2.25	1	---	---	STEEP GRADE
TOTAL					**120.25**	**93.24**	**41.00**	**4.00**		

MOVING SIGNS AND SMALL SIGN SUPPORTS

STATION	OFFSET	638.2102 MOVING SIGNS TYPE II EACH	638.4000 MOVING SMALL SIGN SUPPORTS EACH
122+16.5	3.00 RT	1	1
214+52.5	10.50 LT	1	1
230+12.0	10.50 RT	1	---
231+20.0	3.50 RT	1	---
TOTAL		**4**	**2**

REMOVING SIGNS AND SMALLSIGN SUPPORTS

STATION		638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH
93+65.5	21.00 RT	1	1
112+77.8	31.50 RT	1	1
114+04.5	3.00 RT	1	1
128+74.5	6.00 RT	1	1
132+57.5	4.50 RT	1	1
136+82.0	3.00 RT	1	----
143+56.0	8.00 RT	1	1
158+40.0	5.00 RT	1	2
156+97.0	7.00 RT	1	1
179+62.0	10.00 RT	1	1
224+41.0	12.00 LT	1	1
230+12.0	10.50 RT	----	1
231+20.0	3.50 RT	----	1
TOTAL		**11**	**13**

TRAFFIC CONTROL ITEMS

ROADWAY	DESCRIPTION	DAYS IN SERVICE	ITEM NO. 643.0200 TRAFFIC CONTROL SURVEILLANCE AND MAINTENANCE NO.	ITEM NO. 643.0300 TRAFFIC CONTROL DRUMS NO.	DAYS	ITEM NO. 643.0420 TRAFFIC CONTROL BARRICADES TYPE III NO.	DAYS	ITEM NO. 643.0900 TRAFFIC CONTROL SIGNS NO.	DAYS	ITEM NO. 643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A NO.	DAYS	ITEM NO. 643.0715 TRAFFIC CONTROL WARNING LIGHTS TYPE C NO.	DAYS	ITEM NO. 643.1050 TRAFFIC CONTROL SIGNS PCMS NO.	DAYS	ITEM NO. 643.0800 TRAFFIC CONTROL ARROW BOARDS NO.	DAYS	ITEM NO. 649.0300 TEMPORARY PAVEMENT MARKING REFLECTIVE TAPE 4-INCH LF
TAYLOR DRIVE - STRUCTURES	142+00 - 178+00	170	---	46	7,820	4	680	4	680	8	1,360	5	850	0	0	0	0	0
TAYLOR DRIVE - STRUCTURES	178+00 - 197+50	70	---	30	2,100	2	140	2	140	4	280	5	350	0	0	0	0	0
TAYLOR DRIVE	99+50 - 121+50	80	---	32	2,560	3	240	11	880	6	480	5	400	1	14	1	80	0
TAYLOR DRIVE	121+50 - 142+00	80	---	32	2,560	3	240	3	240	6	480	5	400	0	0	0	0	0
TAYLOR DRIVE	142+00 - 178+00	80	---	46	3,680	4	320	4	320	8	640	5	400	0	0	0	0	0
TAYLOR DRIVE	178+00 - 197+50	80	---	30	2,400	2	160	2	160	4	320	5	400	0	0	0	0	0
TAYLOR DRIVE	197+50 - 201+50	80	---	14	1,120	1	80	1	80	2	160	5	400	0	0	0	0	0
TAYLOR DRIVE FRONTAGE RD	201+50 - 229+00	80	---	70	5,600	3	240	3	240	6	480	10	800	0	0	0	0	6,500
TAYLOR DRIVE	229+00 - 238+50	80	---	15	1,200	1	80	1	80	2	160	5	400	1	14	0	0	0
UNION	STAGE 1	25	---	18	450	4	100	11	275	7	175	10	250	1	25	1	25	440
UNION	STAGE 2	25	---	22	550	4	100	10	250	7	175	11	275	0	0	0	0	280
INDIANA	STAGE 1	25	---	39	975	3	75	20	500	5	125	14	350	0	0	1	25	0
INDIANA	STAGE 2	25	---	46	1,150	1	25	28	700	2	50	11	275	0	0	0	0	0
ERIE	STAGE 1	25	---	35	875	4	100	26	650	8	200	7	175	0	0	0	0	160
ERIE	STAGE 2	25	---	25	625	2	50	21	525	4	100	12	300	0	0	1	25	0
UNIVERSITY CONNECTION	10+00 - 21+00	20	---	10	200	0	0	0	0	0	0	10	200	0	0	0	0	0
UNDISTRIBUTED			110		1,055		190		600		455		475		17		45	0
PROJECT TOTALS			**189**		**34,920**		**2,820**		**6,320**		**5,640**		**6,700**		**70**		**200**	**7,380**

3

CONSTRUCTION STAKING CURB GUTTER AND CURB AND GUTTER, ITEM NO. 650.5000

STATION	LF
142+40	363
178+23	68
228+90	498
TOTAL	**929**

CONSTRUCTION STAKING

STATION	TO	STATION	ITEM NO. 650.4500 SUBGRADE LF	ITEM NO. 650.5000 BASE LF	ITEM NO. 650.9920 SLOPE STAKES LF
99+63	-	111+53	1190	1190	1190
112+22	-	141+92	2970	2970	2970
142+80	-	177+44	3464	3464	3464
178+31	-	180+15	184	184	184
182+01	-	187+67	566	566	566
189+24	-	197+10	786	786	786
197+66	-	201+63	397	397	397
201+63	-	213+66	1203	1203	1203
214+37	-	228+41	1404	1404	1404
229+71	-	237+66	795	795	795
UW CONNECTION			1052	1052	1052
NEW JERSEY AVE			341	341	341
Total			**14352**	**14352**	**14352**

CONSTRUCTION STAKING STORM SEWER AND CULVERTS

STATION	DESCRIPTION	ITEM NO. 650.4000 STORM SEWER EACH	ITEM NO. 650.6000 CULVERTS EACH
120+66	RT	---	1
131+23	RT	---	1
131+78	RT	---	1
178+77	RT	1	1
228+51	RT	1	---
234+25	LT	1	---
TOTAL		3	4

SAWING

STATION	ITEM NO. 690.0150 SAWING ASPHALT LF	ITEM NO. 690.0250 SAWING CONCRETE LF
TAYLOR DRIVE		
99+67	---	5
111+47	---	5
112+28	---	5
141+93	---	5
142+40	238	83
142+40 SB LT	---	18
142+50	80	---
172+32 NB RT	---	19
172+32 NB LT	---	19
177+46	---	20
177+74	---	5
177+85	---	5
178+23	---	488
197+15	---	21
197+67	---	24
200+74	---	18
210+06	---	5
210+50	---	5
212+80	---	5
213+17	---	5
213+64	---	18
214+41	---	18
229+75	12	---
230+05	11	---
225+50	---	5
225+50 LT	---	5
228+90	---	427
229+73	---	25
UNIVERSITY CONNECTION	---	
20+75	---	21
21+00	---	27
NEW JERSEY AVE	---	19
DRIVEWAYS	249	---
TOTAL	**590**	**1325**

EXPOSING EXISTING UTILITIES, ITEM NO. SPV.0060.10

STATION	EA
162+95	1
165+75	1
167+75	1
171+90	1
176+50	1
179+00	1
TOTAL	**6**

EXACT LOCATION OF EXPOSING EXISTING UTILITIES MAY VARY DEPENDING ON FIELD LOCATION OF UTILITIES AND AS DIRECTED BY ENGINEER

CURB AND GUTTER

STATION	ITEM NO. SPV.0090.04 CURB AND GUTTER TYPE A, SPECIAL LF	ITEM NO. SPV.0090.05 CURB AND GUTTER TYPE D, SPECIAL LF
TAYLOR DRIVE		
99+67	---	18
111+47	---	21
112+28	---	22
141+93	---	15
142+40	254	109
142+40 SB LT	14	---
142+50	9	---
172+32 NB RT	14	---
172+32 NB LT	14	---
177+46	15	---
177+74	12	---
177+85	12	---
178+23	335	---
197+15	16	---
197+67	19	---
200+74	13	---
210+06	---	9
210+50	---	9
212+80	---	9
213+17	---	9
213+64	13	---
214+41	13	---
225+50	---	22
225+50 LT	---	20
228+90	498	---
229+73	20	---
UNIVERSITY CONNECTION		
20+75	14	---
21+00	14	---
NEW JERSEY AVE	14	---
TOTAL	**1313**	**263**

TREE WELL AND TREE ISLAND, ITEM NO. SPV.0060.12

STATION	EA
117+60	1
129+85	1
130+15	1
235+15	1
236+55	1
236+65	1
TOTAL	**6**

BENCH, ITEM NO. SPV.0060.13

STATION	EACH
147+80	1
158+85	1
201+50	1
TOTAL	**3**

3

CONDUIT AND WIRE QUANTITIES

CIRCUIT	FROM	TO *	ITEM NO. 652.0215 CONDUIT RIGID NON-METTALIC SCHEDULE 40 1 1/4-INCH LF	ITEM NO. 655.0610 ELECTRICAL WIRE LIGHTING 12 AWG LF	ITEM NO. 655.0615 ELECTRICAL WIRE LIGHTING 10 AWG LF	ITEM NO. 655.0620 ELECTRICAL WIRE LIGHTING 8 AWG LF
T1	CABINET	A1	25	---	45	70
	A1	A2	100	---	120	220
	A2	A3	100	120	220	---
	A3	A4	100	120	220	---
	A4	A5	100	120	220	---
	A5	A6	100	120	220	---
	A6	A7	100	120	220	---
	A7	A8	100	120	220	---
	A8	A9	100	120	220	---
	A9	A10	100	120	220	---
	A10	A11	100	120	220	---
	A11	A12	100	120	220	---
	A12	A13	60	80	140	---
T1	CABINET	B1	75	---	95	170
	B1	B2	100	---	120	220
	B2	B3	100	120	220	---
	B3	B4	100	120	220	---
	B4	B5	100	120	220	---
	B5	B6	100	120	220	---
	B6	B7	100	120	220	---
	B7	B8	100	120	220	---
	B8	B9	100	120	220	---
	B9	B10	100	120	220	---
	B10	B11	100	120	220	---
	B11	B12	100	120	220	---
	B12	B13	85	105	190	---
	B13	B14	115	135	250	---
T2	CABINET	A1	7	27	34	---
	A1	A2	100	120	220	---
	A2	A3	100	320	---	---
	A3	A4	100	320	---	---
	A4	A5	110	350	---	---
	A5	A6	145	455	---	---
	A6	A7	100	320	---	---
	A7	A8	100	320	---	---
	A8	A9	100	320	---	---
	A9	A10	100	320	---	---
T2	CABINET	B1	75	---	95	170
	B1	B2	100	---	120	220
	B2	B3	100	---	120	220
	B3	B4	100	---	120	220
	B4	B5	100	---	120	220
	B5	B6	100	---	120	220
	B6	B7	100	---	120	220
	B7	B8	100	---	120	220
	B8	B9	100	---	120	220
	B9	B10	100	---	120	220
	B10	B11	100	120	220	---
	B11	B12	100	120	220	---
	B12	B13	100	120	220	---
	B13	B14	100	120	220	---
	B13	B14	100	120	220	---

(CONTINUED)

* = WIRE IN THE POLE TO THE FIXTURE IS INCLUDED IN THE "TO" POLE.

CONDUIT AND WIRE QUANTITIES (CONTINUED)

CIRCUIT	FROM	TO *	ITEM NO. 652.0215 CONDUIT RIGID NON-METTALIC SCHEDULE 40 1 1/4-INCH LF	ITEM NO. 655.0610 ELECTRICAL WIRE LIGHTING 12 AWG LF	ITEM NO. 655.0615 ELECTRICAL WIRE LIGHTING 10 AWG LF	ITEM NO. 655.0620 ELECTRICAL WIRE LIGHTING 8 AWG LF
T3	CABINET	A1	100	---	120	220
	A1	A2	100	---	120	220
	A2	A3	100	---	120	220
	A3	A4	100	---	120	220
	A4	A5	100	---	120	220
	A5	A6	100	---	120	220
	A6	A7	100	---	120	220
	A7	A8	100	120	220	---
	A8	A9	100	120	220	---
	A9	A10	100	120	220	---
	A10	A11	100	120	220	---
	A11	A12	100	120	220	---
	A12	A13	100	120	220	---
	A12	A13	100	120	220	---
T3	CABINET	B1	15	---	35	50
	B1	B2	200	---	220	420
	B2	B3	120	---	142	262
	B3	B4	230	---	252	482
	B4	B5	110	---	130	240
	B5	B6	100	---	120	220
	B6	B7	100	---	120	220
	B7	B8	100	120	220	---
	B8	B9	120	140	260	---
	B9	B10	170	192	362	---
	B10	B11	140	162	302	---
	B11	B12	110	130	240	---
	B12	B13	100	120	220	---
T4	CABINET	A1	60	200	---	---
	A1	A2	105	335	---	---
T4	CABINET	B1	50	170	---	---
	B1	B2	100	320	---	---
	TOTALS		**8327**	**8921**	**12892****	**6264**

* = WIRE IN THE POLE TO THE FIXTURE IS INCLUDED IN THE "TO" POLE.
** = ADDITIONAL QUANTITY ELSEWHERE

CONCRETE BASE AND DECORATIVE POLE QUANTITIES

POLE / LUMINAIRE NUMBER	STATION	ITEM NO. SPV.0060.04 DECORATIVE LIGHTINNG POLE CONCRETE BASES TYPE 5 MODIFIED EACH	ITEM NO. SPV.0060.03 DECORATIVE LIGHTINNG POLE CONCRETE BASES TYPE 2 MODIFIED EACH	ITEM NO. SPV.0060.01 DECORATIVE LIGHTING ASSEMBLY 14 FOOT POLE LED EACH	ITEM NO. SPV.0060.02 DECORATIVE LIGHTING ASSEMBLY 16 FOOT POLE LED EACH
T1,A13	112+41.00	1	---	1	---
T1,A12	113+00.00	1	---	1	---
T1,A11	114+00.00	1	---	1	---
T1,A10	115+00.00	1	---	1	---
T1,A9	116+00.00	1	---	1	---
T1,A8	117+00.00	1	---	1	---
T1,A7	118+00.00	1	---	1	---
T1,A6	119+00.00	1	---	1	---
T1,A5	120+00.00	1	---	1	---
T1,A4	121+00.00	1	---	1	---
T1,A3	122+00.00	1	---	1	---
T1,A2	123+00.00	1	---	1	---
T1,A1	124+00.00	1	---	1	---
T1,B1	125+00.00	1	---	1	---
T1,B2	126+00.00	1	---	1	---
T1,B3	127+00.00	1	---	1	---
T1,B4	128+00.00	1	---	1	---
T1,B5	129+00.00	1	---	1	---
T1,B6	130+00.00	1	---	1	---
T1,B7	131+00.00	1	---	1	---
T1,B8	132+00.00	1	---	1	---
T1,B9	133+00.00	1	---	1	---
T1,B10	134+00.00	1	---	1	---
T1,B11	135+00.00	1	---	1	---
T1,B12	136+00.00	1	---	1	---
T1,B13	136+85.00	1	---	1	---
T2,A10	138+00.00	1	---	1	---
T2,A9	139+00.00	1	---	1	---
T2,A8	140+00.00	1	---	1	---
T2,A7	141+00.00	1	---	1	---
T2,A6	141+68.00	1	---	1	---
T2,A5	143+20.00	1	---	1	---
T2,A4	144+10.00	1	---	1	---
T2,A3	145+10.00	1	---	1	---
T2,A2	146+10.00	1	---	1	---
T2,A1	147+10.00	1	---	1	---
T2,B1	147+90.00	1	---	1	---
T2,B2	148+90.00	1	---	1	---
T2,B3	149+90.00	1	---	1	---
T2,B4	150+90.00	1	---	1	---
T2,B5	151+90.00	1	---	1	---
T2,B6	152+90.00	1	---	1	---
T2,B7	153+90.00	1	---	1	---
T2,B8	154+90.00	1	---	1	---
T2,B9	155+90.00	1	---	1	---
T2,B10	156+90.00	1	---	1	---
T2,B11	157+90.00	1	---	1	---
T2,B12	158+90.00	1	---	1	---
T2,B13	159+90.00	1	---	1	---
T2,B14	160+90.00	1	---	1	---
T2,B15	161+90.00	1	---	1	---
T3,A14	162+90.00	1	---	1	---
T3,A13	163+90.00	1	---	1	---
T3,A12	164+90.00	1	---	1	---
T3,A11	165+90.00	1	---	1	---

(CONTINUED)

CONCRETE BASE AND DECORATIVE POLE QUANTITIES (CONTINUED)

POLE / LUMINAIRE NUMBER	STATION	ITEM NO. SPV.0060.04 DECORATIVE LIGHTINNG POLE CONCRETE BASES TYPE 5 MODIFIED EACH	ITEM NO. SPV.0060.03 DECORATIVE LIGHTINNG POLE CONCRETE BASES TYPE 2 MODIFIED EACH	ITEM NO. SPV.0060.01 DECORATIVE LIGHTING ASSEMBLY 14 FOOT POLE LED EACH	ITEM NO. SPV.0060.02 DECORATIVE LIGHTING ASSEMBLY 16 FOOT POLE LED EACH
T3,A10	166+90.00	1	---	1	---
T3,A9	167+90.00	1	---	1	---
T3,A8	168+90.00	1	---	1	---
T3,A7	169+90.00	1	---	1	---
T3,A6	170+90.00	1	---	1	---
T3,A5	171+90.00	1	---	1	---
T3,A4	172+90.00	1	---	1	---
T3,A3	173+90.00	1	---	1	---
T3,A2	174+90.00	1	---	1	---
T3,A1	175+90.00	1	---	1	---
T3,B1	177+02.00	1	---	1	---
T3,B2	178+80.00	1	---	1	---
T3,B3	180+00.00	---	1	---	1
T3,B4	182+30.00	---	1	---	1
T3,B5	183+40.00	1	---	1	---
T3,B6	184+40.00	1	---	1	---
T3,B7	185+40.00	1	---	1	---
T3,B8	186+40.00	1	---	1	---
T3,B9	187+60.00	---	1	---	1
T3,B10	189+30.00	---	1	---	1
T3,B11	190+70.00	1	---	1	---
T3,B12	191+80.00	1	---	1	---
T3,B13	192+80.00	1	---	1	---
T4,A2	234+50.00	1	---	1	---
T4,A1	235+50.00	1	---	1	---
T4,B1	236+50.00	1	---	1	---
T4,B2	237+50.00	1	---	1	---
TOTALS		**78**	**4**	**78**	**4**

LIGHTING CONTROL CABINETS AND BASES AND ELECTRICAL SERVICE METER BREAKER PEDESTALS

STATION	LOCATION	ITEM NO. 654.0200 CONCRETE CONTROL CABINET BASES TYPE 6 EACH	ITEM NO. 656.0200 ELECTRICAL SERVICE METER BREAKER PEDESTAL LS
124+16.00	RT	1	1
147+17.00	RT	1	1
176+65.00	RT	1	1
236+05.00	LT	1	1
TOTALS		**4**	**4**

3

NON-METALLIC CONDUIT

LOCATION	LOCATION	652.0225 CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH L.F.	652.0235 CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH L.F.	652.0615 CONDUIT SPECIAL 3-INCH L.F.
TAYLOR DR AT UNION AVE	CB1-PB1	-	30	-
	PB1-SB1	15	-	-
	PB1-PB2	120	-	-
	PB1-PB3	-	135	-
	PB3-SB2	10	-	-
	PB3-SB3	15	-	-
	PB3-SB4	10	-	-
	PB3-PB4	-	-	130
	PB3-PB14	-	-	110
	PB4-SB5	20	-	-
	PB15-SB13	40	-	-
SUBTOTAL		230	165	240
TAYLOR DR AT INDIANA AVE	PB5-SB4	15	-	-
	PB10-SB7	25	-	-
	PB8-SB13	5	-	-
	PB9-SB14	10	-	-
	PB12-SB15	10	-	-
SUBTOTAL		65	0	0
TAYLOR DR AT NEW JERSEY AVE	PB23-SB11	20	-	-
	PB6-SB12	20	-	-
SUBTOTAL		40	0	0
TAYLOR DR AT ERIE AVE	PB6-SB6	15	-	-
SUBTOTAL		15	0	0
TOTAL		350	165	240

PULL BOXES

LOCATION	PB NO.	STATION	OFFSET	653.0140 PULLBOXES STEEL 24X42-INCH EACH	653.0900 ADJUSTING PULL BOXES EACH
TAYLOR DR AT UNION AVE	PB1	142+86.7	23.6 RT	1	-
	PB2	143+09.7	132.5 RT	1	-
	PB3	142+40.6	19.4 RT	1	-
	PB4	141+77.3	25.6 RT	1	
	PB14	FIELD	LOCATE	-	1
TOTAL				4	1

REMOVING PULL BOXES

LOCATION	PB NO.	STATION	OFFSET	653.0905 REMOVING PULL BOXES EACH
TAYLOR DR AT UNION AVE	PB1	FIELD	LOCATE	1
	PB2	FIELD	LOCATE	1
	PB3	FIELD	LOCATE	1
	PB4	FIELD	LOCATE	1
TOTAL				4

CONCRETE BASES

LOCATION	SB NO.	STATION	OFFSET	654.0101 CONCRETE BASES TYPE 1 EACH	654.0102 CONCRETE BASES TYPE 2 EACH
TAYLOR DR AT UNION AVE	SB1	142+82.6	39.9 RT	1	-
	SB2	142+51.2	22.9 RT	1	-
	SB3	142+47.8	6.4 RT	-	1
	SB4	142+34.4	18.9 RT	1	-
	SB5	141+91.6	40.7 RT	-	1
	SB13	142+97.2	33.7 LT	1	-
SUBTOTAL				5	1
TAYLOR DR AT INDIANA AVE	SB4	178+33.2	11.5 RT	1	-
	SB7	176+30.7	5.8 RT	1	-
	SB13	177+79.1	11.4 RT	1	-
	SB14	177+38.4	4.8 RT	1	-
	SB15	176+30.5	48.1 LT	1	-
SUBTOTAL				5	0
TAYLOR DR AT NEW JERSEY AVE	SB11	197+79.0	4.7 RT	1	-
	SB12	197+06.7	4.0 RT	1	-
SUBTOTAL				2	0
TAYLOR DR AT ERIE AVE	SB6	229+74.5	6.8 RT	1	-
SUBTOTAL				1	0
TOTAL				12	2

LIGHTING ELECTRICAL CABLE

LOCATION	LOCATION	655.0320 CABLE TYPE UF, 2-10 AWG GROUNDED L.F.
TAYLOR DR AT UNION AVE	CB1-SB3	120
	SB3-SB6	215
	CB1-SB11	220
	SB11-SB8	195
TOTAL		750

LIGHTING ELECTRICAL WIRE

LOCATION	LOCATION	655.0615 ELECTRICAL WIRE, LIGHTING, 10 AWG L.F.
TAYLOR DR AT UNION AVE	SB3-LUMINAIRE 1	120
	SB6-LUMINAIRE 1	120
	SB8-LUMINAIRE 1	120
	SB11-LUMINAIRE	120
TOTAL		480

REMOVING CONCRETE BASES

LOCATION	SB NO.	STATION	OFFSET	204.0195 REMOVING CONCRETE BASES EACH
TAYLOR DR AT UNION AVE	SB1	FIELD	LOCATE	1
	SB2	FIELD	LOCATE	1
	SB3	FIELD	LOCATE	1
	SB11	FIELD	LOCATE	1
SUBTOTAL				4
TAYLOR DR AT INDIANA AVE	SB4	FIELD	LOCATE	1
	SB7	FIELD	LOCATE	1
SUBTOTAL				2
TAYLOR DR AT ERIE AVE	SB6	FIELD	LOCATE	1
SUBTOTAL				1
TOTAL				7

MODIFY TRAFFIC SIGNALS

	SPV.0105.02 MODIFY TRAFFIC SIGNALS LS	SPV.0105.03 MODIFY TRAFFIC SIGNALS LS	SPV.0105.04 MODIFY TRAFFIC SIGNALS LS	SPV.0105.05 MODIFY TRAFFIC SIGNALS LS
TAYLOR DR AT UNION AVE	1	-	-	-
TAYLOR DR AT INDIANA AVE	-	1	-	-
TAYLOR DR AT NEW JERSEY AVE	-	-	1	-
TAYLOR DR AT ERIE AVE	-	-	-	1
TOTAL	1	1	1	1

TEMPORARY SIGNALS

	661.0200.01 TEMPORARY TRAFFIC SIGNALS FOR INTERSECTIONS LS	661.0300 GENERATORS DAY	SPV.0105.01 TEMPORARY NON-INTRUSIVE VEHICLE DETECTION SYSTEM FOR INTERSECTIONS LS
TAYLOR DR AT UNION AVE	1	2	1
TOTAL	1	2	1

ALL ITEMS ARE CATEGORY 0010

SHEET 1 OF 4

TRAFFIC DETECTOR LOOPS

LOCATION	LOOP NO.	HOME RUN PB	STATION	OFFSET	SIZE	NO. TURNS	PAVEMENT TYPE	SDD INSTALLATION REFERENCE	652.0800 CONDUIT LOOP DETECTOR LF	652.0900 LOOP DETECTOR SLOTS LF	655.0700 LOOP DETECTOR LEAD IN CABLE LF	655.0800 LOOP DETECTOR WIRE LF
TAYLOR DR AT UNION AVE	11	PB16	EXISTING		6 X 6	EXISTING	CONCRETE	EXISTING	-	-	220	-
	12	PB15	EXISTING		6 X 30	EXISTING	CONCRETE	EXISTING	-	-	140	-
	21	PB8	EXISTING		6 X 20	EXISTING	CONCRETE	EXISTING	-	-	495	-
	22	PB7	EXISTING		6 X 20	EXISTING	CONCRETE	EXISTING	-	-	340	-
	41	PB11	EXISTING		7 X 6	EXISTING	CONCRETE	EXISTING	-	-	435	-
	42	PB10	EXISTING		8 X 20	EXISTING	CONCRETE	EXISTING	-	-	310	-
	51	PB7	EXISTING		9 X 6	EXISTING	CONCRETE	EXISTING	-	-	340	-
	52	PB6	EXISTING		10 X 30	EXISTING	CONCRETE	EXISTING	-	-	240	-
	61	PB18	EXISTING		11 X 20	EXISTING	CONCRETE	EXISTING	-	-	455	-
	62	PB17	EXISTING		12 X 20	EXISTING	CONCRETE	EXISTING	-	-	295	-
	81	PB2	EXISTING		6 X 6	EXISTING	CONCRETE	EXISTING	-	-	150	-
	82	PB3	142+23.3	26.2 RT	6 X 30	3	CONCRETE	LOOP DETECTOR INSTALLED IN EXISTING CONCRETE PAVEMENT	102	87	75	321
	83	PB3	142+36.5	50.9 RT	6 X 30	3	CONCRETE	LOOP DETECTOR INSTALLED IN EXISTING CONCRETE PAVEMENT	132	102	75	416
	84	PB2	EXISTING		6 X 6	EXISTING	CONCRETE	EXISTING	-	-	150	-
	85	PB1	142+64.0	25.6 RT	6 X 20	3	CONCRETE	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 1)	88	-	30	277
	86	PB1	142+72.0	30.3 RT	6 X 20	3	CONCRETE	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 1)	66	-	30	208
SUBTOTAL									388	189	3,780	1,222
TAYLOR DR AT INDIANA AVE	82	PB8	177+92.2	11.6 RT	6 X 30	3	CONCRETE	LOOP DETECTOR INSTALLED IN EXISTING CONCRETE PAVEMENT	90	81	225	284
SUBTOTAL									90	81	225	284
TOTAL									478	270	4,005	1,506

LOCATION IS TO FRONT CENTER OF DETECTOR LOOP

SIGNAL BASES, POLES, ARMS, AND LUMINAIRES

LOCATION	SB NO.	657.0100 PEDESTAL BASES EACH	657.0255 TRANSFORMER BASES BREAKAWAY 11 1/2-INCH BOLT CIRCLE EACH	657.0305 POLES, TYPE 2 EACH	657.0310 POLES, TYPE 3 EACH	657.0405 TRAFFIC SIGNAL STANDARDS, ALUMINUM, 3.5-FT EACH	657.0430 TRAFFIC SIGNAL STANDARDS ALUMINUM 10-FT EACH	657.0425 TRAFFIC SIGNAL STANDARDS ALUMINUM 15-FT EACH	657.0590 TROMBONE ARMS, 20-FOOT EACH	657.0595 TROMBONE ARMS, 25-FOOT EACH	658.0500 PEDESTRIAN PUSH BUTTONS EACH	659.0125 LUMINAIRES UTILITY HPS 250 WATTS EACH	657.0609 LUMINAIRE ARMS, SINGLE MEMBER, 4-INCH CLAMP, 6-FOOT EACH
TAYLOR DR AT UNION AVE	SB1	1	-	-	-	-	-	1	-	-	1	-	-
	SB2	1	-	-	-	-	1	-	-	-	1	-	-
	SB3	-	1	-	1	-	-	-	1	-	1	1	1
	SB4	1	-	-	-	-	-	1	-	-	1	-	-
	SB5	-	1	1	-	-	-	-	-	1	1	-	-
	SB11	-	-	-	-	-	-	-	-	-	1	-	-
	SB13	1	-	-	-	-	-	1	-	-	-	-	-
SUBTOTAL		4	2	1	1	0	1	3	1	1	6	1	1
TAYLOR DR AT INDIANA AVE	SB4	1	-	-	-	-	-	1	-	-	1	-	-
	SB7	1	-	-	-	-	-	1	-	-	1	-	-
	SB9	-	-	-	-	-	-	-	-	-	1	-	-
	SB13	1	-	-	-	1	-	-	-	-	1	-	-
	SB14	1	-	-	-	-	1	-	-	-	1	-	-
	SB15	1	-	-	-	1	-	-	-	-	1	-	-
SUBTOTAL		5	0	0	0	2	1	2	0	0	6	0	0
TAYLOR DR AT NEW JERSEY AVE	SB11	1	-	-	-	-	1	-	-	-	1	-	-
	SB12	1	-	-	-	-	1	-	-	-	1	-	-
SUBTOTAL		2	0	0	0	0	2	0	0	0	2	0	0
TAYLOR DR AT ERIE AVE	SB6	1	-	-	-	-	-	1	-	-	1	-	-
SUBTOTAL		1	0	0	0	0	0	1	0	0	1	0	0
TOTAL		12	2	1	1	2	4	6	1	1	15	1	1

ALL ITEMS ARE CATEGORY 0010

FILE NAME : Proposed Signals.dgn PLOT DATE : 3/21/2015 PLOT BY : JFAIT-TADI PLOT NAME : PLOT SCALE : 40.0000 ' / in.
WISDOT/CADDS SHEET 43

SIGNAL FACES

LOCATION	SB NO.	HEAD NO.	658.0110 TRAFFIC SIGNAL FACE 3-12 INCH VERTICAL R-Y-G EACH	658.0110 TRAFFIC SIGNAL FACES, 3-12 INCH VERTICAL R-Y->G-> EACH	658.0120 TRAFFIC SIGNAL FACES, 5-12 INCH VERTICAL R-Y-G<Y<G EACH	658.0155 TRAFFIC SIGNAL FACES, 3-12 INCH HORIZONTAL R-Y-G EACH	658.0215 BACKPLATES SIGNAL FACE 3-SECTION 12-INCH EACH	658.0225 BACKPLATES, SIGNAL FACE 5-SECTION 12-INCH EACH	658.0416 PEDESTRIAN SIGNAL FACE 16-INCH EACH	658.0600 LED MODULES 12-INCH RED BALL EACH	658.0605 LED MODULES 12-INCH YELLOW BALL EACH	658.0610 LED MODULES 12-INCH GREEN BALL EACH	658.0620 LED MODULES 12-INCH YELLOW ARROW EACH	658.0625 LED MODULES 12-INCH GREEN ARROW EACH	658.0635 LED MODULES PEDESTRIAN COUNTDOWN TIMER 16-INCH 16-INCH EACH
TAYLOR DR AT UNION AVE	SB1	15	-	1	-	-	1	-	-	1	-	-	1	1	-
		20	-	-	-	-	-	-	1	-	-	-	-	-	1
	SB2	19	-	-	-	-	-	-	1	-	-	-	-	-	1
	SB3	6	-	-	-	1	1	-	-	1	1	1	-	-	-
		21	-	-	-	-	-	-	1	-	-	-	-	-	1
	SB4	11	1	-	-	-	1	-	-	1	1	1	-	-	-
		12	1	-	-	-	1	-	-	1	1	1	-	-	-
		18	-	-	-	-	-	-	1	-	-	-	-	-	1
	SB5	10	-	-	-	1	1	-	-	1	1	1	-	-	-
		17	-	-	-	-	-	-	1	-	-	-	-	-	1
	SB11	22	-	-	-	-	-	-	1	-	-	-	-	-	1
	SB13	16	-	-	-	-	-	-	-	-	-	-	-	-	-
SUBTOTAL			2	1	0	2	5	0	6	5	4	4	1	1	6
TAYLOR DR AT INDIANA AVE	SB4	1	1	-	-	-	1	-	-	1	1	1	-	-	-
		20	-	-	-	-	-	-	1	-	-	-	-	-	1
	SB7	9	1	-	-	-	1	-	-	1	1	1	-	-	-
		18	-	-	-	-	-	-	1	-	-	-	-	-	1
	SB9	17	-	-	-	-	-	-	1	-	-	-	-	-	1
	SB14	19	-	-	-	-	-	-	1	-	-	-	-	-	1
SUBTOTAL			2	0	0	0	2	0	4	2	2	2	0	0	4
TAYLOR DR AT NEW JERSEY AVE	SB11	15	-	-	-	-	-	-	1	-	-	-	-	-	1
	SB12	16	-	-	-	-	-	-	1	-	-	-	-	-	1
SUBTOTAL			0	0	0	0	0	0	2	0	0	0	0	0	2
TAYLOR DR AT ERIE AVE	SB5	19	-	-	-	-	-	-	1	-	-	-	-	-	1
	SB6	14	-	-	1	-	-	1	-	1	1	1	1	1	-
		9	1	-	-	-	1	-	-	1	1	1	-	-	-
		18	-	-	-	-	-	-	SALVAGED	-	-	-	-	-	SALVAGED
	SB7	20	-	-	-	-	-	-	1	-	-	-	-	-	1
SUBTOTAL			1	0	1	0	1	1	2	2	2	2	1	1	2
TOTAL			5	1	1	2	8	1	14	9	8	8	2	2	14

ALL ITEMS ARE CATEGORY 0010

SHEET 3 OF 4

3

TRAFFIC SIGNAL CABLE

LOCATION	LOCATION	655.0230 CABLE TRAFFIC SIGNAL 5-14 AWG L.F.	655.0240 CABLE TRAFFIC SIGNAL 7-14 AWG L.F.	655.0260 CABLE TRAFFIC SIGNAL 12-14 AWG L.F.
TAYLOR DR AT UNION AVE	CB1-SB1	-	-	70
	CB1-SB2	-	110	-
	CB1-SB3	115	-	-
	CB1-SB4	-	-	110
	CB1-SB5	-	-	185
	CB1-SB6	-	-	250
	CB1-SB7	-	-	280
	CB1-SB8	-	-	315
	CB1-SB9	-	-	320
	CB1-SB10	-	-	280
	CB1-SB11	-	-	220
	CB1-SB12	-	-	165
	CB1-SB13	-	-	210
	SB1-HEAD 15	20	-	-
	SB1-HEAD 20	20	-	-
	SB2-HEAD19	20	-	-
	SB3-HEAD6	50	-	-
	SB3-HEAD21	20	-	-
	SB4-HEAD11	20	-	-
	SB4-HEAD12	20	-	-
	SB4-HEAD18	20	-	-
	SB5-HEAD10	55	-	-
	SB5-HEAD17	20	-	-
	SB13-HEAD16	20	-	-
SUBTOTAL		400	110	2,405
TAYLOR DR AT INDIANA AVE	CB1-SB4	-	-	210
	CB1-SB7	-	-	385
	SB5-SB13	-	35	-
	SB6-SB14	-	40	-
	SB8-SB15	-	25	-
	SB4-HEAD 1	20	-	-
	SB4-HEAD 20	20	-	-
	SB7-HEAD9	20	-	-
	SB7-HEAD18	20	-	-
	SB9-HEAD17	20	-	-
	SB14-HEAD19	20	-	-
SUBTOTAL		120	100	595
TAYLOR DR AT NEW JERSEY AVE	SB10-SB11	-	35	-
	SB2-SB12	-	35	-
	SB11-HEAD 15	20	-	-
	SB12-HEAD16	20	-	-
SUBTOTAL		40	70	0
TAYLOR DR AT ERIE AVE	CB1-SB6	-	-	335
	SB6-HEAD9	-	35	-
	SB6-HEAD14	-	20	-
	SB6-HEAD18	20	-	-
SUBTOTAL		20	55	335
TOTAL		580	335	3,335

EQUIPMENT GROUNDING CONDUCTORS

LOCATION	LOCATION	655.0515 * ELECTRICAL WIRE TRAFFIC SIGNALS 10 AWG (GREEN) L.F.
TAYLOR DR AT UNION AVE	CB1-SB1	40
	SB1-SB2	85
	SB2-SB3	40
	SB3-SB4	40
	SB4-SB5	120
	SB5-SB6	120
	SB6-SB7	85
	SB7-SB8	70
	S89-SB9	55
	910-SB10	75
	SB01-SB11	95
	SB-SB12	90
	SB12-SB13	80
	SB13-CB1	180
SUBTOTAL		1,175
TAYLOR DR AT INDIANA AVE	SB3-SB4	70
	SB4-SB5	115
	SB13-SB5	40
	SB14-SB6	40
	SB6-SB7	125
	SB7-SB8	135
	SB15-SB8	50
SUBTOTAL		575
TAYLOR DR AT NEW JERSEY AVE	SB10-SB11	50
	SB2-SB12	50
SUBTOTAL		100
TAYLOR DR AT NEW JERSEY AVE	SB5-SB6	60
	SB6-SB7	140
SUBTOTAL		200
TOTAL		2,050

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE

PULL BOX BONDING JUMPERS

LOCATION	LOCATION	655.0515 * ELECTRICAL WIRE TRAFFIC SIGNALS 10 AWG (GREEN) L.F.
TAYLOR DR AT UNION AVE	CB1-PB1	20
	SB3-PB3	35
	SB5-PB4	35
	SB6-PB5	35
	SB7-PB6	25
	SB8-PB9	20
	SB9-PB10	20
	SB10-PB12	25
	SB11-PB13	20
	SB12-PB14	20
	SB12-PB15	40
SUBTOTAL		295
TAYLOR DR AT INDIANA AVE	SB4-PB5	30
	SB7-PB10	40
SUBTOTAL		70
TAYLOR DR AT ERIE AVE	SB6-PB6	30
SUBTOTAL		30
TOTAL		395

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE

SIGNAL MOUNTING HARDWARE

	658.5069.01 SIGNAL MOUNTING HARDWARE LS	658.5069.02 SIGNAL MOUNTING HARDWARE LS	658.5069.03 SIGNAL MOUNTING HARDWARE LS	658.5069.04 SIGNAL MOUNTING HARDWARE LS
TAYLOR DR AT UNION AVE	1	-	-	-
TAYLOR DR AT INDIANA AVE	-	1	-	-
TAYLOR DR AT NEW JERSEY AVE	-	-	1	-
TAYLOR DR AT ERIE AVE	-	-	-	1
TOTAL	1	1	1	1

ALL ITEMS ARE CATEGORY 0010

SHEET 4 OF 4

R/W PROJECT NUMBER	SHEET NUMBER	TOTAL SHEETS
FEDERAL PROJECT NUMBER	4.0	10

PLAT OF RIGHT-OF-WAY REQUIRED FOR

TAYLOR DRIVE, CITY OF SHEBOYGAN

KOHLER MEMORIAL DRIVE - CROCKER AVE.

CTH A TOWN/CITY OF SHEBOYGAN, SHEBOYGAN COUNTY

CONSTRUCTION PROJECT NUMBER

4996-01-58

COUNTY CLERK
FILED
2015 JAN -6 P 3:17
SHEBOYGAN COUNTY
WISCONSIN

RECEIVED
JAN 06 2015
SHEBOYGAN COUNTY
PLANNING & CONSERVATION

GN

4

4

CONVENTIONAL ABBREVIATIONS

ACCESS POINT/ DRIVEWAY CONNECTION	AP	RELEASE OF RIGHTS	ROR
ACCESS RIGHTS	AR	REMAINING	REM.
ACRES	AC.	RIGHT-OF-WAY	R/W
AND OTHERS	ET.AL.	SECTION	SEC.
CENTERLINE	C/L	STATION	STA.
CERTIFIED SURVEY MAP	CSM	TEMPORARY LIMITED EASEMENT	TLE
CORNER	COR.	VOLUME	V.
DOCUMENT	DOC.		
EASEMENT	EASE.		
HIGHWAY EASEMENT	H.E.		
LAND CONTRACT	LC		
MONUMENT	MON.		
PAGE	P.		
PERMANENT LIMITED EASEMENT	PLE		
PROPERTY LINE	P/L		
RECORDED AS	(RCD)		
REFERENCE LINE	R/L		

CURVE DATA

LONG CHORD	LCH
LONG CHORD BEARING	LCB
RADIUS	R
DEGREE OF CURVE	D
CENTRAL ANGLE OR DELTA	DELTA
LENGTH OF CURVE	L
TANGENT	TAN

CONVENTIONAL SYMBOLS

FOUND IRON PIPE/PIN (IF UNLESS NOTED)

R/W MONUMENT ● (SET)

R/W STANDARD ▲ (SET)

SIGN ISIGN

SECTION CORNER MONUMENT

SECTION CORNER SYMBOL

FEE (HATCH VARIES)

TEMPORARY LIMITED EASEMENT

PERMANENT LIMITED EASEMENT

R/W BOUNDARY POINT RWBP

PARCEL NUMBER 1

SIGN NUMBER (OFF PREMISE) P-1

BUILDING

PROPOSED R/W LINE

EXISTING H.E. LINE

PROPERTY LINE

LOT & TIE LINES

SLOPE INTERCEPTS

CORPORATE LIMITS

RESTRICTED ACCESS (BY PREVIOUS ACQUISITION/CONFIRD.)

RESTRICTED ACCESS (BY ACQUISITION)

NO ACCESS (BY STATUTORY AUTHORITY)

SECTION LINE

QUARTER LINE

SIXTEENTH LINE

EXISTING CENTERLINE

PROPOSED REFERENCE LINE

PARALLEL OFFSET

CONVENTIONAL UTILITY SYMBOLS

	NON COMPENSABLE	COMPENSABLE
WATER	—W—	
GAS	—G—	
TELEPHONE	—T—	
OVERHEAD TRANSMISSION LINES	—OH—	
ELECTRIC	—E—	
CABLE TELEVISION	—TV—	
FIBER OPTIC	—FO—	
SANITARY SEWER	—SAN—	
STORM SEWER	—SS—	
POWER POLE		
TELEPHONE POLE		
TELEPHONE PEDESTAL		
LIGHT POLE		

END RELOCATION ORDER
STA. 135+00

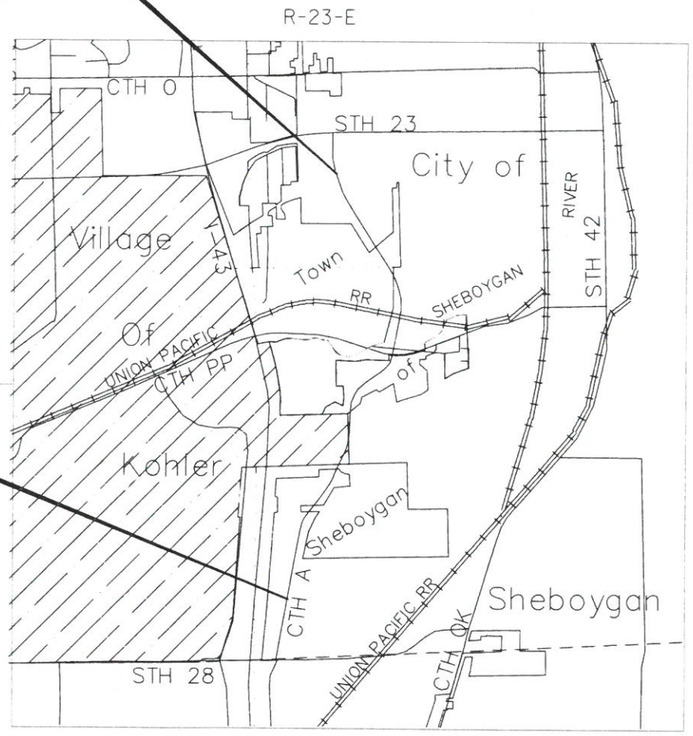
798.221' NORTH OF AND 722.047' EAST OF THE SOUTHWEST CORNER OF THE SOUTHWEST 1/4 OF SECTION 21, T.15N., R.23E.

N=175855.321'
E=209934.787'

BEGIN RELOCATION ORDER
STA. 19+00

1321.930' SOUTH OF AND 850.961' EAST OF THE NORTHWEST CORNER OF THE SOUTHWEST 1/4 OF SECTION 33, T.15N., R.23E.

N=165739.347'
E=207340.401'



LAYOUT
SCALE 0 1000 FT

TOTAL NET LENGTH OF CENTERLINE = 2.146 MI.



N

Revised Parcel #3
Bollmann Farms LLC

RECEIVED
ACCEPTED FOR
SHEBOYGAN COUNTY
JAN 06 2015
DATE: 1-6-15
(Signature)
SHEBOYGAN COUNTY
PLANNING & CONSERVATION

PLANS PREPARED BY

TERRATEC ENGINEERING, LLC.
W67 N222 EVERGREEN BLVD., STE. 205
CEDARBURG, WI 53012
Tel: 262.377.9905 - Fax: 262.375.1958

WISCONSIN
ROBERT F. SCHMALZER
1780
COLGATE, WI
LAND SURVEYOR

DATE: 6-30-2014 (Signature)

REVISION	DATE
7-17-2014	
8-18-2014	
10/24/2014	
1/5/2015	

NOTES:

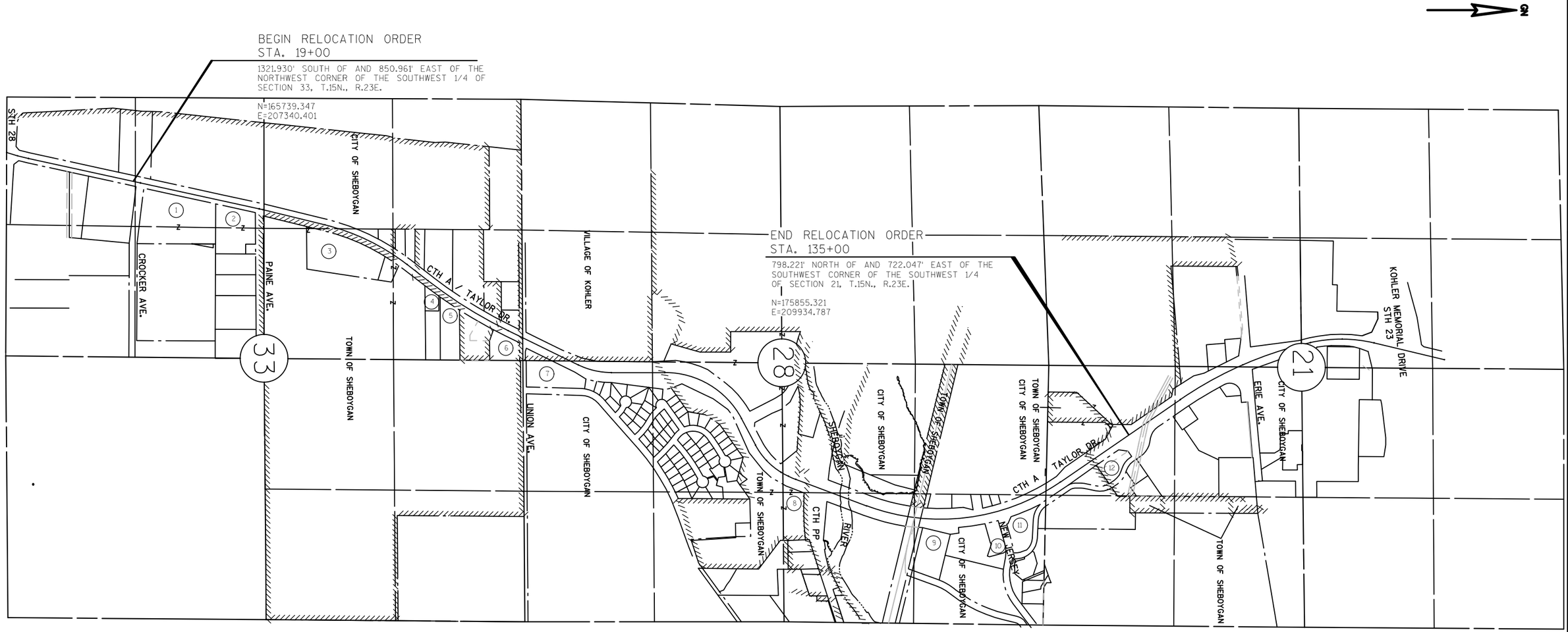
COORDINATES AND BEARINGS SHOWN ON THIS PLAT ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM, SHEBOYGAN COUNTY, NAD83 (1997) ADJUSTMENT IN US SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

RIGHT-OF-WAY MONUMENTS ARE TYPE 2 (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 SYSTEM OR OTHER "SURVEYS OF PUBLIC RECORD". PROPERTY LINES SHOWN ON THIS PLAT ARE DRAWN FROM DATA DERIVED FROM MAPS AND DOCUMENTS OF PUBLIC RECORD AND/OR EXISTING OCCUPATIONAL LINES. THIS PLAT MAY NOT BE A TRUE REPRESENTATION OF EXISTING PROPERTY LINES, EXCLUDING RIGHT-OF-WAY LINES, AND SHOULD NOT BE USED AS A SUBSTITUTE FOR AN ACCURATE FIELD SURVEY.

A TEMPORARY LIMITED EASEMENT (TLE) IS A RIGHT FOR CONSTRUCTION PURPOSES, AS DEFINED HEREIN. TEMPORARY LIMITED EASEMENT INCLUDING THE RIGHT TO OPERATE NECESSARY EQUIPMENT THEREON AND THE RIGHT OF INGRESS AND EGRESS, AS LONG AS REQUIRED FOR SUCH PUBLIC PURPOSE, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE, OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM NECESSARY OR DESIRABLE. ALL (TLES) EXPIRE AT THE COMPLETION OF THE CONSTRUCTION PROJECT FOR WHICH THIS INSTRUMENT IS GIVEN.

DIMENSIONING FOR THE NEW RIGHT-OF-WAY IS MEASURED ALONG AND PERPENDICULAR TO NEW REFERENCE LINES.

RIGHT-OF-WAY POINTS SHOWN ON THIS PLAT THAT DO NOT CONTAIN THE "R/W MONUMENT (SET)" SYMBOLS HAVE NOT BEEN SET. THE LOCATION IS INACCESSIBLE AND/OR OBSTRUCTED OR AN EXISTING MONUMENT WAS LOCATED AND DETERMINED TO BE IN THE CORRECT POSITION.



REVISION DATE 7-17-2014	DATE: JUNE 30, 2014	SCALE, FEET 0 N/A	HWY: CTH A/TAYLOR DR.	STATE R/W PROJECT NUMBER -	PLAT SHEET 4.1
	GRID FACTOR N/A		COUNTY: SHEBOYGAN	CONSTRUCTION PROJECT NUMBER 4996-01-58	PS&E SHEET --128 E

FILE NAME : C:\CIVIL 3D PROJECTS\4996-01-58\RWLAYOUT.DWG PLOT DATE : 1/6/2015 10:38 AM PLOT BY : BOB PLOT NAME : PLOT SCALE : 0 WISDOT/CADDS SHEET 75

BEGIN RELOCATION ORDER
STA. 19+00

1321.930' SOUTH OF AND 850.961' EAST OF THE NORTHWEST CORNER OF THE SOUTHWEST 1/4 OF SECTION 33, T.15N., R.23E.

N=165739.347
E=207340.401

COORDINATE TABLE		
Node ID	Northing	Easting
100	165837.072	207407.793
101	165835.810	207418.265
102	165894.453	207426.971
103	166091.805	207470.051
104	166088.606	207484.706
105	166213.662	207512.004
106	166216.861	207497.349
107	166433.753	207544.694
108	166430.555	207559.349
109	166570.518	207589.901
110	166633.769	207603.708
111	166636.968	207589.053
112	166782.540	207620.829
113	166781.901	207623.760
114	166833.681	207635.063
115	166834.321	207632.132
116	166973.700	207662.557
117	166973.659	207655.895

COORDINATE TABLE		
Node ID	Northing	Easting
118	166570.600	207567.913
119	167061.957	207629.334
301	166089.140	207482.263
303	166086.900	207492.522
304	166211.956	207519.820
306	166215.368	207504.188
307	166432.261	207551.533
308	166472.565	207568.519
309	166470.753	207576.824
310	166602.647	207605.614
311	166604.460	207597.310
312	166635.156	207597.357
313	166805.063	207639.564
314	166973.754	207671.269
500	165803.225	207354.345
501	167013.428	207618.517
502	167053.639	207627.294
5016	167062.859	209142.640
10133	167061.720	207232.861

N=167,061.277
E=206489.440
2" IP FOUND
10133

SW-SW 33-15-23
SE-SW 33-15-23
NW-SW 33-15-23
NE-SW 33-15-23
CITY OF SHEBOYGAN

MATCH LINE STA. 17+75.00
MATCH LINE STA. 33+25.00

R/W REF LINE CTH A/ TAYLOR DRIVE N 12°18'50" E

STA. 19+65.38 N=165803.225 E=207354.345 C/L CROCKER DRIVE

SOUTH TAYLOR DRIVE

CROCKER AVENUE
C/L CROCKER AVENUE S 83°07'40" E
1/16 LINE
45.00
40.00
40.00

SLOPE INTERCEPT
TLE FOR SLOPES
SIGN
SEE DETAIL
SIGN S-1
TEMP EASEMENT AGREEMENT INGRESS/EGRESS DOC. NO. 1906063
TEMP EASEMENT AGREEMENT TRUCK TURN AROUND DOC. NO. 1906063
S 89°47'09" E 508.27'
STA. 21+51.00
25' RAIL EASEMENT PER SHEBOYGAN INDUSTRIAL PARK NO. 1 VACATED DOC. NO. 1140663
25' RAIL EASEMENT PER SHEBOYGAN INDUSTRIAL PARK NO. 1 VACATED DOC. NO. 1140662

STA. 32+04.08 C/L PAINE AVE.
PI STA. 32+45.24 ANG=81°28'00"
STA. 32+53.80
N. LINE SW 1/4 33-15-23 N 89°57'57" E 2653.20' COR. TO COR.
N 89°57'57" E 139.89'
R/W REF LINE CTH A/ TAYLOR DRIVE N 13°46'51" E
S 12°18'50" W 72.04'
S 77°41'10" E 45.00'
S 13°46'51" W 8.37'
60.00
45.00
PAINE AVENUE
C/L PAINE AVENUE N 89°38'44" E
N=167,062.859
E=209142.640
ROCK W/DRILL HO
5016

J. L. FRENCH CORPORATION
SHEBOYGAN INDUSTRIAL PARK NO. 1
DOC. NO. 907656
DOC. NO. 920036
LOT 5 BLOCK 3
DOC. NO. 906220
BUILDING 3101
1

IVARS REAL ESTATE USA, LLC
SHEBOYGAN INDUSTRIAL PARK NO. 1
DOC. NO. 1906064
LOT 6 BLOCK 3
DOC. NO. 906220
BUILDING 2803
2

LINE COURSE TABLE		
NUMBER	DIRECTION	DISTANCE
104-105	N 12°18'50" E	128.00'
107-307	S 77°41'10" E	7.00'
308-109	N 12°18'50" E	100.26'
109-311	N 12°18'50" E	34.74'
111-312	S 77°41'10" E	8.50'
312-313	N 13°57'01" E	175.07'
313-314	N 10°38'40" E	171.64'
314-116	S 89°38'44" W	8.71'
110-311	S 12°18'50" W	30.00'
311-310	S 77°41'10" E	8.50'
310-309	S 12°18'50" W	135.00'
309-308	N 77°41'10" W	8.50'
108-307	N 77°41'10" W	8.00'
307-318	S 12°18'50" W	170.00'
318-317	N 77°41'10" W	4.50'
317-316	S 12°18'50" W	4.00'
316-315	S 77°41'10" E	4.50'
315-306	S 12°18'50" W	48.00'
306-106	N 77°41'10" W	7.00'
306-105	S 77°41'10" E	8.00'
105-304	S 77°41'10" E	8.00'
304-303	S 12°18'50" W	128.00'
303-104	N 77°41'10" W	8.00'
104-301	N 77°41'10" W	2.50'
305-101	N 83°07'40" W	8.54'
305-101	S 83°07'40" E	19.09'
301-305	S 12°18'50" W	260.34'
301-103	S 77°41'10" E	12.50'
119-502	S 13°46'51" W	8.56'

SIGN SCHEDULE

SIGN NO.	STATION	OFFSET	SIGN OWNER
S-1	26+57.23	56.16 RT	J.L. FRENCH CORPORATION

PARCEL 1 (FEE) LINE COURSE TABLE		
NUMBER	DIRECTION	DISTANCE
118-109	S 89°47'09" E	21.99'
109-108	S 12°18'50" W	143.26'
108-107	N 77°41'10" W	15.00'
107-106	S 12°18'50" W	222.00'
106-105	S 77°41'10" E	15.00'
105-104	S 12°18'50" W	128.00'
104-103	N 77°41'10" W	15.00'
103-102	S 12°18'50" W	202.00'
102-101	S 8°26'42" W	59.29'
101-100	N 83°07'40" W	10.55'
100-118	N 12°18'50" E	750.80'

PARCEL 2 (FEE) LINE COURSE TABLE		
NUMBER	DIRECTION	DISTANCE
117-116	N 89°38'44" E	6.66'
116-115	S 12°18'50" W	142.66'
115-114	S 77°41'10" E	3.00'
114-113	S 12°18'50" W	53.00'
113-112	N 77°41'10" W	3.00'
112-111	S 12°18'50" W	149.00'
111-110	S 77°41'10" E	15.00'
109-118	N 89°47'09" W	21.99'
118-117	N 12°18'50" E	412.55'

SCHEDULE OF LANDS AND INTEREST

PARCEL NO.	OWNER	INTEREST REQUIRED	AREA SQ. FT. REQUIRED NEW	EXISTING	TOTAL	TLE SQ. FT. REQUIRED
1	J. L. FRENCH CORPORATION	FEE/TLE	9047	0	9047	6563 SQ. FT.
2	IVARS REAL ESTATE USA, LLC	FEE/TLE	3836	0	3836	3933 SQ. FT
90	SHEBOYGAN INDUSTRIAL PARK NO. 1 (UTILITY EASEMENT)	RELEASE OF RIGHTS				
91	ALLIANT ENERGY (UG ELEC, POLES, GUYS)	RELEASE OF RIGHTS				
92	SBC/AT&T (UG CABLE, PED)	RELEASE OF RIGHTS				
93	CHARTER COMMUNICATIONS (UG CABLE, PED)	RELEASE OF RIGHTS				
94	CITY OF SHEBOYGAN (UG ELEC)	RELEASE OF RIGHTS				

"OWNERS" NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY, AND ARE SUBJECT TO CHANGE PRIOR TO TRANSFER OF LAND INTERESTS TO THE DEPARTMENT OF TRANSPORTATION.

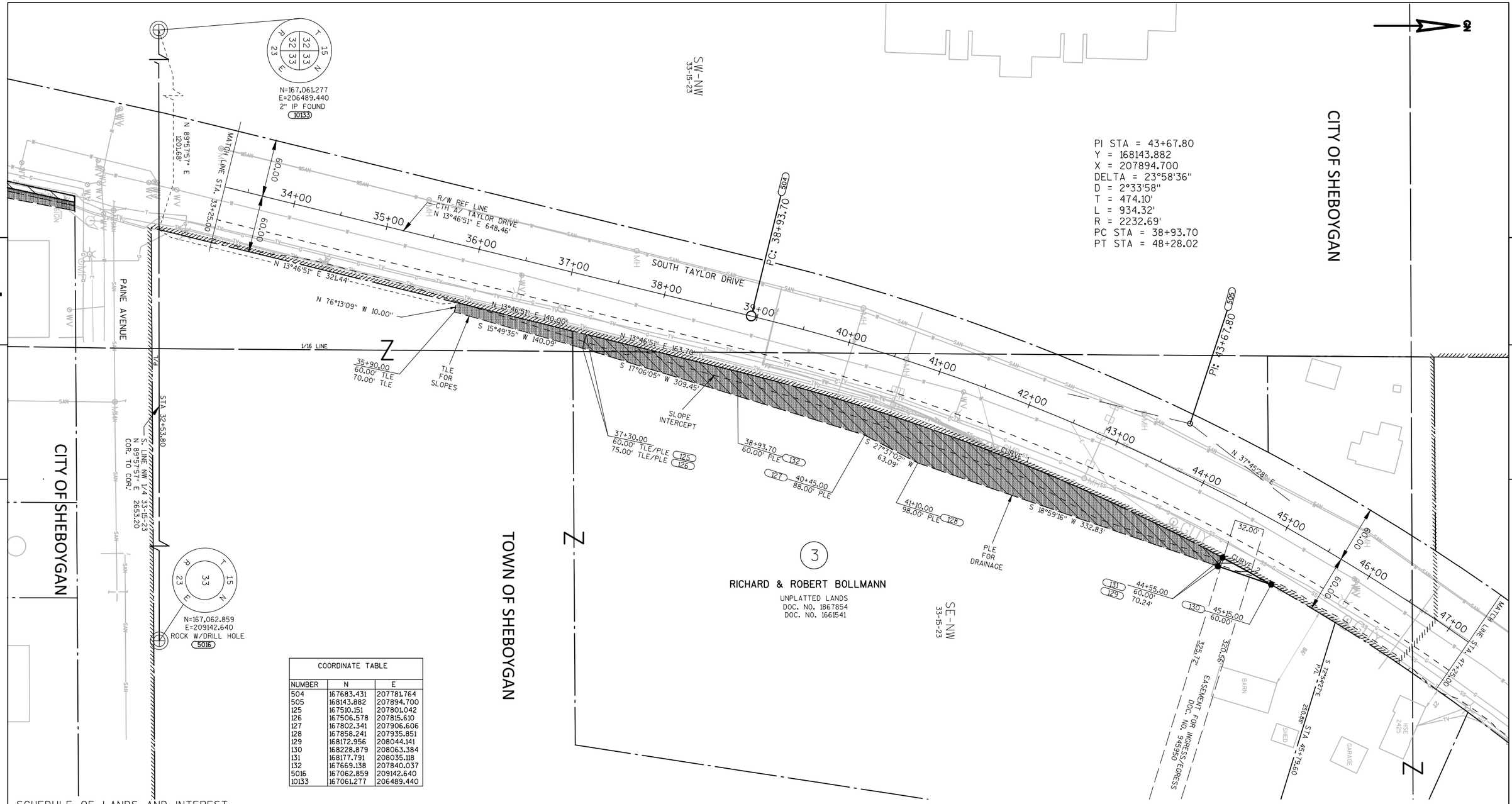
IRON PIPES FOUND		
DESCRIPTION	N	E
1" IP	167053.696	207688.741
1" IP	166570.573	207567.747

ROAD NAME	BASIS OF EXISTING R/W	WIDTH	YEAR
TAYLOR DR	SHEBOYGAN INDUSTRIAL PARK NO. 1	40'	1968
CROCKER AVE	SHEBOYGAN INDUSTRIAL PARK NO. 1	80'	1968
PAINE AVE	SHEBOYGAN INDUSTRIAL PARK NO. 1	80'	1968
TAYLOR DR	CITY OF SHEBOYGAN, GEN. ORD. NO. 47-82-83	VARIES	1982

REVISION DATE			
7/17/2014			
7/23/2014			
8/18/2014			

DATE:JUNE 30, 2014
GRID FACTOR N/A
SCALE, FEET 0 50 100
HWY: CTHA/TAYLOR DR.
COUNTY: SHEBOYGAN
STATE R/W PROJECT NUMBER -
CONSTRUCTION PROJECT NUMBER 4996-01-58
PLAT SHEET 4.2
PS&E SHEET -

FILE NAME : C:\CIVIL 3D PROJECTS\4996-01-58\RWSHEET4_2.DWG
PLOT DATE : 1/6/2015 10:20 AM
PLOT BY : BOB
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 75



COORDINATE TABLE		
NUMBER	N	E
504	167683.431	207781.764
505	168143.882	207894.700
125	167510.151	207801.042
126	167506.578	207815.610
127	167802.341	207906.606
128	167858.241	207935.851
129	168172.956	208044.141
130	168228.879	208063.384
131	168177.791	208035.118
132	167669.138	207840.037
5016	167062.859	209142.640
10133	167061.277	206489.440

SCHEDULE OF LANDS AND INTEREST

PARCEL NO.	OWNER	INTEREST REQUIRED	AREA SQ. FT. REQUIRED			PLE	TLE
			NEW	EXISTING	TOTAL	SQ. FT. REQUIRED	SQ. FT. REQUIRED
3	RICHARD & ROBERT BOLLMANN	FEE/TLE	306	0	306	18,760 SQ. FT.	1750 SQ. FT.

"OWNERS" NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY. AND ARE SUBJECT TO CHANGE PRIOR TO TRANSFER OF LAND INTERESTS TO THE DEPARTMENT OF TRANSPORTATION.

LINE COURSE TABLE		
NUMBER	DIRECTION	DISTANCE
126-125	N 76°13'09" W	15.00'
125-126	S 76°13'09" E	15.00'
131-129	S 61°48'53" E	10.24'
129-131	N 61°48'53" W	10.24'
130-129	S 18°59'16" W	59.14'

CURVE TABLE					
NUMBER	DELTA ANGLE	CHORD DIRECTION	RADIUS	ARC LENGTH	CHORD LENGTH
CURVE 1	14°24'15"	N 20°58'59" E	2172.69	546.22'	544.78'
CURVE 2	1°32'23"	N 28°57'18" E	2172.69	58.39'	58.39'

ROAD NAME	BASIS OF EXISTING R/W	WIDTH	YEAR
CTH A	-	66'	-
TAYLOR DR	SHEBOYGAN INDUSTRIAL PARK NO. 1	40'	1968
PAINE AVE	SHEBOYGAN INDUSTRIAL PARK NO. 1	80'	1968
TAYLOR DR	CITY OF SHEBOYGAN, GEN. ORD. NO. 47-82-83	VARIES	1982

REVISION DATE
7/17/2014
8/18/2014
1/5/2015

DATE: JUNE 30, 2014
GRID FACTOR N/A

SCALE, FEET
0 50 100

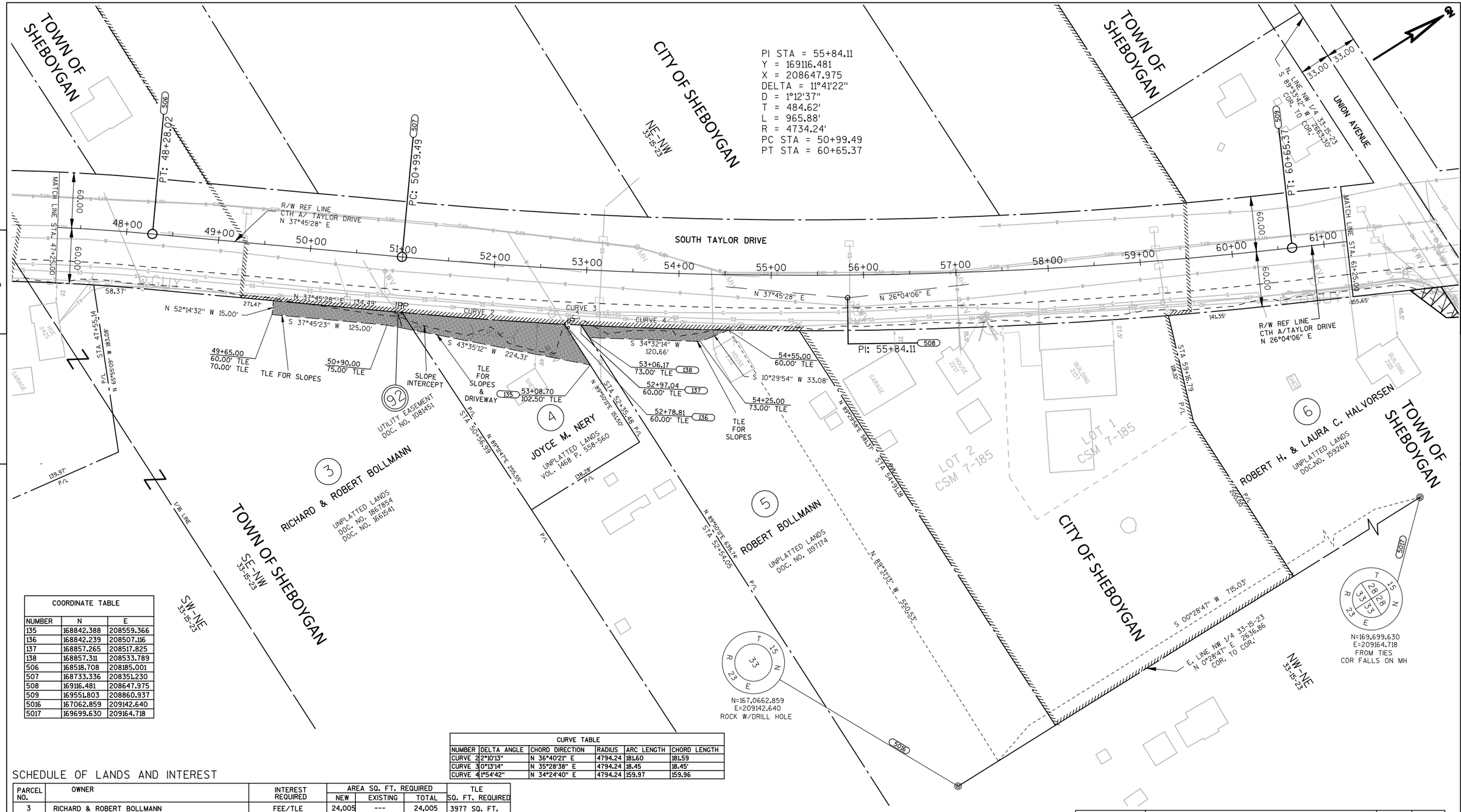
HWY: CTH A/TAYLOR DR.
COUNTY: SHEBOYGAN

STATE R/W PROJECT NUMBER -
CONSTRUCTION PROJECT NUMBER 4996-01-58

PLAT SHEET 4.3
PS&E SHEET 130

E

FILE NAME : C:\CIVIL 3D PROJECTS\4996-01-58\RWSHEET4_3.DWG
PLOT DATE : 1/6/2015 10:26 AM
PLOT BY : BOB
PLOT NAME :
PLOT SCALE : 1" = 100'_XREF
WISDOT/CADDS SHEET 75



COORDINATE TABLE		
NUMBER	N	E
135	168842.388	208559.366
136	168842.239	208507.116
137	168857.265	208517.825
138	168857.311	208533.789
506	168518.708	208185.001
507	168733.336	208351.230
508	169116.481	208647.975
509	169551.803	208860.937
5016	167062.859	209142.640
5017	169699.630	209164.718

CURVE TABLE					
NUMBER	DELTA ANGLE	CHORD DIRECTION	RADIUS	ARC LENGTH	CHORD LENGTH
CURVE 2	2°10'13"	N 36°40'21" E	4794.24	181.60	181.59
CURVE 3	0°13'14"	N 35°28'38" E	4794.24	18.45	18.45'
CURVE 4	1°54'40"	N 34°24'40" E	4794.24	159.97	159.96

SCHEDULE OF LANDS AND INTEREST

PARCEL NO.	OWNER	INTEREST REQUIRED	AREA SQ. FT. REQUIRED			TLE
			NEW	EXISTING	TOTAL	SQ. FT. REQUIRED
3	RICHARD & ROBERT BOLLMANN	FEE/TLE	24,005	---	24,005	3977 SQ. FT.
4	JOYCE M. NERY	TLE	---	---	---	5193.48 SQ. FT
5	ROBERT BOLLMANN	TLE	---	---	---	1793 SQ. FT.
92	SBC/AT&T (PED, UG WIRES)	RELEASE OF RIGHTS				

"OWNERS" NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY, AND ARE SUBJECT TO CHANGE PRIOR TO TRANSFER OF LAND INTERESTS TO THE DEPARTMENT OF TRANSPORTATION.

LINE COURSE TABLE		
NUMBER	DIRECTION	DISTANCE
136-135	N 89°50'11" E	52.25'
138-137	S 89°50'11" W	15.96'

IRON PIPES FOUND		
DESCRIPTION	N	E
1" IP	168696.200	208398.431
1" IP	168700.804	208402.109
1" IP	168844.208	208512.774

ROAD NAME	BASIS OF EXISTING R/W	WIDTH	YEAR
CTH A	-	66'	-
TAYLOR DR	CITY OF SHEBOYGAN, GEN. ORD. NO. 47-82-83	VARIES	1982

REVISION DATE			
7-17-2014	---	---	---
8-18-2014	---	---	---
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DATE:JUNE 30, 2014

GRID FACTOR N/A

SCALE, FEET 0 50 100

HWY: CTH A/TAYLOR DR.

COUNTY: SHEBOYGAN

STATE R/W PROJECT NUMBER -

CONSTRUCTION PROJECT NUMBER 4996-01-58

PLAT SHEET 4.4

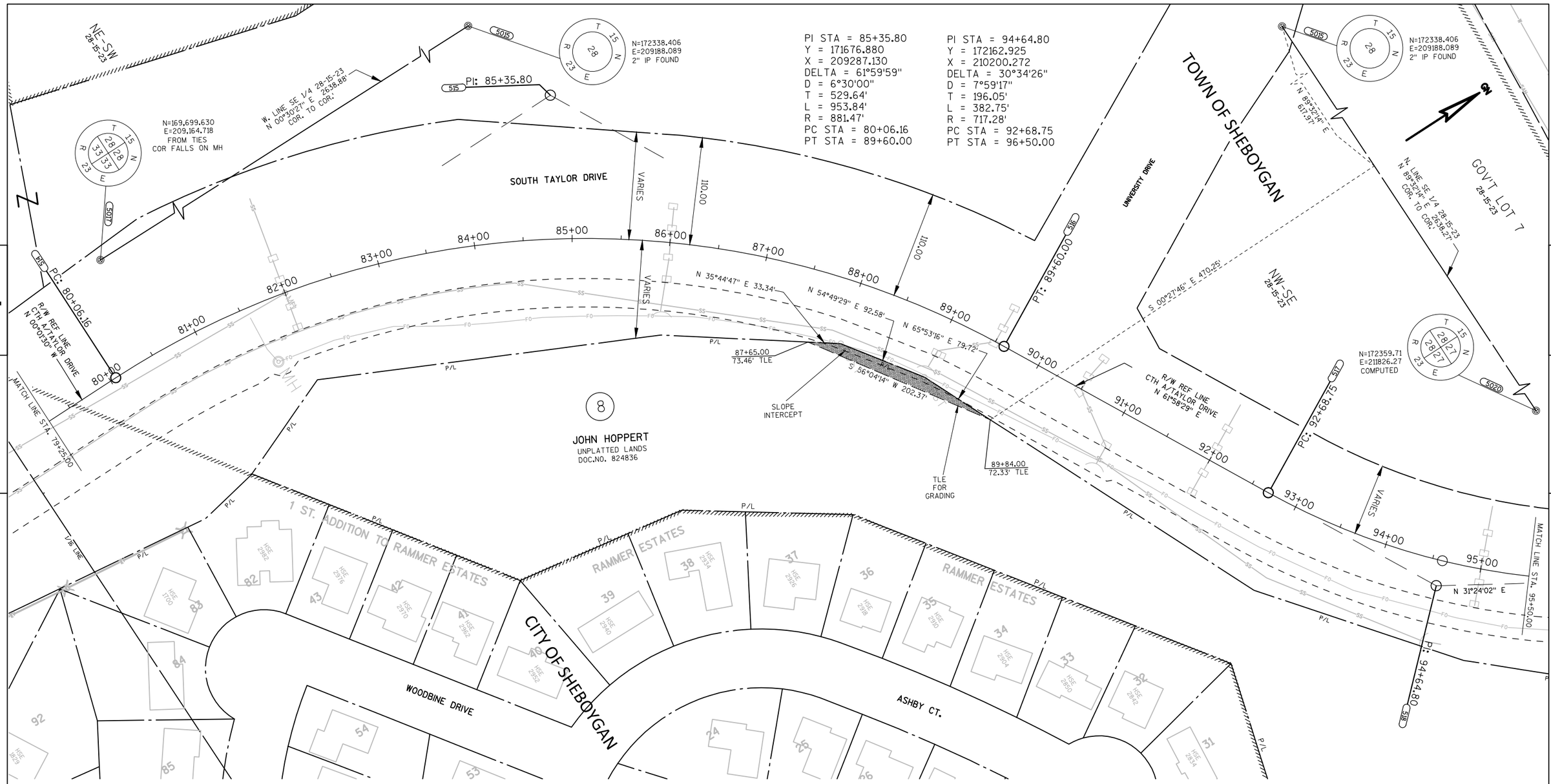
PS&E SHEET -- E

FILE NAME : C:\CIVIL 3D PROJECTS\4996-01-58\RWSHEET4_4.DWG PLOT DATE : 1/6/2015 9:28 AM PLOT BY : BOB PLOT NAME : PLOT SCALE : ********** WISDOT/CADDS SHEET 75

COORDINATE TABLE		
NUMBER	N	E
140	169634.694	208968.283
141	169652.090	209014.644
142	169665.540	209022.337
510	169697.852	208932.386
511	170265.156	209209.915
512	170424.116	209287.679
513	170601.079	209287.602
5015	172338.406	209188.089
5017	169699.630	209164.718

PI STA = 72+89.17
Y = 170424.116
X = 209287.679
DELTA = 26°05'36"
D = 7°30'10"
T = 176.96'
L = 347.79'
R = 763.67'
PC STA = 71+12.21
PT STA = 74+60.00

STA BACK = 62+27.96
STA AHEAD = 64+80.66
PI: 64+80.66
PC: 71+12.21
PI: 74+60.00
PI: 72+89.17
SOUTH TAYLOR DRIVE
VILLAGE OF KOHLER
CITY OF SHEBOYGAN
TOWN OF SHEBOYGAN
UNION AVENUE
GEORGIA AVENUE
LILY CT.
1 ST. ADDITION TO RAMMER ESTATES
INREIT BL SHEBOYGAN, LLC
UNPLATTED LANDS
DOC.NO. 1843935
ROBERT H. & LAURA C. HALVORSEN
UNPLATTED LANDS
DOC.NO. 1592614
SHEBOYGAN COUNTY LAND
R/W REF LINE CTH A/TAYLOR DRIVE N 26°04'06" E
R/W REF LINE CTH A/TAYLOR DRIVE N 00°01'30" W
SLOPE INTERCEPT
TLE FOR SLOPES
70+58.00 80.00' TLE 95.00' TLE
71+00.00' 80.00' TLE 95.00' TLE
W. LINE SE 1/4 28-15-23 N 00°30'27" E 2638.88' COR. TO COR.
E. LINE NW 1/4 33-15-23 S 0°28'47" W 2636.86 COR. TO COR.
N. LINE NW 1/4 33-15-23 S 89°33'42" W 2663.30' COR. TO COR.
MATCH LINE STA. 61+25.00
MATCH LINE STA. 79+25.00
IP
SIGN S-2
N 26°04'06" E 42.00'
N 26°04'06" E 206.20'
N 63°55'54" W 15.00'
S 63°55'54" E 15.00'
S 26°04'06" W 42.00'
S 00°30'27" E 296.47'
S 00°28'47" W 33.00'
N 26°04'06" E
S 26°04'06" W
S 63°55'54" E 133.28'
N 63°55'54" W 69.15'
260.48'
263.41'
304.62
561.75'
261.12
31.74'
24.75'
155.65
48.5'
VARIES
60.00'
80.00'
65.00'
33.00
NE-NW 33-15-23
NW-NE 33-15-23
SW-SE 28-15-23
NE-SW 28-15-23
NW-SE 28-15-23
1/4 LINE
1/8 LINE
P/L
SS
G
OHW
T 15 N R 23 E 28
T 15 N R 23 E 33
N=172338.406 E=209188.089 2" IP FOUND
N=169699.630 E=209164.718 FROM TIE ON FALLS ON MH COR.
BUILDING 2115
BUILDING 3114
HSE 3062
HSE 3066
HSE 3060
HSE 1832
HSE 1835
HSE 1826
HSE 1829
62+21.01 60.00' 143
65+0.58 60.00' 144
61+81.00 60.00' 142
61+81.00 60.00' 141
61+81.00 60.00' 140
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SCHEDULE OF LANDS AND INTEREST

PARCEL NO.	OWNER	INTEREST REQUIRED	AREA SQ. FT. REQUIRED NEW	EXISTING	TOTAL	TLE SQ. FT. REQUIRED
8	JOHN HOPPERT	TLE	---	---	---	2534 SQ. FT.

"OWNERS" NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY, AND ARE SUBJECT TO CHANGE PRIOR TO TRANSFER OF LAND INTERESTS TO THE DEPARTMENT OF TRANSPORTATION.

COORDINATE TABLE		
NUMBER	N	E
514	171147.242	209287.363
515	171676.880	209287.130
516	171925.737	209754.662
517	172070.808	210027.210
518	172162.925	210200.272
5015	172338.406	209188.089
5017	169699.630	209164.718
5020	172359.710	211826.270

IRON PIPES FOUND		
DESCRIPTION	N	E
RWGP	171787.441	209661.462
RWGP	171840.330	209736.619

ROAD NAME	BASIS OF EXISTING R/W	WIDTH	YEAR
TAYLOR DR	RW PLAT UNION AVE TO STH 28	VARIES	1987
UNIVERSITY DR	RW PLAT UNION AVE TO STH 28	VARIES	1987

REVISION DATE			
7-17-2014			
8-18-2014			

DATE:JUNE 30, 2014

GRID FACTOR N/A

SCALE, FEET 0 50 100

HWY: CTH A/TAYLOR DR.

COUNTY: SHEBOYGAN

STATE R/W PROJECT NUMBER -

CONSTRUCTION PROJECT NUMBER 4996-01-58

PLAT SHEET 4.6

PS&E SHEET --133

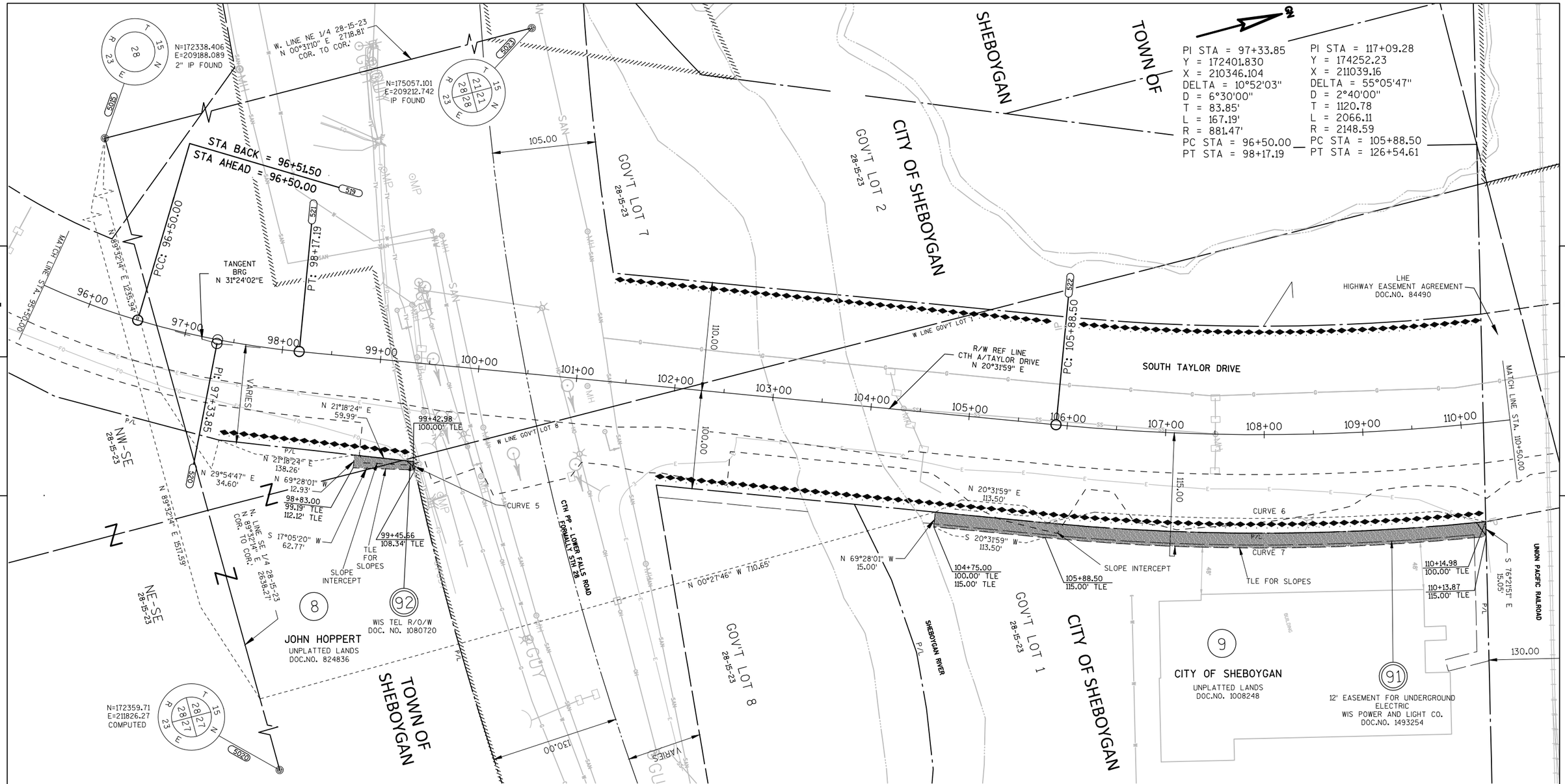
E

FILE NAME : C:\CIVIL 3D PROJECTS\4996-01-58\RWSHEET4_6.DWG

PLOT DATE : 1/6/2015 9:38 AM PLOT BY : BOB PLOT NAME :

PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 75



SCHEDULE OF LANDS AND INTEREST

PARCEL NO.	OWNER	INTEREST REQUIRED	AREA SQ. FT. REQUIRED			TLE
			NEW	EXISTING	TOTAL	SQ. FT. REQUIRED
8	JOHN HOPPERT	TLE	---	---	---	2534 SQ. FT.
9	CITY OF SHEBOYGAN	TLE	---	---	---	8411 SQ. FT
91	ALLIANT ENERGY (EASEMENT, UG CABLE)	RELEASE OF RIGHTS	---	---	---	0 SQ. FT.
92	SBC/AT&T (UG CABLE)	RELEASE OF RIGHTS	---	---	---	0 SQ. FT.

"OWNERS" NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY, AND ARE SUBJECT TO CHANGE PRIOR TO TRANSFER OF LAND INTERESTS TO THE DEPARTMENT OF TRANSPORTATION.

IRON PIPES FOUND		
DESCRIPTION	N	E
1" IP	173598.428	210853.986
REBAR W/CAP	173167.400	210739.871
REBAR W/CAP	173238.007	210552.337
RWGP	172559.539	210619.388
RWGP	172563.213	210513.495

COORDINATE TABLE		
NUMBER	N	E
519	172330.263	210302.418
520	172401.830	210346.104
521	172480.351	210375.513
522	173202.657	210646.049
5015	172338.406	209188.089
5020	172359.710	211826.270
5023	175057.101	209212.742

CURVE TABLE					
NUMBER	DELTA ANGLE	CHORD DIRECTION	RADIUS	ARC LENGTH	CHORD LENGTH
CURVE 5	0°10'04"	S 87°14'49" E	2994.79	8.76'	8.76'
CURVE 6	11°22'22"	N 14°50'48" E	2248.59	446.33	445.60'
CURVE 7	11°20'35"	S 14°51'42" W	2263.59	448.13	447.40'

ROAD NAME	BASIS OF EXISTING R/W	WIDTH	YEAR
TAYLOR DR	RW PLAT UNION AVE TO STH 28	VARIES	1987
TAYLOR DR	PROJECT 1222-1-22	VARIES	1984
STH28/CTH PP	DIVISION PROJECT NO. 2116	VARIES	1933
STH28/CTH PP	PROJECT NO. 4012-1-21	VARIES	1970

REVISION DATE			
7-17-2014			
8-18-2014			

DATE:JUNE 30, 2014

GRID FACTOR N/A

SCALE, FEET 0 50 100

HWY: CTH A/TAYLOR DR.

COUNTY: SHEBOYGAN

STATE R/W PROJECT NUMBER -

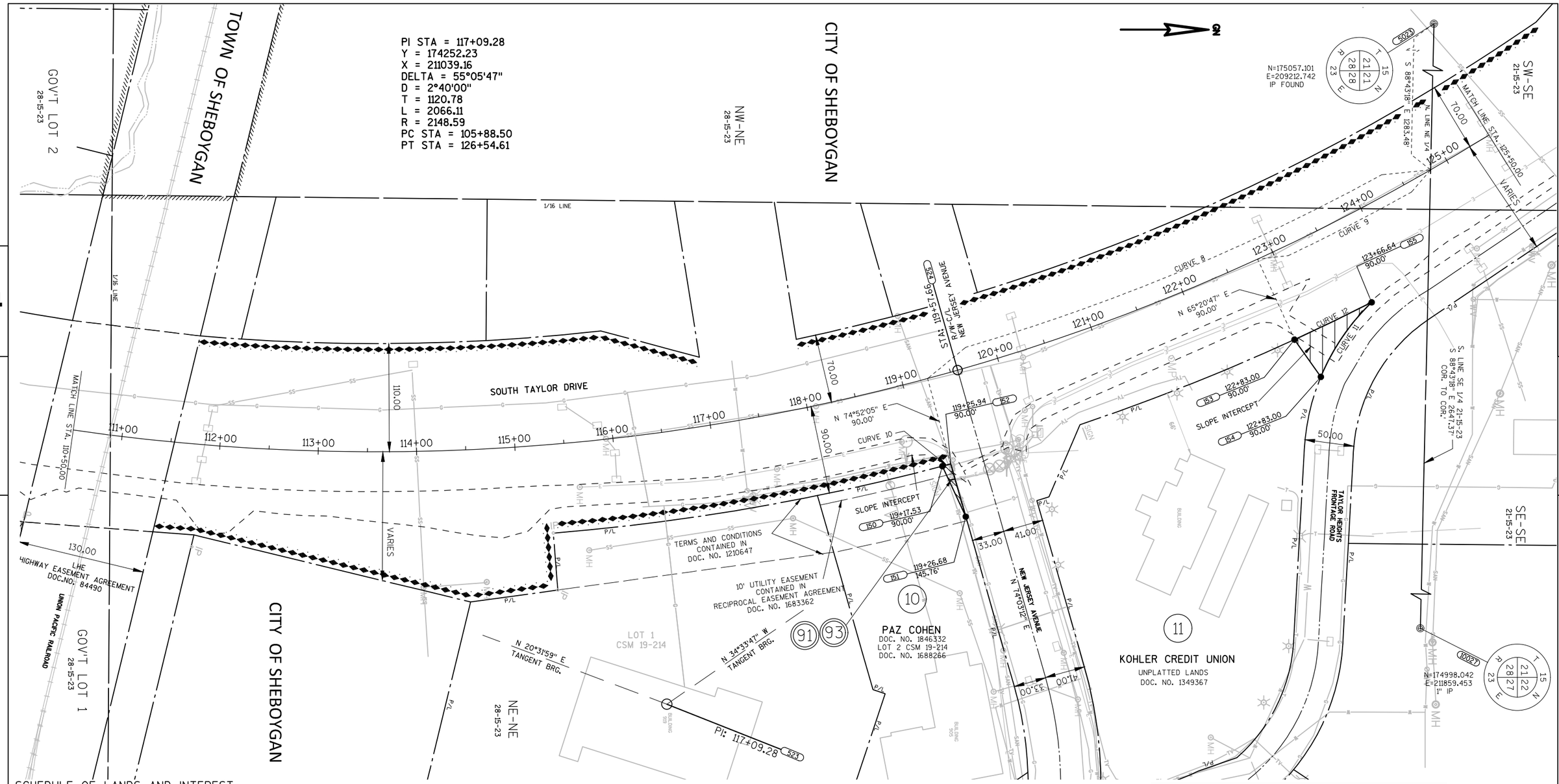
CONSTRUCTION PROJECT NUMBER 4996-01-58

PLAT SHEET 4.7

PS&E SHEET --134

E

FILE NAME : C:\CIVIL 3D PROJECTS\4996-01-58\RWSHEET4_7.DWG PLOT DATE : 1/6/2015 9:52 AM PLOT BY : BOB PLOT NAME : PLOT SCALE : 1 IN:100 FT WISDOT/CADDS SHEET 75



SCHEDULE OF LANDS AND INTEREST

PARCEL NO.	OWNER	INTEREST REQUIRED	AREA SQ. FT. REQUIRED			TLE SQ. FT. REQUIRED
			NEW	EXISTING	TOTAL	
10	PAZ COHEN	FEE	244	---	244	0 SQ. FT.
11	KOHLER CREDIT UNION	FEE	1681	---	1681	0 SQ. FT
91	ALLIANT ENERGY (UG CABLE)	RELEASE OF RIGHTS				
93	CHARTER COMMUNICATIONS (UG CABLE)	RELEASE OF RIGHTS				

"OWNERS" NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY, AND ARE SUBJECT TO CHANGE PRIOR TO TRANSFER OF LAND INTERESTS TO THE DEPARTMENT OF TRANSPORTATION.

COORDINATE TABLE		
NUMBER	N	E
150	174532.178	210797.202
151	174555.959	210848.551
152	174540.638	210794.933
153	174375.602	210721.298
154	174916.829	210706.423
155	174968.533	210630.611
523	174252.235	211039.162
524	174547.704	210699.547
5023	175057.101	209212.742
10027	174998.042	211859.453

IRON PIPES FOUND		
DESCRIPTION	N	E
1" IP	174141.393	210923.287
1" IP	174136.823	210865.230
2" IP	173769.332	210879.168

LINE COURSE TABLE		
NUMBER	DIRECTION	DISTANCE
152-151	N 74°03'12" E	55.76'
151-150	S 65°09'01"W	56.59'
154-153	S 54°47'04"W	46.42'

CURVE TABLE					
NUMBER	DELTA ANGLE	CHORD DIRECTION	RADIUS	ARC LENGTH	CHORD LENGTH
CURVE 8	14°48'13"	S 22°32'01" E	2148.59'	555.13'	553.59'
CURVE 9	05°16'54"	S 27°17'40" E	2148.59'	198.07'	198.00'
CURVE 10	00°13'27"	N 15°01'11" W	2238.59'	8.76'	8.76'
CURVE 11	23°31'58"	S 55°42'23" E	225.00'	92.41'	91.76'
CURVE 12	02°13'50"	N 25°46'08" W	2238.59'	87.14'	87.15'

ROAD NAME	BASIS OF EXISTING R/W	WIDTH	YEAR
TAYLOR DR	PROJECT 1222-1-22	VARIES	1984
TAYLOR DR	CSM 17-179	VARIES	2000
NEW JERSEY AVE	CITY ORDINANCE	66'	1996
NEW JERSEY AVE	DOC. NO. 1349367	8'	1992

REVISION DATE
7-17-2014
8-18-2014
10-24-2014

DATE:JUNE 30, 2014

GRID FACTOR N/A

SCALE, FEET
0 50 100

HWY: CTH A/TAYLOR DR.

COUNTY: SHEBOYGAN

STATE R/W PROJECT NUMBER -

CONSTRUCTION PROJECT NUMBER 4996-01-58

PLAT SHEET 4.8

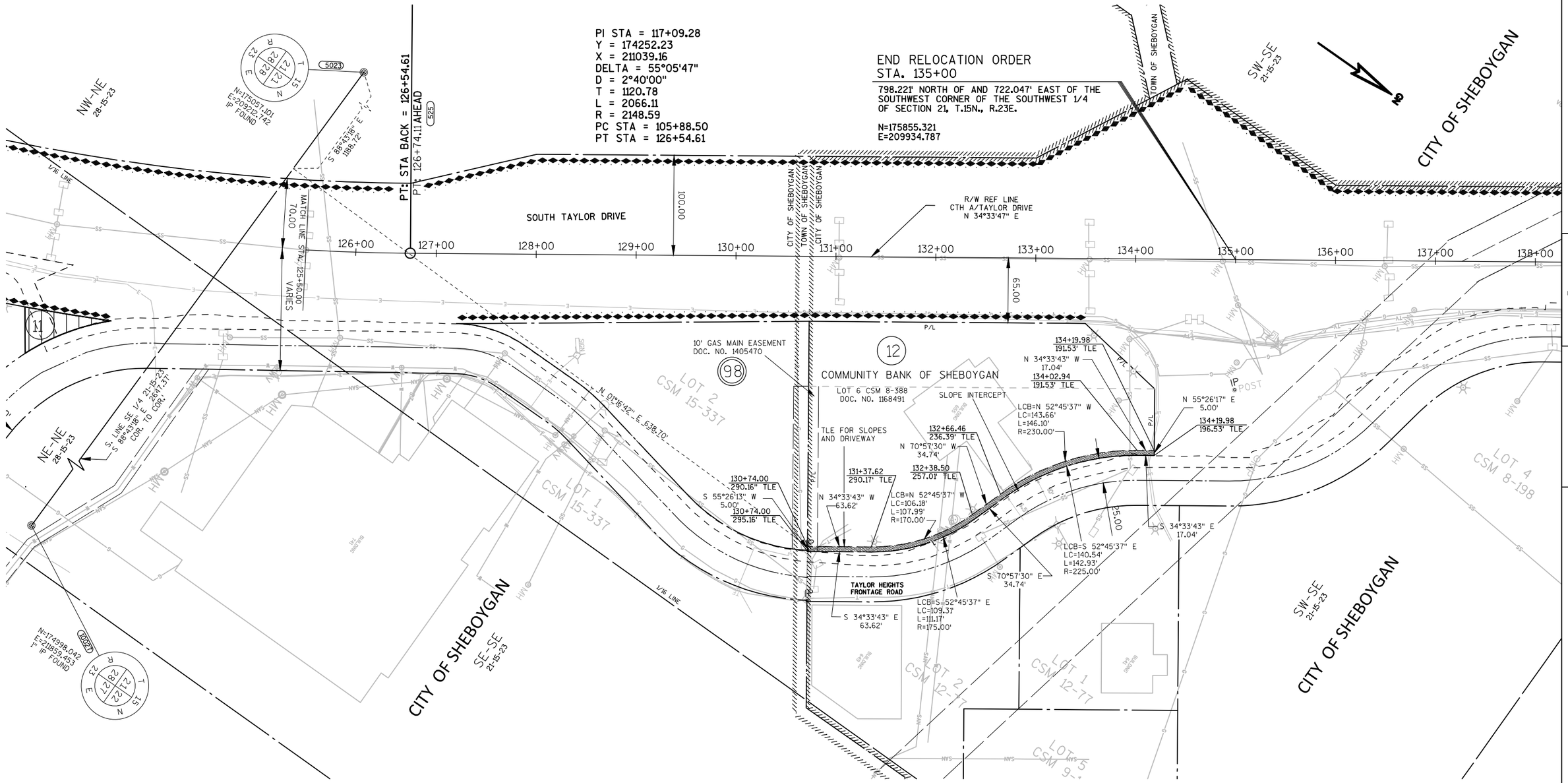
PS&E SHEET -- 135

E

FILE NAME : C:\CIVIL 3D PROJECTS\4996-01-58\RWSHEET4_8.DWG

PLOT DATE : 1/6/2015 10:05 AM PLOT BY : BOB PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 75



SCHEDULE OF LANDS AND INTEREST

PARCEL NO.	OWNER	INTEREST REQUIRED	AREA SQ. FT. REQUIRED			TLE
			NEW	EXISTING	TOTAL	SQ. FT. REQUIRED
11	KOHLER CREDIT UNION	FEE	1681	---	1681	0 SQ. FT.
12	COMMUNITY BANK OF SHEBOYGAN	TLE	---	---	---	1847 SQ. FT
98	WISCONSIN PUBLIC SERVICE (EASEMENT)	RELEASE OF RIGHTS				

"OWNERS" NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY, AND ARE SUBJECT TO CHANGE PRIOR TO TRANSFER OF LAND INTERESTS TO THE DEPARTMENT OF TRANSPORTATION.

COORDINATE TABLE		
NUMBER	N	E
525	175175.199	210403.326
5023	175057.101	209212.742
10027	174998.042	211859.453

IRON PIPES FOUND		
DESCRIPTION	N	E
1" IP (LEANING)	175699.768	210460.246
1" IP	175929.299	210042.013
RWGP	175929.155	210042.278
1" IP	175671.783	210418.783

ROAD NAME	BASIS OF EXISTING R/W	WIDTH	YEAR
TAYLOR DR	PROJECT 1222-1-22	VARIES	1984
TAYLOR DR	CSM 17-179	VARIES	2000
TAYLOR HEIGHTS	CSM 8-388	50'	1989
TAYLOR HEIGHTS	CSM 15-337	50'	1998
TAYLOR HEIGHTS	CSM 8-198	VARIES	1998

REVISION DATE			
7-17-2014	---	---	---
7-23-2014	---	---	---
8-18-2014	---	---	---

DATE:JUNE 30, 2014

GRID FACTOR N/A

SCALE, FEET 0 50 100

HWY: CTH A/TAYLOR DR.

COUNTY: SHEBOYGAN

STATE R/W PROJECT NUMBER -

CONSTRUCTION PROJECT NUMBER 4996-01-58

PLAT SHEET 4.9

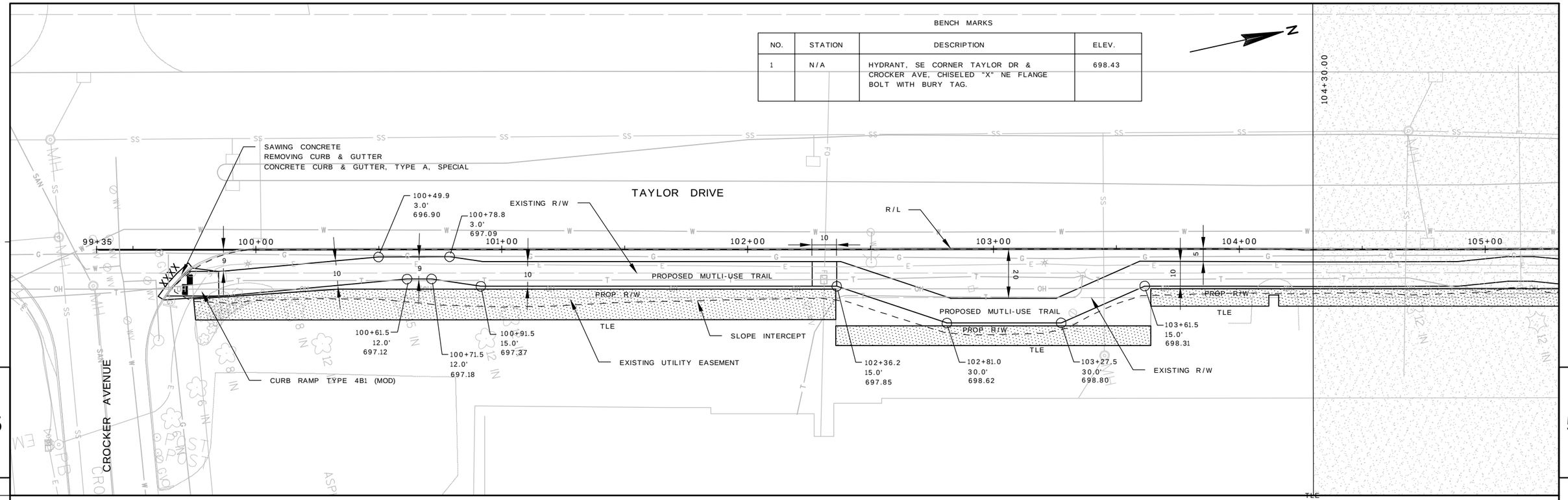
PS&E SHEET --136

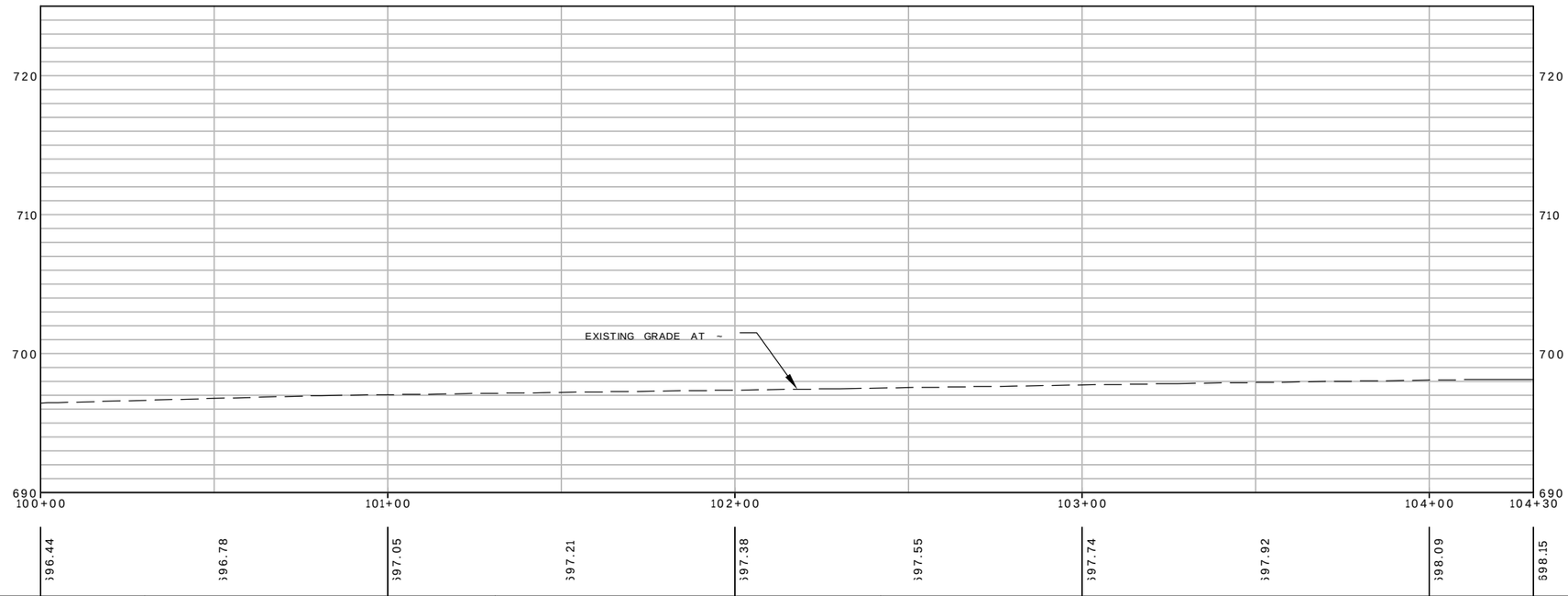
E

FILE NAME : C:\CIVIL 3D PROJECTS\4996-01-58\RWSHEET4_9.DWG PLOT DATE : 1/6/2015 10:14 AM PLOT BY : BOB PLOT NAME : PLOT SCALE :1 IN:100 FT WISDOT/CADDS SHEET 75

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
1	N/A	HYDRANT, SE CORNER TAYLOR DR & CROCKER AVE, CHISELED "X" NE FLANGE BOLT WITH BURY TAG.	698.43





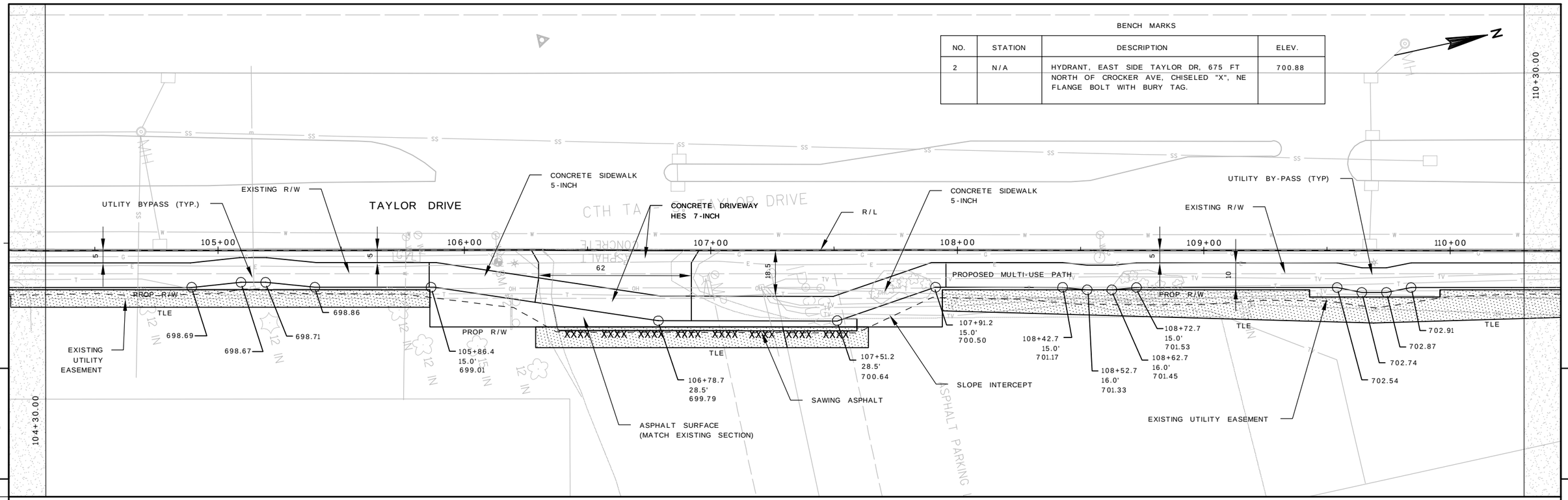
PROJECT NO: 4996-01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	PLAN AND PROFILE:	SHEET	E

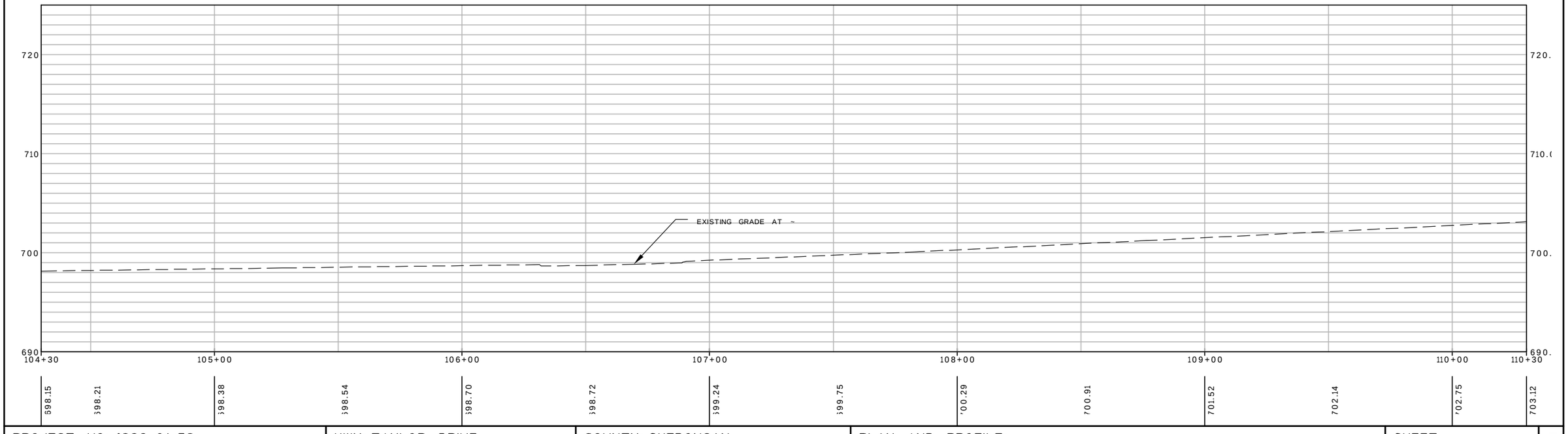
FILE NAME : L:\PROJECTS\11744\DWG\050101_PP.DWG PLOT DATE : 1/13/2015 10:34 AM PLOT BY : JUMP, KEVIN PLOT NAME : ---------- PLOT SCALE : 1" = 40'_XREF

WISDOT/CADDS SHEET 44

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
2	N/A	HYDRANT, EAST SIDE TAYLOR DR, 675 FT NORTH OF CROCKER AVE, CHISELED "X", NE FLANGE BOLT WITH BURY TAG.	700.88





PROJECT NO: 4996-01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	PLAN AND PROFILE:	SHEET 138	E

FILE NAME : L:\PROJECTS\11744\DWG\050102_PP.DWG PLOT DATE : 1/13/2015 10:36 AM PLOT BY : JUMP, KEVIN PLOT NAME : ---------- PLOT SCALE : 1:40_XREF

WISDOT/CADDS SHEET 44

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
3	N/A	CONCRETE LIGHT POLE BASE, CHISELED SQUARE, SOUTH SIDE PAINE AVE, 65 FT EAST OF TAYLOR DR.	704.11
4	N/A	HYDRANT EAST SIDE TAYLOR DR, 430 FT NORTH OF PAINE AVE, CHISELED "X", NE FLANGE BOLT.	701.79

SAWING CONCRETE
REMOVING CURB & GUTTER
CONCRETE CURB & GUTTER, TYPE A, SPECIAL

SAWING CONCRETE
REMOVING CURB & GUTTER
CONCRETE CURB & GUTTER, TYPE A, SPECIAL

TAYLOR DRIVE

CTH TA - S. TAYLOR

PROPOSED MULTI-USE PATH

TLE

EXISTING R/W

EXISTING UTILITY EASEMENT

CURB RAMP TYPE 4B1 (MOD)
CONCRETE SIDEWALK 5-INCH

SLOPE INTERCEPT

EXISTING R/W

TLE

701.02

700.90

UTILITY BY-PASS (TYP)

700.69

700.41

PAINE AVENUE

CULTIVATED

110+30.00

116+30.00

EXISTING GARDE AT ~

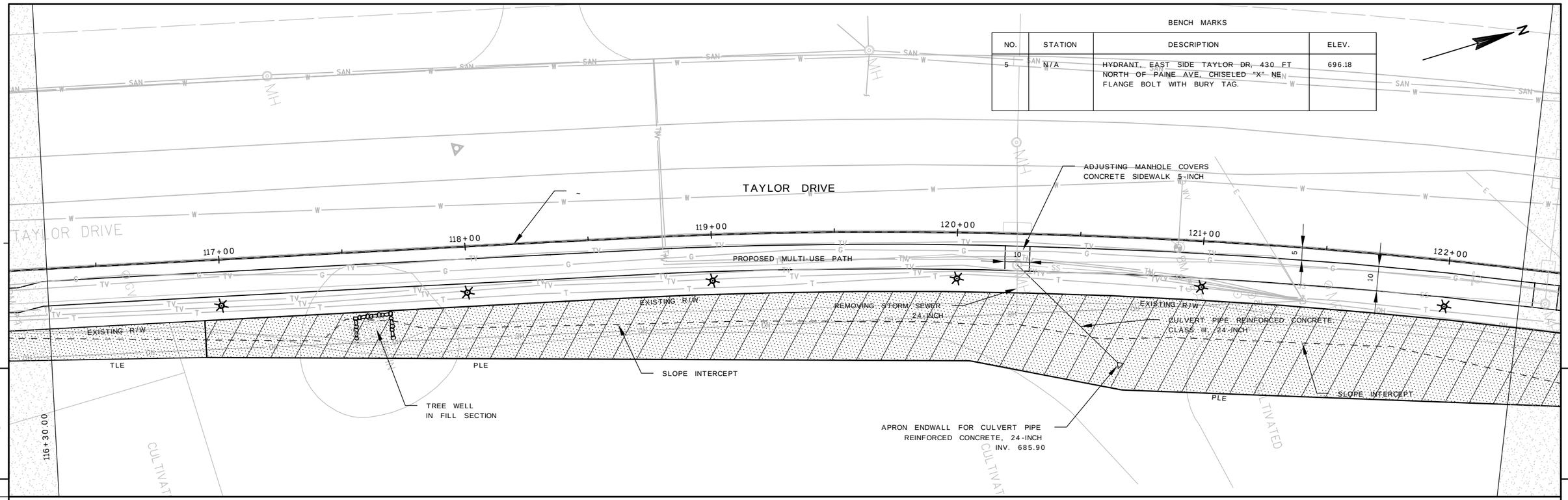
PROJECT NO: 4996-01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	PLAN AND PROFILE:	SHEET 139	E

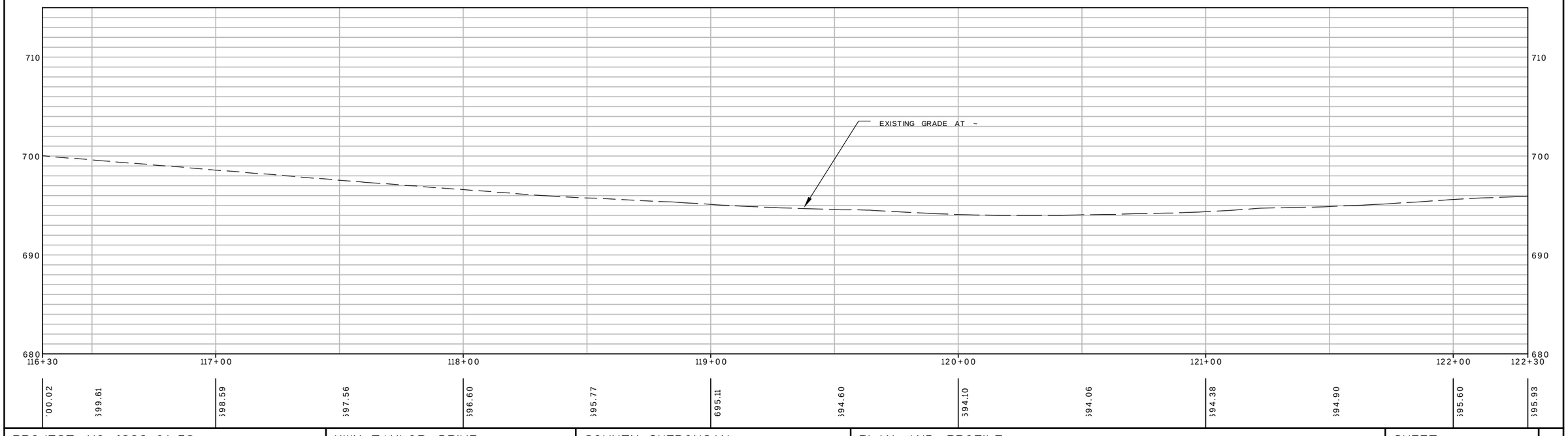
FILE NAME : L:\PROJECTS\11744\DWG\050103_PP.DWG PLOT DATE : 1/13/2015 10:38 AM PLOT BY : JUMP, KEVIN PLOT NAME : ---------- PLOT SCALE : 1:40_XREF

WISDOT/CADDS SHEET 44

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
5	N/A	HYDRANT, EAST SIDE TAYLOR DR, 430 FT NORTH OF PAINE AVE, CHISELED "X" NE FLANGE BOLT WITH BURY TAG.	696.18





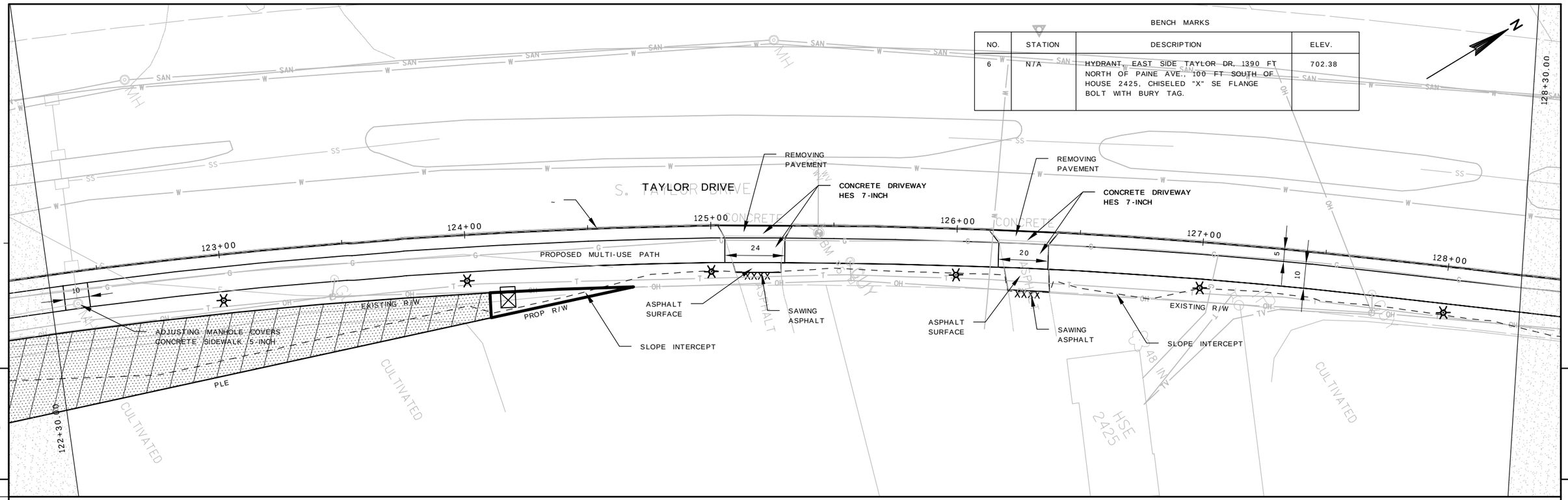
PROJECT NO: 4996-01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	PLAN AND PROFILE:	SHEET 140	E

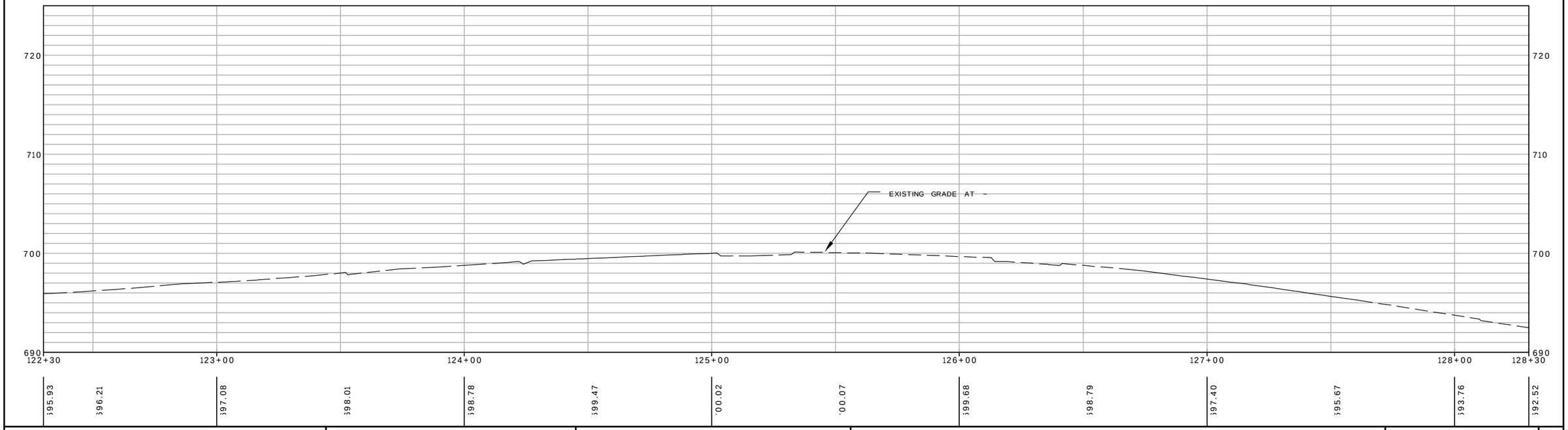
FILE NAME : L:\PROJECTS\11744\DWG\050104_PP.DWG PLOT DATE : 1/13/2015 1:18 PM PLOT BY : HOLZWART, JOE PLOT NAME : ---------- PLOT SCALE : 1" = 40'_XREF

WISDOT/CADDS SHEET 44

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
6	N/A	HYDRANT, EAST SIDE TAYLOR DR. 1390 FT NORTH OF PAINE AVE., 100 FT SOUTH OF HOUSE 2425, CHISELED "X" SE FLANGE BOLT WITH BURY TAG.	702.38





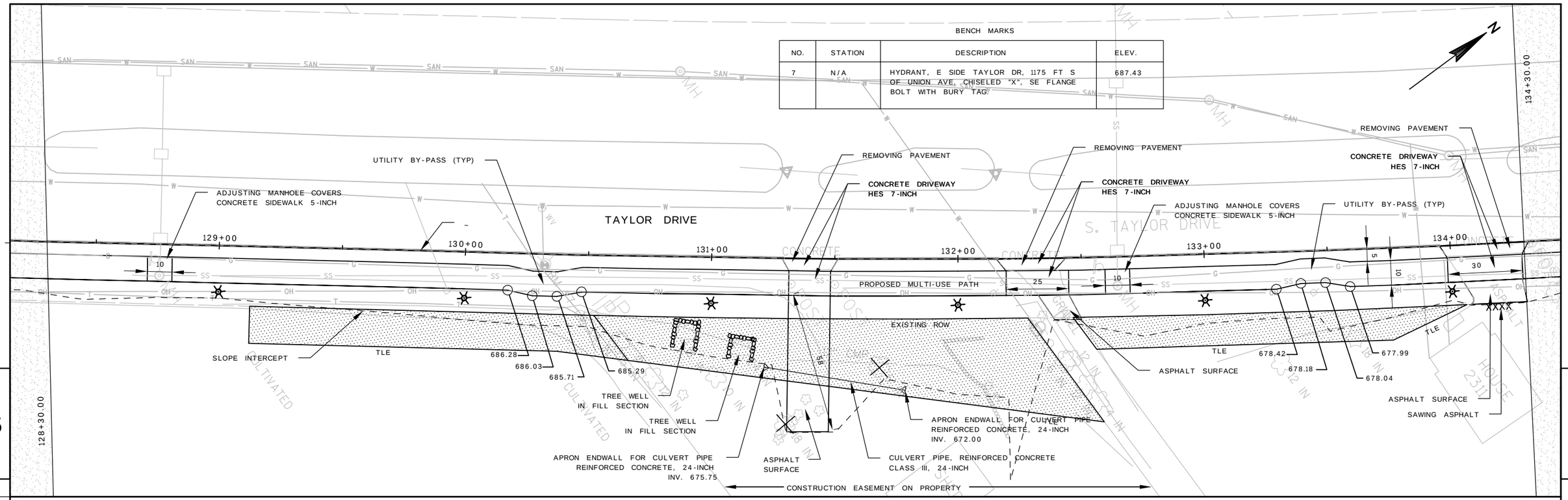
PROJECT NO: 4996-01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	PLAN AND PROFILE:	SHEET 141	E

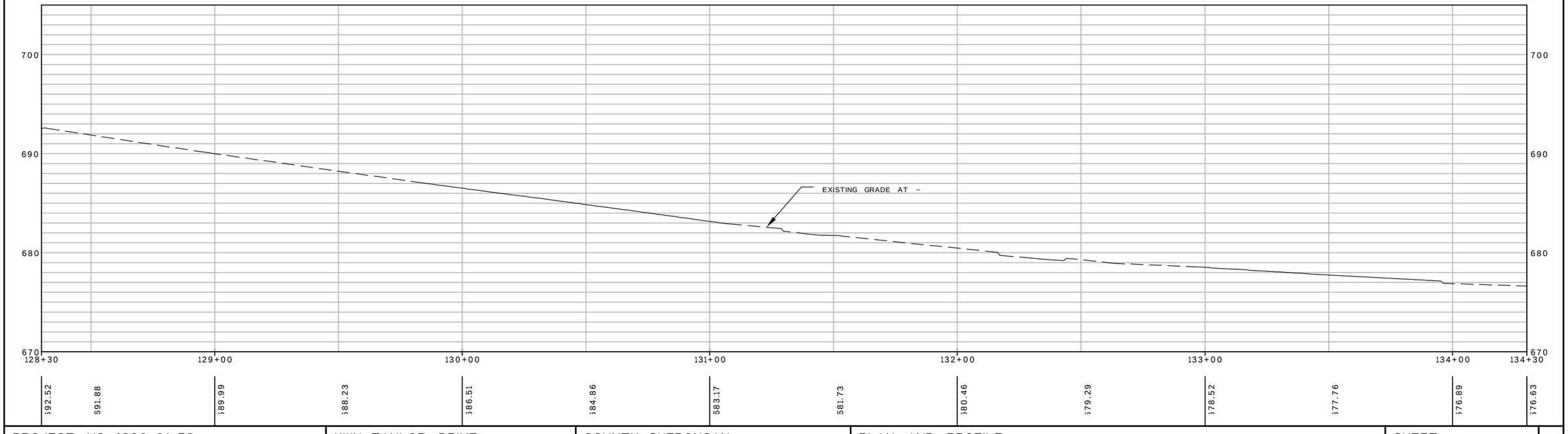
FILE NAME : L:\PROJECTS\11744\DWG\050105_PP.DWG PLOT DATE : 1/13/2015 1:22 PM PLOT BY : HOLZWART, JOE PLOT NAME : ---------- PLOT SCALE : 1" = 40'_XREF

WISDOT/CADDS SHEET 44

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
7	N/A	HYDRANT, E SIDE TAYLOR DR, 1175 FT S OF UNION AVE, CHISELED "X", SE FLANGE BOLT WITH BURY TAG.	687.43

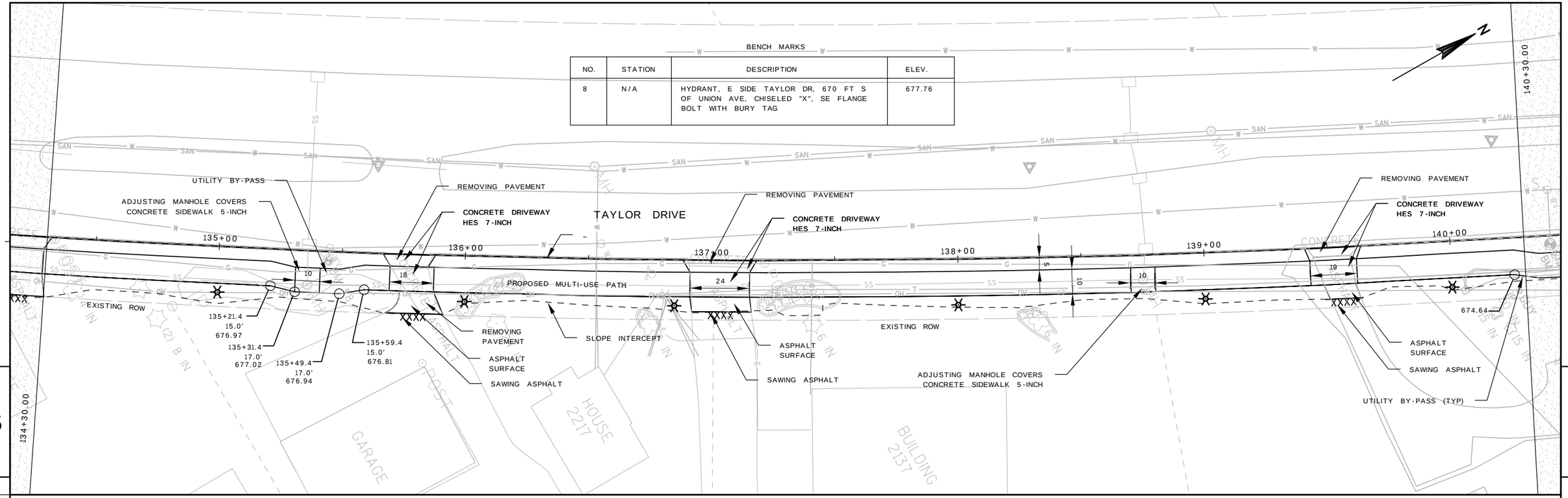


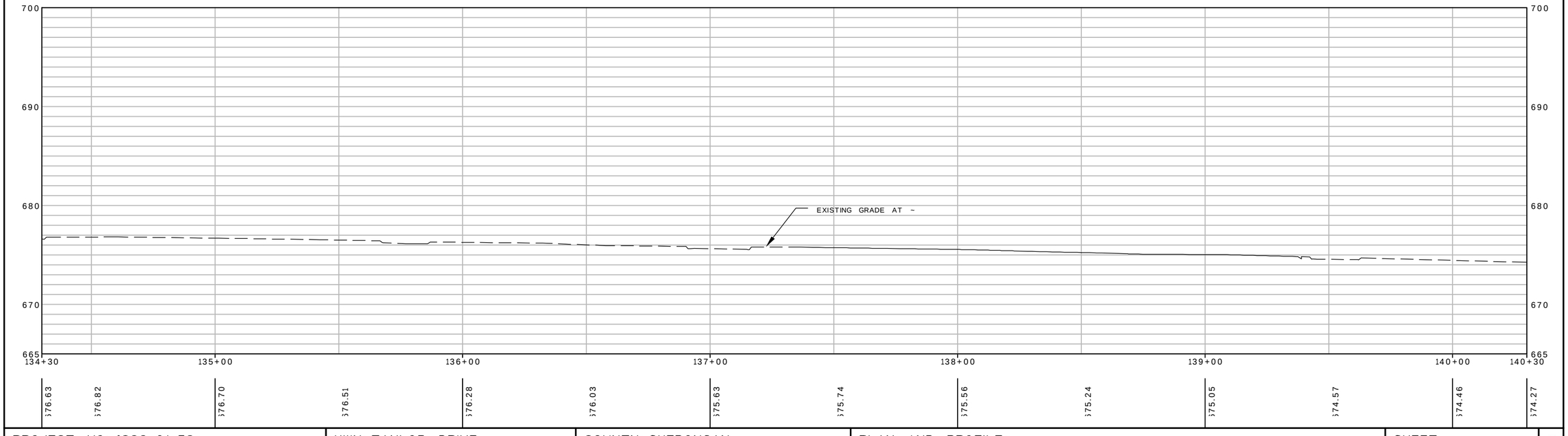


PROJECT NO: 4996-01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	PLAN AND PROFILE:	SHEET 142	E

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
8	N/A	HYDRANT, E SIDE TAYLOR DR, 670 FT S OF UNION AVE, CHISELED "X", SE FLANGE BOLT WITH BURY TAG	677.76

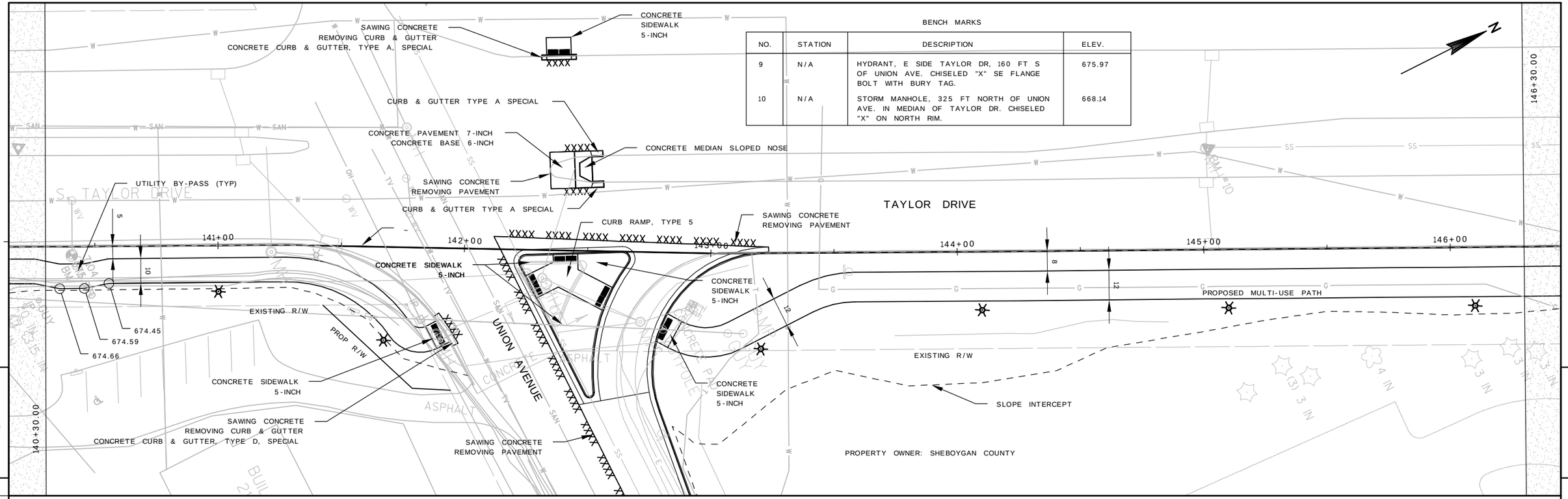




PROJECT NO: 4996-01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	PLAN AND PROFILE:	SHEET 143	E

FILE NAME : L:\PROJECTS\11744\DWG\050107_PP.DWG PLOT DATE : 1/13/2015 10:46 AM PLOT BY : JUMP, KEVIN PLOT NAME : ---------- PLOT SCALE : 1" = 40'_XREF

WISDOT/CADDS SHEET 44



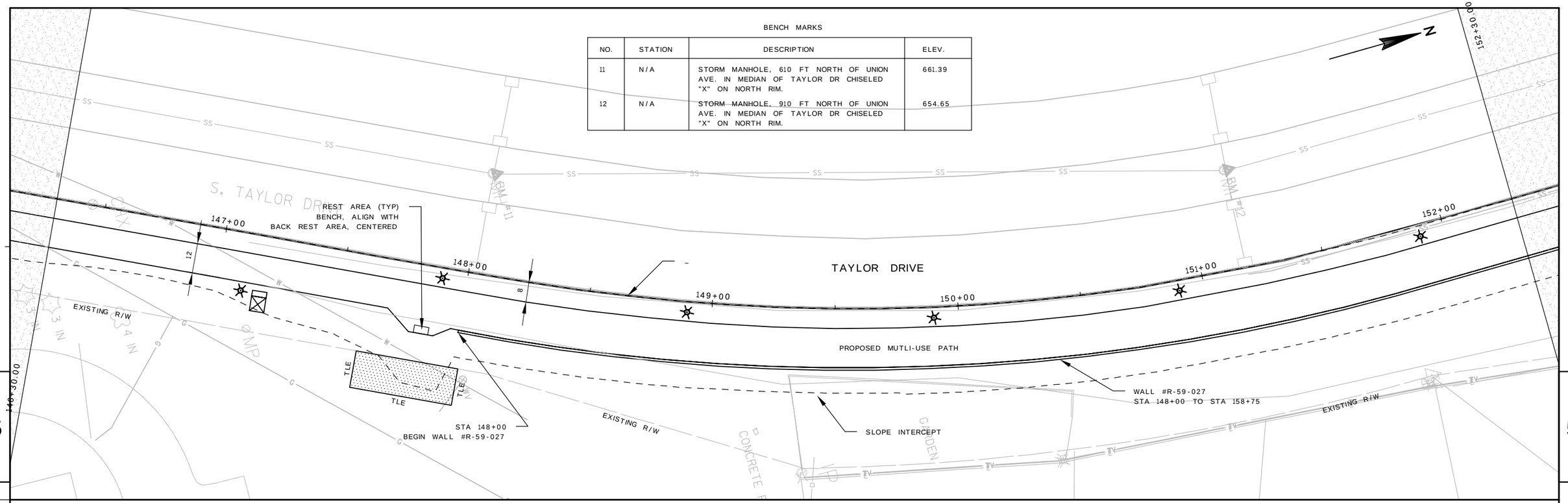
PROJECT NO: 4996-01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	PLAN AND PROFILE:	SHEET 144	E

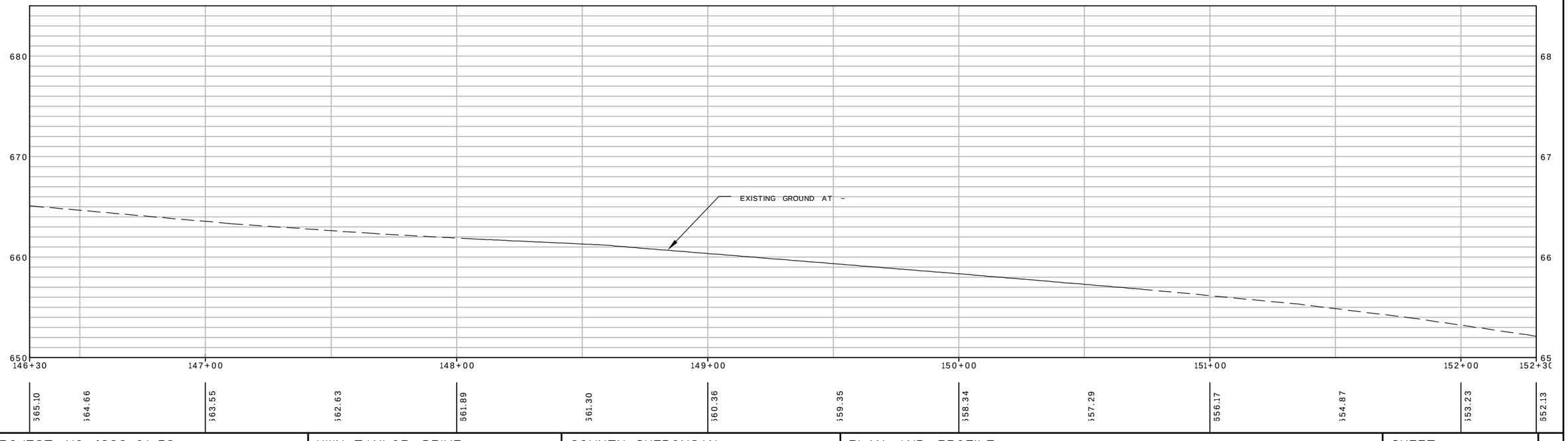
FILE NAME : L:\PROJECTS\11744\DWG\050108_PP.DWG PLOT DATE : 3/24/2015 9:07 AM PLOT BY : JUMP, KEVIN PLOT NAME : ---------- PLOT SCALE : 1:40_XREF

WISDOT/CADDS SHEET 44

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
11	N/A	STORM MANHOLE, 610 FT NORTH OF UNION AVE. IN MEDIAN OF TAYLOR DR CHISELED "X" ON NORTH RIM.	661.39
12	N/A	STORM MANHOLE, 910 FT NORTH OF UNION AVE. IN MEDIAN OF TAYLOR DR CHISELED "X" ON NORTH RIM.	654.65





PROJECT NO: 4996-01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	PLAN AND PROFILE:	SHEET 145	E

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
13	N/A	STORM MANHOLE, 1310 FT NORTH OF UNION AVE. IN MEDIAN OF TAYLOR DR CHISELED "X" ON NORTH RIM.	639.72

N

SS SS SS SS SS SS SS SS SS SS SS SS

RM #13

TAYLOR DRIVE

153+00 154+00 155+00 156+00 157+00 158+00

8

PROPOSED MULTI-USE PATH

WALL #R-59-027
STA 148+00 TO STA 158+75

SLOPE INTERCEPT

152+30.00

TV TV TV TV

EXISTING R/W

IN 12 IN

5 5

650 640 630 620

EXISTING GRADE AT

152+30 153+00 154+00 155+00 156+00 157+00 158+00 158+30

652.13 651.31 649.23 647.11 644.77 642.48 640.05 637.97 635.39 632.77 630.04 627.32 624.70 623.12

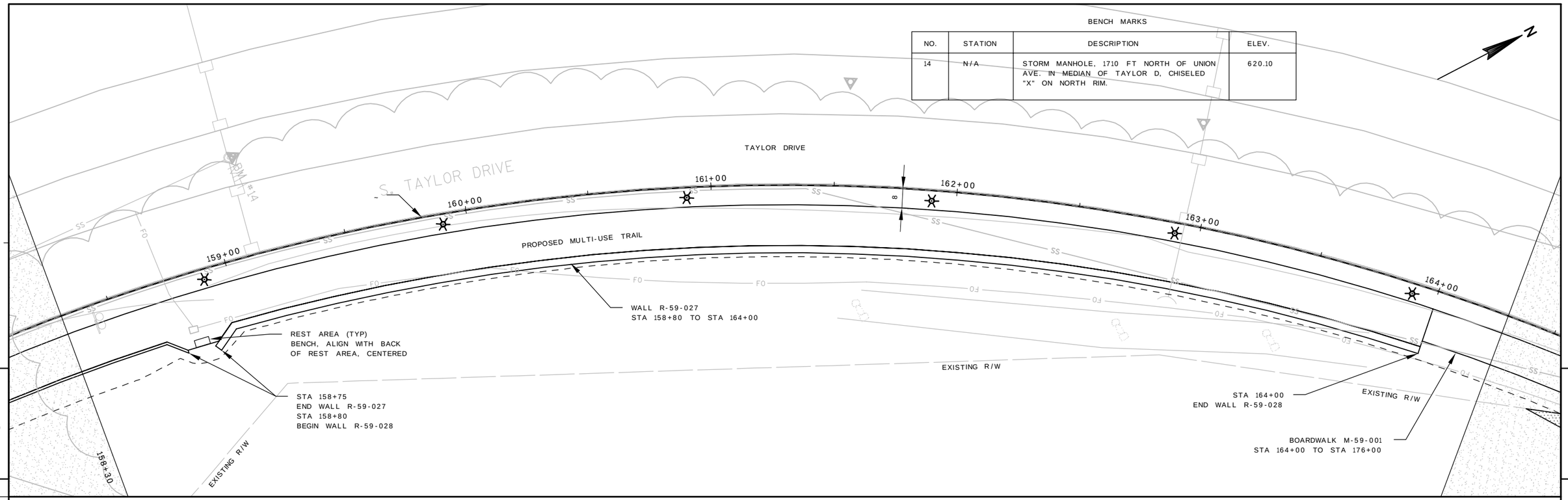
PROJECT NO: 4996-01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	PLAN AND PROFILE:	SHEET 146	E

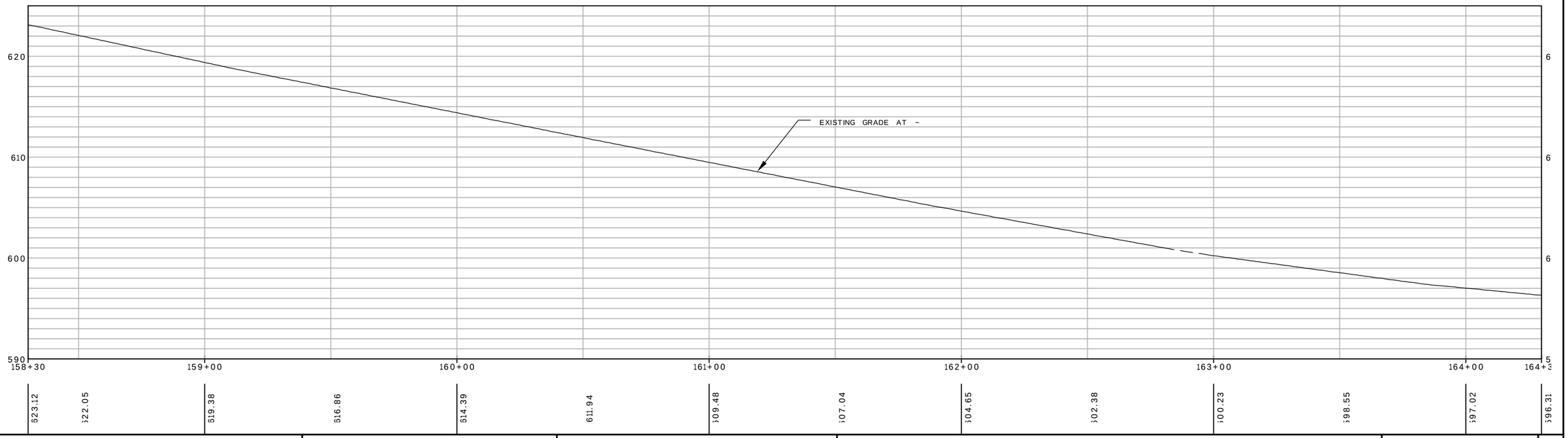
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WISDOT/CADDS SHEET 44

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
14	N/A	STORM MANHOLE, 1710 FT NORTH OF UNION AVE. IN MEDIAN OF TAYLOR D, CHISELED "X" ON NORTH RIM.	620.10





PROJECT NO: 4996-01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	PLAN AND PROFILE:	SHEET 147	E

UNIVERSITY AVE

TAYLOR DRIVE

S. TAYLOR DRIVE

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
15	N/A	CONCRETE LIGHT POLE BASE, CHISELED SQUARE, SOUTH SIDE UNIVERSITY AVE, 83FT NW OF TAYLOR DR	595.99

N

164+30.00

165+00

166+00

167+00

168+00

169+00

170+00

170+30.00

PROPOSED MULTI-USE PATH

EXISTING R/W

TLE

EXISTING R/W

SLOPE INTERCEPT

BOARDWALK M-59-001
STA 164+00 TO STA 176+00

WETLAND BOUNDARY

EXISTING R/W

5

5

620
610
600
590

EXISTING GROUND AT ~

596.31 595.83 594.91 594.54 594.22 594.47 594.85 595.21 595.71 596.24 596.79 597.34 597.85 598.07

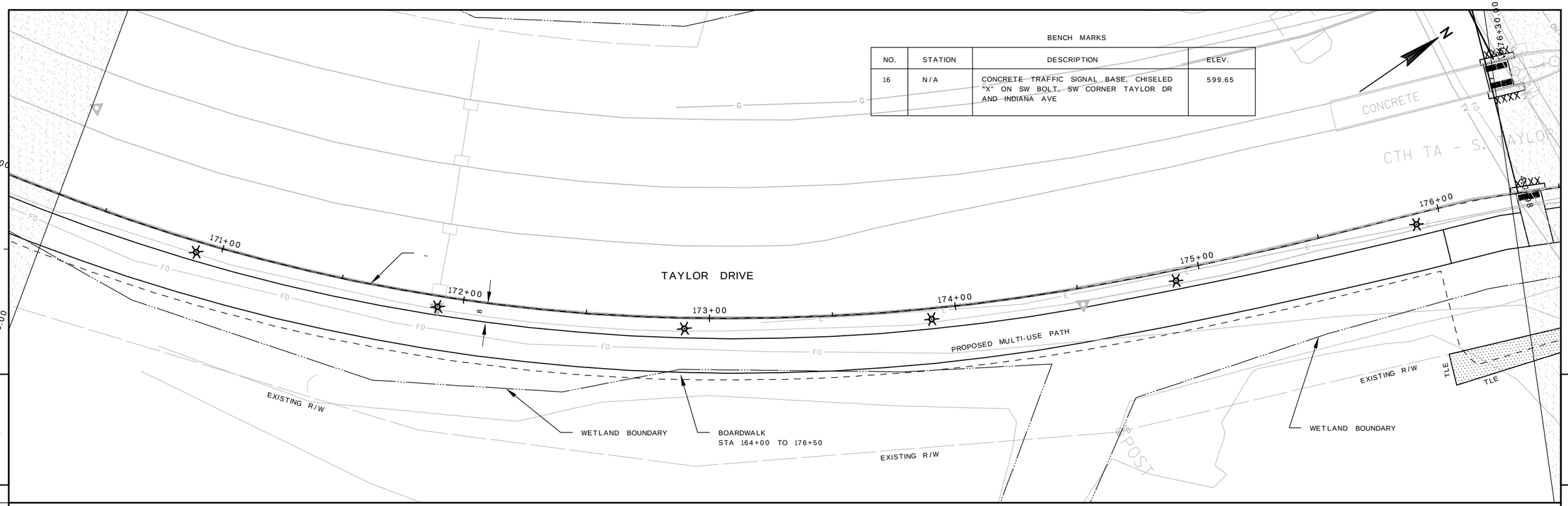
PROJECT NO: 4996-01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	PLAN AND PROFILE:	SHEET 148	E

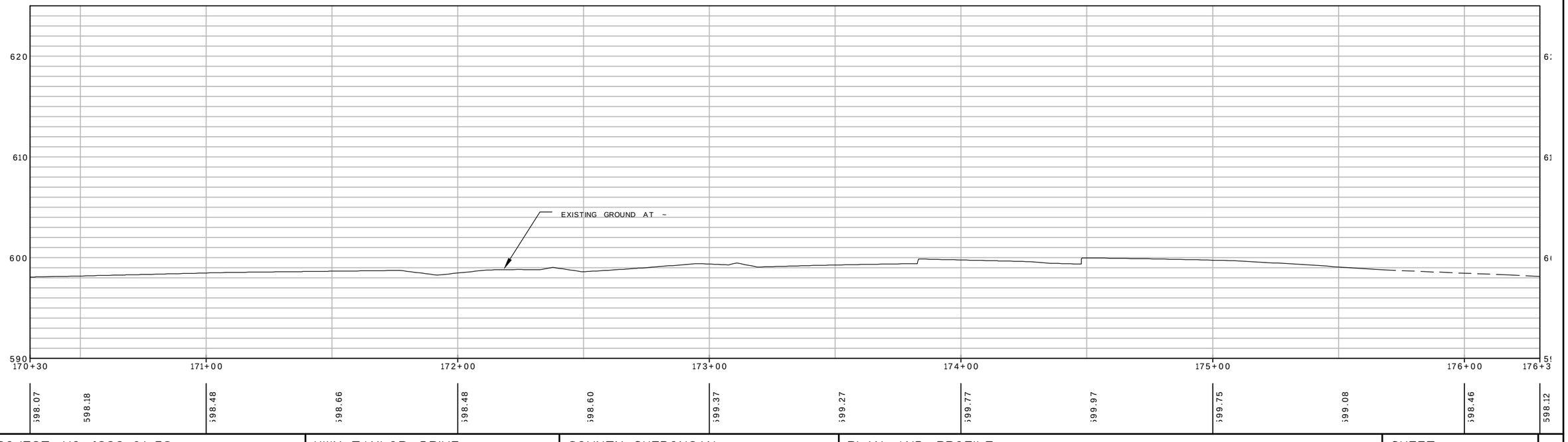
FILE NAME : L:\PROJECTS\11744\DWG\050112_PP.DWG PLOT DATE : 1/13/2015 10:58 AM PLOT BY : JUMP, KEVIN PLOT NAME : ---------- PLOT SCALE : 1" = 40'_XREF

WISDOT/CADDS SHEET 44

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
16	N/A	CONCRETE TRAFFIC SIGNAL BASE, CHISELED "X" ON SW BOLT, SW CORNER TAYLOR DR AND INDIANA AVE	599.65





PROJECT NO: 4996-01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	PLAN AND PROFILE:	SHEET	E

FILE NAME : L:\PROJECTS\11744\DWG\050113_PP.DWG PLOT DATE : 1/13/2015 11:00 AM PLOT BY : JUMP, KEVIN PLOT NAME : ---------- PLOT SCALE : 1" = 40'_XREF

WISDOT/CADDS SHEET 44

SAWING CONCRETE
REMOVING CURB & GUTTER
CURB & GUTTER,TYPE A, SPECIAL

SAWING CONCRETE
REMOVING CURB & GUTTER
CURB & GUTTER,TYPE A, SPECIAL

SAWING CONCRETE
REMOVING CURB & GUTTER
CURB & GUTTER,TYPE A, SPECIAL

SAWING CONCRETE
PAVEMENT REPAIR

SAWING CONCRETE
REMOVING CURB & GUTTER
CURB & GUTTER,TYPE A, SPECIAL

SAWING CONCRETE
PAVEMENT REPAIR

SAWING CONCRETE
REMOVING CURB & GUTTER
CURB & GUTTER,TYPE A, SPECIAL

SAWING CONCRETE
REMOVING PAVEMENT
CURB & GUTTER,TYPE A, SPECIAL

CURB & GUTTER,TYPE A, SPECIAL

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
17	N/A	WISDOT ALUMINUM CAP IN SE ABUTMENT WALL, NB LANE BRIDGE OF TAYLOR DR. OVER SHEBOYGAN RIVER.	598.54

TAYLOR DRIVE

CTH TA - TAYLOR DRIVE

S. TAYLOR DRIVE

177+00 178+00 179+00 180+00 181+00 182+00

182+30.00

30.00

PROPOSED MULTI-USE PATH

179+79.7
18.0'

180+04.7
19.0'

182+12.6
19.0'

182+37.6
18.0'

STA 176+50
END BOARDWALK

CONCRETE SIDEWALK, 5-INCH
CURB RAMP 4B1 (MOD)

CONCRETE SIDEWALK, 5-INCH
CURB RAMP 4B1 (MOD)

CATCH BASIN 2X3-FT, H
RIM 594.08
INV 590.58

INDIANA AVENUE

CONCRETE SIDEWALK, 5-INCH
CURB RAMP 4B1 (MOD)

REMOVING INLETS

REMOVING STORM SEWER

APRON ENDWALLS FOR CULVERT PIPE
REINFORCED CONCRETE 12-INCH
INV 585.62

STORM SEWER PIPE REINFORCED CONCRETE
CLASS III, 12-INCH

PEDESTRIAN BRIDGE
B-59-188
STA 180+16 TO STA 182+02

SLOPE INTEREPT

EXISTING R/W

SHEBOYGAN RIVER

SHEBOYGAN RIVER

610
600
590
580
575

EXISTING GRADE AT ~

598.12 597.87 597.37 596.31 594.74 594.14 595.01 595.69 596.45 585.04 601.62 602.89

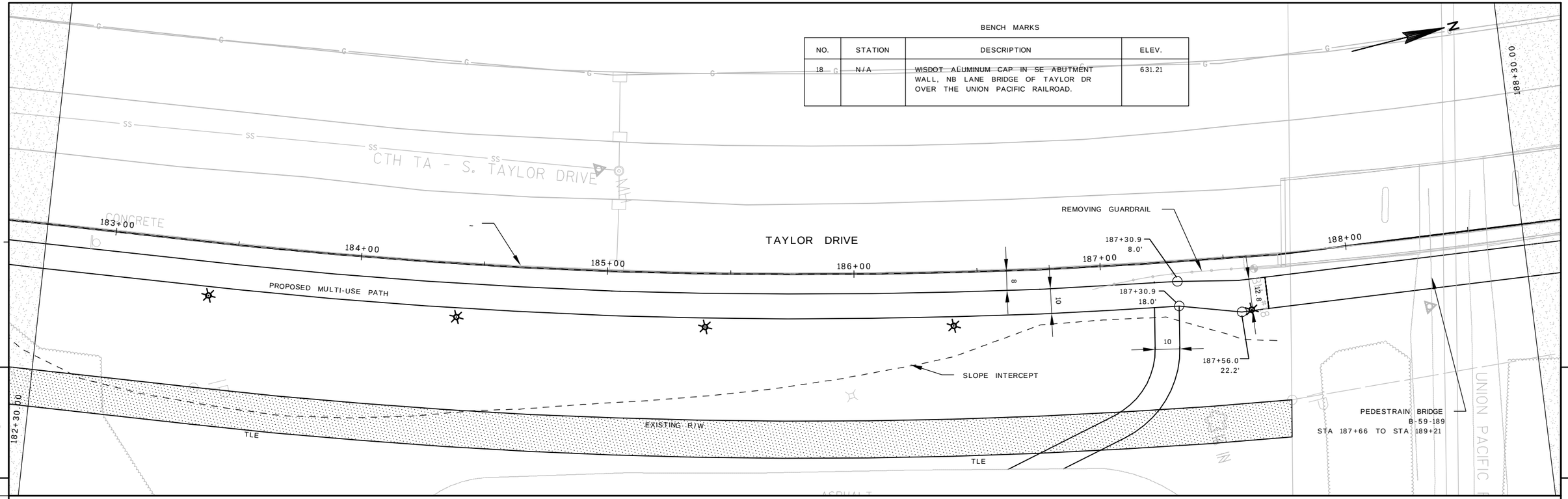
PROJECT NO: 4996-01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	PLAN AND PROFILE:	SHEET 150	E

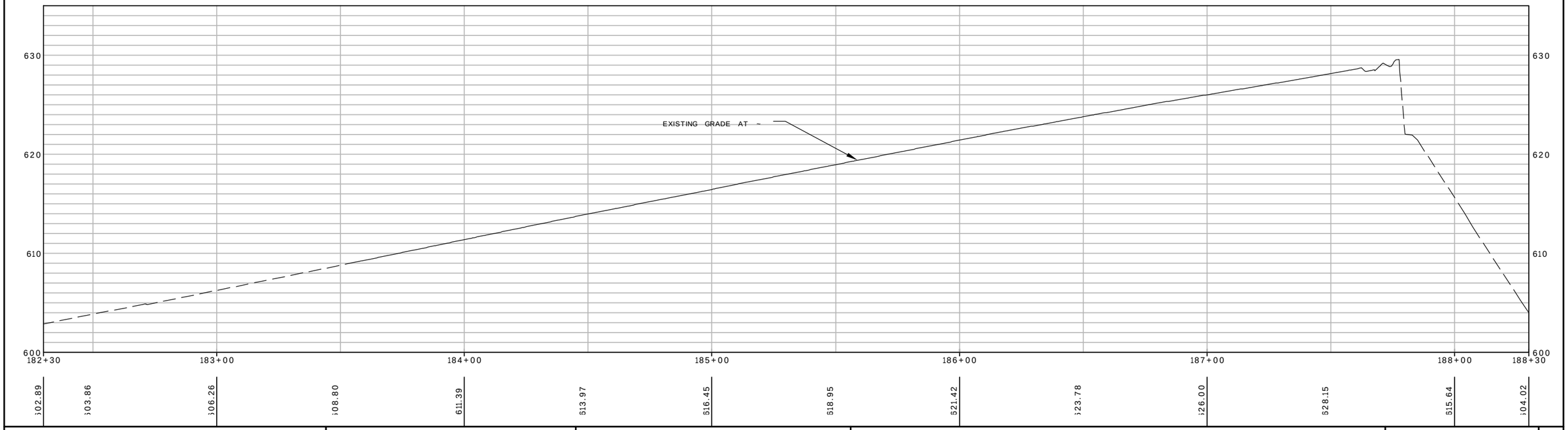
FILE NAME : L:\PROJECTS\11744\DWG\050114_PP.DWG PLOT DATE : 1/13/2015 11:02 AM PLOT BY : JUMP, KEVIN PLOT NAME : ---------- PLOT SCALE : 1" = 40'_XREF

WISDOT/CADDS SHEET 44

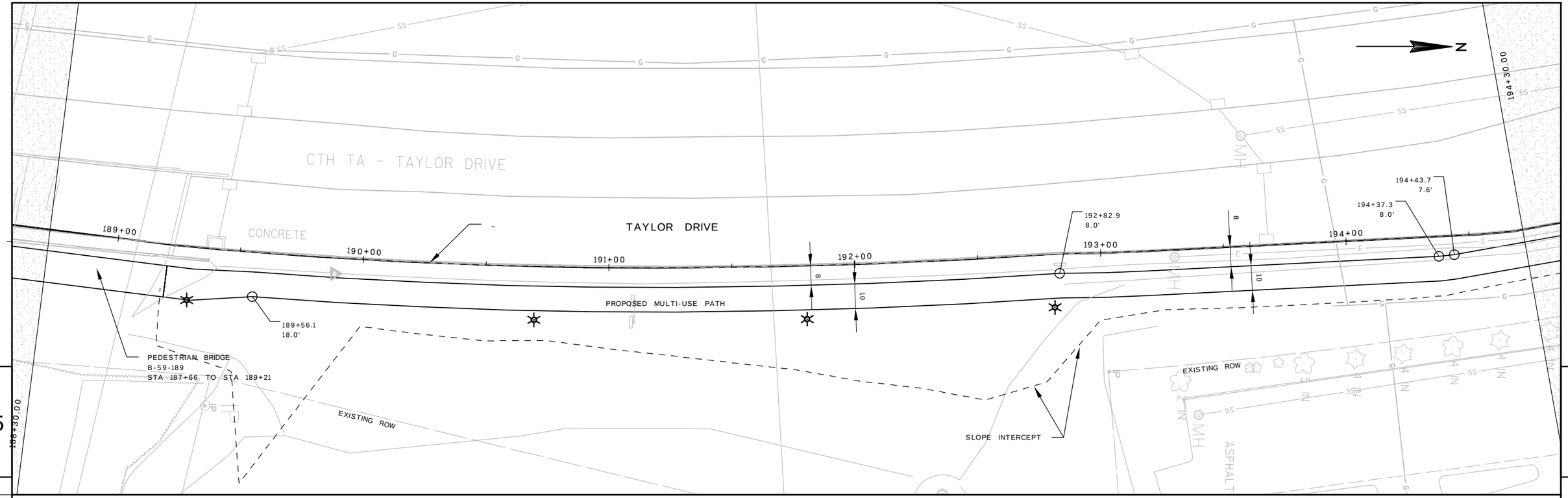
BENCH MARKS

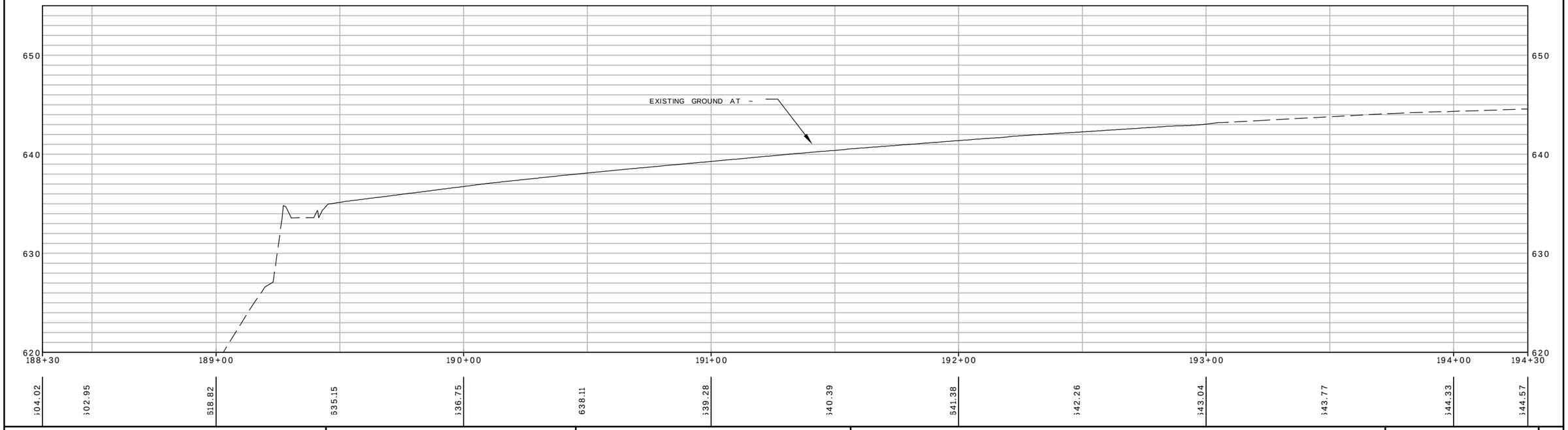
NO.	STATION	DESCRIPTION	ELEV.
18	N/A	WISDOT ALUMINUM CAP IN SE ABUTMENT WALL, NB LANE BRIDGE OF TAYLOR DR OVER THE UNION PACIFIC RAILROAD.	631.21





PROJECT NO: 4996-01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	PLAN AND PROFILE:	SHEET 151	E





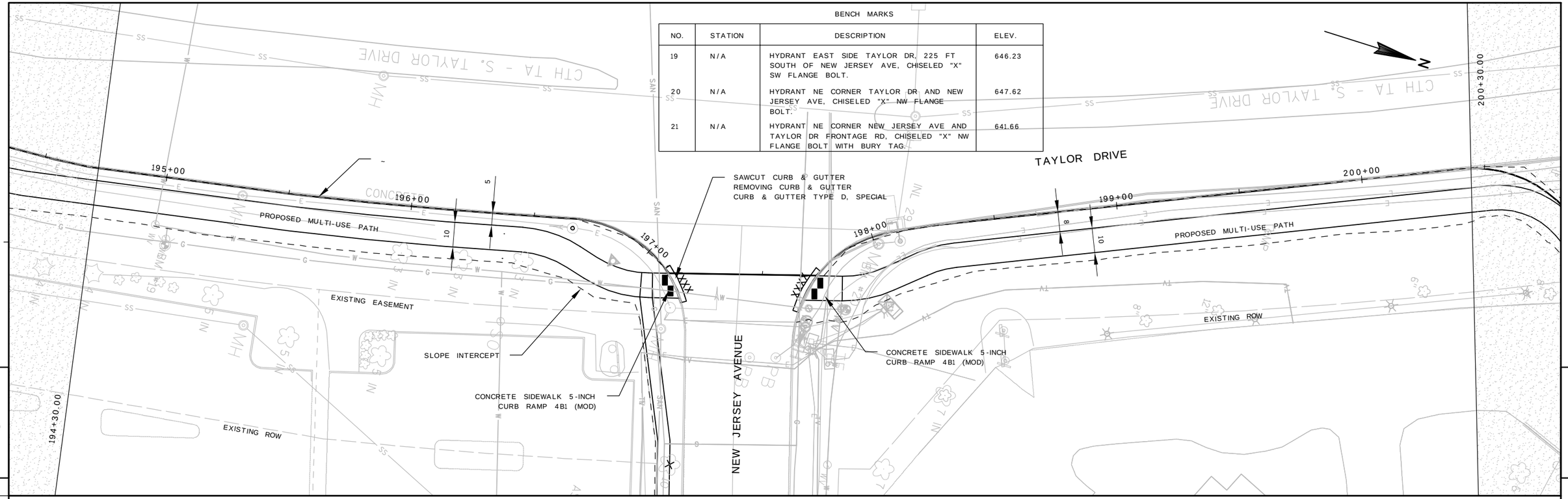
PROJECT NO: 4996-01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	PLAN AND PROFILE:	SHEET	E

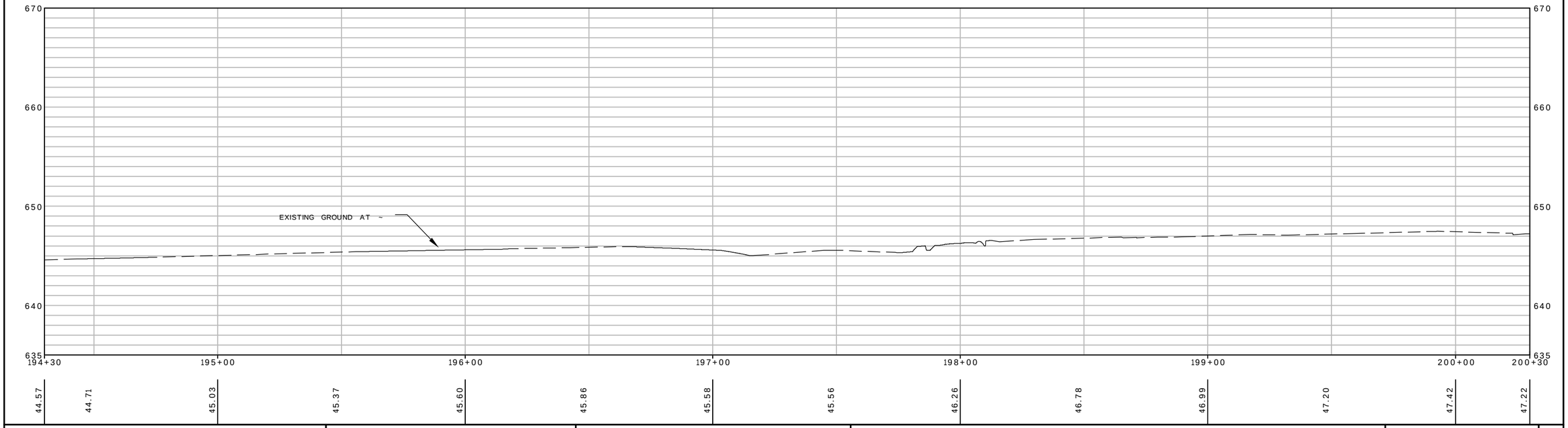
FILE NAME : L:\PROJECTS\11744\DWG\050116_PP.DWG PLOT DATE : 1/13/2015 11:06 AM PLOT BY : JUMP, KEVIN PLOT NAME : ---------- PLOT SCALE : 1" = 40'_XREF

WISDOT/CADDS SHEET 44

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
19	N/A	HYDRANT EAST SIDE TAYLOR DR, 225 FT SOUTH OF NEW JERSEY AVE, CHISELED "X" SW FLANGE BOLT.	646.23
20	N/A	HYDRANT NE CORNER TAYLOR DR AND NEW JERSEY AVE, CHISELED "X" NW FLANGE BOLT.	647.62
21	N/A	HYDRANT NE CORNER NEW JERSEY AVE AND TAYLOR DR FRONTAGE RD, CHISELED "X" NW FLANGE BOLT WITH BURY TAG.	641.66





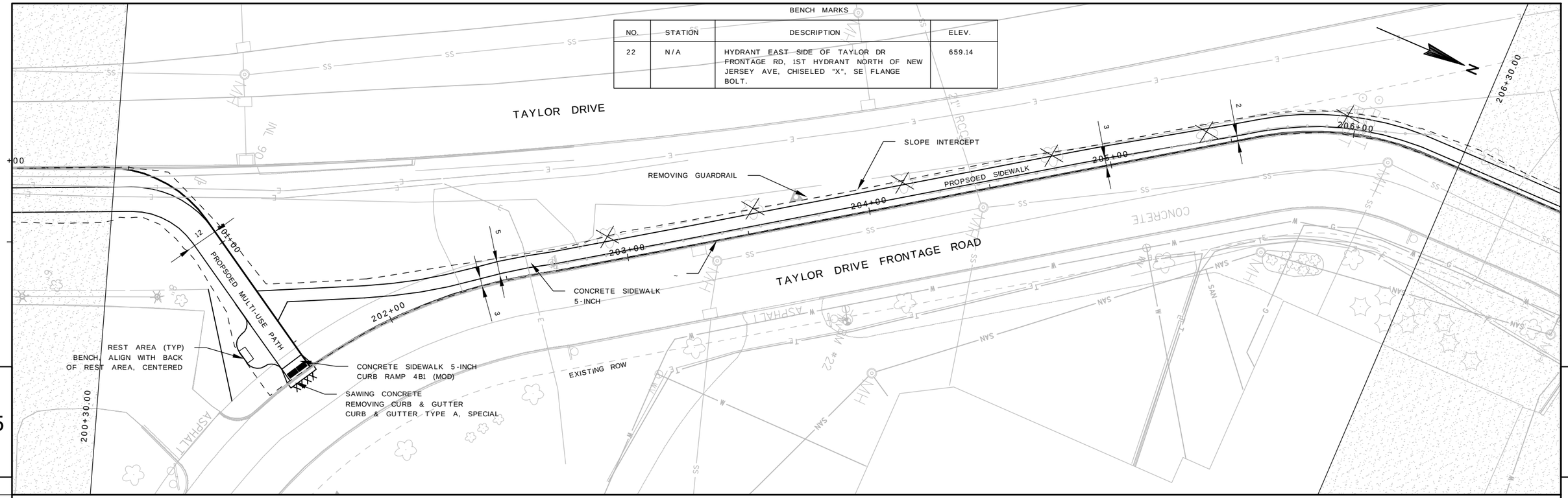
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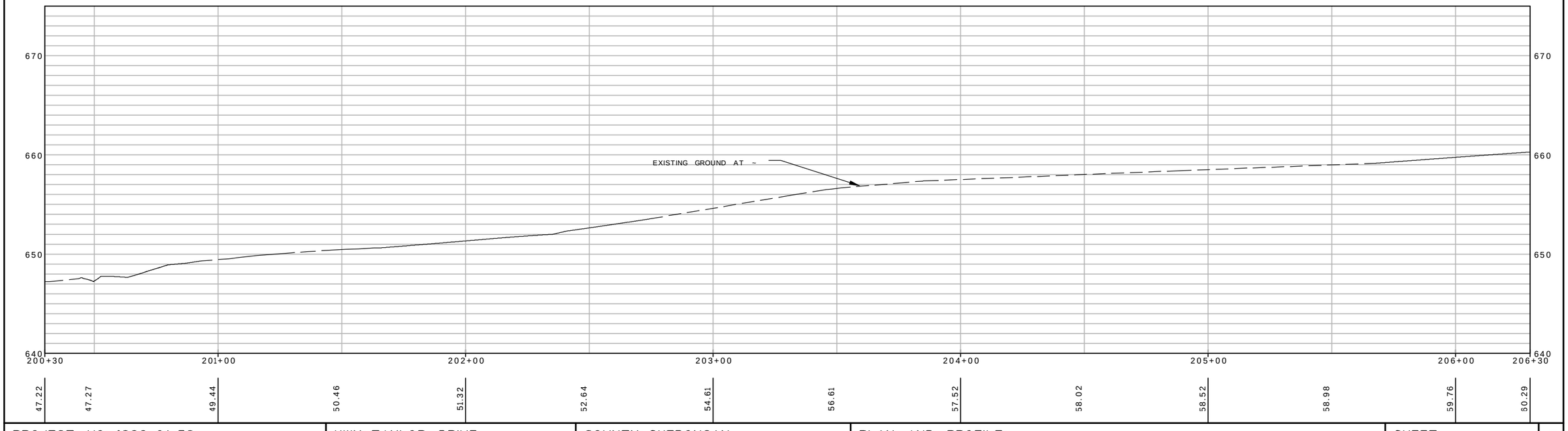
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WISDOT/CADDS SHEET 44

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
22	N/A	HYDRANT EAST SIDE OF TAYLOR DR FRONTAGE RD, 1ST HYDRANT NORTH OF NEW JERSEY AVE, CHISELED "X", SE FLANGE BOLT.	659.14





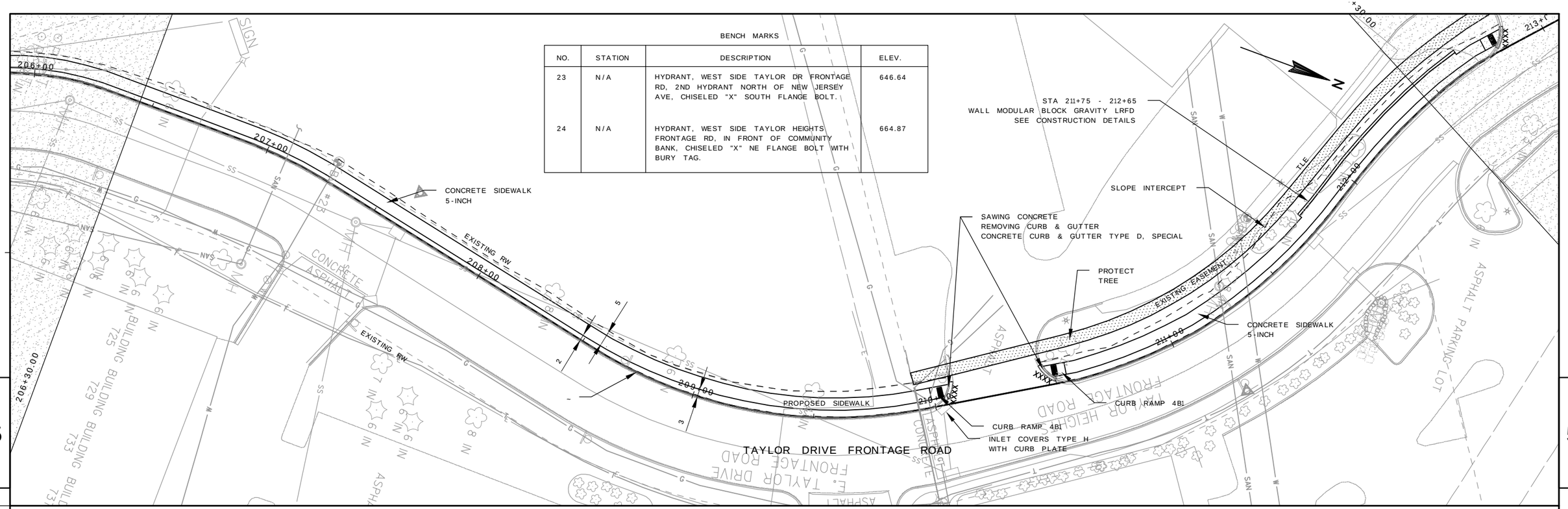
PROJECT NO: 4996-01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	PLAN AND PROFILE:	SHEET	E

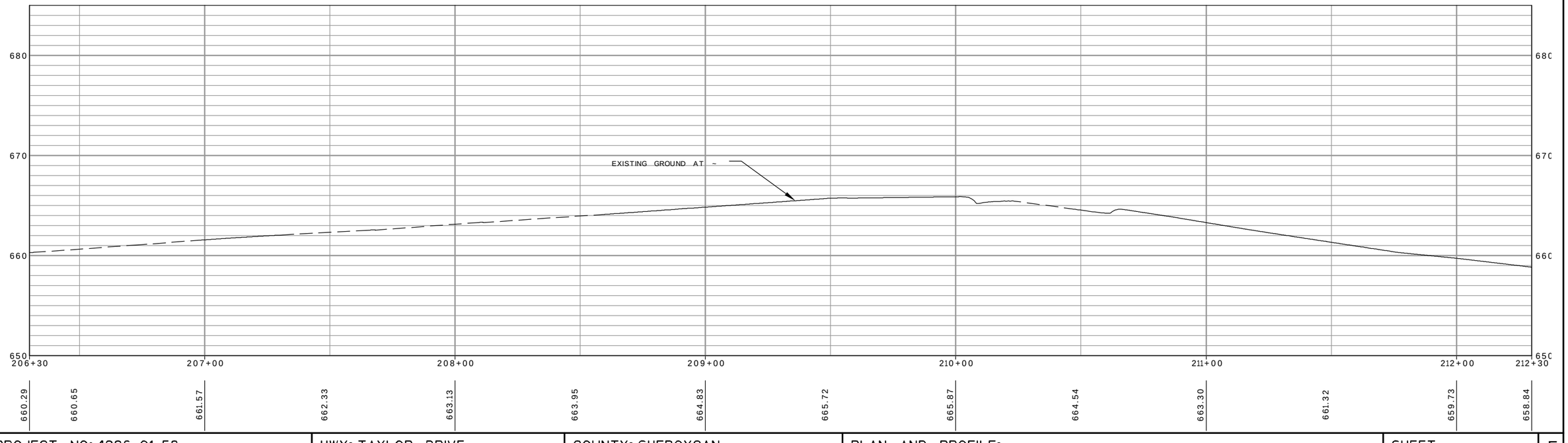
FILE NAME : L:\PROJECTS\11744\DWG\050118_PP.DWG PLOT DATE : 1/13/2015 11:09 AM PLOT BY : JUMP, KEVIN PLOT NAME : ---------- PLOT SCALE : 1" = 40'_XREF

WISDOT/CADDS SHEET 44

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
23	N/A	HYDRANT, WEST SIDE TAYLOR DR FRONTAGE RD, 2ND HYDRANT NORTH OF NEW JERSEY AVE, CHISELED "X" SOUTH FLANGE BOLT.	646.64
24	N/A	HYDRANT, WEST SIDE TAYLOR HEIGHTS FRONTAGE RD, IN FRONT OF COMMUNITY BANK, CHISELED "X" NE FLANGE BOLT WITH BURY TAG.	664.87





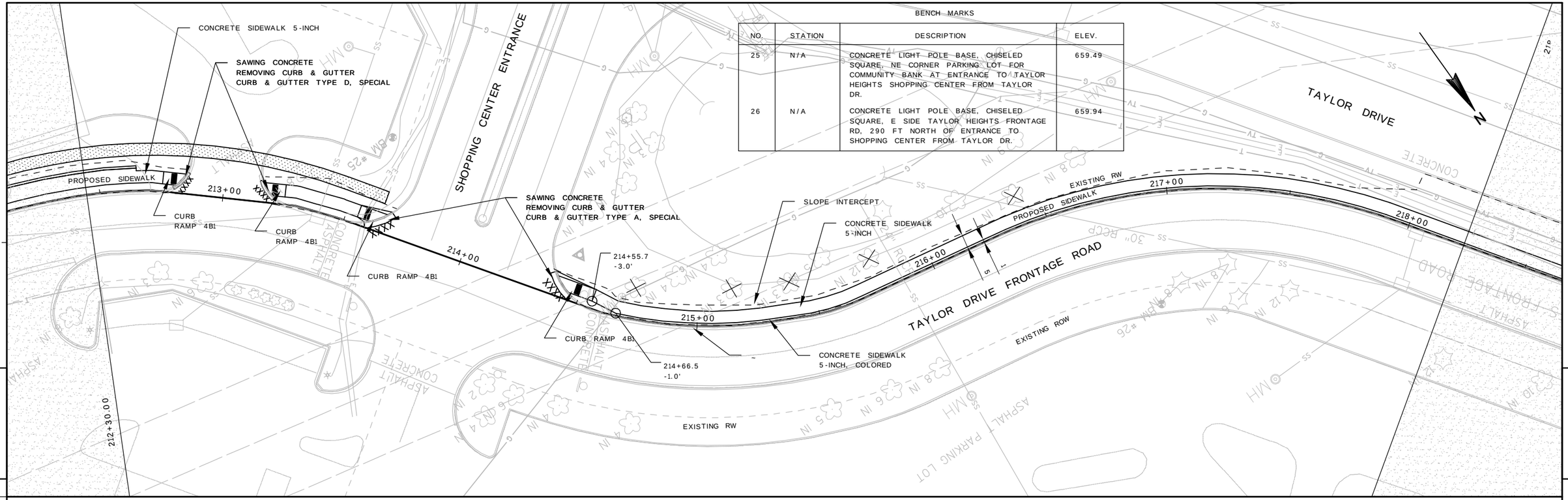
PROJECT NO: 4996-01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	PLAN AND PROFILE:	SHEET	E

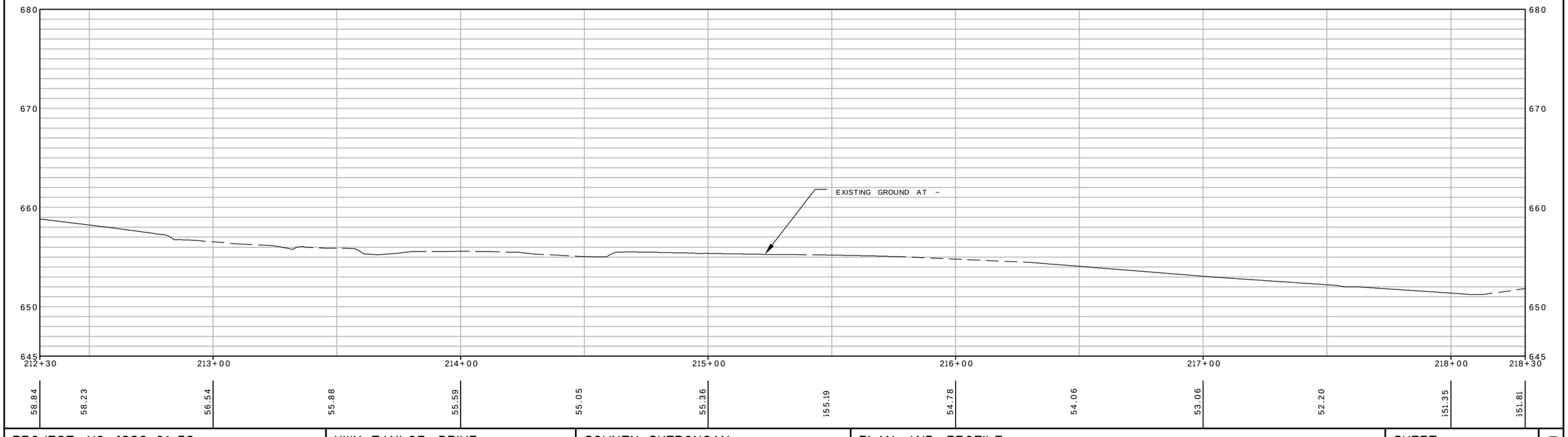
FILE NAME : L:\PROJECTS\11744\DWG\050119_PP.DWG PLOT DATE : 8/4/2015 11:10 AM PLOT BY : BREMER, SAM PLOT NAME : ---------- PLOT SCALE : 1:40_XREF

WISDOT/CADDS SHEET 44

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
25	N/A	CONCRETE LIGHT POLE BASE, CHISELED SQUARE, NE CORNER PARKING LOT FOR COMMUNITY BANK AT ENTRANCE TO TAYLOR HEIGHTS SHOPPING CENTER FROM TAYLOR DR.	659.49
26	N/A	CONCRETE LIGHT POLE BASE, CHISELED SQUARE, E SIDE TAYLOR HEIGHTS FRONTAGE RD, 290 FT NORTH OF ENTRANCE TO SHOPPING CENTER FROM TAYLOR DR.	659.94





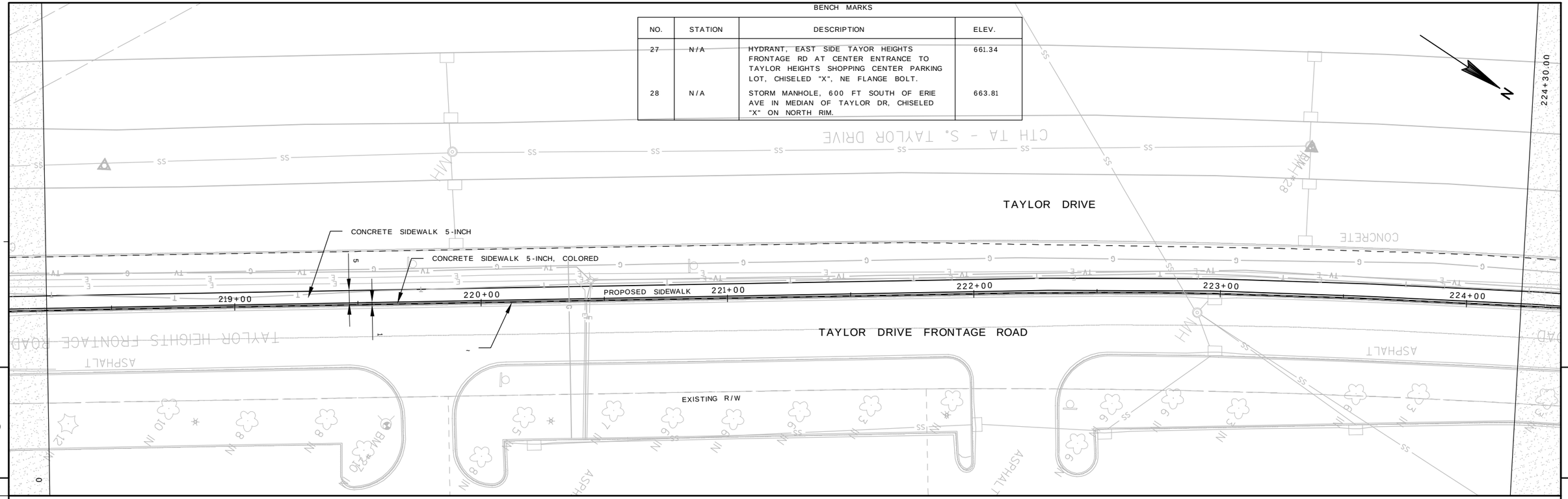
PROJECT NO: 4996-01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	PLAN AND PROFILE:	SHEET 156	E

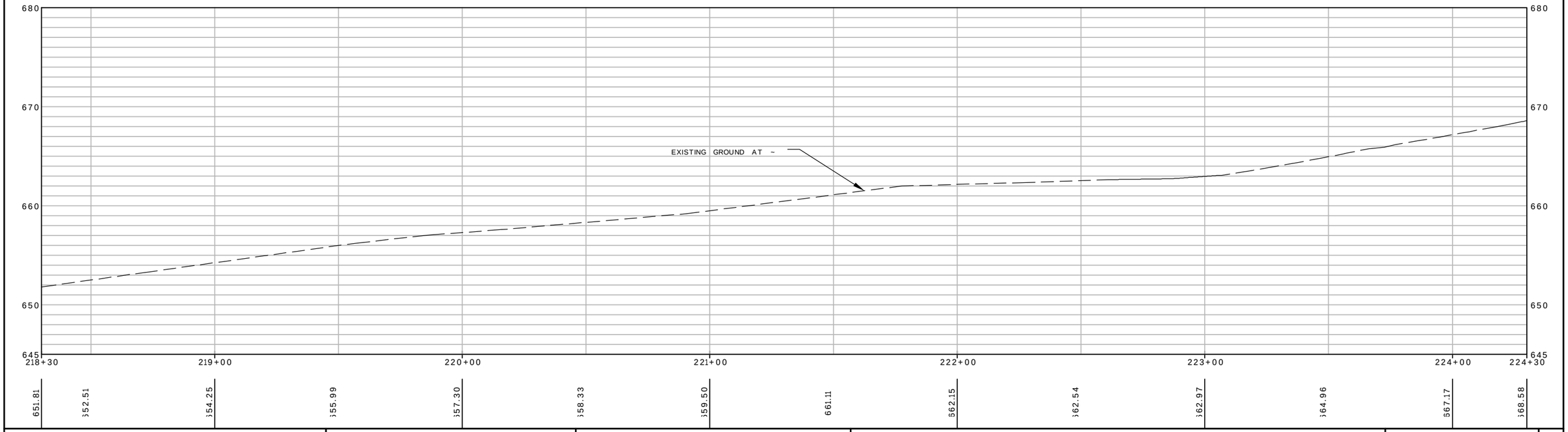
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WISDOT/CADDS SHEET 44

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
27	N/A	HYDRANT, EAST SIDE TAYOR HEIGHTS FRONTAGE RD AT CENTER ENTRANCE TO TAYLOR HEIGHTS SHOPPING CENTER PARKING LOT, CHISELED "X", NE FLANGE BOLT.	661.34
28	N/A	STORM MANHOLE, 600 FT SOUTH OF ERIE AVE IN MEDIAN OF TAYLOR DR, CHISELED "X" ON NORTH RIM.	663.81



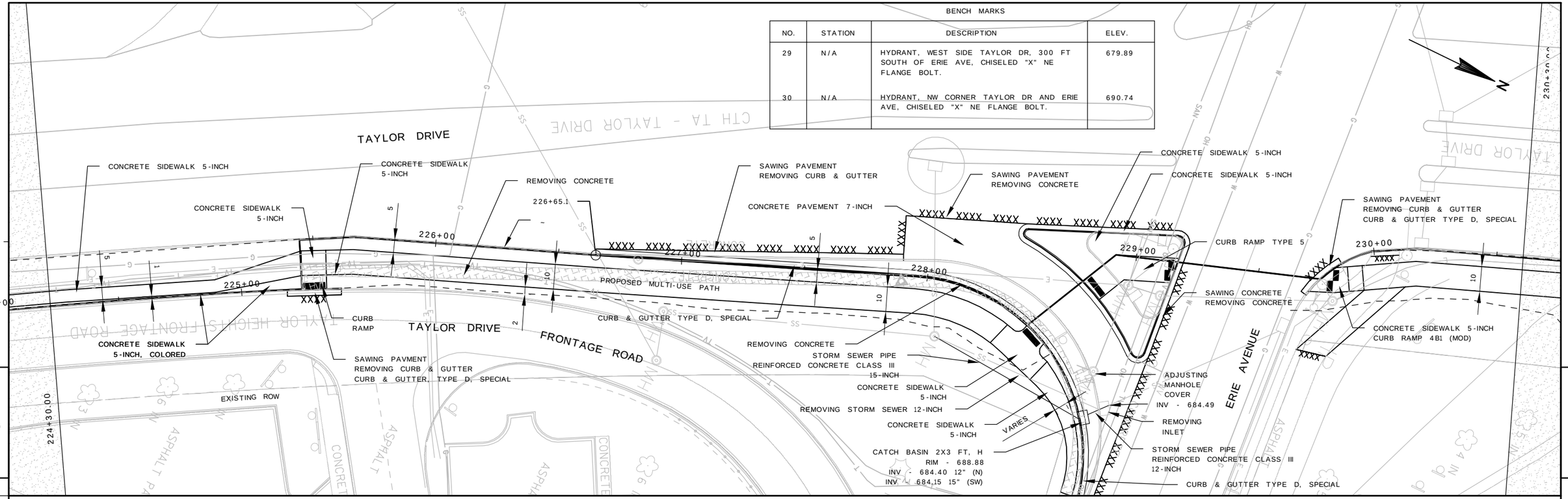


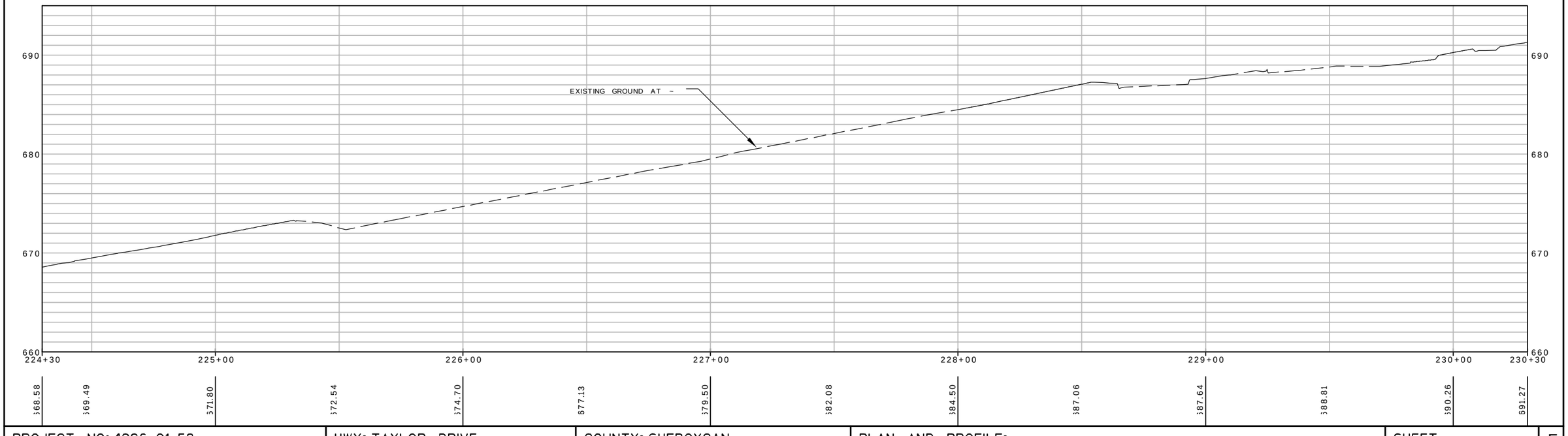
PROJECT NO: 4996-01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	PLAN AND PROFILE:	SHEET 157	E

FILE NAME : L:\PROJECTS\11744\DWG\050121_PP.DWG PLOT DATE : 1/13/2015 11:37 AM PLOT BY : JUMP, KEVIN PLOT NAME : ---------- PLOT SCALE : 1" = 40'_XREF

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
29	N/A	HYDRANT, WEST SIDE TAYLOR DR, 300 FT SOUTH OF ERIE AVE, CHISELED "X" NE FLANGE BOLT.	679.89
30	N/A	HYDRANT, NW CORNER TAYLOR DR AND ERIE AVE, CHISELED "X" NE FLANGE BOLT.	690.74





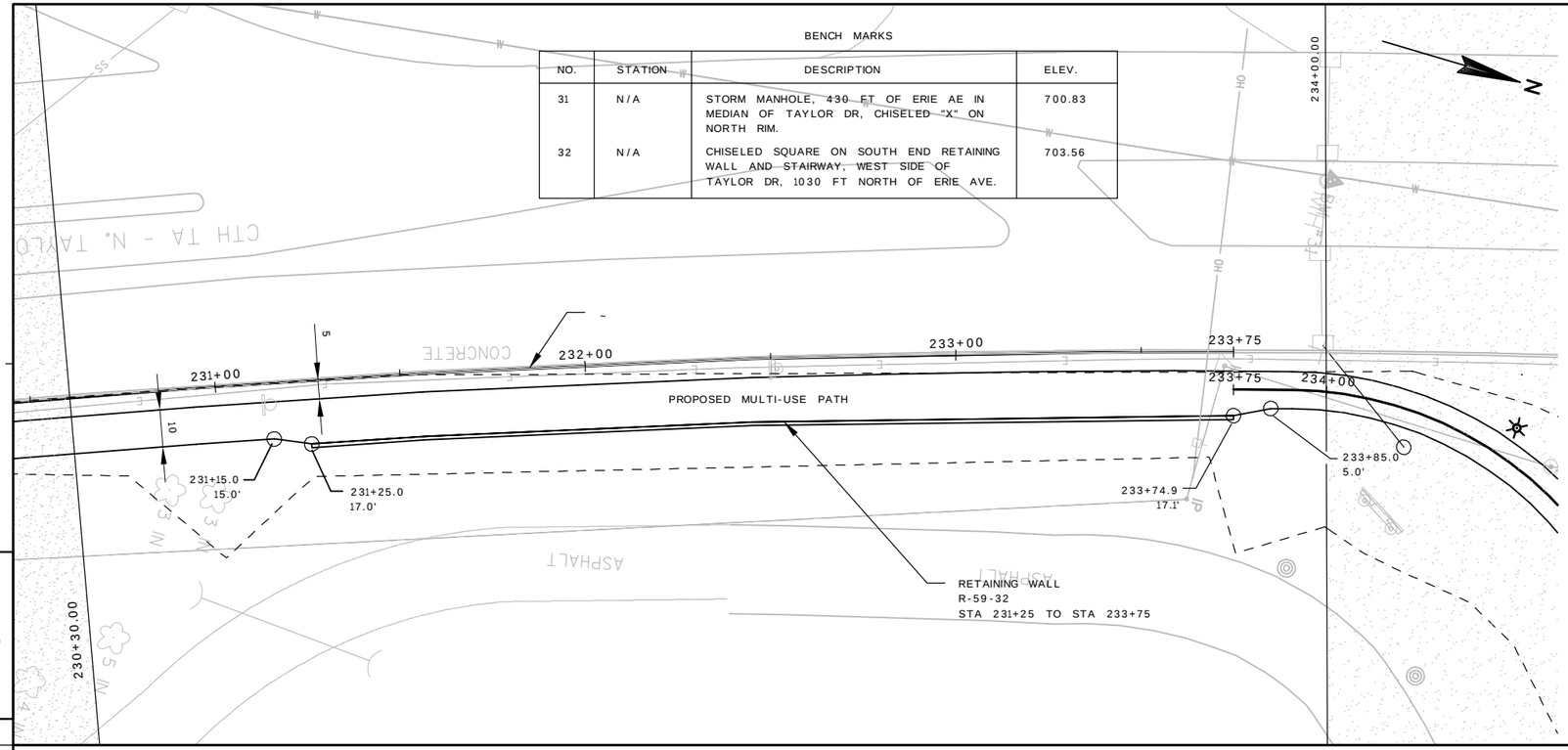
PROJECT NO: 4996-01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	PLAN AND PROFILE:	SHEET	E

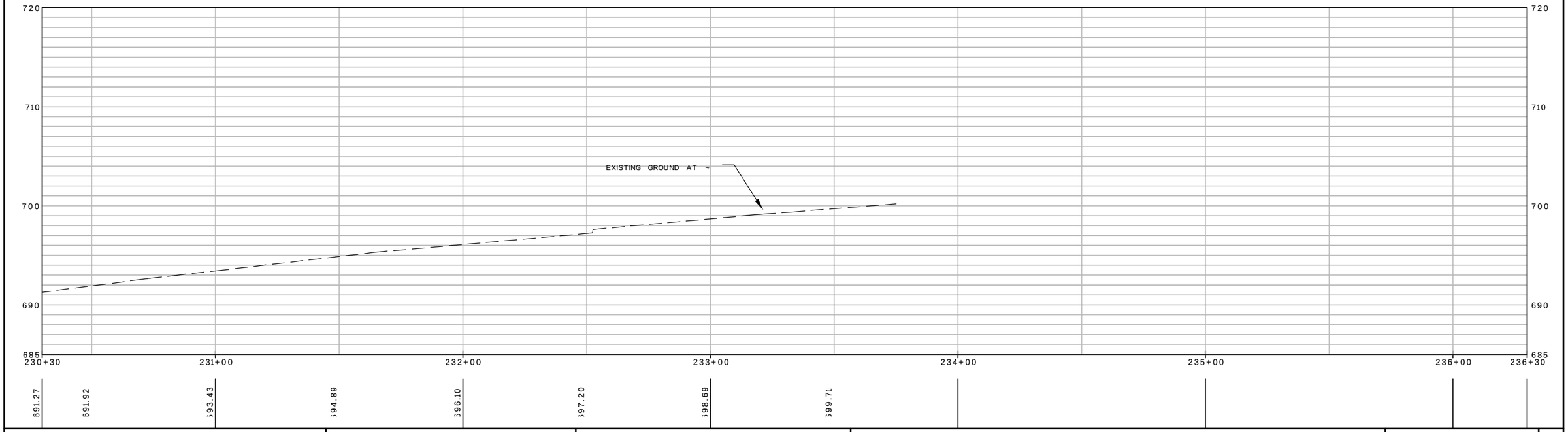
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WISDOT/CADDS SHEET 44

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
31	N/A	STORM MANHOLE, 430 FT OF ERIE AE IN MEDIAN OF TAYLOR DR, CHISELED "X" ON NORTH RIM.	700.83
32	N/A	CHISELED SQUARE ON SOUTH END RETAINING WALL AND STAIRWAY, WEST SIDE OF TAYLOR DR, 1030 FT NORTH OF ERIE AVE.	703.56

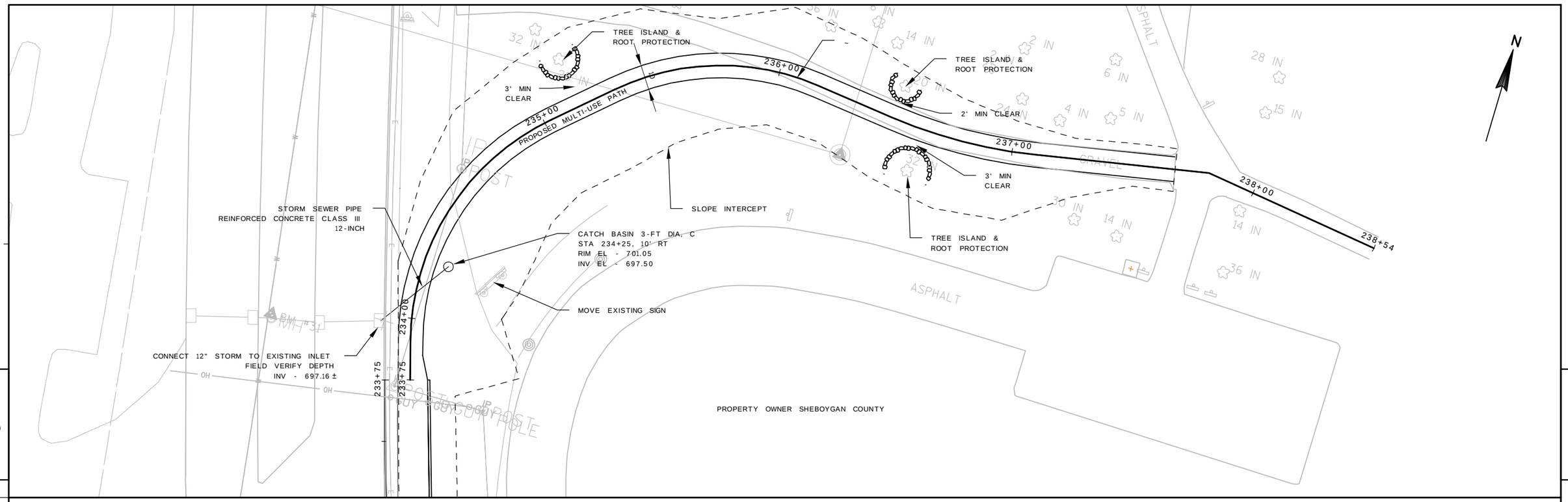


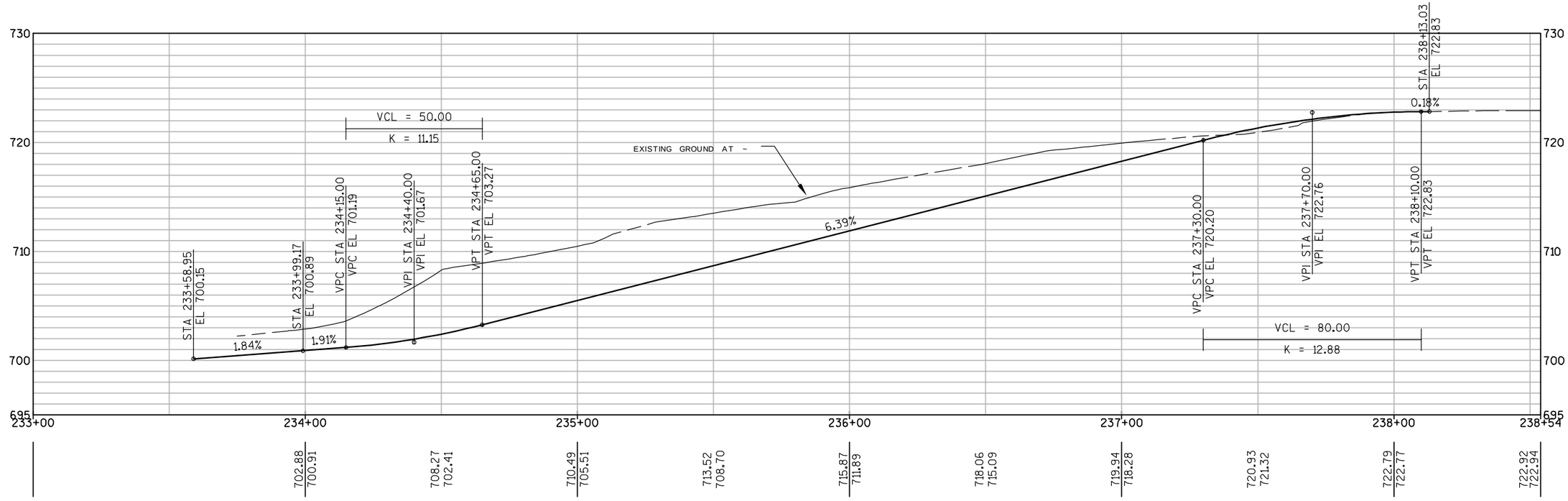


PROJECT NO: 4996-01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	PLAN AND PROFILE:	SHEET	E

FILE NAME : L:\PROJECTS\11744\DWG\050123_PP.DWG PLOT DATE : 1/13/2015 11:38 AM PLOT BY : JUMP, KEVIN PLOT NAME : ---------- PLOT SCALE : 1" = 40'_XREF

WISDOT/CADDS SHEET 44

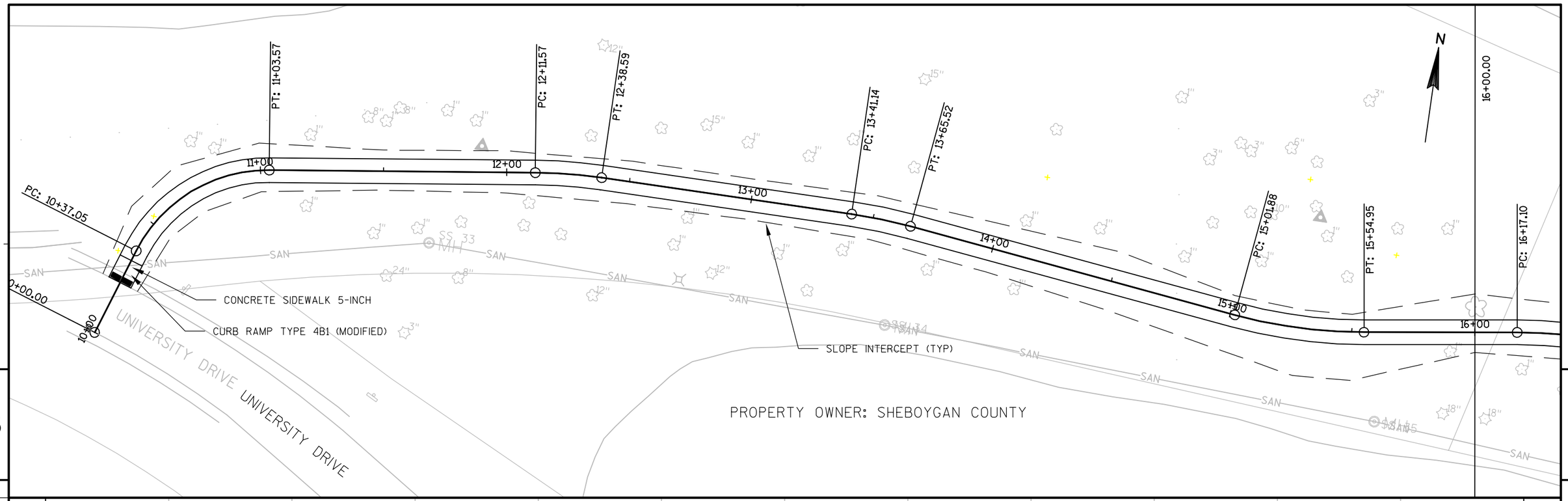


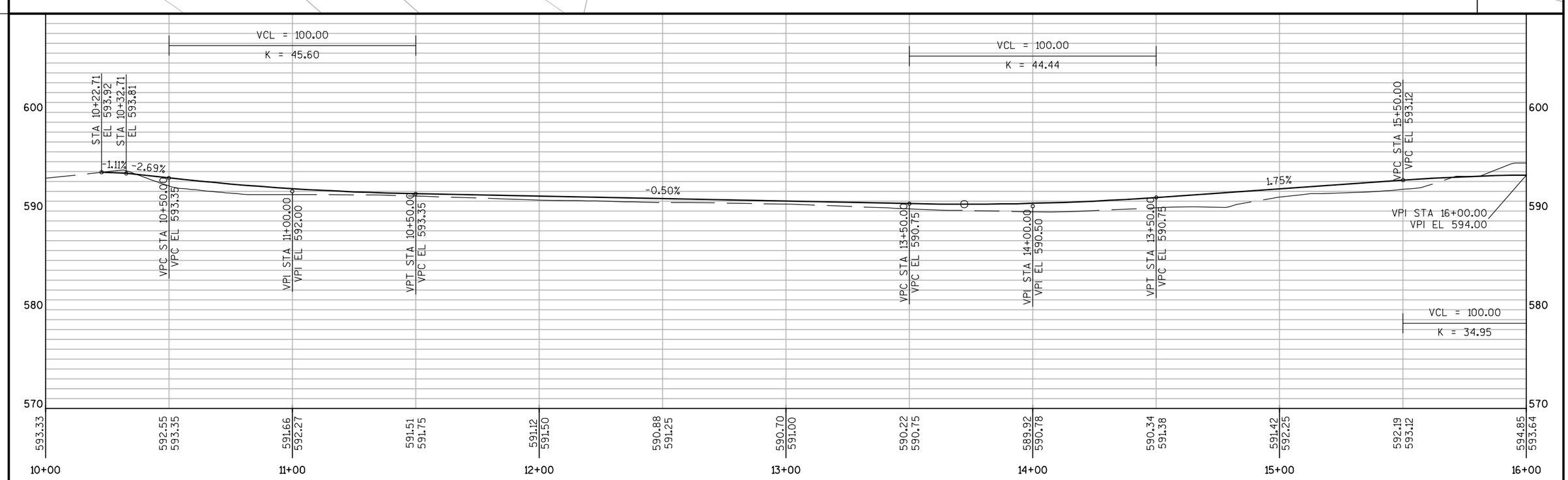


PROJECT NO: 4996-01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	PLAN AND PROFILE:	SHEET -----	E

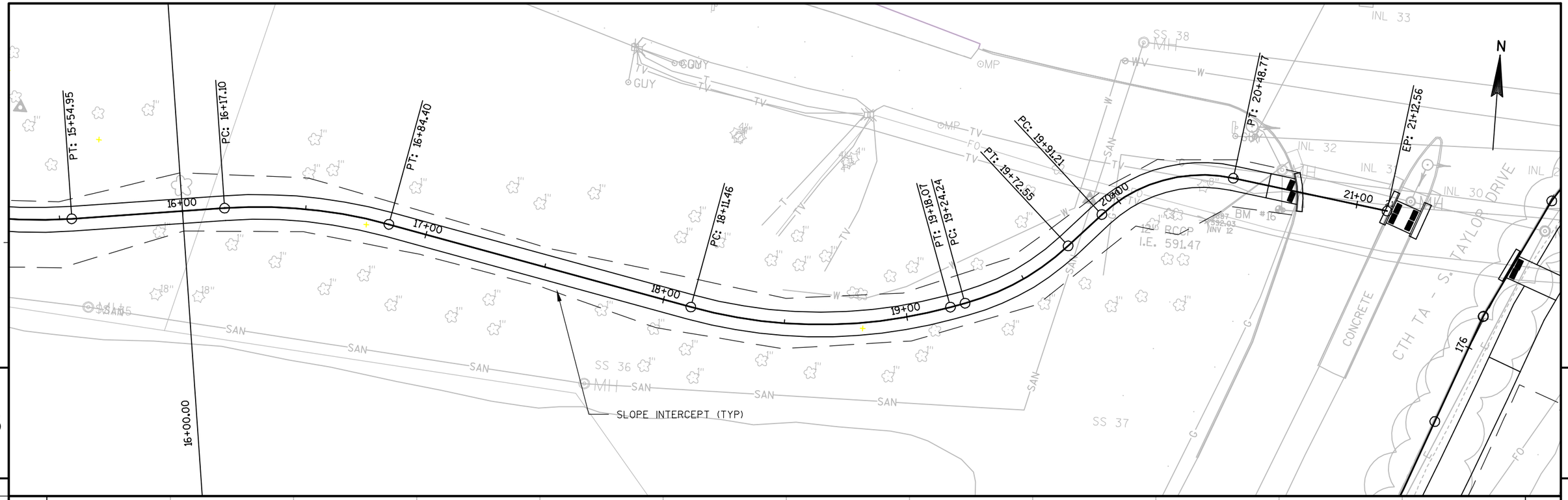
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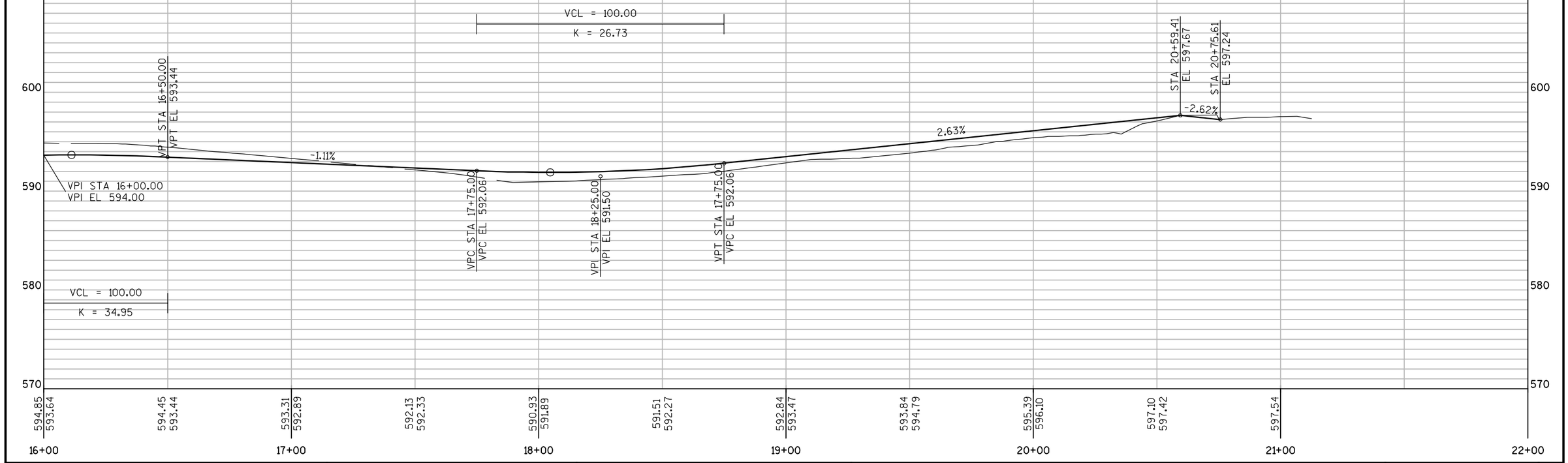
WISDOT/CADDS





PROJECT NO: 4996-01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	PLAN AND PROFILE: UNIVERSITY CONNECTION	SHEET 161	E





PROJECT NO: 4996-01-57	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	PLAN AND PROFILE: UNIVERSITY CONNECTION	SHEET 162	E

FILE NAME : L:\PROJECTS\11744\DWG\050142_PP.DWG
LAYOUT NAME - ****

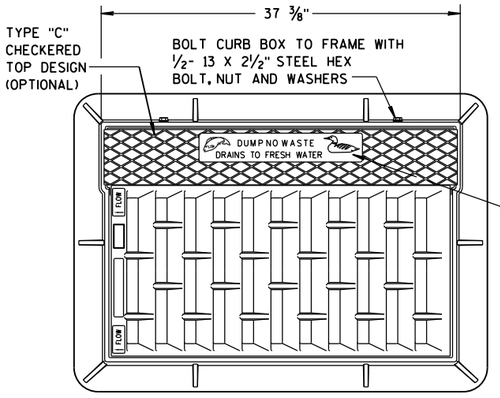
PLOT DATE : 1/13/2015 11:52 AM PLOT BY : JUMP, KEVIN PLOT NAME : PLOT SCALE : 1:40_XREF

WISDOT/CADDS SHEET 44

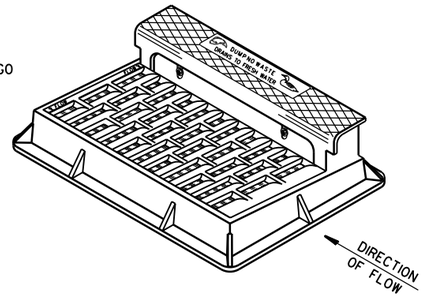
Standard Detail Drawing List

08A05-19A	INLET COVERS TYPE A, H, A-S, H-S & Z
08A05-19B	INLET COVERS TYPE B, B-A, C, MS, MS-A, & WM
08A08-01	CATCH BASINS 3-FT, 4-FT, 5-FT AND 6-FT DIAMETER
08A09-01	CATCH BASINS 2X3-FT AND 2.5X3-FT
08D01-17	CONCRETE CURB, CONCRETE CURB AND GUTTER AND TIES
08D05-15A	CURB RAMPS TYPES 1 AND 1-A
08D05-15B	CURB RAMPS TYPES 2 AND 3
08D05-15C	CURB RAMPS TYPES 4A AND 4A1
08D05-15D	CURB RAMPS TYPE 4B AND 4B1
08D05-15E	CURB RAMPS TYPES 5, 6, 7A, 7B & 8
08E09-06	SILT FENCE
08E10-02	INLET PROTECTION TYPE A, B, C AND D
08F01-11	APRON ENDWALLS FOR CULVERT PIPE
08F04-07	JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL
09A01-13A	AT-GRADE SIDE ROAD INTERSECTION, TYPES "B1", "B2", "C" AND D AND TEE INTERSECTION BYPASS LANE
09A01-13B	AT-GRADE SIDE ROAD INTERSECTION, TYPE "A1" & "A2"
09B02-09	CONDUIT
09B04-11	PULL BOX
09C02-07	CONCRETE BASES, TYPES 1, 2, 5, & 6
09C03-04	TRANSFORMER/PEDESTAL BASES
09C05-09	CONCRETE CONTROL CABINET BASES
09D01-05	CABINET SERVICE INSTALLATION (METER BREAKER PEDESTAL)
09E01-14A	POLE MOUNTINGS FOR TRAFFIC SIGNALS TYPE 2
09E01-14B	POLE MOUNTINGS FOR TRAFFIC SIGNALS AND LIGHTING UNITS, TYPE 3 (HEAVY DUTY)
09E01-14G	HARDWARE DETAILS FOR POLE MOUNTINGS
09E03-05	NON-FREEWAY LIGHTING UNIT POLE WIRING
09E06-05	TRAFFIC SIGNAL STANDARD POLY BRACKET MOUNTINGS (TYPICAL) 13 FT. OR 15 FT.
09E07-05	TRAFFIC SIGNAL STANDARD PEDESTRIAN AND FLASHER TYPICAL MOUNTING DETAILS
09F12-04	LOOP DETECTOR INSTALLED IN EXISTING CONCRETE PAVEMENT
09F15-04A	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 1)
09G01-03A	SPAN WIRE TEMPORARY TRAFFIC SIGNAL
09G01-03B	SPAN WIRE TEMPORARY TRAFFIC SIGNAL
09G01-03C	SPAN WIRE TEMPORARY TRAFFIC SIGNAL
09G01-03D	SPAN WIRE TEMPORARY TRAFFIC SIGNAL
09G01-03E	SPAN WIRE TEMPORARY TRAFFIC SIGNAL
09G01-03F	SPAN WIRE TEMPORARY TRAFFIC SIGNAL
09G01-03G	SPAN WIRE TEMPORARY TRAFFIC SIGNAL
11B02-02	CONCRETE MEDIAN NOSE
12A03-10	NAME PLATE (STRUCTURES)
13C01-17	CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES
13C13-08	URBAN DOWELED CONCRETE PAVEMENT
13C18-02A	CONCRETE PAVEMENT JOINTING
13C18-02B	CONCRETE PAVEMENT STEEL REINFORCEMENT
13C18-02C	CONCRETE PAVEMENT JOINT TIES
13C18-02D	CONCRETE PAVEMENT JOINTING AT UTILITY FIXTURES
14A01-03	TREE PRESERVATION DETAILS
15B03-15A	FENCE CHAIN LINK
15B03-15B	FENCE CHAIN LINK
15C03-02	BARRICADES AND SIGNS FOR SIDEROAD CLOSURES
15C05-02	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS
15C07-12C	PAVEMENT MARKING ARROWS
15C08-16A	PAVEMENT MARKING (MAINLINE)
15C08-16E	PAVEMENT MARKING (LEFT TURN LANE)
15C08-16F	PAVEMENT MARKING (ISLANDS)
15C33-01	STOP LINE AND CROSSWALK PAVEMENT MARKING
15D20-03	TRAFFIC CONTROL, SINGLE LANE CLOSURE, NON-FREEWAY/EXPRESSWAY
15D21-03	TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE

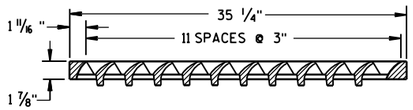
6

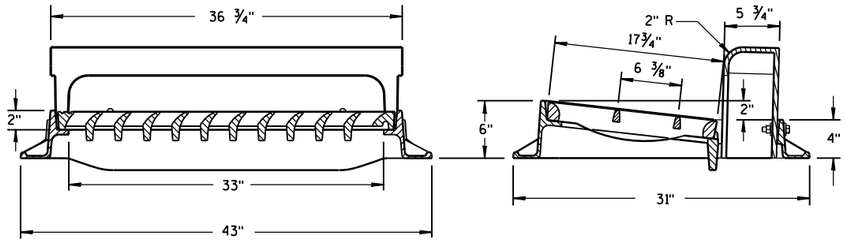


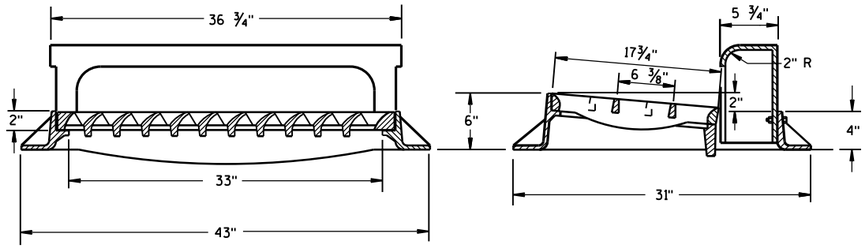
NOTE:
GRATE IS REVERSIBLE.



NOTE: CURB BOX HEIGHT ADJUSTABLE 6" TO 9"

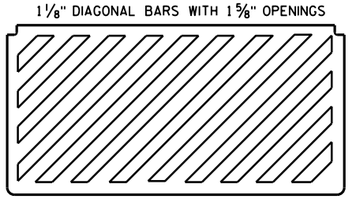






TYPE "H"

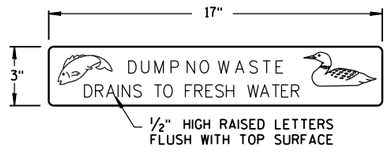
NOTE: EITHER CASTING IS ACCEPTABLE



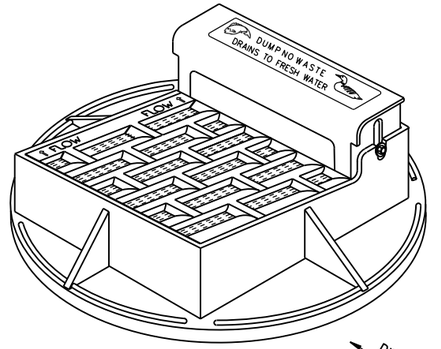
SPECIAL GRATE FOR TYPE "H" COVER

(MEASURES 35 1/4" X 17 3/4" X 2")

(NOTED AS TYPE H-S ON DRAINAGE TABLE)



LOGO DETAIL



NOTE: CURB BOX ADJUSTABLE 4" TO 9"

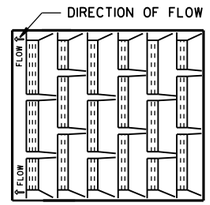
NOTE:
GRATE IS REVERSIBLE.

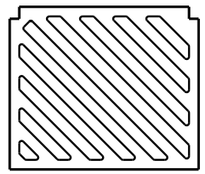
GENERAL NOTES

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

DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR CATCH BASIN, MANHOLE AND INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.

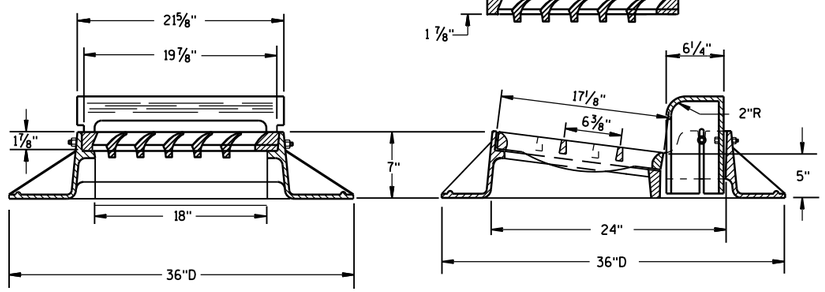




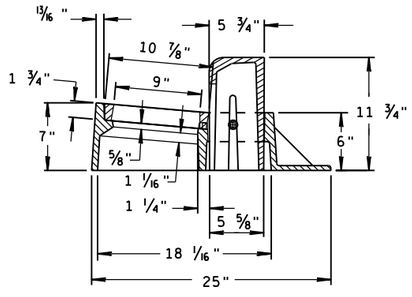
SPECIAL GRATE FOR TYPE "A" COVER

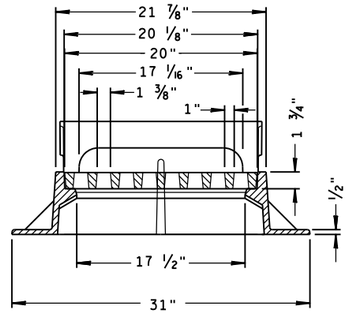
(MEASURES 19 3/4" X 17" X 1 7/8")

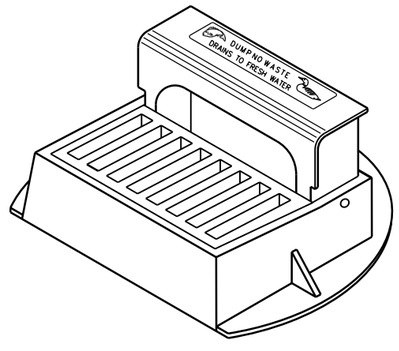
(NOTED AS TYPE A-S ON DRAINAGE TABLE)



TYPE "A"







TYPE "Z"

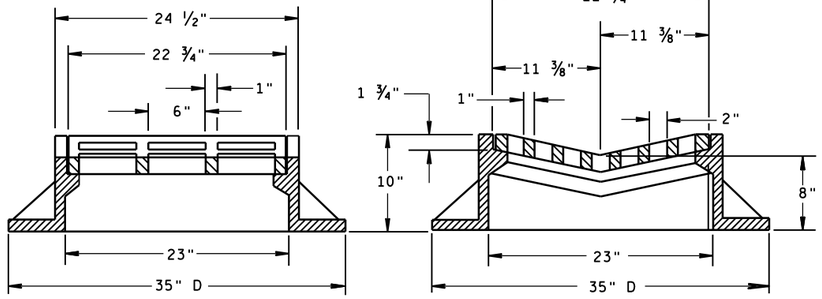
INLET COVERS
TYPE A, H, A-S, H-S & Z

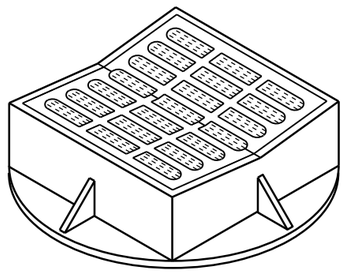
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11-27-13 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER
FHWA

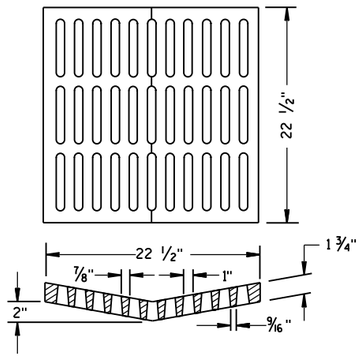
6

S.D.D. 8 A 5-19a



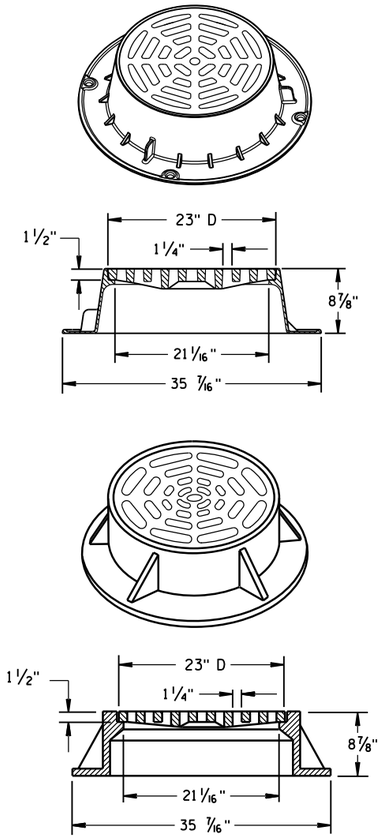


TYPE "B"



ALTERNATIVE GRATE FOR TYPE "B" COVER

USE WHERE PEDESTRIAN OR BICYCLE TRAFFIC IS POSSIBLE.
NOTED AS TYPE B-A ON THE DRAINAGE TABLE



TYPE "C"

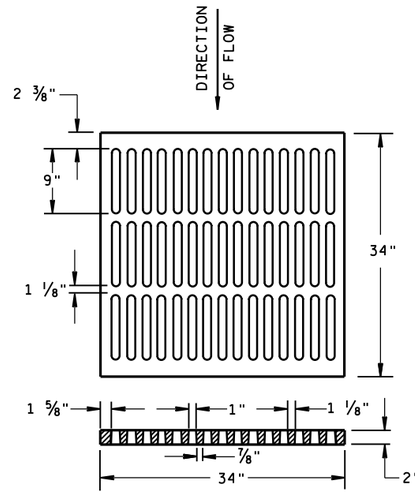
NOTE: EITHER CASTING IS ACCEPTABLE

GENERAL NOTES

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

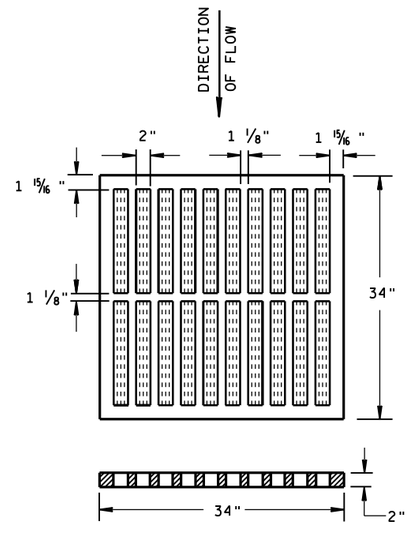
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR CATCH BASIN, MANHOLE AND INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.



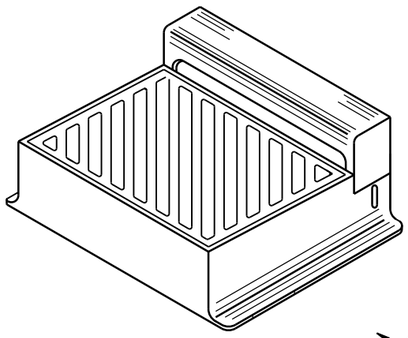
ALTERNATIVE TYPE "MS"

USE WHERE PEDESTRIAN OR BICYCLE TRAFFIC IS PERMITTED
NOTED AS TYPE MS-A ON THE DRAINAGE TABLE

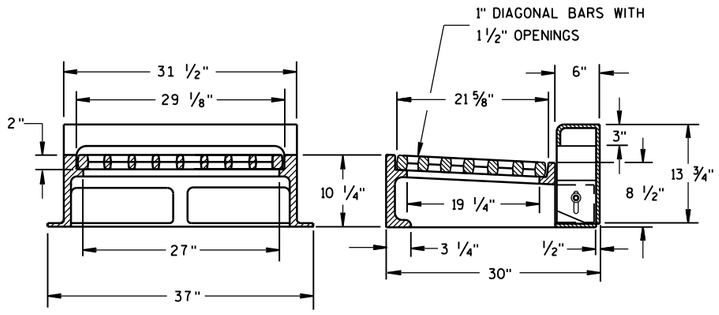


TYPE "MS"

USE ON FREEWAYS AND EXPRESSWAYS
NOTED AS TYPE MS ON DRAINAGE TABLE



DIAGONAL SLOTS, SHALL BE ORIENTED TO THE DIRECTION OF FLOW AS ILLUSTRATED. GRATES ARE MANUFACTURED TO BE REVERSIBLE.



NOTE: CURB BOX HEIGHT ADJUSTABLE 6" TO 9"

TYPE "WM"

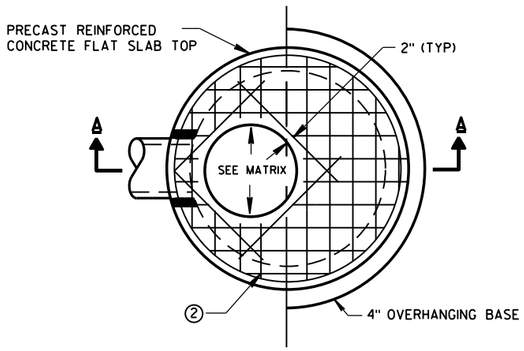
INLET COVERS TYPE B, B-A, C, MS, MS-A, & WM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

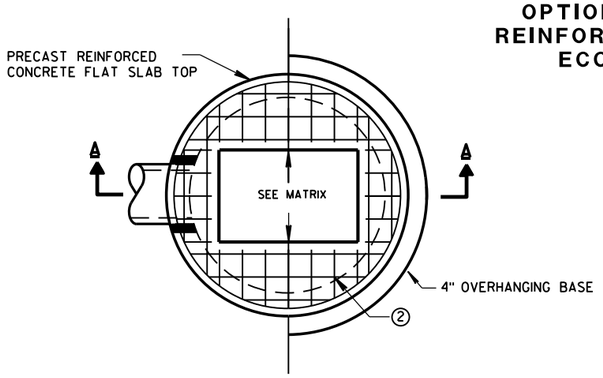
APPROVED
11/27/2013 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

6

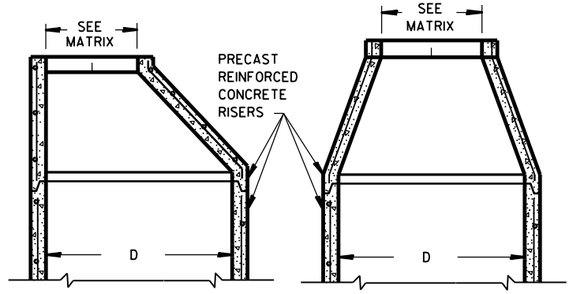
S.D.D. 8 A 5-19b



PLAN VIEW CIRCULAR OPENING

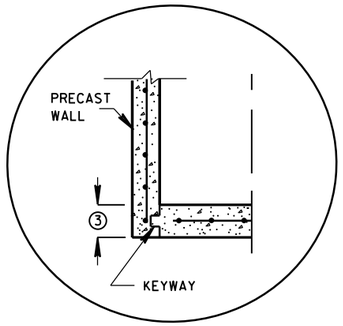


PLAN VIEW RECTANGULAR OPENING

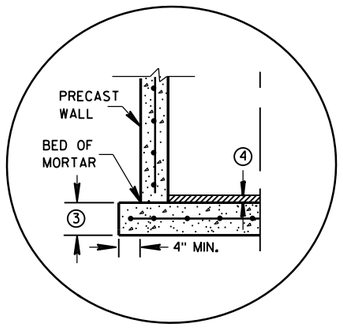


OPTIONAL PRECAST REINFORCED CONCRETE ECCENTRIC TOP

OPTIONAL PRECAST REINFORCED CONCRETE CONCENTRIC TOP

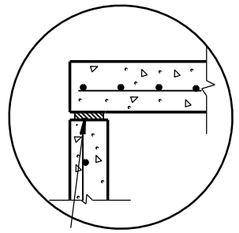


PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION



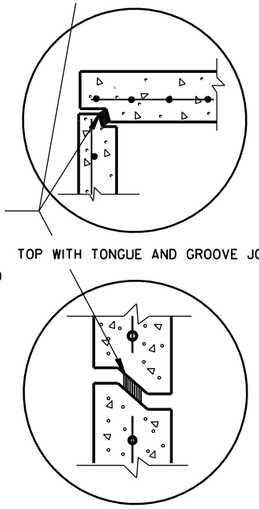
SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

DETAIL "A"



TOP WITH PLAIN END JOINT

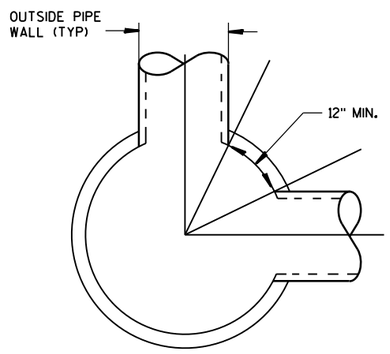
JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C 990 (TYP)



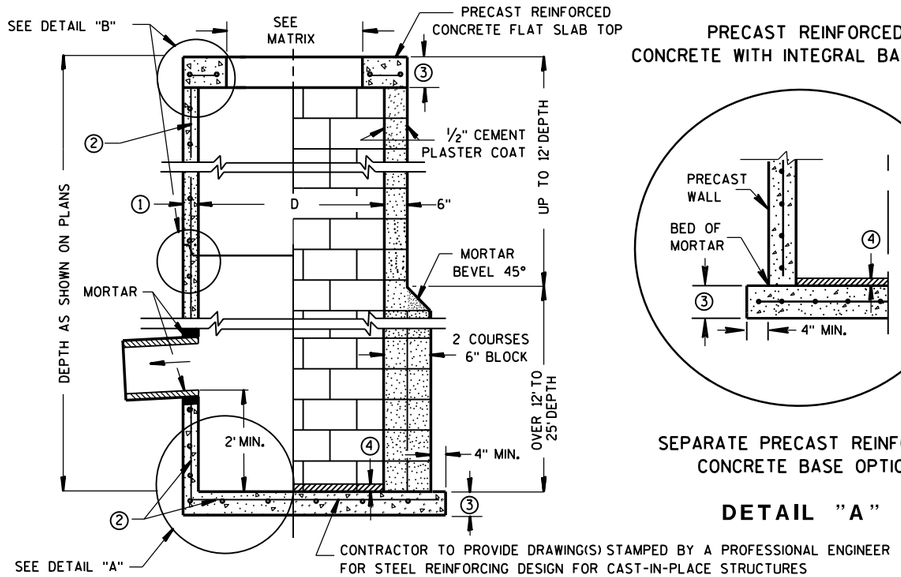
TOP WITH TONGUE AND GROOVE JOINT

RISER WITH TONGUE AND GROOVE JOINT

DETAIL "B"



DETAIL "C"



SECTION A-A

PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

CONCRETE BLOCK WITH CAST-IN-PLACE OR PRECAST REINFORCED CONCRETE BASE ②

GENERAL NOTES

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

UNLESS OTHERWISE AUTHORIZED IN WRITING BY THE ENGINEER, THE CONTRACTOR SHALL NOT ORDER AND DELIVER PRECAST CATCH BASIN UNITS REQUIRED FOR THE PROJECT UNTIL A LIST OF SIZES IS FURNISHED BY THE ENGINEER.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR UNDERGROUND DRAINAGE STRUCTURES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ALL DRAINAGE STRUCTURES ARE DESIGNATED ON THE PLANS AS "MANHOLES 3X3-L", "CATCH BASINS 4-B", "INLETS 2X3-H", ETC. THE FIRST NUMBERS DESIGNATE THE SIZE OF THE STRUCTURE, AND THE FOLLOWING LETTER DESIGNATES THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6 INCHES IN DEPTH, WHICH MEETS THE REQUIREMENTS OF GRANULAR BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.

PRECAST REINFORCED CONCRETE CONE TOPS (ECCENTRIC OR CONCENTRIC) OR PRECAST REINFORCED CONCRETE FLAT SLAB TOPS MAY BE USED ON CONCRETE BLOCK STRUCTURES. THE TOPS SHALL BE INSTALLED ON A BED OF MORTAR.

ECCENTRIC CONE TOPS MAY BE USED ON ALL STRUCTURES, AND CONCENTRIC CONE TOPS SHALL BE USED ONLY ON STRUCTURES 5 FEET OR LESS IN DEPTH, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

STEPS MEETING AASHTO M199 AND THE FOLLOWING REQUIREMENTS SHALL BE INSTALLED IN ALL STRUCTURES OVER 5 FEET IN DEPTH: 16 INCH C-C MAXIMUM SPACING; PROJECT A MINIMUM CLEAR DISTANCE OF 4 INCHES FROM THE WALL AT THE POINT OF EMBEDMENT; MINIMUM LENGTH OF 10 INCHES; MINIMUM WALL EMBEDMENT OF 3 INCHES. FERROUS METAL STEPS NOT PAINTED OR TREATED TO RESIST CORROSION SHALL HAVE A MINIMUM CROSS SECTIONAL DIMENSION OF 1 INCH.

STEPS OF APPROVED POLYPROPYLENE PLASTIC COATED REINFORCEMENT BAR ARE ACCEPTABLE. REINFORCING BAR MUST BE A MINIMUM OF 1/2 INCH AND MEET THE REQUIREMENTS OF ASTM A615.

CERTIFICATION SHALL BE PROVIDED THAT INSTALLED STEPS WHEN TESTED IN ACCORDANCE WITH SECTION 10 OF AASHTO T280 CAN WITHSTAND A VERTICAL LOAD OF 800 LBS. AND A HORIZONTAL LOAD OF 400 LBS.

ALL BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

ALL PRECAST INLET UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M199.

PRECAST REINFORCED RISERS SHALL HAVE A TONGUE AND GROOVE JOINT WITH TONGUE UP OR DOWN.

CONCRETE BLOCK WILL NOT BE PERMITED FOR STRUCTURES GREATER THAN 4 FEET IN DIAMETER.

4" OVERHANGING BASES ARE REQUIRED FOR ALL CONCRETE BLOCK INSTALLATIONS. 4" OVERHANG IS REQUIRED WHEN SEPARATE PRECAST BASE IS PROVIDED. OVERHANG IS NOT REQUIRED ON PRECAST STRUCTURES WITH AN INTEGRAL OR MONOLITHIC BASE.

FOR ADDITIONAL CONFIGURATIONS, MAINTAIN A MINIMUM OF 12 INCHES AS MEASURED FROM THE INSIDE OF THE STRUCTURE WALL BETWEEN THE OUTSIDE PIPE WALLS OF ADJACENT PIPES. SEE DETAIL "C".

① MINIMUM WALL THICKNESS SHALL BE 4 INCHES FOR 3-FT, 5 INCHES FOR 4-FT, 6 INCHES FOR 5-FT AND 7 INCHES FOR 6-FT DIAMETER PRECAST CATCH BASINS.

② FOR PRECAST CATCH BASINS PROVIDE REINFORCING STEEL IN ACCORDANCE TO AASHTO M199.

③ PRECAST FLAT SLAB TOPS AND BASES WITH A DIAMETER OF 48" AND LESS SHALL HAVE A MINIMUM THICKNESS OF 6". PRECAST FLAT SLAB TOPS AND BASES WITH A DIAMETER LARGER THAN 48" SHALL HAVE A MINIMUM THICKNESS OF 8".

④ 1" CONCRETE KEY POURED AFTER INSTALLATION. 2' SUMP MEASURED FROM TOP OF KEY.

CATCH BASIN COVER OPENING MATRIX

CATCH BASIN SIZE	INLET COVER TYPE	ALL A'S	ALL B'S	BW	C	F	ALL H'S	S	T	V	WM	Z
	OPENING SIZE (FT)											
3-FT	2X2	X	X					X		X		
	2 DIA.				X							X
4-FT-6-FT	2X2	X	X					X		X		
	2X2.5			X				X	X	X	X	
	2 DIA.				X							X
	2X3						X					
	2.5X3					X						

PIPE MATRIX

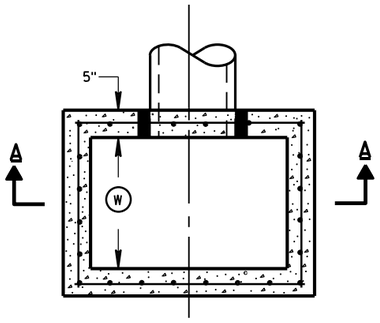
CATCH BASIN SIZE	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES	
	180° SEPARATION (IN)	90° SEPARATION (IN)
3-FT	15	12
4-FT	24	18
5-FT	36	24
6-FT	42	30

CATCH BASINS 3-FT, 4-FT, 5-FT AND 6-FT DIAMETER

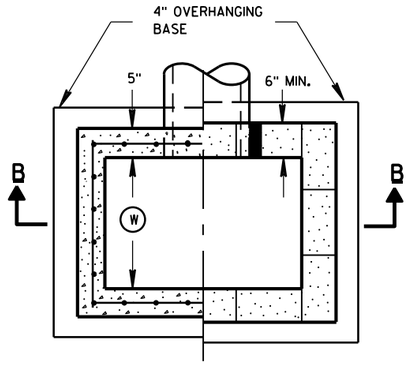
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
6/5/2012 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER
FHWA

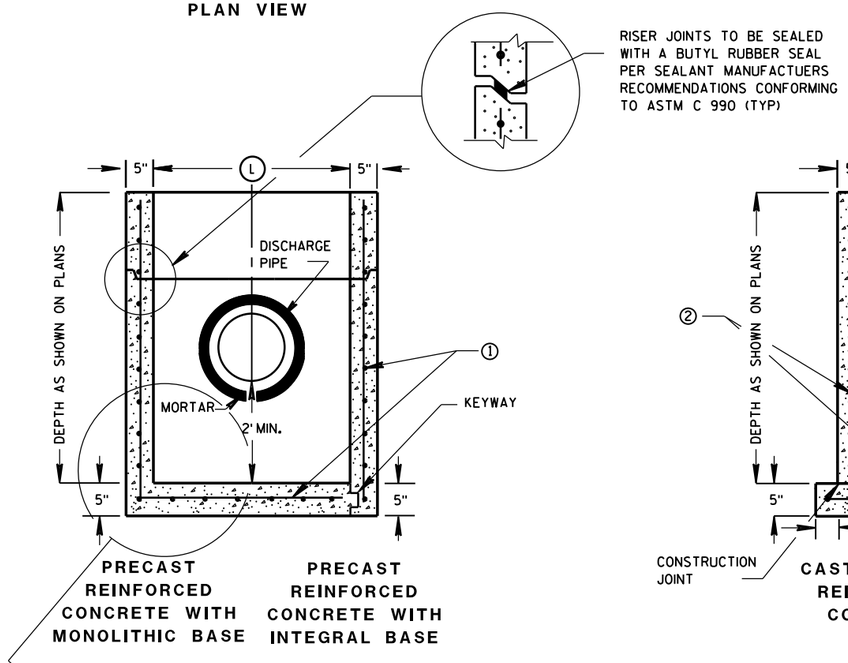
S.D.D. 8 A 8-1



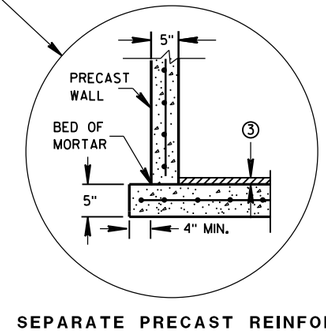
PLAN VIEW



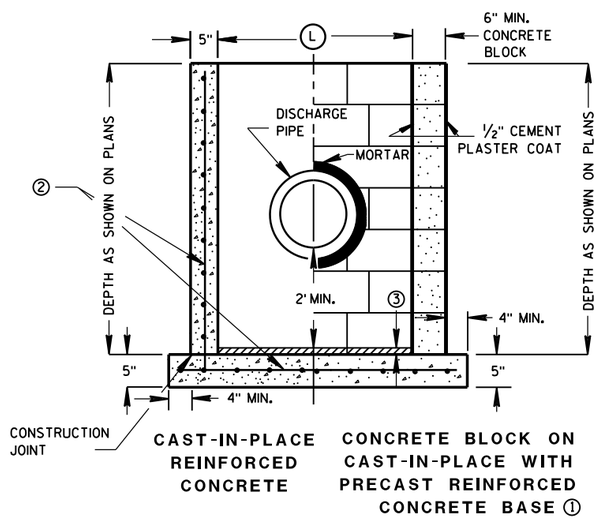
PLAN VIEW



SECTION A-A



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION



SECTION B-B

GENERAL NOTES

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

UNLESS OTHERWISE AUTHORIZED IN WRITING BY THE ENGINEER, THE CONTRACTOR SHALL NOT ORDER AND DELIVER PRECAST CATCH BASIN UNITS REQUIRED FOR THE PROJECT UNTIL A LIST OF SIZES IS FURNISHED BY THE ENGINEER.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR UNDERGROUND DRAINAGE STRUCTURES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ALL PRECAST CATCH BASIN UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF ASTM C 913.

ALL DRAINAGE STRUCTURES ARE DESIGNATED ON THE PLANS AS "MANHOLES 3X3-L", "CATCH BASINS 4-B", "INLETS 2X3-H", ETC. THE FIRST NUMBERS DESIGNATES THE SIZE OF THE STRUCTURE, AND THE FOLLOWING LETTER DESIGNATES THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6 INCHES IN DEPTH, WHICH MEETS THE REQUIREMENTS OF GRANULAR BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.

ALL BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

PRECAST REINFORCED RISERS SHALL HAVE A TONGUE AND GROOVE JOINT WITH TONGUE UP OR DOWN.

4" OVERHANGING BASES ARE REQUIRED FOR CAST-IN-PLACE REINFORCED CONCRETE AND CONCRETE BLOCK INSTALLATIONS.
4" OVERHANG IS REQUIRED WHEN SEPARATE PRECAST BASE IS PROVIDED.
OVERHANG IS NOT REQUIRED ON PRECAST STRUCTURES WITH AN INTEGRAL OR MONOLITHIC BASE.

MAXIMUM INSIDE PIPE DIAMETER DETERMINED BY 3" CLEARANCE ON EACH SIDE OF THE OUTSIDE WALL OF THE PIPE. SEE DETAIL "A". ASSUMES PIPE ENTERS PERPENDICULAR TO THE STRUCTURE.

① FOR PRECAST CATCH BASINS PROVIDE REINFORCING STEEL IN ACCORDANCE TO ASTM C 913.

② CONTRACTOR TO PROVIDE DRAWING(S) STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCING DESIGN FOR CAST-IN-PLACE STRUCTURES.

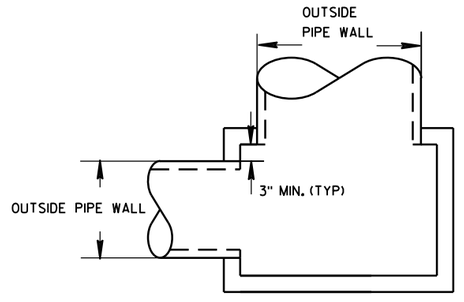
③ 1" CONCRETE KEY POURED AFTER INSTALLATION. 2' SUMP MEASURED FROM TOP OF KEY.

CATCH BASIN COVER MATRIX

CATCH BASIN SIZE		INLET COVER TYPE	F	ALL H'S
	WIDTH (W) (FT)	LENGTH (L) (FT)		
2X3-FT	2	3		X
2.5X3-FT	2.5	3	X	

PIPE MATRIX

CATCH BASIN SIZE	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES	
	WIDTH (IN)	LENGTH (IN)
2X3-FT	12	24
2.5X3-FT	18	24



DETAIL "A"

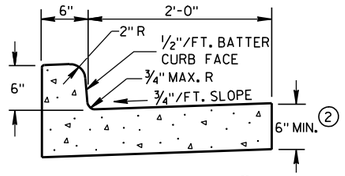
CATCH BASINS 2X3-FT AND 2.5X3-FT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

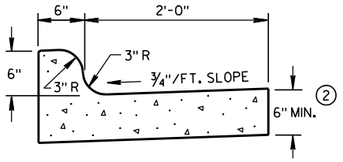
APPROVED
6/5/2012 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER
FHWA

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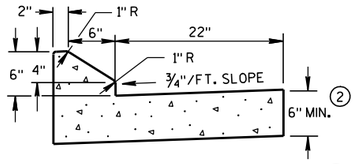
S.D.D. 8 A 9-1



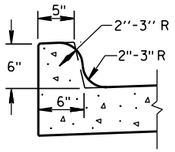
TYPES A & D (1)



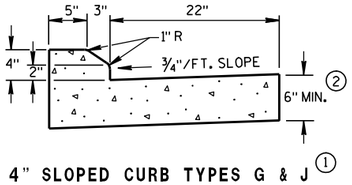
TYPES K & L (1)



6" SLOPED CURB TYPES G & J (1)

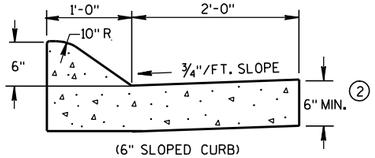


OPTIONAL CURB SHAPE FOR TYPES K & L (1)

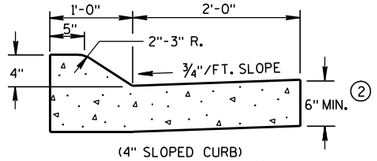


4" SLOPED CURB TYPES G & J (1)

CONCRETE CURB & GUTTER 30"

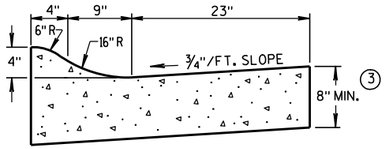


(6" SLOPED CURB)



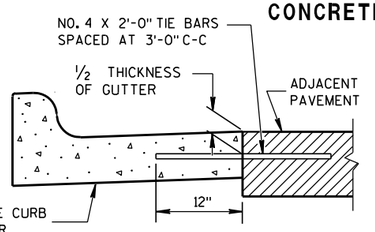
(4" SLOPED CURB)

TYPES A & D (1)

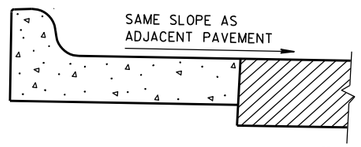


4" SLOPED CURB TYPES R & T (1) (4)

CONCRETE CURB & GUTTER 36"



TYPICAL TIE BAR LOCATION (1)



REVERSE SLOPE GUTTER (5)
(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. A LONGITUDINAL CONSTRUCTION JOINT IS NOT REQUIRED WITH INTEGRAL CURB AND GUTTER.

WHERE THE TRANSVERSE JOINTS IN THE PAVEMENT ARE REQUIRED TO BE SEALED, THE JOINTS IN THE INTEGRAL CURB AND GUTTER SHALL BE SEALED TO THE FACE OF CURB WITH THE SAME TYPE OF SEALANT. THE COST OF FURNISHING AND INSTALLING THIS SEALANT SHALL BE INCIDENTAL TO THE ITEM CONCRETE CURB AND GUTTER.

UNLESS OTHERWISE SHOWN ON THE TYPICAL CROSS SECTIONS, THE BASE AGGREGATE AND COMMON EXCAVATION LIMITS ARE 2'-0" BEHIND THE BACK OF CURBS.

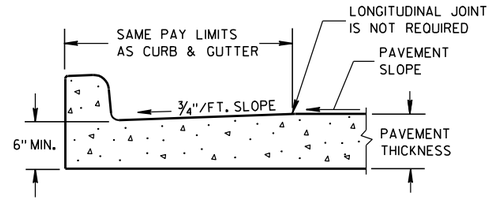
(1) TIE BARS ARE REQUIRED FOR CURB AND GUTTER TYPES A, G, K AND R.

(2) THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.

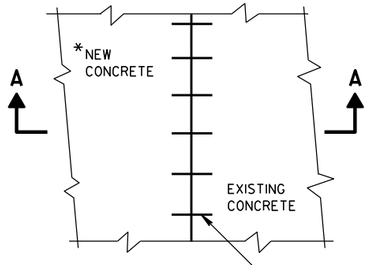
(3) THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 8" MINIMUM GUTTER THICKNESS IS MAINTAINED.

(4) THE FACE OF CURB IS 6" FROM THE BACK OF CURB.

(5) WHEN REVERSE SLOPE GUTTER IS REQUIRED, THE LOCATION(S) WILL BE SHOWN ELSEWHERE IN THE PLAN.

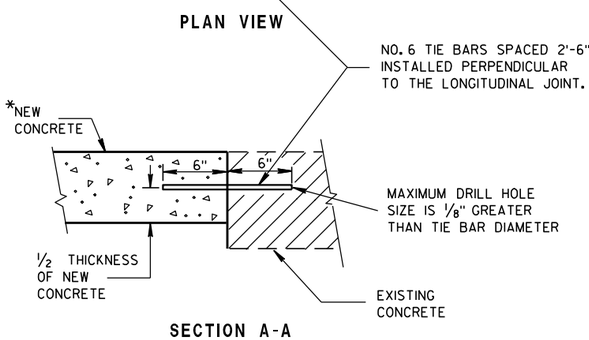


PARTIAL SECTION OF PAVEMENT WITH INTEGRAL CURB & GUTTER



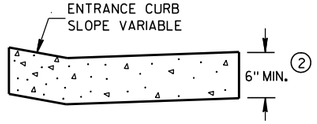
PLAN VIEW

*NEW CURB & GUTTER, SURFACE DRAINS, CONCRETE PAVEMENT OR OTHER NEW CONCRETE.

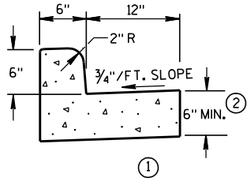


SECTION A-A

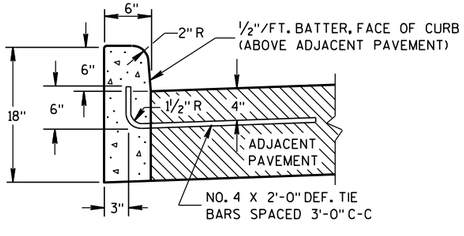
TIE BARS DRILLED INTO EXISTING PAVEMENT



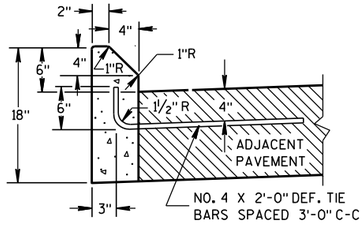
DRIVEWAY ENTRANCE CURB
(WHEN DIRECTED BY THE ENGINEER)



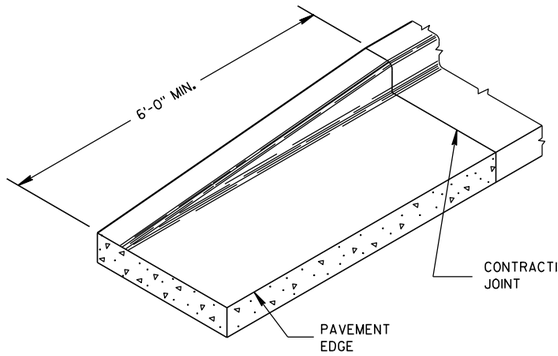
(1)
TYPES A & D
CONCRETE CURB & GUTTER 18"



(1)
TYPES A & D



(1)
TYPES G & J



END SECTION CURB & GUTTER

CONCRETE CURB

CONCRETE CURB, CONCRETE CURB & GUTTER AND TIES

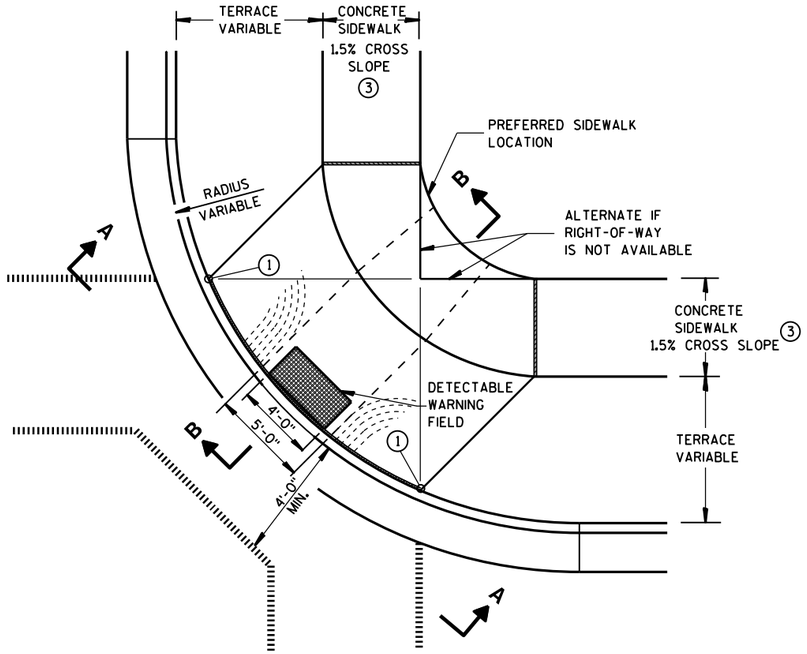
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
9/4/08 DATE
/S/ Jerry H. [illegible]
ROADWAY STANDARDS ENGINEER

FHWA

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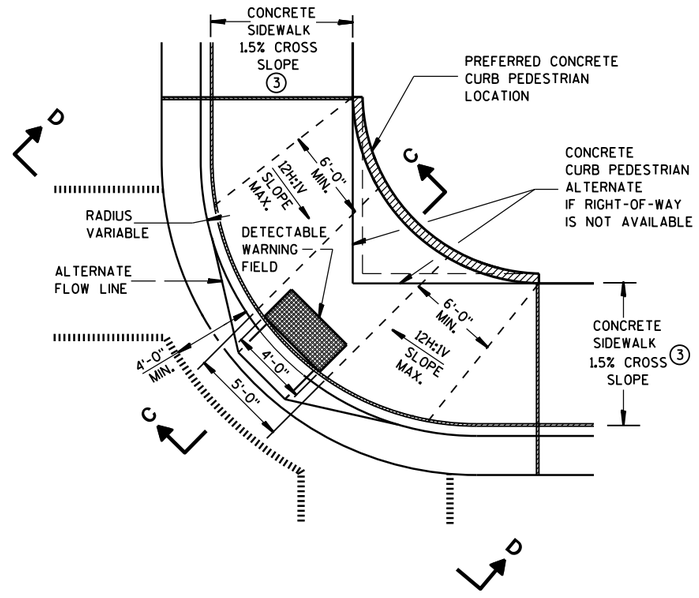
S.D.D. 8 D 1-17



PLAN VIEW

TYPE 1 RAMP

(CENTER OF CORNER RADIUS)



PLAN VIEW

TYPE 1-A RAMP

(NO TERRACE)

GENERAL NOTES

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

RAMPS SHALL BE BUILT AT 12H:1V OR FLATTER. WHEN NECESSARY, THE SIDEWALK ELEVATION MAY BE LOWERED TO MEET THE HIGH POINT ON THE RAMP.

TYPE 1 RAMPS SHALL HAVE A NORMAL SIDEWALK APRON AND CURB ON BOTH SIDES OF RAMP.

DETECTABLE WARNING FIELD SHALL BE MEASURED AND PAID BY THE SQUARE FOOT AS "CURB RAMP DETECTABLE WARNING FIELD". THE CONCRETE PEDESTRIAN CURB, IF NEEDED, SHALL BE MEASURED AND PAID BY THE LINEAL FOOT AS "CONCRETE CURB PEDESTRIAN". CONCRETE SIDEWALK IN THE CURB RAMP AREA SHALL BE MEASURED AND PAID BY THE SQUARE FOOT AS CONCRETE SIDEWALK, INCLUDING THE AREA UNDER THE DETECTABLE WARNING FIELD.

SELECT CURB RAMP DETECTABLE WARNING FIELD MATERIALS AND DEVICES FROM THE DEPARTMENT'S APPROVED MATERIALS LIST. THE COLOR OF THE DETECTABLE WARNING FIELD IS SPECIFIED ELSEWHERE AND IS INCIDENTAL TO THE BID ITEM OF "CURB RAMP DETECTABLE WARNING FIELD".

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

SURFACE TEXTURE OF THE RAMP SHALL BE OBTAINED BY COARSE BROOMING TRANSVERSE TO THE SLOPE OF THE RAMP.

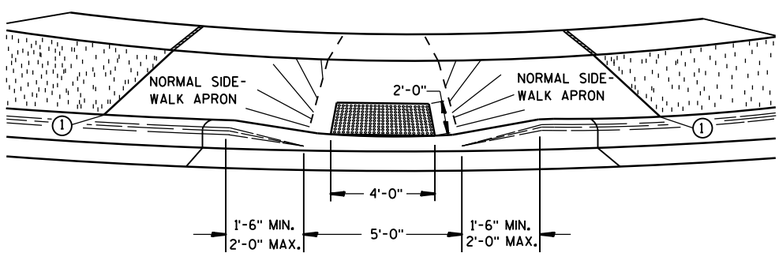
① THIS POINT IS AN EXTENSION OF OUTSIDE EDGE OF APPROACHING SIDEWALK WHERE IT MEETS THE BACK OF CONCRETE CURB.

② GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. PROVIDE DRAINAGE AWAY FROM CURB RAMP AT GUTTER FLAG INTERFACE.

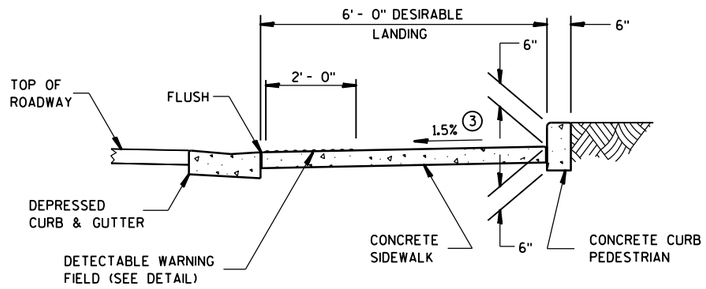
③ ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

LEGEND

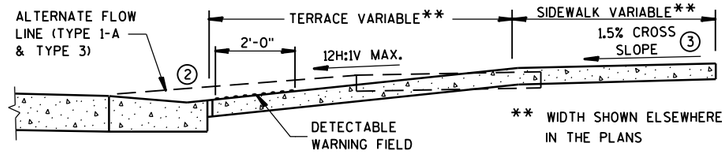
- ½" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)
- ALTERNATIVE LAYOUT



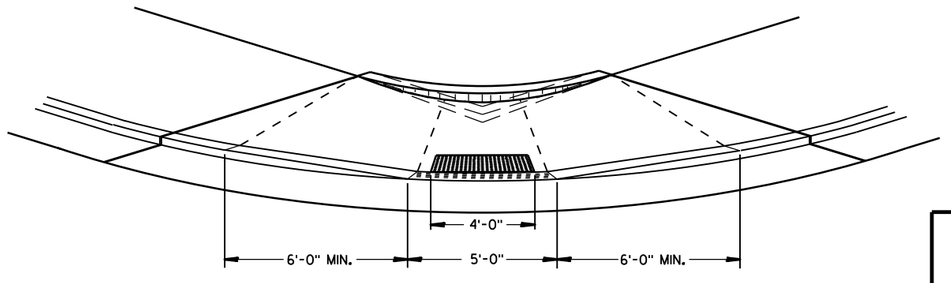
VIEW A-A



SECTION C-C



SECTION B-B



VIEW D-D

CURB RAMPS TYPES 1 AND 1-A

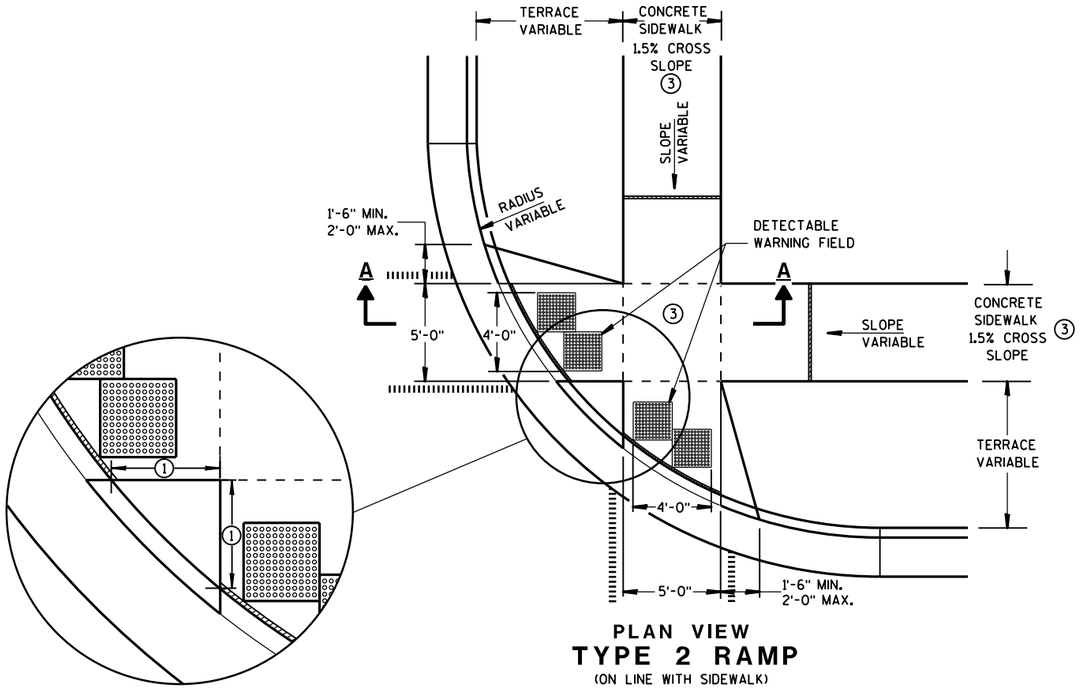
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

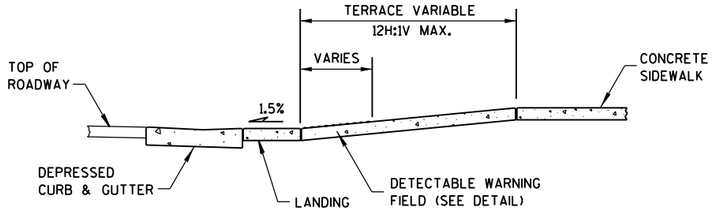
S.D.D. 8 D 5-15a

6

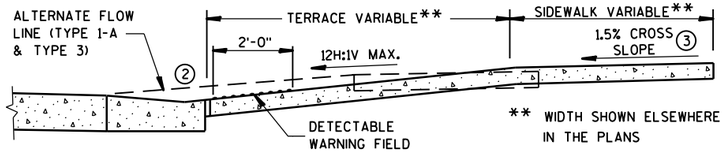
S.D.D. 8 D 5-15a



PLAN VIEW
TYPE 2 RAMP
(ON LINE WITH SIDEWALK)



SECTION A-A



SECTION B-B

GENERAL NOTES

USE THE TYPE 3 RAMP ONLY WHEN A TYPE 1 OR TYPE 2 CANNOT BE ACHIEVED BECAUSE OF FIELD CONDITIONS.

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

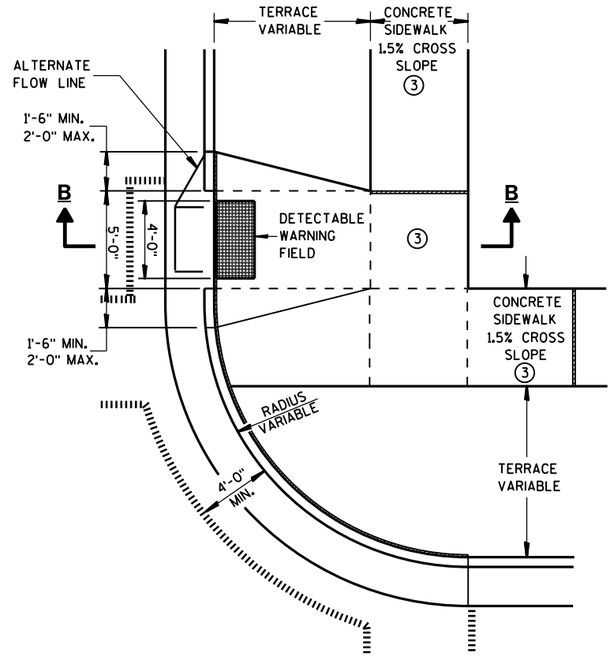
① WHEN THIS DISTANCE IS LESS THAN 6'-0" IT MAY BE DIFFICULT TO ACHIEVE A 12H:1V SLOPE, OR FLATTER, ON THE RAMP. REDUCE CURB HEIGHT IN TRIANGLE AREA TO ACHIEVE 12H:1V SLOPE, OR FLATTER, ON RAMP. 2" MINIMUM CURB HEIGHT.

② GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. PROVIDE DRAINAGE AWAY FROM CURB RAMP AT GUTTER FLAG INTERFACE.

③ ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

LEGEND

- ½" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)
- ALTERNATIVE LAYOUT



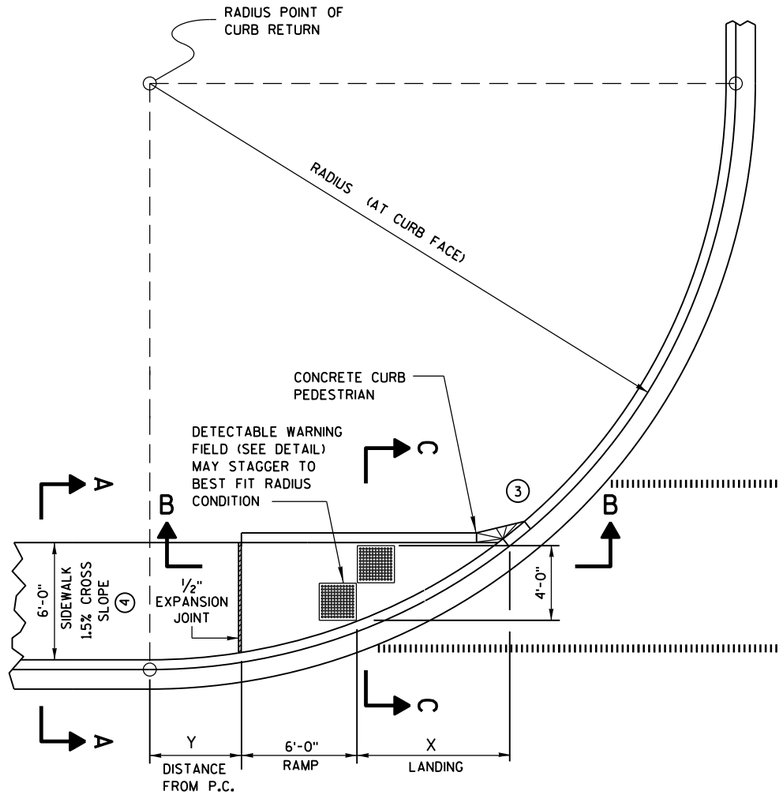
PLAN VIEW
TYPE 3 RAMP
(OUTSIDE OF CROSSWALK AREA)

CURB RAMPS TYPES 2 AND 3

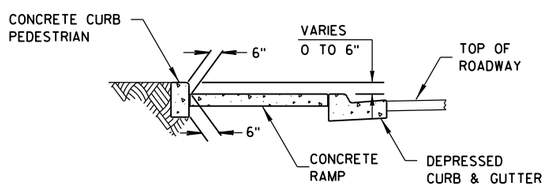
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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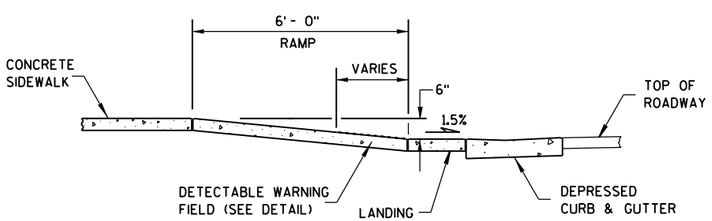
S.D.D. 8 D 5-15b



CURB RAMP TYPE 4A
PLAN VIEW



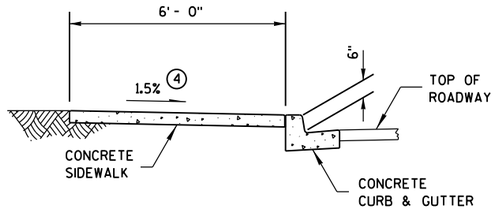
SECTION C-C FOR TYPE 4A



SECTION B-B FOR TYPE 4A

RADIUS (AT CURB FACE)	X	Y
20 FEET	6'-1¾"	2'-7¼"
30 FEET	7'-11¾"	4'-8¼"
40 FEET	9'-5¼"	6'-5"
50 FEET	10'-8¾"	7'-11¼"
60 FEET	11'-10¼"	9'-3½"

INTERMEDIATE RADII CAN BE INTERPOLATED



SECTION A-A FOR TYPE 4A

GENERAL NOTES

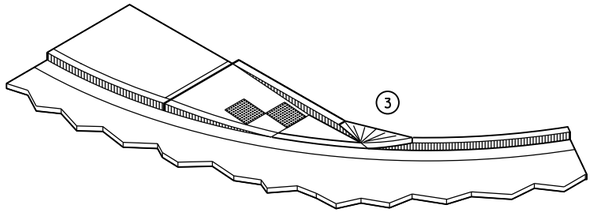
AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

RAMP SLOPES SHALL NOT BE STEEPER THAN 12:1.

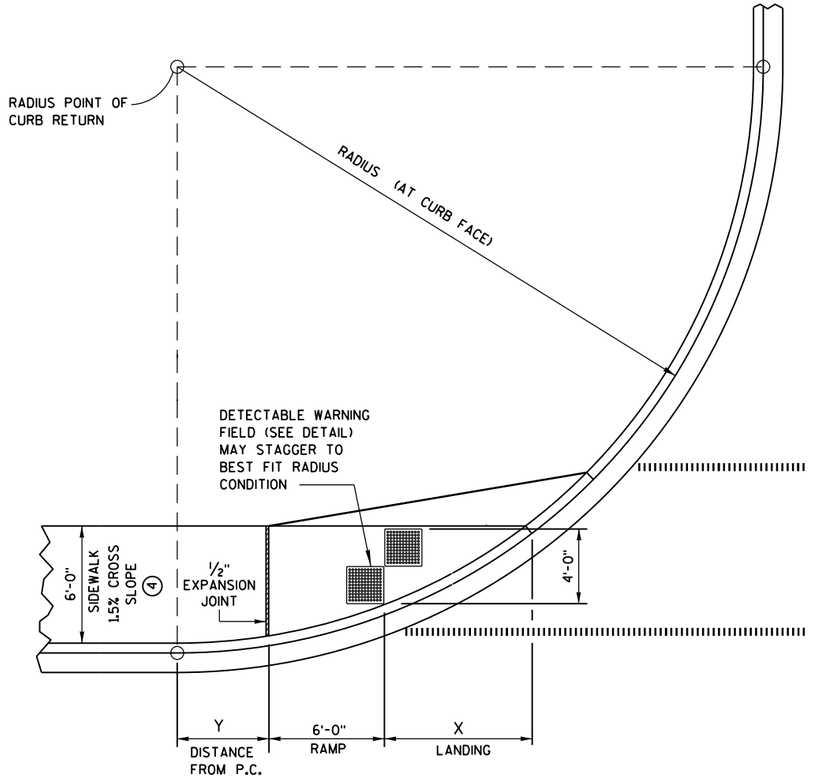
DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

(3) INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS.) DO NOT MARK TRANSITION NOSE.

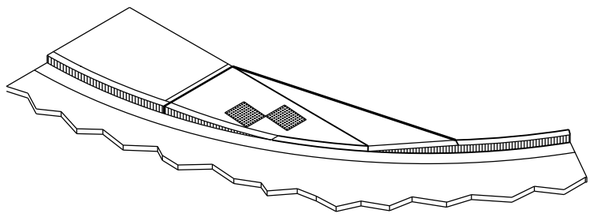
(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.



ISOMETRIC VIEW FOR TYPE 4A



CURB RAMP TYPE 4A1
PLAN VIEW



ISOMETRIC VIEW FOR TYPE 4A1

LEGEND

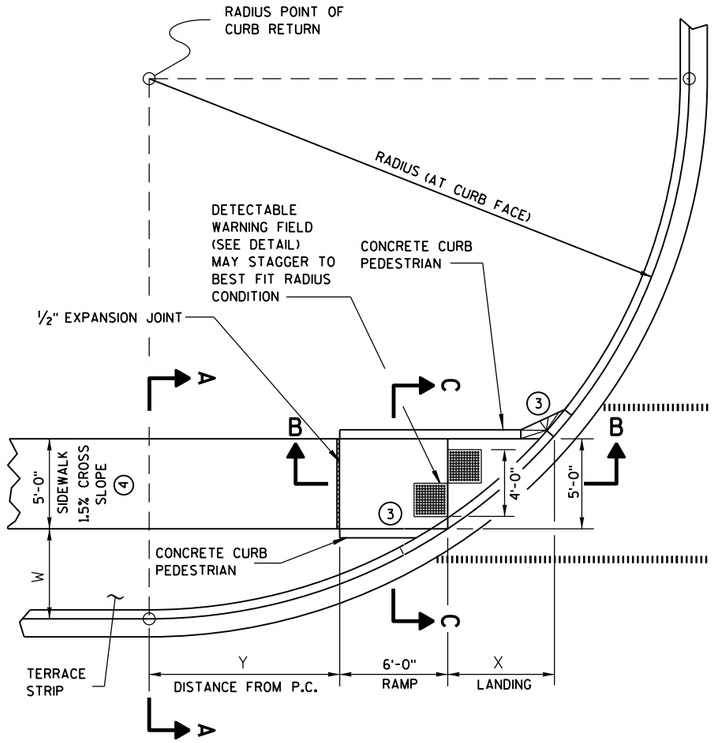
- 1/2" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)

CURB RAMPS
TYPES 4A AND 4A1

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

S.D.D. 8 D 5-15c



CURB RAMP TYPE 4B
PLAN VIEW

LEGEND

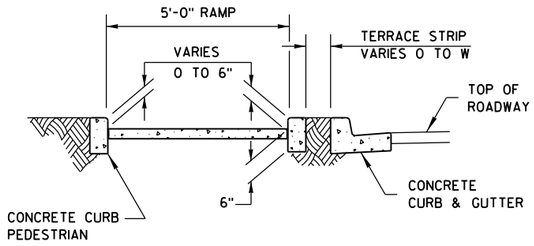
½" EXPANSION JOINT-SIDEWALK

CONTRACTION JOINT FIELD LOCATED

PAVEMENT MARKING CROSSWALK (WHITE)

RADIUS (AT CURB FACE)	W = 3'-0"		W = 4'-0"		W = 5'-0"		W = 6'-0"		W = 7'-0"	
	X	Y	X	Y	X	Y	X	Y	X	Y
20 FEET	5'-5½"	4'-6½"	4'-8½"	6'-0"	4'-1"	7'-2¾"	3'-7"	8'-3½"	3'-1½"	9'-2½"
30 FEET	7'-3¾"	7'-1"	6'-5½"	8'-11½"	5'-9¼"	10'-7"	5'-2½"	12'-0"	4'-8¾"	13'-3¼"
40 FEET	8'-9½"	9'-2½"	7'-10"	11'-5¼"	7'-1"	13'-4½"	6'-5¾"	15'-¾"	5'-11½"	16'-7¼"
50 FEET	10'-¾"	11'-¾"	9'-¼"	13'-7¼"	8'-2½"	15'-9½"	7'-6½"	17'-9"	6'-11¾"	19'-6¼"
60 FEET	11'-2½"	12'-8¾"	10'-¾"	15'-6½"	9'-2¼"	17'-11¾"	8'-5¾"	20'-1¾"	7'-10½"	22'-1½"

INTERMEDIATE RADII CAN BE INTERPOLATED



SECTION C-C FOR TYPE 4B

GENERAL NOTES

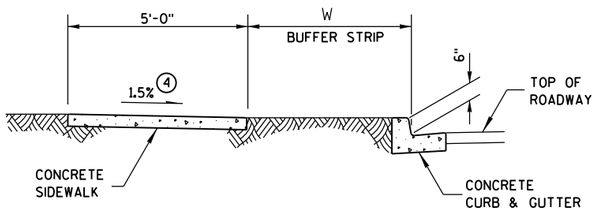
AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

RAMP SLOPES SHALL NOT BE STEEPER THAN 12:1.

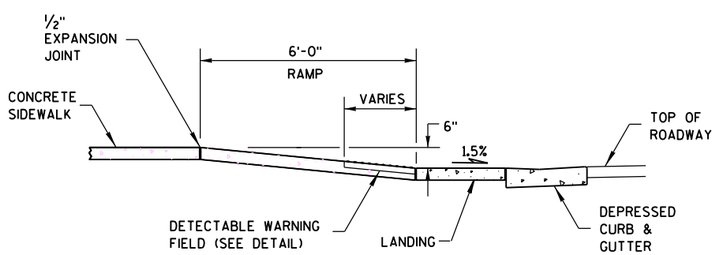
DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

(3) INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS.) DO NOT MARK TRANSITION NOSE.

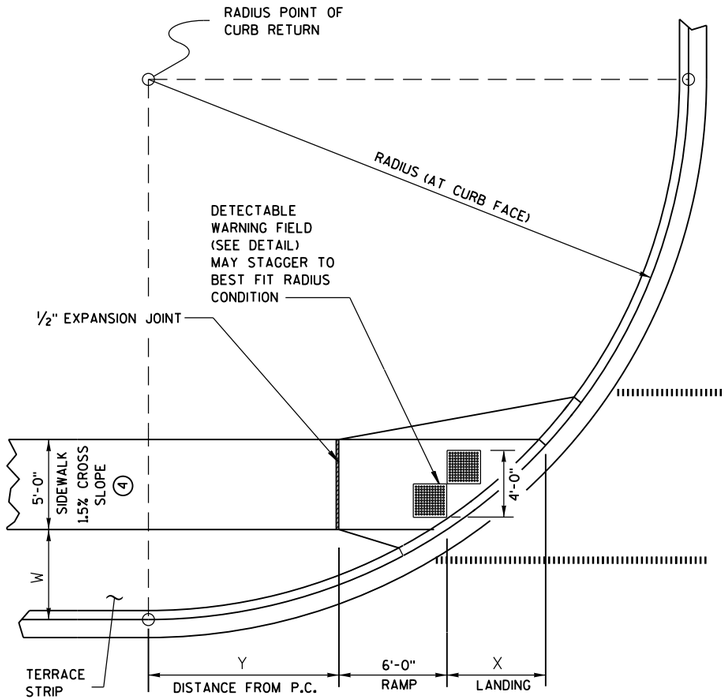
(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.



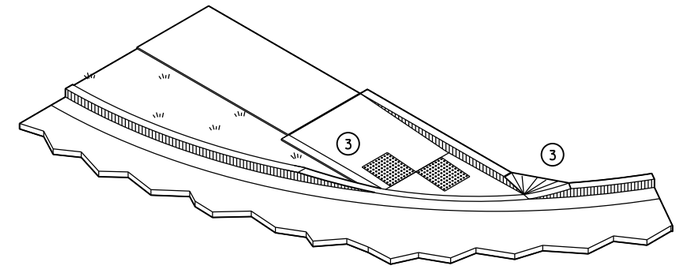
SECTION A-A FOR TYPE 4B



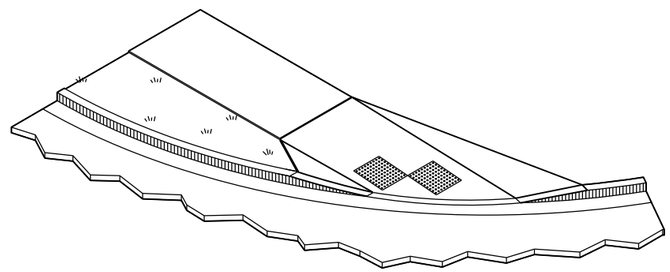
SECTION B-B FOR TYPE 4B



CURB RAMP TYPE 4B1
PLAN VIEW



ISOMETRIC VIEW FOR TYPE 4B



ISOMETRIC VIEW FOR TYPE 4B1

CURB RAMPS TYPE 4B AND 4B1

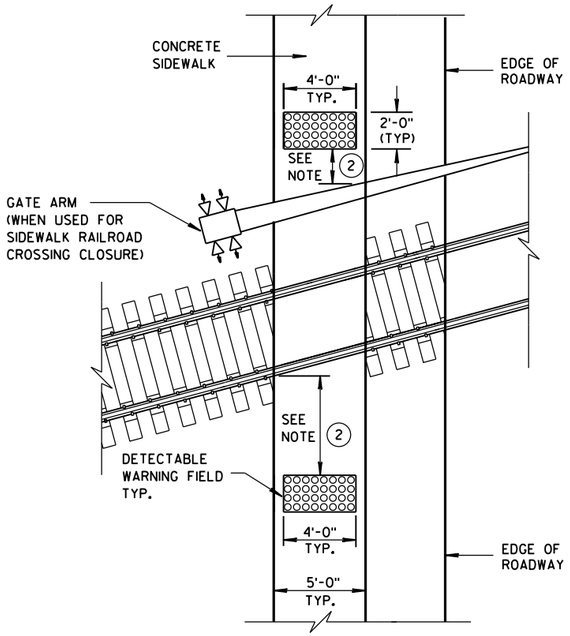
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

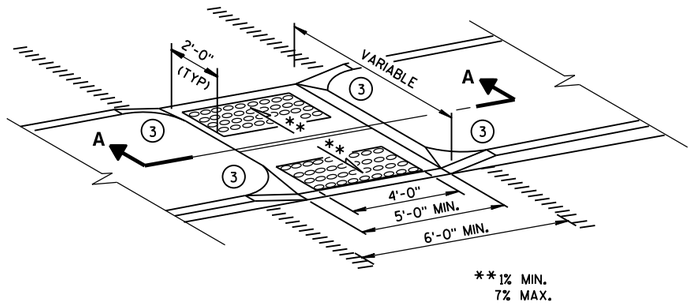
S.D.D. 8 D 5-15d

6

S.D.D. 8 D 5-15d



TYPE 8
DETECTABLE WARNINGS AT RAILROAD CROSSING



MEDIAN ISLAND
NON-ELEVATED CROSSING
TYPE 5

GENERAL NOTES

SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.

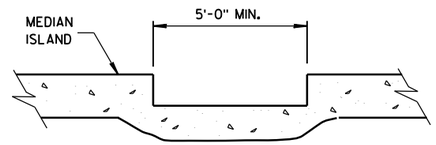
DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

(1) SLOPE SIDEWALK TOWARD LANDING AS SHOWN WHERE THERE IS NO TERRACE OR WHERE THE TERRACE WIDTH IS LESS THAN 6 FEET WIDE.

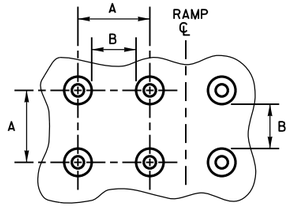
(2) THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO A RAILROAD CROSSING SHALL BE 1.5 FEET ± 0.1' FROM THE FACE OF THE GATE ARM IF THE GATE ARM EXTENDS ACROSS THE SIDEWALK. WHERE THERE IS NO PEDESTRIAN GATE, THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO THE RAILROAD CROSSING SHALL BE 15 FEET FROM THE NEAREST RAIL.

(3) INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS.) DO NOT MARK TRANSITION NOSE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.



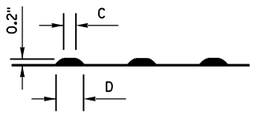
SECTION A-A



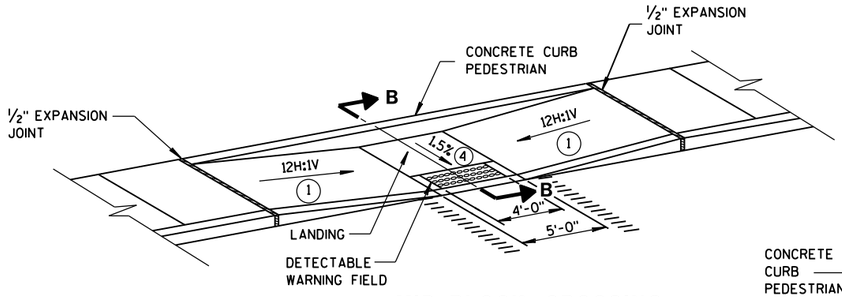
PLAN VIEW

	MIN.	MAX.
A	1.6"	2.4"
B	0.65"	1.5"
C	*	*
D	0.9"	1.4"

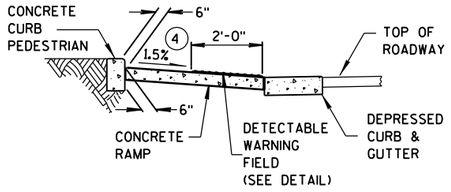
* THE C DIMENSION IS 50% TO 65% OF THE D DIMENSION.



ELEVATION VIEW

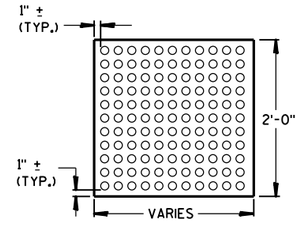


MID-BLOCK CROSSING
TYPE 7A



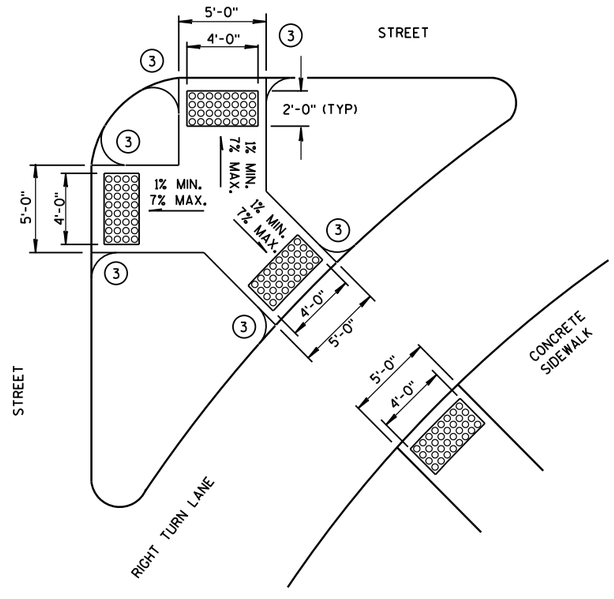
SECTION B-B

TRUNCATED DOMES
DETECTABLE WARNING PATTERN DETAIL

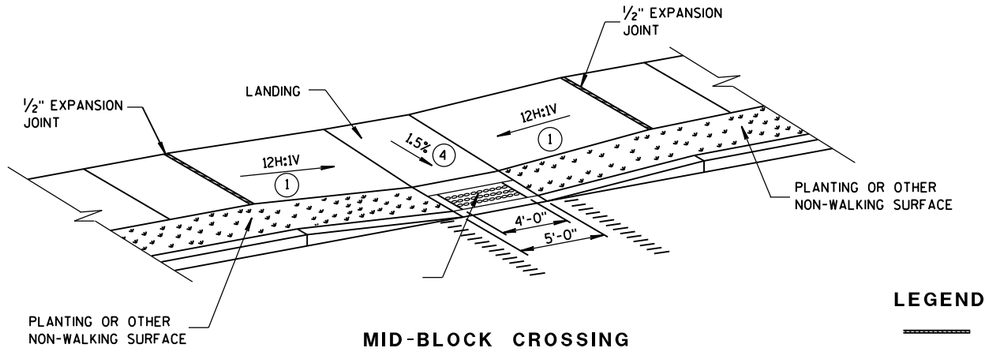


PLAN VIEW

DETECTABLE WARNING FIELD (TYPICAL)



TYPE 6
DETECTABLE WARNING AT ISLANDS



MID-BLOCK CROSSING
TYPE 7B

NOTE: THESE PARALLEL AND PARALLEL/PERPENDICULAR CURB RAMPS MAY BE USED AT INTERSECTIONS AND MID BLOCK LOCATIONS.

LEGEND

- ½" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)

CURB RAMPS
TYPES 5, 6, 7A, 7B & 8

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

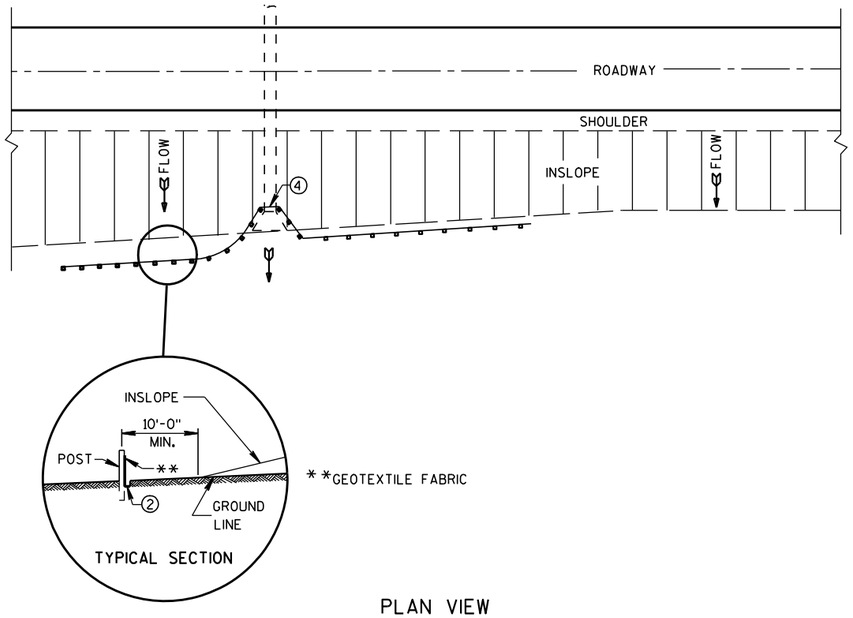
APPROVED
2-6-2013 DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS [illegible] ENGINEER
FHWA

6

S.D.D. 8 D 5-15e

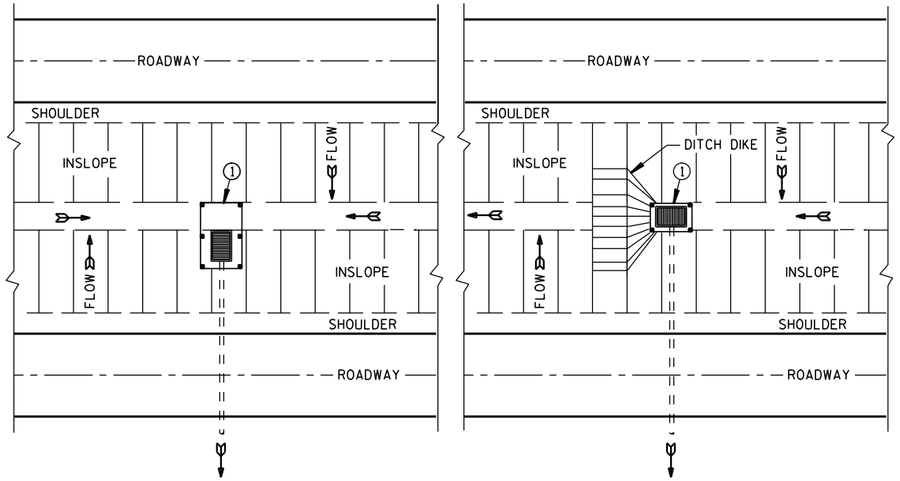
6

S.D.D. 8 D 5-15e



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.

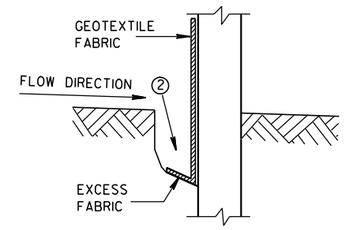
① HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.

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.

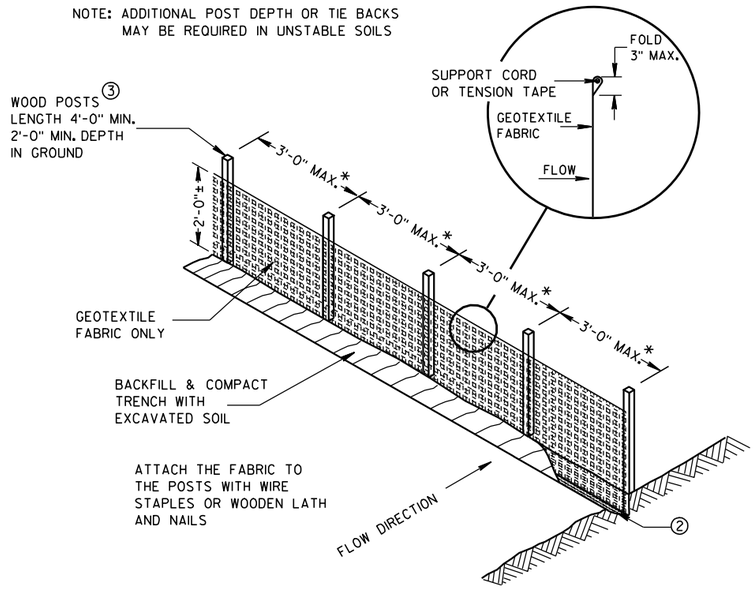
③ WOOD POSTS SHALL BE A MINIMUM SIZE OF 1⅛" X 1⅛" OF OAK OR HICKORY.

④ SILT FENCE TO EXTEND ACROSS THE TOP OF THE PIPE.

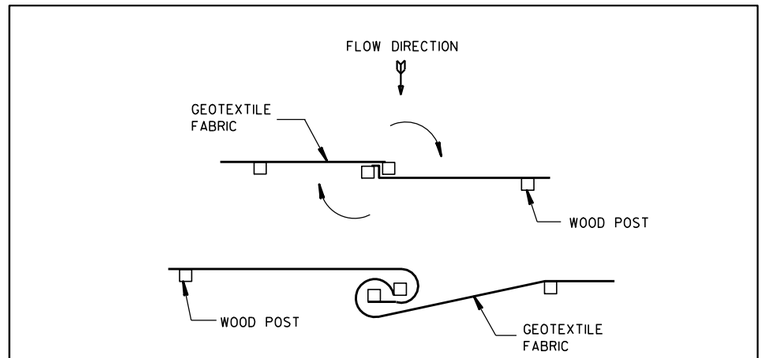
⑤ CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS; A) OVERLAP THE END POSTS AND TWIST, OR ROTATE, AT LEAST 180 DEGREES, B) HOOK THE END OF EACH SILT FENCE LENGTH.



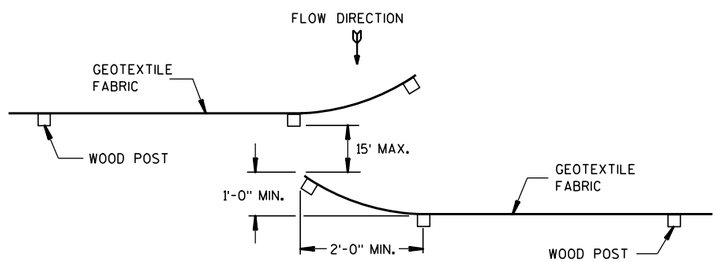
TRENCH DETAIL



SILT FENCE

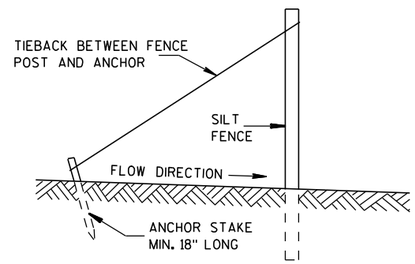


TWIST METHOD



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

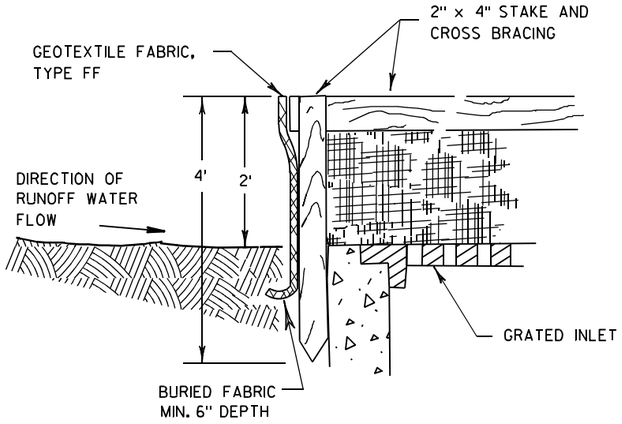
APPROVED
4-29-05 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

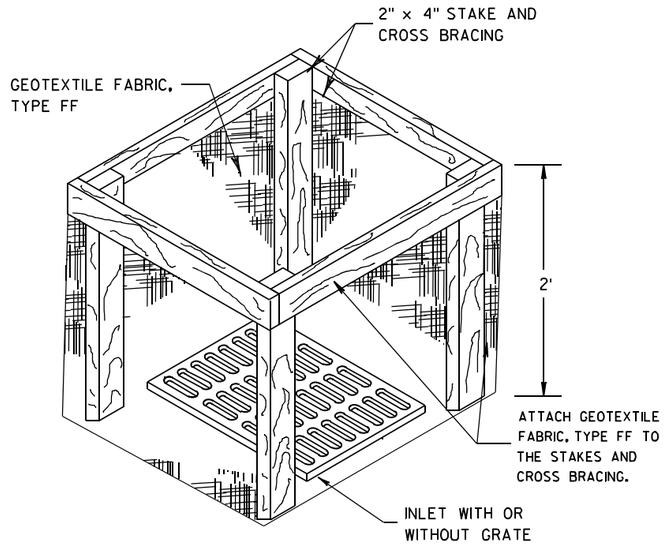
6

S.D.D. 8 E 9-6

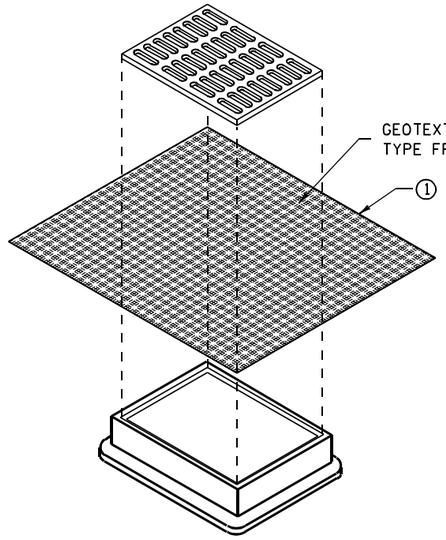
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S.D.D. 8 E 9-6



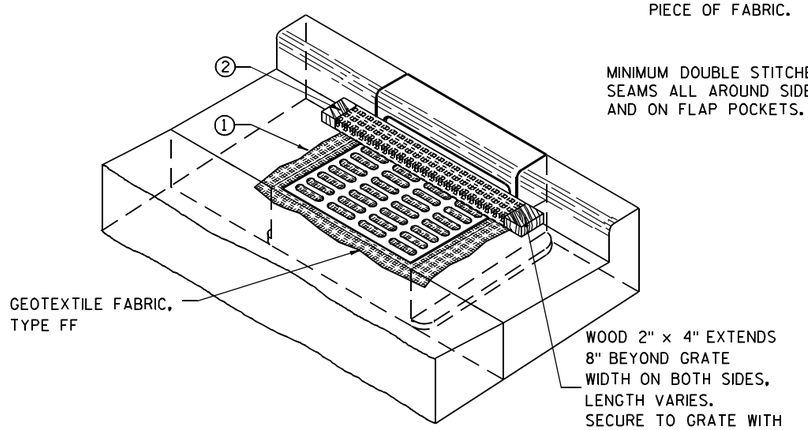


INLET PROTECTION, TYPE A

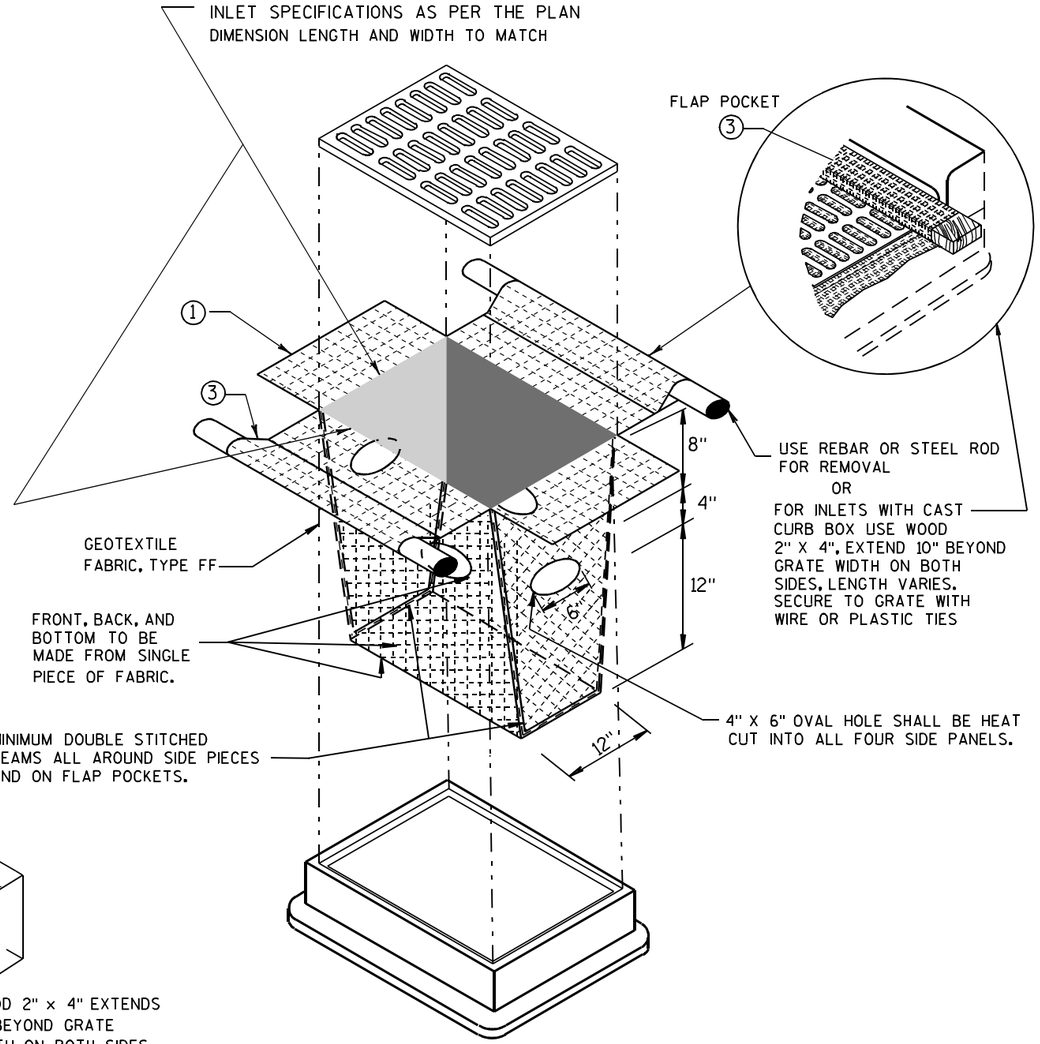


INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)

(CAN BE INSTALLED IN ANY INLET WITHOUT A CURB BOX)



INLET PROTECTION, TYPE C (WITH CURB BOX)



INLET PROTECTION, TYPE D

(CAN BE INSTALLED IN ANY INLET TYPE WITH
OR WITHOUT A CURB BOX AS PER NOTE ②)

GENERAL NOTES

INLET PROTECTION DEVICES SHALL BE MAINTAINED OR REPLACED AT THE DIRECTION OF THE ENGINEER.

MANUFACTURED ALTERNATIVES APPROVED AND LISTED ON THE DEPARTMENT'S EROSION CONTROL PRODUCT ACCEPTABILITY LIST MAY BE SUBSTITUTED.

WHEN REMOVING OR MAINTAINING INLET PROTECTION, CARE SHALL BE TAKEN SO THAT THE SEDIMENT TRAPPED ON THE GEOTEXTILE FABRIC DOES NOT FALL INTO THE INLET. ANY MATERIAL FALLING INTO THE INLET SHALL BE REMOVED IMMEDIATELY.

① FINISHED SIZE, INCLUDING FLAP POCKETS WHERE REQUIRED, SHALL EXTEND A MINIMUM OF 10" AROUND THE PERIMETER TO FACILITATE MAINTENANCE OR REMOVAL.

② FOR INLET PROTECTION, TYPE C (WITH CURB BOX), AN ADDITIONAL 18" OF FABRIC IS WRAPPED AROUND THE WOOD AND SECURED WITH STAPLES. THE WOOD SHALL NOT BLOCK THE ENTIRE HEIGHT OF THE CURB BOX OPENING.

③ FLAP POCKETS SHALL BE LARGE ENOUGH TO ACCEPT WOOD 2X4.

INSTALLATION NOTES

TYPE B & C

TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE.

THE CONTRACTOR SHALL DEMONSTRATE A METHOD OF MAINTENANCE, USING A SEWN FLAP, HAND HOLDS OR OTHER METHOD TO PREVENT ACCUMULATED SEDIMENT FROM ENTERING THE INLET.

TYPE D

DO NOT INSTALL INLET PROTECTION TYPE D IN INLETS SHALLOWER THAN 30", MEASURED FROM THE BOTTOM OF THE INLET TO THE TOP OF THE GRATE.

TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE.

THE INSTALLED BAG SHALL HAVE A MINIMUM SIDE CLEARANCE, BETWEEN THE INLET WALLS AND THE BAG, MEASURED AT THE BOTTOM OF THE OVERFLOW HOLES, OF 3". WHERE NECESSARY THE CONTRACTOR SHALL CINCH THE BAG, USING PLASTIC ZIP TIES, TO ACHIEVE THE 3" CLEARANCE. THE TIES SHALL BE PLACED AT A MAXIMUM OF 4" FROM THE BOTTOM OF THE BAG.

INLET PROTECTION
TYPE A, B, C, AND D

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
10/16/02
DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

6
S.D.D. 8 E 10-2

METAL APRON ENDWALLS

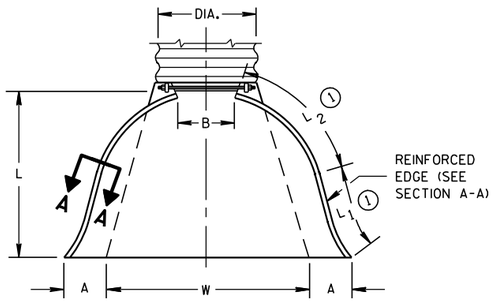
PIPE DIA. (IN.)	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
12	.064	.060	6	6	6	21	12	17 1/2	24	2 1/2 to 1	1 Pc.
15	.064	.060	7	8	6	26	14	21 3/4	30	2 1/2 to 1	1 Pc.
18	.064	.060	8	10	6	31	15	28 1/4	36	2 1/2 to 1	1 Pc.
21	.064	.060	9	12	6	36	18	29 5/8	42	2 1/2 to 1	1 Pc.
24	.064	.075	10	13	6	41	18	37 1/4	48	2 1/2 to 1	1 Pc.
30	.079	.075	12	16	8	51	18	52 1/4	60	2 1/2 to 1	1 Pc.
36	.079	.105	14	19	9	60	24	59 3/4	72	2 1/2 to 1	2 Pc.
42	.109	.105	16	22	11	69	24	75 5/8	84	2 1/2 to 1	2 Pc.
48	.109	.105	18	27	12	78	24	81	90	2 1/4 to 1	3 Pc.
54	.109	.105	18	30	12	84	30	85 1/2	102	2 1/4 to 1	3 Pc.
60	.109×	.105×	18	33	12	87	—	—	114	2 to 1	3 Pc.
66	.109×	.105×	18	36	12	87	—	—	120	2 to 1	3 Pc.
72	.109×	.105×	18	39	12	87	—	—	126	2 to 1	3 Pc.
78	.109×	.105×	18	42	12	87	—	—	132	1 1/2 to 1	3 Pc.
84	.109×	.105×	18	45	12	87	—	—	138	1 1/2 to 1	3 Pc.
90	.109×	.105×	18	37	12	87	—	—	144	1 1/2 to 1	3 Pc.
96	.109×	.105×	18	35	12	87	—	—	150	1 1/2 to 1	3 Pc.

× EXCEPT CENTER PANEL SEE GENERAL NOTES

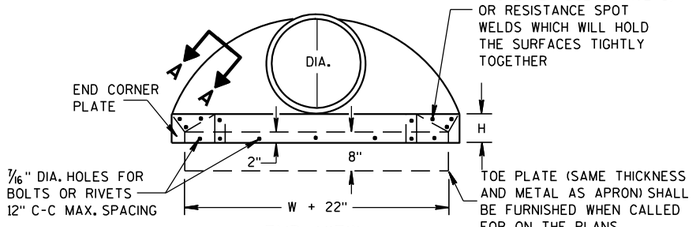
REINFORCED CONCRETE APRON ENDWALLS

PIPE DIA. (IN.)	DIMENSIONS (Inches) T	A	B	C	D	E	G	APPROX. SLOPE
12	2	4	24	48 7/8	72 1/8	24	2	3 to 1
15	2 1/4	6	27	46	73	30	2 1/4	3 to 1
18	2 1/2	9	27	46	73	36	2 1/2	3 to 1
21	2 3/4	9	36	37 1/2	73 1/2	42	2 3/4	3 to 1
24	3	9 1/2	43 1/2	30	73 1/2	48	3	3 to 1
27	3 1/4	10 1/2	49 1/2	24	73 1/2	54	3 1/4	3 to 1
30	3 1/2	12	54	19 3/4	73 1/2	60	3 1/2	3 to 1
36	4	15	63	34 3/4	97 3/4	72	4	3 to 1
42	4 1/2	21	63	35	98	78	4 1/2	3 to 1
48	5	24	72	26	98	84	5	3 to 1
54	5 1/2	27	65	* 33 1/4 - ** 35	* 98 1/4 - ** 100	90	5 1/2	2 2/5 to 1
60	6	* 30 - ** 35	60	39	99	96	5	2 to 1
66	6 1/2	* 24 - ** 30	* 72 - ** 78	* 21 - ** 27	99	102	5 1/2	2 to 1
72	7	* 24 - ** 36	78	21	99	108	6	2 to 1
78	7 1/2	* 24 - ** 36	78	21	99	114	6 1/2	2 to 1
84	8	36	90 1/2	21	111 1/2	120	6 1/2	1 1/2 to 1
90	8 1/2	41	87 1/2	24	111 1/2	132	6 1/2	1 1/2 to 1

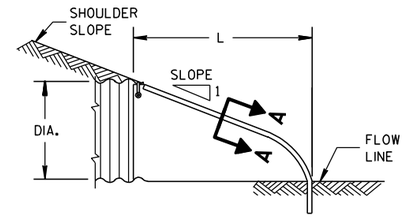
*MINIMUM
**MAXIMUM



PLAN VIEW

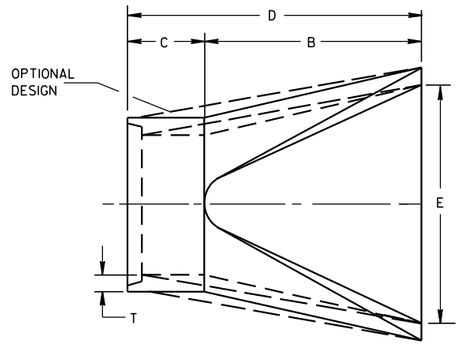


END VIEW

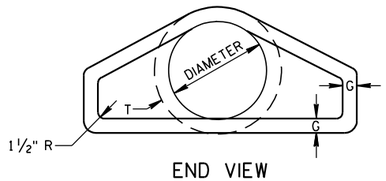


SIDE ELEVATION

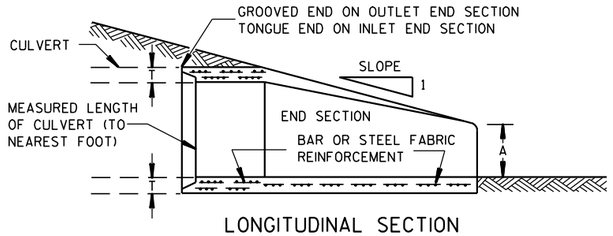
METAL ENDWALLS



PLAN

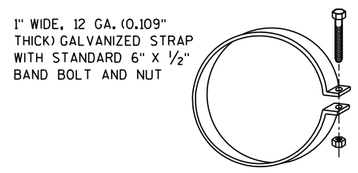


END VIEW



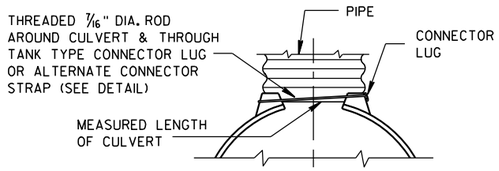
LONGITUDINAL SECTION

CONCRETE ENDWALLS

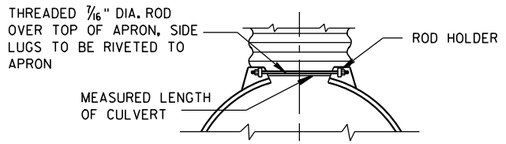


ALTERNATE FOR TYPE 1 CONNECTION

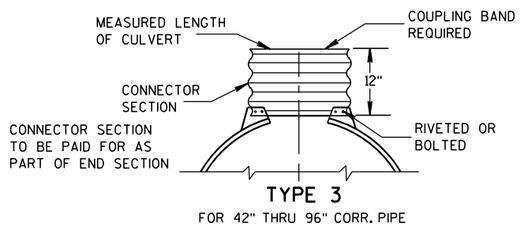
END SECTION CONNECTOR STRAP



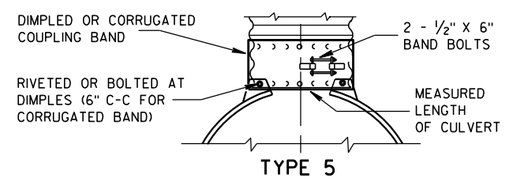
TYPE 1
FOR 12" THRU 24" CORR. PIPE



TYPE 2
FOR 30" THRU 96" CORR. PIPE



TYPE 3
FOR 42" THRU 96" CORR. PIPE



TYPE 5
ALTERNATE FOR:
ALL SIZES CORRUGATED CIRCULAR PIPE

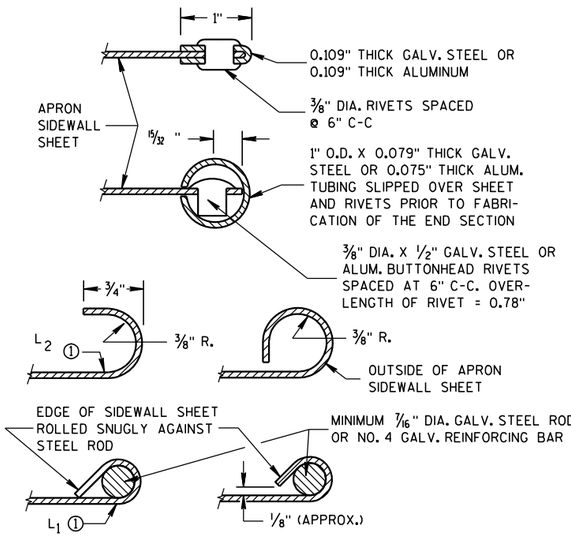
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL. AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

FOR CIRCUMFERENTIALLY CORRUGATED PIPE USE ENDWALL CONNECTION DETAILS 1, 2, 3 OR 5 AS APPLICABLE.

FOR HELICALLY CORRUGATED PIPE USE ENDWALL CONNECTION DETAILS 1, 2 OR 5.

FOR HELICALLY CORRUGATED PIPES WITH TWO CIRCUMFERENTIAL CORRUGATIONS AT EACH END USE ENDWALL CONNECTION DETAILS 1, 2 OR 3.

CONNECTION DETAILS



SECTION A-A

GENERAL NOTES

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

CONCRETE CULVERT ENDWALLS MAY NOT BE USED WITH GALVANIZED STEEL OR ALUMINUM CULVERT PIPE OR VISE VERSA. GALVANIZED STEEL OR ALUMINUM ENDWALLS SHALL NORMALLY BE INSTALLED ON CULVERT PIPE OF THE SAME METAL.

ALL THREE PIECE STEEL APRON ENDWALLS FOR 60" DIAMETER PIPE AND LARGER SHALL HAVE 0.109" SIDES AND 0.138" CENTER PANELS. ALL THREE PIECE ALUMINUM APRON ENDWALLS FOR 60" DIAMETER PIPE AND LARGER SHALL HAVE 0.105" SIDES AND 0.134" CENTER PANELS. THE WIDTH OF CENTER PANELS SHALL BE GREATER THAN 20 PERCENT OF THE PIPE PERIMETER.

LAP SEAMS SHALL BE TIGHTLY JOINED BY GALVANIZED RIVETS OR BOLTS FOR STEEL UNITS AND ALUMINUM RIVETS AND BOLTS FOR ALUMINUM UNITS. FOR THE 60" THROUGH 96" DIAMETER APRON ENDWALL SIZES, THE REINFORCED EDGES AND CENTER PANEL SEAMS SHALL BE FURTHER REINFORCED WITH GALVANIZED STEEL OR ALUMINUM STIFFENER ANGLES. THE ANGLES SHALL BE ATTACHED BY GALVANIZED NUTS AND BOLTS FOR STEEL UNITS AND ALUMINUM NUTS AND BOLTS FOR ALUMINUM UNITS.

WHERE TWO OR MORE PIPES WITH APRON ENDWALLS ARE LAID ADJACENT TO EACH OTHER, THEY SHALL BE SEPARATED BY A DISTANCE SUFFICIENT TO PROVIDE A MINIMUM CLEARANCE OF 6 INCHES BETWEEN APRON ENDWALLS.

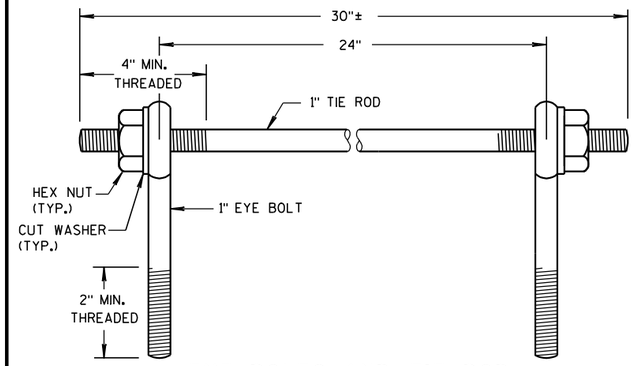
① FOR PIPE SIZES UP TO 60" DIAMETER, A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

APRON ENDWALLS FOR CULVERT PIPE

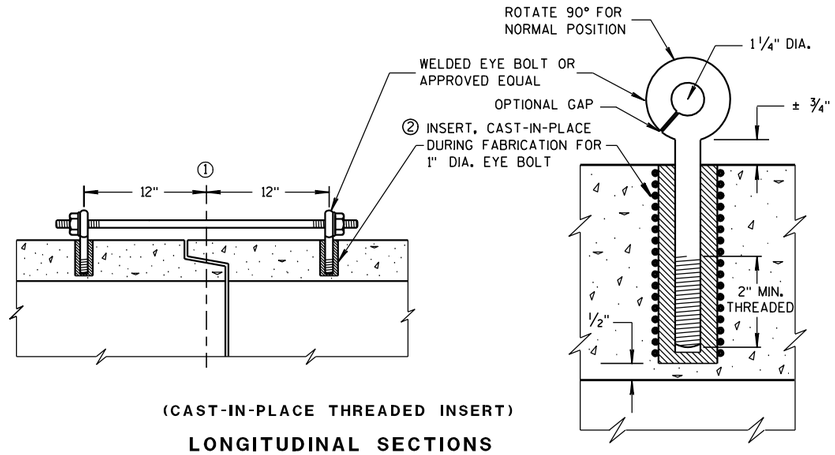
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11/30/94 DATE
/S/ Rory L. Rhinesmith
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

6
S.D.D. 8 F 1-11



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.

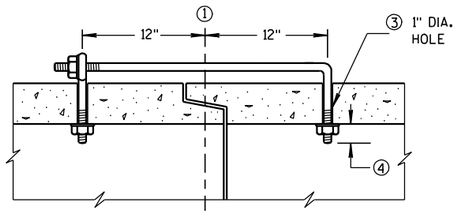
② THE INSIDE OF THE THREADED INSERTS SHALL BE CLEAN TO ALLOW THE INSERTION OF THREADED EYE BOLTS.

③ HOLES SHALL BE CAST-IN-PLACE OR DRILLED 12 INCHES FROM ℄ OF TONGUE AND GROOVE.

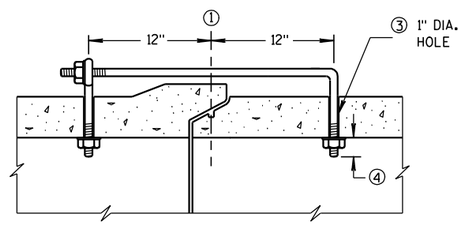
④ BOLT PROJECTION INSIDE OF PIPE SHALL NOT EXCEED 2 INCHES.

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)

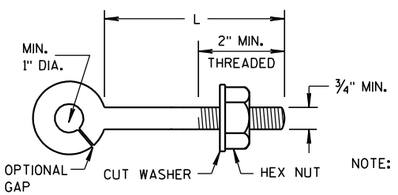


(MODIFIED BELL PIPE)

LONGITUDINAL SECTION

EYE BOLT DIMENSION TABLE

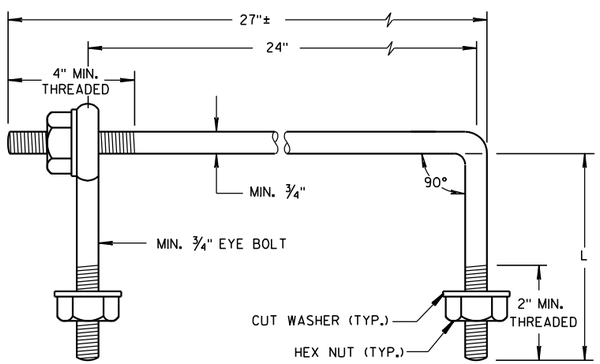
PIPE SIZE	L = LENGTH	
	TONGUE & GROOVE PIPE	MODIFIED BELL PIPE
18" TO 24"	4 1/2"	6 1/4"
30"	5"	7"
36"	5 1/2"	7"
42"	6"	
48"	6 1/2"	
60"	7 1/2"	
66"	8"	



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

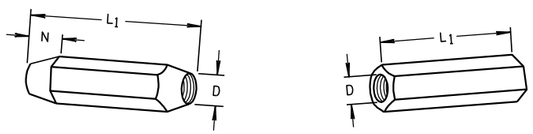
(JOINT TIES FOR 18" TO 66" DIA. CONCRETE PIPE)

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

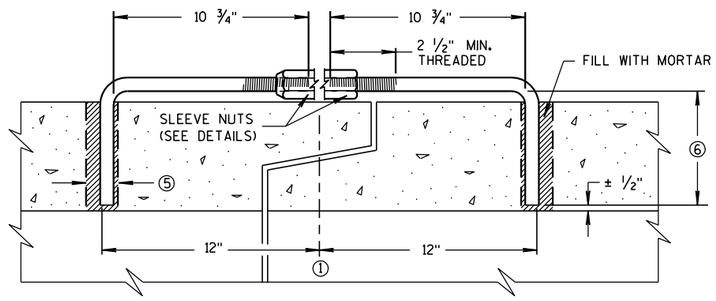
DIMENSIONS SHOWN ARE IN INCHES



TAPERED PLAIN

RIGHT AND LEFT THREADS

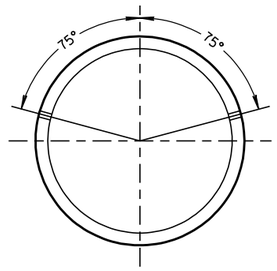
SLEEVE NUTS



LONGITUDINAL SECTION

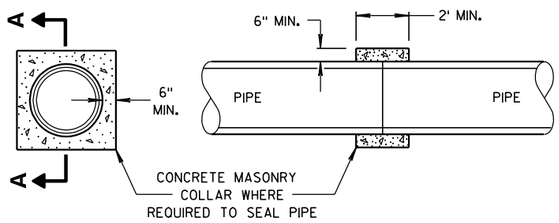
(JOINT TIES FOR 12" TO 108" DIA. CONCRETE PIPE)

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

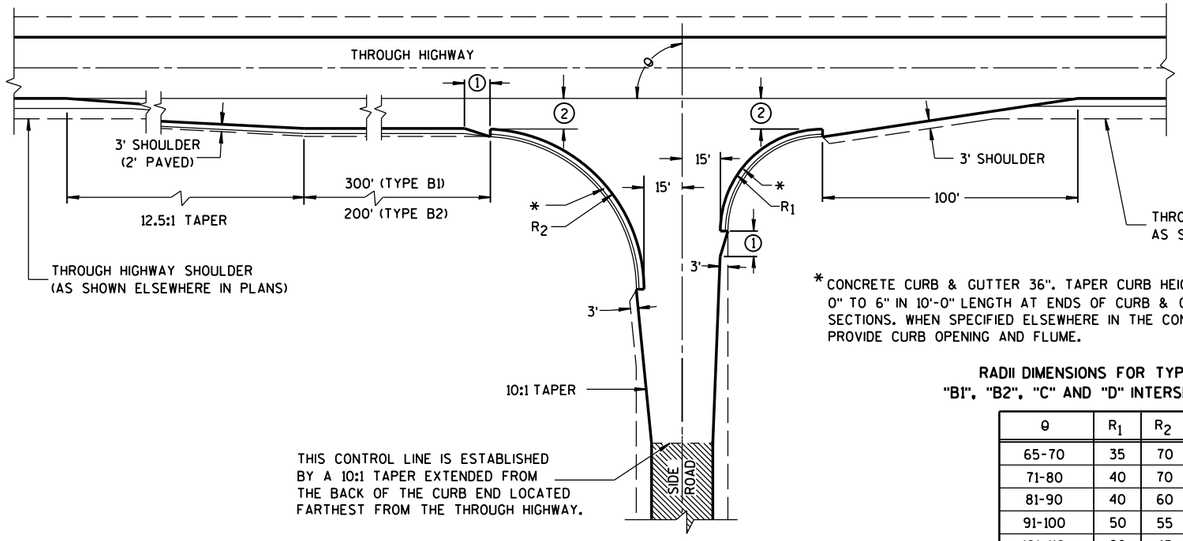
JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
6/5/2012 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER
177
FHWA

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S.D.D. 8 F 4-7

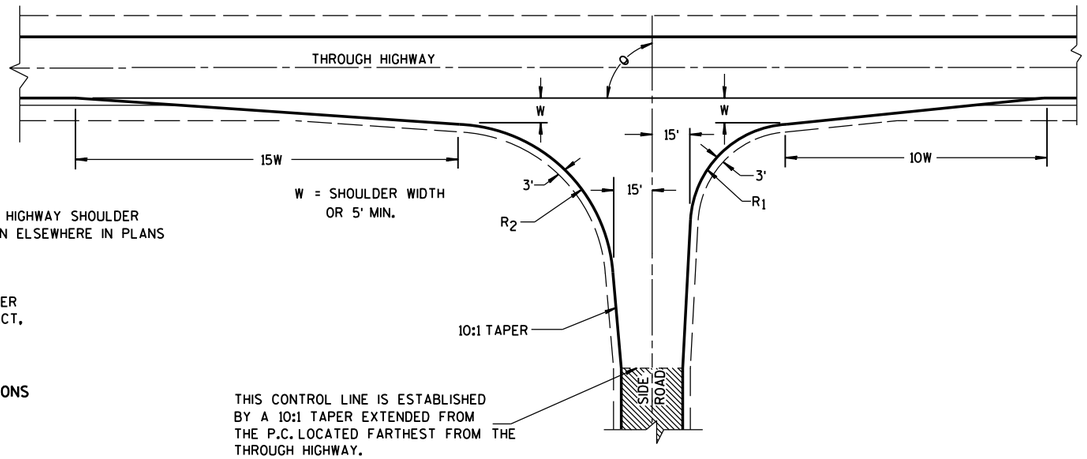


TYPE "B1" AND "B2"

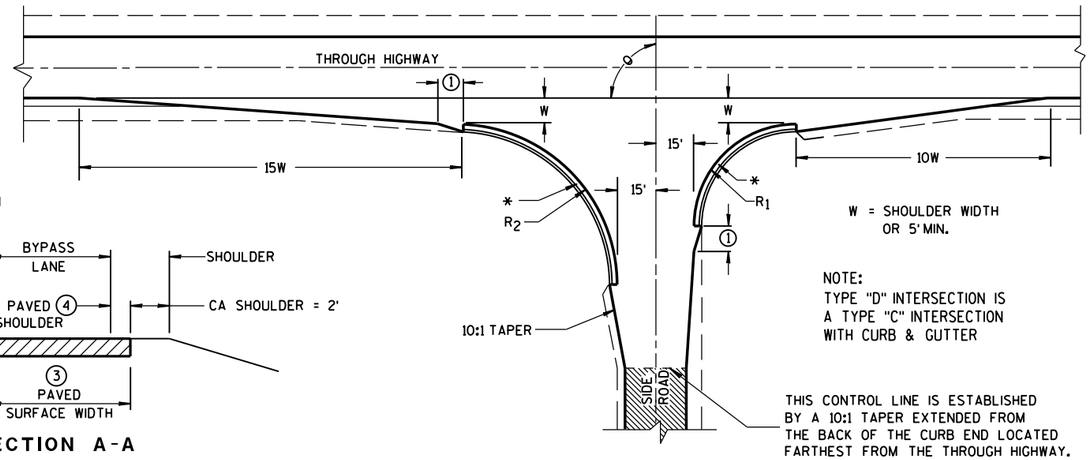
*CONCRETE CURB & GUTTER 36". TAPER CURB HEIGHT 0" TO 6" IN 10'-0" LENGTH AT ENDS OF CURB & GUTTER SECTIONS. WHEN SPECIFIED ELSEWHERE IN THE CONTRACT, PROVIDE CURB OPENING AND FLUME.

RADII DIMENSIONS FOR TYPES "B1", "B2", "C" AND "D" INTERSECTIONS

θ	R_1	R_2
65-70	35	70
71-80	40	70
81-90	40	60
91-100	50	55
101-110	60	45



TYPE "C"



TYPE "D"

GENERAL NOTES

DESIGNS MAY BE USED INTERCHANGEABLY IN COMBINATION OR SEPARATELY FOR ANY ONE COMPLETE INTERSECTION DEPENDING UPON INTERSECTION ANGLE AND SURFACING OF EACH APPROACH ROADWAY.

SIDE ROAD SURFACING NOTE

WHEN THE SIDE ROAD IS NOT PRESENTLY PAVED, PAVEMENT SHALL BE PLACED TO THE LIMITS SHOWN UNLESS OTHERWISE PROVIDED IN THE CONTRACT. WHERE THE CONSTRUCTION LIMITS ARE BEYOND THE PAVING LIMITS, CRUSHED AGGREGATE SURFACING SHALL BE PLACED BETWEEN THE PAVING LIMITS AND CONSTRUCTION LIMITS.

WHEN THE SIDE ROAD IS PRESENTLY PAVED, NEW PAVEMENT SHALL BE PLACED TO THE LIMITS OF DESIGN AS SHOWN AND BEYOND, IF NECESSARY, TO MEET EXISTING PAVEMENT.

WHEN THE SIDE ROAD IS THE CONSTRUCTION PROJECT, THE INTERSECTION SURFACING SHALL BE THE SAME AS FOR THE PROJECT.

EXISTING PAVED SURFACE

BYPASS LANE

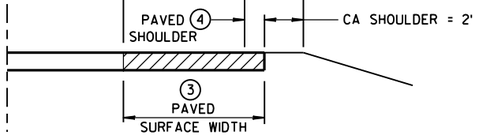
(1) 10-FT TYPICAL.

(2) 12-FT** PLUS ADDITIONAL WIDTH FOR BIKE LANE IF SHOWN ELSEWHERE IN THE PLAN.

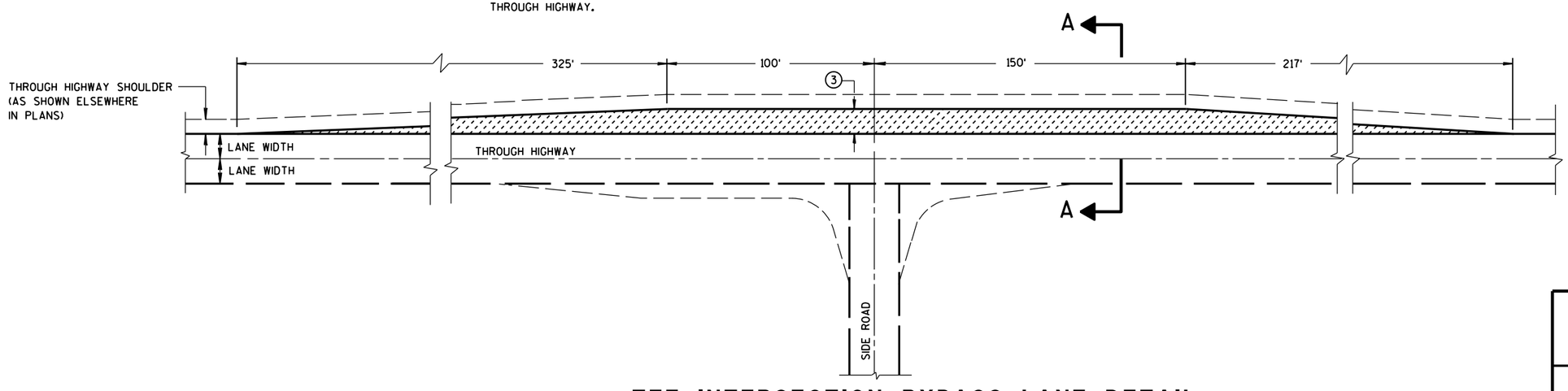
**10-FT MAY BE USED ON TYPE B2 ON RESURFACING PROJECTS IF SPECIFIED IN THE CONTRACT.

(3) BYPASS LANE PAVED SURFACE WIDTH OUTSIDE OF TRAVEL LANE
-ASPHALT = 12-FT PLUS PAVED SHOULDER WIDTH.
-PC CPNCRETE = 13-FT PLUS PAVED SHOULDER WIDTH.

(4) BYPASS LANE PAVED SHOULDER WIDTH = THE GREATER OF 1-FT OR THE PAVED SHOULDER WIDTH OF THE THROUGH HIGHWAY.



SECTION A-A
(SHOWING BYPASS LANE AND SHOULDER)



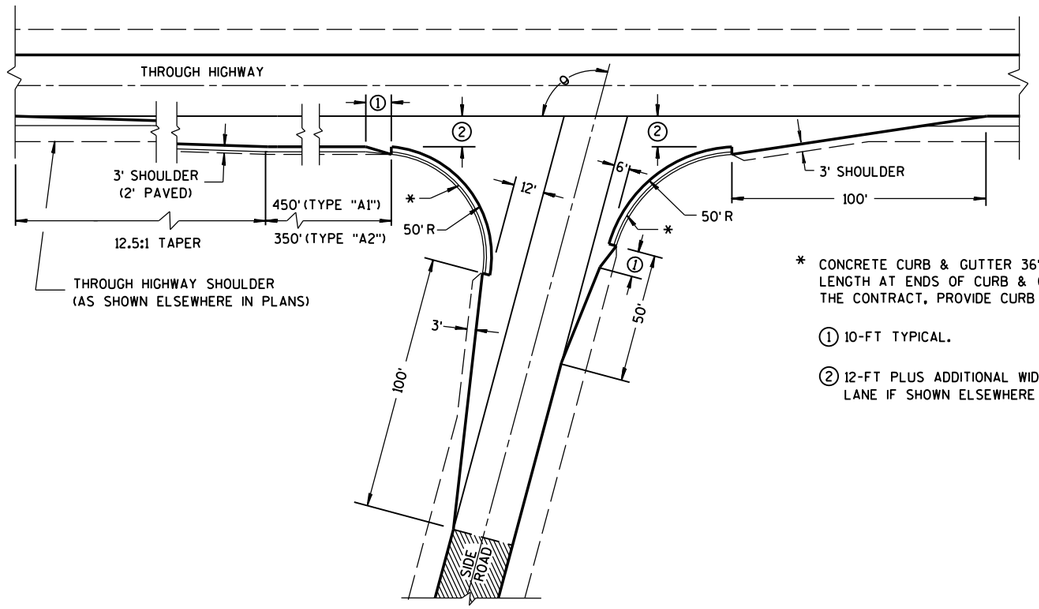
TEE INTERSECTION BYPASS LANE DETAIL

AT-GRADE SIDE ROAD INTERSECTION, TYPES "B1", "B2", "C" AND "D" AND TEE INTERSECTION BYPASS LANE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPO

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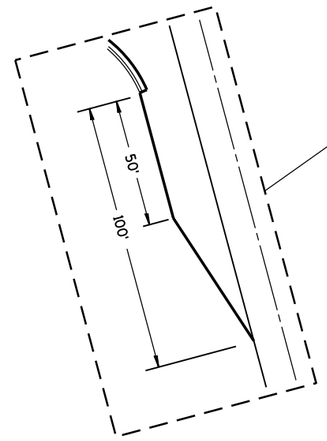
θ = MORE THAN 80°

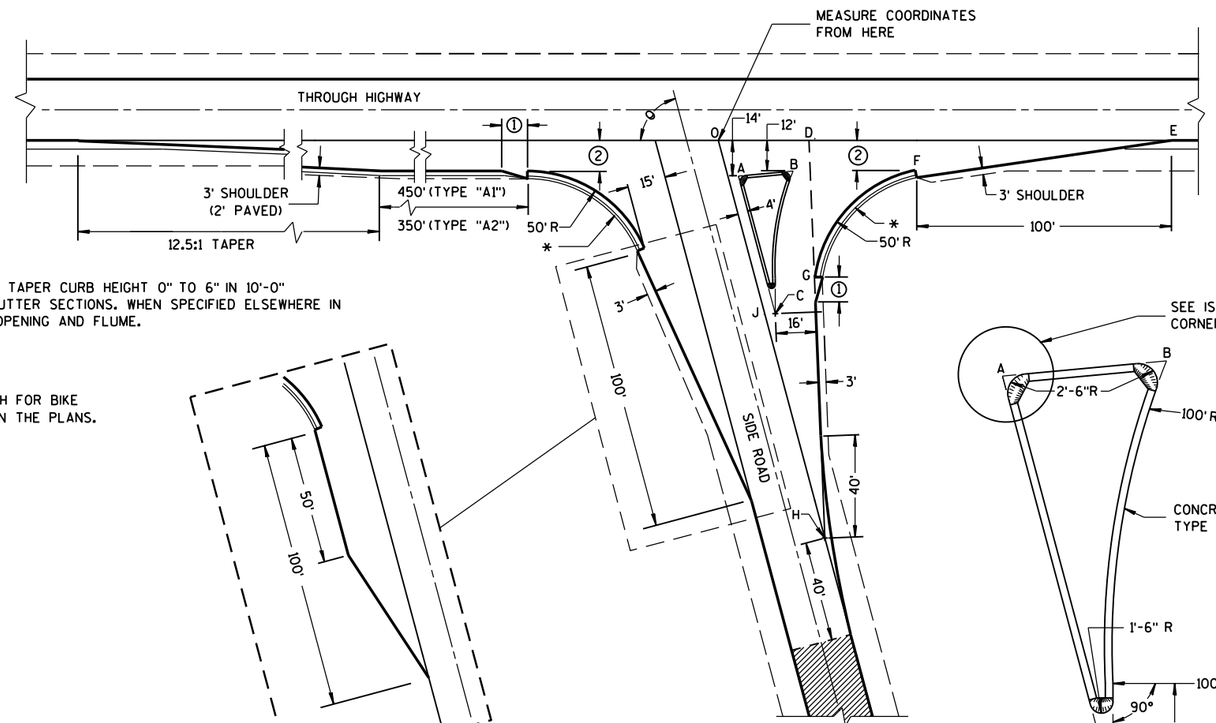
* CONCRETE CURB & GUTTER 36". TAPER CURB HEIGHT 0" TO 6" IN 10'-0" LENGTH AT ENDS OF CURB & GUTTER SECTIONS. WHEN SPECIFIED ELSEWHERE IN THE CONTRACT, PROVIDE CURB OPENING AND FLUME.

① 10-FT TYPICAL.

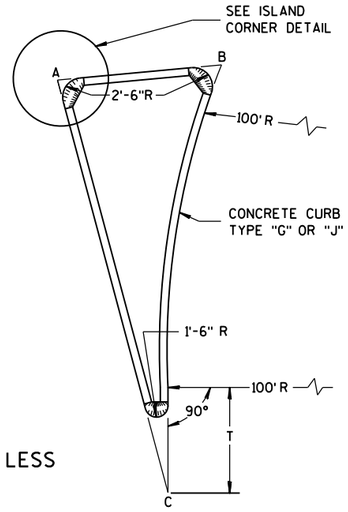
② 12-FT PLUS ADDITIONAL WIDTH FOR BIKE LANE IF SHOWN ELSEWHERE IN THE PLANS.

EXISTING PAVED SURFACE

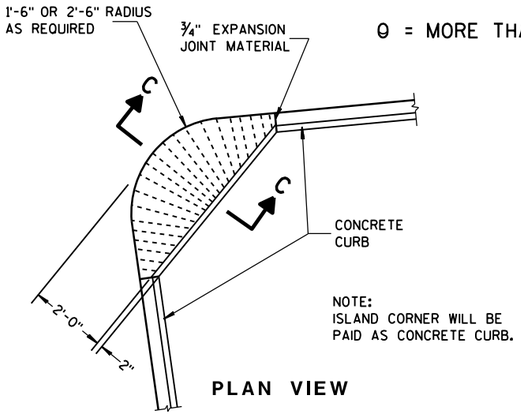




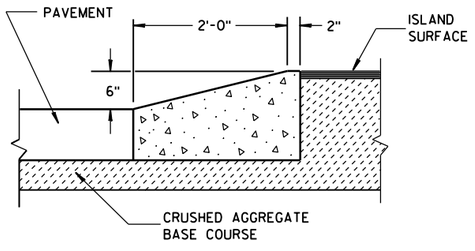
θ = ACUTE ANGLES 80° OR LESS



SIDE ROAD WIDENING AND TAPER REQUIRED WHERE
THE THROUGH HIGHWAY CARRIES TWO-WAY TRAFFIC
θ = ACUTE ANGLES 70° OR LESS



PLAN VIEW



SECTION C-C

ISLAND CORNER DETAIL

(TO BE CONSTRUCTED AT ALL ISLAND CORNERS)

TABLE OF DIMENSIONS FOR
VARIABLE SIDE ROAD INTERSECTION ANGLES
(INTERPOLATE VALUES FOR ANGLES NOT SHOWN)

ANGLE θ DEGREES	COORDINATES IN FEET (MEASURED FROM POINT "O") X / Y								LENGTH IN FEET				
	A	B	C	D	E	F	G	H	AB	AC	T	OJ	OH
60	12.7 / -14.0	44.9 / -12.0	46.4 / -72.4	41.9 / 0.0	205.0 / 0.0	104.6 / -12.0	64.0 / -75.5	85.0 / -147.1	32.3	67.4	4.9	85.9	169.9
65	10.9 / -14.0	39.0 / -12.0	37.8 / -71.6	39.4 / 0.0	196.1 / 0.0	95.7 / -12.0	54.1 / -71.5	70.5 / -151.3	28.2	63.6	8.5	80.9	166.9
70	9.4 / -14.0	33.9 / -12.0	29.8 / -70.1	37.4 / 0.0	188.3 / 0.0	87.8 / -12.0	45.6 / -67.5	56.1 / -154.2	24.6	59.7	11.5	76.1	164.1
75	7.9 / -14.0	29.3 / -12.0	22.3 / -67.9	35.7 / 0.0	181.2 / 0.0	80.7 / -12.0	38.2 / -63.4	41.8 / -155.9	21.5	55.8	13.8	71.4	161.4
80	6.5 / -14.0	25.4 / -12.0	15.6 / -65.2	34.4 / 0.0	174.8 / 0.0	74.4 / -12.0	31.8 / -59.3	27.6 / -156.5	18.9	52.0	15.6	66.9	158.9

TYPE "A1" & "A2" SIDE ROAD INTERSECTION DETAILS

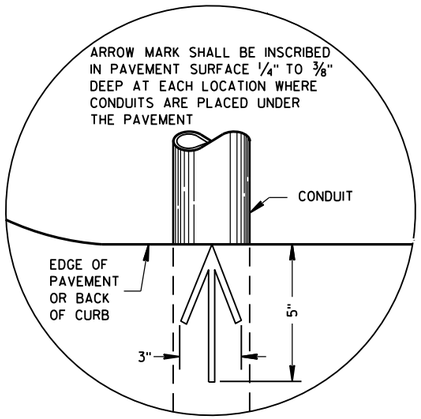
AT-GRADE SIDE ROAD
INTERSECTION, TYPE "A1" & "A2"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
12/18/12 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

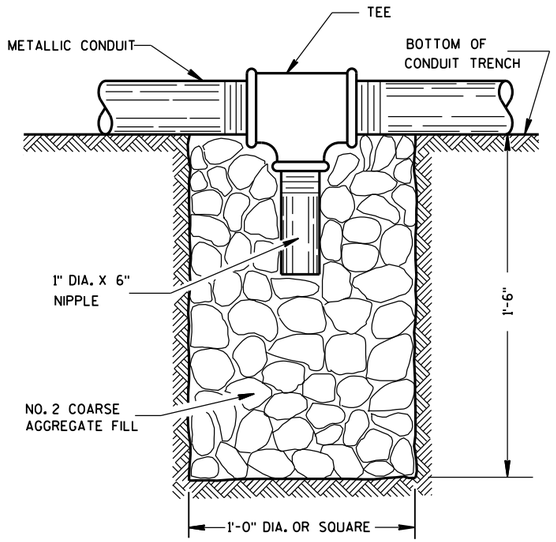
S.D.D. 9 A 1-13b

6



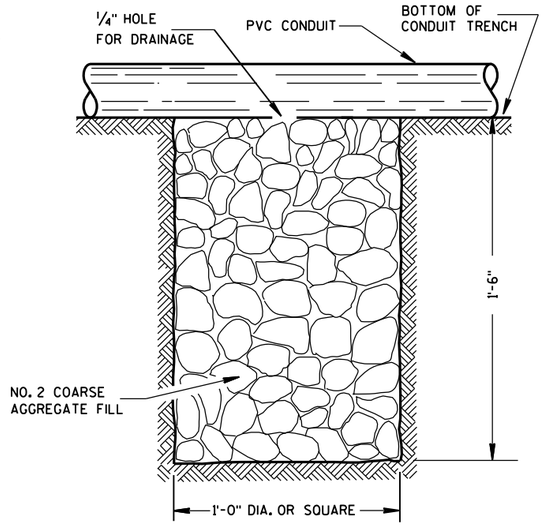
PLAN VIEW

ARROW MARK



NOTE: INSTALL AT LOCATIONS WHERE METALLIC CONDUITS CANNOT BE PITCHED TO DRAIN INTO A PULL BOX.

DRAIN SUMP FOR METALLIC CONDUIT



NOTE: INSTALL AT LOCATIONS WHERE PVC CONDUITS CANNOT BE PITCHED TO DRAIN INTO A PULL BOX.

DRAIN SUMP FOR PVC CONDUIT

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

METALLIC (STANDARD SPECIFICATION 652.2.2) OR NONMETALLIC (STANDARD SPECIFICATION 652.2.3) CONDUIT SHALL BE FURNISHED AND PLACED AS SHOWN.

DEPTH OF CONDUIT INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES MINIMUM AND 36 INCHES MAXIMUM.

DEPTH OF CONDUIT INSTALLED THAT IS NOT BELOW THE TRAVELED WAY SHALL BE 18 INCHES MINIMUM AND 36 INCHES MAXIMUM.

ANY EXCEPTION TO THE MAXIMUM DEPTH SHALL BE ONLY WITH THE WRITTEN APPROVAL OF THE ENGINEER.

THE TRENCH SHALL NOT BE BACKFILLED PRIOR TO INSPECTION OF THE CONDUIT.

ALL METALLIC CONDUIT RACEWAY ENDS SHALL BE REAMED AND THREADED.

ALL METALLIC CONDUIT IN WHICH WIRE OR CABLE IS TO BE INSTALLED SHALL BE BUSHED WITH APPROVED THREADED BUSHINGS BEFORE INSTALLATION OF THE WIRE OR CABLE.

ALL METALLIC CONDUITS IN WHICH WIRE OR CABLE IS NOT TO BE INSTALLED SHALL BE CAPPED WITH THREADED PROTECTIVE CAPS, AS APPROVED BY THE ENGINEER.

ALL NONMETALLIC CONDUIT SHALL BE CAPPED OR PLUGGED IMMEDIATELY AFTER INSTALLATION AND SHALL REMAIN CAPPED OR PLUGGED UNTIL WIRE/CABLES ARE INSTALLED.

NONMETALLIC CONDUITS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

BENDING OF PVC ELECTRICAL CONDUIT SHALL BE ACCOMPLISHED BY USING A BLANKET OR EMERSION TYPE TANK DESIGNED FOR THE PURPOSE OF BENDING PVC ELECTRICAL CONDUIT.

ALL CUT ENDS SHALL BE TRIMMED INSIDE AND OUTSIDE TO REMOVE ALL ROUGH EDGES ON NONMETALLIC CONDUIT. (SEE NEC 347.5)

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY U.L. LISTED ADAPTER FITTINGS SHALL BE USED.

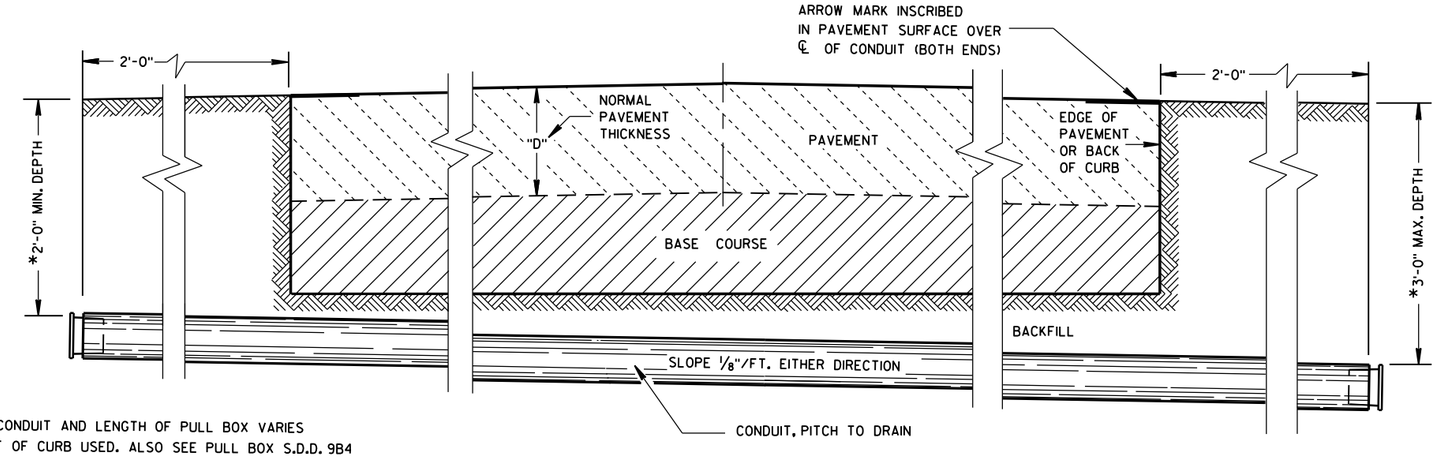
PRIOR TO CONDUIT ACCEPTANCE, CONDUIT CAPS OR PLUGS SHALL BE REMOVED, AND THE CAPS, PLUGS AND CONDUIT ENDS SHALL BE THOROUGHLY CLEANED AND THEN THE CAPS OR PLUGS REINSTALLED TO ENSURE THAT THE CAPS OR PLUGS CAN BE EASILY REMOVED IN THE FUTURE.

ALL CONDUIT BEING FURNISHED AND INSTALLED SHALL HAVE THE U.L. LABEL FIRMLY ATTACHED.

CONDUIT RUNS SHALL BE THE SAME SIZE OF CONDUIT FROM ONE END TO THE OTHER (FROM PULL BOX TO PULL BOX-OR-JUNCTION BOX TO JUNCTION BOX-OR-BASE TO BASE, ETC.).

TRACER WIRE SHALL BE INSTALLED AS STATED IN THE STANDARD SPECIFICATION, ITEM 652.3.1.1.

ALL CONDUIT RUNS SHALL BE STRAIGHT (WITHOUT BENDS) FROM PULL BOX TO PULL BOX, PULL BOX TO BASE AND BASE TO BASE AS SHOWN ON THE PLANS.



*DEPTH OF CONDUIT AND LENGTH OF PULL BOX VARIES WITH HEIGHT OF CURB USED. ALSO SEE PULL BOX S.D.D. 9B4

SIDE ELEVATION

DETAIL FOR CONDUIT UNDER PAVED HIGHWAYS

CONDUIT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2015 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

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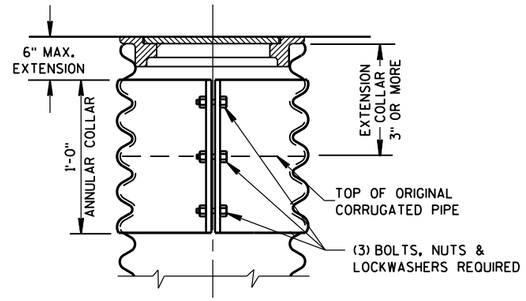
S.D.D. 9 B 2-9

TABLE OF NOMINAL DIMENSIONS AND WEIGHTS

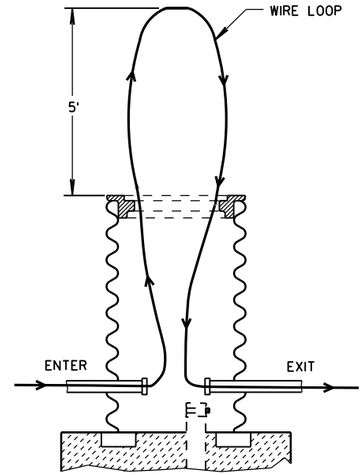
DIMENSION IN INCHES		CORRUGATED STEEL PIPE								
PIPE DIAMETER (INSIDE)	A	12	12	12	18	18	18	24	24	24
PIPE LENGTH **	B	24	30	36	24	30	36	36	42	48
WALL THICKNESS	C	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064
COVER	D	10 1/4	10 1/4	10 1/4	16 1/4	16 1/4	16 1/4	22 1/4	22 1/4	22 1/4
FRAME	E	14 1/2	14 1/2	14 1/2	20 1/2	20 1/2	20 1/2	26 1/2	26 1/2	26 1/2
FRAME	F	8 1/2	8 1/2	8 1/2	14 1/2	14 1/2	14 1/2	20 1/2	20 1/2	20 1/2
FRAME	G	11 1/2	11 1/2	11 1/2	17 1/2	17 1/2	17 1/2	23 1/2	23 1/2	23 1/2
WEIGHT IN POUNDS *										
FRAME AND COVER		60	60	60	110	110	110	155	155	155

* THE ACTUAL WEIGHT OF THE MANHOLE FRAME AND COVER MAY VARY WITHIN 5 PERCENT PLUS OR MINUS OF THE WEIGHTS SHOWN.

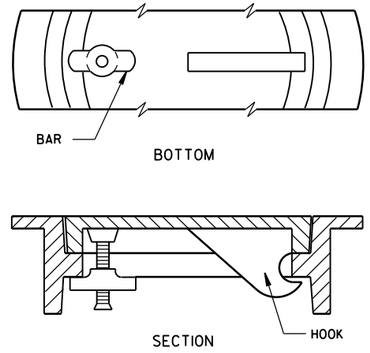
** NORMALLY USED LENGTHS. THE PROJECT ENGINEER SHALL DETERMINE IF PIPE LENGTHS, OTHER THAN THOSE SPECIFIED, SHALL BE USED, TO A MAXIMUM OF 48" (CONTINUOUS LENGTH, NON-SPLICED). THE ADDITIONAL LENGTH SHALL BE INCIDENTAL TO THE PULL BOX BID PRICE.



CORRUGATED PIPE EXTENDER

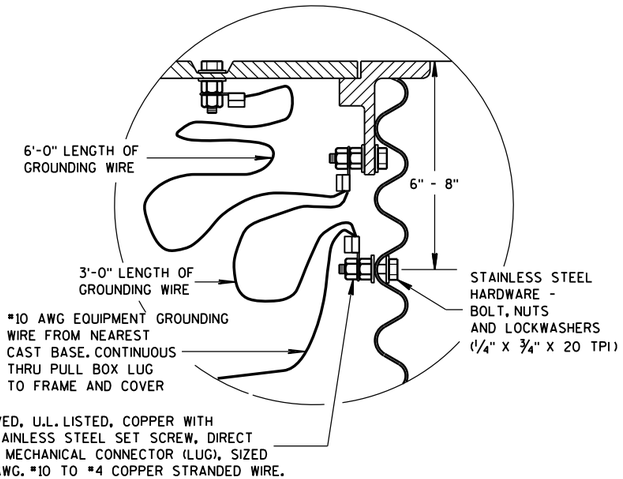


MEASUREMENT DETAIL FOR WIRE/CABLE IN THE PULL BOX

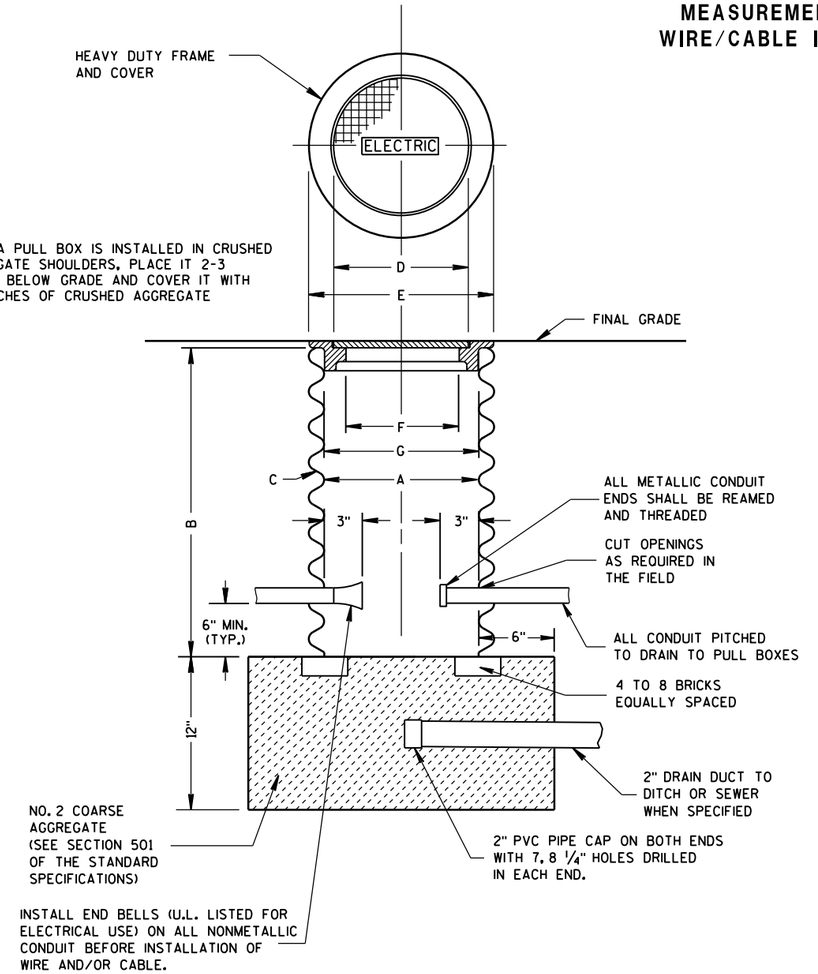


ALTERNATE COVER (LOCKING)

TIGHTENING BAR TYPE



EQUIPMENT GROUNDING LUG AND LOCATION IN STEEL PULL BOXES



PULL BOX

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

ALL FRAMES AND COVERS SHALL BE HEAVY DUTY TYPE, SUITABLE FOR VEHICULAR TRAFFIC LOADS.

PULL BOXES LOCATED IN THE ROADWAYS SHALL HAVE LOCKING COVERS.

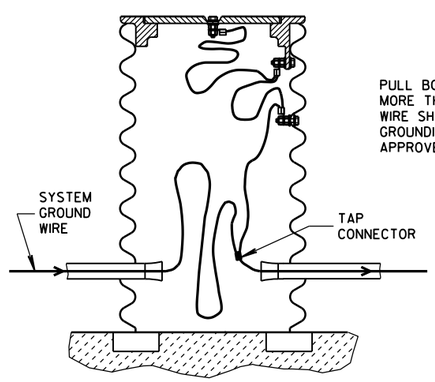
ENTRANCE HOLES INTO PULL BOXES SHALL BE CUT WITH A CIRCULAR HOLE SAW OR HYDRAULIC CONDUIT PUNCH. HOLE SIZE SHALL BE THE OUTSIDE DIAMETER OF THE CONDUIT THAT IS TO FIT IN THE OPENING PLUS NO MORE THAN 1/4".

THE CONTRACTOR SHALL NOT INSTALL WIRE IN ANY PULL BOX UNTIL ITS INSTALLATION HAS BEEN INSPECTED AND ACCEPTED BY THE ENGINEER.

GROUNDING LUGS (MECHANICAL CONNECTORS) SHALL BE U.L. LISTED AND APPROVED FOR USE WITH COPPER WIRE.

ALL METALLIC CONDUIT IN WHICH WIRE AND/OR CABLE IS TO BE INSTALLED, SHALL BE BUSHED BEFORE INSTALLATION OF THE WIRE AND/OR CABLE.

WHEN PULL BOXES ARE INSTALLED FOR FUTURE USE, DO NOT INSTALL THE EQUIPMENT GROUNDING LUG. THE EQUIPMENT GROUNDING LUG, THE EQUIPMENT GROUNDING ELECTRODE AND THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE REQUIRED AND INSTALLED UNDER A FUTURE WIRING CONTRACT.



PULL BOX TO NEAREST BASE DISTANCE MORE THAN 20 FEET. PULL BOX GROUND WIRE SHALL CONNECT AT SYSTEM GROUNDING WIRE. USE DEPARTMENT APPROVED TAP CONNECTOR.

EQUIPMENT GROUNDING LUG AND LOCATION IN STEEL PULL BOXES

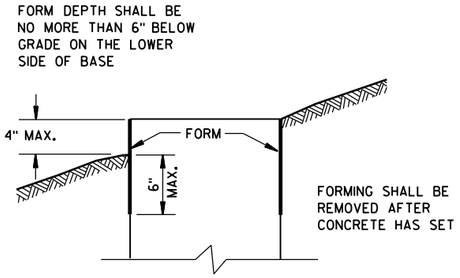
PULL BOX

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

6

S.D.D. 9 B 4-11



FORMING DETAIL

QUANTITY REQUIREMENTS	CONCRETE BASE TYPE		
	1	2	5 & 6
APPROX. CUBIC YARDS OF CONCRETE	0.40	0.57	0.40
LBS. OF HOOP BAR STEEL	NONE	23	16
LBS. OF VERTICAL BAR STEEL	NONE	60	18

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

BASES SHALL BE EXCAVATED BY USE OF A CIRCULAR AUGER.

TOP SURFACES OF CONCRETE BASES SHALL BE TROWEL FINISHED SMOOTH AND LEVEL.

CONDUIT SIZES AND LOCATIONS SHALL BE AS SHOWN ON THE PLANS.

THE FINAL OR TERMINATING CONCRETE BASE IN A CONDUIT RUN SHALL HAVE A 6" EXIT STUB INSTALLED FOR FUTURE CABLING USE. THE EXIT STUB SHALL BE SIZED AS USED THROUGHOUT THE CONDUIT RUN AS SHOWN AT THE ENTRANCE OF THE BASE.

MINIMUM BENDING RADIUS OF CONDUIT IS EQUAL TO 6 X THE DIAMETER.

CONDUIT HEIGHT ABOVE CONCRETE BASES SHALL BE 1 INCH. ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED.

ALL CONDUIT ENDS AT THE TOP OF CONCRETE BASES SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUITS IN WHICH WIRE OR CABLE IS NOT INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

GENERAL NOTES (CONTINUED)

BELL ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF CONCRETE BASES BEFORE INSTALLATION OF CABLE OR WIRE.

ENDS OF CONDUIT INSTALLED BELOW GRADE FOR FUTURE USE SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC.

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS, U.L. LISTED FOR ELECTRICAL USE, SHALL BE USED.

IF A BASE REQUIRES A DEEP FORM BECAUSE OF LOOSE DIRT OR FILL, THE FORM SHALL BE REMOVED BEFORE BACKFILLING AROUND THE BASE. BACKFILL SHALL BE TAMPED TIGHT AGAINST THE BARE CONCRETE BASE IN LAYERS OF 1 FOOT OR LESS.

A NO. 4 AWG, STRANDED COPPER EQUIPMENT GROUNDING CONDUCTOR SHALL BE EXOTHERMICALLY WELDED TO THE EQUIPMENT GROUNDING ELECTRODE (GROUND ROD) FOR TYPE 1, TYPE 2, TYPE 5, AND TYPE 6 BASES.

THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE FURNISHED AND INSTALLED TO ENTER THE BASE OF THE TYPE 2 AND TYPE 5 BASES THROUGH A 1 INCH CONDUIT INSTALLED FOR GROUNDING PURPOSES, LEAVING A 4 FOOT COIL OF WIRE ABOVE THE CONCRETE BASE. THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE NEATLY COILED AND THE COILS TIED TOGETHER.

ANCHOR RODS SHALL BE THREADED 12" IN LENGTH ON EACH END OF THE ROD. ANCHOR RODS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 654.2.1 OF THE STANDARD SPECIFICATIONS.

WASHERS AND LOCK WASHERS ARE REQUIRED ON ALL ANCHOR RODS.

WHEN ANCHOR RODS USING THE ALTERNATE "L" BEND ARE FURNISHED, THE 4" "L" BEND SHALL BE IN ADDITION TO THE SPECIFIED ANCHOR ROD BAR LENGTH. THE "L" BEND END SHALL NOT BE THREADED.

ANCHOR RODS SHALL BE INSTALLED WITH MISALIGNMENTS OF LESS THAN 1:40 FROM VERTICAL.

WELDING OF THE ANCHOR RODS TO THE CAGE IS UNACCEPTABLE. TIE WIRES SHALL BE USED.

BAR STEEL REINFORCEMENT SHALL BE COATED WITH POWDERED EPOXY RESIN IN ACCORDANCE WITH SECTION 505 OF THE STANDARD SPECIFICATIONS (LATEST EDITION).

(1) THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE AND INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES. THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE THAT IS NOT INSTALLED BELOW THE TRAVELED WAY SHALL BE 18 INCHES. THE MAXIMUM DEPTH OF ALL CONDUIT SHALL BE 36 INCHES EXCEPT WITH WRITTEN APPROVAL BY THE ENGINEER.

(2) (4) 1" DIA. X 3'-6" ANCHOR RODS.

(3) (4) 1" DIA. X 5'-0" ANCHOR RODS.

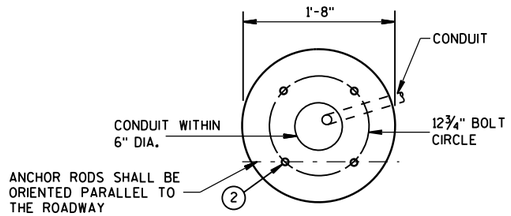
(4) (6) NO. 6 X 6'-8" BAR STEEL REINFORCEMENT.

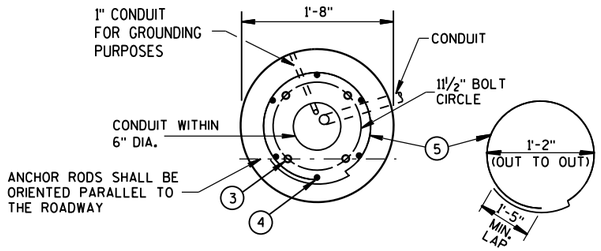
(5) (7) NO. 4 X 5'-1" BAR STEEL REINFORCEMENT @ 1'-0" C-C.

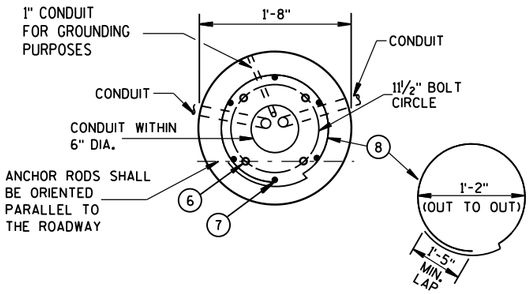
(6) (4) 1" DIA. X 3'-6" ANCHOR RODS.

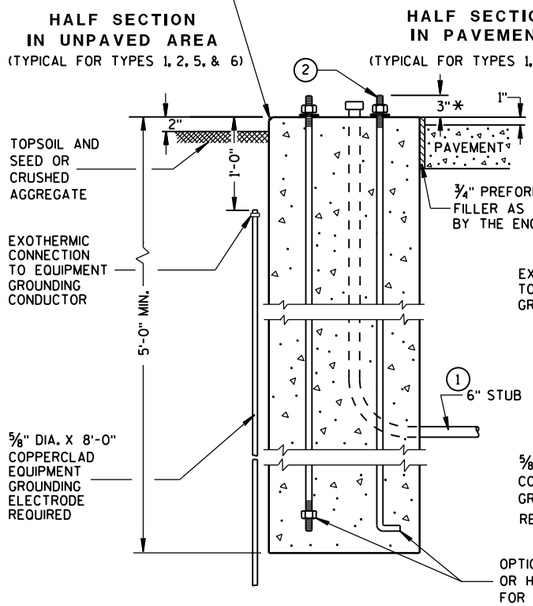
(7) (6) NO.4 X 4'-8" BAR STEEL REINFORCEMENT.

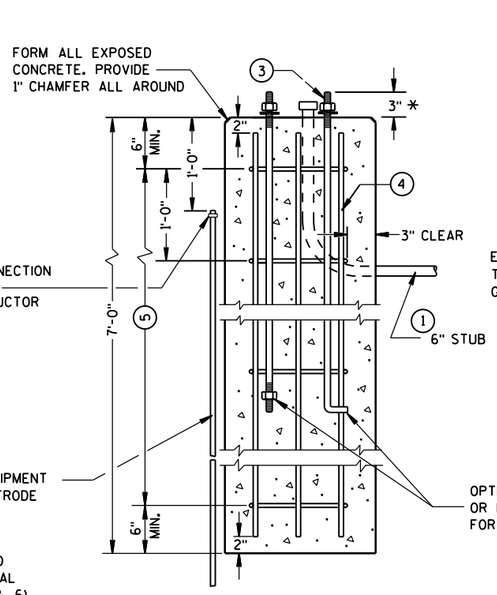
(8) (5) NO. 4 X 5'-1" BAR STEEL REINFORCEMENT @ 1'-0" C-C.



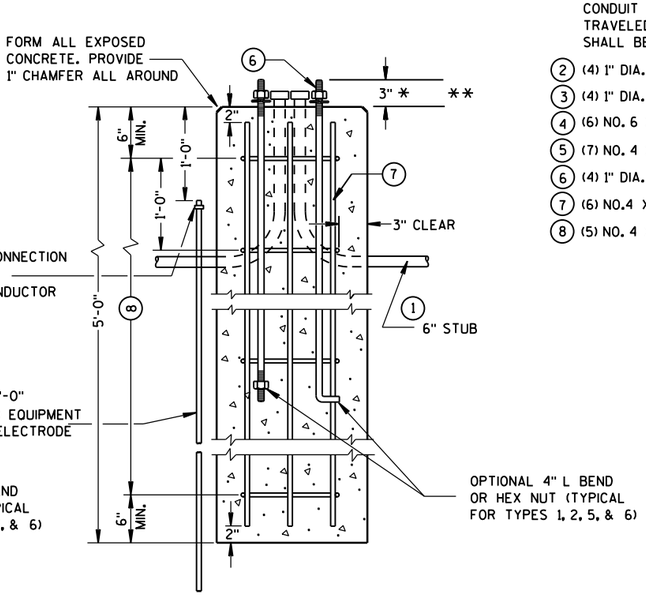








TYPE 2



TYPE 5 & 6

CONCRETE BASES

* ANY ANCHOR ROD PROJECTION SHORTER THAN 2¾" OR LONGER THAN 3¼" SHALL REQUIRE THE BASE TO BE REMOVED AND REPLACED AT THE CONTRACTORS EXPENSE.

** FOR NONBREAKAWAY INSTALLATIONS, 4½" ± ANCHOR ROD PROJECTION WITH THE USE OF LEVELING NUTS. RODENT SCREEN REQUIRED.

CONCRETE BASES, TYPES 1, 2, 5, & 6

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

6

S.D.D. 9 C 2-7

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

FOUR (4) BOLTS SHALL BE FURNISHED WITH EACH TRANSFORMER BASE. BOLTS SHALL BE 1" DIAMETER, 4" IN LENGTH, WITH WASHERS, LOCK WASHERS AND NUTS. BOLTS, NUTS AND WASHERS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 641.2.2 OF THE STANDARD SPECIFICATIONS.

LEVELING SHIMS, IF NEEDED, SHALL BE DESIGNED FOR THE PURPOSE AND USED UNDER CAST BASES WHEN PLUMBING POLES OR STANDARDS DURING INSTALLATION. THE USE OF WASHERS IN LIEU OF PROPER LEVELING SHIMS IS NOT ACCEPTABLE.

SHIM LENGTH SHALL BE LONG ENOUGH TO COMPLETELY COVER THE AREA UNDER THE LENGTH AND WIDTH OF THE BASE MOUNTING FLANGE.

DOUBLE NUTTING IS NOT ACCEPTABLE FOR LEVELING OR MOUNTING PURPOSES.

A NEMA APPROVED, U.L. LISTED, COPPER WITH BRASS OR STAINLESS STEEL SET SCREW, DIRECT BURY RATED, MECHANICAL CONNECTOR (LUG), SIZED TO ACCEPT AWG. #10 TO #4 COPPER STRANDED WIRE SHALL BE FURNISHED AND INSTALLED IN THE PEDESTAL AND TRANSFORMER BASES.

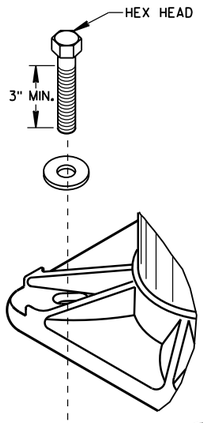
THE MECHANICAL CONNECTOR SHALL BE INSTALLED USING A 1/4" - 20 (TPI) STAINLESS STEEL HEX HEAD BOLT OF SUFFICIENT LENGTH TO FIRMLY ATTACH THE LUG TO THE BASE.

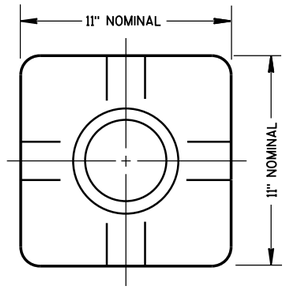
SHOULD THE MANNER OF ATTACHMENT OF THE LUG REQUIRE WASHERS, HEX NUTS, LOCK WASHER - THEY SHALL BE STAINLESS STEEL AS IS THE BOLT. THE MANNER OF ATTACHMENT SHALL NOT BLOCK ACCESSIBILITY TO WIRE PLACEMENT IN THE CONNECTOR.

PEDESTAL BASE COLLAR THREADING SHALL BE TAPERED AND IN ACCORDANCE WITH NATIONAL PIPE THREADING DIMENSIONS.

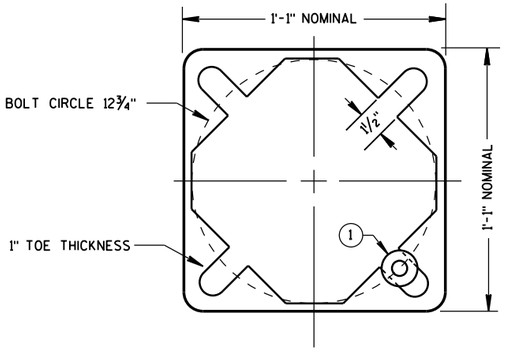
BASE COLLAR THREADING SHALL EXTEND INTO THE BASE COLLAR WITH SUFFICIENT DEPTH TO ACCEPT THE INSTALLATION OF TRAFFIC SIGNAL STANDARDS TO A DEPTH OF 1 1/2", THEN TIGHTENING TO A POINT OF BEING IMMOVABLE.

THE ACCESS DOOR SHALL BE OF THE SAME MATERIAL AS THE BASE.

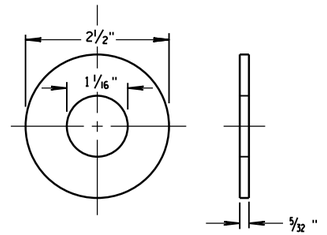




TOP VIEW
(PEDESTAL BASE)

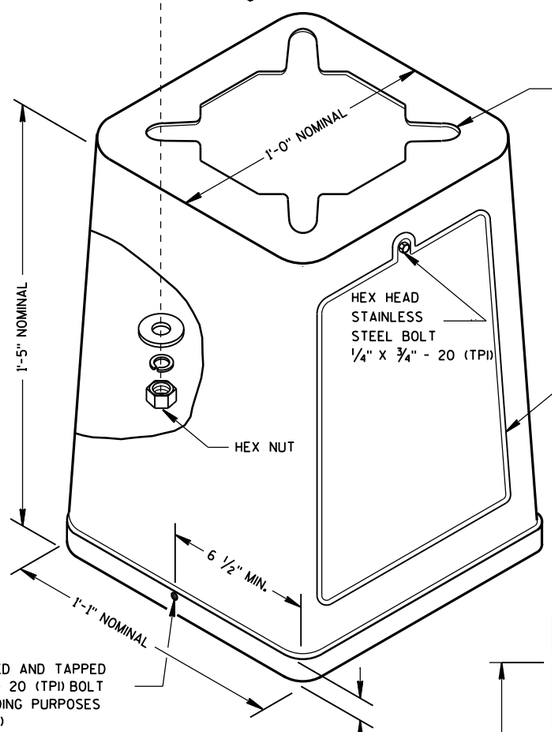


BOTTOM VIEW
(PEDESTAL BASE)

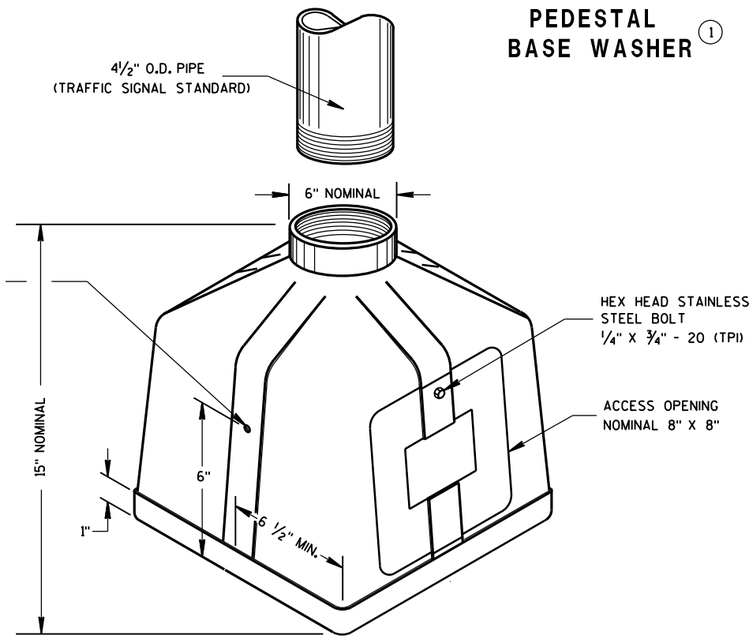


ZINC COATED STEEL WASHER
TO BE PROVIDED BY THE CONTRACTOR

PEDESTAL BASE WASHER (1)

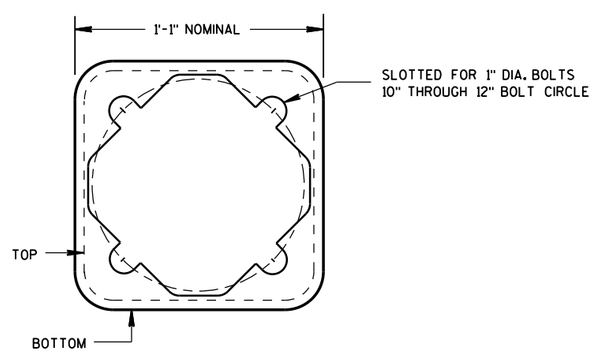


ISOMETRIC VIEW

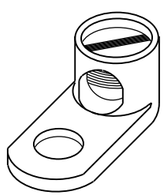


ISOMETRIC VIEW

PEDESTAL BASE



BOTTOM VIEW
(TRANSFORMER BASE)

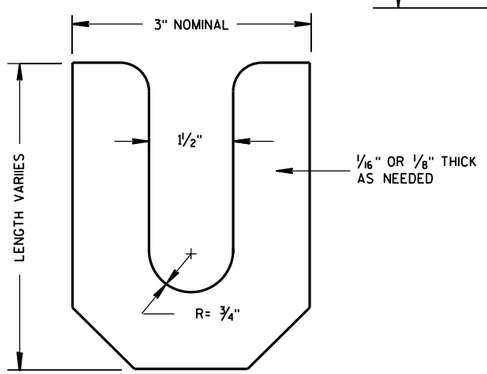


TYPICAL MECHANICAL CONNECTOR LUG

TO BE FURNISHED WITH EACH BASE

TRANSFORMER BASE

INTENDED FOR USE WITH TYPE 2, 3, 4, 5 & 6 POLES



LEVELING SHIM

TRANSFORMER/PEDESTAL BASES

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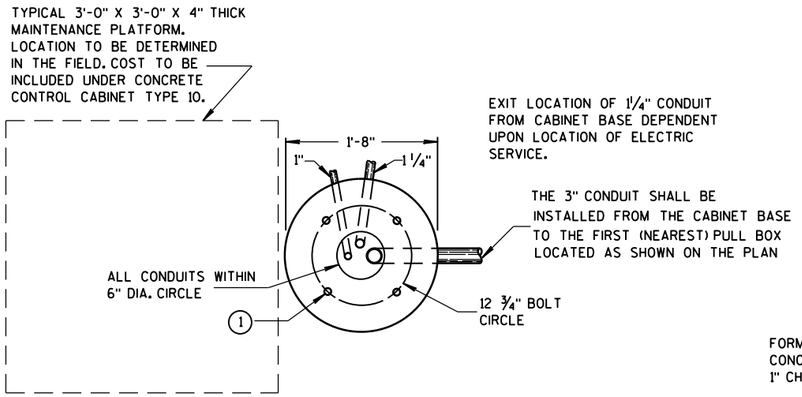
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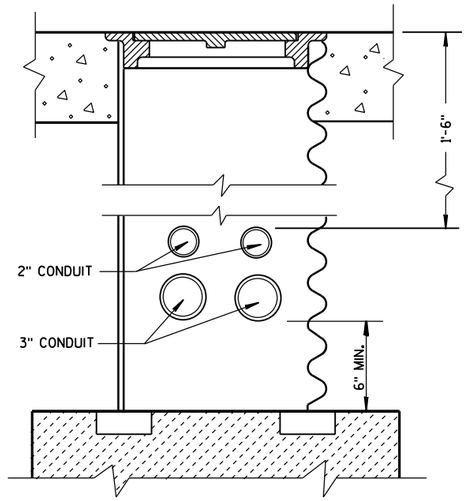
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S.D.D. 9 C 3-4

CONTROL CABINET BASE TYPE	DIMENSIONS				C.Y. CONCRETE (APPROX.)
	H	I	J	K	
TYPE 6 - 30" CABINET	34"	60"	10"	17"	.64
TYPE 7 - 38" CABINET	42"	60"	10"	21"	.93
TYPE 8 - 38" CABINET	42"	72"	12"	21"	1.29
TYPE 9 - VARIABLE	54"	72"	14"	27"	1.56
TYPE 10 - POST MOUNT	AS SHOWN				.65 *

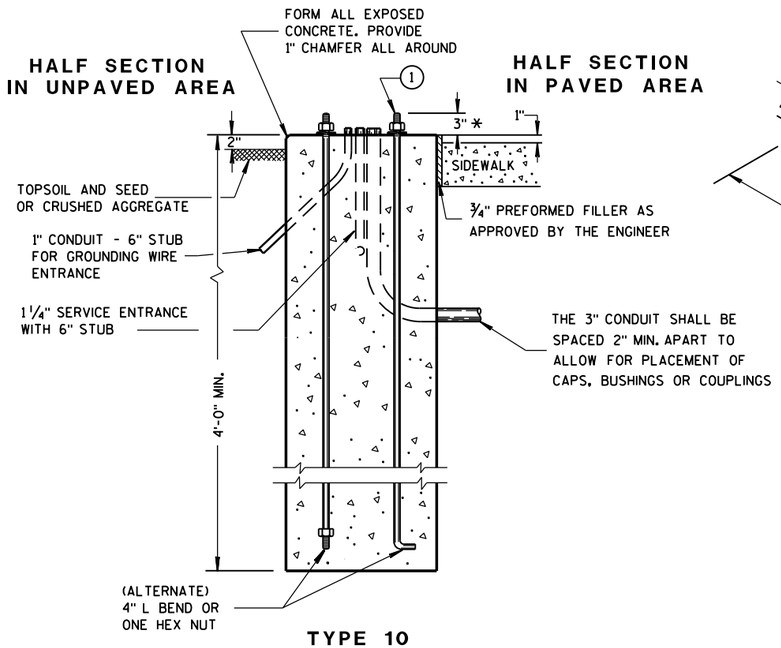
* INCLUDES MAINTENANCE PLATFORM.



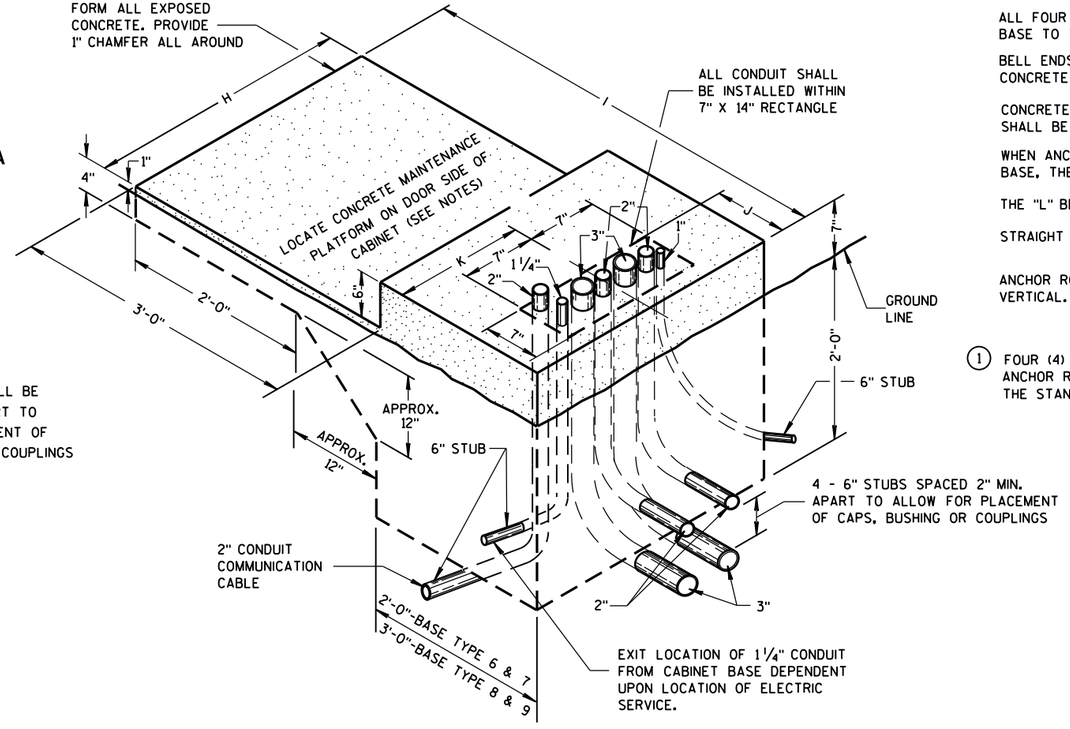


CONDUIT LOCATIONS IN 24" X 36" PULL BOX

(LEADING TO CONTROLLER CABINET BASE TYPE 6, 7, 8 AND 9)



TYPE 10



TYPE 6,7,8 AND 9
(ISOMETRIC VIEW)

* ANY ANCHOR ROD PROJECTION SHORTER THAN 2¾" OR LONGER THAN 3¼" SHALL REQUIRE THE BASE TO BE REMOVED AND REPLACED AT THE CONTRACTORS EXPENSE.

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

INSTALL FOUR ½ INCH MINIMUM DIAMETER X 4 INCH MINIMUM LENGTH APPROVED CONCRETE MASONRY ANCHORS WITH A PULLOUT STRENGTH OF 9,000 LBS. TO ANCHOR THE CABINET TO TYPE 6, 7, 8, AND 9 BASES. THE ANCHOR STUDS SHALL BE LOCATED AS DIRECTED BY THE ENGINEER TO PROPERLY ANCHOR THE CONTROL CABINET TO THE BASE.

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS, U.L. LISTED FOR ELECTRICAL USE, SHALL BE USED.

CONDUIT HEIGHT ABOVE THE CONCRETE BASE SHALL BE 1 INCH.

DEPTH OF CONDUIT INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES MINIMUM AND 36 INCHES MAXIMUM.

DEPTH OF CONDUIT INSTALLED THAT IS NOT BELOW THE TRAVELED WAY SHALL BE 18 INCHES MINIMUM AND 36 INCHES MAXIMUM.

ANY EXCEPTION TO THE MAXIMUM DEPTH SHALL BE ONLY WITH THE WRITTEN APPROVAL OF THE ENGINEER.

CONTROL CABINET BASE TOP SURFACES SHALL BE TROWEL FINISHED SMOOTH AND LEVEL.

WHEN A TYPE 10 CONTROL CABINET BASE IS USED TO POST MOUNT A CONTROL CABINET, A 36" SQUARE 4" THICK CONCRETE MAINTENANCE PLATFORM SHALL BE REQUIRED ON THE DOOR SIDE OF THE CABINET. THE TOP 1 INCH SHALL BE ABOVE FINISHED GRADE AND BE BROOM FINISHED AND LEVEL.

MAINTENANCE PLATFORMS ARE NOT REQUIRED WHEN THE SURROUNDING AREA IS PAVED.

MINIMUM BENDING RADIUS OF CONDUIT = 6 X THE DIAMETER.

ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED.

ALL CONDUIT ENDS AT THE TOP OF CONCRETE BASES SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUITS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

ALL FOUR (TWO INCH AND THREE INCH) CONDUIT SHALL BE INSTALLED FROM THE CABINET BASE TO THE FIRST (NEAREST PULL BOX LOCATED AS SHOWN ON THE PLANS.

BELL ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF THE CONCRETE BASE BEFORE INSTALLATION OF CABLE OR WIRE.

CONCRETE FORM DEPTH BELOW FINISHED GRADE SHALL BE 6" MAXIMUM. CONCRETE FORMS SHALL BE REMOVED AFTER CONCRETE HAS SET.

WHEN ANCHOR RODS USING THE ALTERNATE L BEND ARE FURNISHED FOR THE TYPE 10 BASE, THE 4" L BEND SHALL BE IN ADDITION TO THE SPECIFIED ANCHOR ROD BAR LENGTH.

THE "L" BEND SHALL NOT BE THREADED.

STRAIGHT ANCHOR RODS SHALL BE THREADED 12" IN LENGTH ON EACH END OF THE ROD.

ANCHOR RODS SHALL BE INSTALLED WITH MISALIGNMENTS OF LESS THAN 1:40 FROM VERTICAL.

(1) FOUR (4) ANCHOR RODS, 1" DIA. X 3'-6". ANCHOR RODS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 654.2.1 OF THE STANDARD SPECIFICATIONS.

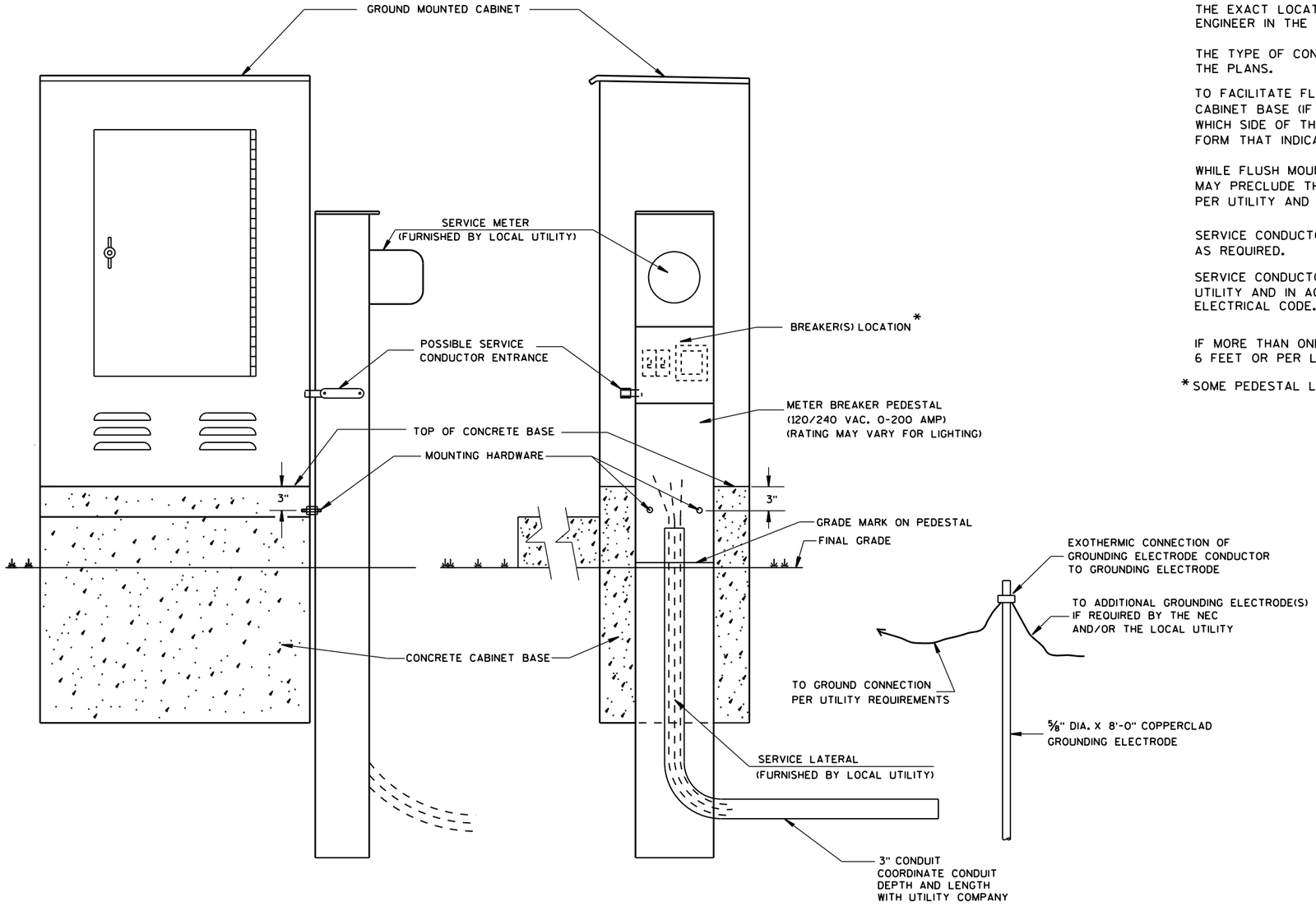
CONCRETE CONTROL CABINET BASES

CONCRETE CONTROL CABINET BASES

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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.

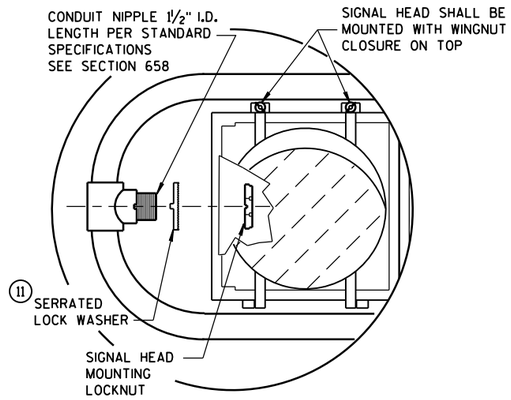
* SOME PEDESTAL LIGHTING PLANS SHOW MAIN LUGS ONLY.

CABINET SERVICE INSTALLATION (METER BREAKER PEDESTAL)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

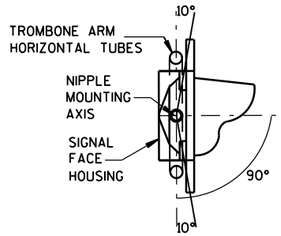
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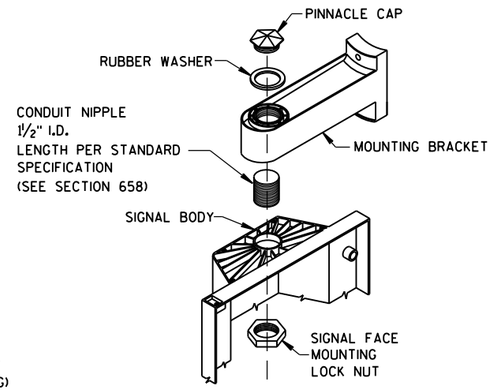
HORIZONTAL SIGNAL HEAD MOUNTING DETAIL *

* SIGNAL HEAD ATTACHMENT ALSO APPLYS TO MOUNTING AT CROSS BAR



SECTION A-A

(10 DEGREES TILT REQUIREMENT OF FACE(S) IN THE TROMBONE MOUNTING)



SIGNAL FACE MOUNTING DETAIL

(BANDED)

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

POLES SHALL BE EITHER ALUMINUM OR GALVANIZED STEEL AS CALLED FOR IN THE CONTRACT.

SECTION 657, POLES, OF THE STANDARD SPECIFICATIONS SHALL APPLY TO THIS DRAWING.

A PULL WIRE/ROPE IN ACCORDANCE WITH STANDARD SPECIFICATION 652 SHALL BE INSTALLED IN EACH TROMBONE ARM RACEWAY DURING THE MANUFACTURING PROCESS.

TYPE 2 ALUMINUM POLES SHALL BE CONSTRUCTED OF 6063-T6 ALUMINUM ALLOY. SLEEVING INSIDE THE POLE IS NOT ACCEPTABLE.

WHEN TRANSFORMER BASES ARE USED, WIRE CONNECTIONS SHALL BE MADE IN THE TRANSFORMER BASE.

(1) 4" X 6" REINFORCED HANDHOLE & COVER ASSEMBLY WITH 2 (TWO) ¼" X ¾" - 20 TPI HEX HEAD STAINLESS STEEL BOLTS.

(2) SIGNAL FACE MOUNTING BRACKETS. MOUNT WITH CAP SCREWS AND BANDING. (SEE STANDARD SPECIFICATIONS - SEC. 658)

(3) GROMMETS, 1" CHASE NIPPLES OR 1" CLOSE CONDUIT NIPPLES WITH BUSHINGS SHALL BE PROVIDED FOR 1⅜" HOLE IN POLE SHAFT FOR WIRING.

(4) SECURELY MOUNT DULL BLACK POLYCARBONATE BACKPLATES, PROJECTING 5" BEYOND ALL SIDES OF THE SIGNAL FACE HOUSING, PER MANUFACTURER'S RECOMMENDATIONS.

(5) POLE MOUNTED SIGNAL FACES SHALL REQUIRE 1 OR MORE MOUNTING SPACERS UNDER THE TOP MOUNTING BRACKET(S) AS REQUIRED, TO PLUMB THE SIGNAL FACES.

(6) CAST ALUMINUM TRANSFORMER BASE, WHEN REQUIRED.

(7) MOUNTING BRACKET NIPPLES FOR THE SIGNAL FACE(S) SHALL BE 2 INCHES IN LENGTH AND 1½ INCHES IN DIAMETER. (SEE STANDARD SPECIFICATION - SECTION 658).

(8) VERTICAL STRUT (ADJUSTABLE). ONE (1) SET SCREW (¼" X ¾" LONG - 20 TPI, STAINLESS STEEL, HEX HEAD) INTO EACH ARM MEMBER IF STRUT IS THE SLIDING TYPE.

(9) FURNISH AND INSTALL VENTILATED, CAST, METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) ¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.

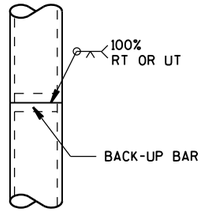
(10) SHIMMING, IF NEEDED, SHALL BE LOCATED BETWEEN THE CONCRETE FOUNDATION AND THE TRANSFORMER BASE.

(11) USE SERRATED LOCK WASHERS WITH NOTCHES BETWEEN END TEE AND SIGNAL HEAD.

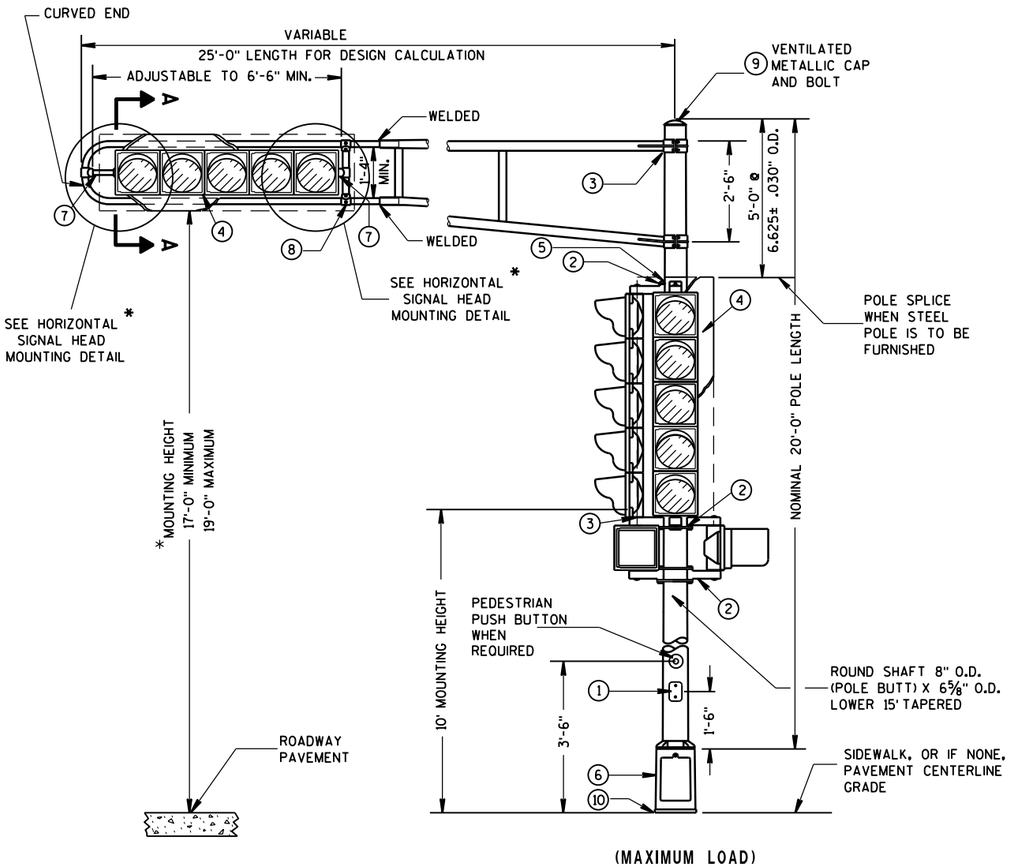
*MOUNTING HEIGHT LIMITATION DIMENSIONS OF THE TROMBONE MAST ARM WILL BE DEPENDENT UPON THE USE/NON-USE OF A TRANSFORMER BASE.

FOR MANUFACTURERS USE ONLY

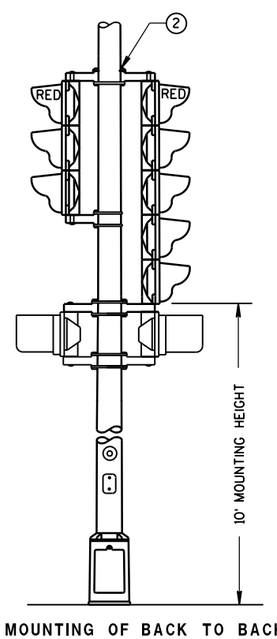
WELD TO BE 100% R.T. OR U.T. TESTED AS PER THE REQUIREMENTS OF AWS D 1.5-88. RECORDS OF COMPLIANCE OF SUCH TESTING SHALL BE FURNISHED TO THE OFFICE OF DESIGN/BRIDGE FOR VERIFICATION AND APPROVAL.



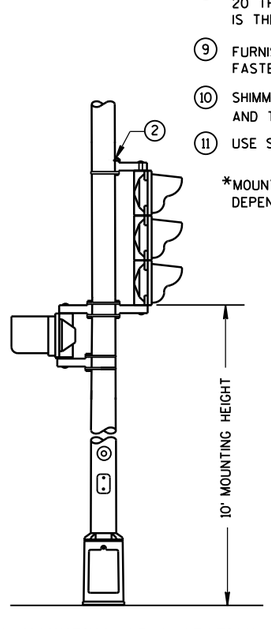
POLE SPLICE DETAIL



(MAXIMUM LOAD)



TYPICAL MOUNTING OF BACK TO BACK 3 AND 5 SECTION SIGNAL FACES



TYPICAL MOUNTING OF 3 SECTION SIGNAL FACE

TYPE 2 POLE MOUNTING CONFIGURATION

POLE MOUNTINGS FOR TRAFFIC SIGNALS TYPE 2

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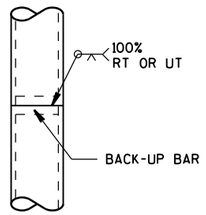
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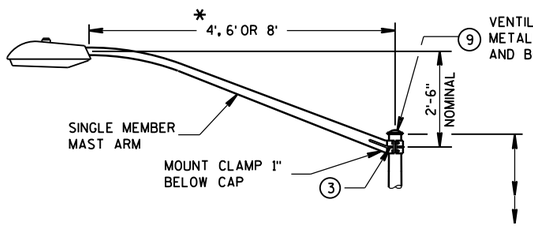
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FOR MANUFACTURERS USE ONLY

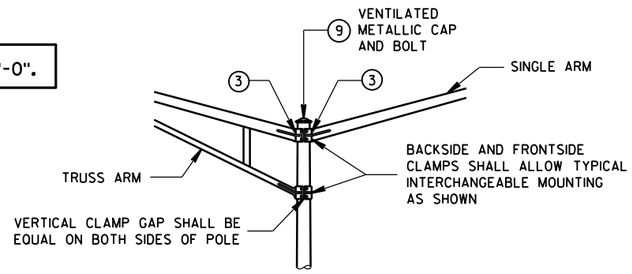
WELD TO BE 100% R.T. OR U.T. TESTED AS PER THE REQUIREMENTS OF AWS D 1.5-88. RECORDS OF COMPLIANCE OF SUCH TESTING SHALL BE FURNISHED TO THE OFFICE OF DESIGN/BRIDGE FOR VERIFICATION AND APPROVAL.

*RISE FOR 4' ARM SHALL BE 2'-0".





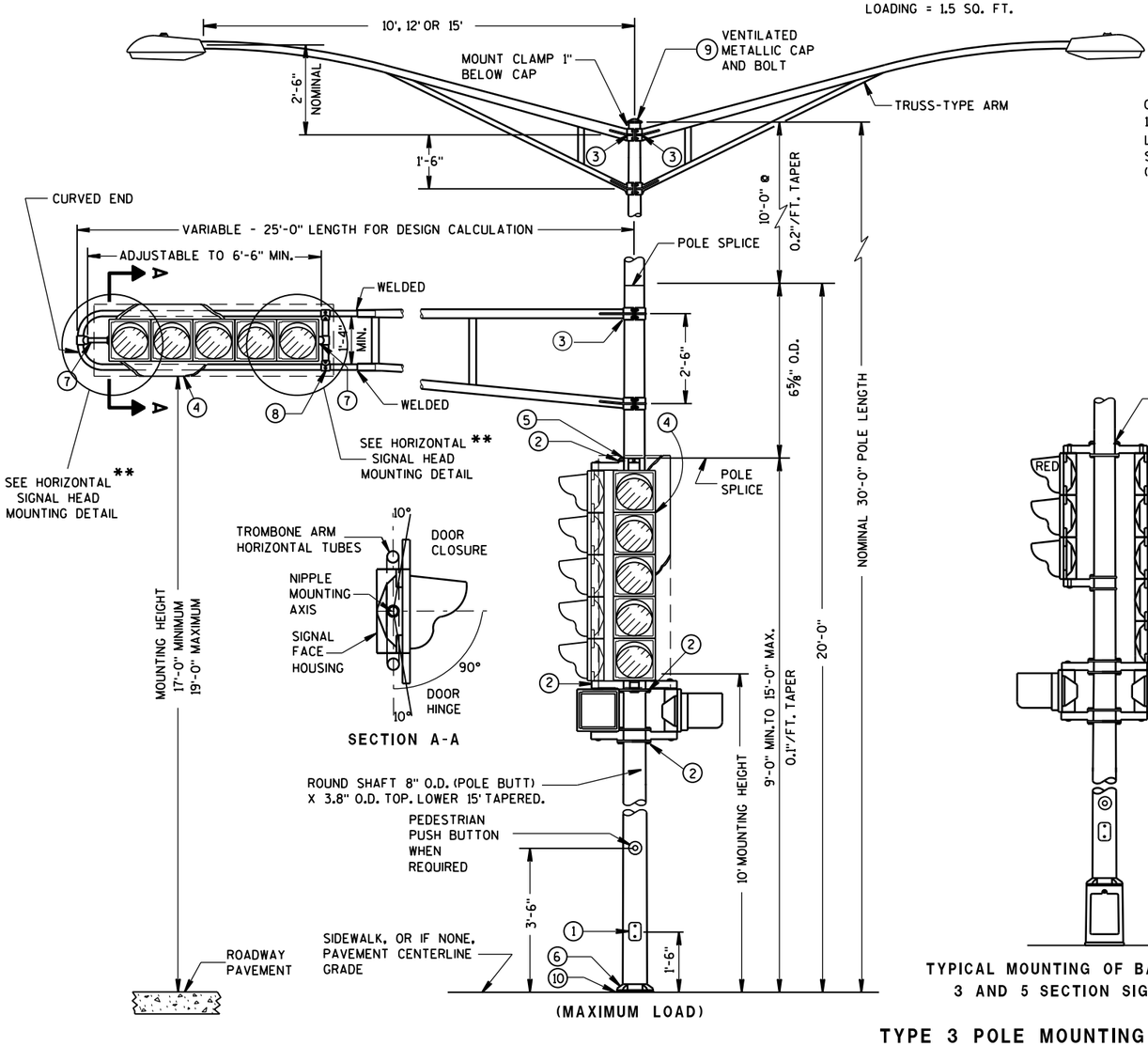
POLE SPLICE DETAIL

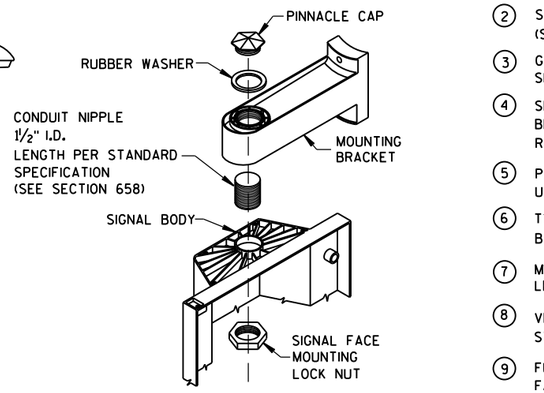


INTERCHANGEABLE MOUNTING DETAIL

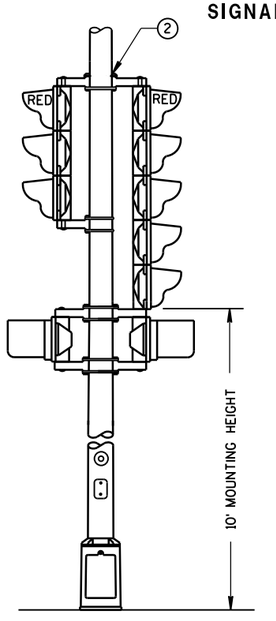
LUMINAIRE

WT. - 50 LBS.
EFFECTIVE PROJECTED
AREA FOR WIND
LOADING = 1.5 SQ. FT.

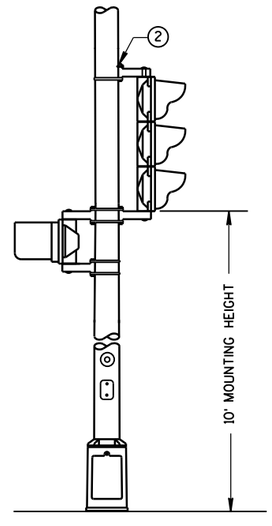




SIGNAL FACE MOUNTING DETAIL
(BANDED)



TYPICAL MOUNTING OF BACK TO BACK
3 AND 5 SECTION SIGNAL FACES



TYPICAL MOUNTING OF 3 SECTION
SIGNAL FACE

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

ALL TYPE 3 POLE MOUNTINGS SHALL BE DESIGNED TO INCLUDE TWIN 15' ARMS WITH LUMINAIRES.

POLES SHALL BE GALVANIZED STEEL.

SECTION 657, POLES, OF THE STANDARD SPECIFICATIONS SHALL APPLY TO THIS DRAWING.

A PULL WIRE/ROPE IN ACCORDANCE WITH STANDARD SPECIFICATION 652, SHALL BE INSTALLED IN EACH TROMBONE ARM RACEWAY DURING THE MANUFACTURING PROCESS.

THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 2⅜ INCHES IN OUTSIDE DIAMETER. THE STRAIGHT PORTION OF THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 12 INCHES IN LENGTH.

WHEN TRANSFORMER BASES ARE USED, WIRE CONNECTIONS SHALL BE MADE IN THE TRANSFORMER BASE.

(1) 4" X 6" REINFORCED HANDHOLE & COVER ASSEMBLY WITH 2 (TWO) ¼" X ¾" - 20 TPI HEX HEAD STAINLESS STEEL BOLTS.

(2) SIGNAL FACE MOUNTING BRACKETS, MOUNT WITH CAP SCREWS AND BANDING. (SEE STANDARD SPECIFICATIONS - SEC. 658)

(3) GROMMETS, 1" CHASE NIPPLES OR 1" CLOSE CONDUIT NIPPLES WITH BUSHINGS SHALL BE PROVIDED FOR 1⅜" HOLE IN POLE SHAFT FOR WIRING.

(4) SECURELY MOUNT DULL BLACK POLYCARBONATE BACKPLATES, PROJECTING 5" BEYOND ALL SIDES OF THE SIGNAL FACE HOUSING, PER MANUFACTURER'S RECOMMENDATIONS.

(5) POLE MOUNTED SIGNAL FACES SHALL REQUIRE 1 OR MORE MOUNTING SPACERS UNDER THE TOP MOUNTING BRACKET(S) AS REQUIRED, TO PLUMB THE SIGNAL FACE.

(6) TYPE 3 POLE CONFIGURATIONS SHALL BE MOUNTED DIRECTLY TO THEIR CONCRETE BASES.

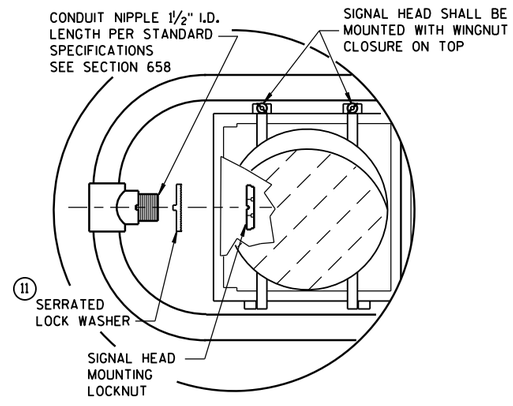
(7) MOUNTING BRACKET NIPPLES FOR THE SIGNAL FACE(S) SHALL BE 2 INCHES IN LENGTH AND 1½ INCHES IN DIAMETER. (SEE STANDARD SPECIFICATION - SECTION 658)

(8) VERTICAL STRUT (ADJUSTABLE). ONE (1) SET SCREW (1/4 " X ¾" -20 TPI, STAINLESS STEEL, HEX HEAD) INTO EACH ARM MEMBER IF STRUT IS THE SLIDING TYPE.

(9) FURNISH AND INSTALL VENTILATED, CAST, METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) ¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.

(10) SHIMMING, IF NEEDED, SHALL BE LOCATED BETWEEN THE CONCRETE FOUNDATION AND POLE.

(11) USE SERRATED LOCK WASHERS WITH NOTCHES BETWEEN END TEE AND SIGNAL HEAD.



HORIZONTAL SIGNAL HEAD MOUNTING DETAIL**

** SIGNAL HEAD ATTACHMENT ALSO APPLYS TO MOUNTING AT CROSS BAR

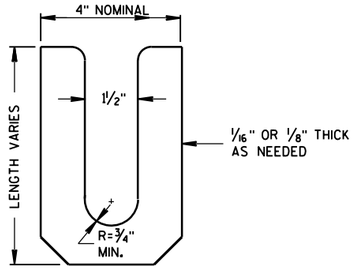
TYPE 3 POLE MOUNTING CONFIGURATION

POLE MOUNTINGS FOR TRAFFIC SIGNALS AND LIGHTING UNITS, TYPE 3 (HEAVY DUTY)

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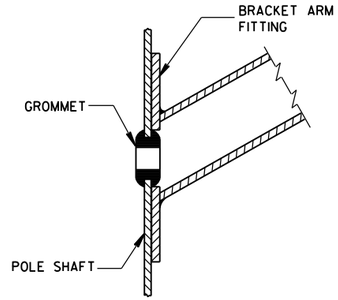
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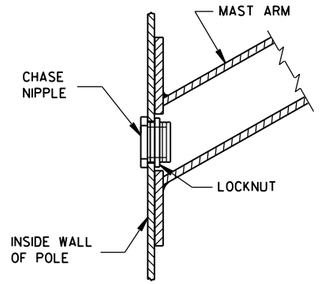


LEVELING SHIM (13)

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.

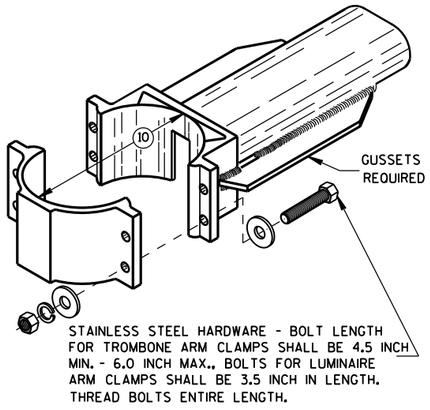
(10) 4.5" I.D. FOR LUMINAIRE MAST ARM CLAMP.
6.625" I.D. FOR TROMBONE MAST ARM CLAMP.

(11) INDIVIDUAL BASE PLATE ANCHOR ROD COVERS. (4 REQUIRED)

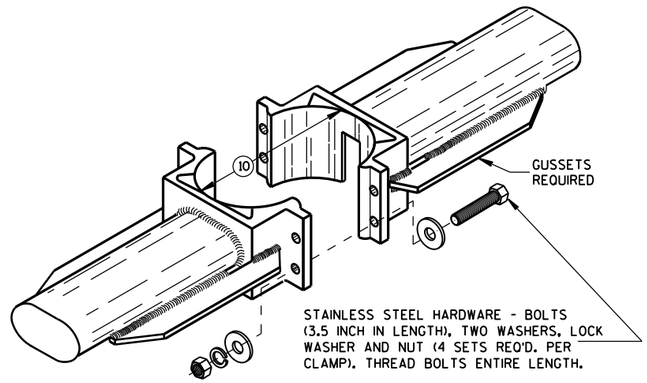
(12) BASE PLATE SLOTTED TO ACCEPT 11" THROUGH 12" BOLT CIRCLE USING 1" DIAMETER ANCHOR RODS.

(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.

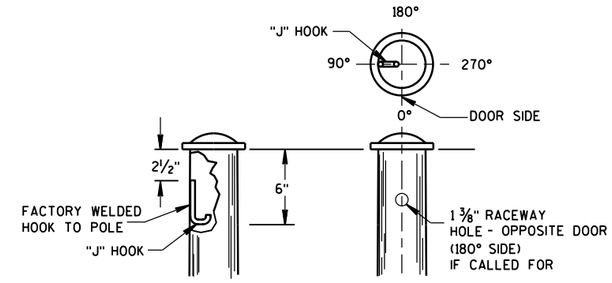
SHIMS SHALL BE LONG ENOUGH AND WIDE ENOUGH TO COMPLETELY COVER THE AREA UNDER THE LENGTH AND WIDTH OF THE BASE MOUNTING FLANGE.



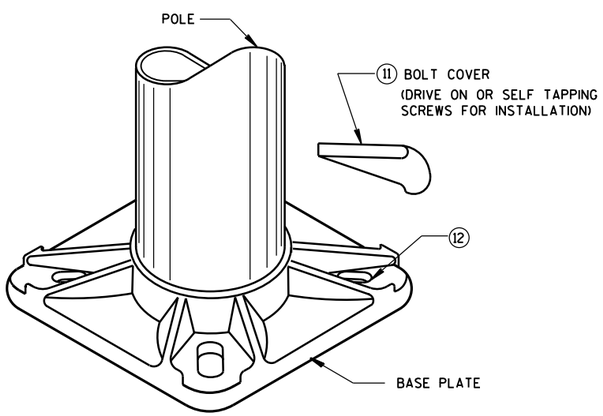
TYPICAL TROMBONE MAST ARM AND SINGLE LUMINAIRE MAST ARM MOUNTING CLAMP



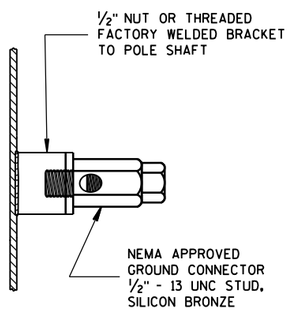
TYPICAL LUMINAIRE MAST ARM (DOUBLE) MOUNTING BRACKETS

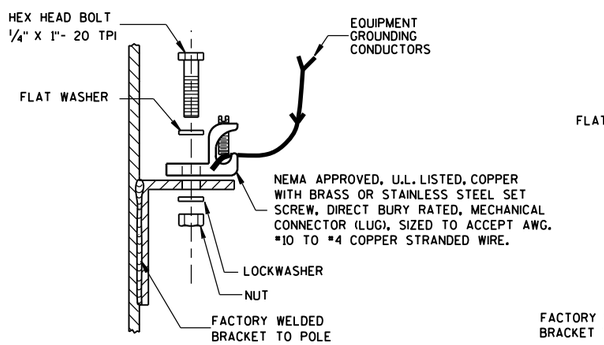


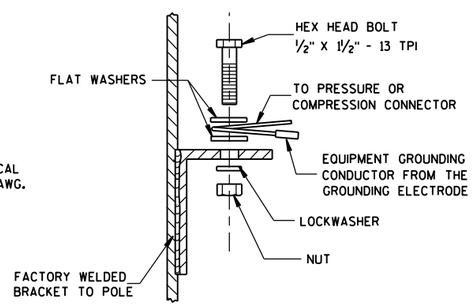
TYPICAL "J" HOOK LOCATION



BASE PLATE







TYPICAL GROUNDING CONNECTIONS

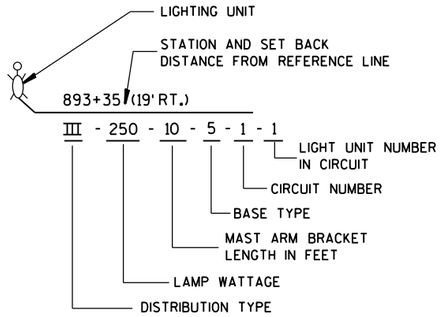
NUT, BOLT AND WASHERS SHALL BE STAINLESS STEEL

HARDWARE DETAILS FOR POLE MOUNTINGS

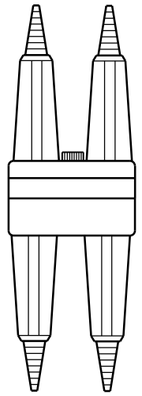
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DEPARTMENT OF TRANSPORTATION

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Feb. 2015 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
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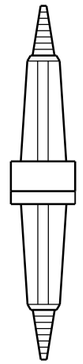
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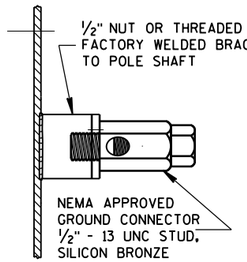
LIGHTING UNIT CODE
(TYPICAL)

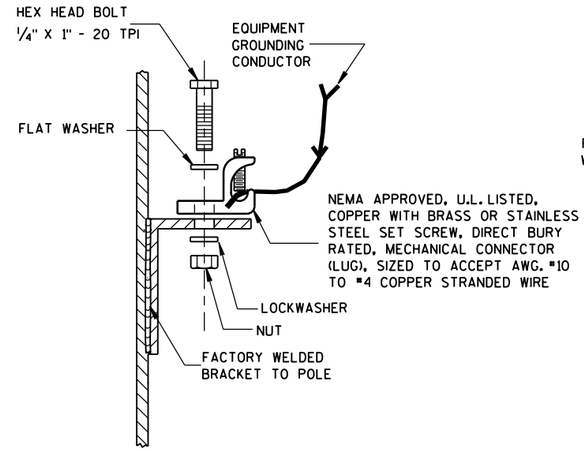


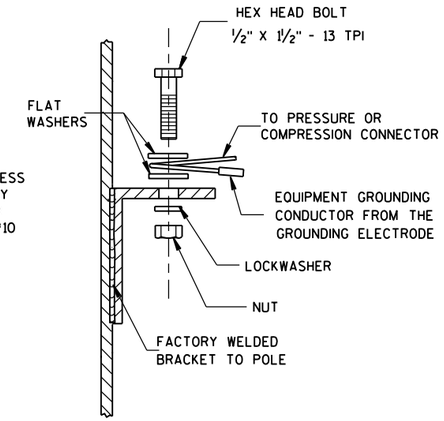
DETAIL "A"
BREAKAWY DOUBLE POLE WITH WATERPROOF INSULATING BOOT



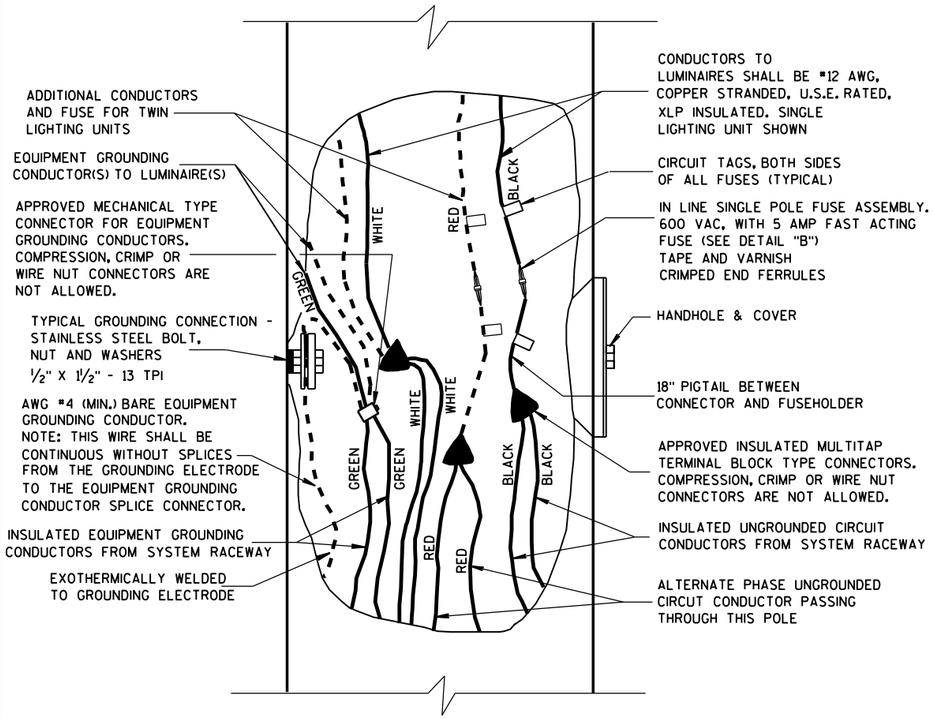
DETAIL "B"
BREAKAWY SINGLE POLE WITH WATERPROOF INSULATING BOOT



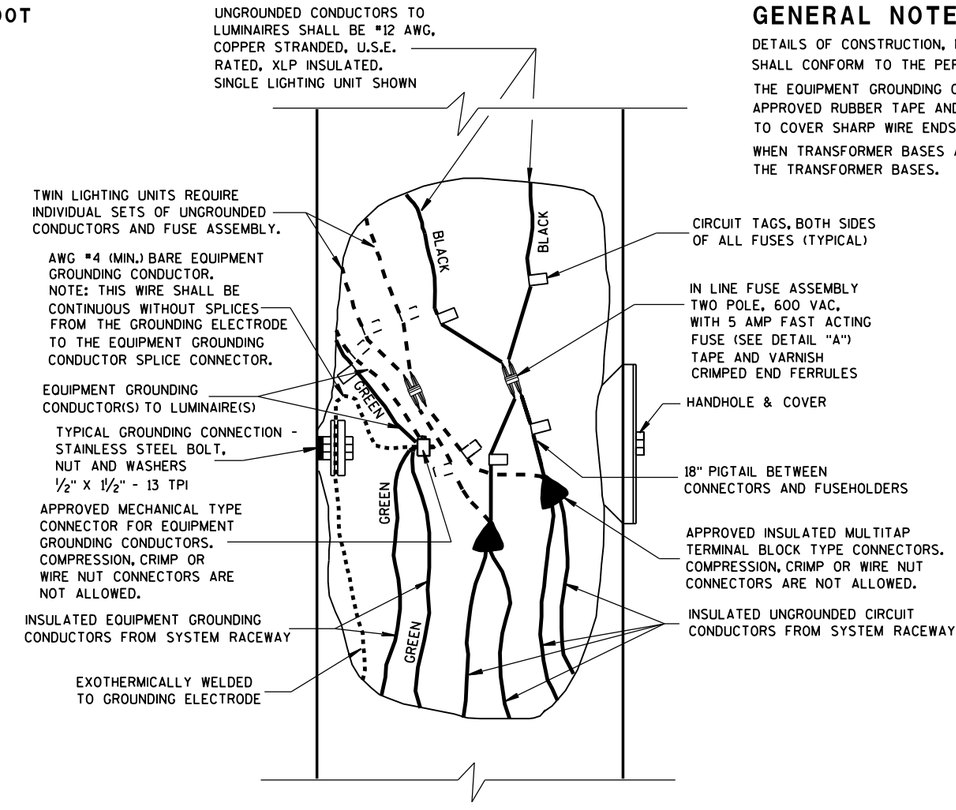




TYPICAL GROUNDING CONNECTIONS
NUT, BOLT, WASHERS AND LOCKWASHERS SHALL BE STAINLESS STEEL



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.

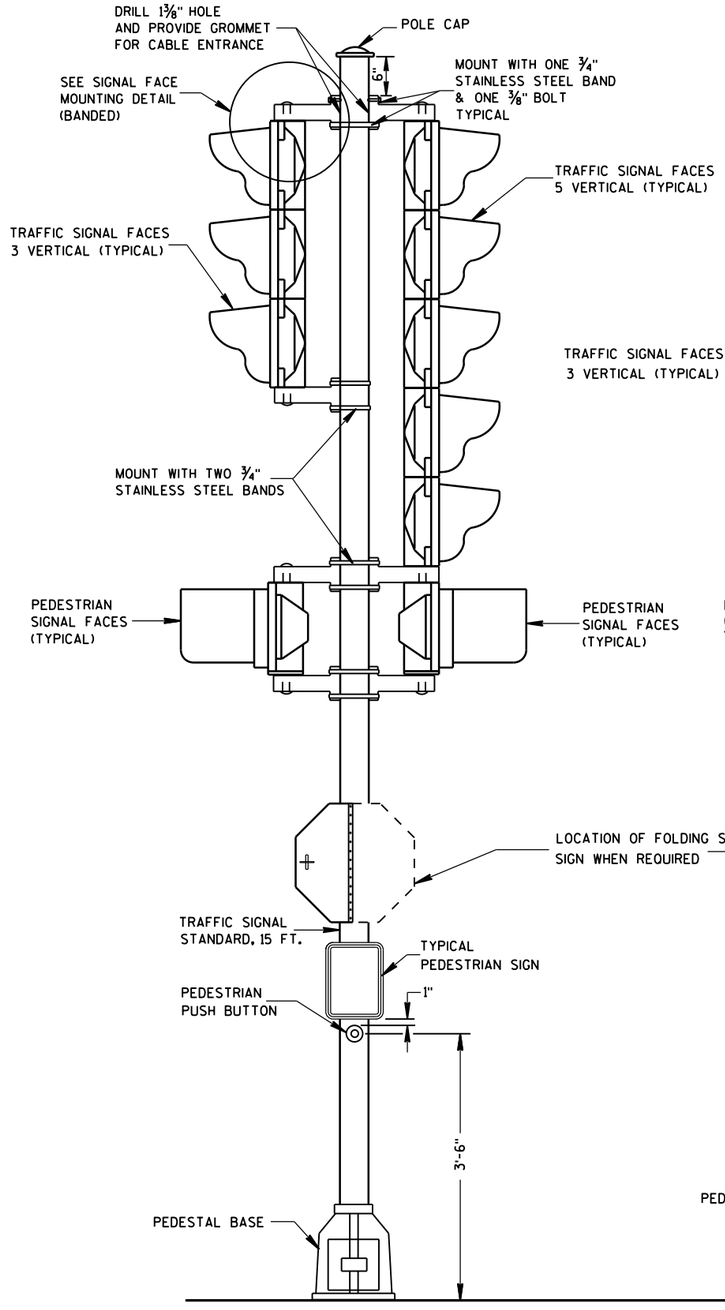
WHEN TRANSFORMER BASES ARE USED, ALL WIRING CONNECTIONS SHALL OCCUR WITHIN THE TRANSFORMER BASES.

NON-FREEWAY LIGHTING UNIT POLE WIRING

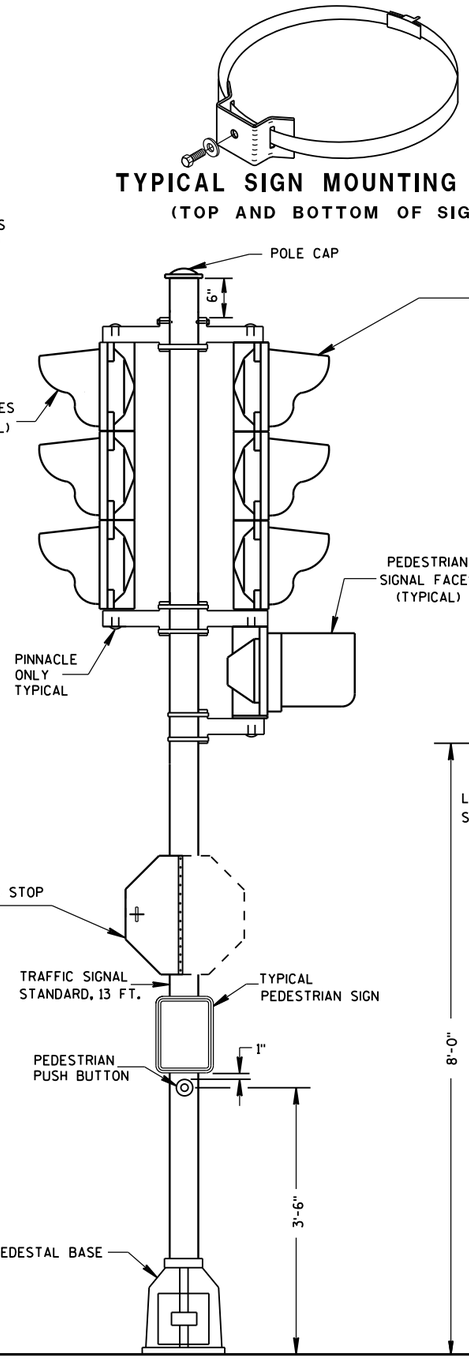
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Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

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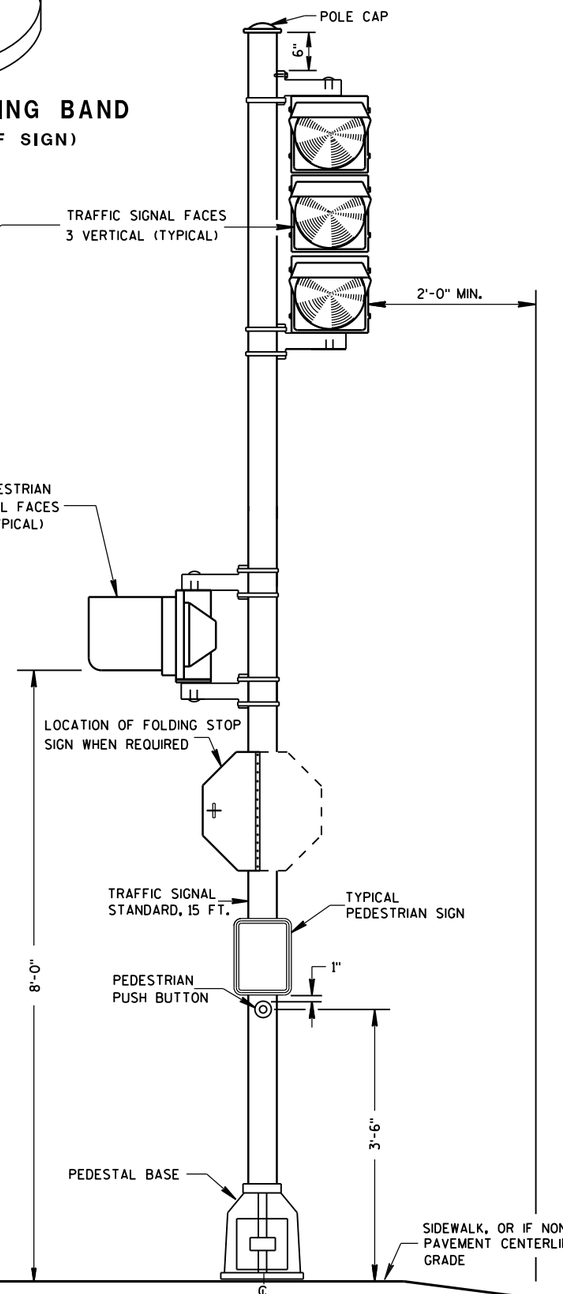


TRAFFIC SIGNAL STANDARD-15 FT.



TRAFFIC SIGNAL STANDARD-13 FT.

TYPICAL SIGN MOUNTING BAND
(TOP AND BOTTOM OF SIGN)



TRAFFIC SIGNAL STANDARD-15 FT.
3M MOUNTING (TYPICAL)

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

SEE THE SIGNAL PLAN FOR REQUIRED SIGNAL FACE SIZES.

ALL PEDESTAL BASES SHALL BE MOUNTED ON CONCRETE BASE - TYPE 1.

FOR APPROVED MOUNTING HARDWARE, SEE THE CONTRACT SPECIAL PROVISIONS.

POLYCARBONATE MOUNTING BRACKETS SHALL BE USED.

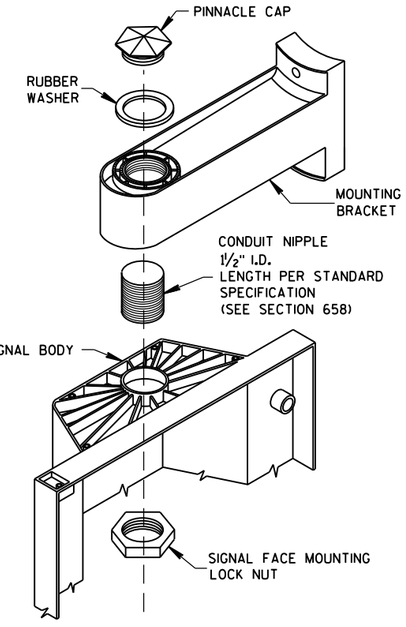
LENGTH AND LOCATION OF TRAFFIC SIGNAL STANDARDS SHALL BE AS SHOWN ON THE PLANS.

OPTICALLY PROGRAMMED SIGNAL FACES SHALL BE MASKED IN ACCORDANCE WITH MANUFACTURERS INSTRUCTIONS, AND UNDER THE DIRECTIONS OF THE REGION TRAFFIC ENGINEER.

FOLDING STOP SIGNS SHALL BE IN ACCORDANCE WITH THE MUTCD AND/OR THE LATEST WISCONSIN SUPPLEMENT. THE SIGNS SHALL BE SIZED AND LOCATED AS CALLED FOR IN IN THE PLANS.

PEDESTRIAN SIGNS SHALL BE AS DESIGNATED IN THE PLANS.

FURNISH AND INSTALL VENTILATED, CAST, METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) ¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.



SIGNAL FACE MOUNTING DETAIL
(BANDED)

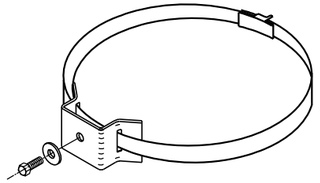
TRAFFIC SIGNAL STANDARD POLY BRACKET MOUNTINGS (TYPICAL) 13 FT. OR 15 FT.

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

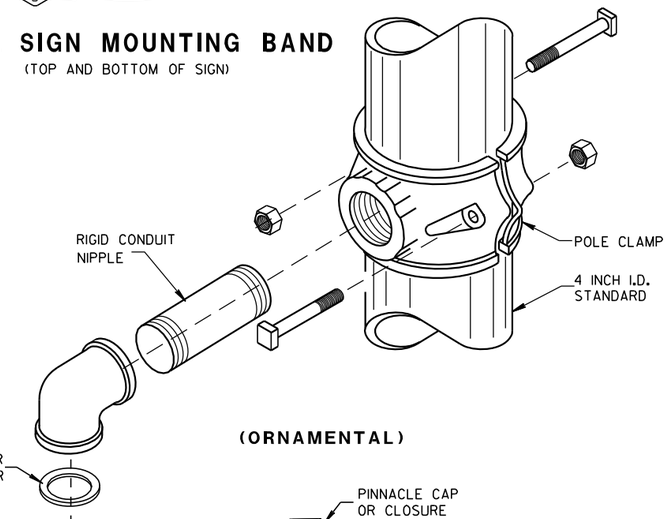
APPROVED
2/28/2013 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

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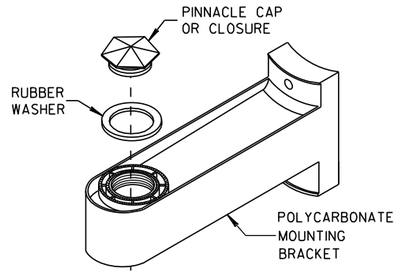
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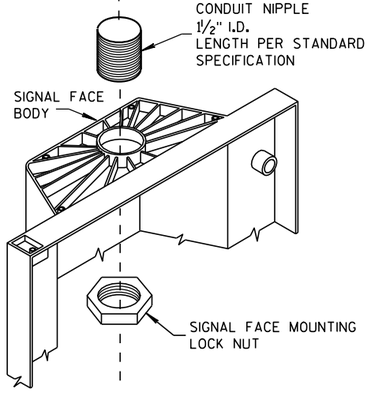
TYPICAL SIGN MOUNTING BAND
(TOP AND BOTTOM OF SIGN)



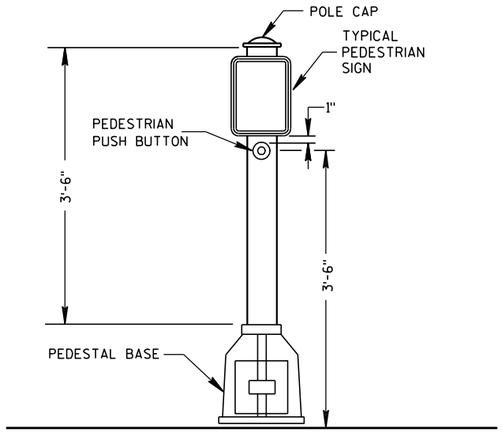
(ORNAMENTAL)



(BANDED)



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.

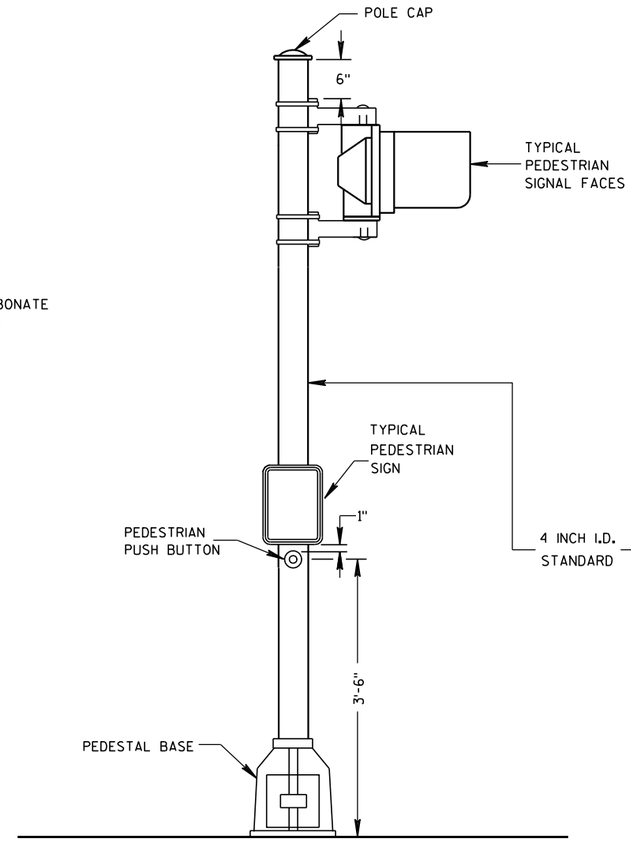
POLYCARBONATE SIGNAL FACE MOUNTING BRACKETS SHALL BE USED UNLESS ORNAMENTAL POLE CLAMPS ARE SPECIFIED.

LENGTH OF TRAFFIC STANDARDS SHALL BE AS SHOWN ON THE PLANS.

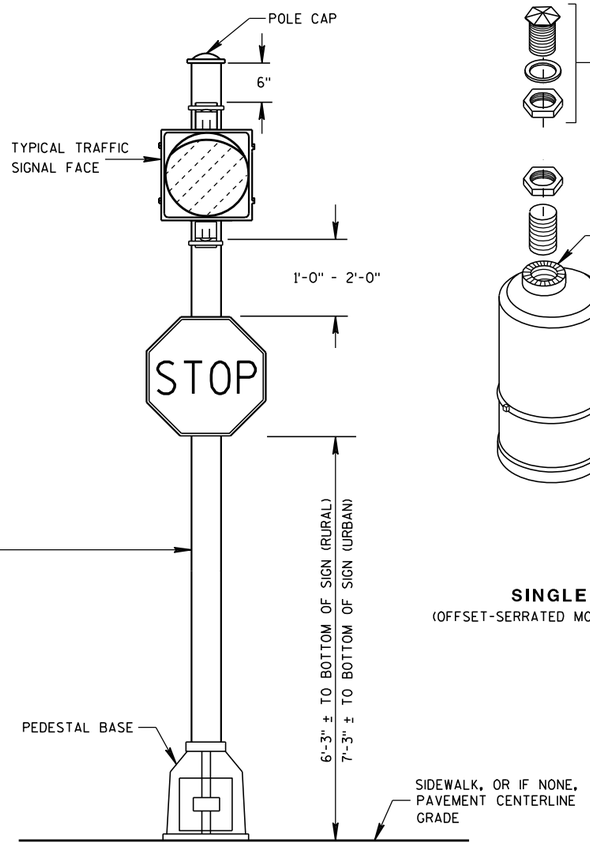
MOUNTINGS AND BRACKETS SHALL BE AS SHOWN ON THE PLANS OR DESCRIBED IN THE SPECIAL PROVISIONS (BY THE DISTRICT TRAFFIC ENGINEER).

PEDESTRIAN SIGNS SHALL BE AS DESIGNATED IN THE PLANS.

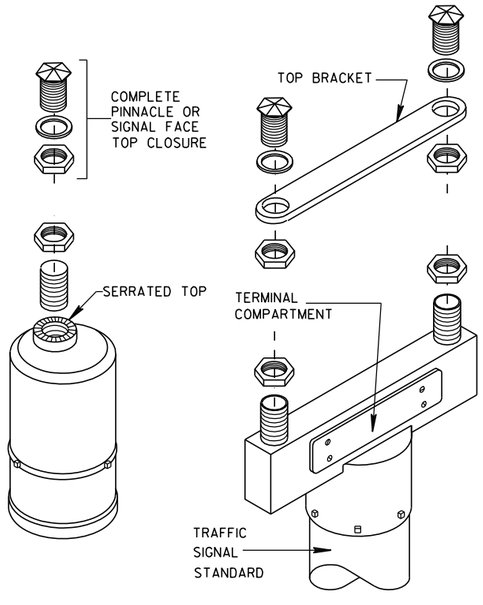
FURNISH AND INSTALL VENTILATED, CAST, METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) ¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.



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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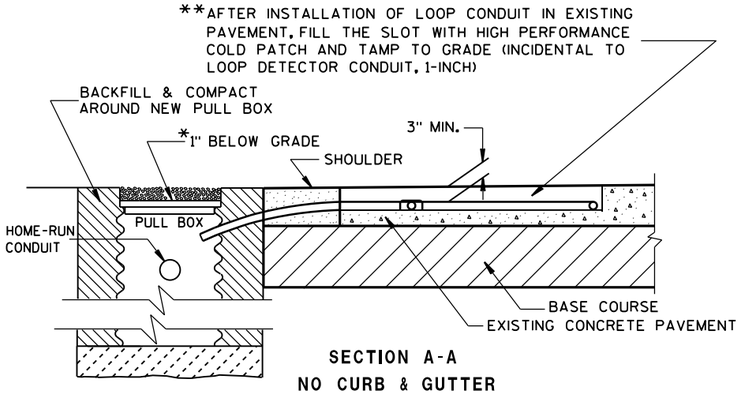
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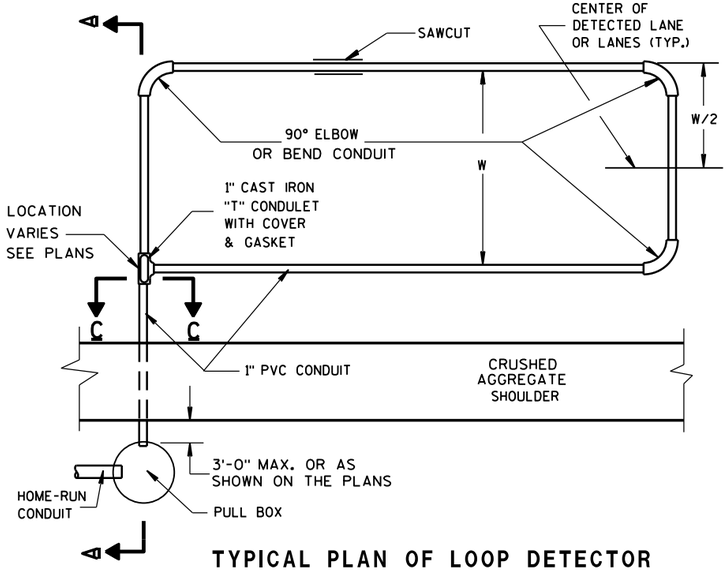
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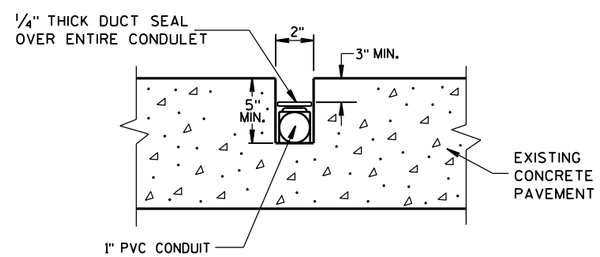
SECTION A-A
NO CURB & GUTTER

LOOP DETECTOR INSTALLATION DETAIL

*RECESS PULL BOX SO THAT THE COVER IS 3" BELOW GRADE IN SHOULDER AREAS OF CRUSHED AGGREGATE. BACKFILL OVER COVER WITH THE CRUSHED AGGREGATE TO BRING THE AREA TO GRADE LEVEL.



TYPICAL PLAN OF LOOP DETECTOR



SIDE VIEW
SECTION C-C

LOOP DETECTOR SLOT DETAIL

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

LOOP SIZE, LOCATION, NUMBER OF TURNS OF WIRE AND ASSOCIATED SIGNAL PHASE SHALL BE AS SHOWN ON THE PLANS.

PITCH LEAD OUT CONDUIT TO DRAIN TO ROADSIDE PULL BOX.

SPLICES SHALL BE INSTALLED BY USING CAST IN PLACE SPLICE KITS LISTED ON THE DEPARTMENTS APPROVED PRODUCTS LIST OR AN ENGINEER APPROVED EQUAL. NON-INSULATED BUTT SPLICES TO FIT #12 AWG STRANDED WIRE SHALL BE USED. SPLICES SHALL BE SOLDERED AND INSULATED FROM EACH OTHER AS PER INSTRUCTIONS INCLUDED IN THE SPLICE KIT.

MEASURE GROUND RESISITANCE USING A MEGGER. REPLACE LOOP WIRE NOT ATTAINING A READING OF INFINITY TO GROUND.

AFTER SPLICING THE LOOP WIRE TO THE LOOP LEAD-IN CABLE, THE CONTRACTOR SHALL MEASURE INDUCTANCE, GROUND RESISTANCE AND WIRE RESISTANCE AT THE CABINET END OF THE LEAD-IN CABLE AND FURNISH A COPY OF THE READINGS TO THE PROJECT ENGINEER FOR EVALUATION.

BEFORE PLACING THE 1 INCH CONDUIT IN THE CLEANED OUT SLOT, PLACE SOME OF THE TAR OR EPOXY SEALANT IN THE SLOT TO A DEPTH OF APPROXIMATELY $\frac{1}{2}$ INCH.

ONCE THE 2" LOOP SLOT HAS BEEN CHIPPED OUT, THE LOOP INSTALLATION SHALL BE COMPLETED PRIOR TO OPENING THE LANE(S) TO TRAFFIC.

LOOP DETECTOR LEADS SHALL BE IDENTIFIED WITH THEIR ASSOCIATED LOOP BY USE OF WATERPROOF TAGS AT BOTH ENDS OF THE CABLE. A LISTING OF THE CABLE IDENTIFICATION PER INDIVIDUAL LOOP LEAD-IN SHALL BE PLACED IN THE CABINET.

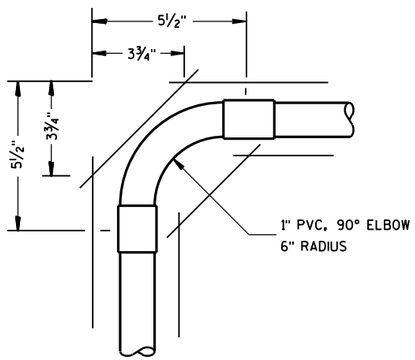
THE #12 AWG LOOP WIRE FROM THE LOOP TO THE ROADSIDE PULL BOX, SHALL BE HAND TWISTED AT LEAST 3 TWISTS PER FOOT BEFORE INSTALLATION.

SPLICES OF LOOP WIRE TO LEAD-IN CABLE SHALL BE MADE ONLY IN PULL BOXES AT THE SIDE OF THE ROAD.

THE #12 AWG LOOP WIRE SHALL BE INSTALLED FROM THE ROADSIDE PULL BOX, THROUGH THE LOOP CONDUIT BACK TO THE ROADSIDE PULL BOX, AND BE INSTALLED IN ONE, NON-SPLICED, CONTINUOUS LENGTH.

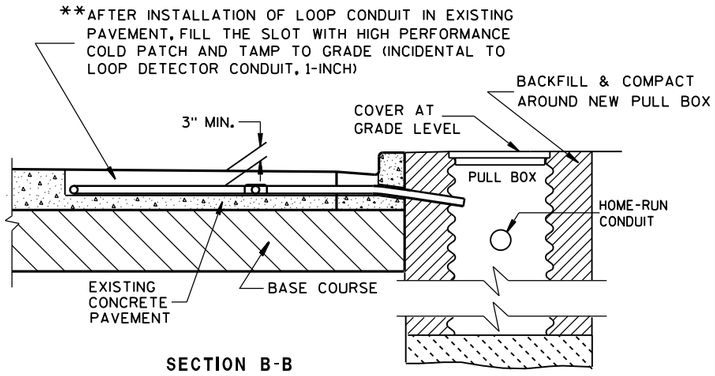
** AFTER THE HIGH PERFORMANCE COLD PATCH HAS BEEN TAMPED, SEAL THE SLOT/HIGH PERFORMANCE COLD PATCH/ PAVEMENT OPENING WITH HOT POURED ELASTIC TYPE MATERIAL CONFORMING TO THE REQUIREMENTS OF THE "SPECIFICATION FOR JOINT SEALANTS, HOT POURED, FOR CONCRETE AND ASPHALT PAVEMENTS, ASTM DESIGNATION: D3405".

IN THE EVENT HIGH PERFORMANCE COLD PATCH IS NOT AVAILABLE, AND FLEXIBLE TYPE EPOXY IS USED AS A LOOP SLOT FILLER, THE 2 INCH SLOT SHALL BE TOTALLY CLEAN AND DRY BEFORE ITS INSTALLATION. EPOXY USE SHALL BE APPROVED BY THE DISTRICT TRAFFIC ENGINEER AND THE FURNISHED EPOXY SHALL BE INSTALLED AFTER WRITTEN APPROVAL BY THE PROJECT ENGINEER.



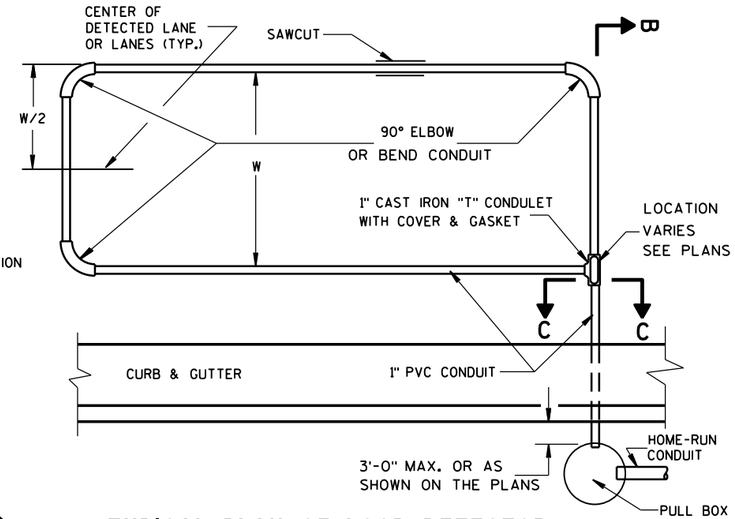
TOP VIEW

CORNER SAW SLOT DETAIL

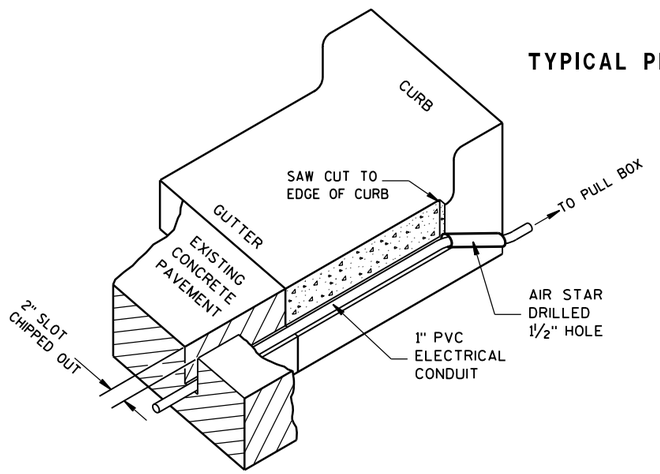


SECTION B-B
CURB & GUTTER

LOOP DETECTOR INSTALLATION DETAIL



TYPICAL PLAN OF LOOP DETECTOR



ISOMETRIC VIEW

TYPICAL SAW CUT DETAIL FOR LEAD-IN CONDUIT

LOOP DETECTOR INSTALLED IN EXISTING CONCRETE PAVEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

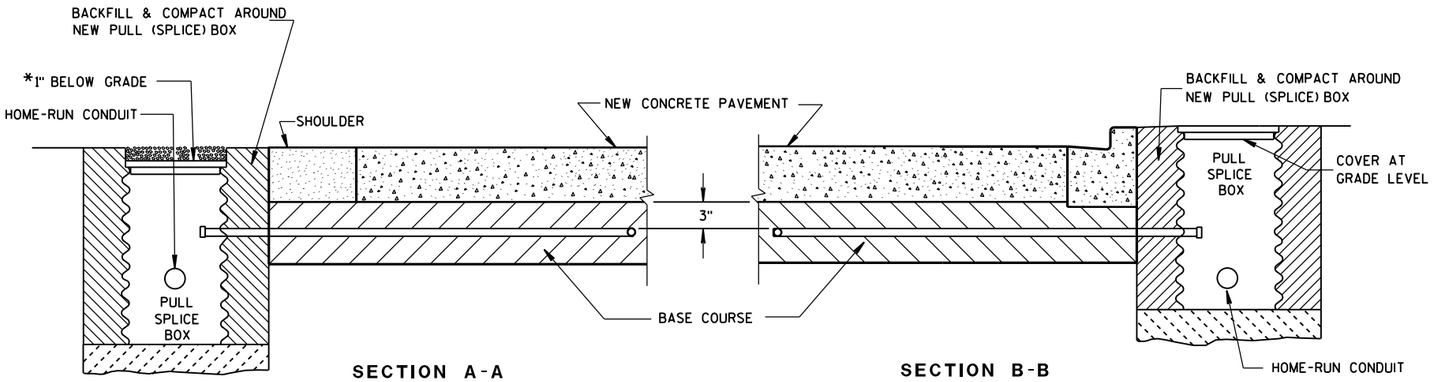
APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

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SECTION A-A
NO CURB & GUTTER

SECTION B-B
CURB & GUTTER

*RECESS PULL (SPLICE) BOX SO THAT THE COVER IS 3" BELOW GRADE IN SHOULDER AREAS OF CRUSHED AGGREGATE. BACKFILL OVER COVER WITH THE CRUSHED AGGREGATE TO BRING THE AREA TO GRADE LEVEL.

LOOP DETECTOR INSTALLATION DETAIL

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

LOOP SIZE, CONFIGURATION LOCATION, NUMBER OF TURNS OF WIRE AND ASSOCIATED SIGNAL PHASE SHALL BE AS SHOWN ON THE PLANS.

PITCH LEAD OUT CONDUIT TO DRAIN TO ROADSIDE PULL (SPLICE) BOX.

SPLICES SHALL BE INSTALLED BY USING CAST IN PLACE SPLICE KITS LISTED ON THE DEPARTMENTS APPROVED PRODUCTS LIST OR AN ENGINEER APPROVED EQUAL. NON-INSULATED BUTT SPLICES TO FIT #12 AWG STRANDED WIRE SHALL BE USED. SPLICES SHALL BE SOLDERED AND INSULATED FROM EACH OTHER AS PER INSTRUCTIONS INCLUDED IN THE SPLICE KIT.

MEASURE GROUND RESISTANCE USING A MEGGER. REPLACE LOOP WIRE NOT ATTAINING A READING OF INFINITY TO GROUND.

AFTER SPLICING THE LOOP WIRE TO THE LOOP LEAD-IN CABLE, THE CONTRACTOR SHALL MEASURE INDUCTANCE, GROUND RESISTANCE AND WIRE RESISTANCE AT THE CABINET END OF THE LEAD-IN CABLE AND FURNISH A COPY OF THE READINGS TO THE PROJECT ENGINEER FOR EVALUATION.

LOOP DETECTOR LEADS SHALL BE IDENTIFIED WITH THEIR ASSOCIATED LOOP BY USE OF WATERPROOF TAGS AT BOTH ENDS OF THE CABLE. A LISTING OF THE CABLE IDENTIFICATION PER INDIVIDUAL LOOP LEAD-IN SHALL BE PLACED IN THE CABINET.

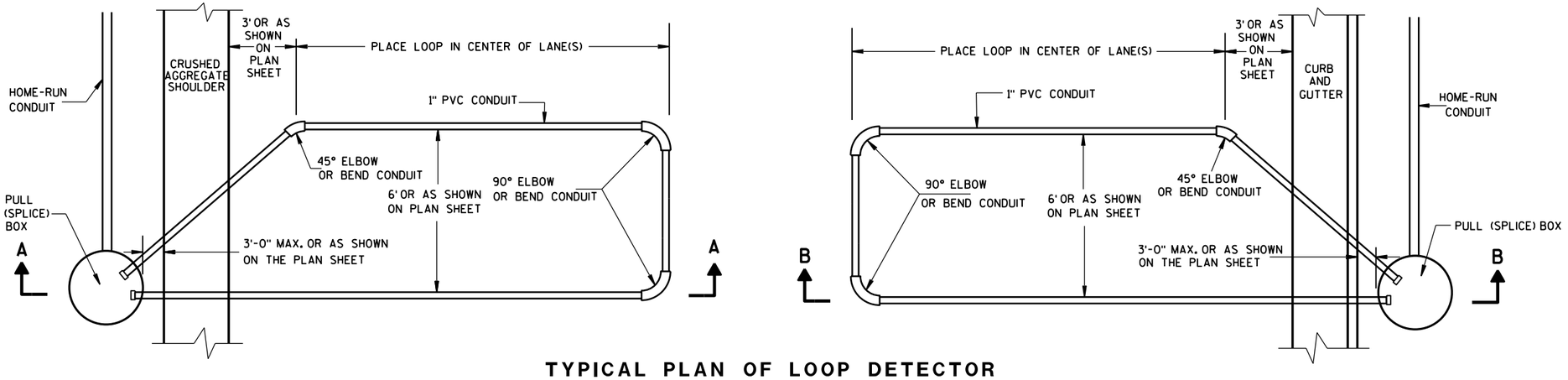
THE #12 AWG. LOOP WIRE IN THE PULL (SPLICE) BOX SHALL BE HAND TWISTED AT LEAST 3 TWISTS PER FOOT BEFORE BEING SPLICED TO THE LOOP LEAD-IN CABLE.

SPLICES OF LOOP WIRE TO LEAD-IN CABLE SHALL BE MADE ONLY IN PULL (SPLICE) BOXES AT THE SIDE OF THE ROAD.

THE #12 AWG LOOP WIRE SHALL BE INSTALLED FROM THE ROADSIDE PULL (SPLICE) BOX THROUGH THE LOOP CONDUIT, BACK TO THE ROADSIDE PULL (SPLICE) BOX, AND BE INSTALLED IN ONE, NON-SPLICE CONTINUOUS LENGTH.

PROTECTION OF THE CONDUIT IN THE BASE COURSE, SHALL BE REQUIRED AFTER INSTALLATION AND BEFORE NEW PAVEMENT IS INSTALLED.

SHOULD INSTALLATION REPAIR BE REQUIRED, IT SHALL BE DONE UNDER THE DIRECTION OF THE PROJECT ENGINEER.



TYPICAL PLAN OF LOOP DETECTOR WITH 18" OR 24" PULL (SPLICE) BOX

LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 1)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

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S.D.D. 9 F 15-4a

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S.D.D. 9 F 15-4a

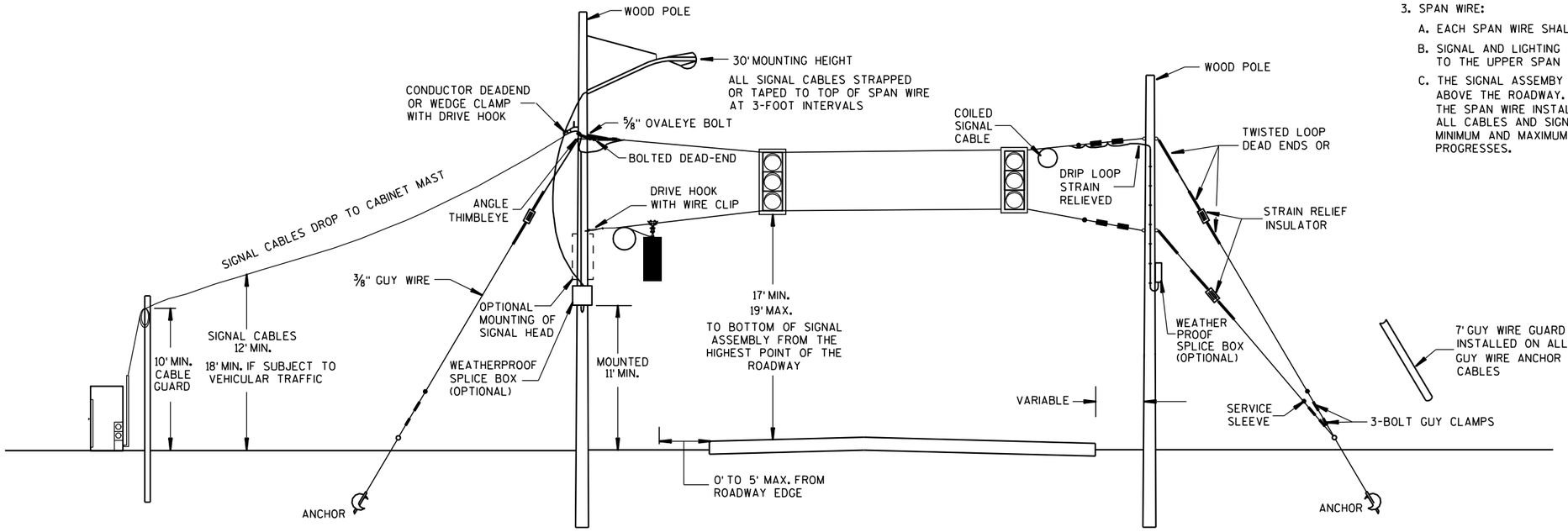
GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

1. WOOD POLES SHALL BE CLASS 4. LENGTH DETERMINED BY SIGNAL PLAN.

2. SIGNAL FACES:
   A. ALL SECTIONS SHALL BE 12" AND POLYCARBONATE.
   B. EACH SHALL CONTAIN A 5" WIDE DULL BLACK POLYCARBONATE BACKPLATE.
   C. EACH SHALL BE WIRED FROM THE TOP SIGNAL MOUNTING BRACKET.
   D. NEAR RIGHT SIGNAL FACE SUSPENDED ON THE TETHER (NO BACKPLATE) SHALL NOT BE OVER THE TRAVELED WAY. IF THE POLE IS WITHIN 5 FEET OF THE TRAVELED WAY MOUNT THE SIGNAL FACE ON THE WOOD POLE WITH BACKPLATE.

3. SPAN WIRE:
   A. EACH SPAN WIRE SHALL BE INDIVIDUALLY DOWN GUYED.
   B. SIGNAL AND LIGHTING CABLES SHALL ONLY BE ATTACHED TO THE UPPER SPAN WIRE.
   C. THE SIGNAL ASSEMBY SHALL HAVE A 17' MIN. HEIGHT ABOVE THE ROADWAY. THIS SHALL BE MEASURED AFTER THE SPAN WIRE INSTALLATION IS COMPLETED WITH ALL CABLES AND SIGNAL FACES IN PLACE. MAINTAIN MINIMUM AND MAXIMUM HEIGHTS AS ROADWAY WORK PROGRESSES.



SPAN WIRE
TEMPORARY SIGNALS

MINIMUM POLE LENGTHS	POLE BURIEL DEPTHS
25'	5'
30'	6'
35'	7'
40'	8'
45'	9'

SPAN WIRE
TEMPORARY TRAFFIC SIGNAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

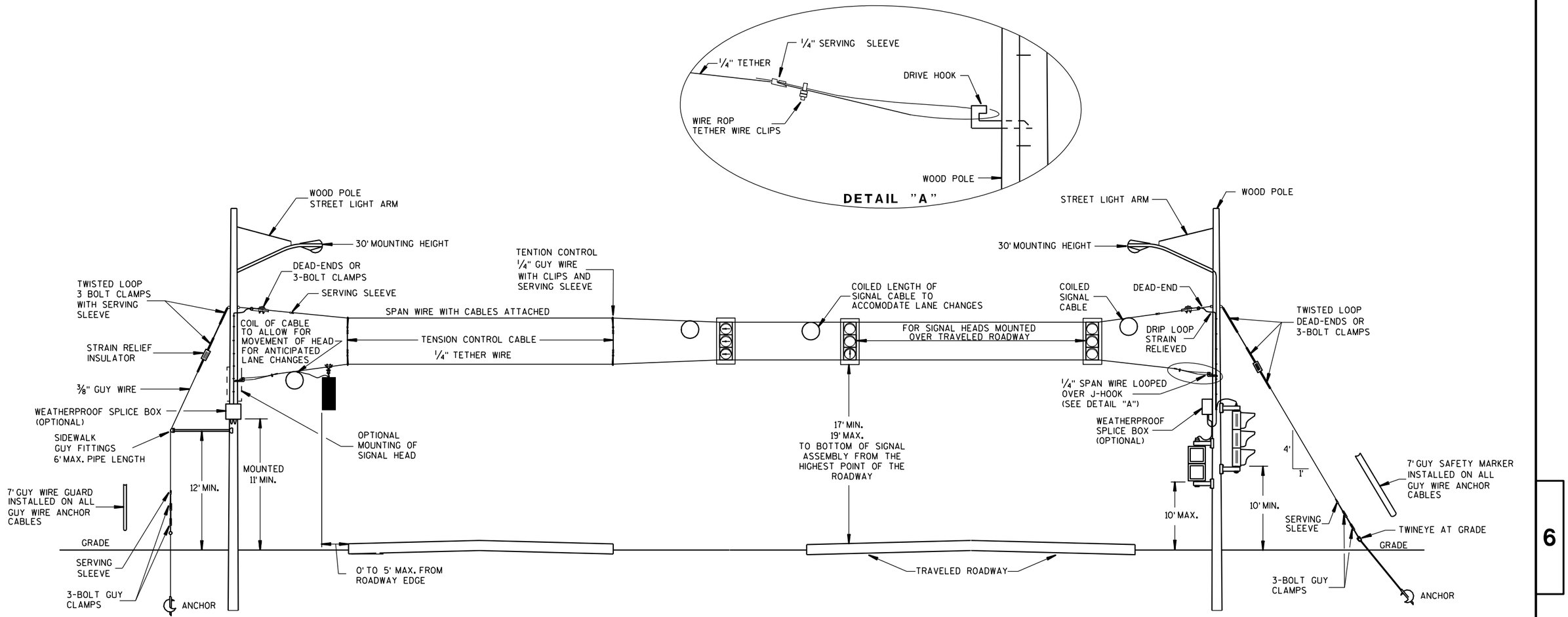
APPROVED

7-14-08 DATE

/S/ Balu Ananthar[illegible]n
STATE ELECTRICAL ENGI 194 HWYS

FHWA

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S.D.D. 9 G 1-3a



GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

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   D. NEAR RIGHT SIGNAL FACE SUSPENDED ON THE TETHER (NO BACKPLATE) SHALL NOT BE OVER THE TRAVELED WAY. IF THE POLE IS WITHIN 5 FEET OF THE TRAVELED WAY MOUNT THE SIGNAL FACE ON THE WOOD POLE WITH BACKPLATE.
   E. FAR INDICATION SHALL BE MAINTAINED OVER CENTER OF TRAFFIC LANE.
3. SPAN WIRE:
   A. EACH SPAN WIRE SHALL BE INDIVIDUALLY DOWN GUYED.
   B. SIGNAL AND LIGHTING CABLES SHALL ONLY BE ATTACHED TO THE UPPER SPAN WIRE.
   C. THE SIGNAL ASSEMBY SHALL HAVE A 17' MIN. HEIGHT ABOVE THE ROADWAY. THIS SHALL BE MEASURED AFTER THE SPAN WIRE INSTALLATION IS COMPLETED WITH ALL CABLES AND SIGNAL FACES IN PLACE. MAINTAIN MINIMUM AND MAXIMUM HEIGHTS AS ROADWAY WORK PROGRESSES.

SPAN WIRE
TEMPORARY SIGNALS
4 LANE ROADWAYS

MINIMUM POLE LENGTHS	CLASS	MIN. BURIAL DEPTHS
25'	V	5'
30'	V	6'
35'	IV	7'
40'	IV	8'
45'	IV	9'

SPAN WIRE
TEMPORARY TRAFFIC SIGNAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

7-14-08 DATE

/S/ Balu Ananthanarayanan
STATE ELECTRICAL ENGI 195 HWYS

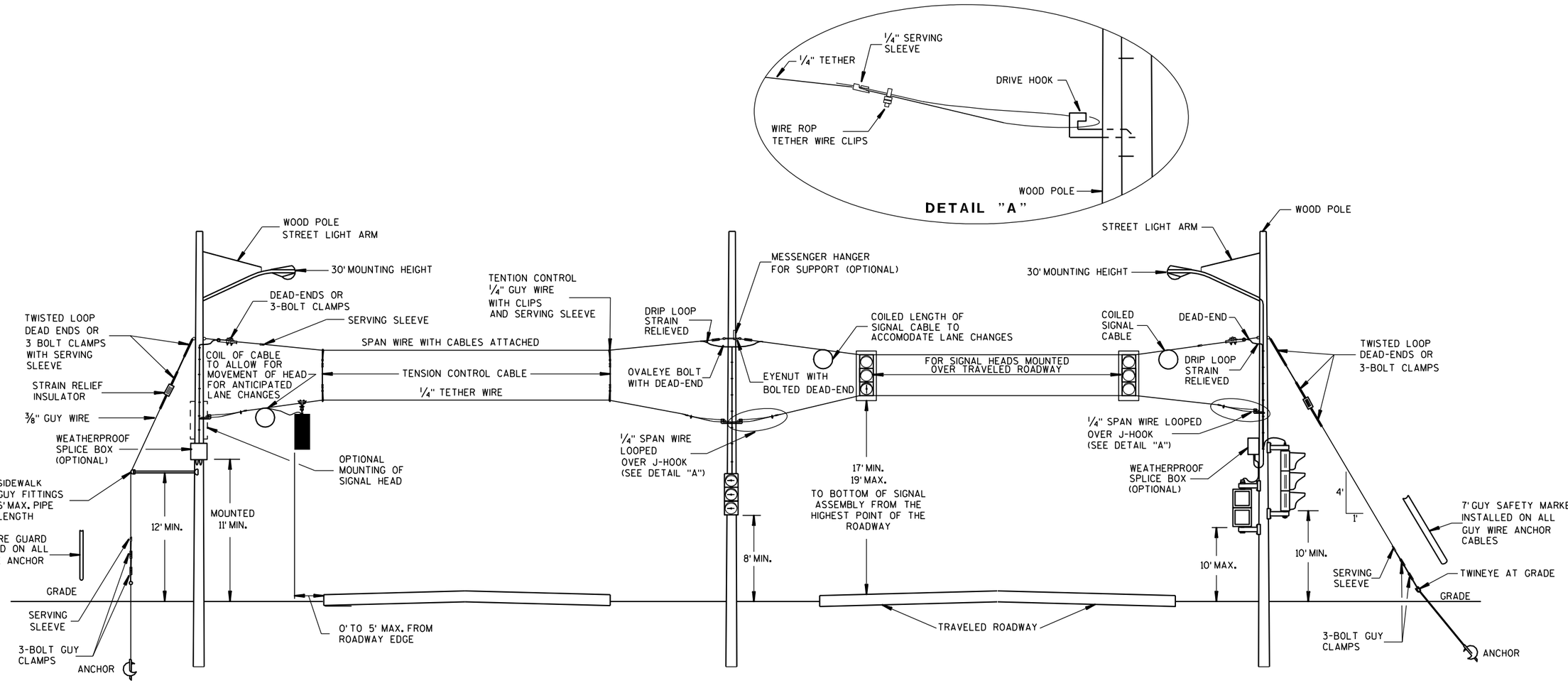
FHWA

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S.D.D. 9 G 1-3b

6

S.D.D. 9 G 1-3b



SPAN WIRE
TEMPORARY SIGNALS
4 LANE ROADWAYS

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

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   E. FAR INDICATION SHALL BE MAINTAINED OVER CENTER OF TRAFFIC LANE.

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   A. EACH SPAN WIRE SHALL BE INDIVIDUALLY DOWN GUYED.
   B. SIGNAL AND LIGHTING CABLES SHALL ONLY BE ATTACHED TO THE UPPER SPAN WIRE.
   C. THE SIGNAL ASSEMBY SHALL HAVE A 17' MIN. HEIGHT ABOVE THE ROADWAY. THIS SHALL BE MEASURED AFTER THE SPAN WIRE INSTALLATION IS COMPLETED WITH ALL CABLES AND SIGNAL FACES IN PLACE. MAINTAIN MINIMUM AND MAXIMUM HEIGHTS AS ROADWAY WORK PROGRESSES.

MINIMUM POLE LENGTHS	CLASS	MIN. BURIAL DEPTHS
25'	V	5'
30'	V	6'
35'	IV	7'
40'	IV	8'
45'	IV	9'

SPAN WIRE TEMPORARY TRAFFIC SIGNAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

7-14-08 DATE

/S/ Balu Ananthanarayanan
STATE ELECTRICAL ENGI

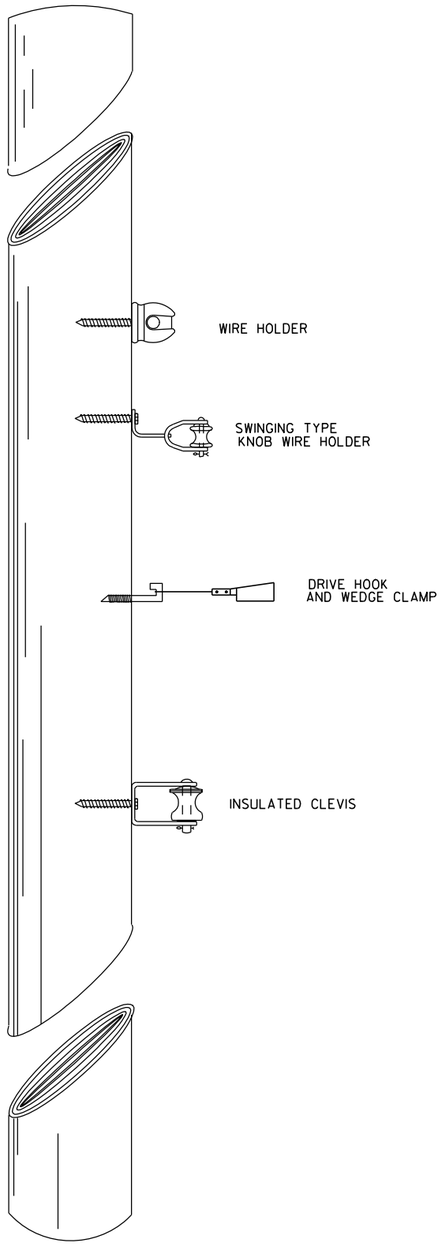
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HWYS

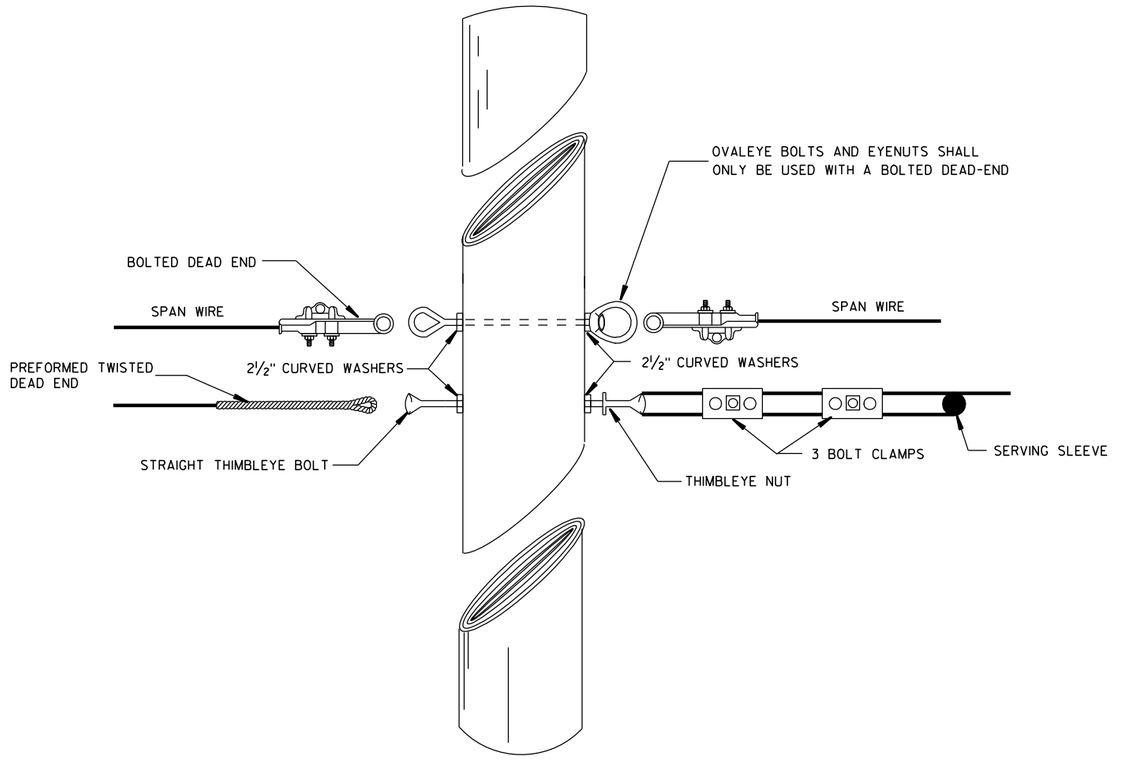
FHWA

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S.D.D. 9 G 1-3c



TYPICAL CABLE HANGERS



TYPICAL DEAD-ENDING

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S.D.D. 9 G 1-3d

SPAN WIRE
TEMPORARY TRAFFIC SIGNAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

7-14-08
DATE

/S/ Balu Ananthanarayanan
STATE ELECTRICAL ENGI

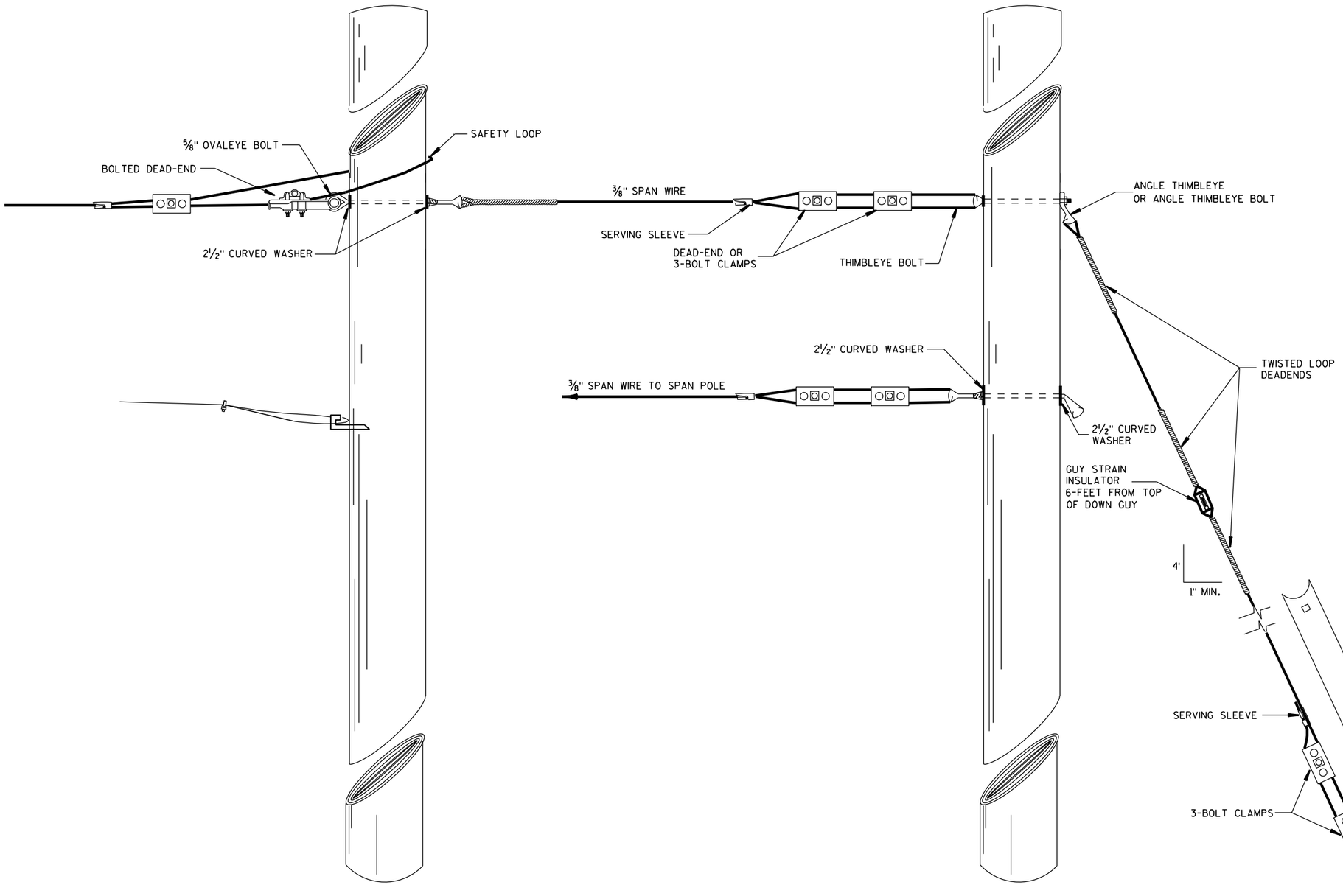
197

HWYS

FHWA

GENERAL NOTES

1. USE ¾" DRILL IN WOOD POLE TO PROVIDE HOLE FOR ⅝" BOLTS.
2. SAFTY LOOP REQUIRED ON EACH END OF ALL SPAN WIRES.



SPAN WIRE POLE

GUY POLE

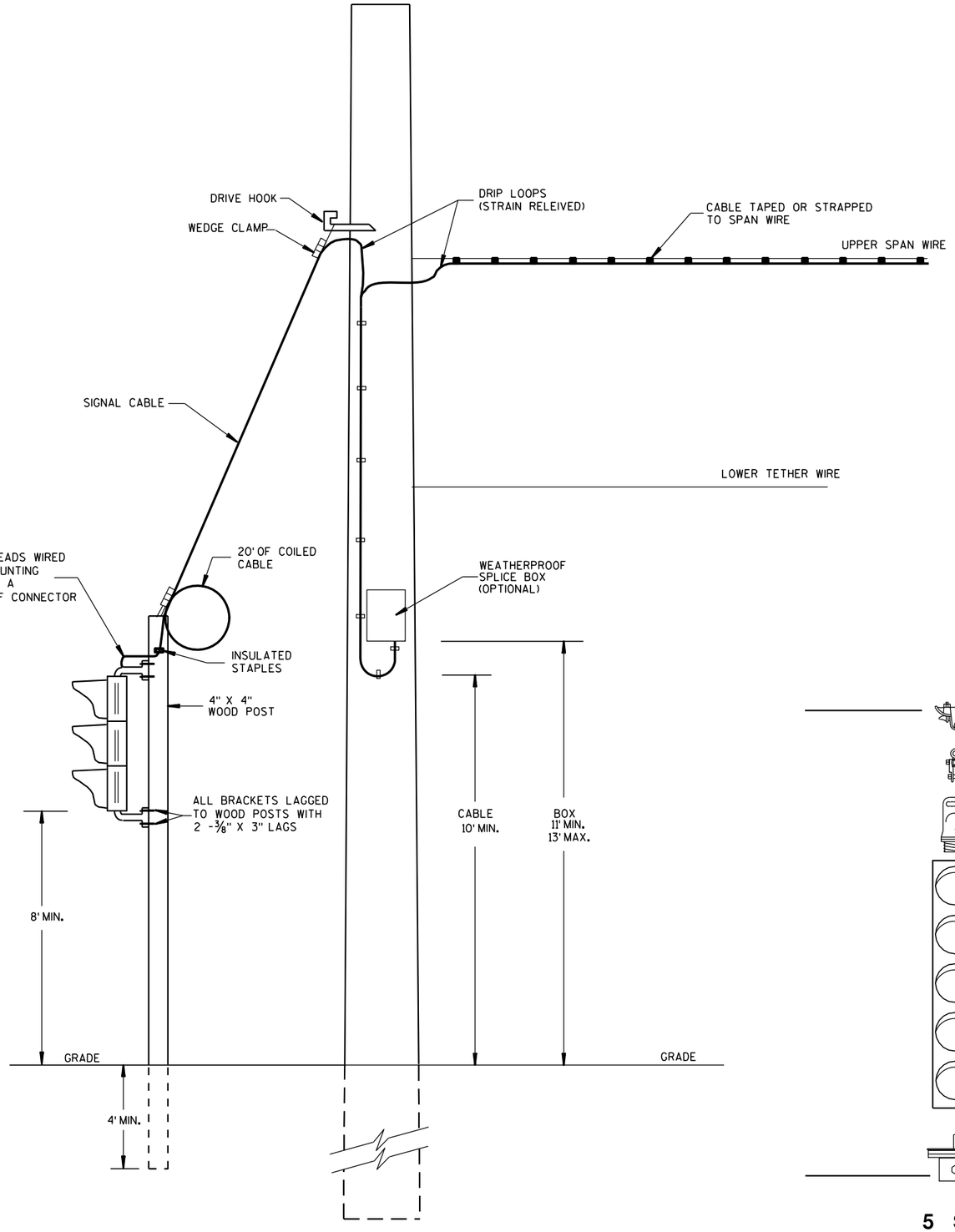
TYPICAL DEAD-ENDINGS OR GUYING

SPAN WIRE TEMPORARY TRAFFIC SIGNAL

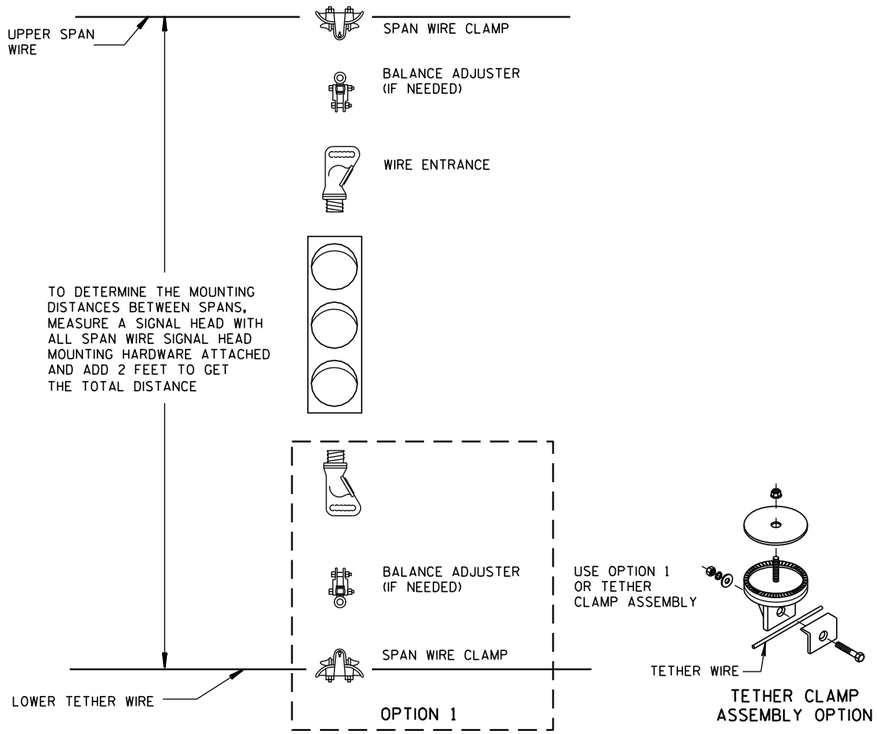
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
7-14-08 DATE
/S/ Balu Aganthanarayanan
STATE ELECTRICAL ENGI 198 HWYS
FHWA

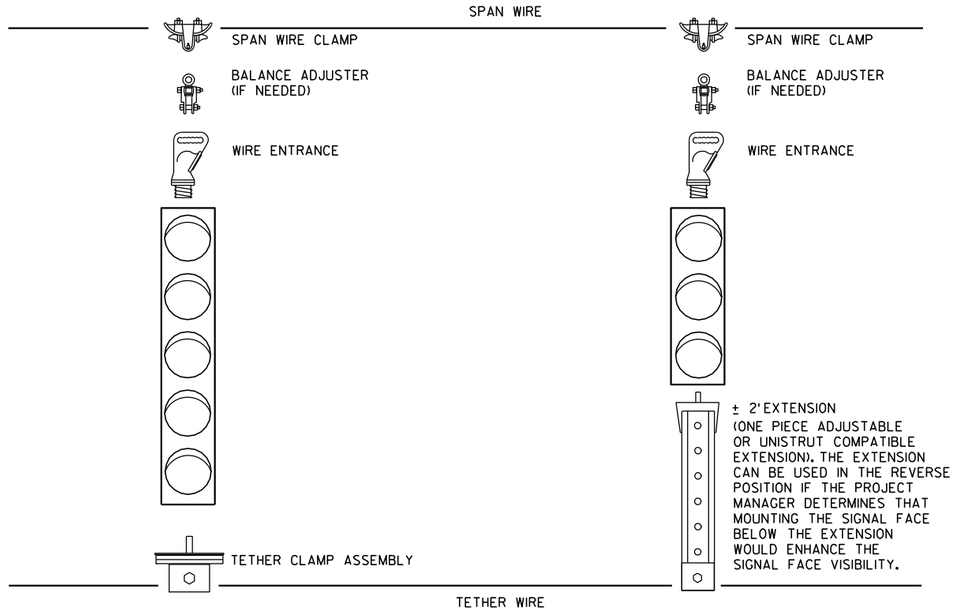
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S.D.D. 9 G 1-3e



TYPICAL DROP TO TEMPORARY MOVEABLE SIGNAL



TYPICAL SPAN WIRE MOUNTING HARDWARE



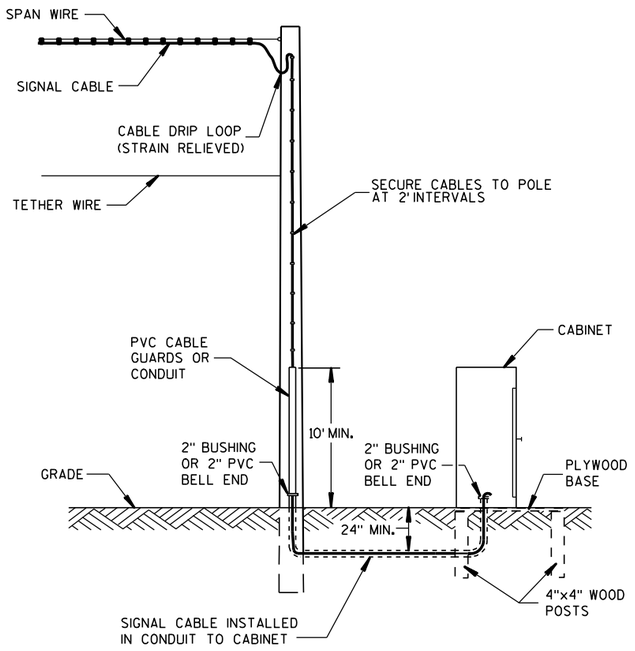
5 SECTION VERTICAL WITH 3 SECTION VERTICAL ON ONE SPAN WIRE

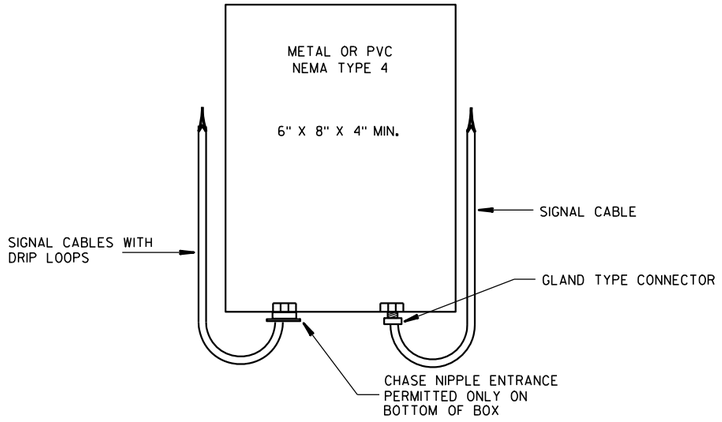
SPAN WIRE
TEMPORARY TRAFFIC SIGNAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

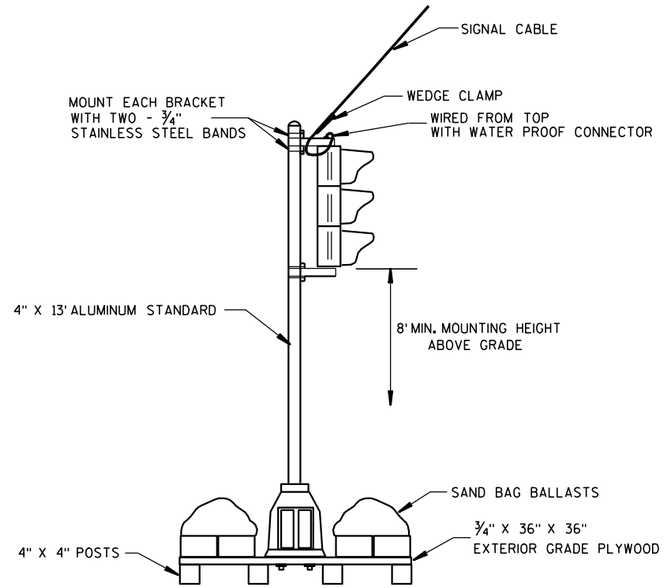
APPROVED
7-14-08 DATE
/S/ Balu Aganthangarayanan
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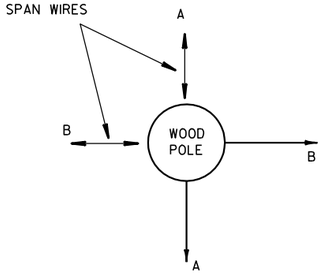




SPLICE BOX

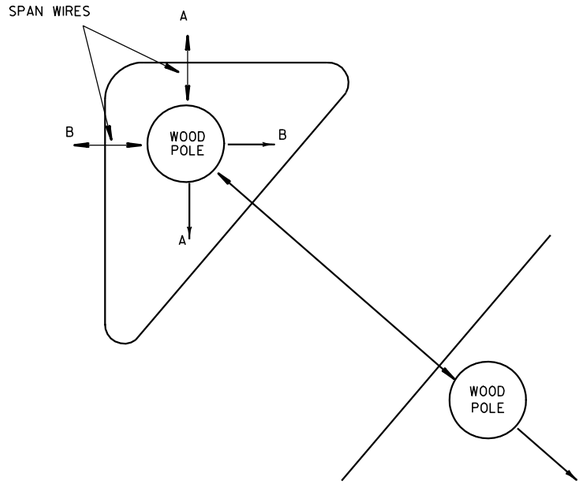


TYPICAL SKID TYPE TEMPORARY

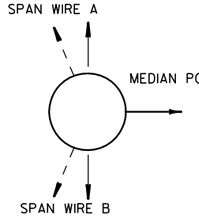


ALL DOWN OR SIDEWALK GUYS
SHALL BE INSTALLED IN THE
OPPOSITE DIRECTION OF THE
STRAIN OF THE SPAN WIRE

CORNER POLES



ISLAND POLES



GUY AWAY FROM
INTERSECTION OR IN
OPPOSITE DIRECTION OF THE
SPAN LOADING

MEDIAN POLES

SPAN WIRE
TEMPORARY TRAFFIC SIGNAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

7-14-08
DATE

/S/ Balu Aganthangayagan
STATE ELECTRICAL ENGI

200

HWYS

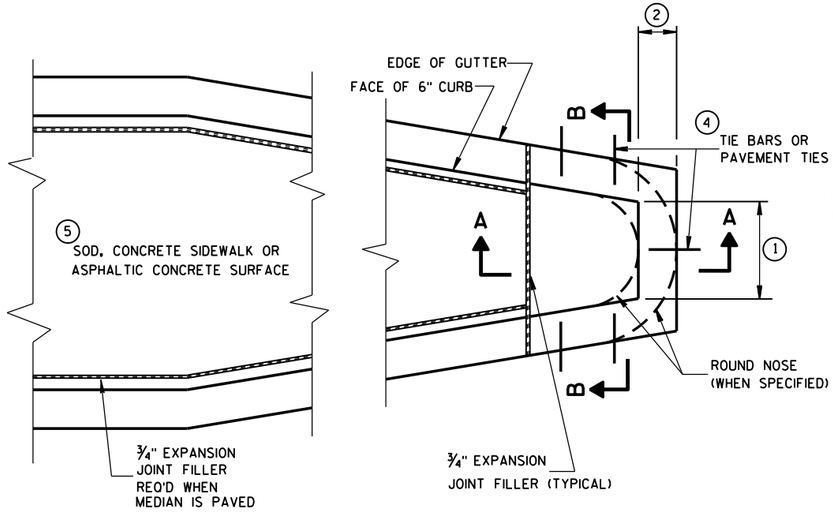
FHWA

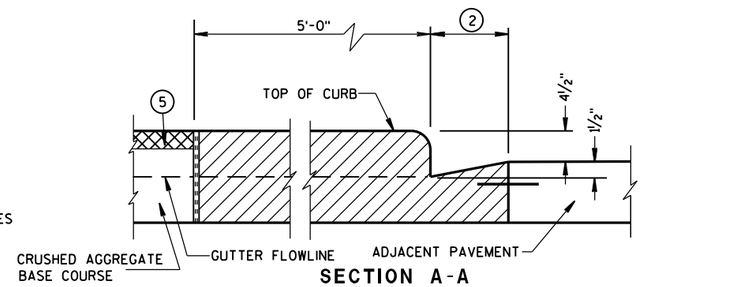
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S.D.D. 9 G 1-3g

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S.D.D. 9 G 1-3g





CONCRETE MEDIAN BLUNT NOSE DETAIL

GENERAL NOTES

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

(1) SEE PLAN FOR MEDIAN NOSE WIDTH AND RADIUS (FOR ROUND NOSE ALTERNATE).

(2) WIDTH OF GUTTER TO MATCH EXISTING ADJACENT GUTTER OR AS SPECIFIED ELSEWHERE IN THE PLAN.

(3) DEPTH EQUAL TO ADJACENT PAVEMENT. ADJACENT PAVEMENT STRUCTURE DETAILS ARE SHOWN ON THE PLAN. TYPICAL OPTIONS ARE:

(1) NEW OR EXISTING CONCRETE PAVEMENT.

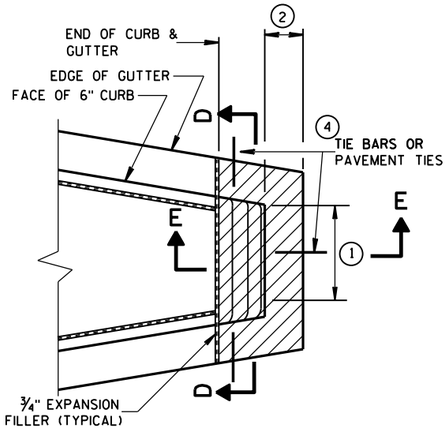
(2) ASPHALTIC CONCRETE PAVEMENT OVER NEW OR EXISTING CONCRETE BASE COURSE.

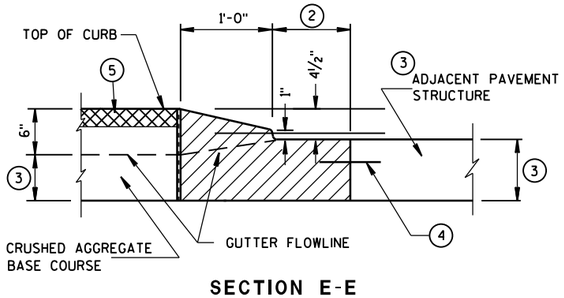
(3) ASPHALTIC CONCRETE PAVEMENT OVER CRUSHED AGGREGATE BASE COURSE.

(4) TIE BARS OR PAVEMENT TIES REQUIRED IN NEW CONCRETE PAVEMENT OR CONCRETE BASE COURSE. TIE BARS SHALL BE NO. 4 X 2'-0" SPACED AT 2'-0" C-C.

PAVEMENT TIES REQUIRED IN EXISTING CONCRETE BASE COURSE. PAVEMENT TIES SHALL BE NO. 6 X 1'-0" SPACED AT 3'-0" C-C INSTALLED ON A HORIZONTAL SKEW OF 6:1. THE DIRECTION OF SKEW SHALL ALTERNATE AFTER EVERY ONE OR TWO BARS.

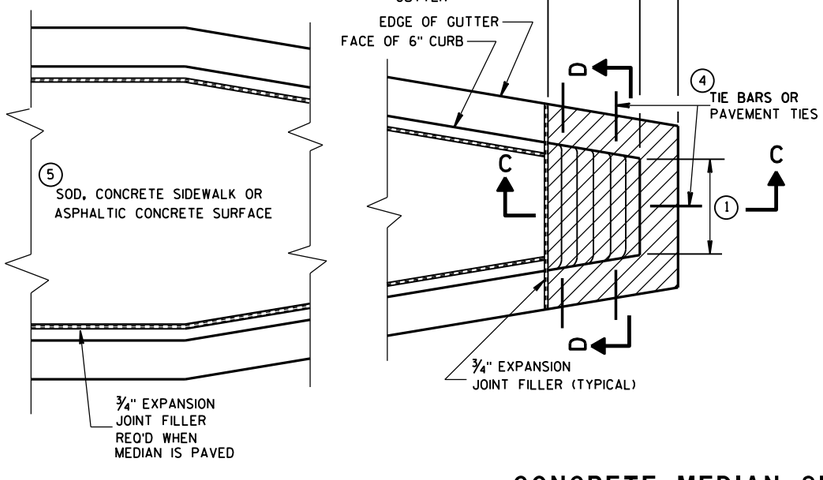
(5) SURFACE TYPE AND DETAILS ARE SHOWN ELSEWHERE IN THE PLAN.

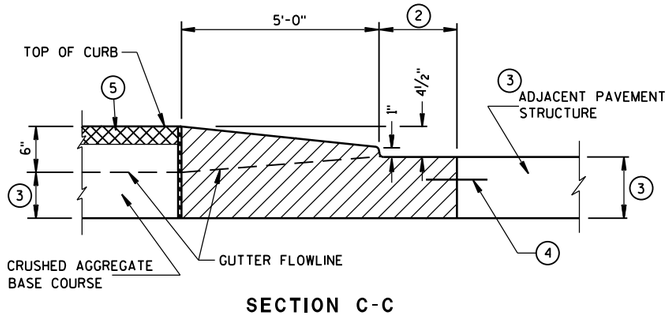




SECTION E-E

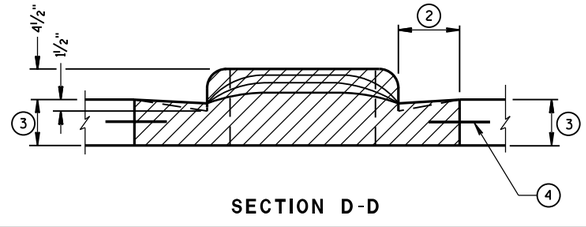
CONCRETE MEDIAN SLOPED NOSE TYPE 2





SECTION C-C

CONCRETE MEDIAN SLOPED NOSE TYPE 1



SECTION D-D

CONCRETE MEDIAN NOSE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

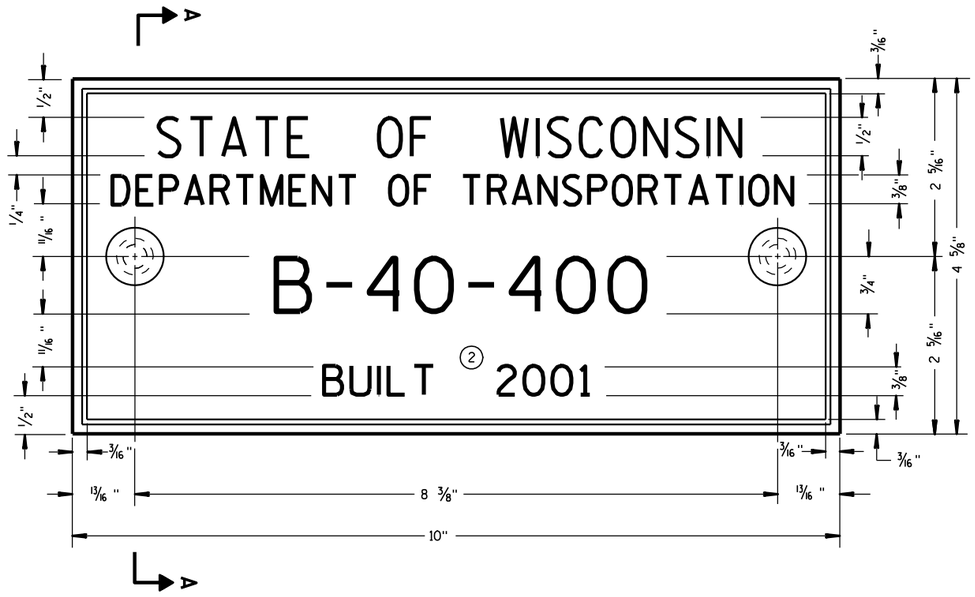
APPROVED
6/8/2006
DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS D ENGINEER
FHWA

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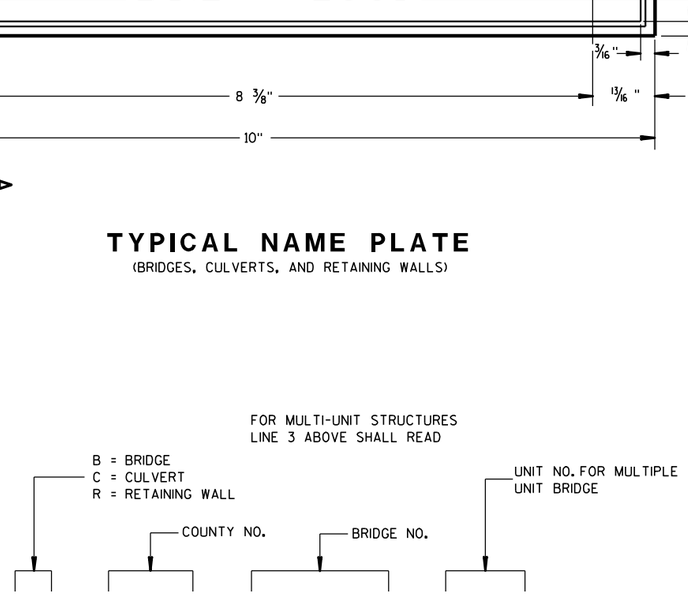
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S.D.D. 11 B 2-2



TYPICAL NAME PLATE
(BRIDGES, CULVERTS, AND RETAINING WALLS)



NUMBERING DESIGNATION
MULTI-UNIT STRUCTURES

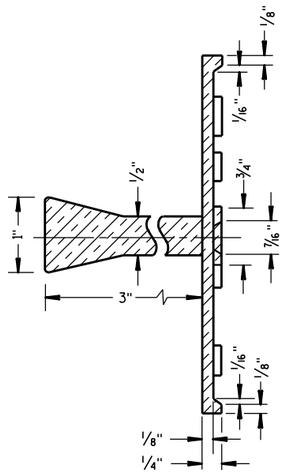
GENERAL NOTES

NAME PLATES TO BE INSTALLED ON BRIDGES, CULVERTS, AND RETAINING WALLS SHALL CONFORM TO THE REQUIREMENTS OF SECTION 502.3.11 OF THE STANDARD SPECIFICATIONS.

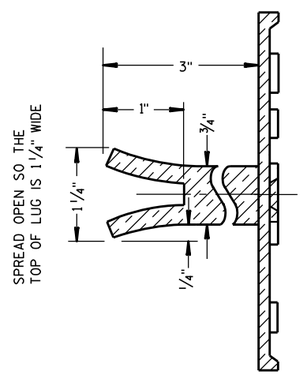
THE BRIDGE NUMBER AND YEAR BUILT SHOWN ON THIS DRAWING ARE EXAMPLES ONLY. SEE CONSTRUCTION PLANS FOR INDIVIDUAL NUMBERING AND YEAR BUILT.

(1) EPOXY RESIN SHALL BE FROM AN APPROVED MANUFACTURER AND USED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

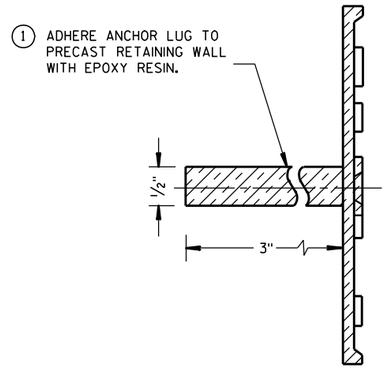
(2) REHABILITATION OF AN EXISTING STRUCTURE SHOULD USE THE DATE OF ORIGINAL STRUCTURE CONSTRUCTION.



SECTION A-A



ALTERNATE LUG



ALTERNATE LUG
(FOR ATTACHMENT TO PRECAST STRUCTURES)

NAME PLATE (STRUCTURES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

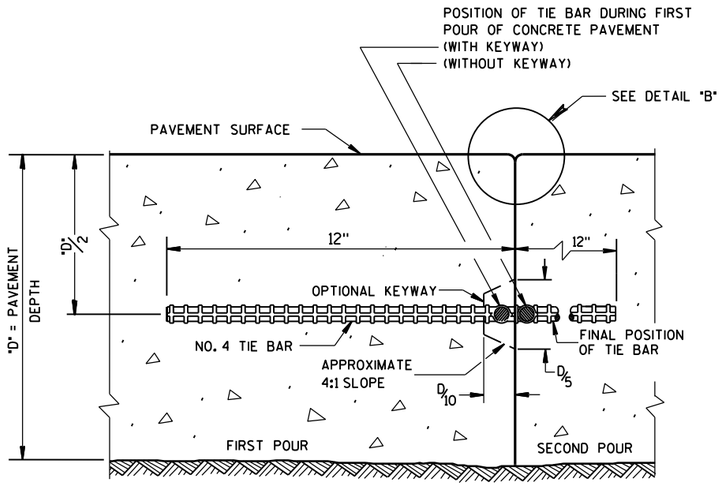
APPROVED

3/26/10 DATE — /S/ Scot Beck — CHIEF STRUCTURAL DEVELOPMENT ENGINEER

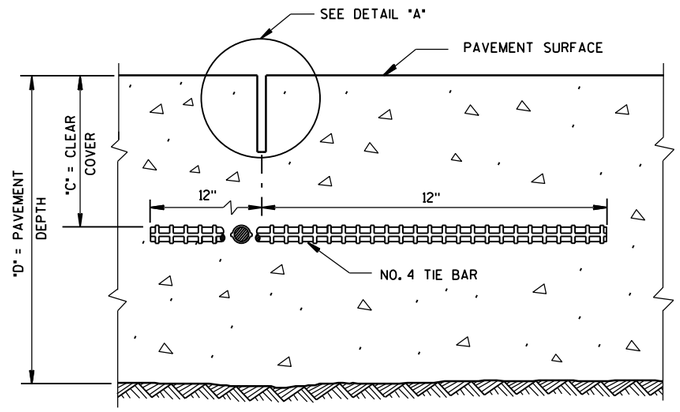
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S.D.D. 12 A 3-10



CONSTRUCTION JOINT



SAWED JOINT

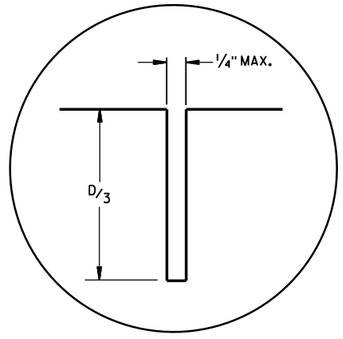
GENERAL NOTES

DO NOT SEAL OR FILL LONGITUDINAL JOINTS.

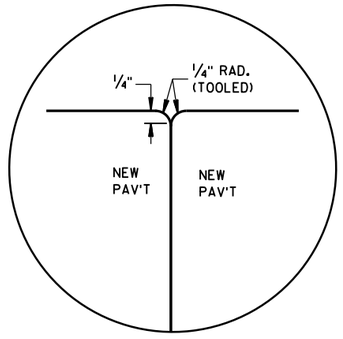
CREATE A LONGITUDINAL JOINT FOR PAVEMENT WIDTHS GREATER THAN 15 FEET.

CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

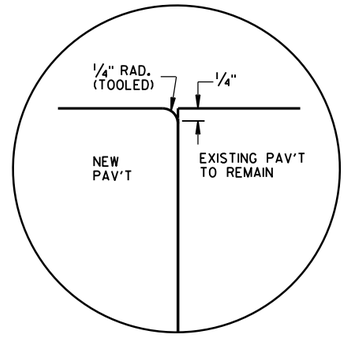
(1) ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.



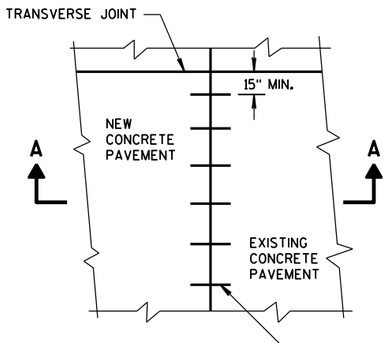
DETAIL "A"



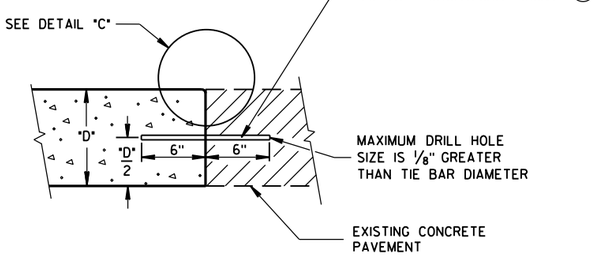
DETAIL "B"



DETAIL "C"



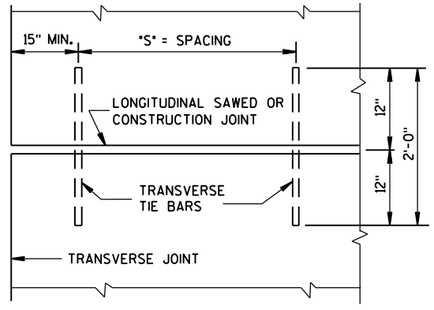
PLAN VIEW



SECTION A-A
LONGITUDINAL CONSTRUCTION JOINT TIE BARS ANCHORED INTO EXISTING PAVEMENT

TIE BAR TABLE

PAVEMENT DEPTH "D"	CLEAR COVER "C"	MAXIMUM TIE BAR SPACING "S"	
		PAVEMENT WIDTH	
		24' OR 26'	≥30'
6, 6 1/2"	3"±1/2"	48"	42"
7, 7 1/2"	3 1/4"±1"	45"	36"
8, 8 1/2"	3 3/4"±1"	39"	30"
9, 9 1/2"	4 1/4"±1"	33"	27"
10, 10 1/2"	4 3/4"±1"	30"	24"
11, 11 1/2"	5 1/4"±1"	27"	21"
12"	5 3/4"±1"	24"	21"



PLAN VIEW
SHOWING LOCATION OF TIE BARS

CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

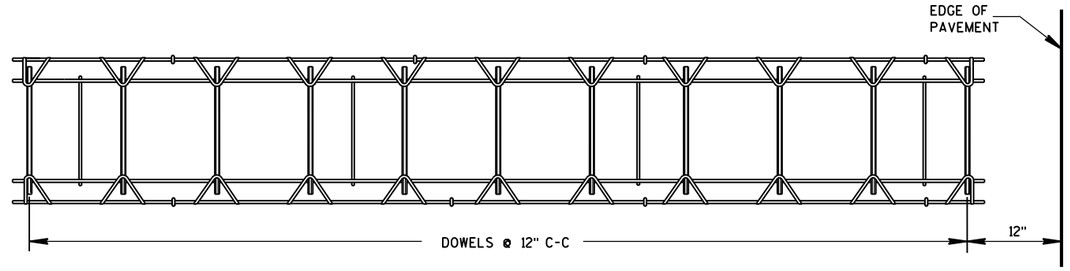
9/2014 DATE

/S/ Deb Bischoff
PAVEMENT POLICY & DE ENGINEER

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S.D.D. 13 C 1-17

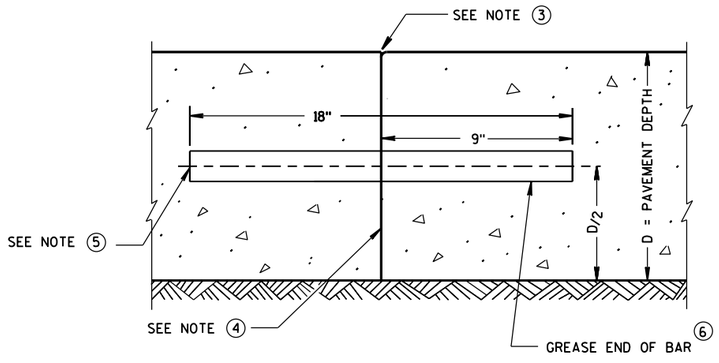


PLAN VIEW

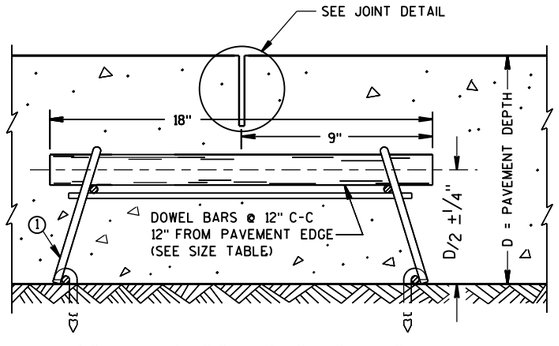


SIDE VIEW

CONTRACTION JOINT DOWEL ASSEMBLY ①



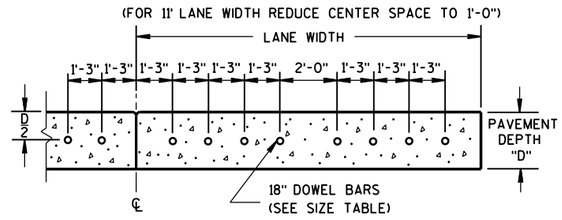
TRANSVERSE CONSTRUCTION JOINT



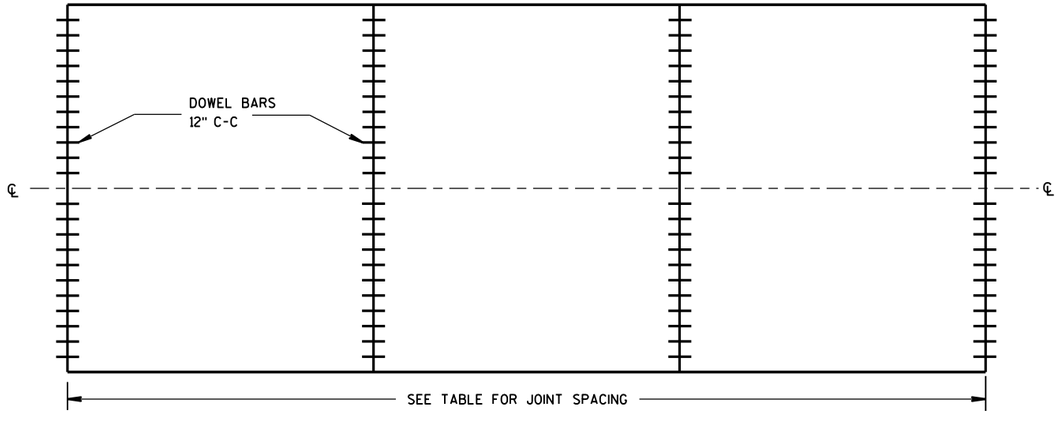
DOWELED CONTRACTION JOINT

PAVEMENT DEPTH, DOWEL BAR SIZE AND JOINT SPACING TABLE

PAVEMENT DEPTH (D)	DOWEL BAR DIAMETER	CONTRACTION JOINT SPACING
5 ½", 6", 6 ½"	NONE	12'
7", 7 ½"	1"	14'
8", 8 ½"	1 ¼"	15'
9", 9 ½"	1 ¼"	15'
10" & ABOVE	1 ½"	15'



DRILLED DOWEL BAR CONSTRUCTION JOINT ⑦



CONTRACTION JOINT LOCATIONS

GENERAL NOTES

CONTRACTION JOINTS

CONSTRUCT TRANSVERSE CONTRACTION JOINTS NORMAL TO THE CENTERLINE. SHOW THE LOCATION OF CONTRACTION JOINTS THROUGH INTERSECTIONS ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

DO NOT SEAL OR FILL CONTRACTION JOINTS.

INSTALL DOWEL BARS PARALLEL TO THE PAVEMENT CENTERLINE AND PAVEMENT SURFACE.

FOR PAVEMENT SLABS OF VARYING WIDTHS, LOCATE THE OUTER MOST DOWEL BAR SO THAT THE CENTER OF THE BAR IS A MINIMUM OF 6 INCHES AND A MAXIMUM OF 18 INCHES FROM THE LONGITUDINAL JOINT AND THE FREE EDGE OF PAVEMENT.

CONSTRUCTION JOINTS

LOCATE CONSTRUCTION JOINTS A MINIMUM OF 6 FEET FROM THE NEAREST CONTRACTION JOINT AND ALIGN PARALLEL TO CONTRACTION JOINTS.

① **OBTAIN THE ENGINEER'S APPROVAL FOR THE USE OF ALTERNATIVE DESIGNS OF THE DOWEL ASSEMBLY. USE MECHANICAL DOWEL BAR INSERTERS OR DOWEL ASSEMBLIES WHEN CONSTRUCTING CONTRACTION JOINTS.**

② SECURE BASKETS WITH ANCHORS TO HOLD DOWEL BARS IN THE CORRECT POSITION AND ALIGNMENT. TYPE, LOCATION, NUMBER AND LENGTH OF ANCHORS ARE DEPENDENT UPON FIELD CONDITIONS.

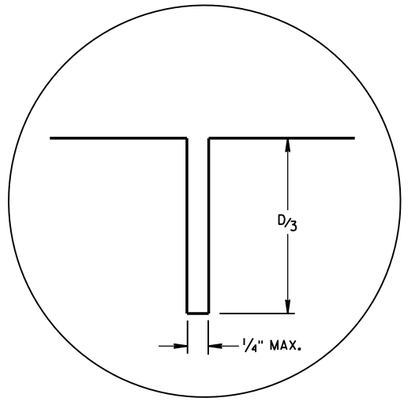
③ FORM OR SAW CONSTRUCTION JOINTS. PROVIDE A ¼-INCH RADIUS AT FORMED JOINTS.

④ PROVIDE A SMOOTH VERTICAL FACE FOR THE ENTIRE DEPTH OF THE PAVEMENT WHEN FORMING CONSTRUCTION JOINTS.

⑤ INSTALL DOWEL BARS AT CONSTRUCTION JOINTS BY FORMING OR DRILLING. INSTALL FORMED DOWEL BARS 12 INCHES C-C AND 12 INCHES FROM PAVEMENT EDGE. REMOVE EXCESS CONCRETE FROM THE FREE END OF THE DOWEL BAR IF DOWEL BARS ARE FORMED THROUGH A HEADER BOARD. INSTALL DRILLED DOWEL BARS ACCORDING TO *DRILLED DOWEL BAR CONSTRUCTION JOINT* DETAIL.

⑥ APPLY A THIN UNIFORM COATING OF SURFACE TREATMENT TO THE FREE END OF DOWEL BARS TO PREVENT BONDING.

⑦ ANCHOR DOWEL BARS INTO DRILLED HOLES WITH AN EPOXY. MAXIMUM DRILLED HOLE SIZE IS ⅛-INCH GREATER THAN DOWEL BAR DIAMETER, 9 INCHES IN LENGTH.



JOINT DETAIL

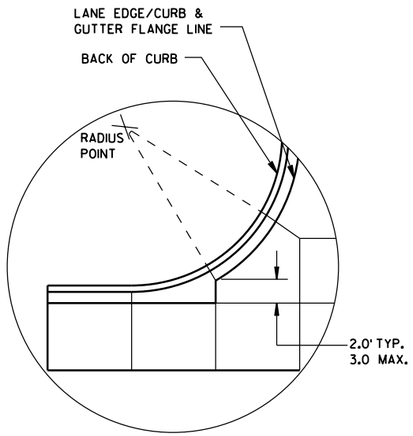
URBAN DOWELED CONCRETE PAVEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

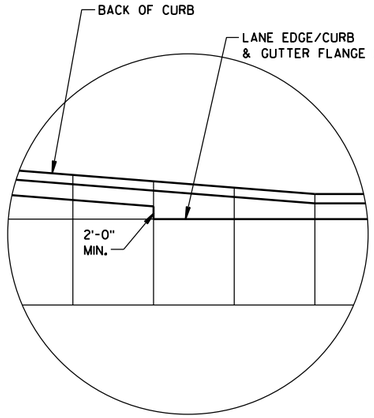
APPROVED
5/3/2013 DATE
/S/ Deb Bischoff
PAVEMENT POLICY & DE ENGINEER
FHWA

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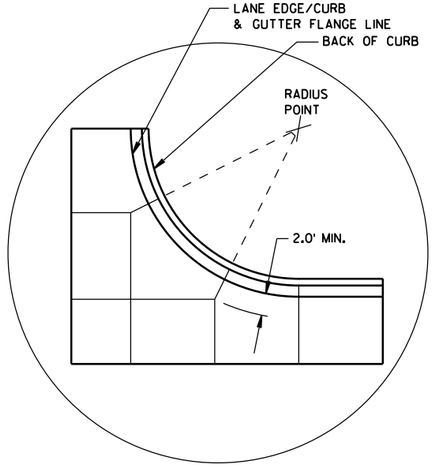
S.D.D. 13 C 13-8



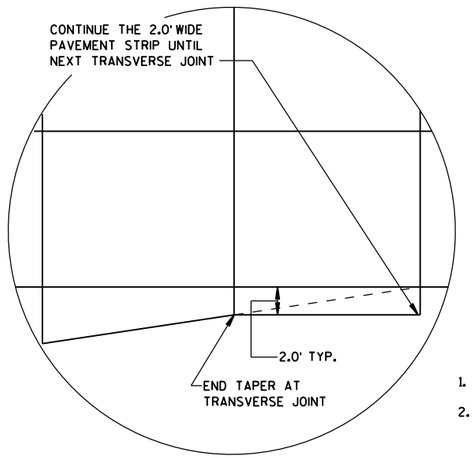
DETAIL "A"



DETAIL "B"



DETAIL "C"



DETAIL "D"

GENERAL NOTES

THE PRIMARY ROADWAY CONTROLS THE TRANSVERSE JOINT PATTERN.

ALIGN NEW JOINTS WITH EXISTING JOINTS OR CRACKS.

CONSTRUCT TRANSVERSE JOINTS PERPENDICULAR TO THE ROADWAY.

ADJUST TRANSVERSE JOINTS TO ALIGN WITH UTILITY FIXTURES (E.G. MANHOLES AND INLETS) IN THE PAVEMENT STRUCTURE WHEN POSSIBLE. WATER VALVES DO NOT REQUIRE JOINT ADJUSTMENT.

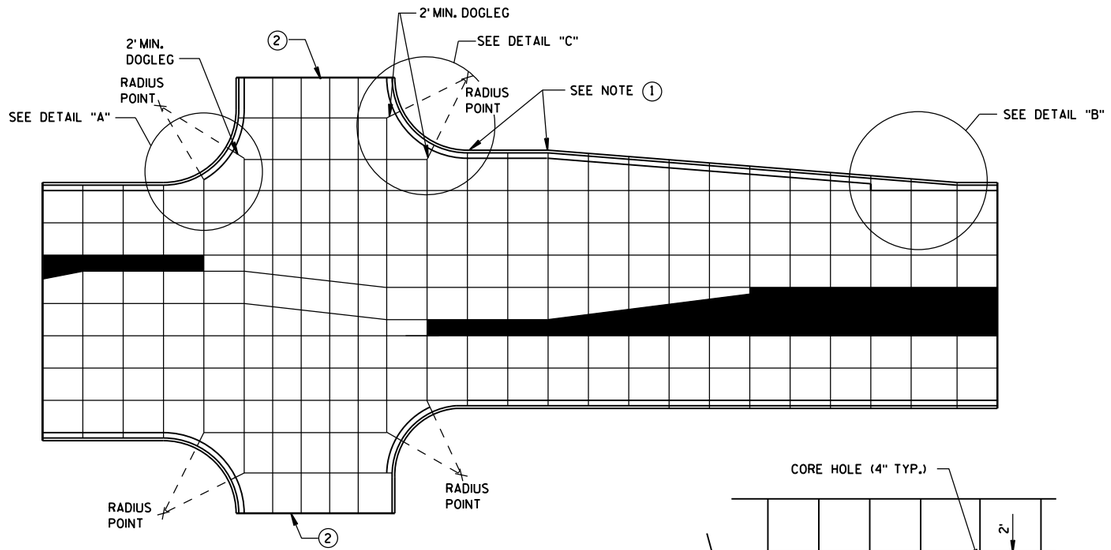
AVOID SLABS LESS THAN 2 FEET WIDE OR GREATER THAN 15 FEET WIDE.

SEE TABLE FOR TRANSVERSE JOINT SPACING. JOINT SPACING SPECIFIED IS MAXIMUM AND ACTUAL SPACING CAN BE ADJUSTED TO ACCOMMODATE INTERSECTIONS.

AVOID ANGLES LESS THAN 60° BY DOGLEGGING JOINTS THROUGH CURVE RADIUS POINTS. USE 90° ANGLES WHEN POSSIBLE.

CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

1. PROVIDE TRANSVERSE JOINTS AT ALL PAVEMENT WIDTH CHANGES.
2. CONSTRUCT DOWELED EXPANSION JOINT ON THE SIDE ROAD OF AN INTERSECTION IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH. ALIGN EXPANSION JOINT WITH EDGE OF RADIUS.
3. THE ENGINEER MAY APPROVE SLIGHT VARIATIONS FROM THESE JOINTING DETAILS.

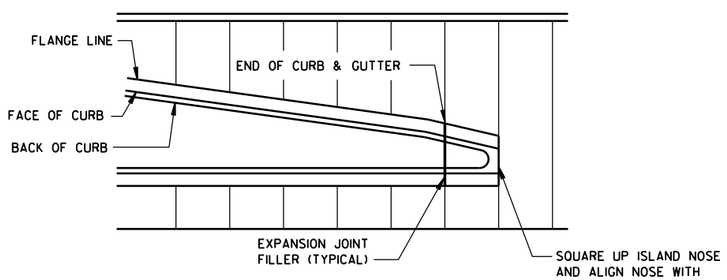


STANDARD INTERSECTION

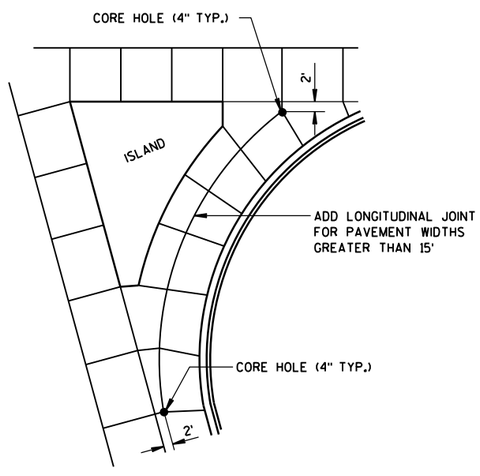
PAVEMENT DEPTH AND JOINT SPACING TABLE

PAVEMENT DEPTH (D)	CONTRACTION JOINT SPACING
6", 6½"	12'
7", 7½"	14'
8" & ABOVE	15'

SKEWED INTERSECTION



APPROACH TO MEDIAN



LARGE RIGHT TURN

CONCRETE PAVEMENT JOINTING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

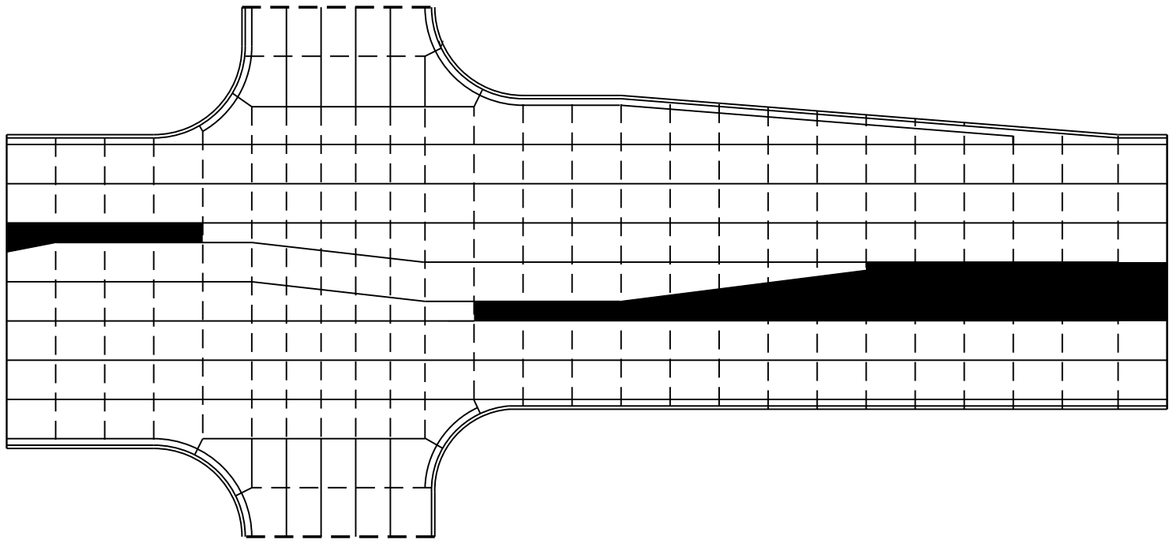
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S.D.D. 13 C 18-2a

LEGEND

POTENTIAL DOWELED EXPANSION JOINT

DOWELED JOINT

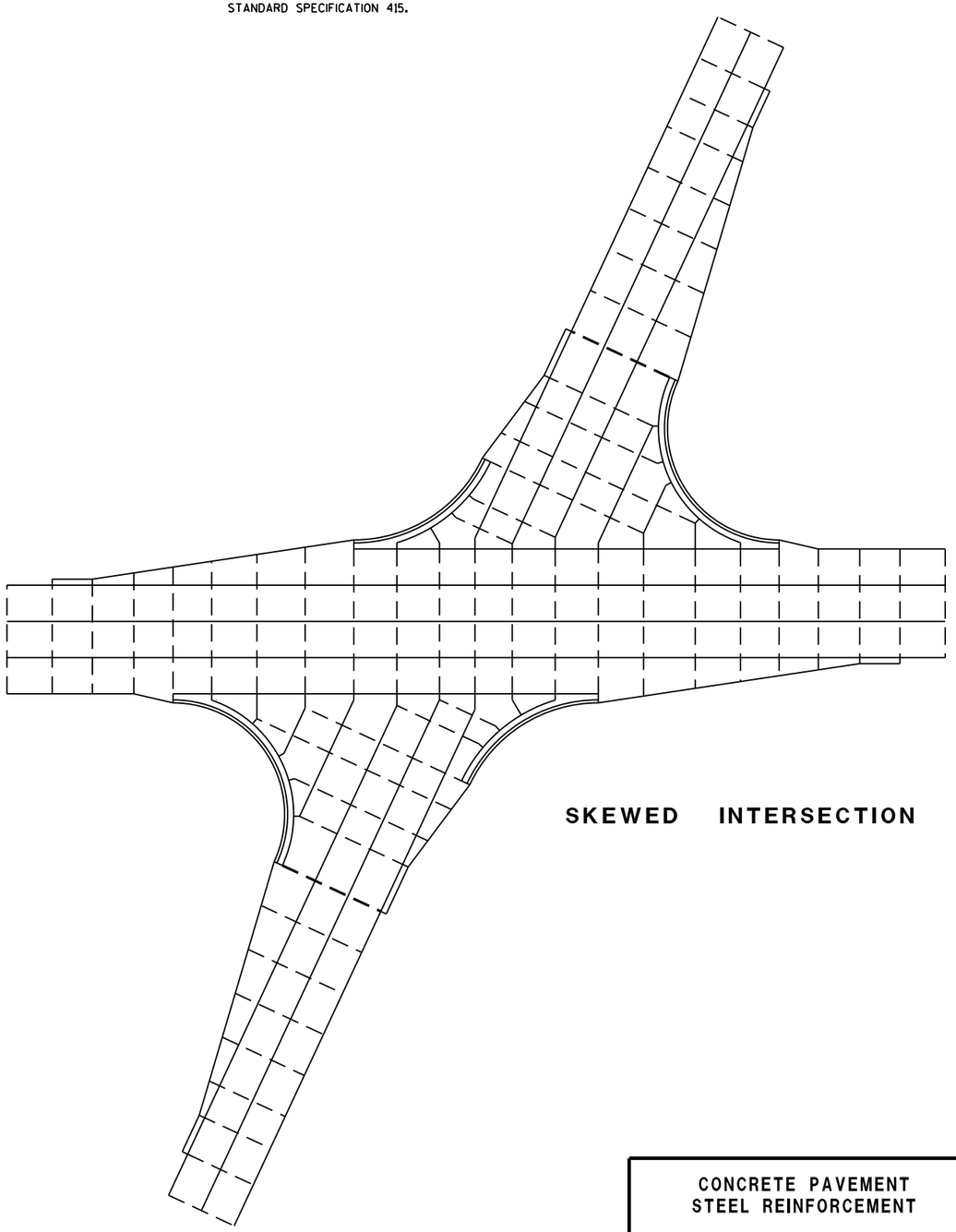
TIED JOINT



STANDARD INTERSECTION

GENERAL NOTES

USE AN EXPANSION JOINT FILLER MEETING THE REQUIREMENTS OF STANDARD SPECIFICATION 415.



SKEWED INTERSECTION

CONCRETE PAVEMENT
STEEL REINFORCEMENT

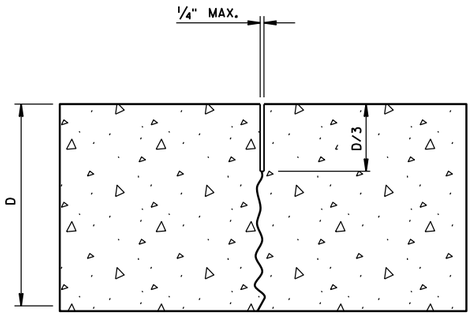
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

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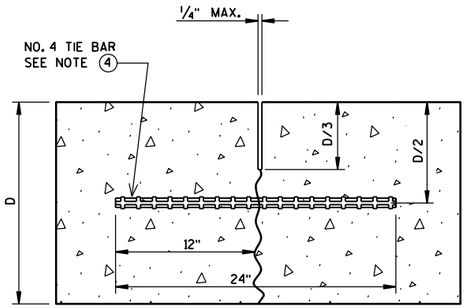
S.D.D. 13 C 18-2b

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S.D.D. 13 C 18-2b



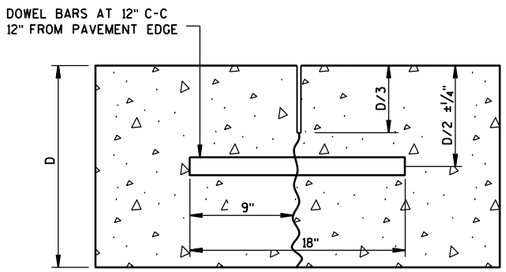
UNDOWELED-TRANSVERSE



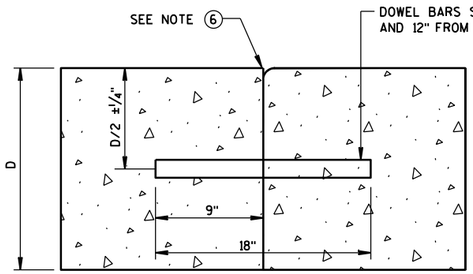
TIED LONGITUDINAL

GENERAL NOTES

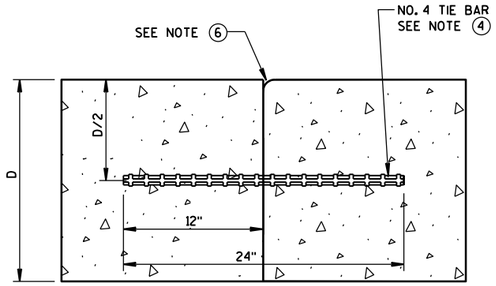
1. USE DOWELED EXPANSION JOINTS ON SIDE ROADS AT INTERSECTIONS (TO ISOLATE THE SIDE ROAD FROM THE THROUGH STREET) IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH.
2. SPACE CONTRACTION JOINTS IN ACCORDANCE WITH 13C4, 13C11 OR 13C13.
3. LOCATE CONSTRUCTION JOINTS A MINIMUM OF 6 FEET FROM THE NEAREST CONTRACTION JOINT AND ALIGN PARALLEL TO CONTRACTION JOINTS.
4. SPACE TIE BARS AT LONGITUDINAL CONSTRUCTION OR CONTRACTION JOINTS IN ACCORDANCE WITH SDD 13C1.
5. CONSTRUCTION JOINTS CAN BE FORMED OR SAWED.
6. IF JOINT IS FORMED, PROVIDE A 1/4-INCH RADIUS.



DOWELED-TRANSVERSE



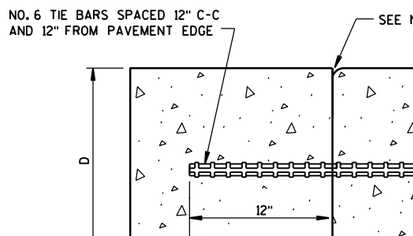
DOWELED TRANSVERSE



TIED LONGITUDINAL

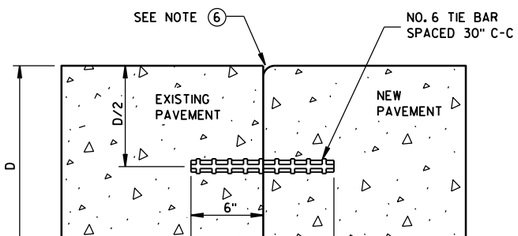
CONTRACTION JOINTS

SEE NOTE (2)



TIED TRANSVERSE

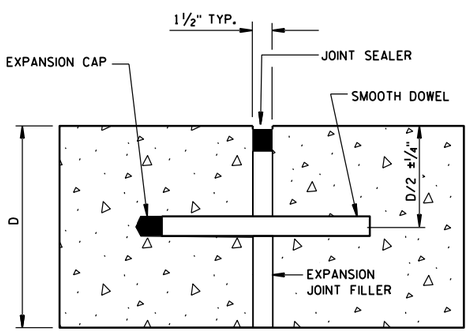
(FOR USE ON NON-DOWELED PAVEMENTS ONLY)



TIED LONGITUDINAL TO EXISTING

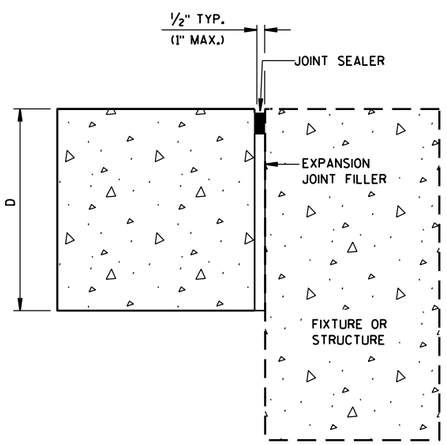
CONSTRUCTION JOINTS

SEE NOTE (5)



DOWELED-TRANSVERSE

SEE NOTE (1)



UNTIED-LONGITUDINAL

EXPANSION JOINTS

CONCRETE PAVEMENT
JOINT TYPES

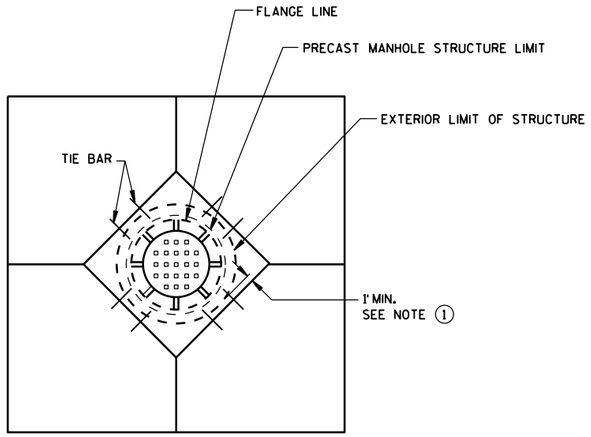
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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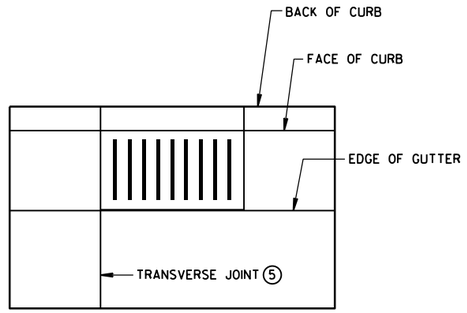
S.D.D. 13 C 18-2c

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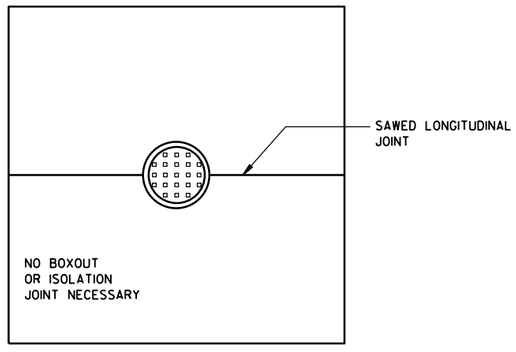
S.D.D. 13 C 18-2c



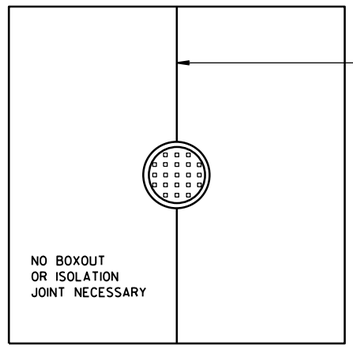
DIAGONAL MANHOLE BOXOUT FOR CONSTRUCTION JOINTS



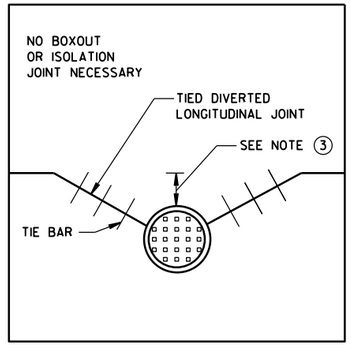
INLET WITH TRANSVERSE JOINT



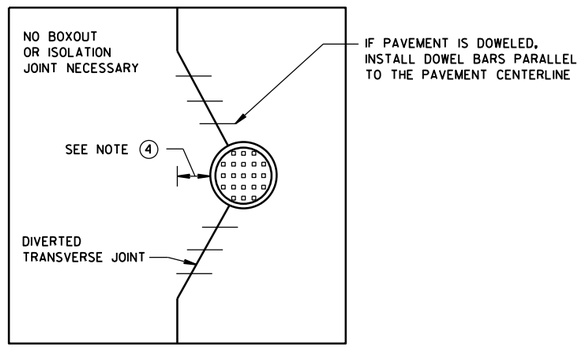
MANHOLE WITH LONGITUDINAL JOINT



MANHOLE WITH TRANSVERSE JOINT



MANHOLE WITH DIVERTED LONGITUDINAL CONTRACTION JOINT



MANHOLE WITH DIVERTED TRANSVERSE CONTRACTION JOINT

GENERAL NOTES

(1) USE BOXOUTS WHEN UTILITY STRUCTURE IS IN THE PATH OF CONSTRUCTION JOINTS. PROVIDE A 1-FOOT MINIMUM CLEARANCE BETWEEN THE EXTERIOR LIMIT OF THE STRUCTURE TO THE DIAMOND BOXOUT.

(2) ADJUST TRANSVERSE JOINT TO INTERSECT MANHOLE IF POSSIBLE.

(3) IF DISTANCE BETWEEN THE LONGITUDINAL JOINT AND THE EDGE OF MANHOLE IS 2 FEET OR LESS, DIVERT THE LONGITUDIAL JOINT AT A 2:1 TAPER RATE TO THE CENTER OF THE MANHOLE. IF THE DISTANCE IS GREATER THAN 2 FEET, DO NOT DIVERT THE JOINT AND SAW AS NORMAL. PLACE REBAR REINFORCEMENT AROUND THE MANHOLE.

(4) IF DISTANCE FROM THE EDGE OF THE MANHOLE TO THE NEAREST TRANSVERSE JOINT IS 4 FEET OR LESS, REDIRECT JOINT TO INTERSECT THE CENTER OF THE MANHOLE. IF DISTANCE IS GREATER THAN 4 FEET, DO NOT DIVERT THE JOINT AND SAW AS NORMAL. PLACE REBAR REINFORCEMENT AROUND THE MANHOLE.

(5) ALIGN TRANSVERSE JOINT WITH ONE EDGE OF INLET WHEN PRACTICAL.

CONCRETE PAVEMENT JOINTING AT UTILITY FIXTURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

5-3-2013
DATE

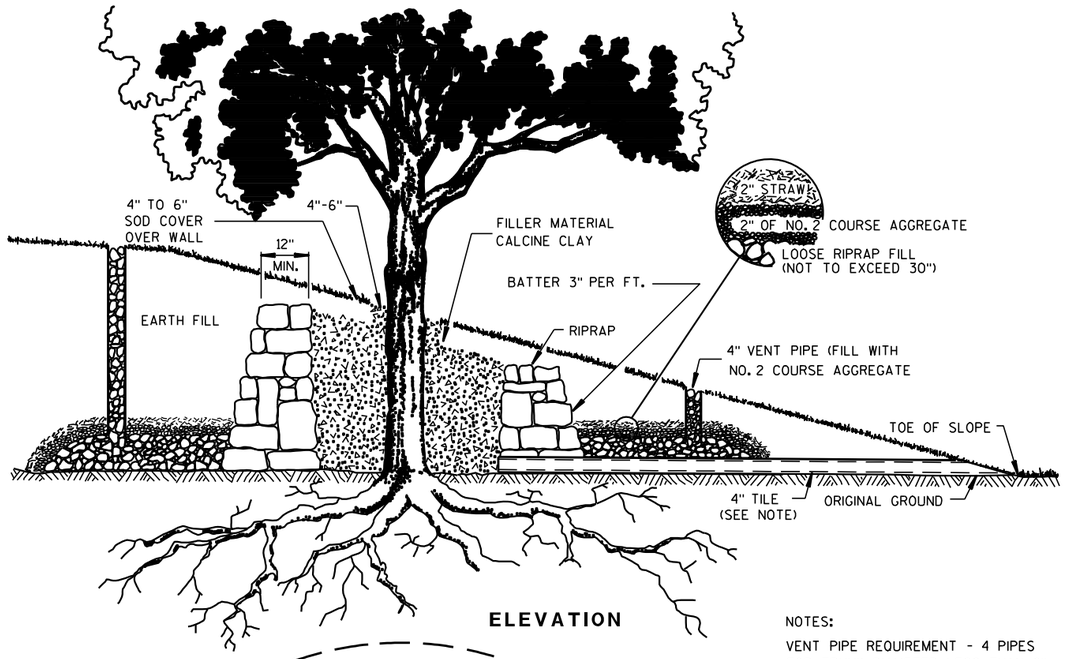
/S/ Deb Bischoff
PAVEMENT POLICY & DE

NEER

FHWA

6

S.D.D. 13 C 18-2d



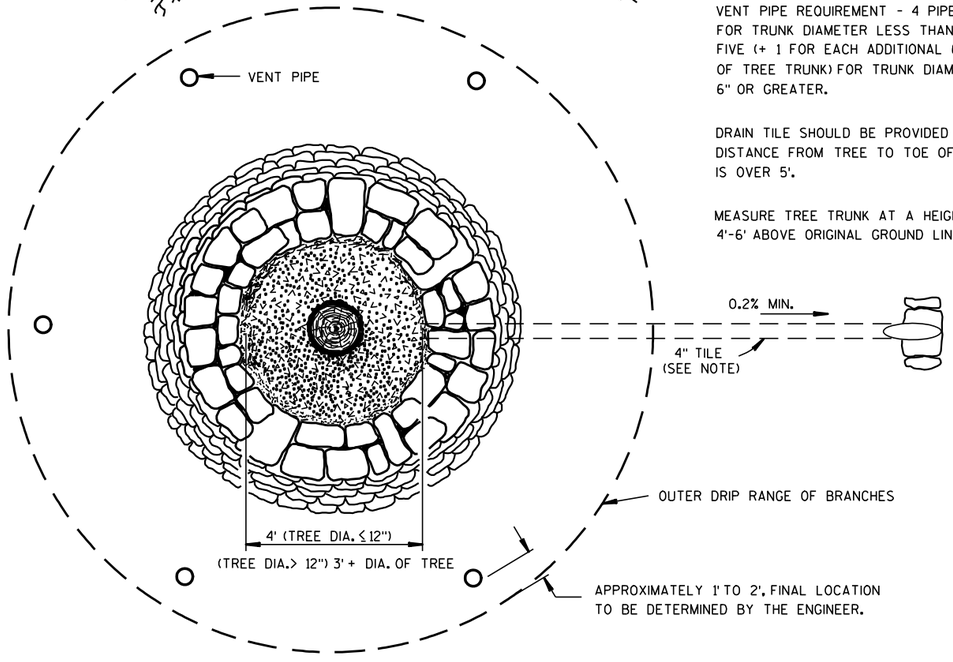
ELEVATION

NOTES:

VENT PIPE REQUIREMENT - 4 PIPES FOR TRUNK DIAMETER LESS THAN 6". FIVE (+ 1 FOR EACH ADDITIONAL 6" OF TREE TRUNK) FOR TRUNK DIAMETER 6" OR GREATER.

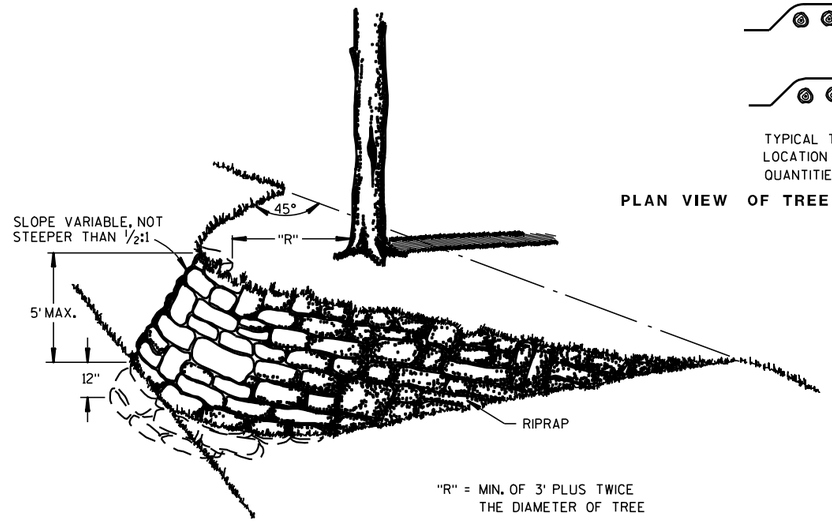
DRAIN TILE SHOULD BE PROVIDED IF DISTANCE FROM TREE TO TOE OF SLOPE IS OVER 5'.

MEASURE TREE TRUNK AT A HEIGHT 4'-6' ABOVE ORIGINAL GROUND LINE.



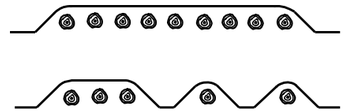
PLAN

FULL TREE WELL WITH RIPRAP WALL



"R" = MIN. OF 3' PLUS TWICE THE DIAMETER OF TREE

DETAILS OF TREE ISLAND AND ROOT PROTECTION



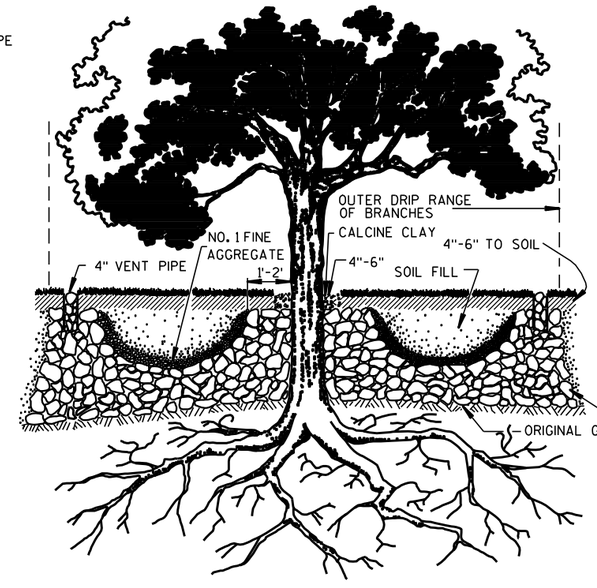
TYPICAL TREATMENTS OF ROOT PROTECTION. LOCATION SHOWN ON MISCELLANEOUS QUANTITIES SHEET.

PLAN VIEW OF TREE ISLANDS FOR ONE OR MORE TREES

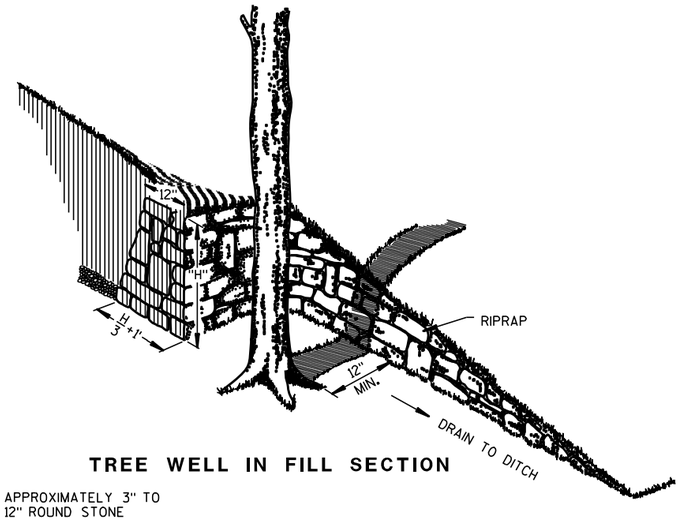
GENERAL NOTES

WALLS TO BE BUILT TO APPROXIMATE SHAPE AND DIMENSIONS SHOWN. STONE TO CONFORM TO SPECIFICATIONS FOR RIPRAP.

DETAILED DRAWINGS OF PROPOSED ALTERNATE DESIGNS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.



TREE WELL WITHOUT WALL



TREE WELL IN FILL SECTION

DETAILS FOR TREE WELLS

TREE PRESERVATION DETAILS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
8/25/76 DATE
/S/ D. L. Strand STATE DESIGN ENGINEER
FHWA

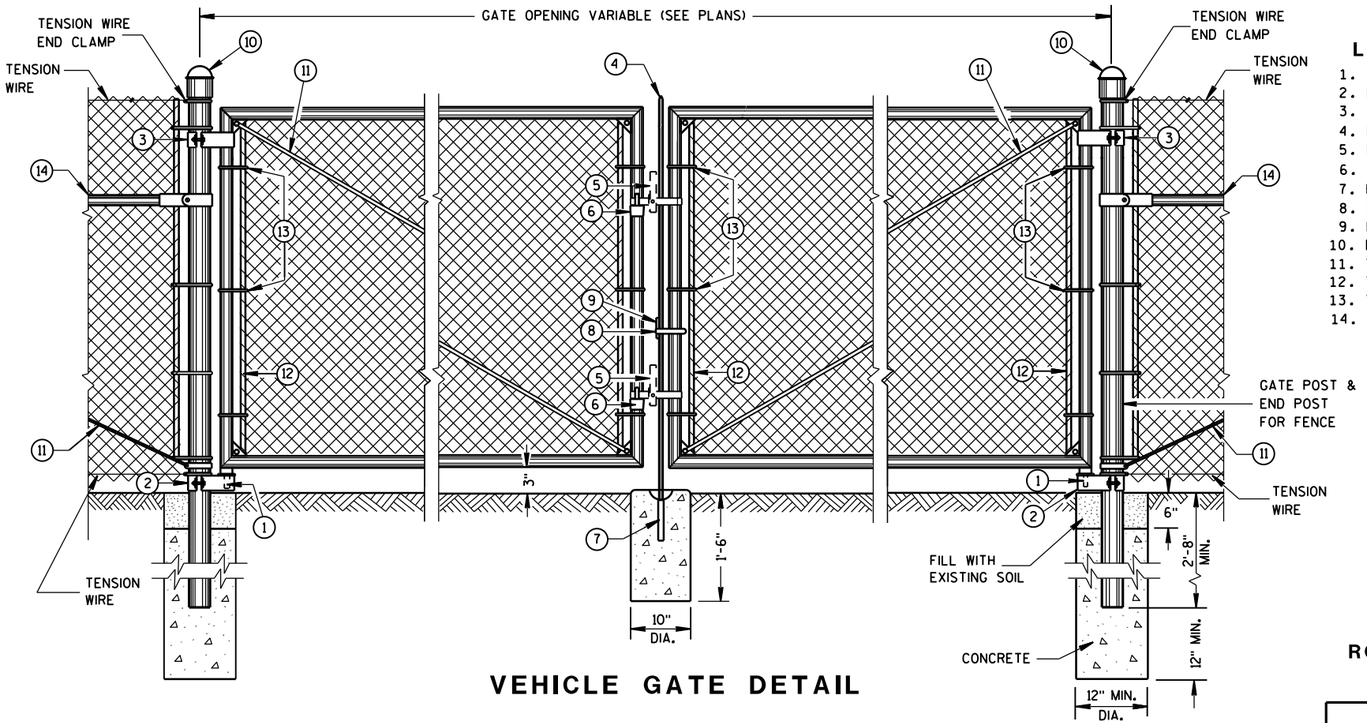
WYS

6

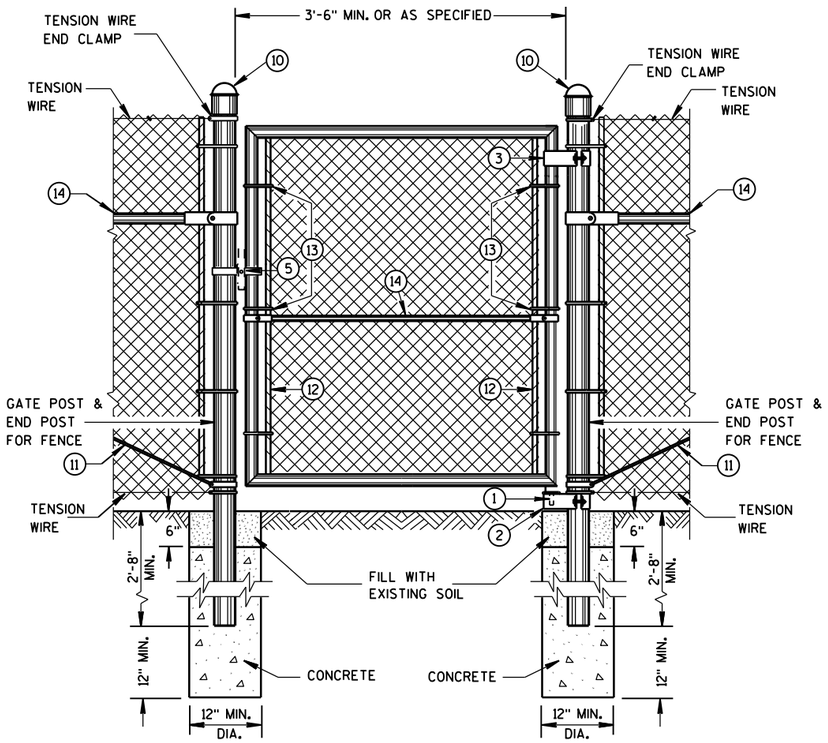
S.D.D. 14 A 1-3

6

S.D.D. 14 A 1-3



VEHICLE GATE DETAIL



PEDESTRIAN GATE DETAIL

LEGEND

1. STRAIGHT PLUG
2. BOTTOM HINGE
3. TOP HINGE
4. PLUNGER ROD
5. FULCRUM LATCH
6. FORK CATCH *
7. PLUNGER ROD CATCH
8. LOCK KEEPER GUIDE
9. LOCK KEEPER
10. DOME TOPS
11. TRUSS RODS
12. TENSION BAR
13. TENSION BANDS
14. BRACE RAIL

*NOT REQUIRED ON SINGLE SWING PEDESTRIAN GATE

GENERAL NOTES

FENCE POSTS INSTALLED ON CONCRETE WALLS SHALL BE ANCHORED INTO EMBEDDED METAL SLEEVES OR CORED HOLE BY FILLING THE ANNULAR SPACE WITH PEA GRAVEL FOLLOWED BY AN EPOXY RESIN ADHESIVE. THE EPOXY RESIN ADHESIVE SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M 235, CLASS A, B OR C.

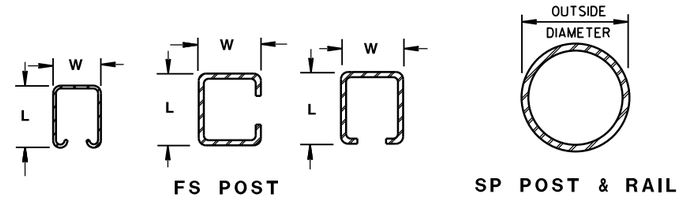
USE FENCE FABRIC KNUCKLED AT BOTH SELVAGES.

FOR LEAF GATES GREATER THAN 8 FEET WIDE, INSTALL INTERIOR VERTICAL BRACE RAIL AT 8 FOOT INTERVALS.

FOR FABRIC HEIGHTS GREATER THAN 8 FEET, INSTALL INTERIOR HORIZONTAL BRACE RAILS TO LEAF GATE.

MAXIMUM SAG FOR OUTER GATE MEMBER SHALL NOT EXCEED THE GREATER OF 1% OF THE LEAF GATE WIDTH OR 2 INCHES.

USE TYPE 2, CLASS 3, MARCELLED/CRIMPED, TENSION WIRE PER ASTM A 817.



FS POST

SP POST & RAIL

CROSS SECTIONS OF POSTS AND RAILS

ROLLED-FORMED STEEL FENCE POST (2.0 OZ./SQ. FT. COATING)

POST TYPE	LENGTH (L) INCH	WIDTH (W) INCH	WEIGHT LBS/FT
FS1	1.625	1.25	1.35
FS2†	1.875	1.625	1.850
FS2	1.875	1.625	2.400
FS3	2.250	1.700	2.780

ROUND STEEL FENCE POST (1.8 OZ./SQ. FT. COATING)

POST TYPE	OUTSIDE DIMENSION INCH	WALL THICKNESS INCH	WEIGHT LBS/FT
SP1	1.660	0.140	2.270
SP2	1.900	0.145	2.720
SP3	2.375	0.154	3.650
SP4	2.875	0.203	5.800
SP5	4.000	0.226	9.120
SP6	6.625	0.280	18.990
SP7	8.625	0.322	28.580

REQUIRED FENCE POST SIZES

USE	FABRIC HEIGHTS FEET	POST TYPE
TERMINAL POSTS **	LESS THAN OR EQUAL TO 6 FT.	SP3
	GREATER THAN OR EQUAL TO 6 FT.	SP4
LINE POSTS	LESS THAN OR EQUAL TO 6 FT.	SP2
	LESS THAN OR EQUAL TO 8 FT.	SP3
	GREATER THAN OR EQUAL TO 8 FT.	SP4
	LESS THAN OR EQUAL TO 8 FT.	FS2 OR FS2†
	GREATER THAN OR EQUAL TO 8 FT.	FS3

REQUIRED POST SIZE FOR GATES

USE	LEAF WIDTHS FEET	POST TYPE
GATES	LESS THAN OR EQUAL TO 6 FT.	SP4
	LESS THAN OR EQUAL TO 13 FT.	SP5
	LESS THAN OR EQUAL TO 18 FT.	SP6
	LESS THAN OR EQUAL TO 23 FT.	SP7

BRACE RAIL TYPES

USE		TYPE
BRACE RAIL		SP1 OR FS1

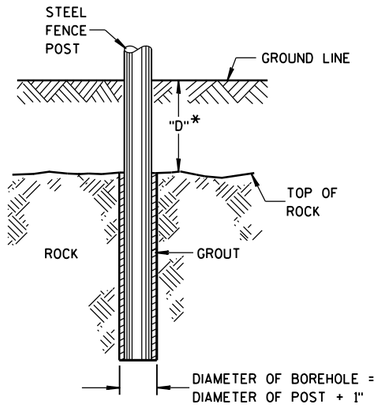
** INCLUDES END, CORNER, ANGLE, INTERSECTION AND INTERMEDIATE BRACED POSTS

FENCE CHAIN LINK

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

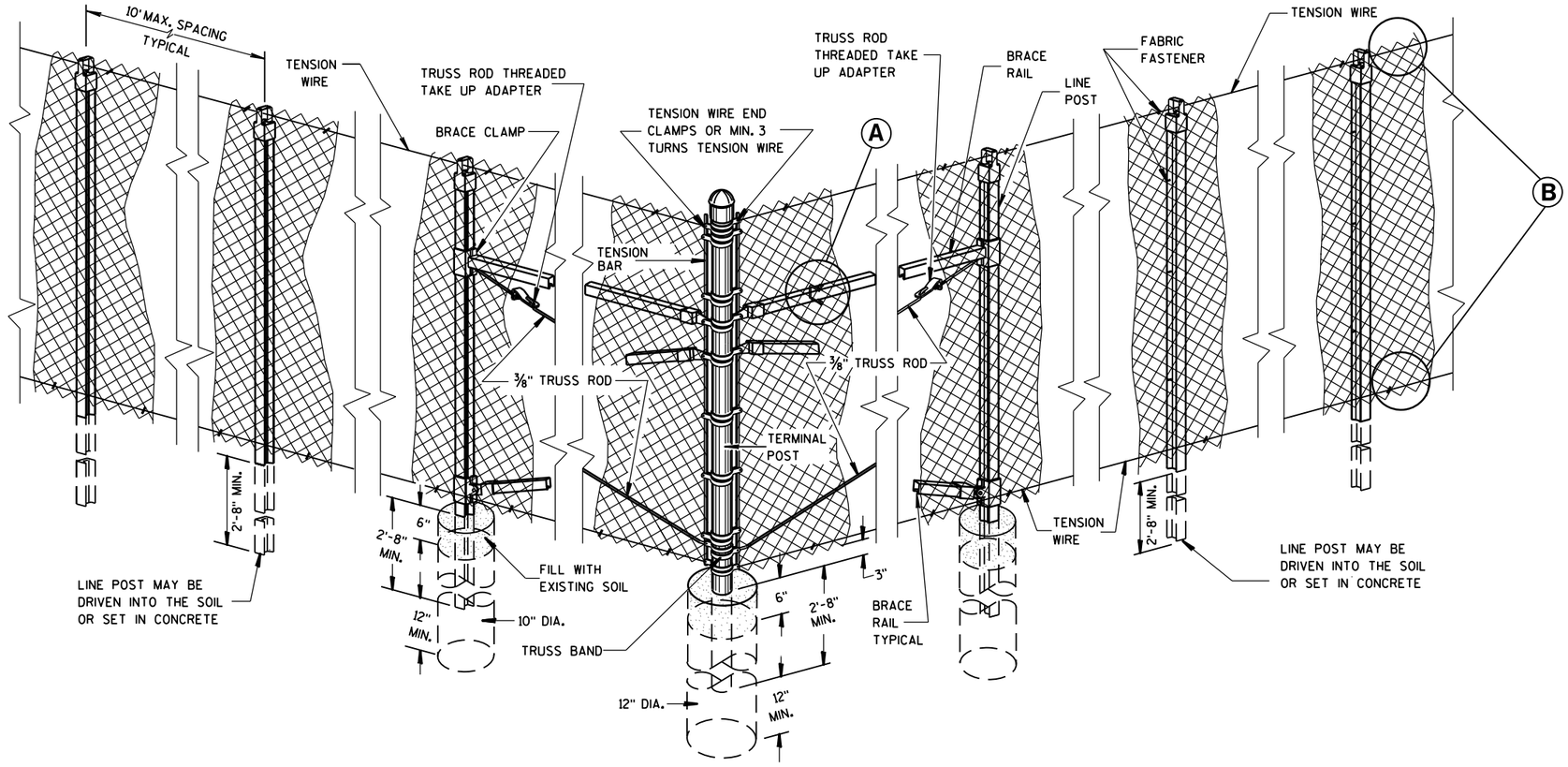
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S.D.D. 15 B 3-15a

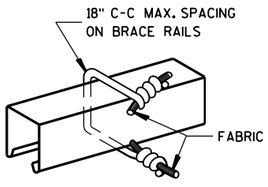


*IF "D" IS LESS THAN 2'-6", DRILL ROCK AND INSTALL GROUT

ROCK INSTALLATION OF LINE POST



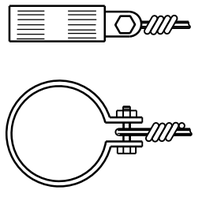
END, CORNER, ANGLE INTERSECTION & INTERMEDIATE BRACED POSTS



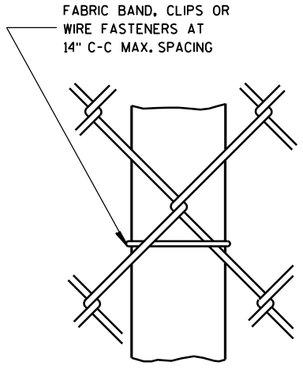
BRACE RAIL

FABRIC FASTENER

Ⓐ



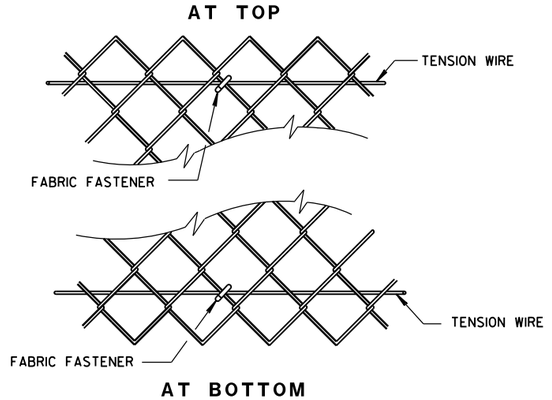
TENSION WIRE END CLAMP



LINE POST

FABRIC FASTENER

AT TOP



AT BOTTOM

SELVAGES

Ⓑ

FENCE CHAIN LINK

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

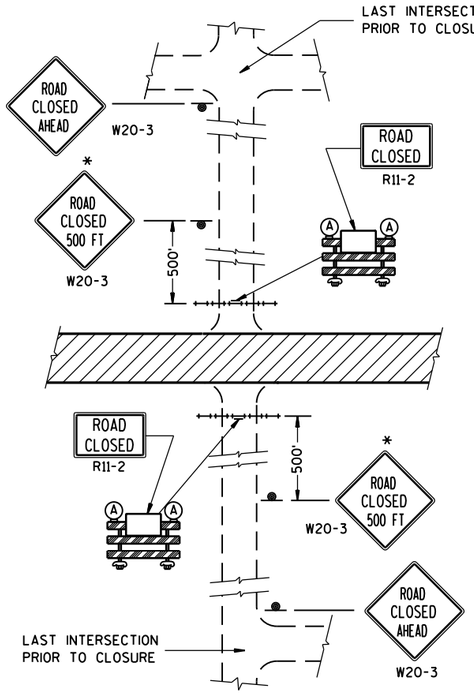
APPROVED
FEB. 2015 DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

6

S.D.D. 15 B 3-15b

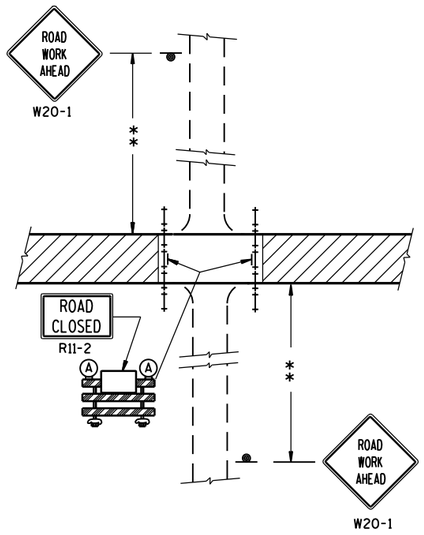
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S.D.D. 15 B 3-15b



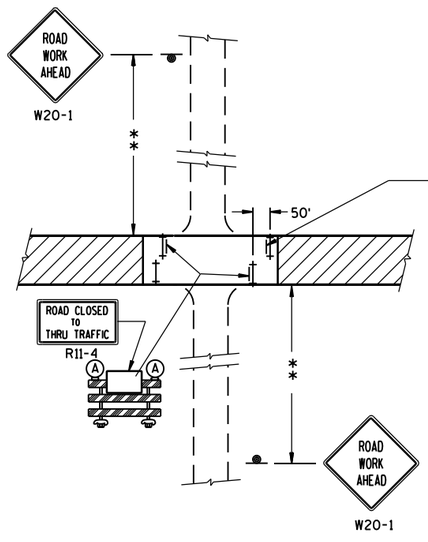
DETAIL 1

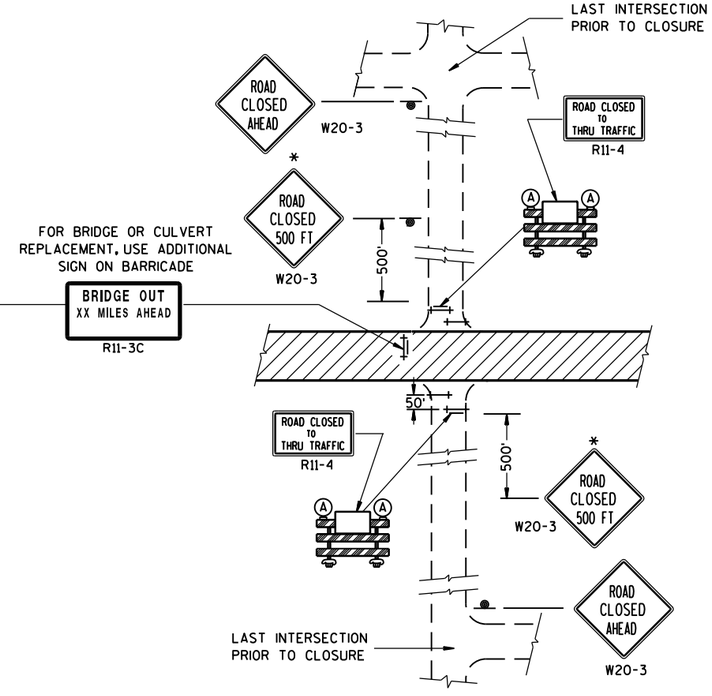
(NO ACCESS TO PROJECT)



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

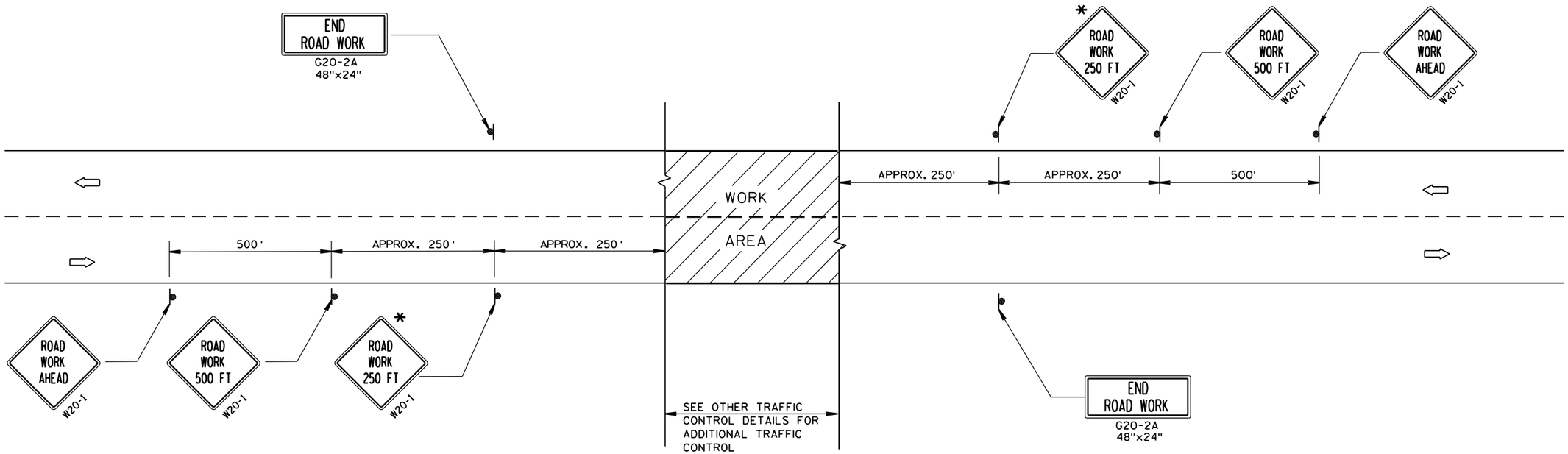
APPROVED
8/2013 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER
FHWA

6

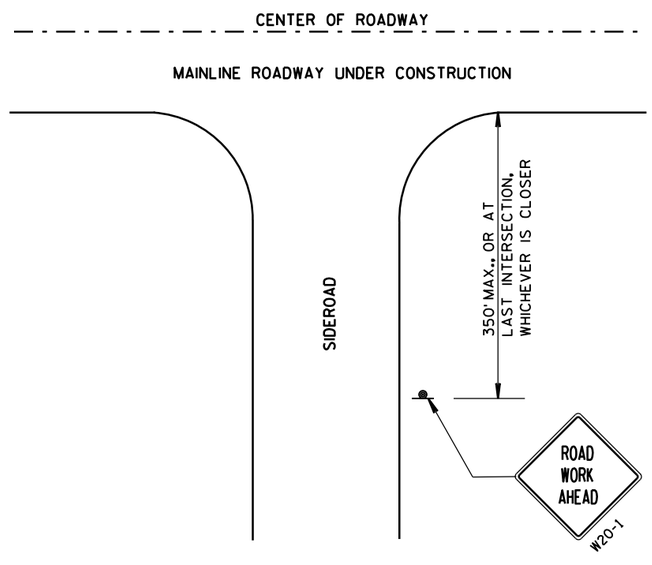
S.D.D. 15 C 3-2

6

S.D.D. 15 C 3-2



TYPICAL SIDEROAD APPROACH WARNING SIGN DETAIL



GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS, 36"x36" SIGNS MAY BE USED INSTEAD OF 48"x48" SIGNS.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

IF A "STOP" SIGN MUST BE REMOVED FOR A WORK OPERATION, A TEMPORARY "STOP" SIGN SHALL BE PLACED PRIOR TO THE SIGN REMOVAL, OR A FLAGGER SHALL BE PROVIDED UNTIL THE SIGN IS RE-ESTABLISHED.

* THE THIRD W20-1 SIGN IS REQUIRED ONLY IF THERE IS AN INTERSECTION BETWEEN THE "ROAD WORK 500 FT" SIGN AND THE WORK ZONE. ADJUST THE PLACEMENT OF THIS SIGN BASED ON INTERSECTION LOCATION AND OTHER FIELD CONDITIONS.

LEGEND

- SIGN ON PERMANENT SUPPORT
- DIRECTION OF TRAFFIC
- WORK AREA

TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

8/2013 — DATE

/S/ Travis Feltes — STATE TRAFFIC ENGINEER

213 — SIGN

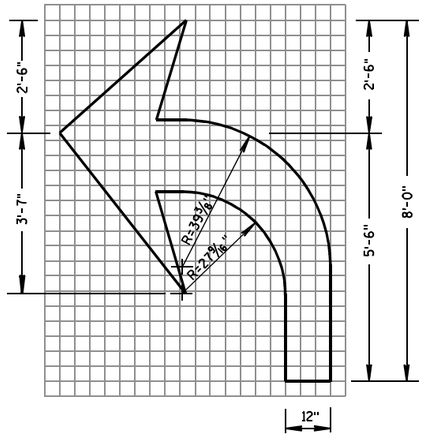
FHWA

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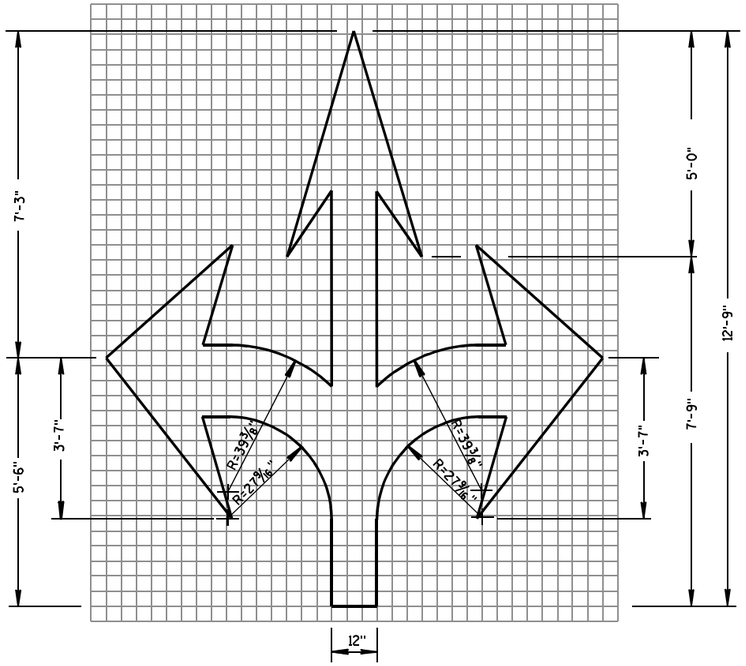
S.D.D. 15 C 5-2

6

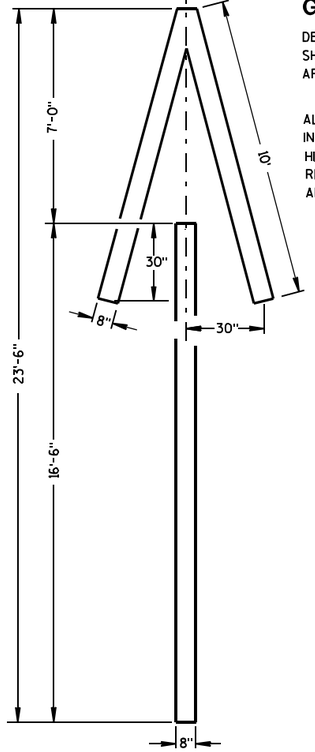
S.D.D. 15 C 5-2



TYPE 2



TYPE 6

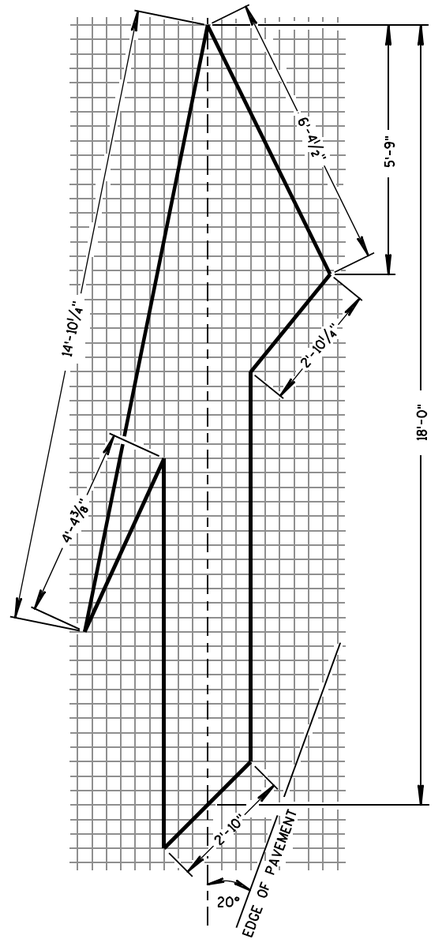


TYPE 4

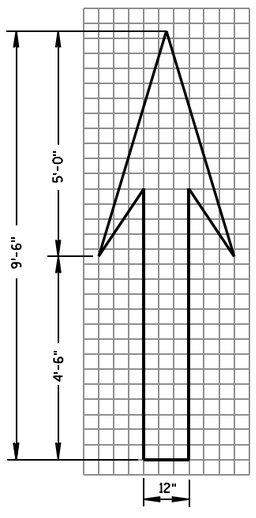
GENERAL NOTES

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

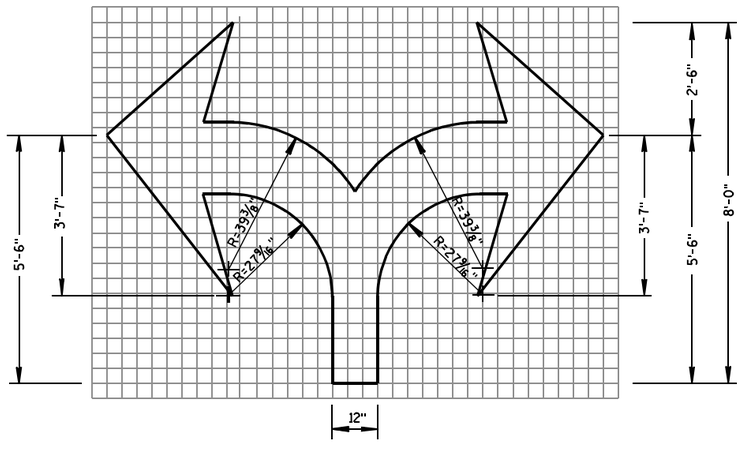
ALL LETTERS, ARROWS AND SYMBOLS SHALL BE IN CONFORMANCE WITH REQUIREMENTS INCLUDED IN "STANDARD ALPHABETS FOR HIGHWAY SIGNS AND PAVEMENT MARKING" BOOK BY THE FEDERAL HIGHWAY ADMINISTRATION. ALL LETTERS, ARROWS AND SYMBOLS SHALL BE WHITE AND REFLECTORIZED. SMALL DIFFERENCES IN DIMENSIONS WITHIN THE TOLERANCES OF THAT BOOK ARE ACCEPTABLE.



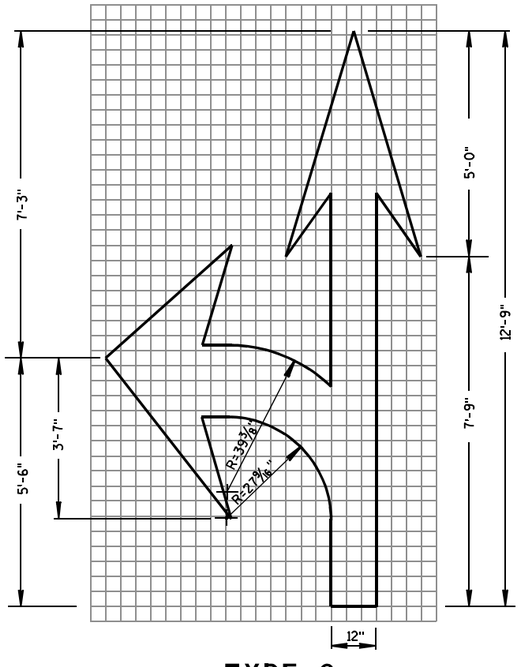
TYPE 5 LANE DROP ARROW



TYPE 1



TYPE 7



TYPE 3

PAVEMENT MARKING ARROWS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

7/1/11 — DATE

/S/ Thomas N. Nothdurft — STATE TRAFFIC ENGINEER

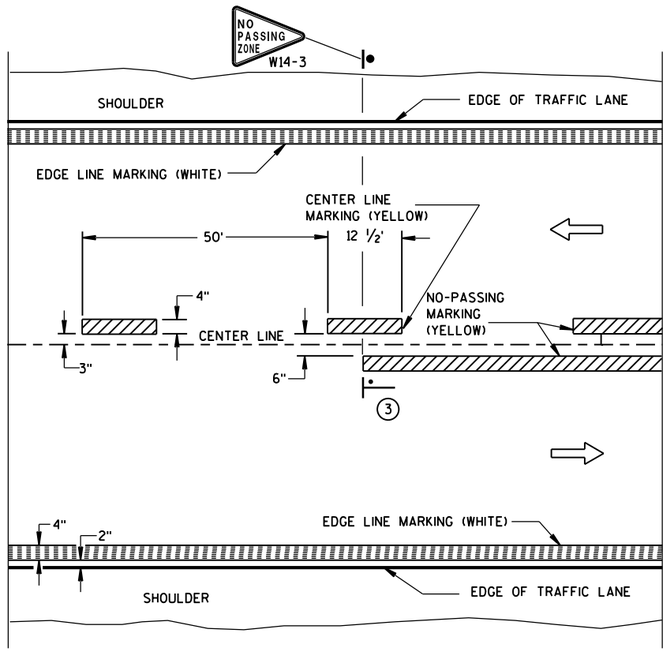
FHWA

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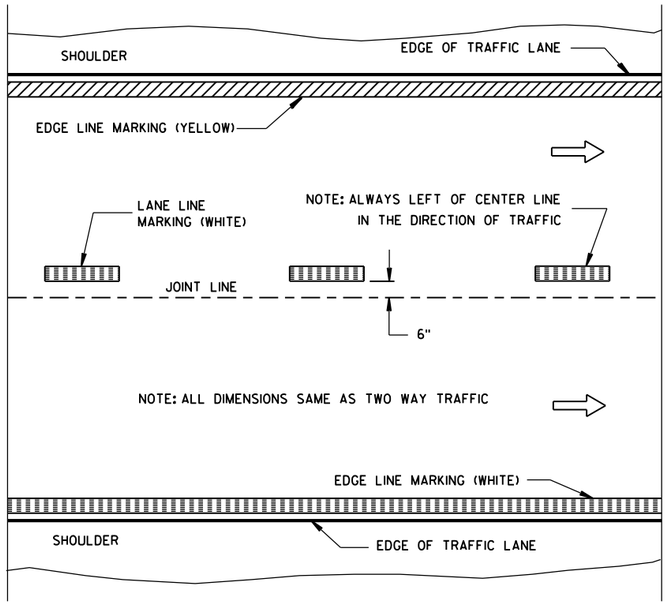
S.D.D. 15 C 7-12c

6

S.D.D. 15 C 7-12c

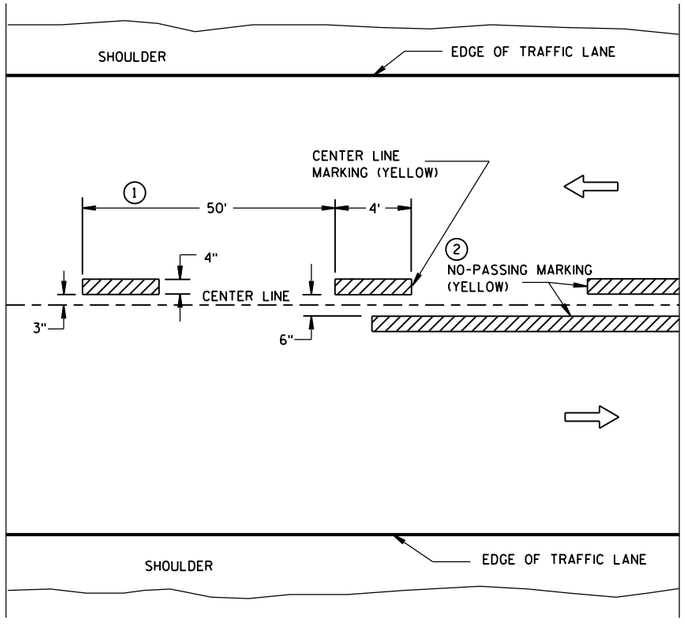


TWO WAY TRAFFIC

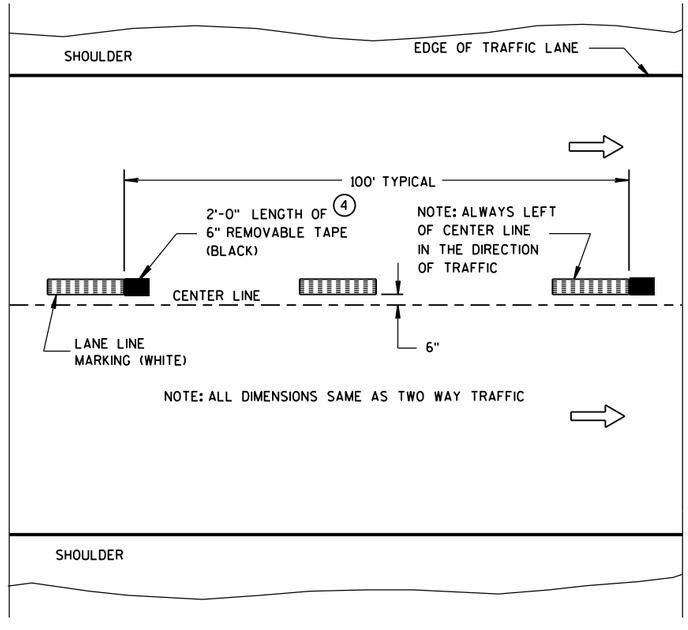


ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY (INTERMEDIATE) PAVEMENT MARKING

(SHOWS CYCLE FOR TEMPORARY CENTER LINE OR TEMPORARY LANE LINE MARKING)

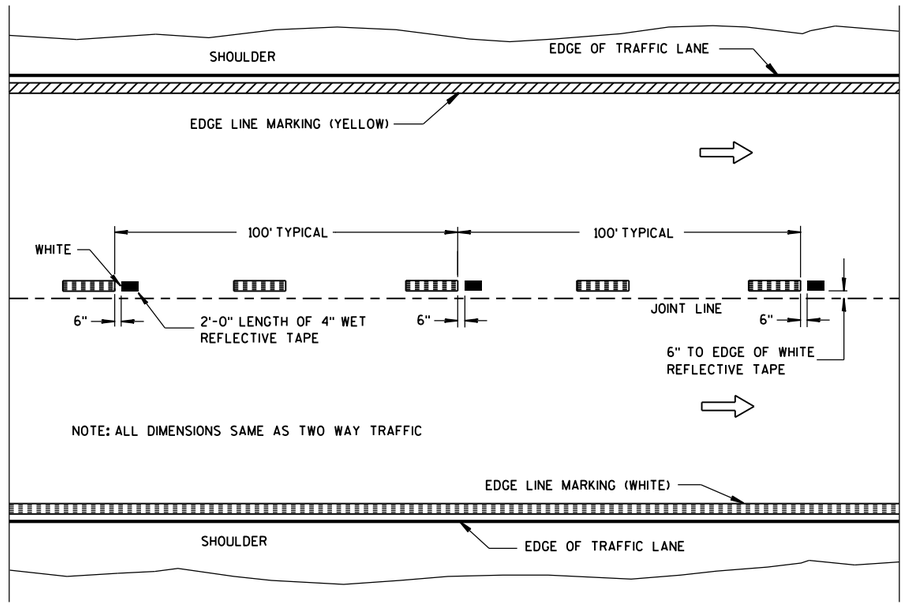
GENERAL NOTES

DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.

1. HALF CYCLE LENGTHS (25'±) WITH 2' MINIMUM STRIPE LENGTHS SHALL BE PROVIDED ON ROADWAYS (INCLUDING TEMPORARY TRAVELED WAYS) WITH REVERSE CURVATURE, CURVATURE OF OVER 5 DEGREES OR WHEN DIRECTED BY THE ENGINEER TO MARK UNUSUAL ALIGNMENT OF THE TRAVELED WAY.
2. NO PASSING ZONE TEMPORARY PAVEMENT MARKING IS REQUIRED TO BE PLACED, WHERE APPROPRIATE, ALONG WITH CENTERLINE TEMPORARY PAVEMENT MARKING WHEN A SAME DAY PERMANENT PAVEMENT MARKING ITEM IS INCLUDED IN THE CONTRACT.
3. NO PASSING ZONE MARKINGS ARE PLACED ACCORDING TO "T" MARKINGS. IF EXISTING NO PASSING ZONE W14-3 SIGNS ARE BEYOND 50 FEET IN EITHER DIRECTION, THE SIGNS SHALL BE MOVED TO THE "T" MARKINGS.
4. CONCRETE ONLY.

NOTE

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL



WET REFLECTIVE TAPE SUPPLEMENT TO
SPRAYED OR NON WET REFLECTIVE TAPE LANE LINE

LEGEND

"T" MARKING

POST MOUNTED SIGN

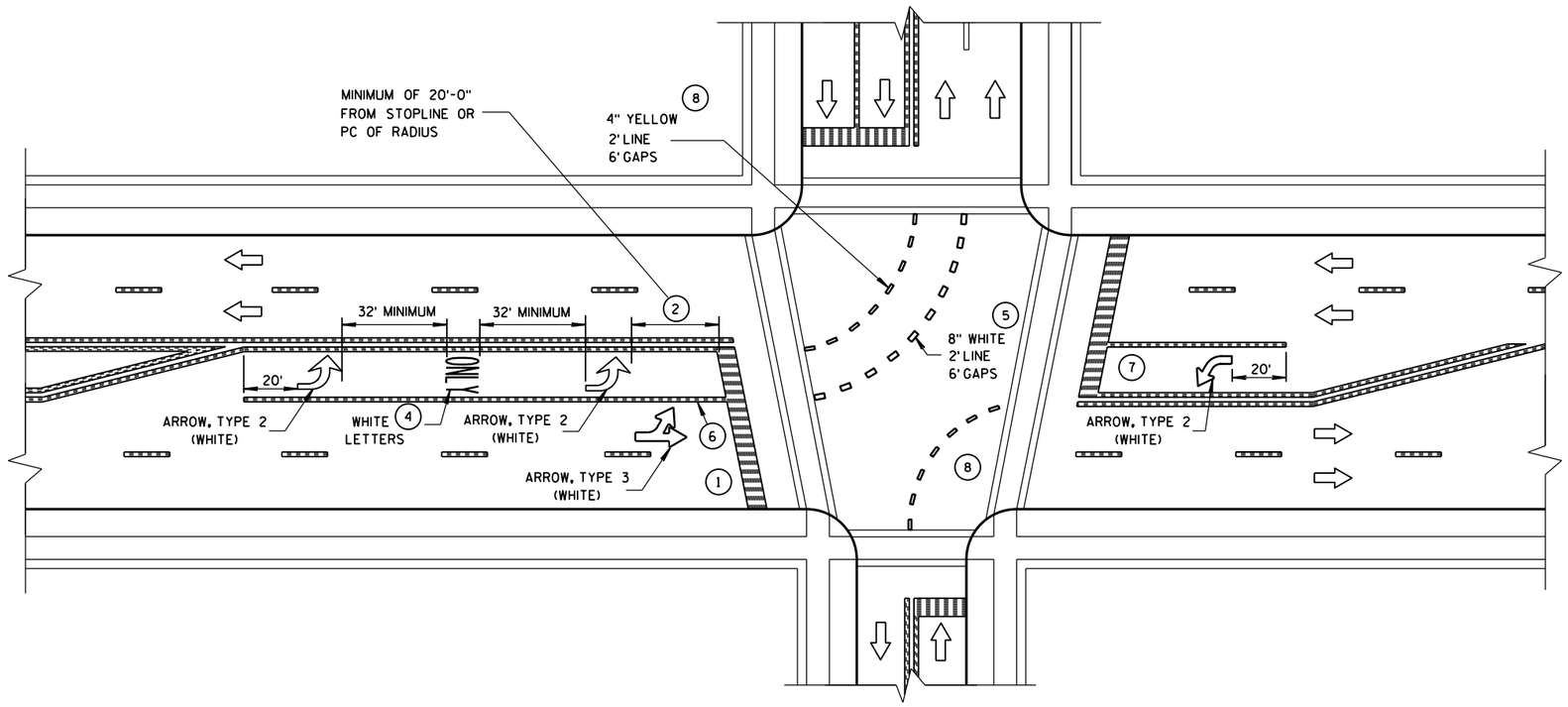
PAVEMENT MARKING (MAINLINE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
5-13-2013 DATE
/S/ Travis Feltes STATE TRAFFIC E
FHWA

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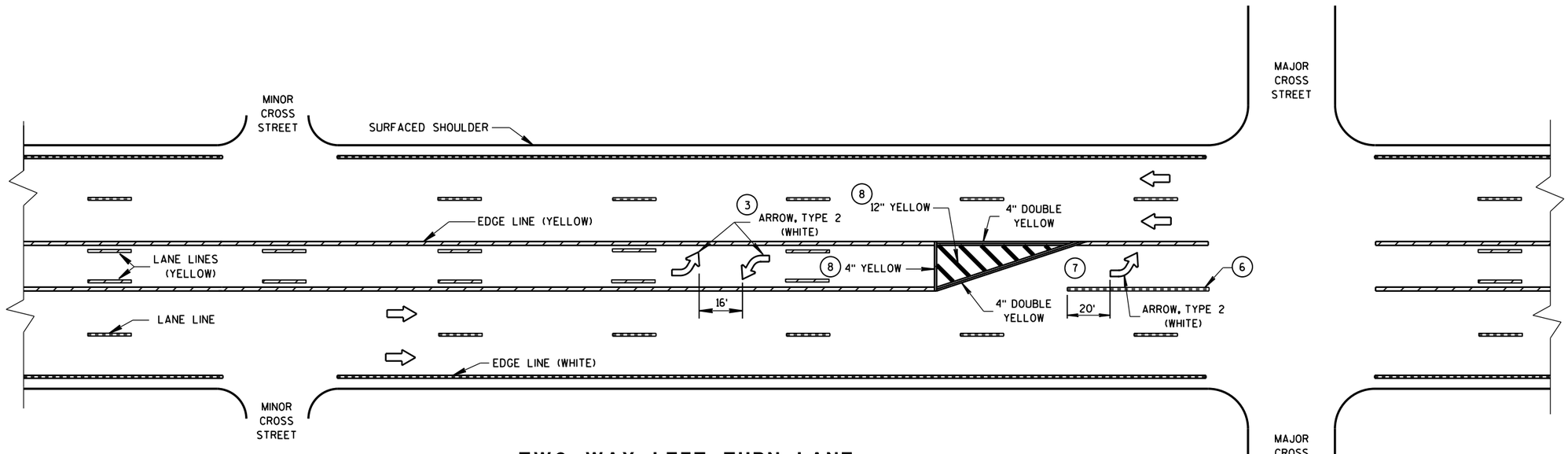
S.D.D. 15 C 8-16a



GENERAL NOTES

1. STOP BAR IS REQUIRED ONLY WHEN SPECIFIED IN THE CONTRACT.
2. DISTANCE MAY BE ADJUSTED TO ACCOMODATE SHORT LEFT TURN LANES. AS APPROVED BY THE ENGINEER.
3. A SET OF ARROWS IS REQUIRED EVERY 400 FEET OR NEAR INTERSECTIONS OR DRIVEWAYS WITH TURNING TRAFFIC.
4. ADD EXTRA SETS OF ONE ARROW AND ONE ONLY PER 160 FEET OR WHEN ON A CURVE.
5. 8" WHITE WITH 2' LINE 6' GAPS FOR DUAL TURN LANE.
6. 8" WHITE
7. ADD SECOND ARROW WHEN TURN BAY IS GREATER THAN OR EQUAL TO 108 FEET.
8. REQUIRED ONLY WHEN SPECIFIED IN THE CONTRACT.

NOTE:
ARROW SYMBOL (⇨)
SHOWS DIRECTION OF TRAVEL



TWO WAY LEFT TURN LANE

PAVEMENT MARKING (LEFT TURN LANE)

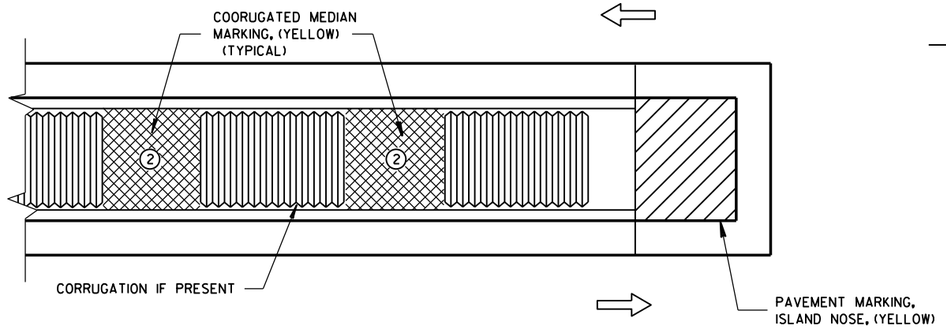
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

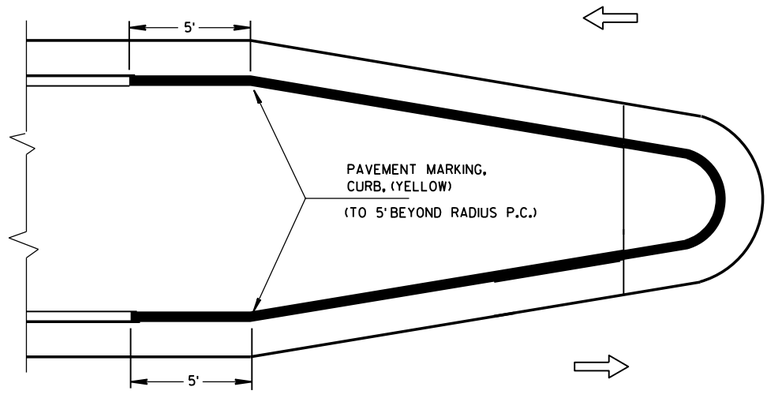
S.D.D. 15 C 8-16e

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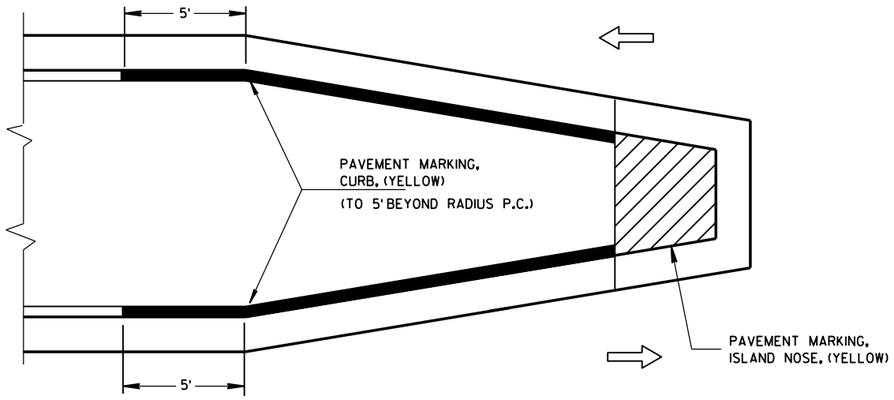
S.D.D. 15 C 8-16e



MEDIAN ISLAND WITH SQUARE BLUNT NOSE

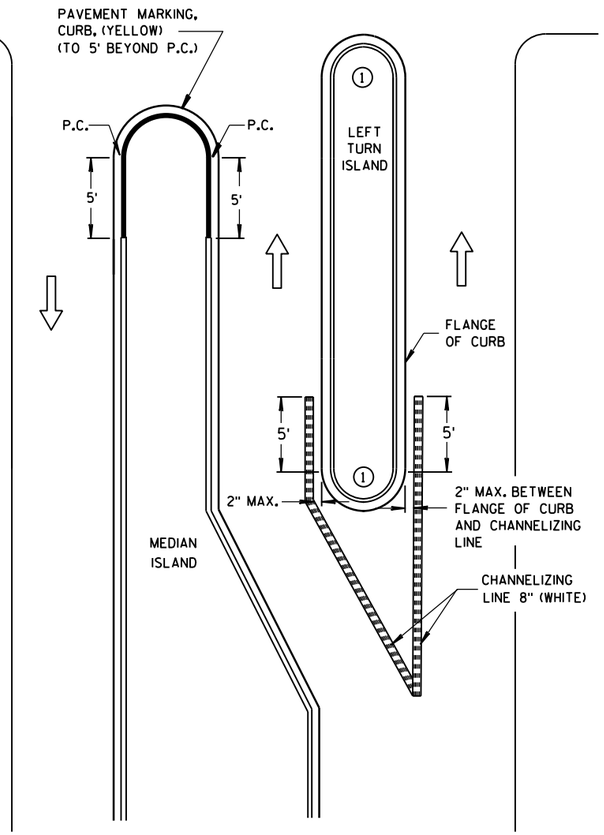


MEDIAN ISLAND WITH ROUND BLUNT NOSE



MEDIAN ISLAND WITH SLOPED NOSE

TYPICAL PLACEMENT OF PAVEMENT MARKING ON MEDIAN ISLANDS

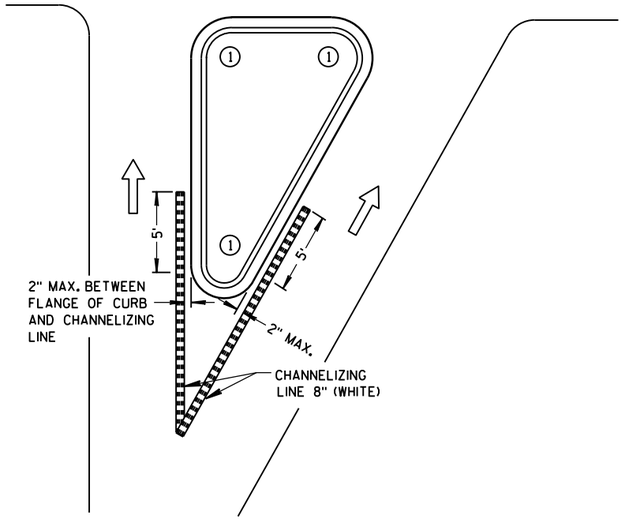


LEFT TURN & MEDIAN ISLAND

GENERAL NOTES

1. DO NOT MARK CURB NOSES THAT SEPARATE LANES OF TRAFFIC TRAVELING IN THE SAME DIRECTION.

2. WHEN CONCRETE CORRUGATED MEDIAN IS CONSTRUCTED TO SEPARATE TRAFFIC OPERATING IN THE OPPOSING DIRECTION YELLOW PAVEMENT MARKING SHALL BE APPLIED TO THE FLAT PORTION OF THE CONCRETE CORRUGATED MEDIAN. THE ITEM OF PAVEMENT MARKING, CONCRETE CORRUGATED MEDIAN, WILL BE MEASURED IN PLACE AND AND ACCEPTED IN ACCORDANCE WITH THE CONTRACT AND PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE FOOT.



RIGHT TURN ISLAND

LEGEND

- ISLAND NOSE MARKING
- CURB MARKING
- CORRUGATED MEDIAN MARKING
- DIRECTION OF TRAVEL

PAVEMENT MARKING
(ISLANDS)

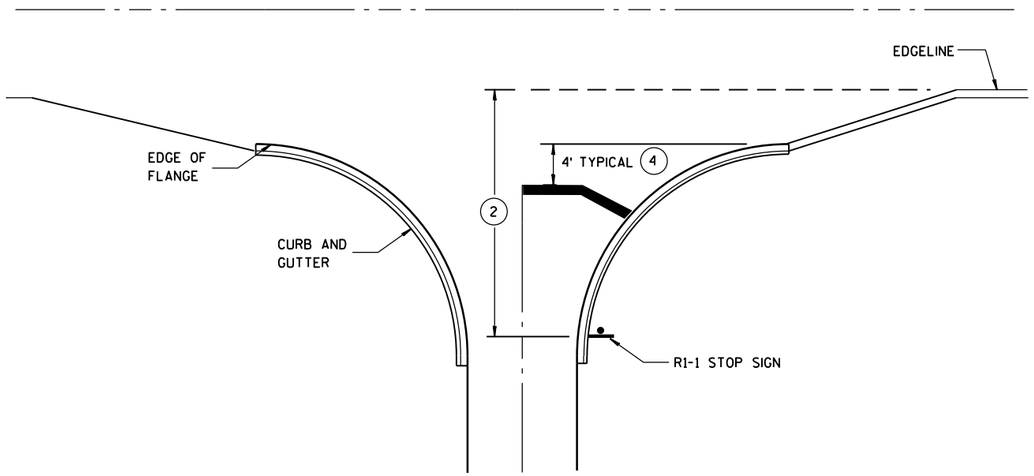
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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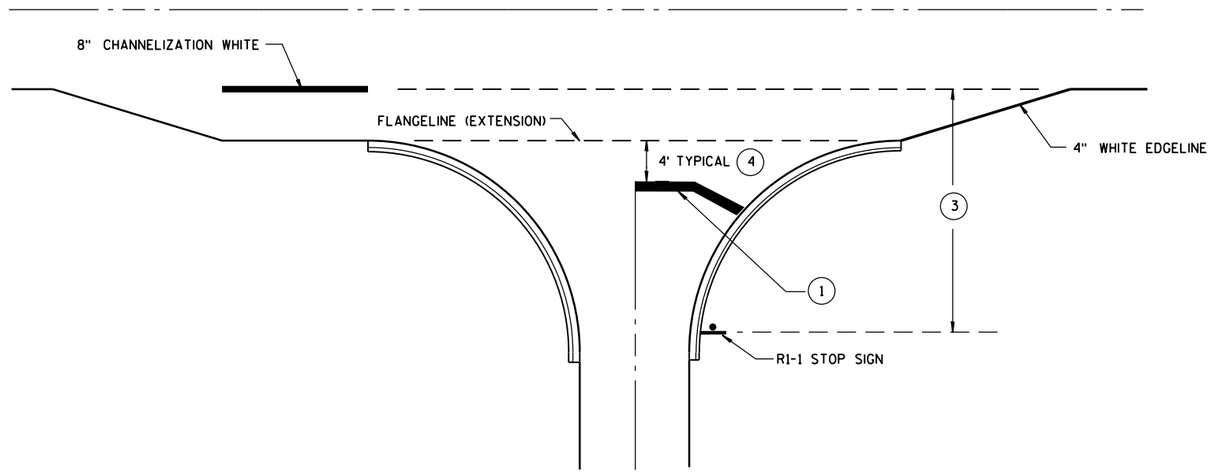
S.D.D. 15 C 8-16f

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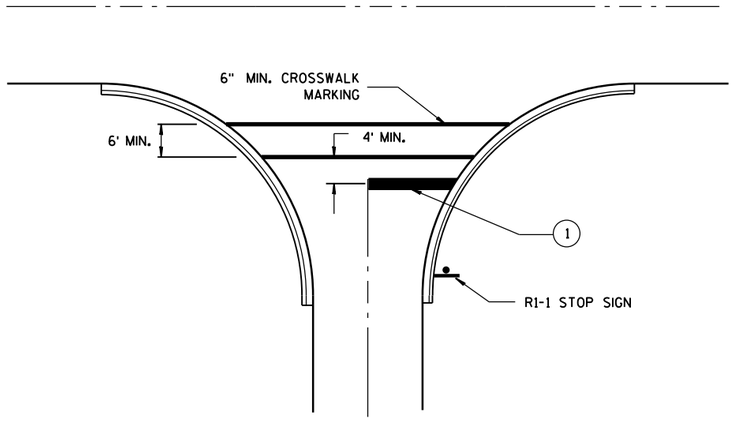
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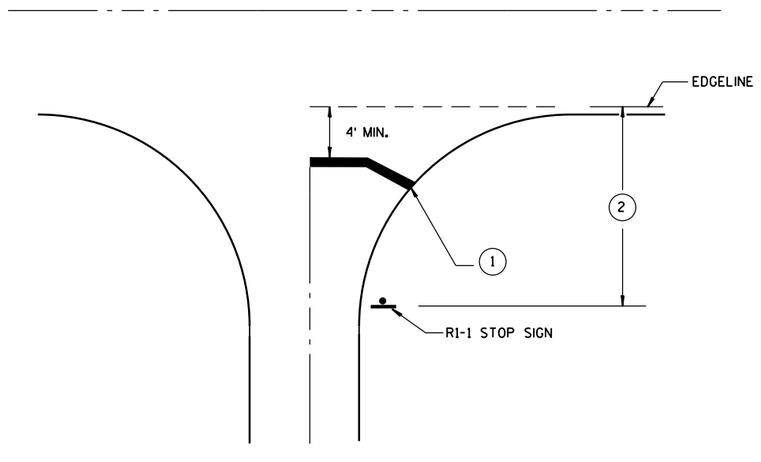
TYPICAL STOP LINE PAVEMENT MARKING WITH CURB AND GUTTER



TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH RIGHT TURN LANE



TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH CROSSWALK MARKING



TYPICAL STOP LINE PAVEMENT MARKING WITHOUT CURB AND GUTTER

GENERAL NOTES

1. 18-INCH STOP LINES MAY BE DELETED OR ADDED BY THE PROJECT ENGINEER BASED ON VISIBILITY AND SIGHT LINES.
2. IF STOP SIGN IS LESS THAN OR EQUAL TO 40 FEET FROM THE EDGELINE THAN NO STOP LINE IS REQUIRED.
3. IF STOP SIGN IS LESS THAN OR EQUAL TO 30 FEET FROM THE FLANGELINE EXTENSION THAN NO STOP LINE IS REQUIRED.
4. MOVE CLOSER TO EDGE OF TRAVEL LANE AS NEEDED FOR VISIBILITY AND SIGHT LINES.

STOP LINE AND CROSSWALK PAVEMENT MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

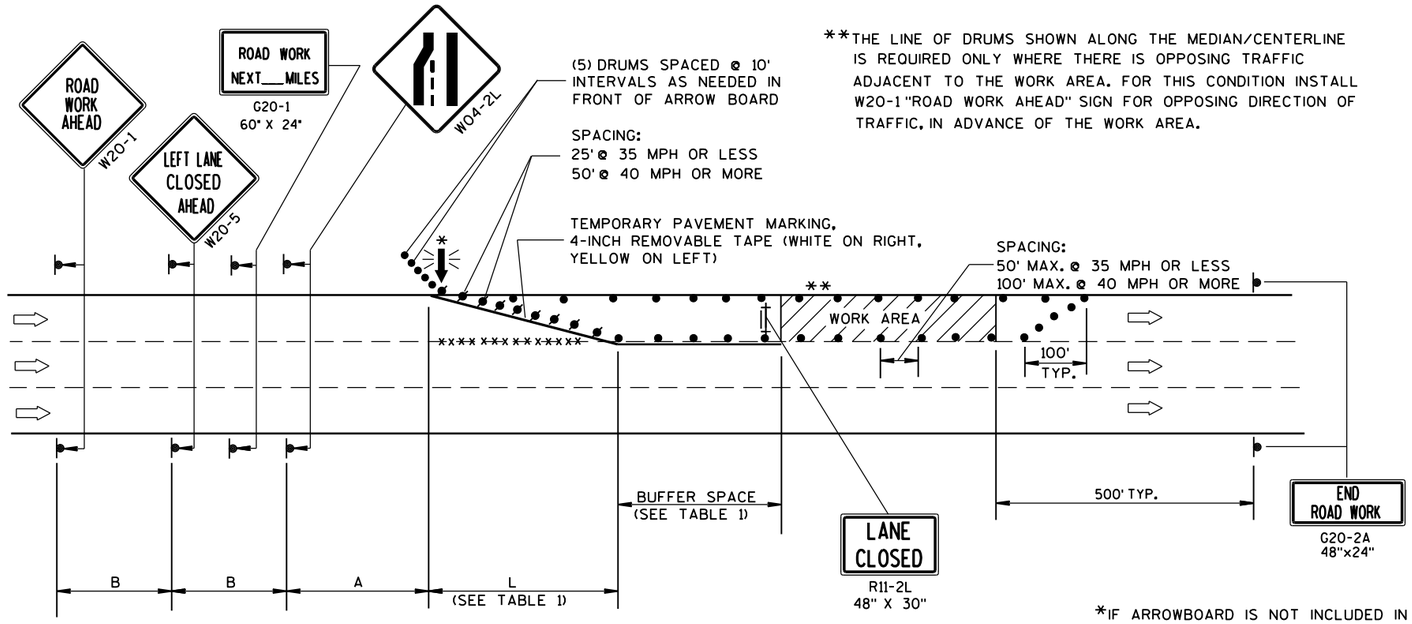
4/30/2013
DATE

/S/ Travis Feltes
STATE TRAFFIC E

FHWA

6

S.D.D. 15 C 33-1



**THE LINE OF DRUMS SHOWN ALONG THE MEDIAN/CENTERLINE IS REQUIRED ONLY WHERE THERE IS OPPOSING TRAFFIC ADJACENT TO THE WORK AREA. FOR THIS CONDITION INSTALL W20-1 "ROAD WORK AHEAD" SIGN FOR OPPOSING DIRECTION OF TRAFFIC, IN ADVANCE OF THE WORK AREA.

B=400' AT 25-30 MPH
700' AT 35-40 MPH
1000' AT 45-55 MPH

A=200' AT 25-30 MPH
350' AT 35-40 MPH
500' AT 45-55 MPH

(PLACE BARRICADE AND SIGN APPROX. EVERY 1000' ACROSS THE CLOSED LANE)

*IF ARROWBOARD IS NOT INCLUDED IN MISCELLANEOUS QUANTITIES, SUBSTITUTE A TYPE III BARRICADE WITH W01-6 SIGN IN THE LANE CLOSURE TAPER.

W01-6
48"x24"

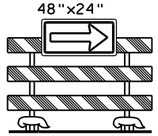


TABLE 1
TAPER AND BUFFER SPACE FOR 12' LANE WIDTH

S	L	BUFFER SPACE
25	125'	55'
30	180'	85'
35	245'	120'
40	320'	170'
45	540'	220'
50	600'	280'
55	660'	335'

FOR LANE WIDTH OTHER THAN 12':

L = WS AT 45 MPH OR GREATER

$L = \frac{WS^2}{60}$ AT 40 MPH OR LESS

L = TAPER LENGTH IN FEET

S = NON-CONSTRUCTION SPEED LIMIT (MPH)

W = WIDTH OF LANE CLOSURE

LEGEND

- TYPE III BARRICADE WITH ATTACHED SIGN
- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL DRUM
- FLASHING ARROW BOARD
- DIRECTION OF TRAFFIC
- REMOVING PAVEMENT MARKING (SEE GENERAL NOTES)
- WORK AREA

GENERAL NOTES

THIS LANE CLOSURE DETAIL IS TYPICAL FOR CLOSING THE LEFT LANE. FOR A RIGHT LANE CLOSURE, REVERSE THE TRAFFIC CONTROL.

THIS DETAIL MAY BE USED FOR ROADWAYS WITH EITHER TWO OR THREE LANES IN EACH DIRECTION.

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36" X 36" SIGNS MAY BE USED IF APPROVED BY DISTRICT TRAFFIC UNIT.

"WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, OR THAT WILL BE PLACED IN A CLOSED LANE, MAY BE MOUNTED ON PORTABLE SUPPORTS.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

ON UNDIVIDED ROADWAYS, OMIT THE SIGNS SHOWN ON LEFT SIDE OF ROAD.

W20-1, G20-1 AND G20-2A SIGNS ARE NOT REQUIRED IF THE LANE CLOSURE IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT.

OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS.

CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROWBOARDS SO THE APPROACHING DRIVER HAS A CLEAR VIEW OF THE ARROWBOARDS AND LANE CLOSURE DRUMS.

PLACE THE ARROWBOARD AS CLOSE AS POSSIBLE TO THE BEGINNING OF THE LANE CLOSURE TAPER, PREFERABLY ON THE SHOULDER OR TERRACE.

CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

BARRICADES IN A CLOSED LANE THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED UPON COMPLETION OF THE OPERATION OR, FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

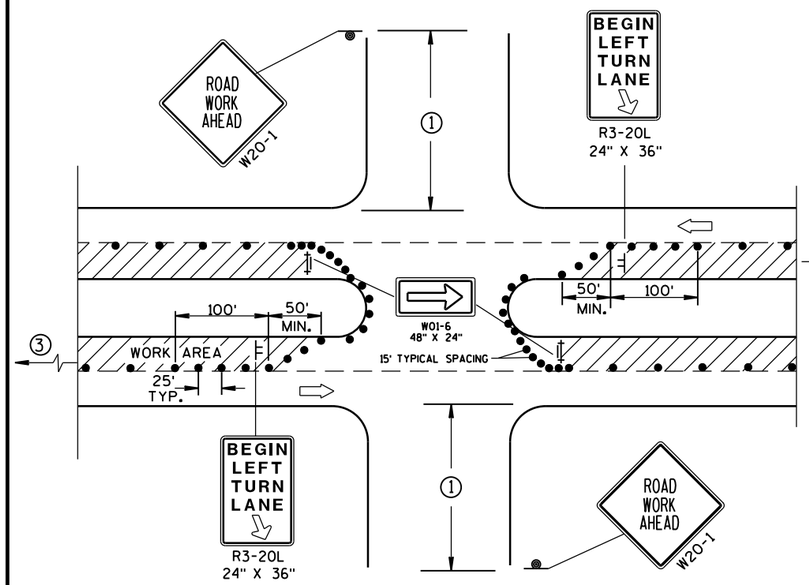
TRAFFIC CONTROL, SINGLE LANE CLOSURE, NON-FREEWAY/EXPRESSWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Feb. 2015 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER
FHWA

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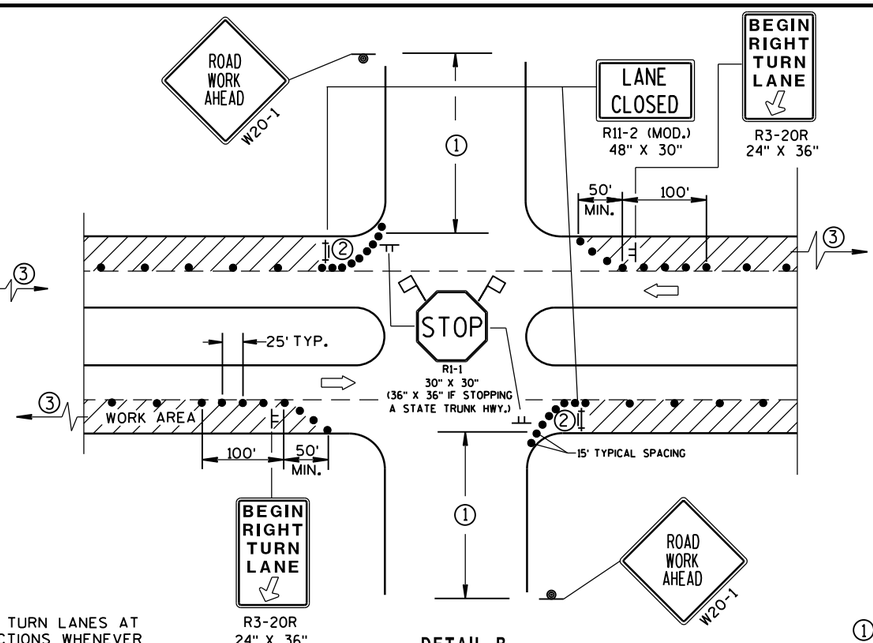
S.D.D. 15 D 20-3



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

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.

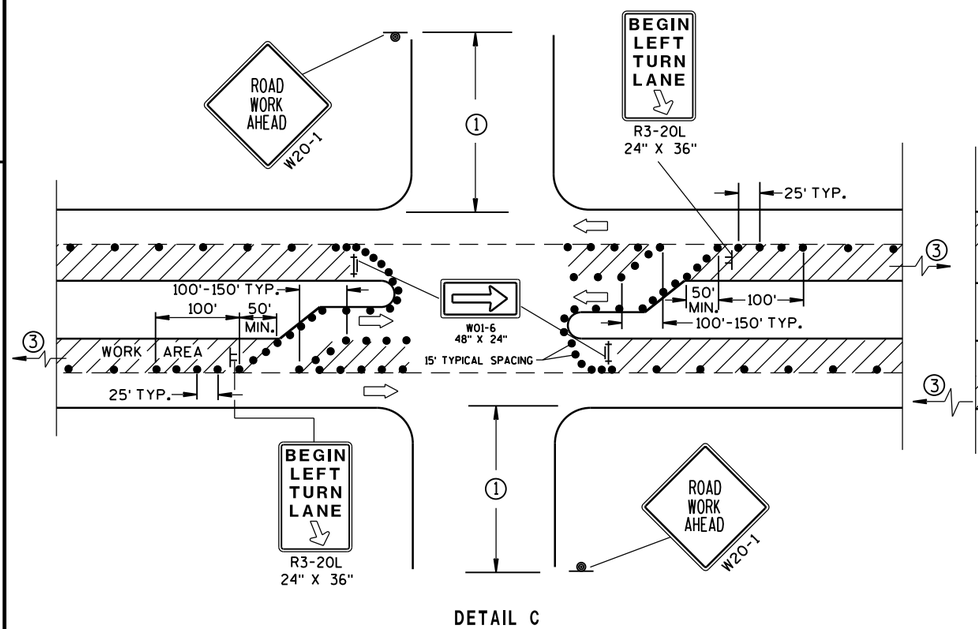
CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

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.

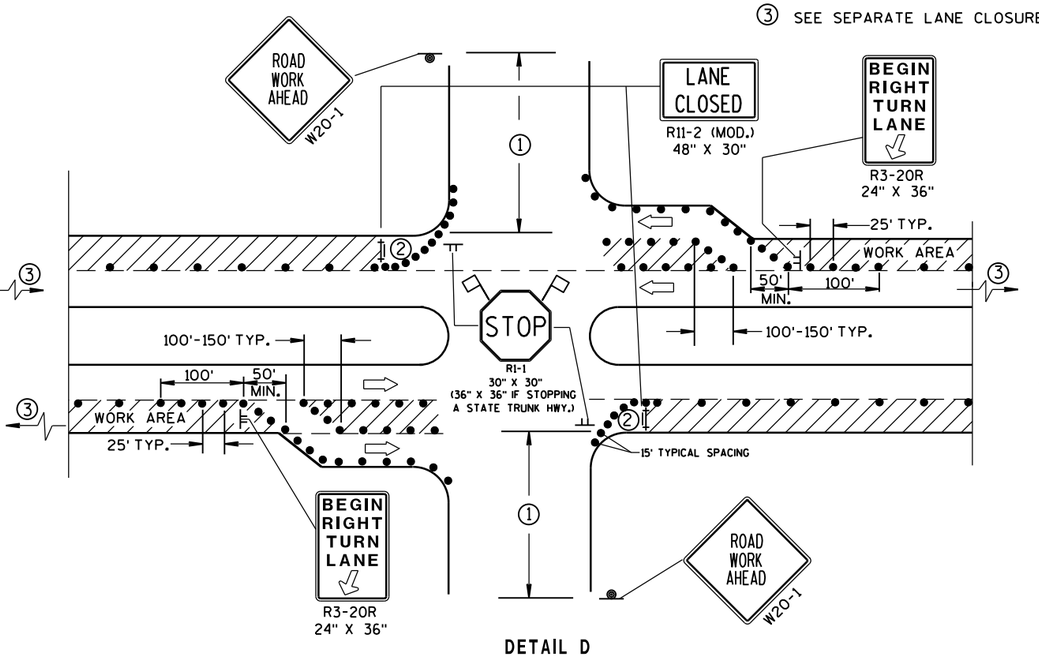
② ALSO USE BARRICADE AND 15-FOOT TYPICAL DRUM SPACING AT COMMERCIAL DRIVEWAYS.

③ SEE SEPARATE LANE CLOSURE DETAIL FOR ADDITIONAL TRAFFIC CONTROL.



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)

LEGEND

- TRAFFIC CONTROL DRUM
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT (5' MIN. MOUNTING HEIGHT)
- TYPE III BARRICADE WITH ATTACHED SIGN AND TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC
- FLAGS, 16" X 16" MIN., (ORANGE)
- WORK AREA

TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Nov. 2014 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER
FHWA

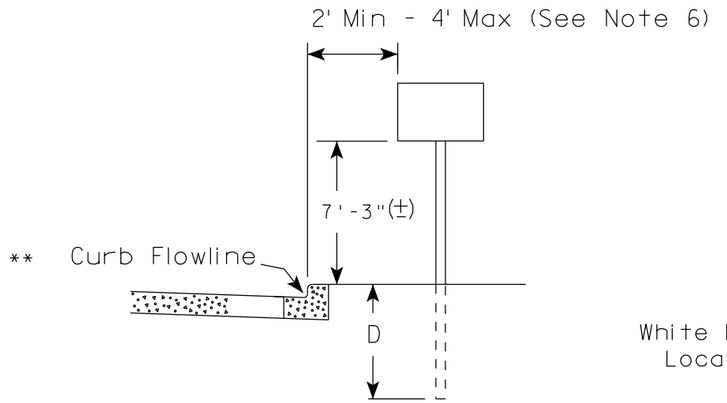
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S.D.D. 15 D 21-3

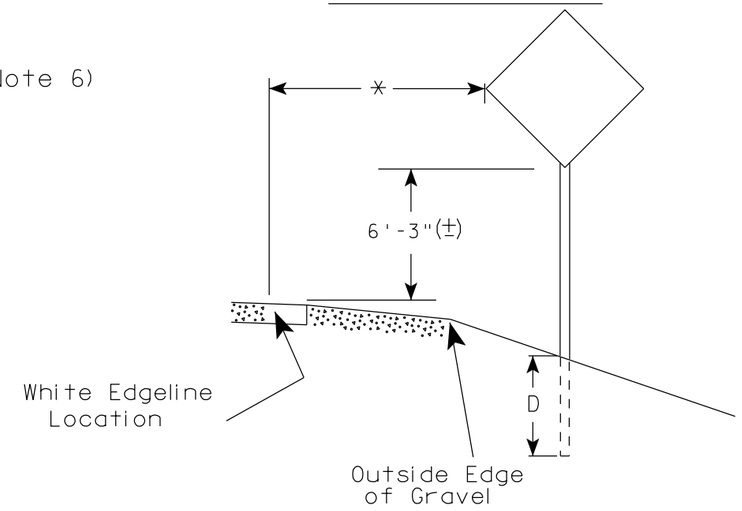
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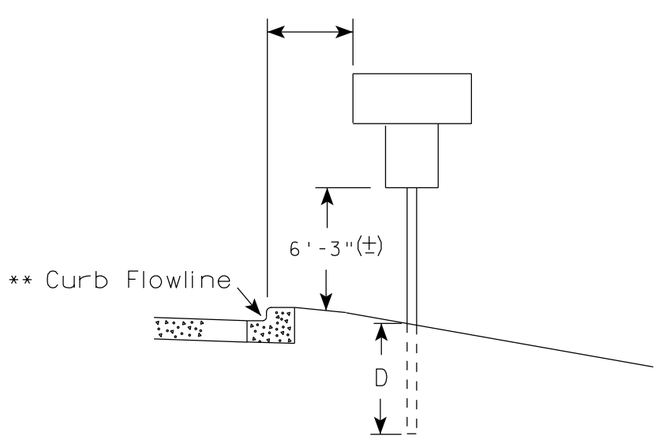
S.D.D. 15 D 21-3

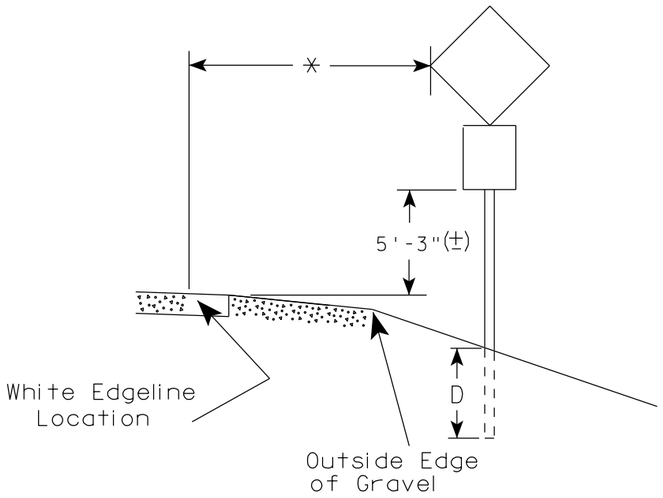
URBAN AREA



RURAL AREA (See Note 2)







GENERAL NOTES

1. Signs wider than 4 feet, 20 sq.ft or larger, shall be mounted on multiple posts. Refer to plate A4-4.
2. If signs are mounted on barrier wall, see A4-10 sign plate.
3. For expressways and freeways, mounting height is 7'- 3" (±) or 6'-3" (±) depending upon existence of a sub-sign.
4. Minimum mounting height for J assemblies (A2-1S) is 7'-3" (±) or 6'-3" (±) per urban or rural detail respectively.
5. Minimum mounting height for signs mounted on traffic signal poles is 5'- 3" (±).
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. The (±) tolerance for mounting height is 3 inches.
8. Folding signs shall be mounted at a height of 5'-3" (±) or as directd by the Engineer.
9. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Enhanced Reference Markers, Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4'-3" (±).

POST EMBEDMENT DEPTH

Area of Sign Installation (Sq. Ft.)	D (Min)
20 or Less	4'
Greater than 20	5'

** The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically measured where there is sidewalk adjacent to the roadway or parking is permitted. In the absence of sidewalk vertical clearance is measured from the top of the curb. Offset of signs is measured from the flow line.

* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

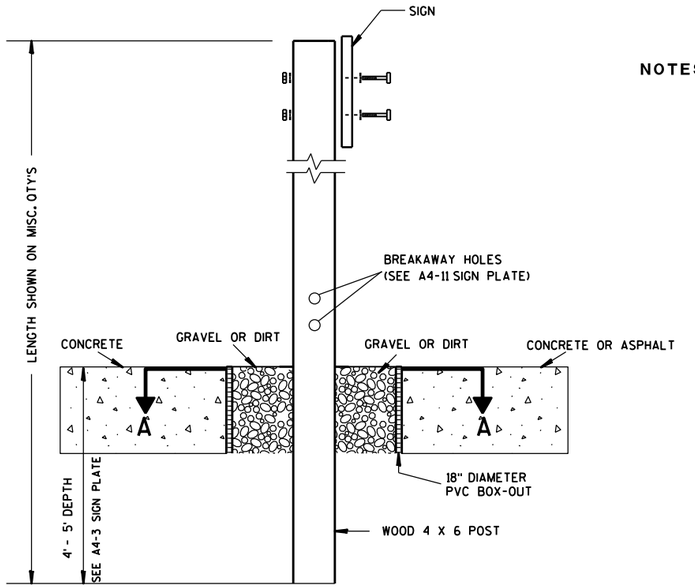
TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/12/14 PLATE NO. A4-3.19

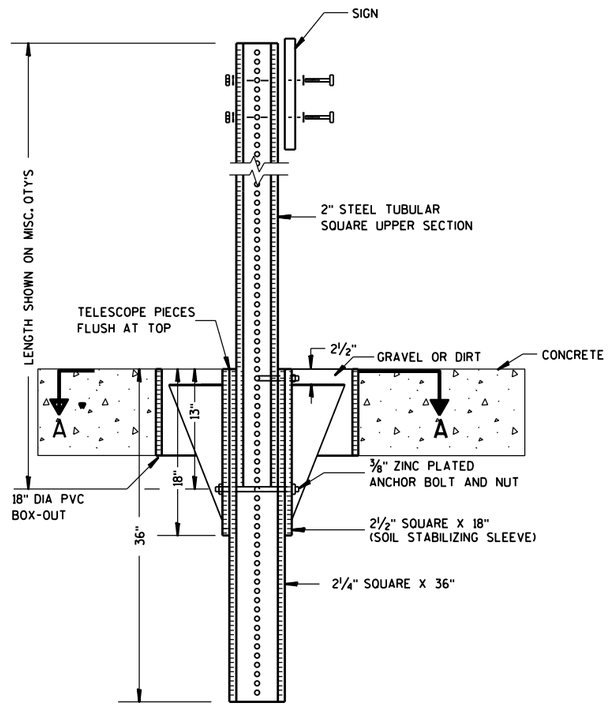
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



ELEVATION VIEW

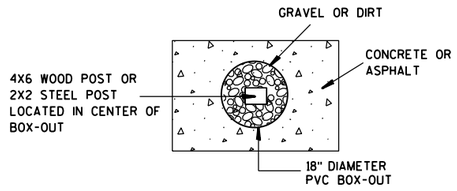
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

NOTES:
1. ALL MATERIAL TO BE APPROVED BY ENGINEER PRIOR TO INSTALLATION
2. SEE SIGN PLATE A4-8 FOR SIGN HARDWARE REQUIREMENTS
3. 18 INCH X 18 INCH SQUARE BOX-OUTS MAY BE USED FOR INSTALLATIONS IN EXISTING CONCRETE OR ASPHALT LOCATIONS.



ELEVATION VIEW

DETAIL OF STEEL 2 X 2 SIGN POST IN BOX-OUT



PLAN VIEW

FOR NEW CONCRETE/ASPHALT INSTALLATIONS

SIGN POST BOX-OUTS A4-3B

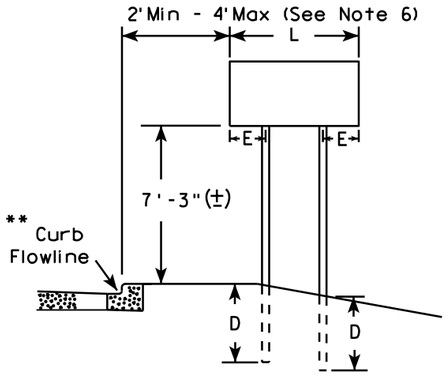
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

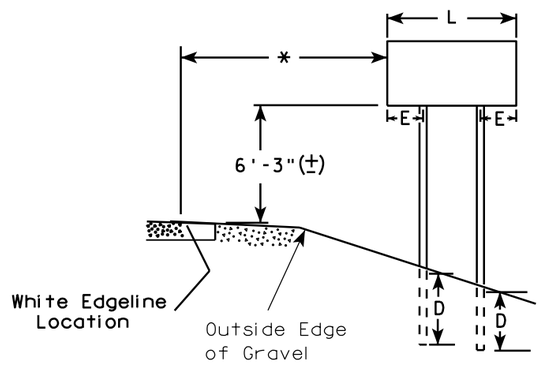
DATE 1/27/14 PLATE NO. A4-3B.1

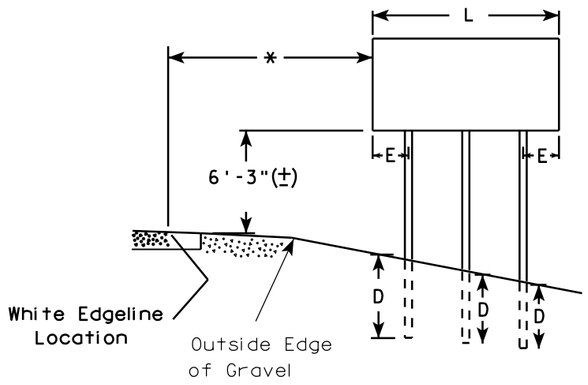
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

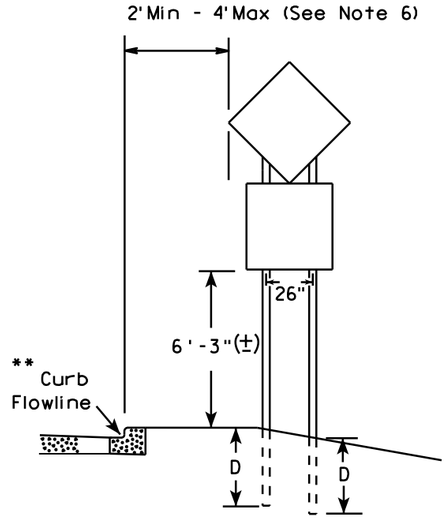
URBAN AREA



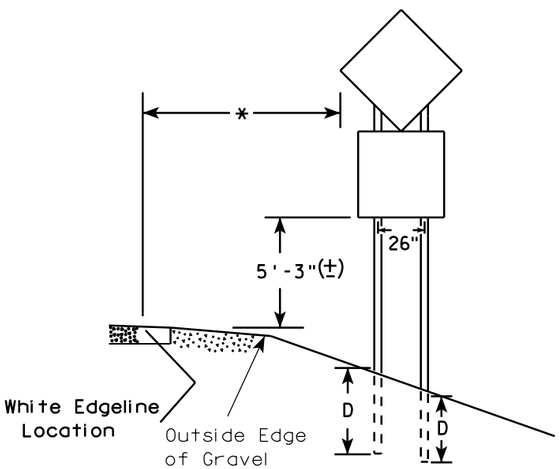
RURAL AREA (See Note 3)







48" DIAMOND WARNING SIGN



48" DIAMOND WARNING SIGN

GENERAL NOTES

1. For 3 or 4 post installations, individual post spacing shall be greater than 3'-6".
2. See tables below for required number of posts.
3. For expressways and freeways, mounting height is 7'-3" (±) or 6'-3" (±) depending upon existence of sub-sign.
4. The (±) tolerance for mounting height is 3 inches.
5. Minimum mounting height for J assemblies (A2-1S) is 7'-3" (±) or 6'-3" (±) per urban or rural detail respectively.
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. Folding signs shall be mounted at a height of 5'-3" (±) or as directed by the engineer.
8. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4"-3" (±).

* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

** The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically measured where there is sidewalk adjacent to the roadway or parking is permitted. In the absence of sidewalk vertical clearance is measured from the top of the curb. Offset of signs is measured from the flow line.

*** See A4-3 sign plate for signs 4' or less in width or less than 20 S.F. in area.

SIGN SHAPE OTHER THAN DIAMOND (TWO POSTS REQUIRED)	
L	E
Greater than 48" Less than 60"	12"
60" to 120"	L/5

***

SIGN SHAPE OTHER THAN DIAMOND (THREE POSTS REQUIRED)	
L	E
Greater than 120" less than 168"	12"

SIGN SHAPE OTHER THAN DIAMOND (FOUR POSTS REQUIRED)	
L	E
168" and greater	12"

POST EMBEDMENT DEPTH

Area of Sign Installation (Sq. Ft.)	D (Min)
20 or Less	4'
Greater than 20	5'

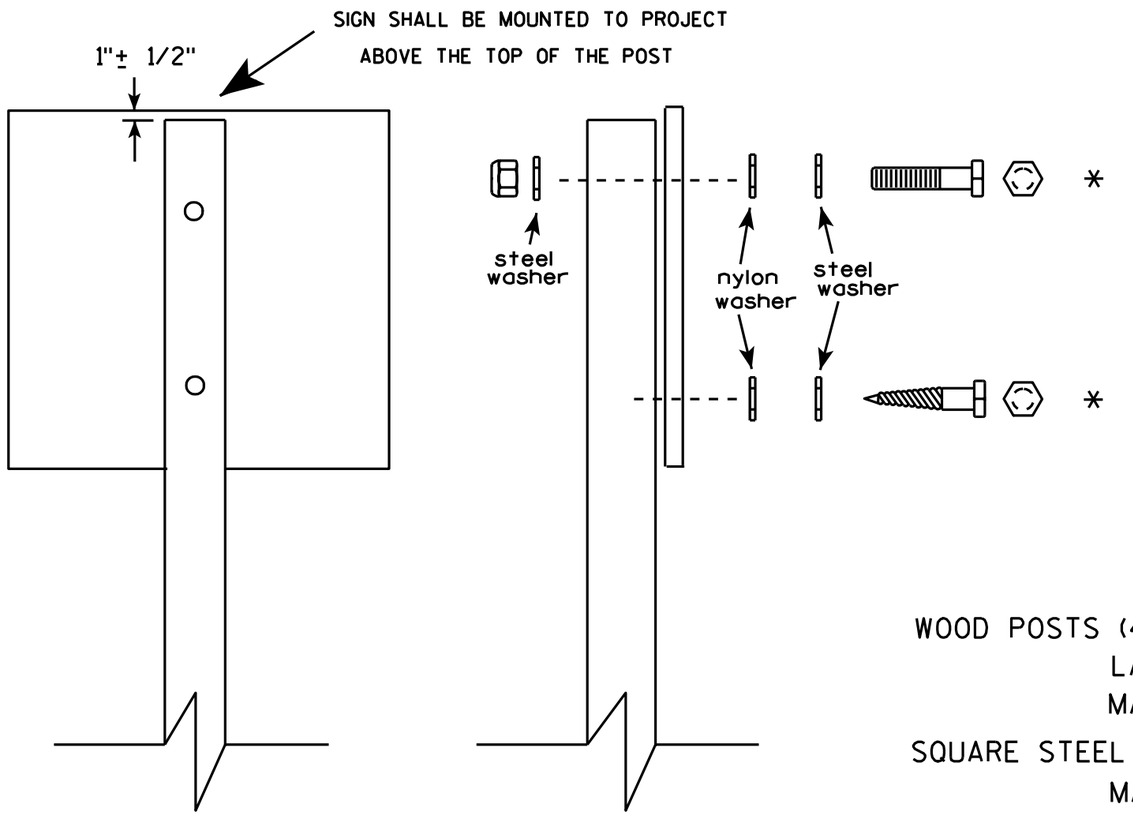
TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/12/14 PLATE NO. A4-4 223 13

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



Nuts, bolts and lags used for mounting signs shall have hexagonal heads and shall be either :

a. Hot dip galvanized in accordance with ASTM Designation: A 153, Class D, or SC 3

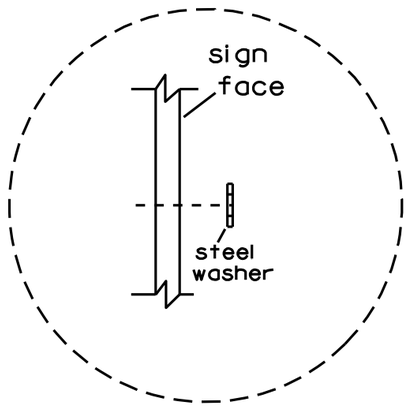
b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.

Threads on bolts and nuts shall be manufactured with sufficient allowance for the cadmium plate or galvanized coating to permit the nuts to run freely on the bolts.

WOOD POSTS (4" x 4" or 4" x 6")
LAG SCREWS - 3/8" X 3"
MACHINE BOLTS - 5/16" X 6-1/2" or 7" Length w/ nuts

SQUARE STEEL POSTS (2" x 2")
MACHINE BOLTS - 3/8" X 3-1/4" Length w/ nuts
RIVETS - 9/32 " (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL
O.D. FLANGE .720-.765 INCH, GRIP RANGE .042-.375 INCH

WASHERS (ALL POSTS) -
1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON for all Type H signs.



Washer Placement when Sign Has Other Than Type H or Type F Face

* Two different fastening systems are shown for illustration purposes. On any individual sign, either one or the other system shall be used. Actual number of fasteners per sign varies with the sign area, but normally there are two. For a single post installation, all signs greater than 9 sq. ft. require the use of 3 fasteners.

ATTACHMENT OF SIGNS TO POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/23/10 PLATE NO. A4-8.7

7

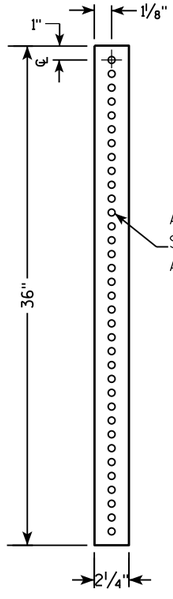
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PROJECT NO:

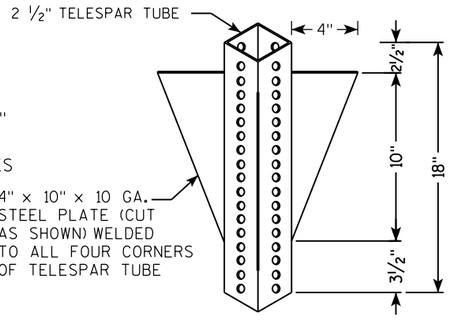
SHEET NO: 224 E

TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM

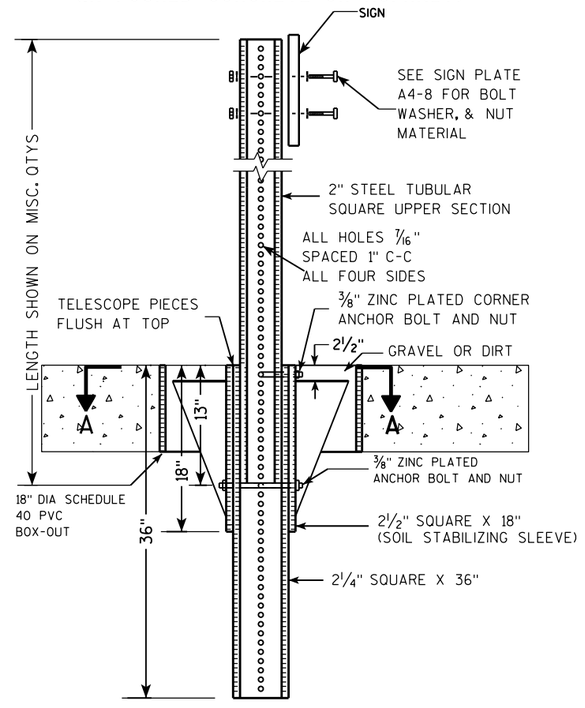
2 1/4 " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH



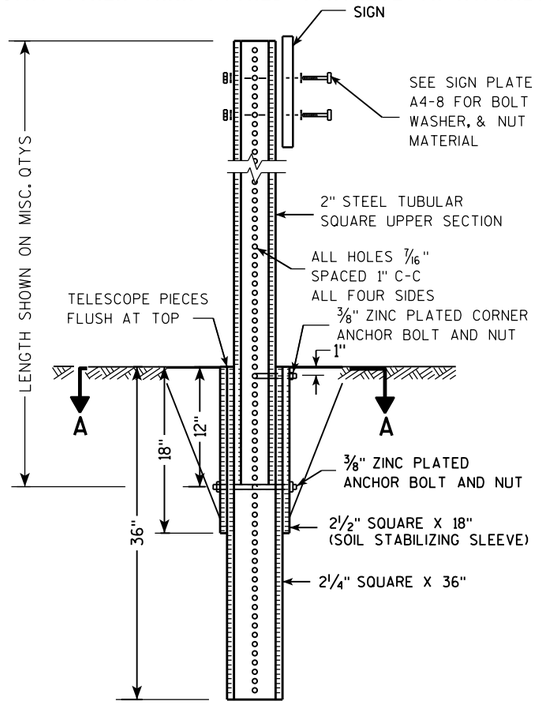
2 1/2 " SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH

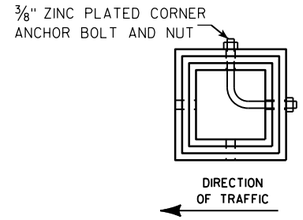


DETAIL OF TUBULAR STEEL SIGN POST
(IN POURED CONCRETE OR ASPHALT)



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

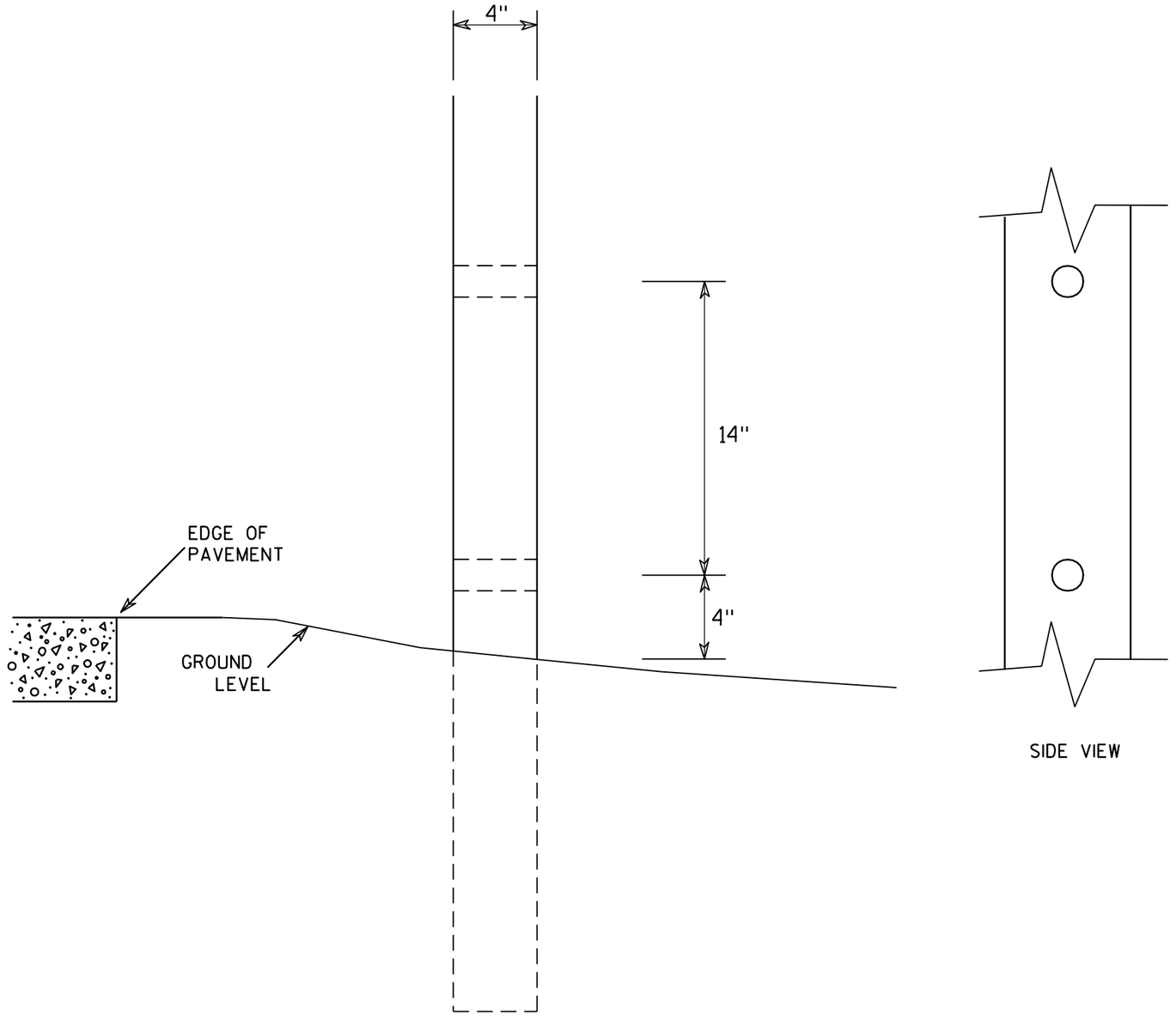
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/05/15 PLATE 225 A4-9.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A49.DGN PLOT DATE : 05-FEB-2015 17:09 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 13.659812:1.000000

WISDOT/CADDS SHEET 42



SIDE VIEW

GENERAL NOTES

1. All 4 x 6 Wood Posts shall be modified by having two 1½" diameter holes drilled perpendicular to the roadway centerline.

7

7

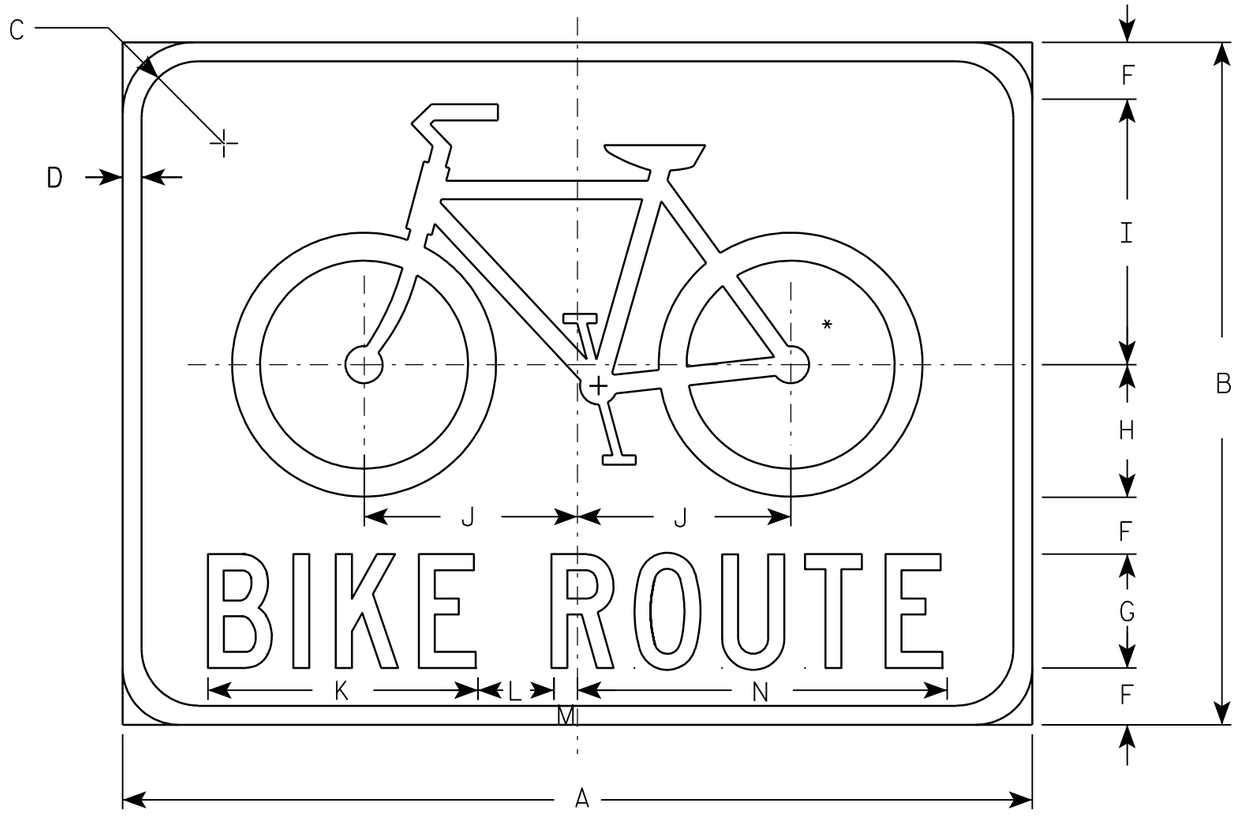
4 X 6 WOOD POST MODIFICATIONS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spang for State Traffic Engineer

DATE 3/27/97 PLATE NO. A4-11.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 226	E



D11-1

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - GREEN
   Message - WHITE
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

* See W11-1 for symbol design

Metric equivalent for this sign is:

SIZE	
1	
2	600 mm X 450 mm
3	750 mm X 600 mm
4	
5	

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m2
1																												
2	24	18	1 1/2	1/2		1 1/2	3	3 1/2	7	5 5/8	7 1/8	2	5/8	9 3/4													3.0	0.27
3	30	24	1 1/4	5/8		2	4	4 3/4	9 1/4	7 1/2	9 1/2	2 5/8	7/8	13													5.0	0.45
4																												
5																												

STANDARD SIGN
D11-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/24/04 PLATE NO. D11-1.1

PROJECT NO:

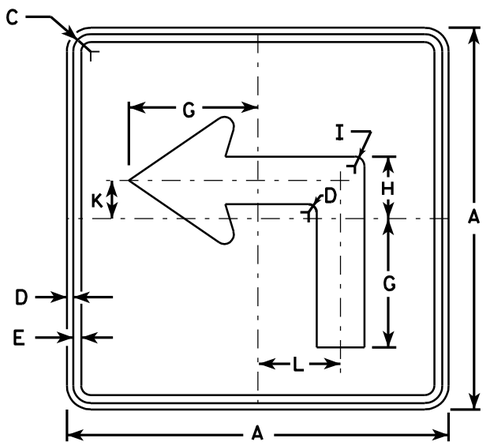
SHEET NO: 227 E

FILE NAME : C:\Users\Projects\tr_stdplate\D111.DGN PLOT DATE : 17-MAR-2005 10:38 PLOT BY : DOTDZK

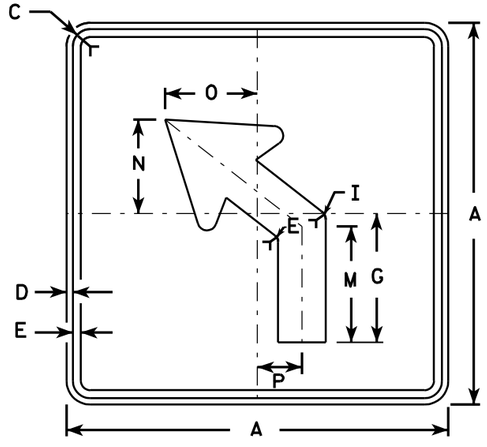
WISDOT/CADDS SHEET 42

7

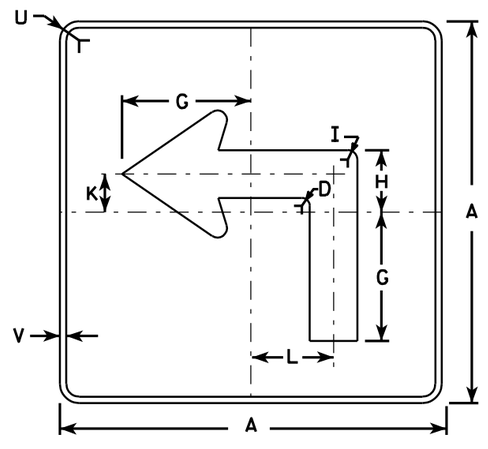
7



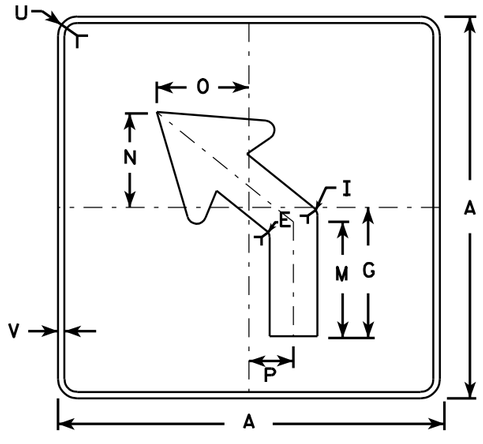
M5-1L
MK5-1L
MM5-1L
MO5-1L
MP5-1L
MR5-1L



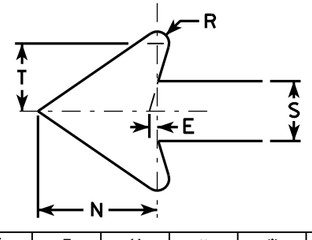
M5-2L
MK5-2L
MM5-2L
MO5-2L
MP5-2L
MR5-2L



MB5-1L
MG5-1L
MN5-1L



MB5-2L
MG5-2L
MN5-2L



NOTES

1. Signs are Type II - See Note 4 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - See note 4
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M5-1 and M5-2 Background - White - Type H Reflective
   Message - Black
   MB5-1 and MB5-2 Background - Blue
   Message - White - Type H Reflective
   MG5-1 and MG5-2 Background - Green
   Message - White - Type H Reflective
   MK5-1 and MK5-2 Background - Green
   Message - White Type H Reflective
   MM5-1 and MM5-2 Background - White - Type H Reflective
   Message - Green
   MN5-1 and MN5-2 Background - Brown
   Message - White - Type H Reflective
   MO5-1 and MO5-2 Background - Orange - Type F Reflective
   Message - Black
   MP5-1 and MP5-2 Background - White - Type H Reflective
   Message - Blue
   MR5-1 and MR5-2 Background - Brown
   Message - Yellow - Type H Reflective
5. M5-1R same as M5-1L except arrow points right.
6. M5-2R same as M5-2L except arrow tilts right.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	21		1 1/8	3/8	3/8		7	3 3/8	5/8		2 1/8	4 1/2	6 3/8	5 1/4	5	2 1/2		1/2	2 5/8	3	1 1/2	1/2					3.06
3	30		1 3/8	1/2	5/8		10 1/8	4 1/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25
4	30		1 3/8	1/2	5/8		10 1/8	4 1/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25
5	30		1 3/8	1/2	5/8		10 1/8	4 1/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25

STANDARD SIGN
M5-1 & M5-2

WISCONSIN DEPT OF TRANSPORTATION

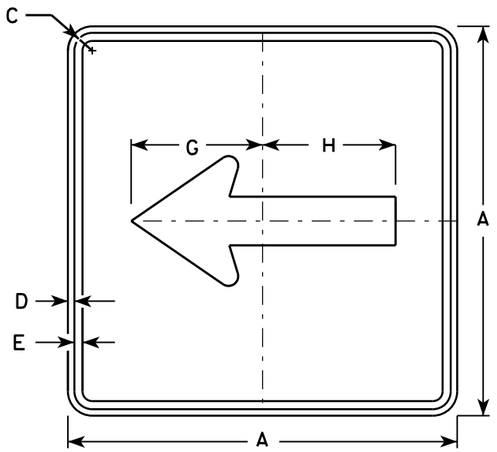
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 7/29/13 PLATE NO. M5-1.12

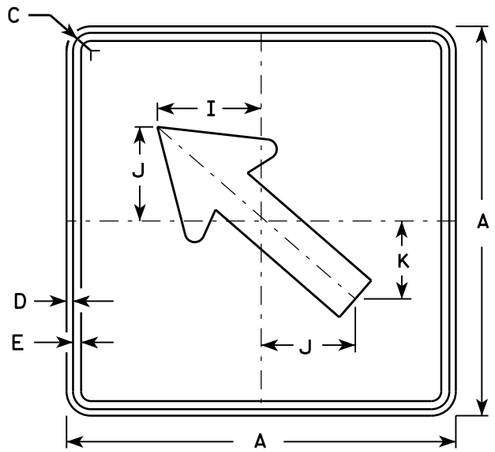
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 228 | E

7

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\M51.DGN PLOT DATE : 29-JUL-2013 13:34 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 11.908552:1.000000
WISDOT/CADDS SHEET 42



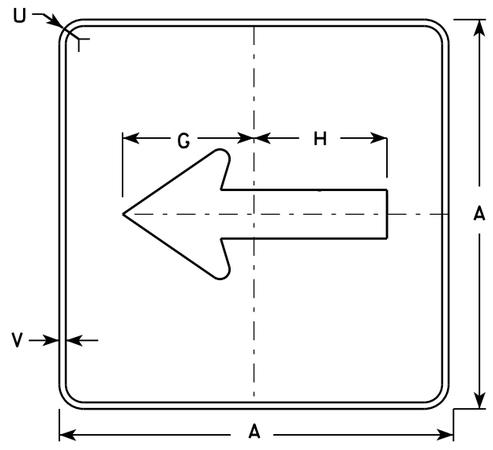
M6-1
MK6-1
MM6-1
MN6-1
MO6-1
MP6-1
MR6-1



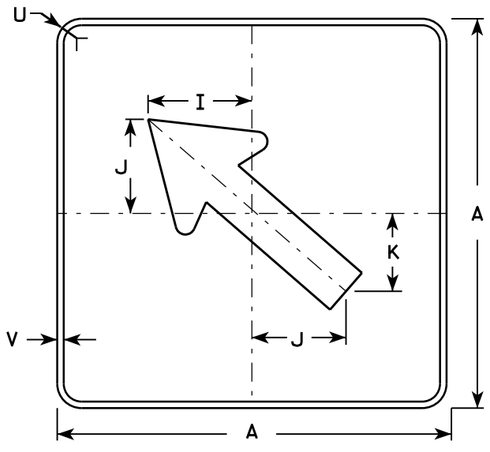
M6-2
MK6-2
MM6-2
MN6-2
MO6-2
MP6-2
MR6-2

NOTES

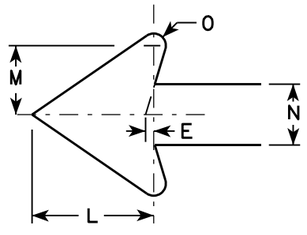
1. Signs are Type II - Type H except as Shown
2. Color:
   Background - See note 4
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M6-1 and M6-2 Background - White
   Message - Black
   MB6-1 and MB6-2 Background - Blue
   Message - White
   MG6-1 and MG6-2 Background - Green
   Message - White
   MK6-1 and MK6-2 Background - Green
   Message - White
   MM6-1 and MM6-2 Background - White
   Message - Green
   MN6-1 and MN6-2 Background - Brown
   Message - White
   MO6-1 and MO6-2 Background - Orange - Type F Reflective
   Message - Black
   MP6-1 and MP6-2 Background - White
   Message - Blue
   MR6-1 and MR6-2 Background - Brown
   Message - Yellow



MB6-1



MB6-2



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	21		1 1/8	3/8	3/8		7 1/2	7 1/8	5 5/8	5	4 1/4	5 1/4	3	2 5/8	1/2						1 1/2	1/2						3.06
3	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2						6.25
4	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2						6.25
5	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2						6.25

STANDARD SIGN M6-1 & M6-2 SERIES

WISCONSIN DEPT OF TRANSPORTATION

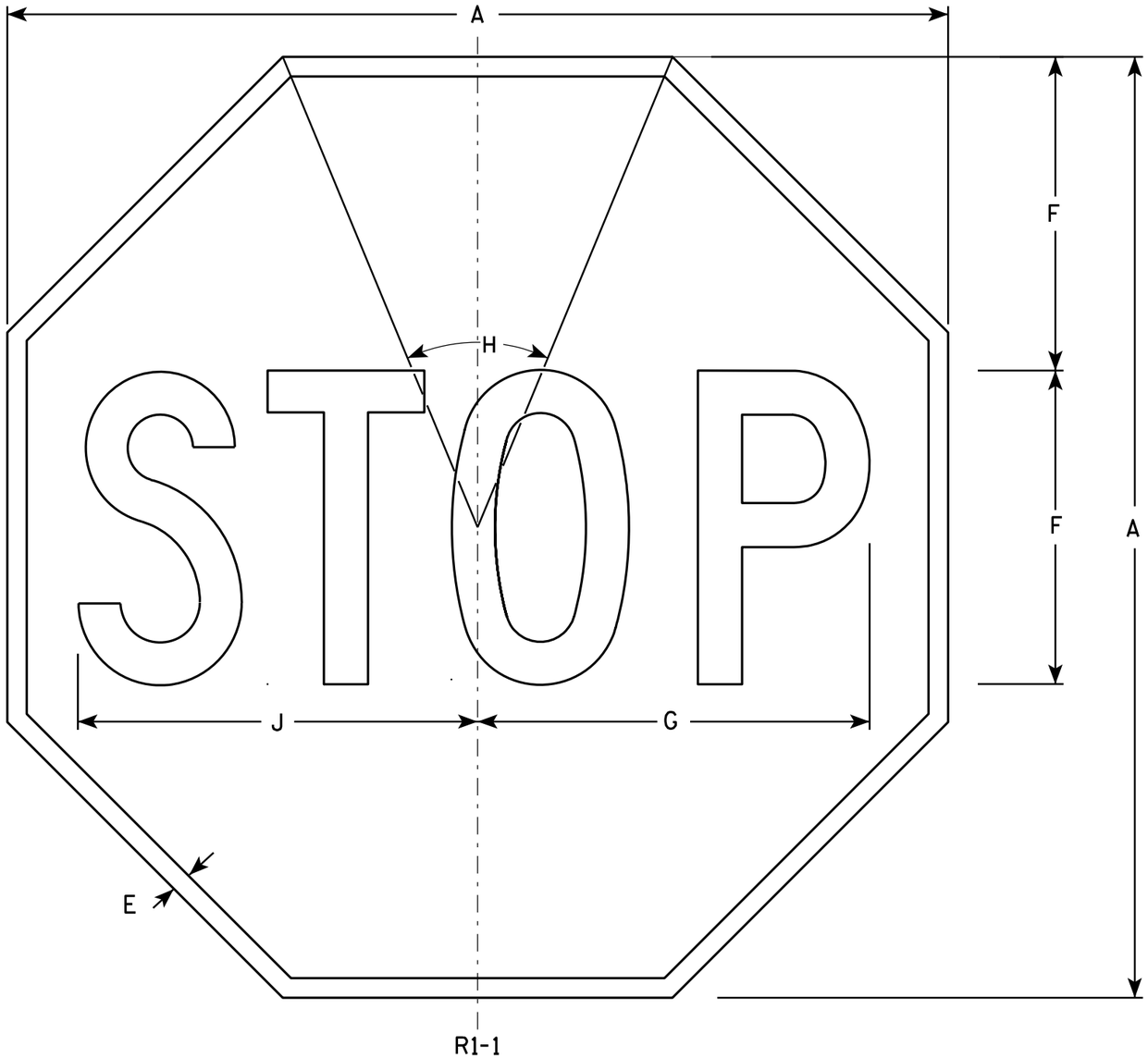
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 7/03/14 PLATE M6-1.14

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

7

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\M61.DGN PLOT DATE : 03-JUL-2014 14:28 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 11.675051:1.000000
WISDOT/CADDS SHEET 42



NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Red
   Message - White
3. Message Series - C

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24				3/8	8	10	45°		10 1/4																	3.31
2S	30				5/8	10	12 1/2	45°		12 3/4																	5.18
2M	36				3/4	12	15	45°		15 3/8																	7.46
3	36				3/4	12	15	45°		15 3/8																	7.46
4	48				1	16	20	45°		20 1/2																	13.25
5	48				1	16	20	45°		20 1/2																	13.25
6	18				3/8	6	7 3/4	45°		7 3/4																	1.86
7	12				1/4	4	5	45°		5 1/8																	0.78

STANDARD SIGN
R1-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/03/10 PLATE NO. R1-1.12

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 230	E



R4-11

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	O	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30		1 3/8	1/2	5/8	4	3 1/8	10	2 1/2	3 7/8	8 5/8	8 3/4	8 1/2	1 1/4	1 3/4	7 7/8		10 3/8	2	1	11 1/4						6.25
2M	30		1 3/8	1/2	5/8	4	3 1/8	10	2 1/2	3 7/8	8 5/8	8 3/4	8 1/2	1 1/4	1 3/4	7 7/8		10 3/8	2	1	11 1/4						6.25
3																											
4																											
5																											

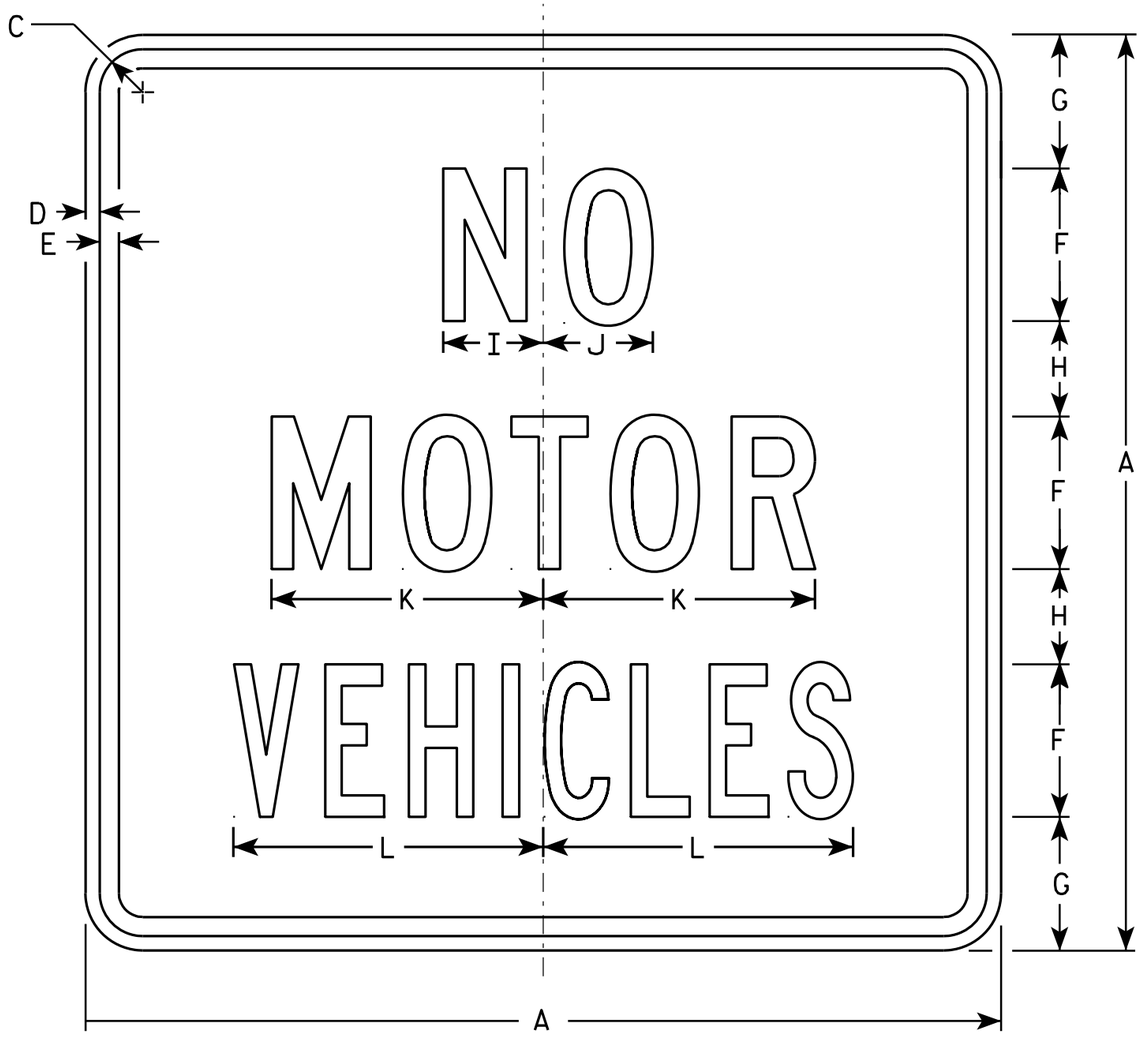
STANDARD SIGN
R4-11

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/16/15 PLATE R4-11.1

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E



R5-3

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - See Note 5.
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Lines 1 & 2 are Series C.
   Line 3 is Series B.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24		1 1/8	3/8	1/2	4	3 1/2	2 1/2	2 5/8	2 7/8	7 1/8	8 1/8															4.0
2M	24		1 1/8	3/8	1/2	4	3 1/2	2 1/2	2 5/8	2 7/8	7 1/8	8 1/8															4.0
3																											
4																											
5																											

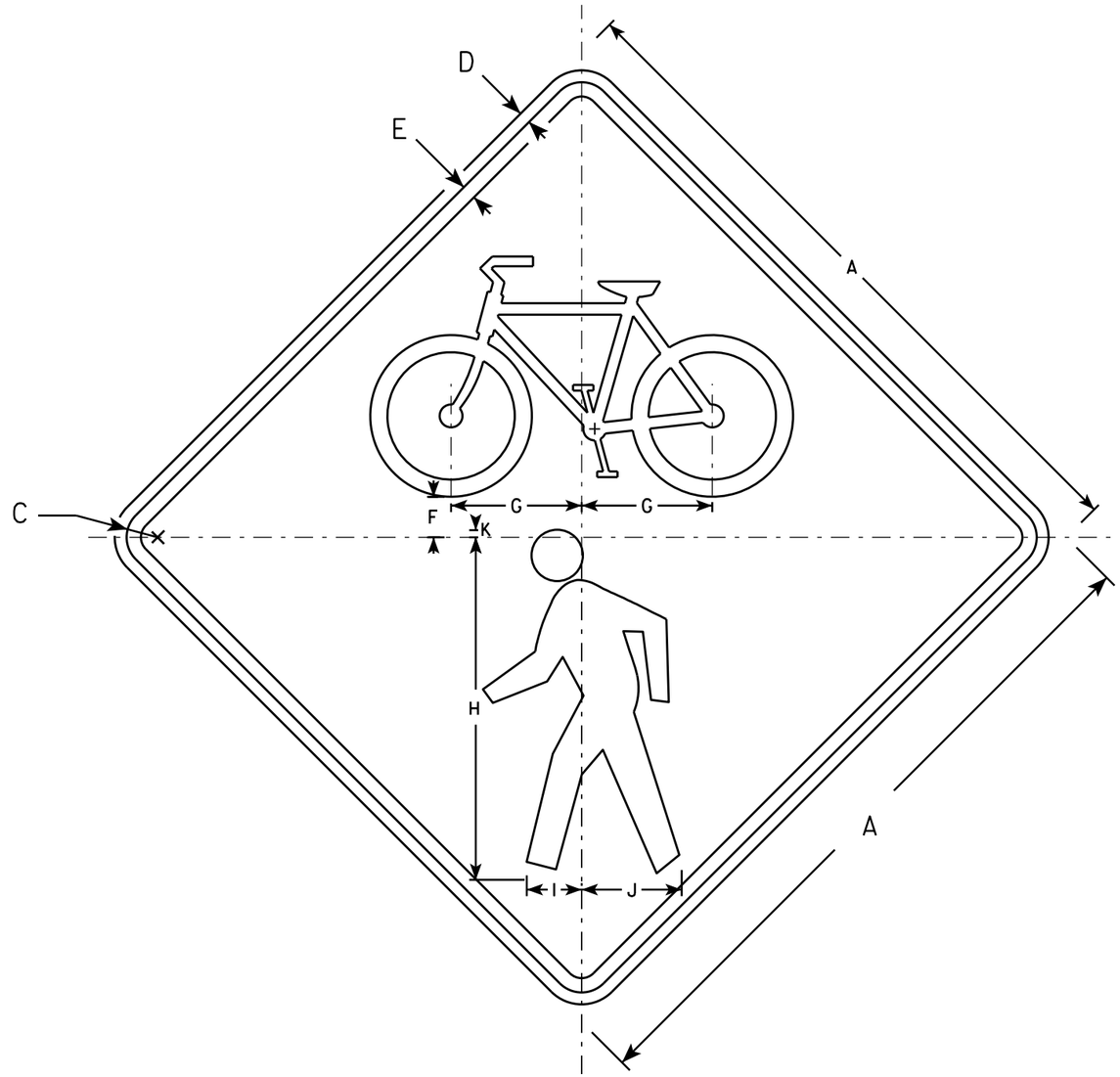
STANDARD SIGN
R5-3

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/29/2011 PLATE NO. R5-3.2

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 232 | E



W11-15

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Yellow
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2	1 3/8	4 5/8	12	1 7/8	3 1/2	1/4																4.0
2S	30		1 3/8	1/2	5/8	1 3/4	5 3/4	15	2 3/8	4 3/8	3/8																6.25
2M	36		1 5/8	5/8	3/4	2 1/8	6 7/8	18	2 7/8	5 1/4	3/8																9.0
3	36		1 5/8	5/8	3/4	2 1/8	6 7/8	18	2 7/8	5 1/4	3/8																16.0
4	48		2 1/4	3/4	1	2 7/8	9 1/8	24	3 7/8	7	1/2																16.0
5																											

STANDARD SIGN
W11-15

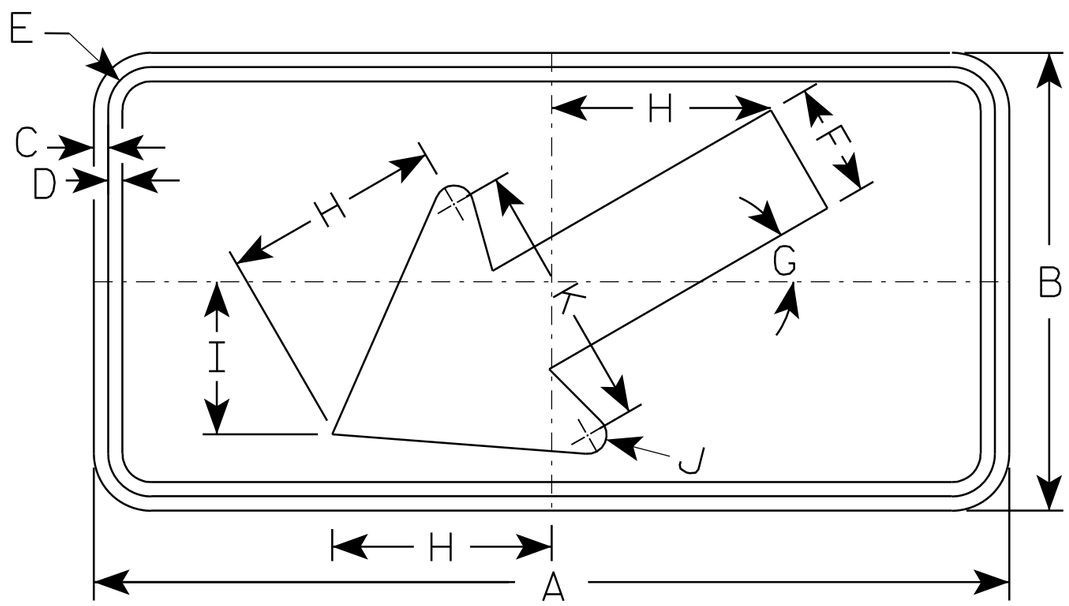
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 2/13/14 PLATE NO. W11-15.4

PROJECT NO: | HWY: | COUNTY: | | SHEET NO: E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W1115.DGN PLOT DATE : 13-FEB-2014 10:54 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 7.783368:1.000000
WISDOT/CADDS SHEET 42



W16-7L

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W16-7R is the same as W16-L except the arrow is reversed along the vertical centerline.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	12	3/8	3/8	1 1/8	3	30°	5 3/4	4	1/2	7																2.0
2M	30	18	3/8	1/2	1 1/8	4 1/2	30°	8 1/2	6	5/8	10 1/4																3.75
3	30	18	3/8	1/2	1 1/8	4 1/2	30°	8 1/2	6	5/8	10 1/4																3.75
4																											8
5																											8

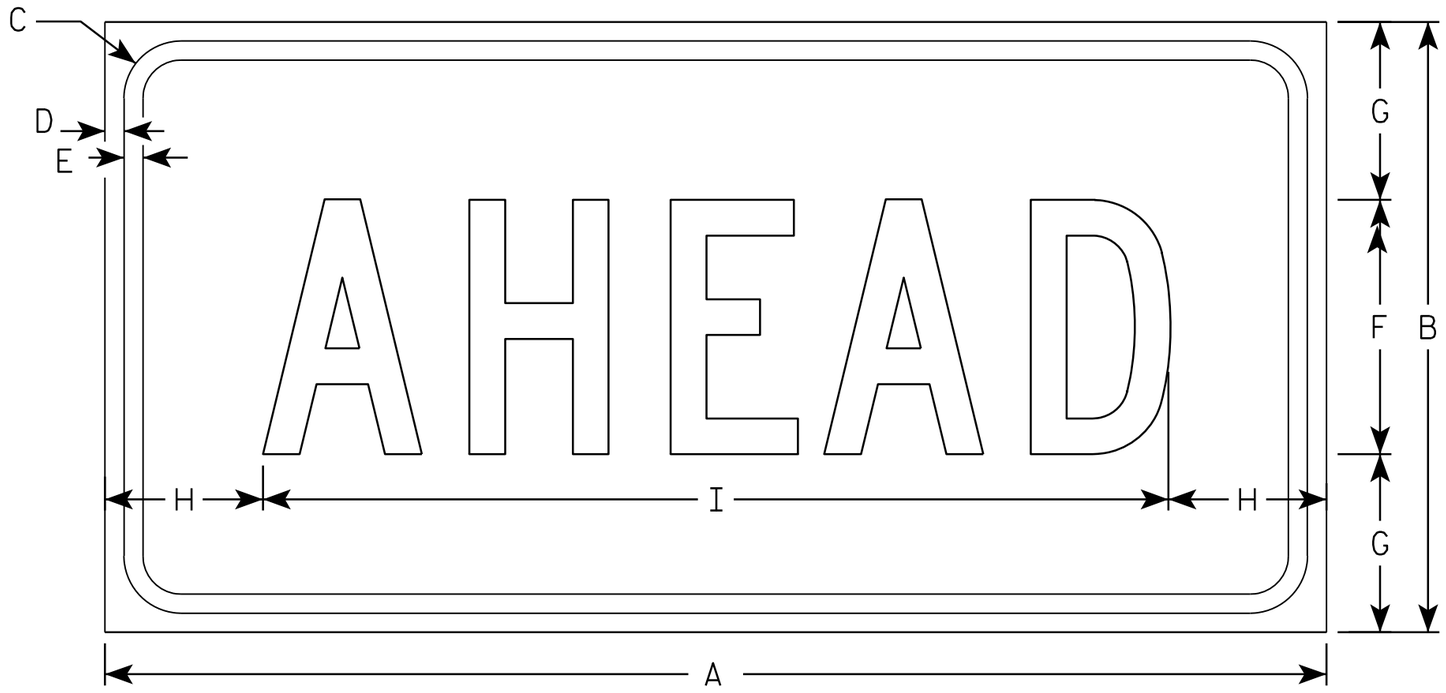
STANDARD SIGN
W16-7

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/02/10 PLATE NO. W16-7.5

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 234	E



W16-9P

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	12	1 1/8	3/8	3/8	5	3 1/2	3 1/8	17 3/4																		2.0
2M	30	18	1 1/8	3/8	1/2	7	5 1/2	2 3/4	24 1/2																		3.75
3	30	18	1 1/8	3/8	1/2	7	3 1/2	2 3/4	24 1/2																		3.75
4	48	24	1 3/8	1/2	5/8	10	7	6 1/8	35 3/4																		8.0
5																											

STANDARD SIGN
W16-9P

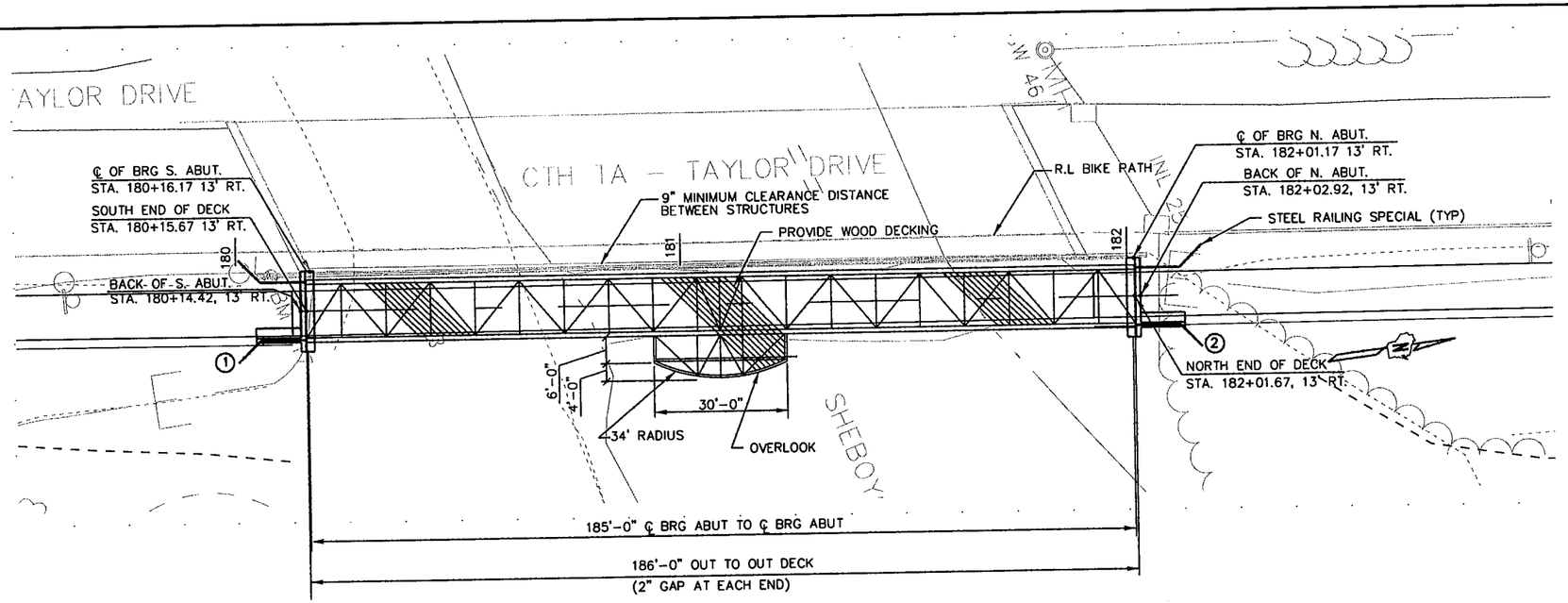
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

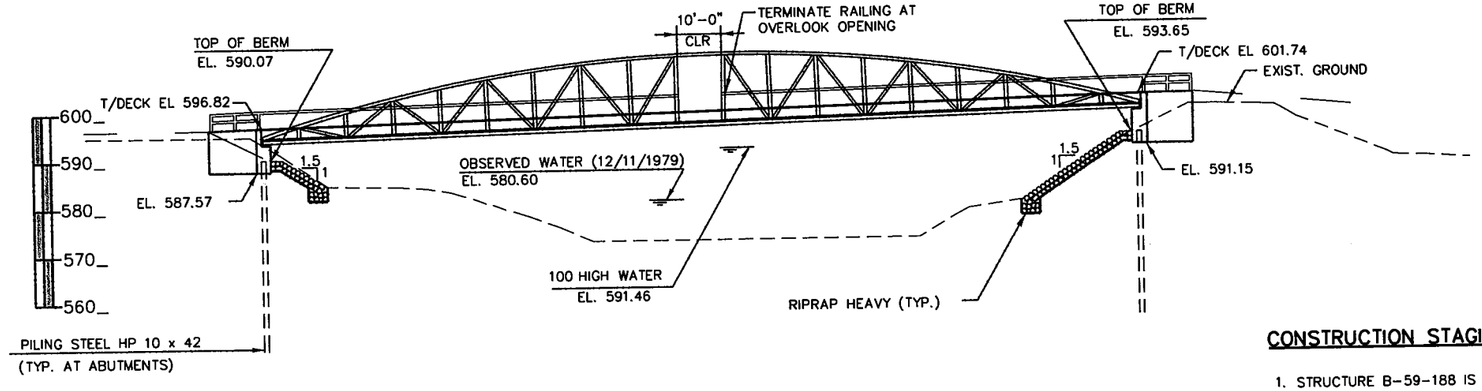
DATE 12/28/10 PLATE NO. W16-9P.6

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 235 | E

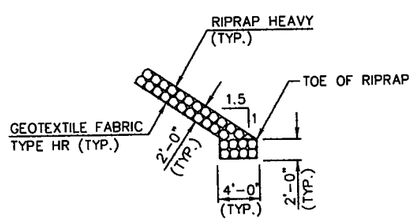
FILE NAME : C:\Users\PROJECTS\tr_stdplate\W169P.DGN PLOT DATE : 28-DEC-2010 13:39 PLOT BY : dotsja PLOT NAME : PLOT SCALE : 2.979524:1.000000
WISDOT/CADDS SHEET 42



PLAN
(SINGLE SPAN TRUSS)



ELEVATION



RIPRAP DETAIL

WISCONSIN
PHILIP J.
ENGLEBERT
E-16118
SHEBOYGAN,
WIS.
PROFESSIONAL ENGINEER
1/8/15

(X) INDICATES WING NUMBER

STATE PROJECT NUMBER
4996-01-58

DESIGN DATA

LIVE LOAD:

DESIGN LOADING: 90 PSF PEDESTRIAN AND 20,000 LB MAINTENCE VEHICLE. (H10)

ULTIMATE DESIGN STRESSES:

CONCRETE MASONRY, ALL OTHER ——— f'_c = 3,500 P.S.I.
HIGH-STRENGTH BAR STEEL REINFORCEMENT, GRADE 60 ——— f_y = 60,000 P.S.I.
WOOD DECKING, DOUGLAS FIR LARCH SELECT STRUCTURAL ——— F_b = 1,750 P.S.I.

FOUNDATION DATA:

ABUTMENTS TO BE SUPPORTED ON PILING STEEL HP 10 x 42 DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 100 TONS** PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA. ESTIMATED 42' LONG AT SOUTH ABUTMENT AND 42' LONG AT NORTH ABUTMENT.

** THE FACTORED AXIAL RESISTANCE OF PILES IN COMPRESSION USED FOR DESIGN IS THE REQUIRED DRIVING RESISTANCE MULTIPLIED BY A RESISTANCE FACTOR OF 0.5 USING MODIFIED GATES TO DETERMINE DRIVEN PILE CAPACITY.

LIST OF DRAWINGS

1. GENERAL PLAN
2. QUANTITIES, NOTES & PROFILES
3. SUBSURFACE EXPLORATION
4. ABUTMENTS
5. POST MOUNTED RAILING DETAILS
6. POST MOUNTED RAILING PLANS

HYDRAULIC DATA:

100 YEAR FREQUENCY
DRAINAGE AREA ——— 417 SQ. MI.
VELOCITY ——— 7.78 F.P.S.
WATERWAY AREA ——— 1303 SQ. FT.
Q_{100} ——— 10,139 C.F.S.
HIGH $WATER_{100}$ ELEVATION ——— 591.46
SCOUR CRITICAL CODE ——— 9
REGULATORY Q_{100} ——— 10,185 C.F.S.
REGULATORY HIGH $WATER_{100}$ ELEVATION — 591.49

2 YEAR FREQUENCY
Q_2 ——— 3154 C.F.S.
HIGH $WATER_2$ ELEVATION ——— 585.72

CONSTRUCTION STAGING / METHODS:

1. STRUCTURE B-59-188 IS A PREFABRICATED PEDESTRIAN STEEL TRUSS BRIDGE.
2. FALSE WORK WILL NOT BE REQUIRED FOR THE BRIDGE STRUCTURE.
3. CONTRACTOR SHALL SUBMIT THE DETAILED CONSTRUCTION PHASING PLAN AND PROCEDURES FOR OWNER REVIEW PRIOR TO CONSTRUCTION.

DONOHUE & ASSOCIATES, INC.
CONTACT: KIM GAHAGAN, P.E.
3311 WEEDEN CREEK ROAD
SHEBOYGAN, WI 53081
(920) 803-7310

BRIDGE OFFICE CONTACT:
WILLIAM DREHER, P.E.
(608) 266-8489

NO.	DATE	REVISION	BY

DONOHUE & ASSOCIATES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED William C. Dreher KAR 1/12/15
CHIEF STRUCTURES DESIGN ENGINEER — DATE

STRUCTURE B-59-188

TAYLOR DRIVE BIKE PATH OVER SHEBOYGAN RIVER

COUNTY	~~TOWN~~/CITY/~~VILLAGE~~
SHEBOYGAN	SHEBOYGAN

DESIGN SPEC.
AASHTO LRFD DESIGN SPEC. 5th EDITION

DESIGNED BY	DESIGN CK'D.	DRAWN BY	PLANS CK'D.
KAG	PJE	KAG	PJE

GENERAL PLAN

SHEET 1 OF 6
236

I.D. 1133-03-02 DATE : $$...date...$$

FILE NAME : L:\Projects\11744\Dwg\structures\B-59-188\01_GenPlan_B-59-188.dwg
PLOT DATE : 01/08/15

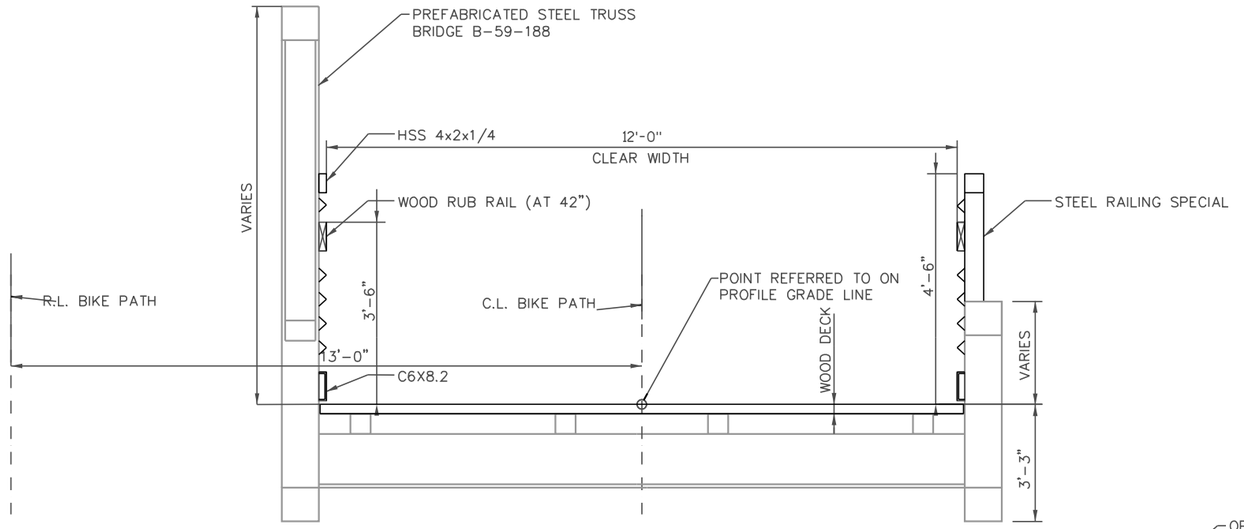
8

STATE PROJECT NUMBER

4996-01-58

TOTAL ESTIMATED QUANTITIES-CAT 0050

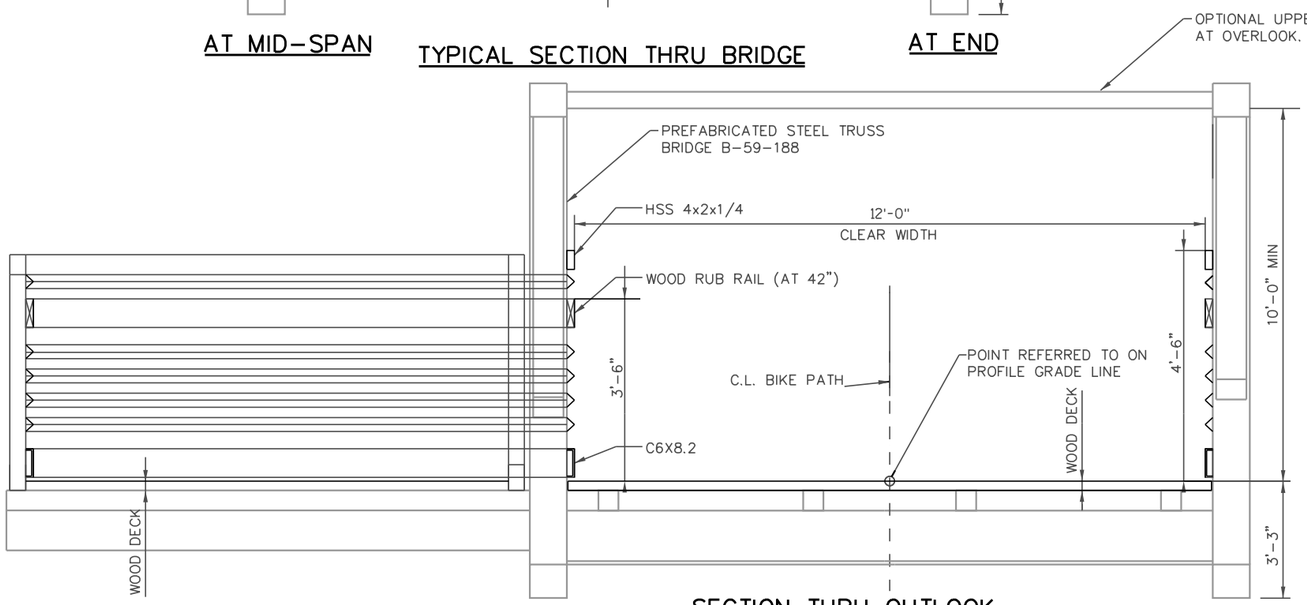
BID ITEM NO.	BID ITEMS	UNIT	TOTAL
206.1000	EXCAVATION FOR STRUCTURES BRIDGES B-59-188	LS	1
210.0100	BACKFILL STRUCTURE	CY	170
502.0100	CONCRETE MASONRY BRIDGES	CY	50
505.0405	BAR STEEL REINFORCEMENT HS BRIDGES	LB	3410
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	10
550.1100	PILING STEEL HP 10-INCH X 42 LB	LF	504
606.0300	RIPRAP HEAVY	CY	81
612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	74
645.0120	GEOTEXTILE FABRIC TYPE HR	SY	106
SPV.0060.08	STEEL RAILING SPECIAL, B-59-188	EA	1
SPV.0105.07	PREFABRICATED STEEL TRUSS PEDESTRIAN BRIDGE B-59-188 LRFD	LS	1



AT MID-SPAN

AT END

TYPICAL SECTION THRU BRIDGE



SECTION THRU OUTLOOK

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2" CLEAR UNLESS SHOWN OR NOTED OTHERWISE.

ALL STATIONS AND ALL ELEVATIONS ARE IN FEET.

FILLER SHALL CONFORM TO THE REQUIREMENTS OF A.A.S.H.T.O. DESIGNATION M153, TYPES I, II, OR III OR M213.

THE AREA OF THE FILL IN FRONT OF THE ABUTMENTS SHALL BE COVERED WITH SLOPE PAVING CRUSHED AGGREGATE, TO THE LIMITS SHOWN ON SHEET 1, ON THE ABUTMENT SHEETS OR AS DIRECTED BY THE ENGINEER.

THE FIRST DIGIT OF A THREE DIGIT AND THE FIRST TWO DIGITS OF A FOUR DIGIT BAR MARK SIGNIFIES THE BAR SIZE.

FILL/EXCAVATE TO BOTTOM OF ABUTMENT ELEVATION BEFORE DRIVING PILING. AT THE BACKFACE OF ABUTMENTS, ALL VOLUME WHICH CANNOT BE PLACED BEFORE ABUTMENT CONSTRUCTION AND IS NOT OCCUPIED BY THE NEW STRUCTURE, SHALL BE BACKFILLED WITH BACKFILL STRUCTURE.

THE FINISHED GRADED SECTION SHALL BE THE UPPER LIMITS OF EXCAVATION FOR STRUCTURES.

FALSE-WORK CLEARANCES SHALL COMPLY WITH MINIMUM CONSTRUCTION CLEARANCES.

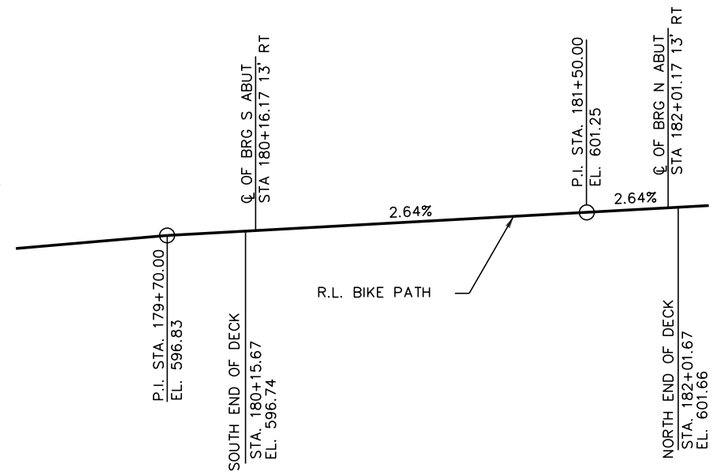
THE SLOPE OF THE FILL IN FRONT OF THE ABUTMENTS SHALL BE COVERED WITH RIPRAP HEAVY, TO THE LIMITS SHOWN ON SHEET 1, ON THE ABUTMENT SHEETS OR AS DIRECTED BY THE ENGINEER.

ALL PERMANENT CLEARANCES SHALL BE VERIFIED BEFORE PROJECT CLOSING.

BRIDGE DECKING SHALL BE NOMINAL 3"X10"DOUGLAS FIR LARCH SELECT STRUCTURAL S1S2E ACZA TREATED. PLANKS SHALL BE PLACED ROUGH SIDE UP.

BRIDGE TO BE FABRICATED WITH WEATHERING STEEL.

FABRICATE TOP CHORD TO PARABOLIC CURVE



PROFILE GRADE LINE, BIKE PATH

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-59-188

DRAWN BY KAG | PLANS CK'D. PJE

QUANTITIES, NOTES, & PROFILES

SHEET 2 OF 6

237

FILE NAME : L:\Projects\11744\Dwg\structures\B-59-188\02_Sect&Quantities_B-59-188.dwg

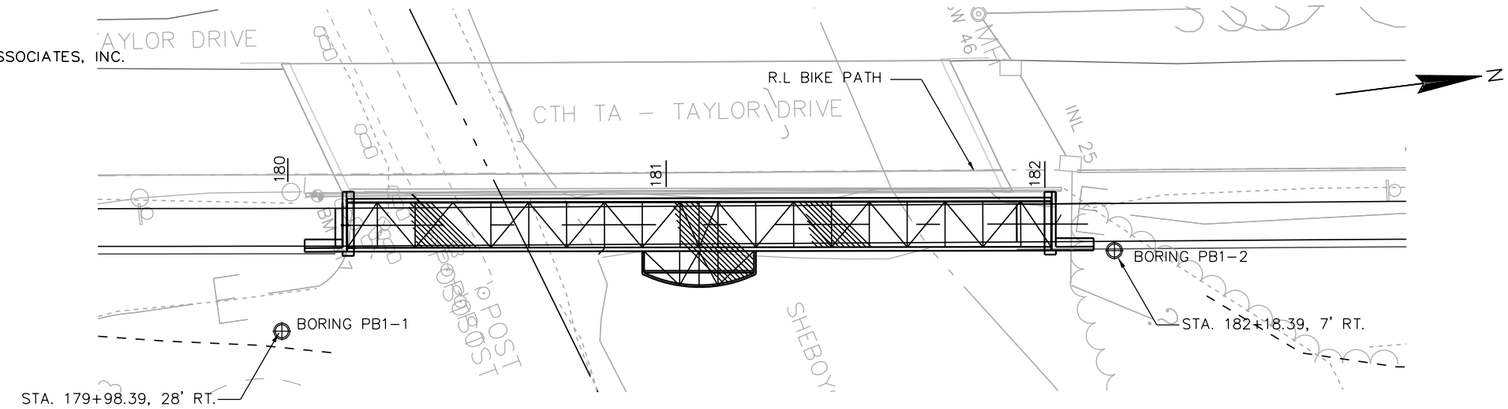
PLOT DATE : 01/08/15

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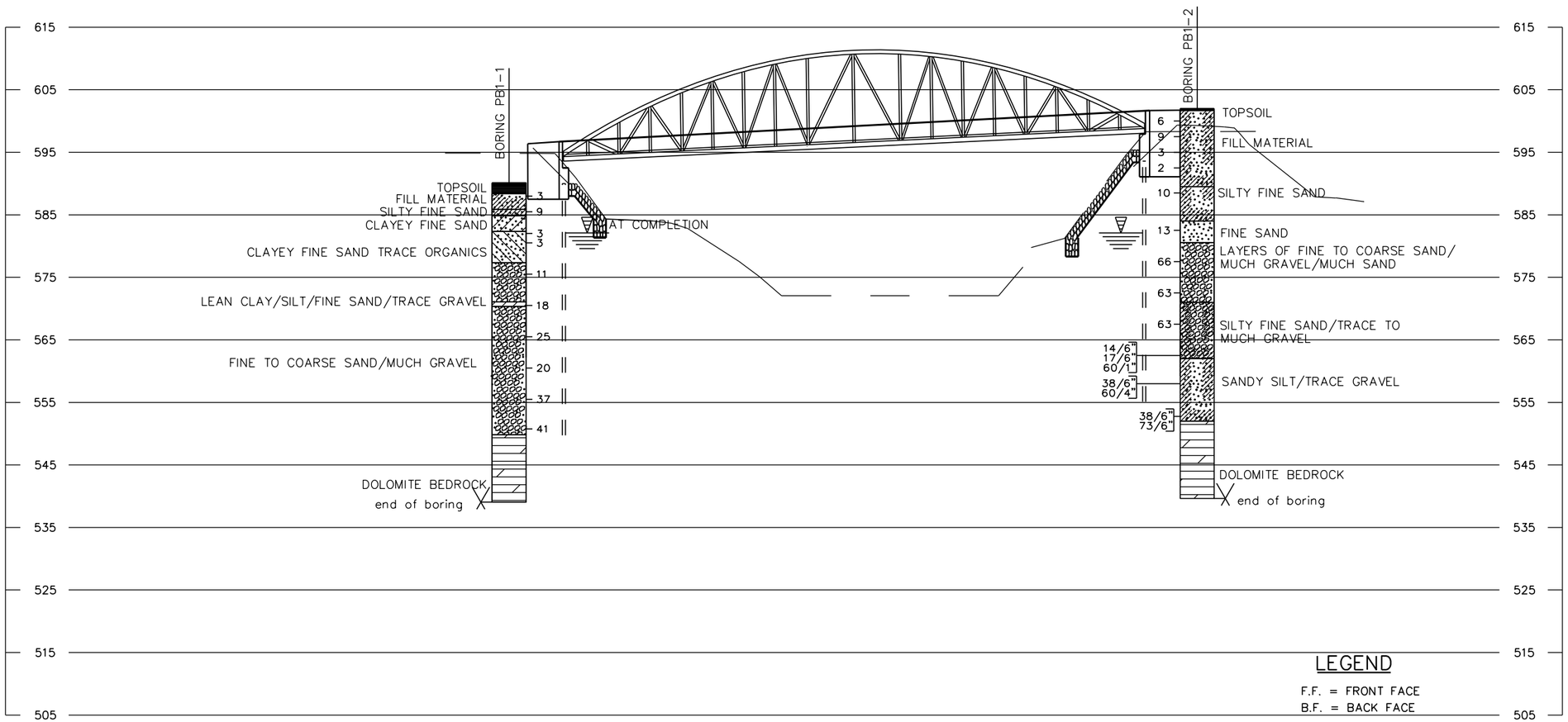
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BORINGS PERFORMED BY:
SOILS & ENGINEERING SERVICES, INC.
MADISON, WISCONSIN
AUGUST 25, 2014

PLANS PREPARED BY DONOHUE & ASSOCIATES, INC.



PLAN



LEGEND

F.F. = FRONT FACE
B.F. = BACK FACE

STATE PROJECT NUMBER

4996–01–58

ABBREVIATIONS

F — Fine M — Medium C — Coarse
Ws — Weathered So — Sound

MATERIAL SYMBOLS

Topsoil, Silt, Sandstone
Sand, Peat, Limestone
Gravel, Clay, Igneous Rock

LEGEND OF PROBING

95/6=95 BLOWS FOR 6" PENETRATION
PROBING TAKEN WITH A 350# WT. FALLING 18" ON A 2" O.D. POINT.

Probing No.
Sta.
Elevation
7 Average Blows Per Foot
Refusal 95/6

LEGEND OF BORING

Boring No.
Elev. Sta.
Unconfined STRENGTH → 7. 7 7
Blows Per Ft. USING 140# WT. FALLING 30"
Wash Sample
Shelby Tube — S.T.
Ground Water ELEVATION
No Ground Water OBSERVED ABOVE THIS ELEVATION
Sandy Gravel
F. Boulders or COBBLES
Sand
Silty Clay
So Limestone

UNLESS OTHERWISE SPECIFIED, THE BLOWS PER FOOT AT THE LOCATIONS INDICATED ARE BASED ON DRIVING A 2" O.D. X 1.4" I.D. SPLIT SPOON SAMPLER WITH A 140# HAMMER HAVING A FREE FALL OF 30". THE BLOW COUNT IS TAKEN IN UNDISTURBED SOIL IMMEDIATELY BELOW A CASED OR OPEN HOLE ELIMINATING SIDE FRICTION ON THE DRIVE PIPE.

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

TO OBTAIN RELATIVE DATA CONCERNING THE CHARACTER OF MATERIAL IN AND UPON WHICH THE FOUNDATION MIGHT BE BUILT, BORINGS AND/OR SOUNDINGS WERE MADE AT POINTS APPROXIMATELY AS INDICATED ON THIS DRAWING. THE DATA PRESENTED HEREIN REPRESENTS THE FINDINGS OF THE SUBSURFACE EXPLORATIONS MADE. HOWEVER, BECAUSE THE DEPTHS INVESTIGATED ARE LIMITED AND THE AREA OF THE BORINGS AND/OR SOUNDINGS IS VERY SMALL IN RELATION TO THE ENTIRE AREA, THE WISCONSIN DEPARTMENT OF TRANSPORTATION DOES NOT WARRANT CONDITIONS BELOW THE DEPTHS INVESTIGATED OR THAT THE CLASSIFICATION OF MATERIAL ENCOUNTERED IN THESE INVESTIGATIONS IS NECESSARILY TYPICAL OF THE ENTIRE SITE.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B–59–188

DRAWN BY KAG | PLANS CK'D. PJE

SUBSURFACE EXPLORATION

SHEET 3 OF 6

238

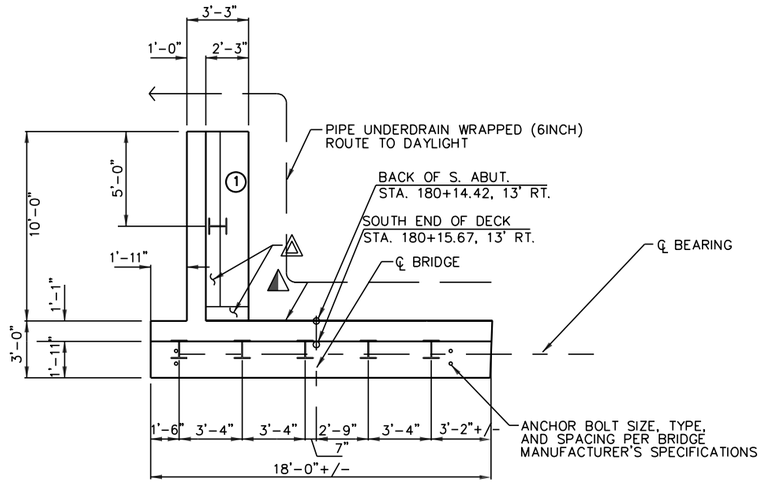
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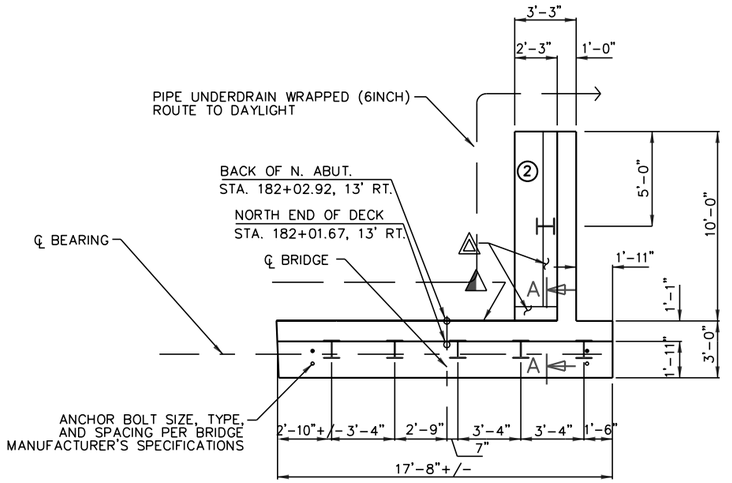
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STATE PROJECT NUMBER

4996-01-58



SOUTH ABUTMENT PLAN



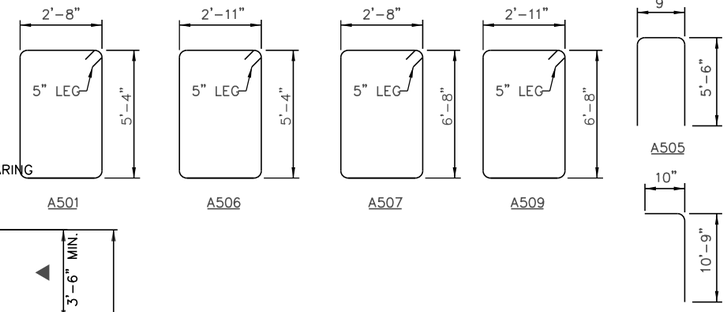
NORTH ABUTMENT PLAN

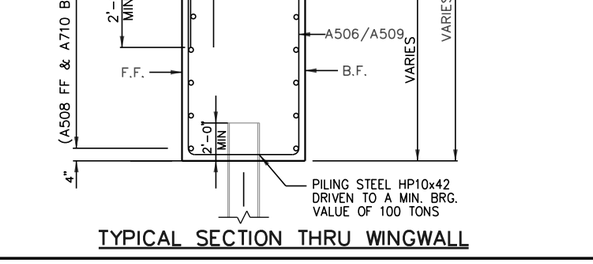
BILL OF BARS

DIMENSIONS IN BENDING DETAILS ARE OUT TO OUT OF BAR. BILL OF BARS IS FOR BOTH ABUTMENTS.

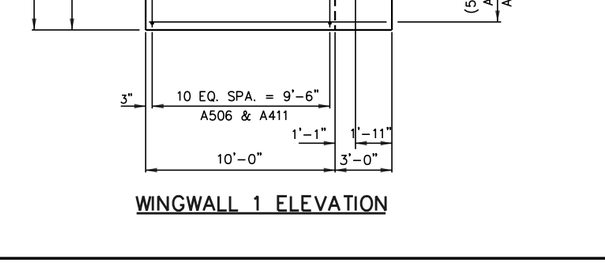
MARK	NO. REQ'D.	LENGTH	BENT	LOCATION	TOTAL WEIGHT = 3,410 LBS.
A501	18	16'-0"	X	ABUT. BODY - STIRRUPS	VERT.
A502	14	17'-8"*		ABUT. BODY - F.F	HORIZ.
A703	16	17'-8"*		ABUT. BODY - B.F.	HORIZ.
A504	12	17'-8"*		ABUT. BACKWALL	HORIZ.
A505	36	11'-9"	X	ABUT. BACKWALL	VERT.
A506	11	16'-6"	X	WINGWALL BODY-STIRRUPS	VERT.
A507	18	18'-8"	X	ABUT. BODY-STIRRUPS	HORIZ.
A508	14	12'-6"		WINGWALL - F.F.	HORIZ.
A509	11	19'-2"	X	WINGWALL BODY STIRRUPS	VERT.
A710	14	12'-6"		WINGWALL - B.F.	HORIZ.
A411	44	5'-6"		WINGWALL - E.F.	VERT.
A512	12	11'-7"	X	WINGWALL - E.F.	HORIZ.

* CUT BARS AS NECESSARY TO PROVIDE 2" CLEARANCE.

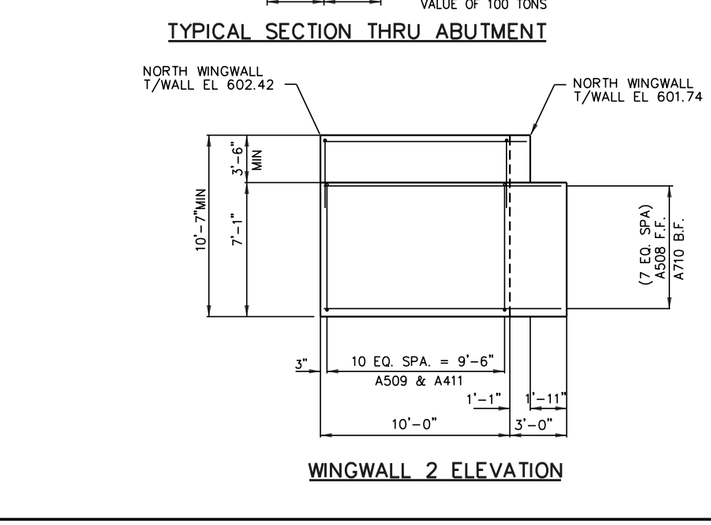




SOUTH ABUTMENT ELEVATION



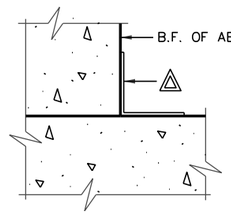
NORTH ABUTMENT ELEVATION



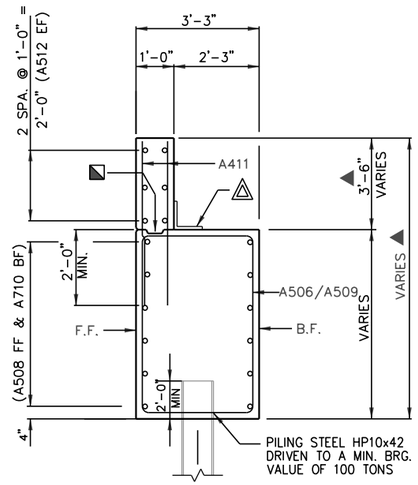
TYPICAL SECTION THRU ABUTMENT

LEGEND

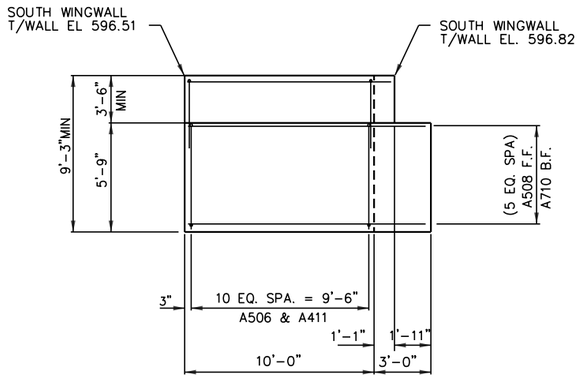
- 18" RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZONTAL AND VERTICAL JOINTS ON BACK FACE.
- PLACE BOTTOM HALF OF RUBBERIZED MEMBRANE WATERPROOFING HORIZONTAL IN THIS AREA. SEE SECTION A-A ON THIS SHEET.
- OPTIONAL CONST. JOINT FORMED BY BEVELED 2" x 6" KEYWAY WITH MEMBRANE ON BACKFACE.
- DIMENSION TO BE VERIFIED BY CONTRACTOR WITH BRIDGE MANUFACTURER.



SECTION A-A



TYPICAL SECTION THRU WINGWALL



WINGWALL 1 ELEVATION

WINGWALL 2 ELEVATION

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-59-188

DRAWN BY KAG | PLANS CK'D. PJE

ABUTMENTS

SHEET 4 OF 6
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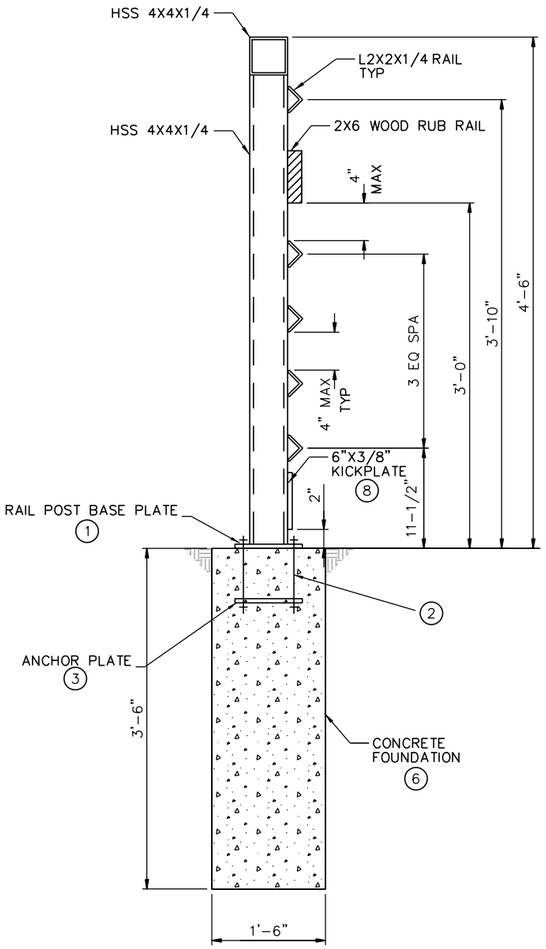
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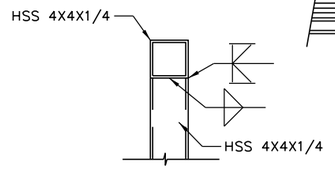
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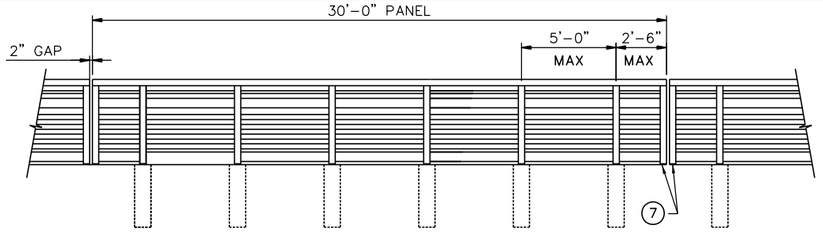
4996-01-58



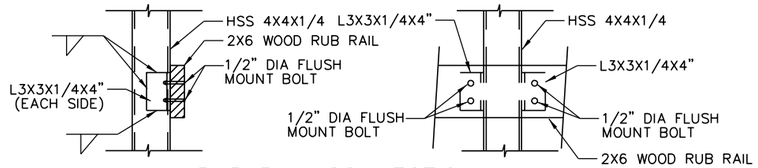
SECTION THRU RAILING



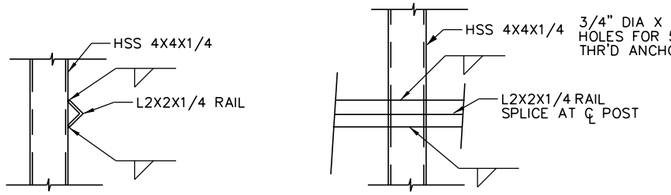
TOP CONNECTION



ELEVATION

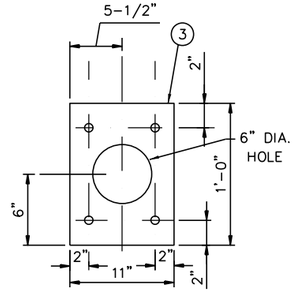


RUB RAIL CONNECTION

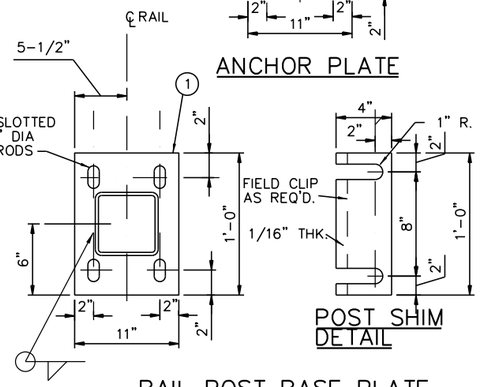


ANGLE CONNECTION

(KICKPLATE CONNECTION SIMILAR)

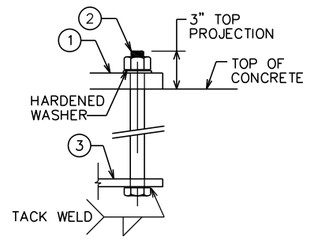


ANCHOR PLATE

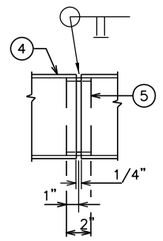


POST SHIM DETAIL

RAIL POST BASE PLATE

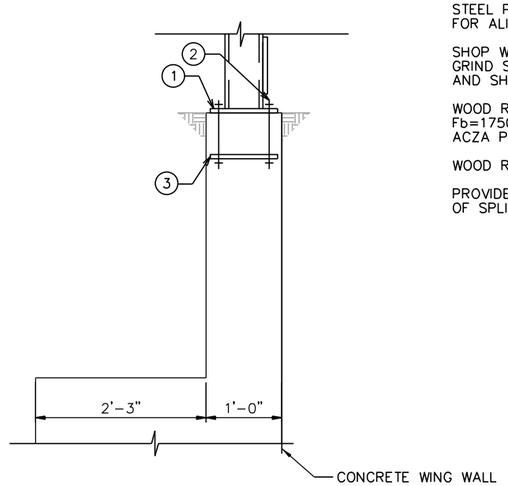


ANCHOR BOLTS



SHOP RAIL SPLICE DETAIL

(LOCATION MUST BE SHOWN ON SHOP DRAWINGS)



SECTION THRU RAILING AT WING WALL

LEGEND

1. PLATE 5/8" x 11" x 1'-0" WITH 3/4" X 2" SLOTTED HOLES FOR ANCHOR BOLTS NO. 2. WELD TO HSS4x4 AS SHOWN. SLOTS PARALLEL TO LONG SIDE OF PLATE.
2. 5/8" DIA X 10" LONG, TYPE 316 STAINLESS STEEL BOLT (MIN. TENSILE STRENGTH=70KSI) WITH NUT AND WASHERS OF SAME ALLOY GROUP. (ALTERNATE RAIL POST ANCHORAGE: 4 EQUIVALENT STAINLESS STEEL CONCRETE MASONRY ANCHORS TYPE S 5/8" EMBED 7" IN CONCRETE FOR RAIL POSTS.
3. 5/8" X 11" X 1'-0" ANCHOR PLATE (GALVANIZED) WITH 3/4' DIA HOLES FOR ANCHOR BOLTS. ANCHOR PLATE IS NOT REQUIRED WHEN TYPE S MASONRY ANCHORS ARE USED.
4. HSS 4 x 4 x 1/4 STRUCTURAL TUBING.
5. SPLICE SLEEVE FABRICATED FROM 1/4" PLATE. PROVIDE "SLIDING FIT".
6. REINFORCE CONCRETE FOUNDATION WITH 4-#4 BARS VERTICALLY AND #3@12" TIES.
7. PROVIDE 2"X4" HSS END POSTS ON EACH PANEL END.
8. C6X8.2 MAY BE SUBSTITUTED FOR 6"X 3/8" PLATE

GENERAL NOTES

BID ITEM SHALL BE "STEEL RAILING SPECIAL B-59-188" BID ITEM INCLUDES ALL ITEMS SHOWN.

POST BASE PLATES SHALL BE FLAT WITH ALL SURFACES SMOOTH AND FREE FROM WARP AND ALL EDGES SMOOTH, STRAIGHT AND VERTICAL. ALL PLATE CUTS SHALL BE MACHINE OR MACHINE FLAME CUTS.

ALL STEEL USED IN FABRICATION SHALL BE MADE FROM MATERIALS CONFORMING TO ASTM A847, A588 OR A242 GRADE 50 WEATHERING STEEL UNLESS NOTED OTHERWISE.

FILL BOLT SLOT OPENINGS IN POST SHIMS & PLATE NO. 1 WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER.

RAIL MEMBERS SHALL BE ATTACHED CONTINUOUSLY TO A MINIMUM OF FOUR POSTS AND A MAXIMUM OF EIGHT.

STEEL POST SHIMS MAY BE USED UNDER POSTS WHERE REQ'D. FOR ALIGNMENT.

SHOP WELD ALL STEEL CONNECTIONS WITH 3/16" FILLET WELDS. GRIND SMOOTH. FINISHED RAIL SHALL BE FREE OF BURRS AND SHARP EDGES.

WOOD RUB RAIL 2X6, S4S E4E, TREATED STRUCTURAL LUMBER, Fb=1750psi. RUB RAILS SHALL BE PRESSURE TREATED TO AWPA ACZA PER SPECIFICATION.

WOOD RUB RAIL SHALL BE SPLICED AT RAIL POSTS.

PROVIDE 1/2" DIA DRAIN HOLES IN LOW END OF ALL RAILS CLEAR OF SPLICE TUBE

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-59-188

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POST MOUNTED RAILING DETAILS

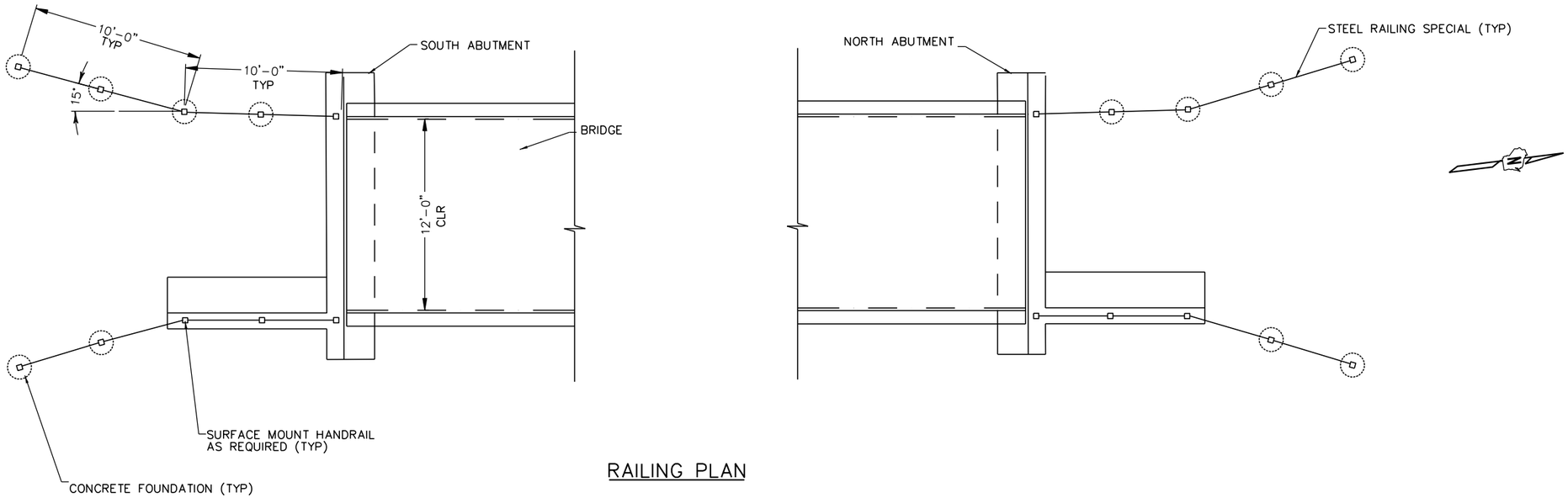
SHEET 5 OF 6

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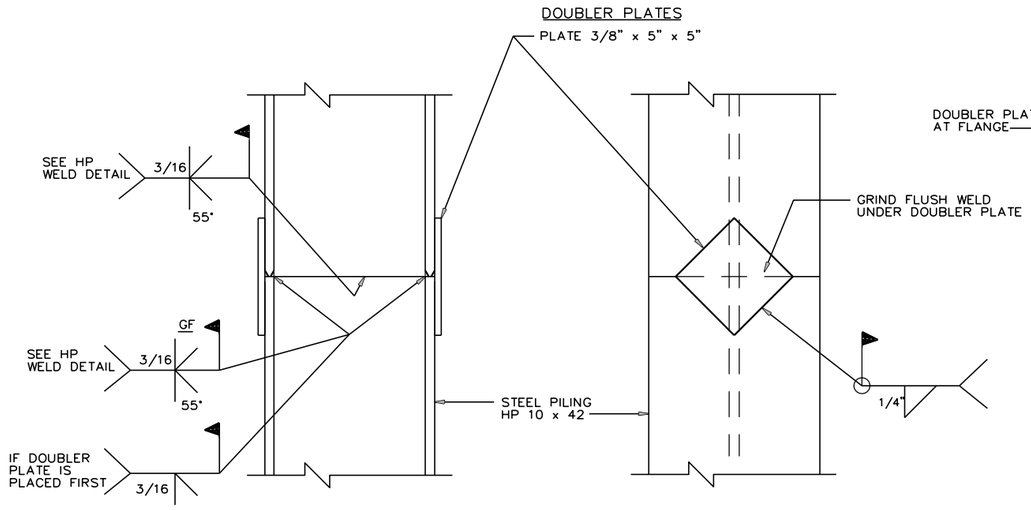
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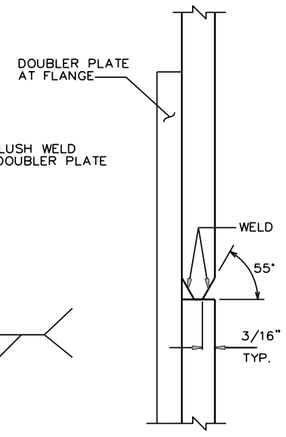
STATE PROJECT NUMBER
4996-01-58



RAILING PLAN



STEEL 'HP' SHAPES



HP WELD DETAIL
FLANGE SHOWN, WEB SIMILAR

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

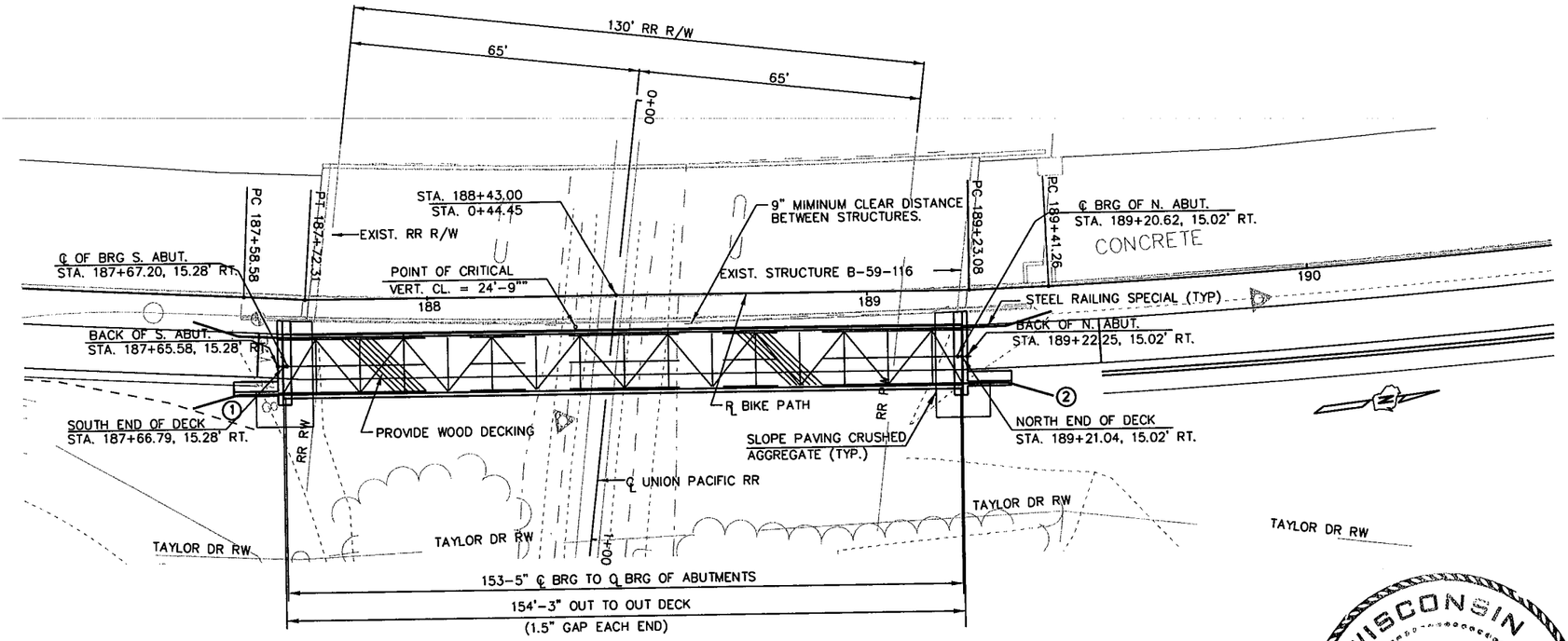
STRUCTURE B-59-188

DRAWN BY KAG | PLANS CK'D. PJE

POST MOUNTED RAILING PLAN

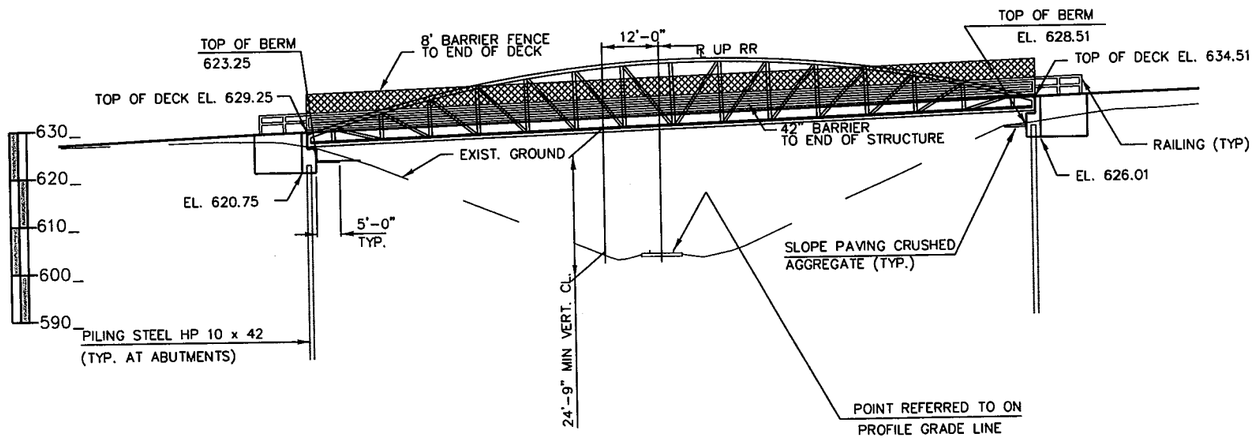
SHEET 6 OF 6

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PLAN

(SINGLE SPAN TRUSS)



ELEVATION

RAILROAD MILEPOST: 00.80 INCREASING WEST

TIMETABLE DIRECTION ARROW: NOT AVAILABLE ON FRA SITE

NEAREST RAILROAD STATION AND END STATION OF RAILROAD SUBDIVISION:

(X) INDICATES WING NUMBER

STATE PROJECT NUMBER
4996-01-58

DESIGN DATA

LIVE LOAD:

DESIGN LOADING: 90 PSF PEDESTRIAN AND 20,000 LB MAINTENCE VEHICLE (H10)

ULTIMATE DESIGN STRESSES:

CONCRETE MASONRY, ALL OTHER ——— f'_c = 3,500 P.S.I.

HIGH-STRENGTH BAR STEEL REINFORCEMENT, GRADE 60 ——— f_y = 60,000 P.S.I.

WOOD DECKING, DOUGLAS FIR LARCH, SELECT STRUCTURAL ——— F_b = 1,750 P.S.I.

FOUNDATION DATA:

ABUTMENTS TO BE SUPPORTED ON PILING STEEL HP 10 x 42 DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 100 TONS** PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA. ESTIMATED 55' LONG AT SOUTH ABUTMENT AND 73' LONG AT NORTH ABUTMENT.

** THE FACTORED AXIAL RESISTANCE OF PILES IN COMPRESSION USED FOR DESIGN IS THE REQUIRED DRIVING RESISTANCE MULTIPLIED BY A RESISTANCE FACTOR OF 0.5 USING MODIFIED GATES TO DETERMINE DRIVEN PILE CAPACITY.

LIST OF DRAWINGS

1. GENERAL PLAN
2. QUANTITIES, NOTES, & PROFILES
3. SUBSURFACE EXPLORATION
4. ABUTMENTS
5. POST MOUNTED RAILING DETAILS
6. POST MOUNTED RAILING PLANS

WISCONSIN
PHILIP J. ENGLEBERT
E-16118
SHEBOYGAN, WIS.
PROFESSIONAL ENGINEER
1/5/15

CONSTRUCTION STAGING / METHODS:

1. CONSTRUCT ABUTMENTS OUTSIDE OF RAILROAD RIGHT-OF-WAY.
2. STRUCTURE B-59-189 IS A PREFABRICATED PEDESTRIAN STEEL TRUSS BRIDGE.
3. FALSE WORK WILL NOT BE REQUIRED FOR THE BRIDGE STRUCTURE.
4. CONTRACTOR SHALL SUBMIT THE DETAILED CONSTRUCTION PHASING PLAN AND PROCEDURES FOR OWNER AND RAILROAD REVIEW PRIOR TO CONSTRUCTION.

DONOHUE & ASSOCIATES, INC.
CONTACT: KIM GAHAGAN, P.E.
3311 WEEDEN CREEK ROAD
SHEBOYGAN, WI 53081
(920) 803-7310

BRIDGE OFFICE CONTACT:
WILLIAM DREHER, P.E.
(608) 266-8489

NO.	DATE	REVISION	BY

Original Plans Prepared By
DONOHUE® & ASSOCIATES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
ACCEPTED William C. Dreher KAR 01/11/15
CHIEF STRUCTURES DESIGN ENGINEER — DATE

STRUCTURE B-59-189

TAYLOR DR. BIKE PATH OVER UNION PACIFIC RAILROAD

COUNTY	~~TOWN/CITY/VILLAGE~~
SHEBOYGAN	SHEBOYGAN

DESIGN SPEC.
AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS

DESIGNED BY	KAG	DESIGN CK'D.	PJE	DRAWN BY	KAG	PLANS CK'D.	TLK

GENERAL PLAN

SHEET 1 OF 6
242

I.D. 4996-01-57 DATE : $$...dole...$$

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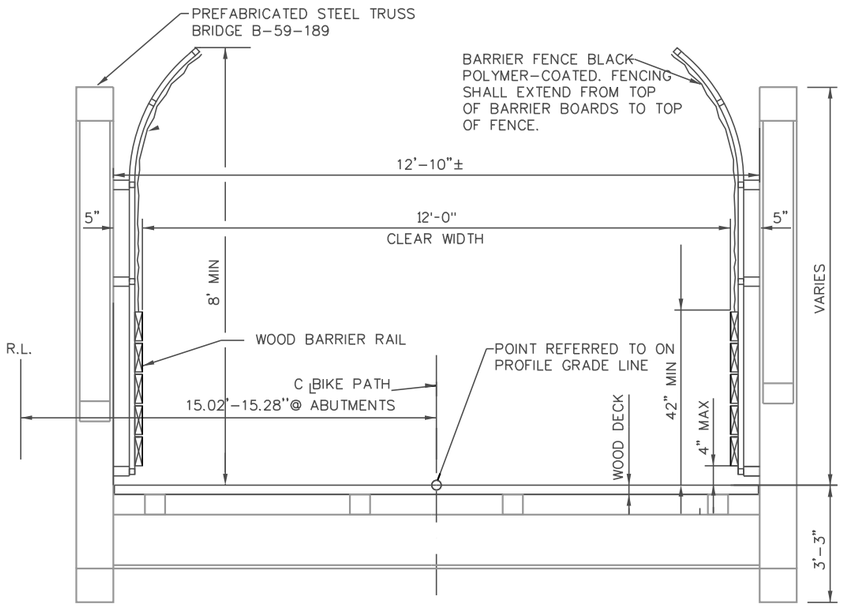
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STATE PROJECT NUMBER

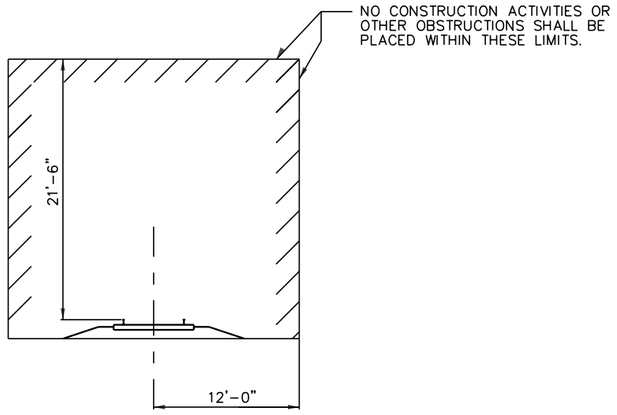
4996-01-58

TOTAL ESTIMATED QUANTITIES-CAT 0060

BID ITEM NO.	BID ITEMS	UNIT	TOTAL
206.1000	EXCAVATION FOR STRUCTURES BRIDGES B-59-189	LS	1
210.0100	BACKFILL STRUCTURE	CY	140
502.0100	CONCRETE MASONRY BRIDGES	CY	42
505.0405	BAR STEEL REINFORCEMENT HS BRIDGES	LB	3180
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	10
550.1100	PILING STEEL HP 10-INCH X 42 LB	LF	640
604.0500	SLOPE PAVING CRUSHED AGGREGATE	SY	28
612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	76
SPV.0060.09	STEEL RAILING SPECIAL B-59-189	EA	1
SPV.0105.08	PREFABRICATED STEEL PEDESTRIAN TRUSS BRIDGE B-59-189 LRFD	LS	1



TYPICAL SECTION THRU BRIDGE



MINIMUM CONSTRUCTION CLEARANCE ENVELOPE

(NORMAL TO RAILROAD)

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2" CLEAR UNLESS SHOWN OR NOTED OTHERWISE.

FILLER SHALL CONFORM TO THE REQUIREMENTS OF A.A.S.H.T.O. DESIGNATION M153, TYPES I, II, OR III OR M213.

THE AREA OF THE FILL IN FRONT OF THE ABUTMENTS SHALL BE COVERED WITH SLOPE PAVING CRUSHED AGGREGATE, TO THE LIMITS SHOWN ON SHEET 1, ON THE ABUTMENT SHEETS OR AS DIRECTED BY THE ENGINEER.

THE FIRST DIGIT OF A THREE DIGIT AND THE FIRST TWO DIGITS OF A FOUR DIGIT BAR MARK SIGNIFIES THE BAR SIZE.

FILL/EXCAVATE TO BOTTOM OF ABUTMENT ELEVATION BEFORE DRIVING PILING. AT THE BACKFACE OF ABUTMENTS, ALL VOLUME WHICH CANNOT BE PLACED BEFORE ABUTMENT CONSTRUCTION AND IS NOT OCCUPIED BY THE NEW STRUCTURE, SHALL BE BACKFILLED WITH BACKFILL STRUCTURE.

THE FINISHED GRADED SECTION SHALL BE THE UPPER LIMITS OF EXCAVATION FOR STRUCTURES.

ALL STATIONS AND ALL ELEVATIONS ARE IN FEET.

THE PROPOSED GRADE SEPARATION PROJECT SHALL NOT INCREASE THE QUANTITY AND/OR CHARACTERISTICS OF THE FLOW IN THE RAILROAD'S DITCHES AND/OR DRAINAGE STRUCTURES.

THE ELEVATION OF THE EXISTING TOP-OF-RAIL PROFILE SHALL BE VERIFIED BEFORE BEGINNING CONSTRUCTION. ALL DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE RAILROAD PRIOR TO CONSTRUCTION.

THE CONTRACTOR MUST SUBMIT A PROPOSED METHOD OF EROSION AND SEDIMENT CONTROL AND HAVE THE METHOD APPROVED BY THE RAILROAD.

ERECTION OVER THE RAILROAD'S RIGHT-OF-WAY SHALL BE DESIGNED TO CAUSE NO INTERRUPTION TO THE RAILROAD'S OPERATION, ENABLING THE TRACK(S) TO REMAIN OPEN TO TRAFFIC PER THE RAILROAD'S REQUIREMENTS.

RAILROAD REQUIREMENTS DO NOT ALLOW WORK WITHIN 50 FEET OF TRACK CENTERLINE WHEN A TRAIN PASSES THE WORK SITE AND ALL PERSONNEL MUST CLEAR THE AREA WITHIN 25 FEET OF THE TRACK CENTERLINE AND SECURE ALL EQUIPMENT.

FALSE-WORK CLEARANCES SHALL COMPLY WITH MINIMUM CONSTRUCTION CLEARANCES. ALL PERMANENT CLEARANCES SHALL BE VERIFIED BEFORE PROJECT CLOSING.

BRIDGE DECKING SHALL BE NOMINAL 3"X10" OR 12" DOUGLAS FIR LARCH SELECT STRUCTURAL S1S2E, ACZA TREATED. PLANKS SHALL BE PLACED ROUGH SIDE UP.

WOOD BARRIER RAILS TO BE 2"X6" S4S STRUCTURAL ACZA TREATED . MAINTAIN 1/2" GAP BETWEEN BOARDS.

BRIDGE TO BE FABRICATED WITH WEATHERING STEEL.

FABRICATE TOP CHORD TO PARABOLIC CURVE

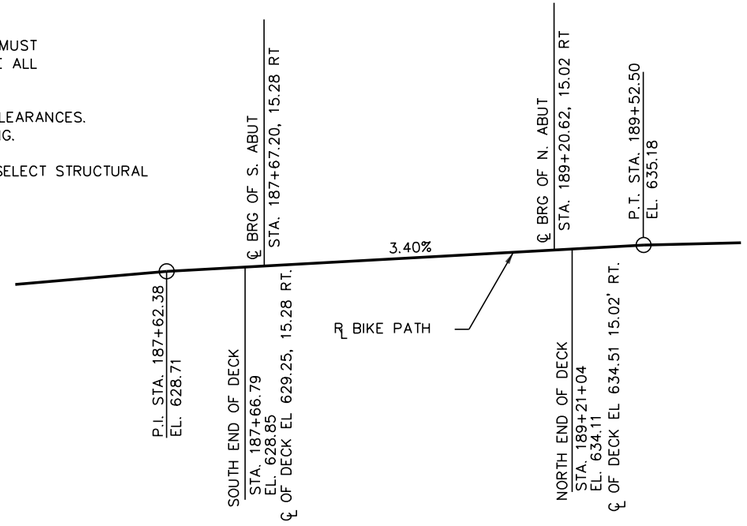
STA. 0+30	STA. 0+40	STA. 0+50	STA. 0+60	STA. 0+70	STA. 0+80
EL. 601.58	EL. 601.58	EL. 601.60	EL. 601.61	EL. 601.64	EL. 601.66

SOUTH RAIL

STA. 0+30	STA. 0+40	STA. 0+50	STA. 0+60	STA. 0+70	STA. 0+80
EL. 601.61	EL. 601.62	EL. 601.63	EL. 601.65	EL. 601.67	EL. 601.70

NORTH RAIL

EXISTING ELEVATIONS, UP RR



PROFILE GRADE LINE, BIKE PATH

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-59-189

DRAWN BY KAG | PLANS CK'D. PJE

QUANTITIES, NOTES, & PROFILES

SHEET 2 OF 6

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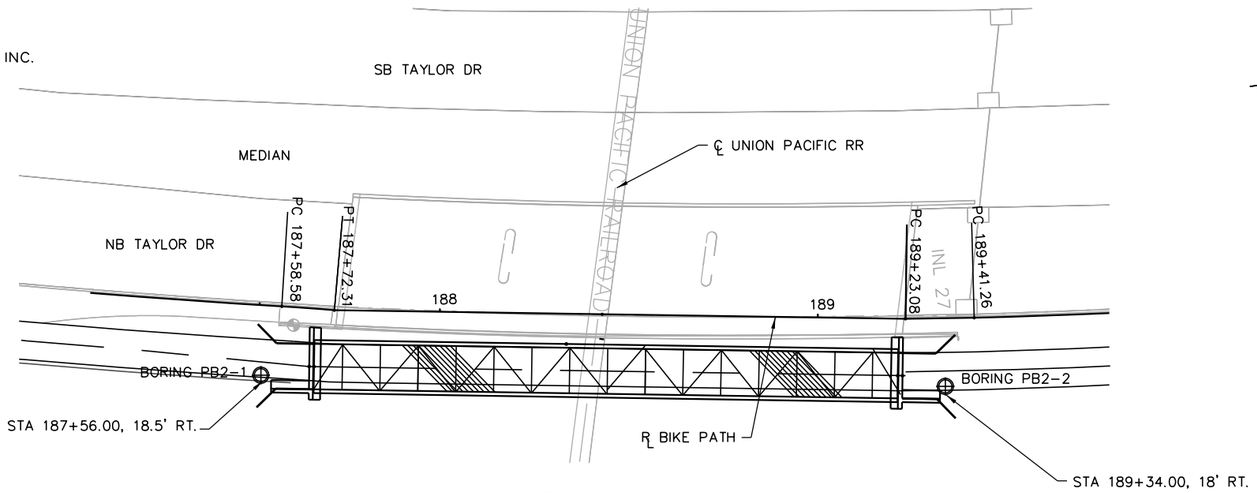
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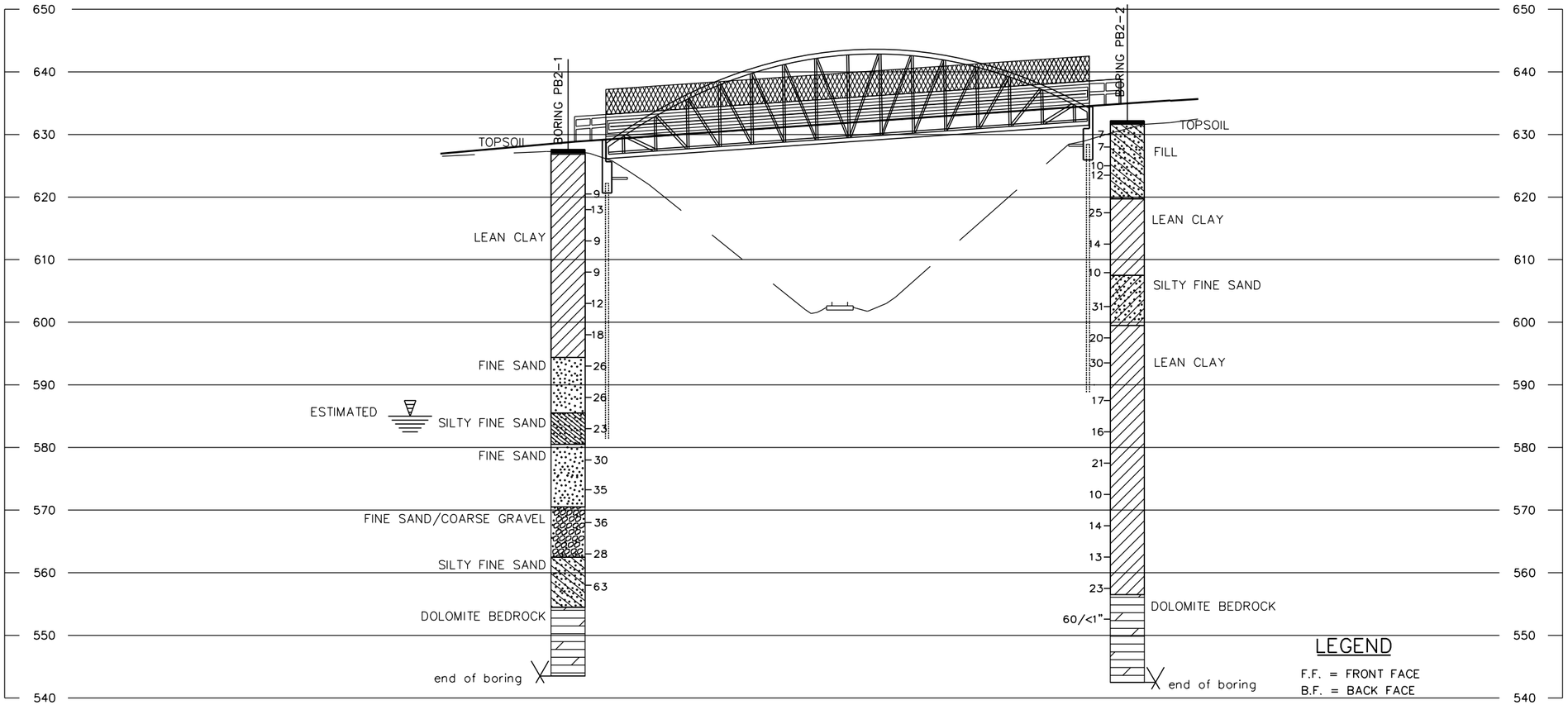
PLOT DATE : 01/05/15

BORINGS PERFORMED BY:
SOILS & ENGINEERING SERVICES, INC.
MADISON, WISCONSIN
JULY 1, 2014

PLANS PREPARED BY DONOHUE & ASSOCIATES, INC.



PLAN



LEGEND

F.F. = FRONT FACE
B.F. = BACK FACE

STATE PROJECT NUMBER

4996-01-58

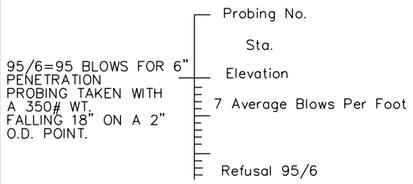
ABBREVIATIONS

F — Fine M — Medium C — Coarse
Ws — Weathered So — Sound

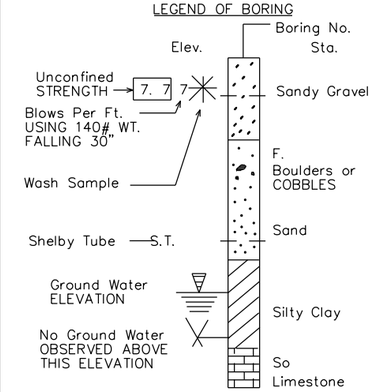
MATERIAL SYMBOLS

Topsoil, Silt, Sandstone, Sand, Peat, Limestone, Gravel, Clay, Igneous Rock

LEGEND OF PROBING



LEGEND OF BORING



UNLESS OTHERWISE SPECIFIED, THE BLOWS PER FOOT AT THE LOCATIONS INDICATED ARE BASED ON DRIVING A 2" O.D. X 1.4" I.D. SPLIT SPOON SAMPLER WITH A 140# HAMMER HAVING A FREE FALL OF 30". THE BLOW COUNT IS TAKEN IN UNDISTURBED SOIL IMMEDIATELY BELOW A CASED OR OPEN HOLE ELIMINATING SIDE FRICTION ON THE DRIVE PIPE.

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

TO OBTAIN RELATIVE DATA CONCERNING THE CHARACTER OF MATERIAL IN AND UPON WHICH THE FOUNDATION MIGHT BE BUILT, BORINGS AND/OR SOUNDINGS WERE MADE AT POINTS APPROXIMATELY AS INDICATED ON THIS DRAWING. THE DATA PRESENTED HEREIN REPRESENTS THE FINDINGS OF THE SUBSURFACE EXPLORATIONS MADE. HOWEVER, BECAUSE THE DEPTHS INVESTIGATED ARE LIMITED AND THE AREA OF THE BORINGS AND/OR SOUNDINGS IS VERY SMALL IN RELATION TO THE ENTIRE AREA, THE WISCONSIN DEPARTMENT OF TRANSPORTATION DOES NOT WARRANT CONDITIONS BELOW THE DEPTHS INVESTIGATED OR THAT THE CLASSIFICATION OF MATERIAL ENCOUNTERED IN THESE INVESTIGATIONS IS NECESSARILY TYPICAL OF THE ENTIRE SITE.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-59-189

DRAWN BY KAG | PLANS CK'D. PJE

SUBSURFACE EXPLORATION

SHEET 3 OF 6

244

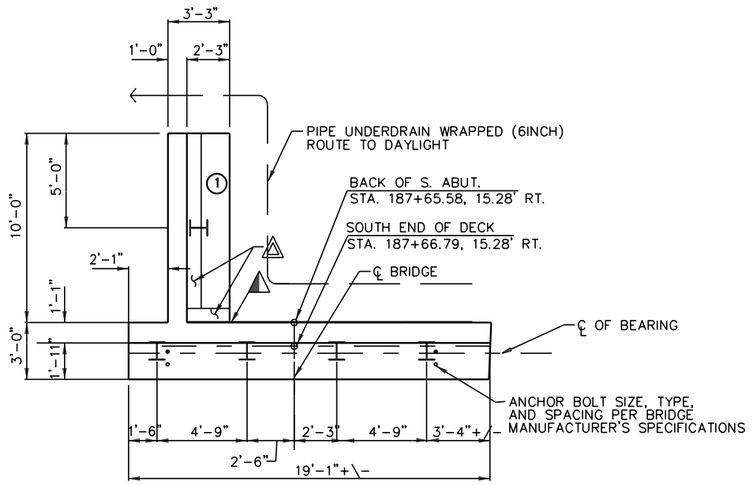
8

8

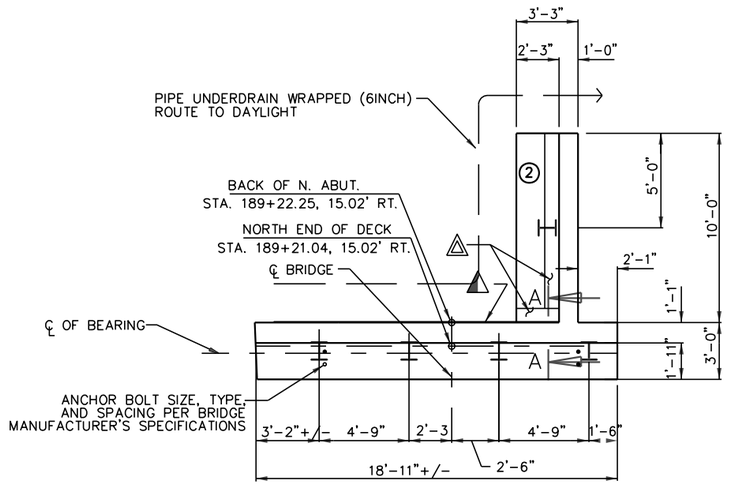
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STATE PROJECT NUMBER

4996-01-58



SOUTH ABUTMENT PLAN



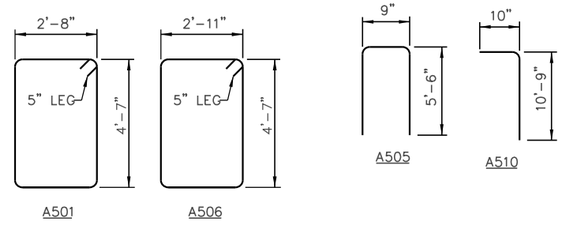
NORTH ABUTMENT PLAN

BILL OF BARS

DIMENSIONS IN BENDING DETAILS ARE OUT TO OUT OF BAR. BILL OF BARS IS FOR BOTH ABUTMENTS.

MARK	NO. REQ'D.	LENGTH	BENT	LOCATION	TOTAL WEIGHT = 3,180 LBS.
A501	38	14'-8"	X	ABUT. BODY - STIRRUPS	VERT.
A502	12	19'-0"*		ABUT. BODY - F.F	HORIZ.
A703	14	19'-0"*		ABUT. BODY - B.F.	HORIZ.
A504	12	19'-0"*		ABUT. BACKWALL	HORIZ.
A505	38	11'-5"	X	ABUT. BACKWALL	VERT.
A506	22	15'-2"	X	WINGWALL	VERT.
A707	12	12'-6"		WINGWALL - B.F.	HORIZ.
A508	12	12'-6"		WINGWALL - F.F.	HORIZ.
A409	44	5'-6"		WINGWALL - F.F.	VERT.
A510	12	11'-7"	X	WINGWALL - E.F.	HORIZ.

* CUT BARS AS NECESSARY TO PROVIDE 2" CLEARANCE.

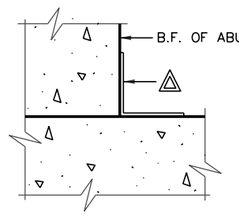


SOUTH ABUTMENT ELEVATION

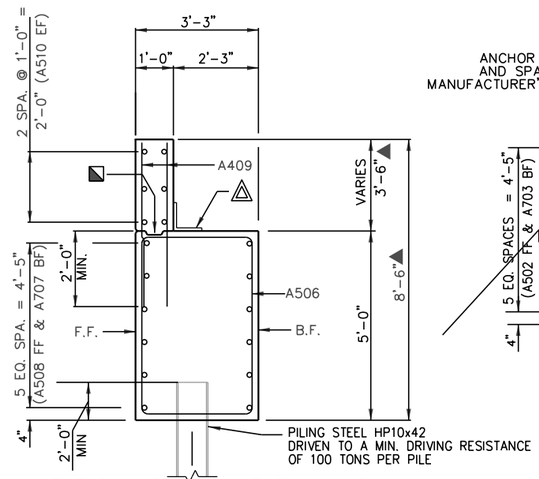
NORTH ABUTMENT ELEVATION

LEGEND

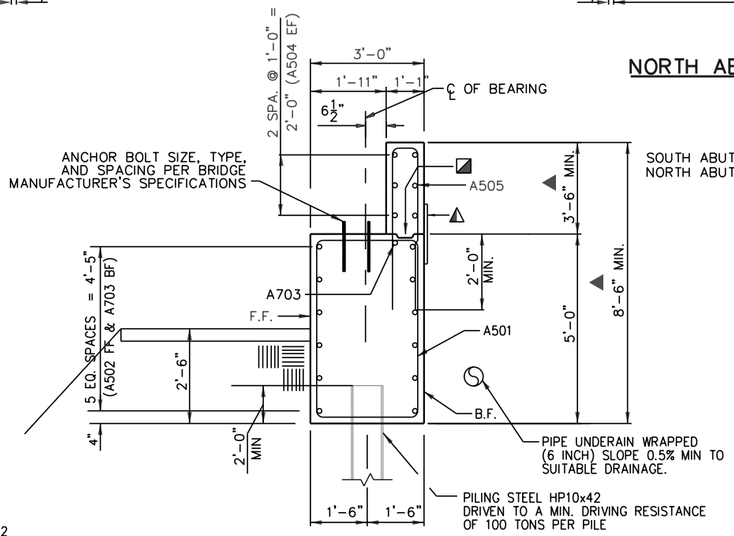
- 18" RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZONTAL AND VERTICAL JOINTS ON BACK FACE.
- PLACE BOTTOM HALF OF RUBBERIZED MEMBRANE WATERPROOFING HORIZONTAL IN THIS AREA. SEE SECTION A-A ON THIS SHEET.
- OPTIONAL CONST. JOINT FORMED BY BEVELED 2" x 6" KEYWAY WITH MEMBRANE ON BACKFACE.
- DIMENSION TO BE VERIFIED BY CONTRACTOR WITH BRIDGE MANUFACTURER.



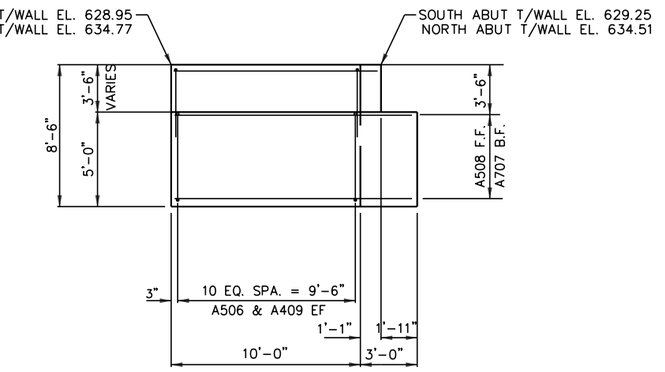
SECTION A-A



TYPICAL SECTION THRU WINGWALL



TYPICAL SECTION THRU ABUTMENT



WINGWALL 1 ELEVATION
(WINGWALL 2 SIMILAR)

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-59-189

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ABUTMENTS

SHEET 4 OF 6

245

FILE NAME : L:\Projects\11744\Dwg\structures\B-59-189\04_Abutments_B-59-189.dwg

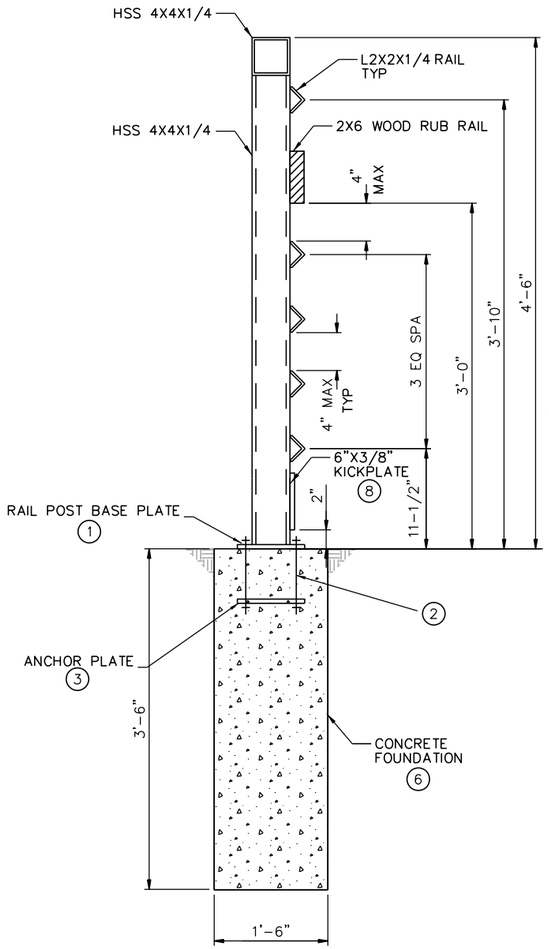
PLOT DATE : 01/05/15

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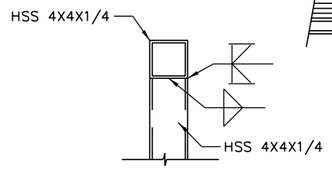
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STATE PROJECT NUMBER

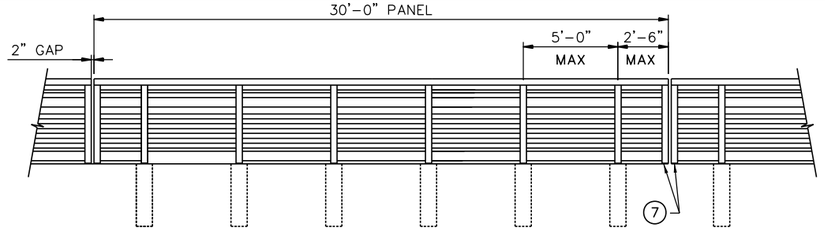
4996-01-58



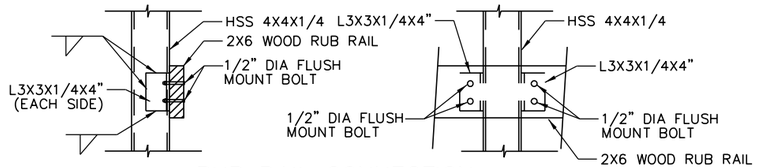
SECTION THRU RAILING



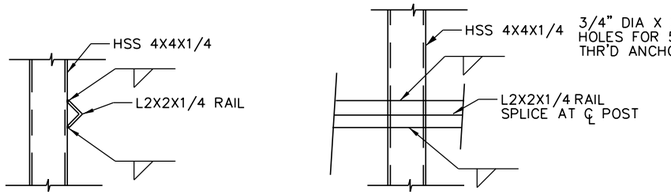
TOP CONNECTION



ELEVATION

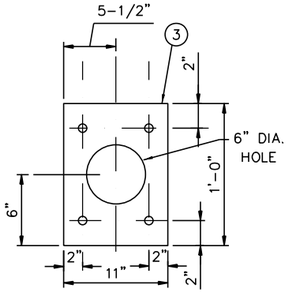


RUB RAIL CONNECTION

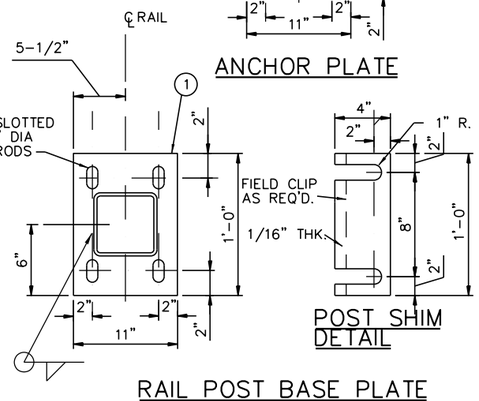


ANGLE CONNECTION

(KICKPLATE CONNECTION SIMILAR)

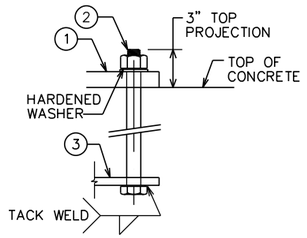


ANCHOR PLATE

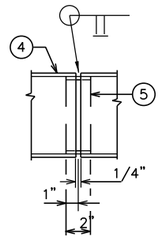


RAIL POST BASE PLATE

POST SHIM DETAIL

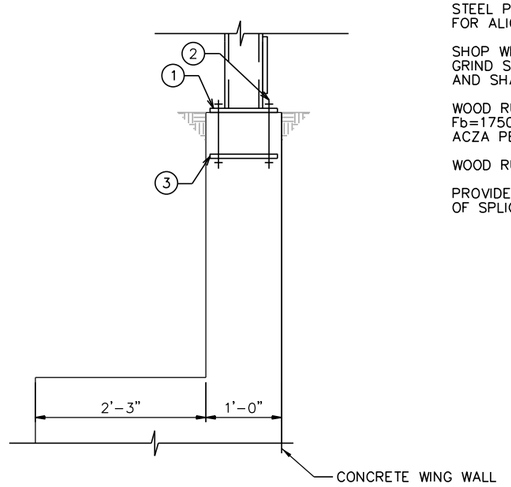


ANCHOR BOLTS



SHOP RAIL SPLICE DETAIL

(LOCATION MUST BE SHOWN ON SHOP DRAWINGS)



SECTION THRU RAILING AT WING WALL

LEGEND

1. PLATE 5/8" x 11" x 1'-0" WITH 3/4" X 2" SLOTTED HOLES FOR ANCHOR BOLTS NO. 2. WELD TO HSS4x4 AS SHOWN. SLOTS PARALLEL TO LONG SIDE OF PLATE.
2. 5/8" DIA X 10" LONG, TYPE 316 STAINLESS STEEL BOLT (MIN. TENSILE STRENGTH=70KSI) WITH NUT AND WASHERS OF SAME ALLOY GROUP. (ALTERNATE RAIL POST ANCHORAGE: 4 EQUIVALENT STAINLESS STEEL CONCRETE MASONRY ANCHORS TYPE S 5/8" EMBED 7" IN CONCRETE FOR RAIL POSTS.
3. 5/8" X 11" X 1'-0" ANCHOR PLATE (GALVANIZED) WITH 3/4' DIA HOLES FOR ANCHOR BOLTS. ANCHOR PLATE IS NOT REQUIRED WHEN TYPE S MASONRY ANCHORS ARE USED.
4. HSS 4 x 4 x 1/4 STRUCTURAL TUBING.
5. SPLICE SLEEVE FABRICATED FROM 1/4" PLATE. PROVIDE "SLIDING FIT".
6. REINFORCE CONCRETE FOUNDATION WITH 4-#4 BARS VERTICALLY AND #3@12" TIES.
7. PROVIDE 2"X4" HSS END POSTS ON EACH PANEL END.
8. C6X8.2 MAY BE SUBSTITUTED FOR 6"X 3/8" PLATE

GENERAL NOTES

BID ITEM SHALL BE "STEEL RAILING SPECIAL B-59-189" BID ITEM INCLUDES ALL ITEMS SHOWN.

POST BASE PLATES SHALL BE FLAT WITH ALL SURFACES SMOOTH AND FREE FROM WARP AND ALL EDGES SMOOTH, STRAIGHT AND VERTICAL. ALL PLATE CUTS SHALL BE MACHINE OR MACHINE FLAME CUTS.

ALL STEEL USED IN FABRICATION SHALL BE MADE FROM MATERIALS CONFORMING TO ASTM A847, A588 OR A242 GRADE 50 WEATHERING STEEL UNLESS NOTED OTHERWISE.

FILL BOLT SLOT OPENINGS IN POST SHIMS & PLATE NO. 1 WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER.

RAIL MEMBERS SHALL BE ATTACHED CONTINUOUSLY TO A MINIMUM OF FOUR POSTS AND A MAXIMUM OF EIGHT.

STEEL POST SHIMS MAY BE USED UNDER POSTS WHERE REQ'D. FOR ALIGNMENT.

SHOP WELD ALL STEEL CONNECTIONS WITH 3/16" FILLET WELDS. GRIND SMOOTH. FINISHED RAIL SHALL BE FREE OF BURRS AND SHARP EDGES.

WOOD RUB RAIL 2X6, S4S E4E, TREATED STRUCTURAL LUMBER, Fb=1750psi. RUB RAILS SHALL BE PRESSURE TREATED TO AWPA ACZA PER SPECIFICATION.

WOOD RUB RAIL SHALL BE SPLICED AT RAIL POSTS.

PROVIDE 1/2" DIA DRAIN HOLES IN LOW END OF ALL RAILS CLEAR OF SPLICE TUBE

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-59-189

DRAWN BY KAG | PLANS CK'D. PJE

POST MOUNTED RAILING DETAILS

SHEET 5 OF 6

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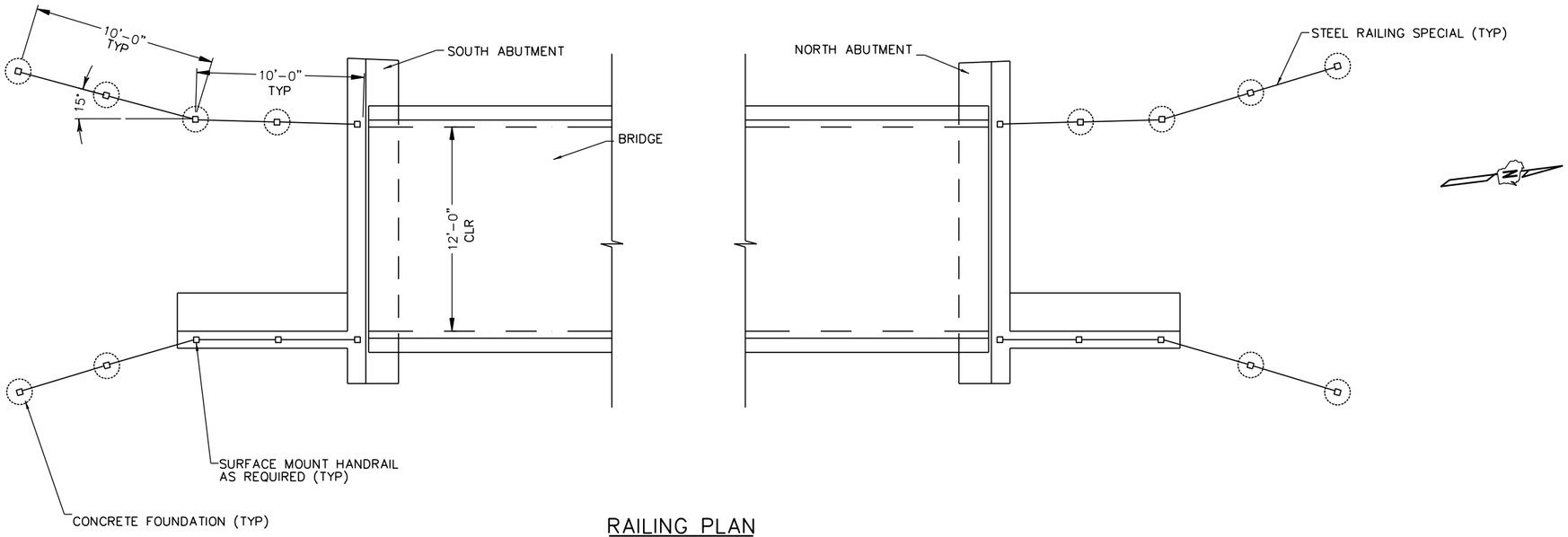
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8

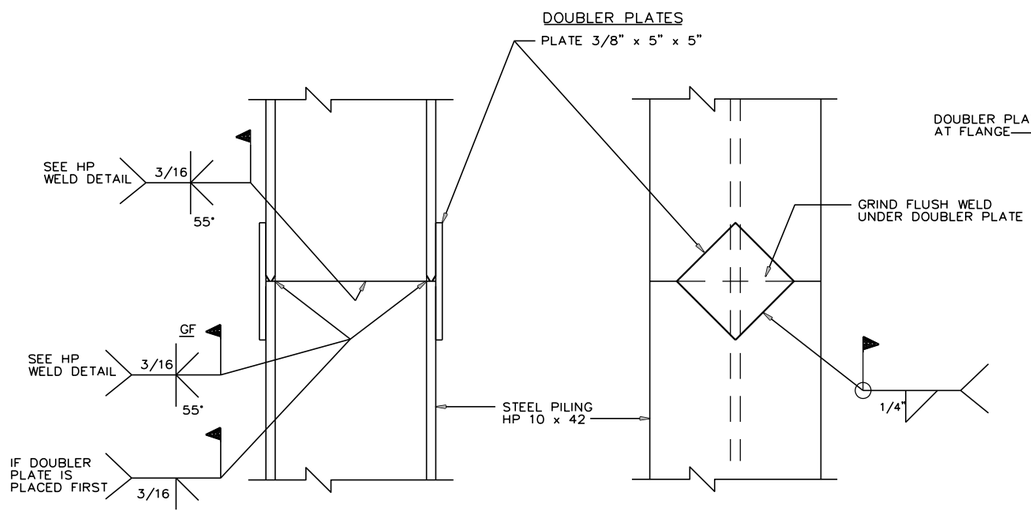
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STATE PROJECT NUMBER

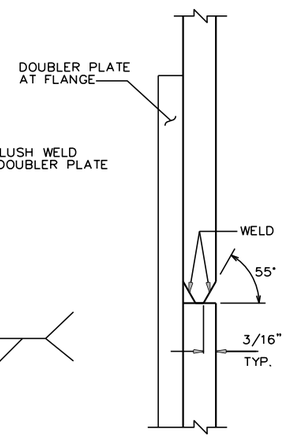
4996-01-58



RAILING PLAN



STEEL 'HP' SHAPES



HP WELD DETAIL
FLANGE SHOWN, WEB SIMILAR

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-59-189

DRAWN BY KAG | PLANS CK'D. PJE

POST MOUNTED RAILING PLAN

SHEET 6 OF 6

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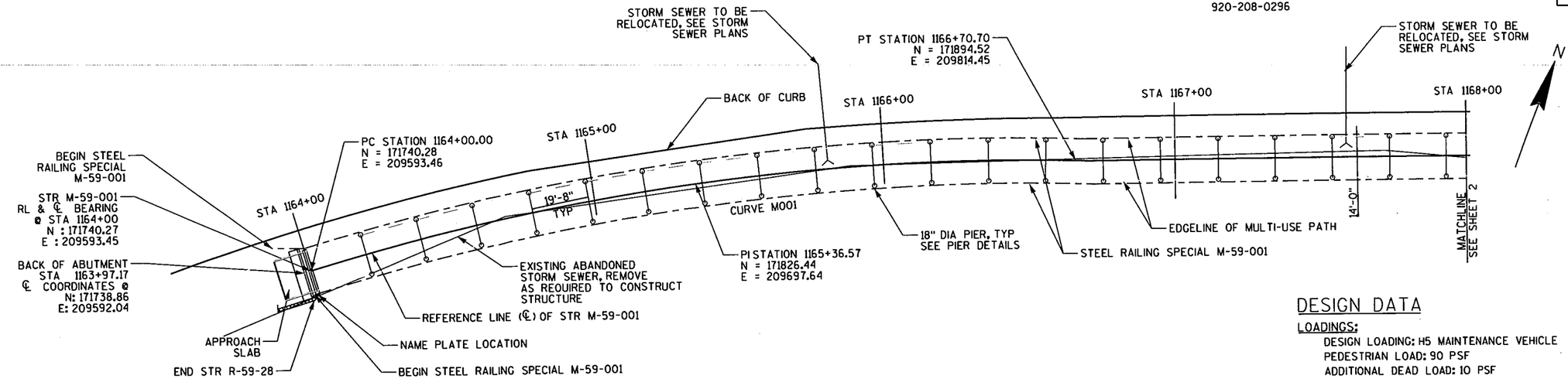
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PLOT TIME : 4:08:26 PM

PLOT BY : kgahagan

STATE PROJECT NUMBER
4996-01-58

CONSULTANT CONTACT:
PHIL ENGLEBERT
920-208-0296



LIST OF DRAWINGS

1. PLAN AND PROFILE
2. PLAN AND PROFILE
3. PLAN AND PROFILE
4. SUBSURFACE EXPLORATION I
5. SUBSURFACE EXPLORATION II
6. SUBSURFACE EXPLORATION III
7. TYPICAL SECTIONS
8. PLANS & DETAILS
9. PIER PLANS AND DETAILS
10. PIER ELEVATIONS & QUANTITIES
11. NORTH ABUTMENT
12. NORTH ABUTMENT WING
13. SOUTH ABUTMENT
14. ABUTMENT BILL OF BARS
15. RAILING DETAILS
16. POST MOUNTED RAILING DETAILS

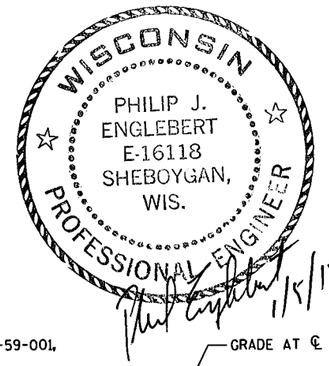
DESIGN DATA

LOADINGS:
DESIGN LOADING: H5 MAINTENANCE VEHICLE
PEDESTRIAN LOAD: 90 PSF
ADDITIONAL DEAD LOAD: 10 PSF

ULTIMATE DESIGN STRESSES:
STRUCTURAL GLUED LAMINATED TIMBER ——— fb = 2,400 psi
DOUGLAS FIR LARCH, SELECT STRUCTURAL TIMBER ——— fb = 1,750 psi
CONCRETE MASONRY ——— f'c = 4,000 psi
HIGH STRENGTH BAR STEEL REINFORCEMENT ——— fy = 60,000 psi

PLAN

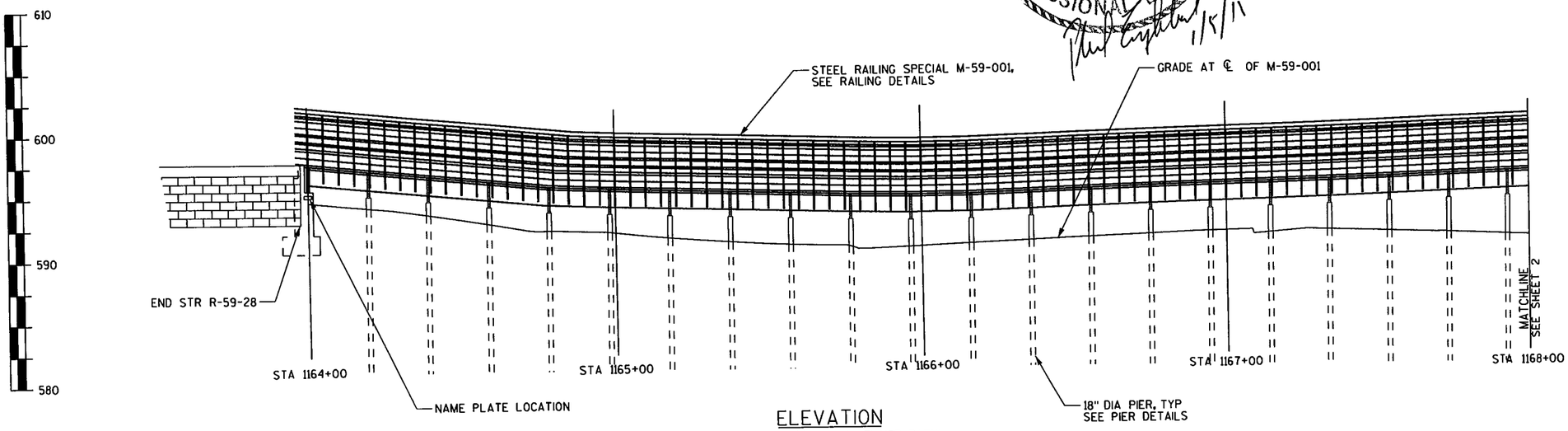
(TIMBER DECKING AND SUPPORTS NOT SHOWN FOR CLARITY)



REFER TO SHEET 10 FOR GENERAL NOTES AND ESTIMATED QUANTITIES

CURVE M001

PISTA = 1165+36.57
N = 171826.44
E = 209697.64
DELTA = 18°42'59"
D = 6°54'50"
T = 136.57
L = 270.70
R = 828.69
PC STA = 1164+00.00
N = 171740.28
E = 209593.46
PT STA = 1166+70.70
N = 171894.52
E = 209814.45



ELEVATION

(NORMAL TO ℄ OF MULTI-USE PATH)

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

NO.	DATE	REVISION	BY

DONOHUE & ASSOCIATES

ACCEPTED William C. Drehen KAR 01/11/15
CHIEF STRUCTURES DESIGN ENGINEER — DATE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE M-59-001

TAYLOR DRIVE MULTI-USE PATH

COUNTY	~~TOWN~~/CITY/~~VILLAGE~~
SHEBOYGAN	SHEBOYGAN

DESIGN SPEC.
AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS

DESIGNED BY	DJN	DESIGN CK'D.	PJE	DRAWN BY	DJN	PLANS CK'D.	PJE

PLAN & PROFILE

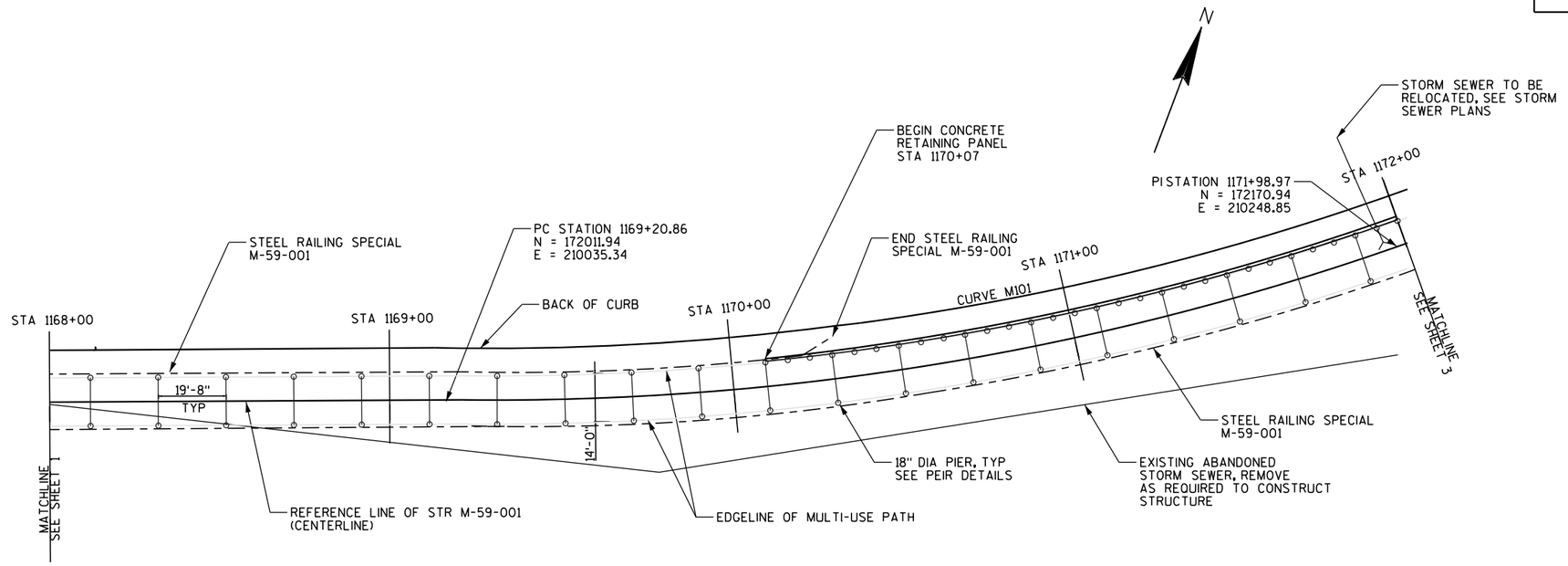
SHEET 1 OF 16

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STATE PROJECT NUMBER
4996-01-58

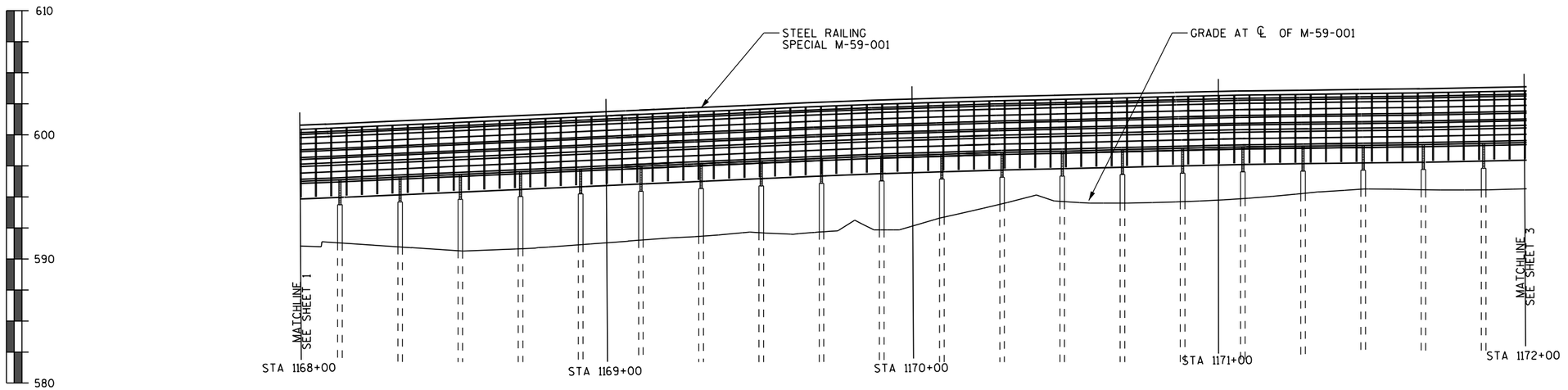


PLAN

(TIMBER DECKING AND SUPPORTS NOTSHOWN FOR CLARITY)

CURVE M101

PISTA = 1171+98.97
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E = 210248.85
DELTA = 38°39'58"
D = 7°13'40"
T = 278.12
L = 534.96
R = 792.71
PC STA = 1169+20.86
N = 172011.94
E = 210035.34
PT STA = 1174+55.82
N = 172391.66
E = 210397.69



ELEVATION

(NORMAL TO ℄ OF STRUCTURE)

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE M-59-001

DRAWN BY DJN | PLANS CK'D. PJE

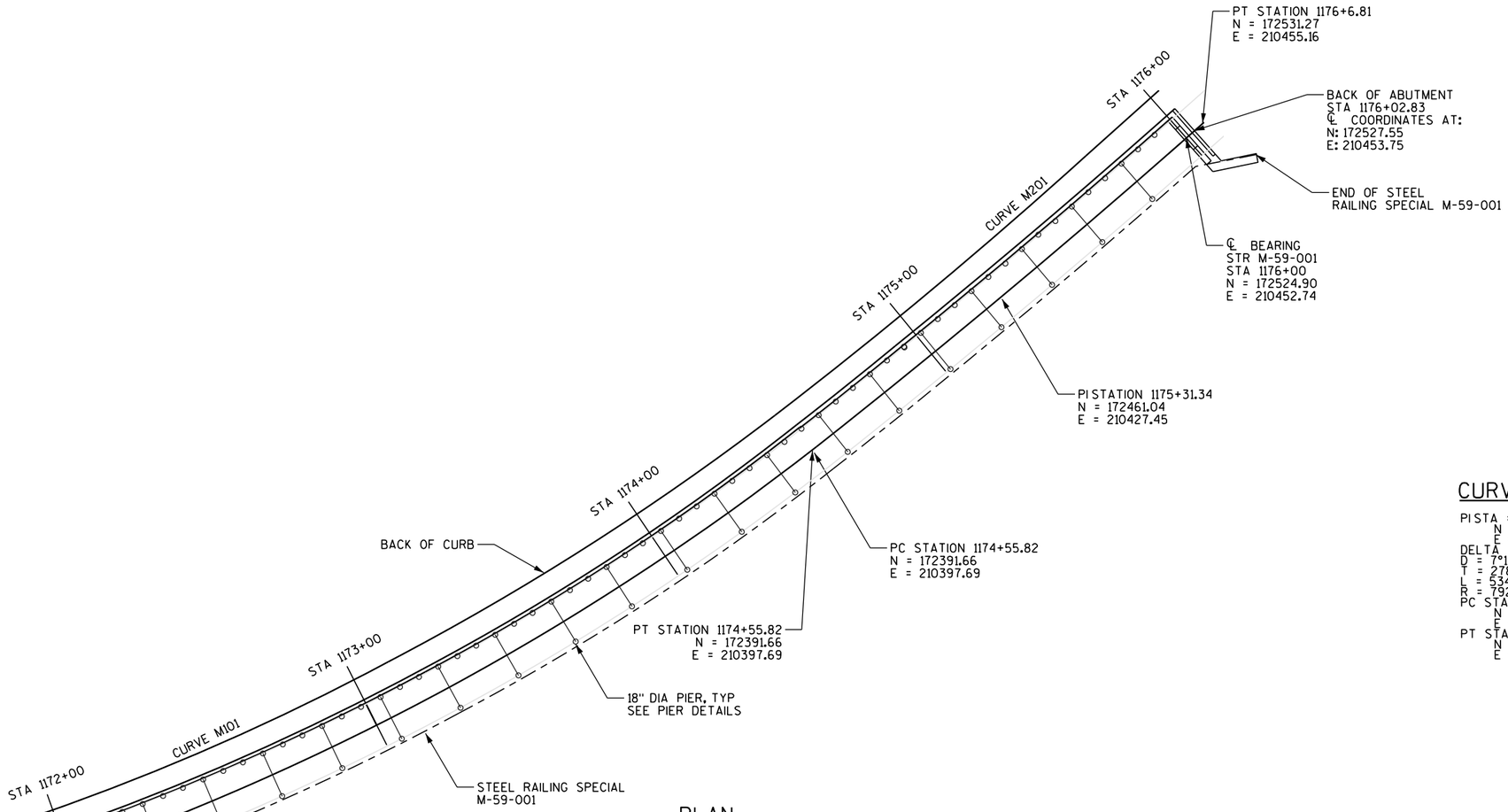
PLAN & PROFILE

SHEET 2 OF 16

249

FILE NAME : L:\Projects\11744\Dwg\structures\M-59-0001\08_02 Plan and Profile.DGN PLOT DATE : 08/27/14 PLOT TIME : 12:33:20 PM PLOT BY : kgahagan

STATE PROJECT NUMBER
4996-01-58



PLAN

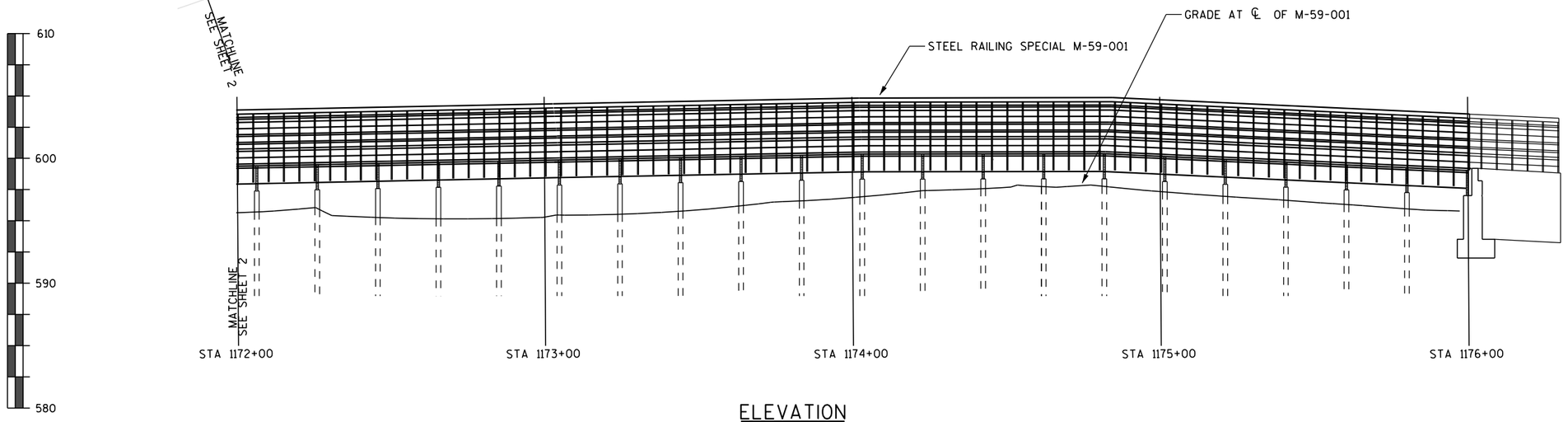
(TIMBER DECKING AND SUPPORTS NOTSHOWN FOR CLARITY)

CURVE M101

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E = 210248.85
DELTA = 38°39'58"
D = 7°13'40"
T = 278.12
L = 534.96
R = 792.71
PC STA = 1169+20.86
N = 172011.94
E = 210035.34
PT STA = 1174+55.82
N = 172391.66
E = 210397.69

CURVE M201

PI = 1175+31.34
N = 172461.04
E = 210427.45
DELTA = 3°22'37"
D = 2°14'11"
T = 75.52
L = 151.00
R = 2561.90
PC STA = 1174+55.82
N = 172391.66
E = 210397.69
PT STA = 1176+06.81
N = 172531.27
E = 210455.16



ELEVATION

(NORMAL TO ℄ OF STRUCTURE)

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE M-59-001

DRAWN BY DJN | PLANS CK'D. PJE

PLAN & PROFILE

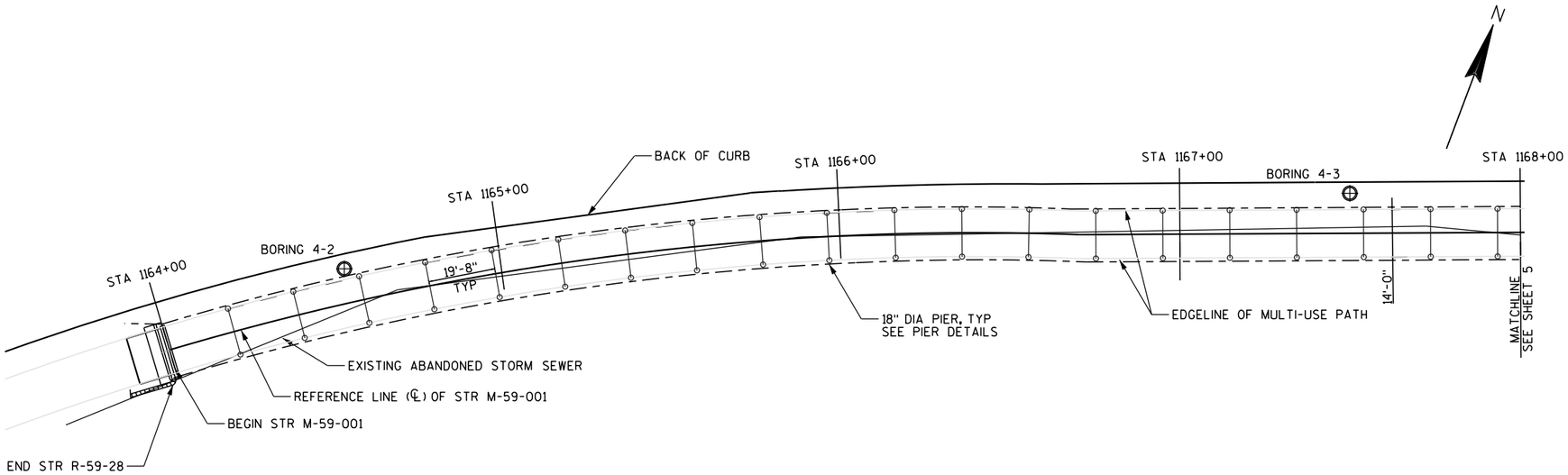
SHEET 3 OF 16

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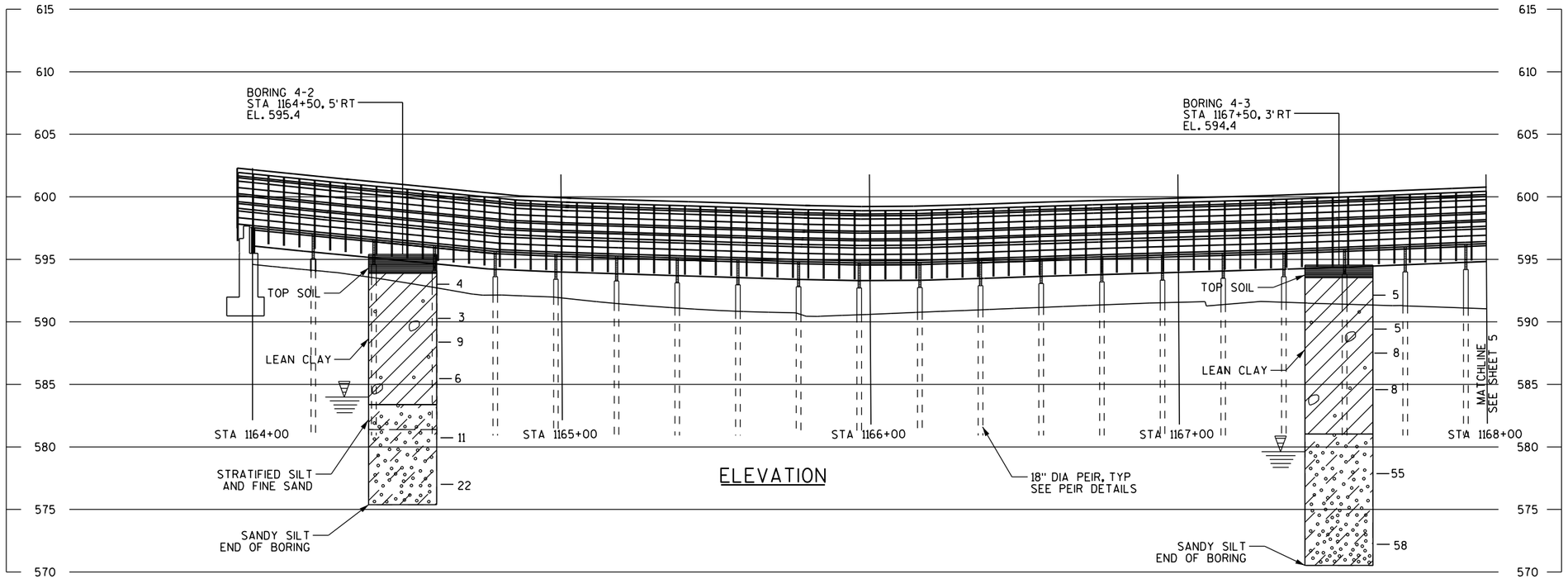
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FILE NAME : L:\Projects\11744\Dwg\structures\M-59-0001\08_03 Plan and Profile.DGN PLOT DATE : 08/27/14 PLOT TIME : 12:34:06 PM PLOT BY : kgahagan



PLAN



ELEVATION

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

STATE PROJECT NUMBER

4996-01-58

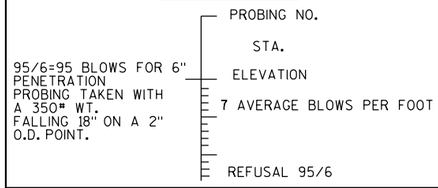
ABBREVIATIONS

F — FINE M — MEDIUM C — COARSE
WS — WEATHERED SO — SOUND

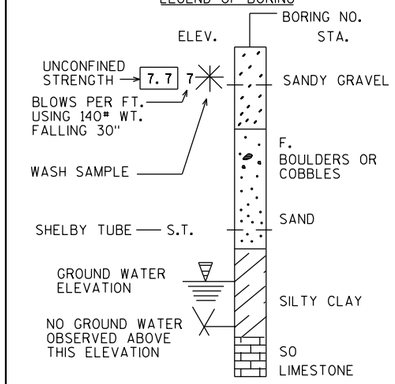
MATERIAL SYMBOLS

TOPSOIL, SILT, SANDSTONE
SAND, PEAT, LIMESTONE
GRAVEL, CLAY, IGNEOUS ROCK

LEGEND OF PROBING



LEGEND OF BORING



UNLESS OTHERWISE SPECIFIED, THE BLOWS PER FOOT AT THE LOCATIONS INDICATED ARE BASED ON DRIVING A 2" O.D. X 1.4" I.D. SPLIT SPOON SAMPLER WITH A 140# HAMMER HAVING A FREE FALL OF 30". THE BLOW COUNT IS TAKEN IN UNDISTURBED SOIL IMMEDIATELY BELOW A CASED OR OPEN HOLE ELIMINATING SIDE FRICTION ON THE DRIVE PIPE.

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

TO OBTAIN RELATIVE DATA CONCERNING THE CHARACTER OF MATERIAL IN AND UPON WHICH THE FOUNDATION MIGHT BE BUILT, BORINGS AND/OR SOUNDINGS WERE MADE AT POINTS APPROXIMATELY AS INDICATED ON THIS DRAWING. THE DATA PRESENTED HEREIN REPRESENTS THE FINDINGS OF THE SUBSURFACE EXPLORATIONS MADE. HOWEVER, BECAUSE THE DEPTHS INVESTIGATED ARE LIMITED AND THE AREA OF THE BORINGS AND/OR SOUNDINGS IS VERY SMALL IN RELATION TO THE ENTIRE AREA, THE WISCONSIN DEPARTMENT OF TRANSPORTATION DOES NOT WARRANT CONDITIONS BELOW THE DEPTHS INVESTIGATED OR THAT THE CLASSIFICATION OF MATERIAL ENCOUNTERED IN THESE INVESTIGATIONS IS NECESSARILY TYPICAL OF THE ENTIRE SITE.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE M-59-001

DRAWN BY DJN | PLANS CK'D. PJE

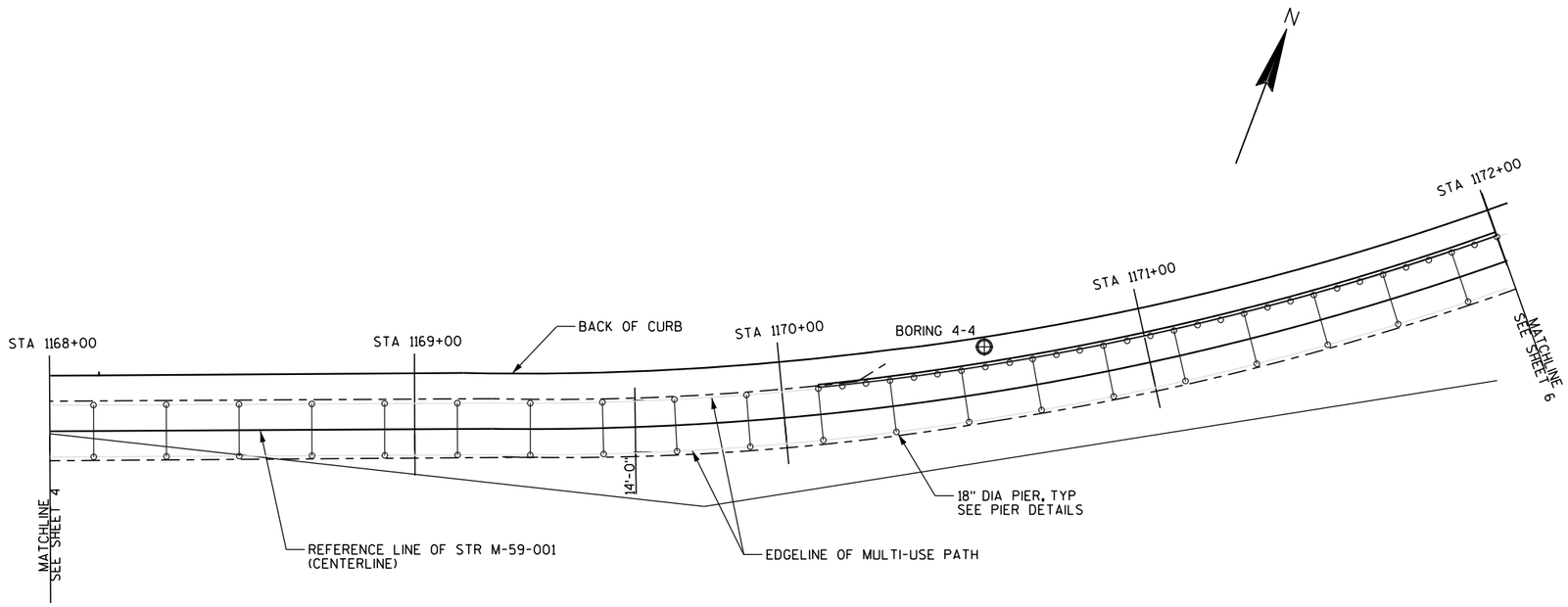
SUBSURFACE EXPLORATION I

SHEET 4 OF 16

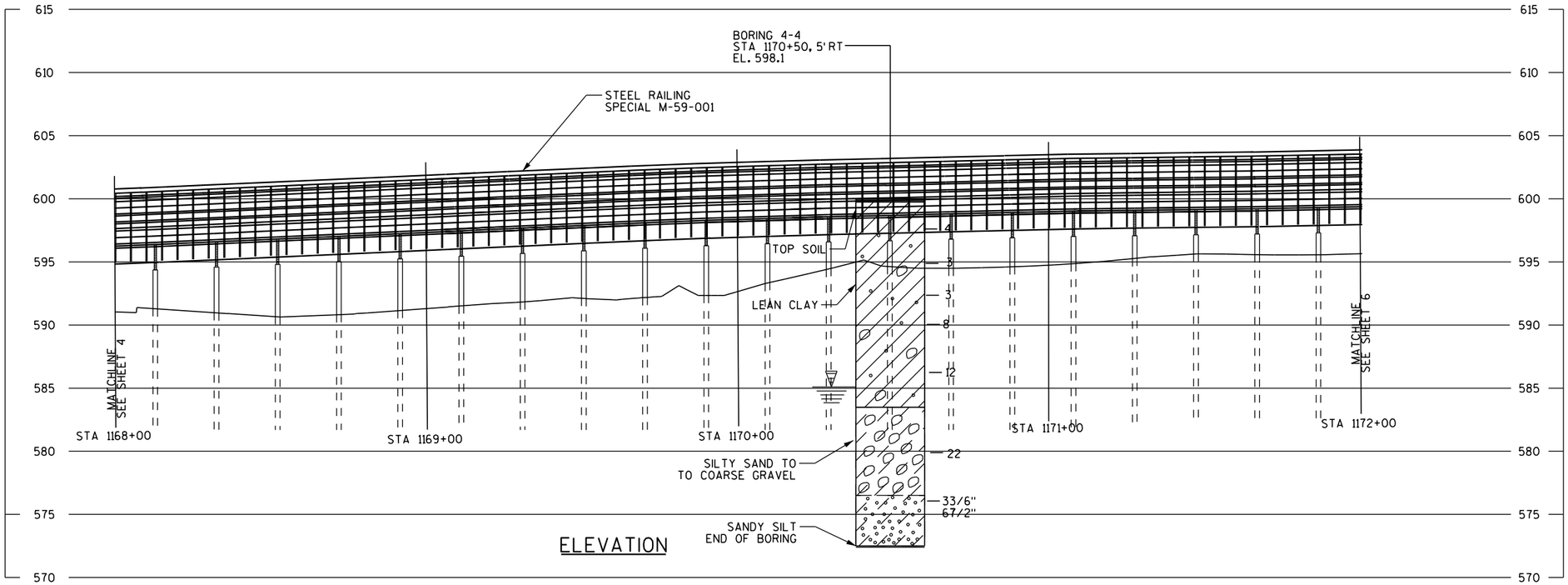
251

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8



PLAN



ELEVATION

STATE PROJECT NUMBER

4996-01-58

ABBREVIATIONS

F — FINE M — MEDIUM C — COARSE
WS — WEATHERED SO — SOUND

MATERIAL SYMBOLS

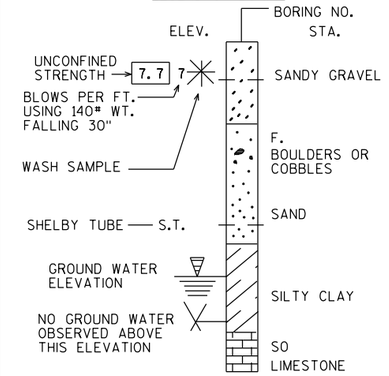
TOPSOIL, SILT, SANDSTONE
SAND, PEAT, LIMESTONE
GRAVEL, CLAY, IGNEOUS ROCK

LEGEND OF PROBING

PROBING NO.
STA.
ELEVATION
7 AVERAGE BLOWS PER FOOT
REFUSAL 95/6

95/6=95 BLOWS FOR 6" PENETRATION PROBING TAKEN WITH A 350# WT. FALLING 18" ON A 2" O.D. POINT.

LEGEND OF BORING



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STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE M-59-001

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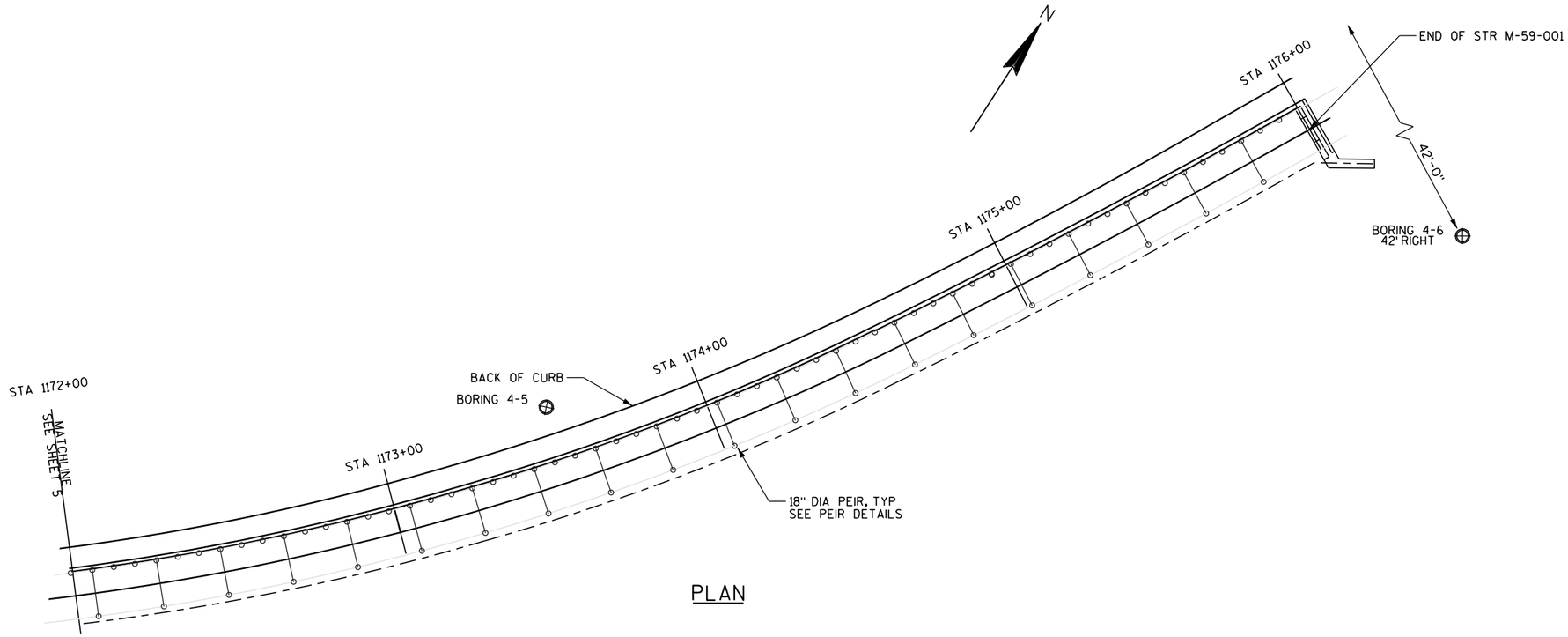
SUBSURFACE EXPLORATION

SHEET 5 OF 16

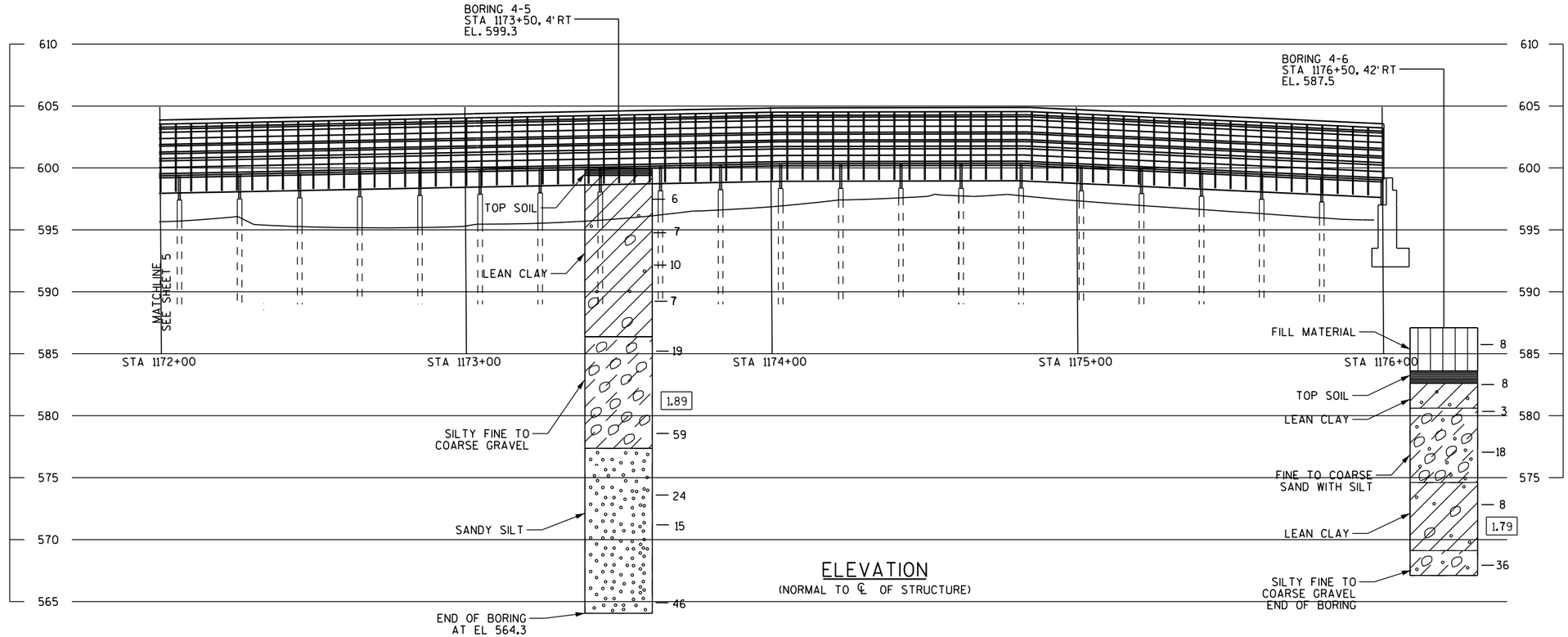
252

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PLAN



ELEVATION
(NORMAL TO ℄ OF STRUCTURE)

STATE PROJECT NUMBER

4996-01-58

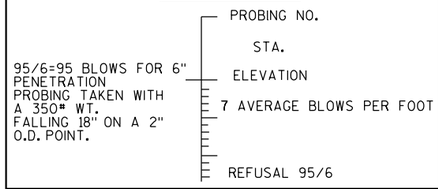
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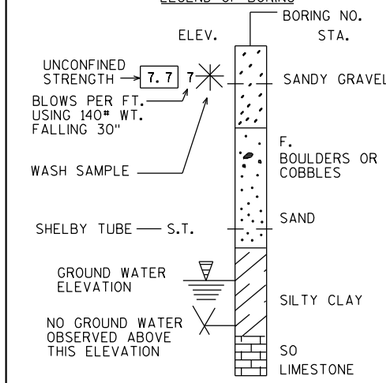
MATERIAL SYMBOLS

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DEPARTMENT OF TRANSPORTATION

STRUCTURE M-59-001

DRAWN BY DJN | PLANS CK'D. PJE

SUBSURFACE EXPLORATION

SHEET 6 OF 16
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STATE PROJECT NUMBER
4996-01-58

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2" CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

ALL STATIONS AND ALL ELEVATIONS ARE IN FEET.

THE FINISHED GRADED SECTION SHALL BE THE UPPER LIMITS OF EXCAVATION FOR STRUCTURES.

THE LOWER LIMITS OF EXCAVATION FOR THE ABUTMENTS SHALL BE THE BOTTOM OF THE ABUTMENT FOOTING/KEY AND FOR THE CONCRETE RETAINING WALLS SHALL BE THE BOTTOM OF THE RETAINING WALL.

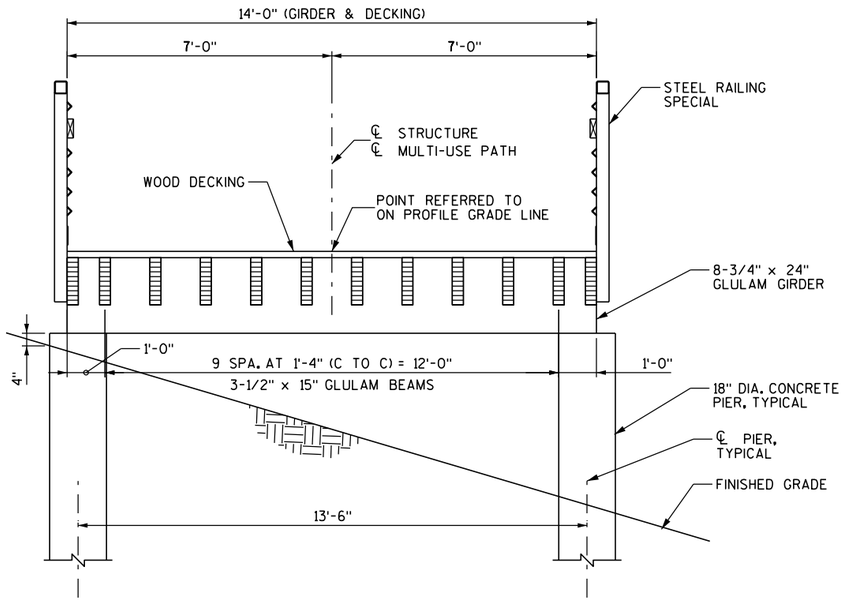
AT THE BACKFACE OF THE ABUTMENTS AND CONCRETE RETAINING WALLS, ALL VOLUME WHICH CANNOT BE PLACED BEFORE ABUTMENT AND RETAINING WALL CONSTRUCTION AND IS NOT OCCUPIED BY THE NEW STRUCTURE SHALL BE BACKFILLED WITH STRUCTURE BACKFILL.

GLULAM BEAMS AND GIRDERS ARE TO BE PRESSURE PRESERVATIVE TREATED USING OIL-SOLUBLE PRESERVATIVES IN ACCORDANCE WITH THE SPECIAL PROVISIONS.

THE CONTRACTOR IS TO PROVIDE COMPLETE DESIGN, PLANS, DETAILS, SPECIFICATIONS, AND SHOP DRAWINGS FOR THE GLULAM BEAM AND GIRDER CONNECTIONS IN ACCORDANCE WITH THE SPECIAL PROVISIONS. ALL HANGERS AND BEARING CONNECTIONS ARE TO BE HOT-DIP GALVANIZED PER ASTM A123. ALL STEEL FASTENERS ARE TO BE HOT-DIP GALVANIZED PER ASTM A153.

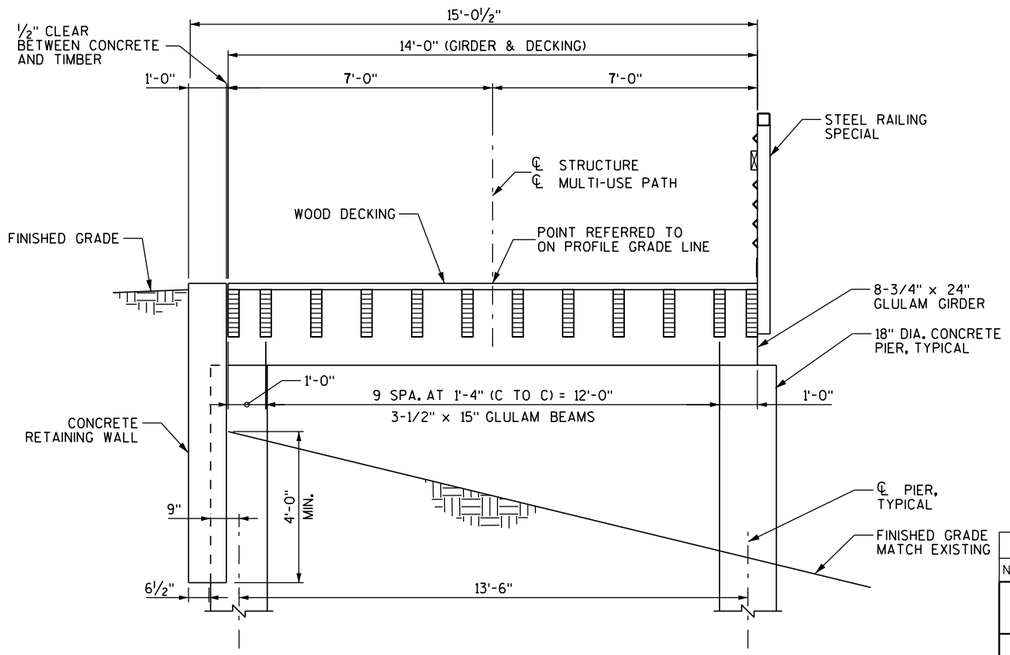
WOOD DECKING TO BE PRE-DRILLED AND FASTENED TO SUPPORTS WITH STAINLESS STEEL SCREWS IN ACCORDANCE WITH THE SPECIAL PROVISIONS. IF FIELD CUTTING OF THE DECKING IS REQUIRED, SEAL ALL CUT ENDS WITH LATEX BASED END SEALER IN ACCORDANCE WITH THE SPECIAL PROVISIONS.

REFER TO SHEET 1 FOR DESIGN DATA.



CROSS SECTION THROUGH BOARDWALK

(STA 1164+00 TO 1170+07)



CROSS SECTION THROUGH BOARDWALK

(AT BOARDWALK SUPPORT PIERS)
(STA 1170+07 TO 1176+00)

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE M-59-001

DRAWN BY DJN | PLANS CK'D. PJE

TYPICAL SECTIONS

SHEET 7 OF 16

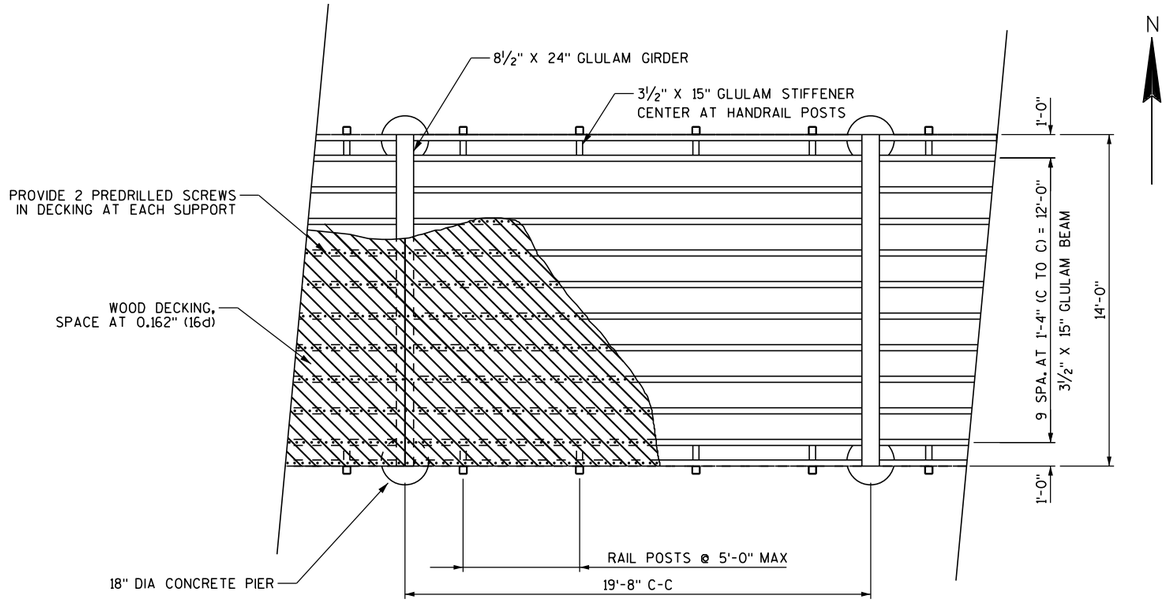
254

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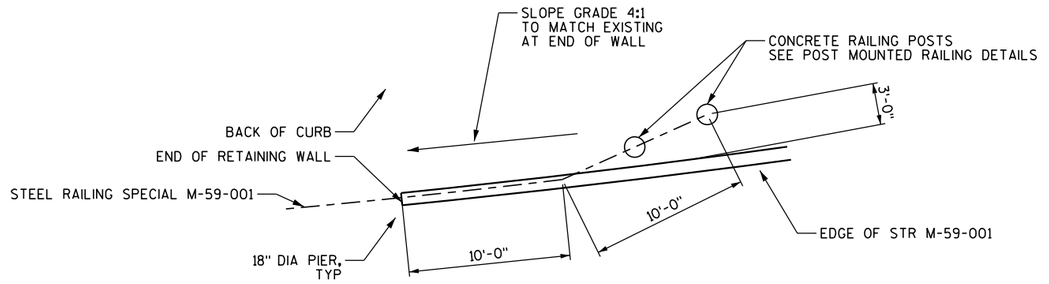
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STATE PROJECT NUMBER

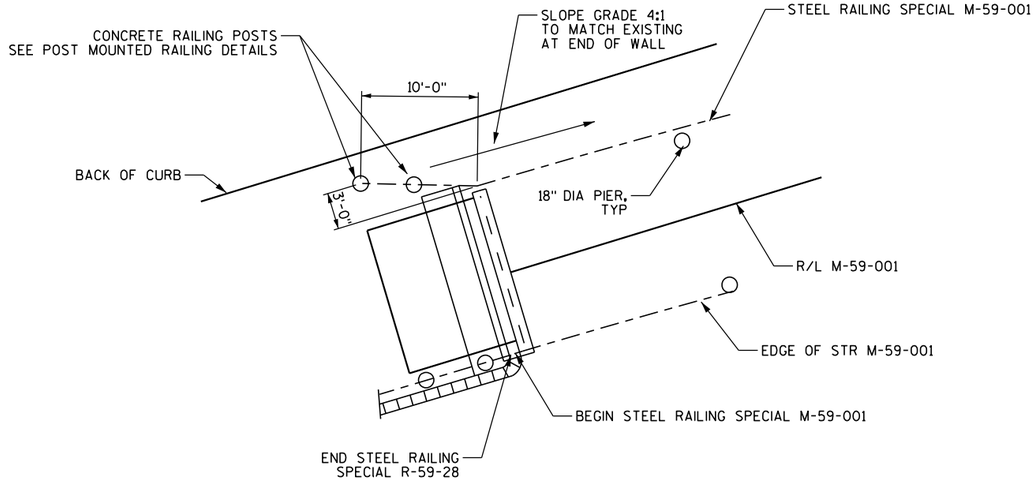
4996-01-58



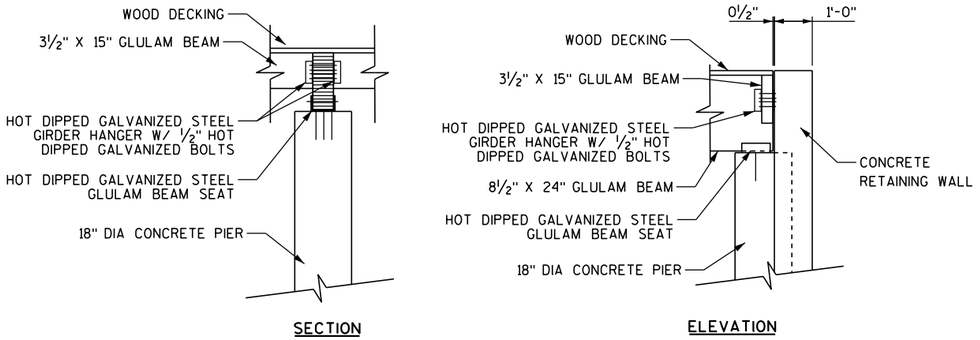
PLAN



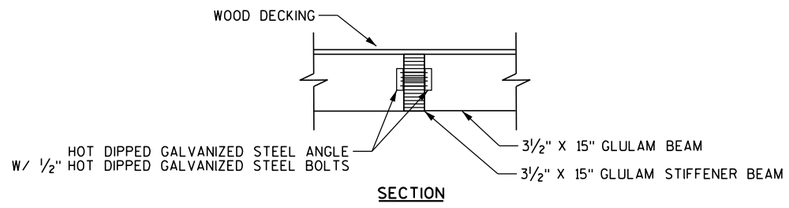
TYPICAL RAILING TERMINATION DETAIL



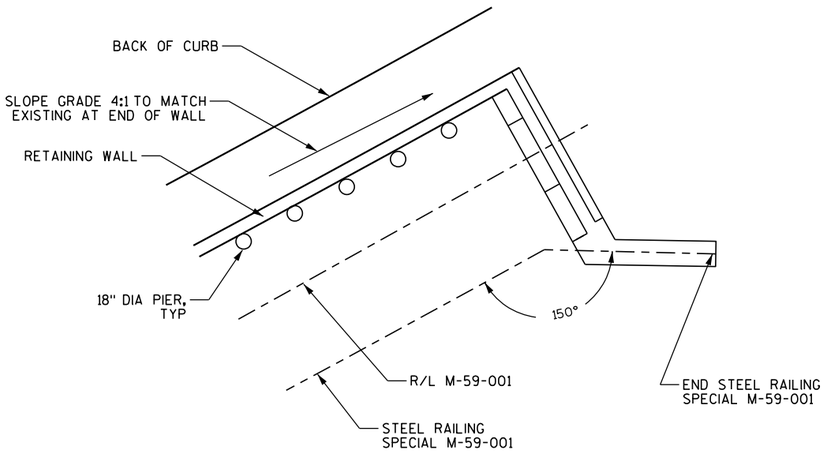
RAILING TERMINATION AT SOUTH ABUTMENT



GLULAM BEAM ANCHOR DETAIL



GLULAM STIFFENER DETAIL



RAILING TERMINATION AT NORTH ABUTMENT

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE M-59-001

DRAWN BY DJN | PLANS CK'D. PJE

PLANS & DETAILS

SHEET 8 OF 16

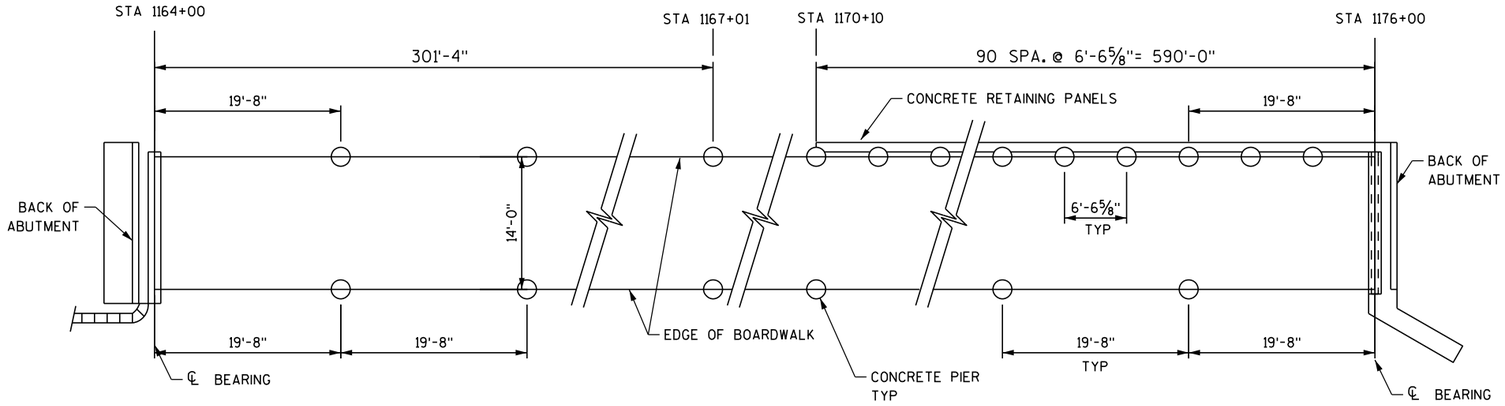
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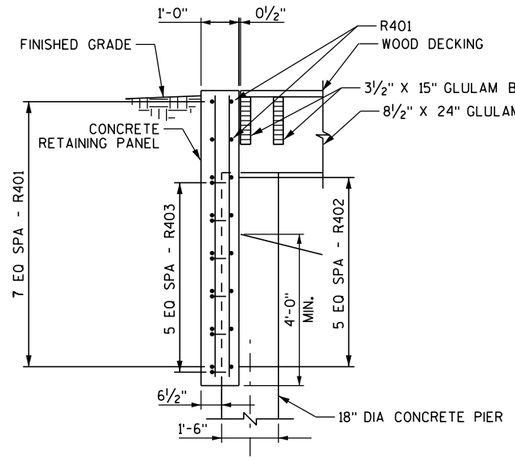
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STATE PROJECT NUMBER

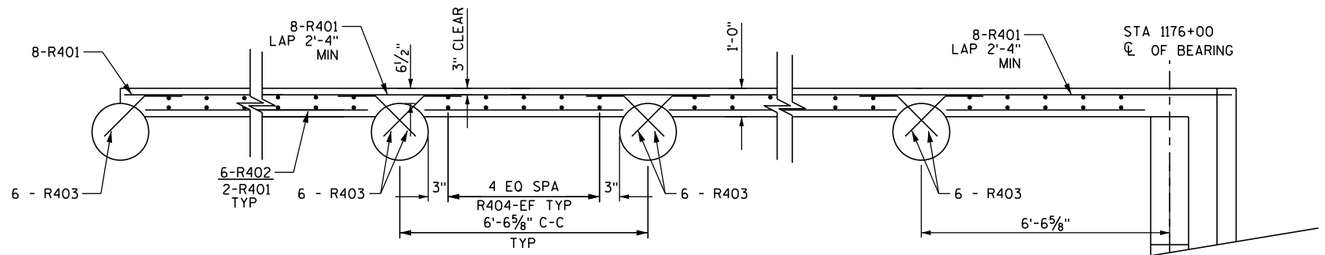
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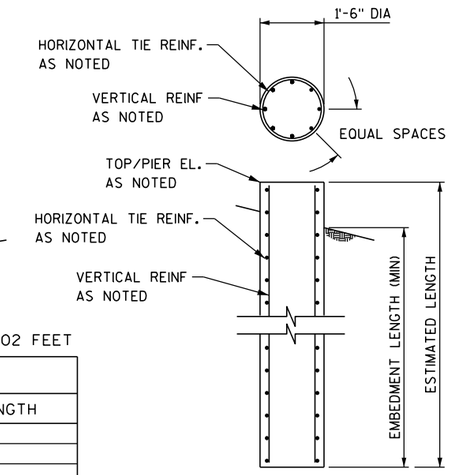
PIER PLAN



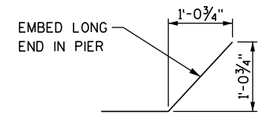
PANEL SECTION



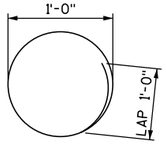
RETAINING PANEL DETAILS



PIER SECTION



R403



P305
P306
P307

PIER LENGTH SUMMARY

EST. TOTAL LENGTH: 3302 FEET

STATION	LEFT			RIGHT		
	NO. OF PIERS	MIN EMBEDMENT DEPTH	ESTIMATED LENGTH	NO. OF PIERS	MIN EMBEDMENT DEPTH	ESTIMATED LENGTH
1164+00 - 1165+38	7	12'-0"	13'-0"	7	13'-0"	16'-0"
1165+39 - 1166+77	7	12'-0"	13'-0"	7	14'-0"	16'-0"
1166+78 - 1168+52	9	12'-0"	13'-0"	9	12'-0"	16'-0"
1168+53 - 1169+90	7	17'-0"	18'-0"	7	12'-0"	18'-0"
1169+91 - 1171+87	28	15'-0"	16'-0"	10	13'-0"	18'-0"
1171+88 - 1176+00	62	15'-0"	16'-0"	20	12'-0"	18'-0"

REINFORCEMENT SUMMARY

LENGTH OF PIER	VERTICAL REINFORCEMENT	HORIZONTAL TIE REINFORCEMENT
13'-0"	6-P601	19 - P305
16'-0"	8-P602	24 - P306
18'-0"	8-P603	27 - P307

BILL OF BARS

UNCOATED: 0 LBS
COATED: 51,860 LBS

BAR MARK	NO. REQ'D	LENGTH	BENT	COATED	LOCATION
P601	138	12'-6"		X	VERTICAL
P602	904	15'-6"		X	VERTICAL
P603	352	17'-6"		X	VERTICAL
P305	437	3'-8"	X	X	TIES
P306	2712	3'-8"	X	X	TIES
P307	1188	3'-8"	X	X	TIES
R401	300	22'-4"		X	WALL-HORIZONTAL
R402	540	5'-3"		X	WALL-HORIZONTAL
R403	1080	2'-6"	X	X	WALL-HORIZONTAL
R404*	900	6'-8"		X	WALL-VERTICAL

*FIELD CUT R404 AND FIELD COAT CUT END WHEN WALL IS SHORT ALTERNATE R404 HIGHER AND LOWER WHEN HEIGHT OF RETAINING WALL IS GREATER THAN 7'-0"

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE M-59-001

DRAWN BY DJN | PLANS CK'D. PJE

PIER PLANS & DETAILS

SHEET 9 OF 16

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8

8

STATE PROJECT NUMBER

4996-01-58

ELEVATION TABLE

STATION	TOP OF DECK EL.	TOP OF PIER EL.
1164+00.00	597.34	S. ABUTMENT
1164+19.67	596.85	594.68
1164+39.34	596.39	594.22
1164+59.01	595.92	593.75
1164+78.68	595.44	593.27
1164+98.35	595.23	593.06
1165+18.02	595.08	592.91
1165+37.69	594.93	592.76
1165+57.36	594.78	592.61
1165+77.03	594.63	592.46
1165+96.70	595.54	593.37
1166+16.37	594.56	592.39
1166+36.04	594.71	592.54
1166+55.71	594.87	592.70
1166+75.38	595.02	592.85
1166+95.05	595.16	592.99
1167+14.72	595.30	593.13
1167+34.39	595.44	593.27
1167+54.06	595.61	593.44
1167+73.73	595.81	593.64
1167+93.40	596.00	593.83
1168+13.07	596.20	594.03
1168+32.74	596.41	594.24
1168+52.41	596.63	594.46
1168+72.08	596.85	594.68
1168+91.75	597.06	594.89
1169+11.42	597.28	595.11
1169+31.09	597.50	595.33
1169+50.76	597.71	595.54
1169+70.43	597.92	595.75
1169+90.10	598.11	595.94
1170+09.77	598.26	596.09
1170+29.44	598.40	596.23
1170+49.11	598.51	596.34
1170+68.78	598.62	596.45
1170+88.45	598.74	596.57
1171+08.12	598.85	596.68
1171+27.79	598.91	596.74
1171+47.46	598.97	596.80
1171+67.13	599.03	596.86
1171+86.80	599.12	596.95
1172+06.47	599.22	597.05
1172+26.14	599.32	597.15
1172+45.81	599.41	597.24
1172+65.48	599.51	597.34
1172+85.15	599.60	597.43
1173+04.82	599.70	597.53
1173+24.49	599.79	597.62
1173+44.16	599.88	597.71
1173+63.83	599.98	597.81
1173+83.50	600.07	597.90
1174+03.17	600.16	597.99
1174+22.84	600.17	598.00
1174+42.51	600.18	598.01
1174+62.18	600.19	598.02
1174+81.85	600.20	598.03
1175+01.52	599.97	597.80
1175+21.19	599.75	597.58
1175+40.86	599.52	597.35
1175+60.53	599.30	597.13
1175+80.20	599.07	596.90
1176+00.00	598.85	N. ABUTMENT

TOP OF PIER ELEVATION ON INTERMEDIATE PIERS SHALL BE ELEVATION OF LOWER PIER

TOTAL ESTIMATED QUANTITIES-CAT 0040

BID ITEMS	BID ITEMS	UNIT	SOUTH ABUT.	NORTH ABUT.	PIERS/ WALL	TOTALS
206.1000	EXCAVATION FOR STRUCTURES BRIDGES (M-59-001)	LS				1
210.0100	BACKFILL STRUCTURE	CY	10	15	320	345
502.0100	CONCRETE MASONRY BRIDGES	CY	25	30	175	230
505.0405	BAR STEEL REINFORCEMENT HS BRIDGES	LB	1670	1700		3370
505.0605	BAR STEEL REINFORCEMENT HS COATED BRIDGES	LB	130	1330	51860	53320
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	20	20		40
612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	30	30		60
SPV.0060.07	STEEL RAILING SPECIAL M-59-1	EA			1	1
SPV.0090.02	DRILLED SHAFT FOUNDATION	LF			2900	2900
SPV.0105.09	TIMBER BOARDWALK	LS			1	1
	NON-BID ITEMS					
	PREFORMED JOINT FILLER	SIZE				½",¾"

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2" CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

ALL STATIONS AND ALL ELEVATIONS ARE IN FEET.

THE FINISHED GRADED SECTION SHALL BE THE UPPER LIMITS OF EXCAVATION FOR STRUCTURES.

THE LOWER LIMITS OF EXCAVATION FOR THE ABUTMENTS SHALL BE THE BOTTOM OF THE ABUTMENT FOOTING/KEY AND FOR THE CONCRETE RETAINING WALLS SHALL BE THE BOTTOM OF THE RETAINING WALL.

AT THE BACKFACE OF THE ABUTMENTS AND CONCRETE RETAINING WALLS, ALL VOLUME WHICH CANNOT BE PLACED BEFORE ABUTMENT AND RETAINING WALL CONSTRUCTION AND IS NOT OCCUPIED BY THE NEW STRUCTURE SHALL BE BACKFILLED WITH STRUCTURE BACKFILL.

GLULAM BEAMS AND GIRDERS ARE TO BE PRESSURE PRESERVATIVE TREATED USING OIL-SOLUBLE PRESERVATIVES IN ACCORDANCE WITH THE SPECIAL PROVISIONS.

THE CONTRACTOR IS TO PROVIDE COMPLETE DESIGN, PLANS, DETAILS, SPECIFICATIONS, AND SHOP DRAWINGS FOR THE GLULAM BEAM AND GIRDER CONNECTIONS IN ACCORDANCE WITH THE SPECIAL PROVISIONS. ALL HANGERS AND BEARING CONNECTIONS ARE TO BE HOT-DIP GALVANIZED PER ASTM A123. ALL STEEL FASTENERS ARE TO BE HOT-DIP GALVANIZED PER ASTM A153.

WOOD DECKING TO BE PRE-DRILLED AND FASTENED TO SUPPORTS WITH STAINLESS STEEL SCREWS IN ACCORDANCE WITH THE SPECIAL PROVISIONS. IF FIELD CUTTING OF THE DECKING IS REQUIRED, SEAL ALL CUT ENDS WITH LATEX BASED END SEALER IN ACCORDANCE WITH THE SPECIAL PROVISIONS.

REFER TO SHEET 1 FOR DESIGN DATA.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE M-59-001

DRAWN BY DJN | PLANS CK'D. PJE

PIER ELEVATIONS & QUANTITIES

SHEET 10 OF 16

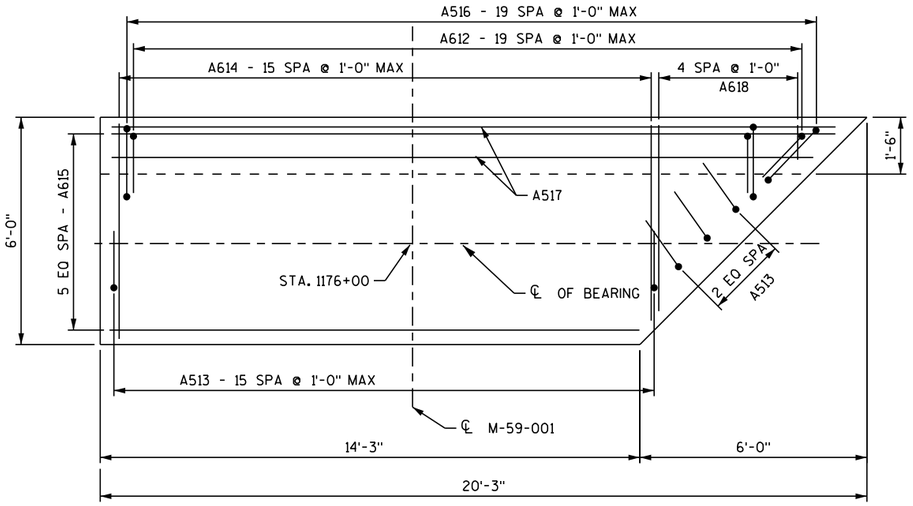
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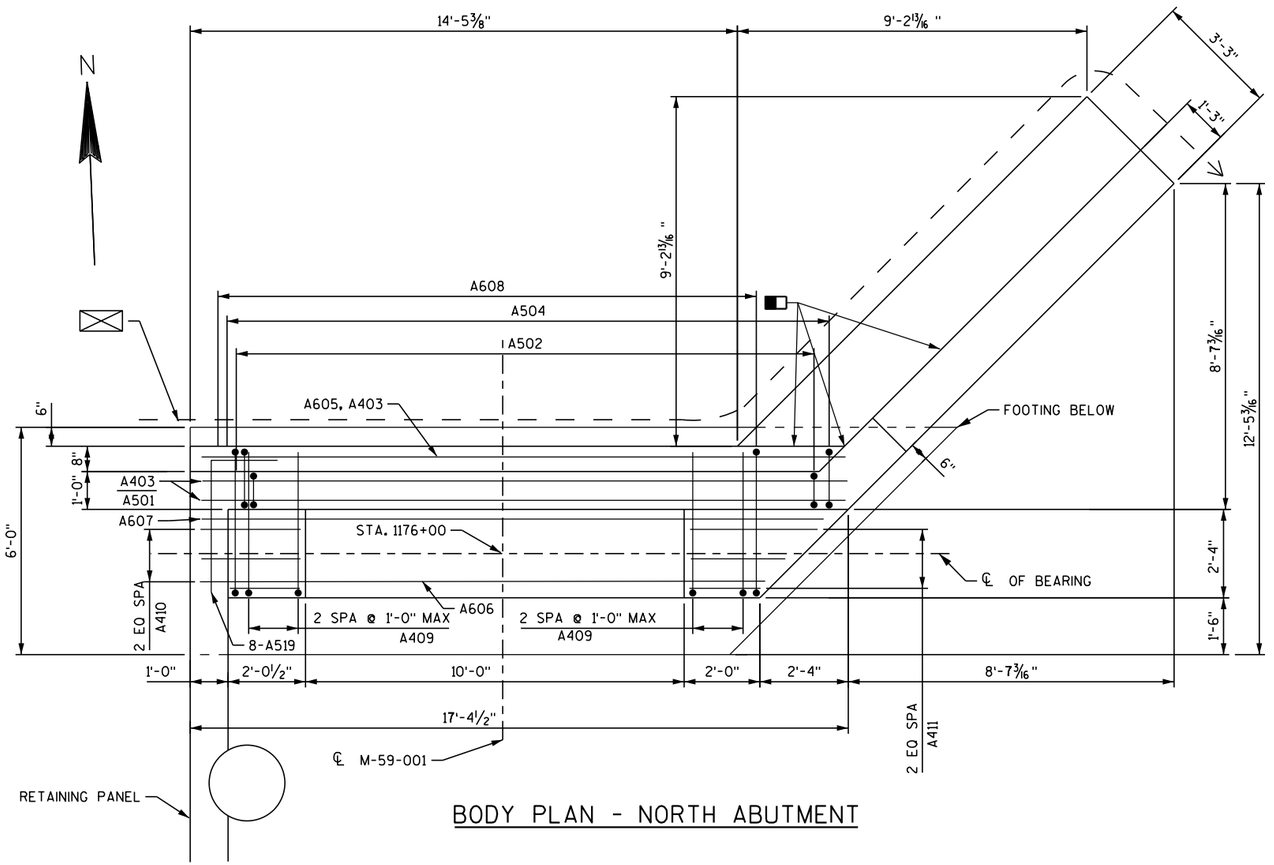
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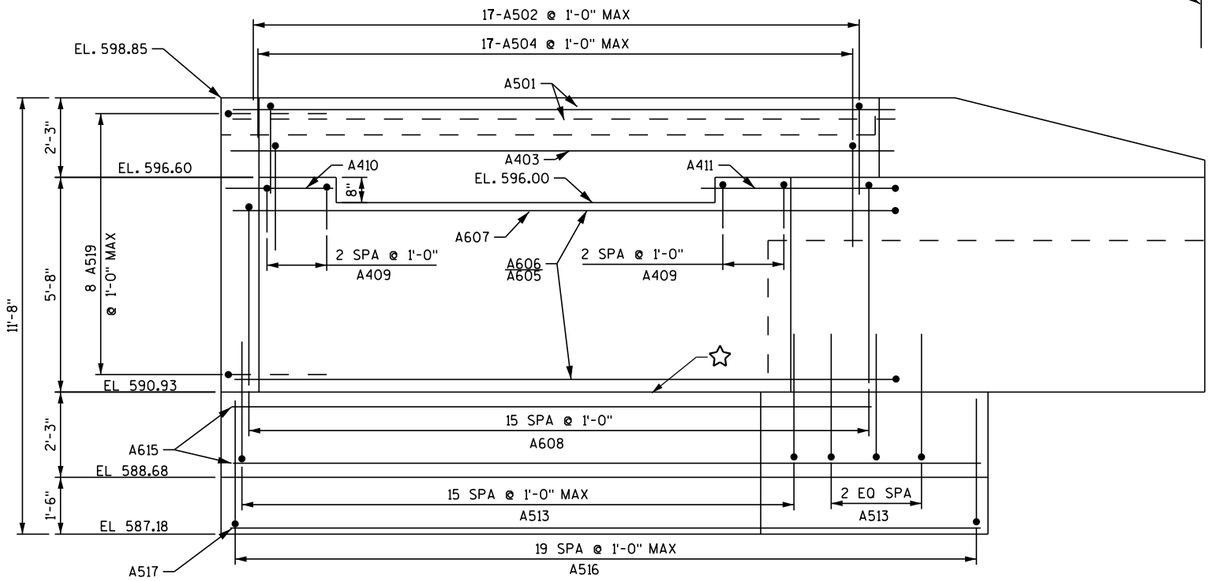
4996-01-58



FOOTING PLAN - NORTH ABUTMENT



BODY PLAN - NORTH ABUTMENT



ELEVATION - NORTH ABUTMENT

LEGEND

☆ KEYED CONST. JOINT - FORMED BY A SURFACED BEVELED 2" X 6".

18" RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZONTAL AND VERTICAL JOINTS ON BACK FACE.

PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. ATTACH RODENT SHIELD AT ENDS OF PIPE UNDERDRAIN. SEE DETAIL ON SHEET 13.

B.F. DENOTES BACK FACE

F.F. DENOTES FRONT FACE

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE M-59-001

DRAWN BY DJN | PLANS CK'D. PJE

NORTH ABUTMENT

SHEET 11 OF 16

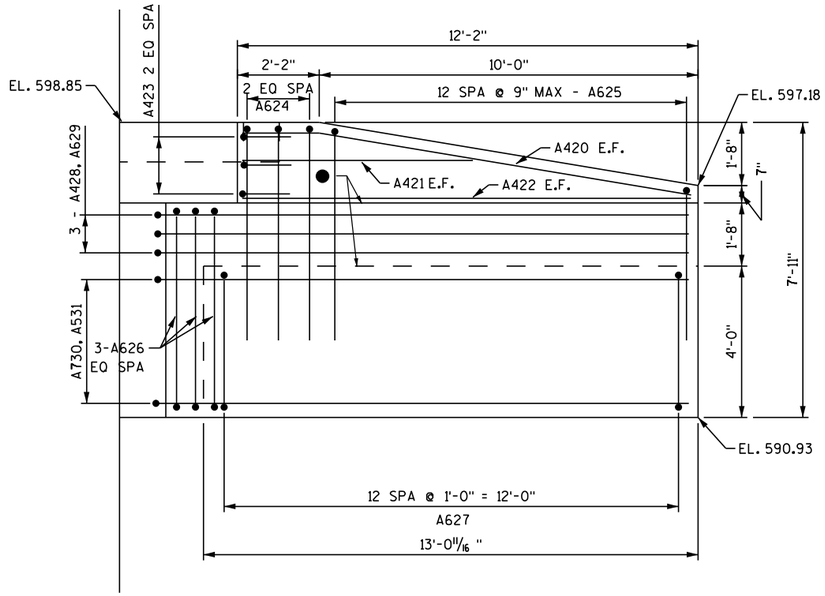
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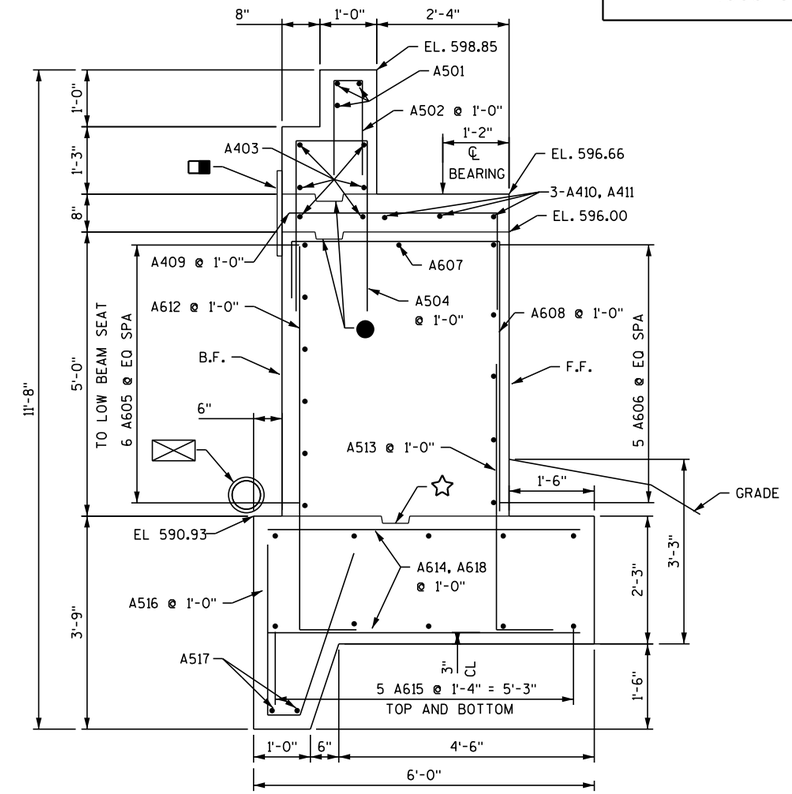
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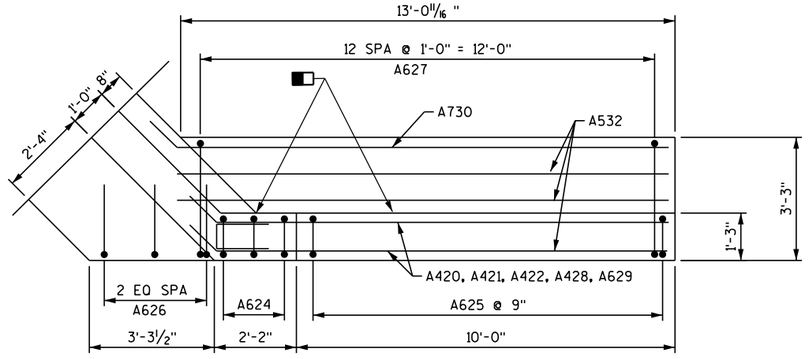


ELEVATION - WING

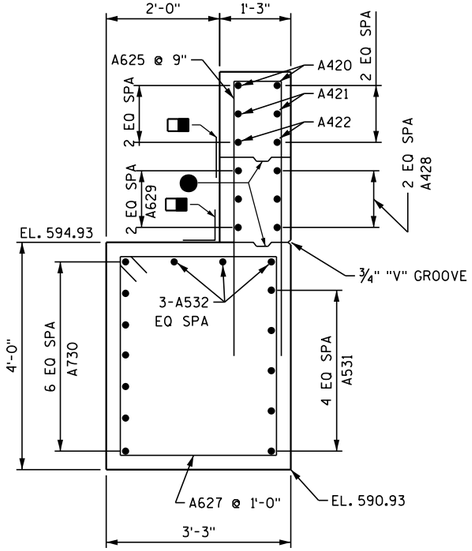
(LOOKING AT FRONT FACE)



SECTION THRU ABUT BODY



PLAN - WING



SECTION THRU WING

LEGEND

- 18" RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZONTAL AND VERTICAL JOINTS ON BACK FACE.
- OPT. KEYED CONST. JOINT - FORMED BY A SURFACED BEVELED 2" X 6" WITH RUBBERIZED MEMBRANE WATERPROOFING ON B.F.
- KEYED CONST. JOINT - FORMED BY A SURFACE BEVELED 2" X 6"
- PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. ATTACH RODENT SHIELD AT ENDS OF PIPE UNDERDRAIN. SEE DETAIL ON SHEET 13.

B.F. DENOTES BACK FACE

F.F. DENOTES FRONT FACE

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE M-59-001

DRAWN BY DJN | PLANS CK'D. PJE

NORTH ABUTMENT WING

SHEET 12 OF 16

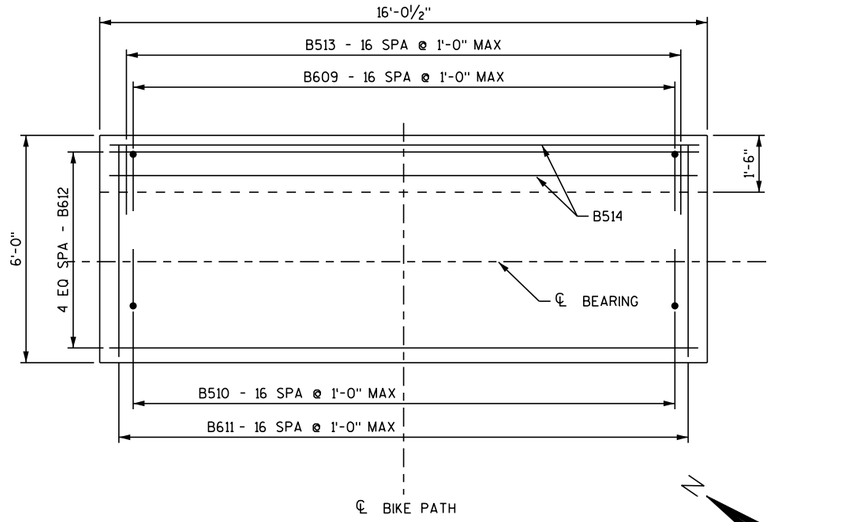
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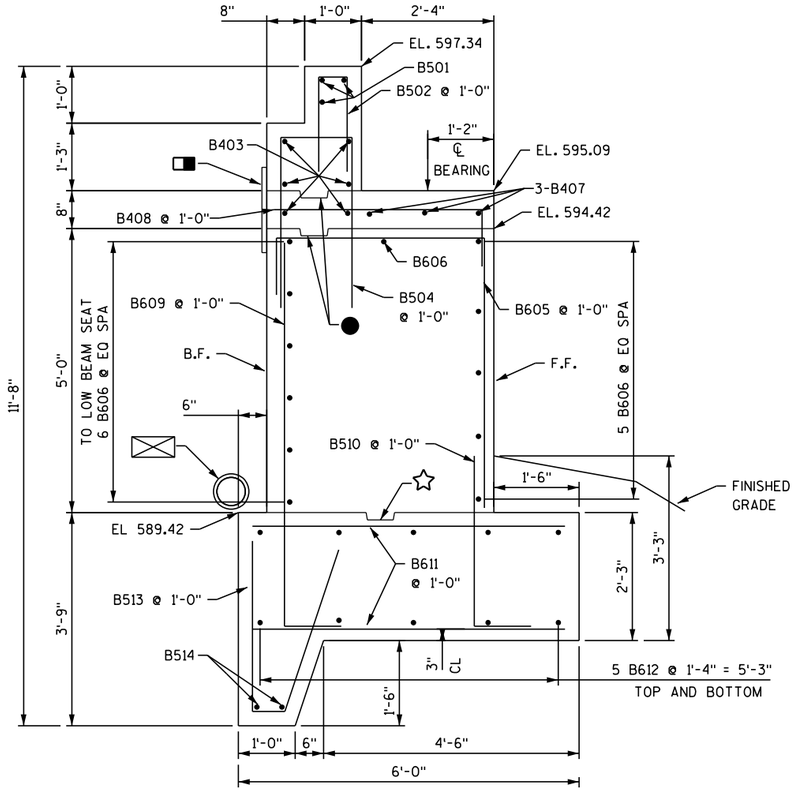
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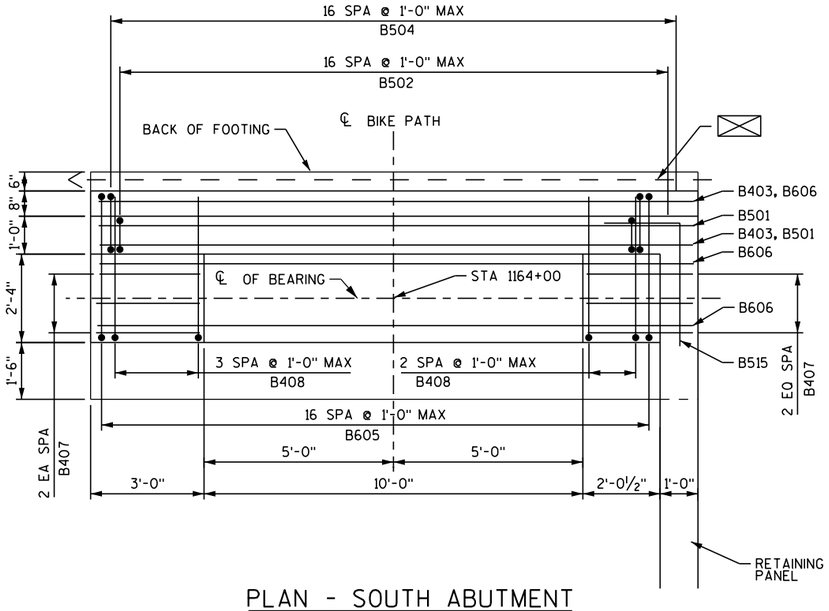
4996-01-58



FOOTING PLAN - SOUTH ABUTMENT

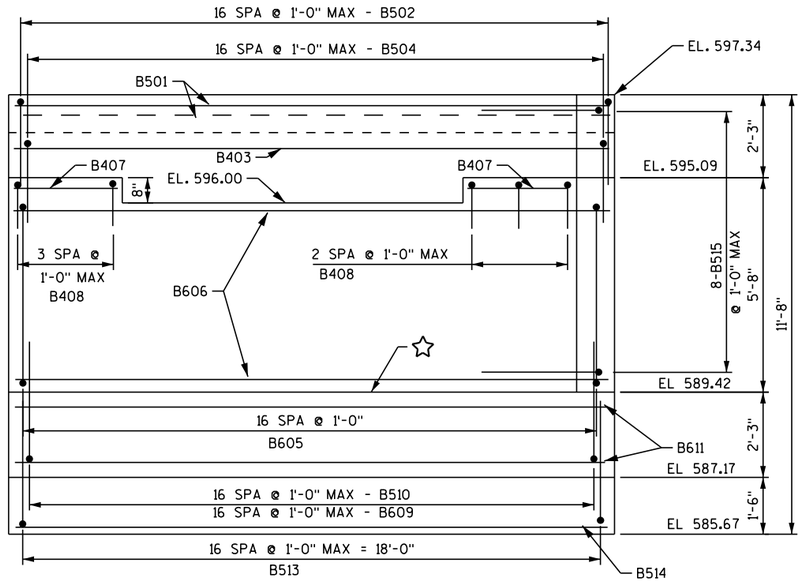


SECTION THRU ABUT BODY



PLAN - SOUTH ABUTMENT

(UPPER PLAN & WALL REINFORCEMENT)



ELEVATION - SOUTH ABUTMENT

(LOOKING AT FRONT FACE)

LEGEND

☆ KEYED CONST. JOINT - FORMED BY A SURFACED BEVELED 2" X 6".

▬ 18" RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZONTAL AND VERTICAL JOINTS ON BACK FACE.

● OPT. KEYED CONST. JOINT - FORMED BY A SURFACED BEVELED 2" X 6" WITH RUBBERIZED MEMBRANE WATERPROOFING ON B.F.

⊠ PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. ATTACH RODENT SHIELD AT ENDS OF PIPE UNDERDRAIN. SEE DETAIL ON SHEET 13.

B.F. DENOTES BACK FACE

F.F. DENOTES FRONT FACE

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STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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DRAWN BY DJN | PLANS CK'D. PJE

SOUTH ABUTMENT

SHEET 13 OF 16

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STATE PROJECT NUMBER

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NORTH ABUTMENT

BILL OF BARS

COATED: 1330 LBS
UNCOATED: 1670 LBS

BAR MARK	COAT	NUMBER REQUIRED	LENGTH	BAR SERIES	BENT	LOCATION
A501	X	3	17'-4"			HORIZONTAL BODY
A502	X	17	4'-8"		X	BODY TIES
A403		6	17'-4"			HORIZONTAL BODY
A504		17	7'-1"		X	BODY TIES
A605		6	17'-4"			HORIZONTAL BODY
A606		5	14'-7"			HORIZONTAL BODY
A607		1	16'-10"			HORIZONTAL BODY
A608		16	9'-10"		X	BODY TIES
A409		6	6'-1"		X	BODY TIES
A410		3	2'-7"			HORIZONTAL BODY
A411		3	2'-10"	(X)		HORIZONTAL BODY
A612		20	7'-10"		X	VERTICAL BODY
A513		19	6'-4"		X	VERTICAL BODY
A614		16	5'-6"			FOOTING
A615		6	16'-8"	(X)		FOOTING
A516		20	7'-6"		X	FOOTING-KEY
A517		2	19'-3"	(X)		FOOTING-KEY
A618		5	2'-9"	(X)		FOOTING
A519	X	8	6'-6"		X	BODY-WALL TIE
A420	X	2	12'-0"		X	WING HORIZONTAL
A421	X	2	6'-10"			WING HORIZONTAL
A422	X	2	11'-10"			WING HORIZONTAL
A423	X	3	4'-10"		X	WING HORIZONTAL
A624	X	3	11'-7"		X	WING VERTICAL
A625	X	13	10'-11"	(X)	X	WING VERTICAL
A626	X	3	6'-11"		X	WING VERTICAL
A627	X	13	13'-6"		X	WING VERTICAL
A428	X	6	11'-9"		X	WING HORIZONTAL
A629	X	6	14'-7"		X	WING HORIZONTAL
A730	X	7	15'-7"		X	WING HORIZONTAL
A531	X	5	15'-7"		X	WING HORIZONTAL
A532	X	3	14'-7"			WING HORIZONTAL

SOUTH ABUTMENT

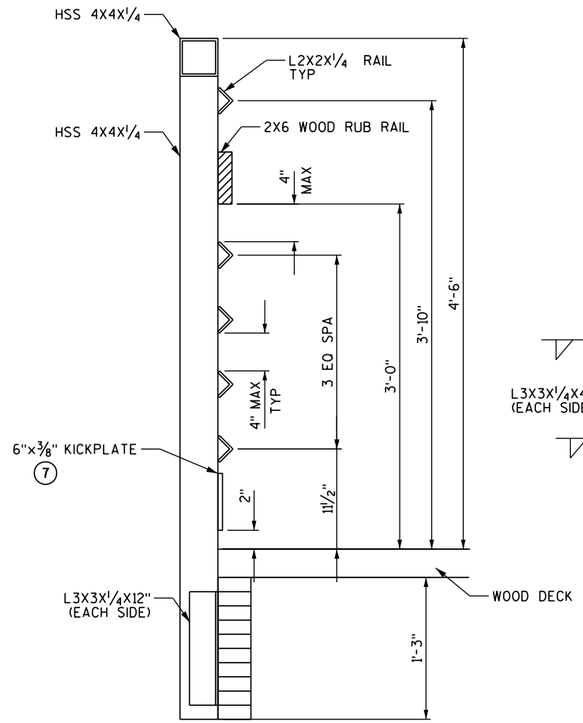
BILL OF BARS

COATED: 130 LBS
UNCOATED: 1700 LBS

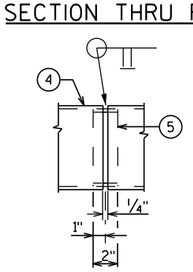
BAR MARK	COAT	NUMBER REQUIRED	LENGTH	BAR SERIES	BENT	LOCATION
B501	X	3	15'-8"			BODY HORIZONTAL
B502	X	17	4'-8"		X	VERTICAL TIES
B403		6	15'-8"			BODY HORIZONTAL
B504		17	7'-1"		X	VERTICAL TIES
B605		17	9'-10"		X	BODY VERTICAL
B606		12	15'-8"			BODY HORIZONTAL
B407		6	2'-8"			BODY HORIZONTAL
B408		7	6'-1"		X	BODY TIES
B609		17	7'-10"		X	BODY VERTICAL
B510		17	6'-4"			BODY VERTICAL
B611		17	5'-6"		X	FOOTING HORIZONTAL
B612		10	15'-6"			FOOTING HORIZONTAL
B513		17	7'-6"		X	FOOTING - KEY
B514		2	15'-6"			FOOTING - KEY

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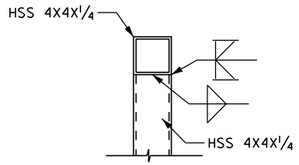


SECTION THRU RAILING

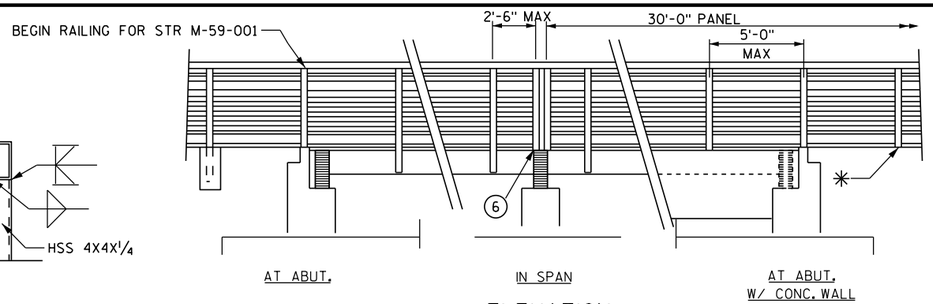


SHOP RAIL SPLICE DETAIL

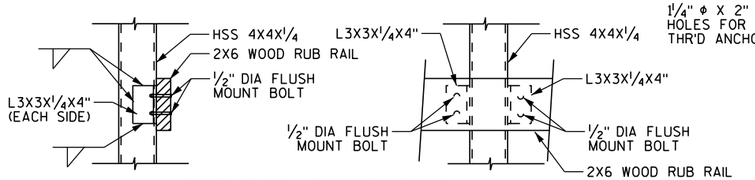
(LOCATION MUST BE SHOWN ON SHOP DRAWINGS)



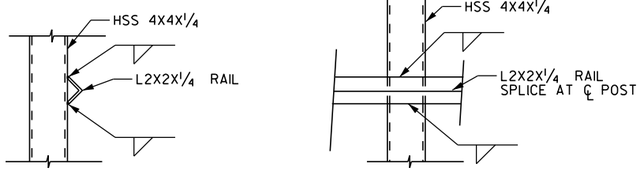
TOP CONNECTION



ELEVATION

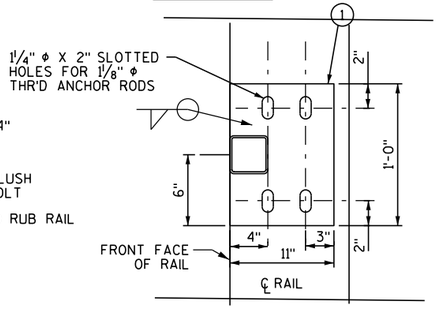


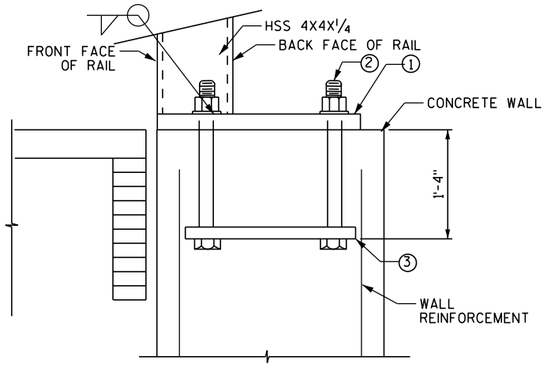
RUB RAIL CONNECTION



ANGLE CONNECTION

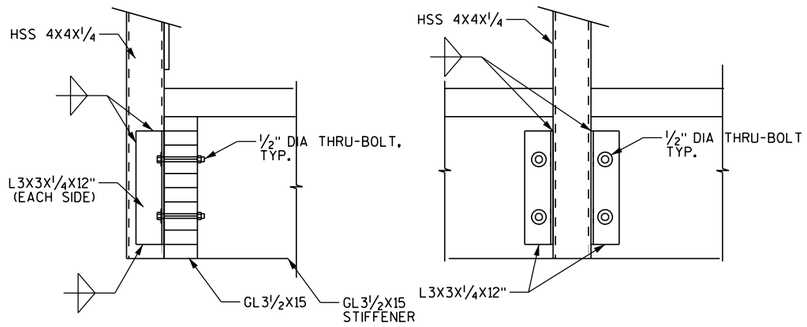
(KICKPLATE CONNECTION SIMILAR)



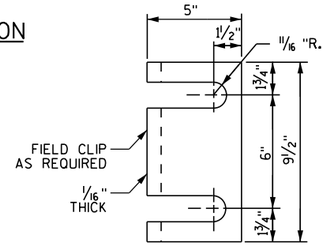


SECTION AT TOP OF CONC. WALL

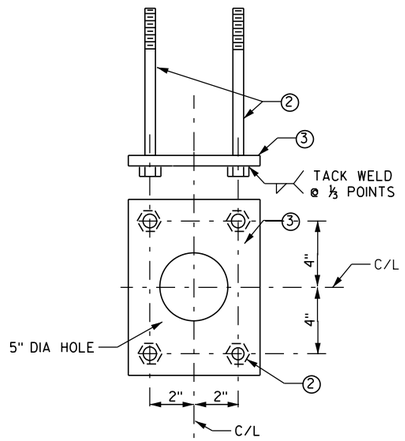
(ABUTMENT AND WING WALL SIM)



POST TO BEAM CONNECTION



POST SHIM DETAIL



WALL ANCHORAGE DETAIL

LEGEND

1. PLATE 1¼" x 11" x 1'-0" WITH 1¼" X 2" SLOTTED HOLES FOR ANCHOR BOLTS NO. 2. WELD TO HSS4x4 AS SHOWN. SLOTS PARALLEL TO LONG SIDE OF PLATE.
2. A325 - ⅞" DIA. 20" LONG HEX BOLTS (GALVANIZED) WITH A325 NUT AND WASHER. 4 REQ'D. PER POST. THREAD 3" AND PLACE NORMAL TO PLATE NO. 1. CHAMFER TOP OF BOLTS BEFORE THREADING.
3. ¼" x 8" x 8" FLAT BAR WITH 15/16 " DIA. HOLES FOR ANCHOR BOLTS NO. 2.
4. HSS 4 x 4 x ¼ STRUCTURAL TUBING.
5. SPLICE SLEEVE FABRICATED FROM ¼" PLATE. PROVIDE "SLIDING FIT".
6. PROVIDE 2"X4" HSS END POSTS ON EACH PANEL END. PROVIDE 2" GAP BETWEEN END POSTS.
7. C6X8.2 MAY BE SUBSTITUTED FOR 6"X 3/8" PLATE.

✳ ANCHOR TO TOP OF WING WALL.

GENERAL NOTES

BID ITEM SHALL BE "STEEL RAILING SPECIAL M-59-001". BID ITEMS INCLUDE ALL ITEMS SHOWN.

POST BASE PLATES SHALL BE FLAT WITH ALL SURFACES SMOOTH AND FREE FROM WARP AND ALL EDGES SMOOTH, STRAIGHT AND VERTICAL. ALL PLATE CUTS SHALL BE MACHINE OR MACHINE FLAME CUTS.

ALL STEEL USED IN FABRICATION SHALL BE MADE FROM MATERIALS CONFORMING TO ASTM A847, A588 OR A242 GRADE 50 WEATHERING STEEL UNLESS NOTED OTHERWISE.

FILL BOLT SLOT OPENINGS IN POST SHIMS & PLATE NO. 3 WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER.

RAIL MEMBERS SHALL BE ATTACHED CONTINUOUSLY TO A MINIMUM OF FOUR POSTS AND A MAXIMUM OF EIGHT.

STEEL POST SHIMS MAY BE USED UNDER POSTS WHERE REQ'D. FOR ALIGNMENT.

SHOP WELD ALL STEEL CONNECTIONS WITH 3/16" FILLET WELDS. GRIND SMOOTH. FINISHED RAIL SHALL BE FREE OF BURRS AND SHARP EDGES.

WOOD RUN RAIL 2X6, S4S, E4E, TREATED STRUCTURAL LUMBER, Fb=1750psi. RUB RAILS SHALL BE PRESSURE TREATED TO AWPA ACZA PER SPECIFICATION.

WOOD RUB RAIL SHALL BE SPLICED AT RAIL POSTS.

AT RAIL ENDS, CAP HSS4X4X¼" WITH ¼" PLATE AND PROVIDE ½" DIA HOLE IN BOTTOM OF RAIL FOR DRAINAGE. GRIND CORNERS OF STEEL RAILINGS SMOOTH.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE M-59-001

DRAWN BY DJN | PLANS CK'D. PJE

RAILING DETAILS

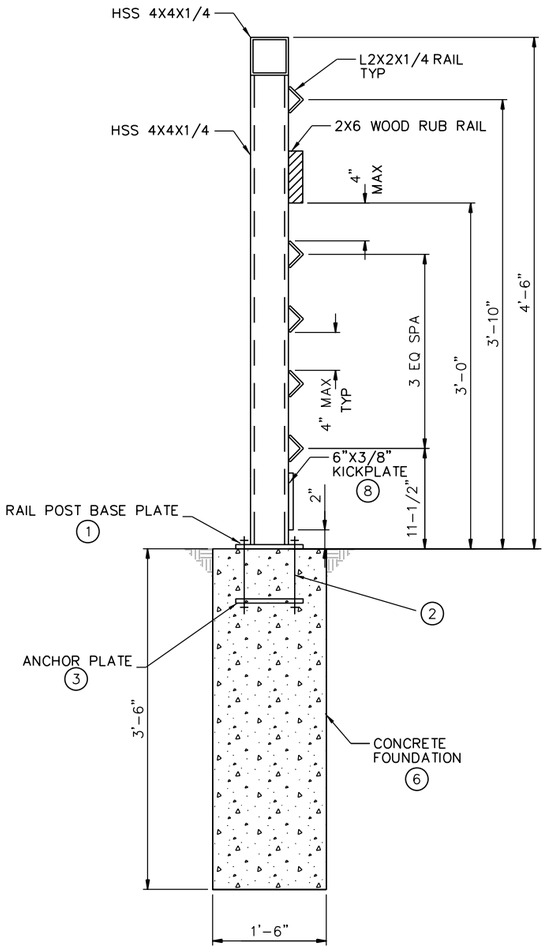
SHEET 15 OF 16

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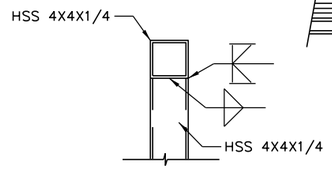
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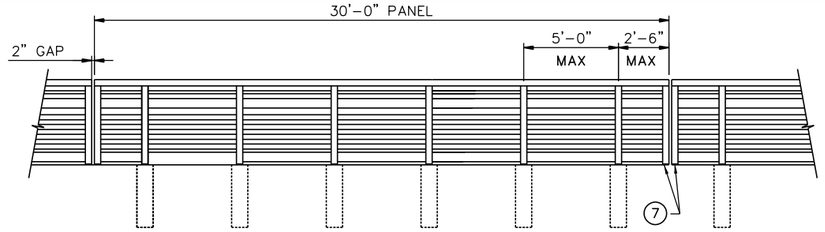
STATE PROJECT NUMBER
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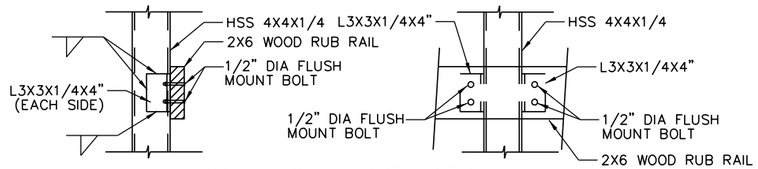
SECTION THRU RAILING



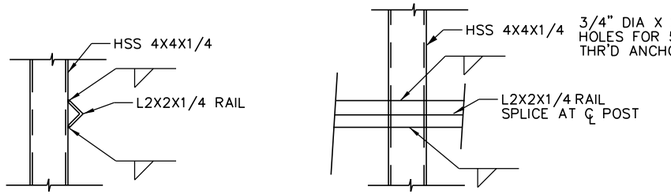
TOP CONNECTION



ELEVATION

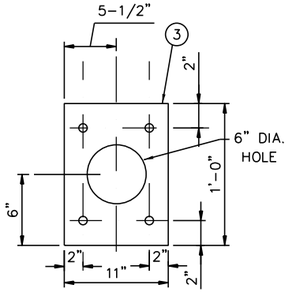


RUB RAIL CONNECTION

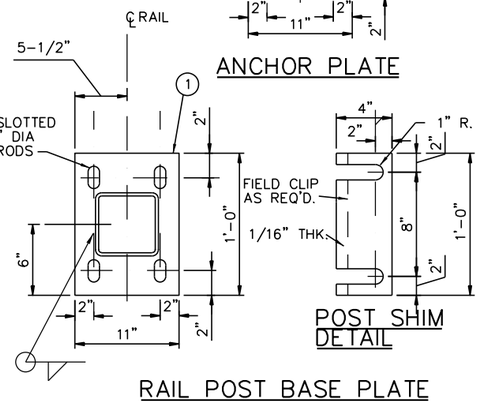


ANGLE CONNECTION

(KICKPLATE CONNECTION SIMILAR)

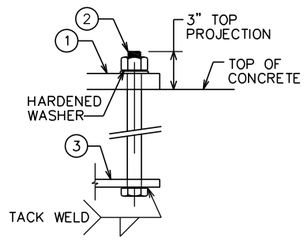


ANCHOR PLATE

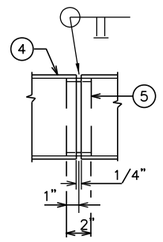


RAIL POST BASE PLATE

POST SHIM DETAIL

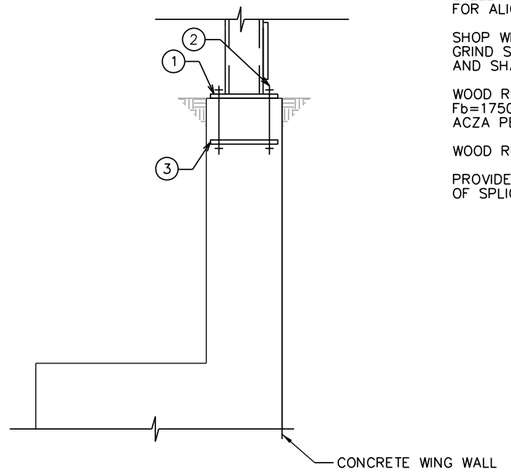


ANCHOR BOLTS



SHOP RAIL SPLICE DETAIL

(LOCATION MUST BE SHOWN ON SHOP DRAWINGS)



SECTION THRU RAILING AT WING WALL

LEGEND

1. PLATE 5/8" x 11" x 1'-0" WITH 3/4" X 2" SLOTTED HOLES FOR ANCHOR BOLTS NO. 2. WELD TO HSS4x4 AS SHOWN. SLOTS PARALLEL TO LONG SIDE OF PLATE.
2. 5/8" DIA X 10" LONG, TYPE 316 STAINLESS STEEL BOLT (MIN. TENSILE STRENGTH=70KSI) WITH NUT AND WASHERS OF SAME ALLOY GROUP. (ALTERNATE RAIL POST ANCHORAGE: 4 EQUIVALENT STAINLESS STEEL CONCRETE MASONRY ANCHORS TYPE S 5/8" EMBED 7" IN CONCRETE FOR RAIL POSTS.
3. 5/8" X 11" X 1'-0" ANCHOR PLATE (GALVANIZED) WITH 3/4' DIA HOLES FOR ANCHOR BOLTS. ANCHOR PLATE IS NOT REQUIRED WHEN TYPE S MASONRY ANCHORS ARE USED.
4. HSS 4 x 4 x 1/4 STRUCTURAL TUBING.
5. SPLICE SLEEVE FABRICATED FROM 1/4" PLATE. PROVIDE "SLIDING FIT".
6. REINFORCE CONCRETE FOUNDATION WITH 4-#4 BARS VERTICALLY AND #3@12" TIES.
7. PROVIDE 2"X4" HSS END POSTS ON EACH PANEL END.
8. C6X8.2 MAY BE SUBSTITUTED FOR 6"X 3/8" PLATE

GENERAL NOTES

BID ITEM SHALL BE "STEEL RAILING SPECIAL M-59-001" BID ITEM INCLUDES ALL ITEMS SHOWN.

POST BASE PLATES SHALL BE FLAT WITH ALL SURFACES SMOOTH AND FREE FROM WARP AND ALL EDGES SMOOTH, STRAIGHT AND VERTICAL. ALL PLATE CUTS SHALL BE MACHINE OR MACHINE FLAME CUTS.

ALL STEEL USED IN FABRICATION SHALL BE MADE FROM MATERIALS CONFORMING TO ASTM A847, A588 OR A242 GRADE 50 WEATHERING STEEL UNLESS NOTED OTHERWISE.

FILL BOLT SLOT OPENINGS IN POST SHIMS & PLATE NO. 1 WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER.

RAIL MEMBERS SHALL BE ATTACHED CONTINUOUSLY TO A MINIMUM OF FOUR POSTS AND A MAXIMUM OF EIGHT.

STEEL POST SHIMS MAY BE USED UNDER POSTS WHERE REQ'D. FOR ALIGNMENT.

SHOP WELD ALL STEEL CONNECTIONS WITH 3/16" FILLET WELDS. GRIND SMOOTH. FINISHED RAIL SHALL BE FREE OF BURRS AND SHARP EDGES.

WOOD RUB RAIL 2X6, S4S E4E, TREATED STRUCTURAL LUMBER, Fb=1750psi. RUB RAILS SHALL BE PRESSURE TREATED TO AWPA ACZA PER SPECIFICATION.

WOOD RUB RAIL SHALL BE SPLICED AT RAIL POSTS.

PROVIDE 1/2" DIA DRAIN HOLES IN LOW END OF ALL RAILS CLEAR OF SPLICE TUBE

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE M-59-001

DRAWN BY KAG | PLANS CK'D. PJE

POST MOUNTED RAILING DETAILS

SHEET 16 OF 16

263

8

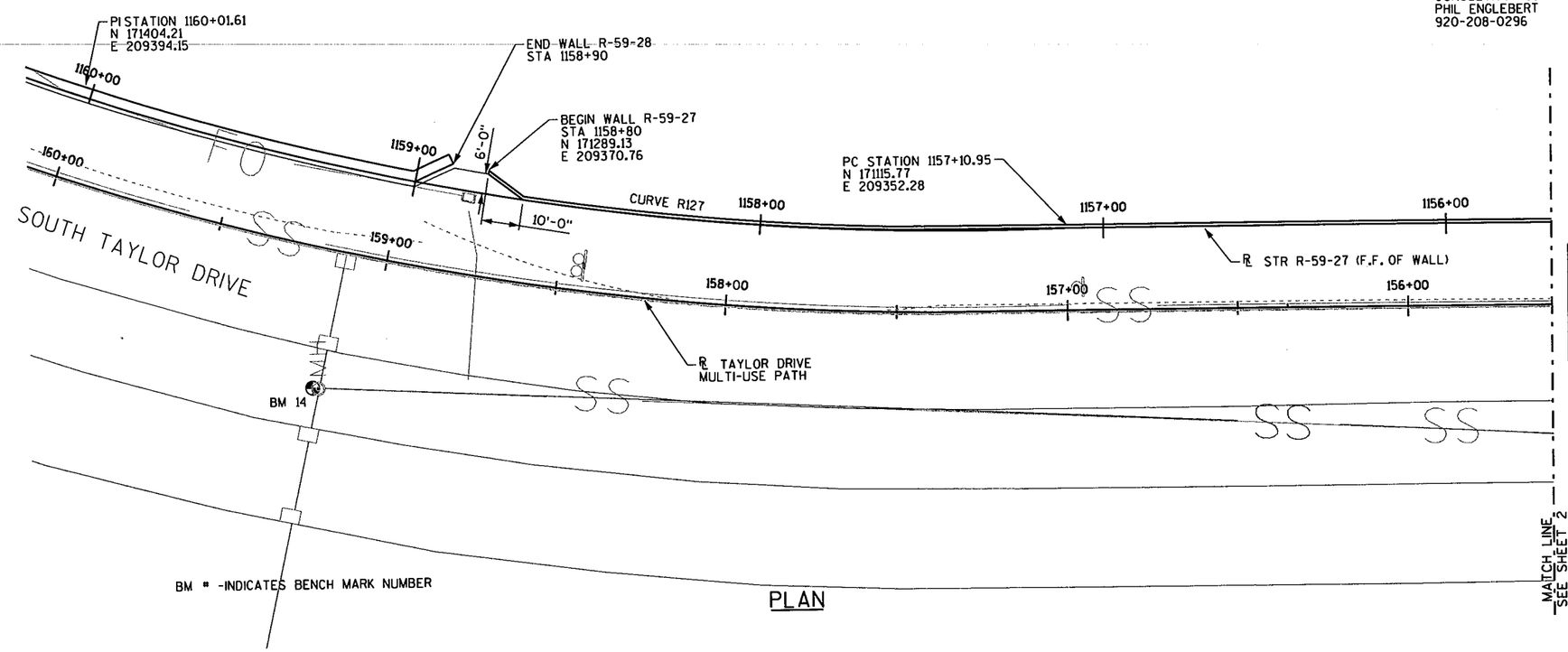
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STATE PROJECT NUMBER

4996-01-58

BRIDGE OFFICE CONTACT:
WILLIAM DREHER
608-266-8489

CONSULTANT CONTACT
PHIL ENGLEBERT
920-208-0296



PLAN

REFER TO SHEET 10 FOR GENERAL NOTES, DESIGN DATA, AND ESTIMATED QUANTITIES

LIST OF DRAWINGS

1. GENERAL PLAN I
2. GENERAL PLAN II
3. GENERAL PLAN III
4. GENERAL ELEVATION I
5. GENERAL ELEVATION II
6. GENERAL ELEVATION III
7. SUBSURFACE EXPLORATION I
8. SUBSURFACE EXPLORATION II
9. SUBSURFACE EXPLORATION III
10. SECTION, NOTES, AND QUANTITIES
11. WALL DETAILS
12. PANEL DETAILS 1 THRU 4
13. PANEL DETAILS 5 THRU 8
14. PANEL DETAILS 9 THRU 12
15. PANEL DETAILS 13 THRU 16
16. PANEL DETAILS 17 THRU 20
17. PANEL DETAILS 21 THRU 24
18. PANEL DETAILS 25 THRU 28
19. PANEL DETAILS 29 THRU 32
20. PANEL DETAILS 33 THRU 36
21. PANEL DETAILS 37 THRU 40
22. WALL TABLES I
23. WALL TABLES II
24. WALL TABLES III
25. BILL OF BARS

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
14	159+14, LT	STORM MANHOLE, CHISELED "X" ON NORTH RIM	620.10

ELEVATIONS SHOWN ON THE PLAN ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88) (UPDATED 2009).

WISCONSIN
PHILIP J. ENGLEBERT
E-16118
SHEBOYGAN, WIS.
PROFESSIONAL ENGINEER
1/5/15

CURVE R127

PI = 1160+01.61
N = 171404.21
E = 209394.15
DELTA = 38°37'39"
D = 6°54'30"
R = 829.36'
T = 290.66'
L = 559.14'
PC = 1157+10.95
N = 171099.79
E = 2091099.79
PT = 1162+70.09
N = 171642.58
E = 209519.58

LEGEND

F.F. = FRONT FACE
B.F. = BACK FACE

NO.	DATE	REVISION	BY

DONOHUE & ASSOCIATES

ACCEPTED William C. Dreher KAR 01/11/15
CHIEF STRUCTURES DESIGN ENGINEER DATE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-59-27

RETAINING WALL ALONG TAYLOR DRIVE

COUNTY SHEBOYGAN | ~~TOWN/CITY/VILLAGE~~ SHEBOYGAN

DESIGN SPEC. AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS

DESIGNED BY	DJN	DESIGN CK'D.	PJE	DRAWN BY	DJN	PLANS CK'D.	PJE

GENERAL PLAN I

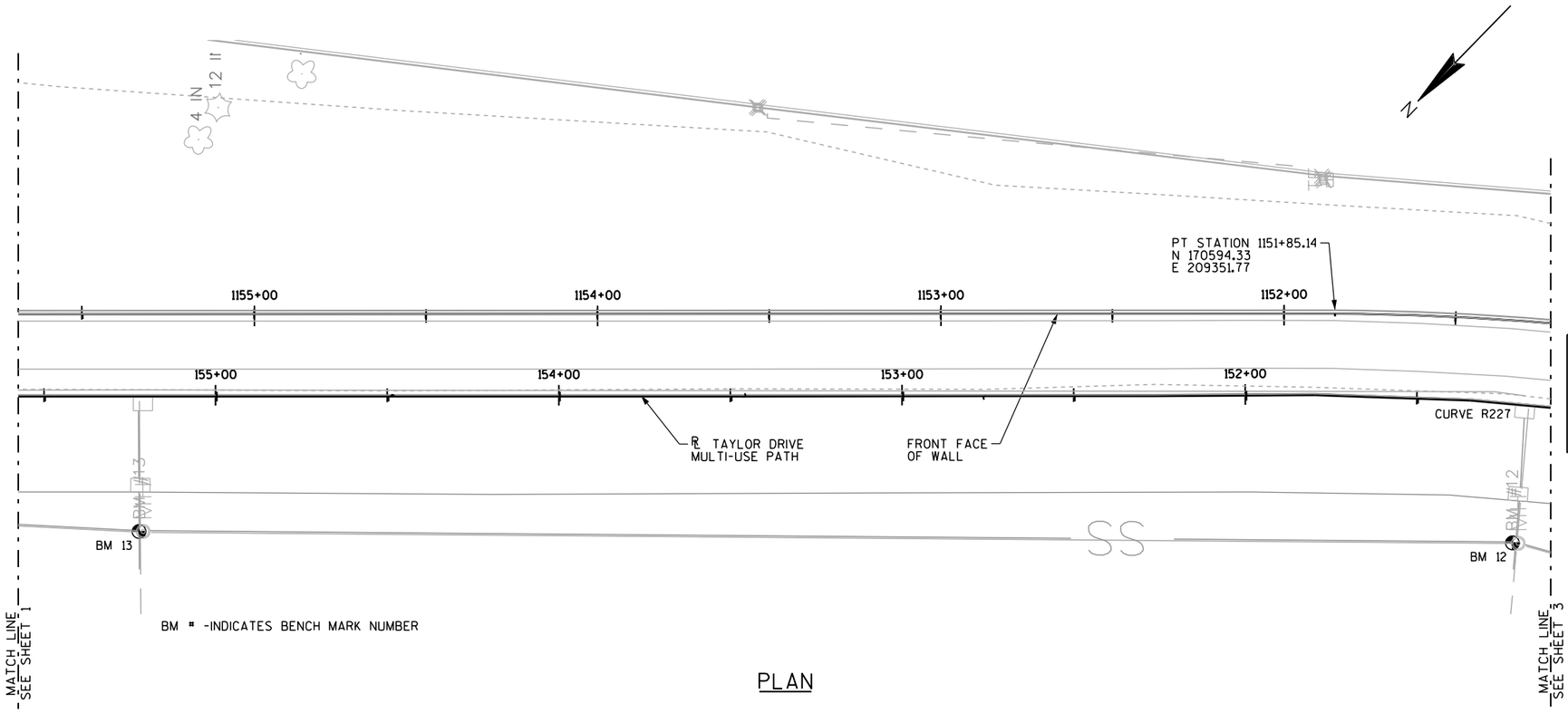
SHEET 1 OF 25

264

8

8

STATE PROJECT NUMBER
4996-01-58



PLAN

REFER TO SHEET 10 FOR GENERAL NOTES, DESIGN DATA, AND ESTIMATED QUANTITIES

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
12	151+18, LT	STORM MANHOLE, CHISELED "X" ON NORTH RIM	654.65
13	155+22, LT	STORM MANHOLE, CHISELED "X" ON NORTH RIM	639.72

CURVE R227

PI = 1149+96.13
N = 170398.31
E = 209350.18
DELTA = 26°29'09"
D = 6°52'44"
R = 832.94'
T = 196.02'
L = 385.04'
PC = 1148+00.10
N = 170223.13
E = 209262.23
PT = 1151+85.14
N = 170594.33
E = 209351.77

LEGEND

F.F. = FRONT FACE
B.F. = BACK FACE

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-59-027

DRAWN BY DJN | PLANS CK'D. PJE

GENERAL PLAN II

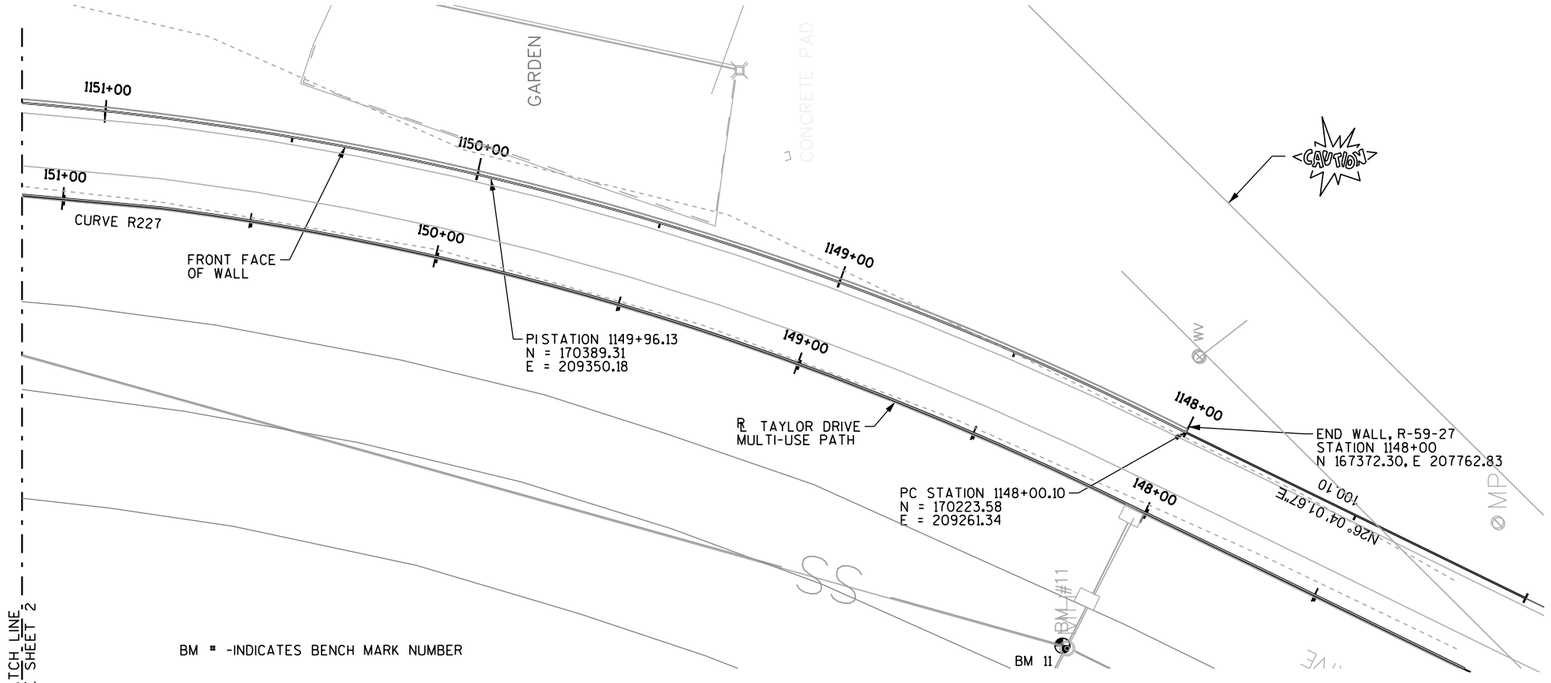
SHEET 2 OF 25

265

8

8

STATE PROJECT NUMBER
4996-01-58



PLAN

REFER TO SHEET 10 FOR GENERAL NOTES, DESIGN DATA, AND ESTIMATED QUANTITIES

CURVE R227

PI = 1149+96.13
N = 170398.31
E = 209350.18
DELTA = 26°29'09"
D = 6°52'44"
R = 832.94'
T = 196.02'
L = 385.04'
PC = 1148+00.10
N = 170223.13
E = 209262.23
PT = 1151+85.14
N = 170594.33
E = 209351.77

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
11	148+04, LT	STORM MANHOLE, CHISELED "X" ON NORTH RIM	661.39

LEGEND

F.F. = FRONT FACE
B.F. = BACK FACE

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-59-27

DRAWN BY DJN | PLANS CK'D. PJE

GENERAL PLAN III

SHEET 3 OF 25

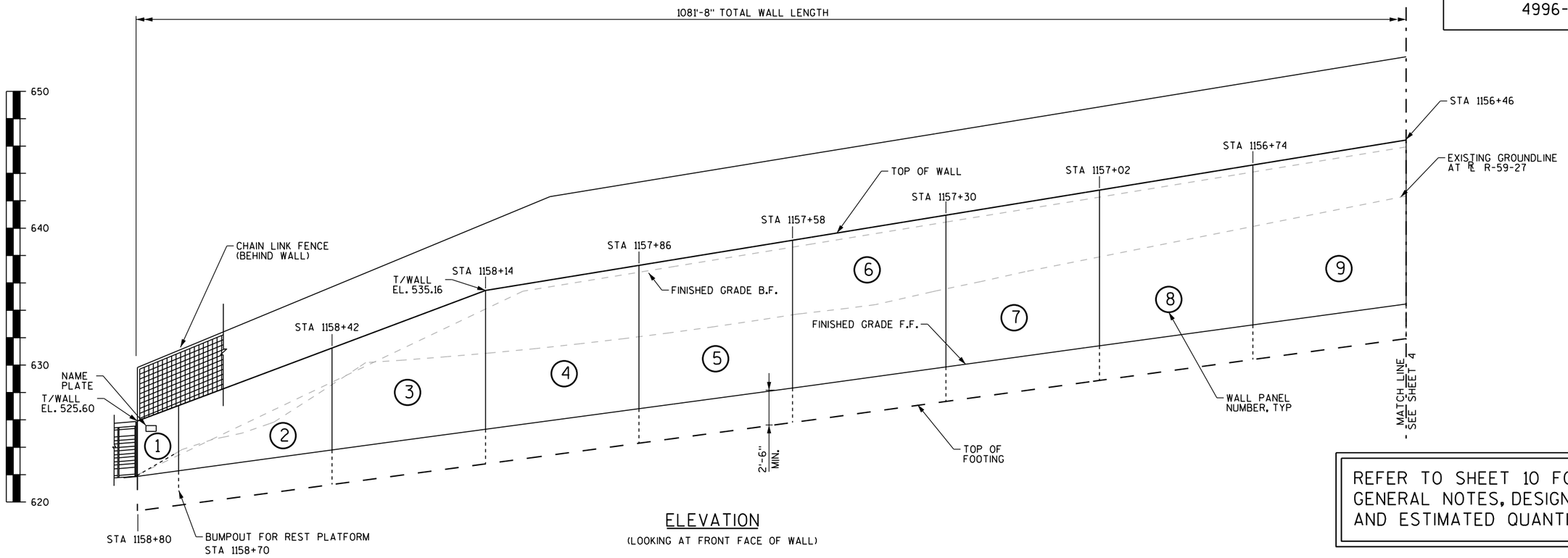
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PLOT TIME : 1:00:42 PM
PLOT BY : kgahagan

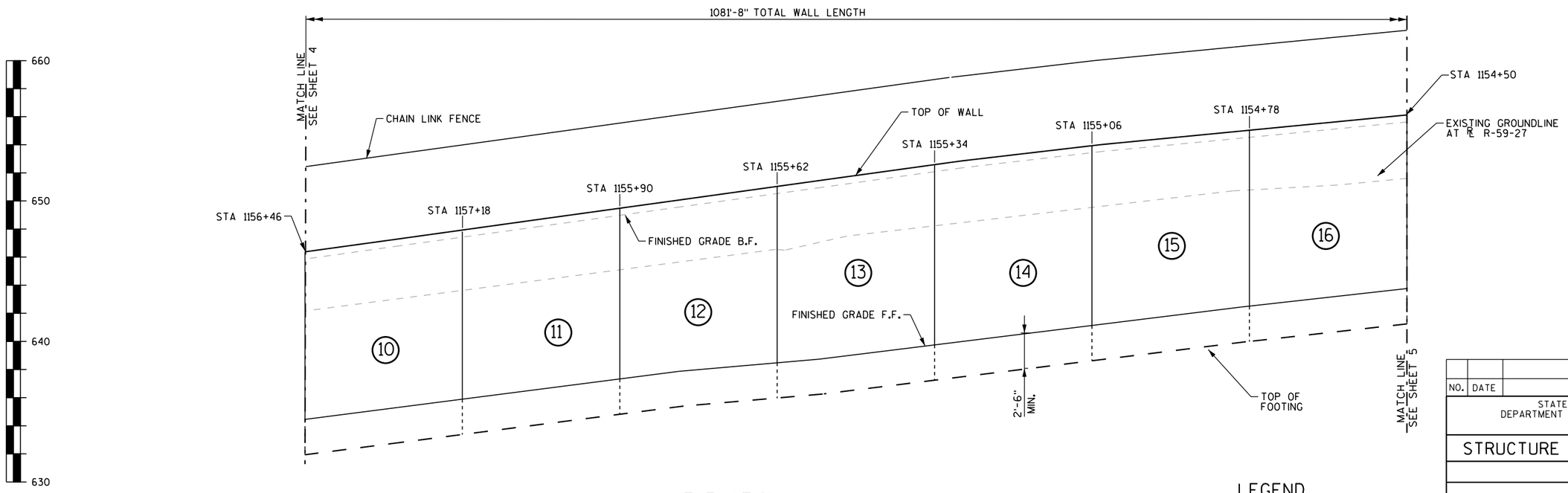
STATE PROJECT NUMBER
4996-01-58



ELEVATION

(LOOKING AT FRONT FACE OF WALL)

REFER TO SHEET 10 FOR GENERAL NOTES, DESIGN DATA, AND ESTIMATED QUANTITIES



ELEVATION

(LOOKING AT FRONT FACE OF WALL)

ELEVATIONS SHOWN ON THE PLAN ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88) (UPDATED 2009).

LEGEND

F.F. = FRONT FACE

B.F. = BACK FACE

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-59-27

DRAWN BY DJN | PLANS CK'D. PJE

GENERAL ELEV I

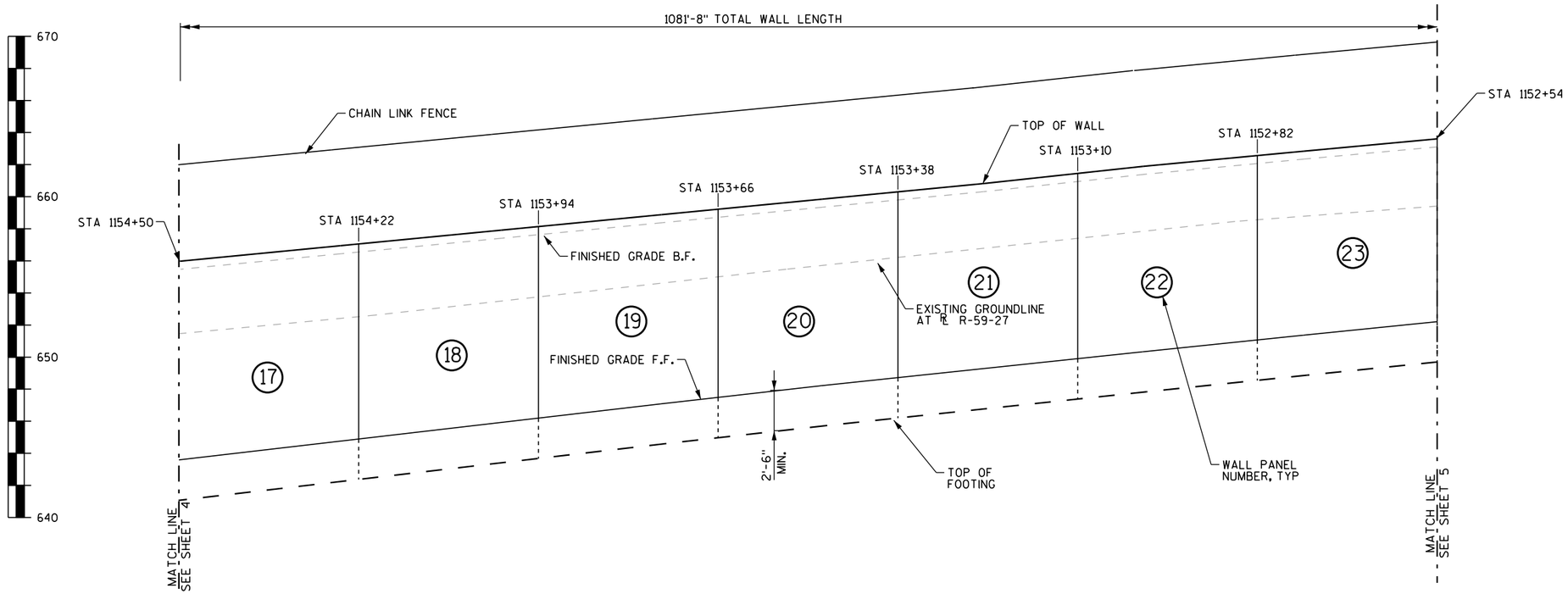
SHEET 4 OF 25

267

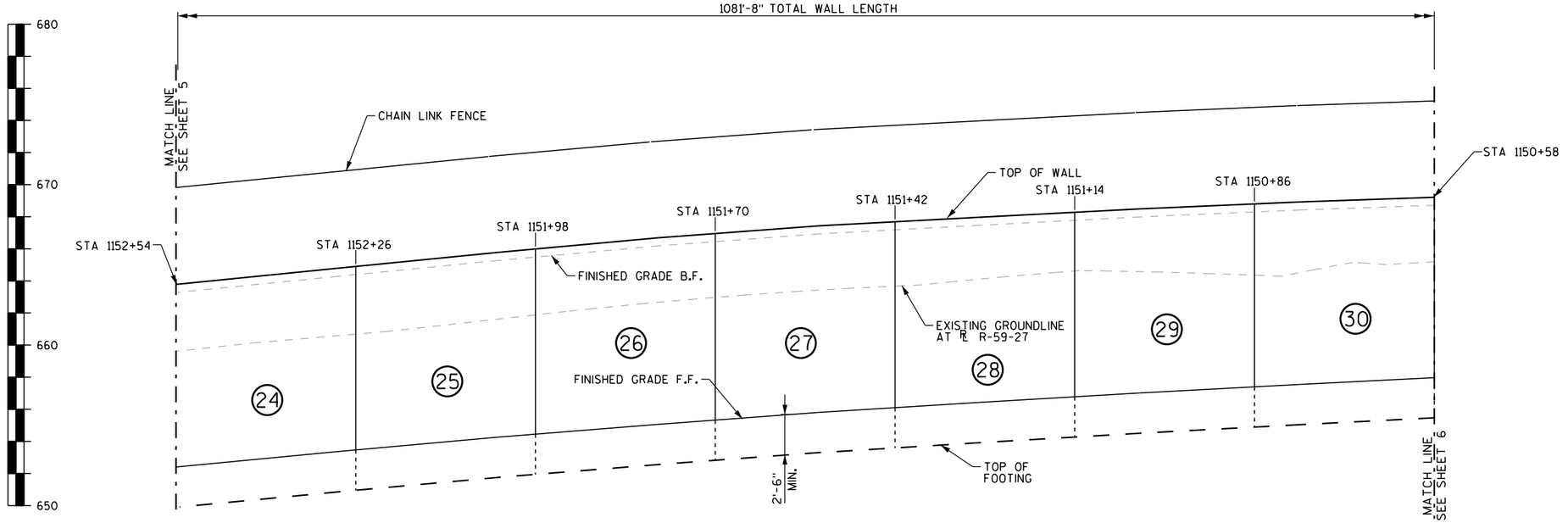
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STATE PROJECT NUMBER
4996-01-58

REFER TO SHEET 10 FOR GENERAL NOTES, DESIGN DATA, AND ESTIMATED QUANTITIES



ELEVATION
(LOOKING AT FRONT FACE OF WALL)



ELEVATION
(LOOKING AT FRONT FACE OF WALL)

LEGEND

F.F. = FRONT FACE
B.F. = BACK FACE

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-59-27

DRAWN BY	DJN	PLANS CK'D.	PJE

GENERAL ELEV II

SHEET 5 OF 25

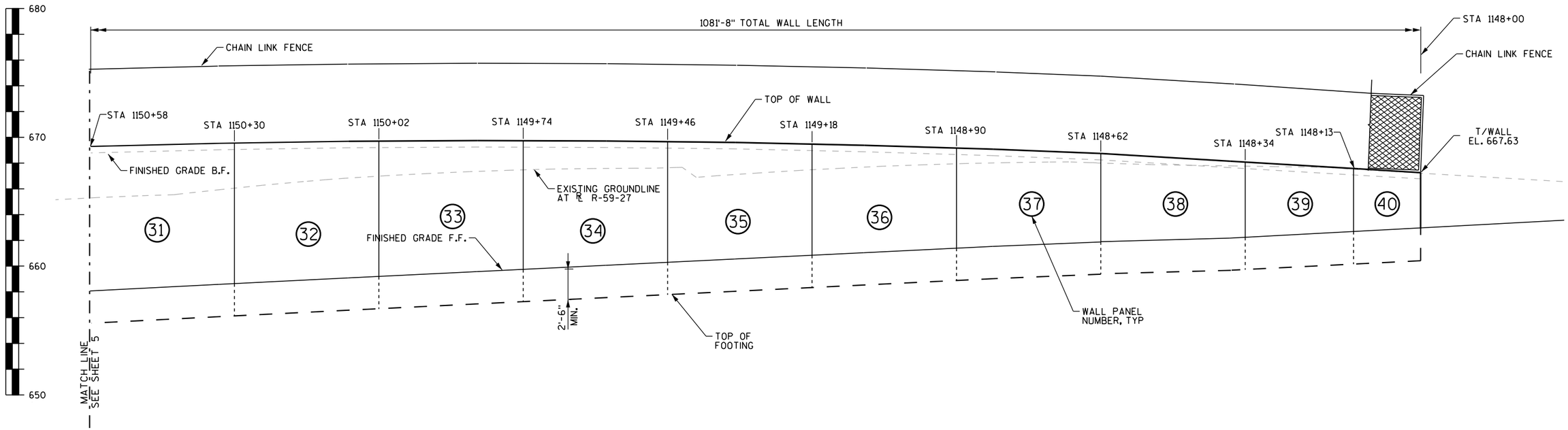
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STATE PROJECT NUMBER
4996-01-58

REFER TO SHEET 10 FOR GENERAL NOTES, DESIGN DATA, AND ESTIMATED QUANTITIES



ELEVATION

(LOOKING AT FRONT FACE OF WALL)

ELEVATIONS SHOWN ON THE PLAN ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88) (UPDATED 2009).

LEGEND

F.F. = FRONT FACE
B.F. = BACK FACE

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-59-27

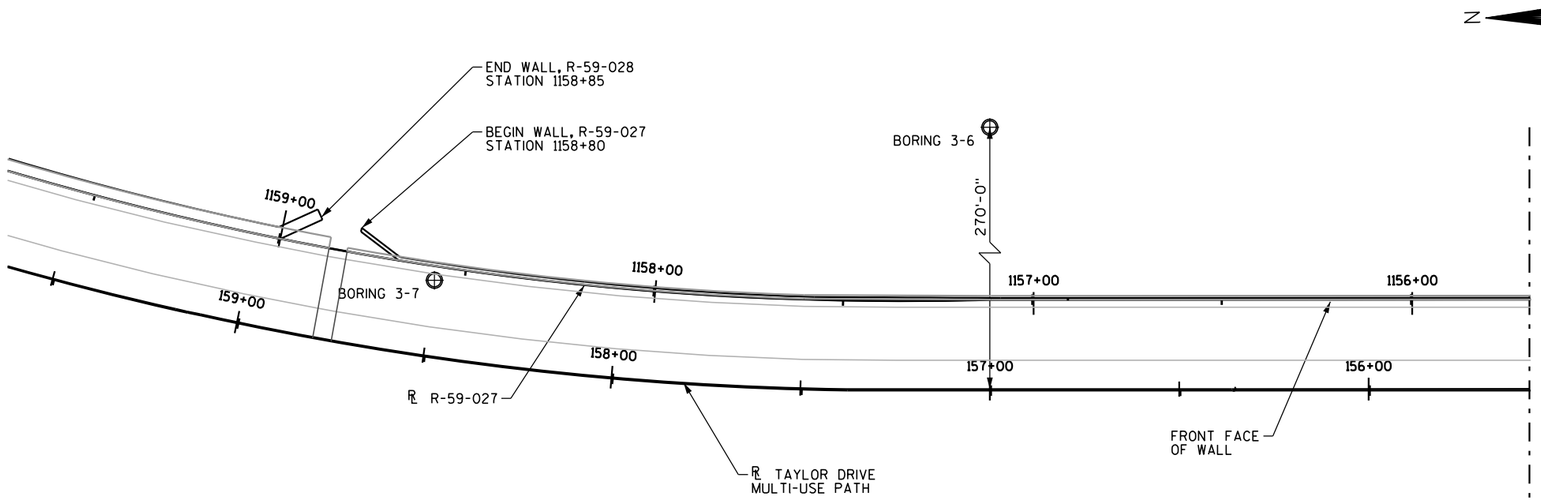
DRAWN BY DJN | PLANS CK'D. PJE

GENERAL ELEV III

SHEET 6 OF 25

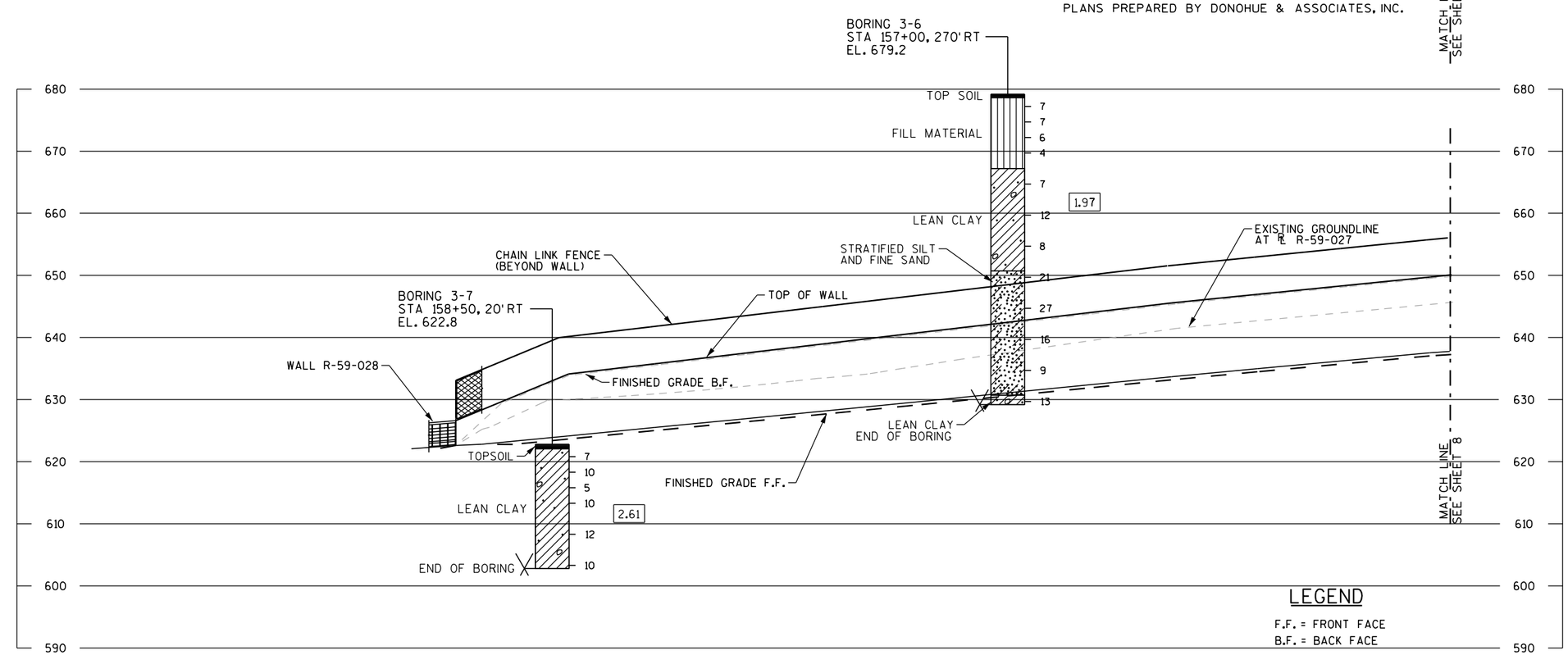
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BORINGS PERFORMED BY:
SOILS & ENGINEERING SERVICES, INC.
MADISON, WISCONSIN
AUGUST 10-11, 2010

PLANS PREPARED BY DONOHUE & ASSOCIATES, INC.



LEGEND

F.F. = FRONT FACE
B.F. = BACK FACE

STATE PROJECT NUMBER

4996-01-58

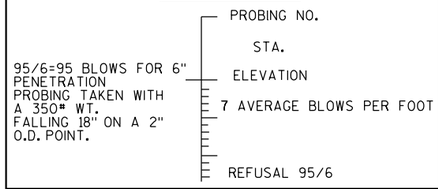
ABBREVIATIONS

F — FINE M — MEDIUM C — COARSE
WS — WEATHERED SO — SOUND

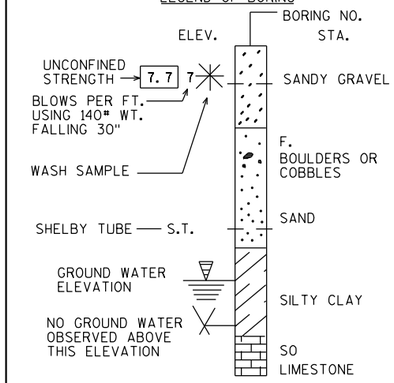
MATERIAL SYMBOLS

TOPSOIL, SILT, SANDSTONE
SAND, PEAT, LIMESTONE
GRAVEL, CLAY, IGNEOUS ROCK

LEGEND OF PROBING



LEGEND OF BORING



UNLESS OTHERWISE SPECIFIED, THE BLOWS PER FOOT AT THE LOCATIONS INDICATED ARE BASED ON DRIVING A 2" O.D. X 1.4" I.D. SPLIT SPOON SAMPLER WITH A 140# HAMMER HAVING A FREE FALL OF 30". THE BLOW COUNT IS TAKEN IN UNDISTURBED SOIL IMMEDIATELY BELOW A CASED OR OPEN HOLE ELIMINATING SIDE FRICTION ON THE DRIVE PIPE.

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

TO OBTAIN RELATIVE DATA CONCERNING THE CHARACTER OF MATERIAL IN AND UPON WHICH THE FOUNDATION MIGHT BE BUILT, BORINGS AND/OR SOUNDINGS WERE MADE AT POINTS APPROXIMATELY AS INDICATED ON THIS DRAWING. THE DATA PRESENTED HEREIN REPRESENTS THE FINDINGS OF THE SUBSURFACE EXPLORATIONS MADE. HOWEVER, BECAUSE THE DEPTHS INVESTIGATED ARE LIMITED AND THE AREA OF THE BORINGS AND/OR SOUNDINGS IS VERY SMALL IN RELATION TO THE ENTIRE AREA, THE WISCONSIN DEPARTMENT OF TRANSPORTATION DOES NOT WARRANT CONDITIONS BELOW THE DEPTHS INVESTIGATED OR THAT THE CLASSIFICATION OF MATERIAL ENCOUNTERED IN THESE INVESTIGATIONS IS NECESSARILY TYPICAL OF THE ENTIRE SITE.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-59-27

DRAWN BY DJN | PLANS CK'D. PJE

SUBSURFACE EXPLORATION I

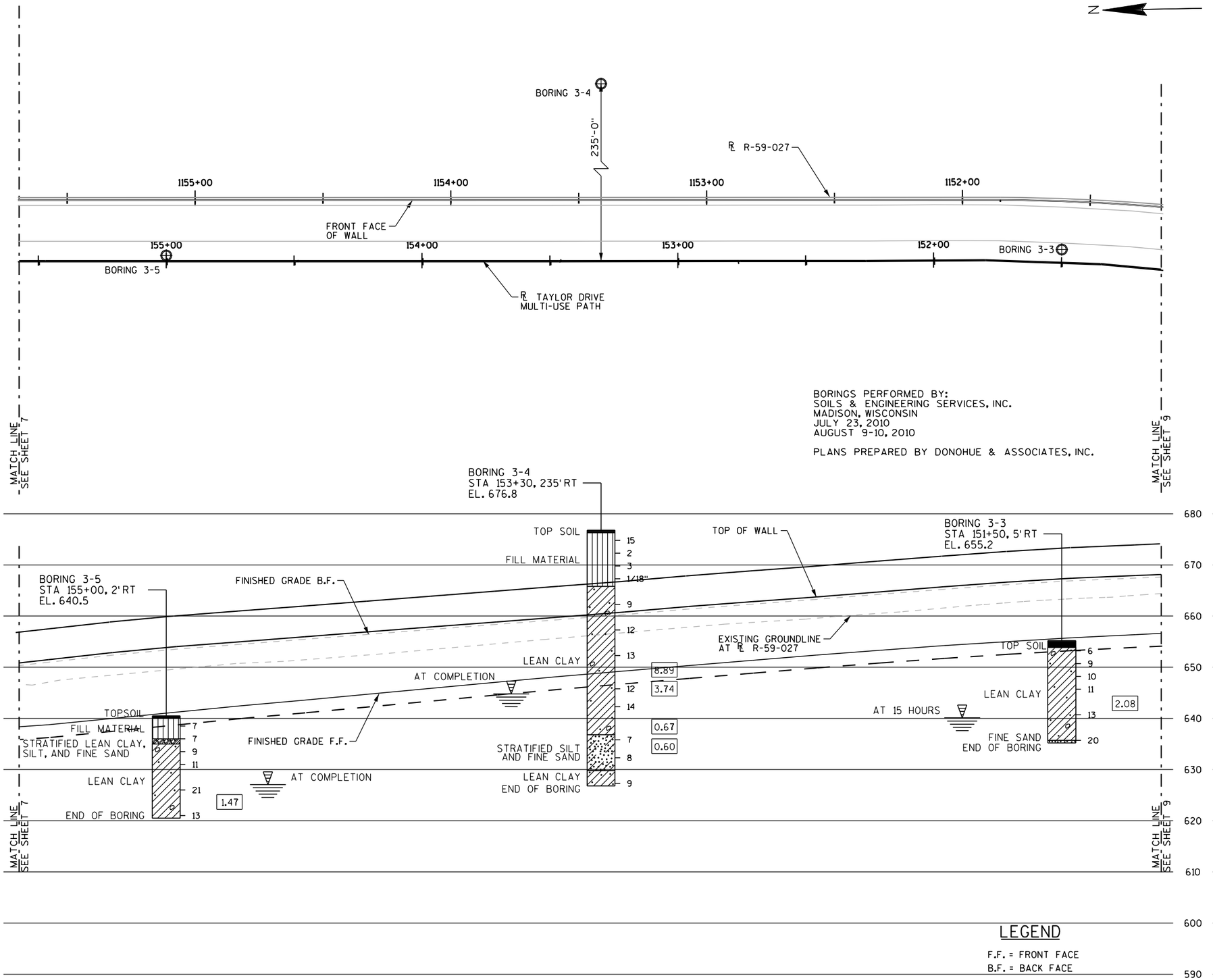
SHEET 7 OF 25

270

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STATE PROJECT NUMBER

4996-01-58

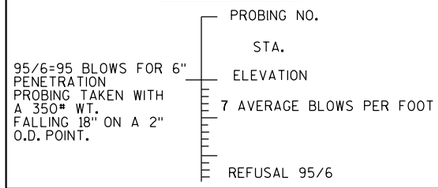
ABBREVIATIONS

F — FINE M — MEDIUM C — COARSE
WS — WEATHERED SO — SOUND

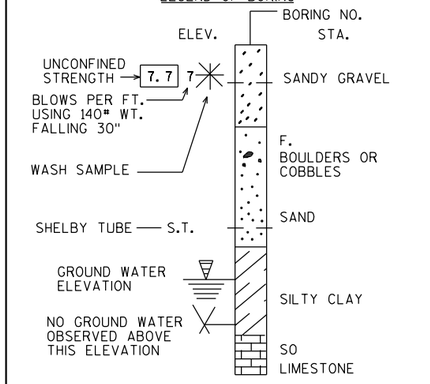
MATERIAL SYMBOLS

TOPSOIL, SILT, SANDSTONE, SAND, PEAT, LIMESTONE, GRAVEL, CLAY, IGNEOUS ROCK

LEGEND OF PROBING



LEGEND OF BORING



UNLESS OTHERWISE SPECIFIED, THE BLOWS PER FOOT AT THE LOCATIONS INDICATED ARE BASED ON DRIVING A 2" O.D. X 1.4" I.D. SPLIT SPOON SAMPLER WITH A 140# HAMMER HAVING A FREE FALL OF 30". THE BLOW COUNT IS TAKEN IN UNDISTURBED SOIL IMMEDIATELY BELOW A CASED OR OPEN HOLE ELIMINATING SIDE FRICTION ON THE DRIVE PIPE.

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

TO OBTAIN RELATIVE DATA CONCERNING THE CHARACTER OF MATERIAL IN AND UPON WHICH THE FOUNDATION MIGHT BE BUILT, BORINGS AND/OR SOUNDINGS WERE MADE AT POINTS APPROXIMATELY AS INDICATED ON THIS DRAWING. THE DATA PRESENTED HEREIN REPRESENTS THE FINDINGS OF THE SUBSURFACE EXPLORATIONS MADE. HOWEVER, BECAUSE THE DEPTHS INVESTIGATED ARE LIMITED AND THE AREA OF THE BORINGS AND/OR SOUNDINGS IS VERY SMALL IN RELATION TO THE ENTIRE AREA, THE WISCONSIN DEPARTMENT OF TRANSPORTATION DOES NOT WARRANT CONDITIONS BELOW THE DEPTHS INVESTIGATED OR THAT THE CLASSIFICATION OF MATERIAL ENCOUNTERED IN THESE INVESTIGATIONS IS NECESSARILY TYPICAL OF THE ENTIRE SITE.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

R-59-27

DRAWN BY DJN | PLANS CK'D. PJE

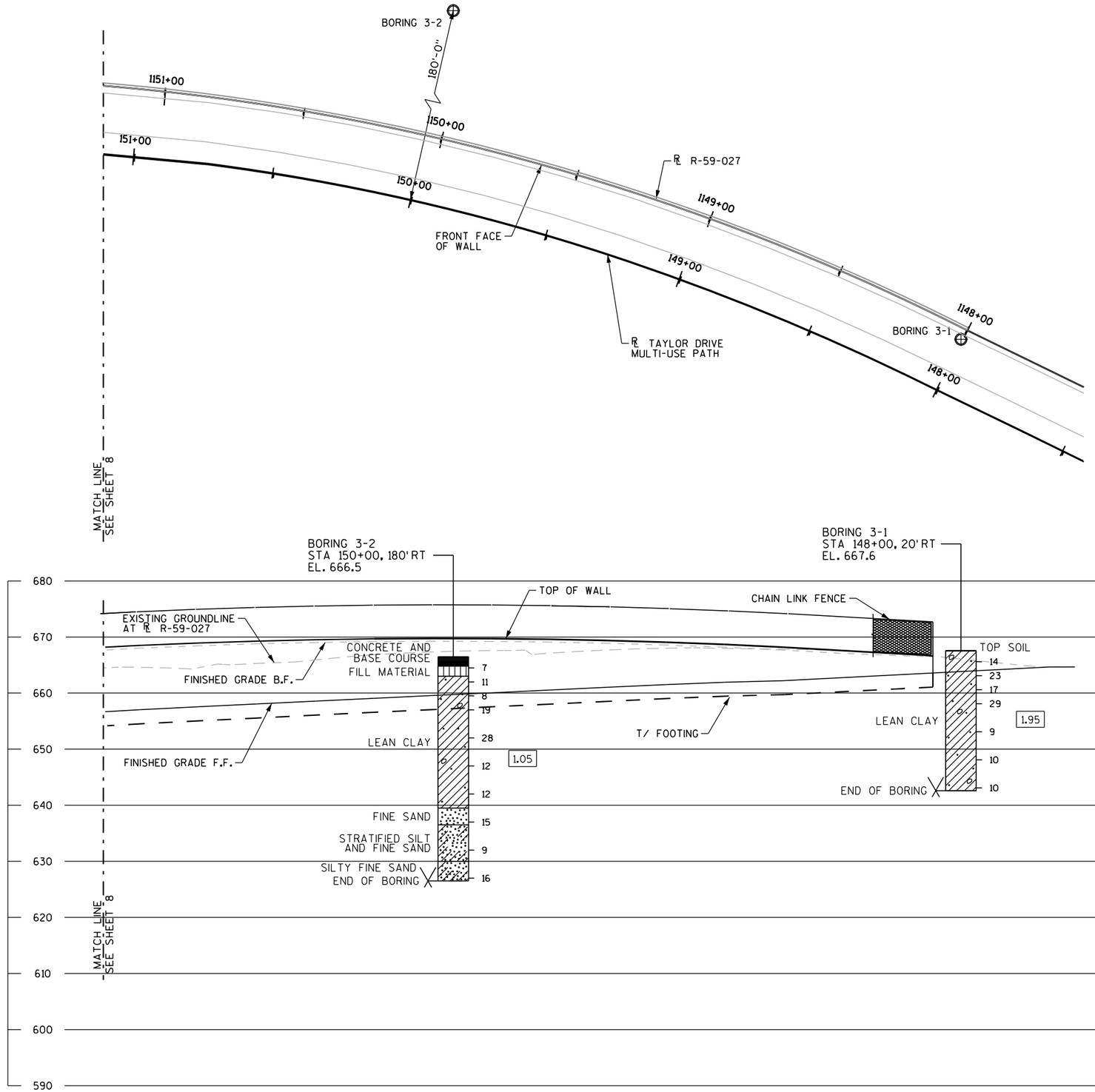
SUBSURFACE EXPLORATION II

SHEET 8 OF 25

271

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Z

BORINGS PERFORMED BY:
SOILS & ENGINEERING SERVICES, INC.
MADISON, WISCONSIN
JULY 23, 2010
AUGUST 9-10, 2010

PLANS PREPARED BY DONOHUE & ASSOCIATES, INC.

STATE PROJECT NUMBER

4996-01-58

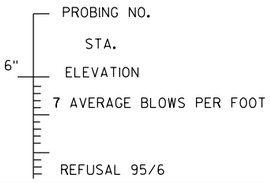
ABBREVIATIONS

F — FINE M — MEDIUM C — COARSE
WS — WEATHERED SO — SOUND

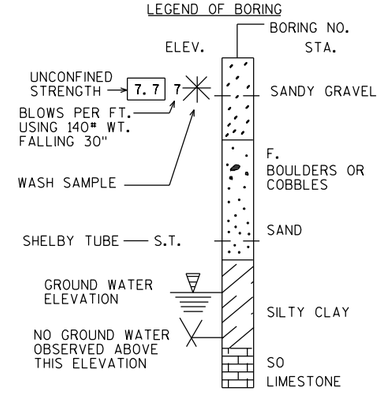
MATERIAL SYMBOLS

TOPSOIL, SILT, SANDSTONE
SAND, PEAT, LIMESTONE
GRAVEL, CLAY, IGNEOUS ROCK

LEGEND OF PROBING



LEGEND OF BORING



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LEGEND

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B.F. = BACK FACE

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-59-27

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SUBSURFACE EXPLORATION III

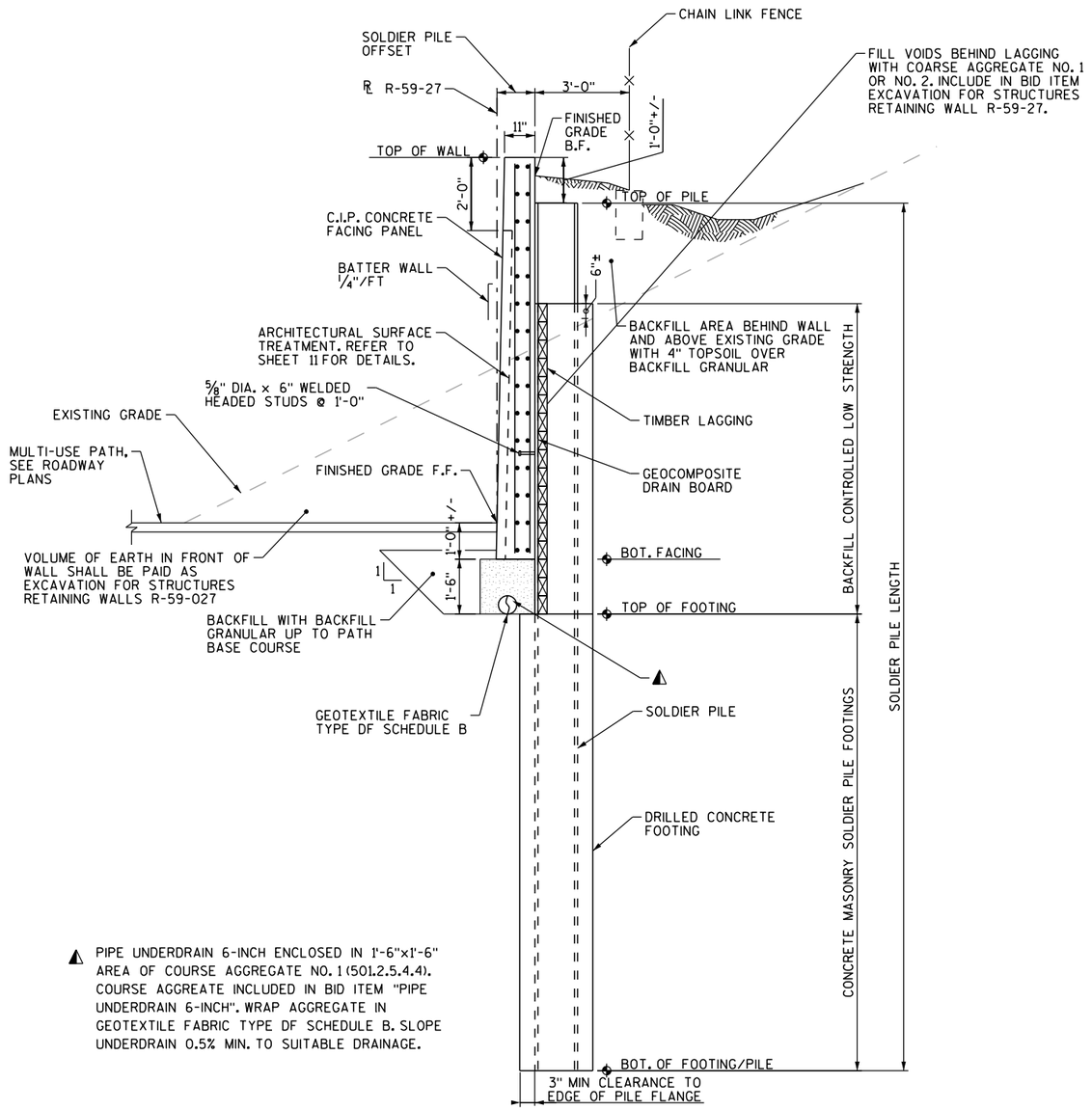
SHEET 9 OF 25

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FILE NAME : L:\Projects\11744\Dwg\structures\R-59-0027\08_09subsurface_3.DGN PLOT DATE : 08/28/14 PLOT TIME : 6:53:52 AM PLOT BY : kgahagan



⚠ PIPE UNDERDRAIN 6-INCH ENCLOSED IN 1'-6"x1'-6" AREA OF COURSE AGGREGATE NO. 1 (501.2.5.4.4). COURSE AGGREATE INCLUDED IN BID ITEM "PIPE UNDERDRAIN 6-INCH". WRAP AGGREGATE IN GEOTEXTILE FABRIC TYPE DF SCHEDULE B. SLOPE UNDERDRAIN 0.5% MIN. TO SUITABLE DRAINAGE.

CROSS SECTION THROUGH WALL

DESIGN DATA

LIVE LOAD SURCHARGE ——— 100 PSF

ULTIMATE DESIGN STRESSES:

CONCRETE MASONRY, SOLDIER PILE FOOTINGS	f'c = 3,500 psi
CONCRETE MASONRY, FACING PANELS	f'c = 4,000 psi
BACKFILL LEAN-MIX CONCRETE	f'c = 100 TO 200 psi
HIGH STRENGTH BAR STEEL REINFORCEMENT	fy = 60,000 psi
HIGH STRENGTH STRUCTURAL STEEL (ASTM A709, GRADE 50)	fy = 50,000 psi
TIMBER LAGGING	Fb = 1200 psi E = 1,500,000 psi

DESIGN SOIL PROPERTIES

BACKSLOPE ANGLE	21.8°
ACTIVE PRESSURE COEFFICIENT Ka	0.436
DENSITY	136 PCF
ANGLE OF INTERNAL FRICTION	30°

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2" CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

THE EXISTING GROUND LINE SHALL BE USED AS THE UPPER LIMITS OF EXCAVATION FOR STRUCTURES RETAINING WALLS (R-59-027).

ALL STATIONS AND ALL ELEVATIONS ARE IN FEET.

ALL STATIONS ARE ALONG THE R/L FOR R-59-027. THE R/L FOR R-59-027 IS ALONG THE FRONT FACE OF WALL.

EXCAVATE SOIL IN FRONT OF THE WALL IN SUFFICIENTLY SMALL LIFTS. SMOOTH SOIL FACE TO CREATE A CONTACT SURFACE FOR LAGGING. INSTALL LAGGING FROM THE TOP DOWN ON THE BACK OF THE FRONT FLANGE OF THE SOLDIER PILES IMMEDIATELY AFTER EXCAVATION TO PREVENT EROSION OF THE SOIL.

SHIM LAGGING 3/4" TO ALLOW DRAINAGE BETWEEN BOARDS. EXTEND LAGGING TO THE TOP OF THE SOLIDER PILE FOOTING.

PLACEMENT OF SOLDIER PILES SHALL NOT VARY MORE THAN 1 INCH FROM THE HORIZONTAL PLAN LOCATION.

FILL ALL VOIDS AROUND THE SOLDIER PILES ABOVE THE SOLDIER PILE FOOTING WITH BACKFILL LEAN-MIX CONCRETE.

TOTAL ESTIMATED QUANTITIES-CAT 0020

ITEM NO.	BID ITEMS	UNIT	TOTALS
206.3000	EXCAVATION FOR STRUCTURES RETAINING WALLS (R-59-27)	LS	1
209.0200.S	BACKFILL CONTROLLED LOW STRENGTH	CY	960
210.0100	BACKFILL GRANULAR	CY	350
504.0500	CONCRETE MASONRY RETAINING WALLS	CY	485
505.0615	BAR STEEL REINFORCEMENT HS COATED RETAINING WALLS	LB	43310
506.0605	STRUCTURAL STEEL HS	LB	456234
612.0106	PIPE UNDERDRAIN 6-INCH	LF	1125
645.0112	GEOTEXTILE FABRIC TYPE DF SCHEDULE B	SY	750
SPV.0035.01	CONCRETE MASONRY SOLDIER PILE FOOTINGS	CY	885
SPV.0060.11	WELDED STUD SHEAR CONNECTORS 5/8x6-INCH	EACH	1665
SPV.0090.03	FOUNDATION DRILLING	LF	4840
SPV.0090.01	FENCE CHAIN LINK POLYMER COATED 6-FT	LF	1082
SPV.0105.10	STAINING CONCRETE STRUCTURE R-59-27	LS	1
SPV.0110.01	TIMBER LAGGING	MBM	35.04
SPV.0165.01	ANTI-GRAFFITI COATING (R-59-27)	SF	13150
SPV.0180.01	ARCHITECTURAL SURFACE TREATMENT (R-59-27)	SY	1171
SPV.0180.02	GEOCOMPOSITE DRAIN BOARD	SY	116

NO.	DATE	REVISION	BY

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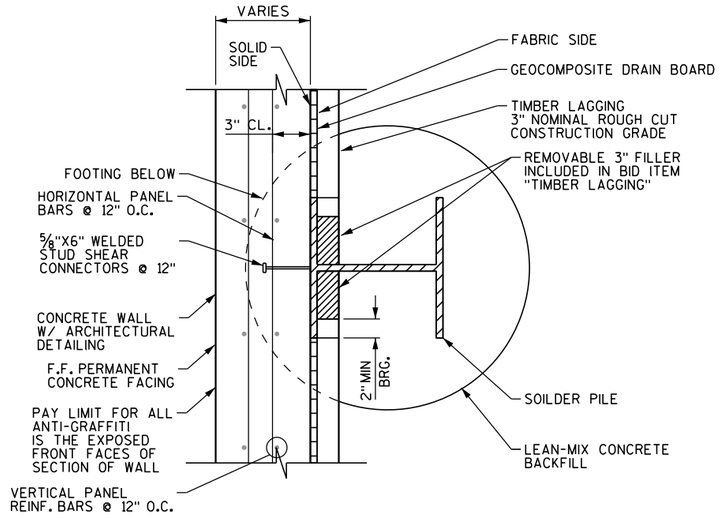
STRUCTURE R-59-27

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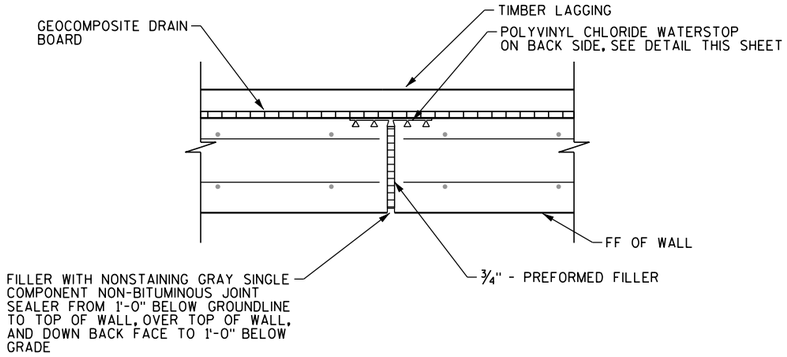
SECTION, NOTES & QUANTITIES

STATE PROJECT NUMBER

4996-01-58

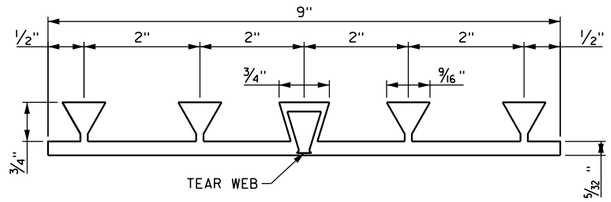


POST CONNECTION DETAIL



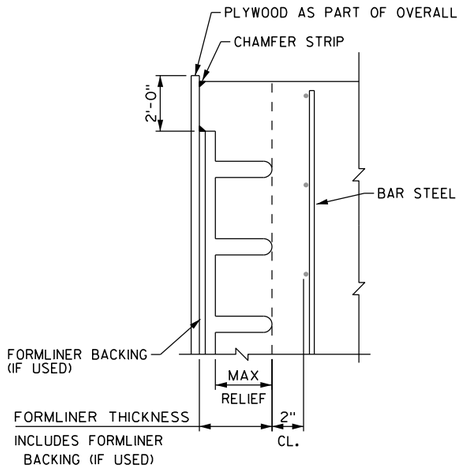
VERTICAL EXPANSION JOINT

DO NOT RUN BAR STEEL THRU JOINT

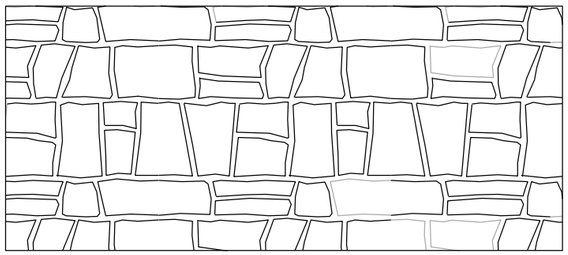


POLYVINYL CHLORIDE WATERSTOP

POLYVINYL CHLORIDE WATERSTOP IS INCIDENTAL TO BID ITEM "CONCRETE MASONRY RETAINING WALLS"



SECTION THRU FORMLINER



RUSTIC ASHLAR

FORMLINER THICKNESS = 3"
SIZE = 8" TO 32"
RELIEF = 2"
COLOR = GREY LANINSTONE W/ ANTI-GRAFFITICOAT

8

8

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DEPARTMENT OF TRANSPORTATION

STRUCTURE R-59-27

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WALL DETAILS

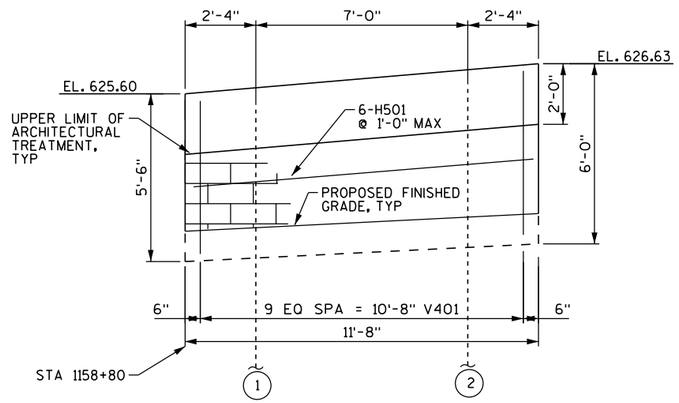
SHEET 11 OF 25

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FILE NAME : L:\Projects\11744\Dwg\structures\R-59-0027\08_11 plan and details.DGN PLOT DATE : 01/07/14 PLOT TIME : 9:36:19 AM PLOT BY : dnevers

STATE PROJECT NUMBER

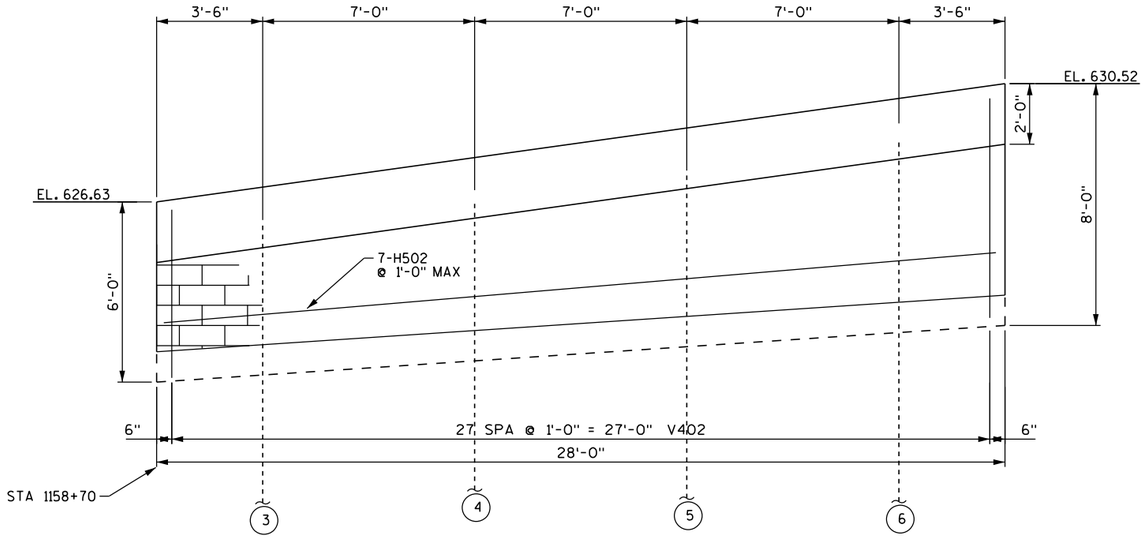
4996-01-58



NOTE: PANEL IS ON AN ANGLE, SEE SHEET 1

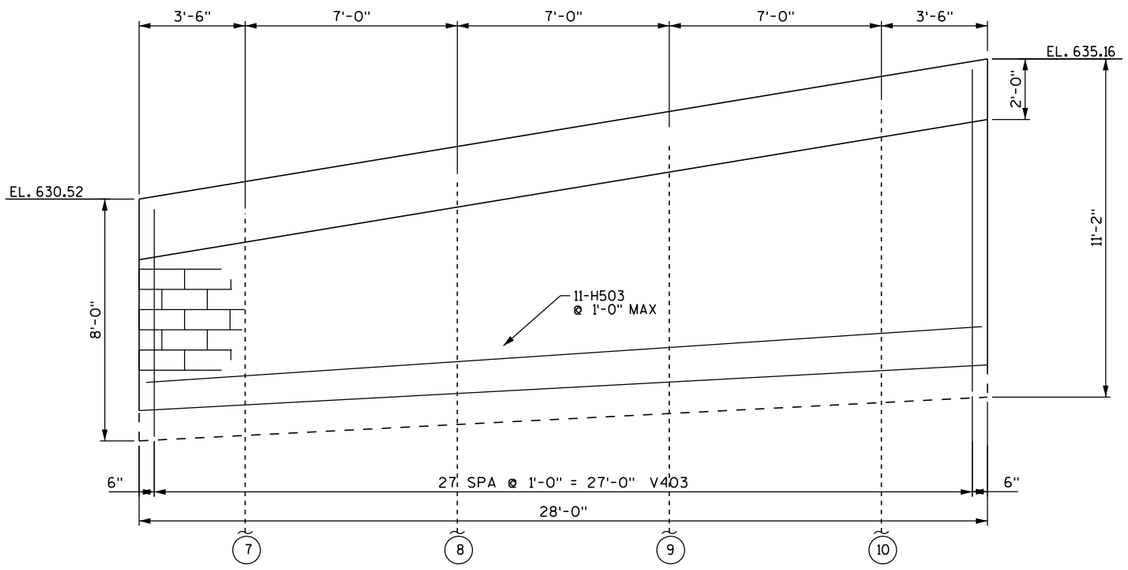
ELEVATION PANEL 1

(REINF. SHOWN TYPICAL OF EACH FACE)



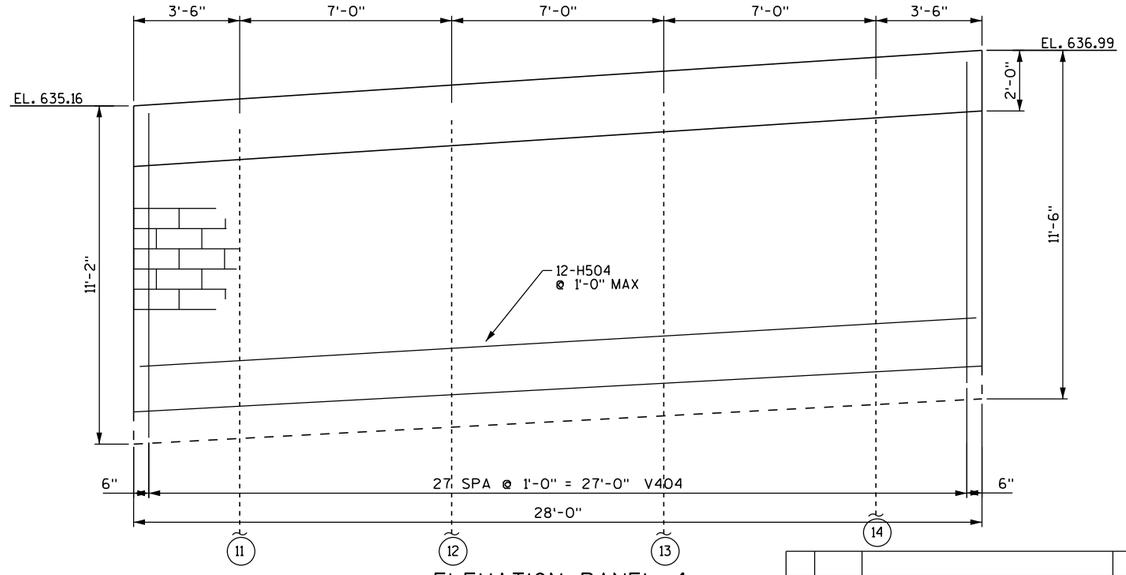
ELEVATION PANEL 2

(REINF. SHOWN TYPICAL OF EACH FACE)



ELEVATION PANEL 3

(REINF. SHOWN TYPICAL OF EACH FACE)



ELEVATION PANEL 4

(REINF. SHOWN TYPICAL OF EACH FACE)

LEGEND

(#) = PILE NUMBER

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-59-27

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PANEL DETAILS 1 THRU 4

SHEET 12 OF 25

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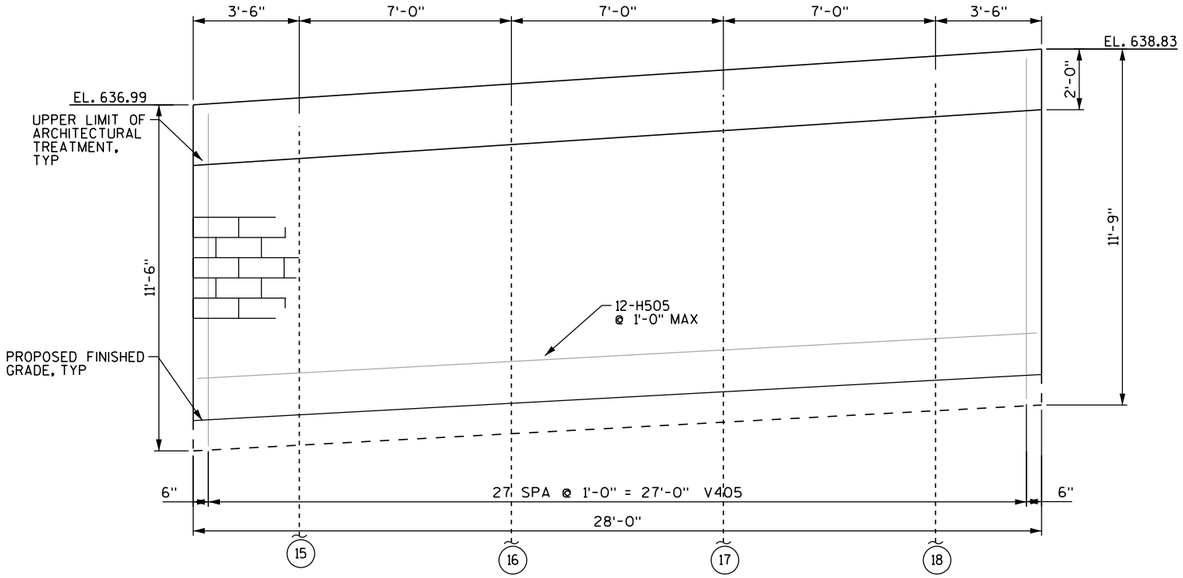
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8

FILE NAME : L:\Projects\11744\Dwg\structures\R-59-0027\08_12Panel Details_1.DGN PLOT DATE : 12/22/14 PLOT TIME : 3:11:30 PM PLOT BY : kgahagan

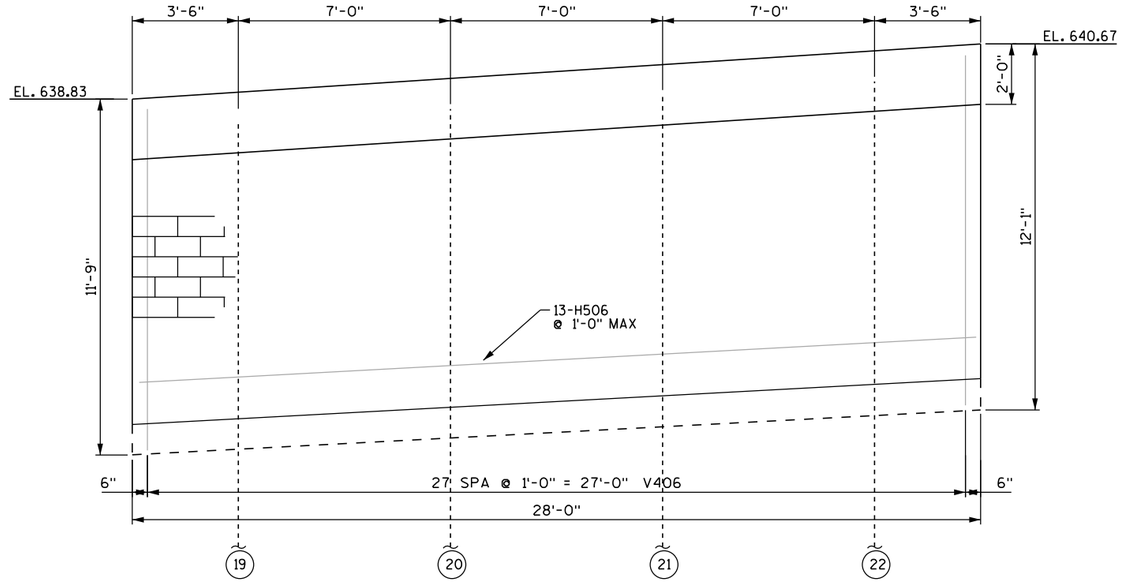
STATE PROJECT NUMBER

4996-01-58



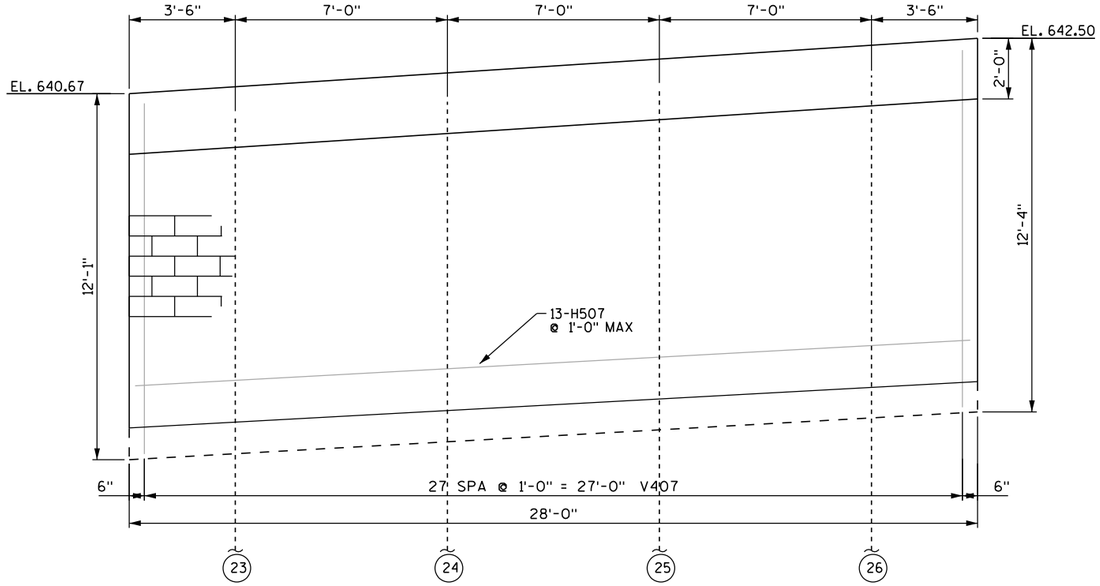
ELEVATION PANEL 5

(REINF. SHOWN TYPICAL OF EACH FACE)



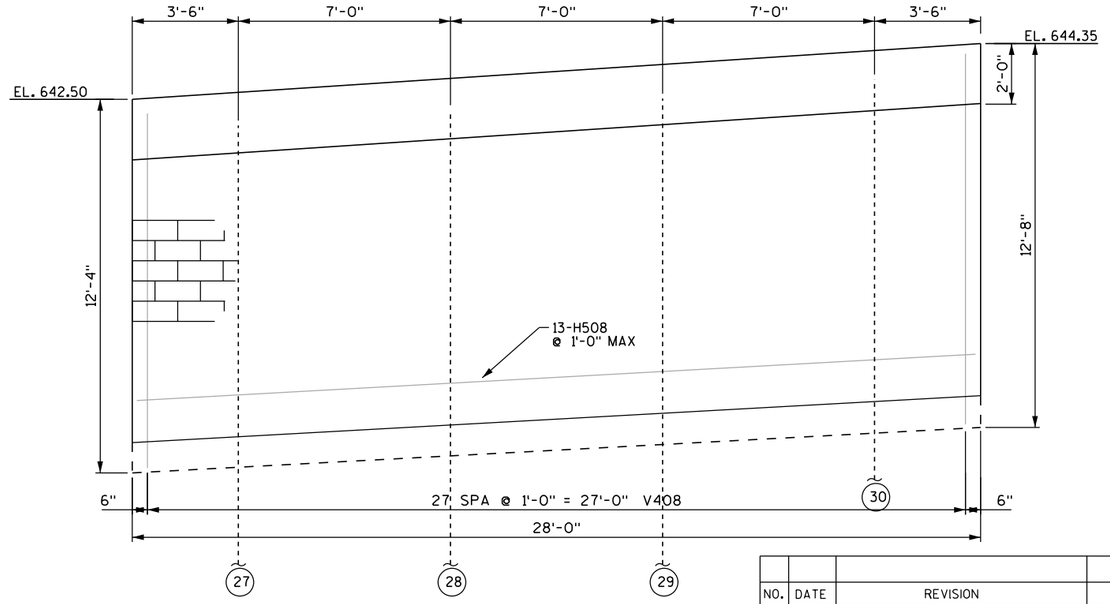
ELEVATION PANEL 6

(REINF. SHOWN TYPICAL OF EACH FACE)



ELEVATION PANEL 7

(REINF. SHOWN TYPICAL OF EACH FACE)



ELEVATION PANEL 8

(REINF. SHOWN TYPICAL OF EACH FACE)

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STRUCTURE R-59-27

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PANEL DETAILS 5 THRU 8

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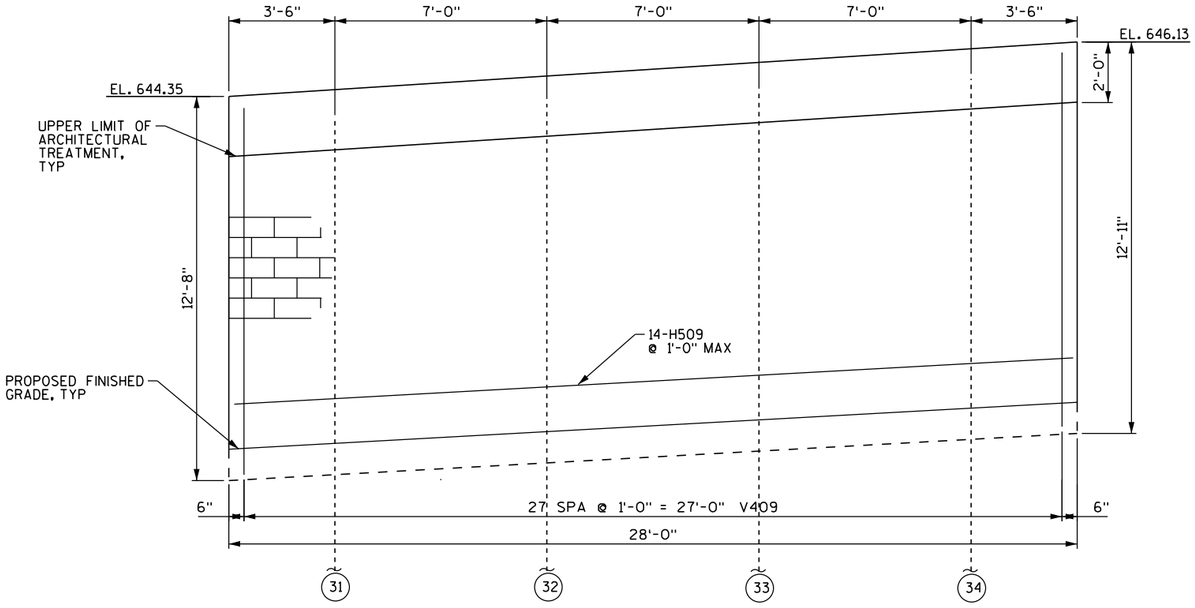
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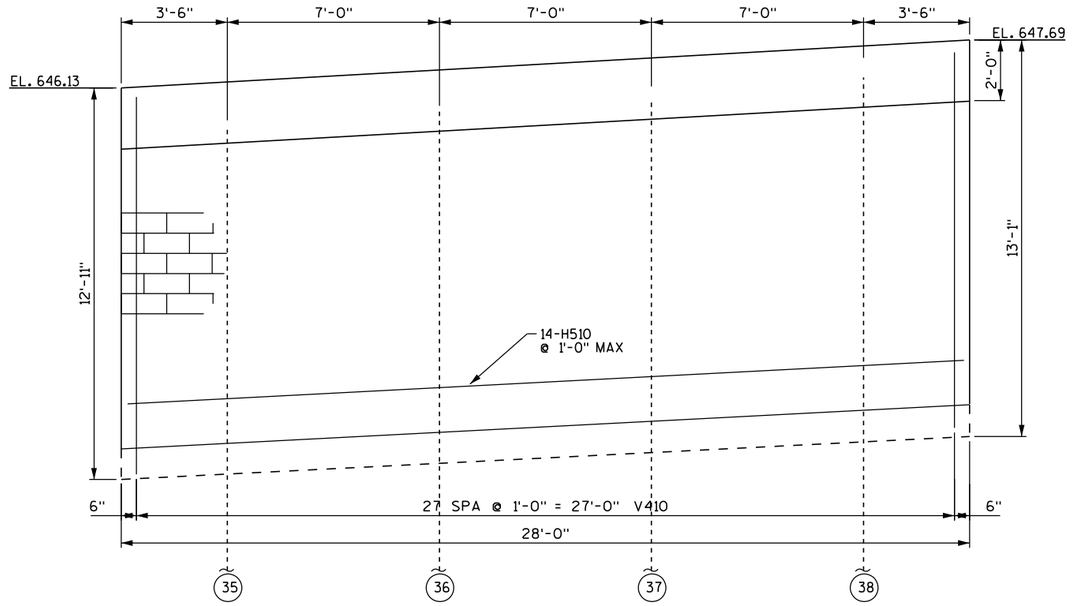
STATE PROJECT NUMBER

4996-01-58



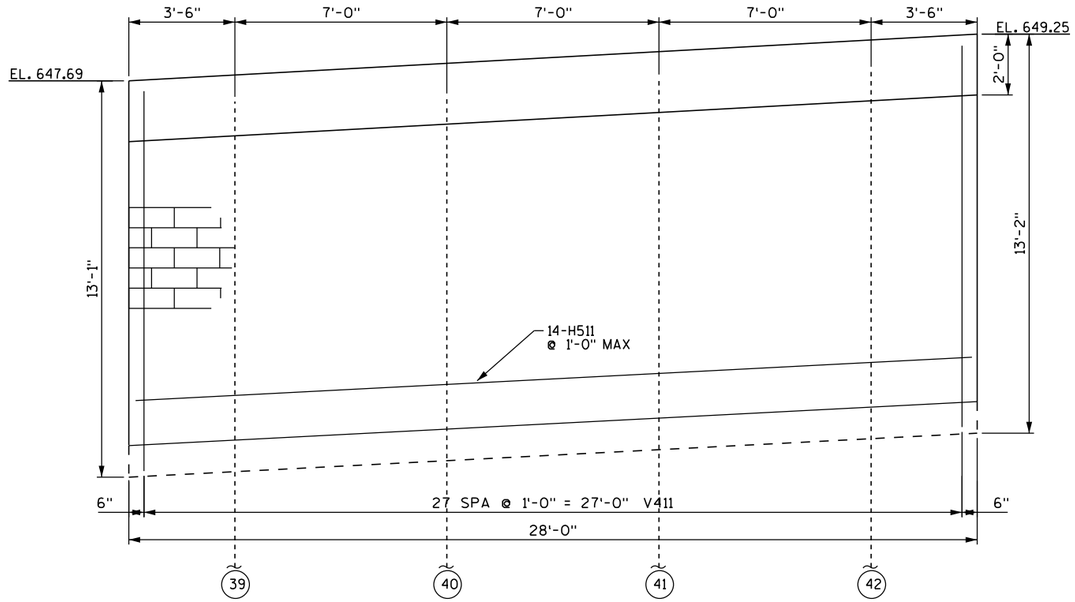
ELEVATION PANEL 9

(REINF. SHOWN TYPICAL OF EACH FACE)



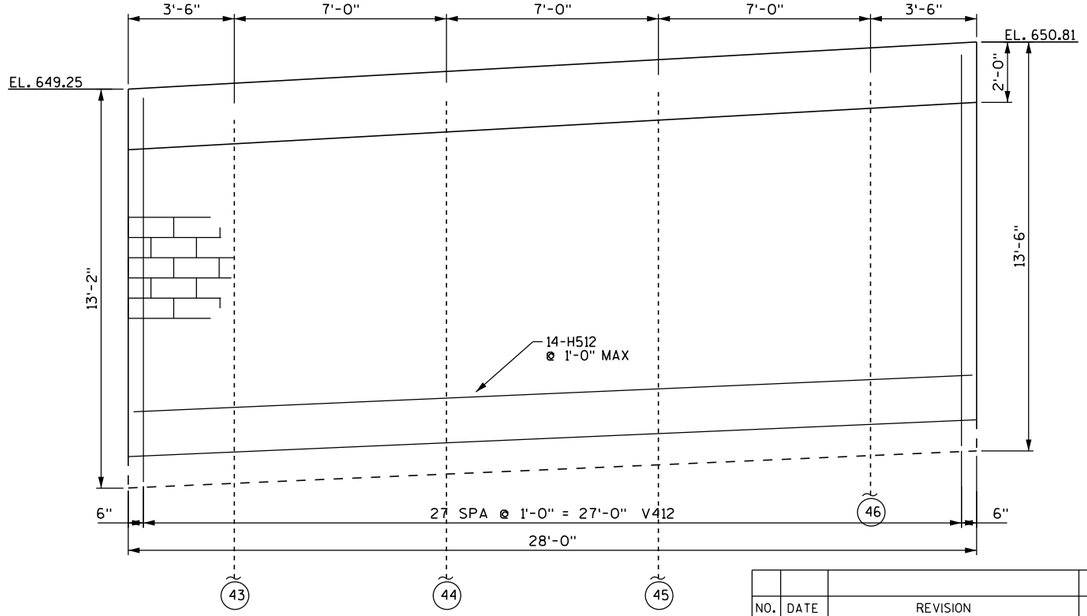
ELEVATION PANEL 10

(REINF. SHOWN TYPICAL OF EACH FACE)



ELEVATION PANEL 11

(REINF. SHOWN TYPICAL OF EACH FACE)



ELEVATION PANEL 12

(REINF. SHOWN TYPICAL OF EACH FACE)

NO.	DATE	REVISION	BY

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STRUCTURE R-59-27

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PANEL DETAILS 9 THRU 12

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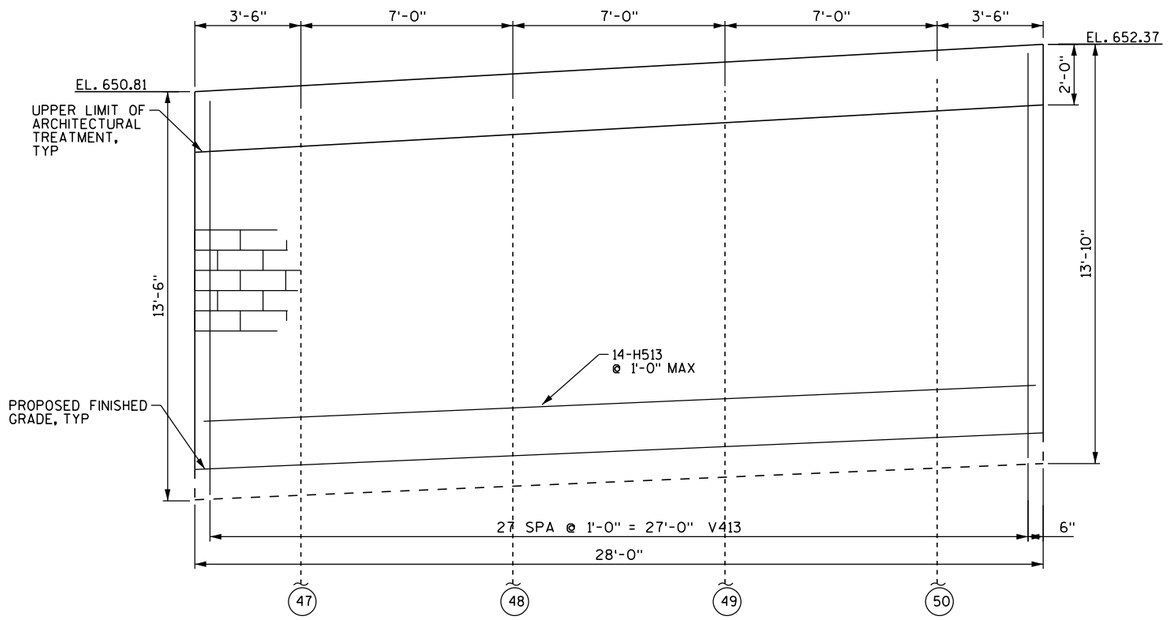
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8

FILE NAME : L:\Projects\11744\Dwg\structures\R-59-0027\08_14Panel Details_3.DGN PLOT DATE : 01/07/14 PLOT TIME : 9:30:26 AM PLOT BY : dnevers

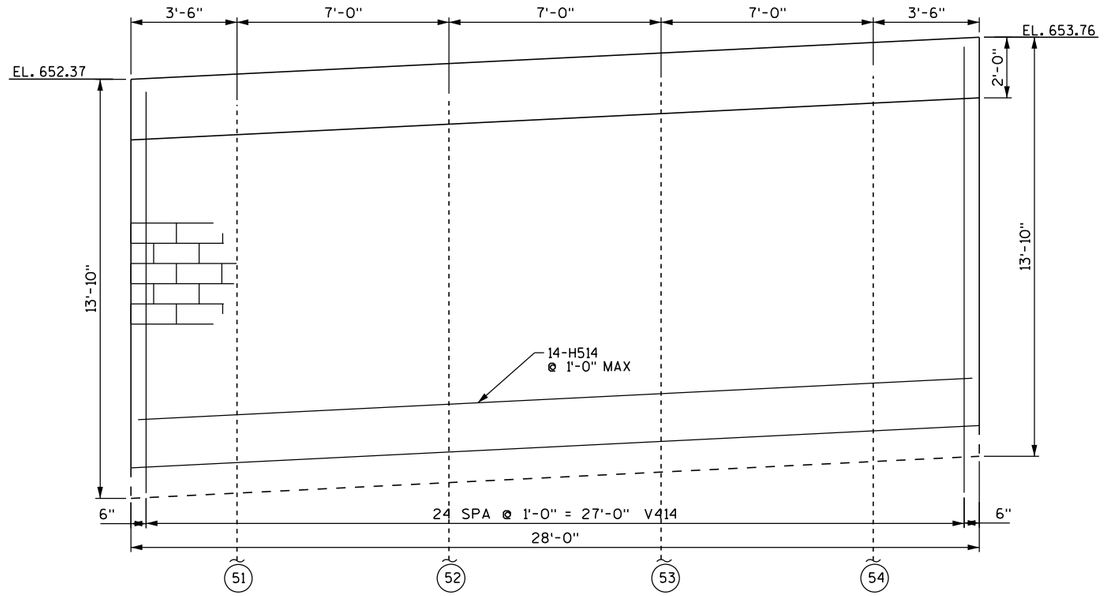
STATE PROJECT NUMBER

4996-01-58



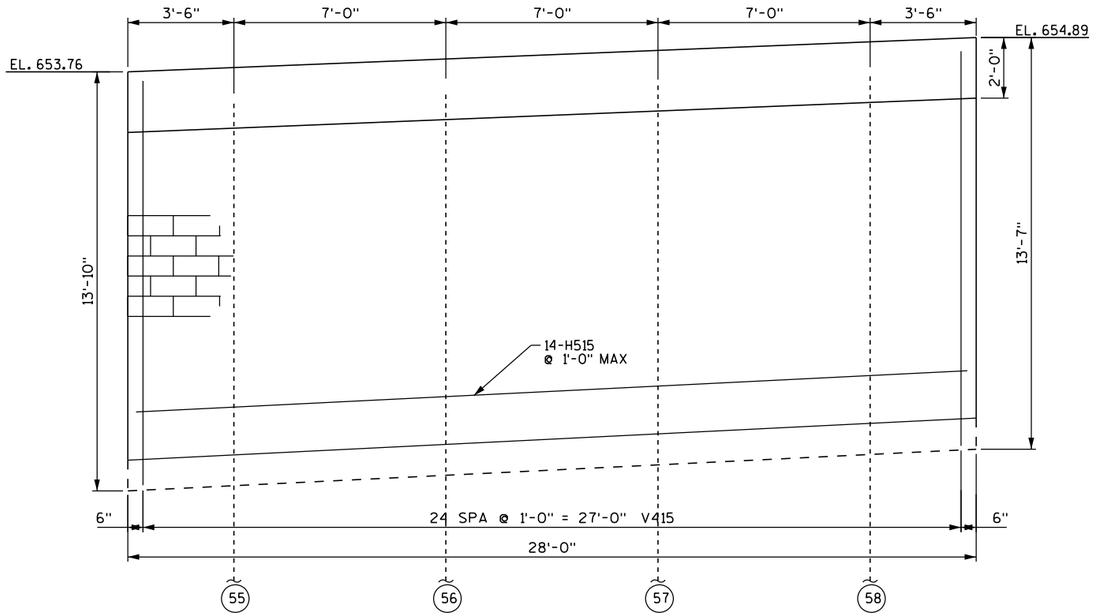
ELEVATION PANEL 13

(REINF. SHOWN TYPICAL OF EACH FACE)



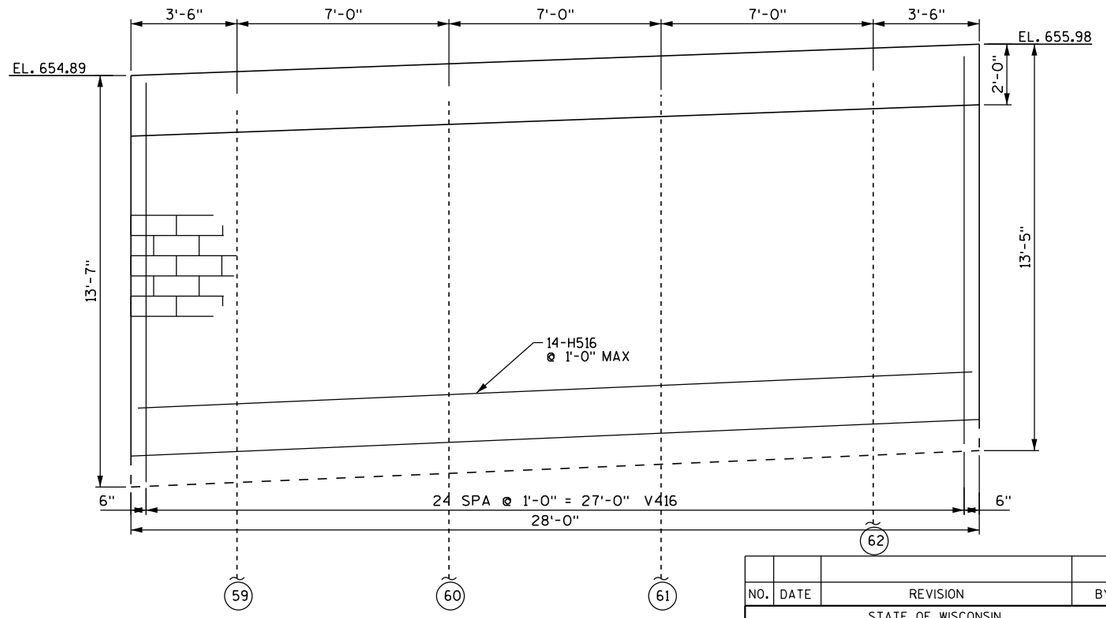
ELEVATION PANEL 14

(REINF. SHOWN TYPICAL OF EACH FACE)



ELEVATION PANEL 15

(REINF. SHOWN TYPICAL OF EACH FACE)



ELEVATION PANEL 16

(REINF. SHOWN TYPICAL OF EACH FACE)

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
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STRUCTURE R-59-27

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PANEL DETAILS 13 THRU 16

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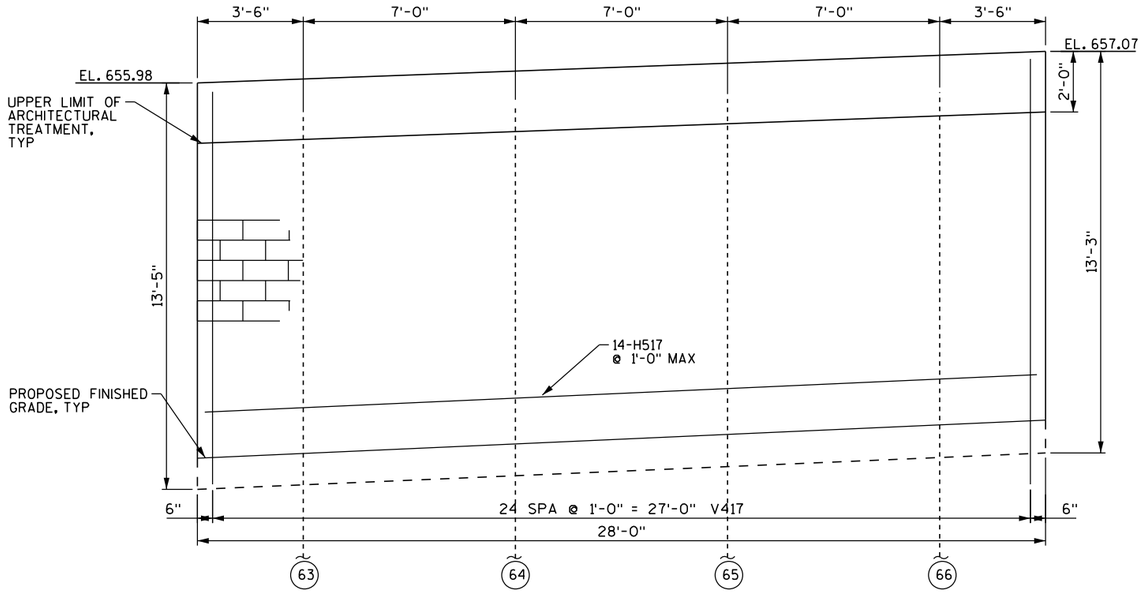
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8

FILE NAME : L:\Projects\11744\Dwg\structures\R-59-0027\08_15Panel Details_4.DGN PLOT DATE : 01/07/14 PLOT TIME : 9:30:56 AM PLOT BY : dnevers

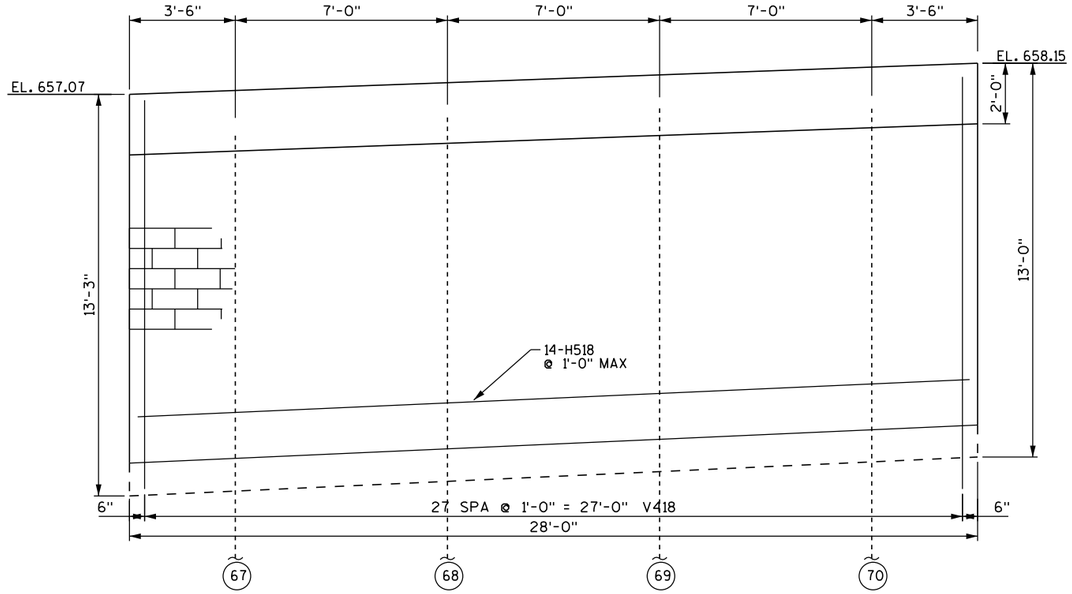
STATE PROJECT NUMBER

4996-01-58



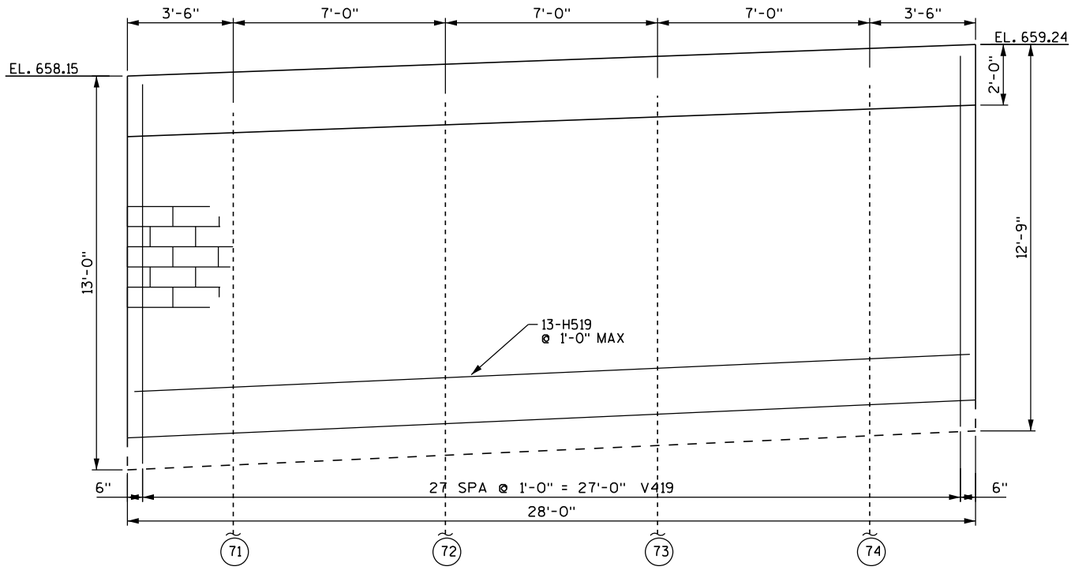
ELEVATION PANEL 17

(REINF. SHOWN TYPICAL OF EACH FACE)



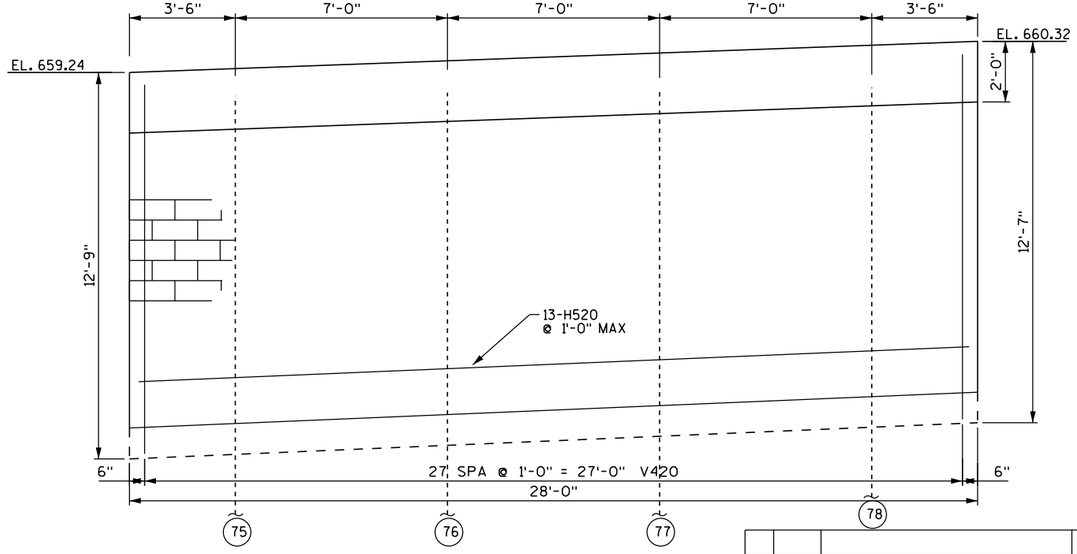
ELEVATION PANEL 18

(REINF. SHOWN TYPICAL OF EACH FACE)



ELEVATION PANEL 19

(REINF. SHOWN TYPICAL OF EACH FACE)



ELEVATION PANEL 20

(REINF. SHOWN TYPICAL OF EACH FACE)

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
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STRUCTURE R-59-27

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PANEL DETAILS 17 THRU 20

SHEET 16 OF 25

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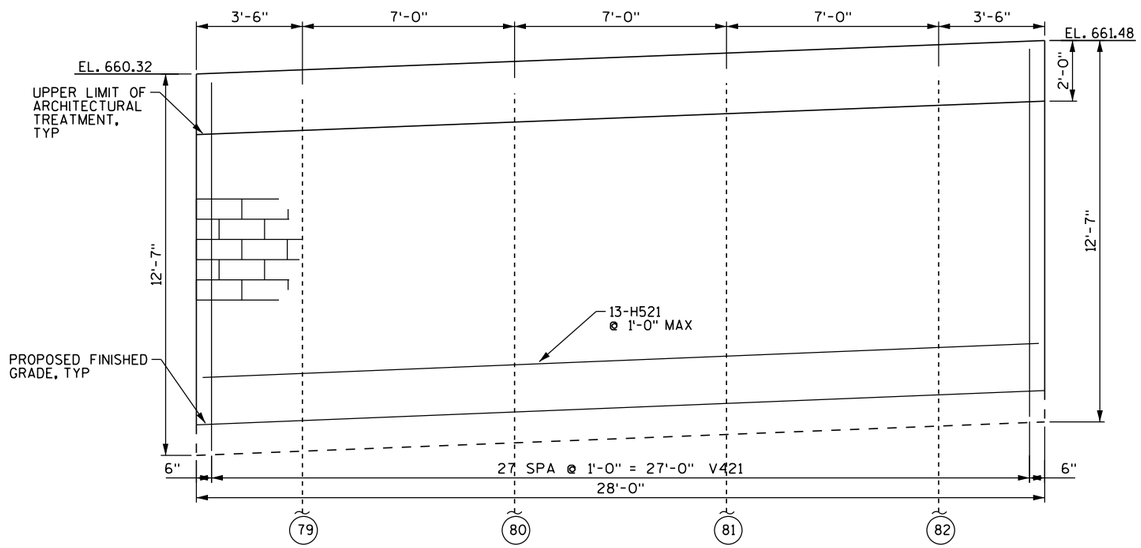
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FILE NAME : L:\Projects\11744\Dwg\structures\R-59-0027\08_16Panel Details_5.DGN PLOT DATE : 01/07/14 PLOT TIME : 9:31:19 AM PLOT BY : dnevers

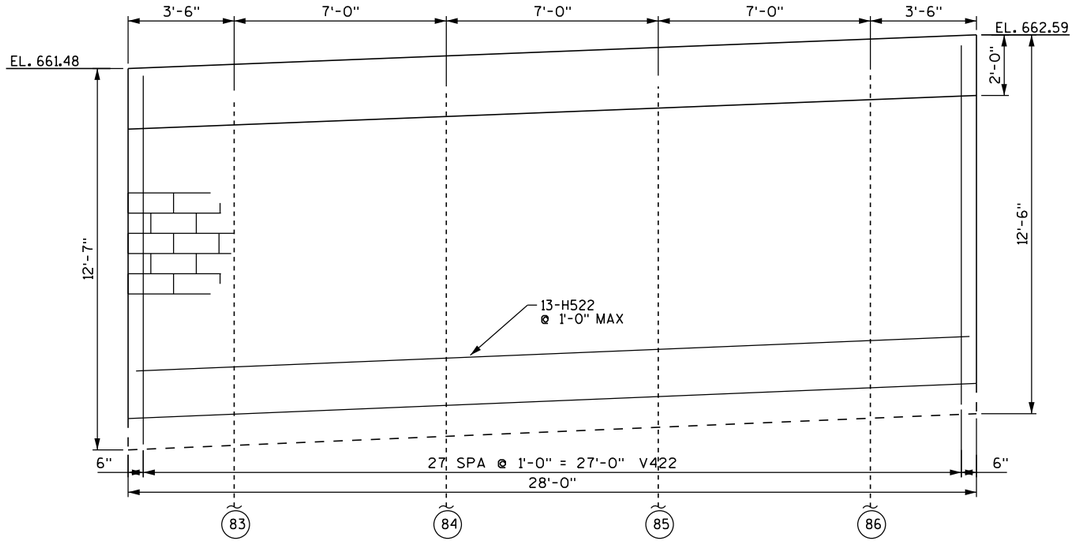
STATE PROJECT NUMBER

4996-01-58



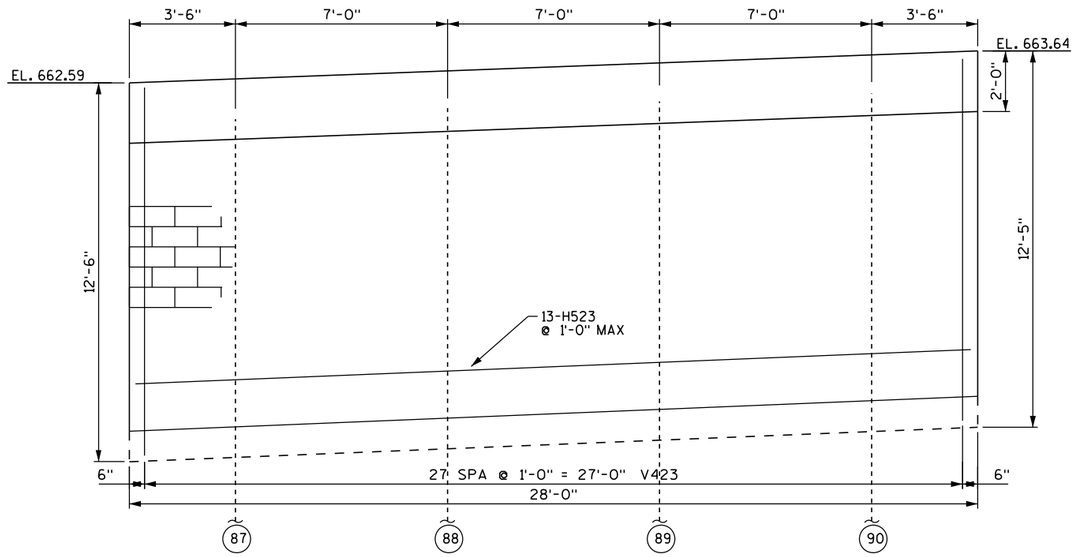
ELEVATION PANEL 21

(REINF. SHOWN TYPICAL OF EACH FACE)



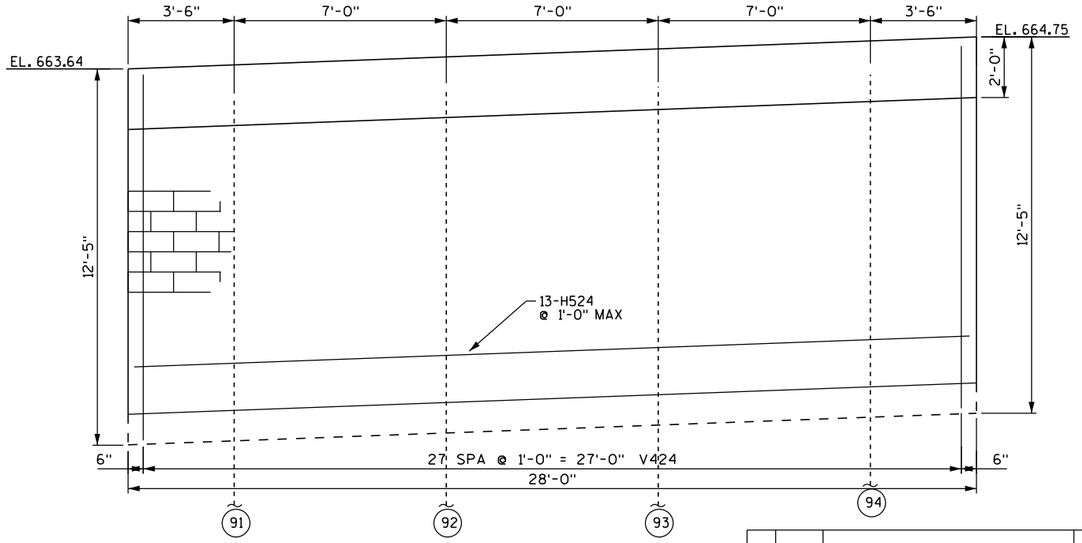
ELEVATION PANEL 22

(REINF. SHOWN TYPICAL OF EACH FACE)



ELEVATION PANEL 23

(REINF. SHOWN TYPICAL OF EACH FACE)



ELEVATION PANEL 24

(REINF. SHOWN TYPICAL OF EACH FACE)

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-59-27

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PANEL DETAILS 21 THRU 24

SHEET 17 OF 25

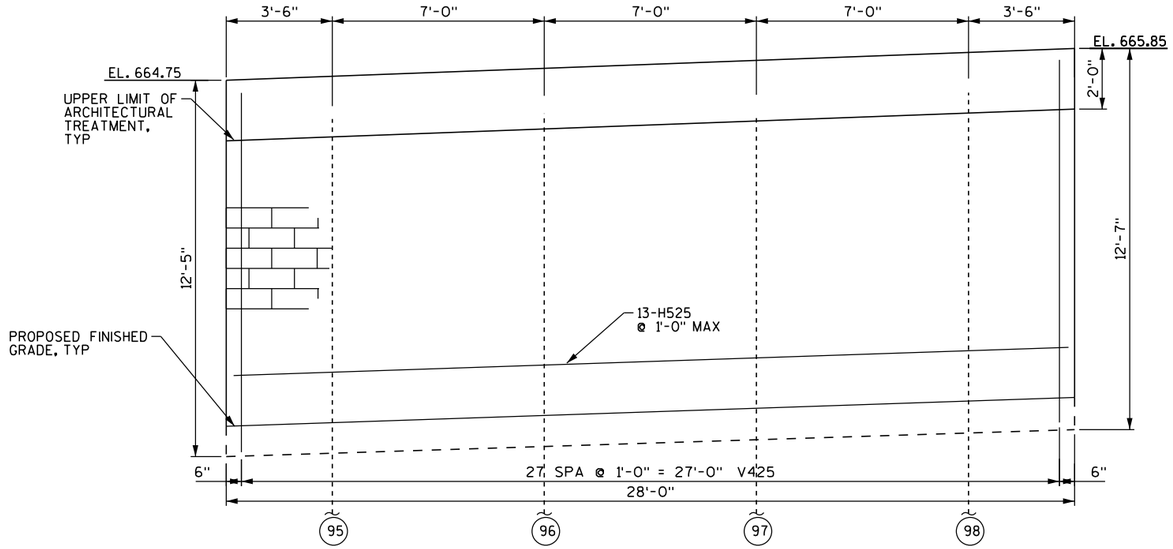
280

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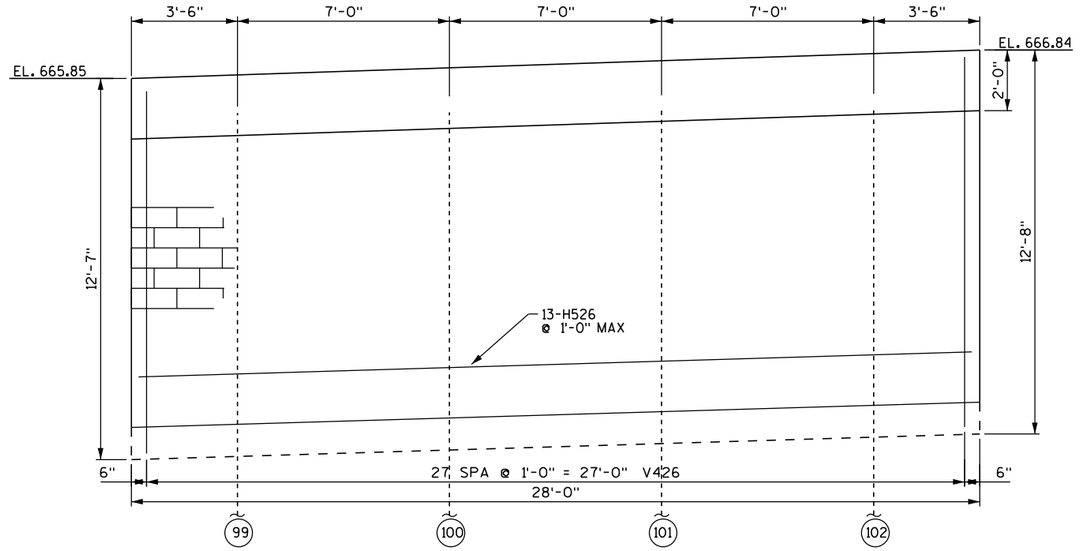
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STATE PROJECT NUMBER
4996-01-58



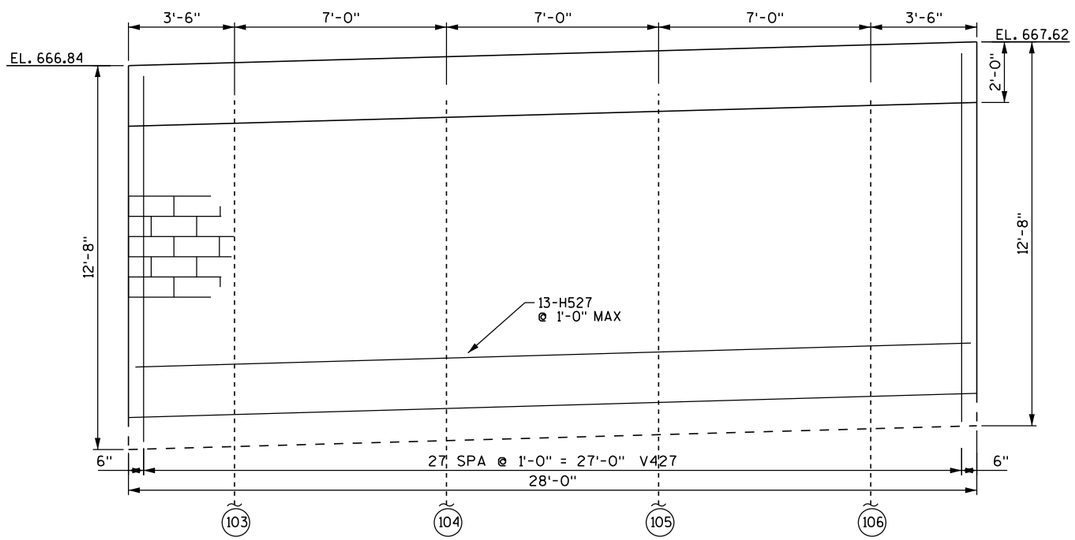
ELEVATION PANEL 25

(REINF. SHOWN TYPICAL OF EACH FACE)



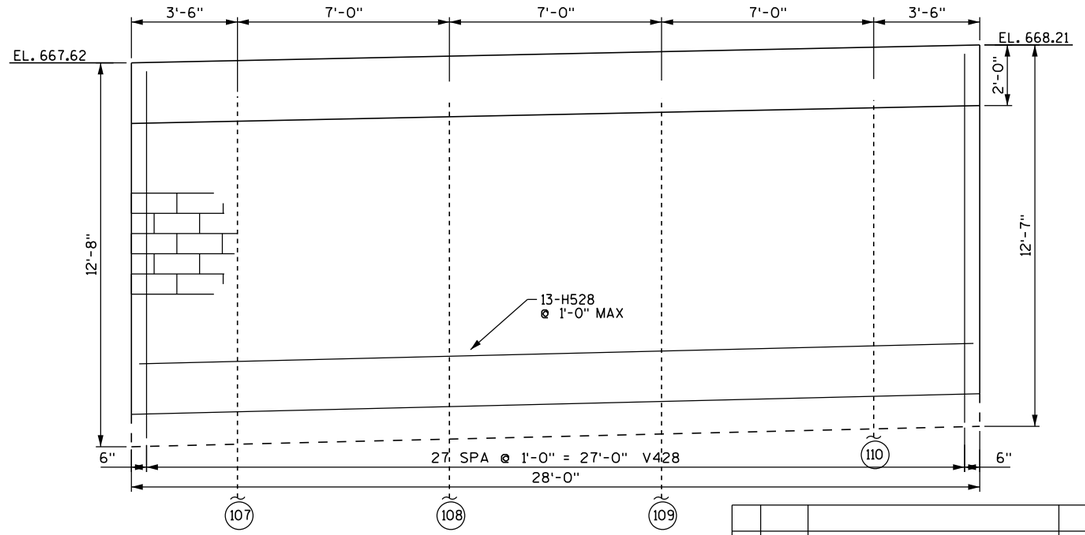
ELEVATION PANEL 26

(REINF. SHOWN TYPICAL OF EACH FACE)



ELEVATION PANEL 27

(REINF. SHOWN TYPICAL OF EACH FACE)



ELEVATION PANEL 28

(REINF. SHOWN TYPICAL OF EACH FACE)

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-59-27

DRAWN BY DJN | PLANS CK'D. PJE

PANEL DETAILS 25 THRU 28

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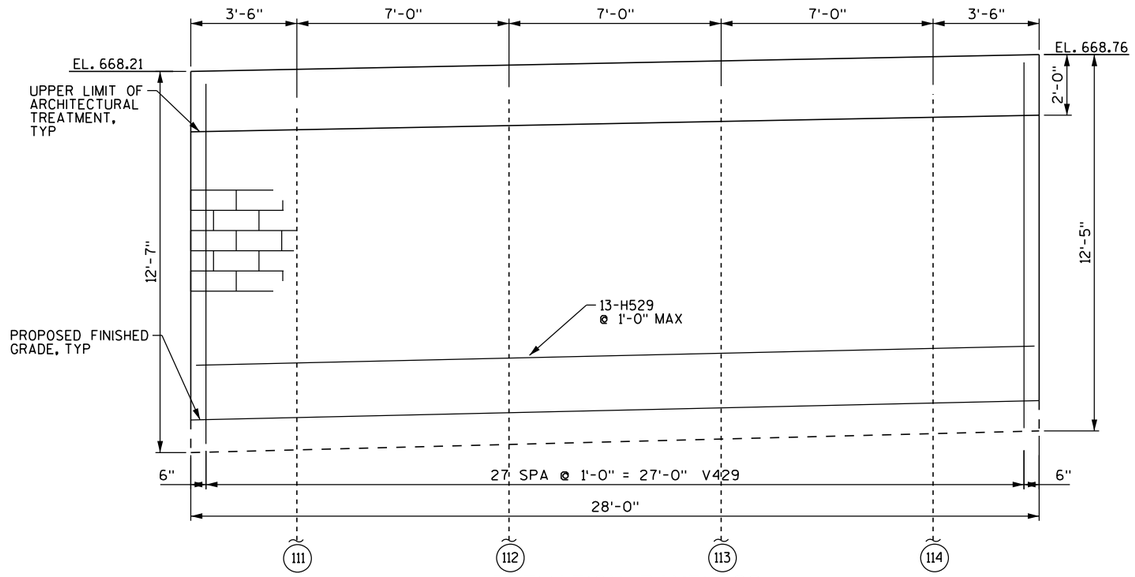
8

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FILE NAME : L:\Projects\11744\Dwg\structures\R-59-0027\08_18Panel Details_7.DGN PLOT DATE : 08/27/14 PLOT TIME : 12:39:23 PM PLOT BY : kgahagan

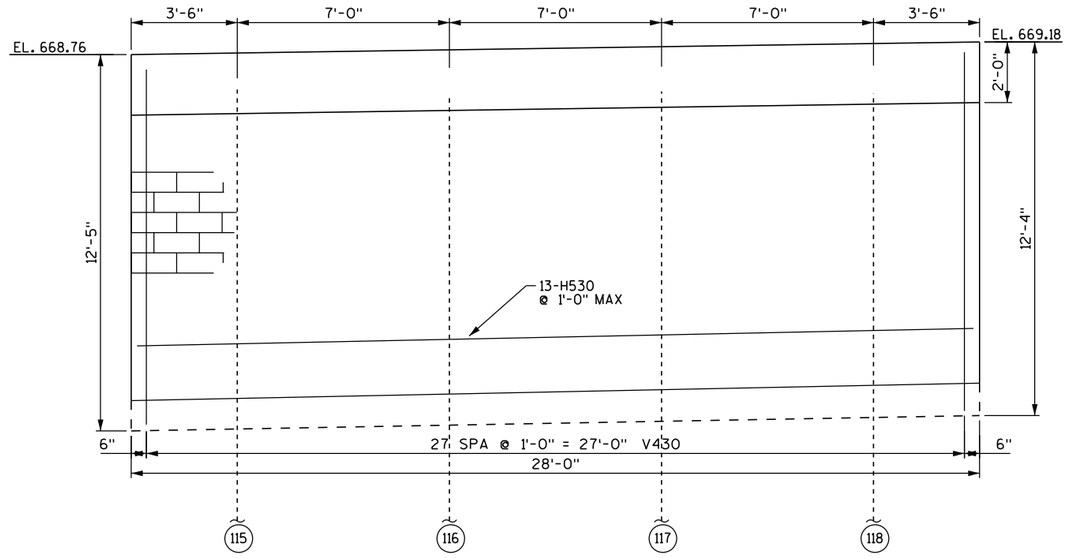
STATE PROJECT NUMBER

4996-01-58



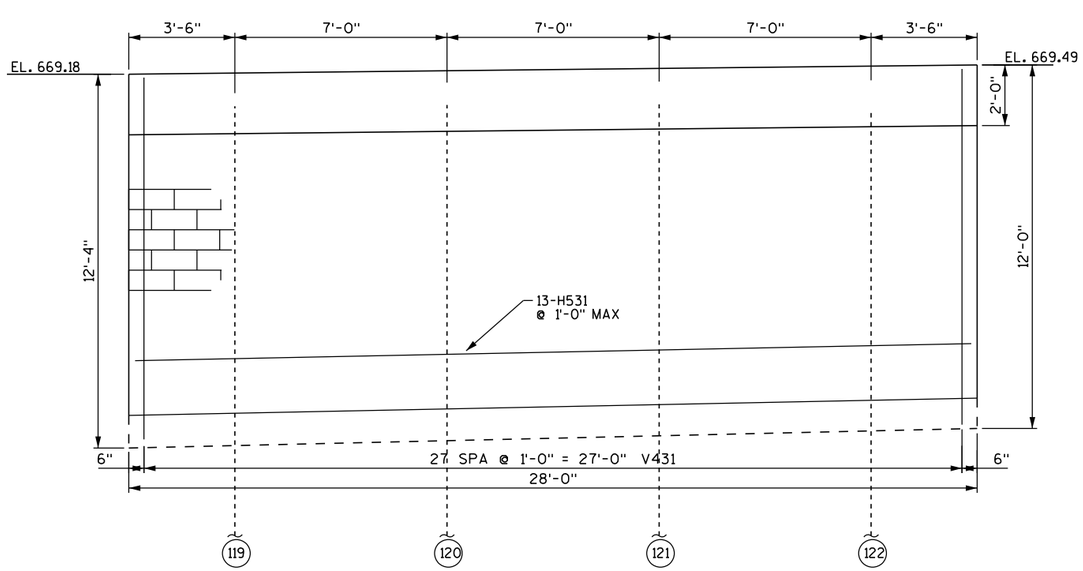
ELEVATION PANEL 29

(REINF. SHOWN TYPICAL OF EACH FACE)



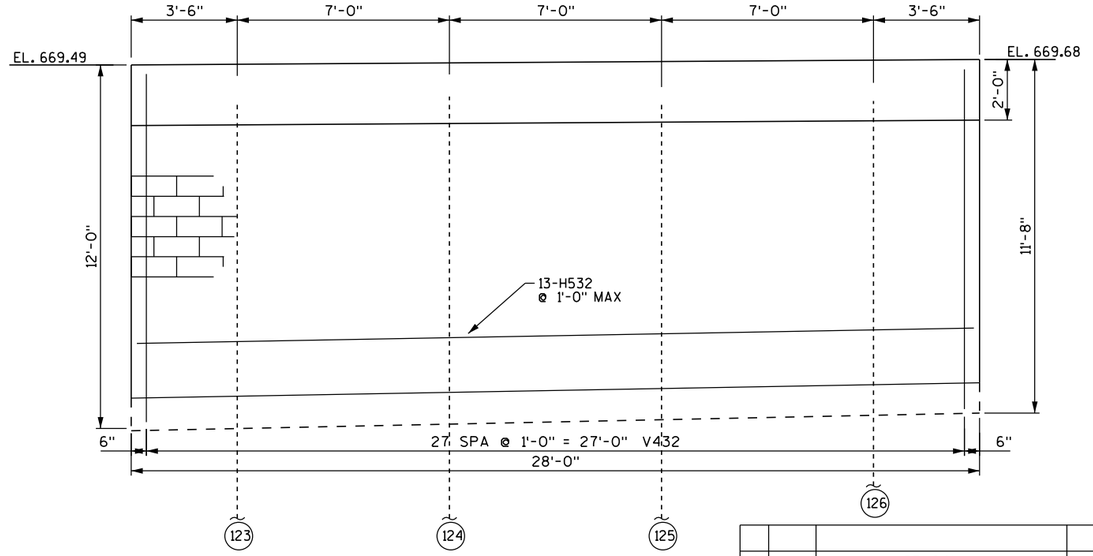
ELEVATION PANEL 30

(REINF. SHOWN TYPICAL OF EACH FACE)



ELEVATION PANEL 31

(REINF. SHOWN TYPICAL OF EACH FACE)



ELEVATION PANEL 32

(REINF. SHOWN TYPICAL OF EACH FACE)

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DEPARTMENT OF TRANSPORTATION

STRUCTURE R-59-27

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PANEL DETAILS 29 THRU 32

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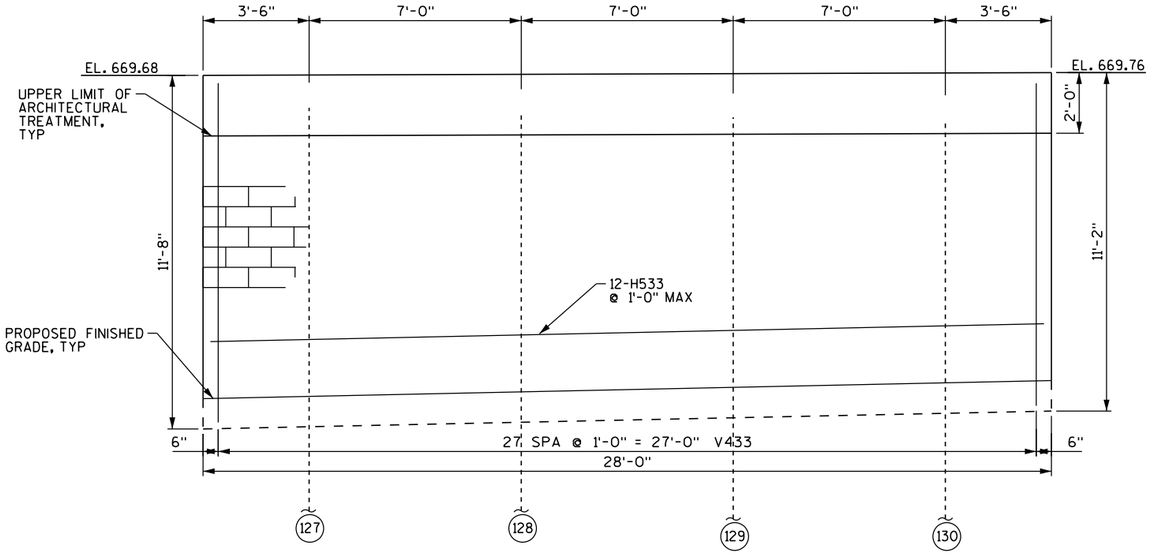
282

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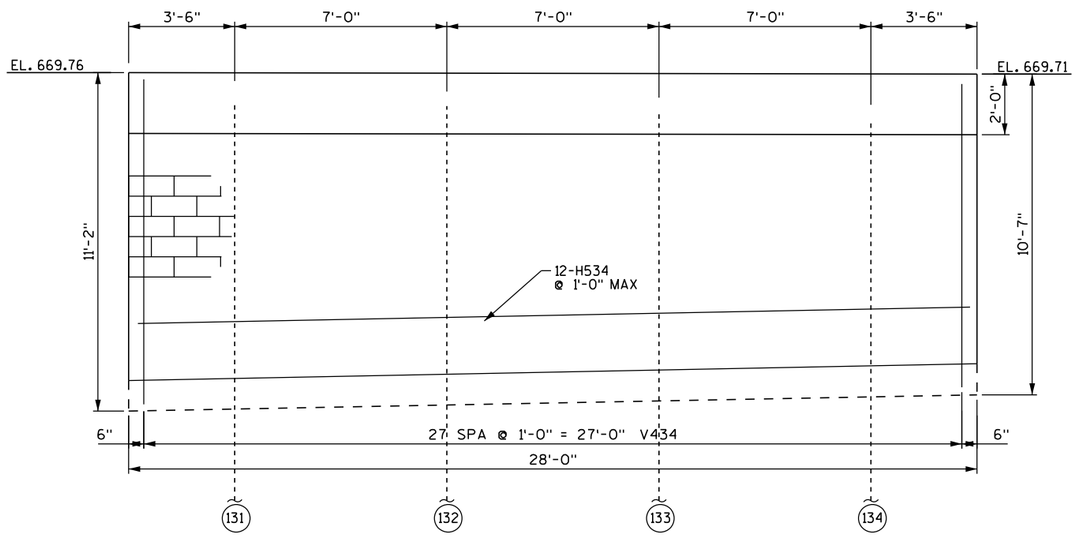
FILE NAME : L:\Projects\11744\Dwg\structures\R-59-0027\08_19Panel Details_8.DGN PLOT DATE : 01/07/14 PLOT TIME : 9:32:38 AM PLOT BY : dnevers

STATE PROJECT NUMBER
4996-01-58



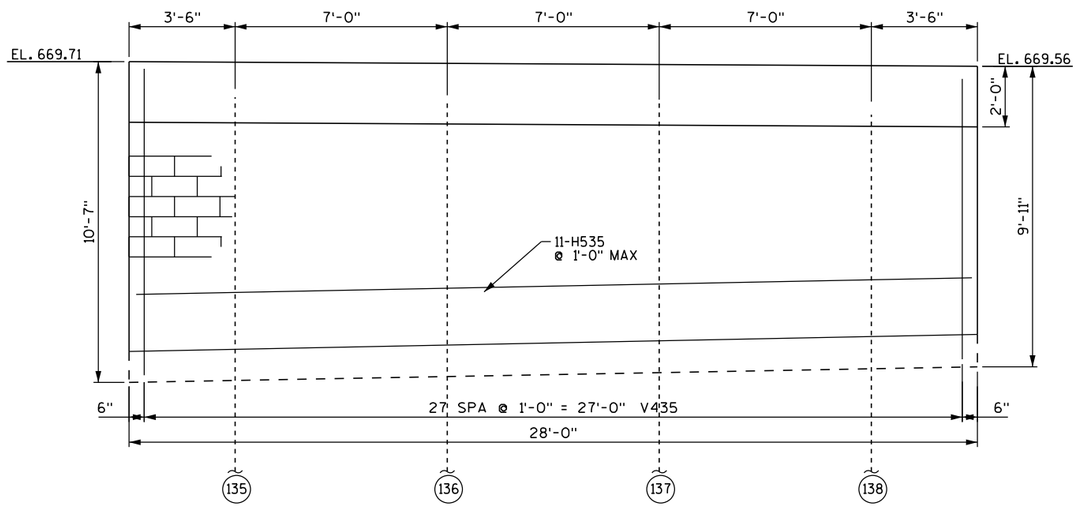
ELEVATION PANEL 33

(REINF. SHOWN TYPICAL OF EACH FACE)



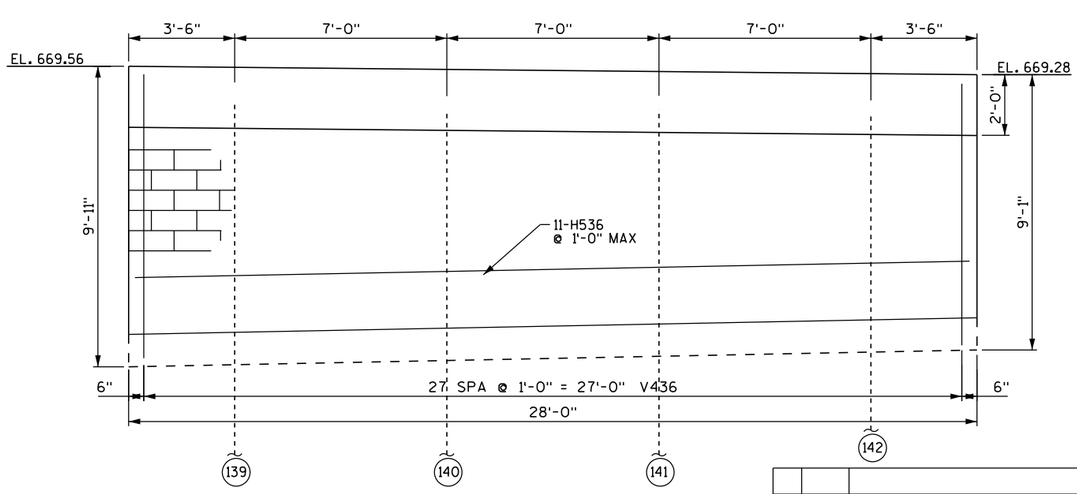
ELEVATION PANEL 34

(REINF. SHOWN TYPICAL OF EACH FACE)



ELEVATION PANEL 35

(REINF. SHOWN TYPICAL OF EACH FACE)



ELEVATION PANEL 36

(REINF. SHOWN TYPICAL OF EACH FACE)

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PANEL DETAILS 33 THRU 36

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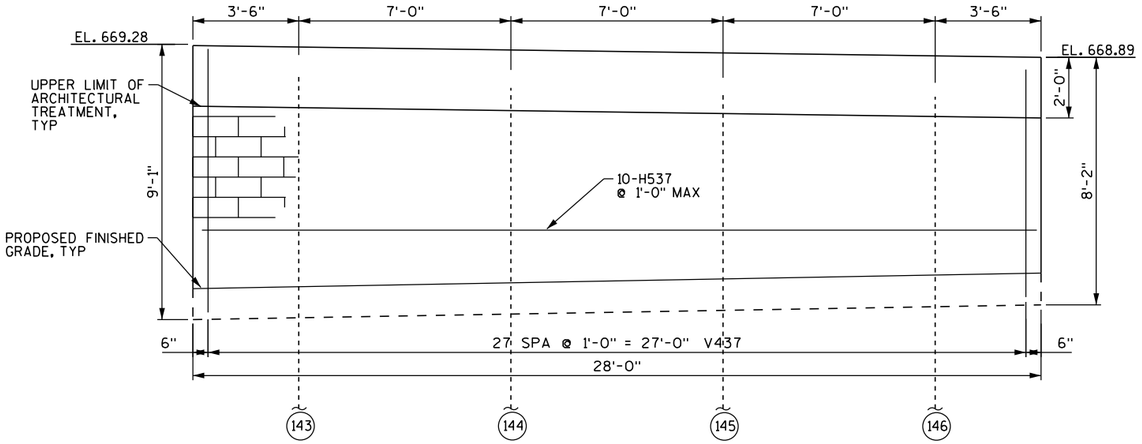
283

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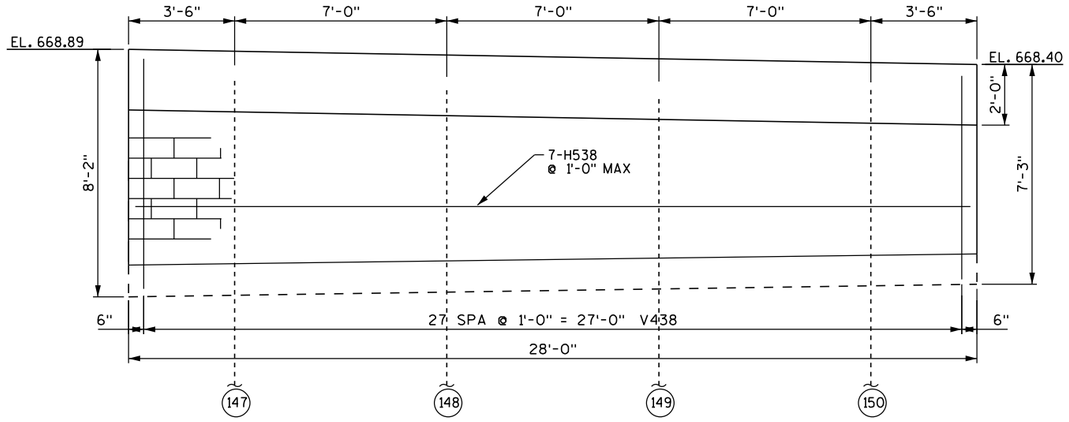
FILE NAME : L:\Projects\11744\Dwg\structures\R-59-0027\08_20Panel Details_9.DGN PLOT DATE : 01/07/14 PLOT TIME : 9:33:08 AM PLOT BY : dnevers

STATE PROJECT NUMBER
4996-01-58



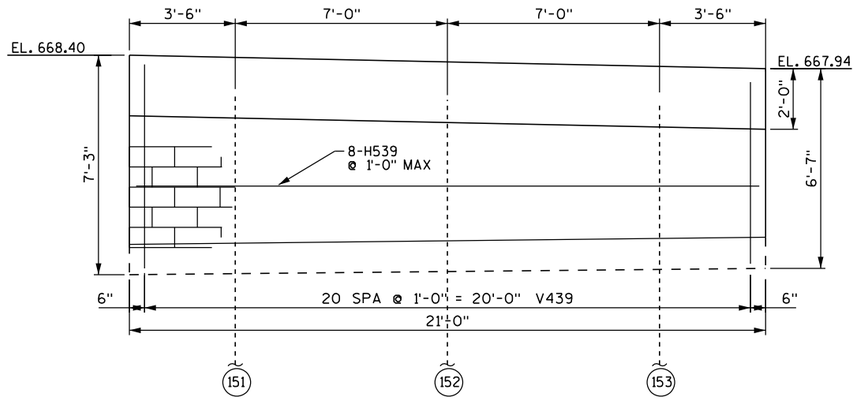
ELEVATION PANEL 37

(REINF. SHOWN TYPICAL OF EACH FACE)



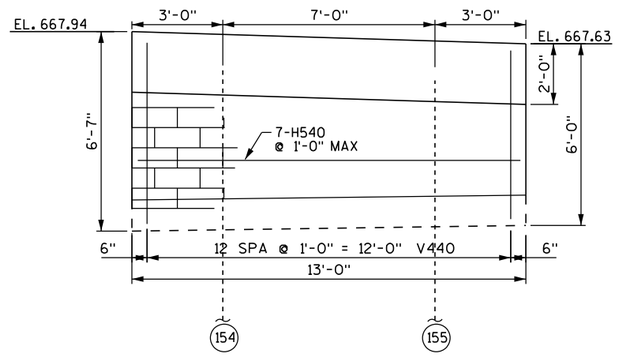
ELEVATION PANEL 38

(REINF. SHOWN TYPICAL OF EACH FACE)



ELEVATION PANEL 39

(REINF. SHOWN TYPICAL OF EACH FACE)



ELEVATION PANEL 40

(REINF. SHOWN TYPICAL OF EACH FACE)

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PANEL DETAILS 37 THRU 40

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STATE PROJECT NUMBER

4996-01-58

WALL TABLE 1

PANEL NUMBER	SOLDIER PILE NO.	STATION	TOP OF WALL EL.	TOP OF PILE EL.	BOT. OF FACING EL.	TOP OF FTG. EL.	BTM. OF FTG. EL.	FOOTING LENGTH (FT)	FOOTING DIA (IN)	PILE LENGTH (FT)	PILE SIZE	PILE OFFSET (IN)
		1158 + 80	625.60		620.10							
1	1	1158 + 78.00		624.78		618.69	599.49	19.20	36	25.29	HP12x53	12.40
	2	1158 + 72.00		625.31		618.96	599.76	19.20	36	25.54	HP12x53	12.46
EXP. JOINT		1158 + 70.00	626.63		620.63							
2	3	1158 + 66.50		626.12		619.37	600.17	19.20	36	25.95	HP12x53	12.56
	4	1158 + 59.50		627.09		619.84	600.64	19.20	36	26.45	HP12x53	12.69
	5	1158 + 52.50		628.06		620.31	601.11	19.20	36	26.95	HP12x53	12.81
	6	1158 + 45.50		629.03		620.78	601.58	19.20	36	27.45	HP12x53	12.94
EXP. JOINT		1158 + 42.00	630.52		622.52							
3	7	1158 + 38.50		630.10		621.20	599.60	21.60	36	30.50	HP12x84	13.10
	8	1158 + 31.50		631.26		621.57	599.97	21.60	36	31.29	HP12x84	13.30
	9	1158 + 24.50		632.42		621.94	600.34	21.60	36	32.08	HP12x84	13.50
	10	1158 + 17.50		633.58		622.31	600.71	21.60	36	32.87	HP12X84	13.69
EXP. JOINT		1158 + 14.00	635.16		623.99							
4	11	1158 + 10.50		634.39		622.68	601.08	21.60	36	33.31	HP12X84	13.80
	12	1158 + 03.50		634.85		623.05	601.45	21.60	36	33.39	HP12X84	13.82
	13	1157 + 96.50		635.30		623.43	601.83	21.60	36	33.48	HP12X84	13.84
	14	1157 + 89.50		635.76		623.80	602.20	21.60	36	33.56	HP12X84	13.86
EXP. JOINT		1157 + 86.00	636.99		625.49							
5	15	1157 + 82.50		636.22		624.19	602.59	21.60	36	33.63	HP12X84	13.88
	16	1157 + 75.50		636.68		624.59	602.99	21.60	36	33.69	HP12X84	13.90
	17	1157 + 68.50		637.14		624.98	603.38	21.60	36	33.76	HP12X84	13.91
	18	1157 + 61.50		637.60		625.38	603.78	21.60	36	33.82	HP12X84	13.93
EXP. JOINT		1157 + 58.00	638.83		627.08							
6	19	1157 + 54.50		638.06		625.77	604.17	21.60	36	33.89	HP12X84	13.95
	20	1157 + 47.50		638.52		626.15	604.55	21.60	36	33.97	HP12X84	13.97
	21	1157 + 40.50		638.98		626.52	604.92	21.60	36	34.06	HP12X84	13.99
	22	1157 + 33.50		639.44		626.90	605.30	21.60	36	34.14	HP12X84	14.01
EXP. JOINT		1157 + 30.00	640.67		628.59							
7	23	1157 + 26.50		639.90		627.29	605.69	21.60	36	34.21	HP14x89	14.03
	24	1157 + 19.50		640.36		627.68	606.08	21.60	36	34.27	HP14x89	14.04
	25	1157 + 12.50		640.81		628.08	606.48	21.60	36	34.34	HP14x89	14.06
	26	1157 + 05.50		641.27		628.47	606.87	21.60	36	34.40	HP14x89	14.07
EXP. JOINT		1157 + 02.00	642.50		630.17							
8	27	1156 + 98.50		641.73		628.86	607.26	21.60	36	34.47	HP14x89	14.09
	28	1156 + 91.50		642.19		629.24	607.64	21.60	36	34.56	HP14x89	14.11
	29	1156 + 84.50		642.66		629.61	608.01	21.60	36	34.64	HP14x89	14.14
	30	1156 + 77.50		643.12		629.99	608.39	21.60	36	34.73	HP14x89	14.16
EXP. JOINT		1156 + 74.00	644.35		631.68							
9	31	1156 + 70.50		643.57		630.37	608.77	21.60	36	34.80	HP14x89	14.18
	32	1156 + 63.50		644.02		630.75	609.15	21.60	36	34.86	HP14x89	14.19
	33	1156 + 56.50		644.46		631.14	609.54	21.60	36	34.93	HP14x89	14.21
	34	1156 + 49.50		644.91		631.52	609.92	21.60	36	34.99	HP14x89	14.22
EXP. JOINT		1156 + 46.00	646.13		633.21							
10	35	1156 + 42.50		645.33		631.89	610.29	21.60	36	35.04	HP14x89	14.24
	36	1156 + 35.50		645.72		632.24	610.64	21.60	36	35.08	HP14x89	14.25
	37	1156 + 28.50		646.11		632.59	610.99	21.60	36	35.12	HP14x89	14.26
	38	1156 + 21.50		646.50		632.94	611.34	21.60	36	35.16	HP14x89	14.27
EXP. JOINT		1156 + 18.00	647.69		634.61							
11	39	1156 + 14.50		646.89		633.29	609.29	24.00	36	37.59	HP14x102	14.27
	40	1156 + 07.50		647.28		633.66	609.66	24.00	36	37.61	HP14x102	14.28
	41	1156 + 00.50		647.67		634.03	610.03	24.00	36	37.64	HP14x102	14.28
	42	1155 + 93.50		648.06		634.40	610.40	24.00	36	37.66	HP14x102	14.29
EXP. JOINT		1155 + 90.00	649.25		636.08							
12	43	1155 + 86.50		648.45		634.73	610.73	24.00	36	37.71	HP14x102	14.30
	44	1155 + 79.50		648.84		635.04	611.04	24.00	36	37.79	HP14x102	14.32
	45	1155 + 72.50		649.23		635.35	611.35	24.00	36	37.88	HP14x102	14.34
	46	1155 + 65.50		649.62		635.66	611.66	24.00	36	37.96	HP14x102	14.36
EXP. JOINT		1155 + 62.00	650.81		637.31							
13	47	1155 + 58.50		650.01		635.96	611.96	24.00	36	38.04	HP14x102	14.39
	48	1155 + 51.50		650.40		636.27	612.27	24.00	36	38.12	HP14x102	14.41
	49	1155 + 44.50		650.79		636.58	612.58	24.00	36	38.21	HP14x102	14.43
	50	1155 + 37.50		651.18		636.89	612.89	24.00	36	38.29	HP14x102	14.45
EXP. JOINT		1155 + 34.00	652.37		638.54							
14	51	1155 + 30.50		651.54		637.21	613.21	24.00	36	38.33	HP14x102	14.46
	52	1155 + 23.50		651.89		637.56	613.56	24.00	36	38.33	HP14x102	14.46
	53	1155 + 16.50		652.24		637.91	613.91	24.00	36	38.33	HP14x102	14.46
	54	1155 + 09.50		652.59		638.26	614.26	24.00	36	38.33	HP14x102	14.46
EXP. JOINT		1155 + 06.00	653.76		639.93							
15	55	1155 + 02.50		652.90		638.60	614.60	24.00	36	38.30	HP14x102	14.45
	56	1154 + 95.50		653.18		638.95	614.95	24.00	36	38.24	HP14x102	14.43
	57	1154 + 88.50		653.47		639.29	615.29	24.00	36	38.17	HP14x102	14.42
	58	1154 + 81.50		653.75		639.64	615.64	24.00	36	38.11	HP14x102	14.40
EXP. JOINT		1154 + 78.00	654.89		641.31							

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NO.	DATE	REVISION	BY

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DEPARTMENT OF TRANSPORTATION

STRUCTURE R-59-27

DRAWN BY DJN | PLANS CK'D. PJE

WALL TABLES 1 THRU 15

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PANEL NUMBER	SOLDIER PILE NO.	STATION	TOP OF WALL EL.	TOP OF PILE EL.	BOT. OF FACING EL.	TOP OF FTG. EL.	BTM. OF FTG. EL.	FOOTING LENGTH (FT)	FOOTING DIA (IN)	PILE LENGTH (FT)	PILE SIZE	PILE OFFSET (IN)
EXP. JOINT		1154 + 78.00	654.89		641.31							
	59	1154 + 74.50		654.03		639.97	615.97	24.00	36	38.06	HP14x102	14.39
16	60	1154 + 67.50		654.30		640.28	616.28	24.00	36	38.02	HP14x102	14.38
	61	1154 + 60.50		654.57		640.59	616.59	24.00	36	37.98	HP14x102	14.37
	62	1154 + 53.50		654.84		640.90	616.90	24.00	36	37.94	HP14x102	14.36
EXP. JOINT		1154 + 50.00	655.98		642.56							
	63	1154 + 46.50		655.12		641.22	617.22	24.00	36	37.90	HP14x102	14.35
17	64	1154 + 39.50		655.39		641.53	617.53	24.00	36	37.86	HP14x102	14.34
	65	1154 + 32.50		655.66		641.85	617.85	24.00	36	37.81	HP14x102	14.33
	66	1154 + 25.50		655.93		642.16	618.16	24.00	36	37.77	HP14x102	14.32
EXP. JOINT		1154 + 22.00	657.07		643.82							
	67	1154 + 18.50		656.21		642.49	618.49	24.00	36	37.72	HP14x102	14.30
18	68	1154 + 11.50		656.48		642.82	618.82	24.00	36	37.66	HP14x102	14.29
	69	1154 + 04.50		656.75		643.15	619.15	24.00	36	37.59	HP14x102	14.27
	70	1153 + 97.50		657.02		643.48	619.48	24.00	36	37.53	HP14x102	14.26
EXP. JOINT		1153 + 94.00	658.15		645.15							
	71	1153 + 90.50		657.29		643.82	622.22	21.60	36	35.07	HP14x89	14.24
19	72	1153 + 83.50		657.56		644.15	622.55	21.60	36	35.01	HP14x89	14.23
	73	1153 + 76.50		657.83		644.49	622.89	21.60	36	34.94	HP14x89	14.21
	74	1153 + 69.50		658.10		644.82	623.22	21.60	36	34.88	HP14x89	14.20
EXP. JOINT		1153 + 66.00	659.24		646.49							
	75	1153 + 62.50		658.38		645.15	623.55	21.60	36	34.83	HP14x89	14.18
20	76	1153 + 55.50		658.65		645.46	623.86	21.60	36	34.79	HP14x89	14.17
	77	1153 + 48.50		658.92		645.77	624.17	21.60	36	34.74	HP14x89	14.16
	78	1153 + 41.50		659.19		646.08	624.48	21.60	36	34.70	HP14x89	14.15
EXP. JOINT		1153 + 38.00	660.32		647.74							
	79	1153 + 34.50		659.47		646.39	624.79	21.60	36	34.68	HP14x89	14.15
21	80	1153 + 27.50		659.76		646.68	625.08	21.60	36	34.68	HP14x89	14.15
	81	1153 + 20.50		660.05		646.97	625.37	21.60	36	34.68	HP14x89	14.15
	82	1153 + 13.50		660.34		647.26	625.66	21.60	36	34.68	HP14x89	14.15
EXP. JOINT		1153 + 10.00	661.48		648.90							
	83	1153 + 06.50		660.62		647.55	625.95	21.60	36	34.67	HP14x89	14.14
22	84	1152 + 99.50		660.90		647.85	626.25	21.60	36	34.65	HP14x89	14.14
	85	1152 + 92.50		661.17		648.14	626.54	21.60	36	34.63	HP14x89	14.13
	86	1152 + 85.50		661.45		648.44	626.84	21.60	36	34.61	HP14x89	14.13
EXP. JOINT		1152 + 82.00	662.59		650.09							
	87	1152 + 78.50		661.72		648.73	627.13	21.60	36	34.59	HP14x89	14.12
23	88	1152 + 71.50		661.98		649.01	627.41	21.60	36	34.57	HP14x89	14.12
	89	1152 + 64.50		662.25		649.30	627.70	21.60	36	34.55	HP14x89	14.11
	90	1152 + 57.50		662.51		649.58	627.98	21.60	36	34.53	HP14x89	14.11
EXP. JOINT		1152 + 54.00	663.64		651.22							
	91	1152 + 50.50		662.78		649.86	628.26	21.60	36	34.52	HP14x89	14.11
24	92	1152 + 43.50		663.06		650.14	628.54	21.60	36	34.52	HP14x89	14.11
	93	1152 + 36.50		663.33		650.41	628.81	21.60	36	34.52	HP14x89	14.11
	94	1152 + 29.50		663.61		650.69	629.09	21.60	36	34.52	HP14x89	14.11
EXP. JOINT		1152 + 26.00	664.75		652.33							
	95	1152 + 22.50		663.89		650.95	629.35	21.60	36	34.54	HP14x89	14.11
25	96	1152 + 15.50		664.16		651.18	629.58	21.60	36	34.58	HP14x89	14.12
	97	1152 + 08.50		664.44		651.42	629.82	21.60	36	34.62	HP14x89	14.13
	98	1152 + 01.50		664.71		651.65	630.05	21.60	36	34.66	HP14x89	14.14
EXP. JOINT		1151 + 98.00	665.85		653.27							
	99	1151 + 94.50		664.97		651.88	630.28	21.60	36	34.69	HP14x89	14.15
26	100	1151 + 87.50		665.22		652.11	630.51	21.60	36	34.71	HP14x89	14.15
	101	1151 + 80.50		665.47		652.33	630.73	21.60	36	34.74	HP14x89	14.16
	102	1151 + 73.50		665.72		652.56	630.96	21.60	36	34.76	HP14x89	14.16
EXP. JOINT		1151 + 70.00	666.84		654.17							
	103	1151 + 66.50		665.94		652.77	631.17	21.60	36	34.77	HP14x89	14.17
27	104	1151 + 59.50		666.13		652.96	631.36	21.60	36	34.77	HP14x89	14.17
	105	1151 + 52.50		666.33		653.16	631.56	21.60	36	34.77	HP14x89	14.17
	106	1151 + 45.50		666.52		653.35	631.75	21.60	36	34.77	HP14x89	14.17
EXP. JOINT		1151 + 42.00	667.62		654.95							
	107	1151 + 38.50		666.69		653.54	631.94	21.60	36	34.76	HP14x89	14.16
28	108	1151 + 31.50		666.84		653.71	632.11	21.60	36	34.74	HP14x89	14.16
	109	1151 + 24.50		666.99		653.88	632.28	21.60	36	34.71	HP14x89	14.15
	110	1151 + 17.50		667.14		654.05	632.45	21.60	36	34.69	HP14x89	14.15
EXP. JOINT		1151 + 14.00	668.21		655.63							
	111	1151 + 10.50		667.28		654.22	632.62	21.60	36	34.66	HP14x89	14.14
29	112	1151 + 03.50		667.42		654.40	632.80	21.60	36	34.62	HP14x89	14.13
	113	1150 + 96.50		667.55		654.57	632.97	21.60	36	34.58	HP14x89	14.12
	114	1150 + 89.50		667.69		654.75	633.15	21.60	36	34.54	HP14x89	14.11
EXP. JOINT		1150 + 86.00	668.76		656.34							
	115	1150 + 82.50		667.81		654.90	633.30	21.60	36	34.51	HP14x89	14.10
30	116	1150 + 75.50		667.92		655.03	633.43	21.60	36	34.49	HP14x89	14.10
	117	1150 + 68.50		668.02		655.16	633.56	21.60	36	34.46	HP14x89	14.09
	118	1150 + 61.50		668.13		655.29	633.69	21.60	36	34.44	HP14x89	14.09
EXP. JOINT		1150 + 58.00	669.18		656.85							

STATE PROJECT NUMBER

4996-01-58

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NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-59-27

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WALL TABLES 2
16 THRU 30

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STATE PROJECT NUMBER

4996-01-58

PANEL NUMBER	SOLDIER PILE NO.	STATION	TOP OF WALL EL.	TOP OF PILE EL.	BOT. OF FACING EL.	TOP OF FTG. EL.	BTM. OF FTG. EL.	FOOTING LENGTH (FT)	FOOTING DIA (IN)	PILE LENGTH (FT)	PILE SIZE	PILE OFFSET (IN)
EXP. JOINT		1150 + 58.00	669.18		656.85							
	119	1150 + 54.50		668.22		655.43	633.83	21.60	36	34.39	HP14x89	14.07
31	120	1150 + 47.50		668.30		655.59	633.99	21.60	36	34.31	HP14x89	14.05
	121	1150 + 40.50		668.37		655.75	634.15	21.60	36	34.22	HP14x89	14.03
	122	1150 + 33.50		668.45		655.91	634.31	21.60	36	34.14	HP14x89	14.01
EXP. JOINT		1150 + 30.00	669.49		657.49							
	123	1150 + 26.50		668.51		656.06	634.46	21.60	36	34.06	HP12X84	13.99
32	124	1150 + 19.50		668.56		656.19	634.59	21.60	36	33.98	HP12X84	13.97
	125	1150 + 12.50		668.61		656.32	634.72	21.60	36	33.89	HP12X84	13.95
	126	1150 + 05.50		668.66		656.45	634.85	21.60	36	33.81	HP12X84	13.93
EXP. JOINT		1150 + 02.00	669.68		658.01							
	127	1149 + 98.50		668.69		656.58	634.98	21.60	36	33.71	HP12X84	13.90
33	128	1149 + 91.50		668.71		656.73	635.13	21.60	36	33.58	HP12X84	13.87
	129	1149 + 84.50		668.73		656.87	635.27	21.60	36	33.46	HP12X84	13.84
	130	1149 + 77.50		668.75		657.02	635.42	21.60	36	33.33	HP12X84	13.81
EXP. JOINT		1149 + 74.00	669.76		658.59							
	131	1149 + 70.50		668.75		657.16	635.56	21.60	36	33.20	HP12X84	13.77
34	132	1149 + 63.50		668.74		657.29	635.69	21.60	36	33.05	HP12X84	13.74
	133	1149 + 56.50		668.73		657.43	635.83	21.60	36	32.90	HP12X84	13.70
	134	1149 + 49.50		668.72		657.56	635.96	21.60	36	32.75	HP12X84	13.66
EXP. JOINT		1149 + 46.00	669.71		659.13							
	135	1149 + 42.50		668.69		657.69	636.09	21.60	36	32.60	HP12X84	13.62
35	136	1149 + 35.50		668.65		657.82	636.22	21.60	36	32.43	HP12X84	13.58
	137	1149 + 28.50		668.62		657.95	636.35	21.60	36	32.27	HP12X84	13.54
	138	1149 + 21.50		668.58		658.08	636.48	21.60	36	32.10	HP12X84	13.50
EXP. JOINT		1149 + 18.00	669.56		659.64							
	139	1149 + 14.50		668.53		658.21	639.01	19.20	36	29.52	HP12x53	13.45
36	140	1149 + 07.50		668.46		658.35	639.15	19.20	36	29.31	HP12x53	13.40
	141	1149 + 00.50		668.39		658.49	639.29	19.20	36	29.10	HP12x53	13.35
	142	1148 + 93.50		668.32		658.63	639.43	19.20	36	28.89	HP12x53	13.30
EXP. JOINT		1148 + 90.00	669.28		660.20							
	143	1148 + 86.50		668.23		658.77	639.57	19.20	36	28.67	HP12x53	13.24
37	144	1148 + 79.50		668.13		658.90	639.70	19.20	36	28.44	HP12x53	13.18
	145	1148 + 72.50		668.04		659.03	639.83	19.20	36	28.21	HP12x53	13.13
	146	1148 + 65.50		667.94		659.16	639.96	19.20	36	27.98	HP12x53	13.07
EXP. JOINT		1148 + 62.00	668.89		660.72							
	147	1148 + 58.50		667.83		659.27	640.07	19.20	36	27.76	HP12x53	13.01
38	148	1148 + 51.50		667.71		659.38	640.18	19.20	36	27.53	HP12x53	12.96
	149	1148 + 44.50		667.58		659.49	640.29	19.20	36	27.30	HP12x53	12.90
	150	1148 + 37.50		667.46		659.60	640.40	19.20	36	27.07	HP12x53	12.84
EXP. JOINT		1148 + 34.00	668.40		661.15							
	151	1148 + 30.50		667.32		659.69	640.49	19.20	36	26.84	HP12x53	12.78
39	152	1148 + 23.50		667.17		659.76	640.56	19.20	36	26.62	HP12x53	12.73
	153	1148 + 16.50		667.02		659.83	640.63	19.20	36	26.39	HP12x53	12.67
EXP. JOINT		1148 + 13.00	667.94		661.36							
	154	1148 + 10.00		666.87		659.92	640.72	19.20	36	26.15	HP12x53	12.61
40	155	1148 + 03.00		666.70		660.07	640.87	19.20	36	25.83	HP12x53	12.53
		1148 + 00.00	667.63		661.63							

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NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-59-27

DRAWN BY DJN | PLANS CK'D. PJE

WALL TABLES 3
31 THRU 40

SHEET 24 OF 25

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FILE NAME : L:\Projects\11744\Dwg\structures\R-59-0027\08_24wall tables_3.DGN PLOT DATE : 01/05/15 PLOT TIME : 9:34:48 AM PLOT BY : kgahagan

STATE PROJECT NUMBER
4996-01-58

BILL OF BARS
VERTICAL

COATED: 0 LBS
UNCOATED: 15800 LBS

BAR MARK	COAT	NUMBER REQUIRED	LENGTH	BAR SERIES	BENT	LOCATION
V401	X	12	5'-4"	X		VERTICAL PANEL 1
V402	X	27	6'-7"	X		VERTICAL PANEL 2
V403	X	27	9'-2"	X		VERTICAL PANEL 3
V404	X	27	10'-11"	X		VERTICAL PANEL 4
V405	X	27	11'-2"	X		VERTICAL PANEL 5
V406	X	27	11'-6"	X		VERTICAL PANEL 6
V407	X	27	11'-10"	X		VERTICAL PANEL 7
V408	X	27	12'-1"	X		VERTICAL PANEL 8
V409	X	27	12'-4"	X		VERTICAL PANEL 9
V410	X	27	12'-7"	X		VERTICAL PANEL 10
V411	X	27	12'-9"			VERTICAL PANEL 11
V412	X	27	12'-11"	X		VERTICAL PANEL 12
V413	X	27	13'-3"	X		VERTICAL PANEL 13
V414	X	27	13'-5"			VERTICAL PANEL 14
V415	X	27	13'-2"			VERTICAL PANEL 15
V416	X	27	13'-1"			VERTICAL PANEL 16
V417	X	27	12'-11"			VERTICAL PANEL 17
V418	X	27	12'-8"			VERTICAL PANEL 18
V419	X	27	12'-5"			VERTICAL PANEL 19
V420	X	27	12'-2"			VERTICAL PANEL 20
V421	X	27	12'-2"			VERTICAL PANEL 21
V422	X	27	12'-2"			VERTICAL PANEL 22
V423	X	27	12'-1"			VERTICAL PANEL 23
V424	X	27	12'-0"			VERTICAL PANEL 24
V425	X	27	12'-1"			VERTICAL PANEL 25
V426	X	27	12'-3"			VERTICAL PANEL 26
V427	X	27	12'-3"			VERTICAL PANEL 27
V428	X	27	12'-3"			VERTICAL PANEL 28
V429	X	27	12'-1"			VERTICAL PANEL 29
V430	X	27	12'-0"			VERTICAL PANEL 30
V431	X	27	11'-9"	X		VERTICAL PANEL 31
V432	X	27	11'-5"	X		VERTICAL PANEL 32
V433	X	27	11'-1"	X		VERTICAL PANEL 33
V434	X	27	10'-6"	X		VERTICAL PANEL 34
V435	X	27	9'-10"	X		VERTICAL PANEL 35
V436	X	27	9'-1"	X		VERTICAL PANEL 36
V437	X	27	8'-3"	X		VERTICAL PANEL 37
V438	X	27	7'-4"	X		VERTICAL PANEL 38
V439	X	21	6'-6"	X		VERTICAL PANEL 39
V440	X	13	5'-11"	X		VERTICAL PANEL 40

BILL OF BARS
HORIZONTAL

COATED: 27510 LBS
UNCOATED: 0 LBS

BAR MARK	COAT	NUMBER REQUIRED	LENGTH	BAR SERIES	BENT	LOCATION
H501	X	9	11'-4"			HORIZONTAL PANEL 1
H502	X	10	27'-8"			HORIZONTAL PANEL 2
H503	X	10	27'-8"			HORIZONTAL PANEL 3
H504	X	12	27'-8"			HORIZONTAL PANEL 4
H505	X	12	27'-8"			HORIZONTAL PANEL 5
H506	X	13	27'-8"			HORIZONTAL PANEL 6
H507	X	13	27'-8"			HORIZONTAL PANEL 7
H508	X	13	27'-8"			HORIZONTAL PANEL 8
H509	X	13	27'-8"			HORIZONTAL PANEL 9
H510	X	14	27'-8"			HORIZONTAL PANEL 10
H511	X	14	27'-8"			HORIZONTAL PANEL 11
H512	X	14	27'-8"			HORIZONTAL PANEL 12
H513	X	14	27'-8"			HORIZONTAL PANEL 13
H514	X	14	27'-8"			HORIZONTAL PANEL 14
H515	X	14	27'-8"			HORIZONTAL PANEL 15
H516	X	14	27'-8"			HORIZONTAL PANEL 16
H517	X	14	27'-8"			HORIZONTAL PANEL 17
H518	X	14	27'-8"			HORIZONTAL PANEL 18
H519	X	13	27'-8"			HORIZONTAL PANEL 19
H520	X	13	27'-8"			HORIZONTAL PANEL 20
H521	X	13	27'-8"			HORIZONTAL PANEL 21
H522	X	13	27'-8"			HORIZONTAL PANEL 22
H523	X	13	27'-8"			HORIZONTAL PANEL 23
H524	X	13	27'-8"			HORIZONTAL PANEL 24
H525	X	13	27'-8"			HORIZONTAL PANEL 25
H526	X	13	27'-8"			HORIZONTAL PANEL 26
H527	X	13	27'-8"			HORIZONTAL PANEL 27
H528	X	13	27'-8"			HORIZONTAL PANEL 28
H529	X	13	27'-8"			HORIZONTAL PANEL 29
H530	X	13	27'-8"			HORIZONTAL PANEL 30
H531	X	13	27'-8"			HORIZONTAL PANEL 31
H532	X	13	27'-8"			HORIZONTAL PANEL 32
H533	X	13	27'-8"			HORIZONTAL PANEL 33
H534	X	12	27'-8"			HORIZONTAL PANEL 34
H535	X	11	27'-8"			HORIZONTAL PANEL 35
H536	X	11	27'-8"			HORIZONTAL PANEL 36
H537	X	10	27'-8"			HORIZONTAL PANEL 37
H538	X	7	27'-8"			HORIZONTAL PANEL 38
H539	X	8	20'-8"			HORIZONTAL PANEL 39
H540	X	5	13'-8"			HORIZONTAL PANEL 40

BAR SERIES TABLE

BAR MARK	NO. REQ'D.	LENGTH
V401	2 SERIES OF 12	5' - 1" TO 5' - 7"
V402	2 SERIES OF 27	5' - 7" TO 7' - 7"
V403	2 SERIES OF 27	7' - 7" TO 10' - 9"
V404	2 SERIES OF 27	10' - 9" TO 11' - 1"
V405	2 SERIES OF 27	11' - 0" TO 11' - 4"
V406	2 SERIES OF 27	11' - 4" TO 11' - 8"
V407	2 SERIES OF 27	11' - 8" TO 11' - 11"
V408	2 SERIES OF 27	11' - 11" TO 12' - 3"
V409	2 SERIES OF 27	12' - 3" TO 12' - 5"
V410	2 SERIES OF 27	12' - 5" TO 12' - 8"
V412	2 SERIES OF 27	12' - 9" TO 13' - 1"
V413	2 SERIES OF 27	13' - 1" TO 13' - 5"
V431	2 SERIES OF 27	11' - 7" TO 11' - 11"
V432	2 SERIES OF 27	11' - 3" TO 11' - 7"
V433	2 SERIES OF 27	10' - 9" TO 11' - 5"
V434	2 SERIES OF 27	10' - 2" TO 10' - 9"
V435	2 SERIES OF 27	9' - 6" TO 10' - 2"
V436	2 SERIES OF 27	8' - 8" TO 9' - 6"
V437	2 SERIES OF 27	7' - 9" TO 8' - 8"
V438	2 SERIES OF 27	6' - 10" TO 7' - 9"
V439	2 SERIES OF 21	6' - 2" TO 6' - 10"
V440	2 SERIES OF 13	5' - 7" TO 6' - 2"

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NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-59-27

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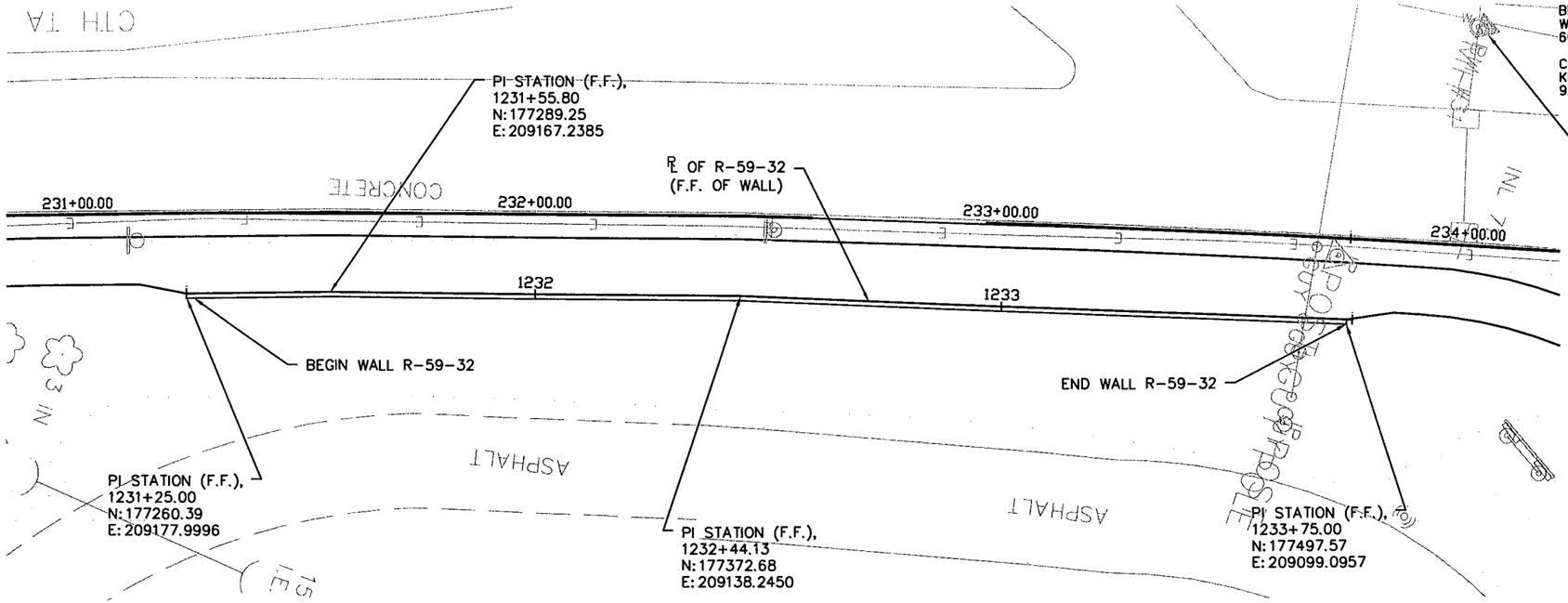
BILL OF BARS

SHEET 25 OF 25

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FILE NAME : L:\Projects\11744\Dwg\structures\R-59-0027\08_25BILL OF BARS.DGN PLOT DATE : 01/04/15 PLOT TIME : 11:55:48 AM PLOT BY : kgahagan

STATE PROJECT NUMBER
4996-01-58



PLAN
(MODULAR BLOCK MSE RETAINING WALL)

BRIDGE OFFICE CONTACT:
WILLIAM DREHER
608-266-8489

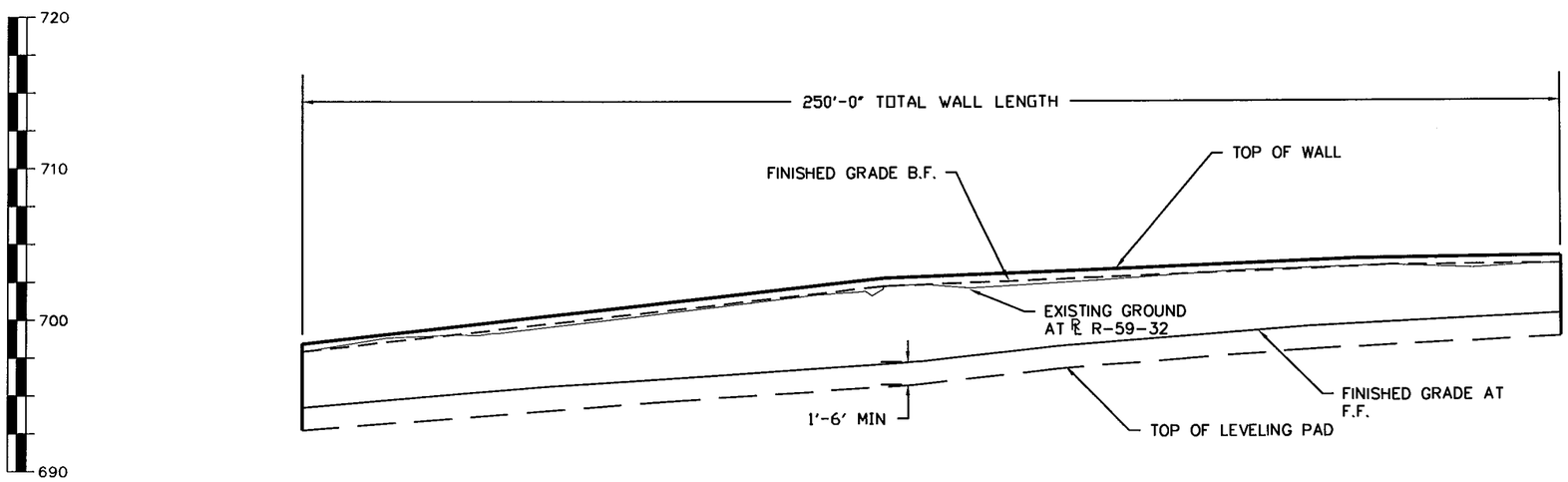
CONSULTANT CONTACT
KIM GAHAGAN
920-803-7310

REFER TO SHEET 2 FOR GENERAL NOTES, DESIGN DATA, AND ESTIMATED QUANTITIES

WISCONSIN
PHILIP J. ENGLEBERT
E-16118
SHEBOYGAN, WIS.
PROFESSIONAL ENGINEER
12/22/14

LIST OF DRAWINGS

1. GENERAL PLAN
2. SECTION, NOTES, AND QUANTITIES
3. SUBSURFACE EXPLORATION



ELEVATION
(LOOKING AT FRONT FACE OF WALL)

BENCH MARK

NO.	STATION	DESCRIPTION	ELEV.
31	234+01, 44' LT	STORM MANHOLE, 430' NORTH OF ERIE AVE, IN MEDIAN OF N. TAYLOR DR, CHISELED "X" ON NORTH RIM	700.83

ELEVATIONS SHOWN ON THE PLAN ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88) (UPDATED 2009).

LEGEND

F.F. = FRONT FACE
B.F. = BACK FACE

NO.	DATE	REVISION	BY

DONOHUE & ASSOCIATES

ACCEPTED William C. Dreher KAR 01/11/15
CHIEF STRUCTURES DESIGN ENGINEER — DATE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-59-32

RETAINING WALL ALONG TAYLOR DRIVE

COUNTY	~~TOWN/CITY/VILLAGE~~
SHEBOYGAN	SHEBOYGAN

DESIGN SPEC. AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS

DESIGNED BY	DESIGN CK'D.	DRAWN BY	PLANS CK'D.
KAG	PJE	KAG	PJE

GENERAL PLAN

SHEET 1 OF 3

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FILE NAME : $$....designfile....$$ PLOT DATE : $$...plottingdate...$$ PLOT TIME : $$...plottingtime...$$ PLOT BY : $$...plotuser...$$

STATE PROJECT NUMBER
4996-01-58

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

THE PLAN QUANTITY FOR THE BID ITEM "WALL MODULAR BLOCK MECHANICALLY STABILIZED EARTH LRFD" IS BASED ON A WALL HEIGHT MEASURED FROM THE TOP OF WALL TO A CONSTANT DEPTH OF 1'-6" BELOW FINISHED GRADE F.F..

ALL STATIONS AND ALL ELEVATIONS ARE IN FEET. WALL STATIONS AND ELEVATIONS ARE LISTED IN THE GEOMETRY TABLE ON THIS SHEET.

ALL STATIONS ARE ALONG THE R/L FOR R-59-32.

EXCAVATION BEHIND REINFORCED SOIL ZONE IS INCLUDED IN BID ITEM "BACKFILL STRUCTURE".

DESIGN DATA

THE CONTRACTOR SHALL PROVIDE COMPLETE DESIGN, PLANS, DETAILS, SPECIFICATIONS, AND SHOP DRAWINGS FOR THE RETAINING WALL IN ACCORDANCE WITH THE SPECIAL PROVISIONS. THE RETAINING WALL MANUFACTURER SHALL PROVIDE TECHNICAL ASSISTANCE TO THE CONTRACTOR DURING CONSTRUCTION. THE COST OF FURNISHING THESE ITEMS SHALL BE INCLUDED IN THE BID ITEM "WALL MODULAR BLOCK MECHANICALLY STABILIZED EARTH LRFD".

PLANS, ELEVATIONS AND DETAILS SHOWN ON THESE DRAWINGS ARE INTENDED TO INDICATE WALL LOCATIONS, LENGTHS, HEIGHTS, AND DETAILS COMMON TO THE WALL SYSTEM SELECTED. THE CONTRACTOR SHALL VERIFY THAT THE WALL SYSTEM SELECTED WILL CONFORM TO THE REQUIRED ALIGNMENTS AND DETAILS.

THE RETAINING WALL IS TO BE DESIGNED USING THE ELEVATIONS PROVIDED IN THE GEOMETRY TABLE ON THIS SHEET.

DESIGN FOR RETAINING WALL TO PROVIDE FOR FINISHED GRADE SLOPED BEHIND WALL AS SHOWN.

THE RETAINING WALL BLOCKS SHALL BE STRAIGHT FACE. COLOR SHALL BE SELECTED BY THE ENGINEER.

DESIGN RETAINING WALL FOR A LIVE LOAD SURCHARGE OF 100 PSF.

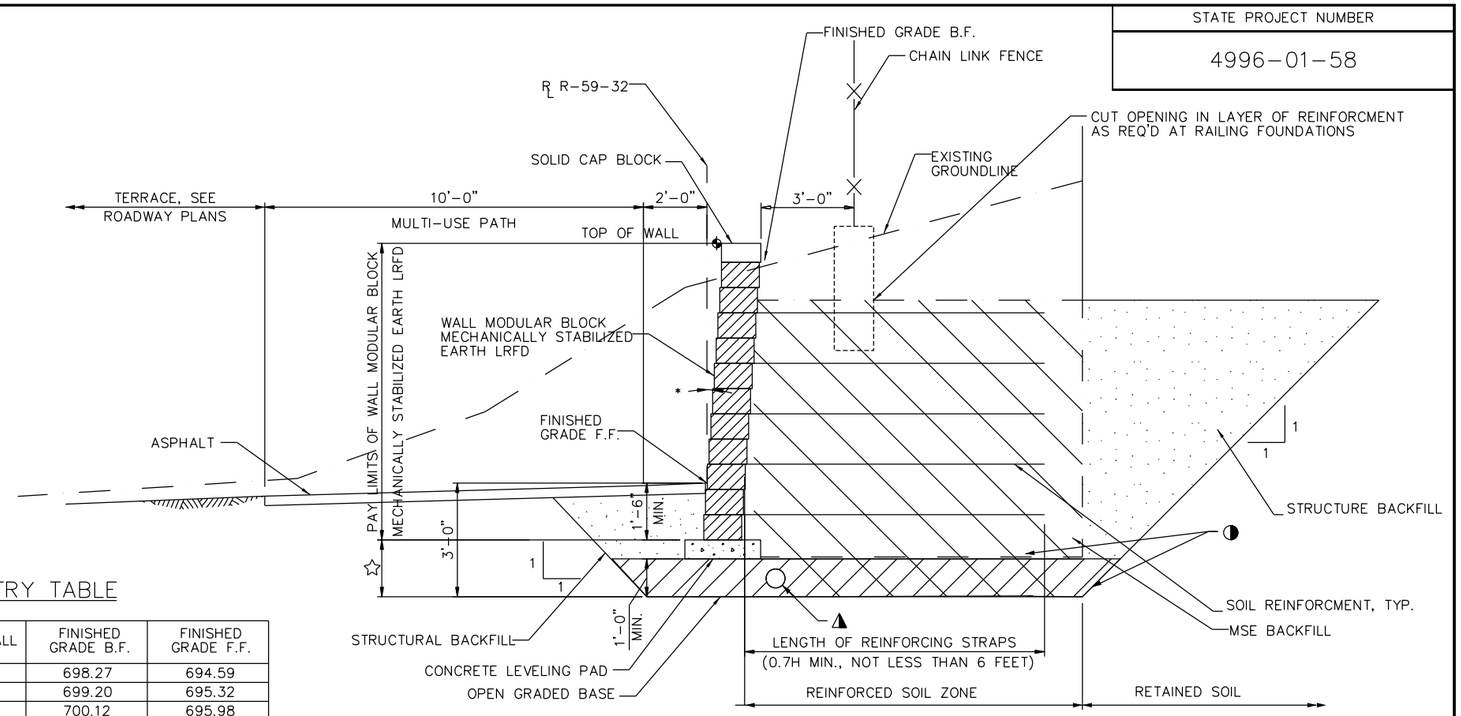
FINAL DESIGN FOR INTERNAL STABILITY AND EXTERNAL SLIDING AND ECCENTRICITY IS THE RESPONSIBILITY OF THE WALL DESIGNER.

THE MAXIMUM VALUE OF THE ANGLE OF INTERNAL FRICTION OF THE WALL BACKFILL MATERIAL IN THE REINFORCED ZONE SHALL BE ASSUMED TO BE 30° WITHOUT CERTIFIED TEST VALUES.

ULTIMATE DESIGN STRESSES:

CONCRETE MASONRY ——— f'c = 3,500 psi

HIGH STRENGTH BAR STEEL REINFORCEMENT ——— fy = 60,000 psi



CROSS SECTION THROUGH WALL

GEOMETRY TABLE

WALL STATION	TOP OF WALL	FINISHED GRADE B.F.	FINISHED GRADE F.F.
1231+25	698.77	698.27	694.59
1231+50	699.70	699.20	695.32
1231+75	700.62	700.12	695.98
1232+00	701.50	701.00	696.53
1232+25	702.48	701.98	697.09
1232+50	703.19	702.69	697.68
1232+75	703.51	703.01	698.59
1233+00	703.84	703.34	699.25
1233+25	704.17	703.67	699.86
1233+50	704.41	703.91	700.29
1233+75	704.48	703.98	700.68

DIMENSIONS	EVALUATED LOCATIONS		
WALL HEIGHT (FEET)	6.5	6.2	5.9
EXPOSED WALL HEIGHT (FEET)	4.5	4.2	3.9
MINIMUM LENGTH OF REINFORCEMENT (FEET)■	6.0	6.0	6.0
WALL STATION 703.98	1230+46	1231+96	1233+70
BORING USED	9-1	9-2	9-3
FACTORED BEARING RESISTANCE (PSF)	2,200	2,200	2,200
CAPACITY TO DEMAND RATIO (CDR)			
SLIDING (CDR>1.0)	1.7	1.8	1.7
ECCENTRICITY (CDR>1.0)	3.0	3.4	3.4
OVERALL STABILITY (CDR>1.0)	4.1	–	–
BEARING RESISTANCE (CDR>1.0)	1.4	1.4	1.5
SETTLEMENT (INCHES)	<1.2	<1.3	<1.2

SOIL DESCRIPTIONS	TOTAL UNIT WEIGHT (PCF)	FRICTION ANGLE (DEGREES)	COHESION (PSF)
GRANULAR BACKFILL (REINFORCED ZONE)	120	30	–
GRANULAR BACKFILL (RETAINED SOIL)	120	30	–
LEAN CLAY (FOUNDATION SOIL)	136	0	2,600

▲ PIPE UNDERDRAIN WRAPPED 6-INCH. SLOPE 0.5% MIN. TO SUITABLE DRAINAGE.

◐ GEOTEXTILE FABRIC TYPE DF SCHEDULE B. PLACE BETWEEN REINFORCED SOIL ZONE AND OPEN GRADED BASE.

* WALL FRONT FACE BATTER VARIES BY MANUFACTURER.

☆ LIMITS FOR EXCAVATION FOR STRUCTURES.

TOTAL ESTIMATED QUANTITIES-CAT 0070

ITEM NO.	BID ITEMS	UNIT	TOTALS
206.3000	EXCAVATION FOR STRUCTURES RETAINING WALLS (R-59-32)	LS	1
310.0115	BASE AGGREGATE OPEN GRADED	CY	186
210.0100	BACKFILL STRUCTURE	CY	1065
SPV.0165.04	WALL MODULAR BLOCK MECHANICALLY STABILIZED EARTH LRFD R-59-32	SF	1625
612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	260
645.0112	GEOTEXTILE FABRIC TYPE DF SCHEDULE B	SY	528
SPV.0090.01	FENCE CHAIN LINK POLYMER-COATED 6-FT	LF	250

■ THE LENGTHS PROVIDED IN THE TABLE ARE THE MINIMUM REQUIRED REINFORCEMENT LENGTHS BASED UPON THE MINIMUM DESCRIBED IN THE SPECIAL PROVISIONS OR EXTERNAL AND OVERALL STABILITY AT THE DESIGNATED LOCATIONS. THESE DESIGNATED LOCATIONS REPRESENT TYPICAL AND CRITICAL WALL LOCATIONS, BUT SHALL NOT BE CONSIDERED ALL INCLUSIVE. THE CONTRACTOR DESIGN LENGTHS SHALL MEET OR EXCEED THE MINIMUM VALUES REPRESENTED IN THE TABLE AT THESE DESIGNATED LOCATIONS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-59-32

DRAWN BY KAG | PLANS CK'D. PJE

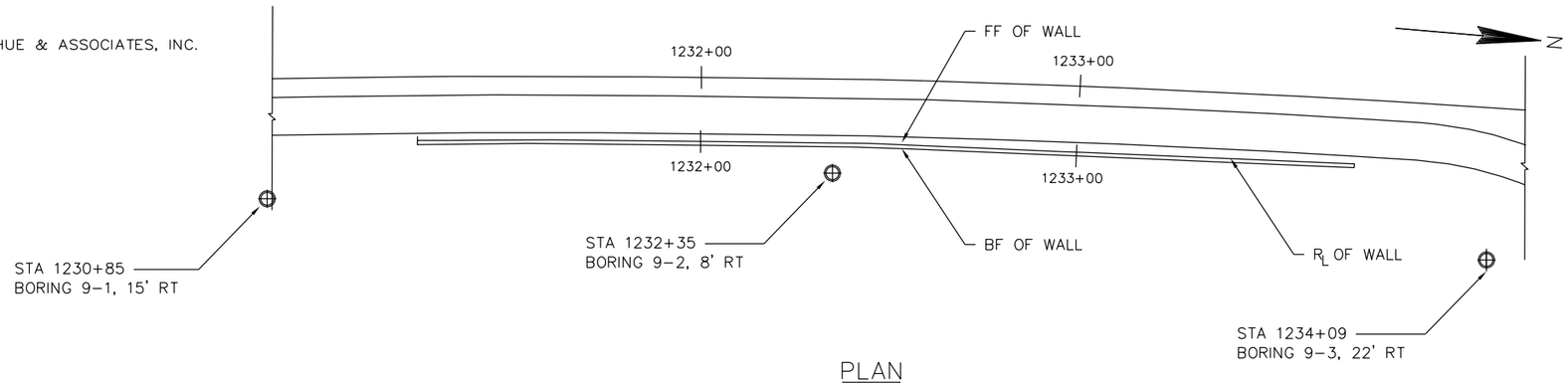
SECTION, NOTES & QUANTITIES

SHEET 2 OF 3

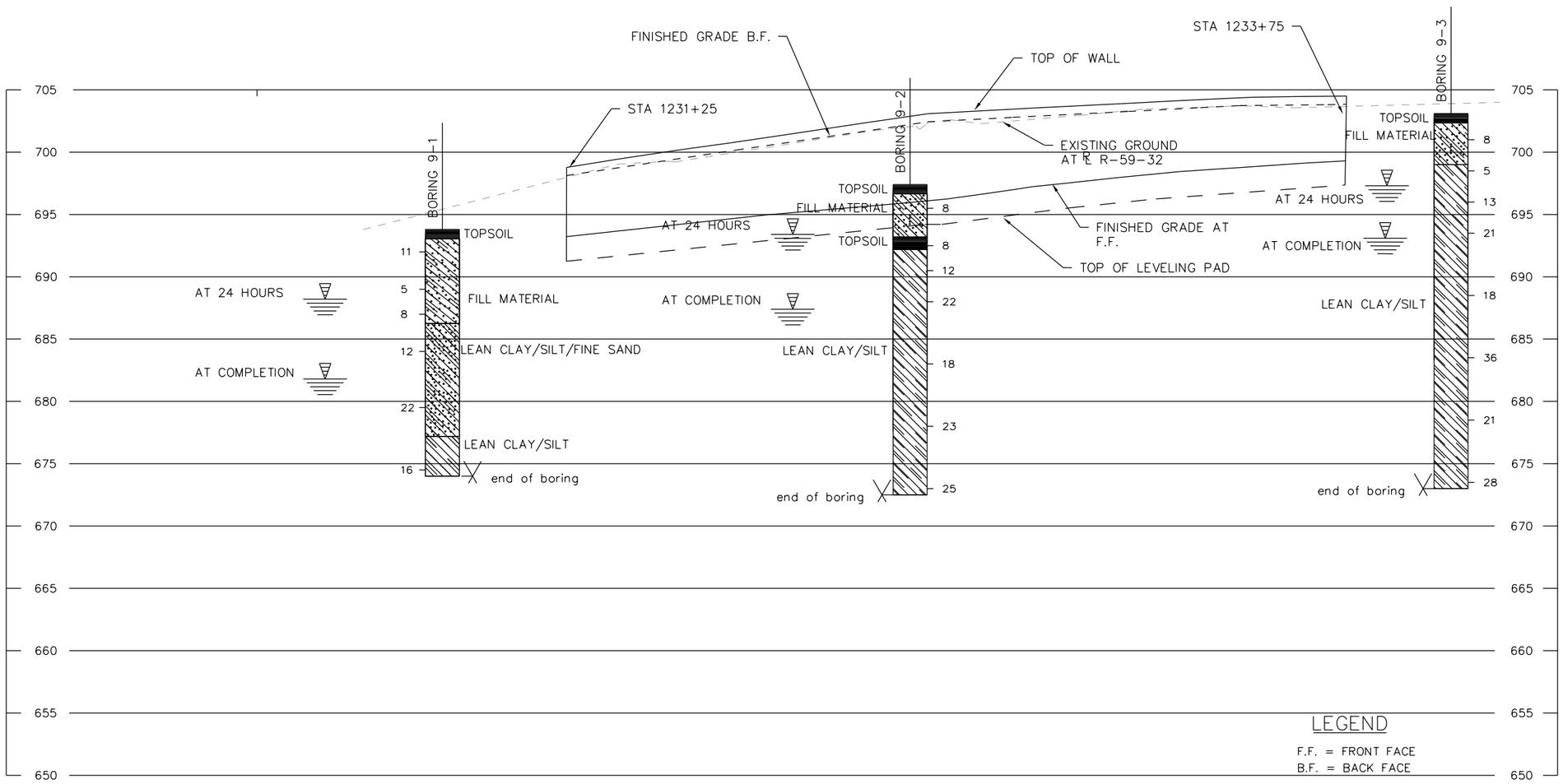
290

BORINGS PERFORMED BY:
SOILS & ENGINEERING SERVICES, INC.
MADISON, WISCONSIN
MAY 21st, 2013

PLANS PREPARED BY DONOHUE & ASSOCIATES, INC.



PLAN



LEGEND

F.F. = FRONT FACE
B.F. = BACK FACE

STATE PROJECT NUMBER

4996-01-58

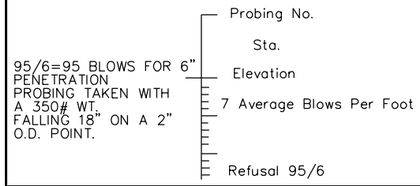
ABBREVIATIONS

F — Fine M — Medium C — Coarse
Ws — Weathered So — Sound

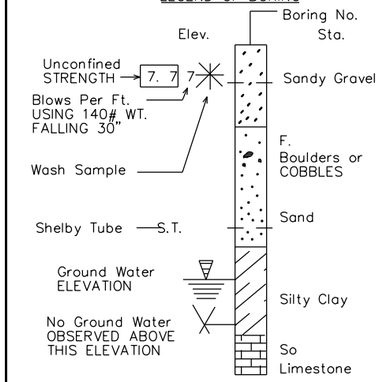
MATERIAL SYMBOLS

Topsoil, Silt, Sandstone
Sand, Peat, Limestone
Gravel, Clay, Igneous Rock

LEGEND OF PROBING



LEGEND OF BORING



UNLESS OTHERWISE SPECIFIED, THE BLOWS PER FOOT AT THE LOCATIONS INDICATED ARE BASED ON DRIVING A 2" O.D. X 1.4" I.D. SPLIT SPOON SAMPLER WITH A 140# HAMMER HAVING A FREE FALL OF 30". THE BLOW COUNT IS TAKEN IN UNDISTURBED SOIL IMMEDIATELY BELOW A CASED OR OPEN HOLE ELIMINATING SIDE FRICTION ON THE DRIVE PIPE.

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

TO OBTAIN RELATIVE DATA CONCERNING THE CHARACTER OF MATERIAL IN AND UPON WHICH THE FOUNDATION MIGHT BE BUILT, BORINGS AND/OR SOUNDINGS WERE MADE AT POINTS APPROXIMATELY AS INDICATED ON THIS DRAWING. THE DATA PRESENTED HEREIN REPRESENTS THE FINDINGS OF THE SUBSURFACE EXPLORATIONS MADE. HOWEVER, BECAUSE THE DEPTHS INVESTIGATED ARE LIMITED AND THE AREA OF THE BORINGS AND/OR SOUNDINGS IS VERY SMALL IN RELATION TO THE ENTIRE AREA, THE WISCONSIN DEPARTMENT OF TRANSPORTATION DOES NOT WARRANT CONDITIONS BELOW THE DEPTHS INVESTIGATED OR THAT THE CLASSIFICATION OF MATERIAL ENCOUNTERED IN THESE INVESTIGATIONS IS NECESSARILY TYPICAL OF THE ENTIRE SITE.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-59-32

DRAWN BY KAG | PLANS CK'D. PJE

SUBSURFACE EXPLORATION

SHEET 3 OF 3

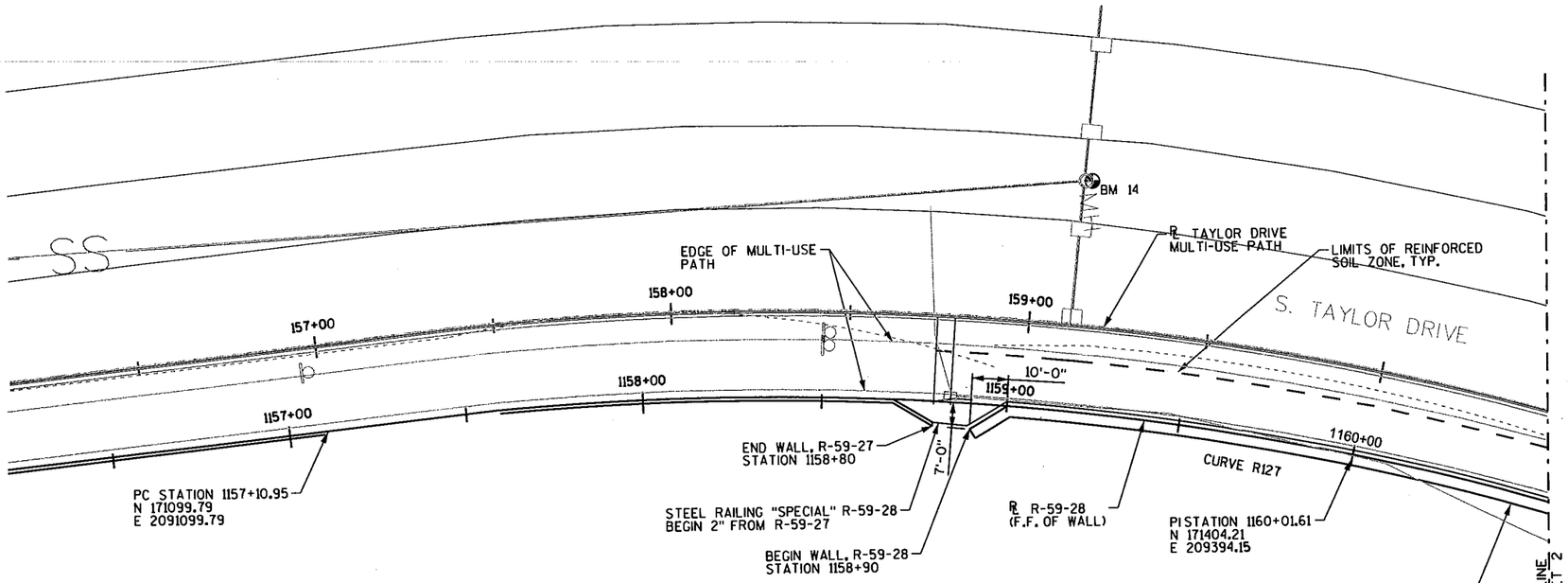
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STATE PROJECT NUMBER
4996-01-58

BRIDGE OFFICE CONTACT:
WILLIAM DREHER
608-266-8489

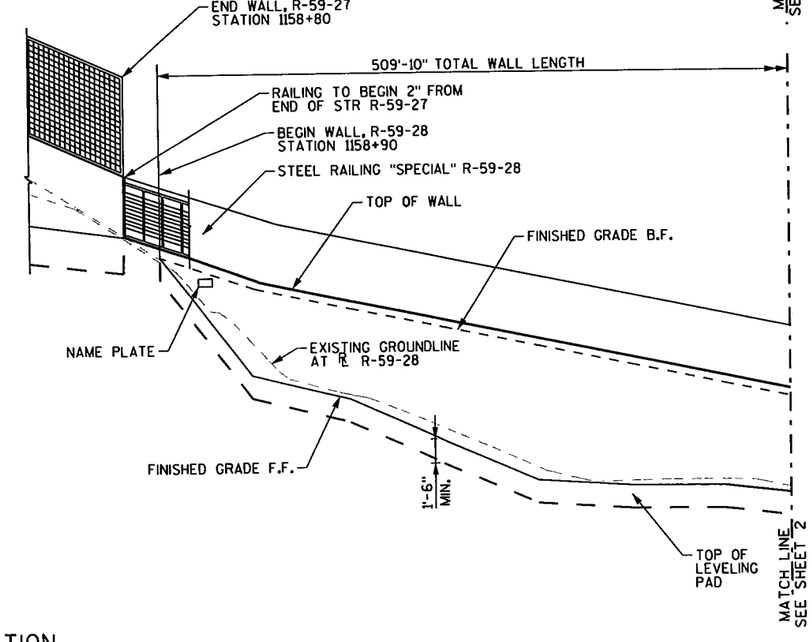
CONSULTANT CONTACT
PHIL ENGLEBERT
920-208-0296



PLAN
(MODULAR BLOCK MSE RETAINING WALL)

BM * -INDICATES BENCH MARK NUMBER





ELEVATION
(LOOKING AT FRONT FACE OF WALL)

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
14	159+14, LT	STORM MANHOLE, CHISELED "X" ON NORTH RIM	620.10

ELEVATIONS SHOWN ON THE PLAN ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88) (UPDATED 2009).

LEGEND

F.F. = FRONT FACE
B.F. = BACK FACE

CURVE R127

PI = 1160+01.61
N = 171404.21
E = 209394.15
DELTA = 38°37'39"
D = 6°54'30"
R = 829.36'
T = 290.66'
L = 559.14'
PC = 1157+10.95
N = 171099.79
E = 2091099.79
PT = 1162+70.09
N = 171642.58
E = 209519.58

REFER TO SHEET 3 FOR GENERAL NOTES, DESIGN DATA, AND ESTIMATED QUANTITIES

WISCONSIN
PHILIP J. ENGLEBERT
E-16118
SHEBOYGAN, WIS.
PROFESSIONAL ENGINEER
1/5/15

LIST OF DRAWINGS

1. GENERAL PLAN I
2. GENERAL PLAN II
3. SECTION, NOTES, AND QUANTITIES
4. SUBSURFACE EXPLORATION I
5. SUBSURFACE EXPLORATION II
6. RAILING DETAILS

NO.	DATE	REVISION	BY

DONOHUE & ASSOCIATES

ACCEPTED William C. Dreher KAR 01/11/15
CHIEF STRUCTURES DESIGN ENGINEER — DATE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-59-28

RETAINING WALL ALONG TAYLOR DRIVE

COUNTY: SHEBOYGAN | ~~TOWN~~/CITY/~~VILLAGE~~: SHEBOYGAN

DESIGN SPEC.: AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS

DESIGNED BY	DJN	DESIGN CK'D.	PJE	DRAWN BY	DJN	PLANS CK'D.	PJE

GENERAL PLAN I

SHEET 1 OF 6

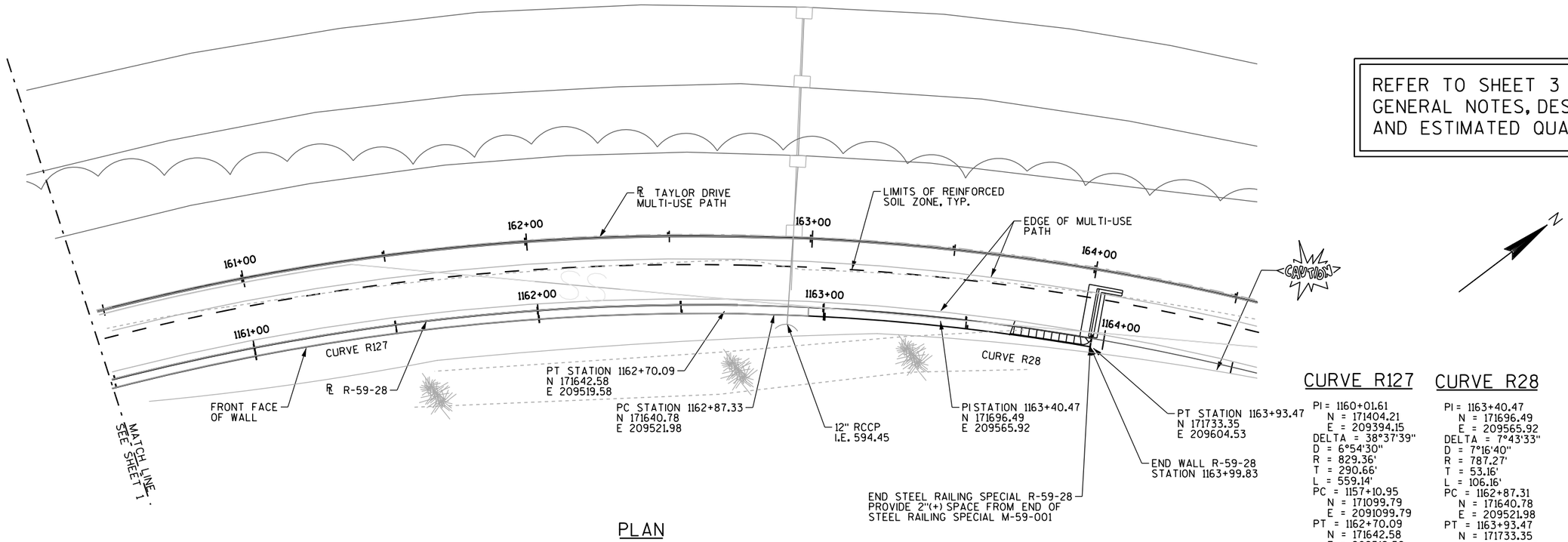
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STATE PROJECT NUMBER

4996-01-58



PLAN

(MODULAR BLOCK MSE RETAINING WALL)

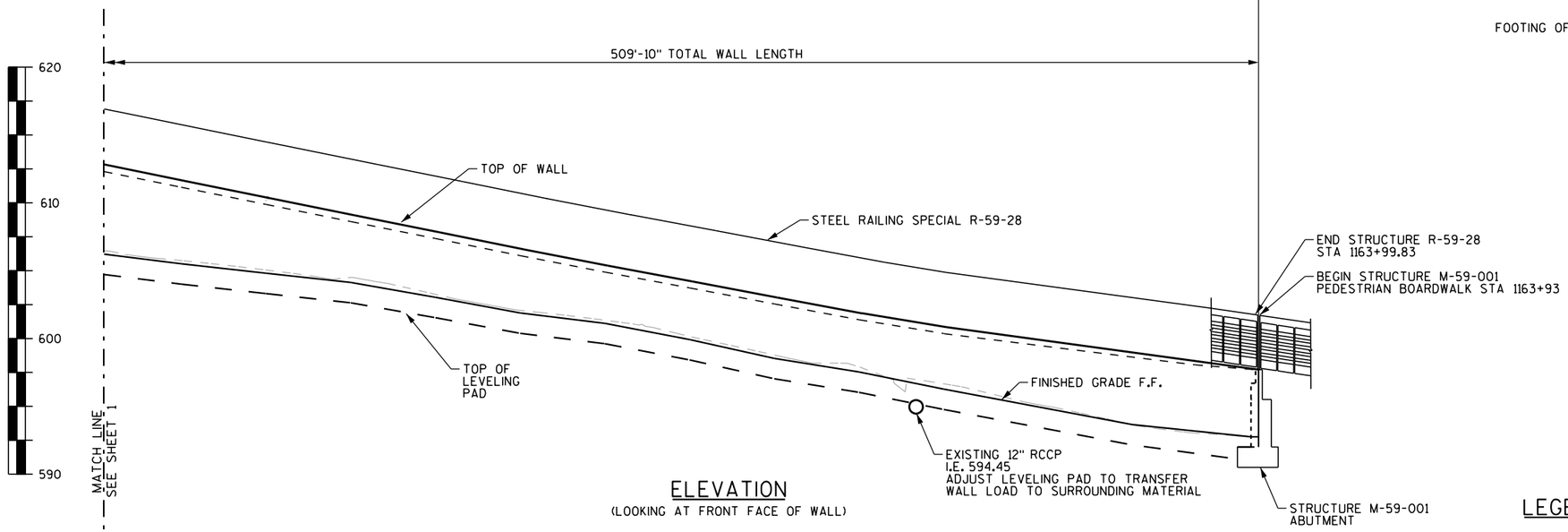
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R = 829.36'
T = 290.66'
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PC = 1157+10.95
N = 171099.79
E = 2091099.79
PT = 1162+70.09
N = 171642.58
E = 209519.58

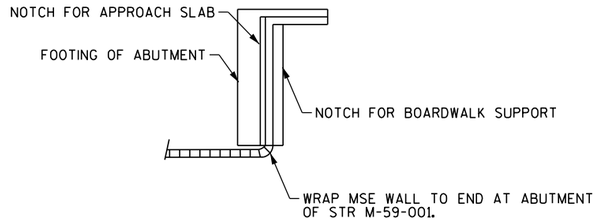
CURVE R28

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E = 209565.92
DELTA = 7°43'33"
D = 7°16'40"
R = 787.27'
T = 53.16'
L = 106.16'
PC = 1162+87.31
N = 171640.78
E = 209521.98
PT = 1163+93.47
N = 171733.35
E = 209604.53



ELEVATION

(LOOKING AT FRONT FACE OF WALL)



CONNECTION TO M-59-001

LEGEND

F.F. = FRONT FACE
B.F. = BACK FACE

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-59-28

DRAWN BY DJN | PLANS CK'D. PJE

GENERAL PLAN II

SHEET 2 OF 6

293

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8

FILE NAME : L:\Projects\11744\Dwg\structures\R-59-0028\08_02general plan_2.DGN PLOT DATE : 12/18/13 PLOT TIME : 9:14:21 AM PLOT BY : dnevers

STATE PROJECT NUMBER
4996-01-58

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

THE PLAN QUANTITY FOR THE BID ITEM "WALL MODULAR BLOCK MECHANICALLY STABILIZED EARTH LRFD" IS BASED ON A WALL HEIGHT MEASURED FROM THE TOP OF WALL TO A CONSTANT DEPTH OF 1'-6" BELOW FINISHED GRADE F.F..

ALL STATIONS AND ALL ELEVATIONS ARE IN FEET. WALL STATIONS AND ELEVATIONS ARE LISTED IN THE GEOMETRY TABLE ON THIS SHEET.

ALL STATIONS ARE ALONG THE R/L FOR R-59-28. THE R/L FOR R-59-28 IS ALONG THE FRONT FACE OF WALL, AT FINISHED GRADE

THE EXISTING GROUND LINE SHALL BE THE UPPER LIMITS OF EXCAVATION FOR STRUCTURES RETAINING WALLS (R-59-28)

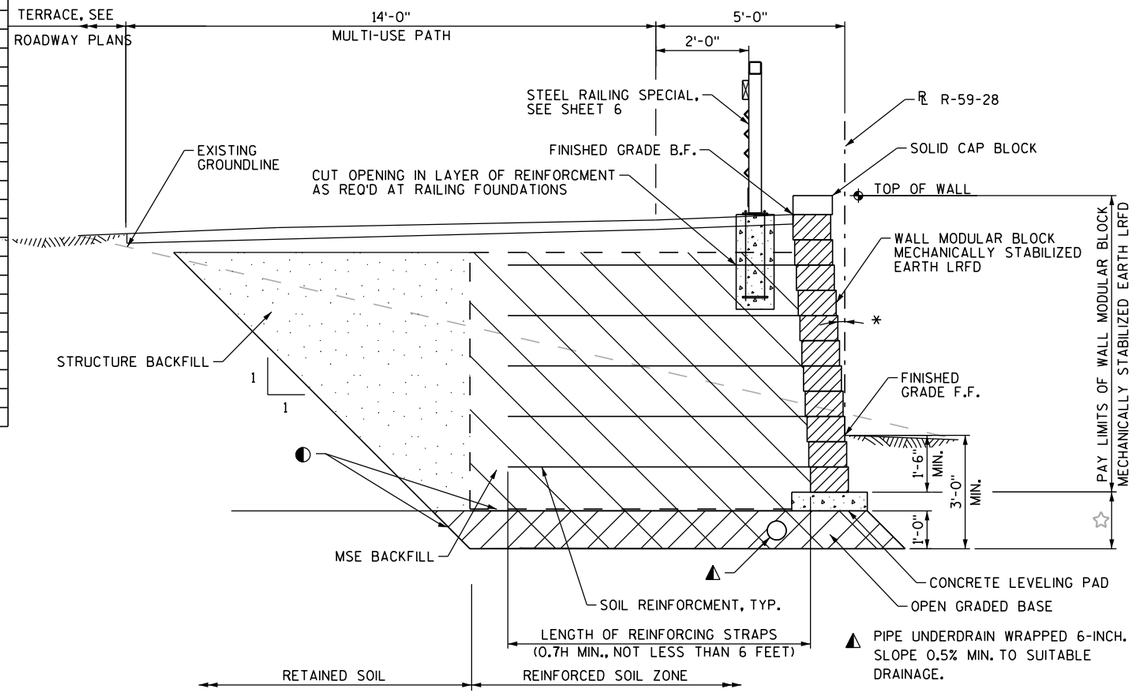
SOIL BORINGS INDICATE GROUNDWATER MAY BE PRESENT WITHIN THE EXCAVATION LIMITS DURING CONSTRUCTION. IF DEWATERING IS NEEDED, TEMPORARILY LOWER THE GROUNDWATER TABLE TO 12 INCHES BELOW THE LOWEST EXCAVATION ELEVATION PRIOR TO COMMENCEMENT OF SITE EXCAVATION.

DEWATERING AND LOWERING THE GROUNDWATER TABLE (AS REQUIRED) IS TO BE INCLUDED IN THE BID ITEM "EXCAVATION FOR STRUCTURES RETAINING WALLS (R-59-28)"

EXCAVATION BEHIND REINFORCED SOIL ZONE IS INCLUDED IN BID ITEM "BACKFILL STRUCTURE".

GEOMETRY TABLE

WALL STATION	TOP OF WALL	FINISHED GRADE B.F.	FINISHED GRADE F.F.
1158+90	620.51	620.01	618.30
1159+00	620.71	620.21	615.36
1159+25	619.09	618.59	612.87
1159+50	617.80	617.30	610.57
1159+75	616.53	616.03	607.41
1160+00	615.25	614.75	607.02
1160+25	613.98	613.48	606.65
1160+50	612.71	612.21	606.28
1160+75	611.44	610.94	605.50
1161+00	610.17	609.67	604.81
1161+25	608.91	608.41	604.13
1161+50	607.65	607.15	603.04
1161+75	606.40	605.90	601.88
1162+00	605.19	604.69	601.12
1162+25	604.02	603.52	599.91
1162+50	602.84	602.34	598.53
1162+75	601.68	601.18	597.53
1163+00	600.66	600.16	596.27
1163+25	600.25	599.75	594.92
1163+50	599.38	598.88	593.65
1163+75	598.54	598.04	592.68
1163+92	597.77	597.27	592.60



CROSS SECTION THROUGH WALL

▲ PIPE UNDERDRAIN WRAPPED 6-INCH. SLOPE 0.5% MIN. TO SUITABLE DRAINAGE.

◐ GEOTEXTILE FABRIC TYPE DF SCHEDULE B. PLACE BETWEEN REINFORCED SOIL ZONE AND OPEN GRADED BASE.

* WALL FRONT FACE BATTER VARIES BY MANUFACTURER.

☆ LIMITS FOR EXCAVATION FOR STRUCTURES.

DESIGN DATA

THE CONTRACTOR SHALL PROVIDE COMPLETE DESIGN, PLANS, DETAILS, SPECIFICATIONS, AND SHOP DRAWINGS FOR THE RETAINING WALL IN ACCORDANCE WITH THE SPECIAL PROVISIONS. THE RETAINING WALL MANUFACTURER SHALL PROVIDE TECHNICAL ASSISTANCE TO THE CONTRACTOR DURING CONSTRUCTION. THE COST OF FURNISHING THESE ITEMS SHALL BE INCLUDED IN THE BID ITEM "WALL MODULAR BLOCK MECHANICALLY STABILIZED EARTH LRFD".

PLANS, ELEVATIONS AND DETAILS SHOWN ON THESE DRAWINGS ARE INTENDED TO INDICATE WALL LOCATIONS, LENGTHS, HEIGHTS, AND DETAILS COMMON TO THE WALL SYSTEM SELECTED. THE CONTRACTOR SHALL VERIFY THAT THE WALL SYSTEM SELECTED WILL CONFORM TO THE REQUIRED ALIGNMENTS AND DETAILS.

THE RETAINING WALL IS TO BE DESIGNED USING THE ELEVATIONS PROVIDED IN THE GEOMETRY TABLE ON THIS SHEET.

DESIGN FOR RETAINING WALL TO PROVIDE FOR FINISHED GRADE SLOPED BEHIND WALL AS SHOWN.

THE RETAINING WALL BLOCKS SHALL BE STRAIGHT FACE. COLOR SHALL BE SELECTED BY THE ENGINEER.

DESIGN RETAINING WALL FOR A LIVE LOAD SURCHARGE OF 120 PSF.

FINAL DESIGN FOR INTERNAL STABILITY AND EXTERNAL SLIDING AND ECCENTRICITY IS THE RESPONSIBILITY OF THE WALL DESIGNER.

THE MAXIMUM VALUE OF THE ANGLE OF INTERNAL FRICTION OF THE WALL BACKFILL MATERIAL IN THE REINFORCED ZONE SHALL BE ASSUMED TO BE 30° WITHOUT CERTIFIED TEST VALUES.

ULTIMATE DESIGN STRESSES:

CONCRETE MASONRY ——— f'c = 3,500 psi

HIGH STRENGTH BAR STEEL REINFORCEMENT ——— fy = 60,000 psi

DIMENSIONS	EVALUATED LOCATIONS		
WALL HEIGHT (FEET)	6.9	9.5	6.0
EXPOSED WALL HEIGHT (FEET)	5.4	8.0	4.5
■ MINIMUM LENGTH OF REINFORCEMENT (FEET)	6.0	6.0	6.0
WALL STATION	1159+00	1160+00	1163+00
BORING USED	3-7	4-1	4-2
FACTORED BEARING RESISTANCE (PSF)	3,800	3,800	3,800
CAPACITY TO DEMAND RATIO (CDR)			
SLIDING (CDR>1.0)	2.0	1.6	2.3
ECCENTRICITY (CDR>1.0)	3.4	2.1	4.5
OVERALL STABILITY (CDR>1.0)	-	2.8	-
BEARING RESISTANCE (CDR>1.0)	2.6	1.7	3.0
SETTLEMENT (INCHES)	<1.0	<1.0	<1.0

SOIL DESCRIPTIONS	TOTAL UNIT WEIGHT (PCF)	FRICTION ANGLE (DEGREES)	COHESION (PSF)
GRANULAR BACKFILL (REINFORCED ZONE)	120	30	-
GRANULAR BACKFILL (RETAINED SOIL)	120	30	-
LEAN CLAY (FOUNDATION SOIL)	136	0	2,600

TOTAL ESTIMATED QUANTITIES-CAT 0030

ITEM NO.	BID ITEMS	UNIT	TOTALS
206.3000	EXCAVATION FOR STRUCTURES RETAINING WALLS (R-59-28)	LS	1
310.0115	BASE AGGREGATE OPEN GRADED	CY	510
210.0100	BACKFILL STRUCTURE	CY	720
SPV.0165.03	WALL MODULAR BLOCK MECHANICALLY STABILIZED EARTH LRFD R-59-28	SF	2910
612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	535
645.0112	GEOTEXTILE FABRIC TYPE DF SCHEDULE B	SY	1160
SPV.0060.05	STEEL RAILING SPECIAL - R-59-28	EA	1

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NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-59-28

DRAWN BY DJN | PLANS CK'D. PJE

SECTION, NOTES & QUANTITIES

SHEET 3 OF 6

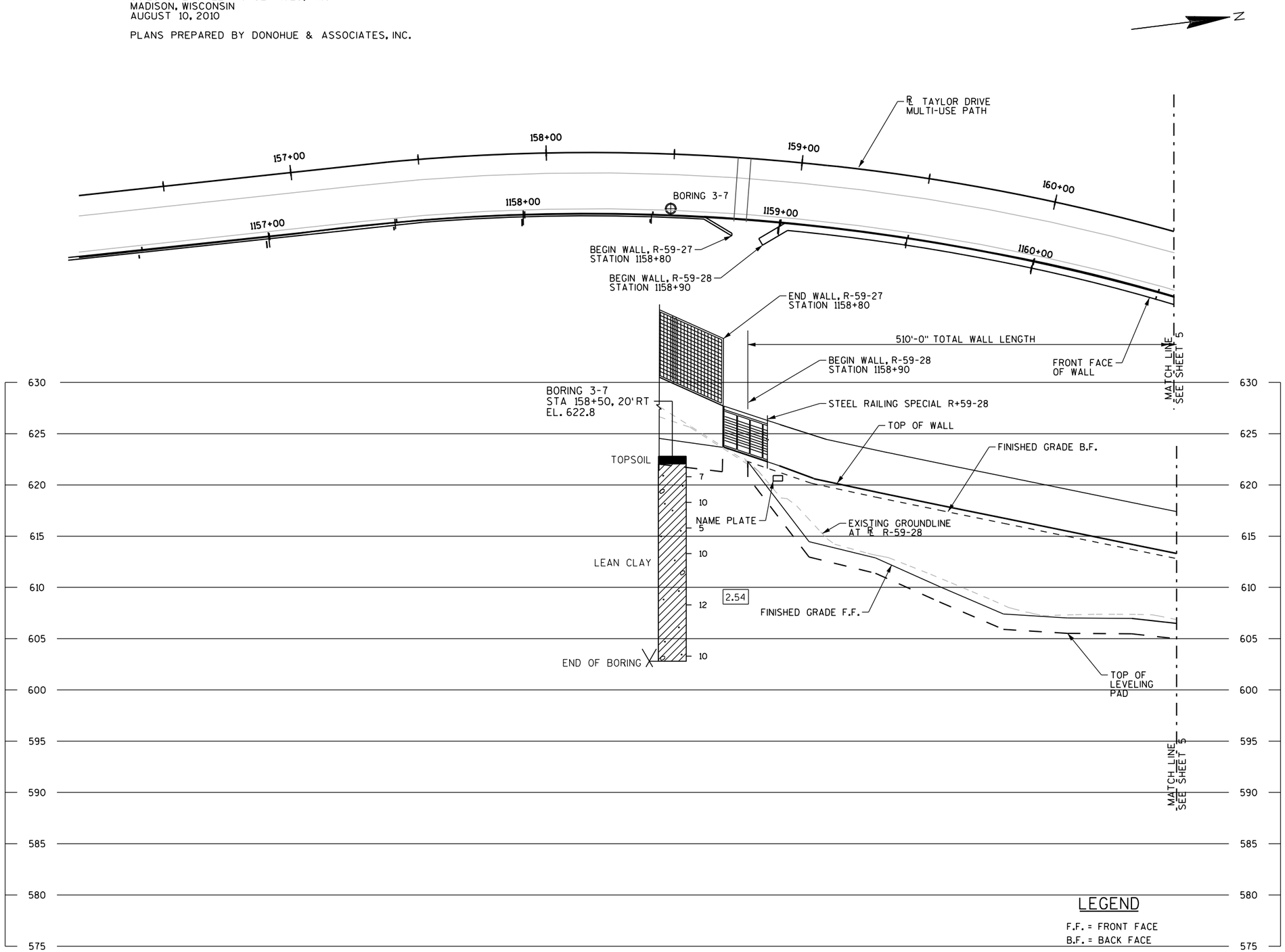
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BORINGS PERFORMED BY:
SOILS & ENGINEERING SERVICES, INC.
MADISON, WISCONSIN
AUGUST 10, 2010

PLANS PREPARED BY DONOHUE & ASSOCIATES, INC.



STATE PROJECT NUMBER

4996-01-58

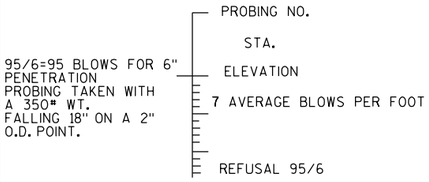
ABBREVIATIONS

F — FINE M — MEDIUM C — COARSE
WS — WEATHERED SO — SOUND

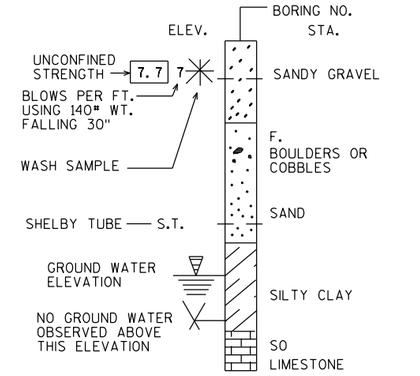
MATERIAL SYMBOLS

TOPSOIL, SILT, SANDSTONE, SAND, PEAT, LIMESTONE, GRAVEL, CLAY, IGNEOUS ROCK

LEGEND OF PROBING



LEGEND OF BORING



UNLESS OTHERWISE SPECIFIED, THE BLOWS PER FOOT AT THE LOCATIONS INDICATED ARE BASED ON DRIVING A 2" O.D. X 1.4" I.D. SPLIT SPOON SAMPLER WITH A 140# HAMMER HAVING A FREE FALL OF 30". THE BLOW COUNT IS TAKEN IN UNDISTURBED SOIL IMMEDIATELY BELOW A CASED OR OPEN HOLE ELIMINATING SIDE FRICTION ON THE DRIVE PIPE.

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NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-59-28

DRAWN BY DJN | PLANS CK'D. PJE

SUBSURFACE EXPLORATION 1

SHEET 4 OF 6

295

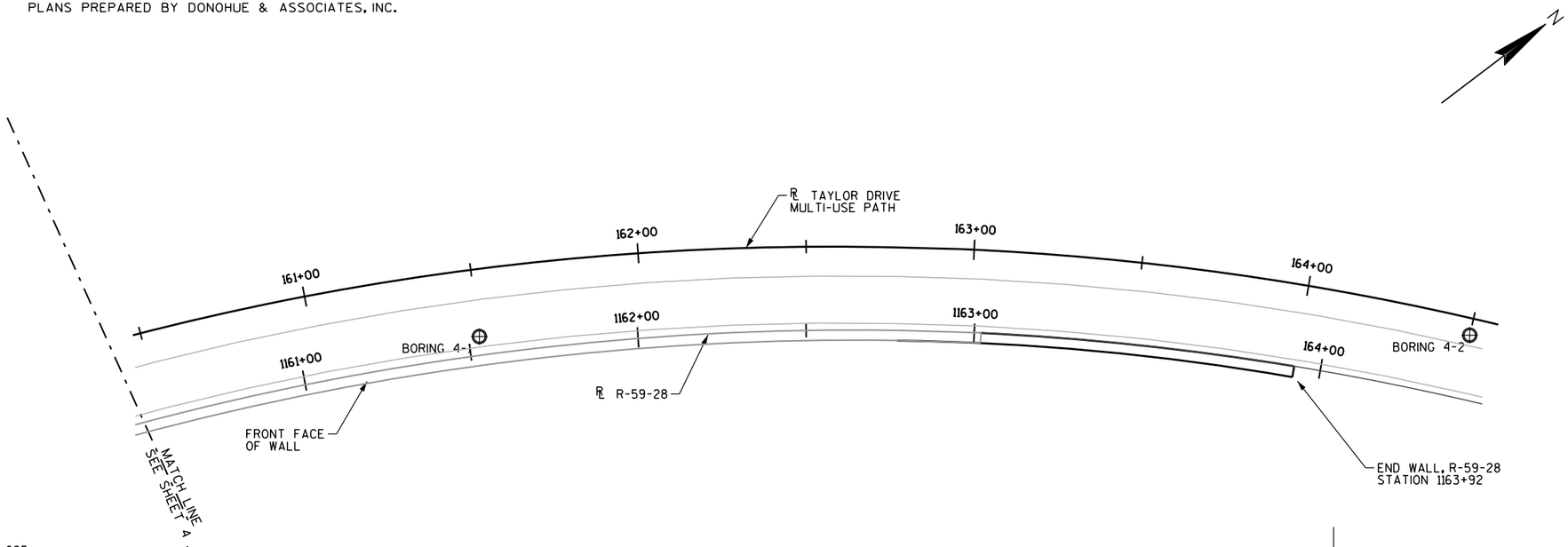
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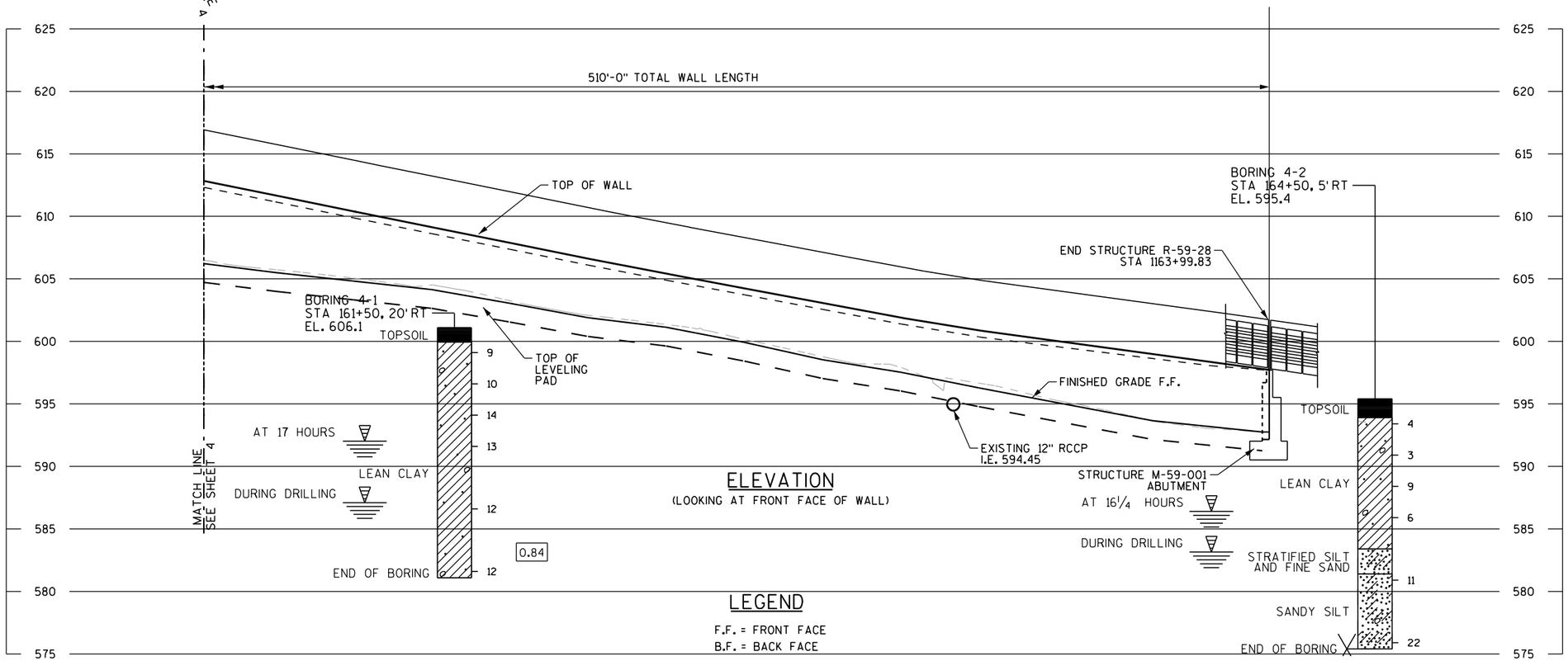
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BORINGS PERFORMED BY:
SOILS & ENGINEERING SERVICES, INC.
MADISON, WISCONSIN
AUGUST 10, 2010

PLANS PREPARED BY DONOHUE & ASSOCIATES, INC.





STATE PROJECT NUMBER

4996-01-58

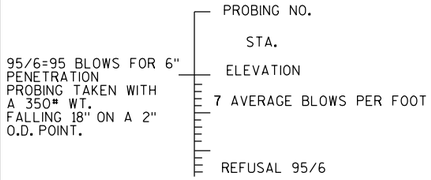
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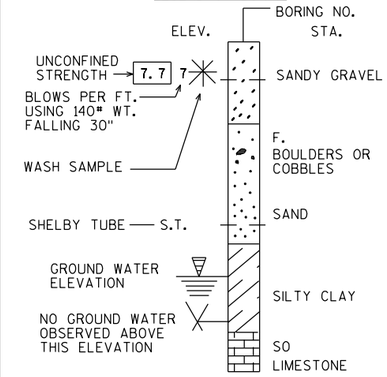
MATERIAL SYMBOLS

TOPSOIL, SILT, SANDSTONE
SAND, PEAT, LIMESTONE
GRAVEL, CLAY, IGNEOUS ROCK

LEGEND OF PROBING



LEGEND OF BORING



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STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-59-28

DRAWN BY DJN | PLANS CK'D. PJE

SUBSURFACE EXPLORATION II

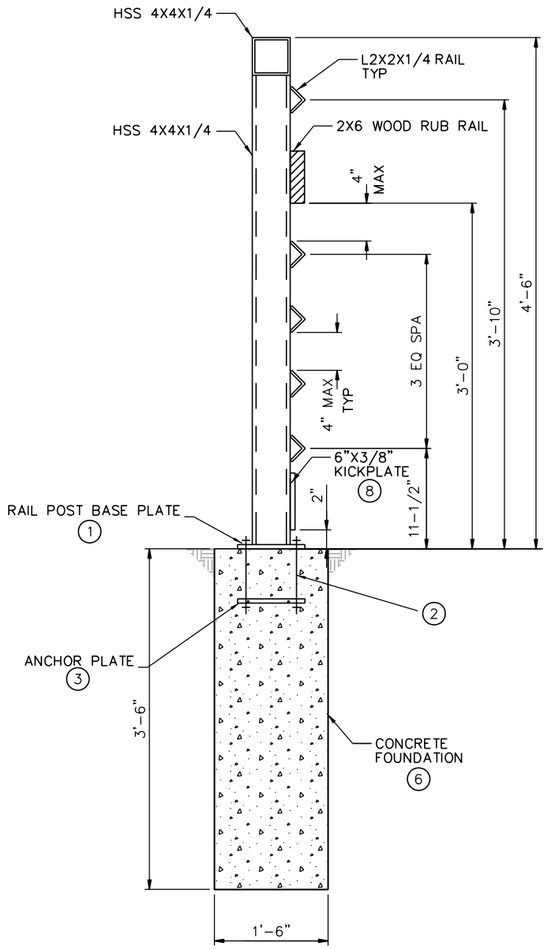
SHEET 5 OF 6

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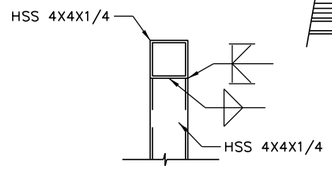
FILE NAME : L:\Projects\11744\Dwg\structures\R-59-0028\08_05subsurface_2.DGN PLOT DATE : 08/28/14 PLOT TIME : 6:26:40 AM PLOT BY : kgahagan

STATE PROJECT NUMBER

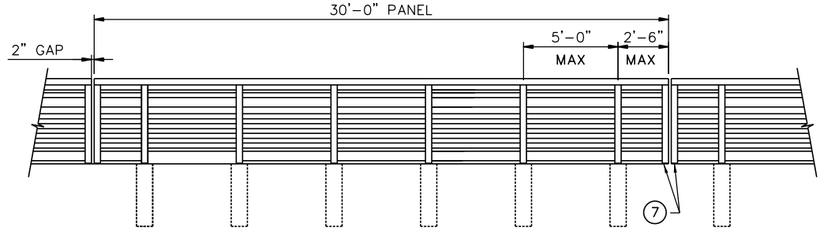
4996-01-58



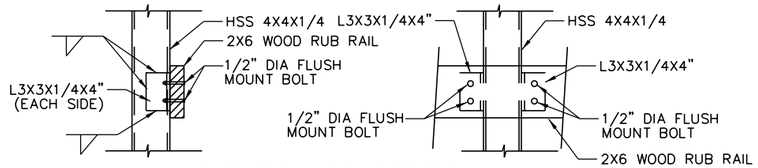
SECTION THRU RAILING



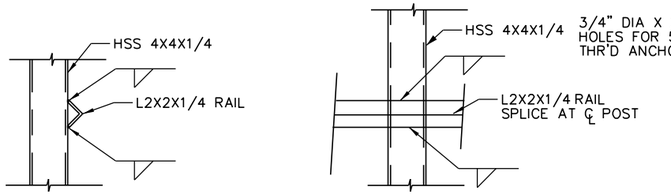
TOP CONNECTION



ELEVATION

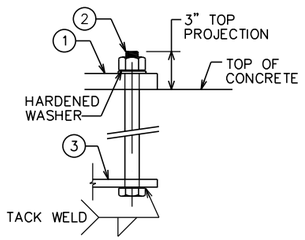


RUB RAIL CONNECTION

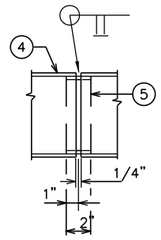


ANGLE CONNECTION

(KICKPLATE CONNECTION SIMILAR)

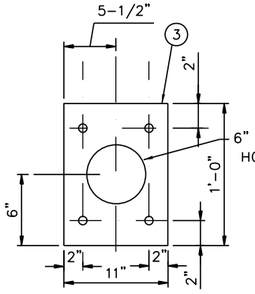


ANCHOR BOLTS

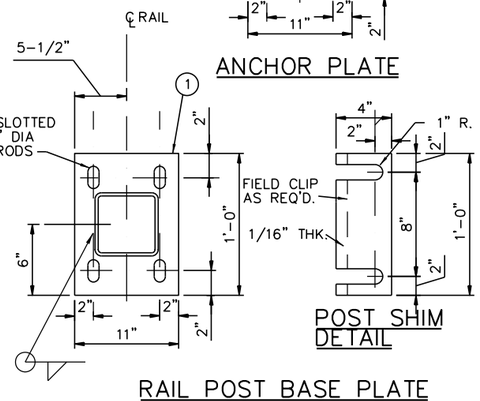


SHOP RAIL SPLICE DETAIL

(LOCATION MUST BE SHOWN ON SHOP DRAWINGS)



ANCHOR PLATE



RAIL POST BASE PLATE

POST SHIM DETAIL

LEGEND

1. PLATE 5/8" x 11" x 1'-0" WITH 3/4" X 2" SLOTTED HOLES FOR ANCHOR BOLTS NO. 2. WELD TO HSS4x4 AS SHOWN. SLOTS PARALLEL TO LONG SIDE OF PLATE.
2. 5/8" DIA X 10" LONG, TYPE 316 STAINLESS STEEL BOLT (MIN. TENSILE STRENGTH=70KSI) WITH NUT AND WASHERS OF SAME ALLOY GROUP. (ALTERNATE RAIL POST ANCHORAGE: 4 EQUIVALENT STAINLESS STEEL CONCRETE MASONRY ANCHORS TYPE S 5/8" EMBED 7" IN CONCRETE FOR RAIL POSTS.
3. 5/8" X 11" X 1'-0" ANCHOR PLATE (GALVANIZED) WITH 3/4' DIA HOLES FOR ANCHOR BOLTS. ANCHOR PLATE IS NOT REQUIRED WHEN TYPE S MASONRY ANCHORS ARE USED.
4. HSS 4 x 4 x 1/4 STRUCTURAL TUBING.
5. SPLICE SLEEVE FABRICATED FROM 1/4" PLATE. PROVIDE "SLIDING FIT".
6. REINFORCE CONCRETE FOUNDATION WITH 4-#4 BARS VERTICALLY AND #3@12" TIES.
7. PROVIDE 2"X4" HSS END POSTS ON EACH PANEL END.
8. C6X8.2 MAY BE SUBSTITUTED FOR 6"X 3/8" PLATE

GENERAL NOTES

BID ITEM SHALL BE "STEEL RAILING SPECIAL R-59-28" BID ITEM INCLUDES ALL ITEMS SHOWN.

POST BASE PLATES SHALL BE FLAT WITH ALL SURFACES SMOOTH AND FREE FROM WARP AND ALL EDGES SMOOTH, STRAIGHT AND VERTICAL. ALL PLATE CUTS SHALL BE MACHINE OR MACHINE FLAME CUTS.

ALL STEEL USED IN FABRICATION SHALL BE MADE FROM MATERIALS CONFORMING TO ASTM A847, A588 OR A242 GRADE 50 WEATHERING STEEL UNLESS NOTED OTHERWISE.

FILL BOLT SLOT OPENINGS IN POST SHIMS & PLATE NO. 1 WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER.

RAIL MEMBERS SHALL BE ATTACHED CONTINUOUSLY TO A MINIMUM OF FOUR POSTS AND A MAXIMUM OF EIGHT.

STEEL POST SHIMS MAY BE USED UNDER POSTS WHERE REQ'D. FOR ALIGNMENT.

SHOP WELD ALL STEEL CONNECTIONS WITH 3/16" FILLET WELDS. GRIND SMOOTH. FINISHED RAIL SHALL BE FREE OF BURRS AND SHARP EDGES.

WOOD RUB RAIL 2X6, S4S E4E, TREATED STRUCTURAL LUMBER, Fb=1750psi. RUB RAILS SHALL BE PRESSURE TREATED TO AWPA ACZA PER SPECIFICATION.

WOOD RUB RAIL SHALL BE SPLICED AT RAIL POSTS.

PROVIDE 1/2" DIA DRAIN HOLES IN LOW END OF ALL RAILS CLEAR OF SPLICE TUBE

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE R-59-28

DRAWN BY KAG | PLANS CK'D. PJE

POST MOUNTED RAILING DETAILS

SHEET 6 OF 6

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8

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FILE NAME : L:\Projects\11744\Dwg\structures\R-59-0028\08_06railing.DGN PLOT DATE : 01/06/15 PLOT TIME : 7:41:15 AM PLOT BY : kgahagan

CROCKER TO PAINE

99+50 - 112+00

STATION	LENGTH	CUT AREA	CUT VOL.	REUSABLE VOL.	FILL AREA	FILL VOL.	CUM. CUT VOL.	CUM. REUSABLE VOL.	CUM. FILL VOL.	CUM. NET VOL.
	LF	SF	CY	CY	SF	CY	CY	CY	CY	CY
99+74	0	7.38	0.00	0.00	2.09	0.00	0.00	0.00	0.00	0.00
100+50	76	16.28	33.30	33.30	0.00	2.95	33.30	33.30	2.95	30.35
101+00	50	20.56	34.11	34.11	0.00	0.00	67.41	67.41	2.95	64.46
101+50	50	19.03	36.65	36.65	0.00	0.00	104.06	104.06	2.95	101.11
102+00	50	17.07	33.43	33.43	0.00	0.00	137.49	137.49	2.95	134.54
102+50	50	17.13	31.67	31.67	0.00	0.00	169.16	169.16	2.95	166.22
103+00	50	15.48	30.20	30.20	0.42	0.39	199.37	199.37	3.34	196.03
103+50	50	10.59	24.14	24.14	0.24	0.61	223.51	223.51	3.95	219.56
104+00	50	10.05	19.11	19.11	0.14	0.35	242.62	242.62	4.30	238.32
104+50	50	8.93	17.57	17.57	0.29	0.40	260.20	260.20	4.70	255.49
105+00	50	8.98	16.58	16.58	0.15	0.40	276.78	276.78	5.11	271.67
105+50	50	9.64	17.24	17.24	0.20	0.32	294.02	294.02	5.43	288.59
106+00	50	12.21	20.23	20.23	0.50	0.65	314.26	314.26	6.08	308.18
106+50	50	25.31	34.74	34.74	0.03	0.49	349.00	349.00	6.57	342.43
107+00	50	0.02	23.46	23.46	15.54	14.41	372.45	372.45	20.98	351.47
107+50	50	0.38	0.37	0.37	7.56	21.39	372.83	372.83	42.37	330.45
108+00	50	3.21	3.32	3.32	2.86	9.65	376.15	376.15	52.03	324.13
108+50	50	1.22	4.10	4.10	5.33	7.59	380.25	380.25	59.61	320.64
109+00	50	3.99	4.82	4.82	2.85	7.58	385.07	385.07	67.20	317.87
109+50	50	6.35	9.58	9.58	2.08	4.56	394.65	394.65	71.76	322.89
109+70	50	4.24	3.93	3.93	2.77	1.79	398.58	398.58	73.56	325.02
110+00	50	7.25	6.39	6.39	1.01	2.10	404.96	404.96	75.65	329.31
110+50	50	7.98	14.11	14.11	0.21	1.13	419.07	419.07	76.78	342.29
111+00	50	9.15	15.87	15.87	0.10	0.29	434.94	434.94	77.06	357.87
111+39	39	11.18	14.69	14.69	0.49	0.42	449.62	449.62	77.48	372.14

PAINE TO UNION

112+00 - 142+00

STATION	LENGTH	CUT AREA	CUT VOL.	REUSABLE VOL.	FILL AREA	FILL VOL.	CUM. CUT VOL.	CUM. REUSABLE VOL.	CUM. FILL VOL.	CUM. NET VOL.
	LF	SF	CY	CY	SF	CY	CY	CY	CY	CY
112+40	0	11.28	42.00	42.00	0.28	1.43	0.00	0.00	0.00	0.00
112+50	10	17.38	5.31	5.31	0.00	0.05	5.31	5.31	0.05	5.26
113+00	50	18.40	33.13	33.13	0.00	0.00	38.44	38.44	0.05	38.39
113+50	50	20.71	36.22	36.22	0.00	0.00	74.66	74.66	0.05	74.61
114+00	50	9.54	28.01	28.01	0.10	0.09	102.67	102.67	0.14	102.53
114+50	50	7.81	16.06	16.06	0.51	0.56	118.73	118.73	0.70	118.03
115+00	50	4.47	11.37	11.37	1.67	2.02	130.10	130.10	2.72	127.38
115+50	50	3.65	7.52	7.52	4.55	5.76	137.62	137.62	8.48	129.14
116+00	50	2.76	5.93	5.93	9.13	12.66	143.55	143.55	21.14	122.41
116+50	50	2.34	4.72	4.72	12.91	20.41	148.27	148.27	41.55	106.72
117+00	50	0.18	2.33	2.33	23.37	33.59	150.60	150.60	75.14	75.46
117+50	50	0.18	0.33	0.33	22.93	42.87	150.93	150.93	118.01	32.92
117+60	10	0.02	0.04	0.04	27.40	9.32	150.97	150.97	127.33	23.64
118+00	40	0.00	0.02	0.02	53.93	60.25	150.99	150.99	187.58	-36.59
118+50	50	0.00	0.00	0.00	75.93	120.24	150.99	150.99	307.82	-156.83
119+00	50	0.01	0.01	0.01	83.88	147.97	151.00	151.00	455.79	-304.79
119+50	50	0.01	0.02	0.02	89.90	160.90	151.02	151.02	616.69	-465.67
120+00	50	0.28	0.28	0.28	89.99	166.56	151.30	151.30	783.25	-631.95
120+50	50	0.03	0.29	0.29	112.09	187.11	151.59	151.59	970.36	-818.77
121+00	50	0.36	0.36	0.36	107.63	203.44	151.95	151.95	1173.80	-1021.85
121+50	50	0.52	0.81	0.81	92.42	185.23	152.76	152.76	1359.03	-1206.27
122+00	50	0.06	0.54	0.54	100.22	178.37	153.30	153.30	1537.40	-1384.10
122+50	50	0.15	0.20	0.20	140.18	222.59	153.50	153.50	1759.99	-1606.49
123+00	50	0.56	0.66	0.66	133.86	253.75	154.16	154.16	2013.74	-1859.58
123+50	50	0.65	1.13	1.13	78.66	196.78	155.29	155.29	2210.52	-2055.23
124+00	50	1.61	2.10	2.10	27.75	98.53	157.39	157.39	2309.05	-2151.66
124+50	50	3.87	5.07	5.07	5.31	30.61	162.46	162.46	2339.66	-2177.20
125+00	50	9.16	12.06	12.06	0.55	5.43	174.52	174.52	2345.09	-2170.57
125+50	50	8.18	16.06	16.06	0.14	0.64	190.58	190.58	2345.73	-2155.15
126+00	50	14.73	21.21	21.21	0.15	0.27	211.79	211.79	2346.00	-2134.21
126+50	50	14.63	27.18	27.18	0.28	0.40	238.97	238.97	2346.40	-2107.43
127+00	50	12.21	24.85	24.85	0.00	0.26	263.82	263.82	2346.66	-2082.84
127+50	50	6.52	17.34	17.34	0.76	0.70	281.16	281.16	2347.36	-2066.20
128+00	50	5.56	11.19	11.19	1.36	1.96	292.35	292.35	2349.32	-2056.97
128+50	50	8.72	13.22	13.22	0.50	1.71	305.57	305.57	2351.03	-2045.46
129+00	50	7.18	14.72	14.72	1.90	2.21	320.29	320.29	2353.24	-2032.95
129+50	50	6.15	12.34	12.34	4.44	5.87	332.63	332.63	2359.11	-2026.48
130+00	50	4.13	9.52	9.52	10.90	14.20	342.15	342.15	2373.31	-2031.16
130+50	50	2.29	5.94	5.94	23.51	31.86	348.09	348.09	2405.17	-2057.08
131+00	50	3.60	5.45	5.45	52.36	70.25	353.54	353.54	2475.42	-2121.88
131+50	50	17.74	19.76	19.76	78.16	120.85	373.30	373.30	2596.27	-2222.97
132+00	50	2.63	18.86	18.86	73.06	140.02	392.16	392.16	2736.29	-2344.13
132+50	50	4.01	6.15	6.15	3.25	70.66	398.31	398.31	2806.95	-2408.64
133+00	50	2.30	5.85	5.85	10.02	12.29	404.16	404.16	2819.24	-2415.08
133+50	50	0.86	2.93	2.93	18.18	26.11	407.09	407.09	2845.35	-2438.26
134+00	50	10.47	10.49	10.49	2.79	19.41	417.58	417.58	2864.76	-2447.18
134+50	50	2.80	12.29	12.29	2.17	4.59	429.87	429.87	2869.35	-2439.48
135+00	50	4.76	7.01	7.01	4.24	5.94	436.88	436.88	2875.29	-2438.41
135+50	50	9.77	13.46	13.46	2.33	6.09	450.34	450.34	2881.38	-2431.04
136+00	50	8.18	16.62	16.62	0.08	2.23	466.96	466.96	2883.61	-2416.65
136+50	50	4.22	11.49	11.49	1.34	1.31	478.45	478.45	2884.92	-2406.47
137+00	50	13.08	16.02	16.02	0.13	1.36	494.47	494.47	2886.28	-2391.81
137+50	50	12.88	24.03	24.03	0.00	0.12	518.50	518.50	2886.40	-2367.90
138+00	50	4.92	16.48	16.48	1.67	1.54	534.98	534.98	2887.94	-2352.96
138+50	50	8.38	12.31	12.31	0.25	1.77	547.29	547.29	2889.71	-2342.42
139+00	50	9.48	16.54	16.54	1.22	1.36	563.83	563.83	2891.07	-2327.24
139+50	50	12.80	20.63	20.63	0.80	1.88	584.46	584.46	2892.95	-2308.49
140+00	50	5.48	16.92	16.92	1.13	1.80	601.38	601.38	2894.75	-2293.37
140+50	50	8.81	13.23	13.23	0.17	1.20	614.61	614.61	2895.95	-2281.34
141+00	50	8.93	16.42	16.42	0.10	0.25	631.03	631.03	2896.20	-2265.17
141+50	50	8.64	16.26	16.26	1.44	1.43	647.29	647.29	2897.63	-2250.34
141+89	39	7.48	11.64	11.64	7.46	6.42	658.93	658.93	2904.05	-2245.12

UNION TO R-59-027

142+00 - 148+00

STATION	LENGTH	CUT AREA	CUT VOL.	REUSABLE VOL.	FILL AREA	FILL VOL.	CUM. CUT VOL.	CUM. REUSABLE VOL.	CUM. FILL VOL.	CUM. NET VOL.
	LF	SF	CY	CY	SF	CY	CY	CY	CY	CY
142+84	0	27.48	61.52	61.52	53.11	106.56	0.00	0.00	0.00	0.00
143+00	16	6.90	10.19	10.19	188.71	71.65	10.19	10.19	71.65	-61.46
143+50	50	0.00	6.39	6.39	60.40	230.65	16.58	16.58	302.30	-285.72
144+00	50	0.00	0.00	0.00	90.65	139.86	16.58	16.58	442.16	-425.58
144+50	50	0.07	0.07	0.07	52.41	132.47	16.65	16.65	574.63	-557.98
145+00	50	0.56	0.58	0.58	19.30	66.40	17.23	17.23	641.03	-623.80
145+50	50	2.50	2.83	2.83	2.88	20.54	20.06	20.06	661.57	-641.51
146+00	50	21.89	22.58	22.58	0.26	2.90	42.64	42.64	664.47	-621.83
146+50	50	16.75	35.77	35.77	1.30	1.44	78.41	78.41	665.91	-587.50
147+00	50	21.47	35.39	35.39	1.13	2.25	113.80	113.80	668.16	-554.36
147+50	50	59.33	74.82	74.82	0.65	1.64	188.62	188.62	669.80	-481.18
148+00	50	76.18	125.47	125.47	0.71	1.26	314.09	314.09	671.06	-356.97

ALONG R-59-027

148+00 - 158+50

STATION	LENGTH	CUT AREA	CUT VOL.	REUSABLE VOL.	FILL AREA	FILL VOL.	CUM. CUT VOL.	CUM. REUSABLE VOL.	CUM. FILL VOL.	CUM. NET VOL.
	LF	SF	CY	CY	SF	CY	CY	CY	CY	CY
148+00	0	76.18	125.47	125.47	0.71	1.26	0	0	0	0
148+50	50	84.66	148.93	148.93	0.46	1.09	148.93	148.93	1.09	147.84
149+00	50	89.83	161.57	161.57	3.06	3.26	310.50	310.50	4.35	306.15
149+50	50	100.49	176.21	176.21	3.17	5.76	486.71	486.71	10.11	476.60
150+00	50	99.13	184.83	184.83	6.78	9.21	671.54	671.54	19.32	652.22
150+50	50	94.85	179.61	179.61	16.57	21.62	851.15	851.15	40.94	810.21
151+00	50	95.23	176.00	176.00	14.43	28.71	1027.15	1027.15	69.65	957.50
151+50	50	96.65	177.66	177.66	16.44	28.59	1204.81	1204.81	98.24	1106.57
152+00	50	94.19	176.70	176.70	16.77	30.76	1381.51	1381.51	129.00	1252.51
152+50	50	88.11	168.79	168.79	17.14	31.40	1550.30	1550.30	160.40	1389.90
153+00	50	93.18	167.86	167.86	16.68	31.31	1718.16	1718.16	191.71	1526.45
153+50	50	92.78	172.18	172.18	16.59	30.80	1890.34	1890.34	222.51	1667.83
154+00	50	95.24	174.09	174.09	17.08	31.18	2064.43	2064.43	253.69	1810.74
154+50	50	101.85	182.49	182.49	17.18	31.72	2246.92	2246.92	285.41	1961.51
155+00	50	108.81	195.05	195.05	18.16	32.72	2441.97	2441.97	318.13	2123.84
155+50	50	98.67	192.11	192.11	17.40	32.92	2634.08	2634.08	351.05	2283.03
156+00	50	97.75	181.87	181.87	17.39	32.21	2815.95	2815.95	383.26	2432.69
156+50	50	90.34	174.15	174.15	17.58	32.38	2990.10	2990.10	415.64	2574.46
157+00	50	67.88	146.50	146.50	17.19	32.20	3136.60	3136.60	447.84	2688.76
157+50	50	54.45	113.27	113.27	18.98	33.48	3249.87	3249.87	481.32	2768.55
158+00	50	55.07	101.41	101.41	19.54	35.66	3351.28	3351.28	516.98	2834.30
158+50	50	25.69	74.78	74.78	9.32	26.73	3426.06	3426.06	543.71	2882.35

ALONG R-59-028

158+50 - 164+00

STATION	LENGTH	CUT AREA	CUT VOL.	REUSABLE VOL.	FILL AREA	FILL VOL.	CUM. CUT VOL.	CUM. REUSABLE VOL.	CUM. FILL VOL.	CUM. NET VOL.
	LF	SF	CY	CY	SF	CY	CY	CY	CY	CY
158+50	0	25.69	74.78	74.78	9.32	26.73	0.00	0.00	0.00	0.00
159+00	50	63.25	82.35	82.35	2.31	10.78	82.35	82.35	10.78	71.57
159+50	50	81.68	134.20	134.20	3.52	5.41	216.55	216.55	16.19	200.36
160+00	50	94.58	163.21	163.21	2.24	5.33	379.76	379.76	21.52	358.24
160+50	50	77.86	159.67	159.67	2.54	4.43	539.43	539.43	25.95	513.48
161+00	50	72.15	138.90	138.90	1.85	4.07	678.33	678.33	30.02	648.31
161+50	50	67.88	129.66	129.66	1.55	3.14	807.99	807.99	33.16	774.83
162+00	50	64.79	122.85	122.85	1.33	2.67	930.84	930.84	35.83	895.01
162+50	50	64.65	119.85	119.85	1.09	2.24	1050.69	1050.69	38.07	1012.62
163+00	50	66.20	121.15	121.15	2.28	3.12	1171.84	1171.84	41.19	1130.65
163+50	50	64.60	121.10	121.10	4.33	6.12	1292.94	1292.94	47.31	1245.63
164+00	50	2.70	62.31	62.31	12.88	15.93	1355.25	1355.25	63.24	1292.01

ALONG BOARDWALK

164+00 - 177+44

STATION	LENGTH	CUT AREA	CUT VOL.	REUSABLE VOL.	FILL AREA	FILL VOL.	CUM. CUT VOL.	CUM. REUSABLE VOL.	CUM. FILL VOL.	CUM. NET VOL.
	LF	SF	CY	CY	SF	CY	CY	CY	CY	CY
164+00	0	2.70	62.31	62.31	0.00	0.00	0.00	0.00	0.00	0.00
164+50	50	1.81	4.18	4.18	0.00	0.00	4.18	4.18	0.00	4.18
165+00	50	0.64	2.27	2.27	0.00	0.00	6.45	6.45	0.00	6.45
165+50	50	1.19	1.70	1.70	0.00	0.00	8.15	8.15	0.00	8.15
166+00	50	0.73	1.78	1.78	0.00	0.00	9.93	9.93	0.00	9.93
166+50	50	0.58	1.22	1.22	0.00	0.00	11.15	11.15	0.00	11.15
167+00	50	0.07	0.60	0.60	0.00	0.00	11.75	11.75	0.00	11.75
167+50	50	0.00	0.07	0.07	0.00	0.00	11.82	11.82	0.00	11.82
168+00	50	0.00	0.00	0.00	0.00	0.00	11.82	11.82	0.00	11.82
168+50	50	0.00	0.00	0.00	0.00	0.00	11.82	11.82	0.00	11.82
169+00	50	0.00	0.00	0.00	0.00	0.00	11.82	11.82	0.00	11.82
169+50	50	0.00	0.00	0.00	0.00	0.00	11.82	11.82	0.00	11.82
170+00	50	0.00	0.00	0.00	0.00	0.00	11.82	11.82	0.00	11.82
170+50	50	1.16	1.08	1.08	23.54	73.90	12.90	12.90	73.90	-61.00
171+00	50	0.57	1.61	1.61	29.65	49.24	14.51	14.51	123.14	-108.63
171+50	50	1.98	2.37	2.37	19.40	45.42	16.88	16.88	168.56	-151.68
172+00	50	3.02	4.64	4.64	16.01	32.80	21.52	21.52	201.36	-179.84
172+50	50	0.65	3.41	3.41	25.59	38.52	24.93	24.93	239.88	-214.95
173+00	50	1.14	1.66	1.66	30.57	52.00	26.59	26.59	291.88	-265.29
173+50	50	3.36	4.16	4.16	20.25	47.05	30.75	30.75	338.93	-308.18
174+00	50	3.69	6.53	6.53	17.58	35.03	37.28	37.28	373.96	-336.68
174+50	50	7.15	10.04	10.04	7.16	22.91	47.32	47.32	396.87	-349.55
175+00	50	4.85	11.12	11.12	11.95	17.69	58.44	58.44	414.56	-356.12
175+50	50	3.58	7.81	7.81	12.88	22.99	66.25	66.25	437.55	-371.30
176+00	50	0.46	3.75	3.75	207.35	203.92	70.00	70.00	641.47	-571.47
176+50	50	0.06	0.48	0.48	189.38	367.34	70.48	70.48	1008.81	-938.33
177+00	50	0.52	0.54	0.54	163.15	326.41	71.02	71.02	1335.22	-1264.20
177+44	44	0.00	0.42	0.42	158.19	261.83	71.44	71.44	1597.05	-1525.61

INDIANA TO R-59-188

178+50 - 180+16

STATION	LENGTH	CUT AREA	CUT VOL.	REUSABLE VOL.	FILL AREA	FILL VOL.	CUM. CUT VOL.	CUM. REUSABLE VOL.	CUM. FILL VOL.	CUM. NET VOL.
	LF	SF	CY	CY	SF	CY	CY	CY	CY	CY
178+50	0	3.88	7.62	7.62	23.02	355.71	0.00	0.00	0.00	0.00
179+00	50	0	3.59	3.59	83.51	98.64	3.59	3.59	98.64	-95.05
179+50	50	0.08	0.07	0.07	130.29	197.95	3.66	3.66	296.59	-292.93
180+00	50	0	0.08	0.08	186.43	293.25	3.74	3.74	589.84	-586.10
180+16	16	1.13	0.33	0.33	143.53	95.75	4.07	4.07	685.59	-681.52

R-59-188 TO R-59-189

182+02 - 187+66

STATION	LENGTH	CUT AREA	CUT VOL.	REUSABLE VOL.	FILL AREA	FILL VOL.	CUM. CUT VOL.	CUM. REUSABLE VOL.	CUM. FILL VOL.	CUM. NET VOL.
	LF	SF	CY	CY	SF	CY	CY	CY	CY	CY
182+50	0	82.22	361.67	361.67	0.16	623.55	0.00	0.00	0.00	0.00
183+00	50	156.34	220.89	220.89	0.01	0.16	220.89	220.89	0.16	220.73
183+50	50	259.63	385.16	385.16	0.00	0.00	606.05	606.05	0.16	605.89
184+00	50	284.59	503.91	503.91	0.00	0.00	1109.96	1109.96	0.16	1109.80
184+50	50	264.46	508.38	508.38	0.00	0.00	1618.34	1618.34	0.16	1618.18
185+00	50	163.59	396.34	396.34	0.00	0.00	2014.68	2014.68	0.16	2014.52
185+50	50	115.54	258.45	258.45	0.00	0.00	2273.13	2273.13	0.16	2272.97
186+00	50	58.33	160.99	160.99	0.00	0.00	2434.12	2434.12	0.16	2433.96
186+50	50	17.08	69.82	69.82	0.07	0.06	2503.94	2503.94	0.22	2503.72
187+00	50	5.26	20.69	20.69	1.09	1.07	2524.63	2524.63	1.29	2523.34
187+50	50	0.27	5.12	5.12	14.38	14.32	2529.75	2529.75	15.61	2514.14
187+66	16	0.01	0.09	0.09	60.42	22.84	2529.84	2529.84	38.45	2491.39

R-59-189 TO NEW JERSEY

189+21 - 197+00

STATION	LENGTH	CUT AREA	CUT VOL.	REUSABLE VOL.	FILL AREA	FILL VOL.	CUM. CUT VOL.	CUM. REUSABLE VOL.	CUM. FILL VOL.	CUM. NET VOL.
	LF	SF	CY	CY	SF	CY	CY	CY	CY	CY
189+21	0	0.00	0.00	0.00	142.37	417.90	0.00	0.00	0.00	0.00
189+50	29	0.55	0.25	0.25	113.25	118.34	0.25	0.25	118.34	-118.09
190+00	50	0.25	0.74	0.74	13.69	117.54	0.99	0.99	235.88	-234.89
190+50	50	0.13	0.35	0.35	22.09	33.13	1.34	1.34	269.01	-267.67
191+00	50	0.15	0.26	0.26	31.31	49.44	1.60	1.60	318.45	-316.85
191+50	50	0.03	0.17	0.17	54.16	79.15	1.77	1.77	397.60	-395.83
192+00	50	0.05	0.07	0.07	88.58	132.17	1.84	1.84	529.77	-527.93
192+50	50	0.00	0.04	0.04	123.90	196.74	1.88	1.88	726.51	-724.63
193+00	50	0.00	0.00	0.00	22.55	135.60	1.88	1.88	862.11	-860.23
193+50	50	0.00	0.00	0.00	11.87	31.87	1.88	1.88	893.98	-892.10
194+00	50	0.00	0.00	0.00	11.22	21.38	1.88	1.88	915.36	-913.48
194+50	50	0.47	0.43	0.43	4.07	14.15	2.31	2.31	929.51	-927.20
195+00	50	2.33	2.59	2.59	3.51	7.01	4.90	4.90	936.52	-931.62
195+50	50	3.21	5.13	5.13	2.17	5.26	10.03	10.03	941.78	-931.75
196+00	50	2.90	5.65	5.65	2.31	4.15	15.68	15.68	945.93	-930.25
196+50	50	5.29	7.58	7.58	1.27	3.31	23.26	23.26	949.24	-925.98
197+00	50	8.75	13.00	13.00	0.70	1.82	36.26	36.26	951.06	-914.80

NEW JERSEY TO SHOPPING CENTER ENTRANCE

198+00 - 213+50

STATION	LENGTH	CUT AREA	CUT VOL.	REUSABLE VOL.	FILL AREA	FILL VOL.	CUM. CUT VOL.	CUM. REUSABLE VOL.	CUM. FILL VOL.	CUM. NET VOL.
	LF	SF	CY	CY	SF	CY	CY	CY	CY	CY
198+00	0	10.99	0.00	0.00	0.35	0.00	0.00	0.00	0.00	0.00
198+50	50	12.34	21.60	21.60	0.00	0.33	21.60	21.60	0.33	21.27
199+00	50	15.16	25.46	25.46	0.00	0.00	47.06	47.06	0.33	46.73
199+50	50	16.46	29.28	29.28	0.10	0.09	76.34	76.34	0.42	75.92
200+00	50	14.71	28.86	28.86	0.25	0.33	105.20	105.20	0.75	104.45
200+50	50	10.46	23.30	23.30	2.36	2.42	128.50	128.50	3.17	125.33
201+00	50	5.00	14.31	14.31	1.02	3.13	142.81	142.81	6.30	136.51
201+24	24	0.31	2.37	2.37	3.56	2.05	145.18	145.18	8.35	136.83
201+75	51	0.61	0.87	0.87	5.88	8.90	146.05	146.05	17.25	128.80
202+00	25	1.34	0.90	0.90	2.24	3.76	146.95	146.95	21.01	125.94
202+50	50	2.42	3.48	3.48	0.27	2.32	150.43	150.43	23.33	127.10
203+00	50	6.53	8.29	8.29	0.02	0.27	158.72	158.72	23.60	135.12
203+50	50	4.75	10.45	10.45	0.19	0.19	169.17	169.17	23.79	145.38
204+00	50	2.41	6.63	6.63	0.48	0.61	175.80	175.80	24.40	151.40
204+50	50	1.51	3.63	3.63	0.81	1.19	179.43	179.43	25.59	153.84
205+00	50	3.46	4.60	4.60	0.19	0.93	184.03	184.03	26.52	157.51
205+50	50	4.10	7.00	7.00	0.00	0.18	191.03	191.03	26.70	164.33
206+00	50	2.02	5.67	5.67	0.19	0.18	196.70	196.70	26.88	169.82
206+50	50	6.37	7.76	7.76	0.00	0.18	204.46	204.46	27.06	177.40
207+00	50	4.43	10.00	10.00	0.00	0.00	214.46	214.46	27.06	187.40
207+50	50	5.60	9.29	9.29	0.00	0.00	223.75	223.75	27.06	196.69
208+00	50	4.27	9.13	9.13	0.00	0.00	232.88	232.88	27.06	205.82
208+50	50	4.88	8.47	8.47	0.00	0.00	241.35	241.35	27.06	214.29
209+00	50	4.63	8.81	8.81	0.00	0.00	250.16	250.16	27.06	223.10
209+50	50	4.39	8.35	8.35	0.07	0.06	258.51	258.51	27.12	231.39
210+00	50	9.41	12.78	12.78	0.00	0.06	271.29	271.29	27.18	244.11
210+50	50	6.25	14.50	14.50	0.08	0.07	285.79	285.79	27.25	258.54
211+00	50	5.97	11.31	11.31	0.00	0.07	297.10	297.10	27.32	269.78
211+50	50	8.70	13.58	13.58	0.00	0.00	310.68	310.68	27.32	283.36
212+00	50	12.32	19.47	19.47	0.00	0.00	330.15	330.15	27.32	302.83
212+50	50	14.21	24.57	24.57	0.00	0.00	354.72	354.72	27.32	327.40
212+81	31	6.07	11.64	11.64	0.17	0.10	366.36	366.36	27.42	338.94
213+21	50	8.02	10.43	10.43	0.06	0.17	376.79	376.79	27.59	349.20
213+50	29	6.31	7.70	7.70	0.00	0.03	384.49	384.49	27.62	356.87

9

9

PROJECT NO: 4996-01-58 | HWY: TAYLOR DRIVE | COUNTY: SHEBOYGAN | EARTHWORK SUMMARY TABLES | SHEET 300 | E

FILE NAME : L:\PROJECTS\11744\DWG\090101_EW.DWG
LAYOUT NAME - EW3

PLOT DATE : 10/24/2014 8:44 AM PLOT BY : MOYER, TIM PLOT NAME : PLOT SCALE : 1:10_XREF

WISDOT/CADDS SHEET 49

SHOPPING CENTER ENTRANCE TO ERIE

214+75 - 229+00

STATION	LENGTH	CUT AREA	CUT VOL.	REUSABLE VOL.	FILL AREA	FILL VOL.	CUM. CUT VOL.	CUM. REUSABLE VOL.	CUM. FILL VOL.	CUM. NET VOL.
	LF	SF	CY	CY	SF	CY	CY	CY	CY	CY
214+75	0	3.73	23.24	23.24	0.00	0.02	0.00	0.00	0.00	0.00
215+00	25	2.92	3.08	3.08	0.27	0.13	3.08	3.08	0.13	2.95
215+50	50	3.29	5.75	5.75	0.11	0.35	8.83	8.83	0.48	8.35
216+00	50	3.50	6.29	6.29	0.05	0.15	15.12	15.12	0.63	14.49
216+50	50	3.87	6.82	6.82	0.00	0.05	21.94	21.94	0.68	21.26
217+00	50	3.60	6.92	6.92	0.14	0.13	28.86	28.86	0.81	28.05
217+50	50	3.44	6.53	6.53	0.06	0.19	35.39	35.39	1.00	34.39
218+00	50	8.18	10.76	10.76	0.00	0.06	46.15	46.15	1.06	45.09
218+50	50	3.61	10.92	10.92	1.35	1.25	57.07	57.07	2.31	54.76
219+00	50	2.67	5.82	5.82	2.52	3.58	62.89	62.89	5.89	57.00
219+50	50	1.52	3.88	3.88	6.81	8.64	66.77	66.77	14.53	52.24
220+00	50	1.97	3.23	3.23	5.35	11.27	70.00	70.00	25.80	44.20
220+50	50	0.62	2.40	2.40	8.72	13.04	72.40	72.40	38.84	33.56
221+00	50	1.15	1.64	1.64	9.60	16.96	74.04	74.04	55.80	18.24
221+50	50	1.14	2.12	2.12	9.94	18.09	76.16	76.16	73.89	2.27
222+00	50	2.01	2.91	2.91	4.70	13.55	79.07	79.07	87.44	-8.37
222+50	50	3.29	4.91	4.91	0.88	5.17	83.98	83.98	92.61	-8.63
223+00	50	3.47	6.26	6.26	1.68	2.37	90.24	90.24	94.98	-4.74
223+50	50	3.19	6.17	6.17	2.15	3.54	96.41	96.41	98.52	-2.11
224+00	50	3.69	6.38	6.38	1.72	3.58	102.79	102.79	102.10	0.69
224+50	50	2.92	6.12	6.12	2.96	4.33	108.91	108.91	106.43	2.48
225+00	50	3.50	5.94	5.94	1.48	4.11	114.85	114.85	110.54	4.31
226+00	50	10.48	25.88	25.88	0.18	3.06	140.73	140.73	113.60	27.13
226+50	50	11.20	20.07	20.07	0.12	0.28	160.80	160.80	113.88	46.92
227+00	50	19.21	28.16	28.16	0.00	0.12	188.96	188.96	114.00	74.96
227+50	50	24.01	40.02	40.02	0.00	0.00	228.98	228.98	114.00	114.98
228+00	50	34.55	54.22	54.22	0.02	0.02	283.20	283.20	114.02	169.18
229+00	50	95.37	240.59	240.59	0.00	0.03	523.79	523.79	114.05	409.74

ERIE TO PROJECT END

230+00 - 237+67

STATION	LENGTH	CUT AREA	CUT VOL.	REUSABLE VOL.	FILL AREA	FILL VOL.	CUM. CUT VOL.	CUM. REUSABLE VOL.	CUM. FILL VOL.	CUM. NET VOL.
	LF	SF	CY	CY	SF	CY	CY	CY	CY	CY
230+00	0	5.80	187.35	187.35	1.26	2.33	0.00	0.00	0.00	0.00
230+50	50	11.88	16.37	16.37	0.00	1.16	16.37	16.37	1.16	15.21
231+00	50	64.99	71.17	71.17	0.00	0.00	87.54	87.54	1.16	86.38
231+50	50	32.14	89.93	89.93	0.00	0.00	177.47	177.47	1.16	176.31
232+00	50	39.90	66.70	66.70	0.00	0.00	244.17	244.17	1.16	243.01
232+50	50	45.45	79.03	79.03	0.00	0.00	323.20	323.20	1.16	322.04
233+00	50	37.54	76.85	76.85	0.00	0.00	400.05	400.05	1.16	398.89
233+50	50	32.51	64.86	64.86	0.00	0.00	464.91	464.91	1.16	463.75
234+00	50	86.08	0.00	0.00	0.00	0.00	464.91	464.91	1.16	463.75
234+50	50	220.94	284.28	284.28	0.00	0.00	749.19	749.19	1.16	748.03
235+00	50	197.72	387.64	387.64	0.00	0.00	1136.83	1136.83	1.16	1135.67
235+50	50	182.33	351.90	351.90	0.00	0.00	1488.73	1488.73	1.16	1487.57
236+00	50	129.40	288.64	288.64	0.00	0.00	1777.37	1777.37	1.16	1776.21
236+50	50	116.47	227.66	227.66	0.00	0.00	2005.03	2005.03	1.16	2003.87
237+00	50	79.05	181.04	181.04	0.00	0.00	2186.07	2186.07	1.16	2184.91
237+50	50	4.38	77.25	77.25	1.03	0.96	2263.32	2263.32	2.12	2261.20
237+67	16.6	6.69	3.40	3.40	0.64	0.52	2266.72	2266.72	2.64	2264.08

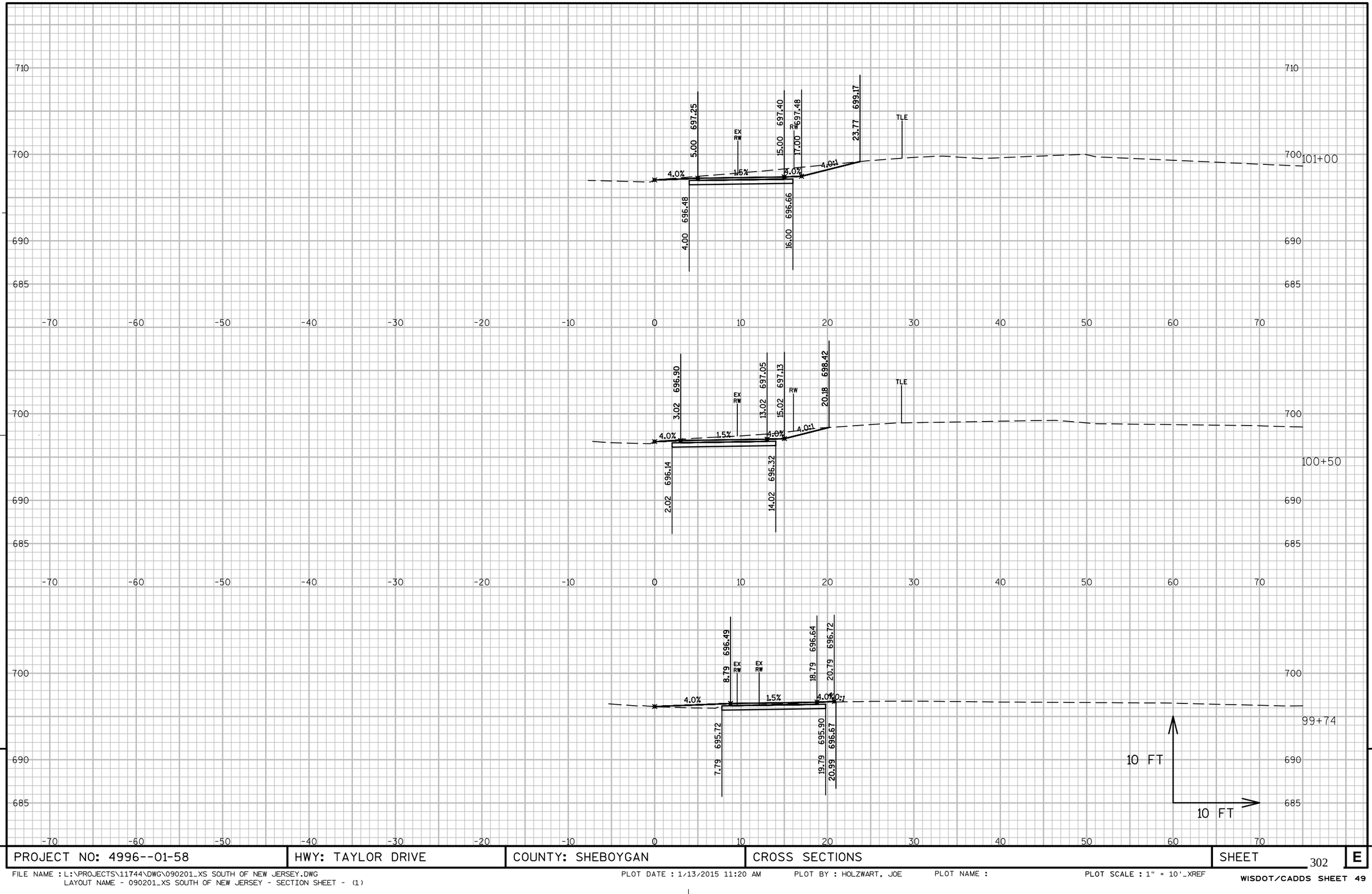
LUTHERAN EXTENSION

10+23 - 21+00

STATION	LENGTH	CUT AREA	CUT VOL.	REUSABLE VOL.	FILL AREA	FILL VOL.	CUM. CUT VOL.	CUM. REUSABLE VOL.	CUM. FILL VOL.	CUM. NET VOL.
	LF	SF	CY	CY	SF	CY	CY	CY	CY	CY
10+23	0	9.30	0.00	0.00	0.24	0.00	0.00	0.00	0.00	0.00
10+50	27	0.42	4.91	4.91	5.34	2.82	4.91	4.91	2.82	2.09
10+70	20	0.00	0.16	0.16	7.86	4.97	5.07	5.07	7.79	-2.72
11+00	30	1.48	0.82	0.82	3.34	6.16	5.89	5.89	13.95	-8.06
11+50	50	5.96	6.89	6.89	0.90	3.93	12.78	12.78	17.88	-5.10
12+00	50	4.59	9.77	9.77	1.34	2.08	22.55	22.55	19.96	2.59
12+50	50	4.42	8.34	8.34	1.50	2.63	30.89	30.89	22.59	8.30
13+00	50	5.37	9.07	9.07	1.02	2.33	39.96	39.96	24.92	15.04
13+50	50	2.80	7.57	7.57	2.04	2.83	47.53	47.53	27.75	19.78
14+00	50	0.00	2.59	2.59	5.48	6.96	50.12	50.12	34.71	15.41
14+50	50	0.00	0.00	0.00	12.05	16.23	50.12	50.12	50.94	-0.82
15+00	50	1.06	0.98	0.98	9.60	20.05	51.10	51.10	70.99	-19.89
15+28	28	1.22	1.20	1.20	14.64	12.75	52.30	52.30	83.74	-31.44
15+50	22	0.99	0.88	0.88	15.22	11.93	53.18	53.18	95.67	-42.49
16+00	50	32.93	31.41	31.41	0.00	14.09	84.59	84.59	109.76	-25.17
16+50	50	26.90	55.40	55.40	0.00	0.00	139.99	139.99	109.76	30.23
17+00	50	15.32	39.09	39.09	0.00	0.00	179.08	179.08	109.76	69.32
17+50	50	6.55	20.25	20.25	0.66	0.61	199.33	199.33	110.37	88.96
18+00	50	0.00	6.06	6.06	8.63	8.61	205.39	205.39	118.98	86.41
18+50	50	0.00	0.00	0.00	4.15	11.84	205.39	205.39	130.82	74.57
19+00	50	1.46	1.35	1.35	3.01	6.63	206.74	206.74	137.45	69.29
19+50	50	0.00	1.35	1.35	8.07	10.26	208.09	208.09	147.71	60.38
20+00	50	3.32	3.07	3.07	4.31	11.46	211.16	211.16	159.17	51.99
20+20	20	0.21	1.31	1.31	15.41	7.30	212.47	212.47	166.47	46.00
20+50	30	4.42	2.57	2.57	2.67	10.05	215.04	215.04	176.52	38.52
20+75	25	11.21	7.26	7.26	0.27	1.36	222.30	222.30	177.88	44.42

9

9



9

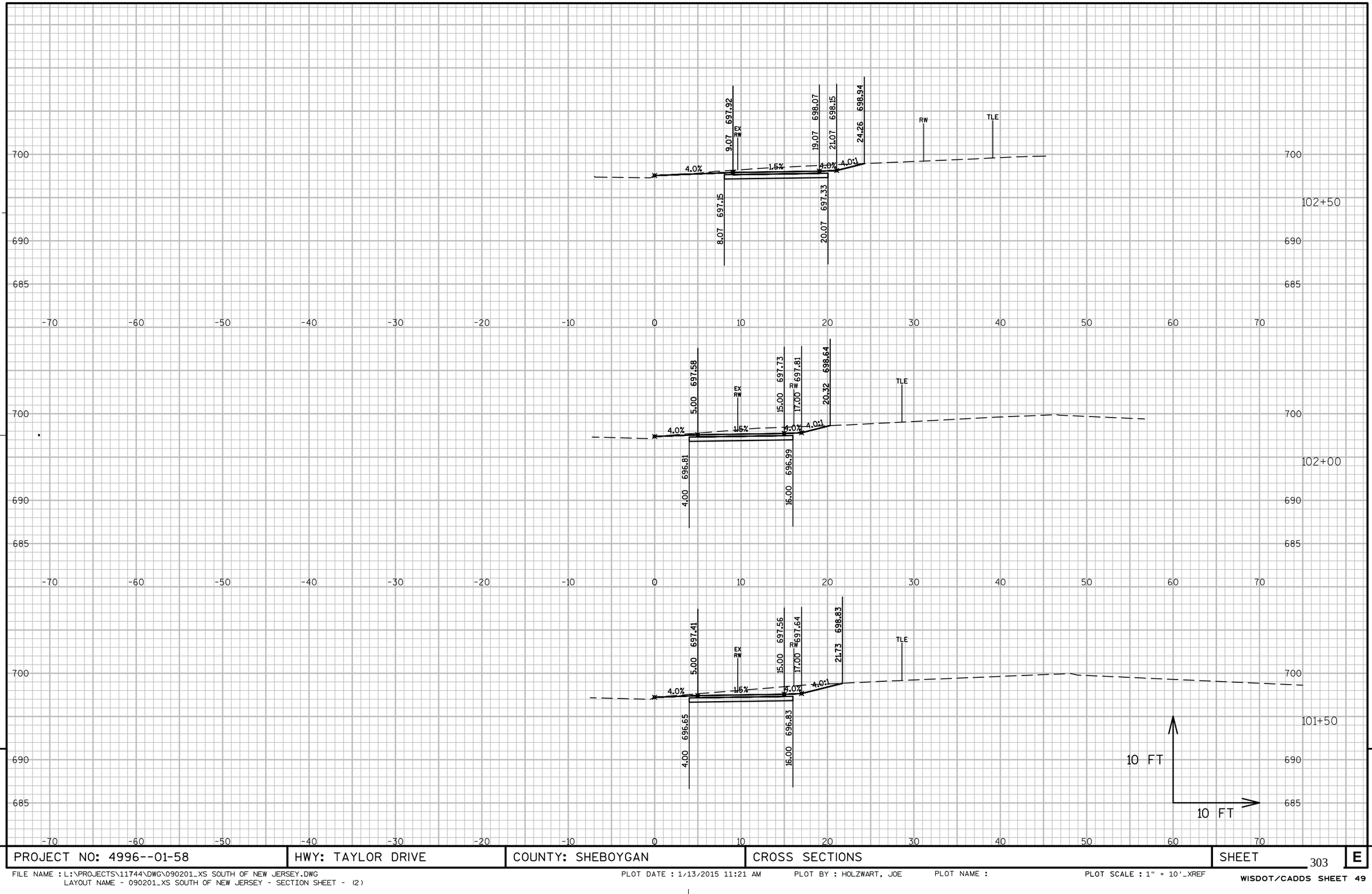
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PROJECT NO: 4996--01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	CROSS SECTIONS	SHEET 302	E

FILE NAME : L:\PROJECTS\11744\DWG\090201_XS SOUTH OF NEW JERSEY.DWG
LAYOUT NAME - 090201_XS SOUTH OF NEW JERSEY - SECTION SHEET - (1)

PLOT DATE : 1/13/2015 11:20 AM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49



9

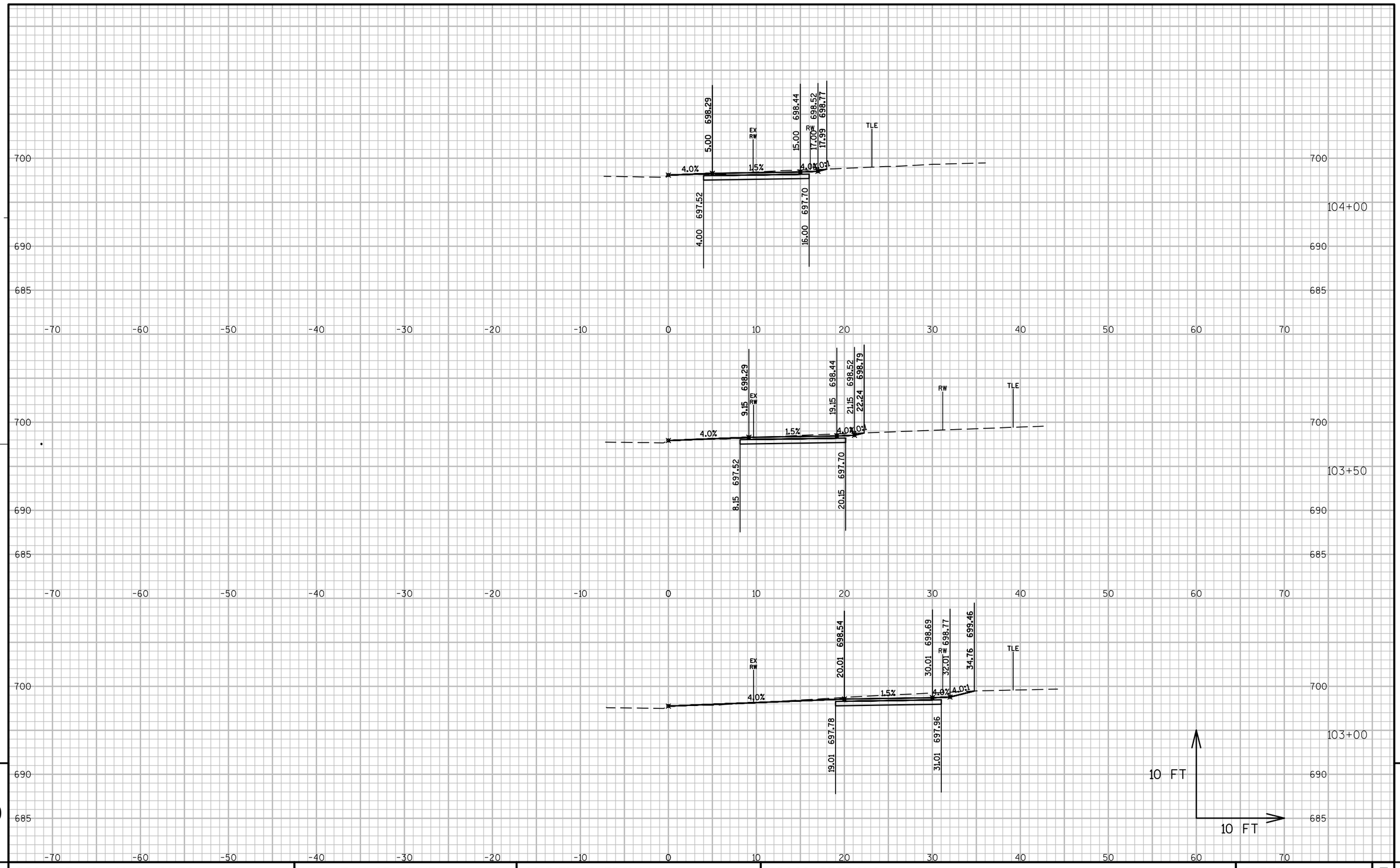
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PROJECT NO: 4996--01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	CROSS SECTIONS	SHEET 303	E

FILE NAME : L:\PROJECTS\11744\DWG\090201_XS SOUTH OF NEW JERSEY.DWG
LAYOUT NAME - 090201_XS SOUTH OF NEW JERSEY - SECTION SHEET - (2)

PLOT DATE : 1/13/2015 11:21 AM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49

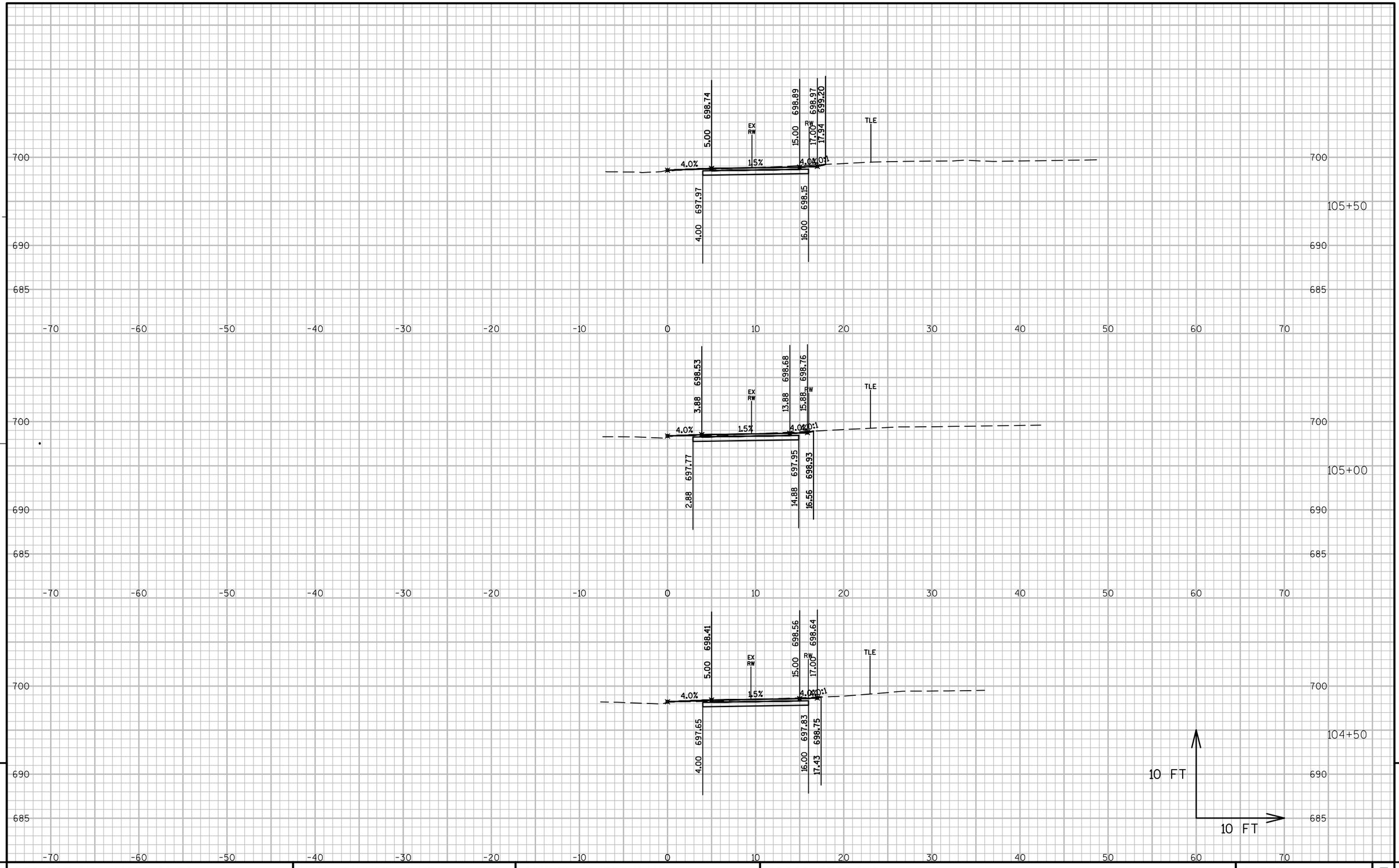


PROJECT NO: 4996--01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	CROSS SECTIONS	SHEET 304	E

FILE NAME : L:\PROJECTS\11744\DWG\090201_XS SOUTH OF NEW JERSEY.DWG
LAYOUT NAME - 090201_XS SOUTH OF NEW JERSEY - SECTION SHEET - (3)

PLOT DATE : 1/13/2015 11:21 AM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49



9

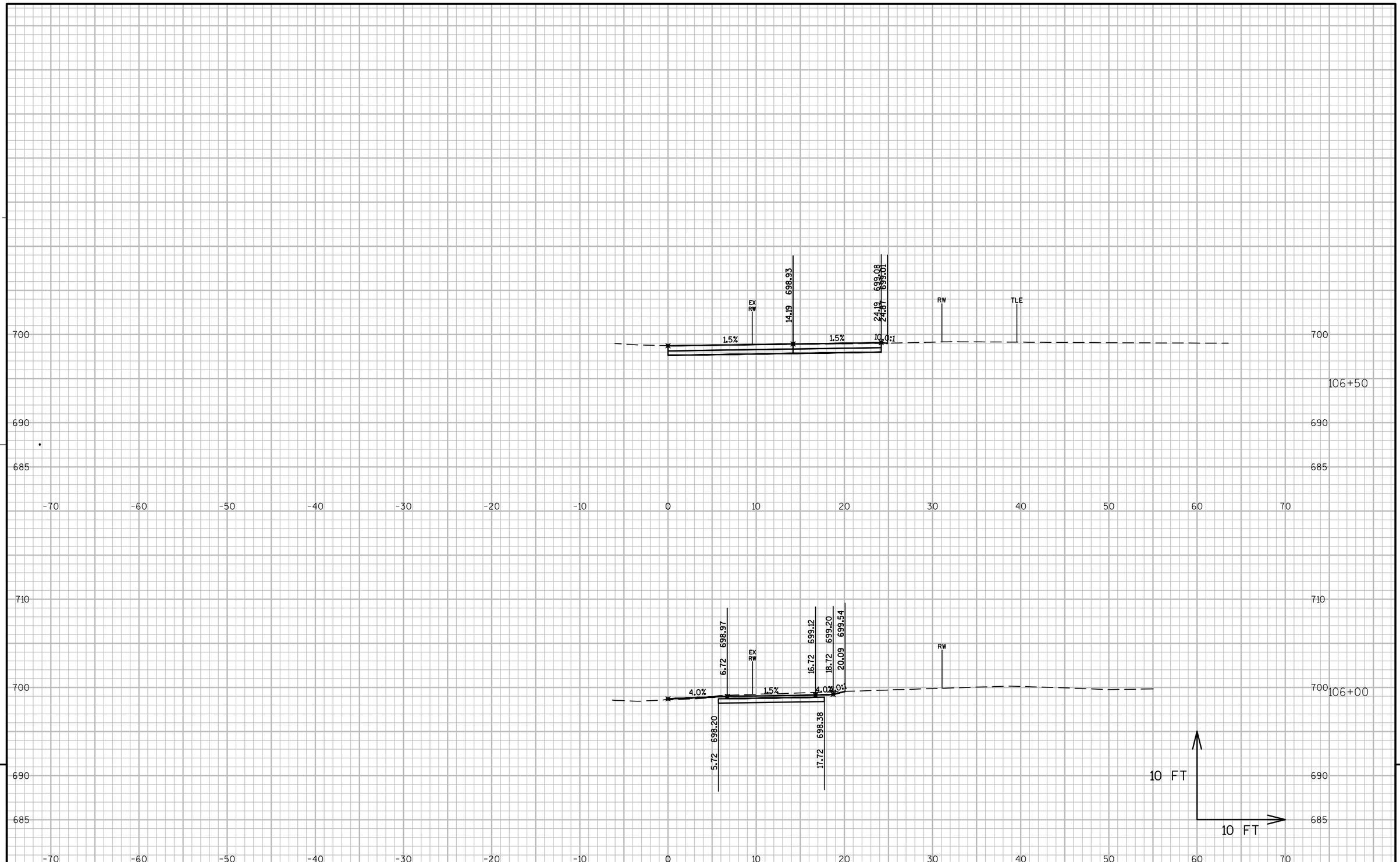
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PROJECT NO: 4996--01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	CROSS SECTIONS	SHEET 305	E

FILE NAME : L:\PROJECTS\11744\DWG\090201_XS SOUTH OF NEW JERSEY.DWG
LAYOUT NAME - 090201_XS SOUTH OF NEW JERSEY - SECTION SHEET - (4)

PLOT DATE : 1/13/2015 11:21 AM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49

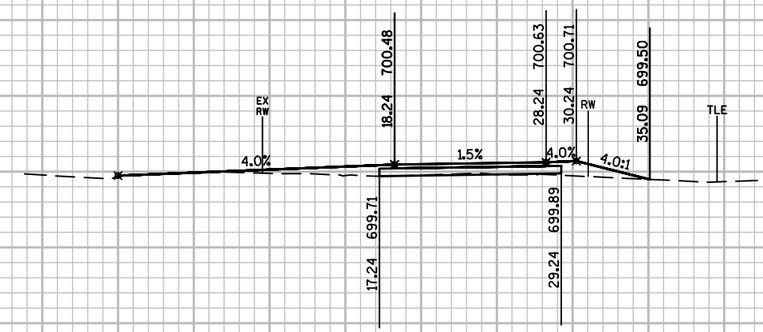


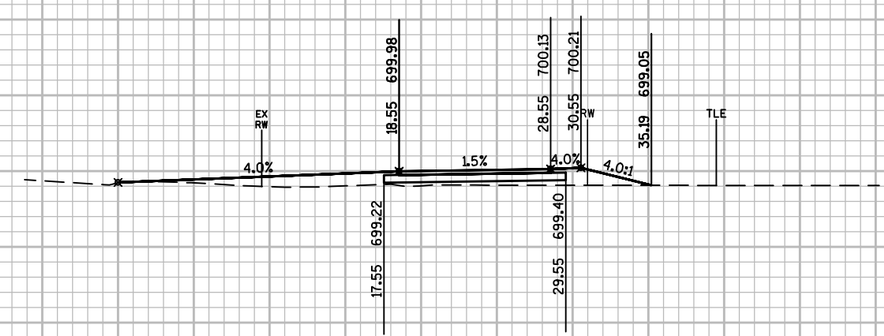
PROJECT NO: 4996--01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	CROSS SECTIONS	SHEET 306	E

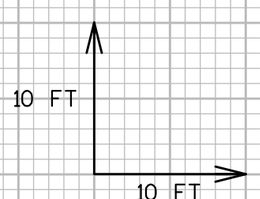
FILE NAME : L:\PROJECTS\11744\DWG\090201_XS SOUTH OF NEW JERSEY.DWG
LAYOUT NAME - 090201_XS SOUTH OF NEW JERSEY - SECTION SHEET - (5)

PLOT DATE : 1/13/2015 11:21 AM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49





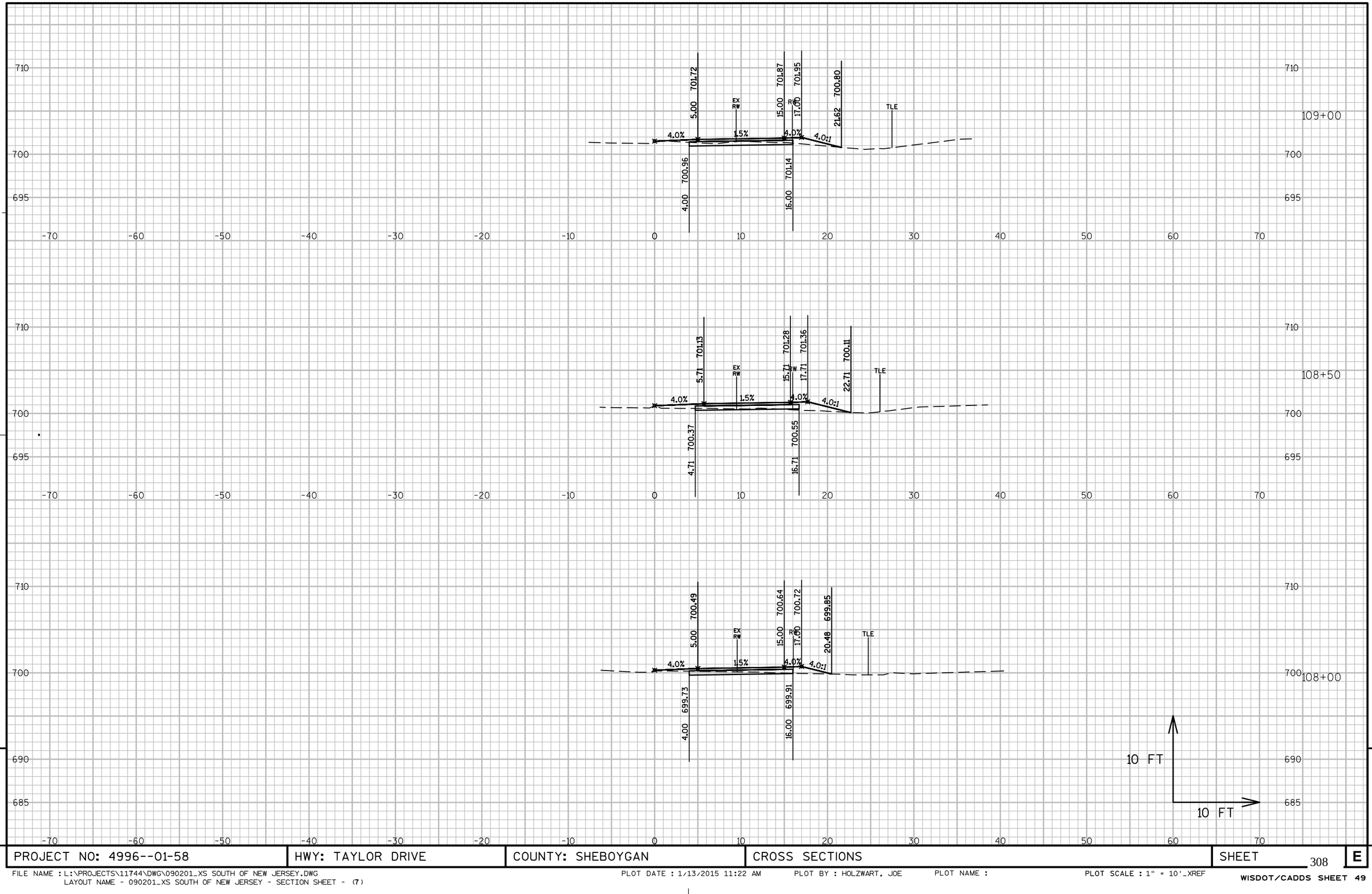


PROJECT NO: 4996--01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	CROSS SECTIONS	SHEET 307	E

FILE NAME : L:\PROJECTS\11744\DWG\090201_XS SOUTH OF NEW JERSEY.DWG
LAYOUT NAME - 090201_XS SOUTH OF NEW JERSEY - SECTION SHEET - (6)

PLOT DATE : 1/13/2015 11:22 AM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49

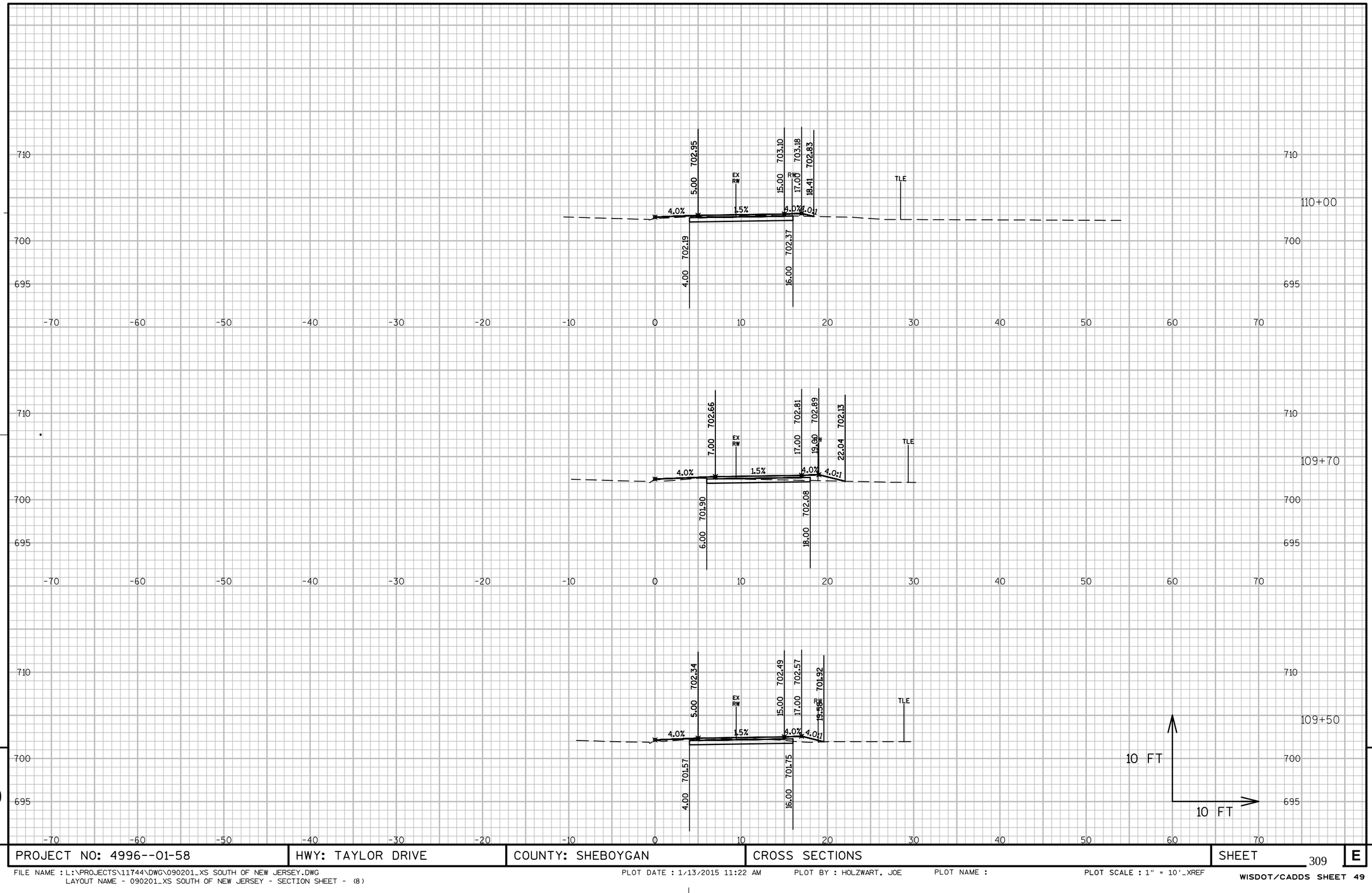


PROJECT NO: 4996--01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	CROSS SECTIONS	SHEET 308	E

FILE NAME : L:\PROJECTS\11744\DWG\090201_XS SOUTH OF NEW JERSEY.DWG
LAYOUT NAME - 090201_XS SOUTH OF NEW JERSEY - SECTION SHEET - (7)

PLOT DATE : 1/13/2015 11:22 AM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49



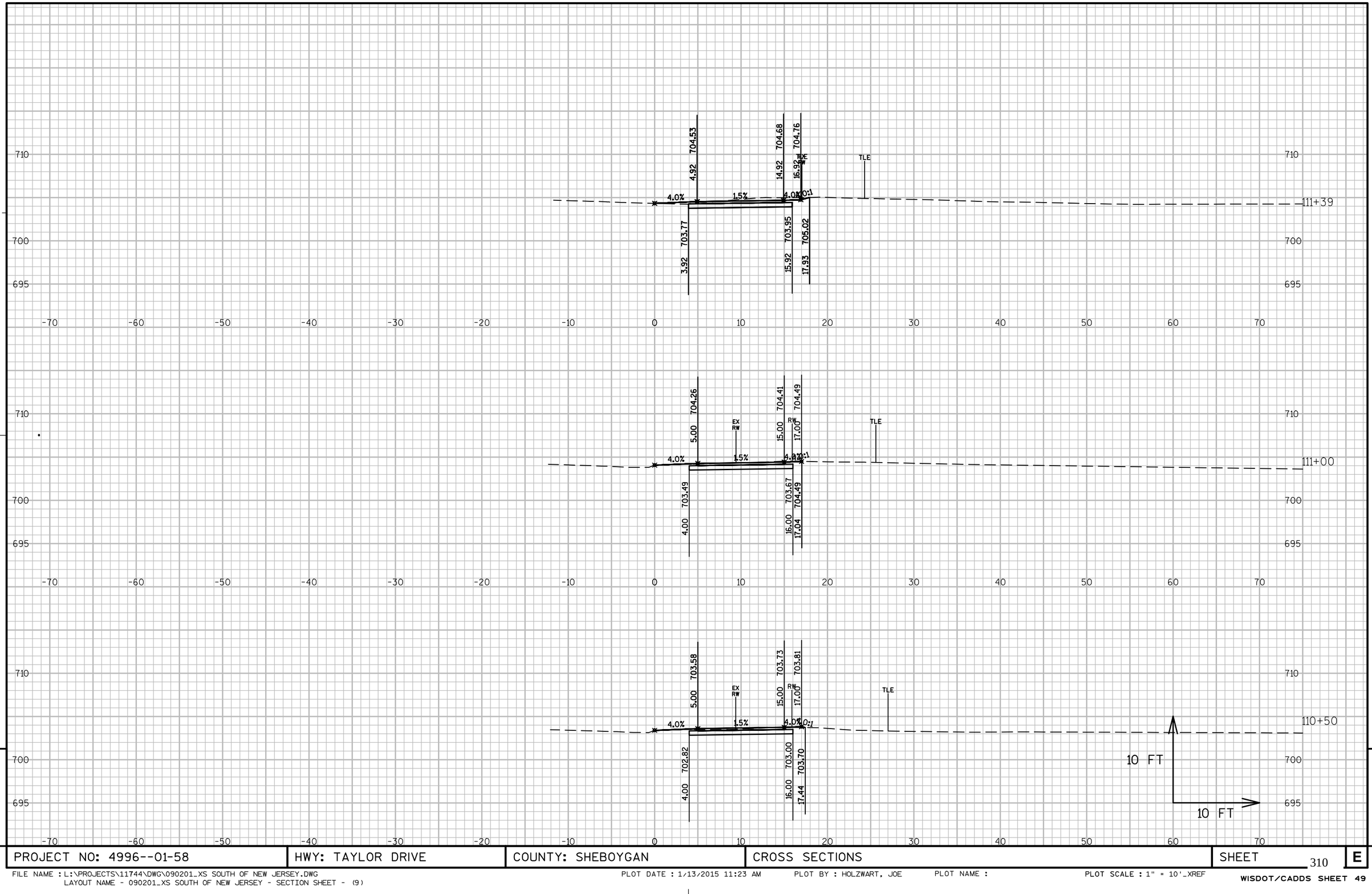
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9

PROJECT NO: 4996--01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	CROSS SECTIONS	SHEET 309	E

FILE NAME : L:\PROJECTS\11744\DWG\090201_XS SOUTH OF NEW JERSEY.DWG
LAYOUT NAME - 090201_XS SOUTH OF NEW JERSEY - SECTION SHEET - (8)

PLOT DATE : 1/13/2015 11:22 AM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1" = 10'_XREF



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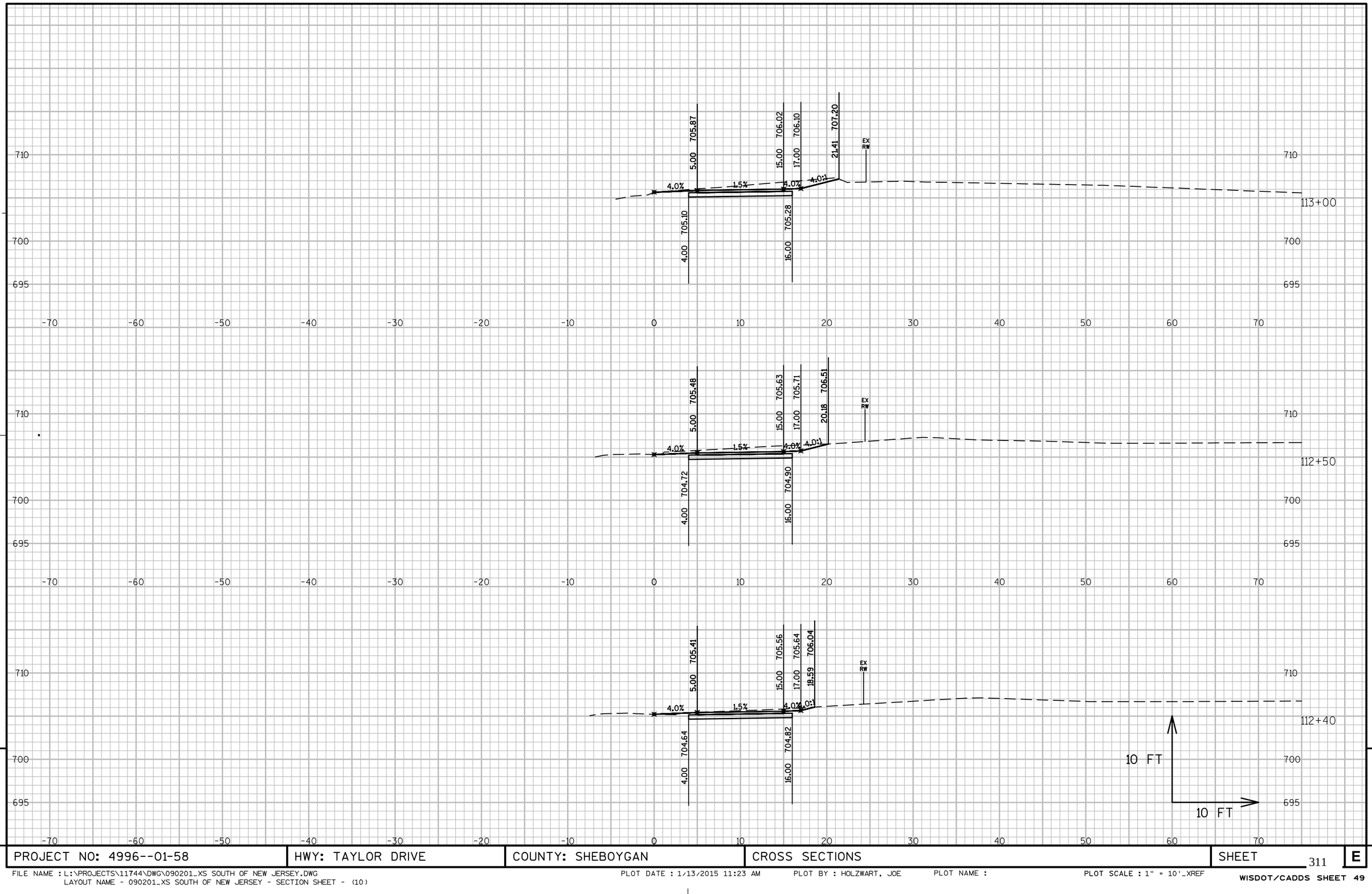
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PROJECT NO: 4996--01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	CROSS SECTIONS	SHEET 310	E

FILE NAME : L:\PROJECTS\11744\DWG\090201_XS SOUTH OF NEW JERSEY.DWG
LAYOUT NAME - 090201_XS SOUTH OF NEW JERSEY - SECTION SHEET - (9)

PLOT DATE : 1/13/2015 11:23 AM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49



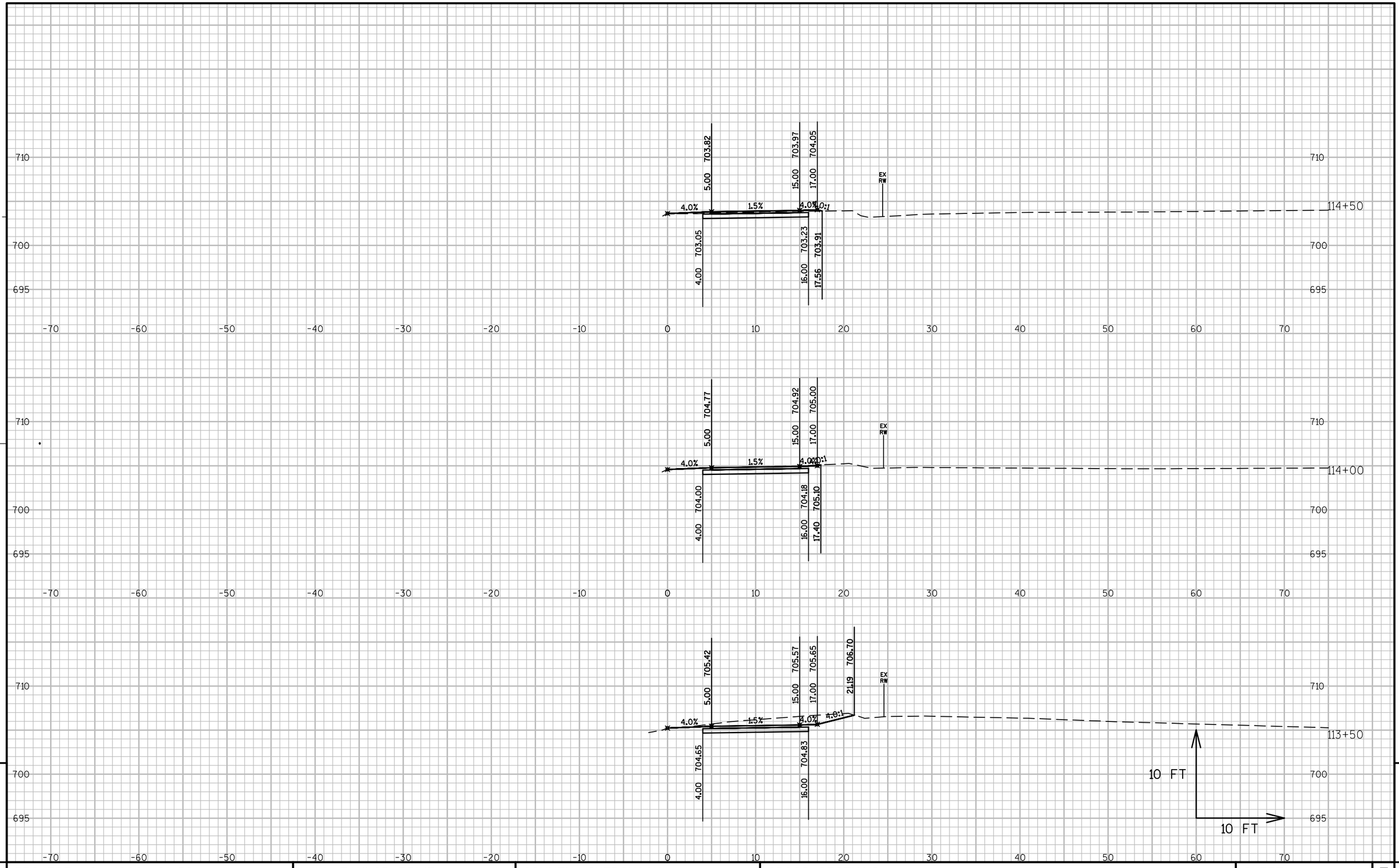
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PROJECT NO: 4996--01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	CROSS SECTIONS	SHEET 311	E

FILE NAME : L:\PROJECTS\11744\DWG\090201_XS SOUTH OF NEW JERSEY.DWG
LAYOUT NAME - 090201_XS SOUTH OF NEW JERSEY - SECTION SHEET - (10)

PLOT DATE : 1/13/2015 11:23 AM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1" = 10'_XREF

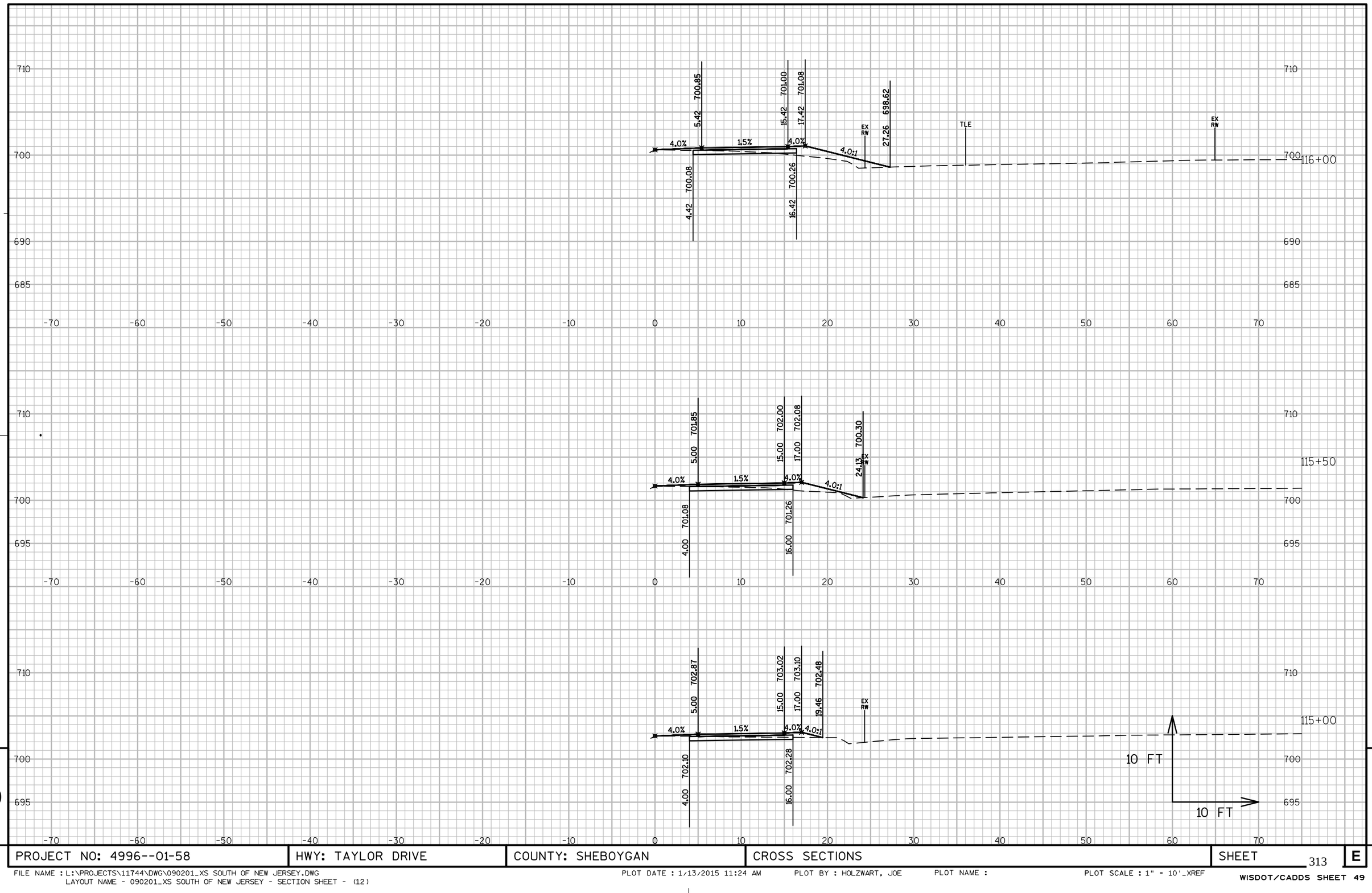


PROJECT NO: 4996--01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	CROSS SECTIONS	SHEET 312	E

FILE NAME : L:\PROJECTS\11744\DWG\090201_XS SOUTH OF NEW JERSEY.DWG
LAYOUT NAME - 090201_XS SOUTH OF NEW JERSEY - SECTION SHEET - (11)

PLOT DATE : 1/13/2015 11:23 AM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49

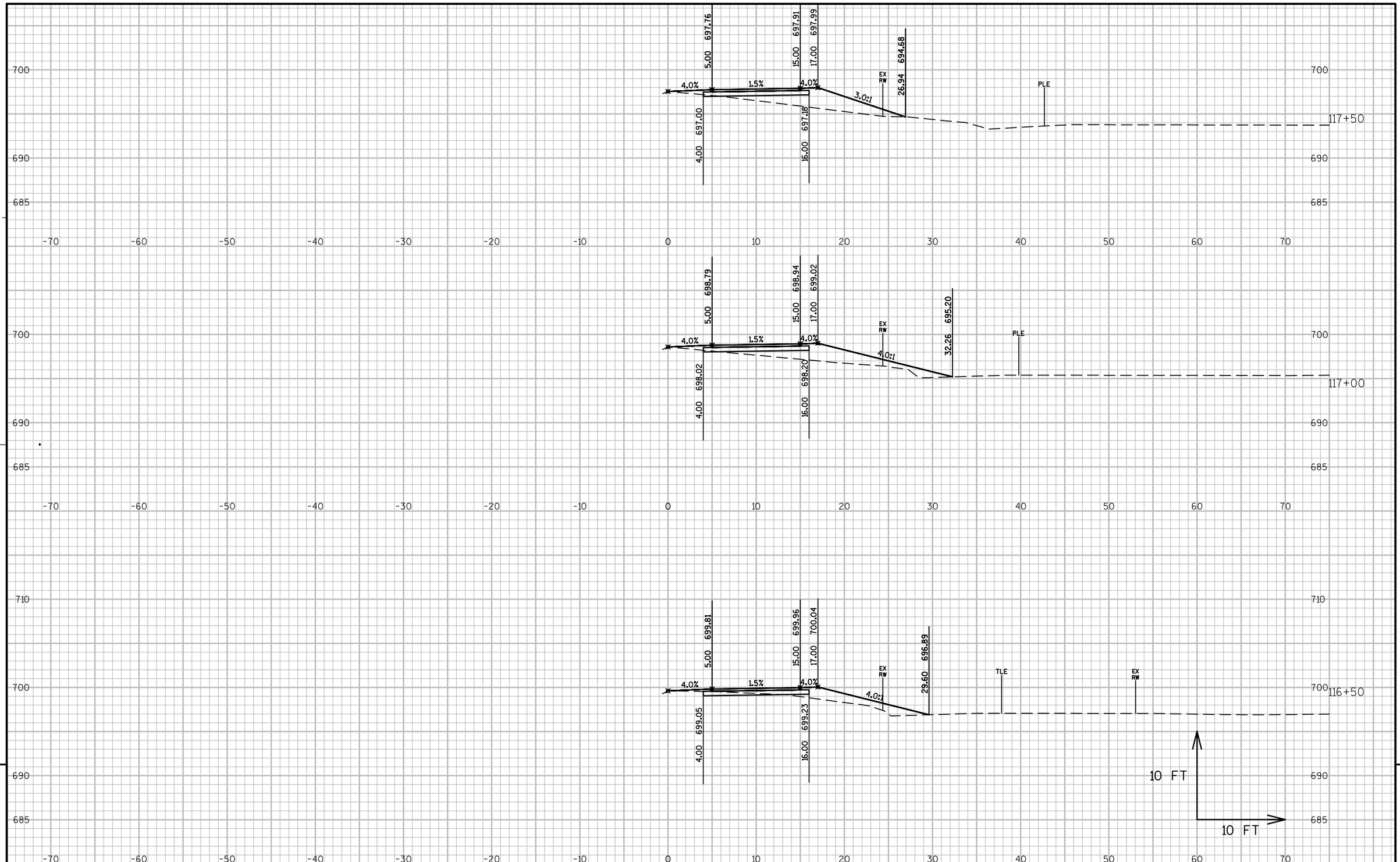


PROJECT NO: 4996--01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	CROSS SECTIONS	SHEET 313	E

FILE NAME : L:\PROJECTS\11744\DWG\090201_XS SOUTH OF NEW JERSEY.DWG
LAYOUT NAME - 090201_XS SOUTH OF NEW JERSEY - SECTION SHEET - (12)

PLOT DATE : 1/13/2015 11:24 AM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49

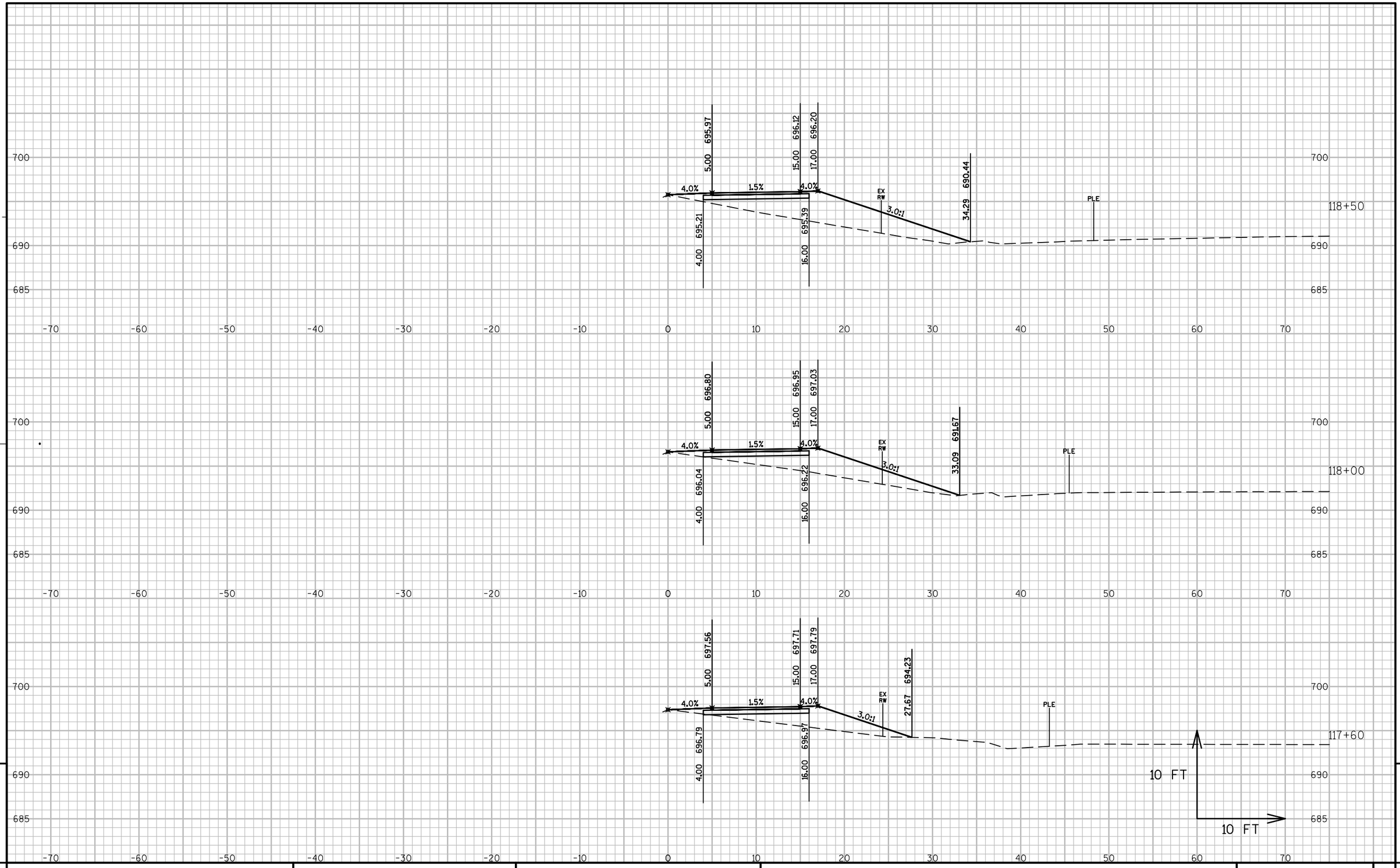


PROJECT NO: 4996--01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	CROSS SECTIONS	SHEET 314	E

FILE NAME : L:\PROJECTS\11744\DWG\090201_XS SOUTH OF NEW JERSEY.DWG
LAYOUT NAME - 090201_XS SOUTH OF NEW JERSEY - SECTION SHEET - (13)

PLOT DATE : 1/13/2015 11:24 AM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49



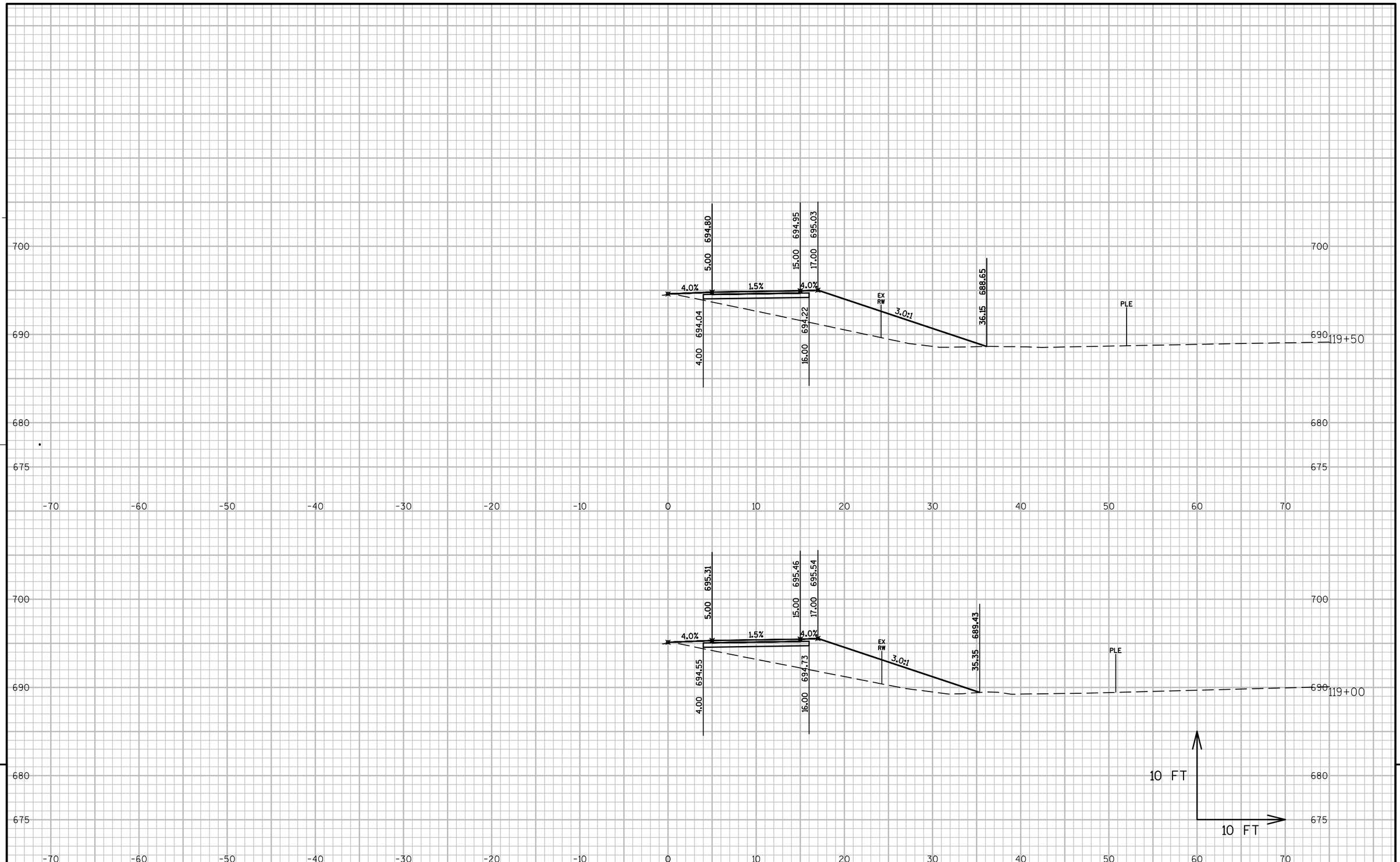
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PROJECT NO: 4996--01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	CROSS SECTIONS	SHEET 315	E

FILE NAME : L:\PROJECTS\11744\DWG\090201_XS SOUTH OF NEW JERSEY.DWG
LAYOUT NAME - 090201_XS SOUTH OF NEW JERSEY - SECTION SHEET - (14)

PLOT DATE : 1/13/2015 11:24 AM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1" = 10'_XREF

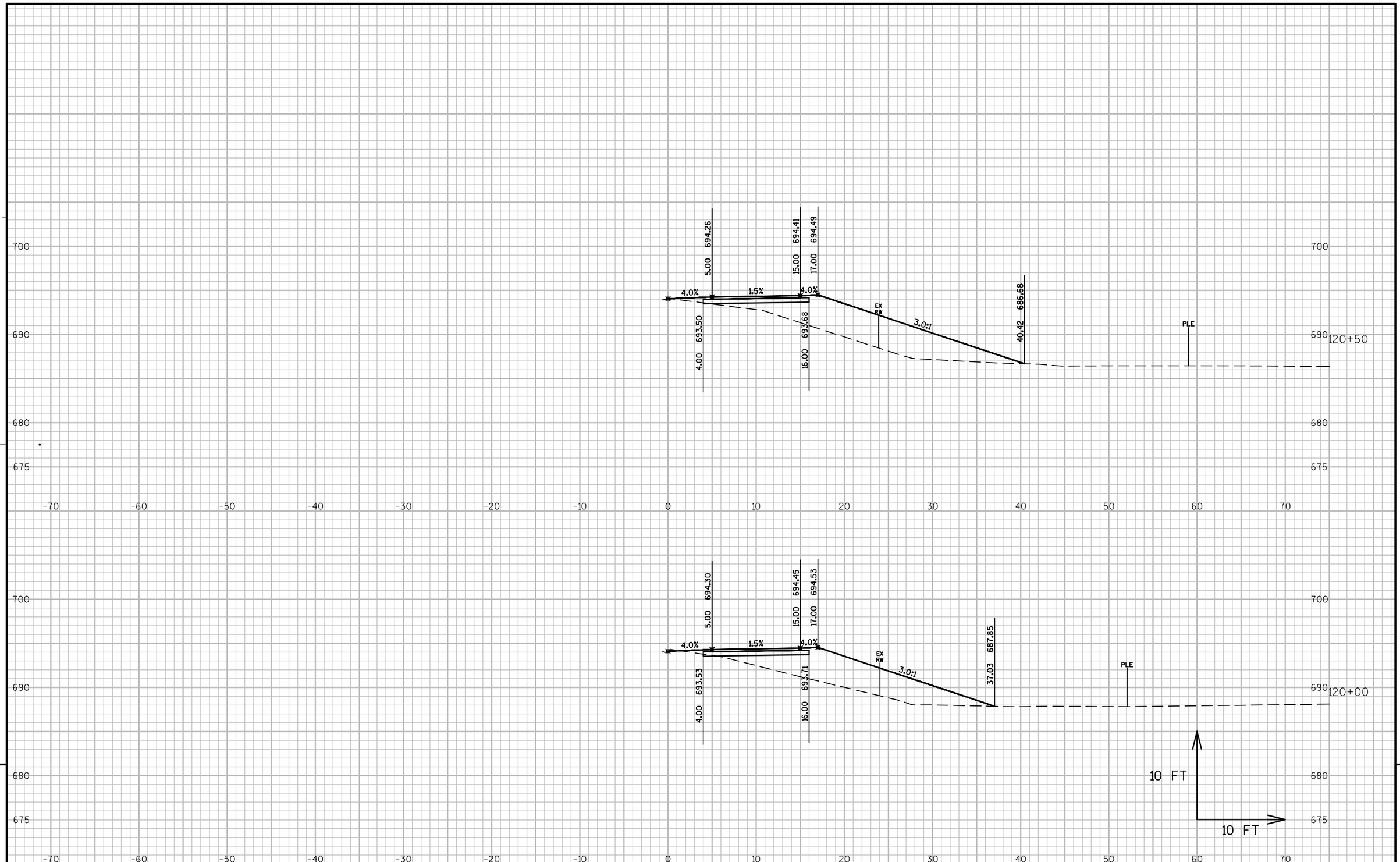


PROJECT NO: 4996--01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	CROSS SECTIONS	SHEET 316	E

FILE NAME : L:\PROJECTS\11744\DWG\090201_XS SOUTH OF NEW JERSEY.DWG
LAYOUT NAME - 090201_XS SOUTH OF NEW JERSEY - SECTION SHEET - (15)

PLOT DATE : 1/13/2015 11:25 AM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49

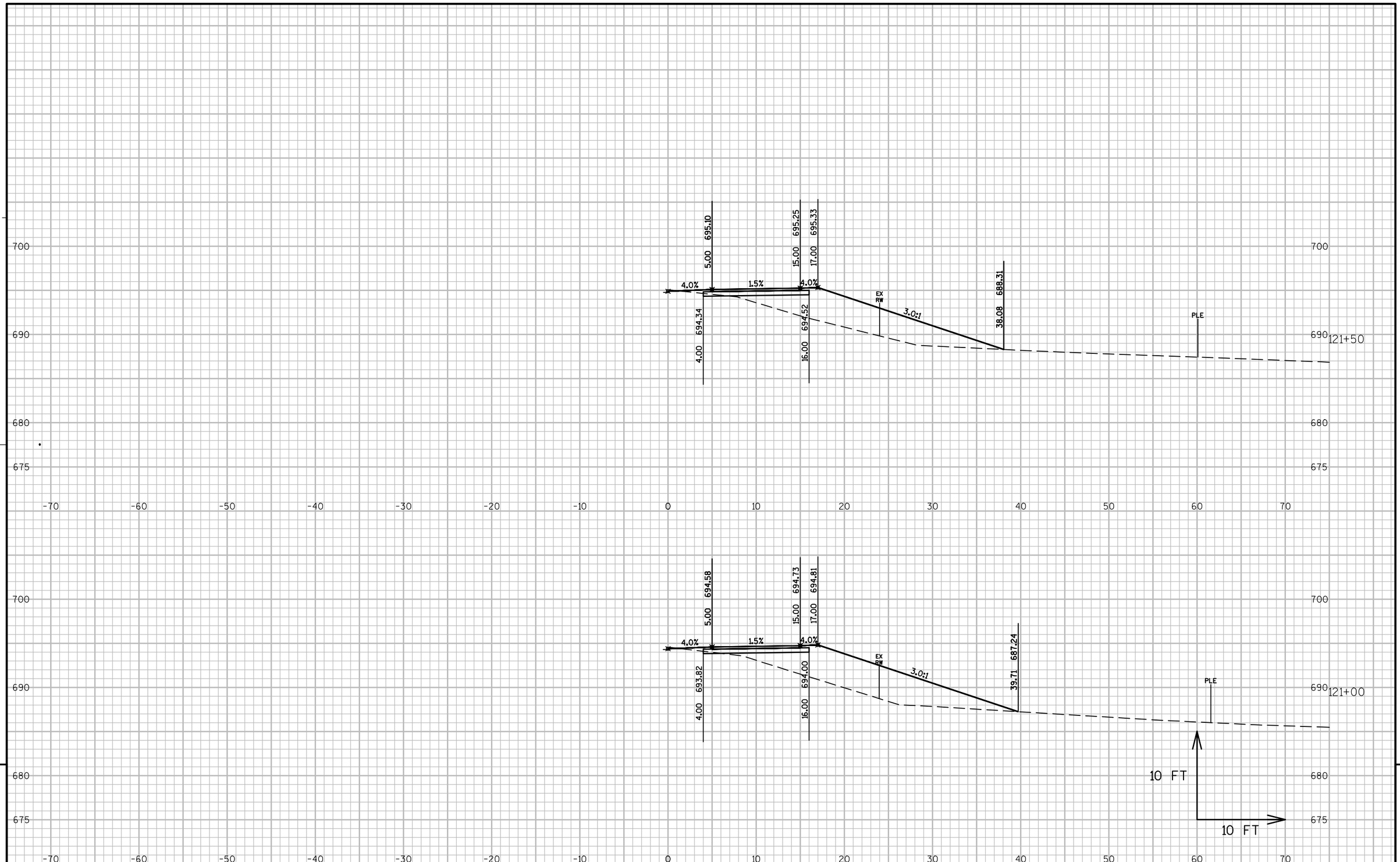


PROJECT NO: 4996--01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	CROSS SECTIONS	SHEET 317	E

FILE NAME : L:\PROJECTS\11744\DWG\090201_XS SOUTH OF NEW JERSEY.DWG
LAYOUT NAME - 090201_XS SOUTH OF NEW JERSEY - SECTION SHEET - (16)

PLOT DATE : 1/13/2015 11:25 AM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49

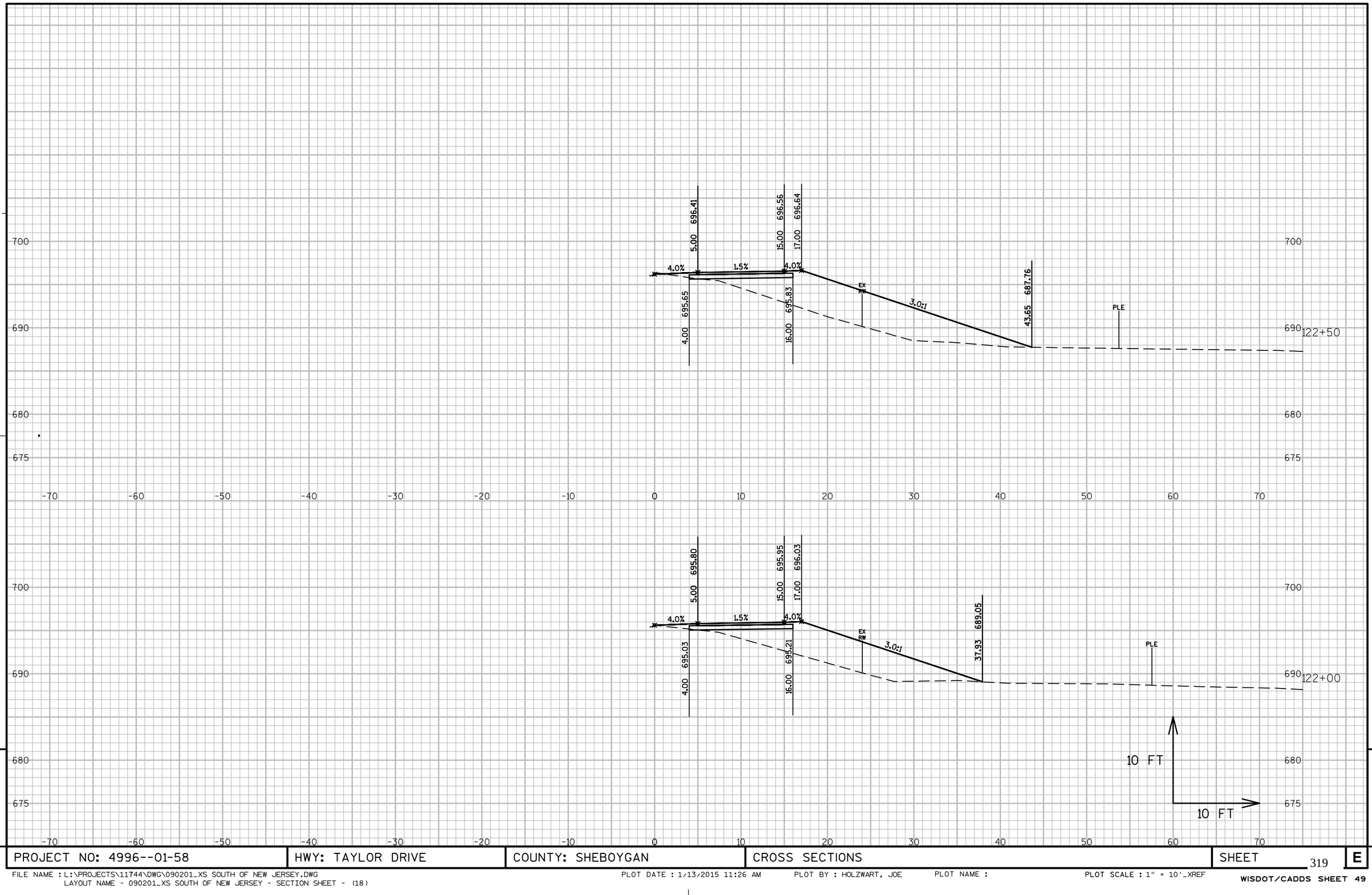


PROJECT NO: 4996--01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	CROSS SECTIONS	SHEET 318	E

FILE NAME : L:\PROJECTS\11744\DWG\090201_XS SOUTH OF NEW JERSEY.DWG
LAYOUT NAME - 090201_XS SOUTH OF NEW JERSEY - SECTION SHEET - (17)

PLOT DATE : 1/13/2015 11:25 AM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49

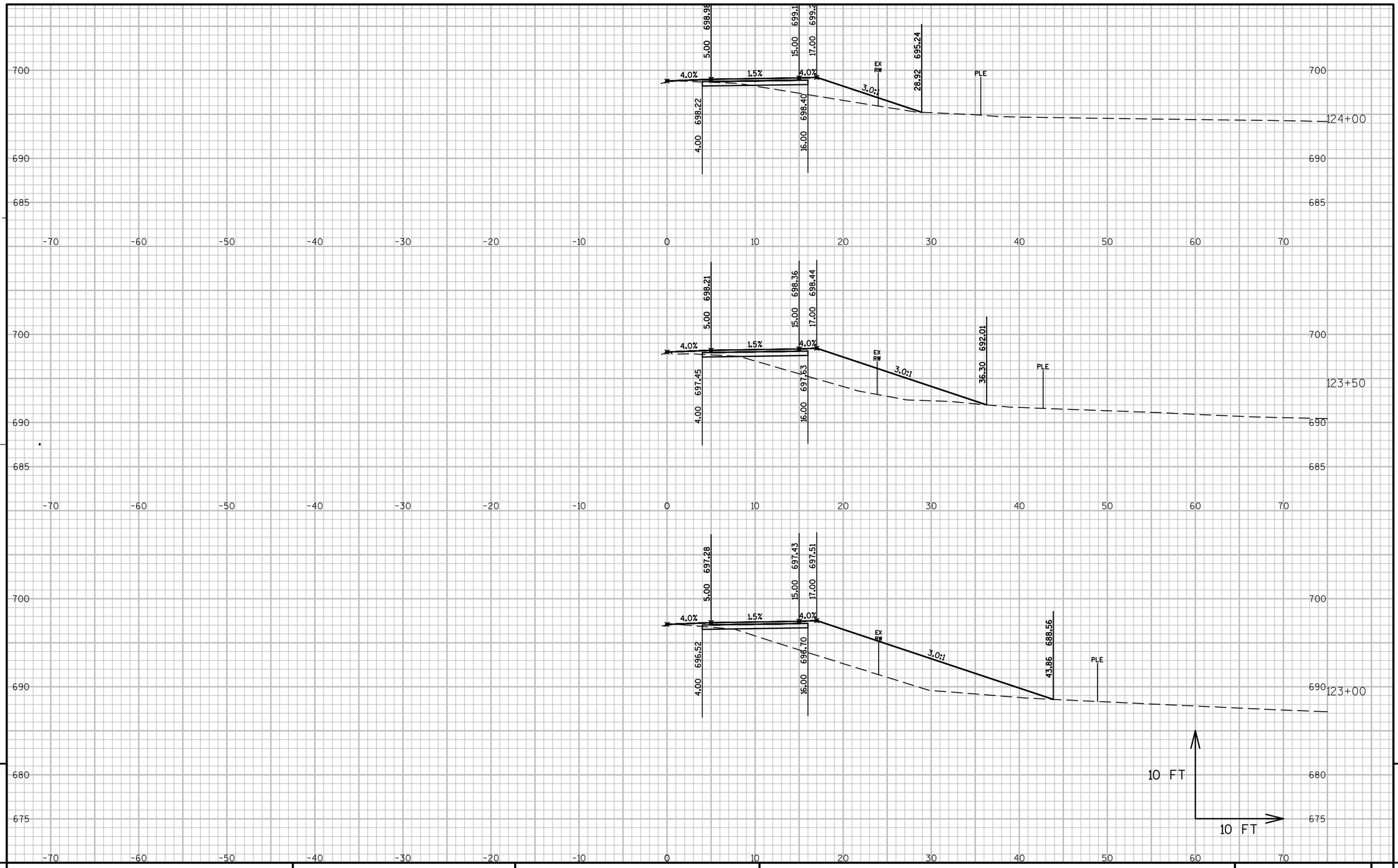


PROJECT NO: 4996--01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	CROSS SECTIONS	SHEET 319	E

FILE NAME : L:\PROJECTS\11744\DWG\090201_XS SOUTH OF NEW JERSEY.DWG
LAYOUT NAME - 090201_XS SOUTH OF NEW JERSEY - SECTION SHEET - (18)

PLOT DATE : 1/13/2015 11:26 AM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49

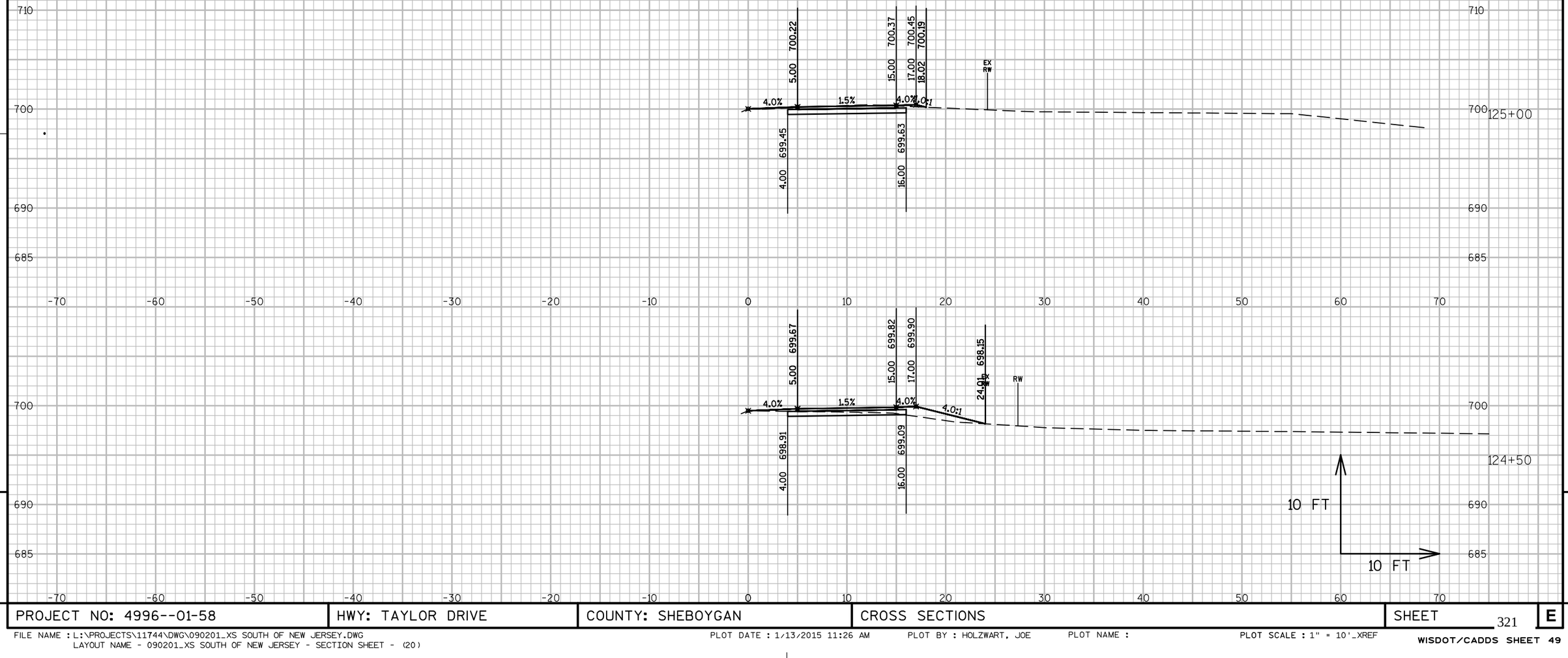


PROJECT NO: 4996--01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	CROSS SECTIONS	SHEET 320	E

FILE NAME : L:\PROJECTS\11744\DWG\090201_XS SOUTH OF NEW JERSEY.DWG
LAYOUT NAME - 090201_XS SOUTH OF NEW JERSEY - SECTION SHEET - (19)

PLOT DATE : 1/13/2015 11:26 AM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49

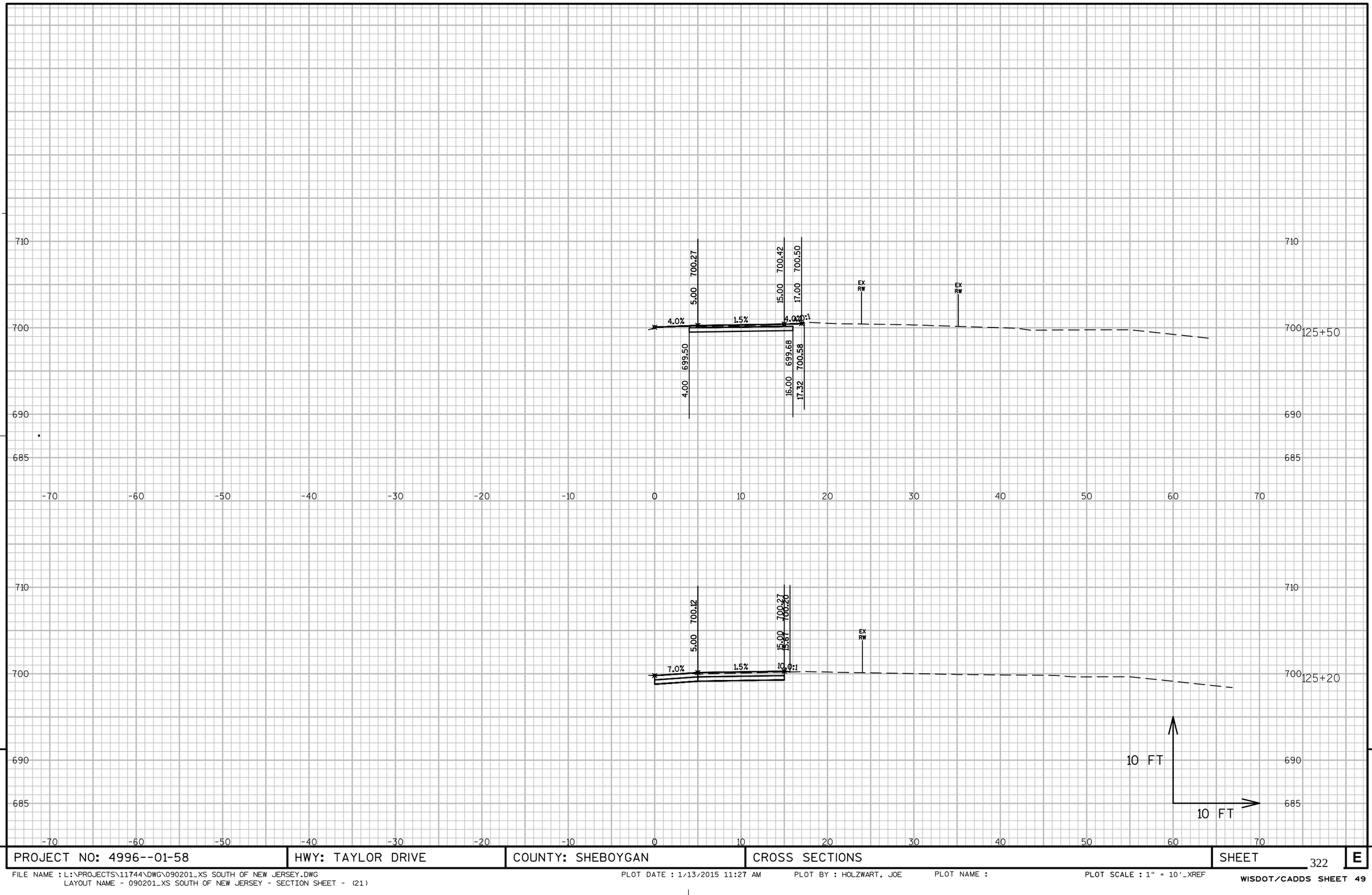


PROJECT NO: 4996--01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	CROSS SECTIONS	SHEET 321	E

FILE NAME : L:\PROJECTS\11744\DWG\090201_XS SOUTH OF NEW JERSEY.DWG
LAYOUT NAME - 090201_XS SOUTH OF NEW JERSEY - SECTION SHEET - (20)

PLOT DATE : 1/13/2015 11:26 AM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49



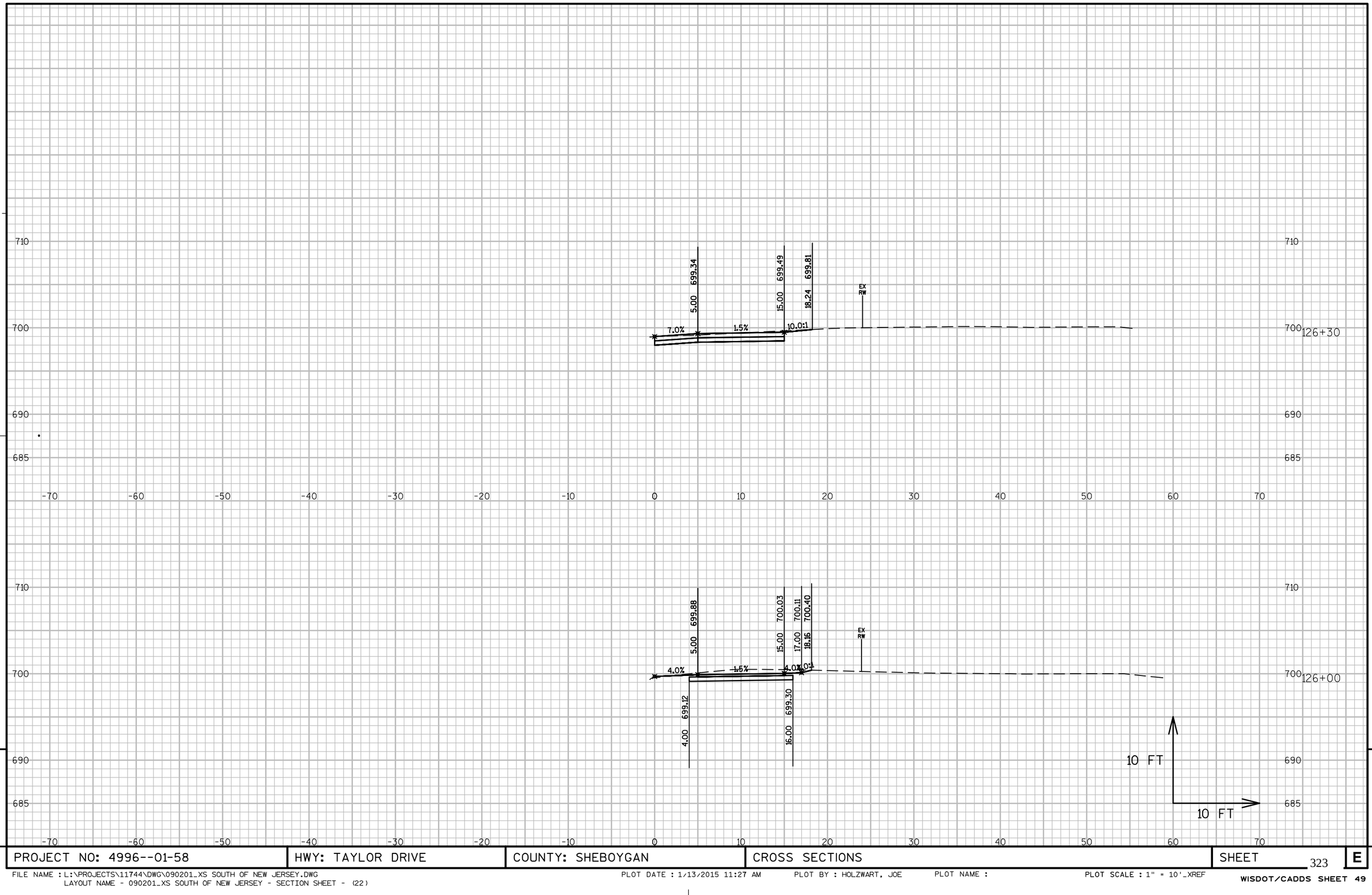
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9

PROJECT NO: 4996--01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	CROSS SECTIONS	SHEET 322	E

FILE NAME : L:\PROJECTS\11744\DWG\090201_XS SOUTH OF NEW JERSEY.DWG
LAYOUT NAME - 090201_XS SOUTH OF NEW JERSEY - SECTION SHEET - (21)

PLOT DATE : 1/13/2015 11:27 AM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1" = 10'_XREF

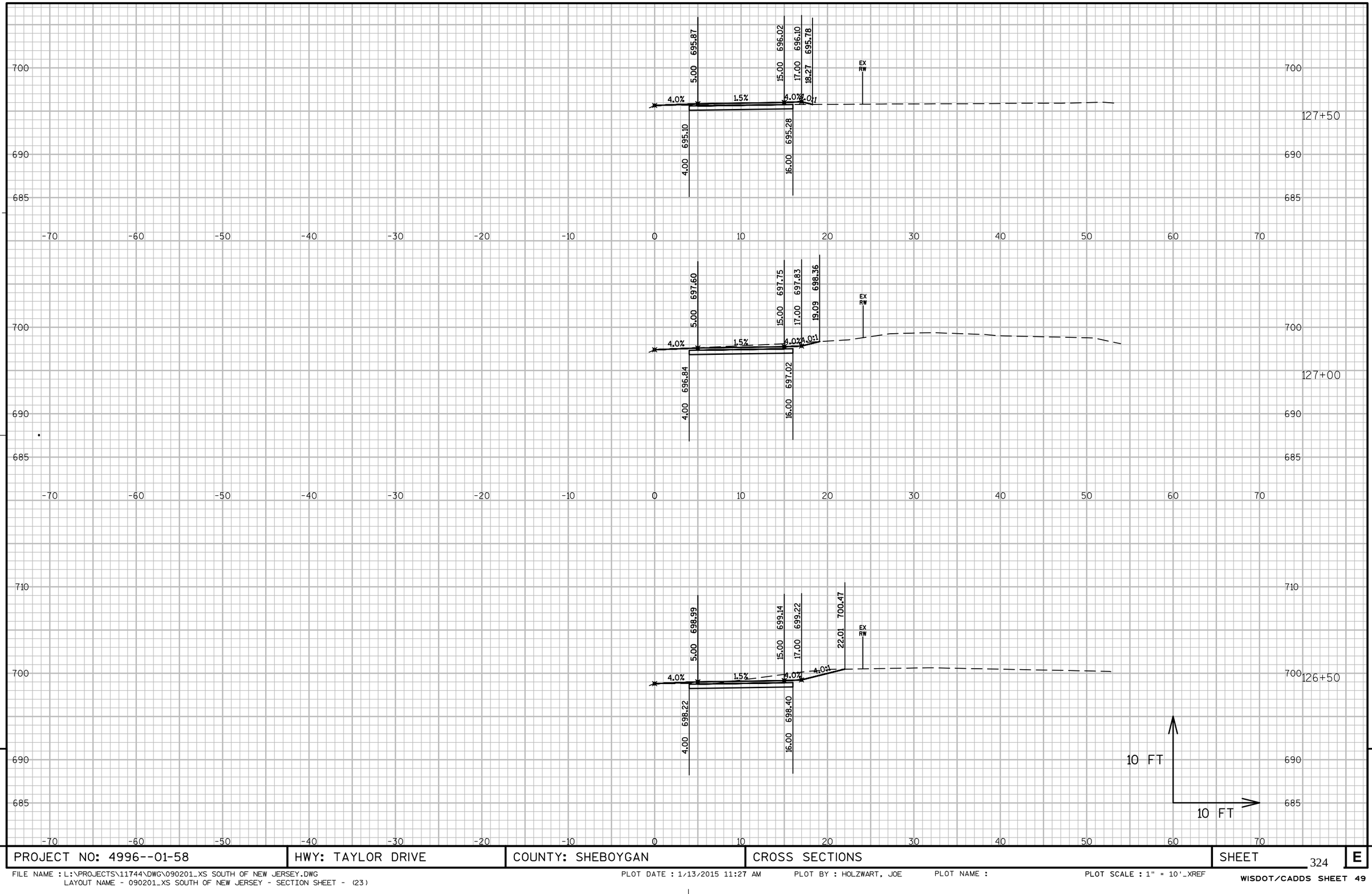


PROJECT NO: 4996--01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	CROSS SECTIONS	SHEET 323	E

FILE NAME : L:\PROJECTS\11744\DWG\090201_XS SOUTH OF NEW JERSEY.DWG
LAYOUT NAME - 090201_XS SOUTH OF NEW JERSEY - SECTION SHEET - (22)

PLOT DATE : 1/13/2015 11:27 AM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49

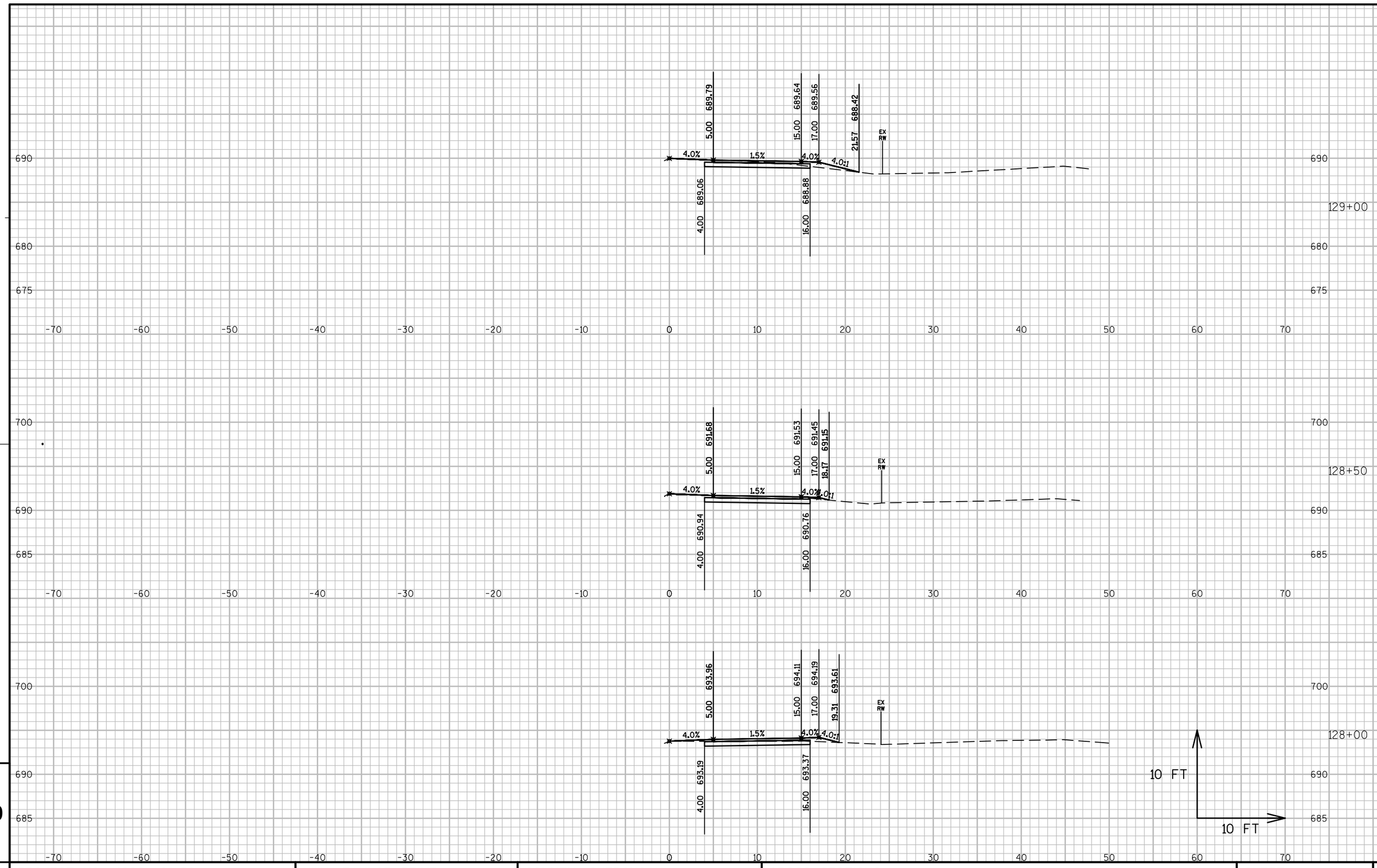


PROJECT NO: 4996--01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	CROSS SECTIONS	SHEET 324	E

FILE NAME : L:\PROJECTS\11744\DWG\090201_XS SOUTH OF NEW JERSEY.DWG
LAYOUT NAME - 090201_XS SOUTH OF NEW JERSEY - SECTION SHEET - (23)

PLOT DATE : 1/13/2015 11:27 AM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49

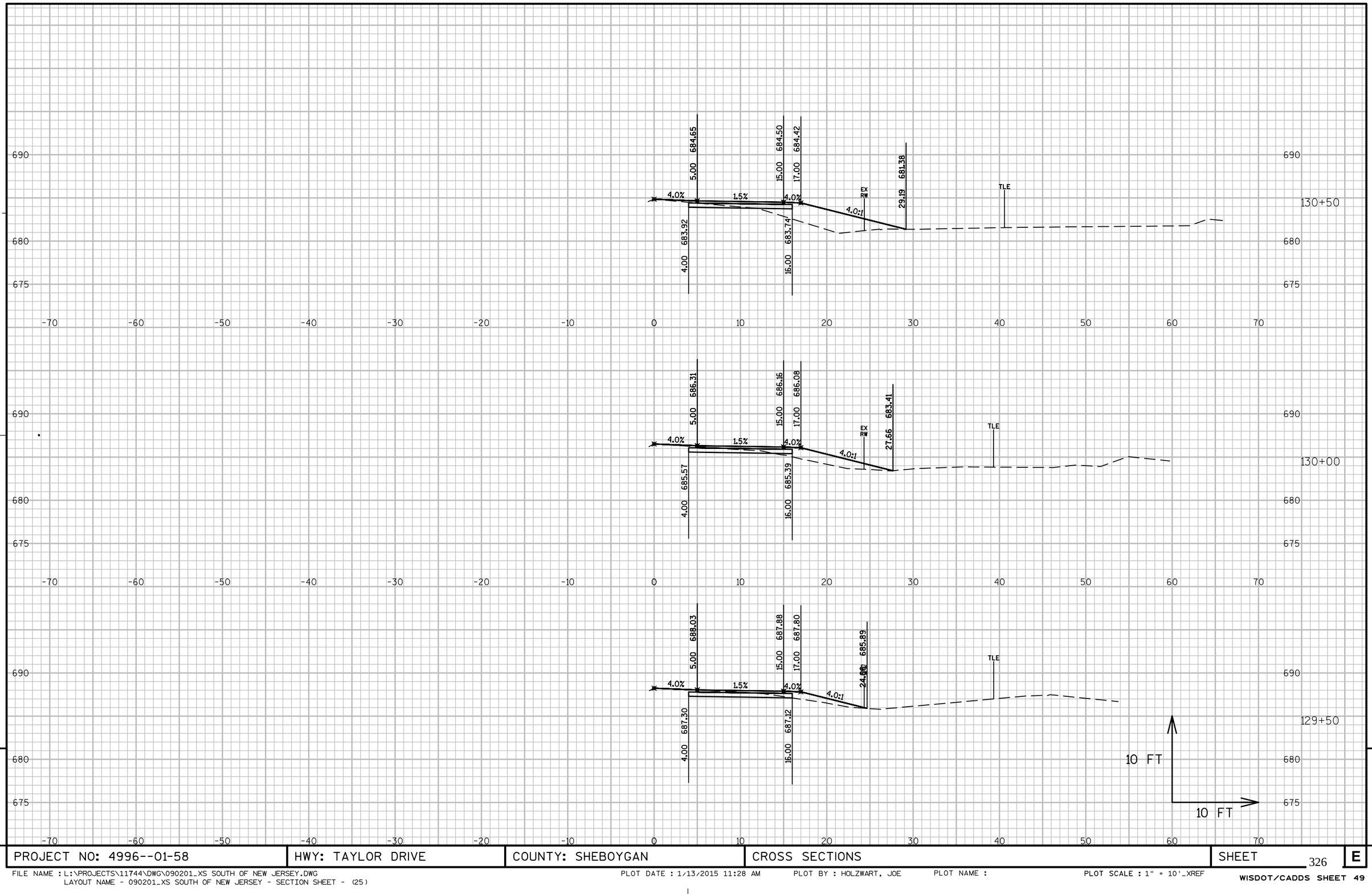


PROJECT NO: 4996--01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	CROSS SECTIONS	SHEET 325	E

FILE NAME : L:\PROJECTS\11744\DWG\090201_XS SOUTH OF NEW JERSEY.DWG
LAYOUT NAME - 090201_XS SOUTH OF NEW JERSEY - SECTION SHEET - (24)

PLOT DATE : 1/13/2015 11:28 AM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1" = 10'_XREF

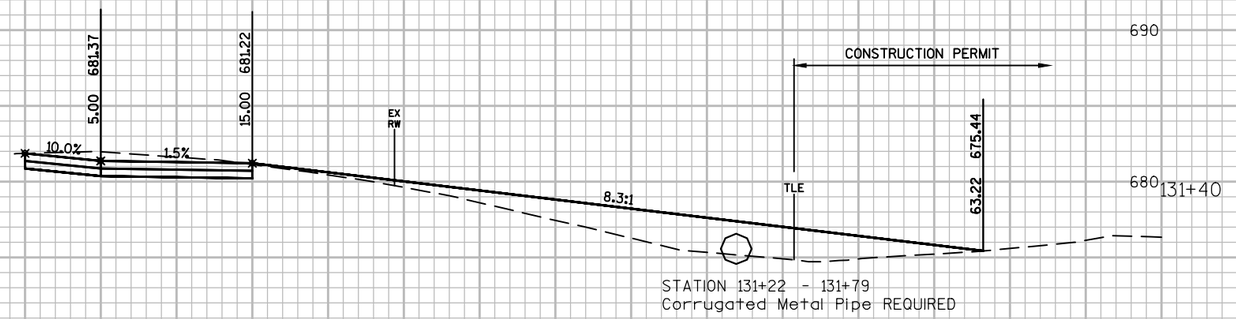
WISDOT/CADDS SHEET 49

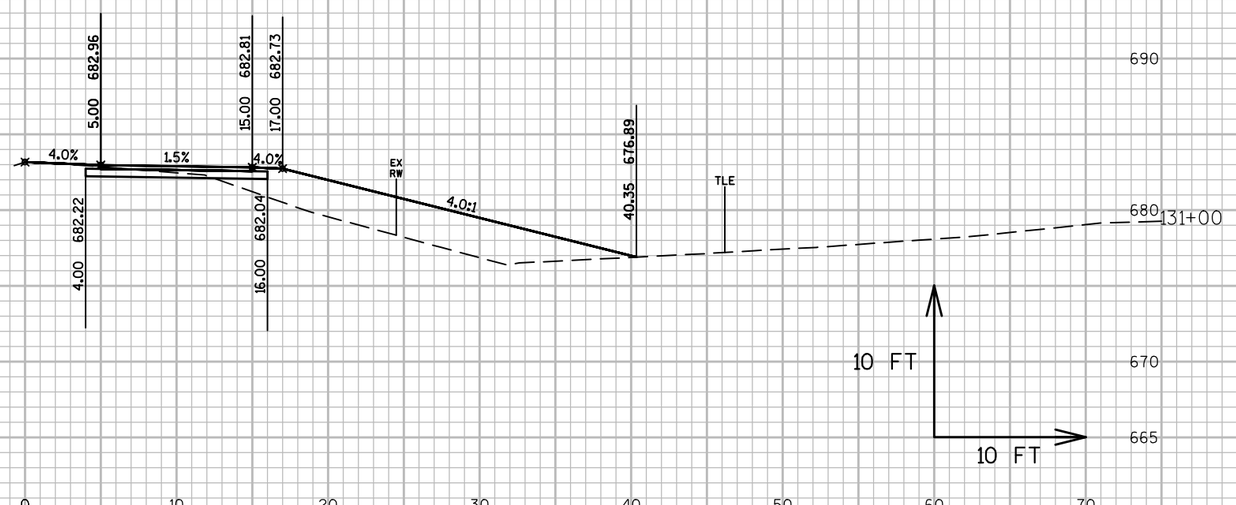


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PROJECT NO: 4996--01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	CROSS SECTIONS	SHEET 326	E



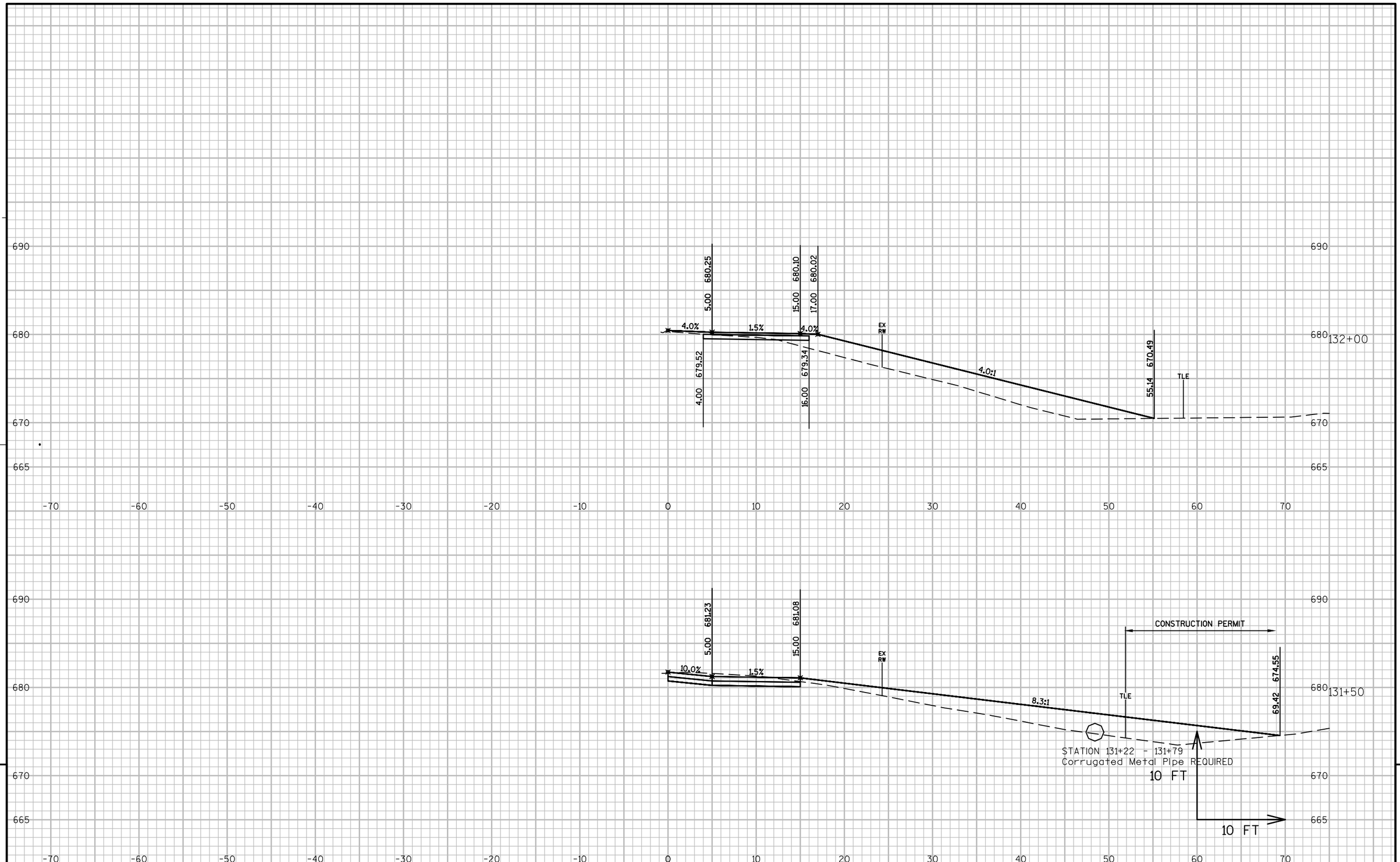


PROJECT NO: 4996--01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	CROSS SECTIONS	SHEET 327	E

FILE NAME : L:\PROJECTS\11744\DWG\090201_XS SOUTH OF NEW JERSEY.DWG
LAYOUT NAME - 090201_XS SOUTH OF NEW JERSEY - SECTION SHEET - (26)

PLOT DATE : 1/13/2015 11:28 AM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49

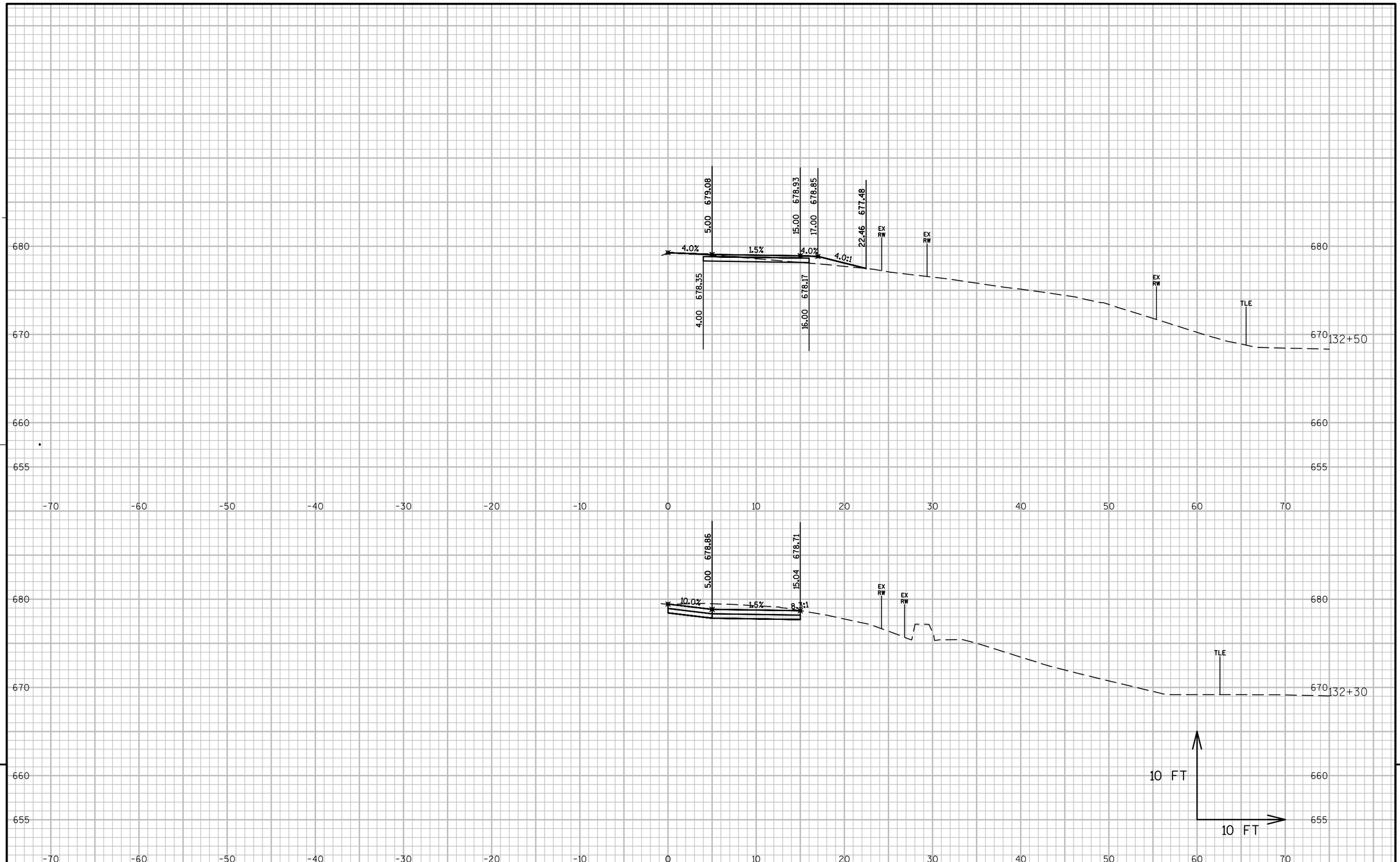


PROJECT NO: 4996--01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	CROSS SECTIONS	SHEET 328	E

FILE NAME : L:\PROJECTS\11744\DWG\090201_XS SOUTH OF NEW JERSEY.DWG
LAYOUT NAME - 090201_XS SOUTH OF NEW JERSEY - SECTION SHEET - (27)

PLOT DATE : 1/13/2015 11:29 AM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49

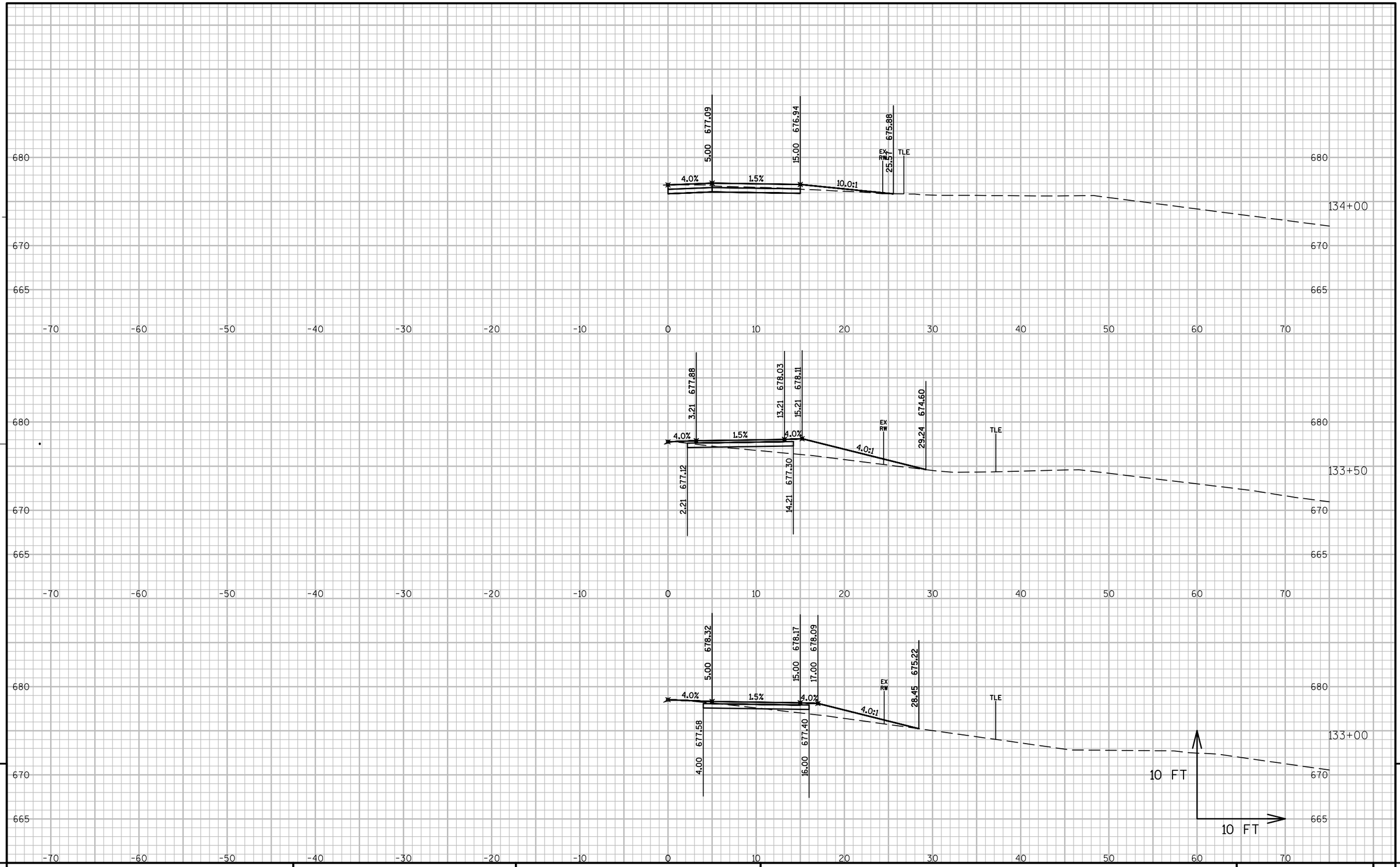


PROJECT NO: 4996--01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	CROSS SECTIONS	SHEET 329	E

FILE NAME : L:\PROJECTS\11744\DWG\090201_XS SOUTH OF NEW JERSEY.DWG
LAYOUT NAME - 090201_XS SOUTH OF NEW JERSEY - SECTION SHEET - (28)

PLOT DATE : 1/13/2015 11:29 AM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49

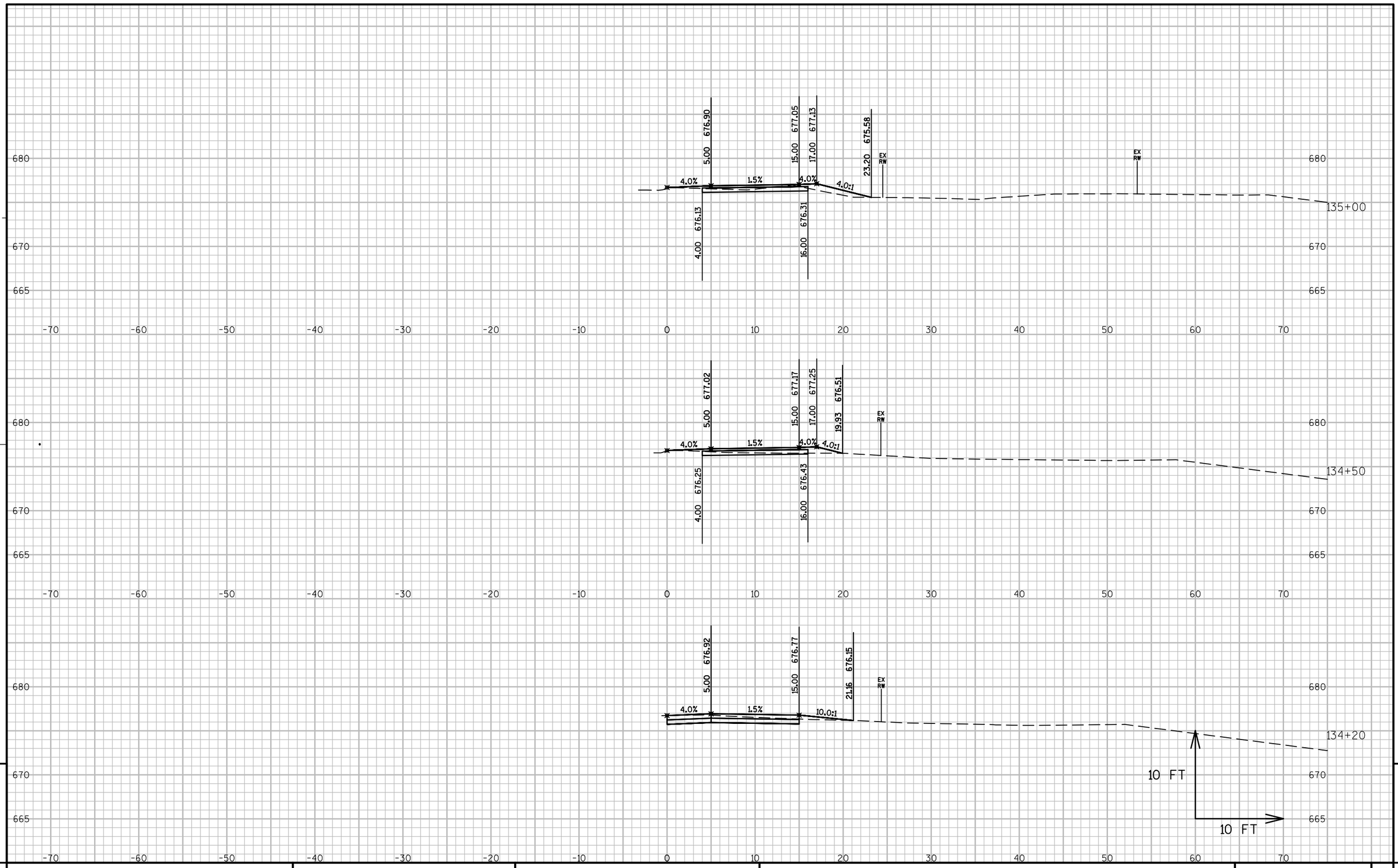


PROJECT NO: 4996--01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	CROSS SECTIONS	SHEET 330	E

FILE NAME : L:\PROJECTS\11744\DWG\090201_XS SOUTH OF NEW JERSEY.DWG
LAYOUT NAME - 090201_XS SOUTH OF NEW JERSEY - SECTION SHEET - (29)

PLOT DATE : 1/13/2015 11:29 AM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49



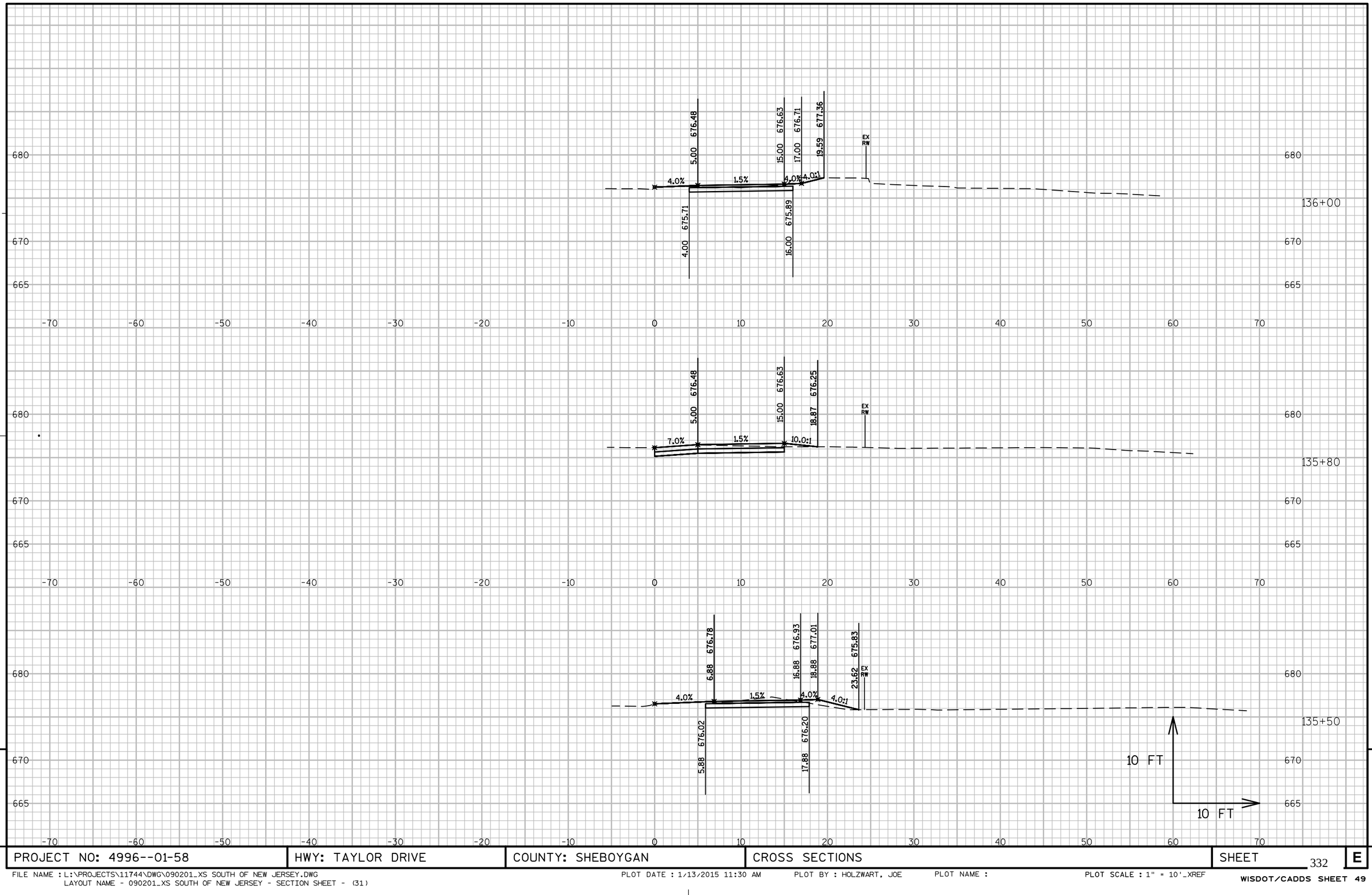
9

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PROJECT NO: 4996--01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	CROSS SECTIONS	SHEET 331	E

FILE NAME : L:\PROJECTS\11744\DWG\090201_XS SOUTH OF NEW JERSEY.DWG
LAYOUT NAME - 090201_XS SOUTH OF NEW JERSEY - SECTION SHEET - (30)

PLOT DATE : 1/13/2015 11:29 AM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1" = 10'_XREF



9

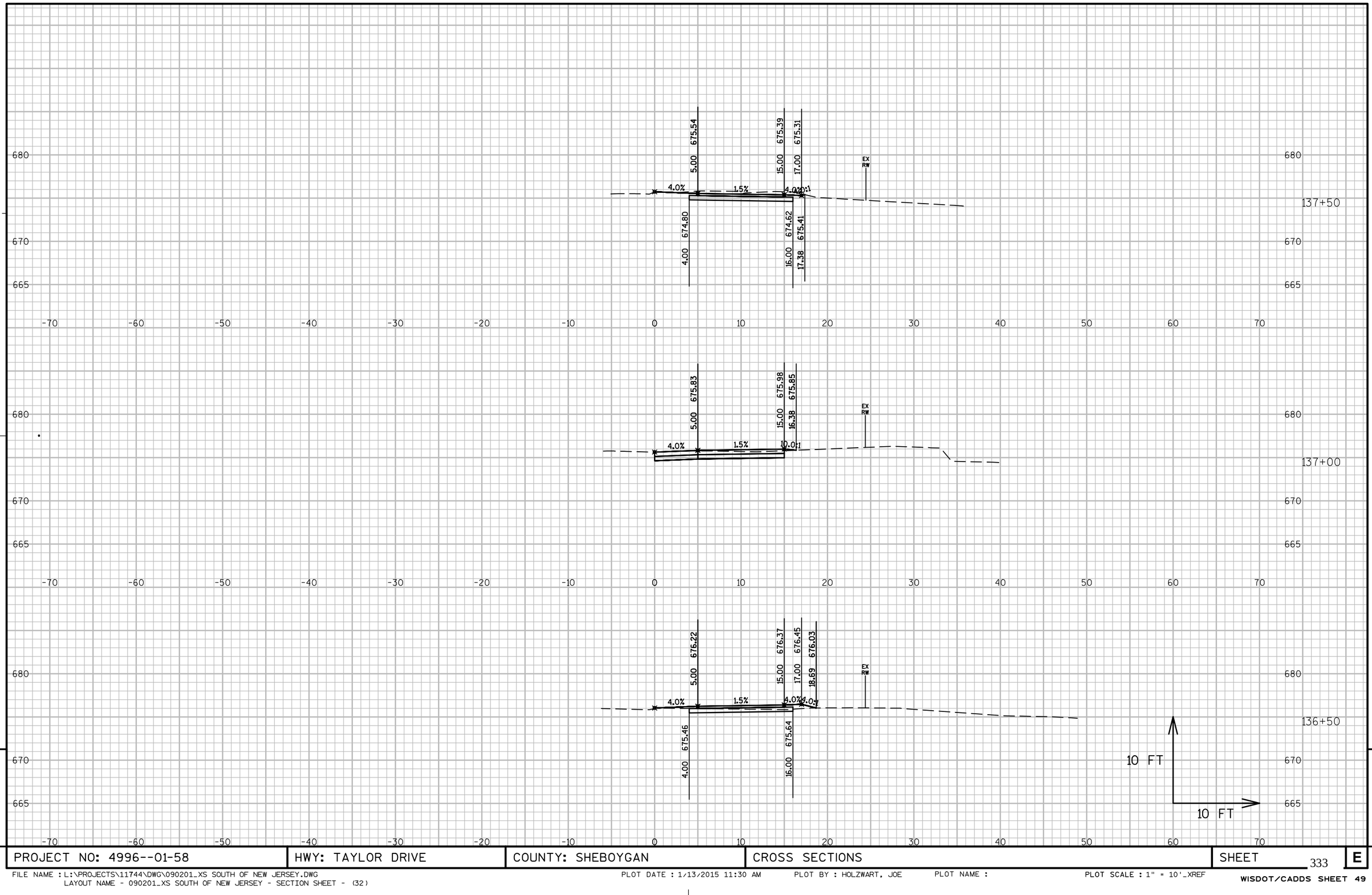
9

PROJECT NO: 4996--01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	CROSS SECTIONS	SHEET 332	E

FILE NAME : L:\PROJECTS\11744\DWG\090201_XS SOUTH OF NEW JERSEY.DWG
LAYOUT NAME - 090201_XS SOUTH OF NEW JERSEY - SECTION SHEET - (31)

PLOT DATE : 1/13/2015 11:30 AM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49



9

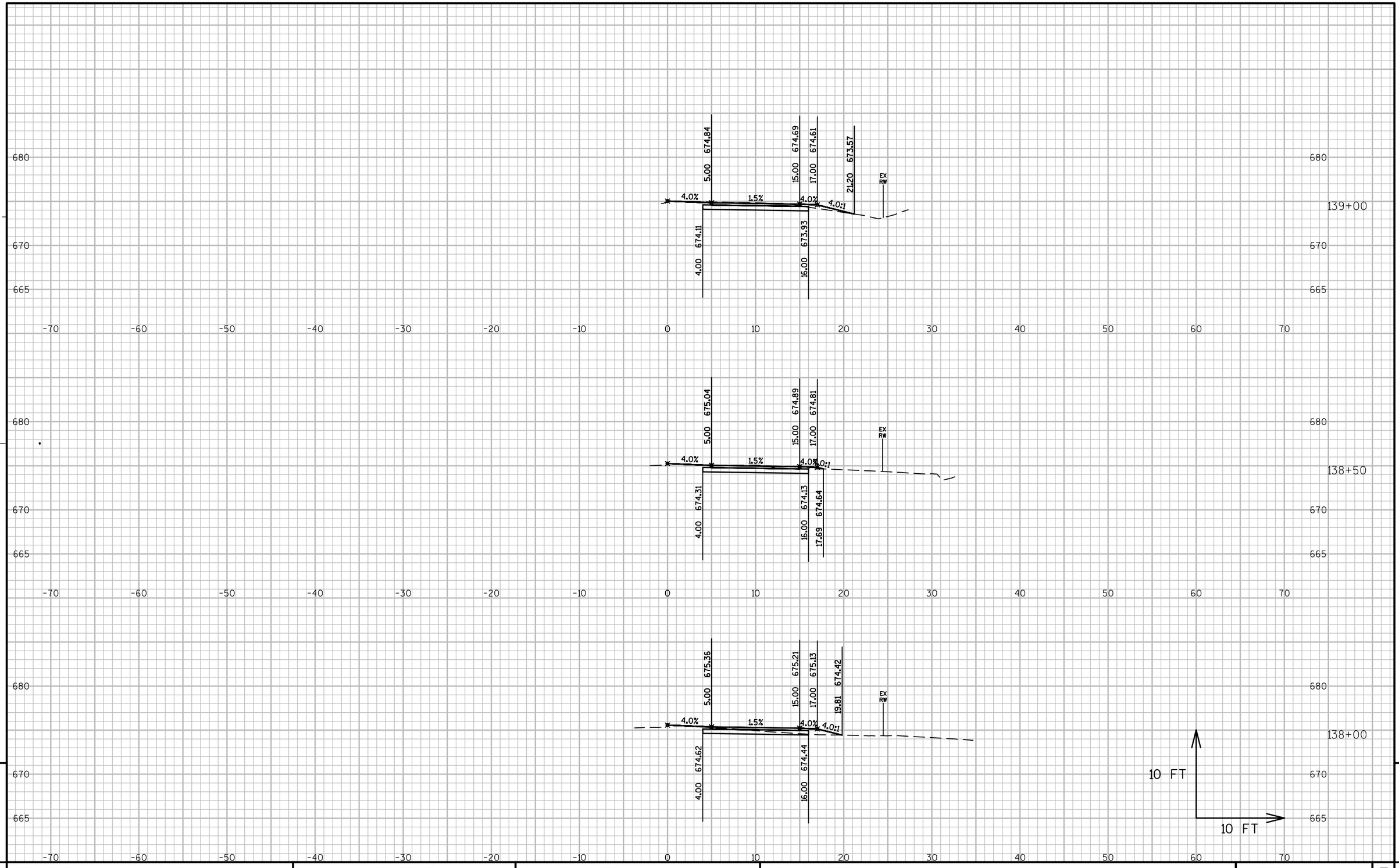
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PROJECT NO: 4996--01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	CROSS SECTIONS	SHEET 333	E

FILE NAME : L:\PROJECTS\11744\DWG\090201_XS SOUTH OF NEW JERSEY.DWG
LAYOUT NAME - 090201_XS SOUTH OF NEW JERSEY - SECTION SHEET - (32)

PLOT DATE : 1/13/2015 11:30 AM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49



9

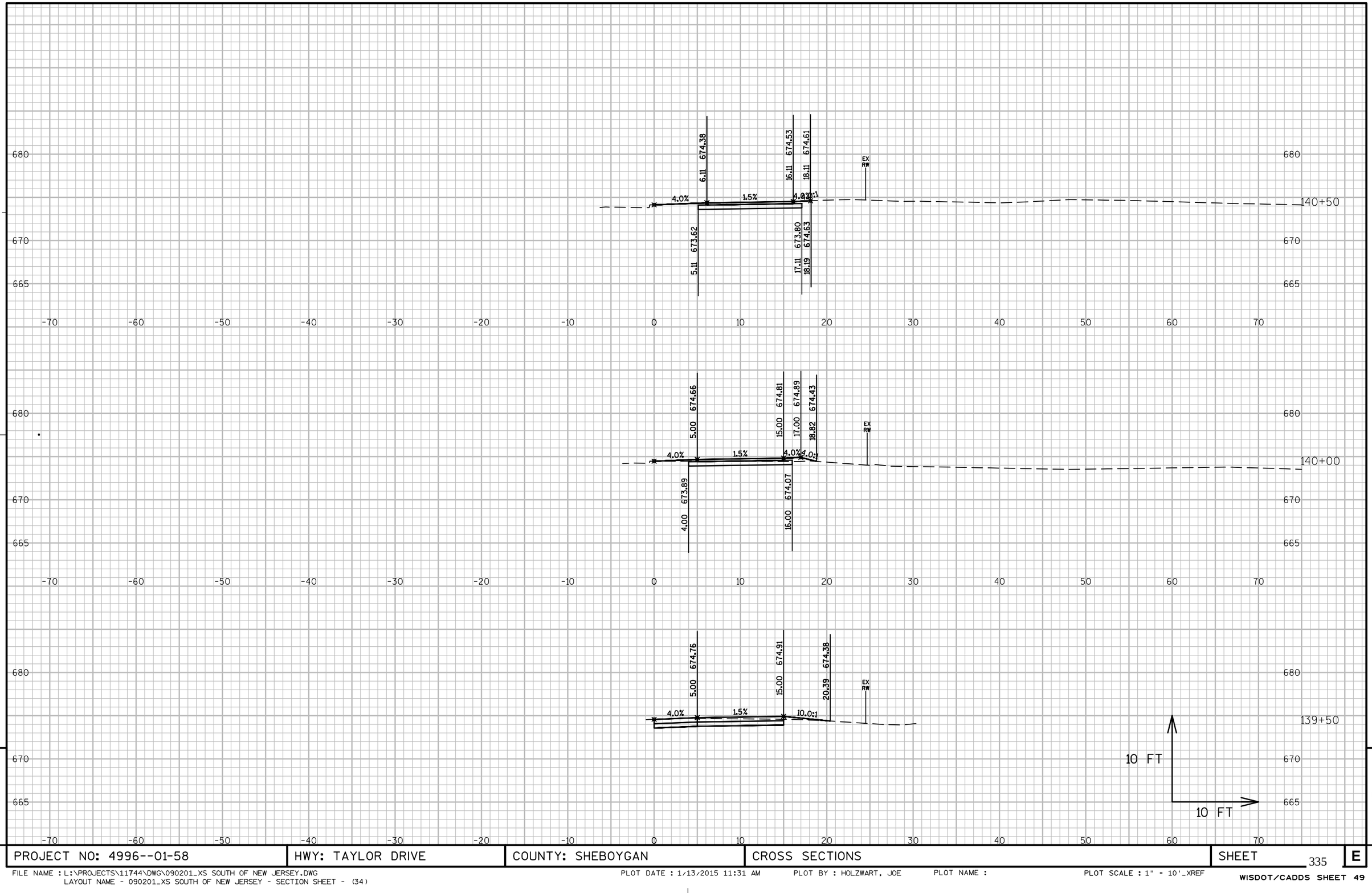
PROJECT NO: 4996--01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	CROSS SECTIONS	SHEET 334	E

9

FILE NAME : L:\PROJECTS\11744\DWG\090201_XS SOUTH OF NEW JERSEY.DWG
LAYOUT NAME - 090201_XS SOUTH OF NEW JERSEY - SECTION SHEET - (33)

PLOT DATE : 1/13/2015 11:30 AM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49



9

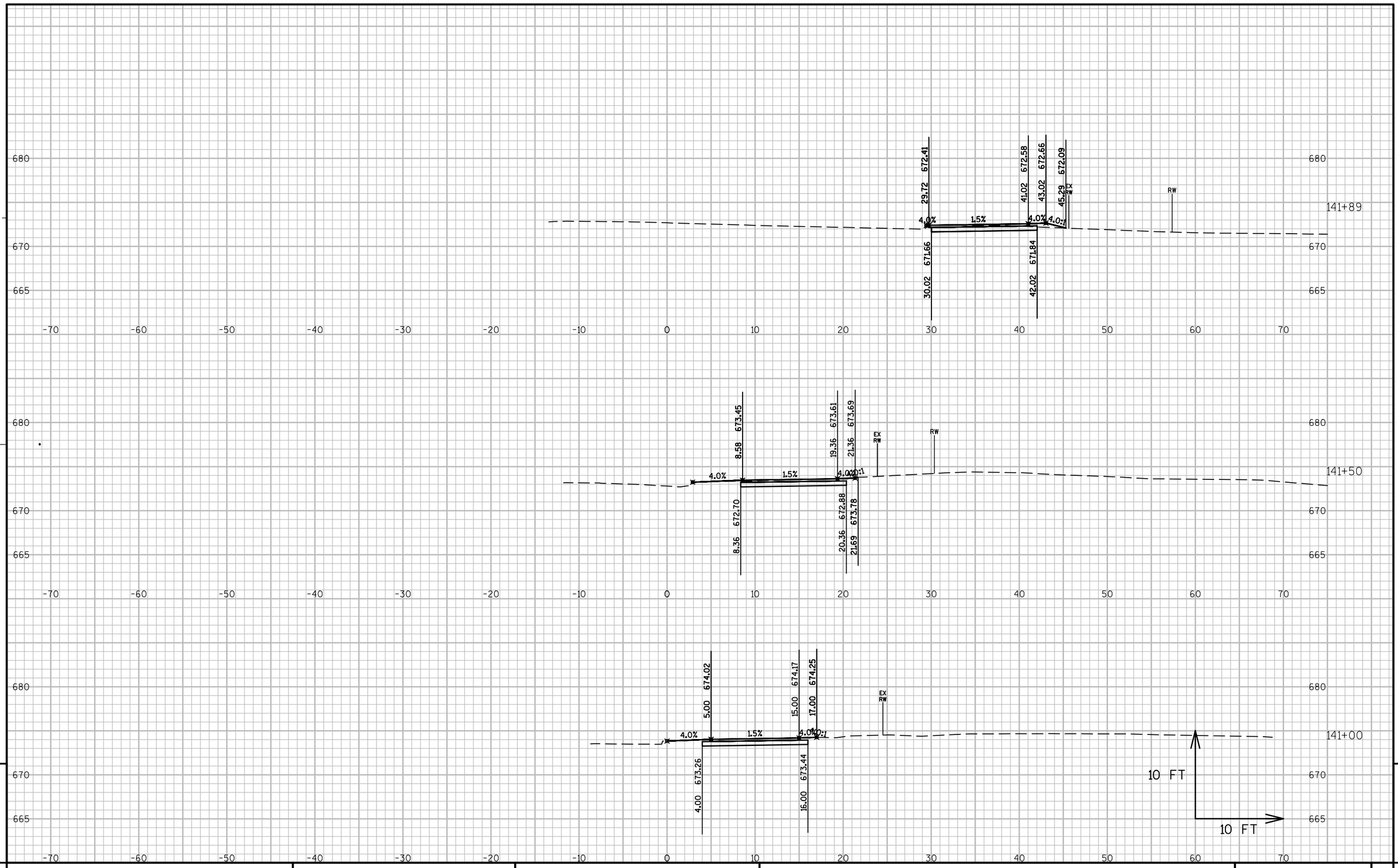
9

PROJECT NO: 4996--01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	CROSS SECTIONS	SHEET 335	E

FILE NAME : L:\PROJECTS\11744\DWG\090201_XS SOUTH OF NEW JERSEY.DWG
LAYOUT NAME - 090201_XS SOUTH OF NEW JERSEY - SECTION SHEET - (34)

PLOT DATE : 1/13/2015 11:31 AM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49

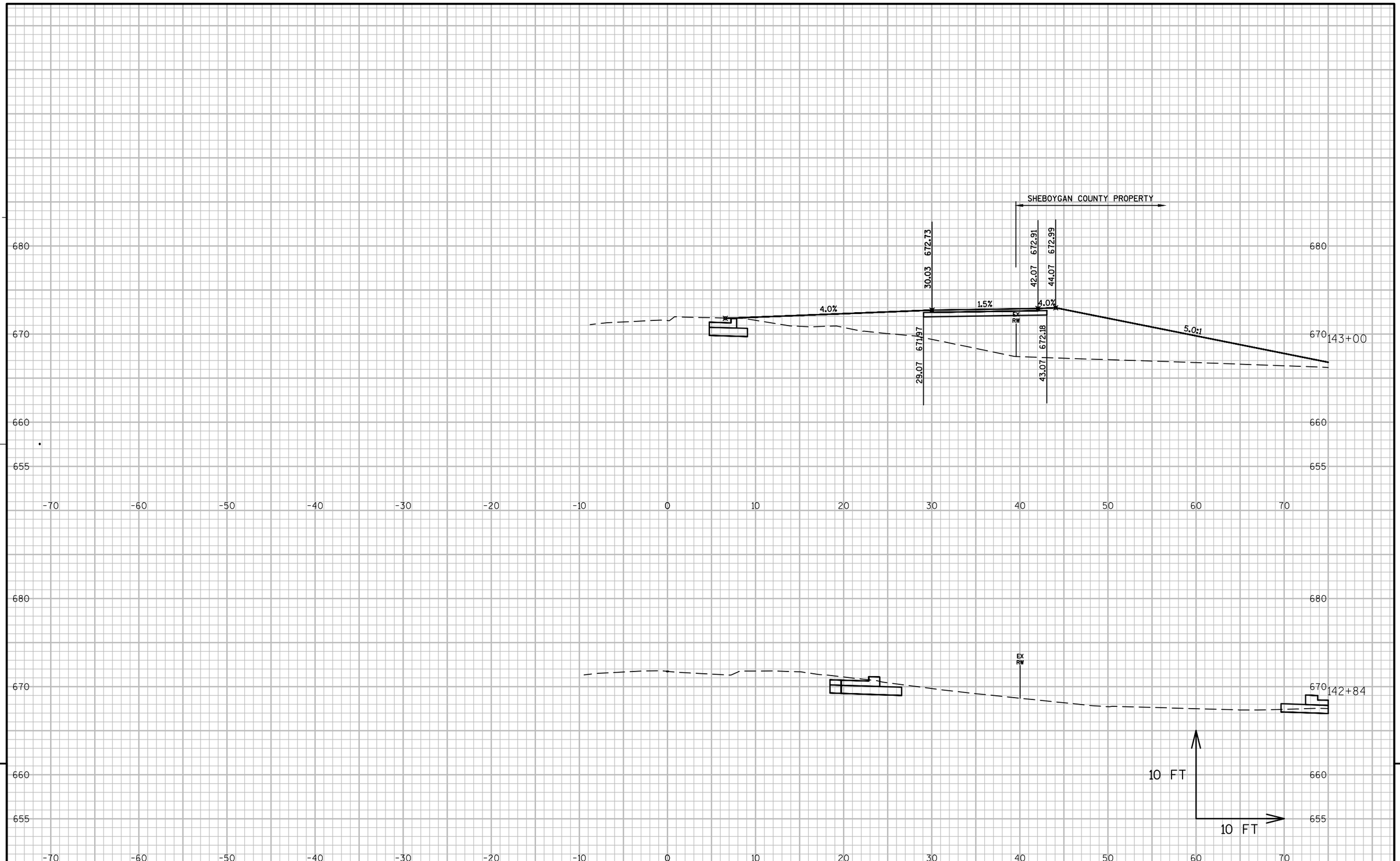


PROJECT NO: 4996--01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	CROSS SECTIONS	SHEET 336	E

FILE NAME : L:\PROJECTS\11744\DWG\090201_XS SOUTH OF NEW JERSEY.DWG
LAYOUT NAME - 090201_XS SOUTH OF NEW JERSEY - SECTION SHEET - (35)

PLOT DATE : 1/13/2015 11:31 AM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49

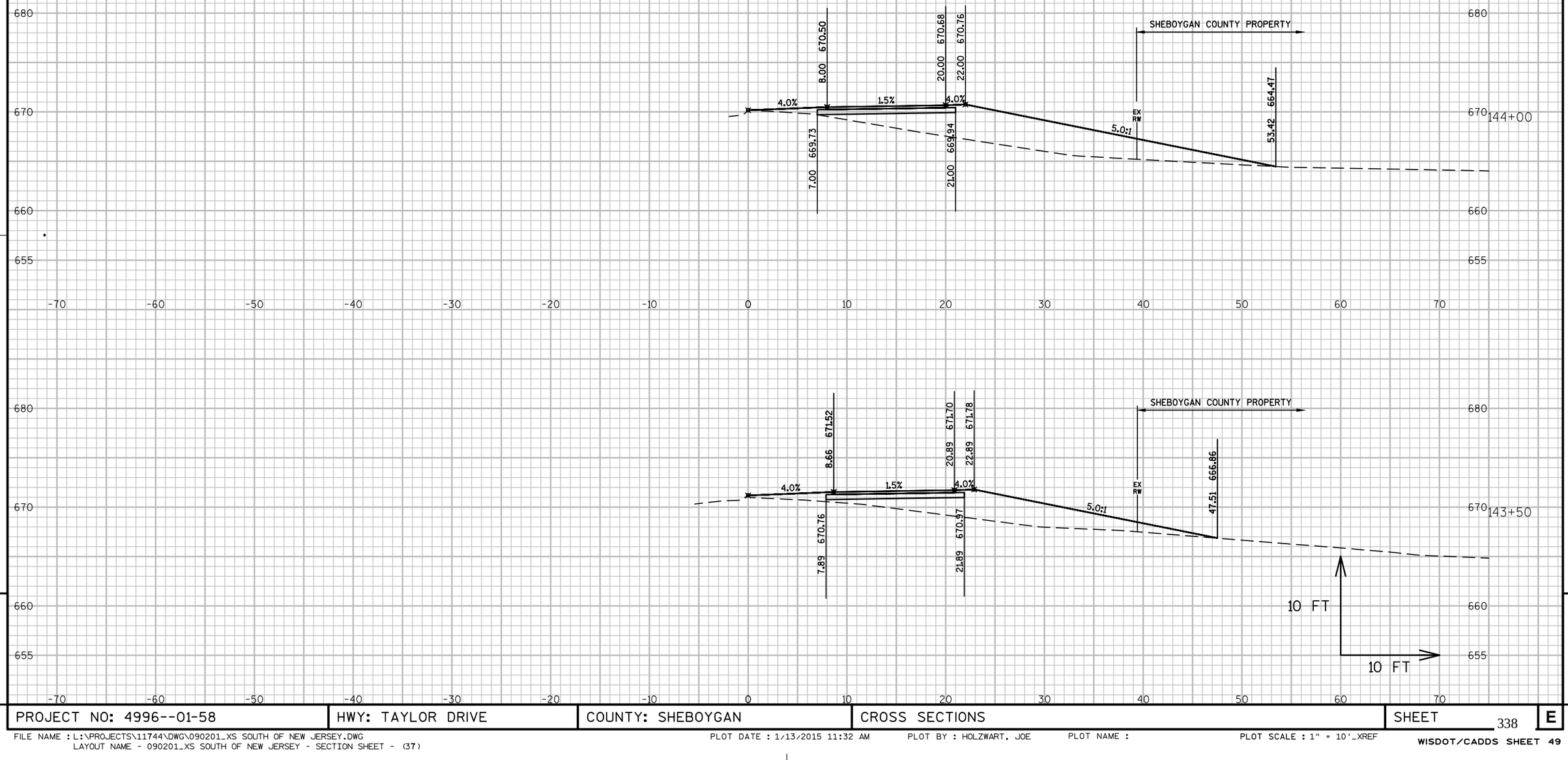


PROJECT NO: 4996--01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	CROSS SECTIONS	SHEET 337	E

FILE NAME : L:\PROJECTS\11744\DWG\090201_XS SOUTH OF NEW JERSEY.DWG
LAYOUT NAME - 090201_XS SOUTH OF NEW JERSEY - SECTION SHEET - (36)

PLOT DATE : 1/13/2015 11:31 AM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49



9

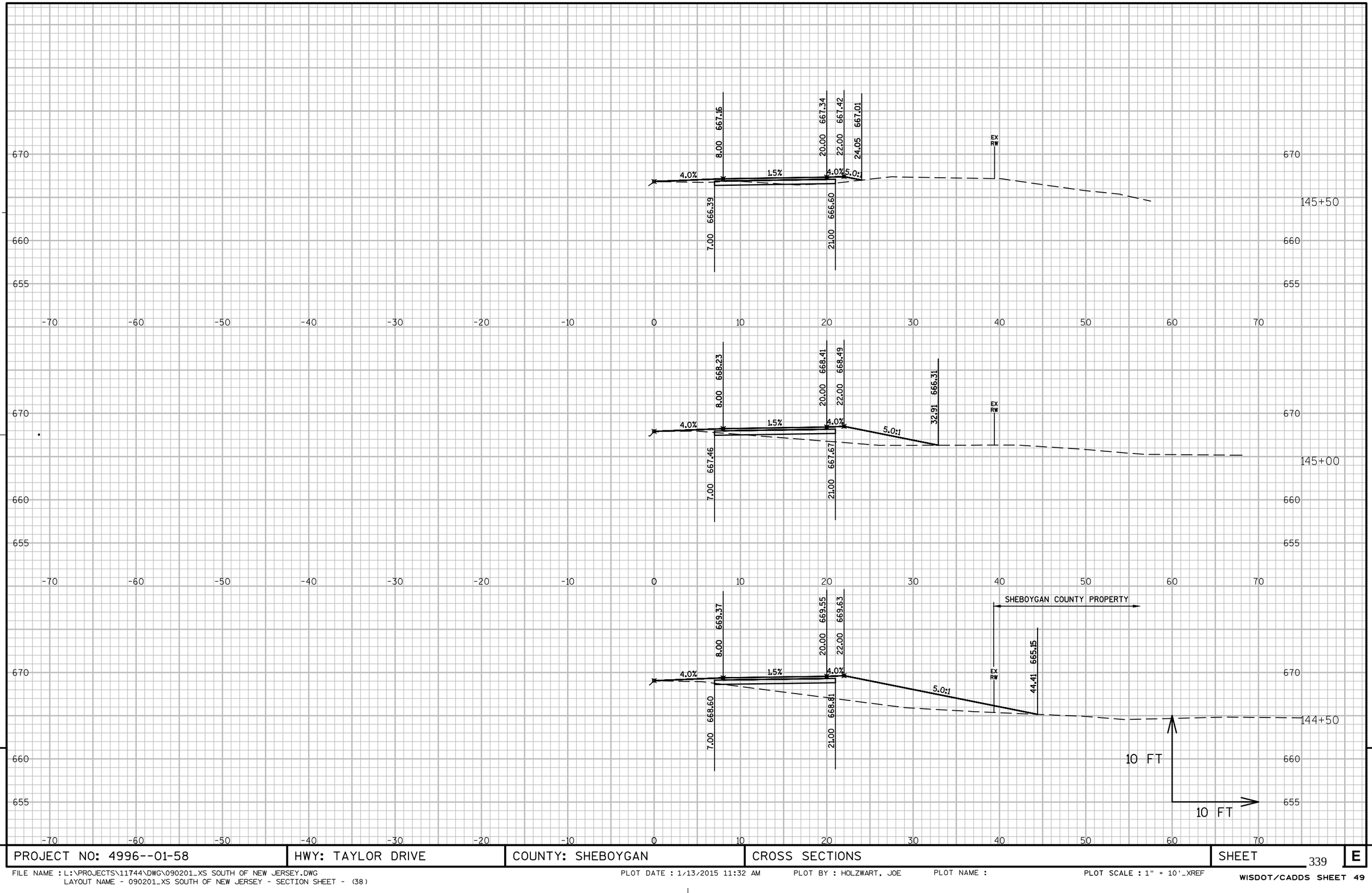
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PROJECT NO: 4996--01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	CROSS SECTIONS	SHEET 338	E

FILE NAME : L:\PROJECTS\11744\DWG\090201_XS SOUTH OF NEW JERSEY.DWG
LAYOUT NAME - 090201_XS SOUTH OF NEW JERSEY - SECTION SHEET - (37)

PLOT DATE : 1/13/2015 11:32 AM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49

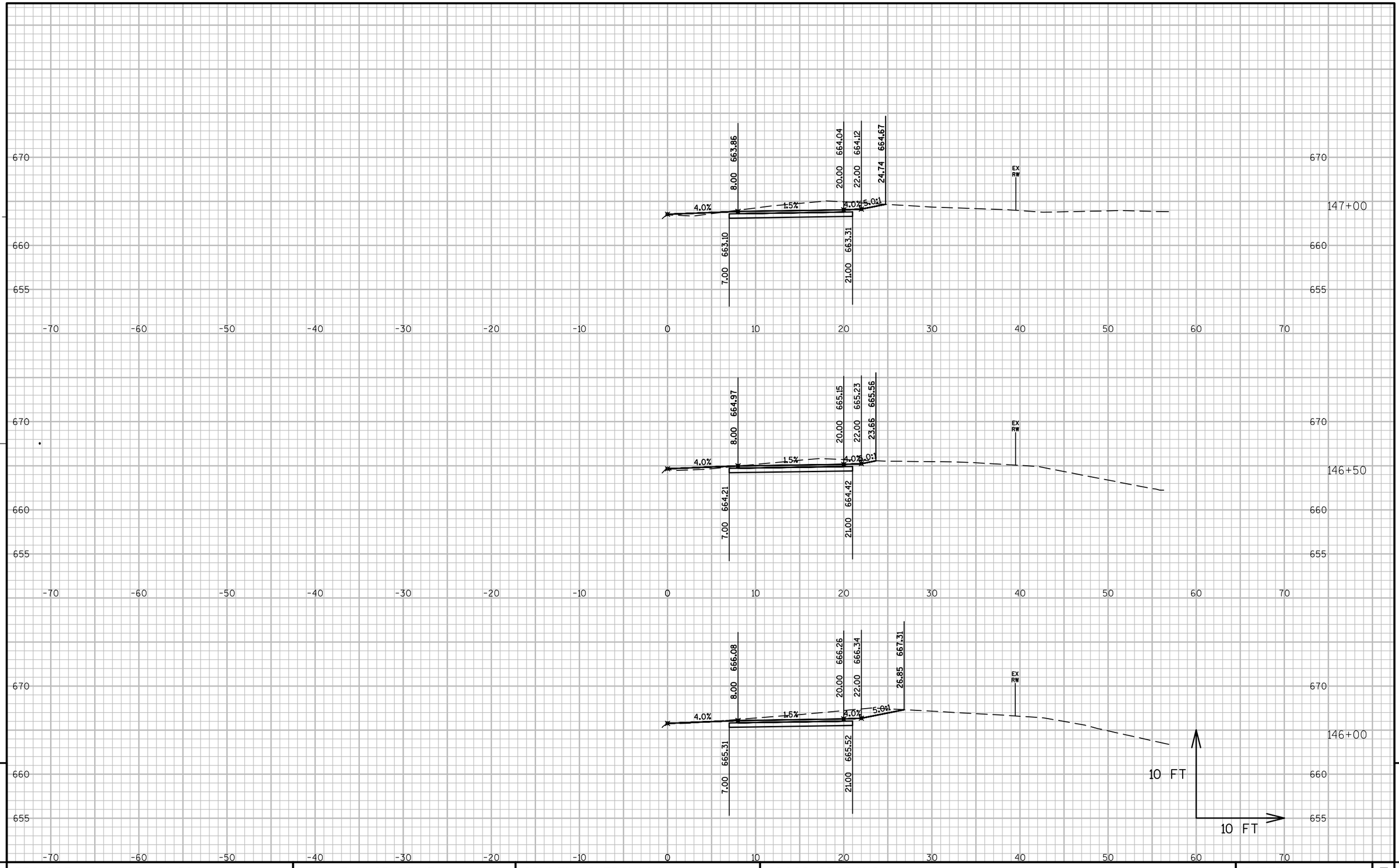


PROJECT NO: 4996--01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	CROSS SECTIONS	SHEET 339	E

FILE NAME : L:\PROJECTS\11744\DWG\090201_XS SOUTH OF NEW JERSEY.DWG
LAYOUT NAME - 090201_XS SOUTH OF NEW JERSEY - SECTION SHEET - (38)

PLOT DATE : 1/13/2015 11:32 AM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49

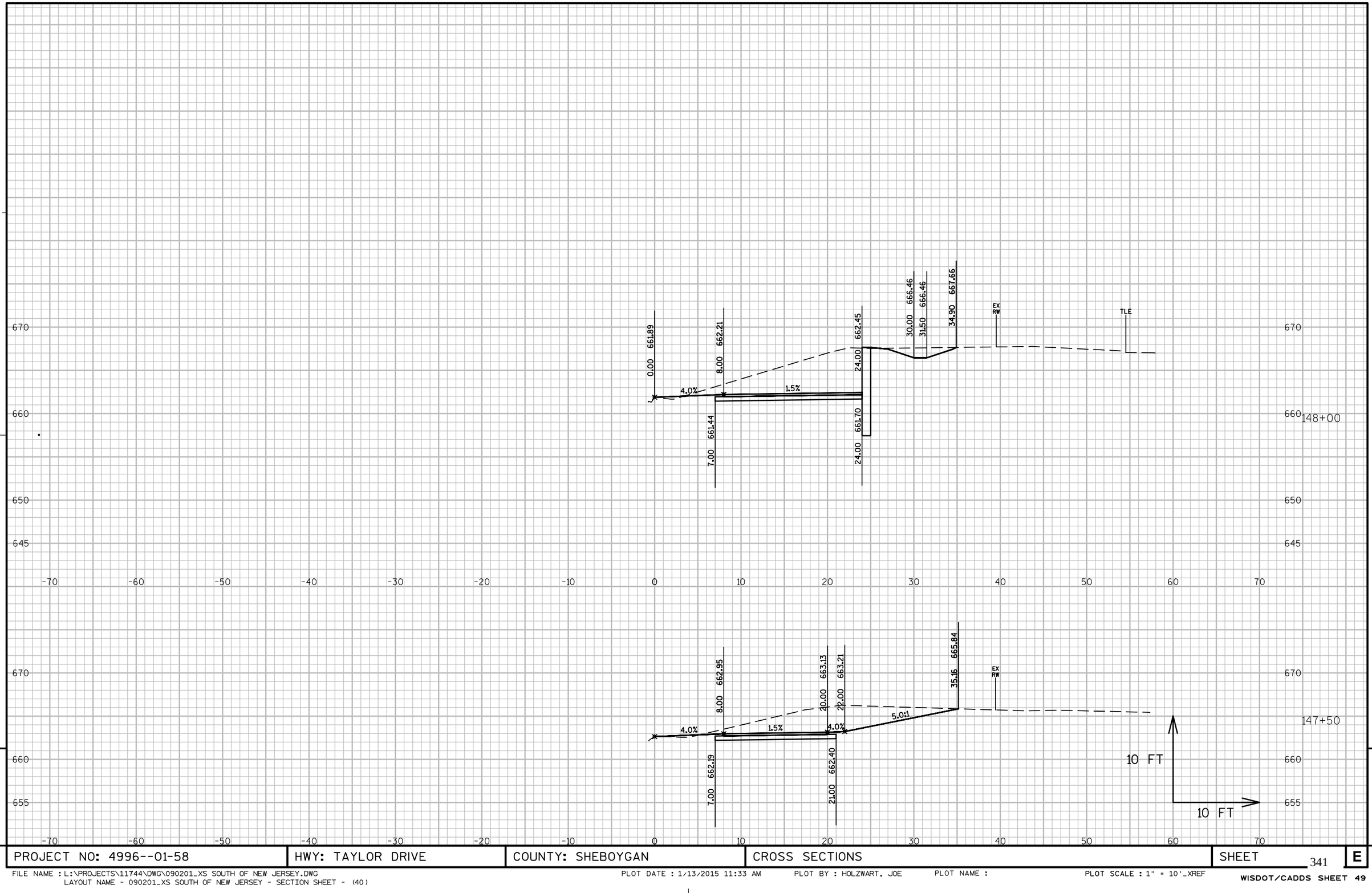


PROJECT NO: 4996--01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	CROSS SECTIONS	SHEET 340	E

FILE NAME : L:\PROJECTS\11744\DWG\090201_XS SOUTH OF NEW JERSEY.DWG
LAYOUT NAME - 090201_XS SOUTH OF NEW JERSEY - SECTION SHEET - (39)

PLOT DATE : 1/13/2015 11:32 AM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49



9

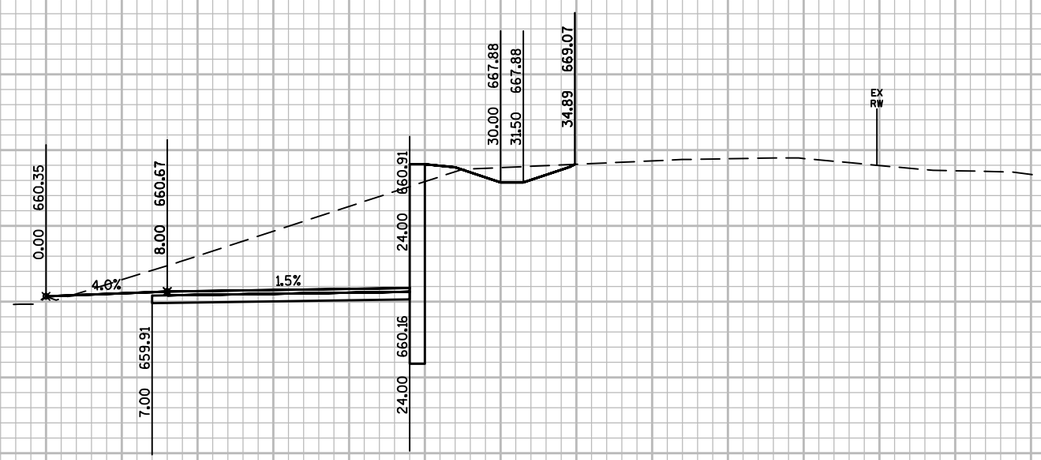
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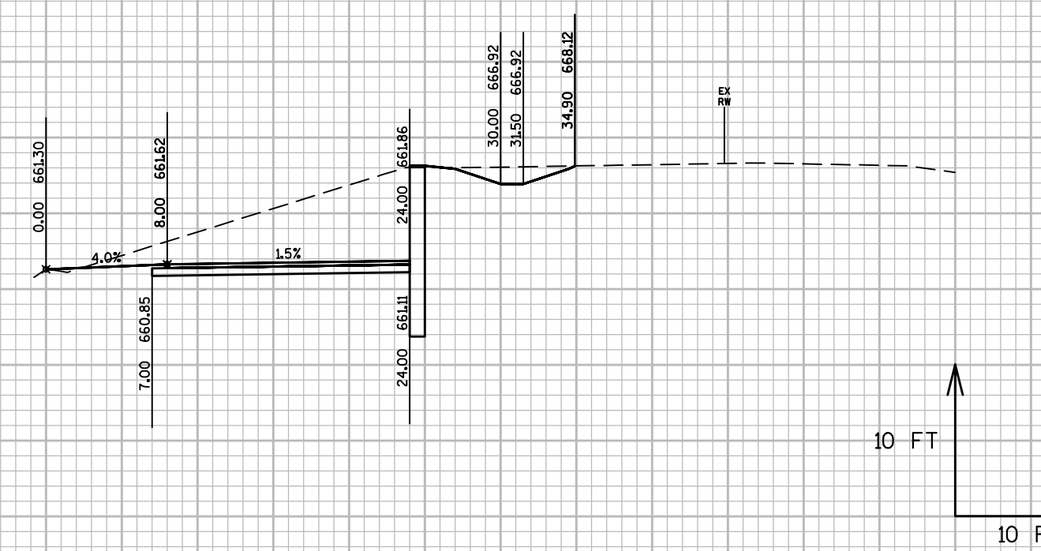
PROJECT NO: 4996--01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	CROSS SECTIONS	SHEET 341	E

FILE NAME : L:\PROJECTS\11744\DWG\090201_XS SOUTH OF NEW JERSEY.DWG
LAYOUT NAME - 090201_XS SOUTH OF NEW JERSEY - SECTION SHEET - (40)

PLOT DATE : 1/13/2015 11:33 AM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49



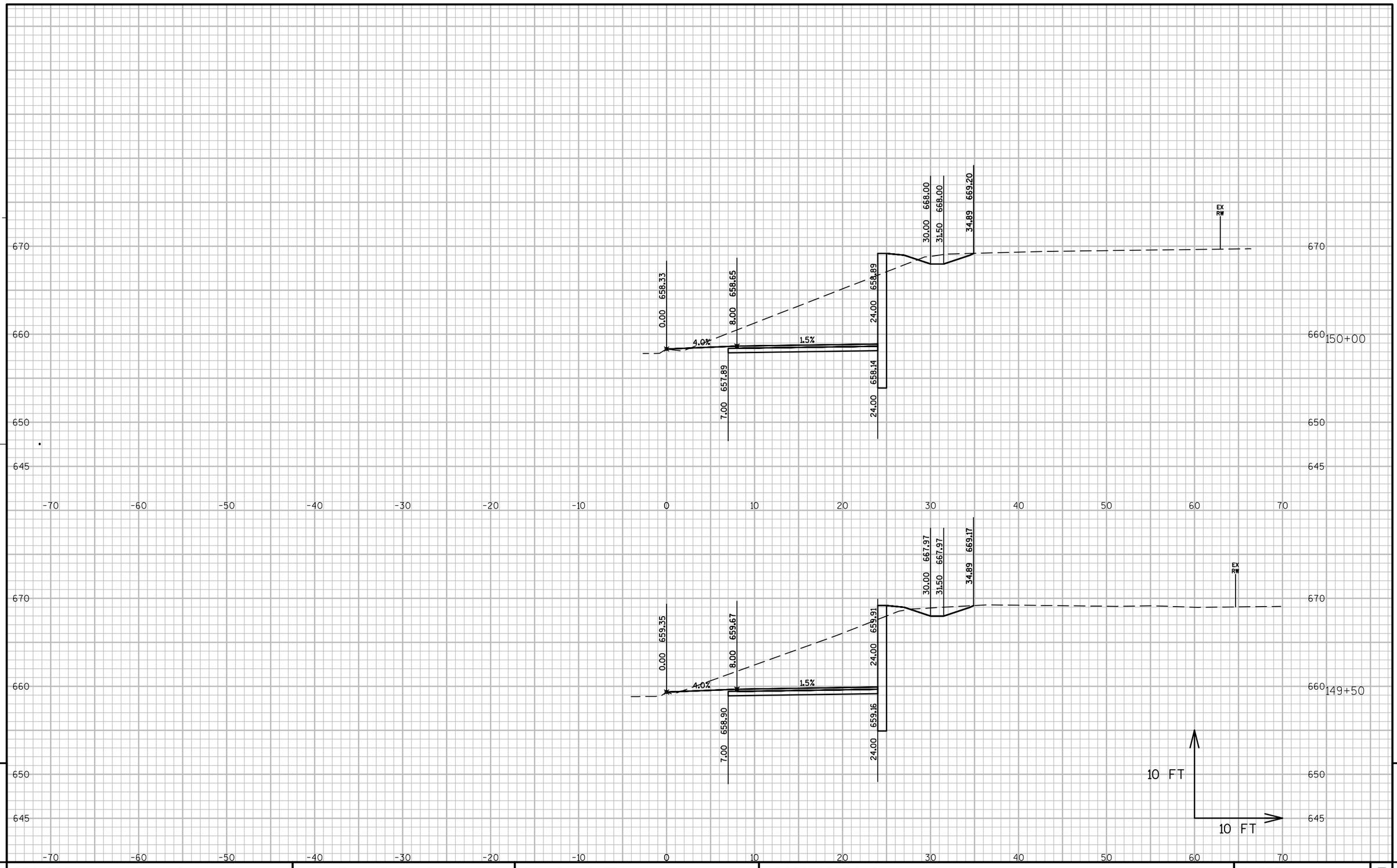


PROJECT NO: 4996--01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	CROSS SECTIONS	SHEET 342	E

FILE NAME : L:\PROJECTS\11744\DWG\090201_XS SOUTH OF NEW JERSEY.DWG
LAYOUT NAME - 090201_XS SOUTH OF NEW JERSEY - SECTION SHEET - (41)

PLOT DATE : 1/13/2015 11:33 AM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49



9

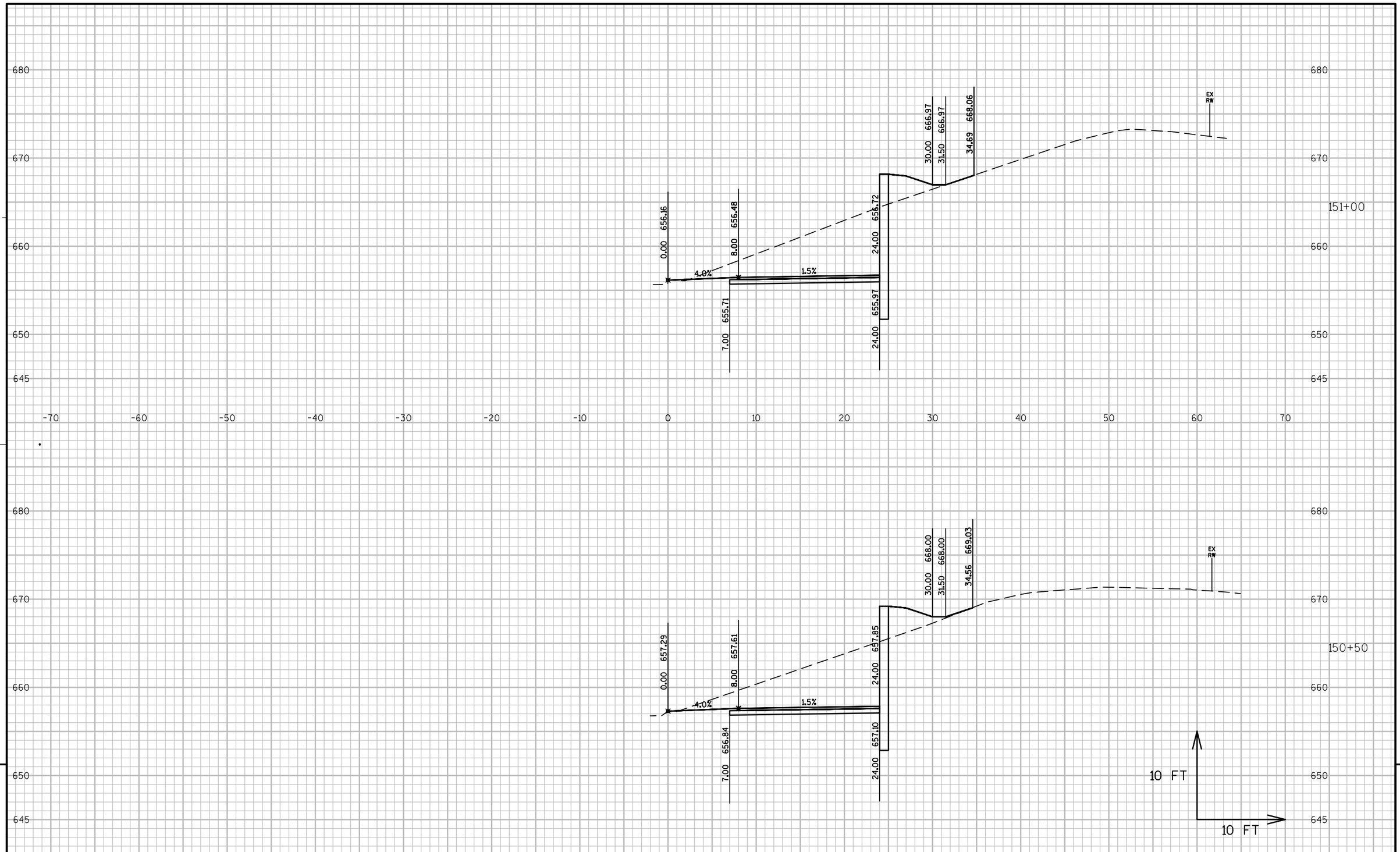
9

PROJECT NO: 4996--01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	CROSS SECTIONS	SHEET 343	E

FILE NAME : L:\PROJECTS\11744\DWG\090201_XS SOUTH OF NEW JERSEY.DWG
LAYOUT NAME - 090201_XS SOUTH OF NEW JERSEY - SECTION SHEET - (42)

PLOT DATE : 1/13/2015 11:33 AM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49



9

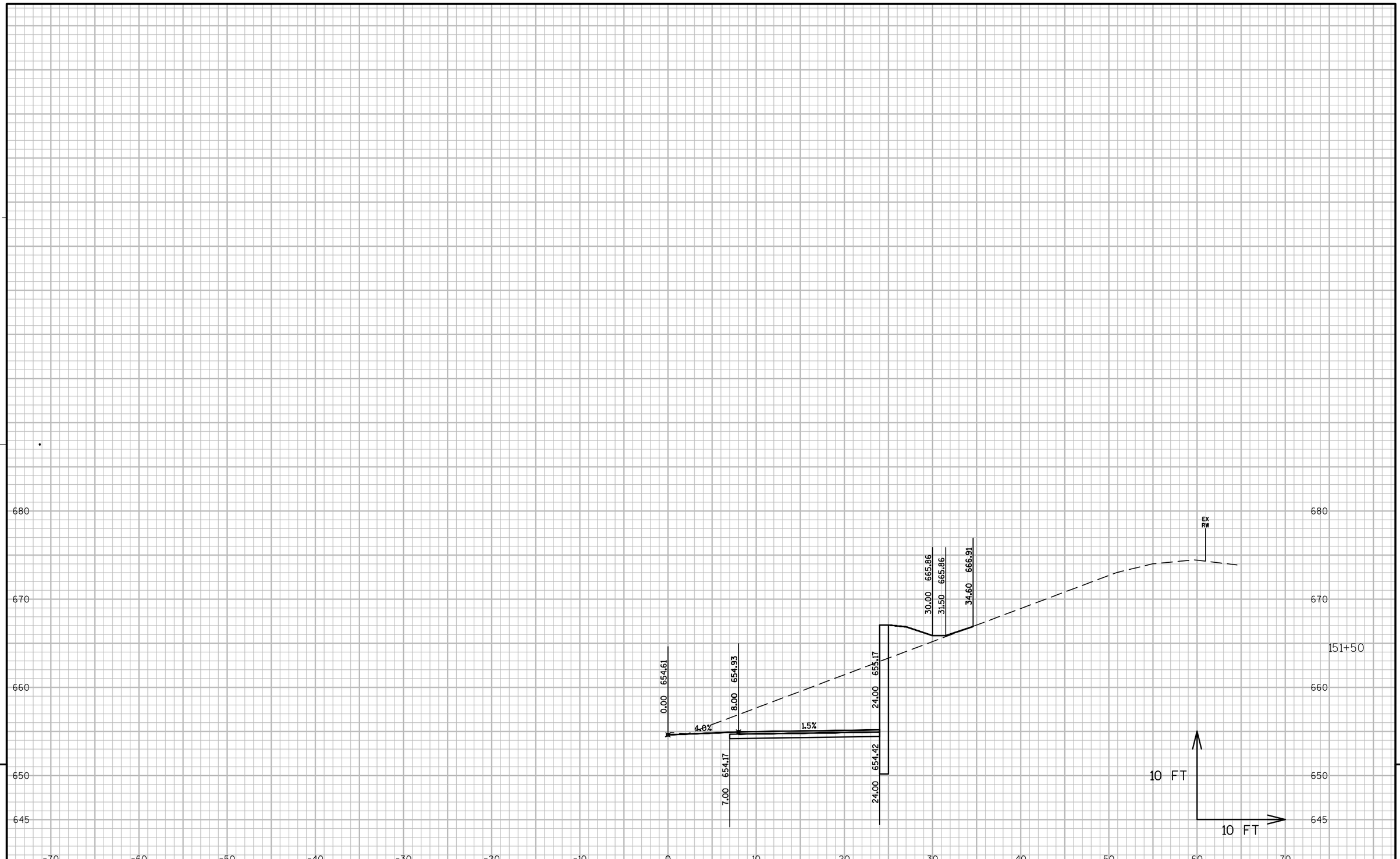
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PROJECT NO: 4996--01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	CROSS SECTIONS	SHEET 344	E

FILE NAME : L:\PROJECTS\11744\DWG\090201_XS SOUTH OF NEW JERSEY.DWG
LAYOUT NAME - 090201_XS SOUTH OF NEW JERSEY - SECTION SHEET - (43)

PLOT DATE : 1/13/2015 11:34 AM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49



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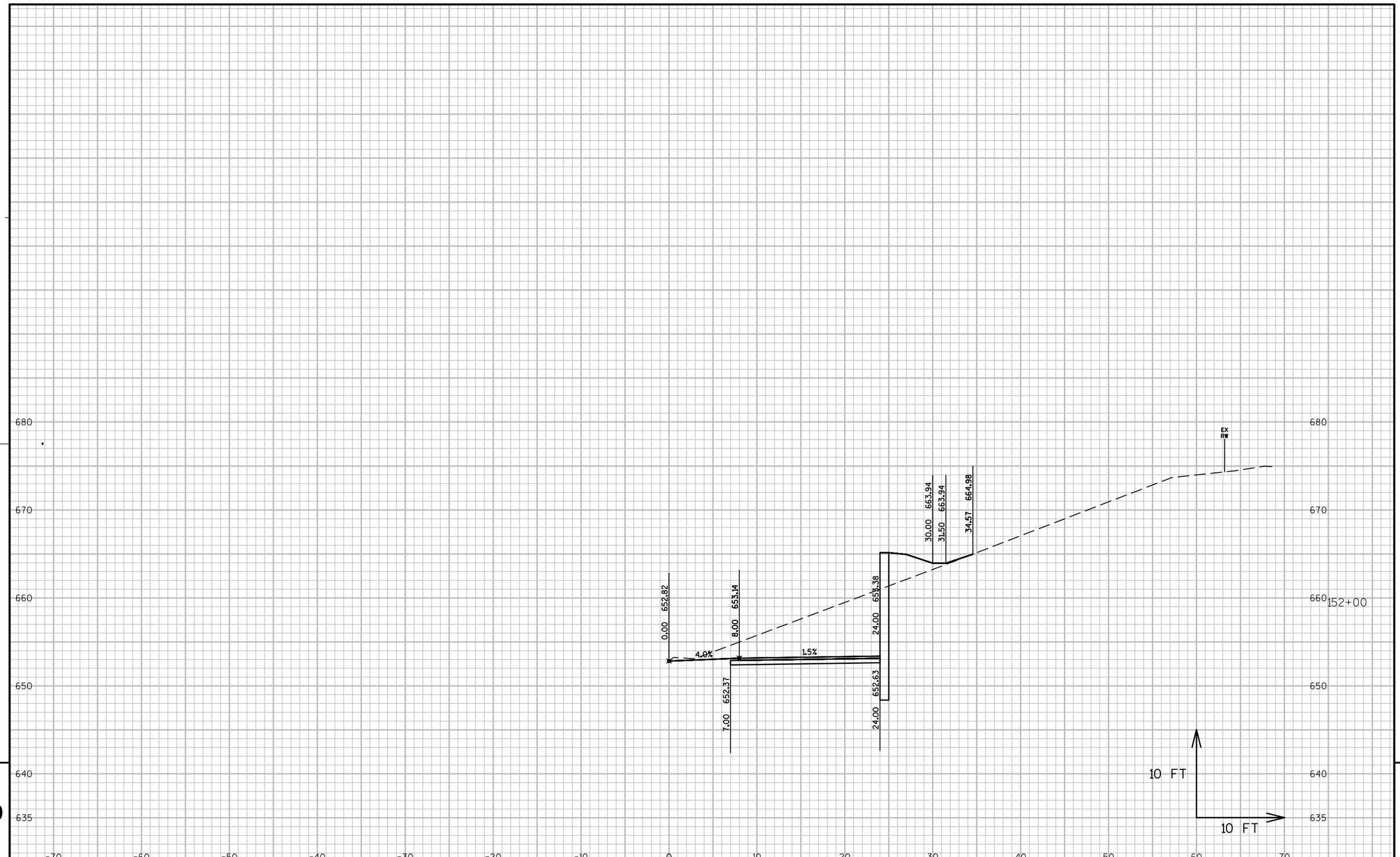
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PROJECT NO: 4996--01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	CROSS SECTIONS	SHEET 345	E

FILE NAME : L:\PROJECTS\11744\DWG\090201_XS SOUTH OF NEW JERSEY.DWG
LAYOUT NAME - 090201_XS SOUTH OF NEW JERSEY - SECTION SHEET - (44)

PLOT DATE : 1/13/2015 11:34 AM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49

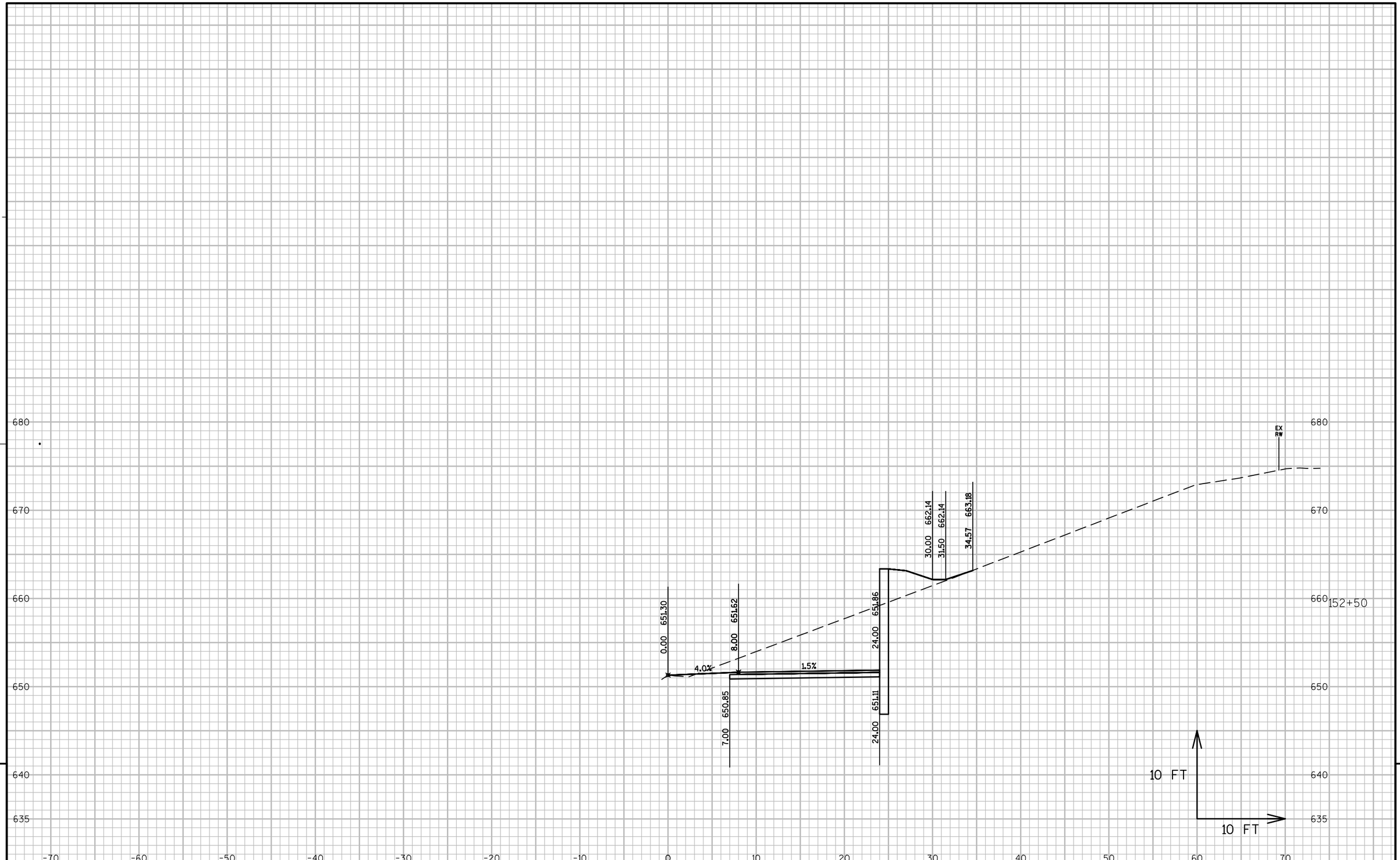


PROJECT NO: 4996--01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	CROSS SECTIONS	SHEET 346	E

FILE NAME : L:\PROJECTS\11744\DWG\090201_XS SOUTH OF NEW JERSEY.DWG
LAYOUT NAME - 090201_XS SOUTH OF NEW JERSEY - SECTION SHEET - (45)

PLOT DATE : 1/13/2015 11:34 AM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49

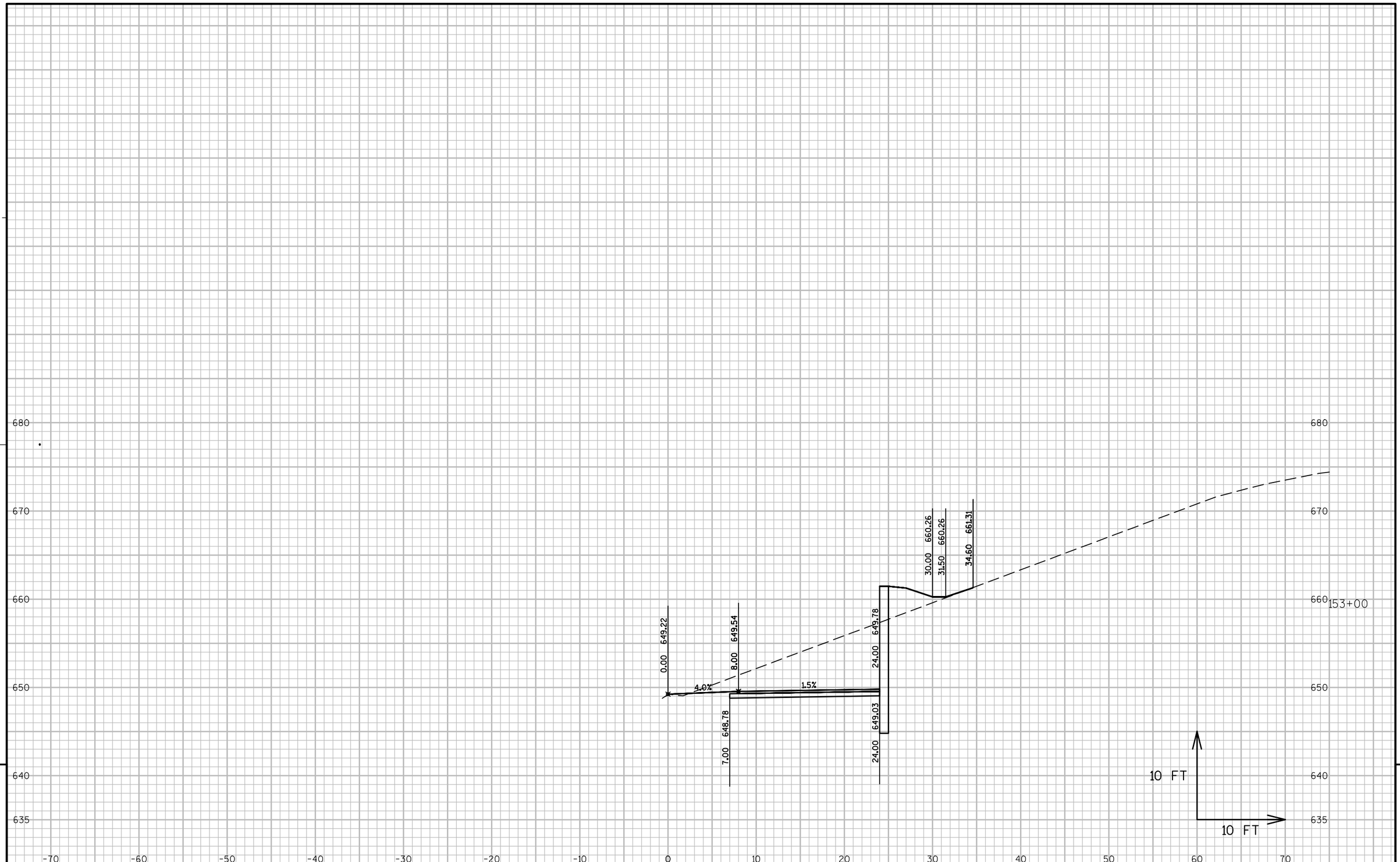


PROJECT NO: 4996--01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	CROSS SECTIONS	SHEET 347	E

FILE NAME : L:\PROJECTS\11744\DWG\090201_XS SOUTH OF NEW JERSEY.DWG
LAYOUT NAME - 090201_XS SOUTH OF NEW JERSEY - SECTION SHEET - (46)

PLOT DATE : 1/13/2015 11:35 AM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49



9

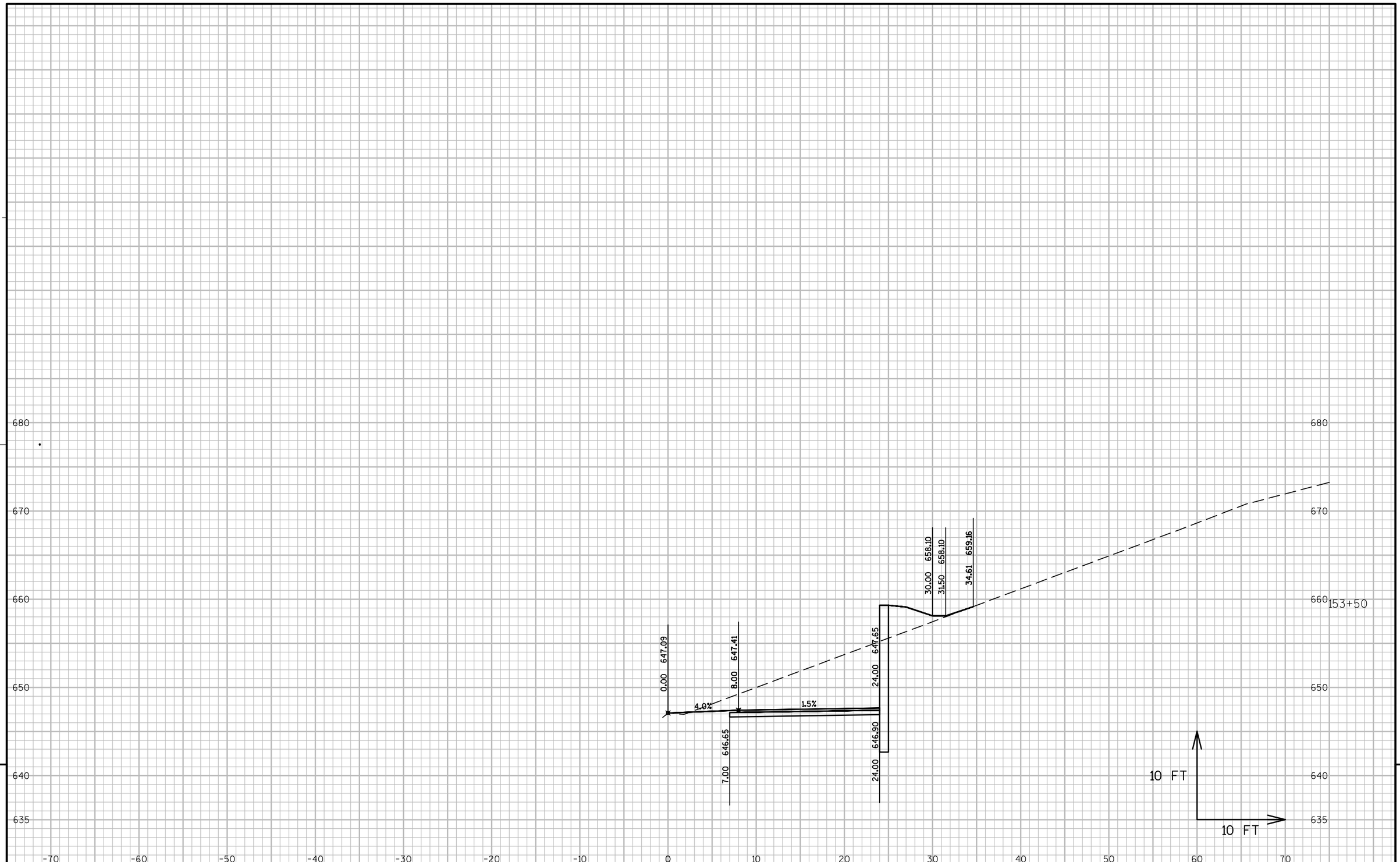
9

PROJECT NO: 4996--01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	CROSS SECTIONS	SHEET 348	E

FILE NAME : L:\PROJECTS\11744\DWG\090201_XS SOUTH OF NEW JERSEY.DWG
LAYOUT NAME - 090201_XS SOUTH OF NEW JERSEY - SECTION SHEET - (47)

PLOT DATE : 1/13/2015 11:35 AM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49



9

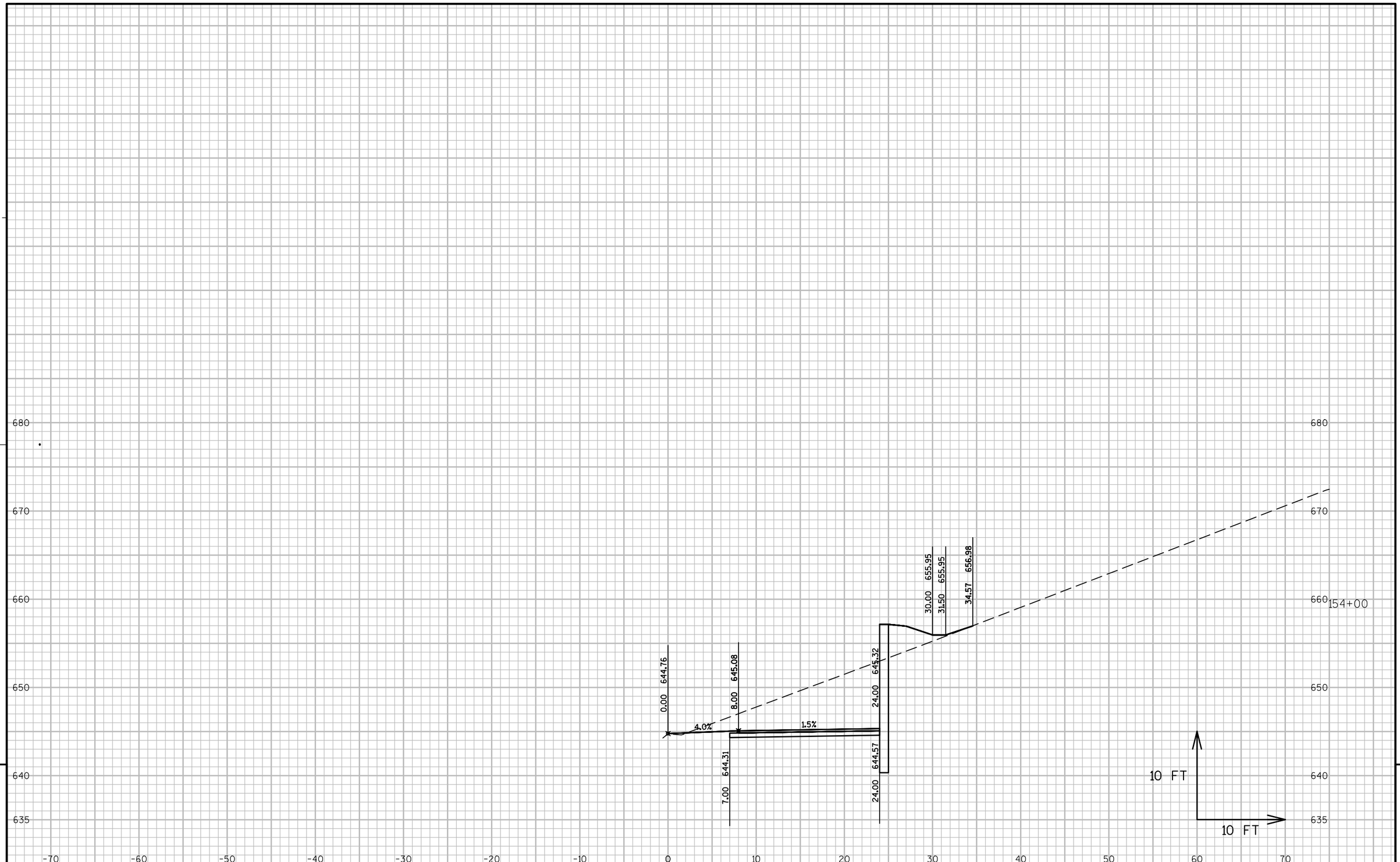
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PROJECT NO: 4996--01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	CROSS SECTIONS	SHEET 349	E

FILE NAME : L:\PROJECTS\11744\DWG\090201_XS SOUTH OF NEW JERSEY.DWG
LAYOUT NAME - 090201_XS SOUTH OF NEW JERSEY - SECTION SHEET - (48)

PLOT DATE : 1/13/2015 11:35 AM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49



9

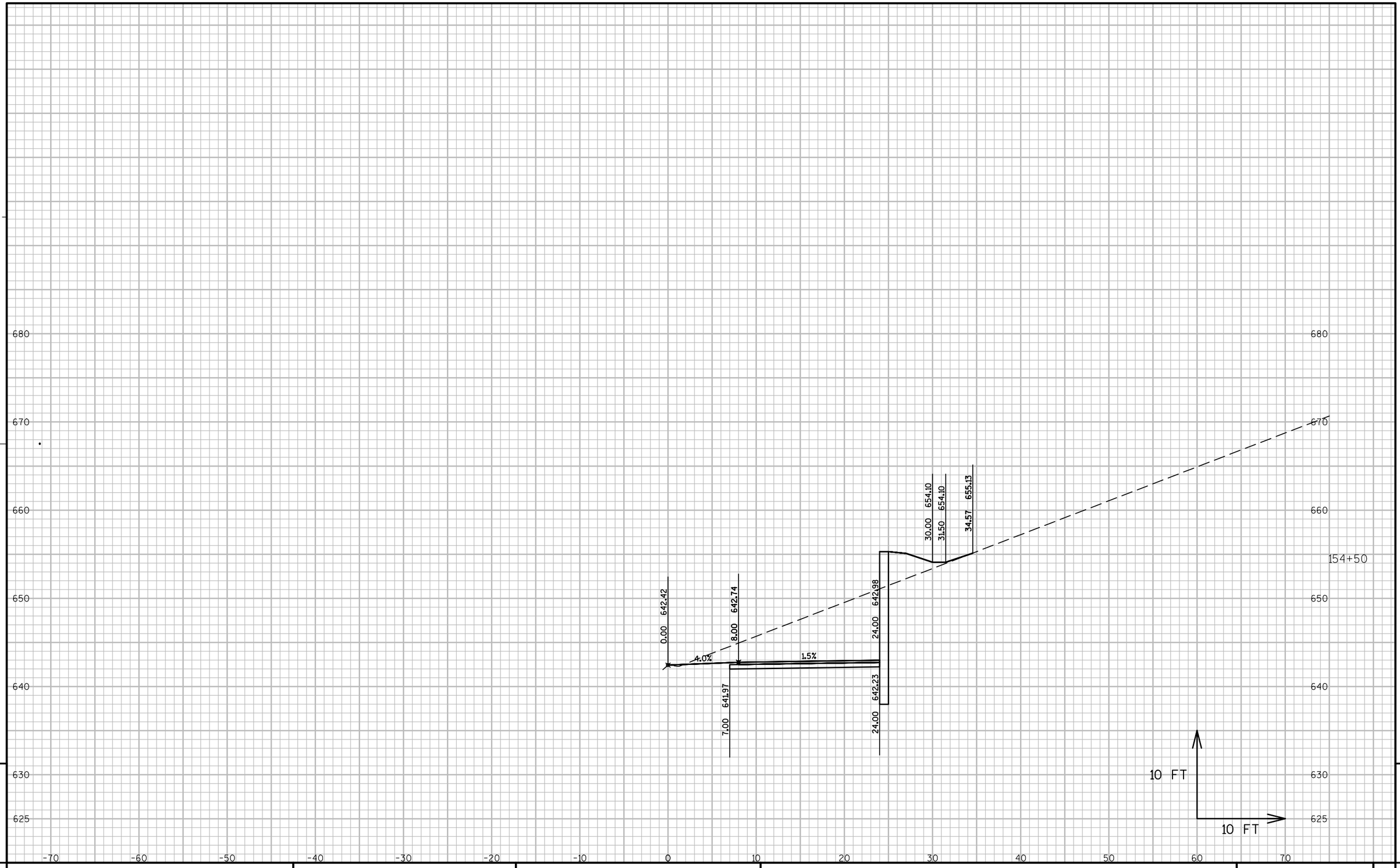
9

PROJECT NO: 4996--01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	CROSS SECTIONS	SHEET 350	E

FILE NAME : L:\PROJECTS\11744\DWG\090201_XS SOUTH OF NEW JERSEY.DWG
LAYOUT NAME - 090201_XS SOUTH OF NEW JERSEY - SECTION SHEET - (49)

PLOT DATE : 1/13/2015 11:35 AM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49



9

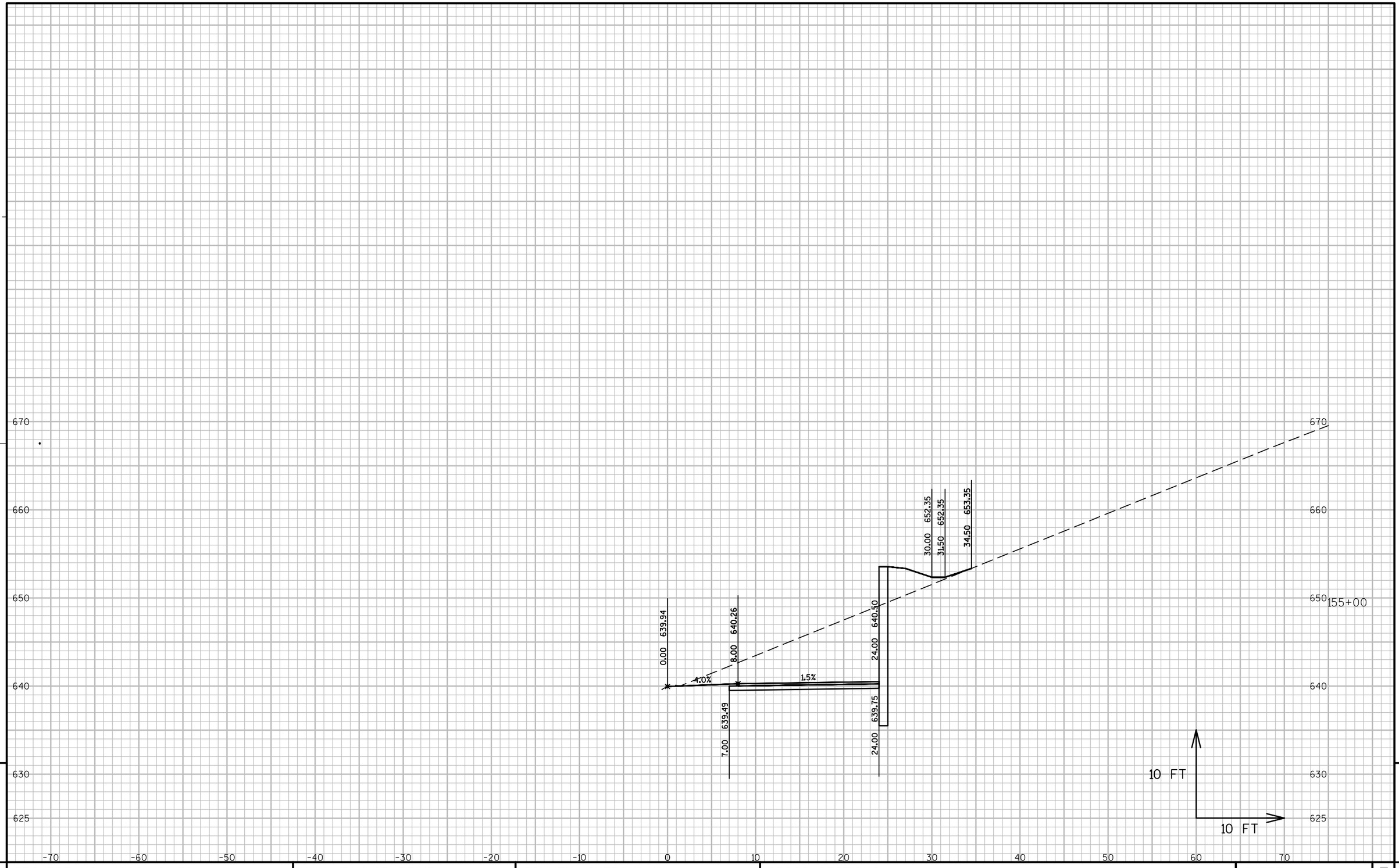
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PROJECT NO: 4996--01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	CROSS SECTIONS	SHEET 351	E

FILE NAME : L:\PROJECTS\11744\DWG\090201_XS SOUTH OF NEW JERSEY.DWG
LAYOUT NAME - 090201_XS SOUTH OF NEW JERSEY - SECTION SHEET - (50)

PLOT DATE : 1/13/2015 11:36 AM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49



9

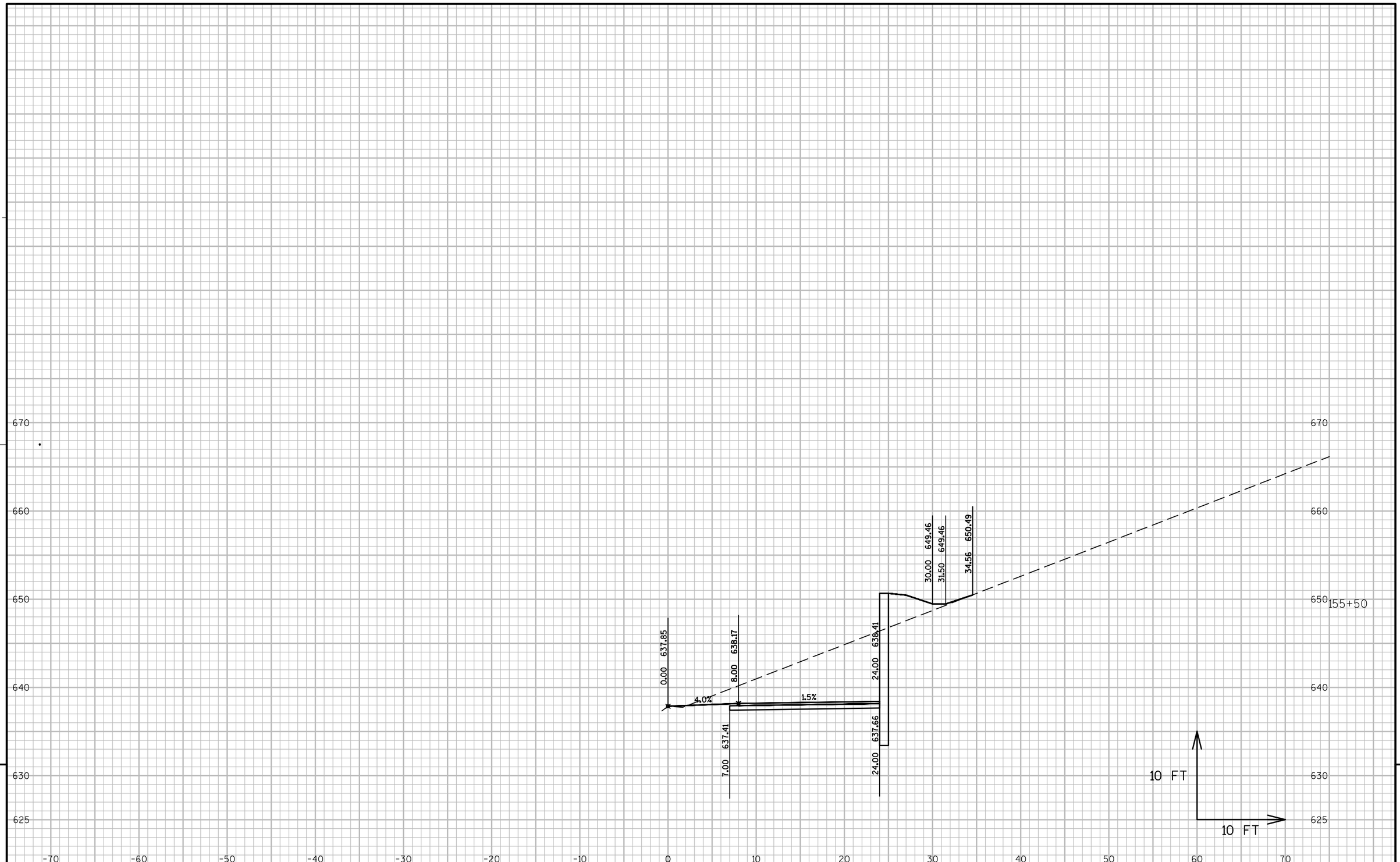
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PROJECT NO: 4996--01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	CROSS SECTIONS	SHEET 352	E

FILE NAME : L:\PROJECTS\11744\DWG\090201_XS SOUTH OF NEW JERSEY.DWG
LAYOUT NAME - 090201_XS SOUTH OF NEW JERSEY - SECTION SHEET - (51)

PLOT DATE : 1/13/2015 11:36 AM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49



9

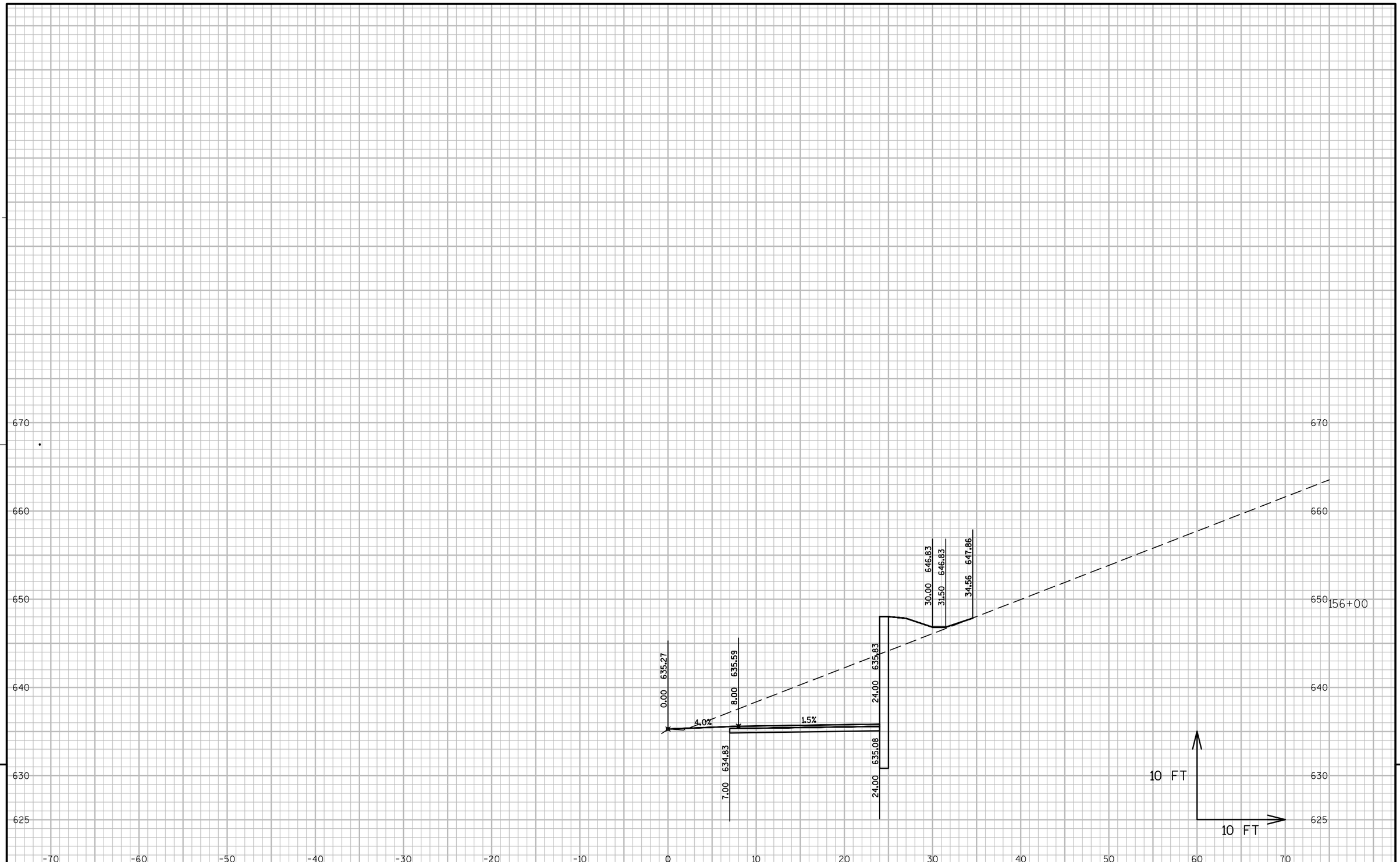
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PROJECT NO: 4996--01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	CROSS SECTIONS	SHEET 353	E

FILE NAME : L:\PROJECTS\11744\DWG\090201_XS SOUTH OF NEW JERSEY.DWG
LAYOUT NAME - 090201_XS SOUTH OF NEW JERSEY - SECTION SHEET - (52)

PLOT DATE : 1/13/2015 11:36 AM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49



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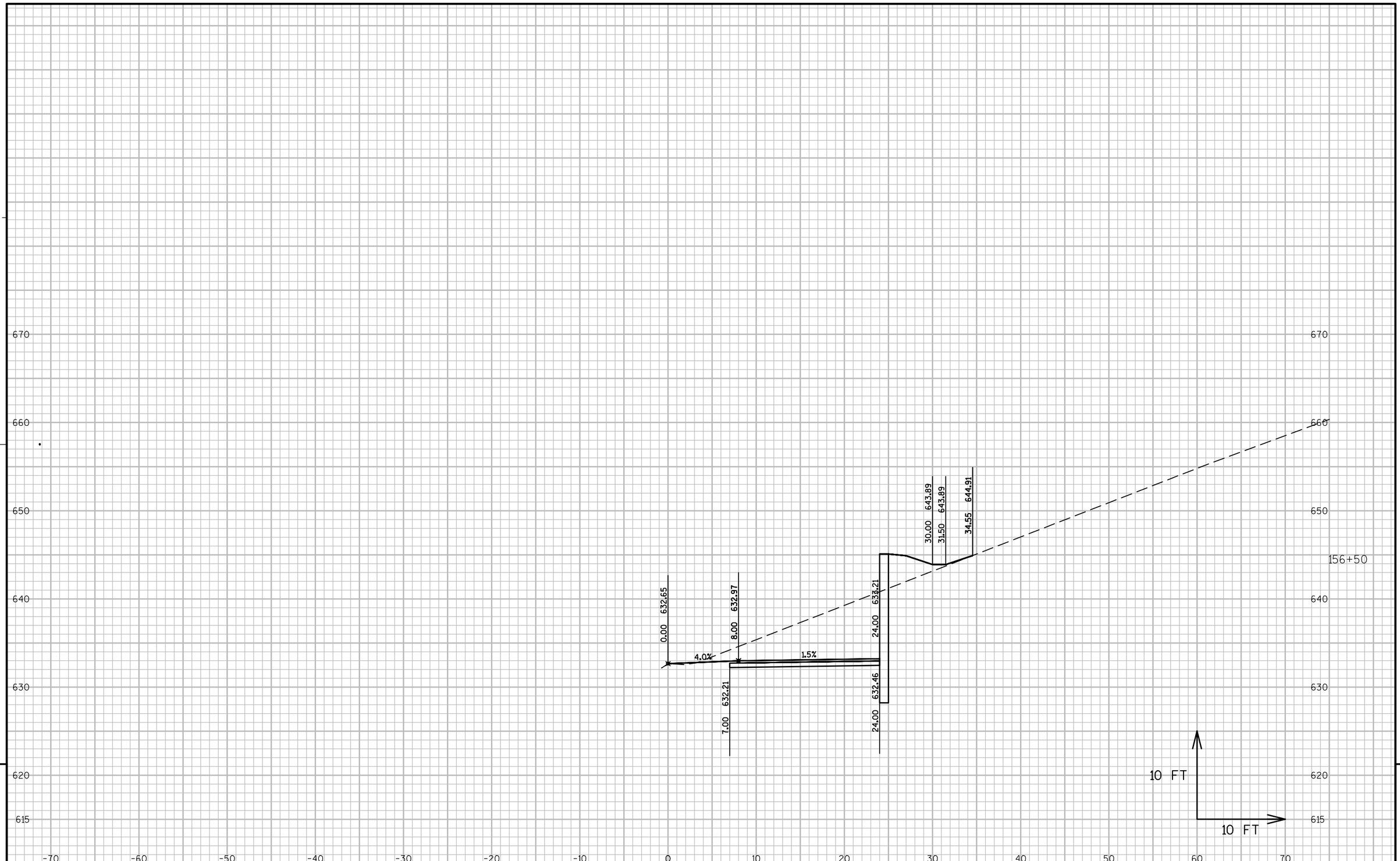
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PROJECT NO: 4996--01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	CROSS SECTIONS	SHEET 354	E

FILE NAME : L:\PROJECTS\11744\DWG\090201_XS SOUTH OF NEW JERSEY.DWG
LAYOUT NAME - 090201_XS SOUTH OF NEW JERSEY - SECTION SHEET - (53)

PLOT DATE : 1/13/2015 11:37 AM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49



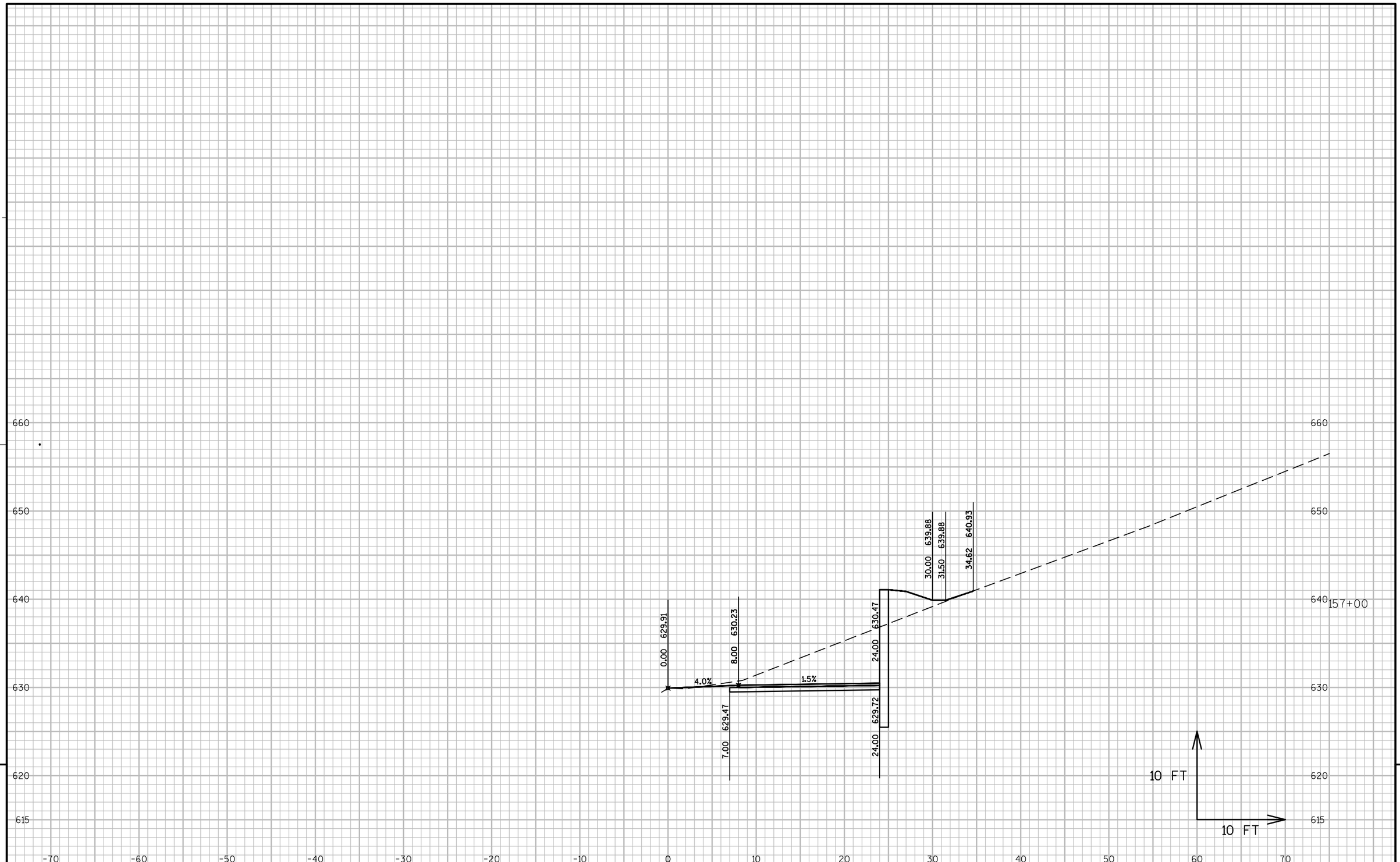
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PROJECT NO: 4996--01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	CROSS SECTIONS	SHEET 355	E

FILE NAME : L:\PROJECTS\11744\DWG\090201_XS SOUTH OF NEW JERSEY.DWG
LAYOUT NAME - 090201_XS SOUTH OF NEW JERSEY - SECTION SHEET - (54)

PLOT DATE : 1/13/2015 11:37 AM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1" = 10'_XREF



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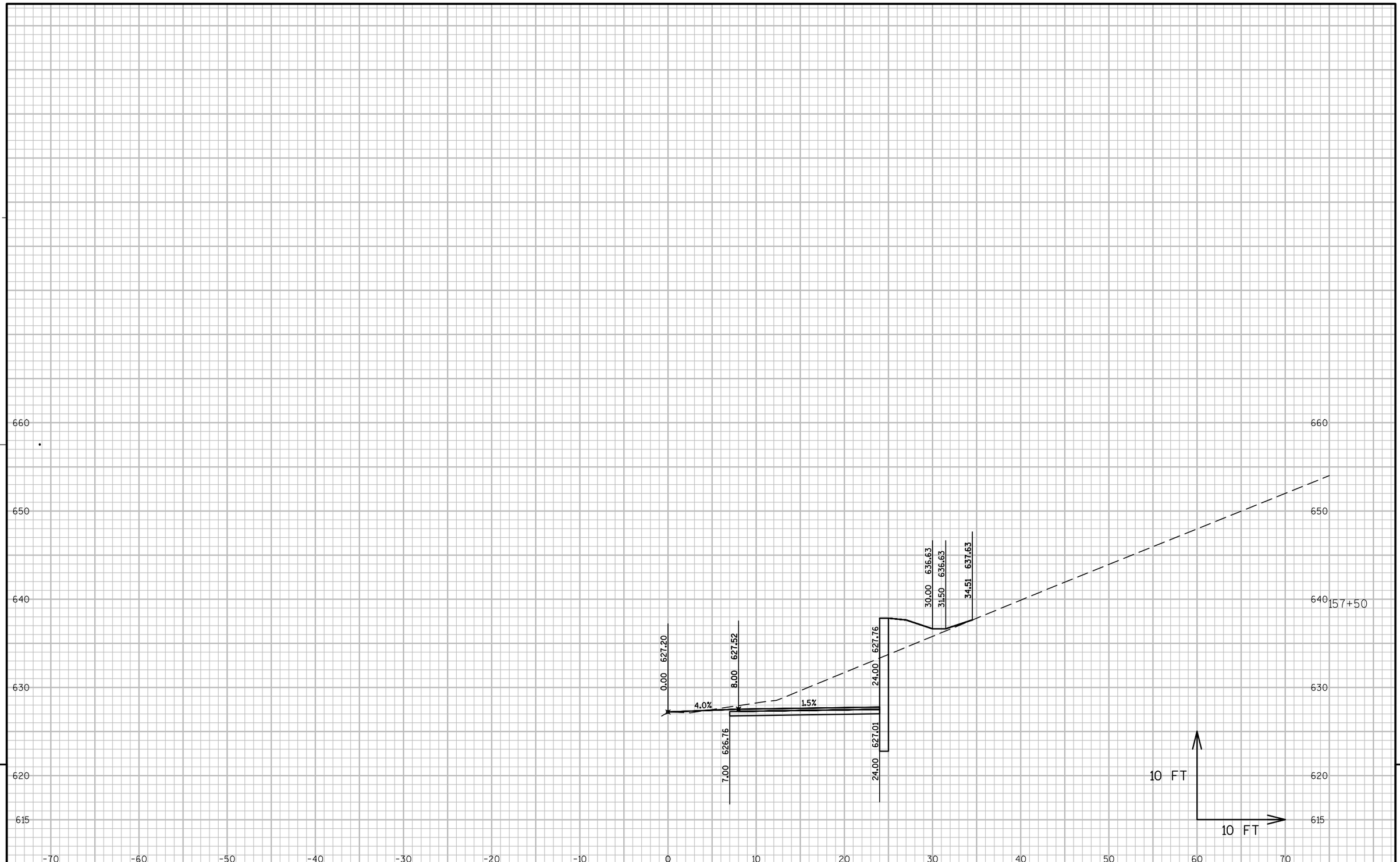
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PROJECT NO: 4996--01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	CROSS SECTIONS	SHEET 356	E

FILE NAME : L:\PROJECTS\11744\DWG\090201_XS SOUTH OF NEW JERSEY.DWG
LAYOUT NAME - 090201_XS SOUTH OF NEW JERSEY - SECTION SHEET - (55)

PLOT DATE : 1/13/2015 11:37 AM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49



9

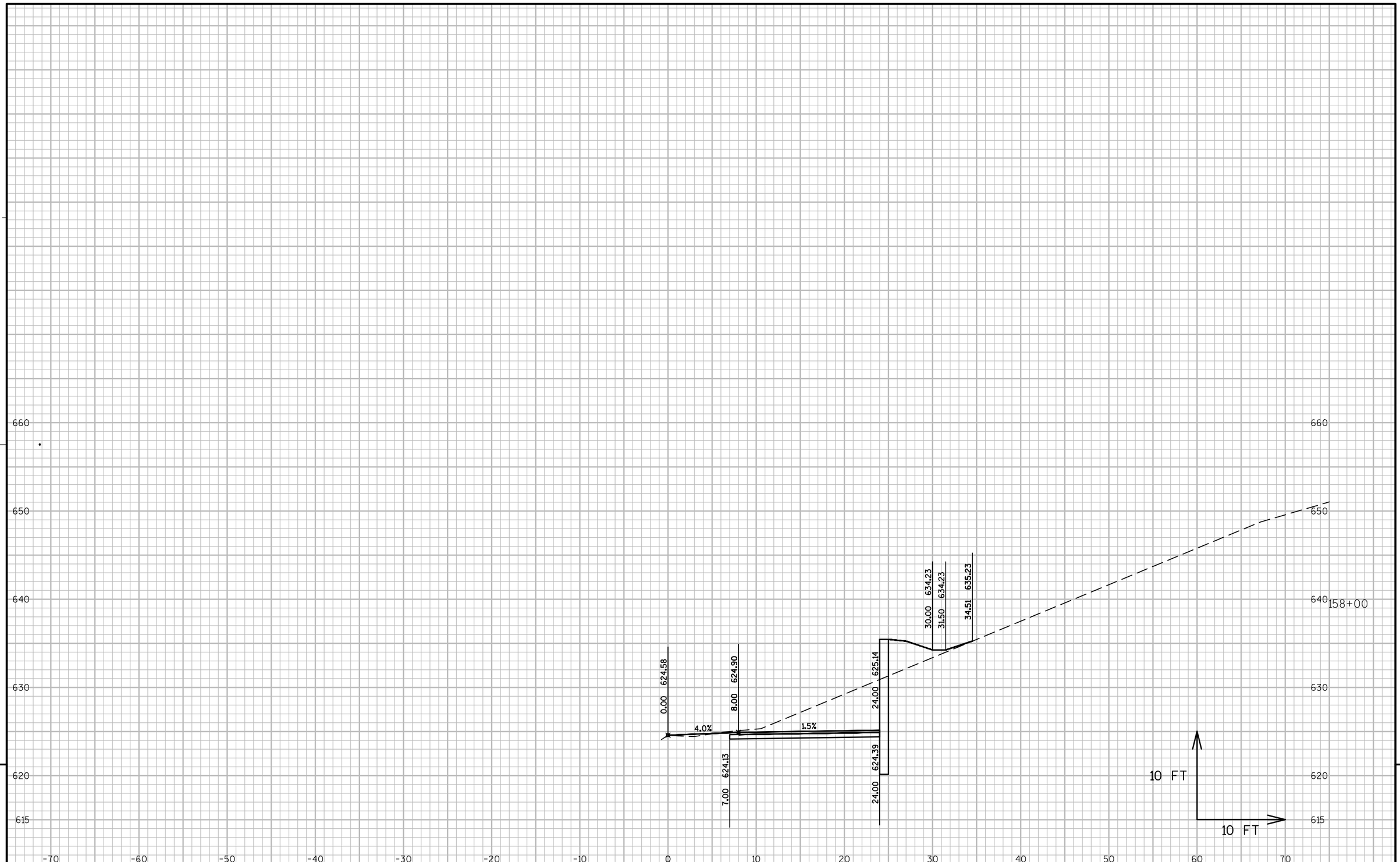
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PROJECT NO: 4996--01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	CROSS SECTIONS	SHEET 357	E

FILE NAME : L:\PROJECTS\11744\DWG\090201_XS SOUTH OF NEW JERSEY.DWG
LAYOUT NAME - 090201_XS SOUTH OF NEW JERSEY - SECTION SHEET - (56)

PLOT DATE : 1/13/2015 11:38 AM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49



9

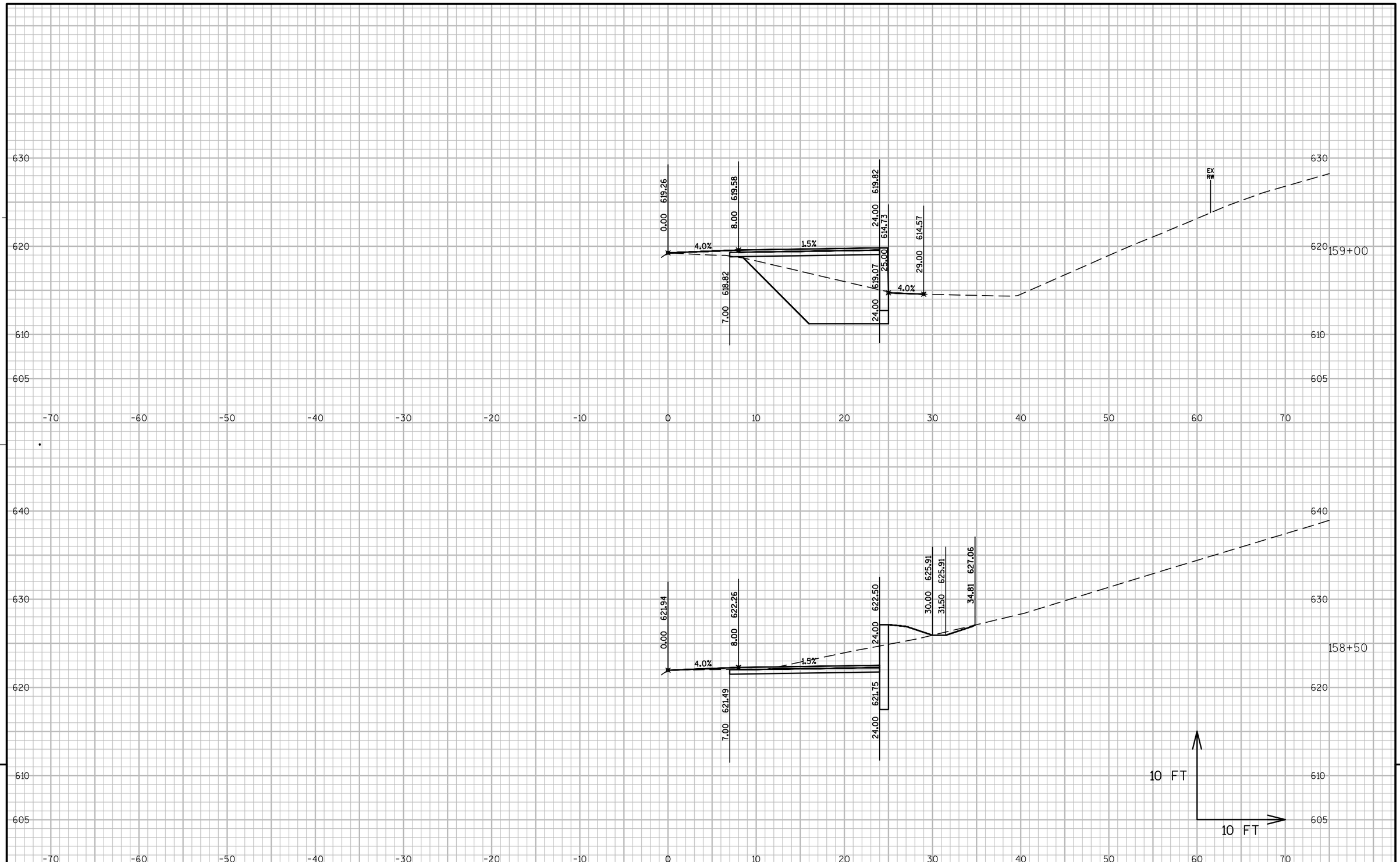
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PROJECT NO: 4996--01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	CROSS SECTIONS	SHEET 358	E

FILE NAME : L:\PROJECTS\11744\DWG\090201_XS SOUTH OF NEW JERSEY.DWG
LAYOUT NAME - 090201_XS SOUTH OF NEW JERSEY - SECTION SHEET - (57)

PLOT DATE : 1/13/2015 11:38 AM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49



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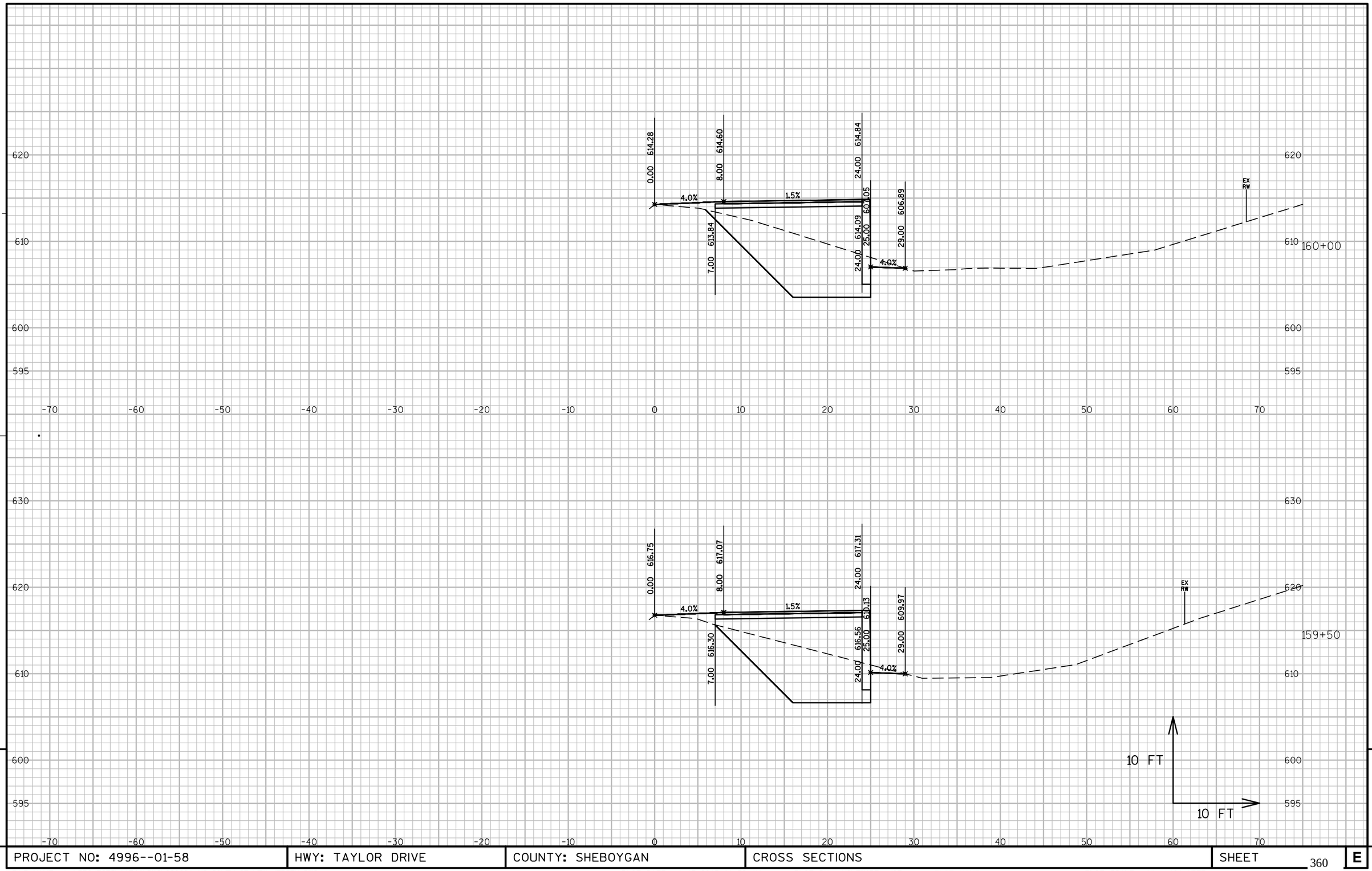
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PROJECT NO: 4996--01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	CROSS SECTIONS	SHEET 359	E

FILE NAME : L:\PROJECTS\11744\DWG\090201_XS SOUTH OF NEW JERSEY.DWG
LAYOUT NAME - 090201_XS SOUTH OF NEW JERSEY - SECTION SHEET - (58)

PLOT DATE : 1/13/2015 11:38 AM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49

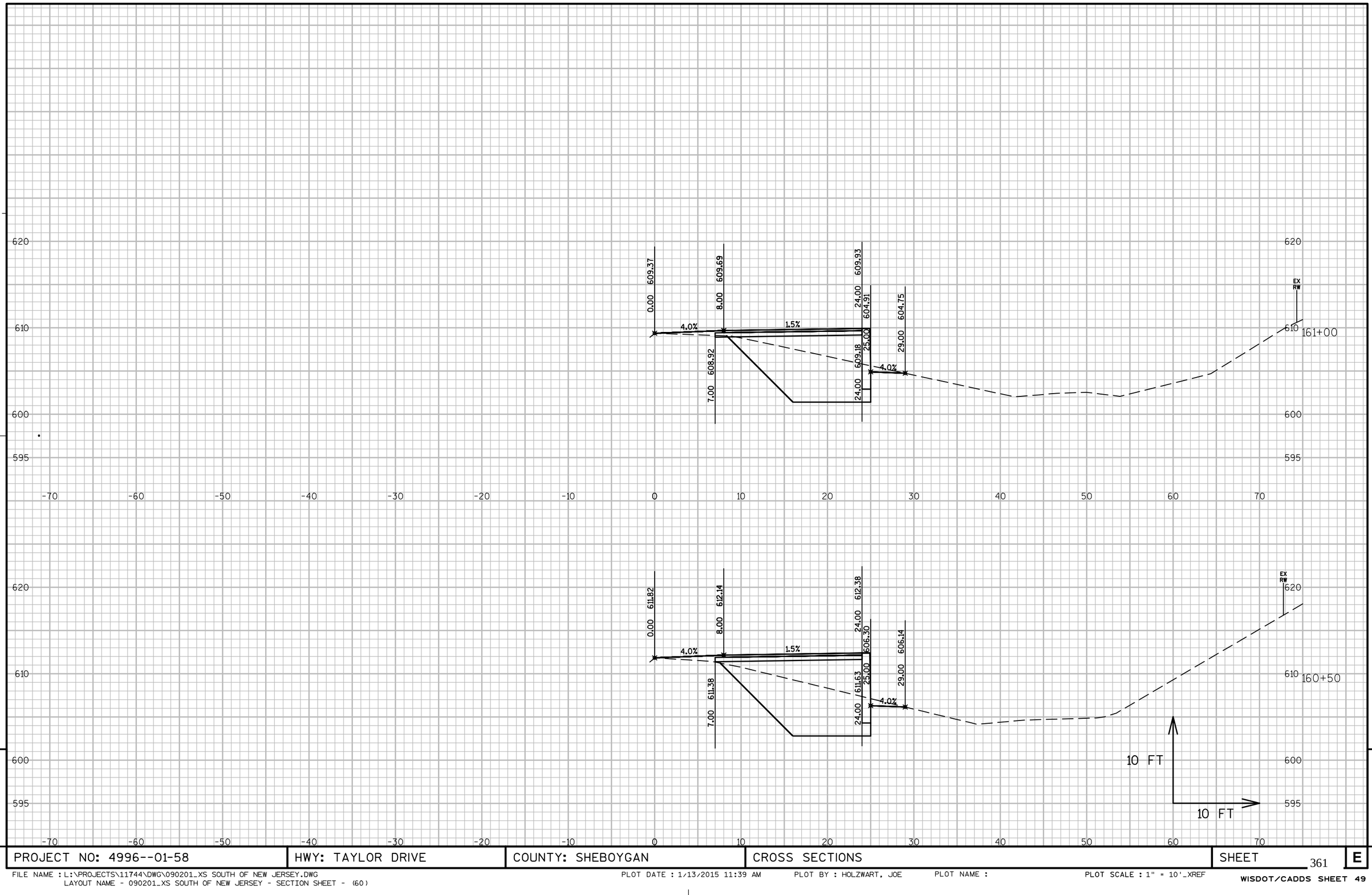


PROJECT NO: 4996--01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	CROSS SECTIONS	SHEET 360	E

FILE NAME : L:\PROJECTS\11744\DWG\090201_XS SOUTH OF NEW JERSEY.DWG
LAYOUT NAME - 090201_XS SOUTH OF NEW JERSEY - SECTION SHEET - (59)

PLOT DATE : 1/13/2015 11:39 AM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49

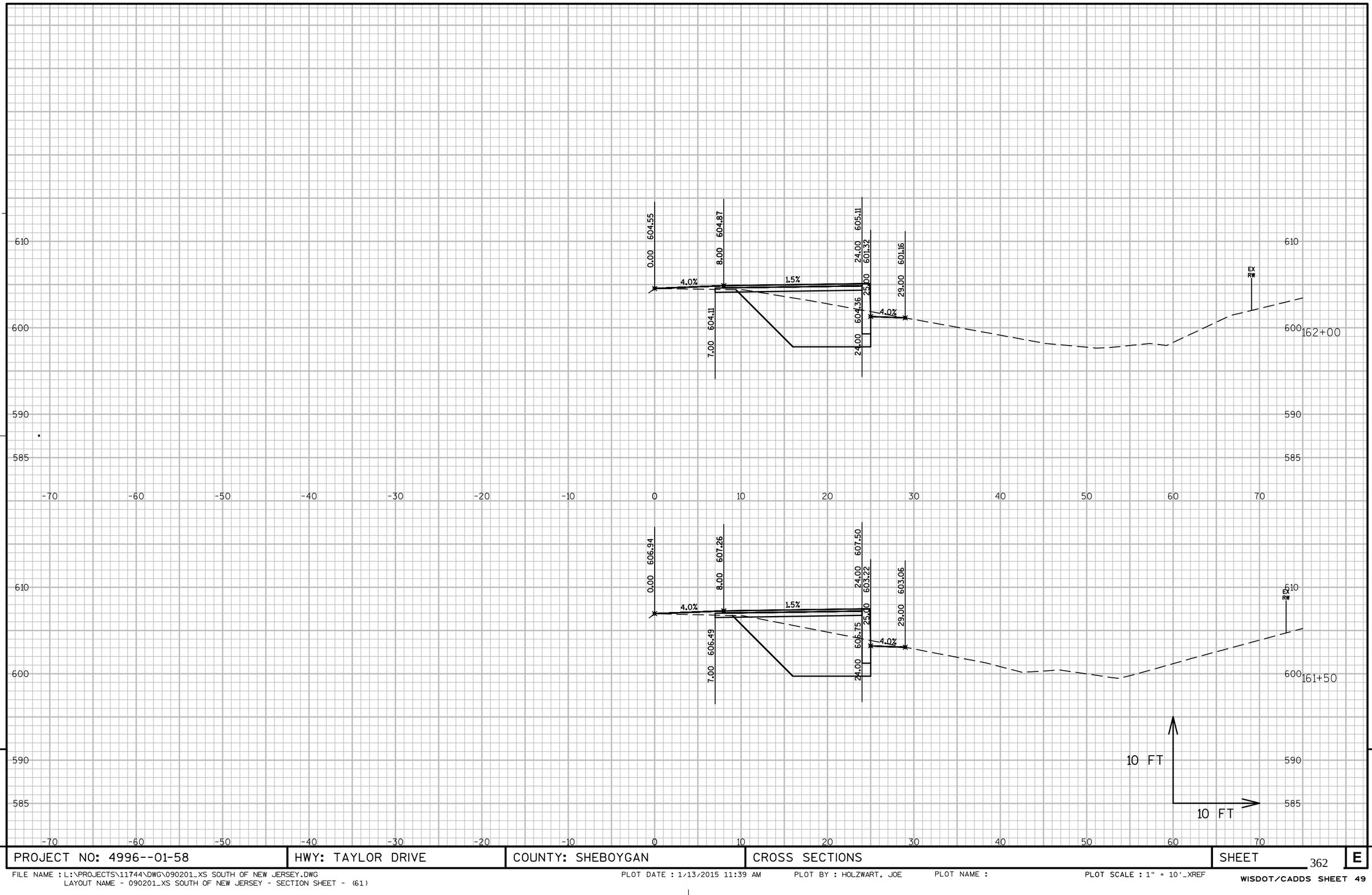


PROJECT NO: 4996--01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	CROSS SECTIONS	SHEET 361	E

FILE NAME : L:\PROJECTS\11744\DWG\090201_XS SOUTH OF NEW JERSEY.DWG
LAYOUT NAME - 090201_XS SOUTH OF NEW JERSEY - SECTION SHEET - (60)

PLOT DATE : 1/13/2015 11:39 AM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49

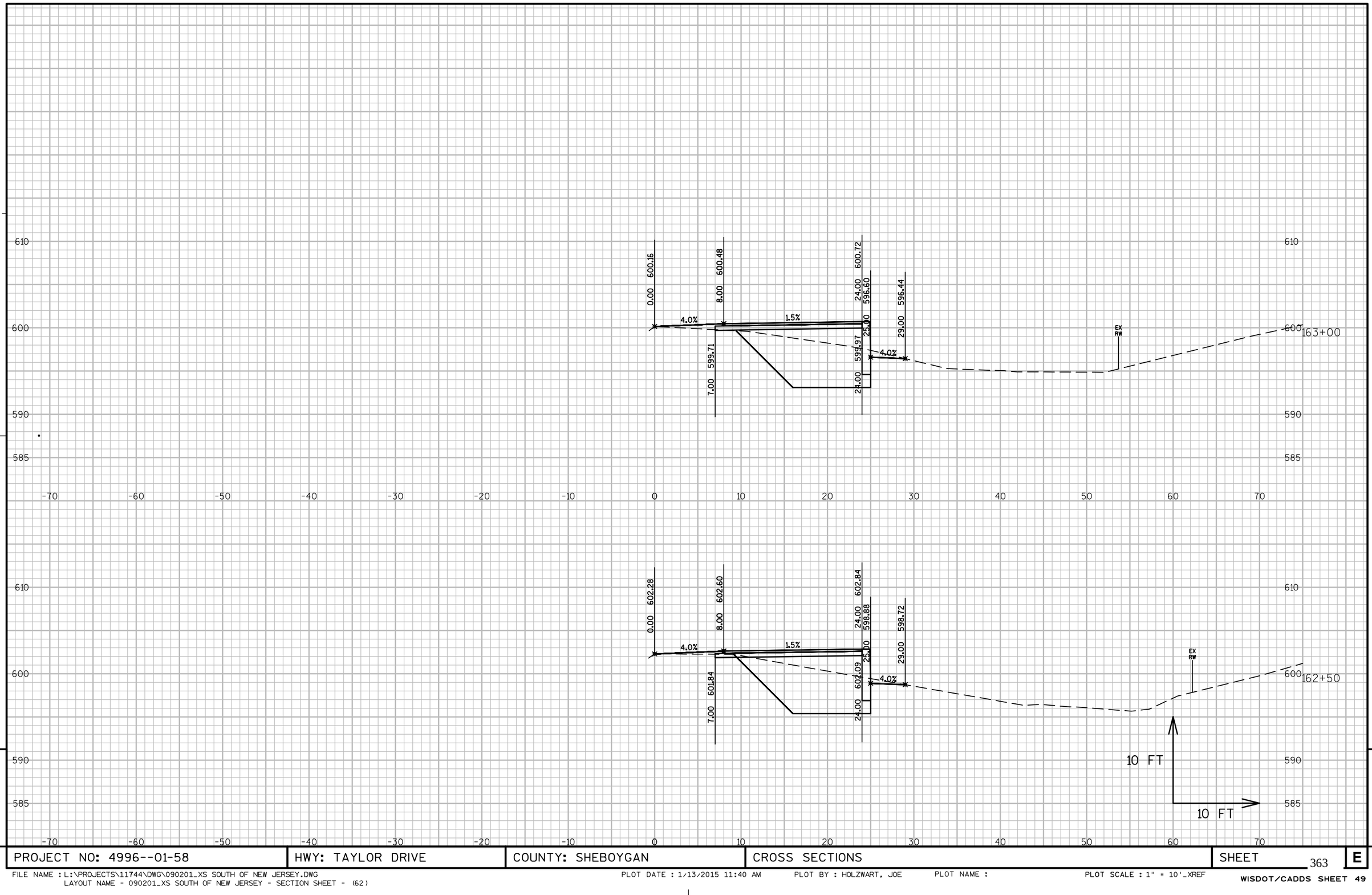


PROJECT NO: 4996--01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	CROSS SECTIONS	SHEET 362	E

FILE NAME : L:\PROJECTS\11744\DWG\090201_XS SOUTH OF NEW JERSEY.DWG
LAYOUT NAME - 090201_XS SOUTH OF NEW JERSEY - SECTION SHEET - (61)

PLOT DATE : 1/13/2015 11:39 AM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49



9

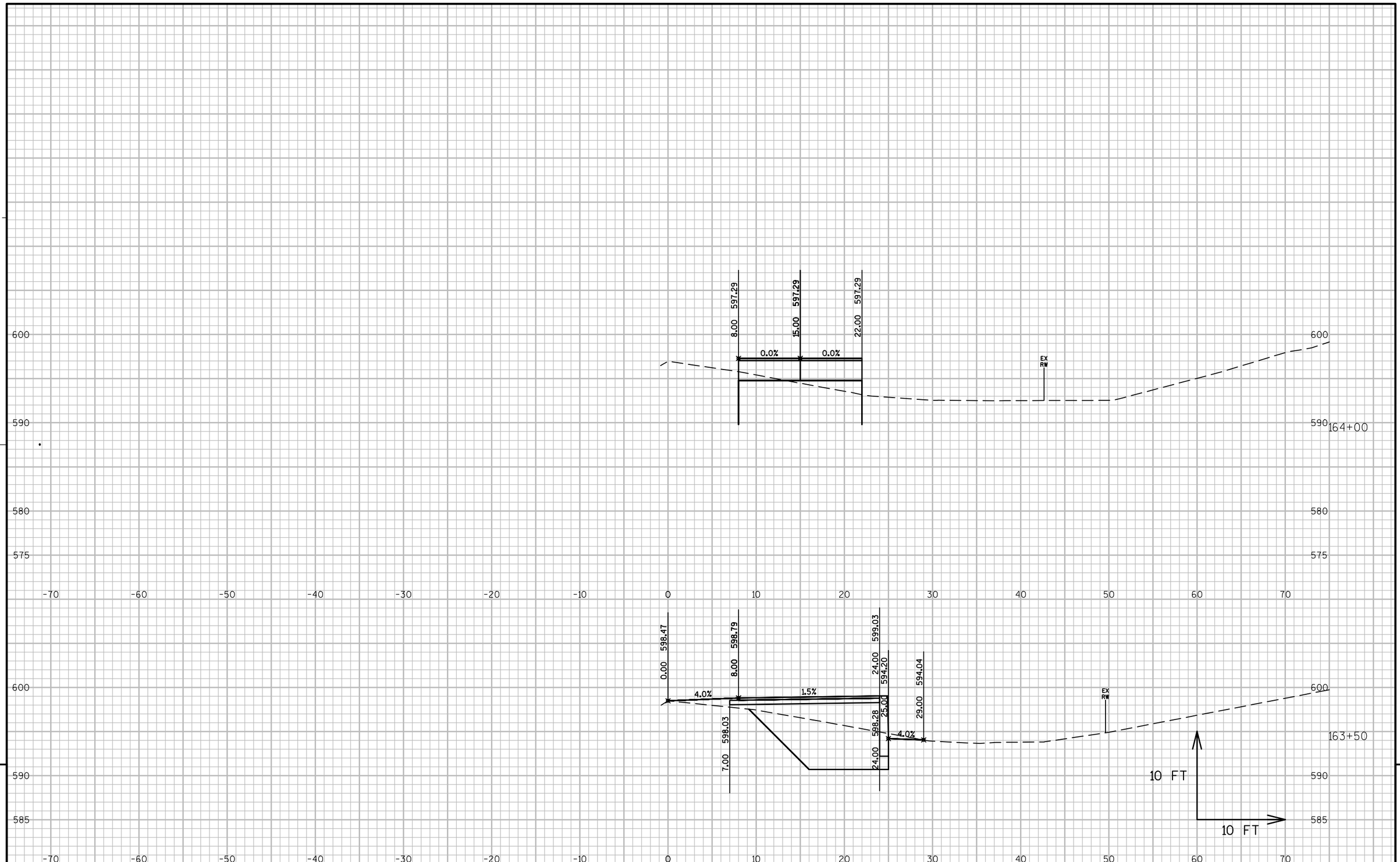
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PROJECT NO: 4996--01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	CROSS SECTIONS	SHEET 363	E

FILE NAME : L:\PROJECTS\11744\DWG\090201_XS SOUTH OF NEW JERSEY.DWG
LAYOUT NAME - 090201_XS SOUTH OF NEW JERSEY - SECTION SHEET - (62)

PLOT DATE : 1/13/2015 11:40 AM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49



9

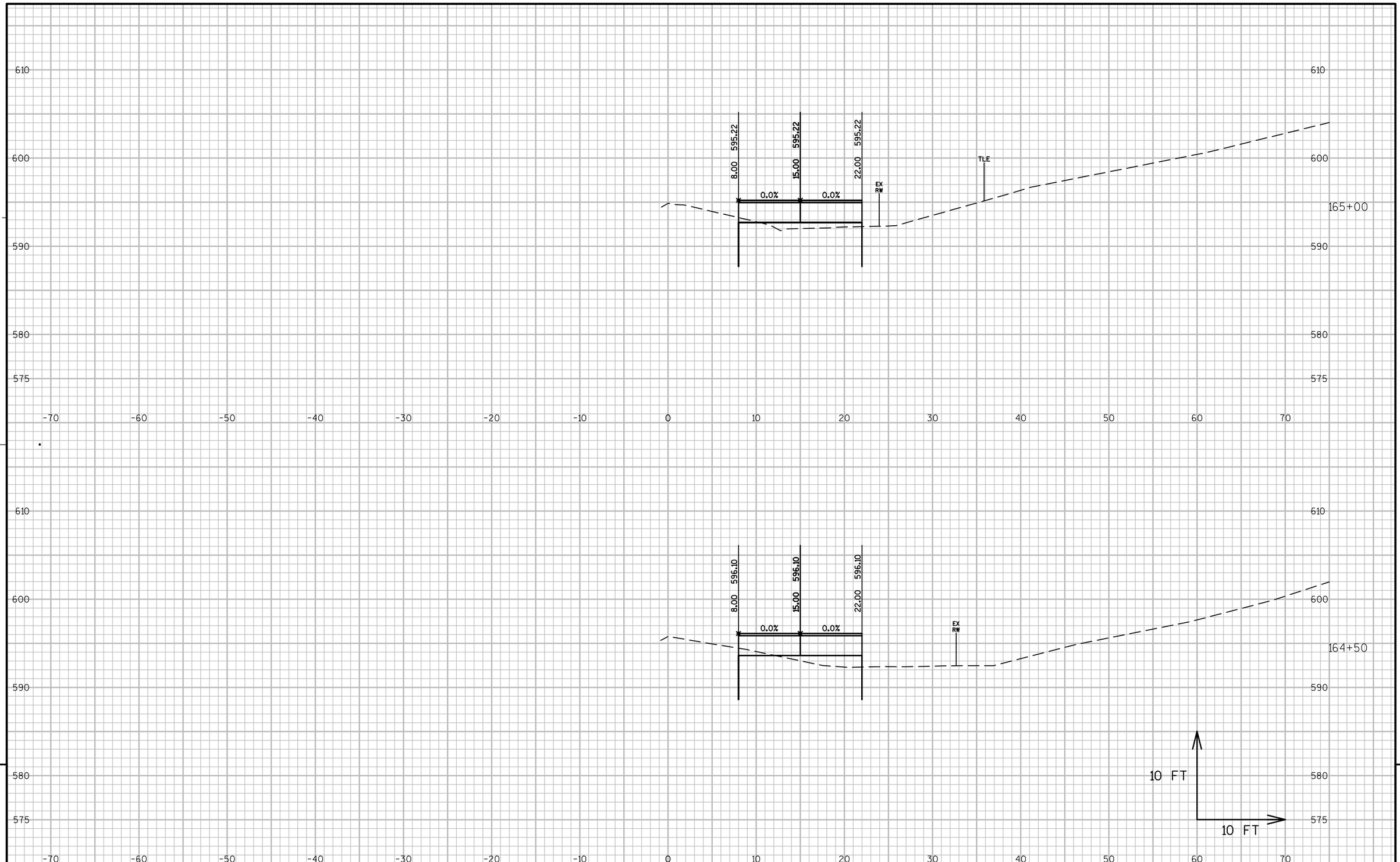
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PROJECT NO: 4996--01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	CROSS SECTIONS	SHEET 364	E

FILE NAME : L:\PROJECTS\11744\DWG\090201_XS SOUTH OF NEW JERSEY.DWG
LAYOUT NAME - 090201_XS SOUTH OF NEW JERSEY - SECTION SHEET - (63)

PLOT DATE : 1/13/2015 11:40 AM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49



9

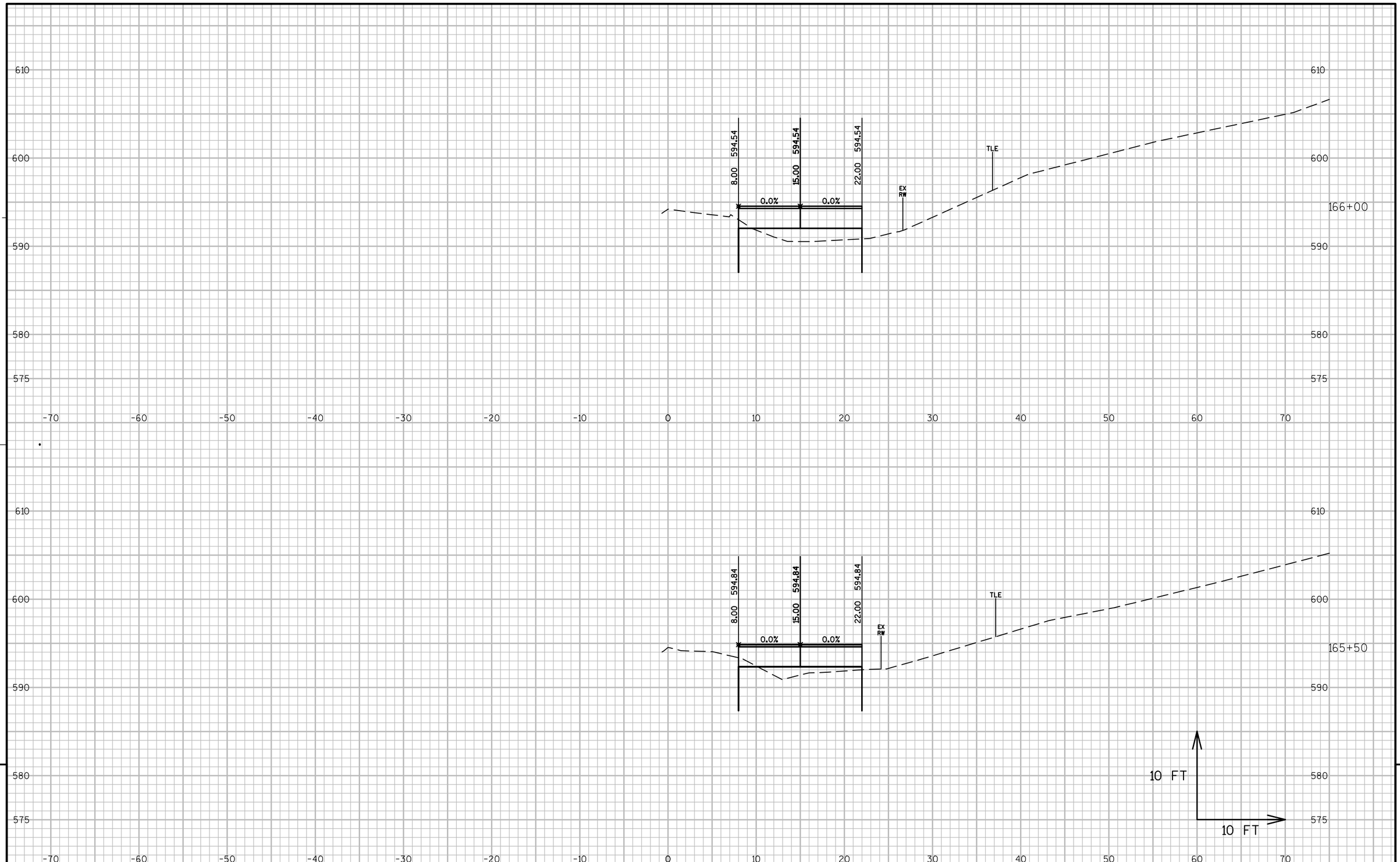
9

PROJECT NO: 4996--01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	CROSS SECTIONS	SHEET 365	E

FILE NAME : L:\PROJECTS\11744\DWG\090201_XS SOUTH OF NEW JERSEY.DWG
LAYOUT NAME - 090201_XS SOUTH OF NEW JERSEY - SECTION SHEET - (64)

PLOT DATE : 1/13/2015 11:40 AM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49



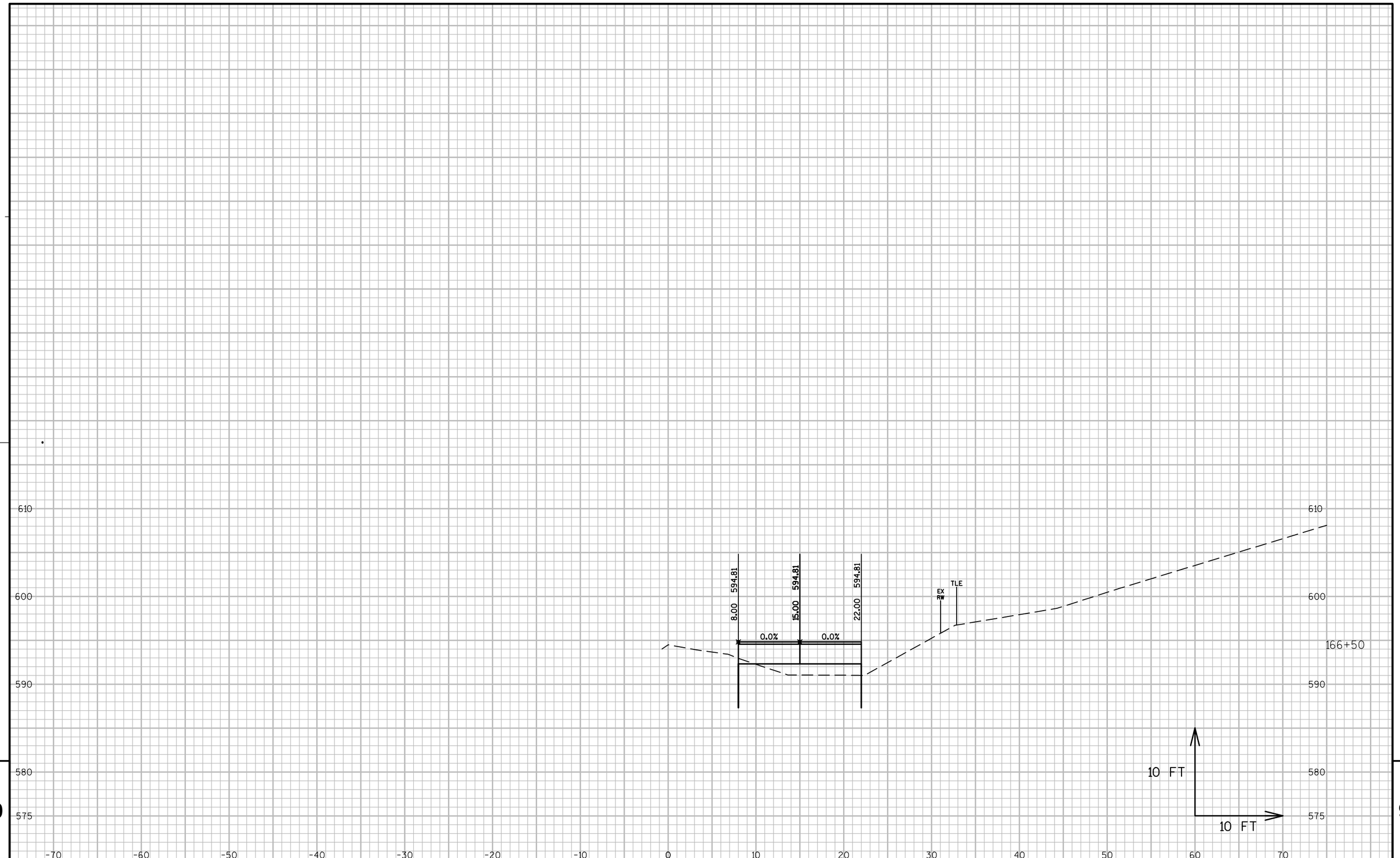
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9

PROJECT NO: 4996--01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	CROSS SECTIONS	SHEET 366	E

FILE NAME : L:\PROJECTS\11744\DWG\090201_XS SOUTH OF NEW JERSEY.DWG
LAYOUT NAME - 090201_XS SOUTH OF NEW JERSEY - SECTION SHEET - (65)

PLOT DATE : 1/13/2015 11:41 AM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1" = 10'_XREF



9

9

PROJECT NO: 4996--01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	CROSS SECTIONS	SHEET 367	E

FILE NAME : L:\PROJECTS\11744\DWG\090201_XS SOUTH OF NEW JERSEY.DWG
LAYOUT NAME - 090201_XS SOUTH OF NEW JERSEY - SECTION SHEET - (66)

PLOT DATE : 1/13/2015 11:41 AM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49

620

610

600

590

580

575

8.00 595.18

15.00 595.18

22.00 595.18

0.0% 0.0%

EX RW

167+00

10 FT

10 FT

-70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70

9

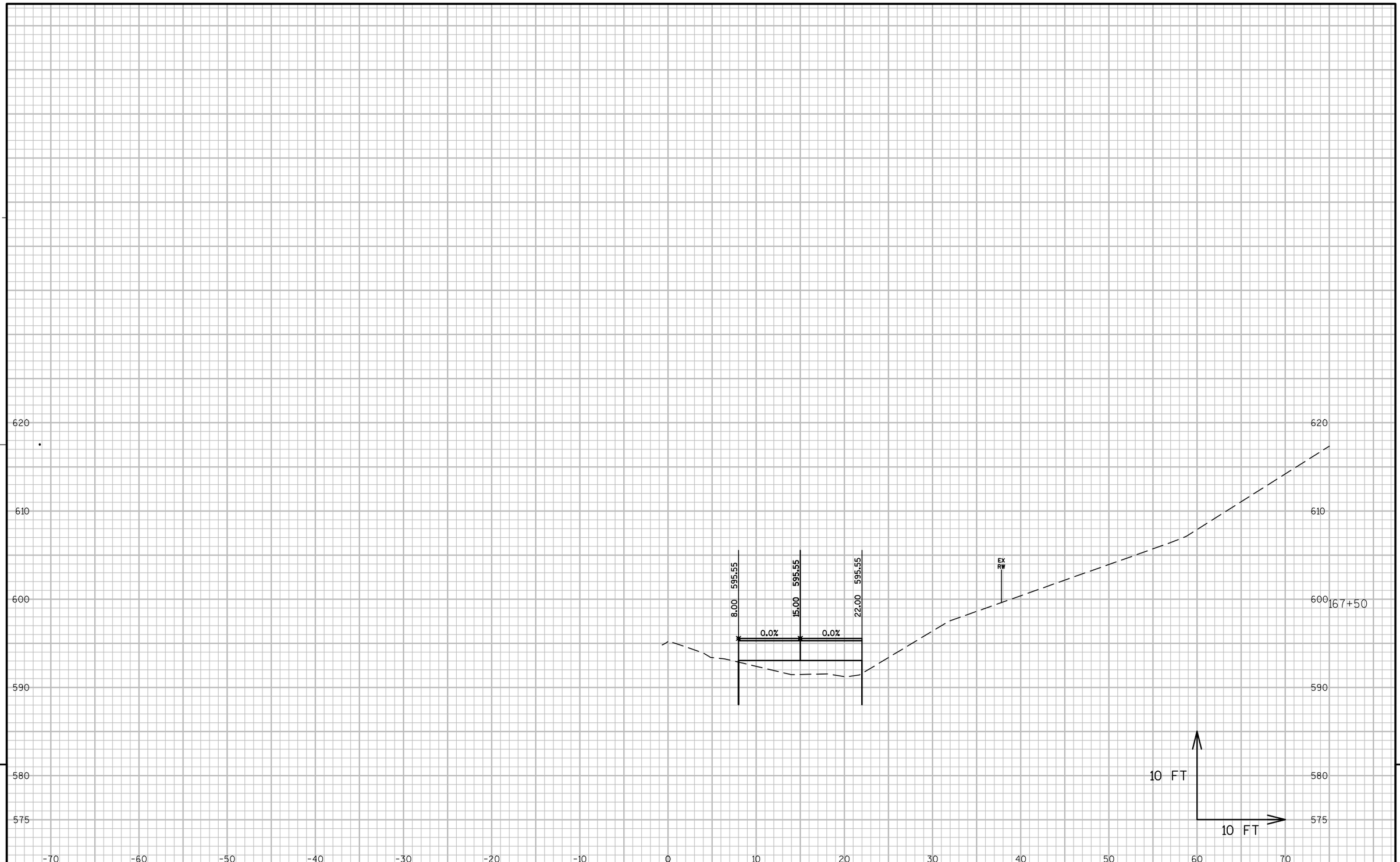
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PROJECT NO: 4996--01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	CROSS SECTIONS	SHEET 368	E

FILE NAME : L:\PROJECTS\11744\DWG\090201_XS SOUTH OF NEW JERSEY.DWG
LAYOUT NAME - 090201_XS SOUTH OF NEW JERSEY - SECTION SHEET - (67)

PLOT DATE : 1/13/2015 11:41 AM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49



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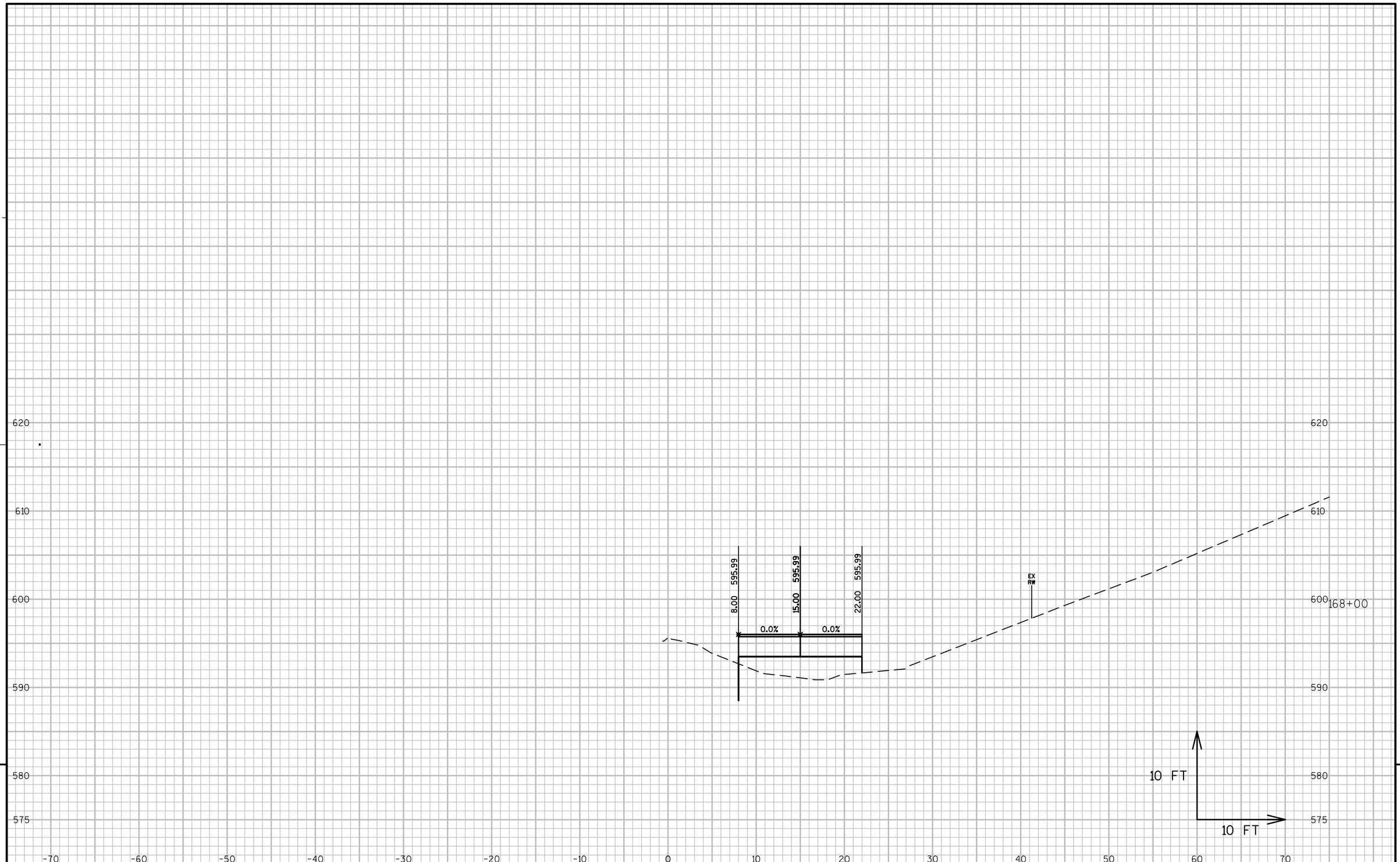
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PROJECT NO: 4996--01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	CROSS SECTIONS	SHEET 369	E

FILE NAME : L:\PROJECTS\11744\DWG\090201_XS SOUTH OF NEW JERSEY.DWG
LAYOUT NAME - 090201_XS SOUTH OF NEW JERSEY - SECTION SHEET - (68)

PLOT DATE : 1/13/2015 11:41 AM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 4996--01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	CROSS SECTIONS	SHEET 370	E

FILE NAME : L:\PROJECTS\11744\DWG\090201_XS SOUTH OF NEW JERSEY.DWG
LAYOUT NAME - 090201_XS SOUTH OF NEW JERSEY - SECTION SHEET - (69)

PLOT DATE : 1/13/2015 11:42 AM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49

620

610

600

590

580

575

8.00 596.54

15.00 596.54

22.00 596.54

0.0% 0.0%

EX RW

168+50

10 FT

10 FT

-70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70

9

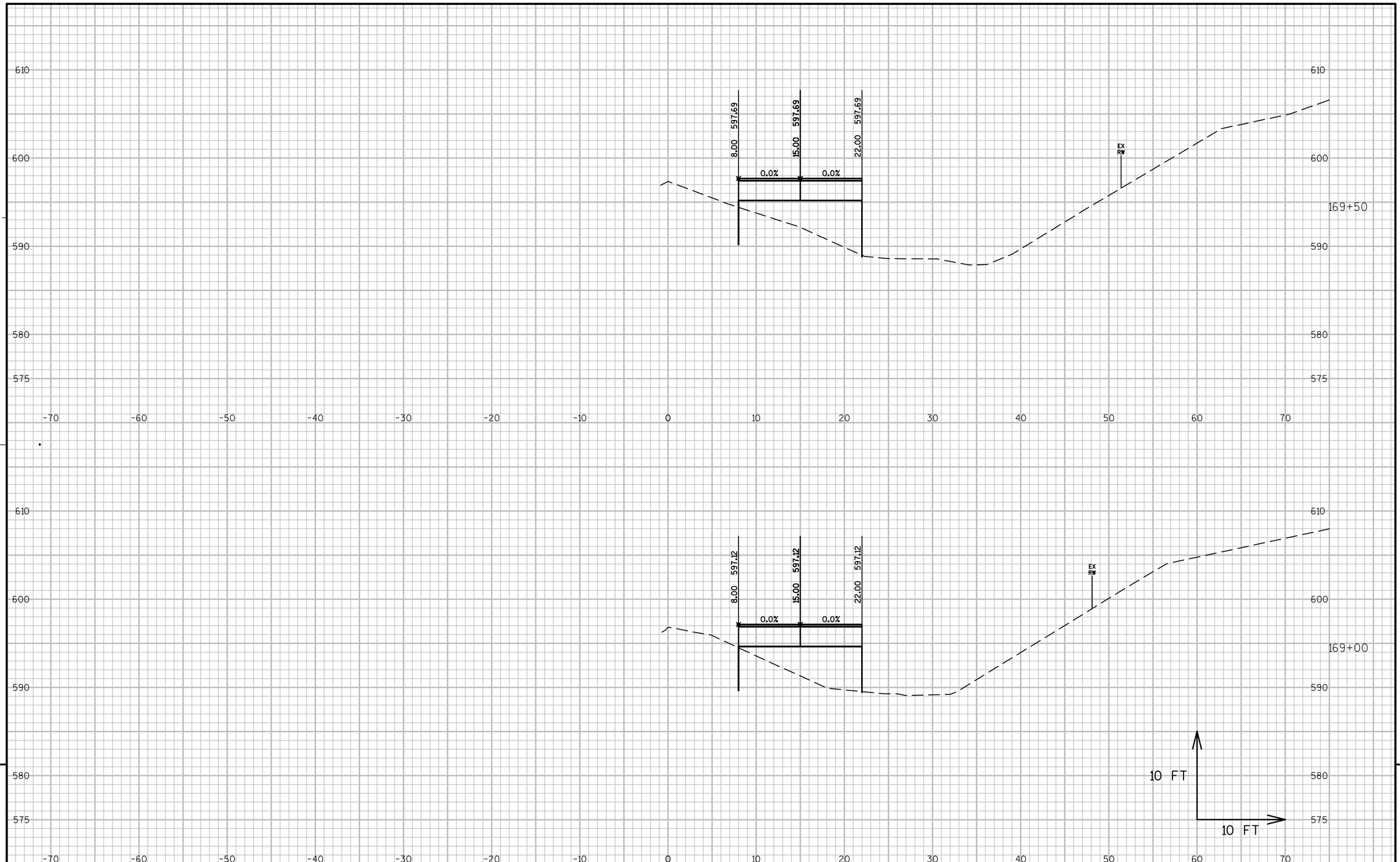
9

PROJECT NO: 4996--01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	CROSS SECTIONS	SHEET 371	E

FILE NAME : L:\PROJECTS\11744\DWG\090201_XS SOUTH OF NEW JERSEY.DWG
LAYOUT NAME - 090201_XS SOUTH OF NEW JERSEY - SECTION SHEET - (70)

PLOT DATE : 1/13/2015 11:42 AM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49



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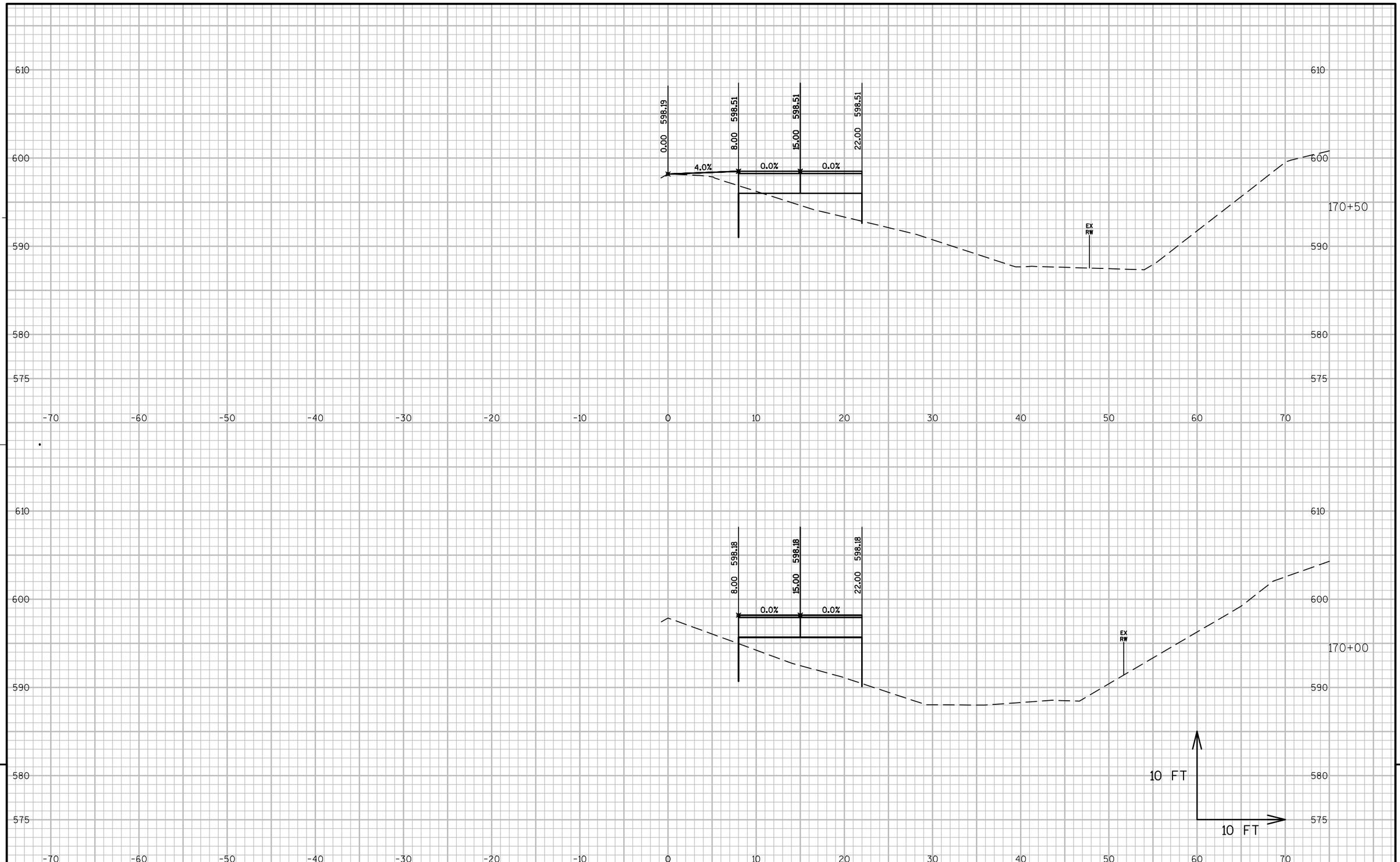
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PROJECT NO: 4996--01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	CROSS SECTIONS	SHEET 372	E

FILE NAME : L:\PROJECTS\11744\DWG\090201_XS SOUTH OF NEW JERSEY.DWG
LAYOUT NAME - 090201_XS SOUTH OF NEW JERSEY - SECTION SHEET - (71)

PLOT DATE : 1/13/2015 11:42 AM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49



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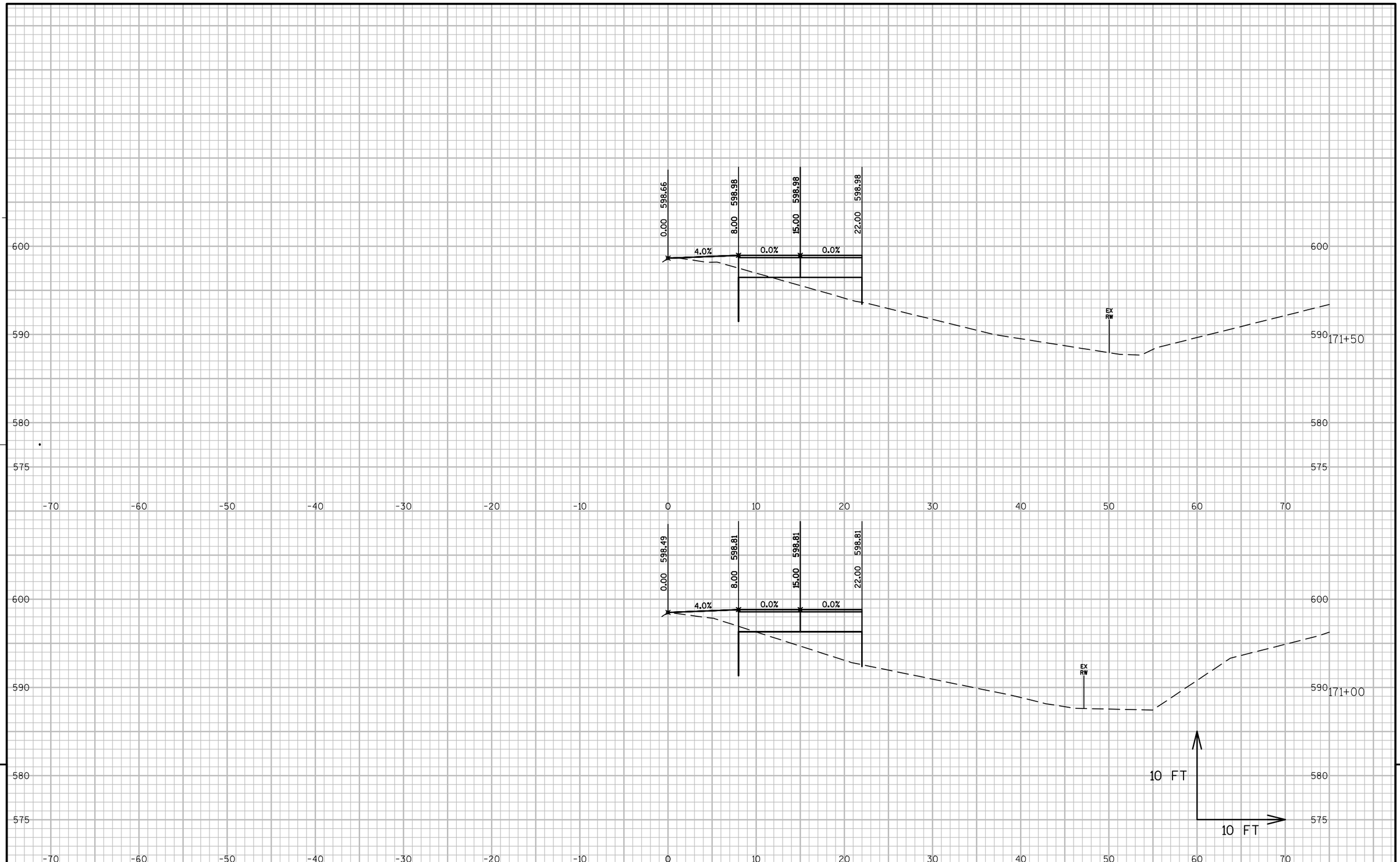
9

PROJECT NO: 4996--01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	CROSS SECTIONS	SHEET 373	E

FILE NAME : L:\PROJECTS\11744\DWG\090201_XS SOUTH OF NEW JERSEY.DWG
LAYOUT NAME - 090201_XS SOUTH OF NEW JERSEY - SECTION SHEET - (72)

PLOT DATE : 1/13/2015 11:43 AM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49



9

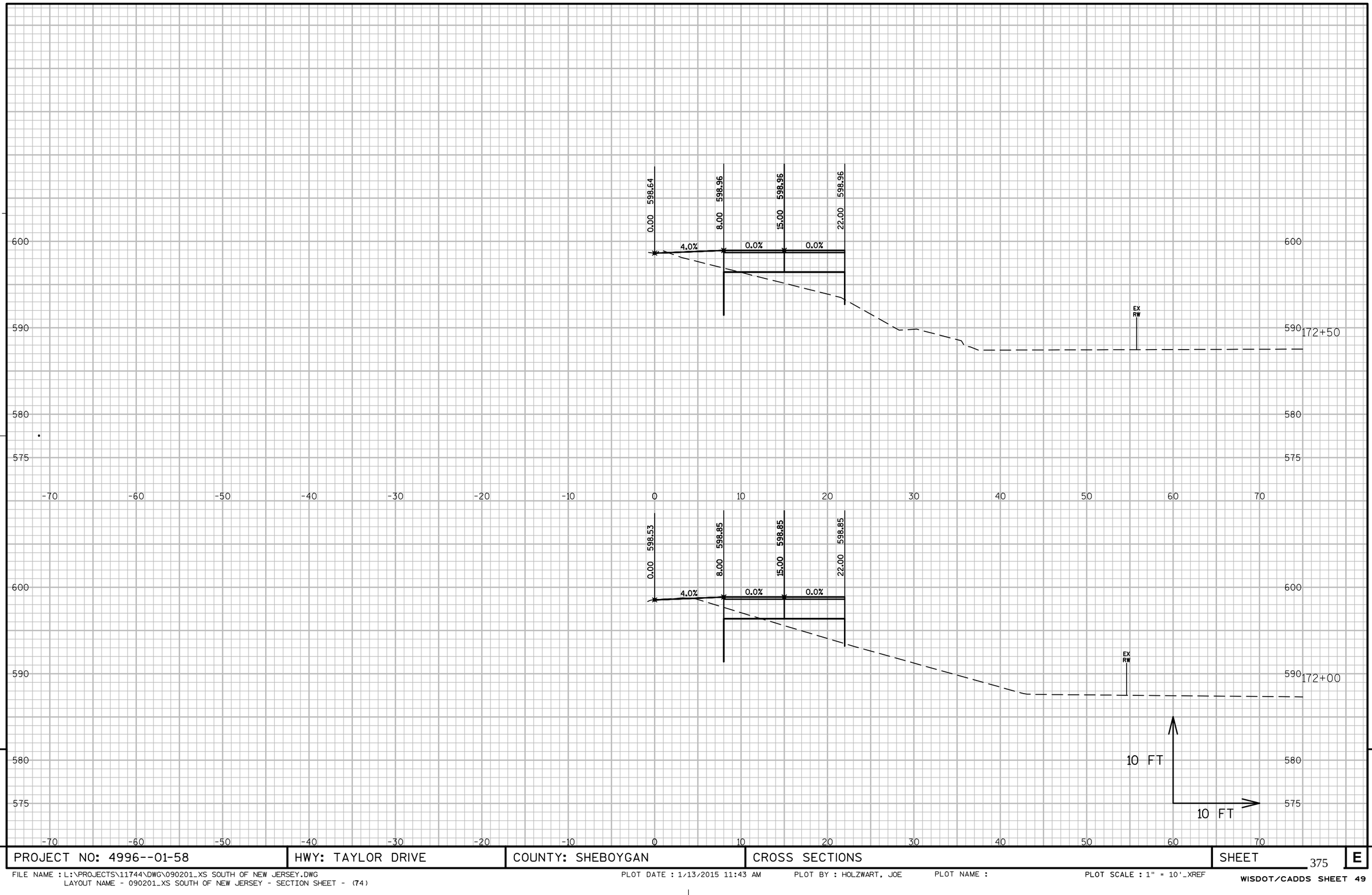
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PROJECT NO: 4996--01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	CROSS SECTIONS	SHEET 374	E

FILE NAME : L:\PROJECTS\11744\DWG\090201_XS SOUTH OF NEW JERSEY.DWG
LAYOUT NAME - 090201_XS SOUTH OF NEW JERSEY - SECTION SHEET - (73)

PLOT DATE : 1/13/2015 11:43 AM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49



9

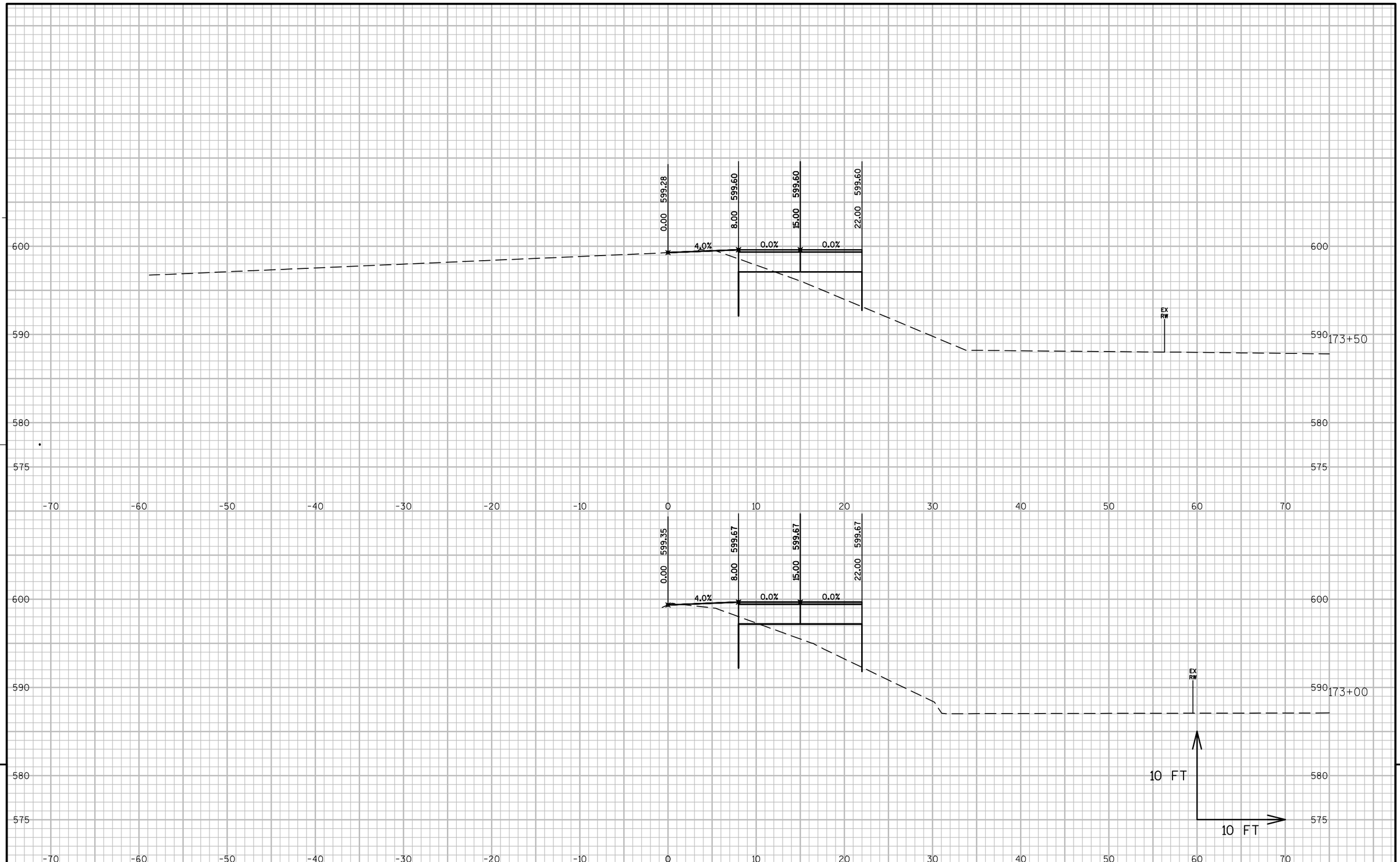
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PROJECT NO: 4996--01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	CROSS SECTIONS	SHEET 375	E

FILE NAME : L:\PROJECTS\11744\DWG\090201_XS SOUTH OF NEW JERSEY.DWG
LAYOUT NAME - 090201_XS SOUTH OF NEW JERSEY - SECTION SHEET - (74)

PLOT DATE : 1/13/2015 11:43 AM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49

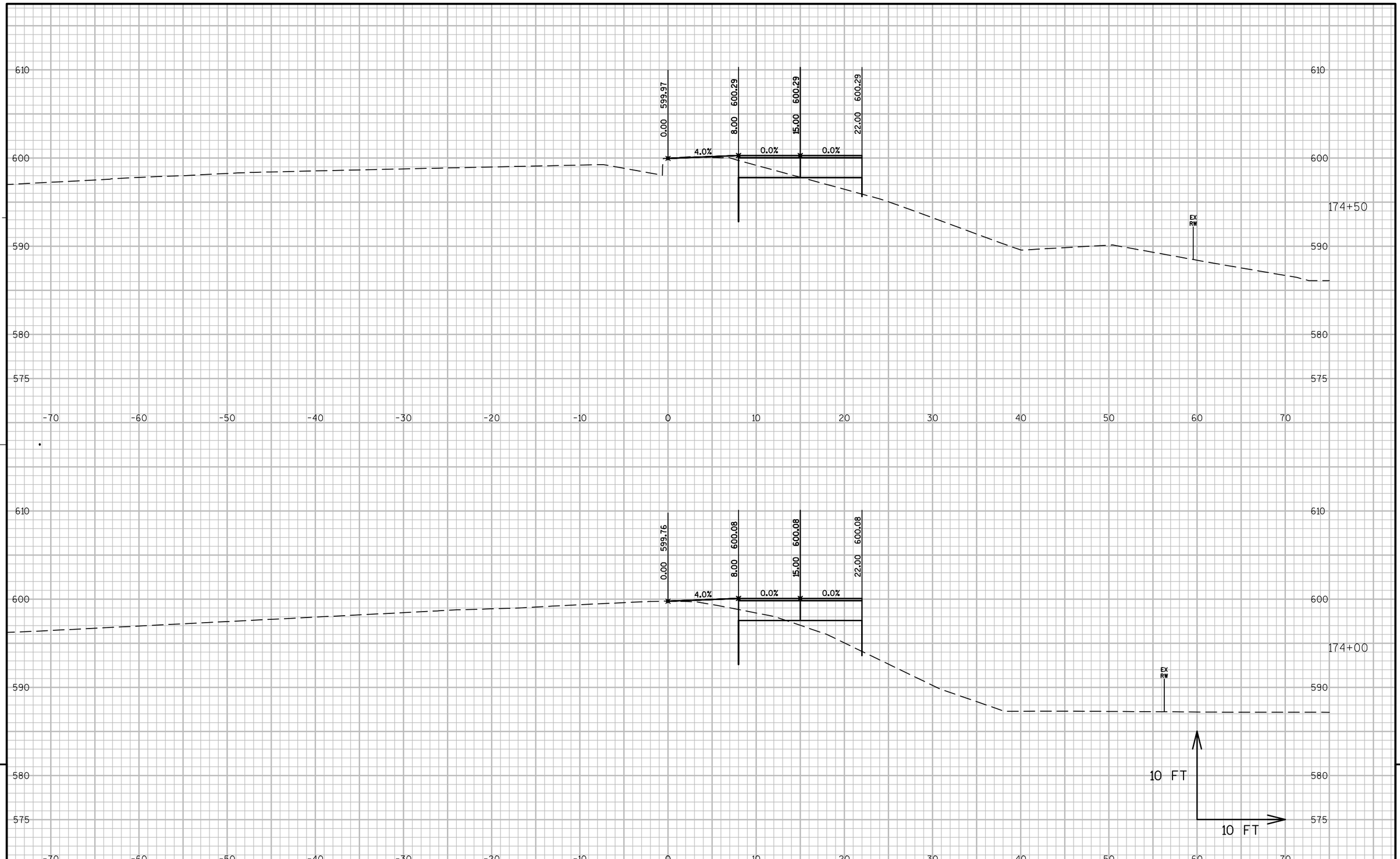


PROJECT NO: 4996--01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	CROSS SECTIONS	SHEET 376	E

FILE NAME : L:\PROJECTS\11744\DWG\090201_XS SOUTH OF NEW JERSEY.DWG
LAYOUT NAME - 090201_XS SOUTH OF NEW JERSEY - SECTION SHEET - (75)

PLOT DATE : 1/13/2015 11:44 AM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49



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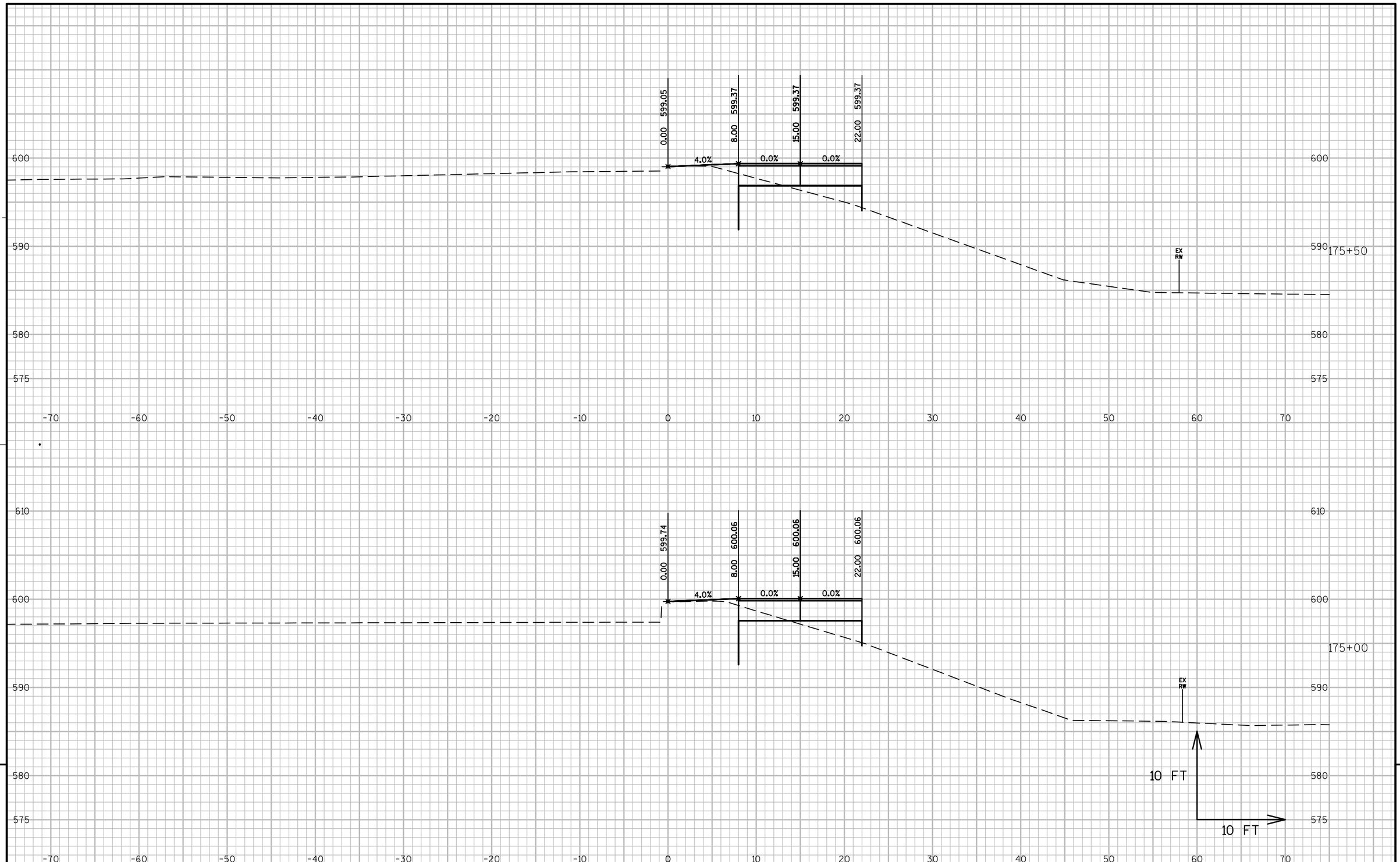
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PROJECT NO: 4996--01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	CROSS SECTIONS	SHEET 377	E

FILE NAME : L:\PROJECTS\11744\DWG\090201_XS SOUTH OF NEW JERSEY.DWG
LAYOUT NAME - 090201_XS SOUTH OF NEW JERSEY - SECTION SHEET - (76)

PLOT DATE : 1/13/2015 11:44 AM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49



9

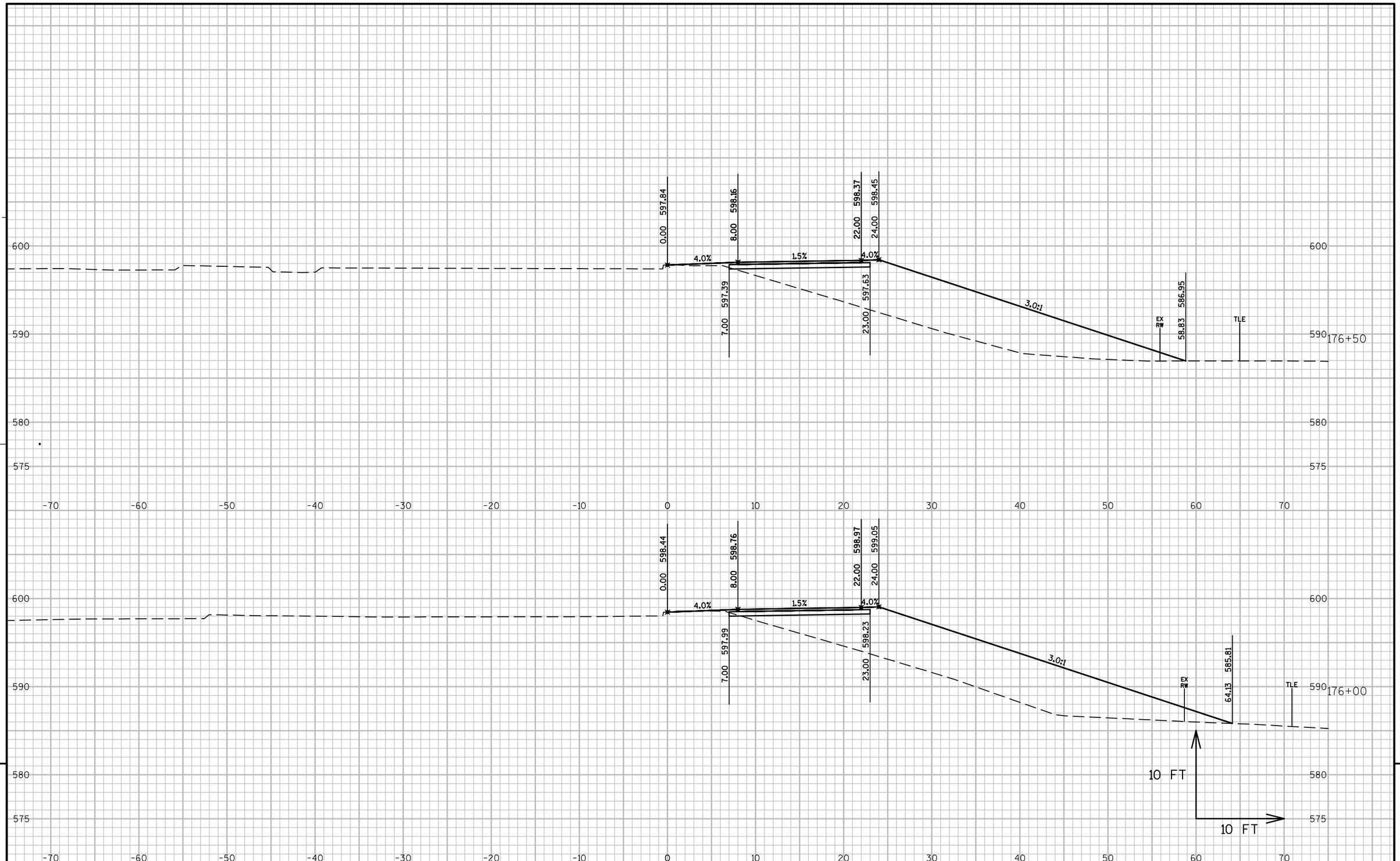
9

PROJECT NO: 4996--01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	CROSS SECTIONS	SHEET 378	E

FILE NAME : L:\PROJECTS\11744\DWG\090201_XS SOUTH OF NEW JERSEY.DWG
LAYOUT NAME - 090201_XS SOUTH OF NEW JERSEY - SECTION SHEET - (77)

PLOT DATE : 1/13/2015 11:44 AM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49

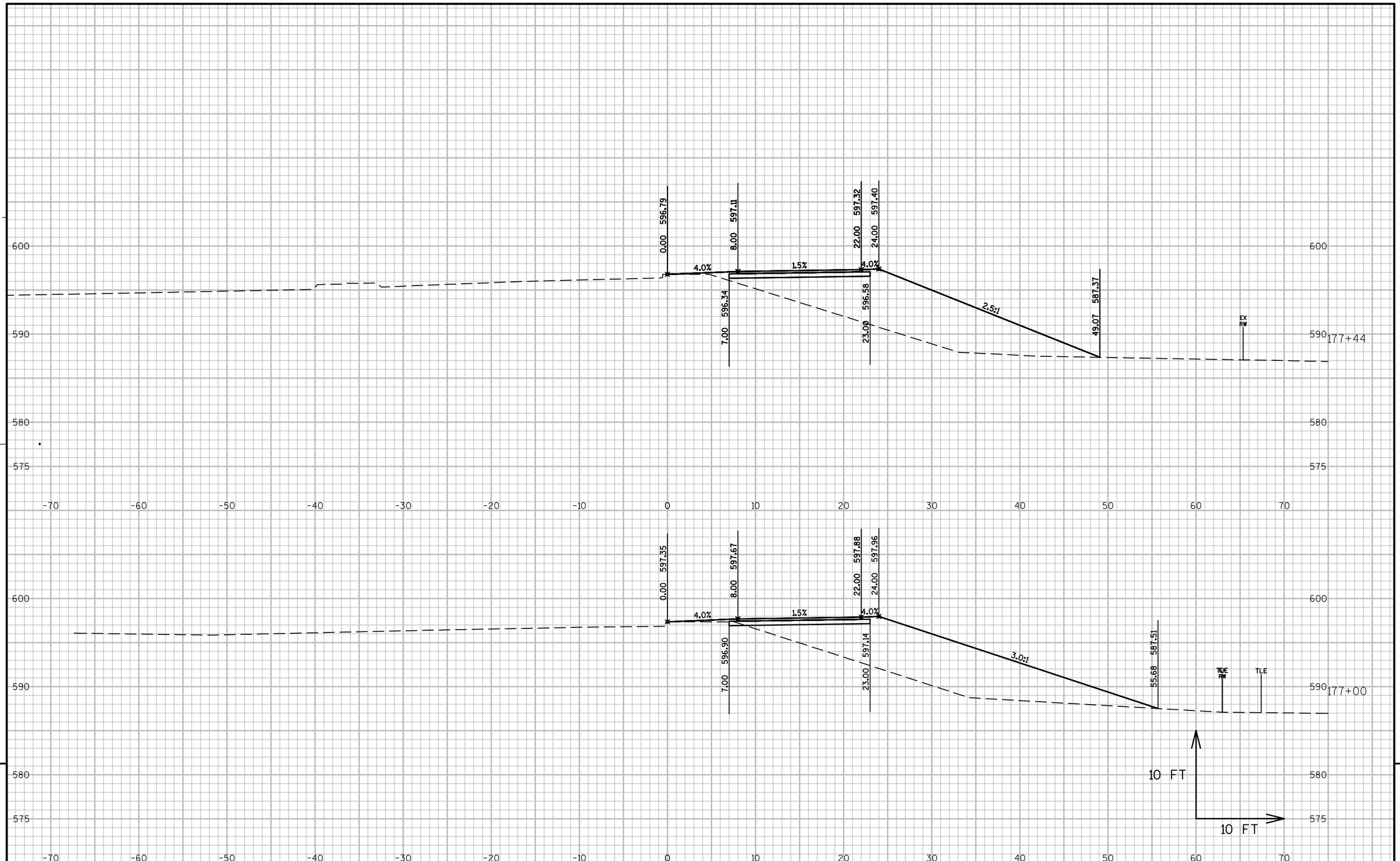


PROJECT NO: 4996--01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	CROSS SECTIONS	SHEET 379	E

FILE NAME : L:\PROJECTS\11744\DWG\090201_XS SOUTH OF NEW JERSEY.DWG
LAYOUT NAME - 090201_XS SOUTH OF NEW JERSEY - SECTION SHEET - (78)

PLOT DATE : 1/13/2015 11:45 AM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49

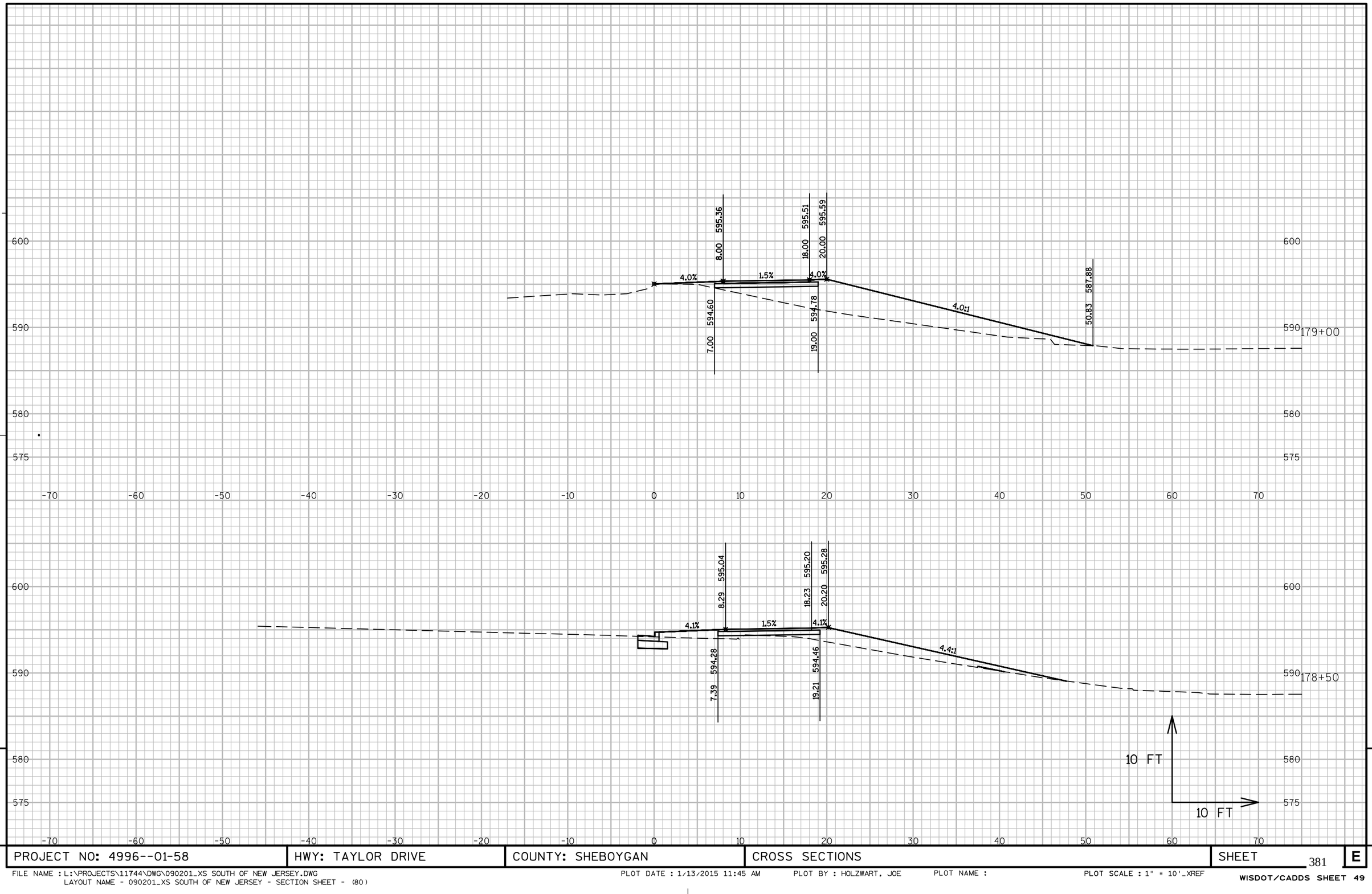


PROJECT NO: 4996--01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	CROSS SECTIONS	SHEET 380	E

FILE NAME : L:\PROJECTS\11744\DWG\090201_XS SOUTH OF NEW JERSEY.DWG
LAYOUT NAME - 090201_XS SOUTH OF NEW JERSEY - SECTION SHEET - (79)

PLOT DATE : 1/13/2015 11:45 AM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49



9

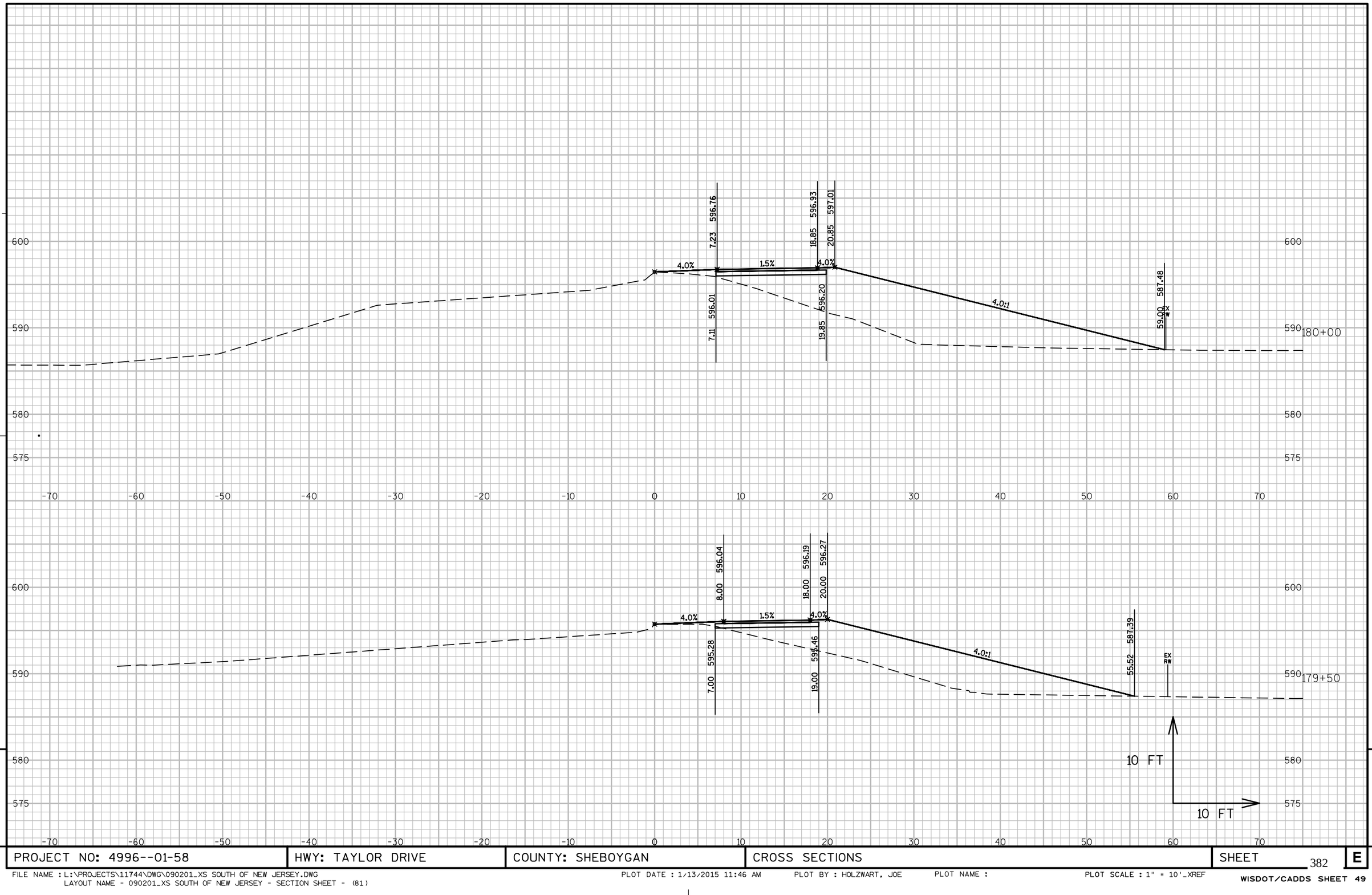
9

PROJECT NO: 4996--01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	CROSS SECTIONS	SHEET 381	E

FILE NAME : L:\PROJECTS\11744\DWG\090201_XS SOUTH OF NEW JERSEY.DWG
LAYOUT NAME - 090201_XS SOUTH OF NEW JERSEY - SECTION SHEET - (80)

PLOT DATE : 1/13/2015 11:45 AM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49



9

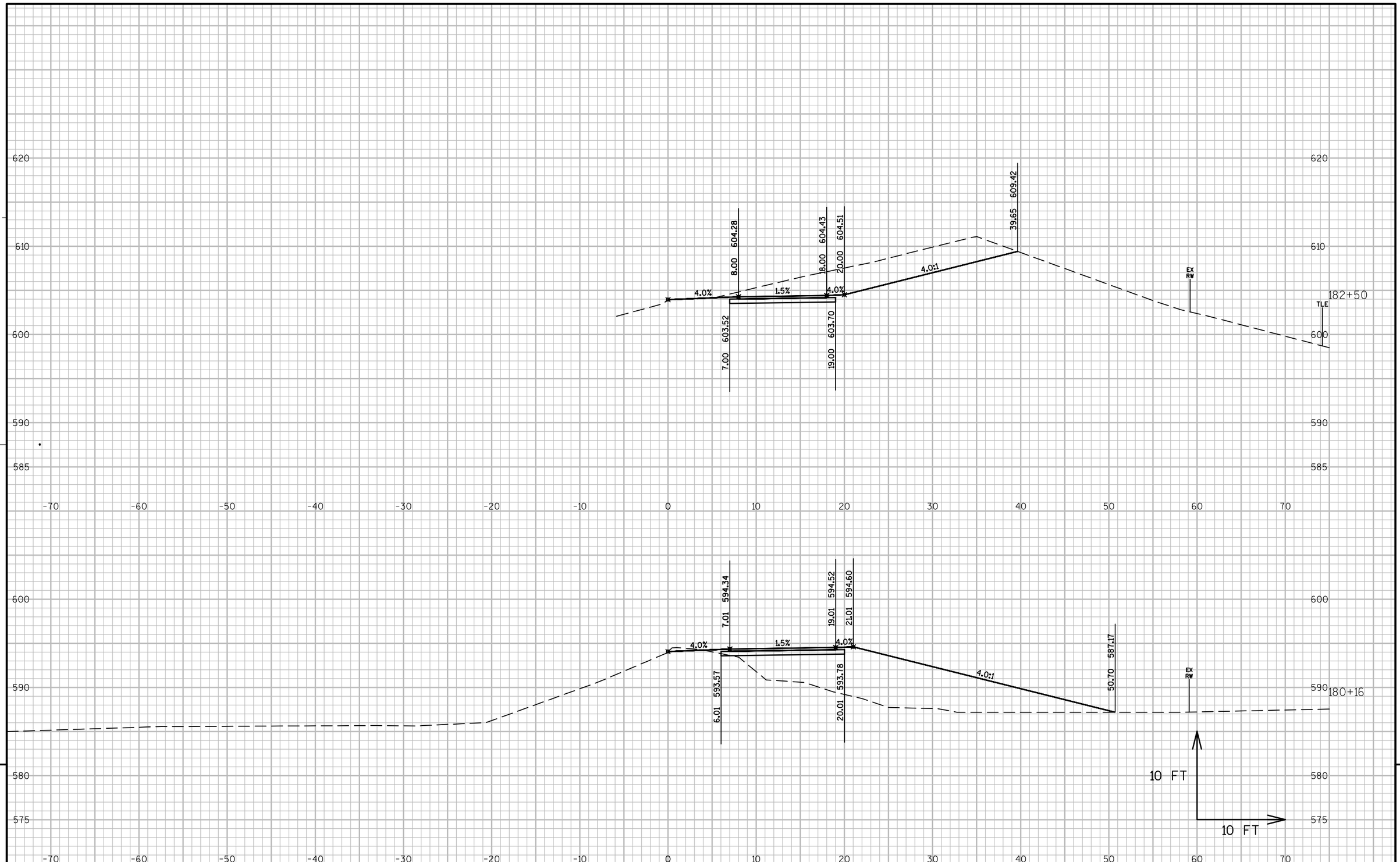
9

PROJECT NO: 4996--01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	CROSS SECTIONS	SHEET 382	E

FILE NAME : L:\PROJECTS\11744\DWG\090201_XS SOUTH OF NEW JERSEY.DWG
LAYOUT NAME - 090201_XS SOUTH OF NEW JERSEY - SECTION SHEET - (81)

PLOT DATE : 1/13/2015 11:46 AM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49

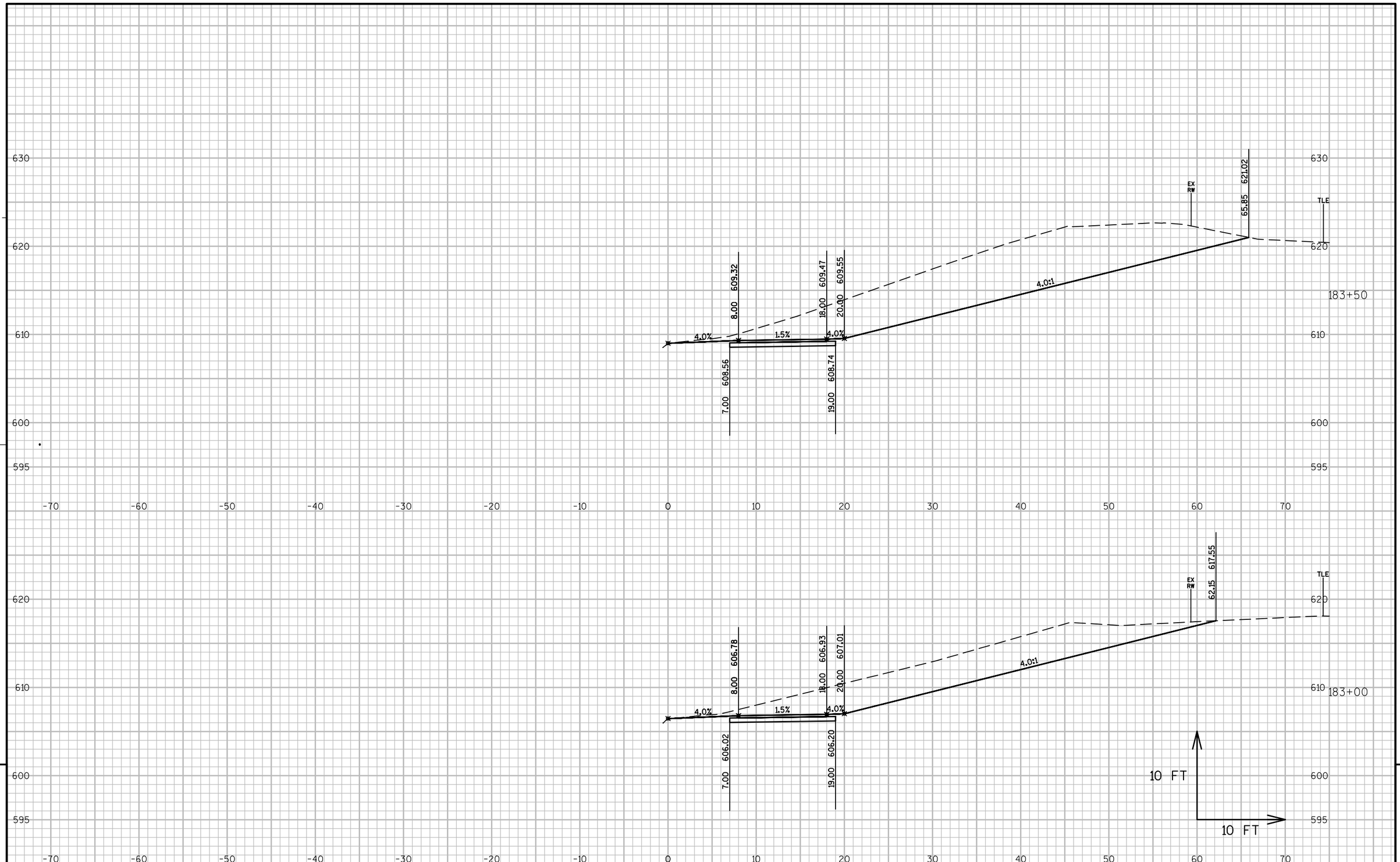


PROJECT NO: 4996--01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	CROSS SECTIONS	SHEET 383	E

FILE NAME : L:\PROJECTS\11744\DWG\090201_XS SOUTH OF NEW JERSEY.DWG
LAYOUT NAME - 090201_XS SOUTH OF NEW JERSEY - SECTION SHEET - (82)

PLOT DATE : 1/13/2015 11:46 AM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49

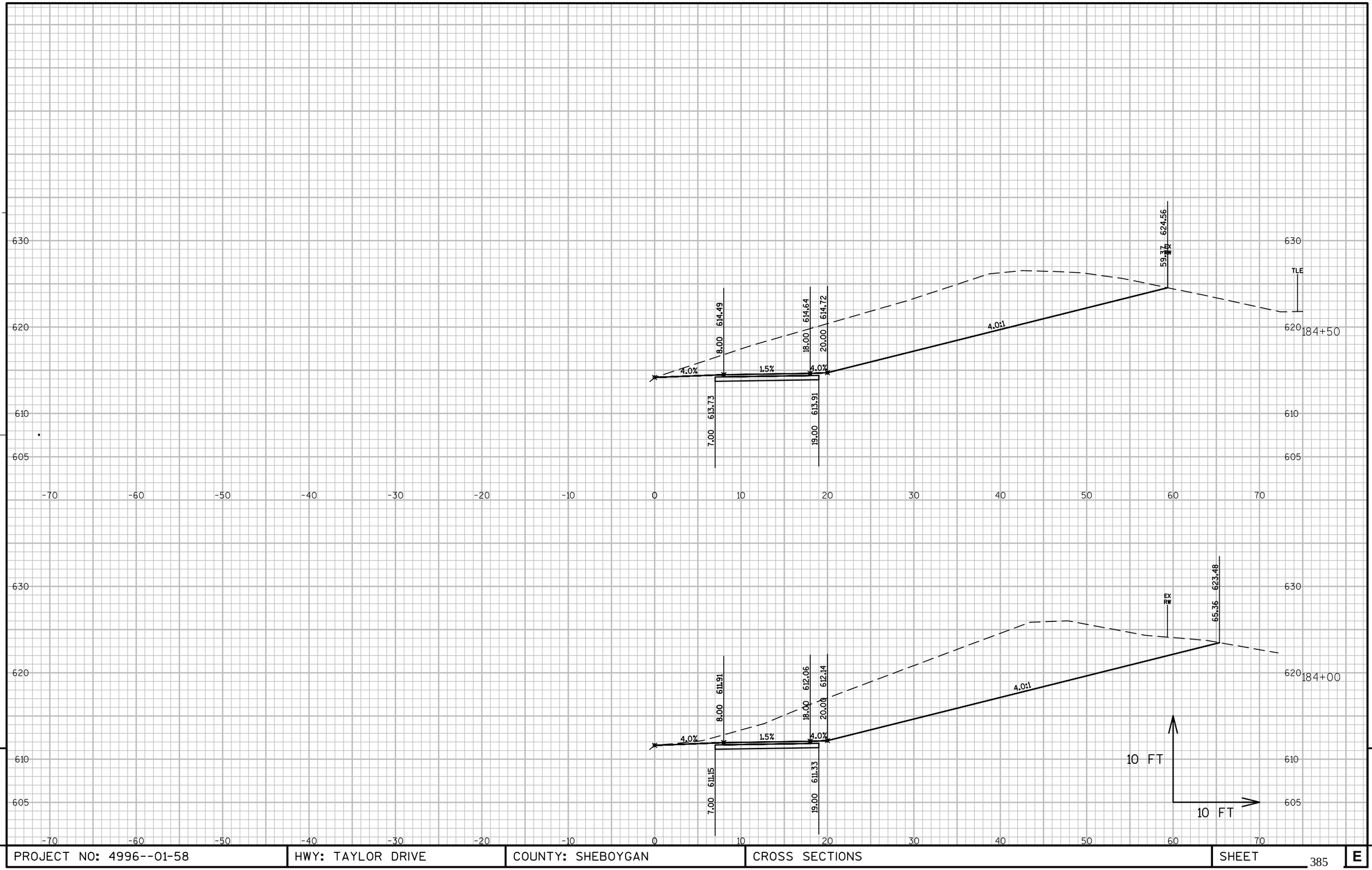


PROJECT NO: 4996--01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	CROSS SECTIONS	SHEET 384	E

FILE NAME : L:\PROJECTS\11744\DWG\090201_XS SOUTH OF NEW JERSEY.DWG
LAYOUT NAME - 090201_XS SOUTH OF NEW JERSEY - SECTION SHEET - (83)

PLOT DATE : 1/13/2015 11:46 AM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49

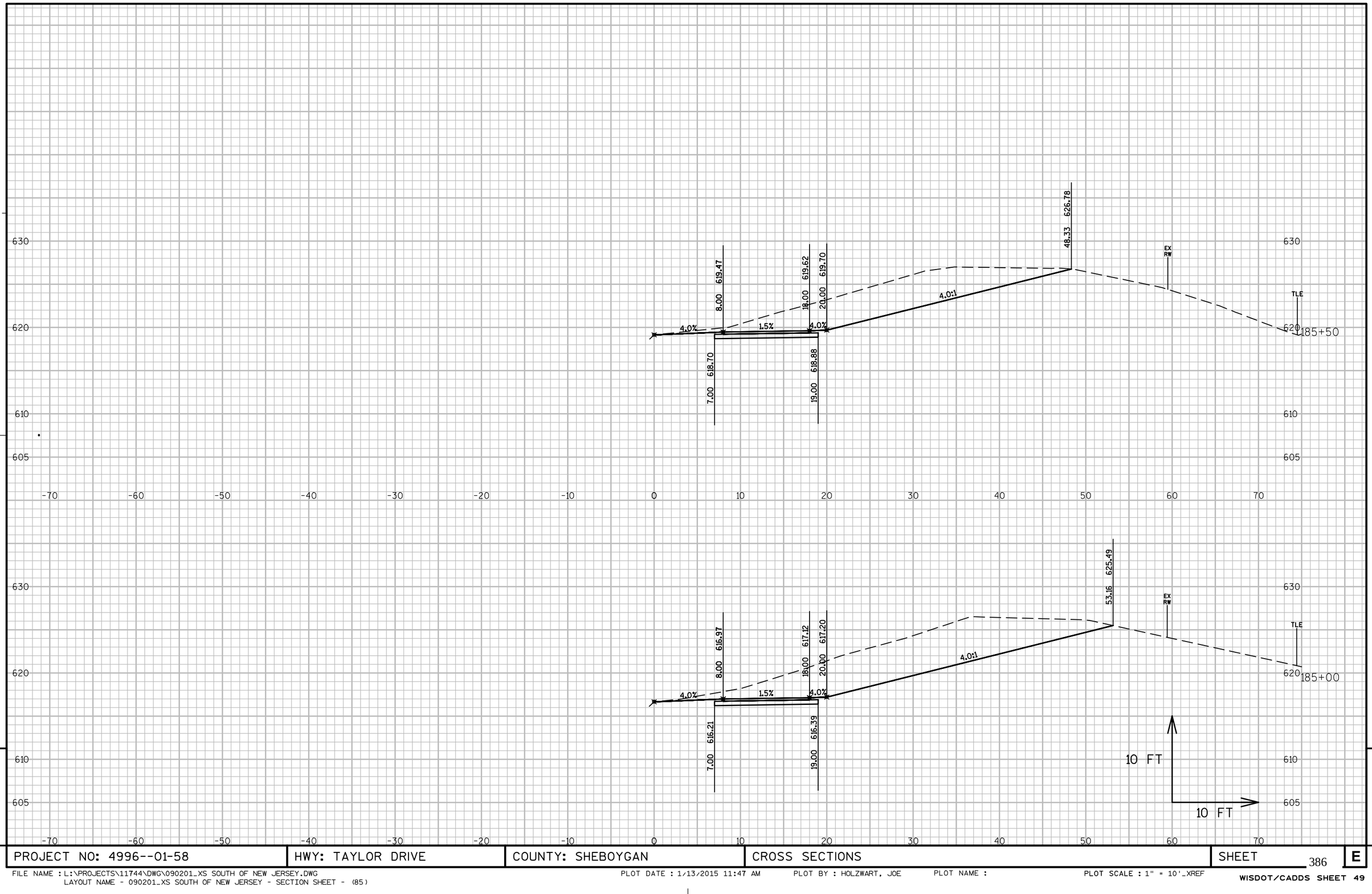


PROJECT NO: 4996--01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	CROSS SECTIONS	SHEET 385	E

FILE NAME : L:\PROJECTS\11744\DWG\090201_XS SOUTH OF NEW JERSEY.DWG
LAYOUT NAME - 090201_XS SOUTH OF NEW JERSEY - SECTION SHEET - (84)

PLOT DATE : 1/13/2015 11:46 AM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49

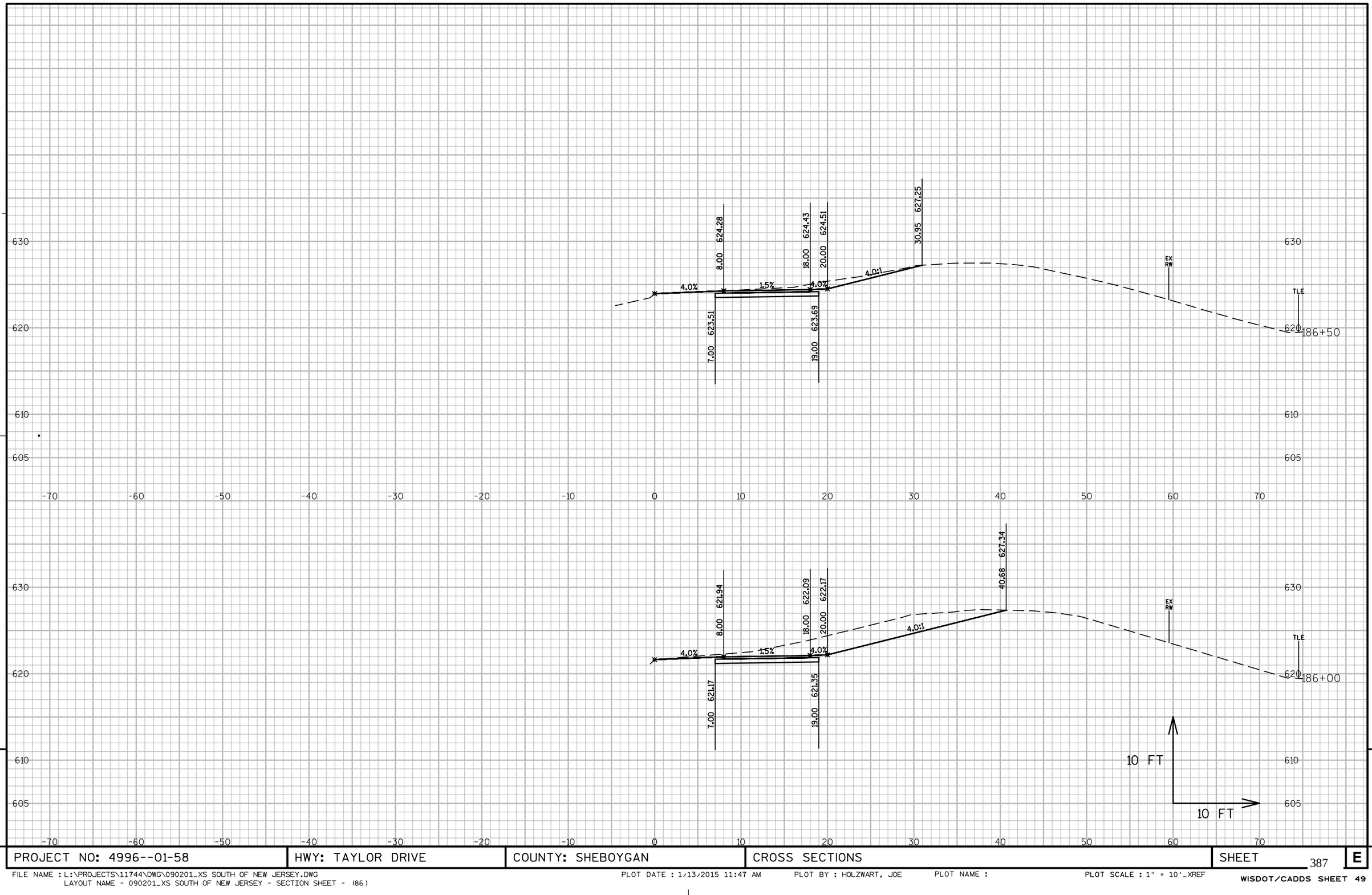


PROJECT NO: 4996--01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	CROSS SECTIONS	SHEET 386	E

FILE NAME : L:\PROJECTS\11744\DWG\090201_XS SOUTH OF NEW JERSEY.DWG
LAYOUT NAME - 090201_XS SOUTH OF NEW JERSEY - SECTION SHEET - (85)

PLOT DATE : 1/13/2015 11:47 AM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49



9

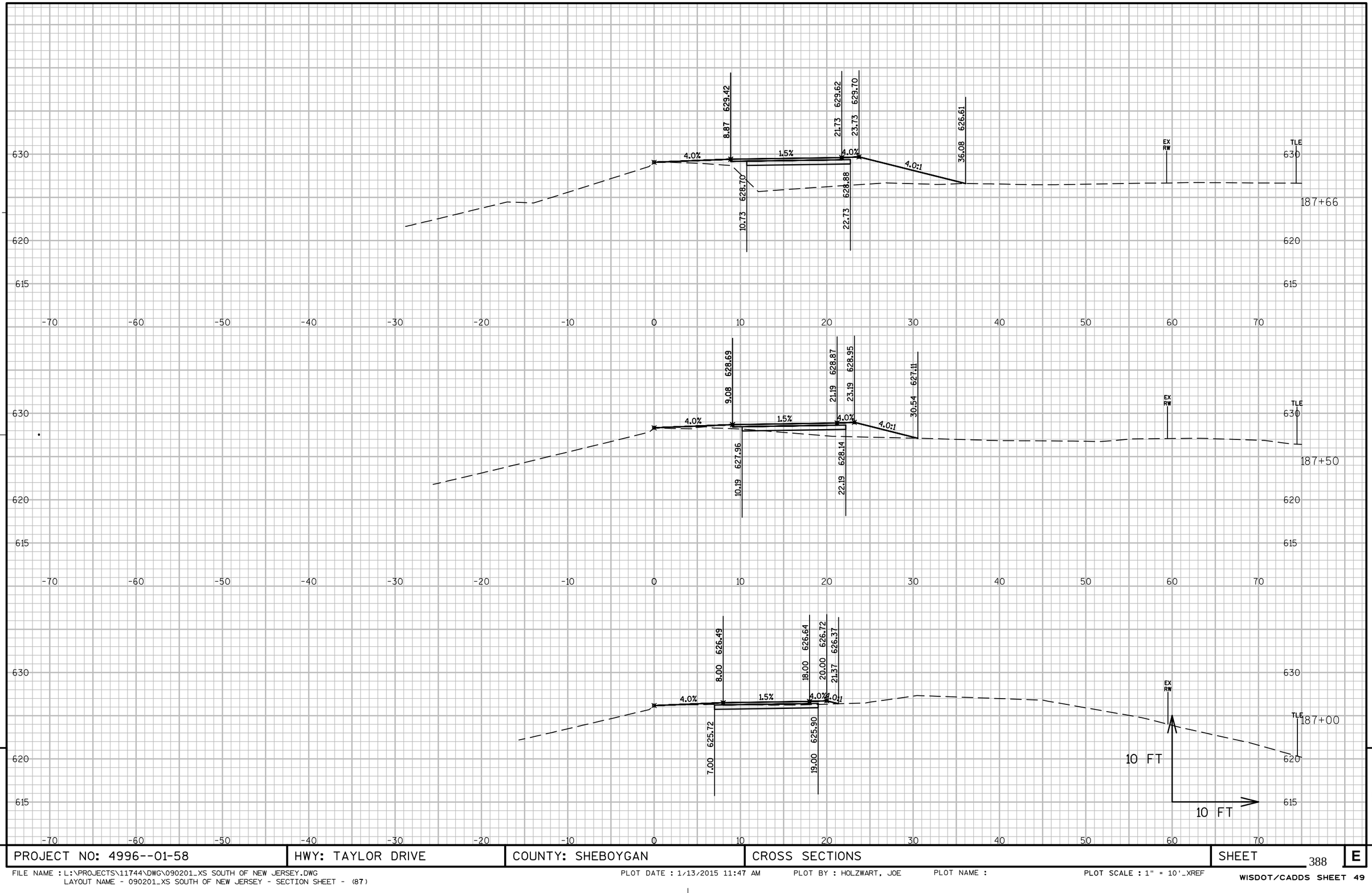
9

PROJECT NO: 4996--01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	CROSS SECTIONS	SHEET 387	E

FILE NAME : L:\PROJECTS\11744\DWG\090201_XS SOUTH OF NEW JERSEY.DWG
LAYOUT NAME - 090201_XS SOUTH OF NEW JERSEY - SECTION SHEET - (86)

PLOT DATE : 1/13/2015 11:47 AM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49

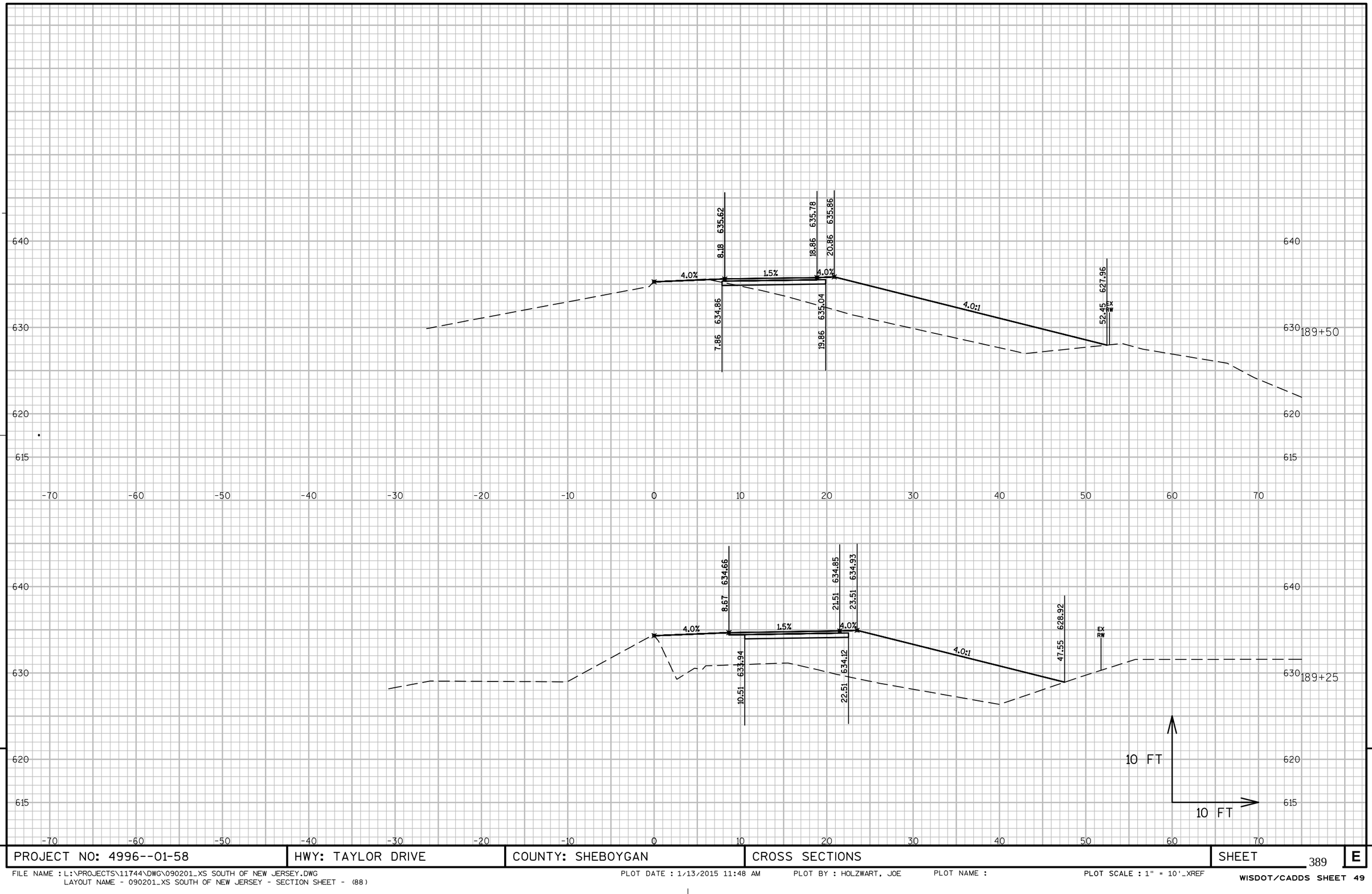


PROJECT NO: 4996--01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	CROSS SECTIONS	SHEET 388	E

FILE NAME : L:\PROJECTS\11744\DWG\090201_XS SOUTH OF NEW JERSEY.DWG
LAYOUT NAME - 090201_XS SOUTH OF NEW JERSEY - SECTION SHEET - (87)

PLOT DATE : 1/13/2015 11:47 AM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49

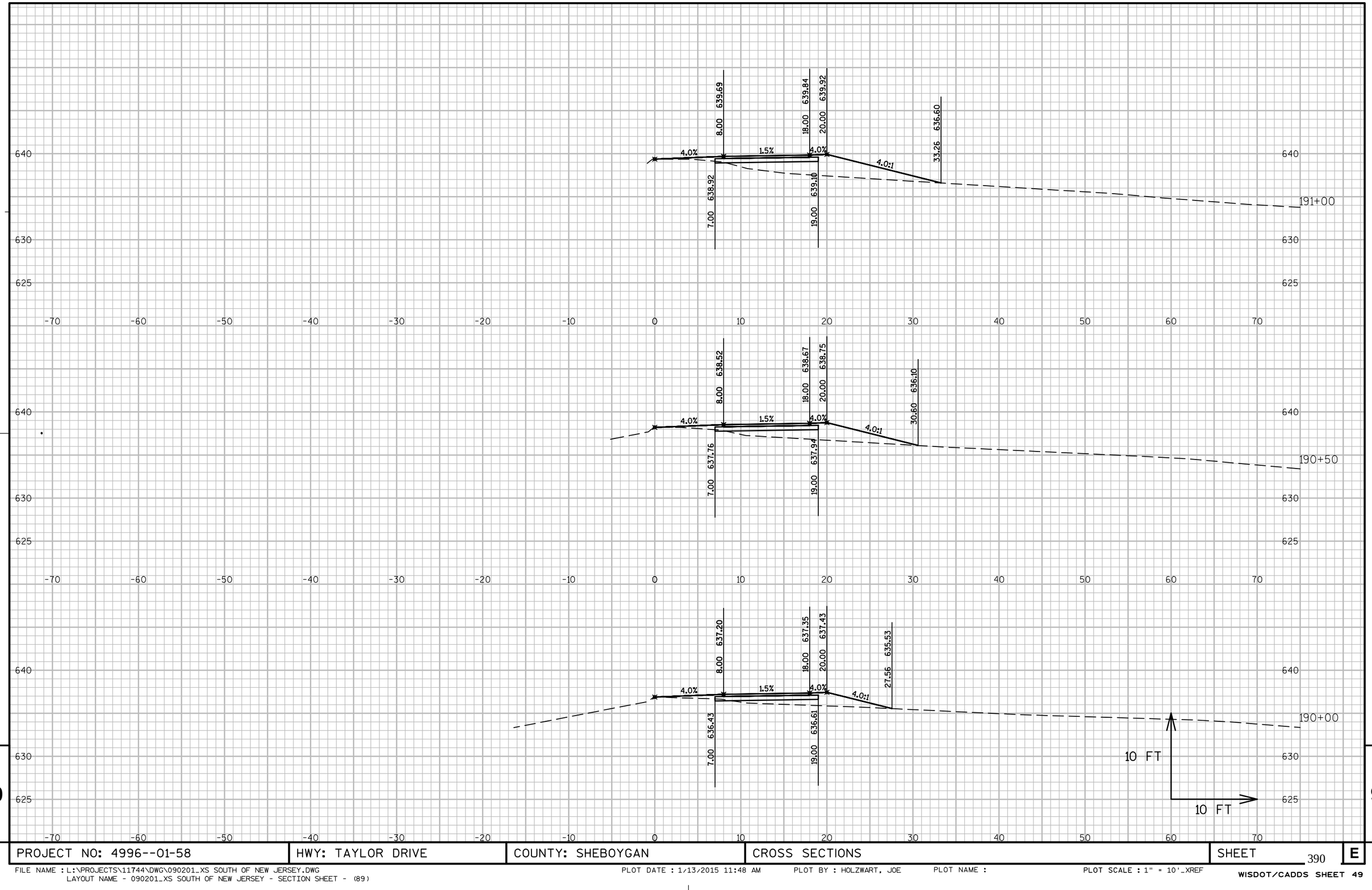


PROJECT NO: 4996--01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	CROSS SECTIONS	SHEET 389	E

FILE NAME : L:\PROJECTS\11744\DWG\090201_XS SOUTH OF NEW JERSEY.DWG
LAYOUT NAME - 090201_XS SOUTH OF NEW JERSEY - SECTION SHEET - (88)

PLOT DATE : 1/13/2015 11:48 AM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49

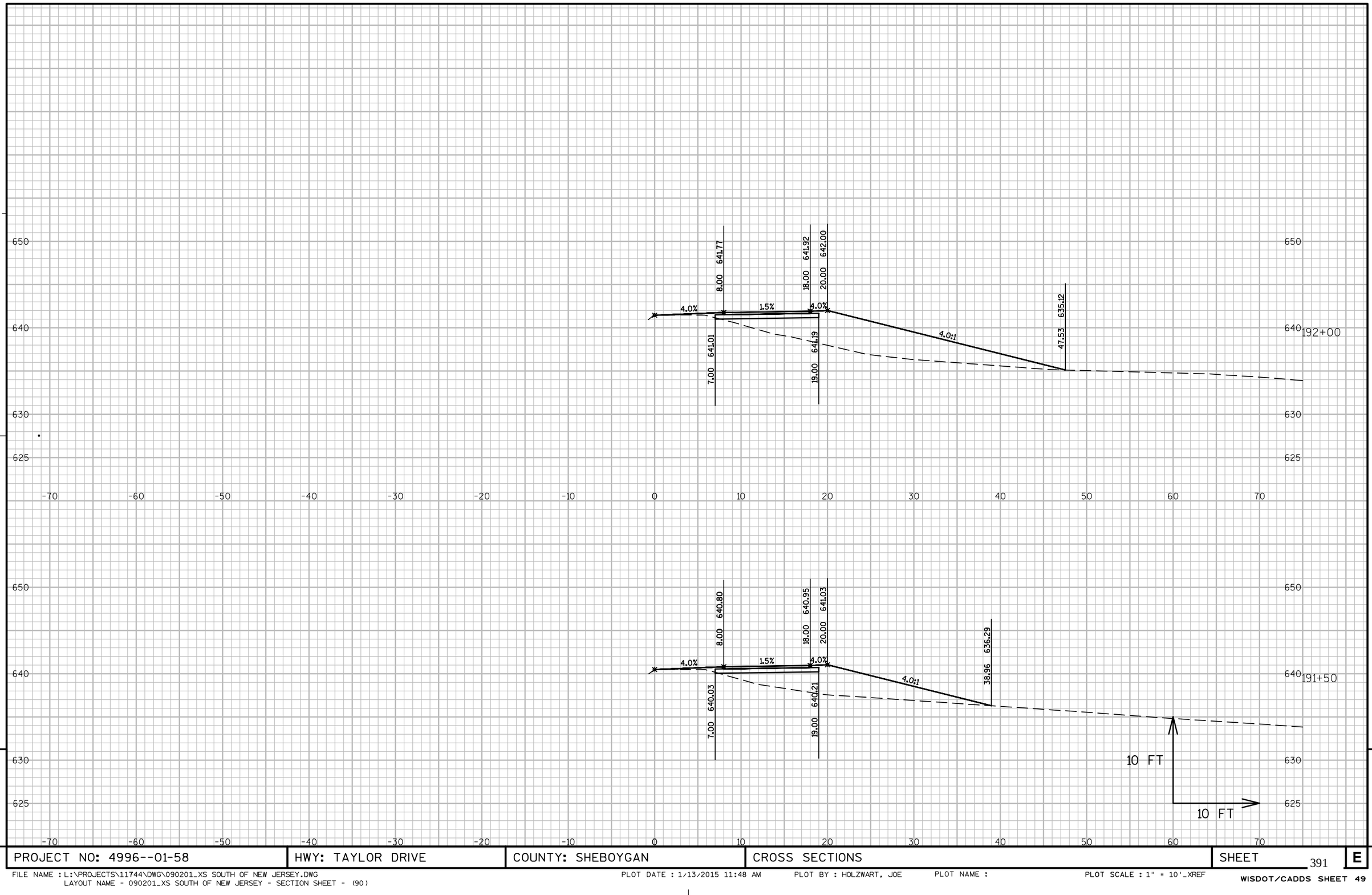


PROJECT NO: 4996--01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	CROSS SECTIONS	SHEET 390	E

FILE NAME : L:\PROJECTS\11744\DWG\090201_XS SOUTH OF NEW JERSEY.DWG
LAYOUT NAME - 090201_XS SOUTH OF NEW JERSEY - SECTION SHEET - (89)

PLOT DATE : 1/13/2015 11:48 AM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49

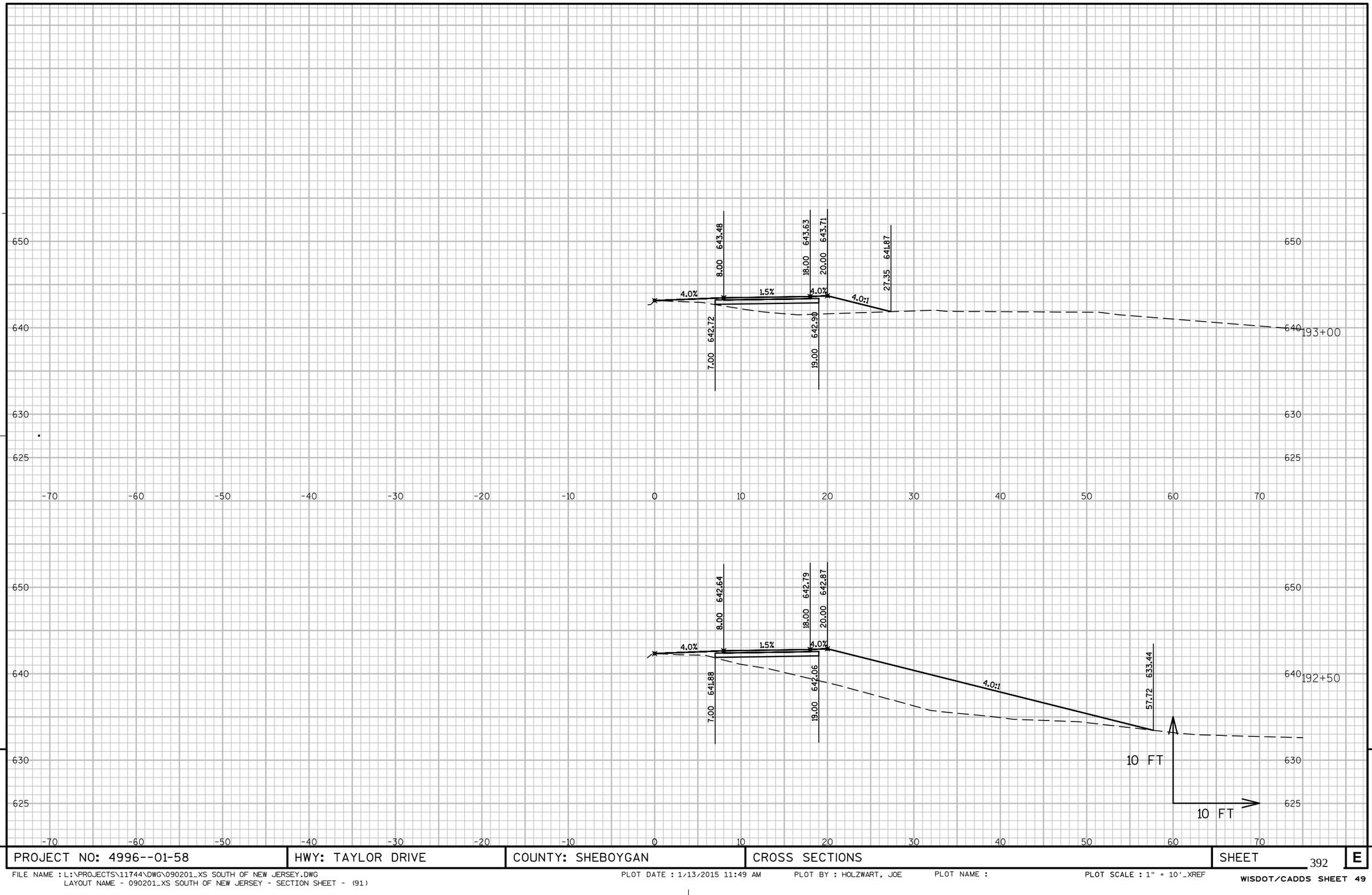


PROJECT NO: 4996--01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	CROSS SECTIONS	SHEET 391	E

FILE NAME : L:\PROJECTS\11744\DWG\090201_XS SOUTH OF NEW JERSEY.DWG
LAYOUT NAME - 090201_XS SOUTH OF NEW JERSEY - SECTION SHEET - (90)

PLOT DATE : 1/13/2015 11:48 AM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 4996--01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	CROSS SECTIONS	SHEET 392	E

FILE NAME : L:\PROJECTS\11744\DWG\090201_XS SOUTH OF NEW JERSEY.DWG
LAYOUT NAME - 090201_XS SOUTH OF NEW JERSEY - SECTION SHEET - (91)

PLOT DATE : 1/13/2015 11:49 AM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49

9

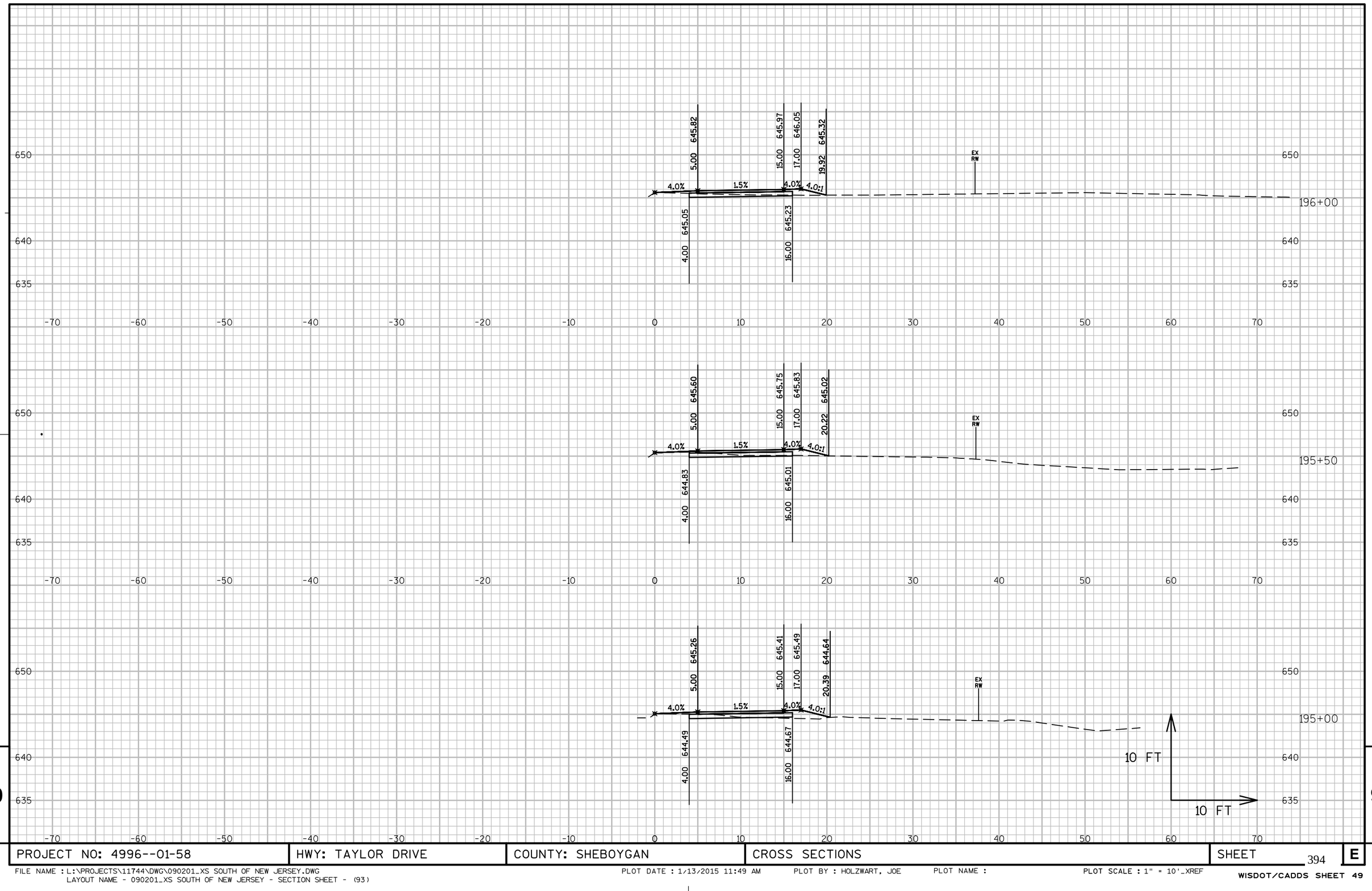
9

PROJECT NO: 4996--01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	CROSS SECTIONS	SHEET 393	E

FILE NAME : L:\PROJECTS\11744\DWG\090201_XS SOUTH OF NEW JERSEY.DWG
LAYOUT NAME - 090201_XS SOUTH OF NEW JERSEY - SECTION SHEET - (92)

PLOT DATE : 1/13/2015 11:49 AM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49



9

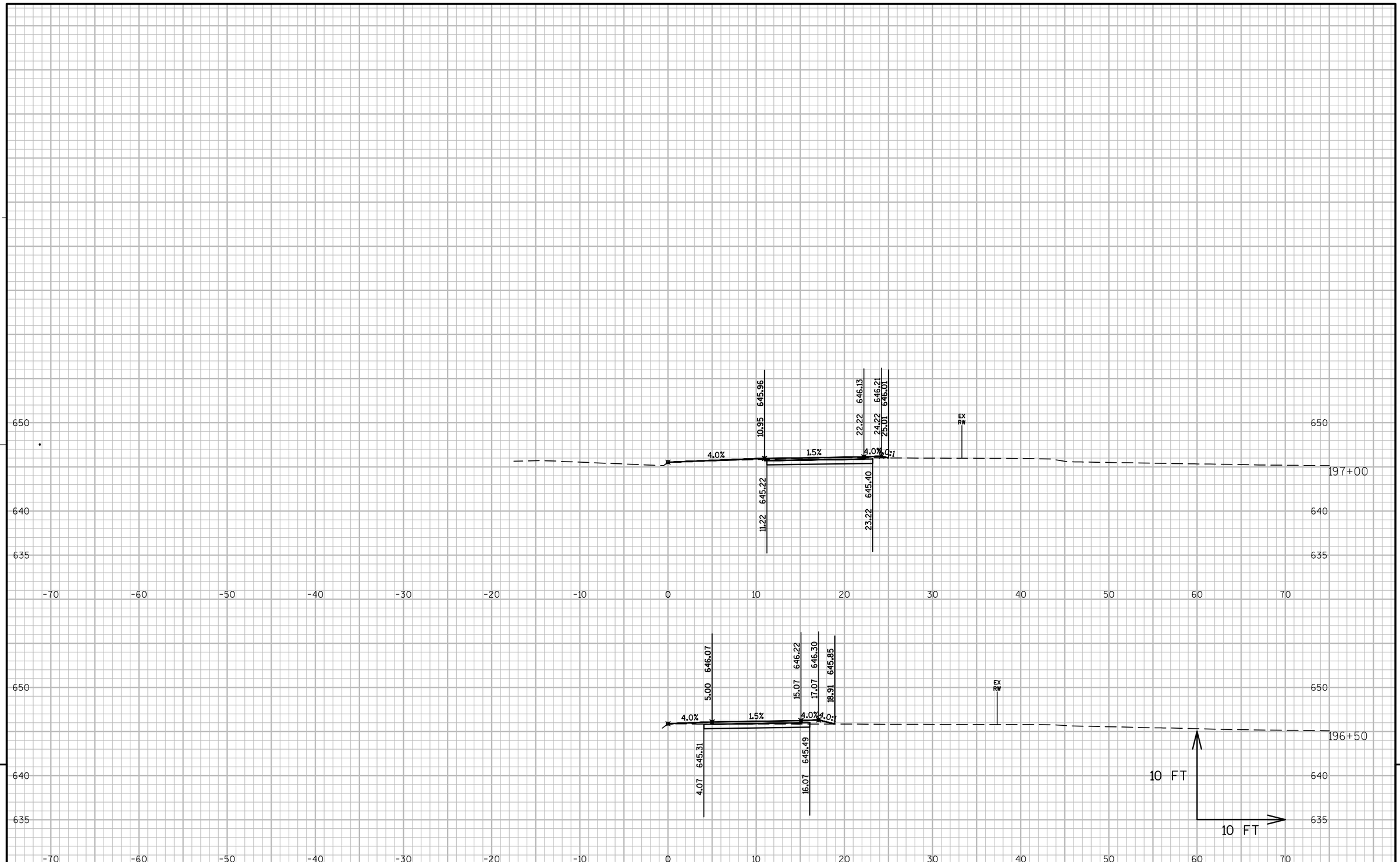
PROJECT NO: 4996--01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	CROSS SECTIONS	SHEET 394	E

9

FILE NAME : L:\PROJECTS\11744\DWG\090201_XS SOUTH OF NEW JERSEY.DWG
LAYOUT NAME - 090201_XS SOUTH OF NEW JERSEY - SECTION SHEET - (93)

PLOT DATE : 1/13/2015 11:49 AM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49



9

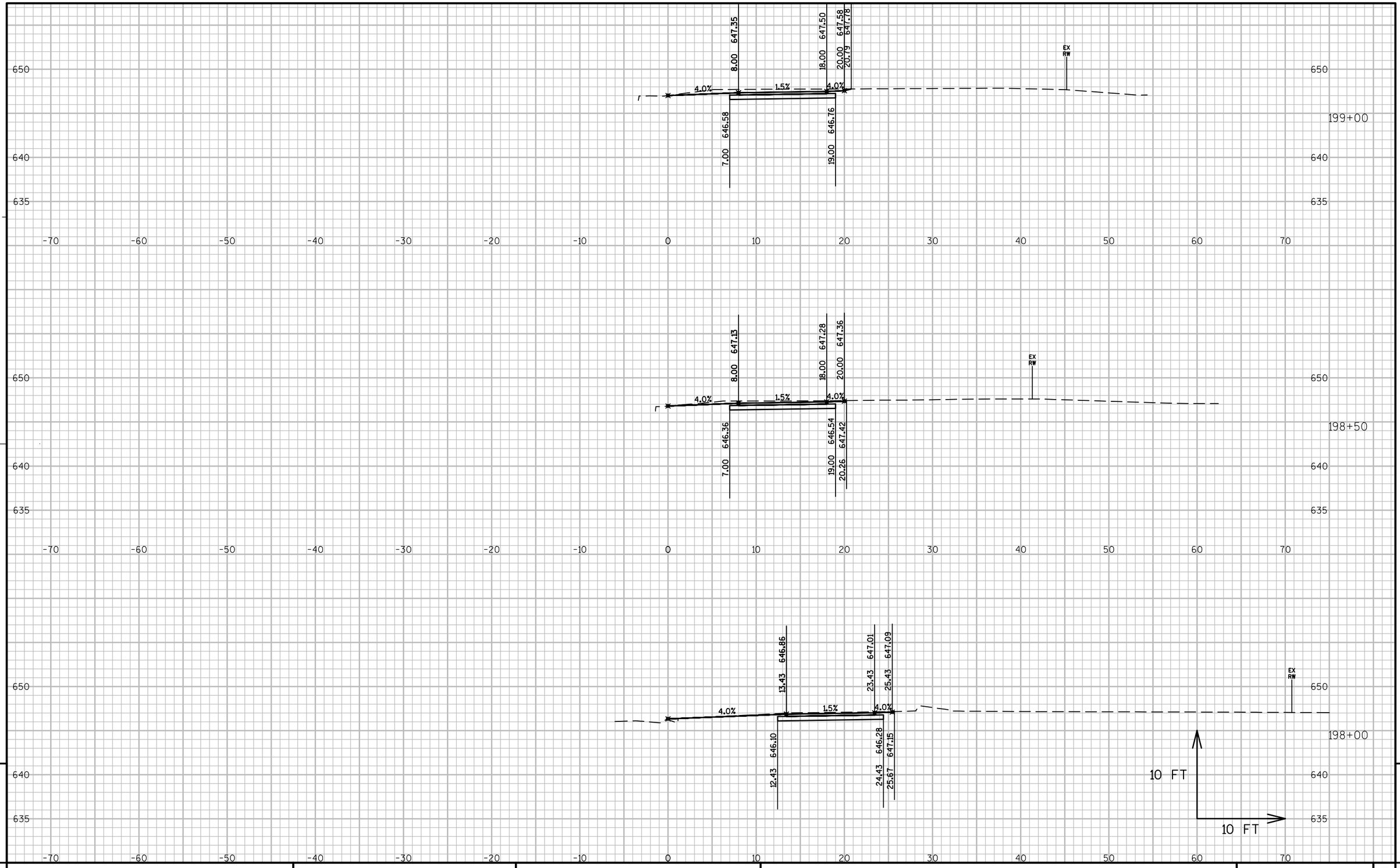
9

PROJECT NO: 4996--01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	CROSS SECTIONS	SHEET 395	E

FILE NAME : L:\PROJECTS\11744\DWG\090201_XS SOUTH OF NEW JERSEY.DWG
LAYOUT NAME - 090201_XS SOUTH OF NEW JERSEY - SECTION SHEET - (94)

PLOT DATE : 1/13/2015 11:50 AM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49

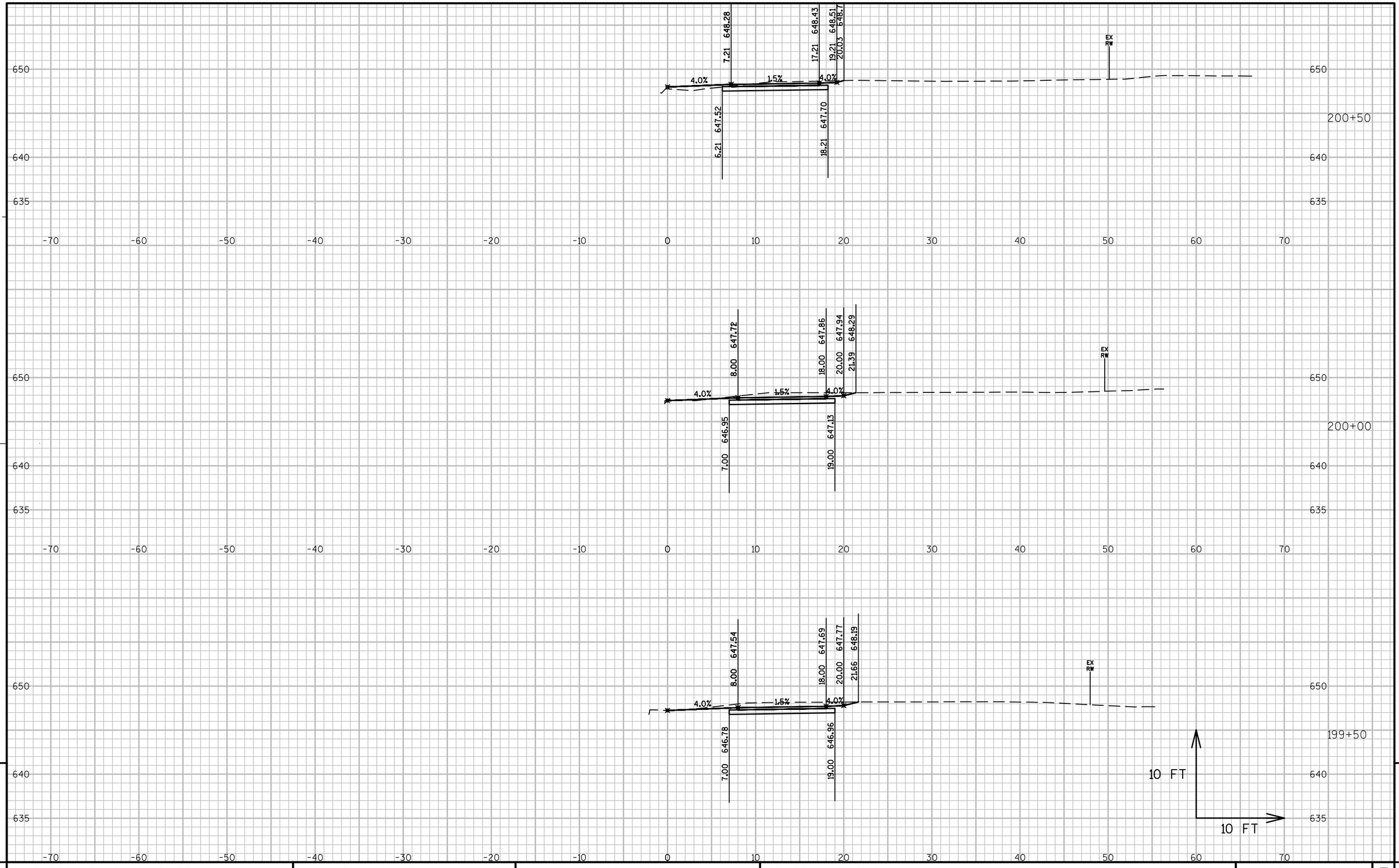


PROJECT NO: 4996--01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	CROSS SECTIONS	SHEET 396	E

FILE NAME : L:\PROJECTS\11744\DWG\090201_XS NORTH OF NEW JERSEY.DWG
LAYOUT NAME - 090201_XS NORTH OF NEW JERSEY - SECTION SHEET - (1)

PLOT DATE : 1/13/2015 1:07 PM PLOT BY : JUMP, KEVIN PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49

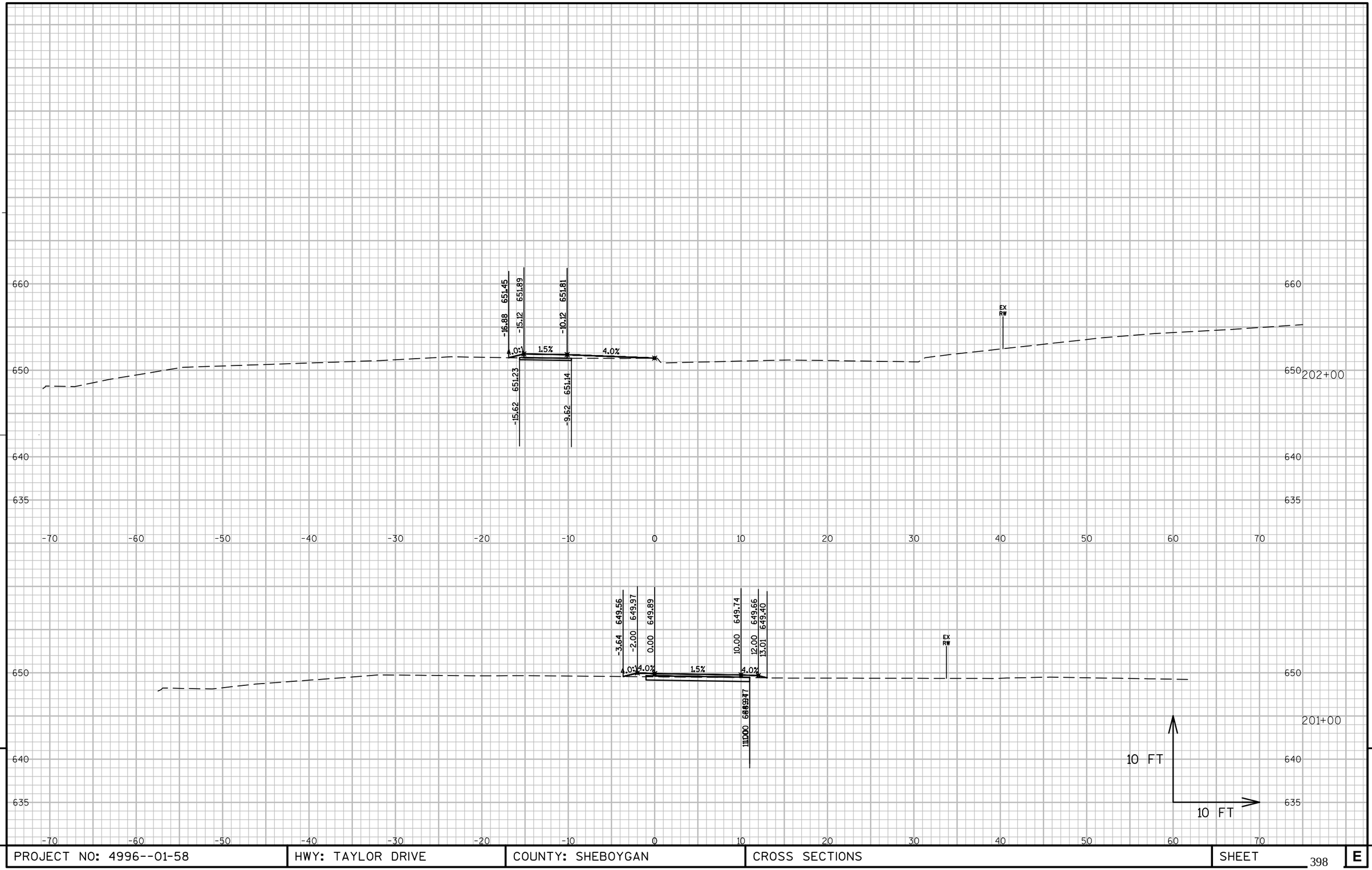


PROJECT NO: 4996--01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	CROSS SECTIONS	SHEET 397	E

FILE NAME : L:\PROJECTS\11744\DWG\090201_XS NORTH OF NEW JERSEY.DWG
LAYOUT NAME - 090201_XS NORTH OF NEW JERSEY - SECTION SHEET - (2)

PLOT DATE : 1/13/2015 1:07 PM PLOT BY : JUMP, KEVIN PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49



9

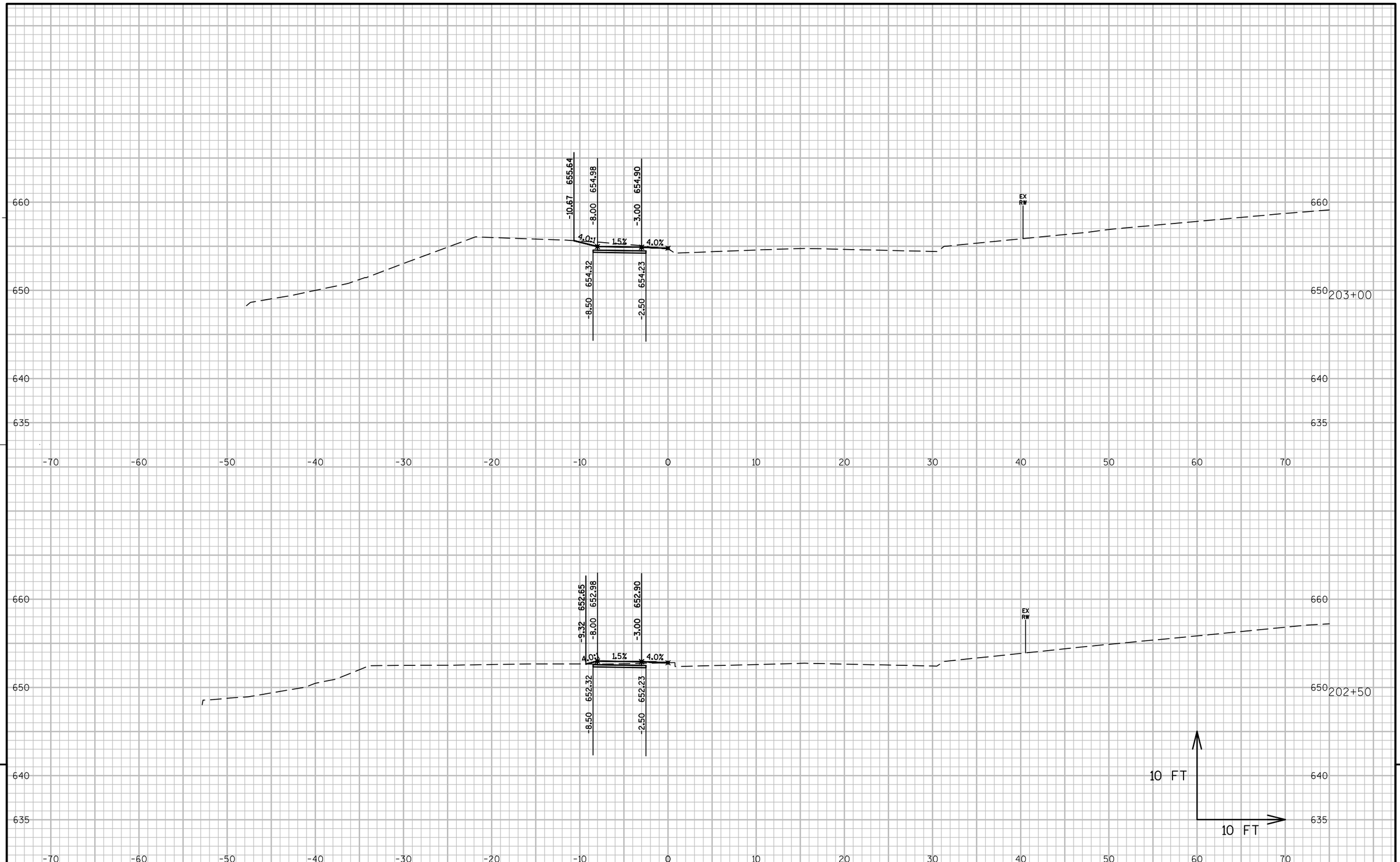
9

PROJECT NO: 4996--01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	CROSS SECTIONS	SHEET 398	E

FILE NAME : L:\PROJECTS\11744\DWG\090201_XS NORTH OF NEW JERSEY.DWG
LAYOUT NAME - 090201_XS NORTH OF NEW JERSEY - SECTION SHEET - (3)

PLOT DATE : 1/13/2015 1:07 PM PLOT BY : JUMP, KEVIN PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49



9

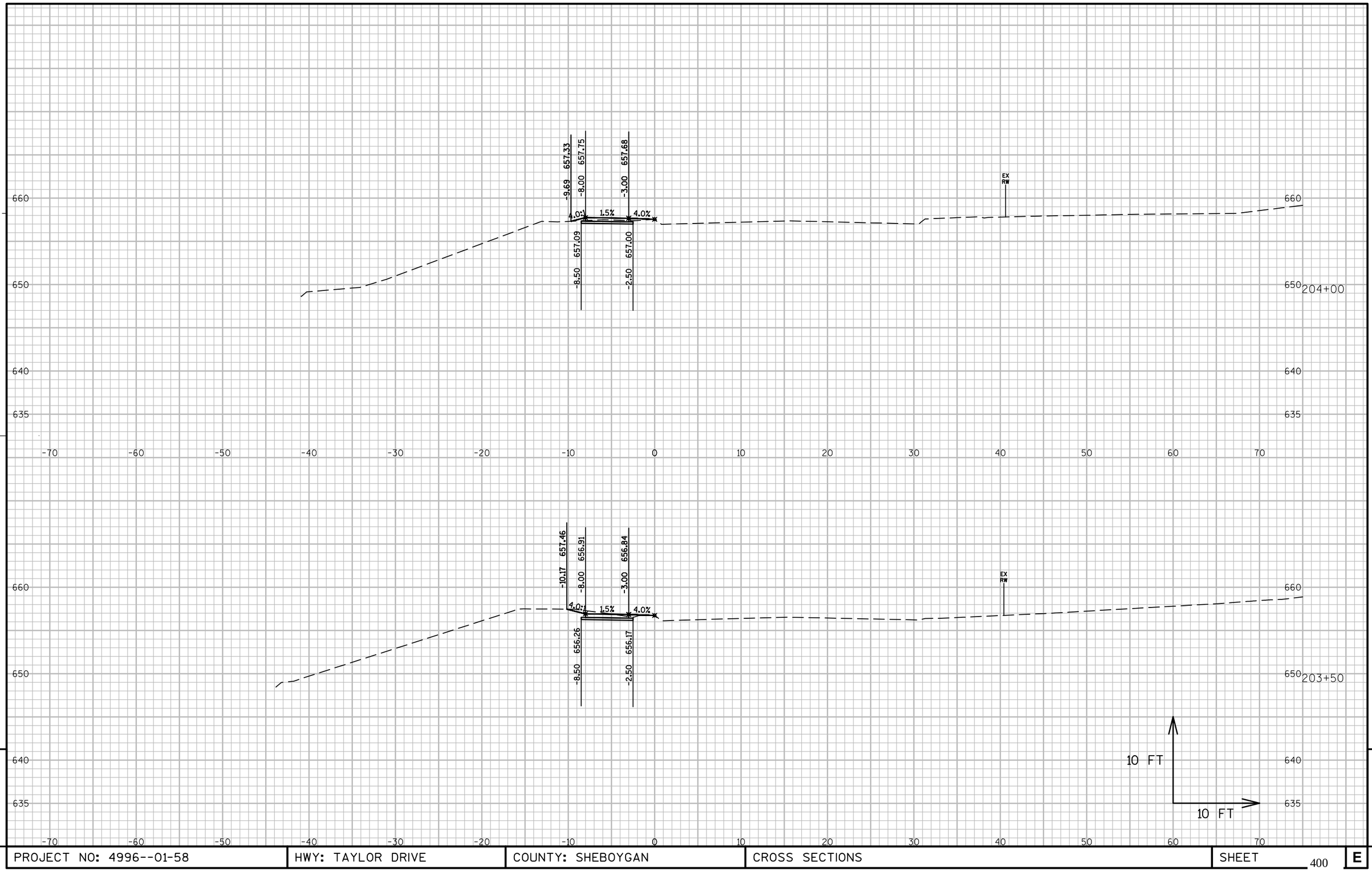
9

PROJECT NO: 4996--01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	CROSS SECTIONS	SHEET 399	E

FILE NAME : L:\PROJECTS\11744\DWG\090201_XS NORTH OF NEW JERSEY.DWG
LAYOUT NAME - 090201_XS NORTH OF NEW JERSEY - SECTION SHEET - (4)

PLOT DATE : 1/13/2015 1:07 PM PLOT BY : JUMP, KEVIN PLOT NAME : PLOT SCALE : 1" = 10'_XREF

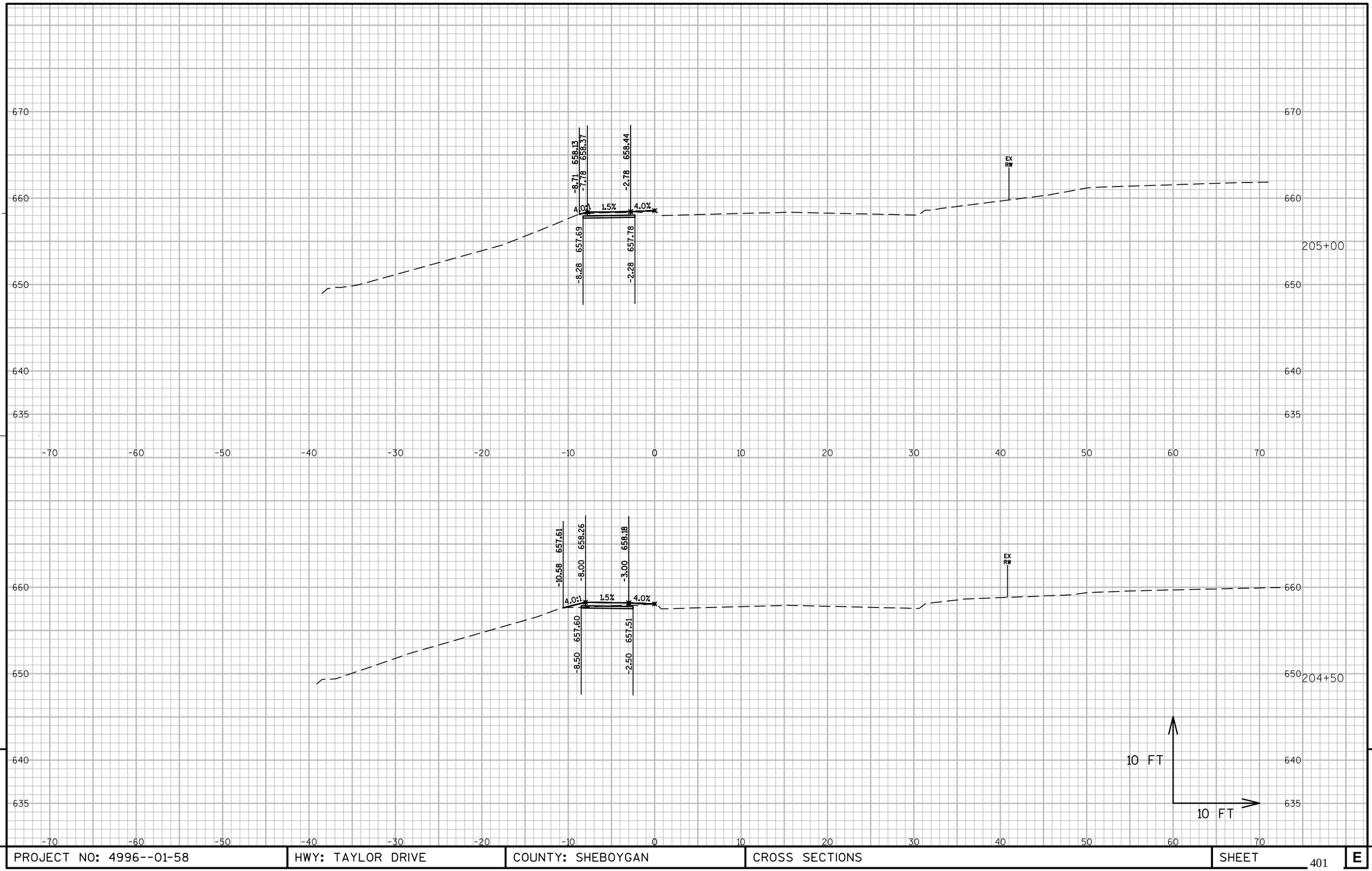
WISDOT/CADDS SHEET 49



PROJECT NO: 4996--01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	CROSS SECTIONS	SHEET 400	E

FILE NAME : L:\PROJECTS\11744\DWG\090201_XS NORTH OF NEW JERSEY.DWG
LAYOUT NAME - 090201_XS NORTH OF NEW JERSEY - SECTION SHEET - (5)

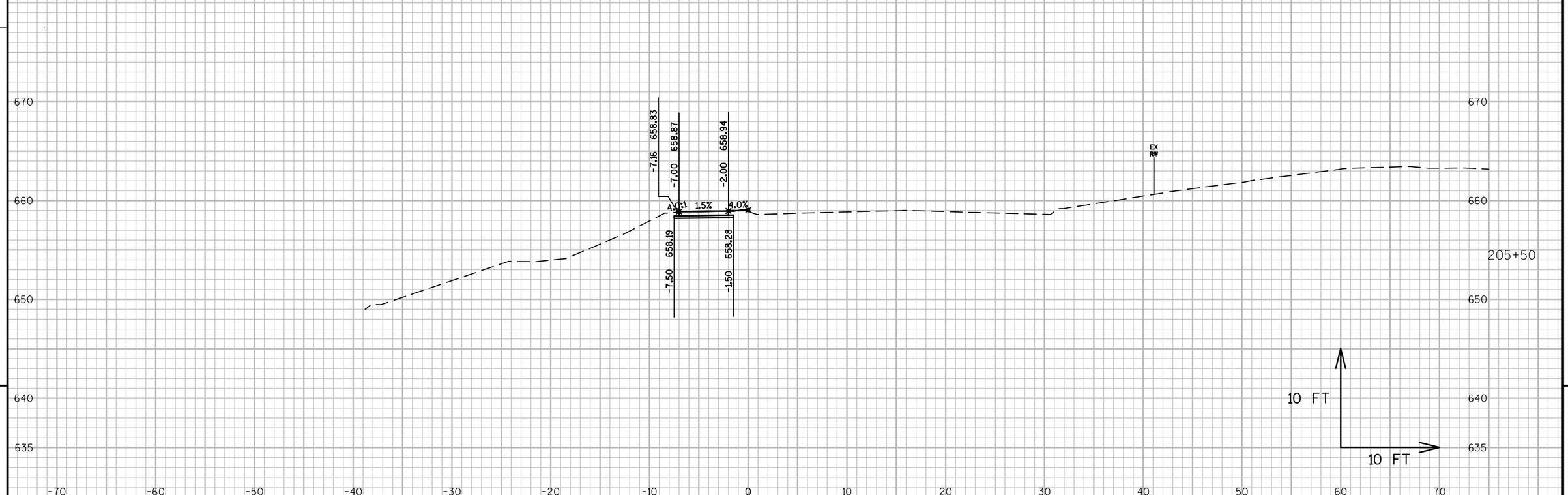
PLOT DATE : 1/13/2015 1:08 PM PLOT BY : JUMP, KEVIN PLOT NAME : PLOT SCALE : 1" = 10'_XREF



PROJECT NO: 4996--01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	CROSS SECTIONS	SHEET 401	E

FILE NAME : L:\PROJECTS\11744\DWG\090201_XS NORTH OF NEW JERSEY.DWG
LAYOUT NAME - 090201_XS NORTH OF NEW JERSEY - SECTION SHEET - (6)

PLOT DATE : 1/13/2015 1:08 PM PLOT BY : JUMP, KEVIN PLOT NAME : PLOT SCALE : 1" = 10'_XREF



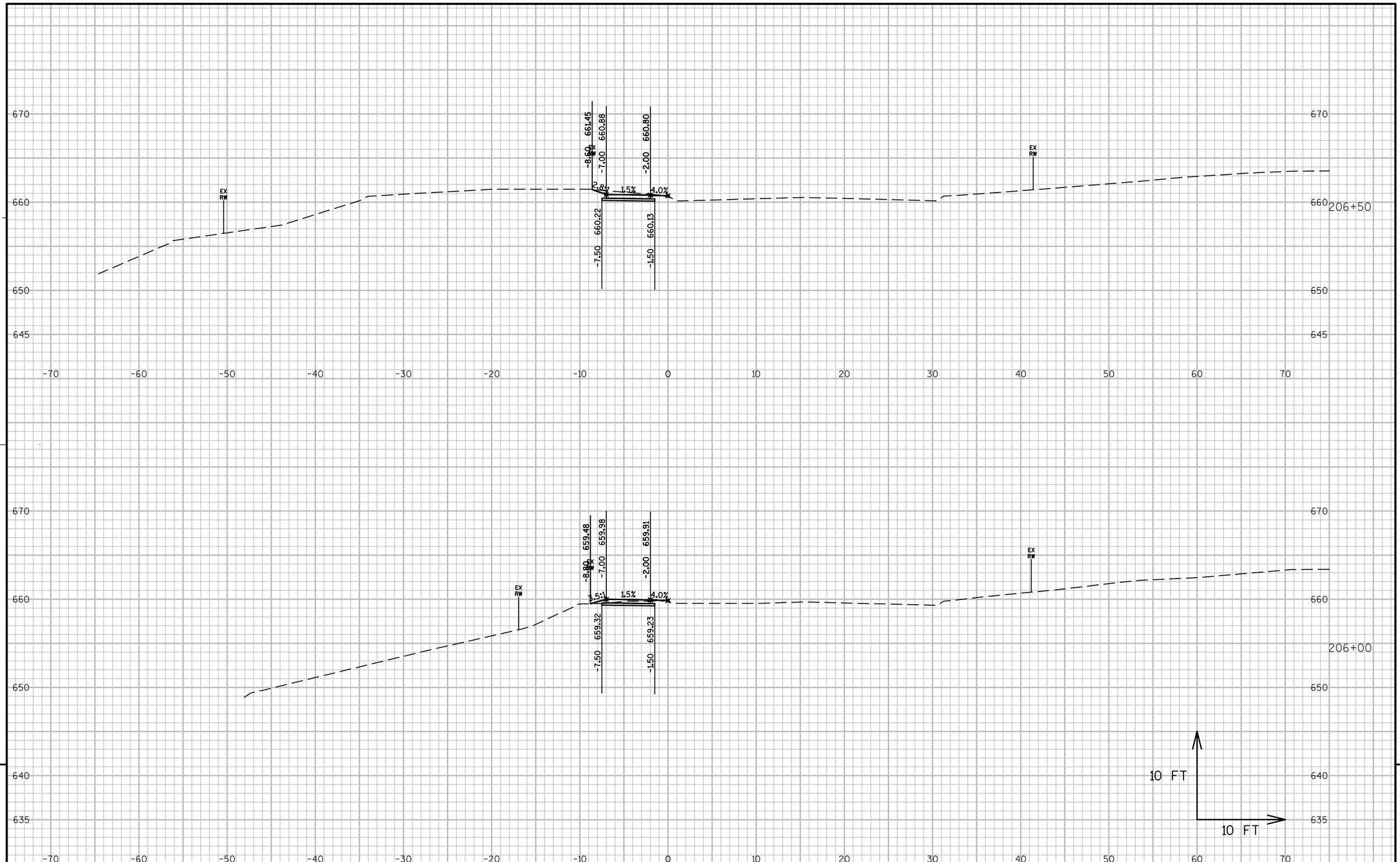
9

9

PROJECT NO: 4996--01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	CROSS SECTIONS	SHEET 402	E

FILE NAME : L:\PROJECTS\11744\DWG\090201_XS NORTH OF NEW JERSEY.DWG
LAYOUT NAME - 090201_XS NORTH OF NEW JERSEY - SECTION SHEET - (7)

PLOT DATE : 1/13/2015 1:08 PM PLOT BY : JUMP, KEVIN PLOT NAME : PLOT SCALE : 1" = 10'_XREF



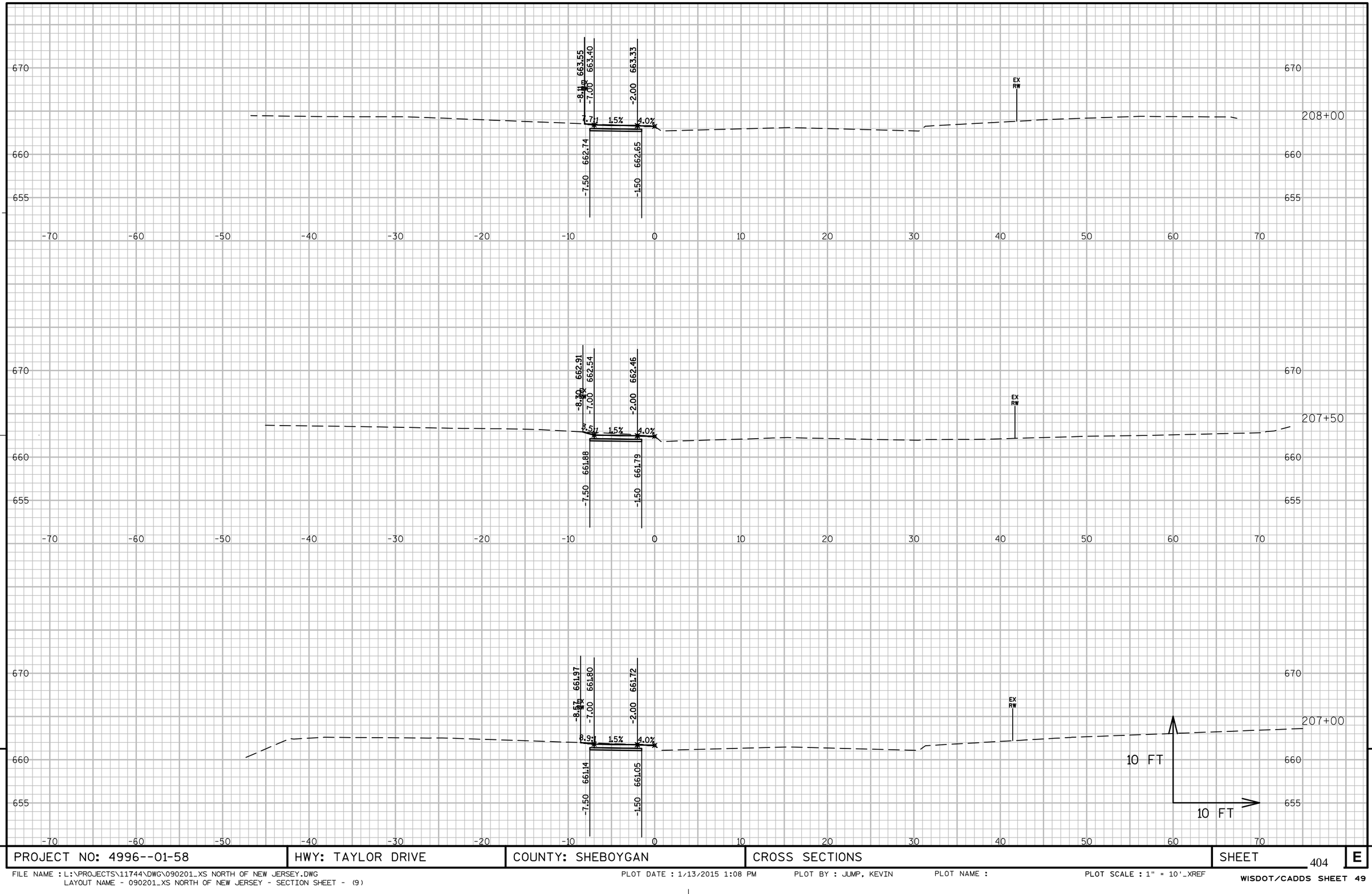
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9

PROJECT NO: 4996--01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	CROSS SECTIONS	SHEET 403	E

FILE NAME : L:\PROJECTS\11744\DWG\090201_XS NORTH OF NEW JERSEY.DWG
LAYOUT NAME - 090201_XS NORTH OF NEW JERSEY - SECTION SHEET - (8)

PLOT DATE : 1/13/2015 1:08 PM PLOT BY : JUMP, KEVIN PLOT NAME : PLOT SCALE : 1" = 10'_XREF



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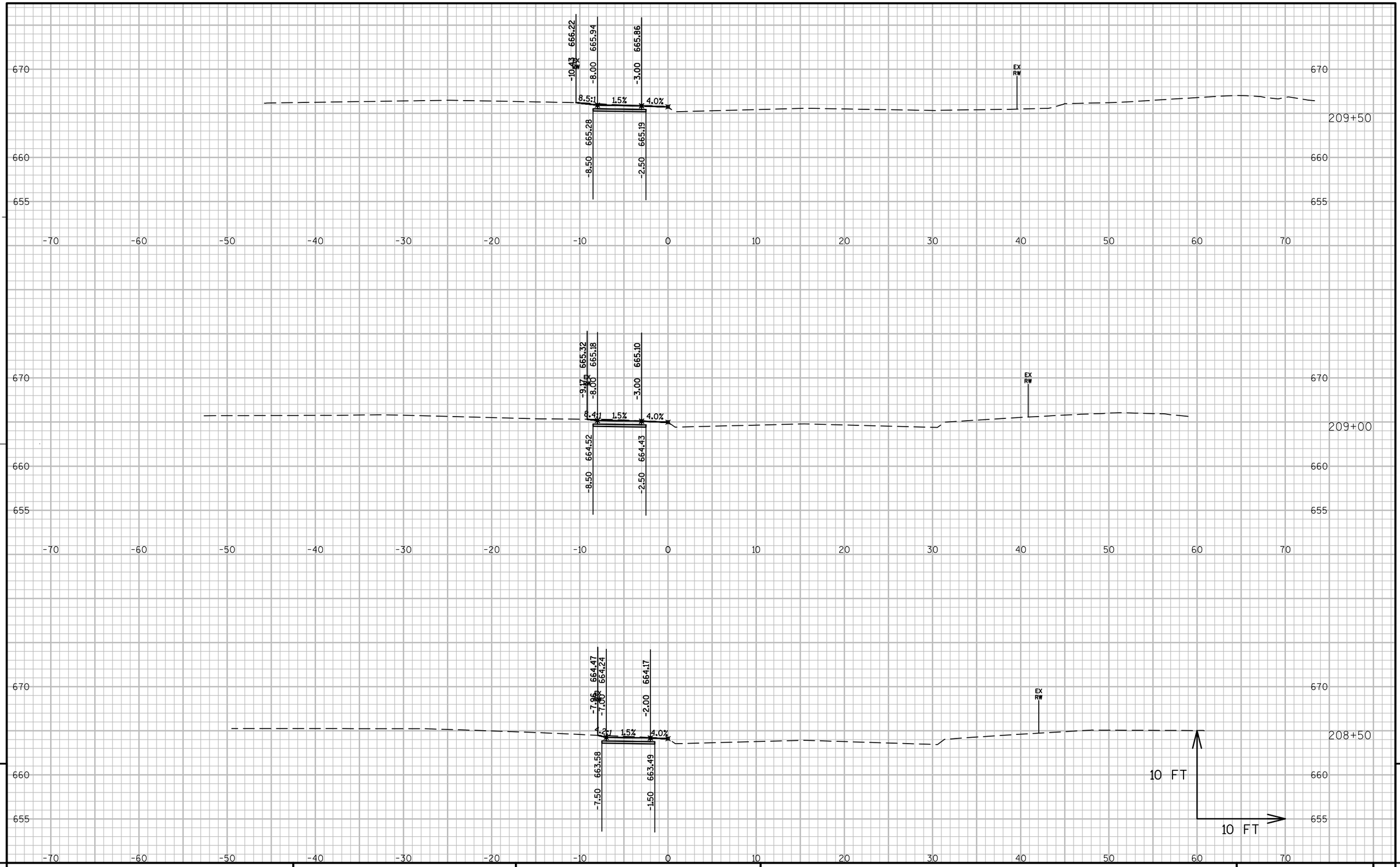
9

PROJECT NO: 4996--01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	CROSS SECTIONS	SHEET 404	E

FILE NAME : L:\PROJECTS\11744\DWG\090201_XS NORTH OF NEW JERSEY.DWG
LAYOUT NAME - 090201_XS NORTH OF NEW JERSEY - SECTION SHEET - (9)

PLOT DATE : 1/13/2015 1:08 PM PLOT BY : JUMP, KEVIN PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49



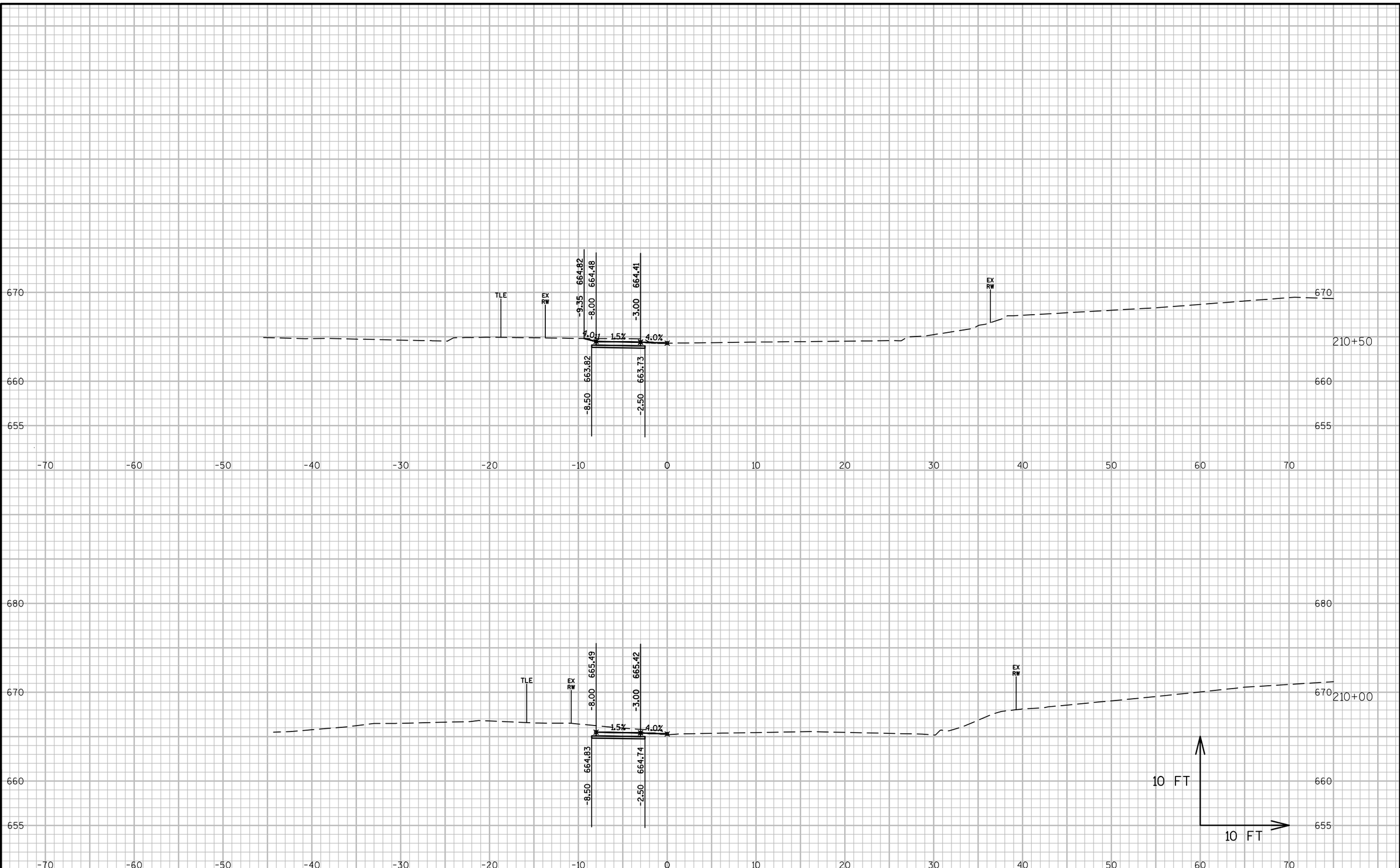
9

9

PROJECT NO: 4996--01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	CROSS SECTIONS	SHEET 405	E

FILE NAME : L:\PROJECTS\11744\DWG\090201_XS NORTH OF NEW JERSEY.DWG
LAYOUT NAME - 090201_XS NORTH OF NEW JERSEY - SECTION SHEET - (10)

PLOT DATE : 1/13/2015 1:09 PM PLOT BY : JUMP, KEVIN PLOT NAME : PLOT SCALE : 1" = 10'_XREF

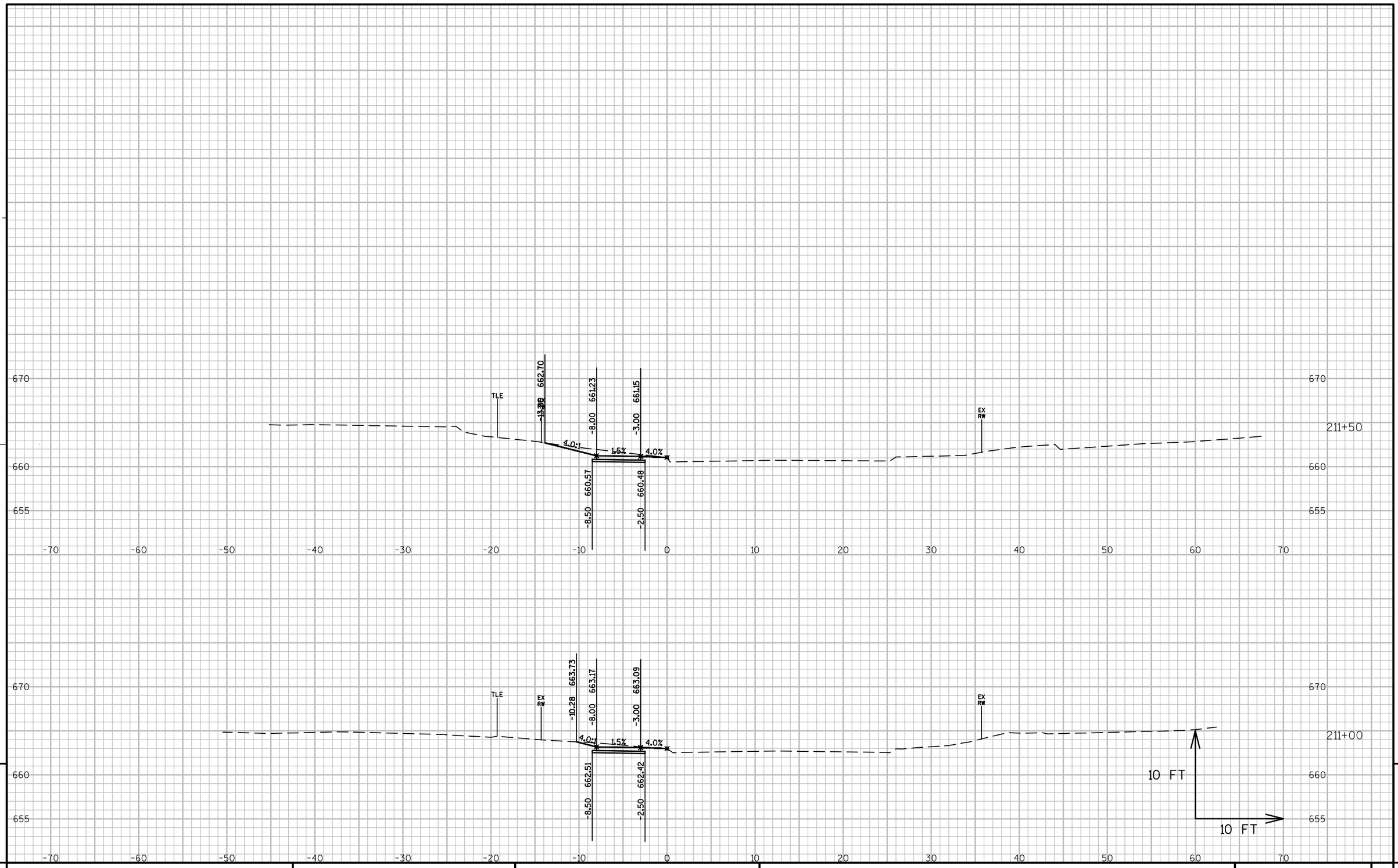


PROJECT NO: 4996--01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	CROSS SECTIONS	SHEET 406	E

FILE NAME : L:\PROJECTS\11744\DWG\090201_XS NORTH OF NEW JERSEY.DWG
LAYOUT NAME - 090201_XS NORTH OF NEW JERSEY - SECTION SHEET - (11)

PLOT DATE : 1/13/2015 1:09 PM PLOT BY : JUMP, KEVIN PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49



9

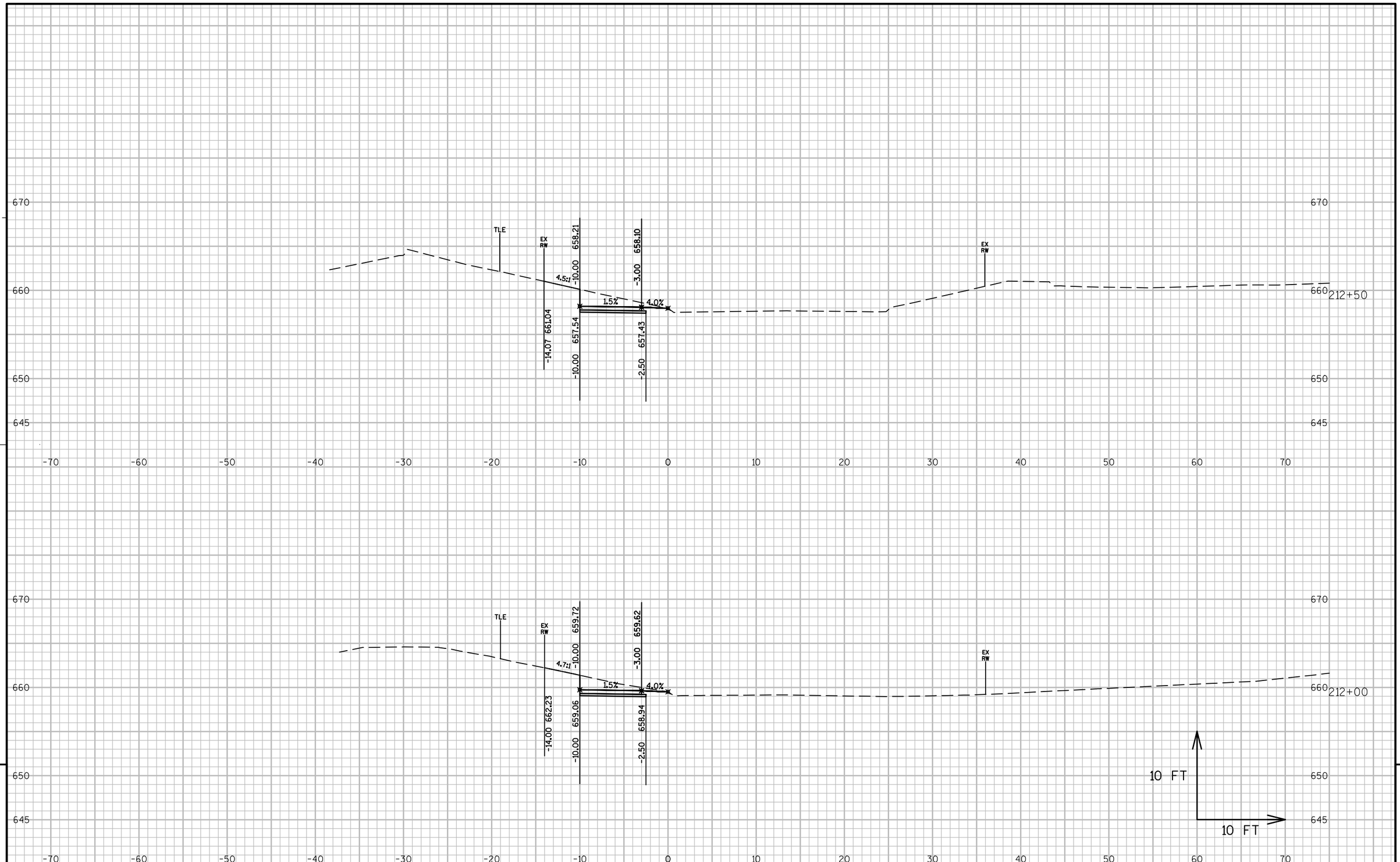
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PROJECT NO: 4996--01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	CROSS SECTIONS	SHEET 407	E

FILE NAME : L:\PROJECTS\11744\DWG\090201_XS NORTH OF NEW JERSEY.DWG
LAYOUT NAME - 090201_XS NORTH OF NEW JERSEY - SECTION SHEET - (12)

PLOT DATE : 1/13/2015 1:09 PM PLOT BY : JUMP, KEVIN PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49



9

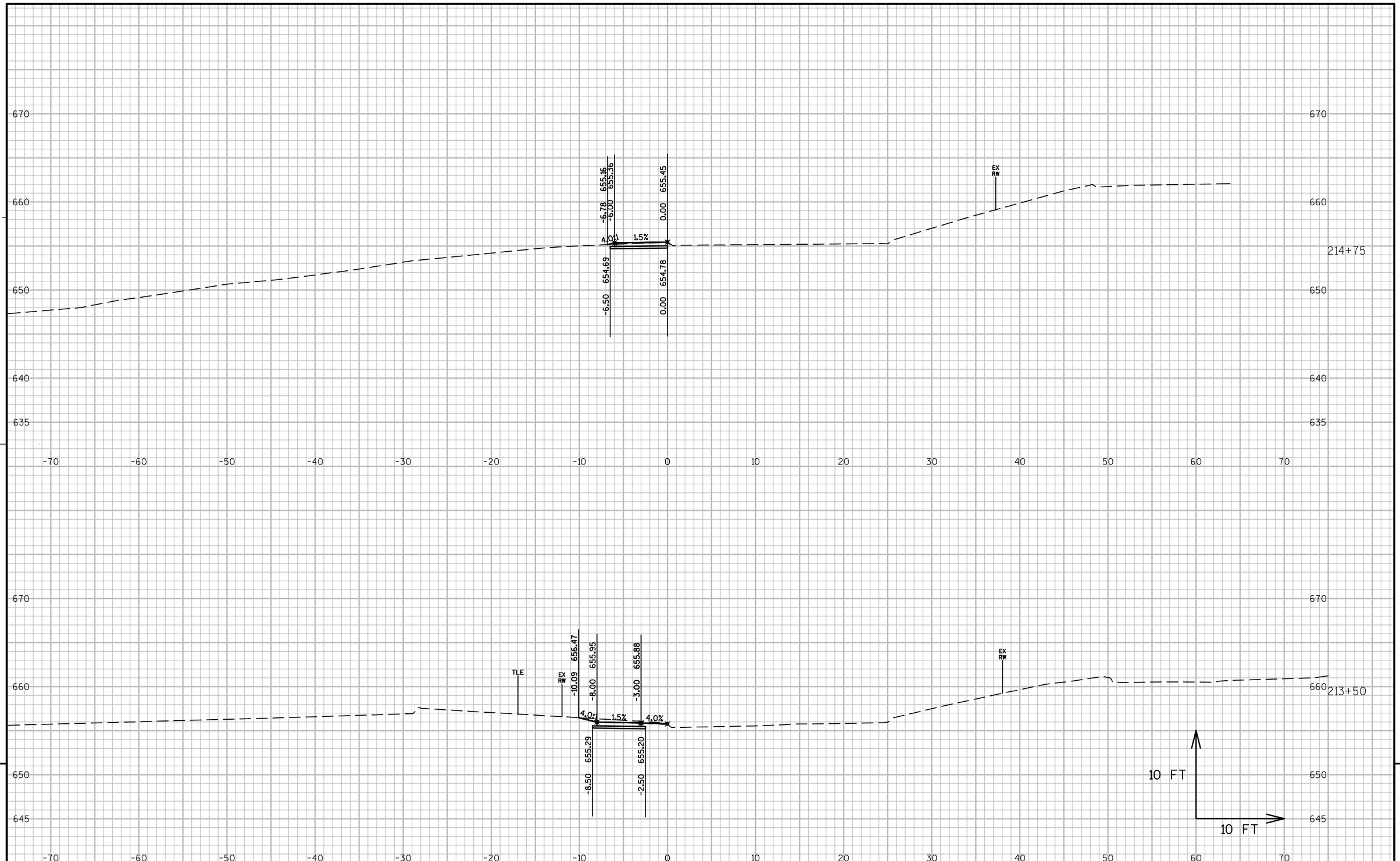
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PROJECT NO: 4996--01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	CROSS SECTIONS	SHEET 408	E

FILE NAME : L:\PROJECTS\11744\DWG\090201_XS NORTH OF NEW JERSEY.DWG
LAYOUT NAME - 090201_XS NORTH OF NEW JERSEY - SECTION SHEET - (13)

PLOT DATE : 1/13/2015 1:09 PM PLOT BY : JUMP, KEVIN PLOT NAME : PLOT SCALE : 1" = 10'_XREF

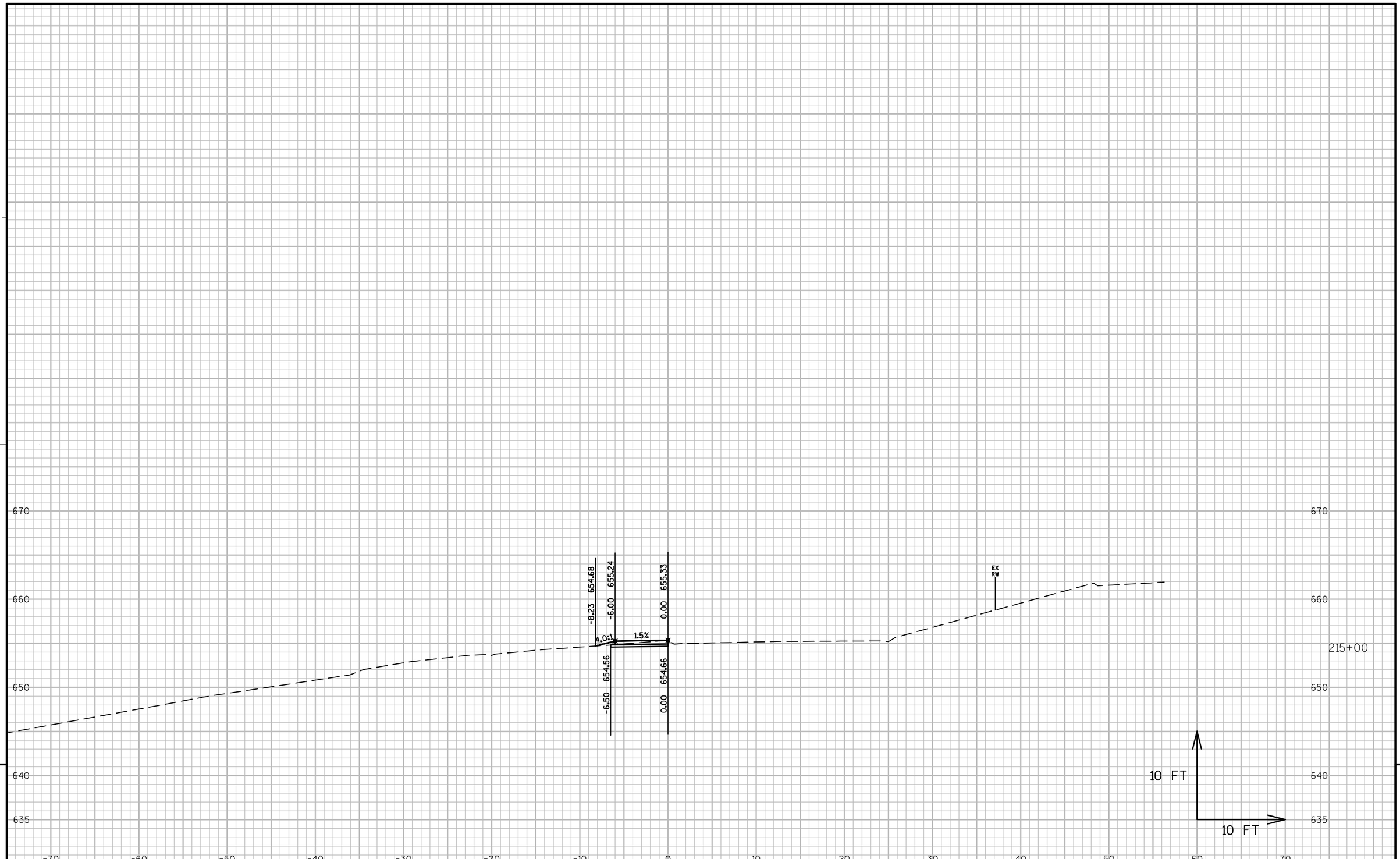
WISDOT/CADDS SHEET 49



PROJECT NO: 4996--01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	CROSS SECTIONS	SHEET 409	E

FILE NAME : L:\PROJECTS\11744\DWG\090201_XS NORTH OF NEW JERSEY.DWG
LAYOUT NAME - 090201_XS NORTH OF NEW JERSEY - SECTION SHEET - (14)

PLOT DATE : 1/13/2015 1:09 PM PLOT BY : JUMP, KEVIN PLOT NAME : PLOT SCALE : 1" = 10'_XREF



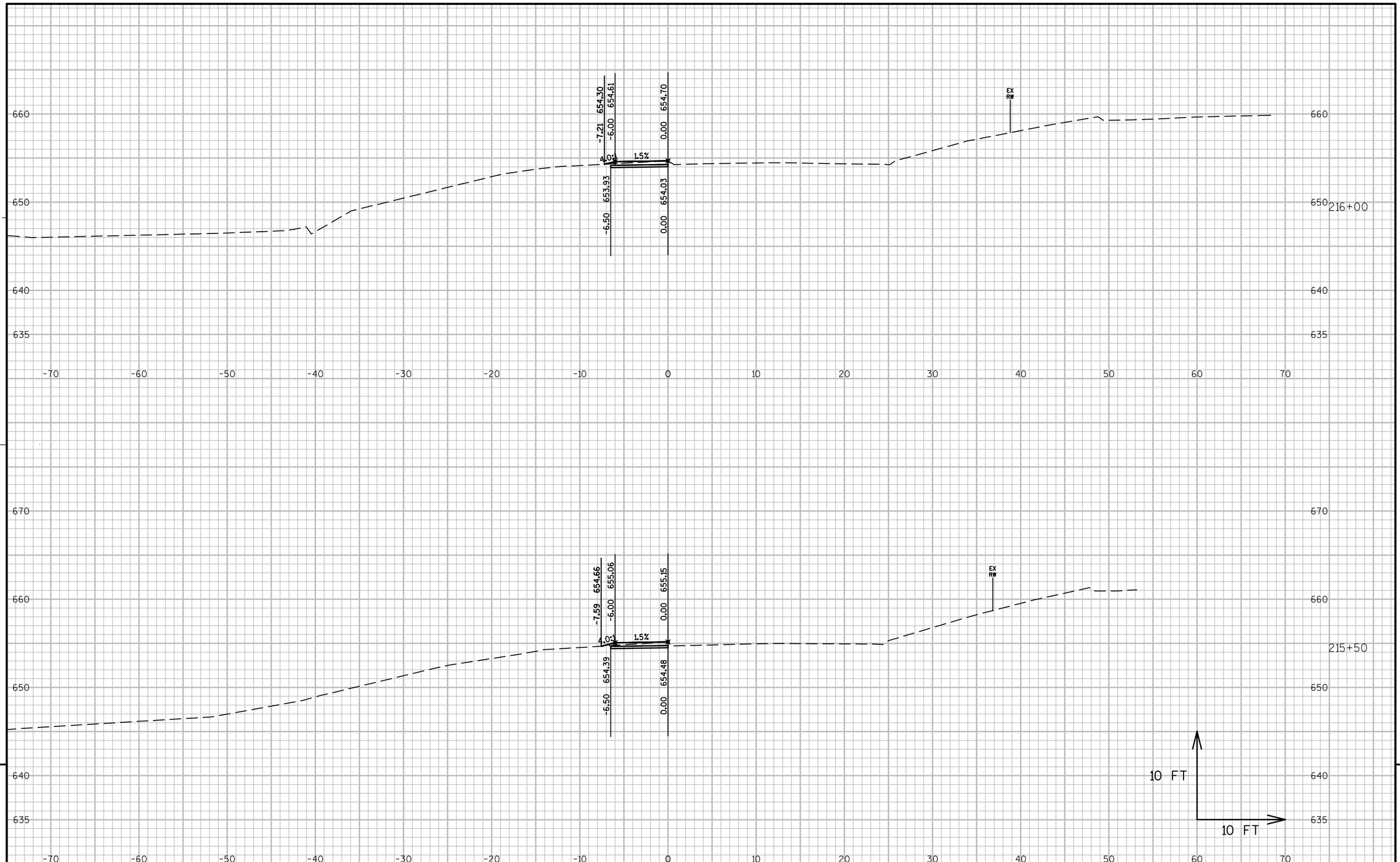
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9

PROJECT NO: 4996--01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	CROSS SECTIONS	SHEET 410	E

FILE NAME : L:\PROJECTS\11744\DWG\090201_XS NORTH OF NEW JERSEY.DWG
LAYOUT NAME - 090201_XS NORTH OF NEW JERSEY - SECTION SHEET - (15)

PLOT DATE : 1/13/2015 1:09 PM PLOT BY : JUMP, KEVIN PLOT NAME : PLOT SCALE : 1" = 10'_XREF



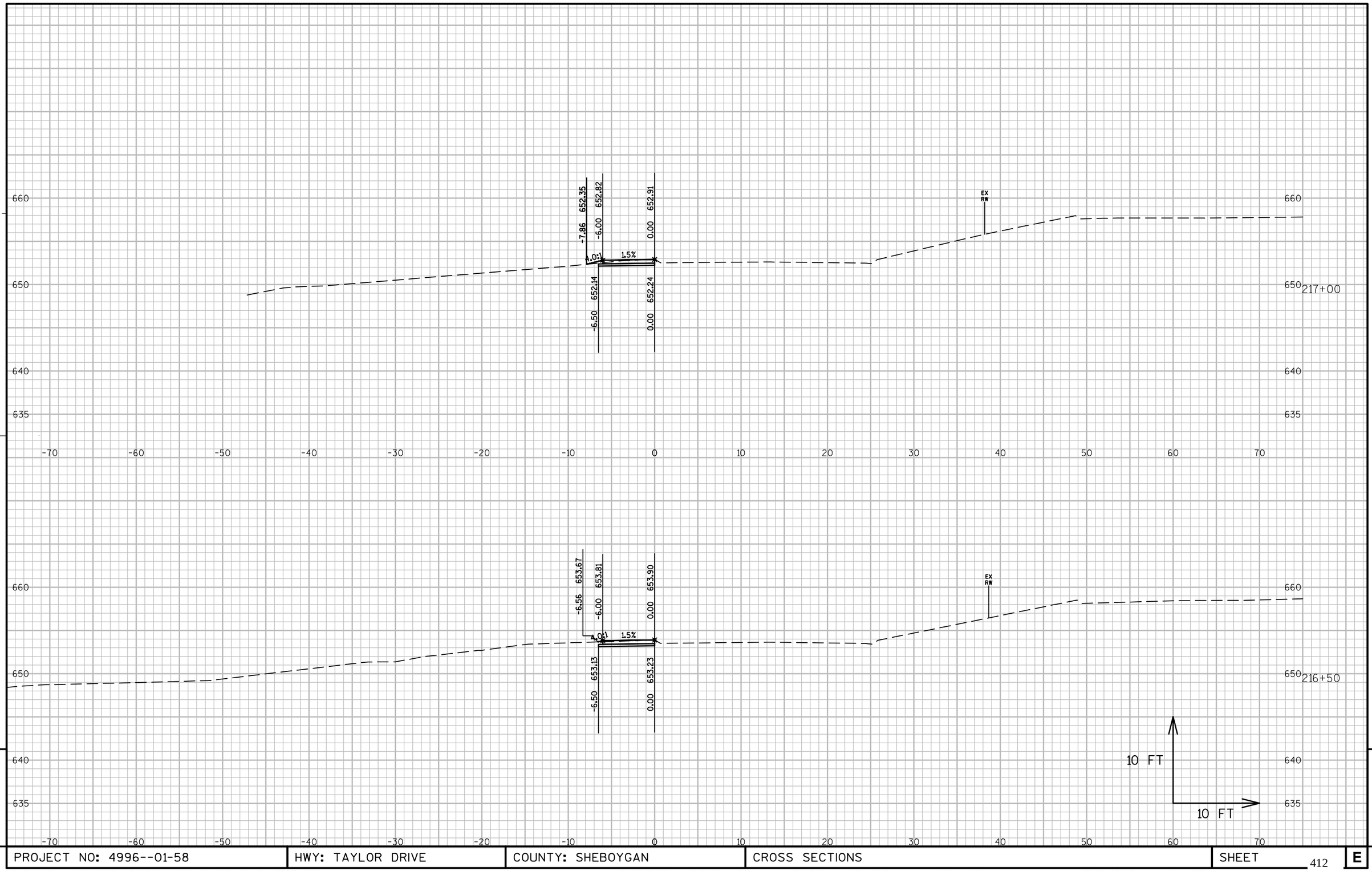
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9

PROJECT NO: 4996--01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	CROSS SECTIONS	SHEET 411	E

FILE NAME : L:\PROJECTS\11744\DWG\090201_XS NORTH OF NEW JERSEY.DWG
LAYOUT NAME - 090201_XS NORTH OF NEW JERSEY - SECTION SHEET - (16)

PLOT DATE : 1/13/2015 1:10 PM PLOT BY : JUMP, KEVIN PLOT NAME : PLOT SCALE : 1" = 10'_XREF



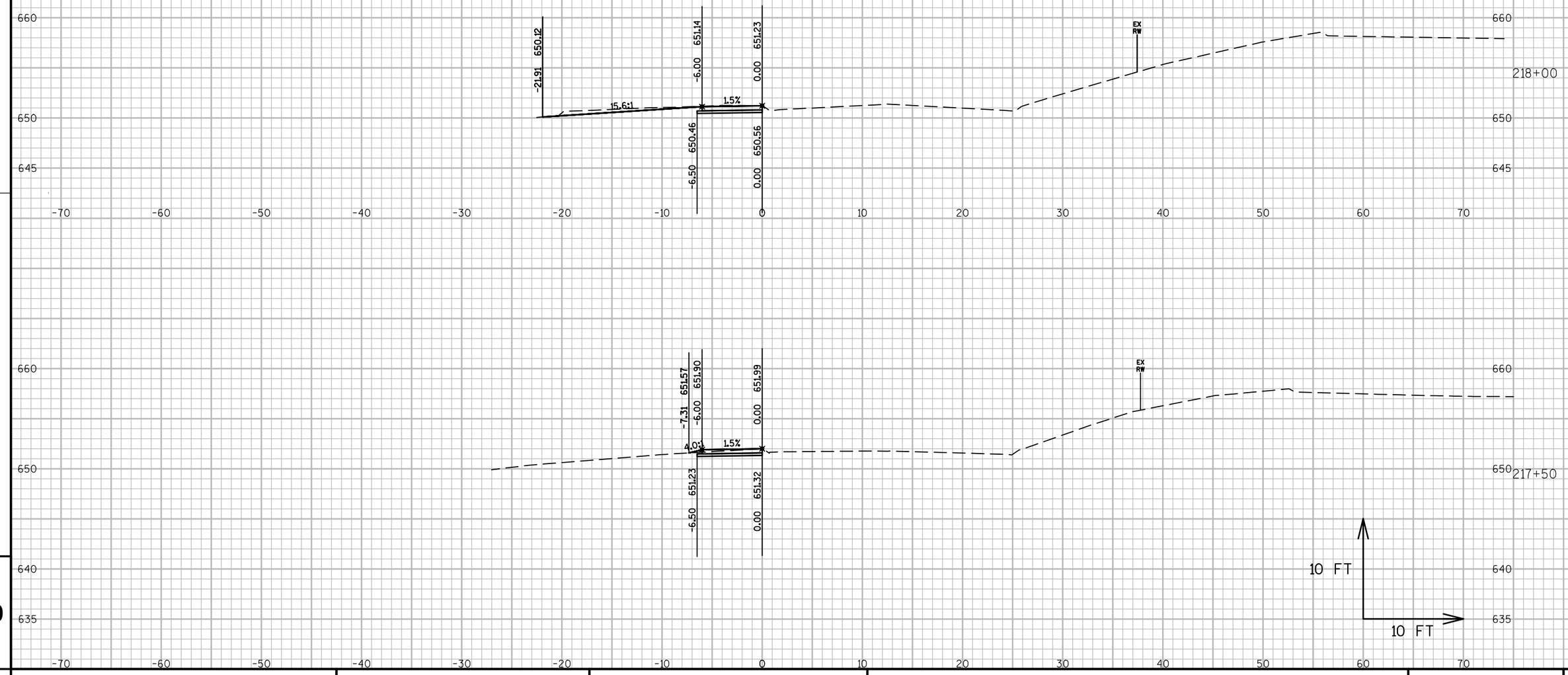
9

9

PROJECT NO: 4996--01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	CROSS SECTIONS	SHEET 412	E

FILE NAME : L:\PROJECTS\11744\DWG\090201_XS NORTH OF NEW JERSEY.DWG
LAYOUT NAME - 090201_XS NORTH OF NEW JERSEY - SECTION SHEET - (17)

PLOT DATE : 1/13/2015 1:10 PM PLOT BY : JUMP, KEVIN PLOT NAME : PLOT SCALE : 1" = 10'_XREF

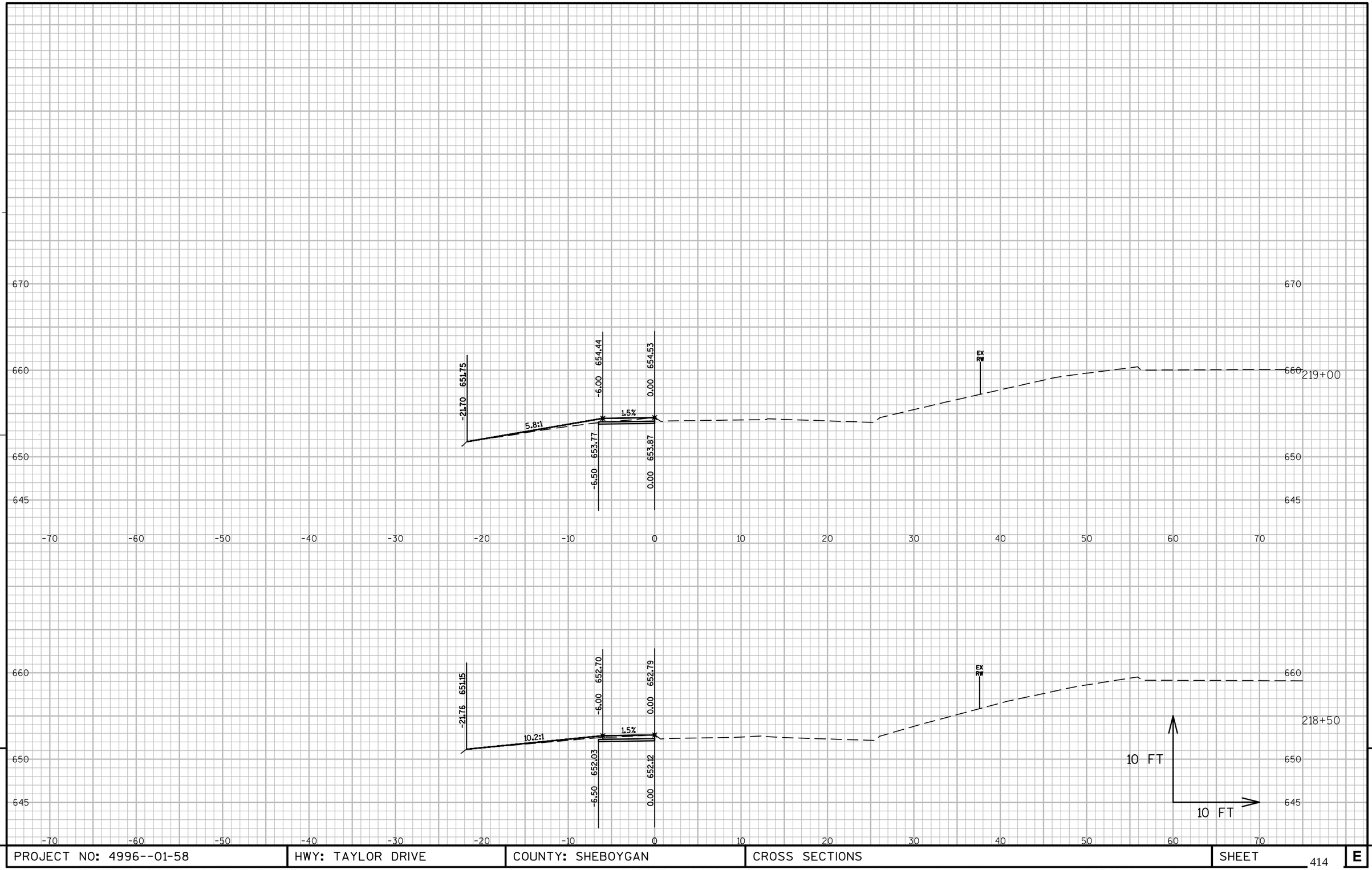


PROJECT NO: 4996--01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	CROSS SECTIONS	SHEET 413	E

FILE NAME : L:\PROJECTS\11744\DWG\090201_XS NORTH OF NEW JERSEY.DWG
LAYOUT NAME - 090201_XS NORTH OF NEW JERSEY - SECTION SHEET - (18)

PLOT DATE : 1/13/2015 1:10 PM PLOT BY : JUMP, KEVIN PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49



9

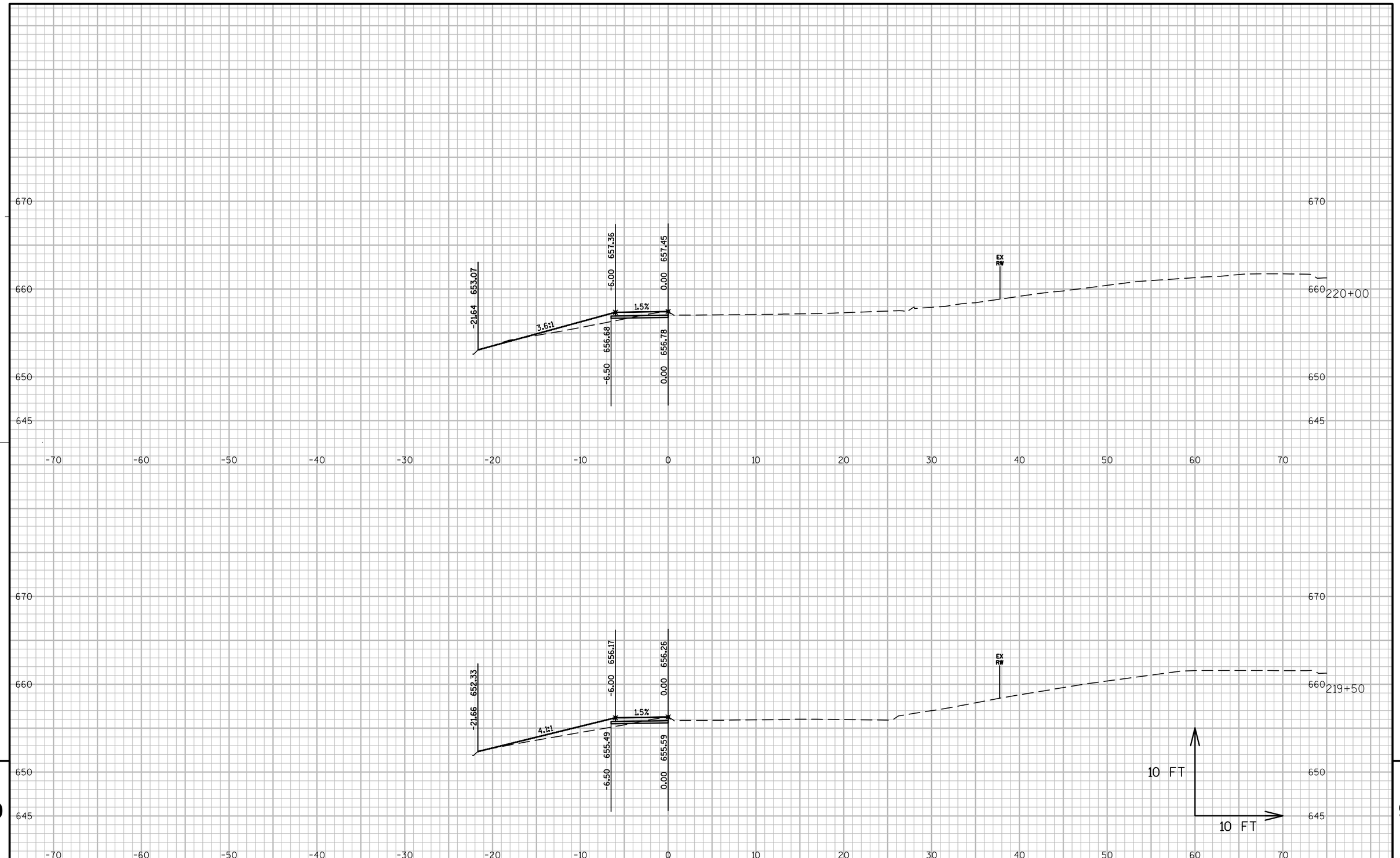
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PROJECT NO: 4996--01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	CROSS SECTIONS	SHEET 414	E

FILE NAME : L:\PROJECTS\11744\DWG\090201_XS NORTH OF NEW JERSEY.DWG
LAYOUT NAME - 090201_XS NORTH OF NEW JERSEY - SECTION SHEET - (19)

PLOT DATE : 1/13/2015 1:10 PM PLOT BY : JUMP, KEVIN PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49



9

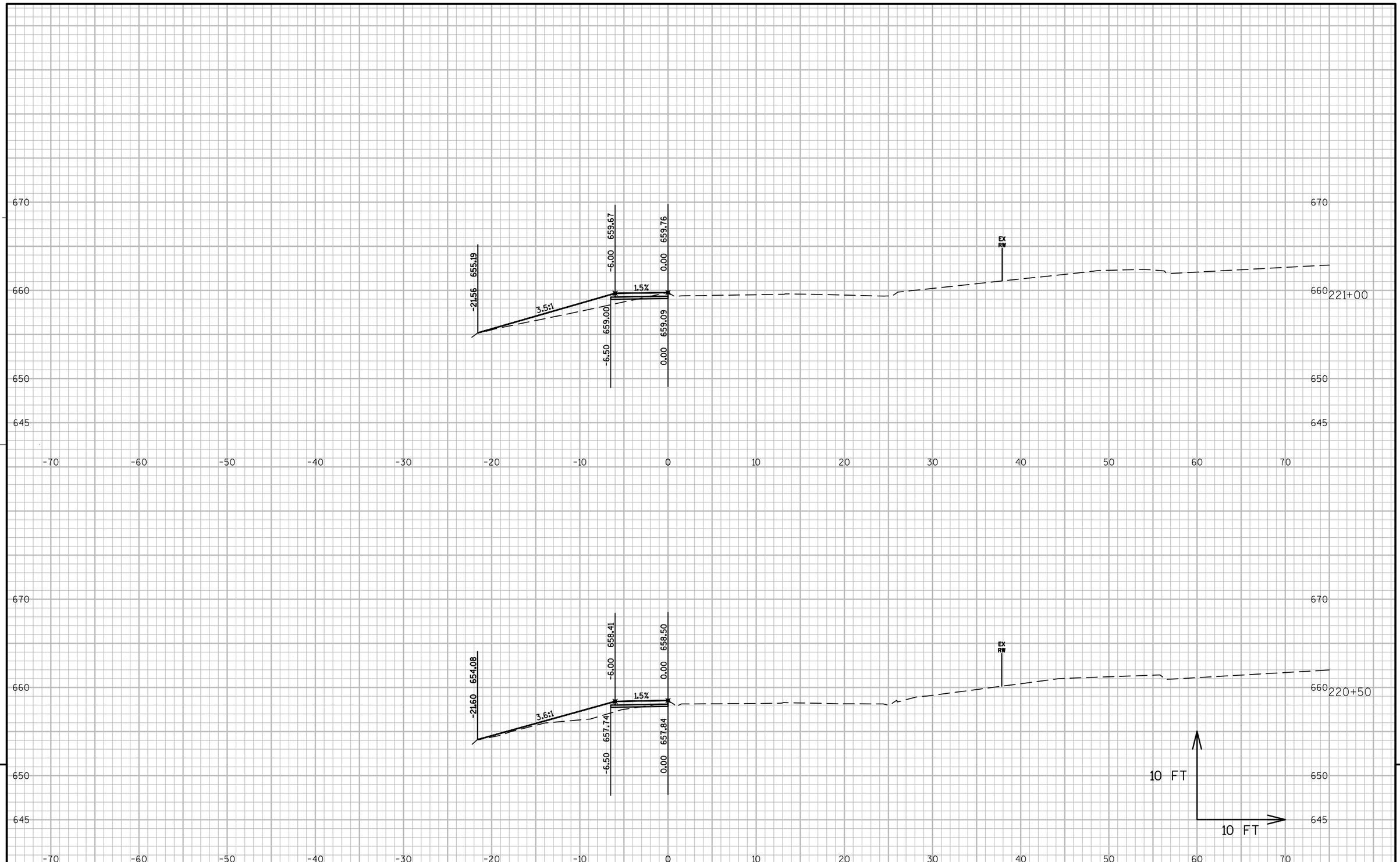
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PROJECT NO: 4996--01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	CROSS SECTIONS	SHEET 415	E

FILE NAME : L:\PROJECTS\11744\DWG\090201_XS NORTH OF NEW JERSEY.DWG
LAYOUT NAME - 090201_XS NORTH OF NEW JERSEY - SECTION SHEET - (20)

PLOT DATE : 1/13/2015 1:10 PM PLOT BY : JUMP, KEVIN PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49



9

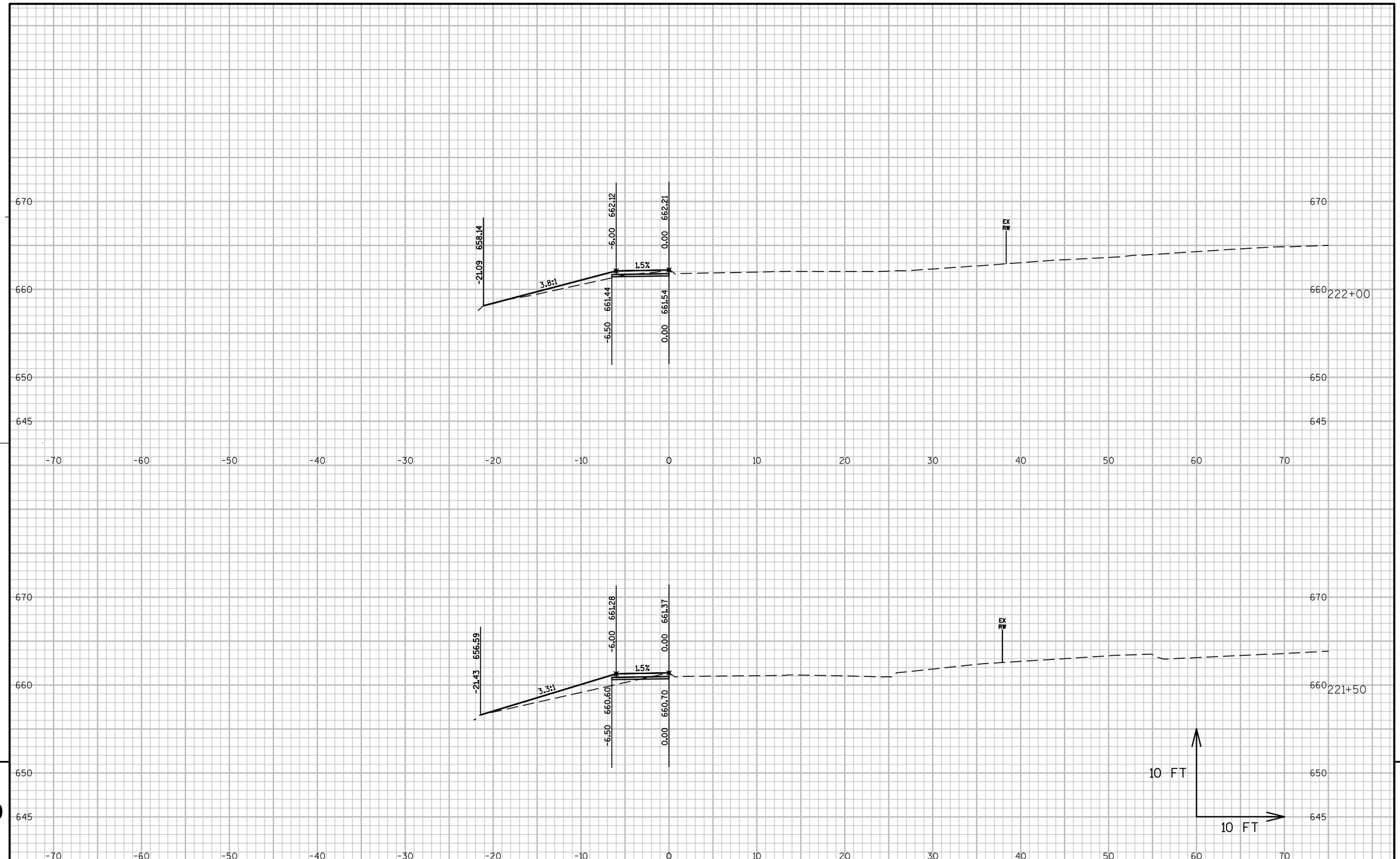
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PROJECT NO: 4996--01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	CROSS SECTIONS	SHEET 416	E

FILE NAME : L:\PROJECTS\11744\DWG\090201_XS NORTH OF NEW JERSEY.DWG
LAYOUT NAME - 090201_XS NORTH OF NEW JERSEY - SECTION SHEET - (21)

PLOT DATE : 1/13/2015 1:11 PM PLOT BY : JUMP, KEVIN PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49

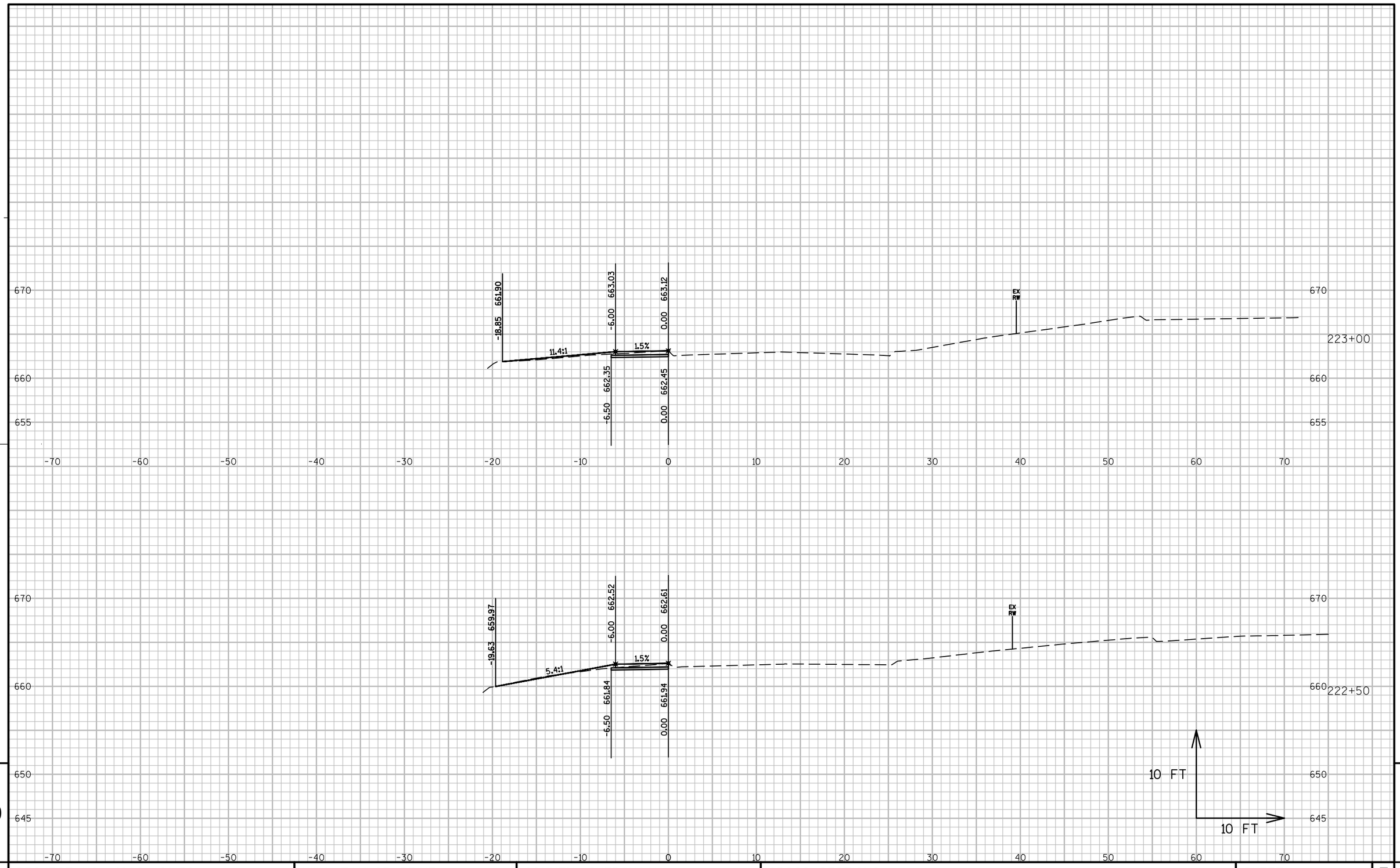


PROJECT NO: 4996--01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	CROSS SECTIONS	SHEET 417	E

FILE NAME : L:\PROJECTS\11744\DWG\090201_XS NORTH OF NEW JERSEY.DWG
LAYOUT NAME - 090201_XS NORTH OF NEW JERSEY - SECTION SHEET - (22)

PLOT DATE : 1/13/2015 1:11 PM PLOT BY : JUMP, KEVIN PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49



9

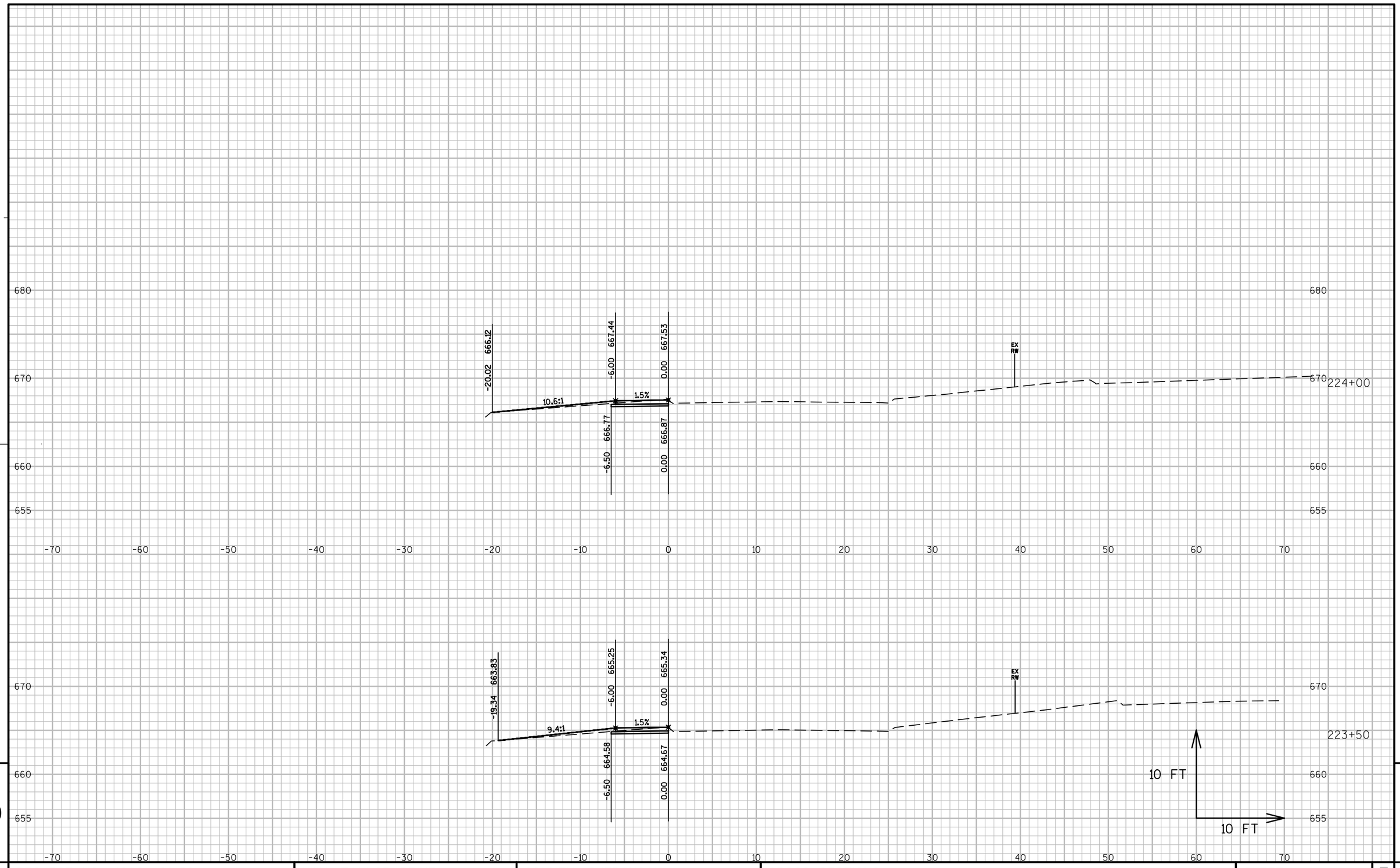
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PROJECT NO: 4996--01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	CROSS SECTIONS	SHEET 418	E

FILE NAME : L:\PROJECTS\11744\DWG\090201_XS NORTH OF NEW JERSEY.DWG
LAYOUT NAME - 090201_XS NORTH OF NEW JERSEY - SECTION SHEET - (23)

PLOT DATE : 1/13/2015 1:11 PM PLOT BY : JUMP, KEVIN PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49



9

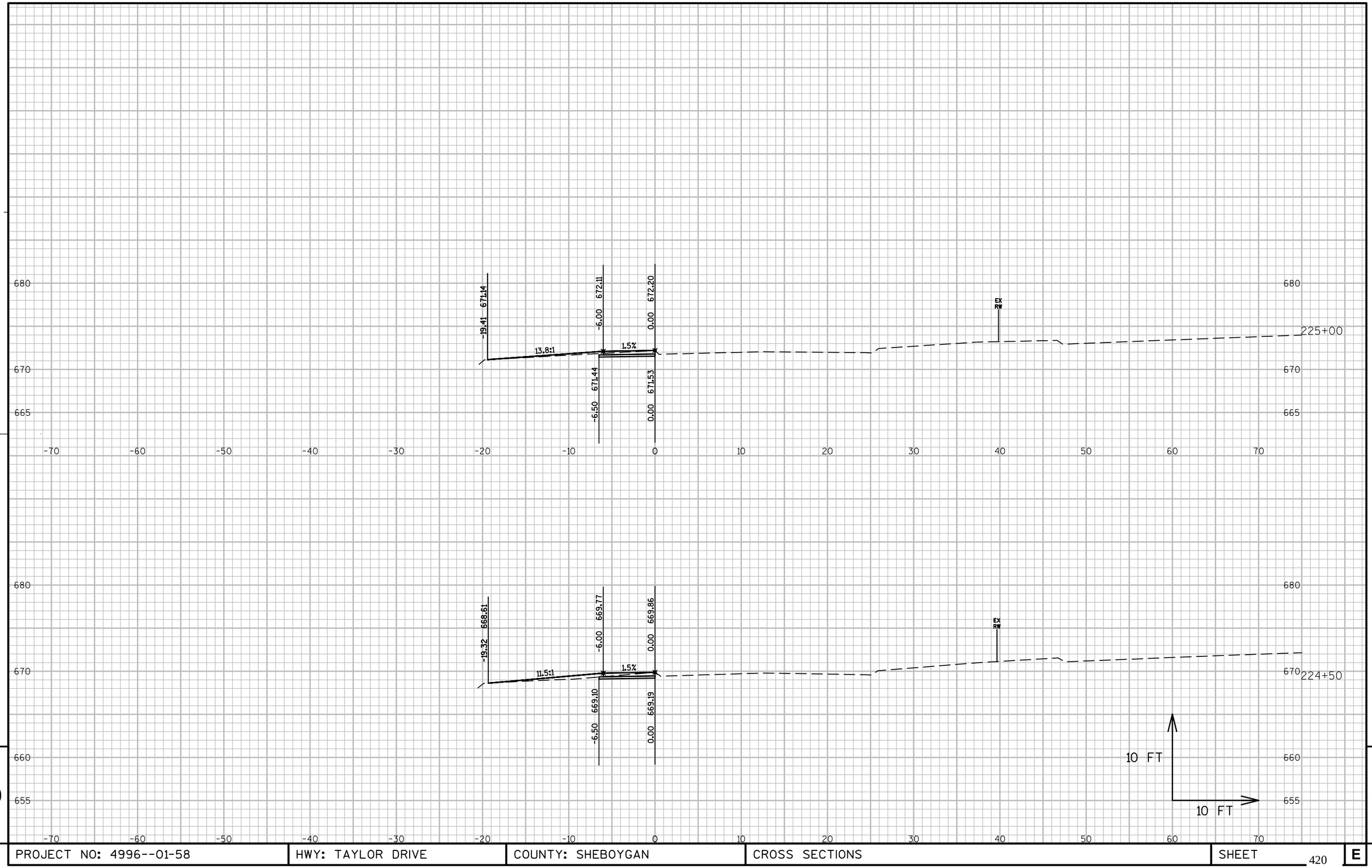
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PROJECT NO: 4996--01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	CROSS SECTIONS	SHEET 419	E

FILE NAME : L:\PROJECTS\11744\DWG\090201_XS NORTH OF NEW JERSEY.DWG
LAYOUT NAME - 090201_XS NORTH OF NEW JERSEY - SECTION SHEET - (24)

PLOT DATE : 1/13/2015 1:11 PM PLOT BY : JUMP, KEVIN PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49



9

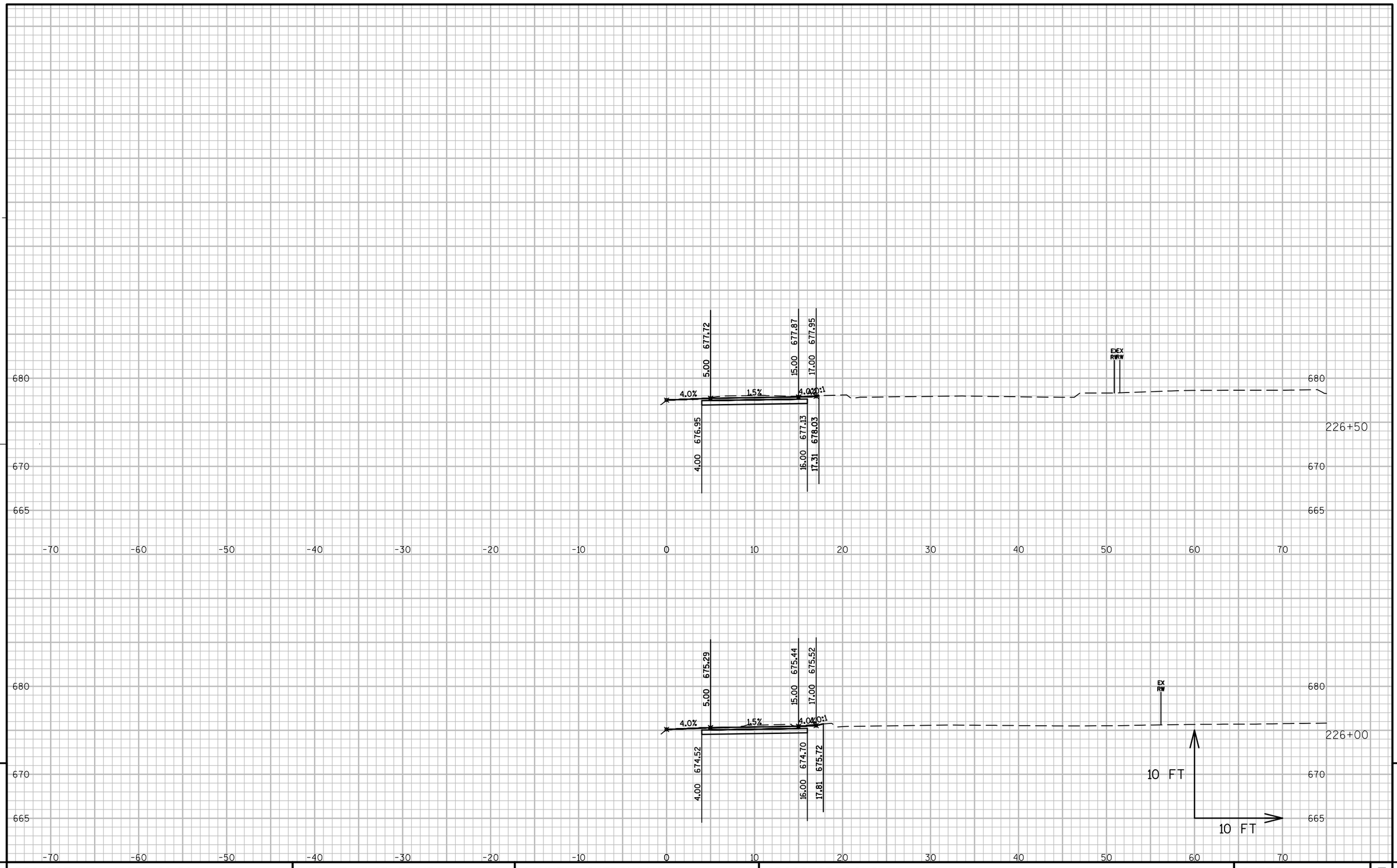
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PROJECT NO: 4996--01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	CROSS SECTIONS	SHEET 420	E

FILE NAME : L:\PROJECTS\11744\DWG\090201_XS NORTH OF NEW JERSEY.DWG
LAYOUT NAME - 090201_XS NORTH OF NEW JERSEY - SECTION SHEET - (25)

PLOT DATE : 1/13/2015 1:11 PM PLOT BY : JUMP, KEVIN PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49

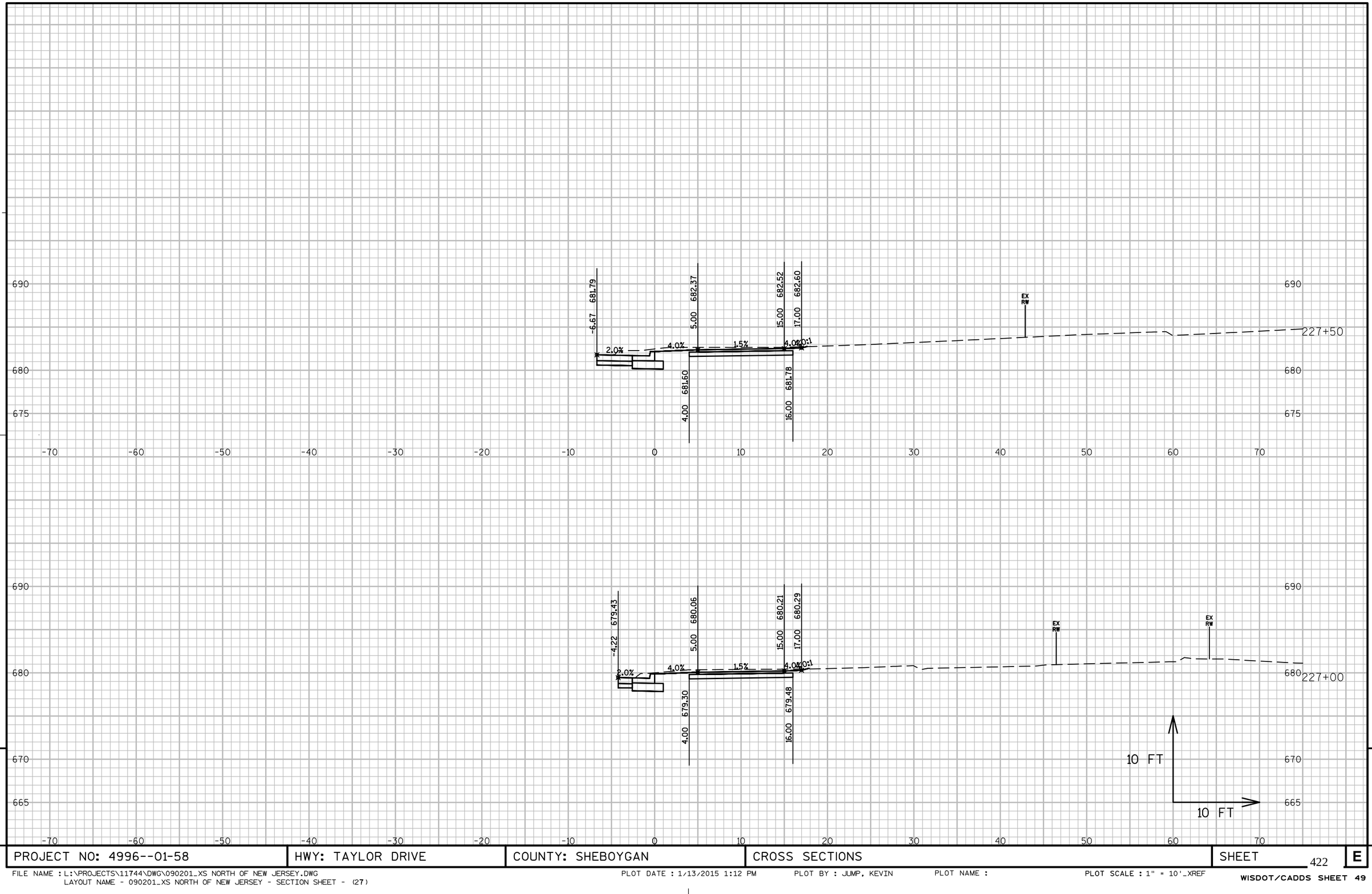


PROJECT NO: 4996--01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	CROSS SECTIONS	SHEET 421	E

FILE NAME : L:\PROJECTS\11744\DWG\090201_XS NORTH OF NEW JERSEY.DWG
LAYOUT NAME - 090201_XS NORTH OF NEW JERSEY - SECTION SHEET - (26)

PLOT DATE : 1/13/2015 1:12 PM PLOT BY : JUMP, KEVIN PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49



9

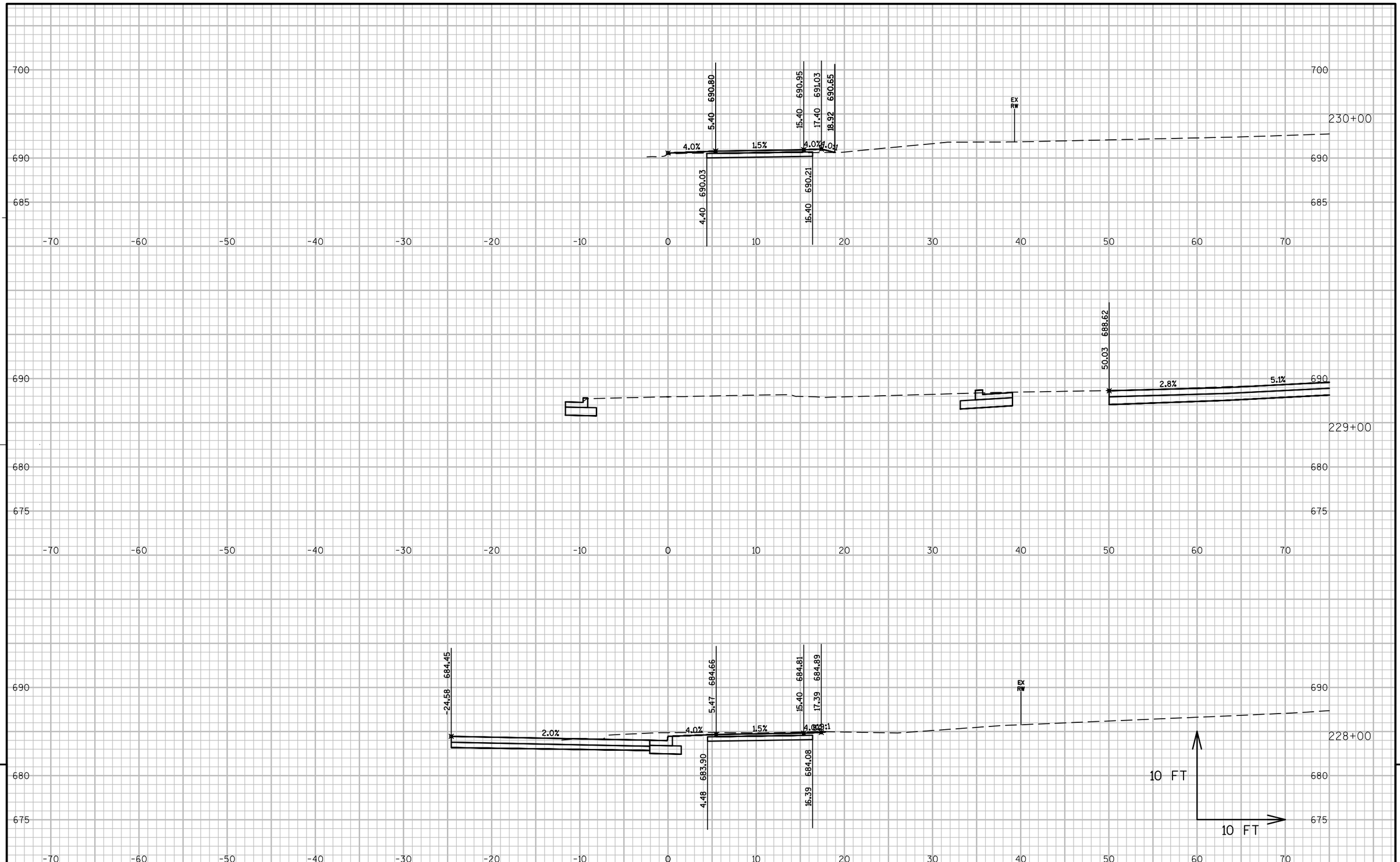
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PROJECT NO: 4996--01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	CROSS SECTIONS	SHEET 422	E

FILE NAME : L:\PROJECTS\11744\DWG\090201_XS NORTH OF NEW JERSEY.DWG
LAYOUT NAME - 090201_XS NORTH OF NEW JERSEY - SECTION SHEET - (27)

PLOT DATE : 1/13/2015 1:12 PM PLOT BY : JUMP, KEVIN PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49

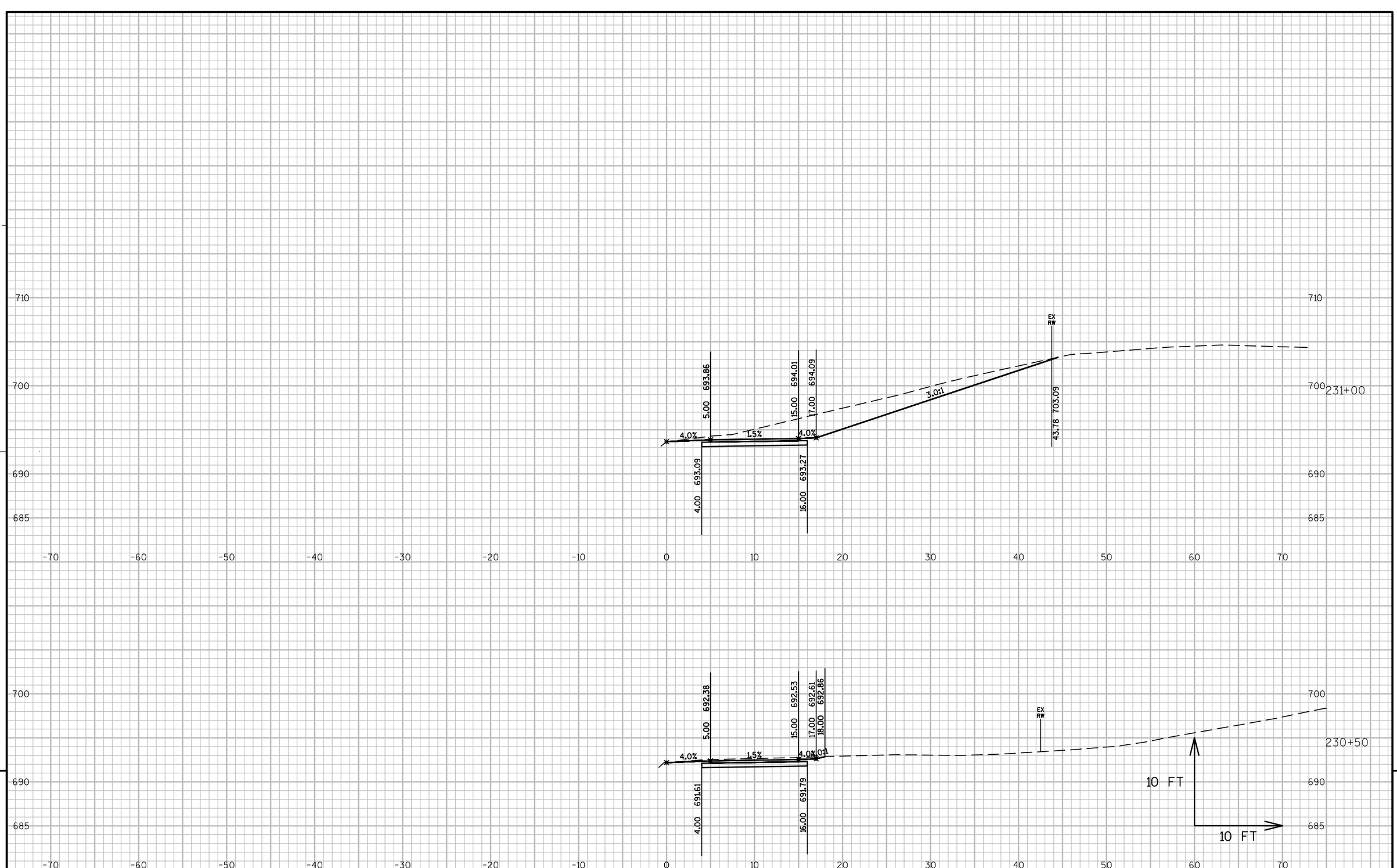


PROJECT NO: 4996--01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	CROSS SECTIONS	SHEET 423	E

FILE NAME : L:\PROJECTS\11744\DWG\090201_XS NORTH OF NEW JERSEY.DWG
LAYOUT NAME - 090201_XS NORTH OF NEW JERSEY - SECTION SHEET - (28)

PLOT DATE : 1/13/2015 1:12 PM PLOT BY : JUMP, KEVIN PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49

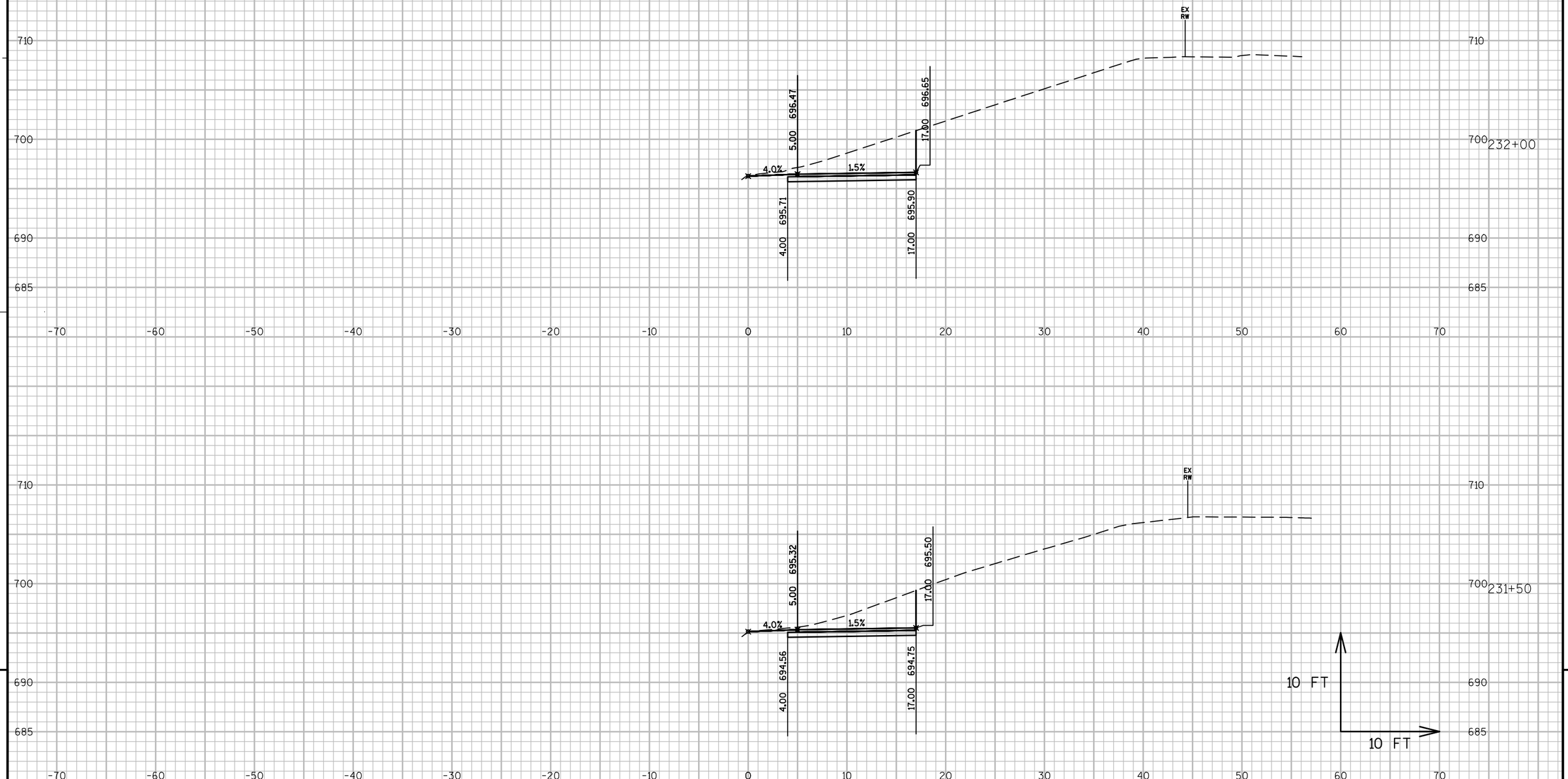


PROJECT NO: 4996--01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	CROSS SECTIONS	SHEET 424	E

FILE NAME : L:\PROJECTS\11744\DWG\090201_XS NORTH OF NEW JERSEY.DWG
LAYOUT NAME - 090201_XS NORTH OF NEW JERSEY - SECTION SHEET - (29)

PLOT DATE : 1/13/2015 1:12 PM PLOT BY : JUMP, KEVIN PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49



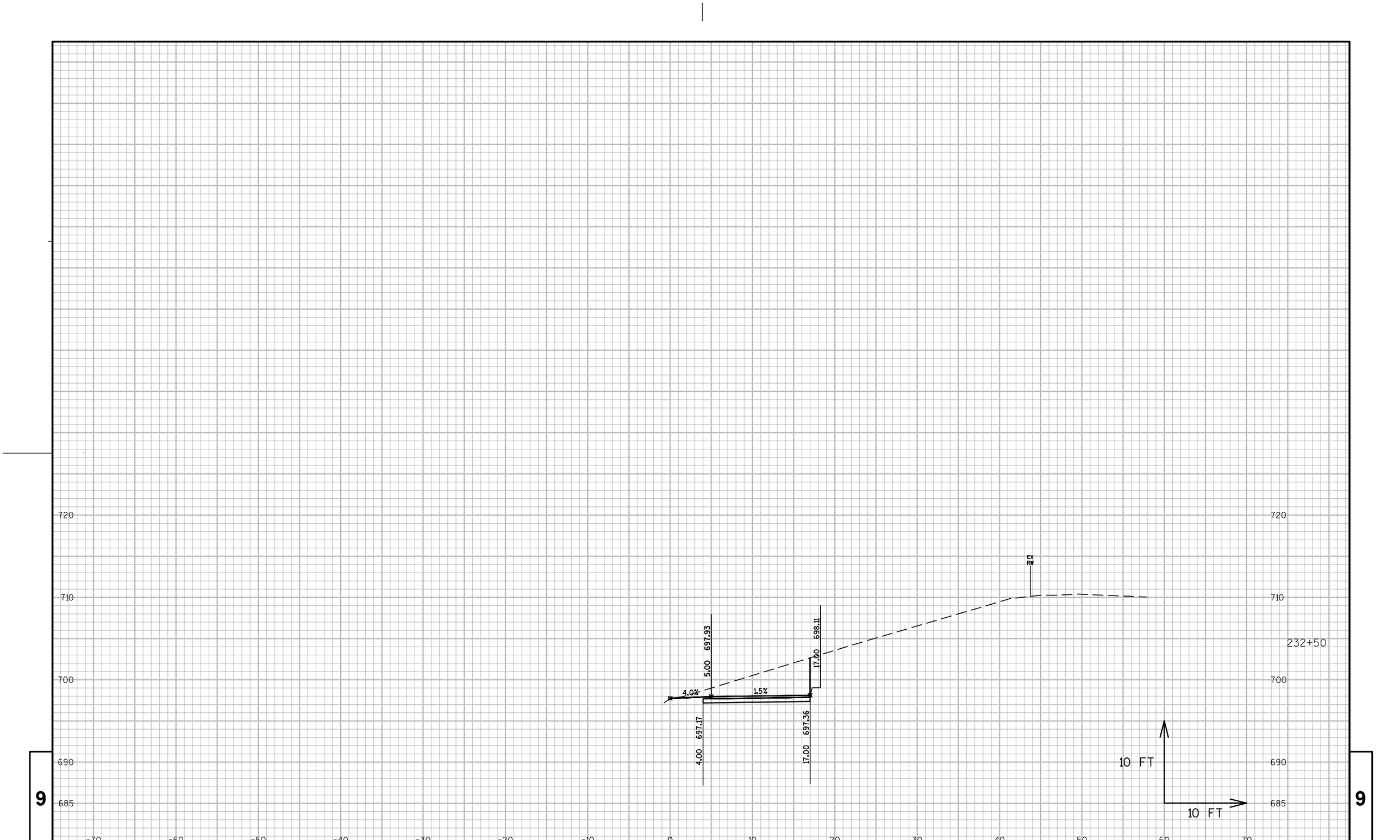
9

9

PROJECT NO: 4996--01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	CROSS SECTIONS	SHEET 425	E

FILE NAME : L:\PROJECTS\11744\DWG\090201_XS NORTH OF NEW JERSEY.DWG
LAYOUT NAME - 090201_XS NORTH OF NEW JERSEY - SECTION SHEET - (30)

PLOT DATE : 1/13/2015 1:12 PM PLOT BY : JUMP, KEVIN PLOT NAME : PLOT SCALE : 1" = 10'_XREF



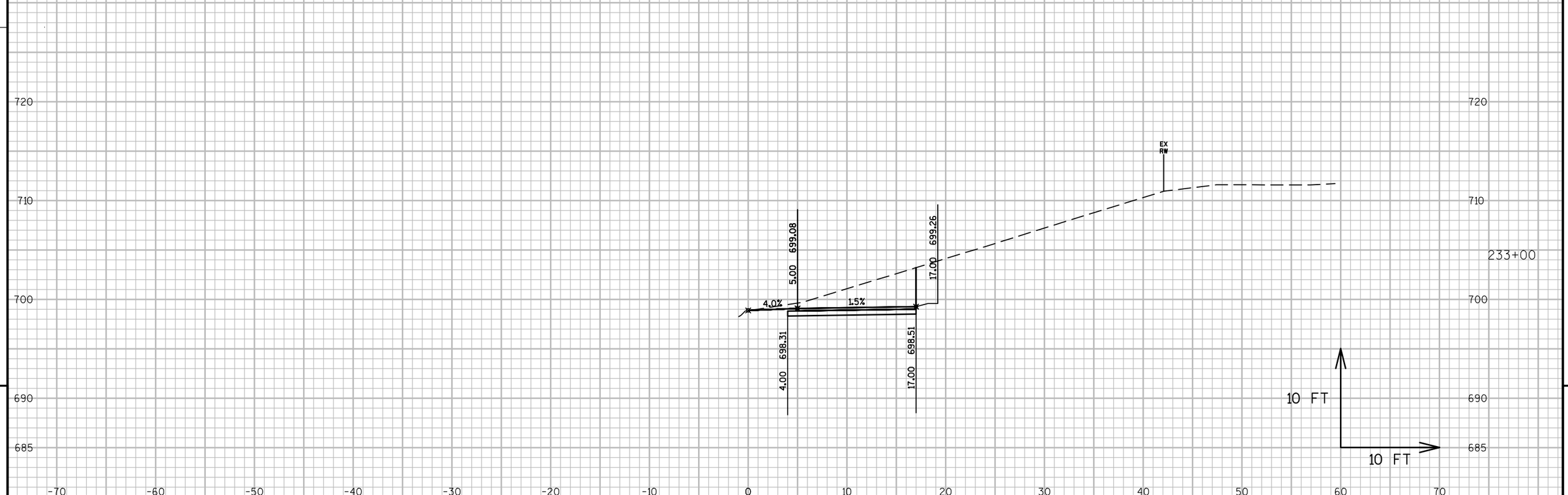
9

9

PROJECT NO: 4996--01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	CROSS SECTIONS	SHEET 426	E

FILE NAME : L:\PROJECTS\11744\DWG\090201_XS NORTH OF NEW JERSEY.DWG
LAYOUT NAME - 090201_XS NORTH OF NEW JERSEY - SECTION SHEET - (31)

PLOT DATE : 1/13/2015 1:13 PM PLOT BY : JUMP, KEVIN PLOT NAME : PLOT SCALE : 1" = 10'_XREF



9

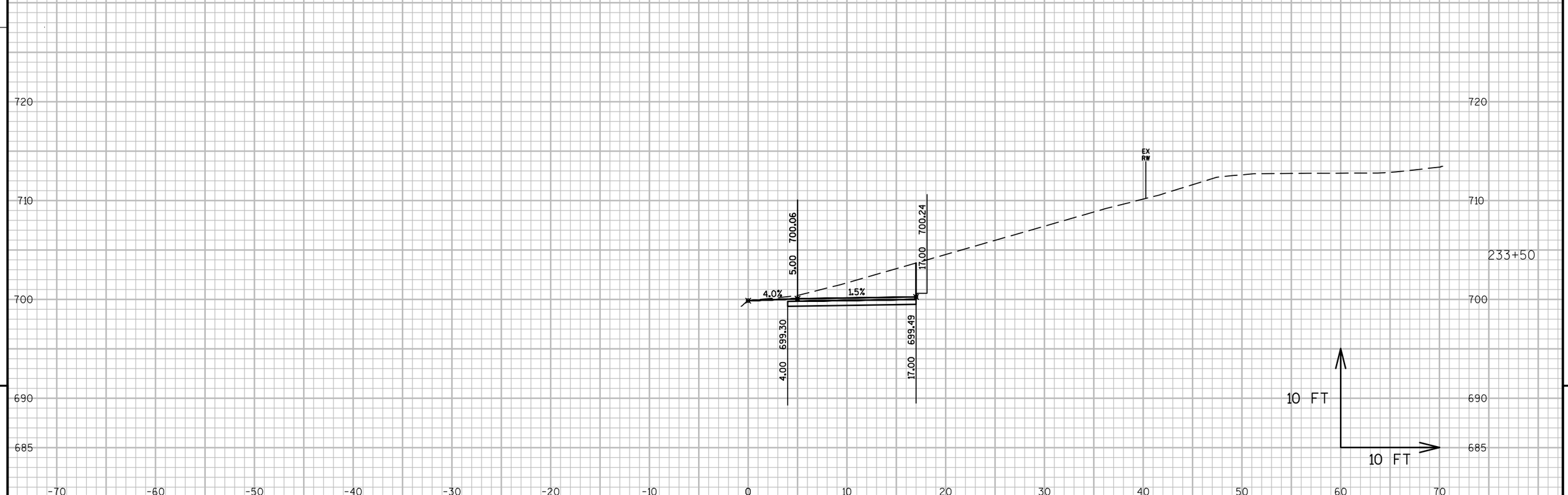
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PROJECT NO: 4996--01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	CROSS SECTIONS	SHEET 427	E

FILE NAME : L:\PROJECTS\11744\DWG\090201_XS NORTH OF NEW JERSEY.DWG
LAYOUT NAME - 090201_XS NORTH OF NEW JERSEY - SECTION SHEET - (32)

PLOT DATE : 1/13/2015 1:13 PM PLOT BY : JUMP, KEVIN PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49



9

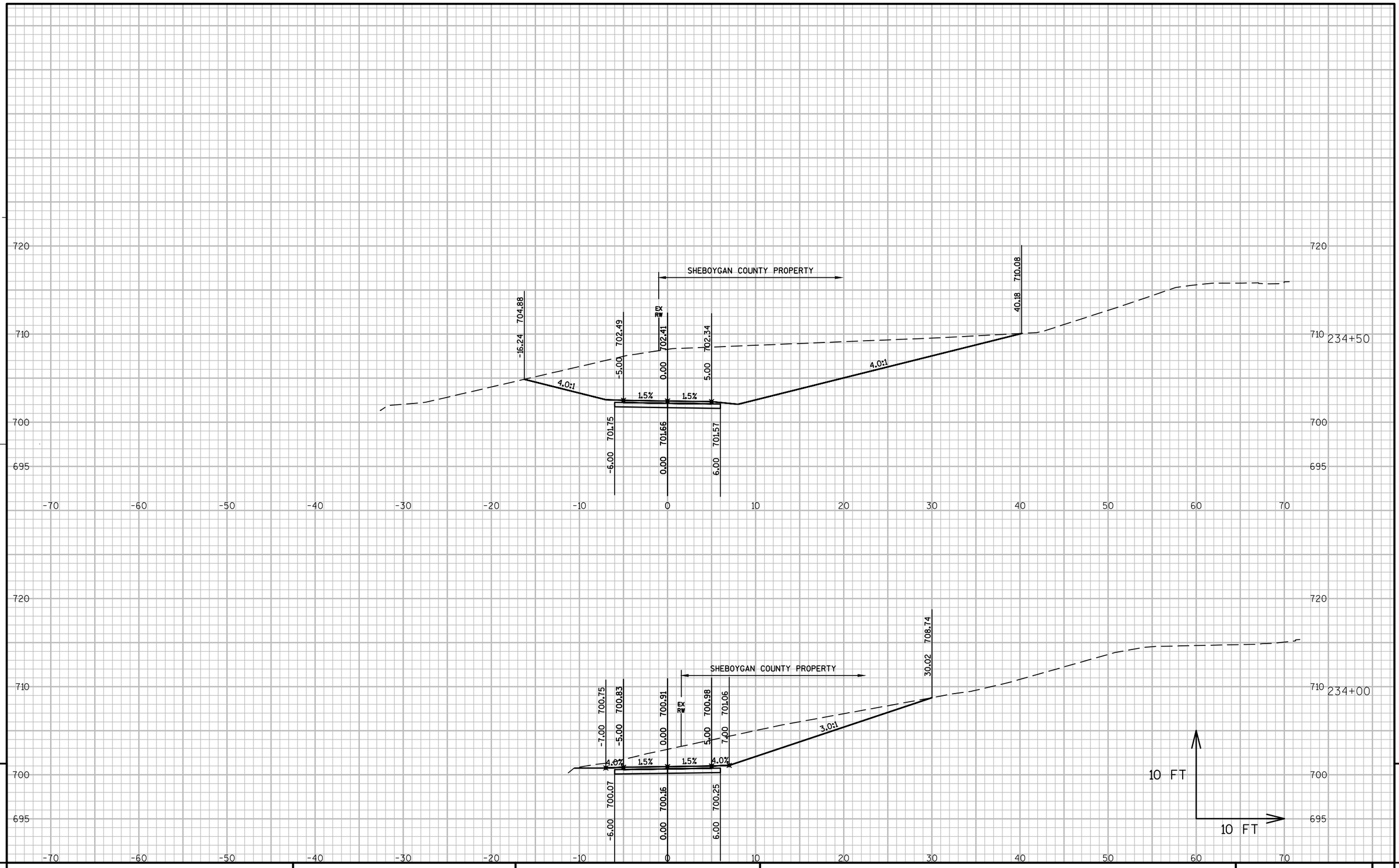
9

PROJECT NO: 4996--01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	CROSS SECTIONS	SHEET 428	E

FILE NAME : L:\PROJECTS\11744\DWG\090201_XS NORTH OF NEW JERSEY.DWG
LAYOUT NAME - 090201_XS NORTH OF NEW JERSEY - SECTION SHEET - (33)

PLOT DATE : 1/13/2015 1:13 PM PLOT BY : JUMP, KEVIN PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49

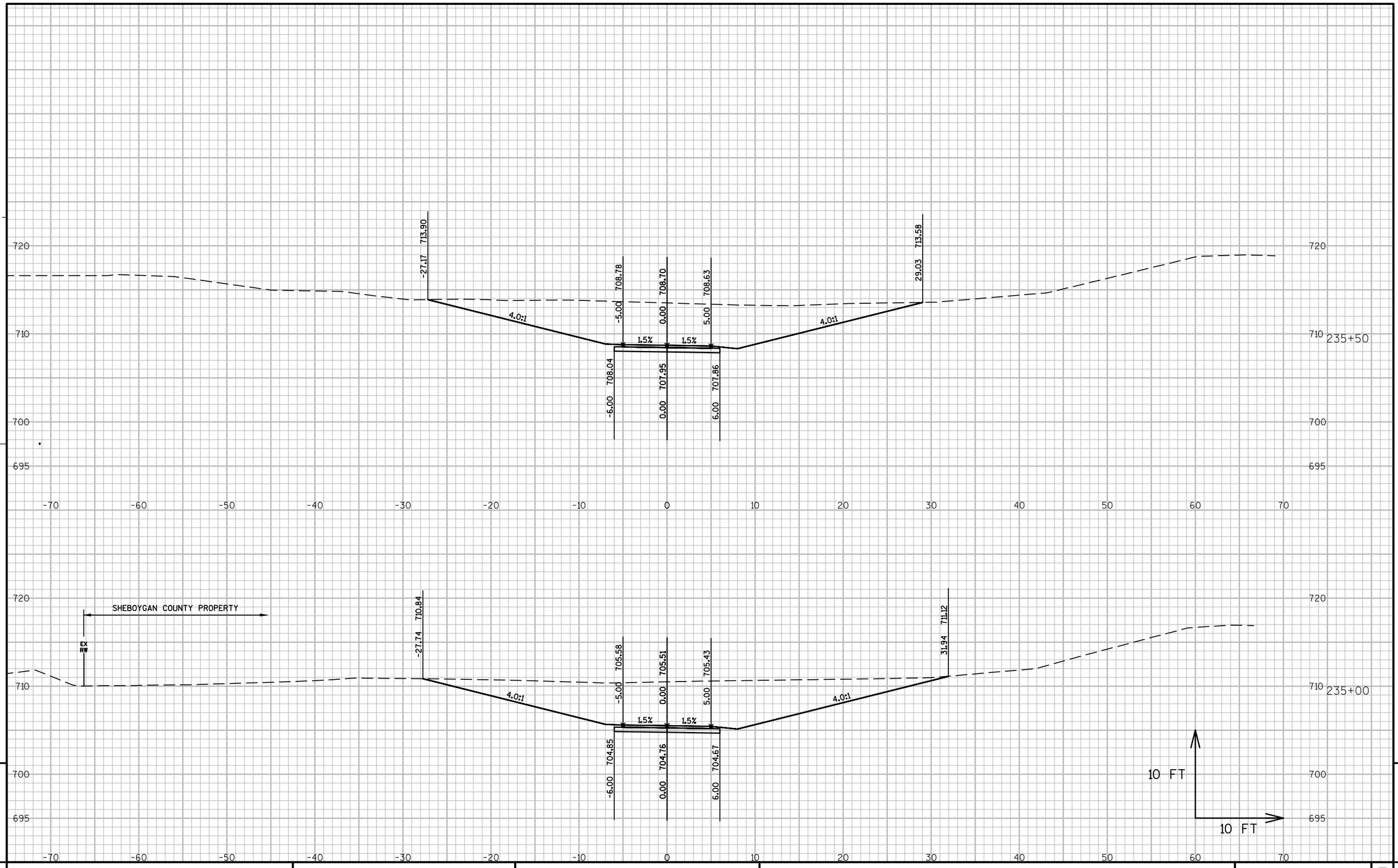


PROJECT NO: 4996-01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	CROSS SECTIONS:	SHEET 429	E

FILE NAME : L:\PROJECTS\11744\DWG\090202_XS.DWG
LAYOUT NAME - SECTION SHEET - (1)

PLOT DATE : 10/30/2014 1:31 PM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1:10_XREF

WISDOT/CADDS SHEET 49



9

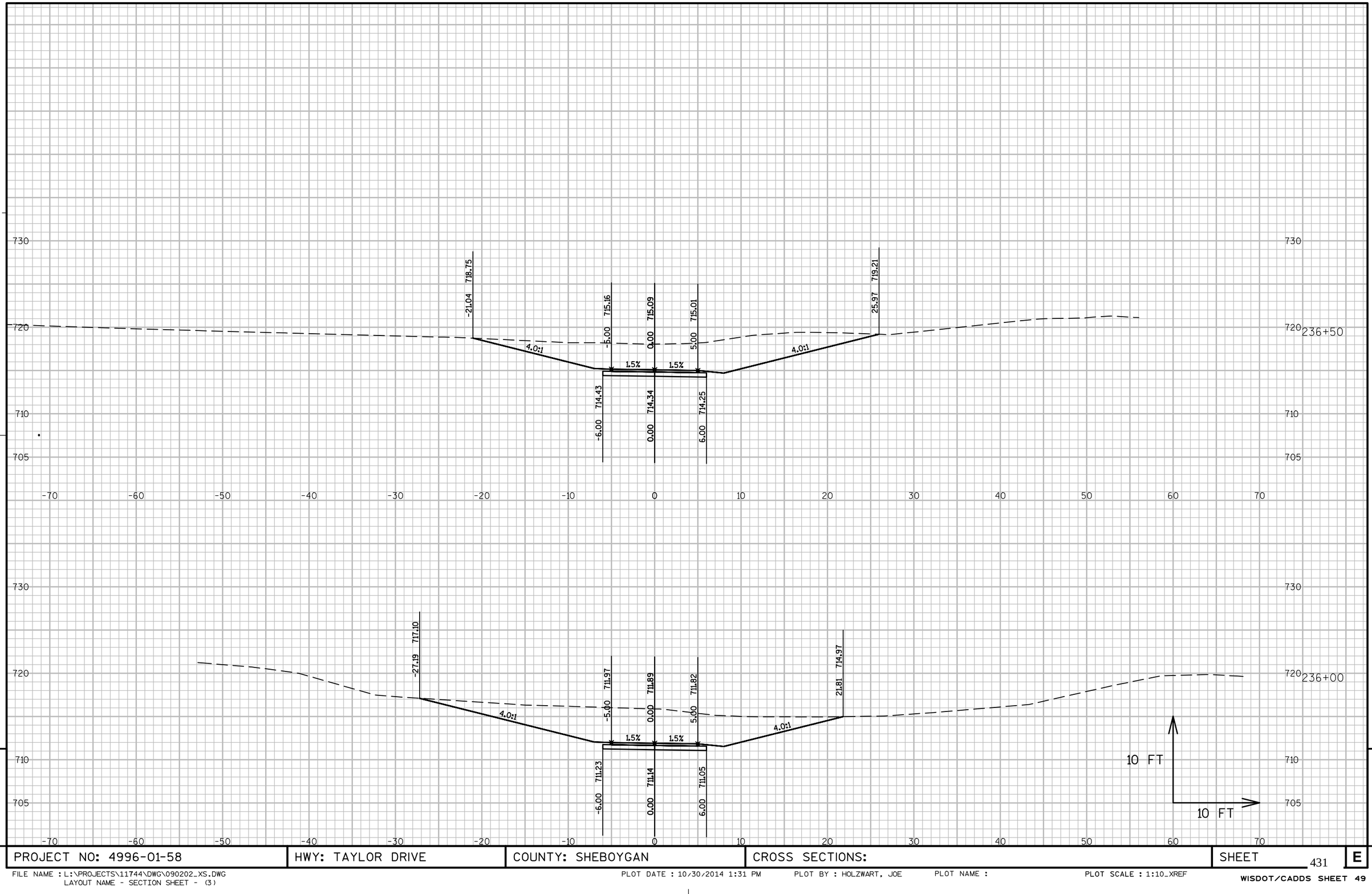
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PROJECT NO: 4996-01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	CROSS SECTIONS:	SHEET 430	E

FILE NAME : L:\PROJECTS\11744\DWG\090202_XS.DWG
LAYOUT NAME - SECTION SHEET - (2)

PLOT DATE : 10/30/2014 1:31 PM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1:10_XREF

WISDOT/CADDS SHEET 49



9

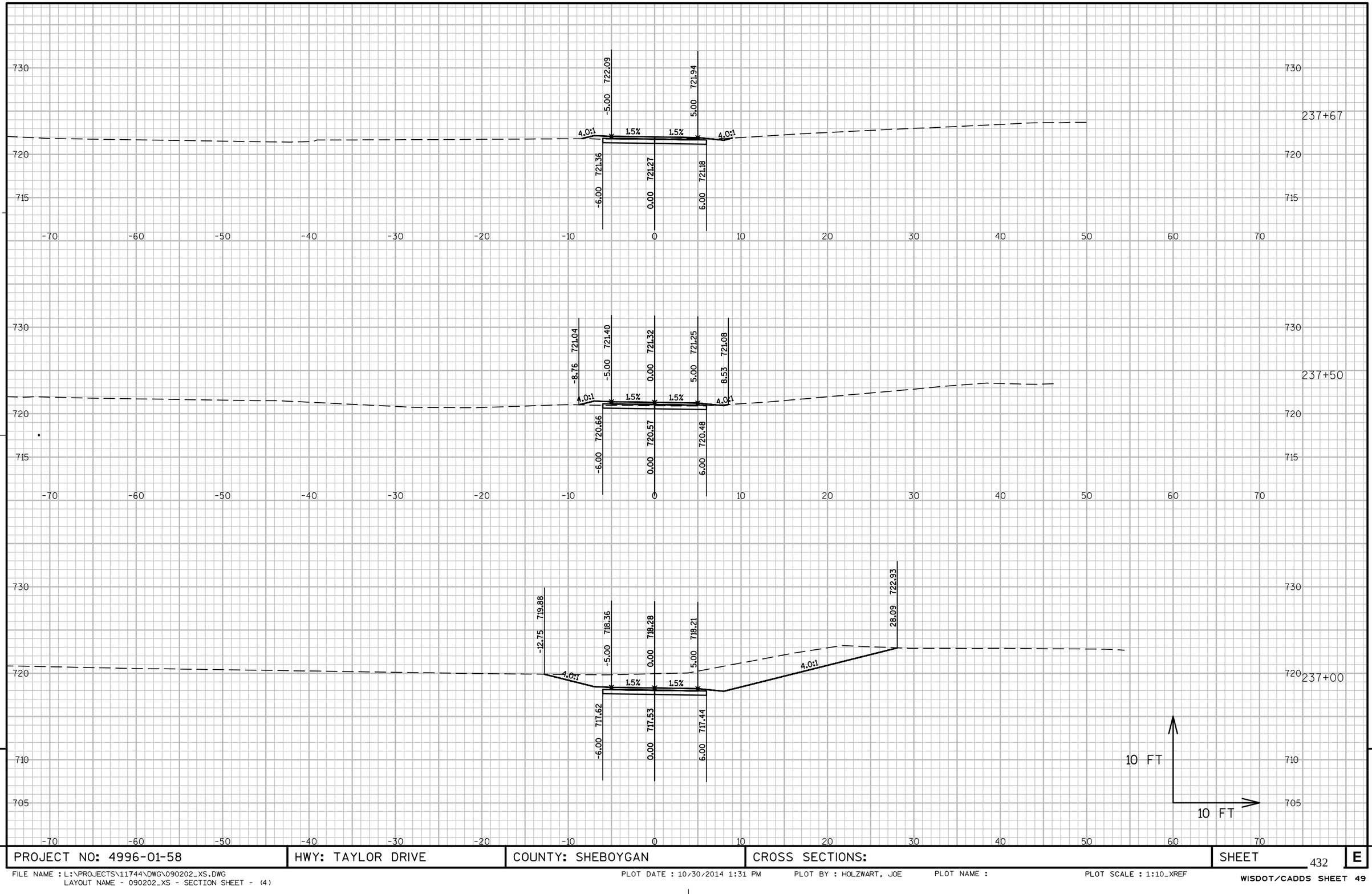
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PROJECT NO: 4996-01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	CROSS SECTIONS:	SHEET 431	E

FILE NAME : L:\PROJECTS\11744\DWG\090202_XS.DWG
LAYOUT NAME - SECTION SHEET - (3)

PLOT DATE : 10/30/2014 1:31 PM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1:10_XREF

WISDOT/CADDS SHEET 49

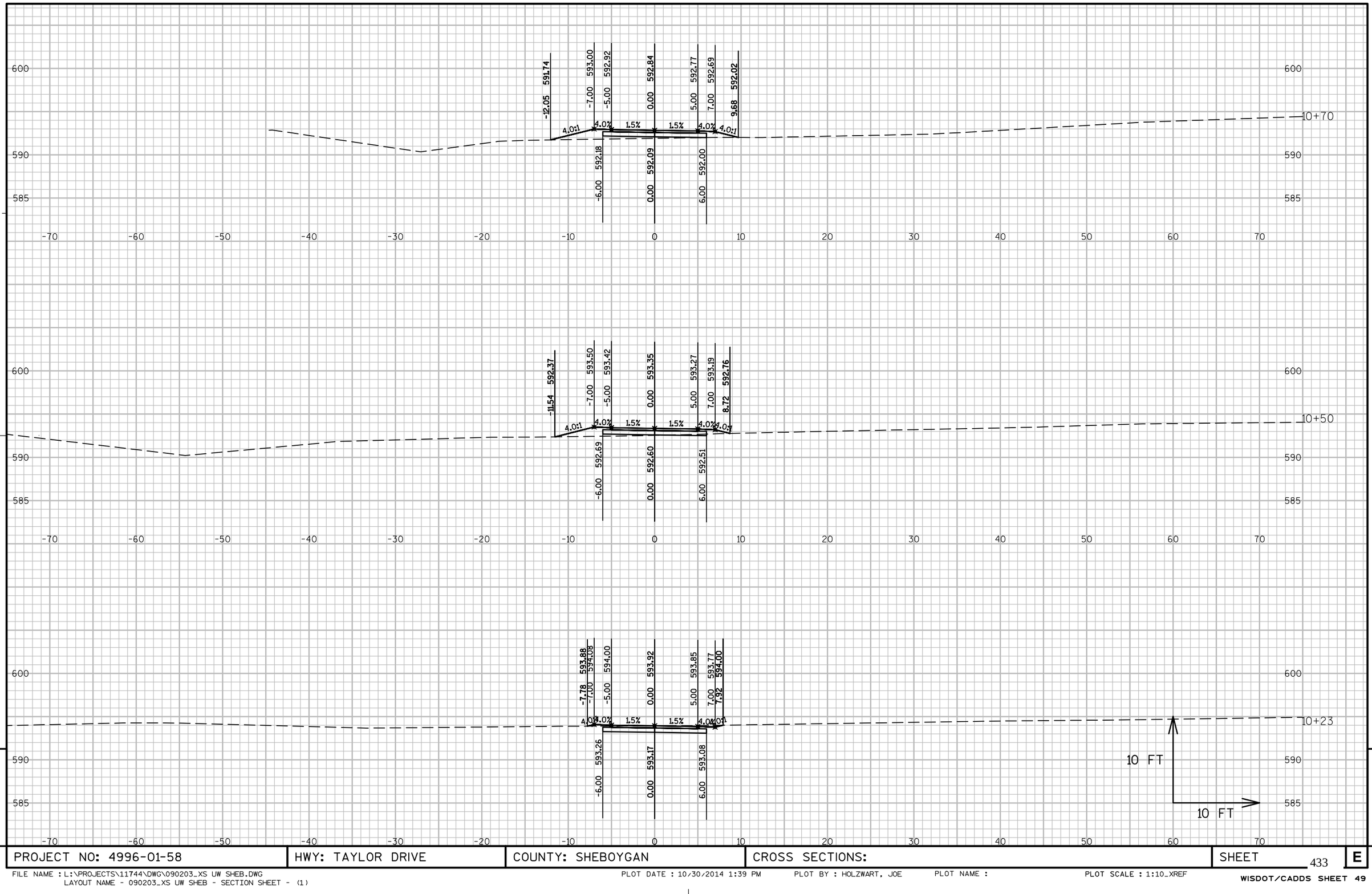


PROJECT NO: 4996-01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	CROSS SECTIONS:	SHEET 432	E

FILE NAME : L:\PROJECTS\11744\DWG\090202_XS.DWG
LAYOUT NAME - 090202_XS - SECTION SHEET - (4)

PLOT DATE : 10/30/2014 1:31 PM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1:10_XREF

WISDOT/CADDS SHEET 49



9

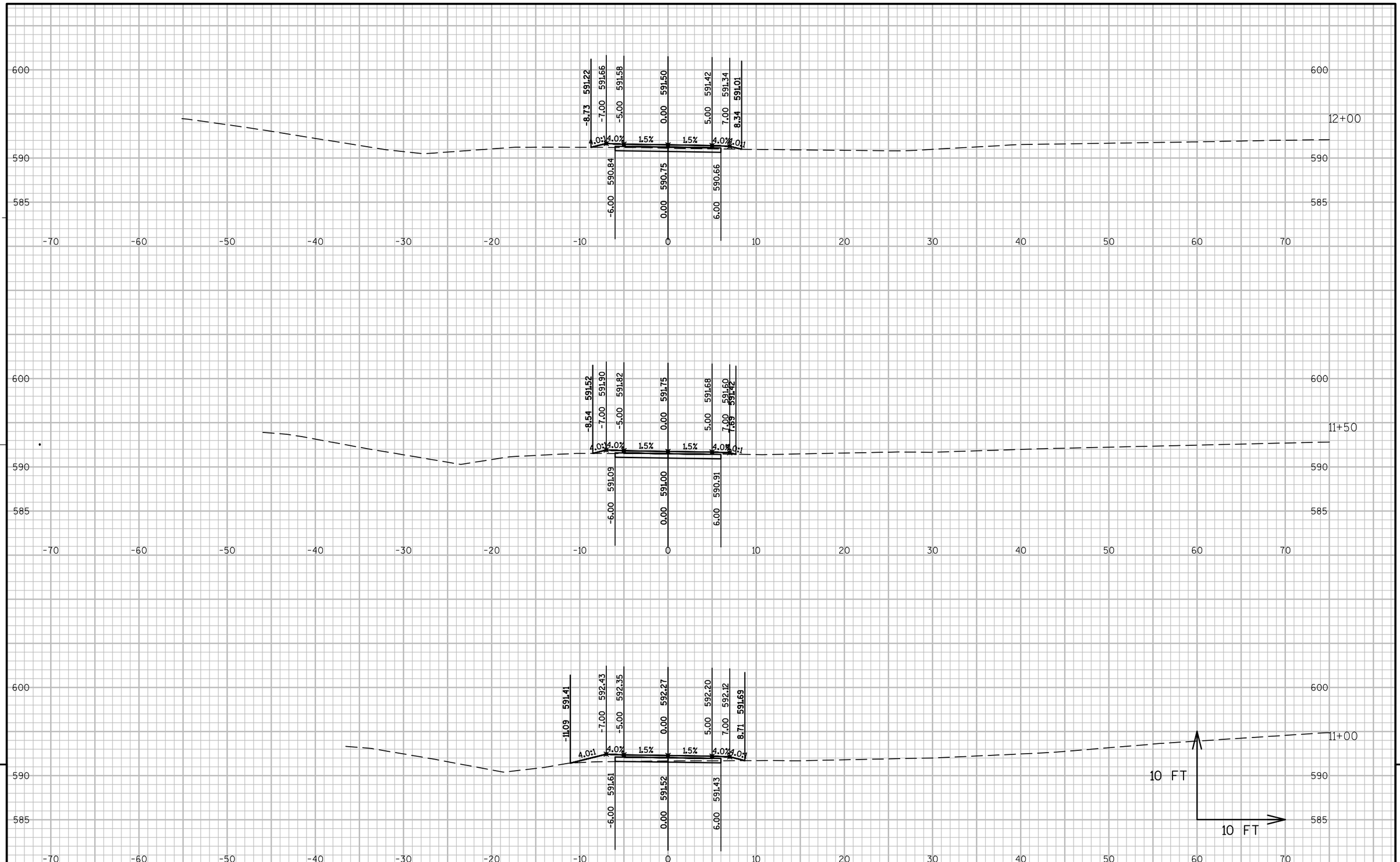
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PROJECT NO: 4996-01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	CROSS SECTIONS:	SHEET 433	E

FILE NAME : L:\PROJECTS\11744\DWG\090203_XS UW SHEB.DWG
LAYOUT NAME - 090203_XS UW SHEB - SECTION SHEET - (1)

PLOT DATE : 10/30/2014 1:39 PM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1:10_XREF

WISDOT/CADDS SHEET 49



9

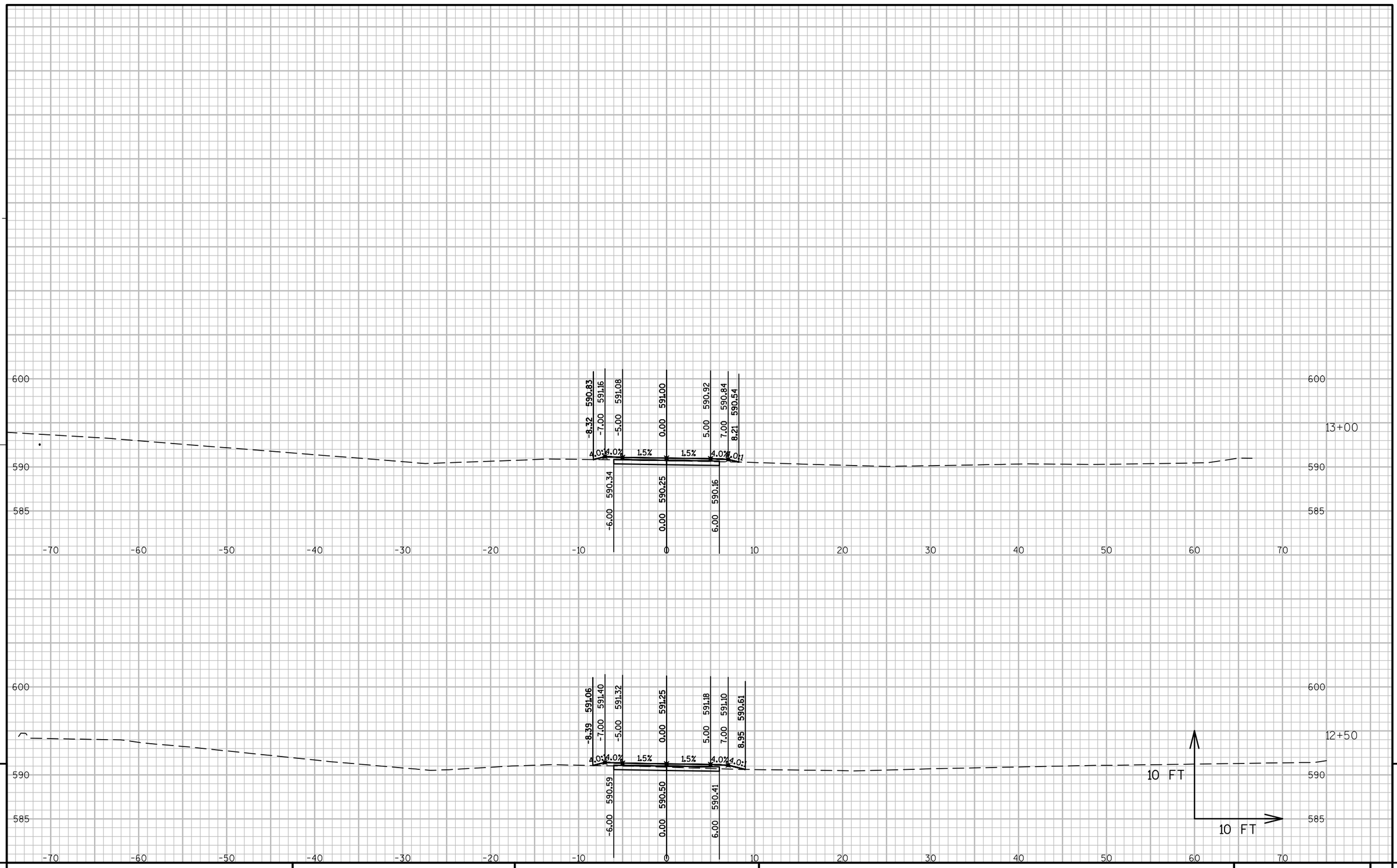
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PROJECT NO: 4996-01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	CROSS SECTIONS:	SHEET 434	E

FILE NAME : L:\PROJECTS\11744\DWG\090203_XS UW SHEB.DWG
LAYOUT NAME - 090203_XS UW SHEB - SECTION SHEET - (2)

PLOT DATE : 10/30/2014 1:39 PM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1:10_XREF

WISDOT/CADDS SHEET 49

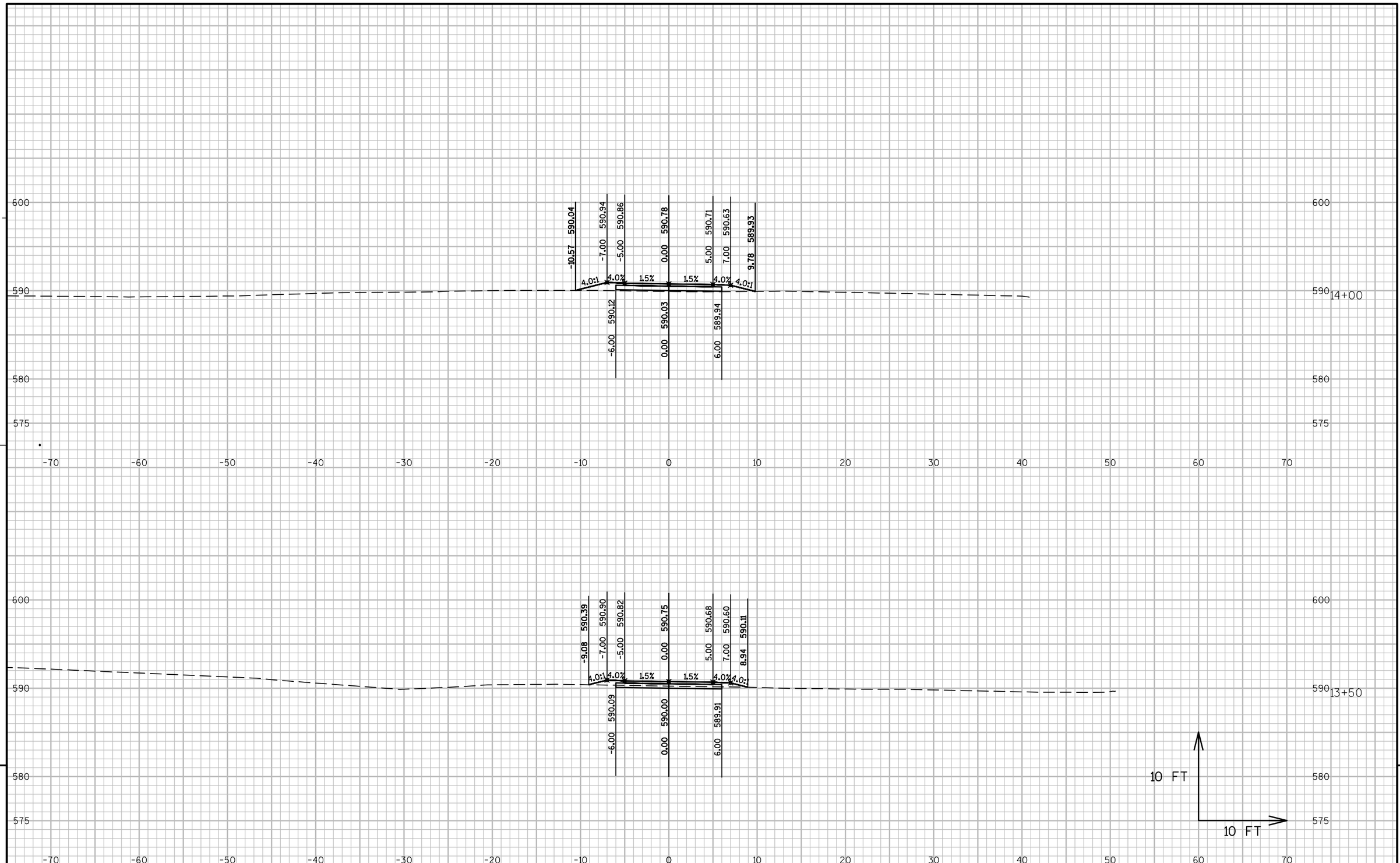


PROJECT NO: 4996-01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	CROSS SECTIONS:	SHEET 435	E

FILE NAME : L:\PROJECTS\11744\DWG\090203_XS UW SHEB.DWG
LAYOUT NAME - 090203_XS UW SHEB - SECTION SHEET - (3)

PLOT DATE : 10/30/2014 1:39 PM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1:10_XREF

WISDOT/CADDS SHEET 49

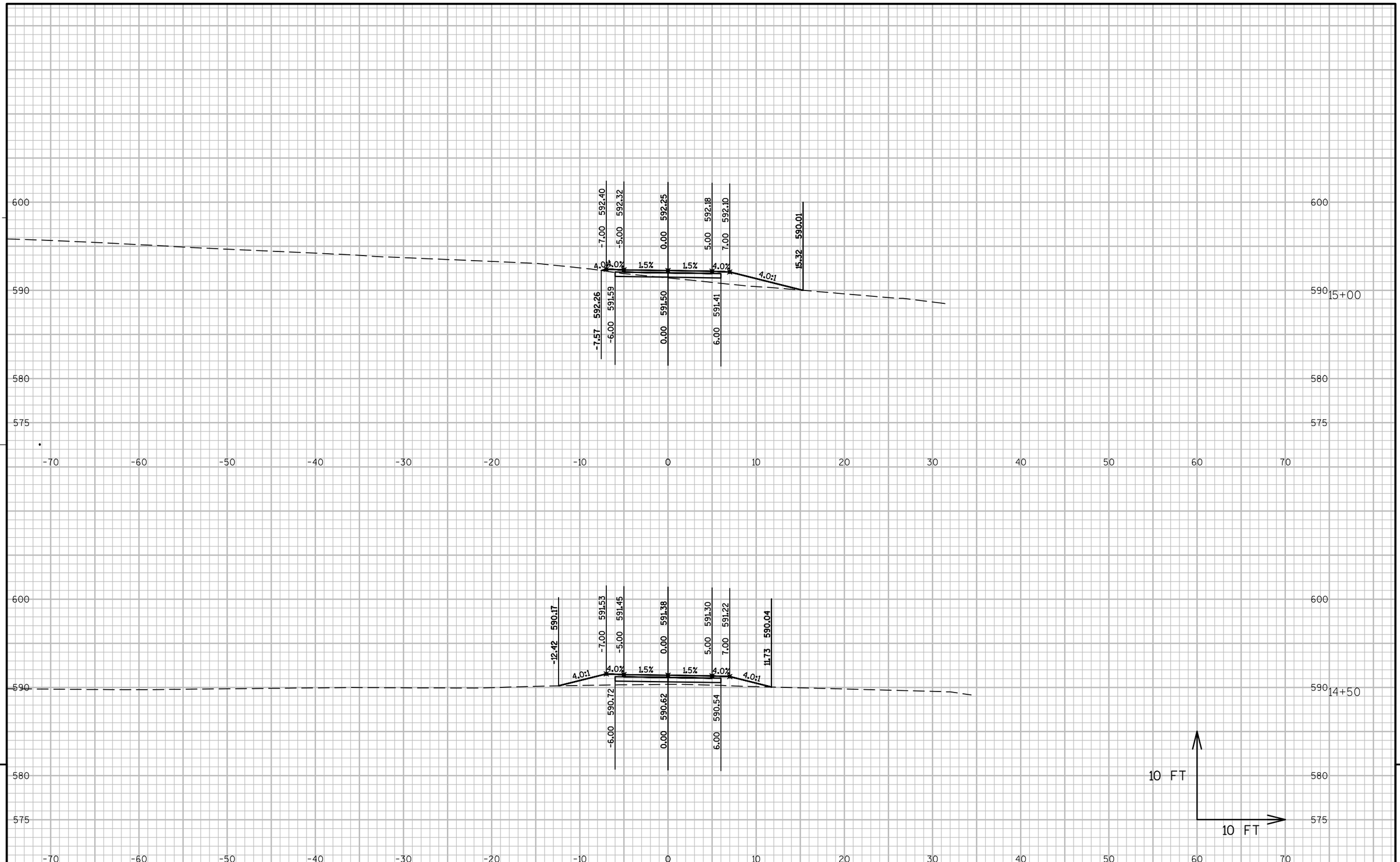


PROJECT NO: 4996-01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	CROSS SECTIONS:	SHEET 436	E

FILE NAME : L:\PROJECTS\11744\DWG\090203_XS UW SHEB.DWG
LAYOUT NAME - 090203_XS UW SHEB - SECTION SHEET - (4)

PLOT DATE : 10/30/2014 1:39 PM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1:10_XREF

WISDOT/CADDS SHEET 49



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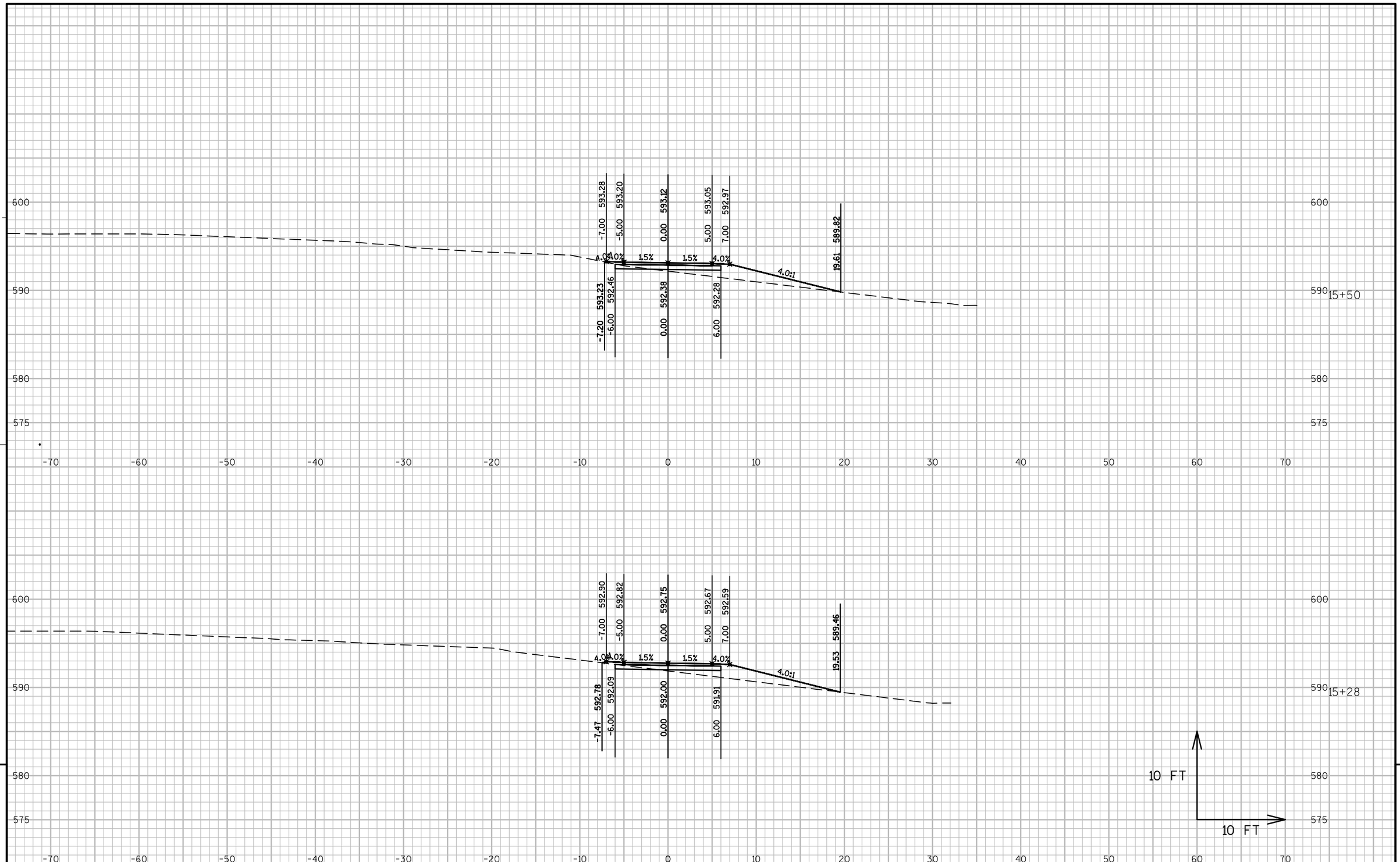
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PROJECT NO: 4996-01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	CROSS SECTIONS:	SHEET 437	E

FILE NAME : L:\PROJECTS\11744\DWG\090203_XS UW SHEB.DWG
LAYOUT NAME - 090203_XS UW SHEB - SECTION SHEET - (5)

PLOT DATE : 10/30/2014 1:39 PM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1:10_XREF

WISDOT/CADDS SHEET 49



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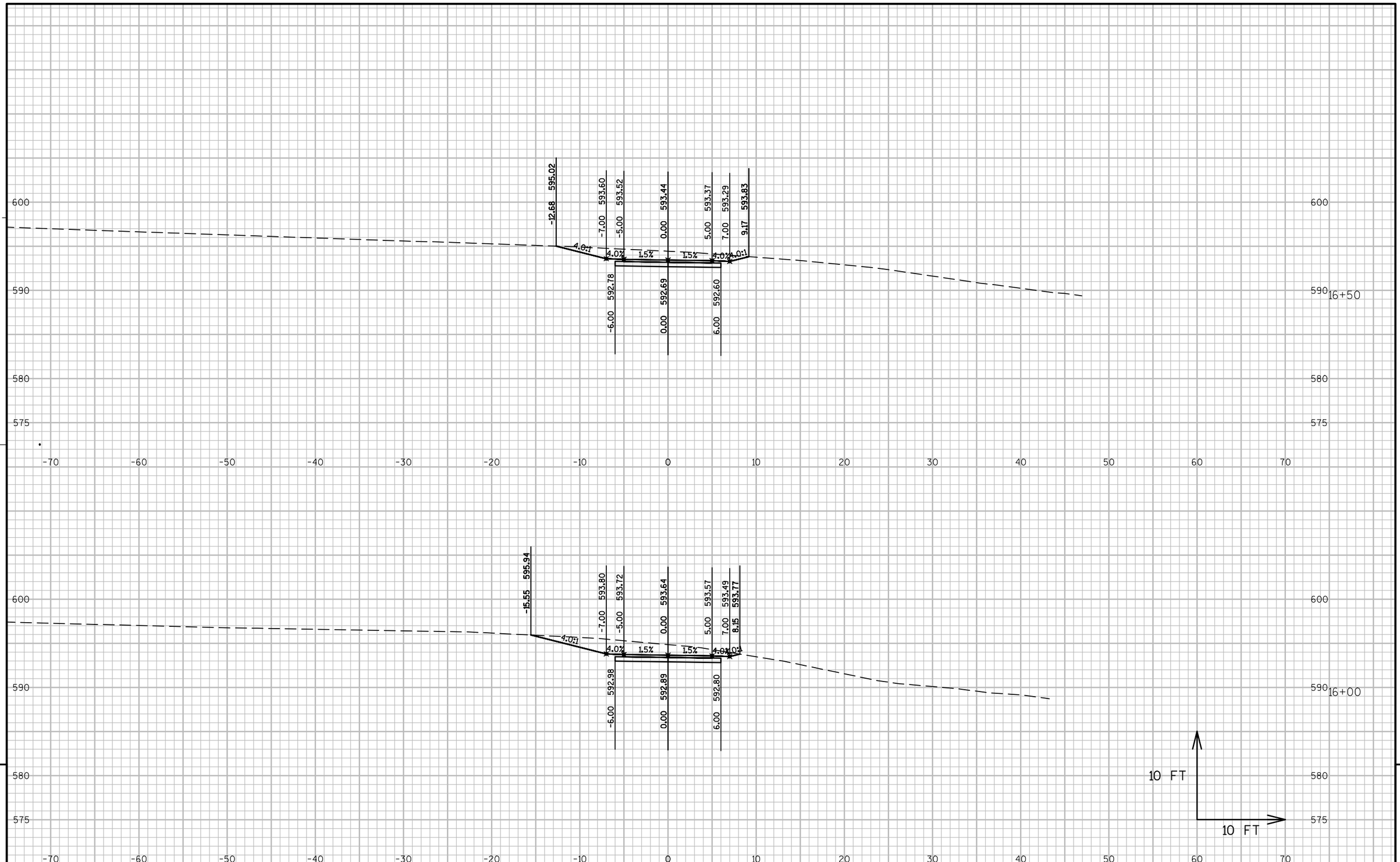
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PROJECT NO: 4996-01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	CROSS SECTIONS:	SHEET 438	E

FILE NAME : L:\PROJECTS\11744\DWG\090203_XS UW SHEB.DWG
LAYOUT NAME - 090203_XS UW SHEB - SECTION SHEET - (6)

PLOT DATE : 10/30/2014 1:39 PM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1:10_XREF

WISDOT/CADDS SHEET 49



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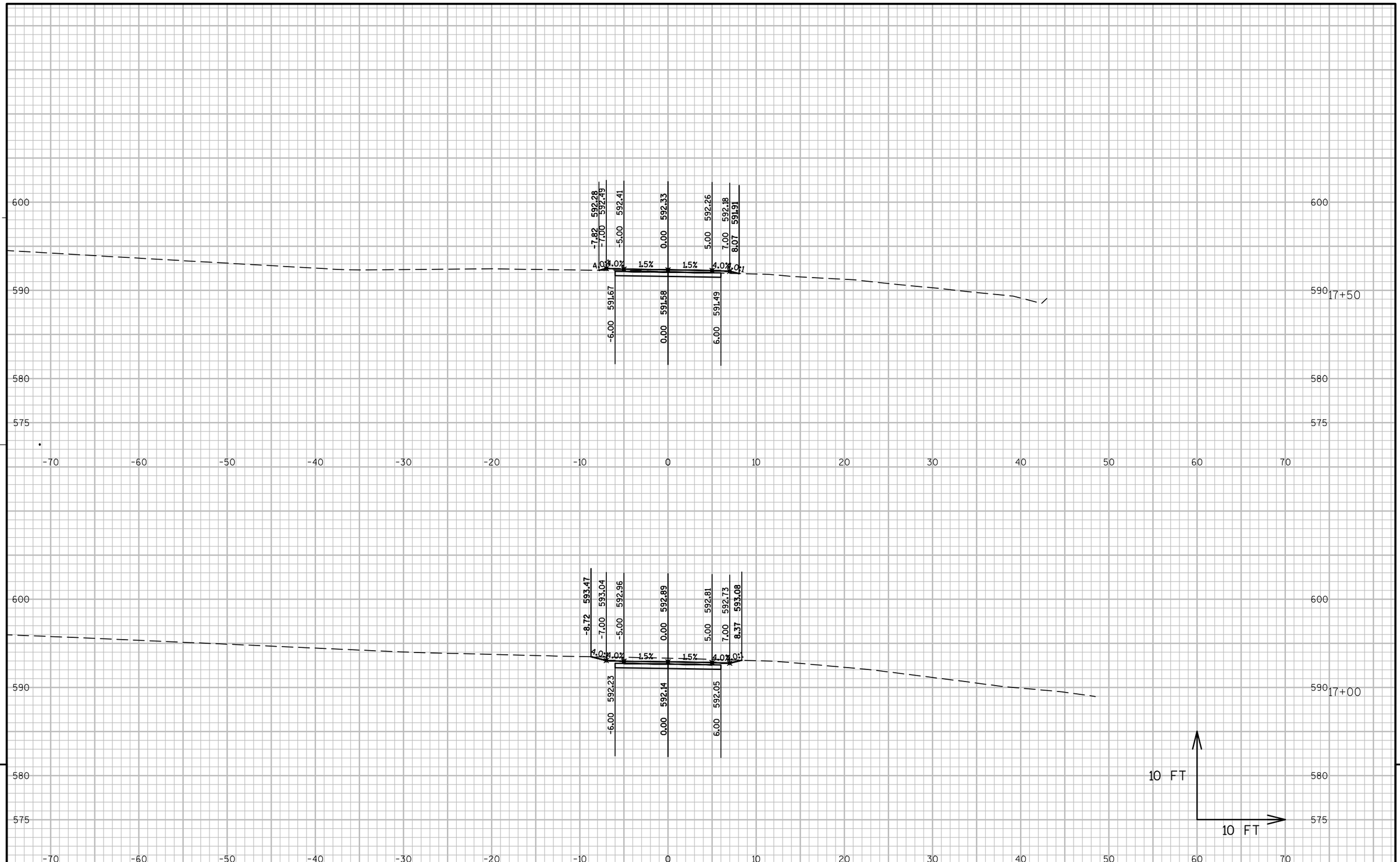
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PROJECT NO: 4996-01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	CROSS SECTIONS:	SHEET 439	E

FILE NAME : L:\PROJECTS\11744\DWG\090203_XS UW SHEB.DWG
LAYOUT NAME - 090203_XS UW SHEB - SECTION SHEET - (7)

PLOT DATE : 10/30/2014 1:39 PM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1:10_XREF

WISDOT/CADDS SHEET 49

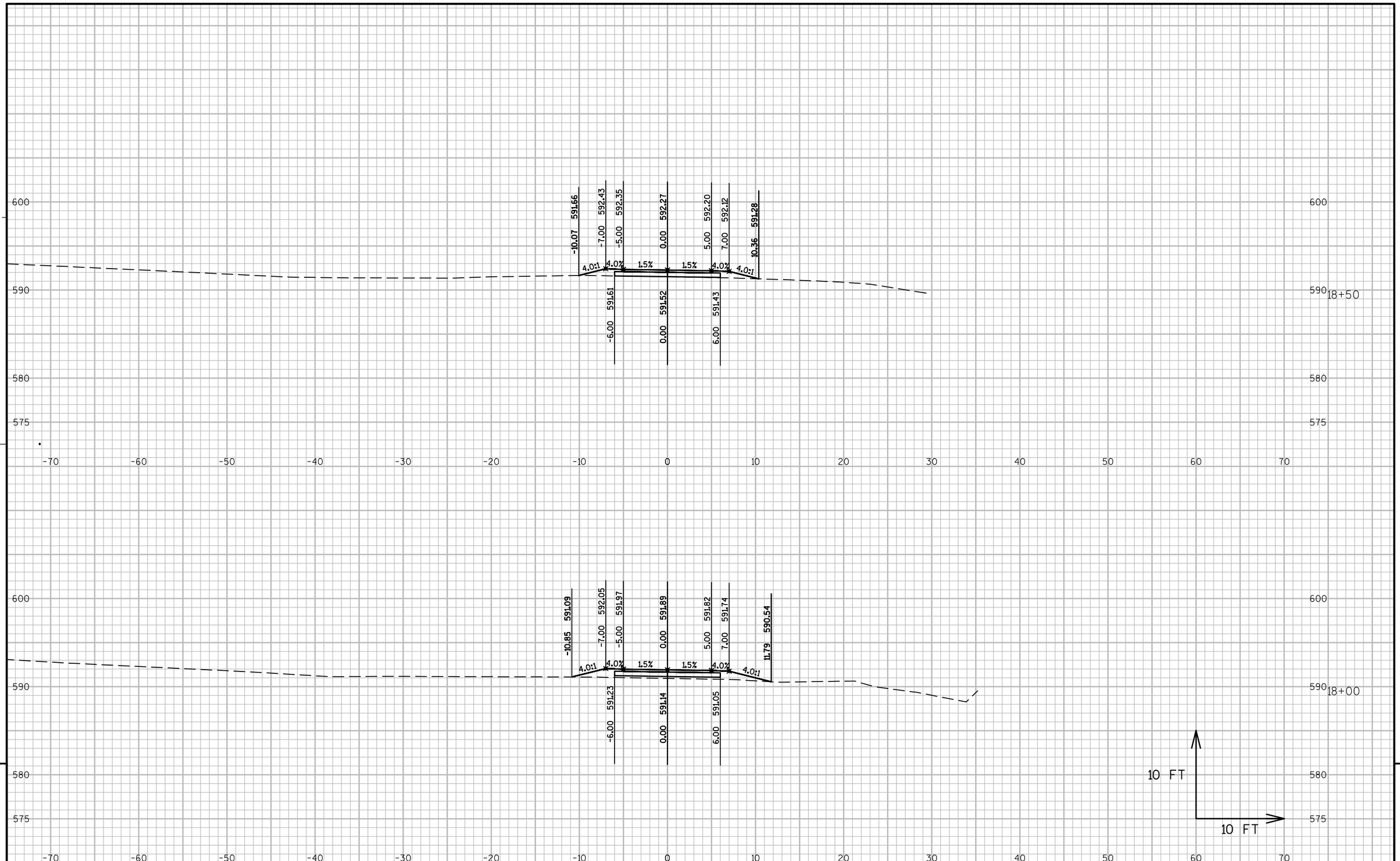


PROJECT NO: 4996-01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	CROSS SECTIONS:	SHEET 440	E

FILE NAME : L:\PROJECTS\11744\DWG\090203_XS UW SHEB.DWG
LAYOUT NAME - 090203_XS UW SHEB - SECTION SHEET - (8)

PLOT DATE : 10/30/2014 1:39 PM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1:10_XREF

WISDOT/CADDS SHEET 49



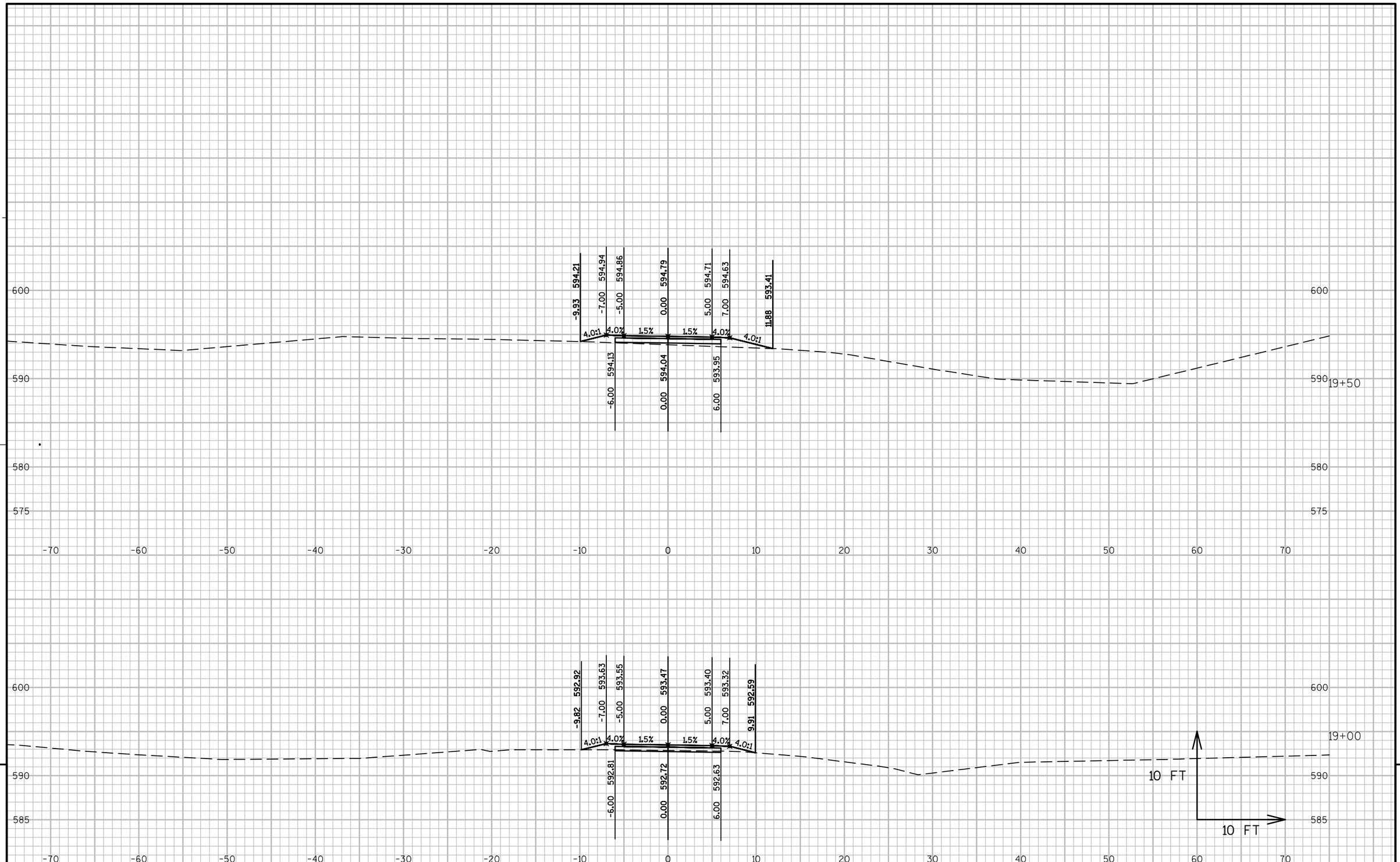
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PROJECT NO: 4996-01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	CROSS SECTIONS:	SHEET 441	E

FILE NAME : L:\PROJECTS\11744\DWG\090203_XS UW SHEB.DWG
LAYOUT NAME - 090203_XS UW SHEB - SECTION SHEET - (9)

PLOT DATE : 10/30/2014 1:39 PM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1:10_XREF



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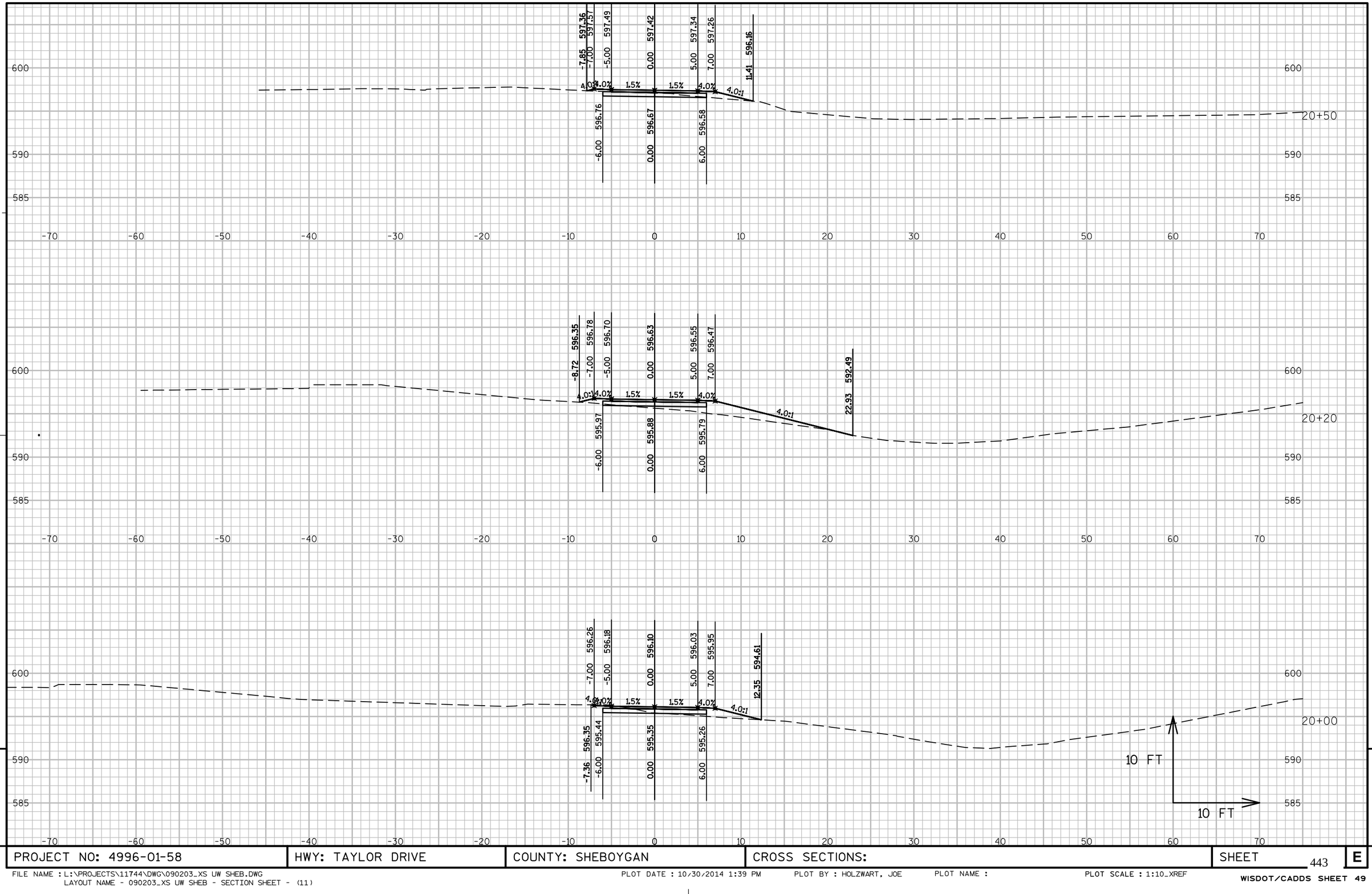
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PROJECT NO: 4996-01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	CROSS SECTIONS:	SHEET 442	E

FILE NAME : L:\PROJECTS\11744\DWG\090203_XS UW SHEB.DWG
LAYOUT NAME - 090203_XS UW SHEB - SECTION SHEET - (10)

PLOT DATE : 10/30/2014 1:39 PM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1:10_XREF

WISDOT/CADDS SHEET 49



9

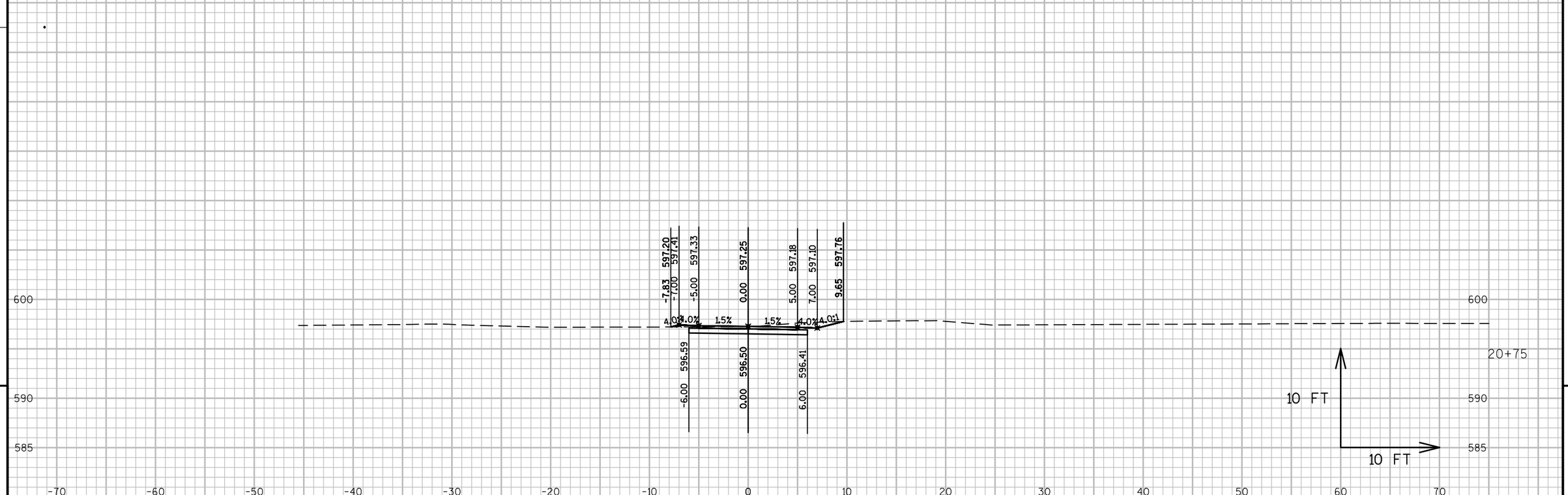
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PROJECT NO: 4996-01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	CROSS SECTIONS:	SHEET 443	E

FILE NAME : L:\PROJECTS\11744\DWG\090203_XS UW SHEB.DWG
LAYOUT NAME - 090203_XS UW SHEB - SECTION SHEET - (11)

PLOT DATE : 10/30/2014 1:39 PM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1:10_XREF

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 4996-01-58	HWY: TAYLOR DRIVE	COUNTY: SHEBOYGAN	CROSS SECTIONS:	SHEET 444	E

FILE NAME : L:\PROJECTS\11744\DWG\090203_XS UW SHEB.DWG
LAYOUT NAME - 090203_XS UW SHEB - SECTION SHEET - (12)

PLOT DATE : 10/30/2014 1:39 PM PLOT BY : HOLZWART, JOE PLOT NAME : PLOT SCALE : 1:10_XREF

Notes

Wisconsin Department of Transportation

Dedicated people creating transportation solutions
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